CITY COMMISSION AND
COMMUNITY
REDEVELOPMENT AGENCY
AGENDA
City Hall Commission Chambers
300 W. Plant Street
Winter Garden, Florida

Regular Meeting **August 13, 2026** **6:30 PM**

Call to Order
Determination of a Quorum
Invocation and Pledge of Allegiance

1. Approval of Minutes

A. **Regular Meeting Minutes** – July 23, 2026

2. PRESENTATION

A. **Proclamation 26-11:** West Orange Healthy Selfie Day – September 18, 2026 – **Mayor Rees**

B. **Solid Waste Rates** — Rafelis Financial Consultants, Inc. – **Trevor McCarthy**

3. FIRST READING AND PUBLC HEARING OF PROPOSED ORDINANCES

A. **Ordinance 26-24**: AN ORDINANCE OF THE CITY OF WINTER GARDEN AMENDING THE WINTER GARDEN COMPREHENSIVE PLAN TO ADDRESS CHANGES TO STATE STATUTES, EXTENDING THE PLANNING HORIZON TO 2050, AMENDING THE FUTURE LAND USE MAP SERIES, AND AMENDING VARIOUS ELEMENTS OF THE COMPREHENSIVE PLAN TO IMPLEMENT THE COMMUNITY VISION; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DAT E – **Second reading and public hearing after State Review** – **Planning Director Carson**

B. **Ordinance 26-26:** AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF WINTER GARDEN, FLORIDA, AMENDING CHAPTER 118, "ZONING," ARTICLE II, "ADMINISTRATION," OF THE CITY OF WINTER GARDEN CODE OF ORDINANCES TO CREATE DIVISION 6, TO BE ENTITLED "ZONING COMPLIANCE REVIEW,"; PROVIDING A PROCESS FOR VERIFYING THAT CERTAIN DEVELOPMENT ACTIVITIES COMPLY WITH OBJECTIVE LAND DEVELOPMENT REGULATIONS; PROVIDING FOR PURPOSE AND INTENT; PROVIDING DEFINITIONS; PROVIDING FOR APPLICABILITY AND EXEMPTIONS; PROVIDING APPLICATION AND SUBMITTAL REQUIREMENTS; PROVIDING REVIEW STANDARDS; PROVIDING PROCEDURES AND TIMEFRAMES FOR ACTION ON APPLICATIONS; PROVIDING FOR CONDITIONS OF APPROVAL, EXPIRATION, EXTENSIONS, AND APPEALS; AUTHORIZING THE ESTABLISHMENT OF ZONING COMPLIANCE REVIEW FEES BY RESOLUTION; PROVIDING FOR ENFORCEMENT AND PENALTIES; PROVIDING FOR CONFLICTS, SEVERABILITY, CODIFICATION AND AN EFFECTIVE DATE – **Second reading and public hearing August 27, 2026** – **Planning Director Carson**

4. REGULAR BUSINESS

A. Recommendation to approve request to change traffic lights at South Dillard Street and East Story Road to a split-phase operation and hire Traffic Engineering and Management, LLC dba Control Specialists to modify lights in the amount of $**14,600 – Assistant City Manager for Public Services Pash**

B. Recommendation to approve request for intersection improvements at Avalon Road & Tucker Ranch/Coscester Street, Avalon Road & Golden Bell Street/Long beam Way, Marsh Road & Williams Road and Avalon Road & State Road 50 and use City's contract engineers to design proposed final improvement – **Assistant City Manager for Public Services Pash**

C. Recommendation to approve bid proposal from Core & Main to purchase 1,225 water meters, meter boxes, and cables in the amount of $**382,809.29** – **Assistant City Manager for Public Services Pash**

D. Recommendation to approve Purchase Order for Mead and Hunt, Inc., to design Southwest Reclaimed Water Main in the amount of $**576,747.12** – **City Engineer Monahan**

E. Recommendation to approve **SITE PLAN** for property located at 12152 West Colonial Drive (Orlando Orthopaedic Center at Winter Garden) – **Planning Director Carson**

F. Recommendation to approve **SITE PLAN** for property located at 1680 Marcel Drive (WG Basketball Academy), subject to conditions – **Planning Director Carson**

G. Recommendation to approve Special Exception Permit and Agreement to remove billboards located at 1101 East Plant Street and 14909 West Colonial Drive and construct new double-sided digital billboard at West Colonial Drive, Subject to conditions – **Planning Director Carson**

Dispense as the City Commission and convene as the Community Redevelopment Agency

H. Recommendation to approve Dragonfly Architecture, LLC to provide architectural and engineering services for property located at 95 Center Street in the amount of $**48,900** – **Economic Development Director Hutchinson**

I. Recommendation to approve grant funding for Habitat's Neighborhood Revitalization program in the amount of $**30,000 — Economic Development Director Hutchinson**

J. Recommendation to approve reimbursement of General Fund by CRA for Zanders Park renovation work of old playground area in the amount of **$68,831.25** – **Economic Development Director Hutchinson**

K. Recommendation to approve purchase of park furniture for Zanders Park renovation in the amount $**28,976.69** – **Economic Development Director Hutchinson**

Adjourn as the Community Redevelopment Agency and reconvene as the City Commission

5. Matters From Public - (Limited to 3 minutes per speaker)

6. **Matters From City Attorney - A. Kurt Ardaman**

7. **Matters From City Manager - Jon C. Williams**

8. **Matters From Mayor and Commissioners**

9. **Adjourn to Regular Meeting on Thursday, August 27, 2026 at 6:30 p.m. in City Hall Commission Chambers, 300 W. Plant Street, 1st floor**

NOTICES:
In accordance with Florida Statutes 286.0105, if any person decides to appeal any decision made by said body with respect to any matter considered at such meeting, he/she will need a record of the proceedings and, for that purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. The City of Winter Garden does not prepare or provide such record.

Any opening invocation that is offered before the official start of the Commission meeting shall be the voluntary offering of a private person, to and for the benefit of the Commission. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the City Commission or the city staff, and the City is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the City Commission meeting are invited to stand during the opening invocation and to stand and recite the Pledge of Allegiance. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the City Commission Chambers or exit the City Commission Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance. (Reference Resolutions 15-04 and 16-02).

Pursuant to Florida Statutes 282.601, 286.603, and the Americans with Disabilities Act (ADA), the City of Winter Garden makes every effort to ensure that those with disabilities have access to electronic information provided to the public, except when compliance with those sections impose an undue burden on the agency. In the event of difficulty accessing this publicly provided information, please contact the City Clerk's Office at (407) 656-4111, Ext. 6327, for assistance.



Those needing assistance to participate in any of these proceedings should contact the City Clerk's Office at least 48 hours in advance of the meeting (407) 656-4111 Ext 6327.



Help for the hearing impaired is available through the Assistive Listening System. Receivers can be obtained at the meeting from the Information Technology Department (407) 656-4111 Ext. 5455.

City Commission

Minutes

July 23, 2026, 6:30 p.m.

Regular Meeting of the City of Winter Garden City Commission was called to order by Mayor Rees at 6:30 PM at City Hall, 300 West Plant Street, Winter Garden, Florida. An Opening Invocation and Pledge of Allegiance were given.

Present:
Commissioner District 1 - Lisa L. Bennett
Commissioner District 2 - Iliana R. Jones
Commissioner District 3 - Chloe Johnson
Commissioner District 4 - Colin Sharman

Also Present:
City Manager Jon C. Williams
City Attorney A. Kurt Ardaman
City Clerk Ronisha Martin

Absent:
Mayor John Rees

1. Approval of Minutes

A. Regular Meeting Minutes – July 9, 2026

Commissioner Iliana Jones clarified that she abstained from voting on both the Temporary Construction Yard License Agreement and the Special Event permit for the hotel at 8 North Highland Avenue. City Attorney Kurt Ardaman confirmed that the minutes would reflect the vote on each item was not unanimous and that Commissioner Jones did not participate. Documentation was filed with the City Clerk.

Motion by Commissioner Sharman to approve regular meeting minutes of July 9, 2026, with clarification. Seconded by Commissioner Johnson and carried unanimously 4-0.

2. SECOND READING AND PUBLIC HEARING OF PROPOSED ORDINANCES

A. **ORDINANACE 26-22** AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA, AMENDING THE CITY OF WINTER GARDEN FISCAL YEAR 2025-2026 BUDGET; PROVIDING FOR SEVERABILITY AND AN EFFECTIVE DATE

City Attorney Kurt Ardaman read Ordinance 26-22 by title only. Finance Director Laura Zielonka stated that this ordinance amends the current fiscal year budget to reflect changes occurring throughout the year. She noted that the amendments adjust the General Fund, two special revenue funds, and one enterprise fund, totaling approximately $3.5 million. Staff recommended approval.

Mayor Pro Tem Bennett opened the public hearing; hearing and seeing none, she closed the public hearing.

Motion by Commissioner Sharman to approve Ordinance 26-22. Seconded by Commissioner Johnson and carried unanimously 4-0.

B. **ORDINANCE 26-23**: AN ORDINANCE OF THE CITY OF WINTER GARDEN, FLORIDA, AMENDING CHAPTER 66, CITY OF WINTER GARDEN CODE OF ORDINANCES; AMENDING SECTION 66-104 AND SECTION 66-107 GOVERNING LOCAL BUSINESS TAXES; PROVIDING FOR TAX SCHEDULE; PROVIDING REQUIREMENTS FOR INCREASING RATE OF LOCAL BUSINESS TAXES; PROVIDING FOR CODIFICATION, SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE

City Attorney Kurt Ardaman read Ordinance 26-23 by title only. Planning Director Kelly Carson stated that this ordinance amends Chapter 66 of the City Code by increasing existing local business tax rates by 5%, consistent with Chapter 205, Florida Statutes. The ordinance also updates the timeline for future adjustments to better align with the City's budget and administrative processes. She noted minor corrections were made since the first reading to accurately reflect the 5% percent increase. Staff recommended approval.

Mayor Pro Tem Bennett opened the public hearing; hearing and seeing none, she closed the public hearing.

Motion by Commissioner Jones to approve Ordinance 26-23. Seconded by Commissioner Sharman and carried unanimously 4-0.

3. REGULAR BUSINESS

A. Recommendation to approve First Amendment to the Communications Site Lease Agreement (Ground) between City of Winter Garden and American Tower Asset Sub, LLC, and authorize Mayor execute amendment and associated Memorandum of Lease

City Manager Jon C. Williams stated that the amendment modernizes the City's original 1999 tower lease and strengthens protections for the City. The lease provides for five additional five-year renewal periods, with an expiration date of June 13, 2054. He stated that a one-time payment of $100,000 is due within thirty days of the effective date and that monthly rent will increase from $2,986 to $3,600, with a 20% rent escalator at the beginning of each renewal term starting in 2029. He noted that the amendment is estimated to generate approximately $2.06 million in revenue over the term of the agreement, excluding co-locator revenue. Furthermore, he stated that the amendment provides additional co-locator revenue of $200 per month per new co-locator, increasing 3% annually, and that it strengthens assignment and transfer protections, updates site maintenance requirements, improves fencing and security, revises equipment removal requirements, and enhances indemnification and notice procedures. Staff recommended approval.

Motion by Commissioner Sharman to approve First Amendment to the Communication Site Lease Agreement (Ground) between City of Winter Garden and American Tower Asset Sub, LLC. and authorize Mayor execute amendment and associated Memorandum of Lease. Seconded by Commissioner Johnson and

carried unanimously 4-0.

B. Recommendation to approve setting proposed MILLAGE RATE for fiscal year 2026-2027 at the current rate of 4.8565 mills and set public hearing dates for fiscal-year 2027 budget

Item 6A was addressed at this point in the meeting.

City Manager Jon C. Williams stated that he would combine this item with the related item under his report regarding the first and second budget public hearing dates. He stated that the Truth-in-Millage (TRIM) Law requires the City to notify the Property Appraiser of its tentative millage rate by August 3, 2026. Staff recommended maintaining the current millage rate of 4.8565 mills, which exceeds the rollback rate of 4.5928 mills. He noted the current gross taxable value is approximately $7.06 billion, a 7.71 percent increase over the prior year, and that the current rate would generate approximately $32.58 million in Ad Valorem Tax Revenue (AVTR), compared to approximately $30.81 million at the rollback rate.

He further stated that Senate Bill 4F, effective July 1, 2026, establishes new voting thresholds for adopting the millage rate based on the rollback rate rather than the previously used maximum millage calculation. Mr. Williams further noted that the proposed millage rate may be decreased during the budget hearings but cannot be increased without reinitiating the TRIM notification process. Staff recommended approval to set the proposed millage rate for fiscal year 2026-2027 at the current rate of 4.8565 mills and set the public budget hearing dates for fiscal year 2026–2027 for Tuesday, September 15, 2026, and Tuesday, September 29, 2026.

Motion by Commissioner Sharman to approve setting proposed millage rate for fiscal year 2026–2027 at the current rate of 4.8565 mills and to schedule budget public hearing dates on Tuesday, September 15, 2026, and Tuesday, September 29, 2026, at 6:30 p.m. Seconded by Commissioner Johnson and carried unanimously 4-0.

C. Recommendation to approve lien reduction and removal of Code Enforcement lien for 243 Florida Avenue

Assistant City Manager for Public Services Steve Pash stated that this item is a request to reduce and remove the Code Enforcement lien for the property located at 243 Florida Avenue. He noted that a stop work order was issued in 2024 for work being performed without a permit and that the Code Enforcement Board imposed fines of $300 per day until the work was permitted and completed. He further stated that the property was brought into compliance after 561 days, resulting in a lien of $168,300. Staff recommended reducing the lien to $5,000 and releasing the lien if paid in full by August 31, 2026.

Motion by Commissioner Johnson to approve lien reduction and removal of Code Enforcement lien for 243 Florida Avenue. Seconded by Commissioner Sharman and carried unanimously 4-0.

D. Recommendation to approve Request for Proposal (RFP 26-002) and award Janitorial and Floor Care Services Contract to American Janitorial in the amount of $119,478.84

Facility Operations Manager David Markland stated that this item is a request to approve a contract with American Janitorial, Inc., for janitorial and floor care services at various City facilities. He noted that twenty-two vendors attended the mandatory walkthrough and nine submitted proposals. Following evaluation by the selection committee, American Janitorial, Inc. was determined to be the most qualified firm. Staff recommended awarding the contract in the amount of $119,478.84 annually.

Motion by Commissioner Jones to approve Request for Proposal (RFP 26-002) and award janitorial and floor care services to American Janitorial Inc., in the amount of $119,478.84 annually. Seconded by Commissioner Sharman and carried unanimously 4-0.

E. Recommendation to approve Request for Proposal (RFP 26-003) and award Construction Services to Cathcart Construction Company for Fullers Reclaim Jockey Pump and Western Storage Potable Refill Pipe Upgrades in the amount of $435,490

City Engineer Jim Monahan stated that on June 2, 2026, the City received two proposals for construction services for the Fullers Reclaim Jockey Pump and Western Storage Potable Refill Pipe upgrades. He noted that, following an independent review and scoring by a four-member City employee panel, Cathcart Construction Company was selected to perform the work. Staff recommended awarding the construction contract to Cathcart Construction Company in the amount of $435,490.

Motion by Commissioner Sharman to approve Request for Proposal (RFP 26-003) and award construction services to Cathcart Construction Company for Fullers Reclaim Jockey Pump and Western Storage Potable Refill Pipe Upgrades in the amount of $435,490. Seconded by Commissioners Jones and Johnson simultaneously and unanimously carried 4-0.

F. Recommendation to approve Purchase Order for Continued use of Thioguard (magnesium hydroxide) for Odor Control at Lift Station 23 and 47 for one year in the amount of $400,000

City Engineer Jim Monahan stated that this request is for the purchase of Thioguard solution, which raises the pH in wastewater, keeping hydrogen sulfide in a liquid state to reduce odors and corrosion of pipes and manholes. He further stated that the chemical is included in the current budget at $4.06 per gallon, with a 3% mid-year increase to $4.18 per gallon at the end of October. Staff recommended approval for one year in an estimated amount of $400,000. He noted that staff is working with the provider to add equipment to minimize the amount of Thioguard used and that usage would be adjusted as needed based on odor conditions at the two lift stations.

Motion by Commissioner Sharman to approve purchase order for continued use of Thioguard (magnesium hydroxide) for odor control at lift stations 23 and 47 for one year in the amount of $400,000. Seconded by Commissioner Jones and carried unanimously 4-0.

G. Recommendation to approve SITE PLAN and FAIR SHARE AGREEMENT for properties located at 530 and 550 East Crown Point Road

Planning Director Carson stated that the applicant is proposing to construct three commercial office/flex warehouse buildings totaling 63,650 square feet on a 5.34-acre property located at 530 and 550 East Crown Point Road. The project includes related site improvements, including parking areas and buffer landscaping, and is consistent with the property's PCD zoning ordinance, Comprehensive Plan, and City Code. Ms. Carson stated that a Traffic Improvements Fair Share Agreement is also being considered for approval, which establishes the applicant's contribution toward future improvements along East Crown Point Road, including signalization of the East Crown Point Road and Palm Drive intersection. Staff recommended approval of the site plan with staff conditions and the Fair Share Agreement.

Motion by Commissioner Sharman to approve SITE PLAN and Fair Share Agreement for properties located at 530 and 550 East Crown Point Road. Seconded by Commissioner Jones and carried unanimously 4-0.

H. Recommendation to approve SPECIAL EVENT – National Night Out – Tuesday, October 6, 2026 from 6:00 – 9:00 p.m. with street closure

Planning Director Kelly Carson stated that the Winter Garden Police Department has submitted an application to hold their annual National Night Out event on Tuesday, October 6, 2026, from 6:00 p.m. to 9:00 p.m. The event will take place at the pavilion located at 104 South Lakeview Avenue and will include free food and an opportunity for citizens to interact with police and fire personnel.

She further stated that portions of Tremaine Street and South Lakeview Avenue will be closed during the event, consistent with the previous year. Staff recommended approval of the event and proposed road closures.

Motion by Commissioner Sharman to approve SPECIAL EVENT — National Night Out — Tuesday, October 6, 2026 for 6:00 – 9:00 p.m. with street closures. Seconded by Commissioner Johnson and carried unanimously 4-0.

I. Recommendation to approve SPECIAL EVENT – Bloom and Grow Society – Annual Flora Fiesta – Wednesday, October 7, 2026, from 3:00 – 5:00 p.m.

Planning Director Kelly Carson stated that the Bloom and Grow Society is requesting to hold their sixth annual Flora Fiesta event on Wednesday, October 7, 2026, from 3:00 p.m. to 5:00 p.m. at the City's Butterfly Sculpture Park. She noted that the event will include a short welcome program and the release of one hundred butterflies from four stations throughout the park. Staff recommended approval.

Motion by Commissioner Sharman to approve SPECIAL EVENT — Bloom and Grow Society — Annual Flora Fiesta — Wednesday, October 7, 2026 for 3:00 – 5:00 p.m. Seconded by Commissioner Jones and carried unanimously 4-0.

4. Matters From Public – There were no items.

5. Matters From City Attorney

City Attorney Kurt Ardaman stated that the approval of the Johns Lake Urban Village Planned Unit Development (UVPUD) has been challenged by Adam Garcia, who had spoken at the public hearing on the item. He noted that a petition for writ of certiorari has been filed and that the City will defend accordingly.

6. Matters From City Manager - Jon C. Williams

Establish budget hearing dates for fiscal year 2026–2027

City Manager Jon C. Williams noted that the item regarding the first and second public hearing dates for the fiscal year 2026–2027 budget was addressed in conjunction with the proposed millage rate item (Item 3B) earlier in the meeting.

First Amendment to the HUD Interlocal Cooperation Agreement with Orange County for Community Development Programs under the Urban County Program

City Manager Jon C. Williams stated that he would like to add one item to the agenda: The First Amendment to the HUD Interlocal Cooperation Agreement between the City and Orange County. He explained that the amendment updates the 2023 HUD Interlocal Cooperation Agreement to bring the City into compliance with new HUD requirements issued in Community Planning and Development (CPD) Notice 26-08, dated May 5, 2026. He noted an executed copy must be returned to the County by July 31, 2026, necessitating tonight's addition to the agenda. Furthermore, he stated that the amendment revises the agreement's cooperation and compliance provisions to ensure the City and County remain eligible for Community Development Block Grant (CDBG), HOME Investment Partnerships (HOME), and Emergency Solutions Grant (ESG) funding during the next urban county qualification cycle. Staff recommended approval.

Motion by Commissioner Sharman to approve the First Amendment to the HUD Interlocal Cooperation Agreement with Orange County for Community Development Programs under the Urban County Program and authorize Mayor Pro Tem execute agreement. Seconded by Commissioner Johnson and carried unanimously 4-0.

7. Matters From Mayor and Commissioners

Commissioner Jones thanked staff for their hard work.

Commissioner Johnson thanked staff for their hard work and expressed appreciation for residents attending the meeting and staying informed about the community.

Commissioner Sharman shared an inspirational video and discussed the book *Inner Excellence*, emphasizing positivity, teamwork, and finding common ground despite differing viewpoints. He also encouraged continued dialogue regarding the property tax amendment.

Mayor Pro Tem Bennett thanked police, fire, and City staff for their hard work.

8. Adjourn

The meeting adjourned at 7:05 p.m.

ATTEST:

City Clerk Ronisha Martin

APPROVED:

Mayor John Rees

WINTER GARDEN
FLORIDA

Proclamation

26-11

Whereas, Healthy West Orange was launched in 2016 to inspire healthy behaviors and provides resources to help residents make better lifestyle choices; and

Whereas, for the past 10 years, Healthy West Orange has united residents, organizations, businesses, schools, and local governments around the shared vision of creating one of the healthiest communities in the nation; and

Whereas,, Healthy West Orange champions programs, events, and initiatives that encourage healthy lifestyles and meaningful community engagement; and

Whereas, Healthy West Orange advocates healthy community decisions and encourages local leaders to keep their communities' health and wellness a top priority; and

Whereas, the West Orange Healthy Selfie campaign was established in 2016 as a fun and engaging way to encourage residents to celebrate healthy living and share positive wellness activities throughout the community; and

Whereas,, Healthy West Orange declares the third Friday in September as the Annual West Orange Healthy Selfie Day.

Therefore, it is my great pleasure and privilege as the Mayor of City of Winter Garden to declare Friday, September 18, 2026 as

West Orange Healthy Selfie Day

and in celebration of the 10th Anniversary of Healthy Selfie, I urge all citizens to join in supporting this initiative.

In witness thereof, I have hereunto set my hand and caused the City Seal to be affixed this 13th day of August 2026.

CITY OF WINTER GARDEN · WINTER GARDEN · ORANGE COUNTY · FLORIDA

John Rees

Mayor John Rees

Ronisha Martin

Ronisha Martin, City Clerk

CITY OF WINTER GARDEN · 1903 · 100th ANNIVERSARY · 2003 · FLORIDA

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Kelly Carson, Planning Director

Via: City Manager Jon C. Williams

Date: August 6, 2026 **Meeting Date:** August 13, 2026

Subject: **Ordinance 26-24**
CITY OF WINTER GARDEN COMPRESSIVE PLAN 2050

Issue: Ordinance 26-24 - Amending the Winter Garden Comprehensive Plan (Winter Garden 2050).

Discussion:

Pursuant to Section 163.3177, Florida Statutes, all counties and municipalities in Florida are required to prepare and maintain a long-range Comprehensive Plan to guide future growth and development. As part of this responsibility, local governments must continually monitor a wide range of community characteristics, including population growth, land development, public facilities and services, and environmental resources. The Comprehensive Plan establishes the community's long-term vision by setting forth goals, objectives, and policies that guide future land use decisions, capital investments, budgeting, and other governmental actions. Because communities and state laws evolve over time, the Comprehensive Plan must also be periodically updated through amendments, revisions to implementation strategies, and comprehensive evaluations.

Section 163.3191, Florida Statutes, requires each local government to periodically complete an Evaluation and Appraisal (EA) of its Comprehensive Plan to ensure it remains relevant and consistent with current conditions and state requirements. The City last completed an EA in 2009 and adopted a series of EA-based amendments in 2010, establishing a planning horizon through the year 2020.

The proposed EA-based amendments update the Comprehensive Plan to reflect changes in state law since the 2010 adoption, clarify existing policies, more accurately reflect current practices, procedures, and community conditions, and revise outdated references and definitions. The amendments also extend the City's planning horizon to 2050, update the community vision, evaluate level of service standards for public facilities, and identify opportunities and strategies to address the City's current and future needs while supporting orderly, sustainable growth.

Recommended Action:

Staff recommends approval of Ordinance 26-24 and to permit City Staff to transmit the EA-based amendment and supporting documents to the State and all other reviewing agencies as required pursuant to Section 163.3184(3)(b), Florida Statutes.

Attachment(s)/References:

Ordinance 26-24

Attachment A – Goals, Objectives, & Policies

Attachment B – Data & Analysis

Attachment C – Public Engagement Summary

Attachment D – Staff Report

Statutes Matrix

Business Impact Estimate

ORDINANCE 26-24

AN ORDINANCE OF THE CITY OF WINTER GARDEN AMENDING THE WINTER GARDEN COMPREHENSIVE PLAN TO ADDRESS CHANGES TO STATE STATUTES, EXTENDING THE PLANNING HORIZON TO 2050, AMENDING THE FUTURE LAND USE MAP SERIES, AND AMENDING VARIOUS ELEMENTS OF THE COMPRHENESIVE PLAN TO IMPLEMENT THE COMMUNITY VISION; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE

WHEREAS, on the 13th of June, 1991, the City Commission of the City of Winter Garden adopted Ordinance 91-16 which adopted a new Comprehensive Plan for the City of Winter Garden, and on the 24th of June, 2010, the City Commission of the City of Winter Garden adopted Ordinance 10-19 readopting and amending the Comprehensive Plan for the City of Winter Garden; and

WHEREAS, the City desires to update the Winter Garden Comprehensive Plan to incorporate goals, objectives, and policies that are consistent with the community's vision, current conditions, and changes to Florida Statutes Section 163 since the Comprehensive Plan was last updated in June of 2010; and

WHEREAS, the City Commission has considered the data and analysis (Attachment B), public engagement summaries (Attachment C), and staff report (Attachment D) as supporting documentation; and

WHEREAS, pursuant to Section 163.3174, FS, the Local Planning Authority (Planning and Zoning Board) conducted a public hearing, with due public notice having been provided, Amendment on August 3, 2026; and

WHEREAS, pursuant to Section 163.3184, FS, the City Commission on August 13, 2026, held an initial public hearing and authorized transmittal of the Amendment to the FloridaCommerce for written comment, and

WHEREAS, pursuant to Section 163.3184, FS, the City Commission conducted an adoption public hearing, with due public notice having been provided, on the Amendment on [ENTER DATE]; and

WHEREAS, the comprehensive plan amendment set forth in herein is in-compliance with state law, and is in the best interest of all the health, safety, and welfare of the public.

IT IS HEREBY ORDAINED BY THE CITY OF WINTER GARDEN AS FOLLOWS:

SECTION 1. Recitals. The above recitals are hereby incorporated by reference and shall constitute the legislative findings of the City Commission of the City of Winter Garden.

SECTION 2: Adoption. The Comprehensive Plan of the City of Winter Garden is hereby amended to be in line with Attachment A (words that are underlined are additions; ~~stricken-through~~ provisions are being deleted).

SECTION 3: **Adoption of Relief Concerning Declared Emergency.** The Comprehensive Plan of the City of Winter Garden is further hereby amended to add the following Policy:

Policy 1-1.1.1: Relief Concerning Declared Emergency. The purpose of this policy is to address the restrictions of Section 28 of Chapter 2025-190, Laws of Florida. This policy shall sunset and expire on October 1, 2027 unless extended pursuant to the provisions of Section 28 of Chapter 2025-190, Laws of Florida or otherwise by general law, and if extended will automatically sunset and expire when such extension expires. If Section 28 of Chapter 2025-190, Laws of Florida is repealed or expires as it applies to the city, this policy shall automatically expire simultaneously therewith. If Section 28 of Chapter 2025-190, Laws of Florida is substantially amended after the effective date of this section, the Planning & Zoning Director may freeze use of this policy and any implementing land development regulation until an amendment to this policy is adopted to incorporate the amendments made to Section 28 of Chapter 2025-190, Laws of Florida. If a court of competent jurisdiction issues an injunction against the enforcement of or declares invalid or unconstitutional Section 28 of Chapter 2025-190, Laws of Florida, the Planning and Zoning Director may freeze use of this policy and any implementing land development regulation until an amendment to this policy is adopted or it is repealed.

If an authorized applicant for a development order believes that any city-initiated amendment to land development regulations and Comprehensive Plan, that occurred after August 1, 2024 is "more restrictive or burdensome" than existed prior to August 1, 2024, the applicant may file an application with the City to have the version of land development regulations and the Comprehensive Plan existing as of August 1, 2024 apply to and govern the development order application at issue subject and pursuant to a process to be adopted in the land development regulations of the City of Winter Garden. The City has adopted a land development regulation by Ordinance 25-23 implementing this policy (which is further ratified by the adoption of policy), and the City may further amend such land development regulation ordinance from time to time in its legislative discretion.

SECTION 4. Codification. Sections 2 and 3 of this Ordinance shall be codified and made part of the City of Winter Garden Comprehensive Plan.

SECTION 5. Severability. If any portion of this Ordinance is determined to void, unconstitutional, or invalid by a court of competent jurisdiction, the remainder of this Ordinance shall remain in full force and effect.

SECTION 6. Conflicts. In the event of a conflict or conflicts between this ordinance and

other ordinances, this ordinance controls to the extent of the conflict..

SECTION 7. Effective date. This Ordinance shall become effective after adoption in accordance with general law.

FIRST READING: _____, 2026

SECOND READING: _____, 2026

PASSED AND ADOPTED on second reading this _____day of _____2026.

CITY COMMISSION
CITY OF WINTER GARDEN, FLORIDA

_____
By: John Rees, Mayor

ATTEST:

_____
Ronisha Martin, City Clerk



COMPREHENSIVE PLAN
WINTER GARDEN
2050
Rooted in Tradition
Growing Strong Communities

GOALS, OBJECTIVES, & POLICIES

Table of Elements

Element Number	Element Name
1	Future Land Use
2	Multimodal Transportation
3	Housing
4	Public Facilities
5	Conservation
6	Recreation and Open Space
7	Intergovernmental Coordination
8	Capital Improvement
9	Public Schools Facilities
10	Property Rights



FUTURE LAND USE

Table of Contents

Goal 1-1: Maintain the City's Character 3
Objective 1-1.1: Emergency Relief 3
Objective 1-1.2: Land Development Regulations 4
Objective 1-1.3: Future Land Use Map Series and Land Use Categories 9
Goal 1-2: Quality Community Development 25
Objective 1-2.1: Activity Centers 26
Objective 1-2.2: Targeted Development Areas 35
Objective 1-2.3: Future Development 38
Objective 1-2.4: Redevelopment 44
Objective 1-2.5: Natural Resources 46
Objective 1-2.6: Resource Planning & Management Plans 48
Objective 1-2.7: Utility and Infrastructure Planning 48
Objective 1-2.8: Historic Downtown District 51
Objective 1-2.9: Private Energy Efficiency Plan 52
Objective 1-2.10: Public Energy Efficiency Plan 54
Goal 1-3: Wekiva Parkway & Protection Act 54
Objective 1-3.1: Protection of Recharge and Natural Habitat 55

Goal 1-1: ~~Goal 1-1~~ Maintain the City's Character

~~Ensure the City of Winter Garden m~~Maintain Winter Garden's ~~s its low density residential character~~small town charm while ~~at the same time providing for the most effective provision of services, to~~ promoting~~e~~ sustainable community development, ~~to promote conscientious~~ economic development ~~in the appropriate locations~~, ~~to promote a concentration of~~ mixed land uses in ~~specific~~ designated areas, ~~to promote~~ and quality infill and redevelopment. ~~which strengthens the character of the City, to~~ P~~p~~rotect sensitive natural areas by directing growth ~~to environmentally~~ to appropriate areas~~,~~ and prohibit ~~those uses which are~~ incompatible uses. In short, to be the best small City in the State of Florida.~~(9J-5.006(3)(A))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 1-1.1: Emergency Relief

Apply Section 28 of Chapter 2025-190, Laws of Florida providing emergency relief to developers and landowners related to more restrictive or burdensome City-initiated amendments to its land development regulations and Comprehensive Plan.

Policy 1-1.1.1: Relief Concerning Declared Emergency.

The purpose of this policy is to address the restrictions of Section 28 of Chapter 2025-190, Laws of Florida. This policy shall sunset and expire on October 1, 2027 unless extended pursuant to the provisions of Section 28 of Chapter 2025-190, Laws of Florida or otherwise by general law, and if extended will automatically sunset and expire when such extension expires. If Section 28 of Chapter 2025-190, Laws of Florida is repealed or expires as it applies to the city, this policy shall automatically expire simultaneously therewith. If Section 28 of Chapter 2025-190, Laws of Florida is substantially amended after the effective date of this section, the Planning & Zoning Director may freeze use of this policy and any implementing land development regulation until an amendment to this policy is adopted to incorporate the amendments made to Section 28 of Chapter 2025-190, Laws of Florida. If a court of competent jurisdiction issues an injunction against the enforcement of or declares invalid or unconstitutional Section 28 of Chapter 2025-190, Laws of Florida, the Planning and Zoning Director may freeze use of this policy

and any implementing land development regulation until an amendment to this policy is adopted or it is repealed.

If an authorized applicant for a development order believes that any city-initiated amendment to land development regulations and Comprehensive Plan, that occurred after August 1, 2024 is "more restrictive or burdensome" than existed prior to August 1, 2024, the applicant may file an application with the City to have the version of land development regulations and the Comprehensive Plan existing as of August 1, 2024 apply to and govern the development order application at issue subject and pursuant to a process to be adopted in the land development regulations of the City of Winter Garden. The City has adopted a land development regulation by Ordinance 25-23 implementing this policy (which is further ratified by the adoption of policy), and the City may further amend such land development regulation ordinance from time to time in its legislative discretion.

Objective 1-1.2: ~~Objective 1-1.1:~~ Land Development Regulations

~~The City will c~~Continue to apply the land development regulations that implement the comprehensive plan to guide future growth and development and discourage urban sprawl. ~~(9J-5.006(3)(b)8.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.2.1: ~~Policy 1-1.1.1:~~ The Land Development Regulations Implementation

The City shall continue to enforce the adopted land development regulations which contain specific and detailed provisions required to implement the Comprehensive Plan and which:

(1) Regulate the subdivision of land.~~(9J-5.006(3)(c)1.)~~

(2) Regulate the uses of land and water consistent with this Element.

~~(2)~~(3) ~~and e~~Ensure the compatibility of adjacent land uses in Orange County, Ocoee, and Oakland.~~(9J-5.006(3)(c)2.)~~

~~(3)~~(4) Provide for open space.~~(9J-5.006(3)(c)4.)~~

~~(4)~~(5) Protect environmentally sensitive lands. ~~including wetlands designated on the Future Land Use Map Series by requiring the use of buffering, minimum building setbacks, preservation of~~

~~natural vegetation, and by prohibiting any activity which impairs the natural function of these lands.(9J-5.006(3)(c)6.)~~

~~(5)~~(6) Regulate areas subject to seasonal and periodic flooding and provide for drainage and stormwater management ~~by adopting Flood Hazard Boundary Maps, by establishing floodproofing measures, by adopting a stormwater management ordinance which establishes retention requirements and storm events and by requiring a St. Johns River Water Management District permit or exemption letter.(9J-5.006(3)(c)1.) (9J-5.006(3)(c)4.)~~

~~(6)~~(7) Protect potable water wellfields and aquifer recharge areas ~~by establishing a cone of influence, by prohibiting the storage of hazardous waste within this cone, and by requiring porous surfaces for any developed land area.(9J-5.006(3)(c)6.)~~

~~(7)~~(8) Regulate signage.~~(9J-5.006(3)(c)1.)~~

~~(8)~~(9) Ensure safe and convenient on-site traffic flow and cross-connections between adjacent properties ~~vehicle parking needs.(9J-5.006(3)(c)4.)~~

~~(9)~~(10) Ensure ~~Provide that~~ development orders ~~and permits shall~~ are not ~~not be~~ issued ~~which~~ if they result in a reduction ~~of the level of services for the affected public facilities~~ below the level of service standards ~~adopted in this Comprehensive Plan~~, and at a minimum, ~~that~~ these facilities and services shall be available concurrent with ~~the impacts of~~ development impacts.~~(9J-5.006(3)(c)3.)~~

(11) Require data and analysis for future land use map amendments demonstrating that adequate ~~water supplies and associated~~ public facilities are available to meet projected growth demands.~~.~~

(12) In designated areas of the City with established design standards, ensure the implementation of high-quality design, architecture, and multi-modal-oriented development.

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 09-59, 01/28/2010~~

(13) ~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.2.2: ~~Policy 1-1.2.17:~~ Adaptive Reuse Standards

The land development code shall contain standards to ensure compatibility between converted commercial/offices uses and adjacent residential properties, including ~~address~~ minimum lot size, buffers, and aggregation of lots, and design standards. ~~for conversion of single family homes to office or commercial for lots in the Residential-Neighborhood Commercial, Downtown Transitional, and Traditional Downtown land uses~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.2.3: ~~Policy 1-2.1.9:~~ Transit, Bike, and Pedestrian Supportive Land Development Regulations

The City shall continue to monitor its Land Development Code and design guidelines to ensure design and development standards support pedestrian/bike movement and use of transit. These standards shall address building orientation and setbacks; direct pedestrian/bike pathways between public sidewalk systems and building entrances; elimination of pedestrian/bike and transit impediments such as landscaping, drainage swales, and buffer walls; location of transit stops; transit easements and aisles; transit shelters, waiting areas, and seating; parking location and internal pedestrian circulation; building architecture and pedestrian-oriented facades; bicycle ~~parking~~ facilities; and guidelines for the location, design, accessibility, and appearance of parking garages.

Policy 1-1.2.4: ~~Policy 1-4.1.8: Architectural~~ Public Amenities Design Standards

The City shall ~~-maintain will provide a coordinated set of architectural and development~~ design guidelines for ~~- landscaping,~~ public amenities and infrastructure, including ~~,~~signage, ~~median beautification~~landscaping within rights-of-way, parking garages, ~~and~~ pedestrian/bike areas, and transit areas. ~~These design guidelines will further improve multi-modal opportunities by creating continuous, direct and convenient pedestrian linkages between buildings and public pedestrian systems and transit stops; establish standards for the provision of transit facilities, pedestrian system amenities, and bicycle parking; and give higher priority in site design for the accommodation~~

~~of multi-modal transportation over facilities exclusively for automobiles, particularly single-occupant automobile trips.~~ The Land Development Code shall include incentives or bonuses to encourage implementation of the preferred development design standards.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.2.5: ~~Policy 1-1.2.18:~~ Updates to the Land Development Regulations

The City ~~will~~ shall continue to update the Land Development Regulations as warranted to ensure consistency with amendments to the comprehensive plan.

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Objective 1-2.8: Innovated Regulation.~~

~~To ensure the City's Land Development regulations provide up to date regulations with the changing trends in land development by the time frames set forth in the policies below.~~ ~~(9J-5.006(3)(b)10.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-1.2.6: ~~Policy 1-2.3.10:~~ Rezoning Criteria

No petition for a rezoning ~~may~~ shall be approved unless evidence is presented to the City Commission's satisfaction that determines that:

(1) ~~(1)~~ The request is consistent with the Comprehensive Plan and the Future Land Use Map, ~~and~~

(2) ~~(2)~~ The proposed rezoning will not substantially devalue or prevent reasonable use and enjoyment of the adjacent properties, ~~and~~

(3) ~~(3)~~ Adequate facilities are available or a development agreement has been established that will provide these improvements in a reasonable time frame, ~~and~~

(4) ~~(4)~~ The proposed rezoning will not allow a type or intensity of development that is premature or presently out of character in relationship to the surrounding area, ~~and~~

(5) ~~(5)~~ The rezoning will not interfere with an adjacent property owner's reasonable expectation of use or enjoyment, and~~.~~

~~(6)~~ The rezoning will not lower the Level of Service of roads ~~significantly increase the vehicular traffic~~ in adjacent residential neighborhoods unless the developer mitigates the proposed traffic deficiencies.

~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-1.2.7: ~~Policy 1-2.8.2:~~ Planned Development Regulations~~PUD Ordinance.~~

The City shall periodically review its existing Planned ~~Unit~~ Development ~~Ordinance~~ Regulations and shall make changes if necessary.

~~Policy: 1-2.14.3:~~

Policy 1-1.2.8: Complimentary Land Uses

The City shall maintain a land development code that allows for ~~will identify and facilitate~~ the inclusion of complementary land uses to residential areas ~~not already present in the zoning districts~~ such as ~~supermarkets~~grocery stores, parks and recreational fields, and schools, to ~~reduce the vehicle miles traveled and~~ promote ~~bicycling and walking to these uses~~multiple modes of transportation.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.2.9: ~~Policy 1-2.14.4:~~ Uses Near Employment Centers

The City ~~will~~ shall maintain a land development code that ~~review and revise zoning classifications as necessary to~~ allows local-serving businesses such as childcare centers, restaurants, banks, family medical offices, drugstores, and other similar services near employment centers. ~~to minimize midday vehicle use~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.2.10: Housing Variety

The City shall consider amending the Land Development Code to allow for additional housing types in appropriate zoning districts.

Policy 1-1.2.11: Accessory Dwelling Units (ADU)

The City shall consider expanding the number of zoning districts that allow ADUs, where appropriate.

~~Objective 1-1.1:~~Objective 1-1.3: ~~Objective 1-1.2:~~ Future Land Use Map Series and Land Use Categories

~~The City of Winter Garden shall~~I ~~i~~mplement all land use categories, ordinances, regulations and policies pertaining to development necessary to ensure consistency with all elements of the comprehensive plan. ~~The City shall continue~~Continue to maintain and manage the Future Land Use Map, ~~as shown in Figure 1.1.~~ ~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-1.1.1:~~Policy 1-1.3.1: ~~Policy 1-1.2.1:~~ Establishment of Intensities and Densities

~~It is t~~The City shall establish ~~'s intent that for other types of development applications,~~a range of intensities and densities ~~will be established consistent with the ranges of the~~for each specific land use category as stated in this element, Table 1-1, and on the Future Land Use Map. ~~It shall be the policy of the City to establish~~The final intensity~~ies~~ and density~~ies~~ for a specific development and redevelopment project~~s~~ ~~with~~ shall be determined during the final site plan.

~~Added by Ordinance 10-19, 06/24/2010~~

Table 1-1: Future Land Use Districts

FLU Category	Range or Max Intensity/ Gross Density	Max Stories	Zoning Classification
Suburban Residential	Max Gross Density 4 du/ac	2 stories	PUD, R-1A & R-1
Low Density Residential	Gross Density Range 2 - 6 du/ac and up to 9 du/ac for workforce/low income housing with a maximum of 10 acres	2 stories	PUD, R-1A, R-1, R-2 & R-1B
Medium Density Residential	Gross Density Range 3-15 du/ac	3 stories	CAPUD, PUD, R-2 & R-3
Medium / High (M/H) Density Residential	Max Gross Density 20 du/ac	4 stories	PUD
Residential-Neighborhood Commercial	Intensity 0.35 FAR Max Gross Density 6 du/ac	2 stories	RNC, RNC-2, PUD & PCD
Commercial	Intensity 0.35 FAR or 2.0 by Activity Center development bonus Residential uses are permitted but must be secondary to primary commercial uses. Max Gross density 10 du/ac and up to 30 du/ac by Activity Center development bonus.	3 stories [1]	C-1, C-2, C-3, C-4, PCD & CAPUD
Downtown Transitional	Intensity 0.35 FAR Gross density 10 du/ac Minimum of 35% residential uses.	3 stories	RNC, PUD, PCD, C-1, C-2, CAPUD & C-3.
South Beltway Center	Intensity 0.4 FAR and up to 0.5 FAR including residential development	Commercial: 7 stories Residential 2 stories	PCD
Industrial	Intensity 0.35 FAR and up to 0.5 FAR by Activity Center development bonus	3 stories	I-1, I-2, PID, & CAPUD.
Conservation	Intensity 0.2 FAR	2 stories	All districts
Urban Village	Intensity 0.3 FAR, Max Gross Density 4 du/ac, except in the Village Center where max is 12 du/ac.	2 stories	UVPUD & R-6.

Traditional Downtown	Intensity 0.75 FAR and up to 4.0 FAR by Activity Center development bonus. Residential development only allowed as part of a mixed-use development with non-residential uses. Max Gross Density 25 du/ac and up to 50 du/ac by Activity Centers development bonus	3 stories [1]	PUD, PCD, R-NC, RNC-2, C-1, C-2, C-3 & C-4
Multi Use Development	Intensity 0.5 FAR and up to 2.0 FAR by Activity Center development bonus. Max Gross Density 10 du/ac and up to 30 du/ac by Activity Centers development bonus.	3 stories [1]	R-3, RNC-2, C-2, C-3, C-4, I-1, PCD, PUD & CAPUD
Multi Office Industrial	Intensity 0.35 FAR and up to 0.75 FAR by Activity Center development bonus.	3 stories [1]	C-2, C-3, C-4, I-1, I-2, PID & PUD
Institutional	Intensity 0.35 FAR	3 stories	All districts
Neighborhood Residential	Gross Density Range 2 - 6 du/ac and up to 10 du/ac by development bonus.	2 stories	PUD, R-NC, R-2, R-4 & R-5
Neighborhood Mixed-Use	Intensity 0.75 FAR and up to 3.0 FAR by development bonus Max Gross Density 10 du/ac and up to 20 du/ac by development bonus.	4 stories	RNC-2, RNC, C-3, C-4, PCD, PUD & CAPUD.

[1] Maximum height may exceed maximum stories in table if located within an Activity Center. See Table 1-2 for maximum height.

Policy 1-1.3.2: ~~Policy 1-1.2.2:~~ Suburban Residential

~~Properties designated with the~~ Suburban Residential ~~land use category are required to be developed at a gross residential density no greater than 4 dwelling units per acre and~~ shall ~~will~~ be allowed ~~identified on the Future Land Use Map only~~ in areas that are either similar in nature (i.e. have the same type of density of existing neighborhoods) or where environmental factors require low residential densities. ~~-~~Factors in determining this land use category included proximity to natural resources and urban services, availability of public facilities, and the characteristics of nearby existing and future neighborhoods.~~. Churches and schools may be allowed via a Special Exception Permit. The zoning classifications that are consistent with the Suburban Density classification are PUD, R-1A, R-1, and INT. (FS 163.3177(6)(a)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.3: ~~Policy 1-1.2.3:~~ Low Density Residential

~~**Policy 1-1.1.2:** Properties designated with the~~ Low Density Residential land use category ~~are required to be developed at a gross residential density between 2 to 6 dwelling units per gross acre and up to 9 units per gross acre for workforce/low income housing with a maximum of 10 acres and~~ shall ~~will~~ be allowed ~~identified on the Future Land Use Map only~~ in areas that have ~~the~~ urban services and public facilities that can accommodate a higher density of residential housing. ~~-~~Factors in determining the location ~~of this land use category~~ include~~d~~ proximity to natural resources and urban services, availability of public facilities, and the characteristics of nearby existing and future neighborhoods. ~~Churches and schools are allowable uses in the Low Density areas that are zoned R-2 and in specified areas of PUDs and via a Special Exception Permit in all other allowable zoning classifications. The zoning classifications that are consistent with the Low Density Residential classification are PUD, R-1A, R-1, R-2, R-1B, and INT. (FS 163.3177(6)(a)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.4: ~~Policy 1-1.2.4:~~ Medium Density Residential

~~Properties designated with the Medium Density Residential land use category are required to be developed at a gross residential density between 3 to 10 dwelling units per gross acre.~~ Medium Density Residential areas shall have access to a major collector, or higher functional classification, street. ~~-~~Development should provide amenities including recreation, open space, and buffering to provide additional protection if there are adjacent low density residential areas. ~~The zoning classifications that are consistent with the Medium Density Residential Classification are PUD, R-2, R-3, and INT. Churches and schools are allowable uses in the Medium Density areas that are zoned R-2 and R-3. FS 163.3177(6)(a)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.5: ~~Policy 1-1.2.5:~~ Medium / High (M/H) Density Residential

The intent ~~of this Future Land Use Classification~~ is to provide a slightly higher density than the Medium Density Residential Classification for multifamily complexes that provide a high degree of amenities such as gated entranceways, pools, passive and active recreational areas for both adults and for children, fitness centers, indoor basketball and/or racquetball courts, covered parking, and have heavily landscaped grounds with semi-mature canopy trees. ~~A maximum of 13 units per acre can be achieved in this future land use. The two zoning classifications that are consistent with the Medium / High Density Residential classification is the PUD and INT zoning districts. Churches and schools are allowable uses in the Medium / High Density Residential classification if clearly identified in the PUD zoning ordinance.~~

~~Added by Ordinance 03-18, 12/11/2003~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.6: ~~Policy 1-1.2.6:~~ Residential-Neighborhood Commercial

~~Properties designated with the Residential-Neighborhood Commercial land use category are required to be developed at a floor area ratio not greater than 0.35. Gross residential density shall be not greater than 6 dwelling units per acre. All uses shall have a maximum height of 35 feet.~~

This designation shall provide for a mixture of permitted low density residential uses and neighborhood commercial and professional uses. ~~The mix should have a minimum of 80% residential uses .~~ Uses should be located on collector and minor arterial streets close to low density residential areas. ~~The zoning classifications that are consistent with the Residential Neighborhood Commercial classification is RNC and INT.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.7: ~~Policy 1-1.2.7:~~ Commercial

~~**Policy 1-1.1.3:** Properties designated with the Commercial land use category are required to be developed at a floor area ratio not greater than 0.35 and a floor area ratio not greater than 2.0 by development bonus inside Activity Centers. Where residential uses are permitted, they shall be secondary to primary commercial uses and the gross residential density shall not be greater than 8 dwelling units per acre and up to 30 dwelling units per acre by development bonus in Activity Centers. Maximum building height is three stories and up to five stories by development bonus in activity centers.~~ The Commercial land use category shall include retail, service, and professional activities. ~~-~~ Uses shall be developed in a manner which is harmonious to nearby noncommercial use and which minimize traffic congestion. ~~-~~All commercial activity in this ~~commercial land use~~ category shall be adjacent to arterials or major collectors. ~~The City shall identify different zoning districts for highway commercial, general commercial, professional / medical districts, and downtown commercial districts in the commercial land use category. Development may exceed the stated 0.35 floor area ratio only by development bonus, no development rights are guaranteed at intensities or densities above the stated permitted range. Additional zoning restrictions per each zoning district may apply. The zoning Classifications what are consistent with the Commercial classification are C-1, C-2, C-3, C-4, PCD, CAPUD and INT.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.8: ~~Policy 1-1.2.8:~~ Downtown Transitional

~~Properties designated with t~~The Downtown Transitional land use ~~category are required to be developed at a floor area ratio not greater~~

~~than 0.35. Gross residential density shall not be greater than 10 dwelling units per acre. This designation~~ shall provide for a mixture of residential and commercial uses on the border of the area identified as the Traditional Downtown future land use. ~~-~~The mixture of uses shall require a combination of low density residential, medium density residential and commercial land uses to allow for development in a traditional downtown form. ~~-~~This includes a mixture which has a minimum of 35% residential uses. ~~-~~The mixture may occur either vertically as multi-story buildings or horizontally as a combination of uses. ~~Development shall be limited to a maximum of three (3) floors (35 feet plus with roof line) with each floor not to exceed 13 feet from floor to ceiling. The intensity of use shall be as regulated by design standards which are developed as a part of the approved site plan specific to each site.~~ Any proposed development within the downtown transitional designation shall provide for a transition to adjacent existing land uses through appropriate site design.

~~Policy 1-1.1.4:~~ ~~-~~Design standards shall incorporate features similar to the attributes and characteristics in the historic downtown area including a traditional "Main Street" theme. ~~-~~Use should be oriented to Plant Street and, if appropriate, be designed to incorporate the West Orange Trail, on~~-~~street parking, pedestrian-oriented retail, brick pavers, and transit use to create a multi-use and multi-modal development. ~~The zoning classifications that are consistent with the Downtown Transitional land use category is RNC, PUD, PCD, C-1, C-2, CAPUD and C-3 and INT.~~

~~Amended by Ordinance 01-39, 02/28/2002~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.9: ~~Policy 1-1.2.9:~~ South Beltway Center

~~Properties designated with t~~The South Beltway Center land use ~~category are required to be developed at a floor area ratio not greater than 0.4 and up to a total floor area ratio of 0.5 including residential development. This designation~~ shall provide for a mix of commercial, office, and residential uses at the northeast quadrant of the interchange at CR 535 and the Beltway (SR 429), known as the Winter Garden Village at Fowler Groves and contains a DRI under the same name. The intent is to provide for a commercial center with a variety of regional, community and neighborhood shopping, dining and entertainment uses. Office and residential uses are also allowed and

may occur as separate parcels and buildings from the commercial uses or within mixed use buildings. ~~The uses must be integrated by road connections, pedestrian connections and architectural features.~~ This land use classification is intended to provide for a combination of commercial land uses for a regional market that could not be accommodated collectively by the downtown commercial district. ~~The mix and distribution of uses as a percentage of the square footage of the entire development at build-out of the referenced phase shall be as follows:~~

	~~% Distribution~~	
~~Land Use[1]~~	~~Phase 1~~	~~Phase 1 and 2~~
~~Commercial[2]~~	~~73%~~	~~66%~~
~~Office[2]~~	~~0%~~	~~3%~~
~~Residential[3]~~	~~27%~~	~~31%~~

~~Notes:~~

~~1— Land use distributions are measured in square feet (s.f.) for each use.~~

~~2— These uses are measured in Gross Leasable Area s.f. (GLA).~~

~~3— Residential uses are measured using the minimum square footage of the dwelling units (1,200 s.f./DU) multiplied times the number of dwelling units.~~

~~This 174.8-acre development shall be processed as a Planned Commercial Development. Development shall consist of no more than 1,150,000 s.f. of retail/service space and 350 multi-family residential units in Phase 1; and no more than 60,000 s.f. of office space and 100 multi-family residential units in Phase 2, or as otherwise approved through the Development of Regional Impact process and the PCD zoning process. Commercial Buildings will have a maximum height of 50 feet, but may not exceed 35 feet within 300 feet of existing adjacent residential uses outside of the project (Stonecrest west of Daniels Road) and may not exceed 35 feet within 125 feet of adjacent residential uses which are proposed, but not built (Stonecrest east of Daniels Road). Clock towers and other similar architectural features may have a~~

~~maximum height of 50 feet, but may not be closer than 400 feet to adjacent residences existing as of October 1, 2004. Residential buildings shall have a maximum height of 38'. Non-residential uses may not exceed a Floor Area Ratio (FAR) of 0.40, the overall FAR for residential and non-residential uses combined may not exceed 0.50. The intensity of use shall be further regulated through the PCD zoning and site plan approvals based on design standards to be developed as part of those approvals.~~

- ~~**Residential uses adjacent to a South Beltway Center site shall be properly buffered from non-residential uses through the provision of land use transitions, such as, barriers, screening materials and/or building setbacks to be established with the zoning of the site.**~~
- ~~The zoning classifications that is consistent with the Beltway Center classification is Planned Commercial Development (PCD) and INT.~~

~~Amended by Ordinance 05-02, 09/07/2005 (Fowler Groves and Beltway Center)~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.10: ~~Policy 1-1.2.10:~~ Industrial

~~**Policy 1-1.1.5:** Properties designated with the Industrial land use category are required to be developed at a floor area ratio not greater than 0.35 and a floor area ratio not greater than 0.5 by development bonus inside Activity Centers.~~ Uses permitted in ~~this~~ the Industrial land use designation include light manufacturing, warehousing, wholesaling, research and development facilities and heavy industrial uses. ~~The zoning code may establish different levels of allowable intensity and uses.~~ These uses shall only be permitted ~~only~~ on arterial or heavily traveled collector streets adjacent to commercial areas. These uses may be located adjacent to residential areas as long as strict buffering requirements are met. ~~There shall be a 40 foot height limitation on all buildings. Development may exceed the stated 0.35 floor area ratio only by development bonus, no development rights are guaranteed at intensities or densities above the stated permitted range. The zoning classifications that are consistent with the Industrial classification are I-1, I-2, Industrial PUD, CAPUD, and INT.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.11: ~~Policy 1-1.2.11:~~ Conservation

~~**Policy 1-1.1.6:** Properties designated with the Conservation land use category are required to be developed at a floor area ratio not greater than 0.2.~~ Property assigned the Conservation land use designation shall be lands that are natural resources. ~~-~~It is the intent of this land use designation to provide for the ~~long term~~long-term protection and preservation of environmentally sensitive natural resources systems. Development shall be limited to passive recreation facilities such as boardwalk or conservation related facilities such monitoring facilities or educational trails. ~~-~~The developer of land adjacent to areas designated with the Conservation land use shall bear the burden of proof in determining that proposed development will not adversely impact conservation resources. ~~The zoning classifications that is consistent with the Conservation classification is CON and INT.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.12: ~~Policy 1-1.2.12:~~ Urban Village

~~Properties designated with t~~The Urban Village land use ~~category are required to be developed at a floor area ratio not greater than 0.3, and a residential density not greater than 4 dwelling units per acre, except in the Village Center where the residential density shall be not greater than 12 units per acre. This land use~~ designation shall be~~is~~ limited to those 658 ± acres identified on ~~Figure 1.2~~the Future Land Use Map. These parcels are located within the JPA-6 area as shown on Exhibit "B" of the Sixth Amendment to the Restated Interlocal Agreement for Joint Planning Area Between Orange County and the City of Winter Garden, Dated January 24, 2007 and were formally part of the Horizon West development in unincorporated Orange County that proposed the same type of development. ~~-~~Development in this area shall be characterized by a community Village structure that includes a Village, Village Center, and neighborhoods that may vary in size to facilitate recreation and pedestrian traffic while preserving natural systems. ~~and shall follow the development program below:~~

~~Use~~	~~Acres~~	~~Amount~~
~~Residential~~	~~531 ±~~	~~2,580~~

~~Commercial~~	~~20 ±~~	~~115,000 Sq Ft~~
~~Natural~~	~~107 ±~~	~~N/A~~

~~Notes: All parcel acreages and natural delineations are estimated. Actual determination of acreage shall be made at time of project specific Urban Village PUD rezonings. Through the annexation and initial comprehensive plan future land use map designation process involving parcels within the JPA 6- area annexed into the City's' municipal boundaries, the City Commission may designate additional parcels with the Urban Village future land use designation and accordingly. make administrative adjustments to the above referenced acreages.~~

~~Development in this future land use shall also be subject to the land development regulations adopted by the City for found OR the Urban Village PUD zoning designation and project specific Urban Village PUDs The City Commission shall have the authoritv when approving Project specific Urban Village PUDs to not count accessory dwelling units towards maximum residential densities of this policy. The zoning classifications that is consistent with the Urban Village land use designation is the Urban Village PUD and INT.~~

Policy 1-1.3.13: ~~Policy 1-1.2.13:~~ Traditional Downtown

~~Properties designated with t~~The Traditional Downtown ~~land use category are required to be developed at a floor area ratio not greater than 0.75 and up to a floor area ratio of 4.0 by development bonuses. Gross residential density shall be not greater than 25 dwelling units per acre and up to 50 dwelling units per acre by development bonus. Maximum building height is three stories and up to five stories by development bonus in activity centers. This~~ land use ~~is to~~ includes a variety of housing types and land uses in the defined downtown area. Any proposed residential development shall only be allowed as part of a mixed-use development with non-residential uses. ~~-~~Developments designed without adequate parking facilities will be required to participate in the downtown parking program. The variety of uses permits educational facilities, civic buildings and commercial establishments to be located within walking distance of private homes. The area is to be served by a network of paths, streets and lanes suitable

for pedestrians as well as multimodal transportation alternatives. This provides residents the options of walking, biking or driving to places within the downtown area. ~~-~~Present and future modes of transit are also considered during the planning stages.~~-~~ The Traditional Downtown land use designation shall be allowed only within the Traditional Downtown Activity Center.~~ Development may exceed the stated 0.75 floor area ratio or 25 dwelling units per acre only by development bonus, no development rights are guaranteed at intensities or densities above the stated permitted range. The zoning classifications that are consistent with the Traditional Downtown land use designation include PUD, PCD, R-NC, RNC-2, C-1, C-2, C-3, C-4, and INT.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.14: ~~Policy 1-1.2.14:~~ Multi Use Development

~~Policy 1-1.1.7:~~ ~~Properties designated with the Multi Use Development land use category are required to be developed at a floor area ratio not greater than 0.5 and up to a floor area ratio of 2.0 by development bonus in Activity Centers. Gross residential density shall be not greater than 8 dwelling units per acre and up to 30 dwelling units per acre by development bonus in Activity Centers. Maximum building height is three stories and up to five stories by development bonus in activity centers.~~ Mixed-use development shall ~~will~~ be encouraged in this land use where mixed uses may occupy the same building or same parcel. The Multi Use Development land use may be located along major collectors or roadways with a higher classification. Permitted uses shall include office, research and development, commercial, ~~high technology, support retail,~~ hotel/motel, ~~restaurants, personal services, professional services, business and financial institutions, office showrooms,~~ and multifamily residential uses. ~~-~~Development shall provide transit, bike, and ~~and~~ pedestrian-friendly design.~~ Development may exceed the stated 0.5 floor area ratio or 8 dwelling units per acre only by development bonus, no development rights are guaranteed at intensities or densities above the stated permitted range. The zoning classifications that are consistent with the Multi Use Development land use designation include R-3, RNC-2, C-2, C-3, C-4, I-1, PCD, PUD, CAPUD, and INT.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.15: ~~Policy 1-1.2.15:~~ Multi Office Industrial

~~Properties designated with the Multi Office Industrial land use category are required to be developed at a floor area ratio not greater than 0.35 and up to a floor area ratio of 0.75 by development bonus in Activity Centers. Maximum building height is three stories and up to five stories by development bonus in activity centers. The Multi Office Industrial land use shall be located in the northeast area of the City.~~ The Multi Office Industrial land use areas shall ~~should~~ be developed as planned office and industrial parks with extensive landscaping, coordinated parking, roadway connectors, and cross access. ~~-~~Permitted uses shall include office, research and development, ~~distribution facilities,~~ industrial, ~~support office uses, warehousing, office showroom, support~~ manufacturing, ~~assembly uses, industrial,~~ and support retail. ~~-~~Mixed-use development will be encouraged in this land use where mixed uses may occupy the same building or same parcel. ~~-~~Development shall provide transit, bike, and pedestrian-friendly design. ~~Development may exceed the stated 0.5 floor area ratio only by development bonus, no development rights are guaranteed at intensities or densities above the stated permitted range. The zoning classifications that are consistent with Multi Office Industrial land use designation include C-2, C-3, C-4, I-1, I-2, PID, PUD, and INT.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.16: ~~Policy 1-1.2.16:~~ Institutional

~~Properties designated with the Institutional land use category are required to be developed at a floor area ratio not greater than 0.35.~~ This land use may be located city-wide and consist primarily of existing public and semi-public facilities including: government administration buildings, public schools, not for profit educational institutions, hospital facilities, arts and cultural or civic facilities, essential public services and facilities, cemeteries, police, fire and emergency operation facilities, utilities, and other similar activities. ~~The zoning classifications that are consistent with the Institutional land use designation include Institutional and Parks and Recreation.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.17: Neighborhood Residential

The Neighborhood Residential designation shall provide for mostly residential uses on the east side of the Historic East Winter Garden Neighborhood, maintaining the traditional residential character of the area while allowing for a greater diversity of housing types to accommodate residents of various income levels and stages of life. Housing units shall consist of detached single-family structures as well as other housing types that supplement the neighborhood's housing supply and accommodate age-in-place solutions. Civic, nonprofit, and other institutional development that provides vital services to the neighborhood shall also be part of this category. Development bonuses may awarded for creating affordable/workforce housing, high quality / contextual design, and as established by the Density Bonus Program.

Policy 1-1.3.18: Neighborhood Mixed-Use

The Neighborhood Mixed-Use designation shall provide for residential and neighborhood oriented commercial uses on the west side of the Historic East Winter Garden Neighborhood, maintaining the traditional neighborhood character of the area while allowing for a greater diversity of housing types to accommodate residents of various income levels and stages of life. Smaller, neighborhood-scale mixed-use development will be encouraged in this land use where multiple uses may occupy the same building or same parcel. The mixture of uses shall allow for development in a traditional neighborhood form. Development shall be oriented towards the roads, with on-street parking, street-oriented retail storefronts, street trees and furnishings, and trail connections to create a multi-modal and pedestrian-friendly area. Development bonuses may awarded for creating affordable/workforce housing, high quality / contextual design, and as established by the Density Bonus Program.

Policy 1-1.3.19: Future Land Use Map Amendments

The City shall maintain a ~~The~~Future Land Use Map. ~~series represents City policy for managing the allocation of future land uses. Land use designations on the future land use map have been allocated pursuant to goals, objectives, and policies stipulated in the comprehensive plan, together with analysis of population, housing, land, and multi-modal transportation resources.~~ Amendments to the map may be initiated by the City or a property owner at any time. The process of amending the

Future Land Use Map~~The process of allocating the land use designations has considered~~ considers the need to conserve open space and natural resources including wetlands, floodplains, water recharge areas, fish and wildlife, maximize utility of existing infrastructure, recognize infrastructure limitations, ~~allocate land to reduce energy use,~~ consideration of capital improvements needs, and conservation of fiscal resources~~. This objective shall be measured through the implementation of the policies below and the Future Land Use Map Series.~~

Policy 1-1.3.20: ~~Policy 1-2.3.1:~~ Mixed/Multi Uses

Mixed/Multi use land development patterns shall be shown on the Future Land Use Map to allow flexibility for zoning and development, and to allow for a concentrated mix of complementary uses~~.~~ ~~to help reduce vehicle miles traveled. (9J-5.006(4)(c))~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.21: ~~Policy 1-2.3.9:~~ Sprawl

The City shall review and consider the identifiers of urban sprawl as described in FS 163.3164(54) ~~FAC 9-J5.006(5)~~ prior to approving any plan amendment. If the City determines the requested amendment will proliferate urban sprawl, the City sha~~wi~~ll deny the amendment. ~~(FAC 9-J5.006(5))~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.22: ~~Policy 1-2.1.7:~~ Integrate Multimodal Transportation with the Future Land Use Map

The Future Land Use Map shall ~~provide a~~ maintain land use designations ~~emphasizing~~ that emphasize development intensities ~~and urban designs~~ that promote the use of multi-modal transportation ~~alternatives~~. ~~Land use p~~Planning ~~activities~~ within these land use designations shall ~~integrate those~~incorporate urban ~~components~~ elements necessary to support ~~for mixed/multi use and multi-modal transportation alternatives to succeed over~~ the long-term viability of

mixed-use development and multi-modal transportation options.~~with the City's land use planning activities.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-1.3.23: ~~Policy 1-2.3.2:~~ Encroachment

Single family residential areas shall be protected from the encroachment of incompatible uses including heavy industrial and high intensity commercial uses.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-1.3.24: Compatibility and Buffering

The City shall ensure compatibility between uses and may require additional screening and buffering between land uses if deemed necessary to maintain compatibility as outlined in the Land Development Code.

Policy 1-1.3.25: Residential Compatibility

When evaluating a residential development application, the City shall consider the following compatibility factors of the adjacent property:

1) Maximum allowed density and intensity
2) Building height
3) Scale of the building or development
4) Buffering and screening
5) Urban design

~~Policy 1-2.3.2: Encroachment.~~

~~Single family residential areas shall be protected from the encroachment of incompatible uses including industrial and high intensity commercial uses.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Policy 1-2.3.4: Commercial Compatibility.~~

~~Commercial development shall be designed so that it does not have a negative impact on surrounding land uses through the use of buffer areas, landscaping, professional uses, and multi-family uses.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Policy 1-2.3.7: Buffers.~~

~~New industrial or heavy commercial development adjacent to residential property must provide adequate buffering along common property lines or common road frontages.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-1.3.26: Jurisdictional Wetland Determinations

If a Jurisdictional Wetland Determination~~,~~ that has been accepted by the City of Winter Garden~~,~~ ~~determines~~ finds that a parcel of property previously identified on the Future Land Use Map as Conservation is not a wetland, then the underlining Future Land Use Category shall govern the development of said parcel.

If a Jurisdictional Wetland Determination~~,~~ that has been accepted by the City of Winter Garden~~,~~ determines that a parcel of property is a wetland (regardless of the land use assigned by the Future Land Use Map), then only the following land uses may be allowed on the parcel:

1) Recreation
2) Setbacks and buffers (if the wetlands are undisturbed)
3) Small road connections (only in no other reasonable connections can be made outside of wetland areas.
4) No dredging or filling will be allowed in wetlands except for utility poles.
5) No exception to the above restrictions will be allowed without a Jurisdiction Wetland Determination acceptable to the City of Winter Garden.

Policy 1-1.3.27: Transfer of Development Rights

The density allocation for areas determined to be true wetlands shall ~~will~~ be 1 dwelling unit per 10 acres. This allotment shall not be used in the wetland areas but shall be allocated to an adjacent developable area.

Goal 1-2: ~~Goal 1-2:~~ Quality Community Development

Foster a ~~The City shall strive to achieve a~~ high quality community in which to work, play, and live by~~. Development and redevelopment will be~~ direct~~ing~~ed development and redevelopment to areas ~~where a full range of~~with public services and facilities~~, are provided to effectively and efficiently meet the~~

~~economic and social needs of the City. The City will minimize~~ minimizing incompatible land uses, promoting quality architecture and design, ~~and~~ protecting natural resources, and promoting~~. The City will use~~ Activity Centers ~~to promote development and redevelopment,~~ that concentrate multi/mixed uses ~~,~~ and promote transit/microtransit and alternative means of transportation. ~~and the reduction of greenhouse gas emissions by the reduction in vehicle miles traveled.~~ Whenever ~~The City will~~ feasible, incorporate and promote energy efficient designs in private and public facilities.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 1-2.1: ~~Objective 1-2.1: Integrate Land Uses and Multimodal Transportation within~~ Activity Centers

Higher intensity development shall be directed to Activity Centers designed to accommodate land use diversity, to support multi-modal transportation alternatives, ~~reduce vehicle miles traveled by offering mixed land uses,~~ efficient delivery of public services, and to promote revitalization of underutilized property through redevelopment and reinvestment. Table 1-2 identifies the Activity Centers and their ~~Six Activity Centers are created to serve these purposes; Traditional Downtown, Downtown Transitional, Crown Point Hi-Tech, Story Road Employment, West State Road 50 Commercial, and the Fowler Grove Regional Activity Centers. B~~boundaries ~~of these Activity Centers~~ are delineated on the ~~Figure 1.3,~~ Activity Centers Map, Map 5 in the Map Series.

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.1.1: Purpose of Activity Centers.~~

~~The City will maintain its low density residential character by utilizing the Activity Centers. The Activity Centers will allow the City to encourage compact development, infill and redevelopment at higher intensities, and avoid large single uses of land. Integrate complementary land uses to live, work, and shop in close proximity. Encourage walkable and bikeable community design and encourage transit oriented development. By providing a mix of uses and an alternative to the single occupant automobile a reduction in both vehicle miles traveled and green house gas emissions should be realized.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.1.3: Energy Efficient Land Use Patterns.~~

~~Activity Centers will encourage a compact arrangement of higher density and intensity complementary land uses within these areas planned for urban development, infill, and redevelopment that will support a multimodal transportation system with accessibility to live, shop, play, and work opportunities.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Table 1-2: Activity Centers

Activity Center	Description	Design & Development Guidelines	Height	FLU Categories
Traditional Downtown Activity Center	Encourage medium intensity office, commercial, institutional, mixed-use, and residential land uses designed to be compatible with traditional downtown standards of development and design to blend into the existing downtown area	Subject to the Historic Downtown District overlay requirements. Developments designed without adequate parking facilities will be required to participate in the downtown parking program. The area is to be served by a transportation network suitable for automobiles, bicycles, pedestrians as well as other transportation alternatives.	5 stories	Traditional Downtown.
Crown Point Hi-Tech Activity Center	Draw high-tech, research and development companies, and corporate offices. Uses may include general office, office showroom, light industrial, and supporting retail. Generally located on the east side of the City, around East Street and West Crown Point Road	Development design is expected to serve pedestrian/trail systems, car/van pool programs, bus transit, local bus circulator systems, and microtransit options.	5 stories	Industrial, Commercial, Multi Use Development, & Multi Office Industrial
Story Road Industrial	Concentrations of industrial, manufacturing, wholesale, technical training centers, and office employment Generally located north and south of Story Road and east of 9th Street		5 stories	Industrial, Mixed Use Development, Multi Office Industrial, & Commercial.
West State Road 50 Commercial	Mixture of office, retail, service, institutional and other commercial uses.	Subject to the West State Road 50 Overlay Commercial Development Standards Multiple properties may be aggregated under a common development program.	5 stories	Commercial, Medium Density Residential, Industrial, & Multi Use Development.

Fowler Grove Regional	Mixture of commercial, office, medical, restaurant, retail, entertainment, and residential uses. Generally located on the northeast quadrant of SR 429 (the Beltway) and CR 535, and is known as the Winter Garden Village at Fowler Groves, and contains the DRI under same name	Commercial and residential uses may be located together within mixed-use buildings.	7 stories	South Beltway Center
Dillard Street	Encourage a mixture of office, commercial, institutional, mixed-use and residential land uses designed to be pedestrian oriented and provide a seamless transition to the nearby historic downtown area	Encourage multi-modal transportation methods and enhance the public realm to increase vibrancy and activity within the corridor.	4 Stories	Commercial, Residential Neighborhood Commercial, Traditional Downtown & Downtown Transitional
Historic East Winter Garden Neighborhood	Retain traditional residential neighborhood character while allowing flexible housing types and compatible neighborhood-serving commercial uses	Subject to the Historic East Winter Garden Neighborhood Overlay District requirements.	2 stories	Neighborhood Residential & Neighborhood Mixed-Use

~~Policy 1-2.1.13: Traditional Downtown Activity Center.~~

~~The Traditional Downtown Activity Center is where the City will encourage medium intensity office, commercial, institutional, and residential land uses designed to be compatible with traditional downtown standards of development and design to blend in to the existing downtown area. This activity center is within the Historic Downtown District overlay that incorporates design standards. Maximum building height is five stories. The following land use categories will be allowed in this activity center: Residential Neighborhood Commercial, Commercial, and Traditional Downtown.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.1.14: Crown Point Hi-Tech Activity Center.~~

~~The Crown Point Hi-Tech Activity Center is located on the east side of the City in the area of Plant Street and West Crown Point Road. The Crown Point Activity Center is intended to draw high-tech, research and development companies, and corporate offices. Other uses may include general office, office showroom, light industrial, and supporting retail. Properties may be included in the activity center as they are annexed into the City. The following land use categories will be allowed in this activity center: Industrial, Commercial, Multi Use Development, and Multi Office Industrial. Development design is expected to serve pedestrian/trail systems, car/van pool programs, bus transit, or local bus circulator systems. Maximum building height is five stories. Joint planning agreements with the City of Ocoee will be developed to coordinate development in this activity center.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.1.15: Story Road Industrial Activity Center.~~

~~The Story Road Industrial Activity Center is where the City will encourage concentrations of industrial, manufacturing, wholesale, technical training centers, and office employment. The activity center consists of those properties within the City north and south of Story Road and east of 9th Street. Properties meeting the requirements above may be included in the activity center as they are annexed into the City. Maximum building height is five stories. The following land use categories will be allowed in this activity center: Industrial, Mixed Use Development, Multi Office Industrial, and Commercial.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.1.16: West State Road 50 Commercial Activity Center.~~

~~State Road 50 is the main east-west gateway into, and through, the City and will be improved to a six-lane cross section throughout the City in 2010-2011. As such the automobile will continue to be the primary transportation source. However, pedestrian circulation and connection will still be an important component of development in the activity center as well as regional and local transit. Design standards are included in the West State Road 50 Overlay Commercial Development Standards that cover this same area. West SR 50 is a designated Activity Center where a mixture of office, retail, service, institutional and residential uses will be permitted. Properties may be included in the activity center as they are annexed into the City, or as they may be aggregated by qualifying properties and under a common development program. Maximum building height is five stories. The following land use categories will be allowed in this activity center: Commercial, Medium Density Residential, Industrial, and Multi Use Development.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.1.17: Fowler Grove Regional Activity Center.~~

~~The Fowler Grove Regional Activity Center is located on the northeast quadrant of SR 429 (the Beltway) and CR 535, and is known as the Winter Garden Village at Fowler Groves, and contains the DRI under same name. This activity center shall provide for a mix of commercial, office, and residential uses with shopping, dining and entertainment uses. Office and residential uses are also allowed and may occur as separate parcels and buildings from the commercial uses or within mixed use buildings. Maximum building height is five stories. The South Beltway Center is the land use category allowed in this activity center.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.1.1: ~~Policy 1-2.1.2:~~ Use of Activity Centers

Activity Centers shall be regarded as areas where complementary non-residential and residential uses occur in a medium intensity urban environment. -Land uses can occur together or on their own within the same building or parcel of land. –While the intent of the Activity Centers is to promote a diversity of land use types, a greater priority is given to the concentration of business activity, employment and residential densities capable of successfully supporting bicycle/pedestrian activity

and multimodal transportation ~~and transit patronage, and promote the reduction of the use of single occupancy vehicle and reduced trip lengthsActivity~~options. Activity Centers also function as transportation hubs for car/van pool programs (transportation demand management programs)~~,~~ ~~and~~ transit, and microtransit services.

Policy 1-2.1.2: ~~Policy 1-2.1.5:~~ Growth Priorities Directed to Activity Centers

The City shall use the Activity Centers as a growth management tool where priority is given to new public services and facilities and where new development/redevelopment will be given priority over other areas~~ of the City with the opportunity to develop at a higher intensity/density, by development bonus, than allowed by the base zoning.~~

Policy 1-2.1.3: Activity Centers Incentives

The City shall use ~~i~~incentives ~~can be used~~ to encourage development in the Activity Centers. ~~Award of any d~~Development bonuses will be awarded at the discretion of the City and will be based on additional ~~development standards provided by the developer that offer~~ quality project design ~~above and beyond~~ features that exceed the minimum code requirements. These features, ~~that~~ may include but are not limited to, pedestrian plazas, enhanced pedestrian/bicycle circulation~~,~~ ~~greenhouse reduction strategies~~, enhanced architectural design, and other onsite and/or offsite improvements. Currently the possibility of increased density/intensity above the permitted levels will be used as the prime incentive, however, additional incentives ~~can~~ may be instituted in the future such as ~~that may include, but be limited to, some form of~~ economic incentives.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.1.4: ~~Policy 1-2.1.4:~~ Supporting Multimodal Transportation

~~Development occurring within~~ Activity Centers shall be developed and redeveloped ~~occur~~ at densities and intensities that ~~lend~~ support ~~to~~ multi-modal transportation ~~services that may~~options, includ~~ing~~~~e~~ bus transit (such as LYNX and/or a local transit circulator), microtransit, connected pedestrian and bicycle systems, ride-sharing and other transportation demand management programs.

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.1.12: Planning Approach.~~

~~The comprehensive plan places a focus on the promotion of land use planning, site design, and development densities necessary to support efficient transit operation and service over the long term. It also promotes pedestrian-oriented planning and development to encourage walking over the use of the automobile for short trips. Activity Centers are placed at strategic transportation corridor crossroads to effectively function as urban nodes for higher intensity employment, commerce and residential activities.~~ These Activity Centers ~~will support internal multi-modal transportation options and also can~~may be linked together by local transit systems~~;~~ with ~~which in turn can be~~ connect~~ions~~~~ed~~ to regional transit systems serving the Orlando metropolitan area.

~~Policy 1-2.1.8: Development Supporting Transit and Pedestrian Oriented Design.~~

~~Development and redevelopment occurring within~~ Site Design within Activity Centers shall ~~give priority to site design needs for~~prioritize transit use and pedestrian/bike activity above design needs for automobile facilities. The Land Development Code shall include incentives or bonuses to encourage transit and pedestrian/bike friendly site design.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.1.5: ~~Policy 1-2.1.6:~~ Activity Center Design

Within each Activity Center, the City ~~will~~ shall encourage architectural and ~~development~~ site designs that incorporates~~for~~ landscaping, public amenities, signage, ~~median beautification, parking garages~~ structured or alternative parking systems, and well-designed pedestrian and transit areas. These ~~designs will further improve multi-modal opportunities by creating~~developments shall provide continuous and ~~;~~ direct ~~and convenient~~ pedestrian and bicycle ~~linkages between~~connections to adjacent buildings~~,~~ ~~and~~public trail/path network, ~~pedestrian systems~~ and transit stops~~.~~; ~~establish standards for the provision of transit facilities, pedestrian system amenities, and bicycle parking; and give higher priority in site design for the~~

~~accommodation of multi-modal transportation over facilities exclusively for automobiles, particularly single-occupant automobile trips.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.1.6: ~~Policy 1-2.1.11:~~ Residential Access to Activity Centers

Access to activity centers from surrounding residential areas by alternative means of transportation shall ~~will~~ be encouraged such as the use of golf carts, EVs (electronic vehicles), and bicycles. ~~to access the downtown activity centers and the use of the West Orange Trail to access the downtown area as well as the Crown Point Hi-Tech Activity Center.~~

~~Added by Ordinance 10-19, 06/24/2010~~
~~Added by Ordinance 10-19, 06/24/2010~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.14.1:~~

~~The City shall allow increased density and intensity in the Activity Centers to support public transit.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.14.2:~~

~~Mixed and multi uses shall be encouraged in the Activity Centers to promote a reduction in vehicle trips, vehicle trip lengths, and promote alternative modes of transportation.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.14.5:~~

~~**Policy 1-2.1.1:** The City shall promote transit oriented development along with mixed and multi use development in the Activity Centers.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.1.7: ~~Policy 1-2.1.10:~~ Annexation of Enclaves

As enclaves located within the designated activity centers are annexed into the City, these properties shall ~~will~~ be accorded all benefits of the activity center. Any expansion of the activity centers ~~as shown on Figure 1.3~~ shall require a comprehensive plan amendment.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 1-2.2: ~~Objective 1-2.3:~~ Targeted Development Areas

Direct f~~F~~uture development and redevelopment activities ~~shall be directed~~ to Activity Centers ~~into appropriate areas~~ as depicted on the Future Land Use Map; to provide compact areas of mixed use development ~~to help in reduction in vehicle miles traveled~~; consistent with sound planning principles and the ~~;~~ small town charm ~~the low density residential character~~ of the City~~; natural limitations including topography and soil conditions; and the goals, objectives, and policies contained in this Plan.(9J-5.006(3)(b)1.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.2.1: ~~Objective 1-2.10:~~ West State Road 50 Commercial Corridor

~~To~~ The City shall continue to implement the West State Road 50 Commercial Corridor activity center and overlay district to provide ~~for~~ comprehensive guidance in the design and development of the ~~commercial~~ corridor as established by~~.~~

~~Added by Ordinance 99-18, 09/19/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.10.1:~~

~~Implementation of the West SR 50 Commercial Corridor overlay district shall be In accordance with the rules and regulations found in Article IX West State Road 50 Overlay Commercial Development, and Article X Supplemental Design Standards, Requirements and Regulations Pertaining to Specified Commercial Corridors Within the City of Winter Garden of~~ the City's Land Development Code.

~~Added by Ordinance 99-18, 09/19/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.10.2:~~

The ~~City shall use the West SR 50~~ overlay regulations shall be used to control and enhance landscaping, signage, architectural design,

buffers, setbacks, pedestrian connection, vehicle access and parking, and site design.

~~Added by Ordinance 99-18, 09/19/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.10.3:~~

~~**Policy 1-2.2.1:** When implementing the West SR 50 overlay regulations the City shall take into consideration the SR 50 widening project scheduled for 2010.~~

~~Added by Ordinance 99-18, 09/19/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.2.2: ~~**Policy 1-2.3.3:**~~ **West State Road 50/Colonial Drive**

Commercial development shall be encouraged along S.R. 50 generally to a depth of 350 - 400 feet unless larger areas can be justified. Multi-family use may be considered to the rear of this development. Access points and median cuts on S.R. 50 shall be limited through the use of parallel access roads, sharing of access points, cross access between properties, and the use of local roads that provide alternate routes to S.R. 50.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.3.5: Professional Uses.~~

~~Professional uses may be considered along Dillard Street and south of Division Street.~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.3.6: Industrial Uses.~~

~~Industrial uses may be considered in existing industrial areas and along Story Road east of Ninth Street, Carter Road, and along East Crown Point Road where access to railroad spurs are available.~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 1-2.3.12:** Optional Elements.~~

~~the City shall continue to consider the need and opportunity to add optional elements to the comprehensive plan such as a Vision Element, a Neighborhood Preservation Element and an Economic Development Element.~~

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.2.3: ~~Objective 1-2.11:~~ East Plant Street

The City shall maintain the East Plant Street Character Area design standards.~~To put into place mechanisms to encourage enhancement of the appearance of development adjacent to East Plant Street by December 2011.~~

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.2.4: ~~Policy 1-2.11.1~~ Crown Point Hi-Tech Activity Center

~~By December 2011,~~ T~~t~~he City shall evaluate, and if deemed appropriate, develop design standards for the Crown Point Hi-Tech Activity Center to include the East Plant Street corridor.

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.11.2:~~

~~Any resulting Crown Point Hi-Tech Activity Center design standards will include, but not be limited to, landscaping, hardscaping, signage, vehicle and pedestrian circulation, cross access, transit oriented design, and architectural standards.~~

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.2.5: ~~Policy 1-2.11.3:~~ Streetscape Funding

~~By December 2011,~~ T~~t~~he City shall explore all potential ~~identify alternative means of~~ funding sources to complete the proposed ~~landscaping and hardscaping~~streetscape improvements along East Plant Street and Dillard Street. ~~-~~At a minimum, these alternative forms of funding include an evaluation of potential state and federal grant funding opportunities, Orange County CDBG participation, or a façade /

landscaping improvement grant funded through the City's Community Redevelopment Agency~~.~~.

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.11.4:~~

~~Landscaping and hardscaping of East Plant Street within the right-of-way will be included in the roadway improvements scheduled for 2010.~~

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.2.6: Dillard Street Overlay

The City shall consider establishing an Overlay Zone in the Land Development Code for areas along Dillard Street to promote a pedestrian oriented environment and enhanced public realm.

Policy 1-2.2.7: New Activity Centers

The City shall periodically review and asses the success of the activity centers and the need to establish additional activity centers.

Objective 1-2.3: ~~Objective 1-2.2:~~ Future Development

Direct f~~F~~uture development in the City ~~will be directed~~ into those areas where utility service and public facilities are available.~~(9J-5.006(3)(b)9.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.2.2: Connection Requirements.~~

~~Existing development shall be required to connect to City water, reclaimed water, and sewer service when such service becomes available.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 09-59, 01/28/2010~~

Policy 1-2.3.1: ~~Policy 1-2.2.5:~~ Location Standards

Public facilities and utilities shall be located to maximize the efficiency of service provided; minimize cost; minimize the impact on the natural environment; and conform to land development regulations.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-2.3.2: ~~Policy 1-2.2.8:~~ Land Use Amendments and Public Facilities

No future land use amendments or changes shall be approved unless adequate water supplies and associated public facilities are available or will be available to meet projected needs. If new development requires an extension of utilities the new development

~~Added by Ordinance 09-59, 01/28/2010~~

~~Policy 1-2.2.1: Full Cost.~~

~~Development which requires the extension of utility service~~ shall pay the full cost for the extension of said service.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-2.3.3: ~~Policy 1-2.2.3:~~ Joint Planning Area (JPA)

The City shall continue to coordinate with Orange County in implementing the Restated Interlocal Agreement for Joint Planning Area Between Orange County and Winter Garden (1997) and the subsequent amendments which includes a delineation of the JPA; participation and agreement on a joint plan; agreement on the administration of land development regulations; consistency determination prior to the issuance of a development permit; and agreement on the provision of essential facilities and services.

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.3.4: ~~Policy 1-2.2.4:~~ Annexation Requirements of Service

The City shall require annexation, when legally possible, of those properties within the JPA when said properties request water and/or sewer service.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.3.5: ~~Policy 1-2.2.6:~~ Enclave Annexations

~~**Policy 1-2.3.5:**~~ The City shall, within the limits of the law and in coordination with property owners, annex enclave property within the City of Winter Garden's jurisdictional limits.

Policy 1-2.3.6: ~~Policy 1-2.8.3:~~ Principles for Residential Subdivisions~~best Development Practices~~

~~The City hereby adopts and endorses the general principals of Reid Ewing's April 1996 "Best Development Practices."~~ The City ~~will~~ shall ~~specifically~~ require the following principles be incorporated into the design of~~for~~ residential subdivisions:

(1) ~~(1)~~ The development shall contribute to the area's job-housing balance;

(2) ~~(2)~~ Large developments (or clusters of small developments) shall provide a mix of land uses that promote walkability and bikeability;~~to include civic uses.~~

(3) ~~(3)~~ Larger developments shall be developed in clusters when there are existing environmental features that are beneficial to preserve such as large trees, wetland and other water bodies, etc.;

(4) ~~(4)~~ Developments ~~PUDs~~ shall place higher density housing areas near parks, schools, and commercial areas;

(5) ~~(5)~~ Developments~~PUDs~~ shall time commercial development and recreational opportunities in phase with residential development;

(6) ~~(6)~~ Residential developments shall make subdivisions into fine-grained neighborhoods with well-defined centers and edges, as well as incorporate a grid-based roadway network with multiple connections to surrounding developments;

(7) ~~(7)~~ Large residential developments shall work with OCPS to determine the need and feasibility of ~~and clusters of small developments must~~ providinge for schools sites on the property;

(8) ~~(8) PUDs~~ Developments shall ~~concentrate~~ incorporate commercial uses within the neighborhoods ~~developments~~ and shall not strip commercial developments along road frontages;

(9) ~~(9) PUDs~~ Developments shall ~~develop~~ incorporate commercial ~~centers~~ uses into all purpose activity centers;

(10) ~~(10)~~All developments shall ~~reduce~~ discourage auto activity when possible and provide for pedestrian-friendly and bike-friendly

elements into the design of the neighborhood.~~environments to include at a minimum tree buffers between sidewalks and high speed roads.~~

~~(FS 163.3177(11) (a & (b)) and (FAC 9J-5.006(5)(j))~~

~~Amended by Ordinance 98-23, 06/25/1998~~
~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.3.7: ~~Objective 1-2.13:~~ Neighborhood Creation and Preservation

The~~o~~ City shall continue to define and preserve existing neighborhoods by enforcing regulations, policies, and programs to implement the following ~~policies~~:

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.13.1:~~ Having a Neighborhood Center~~.~~.

(1) Each n~~N~~eighborhood shall have a discernible center. ~~-~~This center may be a square or green, ~~a~~ park, ~~a~~ school, ~~or a~~ commercial area,~~.~~ or ~~A~~ transit stop. ~~may be considered at this center. FS 163.3177(6)(a)~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Policy 1-2.13.2:~~ Pedestrian Friendly. ~~.~~

(2) Have ~~M~~most of the dwellings within a neighborhood be~~are~~ within a five-minute walk, one-quarter mile, of the center. ~~This distance averages one-quarter of a mile.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Policy 1-2.13.3: Range of~~ Housing ~~Types~~Variety.

(3) ~~There is a variety of dwelling types within the Neighborhood. These usually take form in~~Have a variety of lot sizes for houses and a range of housing types such as townhomes, duplexes, and ~~perhaps some apartments~~other multi-family dwellings.~~This variety provides housing for younger and older people, singles and families, the poor and the wealthy.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Policy 1-2.13.4:~~ Convenient Commercial.

(4) ~~There are~~ Encourage neighborhood-scaled shops and offices to locate at the edges of the n~~N~~eighborhood~~. The shops should be sufficiently varied to supply the weekly needs of a household.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Policy 1-2.13.5~~ Walkable Schools. Ensure that pedestrian and bicycle infrastructure exists for children to be able to use alternate modes of transportation to and from school.

~~There is an elementary school close enough so that most children can walk from their dwelling. This distance should not be more than one mile. FS 163.3177(6)(a)~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~(1)~~(5) ~~Policy 1-2.13.6:~~ Recreation.

~~There are~~Ensure small playgrounds ~~quite~~ are located near ~~every~~ dwellings. Require, at a minimum, a small playground to be sited every ~~This distance should not be more than~~ one-eighth of a mile radius.

~~Amended by Ordinance 99-18, 08/09/1999~~

~~(2)~~(6) ~~Policy 1-2.13.7: Disburse~~ Disperse Traffic

~~The~~ Require streets within a ~~the~~ n~~N~~eighborhood ~~are~~ to be part of a connected network both within and adjacent to the development.~~This provides a variety of itineraries and disperses traffic congestion.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~(3)~~(7) ~~Policy 1-2.13.8:~~ Shade. Install canopy tree along

~~The streets have~~ sidewalks and other pedestrian and bike trails. ~~which are shaded by rows of trees.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~(4)~~(8) ~~Policy 1-2.13.9:~~ Civic Centers.

~~Certain~~ Reserve prominent sites ~~are reserved~~ for civic buildings. Buildings for meetings, education, religion or culture ~~are~~ shall be located at the termination of street vistas or at the n~~N~~eighborhood center.

~~(5) Amended by Ordinance 99-18, 08/09/1999~~

(9) ~~Policy 1-2.13.10:~~ Self Governing.

~~The~~ Neighborhoods ~~is~~ shall be organized to be self-governing. This requires a formal association to debate and decide on matters of maintenance, security and physical change ~~(but not on taxation which should be the responsibility of the City)~~.

~~Amended by Ordinance 99-18, 08/09/1999~~

~~(6)~~(10) ~~Policy 1-2.13.11:~~ Undesirable Land Uses.

~~-~~All undesirable land uses within or adjacent to neighborhoods shall be identified and a strategic plan shall be developed to either eliminate said land uses or mitigate the undesirable effects of the land use. Regulations shall be developed or evaluated to prevent potential undesirable land uses from establishing in or adjacent to established neighborhoods.

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.3.8: ~~Policy 1-2.3.11:~~ West Orange Trail

All new developments adjacent to the West Orange Trail shall provide adequate buffers for the Trail as well as access to the Trail. ~~-~~These buffers shall block any negative effect of the proposed land use on the users of the Trail and may vary in size and/or intensity depending on the magnitude of the impacts of the proposed development. ~~-~~All new adjacent residential developments must provide a direct connection to access the trail.

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.3.9: ~~Policy 1-2.14.6:~~ Public Transit Development Focus

The City ~~will~~ shall ensure new development is designed to make public transit a viable choice for residents by:

(1) Locating medium-high density development in Activity Centers that can be served efficiently by public transit and/or microtransit and other alternative transportation modes.

(2) Require new development in Activity Centers to provide easy access to roadways served, or potentially to be served by transit.

(3) Linking neighborhoods to roadways served, or potentially to be served by transit and/or microtransit with continuous sidewalks or pedestrian/bike paths.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.3.10: ~~Policy 1-2.2.7:~~ School Siting

The City shall seek to co-locate public facilities, such as parks, libraries, and community centers, with schools to the greatest extent possible.~~FS 163.3177(6)(a)~~

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Policy 1-2.8.1: Interlocal Agreements.~~

~~The City shall review its existing interlocal agreements in order to ascertain if any changes need to be made.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 99-18, 08/09/1999~~

Objective 1-2.4: ~~Objective 1-2.4:~~ Redevelopment

~~The City shall continue~~Continue to encourage the redevelopment and renewal of blighted areas through implementing ~~developing~~ new redevelopment programs, supporting existing redevelopment programs ~~,~~ through the City of Winter Garden Community Redevelopment Agency, ~~and through the enforcement~~enforcing ~~of its~~ municipal codes ~~and~~ via the ~~utilization of its~~ Code Enforcement Board, and ~~through~~ rehabilita~~ting~~~~tion~~ blighted areas by obtaining grants and/or other funds.~~(9J-5.006(3)(b)2.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.4.1: Orange County Community Development Program.~~

~~The City shall continue to coordinate its redevelopment activities with the Orange County Community Development Program.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-2.4.1: ~~**Policy 1-2.4.2:**~~ **Code Enforcement**

The City shall strictly enforce its housing and building codes in order to help prevent the spread of blight. This shall include the Standard Building, Housing, Mechanical, Plumbing, Gas, and Fire Prevention Codes and the National Electrical Code along with the most recent amendments.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-2.4.2: ~~**Policy 1-2.4.3:**~~ **Code Enforcement Board & Magistrate**

Code violators ~~will~~ shall be processed through the Code Enforcement Board and/or the City Magistrate in an expeditious manner.

~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.4.3: ~~**Policy 1-2.4.4:**~~ **Main Street Program**

The City shall continue to support the Main Street Program.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-2.4.4: ~~**Policy 1-2.4.5:**~~ **CRA**

The City ~~will~~ shall continue to support the efforts of the Community Redevelopment Agency. The City hereby adopts the Community Redevelopment Plan as amended in 2021.

~~Amended by Ordinance 97-02, 10/23/1997~~

~~**Policy 1-2.4.6:** TCI. The City will continue to support the efforts of Orange County's Targeted Community Initiative (TCI) Program~~.

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Policy 1-2.4.7: Dillard Street.~~

~~The City shall consider applying for beautification grants for South Dillard Street.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.4.5: ~~Policy 1-2.4.8:~~ Downtown Brownfield Area Advisory Committee ~~Community Redevelopment Agency~~

The City shall support the Community Redevelopment Agency in its role as the Winter Garden Downtown Brownfield Area Advisory Committee and its efforts in the remediation, rehabilitation, and economic development of the Brownfield Area as set forth in sections 376.77-376.84 of the Florida Statutes and the historic downtown area and surrounding residential area.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.4.6: ~~Policy 1-2.9.2:~~ Expansion of Non-Conforming Uses

~~**Objective 1-2.4:**~~ The City shall continue to discourage the existence of non-conforming uses by maintaining the land development regulations preventing the expansions of these uses. Where a nonconforming use results in adverse impacts, including but not limited to excessive noise, odor, or safety hazards, the City shall require appropriate mitigation measures to remedy such impacts.

Objective 1-2.5: ~~Objective 1-2.5:~~ Natural Resources

Ensure that natural resources are protected from development activities by the adoption and implementation of land development regulations.~~as stated in Policy 1-1.1.1, of this Future Land Use Element. (9J-5.006(3)(b)4.) (9J-5.006(3)(c)8.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.5.1: ~~Policy 1-2.5.1:~~ Lake Apopka

The City shall ~~maintain its~~support only low ~~density residential zoning~~impact uses along Lake Apopka and will utilize drainage controls and building setbacks to prevent further degradation of the Lake. These controls shall require the preservation of natural vegetation; prohibit direct runoff into the Lake; and require ~~a 30 foot~~ minimum building setback~~s~~.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.5.2: ~~Policy 1-2.5.2:~~ Lake Apopka Cleanup

The City ~~will~~ shall work with other governmental agencies to implement the cleanup of Lake Apopka. These agencies shall include Orange County, the Florida Department of Environmental Regulation, the St. Johns River Water Management District, and those involved in the Lake Apopka SWIM Program.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.5.3: ~~Policy 1-2.5.3:~~ Tree Protection

The City shall maintain tree protection regulations in the Land Development Code that require ~~All~~ new development ~~will~~ to make ~~all~~ reasonable efforts to save existing specimen trees, particularly large native canopy trees such as live oaks (Quercus Virginiana).

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.5.4: ~~Policy 1-2.5.4:~~ Land Clearing

The City shall continue to use the Site Work Permit to control land-clearing activities in the City.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.5.5: ~~Policy 1-2.5.5:~~ Wellfields

The City shall maintain a map and implement land development regulations that protect ~~P~~potable water wellfields and prime aquifer recharge areas ~~shall be mapped and protected~~ from adverse impacts of development.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.5.6: ~~Policy 1-2.3.8:~~ Dredge Spoil Disposal Sites

The disposal of dredge spoils shall be~~is~~ prohibited within the City limits.~~(9J-5.006(3)(c)9.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Objective 1-2.6: ~~Objective 1-2.6:~~ Resource Planning & Management Plans

~~The City shall coordinate~~Coordinate ~~its~~ plans with any appropriate and applicable resource planning and management plan prepared pursuant to Chapter 380, Florida Statutes, and approved by the Governor and Cabinet.~~(9J-5.006(3)(b)7.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-2.6.1: ~~Policy 1-2.6.1:~~ Resource Planning & Management Plans

The City shall review any applicable resource planning and management plan (Chapter 380, F.S.) and adopt necessary measures for coordination.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-2.6.2: ~~Policy 1-2.6.2:~~ Green Mountain Scenic Byway

The City shall ~~of Winter Garden~~ support~~s~~ the Vision, Goals, Objectives and Strategies of the Green Mountain Scenic Byway Corridor Management Committee, as stated in the Green Mountain Scenic Byway Application for Additional Corridor in the City of Winter Garden and within the area delineated by the ~~Corridor~~ Trails and Paths Map, ~~as shown on~~ Map 6 in the Map Series~~Figure 1.4~~, also found in the Application for Additional Corridor.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.6.3: ~~Policy 1-2.9.4:~~ Interagency Hazard Mitigation Report

When deemed appropriate by the City Commission, the City shall cooperate with any agency of the State to encourage the elimination or reduction of any use identified as inconsistent with the recommendations of a State hazard mitigation report.

~~Amended by Ordinance 97-02, 10/23/1997~~

Objective 1-2.7: ~~Objective 1-2.7:~~ Utility and Infrastructure Planning

~~To continue~~Continue to ~~insure~~ ensure the availability of utilities and infrastructure to support proposed development.~~(95J-5.006(3)(b)9.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.7.1: ~~Policy 1-2.7.1:~~ Concurrency

~~Effective upon a date c~~Consistent with the requirements of Section 163.~~3202~~3180, F~~lorida~~ S~~tatutes~~, the City ~~will~~ shall condition development permits/orders, including but not limited to building permits, upon the availability of the public facilities and services necessary to serve the proposed development at the adopted levels of service contained in the Comprehensive Plan of the City, and the City shall require that these facilities and services are available concurrent with the impacts of development and in accordance with the policies of this comprehensive plan.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 1-2.7.2: Utility Location~~

~~Location of utility facilities is allowed in all zoning districts either as permitted uses or special exceptions, with the exception of the R-1 Single Family zoning designation. This includes necessary criteria or standards needed to provide for compatibility of surrounding uses.~~

Policy 1-2.7.2: Electrical Substations

In accordance with 163.3208, F.S. electrical substations are permitted in all land use categories except for the conservation land use district and areas within the Historic Downtown District Overlay.~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.7.3: Floating Solar Facility

Floating Solar facilities as defined by 163.32051, F.S. shall be permitted in land uses that are not primarily residential

Policy 1-2.7.4: Resiliency Facilities

Resiliency facilities, as defined by 163.3210, F.S, shall be a permitted use within all commercial, industrial, and manufacturing land use categories subject to setbacks and landscape criteria for other similar uses as outlined in the land development code.

Policy 1-2.7.5: ~~Policy 1-2.7.3:~~ Impact Fees

The City shall periodically review its Impact Fee Ordinance to ascertain that fees are being collected for roads, water, wastewater, recreation, and public safety in an equitable manner.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 1-2.7.6: ~~Policy 1-2.7.4:~~ Essential Services

No final development permits shall be issued unless evidence is provided that assures that adequate essential services will be available at the time the impacts or proportionate fair-share has been approved of the development ~~will occur~~. ~~-~~This will include adjacent roads complying with the City's road specifications, adequate water pressure, and adequate wastewater piping and lift stations (i.e. avoid double pumping).

~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.7.7: ~~Policy 1-2.7.5:~~ Drainage

No final development permits shall be issued unless evidence is provided that assures adequate access and maintenance will be provided for stormwater drainage and storage facilities in perpetuity.

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Policy 1-2.7.6: ROW~~

~~No final development permits shall be issued unless evidence is provided that assures that right of way for adjacent roads will be in conformance with the Winter Garden Area Transportation Study (WGATS) prepared by Transportation Consulting Group and adopted by the City Commission on March 28, 1996 (and as periodically amended) and the Future Traffic Circulation Map.~~

~~Amended by Ordinance 99-18, 08/09/1999~~

Policy 1-2.7.8: ~~Policy 1-2.7.7:~~ Stand Alone Requirements

No development or phase of a development shall ~~may~~ occur unless that development will properly function on its own as if no other development will occur and not rely on the improvements of any other proposed development or phase of development.

~~Amended by Ordinance 99-18, 08/09/1999~~

~~Policy 1-2.7.8: Water, Wastewater, and Reclaimed Water Master Plans.~~

~~The City shall continue to implement the findings and recommendations of the City of Winter Garden's Water, Wastewater, and Reclaimed Water Master Plans as amended.~~

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~Objective 1-2.9: Non-Conforming Uses~~

~~To reduce the number of uses that are non-conforming with the Future Land Use Map by ½ and to reduce the number of uses identified as inconsistent with any interagency hazard mitigation report by ½ by the year 2007. (9J-5.006(3)(b)3.) (9J-5.006(3)(b)6.)~~

~~Policy 1-2.9.1: Non-Conforming Use List~~

~~The City shall identify through the EAR process the number and location of all non-conforming uses.~~

~~Policy 1-2.9.3: Amortization Schedule~~

~~The City shall continue to maintain an amortization schedule identified in the land development regulations requiring the termination of these uses after an equitable period of time.~~

Objective 1-2.8: ~~Objective 1-2.12:~~ Historic Downtown District

Continue ~~T~~to implement and provide periodic updates to ~~Ordinance 10-05,~~ the Historic Downtown District Overlay regulations ~~adopted by the City Commission on January 14, 2010~~ to ~~encourage the~~ protect~~ion of~~ the City's historical resources.

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.8.1: ~~Policy 1-2.12.1:~~ Maintain Historical List

The City shall maintain and update ~~-~~a list of historical sites every 10 years, which shall be evaluated before the issuance of a development order.

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.8.2: ~~Policy 1-2.12.2:~~ Protection of Historical Resources

The City shall use the Design & Standards Guidelines Manual developed to implement~~s~~ the Historic Downtown District Overlay that incorporate preservation measures for historical structures and shall evaluate developing design criteria for new buildings in any historical districts.

~~Amended by Ordinance 99-18, 08/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 1-2.8.3: Register of Historic Places

The City shall pursue the designation of those historic resources that may be nominated for inclusion on the National Register of Historic Places.

Policy 1-2.8.4: Coordination of Master Site Files

The City shall coordinate with the Division of Historical Resources to update the Florida Master Site File Surveys, as appropriate.

Policy 1-2.8.5: Incentives for Historic Preservation

The City shall consider adopting incentive-based techniques for historic preservation such as transfer of development rights, tax abatement, increase in density, and waivers to certain applicable zoning requirements (setbacks, lot coverage, parking, and similar requirements).

~~Objective 1-2.14: Reduction of Greenhouse Gas Emissions. The City shall strive to reduce greenhouse gas emissions by enacting the following land use policies aimed at reducing vehicle trips, vehicle trip lengths, and promote alternative modes of transportation to include transit, walking, biking, and golf carts (in specific areas of the City).~~

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 1-2.9: ~~Objective 1-2.15:~~ Private Energy Efficiency Plan

~~The City~~ Consider implementing~~will establish~~ green building requirements and standards for new development and redevelopment projects, ~~and will~~ work to provide incentives for green building practices, and remove barriers that may impede their use.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.9.1: ~~Policy 1-2.15.1:~~ Green Building Ordinance

The City ~~will~~ shall consider adopting a Green Building Ordinance that requires new development and redevelopment projects for both residential and commercial buildings to incorporate sufficient green building methods and techniques to qualify for the equivalent of a current LEED Certified rating, GreenPoints, or equivalent rating system.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.9.2: ~~Policy 1-2.15.2:~~ Green Building Flexibility

The City ~~will~~ shall consider allowing increased height, density, and/or intensity, or flexibility in other standards for projects in the Activity Centers that incorporate energy efficient green building practices as part of a project's density bonus award considerations.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.9.3: ~~Policy 1-2.15.3:~~ Green Building Barriers

The City shall continue ~~will~~ to identify and remove any regulatory or procedural barriers to implementing green building practices, ~~such as codes, guidelines, and zoning,~~ and will ensure ~~all~~ plan reviewers and building inspection staff~~s~~ are trained in green building materials, practices, and techniques.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.9.4: ~~Policy 1-2.15.4:~~ Green Building Incentives

The City shall support the use of green building practices by exploring the use of:

(1) Providing information, marketing, and technical assistance about green building practices,~~:~~

(2) Establishing guidelines for green building practices for residential and commercial development, and~~:~~

(3) Providing financial incentives, including reduction in development and administrative fees for projects that use green building practices.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 1-2.10: ~~Objective 1-2.16:~~ Public Energy Efficiency Plan

~~The City will~~ ~~P~~prepare and implement a plan to improve energy efficiency of municipal facilities and systems.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 1-2.10.1: ~~Policy 1-2.16.1:~~ Green Building Incentives

The City shall incorporate the use of green building practices by implementing the following policies for public facilities.

(1) Conduct periodic energy audits on municipal facilities.~~:~~

(2) Consider ~~E~~employing green energy practices in new construction and any remodeling / redevelopment.~~:~~

(3) Improve efficiency of pumping stations (potable and waste water) and associated facilities including replacement or retrofitting system components with high-efficiency units where feasible.~~:~~

(4) Consider e~~E~~xploring~~e~~ the incorporation of solar design features in new buildings including daylighting and solar heating.~~:~~

(5) Consider ~~P~~providing~~e~~ energy efficiency training to design, engineering, building operations, and maintenance staff.~~:~~

(6) Explore ~~R~~replac~~ement~~ing of older fleet vehicles and equipment with fuel-efficient models including gasoline hybrid and alternative fuel or electric models, and~~:~~

(7) Encourage ~~R~~reducing~~e~~ vehicle trips by City employees by ~~encouraging~~ promoting van/car pooling ~~and coordination of~~for off-site meetings.

~~Added by Ordinance 10-19, 06/24/2010~~

Goal 1-3: ~~Goal 1-3:~~ Wekiva Parkway & Protection Act

S~~S~~upport and implement the recommendations of the Wekiva River Basin Committee to protect the surface water and ground water resources of the Wekiva Study Area, as fragile resources necessary for sustaining the community quality of life, drinking water, and health of the Wekiva River System.

~~Added by Ordinance 05-56, 06/14/2007~~

~~Policy 1-3.1.1: The entire municipal limits of the City of Winter Garden and its Joint Planning Area with Orange County are within the boundaries of the Wekiva Study Area but not within the boundaries of the Wekiva River Protection Area.~~

Objective 1-3.1: ~~Objective 1-3.1:~~ Protection of Recharge and Natural Habitat

~~Winter Garden shall~~ P~~p~~rotect the most effective recharge areas ~~(Figure 1.5)~~, karsts features, ~~(Figure 1.6)~~ and sensitive natural habitat including Longleaf Pine, Sand Hill, Sand Pine, and Xeric Oak Scrub ~~(Figure 1.7)~~, within the Wekiva Study Area through the delineation and adoption of the Wekiva Study Area Resource Protection Overlay ~~(Figure 1.8).~~ ~~Added by Ordinance 05-56, 06/14/2007~~
~~Amended by Ordinance 10-19, 06/24/2010\~~

Policy 1-3.1.1: ~~Policy 1-3.1.2:~~ Resource Protection Overlay

The ~~Future Land Use Map of the~~ City ~~of Winter Garden is hereby amended~~shall protect the Wekiva Study Area by ~~establishing the Resource Protection Overlay land use and Resource Protection Overlay Zoning~~maintaining a Future land use Map series that contains~~. and shall include~~ the delineation of the Wekiva Study Area, and Resource Protection Overlay ~~(WSA-5)~~ which is the overlay consisting of Aquifer ~~the Most Effective~~ Recharge Soils ~~(WSA-4),~~ Karst Features, ~~(WSA-2)~~ and Sensitive ~~n~~Natural Habitat. ~~(WSA-3).~~ The ~~c~~City shall protect the Wekiva Study Area by ~~establishing~~ maintaining the Resource Protection Overlay land use and Resource Protection Overlay Zoning.

~~Added by Ordinance 05-56, 06/14/2007~~

~~**Policy 1-3.1.9:** **Priorities for Open Space Protection~~

Policy 1-3.1.2: .

The City's ~~of Winter~~ priorities for open space protection are most effective recharge, karst features, and sensitive natural habitat including Longleaf Pine, Sand Hill, Sand Pine and Xeric Oak Scrub. ~~-~~The city ~~will~~ shall continue to use land acquisition and the land development code to protect WSA open space.

~~Added by Ordinance 05-56, 06/14/2007~~
~~Added by Ordinance 05-56, 06/14/2007~~

Policy 1-3.1.3: ~~Policy 1-3.1.3:~~ Development and Redevelopment within the Wekiva Resource Protection Overlay

All new development and all redevelopment within the city, which is located within the Resource Protection Overlay shall comply with the ~~Wekiva~~ City's l~~L~~and d~~D~~evelopment c~~C~~ode provisions and the policies of this plan.

~~Added by Ordinance 05-56, 06/14/2007~~

Policy 1-3.1.4: ~~Policy 1-3.1.4:~~ Heavy Commercial & Industrial Uses

The Heavy Commercial and Industrial land uses ~~are~~ shall be prohibited within the Resource Protection Overlay. ~~-~~Prohibited uses shall include but not be limited to uses that involve hazardous chemicals or materials that have the potential to contaminate surface or groundwater; including but not limited to facilities for hazardous waste, disposal petroleum and chemical tank farms, landfills, septic tank, heavy industry, fertilizer manufacturing, chemical storage and other similar uses

~~Added by Ordinance 05-56, 06/14/2007~~

Policy 1-3.1.5: ~~Policy 1-3.1.5:~~ Development Standards within the Resource Protection Overlay

The City shall i~~I~~mplement Best Management Practices and maintain development standards such as increased buffers, setbacks, and open space to minimize the adverse impacts of development on the Resource Protection Overlay.

~~Added by Ordinance 05-56, 06/14/2007~~

Policy 1-3.1.6: ~~Policy 1-3.1.6:~~ Development within the Resource Protection Overlay

Prior to the issuance of any development permit within the Resource Protection Overlay, the applicant shall provide the following;

(1) ~~(1)~~ Soils report by a qualified professional to determine the location of all Type "A" Hydrologic soils, to identify the most effective recharge areas. ~~-~~If the soils analysis conclusively proves that the soils cannot provide recharge due to subsurface confining layers, then the presence of Type "A" soils will not, in and of themselves, require compliance with the Wekiva Provisions of the code.

(2) ~~(2)~~ Analysis by a qualified professional geologist to determine the location and nature of all Karst features on the property. If Karst features are determined to exist on the site further analysis shall be required to evaluate surface and subsurface characteristics in order to determine:

a. ~~a.~~ Assessment of the potential for contamination

b. ~~b.~~ Identify protective solution to be incorporated into the site design

~~(1)~~(3) ~~(3)~~ An analysis of the site by a qualified biologist to identify flora and fauna, state and federal listed species and vegetative habitat types including but not limited to Longleaf Pine, Sand Hill, Sand Pine and Xeric Oak Scrub.

~~(2)~~(4) The presence of one or more of the factors shall ~~will~~ require compliance with the Wekiva Study Area provisions of the ~~codes~~land development code and the policies of this plan.

~~Added by Ordinance 05-56, 06/14/2007~~

Policy 1-3.1.7: ~~Policy 1-3.1.7:~~Resource Protection Overlay Standards

All new development and redevelopment within the Resource Protection Overlay shall be required to meet the following standards:

~~(1) All rezoning shall be to the appropriate Planned Development Zoning District.~~

~~(2)~~(1) Minimum open space shall be 25% for both residential and non residential development consisting of WSA Open Space. WSA Open space will be preserved through the use of conservation easements, deed restriction, plats and/or dedication to the appropriate governmental agency, environmental association or homeowners association. Open space shall be connected to the greatest extent possible on-site and to natural areas and open space within adjacent property or corridors.

~~(3)~~(2) Stormwater management systems in the Resource Protection Overlay shall provide retention of the total runoff generated by a twenty five year frequency, twenty four hour duration storm event from the developed site. Sites with no positive outfall, as

determined by the City Engineer, shall be required to retain the total runoff of the 100 Year storm.

~~(4)~~(3) –To discourage development of the Resource Protection Overlay areas development may be clustered on or transferred to others areas of a development site outside the Resource Protection Overlay areas. —The land development code shall provide for reduced lot size and increased ISR in Resource Protection Overlay areas to maximize WSA open space.

(4) –The City of Winter Garden does not contain any identified sensitive natural habitat. -A development that creates sensitive natural habitat of five acres or greater will receive density and intensity bonuses or other development incentives.~~:~~

~~Added by Ordinance 05-56, 06/14/2007~~

~~Amended by Ordinance 08-31, 04/24/2008~~

Policy 1-3.1.8: ~~Policy 1-3.1.8:~~ Wekiva Study Area (WSA) Open Space

Open space shall be defined as land area within the Resource Protection Overlay that remains undisturbed or minimally disturbed such as trails and boardwalks, as part of a natural resource preserve or passive recreation area and shall include land preserved for Conservation purposes. -WSA Open Space may include dry retention, passive recreation, school playgrounds and buffers~~. WSA Open Space~~ however it shall not include setback areas, private yards, street right of way, parking lots, impervious surfaces or active recreation areas. -Up to fifty percent (50%) of the WSA Open Space requirement may be met with dry stormwater retention areas. -None of the 25% WSA Open Space may be chemically treated with pesticides or fertilizers; provided, however, a development that creates sensitive natural habitat may be allowed limited use of pesticides and fertilizers to establish sensitive natural habitat.~~ Restrictions concerning WSA Open Space shall be included in the City's Wekiva Land Development Code requirements.~~

~~Added by Ordinance 05-56, 06/14/2007~~

~~Amended by Ordinance 08-31, 04/24/2008~~

Policy 1-3.1.9: ~~Policy 1-3.1.10~~ Wekiva Development Setbacks

The City of Winter Garden does not contain any identified springs or spring runs.~~-~~ All development shall be set back from any springs, spring

runs, sinkholes and other karst features. ~~-~~All setback areas shall remain in ~~its~~their natural state.

DEVELOPMENT SETBACKS	
Feature	**Minimum Setback (Feet)**
Spring	300
Spring Run	100
Sinkhole with direct connection to aquifer	200
Sinkhole no direct connection to aquifer	100
Other Karst Features	200

~~Added by Ordinance 05-56, 06/14/2007~~

~~**Goal 1-4:** Transportation Concurrency Exception Area (TCEA). Pursuant to subsection 163.3164 (34) of the Florida Statutes (FS) the City of Winter Garden qualifies as a dense urban land area as determined by the Office of Economic and Demographic Research. As such, pursuant to subsection 163.3180 (5)(b)1.a., FS the City is designated a Transportation Concurrency Exception Area. The City shall utilize this designation to responsibly encourage growth in specific areas within the City.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Objective 1-4.1:** TCEA Creation. To establish a City wide transportation concurrency exception area to provide exemptions to transportation concurrency to support urban infill development, redevelopment, and the achievement of the City's redevelopment goals by addressing mobility, urban design, land use mix, network connectivity and reduction in the reliance of the single occupant automobile and reduction in vehicle miles traveled.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 1-4.1.1:** TCEA Interim Mobility Strategies. The City recognizes the need for concurrency exceptions to stimulate development within the City. Notwithstanding policies in the comprehensive plan that establishes roadway level-of-service and transportation concurrency standards, development within the TCEA shall be exempt from those standards except as outlined in policies for mobility found in the Multi Modal Transportation Element. Mobility within the City shall be maintained by the implementation of the strategies and programs in the Multi Modal Transportation Element and through complementary policies in other elements of the comprehensive plan. TCEA mobility strategies may include, but not be limited to:~~

~~Goal 1-4: Transportation demand management program~~

~~Goal 1-5: Transportation system management program~~

~~Goal 1-6: Revised parking standards and regulations~~

~~Goal 1-7: Local and regional transit service~~

~~Goal 1-8: Enhanced pedestrian and bicycle facilities~~

~~Goal 1-9: Transit facility improvements~~

~~Goal 1-10: Complete streets policy implementation~~

~~Goal 1-11: Neighborhood traffic management programs~~

~~Goal 1-12: Transit and pedestrian oriented site design standards~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 1-4.1.2:** SIS and FIHS Facilities. The Florida Turnpike (SR 91) and the Daniel Webster Western Beltway (SR 429) are the only two SIS/FIHS facilities within the City. The City will~~

monitor both roadways and entrance/exit ramps and make all efforts to minimize any potential negative impacts to these facilities.
Added by Ordinance 10-19, 06/24/2010

Policy 1-4.1.3: State Road 50 serves Orange County as a major east-west arterial that literally traverses the state from the east coast to the west coast. SR 50 carries traffic into and through the City. A significant amount of traffic on SR 50 does not start or stop in Winter Garden. During the morning PM peak hour the peak direction of traffic on SR 50 is eastbound (towards Orlando) and the reverse is measured in the PM peak hour. While this non-Winter Garden regional traffic places a burden on the City (by creating congestion and a challenging pedestrian environment) the City recognizes this regional demand is expected within a growing urban area and the importance of providing adequate regional access to and through Winter Garden and will continue to monitor conditions on SR 50.
Added by Ordinance 10-19, 06/24/2010

Policy 1-4.1.4: TCEA Boundary and Annexation. At such time unincorporated land adjacent to the TCEA is annexed into the City and is assigned a future land use and zoning designation the TCEA boundary shall be extended to include such land.
Added by Ordinance 10-19, 06/24/2010

Policy 1-4.1.5: Complete Streets. Implement the "complete streets" policy to ensure that all modes of transportation are incorporated into proposed plans for roadway modifications within the TCEA. The intent of this policy is to develop a comprehensive, integrated, multimodal street network by coordinating transportation planning strategies and private development activities as follows:

Provide safe and convenient on-site pedestrian circulation such as sidewalks and crosswalks connecting buildings, parking areas, and existing or planned public sidewalks

Provide cross-access connections/easements or joint driveways where available and cost effective.

Deed land or convey required easements, as requested by the City, for the construction of public sidewalks, bus turn-out facilities, and/or bus shelters with appropriate credits toward developer contribution requirements.

Where appropriate, developers shall provide for the following improvements with credits toward contribution requirements:

i. Project turn lanes
ii. Bus shelters
iii. Adjacent sidewalks
iv. Streetscaping/landscaping within the public right-of-way
v. Additional bicycle parking.

Added by Ordinance 10-19, 06/24/2010

Policy 1-4.1.6: City adopts these standards as interim mobility standards and shall develop land use and transportation strategies to support and fund mobility by July 9, 2011 consistent with Section 163.3180(5)(b)4., F.S.
Added by Ordinance 10-19, 06/24/2010

Policy 1-4.1.7: TCEA Monitoring. The City of Winter Garden shall monitor the development activity and implementation of mobility strategies within the TCEA to ensure that the exception area is supporting redevelopment. The baseline condition for the performance measures and respective targets will be identified/defined in 2010/2011 and shall be the baseline data available for comparison against the data collected for the subsequent Evaluation and Appraisal Reports. The monitoring will include analysis, data collection and/or information for the following:

- The amount of development/redevelopment by land use in the TCEA as a function of density, FAR, and percentage of mixed use. Other site planning performance criteria may be used as part of the evaluation such as building placement, parking location and number of

spaces, connection to adjacent properties, proximity to transit stops/shelters, connection to adjacent sidewalk network, and provision of pedestrian, bicycle, and transit amenities.

- The implementation of mobility strategies, programs, and policies in support of the TCEA and the City's redevelopment objectives, along with associated targets, include but are not limited to the following:

Mobility Strategy	Performance Measure*	Target*
Transportation Demand Management	Persons participating in ridesharing or vanpooling programs	3% annual increase of participants
	Number of businesses/ employers offering flexible work schedules	5% annual increase of participants
	Implementation of transit pass programs and number of participants (businesses and individual)	Implementation by 2009 with 5% annual increase after implementation
	Number of bus turn out facilities (at locations desired by LYNX)	1 per year as coordinated with LYNX
	Number of improved and/or new bus shelters on LYNX routes within the TCEA	1 improved and/or new shelter each year
Transportation System Management	Number of intersection and/or signal improvements	1 per project generating > 5,000 net new daily trips
	Optimize signal synchronization	By 2013
	Number of joint driveways and/or cross-accesses or combined driveways	1 per redevelopment/ development project
Pedestrian Environment (Sidewalk) Enhancements	Amount of sidewalks added and/or expanded to the network in the TCEA	500 linear feet of sidewalk per year
	Linear feet of streetscaping/ landscaping which enhances the pedestrian environment	500 feet per year

Mobility Strategy	Performance Measure*	Target*
	Number of pedestrian enhanced crosswalks in TCEA	1 intersection per year
Bicycle Facilities Enhancement	Number of bicycle racks/lockers and related amenities for projects within the TCEA	Increase in bicycle rack/locker for redevelopment and new development over existing conditions
	Linear feet of bicycle lanes and related facilities in TCEA	Bicycle lanes and related facilities as part of programmed street improvements, resurfacing or rehabilitation

* Performance Measures and Targets may be subject to further consideration (i.e., if these performance measures and targets cannot be supported by reasonably available data or additional measures are identified that may also be appropriate).

(1) The effects of the TCEA strategies, programs, and policies in accomplishing the objective of improved mobility for the multi-modal transportation system within the TCEA shall be monitored by the following performance measures, including, but not limited to:

Performance Measure	Target*
Change in ridership, including boardings/alightings for LYNX routes within the TCEA	1% annual increase
Change in headways for LYNX routes within the TCEA	10-minute headway decrease every 5 years
Local Transit ridership (change in ridership will be reported in subsequent years after the implementation of the service)	Achieve 1st year ridership projections with a 3% annual increase
Land use and Density and Intensity	Density and intensity of new development
Support Alternative Modes of Transportation	Transit shelters
SIS and FIHS Facilities	Traffic counts and queue length at ramps located in the City

Performance Measure	Target*
Proposed trip generation from redevelopment/new developments (based on CMS Applications and TIAs) versus actual traffic counts on adjacent roadways	Achieve a 5% reduction in actual traffic counts versus trip generation projections
Change in daily and peak hour traffic volumes on SR 50	Achieve less than 1% annual increase
Change in traffic counts and queue lengths at the SR 429 ramps	Achieve less than 1% annual increase in traffic counts and queue lengths

*Performance measures and the associated targets will be coordinated with the respective agencies such as LYNX, Orange County, and FDOT. The facilities and infrastructure for several of the targets, such as bus shelters, are contingent upon development/redevelopment activity and associated developer contributions. Performance measures and targets may be subject to further consideration (i.e., if these performance measures and targets cannot be supported by reasonably available data or additional measures are identified that may also be appropriate).

(2) The City, with consultation of FDOT, will present the evaluation and information for the implemented mobility strategies and the effects on multi-modal mobility, as referenced above, and the extent to which the strategy has achieved the purpose of the TCEA since the adoption of the TCEA and/or the last Evaluation and Appraisal Report. The TCEA monitoring and evaluation for the EAR shall rely on secondary data sources to the fullest extent possible.

(3) In addition, the City will evaluate the strategies to determine whether modifications to the TCEA and/or the strategies are necessary. This evaluation will be conducted every seven years and the results will be included in the Evaluation and Appraisal Report along with any recommendations to refine the TCEA polices and mobility strategies through EAR-based amendments.

Added by Ordinance 10-19, 06/24/2010

Figure 1.1
Existing Future Land Use

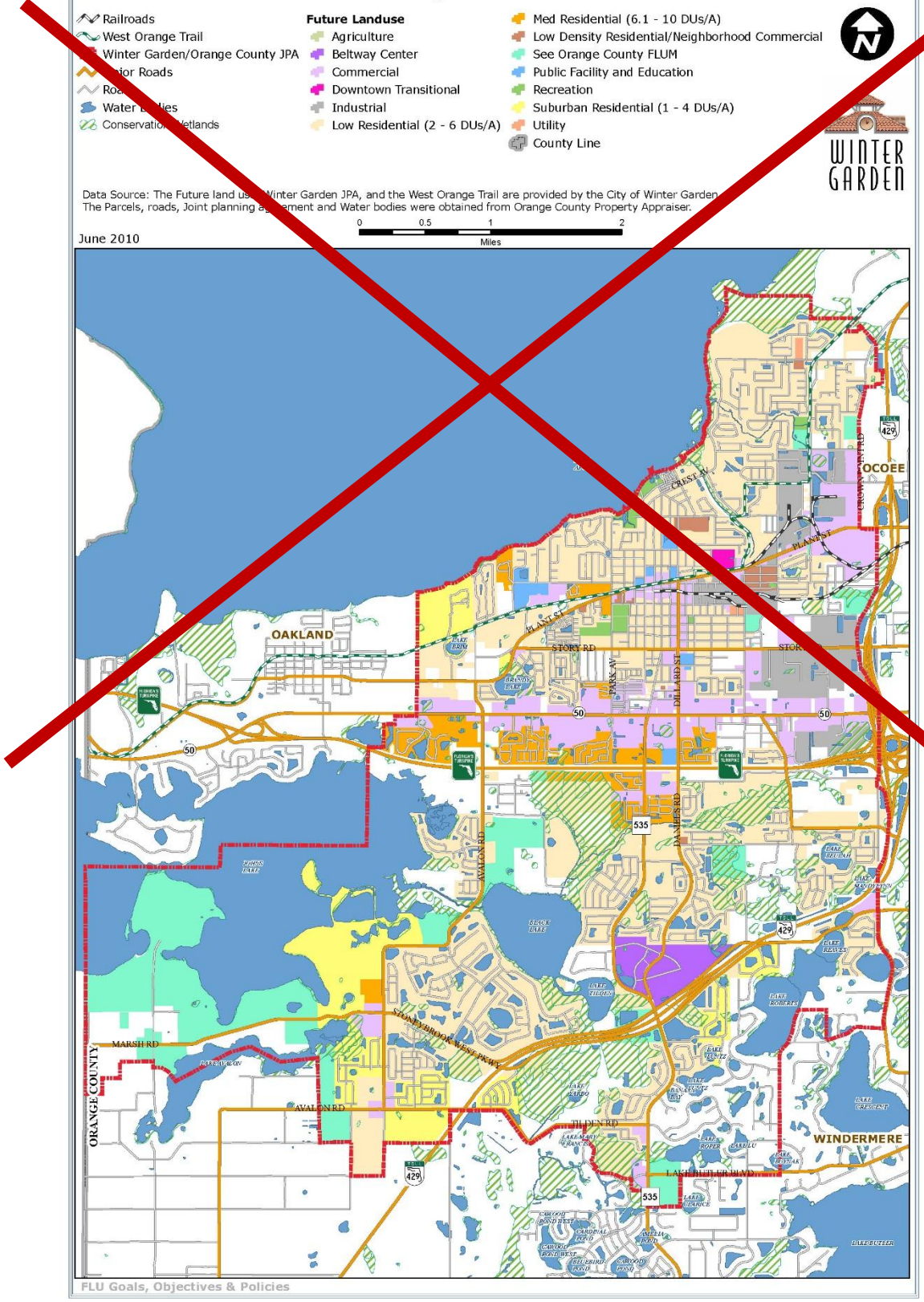


Figure 1.2
Urban Village Future Land Use Properties

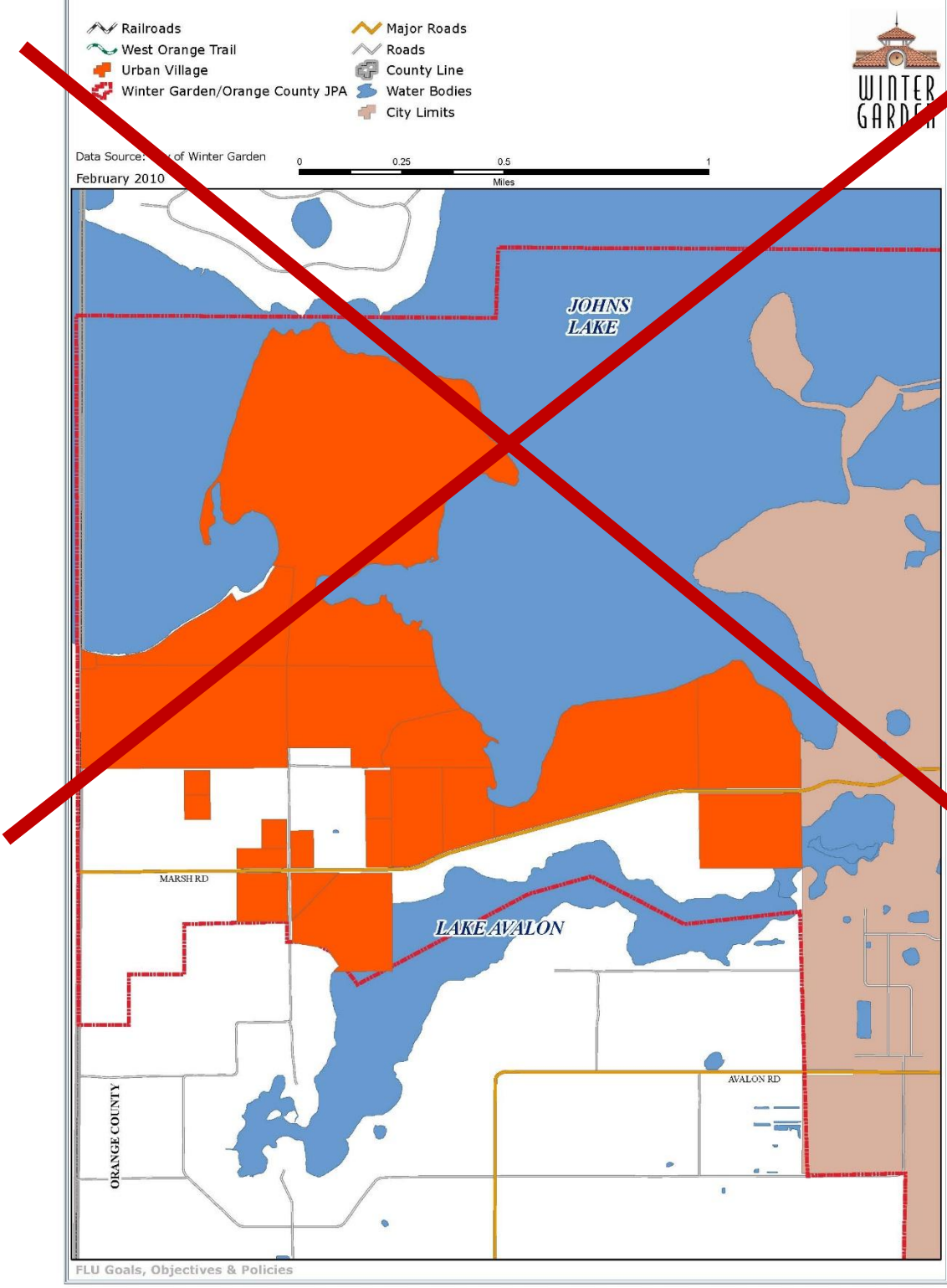


Figure 1.3
Activity Centers

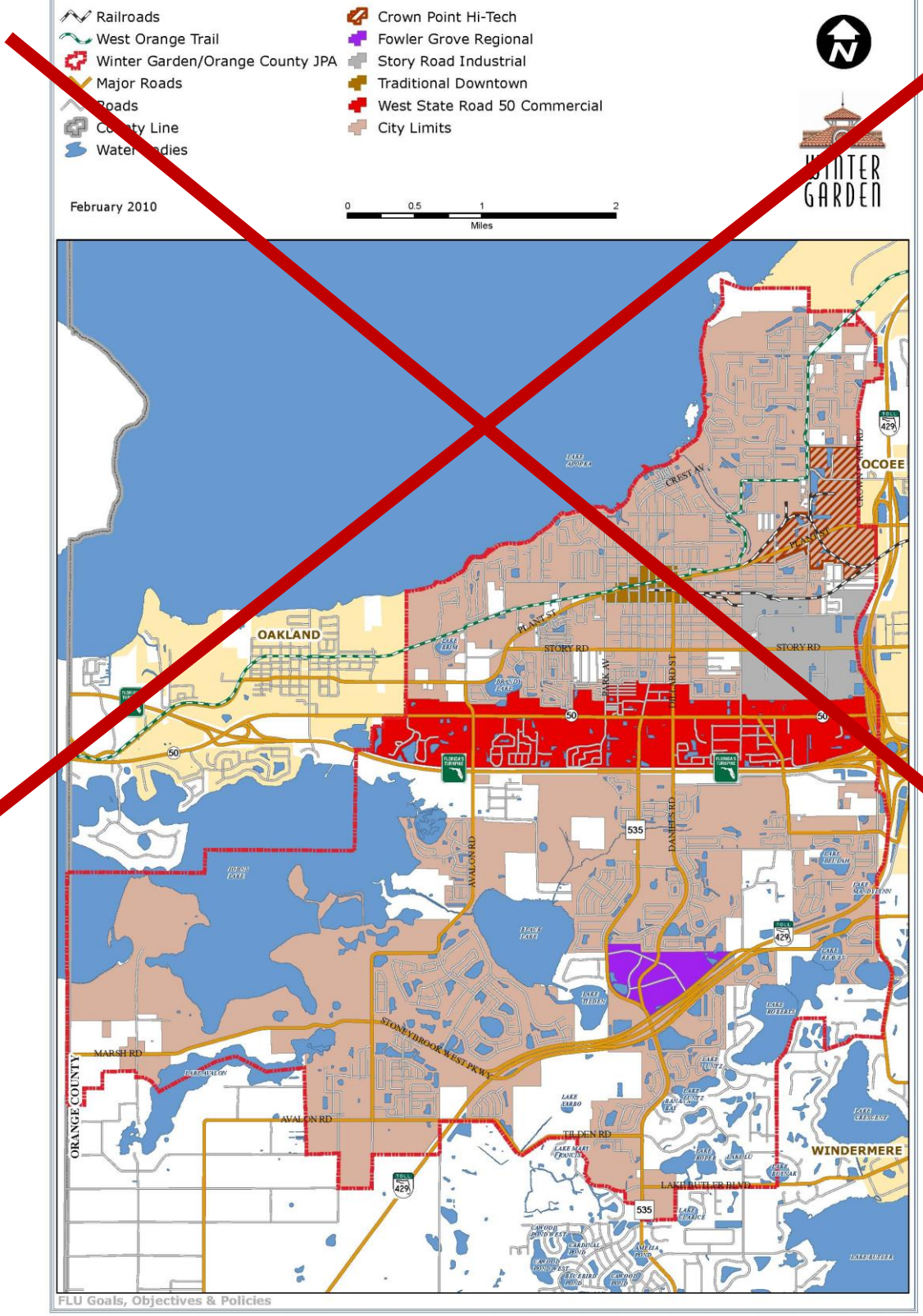


Figure 1.4
Green Mountain Scenic Byway Proposed Corridor

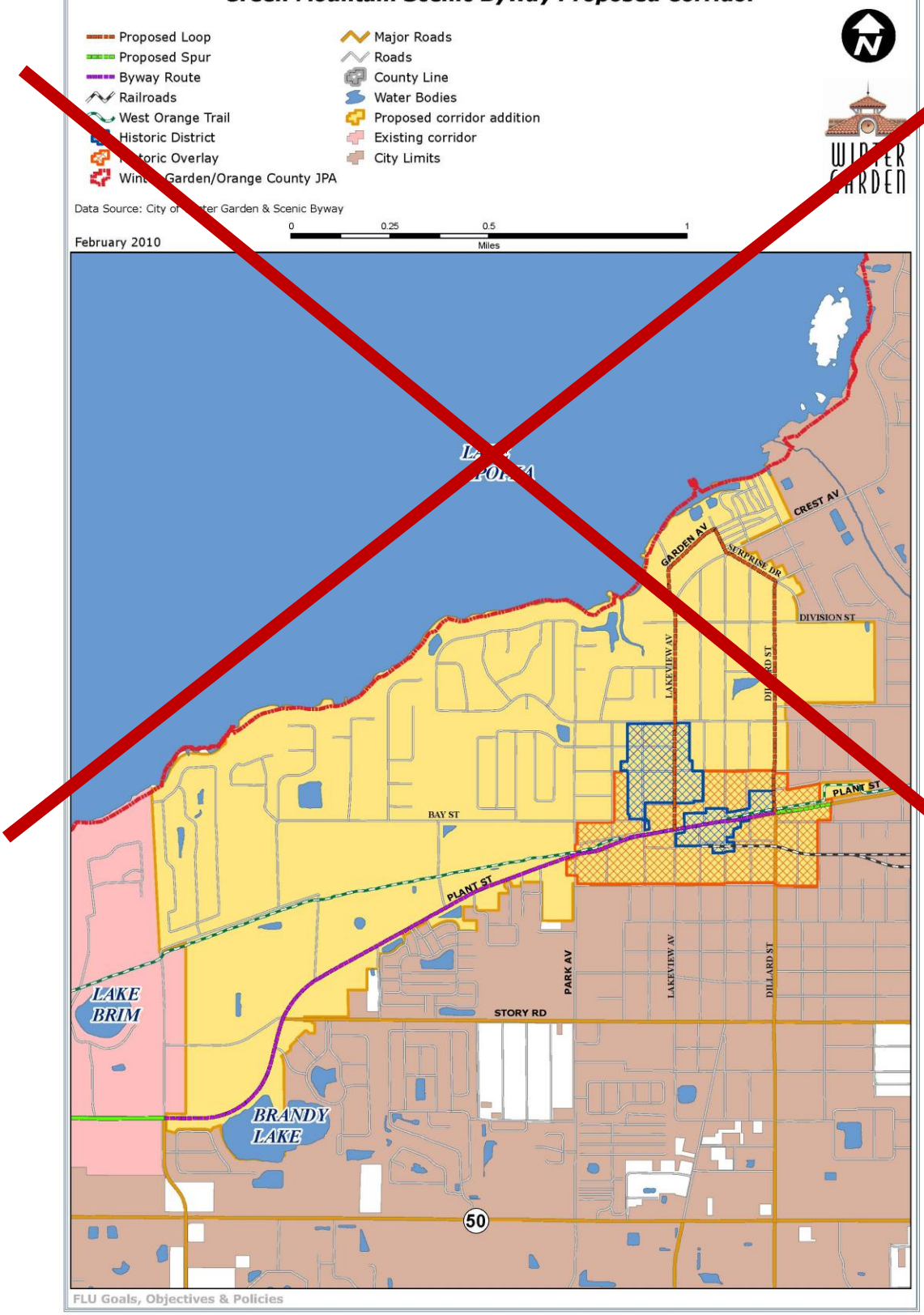


Figure 1.5
Most Effective Recharge Areas

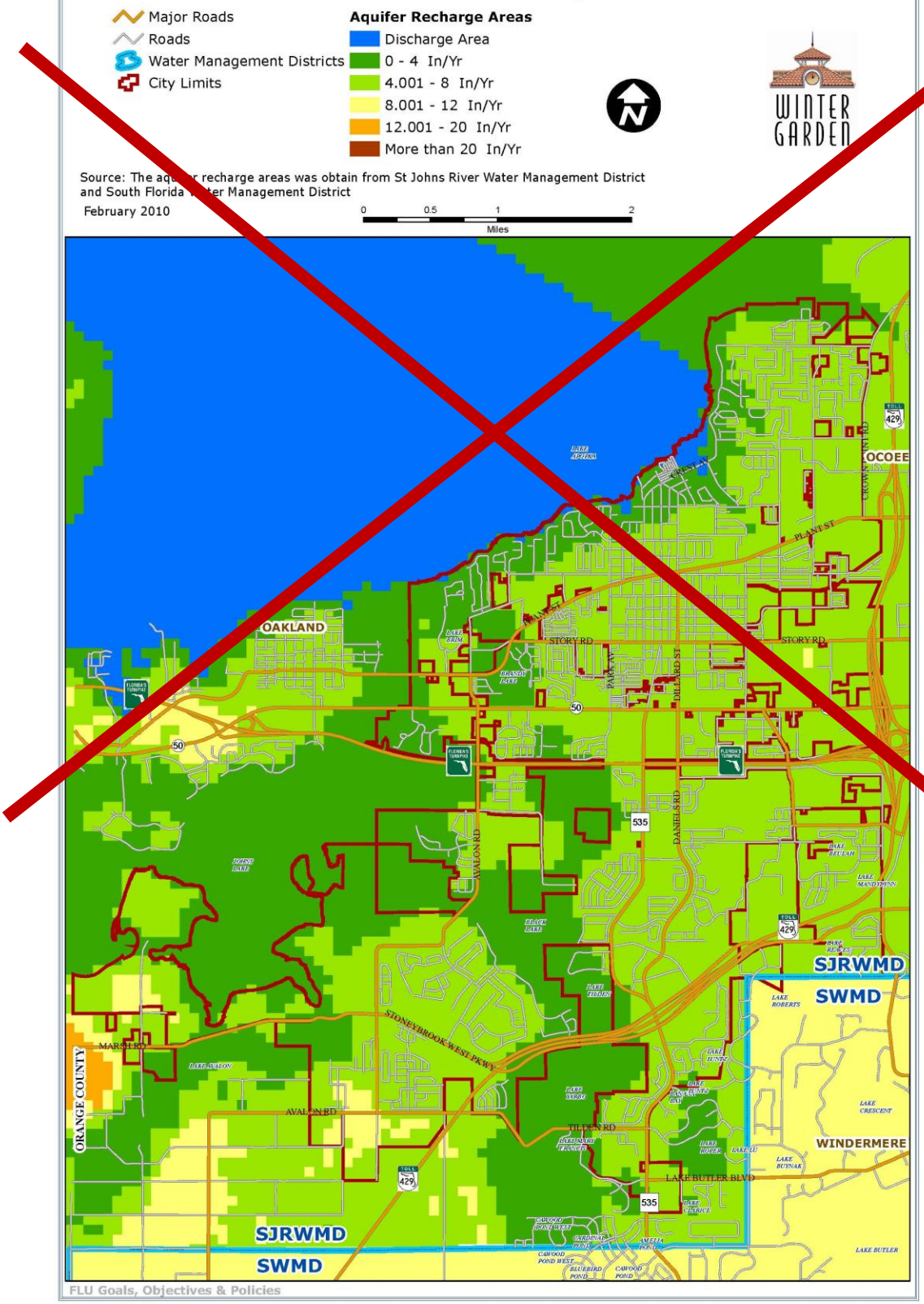


Figure 1.6
Karst Features

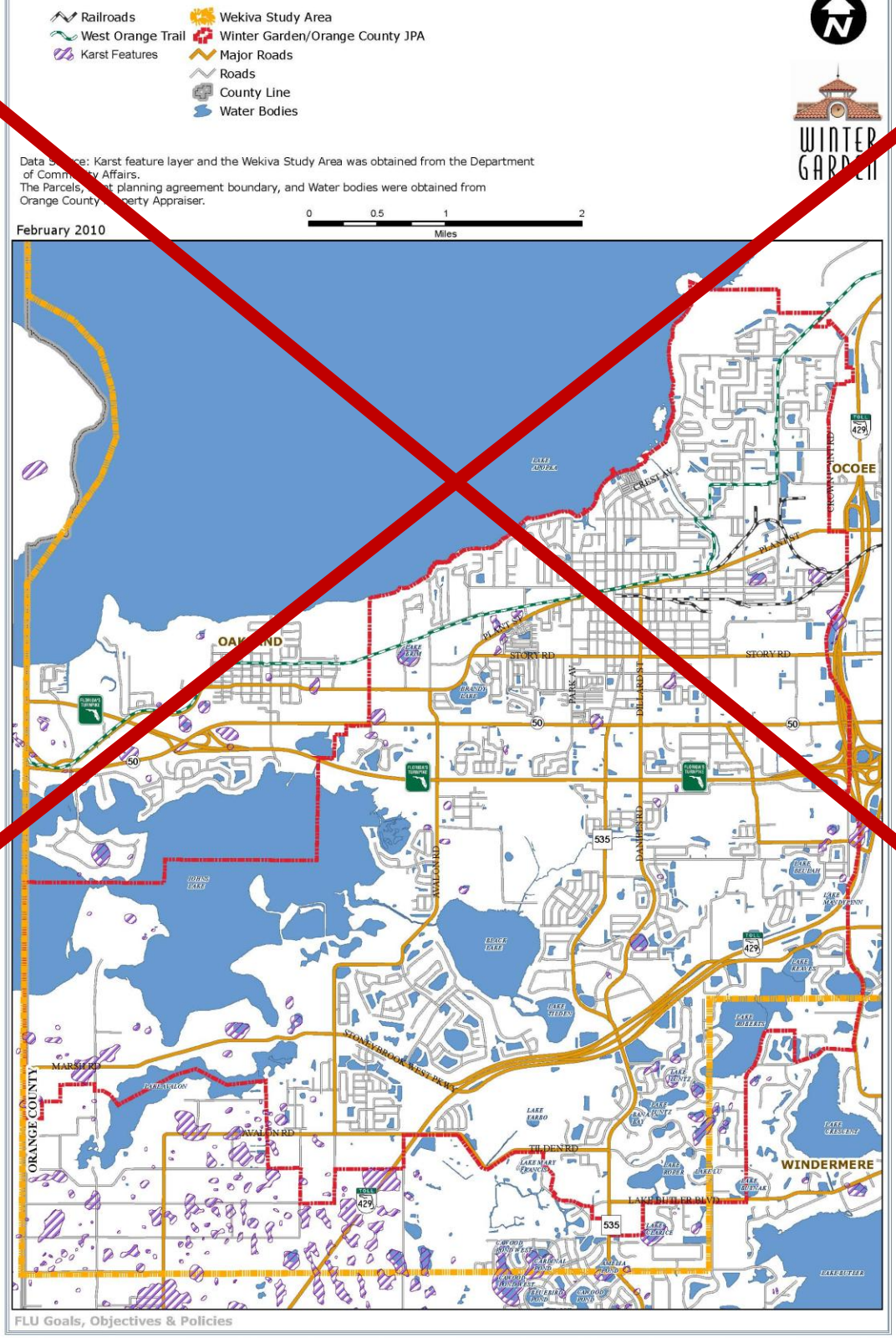
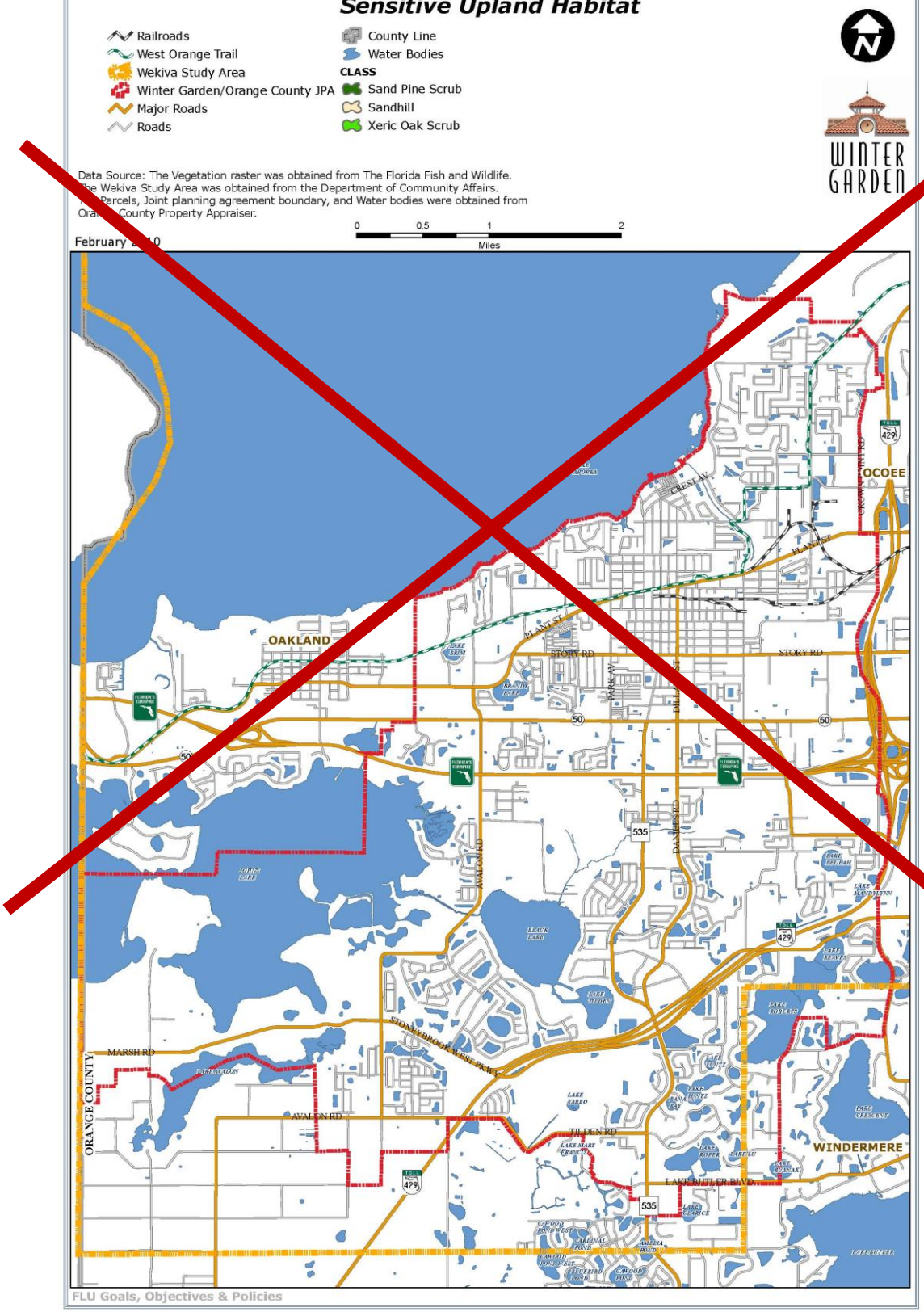


Figure 1.7
Sensitive Upland Habitat



FLU Goals, Objectives & Policies

Figure 1.8
Wekiva Study Area Resource Protection Overlay

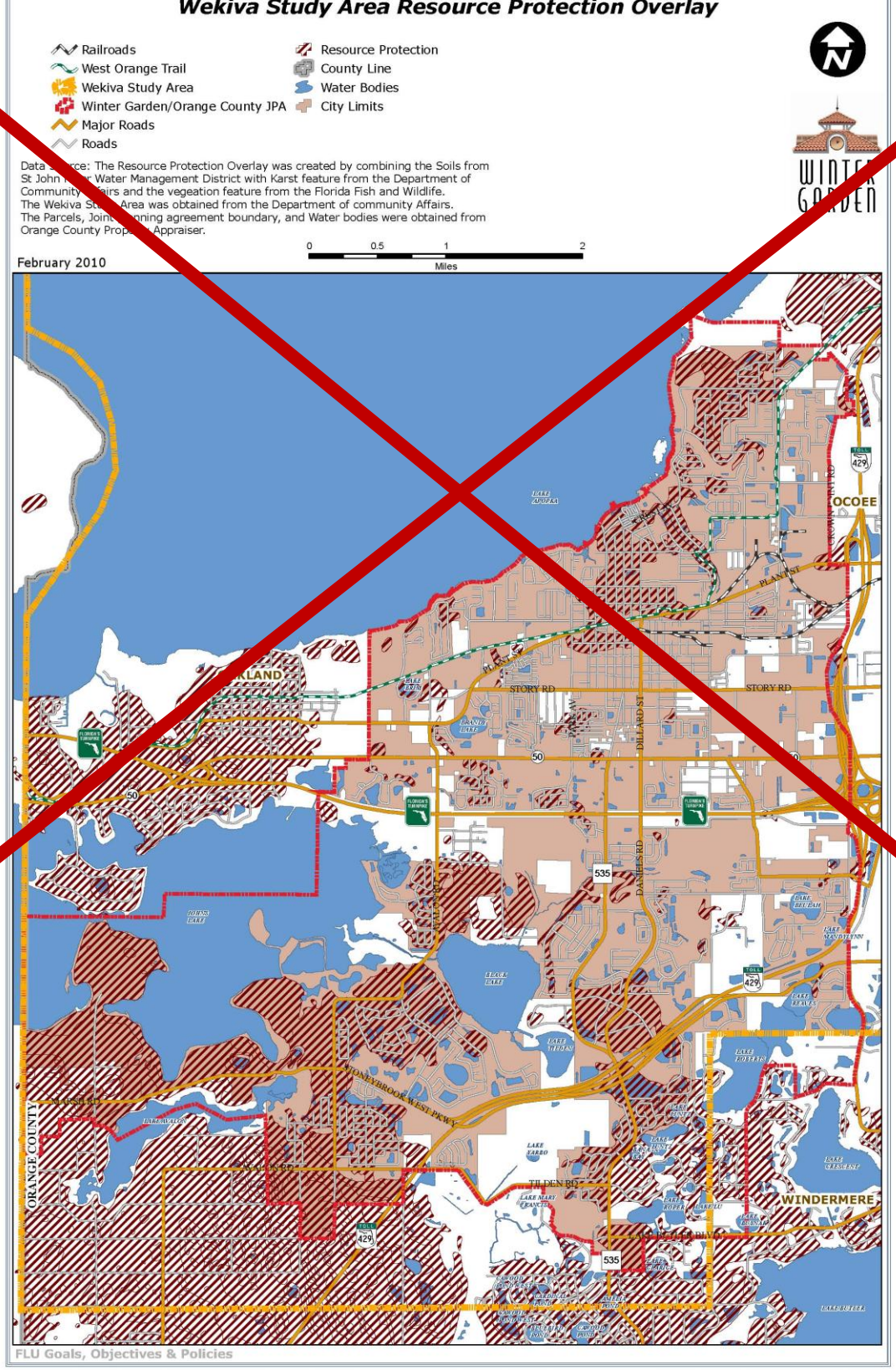
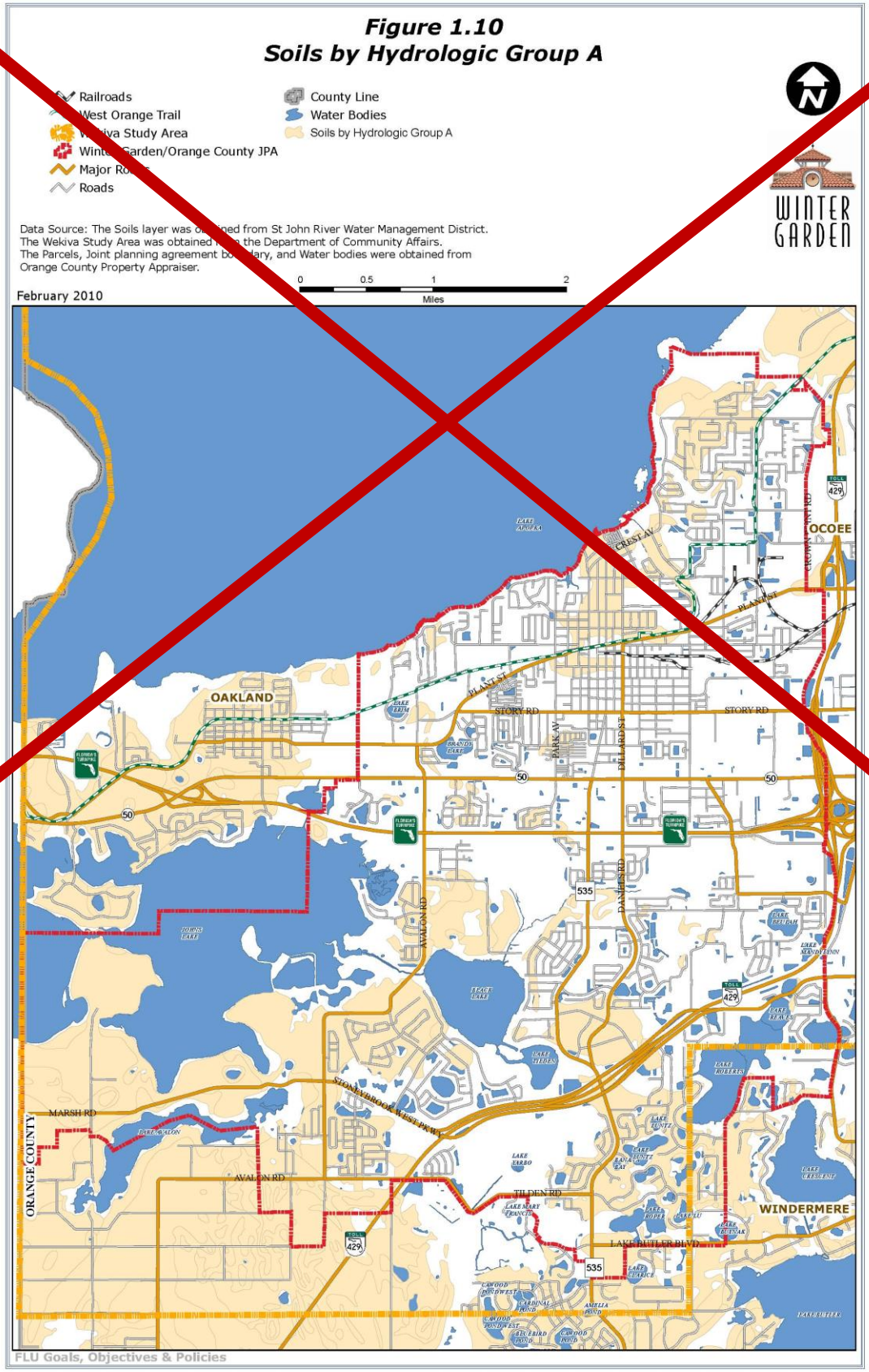


Figure 1.10
Soils by Hydrologic Group A



FLU Goals, Objectives & Policies



2

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

MULTIMODAL TRANSPORTATION

Table of Contents

Goal 2-1: Multimodal Transportation System 3
Objective 2-1.1: Multimodal Transportation System Implementation 3
Objective 2-1.2: Vision Zero 8
Objective 2-1.3: Regional Trail System 10
Objective 2-1.4: Transportation System and Land Use Coordination 11
Objective 2-1.5: Transportation Planning Coordination 13
Objective 2-1.6: Right-of-Way Protection 14
Objective 2-1.7: Subdivision Circulation 15
Objective 2-1.8: Dillard Street Corridor 17
Objective 2-1.9: State Road 50 Management 18
Objective 2-1.10: Efficient Public Transit 19
Goal 2-2: Creation of a Transportation Concurrency Exception Area (TCEA) 21
Objective 2-2.1: TCEA Provisions 21
Objective 2-2.2: TCEA Mobility 30

Goal 2-1: ~~Goal 2-1:~~ Multimodal Transportation System

~~To provide the development of~~ Ddevelop an overall multimodal transportation system which provides for the needs of the City by ~~providing~~ offering alternative travel choices and integrating with land use to work towards reduced vehicle trips and/or shorter trip lengths while protecting established residential areas, environmentally sensitive areas, and historically significant sites.~~(9J-5.007(3)(a)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 2-1.1: ~~Objective 2-1.1:~~ Multimodal Transportation System Implementation

I~~The City shall, i~~n cooperation with area wide and State agencies, provide ~~for~~ a safe, convenient, multimodal transportation system ~~and energy efficient~~for motorized and non-motorized forms of travel ~~transportation system~~. ~~The measurement of this objective shall be determined by the degree to which the following policies are implemented.(9J-007(3)(b)1.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 00-10, 07/27/2000~~

Policy 2-1.1.1: ~~Policy 2-1.1.7:~~ Sidewalks and Bicycle Facilities

~~The City will install sidewalks with the roadway improvements to Plant Street and CR 545/Avalon Road projects.~~ The City shawill work to ensure ~~insure~~ installation of ~~adequate~~ sidewalks and bicycle facilities in coordination with roadway improvement projects and, wherever feasible, ~~with the FDOT SR 50 widening project and with Orange County for the CR 535 road widening project~~ to provide facilities for alternative transportation modes ~~for circulation throughout the City~~.

~~Added by Ordinance 10-19, 06/24/2010~~
~~Policy 2-1.1.8: Reserved.~~
~~Deleted by Ordinance 10-19, 06/24/2010~~

Policy 2-1.1.2: ~~Policy 2-1.1.6:~~ Railroads

The City ~~w~~shail coordinate with the appropriate entities to ensure continued operational access for the railroad lines in the northeast section of the City to serve development and redevelopment in the

industrial areas. Rail lines may also transition to trails via a rails-to-trails conversion.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-1.1.3: Rails to Trails

The City shall continue to coordinate with CSX and the Rails to Trails Conservancy to convert inactive rail lines into trails.

Policy 2-1.1.4: ~~Policy 2-1.1.4:~~ Golf Cart Use

The City sha~~wi~~ll continue to allow ~~and will continuously evaluate policies allowing~~ golf carts and ~~EV (electric vehicle)~~small electric vehicles (EVs) to access ~~to~~ the downtown area from ~~the~~ surrounding residential neighborhoods as part of the designated Golf Cart District. ~~as a means of easing use of traditional motorized vehicles and available parking to reduce greenhouse gases.~~ The City will regularly review and refine these policies to support reduced reliance on traditional motor vehicles, lessen parking demand, and help decrease greenhouse gas emission The City shall assess opportunities to lower speed limits on roads connecting to the existing Golf Cart District to safely expand the roadway network where golf cart use is permitted.

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 2-1.1.9: WGATS**~~

~~The City shall use the Winter Garden Area Transportation Study (WGATS) prepared by Transportation Consulting Group as adopted by the City Commission on March 28, 1996 (and as amended from time to time) to help determine deficient roadways (including right-of-way deficiencies), new roadway requirements and needed capacity improvements within the City.~~

~~Added by Ordinance 96-13, 06/27/1996~~
~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-10, 07/27/2000~~

Policy 2-1.1.5: ~~Policy 2-1.1.12:~~ Engineering Standards

The City shall not issue a ~~No~~ final development permit ~~shall be issued that will construct a~~for any road improvement that is significantly inconsistent with the standards and specifications ~~approved by~~of the American Association of State Highway and Transportation Officials (AASHTO) or the Florida Department of Transportation, unless the City

determines that alternative best practices provide equal or greater safety, performance, and community benefit. In such cases, the City may apply those alternative standards, provided they are supported by documented evidence and professional transportation guidance.

~~Added by Ordinance 99-19, 09/09/1999~~

Policy 2-1.1.6: ~~Policy 2-1.1.13:~~ Future Multimodal Transportation Map

The City shall hereby adopt~~s~~ the Future Multimodal Transportation Map ~~as shown in Figure 2.~~, Map 16 in the Map Series.~~1.~~ All new developments must be consistent with this map.

~~Added by Ordinance 00-10, 07/27/2000~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 2-1.1.14: CR 545**~~

~~The City shall continue to implement the CR 545 Special Benefit Overlay District intended to fund improvements to CR 545 along with Orange County and voluntary contributions by developers. The City will continue to work with the County to implement this improvement.~~

~~Amended by Ordinance 02-19, 10/10/2002~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.1.7: ~~Policy 2-1.1.1:~~ Non-Concurrency Level of Service Standards

The City ~~adopts~~ shall adopt ~~the following~~ non-concurrency~~acceptable~~ peak hour Level of Service (LOS) ~~standards~~ for all roads within the city for planning purposes only, which are located in the Capital Improvements Element.~~:~~

~~Study Roadways~~**~~Roadway~~**

~~From~~	~~To~~	~~Adopted LOS~~	
~~9th Street~~	~~Plant Street~~	~~SR 50 (West Colonial Drive)~~	~~E~~
~~Beard Road~~	~~Daniels Road~~	~~Beulah Road~~	~~E~~
~~Beulah Road~~	~~Roper Road~~	~~SR 50 (West Colonial Drive)~~	~~E~~
~~Carter Road~~	~~SR 50 (West Colonial Drive)~~	~~Story Road~~	~~E~~
~~CR 535/Winter Garden-Vineland Road~~	~~Lake Butler Boulevard~~	~~Stoneybrook Parkway/Daniels Road~~	~~E~~

From	To	Adopted LOS	
CR 535/Winter Garden-Vineland Road	Stoneybrook Parkway/Daniels Road	SR 50 (West Colonial Drive)	E
CR 545/Avalon Road	SR 50 (West Colonial Drive)	Davenport Road	E
Crest Avenue	Division Street	Fullers Cross Road	E
Crown Point Cross Road	Hennis Road	East Crown Point Road	E
Daniels Road	Stoneybrook Parkway	SR 50 (West Colonial Drive)	E
Dillard Street	SR 50 (West Colonial Drive)	Plant Street	E
Division Street	Hennis Road	Lakeview Avenue	E
East Crown Point Road	Plant Street	Northeast City Limits	E
Florida Turnpike (SR 91)	Eastern City Limits	Western City Limits	D
Fullers Cross Road	Crest Avenue	East Crown Point Road	E
Hennis Road	Plant Street	Crown Point Cross Road	E
Lake Butler Boulevard	CR 535/Winter Garden-Vineland Road	Clarice Court	E
Lake Butler Boulevard	Clarice Court	McKinnon Road	E
Lakeview Avenue	Tilden StreetPalmetto Street	Division Street	E
Marsh Road	Avalon Road	Western City Limits	E
Park Ave	Tilden Street	SR 50 (West Colonial Drive)Sand Lime Road	E
Plant Street	Eastern City LimitsTildenville School Road	Western City Limits	E
Roper Road	CR 535/Winter Garden-Vineland Road	Beulah Road	E
SR 50 (West Colonial Drive)	Western City Limits	Western Beltway (SR 429)	D
Stoneybrook Parkway	Avalon Road	Windermer Road	E
Story Road	Eastern City Limits	Western City LimitsPlant Street	E
Tilden Road	Avalon Road	CR 535/Winter Garden-Vineland Road	E
Tilden Street	Park Avenue	Lakeview AvenueDonald Drive	E
Tildenville School Road/(CR 545)	SR 50 (West Colonial Drive)	Plant StreetBay Street	E
Warrior Road	Windermere Road	Beulah Road	E

From	To	Adopted LOS	
West Crown Point Road	Plant Street	Crown Point CrossFullers Cross Road	E
Western Beltway (SR 429)	Southern City Limits	Clarcona-Ocoee Road	D
Windermere Road	Stoneybrook Parkway	Warrior Road	E
Public Transit	N/A		30 Minute Headways

Luke Transportation Engineering Consultants, 2009

Amended by Ordinance 96-13, 06/27/1996
Amended by Ordinance 97-02, 10/23/1997
Amended by Ordinance 99-19, 09/09/1999
Amended by Ordinance 00-10, 07/27/2000
Amended by Ordinance 10-19, 06/24/2010

Policy 2-1.1.8: Policy 2-1.1.2: Paving Program

The City shall continue to improve and maintain its local street system by continuing its systematic paving and resurfacing program in order to develop the local roadways into a multimodal system where possible and provide for the safety and convenience of its residents. The City shall continue to maintain and enhance its local street network through a systematic paving and resurfacing program. These efforts will support the gradual development of a multimodal roadway system, where feasible, and promote the safety and convenience of all residents.

Amended by Ordinance 97-02, 10/23/1997

Amended by Ordinance 10-19, 06/24/2010

Policy 2-1.1.9: Policy 2-1.1.3: Parking Regulations

The City shall continue to review all proposed development and redevelopment as to circulation and parking in order to assureensure safe and convenient on-site traffic flow considering necessary motorized and non-motorized vehicle parking. This shall include the enforcement adoption of regulations which that require access limitations, parking lot design criteria, sidewalks and bike paths, traffic calming elements, signage, and acceleration and deceleration lanes. (9J-5.019(4)(c)3.1) (9J-5.019(4)(c)3 & 15)

Amended by Ordinance 97-02, 10/23/1997
Amended by Ordinance 99-19, 09/09/1999

Policy 2-1.1.10: ~~Policy 2-1.1.10:~~ Impacts ~~to~~on Unimproved Roads

~~No final development permit shall be issued to construct a development that will have an adverse impact to an unimproved road or a road that is significantly inconsistent with the City's Road Specifications.~~ The City shall not issue a final development permit for a project that would adversely impact an unimproved road or a road that is significantly inconsistent with the City's road specifications, unless the developer improves the roadway to meet applicable City standards.

~~Added by Ordinance 99-19, 09/09/1999~~

Policy 2-1.1.11: Constrained Roadway Network

The City shall evaluate opportunities to increase north-south mobility in the City by improving the livability and efficiency of Avalon Road, Daniels Road, Winter Garden Vineland Road, and Beulah Road ensuring the improvements align with City's goals of creating a multi-modal transportation system.

Objective 2-1.2: Vision Zero

Achieve zero traffic fatalities and a 50 percent reduction in serious injuries from 2025 to 2050.

Policy 2-1.2.1: Vision Zero Action Plan

The City shall continue to coordinate with the County, MetroPlan Orlando, and the state to implement the City's Vision Zero Action Plan.

Policy 2-1.2.2: Road Safety Education for Children and Teens

The City shall work with public and private schools and parent organizations to introduce children and teens to safe transportation habits and transportation safety programs.

Policy 2-1.2.3: Safe Routes to School

The City shall coordinate with Orange County, Orange County Public Schools, and FDOT to seek funding for the development of a Safe Routes to School program.

Policy 2-1.2.4: ~~Policy 2-1.1.11:~~ Dangerous Situations

The City shall not issue a ~~No~~ final development permit ~~shall be issued to construct a development that~~for a project that will create a dangerous traffic/bike/pedestrian situation.

~~Added by Ordinance 99-19, 09/09/1999~~

Objective 2-1.3: Complete Streets

Create a transportation system that ensures safe, convenient, and comfortable travel of all users through a more efficient use of the right of way and alternative modes of travel.

Policy 2-1.3.1: ~~Policy 1-4.1.5:~~ Implement Complete Streets

The City shall implement ~~the~~ a "~~"~~complete streets" policy to ensure that all modes of transportation are incorporated into proposed plans for roadway modifications ~~within the TCEA~~. The intent of this policy is to develop a comprehensive, integrated, multimodal street network by coordinating transportation planning strategies and private development activities as follows:

1) Provide safe and convenient on-site pedestrian circulation such as sidewalks and crosswalks connecting buildings, parking areas, and existing or planned public sidewalks.
2) Provide cross-access connections/easements or joint driveways where available and cost effective.
3) Deed land or convey required easements, as requested by the City, for the construction of public sidewalks, bus turn-out facilities, and/or bus shelters with appropriate credits toward developer contribution requirements.
4) Where appropriate, developers shall provide for the following improvements with credits toward contribution requirements:
    i. Project turn lanes
    ii. Bus shelters
    iii. Adjacent sidewalks & multimodal trails
    iv. Streetscaping/landscaping within the public right-of-way
    v. Additional bicycle parking~~.~~

Policy 2-1.3.2: Alternative Modes of Transportation

The City shall improve and expand the number of transportation facilities for non-motorized transportation including but not limited to the expansion of the City's sidewalks, crosswalks, bicycle lanes, and trail systems.

Policy 2-1.3.3: Context Sensitive Design

The City shall use context sensitive design to better integrate the City's transportation system with its built environment and provide multiple modes of travel.

Policy 2-1.3.4: Traffic Calming

The City shall consider creating a Traffic Calming Toolkit and develop a process for implementing various traffic calming techniques to improve the safety of roadways when necessary.

Policy 2-1.3.5: Accessibility

The City shall coordinate with FDOT to ensure all public rights of way meet ADA standards when feasible.

Objective 2-1.4: Regional Trail System

Develop a regional trail system to provide residents with a functional and recreational transportation system for pedestrians and bicyclists and maintain the trail Level of Service established in the Capital Improvement Element.

Policy 2-1.4.1: Healthy West Orange

The City shall participate in the Healthy West Orange Trails Initiative and coordinate with local and regional agencies and organizations to continue to develop a regional trail system.

Policy 2-1.4.2: Activation Facilities

The City shall coordinate with Healthy West Orange to develop activation facilities, (e.g. outdoor fitness areas, playgrounds, community gardens, etc.) as detailed in the 2022 Healthy West Orange Trails Initiative to enhance existing and future trails.

Policy 2-1.4.3: Community Programming

The City shall evaluate opportunities to program community events near or adjacent to a trail when feasible.

Policy 2-1.4.4: Trail Funding

The City shall continue to pursue local, state, and federal grants to fund future trails.

Policy 2-1.4.5: Pedestrian and Bicycle Access

The City shall work to ensure pedestrians and bicyclists have safe and convenient access to the regional trail system.

Objective 2-1.5: ~~Objective 2-1.2:~~ Transportation System and Land Use Coordination

~~Coordinate the transportation system with the future Land Use Map and to ensure that existing and proposed populations densities, housing and employment patterns and land uses are consistent with the transportation modes and services proposed to serve these areas.~~ Coordinate the transportation system with the Future Land Use Map to ensure that existing and planned population densities, housing and employment patterns, and land uses are supported by appropriate transportation modes and services.~~The measurement of this objective is the degree to which the following policies are implemented. ((9J-007(3)(b)2.) & (9J-5.019(4)(b)2.))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-19, 09/09/1999~~
~~Amended by Ordinance 00-10, 07/27/2000~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.5.1: ~~Policy 2-1.2.1:~~ Traffic Circulation

The City shall require all new development and redevelopment to provide a traffic circulation plan which illustrates safe access to the system and coordinates projected traffic flow with the existing street pattern. The traffic circulation plan shall address median cuts, acceleration and deceleration lanes, storage turn lanes, signage and signalization. Standards for the preceding shall be adopted in the City's land development regulations.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 2-1.5.2: ~~Policy 2-1.2.2:~~ Access Management

~~In its review of development plans,~~ The City shall ~~will~~coordinate with FDOT regarding ~~carefully review~~ proposed access points along State Road 50 ~~and limit them to provide reasonable access to the site and address safety issues. It will require frontage roads, shared access points, cross access and restricted turning movements where necessary. It will ensure that all development on State roads is~~ consistent with Chapters 14-96 and 14-97 F.A.C.~~(9J-5.019(4)(c)2.))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-19, 09/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.5.3: ~~Policy 2-1.2.3:~~ Plant Street

The City shall designate ~~In support of the City's redevelopment efforts,~~ Plant Street (S.R. 438) in the City of Winter Garden~~, West of Dillard Street, is hereby designated~~ as a policy constrained facility. The City opposes the construction of additional traffic capacity ~~through lanes~~ on this section of roadway.~~[]~~

~~Added by Ordinance 96-13, 06/27/1996~~
~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-10, 07/27/2000~~

~~Policy 2-1.2.4: Best Development Practices~~

~~The City hereby adopts and endorses the general principals of Reid Ewing's April 1996 "Best Development Practices." The City will specifically require the following principles for residential subdivisions:~~

~~(1) Development shall allow for through streets spaced no more than ½ mile apart.~~

~~(2) Residential subdivisions shall use traffic calming devices liberally.~~

~~(3) Residential subdivisions shall be designed to keep speeds on local streets below 20 mph.~~

~~(4) Developments shall be designed to keep speeds on collectors within the development to no more than 35 mph.~~

~~(5) Residential subdivisions shall keep all streets as narrow as permissible by the LDRs.~~

~~(6) PUDs shall be designed to avoid using traffic signals wherever possible.~~

~~(7) All developments shall provide for pedestrian friendly environments to include shortcuts whenever possible and shall develop pedestrian routes away from high speed roads or provide buffering.~~

~~(8) PUDs shall incorporate transit orientated design features where applicable.~~

~~Amended by Ordinance 98-23, 06/25/1998~~

Policy 2-1.5.4: ~~Policy 2-1.2.5:~~ Intersection Alignments

The City shall require all new development to ~~must~~ conform with the ~~new~~ intersection alignments as identified in the Future Multimodal ~~Traffic Circulation~~Transportation Map if it is determined that said alignment will not present any undue ~~economical~~economic hardship.

~~Amended by Ordinance 00-10, 07/27/2000~~

Objective 2-1.6: ~~Objective 2-1.3:~~ Transportation Planning Coordination

~~The City will coordinate~~Coordinate ~~its~~ City plans with all transportation planning bodies, including but not limited to FDOT, Orange County, other municipalities, East Central Florida Regional Planning Council, MetroPlan Orlando~~the Metropolitan Planning Organization (MPO)~~, and the Central Florida ~~Orlando-Orange County~~ Expressway Authority. ~~The measurement of this objective shall be the degree to which the following policies are implemented. ((9J.007(3)(b)3.) & (9J-5.019(1) & (9J-5.019(4)(b)3.))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-19, 09/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.6.1: ~~Policy 2-1.3.1:~~ The FDOT 5 Year Work Program

Through ~~the MPO~~MetroPlan Orlando, the City shall ~~will~~ annually review the FDOT 5-Year Plan and all of its updates to ensure ~~insure~~ that the work program is ~~its plans are~~ consistent with ~~that document and~~ the plans of the City.~~This shall include right-of-way needs, access management, and level of service standards.~~[]

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Policy 2-1.3.2: Orange County Traffic Circulation Element. The City will review on an annual basis the Traffic Circulation Element for Orange County in order to insure compatibility with that Plan and the plans of the City. This shall include right-of-way needs, access management, and level of service standards.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 2-1.6.2: ~~Policy 2-1.3.3:~~ City of Ocoee and Town of Oakland

The City shall ~~will~~ review on an annual basis the Transportation ~~Traffic Circulation~~ Elements for the City of Ocoee and Town of Oakland in order to ~~insure~~ensure compatibility with those respective plans and the plans of the City.~~This shall include right-of-way needs, access management, and level of service standards.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-1.6.3: MetroPlan Orlando Transportation Program

The City shall review on an annual basis the most recent version of MetroPlan Orlando's Transportation Improvement Program in order to ensure consistency with the City's programmed improvements.

Objective 2-1.7: ~~Objective 2-1.4:~~ Right-of-Way Protection

~~The City shall p~~Protect both existing and future rights-of-way from building encroachment. The measurement of this objective shall be the lack of encroachment on these rights-of-way~~. and the degree to which the following policies are implemented. (9J-5.019(4)(b)5.))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-19, 09/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.7.1: ~~Policy 2-1.4.1:~~ Development Plans

The City shall pursue needed rights-of-way, for both existing and future roads, through dedication when development plans are presented. If condemnation is necessary, the City shall ~~will~~ work with the entity responsible for the roadway with respect to obtaining data regarding the condemnation proceedings. ~~By December 2011,~~ The City shall ~~will~~ develop a right of way map indicating where right of way exists and areas where right of way is needed.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-19, 09/09/1999~~
~~Amended by Ordinance 00-10, 07/27/2000~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.7.2: ~~Policy 2-1.4.2:~~ Subdivision Plans

The City shall use its Subdivision Regulations and other development regulations along with the Winter Garden Area Transportation Study (WGATS) to determine the right-of-way requirements for arterial,

collector, and local streets and shall coordinate with FDOT and Orange County to ensure that State and County ~~needs~~ requirements are met.~~(9J-5.019(4)(c)4.)~~

~~Amended by Ordinance 96-13, 06/27/1996~~
~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 2-1.7.3: ~~Policy 2-1.4.3:~~ Building Setbacks

The City shall use building setback regulations contained in its zoning ordinance to ~~insure~~ensure that proposed buildings do not encroach on needed rights-of-way and shall coordinate with FDOT and Orange County to ensure that State and County ~~needs~~ requirements are met.~~(9J-5.019(4)(c)4.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 2-1.7.4: ~~Policy 2-1.4.4:~~ ROW Preservation and Acquisition

The City shall coordinate with FDOT and other transportation entities to ensure that adequate rights of way for existing transportation facilities are preserved and acquired for future transportation facilities.~~By December 2011, the City shall establish a right of way preservation policy. Until that time, no new development may receive building permits that significantly vary from the Winter Garden Area Transportation Study (WGATS) or the Future Traffic Circulation Map.~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-10, 07/27/2000~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 2-1.8: ~~Objective 2-1.5:~~ Subdivision Circulation

~~**Policy 2-1.1.1:** The City shall e~~Ensure that new residential subdivisions will be~~are~~ designed to allow for dispersal of residential traffic, and to minimize the impact of residential traffic at connections to the surrounding street systems, by providing for interconnection between developments that accommodates travel demands between adjacent neighborhoods, by connectivity and providing networks for pedestrian and bicycle transportation.~~-~~ Ensure that new residential subdivisions are designed to disperse traffic and minimize impacts at connections to the surrounding street network. This shall be achieved by providing interconnections between adjacent developments that accommodate local travel demand and by establishing connected pedestrian and bicycle networks.

Policy 2-1.8.1: ~~Policy 2-1.5.1:~~ Multiple Connections

The City shall require new residential subdivisions to ~~shall include~~ have an internal street layout ~~which~~ that ~~shall continuously~~connects to ~~the streets of~~ surrounding developments to accommodate travel demand between adjacent neighborhoods without ~~the necessity of using~~needing to use arterial or collector roads.~~the major thoroughfare system.~~

Policy 2-1.8.2: ~~Policy 2-1.5.2:~~ Pedestrian Connections

~~Subdivision design standards~~The City shall require residential subdivisions to be interconnected with safe and adequate pedestrian and bicycle routes. These routes shall provide access to surrounding areas, including schools, parks, commercial areas and other destinations. Connections to adjacent existing or planned sidewalks and bicycle paths shall be required.~~(9J-5.019(4)(c)5.)~~

~~Amended by Ordinance 00-10, 07/27/2000~~

Policy 2-1.8.3: ~~Policy 2-1.5.3:~~ Stub out Requirements

The City shall require subdivisions to ~~shall~~ be designed to include stub outs to connect to abutting undeveloped lands and/or land with redevelopment potential. Provisions for future connections shall be provided in all cardinal directions whether the streets are public or private, except where abutting land is undevelopable. New subdivisions shall align their roadways to connect with the stub outs provided by the adjacent developments.

Policy 2-1.8.4: ~~Policy 2-1.5.4:~~ Gated Community Restrictions

The City shall only permit new subdivisions requesting to become a gated community ~~will only be permitted~~ if they are isolated by environmental or infrastructure constraints that limit access to a single point. ~~-~~Constraints or isolation by design shall not be considered sufficient to allow gating.

~~Added by Ordinance 98-23, 06/25/1998~~

Objective 2-1.9: ~~Policy 2-1.1.15:~~ Dillard Street Corridor

~~To i~~Improve the one-~~-~~mile segment of Dillard Street from East Plant Street south to SR 50 ~~in order~~ to foster better outcomes economically, socially, recreationally, functionally, and aesthetically.

Policy 2-1.9.1: ~~Policy 2-1.1.5: Pedestrian and Bicycle~~Dillard Street Corridor

~~The City shall continue to implement the Bicycle and Pedestrian Master Plan developed in conjunction with FDOT in 2002 as an alternative means of transportation around the City and to further reduce greenhouse gas emissions.(9J-5.019(4)(c)5.)~~ The City shall ~~also~~ continue to plan for the implementation of a multimodal road realignment project along the Dillard Street Corridor from SR 50 to East Plant Street to improve pedestrian and bicycle connections.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-19, 09/09/1999~~
~~Amended by Ordinance 00-10, 07/27/2000~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.9.2: Dillard Complete Street

The City shall ensure elements of the proposed Dillard Street Corridor project ~~shall~~ creates a complete street that incorporates context sensitive design.~~include creating a living street by reducing the street travel lanes; providing roundabouts at key intersections in lieu of traffic signals; installing wide sidewalks and street parking; installing a 10' wide two-way bike lane; burying a segment of the existing overhead utilities and updating old lines; and providing new landscaping and pedestrian amenities.~~

Policy 2-1.9.3: Support

The City shall ~~will~~ support the development of the Dillard Street Corridor project by engaging in continued analysis and detailed design of the corridor, as well as procuring the needed right-of-way in order to commence construction activities.

Policy 2-1.9.4: Funding Opportunities

The City shall ~~also~~ continue to explore ~~various~~ alternative funding opportunities for the Dillard Street Corridor project such as grants, earmarks, and ~~ad valorem taxes~~sales tax.

Objective 2-1.10: ~~Objective 2-1.6:~~ State Road 50 Management

~~To m~~Manage the traffic flow on SR 50 by implementing the West SR 50 Commercial Corridor Overlay plan and its access management requirements and congestion management improvements. ~~applying the following policies.~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.10.1: ~~Policy 2-1.6.1:~~ Access Management

The City shall continue to implement the requirements of the West SR 50 Commercial Corridor overlay plan that identifies access management requirements for new developments along SR50 and possible access management improvements for existing development.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.10.2: ~~Policy 2-1.6.2:~~ Congestion Management

The City shall continue to implement the requirements of the West SR 50 Commercial Corridor overlay plan that identifies congestion management improvements along SR 50. This plan ~~will~~ require ~~s reasonable efforts for~~ new development to provide bicycle parking and accessibility to future transit~~, and will consider new regulations to require bicycle parking.(9J5.019(4)(c)9, 12, and 15)~~

~~Amended by Ordinance 00-10, 07/27/2000~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 2-1.6.3: Funding**~~

~~The "stimulus money" provided through the American Recovery and Reinvestment Act of 2009 is providing the funding to widen SR 50 to 6 lanes throughout the City. The City will coordinate with FDOT in implementing the West SR 50 Commercial Corridor overlay plan.~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 2-1.6.4: Beulah & 9th~~

~~The City hereby acknowledges the need to extend Beulah Road across SR 50 to 9th Street and to eliminate the signal at 9th and SR50 once the Beulah Road Connector is completed. This project is not financially~~

~~feasible at this time but the City shall continue to plan for this improvement through possible redevelopment projects in the area.~~

~~Amended by Ordinance 01-47, 02/28/2002~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Objective 2-1.7: East Plant Street Management~~

~~To manage the traffic flow on East Plant Street by the implementation of the following policies.~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 2-1.7.1: Access Management~~

~~The City shall implement access management requirements during the East Plant Street widening improvements scheduled in the City's 2009/20010 5-year Capital Improvement Schedule.~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.10.3: Intelligent Transportation System

The City shall coordinate with FDOT, MetroPlan Orlando, and other transportation agencies to implement Intelligent Transportation System strategies along State Road 50.

Objective 2-1.11: ~~Objective 2-1.8:~~ Efficient Public Transit

~~To a~~Assist LYNX and LakeXpress in providing an efficient public transit system where feasible by coordinating transit connections between major trip generators and attractors, providing safe and convenient public transit terminals, providing adequate land use / transit connections, and accommodations of the special needs of the transportation disadvantaged.~~(9J-5.019(4)4.)~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.11.1: ~~Policy 2-1.8.1:~~ Pedestrian and Bicycle Facilities

The City shall continue ~~to implement the Bicycle and Pedestrian Master Plan developed in conjunction with FDOT in 2002~~ to help connect residential neighborhoods and commercial areas to the transit routes with pedestrian and bicycle facilities.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.11.2: ~~Policy 2-1.8.2:~~ Transit Facilities

The City shall ~~will~~ continue to coordinate with the ~~the~~ local public transit agency (LYNX) to add additional bus service to west Orange County with ideally, a direct route between the City's ~~bedroom communities~~ residential areas and downtown Orlando.

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 2-1.8.3: Transit Study~~

~~The City commissioned a transit analysis by Planning Innovations, Inc. This Citywide Transit Plan report is in the final draft stages and is intended to evaluate regional and local transit service options within the City. Any local service may be coordinated with LYNX or can be an independent program operated and maintained by the City. The local transit service can act as a feeder system to the regional system. The City shall continue to pursue alternative modes of travel, including carpooling, to reduce trips and to reduce travel distances.~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.11.3: Micro Transit

The City shall coordinate with LYNX, Orange County, FDOT, MetroPlan Orlando and other public and private transportation entities to consider the development of a public micro transit system in Winter Garden.

Policy 2-1.11.4: ~~Policy 2-1.8.4: Mobility Goal~~Increased Ridership

~~Through the implementation of this Multimodal Transportation Element,~~ The City ~~hereby~~ shall set ~~sets~~ a goal of increasing micro transit ~~the bus~~ ridership to 5,000 monthly trips by 2050~~January, 2015~~.~~(9J5.019(4)(c)10)~~

~~Added by Ordinance 00-10, 07/27/2000~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 2-1.11.5: Regional Bus Transit

The City shall coordinate with LYNX to improve bus transit service within Winter Garden, including but not limited to reduced headways, additional stops, additional routes, and improved bus stop shelters.

Goal 2-2: ~~Goal 2-2: Creation of a~~ Transportation Concurrency Exception Area (TCEA)

~~Pursuant to subsection 163.3164 (34) of the Florida Statutes (FS) the City of Winter Garden qualifies as a dense urban land area as determined by the Office of Economic and Demographic Research. As such, pursuant to subsection 163.3180 (5)(b)1.a., FS the City is designated a Transportation Concurrency Exception Area. The City shall~~ Utilize ~~this designation imposed by Florida Statutes~~the transportation concurrency exception area to responsibly encourage growth in specific areas within the City to reduce the negative impacts of transportation concurrency and ~~to~~ maximize the use of existing public infrastructure in the City.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 2-2.1: ~~Objective 2-2.1:~~ TCEA Provisions

~~The City establishes a~~ Implement the Transportation Concurrency Exception Area ~~consistent with subsection 163.3180(5)(b)1.a., Florida Statutes,~~ that covers the jurisdictional limits of the City to provide exemptions to transportation concurrency to support urban infill development, redevelopment, and the achievement of the City's redevelopment goals by addressing mobility, urban design, land use mix, network connectivity ~~and~~ reduction in the reliance of the single occupant automobile, and reduction in vehicle miles traveled, and encourage alternative modes of transportation.~~The City will address its multimodal transportation needs through the strategic framework outlined in the following policies.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 1-4.1.4:TCEA Boundary and Annexation.**~~

~~At such time unincorporated land adjacent to the TCEA is annexed into the City and is assigned a future land use and zoning designation the TCEA boundary shall be extended to include such land.~~

~~**Policy 1-4.1.6:**~~

~~The City shall adopts these standards as interim mobility standards and shall develop land use and transportation strategies to support and fund mobility consistent with Section 163.3180(5) F.S.~~

Policy 1-4.1.7: TCEA Monitoring

The City of Winter Garden shall monitor the development activity and implementation of mobility strategies within the TCEA to ensure that the exception area is supporting redevelopment. The baseline condition for the performance measures and respective targets will be identified/defined in 2010/2011 and shall be the baseline data available for comparison against the data collected for the subsequent Evaluation and Appraisal Reports. The monitoring will include analysis, data collection and/or information for the following:

1) The amount of development/redevelopment by land use in the TCEA as a function of density, FAR, and percentage of mixed use. Other site planning performance criteria may be used as part of the evaluation such as building placement, parking location and number of spaces, connection to adjacent properties, proximity to transit stops/shelters, connection to adjacent sidewalk network, and provision of pedestrian, bicycle, and transit amenities.

2) The implementation of mobility strategies, programs, and policies in support of the TCEA and the City's redevelopment objectives, along with associated targets, include but are not limited to the following:

Mobility Strategy	**Performance Measure***	**Target***
Transportation Demand Management	Persons participating in ridesharing or vanpooling programs	3% annual increase of participants
	Number of businesses/ employers offering flexible work schedules	5% annual increase of participants

~~Mobility Strategy~~	~~Performance Measure*~~	~~Target*~~
	~~Implementation of transit pass programs and number of participants (businesses and individual)~~	~~Implementation by 2009 2030 with 5% annual increase after implementation~~
	~~Number of bus turn out facilities (at locations desired by LYNX)~~	~~1 per year as coordinated with LYNX~~
	~~Number of improved and/or new bus shelters on LYNX routes within the TCEA~~	~~1 improved and/or new shelter each year~~
~~Transportation System Management~~	~~Number of intersection and/or signal improvements~~	~~1 per project generating > 5,000 net new daily trips~~
	~~Optimize signal synchronization~~	~~By 20132035~~
	~~Number of joint driveways and/or cross-accesses or combined driveways~~	~~1 per redevelopment/ development project~~
~~Pedestrian Environment (Sidewalk) Enhancements~~	~~Amount of sidewalks added and/or expanded to the network in the TCEA~~	~~500 linear feet of sidewalk per year~~

Mobility Strategy	Performance Measure*	Target*
	Linear feet of streetscaping/ landscaping which enhances the pedestrian environment	500 feet per year
	Number of pedestrian enhanced crosswalks in TCEA	1 intersection per year
Bicycle Facilities Enhancement	Number of bicycle racks/lockers and related amenities for projects within the TCEA	Increase in bicycle rack/locker for redevelopment and new development over existing conditions
	Linear feet of bicycle lanes and related facilities in TCEA	Bicycle lanes and related facilities as part of programmed street improvements, resurfacing or rehabilitation

* Performance Measures and Targets may be subject to further consideration (i.e., if these performance measures and targets cannot be supported by reasonably available data or additional measures are identified that may also be appropriate).

3) The effects of the TCEA strategies, programs, and policies in accomplishing the objective of improved mobility for the multi-modal transportation system within the TCEA shall be monitored by the following performance measures, including, but not limited to:

Performance Measure	Target*
Change in ridership, including boardings/alightings for LYNX routes within the TCEA	1% annual increase
Change in headways for LYNX routes within the TCEA	10-minute headway decrease every 5 years
Local Transit ridership (change in ridership will be reported in subsequent years after the implementation of the service)	Achieve 1st year ridership projections with a 3% annual increase
Land use and Density and Intensity	Density and intensity of new development
Support Alternative Modes of Transportation	Transit shelters
Strategic Intermodal System (SIS) and Florida Intrastate Highway System (FIHS) Facilities	Traffic counts and queue length at ramps located in the City
Proposed trip generation from redevelopment/new developments (based on CMS Applications and TIAs) versus actual traffic counts on adjacent roadways	Achieve a 5% reduction in actual traffic counts versus trip generation projections
Change in daily and peak hour traffic volumes on SR 50	Achieve less than 1% annual increase
Change in traffic counts and queue lengths at the SR 429 ramps	Achieve less than 1% annual increase in traffic counts and queue lengths

*Performance measures and the associated targets will be coordinated with the respective agencies such as LYNX, Orange County, and FDOT. The facilities and infrastructure for several of the targets, such as bus shelters, are contingent upon development/redevelopment activity and

~~associated developer contributions. Performance measures and targets may be subject to further consideration (i.e., if these performance measures and targets cannot be supported by reasonably available data or additional measures are identified that may also be appropriate).~~

~~4) The City, with consultation of FDOT, will present the evaluation and information for the implemented mobility strategies and the effects on multi-modal mobility, as referenced above, and the extent to which the strategy has achieved the purpose of the TCEA since the adoption of the TCEA and/or the last Evaluation and Appraisal Report. The TCEA monitoring and evaluation for the EAR shall rely on secondary data sources to the fullest extent possible.~~

~~5) In addition, the City will evaluate the strategies to determine whether modifications to the TCEA and/or the strategies are necessary. This evaluation will be conducted every seven years and the results will be included in the Evaluation and Appraisal Report along with any recommendations to refine the TCEA polices and mobility strategies through EAR-based amendments.~~

Policy 2-2.1.1: ~~Policy 2-2.1.2:~~ Activity Center Framework (excluding the Downtown Area)

The City shall exempt development in the remaining activity centers, as identified ~~on~~ in the ~~Future Land Use~~Activity Centers, Map 5 in the Map Series ~~Map 1.3~~, ~~shall be exempt~~ from standard transportation concurrency~~;~~, however, a traffic study will be required if the proposed project involves a rezoning, submittal of a major site plan application, and/or the project's PM peak hour trip generation (based on the latest edition of the ITE Trip Generation Manual) exceeds 100 net new trips to determine any adverse impacts and resulting mitigation including improvements to ingress/egress, intersection improvements, public safety improvements, etc. Development within the remaining activity centers shall also be responsible for road impact fees~~, and at a reduced rate for multi/mixed-use projects,~~ or payment of any proposed Mobility Fee as it may be enacted. Emphasis will be placed on pedestrian and bike mobility and ~~transit oriented~~transit-oriented design and on mixed/multi use development.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.1.2: ~~Policy 2-2.1.1:~~ Traditional Downtown Activity Center Framework

The City shall exempt the Traditional Downtown Activity Center ~~is exempt~~ from standard transportation concurrency and ~~,~~ traffic studies~~, and road impact fees~~. Development will be responsible for any proposed Mobility Fee, as it may be enacted, as it may pertain to capital cost for transit ~~and~~, bike and/or pedestrian improvements. Emphasis will be placed on pedestrian~~/~~, bike~~/~~, and golf cart mobility and accommodations. If needed, these developments shall participate in the downtown parking program. Emphasis will be placed on mixed/multi use development.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.1.3: ~~Policy 2-2.1.3:~~ Outside of Activity Center Framework

The City shall exempt development outside of the activity centers ~~is exempt~~ from standard transportation concurrency but shall be required to conduct a traffic study if the proposed project involves a rezoning, submittal of a major site plan application, and/or project's PM peak hour trip generation (based on the latest edition of the ITE Trip Generation Manual) exceeds 50 net new trips to determine any adverse impacts and resulting mitigation including improvements to ingress/egress, intersection improvements, public safety improvements, etc. Development outside the activity centers shall also be responsible for road impact fees or payment of any proposed Mobility Fee as it may be enacted. Emphasis will be placed on pedestrian and bike mobility and other alternative modes of transportation.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.1.4: ~~Policy 2-2.1.4:~~ Level of Service (LOS) Tables

The City shall continue to maintain the roadway LOS tables and track proposed development trips on area roadways for network monitoring purposes only.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.1.5: ~~Policy 2-2.1.5:~~ Land Development Regulations

The City's land development regulations ~~will~~ shall be amended to reflect these policies ~~and any~~ when a mobility fee is enacted. ~~within 12 months of the adoption the enacting ordinance.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.1.6: ~~Policy 2-2.1.6: SIS and FIHS Facilities~~Strategic Intermodal System (SIS) and Florida Intrastate Highway System (FIHS) Facilities

~~The Florida Turnpike (SR 91) and the Daniel Webster Western Beltway (SR 429) are the two SIS/FIHS facilities within the City.~~ The City shall ~~will~~ monitor ~~both roadways~~ and coordinate with ~~the~~ FDOT and Central Florida Expressway Authority to make all efforts to minimize any potential negative impacts ~~to~~on ~~these facilities~~ the Florida Turnpike (SR 91) and the Daniel Webster Western Beltway (SR 429), ~~are~~ the two SIS/FIHS facilities within the City.

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 2-2.1.7: State Road 50**~~

~~State Road 50 serves Orange County as a major east-west arterial that literally traverses the state from the east coast to the west coast. SR 50 carries traffic into and through the City. A significant amount of traffic on SR 50 does not start or stop in Winter Garden. During the morning PM AM peak hour the peak direction of traffic on SR 50 is eastbound (towards Orlando) and the reverse is measured in the PM peak hour. While this non-Winter Garden regional traffic places a burden on the City (by creating congestion and a challenging pedestrian environment) the City recognizes this regional demand is expected within a growing urban area and the importance of providing adequate regional access to and through Winter Garden and will continue to monitor conditions on SR 50.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 2-2.1.8: TCEA Evaluation**~~

~~Consistent with Policy 1-4.1.76 the City shall evaluate the effectiveness of the Transportation Concurrency Exception Area (TCEA) every seven years and report as part of the EAR the impacts of the following:~~

~~(1) Amount and type of development/redevelopment activity within the TCEA;~~

~~(2) Amount and type of improvements to transit infrastructure and service in the TCEA;~~

~~(3) Change in transit ridership within the TCEA as a function of the amount and type of development/redevelopment activity;~~

~~(4) Adoption and implementation of programs which promote pedestrian and non-automobile travel in the TCEA including improvements to pedestrian and bicycle facilities.~~
~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 2-2.1.9: Detail Traffic Analysis**~~

~~A detailed traffic analysis will be conducted every seven years in conjunction with the TCEA Monitoring Report as part of the City's EAR to provide information to the City and FDOT to evaluate the effectiveness of the TCEA mobility strategies.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 2-2.2: Mobility Plan

Develop a Mobility Plan to guide the implementation of a multimodal transportation system.

Policy 2-2.2.1: Development of the Mobility Plan

The City shall develop a Mobility Plan that promotes an interconnected multimodal transportation system that prioritizes complete streets and alternative modes of travel.

Policy 2-2.2.2: Interim Mobility Plan

The City shall utilize the Future Multimodal Transportation Map as an interim measure until a full Mobility Plan is developed.

Policy 2-2.2.3: Mobility Fees

The City shall establish a Mobility Fee Schedule in the Land Development Code to implement the City's Mobility Plan.

Policy 2-2.2.4: Land Development Code

The City shall update the Land Development when the Mobility Plan is adopted.

Policy 2-2.2.5: Mobility Plan Monitoring

The City shall develop Mobility Plan metrics and assign the responsibility of monitoring the metrics to a relevant department in the City when the Mobility Plan is adopted.

Objective 2-2.3: ~~Objective 2-2.2: TCEA~~ Mobility Strategies

~~The City shall s~~Support mobility within the City through the following ~~interim~~ mobility policies and ~~shall~~ develop land use and transportation strategies to support and fund mobility ~~by July 9, 2011 consistent with Section 163.3180(5)(b)4., F.S~~.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.3.1: Mobility Evaluation and Review

The City shall require all developments generating 50 or more net new trips to submit a traffic impact study and implement approved mobility strategies consistent with the Capital Improvements Element and Land Development Code.

Policy 2-2.3.2: ~~Policy 1-4.1.1: TCEA Interim~~ Mobility Strategies

The City shall recognize~~s~~ the need for concurrency exceptions to stimulate development within the City. ~~Notwithstanding policies in the comprehensive plan that establishes roadway level-of-service and transportation concurrency standards, development within the TCEA shall be exempt from those standards except as outlined in policies for mobility found in the Multi Modal Transportation Element.~~ Mobility within the City shall be maintained by the implementation of the strategies and programs ~~in the Multi Modal Transportation Element and through complementary policies in other elements of the comprehensive plan. TCEA mobility strategies~~that may include, but not be limited to:

1) Transportation demand management program~~.~~
2) Transportation system management program
3) Revised parking standards and regulations
4) Local and regional transit service
5) Enhanced pedestrian and bicycle facilities
6) Transit facility improvements
7) Complete streets policy implementation
8) Neighborhood traffic management programs
9) Transit and pedestrian oriented site design and standards

The specific mobility strategies shall be provided in the Land Development Code.

Policy 2-2.3.3: ~~Policy 2-2.2.1:~~ Funding for Mobility Needs

Funding for mobility needs shall be provided through developer contribution, by the City, county, state and federal government, and other outside sources such as grant funds.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.3.4: ~~Policy 2-2.2.2:~~ Regional Cooperation

The City shall continue to work with its partners at MetroPlan Orlando to ensure equitable distribution of funds for multimodal transportation improvements throughout the region.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.3.5: ~~Policy 2-2.2.3:~~ Design Standards

The City shall require development and redevelopment to support alternative modes of transportation by providing context-appropriate design including sidewalks, bikeways, transit facilities, and parking management that will contribute to specific and identified mobility needs.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.3.6: ~~Policy 2-2.2.4:~~ Road Impact Fees

Development shall be responsible for all existing road impact fees except as provided for in the policies above, or as it may be replaced by any proposed Mobility Fee.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 2-2.3.7: ~~Policy 2-2.2.5:~~ Existing Developer's Agreements

All existing Developer's Agreements that contain transportation improvement commitments shall remain in full force and effect.

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 2-2.2.6: Development of Regional Impacts (DRI). Transportation improvement commitment requirements of DRIs remain unchanged.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 2-2.2.7: Adequate Public Facilities and Services Ordinance (APFSO)~~

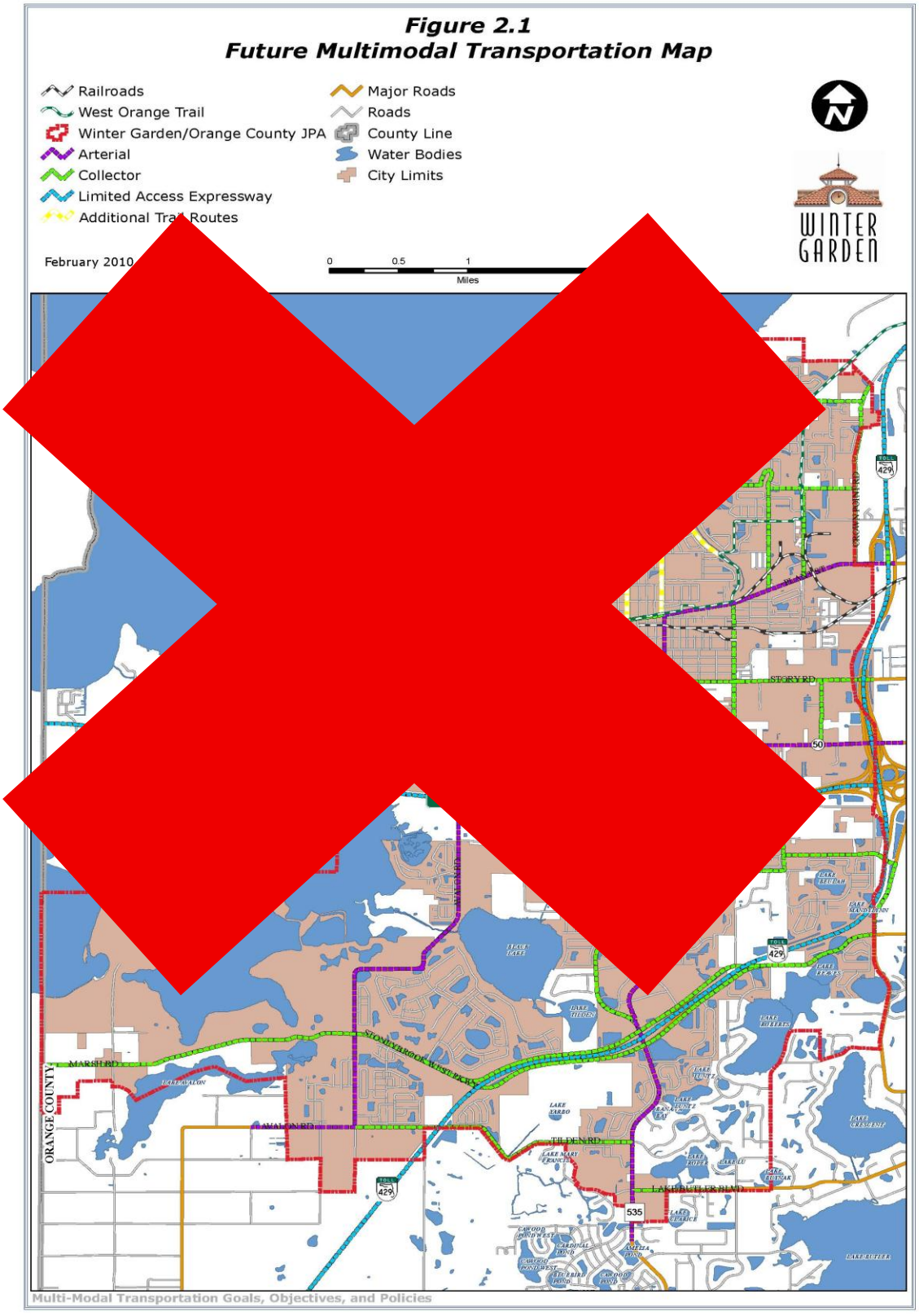
~~Within 12 months of the enacting ordinance the City shall adopt an APFSO addressing all concurrency facilities that may include any proposed Mobility Fee.~~

~~Added by Ordinance 10-19, 06/24/2010~~

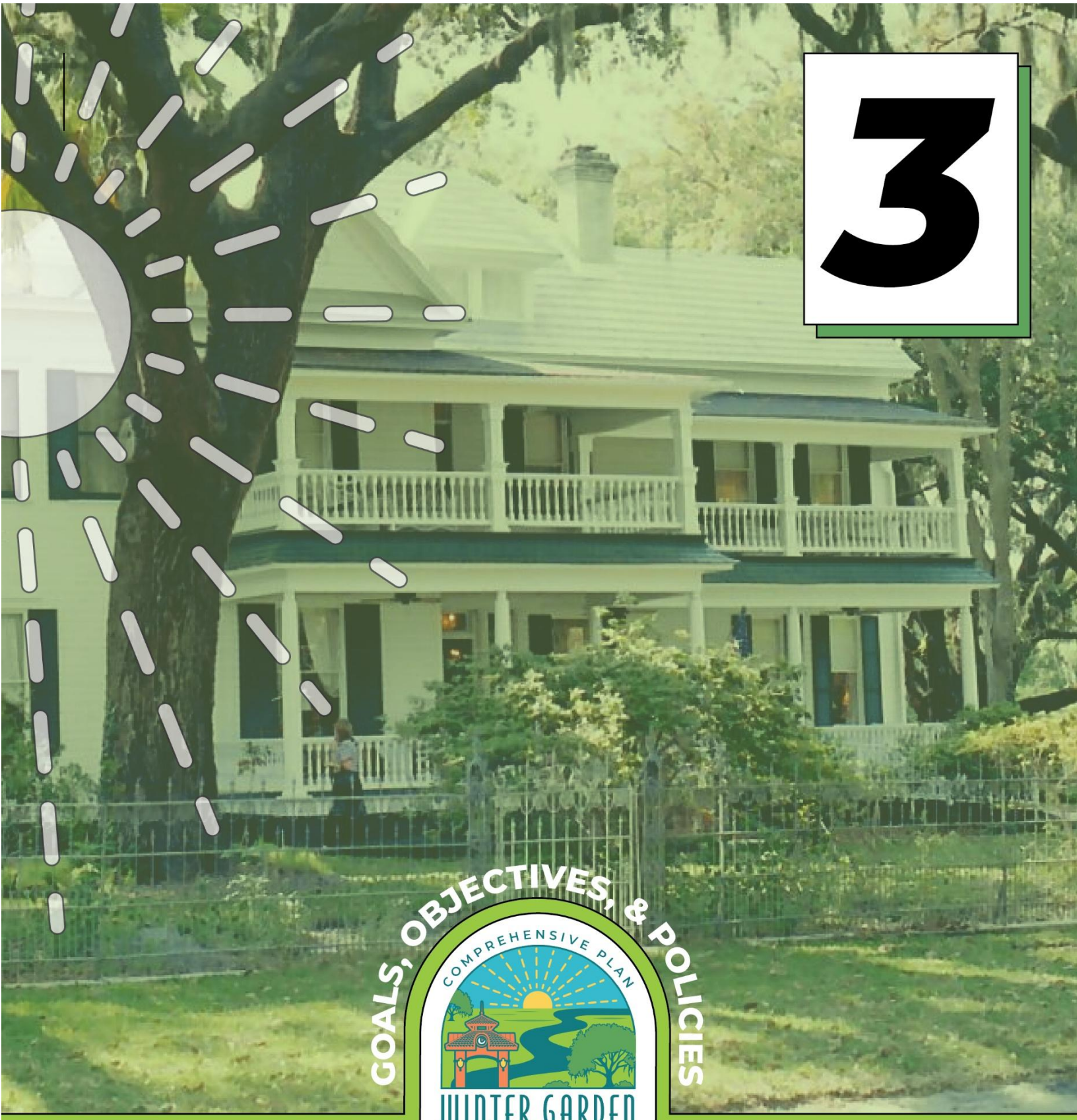
~~Policy 2-2.2.8: By July 2011 The City shall adopt into this comprehensive plan any state mandated Mobility Fee program as may be enacted by state legislature as a result of mandates in subsection 380.06 of the Florida Statutes.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Figure 2.1
Future Multimodal Transportation Map



Multi-Modal Transportation Goals, Objectives, and Policies



3

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

HOUSING

Table of Contents

Goal 3-1: Housing Supply....3
Objective 3-1.1: Adequate and Affordable Housing....3
Objective 3-1.2: Historic East Winter Garden Neighborhood....5
Objective 3-1.3: Substandard Housing Elimination....5
Objective 3-1.4: Low Income Housing....8
Objective 3-1.5: Group Homes and Foster Care....10
Objective 3-1.6: Housing for the Aging Population....10
Objective 3-1.7: Historical Preservation....11
Objective 3-1.8: Displaced Persons....12
Objective 3-1.9: Implementation Plan....12
Objective 3-1.10: Energy Efficiency in Residential Building....13
Objective 3-1.11: Resiliency in Housing Development....14

~~CHAPTER 3: HOUSING ELEMENT GOALS, OBJECTIVES, AND POLICIES~~

Goal 3-1: ~~Goal 3-1:~~ Housing Supply

~~To E~~Ensure that a variety of safe, decent, high-quality, attractive, and affordable housing is provided to meet the needs of present and future residents of Winter Garden and take~~s~~ into account energy efficiency, ~~and~~ conservation, and resiliency.~~(9J-5.010(3)(a))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 3-1.1: ~~Objective 3-1.1:~~ Adequate and Affordable Housing

P~~To p~~rovide adequate ~~and~~ opportunities for affordable housing for the existing population and future population growth to the year 2050~~2020~~.~~(9J-5.010(3)(b)1.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 3-1.1.1: ~~Policy 3-1.1.1:~~ Technical Assistance

The City shall assist the private sector in meeting local housing needs by providing, on an on-going basis, information and technical assistance in the form of data reports, pamphlets, and similar assistance from the Winter Garden Building Department.~~(9J-5.010(3)(c)1.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 3-1.1.2: ~~Policy 3-1.1.2:~~ Permitting Process

The City shall continue to review all local regulatory and permitting processes to identify possible improvements to the housing permitting system and shall implement changes to the system deemed necessary by the City Commission.~~(9J-5.010(3)(c)2.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.1.3: ~~Policy 3-1.1.3:~~ Housing Types

The City of Winter Garden Zoning ~~Ordinance~~ Code shall continue to provide ~~for~~ a variety of housing types including ~~specific districts for~~ single family dwellings~~;~~, multiple~~-~~family dwellings~~;~~ missing middle residential products such as cottage homes, duplexes, and townhomes; mobile homes~~;~~ ~~and~~ planned unit developments (PUD) with residential

uses; mixed-use developments containing residential uses, and accessory dwelling units.

Policy 3-1.1.4: Planned Unit Developments

The City of Winter Garden Zoning Code shall require that at a minimum, all ~~large PUDs~~ Planned Unit Developments over 100 acres shall:

(1) provide housing for a range of ages, including young adults, families, and seniors; ~~"life cycle" housing,~~ and

(2) ~~shall~~ provide a mix of housing types.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 98-23, 06/25/1998~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.1.5: Multiple-Family and Mixed-Use Housing

The City shall encourage multiple-family dwellings and mixed-use developments along major road corridors and within walking distance to commercial centers.

Policy 3-1.1.6: ~~Policy 3-1.1.4: New Units~~Sufficient Land ~~–~~

The City shall provide sufficient land in the future land use map for ~~the~~ construction ~~of the~~to help address the ~~following housing needs:~~City's housing needs as projected in the Data and Analysis portion of the Housing Element.

~~PROJECTED HOUSING NEED BY UNIT TYPE~~					
~~UNIT TYPE~~	~~2000~~	~~2005~~	~~2010~~	~~2015~~	~~2020~~
~~Single Family~~	~~3,618~~	~~4,759~~	~~5,109~~	~~5,544~~	~~5,734~~
~~Multi-Family~~	~~1,521~~	~~1,807~~	~~1,952~~	~~2,097~~	~~2,242~~
~~Mobile Homes~~	~~656~~	~~802~~	~~980~~	~~1,199~~	~~1,467~~
~~TOTALS~~	~~5,795~~	~~7,368~~	~~8,041~~	~~8,840~~	~~9,443~~

~~Source: 2000 US Census of Population and Housing Data;~~
~~City of Winter Garden Planning Department~~
~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999 (Renumbered 99-48 by Resolution 00-01)~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 3-1.1.7: ~~Policy 3-1.1.5:~~ Development ~~Criteria.~~Standards

The City ~~will~~ shall continue to apply development regulations that provide minimal design criteria such as ~~minimum~~ square footage parameters, ~~minimal~~ impervious surface maximums, requirements for placement of ~~HAVC units~~above-ground utilities and mechanical equipment, and other aesthetic controls.

~~Added by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 3-1.1.8: ~~Policy 3-1.1.6:~~ Land Development Regulations~~:~~

T~~t~~he City ~~will~~ shall annually review the need to change the existing Land Development Regulations to include any recent changes in land use and land development such as neo-traditional neighborhood design, small lot zoning, etc. The City shall also review the LDRs to eliminate any requirements that are no longer needed or appropriate.

~~Added by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 3-1.2: Historic East Winter Garden Neighborhood

Prioritize providing high-quality affordable housing in the Historic East Winter Garden neighborhood through the administration of the East Winter Garden Plan and neighborhood-specific ordinances.

Policy 3-1.2.1: East Winter Garden Plan

The City shall continue to implement the action items in the East Winter Garden Plan. As new opportunities and challenges arise, the City shall update the plan in collaboration with community members.

Policy 3-1.2.2: Partner Support

The City shall continue to support the Community Redevelopment Agency (CRA), Habitat for Humanity, and other nonprofit organizations in efforts to provide affordable housing in the East Winter Garden Neighborhood.

Policy 3-1.2.3: Overlay District

The City shall encourage housing diversity by adopting and implementing an overlay district in the East Winter Garden Neighborhood. Once adopted, the City shall continually review and update the overlay district as appropriate.

Objective 3-1.3: ~~Objective 3-1.2:~~ Substandard Housing Elimination

~~the City (through code enforcement procedures) shall~~ C~~c~~ontinue to investigate and pursue corrective measures for deteriorated and dilapidated housing units through code enforcement procedures. Whenever feasible, work with homeowners to rehabilitate homes that have fallen into disrepair to bring them into compliance with current

building codes. ~~The City shall also~~ P~~p~~revent existing and future housing from deteriorating to a substandard level.~~(9J-5.010(3)(b)2.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 3-1.3.1: Resident Education

The City shall educate residents on the importance of home maintenance and share resources for housing rehabilitation. Resident education shall be the first step towards rehabilitating dilapidated housing.

Policy 3-1.3.2: ~~Policy 3-1.2.1:~~ Dilapidated Housing Demolition

Through the Code Enforcement process, the City and/or the private sector shall identify homes that are unable to be rehabilitated and consider demolition as a course of action if these structures pose a threat to the health and safety of the community.~~demolish an average of two (2) dilapidated housing units per year during the planning period.~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.3.3: ~~Policy 3-1.2.2:~~ Dilapidated Housing List

From time to time, the City shall submit a list of all dilapidated housing units located in Winter Garden for inclusion in the Orange County Community Development Housing Assistance Program.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.3.4: ~~Policy 3-1.2.3:~~ Dilapidated Housing Repair

The City and/or the CRA shall work with nonprofit partners such as Rebuilding Together Greater Florida (RTGFL) and Habitat for Humanity to identify and ,repair ~~and/or the private sector shall repair an average of two (2)~~ dilapidated housing ~~units per year during the planning period.~~within the Historic East Winter Garden Neighborhood and throughout the City.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.3.5: ~~Policy 3-1.2.4:~~ Windshield Survey

From time to time, ~~the~~ a City Code Enforcement Officer and the City Building Official shall conduct a survey, by driving around and taking

note, of housing conditions in areas where deterioration is known or suspected.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.3.6: ~~Policy 3-1.2.5:~~ Housing Codes

The City shall continue to enforce all housing and building codes as set forth in city, state, and federal regulations to ensure that all existing and future housing is structurally safe and sanitary and that existing neighborhoods are stabilized.~~(9J-5.010(3)(c)3.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 3-1.3.7: ~~Policy 3-1.2.6:~~ Conservation

The City shall ensure that a~~A~~ll conservation, rehabilitation, and demolition activities ~~shall be~~ are carried out in conformance with the provisions of city, state, and federal regulations.~~(9J-5.010(3)(c)4.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 3-1.3.8: ~~Policy 3-1.2.7:~~ Neighborhood Stabilization

The City ~~will~~ shall support efforts to encourage owner-~~-~~occupied housing without promoting gentrification.~~'=(9J-5.010(3)(c)3.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.3.9: ~~Policy 3-1.2.8:~~ Condemnation

All residential property acquired by the City through code enforcement procedures shall be evaluated with regard to the benefits of transferring the property to Rebuilding Together Greater Florida (RTGFL), ~~transferred to~~ Habitat for Humanity, ~~ies (~~or a similar non-profit organization~~)~~ that specializes in housing for the purpose of providing owner occupied residential housing for very-low, low- or moderate-income families.

~~Added by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.3.10: ~~Policy 3-1.2.9:~~ Enclaves

The City ~~will~~ shall ~~continue to strive to annex~~prioritize annexing residential enclaves and shall work with Orange County to enter into~~investigate the possibility of developing an~~ interlocal agreements ~~with the County~~whenever possible to expedite these annexations. ~~and~~ The City shall work to eliminate ~~pursue the development of~~substandard

~~house~~ housing conditions in these enclaves ~~with either~~through code enforcement action or rehab grants, or ~~both~~other such mechanisms.

Policy 3-1.3.11: ~~Policy 3-1.7.4:~~ Redevelopment of Blighted Areas

The City shall continue to work with and support partner agencies such as ~~encourage the redevelopment and renewal of blighted areas, including residential areas, through~~ the Community Redevelopment Agency (CRA), Rebuilding Together Greater Florida (RTGFL), and Habitat for Humanity to redevelop blighted areas.~~, by developing new redevelopment programs, supporting existing redevelopment programs, and~~ The City shall also seek ~~through the enforcement of its codes and the utilization of its Code Enforcement Board and through rehabilitation by obtaining~~ grants ~~or other funds.~~and/or other funding sources to support new and existing redevelopment programs.

Policy 3-1.3.12: ~~Policy 3-1.7.5:~~ Community Redevelopment Agency

The City ~~will~~ shall continue to support the efforts of the Community Redevelopment Agency in the efforts to supply and rehabilitate housing stock.

~~Added by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Objective 3-1.4: ~~Objective 3-1.3:~~ Low Income Housing

~~The City shall c~~Continue to ~~provide assistance to~~support the provision~~de~~ and rehabilitation of~~e~~ very-low-, low-~~-~~and moderate-~~-~~income housing to include special housing needs and ~~farm worker~~workforce housing. ~~(9J-5.010(3)(b)3.) (9J-5.010(3)(b)1.~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

~~Policy 3-1.3.1: Housing Variety.~~

~~The Winter Garden Zoning Ordinance shall continue to provide for a variety of affordable housing types including single family dwellings, multiple family dwellings, mobile homes, and planned unit developments. Of the above, the highest priority will be for owner occupied housing. (9J-5.010(3)(c)11.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

~~**Policy 3-1.3.2: Location Criteria**~~

~~Water & Sewer - Low and moderate income housing (to include households with special needs) and mobile homes shall only be located in areas where water and sewer service is available and where employment and/or shopping centers are accessible. Mobile homes shall be permitted to locate in residential areas consistent with the requirements of Chapter 320.8285(5), F.S. (9J-5.010(3)(c)5.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.4.1: ~~Policy 3-1.3.3:~~ Orange County

The City shall continue to assist the Orange County Community Development Program, ~~and~~ Habitat for Humanity, and other nonprofit agencies that focus on housing, in identifying sites in the City for very-low, low- and moderate-income housing.~~(9J-5.010(3)(c)1.~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.4.2: ~~Policy 3-1.3.4:~~ Listing

The City shall maintain, and make available to the public, a listing of contact agencies providing assistance for very-low, low- and moderate-income households.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.4.3: ~~Policy 3-1.3.5:~~ Alternative Funding Sources

The City shall continue to investigate alternative funding sources to provide or rehabilitate very-low, low- and moderate-income housing.

~~Added by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.4.4: ~~Policy 3-1.3.6:~~ Affordable Housing Guidelines

The City shall support, evaluate, and implement the suggestions identified in "Affordable Housing Guidelines for State and Local Governments" (US Dept. of Housing and Urban Development, 1991) as appropriate on a case-by-case basis throughout the City.~~(9J-5.010(3)(c)2.)~~

~~**Policy 3-1.7.6:**~~

~~The City will consider the adoption of a Linkage Fee to be used as a revenue source for workforce/affordable housing related activities. A Linkage Fee Study will be conducted to determine the following:~~

- ~~Demonstrate the relationship between non-residential development and the need for workforce/affordable housing.~~
- ~~Estimate appropriate fees.~~

Policy 3-1.4.5: Affordable Housing Incentives

The City shall explore incentives through its Zoning Code or other programs in exchange for affordable housing units built in private developments.

~~Added by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 3-1.5: ~~Objective 3-1.4:~~ Group Homes and Foster Care

Provide adequate sites in residential areas for group homes and foster care facilities licensed or funded by the Florida Department of Health and Rehabilitative Services. ~~(9J-5.010(3)(b)4.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 3-1.5.1: ~~Policy 3-1.4.1:~~ Zoning Restrictions

The Winter Garden Zoning ~~Ordinance~~ Code shall continue to permit group homes and foster care facilities in appropriate zoning districts, in conformance with the criteria established by Chapter 419., ~~F.S. (9J-5.010(3)(c)6.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 3-1.5.2: ~~Policy 3-1.4.2:~~ Siting~~.~~

The City shall ensure that ~~g~~Group homes and foster care facilities ~~shall~~ are~~be~~ located adjacent to necessary infrastructure and near other public facilities, such as schools, libraries, and parks. ~~(9J-5.010(3)(c)6.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Objective 3-1.6: Housing for the Aging Population

Provide adequate and affordable housing options for the aging population.

Policy 3-1.6.1: Zoning Code Revisions

The City shall revise the Zoning Code to limit barriers to developing retirement communities, elderly care facilities, and other elderly-friendly housing options such as accessory dwelling units.

Policy 3-1.6.2: Retirement Communities Siting

The City shall encourage the development of retirement communities and elderly care facilities in appropriate residential neighborhoods in proximity to transit services, commercial centers, medical centers, and public facilities.

Policy 3-1.6.3: Coordination with Orange County Office of Aging

The City shall coordinate with Orange County Office of Aging and other appropriate partners to provide resources and education on housing for the elderly population.

Objective 3-1.7: ~~Objective 3-1.5:~~ Historical Preservation

~~The City shall, strive to~~ Ensure that historic structures are protected from development activities by providing educational programs and~~/or the adoption of any necessary ordinances~~ the administration of the Downtown Historic District code.~~(9J-5.010(3)(b)5.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.7.1: ~~Policy 3-1.5.1:~~ Definition

The City shall define h~~H~~istoric structures ~~shall be considered to be~~as any structure specifically identified by the National Register of Historic Places, ~~or~~ the Florida Department of State as having historic significance, or identified as a Contributing Structure within the City's Historic Downtown District.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.7.2: ~~Policy 3-1.5.2:~~ Historical List

The City shall continue to evaluate its inventory of historic and contributing structures via historic surveys and other historical research. The City shall also continue to evaluate the current limits of the Historic downtown District and determine if the boundaries need to expand as a means to protect structures of historical significance from development orders that would compromise historical

integrity.~~maintain a list of historic structures within the City which shall be evaluated for possible means to provide preservation of the historical significance prior to the issuance of a development order.~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 3-1.7.3: ~~Policy 3-1.5.3:~~ Protection

The City shall continually evaluate and update the Historic Downtown District Overlay ordinance based on best practices to protect all identified historic structures.~~ by adoption of specific ordinances to designate and protect such structures.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Objective 3-1.8: ~~Objective 3-1.6:~~ Displaced Persons

D~~The City shall d~~evelop and adopt a program to provide uniform and equitable treatment for persons displaced by actions of the City.~~(9J-5.010(3)(b)6.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.8.1: ~~Policy 3-1.6.1:~~ Report

The City shall take no action ~~to~~ on displac~~e~~inge persons until a report is submitted to and approved by the City Commission identifying standard and affordable housing available to those individuals to be displaced.~~(9J-5.010(3)(c)9.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Policy 3-1.8.2: ~~Policy 3-1.6.2:~~ Relocation Plan

The City ~~hereby~~ shall coordinate with Orange County ~~adopts Orange County's Relocation Plan.~~to adopt a relocation plan for persons displaced by actions of the City.

~~Added by Ordinance 99-48.1, 12/09/1999, Renumbered 99-48 by Resolution 00-01~~

Objective 3-1.9: ~~Objective 3-1.7:~~ Implementation Plan

~~M~~Maintain and implement a housing implementation plan delineating programs and policies for meeting the housing needs of the City.~~(9J-5.010(3)(b)7.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 3-1.9.1: ~~Policy 3-1.7.1:~~ Policy Guide~~ld~~

The Winter Garden Housing Element shall serve as the policy guide for meeting housing needs in the City.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 3-1.9.2: ~~Policy 3-1.7.2:~~ Housing Program

The City shall coordinate with Orange County to administer h~~H~~ousing programs when applicable ~~shall continue to be administered by Orange County, and the City will coordinate its activities with this effort.~~.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 3-1.9.3: ~~Policy 3-1.7.3:~~ State/Federal Housing Programs

Annually, in conjunction with the required public hearings held by the Orange County Housing Assistance Office, the City shall request that office to review and consider the use of federal, state and local agencies, and nonprofit organizations affordable housing programs to meet needs identified for Winter Garden. ~~(9J-5.010(3)(c)7.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Added by Ordinance 10-19, 06/24/2010~~
~~Added by Ordinance 10-19, 06/24/2010~~
~~Added by Ordinance 10-19, 06/24/2010~~

Objective 3-1.10: ~~Objective 3-1.8:~~ Energy Efficiency in Residential Building

E~~The City shall e~~ncourage energy efficiency in existing residences and promote energy efficient new home construction.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 3-1.10.1: ~~Policy 3-1.8.1:~~ Housing Construction

The City ~~will~~ shall encourage housing construction that uses the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) principals or the Florida Green Building Coalition's Green land development and building standards.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 3-1.10.2: ~~Policy 3-1.8.2:~~ Energy Efficiency Code

The City ~~will~~ shall continue to implement the requirements of the latest Florida Energy Efficiency Code for Building Construction that assures a conscious effort toward energy efficiency so that proper equipment,

building orientation on site, adequate insulation, and appliance selection ~~will~~ shall be considered by the developer.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 3-1.10.3: ~~Policy 3-1.8.3:~~ Renewable Energy in Home Construction

The City ~~will~~ shall promote the use of renewable energy sources, such as solar power, in all new home construction.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 3-1.11: Resiliency in Housing Development

Establish resiliency strategies to protect new and existing housing against weather and environmental impacts, such as flooding or severe storms.

Policy 3-1.11.1: Identification of At-Risk Homes

The City shall work to identify existing housing units that are at a high risk of severe environmental impacts.

Policy 3-1.11.2: Direct Resources

The City shall direct at-risk homeowners and landlords to funding resources, programs, and best practices for retrofitting their homes to better protect against environmental impacts.

Policy 3-1.11.3: Partnerships

The City shall partner with local, state, and federal agencies, as well as nonprofit organizations, to promote housing resiliency strategies.

Policy 3-1.11.4: Zoning Code Revisions

The City shall modify the zoning code to encourage or require housing construction to implement resiliency best practices. Through the zoning code, the City shall ensure that housing is sited outside of areas at high-risk of environmental impacts.



4

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

PUBLIC FACILITIES

Table of Contents

Goal 4-1: Adequate Public Facilities 3
Objective 4-1.1: Concurrency 3
Objective 4-1.2: Discourage Sprawl 5
Goal 4-2: Sanitary Wastewater Management 7
Objective 4-2.1: Improvement to Wastewater System 7
Goal 4-3: Solid Waste Management 11
Objective 4-3.1: Improvement to Solid Waste System 11
Goal 4-4: Stormwater Management 12
Objective 4-4.1: Improvement to Stormwater System 12
Goal 4-5: Potable Water Management 16
Objective 4-5.1: Improvement to Potable Water System 16
Objective 4-5.2: Water Conservation 20
Goal 4-6: Aquifer Recharge Management 22
Objective 4-6.1: Quality and Quantity Preservation 22

~~SECTION I: GENERAL~~

Goal 4-1: ~~Goal 4-1:~~ Adequate Public Facilities

Provide public facilities, including sanitary wastewater ~~sewer~~, solid waste, drainage, potable water, lower quality water sources (such as reclaimed water and surface/stormwater) and natural groundwater aquifer recharge, ~~shall be provided~~ in a manner which protects City investment in existing facilities and promotes orderly compact urban growth.~~(9J-5.011(2)(a))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 09-59, 01/28/2010~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 4-1.1: ~~Objective 4-1.1:~~ Concurrency

~~On an ongoing basis the City shall e~~Continue to enforce the Concurrency Requirements adopted in the Land Development Regulations that ensures that at the time a development permit is issued, adequate facility capacity is available or will be available when needed to serve the development.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-1.1.1: ~~Policy 4-1.1.1:~~ LOS Standards

The City shall use the ~~following~~ level of service (LOS) standards ~~are~~ adopted in the Capital Improvements Element ~~by the City and shall be used~~ as the basis for determining the availability of facility capacity and the demand generated by ~~a development~~development or redevelopment.~~:~~

~~FACILITY~~	~~LOS STANDARD~~
~~SANITARY SEWER~~	
~~Residential~~	~~250 gal./day/unit~~
~~All other uses~~	~~250 gal./day/ERU~~
~~POTABLE WATER~~	
~~Residential~~	~~350 gal./day/unit~~
~~All other uses~~	~~350 gal./day/ERU~~
~~SOLID WASTE~~	~~5.6 pounds/day/person~~

~~DRAINAGE~~	~~Onsite retention: Retain the first 1/2 inch of run-off~~
	~~Storm event: 25 year 24 hour~~
	~~Quantity: Post development stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than predevelopment runoff (9J-5.011(2)(c)2.1))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 98-32, 12/10/1998~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-1.1.2: ~~Policy 4-1.1.2:~~ Concurrency

The City shall require all proposed improvements or expansion ~~shall~~ meet the adopted LOS standards for the facility being improved.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-1.1.3: ~~Policy 4-1.1.3:~~ Tracking

The City shall continue to keep a monthly report which summarizes the demand on the potable water and wastewater ~~sewer~~ systems. ~~as it relates to proposed projects.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-1.1.4: ~~Policy 4-1.1.4:~~ Utility Service Provider Consultation

The City shall issue no development orders or development permits without first consulting with the utility service provider (City of Winter Garden Public Services Department or Orange County) to determine whether adequate water supplies to serve the development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent. ~~The City will~~The City shall also ensure that adequate water supplies and facilities are available and in place prior to issuing a certificate of occupancy or its functional equivalent.

~~Added by Ordinance 09-59, 01/28/2010~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-1.1.5: ~~Policy 4-1.1.5:~~ Adequate Water Supply and Capacity

The City shall ~~To~~ ensure that adequate water supply and capacity are allocated ~~allocations~~ for all developments, ~~, the~~which may cause the

City to ~~City may~~ require any development to use a developer's agreement~~s~~ and/or develop in more than one phase.~~Added by Ordinance 09-59, 01/28/2010~~

Policy 4-1.1.6: ~~Policy 4-2.1.13:~~ Water, Wastewater, and Reclaimed Water Master Plans

The City shall continue to implement the findings and recommendations of the City of Winter Garden's Water, Wastewater, and Reclaimed Water Master Plans as amended by the City Commission.

~~Amended by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 09-59, 01/28/2010~~

Policy 4-1.1.7: Natural Gas

The City shall require natural gas distribution line installation and natural gas main extension in all new platted subdivisions and re-plats of existing subdivisions over five lots, consistent with Section 78-3 of the Land Development Code.

Objective 4-1.2: ~~Objective 4-1.2:~~ Discourage Sprawl

D~~To d~~iscourage sprawl by ~~, encourage~~encouraging infill development~~,~~ and reduce the impacts caused by septic tanks and package plants by providing water and wastewater facilities to the portions of the City where ~~that~~ these facilities are presently unavailable or are presently not connected; as per the City's Water and Wastewater Master Plan as amended.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-1.2.1: Infill Development

The City shall encourage infill development in areas that can easily connect to central infrastructure systems.

Policy 4-1.2.2: ~~Policy 4-1.2.1:~~ Yearly Evaluation

The City shall evaluate all projects on a yearly basis for inclusion in the Capital Improvements Program (CIP).~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-1.2.3: ~~Objective 4-1.3:~~ Existing Deficiencies

The City shall ~~To~~ identify existing facility deficiencies in essential services and ~~to~~ develop a means to correct these deficiencies.~~(9J-5.011(2)(b)1.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~

Policy 4-1.2.4: ~~Policy 4-1.3.1:~~ Top Priority

The City shall give top priority to projects that address existing deficiency needs or replacement needs in the Capital Improvement Program (CIP).~~shall be given top priority with respect to CIP scheduling(9J-5.011(2)(c)1Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-1.2.5: ~~Policy 4-1.4.1: Priorities~~Second Priority

The City shall give second priority to projects which will involve meeting the future needs of the City ~~shall be given second priority to those projects defined as existing deficiency needs~~in the CIP.~~(9J-5.011(2)c)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-1.2.6: ~~Policy 4-1.2.2:~~ Project List

The City Manager shall prepare the project needs list for presentation to the City Commission at its yearly budget meetings.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-1.2.7: ~~Policy 4-1.2.3:~~ Connection Plan

The City shall maintain a map identifying the location of parcels not presently served with water and/or waste-water and/or reclaimed water. The City shall maintain a strategic plan to connect the properties that are considered feasible for connection.

~~Added by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 09-59, 01/28/2010~~

Policy 4-1.2.8: ~~Objective 4-1.4:~~ Coordination

The City shall coordinate the extension of or increase in the capacity of public facilities to meet future needs as identified by the City Manager and the CIP ~~shall be coordinated~~ with the Future Land Use Element and other governmental bodies when necessary.~~(9J-5.011(2)(b)2.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~SECTION II: SANITARY SEWER SUB-ELEMENT~~

Goal 4-2: ~~Goal 4-2:~~ Sanitary Wastewater Management

P~~To p~~rovide a long term environmentally safe and efficient means of collection and treatment of sanitary wastewater.~~(9J-5.011(2)(a))~~

~~Added by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 4-2.1: ~~Objective 4-2.1:~~ Improvement to Wastewater System

~~To c~~Correct any existing facility deficiencies, ~~to~~ coordinate the expansion or increase in capacity, ~~to~~ maximize the existing wastewater collection and treatment facilities, and ~~to~~ discourage urban sprawl by the implementation of the City's sanitary wastewater system.~~(9J-5.011(2)(b))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-2.1.1: ~~Policy 4-2.1.1:~~ Flow Rates

The City shall update projected flow rates ~~will be updated~~ quarterly for sanitary wastewater based upon the best data available.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.2: ~~Policy 4-2.1.2:~~ Service Area

The sanitary wastewater service area ~~will~~ shall include the City and that portion of unincorporated area agreed upon by Orange County and the City of Winter Garden.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.3: ~~Policy 4-2.1.3:~~ Annexation Requirements

The City shall require annexation as a prerequisite for connection of ~~unincorporated area~~ development in unincorporated Orange County to the sanitary wastewater ~~sewer~~ system ~~shall require annexation as a prerequisite~~.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.4: ~~Policy 4-2.1.4:~~ Capacity Expansions

~~The City will~~The City shall continue to plan for wastewater treatment plant capacity, the extension of the collection system and lift stations for the developing areas of the City and the wastewater service area.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.5: ~~Policy 4-2.1.5:~~ Mandatory Connection

The City shall continue to require connection of developed properties when a developed property ~~service is within 200 feet of the sanitary~~ may be feasibly connected to the wastewater ~~sewer~~ system.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.6: ~~Policy 4-2.1.6:~~ Extreme Waste

The City shall continue to require any producer of extreme waste to install necessary pretreatment at the producer's expense prior to connecting to the City sewer facilities.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.7: ~~Policy 4-2.1.7:~~ Dangerous Discharges

The City shall continue to enforce its policy that no substance which is injurious or potentially dangerous will be allowed to be discharged into the sanitary wastewater ~~sewer~~ system.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.8: ~~Policy 4-2.1.8:~~ Package Plants

~~The City will~~The City shall maintain measures which control or prohibit the use of package treatment plants where City wastewater service is available.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 09-59, 01/28/2010~~

Policy 4-2.1.9: ~~Policy 4-2.1.9:~~ New Development

The City shall base approval of new development ~~will be based~~, in part, on the evaluation of the impact on the wastewater ~~sewage~~ treatment system.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.10: ~~Policy 4-2.1.10:~~ Funding

~~The City will~~The City shall require that the total cost of new wastewater service be funded by the user of that service.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.11: ~~Policy 4-2.1.11:~~ Infiltration

The City shall continue to reduce the infiltration problems in the collection system by implementing the repair and replacement program of wastewater lines identified in the City's Water and Wastewater Master Plan.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.12: ~~Policy 4-2.1.12:~~ Design Capacity

The City shall track the potential impacts of all approved but not built development. No additional development permits shall be issued when the potential impacts will be greater than the design capacities of the wastewater treatment facilities of 7.5~~2~~ MGD.~~(9J-5.011(2)(c)2.)~~

~~Added by Ordinance 97-02, 10/23/1997~~

Policy 4-2.1.13: ~~Policy 4-2.1.14:~~ Winter Garden Wastewater Facility Plan

The City's ~~of Winter Garden~~ Wastewater Facility Plan, as it may be amended, prepared for the Wekiva Parkway and Protection Act is hereby adopted and incorporated into the Comprehensive Plan and is on file in the planning department.

~~Added by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-2.1.14: ~~Policy 4-2.1.15:~~ Utilization

~~The City will~~The City shall utilize the Wastewater Facility Plan as the basis for prioritizing the Capital Improvement Program to provide central wastewater service to properties within the city wastewater service area that are currently served by on-site wastewater treatment and disposal systems.

~~Added by Ordinance 00-66, 12/09/1999~~

~~Policy 4-2.1.16:~~

~~All new development and redevelopment shall connect to central wastewater systems.~~

~~Added by Ordinance 00-66, 12/09/1999~~

Policy 4-2.1.15: Septic to Sewer Conversions

The City hereby adopts, by reference, its Wastewater Facility Plan (2024) that identifies approximately 430 parcels within the City that meet the criteria of 50 residential lots or more with more than one onsite sewage treatment and disposal system per 1 acre. The Wastewater Facility Plan (2024) includes system conversion improvements, a 10-year feasibility for wastewater treatment capacity, costs for connecting the residential subdivisions, 20-year projected wastewater flow and a timeline for system improvements.

Policy 4-2.1.16: ~~Policy 4-2.1.17:~~ Required Installation

The City shall require the installation of dual-lined distribution systems and individually metered connections for all new developments. All new development and redevelopment shall connect to reuse systems. ~~City~~ The City sha~~w~~ill identify potential users from existing developed properties and will implement reuse where practicable and financially feasible.

~~Added by Ordinance 00-66, 12/09/1999~~

~~Amended by Ordinance 09-59, 01/28/2010~~

Policy 4-2.1.17: ~~Policy 4-2.1.18:~~ Territorial Wastewater Agreement

The City shall continue to implement the adopted Territorial Wastewater Agreement with Orange County and reuse agreements with Orange County, Orlando Utilities Commission (OUC) and City of Orlando.~~Added by Ordinance 00-66, 12/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-2.1.18: PFAS and Other Unregulated Contaminants

The City of Winter Garden shall continue to monitor and take necessary steps to remove or minimize the risks associated with PFAS (polyfluoroalkyl substances or forever chemicals) and other unregulated contaminants in the City's water system.

~~SECTION III: SOLID WASTE SUB-ELEMENT~~

Goal 4-3: ~~Goal 4-3:~~ Solid Waste ~~Stormwater~~ Management

P~~To p~~rovide a long term environmentally safe and efficient means of collection and disposal of solid waste.~~(9J-5.011(2)(a)).~~

~~Added by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 4-3.1: ~~Objective 4-3.1:~~ Improvement to Solid Waste~~Stormwater~~ System

C~~To c~~orrect any existing facility deficiencies, ~~to~~ coordinate the expansion or increase in capacity, and ~~to~~ maximize the existing solid waste collection facilities.~~(9J-5.011(2)(b))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-3.1.1: ~~Policy 4-3.1.1:~~ Collection

~~The City will~~The City shall continue to operate solid waste ~~the~~ collection service with revenues derived from monthly service fees.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-3.1.2: ~~Policy 4-3.1.2:~~ Littering

~~The City will~~The City shall continue to enforce the littering section of its solid waste ordinance which includes the prohibition of placing debris so that it endangers the proper operation of the ~~sanitary~~ wastewater ~~sewer~~ or drainage system.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-3.1.3: ~~Policy 4-3.1.3:~~ Orange County Agreement

~~The City will~~The City shall continue to support the agreement with Orange County for the processing and disposal of solid waste at the County facilities.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-3.1.4: ~~Policy 4-3.1.4:~~ Recycling

~~The City will~~The City shall~~-~~ consider re-establishing a curbside recycling program and also continue to work with private collection companies to help meet local recycling demands.~~continue to work with the County to improve the recycling program.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Policy 4-3.1.5: Commercial Recycling~~

~~The City shall continue to encourage recycling for non-residential land uses.~~

~~Added by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-3.1.5: ~~Objective 4-3.2: Recycling and~~ Yard Waste

The City shall c~~To c~~ontinue to encourage residents to dispose of yard waste separated from household trash to increase the amount of ~~recycling and~~ yard waste that is diverted from the county landfill.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-3.1.6: ~~Policy 4-3.2.1: Yard Waste~~ Cooperation

The City shall continue to cooperate with Orange ~~the~~ County to restrict yard waste from the landfill.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 4-3.2.2: Recycling~~

~~The City shall continue to work with the County in the implementation of the recycling program.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~SECTION IV: STORMWATER DRAINAGE SUB-ELEMENT~~

Goal 4-4: ~~Goal 4-4:~~ Stormwater Management

P~~To p~~rovide a long term environmentally safe and efficient means of collection and retaining stormwater runoff.~~(9J-5.011(2)(a))~~

~~Added by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 4-4.1: ~~Objective 4-4.1:~~ Improvement to Stormwater System

~~To c~~Correct any existing stormwater deficiencies, ~~to~~ coordinate the establishment of new stormwater retention facilities, ~~to~~ protect the

function of natural drainage systems, and ~~to~~ maximize the existing stormwater retention facilities.~~(9J-5.011(2)(b))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-4.1.1: ~~Policy 4-4.1.1:~~ Stormwater Management Ordinance

The City shall continue to enforce the stormwater management ordinance.

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Policy 4-4.1.2:~~

~~The City of Winter Garden has participated in the Regional Master Storm Water Plan and will support its recommendations. Of the 589 projects identified in the plan, three projects along Lulu Creek were in Winter Garden and will be prioritized in the CIP. The City shall evaluate Surface Water Conservation, Treatment and Flood Control Management Strategies, Groundwater Protection and Reuses Management Strategies, Capital Improvement Programs for subbasins and implement financially feasible projects by 2012 (ranked 1 and 2), evaluate and identify CIPs for subbasins receiving rank of 3 and 4 by 2012 and implement financially feasible projects by 2017.~~

~~(1) The City will use various funding sources including ad valorem taxes and the existing storm water utility to fund the planning, implementation and operation and maintenance of necessary improvements.~~

~~(2) The City shall require all new development and redevelopment to meet current state water quality standards.~~

~~(3) The City shall continue its proactive stormwater maintenance and inspection activities as defined by the NPDES permit including inspection program for all public stormwater systems to insure proper maintenance and functioning, street sweeping and inspection and maintenance of all components of the stormwater system.~~

~~(4) For subbasins in the Wekiva Study Area identified with predicted percent increases in pollutant loads between existing and future conditions, the City of Winter Garden shall continue to monitor and~~

~~evaluate the use of controls in addition to what is already required for stormwater treatment by City regulations and permitting agencies, where most beneficial and where feasible. The types of controls to be evaluated will utilize Best management Practices (BMPs) which include the following at a minimum:~~

~~- Stormwater Reuse~~
~~- Reservoirs/Ponds~~
~~- No Net Floodplain Loss~~
~~- Stormwater Infiltration Basins~~
~~- Buffers~~
~~- Recharge Rules~~
~~- Retention~~
~~- Detention~~
~~- End-of-Pipe Treatments~~
~~- Drainage Well/Recharge Well and Treatment Systems~~
~~- Agricultural Nonpoint Source Pollution Management~~
~~- Waterwise Landscaping and Reduced Turf Area~~
~~Public Outreach/Education for Proper use of Fertilizers~~
~~Amended by Ordinance 05-56, 06/14/2007~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-4.1.2: ~~Policy 4-4.1.3:~~ Site Plan Review

~~As a part of its site plan review process,~~ The City shall require ~~the~~ applicants ~~will be required~~ to show natural drainage features and the proposed method of ~~protection~~on-site retention as a part of its site plan review process.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-4.1.3: ~~Policy 4-4.1.4:~~ St. Johns

~~The City will~~The City shall ~~continue to~~ require that a permit has been requested or permit exemption has been issued from the St. Johns River Water Management District prior to the issuance of a development order.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-4.1.4: ~~Policy 4-4.1.5:~~ SWIM

~~The City will~~The City shall work with the State, Orange ~~the~~ County, and the St. Johns River Water Management District with respect to the Surface Water Improvement and Management Program (SWIM) which

has targeted Lake Apopka for restoration and preservation.~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-4.1.5: ~~Policy 4-4.1.6:~~ Maintenance

The City shall continue to provide maintenance and improvement to its drainage system.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-4.1.6: ~~Policy 4-4.1.7:~~ HOA

~~When drainage systems are to be maintained by homeowners associations,~~ The City shall ~~review the documents to~~ ensure ~~insure~~ that maintenance will occur, when drainage systems are to be maintained by homeowners associations.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-4.1.7: ~~Policy 4-4.1.8: Master Drainage Plan~~ National Pollutant Discharge Elimination System (NPDES)

The City shall continue to implement the National Pollutant Discharge Elimination System (NPDES) permit for drainage.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-4.1.8: ~~Policy 4-4.1.9:~~ Drainage Deficiencies

~~Through the annual budget process,~~ The City shall identify ~~and prioritize~~ the deficiencies and future stormwater improvement needs and shall prioritize any needed improvements into the Capital Improvements Program, through the annual budget process.~~(9J-5.011(2)(c)1.))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~

Policy 4-4.1.9: ~~Policy 4-4.1.10:~~ Wetlands

~~The City will~~The City shall review its zoning code to ascertain and remove any wording which would encourage the development of wetland areas.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-4.1.10: ~~Policy 4-4.1.11:~~ Water Quality

The City ~~hereby~~ shall require~~s~~ the water quality for all new stormwater retention systems to conform to State water quality standards as set forth in the State Water Policy, Chapter 62-302~~17-40, and Chapter 17-25 of~~ the F.A.C. ~~(9J-5.011(2)(c)5.a.))Added by Ordinance 97-02, 10/23/1997~~

~~Policy 4-4.1.12: Lulu Creek~~

~~To mitigate the drainage, pollution, and erosion problems associated with the Lulu Creek Drainage Basin the City has completed the final engineering design for construction of needed improvements. The City shall continue to pursue funding sources for right-of-way acquisition and construction costs.~~

~~Added by Ordinance 00-66, 12/09/1999~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~SECTION V: POTABLE WATER SUB-ELEMENT~~

Goal 4-5: ~~Goal 4-5:~~ Potable Water Management

P~~To p~~rovide a long term safe and efficient means of collection and distribution of potable water throughout the City. ~~(9J-5.011(2)(a))~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 4-5.1: ~~Objective 4-5.1:~~ Improvement to Potable Water System

~~To c~~Correct any existing facility deficiencies, ~~to~~ coordinate the extension or increase capacity, ~~to~~ maximize the existing facilities of the City's potable water transmission and distribution system, and ~~to~~ discourage urban sprawl by the planning and implementation of the City's Water system. ~~(9J-5.011(2)(b))~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-5.1.1: ~~Policy 4-5.1.1: Goal 4-5~~Potable Water Management

The provision of distribution/ storage/ and water treatment facilities shall be consistent with Goal 4-5: Potable Water Management and all its applicable objectives and policies.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-5.1.2: ~~Policy 4-5.1.2:~~ Flow Rates

The City shall update projected flow rates ~~will be updated~~ quarterly based upon the best data available.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-5.1.3: ~~Policy 4-5.1.3:~~ Service Area

The potable water service area sha~~wi~~ll include the City and that portion of unincorporated area agreed upon by the City and Orange County.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-5.1.4: ~~Policy 4-5.1.4:~~ Annexation Requirements

The City shall require annexation as a prerequisite for connection of unincorporated area development to the potable water system ~~shall require annexation as a prerequisite~~.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-5.1.5: ~~Policy 4-5.1.5:~~ Capacity Needs

The City shall continue to plan for potable water treatment plant capacity, storage facilities, and the distribution system for the developing areas of the City and the service area.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-5.1.6: ~~Policy 4-5.1.6:~~ Mandatory Connection

The City shall continue to require development, redevelopment, and existing development to connect to the City's potable water system when financially feasible.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-5.1.7: ~~Policy 4-5.1.7:~~ Irrigation

The City shall continue its policy to meter all irrigation water uses, regardless of source.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 09-59, 01/28/2010~~

Policy 4-5.1.8: ~~Policy 4-5.1.8:~~ Package Plants

~~The City will~~The City shall control or prohibit the use of package water treatment plants.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~

Policy 4-5.1.9: ~~Policy 4-5.1.9:~~ New Development

The City shall determine its ~~Approval~~ approval of new development ~~will be~~ based, in part, on the evaluation of the impact on the potable water system.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-5.1.10: ~~Policy 4-5.1.10:~~ Funding

The City shall require that the total cost of new potable water service be funded by the user of that service.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-5.1.11: ~~Policy 4-5.1.11:~~ Design Capacity

The City shall track the potential impacts of all approved but not built development. No additional development permits shall be issued when potential impacts will be greater than the design capacity of the total water treatment system or will exceed the City's Consumptive Use Permit.~~(9J-5.011(2)(c)4.)~~

~~Added by Ordinance 97-02, 10/23/1997~~

~~**Policy 4-5.1.12: Water, Wastewater, and Reclaimed Water Master Plans**~~

~~The City shall continue to implement the findings and recommendations of the City of Winter Garden's Water, Wastewater, and Reclaimed Water Master Plans as amended by the City Commission.~~

~~Added by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 09-59, 01/28/2010~~

Policy 4-5.1.12: ~~Policy 4-5.1.13:~~ Regional Water Supply Plan

The City of Winter Garden ~~will~~ shall continue to participate in the Regional Water Supply Plan, prepared by the St. Johns River Water

Management District, support the recommendations of the plan, participate in its ongoing programs and prioritize identified projects within the city limits.

Policy 4-5.1.13: 10 Year Water Supply Facility Work Plan

~~(1)~~ The City of Winter Garden 10 Year Water Supply Facility Work Plan, prepared for the Wekiva Parkway and Protection Act, is hereby adopted and incorporated into the Comprehensive Plan and is on file in the Planning Department. ~~The City will~~The City shall utilize the plan as the basis for prioritizing the Capital Improvement Program.

~~(2) The 10 Year Water Supply and Facility Work Plan demonstrates that the Future Land Use Plan will not exceed the city ability to provide service to the entire municipal limits and Joint Planning Area with Orange County.~~

Policy 4-5.1.14: Updates to the 10-Year Water Supply and Facility Work Plan

~~(3) The City will~~The City shall maintain and update ~~upgrade~~ its 10-Year Water Supply and Facility Work Plan consistent with the updates of the Water Management Districts' Regional Water Supply Plan. The Work Plan ~~(Exhibit 1)~~ shall be reviewed annually and shall be updated within 18 months of an update to the water management district's water supply plan that affects the City or sooner if necessary.

Policy 4-5.1.15: Water Source Coordination

~~(4)~~ The City shall coordinate with the St. Johns River Water Management District, Orange County, and other local governments or private utility providers to develop cost effective and technically feasible water sources that will satisfy and supplement future demands without causing adverse impacts to water quality, wetlands, aquatic systems or the environment. ~~Projects currently being considered include:~~

~~a. St Johns River at SR 46 serving Seminole and Eastern Orange County.~~

~~b. Kissimmee River Basin (Lake Tohopekaliga) Potable Water Supply Project.~~

Policy 4-5.1.16: Agreements

~~(5)~~ The City has adopted a Territorial Water, Wastewater and Reclaimed Water Agreement with Orange County, reclaimed water agreement with the City of Ocoee for delivery of reclaimed water to the Forest Lake Golf Course and reuse water agreements with Orange County, OUC and Orlando. ~~The City will~~The City shall strive to maintain the excellent relationships it enjoys with those jurisdictions and will revise these agreements or establish new agreements as necessary.

~~Added by Ordinance 05-56, 06/14/2007~~

~~Amended by Ordinance 09-59, 01/28/2010~~

Objective 4-5.2: ~~Objective 4-5.2:~~ Water Conservation~~Ordinance~~

~~To r~~Reduce overall water consumption throughout the City. ~~(9J-5.011(2)(b)4.)Added by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-5.2.1: ~~Policy 4-5.2.1:~~ Water Conservation Program

The City shall maintain an overall water conservation program which will include an educational program, revision of the water conservation ordinance and the landscape ordinance, water-saving fixture replacement program, and other innovative measures.

~~Added/Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 09-59, 01/28/2010~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-5.2.2: ~~Policy 4-5.2.2:~~ High Water Consumers

The City shall maintain a progressive water rate structure to encourage conservation of potable water.

~~Added by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 09-59, 01/28/2010~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-5.2.3: ~~Policy 4-5.2.3:~~ Water Shortage Order

The City shall assist the St. Johns River Water Management District in the enforcement of any District-declared water shortage order, or emergency order, if requested to do so by the District.

~~Added by Ordinance 00-66, 12/09/1999~~

~~Amended by Ordinance 09-59, 01/28/2010~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-5.2.4: ~~Policy 4-5.2.4:~~ Florida-Friendly Landscaping

~~By December 2011,~~ The City shall maintain and periodically update ~~revise~~ the water conservation ordinance and the landscape ordinance to require the use of Florida Friendly Design Standards to promote the efficient use of water for all new developments and redevelopment.~~Added by Ordinance 00-66, 12/09/1999~~

~~Amended by Ordinance 09-59, 01/28/2010~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-5.2.5: ~~Objective 4-1.5:~~ Reclaimed Water

~~To~~ The City shall ensure efficient operation of the reclaimed water system.

~~Amended by Ordinance 09-59, 01/28/2010~~

Policy 4-5.2.6: ~~Policy 4-1.5.1:~~ Reclaimed Water System Regulations

The City shall implement ~~adopt~~ the reclaimed water regulations in the City's Code of Ordinances to ensure for the efficient operation of the reclaimed water system for the health or safety of the general public or the customer~~, regarding the following matters.~~:

~~(1) The times of day or night during which the reuse may be used by its customers.~~

~~(2) The maximum rate of use of the reuse water by its customers.~~

~~(3) The right to inspect reclaimed water devices, facilities, and terminate service to reclaimed water system found to be in violation of any City ordinance, regulation or procedure.~~

~~(4) Upon being connected to the City's reclaimed water system, the use of water for landscape irrigation from a well is prohibited, unless the reclaimed water from the well is otherwise authorized by the St. Johns River Water Management District pursuant to Part II, Chapter 373, F.S.~~

~~(5) The right to impose the mandatory payment of fees for the installation and usage of reclaimed water systems. Once service is connected, the user shall pay a minimum monthly charge set by resolution of the City Commission.~~

~~(6) The right to temporarily discontinue service to any portion of, or the entire, reclaimed water system as deemed necessary by the City.~~

~~Amended by Ordinance 09-59, 01/28/2010~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~SECTION VI: AQUIFER RECHARGE SUB-ELEMENT~~

Goal 4-6: ~~Goal 4-6:~~ Aquifer Recharge Management

P~~To p~~rovide a long term means of protecting the aquifer.~~(9J-5.011(2)(a))~~

~~Added by Ordinance 97-02, 10/23/1997~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 4-6.1: ~~Objective 4-6.1:~~ Quality and Quantity Preservation

~~The City shall continue~~Continue to implement the land development regulations which will preserve and protect the quality and quantity of groundwater through the establishment of impervious surface ratios in recharge areas; the limitation of incompatible uses permitted adjacent to wellfields and aquifer recharge areas; and the control of stormwater runoff that discharges into such areas.~~(9J-5.011(2)(b)5.)~~

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 4-6.1.1: ~~Policy 4-6.1.1:~~ Stormwater Requirements~~St. Johns~~

The City shall require all development requests to meet its Stormwater Management Ordinance requirements; meet its level of service standards for drainage; and have a valid St. Johns River Water Management District permit or exemption letter.

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-6.1.2: ~~Policy 4-6.1.2:~~ Landscape Ordinance~~ing~~

The City shall continue to enforce a landscape ordinance.

~~Amended by Ordinance 97-02, 10/23/1997~~
~~Amended by Ordinance 00-66, 12/09/1999~~

~~Policy 4-6.1.3: Site Plans~~

~~Applicants for site plan approval will be asked to define existing natural drainage features as well as means for their protection.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

~~Policy 4-6.1.4: Landscaping~~

~~The City shall, in its landscape ordinance preparation, determine a percentage of native vegetation to be required in all development and shall provide a credit for any use in addition to the required.~~

~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-6.1.3: ~~Policy 4-6.1.5: St. Johns~~Groundwater Basin Resource Availability Inventory

~~The City will~~The City shall cooperate with the St. Johns River Water Management District in the Groundwater Basin Resource Availability Inventory and will work to implement its findings where applicable.

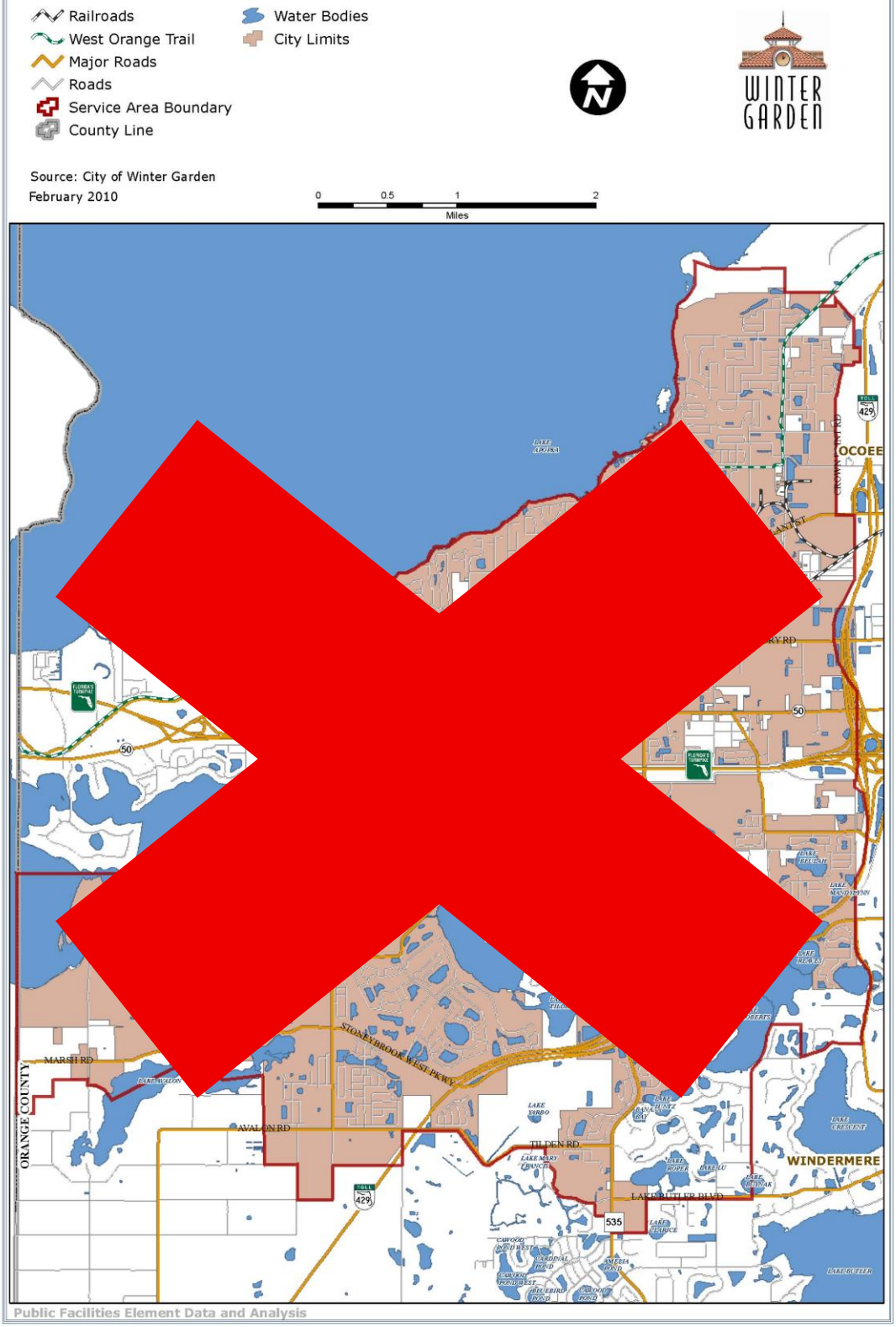
~~Amended by Ordinance 97-02, 10/23/1997~~

Policy 4-6.1.4: ~~Policy 4-6.1.6:~~ Recharge Areas

The City shall protect any identified prime recharge areas which are undeveloped. ~~will be protected by the City(9J-5.011(2)(c)4.)~~

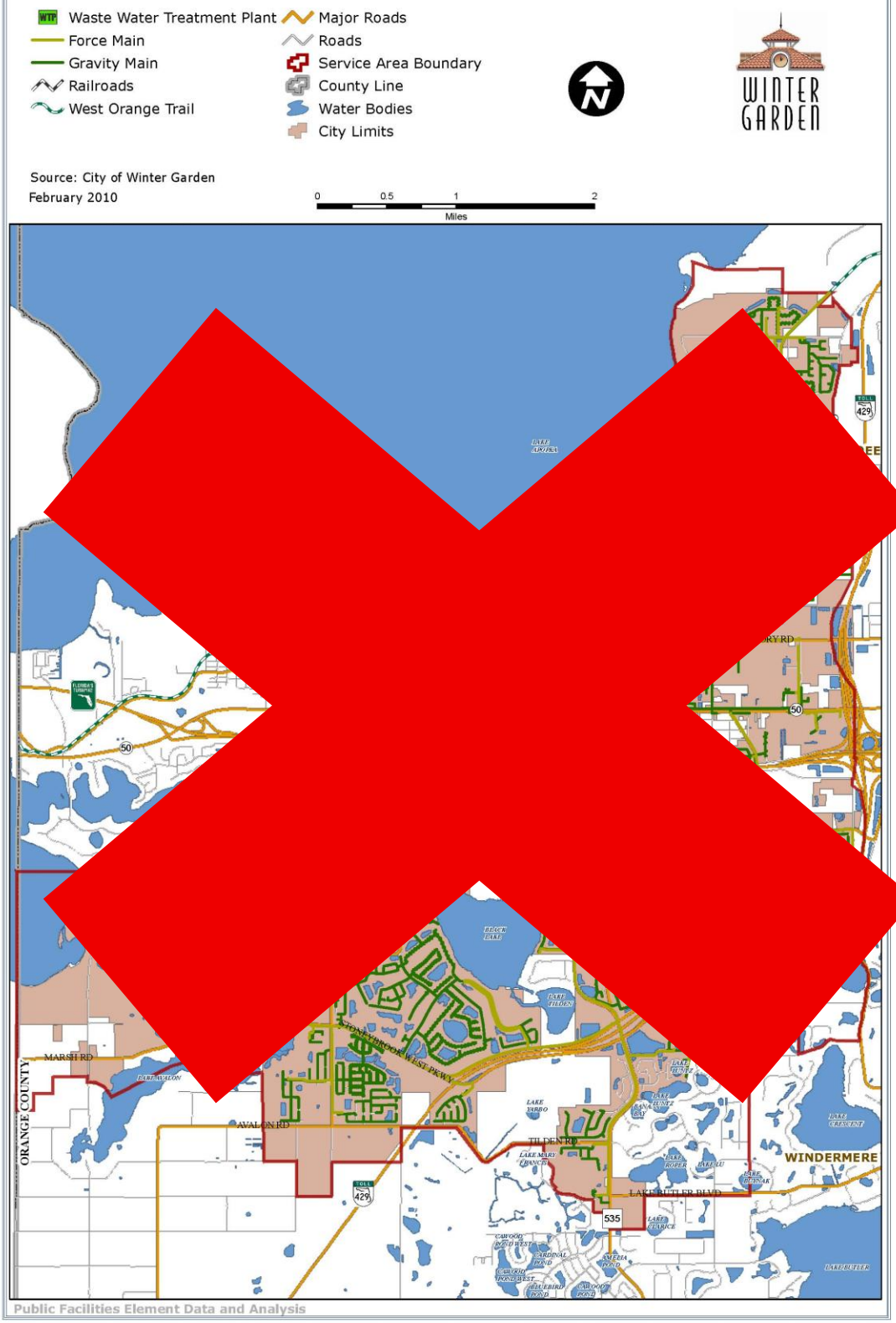
~~Amended by Ordinance 97-02, 10/23/1997~~

Figure 4.1
Wastewater Service Area



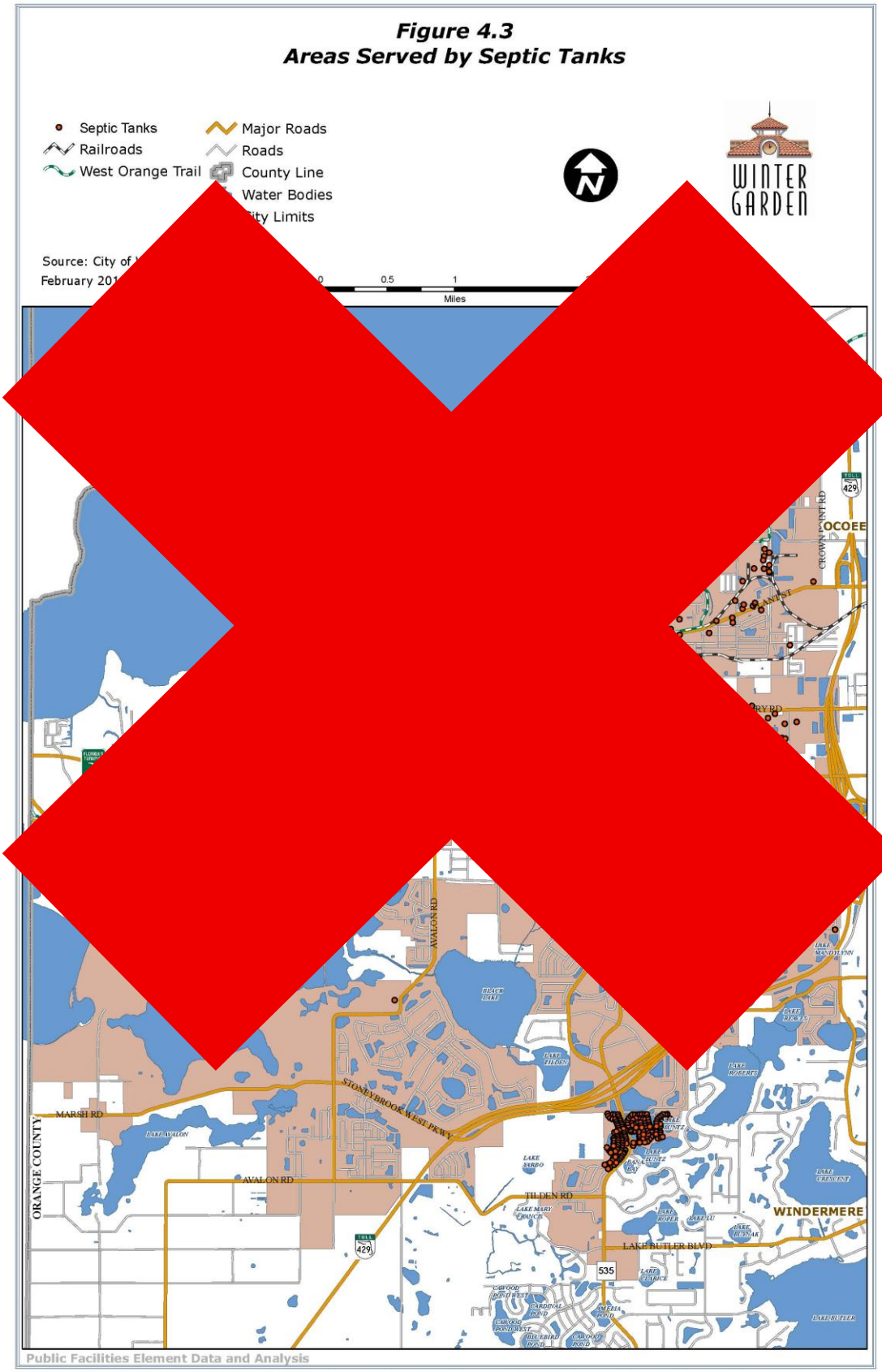
Public Facilities Element Data and Analysis

Figure 4.2
Main Wastewater Collection System and WWTP Location



Public Facilities Element Data and Analysis

Figure 4.3
Areas Served by Septic Tanks



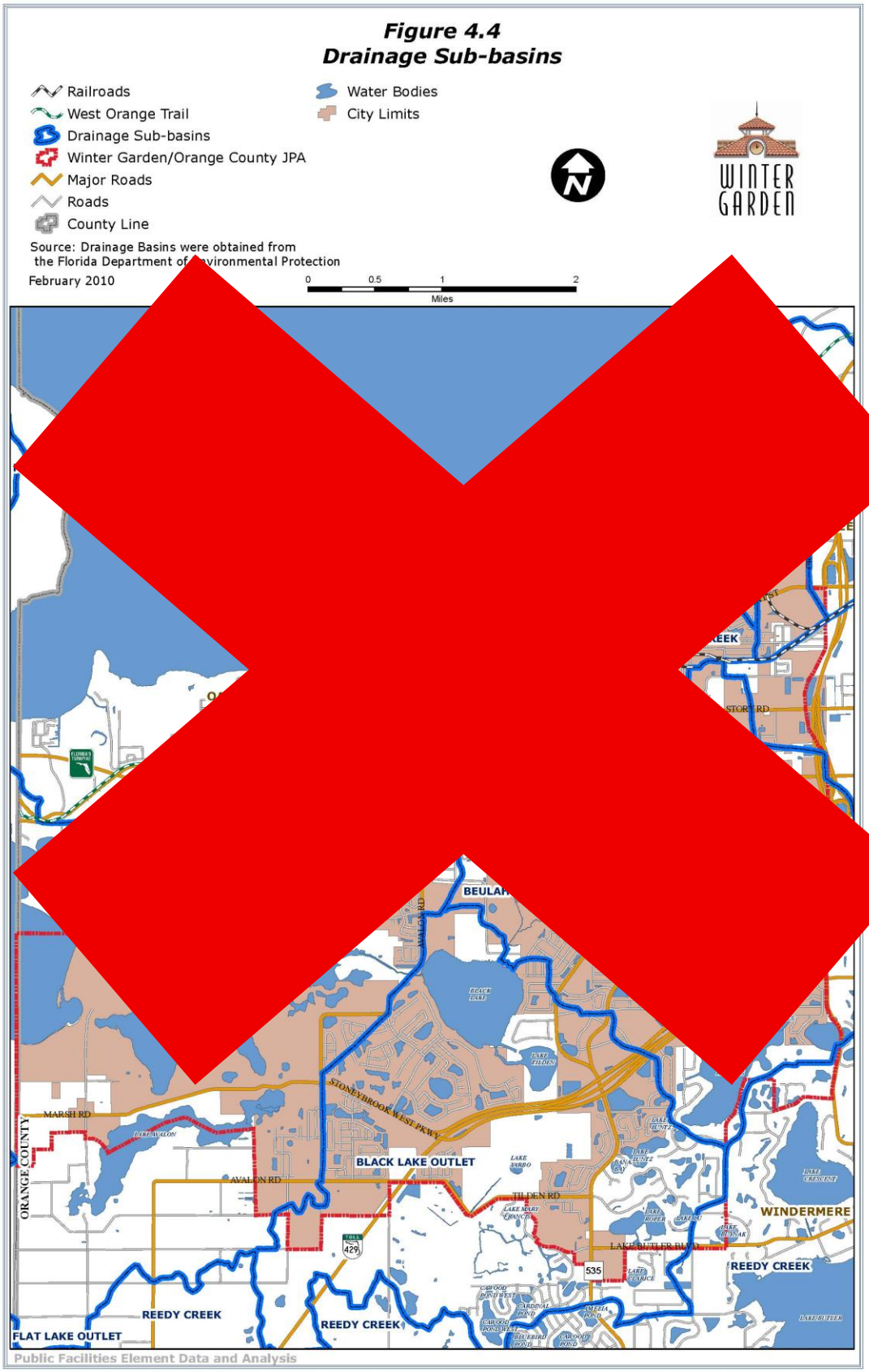
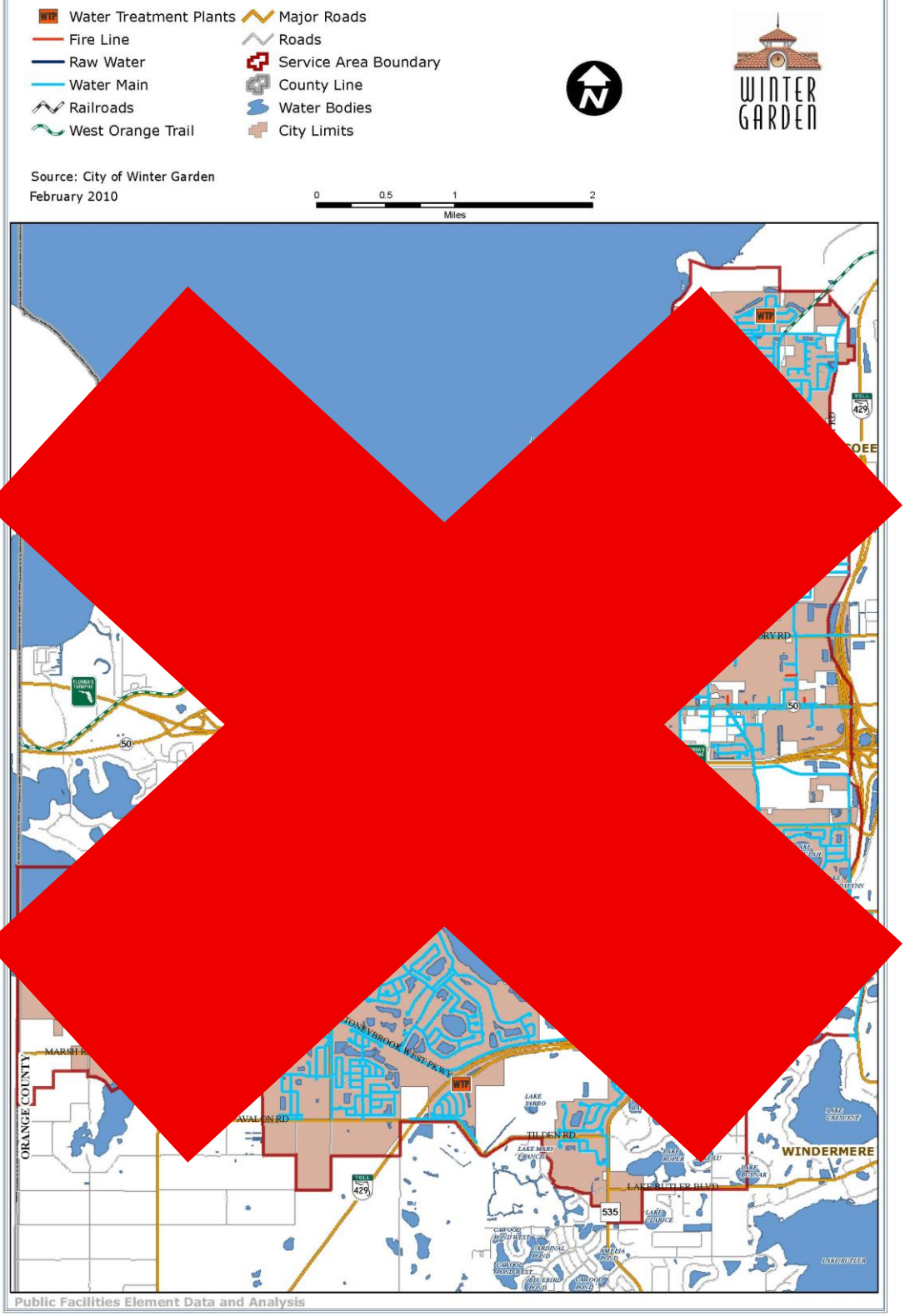


Figure 4.4
Drainage Sub-basins
Railroads
West Orange Trail
Drainage Sub-basins
Winter Garden/Orange County JPA
Major Roads
Roads
County Line
Water Bodies
City Limits
Source: Drainage Basins were obtained from
the Florida Department of Environmental Protection
February 2010
0 0.5 1 2
Miles
WINTER GARDEN
BLACK LAKE OUTLET
REEDY CREEK
FLAT LAKE OUTLET
WINDERMERE
ORANGE COUNTY
MARSH RD
AVALON RD
TILDEN RD
STONEYBROOK WEST PKWY
LAKE BUTLER BLVD
429
535
Public Facilities Element Data and Analysis

Figure 4.5
Potable Water Service Area Distribution System and Water Treatment Plants



Public Facilities Element Data and Analysis

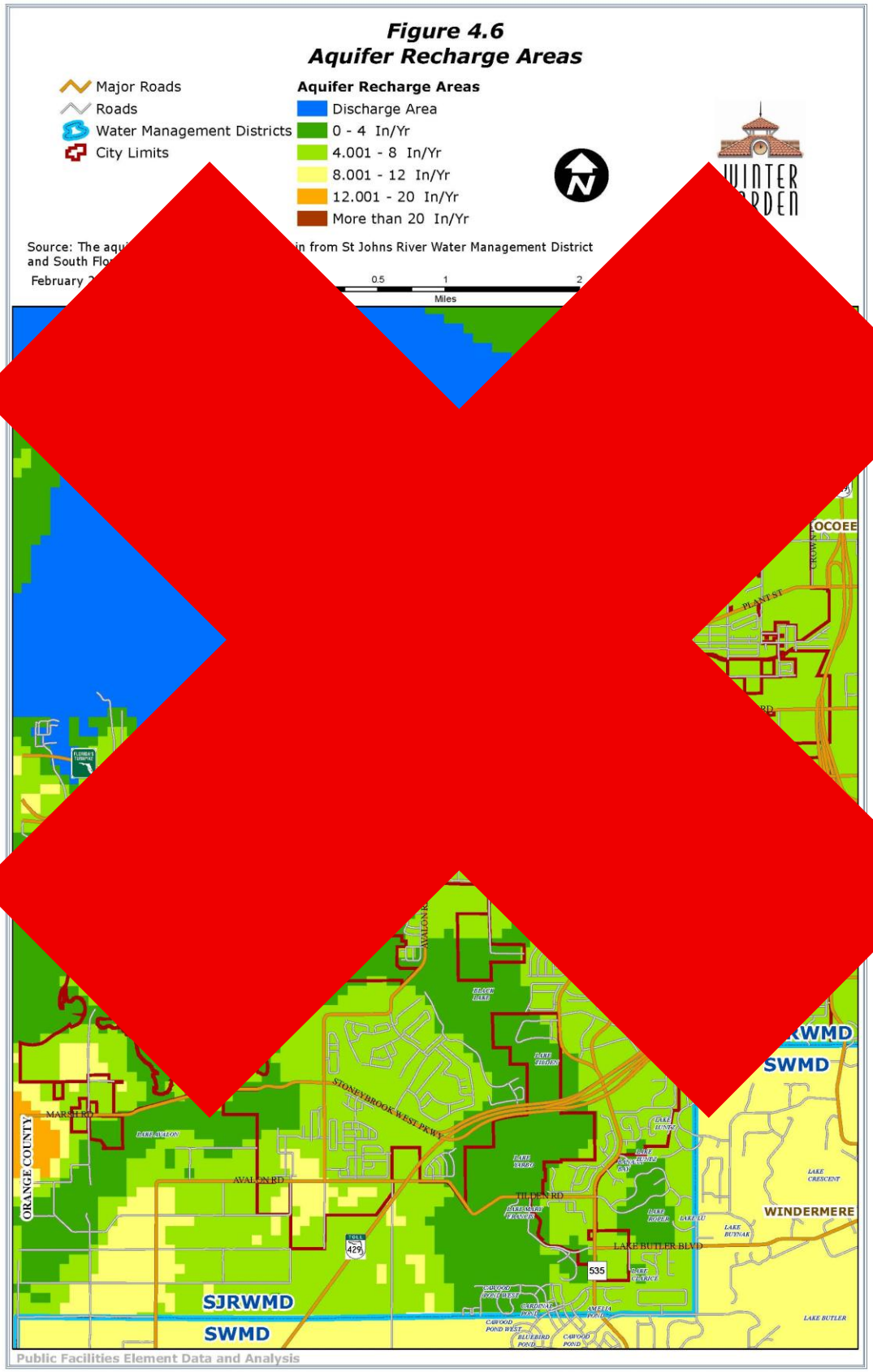


Figure 4.6
Aquifer Recharge Areas
Major Roads
Roads
Water Management Districts
City Limits
Aquifer Recharge Areas
Discharge Area
0 - 4 In/Yr
4.001 - 8 In/Yr
8.001 - 12 In/Yr
12.001 - 20 In/Yr
More than 20 In/Yr
Source: The aqu
and South Flo
in from St Johns River Water Management District
February 2
0.5
1
2
Miles
OCOEE
PLANT ST
STONEYBROOK WEST PKWY
MARSH RD
AVALON RD
TILDEN RD
LAKE BUTLER BLVD
ORANGE COUNTY
SJRWMD
SWMD
WINDERMERE
LAKE BUTLER
429
535
Public Facilities Element Data and Analysis



5

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN
WINTER GARDEN
Rooted in Tradition
2050
Growing Strong Communities

CONSERVATION

Table of Contents

Goal 5-1: Natural Resource Protection. 3
Objective 5-1.1: Air Quality. 3
Objective 5-1.2: Surface Water Quality 3
Objective 5-1.3: Ground Water Quality 6
Objective 5-1.4: Wetland Protection 10
Objective 5-1.5: 100-Year Flood Plain Protection 14
Objective 5-1.6: Minerals and Soil Use 15
Objective 5-1.7: Native Vegetative Protection 16
Objective 5-1.8: Wildlife Protection 19
Objective 5-1.9: Hazardous Waste Management 20

Goal 5-1: ~~Goal 5-1:~~ Natural Resource Protection

~~The City of Winter Garden strives to be the best steward of our natural resources. The City will strive to conserve~~Conserve, protect and enhance ~~our~~the City's ~~-~~natural resources including, air, surface water, groundwater, vegetative communities, wildlife ~~listed as threatened, endangered or species of special concern~~, soils, flood plains, recharge areas, aquifers, wetlands, and energy resources.~~(9J-5.013(2)(a))~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 5-1.1: ~~Objective 5-1.1:~~ Air Quality

~~The City shall C~~continue to implement state and federal mandated programs to maintain or improve air quality and exceed applicable air quality standards.~~Maintain air quality in Winter Garden which meets or exceeds the minimum air quality standards established by the Florida Department of Environmental Protection.(9J-5.013(2)(b)1)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 5-1.1.1:**~~

~~The City shall comply with all requirements of the State Implementation Plan for ozone attainment in Orange County.~~

Policy 5-1.1.1: ~~Policy 5-1.1.2:~~Industrial Use Air Quality Permits

The City shall ensure that all future industrial uses will meet or exceed air quality standards by requiring copies of all applicable state permits be submitted prior to issuing a building permit.

Policy 5-1.1.2: ~~Policy 5-1.1.3:~~Burn Permitting

The City shall ~~continue to~~ require permits for all burning and clearing activity within the corporate limits of the City.

~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 5-1.2: ~~Objective 5-1.2:~~ Surface Water Quality

~~The City shall M~~maintain or improve the quality of all surface waters in the City, implementing the land development regulations which implement

the applicable objectives of the Lake Apopka SWIM Program in accordance with Section 163.3177(6)(D)2B, F.S.. ~~(9J-5.013(2)(b)2)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 5-1.2.1:**~~

~~The City shall continue tertiary treatment of wastewater.~~

Policy 5-1.2.1: ~~Policy 5-1.2.2:~~Stormwater Management

The City shall continue to implement the land development regulations and require all development and redevelopment provide for drainage and stormwater management, low impact development methods, wetland protection, water quality enhancement and stormwater attenuation.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.2.2: ~~Policy 5-1.2.3:~~Stormwater Retention/Detention Systems

~~Winter Garden~~The City shall continue to improve design standards, monitoring, construction and maintenance requirements for stormwater retention/detention ~~systems, and~~systems and shall ensure compliance of these requirements to prevent degradation of the receiving surface water bodies. These requirements shall be included in the Land Development Code.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.2.3: ~~Policy 5-1.2.4:~~Lake Apopka Shoreline Development

The City shall require ~~maintain its~~ low ~~density residential zoning~~ impact development along Lake Apopka and will utilize drainage controls and building setbacks to prevent further degradation of the Lake. These controls shall require the preservation of native vegetation; prohibit direct runoff into the Lake; and provide for a ~~50 foot~~ minimum building setback in the City's land development code.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.2.4: ~~Policy 5-1.2.5:~~Surface Water Improvement and Management Program (SWIM)

The City ~~will~~ shall continue work with the State, the County, and the St. Johns River Water Management District with respect to the Surface Water Improvement and Management Program (SWIM) which ~~has targeted~~targets Lake Apopka for restoration and preservation.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.2.5: ~~Policy 5-1.2.6:~~ Lulu Creek

~~To mitigate the drainage, pollution, and erosion problems associated with the Lulu Creek Drainage Basin the City has completed the final engineering design for construction of needed improvements. The City shall continue to pursue funding sources for right-of-way acquisition and construction costs.~~ The City shall continue to monitor and mitigate drainage, pollution, and erosion associated with the Lulu Creek Drainage Basin.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 5-1.2.7: Wetland Buffer**~~

~~The City shall continue to enforce the wetland buffer requirements, as required by the Land Development Code, to help protect wetlands.~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.2.6: ~~Policy 5-1.2.8:~~ Water Quality Standards

The City ~~Winter Garden~~ shall maintain acceptable water quality standards for surface water bodies, ensuring an aquatic environment that meets or exceeds State and Federal standards.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.2.7: ~~Policy 5-1.2.9:~~Point and Non-Point Source Pollutants

~~Winter Garden~~The City shall continue to enforce water quality standards by identifying all point and significant non-point sources of water pollution, and expand programs to reduce the harmful impacts of these pollutants on the natural environment.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.2.8: ~~Policy 5-1.2.10:~~Hazardous Discharge

~~Winter Garden~~The City shall prohibit the discharge of hazardous, toxic, chemical, petroleum, nuclear waste or liquid sludge into surface waters or wetlands.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.2.9: ~~Policy 5-1.2.11:~~Prohibition of Petroleum Businesses

~~Winter Garden~~The City shall prohibit the location of petroleum businesses where they will negatively affect the quality of surface waters and the surficial and Florida Aquifers.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 5-1.3: ~~Objective 5-1.3:~~ Ground Water Quality

Maintain or improve the quality and quantity of groundwater in ~~Winter Garden~~the City by adopting land development regulations through the implementation of the following policies:

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.3.1: Wekiva Parkway and Protection Act Development Standards

The City shall continue to maximize protection and recharging of aquifers through implementation of Wekiva Parkway and Protection Act land development standards including requiring land located within the Resource Protection Overlay to have a minimum open space requirement of 25% with 20% consisting of Wekiva Study Area open space and 5% useable recreation/open space.

~~Policy 5-1.3.1:~~

~~The City will continue to enforce adopted land development regulations which protect potable water wellfields and aquifer recharge areas, consistent with the Wekiva Protection Act.~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.3.2: ~~Policy 5-1.3.2:~~Mapping of Wellfields and Prime Aquifer Recharge Areas

The City shall map and protect potable water wellfields and prime aquifer recharge areas from adverse impacts of development in conformance with the criteria listed in Objective 5-1.3.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.3.3: ~~Policy 5-1.3.3:~~Regional Groundwater Management

The City shall cooperate and comply with the St. Johns River Water Management District, the Florida Department of Environmental Regulation, and other agencies' water conservation policies and the emergency water conservation plan ~~to develop a comprehensive groundwater management plan as described in Regional Policy 38.2 in order to~~ to ~~assure~~ ensure sufficient uncontaminated water is available for present and future residents.

Policy 5-1.3.4: ~~Policy 5-1.3.4:~~Unauthorized Wells

The City shall report any unauthorized free-flowing uncapped wells to the St. Johns River Water Management District so that agency can cap and plug these wells.

~~Policy 5-1.3.5:~~

~~The City shall continue to maximize protection and recharging of aquifer through implementation of Wekiva Parkway and Protection Act requirements.~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 5-1.3.6:~~

~~The City shall continue to comply with all St. Johns River Water Management District water conservation policies and the emergency water conservation plan. (9J-5.013(2)(c)4)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

Policy 5-1.3.5: ~~Policy 5-1.3.7:~~Groundwater Use Permits

The City shall require potential groundwater users to obtain applicable consumptive use permits and well construction permits from the St. Johns River Water Management District prior to issuance of a building permit.

Policy 5-1.3.6: ~~Policy 5-1.3.8:~~Education and Engagement Programs

The City shall continue to educate residents on the benefits of water conservation and shall expand water conversation efforts for potable water and lower quality water sources, including reuse and surface/stormwater, in accordance with the City's Water Conservation Plan. The City ~~will~~ shall continue to promote the following programs:

1) –Landscape demonstrations and seminars
2) –Irrigation water audit program
3) –Irrigation timer assistance
4) –High water use program
5) –Website information
6) –Public Service Announcements
7) –Rain Barrel Program
~~– Rain Sensor testing and replacement program~~
8) –HOA Water Conservation presentations
9) –Drop Saver Program
10) –Employee training
11) –Display and distribute water conservation information at community functions
12) –Work with developers, civic organizations, ~~home owners~~homeowners associations, community clubs, etc. to promote the importance of water conservation
13) –Participate in educational programs with University of Florida/IFAS Florida Yards & Neighborhoods
14) –Billing inserts, newspaper articles/press releases and other publications to promote water conservation
15) –Water Conservation Month
16) –Low-Flow ~~P~~plumbing retrofit/exchange program
17) –Promote Florida-friendly and native plant landscaping
~~Amended by Ordinance 09-59, 01/28/2010~~

~~**Policy 5-1.3.9:**~~

~~The City shall continue to implement the Wekiva Parkway and Protection Act by requiring land located within the Resource Protection Overlay (see Future Land Use Figure 1.8) to have a minimum open space requirement of 25% with 20% consisting of Wekiva Study Area open space and 5% useable recreation/open space.~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.3.7: ~~Policy 5-1.3.10:~~ Florida-Friendly Landscaping

~~By December 2011, T~~the City shall continue to ~~revise the water conservation ordinance and~~ implement the landscape ordinance to require the use of Florida Friendly Design Standards to promote the efficient use of water for all new developments and redevelopment.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 09-59, 01/28/2010~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.3.8: ~~Policy 5-1.3.11:~~Water Rate Structure

The City shall maintain a progressive water rate structure to encourage efficient use of both potable water and lower-quality water sources such as reuse and surface/stormwater.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 09-59, 01/28/2010~~

~~**Policy 5-1.3.12: Reserved.**~~

Policy 5-1.3.9: ~~Policy 5-1.3.13:~~ Potable Well Heads

~~The enforcement of the City's Land Development Regulations, t~~The City shall continue to restrict incompatible land uses to be located within a 500 foot radius of any potable well heads.~~(9J-5.013(2)(c)1)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

Policy 5-1.3.10: ~~Policy 5-1.3.14:~~Irrigation System Shut-Offs

The City shall require working automatic rain sensors shut-offs on all automatic irrigation systems in accordance with state and local requirements.

~~Added by Ordinance 09-59, 01/28/2010~~

Policy 5-1.3.11: ~~Policy 5-1.3.15:~~Water Conservation Measures

The City shall review and implement/maintain the following water conservation measures throughout City managed property and encourage their use in new development and redevelopment:

1) –Constant monitoring and correction of water loss in the distribution system
2) –Annual water audits

3) –Meter survey and replacement program
4) –Provide Construction meters to contractors and read monthly
5) –Installation of water conserving plumbing fixtures in new construction and retrofitting older construction
6) –Water reuse for irrigation purposes
7) –Constant monitoring and correction of water loss in the water distribution system
8) –Planting of drought-resistant or native vegetation in landscaping projects

~~Added by Ordinance 09-59, 01/28/2010~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.3.12: ~~Policy 5-1.3.16:~~Water Efficient Development

The City shall incentivize water efficient development and redevelopment such as low impact developments and those constructed in accordance with the Florida Water StarSM program by making water efficient development eligible for development bonus consideration in the activity centers.

~~encourage development and redevelopment to incorporate low development impact development techniques in the site design process and shall encourage water-efficient developments such as those that are constructed in accordance the Florida Water StarSM program, a voluntary certification program for new and existing residential and commercial developments, and shall make such low impact development techniques eligible for development bonus consideration in the activity centers.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 5-1.4: ~~Objective 5-1.4:~~ Wetland Protection

~~The City shall C~~continue to implement the land development regulations which require the protection of all wetlands shown on ~~Figure 1.1 of~~ the Future Land Use Map series. These regulations include the use of buffering or building setbacks; preservation of natural vegetation; provisions for stormwater management; and the prohibition of any activity which impairs the natural function of these lands. The City of Winter Garden shall protect identified wetland areas and existing wildlife habitats by implementing the following policies.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.1: ~~Policy 5-1.4.1:~~Wetland Development

The ~~It is the~~ City~~'s~~ shall ensure ~~policy~~ that ~~no development is allowed in a~~ wetland areas are adequately protected from the impacts of proposed development. However, encroachment into a wetland may be allowed in cases where no other feasible or practical alternatives exist that would permit the reasonable use of the land or where there is an overriding public benefit based upon review by the City of Winter Garden.

Policy 5-1.4.2: ~~Policy 5-1.4.2:~~Regulation of Wetland Development

The City shall~~,~~ continue to implement the wetland protection policies as identified in the City's comprehensive plan and require all proposed development within or adjacent to wetlands be permitted through the City of Winter Garden and other appropriate regulatory agencies.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.3: ~~Policy 5-1.4.3:~~ SWIM

The City ~~will~~ shall continue work with the State, the County, and the St. Johns River Water Management District with respect to the Surface Water Improvement and Management Program (SWIM) which has targeted Lake Apopka for restoration and preservation.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.4: ~~Policy 5-1.4.4:~~Lake Apopka Wetland Development Standards

The City shall prevent further degradation to the wetlands adjacent to Lake Apopka by ~~maintaining the~~approving only low impact development ~~density residential land use~~ in that area and by utilization of drainage controls and ~~the 30 foot~~ minimum building setback regulations.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.5: ~~Policy 5-1.4. 5:~~Planned Development Wetland Standards

The City shall continue to utilize the flexibility allowed in the Planned ~~Unit~~ Development classification help to protect and conserve identified wetlands through strategies such as clustering of development and the transfer of development rights out of wetlands to uplands.

~~Amended by Ordinance 00-68, 04/26/2001~~

Policy 5-1.4.6: ~~Policy 5-1.4.6:~~Wetland Partnerships

~~City of Winter Garden~~The City shall continue to seek out innovative partnerships and opportunities to preserve and conserve its natural resources in a balanced approach that ensures multiple and compatible uses of those lands while providing just compensation to the land~~-~~owner including acquisition, conservation easements, and transfer of development rights.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.7: ~~Policy 5-1.4.7:~~Conservation/Wetlands Map

The Conservation/Wetlands designation as shown on ~~Figure 1.1 of~~ the Future Land Use Map series shall serve as a conceptual indicator of conservation and wetland areas. ~~-~~The precise delineation of these areas shall be determined through site-specific studies and field determinations to assess the extent of the wetland areas.

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 5-1.4.8:**~~

~~The City shall protect and conserve wetlands in accordance with these policies. Such regulations shall include criteria for wetland protection and mitigation involving the appropriate regulatory agencies.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.8: ~~Policy 5-1.4.9:~~Wetland Development Permits

The City shall prohibit~~s~~ development in wetland areas and shall only issue development permits after the owner/developer secures ~~and~~ final approval and permits from the City ~~of Winter garden~~ and other appropriate regulatory agencies. Banking wetlands in areas within and adjacent to the City's jurisdictional limits shall take priority if regulatory agencies require banking as a means of mitigation.

~~Added by Ordinance 10-19, 06/24/2010~~

~~Policy 5-1.4.10:~~

~~The City's land development code shall be amended by July 2011 to include lake protection regulations for dock and seawall construction and regulations to protect the shore line and lake littoral zones.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.9: ~~Policy 5-1.4.11:~~Wetland Encroachments

~~For~~ The City shall require all proposed wetland encroachments ~~the owner/developer shall engage A~~be submitted by a qualified environmental consultant to ~~estimate~~ determine the limits and class of onsite wetlands for review by the City ~~of Winter Garden~~.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.10: ~~Policy 5-1.4.12:~~Wetland Buffers

The City shall require a wetland buffer ~~of an average of at least 25 feet with a minimum of 15 feet at any one point between wetlands and new development~~in order to protect water quality, preserve natural wetland functions, and preserve natural habitat. The buffer~~, as measured landward from the approved jurisdictional line,~~ shall be maintained in a natural vegetative state and be free of exotic and nuisance species.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.11: ~~Policy 5-1.4.13:~~Wetlands and Future Land Use

~~Should City determination~~ If a study performed by a qualified environmental consultant or agency shows that wetlands do not exist in an area or areas where they were believed to have existed~~, or that the limit of the wetland is less than depicted,~~ then the underlying future land use for the property shall prevail. Should City determination show that wetlands cover an area larger than depicted then the future land use map series shall be amended to reflect said boundaries of the wetland.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.4.12: ~~Policy 5-1.4.14:~~Incompatible Land Uses

The City shall direct incompatible land uses away from wetlands. Incompatible land uses shall include, but not be limited to:~~,~~

1) ~~i~~Industrial uses~~,~~
2) ~~n~~Non-hazardous and hazardous waste disposal sites~~,~~
3) ~~r~~Refuse transfer stations~~,~~
4) ~~s~~Septic tank dependent business and residences~~,~~
5) ~~j~~Junk yards~~,and~~
6) ~~h~~Heavy manufacturing activities.
~~Added by Ordinance 10-19, 06/24/2010~~

Objective 5-1.5: ~~Objective 5-1.5:~~ 100-Year Flood Plain Protection

~~The City shall~~ Ceontinue to conserve and protect the natural functions of the l00-year floodplain by implementing the flood protection regulations which regulate land use in and development of flood prone areas consistent with the National Flood Insurance Program and the policies set out in this Element and ~~in Article II of Chapter 90 of~~ applicable sections of the City's Code of Ordinances that address~~es~~ flood damage prevention. These policies may include ~~clustering, or~~clustering or compensating storage or directing development away from floodplains.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy5-1.5.1:~~

~~The City shall, continue to implement the land development regulations which regulate areas subject to periodic or seasonal flooding consistent with the policies contained in this Element and in Article II of Chapter 90 of the City's Code of Ordinances that addresses flood damage prevention.~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.5.1: ~~Policy 5-1.5.2:~~Floodplain Development Guidelines

Development in the l00-year floodplain shall be consistent with the guidelines of the National Flood Insurance Program and the requirements found in the City's land development regulations relating to flood damage prevention. The use of best management practices such as the use of PDs, low impact development, and preservation of open space shall be encouraged in flood-prone areas.

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 5-1.5.3:~~

~~The City shall utilize the Planned Unit Development designation to protect and conserve critical areas of the l00-year floodplain.~~

Policy 5-1.5.2: ~~Policy 5-1.5.4:~~Strengthening Flood Protection

~~Winter Garden~~The City shall strengthen floodplain protection requirements for riverine systems by enforcing regulations prohibiting floodplain encroachment without compensating storage.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.5.3: ~~Policy 5-1.5.5:~~Floodplain Protection Coordination

~~Winter Garden~~The City shall, on an ongoing basis, in conjunction with other appropriate agencies such as the Water Management Districts, identify and prioritize ~~problem floodplain~~flood prone areas in need of corrective measures.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 5-1.6: ~~Objective 5-1.6:~~ Minerals and Soil Use

C~~The City shall c~~onserve, protect, and appropriately utilize the minerals and soils in Winter Garden.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.6.1: ~~Policy 5-1.6.1:~~Mining Prohibition

The City's land development regulations shall continue to prohibit mining in the City.

Policy 5-1.6.2: ~~Policy 5-1.6.2:~~Soil Suitability

The City shall utilize the detailed soil survey prepared by the Soil Conservation Service to determine suitability of soils for a requested use prior to issuance of a final development order.

Policy 5-1.6.3: ~~Policy 5-1.6.3:~~Soil Conservation Service Best Management Practices

The City shall cooperate with the Soil Conservation Service in those activities directed at minimizing soil erosion by requiring the use of the Soil Conservation Service's Best Management Practices Standard during and after development activities.

Policy 5-1.6.4: ~~Policy 5-1.6.4:~~Erosion Control Ordinance

The City shall continue to implement the Erosion Control Ordinance which provides a procedure for the issuance of land-clearing permits which implements erosion control methods and controls the removal of minerals and soil from a site.

~~Amended by Ordinance 00-68, 04/26/2001~~

Policy 5-1.6.5: ~~Policy 5-1.6.5:~~Soil Drainage

The City shall continue to implement ~~the~~ land development regulations which provide for drainage and stormwater management in order to decrease the rate of soil erosion.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~**Policy 5-1.6.6:**~~

~~Winter Garden shall on an ongoing basis, assist the Soil Conservation Service with those activities directed at minimizing soil erosion, including the adoption and enforcement of Best Management Practices for agriculture and urban development.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.6.6: ~~Policy 5-1.6.7:~~Soil Development Regulation

~~Winter Garden~~The City shall incorporate regulations into the Land Development Code concerning soils and their suitability for future development. ~~-~~These regulations shall include restricting development in hydric soils, preservation of groundwater recharge areas, and controlling the use of and individual on-site sewage disposal facilities.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 5-1.6.7: ~~Policy 5-1.6.8:~~ State Soil Best Management Practices

~~Winter Garden~~The City shall continue to require and enforce State recommended Best Management Practices to protect soils during development activities.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 5-1.7: ~~Objective 5-1.7:~~ Native Vegetative Protection

C~~The City shall c~~ontinue to implement ~~the~~ land development regulations which provide for the conservation, protection, and appropriate use of the

City's native vegetative communities~~. as specified in the Wekiva Parkway and Protection Act.~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Amended by Ordinance 00-68, 04/26/2001~~

Policy 5-1.7.1: ~~Policy 5-1.7.2:~~Clearing and Native Vegetation Removal

The City shall continue to implement the land clearing permit section of the City Code. This procedure shall establish penalties for the unauthorized removal of native vegetation and require the restoration of any illegally cleared areas.~~ (9J-5.013(2)(c)3)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

Policy 5-1.7.2: ~~Policy 5-1.7.3:~~ Tree Protection and Landscaping Ordinance~~.~~

The City shall periodically evaluate, revise, and supplement the tree protection and landscaping ordinance ~~by October 2010~~to incorporate best practices. The City shall amend the tree ordinance and associated land development regulations, in order to require preservation of valuable tree species, prohibit indiscriminate clearing, and require replacement and maintenance measures. These regulations shall be included in the Land Development Code.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.7.3: ~~Policy 5-1.7.4:~~Incentives for Native Landscaping

The City shall continue to ~~implement land development regulations to~~ provide incentives for preserving or planting native vegetation including:

1) ~~c~~Credits toward meeting landscaping requirements;~~;~~
2) ~~r~~Requiring restoration of unpermitted cleared areas with natural vegetation;~~; and the r~~
3) Requiring ~~of~~ clustering development to protect existing areas of native vegetation~~.~~;
4) Requiring protecting existing live oak trees (Quercus virginiana) and planting new live oak trees wherever space allows and planting conditions are optional for long-term tree health.

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 5-1.7.5:**~~

~~The City shall continue to utilize the Planned Unit Development process to preserve native vegetative communities from destruction by development.~~

Policy 5-1.7.4: ~~Policy 5-1.7.6:~~Native Vegetation Coordination

The City shall continue to work with other governmental agencies to conserve, appropriately use, and protect native vegetative communities located in more than one jurisdiction including but not limited to the freshwater swamp areas along the shores of Lake Apopka.

Policy 5-1.7.5: ~~Policy 5-1.7.7:~~Endangered and Threatened Plant Regulations

The City shall comply with all State and Federal regulations regarding any rare, endangered, or threatened plant species found in Winter Garden.

Policy 5-1.7.6: ~~Policy 5-1.7.8:~~Environmentally Sensitive Lands

The City shall continue to implement the criteria for the designation and protection of environmentally sensitive lands to further the goals and objectives of this Element.~~These criteria shall be consistent with all policies contained in this Element. (9J-5.013(2)(c)9)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

Policy 5-1.7.7: ~~Policy 5-1.7.9:~~ Best Development Practices

The City encourages the use of ~~hereby adopts and endorses the general principals of Reid Ewing's April 1996 "~~Best Development Practices, including~~." The City will~~ specifically requiringe the following environmental principles for residential subdivisions:

1) ~~(1)~~ Larger developments shall use a system approach to environmental planning.

2) ~~(2)~~ P~~U~~Ds shall channel development into areas that are already disturbed when possible.

3) ~~(3)~~ P~~U~~Ds shall preserve patches of high-quality habitat whenever possible as open space and feather the edges of habitat and provide wild-life corridors when appropriate.

4) ~~(4)~~ All development shall provide buffers around wetlands.

5) ~~(5)~~ All developments shall develop wet retention areas into open natural drainage systems and provide natural vegetation around these retention areas when appropriate.

6) ~~(6)~~ All developments are encouraged to use Xeriscaping on all ~~non-wetland~~ landscaping.

~~Amended by Ordinance 00-68, 04/26/2001~~

Objective 5-1.8: ~~Objective 5-1.8:~~ Wildlife Protection

C~~The City shall c~~ontinue to enforce land development regulations to conserve, protect, and utilize its wildlife and wildlife habitats based upon the policies contained in this Element.~~. (9J-5.013(2)(b)4)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.8.1: ~~Policy 5-1.8.1:~~Endangered and Threatened Wildlife Regulations

The City shall comply with all State and Federal regulations regarding any rare, endangered, or threatened wildlife found in the City.

Policy 5-1.8.2: ~~Policy 5-1.8.2:~~Critical Habitat Regulations

~~Critical wildlife habitats for rare, endangered or threatened animals will be~~ The City shall protect~~ed~~ critical wildlife habitats for rare, endangered or threatened wildlife ~~by~~ through the adoption of specific land development regulations to conserve such areas in conformance with State and Federal Laws.

Policy 5-1.8.3: ~~Policy 5-1.8.3:~~Planned Development Habitat Protection

The City shall utilize the Planned ~~Unit~~ Development process and other land development regulations as a tool to conserve and protect identified wildlife habitats.

Policy 5-1.8.4: ~~Policy 5-1.8.4:~~Habitat Protection Coordination

The City shall support all regional, state, and federal programs that identify and protect critical habitats for rare, endangered, or threatened species of wildlife in the City~~:~~ (types and specific locations designated by the U.S. Fish and Wildlife Service, the Florida Game and Freshwater Fish Commission, the Florida Department of Natural Resources, the Florida Department of Environmental Regulation, or the East Central Florida Regional Planning Council) by providing local data when requested and through the adoption of specific regulations to protect such areas once they are designated by one of the above agencies.

Policy 5-1.8.5: ~~Policy 5-1.8.5:~~Prohibition of Activities Adversely Impacting Endangered or Threatened Wildlife

The City shall not approve any development or activity known to adversely affect the survival of endangered or threatened wildlife.

Policy 5-1.8.6: ~~Policy 5-1.8.6:~~Lake Apopka Wildlife Coordination

The City shall continue to cooperate with other governmental agencies on the Lake Apopka restoration project in order to enhance the fish and wildlife potential of the Lake area.

Policy 5-1.8.7: ~~Policy 5-1.8.7:~~ Listed Species

~~By January 30, 2011, T~~the City shall ~~develop regulations that~~continue to ~~will~~ require all new developments greater than a certain ~~10 acres in~~ size or if determined to contain listed species to conduct a primary environmental audit to determine if any listed species exist on the property. If any listed species exist, the developer must develop a relocation or mitigation plan prior to any disturbance of the land.~~. (9J-5.013(2)(c)5)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 5-1.9: ~~Objective 5-1.9:~~ Hazardous Waste Management

~~The City shall~~ Mmanage hazardous wastes so that natural resources are protected.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 5-1.9.1: ~~Policy 5-1.9.1:~~Hazardous Waste Regulations

The City shall require all developments to comply with any applicable state and federal hazardous waste regulations prior to the issuance of a final development order.~~. (9J-5.013(2)(c)10~~)

~~Amended by Ordinance 00-68, 04/26/2001~~

~~**Policy 5-1.9.2: Hazardous Waste & Storage Tanks**~~

~~The City shall minimize future hazardous waste pollution problems:~~

Policy 5-1.9.2: Hazardous Waste Cooperation

The City shall ~~C~~cooperate with all Federal, State, or County agencies concerning hazardous waste contamination and/or abandoned underground storage tanks withholding development permits on property that has been identified to be in violation.

Policy 5-1.9.3: Orange County Amnesty Days

~~(2)~~ The City shall ~~C~~cooperate with Orange County to develop Amnesty days for the collection of household hazardous wastes, such as oil, pesticides, and other chemicals~~; and~~.

Policy 5-1.9.4: Hazardous Waste Response

~~(3)~~ The City shall ~~P~~prepar~~eation of~~ an emergency response plan for dealing with a hazardous waste occurrence, in conjunction with the County, State, and Federal plans.

~~(9J-5.013(2)(c)10)~~

~~Amended by Ordinance 00-68, 04/26/2001~~

Policy 5-1.9.5: ~~Policy 5-1.9.3:~~Location of Solid Waste Disposal and/or Collection Facilities

The City shall locat~~eion of~~ solid waste disposal and/or collection facilities to ~~shall~~ protect against adverse impacts to residential areas, schools, churches, hospitals, water quality and noise pollution, wetlands and other environmental factors.

~~Amended by Ordinance 10-19, 06/24/2010~~



6

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

RECREATION & OPEN SPACE

Table of Contents

Goal 6-1: Open Space and Recreation....3
Objective 6-1.1: Adequate Parks and Recreation....3
Objective 6-1.2: Coordination Efforts....5
Objective 6-1.3: Level of Service Standards and Capital Improvements....6
Objective 6-1.4: Preservation and Acquisition....7
Objective 6-1.5: Management and Stewardship....9

Goal 6-1: ~~Goal 6.1:~~ Open Space and Recreation

~~The provision~~Provide and ~~maintenance~~ maintain ~~of~~ sufficient open space and recreation ~~sites~~ areas to meet the needs of current and future residents of Winter Garden.

Objective 6-1.1: ~~Objective 6.1.1~~ Adequate Parks and Recreation

~~The City of Winter Garden will shall~~ M~~m~~aintain and provide ~~for the future development of a system of~~accessible parks and recreation facilities that ~~include active and resource based recreation opportunities to~~ meet a variety of recreation needs for ~~its~~ residents and visitors and fulfill the LOS standards for Recreation and Trails defined in the Capital Improvement Element.

Policy 6-1.1.1: ~~Policy 6.1.1.1:~~ Public Access

The City shall continue to ensure all neighborhoods have adequate public access to all existing and proposed parks and open space sites.~~maintain all current public access ways to existing and proposed parks and open space sites.~~

~~Policy 6.1.1.2:~~

~~The City shall develop future recreation and open space areas only if they have sufficient public access routes available.~~

Policy 6-1.1.2: ~~Policy 6.1.1.3:~~ Waterfront Access

The City shall continue to promote access to water bodies and natural resources including Lake Apopka through the development and maintenance of public access points, boat ramps, and canoe/kayak launches.~~The City shall continue to maintain its existing public access to Lake Apopka.~~

Policy 6-1.1.3: ~~Policy 6.1.1.4:~~ ADA Access

The City shall ensure all existing and future City owned parks and playgrounds will meet or exceed the requirements of the Americans with Disabilities Act (ADA). Older parks and playgrounds that are not in compliance with current ADA requirements shall be retrofitted as funding allows.

~~The City shall continue to identify all obstacles to park access for the handicapped and elderly and implement a plan to correct these deficiencies.~~

Policy 6-1.1.4: Multimodal Access

The City shall promote access of recreation and open space through multimodal forms of transportation including walking, biking, micromobility, and public transit.

~~**Policy 6.1.1.5: Winter Garden Bicycle and Pedestrian Master Plan**~~

~~The City shall continue to implement the City of Winter Garden Bicycle and Pedestrian Master Plan (2002), as it may be amended, created in conjunction with the FDOT.~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 6-1.1.5: ~~Policy 6.1.1.6:~~ Future Access

The City shall design, construct, and manage parks, recreation facilities, open spaces, and trails with ~~access ways~~sufficient public access routes that are compatible with the natural features and character of individual park sites.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 6-1.1.6: ~~Policy 6.1.1.7:~~ Greenways and Blueways

The City shall provide greenways and blueways where possible to help connect natural resources and parks to the trail system.

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 6.1.1.8:**~~

~~The City shall investigate ways to link the West Orange Trail to parks located south of the Turnpike.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 6-1.1.7: West Orange Trail Connectivity

The City shall coordinate with the Foundation for a Healthier West Orange and West Orange County communities in the development of trails consistent with the Healthy West Orange Trails (HWOT) Initiative Report (2021) and subsequent trail planning projects.

~~**Policy 6.1.1.9:**~~

~~The City shall, through its Zoning Ordinance, continue to require the provision of open space in the form of building setback regulations.~~

~~**Policy 6.1.1.10:**~~

~~The City shall, through its Subdivision Ordinance, continue to require mandatory dedication of recreational lands or recreation fees for all future subdivisions.~~

~~**Policy 6.1.1.11:**~~

~~The City shall continue, through its Zoning Ordinance, to mandate the provision of common recreation and/or open space serving mobile home park residents prior to approving such development.~~

Policy 6-1.1.8: ~~Policy 6.1.1.12:~~ Recreation and Open Space Map

The City hereby adopts the Recreation and Open Space Map, as shown in ~~Figure 6.1~~Map 21 in the Map Series.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 6-1.2: ~~Objective 6.1.2:~~ Coordination Efforts

~~The City shall~~ Ccontinue to utilize existing coordination mechanisms between public and private entities, as identified in this Element, in order to meet the recreation needs established for the City.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 6-1.2.1: ~~Policy 6.1.2.1:~~ Parks Grants

The City shall continue to apply for State and Federal grants in addition to local funding for park acquisition and development.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 6-1.2.2: ~~Policy 6.1.2.2:~~ County Coordination

The City shall continue to participate with the County in the selection and development of any recreation areas serving the residents of Winter Garden.

Policy 6-1.2.3: ~~Policy 6.1.2.3:~~ Trail and Blueways Coordination

The City shall continue to work with federal, state, regional, and local public and private agencies, developers, and/or organizations~~with the Friends of Lake Apopka and the St. John's River Water Management District~~ in the development of trails and blueways consistent with the Lake Apopka Greenways and Trails Master Plan (January 2002), Green Mountain Scenic Byway, and the Healthy West Orange Trails Initiative Report (2021).

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 6.1.2.4:**~~

~~The City shall continue working towards implementing its trails program by coordination with federal, state, regional, and local public and private agencies, developers, and/or organizations.~~

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 6.1.2.5:**~~

~~The City of Winter Garden supports the Vision, Goals, Objectives and Strategies of the Green Mountain Scenic Byway Corridor Management Committee, as stated in the Green Mountain Scenic Byway Application for Additional Corridor in the City of Winter.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 6-1.3: ~~**Objective 6.1.3:**~~ Level of Service Standards and Capital Improvements

M~~The City shall m~~aintain and upgrade existing recreation sites and provide sufficient park acreage to meet adopted level of service standards at all times.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 6-1.3.1: ~~**Policy 6.1.3.1:**~~ Adopted Level of Service

The City's ~~hereby~~ adopted~~s~~ ~~a~~ Level of Service standard for recreation ~~of five (5) acres of recreation/open space for every 1,000 persons~~can be found in the Capital Improvements Element.

Policy 6-1.3.2: ~~**Policy 6.1.3.2:**~~ Maintenance of Facilities

The City shall continue to maintain and upgrade existing recreational facilities and sites ~~through~~ via methods including, but not limited to,~~the provision of~~ landscaping~~;~~ building parking facilities~~,~~; resurfacing ~~of~~ tennis, basketball, pickleball, and shuffleboard courts~~,~~; and general maintenance.

Policy 6-1.3.3: ~~**Policy 6.1.3.4:**~~ Capital Improvement Program

The City shall include in the five-year capital improvements program all expenditures for new or replacement facilities and new park sites needed to meet the adopted level of service standard.

~~Policy 6.1.3.5:~~

~~The City shall incorporate into the existing park system public environmental land, where feasible, for park development, environmental education, and protection.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 6-1.3.4: ~~Policy 6.1.3.6:~~ Tucker Park Ranch

The City shall continue to implement the development of the ~~seek funding to purchase property for the proposed~~ Tucker Ranch Holistic Health, Wellness, Teaching Farm, and Family Activity Center ~~Nature Center~~ located at Tucker Ranch Park and Nature Preserve~~south of the Turnpike and west of CR 545/Avalon Road~~.

~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 6.1.3.7:**~~

~~The City shall continue to require through the land development regulations either land to be dedicated or an impact fee to be paid for all public and private residential development.~~

Policy 6-1.3.5: ~~Policy 6.1.3.8:~~ Land Development Definitions and Standards

The City shall evaluate ~~amend~~ existing land development regulations to determine if additional ~~include specific~~ open space definitions and standards are needed ~~no later than the time-frame established by the State~~to achieve the City's vision.

Objective 6-1.4: ~~Objective 6.1.4:~~ Preservation and Acquisition

~~The City of Winter Garden will shall~~ A~~a~~ctively promote, protect, and where possible acquire environmentally sensitive lands and encourage all forms of resource-based recreation opportunities.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 6-1.4.1: ~~Policy 6.1.4.1:~~ Acquisition through New Development

The City shall continue to require through the land development regulations either land to be dedicated or an impact fee to be paid for all public and private residential development.

~~Amended by Ordinance 00-64, 04/26/2001~~

Policy 6-1.4.2: ~~Policy 6.1.4.2:~~ Maximum Impervious Surface Ratios (ISR)

The City shall continue to require minimum open space for all lots through its maximum impervious surface ratios listed in the City's Code of Ordinances.

~~The Zoning Ordinance shall continue to require open space in the form of building setback regulations.~~

Policy 6-1.4.3: ~~Policy 5-1.7.1:~~Open Space in Residential PDs

The City shall continue to implement ~~the~~ land development regulations which ~~provide for~~require open space dedication for Residential P~~U~~Ds.

Policy 6-1.4.4: ~~Policy 6.1.4.3:~~ Mobile Home Open Space

Mobile home parks shall continue to be required to provide common open space/recreation lands to service the residents of these parks.

Policy 6-1.4.5: ~~Policy 6.1.4.4:~~ Subdivision Open Space

The City shall, through its Subdivision ~~Ordinance~~Code, continue to require mandatory dedication of recreation/open space lands and/or fees in lieu of dedication.

~~Amended by Ordinance 00-64, 04/26/2001~~

Policy 6-1.4.6: ~~Policy 6.1.4.5:~~ Open Space Grants

The City shall continue to apply for State and Federal grants in addition to local funding for the acquisition of open space areas.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 6-1.4.7: ~~Policy 6.1.4.6:~~ Wekiva Parkway and Protection Act Land Acquisition

The City shall continue to implement the Wekiva Parkway and Protection Act by requiring land located within the Resource Protection Overlay to have a minimum open space requirement of 25% with 20% consisting of Wekiva Study Area open space and 5% useable recreation/open space.

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 6.1.4.7:**~~

~~The City shall continue to promote access to water bodies and natural resources through the development and maintenance of public access points, swimming areas, boat ramps, and canoe/kayak launches.~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 6-1.4.8: ~~Policy 6.1.4.8:~~ Preservation of Natural Resources

The City shall preserve its natural resources through land acquisition programs and best management practices of protecting existing environmentally sensitive lands.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 6-1.4.9: ~~Policy 6.1.4.9:~~ Incorporation of Conservation Land

The City shall incorporate into the existing park system ~~public environmental~~conservation land, where feasible, for park development, environmental education, wildlife corridors, and protection.

Policy 6-1.4.10: Expansion of Tree Canopy

The City shall expand the tree canopy through the planting of shade trees in parks, trails, and urban open spaces. Priority should be given to native canopy species - including and especially live oaks (Quercus virginiana) -that are well adapted to the local climate and soil.

Policy 6-1.4.11: ~~Policy 6.1.3.3:~~Park Expansion

The City shall ~~annually, during the budget process,~~ periodically identify and evaluate the purchase of any vacant land available adjacent to existing park sites.

Objective 6-1.5: Management and Stewardship

~~shall~~Actively maintain and promote best management practices to support the long-term ecological health, public well-being, and sustainability goals.

Policy 6-1.5.1: Incorporation of Florida Native Landscaping

The City shall promote the use of Native Florida Landscaping by incorporating native, Florida-Friendly, and/or drought-tolerant plants in city owned parks and open spaces.

Policy 6-1.5.2: Promotion of IPM Practices

The City shall promote Integrated Pest Management (IPM) practices on athletic fields and landscaped areas in city owned parks and open space.

Policy 6-1.5.3: Utilization of Green Infrastructure and Permaculture Design

The City shall integrate, where feasible, ecological design, including vegetated swales, rain gardens, and other low impact development methods for stormwater management in City owned parks and open space system.

Policy 6-1.5.4: Community Stewardship

The City shall promote stewardship for City owned parks and open space through education and engagement programs, including but not limited to:

1) Expanding community garden programming and access;
2) Designing select areas with edible plants such as fruit trees, herbs, and perennial vegetables, that residents can access;
3) Installing educational and interpretive signage with the purpose of explaining sustainable practices, native ecosystems, and climate resilience strategies; and
4) Providing volunteer opportunities within City owned parks.

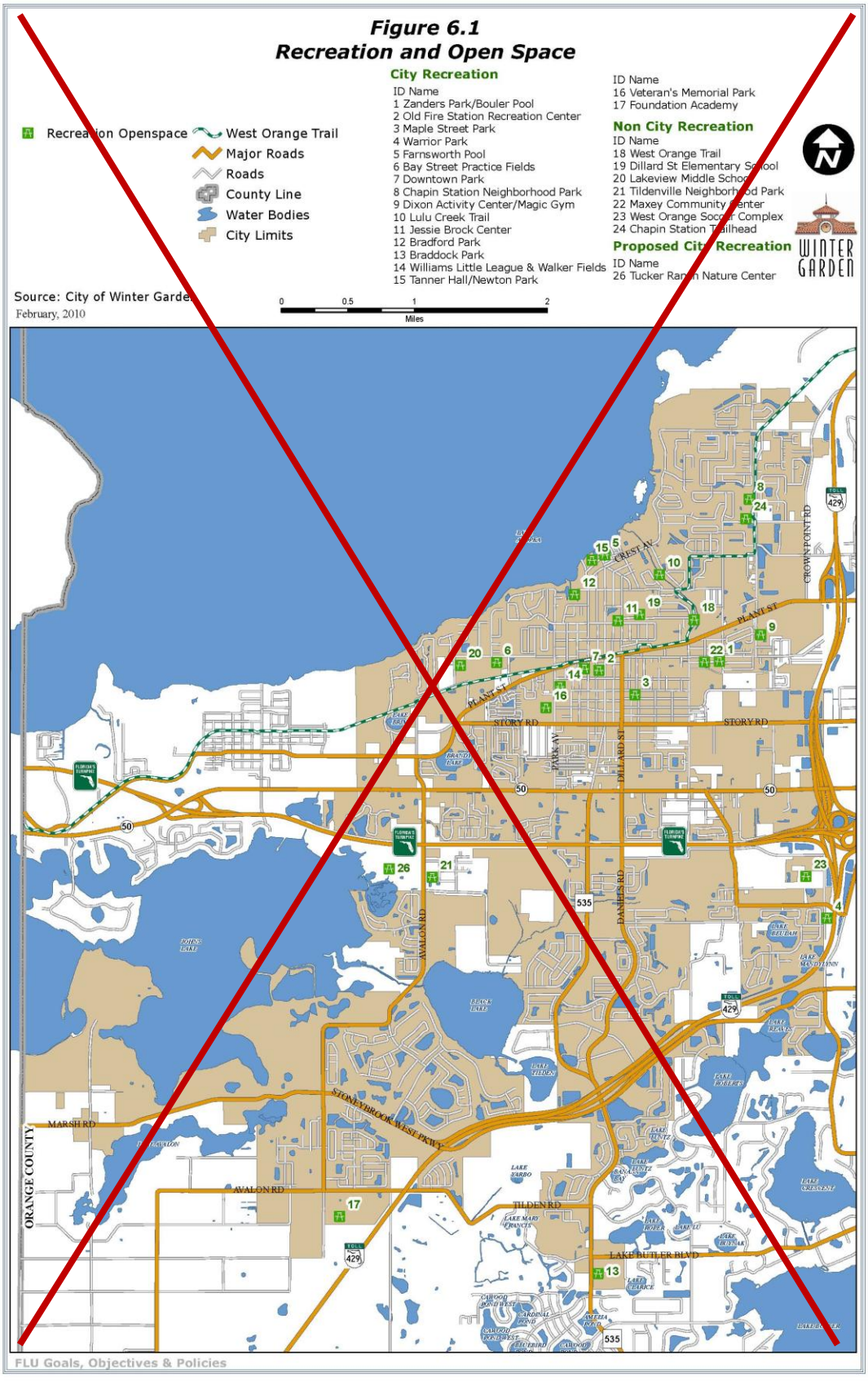
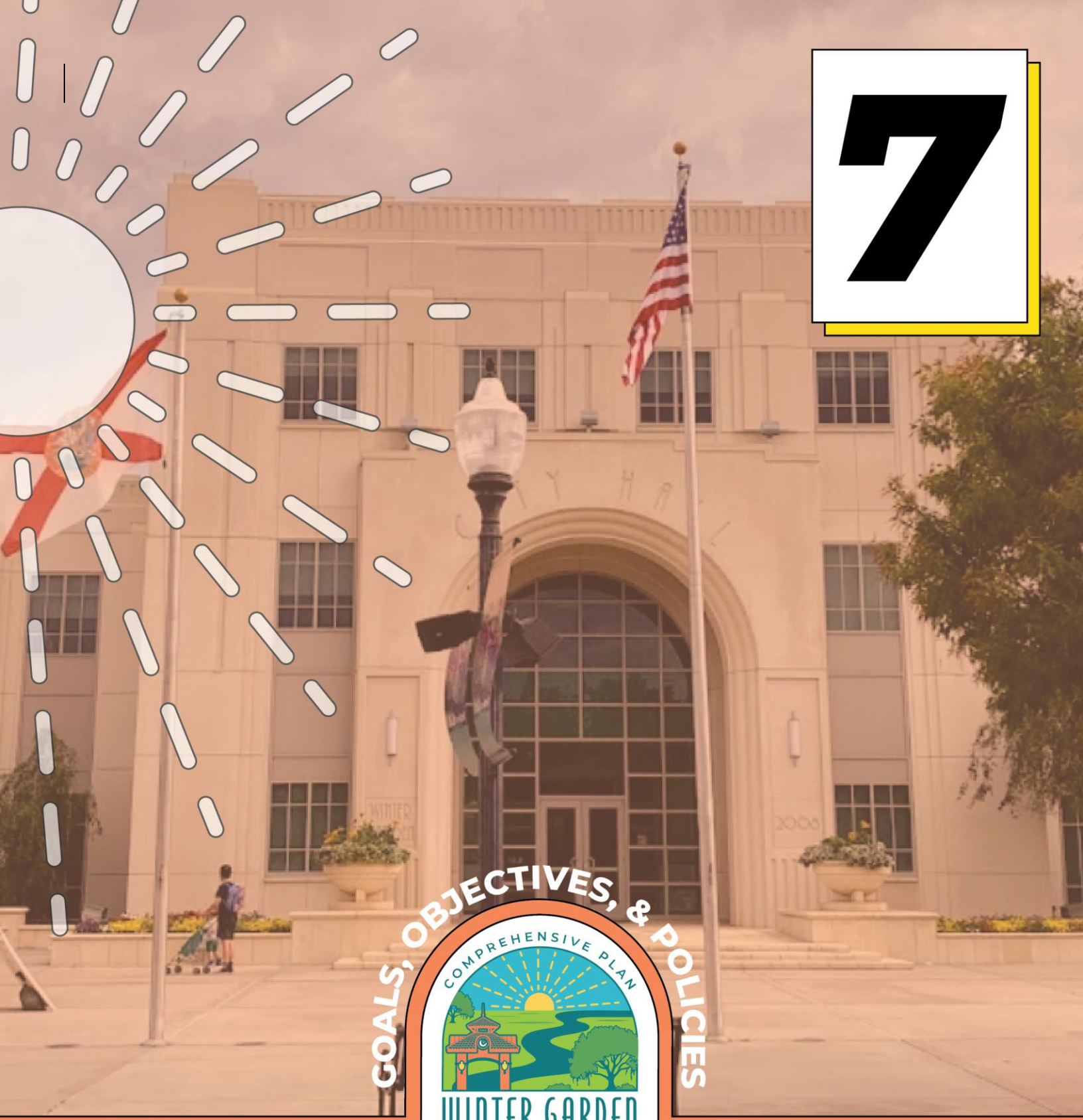


Figure 6.1
Recreation and Open Space
City Recreation
ID Name
1 Zanders Park/Bouler Pool
2 Old Fire Station Recreation Center
3 Maple Street Park
4 Warrior Park
5 Farnsworth Pool
6 Bay Street Practice Fields
7 Downtown Park
8 Chapin Station Neighborhood Park
9 Dixon Activity Center/Magic Gym
10 Lulu Creek Trail
11 Jessie Brock Center
12 Bradford Park
13 Braddock Park
14 Williams Little League & Walker Fields
15 Tanner Hall/Newton Park
ID Name
16 Veteran's Memorial Park
17 Foundation Academy
Non City Recreation
ID Name
18 West Orange Trail
19 Dillard St Elementary School
20 Lakeview Middle School
21 Tildenville Neighborhood Park
22 Maxey Community Center
23 West Orange Soccer Complex
24 Chapin Station Trailhead
Proposed City Recreation
ID Name
26 Tucker Ranch Nature Center
Recreation Openspace
West Orange Trail
Major Roads
Roads
County Line
Water Bodies
City Limits
Source: City of Winter Garden
February, 2010
0 0.5 1 2
Miles
WINTER GARDEN
ORANGE COUNTY
PLANT ST
STORY RD
DILLARD ST
DANIELS RD
AVALON RD
MARSH RD
STONEYBROOK WEST PKWY
TILDEN RD
LAKE BUTLER BLVD
CROWN POINT RD
CREST AV
PARK AV
50
429
535
FLU Goals, Objectives & Policies



7

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

INTERGOVERNMENTAL COORDINATION

Table of Contents

Goal 7-1: Coordination....3
Objective 7-1.1: Coordination of Plans....3
Objective 7-1.2: Impact Mitigation....4
Objective 7-1.3: Level of Service Standards....6
Objective 7-1.4: Enclave Elimination....7
Objective 7-1.5: Oakland Coordination....7
Objective 7-1.6: Water and Wastewater Coordination....8
Objective 7-1.7: Public School Coordination....8

Goal 7-1: ~~Goal 7-1~~Coordination

P~~Ensure~~rovide ~~that~~ an integrated program of intergovernmental coordination that~~which~~ maximizes efficiency in providing services and facilities, reduces duplication of effort, solves common problems, and coordinates development activities ~~is provided by the City.(9J-5.015(3)(a))~~

~~Amended by Ordinance 00-65, 04/26/2001~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 7-1.1: ~~Objective 7-1.1 Plans~~ Coordination of Plans

~~The City shall continue~~Continue to review and coordinate elements of the plans of Ocoee, Oakland, Orange County, Orange County School District, St. Johns River Water Management District (SJRWMD), East Central Florida Regional Planning Council (ECFRPC), Florida Department of Transportation (FDOT), and the Expressway Authority.~~(9J-5.0145(3)(b)1. (3)(b)2.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.1.1: ~~Policy 7-1.1.1~~ Comprehensive Plans of Adjacent Municipalities

The City shall maintain a recent copy of the adopted comprehensive plans for Orange County, the City of Ocoee, and the Town of Oakland, review amendments of said plans and ~~adopted comprehensive plans and shall~~ continually review any Winter Garden development that may adversely affect adjacent land use identified in these plans and review them per policy 7.1.1.3~~shall either modify the City's Plan to reduce these conflicts or request the adjacent government to modify their proposals~~. ~~(9J-5.015(3)(c)5. & (3)(c)7.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.1.2: ~~Policy 7-1.1.2~~ School Board Coordination

The City shall continually request information from the Orange County School Board on any short or long range plans to locate additional schools in the Winter Garden area and shall incorporate such plans into the City's Plan.

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.1.3: ~~Policy 7-1.1.3~~ Conflicts with Adjacent Local Governments

The City shall~~,~~ continually analyze any conflicts between the City of Winter Garden Comprehensive Plan and those of adjacent local governments and amend this Plan to specify intergovernmental coordination mechanisms to be taken to resolve the specific conflicts noted.~~(9J-5.015(3)(c)5. & (3)(c)7.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.1.4: ~~Policy 7-1.1.4~~ Information Sharing

The City shall cooperate with the dissemination of information to other government entities.~~(9J-5.015(3)(c)3.)~~

~~Added by Ordinance 00-65, 04/26/2001~~

Policy 7-1.1.5: ~~Policy 7-1.1.5~~ Water Management District Coordination

The City shall coordinate with the St Johns River Water Management District and the South Florida Water Management District during updates to the District's regional water supply plans to identify potentially feasible water supply projects in the City.~~The City will update its water supply facilities work plan every five years, within 18 months of the adoption of the latter of the two water management districts' regional water supply plans.~~

~~Added by Ordinance 09-59,01/28/2010~~

Policy 7-1.1.6: ~~Policy 7-1.1.6:~~ MetroPlan Orlando

The City shall continue to actively participate on MetroPlan Orlando ~~the~~ committees~~,~~ and subcommittees, when applicable~~, of METROPLAN Orlando~~.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 7-1.1.7: ~~FLU Policy 1-2.8.1:~~ Interlocal Agreements~~.~~

The City shall periodically review its existing interlocal agreements in order to ascertain if any changes need to be made.

Objective 7-1.2: ~~Objective 7-1.2~~ Impact Mitigation

C~~To c~~ontinue to ensure that the impacts of the City's development growth do not negatively ~~effect~~ affect adjacent communities as well as other regional and state interests.~~(9J-5.015(3)(b)2.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.2.1: ~~Policy 7-1.2.1~~ State, Regional and Local Approvals

The City shall ensure that proposed development ~~in the City~~ does not receive a final development permit from the City until all applicable State, regional, and local permits and approvals are received.

~~Amended by Ordinance 00-65, 04/26/2001~~

~~Policy 7-1.2.1~~

~~The City shall continually review the comprehensive plans of Orange County, Ocoee, and Oakland for land use conflicts between development proposed in Winter Garden and the development depicted in the plans of these adjacent local governments and shall either modify the City's Plan to reduce these conflicts or request the adjacent government to modify their proposals. (9J-5.015(3)(c)5. & (3)(c)7.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.2.2: ~~Policy 7-1.2.3~~ Lake Apopka SWIM Plan

The City shall continue to cooperate with ~~the~~ State agencies and the St. Johns River Water Management District in achieving the objectives of the Lake Apopka SWIM Plan by implementing land development regulations which are consistent with and further those objectives that are applicable to the City.

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.2.3: ~~Policy 7-1.2.4~~ Dispute Resolution Process

The City shall utilize the East Central Florida Regional Planning Council's dispute resolution process to reconcile differences on planning and growth management issues between local governments, regional agencies, and private interests in accordance with section 186.509 of the Florida Statutes.~~(9J-5.015(3)(c)2.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 7-1.2.4: ~~Policy 7-1.2.5~~ Joint Planning Agreements (JPAs)

The City shall work closely with Orange County and adjacent local governments to resolve land use and service conflicts in annexation

areas by ~~establishing~~ entering into joint planning agreements addressing future land use, public facilities and other relevant annexation issues. (FS 163.3177(6)(h)1.(a)~~and 9J-5.015(3)(c)4.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.2.5: ~~Policy 7-1.2.6~~ Development Review

The City shall ~~will~~ review and provide input at the planning stage for all community development proposals affecting the City.~~(9J-5.015(3)(c)1.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.2.6: ~~Policy 7-1.2.7~~ Agreements

The City shall~~is willing to~~ negotiate ~~an~~ interlocal or other formal agreements ~~that will identify the coordination of services with projected population~~ with any ~~unit of~~ local government that provides services in the City ~~is a service provider~~.~~(FS 163.3177(6)(h)2.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.2.7: ~~Policy 7-1.2.8 JPA~~Between Orange County & City of Winter Garden

The City ~~will~~ shall continue to implement the Restated Interlocal Agreement for Joint Planning Area Between Orange County and the City of Winter Garden (June 1997), as amended, addressing annexation, land use decisions, and utilities.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 7-1.3: ~~Objective 7-1.3~~ Level of Service Standards

E~~The City shall e~~nsure that the level of service standards adopted for public facilities are coordinated with the agency or local government having maintenance and operating responsibilities for that facility.~~(9J-5.015(3)(b)3.)~~

~~Amended by Ordinance 00-65, 04/26/2001~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 7-1.3.1: ~~Policy 7-1.3.1~~ Conflicting Level of Service Standards

The City shall continue to identify all conflicting level of service standards adopted for public facilities serving Winter Garden.

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.3.2: ~~Policy 7-1.3.2~~ Level of Service for Non-City Public Facilities

The City shall continue to coordinate with the appropriate agency to ensure consistent level of service standards for non-city public facilities.

~~Amended by Ordinance 00-65, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 7-1.3.3: ~~Policy 7-1.3.3:~~ Recycling and Solid Waste

The City shall ~~continue to~~ work with Orange County to help ~~improve the~~evaluate implementing a City recycling process for solid waste.

~~Amended by Ordinance 00-65, 04/26/2001~~

Objective 7-1.4: ~~Objective 7-1.4~~ Enclave Elimination

~~To eliminate~~ Eliminate all ~~of the~~enclaves within the ~~Reserve Area~~Joint Planning Area (JPA).

~~Amended by Ordinance 00-65, 04/26/2001~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 7-1.4.1: ~~Policy 7-1.4.1~~ Annexation of Enclaves

The City shall continue to implement ~~Negotiate an~~ interlocal agreements with Orange County to establish ~~a strategic plan~~strategies for the ongoing annexation of enclaves~~. Also, establish~~ and ~~a policy for~~policies for road ~~and the West Orange Trail~~ annexations. (FS 163.3177(6)(h)1.(a))

~~Amended by Ordinance 00-65, 04/26/2001~~

Objective 7-1.5: ~~Objective 7-1.6:~~ Oakland Coordination

Continue to coordinate with the City of Oakland to provide services to the properties ~~To plan a new road and utility network for the developing property~~ between Oakland and Winter Garden.

~~Amended by Ordinance 00-65, 04/26/2001~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 7-1.5.1: ~~Policy 7-1.6.1:~~ South Shores of Lake Apopka

The City shall coordinate with the City of Oakland for the development and maintenance of new and existing roads and utility corridors on the west side of the City.

~~Amended by Ordinance 00-65, 04/26/2001~~

Objective 7-1.6: ~~Objective 7-1.7:~~ Water and Wastewater Coordination

C~~To C~~oordinate water and wastewater facilities with other providers. (FS 163.3177(6)(h)1.(a)~~.& by 9J-5015(3)(b)3)~~

~~Amended by Ordinance 00-65, 04/26/2001~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 7-1.6.1: ~~Policy 7-1.7.1~~ Orange County Utilities

~~The City will negotiate a new interlocal agreement with Orange County to identify the future utility connections (specifically looping the water systems) in the southern planning area. Also,~~The City shall ~~negotiate~~ continue to implement an interlocal agreement with the County to establish a date that will require all unincorporated development to connect to available City water and wastewater facilities in the southern planning area.

~~Amended by Ordinance 00-65, 04/26/2001~~

Policy 7-1.6.2: ~~Policy 7-1.7.2~~ Interconnects

The City shall~~will~~ continue to provide potable water interconnects with other utility providers when appropriate.

~~Amended by Ordinance 00-65, 04/26/2001~~

Objective 7-1.7: ~~Objective 7-1.5:~~ Public School Coordination

~~The City shall c~~Continue to coordinate with Orange County Public Schools to ensure that sufficient school capacity is available to support ~~the City's~~ residential growth within the city. ~~with school acquisition sites.~~

Policy 7-1.7.1: ~~Policy 7-1.5.1:~~ Orange County School Staff

The City shall continue the informal coordination between the City and the School Board staff and shall continue to allow and encourage comments from the School Board Staff concerning new residential development ~~through the public schools facilities element~~.

Policy 7-1.7.2: ~~Policy 7-1.5.2:~~ School Site Zones

City Staff shall coordinate with Orange County School Staff ~~-~~to identify elementary and middle school zones in the developing areas of Winter Garden.

~~**Objective 7-1.8: Public School Planning**~~

~~The City of Winter Garden shall, throughout the planning period, coordinate and work with Orange County Public Schools to ensure that sufficient school capacity is available to support proposed development and that necessary infrastructure is available to accommodate new schools.~~

~~Added by Ordinance 08-34, 10/09/2008~~
~~Amended by Ordinance 10-19, 06/24/2010~~

~~**Policy 7-18.1**~~

~~The City shall designate a representative to serve on the Technical Advisory Committee to discuss issues and formulate recommendations regarding the appropriate coordination of land uses and schools.~~

~~Added by Ordinance 08-34, 10/09/2008~~

~~**Policy 7-1.8.2**~~

~~The City shall provide projected development data to OCPS on a regular basis to assist in the development of a long-range planning model to project student enrollment.~~

~~Added by Ordinance 08-34, 10/09/2008~~

~~**Policy 7-1.8.3**~~

~~As a member of the OCPS Technical Advisory Committee, the City shall review OCPS model projections for consistency with the City projections and, if necessary, shall recommend additions or modifications to the model results.~~

~~Added by Ordinance 08-34, 10/09/2008~~

Policy 7-1.7.3: ~~Policy 7-1.8.4~~ Amended OCPS Interlocal Agreement

The City shall continue to participate in and regularly review, monitor compliance with, and suggest necessary updates to the Amended Interlocal Agreement for Public School Facility Planning and Implementation of Concurrency (2008), as may be amended, between the City of Winter Garden, Orange County and the other municipalities therein, and the School Board of Orange County.



8

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

CAPITAL IMPROVEMENTS

Table of Contents

Goal 8-1: Public Facilities Provisions. 3
Objective 8-1.1: Objective 8-1.1: 5-Year Schedule of Capital Improvements. 3
Objective 8-1.2: Consistency. 5
Objective 8-1.3: Proportionate/Fair Share. 9
Objective 8-1.4: Concurrency Management System. 11
Objective 8-1.5: Availability of Public Facilities. 12
Objective 8-1.6: Public School Coordination. 13
Objective 8-1.7: TCEA. 16

Goal 8-1: Public Facilities Provisions

Ensure that the City provides the public facilities ~~which~~ that are its responsibility in a manner which meets the adopted level of service (LOS) standards for the needs of both existing and future residents and which are provided in a timely, cost effective, and ~~typically~~ sound manner. ~~(9J-5.016(3)(a))~~

~~Amended by Ordinance 00-67, 04/26/2001~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 8-1.1: ~~Objective 8-1.1:~~ 5-Year Schedule of Capital Improvements

Each year during the budget process, ~~the City Commission shall~~ review the 5-year schedule of capital improvements contained in this Element to ensure that the required capital facilities are constructed to meet any existing deficiencies, to accommodate the needs of planned future growth, and to replace obsolete or worn-out facilities, and will add to this list through the amendment process as it deems necessary. ~~(9J-5.016(3)(b)1)~~

~~Amended by Ordinance 00-67, 04/26/2001~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 8-1.1.1: ~~Policy 8-1.1.1:~~ Public Physical Improvements

The City shall consider p~~P~~ublic physical improvements including land acquisition, buildings, structures, facilities, equipment, trails, and infrastructure with a unit cost exceeding $50,000 and a useful life of at least ten years as ~~shall be considered~~ capital improvements. For purposes of the Capital Improvements Element, public facilities are defined as those facilities that maintain or improve adopted levels of service for traffic circulation, mass transit, portable water, sanitary sewer, solid waste, recreation and parks, stormwater management and Orange County Public Schools ~~(after December 2008)~~.

~~Amended by Ordinance 08-55, 11/13/2008~~

~~Policy 8-1.1.2: The City Commission will include all projects that meets the State's Uniform Accounting System Manual's definition of "Improvements Other the Buildings" (63) and "Building Improvements" of the Capital Outlay section as a capital improvement in the CIP.~~

~~Amended by Ordinance 00-67, 04/26/2001~~
~~Amended by Ordinance 08-55, 11/13/2008~~

Policy 8-1.1.2: ~~Policy 8-1.1.3:~~ Capital Improvement Project Evaluation

The City ~~All proposed capital improvement projects~~ shall ~~be~~ evaluate~~d~~ all proposed capital improvement projects on a yearly basis; projects ~~and~~ shall be consistent ~~consistency~~ with the Comprehensive Plan and prioritized according to the following criteria:

- Elimination of public hazards;
- Elimination of existing capacity deficiencies;
- Impact on the budget of the City ~~and financial feasibility~~;
- Location needs based on projected growth patterns;
- Accommodation of new development and redevelopment facility demands;
- Plans of State agencies, Orange County, OCPS, MetroPlan, and the St. Johns River Water Management District; and
- Local priorities.

~~(9J-5.016(3)(c)1)~~

~~Amended by Ordinance 00-67, 04/26/2001~~
~~Amended by Ordinance 08-55, 11/13/2008~~

Policy 8-1.1.3: ~~Policy 8-1.1.4:~~ Land Use Planning and Capital Improvement and Public Services

The City shall integrate its land use planning and decisions with its plans for public facility capital improvements and public services by developing, adopting and using the programs listed in the 5-year schedule of capital improvements and within individual elements of the ~~comprehensive~~ Comprehensive ~~plan~~Plan. The location of, and ~~level of service~~LOS provided by projects in the 5-year schedule of capital improvements shall maintain adopted standards for levels of service for existing and future development in a manner and location consistent with the ~~comprehensive~~ Comprehensive ~~plan~~Plan.

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 8-1.1.4: ~~Policy 8-1.1.5:~~ Concurrency Requirements

As part of the yearly budget, the City ~~Planner~~ shall ensure each capital project or program is consistent with the City's Comprehensive Plan to include the City's concurrency requirements. The City ~~Planner~~ shall also monitor the development of the adoption and implementation of the CIP for compliance with the City's Comprehensive Plan. ~~(9J-5.016(5) & 9J-5.016(4)(b))~~

~~Added by Ordinance 00-67, 04/26/2001~~
~~Amended by Ordinance 08-55, 11/13/2008~~

Policy 8-1.1.5: ~~Policy 8-1.1.6:~~ Capital Improvement Element Update

The City shall update the 5-Year Capital Improvement Schedule ~~Element~~ annually~~.~~, which will provide the basis of ~~T~~the annual Capital Improvement Budget ~~will be based on a multi-year Capital Improvement Program~~.

~~Amended by Ordinance 08-55, 11/13/2008~~

~~Policy 8-1.1.7: Any additional deletion of concurrency related projects in the Capital Improvements Program shall require a plan amendment to the Comprehensive Plan. The deferral or delay of the construction date of any concurrency related projects already in the Capital Improvements Program shall also require a plan amendment to the Comprehensive Plan.~~

~~Amended by Ordinance 08-55, 11/13/2008~~

Policy 8-1.1.6: ~~Policy 8-1.1.8:~~ Corrections and Modifications

Consistent with S163.3177(3)(b)1, F.S., ~~the following changes may be adopted by local ordinance provided they are consistent with the Comprehensive Plan. These include: C~~the City may make corrections and modifications of the cost~~,~~ ~~of a project already in the Capital Improvements Program, corrections and modifications to~~ revenue sources, and the acceptance of facilities by dedication of a project already in the Capital Improvements Schedule through local ordinances provided the changes are consistent with the Comprehensive Plan.

~~Amended by Ordinance 08-55, 11/13/2008~~

Objective 8-1.2: ~~Objective 8-1.2:~~ Consistency~~.~~ with Future Land Use Map

Prior to the issuance of any final development order, ~~the City shall~~ determine that development is consistent with the Future Land Use Map, the scheduled capital improvements, and maintaining the adopted ~~level of service~~LOS standards. ~~(9J-5.016(3)(b)3)~~

~~Amended by Ordinance 00-67, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 8-1.2.1: ~~Policy 8-1.2.1:~~ Adopted Level of Service

Adopted ~~level of service~~LOS standards for the City shall include the following:

Affected Public Facility and Service Level of Service

FACILITY	LOS STANDARD
Sanitary Sewer	250 gallons/unit/day
Potable Water	350 –gallons/unit/day
Drainage	On-site retention: Retain the first1/2 inch of runoff Storm event: 25 year 24 hour Quantity: Post development stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than pre-development runoff Quality: Conform to State water quality standards as set forth in the State Water Policy, Chapter 17-40, F.A.C.
Solid Waste	5.6 pounds/person/day
Recreation	5 acres/l,000 persons
Trail	0.6 trail miles/1,000 persons

~~Amended by Ordinance 96-13, 06/27/1996~~

~~Amended by Ordinance 98-32, 12/10/1998~~

~~Amended by Ordinance 00-67, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Traffic Circulation

The City shall adopt the following non-concurrency peak hour Level of Service (LOS) for all roads within the city for planning purposes only:

Roadway	From	To	Adopted LOS
9th Street	Plant Street	SR 50 (West Colonial Drive)	E
Beard Road	Daniels Road	Beulah Road	E
Beulah Road	Roper Road	SR 50 (West Colonial Drive)	E
Carter Road	SR 50 (West Colonial Drive)	Story Road	E
CR 535/Winter Garden-Vineland Road	Lake Butler Boulevard	Stoneybrook Parkway/Daniels Road	E
CR 535/Winter Garden-Vineland Road	Stoneybrook Parkway/Daniels Road	SR 50 (West Colonial Drive)	E
CR 545/Avalon Road	SR 50 (West Colonial Drive)	Davenport Road	E
Crest Avenue	Division Street	Fullers Cross Road	E
Crown Point Cross Road	Hennis Road	East Crown Point Road	E
Daniels Road	Stoneybrook Parkway	SR 50 (West Colonial Drive)	E
Dillard Street	SR 50 (West Colonial Drive)	Plant Street	E
Division Street	Hennis Road	Lakeview Avenue	E
East Crown Point Road	Plant Street	Northeast City Limits	E
~~Florida Turnpike (SR 91)~~	~~Eastern City Limits~~	~~Western City Limits~~	~~D~~
Fullers Cross Road	Crest Avenue	East Crown Point Road	E
Hennis Road	Plant Street	Crown Point Cross Road	E
~~Lake Butler Boulevard~~	~~CR 535/Winter Garden-Vineland Road~~	~~Clarice Court~~	~~E~~
Lake Butler Boulevard	Clarice Court	McKinnon Road	E
Lakeview Avenue	~~Tilden Street~~Palmetto Street	Division Street	E
Marsh Road	Avalon Road	Western City Limits	E
Park Ave	Tilden Street	~~SR 50 (West Colonial Drive)~~Sand Lime Road	E
Plant Street	~~Eastern City Limits~~Tildenville School Road	Western City Limits	E
Roper Road	CR 535/Winter Garden-Vineland Road	Beulah Road	E
~~SR 50 (West Colonial Drive)~~	~~Western City Limits~~	~~Western Beltway (SR 429)~~	~~D~~
Stoneybrook Parkway	Avalon Road	Windermere Road	E

Roadway	From	To	Adopted LOS
Story Road	Eastern City Limits	~~Western City Limits~~Plant Street	E
Tilden Road	Avalon Road	CR 535/Winter Garden-Vineland Road	E
Tilden Street	Park Avenue	~~Lakeview Avenue~~Donald Drive	E
Tildenville School Road/(CR 545)	SR 50 (West Colonial Drive)	~~Plant Street~~Bay Street	E
Warrior Road	Windermere Road	Beulah Road	E
West Crown Point Road	Plant Street	~~Crown Point Cross~~Fullers Cross Road	E
~~Western Beltway (SR 429)~~	~~Southern City Limits~~	~~Clarcona-Ocoee Road~~	~~D~~
Windermere Road	Stoneybrook Parkway	Warrior Road	E
Public Transit	N/A		30 Minute Headways

~~(9J-5.016(3)(c)4)~~

~~Added by Ordinance 00-67, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 8-1.2.2: ~~Policy 8-1.2.2:~~ Previously Issued Development Orders

As a part of the City's Concurrency Management System, the City shall determine which previously issued development orders are in effect and shall reserve capacity in all public facilities to provide for these development orders until they expire or are built out.

Policy 8-1.2.3: ~~Policy 8-1.2.3:~~ Development Demand Determination

The City ~~will~~ shall determine whether adequate public facilities and services are or will be available to meet the demand of any proposed development when needed by that development. This determination will be made during the Site Plan review ~~at the time of the issuance of the building permit~~ or at an earlier date if requested by the developer.

Policy 8-1.2.4: ~~Policy 8-1.2.4:~~ Existing Public Facilities

As part of the yearly budget process, the City shall evaluate~~s the~~ existing public facilities ~~as for~~to determine the need for replacement or repair. ~~(9J-5.016(3)(c)3)~~

~~Amended by Ordinance 00-67, 04/26/2001~~

Policy 8-1.2.5: ~~Policy 8-1.2.5:~~ Planned Availability

The City ~~of Winter Garden~~ shall consider the planned availability of concurrency-related facilities and the impact on the adopted levels of service when making land use decisions.

~~Added by Ordinance 08-55, 11/13/2008~~

Policy 8-1.2.6: ~~Policy 8-1.2.6:~~ Capacity

For any phased, large-scale~~,~~ development~~future land use amendment~~, the City shall require the applicant to demonstrate the capacity to provide the necessary infrastructure over the entire build-out period.

~~Added by Ordinance 08-55, 11/13/2008~~

Policy 8-1.2.7: ~~Policy 8-1.2.7:~~ Transportation Concurrency Exception Area (TCEA)

~~Pursuant to subsection 163.3164 (3334) of the Florida Statutes (FS) the City of Winter Garden qualifies as a dense urban land area as determined by the Office of Economic and Demographic Research. As such, pursuant to subsection 163.3180 (5)(b)1.a., FS the City is designated a Transportation Concurrency Exception Area.~~ Policies establishing the standards for the TCEA are found in ~~the Future Land Use Element and,~~ the Multi Modal Transportation Element and Objective 8-1.7.

~~Added by Ordinance 10-19, 06/24/2010~~

Objective 8-1.3: ~~Objective 8-1.3:~~ Proportionate/Fair Share

~~The City Commission shall require~~Require future developments to bear a proportionate cost, as determined by their demand on public facilities, of improvements necessitated by the development in order to maintain adopted ~~level of service~~LOS standards. ~~(9J-5.016(3)(b)4)~~

~~Amended by Ordinance 00-67, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 8-1.3.1: ~~Policy 8-1.3.1:~~ Impact Fees

The City shall maintain an impact fee~~s~~ system for new ~~growth~~ development and, from time to time, review the impact fee schedule to ensure the fee rates are ~~equitable~~commensurate with current costs. This impact fee will pay for a pro-rata share of the improvements needed to support the new development. ~~(9J-5.016(3)(c)8)~~

~~Amended by Ordinance 00-67, 04/26/2001~~

Policy 8-1.3.2: Mobility Fees

The City shall consider developing a mobility fee to replace the road impact fee and provide funding for mobility improvements.

Policy 8-1.3.3: ~~Policy 8-1.3.2:~~ County Growth Impact

The City ~~will~~ shall request that Orange County ~~to~~ spend impact fees in the Winter Garden area for those facilities impacted by County growth.

Policy 8-1.3.4: ~~Policy 8-1.3.3:~~ Deficient Facilities

If a proposed development is consistent with the Land Development Code and the Comprehensive Plan, but one or more concurrency-related facilities is deficient, the applicant may, at his/her expense, improve the ~~level of service~~LOS of the facility if and when such improvement is consistent with City plans and the City agrees to the improvement.

~~Added by Ordinance 08-55, 11/13/2008~~

Policy 8-1.3.5: ~~Policy 8-1.3.4:~~ Pro-Rata Share

~~When necessary and appropriate, new developments~~The City shall ~~be~~ assess~~ed~~ new developments at a pro-rata share of the costs necessary to finance public facility improvements necessitated by development in order to adequately maintain adopted ~~level of service~~LOS standards.

~~Added by Ordinance 08-55, 11/13/2008~~

Policy 8-1.3.6: ~~Policy 8-1.3.5:~~ Transportation Proportionate Share

~~At the City's discretion, a multi-use development of regional impact ("DRI") meeting the criteria of Section 163.3180(12), Florida Statutes, may use the standards and procedures set forth in that statute to satisfy the City's transportation concurrency requirements and transportation mitigation requirement under Section 380.06, Florida Statutes, by payment of a proportionate share contribution. Any proportionate share contribution for a DRI pursuant to this policy shall be stated in the DRI Development Order and shall be subject to the conditions stated in the Development Order.~~

~~If the affected roadway is on the State Highway System or the Orange County system, the FDOT or Orange County, as the case may be, must agree to accept payment of proportionate share contribution as~~

~~adequately mitigating the impacts of development. In order to address transportation concurrency,~~ T~~t~~he City ~~will~~ shall contact and request that MetroPlan Orlando and FDOT ensure that the necessary proportionate share improvements are prioritized in the next appropriate update to the Transportation Improvement Program (TIP). When appropriate, the City's 5-Year Capital Improvement ~~Plan~~ Schedule will be amended to include the necessary improvements to be funded through the Developer's proportionate share contribution.

~~Amended by Ordinance 05-02, 09/07/2005~~
~~Amended by Ordinance 06-10, 02/23/2006~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Objective 8-1.4: ~~Objective 8-1.4:~~ Concurrency Management System

~~The City shall continue~~Continue to use ~~its~~ the Concurrency Management System to ~~insure~~ ensure that necessary capital improvements for previously issued development orders and for future development and redevelopment proposals are provided.

~~Amended by Ordinance 00-67, 04/26/2001~~
~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 8-1.4.1: ~~Policy 8-1.4.1:~~ Outstanding Indebtedness Maximum

~~In providing capital improvements,~~ T~~t~~he City shall limit the maximum ratio of outstanding indebtedness to no greater than 10 percent of the property tax base. ~~(9J-5.016(3)(c)2)~~

~~Amended by Ordinance 00-67, 04/26/2001~~

Policy 8-1.4.2: ~~Policy 8-1.4.2:~~ Capital Improvement Funding

The City shall make every effort to secure Federal and State grants as well as private funds to finance capital improvements.

Policy 8-1.4.3: ~~Policy 8-1.4.3:~~ Fiscal Policies

Through the yearly budget process, the City Commission shall develop fiscal policies which will help direct capital improvement expenditures for those improvements which are outlined by the policies in other Comprehensive Plan elements. ~~(9J-5.016(3)(c)9)~~

~~Amended by Ordinance 00-67, 04/26/2001~~

Policy 8-1.4.4: ~~Policy 8-1.4.4:~~ Bonds

The City ~~may~~ shall consider paying for capital improvements for the Capital Improvement ~~Program~~ Schedule either as a bond tied to the property tax by referendum or by a non-property tax bond for years two or three of the Capital Improvement Element. If this occurs and the bond is approved, the money generated from the bond will be considered committed revenues.

~~Added by Ordinance 08-55, 11/13/2008~~

Policy 8-1.4.5: ~~Policy 8-1.4.5:~~ 5-year Capital Improvement Schedule

The City ~~will~~ shall continue its development of a 5-year Capital Improvement ~~Program~~ Schedule and will utilize this program to determine new public facility needs to be scheduled in the Capital Improvement Element.

~~Policy 8-1.4.6: In the event that either a bond that is tied to property tax is not approved by the citizens or a non-property tax bond is not approved by the City Commission, the City is required to identify other revenue sources to ensure financial feasibility of the capital projects or amend the plan to eliminate projects from the Capital Improvements Program.~~

~~Added by Ordinance 08-55, 11/13/2008~~

Policy 8-1.4.6: ~~Policy 8-1.4.7:~~ Capital Improvement Schedule

Each year as a part of the annual budget review, the City Commission shall consider the public facility needs of City, the existing Capital Improvement Element and the goals, objectives, and policies contained in the Comprehensive Plan in order to ascertain the need to amend the Capital Improvements Schedule.

~~Policy 8-1.4.8: When necessary and appropriate, new developments shall be assessed a pro-rata share of the costs necessary to finance public facility improvements necessitated by development in order to adequately maintain adopted level of service standards.~~

~~Added by Ordinance 08-55, 11/13/2008~~

Objective 8-1.5: ~~Objective 8-1.5:~~ Availability of Public Facilities

~~The City Commission, shall~~ Ccontinue to implement a Concurrency Management System in order to ~~insure~~ensure that the issuance of

development orders is based upon the development requirements of this Plan, land development regulations, and the availability of public facilities at a ~~level of service~~LOS to support the development. ~~(9J-5.016(3)(b)5)~~

~~Amended by Ordinance 00-67, 04/26/2001~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 8-1.5.1: ~~Policy 8-1.5.1:~~ Impact on Level of Service

The City shall use the adopted ~~level of service~~LOS standards to ~~establish~~ evaluate the impact of any proposed development.

Policy 8-1.5.2: ~~Policy 8-1.5.2:~~ Comprehensive Plan Consistency

The City shall require that the proposed development is consistent with all elements of the Comprehensive Plan.

Policy 8-1.5.3: ~~Policy 8-1.5.3:~~ Development Level of Service

The City shall require that the proposed development meets the adopted ~~level of service~~LOS standards prior to the issuance of a building permit or will meet the ~~level of service~~LOS standard when the service is needed. ~~(9J-5.016(3)(c)5 & (3)(c)6)~~

~~Amended by Ordinance 00-67, 04/26/2001~~

Policy 8-1.5.4: ~~Policy 8-1.5.4:~~ Five Year ~~CIP~~CIS

As part of the yearly budgeting process, the City shall develop and maintain a Five-~~-~~Year Capital Improvement ~~Plan~~ Schedule to plan for future improvements. This Five Year Schedule~~Plan~~ shall reflect the needs identified in other elements of this ~~comprehensive~~ Comprehensive ~~p~~Plan ~~and be financially feasible. The tables contained in Exhibit "A", attached hereto and incorporate herein, illustrates the current five (5) year Capital Improvement Plan for fiscal years 2010/2011 to 2014/2015. .(9J-5.016(3)(c)7)~~

~~Amended by Ordinance 00-67, 04/26/2001~~
~~Amended by Ordinance 08-55, 11/13/2008~~
~~Amended by Ordinance 10-06, 03/11/2010~~

Objective 8-1.6: ~~Objective 8-1.6:~~ Public School Coordination

~~To work~~Coordinate with OCPS to develop a ~~financially feasible ten (10) year District Capital Outlay Plan (DCOP)~~five (5) year District Facilities Work Plan,

a consistent Public School Facilities Element (~~"~~PSFE~~"~~), and Capital Improvements Element (~~"~~CIE~~"~~).

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 8-1.6.1: ~~Policy 8-1.6.1:~~ OCPS 5-year District Facilities Work Plan

Prior to June 1st of each year, Orange County Public Schools (OCPS) shall coordinate with the City to develop a ~~financially feasible ten (10) year District Capital Outlay Plan (DCOP)~~five (5) year District Facilities Work Program for review and approval by the OCPS Board and adoption into the Capital Improvements Element for the City.

Policy 8-1.6.2: ~~Policy 8-1.6.2:~~ Growth Consistency

The County shall review the updated five (5) year District Facilities Work Program ~~ten (10) year DCOP~~ to determine if the projected capacity, projected enrollment, and LOS for each school and Concurrency Service Area (CSA) within the City's jurisdiction is consistent with its growth projections.

Policy 8-1.6.3: ~~Policy 8-1.6.3:~~ Level of Service Concurrency

The City shall review and update OCPS' adopted CSA's , ~~adopted Level of Service (~~LOS~~)~~ and enrollment projections in the annual update of the CIE to ensure that ~~the CIE continues to be financially feasible and that~~ the LOS will be achieved.

Policy 8-1.6.4: ~~Policy 8-1.6.4:~~ School Capacity Increase

The five (5) year District Work Plan ~~ten (10) year DCOP~~ shall include all planned capital projects which increase the capacity of public schools within the County.

~~Policy 8-1.6.5: The City shall include the ten (10) year DCOP in the annual update of the CIE.~~

~~Policy 8-1.6.6: The City hereby incorporates by reference the OCPS 10-Year Capital Outlay Plan for 2009-2010 authored by Orange County Public School and adopted by the Orange County School Board on September 8, 2009, which includes school capacity sufficient to meet anticipated student demands projected by OCPS.~~

~~Amended by Ordinance 10-06, 03/11/2010~~

Policy 8-1.6.5: ~~Policy 8-1.6.7:~~Public School Concurrency Area Standards

The adopted LOS standards~~, except for backlogged facilities as provided in CIE Policy 8-1.6.10,~~ to implement school concurrency shall be calculated as a percentage of the Adjusted Florida Inventory of School Houses (FISH) Capacity as follows:

(1) Elementary schools: 110% of adjusted FISH capacity for each elementary school Concurrency Service Area.~~The elementary school LOS shall also include Arbor Ridge K-8, Windy Ridge K-8 and kindergarten through 5 of Blankner K-8.~~

(2) Middle schools: 100% of Adjusted FISH capacity for each middle school Concurrency Service Area.~~Middle school LOS shall also include grades 6-8 of Blankner K-8.~~

(3) High schools, including ninth grade centers: 100% of Adjusted FISH capacity for each high school Concurrency Service Area.

~~Policy 8-1.6.8: In accordance with F.S. 163.3180 (9)(a), the City hereby adopts a long-term school concurrency management system with the ten (10) year planning period of 2007/2008-2017/2018 for areas where a significant backlog exists.~~

Policy 8-1.6.6: ~~Policy 8-1.6.9:~~ Level of Service Review

The City shall annually review adopted LOS standards and report as to whether such standards are being met and/or require changes.

~~**Policy 8-1.6.10: Level of Service Standards**~~

~~Consistent with section 13 of the Interlocal Agreement, the LOS standards shall be applied consistently by all the local governments within Orange County and by the School Board to all schools of the same type. However, within backlogged CSAs, the ratio of student enrollment to school capacity within such CSAs may not increase beyond the interim level of service existing on April 1, 2008. During the period covered by the 10-year schedule of capital improvements, the backlogged CSAs will be improved to the adopted LOS standard. The LOS standards are initially set as follows:~~

~~School Type~~	~~Adopted LOS~~
~~Elementary~~	~~110% of Adjusted FISH Capacity by 2011.~~

~~School Type~~	~~Adopted LOS~~
	~~The interim LOS for backlogged facilities is shown in Figure 13 of the Data, Inventory and Analysis.~~ ~~The following elementary school CSAs are designated as backlogged facilities: A, DD, U and Arbor Ridge.~~ ~~The utilization of a backlogged CSA shall not be permitted to increase beyond such CSA's level of utilization existing on April 1, 2008, as designated in Figure 6 of the Data, Inventory and Analysis, and must achieve an LOS of 110% by 2017.~~
~~Middle~~	~~100% of Adjusted FISH Capacity by 2011.~~ ~~The interim LOS for backlogged facilities is shown in Figure 14 of the Data, Inventory and Analysis.~~ ~~The following middle school CSA's are designated as backlogged facilities: Apopka M.S., Chain of Lakes M.S., Gotha M.S., Meadow Woods M.S. and Walker M.S.~~
~~High~~	~~100% of Adjusted FISH Capacity by 2011.~~ ~~The interim LOS for backlogged facilities is shown in figure 15 of Data, Inventory and Analysis.~~ ~~The following high school CSA's are designated as Backlogged Facilities: Freedom H.S. and University H.S.~~ ~~The utilization of a backlogged CSA shall not be permitted to increase beyond such CSA's level of utilization existing on April 1, 2008, as designated in Figure 10 of the Data, Inventory and Analysis, and must achieve a LOS of 100% by 2017.~~

~~Added by Ordinance 08-34, 10/09/2008~~

Objective 8-1.7: ~~Objective 8-1.7:~~ TCEA

Exempt p~~P~~roposed development projects within the ~~Transportation Concurrency Exception Area (TCEA)~~City ~~is exempt~~ from standard transportation concurrency. To help ensure continued mobility within the City proposed development shall ~~address the following interim~~provide mobility standards consistent with this element ~~until the City develops land use and transportation strategies to support and fund mobility by July 9, 2011 consistent with Section 163.3180(5)(b)4., F.S.~~ ~~]~~

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 8-1.7.1: ~~Policy 8-1.7.1: TCEA~~ Mobility Criteria and Standards

~~A transportation concurrency exception for individual projects within the TCEA shall be granted only if the following criteria are met:~~

Development or redevelopment projects shall be required to meet the following development performance criteria based on the development's (including all phases) trip generation and proportionate impact on adjacent roadways. Said performance criteria and/or proposed mitigation will be funded from a variety of public and private sources including the use of tax increment revenue, the City's ~~Transportation~~ Road Impact Fees~~ fund~~, available County, State and Federal transit and roadway sources and programs, developer fees and contributions.

The developer may sign a development agreement or contract with the City for the provision of the required standards. The choice of standards shall be subject to the final approval of the City during the site plan approval process. The standards chosen shall relate to the particular site and transportation conditions where the development is located. The developer may propose to provide one or more standards off-site with the City's approval. In recognition of the varying costs associated with the standards, the City shall have the discretion to count some individual standards, based on cost estimates provided by the developer and verified by the City, as meeting multiple standards.

~~TCEA Performance~~Mobility ~~Standards~~Criteria

Criteria Level	Net New Average Daily Trip Generation	Required Number of Standards
Level 0	1 to 15	No requirement
Level 1	16 to 50	At least 1 Mobility Standard
Level 2	50 to 199	At least 2 Mobility Standards
Level 3	200 to 399	At least 3 Mobility Standards
Level 4	400 to 1,000	At least 4 Mobility Standards
Level 5	1,000 to 5,000	At least 6 Mobility Standards

Criteria Level	Net New Average Daily Trip Generation	Required Number of Standards
Level 6	Greater than 5,000	At least 8 Mobility Standards

Note: A ~~transportation~~ traffic impact ~~analysis~~ study is ~~maybe~~ required based on Policies 2-2.1.1 and 2-2.1.3 of the Multimodal Transportation Element.~~based on policies under Objective 2-2.1 of the Future Land Use Element.~~

Mobility Standards

(1) Intersection and/or signalization modifications to improve ~~level of service~~LOS and safety and address congestion management. This may include, but is not limited to: signal timing studies, fiber optic inter-connection for traffic signals, OPTICOM signal preemption, Intelligent Transportation System features such as state of the art traffic signal controllers, dynamic massage signs, and traffic monitoring cameras designed to maximize the efficiency of the roadway network by reducing congestion and delay.

(2) Addition of dedicated turn lanes into and out of the development.

(3) Construction of ~~bus shelters and~~ and/~~or the addition of bus shelter lighting using solar technology designed and constructed to the Central Florida Regional Transportation Authority (LYNX) and City standards~~a micro transit hub.

(4) Construction of ~~bus~~micro transit turn-out or shelter facilities.

(5) Provision of free micro transit service ~~bus pass programs provided to~~for employees and/or residents of the development~~. The bus passes must be negotiated as part of a contract with LYNX and approved by the City~~ in the downtown.

(6) Payment to the City which will be transferred to ~~LYNX to~~ offset the cost of advancing micro transit options in the City.~~which will either increase service frequency or add bus service~~

(7) Construction of off- site public sidewalks to complete sidewalk connectivity. Sidewalk construction required to meet Land

Development Code Requirements along subject property frontages shall not count as meeting this Mobility Standard.

(8) Widening of existing sidewalks to increase pedestrian mobility comfort and safety.

(9) Deeding of land for the addition of bicycle lanes, or construction of bicycle lanes to City specification.

(10) Provision of ride sharing or van pooling programs for ~~project's~~project employees/residents.

(11) Provision of Park and Ride facilities.

(12) Funding of streetscaping/landscaping (including pedestrian-scale lighting, where relevant) on public right of way or medians, as coordinated with the City's streetscaping plans.

(13) Buildings with architectural features that provide shading and weather protection (e.g. canopies, awnings, colonnades) over sidewalk to promote pedestrian mobility. The architectural feature shall provide shading along a significant length of the sidewalk.

(14) Provision of additional bicycle parking over the minimum required by the Land Development Code. Bicycle parking shall be located convenient to the entrance of primary buildings and covered where practical.

(15) Removal of non-conforming signage, billboards, and signage that impedes pedestrian movement at the site.

(16) Enhancements to the West Orange Trail or other public trails~~sidewalks/paths~~ identified by the City, County, or state agency plan which increase the system's utility for multimodal transportation. Such enhancements may include but not be limited to:

a. Trail amenities such as benches, directional/informational signage, or safety systems.
b. Bicycle parking at entry points or at connection with transit lines.
c. Land acquisition for expansion or better connectivity the trail system or public sidewalks.
d. Additional/enhanced entry points to the trail system.

(17) Development of, or participation in, a transportation demand management (TDM) program that provides funding or incentives for transportation modes other than single occupant vehicle to reduce vehicle miles traveled (VMT). Such VMT programs shall utilize a methodology approved by the City and may require performance monitoring and reporting.

(18) Develop the project at or near development bonus maximum densities/intensities with transit supportive building and site design.

(19) Business operations are not conducted in the peak hour and/or will not generate traffic during the peak hour.

(20) Use of joint driveways and/or cross-access to reduce curb cuts.

(21) Construction of, or contribution towards, new road facilities that provide alternate routes to reduce congestion.

(22) Construction of, or contribution towards, addition of lanes on existing road facilities, where acceptable to the City, County, and/or FDOT, as relevant.

(23) Other acceptable roadway, pedestrian or bicycle improvements as proposed by the developer and acceptable to the City.

(24) Clustering of and design of the development for maximum density, or use of maximum densities or intensities, at the site which preserves open space, and reduces the need for development of vacant lands, enhances multi-modal opportunities and provides transit-oriented densities or intensities.

(25) An innovative transportation-related modification or standard proposed by the developer, and acceptable to and approved by the City.

(26) Construct a project listed in the City's latest Mobility Plan or contribute funding (commensurate to the impact of the development).

~~Added by Ordinance 10-19, 06/24/2010~~

Policy 8-1.7.2: ~~Policy 8-1.7.2:~~ Traffic Analysis for SIS/FIHS Facilities

The City shall require all major ~~P~~projects that generate more than 5,000 net new Average Daily Trips (ADT) ~~will be required~~ to perform a traffic analysis of the area roadways and shall determine any impact to entrance/exit ramps to the SIS/FIHS facilities. The specific methodology

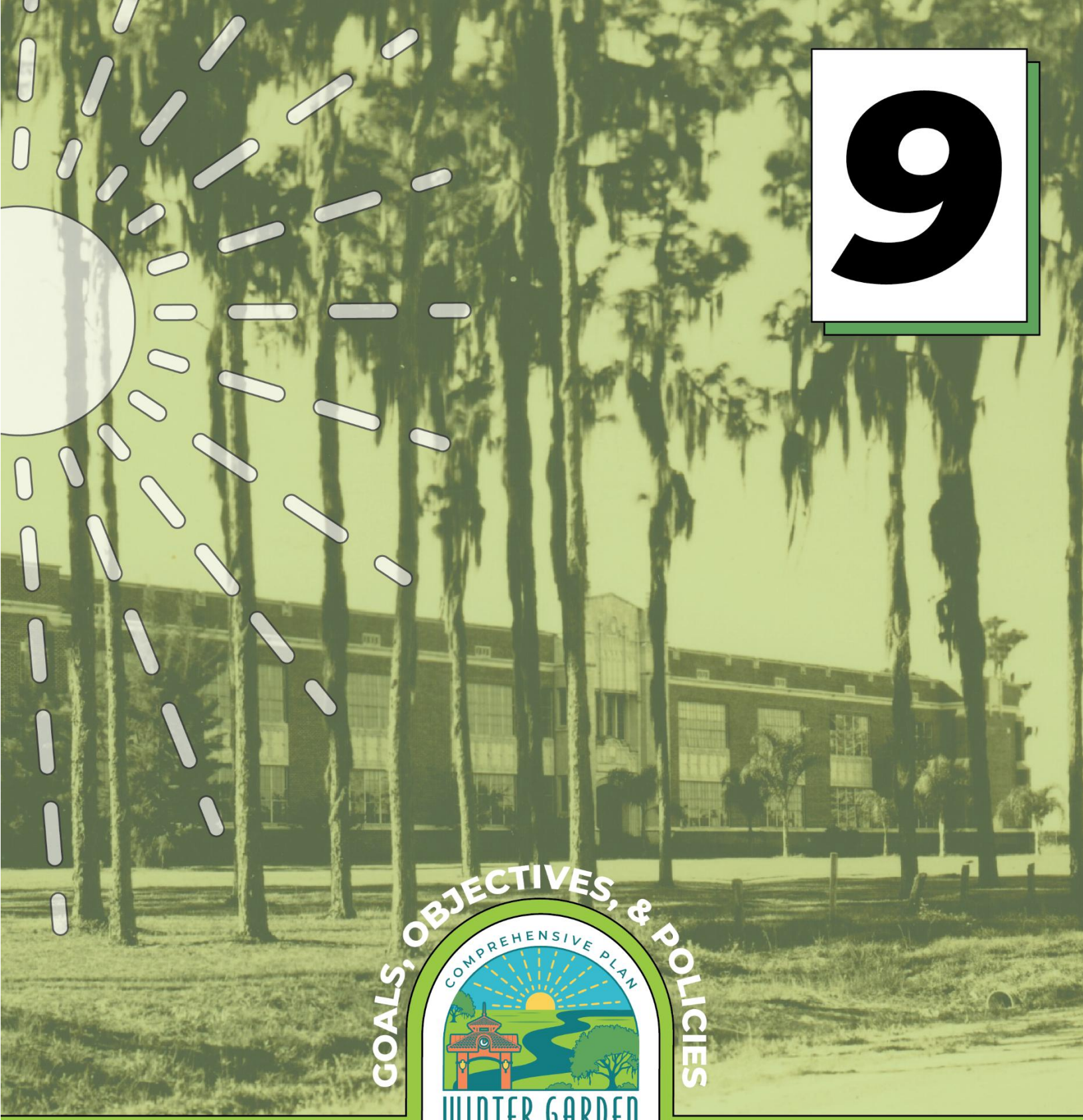
will be established by the City in consultation with FDOT. Once the Traffic Impact Analysis is prepared, a copy will be provided to the City and FDOT for review and comment for final determination of any needed roadway improvements proportionate share contribution, or other mitigation options. The owner/developer may recommend improvements to FDOT roadways to be eligible for mitigation. In addition, the project will receive a determined discount from any off-site trips for participation in the regional or local transit, TDM, and other non-single automobile occupancy performance standards listed above. Any discounts and subsequent performance standards will be evaluated in an effort to ensure all impacts are fully mitigated. For any redevelopment project, only the net new trips are subject to the appropriate performance criteria.

~~Added by Ordinance 10-19, 06/24/2010~~

~~**Policy 8-1.7.3:**~~

~~Additionally, any development consisting of, or occupying a facility with provisions for 50 or more employees is required to participate in a Transportation Demand Management (TDM) program. The TDM program must be outlined in writing to the City of Altamonte Springs not longer than 30 days from Certificate of Occupancy.~~

~~Added by Ordinance 10-19, 06/24/2010~~



9

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

PUBLIC SCHOOLS FACILITIES

Table of Contents

Goal 9-1: Availability of High-Quality Public School Facilities 3
Objective 9-1.1: Concurrency Management System 3
Objective 9-1.2: Development and Concurrency Review 8
Objective 9-1.3: Compliance and Mitigation Strategies 12
Objective 9-1.4: High-Quality Public Schools Facilities 15

~~CHAPTER 9: PUBLIC SCHOOLS FACILITIES ELEMENT~~
~~GOAL, OBJECTIVES, AND POLICIES~~
~~This Element created by Ordinance 08-64, October 9, 2008~~

Goal 9-1: Availability of High-Quality Public School Facilities~~GOAL 9-1:~~

~~Coordination with Orange County Public Schools. To~~ Eestablish plans, regulations and programs in conjunction with Orange County Public Schools (OCPS) to facilitate the future availability of high-quality public school facilities to serve City residents~~, consistent with the adopted level of service for public schools and with state of Florida concurrency statutes and regulations. Amended by Ordinance 10-19, 06/24/2010~~GOAL 9-2: Interlocal Agreement and Coordination. To maintain a high quality educational system for the current and future residents of the City of Winter Garden through enhanced and meaningful coordination between the City and Orange County Public Schools (OCPS)~~ as provided in the Interlocal Agreement (ILA).

Objective 9-1.1: ~~Objective 9-1.1:~~ Concurrency Management System

~~Level of Service Standards. The City of Winter Garden (the "City") shall coordinate~~ Coordinate with Orange County Public Schools (OCPS) to implement a Concurrency Management System that ensures adequate classroom capacity to accommodate the impacts of new residential development throughout the planning period.

~~Objective 9-1.2:~~

~~Concurrency Service Areas. OCPS, in conjunction with the City, shall adopt and annually update school Concurrency Service Areas ("CSAs"), which shall be used to evaluate capacity of schools available to accommodate students generated by proposed development.~~

~~Objective 9-1.3:~~

~~Interlocal Agreement. The City and OCPS shall develop and maintain throughout the planning period a joint process for the implementation of School Concurrency as provided for in the Interlocal Agreement.~~

~~Objective 9-2.1:~~

~~Maintenance of the Interlocal Agreement. Throughout the planning period, the City and OCPS shall work together to review and maintain~~

~~policies and procedures established in the ILA and ensure compliance with the adopted Comprehensive Plan.~~

~~Policy 9-2.3.5:~~

~~In accordance with F.S. 163.3180 (9)(a), the City adopts a long-term school concurrency management system with a 2007/2008-2017/2018 ten (10) year planning period for areas where significant backlog exists.~~

Policy 9-1.1.1: ~~Policy 9-2.1.1:~~Technical Advisory Committee

Pursuant to the Interlocal Agreement, a Technical Advisory Committee, composed of representatives from the City of Winter Garden, Orange County, other local governments located within Orange County, OCPS, and the East Central Florida Regional Planning Council, shall be established to discuss issues of mutual concern. OCPS shall be responsible for arranging meetings, providing notifications, and maintaining a written summary of meeting actions.

Policy 9-1.1.2: ~~Policy 9-2.1.2:~~ Technical Advisory Committee Meetings

The Technical Advisory Committee shall meet quarterly, or as needed, to discuss issues and formulate recommendations regarding coordination of land use and school facilities. Specific areas addressed by the committee shall include, but shall not be limited to, the following:

1) Short and long-range planning, population and student projections, and future development trends;
2) Co-location and joint-use opportunities, and ancillary infrastructure improvements needed to support the school facilities and ensure safe student access to schools;
3) Planning for needed supporting infrastructure for schools such as utilities, roads, sidewalks, etc.;
4) The need for new schools to meet the adopted LOS within the adopted Concurrency Service Areas (CSA~~'~~s) and the coordination of annual revisions to the five (5) year and ten (10) year District Capital Outlay Plan.
5) Update of the City's Capital Improvements Element for inclusion in the City's Comprehensive Plan.

Policy 9-1.1.3: ~~Policy 9-1.1.1:~~ School Capacity Calculation

The City shall utilize OCPS's methodology for calculating school capacity, which is annually determined by OCPS using the Adjusted Florida Inventory of School Houses (FISH) Capacity for each school and Concurrency Service Areas (CSA) within the school district. Consistent with the Interlocal Agreement, Adjusted FISH Capacity shall be defined as the number of students who can be served in a permanent public school facility as provided in FISH, adjusted to account for the design capacity of any Modular or In-Slot Classrooms on campuses designed as Modular or In-Slot schools, but not to exceed Core Capacity. An "in-slot" school is designed to employ in-slot classrooms, which are defined as relocatable classrooms that conceptually 'slide' into the spaces along a common walkway as part of a modular campus which is characterized by a campus with brick and mortar core facilities and covered concrete walkways leading to the relocatable classrooms.

Policy 9-1.1.4: ~~Policy 9-1.1.2:~~ Level of Service Standards

The School Concurrency Management System shall include standards and procedures to ensure that new residential development complies with the Level of Service ("LOS)" Standards provided in the Interlocal Agreement pertaining to school concurrency as executed by and between the City of Winter Garden and OCPS (the "ILA") and as provided in the City's adopted Capital Improvements Element ("CIE") and Intergovernmental Coordination Element ("ICE"). ~~These standards do not include backlogged facilities as provided for in Capital Improvements Element Policy 6.7. The adopted LOS must be achieved in all CSA's by April 1. 2012, except for deficient CSAs where the improvements needed to achieve adequate classroom capacity are specifically identified in the OCPS ten (10) year DCOP for funding by April 1, 2017.~~ The adopted LOS shall be used to determine the available capacity of Elementary, Middle and High Schools within the designated Concurrency Service Area ("CSA") where the development is proposed.

Policy 9-1.1.5: ~~Policy 9-1.1.3:~~ Level of Service Standards by School Type

~~In accordance with Rule 9J-5.025(3)(c)(7), F.A.C.,~~ The adopted LOS for the purposes of school concurrency for each school type ~~shall be calculated as a percentage of adjusted FISH capacity as follows:~~are included in the Capital Improvements Element.

~~School Type~~	~~Standard*~~
~~Elementary~~	~~110% of Adjusted FISH Capacity for each Elementary School Concurrency Service Area. The Elementary school LOS shall also include Arbor Ridge K-8, Windy Ridge K-8 and grades Kindergarten through 5 of Blankner K-8~~
~~Middle~~	~~100% of Adjusted FISH Capacity for each Middle School Concurrency Service Area. The Middle school LOS shall also include grades 6-8 of Blankner K-8~~
~~High Including 9th Grade Centers~~	~~100% of Adjusted FISH Capacity for each High School Concurrency Service Area~~

Policy 9-1.1.6: ~~CSAs Less than District Wide~~

OCPS, in coordination with the City of Winter Garden, Orange County and other local governments within Orange County, has established CSAs that are less than district wide. ~~The City hereby adopts the Orange County Public Schools *Public School Facility Element Update Data Supplement* dated September 1, 2009. This Data Supplement contains:~~

~~Projected Enrollment and Level of Service~~

~~2009-2010 Elementary, Middle, and High School Attendance Zones and Concurrency Service Area Maps~~

~~2009-2010 Tentative Capital Outlay BudgetPolicy 9-1.1.6:~~

Concurrency shall be evaluated and determined within the geographical boundaries of the established Concurrency Service Areas (CSAs).

Policy 9-1.1.7: ~~Policy 9-1.1.8:~~ OCPS Generation Rates

The number of elementary, middle and high school students generated by a residential development shall be calculated utilizing OCPS student generation rates for the applicable school types as set forth in ~~Table 12 of~~ the Data and Analysis portion of the ~~Appendix to the~~ Public School Facilities Element.

Policy 9-1.1.8: ~~Policy 9-2.3.3:~~Review of Adopted CSAs and LOSs

The City shall regularly review OCPS's adopted or recommended CSAs and adopted or recommended LOS's and enrollment projections as provided by OCPS's staff, and account for any changes thereto in the

annual update of the City's CIE to ensure ~~that the CIE continues to be financially feasible and~~ that the LOS will continue to be achieved.

1) Any changes to the adopted CSAs or LOS's shall follow the process and guidelines contained in the Interlocal Agreement.

2) ~~Policy 9-1.2.2: CSAs shall be reviewed annually in conjunction with the adoption of an updated ten (10) year District Capital Outlay Plan (DCOP).~~ CSA boundaries may be adjusted to ensure that the utilization of school capacity is maximized to the greatest extent possible, taking into account transportation costs, court approved desegregation plans, and other factors.

Policy 9-1.1.9: Generation Rate Revision

The City shall discuss with Orange County Public Schools the need to revise student generation rates based on shifting enrollment patterns due to the Family Empowerment Scholarship Program.

~~Policy 9-1.1.11:~~

~~The City, in conjunction with OCPS, shall review LOS standards for public school facilities annually, and any changes to those standards shall be processed as amendments to the City's Public School Facilities Element and Capital Improvements Element.~~

~~Policy 9-1.1.4:~~

~~Any changes or modifications to the adopted LOS shall follow the process and guidelines contained in Section 13 of the Interlocal Agreement.~~

~~Policy 9-1.1.7:~~

~~Any changes or modifications to the adopted CSAs shall follow the process and guidelines as outlined in Section 14 of the Interlocal Agreement. [9J-5.025 (3) (c) 1.F.A.C.]~~

~~**Policy 9-1.1.12:**~~

~~The City shall amend the Concurrency Management System in its Code of Ordinances for the purpose of implementing school concurrency.~~

Objective 9-1.2: ~~Objective 9-1.4:~~Development and Concurrency Review

~~Preliminary Concurrency Review.~~ Upon completion of a Preliminary Concurrency Review, a development that fails to meet school concurrency requirements may be postponed until adequate public school capacity is created through the construction of new schools or other appropriate compliance methods.~~any combination of those methods specified in Policies 9-1.4.1, 9-1.4.2, 9-1.4.3 and 9-1.4.4.~~

Policy 9-1.2.1: ~~Policy 9-1.4.1:~~Concurrency Requirements

A development shall be deemed to meet concurrency if there is available capacity in the CSA where the development is located or where available capacity exists in one or more contiguous CSAs, so long as:

(1) ~~-~~the LOS in the adjacent zone does not exceed 95% of the adopted LOS for the applicable school type, or

(2) when the LOS for the specific school type, when considered district wide, does not exceed 100% of the adopted LOS for such type, and approval of the development does not result in a violation of a court ordered desegregation order.

Policy 9-1.2.2: ~~Policy 9-1.3.1:~~ Comprehensive Plan Amendments and Rezonings

The City shall not adopt a developer-initiated Comprehensive Plan amendment or rezoning that would increase residential density on property that is not otherwise vested or determined exempt from school concurrency requirements until such time as OCPS has determined whether sufficient capacity will exist concurrent with the development, or a capacity enhancement agreement is executed that provides for the needed capacity to accommodate the proposed development, or OCPS fails to timely make a recommendation, in which case the City may thereafter determine, utilizing the best available data and analyses, whether sufficient capacity exists.

Policy 9-1.2.3: ~~Policy 9-1.3.2:~~Vested Developments

The City shall determine if a development is vested or otherwise exempt from school concurrency. Unless the development is determined to be vested or exempt from concurrency, the City shall not approve a residential site plan, plat, or its functional equivalent, until a

concurrency review has been conducted by OCPS, and a Concurrency Certificate or its functional equivalent has been issued for the development consistent with the provisions of the ILA. However, if OCPS fails to timely issue such Concurrency Certificate or its functional equivalent, the City may perform such concurrency review, utilizing the best available data and analyses, to determine whether a development meets concurrency requirements.

~~Policy 9-1.3.3:~~

~~School concurrency shall not apply to property within a Development of Regional Impact (DRI) for which a Development Order was issued prior to July 1, 2005, or for which a DRI application was submitted prior to May 1, 2005, unless the developer elects otherwise or unless the developer files a Notice of Proposed Change ("NOPC") and/or Substantial Deviation to increase the total number of residential dwelling units.~~

~~Policy 9-1.3.4:~~

~~For DRIs that include residential development and are submitted after July 1, 2005, the City shall include OCPS planning staff on its team assigned to review the DRI, and shall ensure that DRI Development Orders and DRI Development Order amendments that increase the total number of residential dwelling units, address the issue of school concurrency. Where existing LOS is exceeded, mitigation for school impacts shall be included in any mitigation agreements, Development Orders and agreements.~~

Policy 9-1.2.4: ~~Policy 9-1.1.10:~~ Construction after Final Subdivision or Site Plan Approval

Where adequate school facilities will be in place or under actual construction within three (3) years after the issuance of final subdivision or site plan approval, or the functional equivalent thereof, the City shall not deny an application for site plan approval, final subdivision approval, or the functional equivalent thereof, for any development or phase of a development that includes residential uses, based solely on failure to achieve and maintain the adopted LOS in a CSA.

~~Policy 9-1.3.5:~~

~~Any Proposed residential development that creates an impact of less than one student shall be considered de minimus and therefore exempt from school capacity review.~~

~~Policy 9-1.3.6:~~

~~Vested rights and exemptions with respect to concurrency and consistency shall be determined in accordance with applicable law.~~

Policy 9-1.2.5: ~~Policy 9-1.3.7:~~Exemptions to Concurrency

Consistent with Section 16.2 of the Interlocal Agreement, the following residential uses shall be exempt from the requirements of school concurrency:

1) Any Residential Development that creates an impact of less than one student.
2) One single-family house, one (1) duplex, and/or one accessory multi-family unit being developed on an existing platted residential lot of record.
3) Any building or structure that has received a Building Permit as of the effective date of this Agreement, or is described in section 163.3167(8), Florida Statutes.
4) Any new Residential Development that has Site Plan Approval for a site pursuant to a specific development order approved prior to the effective date of school concurrency, including the portion of any project that has received final subdivision plat approval as a residential subdivision into one (1) dwelling unit per lot.
5) Any amendment to any previously approved Residential Development, which does not increase the number of dwelling units or change the type of dwelling units (e.g., converts single-family to multi-family, etc.).
6) Any age-restricted community that qualifies as one of the three types of communities designed for older persons as "housing for older persons" in the Housing for Older Persons Act, 42 U.S.C. § 3607(b). This exemption shall be applied in conformity with the principles set forth in Volusia County v. Aberdeen at Ormond Beach, L.P., 760 So. 2d. 126 (Fla. 2000). Provided, however, that any senior housing community or dwelling unit that loses its

qualification as housing for older persons shall be required to meet applicable school concurrency requirements in effect at the time the qualification as housing for older persons is lost.

7) Alterations or expansion of an existing dwelling unit where no additional dwelling units are created.

8) The construction of accessory buildings or structures which will not create additional dwelling units.

9) The replacement of a dwelling unit where no additional dwelling units are created and where the replacement dwelling unit is located on the same lot, provided the original dwelling unit was located on the site as of the effective date of school concurrency. If the type of dwelling unit is different from the original dwelling unit type, the exemption shall be limited to an exemption based on the current student generation rate for the original dwelling unit type. Documentation of the existence of the original dwelling unit must be submitted to the concurrency management official.

10) Developments of Regional Impact that have filed a complete application for a development order prior to May 1, 2005, or for which a development order was issued prior to July 1, 2005. This exemption shall expire upon withdrawal, denial, or expiration of the application for a development order. This exemption shall not apply where the developer files a Notice of Proposed Change and/or Substantial Deviation (as provided in statute) to increase the number of Residential Units. If such Development of Regional Impact has been approved, or is approved, through a development order, such exemption shall expire for any phase of the development order upon expiration of the development order build-out date for such phase, or for the entire development order upon expiration of the development order, or upon any material default of the school mitigation conditions of the development order or a related development agreement, unless such project, or portions of such project, remains exempt pursuant to another exemption provision.

11) The portion of any Residential Development that, prior to the effective date of school concurrency, is the subject of a binding and enforceable development agreement or Capacity

Enhancement Agreement designated as a Capacity Commitment Agreement by resolution of the School Board; however, such exemption shall expire upon expiration of the development agreement, Capacity Enhancement Agreement, extension thereof, or upon any material default of the school impact mitigation conditions of such development agreement or Capacity Enhancement Agreement, unless such project, or portions of such project, remains exempt pursuant to another exemption provision.

12) Any Residential Development with a letter from the Applicable Local Government vesting it for purposes of complying with school concurrency, or which would be vested at common law for purposes of such concurrency requirement implemented by this Agreement.

13) Group living facilities that do not generate students ~~and~~ including residential facilities such as local jails, prisons, hospitals, beds and breakfast, motels and hotels, temporary emergency shelters for the homeless, adult halfway houses, firehouse sleeping quarters, dormitory-type facilities for post-secondary students, and religious non-youth facilities, regardless of whether such facilities may be classified as residential uses.

Objective 9-1.3: Compliance and Mitigation Strategies

Coordinate with Orange County Public Schools to ensure public schools facilities are available which adequately meet LOS standards.

Policy 9-1.3.1: ~~Policy 9-1.1.5:~~LOS Compliance Strategies

The City shall support OCPS's reasonable efforts to initiate and implement any of the following strategies to ensure compliance with adopted LOS standards.

1) Building new schools to relieve over-capacity schools in CSAs that exceed the adopted LOS,

2) Renovating over-capacity schools to add permanent capacity and replace on-campus portables,

3) Rezoning students from over-capacity schools to under-capacity schools,

4) Moving special programs from over-capacity schools to under-capacity schools to utilize excess permanent capacity where such permanent capacity exists.

Policy 9-1.3.2: ~~Policy 9-1.4.2:~~Proportionate Share

Proportionate share, when used for mitigation, shall be calculated based on the number of elementary, middle and high school students generated by the development at build out. As provided ~~for~~ in the ILA, proportionate share shall be calculated based on reasonable methods of estimating cost of school construction. Any Proportionate Share Mitigation must be directed by OCPS to a school capacity improvement identified in the capital improvement schedule in the ~~financially feasible five~~ (5) year district work plan of the District Facilities Work Program and in the Capital Improvements Elements of the Comprehensive Plans for OCPS, the County and the Municipalities, to maintain ~~financial feasibility based upon the~~ adopted LOS standards. If a school capacity improvement does not exist in the District Facilities Work Program, OCPS may, in its sole discretion, add a school capacity improvement to mitigate the impacts from a proposed residential development~~, so long as the financial feasibility of the District Facilities Work Program can be maintained and~~ so long as the City agrees to amend its Capital Improvements Element to include the new School Capacity improvement.

~~Policy 9-1.4.3:~~

1) Proportionate Share Mitigation may include but is not limited to payments of money, the construction of schools, donations of land, expansion of permanent capacity of existing school campuses, payment of funds necessary to advance schools contained in the ten (10) year School Board District Capital Outlay Plan (DCOP), the establishment of charter schools meeting State Requirements for Educational Facilities (SREF) standards, payments into mitigation banks, establishment of an Educational Facilities Benefit District, Community Development District, or any other method or contribution identified in section 17.6 (b) of the school ILA. Such mitigation may be negotiated between the developer and OCPS and, as appropriate, the City.

~~Policy 9-1.4.4:~~

2) Proportionate Share Mitigation shall be credited against the School Impact Fee otherwise due for the residential units within a residential development as provided for by statute.

Policy 9-1.3.3: ~~Policy 9-2.1.3:~~ Development Updates to OCPS Planning Department

To ensure adequate capacity, ~~T~~the City shall provide an update of approved developments, phases of development and estimated build out by phase to the OCPS Planning Department on an annual basis.

Policy 9-1.3.4: ~~Policy 9-2.1.4:~~Generated Future Enrollment Review

The City shall review OCPS's generated future enrollment and growth projections on an annual basis and provide input to the OCPS Planning Department.

Policy 9-1.3.5: ~~Policy 9-2.2.1:~~Development Review for Schools

The City shall give priority development review status to ~~A~~applications for Future Land Use Map amendments, rezonings, conditional use/special exceptions and site plans for OCPS schools ~~shall be given priority status.~~ .

Policy 9-1.3.6: ~~Policy 9-2.2.8:~~Public Private Partnerships

The City ~~of Winter Garden supports~~ shall support Orange County School Board's evaluation of the use of Public Private Partnerships to finance school construction including but not limited to Real Estate Investment Trusts (REIT).

Policy 9-1.3.7: ~~Policy 9-2.2.9:~~ Funding

The City ~~of Winter Garden will~~ shall support efforts by OCPS to formally request additional funding from the State of Florida to meet class size reduction obligations.

Policy 9-1.3.8: ~~OBJECTIVE 9-2.3:~~ District Capital Outlay Plan

~~District Capital Outlay Plan.~~ Prior to June 1st of each year, ~~OCPS~~ the City shall coordinate with ~~the City~~ OCPS to develop a ~~financially feasible~~ ten (10) year District Capital Outlay Plan (DCOP) for review and approval by the OCPS Board and adoption into the Capital Improvements Element for the City.

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 9-1.3.9: ~~Policy 9-2.3.1:~~ Capital Projects

The ten (10) year DCOP shall include all capital projects which increase the capacity of public schools within the City and address the deficiencies necessary to maintain or improve LOS.

~~Policy 9-2.3.2:~~

~~The City shall include the ten (10) year DCOP in the annual update of the CIE.~~

~~Policy 9-2.3.4:~~

~~OCPS, in conjunction with the City, shall review the annual ten (10) year DCOP update to determine the projected capacity, projected enrollment, and LOS for each school and CSA within Orange County.~~

~~Policy 9-1.1.9:~~

~~The City shall support OCPS' efforts to meet adopted LOS standards through the adoption of a ten (10) year, financially feasible DCOP consistent with the DCOP adopted by OCPS. Where the LOS cannot be achieved through the construction of new school capacity as provided in the five (5) year District Capital Outlay Plan (DCOP), the City shall coordinate with OCPS to adopt a long range ten (10) year DCOP as part of the School District's annual capital planning process.~~

Objective 9-1.4: ~~Objective 9-2.2~~ High-Quality Public Schools Facilities

~~Siting of New Public Schools. Throughout the planning period, the City and OCPS shall work~~Work together throughout the planning period to ~~coordinate the siting of new public schools to~~ ensure public school facilities are developed in a high-quality manner, are located in areas that address the needs of future residential development, are coordinated with necessary services and infrastructure development, provide for safe learning environments, and are consistent with the City's adopted Future Land Use Map, Comprehensive Plan, and Code of Ordinances.

~~Amended by Ordinance 10-19, 06/24/2010~~

~~Policy 9-2.1.5:~~

~~The City shall protect existing schools from the intrusion of incompatible land uses through the development review process. [163.3177(12)(g)4. F.S.] and [9J-5.025(3)(b)5.F.A.C.]~~

~~Amended by Ordinance 10-19, 06/24/2010~~

Policy 9-1.4.1: ~~Policy 9-2.2.2:~~Protection of Existing Schools and Neighborhoods

The City shall protect existing schools from the intrusion of incompatible land uses through the development review process. The City shall also protect existing residential neighborhoods through the development review process when considering proposed new schools, school renovations and school expansions. [163.3177 ~~(12) g. 4.,~~ F.S.] ~~and [9J.5.025 (3) (b) 5 F.A. C.]~~

Policy 9-1.4.2: ~~Policy 9-2.2.3:~~ Schools in the Local Community

In an effort to enhance local communities and neighborhoods, the City shall work with OCPS throughout the school siting, design and development process to ensure that proposed schools serve as a focal point for the community and are compatible with the Future Land Use Map and other surrounding land uses and neighborhoods.

Policy 9-1.4.3: ~~Policy 9-2.2.4:~~ Colocation of Public Facilities

Where feasible, OCPS and the City shall work jointly to co-locate public facilities such as parks, libraries, community centers, and other similar public uses with public schools. Where such co-location occurs, both the City and OCPS shall consider the establishment of an ongoing mutual management agreement that permits the school's use of the public facilities and the public's use of school facilities for community meetings and sports activities.

Policy 9-1.4.4: ~~Policy 9-2.2.5:~~School Connectivity

In accordance with Section 1006.23, Florida Statutes, and as funding permits, the City shall, where required, provide construction of sidewalks along roadways and trails connecting neighborhoods that are within two miles of schools to the school facility. ~~-~~OCPS shall be responsible for the construction of sidewalks and trails on school property and shall provide connections to existing and future sidewalks and trails identified by the City.

Policy 9-1.4.5: ~~Policy 9-2.2.6:~~Safe Access

Turn lanes and signalization shall be provided at school entrances and at other locations near schools, where warranted, to provide safe access

to students and the public.~~-~~ OCPS shall be responsible for the construction of school-related signalization and road construction.

Policy 9-1.4.6: ~~Policy 9-2.2.7:~~ Emergency Shelters

The City shall ~~coordinate~~ support ~~with OCPS in~~ OCPS's efforts to construct new public school facilities and rehabilitate existing public school facilities to serve as emergency shelters as required by Section 1013.372, Florida Statutes.



10

GOALS, OBJECTIVES, & POLICIES

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

PROPERTY RIGHTS

Table of Contents

Goal 10-1: Property Rights....3
Objective 10-1.1: Private Property Rights....3

Goal 10-1: Property Rights

Ensure that the City of Winter Garden respects judicially acknowledged and constitutionally protected private property rights; and ensure that private property rights are considered in the City of Winter Garden's decision-making.

Objective 10-1.1: Private Property Rights

Respect judicially acknowledged and constitutionally protected private property rights and ensure that private property rights are considered in Winter Garden's decision-making.

Policy 10-1.1.1: Local Decision Making

The City of Winter Garden shall consider the following rights in decision-making:

1) The right of a property owner to physically possess and control his or her interests in the property, including easements, leases, or mineral rights.
2) The right of a property owner to use, maintain, develop, and improve his or her property for personal use or for the use of any other person, subject to state law and local ordinances.
3) The right of the property owner to privacy and to exclude others from the property to protect the owner's possessions and property.
4) The right of a property owner to dispose of his or her property through sale or gift.



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

DATA & ANALYSIS



7

DATA & ANALYSIS

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

FUTURE LAND USE

Table of Contents

INTRODUCTION 4
Geographic Context 4
Demographic and Socioeconomic Context 4
Existing Land Use 6
NATURAL RESOURCES 7
Waterbodies 7
Wetlands 7
Floodplains 7
Soil Permeability 8
Aquifer Recharge 8
HISTORIC AND CULTURAL RESOURCES 8
Historical Context 8
Historic Resources 9
Historic Downtown District 11
ACTIVITY CENTERS 12
Traditional Downtown Activity Center 12
Crown Point Hi-Tech Activity Center 13
Story Road Industrial Activity Center 13
West State Road 50 Commercial Activity Center 13
Fowler Grove Regional Activity Center 13
COMMUNITY REDEVELOPMENT AREA 14
WEKIVA PARKWAY AND PROTECTION ACT 14
PUBLIC FACILITIES AND SERVICES 16
CARRYING CAPACITY ANALYSIS 17
Projected Population 17
Future Land Use Map 18
Carrying Capacity 19
FUTURE CONSIDERATIONS 21

List of Tables

Table FLUE - 1: Demographic Profile Comparison 5
Table FLUE - 2: Socioeconomic Profile Comparison 5
Table FLUE - 3: Existing Land Use 6
Table FLUE - 4: Wetland Acreage 7
Table FLUE - 5: Floodplain Acreage 8
Table FLUE - 6: Historic Resource Group 9
Table FLUE - 7: Historic Structures 9
Table FLUE - 8: Winter Garden Projects to Reduce Nitrogen Sources 16
Table FLUE - 9: Population Projections 17
Table FLUE - 10: Future Land Use Categories 18
Table FLUE - 11: Carrying Capacity Analysis 20

List of Maps

Map FLUE – 1: City Boundary 23
Map FLUE – 2: Regional Context 24
Map FLUE – 3: Existing Land Use 25
Map FLUE – 4: Waterbodies 26
Map FLUE – 5: Wetland Inventory 27
Map FLUE – 6: Floodplain Inventory 28
Map FLUE – 7: Soil Permeability 29
Map FLUE – 8: Aquifer Recharge 30
Map FLUE – 9: Historic Resources 31
Map FLUE – 10: Activity Centers 32
Map FLUE – 11: Community Redevelopment Area 33
Map FLUE – 12: Wekiva Study Area 34
Map FLUE – 13: Wekiva Study Area 35
Map FLUE – 14: Future Land Use 36

INTRODUCTION

The Future Land Use Element (FLUE) is intended to determine the distribution, location, and intensity of land uses necessary to accommodate the anticipated population growth in the City, advance its economic interests, minimize impacts on the natural environment, and allow for the provision of high-quality public facilities and services. The Data & Analysis portion of this Element provides the basis for future land use decisions and forms the foundation for policy changes to be made by the City within the 2050 planning horizon. Topics related to land use that are considered as part of this analysis include the City's regional context, demographics and socioeconomic conditions, existing land uses, natural resources, historic resources, activity centers, community redevelopment areas, the Wekiva Study Area, population projections, future land use, and the city's carrying capacity.

Geographic Context

The City of Winter Garden is located on the western edge of Orange County, Florida and is approximately 11,650 acres or 18.2 square miles in size. The City is part of the Orlando-Kissimmee-Sanford, FL Metropolitan Statistical Area. The City shares its border with the City of Ocoee, the Town of Oakland, Unincorporated Orange County and Lake County. The three largest bodies of water within or near the City of Winter Garden are Lake Apopka to the north, Johns Lake to the west, and Black Lake in its center. State Road 50, Florida's Turnpike, and State Road 429 are the major roadways connecting the City to its neighbors. The City's boundary can be seen in **FLUE Map - 1** and the City's regional context can be seen in **FLUE Map - 2**.

Demographic and Socioeconomic Context

According to the 2020 census, the permanent population of Winter Garden was 46,964. An overview of Winter Garden's current demographic profile—including age, sex, and race/ethnicity—and socioeconomic characteristics, such as income, housing status, and education, is provided in **Tables FLUE - 1** and **FLUE - 2**. These tables utilize data from ESRI Business Analyst Online (BAO), which extrapolates population characteristics from the 2020 Decennial Census and the 2018-2022 American Community Survey. For context, countywide and state averages are also included to help identify the unique demographic and socioeconomic profile of Winter Garden.

Table FLUE - 1: Demographic Profile Comparison

	Winter Garden	Orange County	Florida
Total Population	46,964	1,429,908	21,538,187
Female Population (%)	50.7%	50.5%	50.8%
Male Population (%)	49.3%	49.5%	49.2%
Median Age	39.0	36.3	43.5
Senior Population 65+ (%)	14.1%	13.3%	22.7%
Non-Hispanic White Pop (%)	49.8%	35.7%	50.2%
Hispanic Population (%)	23.5%	34.3%	27.6%
Population of 2+ Races (%)	16.6%	19.3%	17.2%
Black Population (%)	13.9%	19.3%	15.0%
Other Race Population (%)	8.7%	12.3%	7.6%
Non-Hispanic Asian Population (%)	6.0%	5.7%	3.1%
American Indian Population (%)	0.3%	0.5%	0.5%
Pacific Islander Population (%)	0.1%	0.1%	0.1%

Source: ESRI BAO, 2022 and 2024

The City of Winter Garden has a younger population than the state of Florida with a median age of 39.0 compared to the State's 43.5, but an older population than Orange County's median age of 36.3. This could be attributed to the smaller percentage of Winter Garden's population over the age of 65 in comparison to Florida and larger percentage in comparison to Orange County.

Table FLUE - 2: Socioeconomic Profile Comparison

	Winter Garden	Orange County, FL	Florida
Median Household Income ($)	$102,835	$75,628	$74,715
Household Pop w/Income Below Poverty Level (ACS 5-Yr) (%)	9.9%	13.4%	12.7%
Median Home Value ($)	$474,442	$423,952	$391,816
Owner Occupied Housing Units (%)	74.3%	54.5%	66.4%
Renter Occupied Housing Units (%)	25.7%	45.5%	33.6%
Pop Age 25+: Grad/Professional Degree (%)	19.8%	14.5%	13.2%
Pop Age 25+: Bachelor's Degree (%)	27.51%	22.41%	26.34%
Pop Age 25+: High School Diploma (%)	19.3%	20.3%	23.5%
Employed Civilian Pop 16+ (%)	96.6%	96.7%	96.4%
Unemployed Pop 25-54 (%)	1.4%	1.8%	1.9%

Source: ESRI BAO, 2022 and 2024

Winter Garden stands out with a higher median household income of $102,835, surpassing both Orange County and Florida. The City also has a poverty rate lower than both the county and state averages. With a median home value of $474,442, which is higher than the county's $423,952 and the state's $391,816, Winter Garden

demonstrate a strong demand for housing and a preference for homeownership, as evidenced by its lower renter-occupied housing rate of 25.7% in comparison to Orange County's 45.5% and Florida's 33.6%.

Winter Garden has a consistent employment rate and a slightly lower unemployment rate in comparison to Orange County and Florida. The City has a well-educated population, with a higher percentage of residents over the age of 25 holding a bachelor's degree or higher in comparison to Orange County and Florida. These factors contribute to the City's economic strength and appeal as a desirable place to live.

Existing Land Use

Existing land use represents the current use of land within the City, as determined by Department of Revenue (DOR) land use codes included in the latest Orange County Property Appraiser tax parcel shapefile. **Map FLUE - 3** identifies the existing land use of every parcel within Winter Garden, while **Table FLUE - 3** totals the acreage comprised by each existing land use.

Table FLUE - 3: Existing Land Use

Existing Land Use	Acres	Percent
Agriculture	681.4	6.3%
Commercial	300.4	2.8%
Industrial	504.0	4.6%
Institutional	1,000.9	9.2%
Multi-Family Residential	260.1	2.4%
Mobile Home	145.4	1.3%
Mixed Use	32.3	0.3%
Office	83.6	0.8%
Residential Common Area	1,894.5	17.4%
Recreation and Open Space	1,089.2	10.0%
Single Family Residential	3,300.1	30.3%
Utility	228.2	2.1%
Vacant	1,026.6	9.4%
Water	339.5	3.1%
Total	**10,886.3**	**100.0%**

Source: Orange County Property Appraiser, 2025

The existing land use analysis reveals that the City of Winter Garden is primarily characterized by low density residential development. The three largest existing land use categories are Single Family Residential (30.3%), Residential Common Area (17.4%), and Recreation and Open Space (10.0%). The City is approximately 15.4% undeveloped with 6.3% of the City being comprised of Agriculture and 9.4% as Vacant. Agriculture is deemed undeveloped as the City does not have an agriculture

future land use category and typically indicates properties that will be developed in the future.

NATURAL RESOURCES

Waterbodies

There are multiple major waterbodies within or near the City of Winter Garden that are critical to the natural environment, resiliency, and economy of Winter Garden. Major bodies of water provide habitat to aquatic vegetation and wildlife, natural stormwater management services, and recreational activities. Some of the most notable waterbodies within and in close proximity to Winter Garden can be found on **Map FLUE - 4**.

Wetlands

According to the Environmental Protection Agency (EPA), wetlands occur when water is found near or covering the surface of the soil for significant portions of the year. These critical environmental features serve many purposes, including acting as natural water retention systems, regulating the flow of water, and removing excess nutrients and particulates from stormwater runoff. Wetlands are also integral in supporting much of Florida's rich inventory of native vegetation and wildlife. According to the latest wetland GIS data, shown on **Map FLUE - 5** and **Table FLUE - 4** provided by the National Wetlands Inventory (NWI), the City comprises approximately 1,525 acres of wetlands, generally located within the central and southern portions of the City.

Table FLUE - 4: Wetland Acreage

Wetland Type	Acres
Freshwater Emergent	443.4
Freshwater Forested / Shrub	1,082.7
Total	**1,526.1**

Source: US Fish and Wildlife Services, 2023

Floodplains

Floodplains are important ecological features that contribute to a region's water flow and storage, vegetative health, groundwater replenishment, and water quality protection. Whereas wetlands remain wet throughout the year, floodplain areas are next to bodies of water that experience flooding at different points in time. Based on the latest GIS data from the Federal Emergency Management Agency, floodplains comprise approximately 2,580 acres of the City. A breakdown of floodplain acres in Winter Garden based on annual flood chance can be seen in **Table FLUE - 5** and on **Map FLUE - 6**. As the map shows, most of the floodplains within the City are located

within the central and southern areas, coinciding with the general location of wetlands.

Table FLUE - 5: Floodplain Acreage

Floodplain	Acres
100 year floodplain (1% Annual Chance)	2,534.9
500 year floodplain (0.2% Annual Chance)	48.1
Total	**2,583.0**

Source: Federal Emergency Management Agency, 2024

Soil Permeability

Based on GIS data from the National Resource Conservation Service's soil survey (**Map FLUE – 7**), the City of Winter Garden is predominantly poorly drained or somewhat poorly drained. With some areas in the south and southwest being excessively drained. The areas of very poorly, poorly, and somewhat poorly drained have a soil composition of Cassia, Zolfo, Pompano, Basinger, St. Johns, Immokalee, Ona, and Wabasso fine sands. The excessively drained areas are all Candler fine sands.

Aquifer Recharge

Aquifer recharge areas provide water volumes which contribute to the storage of regional flow to the aquifers. These areas are filled with water coming from rainfall, soil moisture, drainage, and surface water bodies and help maintain groundwater levels. They also remove some pollutants from the water as it percolates through the soil. As a result, protecting these aquifer recharge areas is crucial to maintaining a reliable water supply. Aquifer discharge areas are areas where water seeps upwards to the surface rather than downward into the aquifer. The St. Johns River Water Management District (SJRWMD) classifies aquifer recharge areas into four categories: recharge (low, medium and high) and discharge. Aquifer recharge areas within and around the City are illustrated on **Map FLUE - 8**. The City predominantly contains low to medium aquifer recharge areas with minimal discharge zones and high recharge areas near Johns Lake and the southern and southwestern boundaries, respectively.

HISTORIC AND CULTURAL RESOURCES

Historical Context

Winter Garden was first settled in 1850s and significantly grew after the arrival of the railroad in the late 1800s. Early settlements were primarily farming operations focused on citrus and vegetables and homesteads on the south shore of Lake

Apopka. By the end of the nineteenth century, a business district developed around Plant and Main Street. Winter Garden was officially incorporated in 1908, and by 1920 the City had a population of over 1,000 people. Winter Garden continued to grow into the 1960s, fueled by an economy focused on citrus production and tourism.

Historic Resources

The City of Winter Garden currently has two resource groups (The Winter Garden Historic Residential District and the Winter Garden Downtown Historic District), and one structure (Meadow Marsh) listed on the National Register of Historic Places. However, the City does have two more resource groups and 78 structures that are eligible or potentially eligible to be listed. The City has focused on developing local regulations to protect important historic structures and historic character without listing more properties on the NRHP. All historic resource groups and structures that are currently listed or eligible/potentially eligible to be listed on the National Register of Historic Places are detailed below in **Tables FLUE - 6 & 7** and can be seen on **Map FLUE - 9**. The City is currently exploring opportunities to update the Historic District overlay by potentially expanding the district and adding more structures to the contributing list.

Table FLUE - 6: Historic Resource Group

Resource	SHPO Evaluation	Date Listed
Winter Garden Historic Residential District	Eligible for NRHP	8/1/1996
Winter Garden Downtown Historic District	Eligible for NRHP	8/1/1996
Hurley Citrus Irrigation Resource Group	Potentially Eligible for NRHP	N/A
Possum Hollow Historic District	Eligible for NRHP	N/A

Source: Florida State Historic Preservation Office, 2024

Table FLUE - 7: Historic Structures

Structure Name	Address	Year Built	Structure Use	SHPO Evaluation	Date Listed
Roper House	230 N Highland Ave	1926	Private Residence	Eligible for NRHP	N/A
Roper House	220 N Highland Ave	1937	Private Residence	Eligible for NRHP	N/A
Britt House	136 N Highland Ave	1912	Private Residence	Eligible for NRHP	N/A
124 North Highland Avenue	124 N Highland Ave	1920	Private Residence	Eligible for NRHP	N/A
McMillan House	104 N Lake View Ave	1918	Private Residence	Eligible for NRHP	N/A

Structure Name	Address	Year Built	Structure Use	SHPO Evaluation	Date Listed
130 North Lake View Avenue	130 N Lakeview Ave	1921	Private Residence	Eligible for NRHP	N/A
First Methodist Church	125 S Lakeview Ave	1942	Temple (Religious)	Eligible for NRHP	N/A
Black Building	121 W Plant St	1921	Commercial	Eligible for NRHP	N/A
Edgewater Hotel	99 W Plant St	1926	Commercial	Eligible for NRHP	N/A
Acl Railroad Depot	1 N Main St	1920	Commercial	Eligible for NRHP	N/A
Dillard-Boyd Block	12 W Plant St	1912	Commercial	Eligible for NRHP	N/A
24 West Plant Street	24 W Plant St	1916	Commercial	Eligible for NRHP	N/A
32 West Plant Street	32 W Plant St	1915	Commercial	Eligible for NRHP	N/A
36 West Plant Street	36 W Plant St	1912	Commercial	Eligible for NRHP	N/A
100 West Plant Street	100 W Plant St	1915	Bank	Eligible for NRHP	N/A
126 West Plant Street	126 W Plant St	1922	Commercial	Eligible for NRHP	N/A
140 West Plant Street	140 W Plant St S	1920	Commercial	Eligible for NRHP	N/A
146 West Plant Street	146 W Plant St	1920	Commercial	Eligible for NRHP	N/A
160 West Plant Street	160 W Plant St S	1935	Commercial	Eligible for NRHP	N/A
Pounds Motor Company	162 W Plant St	1926	Commercial	Eligible for NRHP	N/A
First Baptist Church	125 E Plant St	1922	House Of Worship	Eligible for NRHP	N/A
Gregory, H. American Legion Post 63	271 W Plant St	1938	Lodge (Club) Building	Eligible for NRHP	N/A
Davis House	446 W Plant St	1915	Private Residence	Eligible for NRHP	N/A
Britt Mansion	1305 E Plant St	1928	Commercial And Residence	Eligible for NRHP	N/A

Structure Name	Address	Year Built	Structure Use	SHPO Evaluation	Date Listed
West Orange Country Club	100 Avalon Road Rd	1920	Community Center (E.G., Recreation Hall)	Eligible for NRHP	N/A
Hurley Citrus Irrigation Pumphouse		1938	Other	Potentially Eligible for NRHP	N/A
Tilden, Luther F Second House	634 Tildenville School Rd	1905	Private Residence	Eligible for NRHP	N/A
150 South Woodland Avenue	150 S Woodland Ave	1925	Commercial	Eligible for NRHP	N/A
Lake View Middle School	1200 W Bay St, Building 1	1927	Education Related	Eligible for NRHP	N/A
Meadow Marsh	940 Tildenville School Rd W	1878	Bed & Breakfast	Eligible for NRHP	11/15/96
Parker Building	28 S Main St	1915	Commercial	Eligible for NRHP	N/A
Tavares & Gulf Railroad Depot	101 S Boyd St	1913	Hall	Eligible for NRHP	N/A
204 North Lakeview Avenue	204 N Lakeview Ave	19250	Private Residence	Eligible for NRHP	N/A
57 North Lakeview Avenue	57 N Lakeview Ave	1957	Commercial	Eligible for NRHP	N/A
830 Klondike Street	830 Klondike St	1949	Community Center (E.G., Recreation Hall)	Eligible for NRHP	N/A

Source: Florida State Historic Preservation Office, 2024

Historic Downtown District

Historic Downtown District Overlay was established in the City's Land Development Code to promote, protect, and preserve historic structures, buildings, and places within Downtown Winter Garden. Downtown Winter Garden is well-known for its quaint, historic charm and is designated on the National Registry of Historic Places. The railroad tracks that once ran through the center of the City have made way for a

linear park and bike trail that breathes life into a revitalized downtown, drawing 1.4 million visitors every year.

Downtown features a vast array of small boutique shops and restaurants, heritage and art museums, and the award-winning Garden Theatre. In addition to complimentary recreational and cultural amenities, the picturesque downtown is embellished with colorful flowers and landscaping, brick-lined streets, and a streetscape that tells a story about a community's history and character.

ACTIVITY CENTERS

The purpose of activity centers is to integrate land uses and multimodal transportation within specific areas to control growth to provide for a complementary mix of uses at densities high enough to support multimodal transportation systems. The activity centers are intended to accommodate land use diversity, to support multi-modal transportation alternatives, reduce vehicle miles traveled by offering mixed land uses, efficient delivery of public services, and to promote revitalization of underutilized property through redevelopment and reinvestment. This will allow the City to maintain its low-density residential character by directing growth to the activity centers.

The activity centers allow the City to encourage compact development, infill and redevelopment at higher intensities, and avoid large single uses of land, encourage walkable and bikeable community design and encourage transit-oriented development. Activity Centers are areas where complementary non-residential and residential uses occur in a medium and higher intensity urban environment. The intent is to promote diversity in land use types, where uses can occur together within the same building or on the same parcel of land. Priority is given to the concentration of business activity, employment, and residential densities capable of successfully supporting pedestrian activity and transit patronage and promoting the reduction of single occupancy vehicle use to reduce trip lengths. Activity centers also function as transportation hubs for car/van pool programs. There are currently five activity centers in Winter Garden they can be seen on **Map FLUE - 10** and descriptions for each Activity Center is provided below.

Traditional Downtown Activity Center

As the name implies the Traditional Downtown Activity is located in the City of Winter Garden's traditional downtown area and covers approximately 191 acres. This area is also within a portion of the City's Community Redevelopment Area, which was designated to help revitalize the City's downtown district. This area also contains the City's Historic Downtown District Overlay, which provides protection for existing historic resources and includes standards for new development intended to preserve the historic character. In this activity center, the City encourages medium intensity

office, commercial, institutional, and residential land uses designed to be compatible with traditional downtown standards of development and design to blend into the existing downtown area.

Crown Point Hi-Tech Activity Center

The Crown Point Hi-Tech Activity Center is located on the east side of the City in the area of Plant Street and West Crown Point Road and covers approximately 292 acres. This activity center includes portions of the Plant Street Character Area Overlay along E Plant Street, which ensures high-quality, walkable, mixed-use development through specific architectural standards and streetscape requirements. The City markets this activity center to draw high-tech, research and development companies, and corporate offices. Other uses may include general office, office showroom, light industrial, manufacturing, and supporting retail. Properties (enclaves) may be included in the activity center as they are annexed into the City. Transit oriented development design is expected to serve pedestrian/trail systems, car/van pool programs, bus transit, or local bus circulator systems.

Story Road Industrial Activity Center

The Story Road Industrial Activity Center is also located on the east side of the City along East Story Road between 9th Street and the Beltway (SR 429). The City promotes concentrations of industrial, manufacturing, wholesale, technical training centers, and office employment. This area currently has access to railroad spurs to move materials and goods. Properties (enclaves) may be included in the activity center as they are annexed into the City.

West State Road 50 Commercial Activity Center

As the name indicates, the West State Road 50 Commercial Activity Center is located along the State Road 50 corridor from the City limits on the west side to the City limits on the east side. This is the largest activity center at approximately 1,175 acres. This activity center includes the area covered by the West State Road 50 Commercial Overlay district that includes design standards. This activity center contains a mixture of office, retail, service, institutional and residential uses. Properties may be included in the activity center as they are annexed into the City, or aggregated by qualifying properties and under a common development program.

Fowler Grove Regional Activity Center

The Fowler Grove Regional Activity Center is located north of SR 429 (the Beltway) at CR 535 and is known as the Winter Garden Village at Fowler Groves and contains a Development of Regional Impact (DRI) with the same name. This activity center provides for a mix of commercial, office, and residential uses with shopping, dining and entertainment uses. Office and residential uses are also allowed and may occur

as separate parcels and buildings from the commercial uses or within mixed use buildings.

COMMUNITY REDEVELOPMENT AREA

Under Florida law (Chapter 163, Part III), local governments can designate areas as Community Redevelopment Areas (CRAs) when certain conditions of blight exist. Examples of conditions that can support the creation of a CRA include, but are not limited to, the presence of substandard or inadequate structures, a shortage of affordable housing, inadequate infrastructure, insufficient roadways and inadequate parking. The CRA is responsible for developing and implementing the Community Redevelopment Plan that addresses the unique needs or blighted conditions of the targeted area. The plan includes the overall goals for redevelopment in the area, as well as identifying the types of projects planned for the area utilizing any redevelopment tools authorized by F.S. Statutes Chapter 163. The plan is currently set to expire on January 1, 2033.

The Winter Garden Community Redevelopment Agency (CRA) is a public agency that was created by the City Commission in June of 1992, in accordance with the provisions of the Florida Statutes detailed above. The CRA boundary encompasses the Downtown Historic District, East Winter Garden and the East Plant Street corridor, terminating near SR 429 and can be seen on **Map FLUE - 11**.

The Winter Garden Community Redevelopment Agency produced the East Winter Garden Plan in 2018, which was most recently updated in 2022. The plan sets policies and identifies specific actions to create a vibrant neighborhood in accordance with the vision defined during multiple public engagement campaigns. After renewal in 2022, the City pledged to dedicate 75% of the CRA revenue going forward to the Historic East Winter Garden Neighborhood to aid the implementation of the East Winter Garden Plan and revitalize the area. The boundary for this plan can be seen on **Map FLUE - 11**.

WEKIVA PARKWAY AND PROTECTION ACT

In June 2004 Governor Jeb Bush signed the Wekiva Parkway and Protection Act into law. The Wekiva Parkway and Protection Act required local governments within the Wekiva Study Area to amend their comprehensive plans to reflect new statutory requirements in the following areas: master stormwater management plans; water supply facilities work plans; interchange land use plans, if the Wekiva Parkway was planned for their jurisdiction; and land use strategies to optimize open space and promote patterns of development that protect most effective recharge areas, karst features and sensitive natural habitats. Local government comprehensive plan

amendments required by this legislation were due in 2006, while implementing land development regulations were due January 1, 2007.

Winter Garden and fourteen other local governments are included in the Wekiva Study Area: Orange County and the municipalities of Maitland, Eatonville, Orlando, Ocoee, Oakland and Apopka; Seminole County and the municipalities of Lake Mary, Longwood, and Altamonte Springs; and Lake County and the municipalities of Eustis, and Mount Dora. A map of the entire Wekiva Study area is shown on **Map FLUE - 12** and the Study Area in relation to Winter Garden can be seen on **Map FLUE - 13**.

Coordination with the St. Johns River Water Management District is required to ensure that any amendments increasing development potential demonstrate the availability of an adequate water supply. Local comprehensive plans within the Wekiva Study Area are required to protect surface and groundwater resources using the best available data including information presented to the Wekiva River Basin Coordinating Committee.

Local governments were required to prepare wastewater facilities plans. Winter Garden elected to partner with Maitland, Eatonville, Orlando, Ocoee, Winter Garden, Oakland, Apopka and Orange County to establish a joint wastewater facilities plan. Representatives from Orange County and each municipality helped to contribute to the overall plan in 2004. Subsequent updates will be handled by the same group.

In 2008, Total Maximum Daily Loads (TMDLs) were established for nitrate and phosphorus in Wekiva Springs at 0.286 milligrams per liter for nitrate and 0.065 milligrams per liter for phosphorus. Major sources of nutrient pollution include turfgrass fertilizer (25%), onsite sewage treatment and disposal systems (OSTDS) (52%), and sports turfgrass fertilizer. To achieve the required nutrient reductions, restoration efforts are needed throughout the Wekiva Study Area. These include implementing nutrient-reducing OSTDS technologies and requiring wastewater treatment facilities (WWTFs) to meet advanced wastewater treatment standards.

The City of Winter Garden has been assigned a nitrogen reduction target of 14,708 pounds per year by 2038. The City has identified projects aimed at reducing nitrogen sources. **Table 8** below outlines the projects within the City of Winter Garden, their current status, and the estimated nitrogen reductions achieved. These projects along with additional drainage regulations will hopefully achieve the reduction needed by the City to meet the target reduction load.

Table FLUE - 8: Winter Garden Projects to Reduce Nitrogen Sources

Project	Project Descriptions	Status	TN Reduction (lbs/yr)
Tucker Ranch	Convert Agricultural Land to park	Completed	0
Crest Ave WWTF Capacity Expansion & Process Optimization	Modify WWTF to increase treatment capacity and meet more stringent effluent requirements	Underway	TBD
Dillard Street Pond Expansion	Modify pond to treat previously untreated runoff	Completed	41
Plant St. Segment 1	New stormwater treatment in right of way	Completed	38
Street Sweeping	Weekly street sweeps	Ongoing	202
State Road 50 Utility Relocation	Replace city utilities	Completed	TBD
Stormwater Capture and Reuse and Recharge	Treat 2 canals prior to discharge into Lake Apopka	Completed	TBD
Education and Ordinances	Ordinances for fertilizer, pet waste, landscape, and irrigation. Public Outreach including website and brochures	Ongoing	980

Source: Wekiwa Spring and Rock Springs Basin Management Action Plan, 2025

PUBLIC FACILITIES AND SERVICES

The relationship between land use and public facilities and services is closely intertwined. The existing capacity and projected demand for public facilities and services provided by the City are detailed within other elements of this plan: the Transportation Element discusses roadways and non-motorized paths; the Infrastructure Element details water, sewer, solid waste, and drainage services; and the Recreation and Open Space Element describes parks and recreation facilities. The Intergovernmental Coordination Element identifies partnerships with other jurisdictions regarding public facilities and services.

CARRYING CAPACITY ANALYSIS

Projected Population

For comprehensive planning purposes, Chapter 163 of the Florida Statutes mandates that local governments prepare population projections for both permanent and seasonal residents to estimate the land, housing, and services needed to support current and future populations. In Florida, the Bureau of Economic and Business Research (BEBR) is the accepted source for population projections; however, it does not account for seasonal population growth. To address this, the following methodology was used to develop population projections for the City of Winter Garden:

1. Evaluate historic population trends.
2. Identify the latest population projections for Orange County provided by BEBR for the 2050 planning horizon based on an average of BEBR's medium and high population projections.
3. Determine the City of Winter Garden's estimated proportional declining share (3.4% - 3.0%) of Orange County's overall projected population.
4. Estimate the City's projected seasonal population share (2.2%).
5. Apply the City's estimated population share and seasonal growth to BEBR's Countywide population projection models through the 2050 planning horizon.

Table FLUE - 9: Population Projections

	2025 (3.4%)	2030 (3.32%)	2035 (3.24%)	2040 (3.14%)	2045 (3.08%)	2050 (3.0%)
Permanent Population	54,290	58,010	60,781	62,664	63,921	64,824
Seasonal Population	1,241	1,326	1,389	1,432	1,461	1,482
Total Population	55,531	59,336	62,170	64,097	65,382	66,306
Net Gain from Estimated 2024 Population (52,672)	+2,859	+6,664	+9,498	+11,425	+12,710	+13,634

Sources: American Community Survey 2018-2022; BEBR, 2024

Based on the population projections, the City of Winter Garden may see an additional 13,634 permanent and seasonal residents by the year 2050 for a total population of 66,306. In order to accommodate this population, the City will need an additional 3,918 housing units (assuming 3.48 persons per household) by the 2050 planning horizon.

Future Land Use Map

There are currently a total of 15 future land use (FLU) categories in the Winter Garden Future Land Use Element. The City is adding two new future land use categories based on the recommendation of the East Winter Garden Plan. These two new future land use categories are Neighborhood Residential and Neighborhood Mixed-Use. **Map FLUE – 14** is the City's future land use map and **Table FLUE-10** provides details on the acreage of the FLU categories, their density, intensity, and each category's corresponding zoning classifications.

Table FLUE - 10: Future Land Use Categories

Future Land Use Category	Acres	Percent	Density (DU / Acre)	Intensity (FAR)	Zoning Classifications
Suburban Residential	1,171.9	10.8%	4	0	PUD, R-1A, R-1, and INT
Low Density Residential	5,645.1	51.9%	2 to 6*	0	PUD, R-1A, R-1, R-2, R-1B, and INT.
Medium Density Residential	491.2	4.5%	3 to 10	0	PUD, R-2, R-3, and INT.
Medium / High Density Residential	0.0	0.0%	13	0	PUD and INT
Urban Village	840.0	7.7%	4	0.3	Urban Village PUD and INT.
Residential Neighborhood Commercial	60.7	0.6%	6	0.35	RNC and INT.
Downtown Transitional	18.5	0.2%	10	0.35	RNC, PUD, PCD, C-1, C-2, CAPUD, C-3, and INT.
Multi Use Development	253.2	2.3%	8*	0.5**	R-3, RNC-2, C-2, C-3, C-4, I-1, PCD, PUD, CAPUD, and INT.
Traditional Downtown	67.7	0.6%	25*	0.75**	PUD, PCD, R-NC, RNC-2, C-1, C-2, C-3, C-4, and INT.
South Beltway Center	178.8	1.6%	-	0.4**	PCD and INT.

Future Land Use Category	Acres	Percent	Density (DU / Acre)	Intensity (FAR)	Zoning Classifications
Commercial	761.3	7.0%	8*	0.35**	C-1, C-2, C-3, C-4, PCD, CAPUD, and INT.
Mutli Office Industrial	248.8	2.3%	0	0.35**	C-2, C-3, C-4, I-1, I-2, PID, PUD, and INT.
Industrial	243.5	2.2%	0	0.35**	I-1, I-2, Industrial PUD, CAPUD, and INT.
Institutional	442.8	4.1%	0	0.35	Institutional Parks and Recreation.
Conservation	284.1	2.6%	0	0.2	CON and INT.
See Orange County Future Land Use Map	56.8	0.5%	-	-	-
New Future Land Uses					
Neighborhood Residential	100.7	0.9%	2 to 6 *		PUD, R-NC, R-2, R-4, and R-5.
Neighborhood Mixed Use	22.8	0.2%	10*	0.75**	RNC-2, R-NC, C-3, C-4, PCD, PUD, and CAPUD.
Total	**10,886.3**	**100.0%**	-	-	-

*Higher densities may be achieved as detailed in policies of the Comprehensive Plan but are not guaranteed.
**Higher intensities may be achieved as detailed in policies of the Comprehensive Plan but are not guaranteed.

Source: City of Winter Garden, 2025

Carrying Capacity

A carrying capacity analysis was conducted to determine the number of dwelling units and population that Winter Garden's future land use map could support. The carrying capacity analysis for Winter Garden is summarized below and in **Table FLUE - 11**.

1. Determine the total acreage of each future land use category.
2. Determine the acreage of undeveloped land for each future land use category. Undeveloped land is the land identified as vacant or agricultural in the existing land use map (**Map FLUE – 3**).

3. Determine and remove the acreage of undeveloped wetlands for each future land use category. This is because these areas are not likely to develop because of regulations related to wetlands from the St. Johns River Water management District and policies in the City's Land Development Code and Comprehensive Plan.
4. The non-wetland undeveloped land is then assumed to be developed at the maximum standard density of its underlying future land use category (Identified in **Table FLUE – 10**) with a 75% development factor. The 75% development factor reflects the fact that lands are rarely built to their maximum densities due to other land development regulations and market factors.
5. The carrying capacity for each future land use category is then aggregated and multiplied by the persons per household for Winter Garden (3.48).

Table FLUE - 11: Carrying Capacity Analysis

Future Land Use	Acres	Undev. Acres	Undev. Wetlands	Density	Percent Res.	Dev. Factor	Carrying Capacity
Suburban Residential	1,171.9	109.0	47.8	4	100%	0.75	184
Low Density Residential	5,645.1	449.4	270.8	6	100%	0.75	804
Neighborhood Residential	100.7	16.7	7.7	6	100%	0.75	41
Medium Density Residential	491.2	56.3	26.9	10	100%	0.75	220
Urban Village	840.0	409.7	2.4	4	80%	0.75	977
Residential Neighborhood Commercial	60.7	5.2	0.5	6	80%	0.75	17
Neighborhood Mixed-Use	22.8	8.2	0.1	10	50%	0.75	30
Downtown Transitional	18.5	-	-	10	35%	0.75	-
Multi Use Development	253.2	133.3	44.9	8	50%	0.75	265
Traditional Downtown	67.7	2.6	-	25	50%	0.75	25
South Beltway Center	178.8	22.9	17.3		30%	0.75	-
Commercial	761.3	216.9	25.2	8	50%	0	575
Multi Office Industrial	248.8	62.8	1.8	0	0%	0	0
Industrial	243.5	54.0	18.6	0	0%	0	0
Institutional	442.8	36.9	30.0	0	0%	0	0

Future Land Use	Acres	Undev. Acres	Undev. Wetlands	Density	Percent Res.	Dev. Factor	Carrying Capacity
Conservation	284.1	75.5	74.8	0	0%	0	0
See Orange County FLU Map	56.8	48.7	15.9	0	0%	0	0
Total	**10,886.3**	**1,708.1**	**584.7**	**NA**	**NA**	**0.75**	**3,138**
Carrying Capacity (Population)							**11,234**
Projected Population Increase by 2050							**13,634**
Surplus/Deficit (Population)							**-2,400**
Surplus / Deficit (Dwelling Units)							**-780**

Source: BEBR, 2024; Orange County Property Appraiser, 2025; City of Winter Garden, 2025

The City of Winter Garden's future land use map can support an additional 11,234 people or 3,138 dwelling units. The population for Winter Garden is projected to increase by 13,634 people by the year 2050. This means the City will have a deficit of 780 dwelling units. As such, the City will need to modify its future land use map to accommodate the projected population growth. The City can reclassify areas' future land use category to a designation that allows higher density, increase the density of some future land use categories, or plan to annex unincorporated property adjacent to the City's boundary.

FUTURE CONSIDERATIONS

The growth within the City over the next 25 years was among the most frequently discussed topics during the public engagement process. The popularity of Plant Street and the Downtown has made the City an attractive destination for new residents. As the Comprehensive Plan is updated, it should incorporate the key themes identified through public input and strive to balance measured growth with the preservation of the City's unique character and charm.

- **New Future Land Use Categories:** The City is adding two new future land use categories that are consistent with the City's East Winter Garden Plan to increase the stock of affordable housing and improve resident's ability to use alternative modes of transportation. These two new future land use categories are Neighborhood Residential and Neighborhood Mixed Use and their locations can be seen on **Map FLUE – 14**.
- **New Activity Centers.** The City is adding two new future activity centers, one corresponding with the Historic East Winter Garden Neighborhood and another along Dillard Street. The East Winter Garden Neighborhood also includes the southeastern portion of the City's CRA. The purpose of this activity center is to ensure that the existing neighborhood character is preserved. The Dillard Street activity center will ensure that new development

along Dillard Street will be pedestrian oriented and compatible with the downtown.

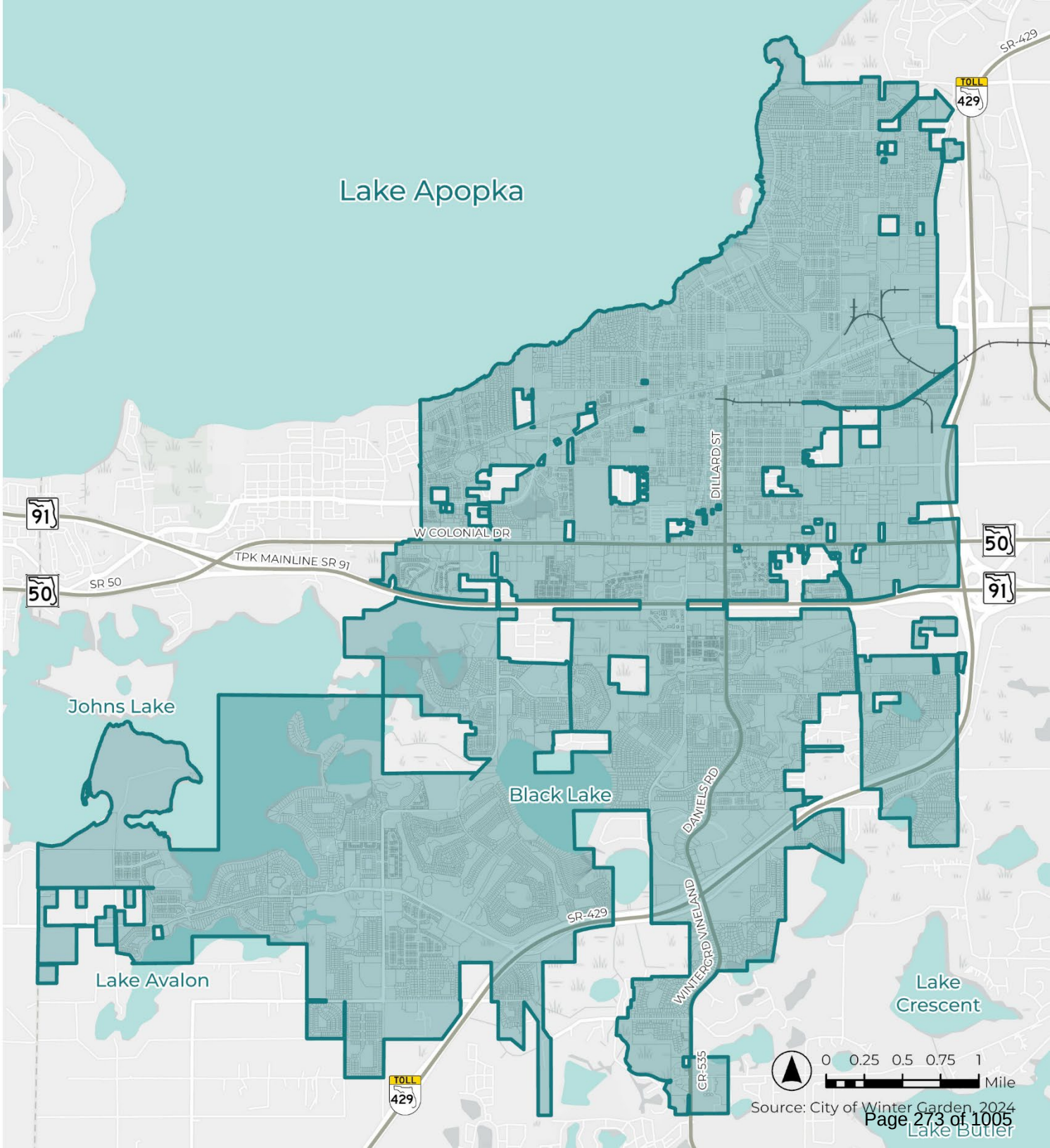
- **Projected Growth:** Results of the carrying capacity reveal that the City will be short 780 residential dwelling units. The City's future growth will depend on the type and location of future growth. The vacant area within the City is limited in capacity and cannot support the additional 1,000 units needed to accommodate the projected population by 2050. The City has identified multiple potential strategies they could pursue to address this shortfall, including annexation, increasing densities, and/or changing future land use designations.
    - **Annexation:** The City currently has a Joint Planning Agreement (JPA) with Orange County, see **Map ICE – 1**. In 2019, the City and County amended the JPA to address and eliminate the existing enclaves. The City should prioritize eliminating the enclaves to assist in alleviating some of the projected 2050 housing units deficit.
- **Future Land Use Categories.** The majority of the City is currently within a residential future land use category and most of these residential future land use categories promote a suburban development pattern. With growth continuing within the City, the development pattern should be addressed to incorporate higher densities and intensities to provide a more meaningful housing spectrum from single family detached to missing middle (duplexes, townhomes, triplexes, apartment house, etc.) opportunities and higher density multifamily housing products.
- **Historic Resources:** Winter Garden has a long rich history of cultivating and processing citrus, which adds to the charm and character that has attracted many residents and visitors. Currently, the City has two resource groups and 78 structures that are currently eligible or potentially eligible to be listed on the National Register of Historic Places. The City should explore options to protect these historic buildings and resources and should consider coordinating with the State Historic Preservation Office to have these historic resources listed. To enhance historic preservation efforts, the City could also consider establishing a local registry and expanding the existing Historic District Overlay.
- **Diversifying the Housing Stock:** Currently, the City allows accessory dwelling units in two zoning districts (R-2 and R-NC), if the lot meets specific dimensional requirements. Adding language to increase the allowable accessory dwelling units where appropriate might alleviate the housing units shortage and help in providing more units at affordable rental rates.

CITY BOUNDARY

MAP FLUE - 1

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel



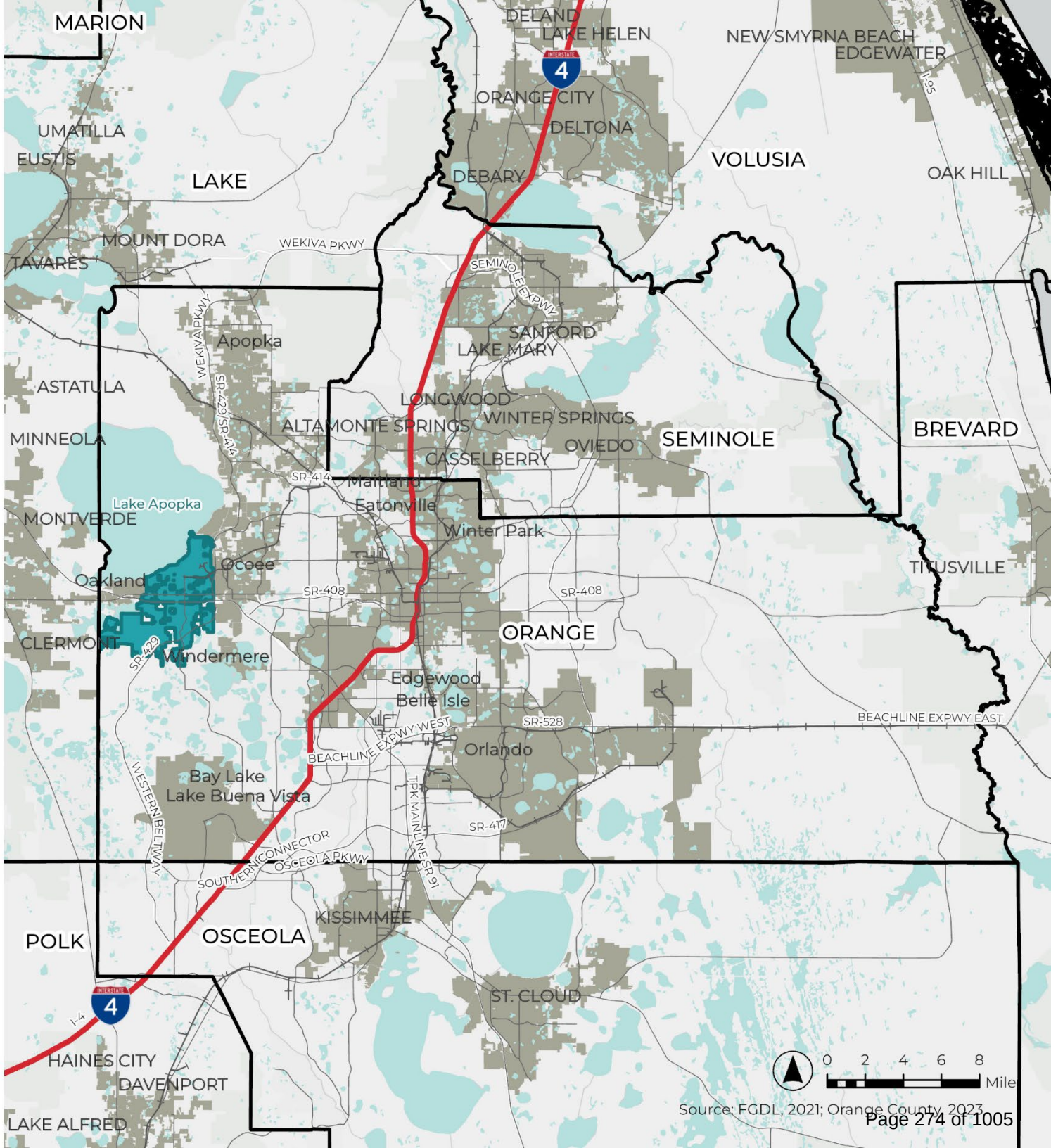
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

REGIONAL CONTEXT

MAP FLUE - 2

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- County
- Other Municipality



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

EXISTING LAND USE

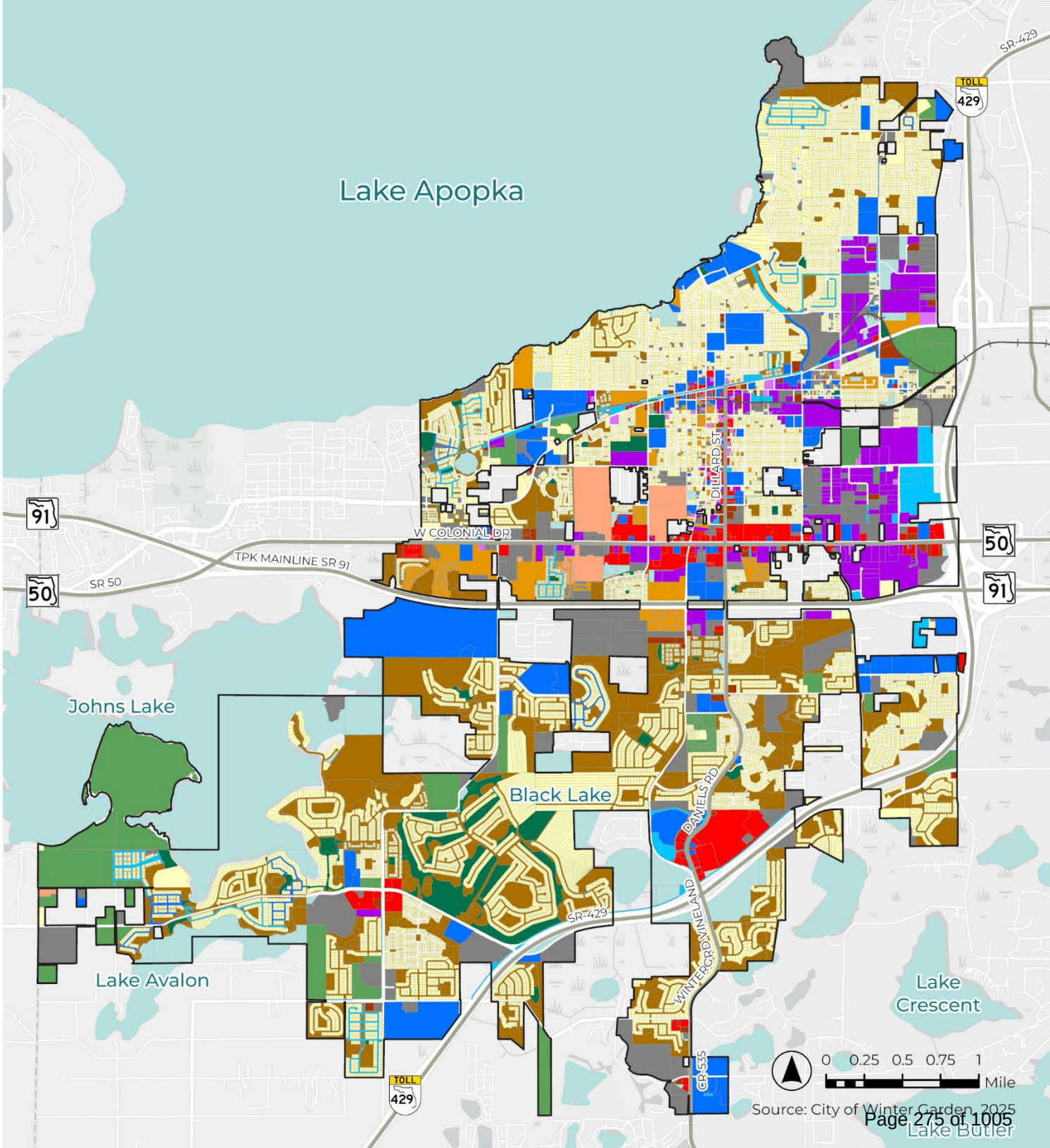
MAP FLUE - 3

Legend

- City of Winter Garden
- Major Roadway
- Railroad
- Parcel

Existing Land Use

- Agriculture
- Single Family Residential
- Multi- Family Residential
- Manufactured Housing
- Residential Common Area
- Mixed Use
- Commercial
- Office
- Industrial
- Institutional
- Recreation and Open Space
- Infrastructure
- Vacant
- Water



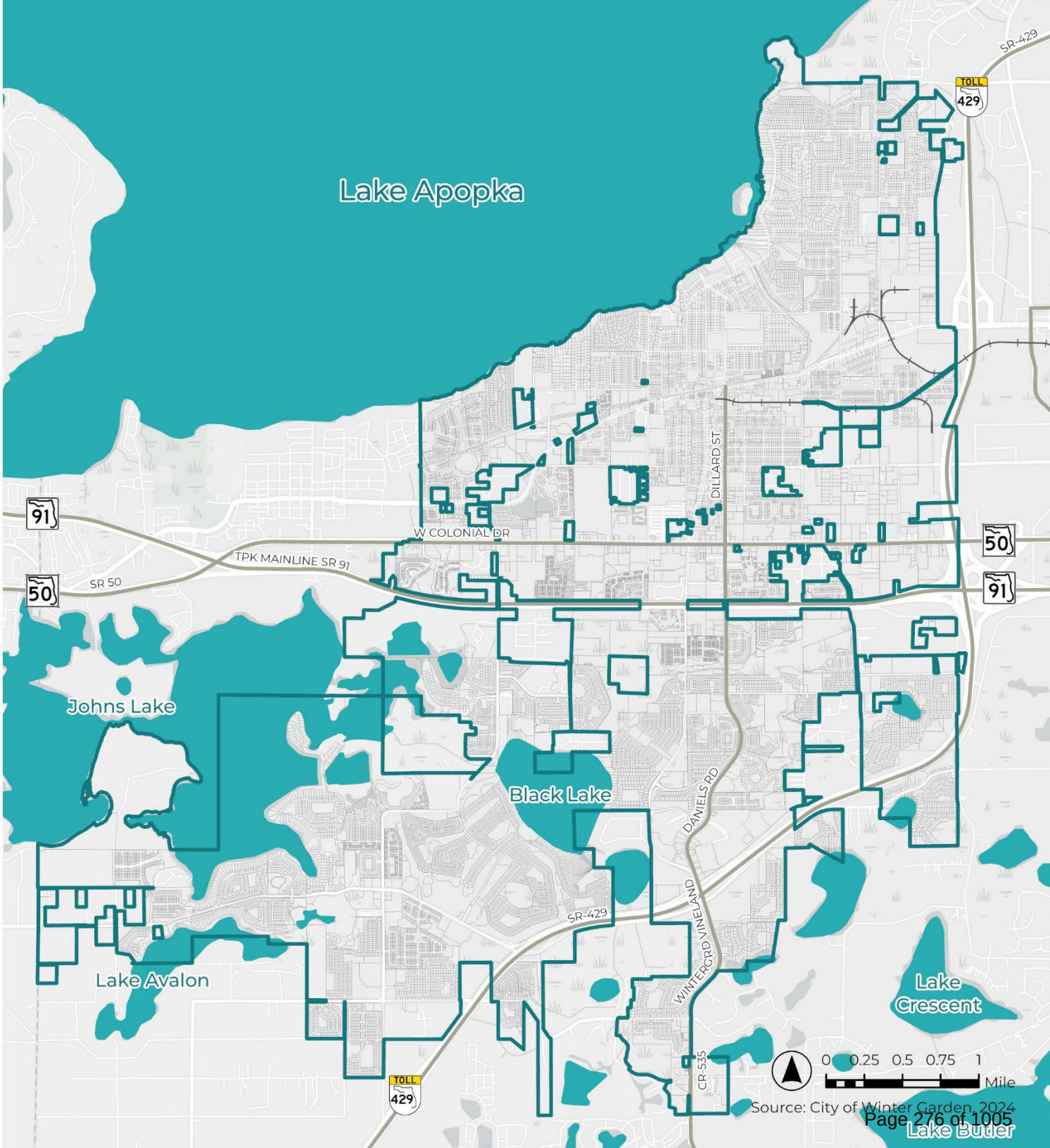
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WATERBODIES

MAP FLUE - 4

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WETLAND INVENTORY

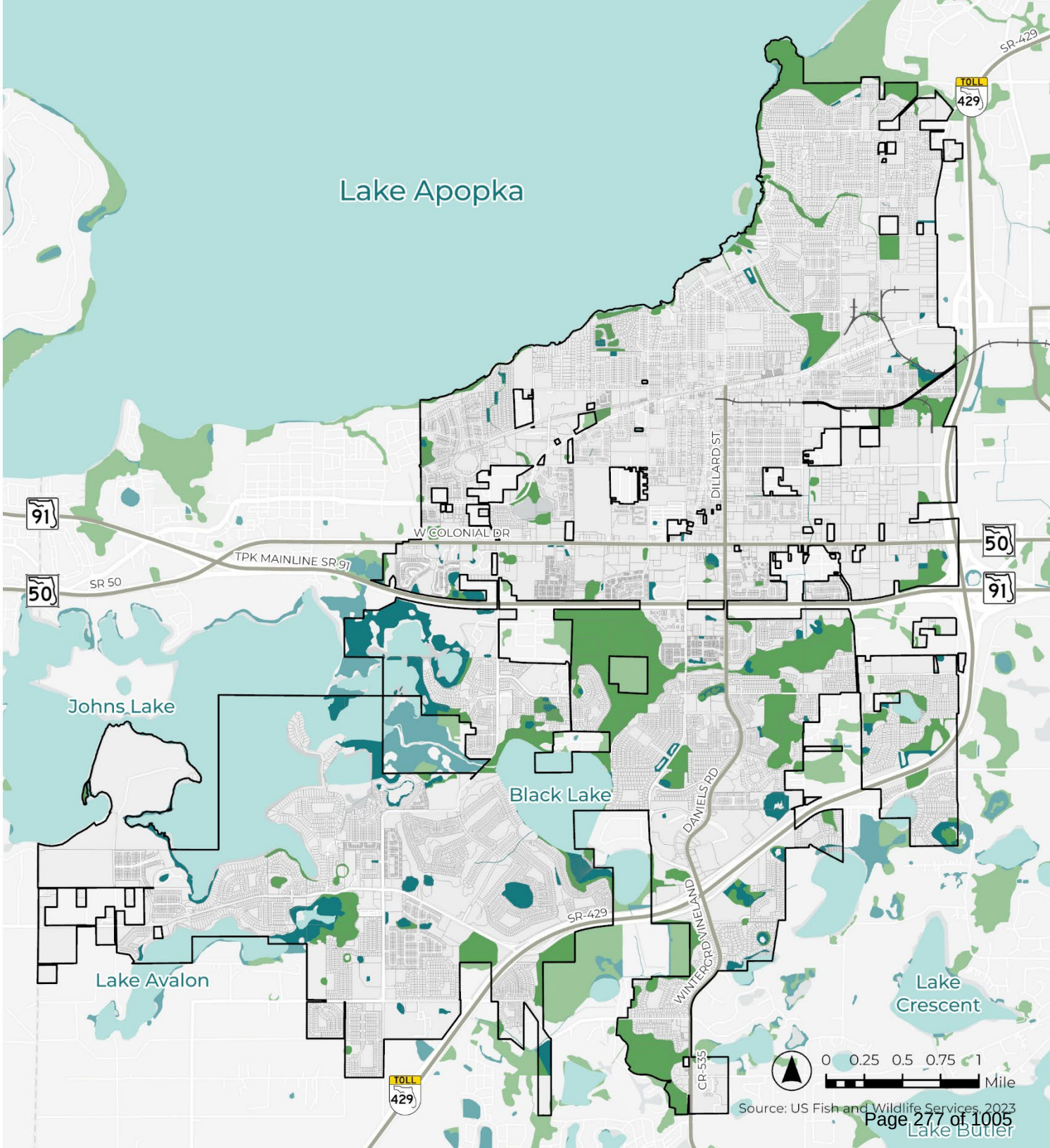
MAP FLUE - 5

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Wetland Type

- Freshwater Emergent Wetland
- Freshwater Forested / Shrub Wetland



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

FLOODPLAIN INVENTORY

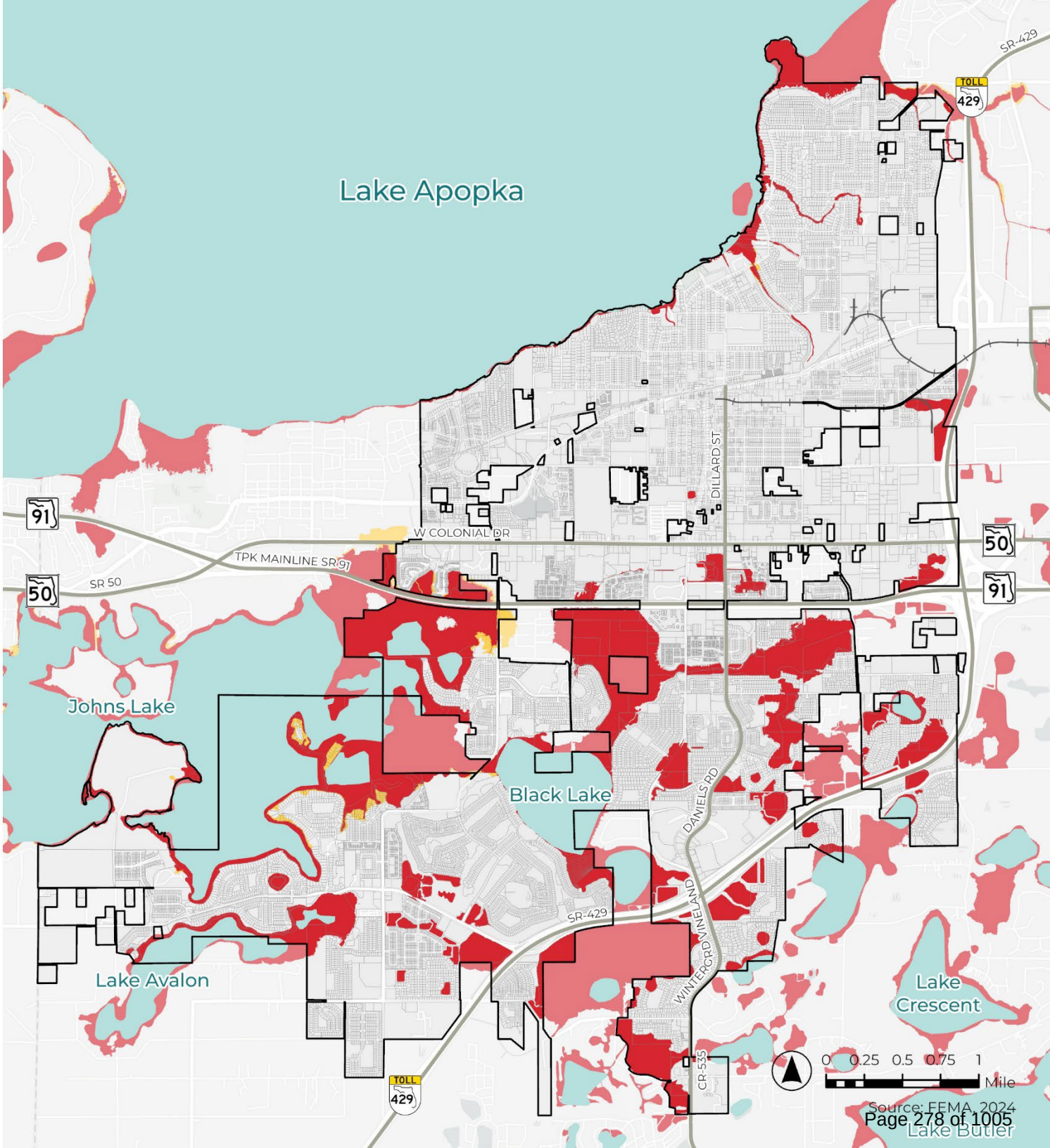
MAP FLUE - 6

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Floodplain

- 100 - Year Floodplain
- 500 - Year Floodplain



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

SOIL PERMEABILITY

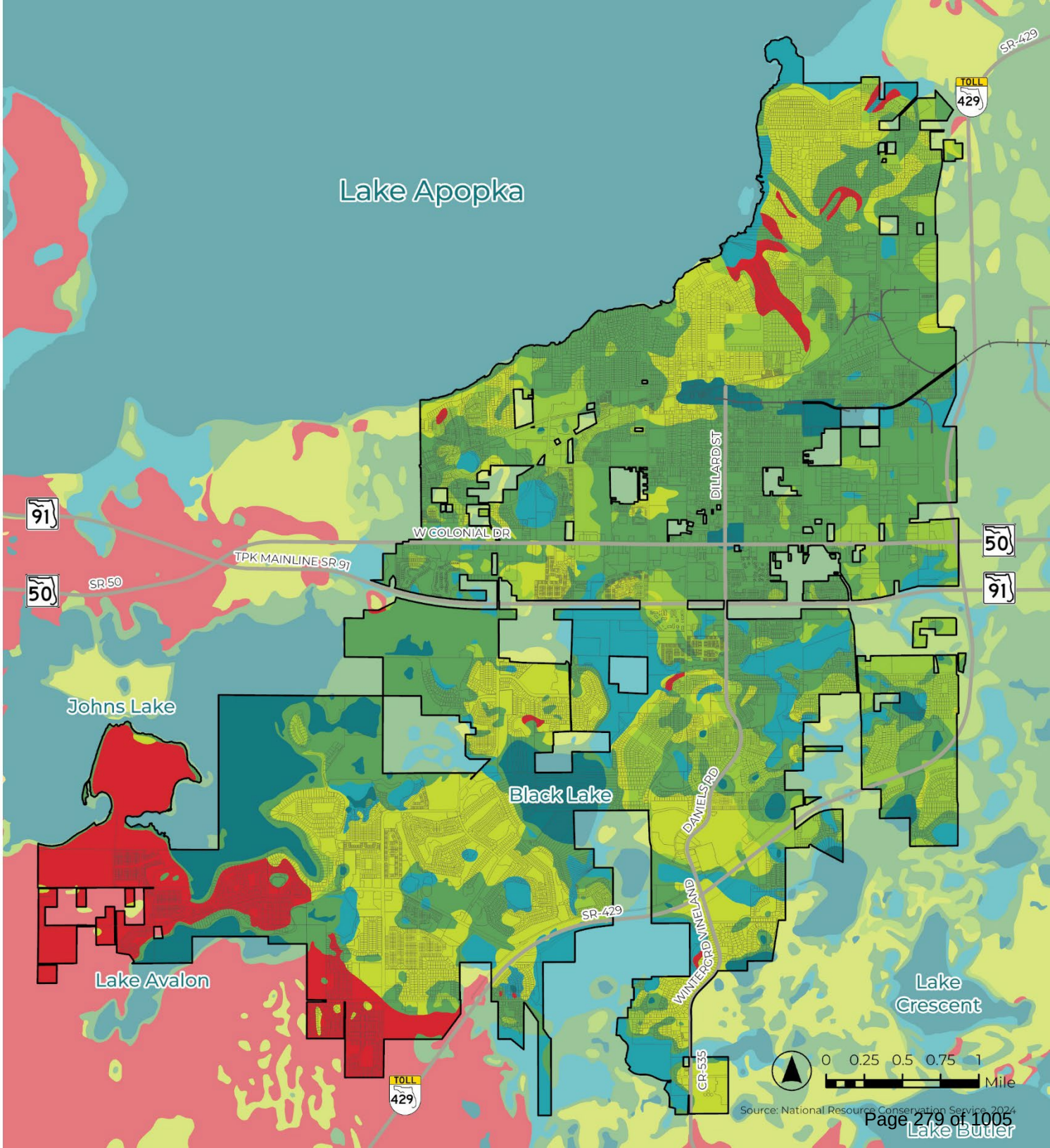
MAP FLUE - 7

Legend

- City of Winter Garden
- Major Roadway
- Railroad
- Parcel

Soil Permeability

- Excessively Drained
- Somewhat Excessively Drained
- Well Drained
- Moderately Well Drained
- Somewhat Poorly Drained
- Poorly Drained
- Very Poorly Drained
- Water



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

AQUIFER RECHARGE

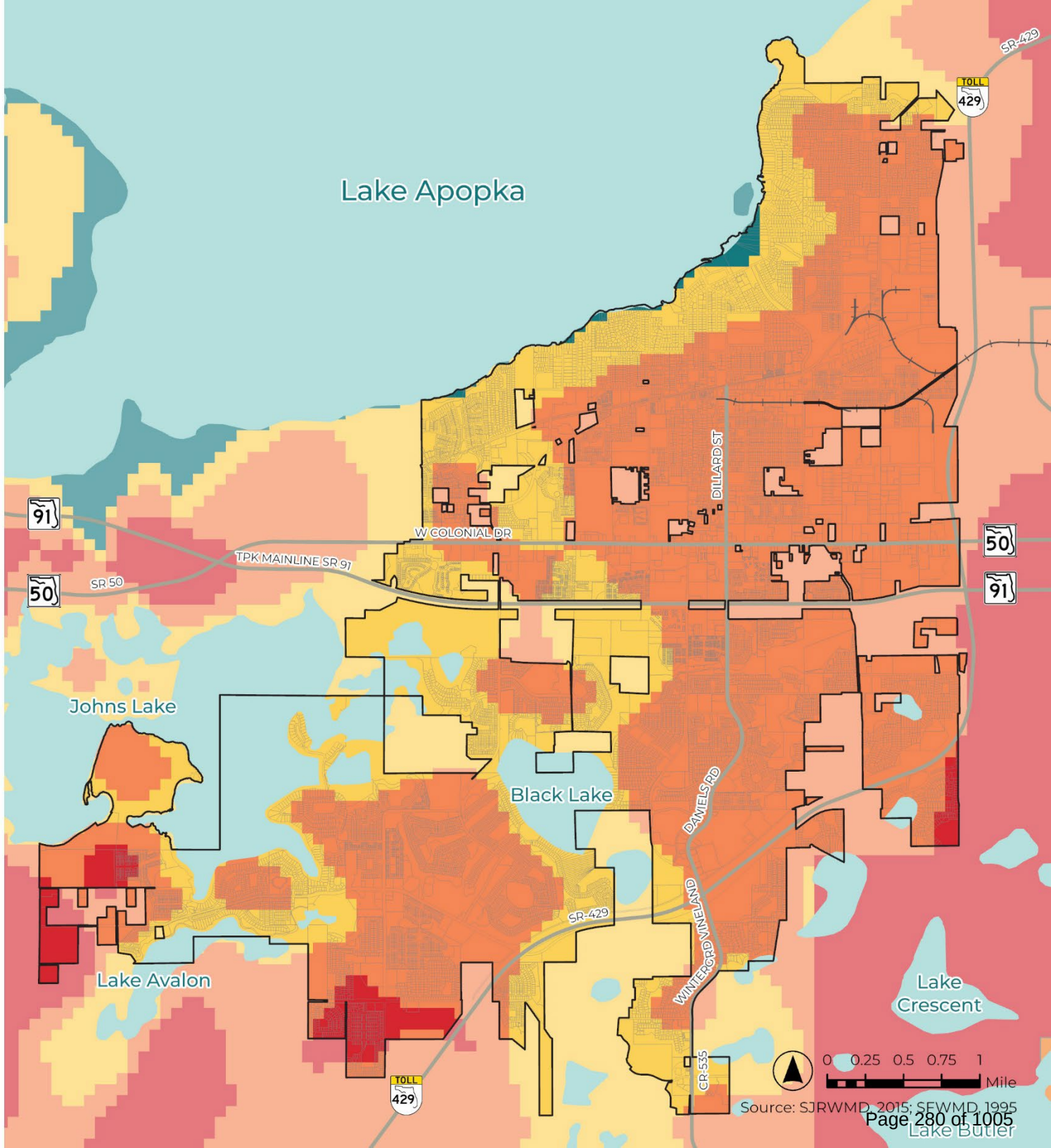
MAP FLUE - 8

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Aquifer Recharge Area

- Low
- Medium
- High
- Discharge



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

NATIONAL REGISTER OF HISTORIC PLACES

MAP FLUE - 9

Legend

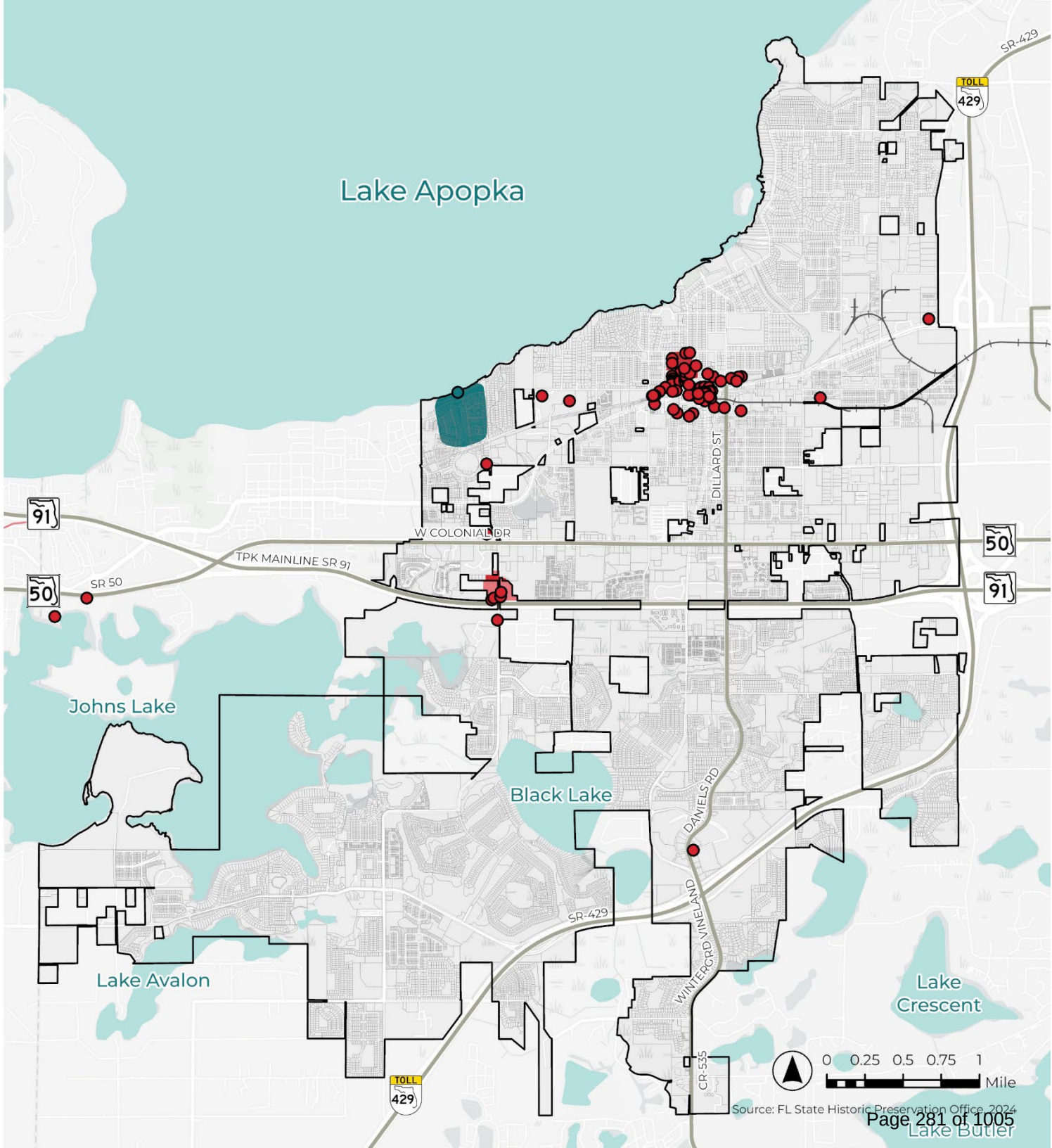
- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Resource Group

- Eligible
- Potentially Eligible

Structure

- Eligible
- Potentially Eligible



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

ACTIVITY CENTERS

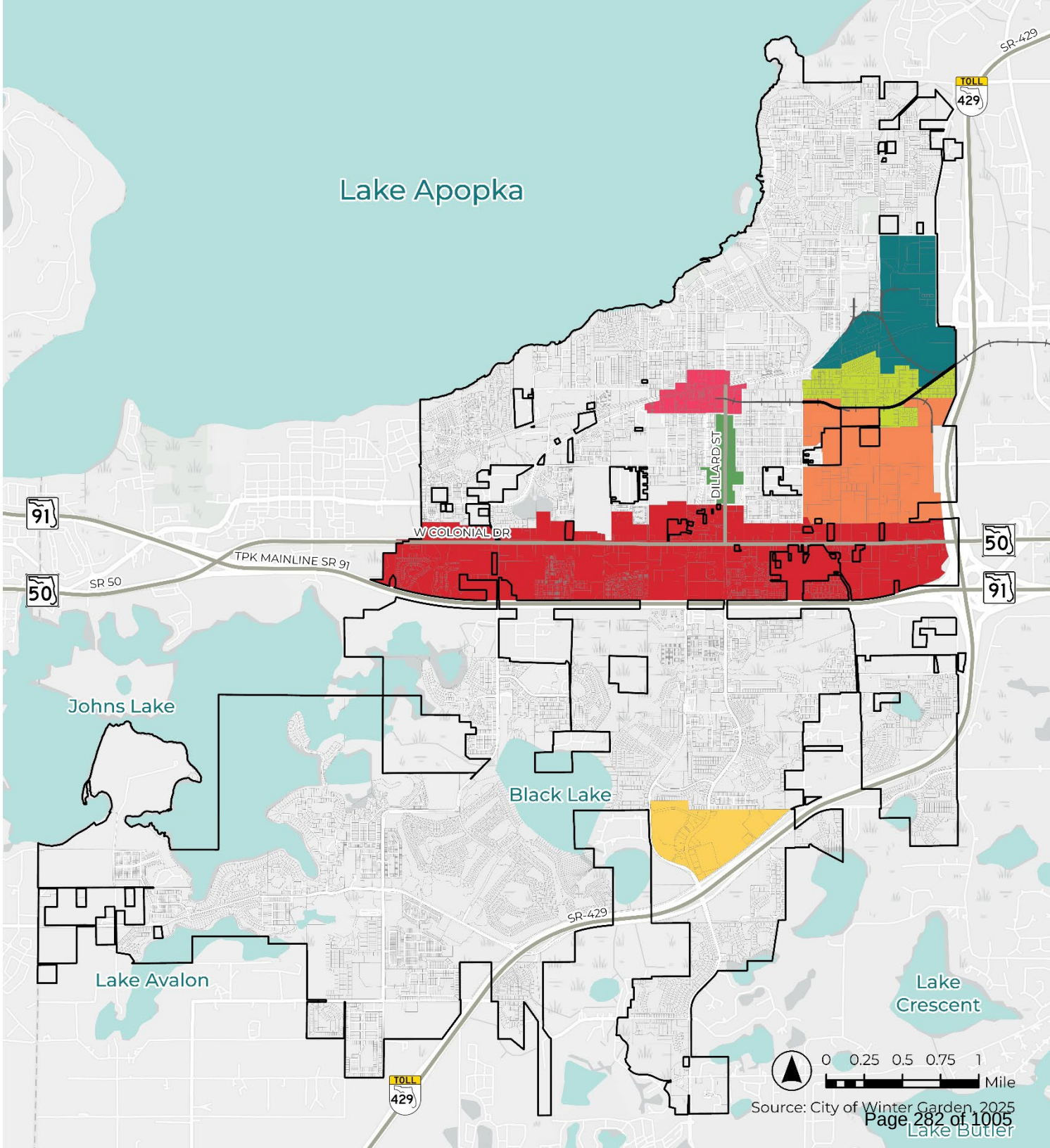
MAP FLUE - 10

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Activity Center

- Crown Point Hi-Tech
- Dillard Street
- Historic East Winter Garden Neighborhood
- Fowler Grove Regional Retail
- Story Road Industrial
- Traditional Downtown
- West State Road 50 Commercial



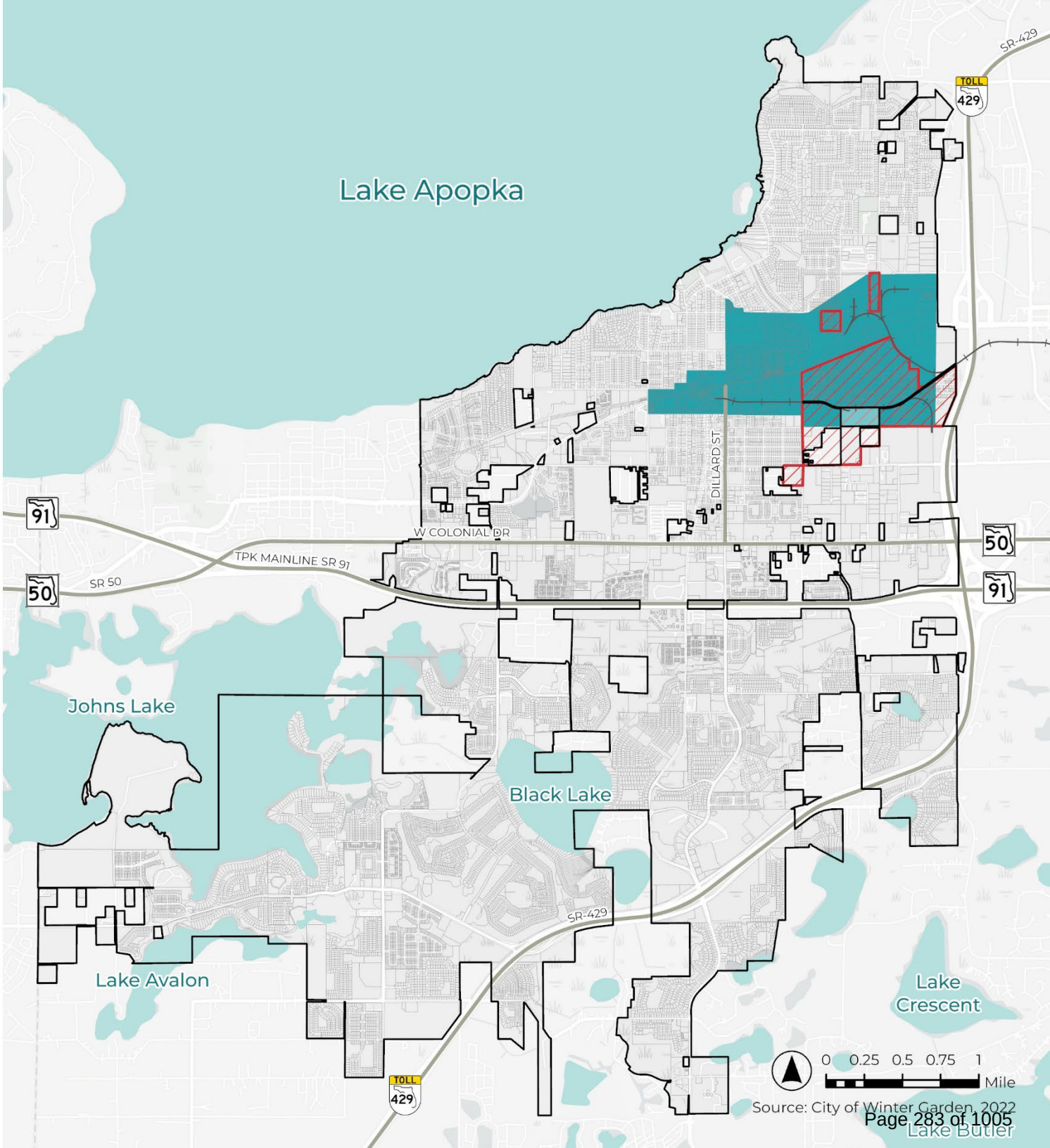
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

COMMUNITY REDEVELOPMENT AREA

MAP FLUE - 11

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Community Redevelopment Area
- East Winter Garden Community



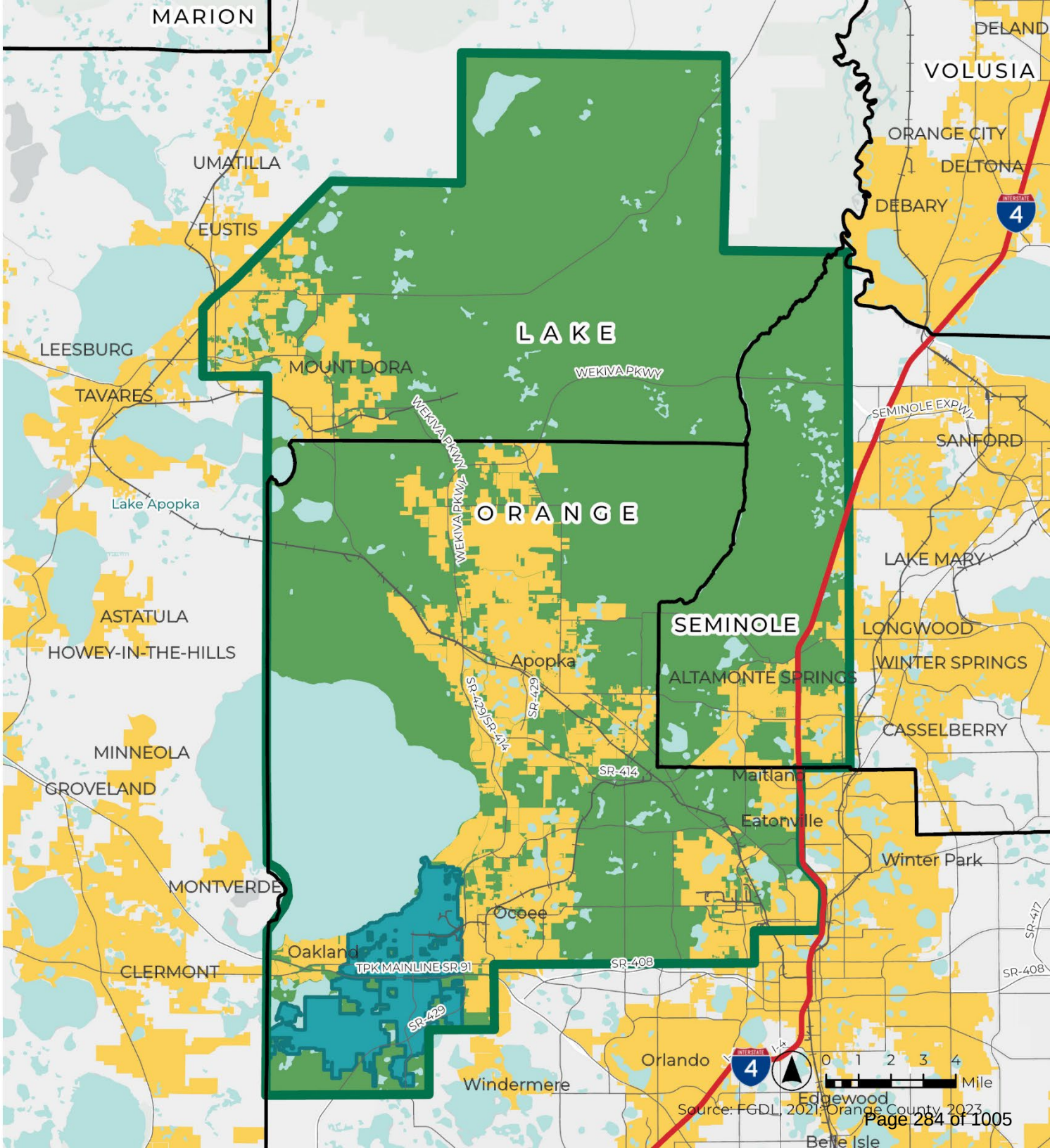
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WEKIVA STUDY AREA

MAP FLUE - 12

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- County
- Other Municipality
- Wekiva Study Area



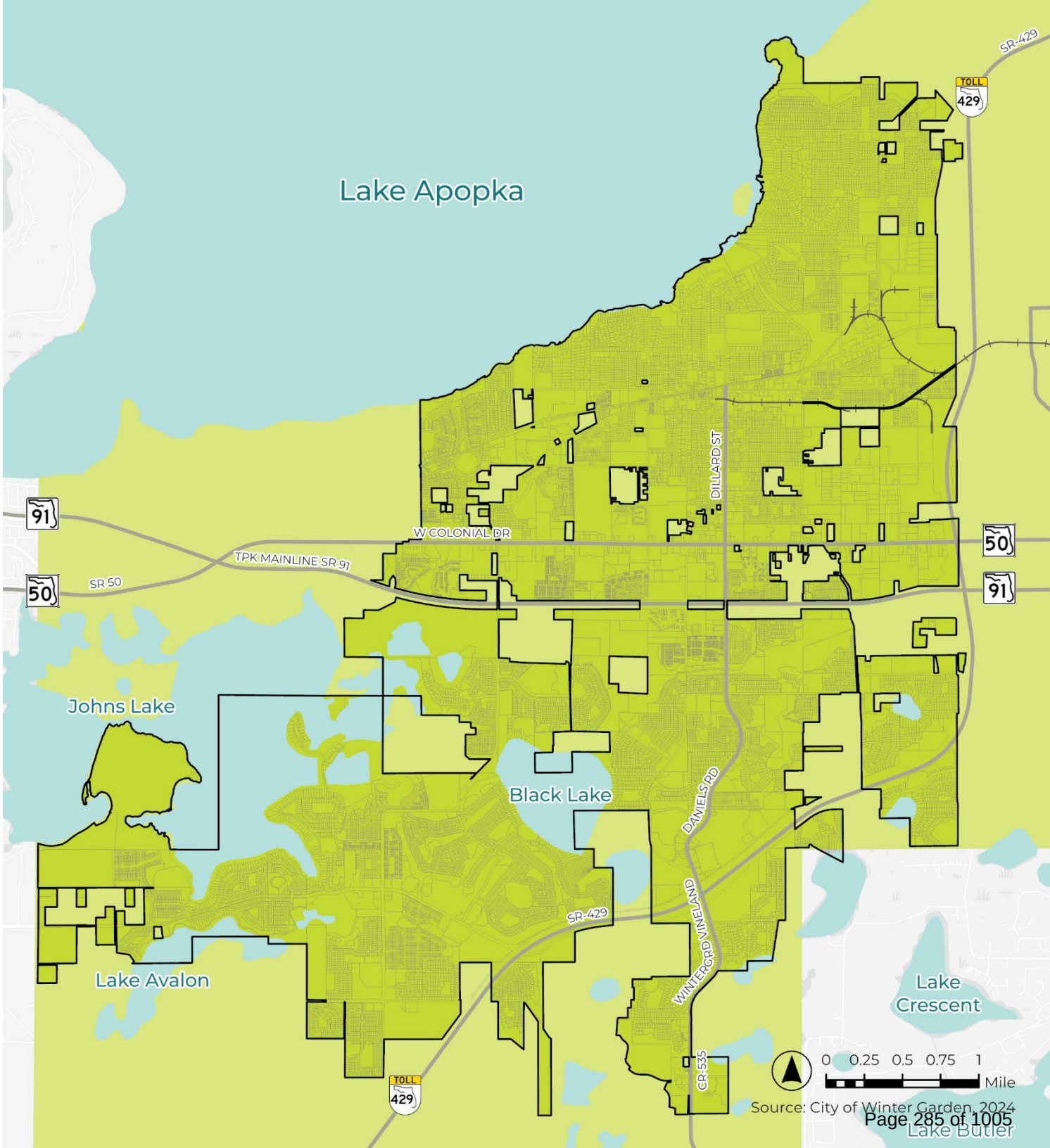
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WEKIVA STUDY AREA

MAP FLUE - 13

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Wekiva Study Area



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

2050 FUTURE LAND USE MAP

MAP FLUE - 14

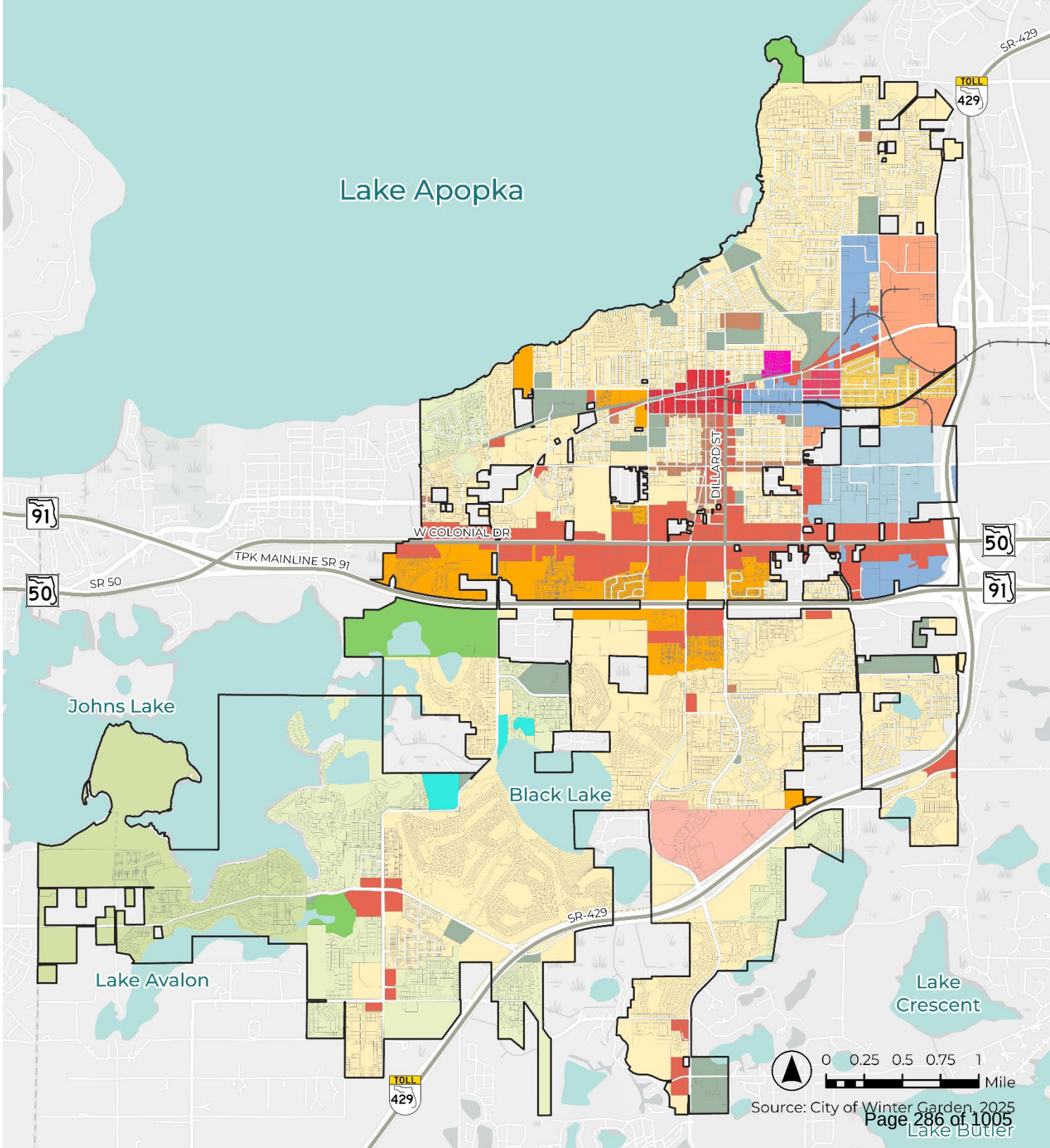
Legend

- City of Winter Garden / Transportation Concurrency Exception Area
- Waterbody
- Major Roadway
- Railroad
- Parcel

Future Land Use

- SUB - Suburban Residential
- LR - Low Density Residential
- NR - Neighborhood Residential
- MR - Medium Density Residential
- VIL - Urban Village
- NC - Residential Neighborhood Commercial
- DT - Downtown Transitional
- MUD - Multi Use Development
- NMU - Neighborhood Mixed-Use
- TD - Traditional Downtown
- BC - South Beltway Center
- MOI - Multi Office Industrial
- I - Industrial
- INT - Institutional
- COM - Commercial
- CON - Conservation
- OC - See Orange County FLUM

COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities





2

DATA & ANALYSIS

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

MULTIMODAL TRANSPORTATION

Table of Contents

INTRODUCTION 4
INVENTORY AND ANALYSIS 4
Roadway Network 4
Strategic Intermodal Facilities 5
Maintenance Responsibility 5
Functional Classification 5
Context Classification 6
Posted Speed Limits 7
Roadway Level of Service Analysis 7
Complete Streets 8
Railroads 8
Pedestrian and Bicycle Facilities 8
Sidewalks 8
Multi-Use Trails and Paths 8
Public Transportation 10
Fixed Route Bus 10
Paratransit 11
NeighborLink 11
Planned Roadway Improvements 11
TRANSPORTATION CONCURRENCY EXCEPTION AREA 13
TRANSPORTATION PLAN 16
VISION ZERO SAFETY ACTION PLAN 16
FUTURE CONSIDERATIONS 16
APPENDIX A: LEVEL OF SERVICE ANALYSIS 37
Adopted Level of Service 37
Current and Projected Level of Service 39

List of Tables

Table MTE - 1: Functional Classification Descriptions 6
Table MTE - 2: Context Classification Descriptions 7
Table MTE - 3: Existing Trails and Paths 9
Table MTE - 4: Future Trails and Paths 10
Table MTE - 5: ACCESSLYNX Eligibility Criteria and Service Area 11
Table MTE – 6: Cost Feasible 12
Table MTE – 7: Unfunded Needs 12
Table MTE – 8: TCEA Performance Standards 14
Table MTE – 9: Mobility Strategies 14
Table MTE - 10: Level of Service Descriptions 37
Table MTE – 11: Adopted Level of Service 38
Table MTE - 12 Current and Projected Level of Service 40

List of Maps

Map MTE – 1: Roadway Network 18
Map MTE – 2: Strategic Intermodal System 19
Map MTE – 3: Roadway Maintenance Responsibility 20
Map MTE – 4: Functional Classification 21
Map MTE – 5: Context Classification 22
Map MTE – 6: Maximum Speed Limit 23
Map MTE – 7: Adopted Level of Service 24
Map MTE – 8: Current Level of Service 25
Map MTE – 9: 2035 Level of Service 26
Map MTE – 10: 2045 Level of Service 27
Map MTE – 11: 2050 Level of Service 28
Map MTE – 12: Railroad Facilities 29
Map MTE – 13: Sidewalks 30
Map MTE – 14: Trails and Paths 31
Map MTE – 15: Transit 32
Map MTE – 16: ACCESS LYNX Transportation Disadvantaged 33
Map MTE – 17: NeighborLink Service Boundary 34
Map MTE – 18: Cost Feasible Improvements 35
Map MTE – 19: Unfunded Needs Improvements 36

INTRODUCTION

Transportation is a key factor in shaping how residents of Winter Garden live, work, and connect within their community. A safe, efficient, and well-connected transportation system supports economic development, enhances regional mobility, and ensures convenient access to critical community destinations such as schools, healthcare facilities, parks, and recreational areas. As the City continues to grow, a robust transportation network remains essential to maintaining a high quality of life for all residents.

The Data & Analysis section of this element provides a comprehensive overview of Winter Garden's current multimodal transportation network, including roadways, railroads, public transit, bicycle and pedestrian infrastructure, and ongoing transportation improvements. It also evaluates regional and local transportation planning initiatives that influence mobility within the City. This section concludes with recommended updates to the Multimodal Transportation Element goals, objectives, and policies, informed by technical findings and feedback from the community visioning process, to ensure the City's transportation system continues to meet evolving needs through the 2050 planning horizon.

Winter Garden has embraced a multimodal approach to transportation planning that prioritizes livability, safety, and accessibility over simply expanding roadway capacity. The City has established a citywide Transportation Concurrency Exemption Area, allowing greater flexibility to pursue strategies that emphasize mobility through transit, walking, and biking rather than relying solely on traditional road widening projects. Guided by Complete Streets principles, Winter Garden is designing corridors and advancing corridor improvements that accommodate all users within the context of the surrounding environment. This shift reflects the City's focus on creating a more connected and livable transportation network that supports community character, enhances economic vitality, and provides access to daily needs as growth continues through the horizon of this plan.

INVENTORY AND ANALYSIS

The inventory and analysis is divided into a review of existing and future conditions of Winter Garden's roadway network, railroads, bicycle and pedestrian network, public transit system, and planned transportation improvements.

Roadway Network

The City of Winter Garden has an extensive roadway network depicted in **Map MTE - 1**. The following section provides data and analysis for this roadway network, including SIS facilities, maintenance responsibility, functional classification, context

classification, posted speed limits, adopted level of service, current level of service and projected level of service.

Strategic Intermodal Facilities

Strategic Intermodal System (SIS) facilities are considered Florida's highest priority network of transportation facilities, which are important to the state's economy and mobility. The Governor and Legislature established the SIS in 2003 to focus the state's limited transportation resources on the more significant interregional, interstate, and international facilities. There are two SIS Highways within Winter Garden the Florida Turnpike (State Road 91) and State Road 429. The location of all SIS highways and railways within and near the City can be found on **Map MTE - 2**.

Maintenance Responsibility

There is a plethora of entities responsible for the maintenance of roadways in or near the City of Winter Garden. This includes neighboring municipalities, Orange County, the Florida Turnpike, and the Florida Department of Transportation. When addressing transportation concerns for the residents of Winter Garden it is important to know who is responsible for a roadway's maintenance. The roadway maintenance and responsibility for most roadways within or near the City of Winter Garden is shown on **Map MTE - 3**.

Functional Classification

Winter Garden establishes its own functional classification definitions for arterial, collector, and minor streets within its Land Development Regulations (LDR). These City definitions may differ from the transportation data referenced in this section because the Florida Department of Transportation (FDOT) uses the Federal Functional Classification System, which is standard across all states. Each Federal functional classification is based on the type of service the road provides to the motoring public. Design standards are tied to the functional classification assigned to the facility. Each classification has a range of allowable lane widths, shoulder widths, curve radii, etc. The functional classifications are listed below in **Table MTE - 1** and displayed on **Map MTE - 4** for the major roadways in the City.

Table MTE - 1: Functional Classification Descriptions

Functional Classification	Description	Typical Speed Limits
Interstates (Limited Access Highways)	The highest classification of roadways in the United States. These arterial roads provide the highest level of mobility and the highest speeds over the longest uninterrupted distance.	55-75 mph
Other Arterials	These include freeways, multilane highways, and other important roadways that supplement the Interstate System. They connect, as directly as practicable, the Nation's principal urbanized areas, cities, and industrial centers. Land access is limited.	50-70 mph
Collectors	Major and minor roads that connect local roads and streets with arterials. Collectors provide less mobility than arterials at lower speeds and for shorter distances. They balance mobility with land access.	35-55 mph
Local roads	Local roads provide limited mobility and are primary access to residential areas, businesses, farms, and other local areas.	20-45 mph

Source: Federal Highway Administration, 2020

Context Classification

Florida Department of Transportation's (FDOT) context classification system describes the general characteristics of the land use, development patterns, and roadway connectivity along a roadway, providing cues as to the types of uses and user groups that will likely utilize the roadway. Context classification is a system based on the complete streets initiative of identifying roads according to their context in the built or natural environment and is a step in the planning and design processes for establishing more comprehensive design criteria and standards for multiple modes of transportation. For the purposes of this section, the eight different context classifications used by the FDOT are described below in **Table MTE - 2** and **Map MTE - 5** displays the context classifications for some of Winter Garden's major roadways.

Table MTE - 2: Context Classification Descriptions

Context Classification	Descriptions
C1-Natural	Lands preserved in a natural or wilderness condition, including lands unsuitable for settlement due to natural conditions.
C2-Rural	Sparsely settled lands; may include agricultural land, grassland, woodland, and wetlands.
C2T-Rural Town	Small concentrations of developed areas immediately surrounded by rural and natural areas; includes many historic towns.
C3R-Suburban Residential	Mostly residential uses within large blocks and a disconnected or sparse roadway network
C3C-Suburban Commercial	Mostly non-residential uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network.
C4-Urban General	Mix of uses set within small blocks with a well-connected roadway network. May extend long distances. The roadway network usually connects to residential neighborhoods immediately along the corridor or behind the uses fronting the roadway.
C5-Urban Center	Mix of uses set within small blocks with a well-connected roadway network. Typically concentrated around a few blocks and identified as part of a civic or economic center of a community, town, or city.
C6-Urban Core	Areas with the highest densities and building heights, and within FDOT classified Large Urbanized Areas (population greater than one million). Many are regional centers and destinations. Buildings have mixed uses, are built up to the roadway, and are within a well-connected roadway network.

Source: Florida Department of Transportation, 2022

Posted Speed Limits

The posted speed limit on a roadway plays a crucial role in determining its capacity and safety. While higher speed limits can enhance a roadway's capacity to efficiently move motor vehicles, they often come at the expense of safety, particularly for vulnerable users, such as bicyclists and pedestrians. **Map MTE - 6** provides the posted speed limits for many of the roadways within or near the City, offering a visual reference for planning and analysis.

Roadway Level of Service Analysis

Appendix A provides a summary of the Roadway Level of Service Analysis for all roadways within Winter Garden that currently have an adopted level of service. The

analysis identifies each roadways adopted level of service (**Map MTE – 7**), current level of service (**Map MTE – 8**); and projected level of service for 2035 (**Map MTE – 9**), 2045(**Map MTE- 10**) and 2050 (**Map MTE – 11**). The current and projected level of service analysis is intended primarily as a monitoring tool to evaluate existing and anticipated travel demand within the transportation network. This analysis does not contemplate future City projects that may result in level of service improvements.

Complete Streets

Complete streets are streets that are designed to accommodate the needs of all users regardless of their mode of transportation. Complete streets ensure that all users are safe, feel comfortable, and have convenient access within their communities. Complete streets are designed using a context sensitive approach meaning its design takes into account the unique built, natural, and cultural environment of the street. The design of these streets requires an understanding of various roadway user needs. Users include but are not limited to pedestrians, bicyclists, transit users, children, older individuals, individuals with disabilities, motorists, freight vehicles, and many others. Winter Garden is currently advancing a Complete Street project on Dillard Street from Plant Street to State Road 50 that will provides a cycle track, enhanced pedestrian facilities, low impact development elements, and on-street parking. The project will focus on redesigning the existing right of way to be safer and more accessible to pedestrian and bicyclists.

Railroads

Winter Garden has 2.7 miles of railroads within the City. These railroads can be seen on **Map MTE - 12** and are on the eastern boundary of the City. All of the railroads are owned by CSX Transportation. Florida Department of Transportation identifies these railroads as spurs which means they are considered Class III railroads. These rail lines are infrequently used and may be better used as multi-modal trails.

Pedestrian and Bicycle Facilities

Sidewalks

The City has an extensive sidewalk network that provides transportation corridors for pedestrians, as regulated by the LDC. There are multiple policies in place to extend the City's sidewalk network including policies related to the Transportation Concurrency Exception Area and Complete Streets. The sidewalk network connects into the regional trails and paths system detailed below and the City's sidewalk network can be seen in **Map MTE – 13**.

Multi-Use Trails and Paths

Winter Garden's 19.6-mile system of multi-use trails and paths provides the residents and visitors of Winter Garden with a recreational and functional pedestrian and bicycle transportation system. One of the most important trails in Winter Garden is the West Orange Trail, which is 22.3 miles in total length and runs through both

Orange and Lake County. The West Orange Trail has 4.9 miles within the City and runs through Downtown Winter Garden along Plant Street. **Map MTE – 14** illustrates the City's trail and path network. **Table MTE - 6** includes the existing trails and paths and **Table MTE - 7** includes future trails and paths. Additionally, there have been ongoing discussions with CSX regarding a railroad segment that runs through Winter Garden, with the goal of purchasing the section and converting it into a trail. This segment would connect Winter Garden's downtown to Ocoee's downtown. The City, in coordination with the Rails-to-Trails Conservancy, should continue to engage with CSX as opportunities arise to purchase railroad segments and convert them into trails where and when feasible.

Table MTE - 3: Existing Trails and Paths

Trail or Path	Length (miles)
Avalon Multipurpose Path	0.5
Crest Trail	0.1
Daniels Multipurpose Path	2.2
Fowler Grove Multipurpose Path	0.5
Hickory Hammock Multipurpose Path	0.5
Jesse Brock Multipurpose Path	0.4
Lulu Creek Trail	0.4
Marsh Rd Multipurpose Path	1.4
Oakland Park Multipurpose Path	0.5
Plant Street Multipurpose Path	0.9
Stone Crest Path	0.4
Stoneybrook West Multipurpose Path	3.0
Sunridge Multipurpose Path	0.5
West Orange Trail	4.9
Winter Garden Vineland Multipurpose Path	1.4
Other Existing Trails	4.7
Total	**19.6**

Source: City of Winter Garden, 2024

Table MTE - 4: Future Trails and Paths

Trail or Path	Length (miles)
Avalon Multipurpose Path	2.2
Avalon Trail	0.7
Beard-Beulah-Warrior Rd Multipurpose Path	2.1
Crest Trail	0.3
Dillard St Multipurpose Path	1.0
Marsh Trail	0.3
Ninth Street	0.5
Railroad Line	2.7
Roper Trail	0.7
Stoneybrook West Multipurpose Path	2.9
Tilden Trail	0.5
West Crown Point Trail	0.4
Windermere Trail	0.8
Other Proposed Trails	5.7
Total	**18.6**

Source: City of Winter Garden, 2024

Public Transportation

Public transportation in the Winter Garden is provided by LYNX. LYNX provides public transportation services predominantly within Orange, Seminole, and Osceola counties, but also provides service to Polk and Lake counties in a limited capacity. LYNX provides three different types of transportation services to the residents of Winter Garden; fixed route bus, paratransit, and NeighborLink, which are described below.

Fixed Route Bus

LYNX operates a total of 69 routes with Route 705 being the only route providing service directly within Winter Garden. Route 705 operated on the weekdays from 5:05 AM to 9:34 PM and on Saturday it operated from 6:00 AM to 9:39 PM. The route's headway or the maximum amount of time a passenger could potentially wait at a bus stop is thirty minutes on the weekdays and an hour on the weekends. LakeXpress is an additional transportation service that connects Mascotte to Winter Garden through Route 50. A map of all routes serving the City can be found on **Map MTE - 15**.

Paratransit

ACCESSLYNX is a shared ride door-to-door transportation service for individuals unable to use the regular fixed route bus service because of a disability or other limitations. ACCESSLYNX provides more than 2,100 scheduled passenger trips each weekday, using a variety of vehicles equipped for individuals with various disabilities. Service from ACCESSLYNX paratransit services is operated under two programs - Americans with Disabilities Act and Transportation Disadvantaged . These programs have different eligibility criteria and service areas, which are outlined below in **Table MTE - 8** and displayed on **Map MTE - 16**.

Table MTE - 5: ACCESSLYNX Eligibility Criteria and Service Area

Program	Service Area
Americans with Disabilities Act	All origins and destinations within the three-county service area of Orange, Osceola, and Seminole Counties.
Transportation Disadvantaged	Transportation Disadvantaged service within Osceola, Orange, and Seminole County. Service is provided to customers whose origin address and/or destination address is further than three-quarters of a mile from a fixed route bus alignment (Map MTE-16).

Source: LYNX, 2024

NeighborLink

LYNX additionally provides NeighborLink (NL) which is a flex-service aimed to make it easier for residents living in less-populated areas to make use of both local transportation and LYNX' local bus system. Residents in the designated area can schedule a ride and a NeighborLink vehicle will pick them up and bring them back if needed. NeighborLink will provide transportation anywhere within the designated service area (**Map MTE - 17**) or to a LYNX local bus stop.

Planned Roadway Improvements

The Metropolitan Transportation Plan prepared by MetroPlan Orlando establishes the vision for the transportation system of the unincorporated and incorporated areas Orange, Osceola, and Seminole County. Roadway improvement projects must be included in the Metropolitan Transportation Plan to receive federal or state funding. The plan is updated every five years and is currently being updated by MetroPlan Orlando, but the currently adopted plan is the 2045 Metropolitan Transportation Plan. **Table MTE - 9** and **Map MTE - 18** detail the cost feasible projects within Winter Garden which includes all roads committed for construction within the 2045 planning horizon of the 2045 Metropolitan Plan. **Table MTE - 10** and **Map MTE - 19** reflect projects that were identified in the Metropolitan Transportation Plan but do not yet have allocated funds.

Table MTE – 6: Cost Feasible

Roadway	From/To	Improvement
Story Rd	Plant St W to Dillard St S	ITS/Technology
Lakeview Ave	Plant St to Fullers Cross Rd	ITS/Technology
Lakeview Ave	Story Rd to E Plant St	ITS/Technology
Avalon Rd	Sunridge Blvd to SR 50 / Colonial Dr	Operational
Tilden Rd	Avalon Rd to Winter Garden-Vineland Rd	Operational
Winter Garden-Vineland Rd	Ficquette Rd to Lake Butler Blvd	Operational (County Level)
SR 50 / Colonial Dr	Dillard St to SR 91 / Florida's Tpke	Operational / Safety
SR 50 / Colonial Dr	Avalon Rd to S Park Ave	Operational / Safety
SR 50 / Colonial Dr	Park Ave to Dillard St	Operational / Safety
Marsh Road	Marsh Rd to Williams Rd	Roundabout Installation
Winter Garden-Vineland Rd	Winter Garden-Vineland Rd to Roper Rd	Intersection Improvements
East Winter Garden	10th Street / Center Street / North Street / Bay Street	Streetscape Improvements

Source: MetroPlan Orlando, 2022

Table MTE – 7: Unfunded Needs

Roadway	From/To	Improvement
Palm Dr	East Crown Point Rd to Ocoee Rd	Complete Streets
Maple St	Ninth St to Seminole St	Complete Streets
Story Rd (Section 1)	Dillard St to Ninth St	Complete Streets
Beulah Rd	Marshall Farms Rd to SR 50 / Colonial Dr	Complete Streets
Stoneybrook West Pkwy	Winter Garden-Vineland Rd to One-Way Pairs	Complete Streets
Lake Butler Blvd/Park Ave	Winter Garden-Vineland Rd to Maguire Rd	Complete Streets
Winter Garden-Vineland Rd	Daniels Rd to Fowler Grove Blvd	Complete Streets

Roadway	From/To	Improvement
Daniels Rd	Roper Rd to SR 50 / Colonial Dr	Complete Streets / Safety / Ops
Roper Rd	Daniels Rd to Beulah Rd	Complete Streets
Beard Rd	Daniels Rd to Beulah Rd	Complete Streets
Warrior Rd	Beulah Rd to Windermere Rd	Complete Streets
Stoneybrook West Pkwy	Lake Roberts Landing Dr to Windermere Rd	Complete Streets / Safety / Ops
Daniels Rd	Fowler Grove Blvd to Roper Rd	Operational
Stoneybrook West Pkwy	Avalon Rd to SR 429	Operational
Story Rd	Carter Rd	Intersection Improvements
Dillard St	W SR 50 to E Plant St	Complete Streets / Safety / Ops
Story Rd	Plant St to Brick Rd	Intersection Improvements
Story Rd	Park Ave	Safety Improvements
Story Rd	Ninth St	Safety Improvements
Marsh Rd	Williams Rd	Safety Improvements
Horizon West Trail	Tiny Rd to West Orange HS	Shared Use Path

Source: MetroPlan Orlando, 2022

TRANSPORTATION CONCURRENCY EXCEPTION AREA

The entire City of Winter Garden is considered a Transportation Concurrency Exception Area (TCEA) consistent with F.S. 163.3164. The City utilizes this designation to encourage growth in specific areas within the City to reduce the negative impacts of transportation concurrency and to maximize the use of existing public infrastructure in the City. The TCEA enables the City to break the cycle of suburban sprawl and automobile dependence by redirecting investments toward alternative transportation modes. This approach supports more compact land use patterns and prioritizes infill development and redevelopment over continued outward suburban expansion.

Individual projects can receive transportation concurrency exception if the project meets certain performance standards. The performance standards are based on the net new average daily trip generation for the individual project. **Table MTE – 11**

provides the number of required mobility standards a project will need to provide to receive a transportation concurrency exception.

Table MTE – 8: TCEA Performance Standards

Criteria Level	Net New Average Daily Trip Generation	Required Number of Standards
Level 0	1 to 15	No requirement
Level 1	16 to 50	At least 1 Mobility Standard
Level 2	50 to 199	At least 2 Mobility Standards
Level 3	200 to 399	At least 3 Mobility Standards
Level 4	400 to 1,000	At least 4 Mobility Standards
Level 5	1,000 to 5,000	At least 6 Mobility Standards
Level 6	Greater than 5,000	At least 8 Mobility Standards and a traffic study to determine impact on FIHS facilities.

Source: City of Winter Garden, 2011

The City of Winter Garden's Comprehensive Plan lists a total of 25 mobility strategies projects could use to meet the performance standards detailed in Table MTE – 11. The mobility standards are meant to improve the multi-modal transportation system of Winter Garden and include strategies to address roadway, transit, pedestrian, and bicycle transportation systems. The 25 mobility strategies are provided below in Table MTE – 12.

Table MTE – 9: Mobility Strategies

Number	Mobility Strategy
1	Intersection and/or signalization modifications to improve level of service and safety and address congestion management. This may include, but is not limited to: signal timing studies, fiber optic inter-connection for traffic signals, OPTICOM signal preemption, Intelligent Transportation System features such as state of the art traffic signal controllers, dynamic massage signs, and traffic monitoring cameras designed to maximize the efficiency of the roadway network by reducing congestion and delay.
2	Addition of dedicated turn lanes into and out of the development.
3	Construction of bus shelters and or the addition of bus shelter lighting using solar technology designed and constructed to the Central Florida Regional Transportation Authority (LYNX) and City standards.
4	Construction of bus turn-out facilities.
5	Provision of bus pass programs provided to employees and/or residents of the development. The bus passes must be negotiated as part of a contract with LYNX and approved by the City.
6	Payment to the City which will be transferred to LYNX which will either increase service frequency or add bus service.
7	Construction of off- site public sidewalks to complete sidewalk connectivity. Sidewalk construction required to meet Land Development Code Requirements along subject property frontages shall not count as meeting this Mobility Standard.

Number	Mobility Strategy
8	Widening of existing sidewalks to increase pedestrian mobility comfort and safety.
9	Deeding of land for the addition of bicycle lanes, or construction of bicycle lanes to City specification.
10	Provision of ride sharing or van pooling programs for project's employees/residents.
11	Provision of Park and Ride facilities.
12	Funding of streetscaping/landscaping (including pedestrian-scale lighting, where relevant) on public right of way or medians, as coordinated with the City's streetscaping plans.
13	Buildings with architectural features that provide shading and weather protection (e.g. canopies, awnings, colonnades) over sidewalk to promote pedestrian mobility. The architectural feature shall provide shading along a significant length of the sidewalk.
14	Provision of additional bicycle parking over the minimum required by the Land Development Code. Bicycle parking shall be located convenient to the entrance of primary buildings and covered where practical.
15	Removal of non-conforming signage, billboards, and signage that impedes pedestrian movement at the site.
16	Enhancements to the West Orange Trail or other public sidewalks/paths which increase the system's utility for multimodal transportation. Such enhancements may include but not be limited to: a. Trail amenities such as benches, directional/informational signage, or safety systems. b. Bicycle parking at entry points or at connection with transit lines. c. Land acquisition for expansion or better connectivity the trail system or public sidewalks. d. Additional/enhanced entry points to the trail system.
17	Development of, or participation in, a transportation demand management (TDM) program that provides funding or incentives for transportation modes other than single occupant vehicle to reduce vehicle miles traveled (VMT). Such VMT programs shall utilize a methodology approved by the City and may require performance monitoring and reporting.
18	Develop the project at or near development bonus maximum densities/intensities with transit supportive building and site design.
19	Business operations are not conducted in the peak hour and/or will not generate traffic during the peak hour.
20	Use of joint driveways and/or cross-access to reduce curb cuts.
21	Construction of, or contribution towards, new road facilities that provide alternate routes to reduce congestion.
22	Construction of, or contribution towards, addition of lanes on existing road facilities, where acceptable to the City, County, and/or FDOT, as relevant.
23	Other acceptable roadway, pedestrian or bicycle improvements as proposed by the developer and acceptable to the City.
24	Clustering of and design of the development for maximum density, or use of maximum densities or intensities, at the site which preserves open space, and reduces the need for development of vacant lands, enhances multi-modal opportunities and provides transit-oriented densities or intensities.

Number	Mobility Strategy
25	An innovative transportation-related modification or standard proposed by the developer, and acceptable to and approved by the City.

Source: City of Winter Garden, 2011

TRANSPORTATION PLAN

Winter Garden's Transportation Plan is in development to guide improvements that make the City's streets, trails, and pathways safer and calmer, and more connected and accessible for users of all ages, abilities, and travel modes. The Plan emphasizes creating a safe, comfortable, equitable, and engaging transportation environment that supports both mobility and community character. Organized into 10 focused chapters, the Plan outlines strategies across key areas: Vision Zero, Safer Streets for All, Speed Management, Traffic Calming, Complete Streets, Reconnecting Communities Pilot Program, Context-Sensitive Design, Safe Routes to School, Smart Transportation, and Increasing Mobility. Together, these chapters offer a comprehensive framework for enhancing Winter Garden's multimodal transportation network.

VISION ZERO SAFETY ACTION PLAN

Winter Garden committed to reaching zero traffic fatalities and a 50 percent reduction in serious injuries by 2040 through the implementation of the Vision Zero Safety Action Plan. The Plan is part of a larger regional safety grant by Safe Streets for All (SS4A) lead by MetroPlan Orlando and in partnership with Orange, Osceola, and Seminole counties. The Vision Zero Plan will guide Winter Garden through identifying crash trends, recommending priority programs and projects, and implementing solutions while tracking progress. Through the Safe System Approach outlined in the Plan, Winter Garden will make improvements to the road network throughout the City to increase traffic safety.

FUTURE CONSIDERATIONS

Based on the data and analysis presented above, the City of Winter Garden will consider the following recommendations when updating the Goals, Objectives, and Policies of the Multimodal Transportation Element of its Comprehensive Plan:

1. **Trail System Level of Service (LOS):** The City currently maintains 17.1 miles of trails and paths within its limits, serving as vital infrastructure for non-motorized transportation and recreational use. The City should consider adopting a formal trail LOS standard, such as 0.3 miles per 1,000 residents, as referenced in the Recreation and Open Space Element, to guide future trail development and ensure continued accessibility.

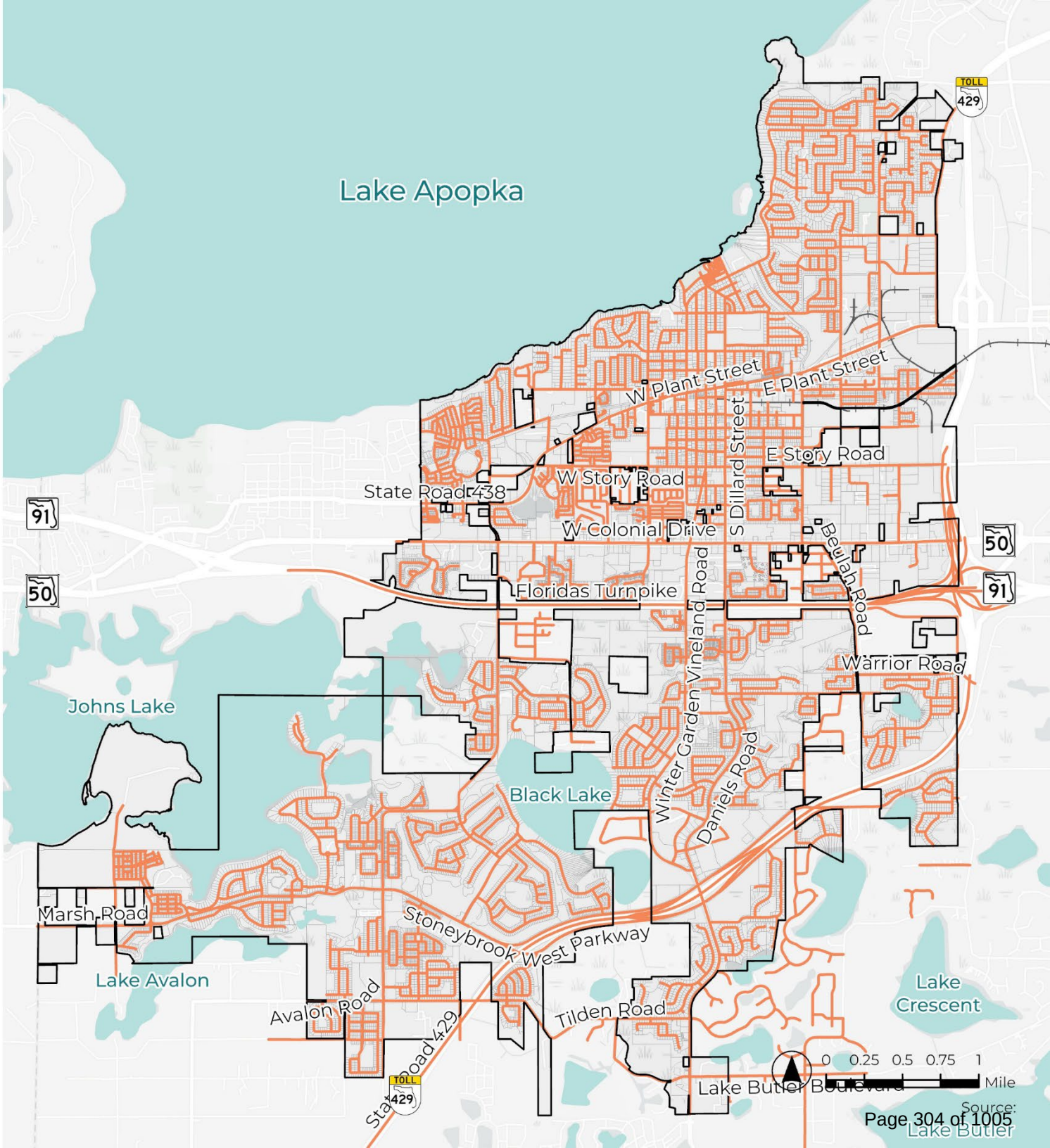
2. **Regional Coordination on Mobility:** With continued population growth both within and surrounding the City, Winter Garden should coordinate with FDOT, Orange County, and MetroPlan Orlando to address current and projected level of service concerns. A combination of roadway capacity improvements, enhanced public transportation options, and expanded active transportation infrastructure should be evaluated to support long-term mobility.
3. **Downtown Parking Study:** The City is in the process of finalizing a comprehensive parking study for the downtown area to assess current capacity and determine whether additional public parking is needed to support residents, visitors, and local businesses.
4. **Adoption of the Transportation Plan:** The City should finalize and formally adopt the Winter Garden Transportation Plan, incorporating its recommendations and implementation strategies into both the Comprehensive Plan and Land Development Code to ensure consistency and alignment with the City's long-term mobility vision.
5. **Integration with Regional Planning:** Once adopted, the City should update its Comprehensive Plan to ensure consistency with MetroPlan Orlando's 2050 Metropolitan Transportation Plan, supporting seamless regional transportation planning and funding opportunities.
6. **Complete Streets:** Is a transportation planning and design approach that ensures roadways are safe, comfortable, and accessible for pedestrians, bicyclists, transit riders, motorists, and people of all ages and abilities. Instead of focusing solely on vehicle capacity, Complete Streets projects are context-sensitive, incorporating features, such as sidewalks, bike lanes, crosswalks, traffic calming, and transit accommodations to create a more balanced, multimodal transportation network that enhances safety, mobility, and quality of life. With the elimination of concurrency citywide, it is important that all new roadways and improvements to existing roadways be prioritized with complete streets in mind.

ROADWAY NETWORK

MAP MTE - 1

Legend

- City of Winter Garden
- Waterbody
- Railroad
- Parcel
- Roadway



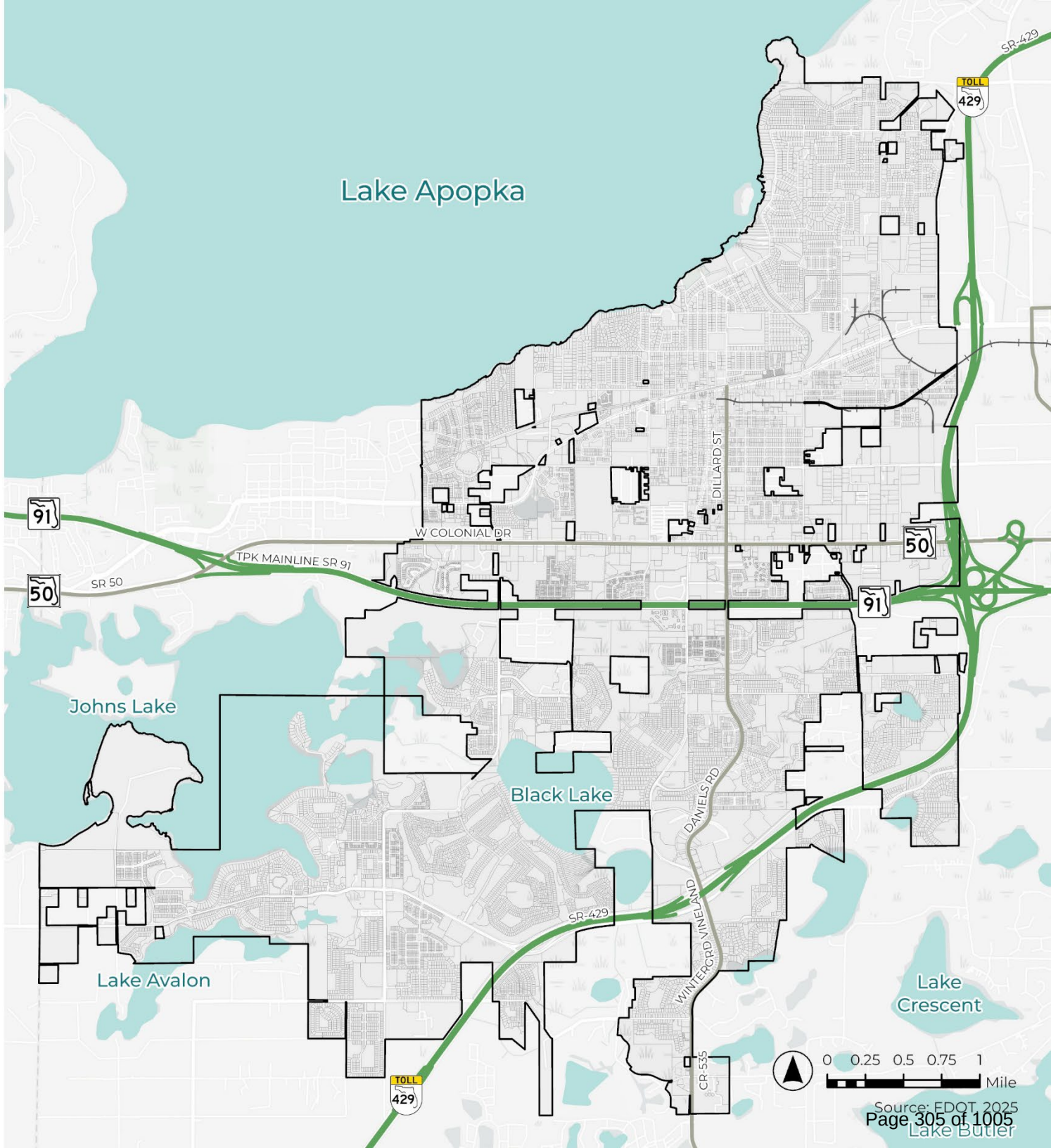
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

STRATEGIC INTERMODAL SYSTEM

MAP MTE - 2

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- SIS Highway



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

ROADWAY MAINTENANCE RESPONSIBILITY

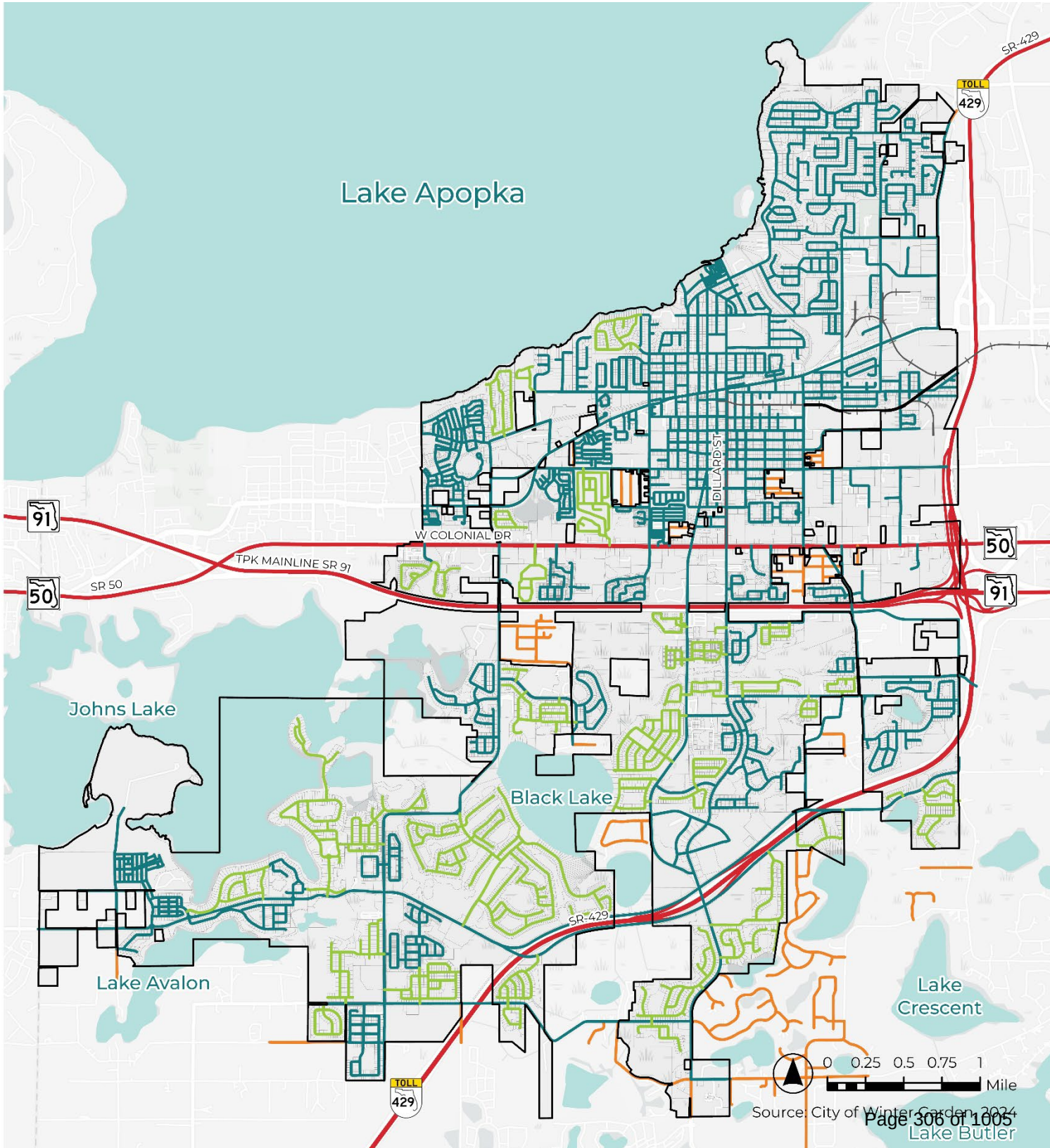
MAP MTE - 3

Legend

- City of Winter Garden
- Waterbody
- Railroad
- Parcel

Roadway Maintenance Responsibility

- Florida
- Orange County
- Winter Garden
- Private



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

FUNCTIONAL CLASSIFICATION

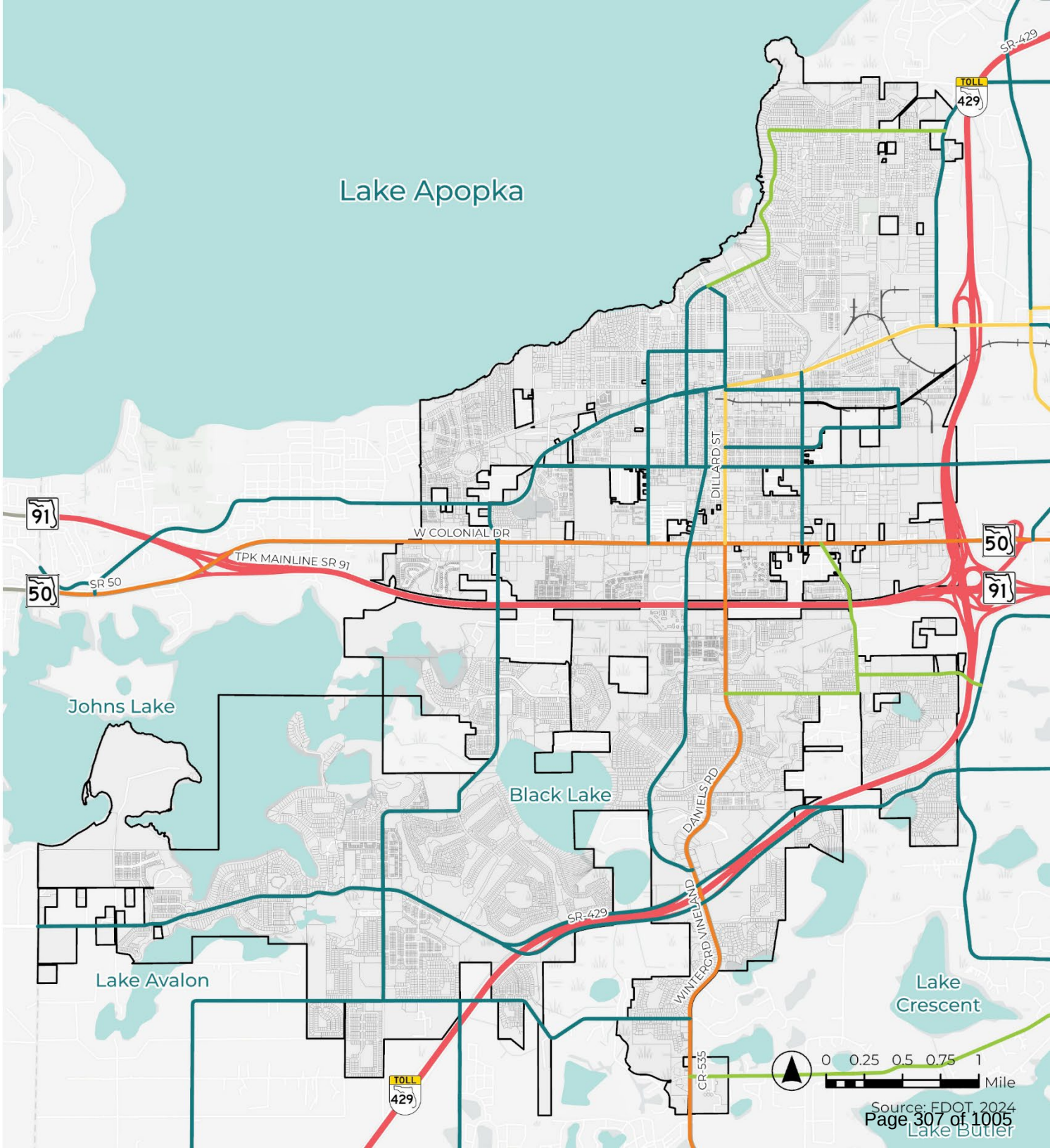
MAP MTE - 4

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Functional Classification

- Principal Arterial - Interstate
- Principal Arterial - Expressway
- Principal Arterial - Other
- Minor Arterial
- Major Collector
- Minor Collector



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

CONTEXT CLASSIFICATION

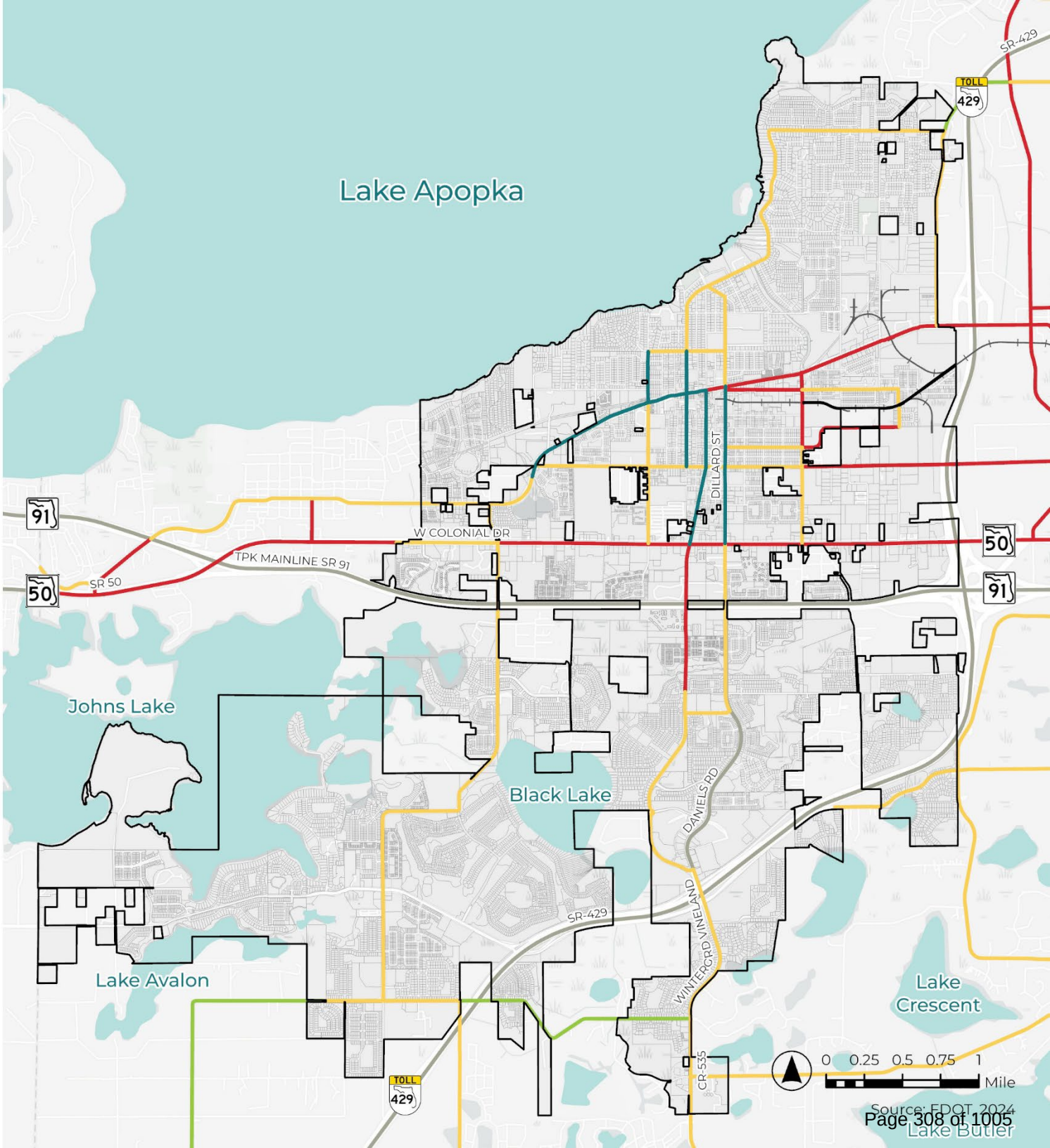
MAP MTE - 5

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Context Classification

- C2-Rural
- C3C-Suburban Commercial
- C3R-Suburban Residential
- C4-Urban General



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

POSTED SPEED LIMIT

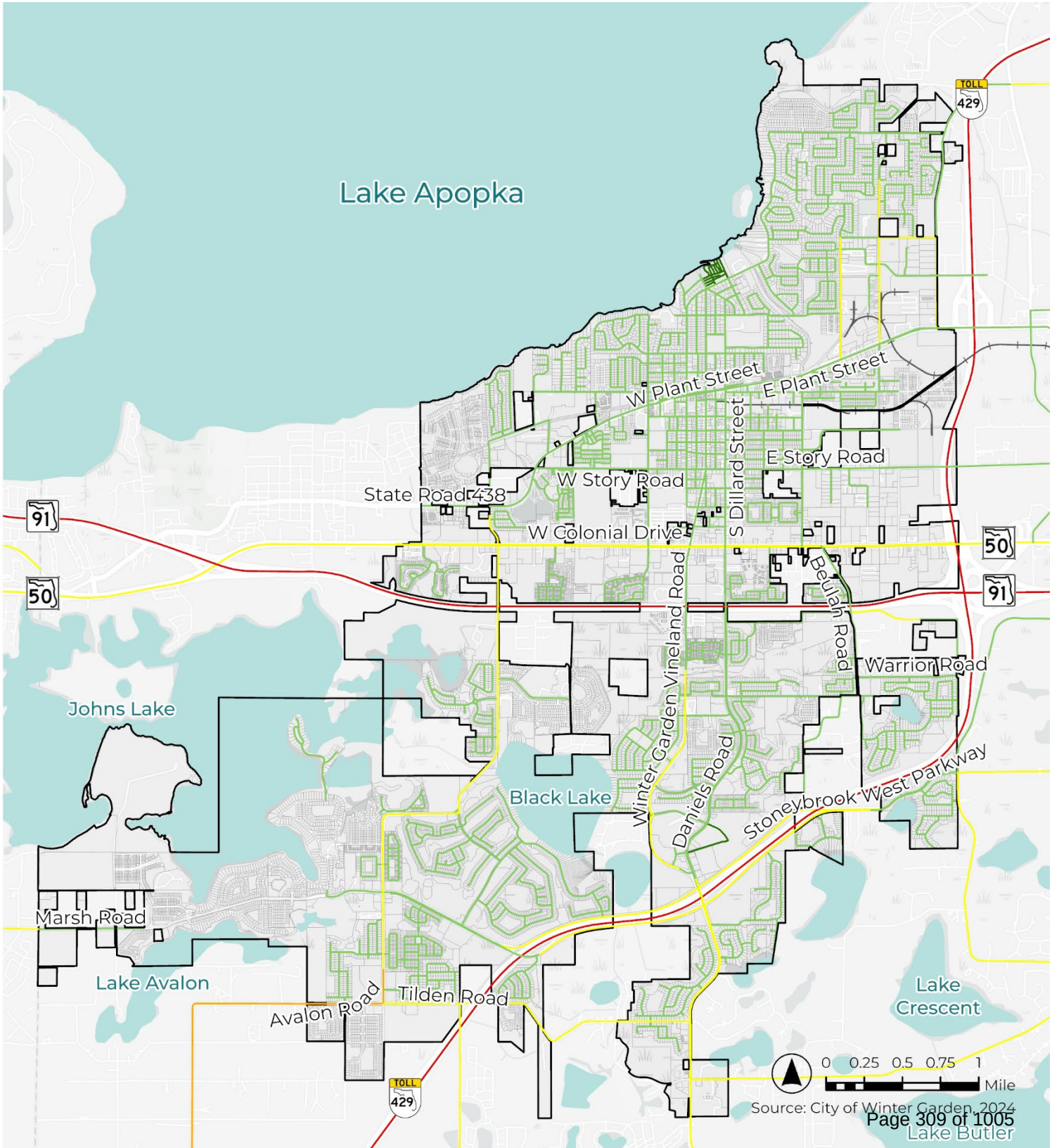
MAP MTE - 6

Legend

- City of Winter Garden
- Waterbody
- Railroad
- Parcel

Posted Speed Limit

- > 15 MPH
- 20 - 35 MPH
- 40 - 50 MPH
- 55 - 65 MPH
- 70 MPH



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

ADOPTED LEVEL OF SERVICE

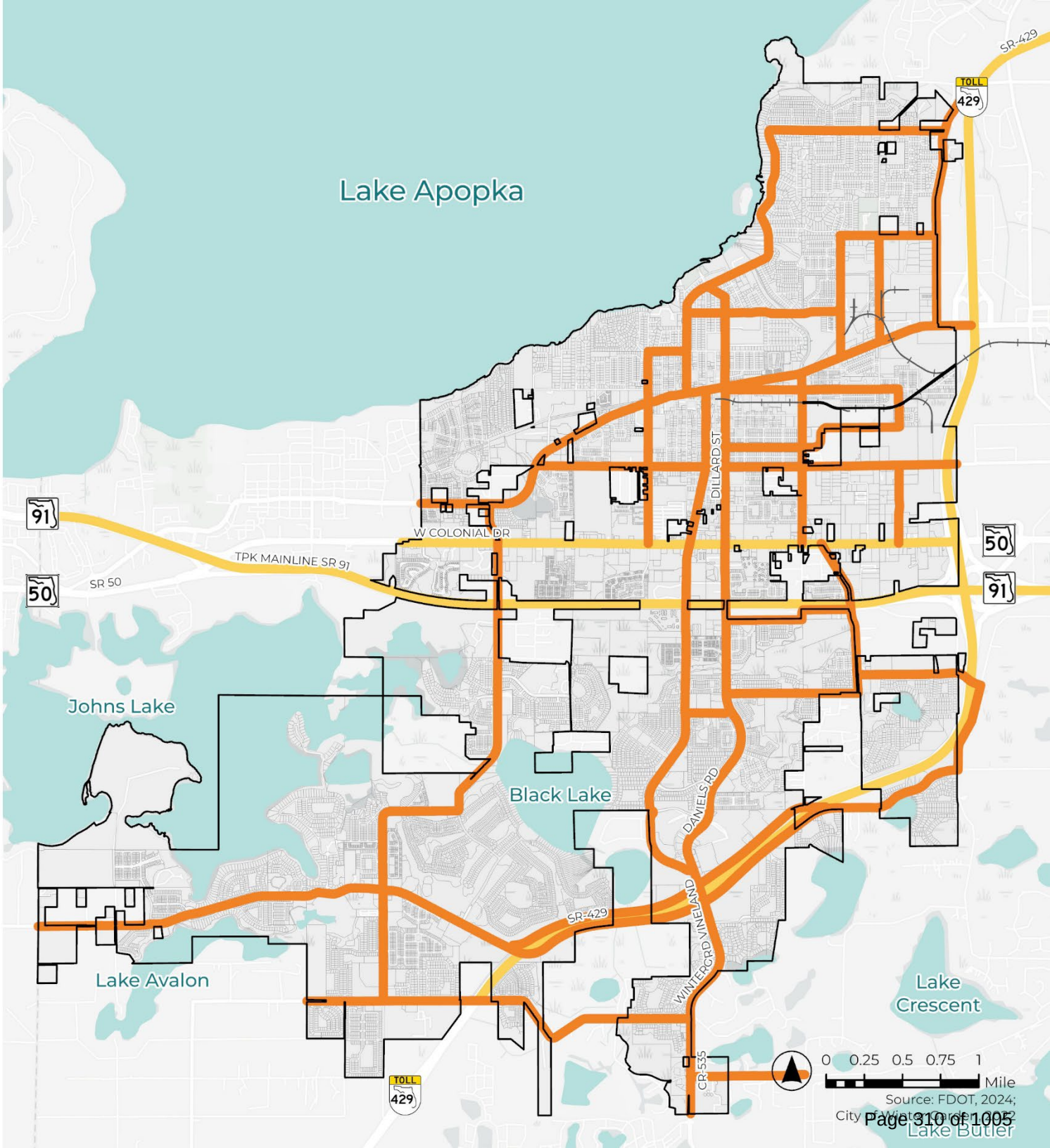
MAP MTE - 7

Legend

- City of Winter Garden
- Waterbody
- Railroad
- Parcel

Adopted LOS

- LOS D
- LOS E



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

CURRENT LEVEL OF SERVICE

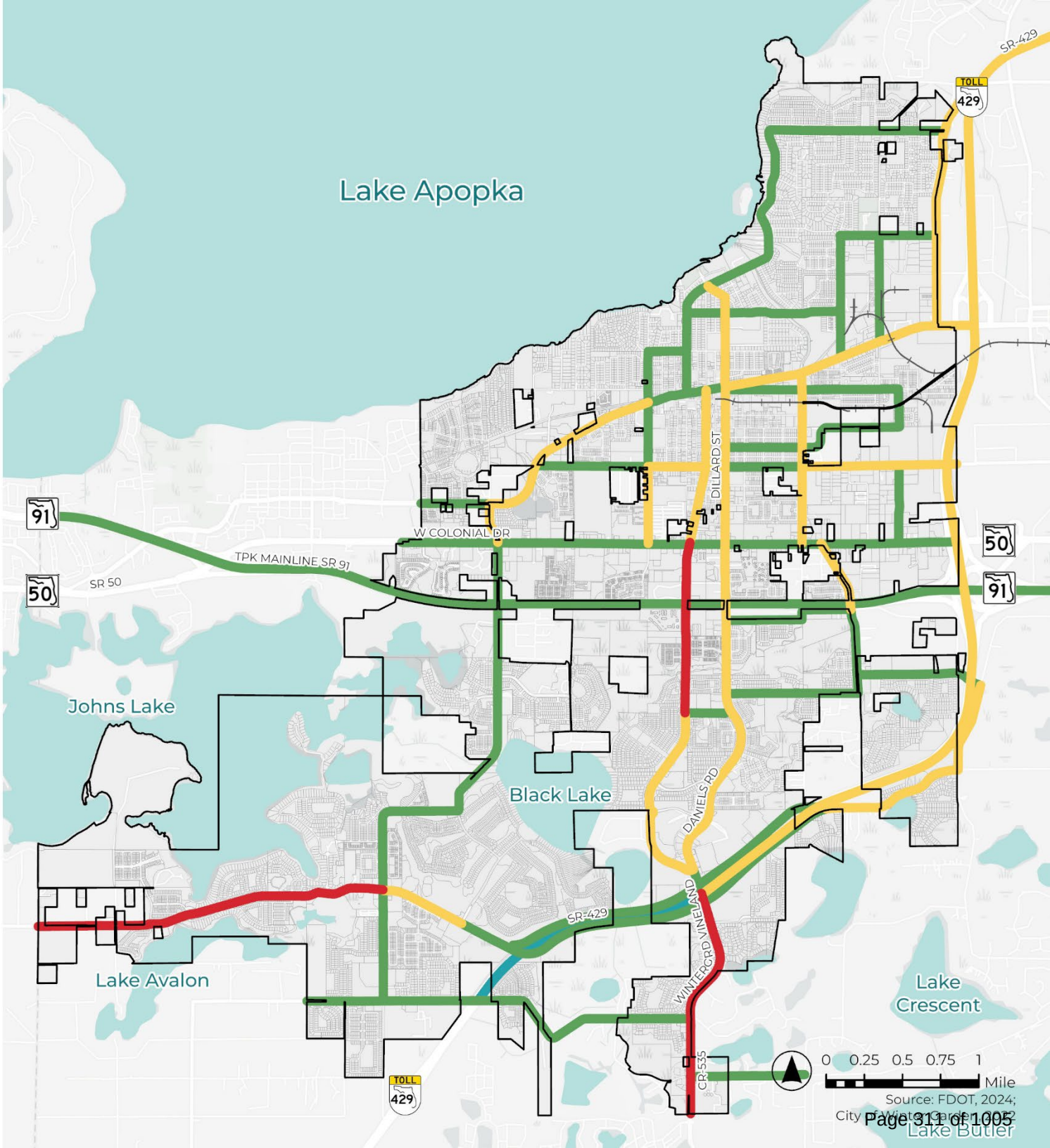
MAP MTE - 8

Legend

- City of Winter Garden
- Waterbody
- Railroad
- Parcel

Current LOS

- LOS B
- LOS C
- LOS D
- LOS F



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

2035 LEVEL OF SERVICE

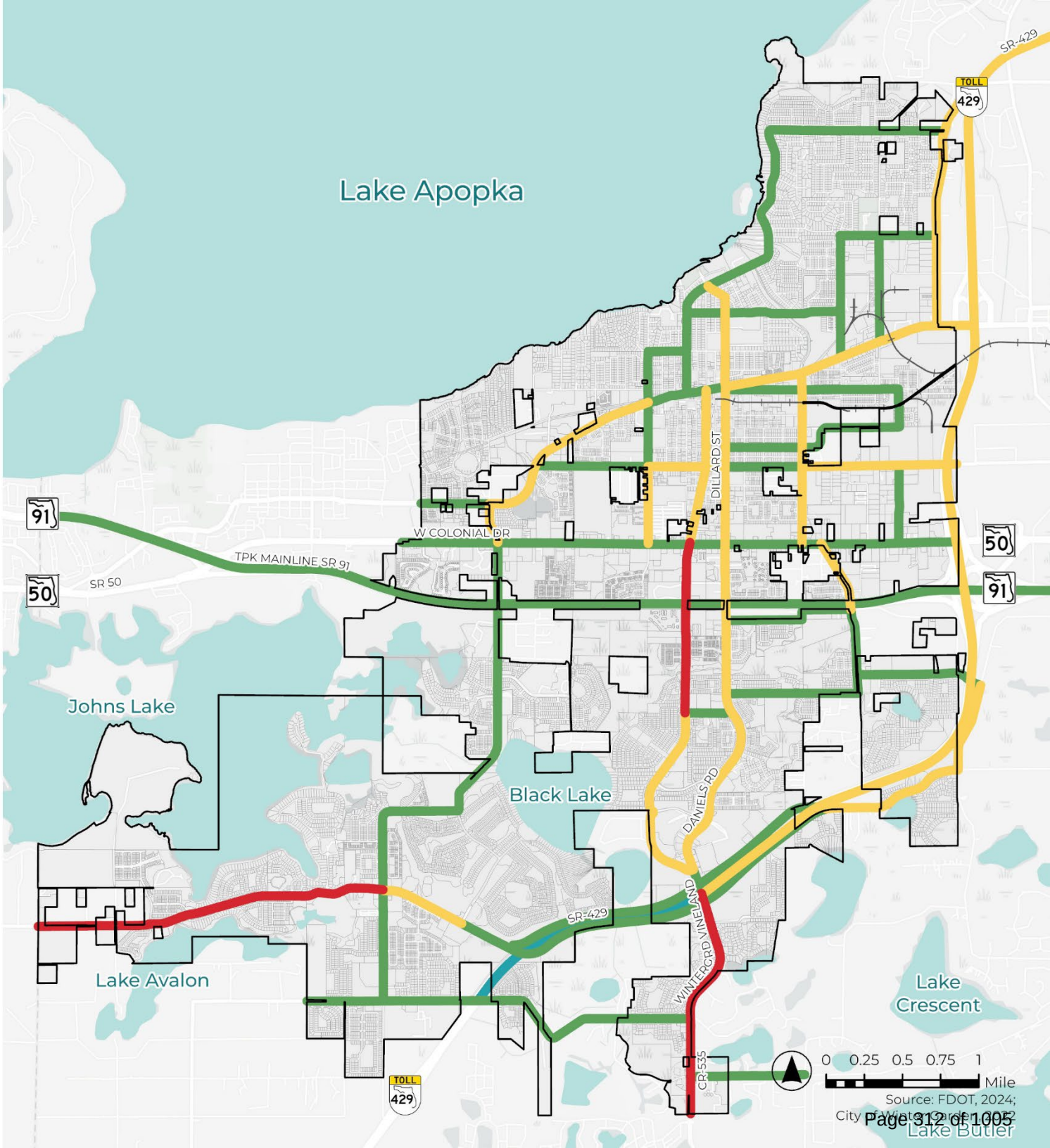
MAP MTE - 9

Legend

- City of Winter Garden
- Waterbody
- Railroad
- Parcel

2035 Projected LOS

- LOS B
- LOS C
- LOS D
- LOS F



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

2045 LEVEL OF SERVICE

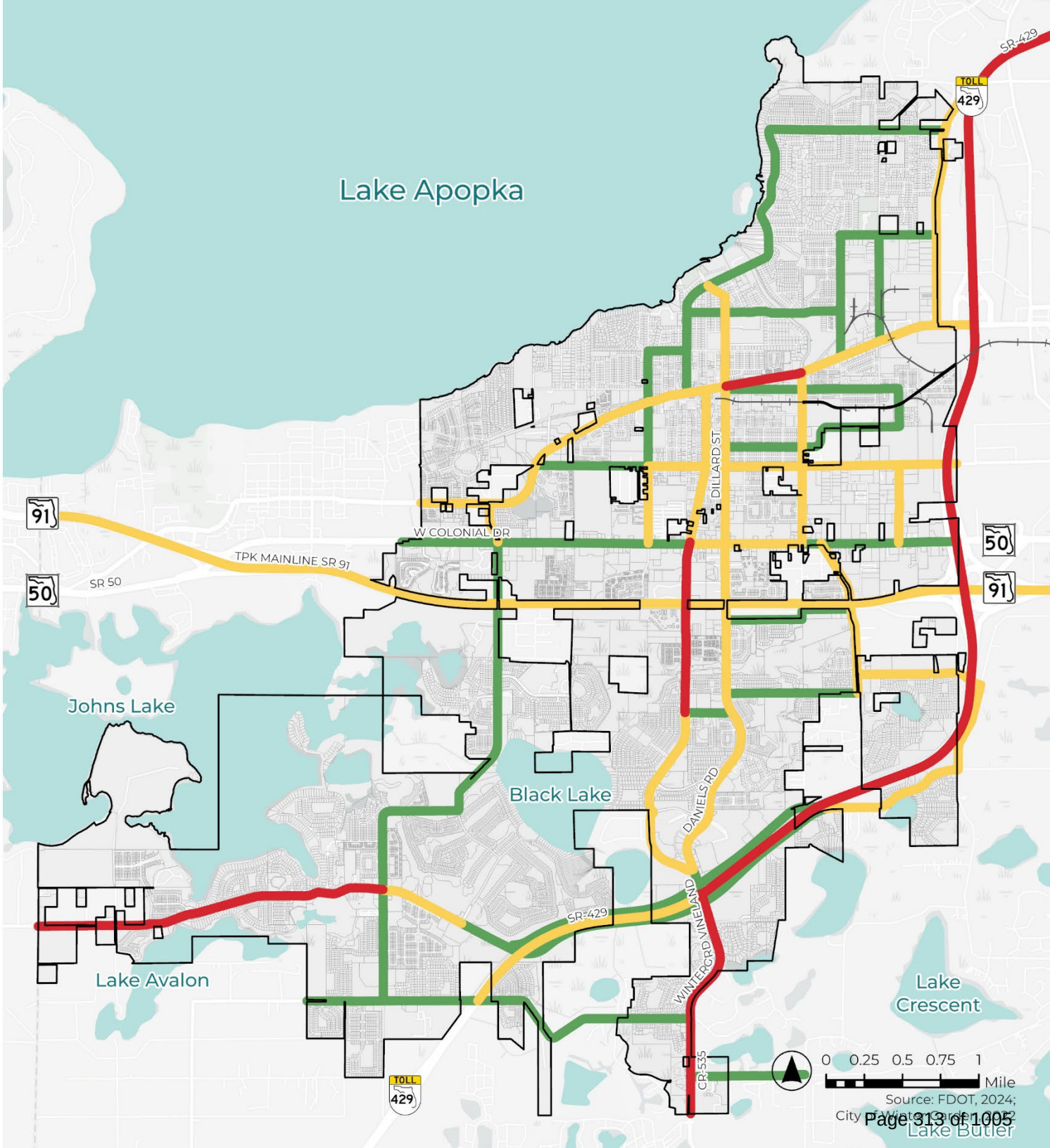
MAP MTE - 10

Legend

- City of Winter Garden
- Waterbody
- Railroad
- Parcel

2045 Projected LOS

- LOS C
- LOS D
- LOS F



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

2050 LEVEL OF SERVICE

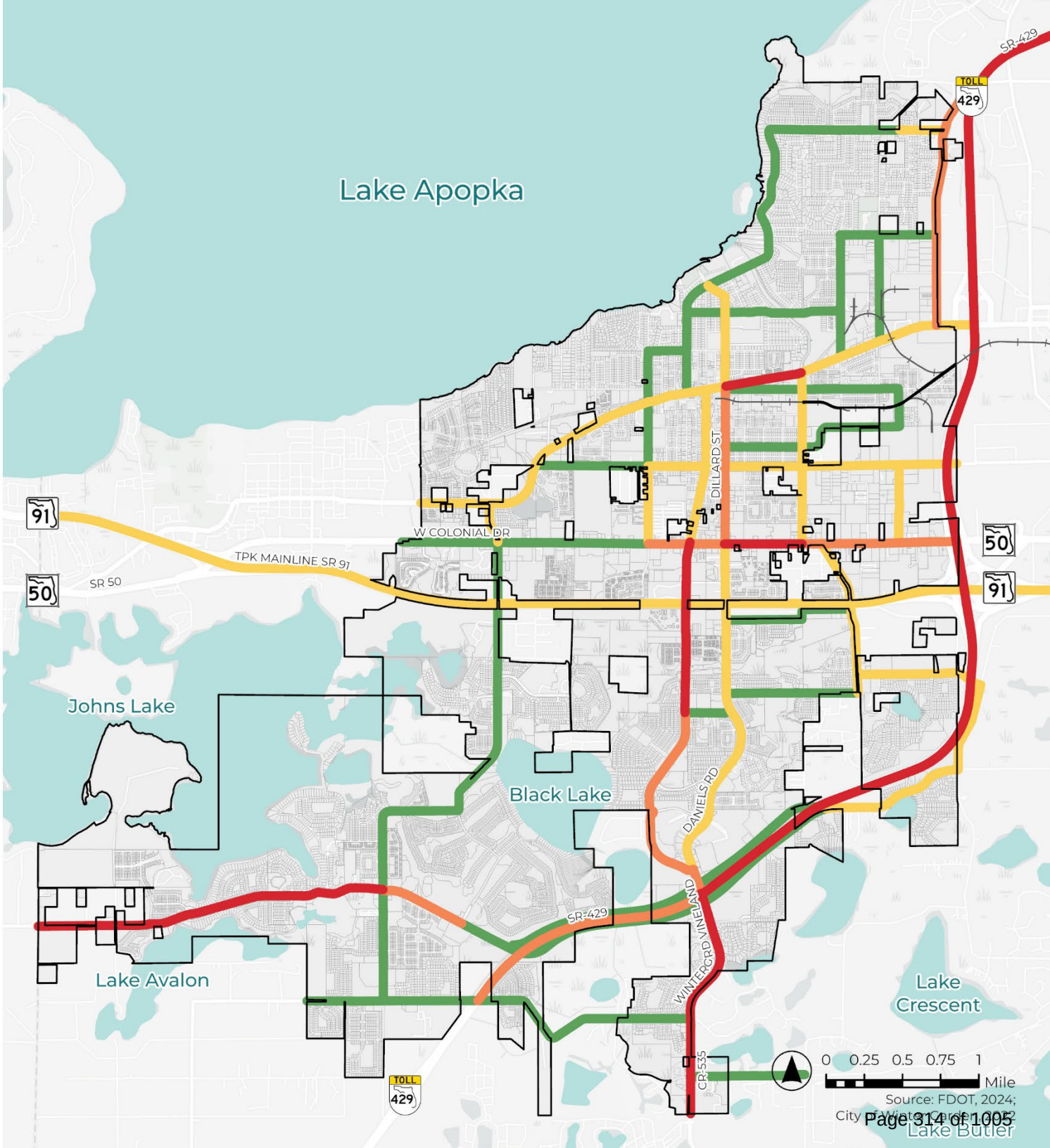
MAP MTE - 11

Legend

- City of Winter Garden
- Waterbody
- Railroad
- Parcel

2050 Projected LOS

- LOS C
- LOS D
- LOS E
- LOS F



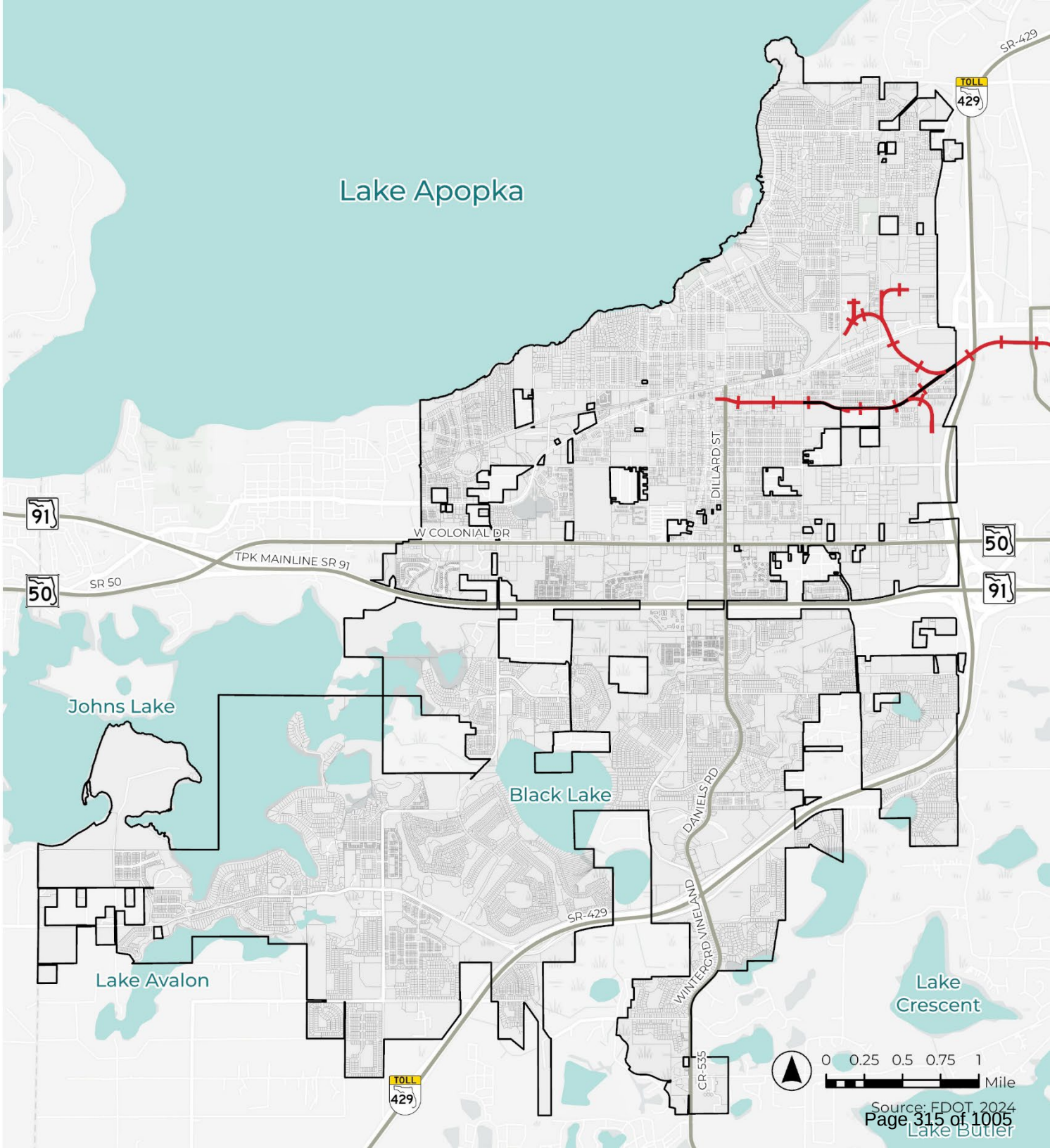
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

RAILROAD FACILITIES

MAP MTE - 12

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Parcel
- Railroad



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

SIDEWALKS

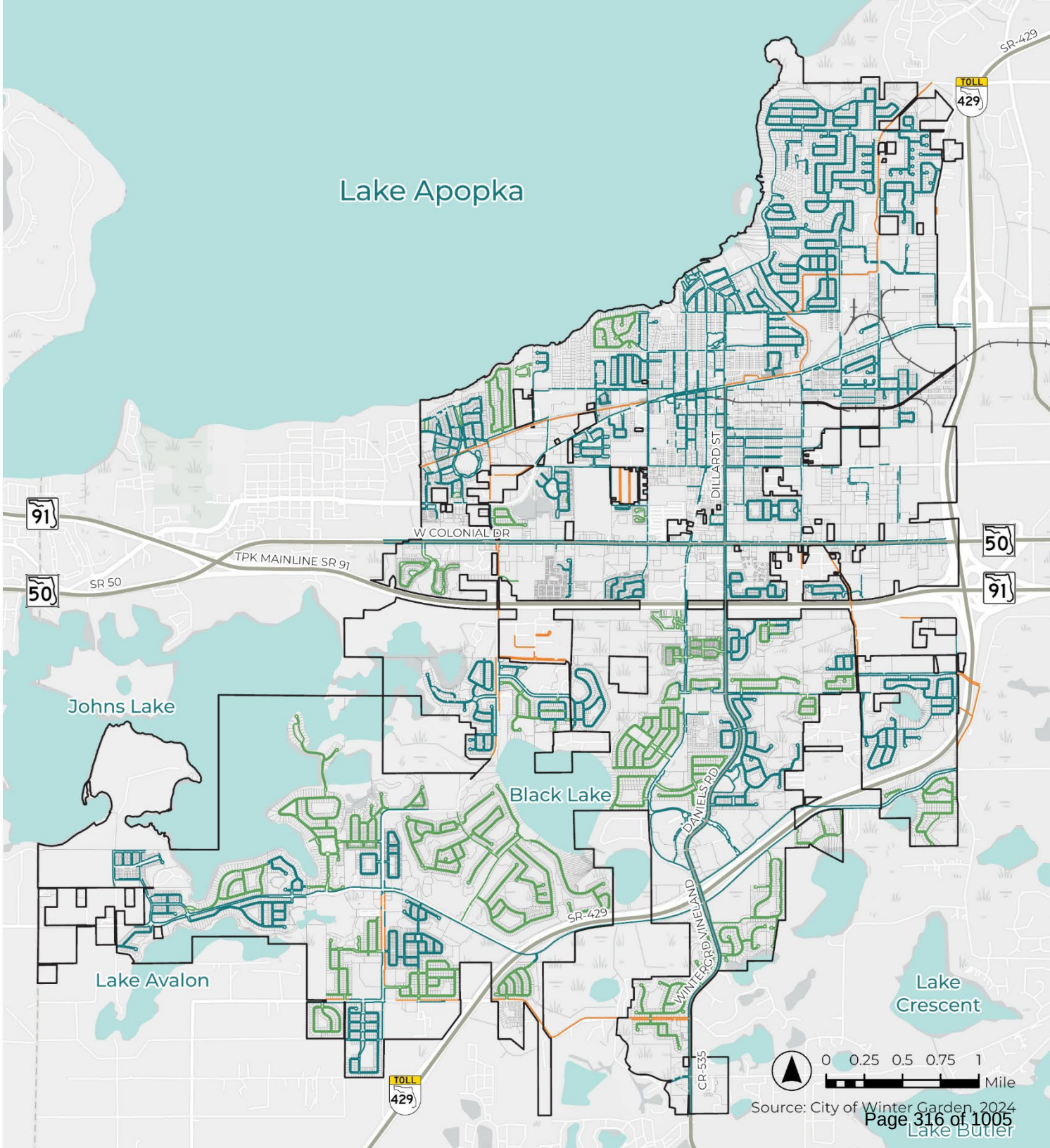
MAP MTE - 13

Legend

- City of Winter Garden
- Waterbody
- Parcel
- Major Roadway
- Railroad

Sidewalk Maintenance Responsibility

- Orange County
- Private
- Winter Garden



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

TRAILS AND PATHS

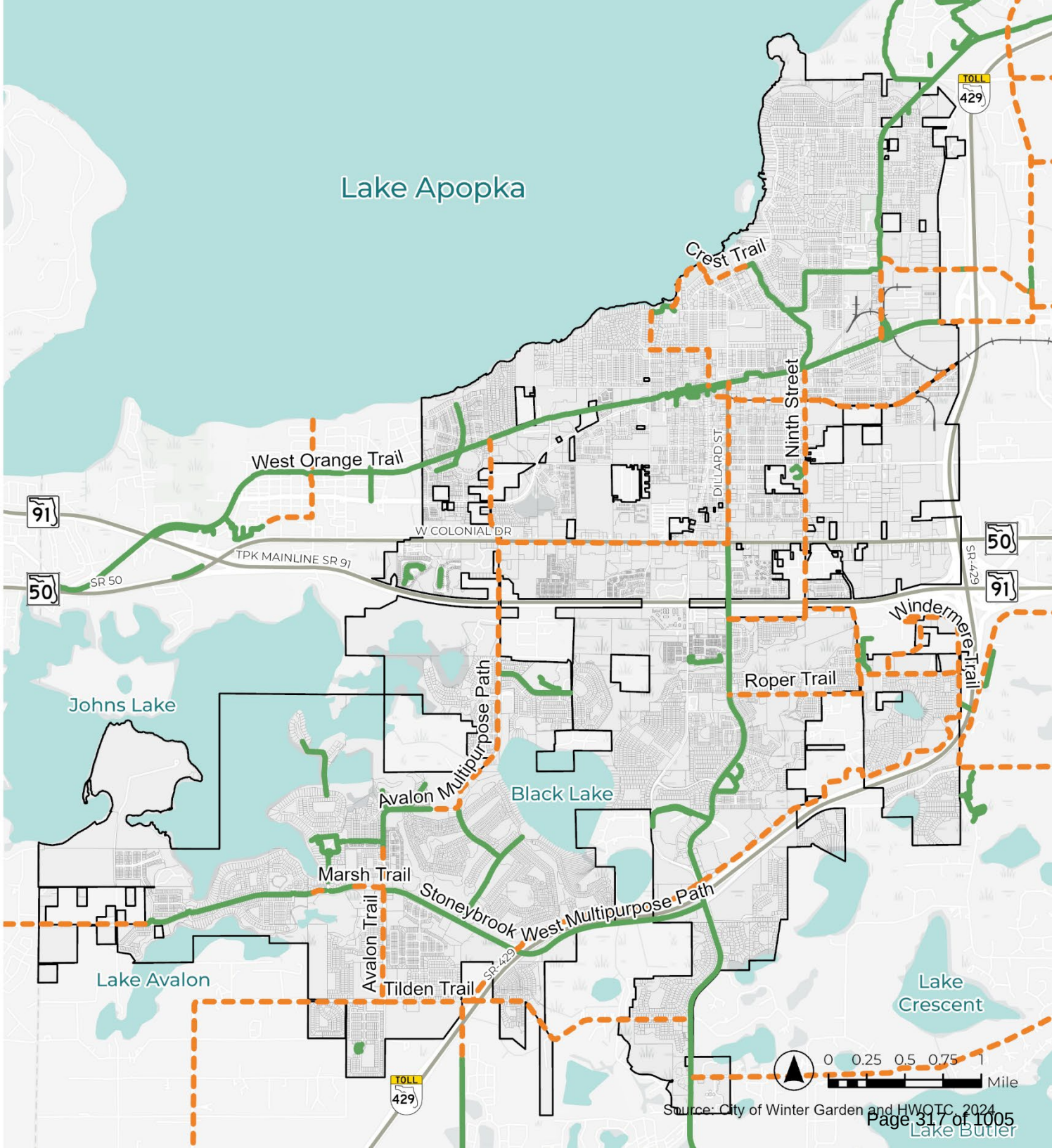
MAP MTE - 14

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Trail or Path

- Existing
- Future



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

TRANSIT

MAP MTE - 15

Legend

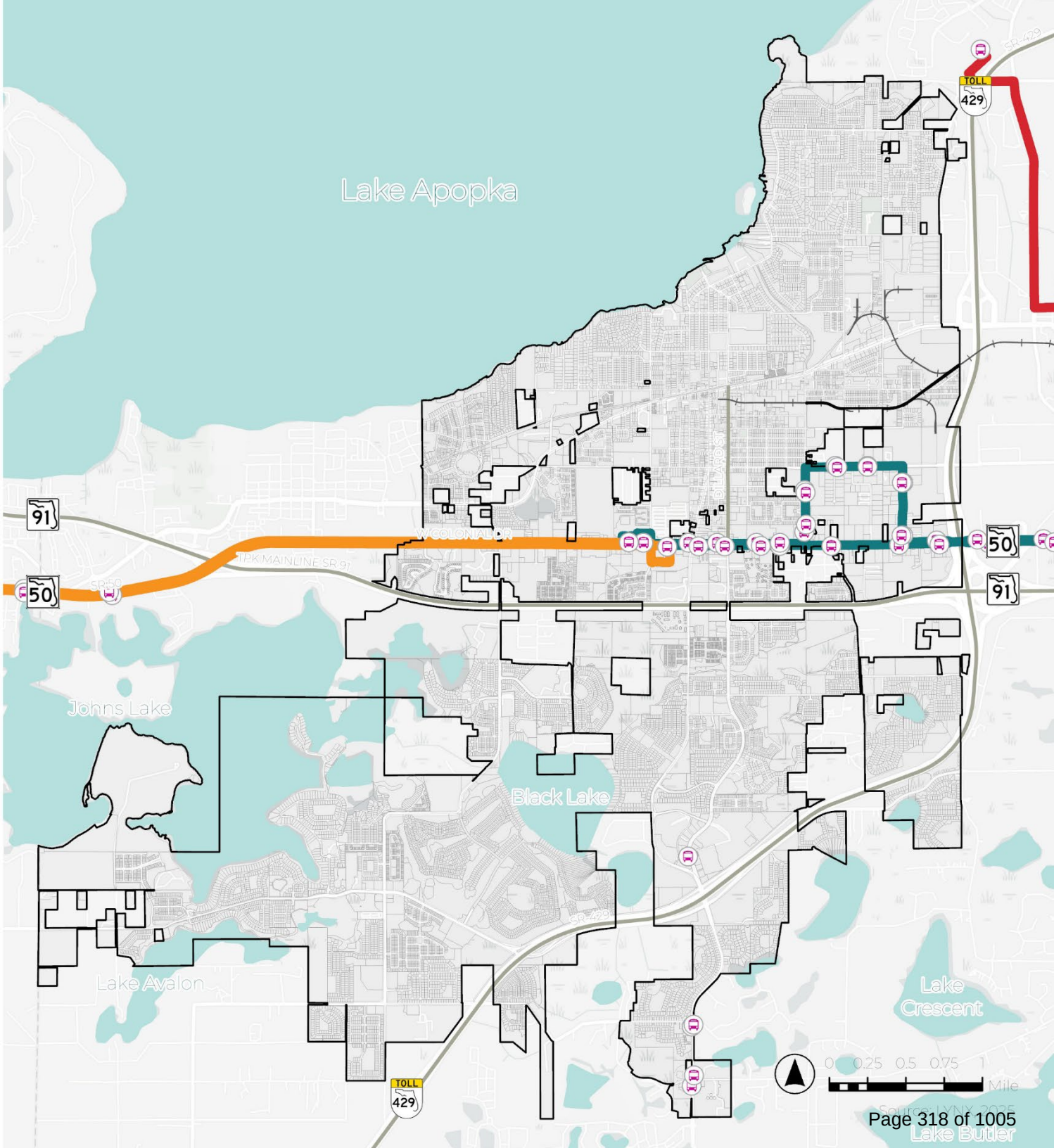
- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Lake Xpress Route

- 50 - Mascotte / Winter Garden Circulator

LYNX Route

- 701 - Orange Technical College Shuttle
- 705 - West Colonial / Winter Garden Circulator
- LYNX Stop



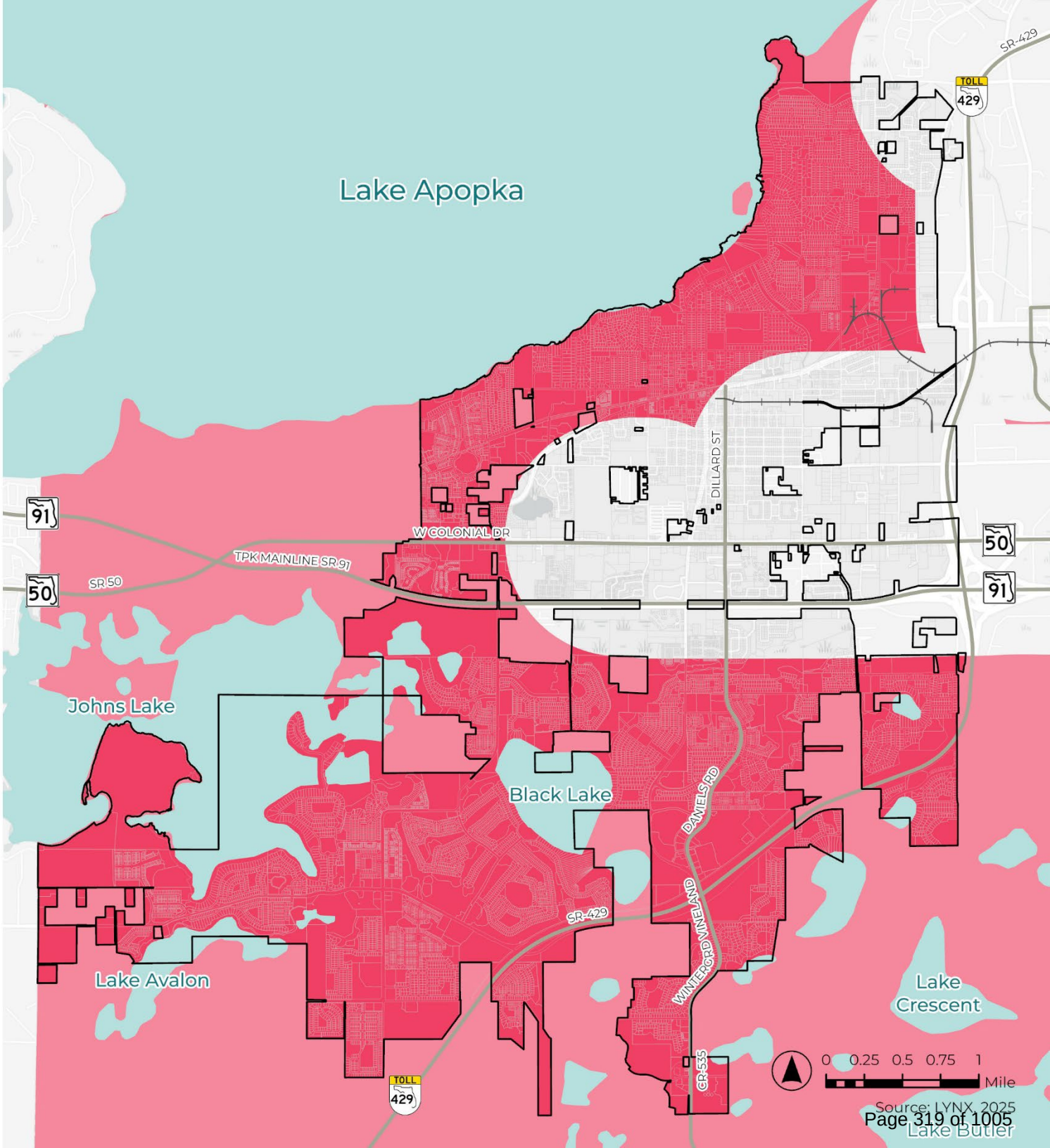
COMPREHENSIVE PLAN WINTER GARDEN 2050 Rooted in Tradition Growing Strong Communities

ACCESS LYNX - TRANSPORTATION DISADVANTAGED

MAP MTE - 16

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Transportation Disadvantaged Service Area



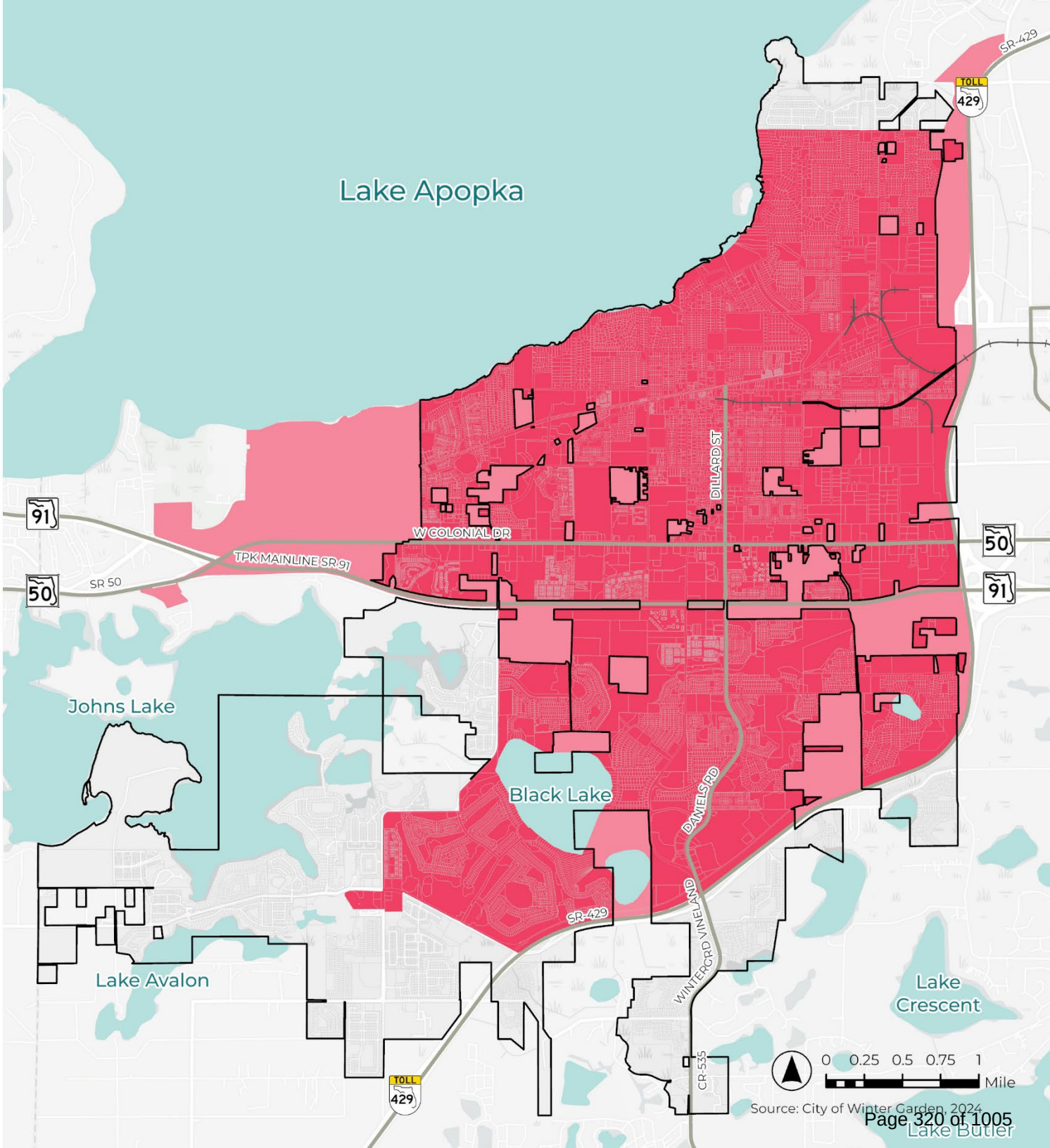
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

NEIGHBORLINK SERVICE BOUNDARY

MAP MTE - 17

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- NeighborLink Service Boundary



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

COST FEASIBLE IMPROVEMENTS

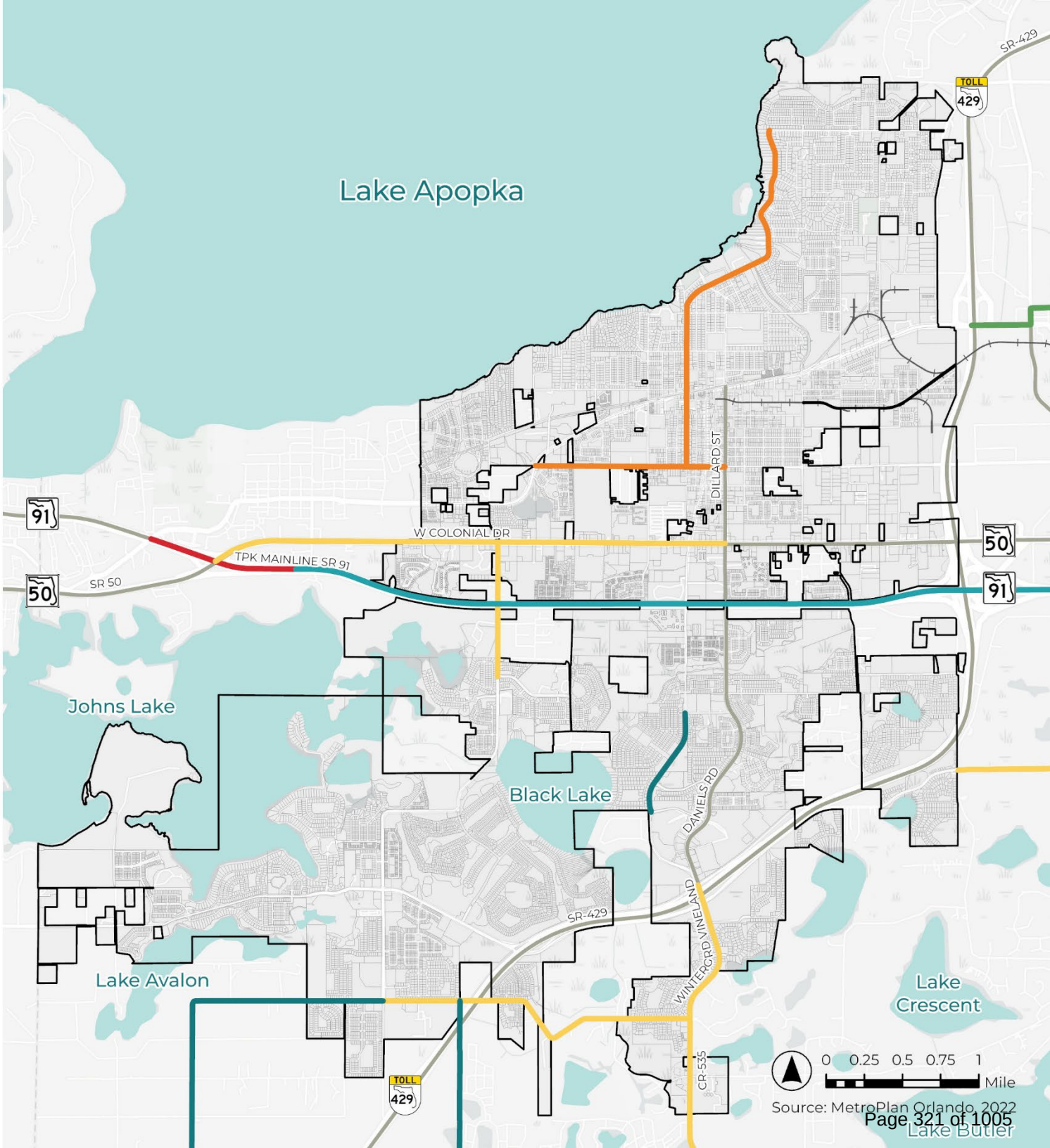
MAP MTE - 18

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Improvement

- Complete Streets
- ITS/Technology
- Interchange Modification
- Operational; Operational / Safety
- Widen from 2 to 4 lanes
- Widen to 10 Lanes



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

UNFUNDED NEEDS IMPROVEMENTS

MAP MTE - 19

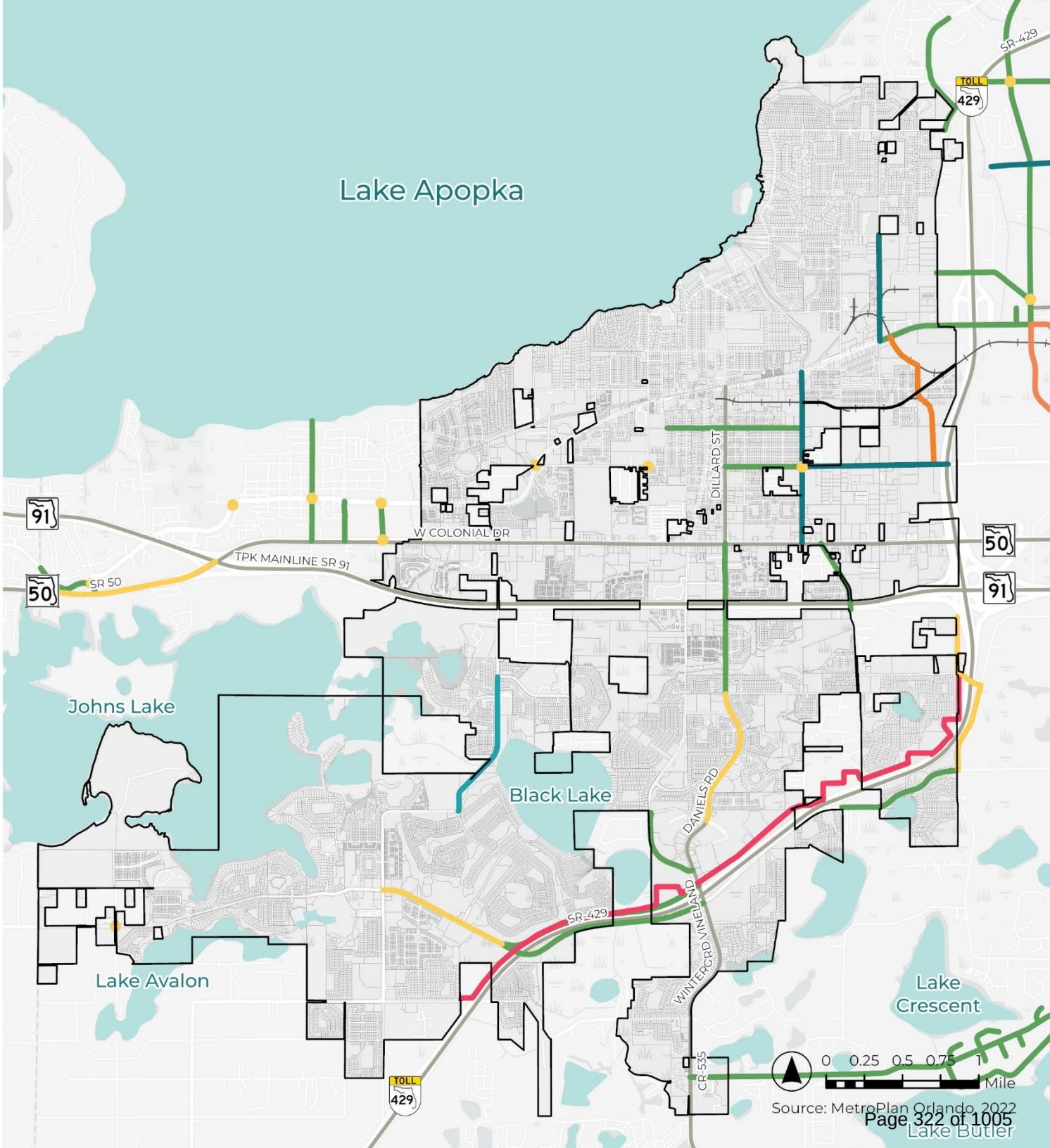
Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Unfunded_Needs

Improvement

- Complete Streets
- Shared Use Path
- New 4 Lane Roadway
- Widen from 2 to 4 lanes
- Widen from 2 to 6 lanes
- Operational / Safety
- ITS/Technology



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

APPENDIX A: LEVEL OF SERVICE ANALYSIS

Adopted Level of Service

Roadway performance within the City of Winter Garden is monitored using adopted Level of Service (LOS) standards for planning purposes only, which identify the minimum acceptable operating conditions of a roadway. LOS conditions are generally classified into six categories which are outlined in **Table MTE - 3**.

Table MTE - 10: Level of Service Descriptions

Level of Service	Descriptions
LOS A	Users are practically unaffected by the presence of other vehicles on the road section. The choice of speed and the maneuverability are free. The level of comfort is excellent, as drivers need minimal attention.
LOS B	The presence of other vehicles begins to affect the behavior of individual drivers. The choice of speed is free, but the maneuverability has somewhat decreased. The comfort is excellent, as drivers simply need to keep an eye on nearby vehicles.
LOS C	The presence of other vehicles affects drivers. The choice of speed is affected, and maneuvering requires vigilance. The level of comfort decreases quickly at this level, because drivers have a growing impression of being caught between other vehicles.
LOS D	The speed and the maneuverability are severely reduced. Low level of comfort for drivers, as collisions with other vehicles, must constantly be avoided. A slight increase in the traffic risks causing some operational problems and saturating the network.
LOS E	Low but uniform speed. Maneuverability is possible only under constraint for another vehicle. Users are in a state of frustration.
LOS F	Unstable speed with the formation of waiting lines at several points. Cycles of stop and departure with no apparent pattern because created by the behavior of other drivers. A high level of vigilance is required for the user with practically no comfort.

Source: Transportation Research Board, 2014

The City utilizes its adopted level of standards for planning and monitoring purposes only. **Table MTE - 4** and **Map MTE – 7** identifies the adopted level of service standards for the City of Winter Garden. These existing level of service standards dissuade regional cut-through traffic and induced demand for additional traffic, furthering an emphasis on multi-modal transportation within the City.

Table MTE – 11: Adopted Level of Service

Roadway	From	To	Adopted LOS
9th Street	Plant Street	SR 50 (West Colonial Drive)	E
Beard Road	Daniels Road	Beulah Road	E
Beulah Road	Roper Road	SR 50 (West Colonial Drive)	E
Carter Road	SR 50 (West Colonial Drive)	Story Road	E
CR 535/Winter Garden-Vineland Road	Lake Butler Boulevard	SR 50 (West Colonial Drive)	E
CR 545/Avalon Road	SR 50 (West Colonial Drive)	Davenport Road	E
Crest Avenue	Division Street	Fullers Cross Road	E
Crown Point Cross Road	Hennis Road	East Crown Point Road	E
Daniels Road	Stoneybrook Parkway	SR 50 (West Colonial Drive)	E
Dillard Street	SR 50 (West Colonial Drive)	Plant Street	E
Division Street	Hennis Road	Lakeview Avenue	E
East Crown Point Road	Plant Street	Northeast City Limits	E
Florida Turnpike (SR 91)	Eastern City Limits	Western City Limits	D
Fullers Cross Road	Crest Avenue	East Crown Point Road	E
Hennis Road	Plant Street	Crown Point Road	E
Lake Butler Boulevard	CR 535/Winter Garden-Vineland Road	McKinnon Road	E
Lakeview Avenue	Tilden Street	Division Street	E
Marsh Road	Avalon Road	Western City Limits	E
Park Ave	Tilden Street	SR 50 (West Colonial Drive)	E
Plant Street	Eastern City Limits	Western City Limits	E
Roper Road	CR 535/Winter Garden-Vineland Road	Beulah Road	E

Roadway	From	To	Adopted LOS
SR 50 (West Colonial Drive)	Western City Limits	Western Beltway (SR 429)	D
Stoneybrook Parkway	Avalon Road	Windermer Road	E
Story Road	Eastern City Limits	Western City Limits	E
Tilden Road	Avalon Road	CR 535/Winter Garden-Vineland Road	E
Tilden Street	Park Avenue	Lakeview Avenue	E
Tildenville School Road/(CR 545)	SR 50 (West Colonial Drive)	Plant Street	E
Warrior Road	Windermere Road	Beulah Road	E
West Crown Point Road	Plant Street	Crown Point Cross Road	E
Western Beltway (SR 429)	Southern City Limits	Clarcona-Ocoee Road	D
Windermere Road	Stoneybrook Parkway	Warrior Road	E
All Other City Roadways			D

Source: 2020 City of Winter Garden Comprehensive Plan

Current and Projected Level of Service

If a roadway segment's performance does not meet the adopted LOS standard identified above in **Table MTE - 4**, the segment is considered to be failing. As discussed in the following subsections of this report, some roadway segments are projected to fall below their adopted LOS standard as a result of the City's anticipated population growth through 2050. The current and projected LOS for 2035, 2045, and 2050 can be found in **Table MTE - 5** and on **Map MTE – 8 (Current), 9 (2035), 10 (2045), and 11 (2050)**, respectively. These numbers were determined using Average Annual Daily Traffic (AADT), the Average Annual Growth Rate (AAGR), and LOS standards from the Florida Department of Transportation (FDOT).

The current and projected level of service analysis is intended primarily as a monitoring tool to evaluate existing and anticipated travel demand within the transportation network. The City has adopted a mobility-focused approach that recognizes roadway expansion alone is not a sustainable solution to accommodating future growth. Instead, the City is implementing a range of mobility strategies designed to provide viable alternatives to single-occupancy vehicle travel, including enhanced transit service, expansion of the multi-use trail network, micromobility options, and Complete Streets improvements within existing rights-of-way. While these strategies may not eliminate roadway congestion, they are intended to support a shift toward a more balanced and multimodal transportation system. As

travel demand increases, the City's mobility framework encourages investment in alternative transportation modes and connectivity improvements rather than relying solely on roadway capacity expansions.

Table MTE - 12 Current and Projected Level of Service

Roadway	From/To	Level of Service				
		Adopted	2025	2035	2045	2050
9th Street	Plant Street (CR 438) to Story Road	E	D	D	D	D
9th Street	Story Road to SR 50 (West Colonial Drive)	E	D	D	D	D
Bay Street	Dillard Street to Bethune Avenue	E	C	C	C	C
Beard Road	Daniels Road to Beulah Road	E	C	C	C	C
Bethune Avenue	Bay Street to East Maple Street	E	C	C	C	C
Beulah Road	Marshall Farms Rd to SR 50 (West Colonial Drive)	E	D	D	D	D
Beulah Road	Roper Road to Warrior Road	E	C	C	D	D
Beulah Road	Warrior Road to Marshall Farms Rd	E	C	D	D	D
Carter Road	SR 50 (West Colonial Drive) to Story Road	E	C	C	D	D
CR 535/Winter Garden-Vineland Road	Daniels Rd to Sembler Wy	E	D	D	D	E
CR 535/Winter Garden-Vineland Road	Lake Butler Boulevard to Tilden Rd	E	F	F	F	F
CR 535/Winter Garden-Vineland Road	Bradford Creek Boulevard to SR 50 (West Colonial Drive)	E	F	F	F	F
CR 535/Winter Garden-Vineland Road	Sembler Wy to Bradford Creek Boulevard	E	D	D	D	E
CR 535/Winter Garden-Vineland Road	SR 429 to Daniels Rd	E	C	C	C	E

Roadway	From/To	Level of Service				
		Adopted	2025	2035	2045	2050
CR 535/Winter Garden-Vineland Road	Tilden Rd to SR 429	E	F	F	F	F
CR 545/Avalon Road	Marsh Road/Stoneybrook West Parkway to Davenport Road	E	C	C	C	C
CR 545/Avalon Road	SR 50 (West Colonial Drive) to Stoneybrook Back Entrance	E	C	C	C	C
CR 545/Avalon Road	Stoneybrook Back Entrance to Marsh Road/Stoneybrook West Parkway	E	C	C	C	C
Crest Avenue	Division Street to Fullers Cross Road	E	C	C	C	C
Crown Point Cross Road	Hennis Road to East Crown Point Road	E	C	C	C	C
Daniels Road	Beard Road to SR 50 (West Colonial Drive)	E	D	D	D	D
Daniels Road	CR 535/Winter Garden-Vineland Rd to Fowler Grove Boulevard	E	D	D	D	D
Daniels Road	Fowler Grove Boulevard to Roper Road	E	D	D	D	D
Daniels Road	Roper Road to Beard Road	E	D	D	D	D
Dillard Street	Plant Street (CR 438) to Crest Avenue	E	D	D	D	D
Dillard Street	SR 50 (West Colonial Drive) to Plant Street (CR 438)	E	D	D	D	E
Division Street	Hennis Road to Lakeview Avenue	E	C	C	C	C
East Crown Point Road	Plant Street (CR 438) to SR 429	E	D	D	D	E
East Maple Street	Dillard Street to Bethune Avenue	E	C	C	C	C

Roadway	From/To	Level of Service				
		Adopted	2025	2035	2045	2050
Florida Turnpike (SR 91)	SR 429 to County Line	D	C	C	D	D
Fullers Cross Road	Crest Avenue to Victoria Way	E	C	C	C	C
Fullers Cross Road	Victoria Way to East Crown Point Road	E	C	C	C	D
Hennis Road	Plant Street (CR 438) to Crown Point Road	E	C	C	C	C
Lake Butler Boulevard	CR 535/Winter Garden-Vineland Road to McKinnon Road	E	C	C	C	C
Lakeview Avenue	Division Street to Tilden Street	E	C	C	C	C
Lakeview Avenue	Tilden Street to Plant Street (CR 438)	E	C	C	C	C
Marsh Road	CR 545/Avalon Road to Western City Limits	E	F	F	F	F
Park Avenue	Plant Street (CR 438) to Story Road	E	C	C	C	C
Park Avenue	Story Road to SR 50 (West Colonial Drive)	E	D	D	D	D
Park Avenue	Tilden Street to Plant Street (CR 438)	E	C	C	C	C
Pennsylvania Avenue	Dillard Street to East Maple Street	E	C	C	C	C
Plant Street (CR 438)	9th Street to Dillard Street (CR 537)	E	D	F	F	F
Plant Street (CR 438)	Dillard Street (CR 537) to Park Avenue	E	C	D	D	D
Plant Street (CR 438)	SR 429 to 9th Street	E	D	D	D	D
Plant Street (CR 438)	Park Avenue to Tildenville School Road/(CR 545)	E	D	D	D	D
Plant Street (CR 438)	Tildenville School Road/(CR 545) to Western City Limits	E	C	C	D	D

Roadway	From/To	Level of Service				
		Adopted	2025	2035	2045	2050
Roper Road	CR 535/Winter Garden-Vineland Road to Daniels Road	E	C	C	C	C
Roper Road	Daniels Road to Beulah Road	E	C	C	C	C
SR 50 (West Colonial Drive)	9th Street to Western Beltway (SR 429)	D	C	C	C	E
SR 50 (West Colonial Drive)	CR 535/Winter Garden-Vineland Road to Dillard Street (CR 537)/Daniels Road	D	C	C	D	E
SR 50 (West Colonial Drive)	CR 545/Avalon Road to Park Avenue	D	C	C	C	C
SR 50 (West Colonial Drive)	Dillard Street (CR 537)/Daniels Road to 9th Street	D	C	C	D	F
SR 50 (West Colonial Drive)	Park Avenue to CR 535/Winter Garden-Vineland Road	D	C	C	C	E
SR 50 (West Colonial Drive)	Western City Limits to CR 545/Avalon Road	D	C	C	C	C
Stoneybrook Parkway	CR 535/Winter Garden-Vineland Road to Town Commons Boulevard	E	C	C	C	C
Stoneybrook Parkway	CR 535/Winter Garden-Vineland Road to Reaves Road	E	C	C	C	C
Stoneybrook Parkway	CR 545/Avalon Road to Town Commons Boulevard	E	D	D	D	E
Stoneybrook Parkway	Reaves Road to CR 535/Winter Garden-Vineland Road	E	C	C	C	C
Stoneybrook Parkway	Reaves Road to Windermer Road	E	D	D	D	D
Stoneybrook Parkway	Town Commons Boulevard to CR 535/Winter Garden-Vineland Road	E	C	C	C	C

Roadway	From/To	Level of Service				
		Adopted	2025	2035	2045	2050
Story Road	9th Street to Dillard Street (CR 537)	E	C	C	D	D
Story Road	Dillard Street (CR 537) to Park Avenue	E	D	D	D	D
Story Road	Plant Street to 9th Street	E	D	D	D	D
Story Road	Park Avenue to Western City Limits	E	C	C	C	C
Tilden Road	CR 545/Avalon Road to CR 535/Winter Garden-Vineland Road	E	C	C	C	C
Tilden Street	Park Avenue to Lakeview Avenue	E	C	C	C	C
Tildenville School Road/(CR 545)	SR 50 (West Colonial Drive) to Plant Street (CR 438)	E	D	D	D	D
Vineland Road	SR 50 (West Colonial Drive) to Plant Street (CR 438)	E	D	D	D	D
Warrior Road	Windermere Road to Beulah Road	E	C	D	D	D
West Crown Point Road	Plant Street (CR 438) to Crown Point Cross Road	E	C	C	C	C
Western Beltway (SR 429)	CR 535/Winter Garden-Vineland Road to Florida Turnpike (SR 91)	D	D	D	F	F
Western Beltway (SR 429)	Florida Turnpike (SR 91) to Plant Street (CR 438)	D	D	D	F	F
Western Beltway (SR 429)	Plant Street (CR 438) to Clarcona-Ocoee Road	D	D	D	F	F
Western Beltway (SR 429)	Southern City Limits to CR 535/Winter Garden-Vineland Road	D	B	C	D	E

Roadway	From/To	Level of Service				
		Adopted	2025	2035	2045	2050
Windermere Road	Maguire Rd to Stoneybrook West Pkwy	E	D	D	D	D

Source: City of Winter Garden, 2022; FDOT, 2024



3

DATA & ANALYSIS

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

HOUSING

Table of Contents

INTRODUCTION 4
HOUSING UNIT TYPE 4
HOUSING AGE 5
HOUSING OCCUPANCY 5
SUBSTANDARD UNITS 6
HOUSING COSTS 7
Renter Costs 7
Homeowner Costs 8
Median Sales Price 10
ASSISTED HOUSING 12
POPULATION PROJECTIONS 12
Population and Household Projections 12
Population Projections by Age 13
Household Projections by Household Income 13
FUTURE CONSIDERATIONS 16

List of Figures

Figure HOU - 1: Housing Units by Type (2023) 4
Figure HOU - 2: Year Structures Built (2023) 5
Figure HOU - 3: Renter Households by Monthly Gross Rent (2023) 8
Figure HOU - 4: Owner Households with a Mortgage by Monthly Housing Costs (2023) 9
Figure HOU - 5: Cost Burdened Renters and Owners Over Time 10
Figure HOU - 6: Median Sales Price for Single-Family Homes in 2024 Dollars 11

List of Tables

Table HOU - 1: Housing Tenure (2023) 6
Table HOU - 2: Vacancy Rates (2023) 6
Table HOU - 3: Substandard Housing (2023) 7
Table HOU- 4: Renter Households, Cost Burden by Income (2023) 8
Table HOU - 5: Owner Households, Cost Burden by Income (2023) 9
Table HOU - 6: Assisted Housing Inventory 12
Table HOU - 7: Population and Household Projections, 2025-2050 12
Table HOU - 8: Population Projections by Age Group, 2025-2050 13
Table HOU - 9: Household Projections by Household Income, 2025-2050 14

INTRODUCTION

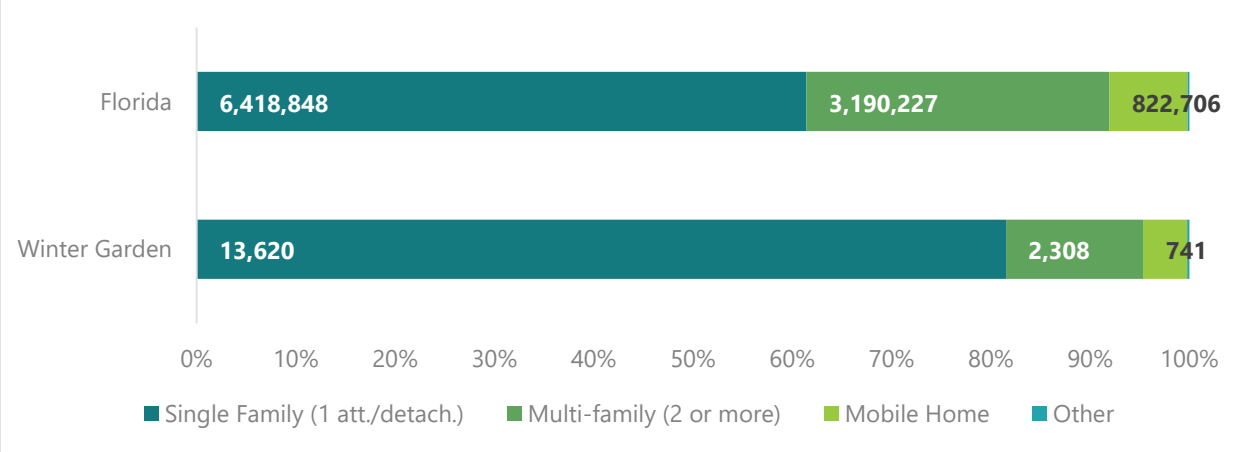
The Winter Garden Housing Data and Analysis chapter offers a detailed assessment of the City's current housing landscape, including an inventory of housing types, ages, occupancy patterns, and trends in housing affordability. It also presents population and household projections through 2050, providing a foundation for data-driven decision-making to address the City's evolving housing needs.

The data used in this chapter is primarily sourced from the American Community Survey (ACS) and the Florida Housing Data Clearinghouse, maintained by the Shimberg Center for Housing Studies at the University of Florida. The data represented from the Shimberg Center was compiled in 2023 (most recent and best available) and may differ in data collection periods, methodologies, and geographic precision from other datasets presented in subsequent sections of this chapter.

HOUSING UNIT TYPE

Winter Garden currently has a total of 16,707 housing units. Like similar suburban communities, Winter Garden has a high proportion of detached and attached (e.g., townhomes or duplexes) single-family homes, accounting for about 80% of all housing units in the City. The remaining 20% of housing units comprise of multi-family dwellings and mobile homes. While public engagement indicates that residents generally prefer single-family homes in their community, they are also open to a variety of housing types, including mixed-use developments, accessory dwelling units, and housing for seniors.

Figure HOU - 1: Housing Units by Type (2023)

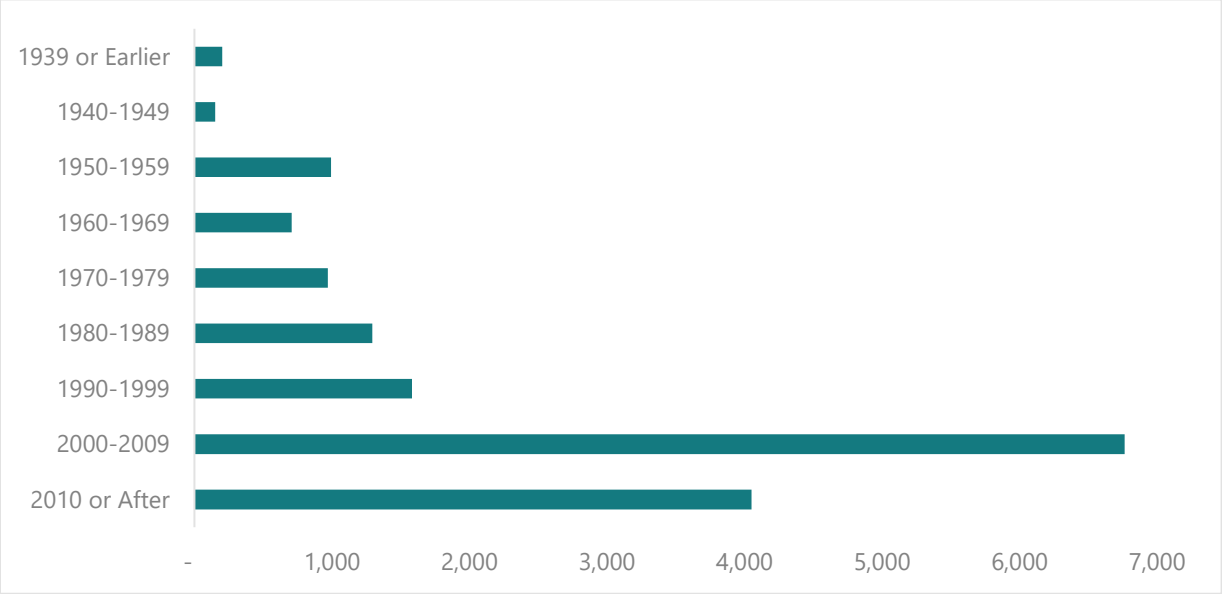


Source: Shimberg Center for Housing Studies, University of Florida

HOUSING AGE

The years prior to 2000 saw fairly consistent rates of housing construction, as the City added an average of 850 new units to its inventory every decade. Construction rates began increasing towards the end of the twentieth century, with a huge spike in housing construction between 2000 and 2009—over 6,700 housing units were built in this decade. Over 60% of the City's current housing stock has been built since 2000, highlighting Winter Garden's significant population growth in recent years.

Figure HOU - 2: Year Structures Built (2023)



Source: Shimberg Center for Housing Studies, University of Florida

HOUSING OCCUPANCY

Most Winter Garden residents are homeowners, with 64% of housing units being owned (compared to 58% at the state level), as shown in **Table HOU-1**. Notably, the vacancy rate in Winter Garden is much lower than the vacancy rates of the state of Florida and several nearby jurisdictions. Vacant housing units are expected within a housing market to account for residents moving to, from, and within Winter Garden; vacant housing units allow for a greater housing choice within a community. While a high percentage of seasonal housing units may account for high vacancy rates in some jurisdictions, Winter Garden has one of the highest seasonal unit rates in Central Florida yet it has a low vacancy rate, see **Table HOU-2**. Winter

Vacant housing is defined by the U.S. Census Bureau as a housing unit that no one is living in at the time and can include units for rent or sale, units for migrant workers, and units for seasonal, recreational, or occasional use.

Garden's comparably low vacancy rate may indicate that Winter Garden is a desirable community for residents in the region.

Table HOU - 1: Housing Tenure (2023)

	Winter Garden	Percentage	Florida	Percentage
Owner	10,696	64%	6,103,429	58%
Renter	4,761	28%	2,862,973	27%
Total Occupied	15,457	93%	8,966,402	86%
Vacant	1,250	7%	1,485,421	14%
Total	**16,707**	**100%**	**10,451,823**	**100%**

Source: Shimberg Center for Housing Studies, University of Florida

Table HOU - 2: Vacancy Rates (2023)

Location	Overall Vacancy Rates	Percent of Vacant Units Used Seasonally
Apopka	6%	35%
Florida	14%	54%
Maitland	9%	14%
Ocoee	6%	6%
Orange County	12%	24%
Orlando	14%	30%
Winter Garden	**7%**	**34%**
Winter Park	10%	17%

Source: American Community Survey 5-Year Estimates

SUBSTANDARD UNITS

The University of Florida Shimberg Center for Housing Studies assigns the following characteristics to substandard housing: overcrowding, no fuel used, and lacking complete plumbing and kitchen facilities. As shown in **Table HOU-3**, approximately 4.3% of the City's housing stock is considered substandard—primarily due to units being overcrowded or lacking complete kitchen or plumbing facilities. The City will continue to provide support and remediation to substandard housing.

Substandard Housing *- Florida statutes define a "substandard unit" as "any unit lacking complete plumbing or sanitary facilities for the exclusive use of the occupants; a unit which is in violation of one or more major sections of an applicable housing code and where such violation poses a serious threat to the health of the occupant; or a unit that has been declared unfit for human habitation but that could be rehabilitated for less than 50 percent of the property value."*

Table HOU - 3: Substandard Housing (2023)

	Number	Percentage
Overcrowded (1.01 or More Persons per Room)	348	2.3%
No Fuel Used	N/A	N/A
Lacking Complete Kitchen Facilities	161	1%
Lacking Complete Plumbing Facilities	175	1%
Total	**684**	**4.3%**

Source: Shimberg Center for Housing Studies, University of Florida

HOUSING COSTS

This section explores housing costs for both homeowners and renters in the City. Tracking this data is important, as increases in housing costs, however minor, can be highly disruptive to a household's financial well-being.

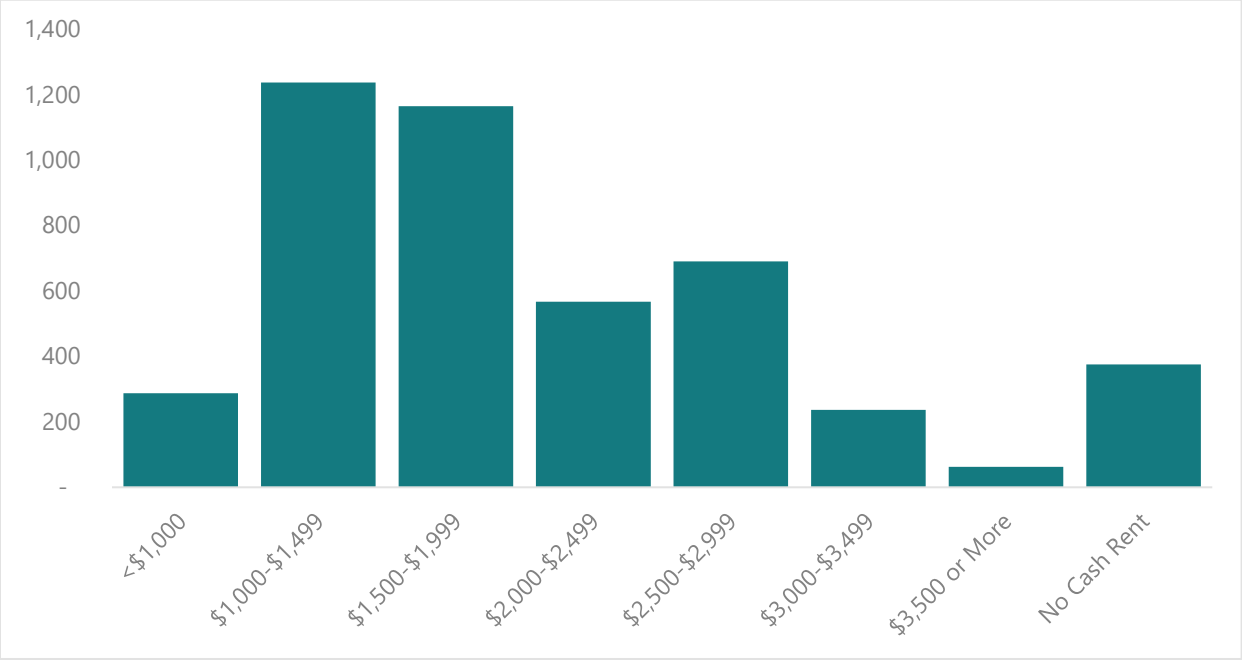
Housing is generally considered to be affordable when a household spends no more than 30% of their income on housing costs. Households that spend more than 30% of their income on housing are considered to be cost-burdened and those that spend more than 50% are determined to be severely cost-burdened. When a household must devote more of their income to housing costs, they have less dispensable income to put towards other needs such as healthcare, transportation, and food. Therefore, addressing housing affordability is important to ensure a high quality of life for all Winter Gardens residents.

Many residents agree that housing affordability should be a priority for the City, particularly in east Winter Garden. While Winter Garden cannot directly influence housing markets, the City can support housing affordability by allowing a diverse range of housing options and providing funding and support to housing affordability programs.

Renter Costs

Over half of renters in Winter Garden pay between $1,000 and $2,000 in monthly rent, with a median gross rent of $1,727 (2023 ACS 5-Year Estimate). This median gross rent is slightly higher than that of the state which sits at $1,564 (2023 ACS 5-Year Estimate). As displayed in **Table HOU-4**, A significant portion of renters (roughly 46%) in the City are considered cost-burdened, meaning these residents dedicate more than 30% of their income to rent each month. **Figure HOU-3** provides the distribution of renters cost as represented by monthly gross rent. Lower-income renters are disproportionately cost-burdened compared to their higher-income peers. However, overall rates of renters who are cost burdened have decreased in the past decade (see **Figure HOU-5**).

Figure HOU - 3: Renter Households by Monthly Gross Rent (2023)



Source: Shimberg Center for Housing Studies, University of Florida

Table HOU- 4: Renter Households, Cost Burden by Income (2023)

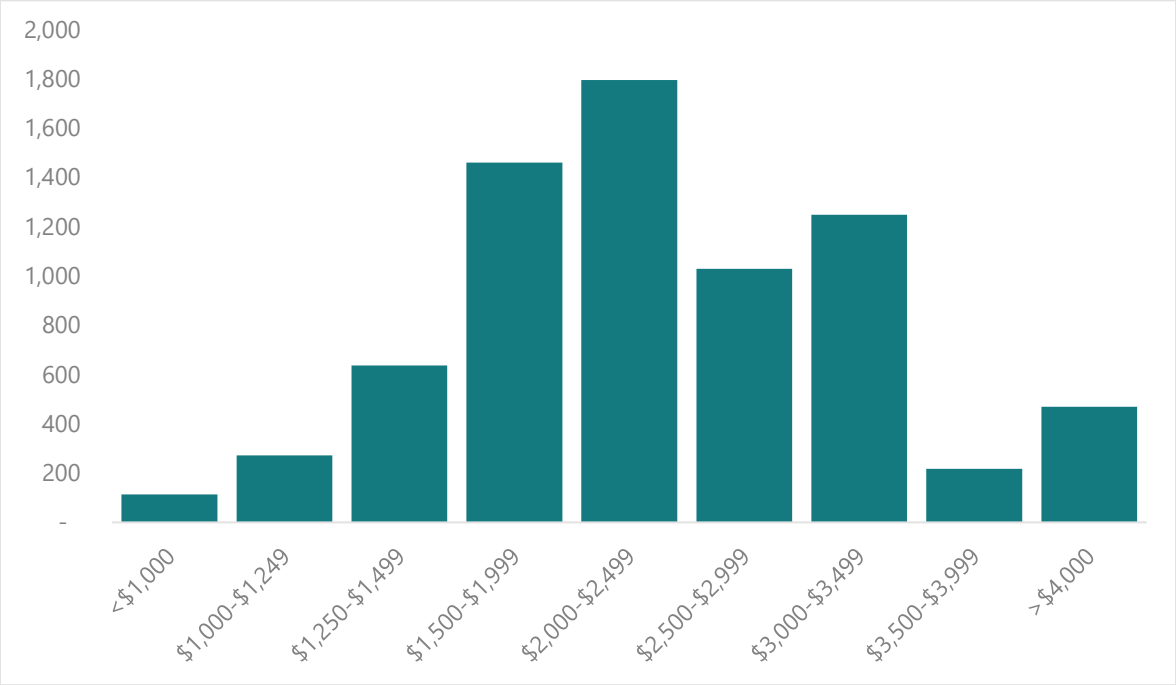
Household Income	Number of Households			Total	Percent
	Affordable Housing Costs	Cost Burdened	Severely Cost Burdened		
30% AMI or less	N/A	N/A	653	**653**	**14%**
30.01-50% AMI	28	304	224	**556**	**12%**
50.01-80% AMI	462	242	252	**956**	**20%**
80.01-100% AMI	663	366	N/A	**1,029**	**21%**
Greater than 100% AMI	1,486	124	N/A	**1,610**	**34%**
Total	**2,639**	**1,036**	**1,129**	**4,804**	**100%**
Percent of Total	**55%**	**22%**	**24%**	**100%**	

Source: Shimberg Center for Housing Studies, University of Florida

Homeowner Costs

Figure HOU-4 shows that the largest share of homeowners devotes between $2,000 and $2,500 each month to housing costs, though a similar proportion pay less than $2,000 or greater than $2,500 each month. The median monthly costs for homeowners with a mortgage is $2,306, which is higher than the state average, which is $1,860 (2023 ACS 5-Year Estimates). Compared to renters, homeowners are significantly less cost burdened—only 23% of homeowners pay more than 30% of their income to housing costs each month, see **Table HOU-5**. Furthermore, the rates of homeowners who are cost-burdened has been steadily decreasing since 2014, as noted in **Figure HOU-5**.

Figure HOU - 4: Owner Households with a Mortgage by Monthly Housing Costs (2023)



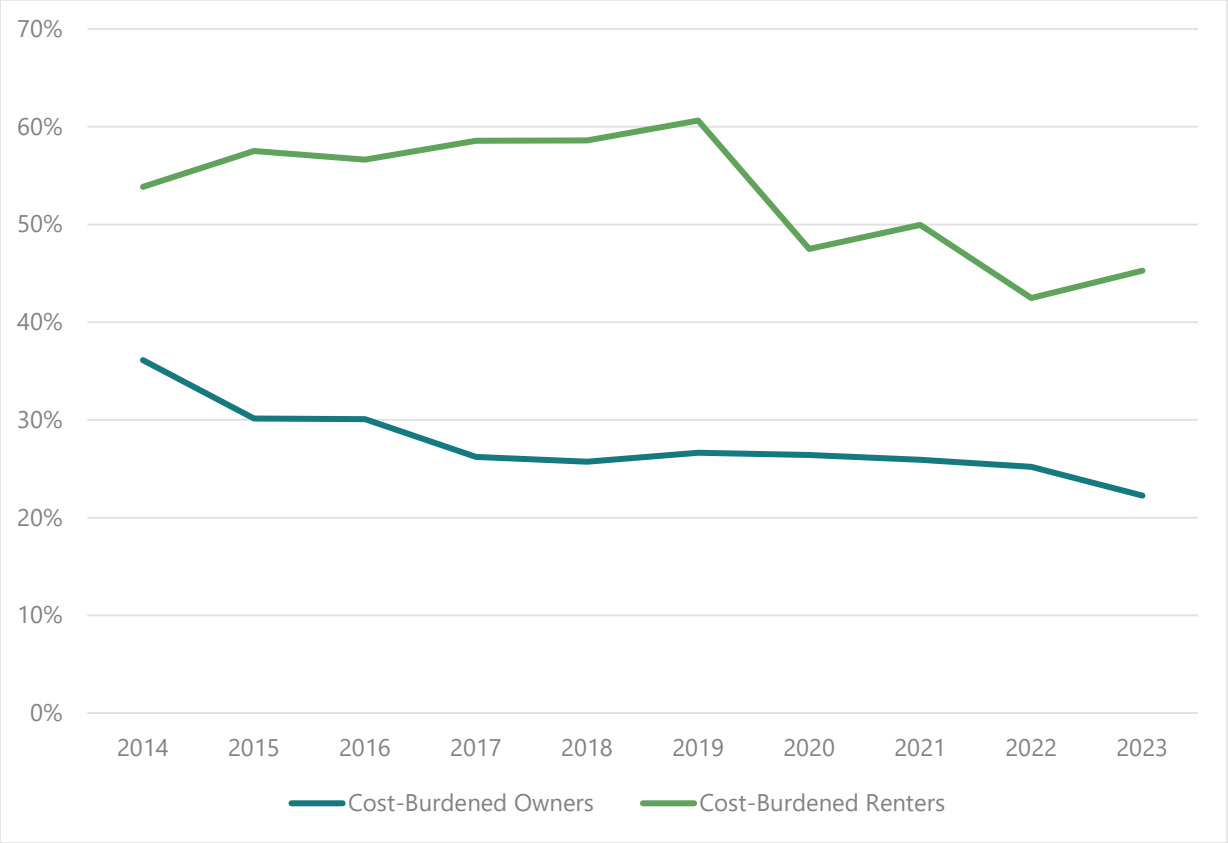
Source: Shimberg Center for Housing Studies, University of Florida

Table HOU - 5: Owner Households, Cost Burden by Income (2023)

Household Income	Number of Households			Total	Percent of Total
	Affordable Housing Costs	Cost Burdened	Severely Cost Burdened		
30% AMI or less	60	30	617	**707**	**6%**
30.01-50% AMI	175	169	206	**550**	**4%**
50.01-80% AMI	925	405	369	**1,699**	**14%**
80.01-100% AMI	653	156	60	**869**	**7%**
Greater than 100% AMI	7,944	689	73	**8706**	**69%**
Total	**9,757**	**1,449**	**1,325**	**12,531**	**100%**
Percent of Total	**78%**	**12%**	**11%**	**100%**	

Source: Shimberg Center for Housing Studies, University of Florida

Figure HOU - 5: Cost Burdened Renters and Owners Over Time

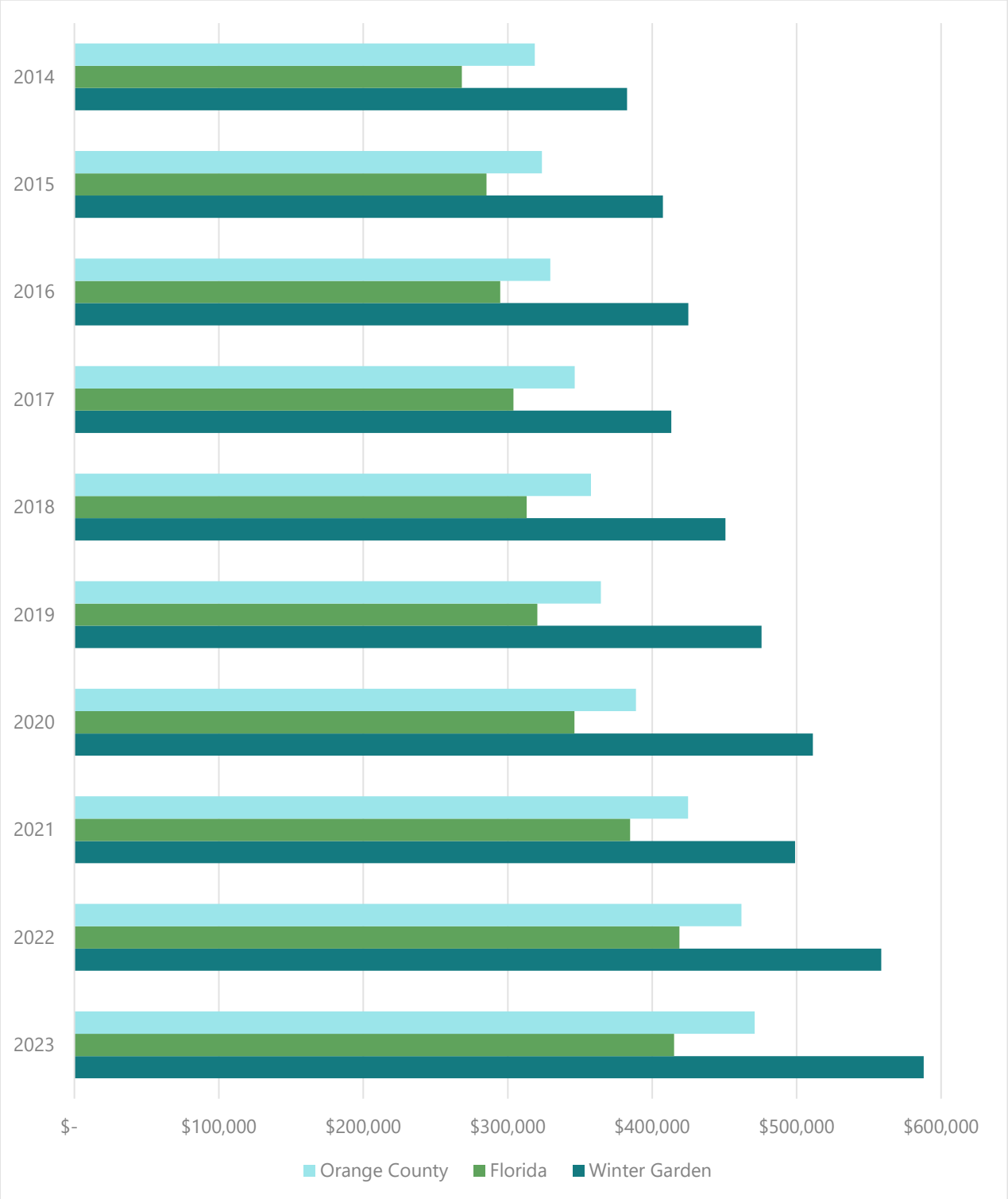


Source: American Community Survey 5-Year Estimates

Median Sales Price

Like many communities, median sales price for single-family homes in Winter Garden have increased greatly in recent years. In the decade between 2014 and 2023, single-family home prices have increased by over 50% in Winter Garden. However, despite increasing home sales price, homeowners are not necessarily more cost-burdened as explored above. Notably, compared to Orange County and the state of Florida, single-family homes in Winter Garden are more expensive. These higher home prices suggests that Winter Garden is a desirable destination within the region for residents. **Figure HOU-6** includes the median sales price for single-family homes in 2024 dollars going back to 2014 and comparing the City to Orange County and the state.

Figure HOU - 6: Median Sales Price for Single-Family Homes in 2024 Dollars



Source: Shimberg Center for Housing Studies, University of Florida

ASSISTED HOUSING

There are four housing developments receiving subsidies in Winter Garden accounting for a total of 502 assisted units. Furthermore, the Winter Garden Community Redevelopment Agency (CRA), along with partner agencies such as West Orange Habitat for Humanity, coordinates home repair programs and affordable housing development in the Historic East Winter Garden Neighborhood.

Table HOU - 6: Assisted Housing Inventory

Name	Program(s) Provided	Target Population	Year Built	Ownership Type	Subsidy End	Assisted Units	Total Units
Bay Pointe Apts.	Rental Assistance/ RD; Section 515	Family	1990	Limited Dividend	2040	61	61
Evergreen Garden Apartments	Rental Assistance/ RD; Section 515	Family	1984	Limited Dividend	2034	33	33
Park Avenue Villas	Housing Credits 4%; Local Bonds; SAIL	Family	1974	For-Profit	2051	120	120
West Pointe Villas	Housing Credits 4%; Local Bonds;S AIL	Family	2001	For-Profit	2054	288	288

Source: Shimberg Center for Housing Studies, University of Florida

POPULATION PROJECTIONS

Winter Garden is expected to see continued population growth by 2050, with an expected increase in about 10,000 people, see **Table HOU-7**. To accommodate this growth, about 3,000 housing units will need to be built within the next 25 years. As indicated in **Figure HOU-2,** housing construction has increased significantly since 2000. If housing construction continues this trend through 2050, the City will be able to meet the additional housing needs to accommodate its growing population.

Population and Household Projections

Table HOU - 7: Population and Household Projections, 2025-2050

	2025	2030	2035	2040	2045	2050
Permanent Population	54,290	58,010	60,781	62,664	63,921	64,824
Permanent Households[1]	15,600	16,670	17,466	18,007	18,368	18,628
Seasonal Population	1,241	1,326	1,389	1,432	1,461	1,482
Seasonal Households[1]	357	381	399	411	420	426

	2025	2030	2035	2040	2045	2050
Total Population	55,531	59,336	62,170	64,096	65,382	66,306
Total Households	**15,957**	**17,051**	**17,865**	**18,418**	**18,788**	**19,053**

[1]The number of households was determined by dividing the projected population by 3.58, the estimated number of people per household.

Population Projections by Age

A person's age can impact their priorities for housing. The following table (**Table HOU-8**) includes population estimates broken down by age group; these projections were determined by applying the projected age proportions provided by Shimberg to the projected total population provided in **Table HOU-7.** The 75+ age cohort is expected to see significant increases (118%), followed by the 70-74 age group (61%). Therefore, the City should consider the housing priorities of these age groups in making decisions on housing. The City may consider policies related to aging-in-place or reviewing standards for senior or age-restricted housing.

Table HOU - 8: Population Projections by Age Group, 2025-2050

Age Group	2025	2030	2035	2040	2045	2050	25 Year Pct. Increase
0-4	3,766	3,933	4,015	4,060	4,106	4,119	**9%**
5-9	3,821	3,929	4,113	4,141	4,120	4,148	**9%**
10-14	3,968	4,047	4,249	4,315	4,280	4,242	**7%**
15-19	3,684	3,657	3,607	3,609	3,671	3,625	**-2%**
20-24	3,145	3,355	3,250	3,228	3,347	3,381	**8%**
25-29	2,905	3,218	3,260	3,113	3,143	3,238	**11%**
30-34	3,950	4,260	4,499	4,654	4,530	4,541	**15%**
35-39	4,035	3,643	3,754	4,047	4,131	4,011	**-1%**
40-44	3,748	3,934	4,322	4,532	4,652	4,728	**26%**
45-49	3,646	3,898	3,924	3,450	3,343	3,417	**-6%**
50-54	3,679	3,732	3,683	3,760	3,757	3,622	**-2%**
55-59	3,235	3,518	3,380	3,510	3,957	3,936	**22%**
60-64	3,485	3,777	3,776	3,727	4,001	4,488	**29%**
65-69	2,860	3,306	3,368	3,583	3,527	3,778	**32%**
70-74	2,114	2,642	3,272	3,492	3,463	3,412	**61%**
75+	3,488	4,486	5,698	6,874	7,355	7,621	**118%**
Total	**55,531**	**59,336**	**62,170**	**64,096**	**65,382**	**66,306**	**19%**

Source: Shimberg Center for Housing Studies, University of Florida; Inspire projections

Household Projections by Household Income

Household income can also determine a person or household's priorities for housing. The projections shown in **Table HOU-9** were determined by applying the projected proportions of households at each income level to the number of total projected households as reported in **Table HOU-7.**

Table HOU - 9: Household Projections by Household Income, 2025-2050

Income Level	Number of Households			
	Affordable Housing Costs	Cost Burdened	Severely Cost Burdened	Total
2025				
Owner-Occupied				
30% of AMI or less	55	28	569	**652**
30.01%-50% AMI	162	156	190	**508**
50.01%-80% AMI	853	373	340	**1,567**
80.01%-100% AMI	602	144	55	**801**
Greater than 100% AMI	7,325	636	67	**8,028**
Renter-Occupied				
30% of AMI or less	-	-	598	**598**
30.01%-50% AMI	26	279	205	**510**
50.01%-80% AMI	423	222	231	**876**
80.01%-100% AMI	607	335	-	**942**
Greater than 100% AMI	1,362	113	-	**1,475**
Total	**11,415**	**2,286**	**2,256**	**15,957**
2030				
Owner-Occupied				
30% of AMI or less	60	30	610	**700**
30.01%-50% AMI	173	168	203	**544**
50.01%-80% AMI	916	401	365	**1,682**
80.01%-100% AMI	647	155	60	**861**
Greater than 100% AMI	7,867	683	72	**8,622**
Renter-Occupied				
30% of AMI or less	-	-	631	**631**
30.01%-50% AMI	28	294	216	**538**
50.01%-80% AMI	446	234	244	**924**
80.01%-100% AMI	640	353	-	**993**
Greater than 100% AMI	1,436	120	-	**1,555**
Total	**12,213**	**2,436**	**2,401**	**17,051**
2035				
Owner-Occupied				
30% of AMI or less	63	31	641	**736**
30.01%-50% AMI	182	176	213	**571**
50.01%-80% AMI	962	422	384	**1,768**
80.01%-100% AMI	679	162	63	**904**
Greater than 100% AMI	8,263	717	75	**9,056**
Renter-Occupied				
30% of AMI or less	-	-	657	**657**
30.01%-50% AMI	28	306	225	**559**
50.01%-80% AMI	465	243	253	**961**

Income Level	Number of Households			
	Affordable Housing Costs	Cost Burdened	Severely Cost Burdened	Total
80.01%-100% AMI	667	368	-	1,035
Greater than 100% AMI	1,494	124	-	1,619
Total	**12,804**	**2,549**	**2,512**	**17,865**
2040				
Owner-Occupied				
30% of AMI or less	65	32	662	760
30.01%-50% AMI	188	182	221	591
50.01%-80% AMI	993	435	396	1,825
80.01%-100% AMI	701	168	65	934
Greater than 100% AMI	8,534	741	78	9,352
Renter-Occupied				
30% of AMI or less	-	-	674	674
30.01%-50% AMI	29	314	232	574
50.01%-80% AMI	476	250	260	986
80.01%-100% AMI	684	377	-	1,062
Greater than 100% AMI	1,533	127	-	1,661
Total	**13,205**	**2,626**	**2,588**	**18,418**
2045				
Owner-Occupied				
30% of AMI or less	66	33	676	775
30.01%-50% AMI	192	186	225	603
50.01%-80% AMI	1,014	445	405	1,864
80.01%-100% AMI	716	171	66	953
Greater than 100% AMI	8,714	756	79	9,549
Renter-Occupied				
30% of AMI or less	-	-	685	685
30.01%-50% AMI	30	319	235	584
50.01%-80% AMI	485	254	265	1,003
80.01%-100% AMI	696	384	-	1,081
Greater than 100% AMI	1,560	130	-	1,691
Total	**13,474**	**2,678**	**2,636**	**18,788**
2050				
Owner-Occupied				
30% of AMI or less	68	34	687	788
30.01%-50% AMI	195	188	229	612
50.01%-80% AMI	1,030	451	411	1,892
80.01%-100% AMI	727	174	68	968
Greater than 100% AMI	8,848	768	81	9,697

Income Level	Number of Households			
	Affordable Housing Costs	Cost Burdened	Severely Cost Burdened	Total
Renter-Occupied				
30% of AMI or less	-	-	693	**693**
30.01%-50% AMI	30	322	238	**589**
50.01%-80% AMI	490	257	267	**1,014**
80.01%-100% AMI	704	388	-	**1,092**
Greater than 100% AMI	1,576	132	-	**1,708**
Total	**13,668**	**2,713**	**2,673**	**19,053**

Source: Shimberg Center for Housing Studies, University of Florida; Inspire projections

FUTURE CONSIDERATIONS

Winter Garden's housing landscape is primarily composed of detached single-family homes, much of which has been constructed over the past two decades. Although housing costs in Winter Garden exceed the state average, data indicates that cost burden rates among homeowners and renters have not significantly worsened. However, as noted in the Future Land Use Element, the City may lack sufficient future land use categories and residential densities to accommodate projected population growth. To address this, the City may consider allowing higher-density residential development, which could not only help meet future housing demand but also expand affordable housing options within the community. The following considerations should inform the update of the Housing Element's goals, objectives, and policies.

1. ***Modify certain future land use categories to accommodate higher-density residential in appropriate locations.*** Winter Garden should evaluate and adjust specific future land use designations to allow for increased residential densities in targeted areas, such as near commercial centers, major roadways, or transit hubs. These modifications will help the City accommodate projected population growth while promoting more compact, walkable, and sustainable development patterns.
2. ***Provide opportunities for mixed-use development.*** The City should identify strategic locations where mixed-use development, which integrates residential, commercial, and civic uses, can be encouraged through zoning regulations and land use policy. Mixed-use areas foster vibrant, walkable neighborhoods and can provide diverse housing options near jobs, services, and amenities.
3. ***Consider developing an incentive program for affordable housing.*** To increase the supply of affordable and workforce housing, Winter Garden may explore the creation of an incentive program that could include tools such as

density bonuses, reduced impact fees, expedited permitting, or tax abatements for developers who include affordable units in their projects.

4. ***Encourage housing units that are appropriate for the aging population.*** The City should support the development of senior-friendly housing options, such as single-story homes, independent living communities, and accessory dwelling units (ADUs), to meet the needs of the aging population and allow older residents to remain in the community.
5. ***Encourage aging-in-place strategies.*** Winter Garden should promote aging-in-place policies that allow residents to remain safely and comfortably in their homes as they grow older. This includes supporting universal design standards, home retrofitting and repair programs, and neighborhood design that improves accessibility to transit, healthcare, and essential services.



4

DATA & ANALYSIS

COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

PUBLIC FACILITIES

Table of Contents

INTRODUCTION 4
SANITARY SEWER 4
Sanitary Sewer Capacity 4
Projected Sanitary Sewer Demands 4
Septic to Sewer 5
SOLID WASTE COLLECTION 6
Collection Programs 6
Projected Solid Waste Demand 7
STORMWATER MANAGEMENT 7
POTABLE WATER 8
Potable Water Capacity 8
Projected Potable Water Demand 8
Central Florida Water Initiative 9
RECLAIMED WATER 10
2022 Reclaimed Water Facility Plan 10
AQUIFER RECHARGE 11
Aquifer Contamination and Groundwater Recharge 12
Regulatory Framework 12
WELLHEAD PROTECTION AREAS 12
FUTURE CONSIDERATIONS 13

List of Tables

Table PFE - 1: Sanitary Sewer LOS Standards 5
Table PFE - 2: Projected Sanitary Sewer Demand 5
Table PFE – 3: Septic to Sewer Conversions 6
Table PFE - 4: Projected Solid Waste Demand 7
Table PFE - 5: Stormwater Management Level of Service Standards 8
Table PFE - 6: Potable Water Capacity 8
Table PFE - 7: Potable Water LOS Standards 8
Table PFE - 8: Projected Potable Water Demand 9
Table PFE – 9: Water Resource Projects 10
Table PFE – 10: Recommended Reclaimed Water Projects 11

List of Maps

Map PFE - 1: Wastewater Service Area 14
Map PFE - 2: Potable Water Service Area 15
Map PFE - 3: Reclaimed Water Service Area 16
Map PFE - 4: Aquifer Recharge 17
Map PFE - 5: Wellhead Protection Area 18

INTRODUCTION

The Public Facilities Element outlines the inventory, analysis, and projected future needs for key systems managed by Winter Garden. These systems include sanitary sewer, solid waste, stormwater, potable water, reclaimed water, and aquifer recharge. This section specifically focuses on infrastructure responsibilities under the City's jurisdiction and excludes the provision of utilities or service demand outside of the City, except when services are provided by Winter Garden Public Services. The City of Winter Garden does provide potable water, reclaimed water, and sanitary services to some properties outside of the City limits, which include small areas of Unincorporated Orange County, the City of Ocoee, and the Town of Oakland, as shown on **Maps PFE - 1**, **PFE - 2, and PFE - 3**. Ensuring adequate and sustainable infrastructure is essential to maintaining the economic vitality and environmental well-being of the community, both now and in the future.

SANITARY SEWER

Sanitary Sewer Capacity

The City of Winter Garden operates one Wastewater Treatment Facility (WWTF), the Crest Avenue Wastewater Treatment Facility. The facility currently has a permitted capacity of 4.75 MGD AADF. The location of the Crest Avenue Wastewater Treatment Facility and the wastewater service area can be found on **Map PFE - 1**.

The current wastewater permit with the Florida Department of Environmental Protection (FDEP) was renewed in December 2023 supporting an expanded capacity of 7.5 MGD following completion of the Crest Avenue Wastewater Treatment Facility (WWTF) Expansion and Process Optimization project. Scheduled to begin construction in early 2025, this estimated $130–$135 million upgrade will convert the existing WWTF to a five-stage Membrane Bioreactor (MBR) system, delivering Advanced Wastewater Treatment (AWT) quality effluent while expanding capacity from 4.75 MGD to 7.5 MGD. The MBR conversion will also enable compliance with the stricter effluent standards outlined in the Wekiwa Spring and Rock Springs Basin Management Action Plans, while matching system output with reclaimed water expansion efforts.

Projected Sanitary Sewer Demands

The City of Winter Garden's current adopted Level of Service (LOS) for sanitary sewer ensures that there is sufficient availability for current and future populations and is summarized below in **Table PFE-1**. These LOS service standards are based on the number of residential units for residential land uses and equivalent residential units for non-residential land uses.

Table PFE - 1: Sanitary Sewer LOS Standards

Land Use	LOS Standard
Residential	250 gallons/day/unit
All other uses	250 gallons/day/ERU

Source: City of Winter Garden, 2010

As described above, Winter Garden provides sanitary sewer service not only within its municipal boundaries, but also to select areas in unincorporated Orange County and the Town of Oakland, which is not anticipated to change within the horizon of the plan. Projected sewer demand is calculated using an average of 70 gallons per person per day, consistent with per capita usage trends documented between 2010 and 2020 in the City's 2022 Reclaimed Water Facility Plan. This projection, based on anticipated population growth through 2050, is outlined in **Table PFE - 2**.

Table PFE - 2: Projected Sanitary Sewer Demand

Year	Projected Total Residents	Projected Sanitary Sewer Demand (mgd)
2025	55,531	3.89
2030	59,336	4.15
2035	62,170	4.35
2040	64,097	4.49
2045	65,382	4.58
2050	66,306	4.64

Source: City of Winter Garden, 2010; 2025

Based on **Table PFE – 2** the City will have enough capacity to meet demand through 2050 with the current sanitary sewer capacity at the Crest Avenue WWTF and more than enough capacity with the increased capacity from the facility's expansion.

Septic to Sewer

F.S. 369.320 requires the City of Winter Garden's Wastewater Facility Plan to phase out existing septic tank systems where central wastewater facilities are available. While F.S. 163.3177 (6)c requires the City of Winter Garden to consider the feasibility of converting developments with more than 50 (1du/ac) residential lots on septic tanks to central sewer service. Winter Garden has approximately 430 parcels within the City that utilize septic systems. 394 of the 430 parcels have been targeted for conversion to central sewer service over the next 20 years. After the conversion of the 394 parcels, the City will have 36 parcels remaining on septic systems. **Table PFE – 3** provides a summary of the projects the City of Winter Garden and Orange County are completing in the next 20 years to convert parcels on septic to central sewer systems within their Joint Planning Area.

Table PFE – 3: Septic to Sewer Conversions

Project	Number of Parcels	Design		Construction	
		Start	Cost	Start	Cost
City of Winter Garden					
Teacup Springs	142	FY 23	$300,000.00	FY 25	$5,500,000.00
Railroad Avenue	18	FY 40	$130,000.00	FY 26	$1,200,000.00
Emerald Acres	28	FY 26	$150,000.00	FY 28	$1,500,000.00
Wintermere Pointe	79	FY 30	$250,000.00	FY 31	$3,400,000.00
Wintermere Harbor	91	FY 30	$250,000.00	FY 32	$3,500,000.00
Mary Jean	33	FY 35	$110,000.00	FY 37	$1,100,000.00
			Total		**$16,200,000.00**
Unincorporated Orange County					
Country Lakes	49	FY 35	$250,000.00	FY 38	$2,700,000.00
Story Rd & 9th Street / Summer Street	47	FY 35	$150,000.00	FY 37	$1,200,000.00
Palm Ave & 9th Street	58	FY 35	$250,000.00	FY 38	$2,800,000.00
Banana Bay/Sunset Lakes	135	FY 40	$150,000.00	FY 42	$6,300,000.00
			Total		**$13,000,000.00**

Source: City of Winter Garden, 2024

SOLID WASTE COLLECTION

Collection Programs

The City of Winter Garden provides solid waste collection services for household trash, yard waste, large items, electronics, and dumpster service. Household trash, yard waste, and large items are collected curbside on a weekly basis. Electronic items including but not limited to appliances, televisions, computers, vacuum cleaners, water heaters, lawn mowers, and grills can be picked up if scheduled in advance. Residents are able to request dumpster services for disposing of large amounts of trash. The City of Winter Garden discontinued the offering and provision of recycling collection, conveyance, and disposal services with Ordinance No. 24-48. However, the City is continuing to explore providing recycling collection service through various private entities.

The City of Winter Garden does not collect hazardous waste like liquid paint, rechargeable batteries, household cleaning products, pool chemicals, pesticides,

herbicides, light bulbs, motor oil, cooking oil, antifreeze, etc. However, residents can drop off hazardous waste items at the two Orange County facilities listed below.

Porter Transfer Station
1326 Good Homes Road
Orlando, FL 32818

Orange County Landfill
5901 Young Pine Road
Orlando, FL 32829

Projected Solid Waste Demand

The City of Winter Garden's current adopted Level of Service (LOS) for Solid Waste is 5.6 pounds/day/person. **Table PFE - 4** provides the projection of solid waste demand based on population projections through 2050 and the adopted level of service. In September of 2001, the City entered into an interlocal agreement with Orange County to provide for use of the County Solid Waste Management System by contract for solid waste disposal and transfer needs. Data from Orange County indicates that the County has adequate Class I landfill capacity through the year 2038. Currently, Orange County's Class I disposal operations are in landfill cells 9 and 10. Portions of remaining Cells 11 and 12 are scheduled to be constructed approximately every three to five years to supply capacity through 2040. After these cells are complete, the County's long-range plan is to develop cells on other portions of the existing 5,000-acre landfill site.

Table PFE - 4: Projected Solid Waste Demand

Year	Projected Total Residents	Projected Solid Waste Demand (pounds/day)
2025	55,531	310,973.6
2030	59,336	332,281.6
2035	62,170	348,152.0
2040	64,097	358,943.2
2045	65,382	366,139.2
2050	66,306	371,313.6

Source: City of Winter Garden, 2010; 2025

STORMWATER MANAGEMENT

All new development within the City is required to provide a drainage design in conformance with the City's adopted drainage level of service standards and state standards. The City of Winter Garden's LDC sets maximum impervious surface ratio (ISR) standards for new development to maintain and support necessary drainage calculations. Additionally, any major development within the City is required to receive a permit from the St. Johns River Water Management District (SJRWMD) for stormwater modifications. The City's adopted drainage level of service standards are summarized below in **Table PFE - 5**.

Table PFE - 5: Stormwater Management Level of Service Standards

Attribute	Level of Service
Storm Event	25 years 24-hour
Onsite Retention	Retain the first ½ inch of run off
Quantity	Post development stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than predevelopment runoff

Source: City of Winter Garden, 2010

POTABLE WATER

Potable Water Capacity

The City operates three Water Treatment Plants with a combined permitted maximum daily capacity of 13.02 MGD, a combined groundwater capacity of 17.63 MGD and a Consumptive Use Permit average permitted withdrawal capacity of 6.33 MGD. The location of the three water treatment plants and their service area can be seen on **Map PFE - 2**. The individual capacities of the three water treatment plants are detailed below in **Table PFE - 6**.

Table PFE - 6: Potable Water Capacity

Plant Name	Address	Permitted Max Day Capacity, (mgd)	Groundwater Well Capacity (mgd)	CUP Average Permitted Withdrawal (mgd)
Woodlark	1680 Woodlark Wy	3.71	6.77	1.69
Palmetto	171 East Palmetto St	6.0	6.69	2.67
Fullers Cross	1025 Fullers Cross Rd	3.31	3.31	1.97
	Total	**13.02**	**16.77**	**6.33**

Source: City of Winter Garden, 2025

Projected Potable Water Demand

Winter Garden's current adopted Level of Service (LOS) for potable water ensures that there is sufficient availability for current and future populations and is summarized below in **Table PFE - 7**.

Table PFE - 7: Potable Water LOS Standards

Land Use	LOS Standard
Residential	350 gallons/day/unit
All other uses	350 gallons/day/ERU

Source: City of Winter Garden, 2010

The City's projected potable water demand is based on population projections through 2050 and is summarized below in **Table PFE - 8**. The projected potable water demand is based on an average per capita demand included in the 2025 Central Florida Water Initiative Regional Water Supply Plan of 143 gallons per day per capita.

Table PFE - 8: Projected Potable Water Demand

Year	Projected Total Residents	Projected Potable Water Demand (mgd)
2025	55,531	7.94
2030	59,336	8.49
2035	62,170	8.89
2040	64,097	9.17
2045	65,382	9.35
2050	66,306	9.48

Source: City of Winter Garden, 2010; 2025 and Central Florida Water Initiative, 2025

Based on **Table PFE – 8** above, the City will have enough potable water to meet demand through the horizon year 2050.

Central Florida Water Initiative

The Central Florida Water Initiative (CFWI) is a regional collaboration focused on sustainable water supply planning. It brings together the St. Johns River, South Florida, and Southwest Florida Water Management Districts, along with the Florida Department of Environmental Protection (FDEP), the Florida Department of Agriculture and Consumer Services (FDACS), utilities, environmental organizations, business leaders, agricultural interests, and other stakeholders. The CFWI Planning Area includes Orange, Osceola, Polk, Seminole, and southern Lake County—encompassing the City of Winter Garden. **Table PFE – 9** highlights two Winter Garden water resource projects featured in the CFWI's most recent Regional Water Supply Plan.

Table PFE – 9: Water Resource Projects

Project	Description	Water Resource Benefit (MGD)	Cost	Date Complete
Winter Garden Conservation Program Expansion Phase II	Expands the City's water conservation software system which allows customers to contact the City for their daily or monthly water use.	0.06	$2,360,000.00	9/1/2018
Winter Garden Reuse Distribution Retrofit	Construct 221 reclaimed water retrofits in the Stoneybrook West community (final phase).	0.10	$1,250,000	6/30/2019

Source: Central Florida Water Initiative, 2025

RECLAIMED WATER

The reclaimed water system in Winter Garden serves approximately 25,000 residential and commercial customers and has an average annual demand of approximately 4.16 MGD and a corresponding influent flow of 4.02 MGD. This demand is met by a combination of effluent from the Crest Ave WWTF and reclaimed water purchased from Orlando's Conserv II facility. The PAR (Public Access Reuse) system and RIBS (Rapid Infiltration Basins) serve as the City's only means of effluent disposal. Currently, effluent flows to the PAR system and RIBS are approximately 2.0 MGD sent to each. The reclaimed water service area can be seen on Map PFE – 3.

2022 Reclaimed Water Facility Plan

Currently, the City purchases reclaimed water from Orange County's Conserv II system. In 2020, the City purchased an average of 2.2 MGD to serve customer demand, primarily in the northwest and southwest portions of the City's service area. The "Wekiwa and Rock Springs BMAP" prohibits land application of effluent not treated to advanced standards within the basin. Therefore, non-advanced wastewater treated (AWT) effluent from the Conserv II system will not satisfy total maximum daily load (TMDL) requirements and cannot be land applied in the Wekiva Basin. Orlando does not intend to modify its treatment process and as a result the City will no longer be able to use Conserv II reclaimed water after 2028. Given current and projected demands, Winter Garden will face a shortfall without augmentation. The City of Winter Garden in 2022 developed a Reclaimed Water Facility Plan to evaluate the options for the City to meet existing and future reuse demand, phase

out supply from Conserv II and comply with SB64 legislation. The recommended short term, midterm, and long-term improvements from this plan are summarized below in **Table PFE – 10**.

Table PFE – 10: Recommended Reclaimed Water Projects

Project Description	Cost
Short Term Improvements, (2-5 Years)	
RW-1 Crest/Smith Transmission Improvements	$2,640,000
RW-1A Crest Augmentation System Discharge Modifications	$96,000
RW-2 Smith St 6 MG Ground Storage Tank and PS	$6,540,000
RW-3 Southwest Area RW Distribution Improvements	$4,674,000
RW-4 Avalon Road Reclaimed Watermain	$2,130,000
Sub-total	$16,080,000
Mid Term Improvements, (6-10 Years)	
RW-5 Wintermere Harbour Reuse Main Ext. and Retrofit	$1,530,000
RW-6 Wintermere Pt. Reuse Main Ext. and Retrofit	$3,006,000
RW-7 Western RIBs (includes $800K land acquisition)	$1,694,000
RW-7A Viscaya RIBs	$654,000
AWS-1 John's Lake Surface Water Supply	$1,257,600
Sub-total	$8,141,600
Long Term Improvements, (10+ Years)	
RW-8 4 MG Ground Storage Tank at Smith St.	$4,000,000
Sub-total	$4,000,000
Total	**$28,221,600**

Source: City of Winter Garden, 2022

AQUIFER RECHARGE

Aquifer recharge is the process of replenishing water in an underground aquifer, a permeable layer that stores and allows groundwater to flow. This recharge happens when rainwater infiltrates the soil or enters the aquifer. Additionally, aquifers can be recharged by water from other aquifers or surface water bodies. Despite Florida's significant annual rainfall, only about 25% (or 13 inches) of the average 51 inches contributes to aquifer recharge. The rest is lost through evaporation, runoff, or plant absorption. Ensuring that aquifer recharge exceeds or at least balances water withdrawals is crucial for maintaining groundwater levels, as the City relies on groundwater as the sole source of drinking water. Careful monitoring of recharge rates helps protect this essential source of clean and reliable drinking water for future generations. The majority of Winter Garden is a medium or low aquifer recharge with some areas of high recharge located in the southern areas of the City. In areas with high aquifer recharge the City enforces the Wekiva Protection Act regulations to ensure proper recharge and minimize impact on the Wekiva River

Protection Area. Aquifer discharge areas are where groundwater exits the aquifer, such as wells, springs, and rivers. The aquifer recharge areas for Winter Garden can be seen in **Map PFE - 4**.

Aquifer Contamination and Groundwater Recharge

The Florida Department of Environmental Protection (FDEP) plays a critical role in safeguarding public water systems from potential contamination. By enforcing state and federal water quality standards, FDEP conducts regular assessments and oversees compliance efforts to ensure the integrity of drinking water sources, such as the Floridian aquifer that supplies the City's water. Given the heavy reliance on groundwater in Winter Garden, maintaining high water quality is crucial for public health.

FDEP's responsibilities include overseeing water quality monitoring, guiding contamination prevention measures, and managing permits related to water use and discharge. Winter Garden works in partnership with FDEP to adhere to stringent water safety regulations, routinely testing contaminants as mandated by state and federal laws. The City publishes the Annual Drinking Water Quality Report, providing transparency and detailed information about the safety and quality of the community's drinking water. This collaborative effort helps ensure a reliable and safe water supply for all residents.

Regulatory Framework

Rules from the Florida Administrative Code, along with state statutes and local ordinances, are in place to mitigate the negative consequences of excessive water consumption. When aquifer levels or surface water flows are significantly reduced, it can have detrimental effects on ecosystems, including the lowering of lake levels and the degradation of wetlands, which serve as critical habitats for a variety of plant and animal species. One of the severe outcomes of over-extraction can also be an increased frequency of sinkholes and saltwater intrusion in coastal areas, posing risks to both natural environments and infrastructure.

WELLHEAD PROTECTION AREAS

Under Chapter 373 of the Florida Statutes, the state grants authority to water management districts to oversee the construction of potable water wells and regulate water use through consumptive use permitting. The districts are responsible for ensuring sustainable water practices and protecting water resources. Additionally, the City's Wellhead Protection Zones are designated areas established to safeguard drinking water sources from contamination and overuse around any City potable water supply well. These 500 ft buffers can be seen on **Map PFE - 5**.

FUTURE CONSIDERATIONS

Based on the findings of the Data and Analysis, the City will consider the following priorities when updating the Public Facilities Element of the Comprehensive Plan:

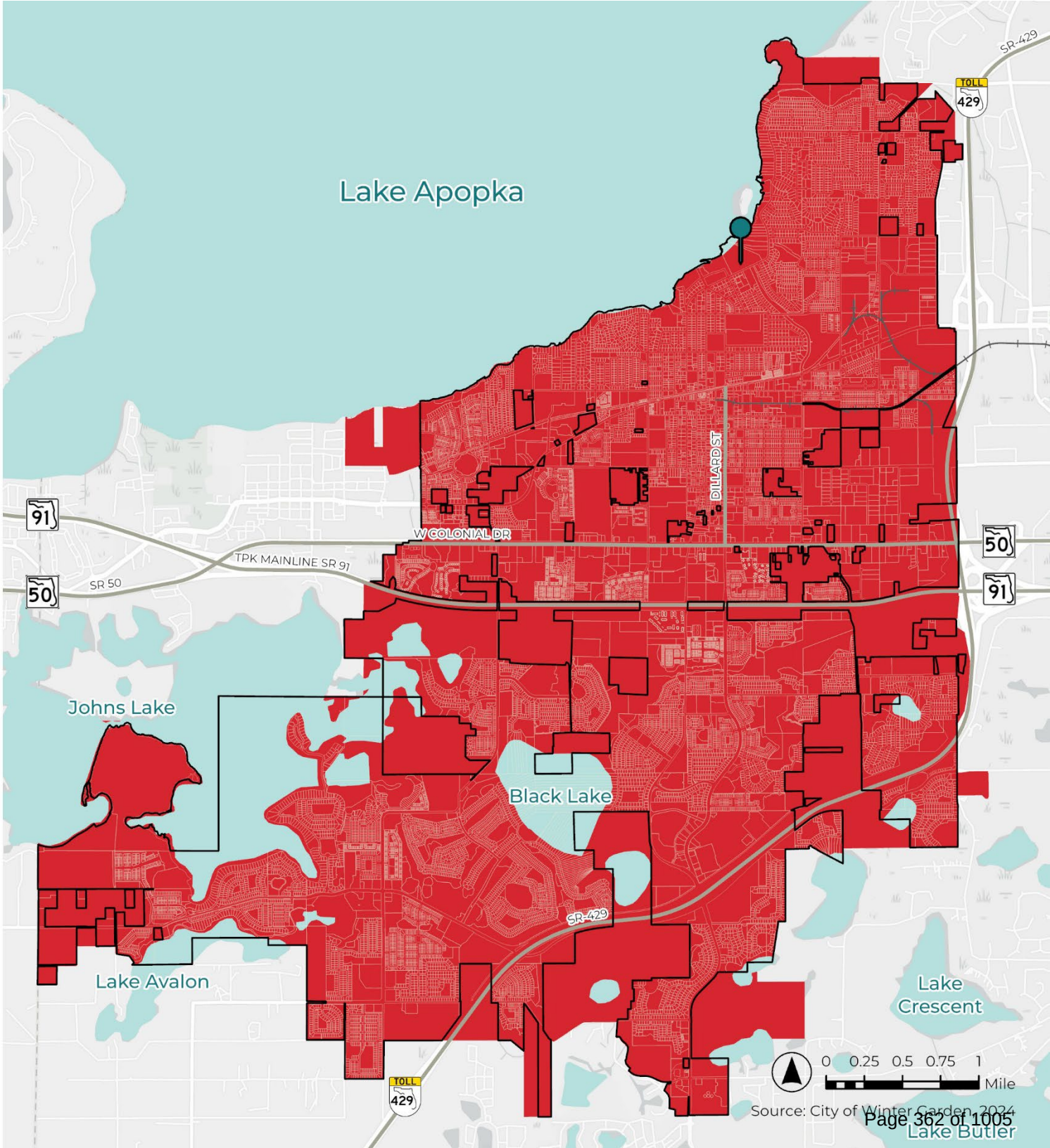
- **Establish a Reclaimed Water Level of Service Standard**
  The City currently requires existing development to connect to reclaimed water service where available, supporting the broader goal of water conservation. However, no formal level of service (LOS) standard has been adopted for reclaimed water. The City should consider establishing a LOS standard to better guide system expansion, manage demand, and track service delivery.
- **Address Septic-to-Sewer Conversion in Coordination with Orange County**
  In compliance with Section 163.3177(6)(c)3, Florida Statutes, the City will continue to evaluate the feasibility of converting large subdivisions from septic to central sewer. Winter Garden is actively coordinating with Orange County to transition the majority of parcels within the Joint Planning Area from septic systems to centralized sewer over the next two decades. The City will also consider prohibiting the use of septic tanks for all future development to support environmental protection and long-term infrastructure efficiency.
- **Plan for Future Potable Water Capacity**
  Based on projected population growth and a per capita potable water demand of 143 gallons per day, the City will have sufficient potable water capacity to meet demand through 2050 without intervention. Winter Garden should still consider exploring options to expand its potable water supply infrastructure, increase reclaimed water utilization, and implement water conservation strategies to ensure a reliable and sustainable supply for current and future residents.

WASTEWATER SERVICE AREA

MAP PFE - 1

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Winter Garden Service Area
- Wastewater Treatment Plant



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

POTABLE WATER SERVICE AREA

MAP PFE - 2

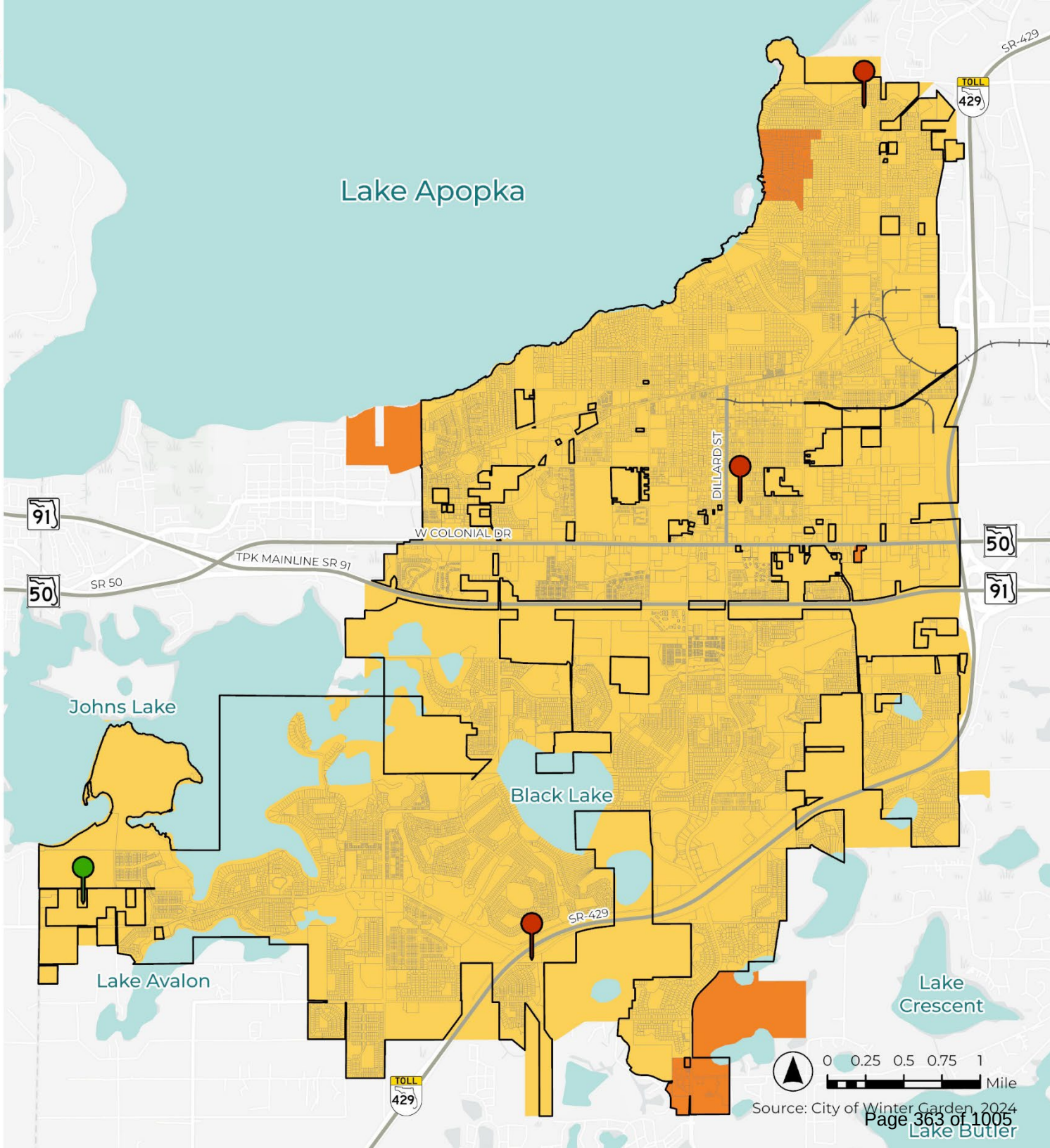
Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Potable Water Service Area

- Winter Garden
- Orange County

- Potable Water Storage and Repump Station
- Potable Water Treatment Plant



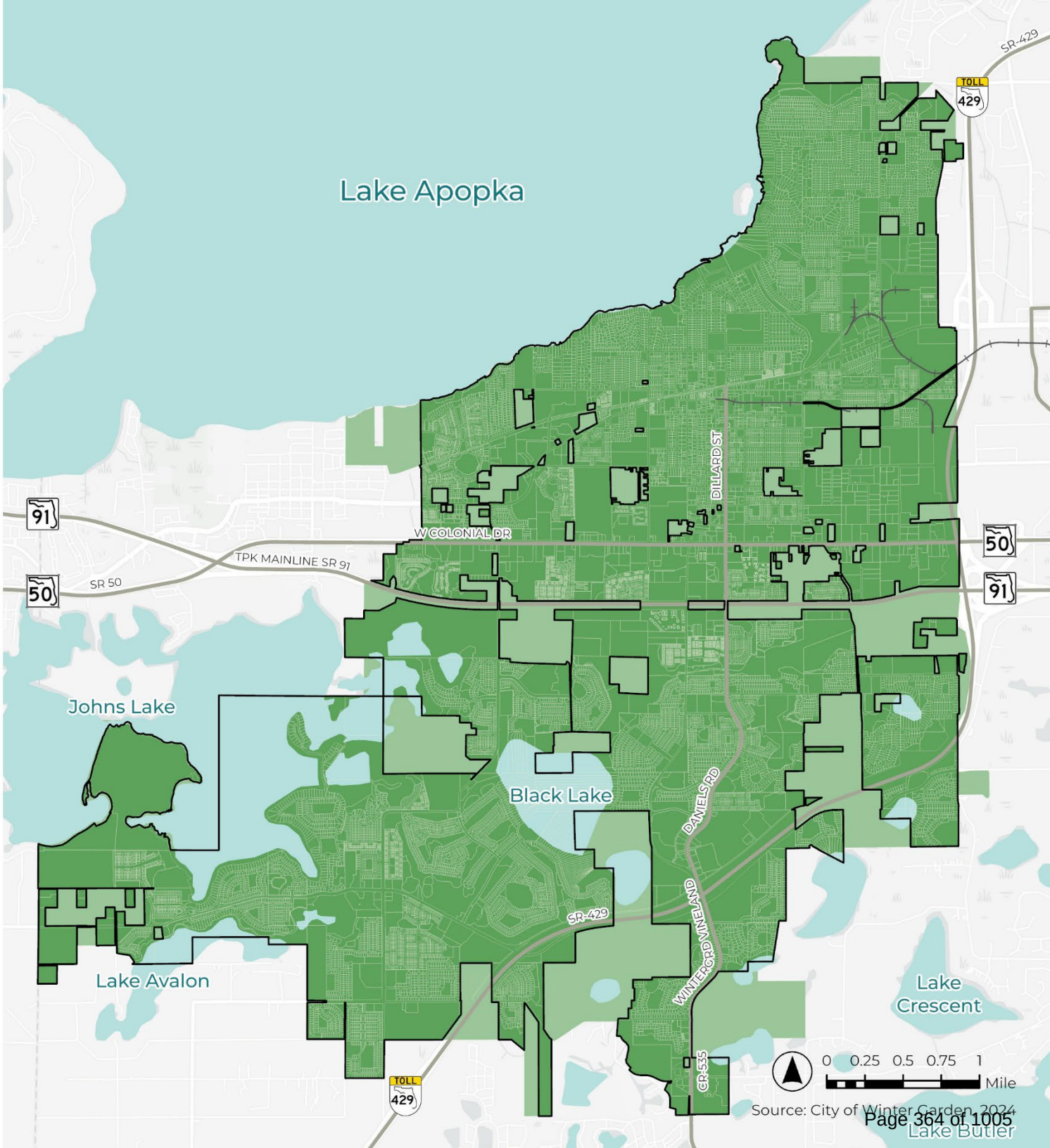
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

RECLAIMED WATER SERVICE AREA

MAP PFE- 3

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Winter Garden Service Area



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

AQUIFER RECHARGE

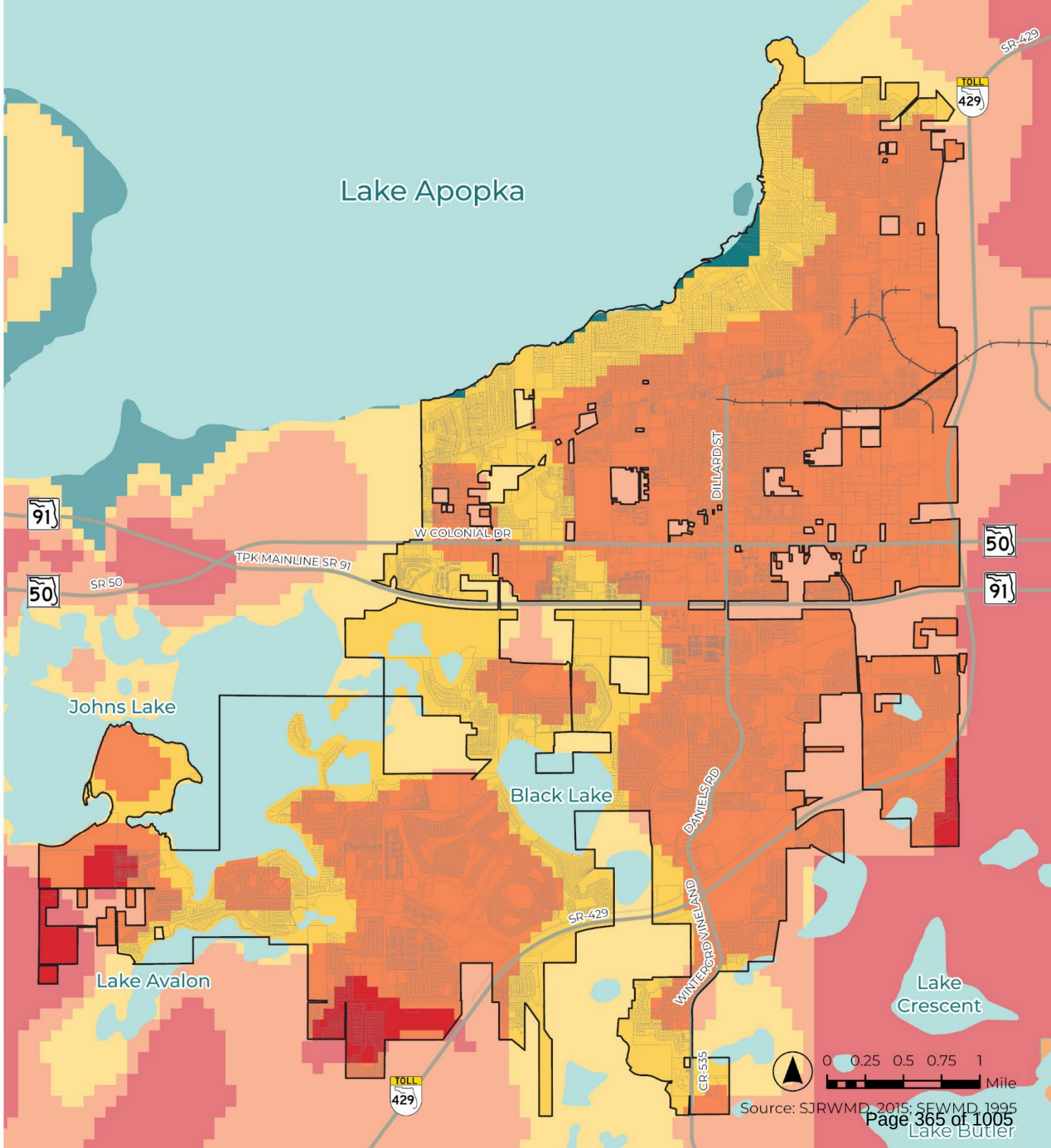
MAP PFE- 4

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Aquifer Recharge Area

- Low
- Medium
- High
- Discharge



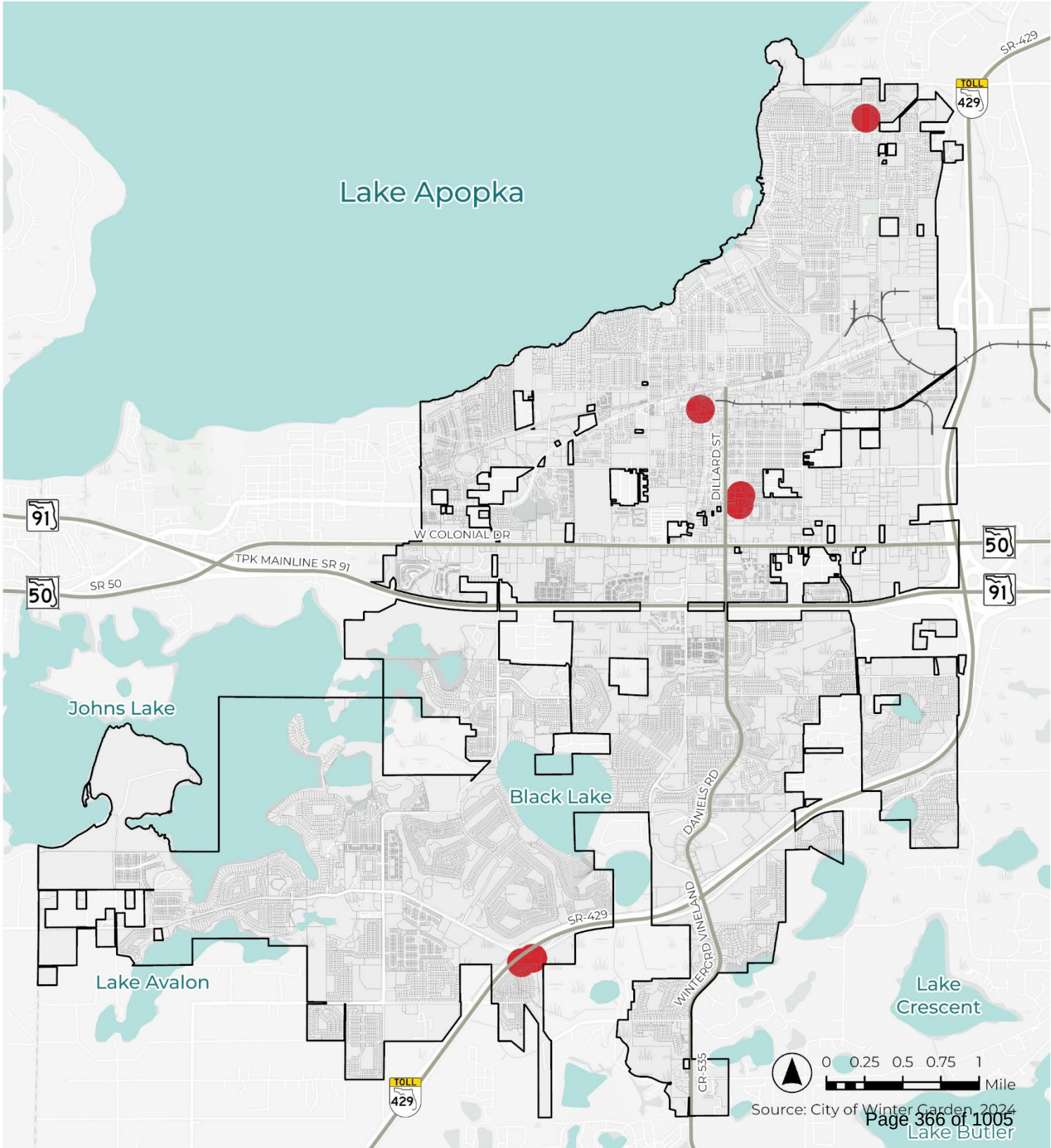
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WELLHEAD PROTECTION AREA

MAP PFE - 5

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Wellhead Protection Area (500ft)



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities



5

DATA & ANALYSIS

COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

CONSERVATION

Table of Contents

INTRODUCTION 4
NATURAL RESOURCE AND INVENTORY 4
Water Resources 4
Major Waterbodies 4
Wetlands 4
Floodplains 6
Aquifer Recharge 6
Wellhead Protection Areas 7
FDEP Water Basins 7
Vegetation and Wildlife 7
Land Use /Land Cover 7
Threatened or Endangered Species 9
Conservation Areas 13
Other Considerations 14
Soils 14
Air Quality 15
Hazardous Waste 15
Water Quality 15
Wekiva Study Area 16
FUTURE CONSIDERATIONS 16

List of Tables

Table CE - 1: Wetland Acreage 5
Table CE - 2: Floodplains 6
Table CE - 3: Land Use / Land Cover 8
Table CE - 4: Natural Land Use / Land Cover 8
Table CE - 5: FWC Threatened or Endangered Species Designations 9
Table CE - 6: Threated or Endangered Species in Orange County 10
Table CE - 7: Conservation Areas 14
Table CE - 8: Air Monitoring Locations in Orange County 15

List of Maps

Map CE – 1: Waterbodies 18
Map CE – 2: Wetland Inventory 19
Map CE – 3: Floodplain Inventory 20
Map CE – 4: Aquifer Recharge 21
Map CE – 5: Wellhead Protection Area 22
Map CE – 6: Florida Department of Environmental Protection Basins 23
Map CE – 7: Land Use / Land Cover 24
Map CE – 8: Conservation Areas 25
Map CE – 9: Soil Permeability 26
Map CE – 10: Karst Features 27
Map CE – 11: Wekiva Study Area 28
Map CE – 12: Wekiva Study Area 29

INTRODUCTION

The Conservation Element of Winter Garden's Comprehensive Plan is intended to guide the protection, enhancement, and sustainable management of the City's natural resources as the community continues to grow and evolve. This element plays a critical role in ensuring that ecological integrity, environmental quality, and public access to green and blue spaces are preserved for current and future generations.

Winter Garden is home to a variety of valuable natural assets, including wetlands, lakes, tree canopies, and diverse wildlife habitats. As development pressures increase, it becomes increasingly important to integrate environmental stewardship into land use, infrastructure, and community planning decisions. The Conservation Element provides the policy framework for identifying, prioritizing, and protecting these resources in balance with the City's broader goals for sustainability, resiliency, and quality of life.

The Data and Analysis section of this element establishes the factual foundation for future conservation efforts. It evaluates existing conditions, identifies environmental programs, and highlights key areas of ecological importance. This information supports the development of goals, objectives, and policies that will guide the City in making informed decisions related to land use planning, water resource protection, tree preservation, air quality, wildlife corridors, and climate adaptation.

NATURAL RESOURCE AND INVENTORY

Three topic areas are explored in the following inventory and analysis. The first section examines major waterbodies, wetlands, and floodplains found in Winter Garden; the second section explores the City's wealth of significant vegetation, wildlife and conservation areas; and the third section describes other crucial environmental considerations.

Water Resources

Major Waterbodies

There are multiple major water bodies within or near the City of Winter Garden that are critical to the natural environment, resiliency, and economy of Winter Garden. Major bodies of water provide habitat to aquatic vegetation and wildlife, natural storm water management services, and recreational activities. Some of the most notable water bodies in the City of Winter Garden can be found on **Map CE - 1**.

Wetlands

According to the Environmental Protection Agency (EPA), wetlands are areas where water is present at or near the surface of the soil for significant portions of the year.

These vital ecosystems provide a wide range of essential environmental services, including natural water retention, flood control, and stormwater filtration by removing excess nutrients and particulates. In addition to their hydrological functions, wetlands play a critical role in sustaining Florida's diverse native vegetation and wildlife, serving as habitat for numerous plant and animal species and contributing to the overall ecological health and resilience of the region.

Wetlands can be classified into two generalized categories, coastal (tidal) and inland (non-tidal). Coastal wetlands, which often line oceanic bodies of water, tend to remain muddy or sandy with little vegetation. There are no coastal wetlands within the City of Winter Garden. Inland wetlands, which are often found along river floodplains and lake perimeters, tend to be marshy and highly vegetated. Inland wetlands are referred to as freshwater emergent or freshwater forested/shrub wetlands. Inland wetlands are often some of the most productive ecosystems on earth. As a result, wetland features throughout Florida are heavily regulated and generally protected from development and other human activities. **Map CE - 2** depicts all the wetlands within the City of Winter Garden and **Table CE - 1** provides an acreage of all wetland typologies within Winter Garden. According to the latest wetland GIS data provided by the U.S. Fish and Wildlife Service through the National Wetlands Inventory (NWI), Winter Garden possesses approximately 1,526.1 acres of wetlands (excluding lakes, ponds, and rivers).

Table CE - 1: Wetland Acreage

Wetland Type	Acres
Freshwater Emergent	443.4
Freshwater Forested/Shrub	1,082.7
Total	**1,526.1**

Source: U.S. Fish and Wildlife Service, 2023

Wetlands within the City of Winter Garden are regulated by both the St. Johns River Water Management District (SJRWMD) and the City of Winter Garden. The SJRWMD utilizes two primary permitting processes: the Environmental Resource Permit (ERP) and the Consumptive Use Permit (CUP) for wetland regulation. The ERP program is designed to protect wetlands, surface waters, and water quality by evaluating and mitigating the potential environmental impacts of new development or construction activities. The CUP process ensures that water withdrawals for public, agricultural, or industrial use do not exceed sustainable limits, helping to prevent the degradation of water resources and the ecosystems that depend on them. The City of Winter Garden reserves the right to protect, preserve and enhance the natural functions of wetlands and other environmentally sensitive areas within the City through Chapter 94 of the City's Code of Ordinance. New development in areas on or adjacent to wetlands may require consultation with a biologist and vegetative buffers. Any activity which impairs the natural functions of wetlands is strictly

prohibited by the City of Winter Garden. Together, these permitting and regulatory systems play a critical role in supporting long-term environmental health and water resource management within Winter Garden and the surrounding region.

Floodplains

Floodplains are important ecological features that contribute to a region's water flow and storage, vegetative health, groundwater refreshment, and water quality. Whereas wetlands remain wet throughout the year, floodplain areas are next to bodies of water that experience flooding at different points in time. Floodplains are comprised of two categories: 100-year floodplain or 1% annual chance of flood (2,534.9 acres) and 500-year floodplain or 0.2% annual chance of flood (48.1 acres). There are a total of 2,583 acres of floodplains in Winter Garden shown on **Map CE - 3** and detailed below in **Table CE - 2**.

Table CE - 2: Floodplains

Floodplains Type	Acres
100-Year	2,534.9
500-Year	48.1
Total	**2,583.0**

Source: Federal Emergency Management Agency, 2024

When comparing the locations of wetlands and floodplains within the community using **Map CE - 2** and **Map CE - 3**, significant portions of these critical environmental features often overlap. This is because both wetlands and floodplains are typically found within the lowest-lying areas of a community.

Managing floodplains in a community is critical and requires proactive measures to protect people and property from hazardous flood events. Chapter 90 of the City's Code of Ordinances designates the city manager (or designee) as the floodplain administrator. The floodplain administrator is responsible for regulating development within the City's floodplains. The City does not participate in the Community Rating System (CRS) through the National Flood Insurance Program (NFIP) which prepares the Flood Insurance Rate Map (FIRM). If the City were to participate in the program it could potentially provide a cost reduction in flood insurance rates for properties in the special flood hazard area or the one percent annual chance floodplain.

Aquifer Recharge

The St. Johns Water Management District classifies aquifer recharge areas into four categories: recharge (low, medium, and high) and discharge. Aquifer discharge areas are areas where water seeps upwards to the surface rather than downward into the aquifer. While aquifer recharge areas provide water volumes which contribute to the storage of regional flow to the aquifers. Aquifer recharge areas are areas where water coming from rainfall, soil moisture and surface water bodies gain access to the

aquifers. Aquifers are where groundwater is stored and the only source of potable water for the City of Winter Garden. Aquifer Recharge areas not only replenish aquifers but also remove natural and artificial pollutants. As a result, protecting these aquifer recharge areas is crucial in maintaining the City of Winter Garden's potable water sources. The City of Winter Garden is also located within the Wekiva Study Area outlined by the Wekiva Parkway Protection Act. As such the City must further promote development patterns that protect effective recharge areas per Florida Statue 369.321(3). The aquifer recharge and discharge areas within and near the City of Winter Garden are illustrated on **Map CE - 4**.

Wellhead Protection Areas

The City of Winter Garden, the St. Johns River Water Management District, and the Florida Department of Environmental Protection, restricts the type of development allowed within a 500-foot protection zone of a wellhead. The Florida Department of Environment Protection keeps an inventory of all wellheads in Florida, and **Map CE - 5** shows all wellheads in Winter Garden and their corresponding 500-foot protection zone. Chapter 94 of the City's Land Development Code further restricts the uses and businesses allowed within 200 from a City water supply well and requires that businesses and uses which manufacture, store, or regularly use a regulated substance are required to register within the City.

FDEP Water Basins

The Florida Department of Environmental Protection's (FDEP) Water Basin database identifies land areas (known as drainage or watershed basins) that channel water to surface water bodies such as creeks, streams, rivers, and reservoirs. Understanding which areas of the City of Winter Garden fall within specific water basins is essential for effective water resource management, flood protection, and environmental stewardship. This information helps guide land use decisions, stormwater planning, and conservation efforts. **Map CE - 6** illustrates the various water basins located within and surrounding the City, providing a visual reference for how water flows through and beyond the City's boundaries.

Vegetation and Wildlife

Land Use /Land Cover

Winter Garden's vegetative inventory is diverse and economically and environmentally significant. One of the leading agencies responsible for its continued identification and protection is the St. Johns River Water Management District (SJRWMD), which maintains a geographic database of all the vegetative communities within its jurisdiction through its Land Use/Land Cover GIS shapefile. According to the district's shapefile, Winter Garden's ten largest land uses include four naturally occurring vegetive communities (Vegetated Non-Forested Wetlands, Lakes, Mixed Wetland Hardwood Forests, and Mixed Scrub-Shrub Wetlands). **Table**

CE - 3 presents the ten largest Land Use/Land Cover categories found within the City of Winter Garden, while **Map CE - 7** showcases all the categories present in Winter Garden.

Table CE - 3: Land Use / Land Cover

Land Use / Land Cover	Acres	Percent
Residential	5,022.2	43.2%
Commercial	1,074.6	9.2%
Lakes	828.9	7.1%
Agriculture	578.8	5.0%
Institutional	497.1	4.3%
Utilities and Transportation	426.7	3.7%
Freshwater Marshes	422.9	3.6%
Mixed Wetland Hardwoods	412.4	3.5%
Water Reservoirs	397.1	3.4%
Mixed Scrub-Shrub Wetland	367.2	3.2%
Recreational	340.2	2.9%
Total	**11,636.3**	**100.0%**

Source: SJRWMD, 2020

There is a total of 3,440.2 acres of land, or 29.6% of the City of Winter Garden, with a natural land use / land cover category. These acres are predominantly wetlands and bodies of water, as detailed below in **Table CE - 4**. The protection of these areas is essential to the conservation and preservation of Winter Garden's natural ecosystems and biotic communities.

Table CE - 4: Natural Land Use / Land Cover

Land Use / Land Cover	Acres	Percent
Lakes	828.9	7.1%
Freshwater Marshes	422.9	3.6%
Mixed Wetland Hardwoods	412.4	3.5%
Water Reservoirs	397.1	3.4%
Mixed Scrub-Shrub Wetland	367.2	3.2%
Upland Mixed Coniferous/Hardwood	227.3	2.0%
Wetland Forested Mixed	192.4	1.7%
Emergent Aquatic Vegetation	172.7	1.5%
Herbaceous Upland Non-forested	165.4	1.4%
Upland Hardwood Forests	131.9	1.1%
Freshwater Marsh	28.3	0.2%
Forest Regeneration	26.2	0.2%

Land Use / Land Cover	Acres	Percent
Pine Flatwoods	19.3	0.2%
Mixed Upland Non-forested	15.9	0.1%
Shrub and Brushland	12.4	0.1%
Cypress	9.6	0.1%
Xeric Oak	5.3	0.0%
Cabbage Palm	4.1	0.0%
Streams and Waterways	0.9	0.0%
Total	**3,440.2**	**29.6%**

Source: SJRWMD, 2020

Threatened or Endangered Species

Winter Garden is in Orange County, which is home to a wide array of wildlife species, many of which are currently considered to be threatened or endangered. The primary agency responsible for the continued identification and protection of these vulnerable species within the State is the Florida Fish and Wildlife Conservation Commission (FWC). The Commission classifies Florida's threatened or endangered wildlife into five (5) categories of special status, which are listed below in **Table CE-5**.

Table CE - 5: FWC Threatened or Endangered Species Designations

Designation	Acronym	Description
Federally designated Endangered	FE	Species in danger of extinction if the deleterious factors affecting their population continue to operate.
Federally designated Threatened	FT	Species that are likely to become endangered in the nation within the foreseeable future if current trends continue.
State designated Threatened	ST	Species that are likely to become endangered in the state within the foreseeable future if current trends continue.
State designated Endangered	SE	Species in danger of extinction if the deleterious factors affecting their population continue to operate.
Species of Special Concern	SSC	Species that do not fit into the previous categories yet warrant special attention.

Source: Florida Fish and Wildlife Conservation Commission, 2024

There are currently seventeen animal species considered threatened or endangered within Orange County, including one fish, one amphibian, six reptiles, and nine bird species. **Table CE- 6** lists the threatened or endangered species which are potentially, likely, or confirmed to be located within Orange County, along with a description of their habitat, range, and current state status.

Table CE - 6: Threated or Endangered Species in Orange County

Scientific Name	Common Name	Habitat	State Status
Fish			
Pteronotropis welaka	Bluenose Shiner	Habitat includes deep, slow-moving, coastal creeks and small to medium rivers of varying clarity and usually with silty bottoms, often heavily choked with brush and vegetation. These shiners prefer deep pools and backwaters (often 1-2 meters) to more shallow areas.	ST
Amphibians			
Notophthalmus perstriatus	Striped Newt	Terrestrial adults and efts utilize mostly xeric upland habitats, particularly sandhill, scrub, scrubby flatwoods, and sometimes mesic flatwoods.	ST
Reptiles			
Alligator mississippiensis	American Alligator	American alligators inhabit fresh and brackish marshes, ponds, lakes, rivers, swamps, bayous, canals, and large spring runs.	FT
Drymarchon couperi	Eastern Indigo Snake	Habitat includes sandhill regions dominated by mature longleaf pines, turkey oaks, and wiregrass; flatwoods; most types of hammocks; coastal scrub; dry glades; palmetto flats; prairie; brushy riparian and canal corridors; and wet fields.	FT
Gopherus polyphemus	Gopher Tortoise	Commonly occupies habitats with a well-drained sandy substrate, ample herbaceous vegetation for food, and sunlit areas for nesting. These habitat types include sandhill (pine-turkey oak), sand pine scrub, xeric hammock, pine flatwoods, dry prairie, coastal grasslands and dunes, and mixed hardwood-pine communities.	ST
Lampropeltis extenuata	Short-tailed Snake	Habitat is dry sandy uplands, especially longleaf pine-turkey oak (sandhill) and sometimes adjacent xeric oak hammocks and rosemary-sand pine scrub; this snake also has	ST

Scientific Name	Common Name	Habitat	State Status
		been found in sphagnum bog adjacent to typical habitat.	
Pituophis melanoleucus	Pine Snake	Good quality pinesnake habitat appears to be characterized by xeric, pine-dominated or pine-oak (50 to 80% pine) woodland with an open, low understory established on sandy soils.	ST
Plestiodon reynoldsi	Sand Skink	This species occurs only on Florida's central ridges, at elevations of 27 m or more, in St. Lucie fine and Lakeland yellow sands. It inhabits loose sands of sand pine-rosemary scrub, less often longleaf pine-turkey oak (sandhill) or turkey oak "barrens" adjacent to scrub, especially high pine-scrub ecotones.	FT
Birds			
Antigone canadensis pratensis	Florida Sandhill Crane	Wet prairies, marshy lake regions, low lying pastures (including "improved" ones), shallow flooded open areas; vicinity of ponds in areas dominated by saw palmettos and scattered wooded hammocks that support cabbage palms, pines, oaks, and wetland trees such as magnolia and cypress; along sloughs and in open pinewood flats.	ST
Aphelocoma coerulescens	Florida Scrub-Jay	Oak scrub on white, drained sand, in open areas without a dense canopy. Palmetto, sand pine and rosemary may co-occur. Includes scrub with no canopy, sand pine scrub, scrubby flatwoods, and coastal scrub. Fire-suppressed scrubs with dense, tall understory or encroaching pine canopies provide poor habitat. Rarely in areas with greater than 50% canopy cover that is taller than 3 m.	FT
Athene cunicularia floridana	Florida Burrowing Owl	High, sparsely vegetated sandy ground, e.g., dry prairies, sandhills, pastures, airport runways, golf courses, ruderal areas. Nests usually in burrows.	ST

Scientific Name	Common Name	Habitat	State Status
Caracara plancus	Crested Caracara	Florida: associated with open country; dry prairie with scattered cabbage palms (Sabal palmetto), wetter prairies, and to some extent also improved pastures and sometimes even rather wooded areas having associated limited areas of open grassland center of range is the Kissimmee Prairie, an area of shallow ponds and sloughs with scattered hummocks of live oaks and cabbage palms.	FT
Dryobates borealis	Red-cockaded Woodpecker	Habitat consists of open, mature pine woodlands, rarely deciduous or mixed pine-hardwoods located near pine woodlands. Optimal habitat is characterized as a broad savanna with a scattered overstory of large pines and a dense groundcover containing a diversity of grass, forb, and shrub species.	FT
Egretta caerulea	Little Blue Heron	Marshes, ponds, lakes, meadows, mudflats, lagoons, streams, mangrove lagoons, and other bodies of calm shallow water; primarily in freshwater habitats.	ST
Egretta tricolor	Tricolored Heron	Marshes, ponds, sloughs, bayous, rivers, mangrove swamps, saltwater lagoons, islands; salt and fresh water.	ST
Mycteria americana	Wood Stork	Chiefly freshwater situations: marshes, swamps, lagoons, ponds, flooded fields; depressions in marshes are important during drought; also occur in brackish wetlands. Nests mostly in upper parts of cypress trees, mangroves, or dead hardwoods over water or on islands along streams or adjacent to shallow lakes. Feeds in freshwater marshes, swamps, lagoons, ponds, flooded pastures and flooded ditches, depressions in marshes (especially during drought).	FT

Scientific Name	Common Name	Habitat	State Status
Platalea ajaja	Roseate Spoonbill	Marshes, swamps, ponds, rivers, and lagoons also tidal flats. Seems to prefer brackish waters and coastal bays in Florida and Texas, freshwater marshes in Louisiana. Wherever shallow, open, still or slow-flowing water occurs. Nests in mangroves (e.g., Florida), in low bushes along coastal islands and on ground on treeless spoil banks along waterways (e.g., Texas and Louisiana).	ST

Source: Florida Natural Areas Inventory, 2024

Conservation Areas

For a property to be considered conservation land by the Florida Natural Areas Inventory (FNAI), a significant portion of the property must be undeveloped and retain most of the attributes one could expect it to have in its natural condition. In addition, the managing agency or organization must demonstrate a formal commitment to the conservation of the land in its natural condition. The City of Winter Garden has one conservation area (Black Lake) within Winter Garden and there are an additional five conservation areas near Winter Garden. These conservation areas can be seen on **Map CE - 8** and below in **Table CE - 4**. The City has multiple platted easements and conservation tracts within subdivisions that have been memorialized as conservation areas throughout its jurisdiction but are excluded from the table below.

Table CE - 7: Conservation Areas

Name	Managing Agency	Total Acres	Acres in City Limits	Description
Within Winter Garden				
Black Lake	Orange County	53.0	53.0	This property contains a variety of forested wetlands.
Near Winter Garden				
Crown Point Conservation Easement	City of Ocoee	51.85	0	Conservation easement, all less-than-fee.
Johns Lake Conservation Area	Orange County	138	0	This property contains freshwater marshes, oak hammocks, improved pasture, and the littoral zone of Johns Lake.
Scrub Point Preserve	Lake County Water Authority	92.7	0	Located on a peninsula that protrudes into the center of John's Lake, this preserve contains lakefront wetland areas and upland scrub with a high diversity of plant species.
Oakland Nature Preserve	Oakland Nature Preserve, Inc.	128.0	0	Ninety acres of this preserve are forested wetlands bordering Lake Apopka. The rest is former orange grove that was converted to dense pine plantation. The pines have been cut, and this area is being replanted with native sandhill species.
Orange County National Golf Center Phase I Conservation Area	FL Fish and Wildlife Conservation Commission	58.4	0	Conservation easement, all less-than-fee.

Source: Florida Natural Areas Inventory, 2024

Other Considerations

Soils

Based on GIS data from the National Resource Conservation Service's soil survey (**Map CE – 9**), the City of Winter Garden is comprised of predominantly poorly drained or somewhat poorly drained soils. With some areas in the east being excessively drained. The areas of very poorly, poorly, and somewhat poorly drained have a soil composition of Cassia, Zolfo, Pompano, Basinger, St. Johns, Immokalee, Ona, and Wabasso fine sands. The excessively drained areas are all Candler fine sands.

Air Quality

The quality of air is measured by the percentage of pollutant parts in the air within a set monitoring time window. The Florida Department of Environmental Protection's Office of Air Monitoring is responsible for conducting this activity throughout the State of Florida. The Office of Air Monitoring currently has two active sites within Orange County. The two sites, their site identification number, address, and available pollution monitoring data are detailed below in **Table CE-8**.

Table CE - 8: Air Monitoring Locations in Orange County

Site ID	Address	Available Pollution Monitoring Data
AQS# L095-2002	466 Harper Street, Winter Park, FL 32789	Ozone (O_3)
		Particulate Matter (PM_{10})
		Particle Pollution ($PM_{2.5}$)
		Sulfur Dioxide (SO_2)
		Nitrogen Dioxide (NO_2)
		Carbon Monoxide (CO)
AQS# L095-001	7697 South Orange Blossom Trail, Orlando, FL 32809	Ozone (O_3)

Source: FDEP Office of Air Monitoring, 2025

The data from the monitoring locations is analyzed according to the Air Quality Index (AQI), which ranks air quality in terms of pollution levels into the following categories: good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, and hazardous. In the past 10 years, Orange County's AQI rankings have consistently been recorded as "moderate" or "good" with few exceptions.

Hazardous Waste

The City of Winter Garden does not collect hazardous waste like liquid paint, rechargeable batteries, household cleaning products, pool chemicals, pesticides, herbicides, light bulbs, motor oil, cooking oil, antifreeze, etc. However, residents can drop off hazardous waste items at the two Orange County facilities listed below.

Porter Transfer Station
1326 Good Homes Road
Orlando, FL 32818

Orange County Landfill
5901 Young Pine Road
Orlando, FL 32829Water Quality

Water Quality

The City of Winter Garden routinely monitors contaminants in the City's potable water supply according to Federal and State, laws, rules, and regulations. The results of this monitoring are made publicly available on an annual basis through the City's Annual Water Quality Report. The latest report was published for the year 2024 and the report found that the City of Winter Garden Water Treatment & Pumping Division had no monitoring or reporting violations. Meaning no contaminants that

are required to be monitored by Federal or State law exceeded the highest level allowed by the Florida Department of Environmental Protection.

Wekiva Study Area

The Wekiva Parkway and Protection Act was signed into law in 2004 by Governor Jeb Bush. The Wekiva Parkway and Protection Act required local governments within the Wekiva Study Area to amend their comprehensive plans to reflect new statutory requirements in the following areas: master stormwater management plans; water supply facilities work plans; interchange land use plans, if the Wekiva Parkway is planned for their jurisdiction; and land use strategies to optimize open space and promote patterns of development that protect most effective recharge areas **(Map CE-4)**, karst features **(Map CE-10)**, and sensitive natural habitats. Local government comprehensive plan amendments required by this legislation were due in 2006, while implementing land development regulations were due January 1, 2007.

Winter Garden and fourteen other local governments are included in the Wekiva Study Area: Orange County and the municipalities of Maitland, Eatonville, Orlando, Ocoee, Oakland and Apopka; Seminole County and the municipalities of Lake Mary, Longwood, and Altamonte Springs; and Lake County and the municipalities of Eustis, and Mount Dora. A map of the entire Wekiva Study area can be seen on **Map CE - 11** and the Study Area in relation to Winter Garden can be seen on **Map CE - 12**.

Map CE – 12 also identifies the Resource Protection Overlay for the Wekiva Study Area within Winter Garden. The Resource Protection Overlay was created by combining the Soils from the St. Johns River Water Management District with Karst features from Florida Commerce (formerly known as the Department of Community Affairs) and the vegetation feature from the Florida Fish and Wildlife in February of 2010.

FUTURE CONSIDERATIONS

Based on the data and analysis above and community engagement activities focused on the Comprehensive Plan, the City of Winter Garden will consider the following updates to the Comprehensive Plan.

- The City does not participate in the Community Rating System (CRS) through the National Flood Insurance Program (NFIP) which prepares the Flood Insurance Rate Map (FIRM). If the City were to participate in the program it could potentially provide a cost reduction in flood insurance rates for properties in the special flood hazard area or the one percent annual chance floodplain which comprises of 2,500 acres of the City.
- The City of Winter Garden has recently begun Phase II for the development of Tucker Recreational Park and Nature Preserve. The City of Winter Garden will

consider coordinating with the Florida Natural Areas inventory to be listed on their Conservation Lands Map.

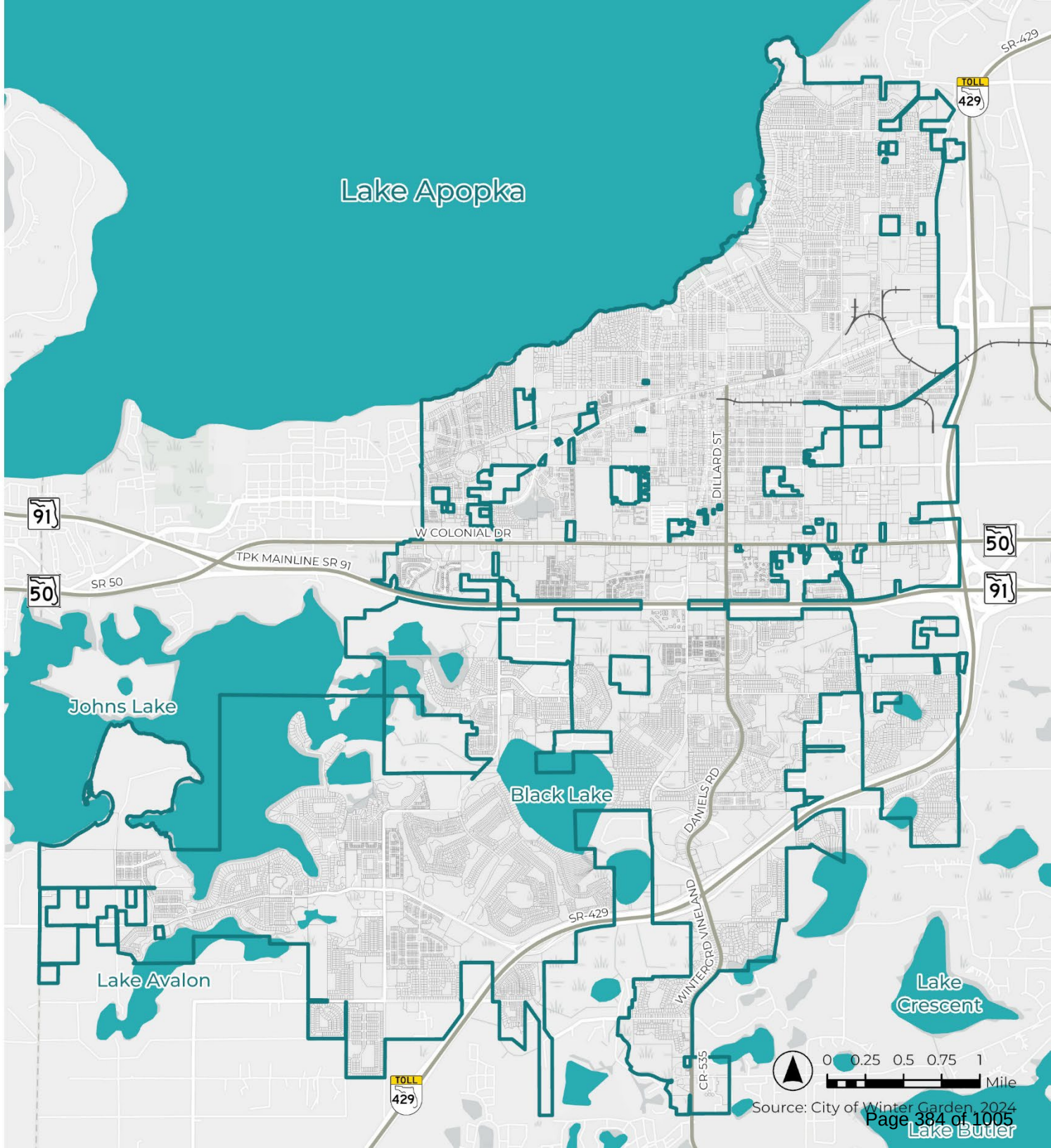
- As detailed in the data and analysis above, the City of Winter Garden has an extensive amount of water resources within and adjacent to its boundaries. The City of Winter Garden will ensure these water resources are protected from pollution and contamination, in order to protect sources of potable water for residents and preserve these aquatic ecosystems.
- The City of Winter Garden plans to convert 91.6% of septic systems to sewer within the City boundary to protect the soil from contamination and preserve environmental health throughout the City. Four sewer infrastructure projects have been scheduled in the coming 20 years to add capacity and expand the collection system to accommodate the conversions and future growth. Additionally, the upgraded sewer plant will treat sewer to advanced water treatment standards which will further help preserve water quality.

WATERBODIES

MAP CE - 1

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WETLAND INVENTORY

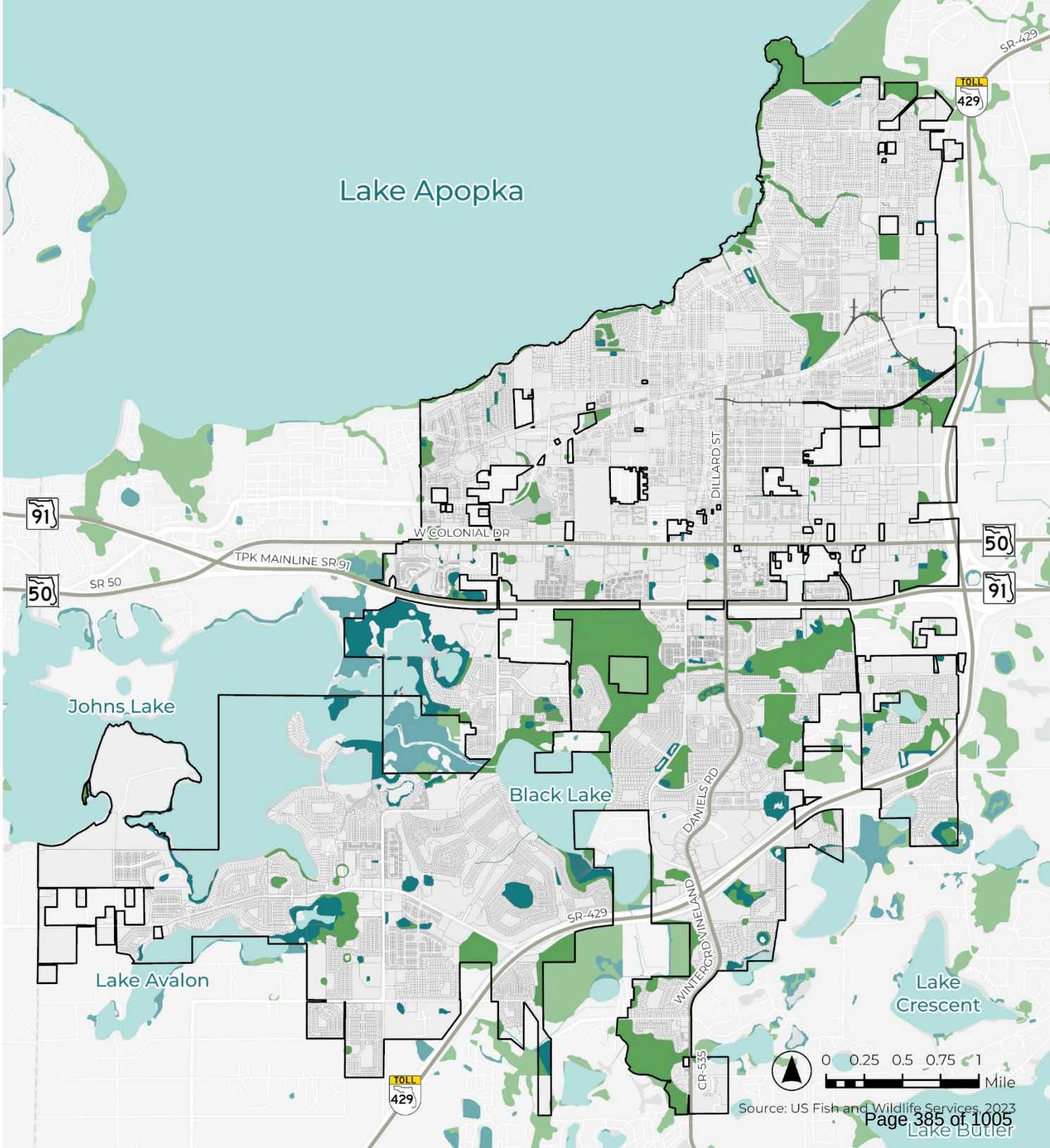
MAP CE - 2

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Wetland Type

- Freshwater Emergent Wetland
- Freshwater Forested / Shrub Wetland



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

FLOODPLAIN INVENTORY

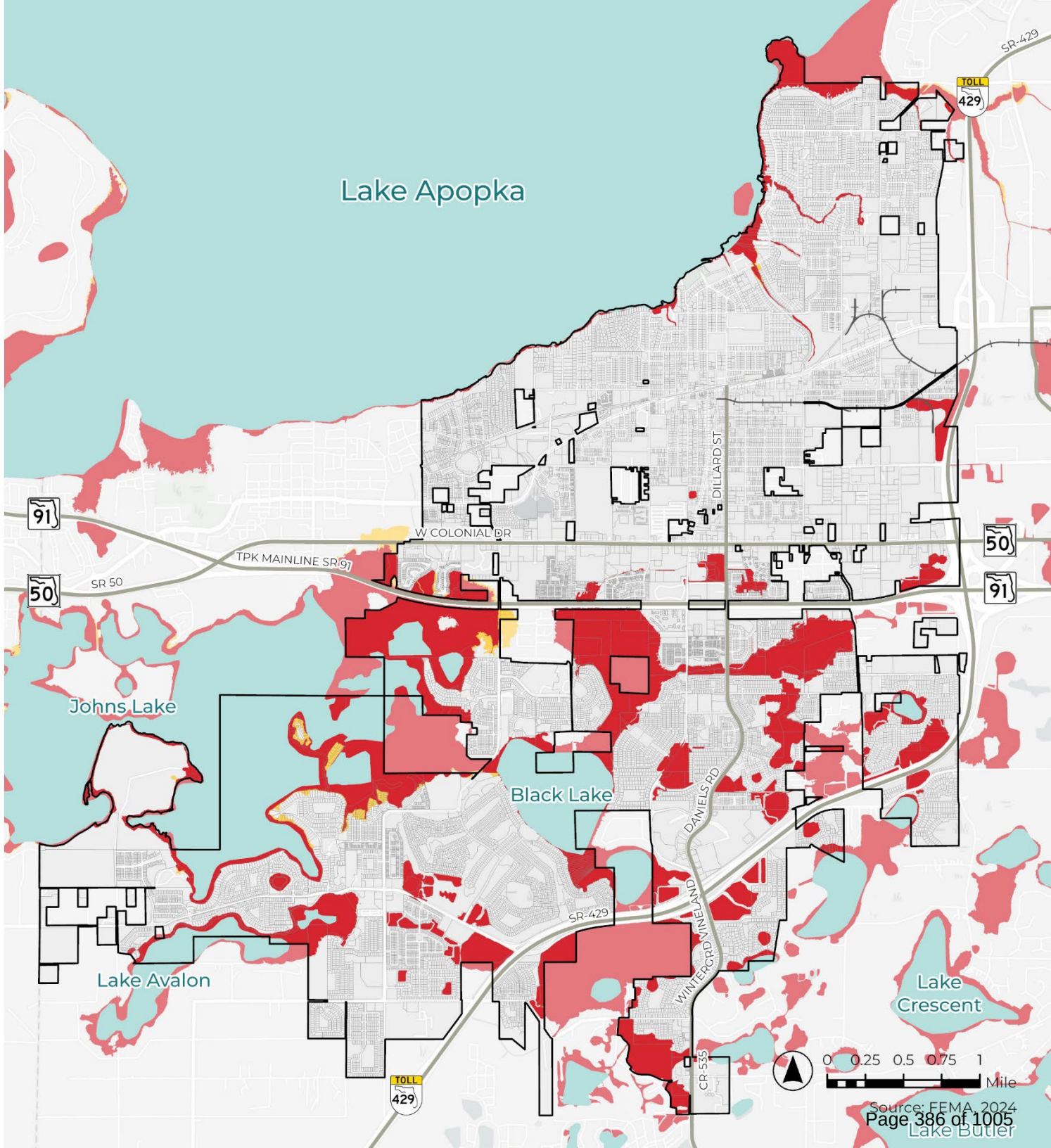
MAP CE - 3

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Floodplain

- 100 - Year Floodplain
- 500 - Year Floodplain



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

AQUIFER RECHARGE

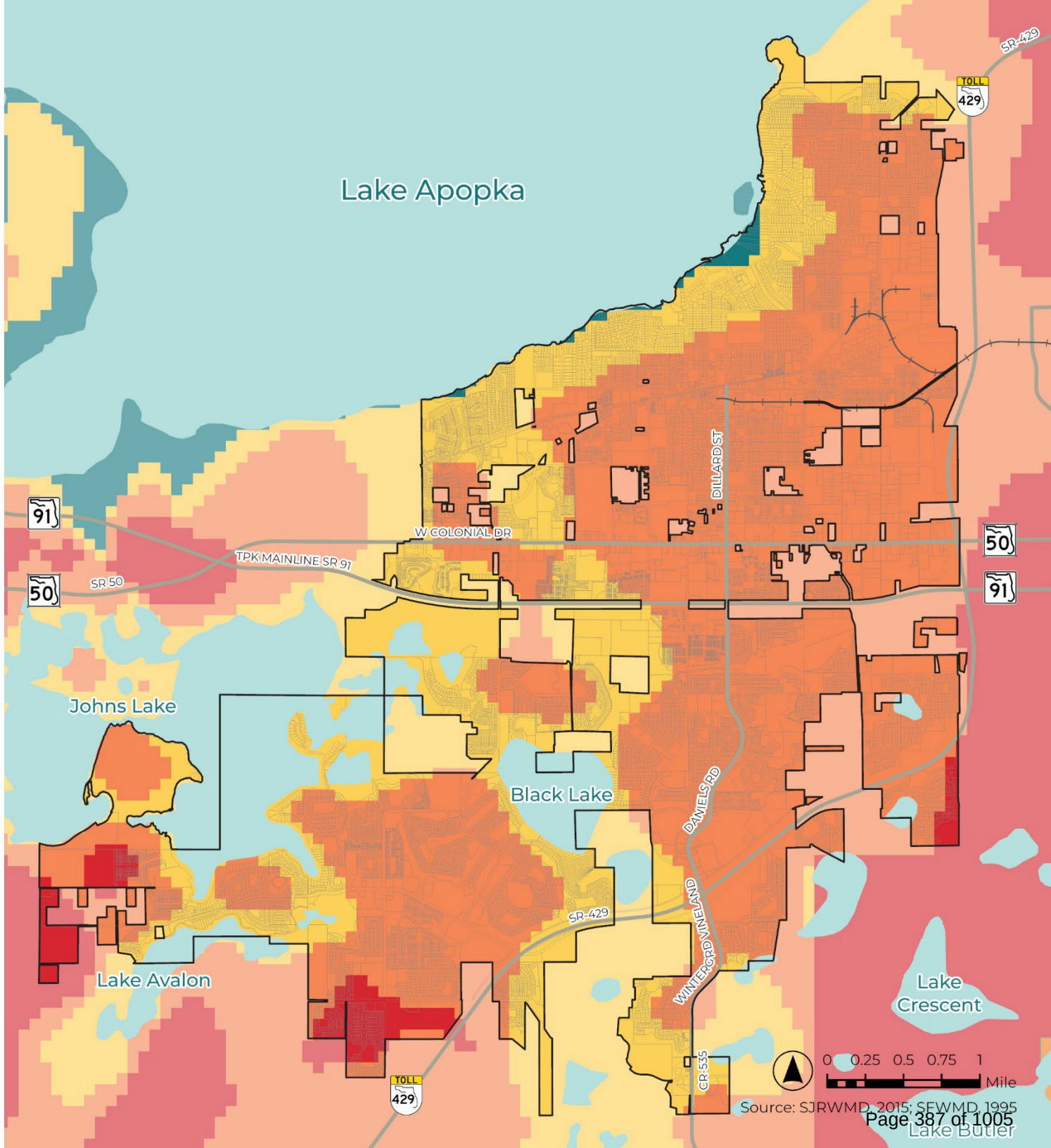
MAP CE - 4

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Aquifer Recharge Area

- Low
- Medium
- High
- Discharge



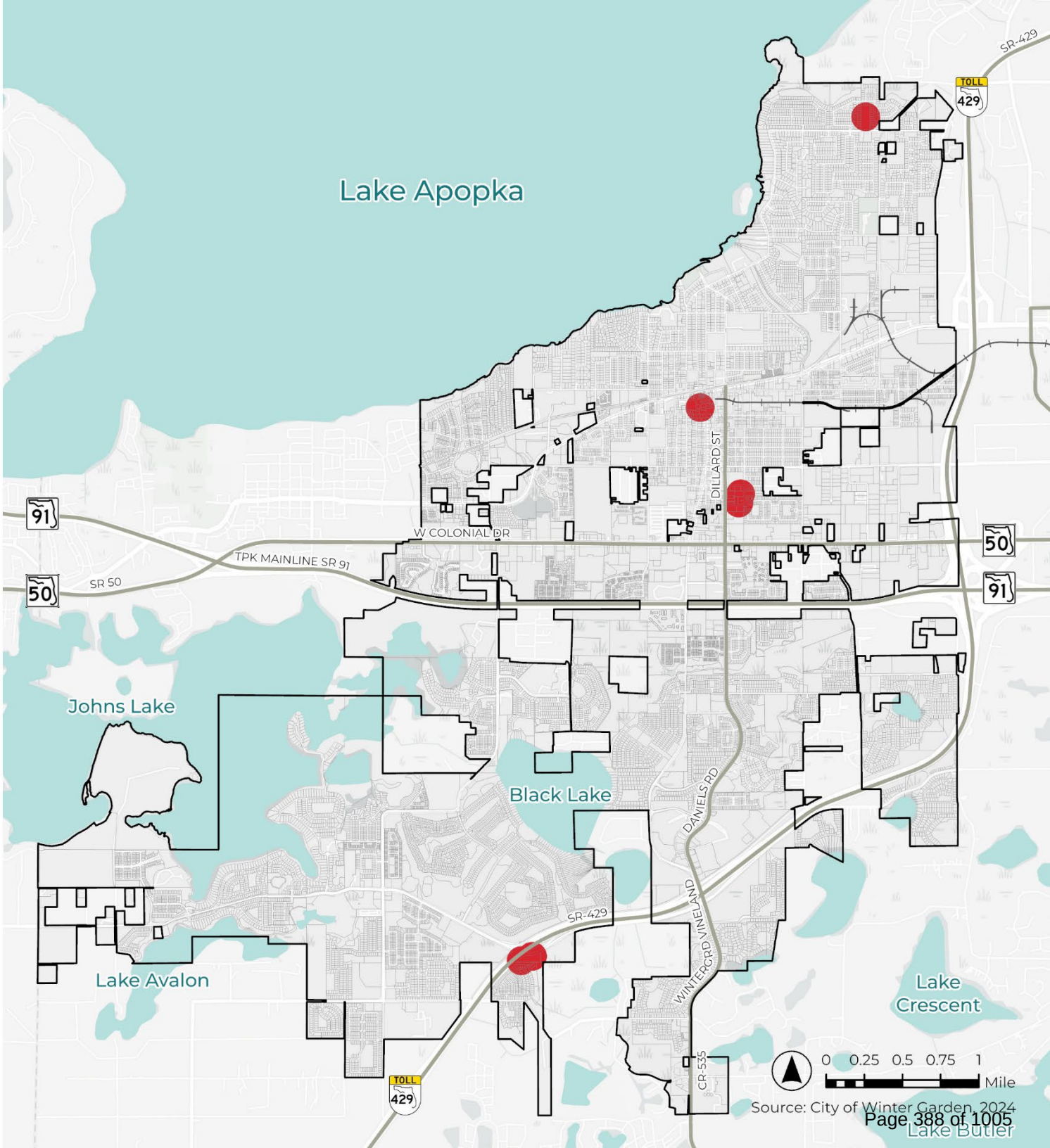
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WELLHEAD PROTECTION AREA

MAP CE - 5

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Wellhead Protection Area (500ft)



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION BASINS

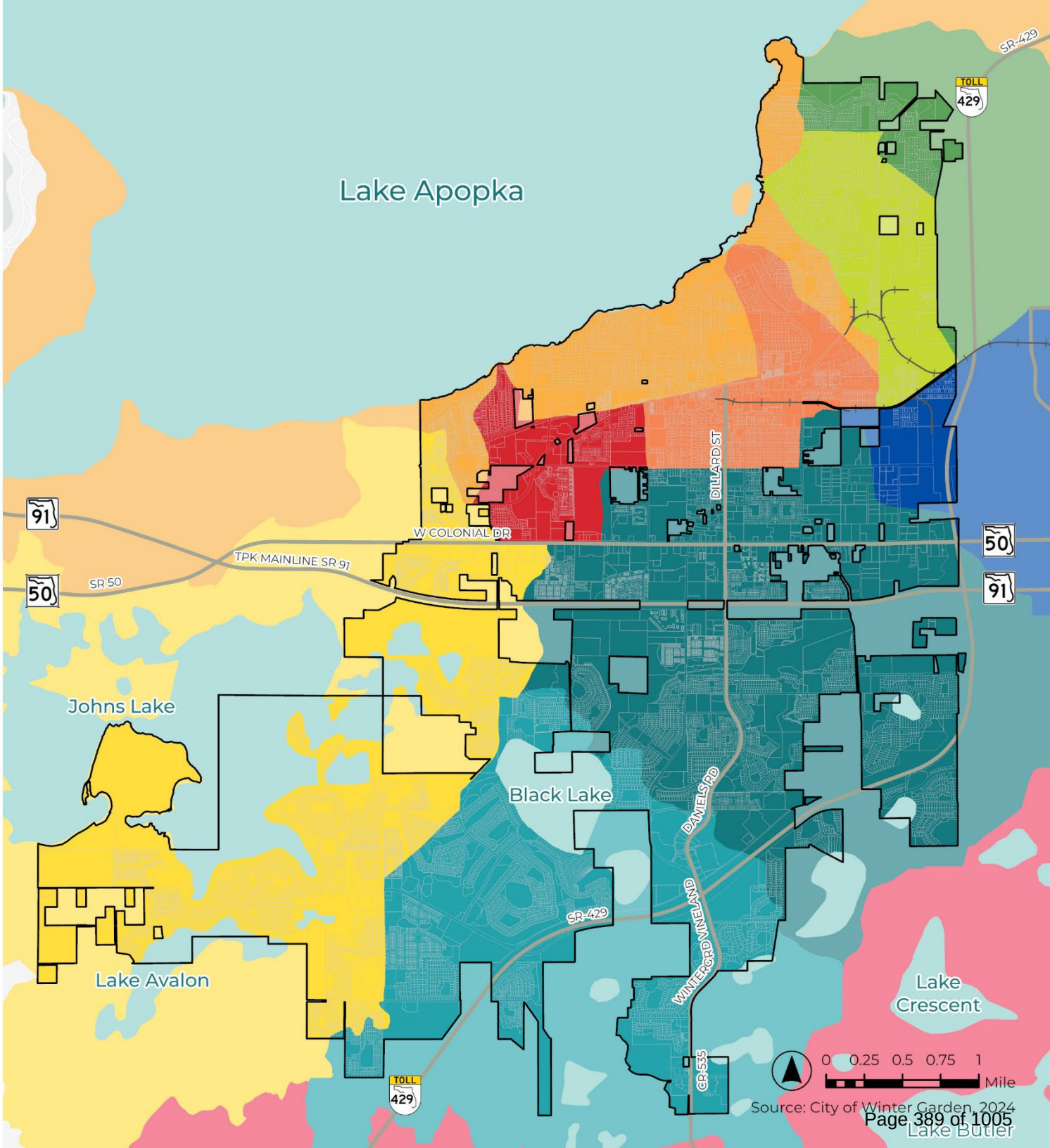
MAP CE - 6

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

FDEP Basin

- Beulah Slough
- Black Lake Outlet
- Crown Point Slough
- Gator Island Drain
- Johns Lake Outlet
- Lake Apopka Outlet
- Lulu Creek
- Reedy Creek
- Tildenville Drain
- Unnamed Lake District



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

LAND USE / LAND COVER

MAP CE - 7

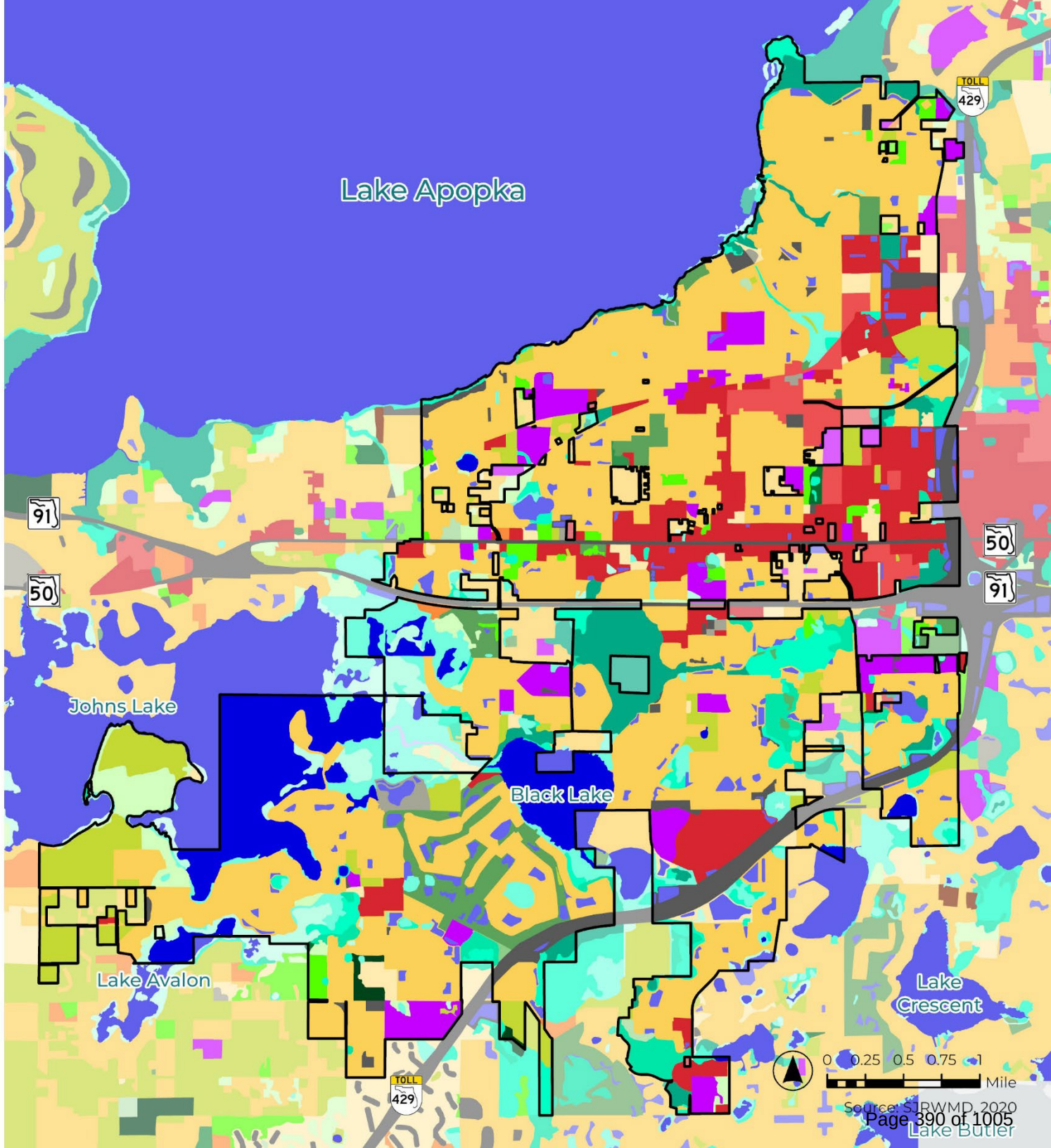
Legend

City of Winter Garden

Land Use / Land Cover

- Agriculture
- Residential
- Commercial
- Industrial
- Institutional
- Utilities and Transportation
- Recreational
- Disturbed Land
- Streams and Waterways
- Water Reservoirs
- Lakes
- Emergent Aquatic Vegetation
- Freshwater Marsh
- Mixed Scrub-Shrub Wetland
- Wetland Forested Mixed
- Mixed Wetland Hardwoods
- Upland Mixed Coniferous/Hardwood
- Upland Hardwood Forests
- Pine Flatwoods
- Cabbage Palm
- Cypress
- Xeric Oak
- Shrub and Brushland
- Forest Regeneration
- Herbaceous Upland Nonforested
- Mixed Upland Nonforested
- Open Lands

COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities



CONSERVATION AREAS

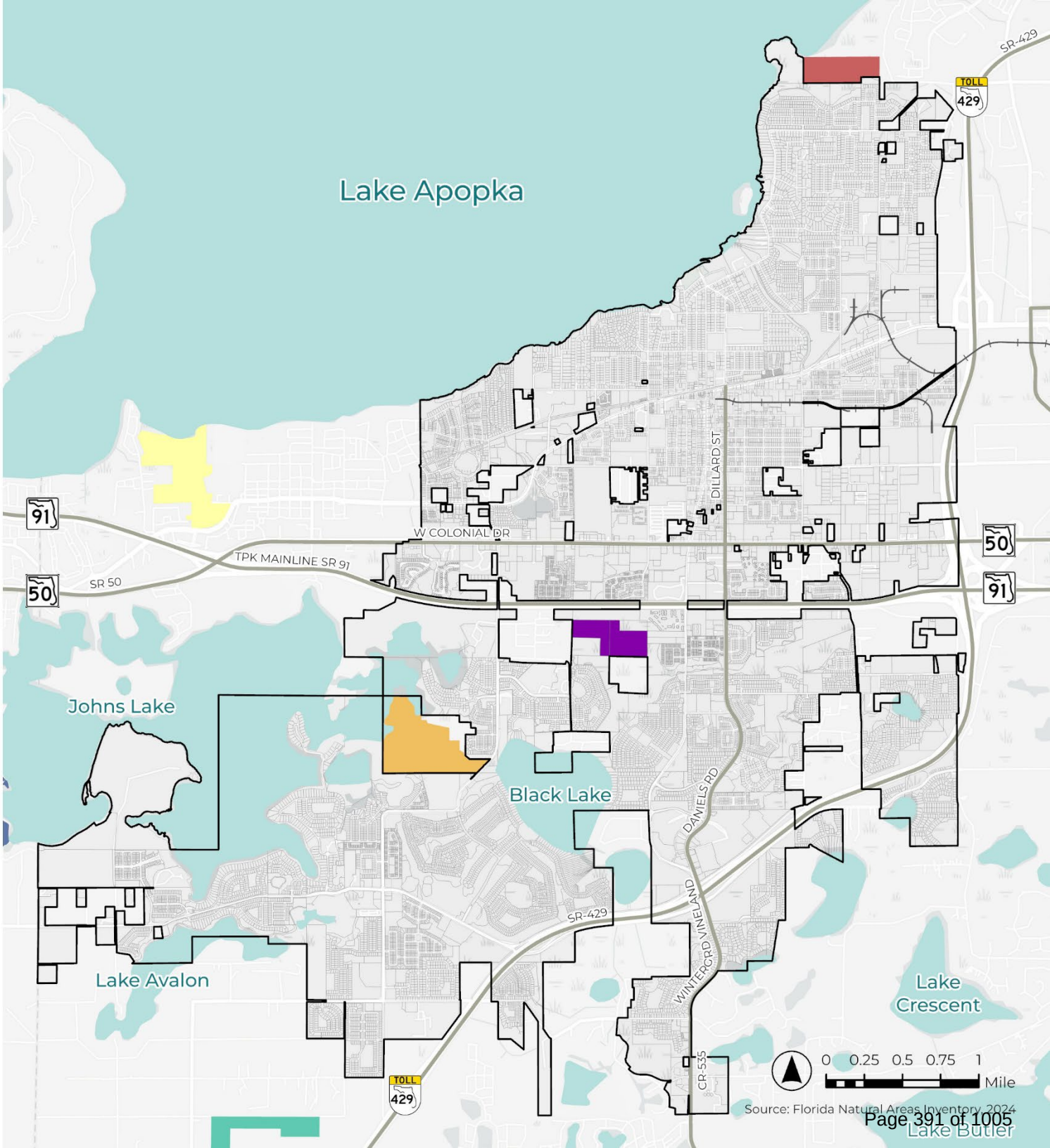
MAP CE - 8

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Conservation Area

- Black Lake
- Crown Point Conservation Easement
- Johns Lake Conservation Area
- Oakland Nature Preserve
- Orange County National Golf Center Conservation Area
- Scrub Point Preserve



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

SOIL PERMEABILITY

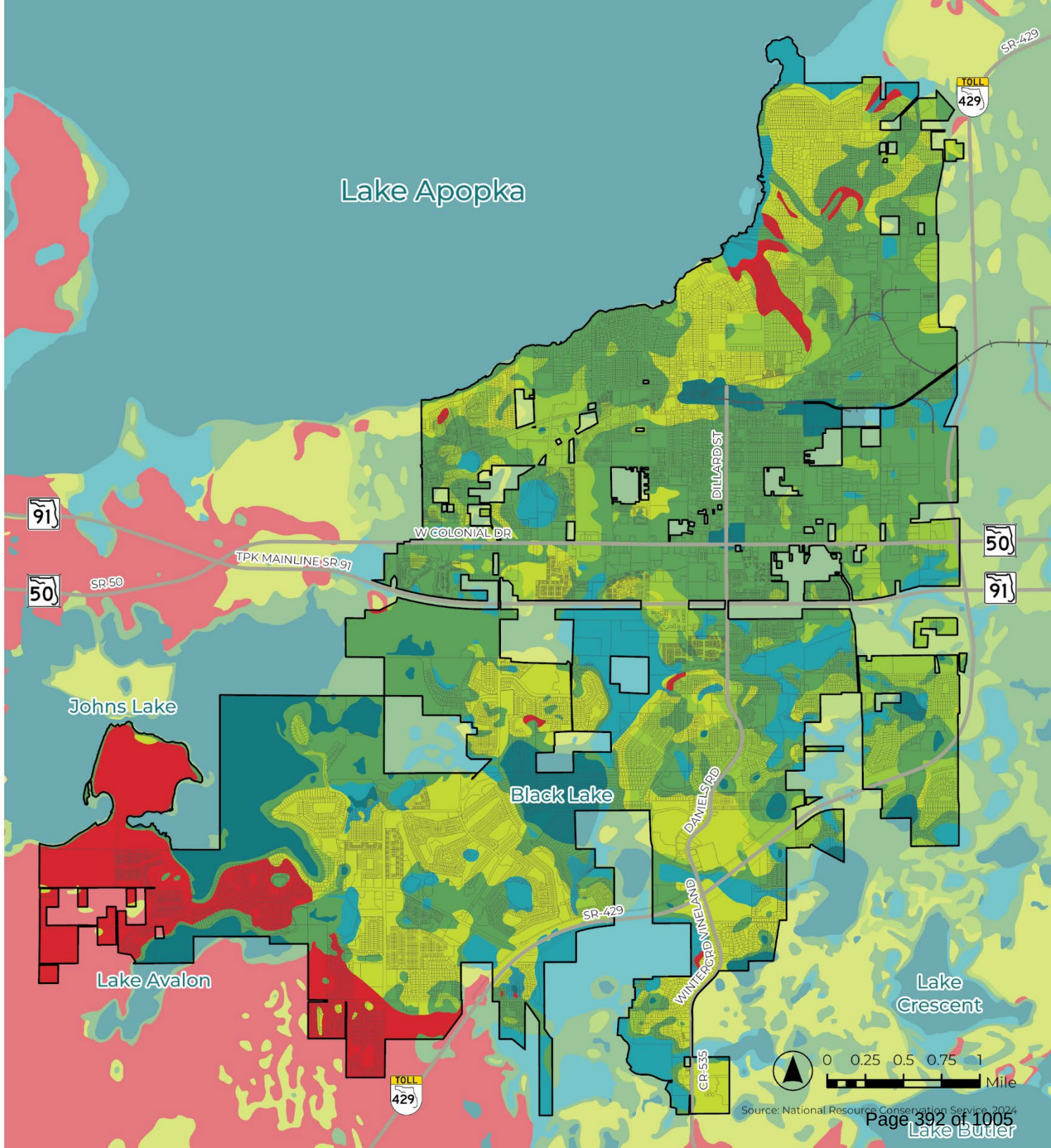
MAP CE - 9

Legend

- City of Winter Garden
- Major Roadway
- Railroad
- Parcel

Soil Permeability

- Excessively Drained
- Somewhat Excessively Drained
- Well Drained
- Moderately Well Drained
- Somewhat Poorly Drained
- Poorly Drained
- Very Poorly Drained
- Water



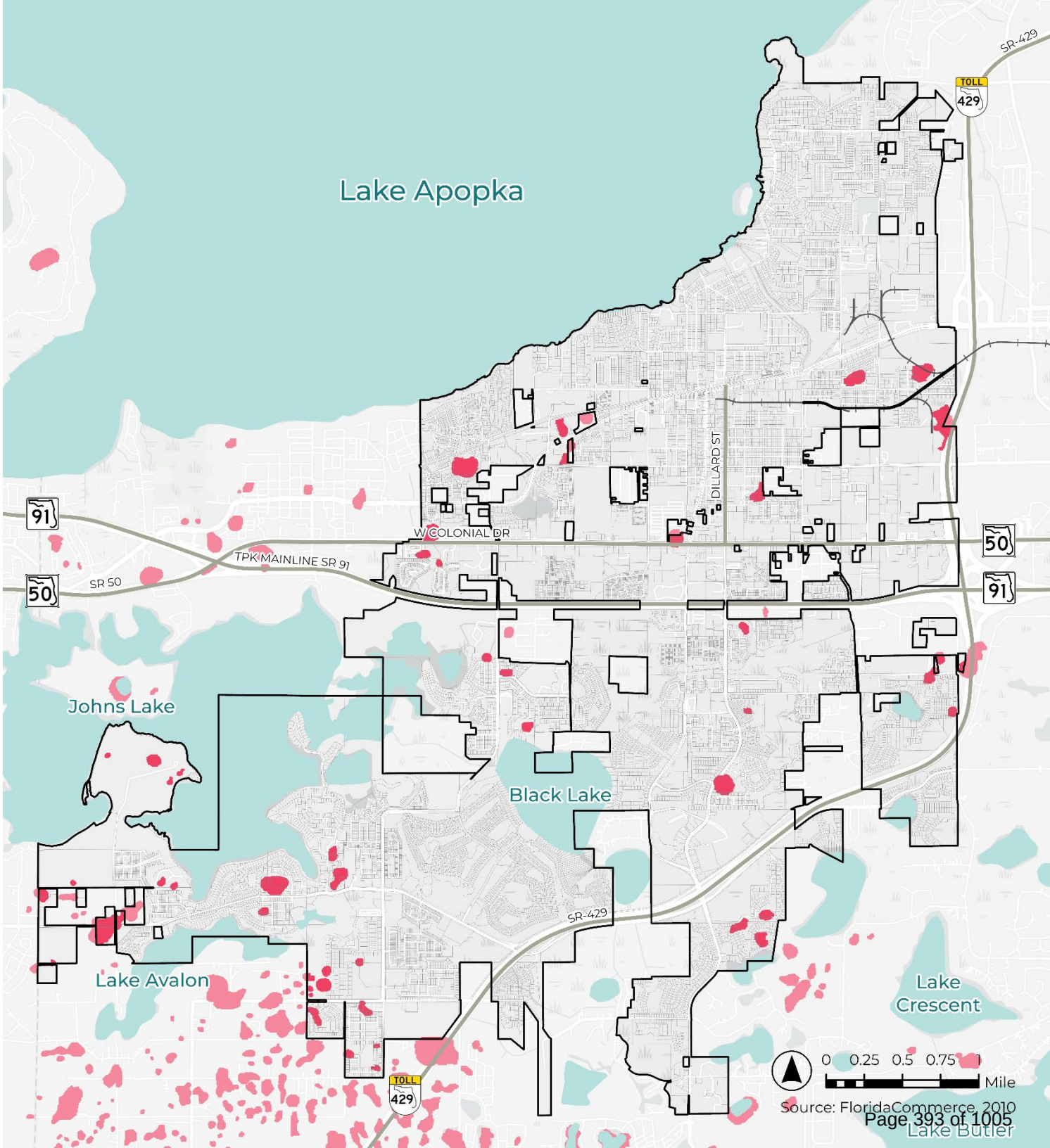
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

KARST FEATURES

MAP CE - 10

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Karst Features



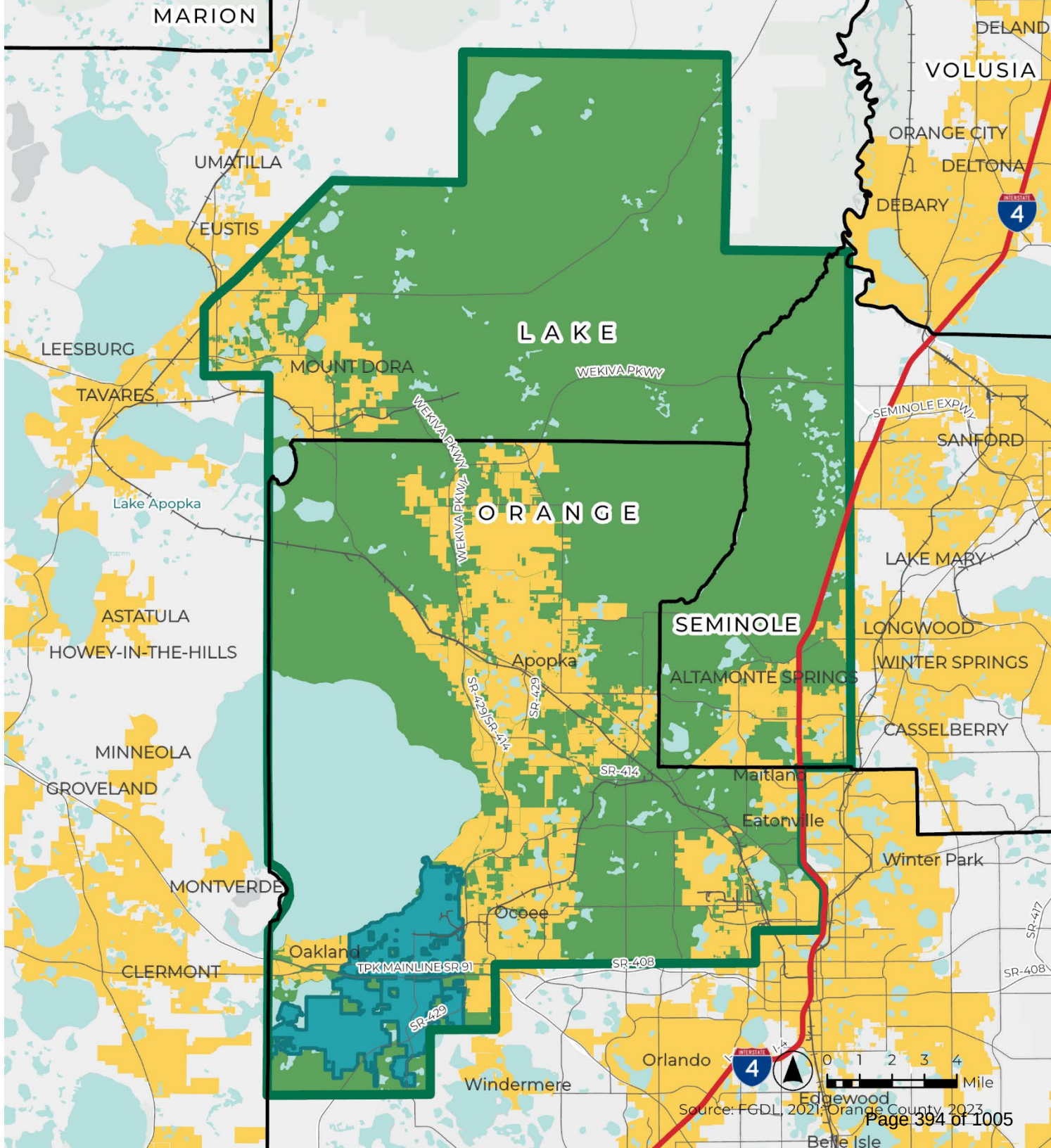
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WEKIVA STUDY AREA

MAP CE - 11

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- County
- Other Municipality
- Wekiva Study Area



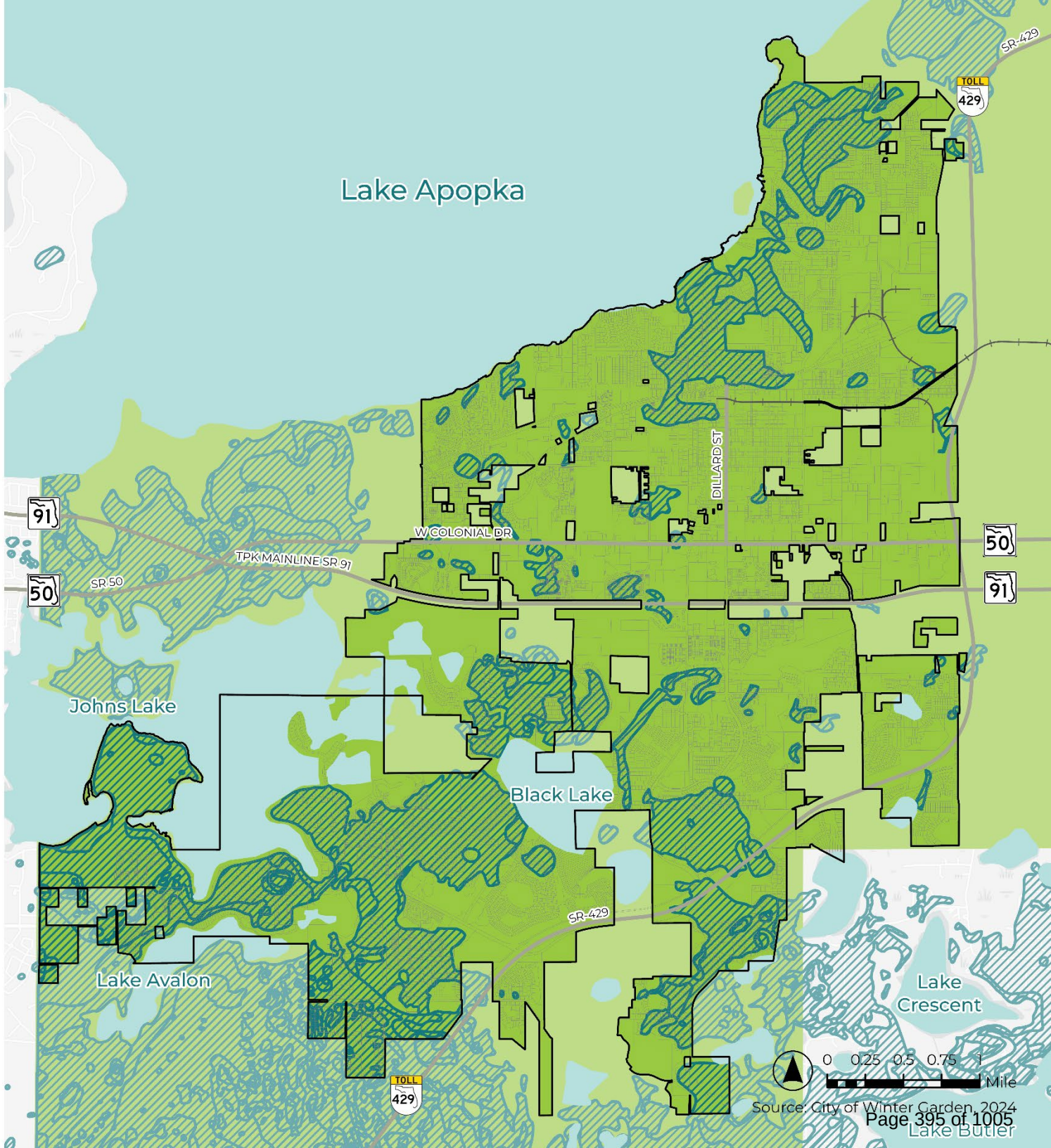
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

WEKIVA STUDY AREA

MAP CE - 12

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Wekiva Study Area
- Resource Protection Overlay



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities



6

DATA & ANALYSIS

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

RECREATION & OPEN SPACE

Table of Contents

INTRODUCTION 3
Recreation and Open Space Inventory 3
Parks 4
Trails and Paths 9
Other Recreation and Open Space 11
ANALYSIS 12
Recreation & Open Space Level of Service Standards 12
Methodology/Analysis. 12
Projected Need. 12
Trails and Paths Level of Service Standards 13
Methodology/Analysis 13
FUTURE CONSIDERATION 14
Parks 14
Trails and Paths 16
Lakefront Access 17

List of Tables

Table ROSE - 1: Inventory of City-Owned Parks and Recreation Facilities 7
Table ROSE - 2: Inventory of County-Owned Parks and Recreation Facilities 8
Table ROSE - 3: Inventory of Existing Trails and Paths 10
Table ROSE - 4: Inventory of Future Trails and Paths 10
Table ROSE - 5: Recreation & Open Space Level of Service Analysis 13
Table ROSE - 6: Trails & Paths Level of Service Analysis 13

List of Maps

Map ROSE -1: Parks 18
Map ROSE -2: Trails and Paths 19

INTRODUCTION

The Recreation & Open Space Element (ROSE) aims to ensure that the City of Winter Garden continues to provide recreation and open space facilities to meet the needs of both current and future residents.

Per Chapter 163, F.S. the Recreation and Open Space Element provides for a comprehensive system of public and private sites for recreation, including, but not limited to, preserved natural lands, parks and playgrounds, trails, open spaces, waterways, and other recreational facilities. A Level of Service (LOS) standard for parks is used to ensure there is adequate recreation and open space available to support both current residents and future population growth; it establishes a benchmark for the number of park acres per person within the city limits. The first section of the Recreation and Open Space Data & Analysis provides an inventory of existing parks, recreational facilities, open space and trails within Winter Garden. The analysis section evaluates the current Level of Service (LOS), analyzing present and future parkland needs based on population projections. The analysis is used to assess whether the current level of recreation and open space will continue to meet the community's needs.

This inventory and Level of Service analysis of recreation and open space is designed to establish a factual foundation for future decisions and policy updates related to the effective provision of these facilities. Key operations conducted during this analysis included performing a desktop inventory of the City's recreation facilities, calculating the current level of service (LOS), and includes future recommendations to ensure the provision of ample, high-quality open space that continues to meet the needs of Winter Garden residents. Additionally, this element does not contain the level of detail meant for a parks and recreation master plan.

Recreation and Open Space Inventory

The City of Winter Garden offers a diverse network of parks, open spaces, and recreational facilities that serve residents of all ages and interests. The City's location in western Orange County provides convenient access to natural features, including Lake Apopka, Johns Lake, and Black Lake, which provide resource-based recreation. Resource based recreation facilities are driven by the natural environment and support activities such as fishing, boating, and nature observation. In addition, the City maintains a system of recreation centers, athletic fields, and community spaces that support activity-based recreation. Activity-based facilities are generally designed for organized sports, such as football, basketball, baseball, softball, tennis, and soccer. The Winter Garden Parks and Recreation Department is responsible for the development, maintenance, and operation of the City's public parks and recreational programs.

Parks

Winter Garden's park system encompasses a total of 422 acres of land, including 338 acres City owned land and 84 acres of County owned land. The following lists and tables provide an inventory of City and County owned parklands and recreational facilities organized by park type.

Pocket Park: A small park designed to serve a 2-3 block area and generally a population of up to 2,500. Pocket parks are 0.5 to 1.0 acres in size, and may be used in areas where it is difficult to acquire sufficient land for a neighborhood park. The City has three pocket parks and are described below.

A. **Butterfly Sculpture Park.** The special facilities park, located on Plant Street, provides a location for the display of public art.

B. **Tildenville Outpost.** This park serves a rest stop along the West Orange Trail and provides parking, restrooms, and a butterfly garden for visitors.

C. **Triangle Park.** This angular park provides a walking path, benches, and the City's 9/11 memorial in between Vineland Road and Main Street.

Neighborhood Park: A park for intense and diverse recreational activities which may include, but are not limited to, equipped play areas, benches, open space landscaping, picnic tables, field games, court games, picnic area, landscaping and gardens. Neighborhood parks are generally 1 to 5 acres and are accessible by foot or bicycle with a service radius of about one-half (0.5) mile and a service population of up to 5,000 persons. The following facilities are considered Neighborhood Parks.

A. **Zanders Park & Bouler Pool.** This park provides a playground area and swimming pool in a residential area on the east side of Winter Garden.
B. **Charlie Mae Wilder Park.** Named after one of East Winter Garden's biggest advocates and the founder of One Winter Garden, this park is equipped with a jogging loop, benches, and shade structures.
C. **Maple Street Park.** This facility contains a playground, volleyball courts, skateboard park, and basketball courts. There are also picnic areas and a racquetball court.
D. **Downtown Interactive Fountain and Pavillion.** The special facilities park, located on Tremaine Street, offers residents a gathering place for community events and a public splash pad.
E. **Warrior Park.** Just beyond Winter Gardens southeastern city limits, this park contains open space for passive recreation and relaxation.
F. **Winter Garden Station.** Winter Garden Station is a scenic trailhead along the West Orange Trail, offering picnic areas, restrooms, parking and a playground. It's a popular spot for biking, jogging, and leisurely strolls, with bike rentals available on-site.

G. **Winter Garden Community Garden.** This garden is maintained mostly by members of the Historic East Winter Garden Neighborhood, with a waitlist for plots of gardening space.

Community Parks and Recreation Centers: Parks and/or facilities that provide a diverse range of recreational and leisure activities or contain an area of environmental or aesthetic quality. Amenities and activities may include, but are not limited to, athletic fields, swimming pools, gymnasiums, performing and designing art centers, crafts buildings, and any facilities associated with neighborhood or mini-park recreation areas. A community park is typically 5 to 25 acres in size and services the needs of up to 25,000 people. Community parks serve a citywide population and are ideally located near collector or arterial roads to accommodate adequate access and should be well buffered from adjacent residential areas. The following descriptions include Community Parks and Recreation Centers in the City.

A. **Jessie Brock Community Center.** Formerly the Dillard Street Elementary School, this structure was remodeled by the City to provide facilities for classes in art, pottery, fitness, dance, cooking, as well as for youth day camps, teen activities, luncheons, dances, pre-school programs, senior citizen programs and private rental functions. The outdoor portion of the park includes a walking path with outdoor fitness equipment stations, park benches, open space, and a floating fountain in the lake. The Winter Garden Parks and Recreation Department Offices are found within the community center.
B. **Newton Park and Boat Ramp, Tanner Hall and Farnsworth Pool.** Located on Lake Apopka, this area includes a banquet center, boat launch, fishing piers, picnic areas, tot lot, walking trails, open space, and a pool. The park serves all Winter Garden residents, providing direct access to Lake Apopka.
C. **Dr. Bradford Memorial Park.** A short walking distance from Newton Park, Dr. Bradford Memorial Park also sits on Lake Apopka, providing open space with scenic views. This park contains passive elements including picnic tables, benches, and walking trails.
D. **Williams Little League Baseball & Walker Field.** Within close proximity to downtown Winter Garden, this park contains baseball and softball fields, a football field, and multi-purpose recreational fields.
E. **Chapin Station Trailhead & Community Park.** Located on the West Orange Trail, Chapin Station serves as the main park office for the West Orange Trail. The park provides tennis and basketball courts, a playground area and passive recreation including picnic tables, pavilions, nature walks, and benches. It also includes bathroom facilities.
F. **Braddock Park.** Braddock Park is intended to serve the southern residents of Winter Garden with softball fields, tot lots, and multi-purpose recreational fields.
G. **Veterans Memorial Park.** Adjacent to Williams Little League Baseball and Walker Field, this park contains softball fields, a playground area, tennis courts, beach volleyball courts, and basketball courts. Other passive elements include picnic tables, benches, and scenic walking trails.

H. **Tucker Ranch Recreational Park and Nature Preserve.** This is Winter Garden's newest nature park. It is located on the shoreline of Johns Lake and offers nature trails, a playground, picnic areas, open space, and a canoe/kayak launch. Future phases will include a 12-acre sustainable working and teaching farm, fishing areas, boardwalks, and a health and nutrition-learning center.
I. **West Orange Park and Dog Park.** This park contains soccer fields, a dog park, and open space for passive recreational activities.
J. **West Orange Recreation Center.** The West Orange Recreation Center is primarily an indoor facility, containing basketball courts and a community center. It also has outdoor baseball fields. The gym is a 24,400 sq. ft. multi-purpose facility and includes locker rooms, concession areas and office space for the operations staff.
K. **George Bailey Community Park.** Just beyond, but adjacent to the boundaries of Winter Garden, this park provides a playground, baseball and softball fields, and picnic tables.



Newton Park.
Source: City of Winter Garden (2025)

Table ROSE - 1: Inventory of City-Owned Parks and Recreation Facilities

NAME	OPERATOR	FACILITIES & AMENITIES	ACREAGE
POCKET PARKS			
Butterfly Park	City	Public art, Open Space, Benches	0.24
Triangle Park	City	9/11 memorial, a walking path, benches	0.31
NEIGHBORHOOD PARKS			
ZANDERS PARK & BOULER POOL	City	Basketball Court, Grill, Picnic Areas, Playground, Swimming Pool	1.55
MAPLE STREET PARK	City	Basketball, Basketball Court, Grill, Picnic Areas, Playground, Racquetball Courts, Skate Ramp, Volleyball	1.59
DOWNTOWN INTERACTIVE FOUNTAIN & PAVILION	City	Interactive Fountain, Pavilion, Farmer's Marker	1.24
CHARLIE MAE WILDER PARK	City	jogging loop, benches, and shade structures	3.14
WINTER GARDEN COMMUNITY GARDEN	City	Gardening plots	2.51
WARRIOR PARK	City	Open Space, Picnic Areas	5.19
COMMUNITY PARKS & RECREATION CENTERS			
JESSIE BROCK COMMUNITY CENTER	City	Trail, Recreation Programs	8.35
NEWTON PARK, BOAT RAMP, TANNER HALL & FARNSWORTH POOL	City	Boat Ramp, Grill, Picnic Areas and Tables, Playground, Fishing, Swimming Pool	9.64
DR. BRADFORD MEMORIAL PARK	City	Fishing, Grill, Picnic Areas	11.97
WILLIAMS LITTLE LEAGUE BASEBALL & WALKER FOOTBALL FIELD	City	Baseball / Softball Diamond, Football Field	15.24
CHAPIN STATION TRAIL HEAD & COMMUNITY PARK	City	Basketball Court, Bike Trail, Grill, Picnic Tables, Playground, Tennis Court	20.15

NAME	OPERATOR	FACILITIES & AMENITIES	ACREAGE
BRADDOCK PARK	City	Baseball / Softball Diamond, Playground, Soccer Field	22.43
VETERANS MEMORIAL PARK	City	Baseball / Softball Diamond, Basketball Court, Grill, Picnic Areas, Playground, Tennis Court, Volleyball	25.57
TUCKER RECREATIONAL PARK & NATURE PRESERVE	City	Canoe/ Kayak Launch, Nature Trail, Open Space, Picnic Areas	208.64
TOTAL ACREAGE			**337.76**

Source: City of Winter Garden, 2024 and University of Florida GeoPlan Center, 2021.

Table ROSE - 2: Inventory of County-Owned Parks and Recreation Facilities

NAME	OPERATOR	FACILITIES & AMENITIES	ACREAGE
POCKET PARK			
TILDENVILLE OUTPOST	County	Trailhead, Pollinator Garden	0.50
NEIGHBORHOOD PARK			
WINTER GARDEN STATION	County	Trailhead, Skating, Playground, Picnic Area, Biking	2.73
COMMUNITY PARKS & RECREATION CENTERS			
WEST ORANGE RECREATION CENTER	County	Gym, Basketball Court, Pickleball Court, Recreation Programs	9.35
TILDENVILLE PARK	County	Basketball Courts, Picnic Area, Playground	4.18
GEORGE BAILEY COMMUNITY PARK	County	Baseball Fields, Picnic Area, Playground, Rental Pavilions	19.91
WEST ORANGE PARK & DOG PARK	County	Playground, Picnic Area, Multipurpose Field, Exercise Station, Dog Park	47.50
TOTAL ACREAGE			**84.17**

Source: City of Winter Garden, 2024 and University of Florida GeoPlan Center, 2021.

Trails and Paths

In addition to the parks and facilities listed above, Winter Garden is home to a robust network of multi-use trails and paths designed for non-motorized users, including pedestrians and cyclists. These networks facilitate active recreation and provide connectivity between various destinations. Because of its impressive trail network, the City of Winter Garden was designated as a "Trail Town" by the State of Florida in 2020. This recognition highlights the city's commitment to providing accessible trails, amenities, and a vibrant downtown that caters to outdoor enthusiasts. The West Orange Trail, which runs through the heart of Winter Garden, played a significant role in earning this designation, connecting trail users to local businesses, recreational opportunities, and enhancing the community's historic charm.

Building on this momentum, local organizations and municipalities collaborated to further enhance the region's trail network and promote active lifestyles. The Healthy West Orange Trails Initiative (2021) was developed through a year-long collaborative effort initiated in 2020 by the West Orange Healthcare District, with input from the City of Winter Garden and other regional partners, to promote health through an interconnected and well-utilized trail system across West Orange County. The plan assesses the existing trails network, identifying both strengths and gaps. The report advocates for raising community awareness of trails, pursuing strategic partnerships from supporting agencies, activating spaces through programming, and integrating historical and cultural assets into trail planning. With support from the Healthy West Orange Trail Connection (HWOTC), the City of Winter Garden and other west Orange County communities are working to connect to the SunTrail network through a system of planned loops. HWOTC has identified three loops, and Winter Garden's roadway network lies between Loops 1 and 2. Closing the remaining gaps in these trail loops is a priority for the City and its neighboring communities, ensuring a more complete and connected regional trail system.

There are currently 19.6 miles of trails and paths within the City limits, and an additional 18.6 miles of planned future trails. **Tables ROSE-3** and **ROSE-4** inventory the existing and future trails and paths within the City of Winter Garden. Two of the most notable trails within the area are described below.

A. **West Orange Trail.** The longest trail within Winter Garden is the West Orange Trail (a Rails to Trails project). In total, the trail covers 22.3 miles, connecting neighboring communities along Lake Apopka. The 4.9 miles of the trail within Winter Garden bisects downtown and pass through various residential neighborhoods and parks. The trail not only facilitates access between residential areas and downtown but also provides links to other parts of Central Florida. Eventually, the trail will become a part of the Coast-to-Coast (C2C) network of trails that connect the Atlantic coast with the Gulf coast. The West Orange Trail is used for recreation and alternative modes of transportation with bike rentals available along the trail at the Winter Garden Station.

B. **Lulu Creek Trail.** Designed as an extension from the West Orange Trail, this trail provides a link from the West Orange Trail to the northern City park facilities and Lake Apopka.

Table ROSE - 3: Inventory of Existing Trails and Paths

TRAIL OR PATH	LENGTH (MILES)
Avalon Multipurpose Path	0.5
Crest Trail	0.1
Daniels Multipurpose Path	2.2
Fowler Grove Multipurpose Path	0.5
Hickory Hammock Multipurpose Path	0.5
Jesse Brock Multipurpose Path	0.4
Lulu Creek Trail	0.4
Marsh Rd Multipurpose Path	1.4
Oakland Park Multipurpose Path	0.5
Plant Street Multipurpose Path	0.9
Stone Crest Path	0.4
Stoneybrook West Multipurpose Path	3.0
Sunridge Multipurpose Path	0.5
West Orange Trail	4.9
Winter Garden Vineland Multipurpose Path	1.4
Other Existing Trails	4.7
TOTAL	**19.6**

Source: City of Winter Garden, 2024

Table ROSE - 4: Inventory of Future Trails and Paths

TRAIL OR PATH	LENGTH (MILES)
Avalon Multipurpose Path	2.2
Avalon Trail	0.7
Beard-Beulah-Warrior Rd Multipurpose Path	2.1
Crest Trail	0.3
Dillard St Multipurpose Path	1.0
Marsh Trail	0.3

Ninth Street	0.5
Railroad Line	2.7
Roper Trail	0.7
Stoneybrook West Multipurpose Path	2.9
Tilden Trail	0.5
West Crown Point Trail	0.4
Windermere Trail	0.8
Other Proposed Trails	5.7
TOTAL	**18.6**

Source: City of Winter Garden, 2025

Other Recreation and Open Space

Private Recreation. Private recreation facilities provide a supplement to public facilities for certain segments of the population. Many existing single-family subdivisions and a majority of multi-family residential projects include recreational facilities. The Land Development Code requires that all Planned Unit Developments provide at least 20% of common recreation and open space per gross site acreage. The code also requires one acre of recreational space for every 200 people, if the proposed development is in a conventional zoning district. Most developments use a combination of active and passive elements including playgrounds, community pools, nature trails, lakes with boat ramps and docks, and community centers providing basketball courts and volleyball courts. The land within the Wekiva Resource Protection Overlay is required to provide 25% of Wekiva Study Area Open Space, and an additional 5% of active recreational space.

Although not owned or operated by the City, there is an agreement between the City of Winter Garden and the wireless tower lot owner adjacent to the Veterans Memorial Park to allow for auxiliary recreational activities space.

Tucker Ranch Phase 2. The transformation of Tucker Ranch Park and Nature Preserve from a historic cattle ranch into an innovative, wellness focused community park began in 2011 when the City of Winter Garden purchased the land. The park encompasses a total of 209 acres. Phase 1, completed in 2018, introduced key amenities including a playground, picnic area, nature trails, and a paddle craft launch on Johns Lake. Phase 2, which is currently underway, began in August 2024 and will focus on the development of the Tucker Ranch Holistic Health, Wellness, Teaching Farm, and Family Activity Center. This phase covers 25.6 acres and will feature a retreat center, edible and teaching gardens, an outdoor teaching kitchen, a trail system, outdoor fitness equipment, and a greenhouse. Completion is expected in 2026, and the park will remain open during construction.

This current phase will offer significant benefits to both Winter Garden residents and visitors from surrounding areas. It will provide a unique opportunity for guests to immerse themselves in the natural environment while learning about nutrition, wellness, and native vegetation through thoughtful programming and well-designed spaces. The City of Winter Garden's investment—alongside its pursuit of grant funding and other partnerships to execute this project—underscores its commitment to providing high-quality park space for the community.

ANALYSIS

This section analyzes the recreational needs of Winter Garden's current and projected population. Level of Service (LOS) standards for recreation and open space provide measurable benchmarks to determine the amount of parkland and recreational facilities required to meet community demand. These standards guide the City in assessing both existing resources and future needs, ensuring that park and recreation planning aligns with City policies, supports a growing population, and remains economically feasible to implement and maintain.

Recreation & Open Space Level of Service Standards

The Level of Service standard for the City of Winter Garden is 5 acres of recreation and open space per 1000 residents.

Methodology/Analysis.

The City of Winter Garden currently maintains 337.76 acres of parkland, while Orange County operates an additional 84.17 acres within and adjacent to the city limits. However, for the purposes of calculating Level of Service (LOS), only park and recreation space maintained by the City is considered. Winter Garden's LOS standard (5 acres per 1,000 residents) is based on recommendations from the Florida Department of Environmental Protection (DEP) and the Florida Recreation and Park Association (FRPA) and has been adjusted to reflect local policies and resource availability. Based on current population estimates, the City is exceeding its LOS standard, providing a surplus of approximately 80 acres of recreation and open space for its residents.

Projected Need.

According to the Bureau of Economic and Business Research, Winter Garden had a population of 51,495 in 2024. The City's population is projected to grow to 66,306 by 2050, including both permanent and seasonal residents. **Table ROSE-5** shows the projected demand for parks and open space based on current LOS standards. With the current 337.8 acres of recreation and open space, the City can continue to meet the 5 acres per resident standard through 2050.

Table ROSE - 5: Recreation & Open Space Level of Service Analysis

YEAR	CURRENT/ PROJECTED RESIDENTS	RECREATION & OPEN SPACE ACREAGE			LEVEL OF SERVICE (LOS) (ACRES PER 1,000 RESIDENTS)	
		DEMAND	SUPPLY	SURPLUS	ADOPTED	ACTUAL
2024	51,495	257.48	337.8	+80.32	5	6.56
2025	55,531	277.66	337.8	+60.14	5	6.08
2030	59,336	296.68	337.8	+41.12	5	5.69
2035	62,170	310.85	337.8	+26.95	5	5.43
2040	64,097	320.49	337.8	+17.31	5	5.27
2045	65,382	326.91	337.8	+10.89	5	5.17
2050	66,306	331.53	337.8	+6.27	5	5.09

Sources: Bureau of Economic and Business Research and City of Winter Garden, 2025.

Trails and Paths Level of Service Standards

The City of Winter Garden does not currently have an adopted level of service standard for trails and paths. Given the robust trail network within the City, the City's status as a Trail Town, and community members' desire to expand the trail network, a level of service analysis was conducted for Winter Garden's trail network.

Methodology/Analysis

There are currently 19.6 miles of trails and paths within the City limits, and an additional 18.6 miles of planned future trails. With the City's current population of 55,531, there are approximately 0.35 trail miles per 1,000 residents. In 2050, with a projected population of 66,306, this number falls to 0.3 trail miles per 1,000 residents, if no improvements are made to the trail system. However, if all currently planned trails and paths are built by 2050, the projected LOS would be 0.58 trail miles per 1,000 residents. **Table ROSE-6** shows the projected demand relationship between the City's population and trail network. The existing column assumes no new trails, while the future column incorporates new trails starting in 2030.

Table ROSE - 6: Trails & Paths Level of Service Analysis

YEAR	CURRENT/PROJECTED RESIDENTS	TRAIL MILES PER 1,000 RESIDENTS	
		EXISTING	FUTURE
2025	55,531	0.35	0.69
2030	59,336	0.33	0.64
2035	62,170	0.32	0.61
2040	64,097	0.31	0.60
2045	65,382	0.30	0.58
2050	66,306	0.30	0.58

Sources: Bureau of Economic and Business Research and City of Winter Garden, 2025.

FUTURE CONSIDERATION

Parks

Parks are essential to promoting community well-being, offering spaces for physical activity, social interaction, and outdoor recreation throughout residential neighborhoods and the broader City. As the City of Winter Garden progresses with its Comprehensive Plan, there are several opportunities to further enhance the recreational and open space offerings for current and future residents.

1. **Expansion and Improvements to Existing Parks:** While Winter Garden has a solid foundation of parks, many of these spaces can be further developed to meet the growing demand for recreational amenities. Evaluating park utilization could provide insights as to which existing parks are not reaching their full potential. In addition, the City should consider new recreational additions to maximize the potential of existing parkland. This could include the addition of benches and beautification furnishings, multipurpose or gathering areas, or smaller fitness and playground equipment, ensuring that parks continue to serve as vibrant community hubs.
2. **Park Access:** As Winter Garden continues to expand its park system, ensuring park access for all residents should remain a central consideration. Park accessibility can be improved through two key strategies:
    a. *ADA Compliance and Inclusive Design:* All existing and future parks should meet or exceed the requirements of the Americans with Disabilities Act (ADA). This includes providing accessible routes to and within park facilities, inclusive playground equipment, ADA-compliant restrooms, seating, and signage with tactile or auditory support where appropriate. Inclusive design benefits not only individuals with disabilities but also families with young children, seniors, and others with mobility challenges.
    b. *Distribution and Multimodal Access:* Park planning should address the geographic distribution of parks across the City to ensure that all neighborhoods have access to quality green space. Park location decisions should be guided by proximity analysis and service area mapping to identify underserved areas. Additionally, parks should be accessible by walking, biking, micromobility options, and public transit. Where possible, reliance on automobile access should be reduced by prioritizing improvements in active transportation infrastructure, such as sidewalks, bike lanes, shared-use paths, and wayfinding signage. Enhancing first- and last-mile connections to parks will ensure all residents can safely and comfortably reach these community assets.

3. **Environmental Stewardship:** The management of open and recreational spaces in Winter Garden is intrinsically linked to the region's natural environment, particularly in areas of resource-based recreation. As the City continues to develop and maintain its park system, it is important to ensure that practices support long-term ecological health, public well-being, and sustainability goals. The following strategies can be applied to City-managed spaces or required of private development through open space provisions in the Land Development Code:
    a. *Reduce Harmful Chemical Use*: Limit or eliminate the application of synthetic fertilizers, herbicides, and pesticides on athletic fields and landscaped areas. This protects groundwater quality, enhances resident health, and supports regional waterbody restoration goals, particularly those associated with Lake Apopka. The City utilizes Integrated Pest Management (IPM) to reduce chemical use.
    b. *Incorporate Florida Native Landscaping and Wildlife Corridors:* Use native and drought-tolerant plants in parks and open spaces to reduce irrigation demands, minimize maintenance needs, and support pollinators and local wildlife. Designated green corridors can improve biodiversity and allow for species movement across developed areas, consistent with Florida Fish and Wildlife Conservation Commission (FWC) guidelines.
    c. *Utilize Green Infrastructure for Pollution Mitigation:* Integrate vegetated swales, rain gardens, and constructed wetlands—especially in areas near Lake Apopka—to naturally filter stormwater runoff and reduce nutrient loading. Native wetland species can be used to stabilize shorelines and improve water quality.
    d. *Expand Tree Canopy Coverage:* Planting shade trees in parks, trails, and urban open spaces enhances safety and improves air quality. Priority should be given to native canopy species that are well adapted to the local climate and soil.
    e. *Incorporate Edible Landscaping and Community Food Forests:* Design select areas of parks or open spaces with edible plants—such as fruit trees, herbs, and perennial vegetables—that residents can access. This supports local food systems, offers educational opportunities, and encourages stewardship. These spaces can be integrated with walking paths and seating areas to encourage interaction.
    f. *Support Community Gardens and Urban Agriculture:* Expand access to community gardens in neighborhoods, near schools, or at existing parks. These spaces can be used for educational programming, intergenerational activities, and food security initiatives. Raised beds,

compost bins, rainwater harvesting systems, and shaded gathering spaces should be included in their design.

g. *Promote Permaculture-Based Design in Parks and Open Spaces:* Permaculture integrates ecological design with sustainable land use. Principles such as maximizing edge, using functional plant guilds, and designing for zero-waste can be applied to park layouts and landscaping. For example, using swales for water harvesting or integrating composting toilets in remote trailheads can reduce infrastructure costs and improve sustainability.
h. *Develop Educational and Interpretive Features on Sustainable Practices:* Install signage and exhibits in parks that explain sustainable practices, native ecosystems, and climate resilience strategies. This can include interpretive trails, demonstration gardens, or small-scale permaculture installations that teach visitors about food cycles, soil health, and biodiversity.

Trails and Paths

Community engagement thus far in the comprehensive plan update process has highlighted community members' desires for an expanded trail network. Trails are another important outdoor recreation feature in Winter Garden, and there is an opportunity to expand and improve trail connectivity throughout the City. Enhancing connections between parks, residential areas, and key trails such as the West Orange Trail would create a more integrated and accessible network for cyclists and pedestrians alike. Increased connectivity encourages active transportation, supports healthy lifestyle choices, and provides residents with more routes for commuting and recreational activities. In addition, trails are an economic driver within the community, attracting visitors, supporting local businesses, increasing nearby property values, and enhancing the overall quality of life for residents.

The City should consider implementing a Level of Service (LOS) standard for trails in addition to the recreation and open space LOS. This would set a benchmark for a specific number of trail miles per population. Currently, with approximately 19.6 miles of trails serving an estimated 55,531 residents, the City provides roughly 0.35 miles of trail per 1,000 people. The National Recreation and Park Association (NRPA) recommends 0.5 to 1.0 miles of trail per 1,000 people as a general guideline. Regionally, other Florida Trail Towns range from 0.05 to 0.67 trail miles per 1,000 residents. Establishing an appropriate LOS based on land availability, funding capacity, and community needs would help guide future trail development and ensure equitable access for all residents.

Based on the trail and path LOS analysis (**Table ROSE – 6**), peer city comparisons, and national standards, it is recommended that Winter Garden adopt a trail level of

service of between 0.35 and 0.60 trail miles per 1,000 residents. Selecting a number closer to 0.35 would ensure that Winter Garden aligns with its existing ratio of trail miles to residents as it continues to grow. On the other hand, choosing an ambitious number closer to 0.60 would serve as motivation for the City to complete its proposed trail network additions, with continued future expansion.

Lakefront Access

Public engagement thus far in the plan update process has highlighted the community's desire and support for activating the waterfront. Lake Apopka presents a significant opportunity for enhancing Winter Garden's park system. Efforts to improve water quality and restore ecosystems around the lake align with broader environmental goals and could provide for enhanced recreational opportunities on the lake. The City has acquired three new lakefront properties between Dr. Bradford Memorial Park and Newton Park. This strategic acquisition aims to unify the two existing parks into a continuous, linear park, thereby enhancing public access to the lakefront and creating one of the most prominent park spaces along Lake Apopka. Currently, the properties are occupied by residential tenants, and the City has indicated that these rental arrangements will continue until formal park development plans are established.

One opportunity that could be realized through the park expansion is the addition of educational features that inform visitors about the environmental history and ongoing restoration of Lake Apopka. Once a thriving fishing destination, the lake suffered decades of severe pollution due to agricultural runoff and nutrient loading from nearby muck farms, leading to ecological collapse by the late 20th century. Since the 1990s, major restoration efforts led by the St. Johns River Water Management District have aimed to improve water quality and restore wetlands, yielding gradual improvements in lake health.

Integrating interpretive signage, interactive exhibits, or even outdoor classrooms into the proposed linear park between Newton Park and Bradford Park could enhance public understanding of this environmental history. It would also highlight Winter Garden's role in the broader effort to rehabilitate and reconnect with this vital natural resource. These features would not only deepen public awareness and environmental stewardship but also enhance recreational opportunities. By connecting visitors to the lake's recovery story, these efforts can foster greater appreciation for natural spaces, support community engagement, and ultimately contribute to the long-term restoration and enjoyment of Lake Apopka as a regional recreational asset.

PARKS

MAP ROSE - 1

Legend

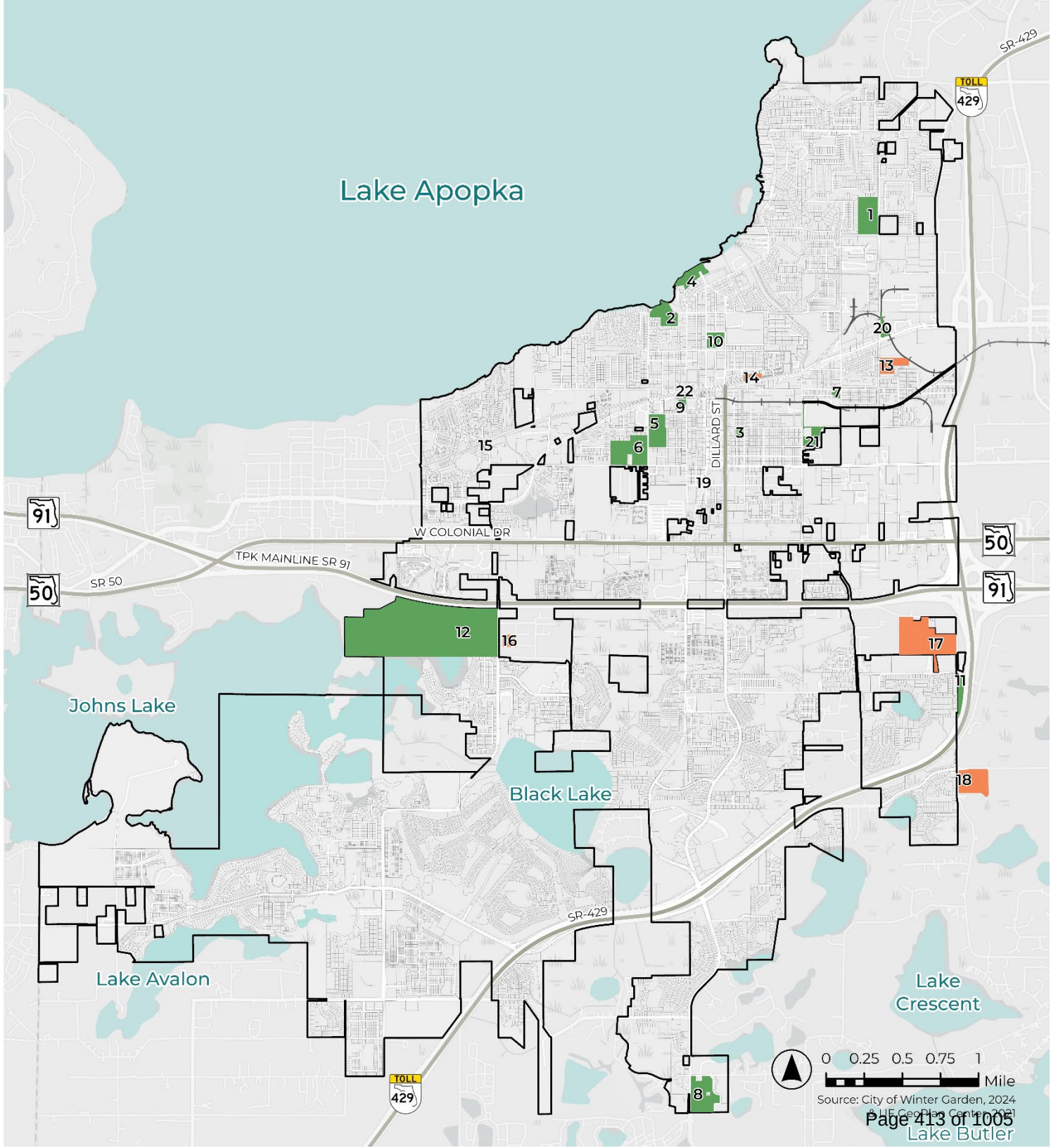
- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Owner

- City of Winter Garden
- Orange County

Facilities

1: Chapin Station Park
2: Dr. Bradford Memorial Park
3: Maple Street Park
4: Newton Park
5: Williams Little League Baseball and Walker Football Field
6: Veteran's Memorial Park
7: Zanders Park and Boulder Pool
8: Braddock Park
9: Butterfly Park
10: Jessie Brock Center
11: Warrior Park
12: Tucker Ranch
13: West Orange Recreation Center
14: Winter Garden Station
15: Tildenville Outpost
16: Tildenville Park
17: West Orange Park
18: George Bailey Community Park
19: Triangle Park
20: Charlie Mae Wilder Park
21: East Winter Garden Community Garden
22: Downtown Interactive Fountain & Pavillion



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

TRAILS AND PATHS

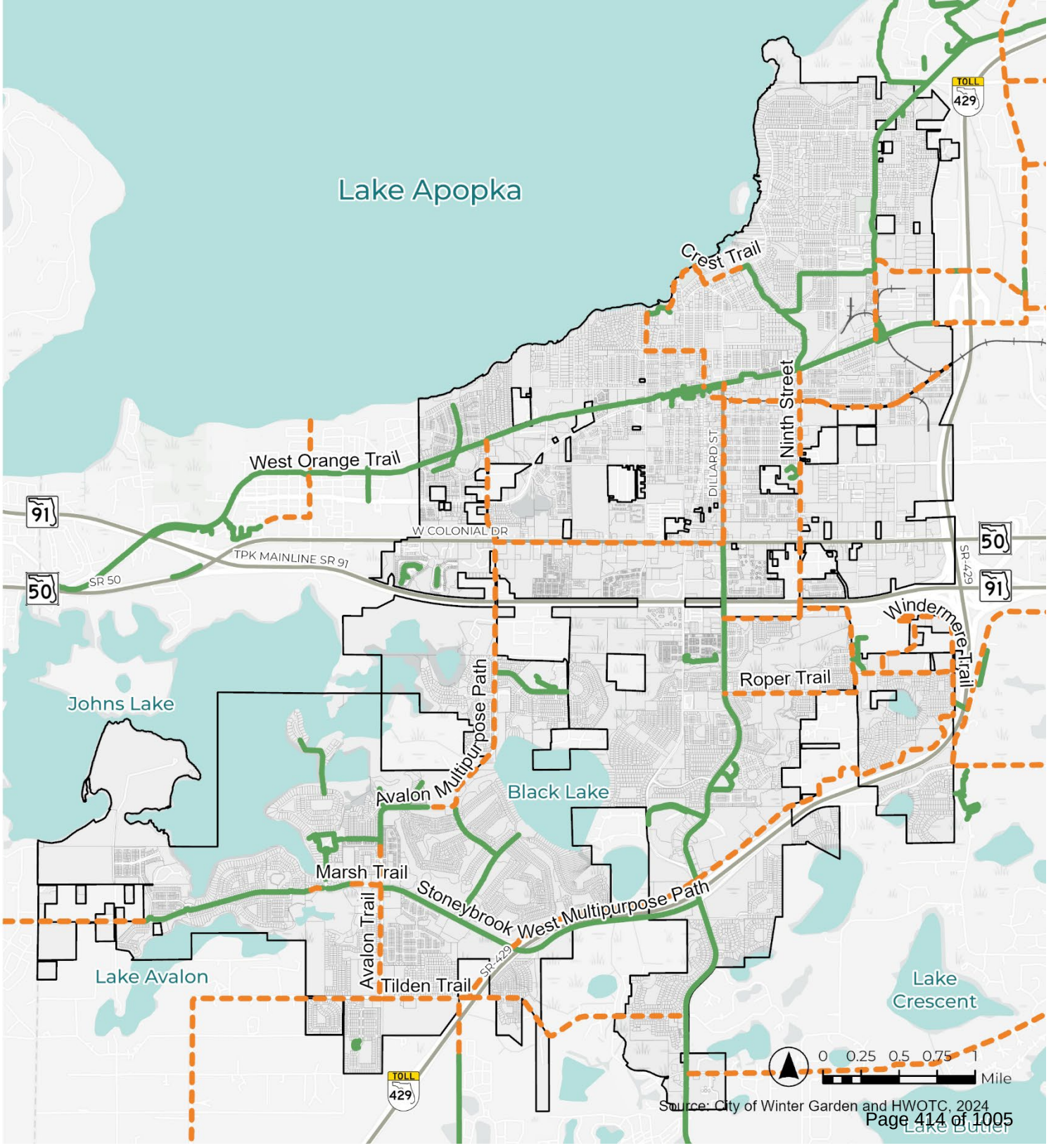
MAP ROSE - 2

Legend

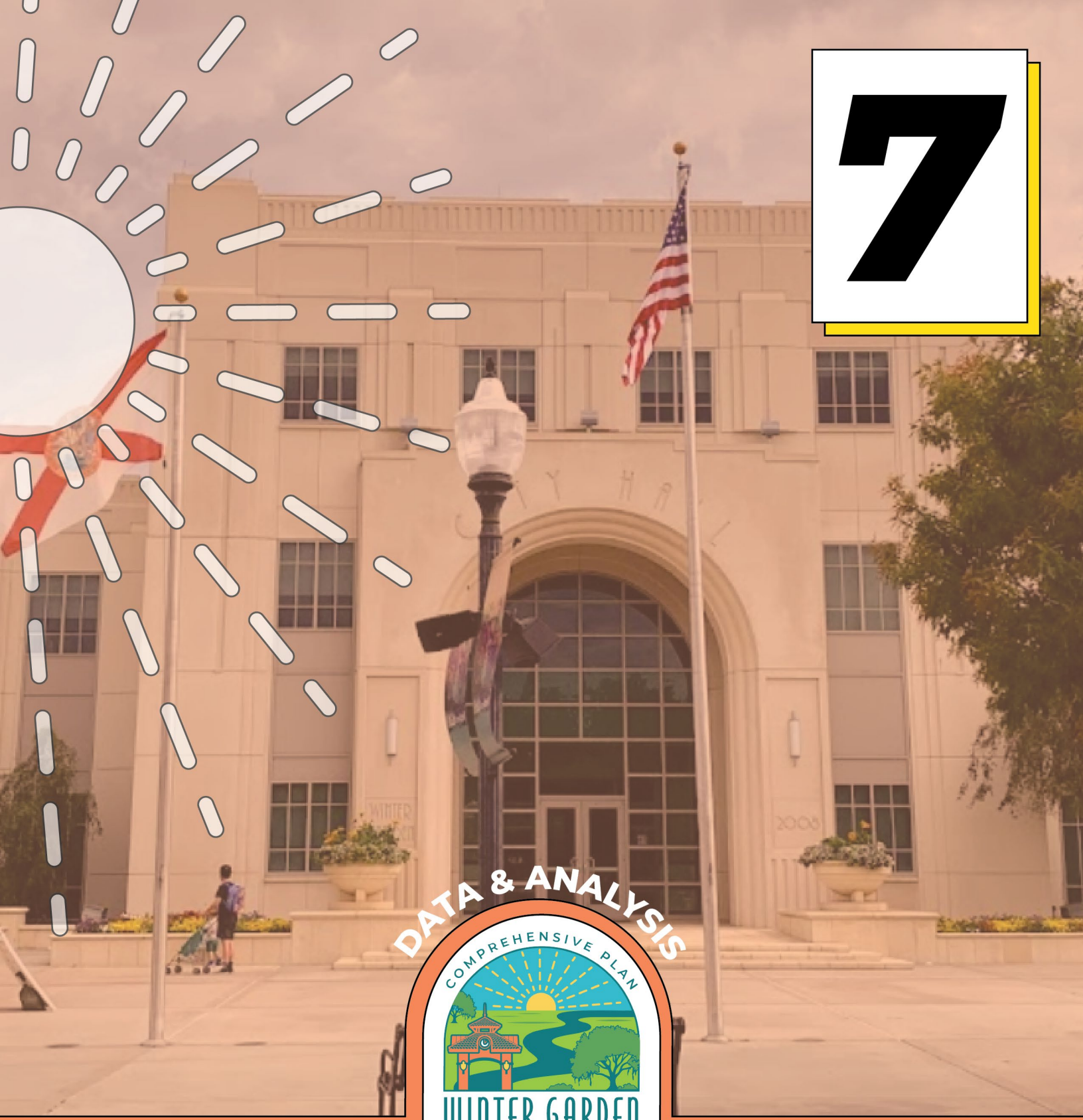
- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel

Trail or Path

- Existing
- Future



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities



7

DATA & ANALYSIS

COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

INTERGOVERNMENTAL COORDINATION

Table of Contents

INTRODUCTION 3
INVENTORY OF EXISTING INTERGOVERNMENTAL COORDINATION MECHANISMS 3
Specific Coordination Subjects 7
Planning 7
Transportation 8
Infrastructure 9
Environment 10
Schools 11
FUTURE CONSIDERATIONS 13
Strengthening Intergovernmental Collaboration 13
Updating Interlocal Agreement for Joint Planning Agreement with Orange County 13
Coordination with Oakland 13
Coordination with Ocoee 14

List of Tables

Table ICE - 1: Inventory of Existing Interlocal Agreements 4
Table ICE - 2: Coordination Mechanisms 11

Map

Map ICE-1 15

INTRODUCTION

The Intergovernmental Coordination element serves the purpose of assessing coordination between Winter Garden and regional, state and federal agencies, municipalities, special districts and adjacent jurisdictions. Coordination between these entities allows the city to progress towards goals outlined in the Comprehensive Plan, including planning for and managing population growth and ensuring that current and future residents receive necessary services. The Element provides guidance to direct future coordination activities and serves as the basis for identifying and resolving conflicting components with other local government comprehensive plans where overlaps occur.

The following sections provide an overview of the intergovernmental coordination mechanisms currently in place and concludes with a discussion of additional opportunities for new agreements to improve the delivery of public services within the community.

INVENTORY OF EXISTING INTERGOVERNMENTAL COORDINATION MECHANISMS

The City of Winter Garden is surrounded by the following jurisdictions: Orange County, Lake County, City of Ocoee and Town of Oakland. Coordination mechanisms between City, County, regional, and state government agencies represent cooperative efforts intended to foster partnerships, cooperation, exchange of information, solve intergovernmental issues that may arise, and achieve greater efficiency for the parties involved.

All local governments within the metropolitan area benefit from the data collections and dissemination efforts provided by Metroplan Orlando (Metropolitan Planning Organization - MPO) and other regional planning agencies. In addition to the formal agreements listed, individual governments exchange information through a variety of formal and informal means. **Table ICE-1** identifies the formal agreements currently in place between the City and its public and private sector partners.

Table ICE - 1: Inventory of Existing Interlocal Agreements

Type Of Agreement	Government Bodies / Agencies	Subject Of Agreement	Year Entered / Last Amended	Status/ Termination Date
Interlocal Agreement	School Board of Orange County, Orange County, City of Apopka, City of Belle Isle, Town of Eatonville, City of Edgewood, City of Maitland, Town of Oakland, City of Ocoee, City of Orlando, Town of Windermere, City of Winter Garden and City of Winter Park	**Public School Facility Planning, Implementation of Concurrency.** To implement statutory school concurrency requirements; coordinate the establishment of new schools in time and place with residential development; and improve efficiency for the school board and local governments.	2011	Active
Interlocal Agreement	Orange County and City of Winter Garden	**Joint Comprehensive Planning Area.** To establish boundaries for annexations, provide limited development standards for annexed property and provide for notice of certain land use applications. To identify future utility connections in the southern planning area, establish a day that will require all unincorporated development to connect to available city and wastewater facilities.	2020	Auto Renews until terminated
Interlocal Agreement	Orange County and City of Winter Garden	**Stormwater Improvement Projects.**	2023	Active
Interlocal Agreement	Town of Oakland and City of Winter Garden	**Oakland Park Development.** To provide for sewer and reuse water services to Oakland Park.	2023	Active
Interlocal Agreement	City of Orlando, Orange County and City of Winter Garden	**Delivery and Use of Reclaimed Water.**	2016	Active
Interlocal Agreement	Orange County, the City of Winter Garden and the Winter Garden Community Redevelopment Agency	**Winter Garden Community Redevelopment Agency (CRA).** To provide for CRA operations. Amended in 2021	2021	Terminates 2033

Type Of Agreement	Government Bodies / Agencies	Subject Of Agreement	Year Entered / Last Amended	Status/ Termination Date
		to extend the CRA for 10 years beyond the initial expiration.		
Interlocal Agreement	Orange County, Florida and City of Winter Garden	**Community Development Programs under the Urban County Program.** To allow the County to administer federal community development funds (CDBG, HOME, and ESG) to construct City potable water mains in conjunction with the County's stormwater improvement project.	2023	Active
Interlocal Agreement	Town of Oakland, City of Winter Garden, City of Apopka, City of Belle Isle, Town of Eatonville, City of Edgewood, City of Kissimmee, City of Maitland, City of Ocoee, School Board of Orange County, City of Orlando, The University of Central Florida Board of Trustees, City of St. Cloud, Town of Windermere, and City of Winter Park	**Police-dispatch Services and Law Enforcement.** To provide mutual-aid provisions that allow police officers of participating agencies to support Winter Garden police officers and vice versa to protect public peace and safety.	2025	Active
Agreement	School Board of Orange County and City of Winter Garden Police Department	**School Resource Officer Program.** To assign safe school officers to each school facility.	2019	2027
Interlocal Agreement	Orange County and City of Winter Garden	**Provision of Fire Dispatch Services.**	2024	2029
Interlocal Agreement	Orange County and City of Winter Garden	**Solid Waste Management System.**	2001	Active
Interlocal Agreement	City of Apopka, City of Belle Isle, Town of Eatonville, City of Edgewood, City of Maitland, City of Ocoee, City of Winter Garden and City of Winter Park; Valencia Water Control District; Florida Department of	**Joint Control of Pollutants.** To determine responsibilities related to the control of the contribution of pollutants within the stormwater system.	1997	Active

Type Of Agreement	Government Bodies / Agencies	Subject Of Agreement	Year Entered / Last Amended	Status/ Termination Date
	Transportation; and Orange County			
Interlocal Agreement	Orange County and City of Winter Garden	**Water, Wastewater and Reclaimed Water.** To allocate utility service areas to the City and the County and address interconnections and service transfers.	2007	Active
Interlocal Agreement	Orange County and City of Winter Garden	**Wholesale Potable Water.** For the provision and delivery of potable water service to specified areas.	2000	Active
Interlocal Agreement	Orange County and City of Winter Garden	**Mildred Dixon Community Center.** To provide for the development of five recreation centers on county-controlled sites.	2009	Active
Interlocal Agreement	Central Florida Expressway Authority (CFX), Orange County, and City of Winter Garden	**Convey Shared Use Drainage Easement Areas and Right of Way Stormwater Management.** Related to infrastructure, road right of way, and drainage easements.	2010	Active
Interlocal Agreement	City of Ocoee and City of Winter Garden	**Reuse Water Line Easement Agreement.**	2014	Active
Agreement	State of Florida Department of Transportation, Traffic Engineering and Management, LLC and City of Winter Garden	**Traffic Signal Maintenance Compensation Agreement.** To determine responsible agencies for the maintenance and instillation of traffic signals and devices.	2021	2041
Memorandum of Understanding	Orange County, Boys and Girls Club of Central Florida, and City of Winter Garden	**Construction of New Facility on City Property.** To determine responsibilities of agencies for the Future Site Location of Project.	2021	2026
Interlocal Agreement	Orange County and City of Winter Garden	**Property Exchange Agreement of West Orange Trail.** Trail conveyance and	2009	Active

Type Of Agreement	Government Bodies / Agencies	Subject Of Agreement	Year Entered / Last Amended	Status/ Termination Date
		maintenance responsibilities.		
Interlocal Agreement	Duke Energy Florida, LLC and City of Winter Garden	**Electric Utility Rights of Way Utilization.**	2023	Active
Franchise Agreement	Lake Apoka Natural Gas District and City of Winter Garden	**Natural Gas distribution and right of way utilization**	2015	2025

Specific Coordination Subjects

Planning

To take a proactive approach to planning efforts and growth management, Winter Garden's efforts are aligned with state, regional, and local priorities. Key partners in this coordination include Orange County, the East Central Florida Regional Planning Council (ECFRPC), the Florida Department of Commerce, the Florida Department of State's Division of Historic Resources, the City of Ocoee, and the Town of Oakland.

At the local level Orange County and the City of Winter Garden have an established a Joint Planning Agreement which allows the City to actively pursue with property owners permission to annex the existing enclaves within the City.

As authorized under Chapter 186.509, Florida Statutes, the ECFRPC facilitates an informal mediation process to resolve disputes between local governments regarding comprehensive plans, enabling more effective regional cooperation.

At the state level, the Florida Department of Commerce oversees growth management policy. Coordination with this agency, as outlined in Chapter 163, Florida Statutes, ensures that Winter Garden's comprehensive plan remains consistent with regional and state goals.

For historic preservation, the Florida Department of State's Division of Historic Resources reviews projects involving state or federal funding or permits to assess impacts on significant historical resources. They support local efforts by assisting with the identification, evaluation, and maintenance of historic sites within Winter Garden.

This coordinated approach across local, regional, and state entities ensures that Winter Garden's growth management strategies align with broader goals while respecting the community's unique character and assets.

Transportation

Winter Garden actively engages in intergovernmental and interagency coordination to address transportation needs within the region. Transportation planning and improvements require collaboration with multiple agencies, including the Florida Department of Transportation (FDOT), MetroPlan Orlando (the regional metropolitan planning organization), LYNX (Central Florida Regional Transportation Agency), the Central Florida Expressway Authority (CFX), Orange County, and neighboring municipalities. Winter Garden coordinates with these agencies to ensure that local priorities are considered in regional transportation plans and funding decisions, particularly for roadway improvements, bicycle and pedestrian facilities, and transit enhancements.

Coordination with the Florida Department of Transportation (FDOT) is also necessary to achieve the City's transportation goals and maintaining minimum level of service (LOS) standards on City, County and State maintained roads. Communication with FDOT is necessary to annually monitor LOS on the state Strategic Intermodal System for FDOT concurrency management, and the City uses FDOT's traffic counting system to ensure that new development does not outpace the capacity of transportation infrastructure. Winter Garden also partners with FDOT on roadway improvements to support concurrency and accelerate the state's construction schedule.

MetroPlan Orlando is the transportation planning agency for Orange, Osceola, and Seminole counties. Metropolitan planning organizations (MPOs) were established to ensure a comprehensive and coordinated approach to transportation planning across multiple jurisdictions. By bringing together local governments and transportation agencies, MPOs develop long-range transportation plans, set funding priorities, and guide regional mobility initiatives. This includes improvements to roadways, transit services, and aviation facilities.

LYNX serves as the primary local provider of mass transit, operating routes in Orange, Seminole, and Osceola counties, and recently expanding service to connect Lake and Volusia counties with Downtown Orlando. Any transit planning efforts of the City should be coordinated with LYNX's services and future plans.

The Central Florida Expressway Authority (CFX) is another key partner. Created under Chapter 348, Part IV, Florida Statutes, CFX is authorized to own and operate an expressway system in Orange County and can lease it to FDOT. CFX's coordination with the City and other local governments is plays an important role in integrating expressways with the local and regional transportation network.

Through collaborative efforts with MetroPlan Orlando, FDOT, LYNX, CFX, and other partners, Winter Garden strives to advance transportation improvements, reduce congestion, and provide safe, multimodal transportation choices for residents and

visitors, in alignment with the City's comprehensive plan and the broader regional vision.

Infrastructure

Achieving the City's goal of providing efficient and sustainable potable water service requires coordination with the regional Water Management District (WMD). Water Management Districts (WMD) are water regulating agencies that play a distinct role in protecting the quantity and quality of groundwater resources. Florida has five WMDs, and the St. Johns River Water Management District (SJRWMD) is the dominant water management agency for Orange County, though the South Florida Water Management District (SFWMD) agency provides service for the southwest portion of the County. The City of Winter Garden coordinates with the St. Johns River Water Management District (SJRWMD) to provide potable water service, ensure sustainable water resource management, and protect natural water systems. Additionally, the City of Winter Garden is a participant with the Central Florida Water Initiative (CFWI) which is a regional approach to meet the demand of freshwater in Central Florida. The CFWI covers five counties (Orange, Osceola, Polk, Seminole and a portion of Lake) and three water management districts (St. Johns River Water Management District, South Florida Water Management District and Southwest Florida Water Management District).

WMDs are tasked with preparing a Groundwater Basin Resource Availability Inventory (GBRAI) which helps local governments plan for future development by identifying groundwater basins, prime recharge areas, minimum surface and groundwater levels, and the quantities of water available for consumptive use. The City can use this information to identify and correct facility deficiencies and address floodplain management priorities. The WMDs also prepare reports detailing the impacts of various land uses, such as industrial, commercial, office, residential, and agricultural, on recharge areas and lands surrounding Outstanding Florida Waters, which are water bodies designated as worthy of special protection because of their natural attributes. These reports can guide the City in developing land use criteria that protect vital groundwater resources.

Beyond groundwater protection, the WMD supports the City's efforts to conserve wetlands and significant uplands through land acquisition, management programs, and cost-share agreements for projects that promote water conservation. The City of Winter Garden can collaborate with the SJRWMD to identify lands that merit acquisition under initiatives like the Florida Forever program and the Save Our Rivers Program. The City must also receive approval from the SJRWMD for all new major developments including any developments that may impact local lakes, wetlands, and other water resources. Furthermore, WMDs have the authority to protect and restore native vegetation along surface water bodies, which helps stabilize soils and reduce erosion.

Winter Garden provides water and wastewater services to portions of unincorporated Orange County, making coordination between the City, the SJRWMD, and Orange County essential for implementing the plan's water supply and resource management strategies. This collaboration has already resulted in projects funded by the SJRWMD, including the conversion of potable to reclaimed water for irrigation serving Winter Garden households and businesses, as well as stormwater management initiatives, supported in partnership with the Florida Department of Environmental Protection, to enhance aquifer recharge and improve water quality at Lake Apopka.

As the City of Winter Garden is located within the Wekiva Study Area outlined in the Wekiva Parkway Protection Act, the City must further promote development patterns that protect effective recharge areas, karst features, and sensitive natural habitats per F.S. 369.321(3). The Wekiva Study Area requirements guide stormwater management, water supply facilities, and interchange land use plans through the City's comprehensive plan and land development regulations.

Environment

The City of Winter Garden actively coordinates with local, state, and regional agencies to protect and enhance natural resources. Key partners are described below.

The City corresponds with Orange County's Environmental Protection Division (EPD) on local environmental issues especially when it comes to matters of lake and wetland protection. Additionally, the city coordinates with Orange County EPD when action is needed to remedy unauthorized wetland removal or disturbances.

The Florida Department of Environmental Protection (DEP) leads efforts to restore and maintain environmental quality across the state, managing aquatic plant control, marine biological research, and fishery data analysis. It also oversees outdoor recreation planning and land acquisition for public use. In partnership with DEP, the City addresses safe drinking water standards, hazardous waste management, and groundwater protection. DEP's Division of Air Resource Management further collaborates with local governments to enforce air quality standards.

The Florida Fish and Wildlife Conservation Commission (FWC) focuses on conserving freshwater aquatic life, wildlife, and habitats. It manages habitat protection programs, endangered species conservation, and permitting processes related to wildlife management. The City coordinates with FWC to safeguard local biodiversity and maintain ecological balance.

The Florida Department of Agriculture and Consumer Services, Division of Forestry (FDACS) promotes fire prevention, forest health, reforestation, and sustainable forestry practices. It also implements programs that support wetland reclamation and urban forestry. The City coordinates with the Division of Forestry for wetland reclamation and use of best management practices for silviculture activities.

Schools

To ensure the appropriate school facilities are available for Winter Garden's population, the city coordinates with the Orange County School Board through an established interlocal agreement. While the City approves future developments, the School Board reviews new development to ensure that there is sufficient capacity at the schools and builds the schools to accommodate children from those new developments. Orange County Public Schools Government Relations Department is responsible for the ongoing coordination with the City, State and Federal Government. This coordination includes gathering information on growth and development; implementation of interlocal agreements, capacity enhancement agreements and school concurrency; and coordinating planning activities with other Orange County Public Schools departments. The City coordinates with the Orange County School Board on school concurrency through implementation of the interlocal agreement focused on land use and overcrowding in local schools.

Table ICE - 2: Coordination Mechanisms

Entity / Agency	Nature Of Coordination	Office Responsible
MetroPlan Orlando (MPO)	Metropolitan area elected officials determine transportation priorities Technical Advisory Committee -- reviews transportation data/plans/programs Bicycle and Pedestrian Technical Advisory Committee – reviews bicycle and pedestrian data/plans/programs Citizens Advisory Committee—citizen participation in MPO programs and planning Rail Transit Planning in Metro Area	Planning, Public Services, Recreation
LYNX (Central Florida Regional Transportation Agency)	Bus Transit/Rapid Transit Service ITS Enhanced Circulator Study Rideshare Programs (Van pool, Carpool programs) Transportation Disadvantage Program Rail Planning	Planning
St. Johns River Water Management District	Surface Water and Groundwater Management. Resource Planning National Pollution Discharge Elimination System (NPDES) Stormwater Permit Lake Apopka Rule & Wekiva Parkway and Protection Act Consumptive Use Permit	Public Services

Entity / Agency	Nature Of Coordination	Office Responsible
	Provides Technical Assistance for Groundwater Models and Wellfield Protection Development Permit and Approval	
Division of Historical Resources	Cultural Resource Analysis and Protection	Planning
Dept of Health	Drinking Water; Wastewater Permit Dredge and Fill Park Acquisition Resource Management	Building/Public Services
Dept of Children and Family Services	Community Residential Homes	Planning
Dept of Transportation	Highway Funding Transportation Planning Access Control, LOS Signalization and R/W Coordination	Public Services, Planning
Florida Department of Environmental Protection	Comprehensive Planning Emergency Management Septic Tanks Development Permit and Approval Wetland Permit	Planning, Building
Florida Fish and Wildlife Conservation Commission	Natural Resource Management Formerly Florida Game and Freshwater Fish Commission Development Permit and Approval Federal Permit for Protected Species	Public Services
Dept of Business and Professional Regulation	Licensing and Permitting Activities Lounge/Bar Regulation Alcohol License	Planning
Dept of Revenue	Revenue/Expenditures Administration	Finance
Bureau of Economic and Business Research	Population and Economic Research and Forecasts	Planning
Private Utilities	Rights-of-Way Use Permits Data Dissemination	Public Services

Entity / Agency	Nature Of Coordination	Office Responsible
Healthy West Orange	Regional Trail System HWO Trails Connection City Health Initiatives Funding Shared Facilities City Events Partnering	Planning, Public Services, Parks

FUTURE CONSIDERATIONS

Strengthening Intergovernmental Collaboration

To ensure efficient service, delivery, and foster responsible growth, the City should proactively and routinely review and update its interlocal agreements with Orange County, neighboring communities, regional and state agencies. This is especially important for agreements addressing transportation planning, utility service areas, and it's joint planning area. Clear, collaborative agreements will provide a solid foundation for managing growth effectively. The City should continue to maintain a repository of interlocal agreements and update the inventory as old agreements expire or new ones are made.

Updating Interlocal Agreement for Joint Planning Agreement with Orange County

The Restated Interlocal Agreement for Joint Planning Area sets forth that the City of Winter Garden and Orange County will work together to enter into interlocal agreements to eliminate enclaves.

There are a number of enclaves and undeveloped pockets that are currently unincorporated or surrounded by the City of Winter Garden, as illustrated on **Map ICE - 1**. As defined by Florida Statutes, an enclave is an unincorporated area surrounded by the corporate limits of the City. State law recognizes that enclaves can hinder planning and service delivery and encourages their elimination.

In light of evolving development patterns and community needs, the City of Winter Garden should continue to work collaboratively with the County to proactively eliminate existing enclaves.

Coordination with Oakland

The current Comprehensive Plan includes a policy supporting coordination with the Town of Oakland for the planning and development of new roadways corridors on the west side of the City. The City has established an interlocal agreement with the

Town of Oakland for the Oakland Park traditional neighborhood development, which uniquely spans both jurisdictions. By continuing to work together, the City and Oakland can create a more seamless, efficient, and coordinated community experience for current and future residents.

Coordination with Ocoee

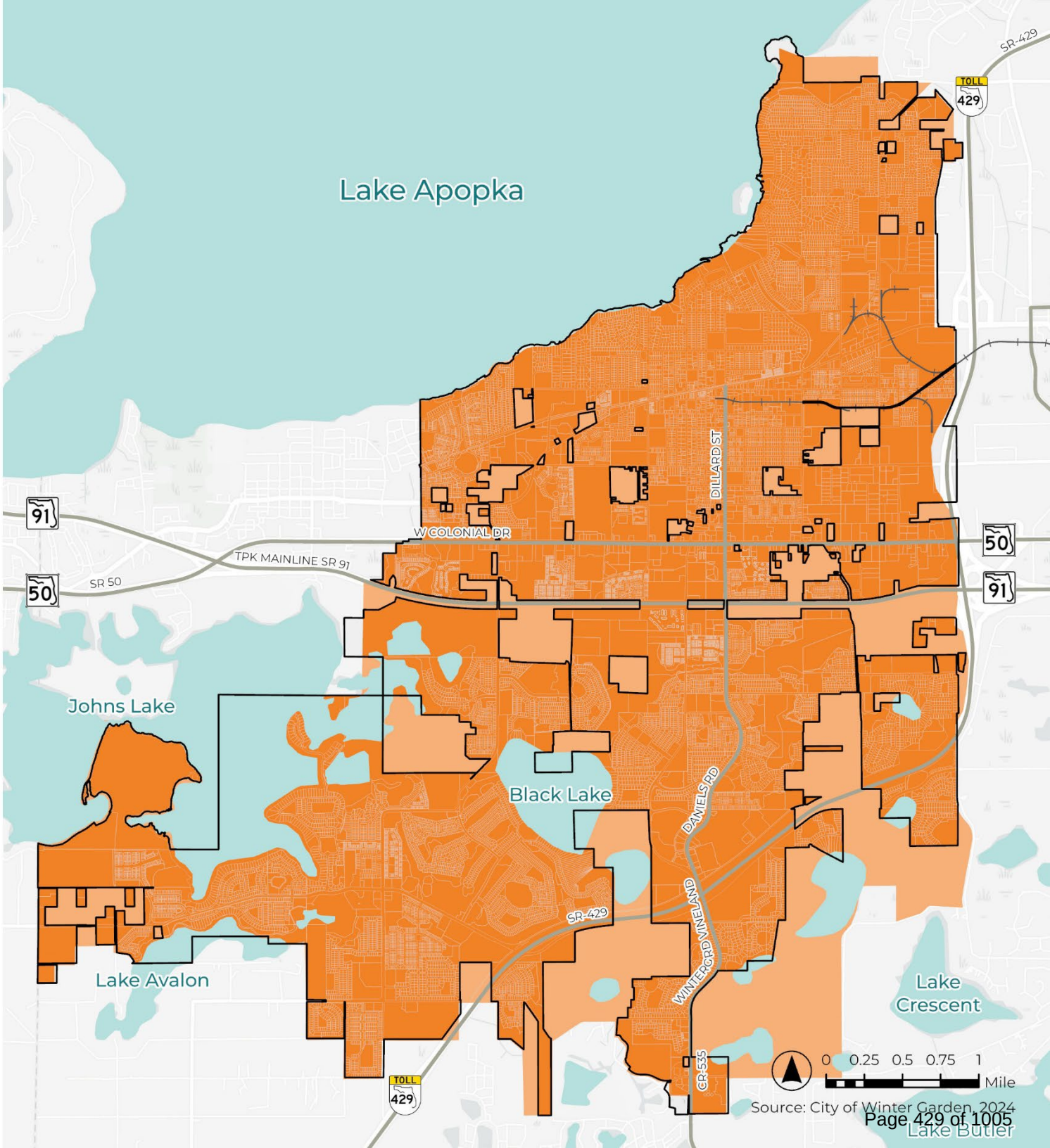
The current Comprehensive Plan includes policies that support the mitigation of land use and development impacts between Winter Garden and Ocoee. The City should explore establishing an interlocal agreement with the City of Ocoee to build upon the interlocal agreement established for reuse water line easements and directly foster collaboration in planning and development to ensure a cohesive transition between the municipalities.

JOINT PLANNING AREA

MAP ICE - 1

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Joint Planning Area



COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities



8

DATA & ANALYSIS

COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

CAPITAL IMPROVEMENTS

Table of Contents

INTRODUCTION 3
IMPROVEMENTS 3
Transportation Facilities 3
Roadway Network 4
Sidewalks and Trail Network 5
Public Transportation 6
Paratransit & NeighborLink 7
Public Facilities 8
Sanitary Sewer 8
Reclaimed Water 9
Potable Water 10
Solid Waste 10
Drainage and Stormwater 10
Recreation/Open Space 11
Public Education Facilities 11
FUTURE CONSIDERATIONS 12

List of Tables

Table CIE - 1: Planned Roadway Improvements Impacting Winter Garden 5
Table CIE - 2: Future Trails and Paths 6
Table CIE - 3: Septic to Sewer Conversions 8
Table CIE - 4: Reclaimed Water Improvement Projects 9

INTRODUCTION

The Capital Improvements Element (CIE) is a required element of the Comprehensive Plan. It is intended to guide the planning, funding, and location of public facilities and services, as identified in other elements of the Comprehensive Plan. Pursuant to Chapter 163, Florida Statutes, the CIE must:

- Identify principles for construction, extension, or increase in capacity of public facilities;
- Establish principles for correcting existing public facility deficiencies;
- Estimate the cost, timing, location, and funding sources for public facility improvements; and
- Ensure the availability of public facilities and the adequacy of those facilities to meet established acceptable levels of service.

The Capital Improvement Program (CIP), which is assessed, reviewed, and updated annually, serves as the primary tool for monitoring and ensuring that necessary public facilities and infrastructure are available to meet Level of Service (LOS) standards outlined in the Comprehensive Plan. The CIP ensures that identified improvements are implemented according to a schedule and may include both public and private funded projects. While state statutes only require the inclusion of capital projects necessary to maintain adopted LOS standards, the City's CIP may also include additional projects that enhance public facilities without directly affecting LOS. For the purposes of the CIE, capital improvement projects are defined as those that either increase facility capacity or alter the established LOS.

The City utilizes a variety of service providers and funding sources to support the CIP, including the General Fund, Community Redevelopment Agency (CRA) Fund, General Impact Fee Fund, Utilities Fund, and Utility Impact Fee Fund.

The primary purpose of the CIE and CIP is to demonstrate that the City of Winter Garden has the capacity to fund the projects necessary to achieve the goals and objectives of the Comprehensive Plan and to maintain adopted LOS standards. This element addresses facilities subject to concurrency requirements, including Transportation, Sanitary Sewer, Potable Water, Solid Waste, Stormwater (Drainage), Parks and Recreation, and Public School Facilities.

IMPROVEMENTS

Transportation Facilities

The City's roadway network consists of a range of transportation facilities, including limited access highways, arterials, collectors, and local roads. Maintenance

responsibilities are shared among the City of Winter Garden, Orange County, the Central Florida Expressway Authority (CFX), Florida's Turnpike Enterprise, and the Florida Department of Transportation (FDOT).

Winter Garden continues to implement both ongoing and planned transportation improvements to enhance the movement of people, goods, and services through the 2050 planning horizon. The City's multimodal transportation system includes roadways, pedestrian and bicycle facilities, local and regional trails, public transit, and paratransit services.

As outlined in the Transportation Element of the Comprehensive Plan, the goals, objectives, and policies should emphasize coordination with regional, state, and federal agencies and focus on the following priorities:

- Establishing a Level of Service (LOS) standard for trails to encourage alternative modes of transportation;
- Coordinating with FDOT, Orange County, and MetroPlan Orlando on roadway, transit, and trail capacity improvements;
- Ensuring consistency with MetroPlan Orlando's 2050 Metropolitan Transportation Plan;
- Completing the Downtown Parking Study and implanting recommendations to meet future demands;
- Finalizing and adopting the Transportation Plan and incorporate it into the Comprehensive Plan and Land Development Code;
- Prioritizing Complete Street principles for all new roadway projects and improvements;
- Implementing roadway capacity improvements to maintain or enhance LOS;
- Expanding and ensuring the reliability of public transportation options; and
- Securing funding for transportation infrastructure and mobility initiatives.

Roadway Network

As identified in the Transportation Element, five roadways within the City of Winter Garden are projected to operate at a failing Level of Service (LOS) by the year 2050. These roadways include CR 535 (Winter Garden–Vineland Road), Marsh Road, Plant Street (CR 438), SR 50 (West Colonial Drive), and the Western Beltway (SR 429). Both CR 535 and SR 429 are projected to have three individual segments operating below acceptable LOS standards. Capacity improvements to these corridors may be necessary over the next 25 years to accommodate projected growth and mitigate congestion.

As outlined in the 2045 Metroplan Orlando Transportation Plan (Cost Feasible Plan), several roadway improvement projects are currently underway in Winter Garden. The 2050 LRTP plan update is ongoing and has not yet been finalized. **Table CIE-1** details the projects scheduled for completion between 2025 and 2045 and their budgeted cost. Planned improvements include three ITS/ technology projects, six operational/ safety projects, one roundabout installation, one intersection improvement, and one streetscape improvement.

Table CIE - 1: Planned Roadway Improvements Impacting Winter Garden

Roadway	From/To	Improvement	Cost	Timeframe
Story Rd	Plant St W to Dillard St S	ITS/Technology	$5,770,000	2031-2035
Lakeview Ave	Plant St to Fullers Cross Rd	ITS/Technology		
Lakeview Ave	Story Rd to E Plant St	ITS/Technology		
Avalon Rd	Sunridge Blvd to SR 50 / Colonial Dr	Operational	$2,750,000	2031-2035
Tilden Rd	Avalon Rd to Winter Garden-Vineland Rd	Operational	$21,120,000	2036-2045
Winter Garden-Vineland Rd	Ficquette Rd to Lake Butler Blvd	Operational (County Level)	$15,460,000	2036-2045
SR 50 / Colonial Dr	Dillard St to SR 91 / Florida's Tpke	Operational / Safety	$32,500,000	2036-2045
SR 50 / Colonial Dr	Avalon Rd to S Park Ave	Operational / Safety	$9,650,000	2036-2045
SR 50 / Colonial Dr	Park Ave to Dillard St	Operational / Safety	$4,890,000	2036-2045
Marsh Road	Marsh Rd to Williams Rd	Roundabout Installation	$5,250,000	2026-2028
Winter Garden-Vineland Rd	Winter Garden-Vineland Rd to Roper Rd	Intersection Improvements	$3,750,000	2026-2028
East Winter Garden	10th Street / Center Street / North Street / Bay Street	Streetscape Improvements	$10,065,000	2026-2027

Source: Metroplan Orlando Long Range Transportation Plan, 2024

Sidewalks and Trail Network

As a result of policies supporting the Transportation Concurrency Exception Area and Complete Streets, the City has made great strides to extend sidewalk and pathways. In 2020, because of its extensive trail network, the City has been designated a “Trail Town” by the State. This recognition along with the Healthy West

Orange Trails initiative has highlighted the importance that trail network plays in the City for not only recreational purposes but for an alternative mode of transportation.

The city has identified 18.6 miles of additional trail systems to integrate the trail network. **Table CIE-2** has listed the 13 named trails the City has identified as future trail connection. While these projects have not yet been budgeted or prioritized for construction, the City has taken an important first step by identifying key trail gaps that should be addressed initially.

Winter Garden's ongoing involvement with the Healthy West Orange initiative, combined with its Trail Town status, positions the City to pursue grant funding and partnership opportunities to implement these trail projects over the next 25 years. Additionally, the City should consider establishing a trail level of service to ensure trail connectivity and opportunities as the City grows in population.

Table CIE - 2: Future Trails and Paths

Trail or Path	Length (miles)
Avalon Multipurpose Path	2.2
Avalon Trail	0.7
Beard-Beulah-Warrior Rd Multipurpose Path	2.1
Crest Trail	0.3
Dillard St Multipurpose Path	1.0
Marsh Trail	0.3
Ninth Street	0.5
Railroad Line	2.7
Roper Trail	0.7
Stoneybrook West Multipurpose Path	2.9
Tilden Trail	0.5
West Crown Point Trail	0.4
Windermere Trail	0.8
Other Proposed Trails	5.7
Total	**18.6**

Source: City of Winter Garden, 2024

Public Transportation

Public transportation service within the City of Winter Garden is operated through LYNX. Currently, one bus route operates within the City limits, primarily along State Road 50 (West Colonial Drive), with another route serving areas just outside the

City's eastern boundary. In addition, LakeXpress provides transportation service that connects Mascotte to Winter Garden through Route 50.

To promote public transportation, potential improvements should include the addition of new routes, increased route frequency (i.e., reduced headways), and extended operational hours. However, the current 2045 Long Range Transportation Plan (LRTP) does not allocate funding for these enhancements. The LYNX Transit Development Plan does acknowledge recent growth and development within Western Orange County. However, there are no specific improvements proposed for those routes.

Strengthening mobility and providing alternatives to driving are key priorities for both the City and Orange County, requiring thorough analysis and strategic planning. Future investments and alternative funding options in alternative transportation options should be explored.

As Downtown Winter Garden continues to thrive as a cultural and commercial, the need for a flexible, accessible, and low-impact transportation option has become increasingly apparent. With growing visitor numbers, expanding retail and dining activity, and the area's walkable character, a micro transit service would help alleviate parking demand, reduce traffic congestion, and enhance the overall experience for residents and visitors alike.

Micro transit, such as on-demand shuttles, electric circulators, or small shared vehicles, offers a cost-effective solution for connecting key destinations within the downtown core and surrounding neighborhoods. It can improve first-mile/last-mile connectivity to regional trails, public parking areas, and potential future transit hubs. Moreover, micro transit supports the City's goals of sustainability, accessibility, and multimodal mobility, offering a convenient alternative for those who are elderly, mobility-limited, or simply seeking a car-free way to enjoy downtown. By implementing micro transit, Winter Garden can continue to foster a vibrant and connected downtown that meets the evolving needs of its community.

Paratransit & NeighborLink

In addition to fixed-route bus service, LYNX offers ACCESSLYNX and NeighborLink (NL) within the City of Winter Garden. ACCESSLYNX is a door-to-door shared ride transportation service designed for individuals who are unable to use the fixed-route bus service due to disabilities or other limitations. NeighborLink (NL) is a flex-service aimed to make it easier for residents living in less-populated areas to make use of both local transportation and LYNX' local bus system. Both services provide additional services for alternative transportation to the residents of Winter Garden.

Public Facilities

Sanitary Sewer

The City of Winter Garden is in the process of upgrading the Crest Avenue Wastewater Treatment Facility (WWTF) in order to meet the Advanced Wastewater Treatment (AWT) standards. Additionally, the expansion of the WWTF will increase the capacity from 4.75 MGD to 7.5 MGD. The increased capacity will be more than sufficient to meet the demand for sewer over the next twenty-five years.

Additionally, the State of Florida has required that municipalities convert residential areas with 50 or more lots with greater than one acre or located within a Basin Management Action Plan. The City has identified 430 parcels within its boundaries on septic and 608 parcels in unincorporated Orange County within its service boundary. The city has identified, **Table CIE-3**, over the next 20 years that 394 City parcels and 376 Orange County parcels will have central sewer. As a result, some parcels will need to upgrade to enhanced nutrient-reducing Onsite Sewage Treatment and Disposal System (OSTDS) which will cost property owners $7,000 to $20,000 to upgrade their current septic system. The city is already working on the first area of conversion, Teacup Springs which is planned for construction this year.

Table CIE - 3: Septic to Sewer Conversions

Project	Number of Parcels	Design		Construction	
		Start	Cost	Start	Cost
City of Winter Garden					
Teacup Springs	142	FY 23	$300,000.00	FY 25	$5,500,000.00
Railroad Avenue	18	FY 40	$130,000.00	FY 26	$1,200,000.00
Emerald Acres	28	FY 26	$150,000.00	FY 28	$1,500,000.00
Wintermere Pointe	79	FY 30	$250,000.00	FY 31	$3,400,000.00
Wintermere Harbor	91	FY 30	$250,000.00	FY 32	$3,500,000.00
Mary Jean	33	FY 35	$110,000.00	FY 37	$1,100,000.00
				Total	**$16,200,000.00**
Unincorporated Orange County					
Country Lakes	49	FY 35	$250,000.00	FY 38	$2,700,000.00
Story Rd & 9th Street / Summer Street	47	FY 35	$150,000.00	FY 37	$1,200,000.00
Palm Ave & 9th Street	58	FY 35	$250,000.00	FY 38	$2,800,000.00
Banana Bay/Sunset Lakes	135	FY 40	$150,000.00	FY 42	$6,300,000.00
				Total	**$13,000,000.00**

Source: City of Winter Garden, 2024

Reclaimed Water

Extending reclaimed water lines is a strategic approach that enables the use of treated wastewater for non-potable purposes such as irrigation and certain industrial activities. This reduces the demand on potable water supplies, conserves freshwater resources, supports water conservation efforts, and enhances the long-term sustainability of the City's water system.

The City of Winter Garden currently purchases reclaimed water from Orange County's Conserv II system. In 2020, the City purchased an average of 2.2 million gallons per day (MGD) to meet customer demand, primarily in the northwest portion of its service area. However, under the Wekiwa and Rock Springs Basin Management Action Plan (BMAP), the land application of wastewater effluent that has not been treated to advanced wastewater treatment (AWT) standards is prohibited within the basin. As a result, reclaimed water from the Conserv II system, which is not treated to AWT standards, does not meet total maximum daily load (TMDL) requirements and cannot be applied within the Wekiva Basin. Orange County has indicated it does not intend to upgrade the Conserv II treatment process. Consequently, the City of Winter Garden will no longer be able to use Conserv II reclaimed water after 2028. Given current and projected future demands, the City anticipates a shortfall in reclaimed water supply without supplemental sources.

To address this, the City developed a Reclaimed Water Facility Plan in 2022 to evaluate options for meeting existing and future reclaimed water demand, phasing out reliance on Conserv II, and ensuring compliance with state regulations. **Table CIE-4** outlines proposed projects and strategies categorized by short-term (2–5 years), mid-term (6–10 years), and long-term (10+ years).

Table CIE - 4: Reclaimed Water Improvement Projects

Project Description	Cost
Short Term Improvements, (2-5 Years)	
RW-1 Crest/Smith Transmission Improvements	$2,640,000
RW-1A Crest Augmentation System Discharge Modifications	$96,000
RW-2 Smith St 6 MG Ground Storage Tank and PS	$6,540,000
RW-3 Southwest Area RW Distribution Improvements	$4,674,000
RW-4 Avalon Road Reclaimed Watermain	$2,130,000
Sub-total	$16,080,000
Mid Term Improvements, (6-10 Years)	
RW-5 Wintermere Harbour Reuse Main Ext. and Retrofit	$1,530,000
RW-6 Wintermere Pt. Reuse Main Ext. and Retrofit	$3,006,000
RW-7 Western RIBs (includes $800K land acquisition)	$1,694,000
RW-7A Viscaya RIBs	$654,000
AWS-1 John's Lake Surface Water Supply	$1,257,600
Sub-total	$8,141,600

Project Description	Cost
Long Term Improvements, (10+ Years)	
RW-8 4 MG Ground Storage Tank at Smith St.	$4,000,000
Sub-total	$4,000,000
Total	**$28,221,600**

Source: City of Winter Garden, 2022

Potable Water

The City of Winter Garden currently operates three water treatment plants with a combined maximum permitted capacity of 13.02 million gallons per day (MGD) and a maximum groundwater capacity of 17.63 MGD. As identified in the Public Facilities Element, the City has sufficient permitted capacity to meet current and projected demands through the year 2035. However, projections indicate that demand will exceed the maximum permitted capacity afterwards.

Currently, the City does not have plans to increase its permitted water supply capacity. Instead, it is pursuing alternative strategies to reduce potable water demand. One such strategy involves expanding the reclaimed water infrastructure to serve additional areas of the City, thereby decreasing reliance on potable water for non-potable uses. Additionally, the City should consider revising its potable water Level of Service (LOS) standard, currently set at 143 gallons per capita per day (GPCD). This figure significantly exceeds the City's 2016-202 average of 116 GPCD identified by the Central Florida Water Initiative Regional Plan. The City could consider lowering the LOS standard to support long-term water conservation goals.

Solid Waste

The City of Winter Garden provides solid waste collection services for household trash, yard waste, large items, electronics, and dumpster service. Household trash, yard waste, and large items are collected curbside on a weekly basis. Winter Garden has an agreement with Orange County to use its landfill and substations. The city should ensure its contract with the County remains up to date.

Recycling within the City was recently paused and many residents have expressed a desire to reinstate this service. The City should explore opportunities to implement a recycling program or alternatives to reduce waste into the landfills.

Drainage and Stormwater

Since the City is within the Wekiva Study Area, it is required to maintain a master stormwater plan. The City has adopted development regulations for all new development to comply with local and state standards. Additionally, the portion of the City is located within the Wekiva Study Area and has additional requirements under the "Wekiva Protection Act" which requires a larger percentage of open space and additional stormwater system regulations. Within the current CIP list, the City has identified stormwater improvements for Roper Drive to address flooding issues.

Furthermore, the City's Land Development Code establishes maximum impervious surface ratio (ISR) standards for new development to ensure proper drainage capacity. In addition, all new developments must obtain a stormwater modification permit from the St. Johns River Water Management District.

Recreation/Open Space

The City of Winter Garden offers a wide range of recreational and open space opportunities for its residents. Currently, the City operates 338 acres of parkland, which includes two pocket parks, four neighborhood parks, eight community parks and a recreation center. In addition, residents have access to 84 acres of Orange County parklands located within or adjacent to the City.

Level of Service (LOS) standards are used to measure the amount of park acreage needed to meet community needs and to ensure the continued availability of parkland as the population grows. Winter Garden has adopted a citywide minimum LOS standard of 5 acres of parkland per 1,000 residents, as outlined in its Comprehensive Plan. Due to the significance of trail facilities within the City, the City and its residents would benefit from establishing a trail level of service to ensure continued improvements and enhancements to those facilities.

Although there are no immediate plans to acquire additional parkland, the City has long-term goals to expand waterfront access. One such opportunity includes the expansion and connection of Newton Park and Dr. Bradford Memorial Park, which would enhance access to lakefront recreation.

Public Education Facilities

The City of Winter Garden, in coordination with Orange County and ten other municipalities, works collaboratively with Orange County Public Schools (OCPS) to plan and develop school facilities within its jurisdiction. In 2008, the City entered into the Amended Interlocal Agreement for Public School Facility Planning and Implementation of Concurrency, which establishes procedures for school facility planning and outlines concurrency requirements. A subsequent amendment in 2010 updated the agreement's Level of Service (LOS) standards and concurrency provisions.

According to Section 8.5 of the 2008 interlocal agreement, any developer submitting a development permit application, such as a site plan or final subdivision, with a residential component that proposes ten or more single-family, or 15 or more multi-family, residential units is subject to school concurrency and must prepare and submit an application to the School Board for a School Capacity Determination.

According to the most recent OCPS work plan, there is currently one active school facility project within the Winter Garden area – the ongoing renovation and

remodeling of Lakeview Middle School. At this time, no additional school facility projects are proposed within the City.

FUTURE CONSIDERATIONS

The Capital Improvements Element serves as a foundational tool for implementing the City's Comprehensive Plan by aligning capital investment priorities with long-term planning goals. Its goals, objectives, and policies are closely coordinated with the City's Capital Improvement Program (CIP), ensuring that infrastructure investments address projected deficiencies and support planned growth.

Elements such as Transportation, Public Facilities, Recreation and Open Space, and Public School Facilities establish adopted levels of service (LOS) that guide the identification and timing of necessary improvements. However, the City's ability to implement these improvements may be limited by available financial resources. Strategic allocation of funding is therefore essential to maintaining LOS standards across the five-year CIP planning window and the 25-year planning horizon of the Comprehensive Plan.

To remain responsive to changing conditions, the City should continue to review and update the CIP annually as part of the budget process. This ensures that capital projects reflect current priorities, population trends, funding opportunities, and community needs. As part of this process, the City should also consider adopting a formal LOS standard for trails. A preliminary benchmark of 0.3 miles per 1,000 residents, recommended in the Recreation and Open Space and Multimodal Transportation Elements, may serve as a starting point.

Recognizing that Winter Garden will experience environmental, social, and economic changes over the coming decades, it is essential for leadership to monitor trends and regularly reassess priorities. The annual CIP process provides a flexible mechanism to ensure infrastructure investments continue to reflect the City's evolving needs and support a high quality of life.



9

DATA & ANALYSIS

COMPREHENSIVE PLAN

WINTER GARDEN 2050

Rooted in Tradition

Growing Strong Communities

PUBLIC SCHOOLS FACILITIES

Table of Contents

INTRODUCTION 3
LEVEL OF SERVICE STANDARDS 3
EXISTING ENROLLMENT AND SCHOOL CAPACITY 3
Elementary School Capacity 3
Middle School Capacity 5
High School Capacity 6
Other School Types 6
ENROLLMENT PROJECTIONS 7
SCHOOL IMPROVEMENTS 8
FORMAL AGREEMENTS 8
FUTURE CONSIDERATIONS 8

List of Tables

Table PSF - 1: Elementary School Capacity Levels 4
Table PSF - 2: Middle School Capacity Levels 5
Table PSF - 3: High School Capacity 6
Table PSF - 4: Non-Traditional School Enrollment 7
Table PSF - 5: Generation Rates 7
Table PSF - 6: New Students Projected by 2050 7

List of Figures

Figure PSF - 1: Elementary School Capacity Levels 4
Figure PSF - 2: Middle School Capacity Levels 5
Figure PSF - 3: High School Capacity Levels 6

INTRODUCTION

The Public School Facilities Element is not a mandatory component of the Comprehensive Plan, as school concurrency is now optional. However, it plays a critical role in ensuring that the City of Winter Garden continues to coordinate with Orange County Public Schools to ensure quality public school facilities are in place for both current and future residents. The data and analysis of this Element is designed to inform future City decisions and policy adjustments related to the effective coordination in implementing school concurrency. This analysis includes an inventory and analysis of the City's public schools, outlines level of service standards, presents current and projected enrollment figures, and planned improvements to the public school system through 2050. Additionally, this section identifies potential opportunities for enhancing the coordination of school facilities and services in the City.

LEVEL OF SERVICE STANDARDS

As established in the goals, objectives, and policies portion of this Element, the adopted Level of Service (LOS) standards for school capacity for each school type are as follows: 110% of capacity for elementary and K-8 schools, and 100% for middle and high schools. The City works with Orange County Public Schools to support the implementation of these service levels.

EXISTING ENROLLMENT AND SCHOOL CAPACITY

Tables PSF-1 – PSF-3 include the current enrollment and permanent capacity for each school in Winter Garden for the 2024-2025 year. These numbers are used to determine the current percent capacity for each school. Several schools around Winter Garden are approaching or above their adopted LOS standards. However, the average capacities for each school type (elementary, middle, and high) are still below their respective LOS thresholds.

Elementary School Capacity

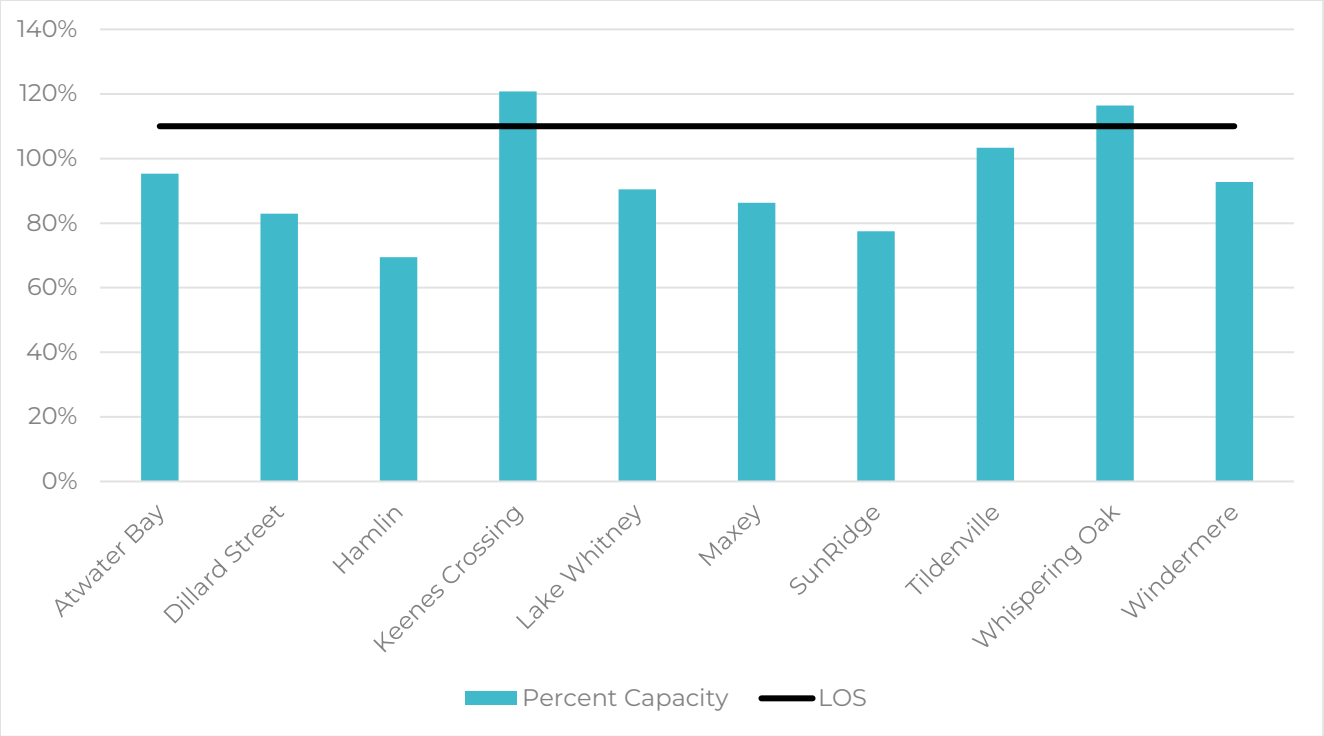
Several elementary schools serving Winter Garden residents are approaching, or above, the adopted level of service for capacity. On average, elementary schools educating City residents have reached 93% of their total capacity, which is below, but may soon be approaching the LOS standard of 110%. **Table PSF-1** and **Figure PSF-1** provide the current capacities of each elementary school in and around the City.

Table PSF - 1: Elementary School Capacity Levels

School Name	2024-2025 Enrollment	Permanent Capacity	Percent Capacity	LOS Status
Atwater Bay	750	787	95%	Below LOS
Dillard Street	466	562	83%	Below LOS
Hamlin	549	791	69%	Below LOS
Keenes Crossing	981	812	121%	Above LOS
Lake Whitney	550	608	90%	Below LOS
Maxey	523	606	86%	Below LOS
SunRidge	629	812	77%	Below LOS
Tildenville	738	714	103%	Nearing LOS
Whispering Oak	771	662	116%	Above LOS
Windermere	575	620	93%	Below LOS
Total	**6,532**	**6,974**	**93%**	Below LOS

Source: Orange County Public Schools

Figure PSF - 1: Elementary School Capacity Levels



Source: Orange County Public Schools

Middle School Capacity

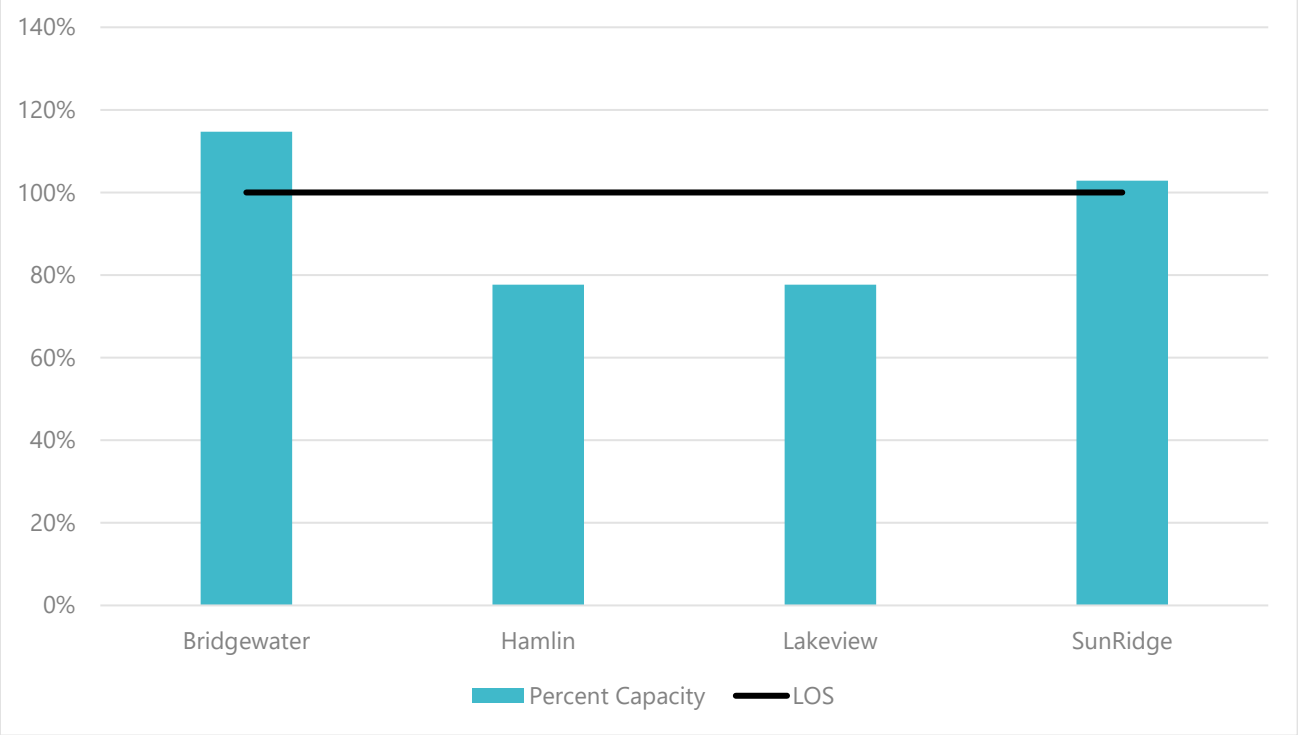
There are two middle schools in Winter Garden, Bridgewater Middle and SunRidge Middle, that exceed the adopted level of service standard. On average, middle schools in the City have reached 94% of their collective total capacity, approaching the 100% LOS standard, as shown in **Table PSF-2** and **Figure PSF-2**.

Table PSF - 2: Middle School Capacity Levels

School Name	2024-2025 Enrollment	Permanent Capacity	Percent Capacity	LOS Status
Bridgewater	1,179	1,028	115%	Above LOS
Hamlin	953	1,227	78%	Below LOS
Lakeview	788	1,015	78%	Below LOS
SunRidge	1,108	1,077	103%	Above LOS
Total	**4,028**	**4,347**	**94%**	Nearing LOS

Source: Orange County Public Schools

Figure PSF - 2: Middle School Capacity Levels



Source: Orange County Public Schools

High School Capacity

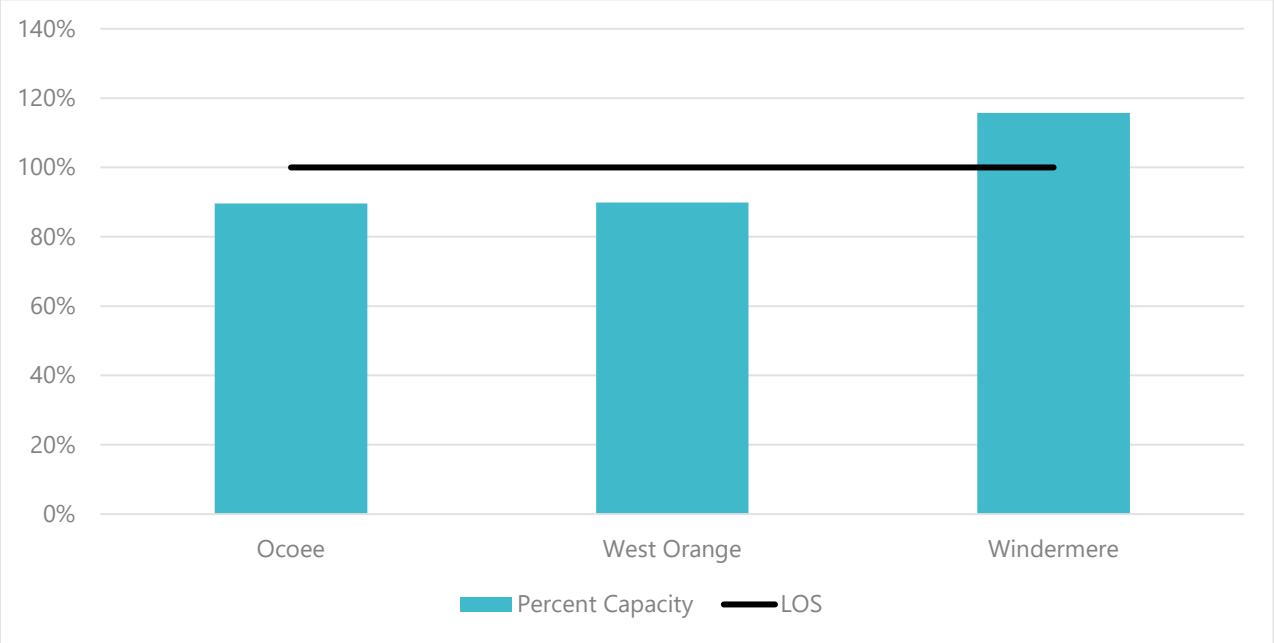
All three high schools in or serving City residents are nearing or exceed the adopted LOS standards for capacity, see **Table PSF-3** and **Figure PSF-3**.

Table PSF - 3: High School Capacity

School Name	2024-2025 Enrollment	Permanent Capacity	Percent Capacity	LOS Status
Ocoee	2,490	2,778	90%	Nearing LOS
West Orange	2,750	3,061	90%	Nearing LOS
Windermere	3,187	2,753	116%	Above LOS
Total	**8,427**	**8,592**	**99%**	Nearing LOS

Source: Orange County Public Schools

Figure PSF - 3: High School Capacity Levels



Source: Orange County Public Schools

Other School Types

In addition to the schools mentioned above, Winter Garden has non-traditional school options, charter and private schools, for local students. Enrollment at the charter and larger private schools are shown in **Table PSF-4**.

Table PSF - 4: Non-Traditional School Enrollment

School Name	2024-2025 Enrollment
Hope Charter/Legacy	414
Oakland Avenue	512
UCP West Orange Charter	302
Ese Transition	108
Esteem Academy	22
Foundation Academy	731
Hospital Homebound	129
Total	**2,218**

Source: Orange County Public Schools

ENROLLMENT PROJECTIONS

As Winter Garden continues to grow, new students will be enrolled in its local schools. **Table PSF-5** outlines the generation rates for various types of residential units as determined by Orange County Public Schools.

Table PSF - 5: Generation Rates

	Elementary School	Middle School	High School
Single-Family (Including Townhouses)	0.351	0.181	0.246
Multi-Family	0.146	0.068	0.084
Mobile Homes	0.217	0.107	0.116

Source: Orange County Public Schools

By 2050, Winter Garden is expected to have a total of 19,053 dwelling units, representing an increase of almost 3,000 units from today. For projecting purposes, the proportions of unit types are assumed to remain consistent through 2050, approximately 82% of these units will be single-family dwellings or townhouses (15,533 units); 14% will be multi-family dwellings (2,632 units); and 4% will be mobile homes (845). Using the generation rates from **Table PSF-5**, Winter Garden should expect an increase of 1,631 total students by 2050.

Table PSF - 6: New Students Projected by 2050

	Elementary School	Middle School	High School	Total
Single-Family (Including Townhouses)	671	346	471	**1,488**
Multi-Family	47	22	27	**97**
Mobile Homes	23	11	12	**46**
Total	**741**	**379**	**510**	**1,631**

SCHOOL IMPROVEMENTS

Over the past several years, Orange County Public Schools (OCPS) has made significant investments in school facilities within the City of Winter Garden and surrounding areas, responding to rapid growth and the evolving educational needs. Since 2020, the City and nearby areas has welcomed several new schools, including Hamlin Elementary, Hamlin Middle, and Atwater Bay Elementary. These additions reflect the School District's commitment to providing high-quality, accessible education in areas experiencing substantial residential development.

Looking ahead, OCPS has allocated several million dollars in its Fiscal Year 2025 capital improvement budget for major renovations to Lakeview Middle School. The planned improvements include comprehensive campus-wide remodeling and modernization, ensuring the school continues to meet the academic and facility standards expected by students, parents, and staff throughout the Winter Garden community.

OCPS also maintains ownership of the property at 1100 E Maple Street. While it is currently occupied by Special Hearts Farm, it may in the future be adapted into another educational facility.

FORMAL AGREEMENTS

The City of Winter Garden, along with Orange County and its other municipalities, coordinates with Orange County Public Schools for school facility planning and development within its jurisdiction. In 2008, the City entered into the *Amended Interlocal Agreement for Public School Facility Planning and Implementation of Concurrency*, which outlines the procedures for school facility development and concurrency requirements. A 2010 amendment to this interlocal agreement updated its Level of Service (LOS) and concurrency standards.

Furthermore, in 2019, the School Board of Orange County and the City of Winter Garden Police Department entered into an agreement to provide school resource officers (SRO) at City schools. In 2025, the City Commission approved an extension to the SRO agreement with Orange County Public Schools through the Safe Schools Allocation fund.

FUTURE CONSIDERATIONS

As Winter Garden continues to grow, ongoing coordination between the City and Orange County Public Schools (OCPS) is essential to ensure that school facility planning remains aligned with new development. During the development review process, the City should consistently share applications with OCPS and Orange County to assess whether existing and planned schools can adequately serve the

growing community. Schools should be strategically located near residential areas and supported by safe, multimodal transportation options to promote accessibility for all students.

Winter Garden and OCPS should also consider revising student generation rates to reflect shifting enrollment patterns influenced by the Family Empowerment Scholarship Program, which allows families to access private and alternative educational options. As more students choose non-public schools, public school enrollment may decrease, potentially impacting long-term facility and capacity planning.

DATE: July 24, 2026

TO: Kelly Carson, Planning Director

FROM: Inspire Placemaking Collective

RE: Public Engagement Summary

The Winter Garden 2050 Comprehensive Plan Update was driven by a robust, multi-faceted public engagement process that successfully culminated in a shared community vision for the City's future. Throughout 2025, the project team actively collaborated with residents, business owners, and City leadership to gather insights and ensure a wide range of voices were heard. This comprehensive outreach effort included a series of three interactive public workshops, targeted stakeholder interviews, interdepartmental director meetings, community pop-up events, and a dedicated project website featuring an online survey and interactive mapping. By synthesizing the extensive feedback gathered across these diverse platforms, the City was able to forge a unified, community-driven vision focused on preserving Winter Garden's cherished small-town charm while strategically prioritizing sustainable infrastructure, multimodal transportation, and diverse housing options. More detailed summaries of the workshops and website follow this introduction.

Key Engagement Events & Milestones

- **Directors Meeting (April 8, 2025):** The project team met with City department directors (including City Management, Planning, Engineering, Police, and Fire) to establish communication channels and share City data related to the Comprehensive Plan's Data and Analysis.
- **Stakeholder Interviews (April 15, 2025):** In-person meetings were held at City Hall with business owners, property owners, and community groups. Stakeholders identified the City's downtown, sense of community, and walkability as major strengths. Key challenges and weaknesses included peak-hour traffic congestion, limited housing diversity, and a lack of downtown parking and public restrooms.
- **Pop-Up Events & Continued Engagement:** Outreach included community Pop-Up events, notably on April 26, 2025, which capitalized on the popularity of local gatherings like the Winter Garden Farmers Market, a cornerstone of the City. On August 7, 2025, the project team participated in the One Winter Garden meeting with the purpose of introducing the update process, sharing insights, and engaging the East Winter Garden community.

- **Public Workshops (March 25 & April 30, 2025):** These workshops allowed residents to participate in visioning exercises, prioritizing initiatives like environmental conservation, historic preservation, and infrastructure improvements.
- **Open Houses (May 18, 2026):** Two open houses (one afternoon and one evening session) were conducted unveiling the changes to the Comprehensive Plan with community.

Core Community Priorities & Themes

1. Preserving "Sense of Place" & Small-Town Charm A resounding theme across all engagement platforms was the desire to protect Winter Garden's historic, family-friendly, and small-town identity. Residents deeply value community events, the brick streets, and the vibrant downtown. Website survey respondents suggested expanding the Farmers Market (potentially adding a night market), closing Plant Street to vehicular traffic on Saturdays, and promoting local arts and culture.

2. Transportation and Infrastructure Improvements Traffic flow and roadway safety are primary concerns for residents. Feedback highlighted the need for:

- Traffic calming measures and more roundabouts instead of stop signs.
- Safer pedestrian crossings, expanded sidewalks (especially in East Winter Garden and downtown), and more bike-friendly infrastructure.
- Expanded multi-use trails, including connections to the Coast-to-Coast Trail and the Lake Apopka Loop.
- Infrastructure upgrades, particularly regarding stormwater drainage in East Winter Garden and moving overhead power lines underground.

3. Housing Diversity and Redevelopment While residents appreciate low-density residential areas, there is a recognized need for diverse and affordable housing options to accommodate a growing population expected to increase by 26% to 44% by 2050.

- Support exists for mixed-use developments, townhomes, and Accessory Dwelling Units (ADUs) within established neighborhoods.
- Participants favored incentivizing infill development and the revitalization of specific corridors, such as Dillard Street and East Winter Garden, through specialized design guidelines and overlays.

4. Environmental Sustainability & Recreation The community strongly advocates for preserving natural habitats, wetlands, and tree canopies. Residents expressed a desire for enhanced sustainability programs, such as providing rain barrels, composting, and native planting initiatives. Expanding recreational spaces, specifically adding more playgrounds, a splash pad, pickleball courts, and activating the Lake Apopka waterfront, were also top priorities.

DATE: March 27, 2025

TO: Kelly Carson, Planning Director

FROM: Inspire Placemaking Collective

RE: Winter Garden – Public Workshop #1 Summary

Public Workshop #1

Introduction

The purpose of this memorandum is to provide a summary of the first Public Workshop for the Winter Garden Comprehensive Plan Update. This workshop was the first in a series of three public workshops held to understand the community's vision for the future of Winter Garden. The workshop took place on Tuesday, March 25, 2025 at City Hall (300 West Plant Street). A list of attendees is provided in Attachment A.

Presentation



The workshop kicked off with a presentation that introduced the project team, scope and timeline. A copy of the presentation is provided in Attachment B. The presentation outlined the plan update process and the preliminary existing conditions within the community. It also highlighted how public engagement insights will shape the plan. Inspire staff further informed attendees about the launch of a project website for Winter Garden's Comprehensive Plan designed to engage individuals who could not attend the workshop (https://www.inspire-engagement.com/winter-garden-comp-plan). The website offers community members access to project information, downloadable documents, and an opportunity to participate by completing an online survey and contributing to the community forum.

Engagement Activities

Attendees took part in a series of activities aimed at helping the project team assess the current conditions within the City by answering the question, "Where

are we now?" A summary of each activity, along with the responses given, is provided below.

Activity #1. Polling Exercise

Participants utilized the Poll Everywhere software to complete an eight-question survey, generating real-time results for the workshop attendees. The responses to each question are detailed in Attachment C, with a summary of the most popular answers outlined below. Physical handouts were available as well.

1. Question #1: Served as a warm-up and asked respondents to provide the ZIP Code of their home address. All participants reported ZIP Code 34787 – corresponding to Winter Garden.
2. Question #2: Asked participants to describe what makes Winter Garden special. The answers focused on community, people, history, and local businesses.
3. Question #3: Asked participants how far they live from a grocery store. All participants who live in Winter Garden responded that they live less than 10 minutes from a grocery store.
4. Question #4: Asked participants how long their commute to work is. 40% of participants who live in Winter Garden responded that they live less than 10 minutes from work. The responses varied from less than 10 minutes to more than 30 minutes.
5. Question #5: Asked attendees to rank their priorities for land use and development. The top three priorities identified were: 1) Protecting and expanding green spaces, parks, nature preserves and recreational areas; 2) Enhancing neighborhood safety and security; and 3) Upgrading and maintaining infrastructure (e.g., stormwater, drainage, roads, utilities).
6. Question #6: Asked attendees how important it is for the City of Winter Garden to facilitate the development of affordable and/or workforce housing. Half of the participants agreed that this is very important (17%) or somewhat important (33%). One third responded that it is not important at all, and the remainder were neutral.
7. Question #7: Asked attendees about their top environmental concern in Winter Garden. The two top concerns were 1) Protecting water resources (e.g. wetlands, lakes, groundwater) and 2) Increasing green spaces, parks, and tree canopy.
8. Question #8: Asked attendees what transportation improvements they would like to see in Winter Garden over the next 20 years. Over 60% of participants responded they would like to see improved roadways and traffic flow.





“What I Love” Exercise

In this activity, participants shared the reasons they love living, working, and playing in Winter Garden by writing their thoughts on a large banner. Responses centered around the friendly community, local events and businesses, and the City staff and board. The full list of responses can be found in Attachment D.

Issue Identification Exercise

In this activity, participants shared their opinions on Winter Garden's transportation, parks and conservation systems, infrastructure, housing market, and redevelopment, including what they liked, disliked, and hoped to change. Images of the boards and responses are provided in Attachment E.

Table 1. Community Assessment Exercise – Redevelopment Responses

What areas are primed for redevelopment?	What should redevelopment look like?	What economic industries should the city try and attract over the next 25 years?
✓ East Winter Garden – more development / places to eat on Plant St. ✓ Dillard St. redevelopment. ✓ Vineland improvements ✓ South story road area – single-family renovation grants ✓ Reclaiming & saving / preserving groves for educational & community events	✓ Parks ✓ Mixed-use developments ✓ Affordable single-family ✓ Connection to West Orange Trail ✓ Underground power & add streetlights on Vineland ✓ Focus on safety ✓ Union forming	✓ Education ✓ Land development tech (i.e. Riegl) ✓ Tech Space ✓ Coworking / shared space ✓ Agritourism ✓ Agricultural education / production

Table 2. Community Assessment Exercise – Mobility Responses

What do you like about Winter Garden's current infrastructure?	What do you dislike about Winter Garden's current infrastructure?	What do you want to change about Winter Garden's current infrastructure?
✓ Roundabouts ✓ West Orange Trail ✓ Fountain on trail	✓ Reactive to infrastructure rather than proactive ✓ Speed & safety for kids ✓ Dillard Street ✓ Golf Carts all over ✓ More wayfinding signage for businesses downtown	✓ Bike lane on Avalon Rd ✓ More roundabouts instead of stop signs or lights ✓ Signs on trail ✓ Safety speed of e-bikes ✓ Gathering on trail ✓ Crosswalks ✓ Bike trails and bike friendly development ✓ ADA access for disabilities ✓ More sidewalks Downtown

Table 3. Community Assessment Exercise – Recreation Responses

What do you like about Winter Garden's current recreation options?	What do you dislike about Winter Garden's current recreation options?	What do you want to change about Winter Garden's current recreation options?
✓ Downtown Winter Garden, family-oriented activities ✓ Tucker Oaks	✓ Insufficient & lacking parks, sports fields	✓ More playgrounds, neighborhood ✓ Splash pad ✓ Pickleball courts ✓ Tennis ✓ Shared garden area ✓ Small amphitheater

Table 4. Community Assessment Exercise – Housing Responses

What do you like about Winter Garden's current housing market?	What do you dislike about Winter Garden's current housing market?	What do you want to change about Winter Garden's current housing market?
✓ Current rate of growth ✓ Home values are up ✓ Single use zoning	✓ The fast-growing rate ✓ Multi-family Housing ✓ Lack of growth management ✓ HOA's	✓ Mixed-use (Vertical) ✓ More affordable housing especially for seniors ✓ Larger lot lines for more yard space ✓ More preservation of agriculture ✓ Housing variety

Table 5. Community Assessment Exercise – Infrastructure Responses

What do you like about Winter Garden's current infrastructure?	What do you dislike about Winter Garden's current infrastructure?	What do you want to change about Winter Garden's current infrastructure?
✓ Pedestrian infrastructure Downtown ✓ New WWTF ✓ Parking structure by the market	✓ Drainage in East Winter Garden ✓ Street lighting in East Winter Garden ✓ Lack of sidewalks in East Winter Garden ✓ Lack of parking in Downtown	✓ More complete streets ✓ More roundabouts (where appropriate Dillard Rd.) ✓ Need sidewalks in East Winter Garden ✓ Festival street (Plant St – from Park to Dillard) ✓ More parking in Downtown

Attachments

A. Attendance List
B. Workshop Presentation
C. Digital Survey Results
D. What I Love About Winter Garden Results
E. Community Assessment Boards Results

A. Attendance List

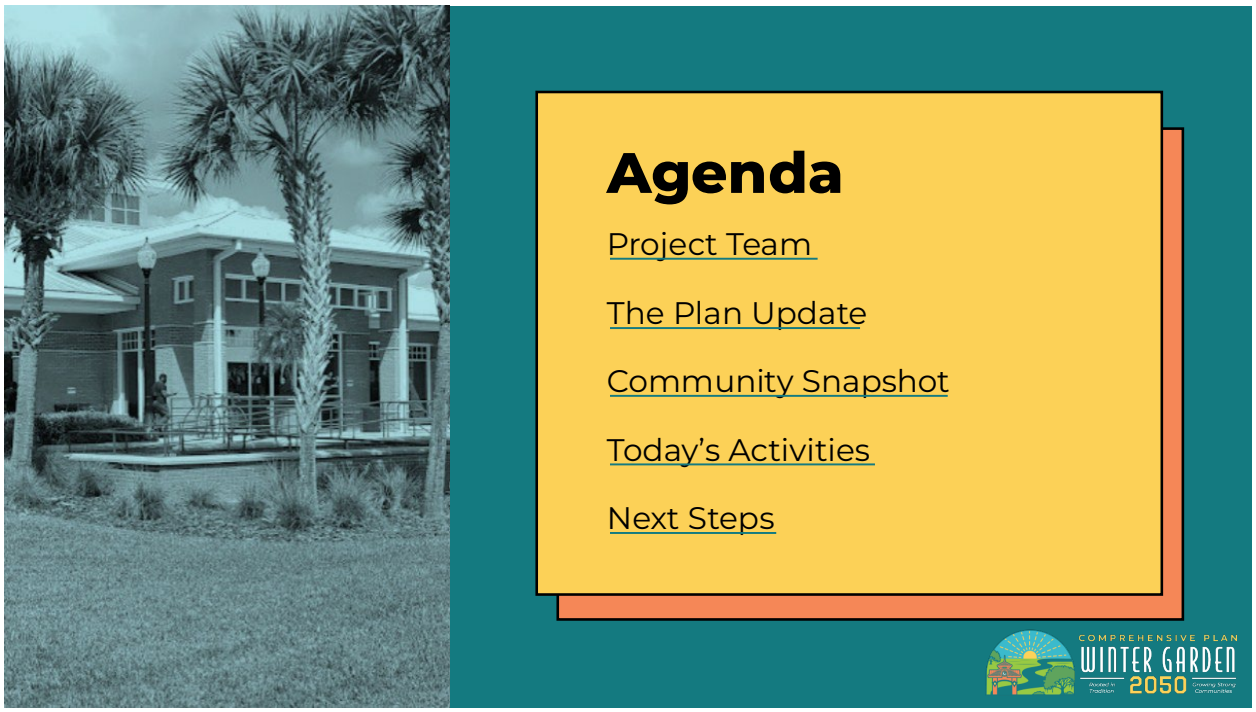
- Milly Appiah
- Chloe Johnson
- Susan Allmen
- Denise Gregorie
- Danykqua Faulk
- Chanell Joy Northern
- Linday Dyson-Smith
- Wanda Northern

F. Body

- Danny Culberson
- John Ried
- Austin Arthur
- Amy Paterson
- Benjamin Grossman
- Sharon Lambert
- Bernie Ileto
- Rose Ileto

B. Workshop Presentation





Project Team

Kelly Carson
Planning Director

Shane Friedman
Planning Supervisor

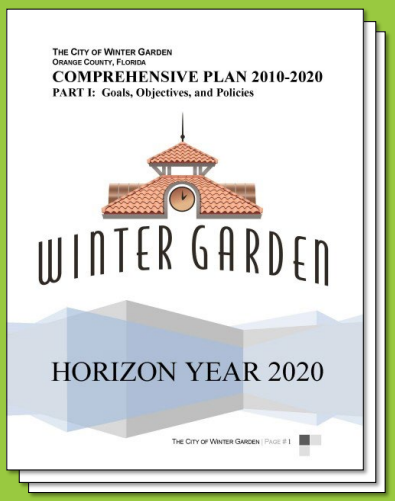
Eric Raasch, AICP
Project Manager

Chris Dougherty, AICP
Project Manager

Gabriela Castro, AICP
Planner

Haiden Lewis
Planner

The Plan Update



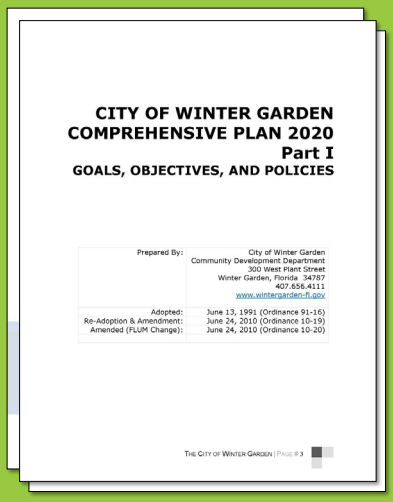
What is a Comprehensive Plan?

A document designed to guide the future actions of a jurisdiction. It presents a vision for a community's future through long range goals, objectives, and policies.

The Comprehensive Plan also serves to:

- Help residents identify their vision for the future of the community
- Coordinate local decision making
- Provide guidance to landowners and developers

The Plan Update



CITY OF WINTER GARDEN
COMPREHENSIVE PLAN 2020
Part I
GOALS, OBJECTIVES, AND POLICIES

Prepared By: City of Winter Garden
Community Development Department
300 West Plant Street
Winter Garden, Florida 34787
407.656.4111
www.wintergarden-fl.gov

Adopted: June 13, 1991 (Ordinance 91-16)
Re-Adoption & Amendment: June 24, 2010 (Ordinance 10-19)
Amended (FLUM Change): June 24, 2010 (Ordinance 10-20)

THE CITY OF WINTER GARDEN | PAGE # 3

Plan Elements

1. Future Land Use
2. Multimodal Transportation
3. Housing
4. Public Facilities
5. Conservation
6. Recreation and Open Space
7. Intergovernmental Coordination
8. Capital Improvements
9. Public School Facilities
10. (NEW) Property Rights

The Plan Update

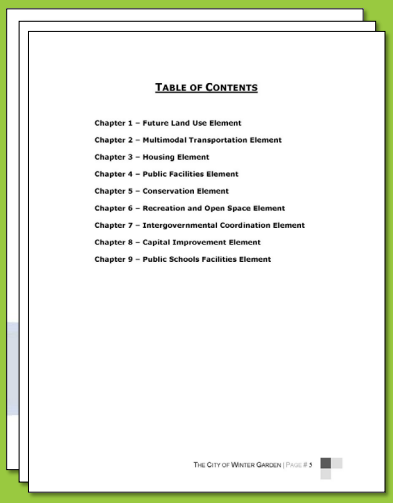


TABLE OF CONTENTS

Chapter 1 – Future Land Use Element
Chapter 2 – Multimodal Transportation Element
Chapter 3 – Housing Element
Chapter 4 – Public Facilities Element
Chapter 5 – Conservation Element
Chapter 6 – Recreation and Open Space Element
Chapter 7 – Intergovernmental Coordination Element
Chapter 8 – Capital Improvement Element
Chapter 9 – Public Schools Facilities Element

THE CITY OF WINTER GARDEN | PAGE # 3

Why Update?

- Required by Florida Statutes
- Current Plan Horizon Year was 2020
- Update the community's vision
- Plan rather than react to new development
- Re-evaluate current decision-making practices
- Evaluate levels of service standards for public facilities
- Identify and address existing and future opportunities

The Plan Update



SCAN ME!

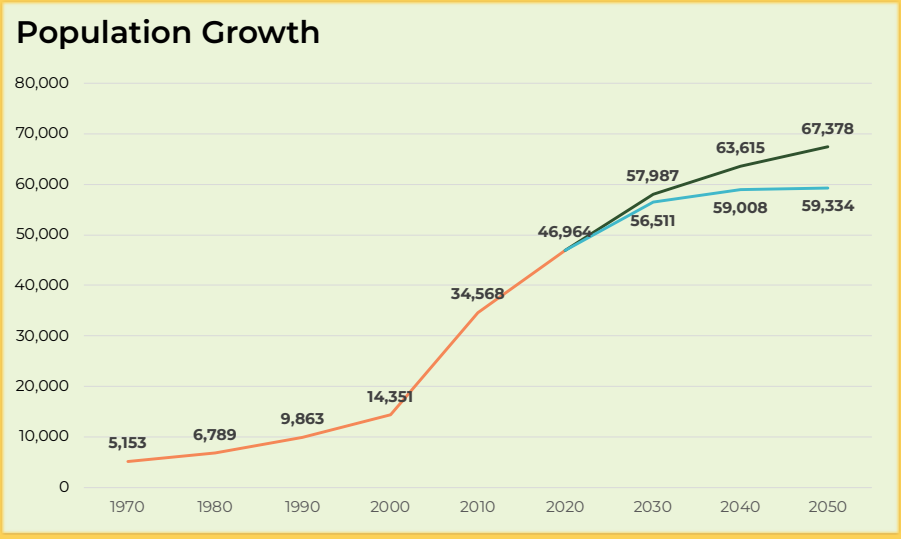
The Plan Update

January 2025	Kick-Off Meeting
January – March 2025	Initial Data Collection
March 25, 2025	Workshop #1
Spring 2025	Pop Up Event
April 2025	Stakeholder Interviews
TBD April 2025*	Workshop #2
TBD May 2025*	Workshop #3
March – June 2025	Update Data & Analysis
June – October 2025	Update Goals, Objectives & Policies
November 2025	Sharing Amendments
December 2025 – April 2026	Adoption Process

*Dates Tentative

Community Snapshot

Population Growth



City is roughly

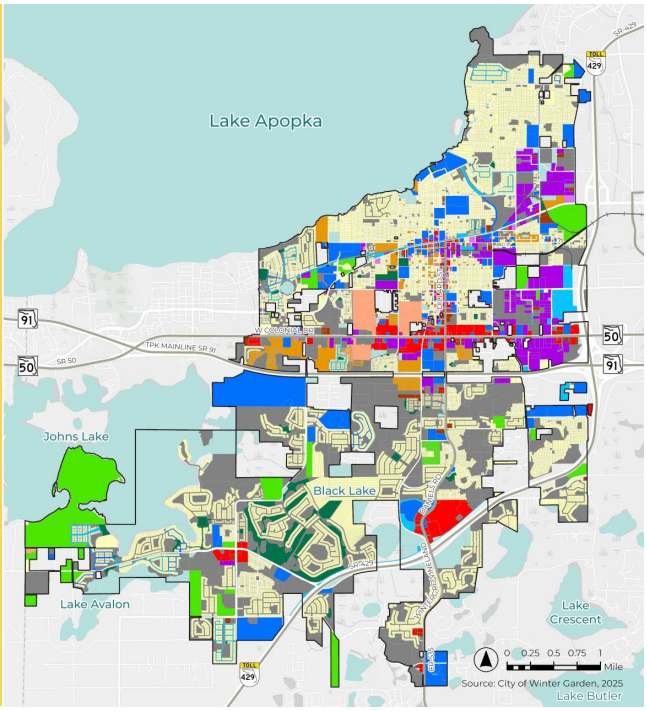
3.4%

of the County's population

26-44%

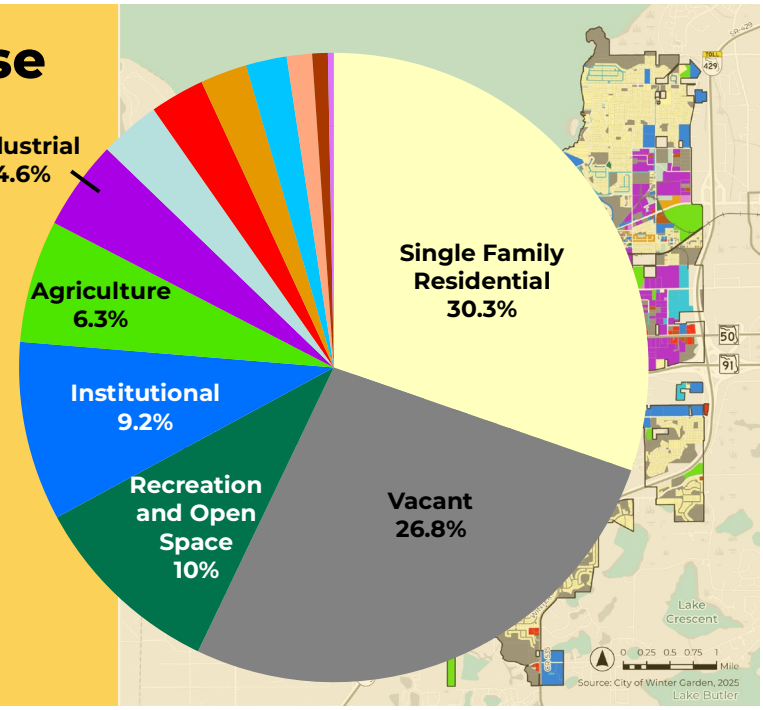
Expected Growth between 2023 & 2050

Existing Land Use

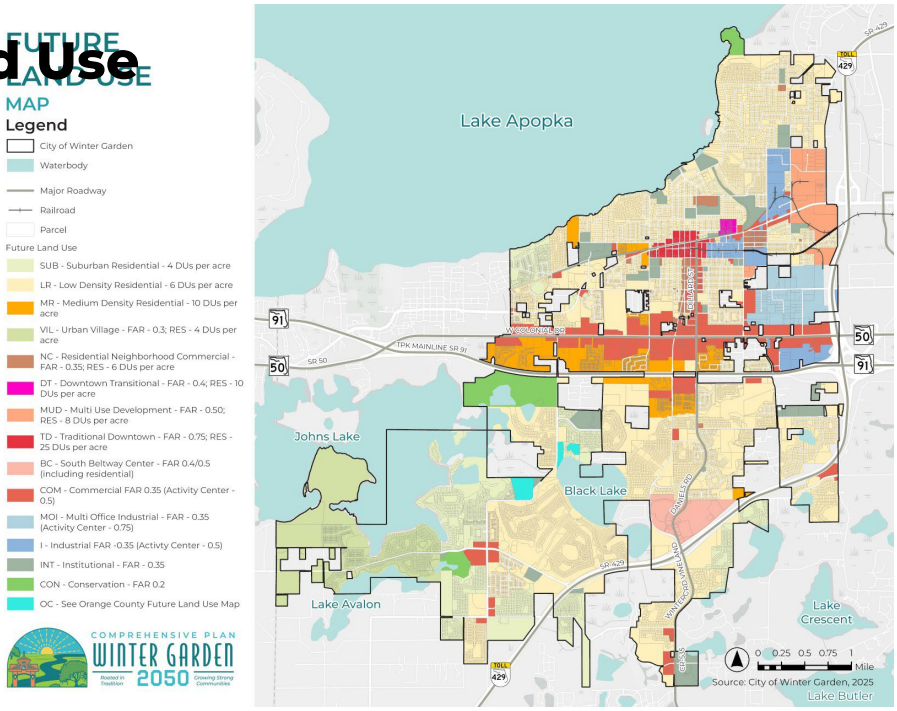


Existing Land Use

Existing Land Use	Percentage
Water	3.1%
Commercial	2.8%
Multi-Family Residential	2.4%
Infrastructure	2.1%
Manufactured Housing	1.3%
Office	0.8%
Mixed Use	0.3%

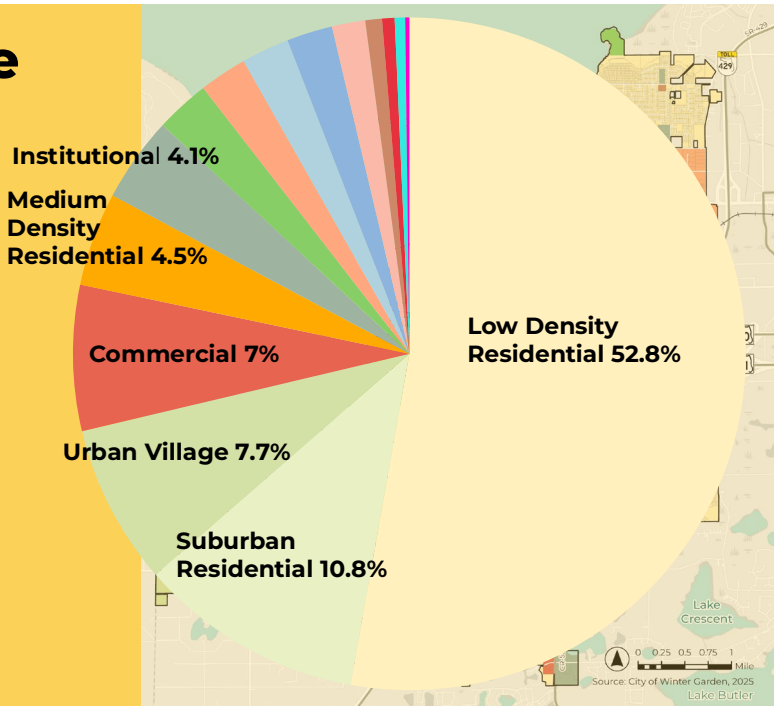


Future Land Use



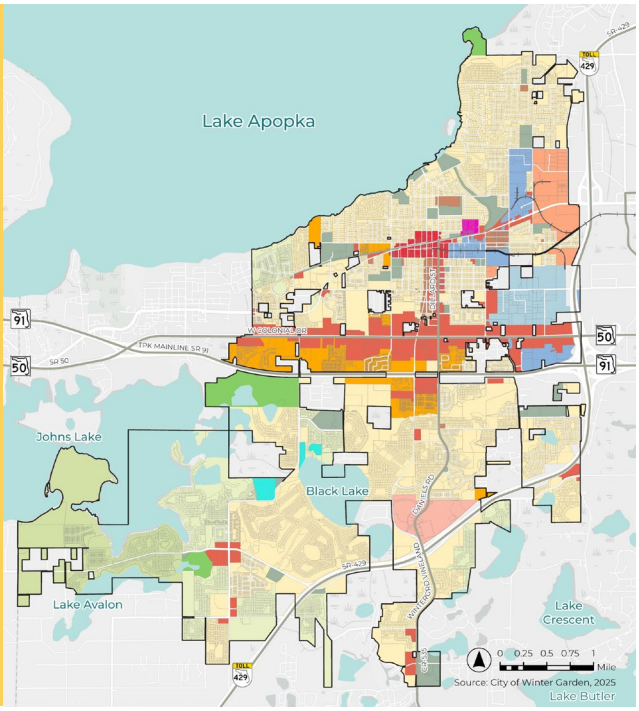
Future Land Use

Future Land Use	Percentage
Conservation	2.6%
Mixed Use Development	2.3%
Multi-Office Industrial	2.3%
Industrial	2.2%
South Beltway Center	1.6%
Neighborhood Commercial	0.8%
Traditional Downtown	0.6%
Orange County FLUM	0.5%
Downtown Transitional	0.2%

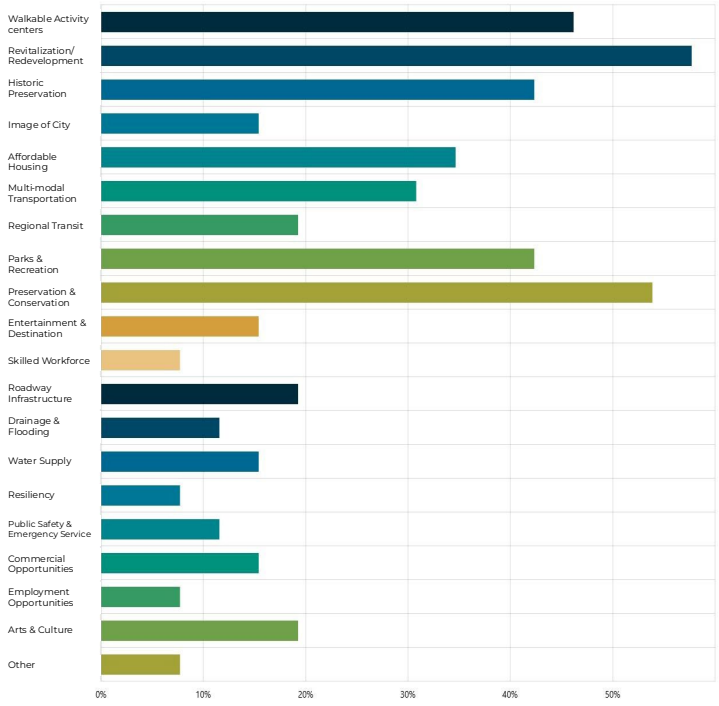


Future Land Use

- Residential Categories **63.6%**
- Mixed Residential and Non-Residential Categories **13.2%**
- Non-Residential Categories **15.6%**



Which of the following initiatives should be prioritized by the City over the next 25 years?



Which of the following initiatives should be prioritized by the City over the next 25 years?

TOP FIVE RESPONSES

1. Focus on revitalization and redevelopment of older underutilized areas
2. Preserve & conserve our natural environment and wildlife habitats
3. Support the development of walkable activity centers where you can live, work, and play
4. Expand our parks and rec options
5. Focus on historic preservation

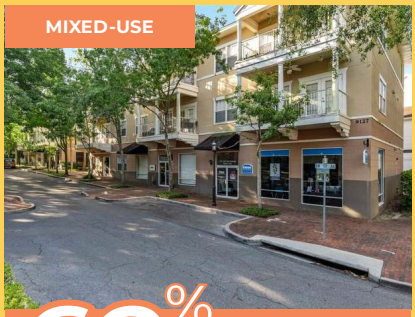
Community Snapshot

"What type(s) of housing do you think should be developed to accommodate Winter Garden's growing population?"

Participants could select as many options as they like.



77% OF PARTICIPANTS SELECTED THIS CHOICE



62% OF PARTICIPANTS SELECTED THIS CHOICE



46% OF PARTICIPANTS SELECTED THIS CHOICE

Today's Activities

1. Digital Survey
2. Community Assessment Exercise
3. What I love banner
4. Community Idea Wall

Digital Survey



VISIT

POLLEV.COM/INSPIRE2714

OR

SCAN

Next Steps



SCAN ME!

1 Visit the Website (Survey & Map)
inspireengagement.com/wintergardencompplan

2 Attend Workshop #2: TBD

Thank you!


COMPREHENSIVE PLAN
WINTER GARDEN
Rooted in Tradition
2050
Growing Strong Communities

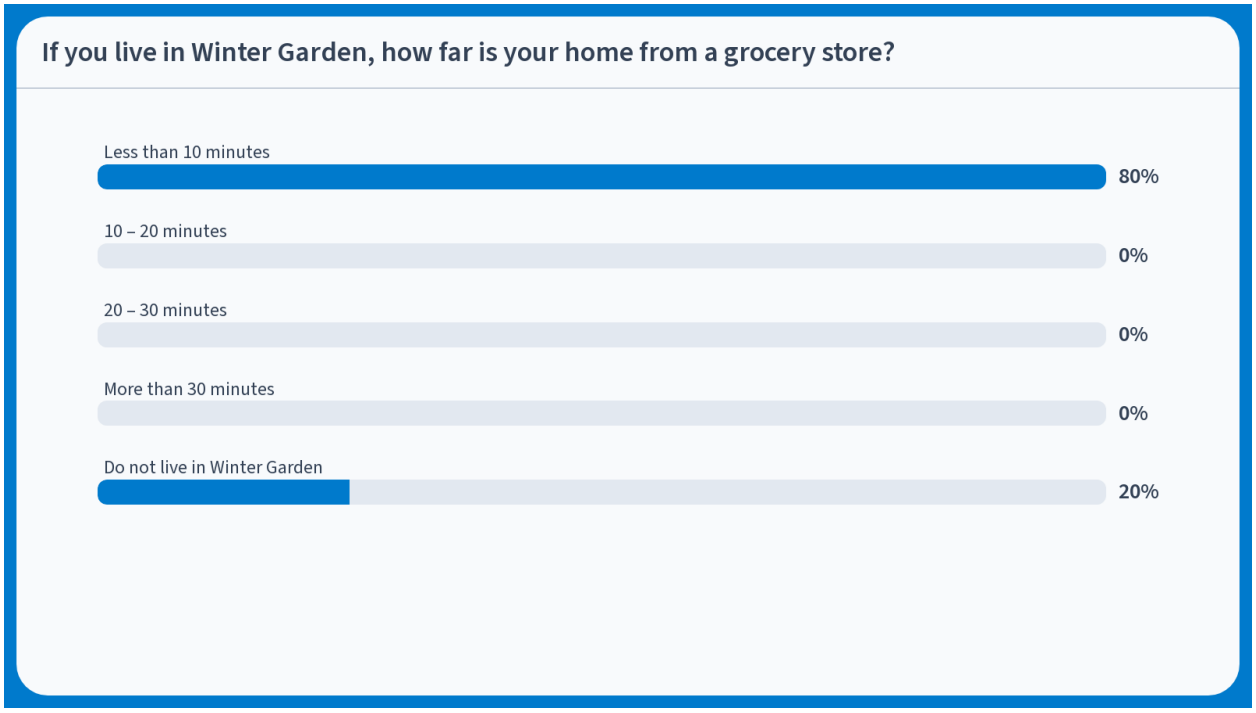
C. Digital Survey Results

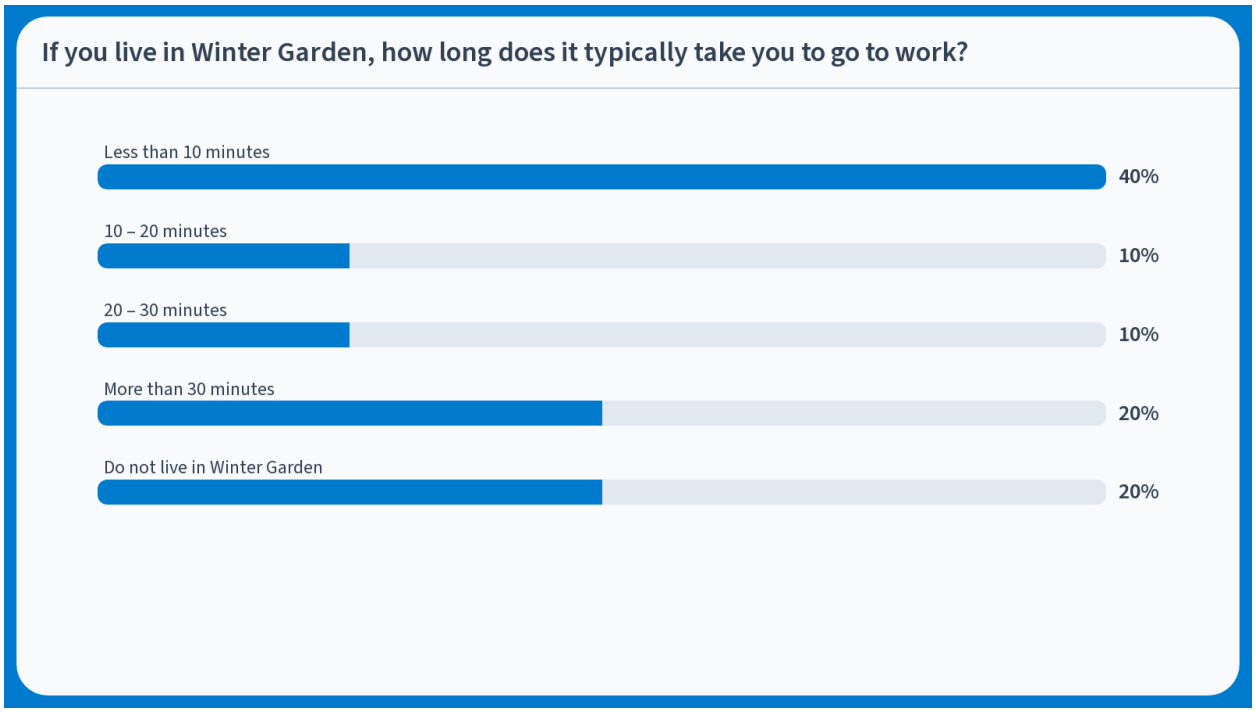
What is the zip code of your place of residence?

34787

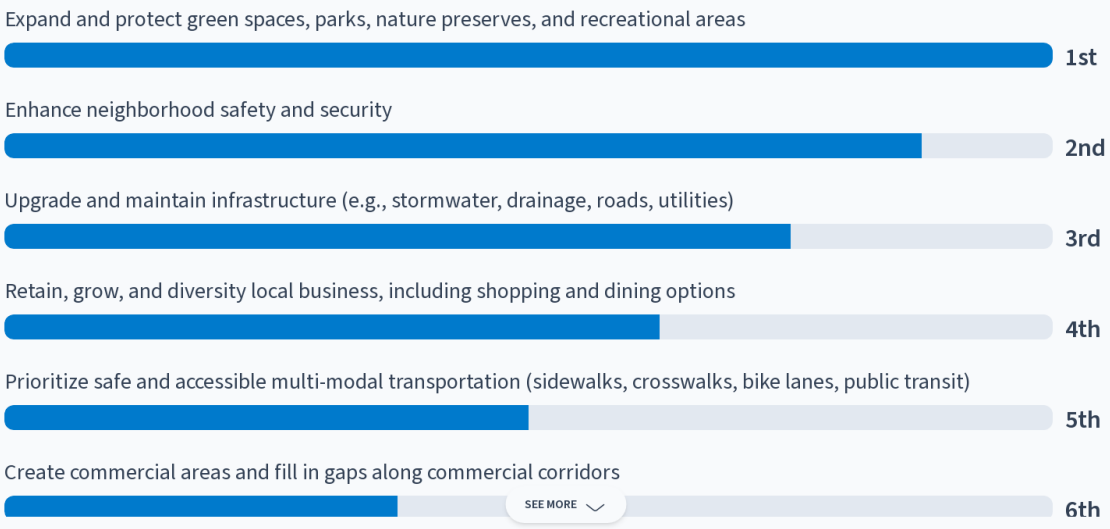
In three words or less, describe what makes Winter Garden special.



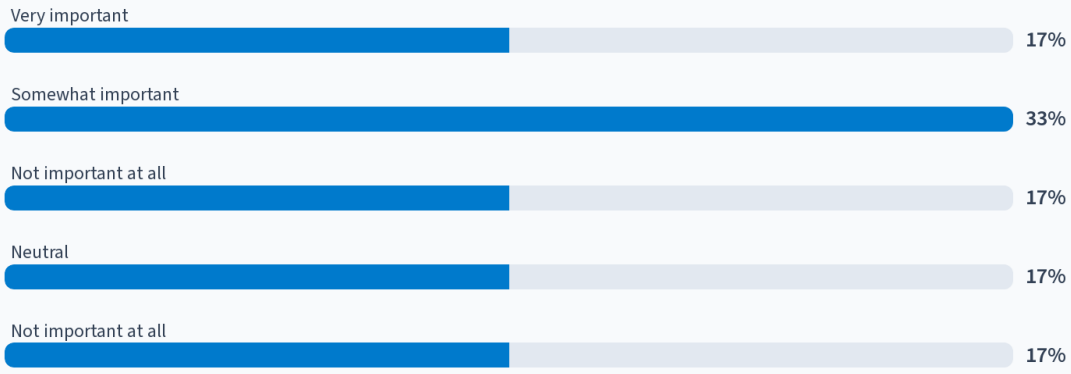

If you live in Winter Garden, how far is your home from a grocery store?
Less than 10 minutes
80%
10 – 20 minutes
0%
20 – 30 minutes
0%
More than 30 minutes
0%
Do not live in Winter Garden
20%


If you live in Winter Garden, how long does it typically take you to go to work?
Less than 10 minutes
40%
10 – 20 minutes
10%
20 – 30 minutes
10%
More than 30 minutes
20%
Do not live in Winter Garden
20%

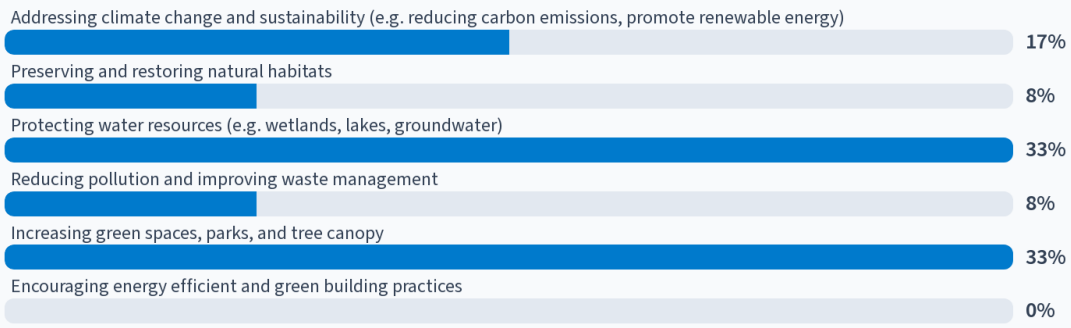
Rank your top priorities for land use and development in the future? Rank your selections from 1 (most important) to 8



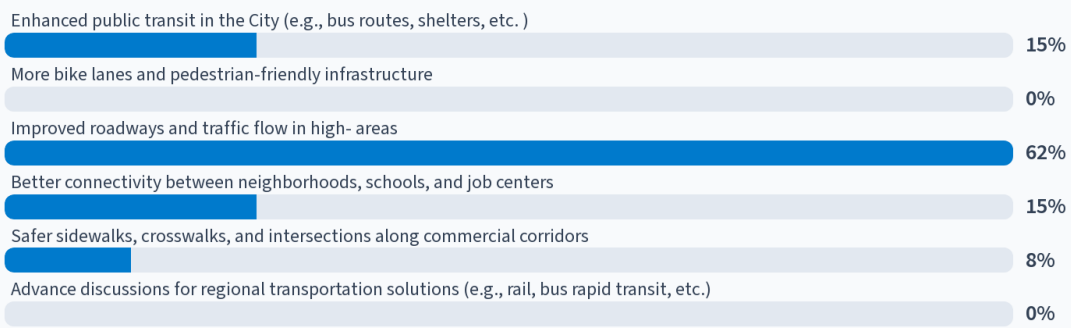
How important is it for the City of Winter Garden to facilitate the development of affordable and/or workforce housing within its boundaries?



What is the top environmental concern in Winter Garden that should be addressed in the Comprehensive Plan?



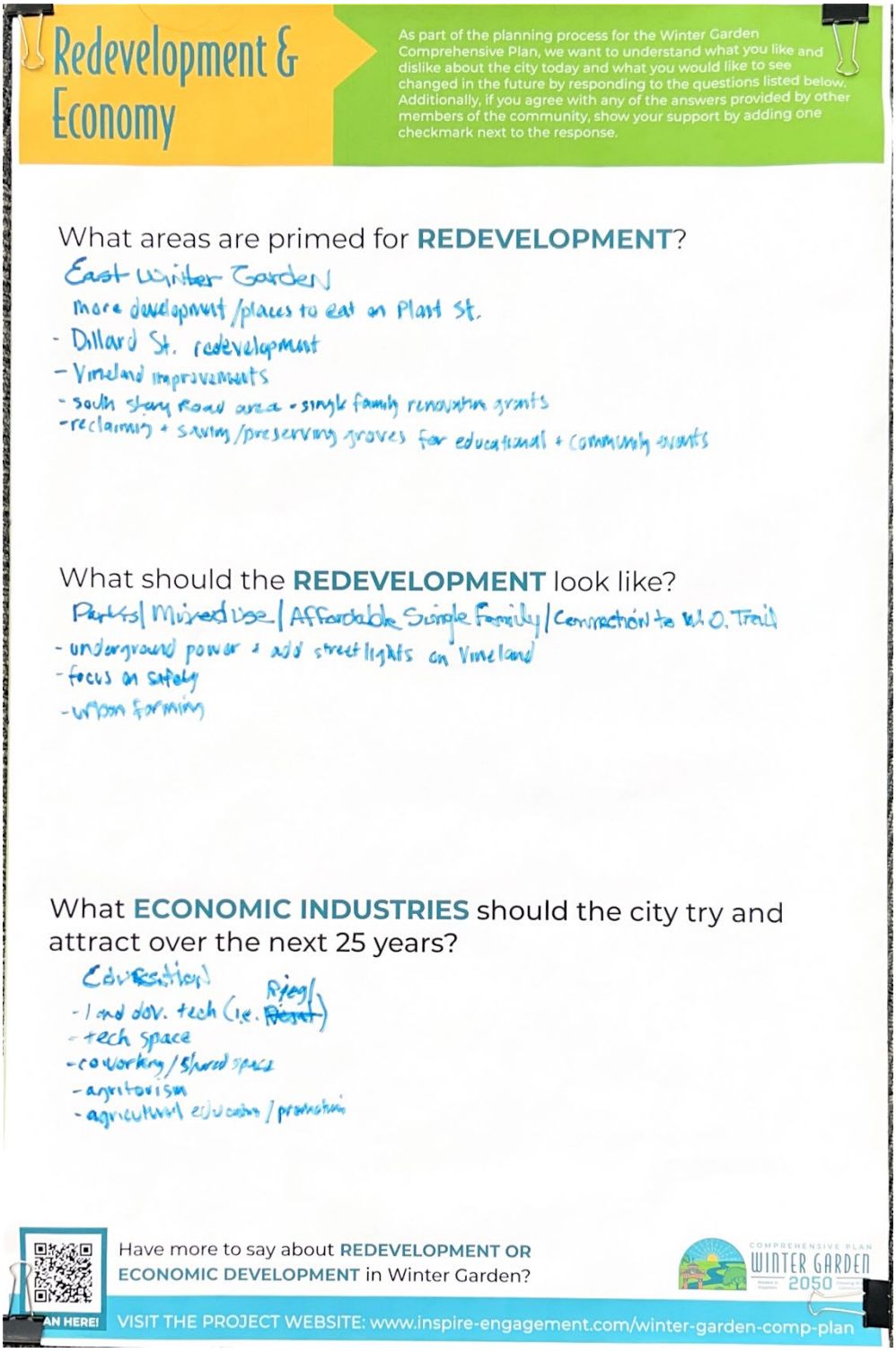
What are the top transportation improvements you would like to see in the City of Winter Garden over the next 20 years? Select up to three.



D. What I Love About Winter Garden Results



E. Community Assessment Boards Results



Redevelopment & Economy

As part of the planning process for the Winter Garden Comprehensive Plan, we want to understand what you like and dislike about the city today and what you would like to see changed in the future by responding to the questions listed below. Additionally, if you agree with any of the answers provided by other members of the community, show your support by adding one checkmark next to the response.

What areas are primed for **REDEVELOPMENT**?

East Winter Garden
more development / places to eat on Plant St.
- Dillard St. redevelopment
- Vineland improvements
- south Story Road area - single family renovation grants
- reclaiming + saving / preserving groves for educational + community events

What should the **REDEVELOPMENT** look like?

Parks | Mixed Use | Affordable Single Family | Connection to W.O. Trail
- underground power + add street lights on Vineland
- focus on safety
- urban farming

What **ECONOMIC INDUSTRIES** should the city try and attract over the next 25 years?

Education
- I and dev. tech (i.e. Rieg/ ~~Regal~~)
- tech space
- co working / shared space
- agritourism
- agricultural education / production

Have more to say about **REDEVELOPMENT OR ECONOMIC DEVELOPMENT** in Winter Garden?

VISIT THE PROJECT WEBSITE: www.inspire-engagement.com/winter-garden-comp-plan

Recreation

As part of the planning process for the Winter Garden Comprehensive Plan, we want to understand what you like and dislike about the city today and what you would like to see changed in the future by responding to the questions listed below. Additionally, if you agree with any of the answers provided by other members of the community, show your support by adding one checkmark next to the response.

What do you like about Winter Garden's
CURRENT RECREATION OPTIONS?

Downtown Winter Garden, family oriented activities
Tucker Oaks

What do you dislike about Winter Garden's
CURRENT RECREATION OPTIONS?

- insufficient & lacking parks, sports fields

What would you like to change about Winter Garden's
RECREATION OPTIONS IN THE FUTURE?

more playgrounds, neighborhood
- splash pad
- pickleball courts
- tennis
- shared garden area
- small amphitheature

Have more to say about **RECREATION** in Winter Garden?

VISIT THE PROJECT WEBSITE: www.inspire-engagement.com/winter-garden-comp-plan

Housing

As part of the planning process for the Winter Garden Comprehensive Plan, we want to understand what you like and dislike about the city today and what you would like to see changed in the future by responding to the questions listed below. Additionally, if you agree with any of the answers provided by other members of the community, show your support by adding one checkmark next to the response.

What do you like about Winter Garden's CURRENT HOUSING MARKET?

Current rate of growth
Home values are up
√ Single use zoning

What do you dislike about Winter Garden's CURRENT HOUSING MARKET?

√√ The fast growth rate
Multi-family housing
Lack of growth management
HOAs

What would you like to change about Winter Garden's HOUSING MARKET IN THE FUTURE?

• Mixed use (Vertical)
√√ More affordable housing especially for seniors
√ Larger lot lines for more yard space
√ More preservation of agriculture
√ Housing variety

Have more to say about HOUSING in Winter Garden?

SCAN HERE

VISIT THE PROJECT WEBSITE: www.inspire-engagement.com/winter-garden-comp-plan

Infrastructure

As part of the planning process for the Winter Garden Comprehensive Plan, we want to understand what you like and dislike about the city today and what you would like to see changed in the future by responding to the questions listed below. Additionally, if you agree with any of the answers provided by other members of the community, show your support by adding one checkmark next to the response.

What do you <u>like</u> about Winter Garden's
CURRENT INFRASTRUCTURE?

Pedestrian Inf. in D.T.
New WNTF
Parking Structure by the Market

What do you <u>dislike</u> about Winter Garden's
CURRENT INFRASTRUCTURE?

Drainage in East W.G.
Street Lighting in East W.G.
Lack of Sidewalks in East W.G.
Lack of parking in D.T.

What would you like to <u>change</u> about Winter Garden's
INFRASTRUCTURE IN THE FUTURE?

Move Complete Streets
More Roundabouts (where appropriate) Dillard Rd
Need sidewalks in East W.G.
Festival Street (Plant Throw Park to Dillard)
More parking in D.T.

Have more to say about **INFRASTRUCTURE** in Winter Garden?

SCAN HERE VISIT THE PROJECT WEBSITE: www.inspire-engagement.com/winter-garden-comp-plan

Mobility

As part of the planning process for the Winter Garden Comprehensive Plan, we want to understand what you like and dislike about the city today and what you would like to see changed in the future by responding to the questions listed below. Additionally, if you agree with any of the answers provided by other members of the community, show your support by adding one checkmark next to the response.

What do you like about Winter Garden's
CURRENT MOBILITY OPTIONS?

roundabouts

West orange trail

fountain on trail

What do you dislike about Winter Garden's
CURRENT MOBILITY OPTIONS?

Reactive to infrastructure rather than proactive.

Speed + Safety for Kids.

More wayfinding signage for bike stop downtown

Dillard-Stroad

Golf carts- all over

What would you like to change about Winter Garden's
MOBILITY OPTIONS IN THE FUTURE?

bike lane on avalon

more roundabouts instead of stop signs or lights.

Signs on trail

Safety

Dock for boat traffic on lake apopka

Speed of e-bikes

crosswalks

bike trails + bike-friendly development

Gatherings on trail

ADA/easier access for disabilities

More sidewalks on DT

Have more to say about **MOBILITY** in Winter Garden?

SCAN HERE

VISIT THE PROJECT WEBSITE: www.inspire-engagement.com/winter-garden-comp-plan

DATE: May 2, 2025

TO: Kelly Carson, Planning Director

FROM: Inspire Placemaking Collective

RE: Second Public Workshop Summary

Public Workshop #2

Introduction

The purpose of this memorandum is to provide a summary of the second public workshop for the Winter Garden Comprehensive Plan Update. This workshop was the second in a series of three public workshops held to understand the community's vision for Winter Garden in 2050. The workshop took place on Wednesday, April 30, 2025, at City Hall (300 West Plant Street). A total of 33 people attended the workshop, and the relative locations of where the attendees live, work, and play within Winter Garden were collected on the Live, Work, Play Map which can be found in Attachment A.



Presentation

The workshop kicked off with a presentation that provided a brief overview of the 2050 Comprehensive Plan Update. A copy of the presentation is provided in Attachment B. The presentation outlined the project team, the Comprehensive Plan Update process, a brief snapshot of Winter Garden, previous public feedback, the workshop's activities and Next Steps.

Workshop Activities

Attendees took part in a series of six activities aimed at answering the question "Where do we want to go?" or what is the community's vision for Winter Garden in the year 2050. A summary of each activity, along with the activities results are provided below.

Activity #1 Visioning Initiatives Prioritization



In this activity attendees identified their top initiative or number one concern they felt should be prioritized during the update to the Winter Garden Comprehensive Plan. There was a total of seven priorities provided and attendees had the option of creating their own priority. The results of this activity are summarized below in Table 1 and the original board can be seen in Attachment C.

Table 1: Activity 1 Results

Initiative Priority	Choices
Support mixed use development	6
Increase affordable housing opportunities and housing diversity	6
Revitalization and redevelopment of older, underutilized areas	5
Preserve and conserve the natural environment and wildlife habitat	5
Enhance the transportation network to more effectively support walking and biking	3
Historic preservation	2
Address stormwater drainage and flooding concerns	1
Downtown Parking Garage	1

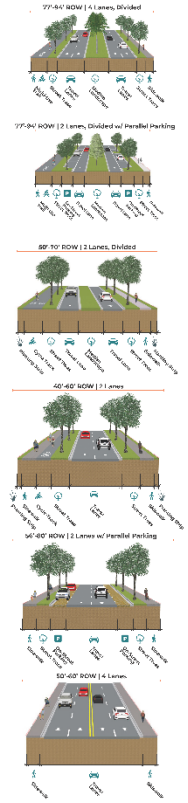
Activity #2 Roadway Mode Choices



In this activity attendees identified a right of way alternative for four roads within Winter Garden. The four roadways included 9th Street, Lakeview Avenue, Avalon Road, and Park Avenue. The results of this activity are summarized below in Table 2 and the original board can be seen in Attachment D.

As shown below, the preferences are somewhat evenly distributed for 9th Street and Park Avenue. For 9th Street, the primary preference is for a two-lane road with a cycle track. The community preferred the two-lane cross-section with on street parking and sidewalks for Lakeview Avenue. Lastly, the community identified the same preference for Avalon Road and Park Avenue, which included a two-lane road divided by a wide median with a cycle track and sidewalk.

Table 2: Activity 2 Results



	9th Street	Lakeview Ave	Avalon Road	Park Ave
				
	Existing 50' ROW	Existing 50' ROW	Existing 56' ROW	Existing 60' ROW
	Existing Roadway Conditions			
Roadway Types	N/A	N/A	3	N/A
	N/A	N/A	1	N/A
	7	1	9	8
	9	3	2	7
	4	13	2	5
	0	0	0	0

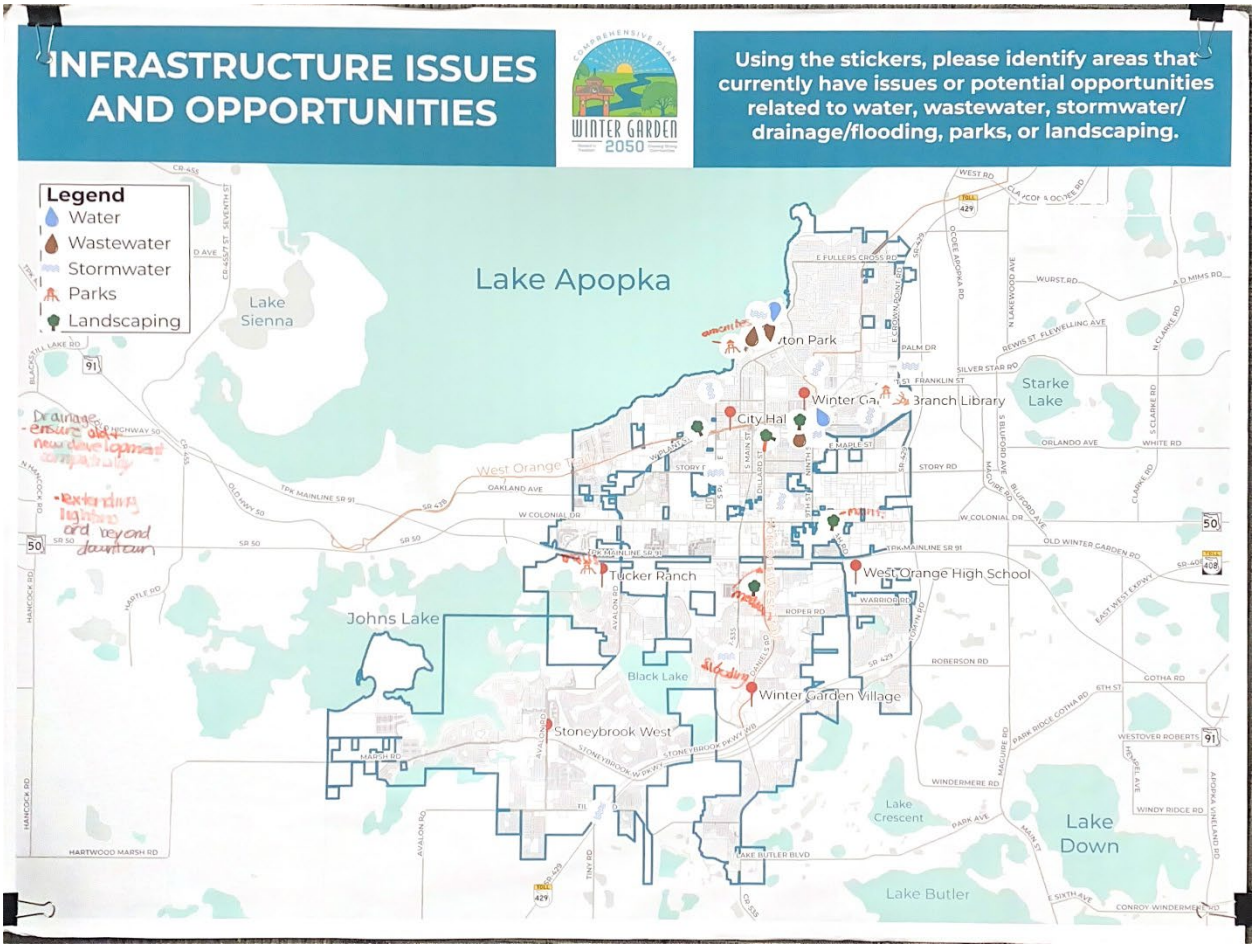


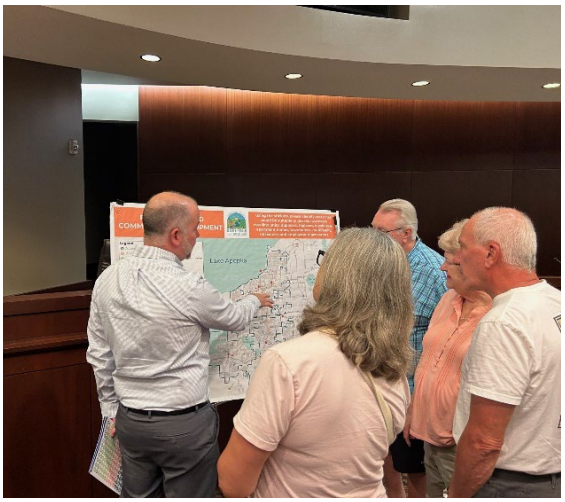
Activity #3 Infrastructure Issues and Opportunities

As part of this activity, attendees were asked to identify areas with existing issues or potential opportunities related to potable water, wastewater, stormwater management (including drainage and flooding), parks, and landscaping. The results of this exercise are illustrated in Figure 1 below.

Overall, most attendees expressed satisfaction with the City's current management of infrastructure. However, several community members highlighted areas for improvement particularly in landscaping, stormwater drainage, and park amenities. Key feedback included requests for increased tree canopy coverage along portions of the West Orange Trail and improved landscaping maintenance along State Road 50 and Daniels Road. Stormwater flooding concerns were reported in areas of East Winter Garden and along Winter Garden Vineland Road. With respect to parks, attendees voiced a desire for additional amenities at Newton Park and Tucker Ranch. There was also interest in the City acquiring a vacant parcel along the eastern edge of Plant Street for potential park development. Additionally, community members suggested extending lighting requirements beyond the downtown area and emphasized the importance of ensuring that new development does not cause drainage issues with existing development.

Figure 1: Activity 3 Results

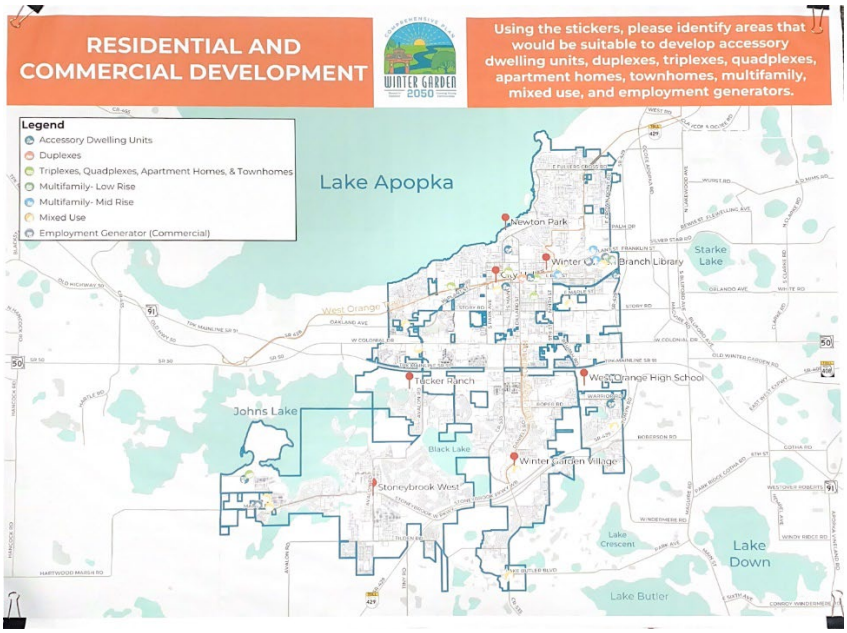




Activity #4: Residential and Commercial Development

This activity had attendees identify areas that would be suitable to develop accessory dwelling units, duplexes, triplexes, quadplexes, apartment homes, townhomes, multifamily, mixed uses, and employment generators. The results of this activity can be seen in Figure 2 below. Attendees expressed general support for accessory dwelling units (ADUs) within established neighborhoods. In terms of housing products, attendees felt that the provision of triplexes, quadraplexes, apartment homes, townhomes, and multifamily was most appropriate in the Plant Street corridor and in the southwest portion of the City near Marsh Road. For employment, attendees focused on the two largest undeveloped properties within the City, the Boyd property and the Strates property. Finally, mixed use products were preferred in numerous locations including Plant Street, Fowler Groves, Lake Butler Road and CR 535, and East Winter Garden.

Figure 2: Activity 4 Results



Activity #5 Vision Banner

This activity had attendees identify their vision for Winter Garden in 2050 by answering the prompt "IN 2050, WINTER GARDEN WILL BE...". The results of this activity are detailed below, and the original results can be found in Attachment E.

IN 2050, WINTER GARDEN WILL BE...

- A thriving community with a mix of families, singles, and active adults hopefully with better transportation options.
- Not over populated, keeping the small town charm w/brick streets, parks, and small local businesses. A bustling farmers market and community gardens.
- Filled with brick roads that are safe the best place to walk, considered + historic light packages, and has easy to identify and vibrant neighborhoods across the city.
- More affordable housing
- Small town charm, affordable housing, successful environment for all people & equal opportunity to be successful.
- A safe place for intergenerational living, activities & community supporting diverse interests.
- Full of happy, healthy kids & families who have transportation independence & options to where they need to go or want to go without being forced (for safety or economics) into single occupancy vehicle 😊 !! (This is what makes us healthy, happy, financially successful & ecologically conservative.)
- New Boutique hotel
- An art destination
- East Plant St. will be as prosperous as the rest of the community.
- Vibrant, multi-age (opportunities for all ages to live, work, play, thrive), charming, full of protected historic structures plus well designed how (Scale appropriate), Dillard Street on a road diet, safe to walk bike, drive, and a mix of housing types.
- Safe
- East WG will have cobblestone streets, multi use affordable house, great school system, top

10 affordable housing, great job opportunities, sidewalks, bike trails and high tech, #1 infrastructure.

Activity #6 Community Idea Wall

This activity provided attendees the opportunity to detail any issue, concern, idea, or comment related to the Comprehensive Plan Update that was not covered in any of the other workshop activities. The results of this activity are detailed below and the original results can be found in Attachment F.

COMMUNITY IDEA WALL

- By 2050, every elementary, middle, and high school child in Winter Garden can safely and comfortably walk or bike to school if they live close enough to walk.
- Homelessness will be solved in 2050 Winter Garden affordable housing.
- Lake Apopka clean + restaurants/Development
- New Boutique Hotel
- Shade along West Orange Trail / plant native trees etc.
- Lanes for golf carts and bike lanes
- Widen roads
- Allow accessory dwellings on lots that are large enough
- Regulate air BNB by registration with the City. These are not homes and are utilized similar to hotel so maybe tax as resort or temporary housing.
- Allow large homes on larger lots downtown
- Community Gardens for produce
- 429 South & Stoney Brook West Intersection / off ramp needs safer traffic transition (Traffic going to far right lane very hazardous)
- ADUs and more shade trees
- More speeding enforcement (S Lakeview Avenue)
- Stormwater infrastructure will be prioritized, and healthy wetlands will be preserved.
- Dillard street will be vibrant and safe to walk.
- Important Now: “Official” Signage on the W. Orange Trail that notifies/identifies that is a bike path. Must not be blocked with people & their animals clustered in groups across the trail blocking the flow of bike traffic.

Key Takeaways

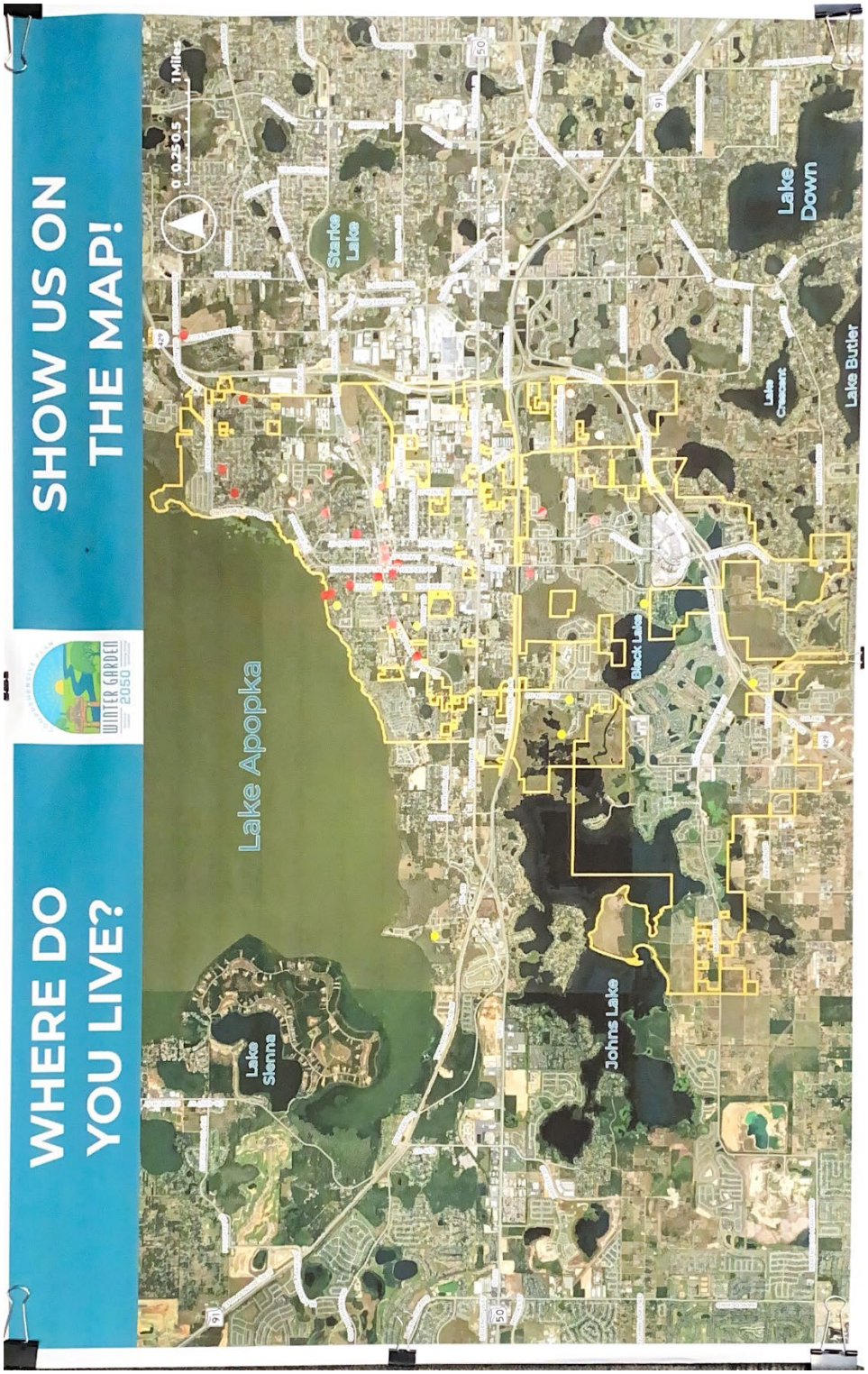
The second workshop for Winter Garden's Comprehensive Plan Update allowed for ample engagement between the residents of Winter Garden and the project team. A diverse set of comments, concerns, ideas, and opportunities for the Comprehensive Plan Update were identified. The three themes below were consistently brought up during the workshop:

1. Preserve and create more affordable housing opportunities for the current and future residents of Winter Garden.
2. Ensure multiple modes of transportation are safe, comfortable, and reliable.
3. Protect and enhance the smalltown charm and family friendliness of Winter Garden.

Attachments

Attachment A: Live, Work, Play Map 11
Attachment B: Workshop #2 Presentation 12
Attachment C: Activity 1 Results 23
Attachment D: Activity 2 Results 24
Attachment E: Activity 5 Results 25
Attachment F: Activity 6 Results 26

Attachment A: Live, Work, Play Map



Attachment B: Workshop #2 Presentation

Workshop #2

Wednesday, April 30th



Agenda

Project Team

The Plan Update

Community Snapshot

Input

Next Steps

Project Team

Kelly Carson
Planning Director

Shane Friedman
Planning Supervisor

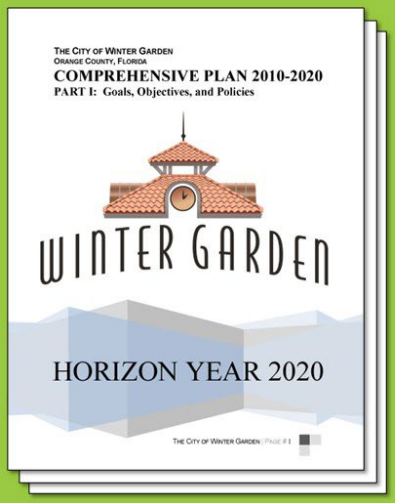
Eric Raasch, AICP
Project Manager

Chris Dougherty, AICP
Project Manager

Gabriela Castro, AICP
Planner

Haiden Lewis
Planner

The Plan Update



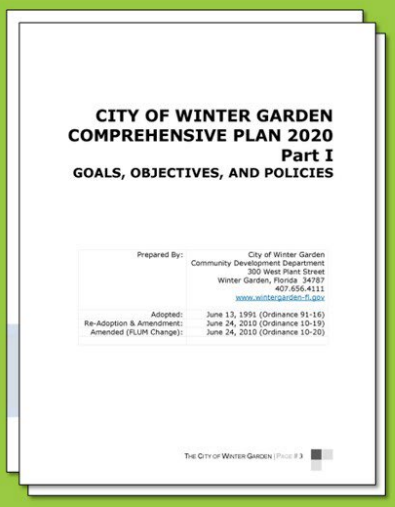
What is a Comprehensive Plan?

A document designed to guide the future actions of a jurisdiction. It presents a vision for a community's future through long range goals, objectives, and policies.

The Comprehensive Plan also serves to:

- Help residents identify their vision for the future of the community
- Coordinate local decision making
- Provide guidance to landowners and developers

The Plan Update



CITY OF WINTER GARDEN
COMPREHENSIVE PLAN 2020
Part I
GOALS, OBJECTIVES, AND POLICIES

Prepared By: City of Winter Garden
Community Development Department
300 West Plant Street
Winter Garden, Florida 34787
407.656.4111
www.wintergarden-fl.gov

Adopted: June 13, 1991 (Ordinance 91-16)
Re-Adoption & Amendment: June 24, 2010 (Ordinance 10-19)
Amended (FLUM Change): June 24, 2010 (Ordinance 10-20)

THE CITY OF WINTER GARDEN | PAGE # 1

Plan Elements

1. Future Land Use
2. Multimodal Transportation
3. Housing
4. Public Facilities
5. Conservation
6. Recreation and Open Space
7. Intergovernmental Coordination
8. Capital Improvements
9. Public School Facilities
10. (NEW) Property Rights

The Plan Update

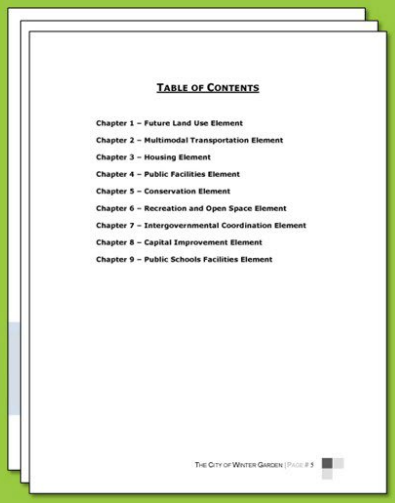


TABLE OF CONTENTS

Chapter 1 – Future Land Use Element
Chapter 2 – Multimodal Transportation Element
Chapter 3 – Housing Element
Chapter 4 – Public Facilities Element
Chapter 5 – Conservation Element
Chapter 6 – Recreation and Open Space Element
Chapter 7 – Intergovernmental Coordination Element
Chapter 8 – Capital Improvement Element
Chapter 9 – Public Schools Facilities Element

THE CITY OF WINTER GARDEN | PAGE # 5

Why Update?

- Required by Florida Statutes
- Current Plan Horizon Year was 2020
- Update the community's vision
- Plan rather than react to new development
- Re-evaluate current decision-making practices
- Evaluate levels of service standards for public facilities
- Identify and address existing and future opportunities

The Plan Update



Visit the Website

inspire-engagement.com/winter-garden-comp-plan

SCAN ME!

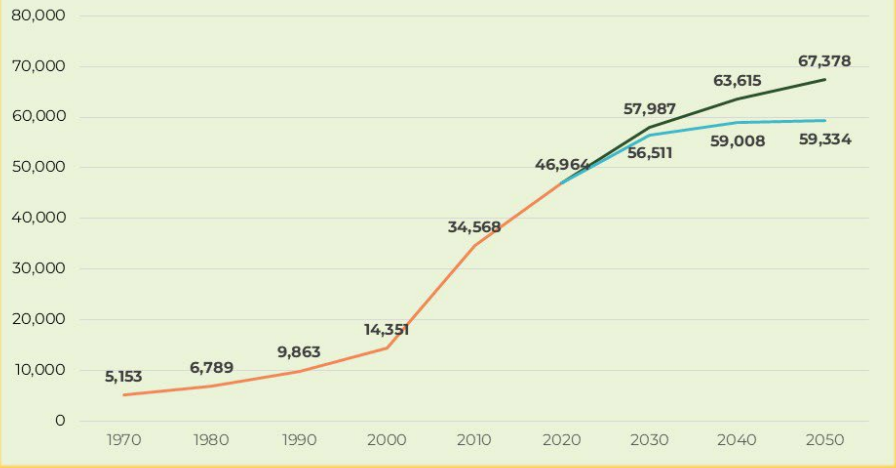
The Plan Update

January 2025	Kick-Off Meeting
January – March 2025	Initial Data Collection
March 25, 2025	Workshop #1
April 15 & 23, 2025	Stakeholder Interviews
April 26, 2025	Pop Up Event
April 30, 2025	Workshop #2
TBD May 2025*	Workshop #3
March – June 2025	Update Data & Analysis
June – October 2025	Update Goals, Objectives & Policies
November 2025	Sharing Amendments
December 2025 – April 2026	Adoption Process

*Dates Tentative

Community Snapshot

Population Growth



City is roughly

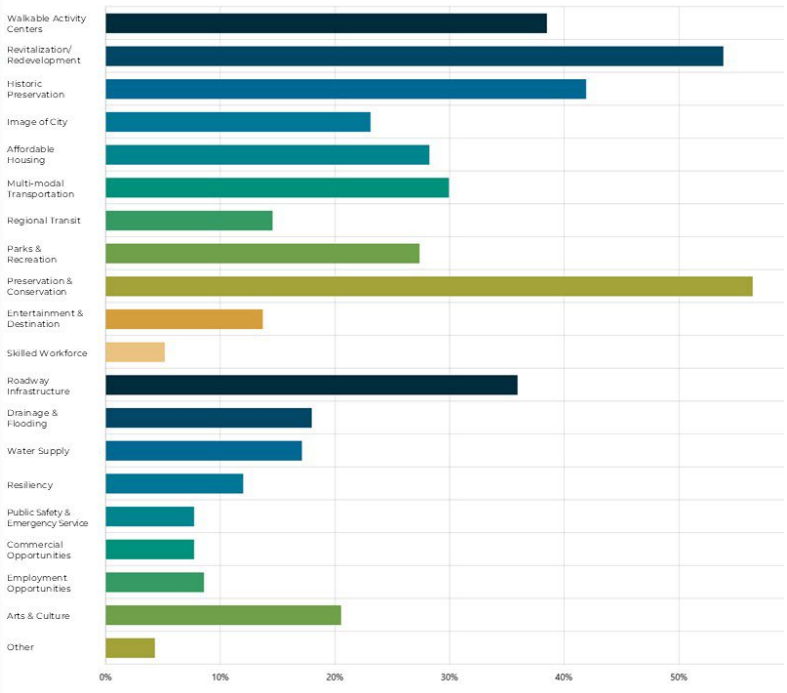
3.4%

of the County's population

26-44%

Expected Growth between 2023 & 2050

Which of the following initiatives should be prioritized by the City over the next 25 years?



Which of the following initiatives should be prioritized by the City over the next 25 years?

TOP FIVE RESPONSES

1. Preserve & conserve our natural environment and wildlife habitats
2. Focus on revitalization and redevelopment of older underutilized areas
3. Focus on historic preservation
4. Support the development of walkable activity centers where you can live, work, and play
5. Improve and expand roadway infrastructure

Community Snapshot

What do you think is special and unique about Winter Garden that you wish to see retained by the year 2050?



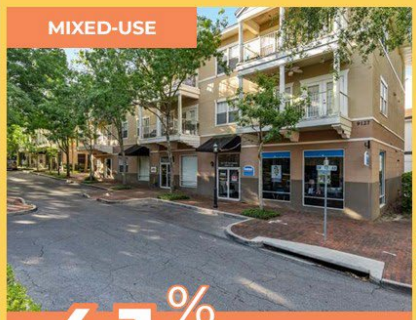
Community Snapshot

"What type(s) of housing do you think should be developed to accommodate Winter Garden's growing population?"

Participants could select as many options as they like.



83% OF PARTICIPANTS SELECTED THIS CHOICE



41% OF PARTICIPANTS SELECTED THIS CHOICE



39% OF PARTICIPANTS SELECTED THIS CHOICE

Input from Workshop #1

LIKES

- Sense of community
- Local businesses
- Community events
- Trails



DISLIKES

- Traffic
- Unsafe roads and pedestrian crossings
- Threats to water resources
- Drainage issues

Input from Workshop #1

IMPROVEMENTS & IDEAS

- Expand and improve greenspaces, parks, recreational areas, nature preserves, and outdoor community gathering spaces.
- Enhance safety and security, including roadway safety.
- Improve infrastructure
  - Roadways – Improve traffic flow, lighting, and crosswalks.
  - Sidewalks – Address gaps Downtown and in East Winter Garden.
  - Drainage – Improve drainage in East Winter Garden.
- Incorporate trails, bike lanes, green space and recreational amenities in new development.
- Greater housing variety, including affordable and senior housing.

Input from Interview Sessions

STRENGTHS

- **Place** - Community Events, Downtown, Plant Street, Farmers Market, Low Density Residential, Parks/Trails, Walkability
- **Community** - Sense of Community, Community Character, Small Town Feel, High Quality of Life, Historic Charm, Welcoming, Family Oriented, Safe
- **Organization** - Strong Leadership, Aesthetics & Maintenance, Capital Improvements



Input from Interview Sessions

WEAKNESSES

- Lack of **parking** for increasingly popular community events
- Limited affordable/workforce/attainable **housing units**
- **Traffic and congestion** at peak hours
- Lack of **traffic calming** particular along main thoroughfares
- No provisions for **accessory dwelling units** (ADU)
- Lack of **Transit** options in downtown
- **Unattractive gateways** into the City
- Limited **public restrooms** in downtown



Input from Interview Sessions

CHALLENGES

- Need **additional revenue streams** to fund needed improvements
- Redevelopment in areas of the City causing **gentrification** and **pushing business /residents out**
- How to solve the dilemma of providing **recycling**
- Attract more/nicer **grocers**
- Moving unsightly overhead **power lines underground**
- **Too popular** within the region – very desirable

Input from Interview Sessions

OPPORTUNITIES

- Enhance Walkability
- Increase Historic Preservation/Cultural Efforts
- Establish More Parking Options in Downtown
- Dillard Street & Complete Streets
- East Winter Garden
- Activating Lakefronts
- Parks & Trials
- Higher Residential Densities



Today's Activities

1. Transportation Activity
2. Housing & Economic Location Map
3. Infrastructure Identification
4. Initiative Priority
5. Vision Banner
6. Idea Wall

Next Steps

1

Visit the Website

inspire-engagement.com/winter-garden-comp-plan



SCAN ME!

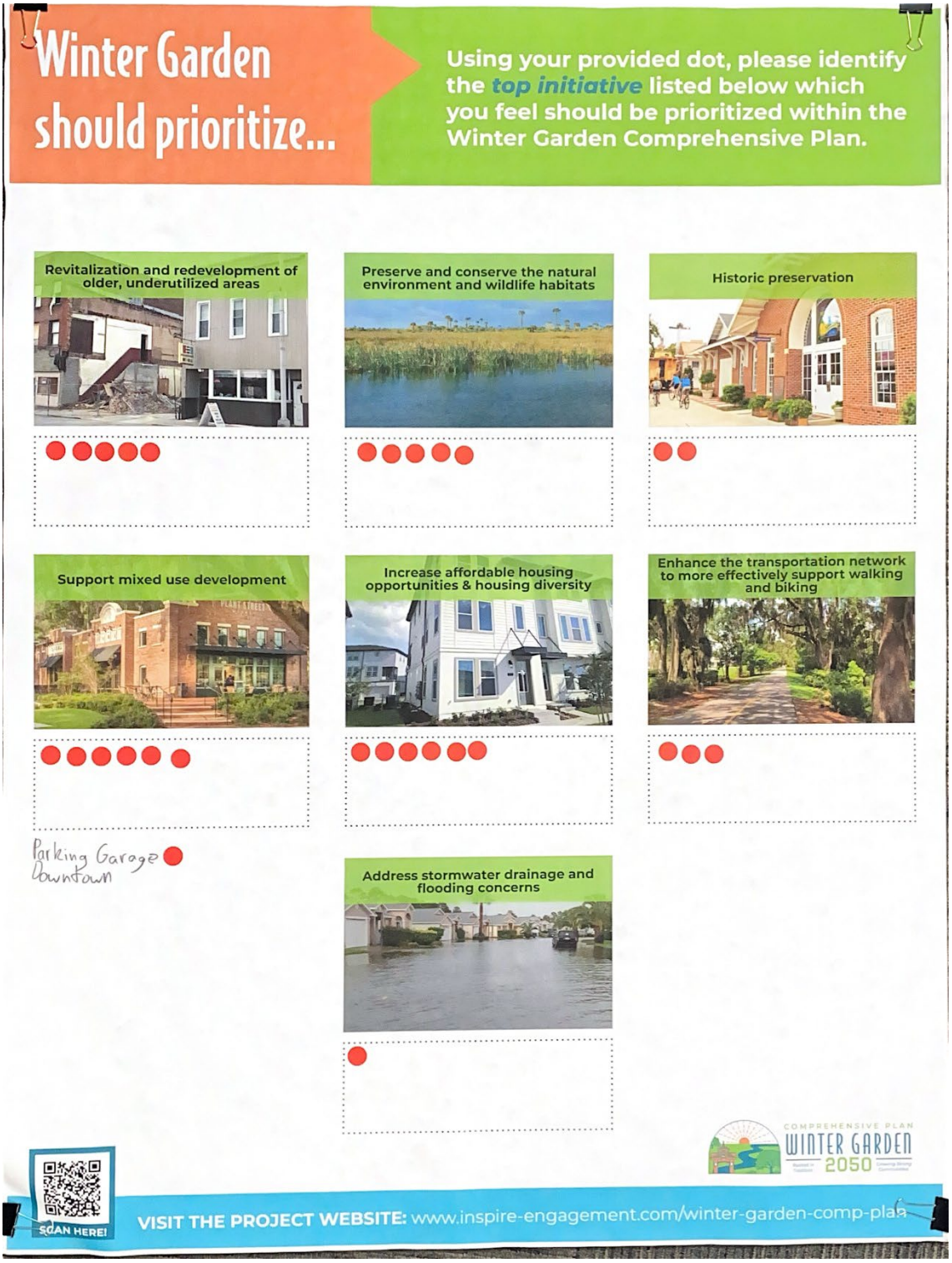
2

Attend the Next Workshop

Thank You!



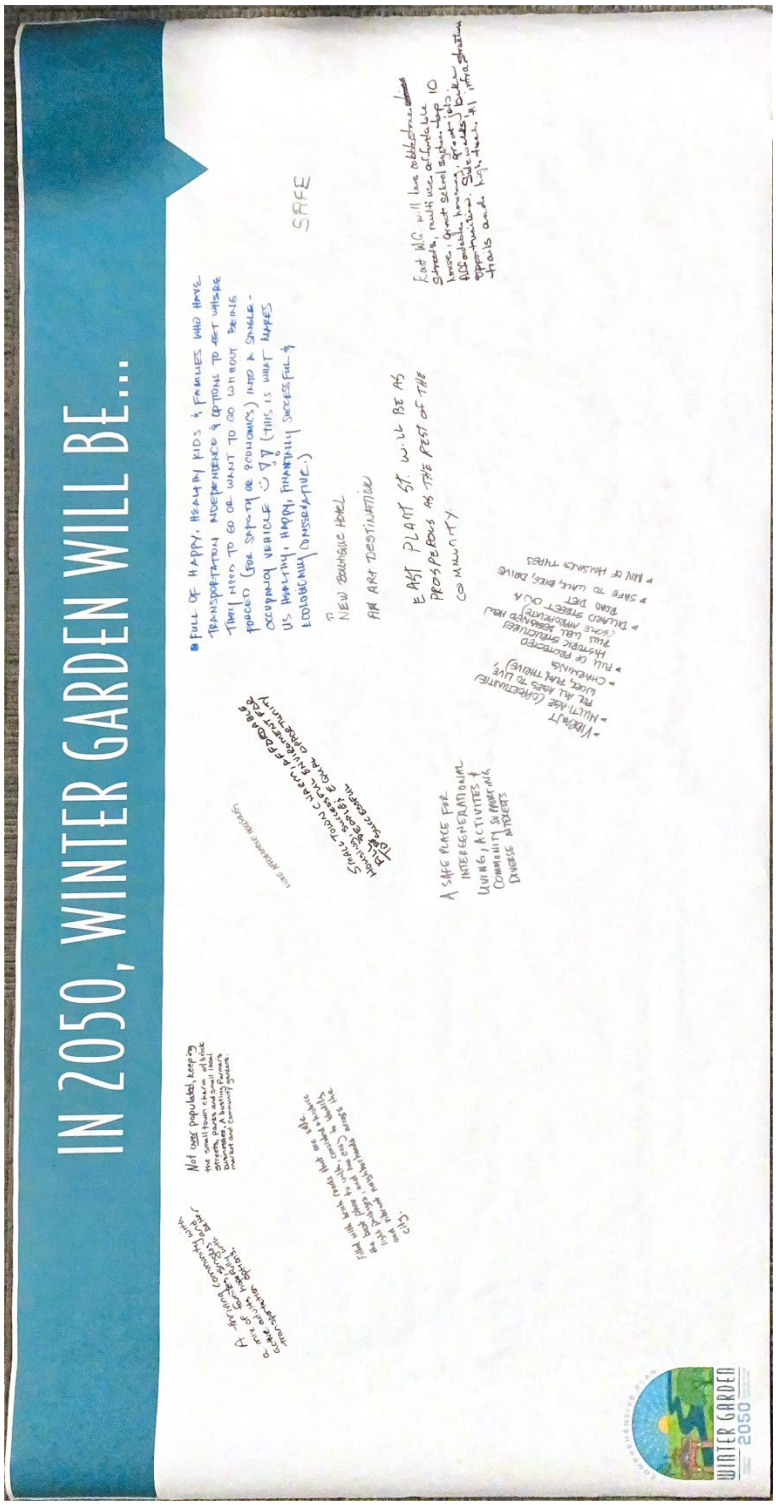
Attachment C: Activity 1 Results



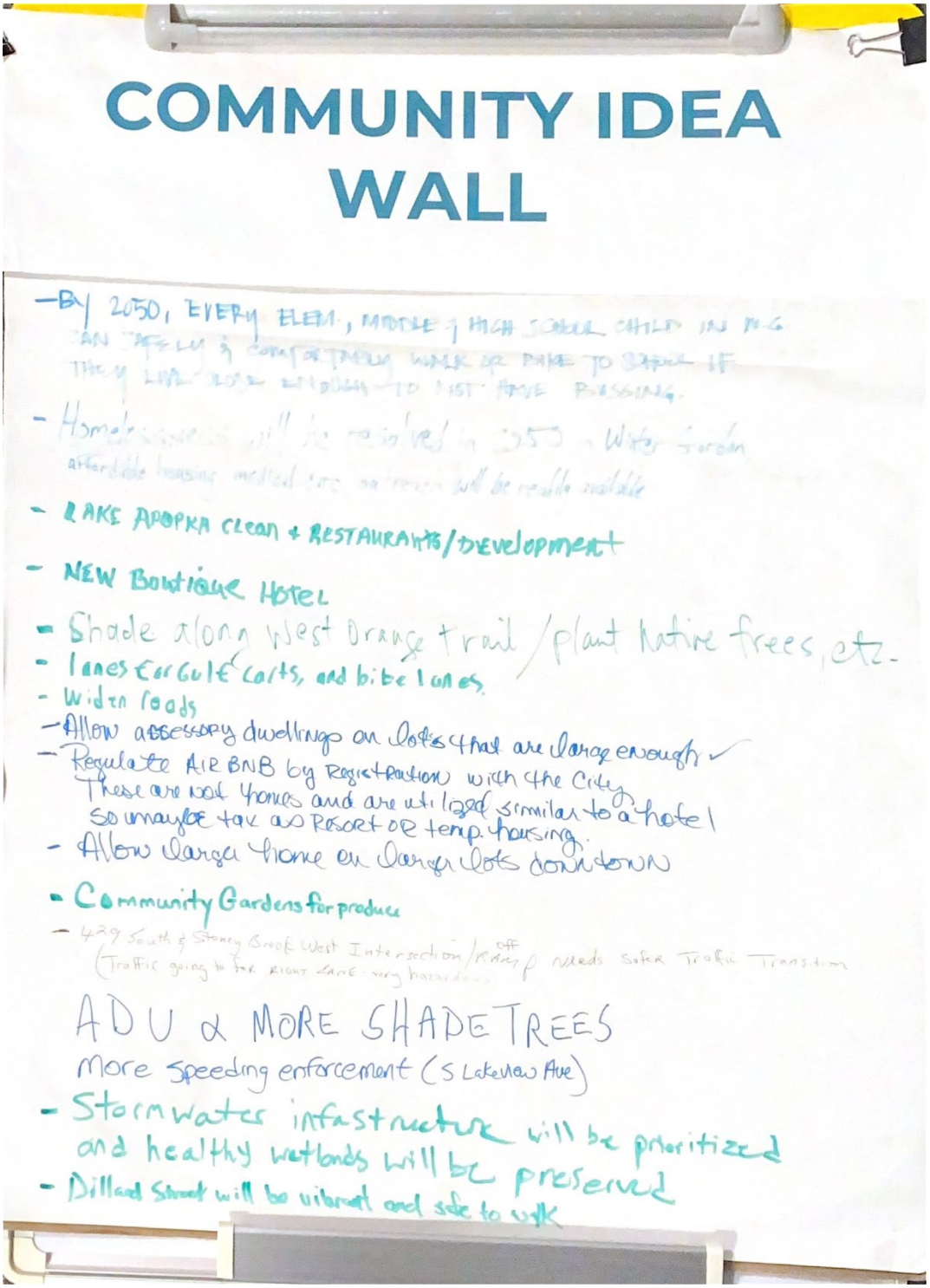
Attachment D: Activity 2 Results

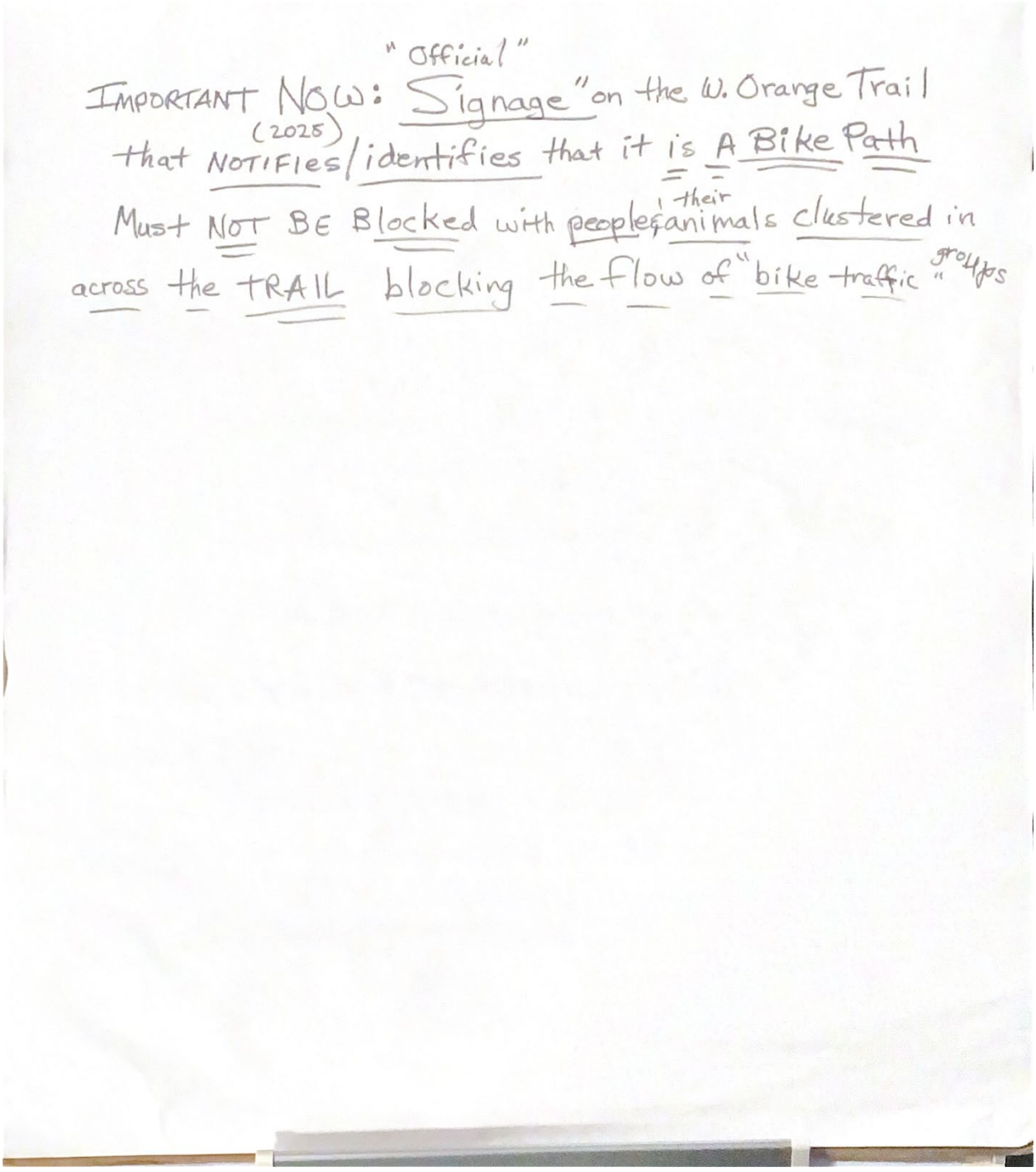


Attachment E: Activity 5 Results



Attachment F: Activity 6 Results




IMPORTANT NOW: "official" Signage" on the W. Orange Trail
that NOTIFIES/identifies (2025) that it is A Bike Path
Must NOT BE Blocked with people & their animals clustered in groups
across the TRAIL blocking the flow of "bike traffic "

DATE: June 13, 2025

TO: Kelly Carson, Planning Director

FROM: Inspire Placemaking Collective

RE: Third Public Workshop Summary

Public Workshop #3

Introduction

The purpose of this memorandum is to provide a summary of the third public workshop for the Winter Garden Comprehensive Plan Update. This workshop was the last in a series of three public workshops held to understand the community's vision for Winter Garden in 2050. The workshop took place on Thursday, June 5, 2025, at City Hall (300 West Plant Street). A total of 11 people attended the workshop, and the relative locations of where the attendees live, work, and play within Winter Garden were collected on the associated map, which can be found in **Attachment A.**



Presentation

The workshop kicked off with a presentation that provided a brief overview of the 2050 Comprehensive Plan Update. A copy of the presentation is provided in **Attachment B**. The presentation outlined the project team, the Comprehensive Plan Update process, a brief snapshot of Winter Garden, previous public feedback, the workshop's activities and next steps.

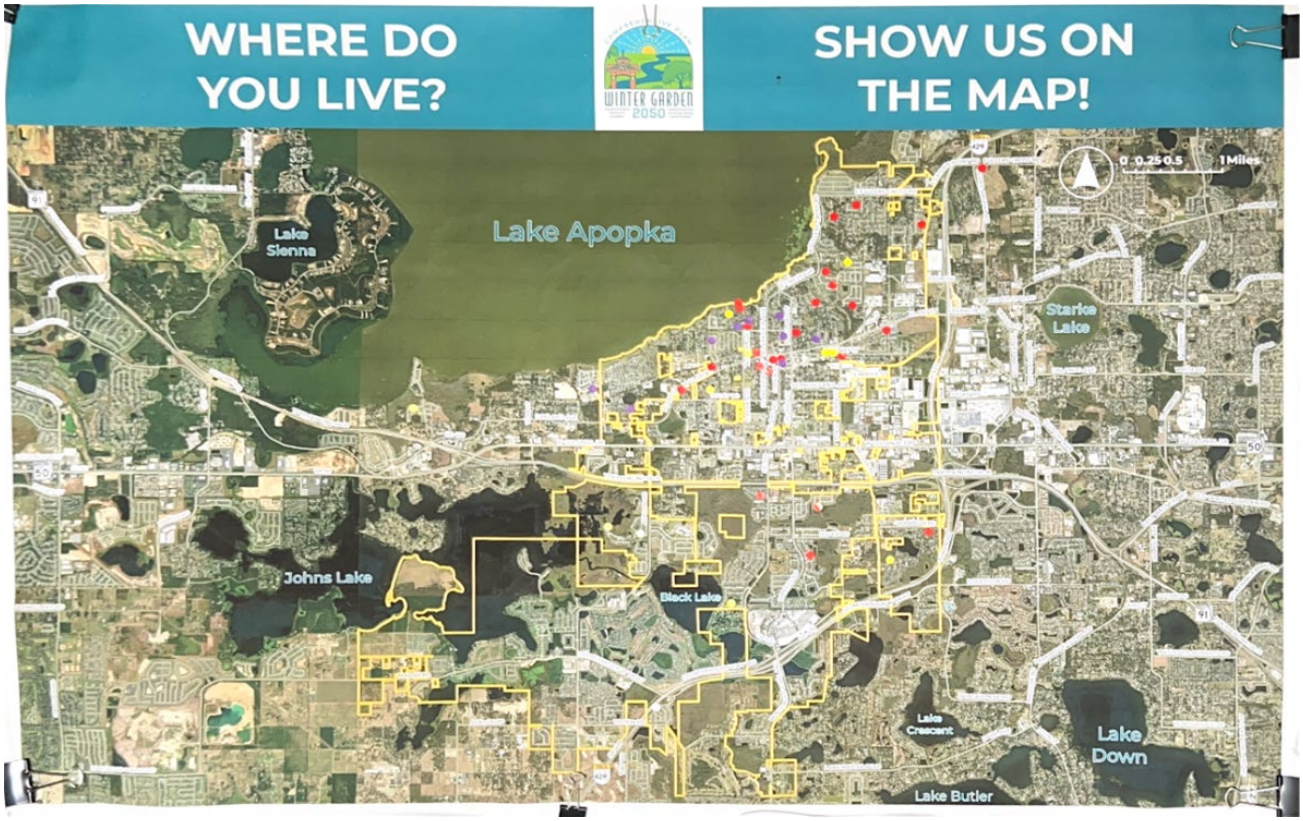
Workshop Activities

Attendees took part in a series of three activities aimed at identifying the community's vision for Winter Garden in the year 2050. A summary of each activity, along with the activities results are provided below.

Activity #1 Live Work Play Map

As attendees entered, they were asked to place a purple sticker on an area in Winter Garden where they live, work, or play. The activity built upon the previous two workshops with attendee responses from the previous two workshops also represented on the map in red and yellow. As the final iteration of the Live Work Play Map, the board shows areas of attendee prioritization from across the three workshops.

Figure 1: Activity 1 Results



Activity #2 Developing Vision Strategies

In this activity attendees were presented with boards representing four different vision categories each with a number of sample strategies for how the City can bring each vision to life. The vision categories were typical aspects of a comprehensive plan including Housing, Sense of Place, Transportation, and Infrastructure. Attendees were asked to create new strategies to meet each respective vision.

Table 1: Activity 2 Results – Housing

Strategy	
Streamline the process to approve accessory dwelling units	Sample Strategy
Encourage vertical mixed-use development	Sample Strategy
Incentivize the development of affordable housing opportunities for senior citizens	Sample Strategy
Require a mixture of housing types for large developments	Sample Strategy
Incentivize developers to designate a percentage of units in their development as affordable units	Sample Strategy
Create a program for volunteer opportunities for helping seniors maintain homes	Attendee Strategy
Community gardens in new developments	Attendee Strategy

Attendees created two additional strategies focused on improving housing up-keep for the aging population and community initiatives.

Table 2: Activity 2 Results – Sense of Place

Strategy	
Increase opportunities to learn about & promote historic resources/cultural programming (use schools)	Sample Strategy
Increase wayfinding signage throughout the City	Sample Strategy
Create a Dillard Street Overlay to promote a walkable mixed-use area	Sample Strategy
Implement design guidelines that encourage redevelopment and revitalization	Sample Strategy
Incentivize infill development	Sample Strategy
Expand events and programming as destination	Attendee Strategy
Embrace coast to coast trail	Attendee Strategy
Promote birding & Lake Apopka Loop/Oakland Preservation Ecotourism	Attendee Strategy
Consider multicultural events	Attendee Strategy
Add diversity of places for young families – not just eating & drinking	Attendee Strategy
Redevelop Lake Apopka Rec Facility & Trailer City	Attendee Strategy
Add trash receptacles	Attendee Strategy

Attendees created five additional strategies focused on capitalizing on existing community assets and marketing the city as a regional destination.

Table 3: Activity 2 Results – Transportation

Strategy	
Expand the multi-use trail system	Sample Strategy
Increase the amount of available parking in downtown	Sample Strategy
Expand the golf cart district	Sample Strategy
Improve bicycle and pedestrian safety around schools	Sample Strategy
Create a connection to Tucker Ranch with the trail system	Attendee Strategy
Prioritize areas for pedestrians (More infrastructure and safety concerns)	Attendee Strategy
Make Plant Street car free (test run on the weekends)	Attendee Strategy
Create a parking garage (another one) in Downtown	Attendee Strategy
Add additional transit services and micromobility alternatives	Attendee Strategy
Prevent loitering on the trails	Attendee Strategy
Increase pedestrian & Cycling safety and signalization	Attendee Strategy
Regulate the speed of e-bikes & scooters	Attendee Strategy

Attendees created eight additional strategies focused on pedestrian and cycling safety as well as non-automobile city connectivity.

Table 4: Activity 2 Results – Infrastructure

Strategy	
Apply best management practices for stormwater	Sample Strategy
Implement water conservation education programs	Sample Strategy
Incentivize the use of low impact development strategies	Sample Strategy
Increase public outreach for infrastructure projects	Sample Strategy
Incentivize native plantings	Attendee Strategy
Improve landscaping requirements	Attendee Strategy
Recycling	Attendee Strategy
Incentivize green building	Attendee Strategy
Composting & rain barrels	Attendee Strategy

Attendees created five additional strategies focused on increasing sustainable practices and green infrastructure opportunities for homeowners.

Activity #3 Visioning Initiatives Prioritization

Following strategy creation, attendees were given three stickers per vision category and asked to assign the stickers to their top strategies or number one strategy they felt should be prioritized during the update to the Winter Garden Comprehensive Plan. The results of this activity are summarized below in **Tables 5 - 8** and the original boards can be viewed in **Attachment C**.

Table 5: Activity 3 Results – Housing Prioritization

Strategy	Responses
Streamline the process to approve accessory dwelling units	4
Encourage vertical mixed-use development	5
Incentivize the development of affordable housing opportunities for senior citizens	4
Require a mixture of housing types for large developments	3
Incentivize developers to designate a percentage of units in their development as affordable units	4
Create a program for volunteer opportunities for helping seniors maintain homes	3
Community gardens in new developments	3

Table 6: Activity 3 Results – Sense of Place Prioritization

Strategy	Responses
Increase opportunities to learn about & promote historic resources/cultural programming (use schools)	1
Increase wayfinding signage throughout the City	0
Create a Dillard Street Overlay to promote a walkable mixed-use area	4
Implement design guidelines that encourage redevelopment and revitalization	2
Incentivize infill development	0
Expand events and programming as destination	1
Embrace the Coast to Coast Trail	4
Promote birding & Lake Apopka Loop/Oakland Preservation Ecotourism	3
Consider multicultural events	1
Add diversity of places for young families – not just eating & drinking	7
Redevelop Lake Apopka Rec Facility & Trailer City (Newton Park)	10
Add trash receptacles	0

Table 7: Activity 3 Results – Transportation Prioritization

Strategy	Responses
Expand the multi-use trail system	3
Increase the amount of available parking in downtown	1
Expand the golf cart district	2
Improve bicycle and pedestrian safety around schools	1
Create a connection to Tucker Ranch with the trail system	6
Prioritize areas for pedestrians (More infrastructure and safety concerns)	2
Make Plant Street car free (test run on the weekends)	5
Create a parking garage (another one) in Downtown	2
Add additional transit services and micromobility alternatives	1
Prevent loitering on the trails	0
Increase pedestrian & cycling safety and signalization	5
Regulate the speed of e-bikes & scooters	5

Table 8: Activity 3 Results – Infrastructure Prioritization

Strategy	Responses
Apply best management practices for stormwater	3
Implement water conservation education programs	1
Incentivize the use of low impact development strategies	2
Increase public outreach for infrastructure projects	1
Incentivize native plantings	6
Improve landscaping requirements	0
Recycling	2
Incentivize green building	5
Composting & rain barrels	8

Key Takeaways

The third workshop for Winter Garden's Comprehensive Plan Update allowed for ample engagement between the residents of Winter Garden and the project team. A diverse set of comments, concerns, ideas, and opportunities for the Comprehensive Plan Update were identified. The four themes below were consistently brought up during the workshop:

1. Preserve and create more diverse housing opportunities for the current and future residents of Winter Garden.
2. Prioritize safety along bike and pedestrian corridors and connectivity to environmental assets like Lake Apopka and Tucker Ranch.
3. Increase availability of City-led sustainability programs for homeowners.
4. Embrace Winter Garden as a destination for young families and nature lovers through targeted development and programming.

Attachments

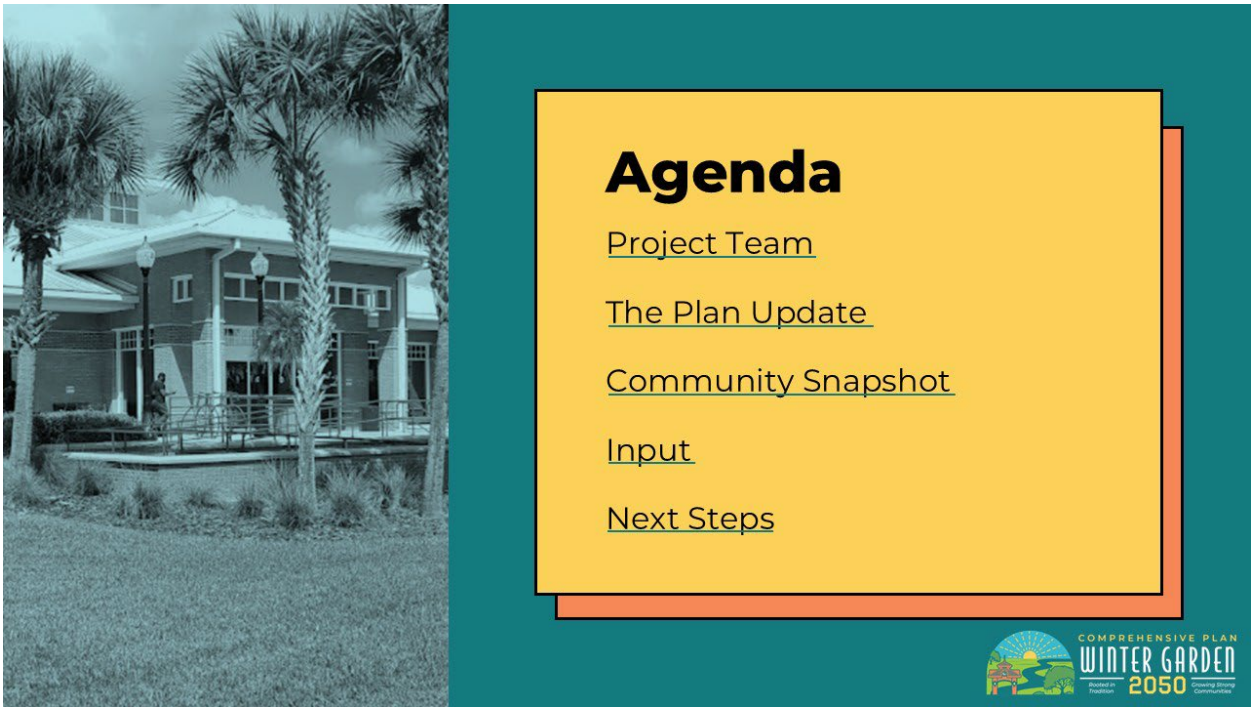
Attachment A: Live, Work, Play Map 11
Attachment B: Workshop #2 Presentation 12
Attachment C: Activity 1 Results 24

Attachment A: Live, Work, Play Map



Attachment B: Workshop #2 Presentation





Project Team

Kelly Carson
Planning Director

Shane Friedman
Planning Supervisor

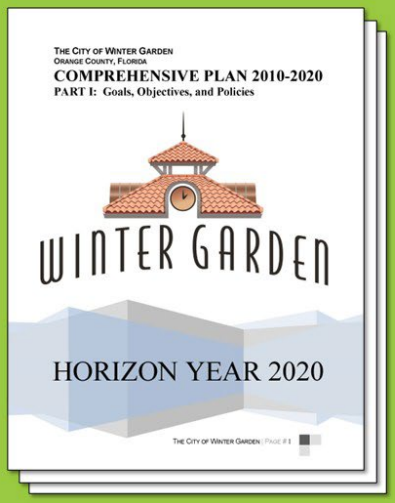
Eric Raasch, AICP
Project Manager

Chris Dougherty, AICP
Project Manager

Gabriela Castro, AICP
Planner

Haiden Lewis
Planner

The Plan Update



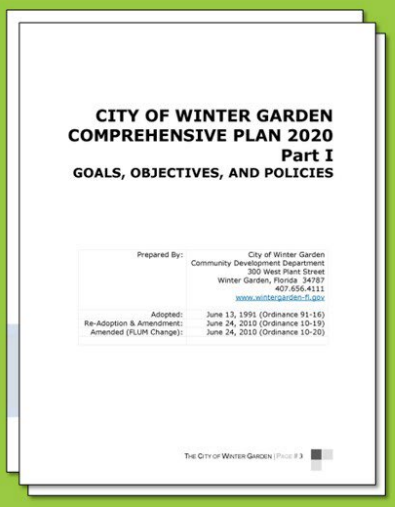
What is a Comprehensive Plan?

A document designed to guide the future actions of a jurisdiction. It presents a vision for a community's future through long range goals, objectives, and policies.

Why Update?

- Required by Florida Statutes
- Current Plan Horizon Year was 2020
- Update the community's vision
- Evaluate levels of service standards for public facilities
- Identify and address existing and future opportunities

The Plan Update



Plan Elements

1. Future Land Use
2. Multimodal Transportation
3. Housing
4. Public Facilities
5. Conservation
6. Recreation and Open Space
7. Intergovernmental Coordination
8. Capital Improvements
9. Public School Facilities
10. (NEW) Property Rights

The Plan Update



Visit the Website

inspire-engagement.com/winter-garden-comp-plan

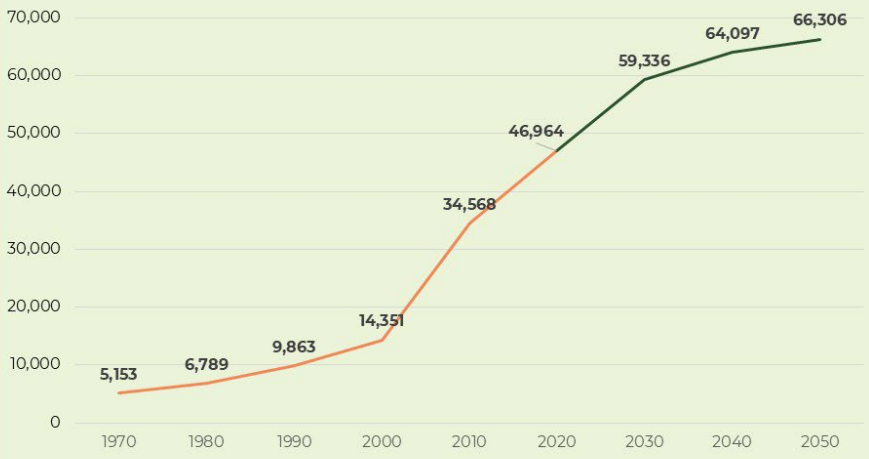
SCAN ME!

The Plan Update

January 2025	Kick-Off Meeting
January – March 2025	Initial Data Collection
March 25, 2025	Workshop #1
April 15 & 23, 2025	Stakeholder Interviews
April 26, 2025	Pop Up Event
April 30, 2025	Workshop #2
June 5, 2025	Workshop #3
March – June 2025	Update Data & Analysis
June – October 2025	Update Goals, Objectives & Policies
November 2025	Sharing Amendments
December 2025 – April 2026	Adoption Process

Community Snapshot

Population Growth



City is roughly

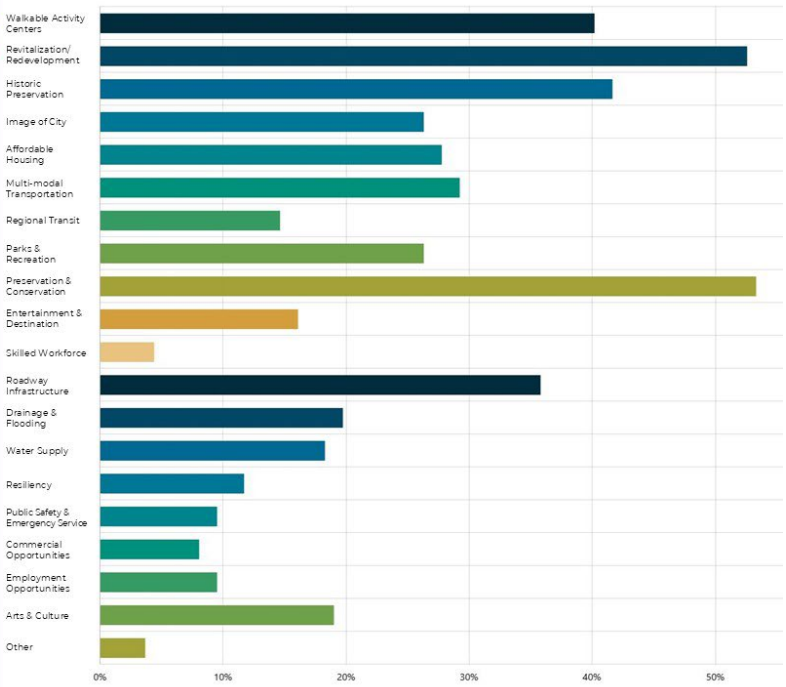
3.4%

of the County's population

26%

Expected Growth between 2023 & 2050

Which of the following initiatives should be prioritized by the City over the next 25 years?



Which of the following initiatives should be prioritized by the City over the next 25 years?

TOP FIVE RESPONSES

1. Preserve & conserve our natural environment and wildlife habitats
2. Focus on revitalization and redevelopment of older underutilized areas
3. Focus on historic preservation
4. Support the development of walkable activity centers where you can live, work, and play
5. Improve and expand roadway infrastructure

Community Snapshot

What do you think is special and unique about Winter Garden that you wish to see retained by the year 2050?



Community Snapshot

"What type(s) of housing do you think should be developed to accommodate Winter Garden's growing population?"

Participants could select as many options as they like.







Input from Workshop #1

LIKES

- Sense of community
- Local businesses
- Community events
- Trails



DISLIKES

- Traffic
- Unsafe roads and pedestrian crossings
- Threats to water resources
- Drainage issues

Input from Workshop #1

IMPROVEMENTS & IDEAS

- Expand and improve greenspaces, parks, recreational areas, nature preserves, and outdoor community gathering spaces.
- Enhance safety and security, including roadway safety.
- Improve infrastructure
  - Roadways – Improve traffic flow, lighting, and crosswalks.
  - Sidewalks – Address gaps in Downtown and in East Winter Garden.
  - Drainage – Improve drainage in East Winter Garden.
- Incorporate trails, bike lanes, green space and recreational amenities in new development.
- Greater housing variety, including affordable and senior housing.

Input from Interview Sessions

STRENGTHS

- **Place** - Community Events, Downtown, Low Density Residential, Parks/Trails, Walkability
- **Community** - Sense of Community, Community Character, High Quality of Life, Historic Charm, Family Oriented, Safe
- **Organization** - Strong Leadership, Aesthetics & Maintenance, Capital Improvements

WEAKNESSES

- Lack of **parking & public restrooms** in downtown
- Limited **housing diversity**
- **Traffic and congestion** at peak hours
- Lack of **traffic calming** particular along main thoroughfares
- Lack of **Transit** options in downtown
- **Unattractive gateways** into the City

Input from Interview Sessions

CHALLENGES

- **Additional revenue streams** to fund improvements
- Redevelopment causing **gentrification** and **pushing business /residents out**
- **Recycling**
- Attract more/nicer **grocers**
- Moving unsightly overhead **power lines underground**
- **Too popular** within the region

OPPORTUNITIES

- Enhance Walkability
- Increase Historic Preservation
- More Parking Options in Downtown
- Dillard Street & Complete Streets
- East Winter Garden
- Activating Lakefronts
- Parks & Trials
- Higher Residential Densities

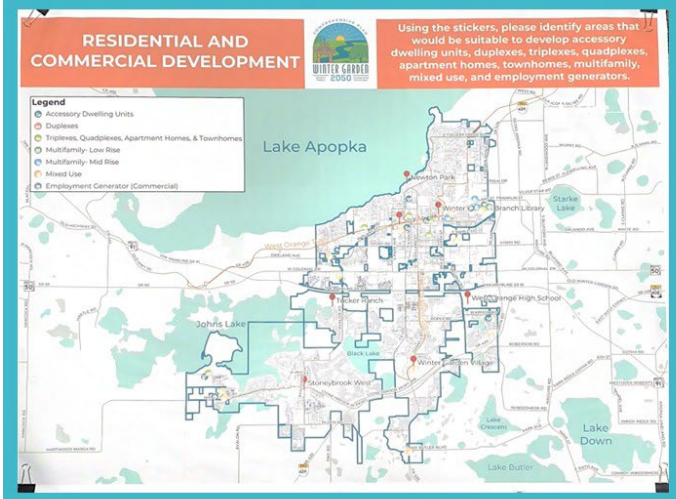
Input from Workshop #2

- Provide for multiple modes of transportation that are safe, comfortable, and reliable.
- Protect and enhance the small-town charm and family friendliness of Winter Garden.
- Infrastructure improvements needed around Lake Apopka
- Additional amenities wanted at existing park facilities
- Increased landscaping and tree canopy along streets and trails



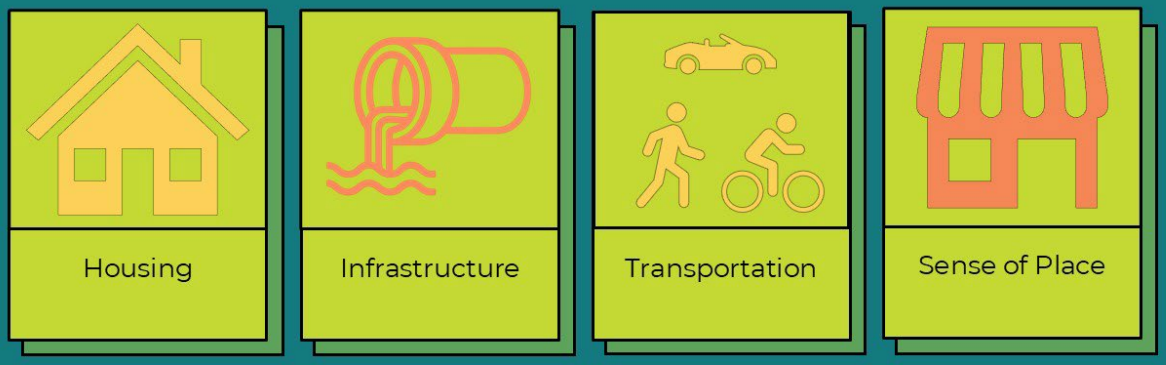


Input from Workshop #2



- Support for housing diversity throughout the city
  - ADUs within established neighborhoods
  - Mixed use throughout the city
  - Multi-family and townhomes on Plant Street and SW portion
- Employment generating uses on undeveloped property

Vision Categories



Today's Activity

Part 1. Develop Vision Strategies

Each of the **four vision categories** is displayed on a board and will be brought to your area.

Each group will write down strategies for how the City can bring each initiative to life.

To help get you started, we have included sample strategies. Add your own thoughts or build on these ideas.



Today's Activity

Part 2. Prioritize Vision Strategies

The strategy boards will be posted on easels.

Place **three dots** on the top strategies you feel are the most important for each topic.



Next Steps



SCAN ME!

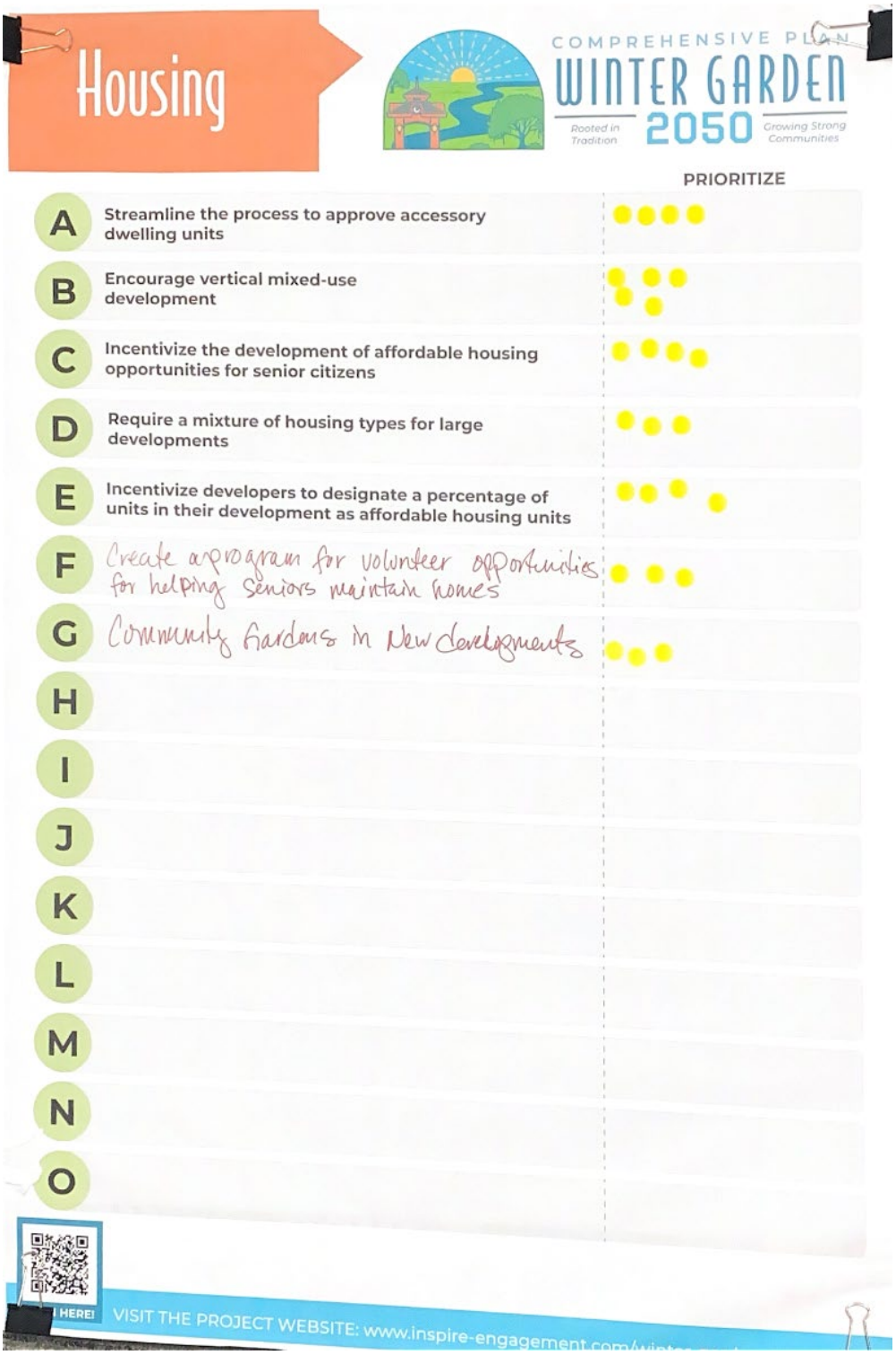
Visit the Website

inspire-engagement.com/winter-garden-comp-plan

Thank You!


COMPREHENSIVE PLAN
WINTER GARDEN
Rooted in Tradition
2050
Growing Strong Communities

Attachment C: Activity 3 Results




Sense of Place
MIXED-USE/REDEVELOPMENT/ HISTORIC STRUCTURES
COMPREHENSIVE PLAN
WINTER GARDEN
Rooted in Tradition
2050
Growing Strong Communities
PRIORITIZE
A Increase opportunities to learn about & promote historic resources/cultural programming (use schools)
B Increase wayfinding signage throughout the City
C Create a Dillard Street Overlay to promote a walkable mixed-use area
D Implement design guidelines that encourage redevelopment and revitalization
E Incentivize infill development
F Expand events and programming as destination
G Embrace coast to coast trail
H promote birding + Lake Apopka Loop / Oakland pres. ecotourism
I Consider multicultural events
J Add Diversity of places for young families - not just eating + drinking
K Redevelop Lake Apopka Rec Facility + Trailer City
L Add trash receptacles
M
N
O
VISIT THE PROJECT WEBSITE: www.inspire-engagement.com/winter-garden-comp-p

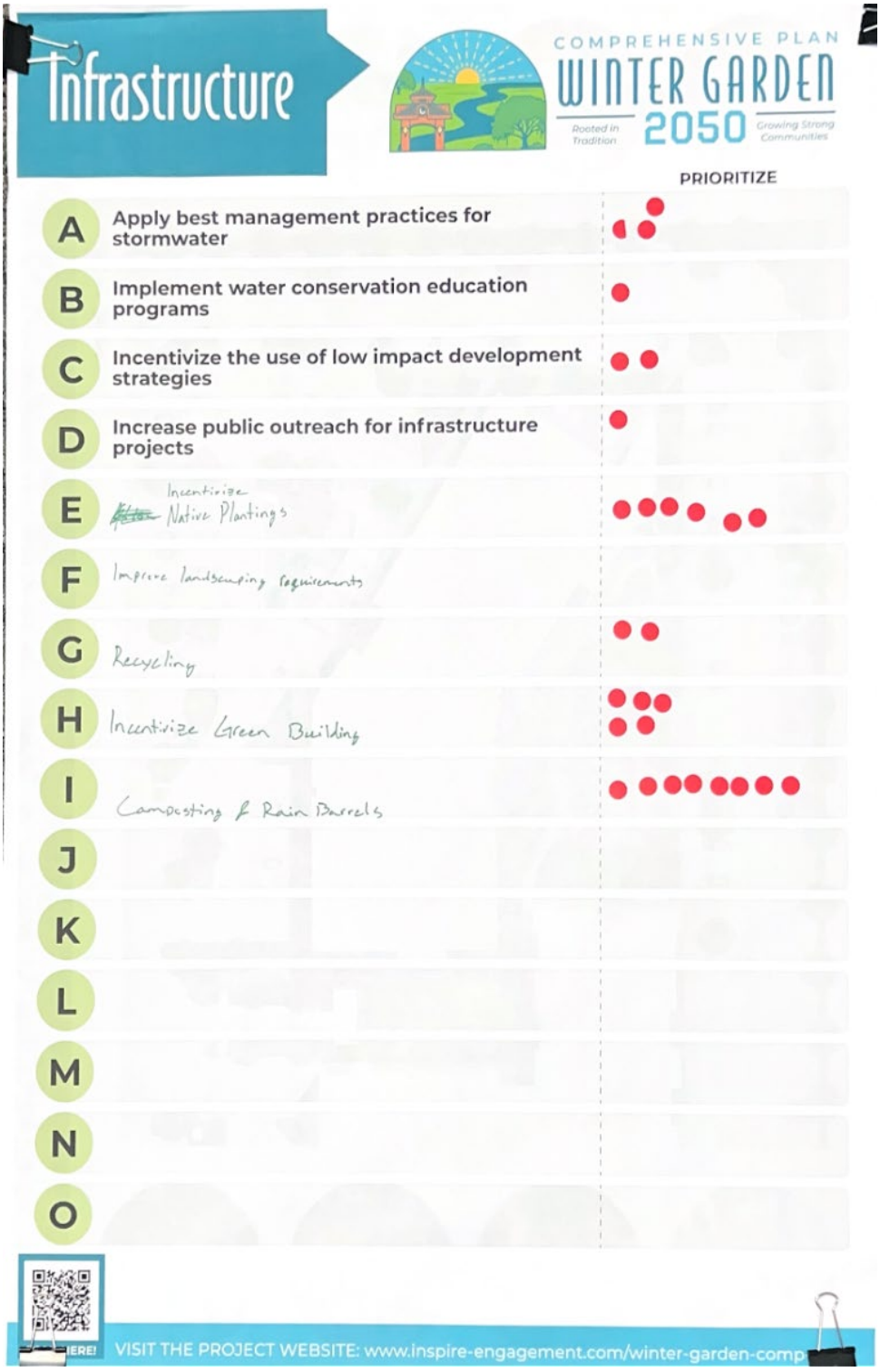
Transportation

COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition · Growing Strong Communities

		PRIORITIZE
A	Expand the multi-use trail system	●●●
B	Increase the amount of available parking in downtown	●
C	Expand the golf cart district	●●
D	Improve bicycle and pedestrian safety around schools	●
E	Create a connection to Tucker Ranch with the trail system	●●●●●●
F	Prioritize areas for pedestrians (More infrastructure and safety concerns)	●●
G	Make Plant Street car free (just runs on the weekends)	●●●●●
H	Create a parking garage (another one) in Downtown	●●
I	Add additional transit services and micromobility alternatives	●
J	Prevent loitering on the trails	
K	Increase pedestrian safety and signalization + cycling	●●●●
L	Regulate the speed of e-bikes + scooters	●●●●
M		
N		
O		

SCAN HERE!

VISIT THE PROJECT WEBSITE: www.inspire-engagement.com/winter-garden-comp-plan


Infrastructure
COMPREHENSIVE PLAN
WINTER GARDEN
2050
Rooted in Tradition
Growing Strong Communities
PRIORITIZE
A Apply best management practices for stormwater
B Implement water conservation education programs
C Incentivize the use of low impact development strategies
D Increase public outreach for infrastructure projects
E Incentivize Native Plantings
F Improve landscaping requirements
G Recycling
H Incentivize Green Building
I Composting & Rain Barrels
J
K
L
M
N
O
VISIT THE PROJECT WEBSITE: www.inspire-engagement.com/winter-garden-comp

DATE: May 2, 2025

TO: Kelly Carson, Planning Director

FROM: Inspire Placemaking Collective

RE: Interview Sessions Summary

Overview

The purpose of this memorandum is to provide a summary of the interview sessions conducted for the City of Winter Garden 2050 Comprehensive Plan Update. These interview sessions were separated into six separate meetings: five stakeholder meetings and one meeting with City of Winter Garden department directors.

Stakeholder Meetings

This section of the memorandum provides a summary of the Stakeholder Meetings. The first four meetings were held in person at City Hall (300 West Plant Street, Winter Garden, FL 34787) on April 15th and the fifth meeting was conducted virtually through Microsoft Teams on April 23rd. The stakeholder meetings were held to discuss issues and opportunities facing Winter Garden within the 2050 planning horizon of the Comprehensive Plan. The list of attendees at the five meetings is detailed in Appendix A.

Discussion

All the stakeholder meetings followed the same format, each being separated into two segments a presentation and a discussion. The presentation (Appendix B) provided a brief overview of the Comprehensive Plan update, a snapshot of the community, and community feedback collected thus far. The discussion was based on 10 questions focused on identifying issues and opportunities for Winter Garden within the 2050 planning horizon. These 10 questions and their results are summarized below and in Appendix A.

1. ***Quick Introductions: Name; organization; live or work in the City; your specific area of interest.***

   See Appendix A.

2. *What do you believe are the best aspects of living (or working) in Winter Garden? What do you feel are some of the worst?*

Best

- Sense of community
- Things to do outside, reserve board In place HOA
- Historic charm & quaint feel
- Landscaping & well maintained – no dead plants
- Walkability factor
- Parks, trails
- Restaurants
- Small village
- Lifestyle & quality of life
- WG setting a vision and building to it
- Plant St
- Community, small business
- Real sense of community
- Trails and lakes
- Downtown winter garden
- Shows well to visitors
- Americana at its best
- West orange trail, Newton Park, plant street
- Safety and walkability
- Family aspect
- Intergenerational entertainment and attraction, things to do
- Visitors feel welcomed within WG
- Destination
- Downtown owners are invested in the community
- Downtown merchants group has group mentality
- Looking out for each other
- Predominately local businesses in downtown
- Tree character- tree ordinance needs to be updated
- Tree fund for mitigation
- Diversity
- Maintaining community character
- Easy access / Location
- Walkability
- Sense of community – People are invested
- Passion for inclusion
- Character of the built commitment
- Small town feel
- Golf cart friendly
- Southern charm / northern brick
- Music in Downtown
- Farmers market
- Dog friendly
- Community events – around holidays
- Really good government officials
- Maintenance of Aesthetics
- Trail accessibility
- Community pocket parks
- Focus on low density to maintain the character
- City effort to maintain/preserve the Downtown area
- Historic preservation

- Culture and art
- Heritage Museum
- Partnerships the City has with non-profit organizations
- West Orange trail connection
- Transformation of the City since the 90's is remarkable
- Small town feel, preserve the character

Worst

- SW part of WG-elementary & high school no one walks
- Bike lanes needed in Roberson area
- No one uses Stoneybrook walkway
- Would love SW WG to look like downtown
- Windemere crossing/ Cambridge crossing
- Connect neighborhoods together
- Drainage problems, flooding
- Joiner St flooding
- State road 50 traffic increase over the next 3 years
- Influx of traffic in and out of Winter Garden
- Traffic patterns & traffic flow
- Lack of public restrooms
- Really bad parking in general
- Parking study has been done with very little results
- Parking requirements on proposed future projects is a challenge
- Proposed trolley as a parking solution
- Dillard St. Improvements
- Gateways to downtown need improvement
- Rail station Downtown WG
- Traffic – more connectivity
- Dillard St – traffic calming
- Speed limit inconsistency
- Frustration – Road Rage
- Affordable Housing – tap incentives
- ADU's
- Homeless regulation
- Big soccer facility
- Parking in plant street, downtown parking, parking during events
- Event shuttle needed
- Infrastructure within market street

Improvement Ideas

- Plant Street - High density where it's walkable
- Mixed use community
- Redevelopment & revitalization
- Urban walkability
- Elementary school age to walk or bike to school
- Resist the pressure to widen lanes and move traffic
- Improve connections to East WG (to the middle school)
- More mixed use
- Bike Walk Central FL & OC & Healthy West Orange working together to connect Doctor Phillips to WG
- WG has identified connection to SunTrail

- Prioritize trails that get kids to school safely
- Implement vision timely manner
- Waterside & twin waters by the lake, large drainage problem
- Need additional east-west corridor besides 50, marsh road
- Clermont
- Marsh roads & lake county area new 700 homes
- Light up roundabouts
- Plan for the pressure of Lake County build
- Reduce vehicles per house
- Oakland & Ocoee coordination
- Increase communication with lake County
- Not motorized transportation facilities need to be prioritized
- Walkway over SR 50
- SR 50 creates a boundary, need to connect the community
- Better traffic enforcement
- Increase tree canopy in trails -West Orange Trail
- Underground power lines
- West Orange Trail entrance onto Plant is congested consider a bypass
- Establishing a main gateway at Dillard St and SR 50
- Side street lighting near downtown
- Embracing the diversity
- Embracing parking with Downtown
- Make East Plant Street as economically viable as West Plant Street
- Continuity of Plant Street corridor
- Challenge of not gentrifying the area
- Lack of public restrooms- only Chapin Station, City Hall
- Recycling Extend to Composting
- Attracting Nicer quality grocery store
- Revitalize East Winter Garden
- Assess Impact around Tucker Ranch area
- Plant St has overlay, Dillard St overlay needed if not done yet (mid-town)

Other

- Lake Avalon area is losing look and feel
- City is acquiring Avalon Rd from OC
- JPA area- annex in enclaves areas okay

3. What do you feel are the biggest opportunities facing Winter Garden in the next 25 years? What opportunities should be addressed immediately?

- Newton Park- crown jewel in WG
    - Expediting improvements
    - Showcase for the City
- Re-activate Lake Apopka

- Educational opportunities at the Lake
- South side of the Lake has muck
- Access to Black Lake of Avalon – need public access
- Cycling – bikes sharing lane
- Velodrome – oval track for cyclists
- Bike bypass on Plant Street

Immediately

- Historic district transition at city limits (buffer)
- Resident design standards
- Lack of affordable housing, East of Dillard St – Higher density
- Traffic
- Sidewalk and trails – lack of connectivity

Next 25 years

- Young families moving to WG
- Employment center
- Technology Opportunities

4. What do you think are the biggest challenges facing Winter Garden in the next 25 years? What challenges should be addressed immediately?

- Opportunities for additional revenue streams
    - How to turn an expense into a revenue stream
    - TDT funding
    - Sales Tax for winter garden
    - Tourism surcharge
    - Golf cart fee
- Development on East Plant St.
- Cultural Opportunities – Museums
- Tucker Ranch – Large Wellness Park – West Orange Country Club
- Connection to the Lake
- Activate/Engage the Lake like Clermont
- Public Park along the Lake
- Rezoning to increase density – Mixed use
- Incentivize Architecture character with density

5. Based on needs, what capital expenditures should Winter Garden focus on in the next 5 to 10 years?

- Evaluate recycling
- City does recycle cardboard
- In the future, recycling may be specialized or significantly limited
- Multi-lane & sidewalks
- Drainage/ flooding
- Dillard Street improvement

- Marsh Fire Station under construction
- Improvement needs to go in front of the development
- Need Police substations in developing areas
- New School off of Williams Road
- AASHTO level of service for sidewalks and multi-modal pathways
- Side streets along downtown
- Dillard Street & SR 50 improvements
- Connection in West Orange Trail toward Ocoee & East Plant Street
- Street Lighting
- Pedestrian bridge over SR 50

6. *How do you feel about the City's current development pattern?*

- Like the West plant street development
- Neglected over at east plant street
- Soccer stadium site
- Biggest vacant commercial area within WG
- East Plant Street limit large box chains
- Maintaining small local businesses over corporate chains
- Affordable housing needs
- City needs to be proactive on development and getting info out to the public
- Golf cart community
- Expand golf cart district
- Coordination within the other cities & County
- More Pickleball courts , currently in veteran park
- Local community inclusive
- Faster permitting process
- Preserve the look and feel of the community
- Dillard St complete street improvements
- Automated Vehicle opportunity
- Small shuttle service
- Widening of sidewalk – fill in the gaps
- Keep OCPS from building a bus depot in East WG
- Wastewater treatment facility-capacity, AWS, buffer or cap
- Acquiring land for future parks
- Bring recycling back
- Avalon Road-improvement, turn lanes, extending some turn lanes

7. ***Do you feel that public facilities and services have kept pace with new development in the last 10 years? If not, where are the lack of facilities and services most prevalent?***

No discussion on this topic.

8. ***Do you feel that there is a sufficient amount of housing and housing variety within the City to satisfy residential demand? If not, where should the new housing be located and what kind?***

- More housing options
- Mixed Use areas
- Have design standards – particularly in the historic district
- Encourage ADUs
- Increase height limit
- Homeless situation -complaints and fear
- Traffic footprint
- Townhomes

9. ***What market/employment sectors do you feel are underdeveloped within the City?***

- Children museum- non-profit - East Plant Street corridor
- Linear park
- Tucker Ranch Park to open next year
- Avalon Rd -taken over by the City
- Farmers market expansion
- Night farmers market
- 42 mile trail around lake Apopka, connect to coast to coast trail
- Hotel on Dillard Street
- Boutique Hotel
- East Winter Garden area
- Grocery Store along east side
- Professional space along SR 50
- Offering a WeWork, WFH space
- Hotels

10. ***What engagement methods and tools should be incorporated as part of this effort to ensure that all voices within the City are heard? Any particular efforts to engage a younger demographic?***

No discussion on this topic.

Directors Meeting

This section of the memorandum provides a summary of the Directors Meeting for the Comprehensive Plan Update that occurred on April 9, 2025, at City Hall (300 West Plant Street, Winter Garden, FL 34787). The meeting was held to establish a line of communication with the directors of various City departments and the project team. The meeting also provided an opportunity to share City data and plans related to the Data & Analysis of the Comprehensive Plan. Table 1 provides a list of attendees, their department and their title.

Table 1: Directors Meeting Attendees

Department	Attendee	Title
City Manager	Jon Williams	City Manager
Community Development	Kelly Carson	Planning Director
Economic Development	Marc Hutchinson	Economic Development Director
Engineering	Jim Monahan	City Engineer
Fire and Rescue	Jose Gainza	Fire Chief
Fiscal Management	Laura Zielonka	Finance Director
Information Technology	David Livingston	Director of Information Technology
Parks and Recreation	Laura Coar	Parks and Recreation Director
Police	Steve Graham	Police Chief
Public Services	Steve Pash	Assistant City Manager
Planning Consultant	Eric Raasch	Project Manager
Planning Consultant	Haiden Lewis	Planner

Discussion

The meeting included a short presentation (Appendix C) that provided a brief overview of the Comprehensive Plan update, and a discussion based on five questions. These questions were focused on identifying resources or projects that are related to the data and analysis portion of the Comprehensive Plan. The five questions and the results of the discussion are summarized below.

1. ***Are there any current or potential issues that we should be aware of as we evaluate and update the comprehensive plan?***

- State Pre-emption on City's ability to regulate development
    - Identify specific guardrails to these pre-emptions
- The City is evaluating a wayfinding initiative
- Working on the Septic to Sewer conversion required by state statutes
- Surrounding area outside of Winter Garden use urban services provided by the City

2. ***Is your department currently, or are about to be, working on any planning initiatives? If so what is it and when will it be completed?***

- Renovating the wastewater treatment plan
- The Strates Project
- The Boyd Project a Planned Development with residential and institutional use
- Tucker Ranch recreational project
- Waterfront redevelopment along lake Apopka
    - Includes two parks
        - Newton and Bradford
- City is currently renewing their consumptive use permit
- Garden Theater
- Police and Fire Impact Fees were updated in 2015
- The City is currently drafting a downtown parking impact fee update
- Utility Impact Fee Update is currently taking place
- The City is coordinating with Orange County to take over County maintained roads in Winter Garden
- Lake Apopka Restoration Initiative
    - City supports but does not wish to fund

3. ***Which types of facilities are currently in short supply or potentially at risk of being in short supply as the city grows (e.g., educational, recreational, employment, medical, infrastructure)?***

- Recreational Facilities
    - Challenging to find sites
- Public Safety
    - Staffing and facilities
- Large community events are a major challenge for staffing
- There are two temporary fire stations that need to be moved to their permanent locations, but the funding is not present
- The schools element will need to be updated to reflect support services around schools
- Transportation Element could examine micromobility options like transit in the form of shuttles or golf carts

4. ***Are there specific people or groups that you think we should meet with as part of the update process?***

- Duke Energy is currently putting power lines underground
- OCPS
- Healthy West Orange
- Lake Apopka Gas
- Orange Couty Trails
- Ocoee
- SunTrail Loops

5. ***Are their upcoming City sponsored events that would provide a good opportunity to engage the public and inform them of the comprehensive plan update?***

- Spring Fever was last weekend
- Farmers Market

Key Findings

The Interview Sessions provided a vast array of information, comments, and concerns related to the City's development into the Comprehensive Plan's 2050 planning horizon. Three major themes were present across all six interview sessions and are detailed below.

- The City of Winter Garden should continue to enhance the City's small town feel and sense of community.

- The City of Winter Garden should continue to ensure adequate infrastructure and transportation services to serve the mobility needs of current and future residents and visitors.
- The City currently has many projects that are underway or being planned that will impact the future of the City and will be imperative to continue coordinating with various departments to ensure the Comprehensive Plan update is consistent with these initiatives.

APPENDIX

Appendix A: Stakeholder Meeting Attendees 13
Appendix B: Stakeholder Meeting Presentation 15
Appendix C: Directors Meeting Presentation 25

Appendix A: Stakeholder Meeting Attendees

Organization	Attendee
Meeting 0	
Property Owner	Charles Roper
Traditions HOA	Karie Clearwater
King's Bay HOA	Larry Blair
Windermere (Cambridge) Crossing HOA	Rose Carter
Comm. Member	Kelly Morphy
business owner	David Buvkles
business owner	Toni Sims Masiero
Waterside on John's Lake - Phase 1 HOA	Jack Hillson
Fuller's Landing HOA	Gregory Snow
Meeting 1	
SOBO WG Art Association	Elizabeth McKinney
Duke Energy	Lisa Curran
Friends of Lake Apopka	Joe Dunn
Business Owner	Joe Alarie
Business Owner	Abby Lancaster
Large Property Owner	Michael Van Den Abbeel
Business Owner	Denise Mead
Property Owner	Becky Roper
Meeting 2	
business community	Sharon Williams
Oxford Chase, (The Residences at) HOA	Emma King
Business owner	Lauren Sutton
advisory committee	Ryan Hinricher
Large Property Owner	Kari Fleck
Oakland Hills	Tom Lee
Comm. Member	Larry Cappleman
	Debra Ushkowitz
advisory committee	Phil Baker
Comm. Member	Don Wingate
Meeting 3	
Carriage Pointe	Lisa Kelley
Finding the Lost Sheep Ministries/ comm member	Sharee Hodge
heakthy west orange	Krista Carter

Organization	Attendee
advisory committee	Will Hawthorne
business owner	Jason Anderson
business owner	Mike Forrester
advisory committee member	Jeffry Ewing
advisory committee member	Jimmy Dunn
east winter garden planning team	Austin Arthur
Meeting 4 - Virtual	
Market to Table Roper Garden Building	
Building Owner	Brett Claflin
HOA President	Kodi Terry
P&Z Board and CF Expressway Authority	Will Hawthorne
Board of Brandy Lake	Karen Montgomery

Appendix B: Stakeholder Meeting Presentation





Project Team

Kelly Carson
Planning Director

Shane Friedman
Planning Supervisor

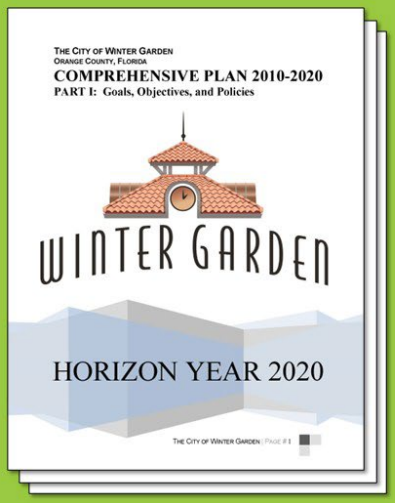
Eric Raasch, AICP
Project Manager

Chris Dougherty, AICP
Project Manager

Gabriela Castro, AICP
Planner

Haiden Lewis
Planner

The Plan Update



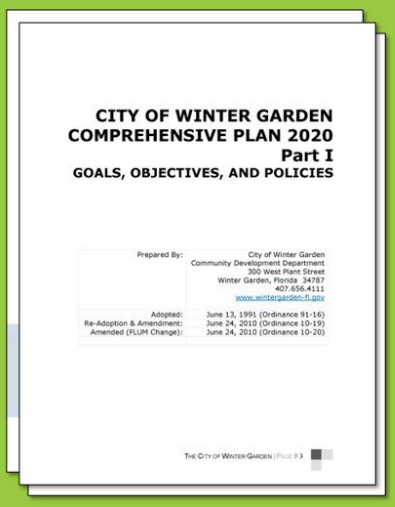
What is a Comprehensive Plan?

A document designed to guide the future actions of a jurisdiction. It presents a vision for a community's future through long range goals, objectives, and policies.

The Comprehensive Plan also serves to:

- Help residents identify their vision for the future of the community
- Coordinate local decision making
- Provide guidance to landowners and developers

The Plan Update



CITY OF WINTER GARDEN
COMPREHENSIVE PLAN 2020
Part I
GOALS, OBJECTIVES, AND POLICIES

Prepared By: City of Winter Garden
Community Development Department
300 West Plant Street
Winter Garden, Florida 34787
407.656.4111
www.wintergarden-fl.gov

Adopted: June 13, 1991 (Ordinance 91-16)
Re-Adoption & Amendment: June 24, 2010 (Ordinance 10-19)
Amended (FLUM Change): June 24, 2010 (Ordinance 10-20)

THE CITY OF WINTER GARDEN | PAGE # 1

Plan Elements

1. Future Land Use
2. Multimodal Transportation
3. Housing
4. Public Facilities
5. Conservation
6. Recreation and Open Space
7. Intergovernmental Coordination
8. Capital Improvements
9. Public School Facilities
10. (NEW) Property Rights

The Plan Update

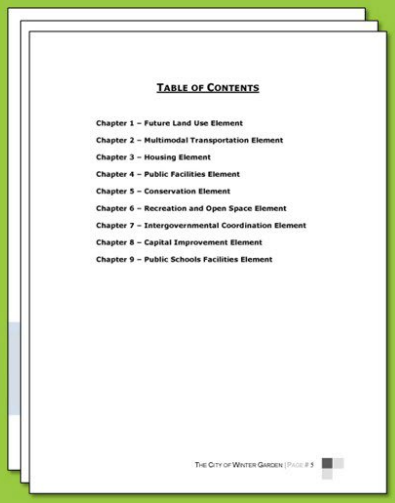


TABLE OF CONTENTS

Chapter 1 – Future Land Use Element
Chapter 2 – Multimodal Transportation Element
Chapter 3 – Housing Element
Chapter 4 – Public Facilities Element
Chapter 5 – Conservation Element
Chapter 6 – Recreation and Open Space Element
Chapter 7 – Intergovernmental Coordination Element
Chapter 8 – Capital Improvement Element
Chapter 9 – Public Schools Facilities Element

THE CITY OF WINTER GARDEN | PAGE # 5

Why Update?

- Required by Florida Statutes
- Current Plan Horizon Year was 2020
- Update the community's vision
- Plan rather than react to new development
- Re-evaluate current decision-making practices
- Evaluate levels of service standards for public facilities
- Identify and address existing and future opportunities

The Plan Update



Visit the Website

inspire-engagement.com/winter-garden-comp-plan

SCAN ME!

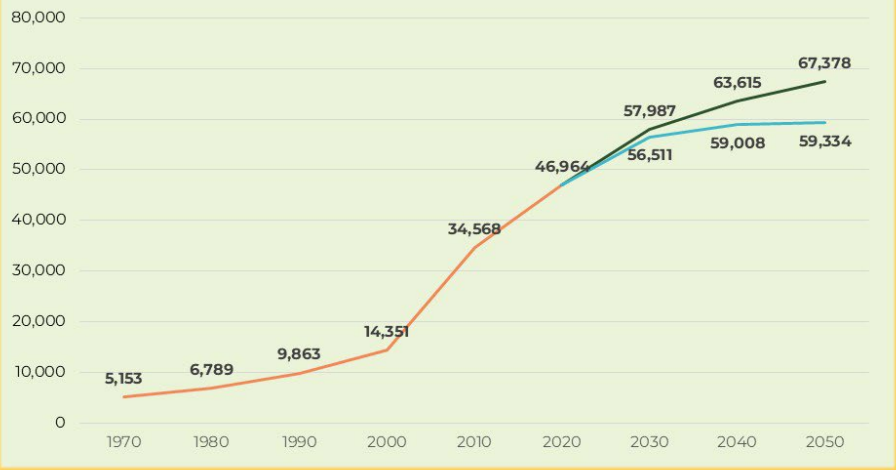
The Plan Update

January 2025	Kick-Off Meeting
January – March 2025	Initial Data Collection
March 25, 2025	Workshop #1
April 23, 2025	Stakeholder Interviews
April 26, 2025	Pop Up Event
April 30, 2025	Workshop #2
TBD May 2025*	Workshop #3
March – June 2025	Update Data & Analysis
June – October 2025	Update Goals, Objectives & Policies
November 2025	Sharing Amendments
December 2025 – April 2026	Adoption Process

*Dates Tentative

Community Snapshot

Population Growth



City is roughly

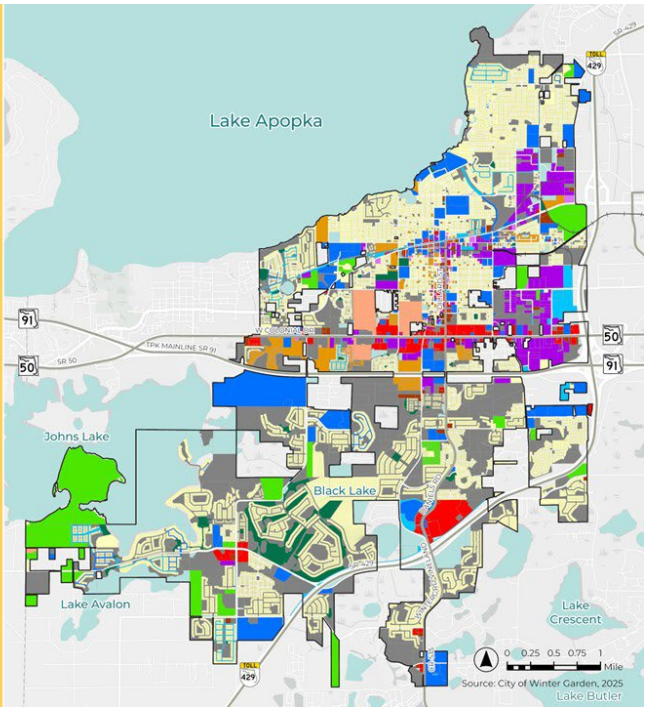
3.4%

of the County's population

26-44%

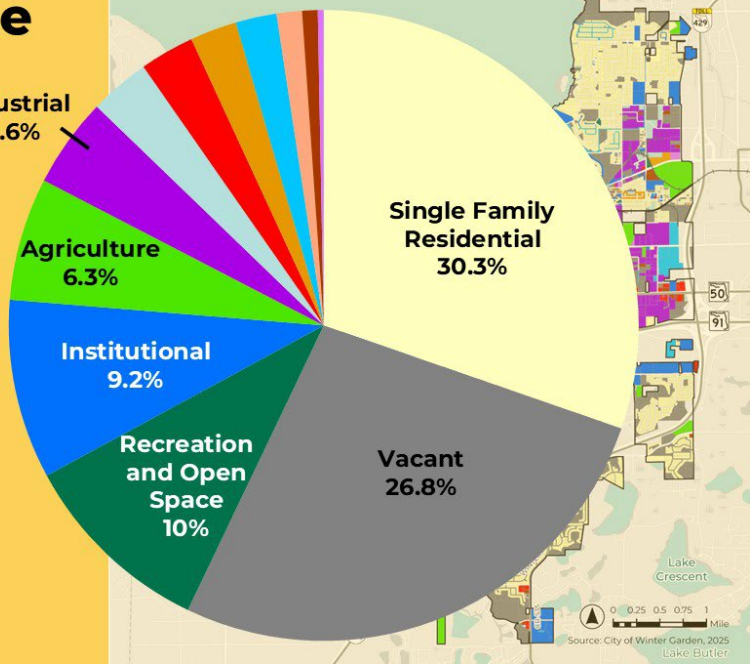
Expected Growth between 2023 & 2050

Existing Land Use

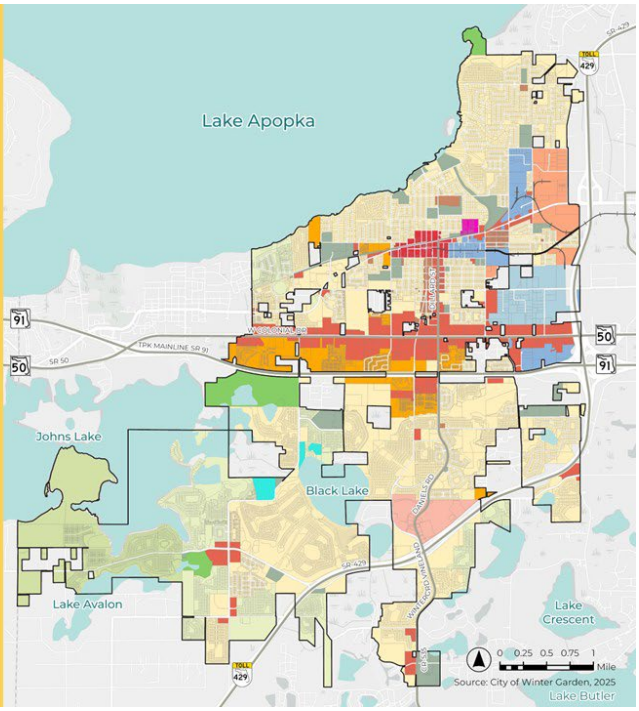


Existing Land Use

Existing Land Use	Percentage
Water	3.1%
Commercial	2.8%
Multi-Family Residential	2.4%
Infrastructure	2.1%
Manufactured Housing	1.3%
Office	0.8%
Mixed Use	0.3%

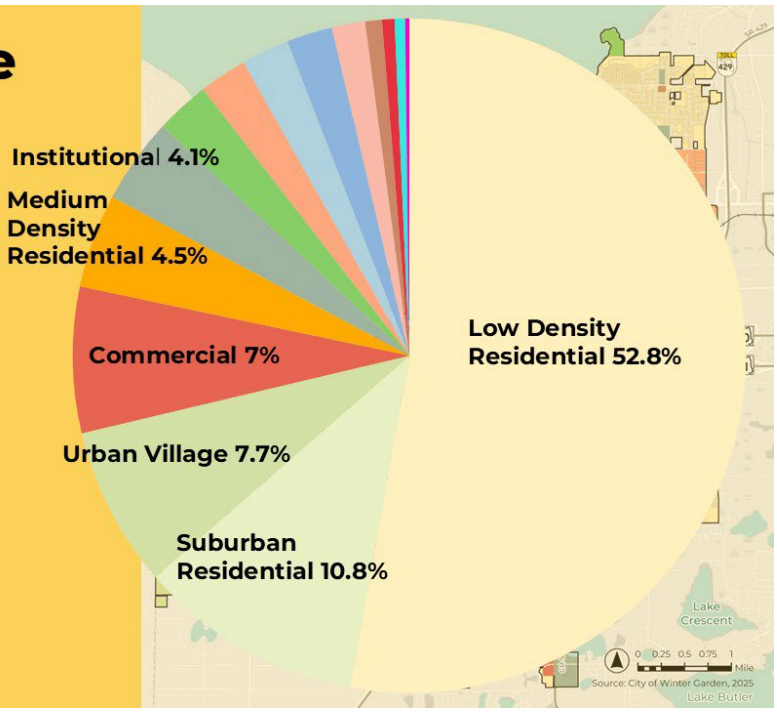


Future Land Use



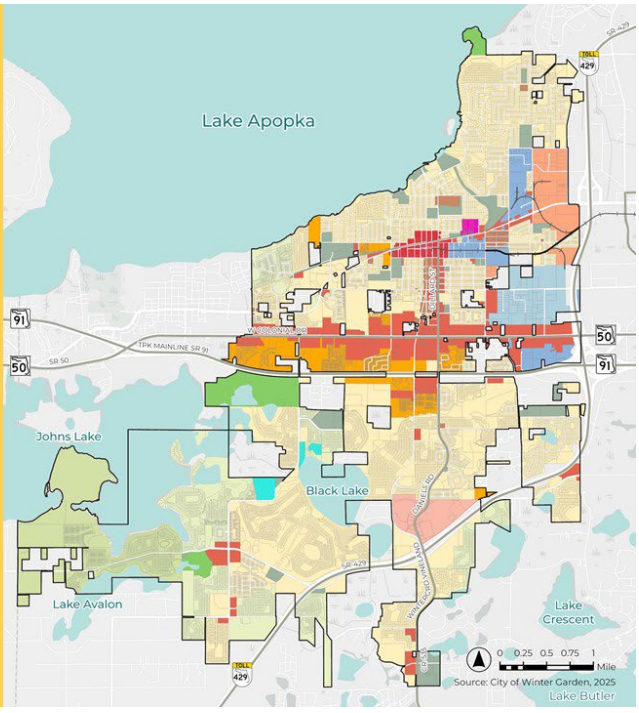
Future Land Use

Future Land Use	Percentage
Conservation	2.6%
Mixed Use Development	2.3%
Multi-Office Industrial	2.3%
Industrial	2.2%
South Beltway Center	1.6%
Neighborhood Commercial	0.8%
Traditional Downtown	0.6%
Orange County FLUM	0.5%
Downtown Transitional	0.2%

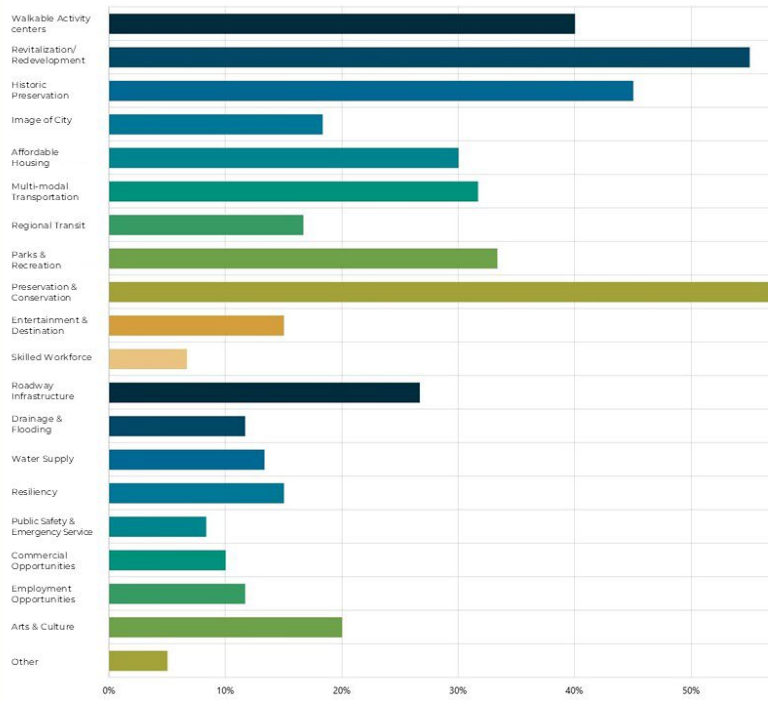


Future Land Use

- Residential Categories **63.6%**
- Mixed Residential and Non-Residential Categories **13.2%**
- Non-Residential Categories **15.6%**



Which of the following initiatives should be prioritized by the City over the next 25 years?



Which of the following initiatives should be prioritized by the City over the next 25 years?

TOP FIVE RESPONSES

1. Preserve & conserve our natural environment and wildlife habitats
2. Focus on revitalization and redevelopment of older underutilized areas
3. Focus on historic preservation
4. Support the development of walkable activity centers where you can live, work, and play
5. Expand our parks and rec options

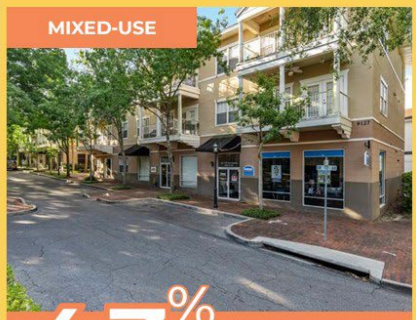
Community Snapshot

"What type(s) of housing do you think should be developed to accommodate Winter Garden's growing population?"

Participants could select as many options as they like.



83% OF PARTICIPANTS SELECTED THIS CHOICE



43% OF PARTICIPANTS SELECTED THIS CHOICE



37% OF PARTICIPANTS SELECTED THIS CHOICE

Input from Workshop #1

LIKES

- Sense of community
- Local businesses
- Community events
- Trails



DISLIKES

- Traffic
- Unsafe roads and pedestrian crossings
- Threats to water resources
- Drainage issues

Input from Workshop #1

IMPROVEMENTS & IDEAS

- Expand and improve greenspaces, parks, recreational areas, nature preserves, and outdoor community gathering spaces.
- Enhance safety and security, including roadway safety.
- Improve infrastructure
  - Roadways – Improve traffic flow, lighting, and crosswalks.
  - Sidewalks – Address gaps Downtown and in East Winter Garden.
  - Drainage – Improve drainage in East Winter Garden.
- Incorporate trails, bike lanes, green space and recreational amenities in new development.
- Greater housing variety, including affordable and senior housing.

Let's Discuss!



Appendix C: Directors Meeting Presentation





Project Team

Kelly Carson
Planning Director

Shane Friedman
Planning Supervisor

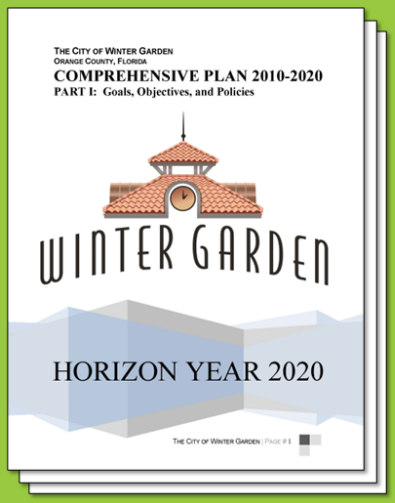
Eric Raasch, AICP
Project Manager

Chris Dougherty, AICP
Project Manager

Gabriela Castro, AICP
Planner

Haiden Lewis
Planner

The Plan Update



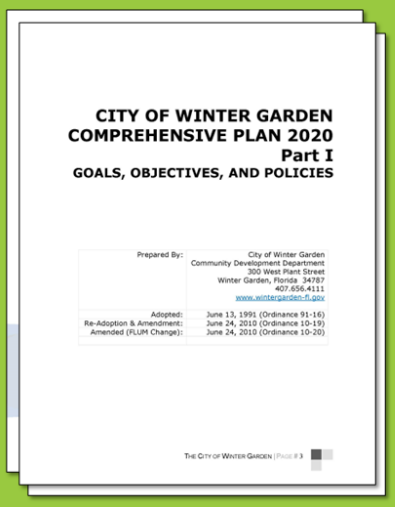
What is a Comprehensive Plan?

A document designed to guide the future actions of a jurisdiction. It presents a vision for a community's future through long range goals, objectives, and policies.

The Comprehensive Plan also serves to:

- Help residents identify their vision for the future of the community
- Coordinate local decision making
- Provide guidance to landowners and developers

The Plan Update



CITY OF WINTER GARDEN
COMPREHENSIVE PLAN 2020
Part I
GOALS, OBJECTIVES, AND POLICIES

Prepared By: City of Winter Garden
Community Development Department
300 West Plant Street
Winter Garden, Florida 34787
407.656.4111
www.wintergarden-fl.gov

Adopted: June 13, 1991 (Ordinance 91-16)
Re-Adoption & Amendment: June 24, 2010 (Ordinance 10-19)
Amended (FLUM Change): June 24, 2010 (Ordinance 10-20)

THE CITY OF WINTER GARDEN | PAGE # 1

Plan Elements

1. Future Land Use
2. Multimodal Transportation
3. Housing
4. Public Facilities
5. Conservation
6. Recreation and Open Space
7. Intergovernmental Coordination
8. Capital Improvements
9. Public School Facilities
10. (NEW) Property Rights

The Plan Update

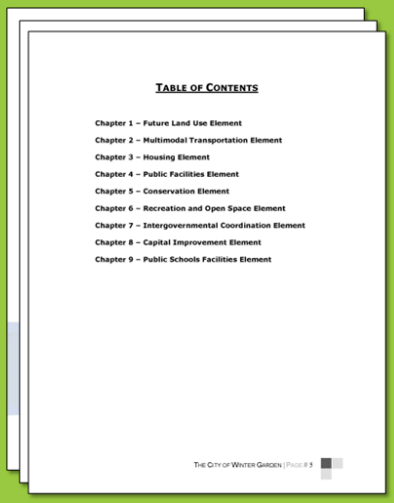


TABLE OF CONTENTS

Chapter 1 – Future Land Use Element
Chapter 2 – Multimodal Transportation Element
Chapter 3 – Housing Element
Chapter 4 – Public Facilities Element
Chapter 5 – Conservation Element
Chapter 6 – Recreation and Open Space Element
Chapter 7 – Intergovernmental Coordination Element
Chapter 8 – Capital Improvement Element
Chapter 9 – Public Schools Facilities Element

THE CITY OF WINTER GARDEN | PAGE # 5

Why Update?

- Required by Florida Statutes
- Current Plan Horizon Year was 2020
- Update the community's vision
- Plan rather than react to new development
- Re-evaluate current decision-making practices
- Evaluate levels of service standards for public facilities
- Identify and address existing and future opportunities

The Plan Update

January 2025	☑	Kick-Off Meeting
January – March 2025	☑	Initial Data Collection
March 25, 2025	☑	Workshop #1
Spring 2025	☐	Pop Up Event
April 15, 2025	☐	Stakeholder Interviews
April 29, 2025	☐	Workshop #2
TBD May 2025*	☐	Workshop #3
March – June 2025	☐	Update Data & Analysis
June – October 2025	☐	Update Goals, Objectives & Policies
November 2025	☐	Sharing Amendments
December 2025 – April 2026	☐	Adoption Process

*Dates Tentative

The Plan Update



Visit the Website

inspire-engagement.com/winter-garden-comp-plan

SCAN ME!

Input from Workshop #1

LIKES

- Sense of community
- Local businesses
- Community events
- Trails







DISLIKES

- Traffic
- Unsafe roads and pedestrian crossings
- Threats to water resources
- Drainage issues

Input from Workshop #1

IMPROVEMENTS & IDEAS

- Expand and improve greenspaces, parks, recreational areas, nature preserves, and outdoor community gathering spaces.
- Enhance safety and security including roadway safety.
- Improve infrastructure
  - Roadways – Improve traffic flow, lighting, and crosswalks.
  - Sidewalks – Address gaps in Downtown and in East Winter Garden.
  - Drainage – Improve drainage in East Winter Garden.
- Incorporate trails, bike lanes, green space and recreational amenities in new development.
- Greater housing variety, including affordable and senior housing.

Discussion

1. Are there any current or potential issues that we should be aware of as we evaluate and update the comprehensive plan?
2. Is your Department currently, or are about to be, working on any planning initiatives? If so...
   a. What is it?
   b. When will it be completed?
3. Which types of facilities are currently in short supply or potentially at risk of being in short supply as the city grows (e.g., educational, recreational, employment, medical, infrastructure)?

Discussion

4. Are there specific people or groups that you think we should meet with as part of the update process?
5. Are their upcoming City sponsored events that would provide a good opportunity to engage the public and inform them of the comprehensive plan update?


Thank you!
COMPREHENSIVE PLAN
WINTER GARDEN
Rooted in Tradition
2050
Growing Strong Communities

DATE: August 14, 2025

TO: Kelly Carson, Planning Director

FROM: Inspire Placemaking Collective, Inc.

RE: Website Summary

Website Survey Summary

Introduction

The purpose of this memorandum is to provide a summary of the responses to the Winter Garden 2050 Website Survey. On March 3, 2025 the Winter Garden 2050 website survey was launched. The survey gathered public input and the results highlight key areas of consideration for Winter Garden's future.

Respondents expressed a strong desire to preserve the community's identity and natural beauty. Community events like the Winter Garden Farmers Market and amenities like the West Orange Trail were frequently highlighted as cornerstones of the City. Additionally, participants emphasized the need for better sustainability practices, safer biking and walking infrastructure, traffic solutions, and redevelopment practices.

The following summary highlights key findings and trends from the online engagement portal, including the survey and mobility mapping, providing insights into community priorities and preferences for the future of Winter Garden.

Survey

The online survey provided valuable insights into the demographics, concerns, and preferences of Winter Garden residents as part of the ongoing 2050 Comprehensive Plan Update. Most survey respondents are long-term residents of the community and over the age of 45. Provided below are key takeaways from the survey. **Appendix A** provides the breakdown of the entire survey.

Total Contributions: 193

About the Contributions:

- 91.71% of respondents live within Winter Garden
- 71.50% attend special events within Winter Garden
- 49.74% have lived in Winter Garden for 10 or more years
- 46.63% are between the ages of 45 and 64 years old

What the Contributors Want:

HOUSING: Respondents think the following housing types should be developed to accommodate Winter Garden's growing population:

Single Family Homes (selected by 76.17% of respondents)

Mixed-Use Housing (selected by 39.38% of respondents)

Accessory Dwelling Units (selected by 38.86% of respondents)

PUBLIC FACILITIES AND SERVICES: Respondents expressed satisfaction with the public facilities and services in Winter Garden. Respondents expressed the following levels of satisfaction with public facilities and community services:

Least Satisfied: Respondents primarily expressed dissatisfaction with recycling and transit.

Most Satisfied: Over 50% of respondents expressed satisfaction with roadways, bike paths, Sidewalks, water, sewer, parks and recreation, drainage, garbage pickup, and public safety (Police & Fire).

FUTURE CITY INITIATIVES: Over 50% of respondents believe the City should prioritize the following initiatives over the next 25 years:

- Preserve/conserve our natural environment and wildlife habitats (52.85%)
- Focus on the revitalization and redevelopment of older, underutilized areas (50.78%)

TOP CONCERNS RELATED TO GROWTH: Over 50% of respondents shared the following concerns related to the growth of the City:

- Traffic congestion (89.58%)
- Infrastructure (roadways, utilities, etc.) (59.38%)
- Impact on the natural environment (52.60%)

MOBILITY ISSUES: Respondents expressed concerns with the following topics regarding mobility issues across the City:

Traffic Congestion: Respondents feel that an overreliance on cars combined with lack of road capacity has exacerbated traffic issues on major roadways, especially SR 50 and Avalon Road.

Lack of Public Transportation Options: Respondents stated that there are little to no transit options for people looking to travel within the City and connect to areas outside of Winter Garden.

Insufficient Pedestrian and Bike Infrastructure: Respondents stated that sidewalks and bike paths are inconsistent and insufficient across the City, leading to concerns about pedestrian and cyclist safety.

OTHER CONCERNS AND PRIORITIES: Respondents expressed concerns regarding the following topics:

Limit Overdevelopment: Respondents are concerned about overdevelopment impacting housing and traffic. They feel that the City should prioritize development that balances density with quality and style.

Preserve Small-Town Charm: Respondents want to prioritize maintaining Winter Garden's identity and community feel and would like more community-oriented development to support the existing identity.

Preserve Green Spaces and Environmental Sustainability: Respondents strongly support preserving and protecting existing green spaces, wetlands, and other natural areas. Respondents want to incorporate more sustainability practices and family-oriented recreation spaces to bolster existing preservation efforts.

Mapping Activity

Where Contributors have Mobility Issues:

Respondents mapped areas of mobility specific concerns across the City. Contributors were permitted to add as many locations of concern as they deemed necessary.

Driving Issues: Respondents identified traffic congestion and low speed limits as major driving issues in the City. Intersection design and lack of public parking in the downtown area were also highlighted in the responses.

Respondents identified Avalon Road and the intersection of Dillard Street and SR 50 as the top areas of driving-related concern.

Transit-Related Issues: Respondents identified the lack of transit options in the Downtown/Plant Street area as a top concern. Areas that do have bus service are seen as poorly marked and connected to local amenities.

Walking-Related Issues: Pedestrian safety due to lack of sidewalk or other points of conflict with cars was highlighted as a pedestrian issue.

Respondents identified Plant Street and the West Orange Trail as the top areas of walking-related concern.

Biking-Related Issues: Lack of bike paths and points of conflict between bikes and cars were highlighted as biking-related issues.

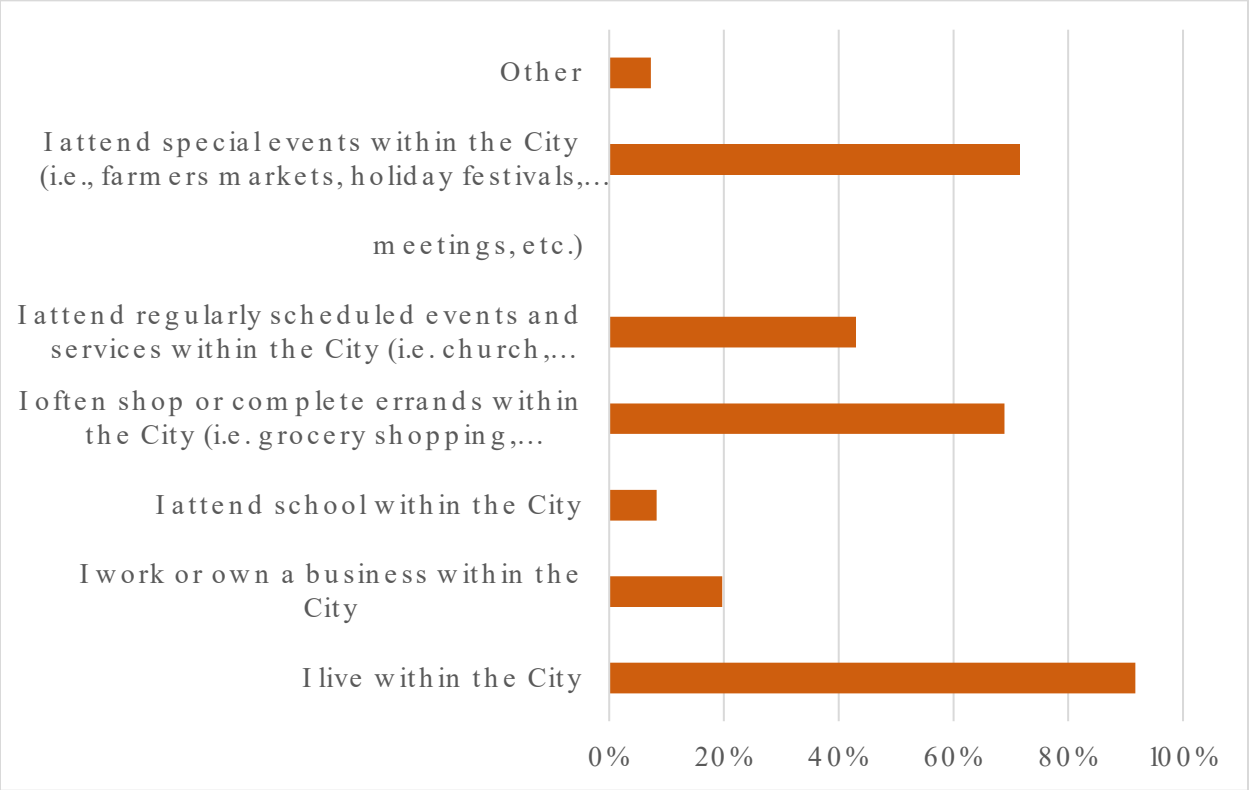
Respondents identified Plant Street, Avalon Road, and the West Orange Trail as the top areas of biking-related concern.

Appendix A: Survey Responses

Question 1: What is your ZIP Code?

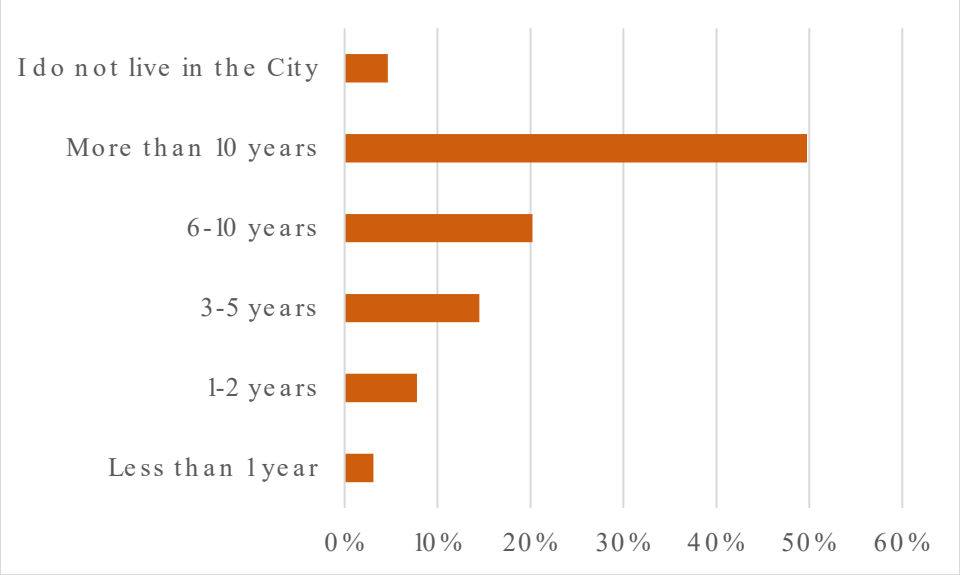
Zip Code	Number of Responses
32703	1
32789	1
32814	1
34760	1
34761	1
34786	1
34787	185
54313	1

Question 2: What is your relationship to the City of Winter Garden?



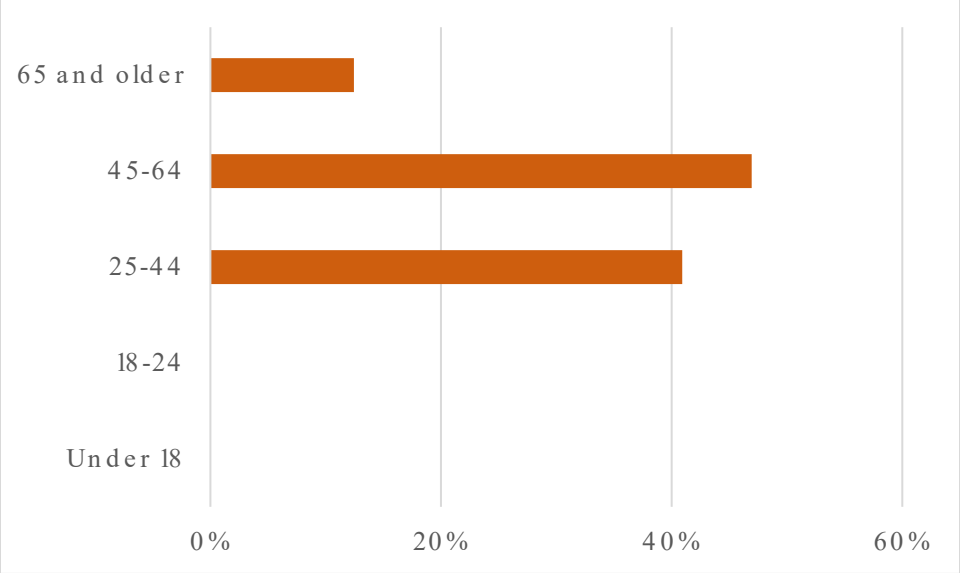
Answer choices	Percent	Count
I live within the City	91.71%	177
I work or own a business within the City	19.69%	38
I attend school within the City	8.29%	16
I often shop or complete errands within the City (i.e. grocery shopping, banking, etc.)	68.91%	133
I attend regularly scheduled events and services within the City (i.e. church, organizational meetings, etc.)	43.01%	83
I attend special events within the City (i.e., farmers markets, holiday festivals, etc.)	71.5%	138
Other	7.25%	14

Question 3: o ή x Ε ή P ſ Ẁ ∕ ф ļ ь ή Ь Ὲ ф ļ į Ỳ P ł Ỳ P Ф ̣ Ў g ℅ ̣ Ў į ļ P ̓



Answer choices	Percent	Count
Less than 1 year	3.11%	6
1-2 years	7.77%	15
3-5 years	14.51%	28
6-10 years	20.21%	39
More than 10 years	49.74%	96
I do not live in the City	4.66%	9

Question 4: ł Ẁ%ФŸЖьή Ь Ў%ď ļ ˆ



Answer choices	Percent	Count
Under 18	0%	0
18-24	0%	0
25-44	40.93%	79
45-64	46.93%	90
65 and older	12.44%	24

Question 5: In 50 characters or less, what do you think is special and unique about Winter Garden that you wish you see retained by the year 2050?

- I like the downtown area.
- Small town feel. No high rises or big box stores.
- Walkability; support for family owned business
- Downtown Winter Garden
- to travel without stupid low speed limits
- "A variety of shops & restaurants
- Small town feel"
- Small town charm with horse farms (about to lose).

- The hometown atmosphere, festivals parades, parks
- Walkable area, small/non-commercial feel.
- small town family friendly environment
- It's small town feel.
- Authentic charm, community feel and pride
- The historical small town charm
- location, location, location
- the trail, trees, events, theater, library, shops
- It’s history and heritage. SLOW DOWN GROWTH!
- Small town feel/Nice pedestrian downtown/bike trl
- Walkable DT, small businesses, charm, culture
- I loved the small town feel.
- the integrity of a “small” community/town
- Walkable downtown area. Has something for everyone
- Downtown, residential, golf cart driving
- Small town feel that is quickly disappearing
- green space, small town charm, improved traffic
- The downtown area and the small town feels
- Smaller size/ not over housed or two many people
- Small town feel
- The friendly small town feel in Downtown.
- great number of shaded areas & small businesses
- An amazing place to raise a family
- Small downtown with shops and restaurants
- small town feel with amenities and things to do
- Small town feel with character
- The small town charm - we do not need to get big.
- West orange trail downtown
- Downtown
- Walkable!
- Small town charm, foodie location

- Trees, charm, small town community feel
- Bike trail tree lined linking to other communities
- Our historical towncenter and community activities
- It has character
- unique family charm-Stars Hallow, farmers market
- Small town charm and vibrancy of LGBTQ accptance
- The downtown, parades,WG Theater, Farmers Mkt
- I can’t do anything justice in 50 chars. I’ve trie
- Building needs to stop! Born here can't enjoy
- Modern safe cops visible variety growing changing
- I wish there was more open space no overcrowding.
- Small streets, hardly any traffic, very calming.
- The lower residential property taxes.
- Our fabulous historic walkable downtown.
- Small town charm
- "Quaint downtown area
- No large chain businesses"
- Small town feel with neighbors helping each other.
- Keep the small town feeling. Less is more!
- Cozy downtown feel that isnt prone to high traffic
- East WG keeping historical building intact
- A sense of community, citizen participation
- Special events and walkability.
- A connected, vibrant Main Street. Bikeability.
- The small town feel. Early 20th century charm.
- Maintain streets, lights, festivals, etc.
- Downtown area. Preserving wetlands/conservation
- The people.
- Clean, small-town feel, beautiful
- Small town feel.
- Need to keep and maintain swamp land!
- Demographics

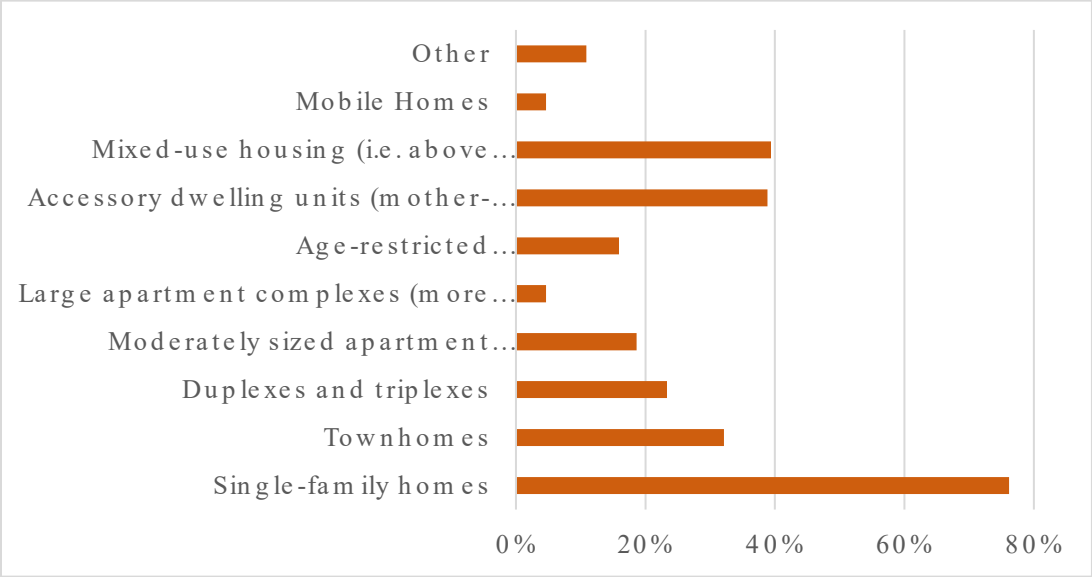
- Small town. Able to shop, work, socialize exercise
- Love the brick roads and old charm of downtown!
- Heritage of orange growers, small community feel
- I love the downtown nostalgic retro vibes.
- The charm of the downtown area without the crowds
- Small town vibe with appealing growth
- We liked the midsize feel
- Small shops but also big chain stores.Green space.
- Small town feel and lots of outdoor amenities
- Some of the natural habitats along the trail
- Tight knit community / Safe / Mayberry-ish
- The small town feel that is anchored by Plant St
- The eclectic atmosphere exists while growing
- It has a welcoming vibe and a small town charm.
- Love that DTWG is non-chain.
- Small town charm, convenience, family-friendly
- The small, hometown community. The green spaces.
- The beauty of the City.
- outdoor spaces, bike trails, quaint charm
- Downtown charm, golf cart district, park/playgroun
- I appreciate the new development around town
- Unique character and charm and history of WG.
- Lake Apopka and Newton Park, mature Oak trees,
- Historic downtown feel that preserves our roots
- I love the charm and character of Winter Garden.
- Small feel, intimate and safe.
- The quaintness of the downtown area.
- The small town feel.
- The small town feel, especially downtown.

- Small town feel with big town resources.
- Culture on Plant Street
- Great city
- A vibrant downtown commercial emphasis
- Farmers market, special events, dining,walkability
- Festivals and holiday celebrations
- Downtown should be kept as a walking area.
- Plant Street, West Orange Trail, Newton Park,trees
- small town feel, mom & pops alive and well.
- Blend of modern with classic charm and walkability
- It is quaint + clean w. garden caters to families
- Small town feel with big city amenities
- downtown, east side improvements, historic things
- Small town feel that is safe, diverse and clean
- Its aesthetic character and sense of community.
- The City is beautiful. I love the shops & rests.
- The downtown area and special events
- The mix of private and public realms in Downtown
- small town w/o chain stores and restaurants
- Small town atmosphere. Unique shops and dinning.
- The city is generally very well managed.
- I like the uniqueness of the downtown area.
- DT WG needs more dining & entertainment
- Farms, forest areas, downtown, historic buildings
- Downtown, Lake Apopka, Bike/run trail
- The small town charm.
- farmers market and associated downtown events.
- I love the focus on nature, community activities.
- The small town charm, the trees, and older homes

- Small/charming downtown, golf cart approved street
- Golf carts, enlarge and lower speed limits win win
- It feels like a community not a vacation place
- Downtown and the surrounding neighborhoods.
- The downtown area
- Charm, trees, small town feel, Old Homes, walkabil
- Quaint small-town with fun family-friendly places
- The small-town feeling
- The fun downtown activities
- Special and Unique: Nothing
- Small town feel, close to Orlando and Disney area.
- WG is family-friendly, and safe. Traditional.
- Small town feel with easy access to larger stuff
- Family oriented, not a tourist location.
- Small town feel; Inclusivity; Diversity; Safety.
- Rich in history, great community to live,
- The native floral and fawna, native animals.
- The family oriented culture and inclusion.
- Improve the quality of life for ALL residents.
- I love the upscale family friendly environment.
- Vibrant and prosperous downtown area.
- Retain and extend downtown walkability
- The charm of downtown. It's clean, vibrant & safe.
- Small town USA. close to attractions..cleanliness
- Its ease of life and beauty. Keep it simple.
- Small town charm, support small and local business
- Small town feel, would be nice if downtown is left
- The downtown area could be extended

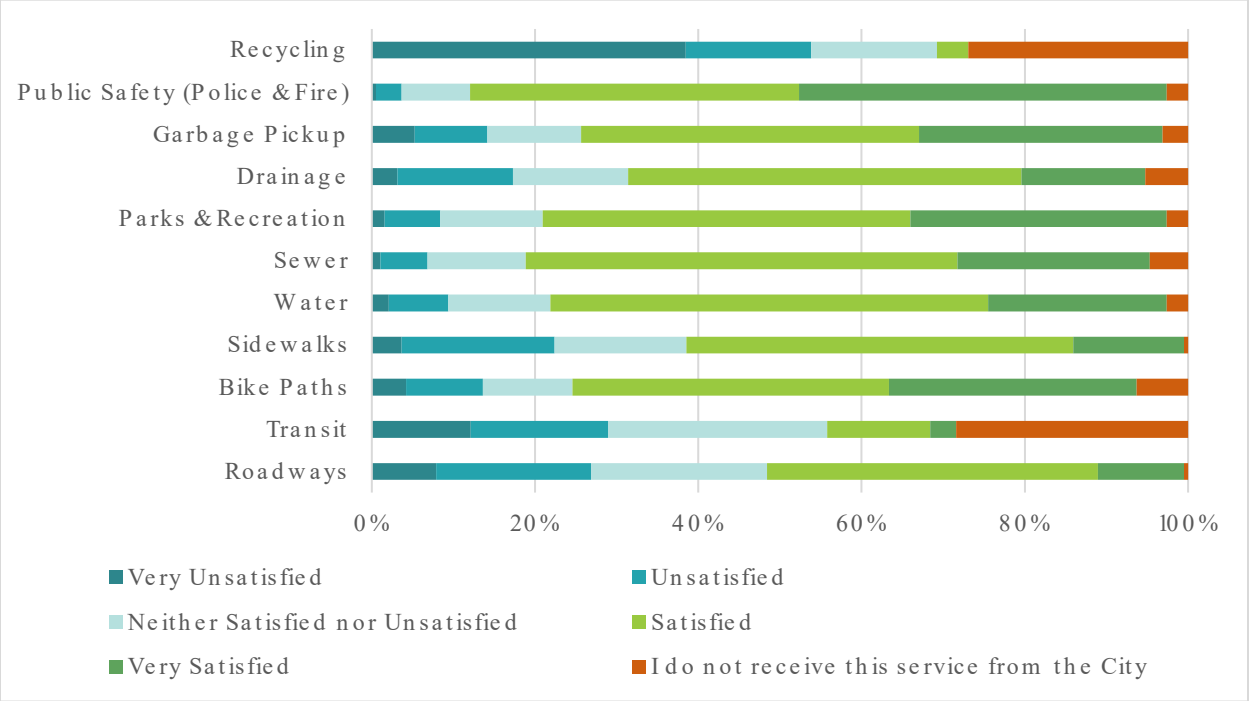
- The bike trail and vibrant downtown area
- having the small town feel while still a big city.
- Keeping a walkable downtown w/ a historic society
- Historic downtown and the West Orange trail.
- WG has a small town charm; hope it never loses
- A real community filled with people who care.
- Resisting overdevelopment, be smart, considerate
- Retain Downtown nostalgia and associated events.
- Great tightknight community feel
- The small town charm, the lush Florida green look.
- Historic architecture, brick streets, sidewalks
- The architecture and urban design choices
- Small town charm i.e. Plant Street & Plant Market
- The aspect of community. Stay Small & Manageable.
- Trail & Plant Street.

Question 6: What type(s) of housing do you think should be developed to accommodate Winter Garden's growing population?



Answer choices	Percent	Count
Single-family homes	76.17%	147
Townhomes	32.12%	62
Duplexes and triplexes	23.32%	45
Moderately sized apartment buildings (5-50 units)	18.65%	36
Large apartment complexes (more than 50 units	4.66%	9
Age-restricted communities/housing	15.91%	5
Accessory dwelling units (mother-in-law suites)	38.86%	75
Mixed-use housing (i.e. above retail/office spaces)	39.38%	76
Mobile Homes	4.66%	9
Other	10.88%	21

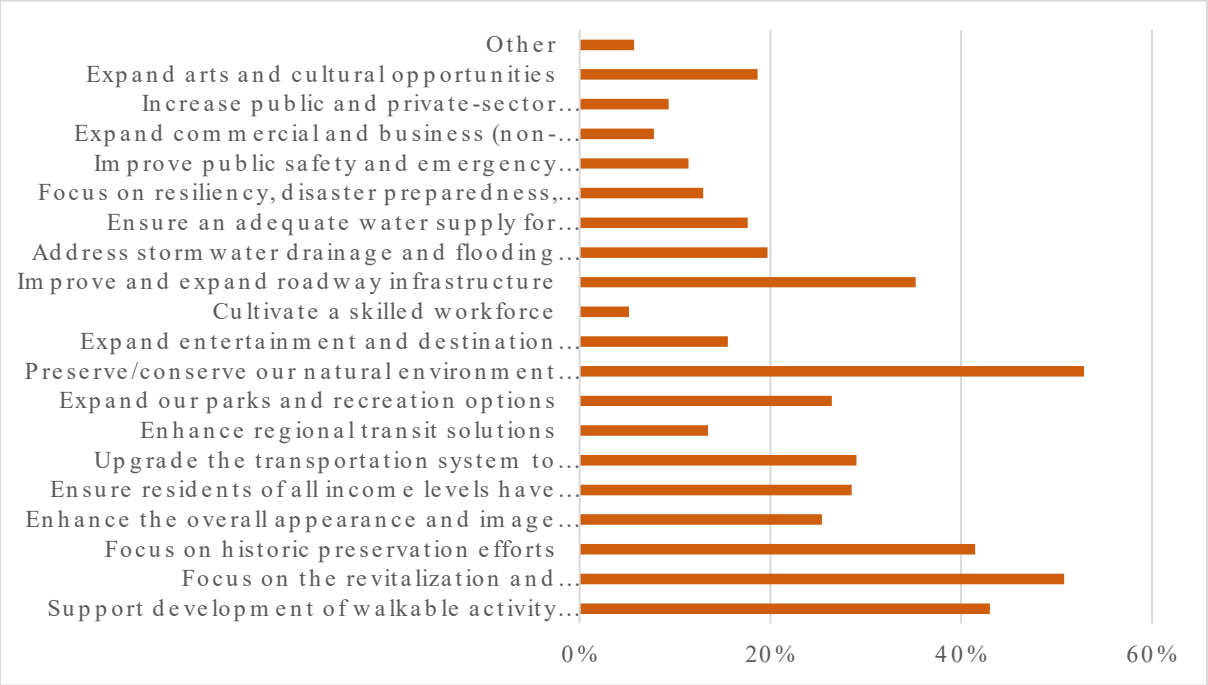
Question 7: How satisfied are you with the following public facilities and services?



	Very Unsatisfied	Unsatisfied	Neither Satisfied nor Unsatisfied	Satisfied	Very Satisfied	I do not receive this service from the City	Score
Roadways	7.89%	18.95%	21.58%	40.53%	10.53%	0.53%	3.28
Transit	12.11%	16.84%	26.84%	12.63%	3.16%	28.42%	3.63
Bike Paths	4.19%	9.42%	10.99%	38.74%	30.37%	6.28%	4.01
Sidewalks	3.65%	18.75%	16.15%	47.40%	13.54%	0.52%	3.50
Water	2.08%	7.29%	12.50%	53.65%	21.88%	2.60%	3.94
Sewer	1.05%	5.76%	12.04%	52.88%	23.56%	4.71%	4.06
Parks & Recreation	1.57%	6.81%	12.57%	45.03%	31.41%	2.62%	4.06
Drainage	3.14%	14.14%	14.14%	48.17%	15.18%	5.24%	3.74

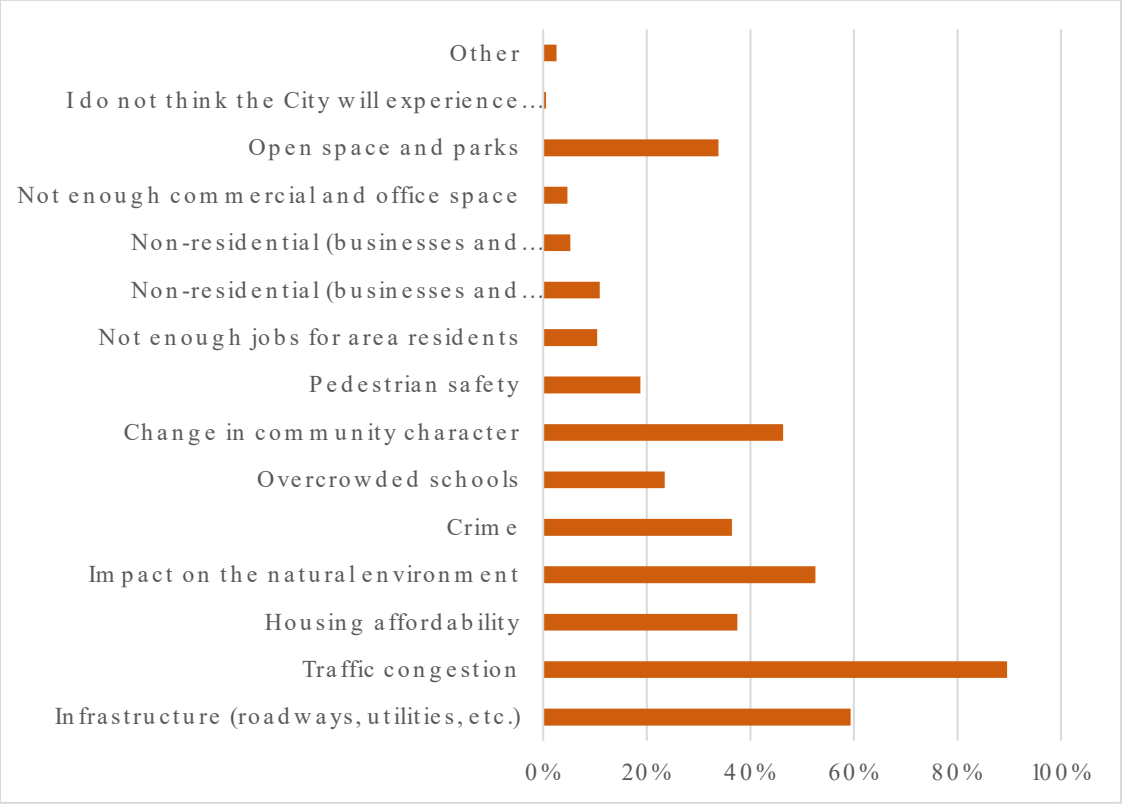
Garbage Pickup	5.24%	8.90%	11.52%	41.36%	29.84%	3.14%	3.91
Public Safety (Police & Fire)	0.52%	3.14%	8.38%	40.31%	45.03%	2.62%	4.34
Recycling	38.46%	15.38%	15.38%	3.85%	0%	26.92%	2.92

Question 8: Which of the following initiatives should be prioritized by the City over the next 25 years?



Answer choices	Percent	Count
Support development of walkable activity centers where you can live, work, and play	43.01%	83
Focus on the revitalization and redevelopment of older, underutilized areas	50.78%	98
Focus on historic preservation efforts	41.45%	80
Enhance the overall appearance and image of the City	25.39%	49
Ensure residents of all income levels have safe and affordable housing options	28.50%	55
Upgrade the transportation system to better accommodate walking and biking	29.02%	56
Enhance regional transit solutions	13.47%	226
Expand our parks and recreation options	26.42%	51
Preserve/conserve our natural environment and wildlife habitats	52.85%	102
Expand entertainment and destination options	15.54%	30
Cultivate a skilled workforce	5.18%	10
Improve and expand roadway infrastructure	35.23%	68
Address stormwater drainage and flooding concerns	19.69%	38
Ensure an adequate water supply for existing and future residents	17.62%	34
Focus on resiliency, disaster preparedness, and recovery	12.95%	25
Improve public safety and emergency service responses	11.40%	22
Expand commercial and business (non-residential) opportunities	7.77%	15
Increase public and private-sector employment opportunities	9.33%	18
Expand arts and cultural opportunities	18.65%	36
Other	5.70%	11

Question 9: What are the top concerns you have related to future growth potentially affecting the City?



Answer choices	Percent	Count
Infrastructure (roadways, utilities, etc.)	59.38%	114
Traffic congestion	89.58%	172
Housing affordability	37.50%	72
Impact on the natural environment	52.60%	101
Crime	36.46%	70
Overcrowded schools	23.44%	45
Change in community character	46.35%	89
Pedestrian safety	18.75%	36
Not enough jobs for area residents	10.42%	20
Non-residential (businesses and services) uses located too close to residential	10.94%	21
Non-residential (businesses and services) uses located too far from residential	5.21%	10
Not enough commercial and office space	4.69%	9
Open space and parks	33.85%	65
I do not think the City will experience any of these issues	0.52%	1
Other	2.60%	5

Question 10: Mobility is the efficient, safe, and equitable movement of people and goods within the City using diverse transportation modes, emphasizing accessibility, connectivity, and convenience across roadways, transit, rail, sidewalks, and bike paths. What are the greatest Mobility Issues in the City?

- I never see public transportation where I live.
- Difficulty getting to public transportation.
- No crosswalk access to busy library
- Safety of pedestrians in downtown WG from bikers
- No. Most people drive. Make it better for them.
- None
- Overdeveloped WG, hence traffic jam in everywhere.
- not enough sidewalks
- Pedestrian access / public transit to MCO
- Dillard Street.
- No cars on Plant St. on Saturdays

- need rules for motorized bikes + local public bus
- Traffic is horrific due to overcrowding
- Traffic and safety on 50.
- Sidewalks are an issue. missing or poor condition
- Driving. Too much traffic
- Pedestrian and bike, scooter traffic
- Drivers being respectful of the many cyclists
- Too much traffic on backroads
- Congestion is a major problem.
- Congestion during rush hour on the 429 & turnpike
- Too many cars. Need other options e-bike paths
- More sidewalks in the daniels/50 area
- One lane roads no longer work. Takes forever
- Traffic congestion, especially in pinch spots
- My subdivision needs the sidewalk finished.
- lol what accessibility?
- Traffic
- Too many cars not walkable
- Limited types of transportation as grows more cars
- No sunrail!
- inconsistent bikepaths and sidewalks
- Sewer issues that cause flooding in roadways
- No car = can't easily get around
- Transporation to stores from outlying areas
- Local golf cart travel inaccessible to Tuscany.
- The traffic on the roadways is bad
- We need more traffic routes Less lights more lanes
- Increased traffic; too much on street parking
- Bikes and getting hit by one.
- the congestion on Colonial drive and Avalon Rd.
- 1) Rural road congestion 2) Unsafe electric bikes.
- crossing busy streets. dillard needs to be redone
- Major roadways are currently too congested!
- road congestion due to too much growth / developm.
- Please connect East WG to DT WG for golf carts use
- Connecting all communities

- Motorist “entitlement” jeopardizing pedestrians
- Dangerous speeds of ebikes/escooters
- Unsafe for walking or biking. Also Need transit.
- Pedestrian, bike safety. Rail access to MCO & ORL.
- Sidewalks need repair to be handicap friendly.
- Traffic not constant bike lanes or sidewalks
- Traffic and non-contiguous bike paths.
- Not very bike friendly
- Not enough close by handicapped parking ie walker
- Not enough roads to accommodate the # of people
- People Speeding in residential areas.
- The constant back up of Avalon from 50 southward
- Traffic. It’s so congested. 1 mi=15 min by car
- Not enough bike paths and sidewalks
- Enforce existing traffic and pedestrian laws
- Congestion on Avalon and Colonial is awful
- Too many NEW res/comm. places, too many cars.
- Public transportation
- Congestion. Population outweighs construction
- Avalon road
- Too many cars and not enough walking/biking option
- Not enough roadway for continued house development
- Stop signs needed at bike crossing path on Hennis.
- Avalon Road - Round about needed John's Lake Point
- Crowding on 50
- Rapid development without adequate infrastructure
- None
- Avalon Rd needs widening, and a lower speed limit
- Trafffic. Decreased flow on Avalon 20+ min to 50
- sidewalks
- Lack of decent sidewalks and no bike paths
- Bikers on the main roads cause traffic issues.
- Lack of a sidewalks on Avalon rd and traffic
- Over population

- Crowded streets and highways
- Traffic congestion
- We don't have rail. I've never used the bus
- The traffic on north Avalon is terrible
- only one trail, gets over crowed, addmore options.
- Mobility in WG is sufficient
- I don’t ever see public transportation options
- Park needs improvement
- all traffic is driven to SR50. need secondary rds
- safety...bike paths and sidewalks
- Crossing 50-Need walkway over 50
- Lack of train, bus to locations in and out of city
- Traffic
- Too much traffic
- Traffic congestion due to housing increases
- Diff to exit from stone creek. Need traffic light.
- Traffic
- Lower income areas not having good mobility
- downtown area is dangerous to pedestrians/bikers
- Side street sidewalks
- Parking
- Rail option to downtown ORL and the airport =great
- Roadways do not support population size
- add bike lanes to Avalon & add more roundabouts
- Not enough bike lanes.
- Traffic
- Large highways and huge parking lots limiting walk
- Not enough sidewalks, and aging road ways
- Congestion due to volume
- Downtown bike path hazardous for peds vs bikers
- HWY 50 is over-crowded. Western Way is jam-packed
- Crowded roads and rude bikers.
- Traffic
- No public transportation, trucks that are too big
- More sidewalks with better connectivity
- None
- Do not really see many issues
- speed bumps
- Traffic congestion in residential area is an issue

- No comments
- Roads being able to handle the traffic. Expanding
- transit the bus do not run on sundays
- we need more multi-use trails
- Traffic congestion in main throughways
- City buses in the residential areas
- inadequate public transit, bike routes, sidewalks
- Parking is a major issue at hand.
- Public transportation
- More sidewalks and streets that allow golf carts
- Traffic congestion and lack of non car options
- Handicapped accessibility
- Need More sidewalks
- Lack of public transport options and roundabouts
- Need to add lanes and roads to improve efficiency
- Congestion. Need less cars on the road
- Satisfied with mobility in Winter Garden
- population density, traffic
- area attractions traffic flow congestion, parking.
- There is next to no public transportation
- Lack of stop lights or roundabouts in Horizon West
- Pedestrian safety along hwy 50. ORL commute times.
- Congestion on Colonial
- Highspeed roads instead of pedestrian-friendly
- Need more walkability around Dillard
- A lack of sidewalks in many areas
- Lack options taking residents to area outside city
- Everything is so car reliant
- sidewalk bike paths don't interconnect
- Public transit connectivity
- Outside Plant Street, there are no good sidewalks
- Congested roads to critical needs, 50 controls all
- Lack of sizable sidewalks
- Traffic.

Question 11: What DRIVING-related issues do you have in the City?

- Not enough public parking downtown
- Library uses this lot for early voting and summer overflow. A crosswalk would be a good safety addition
- Lots of congestion between the Winter Garden Village and 429
- 25 mph speed limit ridiculous
- 35 mph speed limit too low
- SBW Pkway near the Publix plaza intersection.
- Western Way takes forever to make it to 429 exit and the accidents are constant.
- Fiquette Rd AND Reams Rd intersection
- unsafe with traffic and bikes
- Stop sign is located where you can NOT see bikes coming on the trail and bikes usually do not stop and often do not look for cars
- Regular street parking makes it difficult to navigate this section of the road. Oftentimes there are vehicles blocking both sides of the road, and you have to slalom through past the stop at the intersection proceeding north.
- Trail users regularly ignore the pedestrian lights at this crossing and cause traffic issues.
- This shopping center needs better traffic flow at the entry/exit. Post a no left into the plaza to force drivers to enter off Colonial instead of across Park ave.
- SR 50 is a mess
- Plant Street is being close all the times for events that do not benefit the residences of Winter Garden. City should stop approving so many events downtown and closing the streets.
- Dangerous intersection
- Could beautify Daniels/Dillard from 50 to plant with improved infratructure
- Consider roundabout
- Consider roundabout
- terrible traffic flow. Roundabouts would work better, with a dedicated bike path.
- Traffic back up at the 4 way stop

- Plant St. needs to be closed to cars on Saturdays.
- Reduce congestion at this intersection. Also, Colonial Drive is always congested and needs some relief.
- Westbound toward clermont
- Egress from fowlers grove
- 429 exit so close to the westbound roberson/stoneybrook and Daniels/WG Vineland intersectionis HORRIBLE. 4+ light cycles are not uncommon and unacceptable for a city of this size.
- It would be nice to have a right turn lane coming from clermont turning onto Avalon Road.
- This area should be a round about!
- This should also be a round about!
- Parking is already an issue downtown. During events it's near impossible
- 429 backs up in all directions down the turnpike and extends to 408
- Constant traffic
- U turns should not be allowed
- Congestion
- Speeding
- Drivers not using 4 way properly. Pedestrians walking into road as traffic is going.
- Drivers not using 4 way stop properly or safely
- Long light cycles after emergency vehicles pass through, sometimes skipping at least 2 light cycles
- Light cycles too fast
- 535/Tilden Rd
- Horrible congestion during rush hour
- Bad congestion during rush hour, backs up at this intersection
- Heavy traffic
- Need a traffic light! It is hard to make the left turn to west bound 50
- Complete congestion during rush hour
- Takes forever to turn left by Aldi
- Intersection of Avalon and 50
- Intersection of marsh and avalon
- Intersection of at winter garden vilage
- Speeding. Even with the speed bump

- We need more parking downtown
- Traffic on Avalon waiting to turn on 50 is ridiculous. Ridiculous.
- Congested traffic
- Unsightly road signs that are supposed to be there for flooding but there hasn't been flooding since the signs were installed. Since when do parked cars cause flooding?
- Unsightly road signs that are supposed to be there for flooding but there hasn't been flooding since the signs were installed. Since when do parked cars cause flooding?
- Congestion from here to Avalon Road is terrible during rush hour
- This intersection is always terrible
- This intersection is terrible!
- This needs to be widened
- It can be very difficult to get out of our neighborhood here
- This intersection is very difficult, especially during rush hour.
- This area is always congested.
- We need another parking garage in downtown area.
- The exit for the turnpike from 429.
- The intersection 429 and Daniels Road is terrible. Daniels Road at The Village is horrible. Infact, 535 from the 429 to Reams Road is horrible.
- Lower speed limit more important and effectual than "Slow Down" signs
- Speed bumps are for parking lots, not city streets
- Lurking police try to intimidate drivers by jumping on road and tailgating them at night.
- always backed up
- West colonial drive is a standstill most of the afternoon and evening all ways backed up
- Winter garden Vineland road gets backed up especially after the turnpike til Windermere high school
- This road 2 miles forward and backward gets backed up bad and a lot of winter garden residents takes this road/area to and from.
- It is too congested right here when you pull out of the driveway from the townhomes of Winter Garden you can't even get out to make a right the traffic is backed all the way up to Story Road!

- traffic
- always congested
- Growing congestion. Too many people using electric bikes in the area too. Concerning because the bikes travel very fast, and the users are often under 15 and have unexpected travel patterns.
- Too many twists and turns along the road. Daily congestion. Especially traveling north to 50.
- This would be a great place to add a traffic circle. Traffic backs up fairly far back.
- This traffic light is very confusing. The flashing yellow on red is interpreted differently by many drivers. Takes getting used to. Left hand turns are nevre wracking in every direction.
- Excess noise from the 429 has steadily been increasing. Certain cars can be heard speeding. Sounds like a Formula 1 race track. Especially between the hours of 9 and 11pm.
- Daily traffic backups.
- Daniels Rd, WG Vienland Rd, Dillard Street, Plant Street
- "Parking the city created golf cart spaces and they aren't being used. Golf carts continue to use regular spaces when golf cart spaces are empty. Regular cars have to hunt it park far away due to golf carts. Either enforce golf carts parking in designated space or take away golf cart spaces and turn them back to regular parking spaces.
- Also no one adheres to the 2 hour or 10 min pick up parking signs/spaces"
- The main roads are too congested and there aren't enough parking spaces!
- 545 backs up all day now
- 429 westbound in this area backs up all the time due to lane narrowing
- improve traffic flow for left turn and straight
- Many near misses with entry/exit from Aldi/shopping center onto Park Ave. Need a better design. Too much traffic for this entrance and only increasing.
- Right turn on red is not a right of way but drivers treat it as such. Right turn on red should NOT be allowed when cross traffic can U-turn. Too many near collisions.

- Need a crosswalk on the east side of the intersection
- Afternoon traffic congestion
- Highway 50 from Winter Garden Border in Oakland to border in Ocoee
- At night, this light turns red for drivers on Colonial Dr for a very long time without any cars having been present on 9th St. I'm not sure why it turns red for drivers on Colonial when no cars are present on 9th and no cars are turning onto 9th. It adds unnecessary time to the drive.
- It would be very helpful to have longer right-turn and left-turn lanes to help the flow of traffic and prevent back up on Avalon.
- Avalon should be expanded to 2 lanes in each direction (at minimum, 2 lanes headed towards Colonial, keeping 1 lane headed south)
- This area of Avalon will need 2 lanes in each direction when the Wellness Park starts to operate.
- Traffic backup
- Traffic backup
- Traffic backup
- Traffic backup
- severe traffic backup
- severe traffic backup
- Traffic backup
- Always always congested
- It's getting too difficult to take a left out of John's lake pointe onto Avalon due to congestion and flow of traffic
- Needs a traffic light
- Major traffic back up
- Too many people get off at this exit because there is no other way to get to their home. Infrastructure down stream if this exit is poor
- Not enough parking downtown so the streets get crowded with cars
- Avalon is backed up every morning and evening. Avalon needs widening with a dedicated right turn lane towards the middle school. Most folks in the morning are trying to turn left from Avalon onto 50 to get o the turnpike. Please reconsider a turnpike exit at Avalon. Additionally, with zero shoulder on Avalon, I'm shocked there aren't more accidents/injuries with the constant bicycles.
- Lots of traffic at Avalon road

- Traffic at rush hour am and PM is from 50 to Stoneybrook.
- No sidewalk on either side of the roadway make this particular turn dangerous on bike or foot
- Drop off and pick up takes up one whole lane of this busy road leading to the highway
- Congestion at this exit and sometimes a dangerous 3 lane cross to make the right
- Difficulty getting out of neighborhood
- Difficulty leaving the neighborhood
- Left turn lane will back up traffic all the way to Tildenville for all lanes trying to leave Avalon Road
- Too much traffic here danger to pedestrians likes it better when it was closed during the holidays
- Horrible intersection
- Becoming impossible to get out of the neighborhood
- All of Avalon Should be wider
- too many cars travelling down Plant to go to the new houses on the Oakland side.
- General construction of highway. Dangerous on roads with debris. Delays. Keep the open fields by 429. Tons of noise from traffic that travels all the way to Division Street.
- busy
- awkward entrance to shopping center with Wawa on the corner. Too many cars speeding
- speeding
- It should not take 15 mins to leave Winter Garden to go to Clermont.
- Traffic congestion due to residential growth. Need to widen the road.
- Traffic vibrating, road widening required.
- Congestion
- Exit off 429 onto Stonybrooke is a nightmare during peak hours.
- 429 exit onto Turnpike is a mess during mornings. Too many cars cut off those in line for miles to get onto Turnpike southbound.
- This stop sign is inefficient during peak hours. Needs a light/roundabout

- This roadway (Tilden) is used by loud cars racing up and down at all hours of the night.
- This light backs up traffic heading east on Tilden to the point that it cuts off access to shops and those trying to leave neighborhoods (Windward Cay and Wintermere Pointe) are stuck until traffic moves.
- During morning/afternoon Avalon Rd is so congested because of the lack of space for the turn lanes. Road needs to be expanded and bike path moved further from street for safety of residents utilizing the sidewalk
- Daniel's Rd would benefit from a right turn only lane to keep the traffic moving that is trying to turn onto 50. This road gets very backed up.
- Add right turn lane for those trying to turn onto Avalon to keep traffic moving straight on 50
- Congestion
- Congestion
- Someone is going to get killed. So hard to exit the neighborhood during certain times. Need a round about if we can't have a light
- Exiting turnpike to get onto 429 is a nightmare
- Needs a signal or a roundabout..impossible to get out of our development onto Avalon
- 50 in general
- The traffic on Avalon is abysmal. It takes me on average 10 minutes to travel from sunridge to hwy 50.
- This construction and road closures at Tildenville and Oakland for months is horribly inconvenient
- Dangerous intersection due to increasing amount of traffic. Several accidents recently.
- Avalon Road needs widening. And needs a lower speed limit less than 45 (please work with county to lower speed limit!). Or install traffic calming like Hartford Marsh Rd
- Additional recreation/environmental facilities.
- Have county lower speed limit to less than 45. And put up "no Jake brake" signs for the numerous trucks using Avalon.
- Traffic backs up on Avalon, taking 20 minutes from John's Lake Pointe to Highway 50

- Constant congestion at busy times
- Avalon road
- Too much traffic, over congestion at school tomes
- Congestion
- Congestion
- Traffic light backed up most of the day. Need additional lane.
- This should be a round about
- You should not have a separate entrance for the new thing being built it is already congested should be using existing Tucker ranch entrance
- Road needs to be expanded past the turn pike with two lanes going north one heading south is fine
- need a yellow flashing arrow to turn Left on 9th from 50 when traffic is slower
- turning left from Daniels point dr to Daniels can be very difficult during high traffic times
- pulling out of fire station/Wells Fargo and turning left on Daniels is very difficult
- unsafe crossing for cyclists
- unsafe for cyclists and pedestrians
- on-street parking makes this a dangerous intersection
- Traffic heavy
- Traffic Light timing
- General Congestion
- Safety for Students vs Cars & Congestion in/out of WOHS
- Path to / from Tildenville Elementary School & General Congestion
- Congestion, roundabout possibly?
- 4 way stop causes congestion and accidents
- Too much traffic on 50 and Park Avenue especially by Aldi
- Too much Ocoee traffic
- Busy times of day this gets very congested
- speed limit on this road is far too restrictive
- speed limit on this road is too restrictive and low
- This curve is NOT steep enough to require the speed limit slow down.
- School start and end times, congestion here is 20+ minutes.

- Fog or other weather events cause issues with this stop light.
- Avalon. Can't turn at all with the traffic getting out of stone creek community. Lots of accidents due to it.
- Traffic outside the school is horrible. Cars block turning in. The light timing needs to change.
- Lack of sidewalk. It's unsafe for runners who keep going between sidewalks and sand. Please add connecting walkways.
- Left turns are almost impossible out of either community without a light or roundAbout
- Avalon entrance of stone creek needs a light. Most roads need to be widened
- Constant congestion and not enough traffic safety devices (i.e. signal timing, median dividers on 535 southbound after the intersection of 535/SR50)
- This section of 535 experiences heavy flooding during intense storm events
- backs up at light and no turn light
- This intersection is ridiculous. It's unsafe and sometimes requires several minutes to leave from either subdivision.
- I love the downtown area, but often will not go to events because of the issue of parking. I am handicapped and there are few parking spaces available.
- Traffic light or circle needed
- It is nearly impossible to make a left turn out of this development intersection
- It is extremely challenging and dangerous to attempt to make a left turn out of this shopping center. Cars are constantly darting into traffic and cutting people off because it's the only way they can turn left.
- This entire area of Daniels is always extremely congested
- We NEED a roundabout, badly! It takes too long and too much risk to turn left coming off the side roads (Carriage Point and Stonecreek subdivisions) on to Avalon
- This light is a "disastrophy" from all direction, especially driving north on

Avalon during either rush hour and when school is letting out.

- 4 Way Stop is no longer practical.
- Need a roundabout. Nobody can turn left onto Avalon from these subdivisions
- A mess at rush hour and when school lets out. Especially for those driving north on Avalon
- Close that exit from the shopping center. The exit right there at the Drycleaners. Make it an entrance-only.
- Too much traffic during school arrival hours and afternoon hours for residents in the community residents to exit onto Avalon.
- Need traffic lights or roundabout. Entrance of carriage pointe
- Unsafe options to exit neighborhood. Need roundabout or light.
- Unsafe conditions to exit neighborhood.
- Rush hour traffic on 429 has become brutal.
- Cars turning left from Dillard onto Plant Street have trouble accessing the turn lane, especially during Foundation Academy carline times. I often see cars drive in the oncoming traffic lane to access the turn lane or clocking oncoming traffic by trying to fit too many cars in the tiny turn lane. If you don't do either of these dangerous things you will often miss at least one or two left turn signals because you can't get to the turn lane.
- This fourway stop is awful and nobody knows how to use it properly.
- The school traffic causes this road to backup during the afternoon.
- Speed limit is too high for the curves. Scary for pedestrians in this area. Hardly any buffer between roadway and sidewalk in areas.
- Dangerous intersection very close to school
- Dangerous intersection - speed bumps have helped. Unfamiliar drivers believe this is a 4 way stop
- Commute traffic at Marsh/Avalon is too much.
- Commute traffic in the morning, traveling South on Avalon is too busy
- School traffic in the morning in addition to morning commute traffic

is too crowded with very few alternatives.

- Very poor traffic flow for residents of the SunRidge Blvd competing with parents trying to drop off and pick up students. There are no options to avoid to get through.
- This required stop sign on Avalon impedes the flow of traffic during busy commute and school start/end times. A roundabout or alternative for Stoneybrook residents would be better for the greater population.
- North bound on Avalon is backed up dramatically in the mornings.
- A Southbound 429 on ramp from Stoneybrook would be fantastic at moving commuter traffic away from Avalon and Tilden during busy times
- Traffic congestion at Avalon and 50
- Traffic!!!
- School related traffic from private schools.
- Can't turn off my street because of congestion.
- Roads are in desperate need of repaving.
- Northbound congestion
- East and westbound congestion
- Southbound congestion
- Left-hand turn congestion
- left-hand turn congestion
- Colonial Drive is a mess from 4-6 every day
- colonial drive is a mess from 4-6 every day
- colonial drive a mess from 4-6 every day
- traffic lights take too long to change
- traffic lights take too long to change
- traffic backs up so bad on Avalon road before 50 - I support widening that stretch and adding dedicated turn lanes that can accommodate the volume
- Need a round about here
- Traffic backs up here
- Dangerous left turn here and dangerous hills people drive too fast on
- Too many stop signs and access points clogging traffic
- bike path
- multi-use trails

- Road improvement
- Heavy traffic on Highway 50 / West Colonial Dr.
- speeding
- Congestion
- Plant Street and Colonial East and West is way too congested.
- During school hours the traffic is back up on Avalon
- Daniel and W Colonial
- Dangerous intersection
- No one knows what they're doing for some reason, even though it's a simple 4-way
- No one knows what they're doing for some reason, even though it's a simple 4-way
- No one knows what they're doing for some reason, even though it's a simple 4-way
- No thru traffic sign needed for alley
- Left turn lane needs to be added or a roundabout
- No left turn sign or perhaps a concrete median needs to be added for traffic coming from SR 50 trying to turn left into Aldi parking lot
- Major congestion during rush hour. Round about might be useful to move traffic
- always backed up
- Impossible to turn left on 545 during rush hour and school pickup
- This left turn is dangerous and backs up
- This area backs up during rush hour a lot
- going north this area backs up during rush hour a lot
- this road gets very congested in the work day evenings
- West colonial gets very congested in the evenings going toward Clermont
- turn going north on Dillard on to 50.
- exit from 429 you have to cross lanes to turn right onto Daniels
- No public transportation to the closest town
- Add a right turn lane to help pedestrian safety and traffic flow.
- The left turn lane is essential for traffic flow but very dangerous during rush hour.

- The traffic from the turnpike to get on the overpass to the 429 S. Is very dangerous and always a challenge to get to winter garden from Orlando.
- Colonial is congested, and frankly, just an ugly sequence of strip malls
- Backup and dangerous light pattern
- Private schools using public roads as their private driveways for pick ups and drop offs making them completely impassable and risking accidents
- That general area where Park Ave meets Plant Street, and around the sports fields. People get real impatient, confused about right of way and taking turns. On weekends when there's sports, farmer's market or special events it gets a bit Lord of the flies.
- Heavy traffic
- Heavy traffic
- Heavy traffic
- Need fueling options
- Speed limit too slow
- Speed limit too slow
- Need more parking downtown
- City needs more EV fueling options even if not free like the garage. Need commercial zones to add charging stations.
- Congestion
- Congestion
- unsafe, needs to be a roundabout. also needs bike path or sidewalk, very dangerous for peds and always congested from stop sign.
- extend left turn lane for south bound 545. it is not long enough, so people drive in yellow cross hatch area
- raise speed limit to 45. the police should not be paid to sit and write tickets in the same spot everyday because they know people will speed there. it's not a speeding issue, it's an issue of there be no reason a 4 lane Blvd should be 35mph.
- Very dangerous with the trail crossing. Tendency to back up in all directions
- Severely congested most times of the day but in particular 3pm-7pm
- This part of the street from Aldi to Colonial. Traffic is backed up most of the day and bc there is an entrance/egress to Aldi and mobile home park, you get cross traffic

trying to weave through and across, often times blindly. This is possibly the worst intersection in the city

- These 90deg turns are very narrow, the road is crumbling in some areas, and bc of all this there is little margin for error making it a very dangerous intersection if just one driver isn't paying attention or going to fast.
- The north and south bound sides of 535 here are a nightmare with congestion in mornings and evenings. With a slew of entrances and egresses for business and churches, cars end up blocking these to turning traffic causing further backup.
- This area is too congested.
- Not enough parking for City Hall

Question 12: What TRANSIT-related issues do you have in the City?

- There isn't any public transporation
- A big swing, but would love a Public Transit option to nearby attractions (train to MCO, connection to Brightline, etc.)
- Start a local, frequent bus that travels from the Colonial Drive Lynx bus stop to various Winter Garden locations.
- We have Busses?
- Bus access needed
- There aren't ANY bus systems in Winter Garden! We need to establish one to cut down on the amount of cars used in the city!
- Not enough bus stops, no bus shelters, buses not frequent enough
- Need transit.
- No bus stops to get here
- What the amount of precariously housed people living in the woods and using this service I don't feel safe about it. I used public transit in NYC
- No bus stop down very busy Avalon Road
- Complete lack of timely buses to areas of work/play and last mile connection to train and air
- add additional stop

- I do not use bus now but would be unable to anyway because of the distance to the bus stops.
- There is NO public transportation!
- no buses connecting gplant street and story road
- no busses connecting plant and story road
- lack of stops/ inconvenient route
- lack of stops/inconvenient routes
- Inconvenient route/ lack of stops
- Public bus stops should give citizens ease of access to our public parks, businesses, major neighborhoods, and places of government/utilities.
- Public bus stops should give citizens ease of access to our public parks, businesses, major neighborhoods, and places of government/utilities.
- Public bus stops should give citizens ease of access to our public parks, businesses, major neighborhoods, and places of government/utilities.
- Public bus stops should give citizens ease of access to our public parks, businesses, major neighborhoods, and places of government/utilities.
- Public bus stops should give citizens ease of access to our public parks, businesses, major neighborhoods, and places of government/utilities.
- Public bus stops should give citizens ease of access to our public parks, businesses, major neighborhoods, and places of government/utilities.
- Public bus stops should give citizens ease of access to our public parks, businesses, major neighborhoods, and places of government/utilities.
- I've seen multiple crashes at the bus stop with cars not paying attention and running into the car in front of them when the bus stops.
- There are none that go to populated areas like Horizon West
- Add a right turn lane for traffic flow and pedestrian safety. Often the line turns green and the pedestrian walks into the crosswalk just as the car starts.
- Biggest bus-related issue is the buses have little to no room to get off the main lanes for drop-off/pick-

up, which adds to an already big congestion problem up and down 50.

- Colonial is not good here

Question 13: What WALKING-related issues do you have in the City?

- Need more shade on West Orange Trail and benches
- Library gets busy in the summer and runs out of parking! Big lot across the street but no crosswalk
- Safety balance between bikers and pedestrians. I believe there should be a separate part of the trail for bikers instead of riding through downtown Winter Garden. Pedestrians don't always pay attention and bikers sometimes speed and get impatient.
- Consider extending sidewalk on south-side of Plant street to connect downtown to nearby communities (Oak Park, Winter Oaks). There may be a way to weave around historic Oak trees, and safely connect our neighborhoods to downtown.
- sidewalks should be on both sides of the street. with crosswalks on Story Rd.
- Close Plant St. on Saturdays (no cars allowed)
- Colonial is terribly unsafe to walk along.
- When the bike lane ends here
- The side walks in the neighborhood do not connect. There are no crossways to cross streets. Making you have to walk around or in the grass. Doesn't work well with strollers
- There is no sidewalk here. People have to walk in the road to get to and from the park
- Pedestrians not crossing safely. A light and pedestrian signals would be safest here.
- Pedestrians not crossing safely. A light and crossing signals would be safest here
- Lack of shade
- difficult to navigate with a stroller
- missing sidewalk, drainage issues

- Missing sidewalk
- No side walk
- No sidwalk
- No sidwalk
- No sidwalk
- You should close this street permanently and make it walkable to entice more businesses and ease congestion on plant
- I like to roller blade. Why are there bricks between intersections? You can't roller blade over bricks.
- Sidewalk needed all the way to Fuller's Cross Rd.
- People walk out or ride their bikes in front of cars
- Lack of shade. A row of palms could help plus beautify this "entrance" from off the 429 to our City too. Could be a great place to add a bike trail.
- Addition of speed bumps a couple car lengths before the pedestrian walkways could help slow the traffic down. Some people race through this area.
- All up and down dillard street. too many cars hitting walking people and people on bikes.
- People always run the 4 way stop on Plant and Main. They do not yield to pedestrians or bikes. You can see in live cam people running the stop sign all the time.
- Not enough shade for walkers!
- Not enough sidewalks thoughout the city!
- Please widen this road for driving and add a sidewalk all the way down the road for walking. Parallel parking is an option too.
- Drivers ignote pedestrians in crosswalks, especially right turn on red. More enforcement of laws, fewer right turn on red intersections
- Need safe, secure walking access.
- No sidewalk On Smith near Highland.. Pedestrians forced to walk in high traffic roadway.
- There is no sidewalk here and there is heavy vehicle traffic along Smith Street between Plant St Market and points East. Pedestrians are forced to walk in the busy street.
- No walkway or bike path!!!

- No safe crossing here with all the traffic
- No sidewalk
- Sidewalk and bikelane restart here.
- Sidewalk and bikelane missing starting here
- Dangerous intersection
- Missing sidewalk
- If sidewalks continued down Avalon, kids may be able to walk/bike to schools like Sunridge Elementary and Middle.
- No sidewalk from Tilden to Avalon making walking to Publix, or shops nearby difficult.
- No sidewalk from Tilden to Tiny makes this intersection difficult when walking/biking.
- Unsafe crossing.
- Need sidewalk on west side of road to the park. It currently stops at the turn in to the schools so if going to park you have to cross street and then cross back again when you get to the park entrance
- Sidewalk on Tucker Ranch side?
- revamp the sidewalks that are buried in the alley
- This is a great county park with no sidewalks leading to it on the roads that tie into the entrance and should be added.
- revamp the sidewalks that are buried in the alley
- No side walks past John's Lake Pointe until after the turn by StoneyBrook community. Sidewalk should go that entire way
- no side walk close to crooked can on Story road
- Need a sidewalk on the south side of the street to connect Fullers Landing and Crown Point Springs
- should have paved sidewalks leading to West Orange High School
- Would like walkway
- None
- No sidewalks either side.
- No sidewalk
- The entire stretch of Story Rd from Daniels Rd to underneath the 429 overpass into Ocoee has terrible non-vehicular mobility (i.e. no sidewalks in areas, no streetlights in areas, etc)
- no real sidewalks

- no sidewalks
- When there is a special event, it is hard to walk with all the people. Otherwise, the sidewalks are well maintained for the most part.
- Raised sidewalk segment should be repaired
- No sidewalk, at all, around the turn by Knox Nursery. Eliminates safe or even practical walking or running to and from the new city parks on Avalon
- It would be great to get more green on Dillard street so it is more pleasant for walking and biking.
- Speed limit is too high here. Lots of curves and in some areas hardly any buffer between road and sidewalks
- there is not a safe sidewalk or bike lane in this area
- There is no side walk in this area or a bike lane
- Homeless people, busy and fast moving traffic, and poor lighting make this section of Avalon dangerous to ride a bike or walk.
- Riding a bike and walking from Sunridge Blvd to Plant Street on Avalon via sidewalk is dangerous. The neighborhood is run down, homeless people are around that area and traffic is so busy and moving quickly with not enough room for cars let alone bikes and pedestrians.
- Missing sidewalk
- Missing Sidewalk connectivity
- lack of sidewalks, dogs are sometimes loose
- unsafe crossing
- lack of sidewalks
- Lack of sidewalks
- Lack of sidewalks
- I would like to see a side walk on Tildenville Road from SR50 to Plant Street. It would make pedestrian access to the WO Trail easier.
- Unsafe crossing
- No sidewalk
- No sidewalk
- No Sidewalk
- Sidewalk doesn't connect
- Seen a lot of unsafe behavior at this intersection with the bike trail

- students riding bikes in the morning are hard to see in the dark. need an added light.
- Students cross in the morning dark are hard to see. need a light at the crosswalk.
- All pedestrian crossings at 50 are unsafe but this intersection seems particularly busy with pedestrian traffic. There should be lights added to warn drivers when the pedestrian walk signal is being used or a right turn lane added with an island for pedestrians to safety wait at.
- The West Orange Trail on Plant St. has heavy bike and pedestrian use. There should be an option for an alternate bike trail.
- Pedestrians and bikes disregard signage and cars disregard rights of way creating dangerous conditions.
- Need walkability around dillard to local shops
- The streets just a block off plant street often don't have sidewalks, people get creative with parking for events and it makes walking a bit dicey
- side walk doesn't connect, very dangerous
- all of Dillard Street needs a revamp. Better sidewalks, tree lined areas, benches.
- need treelined large sidewalks up and down Plant street outside main hub.
- Noted in earlier comment, but this ped crossing is super dangerous, even for the drivers accustomed to going through it due.
- Lack of sidewalks on the east side of Park.
- The north side of Tilden doesn't have sidewalks. This is a big walking area for kids coming off and to the school bus.
- Walking

Question 14: What BIKING-related issues do you have in the City?

- Bikes on this road are a menace
- Consider bike path to downtown Ocoee. There are barely sidewalks to safely visit.
- Keep maintaining the trail
- Road is rough and cut up prior to the new construction at the traffic circle where bike path exists (and ends) on Tomyn between Warrior and Roberson.
- Road quality between 50 and Palnt St on Daniels is rough/cut and dangerously close to autos while enroute to the trail
- This sidewalk is very rough. My son and several others have fallen on bikes scooters getting to school.
- Bicyclist running stop signs and not obeying traffic laws and then act like it is the person in the vehicles fault
- 535/Tilden Rd
- Avalon road needs a bike lane
- Too many people taking photos and not paying attention
- Too many people taking photos and not paying attention
- Too many people taking photos and not paying attention
- The corner is too congested with walking/tourists/cars
- The bike path at the turn is too narrow
- Bicyclists rarely adhere to stop signs on trail for them. How do you keep them from darting out into traffic?
- bikers create road hazards. they need there own bike lane.
- Addition of speed bumps a couple car lengths before the pedestrian walkways could help slow the traffic down. Some people race through this area.
- Electric bike safety is a concern.
- There are no designated bike paths
- Cars do not yield to bikers
- Not enough bike lines throughout the city, bikers are riding on the sidewalks!
- Biking is mostly treacherous aside from paved trails.
- Awkward bike trail intersections.
- No bike path!

- Sidewalk ends. No shoulder. Biking very dangerous
- No shoulder makes it incredibly dangerous for bicycles on Avalon
- Bikers using this one lane road slowing traffic and creating congestion
- Bikers using this one lane road during rush hours adding to the congestion
- No bikelane or sidewalk
- No bike lane or sidewalk
- Bikers don't stop here and hard to see them with the walls. Need something to improve safety
- Bikers do not always stop. So many of them fly through the stop and throw up a hand. Due to the sun, many times it is hard to see them coming out of shader area (that IS NOT a suggestion to cut down on shade). Leave the trees.
- Would like to be able to ride bikes easily from north of plant street all the way to the shopping centers on colonial.
- Bikers in the street is very dangerous
- None
- too much traffic for pedestrians and bikers downtown crossing in all areas
- bikers massively slow traffic and its dangerous
- A bike path connection from the West Orange Trail to the southern end of the City along Avalon Rd would be amazing
- We badly need bike lanes in both directions on Avalon from Hwy50 the entire way south. At least to Flamingo Crossing. It's been used by cyclist forever and they haven't stopped (nor, should they have to) , despite the increase in car traffic.
- Bikes need their own space on Avalon or they should not be there. It is not safe to pass the bikers with on-coming traffic so busy.
- There is no room for a sidewalk or bike lane on this part of Avalon. Serious bike riders are on the road, usually traveling in groups and the road is already busy with cars. There is very little room to pass the bikes as oncoming traffic is busy. It is not safe at all for bike riders.
- This intersection of Avalon and 50 is so busy and narrow there is no room for a sidewalk to bike lane/

- Tildenville road is very narrow, very busy and have no sidewalks or bike lane to try and get to the Bike Trail or downtown area.
- The bicycles take over the road and run over pedestrians on the trail.
- no bike trails
- constant biking accidents
- broken sidewalks, sidewalks too narrow
- Outside of the trail, there isn't too much in the way of protected biking lanes. This area would be one of many that would benefit greatly by exploring bike infrastructure options.
- bike lanes connecting to WOT
- bike lanes
- bike lanes
- bike lanes
- bike lanes
- bike lanes
- bike lanes
- this is a bad intersection for cars, it's confusing due to the stop sign being so far back from the actual intersection and other drivers get upset easily when people go out of turn.
- need more bike trails in this area.
- Riding a bike from the neighborhoods across 50 has limit crossing places.
- The Multi-Use Path (MUP) in Downtown Plant has too many MUPs - Many Unaware Pedestrians. This is a hazard for bikers
- Bikes disregard signage through downtown
- no sidewalk or shoulder
- bike path doesn't connect
- This transition from trail to sidewalk, requiring to street crossings, is just a bad way of doing this as it's not as well marked as the transition on the west side of the trail closer to Central and Highland Streets. Also, the combined sidewalk used for the trail from this intersection to Woodland Street is way to crowded for bikes and walking peds, combined with tourist peds for the Heritage Ctr and the giant plants that overhang that area. Less than ideal area for dumping through trail traffic into.
- Need bike lane

Question 15: What other items would you like the City to consider as it continues to draft the 2050 Comprehensive Plan?

- Preserving natural spaces. Winter Garden has "garden" in the name. It's important to cultivate that even in the face of growth.
- Traffic congestion, beautification projects, more green space
- Stop the unjustified and absurd cash grab that is the unnecessary speed enforcement
- Please, please recognize again Agricultural lands and stop displacing farms to continue developing townhomes and buildings. We have enough Publix and pharmacies in less than 3 miles from each other. Time to focus to bring the small town charm back!!!
- Do not make this California or New York
- Reducing property taxes.
- more parking areas for downtown winter garden
- Please stop doing events that do not benefits the residents of WG. The city is not big enough to to hold all these events for all of Central Florida. Please focus on your residents and especially the ones that have been living here for years
- Consider revitalization around Lake Apopka (restaurants). Please work to bring Garden Theatre back so we can have high quality arts and culture in our community. Ensure community remains inclusive to all. Invest in local economy with mixed-use development
- Expanding the golf cart district to include south of Story Rd. Also creating more store fronts to expand retail offerings for small local businesses. I would also love to see a revitalization of Dillard Street- more business, safer roadways, etc..
- Close Plant Street to vehicular traffic on Saturdays, especially during the Farmer's Market
- Sustanability--keep the small, historic homes, provide residents with rain barrels, compost barrels, and native plants, create organizations to help seniors maintain their homes and to bond with the younger residents
- Winter Garden has become the City equivalent of a busy soulless airport,

a society of strangers and foreigners who are not assimilated. Community and identity are dying. Slow down the growth before it's too late. Never rezone from AG to residential.

- Residential over business buildings are very interesting. Less "wedged in" retirement buildings (on Daniels, beulah/roberson new dev, etc) & more resort style housing communities (Arya, Esplanade, etc). Low crime focus. RV parks ok, not perm mobile homes
- Try to attract restaurants and stores that are new and upcoming for main roads. Get rid of the Maryland friend chicken that is abandoned and looks like a crack house. Fine the new owners each day until they do something with it.
- How growth impacts our already extreme traffic issues. Preserving land and what makes this town serene and beautiful.
- Stop building. We have enough of everything
- Stop building.
- Completely over crowded. There is no joy to fight the crowds at the Farmers Market & Fowler's Grove
- Improving traffic congestion. The Turnpike/429 interchange is so bad during rush hour that I have considered moving out of the city. I worry it will get exponentially worse at the population grows over the next 10 years. An east/west train would help.
- My family would love to see more indoor activities for families, like to proposed children's museum, as well as more casual dining options similar to 4rivers or sizzlin' greens
- Expand roadways so you can get from place to place easier
- Fix the traffic congestion and decrease housing development. Grow space and activities for families.
- Stop cutting down green spaces. Use the spaces that the abandoned homes downtown already in to refresh and utilize them. We need trees.
- Affordable commercial space for mom and pops
- Grow the sense of community for the residents of the city through the city events. Currently events are so crowded by those who don't reside in Winter Garden.
- Relocate Trailer City from the most valuable property

- Sustainability is our top priority: compost, solar, green building, green/Florida friendly yards
- allow tree houses
- Don't put a professional soccer field/team on plant and 429
- The library, though recently refurbished, is too small and insignificant, having insufficient class/learning opportunities.
- Think of the habits you are destroying and how crowded you are making out home town. I was born and raised here.
- Overhead walkways, more overpasses, more alternate routes, more roundabouts, less lights more lanes keeping everything fresh
- provide better restaurants and shopping venues.
- 1. Nice affordable office spaces (challenge to find). 2. Consider a beautification project for coming off the 429. A welcome to WG wall with palm trees along the retention pond at the southeast corner of Stoneybrook and WG Vineland.
- modernizing the police and fire departments. Give them staffing and facilities to do their jobs
- Metermaids or parking limit enforcement.
- Enable busing throughout the city & decrease cars!
- promote "green" buildings, environmental sustainability, preserve nature and wildlife, improve drinking water quality (too hard)
- Let's connect East WG with the DT area for golf carts please.
- Housing to accommodate different incomes now medium, make all communities comparable- no seen areas. Historic Conservation
- More lanes for more cars is not the answer. Jobs so that people work where they live, creative use of median space for public transportation that goes to and from and around where people want/need to go.
- Growing homelessness issues, more resources or better plan is needed.
- Please make accessory dwelling units viable. Our aging population, families, students and working class residents need them.
- Maintaining a transitional buffer between the downtown commercial district and surrounding residential neighborhood. Increased code enforcement to hold owners accountable for nuisance And

abandoned properties in the downtown residential district.

- Expansion of Plant Street buildings to allow for more business, restaurants, etc.
- Respect wetlands, improve roads and infastructure and don't overbuild
- Stop building on swamp land! Stop redesignation of swamp land! Building on swamp land encourages flooding damage, especially, to older established neighborhoods and prevents wetland recharge of ground water.
- Extend downtown winter garden!!!
- More parking in downtown. Do not consider any new land development. Instead redevelop existing developed areas. Consider additional city centers beyond the downtown city center
- Expand golf cart map area, slow down speeding cars in residential areas. Increase safety across all areas. Improve elementary school downtown.
- Get in front of the traffic problem. With all sides of Winter Garden growing exponentially, the transportation infrastructure must be dealt with now.
- Multi family homes for generational care.
- Speed limits by adding roundness abouts on Avalon Road
- Would to see more small venues for live music or art displays
- Mass transit access (train to go along I4 east/west) or along Colonial (like a sunrail)
- STOP the over building of WG. It is losing the hometown feel. Refurbish the old areas. Business or housing can move there if they wish. Focus on conservation. Look at the noise level. Downtown WG housing areas should be quiet. Work w/State on barriers.
- I would like the area to get an entertainment center with education behind it to encourage families to stay, and move here to keep the community vibrant. Children's museum, Interactive Science Center
- More pickleball courts.
- Less focus on chains and large apartments. Make WG unique and standout from all other towns in Central Florida by limiting what businesses come in.
- Instead of building more office spaces, we should fill the open "for lease" places first and keep the lease

rates low enough that businesses can actually afford to stay. If we don't utilize what's already been built we are wasting resources

- Please conserve our woods and natural areas. Please protect the eagles nest. This keeps us a neighborhood community where people want to stay
- Keep the recreational areas and bike paths
- I would love for you to consider roundabouts on Avalon to allow more access for people exiting neighborhoods. Specifically in front of Johns Lake Pointe near the intersection at Sunridge rd.
- Easier access to cities like Orlando
- Add more trees, like Oak to preserve. Cutting down too many in environment such as what is happening at Rucker ranch. Need more protected areas with green spaces as grow.
- We have found the right balance with respect to old town rejuvenation with modern conveniences and new trends. I would like to see the City switch to preserving what we have now and expand its focus to enhancing the parks and the corridors into downtown
- Too many new residents. Property taxes are pricing people out. Home values are rising so quickly that mortgages are increasing. The city could become unaffordable and lose its charm. Traffic is getting terrible.
- Consideration when letting developers add development without consideration of traffic. They add developments towards Clermont without building roads for people to get to 429 or the turnpike
- Please please please stop developers from taking any more green space. Let's leave our numbers the way the are and fix our roads, intersections, and infrastructure for right now!!!!!
- Stop overpopulation. Too many forests have been cut down for houses. Too much traffic
- reopen the theatre, huge positive impact to our city and a shame it isn't supported more. Brings in business for restaurants, bars and awareness of our city. closing down was embarrassing.
- Recycling!

- Do NOT put a major stadium near Plant St, go to Independence for more room
- stop annexing low density unincorporated orange county parcels as medium or high density
- Expansion of walkable Downtown Districts the mirror parts of Europe
- Fill all the holes in on the streets and make street signs bigger and trim branches by street name signs
- Work to get more affordable housing on the east side - more job opportunities.
- Please consider density and crime, annexation of Tildenville should be a priority. The small town feel is being degraded yearly, there are too many people for the space so entertainment is degraded by crowds, which is also harder to control crime.
- We need a side walk from the corner of Avalon and Tilden Rd across from the private school Foundation Academy. There is no side walk on either side on the top of the hill going down. It's very dangerous.
- Address traffic issues by schools and add sidewalks to connect the especially on Tilden and Tiny Rd.
- Providing for a mix of housing opportunities for low and moderate income households
- keep it quaint and a unique place people want to visit and live. don't make it like any other place with all big box stores and chains. that becomes cookie cutter and we dont' stand out. respect the history and keep green space!
- Special events (Bloom & Grow, Light UP WG, etc) tend to draw people away from local shops and dinning. too many street vendors. Our shop has lower sales during these events than a normal Friday or Saturday.
- I would like to see less building and more parking areas so that when I do participate in a special event I don't have to leave 2 hours before the event in order to get a convenient parking place.
- To keep attracting the right tax base in WG, we need to focus on creating a downtown that attracts professionals & their families. It needs to continue to grow, not be restrained by local officials. You can keep the quaintness & still add more dinning/ent

- Will Tucker Ranch have/be a music venue? Great place for an outdoor amphitheater
- I am highly concerned about making sure our community is sustainable for the future. Please focus on developing aggressively innovative policies to help us become an even greener, more sustainable city in the future.
- Maintaining the small town charm all while improving services and commitments to the community. I would also love for the the recycling program to come back. It's a shame to waste so many valuable resources.
- Flooding issues in the Teacup Springs area. Runoff has increased over the last 20 years as housing has increased.
- Downtown Parking is going to become a bigger issue with growth. We need a Whole Foods or Sprouts.
- Please do not let the City of Winter Garden turn into another Horizon West. Some green space can be preserved.
- Please do not overdevelop the downtown area and lose the quaint, small-town look, feel and reality. Please cleanup poorly-kept properties, esp on main roads where residents and visitors travel to and from our beautiful town. Thank you for this survey opp!
- Historic preservation
- Increase more moderate sized single family homes which aren't stacked right on top of each other. Figure out how to bring back recycling.
- to stop building so much
- Traffic by Tucker Ranch Recreation and Nature Complex
- Housing developments, being built before the infrastructure is ready. How do we build a plan to improve this issue?
- I would like the city to buy Divient Stocks so the Diviends can pay for things and not have to add more taxes
- traffic issues
- Diversity and inclusivity keeping WG safe for all races and genders.
- more frequent litter collection, fixing broken and narrow sidewalks, place guardrails on sidealks near drainage, making the city more walkable. Theres not many things within walking distance. Improve the flow and congestion of traffic after 3pm weekdays.

- Equality from the east to the west, north and south
- East and West Winter Garden should receive fair and equal treatment ie funding, less harassment from police, activities/events at ALL parks, beautification etc
- Concert venues and amphitheater
- Continue to educate the young and the old about the future of the city and how all citizens can be part of the future of the city - continue to ask for ideas, improvements, concerns, welfare, safety, health
- Reduce speed limits on roads allowing for the city to be even more golf cart friendly.
- There needs to be a grocer in downtown winter garden to make the community complete. Being able to get groceries in town instead of having to go onto SR 50 would be a great amenity. This would make the community much more walkable and bike friendly
- more cycling paths, city had a strong cycling culture. dillard revitalization
- Extend downtown area by at least a mile. No chain restaurants/businesses. Consider introducing a concept like Borough market in London. Many diverse food semi permanent food vendors (bigger than plant st. mkt), Welleby park in Sunrise FL (kids playground)
- Traffic
- I would like to see a focus on the 50/Dillard shopping center all the way to where the old K-mart was.
- Stop buying into the now and realize that we need to model ourselves off successful cities for the future. Focus on green energy and overdevelopment
- The city has done an amazing job of bringing people to the historic downtown area. There needs to be a lot of pressure placed on the expressway authority to alleviate highway congestion into and out of downtown Orlando from West Orange county.
- Avoid and minimize current congestion along Colonial and downtown Plant; encourage and expand the use of golf carts as an alternative to cars and trucks.
- Consider developing more office space and coworking spaces to accommodate the new economy
- Preservation, limiting density
- Get us a Trader Joe's! Please keep the 'small town' feel as much as you can. Multi unit properties is great

especially if they're at an affordable price but not massive apartment complexes.

- Need to provide real recycling options. High Speed Train options to Orlando, Tampa, Jacksonville. Attract more businesses to provide better jobs. Let's attack some more big chai restaurants
- We need a Fresh Market (or Sprouts, or Trader Joe's) here. We should not have to go to Dr. Phillips. The Amazon Fresh location should be forcibly converted to Fresh Market.
- More parks. That have trails to run/walk on.
- sidewalk connectivity, traffic calming, accessory dwelling units
- Expanding the urban design pattern of historic winter garden plant street up out further along plant street towards 9th and up and down Dillard street
- Clean up the entrance roads to our beautiful downtown. Dillard street from Plant to Colonial is just run down and doesn't give the appearance that you're about to run into a beautiful area like Plant St.
- Less reliance on cars, need more jobs

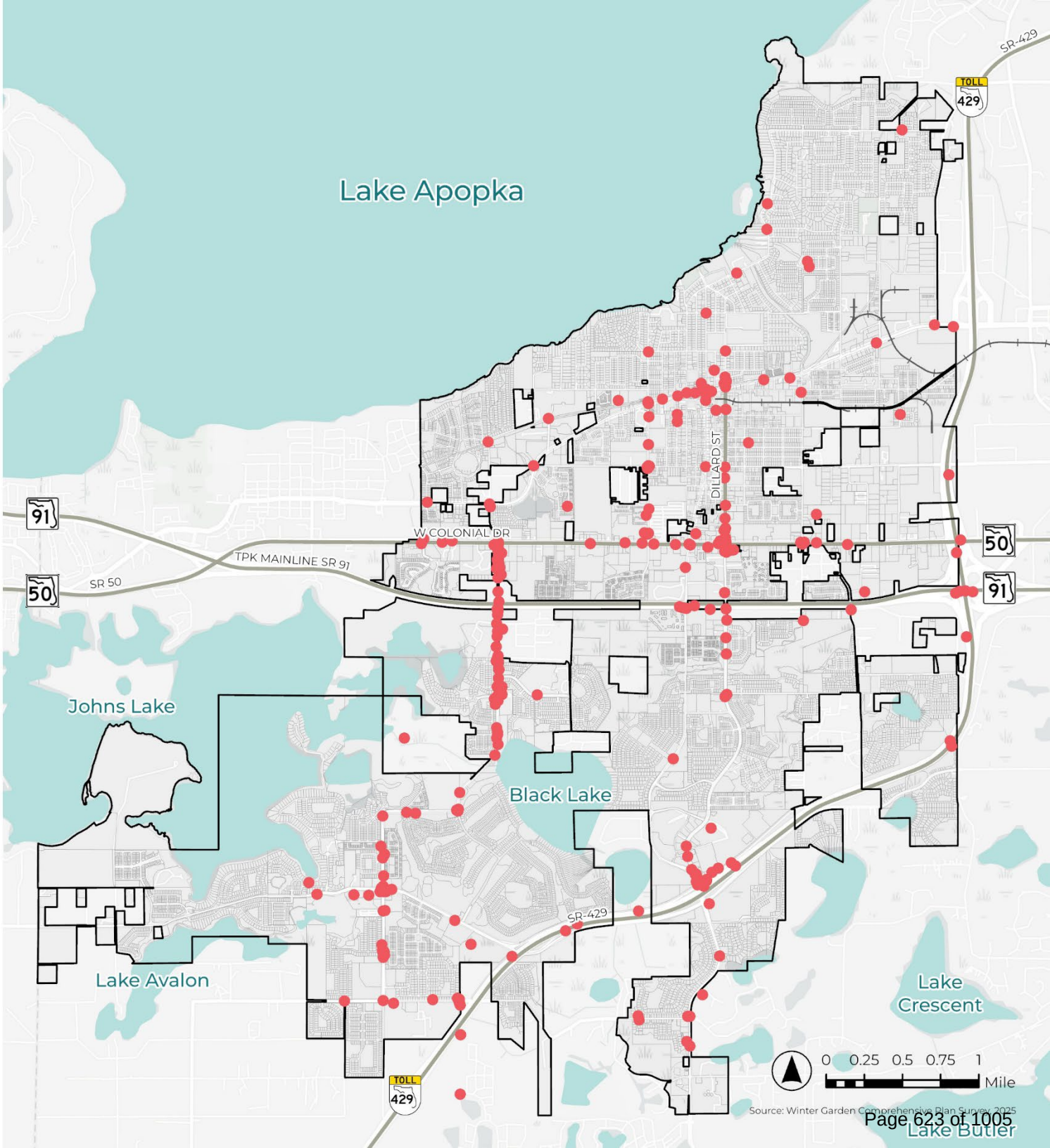
Appendix B: Mobility Issue Mapping

SURVEY RESPONSE: DRIVING RELATED ISSUES

MAP

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Survey Response Pin



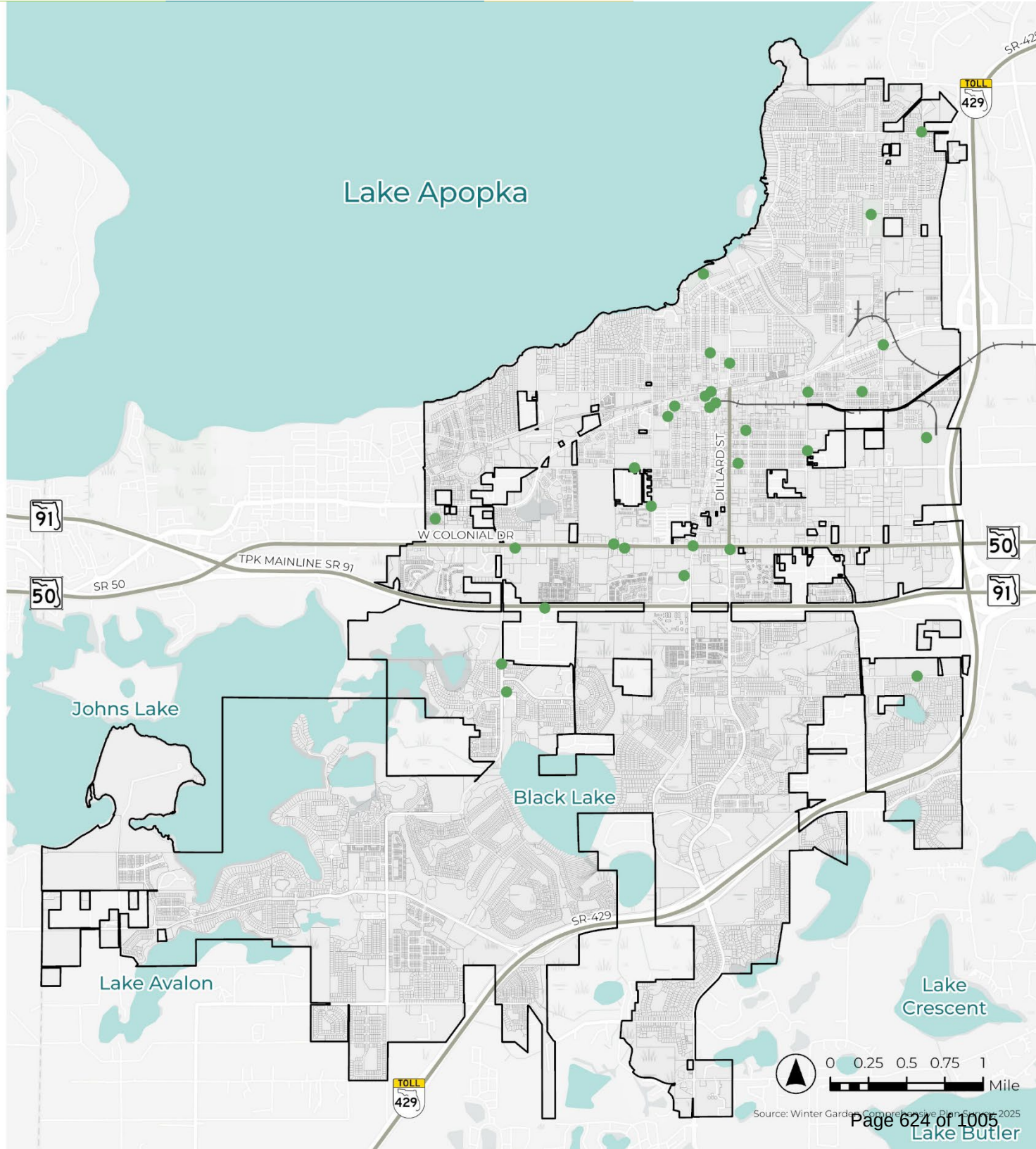
COMPREHENSIVE PLAN
WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

SURVEY RESPONSE: TRANSIT RELATED ISSUES

MAP

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Survey Response Pin



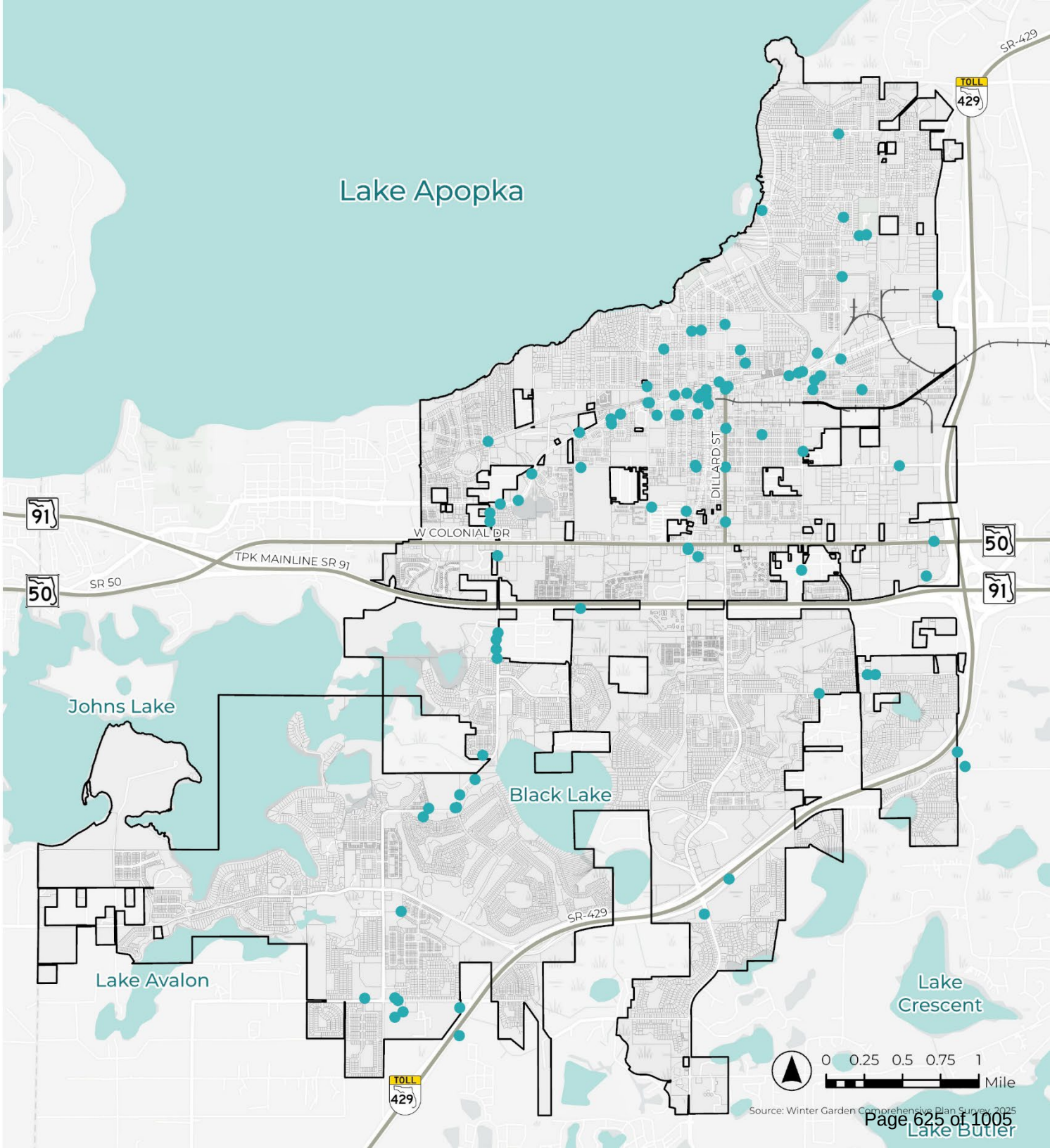
COMPREHENSIVE PLAN WINTER GARDEN 2050
Rooted in Tradition
Growing Strong Communities

SURVEY RESPONSE: WALKING RELATED ISSUES

MAP

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Survey Response Pin



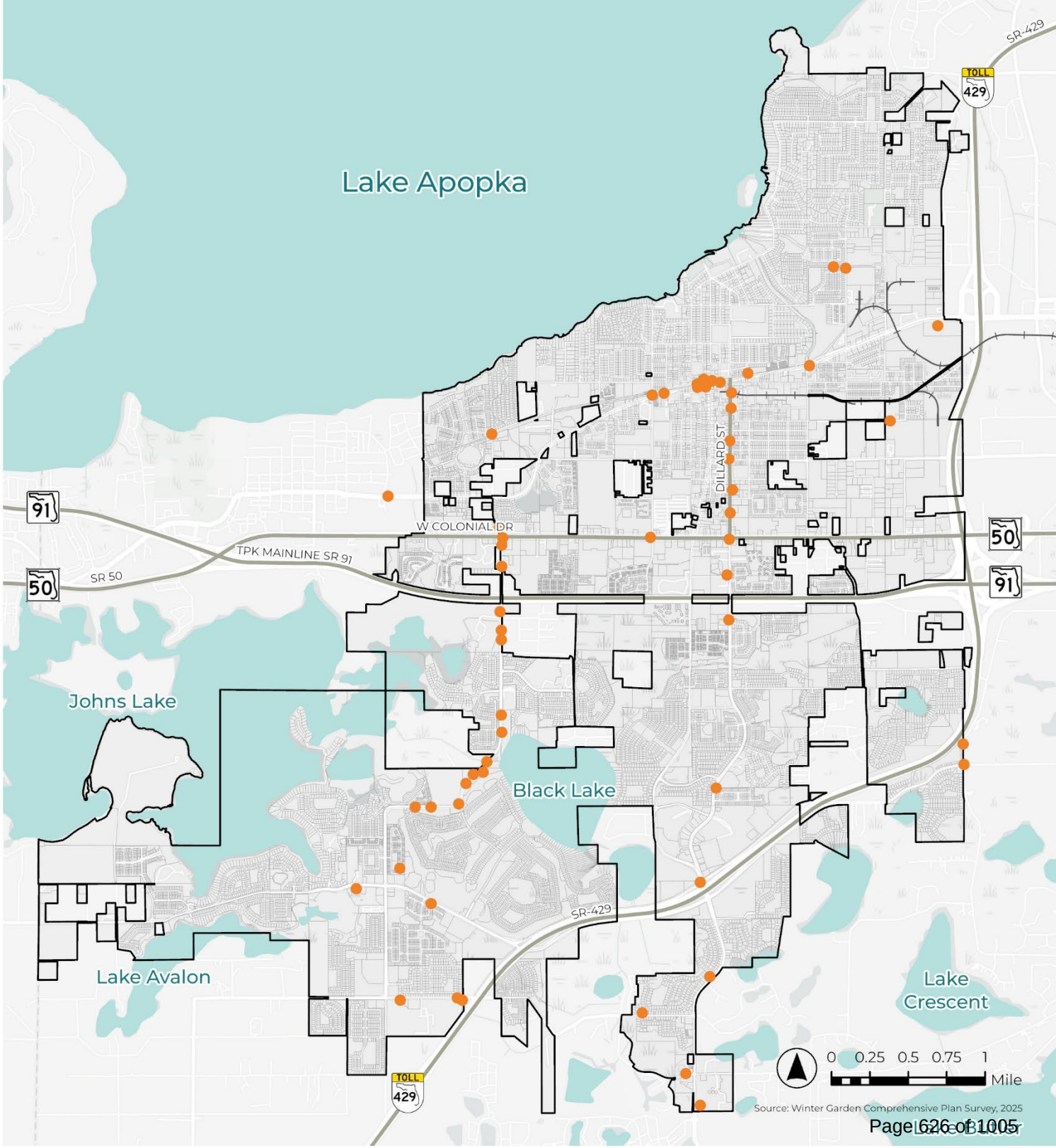
COMPREHENSIVE PLAN WINTER GARDEN 2050
Rooted in Tradition · Growing Strong Communities

SURVEY RESPONSE: BIKING RELATED ISSUES

MAP

Legend

- City of Winter Garden
- Waterbody
- Major Roadway
- Railroad
- Parcel
- Survey Response Pin



COMPREHENSIVE PLAN WINTER GARDEN 2050
Rooted in Tradition · Growing Strong Communities

City of Winter Garden, FL

Florida Statutes, Chapter 163, Part II: Growth Policy; County and Municipal Planning; Land Development Regulation

Legend: Blue shading: Comprehensive Plan change needed; Green shading: No plan amendment needed, but recommend addressing in the LDR; Grey shading: No action needed.

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
General Comments	NA	Change of agency name	Change 'Department of Community Affairs' or 'Department of Economic Opportunity' to 'Florida Department of Commerce'	*No change to the Comprehensive Plan necessary. These terms are not present in the Comprehensive Plan.*		N/A
	NA	Statute & Florida Admin. Code References	Several Florida Statutes and Rules within the Florida Administration Code have been moved, consolidated, or deleted. As such, the City should update its Comp. Plan to reflect these changes.	*Ensure all Florida statutes are currently accurate. Remove/Update all references to 9J-5*		9J-5 references removed throughout the GOPs
	NA	Obsolete Timeframes and References	There are several outdated references to entities, projects, and reports that are discussed in the plan.	*Update planning horizons / timeframes to 2050.* *Objective 3-1* *Policy 3-1.1.4* *Update or remove project specific deadlines.* *Policy 2-1.8.4* *Policy 4-4.1.2* *Policy 8-1.6.10* *Policy 1-4.1.7*	Bus ridership to be amended to microtransit. Need to discuss 4-4.1.2 w/ Public Works. Need to discuss 8-1.6.10 regarding schools but timeframes okay to update. 1-4.1.7, okay but need to review section more broadly.	Planning horizon and completion dates updated throughout.
2026	Section 258.42 & 380.0938	Nature-based Solutions for Improving Coastal Resilience	Authorizes minimal dredging and filling in the Biscayne Bay Aquatic Preserve specifically for restoring and enhancing natural systems like mangroves, salt marshes, seagrasses, and oyster reefs. Prohibits dredging or filling of submerged lands in Terra Ceia Aquatic Preserve unless it is for public necessity or improves water quality and utility. Permits nature-based options such as living seawalls, wave attenuation devices, and green stormwater infrastructure in aquatic preserves to improve resilience. Directs the Department of Environmental Protection to develop, by 2027, design standards and a rule-based statewide permitting process for nature-based coastal resilience projects. Encourages local governments to promote and implement nature based solutions or coastal protection and public awareness.	*No change to the Comprehensive Plan is necessary.*		N/A
	Section 403.086	Perfluoroalkyl and Polyfluoroalkyl Substances	Requires public entities disposing of domestic wastewater biosolids and treated effluent to perform quarterly PFAS sampling and submit results to the department.	*No change to the Comprehensive Plan is necessary.*		N/A
	Section 112.231	Hyperscale Data Centers	Requires coordinated state review for large-scale data centers. Requires local governments to establish site standards with adequate public notices and hearings specific to siting the facilities.	*No change to the Comprehensive Plan is necessary however may want to amend LDC to establish site standards.*		N/A
	Section 377.24	Areas of Critical State Concern	Oil and gas drilling is now prohibited within 10 miles of national estuarine research reserves in rural areas of opportunity, expanding to a 30-mile buffer if the county also contains an area of critical state concern Allow local governments to grant ad valorem tax exemptions for newly constructed affordable multifamily housing, including in designated Areas of Critical State Concern. Exempts Habitat for Humanity projects on 99-year leased lands in such areas from standard construction bond requirements. Extends Florida Forever appropriations through 2035–36 for land acquisition in the Florida Keys Area of Critical State Concern.	*No change to the Comprehensive Plan is necessary however may need to amend LDC.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.2525	Infill Redevelopment Act	Establishes a streamlined process for developing environmentally impacted land for residential use in large counties while overriding conflicting local regulations. Defines applicable parcels, including those with environmental contamination and at least 5 acres adjacent to residential zoning. Requires local governments to permit residential uses that match the average of neighboring districts, and to approve subdivisions meeting legal requirements. Mandates a 20-foot buffer from existing single-family homes or townhouses and imposes double parks or recreational facilities impact fees if the parcel contains formerly operated recreational amenities. Grants adjacent property owners a 90-day option to purchase former recreational areas at a limited price to preserve them as open space for 30 years. Limited to properties in UGB- cannot be applied in ACSC, agricultural lands or lands owned or recently owned by utility companies or near military installations.	*No change to the Comprehensive Plan is necessary however may need to amend LDC.*		N/A
	Section 125.022	Local Land Planning and Development	Requires local governments to create preapplication consultation programs, with automatic approval if deadlines are not met. Authorizes qualified contractors or qualified contractor firms to assist with preapplication reviews and application processing. Establishes a mandatory registry of qualified contractors. Requires local governments to accept certain forms of financial assurance for infrastructure improvements and cannot condition building permits on completion. Expands expedited building permit review for subdivisions, allows up to 50% (or more) of building permits to be issued before a final plat is recorded. Adopts standardized refund schedules when local governments fail to meet application review deadlines. Provides a period of vested rights for approved preliminary plats under certain conditions, ensuring applicants can proceed in good faith with development.	*No change to the Comprehensive Plan is necessary however may need to amend LDC.*		N/A
	Section 163.3162	Agricultural Enclaves	Authorizes landowners to apply for certification as an agricultural enclave if adjacent parcels allow equal or higher density. Requires review and hearing and automatically certifies a parcel as an agricultural enclave if the local government fails to approve or deny within a certain timeframe. Requires development plans consistent with surrounding densities to be treated as conforming uses. Requires enclaves adjacent to urban service districts to be treated as if they are within those districts and obligates local governments and owners to agree in writing on a schedule for final plan approval. Exempts Areas of Critical State Concern and counties with populations greater than 1.75M. Encourages local governments to “incorporate site design measures that maintain habitat permeability….”	*No change to the Comprehensive Plan is necessary however may need to amend LDC.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.2525	Residential Redevelopment of Brownfields	Intended to make it easier to develop environmentally impacted, i.e. brownfield parcels in Broward, Miami-Dade, and Palm Beach counties (counties with populations greater than 1.47 million people). Requires the administrative approval of residential development on a "Qualifying parcel," preempting local law. Qualifying parcel: At least 5 acre parcel with at least a portion designated as brownfield that has a Phase II environmental site assessment; adjacent to parcel zoned for as-of-right residential use in the same jurisdiction. Excludes designated agricultural land, local government public park land, land outside an urban growth boundary, land within a quarter mile of a military installation, or land owned within the last 15 years by a public utility. Density may not exceed the average as-of-right residential zoning district density of adjacent parcels, or 25 units per acre, whichever is lower. The "intensity" of the proposed development on the qualifying parcel must comply with standards applicable to the adjacent parcel. Developer must provide at least a 20 foot buffer between the new development and any adjacent single-family homes or townhouses. Buffer must be maintained as open space or passive recreational facilities accessible to the community. If the qualifying property includes recreational facilities (i.e. golf course), unused for at least a year, the developer must pay double recreational impact fees and give notice of adjacent property owners' option to purchase the qualifying property to preserve it for open space.	*No change to the Comprehensive Plan is necessary. Orange County is not one the Counties mentioned.*		N/A
	Section 553.382 & Section 553.385	off-site manufactured single-family dwellings and proving for parity for on-site and off-site constructed dwellings	Pre-empts local zoning regulations by allowing residential manufactured buildings in RV and mobile home parks, RV lots, and mobile home condominium, cooperative or subdivision. Local government is prohibited from denying building permits for single family dwellings solely based on construction method, provided they comply with applicable codes. Local government cannot adopt or enforce law or policy that has the effect of excluding off-site constructed residential dwellings within its jurisdiction. Off -site constructed dwelling units must be permitted as of right in zoning districts where comparable on-site built housing is allowed, subject to general standards applied to single family dwellings Listed compatibility or design standards must apply equally to off-site and on-site built dwellings	*Remove Housing Element Policy 3-1.3.2 as it provides specific location criteria for mobile homes.*		Housing Element Policy 3-1.3.2 removed from plan.
	Section 163.3177	Schools ILA	Requires school interlocal agreements to allow reasonable access to public easements and rights of ways that are necessary for public school facilities	*No change to the Comprehensive Plan is necessary however ILA may need to be modified to ensure its in compliance.*		N/A
	Section 163.31803	Large Destination Resorts	Requires an administrative process for expansion of "large destination resorts" not to exceed 20 percent of parcel area. A large destination resort is defined as a lodging establishment with at least 5 acres, 500 rooms, and a 70% occupancy rate over the previous 3 years. Does not apply to parcels on the National Register of Historic Places. Process applies to special exceptions or variances needed for maintenance, modification or refurbishment. Changes must be consistent with the existing permitted or accessory uses in the FLUM or zoning district. Sunsets in 2030.	*No change to the Comprehensive Plan is necessary for procedural review changes for large destination resorts.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3194(7)(a)	Compatibility Standards and Findings for Residential Development	Local governments must adopt factors in Comprehensive Plans and Land Development Regulations for assessing compatibility of allowable residential uses within residential FLU category and zoning districts. LDRs must incorporate measures for mitigating or minimizing potential incompatibilities. Staff must specify each area of incompatibility and suggest ways to resolve the incompatibility before recommending denial of a development application. If a development application is denied, the government must provide written justification with specificity [see (7)(c)]; cannot rely on “community character” or “neighborhood feel.” Does not apply to “compatibility between uses in different FLU categories” (named categories are not residential) or in a PUD or master planned community, or within historic districts designated before Jan 1, 2026	*A new policy will need to be added to the Future Land Use Element addressing residential compatibility standards. The LDC will also need to be addressed.*		FLUE Policies 1-1.2.24 & 1-1.2.25 were added.
2025	Section 252.422	Restrictions on county or municipal regulations after a hurricane. (Chapter 2025-190)	Prevents an "impacted local government" from proposing or adopting the following for one year a hurricane makes land fall. (a) A moratorium on construction, reconstruction, or redevelopment of any property. (b) A more restrictive or burdensome amendment to its comprehensive plan or land development regulations. (c) A more restrictive or burdensome procedure concerning review, approval, or issuance of a site plan, development permit, or development order, to the extent that those terms are defined in s. 163.3164.	*Consider adding an objective and policy regarding SB 180.*		FLUE Objective 1-1.1 and Policy 1-1.1.1 were added.
	Section 257.51	Preemption of Regulations of Presential Libraries (Chapter 2025-170)	Creates a new section to preempt local governments from regulation the establishment, maintenance, activities, and operations of any presidential library within its jurisdiction and defers regulation of such institutions to the Federal Government.	*No change to the Comprehensive Plan is necessary this is currently only applicable to the Trump Library being proposed in South Florida.*		N/A
	Section 177.071	Administrative Approval of plats by designated county or municipal official. (Chapter 2025-164)	Amends Section 177.071 to include more requirements for plat and replat submittals. The requirements include the designation of an "administrative authority, a written notice, and a limited timeframe for the approval process.	*No change necessary to the Comprehensive Plan is necessary, however this may require an update to the Land Development Code.*		N/A
	Section 125.01055	Affordable Housing (Chapter 2025-172)	Adds more restrictions on local regulations for high density residential proposed under the Live Local Act. Defines Commercial, Industrial, and Mixed Use. Expands the Act to all lands owned by a religious institution, and all "flexibly zoned area such as a planned unit development permitted for commercial, industrial, or mixed use".	*No change to the Comprehensive Plan is necessary essentially just an expansion of the Live Local Act.*		N/A
2024	Section 163.3164 (32) and (33)	Alternative Mobility Funding Systems and Impact Fees (Chapter 2024-266)	Adds "mobility fee" and "mobility plan" definitions	*No change to the Comprehensive Plan necessary. These terms are not currently defined.*		N/A
	Section 163.3180	Alternative Mobility Funding Systems and Impact Fees (Chapter 2024-266)	- Modifies the conditions for allowing an applicant for a DRI DO, rezoning, or other land use development permit to satisfy the transportation concurrency requirements. It clarifies that if an applicant makes its contribution or constructs its proportionate share pursuant to the requirements stated, the project shall be considered to have mitigated its transportation impacts and be allowed to proceed. - Changes the language from "encourage" to "may" when it comes to a government transitioning from concurrency to mobility or an alternate system. - If the government charges for transportation capacity, there must be an agreement to coordinate mitigation. Includes agreement requirements.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		Impact fee to be reviewed in the future as proposed in GOPs with an emphasis on Mobility improvements.

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3180(5)c	Alternative Mobility Funding Systems and Impact Fees (Chapter 2024-266)	- Includes language to ensure an impact fee study uses recent data and is adopted within 12 months from initiation of the study if increasing fees; the holder of impact fee credits granted in existence before the adoption of the alternative transportation system is entitled to the full benefit of the intensity and density prepaid by the credit balance as of the date the alternative transportation system was first established.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.3164 (44)	Chapter 2024-6, Laws of Florida (SB 82)	Changed Department of Economic Opportunity to Department of Commerce	*No change to the Comprehensive Plan necessary. These terms are not present in the Comprehensive Plan.*		N/A
	Section 163.3221 (14)	Chapter 2024-6, Laws of Florida (SB 82)	Changed Department of Economic Opportunity to Department of Commerce	*No change to the Comprehensive Plan necessary. These terms are not present in the Comprehensive Plan.*		N/A
	Section 163.3251 (1)	Chapter 2024-6, Laws of Florida (SB 82)	Changed Department of Economic Opportunity to Department of Commerce	*No change to the Comprehensive Plan necessary. These terms are not present in the Comprehensive Plan.*		N/A
	Section 163.3175	Ch. 2024-22, Laws of Florida (SB 1720)	Changes to requiring local governments to cooperate with certain major military installations and ranges to encourage compatible land use in associated areas	*No change to the Comprehensive Plan necessary. These terms are not present in the Comprehensive Plan.*		N/A
	Section 163.3202(6)	Ch. 2024-2, Laws of Florida (SB 72)	Fixes cross-reference regarding Florida College System	*No change to the Comprehensive Plan necessary. These terms are not present in the Comprehensive Plan.*		N/A
	Section 163.32051(6)	Ch. 2024-2, Laws of Florida (SB 72)	Deletes the requirement for the Office of Energy to develop and provide recommendations to the legislature regarding a regulatory framework for private and public entities that implement solar floating facilities.	*No change to the Comprehensive Plan necessary. No mention of DOE being needed for the implementation of solar floating facilities.*		N/A
	Section 163.3210 (NEW)	Ch. 2024-186	Creates a new section to maintain, encourage, and ensure adequate and reliable fuel sources for public utilities. A resiliency facility is a permitted use in all commercial, industrial, and manufacturing land use categories in a local government comprehensive plan and all commercial, industrial, and manufacturing districts. A resiliency facility must comply with the setback and landscape criteria for other similar uses. A local government may adopt an ordinance specifying buffer and landscaping requirements for resiliency facilities, provided such requirements do not exceed the requirements for similar uses involving the construction of other facilities that are permitted uses in commercial, industrial, and manufacturing land use categories and zoning districts. After July 1, 2024, a local government may not amend its comprehensive plan, land use map, zoning districts, or land development regulations in a manner that would conflict with a resiliency facility's classification as a permitted and allowable use, including, but not limited to, an amendment that causes a resiliency facility to be a nonconforming use, structure, or development.	*Need to amend FLUE to include a policy permitting resiliency facilities consistent with F.S. 163.3210 to be permitted in all commercial, industrial, and manufacturing land use categories. Also add language for LDC buffer, landscaping, and setback language.*		FLUE Policy 1-2.7.4 added to address Resiliency Facilities.
	Section 163.3184	Ch. 2024-235	Clarifies process to amend a plan - if the local government fails to adopt the amendment within 180 days after receipt of agency comments, the amendment "shall" be deemed withdrawn; transmittal shall be within 10 days of "final adoption" not just 2nd public hearing.	*No change to the Comprehensive Plan necessary. Procedural change for Comprehensive Plan Amendments.*		N/A
2023	Section 163.3191	Evaluation and Appraisal of Comprehensive Plan (Chapter 2023-31)	Amends the requirements of the EAR process. Requires that when local governments notify the state land planning agency of a determination whether EAR-based plan amendments are needed, the notification must include a separate affidavit signed by the Chair or Mayor of the governing body, attesting that all elements of its comprehensive plan comply with section 163.3191, Florida Statutes. The affidavit must also certify that the adopted plan covers the minimum 10-year planning period and cite the source and date of the population projections used in establishing the 10-year planning period.	*No change to the Comprehensive Plan necessary. Procedural change for the EAR. The horizons and source and date for pop. projections will be covered in the update.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3177(6)(c)3	Required and optional elements of comprehensive plan; studies and surveys. (Chapter 2023-169)	"Septic to Sewer." Requires that for any development of more than 50 residential lots, whether built or unbuilt, with more than one onsite sewage treatment and disposal system per 1 acre, the Infrastructure Element must consider the feasibility of providing sanitary sewer services within a 10-year planning horizon and must identify the name and location of the wastewater facility that could receive sanitary sewer flows after connection; the capacity of the facility and any associated transmission facilities; the projected wastewater flow at that facility for the next 20 years, including expected future new construction and connections of onsite sewage treatment and disposal systems to sanitary sewer; and a timeline for the construction of the sanitary sewer system. An onsite sewage treatment and disposal system is presumed to exist on a parcel if sanitary sewer services are not available at or adjacent to the parcel boundary. Each comprehensive plan must be updated to include this requirement by July 1, 2024, and as needed thereafter to account for future applicable developments.	*Need to add data and policy addressing septic to sewer requirements.*		Public Faciliites Element Policy 4-2.1.15 added to address Septic to Sewer. Supporting Data and Analysis provided.
	Section 163.3208	Substation Approval Process (Chapter 2023-31)	Statute preempts local governments from adopting or enforcing land development regulations for new and existing electrical substations. New and existing electrical substations must be permitted in all land use categories and no size limitations can be enforced.	Need to create a new policy in the FLUE permitting electrical substations in all land use categories and direction to amend the LDR.		FLUE Policy 1-2.7.2 added to address preemption on Electrical Substations.
2019-2022	Section 163.3180	Amending Concurrency, (Chapter 2022-122, section 1, Laws of Florida)	Amends subsection (6)(h)2 to revise provisions specifying when school concurrency is deemed satisfied. Requires the district school board to notify the local government that capacity is available for development within 30 days after receipt of the developer's legally binding commitment. Specifies that any proportionate-share mitigation directed toward a school capacity improvement not identified in the 5-year school board educational facilities plan must be set aside and not spent until such an improvement has been identified.	*No change to the comprehensive plan is nessesary Comprehensive plan is already in complain with this section.*		N/A
	Section 163.32051	Floating Solar Facilities, (Chapter 2022-83, section 1, Laws of Florida).	Creates 163.32051, which provides legislative findings regarding floating solar facilities. Defines the term "floating solar facility." Requires a floating solar facility to be a permitted use in the appropriate land use categories and requires local governments to amend their land development regulations to promote expanded uses of floating solar facilities. Authorizes a county or municipality to specify buffer and landscaping requirements, which may not exceed the requirements for similar uses involving the construction of other solar facilities permitted in agricultural land use categories and zoning districts. Provides exceptions to the construction of floating solar facilities in an Everglades Agricultural Area reservoir project if it is determined to have negative impacts on the project	Need to create a policy permitting Floating Solar Facilities in some land use categories and to amend the LDR.		FLUE Policy 1-2.7.3 added to address Floating Solar Facilities.

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3187	Process for Adoption of Small-Scale Comprehensive Plan Amendment (Chapter 2021-206, section 3, Laws of Florida).	Amends subsection (1)(a) to increase the small-scale development amendment limit to 50 acres or fewer. Revises subsection (3) pertaining to small-scale development amendments for sites within a rural area of opportunity to allow a 100 percent increase to the 50-acre acreage limit now included in subsection (1)(a)	*No change to the Comprehensive Plan necessary. Procedural change for small-scale development amendments.*		N/A
	Section 163.3167	Scope of Act (Chapter 2021-206, section 1, Laws of Florida).	Revises subsection (5) to allow landowners with a development order approved before the municipality was incorporated to abandon said development order and develop the order's vested density and intensity as long as the vested uses, density, and intensity are consistent with the municipality's comprehensive plan and all existing concurrency obligations in the development order remain in effect	*No change to the Comprehensive Plan necessary. Procedural/clerical change for development orders.*		N/A
	Section 163.3202	Land Development Regulations (Chapter 2021-201, section 1, Laws of Florida). No longer applicable - see 2024-2	Adds new subsection (5) to specify that land development regulations relating to building design elements may not be applied to a single-family or two-family dwelling except under certain listed conditions	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.3237	Amendment or Cancellation of a Development Agreement (Chapter 2021-195, section 3, Laws of Florida)	Amends this section to allow a party to a development agreement and a local government to amend or cancel a development agreement without consent of other affected property owners unless the amendment or cancellation will modify the allowable uses or entitlements on such owner's property	*No change to the Comprehensive Plan necessary. Procedural/clerical change for development agreements.*		N/A
	Section 163.3177	Required and Optional Elements of Comprehensive Plan; Studies and Surveys (Chapter 2021-195, section 2, Laws of Florida).	Adds subsection (6)(i) which requires each local government to include in its comprehensive plan a property rights element to ensure that private property rights are considered in local decision making. The statute also provides a statement of rights local governments may adopt in order to meet these requirements	*Need to incorporate new Property Rights Element.*		New Property Rights Element added.
	Section 163.3167	Scope of Act (Chapter 2021-195, section 1, Laws of Florida).	Amends subsection (3) to clarify that requirements pertaining to development orders and their incorporation and interaction with comprehensive plans are specifically related to plans for municipalities incorporated after January 1, 2016	*No change to the Comprehensive Plan necessary. Winter Garden incorporated prior to 2016.*		N/A
	Section 163.3205	Solar Facility Approval Process, (Chapter 2021-178, section 1, Laws of Florida)	Creates section 163.3205, F.S., which applies to sites that are subject to an application to construct a solar facility submitted to a local government on, or after, July 1, 2021, to encourage renewable solar electrical generation, define "solar facility", and set forth an allowance for solar facilities in all agricultural land use categories in a local government comprehensive plan and all agricultural zoning districts in an unincorporated area.	*No change necessary in the Comprehensive Plan as the City has no AG FLU categories, but may need to be addressed in the LDR if agriculture zoning exists.*		N/A
	Section 163.3168	Planning Innovations and Technical Assistance (Chapter 2021-161, section 1, Laws of Florida; and Chapter 2021-186, section 1, Laws of Florida)	Repeals existing subsection (4) that directed the state land planning agency to give preference when selecting applications for funding for technical assistance to counties with a population of 200,000 or less, and to municipalities within those counties, for assistance in determining whether the area in and around a proposed multiuse corridor interchange contains appropriate land uses and natural resource protections and amending a comprehensive plan to provide for such land uses and protections	*No change to the Comprehensive Plan necessary. Clerical/procedural change not relevant to Winter Garden.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.31801	Impact Fees; Short Title; Intent; Minimum Requirements; Audits; Challenges, (Chapter 2021-63, section 1, Laws of Florida).	Adds a new subsection (3) to define "Infrastructure" and "Public facilities." Renumbers existing subsections (3) through (11) and rewords existing subsections (3), (5), (6), (8), and (11) for clarity. Amends existing subsection (4) to provide additional regulations pertaining to impact fee credits. Adds a new subsection (6), which prescribes the circumstances under which impact fees may be increased, sets forth limitations on those fee increases, and notes that this section applies retroactively to January 1, 2021.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.3163	Applications for Development Permits; Disclosure and Acknowledgement of Contiguous Sustainable Agricultural Land, (Chapter 2021-7, section 7, Laws of Florida)	Reenacts subsection (3)(b) to provide a definition for "Farm operation."	*No change to the Comprehensive Plan necessary. Term does not exist in the Comp. Plan.*		N/A
	Section 163.3162	Agricultural Lands and Practices, (Chapter 2021-7, section 6, Laws of Florida)	Reenacts subsection (2)(b) to provide a definition for "Farm operation."	*No change to the Comprehensive Plan necessary. Term does not exist in the Comp. Plan.*		N/A
	Section 163.3180	Concurrency (Chapter 2020-150, section 28, Laws of Florida.	Amends subsection (2) to alter the governmental entity that approves onsite sewage treatment and disposal systems from the Department of Health to the Department of Environmental Protection	*No change to the Comprehensive Plan necessary. But may be good to modify 5-1.6.7 stating that approval from FDEP is required.*		N/A
	Section 163.3168	Planning Innovations and Technical Assistance (Chapter 2020-122, section 2, Laws of Florida)	Adds subsection (4) providing guidance to the state land planning agency when selecting applications for technical assistance funding to give preference to counties with a population of 200,000 or less, and to municipalities located within such counties, in determining whether the area in and around a proposed multiuse corridor interchange as described in section 338.2278, F.S., contains appropriate land uses and protections and aiding in amending a comprehensive plan to provide such appropriate land uses and protections	*No change to the Comprehensive Plan necessary. Clerical/procedural change not relevant to Winter Garden and later repealed.*		N/A
	Section 163.31801	Impact Fees; Short Title; Intent; Minimum Requirements; Audits, Challenges (Chapter 2020-58, section 1, Laws of Florida.	Amends subsection (3)(d) to specify that a new or increased impact fee may not be charged to current or pending permit applications submitted before the effective date of an ordinance or resolution imposing such an impact fee unless the result is to reduce the total mitigation costs or impact fees imposed on an applicant. Amends subsection (4) to clarify that a local government must provide credit against the collection of an impact fee of any contribution related to public education facilities regardless of any charter provision, comprehensive plan policy, ordinance, or resolution. Renumbers existing subsections (8) and (9) as subsections (9) and (10). Adds a new subsection (8) that sets forth the provisions by which impact fee credits are assignable and transferable and renumbers subsequent subsections.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.31801	Impact Fees; Short Title; Intent; Minimum Requirements; Audits; Challenges (Chapter 2020-27, section 5, Laws of Florida.	Adds subsection (10) and supporting paragraphs (a) through (e) to address the data on impact fee charges that must be reported in an annual financial report by a county, municipality, or special district.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.31771	Accessory Dwelling Units (Chapter 2020-27, section 4, Laws of Florida.	Amends subsections (3) and (4) to allow a local government to adopt an ordinance allowing accessory dwelling units to be located in any area zoned for single family residential use and removes the requirement that the ordinance be conditioned upon a finding that there is a shortage of affordable rentals within the jurisdiction	*No change to the Comprehensive Plan necessary. Removes state regulations related to ADUs in Single Family Residential.*		ADUs included in the GOPs as one of the housing strategies.
	Section 163.3215	Standing to Enforce Local Comprehensive Plans Through Development Orders (Chapter 2019-165, section 7, Laws of Florida.	Amends subsection (8)(a) to provide that either party is entitled to a certain summary procedure in certain court proceedings. Adds subsection (8)(b) clarifying how a court may find a summary procedure does not apply. Adds subsection (8)(c), which provides that a prevailing party in a challenge to certain development orders can be entitled to recover certain fees and costs	*No change to the Comprehensive Plan necessary. Procedural change for court proceedings.*		N/A
	Section 163.3202	Land Development Regulations (Chapter 2019-165, section 6, Laws of Florida).	Adds paragraph (j) to subsection (2) to require preexisting development orders to be incorporated into local land development regulations.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.31801	Impact Fees; Short Title; Minimum Requirements: Audits; Challenges (Chapter 2019-165, section 5, Laws of Florida).	Amends subsection (3) to add minimum conditions that certain impact fees must satisfy. Renumbers existing subsections (4) and (5) as subsections (6) and (7) Adds a new subsection (4) to require local governments to credit against the collection of an impact fee any contribution related to public education facilities. Adds subsection (5) so that if a local government increases its impact fee rates then the holder of impact fee credits is entitled to the full benefit of the intensity or density of the credit balance as of the date it was established and renumbers subsequent subsections. Amends renumbered subsection (7) to provide that in certain actions, the local government has the burden of proving by a preponderance of the evidence that the imposition or amount of certain required dollar-for-dollar credits for the payment of impact fees meets certain requirements and prohibits the court from using a deferential standard for the benefit of the government. Adds subsection (8) to authorize a local government to provide an exception or waiver for an impact fee for the development or construction of affordable housing, and in doing such is not required to use any revenues to offset the impact. Adds subsection (9) to clarify that this section does not apply to water and sewer connection fees	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3180	Concurrency (Chapter 2019-165, section 4, Laws of Florida.	Amends subsection (5)(i) to clarify compliance requirements for a mobility fee-based funding system. Revises subsection (6)(h)2.b. to require a local government to credit certain contributions, constructions, expansions, or payments toward any other impact fee or exaction imposed by local ordinance for public educational facilities and provides the requirements for the basis of that credit	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.3167	Scope of Act (Chapter 2019-165, section 3, Laws of Florida).	Amends subsection (3) to require local governments that have adopted comprehensive plans after January 1, 2019 to incorporate into their comprehensive plans development orders that existed before the comprehensive plan's effective date	*No change to the Comprehensive Plan is necessary the City incorporated prior to 2019*	No action required.	N/A
	Section 163.3187	Process for Adoption of Small-Scale Comprehensive Plan Amendment (Chapter 2019-157, section 1, Laws of Florida.	Removes subsection (1)(b), which specified the cumulative annual acreage maximum of adopted small-scale comprehensive plan amendments	*No change to the Comprehensive Plan necessary. Procedural change for small scale comprehensive plan amendments.*		N/A
	Section 163.3209	Electric Transmission and Distribution Line Right-of-way Maintenance (Chapter 2019-155, section 2, Laws of Florida	Removes language requiring local government approval of a property owner's request for electric utilities to perform certain right-of-way vegetation and tree maintenance	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.31801	Impact Fees; Short Title; Intent; Minimum Requirements; Audits; Challenges (Chapter 2019-106, section 1, Laws of Florida.	Revises the section's title. Amends language of paragraphs (a) through (d) of subsection (3) to clarify the local government responsibilities related to impact fees. Adds new paragraphs (e) through (i) to subsection (3) to amend the minimum requirements for the adoption of impact fees by specified local governments and note restrictions to the allowable uses of those impact fees. Adds a new subsection (6), which exempts water and sewer connection fees from the Florida Impact Fee Act.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.3177	Required and Optional Elements of Comprehensive Plan; Studies and Surveys (Chapter 2019-3, section 31, Laws of Florida).	Updates statutory reference related to affordable workforce housing within subsection (6)(f)	*No change to Comprehensive Plan necessary. Cross reference change and Comp. Plan is compliant.* *Policy 1-1.2.3* *Policy 3-1.7.6*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
2016-2018	Section 163.3184	Process for Adoption of Comprehensive Plans or Plan Amendments (Chapter 2016-148, section 3, Laws of Florida).	Amends section 163.3184(2)(c) to modify the language pursuant to changes in section 380.06, F.S., to require state coordinated review of plan amendments that approve DRI-sized proposed developments; no substantive change *** Adds subsection 163.3184(5)(e)3 to provide that when an administrative law judge issues an order recommending that a plan amendment be found in compliance, the recommended order becomes the final order 90 days after issuance unless the state land planning agency issues a final order finding the amendment in compliance, refers the recommended order to the Administration Commission, or all parties consent in writing to an extension of the 90-day period. ***** Amends section 163.3184(7)(d), for plan amendment challenges that are subject to mediation or expeditious resolution, to provide that when an administrative law judge issues a recommended order finding an amendment in compliance, except where the parties agree or there are exceptional circumstances, the state land planning agency must issue a final order within 45 days after issuance of a recommended order; and if the final order is not issued in 45 days, the recommended order finding the amendment in compliance becomes the final order.	*No change to the Comprehensive Plan necessary. Procedural change for DRI sized proposed developments*		N/A
	Section 163.3245(1)	Sector Plans (Chapter 2016-148, section 4, Laws of Florida).	Modifies this section to reduce the minimum amount of total land area required for a sector plan from 15,000 acres to 5,000 acres.	*No change to the Comprehensive Plan necessary. Change to Sector Plans which Winter Garden does not have.*		N/A
	Sections 163.3221(4)(b)(2) and (4)(b)(8)	Florida Local Government Development Agreement Act; Definitions. .	Amends the definition of "development" to exclude work by electric utility providers on utility infrastructure on certain rights-of-way or corridors and the creation or termination of distribution and transmission corridors.	*No change to the Comprehensive Plan necessary. Clerical change.*		N/A
	Sections 163.3245(3)(e), (3)(e)6., and (3)(e)12	Chapter 2018-158	Sector Plans, updated statutory cross references.	*No change to the Comprehensive Plan necessary. Change to Sector Plans which Winter Garden does not have.*		N/A
	Sections 163.3246 (11), (12), and (14)	Chapter 2018-158	Local Government Comprehensive Planning Certification Program updated to delete references to Development of Regional Impact Review.	*Remove all references to DRIs except those that are already vested.* *Remove* *Policy 8-1.3.5* *Policy 2-2.2.6* *Keep* *Policy 1-1.2.9* *Policy 1-2.1.17* *Policy 9-1.3.3* *Policy 9-1.3.4* *Policy 2-2.2.6* *Policy 9-1.3.7*		Removed DRI references throughout.
	Section 163.3164	Chapter 2024-266	Definitions, added a new definition of "master development plan" or "master plan" as subsection (31) and renumbered subsequent sections.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
2015	Section 163.3177 (6)(c)4	Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (Chapter 2015-30, section 2, Laws of Florida).	· Provides that a local government that does not own, operate, or maintain its own water supply facilities and is served by a public water utility with a permitted allocation of greater than 300 million gallons per day is not required to amend its comprehensive plan in response to an updated regional water supply plan or maintain a work plan if the local government's usage of water is less than 1 percent of the public water utility's total permitted allocation.· The local government must cooperate with any local government or utility provider that provides service within its jurisdiction. · The local government must keep the element up to date in accordance with section 163.3191 (evaluation and appraisal).	*No change to the Comprehensive Plan necessary. Not applicable to Winter Garden.*		N/A
	Section 163.3184(2)	Comprehensive Plan/Plan Amendment Procedures (Chapter 2015-30, section 3, Laws of Florida).	The list of plan amendments subject to the coordinated state review process is expanded to include plan amendments that propose an amendment to an adopted sector plan and plan amendments that propose a development that qualifies as a development of regional impact pursuant to section 380.06, Florida Statutes.	*No change to the Comprehensive Plan necessary. Clerical/procedural change to coordinated state review.*		N/A
	Section 163.3245	Sector Plans (Chapter 2015-30, section 4, Laws of Florida)	Amends the section as follows: · For both the long-term master plan and detailed specific area plans, provisions in the Community Planning Act that are inconsistent with or are superseded by the planning standards in sections 163.3245(3)(a) and (b) do not apply. · Conservation easements may be based on digital orthophotography that meets certain criteria. · A conservation easement may include a provision for the grantor to substitute other land that meets certain criteria by recording an amendment to the conservation easement; substitution requires the consent of the grantee, which consent shall not be unreasonably withheld (sections 163.3245(3)(b)7. and 9.). · An applicant for a detailed specific area plan must transmit a copy of the application to reviewing agencies, which must provide written comments to the local government within 30 days after the applicant transmits the application (section 163.3245(3)(f)). · Authorizes the Department of Environmental Protection, the Fish and Wildlife Conservation Commission, or the water management district to accept a conservation easement provided for a detailed specific area plan as mitigation under chapters 373 and 379 and section 373.414, Florida Statutes (section 163.3245(3)(h)). · Clarifies that adoption of a long-term master plan or a detailed specific area plan does not limit the right to establish new agricultural or silvicultural uses in the sector plan or detailed specific area plan area (section 163.3245(9)). · Provides that an applicant with an approved master development order may request that the water management district issue a consumptive use permit for the same time period as the approved master development order (section 163.3245(13)). · The more specific provisions of this section supersede the generally applicable provisions of this chapter which otherwise would apply. · This section does not preclude a local government from requiring data and analysis beyond the minimum criteria established by this section (section 163.3245(15)).	*No change to the Comprehensive Plan necessary. Sector Plans are irrelevant to Winter Garden.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3246(11) and (14)	Local Government Comprehensive Planning Certification Program – Connected-City Corridor Pilot Program [New] (Chapter 2015-30, section 5, Laws of Florida)	· Deletes requirements for notice to and coordination by regional planning councils in connection with developments of regional impact within a certified local government. · Creates a connected-city corridor plan amendment pilot program. · Expresses legislative intent to encourage growth of high-technology industry and innovation through a locally controlled comprehensive plan amendment process. · Establishes Pasco County as a pilot community for connected-city corridor plan amendments for a period of 10 years. · Requires the state land planning agency to issue a written notice of certification to Pasco County by July 15, 2015 that includes the geographic boundary of the connected-city corridor and a requirement for annual or biennial monitoring reports. · Provides that the notice of certification is subject to challenge under section 120.569. · Establishes criteria for connected-city corridor plan amendments. · Provides that except for site-specific access management requirements, development in the certification area is deemed to satisfy concurrency if the County adopts a long-term transportation network plan and financial feasibility plan. · Provides an exemption from development of regional impact review. · Requires that the Office of Program Policy Analysis and Government Accountability provide a report and recommendations for implementing a statewide program to the Governor, President of the Senate, and Speaker of the House by December 1, 2024.	*No change to the Comprehensive Plan necessary. Irrelevant to Winter Garden.*		N/A
	Section 163.3248(4)	Rural Land Stewardships (Chapter 2015-30, section 6, Laws of Florida)	Deletes regional planning councils as entities that provide assistance and participate in developing a plan for the rural land stewardship area.	*No change to the Comprehensive Plan necessary. Winter Garden does not have a rural lands stewardship program.*		N/A
2014	Section 163.3167(8)(b)	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Deletes the provision that an initiative or referendum in regards to a comprehensive plan amendment or map amendment is only allowed if it affects more than five parcels of land.	*No change to the Comprehensive Plan necessary. Procedural/clerical change to comprehensive plan amendments.*		N/A
	Section 163.3167(8)(c)	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Deletes the provision that an initiative or referendum in regards to a comprehensive plan amendment or map amendment is only allowed if it affects more than five parcels of land.	*No change to the Comprehensive Plan necessary. Procedural/clerical change to comprehensive plan amendments.*		N/A
	Section 163.3177(7)(a)2	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Changes “rural areas of critical economic concern” to “rural areas of opportunity.”	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
	Section 163.3177(7)(a)3.b	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Changes “rural area of critical economic concern” to “rural area of opportunity.”	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
	Section 163.3177(7)e	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Provides general re-wording and changes “rural area of critical economic concern” to “rural area of opportunity.”	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
	Section 163.3187(3)	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Changes “rural area of critical economic concern” to “rural area of opportunity.”	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3202(1)	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Requires that local governments must adopt, amend, and enforce land development regulations that are consistent with and implement the comprehensive plan within one year after submission of the comprehensive plan or amended comprehensive plan pursuant to section 163.3191, Florida Statutes (evaluation and appraisal process), instead of section 163.3167(2), Florida Statutes).	*No change to the comprehensive plan necessary Policy 1-1.2.18 is compliant*		N/A
	Section 163.3206(1) [New]	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Provides a definition of "fuel" with cross references	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
	Section 163.3206(2)(b) [New]	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Provides a definition of "fuel terminal."	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
	Section 163.3206(3) [New]	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Provides that after July 1, 2014, a local government may not amend its comprehensive plan, land use map, zoning districts, or land use regulations to conflict with a fuel terminal's classification as a permitted and allowable use, including an amendment that causes a fuel terminal to be a nonconforming use, structure, or development.	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
	Section 163.3206(4) [New]	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Provides that if a fuel terminal is damaged or destroyed due to a natural disaster or other catastrophe, a local government must allow the timely repair of the fuel terminal to its capacity before the natural disaster or catastrophe.	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
	Section 163.3206(5) [New]	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Provides that the section does not limit the authority of a local government to adopt, implement, modify, and enforce applicable state and federal requirements for fuel terminals, including safety and building standards. Local authority may not conflict with federal or state safety and security requirements.	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
	Section 163.3246(10)	Chapters 2014-93, 2014-178, and 2014-218, Laws of Florida	Changes "rural area of critical economic concern" to "rural area of opportunity."	*No change to the Comprehensive Plan necessary. These terms do not exist in the Comprehensive Plan.*		N/A
2013	Section 163.2136(3)(c)-(k) [re-numbered]. No longer applicable.	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Re-numbers section 163.3162(3)(b)-(j) as 163.3162(3)(c)-(k) in order to accommodate new section 163.3162(3)(b) - see Section 163.3162(3)(b) [New]	*No change to the Comprehensive Plan necessary. No longer applicable.*		N/A
	Section 163.3162(2)(d)	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Amends the definition of "governmental entity" in the provisions for agricultural lands and practices to provide that the term does not include a water management district (in addition to the term not including a water control district established under chapter 298 and a special district created by special act for water management purposes).	*No change to the Comprehensive Plan necessary. No longer applicable.*		N/A
	Section 163.3162(3)(a)	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Replaces "county" with "governmental entity.": (a) A governmental entity may not exercise any of its powers to adopt or enforce any ordinance, resolution, regulation, rule, or policy to prohibit, restrict, regulate, or otherwise limit an activity of a bona fide farm operation on land classified as agricultural land pursuant to s. 193.461, if such activity is regulated through implemented best management practices, interim measures, or regulations adopted as rules under chapter 120 by the Department of Environmental Protection, the Department of Agriculture and Consumer Services, or a water management district as part of a statewide or regional program; or if such activity is expressly regulated by the United States Department of Agriculture, the United States Army Corps of Engineers, or the United States Environmental Protection Agency.	*No change to the Comprehensive Plan necessary.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3162(3)(b) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Prohibits a governmental entity from charging a fee on a specific agricultural activity of a bona fide farm operation on land classified as agricultural land pursuant to section 193.461, if such agricultural activity is regulated through implemented best management practices, interim measures, or regulations adopted as rules under chapter 120 by the Department of Environmental Protection, the Department of Agriculture and Consumer Services, or a water management district as part of a statewide or regional program; or if such agricultural activity is expressly regulated by the United States Department of Agriculture, the United States Army Corps of Engineers, or the United States Environmental Protection Agency.	*No change to the Comprehensive Plan necessary.*		N/A
	Section 163.3167(8)(a) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Provides that an initiative or referendum process in regard to any development order is prohibited. Removes language that allowed an initiative or referendum process by a local government charter in effect as of June 1, 2011 to be retained and implemented.	*No change to the Comprehensive Plan necessary. Procedural change to development orders.*		N/A
	Section 163.3167(8)(b) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Provides that an initiative or referendum process in regard to any local comprehensive plan amendment or map amendment is prohibited, except for those amendments that affect more than five parcels of land if it is expressly authorized by specific language in a local government charter that was lawful and in effect on June 1, 2011. A general local government charter provision for an initiative or referendum process is not sufficient.	*No change to the Comprehensive Plan necessary. Procedural change to Comprehensive Plan Amendments.*		N/A
	Section 163.3167(8)(c) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	States the intent of the Legislature to prohibit any initiative and referendum in regard to any development order, and prohibit any initiative and referendum in regard to any local comprehensive plan or map amendment except as specifically and narrowly permitted in paragraph (b). States that these prohibitions are remedial in nature and apply retroactively to any initiative or referendum process commenced after June 1, 2011, and that any such initiative or referendum process commenced or completed thereafter is null and void and of no legal force and effect.	*No change to the Comprehensive Plan necessary. Procedural change to Comprehensive Plan Amendments and Development Orders.*		N/A
	Section 163.3180(5)(h)1 [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Revises and adds requirements for local governments that continue to implement a transportation concurrency system, whether in the form adopted into the comprehensive plan before the effective date of the Community Planning Act, Chapter 2011-139, Laws of Florida, or as subsequently modified.	*No change to the Comprehensive Plan necessary. Procedural change to Comprehensive Plan Amendments and Development Orders.*		N/A
	Section 163.3180(5)(h)1.c [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Adds "development agreement" in the listed land use development permits for which an applicant may satisfy transportation concurrency requirements of the local comprehensive plan, the local government's concurrency management system and section 380.06 when applicable, if conditions in subsequent sections are met.	*No change to the Comprehensive Plan necessary. Not applicable to Winter Garden.*		N/A
	Section 163.3180(5)(h)1.c.II [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Adds language allowing a local government to accept contributions from multiple applicants for a planned improvement if it maintains contributions in a separate account designated for that purpose.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A
	Section 163.3180(5)(h)1.d [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Modifies language to require local governments that continue to implement a transportation concurrency system to provide the basis upon which the landowners will be assessed a proportionate share of the cost addressing the transportation impacts resulting from a proposed development.	*No change to the Comprehensive Plan necessary. Not applicable to Winter Garden.*		N/A
	Section 163.3180(5)(h)3 [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Clarifies that a local government is not required to approve a development that, for reasons other than transportation impacts, is not qualified for approval pursuant to the applicable local comprehensive plan and land development regulations.	*No change necessary in the Comprehensive Plan but may need to be addressed in the LDR.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3180(5)(i) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Sets forth new provisions for any local government that elects to repeal transportation concurrency. Encourages adoption of alternative mobility funding system that uses one or more of the tools and techniques identified in subsection (f). Provides that any alternative mobility funding system adopted may not be used to deny, time or phase an application for site plan approval, plat approval, final subdivision approval, building permits, or the functional equivalent of such approvals provided that the developer agrees to pay for the development's identified transportation impacts via the funding mechanism implemented by the local government. States that the revenue from the funding mechanism used in the alternative system must be used to implement the needs of the local government's plan which serves as the basis for the fee imposed. Requires a mobility fee-based funding system to comply with the dual rational nexus test applicable to impact fees. An alternative system that is not mobility fee-based shall not be applied in a manner that imposes upon new development any responsibility for funding an existing transportation deficiency as defined in subsection (h).	*No change to the Comprehensive Plan necessary. Winter Garden is already in compliance.*		N/A
	Section 163.3246(1),(4)-(7), (9)(a), (12) and (13)	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Changes numerous references in the provisions for the local government comprehensive planning certification program from "department" to "state land planning agency."	*No change to the Comprehensive Plan necessary. Clerical change.*		N/A
	Section 163.325 [New]B50:E52D52B5B50:E67	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Creates short title for sections 163.325-163.3253 as the "Manufacturing Competitiveness Act."	*No change to the Comprehensive Plan necessary. Clerical change.*		N/A
	Section 163.3251(1)–(6) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Creates six definitions as used in the provisions for manufacturing development in sections 163.3251-163.3253: (1) "Department" means Department of Economic Opportunity; (2) "Local government development approval" means a local land development permit, order, or other approval issued by a local government, or a modification of such permit, order, or approval, which is required for a manufacturer to physically locate or expand and includes, but is not limited to, the review and approval of a master development plan required under section 163.3252(2)(c). (3) "Local manufacturing development program" means a program enacted by a local government for approval of master development plans under section 163.3252. (4) "Manufacturer" means a business that is classified in Sectors 31-33 of the National American Industry Classification System (NAICS) and is located, or intends to locate, within the geographic boundaries of an area designated by a local government as provided under section 163.3252. (5) "Participating agency" means: (a) The Department of Environmental Protection, (b) The Department of Transportation, (c) The Fish and Wildlife Conservation Commission, when acting pursuant to statutory authority granted by the Legislature and (d) Water management districts. (6) "State development approval" means a state or regional permit or other approval issued by a participating agency, or a modification of such permit or approval, which must be obtained before the development or expansion of a manufacturer's site, and includes, but is not limited to, those specified in section163.3253(1).	*No change to the Comprehensive Plan necessary. These terms do not appear in the Comprehensive Plan.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3252 [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Setting forth provisions for a local manufacturing development program and master development approval for manufacturers, allows a local government to adopt an ordinance establishing a local manufacturing development program through which the local government may grant master development approval for the development or expansion of sites that are, or are proposed to be, operated by manufacturers at specified locations within the local government's geographic boundaries.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(1)(a) and (b) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Requires a local government that elects to establish a local manufacturing development program to submit a copy of the ordinance establishing the program to DEO within 20 days after the ordinance is enacted. Provides that a local government ordinance adopted before the effective date of this act establishes a local manufacturing development program if it satisfies the minimum criteria established in subsection (3) and if the local government submits a copy of the ordinance to DEO on or before September 1, 2013.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)[New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Requires that DEO develop a model ordinance by December 1, 2013, to guide local governments that intend to establish a local manufacturing development program. Requires the model ordinance, **which need not be adopted by a local government**, to include the elements set forth in sections 163.3252(2)(a)-(k).	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(a) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Requires the model ordinance to include procedures for a manufacturer to apply for a master development plan and procedures for a local government to review and approve a master development plan.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(b) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	Requires the model ordinance to identify those areas within the local government's jurisdiction which are subject to the program.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(c)1-4 [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include the minimum elements for a master development plan, including but not limited to: · (1) A site map · (2) A list proposing the site's land uses · (3) The maximum square footage, floor area ratio, and building heights for future development on the site, specifying with particularity those features and facilities for which the local government will require the establishment of maximum dimensions, and · (4) Development conditions	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(d)1-11 [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include a list of development impacts, if applicable to the proposed site, which the local government will require to be addressed in a master development plan, including but not limited to:· (1) Drainage · (2) Wastewater · (3) Potable water · (4) Solid waste · (5) Onsite and offsite natural resources · (6) Preservation of historic and archeological resources · (7) Offsite infrastructure · (8) Public services · (9) Compatibility with adjacent offsite land uses · (10) Vehicular and pedestrian entrance to and exit from the site, and · (11) Offsite transportation impacts	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3252(2)(e) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include a provision vesting any existing development rights authorized by the local government before the approval of a master development plan, if requested by the manufacturer.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(f) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include whether an expiration date is required for a master development plan and, if required, a provision stating that the expiration date may not be earlier than 10 years after the plan's adoption.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(g)1 and 2 [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include a provision limiting the circumstances that require an amendment to an approved master development plan to: (1) Enactment of state law or local ordinance addressing an immediate and direct threat to the public safety that requires an amendment to the master development order, and (2) Any revision to the master development plan initiated by the manufacturer.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(h) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include a provision stating the scope of review for any amendment to a master development plan is limited to the amendment and does not subject any other provision of the approved master development plan to further review.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(i) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include a provision stating that, during the term of a master development plan, the local government may not require additional local development approvals for those development impacts listed in paragraph (d) that are addressed in the master development plan, other than approval of a building permit to ensure compliance with the state building code and any other applicable state-mandated life and safety code.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(j) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include a provision stating that, before commencing construction or site development work, the manufacturer must submit a certification, signed by a licensed architect, engineer, or landscape architect, attesting that such work complies with the master development plan.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(2)(k) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the model ordinance to include a provision establishing the form that will be used by the local government to certify that a manufacturer is eligible to participate in the local manufacturing development program adopted by that jurisdiction.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3252(3)(a)-(d) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires a local manufacturing development program ordinance to as a minimum be consistent with subsection (2) and establish procedures for (a) Reviewing an application from a manufacturer for approval of a master development plan, (b) Approving a master development plan, which may include conditions that address development impacts anticipated during the life of the development, (c) Developing the site in a manner consistent with the master development plan without requiring additional local development approvals other than building permits and (d) Certifying that a manufacturer is eligible to participate in the local manufacturing development program.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3252(4)(a) and (b)1 and 2 [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Prohibits a local government that establishes a local manufacturing development program from abolishing the program until it has been in effect for at least 24 months. · Sets forth provisions for a local government's repealing its local manufacturing development program ordinance, stating that (1) Any application for a master development plan which is submitted to the local government before the effective date of the repeal is vested and remains subject to the local manufacturing development program ordinance in effect when the application was submitted; and (2) The manufacturer that submitted the application is entitled to participate in the manufacturing development coordinated approval process established in section 163.3253.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253 [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Creates provisions for a coordinated manufacturing development approval process, requiring DEO to coordinate the manufacturing development approval process with participating agencies, as set forth in this section, for manufacturers that are developing or expanding in a local government that has a local manufacturing development program.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(1)(a)-(i) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires the approval process to include collaboration and coordination among, and simultaneous review by, the participating agencies of applications for: (a) Wetland or environmental resource permits, (b) Surface water management permits, (c) Stormwater permits, (d) Consumptive water use permits (e) Wastewater permits, (f) Air emission permits, (g) Permits relating to listed species, (h) Highway or roadway access permits and (i) Any other state development approval within the scope of a participating agency's authority.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(2)(a) and (b) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires a manufacturer to file its application for state development approval with DEO and each participating agency with proof that its development or expansion is located in a local government that has a local manufacturing development program. If a local government repeals its local manufacturing development program ordinance, a manufacturer developing or expanding in that jurisdiction remains entitled to participate in the process if the manufacturer submitted its application for a local government development approval before the effective date of repeal.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(3)(a) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires DEO to convene a meeting with one or more participating agencies if a manufacturer requests one at any time during the process and that the participating agencies attend. · Allows DEO to participate as necessary to accomplish the purposes set forth in section 20.60(4)(f), does not require the department to mediate between the participating agencies and the manufacturer.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(3)(b) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Prohibits DEO from being a party to any proceeding initiated under sections 120.569 and 120.57 that relates to approval or disapproval of an application for state development approval processed under this section.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(3)(c) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Prohibits DEO's participation in a coordinated manufacturing development approval process under this section from having any effect on its approval or disapproval of any application for economic development incentives sought under section 288.061 or another incentive requiring DEO approval.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.3253(4)(a) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires that if a participating agency determines an application is incomplete, the participating agency must notify the applicant and DEO in writing of the additional information necessary to complete the application. · Requires that a participating agency provide a request for additional information to the manufacturer and DEO within 20 days after the date the application is filed with the participating agency unless the deadline is waived in writing by the manufacturer.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	163.3253(4)(b) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Provides that if the participating agency does not request additional information within the 20-day period, the participating agency may not subsequently deny the application based on the manufacturer's failure to provide additional information.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(4)(c) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Within 10 days after the manufacturer's response to the request for additional information, a participating agency may make a second request for additional information for the sole purpose of obtaining clarification of the manufacturer's response.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(5)(a) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires each participating agency to take final agency action on a state development approval within its authority within 60 days after a complete application is filed, unless the deadline is waived in writing by the manufacturer. The 60-day period is tolled by the initiation of a proceeding under sections 120.569 and 120.57.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(5)(b) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Requires a participating agency to notify DEO if the agency intends to deny a manufacturers application and, unless waived in writing by the manufacturer, the department shall timely convene an informal meeting to facilitate a resolution.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(5)(c) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Unless waived in writing by the manufacturer, if a participating agency does not approve or deny an application within the 60-day period, within the time allowed by a federally delegated permitting program, or, if a proceeding is initiated under sections 120.569 and 120.57, within 45 days after a recommended order is submitted to the agency and the parties, the state development approval within the authority of the participating agency is deemed approved. A manufacturer seeking to claim approval by default under this subsection shall notify, in writing, the clerks of both the participating agency and DEO of that intent. A manufacturer may not take action based upon the default approval until such notice is received by both agency clerks.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(5)(d) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Allows the manufacturer at any time after a proceeding is initiated under sections 120.569 and 120.57 to demand expeditious resolution by serving notice on an administrative law judge and all other parties to the proceeding. The administrative law judge is required to set the matter for final hearing no more than 30 days after receipt of such notice. After the final hearing is set, a continuance may not be granted without the written agreement of all parties.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(6) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Provides that subsections (4) and (5) do not apply to permit applications governed by federally delegated or approved permitting programs to the extent that subsections (4) and (5) impose timeframes or other requirements that are prohibited by or inconsistent with such federally delegated or approved permitting programs.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A
	Section 163.3253(7) [New]	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Authorizes the state land planning agency to adopt rules to administer section 163.3253.	*No change to the Comprehensive Plan necessary. This program does not appear in the Comprehensive Plan.*		N/A

Years	Source	Title	Description	Recommended Action	City Response	Actions Taken
	Section 163.340(2)	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Updates a statutory reference in the definition of "public body" from section 165.031(5) to 163.031(7).	*No change to the Comprehensive Plan necessary. This term does not appear in the Comprehensive Plan.*		N/A
	Note to Section 163.3162 (2012 version of statute)	Chapters 2013-15, 2013-78, 2013-115, 2013-213, 2013-224 and 2013-239, Laws of Florida	· Repeals section 4 of Chapter 2012-75, Laws of Florida, which had established an alternate method for certain landowners to apply to DEO for an agricultural enclave designation. The right to apply for agricultural enclave designation under the alternate method expired on January 1, 2013.	*No change to the Comprehensive Plan necessary. This term does not appear in the Comprehensive Plan.*		N/A

Business Impact Estimate

This form should be included in agenda packet for the item under which the proposed ordinance is to be considered, and must be posted on the City's website by the time notice of the proposed ordinance is published.

Proposed ordinance's title/reference: **Ordinance 26-24** – Amending the Winter Garden Comprehensive Plan (Winter Garden 2050).

This Business Impact Estimate is provided in accordance with Section 166.041(4*), Florida Statutes*. If one or more of the boxes are checked below, the checked exception(s) to the Business Impact Estimate requirement apply to the above-referenced proposed ordinance, although, the City is implementing the procedure otherwise required by law to ensure that no inadvertent procedural issue could impact the enactment of the proposed ordinance.

☐ The proposed ordinance is required for compliance with Federal or State law or regulation;

☐ The proposed ordinance relates to the issuance or refinancing of debt;

☐ The proposed ordinance relates to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget;

☐ The proposed ordinance is required to implement a contract or an agreement, including, but not limited to, any Federal, State, local, or private grant, or other financial assistance accepted by the

☐ The proposed ordinance is an emergency ordinance;

☐ The ordinance relates to procurement; or

☐ The proposed ordinance is enacted to implement the following:

a. Part II of Chapter 163, *Florida Statutes*, relating to growth policy, county and municipal planning, and land development regulation, including zoning, development orders, development agreements and development permits;
b. Sections 190.005 and 190.046, *Florida Statutes*, regarding community development districts;
c. Section 553.73, *Florida Statutes*, relating to the *Florida Building Code*; or
d. Section 633.202, *Florida Statutes*, relating to the *Florida Fire Prevention Code*.

In accordance with the provisions of controlling law, even notwithstanding the fact that, an exemption noted above may apply, the City hereby publishes the following information:

1. Summary of the proposed ordinance (must include statement of the public purpose, such as serving the public health, safety, morals, and welfare):

Pursuant to Section 163.3177, Florida Statutes, all counties and municipalities in Florida are required to prepare and maintain a long-range Comprehensive Plan to guide future growth and development. As part of this responsibility, local governments must continually monitor a wide range of community characteristics, including population growth, land development, public facilities and services, and environmental resources. The Comprehensive Plan establishes the community's long-term vision by setting forth goals, objectives, and policies that guide future land use decisions, capital investments, budgeting, and other governmental actions. Because communities and state laws evolve over time, the Comprehensive Plan must also be periodically updated through amendments, revisions to implementation strategies, and comprehensive evaluations.

Section 163.3191, Florida Statutes, requires each local government to periodically complete an Evaluation and Appraisal (EA) of its Comprehensive Plan to ensure it remains relevant and consistent with current conditions and state requirements. The City last completed an EA in 2009 and adopted a series of EA-based amendments in 2010, establishing a planning horizon through the year 2020.

The proposed EA-based amendments update the Comprehensive Plan to reflect changes in state law since the 2010 adoption, clarify existing policies, more accurately reflect current practices, procedures, and community conditions, and revise outdated references and definitions. The amendments also extend the City's planning horizon to 2050, update the community vision, evaluate level of service standards for public facilities, and identify opportunities and strategies to address the City's current and future needs while supporting orderly, sustainable growth.

2. Estimate of direct economic impact of the proposed ordinance on private, for-profit businesses in the City:

As stated above, the City's Comprehensive Plan is being updated to extend the City's Horizon Year to 2050, update the Community's vision, evaluate level of service standards for public facilities, and identify and address existing and future opportunities. This Ordinance will not have a cost impact (whether direct or imposed) on any existing businesses in the City of Winter Garden.

3. Estimate of direct compliance costs that businesses may reasonably incur:

No new charges or fees are proposed as a part of this Ordinance.

4. Any new charge or fee imposed by the proposed ordinance:

No new charges or fees are proposed as a part of this Ordinance.

5. Estimate of the City's regulatory costs, including estimated revenues from any new charges or fees to cover such costs:

No new charges or fees are proposed as a part of this Ordinance.

6. Good faith estimate of the number of businesses likely to be impacted by the proposed ordinance:

The Ordinance will have no immediate/existing impact on any businesses within the City of Winter Garden.

7. Additional information (if any, but may wish to include the methodology used to derive information for #1 and #2, above. For example: City staff solicited comments from businesses in the City as to the potential impact of the proposed ordinance by contacting the chamber of commerce, social media posting, direct mail or direct email, posting on City website, public workshop, etc. You may also wish to include efforts made to reduce the potential fiscal impact on businesses based on feedback from businesses. You may also wish to state here that the proposed ordinance is a generally applicable ordinance that applies to all persons similarly situated (individuals as well as businesses) and, therefore, the proposed ordinance does not impose costs only upon businesses.):

N/A

CITY OF WINTER GARDEN

PLANNING & ZONING DIVISION

300 West Plant Street - Winter Garden, Florida 34787-3011 • (407) 656-4111

STAFF REPORT

TO: PLANNING AND ZONING BOARD
PREPARED BY: KELLY CARSON, PLANNING DIRECTOR
DATE: JULY 24, 2026
SUBJECT: CITY OF WINTER GARDEN COMPREHENSIVE PLAN UPDATE
WINTER GARDEN 2050 – ORDINANCE 26-24

INTRODUCTION

Pursuant to Section 163.3177, Florida Statutes, all counties and municipalities in Florida are required to prepare and maintain a long-range Comprehensive Plan to guide future growth and development. As part of this responsibility, local governments must continually monitor a wide range of community characteristics, including population growth, land development, transportation systems, public facilities and services, and environmental resources. The Comprehensive Plan implements the community's long-term vision by setting forth goals, objectives, and policies that guide future land use decisions, capital investments, budgeting, and other governmental actions. Because communities and state laws evolve over time, the Comprehensive Plan must also be periodically updated through amendments, revisions to implementation strategies, and comprehensive evaluations.

Section 163.3191, Florida Statutes, requires each local government to periodically complete an Evaluation and Appraisal Review (EAR) of its Comprehensive Plan to ensure it remains relevant and consistent with current conditions and state requirements. The City last completed an EAR in 2009 and adopted a series of EAR-based amendments in 2010, establishing a planning horizon through the year 2020.

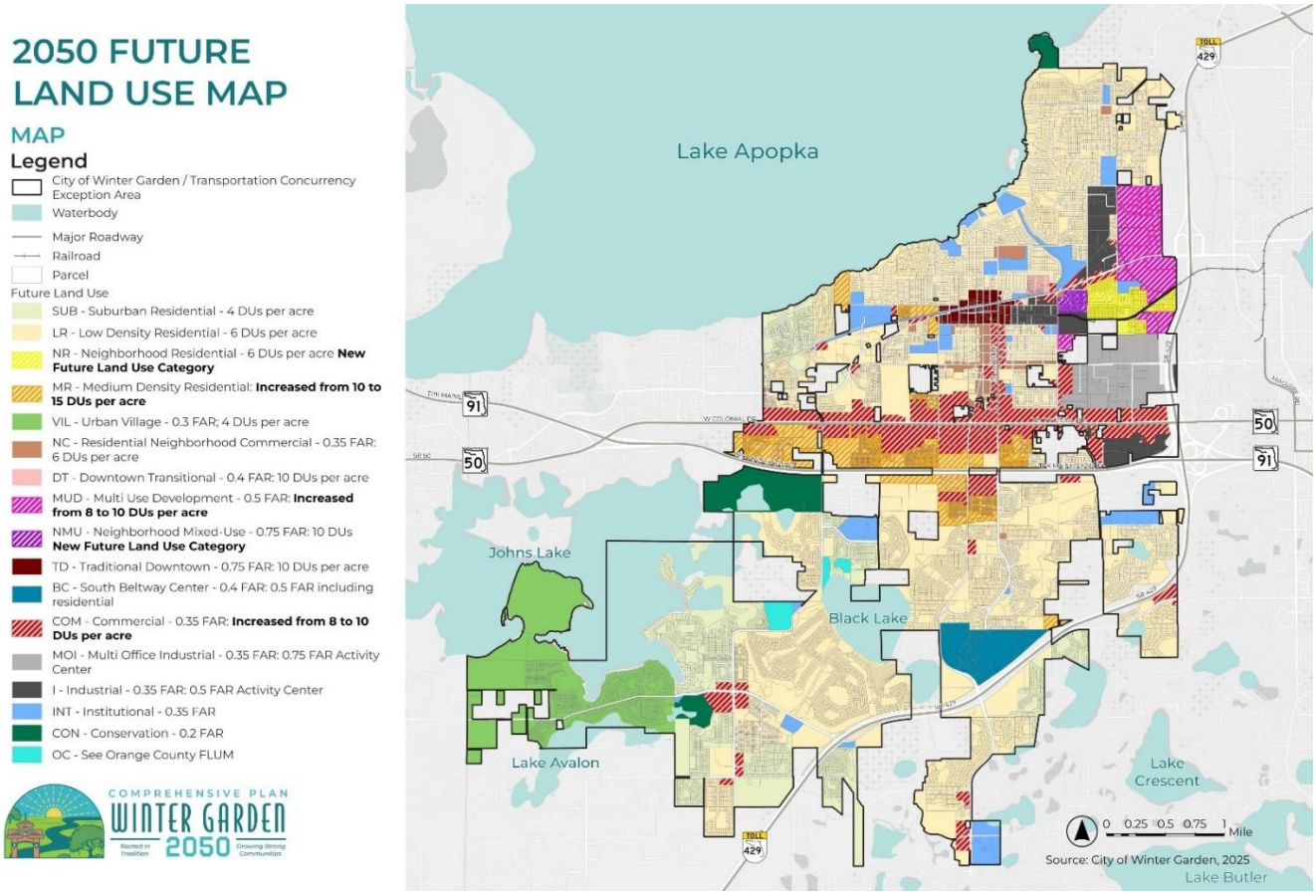
The proposed EAR-based amendments update the Comprehensive Plan to reflect changes in state law since the 2010 adoption, clarify existing policies, more accurately reflect current practices, procedures, local conditions, and revise outdated references and definitions. The amendments also extend the City's planning horizon to 2050, recalibrate the community vision, evaluate level of service standards for public facilities, and identify opportunities and strategies to address the City's current and future needs while supporting orderly, sustainable growth. The Future Land Use Map series was updated to include the current City boundary, changes to future land use categories, new and proposed public facilities, future transportation improvements, and updates to activity centers among other necessary updates.

MAJOR CHANGES

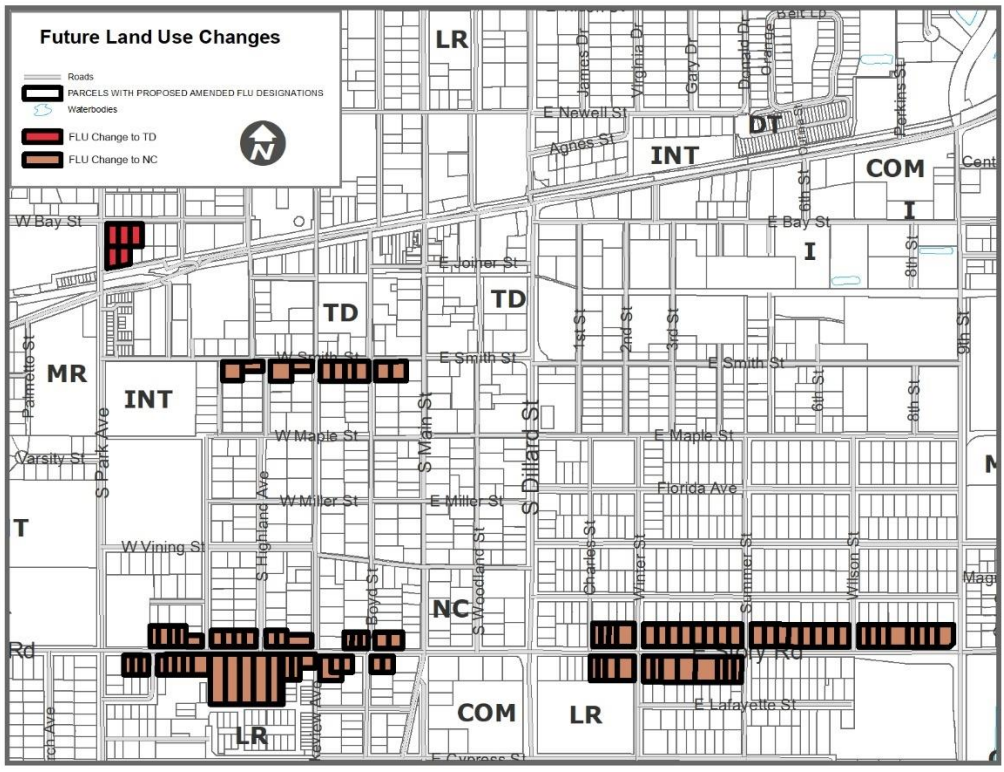
While a substantial number of edits were made throughout the document, the following section outlines the major updates to the Comprehensive Plan goals, objectives, and policies.

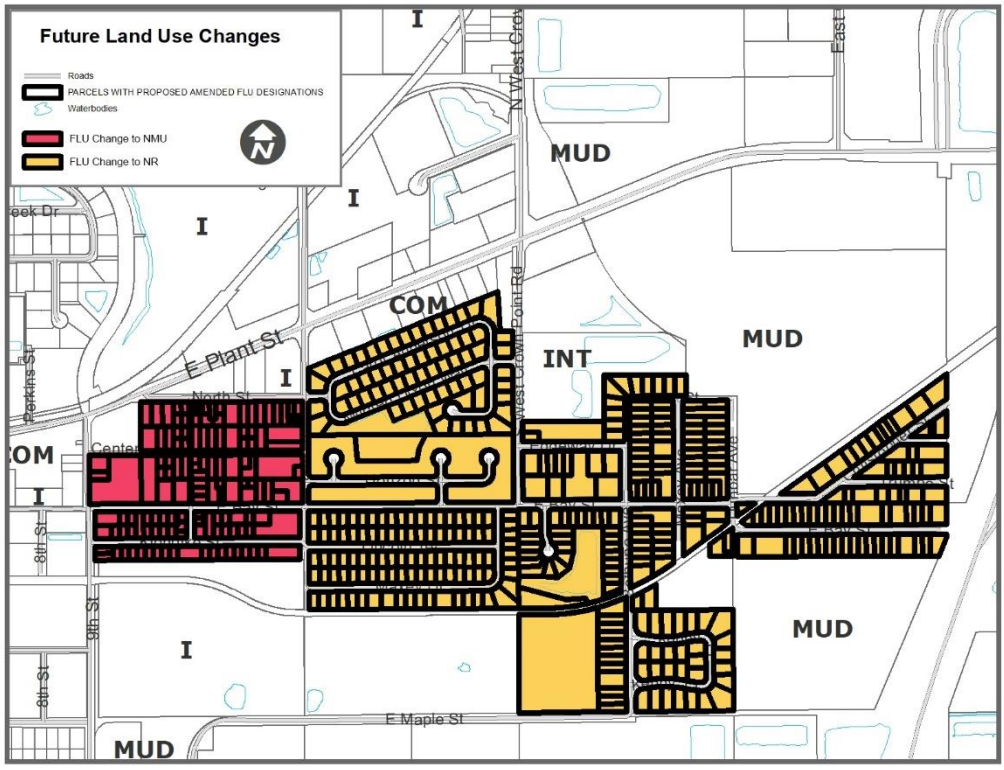
FUTURE LAND USE (CHAPTER 1):

- **Addressed the Historic East Winter Garden Neighborhood:**
    - Created two new land use categories for the Historic East Winter Garden Neighborhood:
        - **Neighborhood Residential** allows for a greater diversity of housing types on the east side of the Historic East Winter Garden Neighborhood while maintaining the character of the area. Civic, nonprofit, and other institutional uses will also be allowed.
        - **Neighborhood Mixed-Use** allows for residential and neighborhood oriented commercial uses on the west side of the Historic East Winter Garden Neighborhood while maintaining the character of the area. Development in this area will be in a traditional neighborhood form.
    - In the East Winter Garden area, development bonuses may be awarded for creating affordable / workforce housing, high quality / contextual design, as established by the Density Bonus Program.
    - Continue partnering with nonprofit organizations to provide affordable housing.
    - Implement the East Winter Garden Plan and adopt a new Overlay District.
- **Increased Density in four (4) future land use categories:**
    - The maximum permitted densities increased for Medium Density Residential (MR), Multi Use Development (MUD), Commercial (COM), and Medium/High Density Residential (M/H) to accommodate projected future population growth.

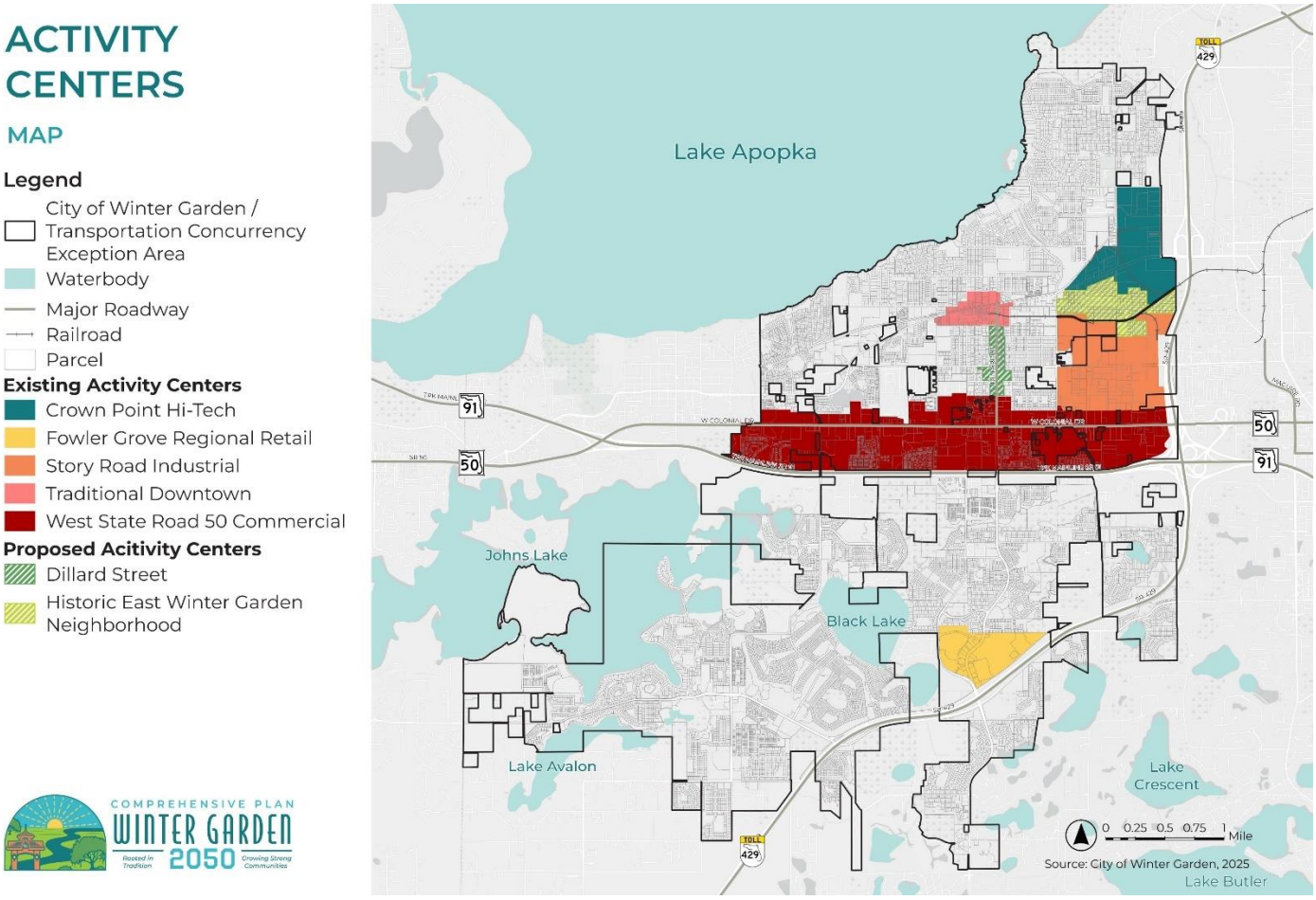


- **Amended Future Land Use Designations:**
    - The Future Land Use Designations for 644 parcels were amended to Traditional Downtown (TD), Residential Neighborhood Commercial (NC), Neighborhood Mixed-Use (NMU), or Neighborhood Residential (NR):





- **Added Two New Activity Centers:**
  - **Dillard Street** to encourage a mix of office, commercial, institutional, mixed-use and residential uses, designed to be pedestrian oriented and provide a gateway and transition area to downtown.
  - **Historic East Winter Garden Neighborhood** to retain neighborhood character while allowing flexible housing types and compatible commercial uses.



- **Addressed Historic Preservation:**
  - Pursue the designation for historic resources that may be nominated for inclusion on the National Register of Historic Places
  - Consider adopting incentive-based techniques for historic preservation.

- **Addressed Compatibility & Buffering:**
  - To ensure compatibility, additional screening and buffering between land uses may be required.
  - Provided factors for residential compatibility, including:
    - Maximum density & intensity
    - Building height

- Scale of building/development
- Buffering and screening
- Urban design

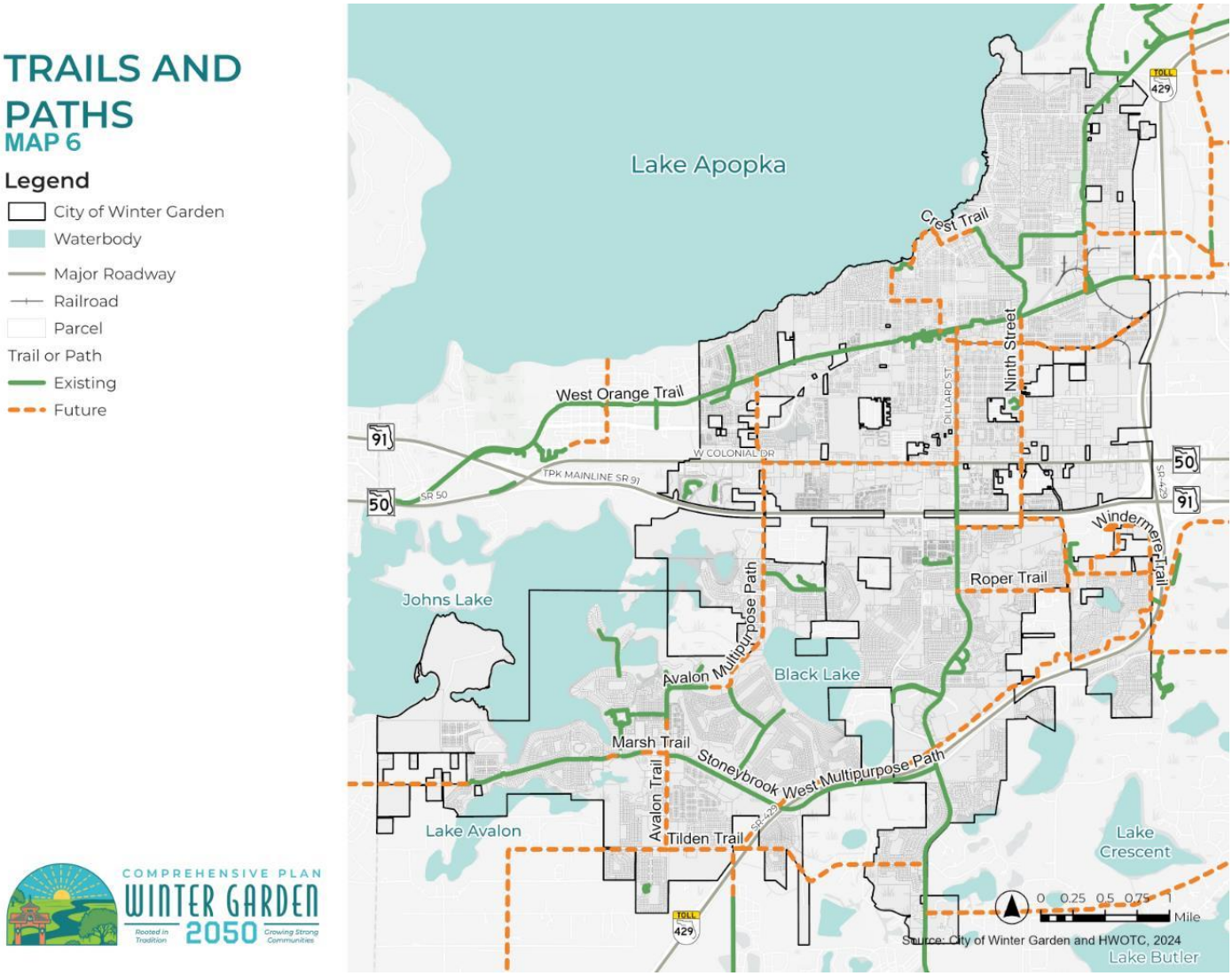
MULTIMODAL TRANSPORTATION (CHAPTER 2):

- **Incorporated the City's Vision Zero Safety Action Plan:**
  - Achieve zero traffic fatalities and a 50% reduction in serious injuries from 2025 – 2050.
  - Implement the City's Vision Zero Action Plan with support from Orange County and MetroPlan Orlando.
  - Develop a Safe Routes to School program and teach kids and teens safe transportation habits.

- **Added New Policies Promoting Complete Streets:**
  - Improve and expand transportation facilities for non-motorized methods (i.e. sidewalks, crosswalks, bicycle lanes, and trails systems).
  - Consider creating a Traffic Calming Toolkit and develop a process for implementing various traffic calming techniques to improve the safety of roadways.

- **Amended Mobility Plans & Strategies:**
  - Develop a Mobility Plan to guide the implementation of a multimodal transportation system.
  - Establish an interim Mobility Plan.
  - Establish a Mobility Fee Schedule in the Land Development Code to implement the City's Mobility Plan.
  - Require traffic impact studies on development generating 50 or more net new trips.

- **Included Additional Policies Regarding Trails:**
  - Continue to support Healthy West Orange Trails Initiative to create a regional trail system.
  - Support Healthy West Orange to develop activation facilities, (e.g. outdoor fitness areas, playgrounds, community gardens, etc.)
  - Ensure convenient pedestrian and bicyclist access to the City's larger system of trails.
  - Established a Trail Level of Service.



HOUSING (CHAPTER 3):

- **Accommodated Housing Variety and Affordability:**
  - Consider allowing additional housing types in appropriate zoning districts.
  - Consider expanding districts where Accessory Dwelling Units are allowed.
  - Develop an incentive program for affordable housing.

- **Provided For Housing for an Aging Population:**
  - Revise the LDC to limit barriers to developing retirement communities, elderly care facilities, and other elderly-friendly housing options.
  - Encourage the development of elderly-friendly housing options in residential neighborhoods in proximity to transit services, commercial centers, medical centers, and public facilities.
  - Consider expanding districts where Accessory Dwelling Units to encourage aging-in-place and multi-generational housing solutions.

- **Addressed Housing Resiliency:**
    - Identify existing housing units that are at a high risk of severe environmental impacts.
    - Guide at-risk homeowners and landlords to funding resources and programs to retrofit their homes to be more resilient.
    - Amend the LDC to encourage or require housing construction to implement resiliency best practices.

PUBLIC FACILITIES (CHAPTER 4):

- **Incorporated the Wastewater Plan:**
    - Incorporated the City's 2024 Wastewater Plan.
    - Incorporated Septic to Sewer conversions.
- **Included Provisions for Improving Water Quality:**
    - Monitor and take steps to remove and/or minimize the risks associated with PFAS and other "forever chemicals".
- **Added Options For Expanding Solid Waste Services:**
    - Evaluate all options for residents who want to recycle including potentially re-establishing the City's recycling program or promoting other private recycling providers.

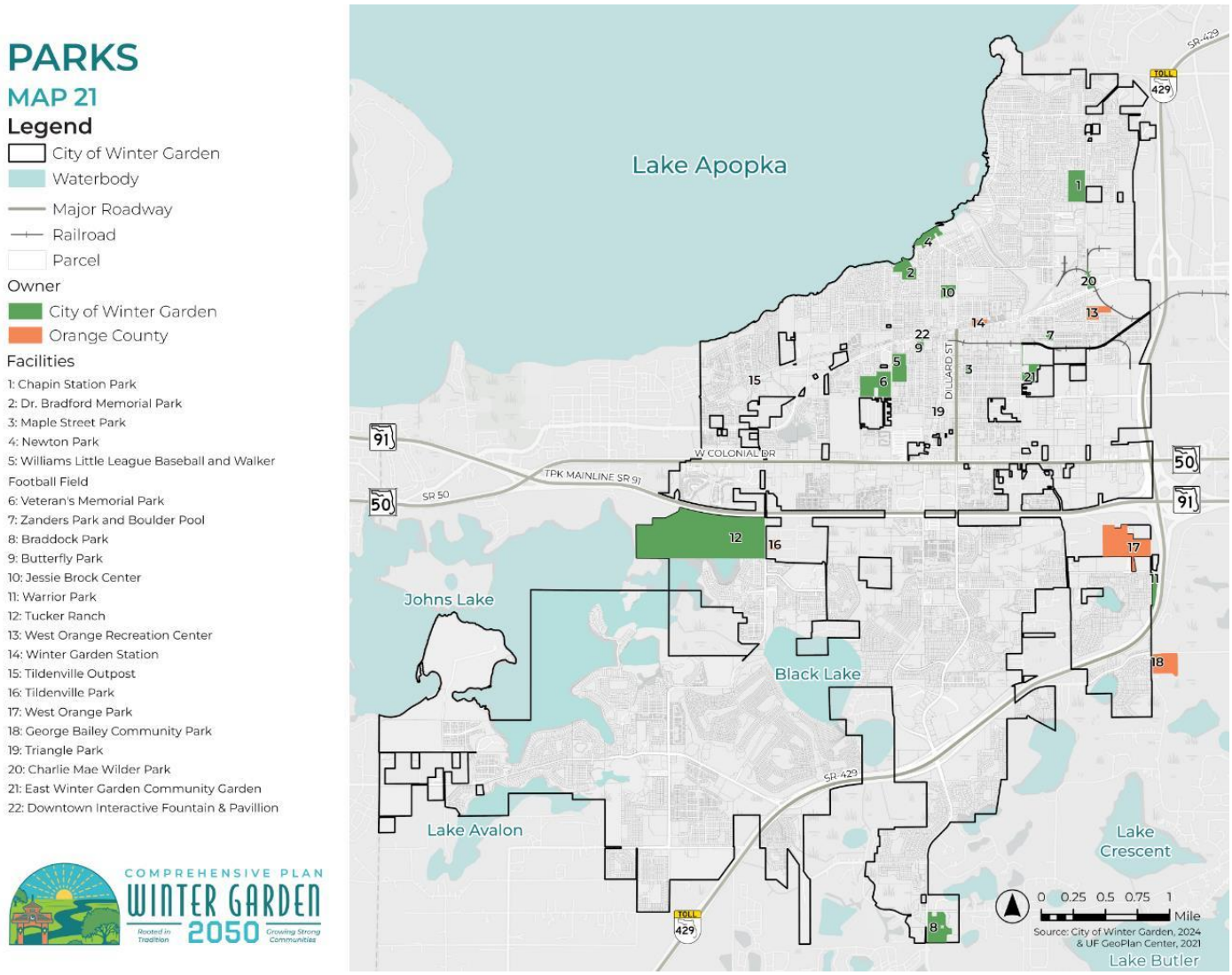
CONSERVATION (CHAPTER 5):

- **Promoted Protection of Natural Resources:**
    - Incentivize the preservation of existing live oaks and the planting of new ones.
    - Encourage the use of low impact and water efficient development.
    - Prioritize banking wetlands in areas near or within the City limits, if mitigation is required.
    - Update provisions regarding Lulu Creek.

RECREATION AND OPEN SPACE (CHAPTER 6):

- **Added Provisions to Expand Tree Canopy:**
    - Expand the City's tree canopy through the planting of shade trees in parks, trails, and urban open spaces.
- **Promoted Public Access to Park Facilities:**
    - Ensure all neighborhoods have adequate access to existing and proposed parks and open space sites.

- Promote waterbody access (i.e., Lake Apopka, Johns Lake, Black Lake, etc.) through the development and maintenance of public access points, boat ramps, and canoe/kayak launches
- Ensure all existing and future City-owned parks and playgrounds will meet or exceed the requirements of the Americans with Disabilities Act (ADA) and retrofit non-compliant parks and playgrounds, as feasible.



- **Implemented Best Management Practices in Parks and Open Spaces:**
  - Promote the use of native, Florida-Friendly, and/or drought-tolerant plants.
  - Promote Integrated Pest Management (IPM) practices
  - Support the use of low impact development methods (i.e., vegetated swales, rain gardens) for stormwater management.
- **Promoted Community Stewardship:**
  - Expand community garden programming and access.

- Design select areas with edible plants.
- Install educational and interpretive signage.
- Provide volunteer opportunities within City-owned parks.

- **Added Additional Trails Provisions:**
  - Incorporated the 2021 Healthy West Orange Trails (HWOTC) Initiative Report.

PUBLIC SCHOOL FACILITIES (CHAPTER 7):

- **Amended Chapter:**
  - Removed financial feasibility language.
  - Ensured continued compliance with OCPS interlocal agreements.

INTERGOVERNMENTAL COORDINATION (CHAPTER 8):

- **Amended Chapter:**
  - Reiterated continued efforts to eliminate enclaves within the City's JPA.
  - Confirmed the City's continued commitment to productive coordination efforts with neighboring jurisdictions including Orange County, Oakland, and Ocoee.

CAPITAL IMPROVEMENTS (CHAPTER 9):

- **Amended Chapter:**
  - Revised the City's mobility standards.
  - Introduced a new level of service standard for trails.

PROPERTY RIGHTS (CHAPTER 10):

- **Added a New Element:**
  - Property Rights is a new element required by State Statutes.
  - This new element is being re-transmitted to the State via the EAR process.

PUBLIC ENGAGEMENT

The Winter Garden 2050 Comprehensive Plan Update was shaped by an extensive public engagement process that included three public workshops, stakeholder interviews, community pop-up events, meetings with City department directors, an interactive project website, online surveys, and mapping activities. Across all engagement efforts, participants consistently expressed a desire to preserve Winter Garden's unique small-town character, historic downtown, and strong sense of community while planning thoughtfully for future growth. The most common priorities included improving transportation safety and connectivity for pedestrians, bicyclists, and golf carts; expanding housing options and affordability while maintaining

neighborhood character; investing in infrastructure such as stormwater management, sidewalks, trails, and parking; protecting natural resources and enhancing parks and recreational opportunities; and revitalizing key corridors, particularly East Winter Garden and the Dillard Street corridor. Overall, the engagement process demonstrated broad community support for balancing growth with preservation by enhancing quality of life, promoting sustainability, and ensuring Winter Garden remains a vibrant, family-oriented community for future generations.

SUMMARY & STAFF RECOMMENDATION

Staff recommends approval of Ordinance 26-24, which updates and amends the City's Comprehensive Plan, and authorization to transmit the Winter Garden 2050 Comprehensive Plan to the reviewing agencies as required pursuant to Section 163.3184(3)(b), Florida Statutes.

END OF STAFF REPORT

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Kelly Carson, Planning Director

Via: City Manager Jon C. Williams

Date: August 6, 2026 **Meeting Date:** August 13, 2026

Subject: **Ordinance 26-26**

Issue: Ordinance **26-26** Amending City Code Chapter 118, Article II to create Division 6, to be entitled “Zoning Compliance Review.

Discussion:

Ordinance 26-26 creates a new Zoning Compliance Review process within Chapter 118 of the City Code to establish a uniform administrative review for certain development activities. The new process is intended to verify that proposed development complies with the City's Land Development Regulations, Comprehensive Plan, and other applicable laws before permits are issued and/or work begins. The ordinance identifies the types of development activities subject to review, establishes application and submittal requirements, defines objective review standards, outlines review procedures and timeframes, authorizes conditions of approval, establishes expiration and appeal procedures, authorizes the adoption of review fees by resolution, and provides enforcement provisions for violations. The ordinance also clarifies the relationship between Zoning Compliance Review, building permits, and other required development approvals, while preserving exemptions provided by state law.

The impetus of this ordinance is the new Florida House Bill 803, which exempts minor residential construction work valued under $7,500 on single-family properties from building permit requirements. The issue is that these building permits were once the trigger for the Planning Department to confirm the proposed improvements are consistent with the City’s land development code. This ordinance would establish a new zoning check as a standalone process to ensure that homeowners are not unknowingly creating nonconformities on their property that could then be subject to code enforcement fines.

Recommended Action:

Staff recommends approval of Ordinance 26-26 with the second reading and adoption anticipated to be on August 27, 2026.

Attachment(s)/References:

Ordinances 26-26

Business Impact Estimate

ORDINANCE 26-26

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF WINTER GARDEN, FLORIDA, AMENDING CHAPTER 118, "ZONING," ARTICLE II, "ADMINISTRATION," OF THE CITY OF WINTER GARDEN CODE OF ORDINANCES TO CREATE DIVISION 6, TO BE ENTITLED "ZONING COMPLIANCE REVIEW,"; PROVIDING A PROCESS FOR VERIFYING THAT CERTAIN DEVELOPMENT ACTIVITIES COMPLY WITH OBJECTIVE LAND DEVELOPMENT REGULATIONS; PROVIDING FOR PURPOSE AND INTENT; PROVIDING DEFINITIONS; PROVIDING FOR APPLICABILITY AND EXEMPTIONS; PROVIDING APPLICATION AND SUBMITTAL REQUIREMENTS; PROVIDING REVIEW STANDARDS; PROVIDING PROCEDURES AND TIMEFRAMES FOR ACTION ON APPLICATIONS; PROVIDING FOR CONDITIONS OF APPROVAL, EXPIRATION, EXTENSIONS, AND APPEALS; AUTHORIZING THE ESTABLISHMENT OF ZONING COMPLIANCE REVIEW FEES BY RESOLUTION; PROVIDING FOR ENFORCEMENT AND PENALTIES; PROVIDING FOR CONFLICTS, SEVERABILITY, CODIFICATION AND AN EFFECTIVE DATE.

WHEREAS, the City of Winter Garden ("City") is a duly constituted municipality of the State of Florida with home rule authority under Article VIII, Section 2(b) of the Florida Constitution, Chapter 166, Florida Statutes, and other applicable law to exercise any power for municipal purposes except as otherwise provided by law; and

WHEREAS, the City Commission desires to establish a uniform zoning compliance review process for certain development activities to determine compliance with the City's Code of Ordinances, adopted comprehensive plan, and other applicable laws before those activities commence; and

WHEREAS, the City Commission finds that a uniform zoning compliance review process will promote consistent, predictable, transparent, and efficient review of development activities and will consolidate related zoning and land development reviews into a single administrative process; and

WHEREAS, the City Commission desires to authorize zoning compliance review fees to defray the City's reasonable cost of administering the review process, establish the initial fee amounts by resolution, publish those fees in the City's fee schedule, and ensure that such fees reasonably relate to the cost of the review and constitute regulatory fees, consistent with Section 166.033, Florida Statutes; and

WHEREAS, the City Commission in good faith finds that this Ordinance serves a valid municipal purpose and promotes the public health, safety, and welfare of the City's residents.

NOW THEREFORE, BE IT ORDAINED by the City Commission of the City of Winter Garden, Florida, that:

SECTION 1. Recitals. The foregoing "Whereas" clauses are true and correct, are adopted and incorporated as the legislative findings and intent of the City Commission of the City of Winter Garden and are incorporated into this Ordinance as if fully set forth herein.

SECTION 2. Authority. The City of Winter Garden has authority to adopt this Ordinance pursuant to Article VIII of the Florida Constitution, Chapter 166, Florida Statutes, and other applicable law, including Chapters 162 and 163, Florida Statutes.

SECTION 3. City Code Amendment. Chapter 118, "Zoning," Article II, "Administration" of the City of Winter Garden Code of Ordinances is hereby amended to create Division 6, to be entitled "Zoning Compliance Review," consisting of Sections 118-167 through 118-180, to read as follows (words that are ~~stricken out~~ are deletions; words that are underlined are additions; provisions not included are not amended):

DIVISION 6. ZONING COMPLIANCE REVIEW

Section 118-167. Purpose and intent.

The purpose of this Division is to establish a uniform administrative process for determining, before commencement, whether the development activities identified herein comply with this Chapter, other applicable provisions of this Code, the City's adopted comprehensive plan, and applicable law. This Division is intended to consolidate related zoning and land development reviews; promote consistency, predictability, transparency, and efficiency; authorize a review fee reasonably related to the City's administrative costs; and provide for uniform enforcement. Nothing in this Division shall be construed to require a building permit for any activity that does not otherwise require a building permit under this Code or other applicable regulations.

Section 118-168. Definitions.

For purposes of this Division, the following terms have the meanings set forth below. Terms used in this Division that are not defined in this Section have the meanings ascribed to them elsewhere in this Chapter or the City Code. Where a term is defined in Chapter 163 or Chapter 166, Florida Statutes, and is not defined in this Code, the statutory definition applies.

(a) *Commence* or *commencement* means to begin site preparation, clearing, grading, filling, excavation, construction, erection, installation, placement, alteration, or other physical work associated with a development activity, including the placement of materials or equipment on the site for that purpose.

(b) *Certificate of Approval* means the approval required under this Code for alteration, demolition, partial demolition, or new construction within the Historic Downtown District.

(c) *Development activity* means any activity subject to Zoning Compliance Review under Section 118-169.

(d) *Development order* means an order or other official action of the City granting, denying, or granting with conditions an application for a development permit, and has the meaning provided by applicable law.

(e) *Director* means the Community Development Director or Planning Director of the City of Winter Garden or the Director's designee, or such other officer or employee of the City as the City Manager may designate to administer this Division.

(f) *Zoning Compliance Review* means the administrative review conducted under this Division to determine whether a proposed development activity complies with the applicable objective standards identified in Section 118-172.

(g) *Zoning Compliance Review approval* means the written approval issued by the Director under this Division upon a determination that a proposed development activity complies, or will comply subject to stated conditions, with the applicable objective standards identified in Section 118-172. A Zoning Compliance Review approval constitutes a development order to the extent provided by applicable law.

Section 118-169. Zoning Compliance Review required; applicability.

(a) **Review required.** Except as provided in Section 118-170, no person shall commence any of the following development activities within the City, and the City shall not issue a building permit for any such activity, until a Zoning Compliance Review approval for the activity is obtained under this Division:

(1) New residential or commercial buildings, including modular and manufactured buildings, and additions to buildings;

(2) Accessory structures and buildings, including those under one hundred sixty (160) square feet in area;

(3) Swimming pools and spas;

(4) Signs regulated under Chapter 102 of this Code, including temporary banner signs;

(5) Docks, and shoreline or lakefront alterations;

(6) Temporary tents;

(7) Fuel systems, generators, and ground-mounted solar arrays;

(8) Communication towers and antennas;

(9) Demolition, re-roofing, and/or exterior door/window modifications of a building or structure located within the Historic Downtown District; provided that, for these activities, the Zoning Compliance Review is in addition to, and does not replace or satisfy, any Certificate of Approval or other historic preservation review required under this Code.

(10) Fences, including those six (6) feet in height and under, excluding barriers required by the Residential Swimming Pool Safety Act, Chapter 515, Florida Statutes;

(11) Retaining walls, including those under twenty-four (24) inches in height;

(12) Driveways, sidewalks, paver patios, and concrete patios;

(13) Sheds, including those under one hundred sixty (160) square feet in area;

(14) Gazebos and pergolas;

(15) Wood or composite decks, including those under one hundred twenty (120) square feet in area and less than eighteen (18) inches in height;

(16) The removal of trees or other vegetation regulated under Chapter 114 of this Code;

(17) The keeping of backyard hens or other animals to the extent regulated under this Code and all related required accessory structures;

(18) A change of use of any building;

(19) The interior buildout or tenant improvement of any commercial, industrial or nonresidential space if associated with a change of use.

(b) **Consistent application.** The activities listed in subsection (a) are subject to Zoning Compliance Review whether or not the activity also requires a building permit, and whether or not the activity is undertaken in connection with an application for a local business tax receipt. The Director may, by written administrative procedure consistent with this Division and applicable law, establish submittal checklists and identify the class of Zoning Compliance Review applicable to a particular activity.

(c) **Relationship to building permit.** For a development activity that also requires a building permit, the applicant or its agent shall obtain a Zoning Compliance Review approval before the application for the building permit, and the City shall not issue the building permit for the activity until the Director has issued the Zoning Compliance Review approval. For development activity that does not require a building permit, the Zoning Compliance Review approval constitutes the City's approval for the activity. A Zoning Compliance Review approval issued for a development activity that has received site plan approval under Division 2 of this article constitutes the certificate required by Section 118-71 for that activity, and a separate certificate is not required.

(d) **Not in lieu of other approvals.** A Zoning Compliance Review approval is in addition to, and not in lieu of, any other approval, permit, or authorization required by this Code or by law, including, without limitation, site plan approval, subdivision or plat approval, special exception approval, variance approval, historic preservation review, building permits, and any state or regional permit. Where a proposed development activity requires a variance, special exception, certificate of approval, rezoning, or other approval that involves the exercise of discretion or requires a public hearing, that approval shall be obtained under the procedures applicable to it, and this Division does not modify or replace those procedures or the standard of review applicable to that approval. A Zoning Compliance Review approval does not waive or satisfy concurrency, impact fee, or other applicable requirements. Where a development activity has previously received site plan approval or another development order that established its compliance with the applicable zoning standards, the Zoning Compliance Review shall be limited to confirming consistency with that prior approval.

Section 118-170. Activities not requiring review; preservation of building permit exemptions.

(a) **Exempt activities.** Unless otherwise required by this Code, the following do not require a Zoning Compliance Review: ordinary repair and maintenance that does not change the use, footprint, height, or location of a building or structure or increase the intensity of a use; interior work in a residential dwelling that does not change the use or occupancy; and

activities expressly exempted by the fee schedule or by written administrative procedure of the Director consistent with this Division and applicable law.

(b) **Advisory land use determinations.** At the request of a prospective applicant, the Director may provide or require a preliminary or advisory determination regarding the general land use or zoning acceptability of a proposed activity, including in connection with a prospective application for a local business tax receipt. An advisory determination is nonbinding, does not constitute nor exempt an applicant from a required Zoning Compliance Review, development order, development permit, or other City approval, does not authorize the commencement of any development activity, and does not give rise to any right of reliance or estoppel claim. If established in the City's fee schedule, the City may charge a fee for an advisory determination, provided that the fee reasonably relates to the City's cost of providing the determination and is consistent with applicable law.

(c) **Preservation of building permit exemptions.** Nothing in this Division requires a building permit for any activity for which a building permit is not otherwise required by law. Work that is exempt from building permit requirements remains subject to all applicable zoning, drainage, easement, setback, and other land development standards of this Code. The City may determine compliance with those standards through a Zoning Compliance Review when required by this Division and not prohibited by applicable law.

Section 118-171. Application and submittal requirements.

An applicant shall submit an application for Zoning Compliance Review to the, Planning and Zoning Division, on a form provided by the City. The application must include the fee established under Section 118-177, the information reasonably necessary to determine compliance with the applicable standards, and an agreement by the applicant to allow the City access upon the subject property to conduct zoning compliance inspections. That information may include the property address or legal description; the name and contact information of the owner and applicant; a description of the proposed development activity; a boundary survey; a site plan, sketch, or drawing showing the location and dimensions of the proposed development activity in relation to property lines, easements, and existing improvements; and any other information the Director reasonably requires to determine compliance with the applicable standards. The Director may waive any submittal item that is not necessary to review a particular development activity.

Section 118-172. Review standards.

The Director shall review each application to determine whether the proposed development activity complies with the applicable objective standards identified below, to the extent applicable to the activity:

(a) the use regulations of this Chapter for the zoning district in which the property is located, including permitted use, accessory use, and special exception standards;

(b) the dimensional and locational standards of this Chapter, including lot area, lot coverage, setback, yard, height, buffer, and separation requirements;

(c) the supplementary and specially regulated use standards of this Chapter, including standards applicable to fences and walls, accessory structures, docks and shorelines, communication towers, and similar uses;

(d) the sign regulations of Chapter 102, the vegetation and tree regulations of Chapter 114, the regulations governing the keeping of animals, and any applicable overlay, corridor, or historic district standards;

(e) any other applicable provisions of the City's Code of Ordinances;

(f) applicable provisions of the City's adopted comprehensive plan; and

(g) the applicability of impact fees; provided that impact fees remain governed by the applicable impact fee ordinances, interlocal agreements, and Section 163.31801, Florida Statutes, and are separate from and in addition to the fee charged under this Division.

Section 118-173. Action on application; timeframes.

(a) The City shall confirm receipt of each application, review the application for completeness, and approve, approve with conditions, or deny the application within the timeframes and in accordance with the procedures required by applicable law. A decision to approve, approve with conditions, or deny an application must include written findings supporting the decision. The denial of an application does not prohibit a future application to be submitted.

(b) If the City fails to act within the timeframes required by applicable law, the applicant is entitled to any refund of the fee required by applicable law. The City's failure to act within any applicable timeframe does not constitute a deemed approval of the application except to the extent required by controlling state law.

(c) If the Director denies an application, the written notice of denial must cite the applicable portions of this Code and identify with reasonable particularity the specific standards with which the proposed development activity does not comply, consistent with applicable law.

(d) A Zoning Compliance Review approval authorizes only the specific development activity described in the application, as approved, and does not authorize any activity that does not comply with this Code or with the conditions of the approval.

(e) An applicant may satisfy the submittal and completeness requirements of this Division through any development preapplication consultation, qualified contractor review, precertification, or similar program the City establishes or recognizes under applicable law. Where applicable law requires the City to accept a precertification or similar determination, the City shall accept that determination for the purposes required by law and shall act on the application within the timeframes required by law.

Section 118-174. Conditions of approval.

The Director may impose reasonable conditions on a Zoning Compliance Review approval when necessary to ensure compliance with the applicable objective standards identified in Section 118-172 and with this Code. The Director shall not impose conditions unrelated to those standards. Each condition must be stated in writing. Failure to comply with any condition constitutes a

violation of this Division and may be grounds for revocation or suspension of the approval by the Director upon written notice to the applicant.

Section 118-175. Expiration and extension.

A Zoning Compliance Review approval expires if the development activity authorized by the approval does not commence, and, where a building permit is required, if the City has not issued a building permit for the activity, within three hundred sixty-five (365) days after the date of the approval. Upon written request filed with the Director at least fourteen (14) days before expiration, and upon a showing of good cause, the Director may extend the approval one (1) time for a period not to exceed three hundred sixty-five (365) additional days. An expired approval requires a new application, review, and fee.

Section 118-176. Appeals.

For purposes of Division 5 of this article, the Director is the administrative official with respect to decisions made under this division. A person aggrieved by a decision of the Director under this division may appeal the decision to the Planning and Zoning Board in accordance with Division 5 of this article. Review of a final decision of the planning and zoning board shall be as provided in Section 118-166 of this Code.

Section 118-177. Fees.

(a) An applicant shall pay the applicable Zoning Compliance Review fee when submitting an application. The City Commission shall establish and may amend the fee by resolution, and the City shall publish the fee in the City's fee schedule.

(b) The fee must reasonably relate to the direct and reasonable indirect costs of reviewing, processing, and acting on the application and performing zoning compliance inspections, and must not be based on a percentage of construction costs, site costs, or project valuation. The fee schedule may establish different fees for different classes of Zoning Compliance Review to reflect differences in review costs. The fee schedule may also provide for reduced or waived fees, including for limited review, after-the-fact review, review of activities exempt from building permit requirements, or review of an activity for which a prior development order has established compliance.

(c) The Zoning Compliance Review fee is separate from, and in addition to, any building permit fee, impact fee, or other fee or charge imposed by this Code or by law. The Zoning Compliance Review is not a building code inspection service, and the fee is not a building permit fee or a fee for building-code plans review or building-code inspection services.

Section 118-178. Relationship to building permits, the Florida Building Code, and private provider review.

The Zoning Compliance Review is a zoning and land development review conducted to determine compliance with the applicable objective standards identified in Section 118-172. It is separate and distinct from building permit review, building-code plans review, construction permitting, inspections, and any private-provider review authorized by law. Nothing in this Division limits, expands, or alters the requirements applicable to building permits, the Florida Building Code, or

private-provider review, and nothing in this Division requires a building permit for any activity for which a building permit is not otherwise required by law.

Section 118-179. Violations; enforcement; fines and civil penalties.

(a) It is unlawful, and constitutes a violation of this Division, for any person to commence, perform, or cause any development activity for which this Division requires a Zoning Compliance Review without first obtaining a Zoning Compliance Review approval; to undertake any such activity in a manner that violates any condition stated in a Zoning Compliance Review approval; or to provide false or misleading information in an application under this Division.

(b) The City may enforce a violation of this Division through one or more cumulative remedies, including the City's code enforcement procedures, including proceedings before the City's code enforcement board or special magistrate pursuant to Chapter 162, Florida Statutes, and the applicable provisions of this Code; the issuance of a code enforcement citation; prosecution under the general penalty provisions of Section 1-15 of this Code; and any other remedy available at law or in equity, including injunctive relief, a stop-work order, and the withholding or denial of building permits, certificates of occupancy or completion, and other City permits and approvals to the extent authorized by law.

(c) The amount of any fine or civil penalty imposed for a violation of this Division must not exceed the amount established in the City's schedule of fines and civil penalties adopted, and amended from time to time, by resolution of the City Commission, and must not exceed the maximum amounts authorized by Chapter 162, Florida Statutes, and other applicable law. Each day that a violation continues constitutes a separate violation.

(d) After-the-fact review. If a development activity requiring a Zoning Compliance Review has commenced or has been completed without a Zoning Compliance Review approval, the responsible person must, within fifteen (15) days after notice from the City, submit an application for after-the-fact review and pay the applicable fee established in the fee schedule. The availability of after-the-fact review does not limit the City's enforcement remedies, excuse the violation, or authorize the continuation of any activity that does not comply with this Code.

Section 118-180. Compliance with controlling state law; conflict.

This Division must be applied and administered in a manner consistent with controlling state law. Nothing in this Division may be construed or applied to require any approval, impose any standard or condition, charge any fee, or cause any delay that is prohibited by, or inconsistent with, applicable state law. To the extent a development activity is entitled to administrative approval, or is exempt from a permit, approval, fee, condition, standard, or other requirement under state law, this Division does not defeat, limit, or delay that entitlement or exemption. In the event of a conflict between this Division and controlling state law, the controlling state law governs.

SECTION 4. City Code Amendment. Chapter 118, "Zoning," of the City of Winter Garden Code of Ordinances is hereby amended by revising the reserved section designation as follows (words that are ~~stricken out~~ are deletions; words that are underlined are additions; provisions not included are not amended):

Secs. ~~118-167--118-195~~ 118-181—118-195

SECTION 5. Conflicts. In the event of a conflict between this Ordinance and any other ordinance or provision of law, this Ordinance controls to the extent of the conflict and as permitted by law.

SECTION 6. Severability. If any section, subsection, sentence, clause, phrase, word or provision of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, whether for substantive, procedural, or any other reason, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions of this Ordinance.

SECTION 7. Codification. This Ordinance shall be codified and incorporated into the City of Winter Garden Code of Ordinances. Any section, paragraph number, subsection number, letter and/or any heading may be changed or modified as necessary to effectuate the foregoing. Grammatical, typographical and similar or like errors may be corrected, and additions, alterations, and omissions not affecting the construction or meaning of this ordinance or City Code may be freely made.

SECTION 8. Effective date. This Ordinance shall become effective thirty (30) days after adoption by the City Commission of the City of Winter Garden, Florida.

FIRST READING: _____.

SECOND READING: _____.

ADOPTED this ____ day of _____, 2026, by the City Commission of the City of Winter Garden, Florida.

CITY COMMISSION OF THE CITY OF WINTER GARDEN, FLORIDA

_____
John Rees, Mayor

_____
Ronisha Martin, City Clerk

Business Impact Estimate

This form should be included in agenda packet for the item under which the proposed ordinance is to be considered, and must be posted on the City's website by the time notice of the proposed ordinance is published.

Proposed ordinance's title/reference: **Ordinance 26-26** – Amending City Code Chapter 118, Article II to create division 6, to be entitled "Zoning Compliance Review".

This Business Impact Estimate is provided in accordance with Section 166.041(4*), Florida Statutes*. If one or more of the boxes are checked below, the checked exception(s) to the Business Impact Estimate requirement apply to the above-referenced proposed ordinance, although, the City is implementing the procedure otherwise required by law to ensure that no inadvertent procedural issue could impact the enactment of the proposed ordinance.

- ☐ The proposed ordinance is required for compliance with Federal or State law or regulation;
- ☐ The proposed ordinance relates to the issuance or refinancing of debt;
- ☐ The proposed ordinance relates to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget;
- ☐ The proposed ordinance is required to implement a contract or an agreement, including, but not limited to, any Federal, State, local, or private grant, or other financial assistance accepted by the
- ☐ The proposed ordinance is an emergency ordinance;
- ☐ The ordinance relates to procurement; or
- ☐ The proposed ordinance is enacted to implement the following:
    a. Part II of Chapter 163, *Florida Statutes*, relating to growth policy, county and municipal planning, and land development regulation, including zoning, development orders, development agreements and development permits;
    b. Sections 190.005 and 190.046, *Florida Statutes*, regarding community development districts;
    c. Section 553.73, *Florida Statutes*, relating to the *Florida Building Code*; or
    d. Section 633.202, *Florida Statutes*, relating to the *Florida Fire Prevention Code*.

In accordance with the provisions of controlling law, even notwithstanding the fact that, an exemption noted above may apply, the City hereby publishes the following information:

1. Summary of the proposed ordinance (must include statement of the public purpose, such as serving the public health, safety, morals, and welfare):

Ordinance 26-26 creates a new Zoning Compliance Review process within Chapter 118 of the City Code to establish a uniform administrative review for certain development activities. The new process is intended to verify that proposed development complies with the City's Land Development Regulations, Comprehensive Plan, and other applicable laws before permits are issued and/or work begins. The ordinance identifies the types of development activities subject to review, establishes application and submittal requirements, defines objective review standards, outlines review procedures and timeframes, authorizes conditions of approval, establishes expiration and appeal procedures, authorizes the adoption of review fees by resolution, and provides enforcement provisions for violations. The ordinance also clarifies the relationship between Zoning Compliance Review, building permits, and other required development approvals, while preserving exemptions provided by state law.

The public purpose of this ordinance is to promote the public health, safety, and welfare by creating a consistent, predictable, transparent, and efficient process for ensuring that development activities comply with the City's zoning regulations, Comprehensive Plan, and other applicable laws before construction or site work begins. By consolidating zoning and land development reviews into a single administrative process, establishing objective review standards, and providing clear enforcement mechanisms, the ordinance enhances regulatory consistency, protects the public interest, and helps ensure orderly growth and development while maintaining compliance with state law.

2. Estimate of direct economic impact of the proposed ordinance on private, for-profit businesses in the City:

Private, for-profit businesses in the City would only be economically impacted by the new fees associated with the Zoning Compliance Review. The fee schedule will be adopted separately via Resolution. The fees will be based on the time and Staff resources required to process, review, and inspect the proposed development activity. Other than the fees the impacts should be minimal.

3. Estimate of direct compliance costs that businesses may reasonably incur:

As noted above, the only direct compliance costs will be the new fees associated with the Zoning Compliance Review, for which businesses will be responsible for paying.

4. Any new charge or fee imposed by the proposed ordinance:

As noted above, a new fee schedule will be adopted for the Zoning Compliance Review process. The fee schedule will be adopted separately via a Resolution.

5. Estimate of the City's regulatory costs, including estimated revenues from any new charges or fees to cover such costs:

The regulatory costs will be assessed and used to establish the fee schedule for the Zoning Compliance Review. The fee schedule will be based on the time and Staff resources required to process, review, and inspect the proposed development activity.

6. Good faith estimate of the number of businesses likely to be impacted by the proposed ordinance:

The proposed ordinance will only have an impact on contractors and other construction professionals insofar as they will be required to submit everything required to ensure compliance with the new regulations and pay the new fees. This new application will take the place of several existing applications and review processes, so the administrative and review processing time for a contractor or construction professional should not change significantly.

7. Additional information (if any, but may wish to include the methodology used to derive information for #1 and #2, above. For example: City staff solicited comments from businesses in the City as to the potential impact of the proposed ordinance by contacting the chamber of commerce, social media posting, direct mail or direct email, posting on City website, public workshop, etc. You may also wish to include efforts made to reduce the potential fiscal impact on businesses based on feedback from businesses. You may also wish to state here that the proposed ordinance is a generally applicable ordinance that applies to all persons similarly situated (individuals as well as businesses) and, therefore, the proposed ordinance does not impose costs only upon businesses.):

N/A

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Steve Pash, Assistant City Manager – Public Services

Via: Jon C. Williams, City Manager

Date: July 30, 2026 **Meeting Date:** August 13, 2026

Subject: S. Dillard Street & E. Story Road – Traffic Light Changes

Issue:

Staff have engaged a traffic consultant to analyze the intersection of South Dillard Street and East Story Road. The consultant was asked to look at improvements to allow more traffic through the lights for east and west bound traffic on Story Road.

Discussion:

From these recommendations, staff is requesting to hire our traffic signal company to modify East Story Road to a split phase traffic signal, giving a green light to all movements (left, through, and right) in one direction first, then giving a green light to all movements in the opposite direction.

Recommended Action:

Staff recommend that City Commission approve the request to change the lights to a split-phase operation and hire Traffic Engineering and Management, LLC dba Control Specialists to modify the lights for a total of $14,600.00.

Attachment(s)/References:

LTEC WG Intersection Analysis
Traffic Engineering and Management, LLC dba Control Specialists Proposal

MEMORANDUM

TO: Steve Pash- Assistant City Manager - Public Services
FROM: J. Antony Luke, PE
Joseph Thomas Roviaro
DATE: April 17, 2026
RE: City of Winter Garden Continuing Transportation Planning Engineering Services - Analysis of Three (3) Intersection Locations
(LTEC № 25-0204)

The City of Winter Garden staff requested a detailed operational analysis of traffic conditions at three (3) intersections within the City of Winter Garden: 1) South Dillard Street and East Story Road (Intersection #1), 2) Avalon Road and Golden Bell Street (gated entrance to Carriage Point Subdivision/Longbeam Way (entrance to Stone Creek Subdivision) (Intersection #2), and 3) Avalon Road and Tucker Ranch Park Entrance/Coscester Street (Intersection #3). The analysis involved procedures consistent with the latest version of the FDOT Manual on Intersection Control Evaluation (ICE) for the intersections of Avalon Road and Golden Bell Street /Longbeam Way and Avalon Road and Tucker Ranch Park Entrance/Coscester Street, which are both currently unsignalized. The intersection of South Dillard Street and East Story Road (Intersection #1) is signalized and involved an analysis to identify potential signal control and geometric improvements to improve the traffic operations.

This summary memorandum refers to each of the intersection locations as:

Study Intersection 1: South Dillard Street & East Story Road (Intersection #1),

Study Intersection 2: Avalon Road & Golden Bell Street/Longbeam Way (Intersection #2), and

Study Intersection 3: Avalon Road & Tucker Ranch Entrance/Coscester Street (Intersection #3).

The locations of the three (3) Study Intersections are shown in **Figure 1**.

This memorandum provides a summary of the following for the signalized Study Intersection #1 and will include the following components:

- Existing traffic volumes, operational conditions, and assessment of historic crash data and
- Development of a recommended concept for improvements and modifications to improve the existing operating conditions.

The summary for the unsignalized Study Intersection #2 and Study Intersection #3 will include the following components:

- Existing traffic volumes, operational conditions, and assessment of historic crash data,
- Assessment based on the FDOT ICE Stage 1 Screening procedures, and
- Development of a recommended concept for improvements and modifications to improve the existing operating conditions.

Study Intersection #1 (South Dillard Street & East Story Road)

- The location of Study Intersection #1 is shown in **Figure 1**, located about halfway between SR 50 and Plant Street, near the central business area of the city of Winter Garden. Dillard Street, near this intersection, is a five-lane north/south roadway with a center 2-way left-turn lane. East Story Road is a two-lane, undivided east/west roadway at this location. The eastbound approach has a separate 180-foot long left-turn lane (this includes the 50-foot taper) and the combination through/right-turn lane is a continuation of the eastbound lane. The westbound approach has a separate combination through/right-turn lane 145-foot long (this includes a 115-foot taper) while the left turn lane is a continuation of the westbound lane. The configuration of Study Intersection #1 is shown in the aerial map plan view in **Figure 2**.
- Dillard Street, near the intersection, serves a number of commercial uses with direct access driveways. East Story Road also contains direct access driveways for uses along the frontage, which are primarily commercial uses. The southeast quadrant of Study Intersection #1 contains a power substation, secured with a wall. The other quadrants of the intersection are developed with commercial uses.
- This intersection is controlled by a traffic signal (strain pole). The posted speed limit for Dillard Street near this intersection is 35 mph. The posted speed limit for East Story Road is 30 mph.

Intersection Volumes and Traffic Operations

- A field review was conducted at Study Intersection #1, including observation of traffic operations during the weekday peak traffic period. **Figure 2** also provides a summary of the AM and PM peak hour traffic volumes collected at Study Intersection #1. Weekday turning movement counts were collected at Study Intersection #1 over a weekday from 7:00 AM to 9:00 AM and 4:00 to 6:00 PM on Tuesday, January 20, 2026. Pedestrian and bicycle volumes were also collected at the intersection. Minimal pedestrian and bicycle volumes were observed at Study Intersection #1. **Figure 3** provides street views for each approach for Study Intersection #1. The City staff also provided existing signal timing plans for Study Intersection #1.
- Study Intersection #1 was analyzed under existing peak bour conditions using the procedures of the *7th Edition Highway Capacity Manual* for signalized intersections using the Synchro 12 software. The level of service (LOS), vehicular delays, and stacking were calculated over the weekday morning and afternoon peak hours. This analysis was completed for the various vehicular movements for the Study Intersection. **Table 1** provides the peak hour LOS analysis results for the Study Intersections. **Attachment A**

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

contains the summary turning movement counts, the existing timings sheet, and the Synchro analysis summaries for Study Intersection #1.

- As can be seen from **Table 1** study Intersection #1 operates at an acceptable Level of Service **C** or better during both the A.M. and P.M. peak periods. The 95th percentile queue length for the northbound and southbound auxiliary left-turn lanes on South Dillard Street is a maximum of two (2) vehicles (assume 25 feet per vehicle). This is well within the available existing northbound (180 feet) and southbound (100 feet) left-turn lane lengths. The 95th percentile queue length for the eastbound auxiliary left-turn lane on East Story Road is a maximum of four (4) vehicles and the 95th percentile queue length for the westbound auxiliary left-turn lane on East Story Road is a maximum of three (3) vehicles. However, it should be noted that due to the long queues for the through/right-turn movements, access to the east/west left turn lane is blocked.

Crash Data Review

- As can be seen from **Table 2** study Intersection #1 has had 55 crashes during the past 5 years (2021-2025). This is an average of 11 crashes per year. The majority of these crashes occurred on South Dillard Street, with only three on East Story Road, two westbound and one eastbound. Twenty-three or 41.8% are angle crashes (left-turn or right-turn) on South Dillard Street. Twenty-one or 38.2% are rear end with 19 on South Dillard Street and two on East Story Road. None of the crashes were fatal, 72.7% had no injuries, and 92.7% had property damage.

Recommended Improvements

- Based on the peak hour operational analysis of Study Intersection #1, signal phasing/timing options were evaluated to reduce the weekday peak hour vehicular delays and stacking for the critical movements. This analysis also considered impacts of potential signal phasing/timing changes to all the traffic movements for Study Intersection #1. Based on the results of the analysis, recommendations were developed for modifications to the signal phasing/timings modifications to the traffic controls.
- Two options are proposed; the first is to modify the side street (East Story Road) phasing to a split phase. Each side street movement would operate separately. The overall intersection phasing would be four-phase signal operation. Phase 1 would be protected north/south left turns, Phase 2 would be permissive north/south movements, Phase 3 would be protected eastbound movements, and Phase 4 would be protected westbound movements. This signal phasing would reduce vehicular conflicts for the east-west movements.
- The second option would be to install separate left-turn signal heads to allow protected east/west left-turns. The new signal phasing would be as follows: Phase 1 would be protected north/south left turns, Phase 2 would be permissive north/south movements, Phase 3 would be protected east/west left turns, and Phase 4 would be permissive east/west movements. This signal phasing would also reduce vehicular conflicts for the

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

east-west movements. Costs for each of the improvement options are expected to involve the limited addition of signal equipment, signal design modifications, and timing plan changes.

- As can be seen from **Table 3**, with the split phasing option, Study Intersection #1 would continue to operate at an acceptable LOS, although the LOS would be reduced to **E**. The analysis indicates that this modification would not result in longer vehicular delays during both the AM and PM peak periods. The 95th percentile queue lengths are similar for the northbound and southbound auxiliary left-turn lanes, a maximum of three (3) vehicles. This is still within the available existing northbound (180 feet) and southbound (100 feet) left-turn lane lengths. The 95th percentile queue length for the eastbound and westbound auxiliary left-turn lanes is a maximum of four (4) vehicles.
- Under the second option, with added eastbound and westbound separate left-turn signal heads, Intersection #1 operates at an acceptable LOS **C** for both AM & PM peak periods. The 95th percentile queue lengths for the northbound and southbound auxiliary left-turn lanes are a maximum of two (2) vehicles. And the 95th percentile queue length for the eastbound and westbound auxiliary left-turn lanes is a maximum of three (3) vehicles.
- Option 2 represents the recommended signal modification for the proposed intersection improvement as it has a better level of service and shorter delays.

Study Intersection 2 (Avalon Road & Golden Bell Street/Longbeam Way)

- The location of Study Intersection #2 is shown in **Figure 1**, located south of Marsh Road/Stoneybrook West Parkway in southwest Winter Garden. Avalon Road is a two-lane, undivided north/south roadway at this location. The configuration of Study Intersection #2 is shown in the aerial map plan view in **Figure 4**. Longbeam Way is the eastern approach to Study Intersection #2 and serves as a primary access to a residential subdivision (Stone Creek). Golden Bell Street also serves as a primary access to a gated residential subdivision (Carriage Pointe) on the west side of Avalon Road.
- Study Intersection #2 is under STOP sign control for the minor street (Golden Bell Street/Longbeam Way) approaches. The posted speed limit for Avalon Road near this intersection is 45 mph. Near this Study Intersection, there are no direct residential driveway connections to Avalon Road.
- Golden Bell Street is a gated local street which serves as direct access driveways and other local roadways within the Carriage Pointe subdivision. Longbeam Way is a short local roadway which connects to Avalon Road to Portcasetle Circle which provides direct driveway access to the homes in the Stone Creek subdivision. The posted speed limit for the local roadways is 25 mph.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Intersection Volumes and Traffic Operations

- A field review was conducted at Study Intersection #2, including observation of traffic operations during the weekday peak traffic period. **Figure 4** also provides a summary of the AM and PM peak hour traffic volumes collected at Study Intersection #2. Weekday turning movement counts were collected at Study Intersection #2 over a weekday from 7:00 AM to 9:00 AM and 4:00 to 6:00 PM on Tuesday, January 20, 2026. Pedestrian and bicycle volumes were also collected at the intersection. Minimal pedestrian and bicycle volumes were observed at Study Intersection #2. **Figure 5** provides street views for each approach for Study Intersection #2.
- An existing 24-hour speed count was conducted Tuesday, April 14, 2026, on Avalon Road just south of Study Intersection #2. The average speed for northbound traffic on Avalon Road is 42.02 mph, the 85th percentile speed is 47.20 mph and the 10 mph Pace is 35-45 mph. Only 20.08% of the northbound vehicles exceed the 45 mph posted speed. The average speed for southbound traffic on Avalon Road is 42.29 mph, the 85th percentile speed is 47.85 mph and the 10 mph Pace is 35-45 mph. Only 24.3% of the southbound vehicles exceed the 45 mph posted speed.
- Study Intersection #2 was analyzed under existing peak hour conditions using the procedures of the *7th Edition Highway Capacity Manual* for unsignalized intersections using the Synchro 12 software. The LOS, vehicular delays, and stacking were calculated over the weekday morning and afternoon peak hours. This analysis was completed for the various vehicular movements for the Study Intersection. **Table 1** also provides the peak hour LOS analysis results for Study Intersection #2. **Attachment B** contains the summary turning movement counts and the Synchro analysis summaries for Study Intersection #2.
- As can be seen from **Table 1** Study Intersection #2 operates at an acceptable Level of Service **E** or better for the minor street movements during both the AM and PM peak periods. The 95th percentile queue length for the northbound and southbound auxiliary left-turn lanes on Avalon Road is a maximum of two (2) vehicles. This is well within the available existing northbound (235 feet) and southbound (345 feet) left-turn lane lengths. The 95th percentile queue length for the eastbound auxiliary left-turn lane on Golden Bell Street is a maximum of two (2) vehicles and the 95th percentile queue length for the westbound minor street movements on Longbeam Way is a maximum of two (2) vehicles.

Crash Data Review

- As can be seen from **Table 2**, study Intersection #2 has had nine (9) crashes during the past 5 years (2021-2025). This is an average of 1.8 crashes per year. All of these crashes occurred on Avalon Road. Six or 66.7% are rear end with two or 22.2% being angle. None of the crashes were fatal, 77.8% had no injuries, and 100% had property damage.

Recommended Improvements

- A FDOT Stage 1 Intersection Control Evaluation (ICE) screening was performed for Study Intersection #2. As part of the Stage 1 ICE screening both a capacity Analysis for Planning of Junctions (Cap-X) and the Safety Performance for Intersection Control Evaluation (SPICE) evaluation was performed. A copy of the Stage 1 form is in **Attachment B**.
- As can be seen from **Table 3**, the all-Way Stop Control for Study Intersection #2 would shorten the minor street delays and improve the minor street level of service by provide gaps in the northbound/southbound traffic flow to allow the minor street traffic to safety turn onto Avalon Road.
- As documented in **Table 2**, the ICE Stage 1 screening supports an All-Way Stop Control for Study Intersection #2. An All-Way Stop Control represents the recommended traffic control modification for the proposed intersection improvement as it reduces speed, provides a safer pedestrian/cyclists crossing, and allows traffic to flow smoothly under the right-of-way rule. The cost for this improvement will involve the limited addition of signage and pavement marking design, sign equipment, and pavement markings.

Study Intersection 3 (Avalon Road & Coscester Street)

- As shown in **Figure 1**, this intersection is located south of SR 50 south of the Florida Turnpike Bridge, in west Winter Garden. Avalon Road is a north/south two-lane undivided roadway with a posted speed limit of 45mph. Coscester Street (east approach) is a two-lane undivided roadway with a posted speed limit of 26 mph. Tucker Ranch Entrance (west approach) is the entrance to the Tucked Ranch Recreation and Nature Complex, located on the west side of Avalon Road, which is currently under construction. Tucker Ranch entrance roadway is a two-lane undivided roadway with a 25 mph speed limit. Intersection #3 is under STOP sign control for the minor street (Coscester Street and Tucker Ranch) approaches. The configuration of Study Intersection #3 is shown in the aerial map plan view in **Figure 6**.
- Avalon Road serves as north-south route extending from north of SR 50, south through west Orange County to south of US 192 in Osceola County. Near this Study Intersection, Avalon Road and Tucker Ranch/Coscester Street provide direct access for limited homes with much of the adjacent properties undeveloped. The frontage properties fronting the quadrants of Study Intersection #3 are currently undeveloped. The City of Winter Garden is currently in the process of taking over maintenance of Avalon Road from Orange County, from the Florida Turnpike bridge south to the City Limit.

Intersection Volumes and Traffic Operations

- A field review was conducted at Study Intersection #3, including observation of traffic operations during the weekday peak traffic period. **Figure 6** also provides a summary of the AM and PM peak hour traffic volumes collected at Study Intersection #3. Weekday turning movement counts were collected at Study Intersection #3 over a weekday from 7:00 AM to 9:00 AM and 4:00 to 6:00 PM on Tuesday, January 20, 2026. Pedestrian and

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

bicycle volumes were also collected at the intersection. Minimal pedestrian and bicycle volumes were observed at Study Intersection #3. **Figure 7** provides street views for each approach for Study Intersection #3.

- An existing 24-hour speed count was conducted Tuesday, April 14, 2026, on Avalon Road just south of Study Intersection #3. The average speed for northbound traffic on Avalon Road is 33.64 mph, the 85th percentile speed is 43.73 mph and the 10 mph Pace is 35-45 mph. Only 8.62% of the northbound vehicles exceed the 45 mph posted speed. The average speed for southbound traffic on Avalon Road is 38.28 mph, the 85th percentile speed is 44.41 mph and the 10 mph Pace is 35-45 mph. Only 11.12% of the southbound vehicles exceed the 45 mph posted speed.
- Study Intersection #3 was analyzed under existing peak bour conditions using the procedures of the *7th Edition Highway Capacity Manual* for unsignalized intersections using the Synchro 12 software. The LOS, vehicular delays, and stacking were calculated over the weekday morning and afternoon peak hours. This analysis was completed for the various vehicular movements for the Study Intersection. **Table 1** also provides the peak hour LOS analysis results for Study Intersection #3. **Attachment C** contains the summary turning movement counts and the Synchro analysis summaries for Study Intersection #3.
- As can be seen from **Table 1** Study Intersection #3 operates at a deficient LOS **F** condition for the eastbound approach (Tucker Ranch) minor street movements during both the A.M. and P.M. peak periods.
- The westbound approach (Coscester Street) operates at an acceptable LOS **C** condition for the minor street movements during both the A.M. and P.M. peak periods.
- The Avalon Road north/south left-turn movements operate at acceptable LOS A conditions. However, this is due to the small number of vehicles currently making these movements.
- The 95th percentile queue length for all the approaches is a maximum of two (2) vehicles.

Crash Data Review

- As can be seen from **Table 2**, study Intersection #3 has had 13 crashes during the past 5 years (2021-2025). This is an average of 2.6 crashes per year. All but two of these crashes occurred on Avalon Road. Ten or 76.9% are rear end with one or 7.7% being angle. None of the crashes were fatal, 53.9% had no injuries, and 92.3% had property damage.

Recommended Improvements

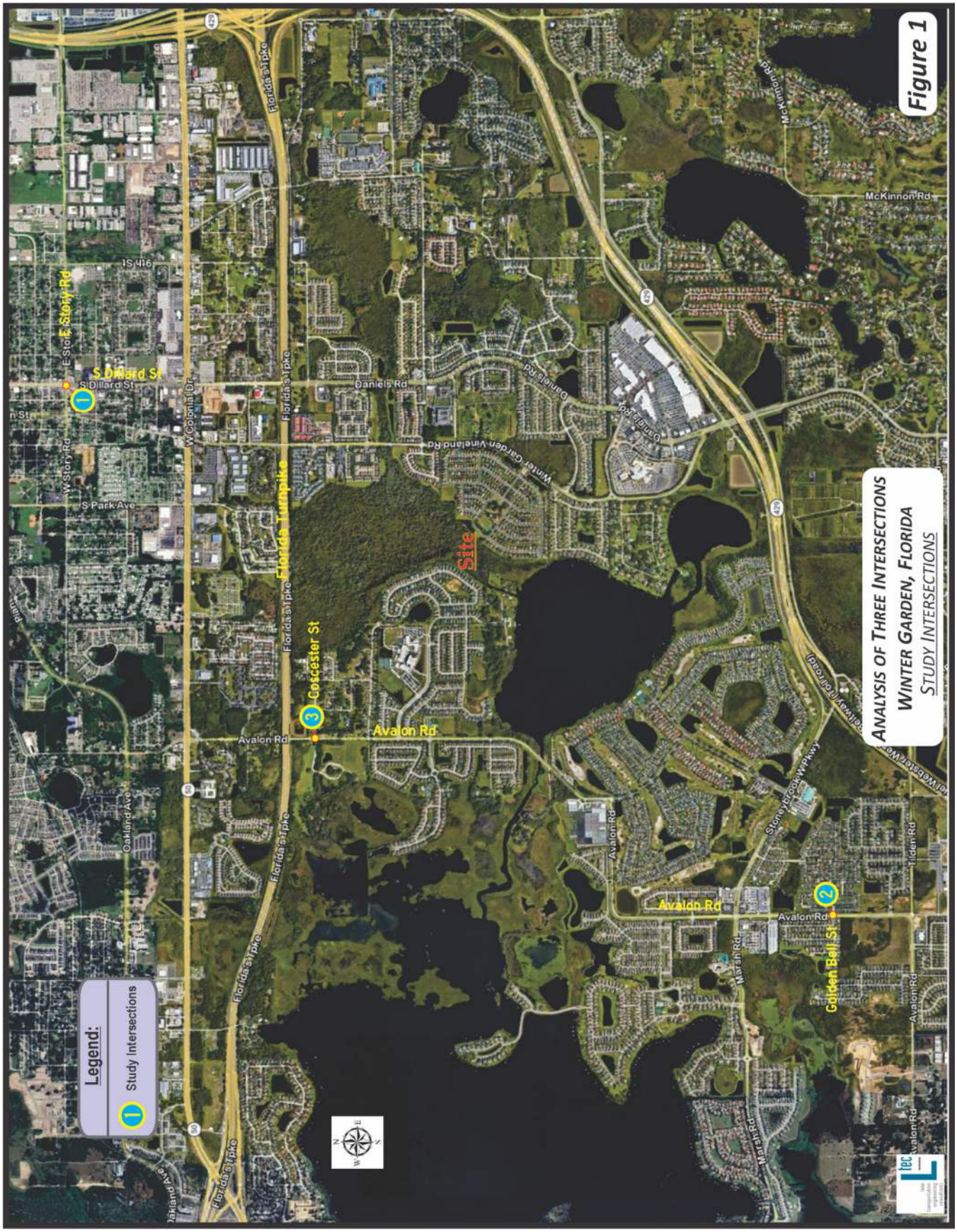
- A FDOT Stage 1 Intersection Control Evaluation (ICE) screening was performed for Study Intersection #3. As part of the Stage 1 ICE screening both a capacity Analysis for Planning of Junctions (Cap-X) and Safety Performance for Intersection Control Evaluation (SPICE)

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

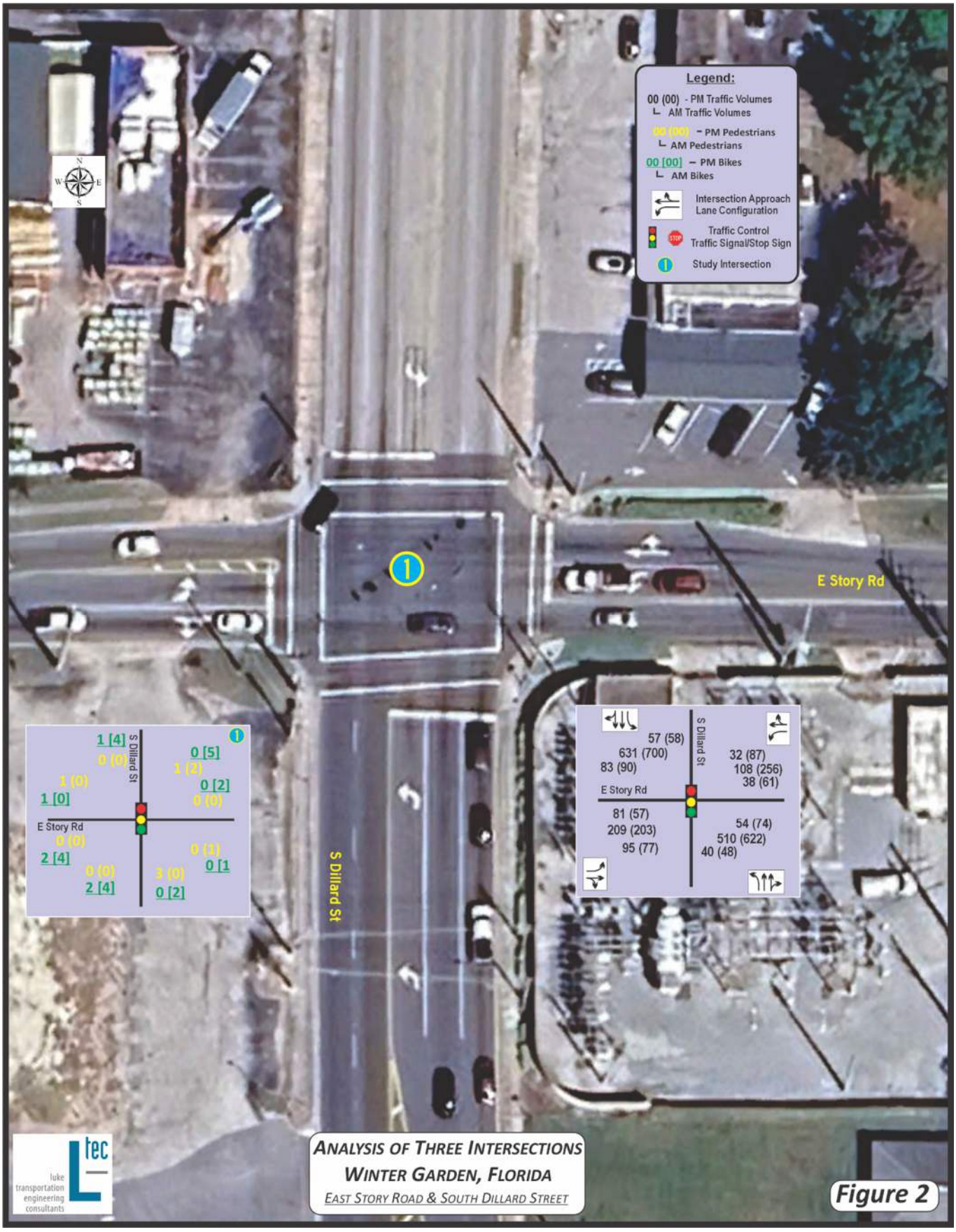
evaluation was performed. A copy of the Stage 1 form is in **Attachment C**.

- As can be seen from **Table 3**, the all-Way Stop Control for Study Intersection #3 would shorten the minor street delays and improve the minor street level of service by provide gaps in the northbound/southbound traffic flow to allow the minor street traffic to safety turn onto Avalon Road.
- As documented in **Table 2**, the ICE Stage 1 screening supports an All-Way Stop Control for Study Intersection #3. An All-Way Stop Control represents the recommended traffic control modification for the proposed intersection improvement as it reduces speed, provides a safer pedestrian/cyclists crossing, and allows traffic to flow smoothly under the right-of-way rule. The cost for this improvement will involve the limited addition of signage and pavement marking design, sign equipment, and pavement markings.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

TABLE 1

Study Intersections Existing (2026) Level of Service

Approach / Movement		Lanes	Turn Lane Length	Traffic Control	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
1 - East Story Road (EB/WB) and South Dillard Street (NB/SB)												
EB	Left	1	130		27.9	0.34	C	82	23.6	0.22	C	63
	Thru	1			16.2	0.46	B	203	17.8	0.52	B	219
	Right	>										
WB	Left	1			19.8	0.11	B	38	21.5	0.20	C	64
	Thru	1	145		19.8	0.72	B	244	19.3	0.64	B	280
	Right	>										
NB	Left	1	180		17.4	0.70	B	31	13.4	0.16	B	32
	Thru	2			21.5	0.56	C	203	17.5	0.59	B	242
	Right	>			21.5	0.56	C		17.5	0.59	B	
SB	Left	1	100		16.2	0.19	B	40	12.6	0.17	B	37
	Thru	2			21.7	0.65	C	236	17.0	0.63	B	277
	Right	>			21.7	0.66	C		17.0	0.63	B	
Intersection Control Delay / LOS					20.5		C		17.7		B	
Approach / Movement		Lanes	Turn Lane Length	Traffic Control	Control Delay (s) (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)	Control Delay (s) (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
2 - Golden Bell Street (EB)/Longbeam Way (WB) and Avalon Road (NB/SB)												
EB	Left	1	75		37.9	0.31	E	30	40.3	0.22	E	20
	Thru	1		STOP	17.7	0.031	C	3	16.1	0.026	C	3
	Right	>										
WB	Left	<										
	Thru	1		STOP	29.8	0.347	D	38	26.6	0.299	D	30
	Right	>										
NB	Left	1	235		9.6	0.003	A	0	9.8	0.013	A	0
	Thru	1		Free Flow								
	Right	>										
SB	Left	1	345		10.1	0.016	B	0	10.4	0.035	B	3
	Thru	1		Free Flow								
	Right	1	190									
3 - Tucker Ranch Entrance (EB)/Coscester Street (WB) and Avalon Road (NB/SB)												
EB	Left	<										
	Thru	1		STOP	56.9	0.103	F	8	66.4	0.316	F	30
	Right	>										
WB	Left	<										
	Thru	1		STOP	23.6	0.015	C	13	17.0	0.091	C	8
	Right	>										
NB	Left	<										
	Thru	1		Free Flow	0.0	0.000	A	0	9.6	0.001	A	0
	Right	>										
SB	Left	<										
	Thru	1		Free Flow	0.0	0.000	A	0	9.5	0.027	A	8
	Right	>										

Luke Transportation Engineering Consultants, Inc., 2026

TABLE 2

1 - East Story Road (EB/WB) and South Dillard Street (NB/SB) - Crash Report Summary

Collision Type	2021	2022	2023	2024	2025	Total	Average	Percent
Rear End	5	4	4	5	3	21	4.20	38.2%
Angle	4	4	6	5	4	23	4.60	41.8%
Sideswipe	1	1	1	0	2	5	1.00	9.1%
Head-On	2	0	0	1	0	3	0.60	5.5%
Other	0	0	2	0	0	2	0.40	3.6%
Pedestrian	1	0	0	0	0	1	0.20	1.8%
Total Crashes	**13**	**9**	**13**	**11**	**9**	**55**	**11.00**	**100.0%**
Fatal	0	0	0	0	0	0	0.00	0.0%
No Injury	8	7	6	10	9	40	8.00	72.7%
Incapacitating Injury	5	2	7	1	0	15	3.00	27.3%
Property Damage	11	9	11	11	9	51	10.20	92.7%
AADT	23,253	22,647	24,235	24,593	27,251		24,396	
Crash Rate - MEV (1)	1.53	1.09	1.47	1.23	0.90		1.24	
(1) Intersection Million Entering Vehicles Formula: (1,000,000 x Crashes) ÷ (365 x Entering AADT) = MEV								

2 - Golden Bell Street (EB)/Longbeam Way (WB) and Avalon Road (NB/SB) - Crash Report Summary

Collision Type	2021	2022	2023	2024	2025	Total	Average	Percent
Rear End	1	1	0	3	1	6	1.20	66.7%
Angle	1	0	1	0	0	2	0.40	22.2%
Sideswipe	0	0	0	0	0	0	0.00	0.0%
Head-On	0	0	0	0	0	0	0.00	0.0%
Other	0	0	0	0	0	0	0.00	0.0%
Pedestrian	0	1	0	0	0	1	0.20	11.1%
Total Crashes	**2**	**2**	**1**	**3**	**1**	**9**	**1.80**	**100.0%**
Fatal	0	0	0	0	0	0	0.00	0.0%
No Injury	2	0	1	3	1	7	1.40	77.8%
Incapacitating Injury	0	2	0	0	0	2	0.40	22.2%
Property Damage	2	2	1	3	1	9	1.80	100.0%
AADT	18,482	18,577	20,177	20,467	14,200		18,381	
Crash Rate - MVMT (1)	1.10	1.09	0.50	1.49	0.71		0.99	
Statewide Average Crash Rate for a 2-Lane/2-Way Undivided					0.54			
(1) Intersection Million Entering Vehicles Formula: (1,000,000 x Crashes) ÷ (365 x Entering AADT) = MEV								

2 - Golden Bell Street (EB)/Longbeam Way (WB) and Avalon Road (NB/SB) - ICE Report Summary

ICE Traffic Control Alternative	Crash Type		Crash Prediction Rank	Safe System for Intersections Rank
	Fatal & Injury	Total		
2-Way Stop	1.06	2.49	2	3
All-Way Stop	0.82	2.14	1	1
Signal Control	1.52	2.91	3	2

3 - Tucker Ranch Entrance (EB)/Coscester Street (WB) and Avalon Road (NB/SB) - Crash Report Summary

Collision Type	2021	2022	2023	2024	2025	Total	Average	Percent
Rear End	2	3	0	2	3	10	2.00	76.9%
Angle	0	0	1	0	0	1	0.20	7.7%
Sideswipe	0	0	0	0	1	1	0.20	7.7%
Head-On	0	0	0	0	0	0	0.00	0.0%
Other	0	0	1	0	0	1	0.20	7.7%
Pedestrian	0	0	0	0	0	0	0.00	0.0%
Total Crashes	**2**	**3**	**2**	**2**	**4**	**13**	**2.60**	**100.0%**
Fatal	0	0	0	0	0	0	0.00	0.0%
No Injury	0	2	1	1	3	7	1.00	53.9%
Incapacitating Injury	2	1	1	1	1	6	1.20	46.2%
Property Damage	2	3	1	2	4	12	2.00	92.3%
AADT	16,638	17,901	17,820	17,748	12,310		16,483	
Crash Rate - MVMT (1)	1.37	1.91	1.28	1.29	3.71		1.80	
Statewide Average Crash Rate for a 2-Lane/2-Way Undivided					0.54			
(1) Intersection Million Entering Vehicles Formula: (1,000,000 x Crashes) ÷ (365 x Entering AADT) = MEV								

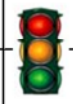
3 - Tucker Ranch Entrance (EB)/Coscester Street (WB) and Avalon Road (NB/SB) - ICE Report Summary

ICE Traffic Control Alternative	Crash Type		Crash Prediction Rank	Safe System for Intersections Rank
	Fatal & Injury	Total		
2-Way Stop	1.21	3.25	2	3
All-Way Stop	0.42	1.18	1	1
Signal Control	1.24	3.65	3	2

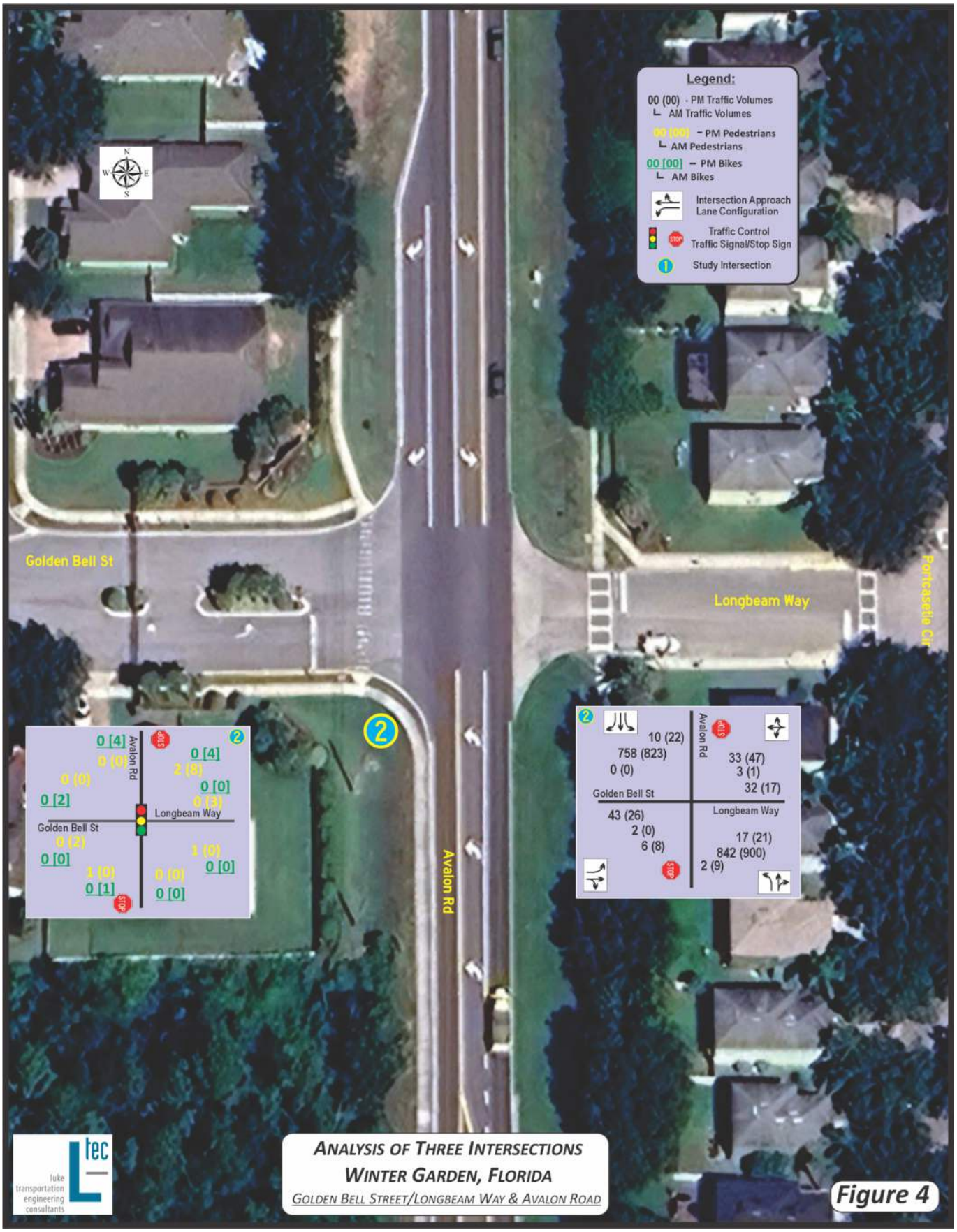
Luke Transportation Engineering Consultants, Inc., 2026

TABLE 3

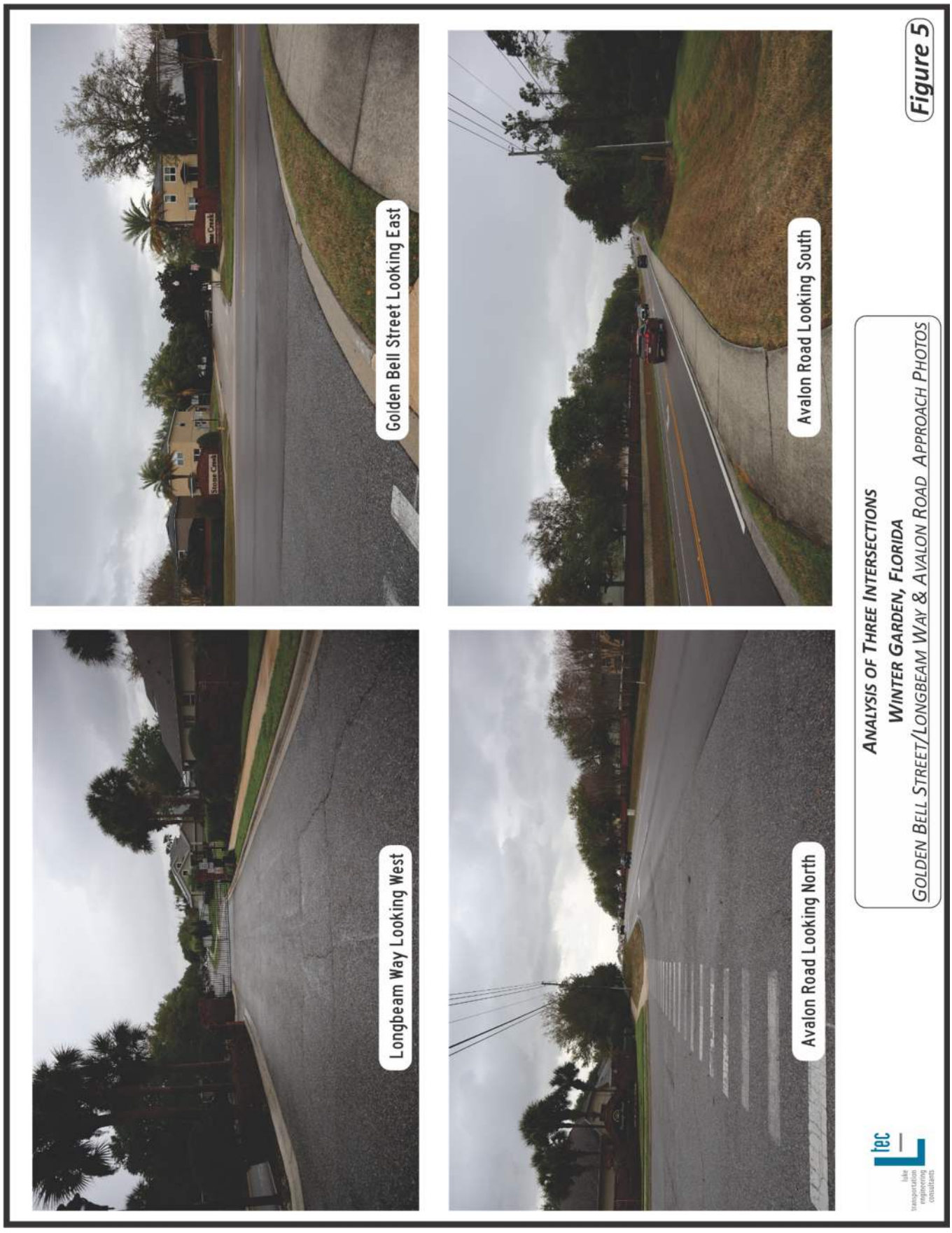
Study Intersections Improve (2026) Level of Service

Approach / Movement		Lanes	Turn Lane Length	Traffic Control	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGr pLOS	95th %ile Queue (Feet)	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGr pLOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
1 - East Story Road (EB/WB) and South Dillard Street (NB/SB) - Split Phasing												
EB	Left	1	130		30.3	0.24	C	95	32.7	0.17	C	83
	Thru	1			57.0	0.89	E	373	46.9	0.83	D	351
	Right	>										
WB	Left	1			28.5	0.11	C	54	29.5	0.15	C	83
	Thru	1	145		194.1	1.31	F	494	44.3	0.84	D	424
	Right	>										
NB	Left	1	180		24.7	0.21	C	36	26.0	0.25	C	50
	Thru	2			30.1	0.61	C	228	32.9	0.69	C	344
	Right	>			30.1	0.61	C		32.9	0.69	C	
SB	Left	1	100		23.3	0.23	C	46	27.9	0.26	C	59
	Thru	2			31.2	0.72	C	271	33.6	0.75	C	387
	Right	>			31.2	0.73	C		33.6	0.75	C	
Intersection Control Delay / LOS					65.7		E		36.1		D	
1 - East Story Road (EB/WB) and South Dillard Street (NB/SB) - New E/W Left Turn Signals												
EB	Left	1	130		20.9	0.40	C	63	18.9	0.26	B	48
	Thru	1			23.6	0.58	C	272	23.4	0.67	C	213
	Right	>										
WB	Left	1			18.0	0.12	B	36	18.3	0.23	B	51
	Thru	1	145		54.9	0.95	D	392	28.8	0.82	C	302
	Right	>										
NB	Left	1	180		20.0	0.19	B	31	16.1	0.19	B	29
	Thru	2			24.6	0.58	C	206	20.8	0.67	C	218
	Right	>			24.6	0.59	C		20.5	0.67	C	
SB	Left	1	100		18.7	0.20	B	41	15.1	0.20	B	34
	Thru	2			25.1	0.69	C	242	20.4	0.71	C	224
	Right	>			25.1	0.69	C		20.4	0.71	C	
Intersection Control Delay / LOS					30.0		C		21.8		C	
Approach / Movement		Lanes	Turn Lane Length	Traffic Control	Control Delay (s) (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)	Control Delay (s) (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
2 - Golden Bell Street (EB)/Longbeam Way (WB) and Avalon Road (NB/SB) - AWSC												
EB	Left	1	75		15.5	0.150	C	51	15.0	0.088	B	37
	Thru	1		STOP	13.1	0.025	B	27	13	0.025	B	36
	Right	>										
WB	Left	<										
	Thru	1		STOP	15.4	0.022	C	46	14.7	0.199	B	57
	Right	>										
NB	Left	1	235		10.9	0.005	B	0	10.9	0.022	B	3
	Thru	1		STOP	377.1	1.998	F		391.8	2.039	F	
	Right	>										
SB	Left	1	345		11.4	0.026	B	26	11.5	0.056	B	3
	Thru	1		STOP	287.0	1.821	F		307.9	1.888	F	
	Right	1	190		10.7	0.00			10.6	0.00		
Intersection Delay / LOS					310.9		F		328.7		F	
Entrance (EB)/Coscester Street (WB) and Avalon Road (NB/SB)												
EB	Left	<										
	Thru	1		STOP	11.2	0.018	B	38	11.1	0.058	B	43
	Right	>										
WB	Left	<										
	Thru	1		STOP	10.5	0.067	B	58	10.6	0.060	B	54
	Right	>										
NB	Left	<										
	Thru	1		STOP	131.5	1.234	F	258	84.9	1.137	F	210
	Right	>										
SB	Left	<										
	Thru	1		STOP	69.7	1.087	F	288	125.8	1.219	F	213
	Right	>										
Intersection Delay / LOS					100.5		F		103.2		F	

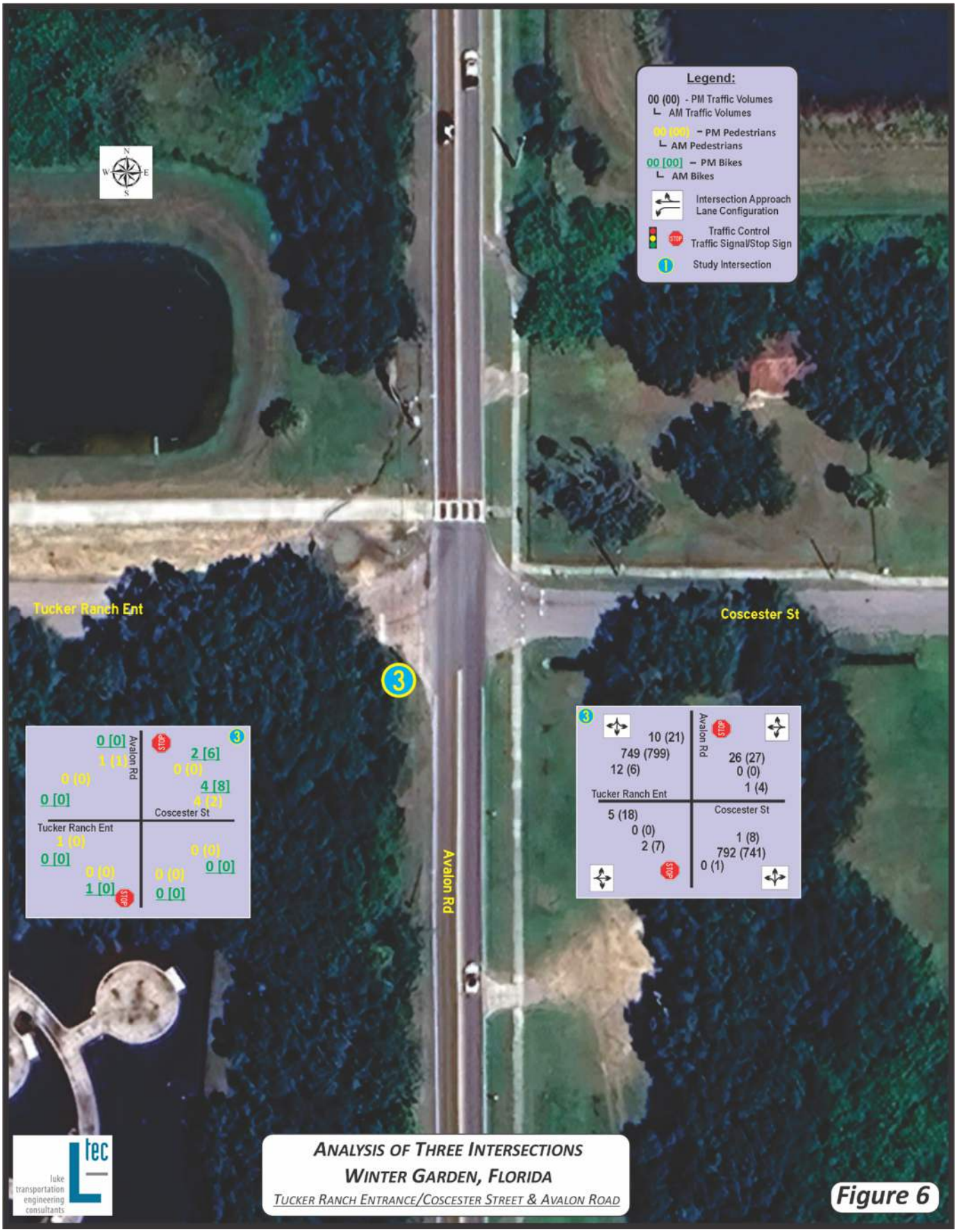
Luke Transportation Engineering Consultants, Inc., 2026



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

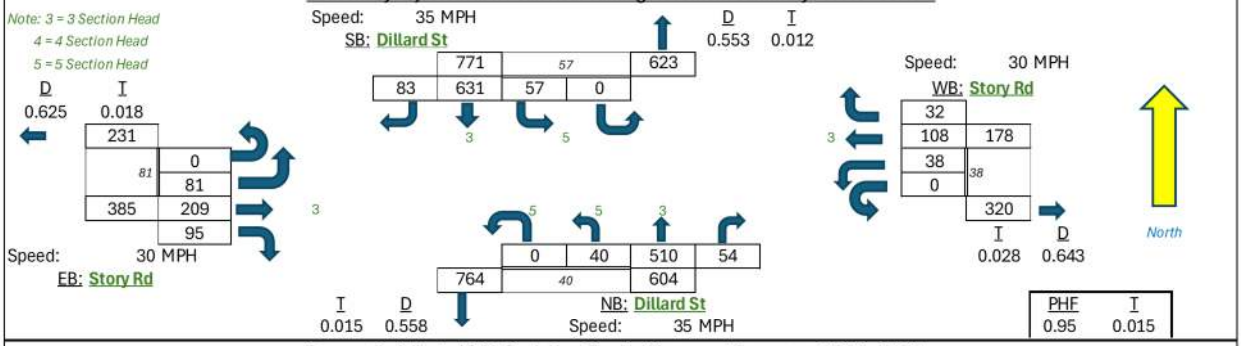
Attachment A

Summary of Vehicle Movements

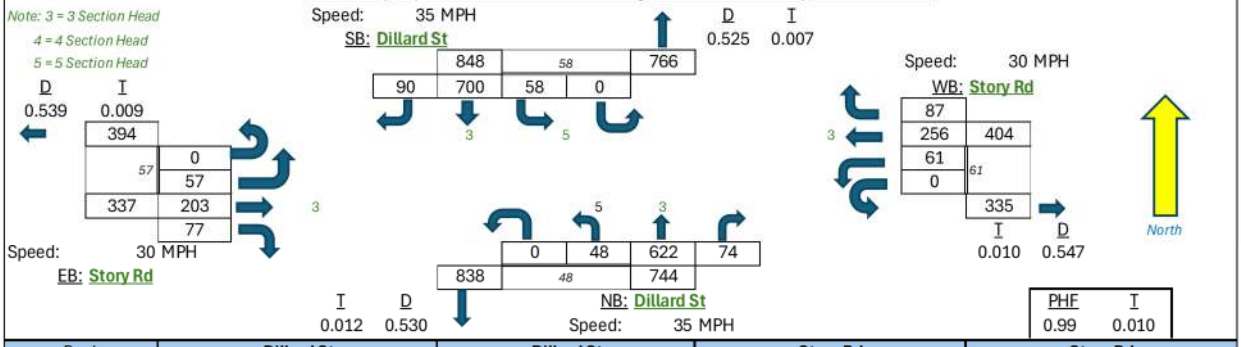
Luke Transportation Engineering Consultants

Project:	WG 3 Intersections		LTEC 25-0204		
N/S Road:	Dillard St	**Observer:**	LTEC		
E/W Road:	Story Rd	**Weather:**	Clear		
Date:	Tuesday, January 20, 2026	**Rd Condition:**	Ok		
City:	Winter Garden	**Signal:**	Yes	**Latitude:**	28°33'30.11"N
County:	Orange	**Major St Movement:**	-	**Longitude:**	81°35'0.91"W
FDOT SF:	1.02 (Note: If SF<1,default to 1.0)	**PM Pk Hr Factor:**	0.99	**Station #:**	1

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:45 - 08:45



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 16:30 - 17:30



Peak Hour Time Interval	Dillard St Northbound				Dillard St Southbound				Story Rd Eastbound				Story Rd Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes	1		2	>	1		2	>	1		1	>	1		1	>
Length	180				100				130							145
7:00 7:15	0	5	69	5	0	8	107	10	0	22	40	21	0	3	12	1
7:15 7:30	0	5	80	14	0	8	121	20	0	21	34	14	0	3	21	5
7:30 7:45	0	5	99	10	0	10	137	16	0	21	50	15	0	6	21	4
7:45 8:00	0	8	142	13	0	14	150	14	0	22	55	21	0	3	24	9
Hourly Sum	0	23	390	42	0	40	515	60	0	86	179	71	0	15	78	19
8:00 8:15	0	11	120	15	0	11	158	24	0	18	53	23	0	12	25	8
8:15 8:30	0	12	133	19	0	11	156	24	0	17	56	23	0	14	32	5
8:30 8:45	0	8	105	6	0	20	155	19	0	22	41	26	0	8	25	9
8:45 9:00	0	13	135	7	1	9	111	14	0	18	54	23	0	8	32	11
Hourly Sum	0	44	493	47	1	51	580	81	0	75	204	95	0	42	114	33
16:00 16:15	0	20	123	17	0	9	165	15	0	12	45	18	0	20	56	15
16:15 16:30	0	10	141	11	1	10	173	14	0	18	53	25	0	13	62	17
16:30 16:45	0	10	143	16	0	14	180	25	0	16	60	13	0	10	79	14
16:45 17:00	0	5	175	15	0	13	156	19	0	18	55	21	0	17	62	24
Hourly Sum	0	45	582	59	1	46	674	73	0	64	213	77	0	60	259	70
17:00 17:15	0	19	131	20	0	25	185	23	0	9	32	21	0	14	64	20
17:15 17:30	0	13	161	22	0	5	165	21	0	13	52	20	0	19	46	27
17:30 17:45	0	12	134	12	0	8	143	19	0	17	55	21	0	17	93	23
17:45 18:00	0	15	166	12	0	9	136	7	0	10	53	21	0	25	108	13
Hourly Sum	0	59	592	66	0	47	629	70	0	49	192	83	0	75	311	83
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																
7:45 8:45	0	40	510	54	0	57	631	83	0	81	209	95	0	38	108	32
% Turns	0	6.6%	84.4%	8.9%	0	7.4%	81.8%	10.8%	0	21.0%	54.3%	24.7%	0	21.3%	60.7%	18.0%
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																
16:30 17:30	0	48	622	74	0	58	700	90	0	57	203	77	0	61	256	87
% Turns	0	6.5%	83.6%	9.9%	0	6.8%	82.5%	10.6%	0	16.9%	60.2%	22.8%	0	15.1%	63.4%	21.5%

Luke Transportation Engineering Consultants, 2026

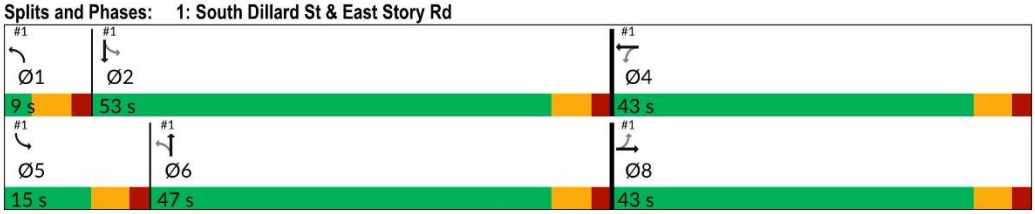
Timings
1: South Dillard St & East Story Rd

AM
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	209	38	108	40	510	57	631
Future Volume (vph)	81	209	38	108	40	510	57	631
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	25.0	25.0	25.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	43.0	43.0	43.0	43.0	9.0	47.0	15.0	53.0
Total Split (%)	41.0%	41.0%	41.0%	41.0%	8.6%	44.8%	14.3%	50.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	21.1	21.1	21.1	21.1	23.0	21.5	28.5	24.3
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.36	0.34	0.45	0.38
v/c Ratio	0.47	0.53	0.14	0.70	0.16	0.51	0.14	0.58
Control Delay (s/veh)	29.3	20.6	18.7	19.2	13.1	21.0	11.7	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.3	20.6	18.7	19.2	13.1	21.0	11.7	18.8
LOS	C	C	B	B	B	C	B	B
Approach Delay (s/veh)		22.5		19.2		20.5		18.2
Approach LOS		C		B		C		B

Intersection Summary	
Cycle Length: 105	
Actuated Cycle Length: 63.2	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 19.8	Intersection LOS: B
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



AM AM Peak Hour 9:29 am 03/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 1

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Queues AM

1: South Dillard St & East Story Rd AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	85	320	40	456	42	594	60	751
v/c Ratio	0.47	0.53	0.14	0.70	0.16	0.51	0.14	0.58
Control Delay (s/veh)	29.3	20.6	18.7	19.2	13.1	21.0	11.7	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.3	20.6	18.7	19.2	13.1	21.0	11.7	18.8
Queue Length 50th (ft)	28	100	12	107	8	105	12	123
Queue Length 95th (ft)	82	203	38	244	31	203	40	236
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	354	1169	571	1125	269	2375	445	2588
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.27	0.07	0.41	0.16	0.25	0.13	0.29

Intersection Summary

HCM 7th Signalized Intersection Summary — AM
1: South Dillard St & East Story Rd — AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Future Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	220	100	40	114	342	42	537	57	60	664	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	250	475	216	374	159	478	250	959	102	323	1013	133
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.03	0.30	0.30	0.05	0.32	0.32
Sat Flow, veh/h	935	1217	553	1051	409	1226	1781	3242	343	1781	3159	413
Grp Volume(v), veh/h	85	0	320	40	0	456	42	294	300	60	373	378
Grp Sat Flow(s),veh/h/ln	935	0	1771	1051	0	1635	1781	1777	1809	1781	1777	1796
Q Serve(g_s), s	5.8	0.0	9.2	2.0	0.0	16.1	1.1	9.5	9.5	1.6	12.3	12.3
Cycle Q Clear(g_c), s	21.8	0.0	9.2	11.2	0.0	16.1	1.1	9.5	9.5	1.6	12.3	12.3
Prop In Lane	1.00		0.31	1.00		0.75	1.00		0.19	1.00		0.23
Lane Grp Cap(c), veh/h	250	0	690	374	0	637	250	526	535	323	570	576
V/C Ratio(X)	0.34	0.00	0.46	0.11	0.00	0.72	0.17	0.56	0.56	0.19	0.65	0.66
Avail Cap(c_a), veh/h	393	0	963	536	0	889	284	1070	1089	469	1227	1240
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	15.5	19.6	0.0	17.6	17.0	20.2	20.2	15.8	19.9	19.9
Incr Delay (d2), s/veh	1.1	0.0	0.7	0.2	0.0	2.3	0.4	1.3	1.3	0.4	1.8	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.5	0.5	0.0	5.9	0.4	3.8	3.9	0.6	4.9	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.9	0.0	16.2	19.8	0.0	19.8	17.4	21.5	21.5	16.2	21.7	21.7
LnGrp LOS	C		B	B		B	B	C	C	B	C	C
Approach Vol, veh/h		405			496			636			811	
Approach Delay, s/veh		18.6			19.8			21.3			21.3	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	27.8		32.5	9.4	26.1		32.5				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	3.0	47.0		37.0	9.0	41.0		37.0				
Max Q Clear Time (g_c+I1), s	3.1	14.3		18.1	3.6	11.5		23.8				
Green Ext Time (p_c), s	0.0	7.5		4.4	0.1	5.5		2.7				
Intersection Summary												
HCM 7th Control Delay, s/veh			20.5									
HCM 7th LOS			C									

AM AM Peak Hour 9:29 am 03/13/2026 Jan 2026 — Synchro 12 Report
JTR — Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC AM
2: Avalon Rd & Golden Bell St/Longbeam Way AM Peak Hour

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Future Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	-	-	-	235	-	-	345	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	2	7	36	3	37	2	946	19	11	852	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1826	1844	852	1835	1834	956	852	0	0	965	0	0
Stage 1	874	874	-	960	960	-	-	-	-	-	-	-
Stage 2	952	970	-	875	874	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	59	75	360	58	76	313	787	-	-	713	-	-
Stage 1	344	367	-	308	335	-	-	-	-	-	-	-
Stage 2	312	332	-	344	367	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	74	360	56	75	313	787	-	-	713	-	-
Mov Cap-2 Maneuver	157	188	-	170	192	-	-	-	-	-	-	-
Stage 1	339	361	-	307	334	-	-	-	-	-	-	-
Stage 2	271	331	-	330	361	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	34.71	29.83	0.02	0.13
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	787	-	-	157	293	220	713	-	-
HCM Lane V/C Ratio	0.003	-	-	0.308	0.031	0.347	0.016	-	-
HCM Ctrl Dly (s/v)	9.6	-	-	37.9	17.7	29.8	10.1	-	-
HCM Lane LOS	A	-	-	E	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.1	1.5	0	-	-

AM AM Peak Hour 9:29 am 03/13/2026 Jan 2026 Synchro 12 Report
JTR Page 4

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC AM
3: Avalon Rd & Tucker Ranch Park/Coscester St AM Peak Hour

Intersection												
Int Delay, s/veh	0.8											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Future Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	100	100	100
Heavy Vehicles, %	27	27	27	3	3	3	2	2	2	2	2	2
Mvmt Flow	6	0	2	5	0	30	0	900	1	10	749	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1675	1676	755	1670	1682	901	761	0	0	901	0	0
Stage 1	775	775	-	901	901	-	-	-	-	-	-	-
Stage 2	900	901	-	769	781	-	-	-	-	-	-	-
Critical Hdwy	7.37	6.77	6.47	7.13	6.53	6.23	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.37	5.77	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.37	5.77	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.743	4.243	3.543	3.527	4.027	3.327	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	66	83	371	76	94	335	851	-	-	754	-	-
Stage 1	355	374	-	332	356	-	-	-	-	-	-	-
Stage 2	301	325	-	392	404	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	59	81	371	74	92	335	851	-	-	754	-	-
Mov Cap-2 Maneuver	59	81	-	74	92	-	-	-	-	-	-	-
Stage 1	347	365	-	332	356	-	-	-	-	-	-	-
Stage 2	275	325	-	381	395	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	56.9	23.57	0	0.13
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	851	-	-	77	228	23	-	-
HCM Lane V/C Ratio	-	-	-	0.103	0.15	0.013	-	-
HCM Ctrl Dly (s/v)	0	-	-	56.9	23.6	9.8	0	-
HCM Lane LOS	A	-	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.5	0	-	-

Timings
1: South Dillard St & East Story Rd

PM
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	203	61	256	48	622	58	700
Future Volume (vph)	57	203	61	256	48	622	58	700
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	25.0	25.0	25.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	50.0	50.0	50.0	50.0	30.0	50.0	30.0	50.0
Total Split (%)	38.5%	38.5%	38.5%	38.5%	23.1%	38.5%	23.1%	38.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	22.7	22.7	22.7	22.7	32.6	26.7	34.9	30.3
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.44	0.36	0.47	0.41
v/c Ratio	0.26	0.50	0.22	0.62	0.13	0.57	0.15	0.57
Control Delay (s/veh)	26.0	25.5	24.7	28.8	10.8	22.2	10.7	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.0	25.5	24.7	28.8	10.8	22.2	10.7	20.5
LOS	C	C	C	C	B	C	B	C
Approach Delay (s/veh)		25.6		28.2		21.4		19.8
Approach LOS		C		C		C		B

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 73.6	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 22.6	Intersection LOS: C
Intersection Capacity Utilization 70.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



Queues PM

1: South Dillard St & East Story Rd PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	283	62	347	48	703	59	798
v/c Ratio	0.26	0.50	0.22	0.62	0.13	0.57	0.15	0.57
Control Delay (s/veh)	26.0	25.5	24.7	28.8	10.8	22.2	10.7	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.0	25.5	24.7	28.8	10.8	22.2	10.7	20.5
Queue Length 50th (ft)	21	105	22	139	10	140	12	162
Queue Length 95th (ft)	63	219	64	280	32	242	37	277
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	470	1151	577	1143	716	2164	715	2161
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.25	0.11	0.30	0.07	0.32	0.08	0.37

Intersection Summary

PM PM Peak Hour 9:59 am 03/03/2026 Jan 2026 Synchro 12 Report

JTR Page 2

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

PM
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Future Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	205	78	62	259	88	48	628	75	59	707	91
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	265	395	150	314	405	138	292	1065	127	344	1129	145
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.03	0.33	0.33	0.05	0.36	0.36
Sat Flow, veh/h	1034	1291	491	1087	1325	450	1781	3197	381	1781	3167	407
Grp Volume(v), veh/h	58	0	283	62	0	347	48	349	354	59	396	402
Grp Sat Flow(s),veh/h/ln	1034	0	1782	1087	0	1775	1781	1777	1802	1781	1777	1797
Q Serve(g_s), s	3.0	0.0	7.7	2.9	0.0	9.9	1.0	9.5	9.5	1.2	10.8	10.8
Cycle Q Clear(g_c), s	12.8	0.0	7.7	10.6	0.0	9.9	1.0	9.5	9.5	1.2	10.8	10.8
Prop In Lane	1.00		0.28	1.00		0.25	1.00		0.21	1.00		0.23
Lane Grp Cap(c), veh/h	265	0	545	314	0	543	292	592	600	344	633	641
V/C Ratio(X)	0.22	0.00	0.52	0.20	0.00	0.64	0.16	0.59	0.59	0.17	0.63	0.63
Avail Cap(c_a), veh/h	728	0	1343	800	0	1337	972	1339	1358	982	1339	1354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	16.7	21.1	0.0	17.5	13.0	16.2	16.2	12.2	15.6	15.6
Incr Delay (d2), s/veh	0.6	0.0	1.1	0.4	0.0	1.8	0.4	1.3	1.3	0.3	1.5	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	3.0	0.7	0.0	3.9	0.4	3.6	3.6	0.4	4.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.6	0.0	17.8	21.5	0.0	19.3	13.4	17.5	17.5	12.6	17.0	17.0
LnGrp LOS	C		B	C		B	B	B	B	B	B	B
Approach Vol, veh/h		341			409			751			857	
Approach Delay, s/veh		18.8			19.6			17.2			16.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	26.8		23.9	9.1	25.4		23.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	24.0	44.0		44.0	24.0	44.0		44.0				
Max Q Clear Time (g_c+I1), s	3.0	12.8		12.6	3.2	11.5		14.8				
Green Ext Time (p_c), s	0.1	8.0		3.8	0.2	6.9		3.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			17.7									
HCM 7th LOS			B									

PM PM Peak Hour 9:59 am 03/03/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC PM
2: Avalon Rd & Golden Bell St/Longbeam Way PM Peak Hour

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Future Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	-	-	-	235	-	-	345	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	9	18	1	51	10	978	23	24	895	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1941	1963	895	1952	1952	990	895	0	0	1001	0	0
Stage 1	942	942	-	1009	1009	-	-	-	-	-	-	-
Stage 2	998	1021	-	942	942	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	48	62	334	48	64	299	758	-	-	692	-	-
Stage 1	310	336	-	289	318	-	-	-	-	-	-	-
Stage 2	289	309	-	315	341	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	59	334	45	61	299	758	-	-	692	-	-
Mov Cap-2 Maneuver	130	164	-	151	172	-	-	-	-	-	-	-
Stage 1	300	325	-	286	314	-	-	-	-	-	-	-
Stage 2	235	305	-	297	330	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	34.61	26.64	0.09	0.27
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	758	-	-	130	334	236	692	-	-
HCM Lane V/C Ratio	0.013	-	-	0.218	0.026	0.299	0.035	-	-
HCM Ctrl Dly (s/v)	9.8	-	-	40.3	16.1	26.6	10.4	-	-
HCM Lane LOS	A	-	-	E	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	1.2	0.1	-	-

PM PM Peak Hour 9:59 am 03/03/2026 Jan 2026 Synchro 12 Report
JTR Page 4

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC PM
3: Avalon Rd & Tucker Ranch Park/Coscester St PM Peak Hour

Intersection												
Int Delay, s/veh	1.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Future Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	92	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	19	0	7	1	0	29	1	788	9	22	850	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1688	1697	853	1689	1696	793	856	0	0	797	0	0
Stage 1	898	898	-	795	795	-	-	-	-	-	-	-
Stage 2	790	799	-	895	901	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.14	6.54	6.24	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.536	4.036	3.336	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	74	92	359	73	92	386	784	-	-	825	-	-
Stage 1	334	358	-	378	397	-	-	-	-	-	-	-
Stage 2	383	398	-	333	354	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	65	87	359	68	87	386	784	-	-	825	-	-
Mov Cap-2 Maneuver	65	87	-	68	87	-	-	-	-	-	-	-
Stage 1	317	340	-	377	396	-	-	-	-	-	-	-
Stage 2	354	397	-	309	336	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	66.36	17.02	0.01	0.24
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	2	-	-	84	329	46	-	-
HCM Lane V/C Ratio	0.001	-	-	0.316	0.091	0.027	-	-
HCM Ctrl Dly (s/v)	9.6	0	-	66.4	17	9.5	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.3	0.1	-	-

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

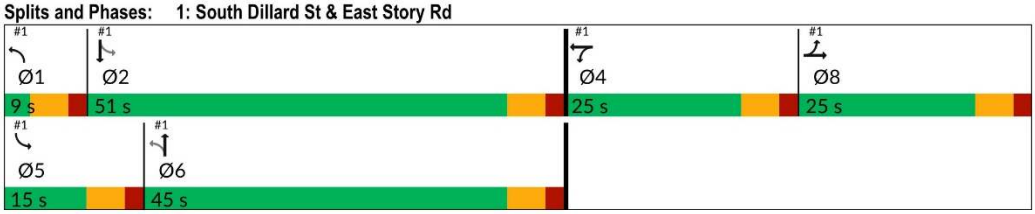
Timings
1: South Dillard St & East Story Rd

AM Split
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	209	38	108	40	510	57	631
Future Volume (vph)	81	209	38	108	40	510	57	631
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8	8	4	4	1	6	5	2
Permitted Phases					6		2	
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	25.0	25.0	25.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	25.0	25.0	25.0	25.0	9.0	45.0	15.0	51.0
Total Split (%)	22.7%	22.7%	22.7%	22.7%	8.2%	40.9%	13.6%	46.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	19.2	19.2	19.2	19.2	26.3	24.0	35.1	30.1
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.29	0.26	0.38	0.33
v/c Ratio	0.23	0.83	0.11	1.05	0.24	0.67	0.22	0.67
Control Delay (s/veh)	35.4	54.5	33.9	84.7	20.8	34.2	18.6	29.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	54.5	33.9	84.7	20.8	34.2	18.6	29.6
LOS	D	D	C	F	C	C	B	C
Approach Delay (s/veh)		50.5		80.6		33.4		28.8
Approach LOS		D		F		C		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 91.8	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay (s/veh): 44.7	Intersection LOS: D
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



Queues
1: South Dillard St & East Story Rd

AM Split
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	85	320	40	456	42	594	60	751
v/c Ratio	0.23	0.83	0.11	1.05	0.24	0.67	0.22	0.67
Control Delay (s/veh)	35.4	54.5	33.9	84.7	20.8	34.2	18.6	29.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	54.5	33.9	84.7	20.8	34.2	18.6	29.6
Queue Length 50th (ft)	44	179	20	~250	15	168	22	206
Queue Length 95th (ft)	95	#373	54	#494	36	228	46	271
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	370	386	367	436	176	1455	290	1675
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.83	0.11	1.05	0.24	0.41	0.21	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

AM Split
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Future Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	220	100	40	114	342	42	537	57	60	664	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	361	247	112	376	87	261	198	883	93	263	917	120
Arrive On Green	0.20	0.20	0.20	0.21	0.21	0.21	0.03	0.27	0.27	0.04	0.29	0.29
Sat Flow, veh/h	1781	1217	553	1767	409	1226	1781	3242	343	1781	3159	413
Grp Volume(v), veh/h	85	0	320	40	0	456	42	294	300	60	373	378
Grp Sat Flow(s),veh/h/ln	1781	0	1771	1767	0	1635	1781	1777	1809	1781	1777	1796
Q Serve(g_s), s	3.6	0.0	15.7	1.6	0.0	19.0	1.5	12.9	12.9	2.1	16.8	16.9
Cycle Q Clear(g_c), s	3.6	0.0	15.7	1.6	0.0	19.0	1.5	12.9	12.9	2.1	16.8	16.9
Prop In Lane	1.00		0.31	1.00		0.75	1.00		0.19	1.00		0.23
Lane Grp Cap(c), veh/h	361	0	359	376	0	348	198	484	493	263	516	521
V/C Ratio(X)	0.24	0.00	0.89	0.11	0.00	1.31	0.21	0.61	0.61	0.23	0.72	0.73
Avail Cap(c_a), veh/h	379	0	377	376	0	348	212	776	790	365	896	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	34.6	28.3	0.0	35.1	23.9	28.3	28.3	22.6	28.5	28.5
Incr Delay (d2), s/veh	0.5	0.0	22.4	0.2	0.0	158.9	0.8	1.8	1.7	0.6	2.8	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	13.7	1.3	0.0	34.8	1.2	9.3	9.5	1.6	11.6	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.3	0.0	57.0	28.5	0.0	194.1	24.7	30.1	30.1	23.3	31.2	31.2
LnGrp LOS	C		E	C		F	C	C	C	C	C	C
Approach Vol, veh/h		405			496			636			811	
Approach Delay, s/veh		51.4			180.7			29.7			30.6	
Approach LOS		D			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	31.9		25.0	9.9	30.3		24.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	3.0	45.0		19.0	9.0	39.0		19.0				
Max Q Clear Time (g_c+I1), s	3.5	18.9		21.0	4.1	14.9		17.7				
Green Ext Time (p_c), s	0.0	7.0		0.0	0.1	5.2		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	65.7
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

AM Split AM Peak Hour 8:50 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Timings
1: South Dillard St & East Story Rd

PM Split
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	203	61	256	48	622	58	700
Future Volume (vph)	57	203	61	256	48	622	58	700
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8	8	4	4	1	6	5	2
Permitted Phases					6		2	
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	25.0	25.0	25.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	32.0	32.0	37.0	37.0	12.0	46.0	15.0	49.0
Total Split (%)	24.6%	24.6%	28.5%	28.5%	9.2%	35.4%	11.5%	37.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	22.3	22.3	26.6	26.6	37.3	32.9	41.3	34.9
Actuated g/C Ratio	0.20	0.20	0.24	0.24	0.33	0.29	0.37	0.31
v/c Ratio	0.16	0.77	0.15	0.81	0.25	0.70	0.25	0.75
Control Delay (s/veh)	43.0	58.2	38.8	56.3	26.0	40.6	25.1	40.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.0	58.2	38.8	56.3	26.0	40.6	25.1	40.5
LOS	D	E	D	E	C	D	C	D
Approach Delay (s/veh)		55.6		53.7		39.7		39.5
Approach LOS		E		D		D		D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 111.6	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 44.3	Intersection LOS: D
Intersection Capacity Utilization 70.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



PM Split PM Peak Hour 8:50 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 1

Queues
1: South Dillard St & East Story Rd

PM Split
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	283	62	347	48	703	59	798
v/c Ratio	0.16	0.77	0.15	0.81	0.25	0.70	0.25	0.75
Control Delay (s/veh)	43.0	58.2	38.8	56.3	26.0	40.6	25.1	40.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.0	58.2	38.8	56.3	26.0	40.6	25.1	40.5
Queue Length 50th (ft)	39	210	40	258	24	270	29	307
Queue Length 95th (ft)	83	#351	83	#424	50	344	59	387
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	436	450	514	530	189	1283	250	1377
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.63	0.12	0.65	0.25	0.55	0.24	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

PM Split
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Future Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	205	78	62	259	88	48	628	75	59	707	91
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	341	247	94	411	308	105	191	909	108	230	939	121
Arrive On Green	0.19	0.19	0.19	0.23	0.23	0.23	0.03	0.28	0.28	0.04	0.30	0.30
Sat Flow, veh/h	1781	1291	491	1767	1325	450	1781	3197	381	1781	3167	407
Grp Volume(v), veh/h	58	0	283	62	0	347	48	349	354	59	396	402
Grp Sat Flow(s),veh/h/ln	1781	0	1782	1767	0	1775	1781	1777	1802	1781	1777	1797
Q Serve(g_s), s	2.6	0.0	14.6	2.7	0.0	17.9	1.8	16.7	16.8	2.2	19.3	19.4
Cycle Q Clear(g_c), s	2.6	0.0	14.6	2.7	0.0	17.9	1.8	16.7	16.8	2.2	19.3	19.4
Prop In Lane	1.00		0.28	1.00		0.25	1.00		0.21	1.00		0.23
Lane Grp Cap(c), veh/h	341	0	341	411	0	412	191	505	512	230	527	533
V/C Ratio(X)	0.17	0.00	0.83	0.15	0.00	0.84	0.25	0.69	0.69	0.26	0.75	0.75
Avail Cap(c_a), veh/h	484	0	484	572	0	575	251	742	753	324	798	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	37.2	29.2	0.0	35.1	25.1	30.5	30.5	24.1	30.5	30.5
Incr Delay (d2), s/veh	0.3	0.0	9.7	0.2	0.0	9.3	1.0	2.4	2.4	0.8	3.1	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	7.2	1.2	0.0	8.6	0.8	7.3	7.4	1.0	8.4	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.7	0.0	46.9	29.5	0.0	44.3	26.0	32.9	32.9	24.9	33.6	33.6
LnGrp LOS	C		D	C		D	C	C	C	C	C	C
Approach Vol, veh/h		341			409			751			857	
Approach Delay, s/veh		44.5			42.1			32.5			33.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	34.4		28.2	10.0	33.2		24.3				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	6.0	43.0		31.0	9.0	40.0		26.0				
Max Q Clear Time (g_c+I1), s	3.8	21.4		19.9	4.2	18.8		16.6				
Green Ext Time (p_c), s	0.0	7.0		2.4	0.1	6.0		1.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			36.1									
HCM 7th LOS			D									

PM Split PM Peak Hour 8:50 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Timings
1: South Dillard St & East Story Rd

AM E_W Lt
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	209	38	108	40	510	57	631
Future Volume (vph)	81	209	38	108	40	510	57	631
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	3	8	7	4	1	6	5	2
Permitted Phases	8		4		6		2	
Detector Phase	3	8	7	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	15.0	25.0	15.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	15.0	28.0	15.0	28.0	9.0	42.0	15.0	48.0
Total Split (%)	15.0%	28.0%	15.0%	28.0%	9.0%	42.0%	15.0%	48.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	30.3	25.7	27.7	22.5	24.3	22.1	32.5	27.9
Actuated g/C Ratio	0.39	0.33	0.35	0.29	0.31	0.28	0.42	0.36
v/c Ratio	0.31	0.54	0.10	0.80	0.20	0.62	0.18	0.62
Control Delay (s/veh)	19.4	28.7	16.9	34.0	16.9	28.7	15.3	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.4	28.7	16.9	34.0	16.9	28.7	15.3	24.0
LOS	B	C	B	C	B	C	B	C
Approach Delay (s/veh)		26.8		32.6		27.9		23.3
Approach LOS		C		C		C		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 78.3	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay (s/veh): 27.1	Intersection LOS: C
Intersection Capacity Utilization 73.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



Queues
1: South Dillard St & East Story Rd

AM E_W Lt
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	85	320	40	456	42	594	60	751
v/c Ratio	0.31	0.54	0.10	0.80	0.20	0.62	0.18	0.62
Control Delay (s/veh)	19.4	28.7	16.9	34.0	16.9	28.7	15.3	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.4	28.7	16.9	34.0	16.9	28.7	15.3	24.0
Queue Length 50th (ft)	27	140	12	168	13	146	18	177
Queue Length 95th (ft)	63	#272	36	#392	31	206	41	242
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	309	618	427	587	209	1662	346	1933
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.52	0.09	0.78	0.20	0.36	0.17	0.39

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

AM E_W Lt
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Future Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	220	100	40	114	342	42	537	57	60	664	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	214	379	172	330	120	360	227	918	97	296	965	126
Arrive On Green	0.06	0.31	0.31	0.04	0.29	0.29	0.03	0.28	0.28	0.05	0.31	0.31
Sat Flow, veh/h	1781	1217	553	1767	409	1226	1781	3242	343	1781	3159	413
Grp Volume(v), veh/h	85	0	320	40	0	456	42	294	300	60	373	378
Grp Sat Flow(s),veh/h/ln	1781	0	1771	1767	0	1635	1781	1777	1809	1781	1777	1796
Q Serve(g_s), s	2.4	0.0	11.4	1.2	0.0	20.5	1.3	10.6	10.7	1.7	13.8	13.9
Cycle Q Clear(g_c), s	2.4	0.0	11.4	1.2	0.0	20.5	1.3	10.6	10.7	1.7	13.8	13.9
Prop In Lane	1.00		0.31	1.00		0.75	1.00		0.19	1.00		0.23
Lane Grp Cap(c), veh/h	214	0	551	330	0	480	227	503	512	296	543	549
V/C Ratio(X)	0.40	0.00	0.58	0.12	0.00	0.95	0.19	0.58	0.59	0.20	0.69	0.69
Avail Cap(c_a), veh/h	329	0	551	476	0	480	253	854	869	426	996	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	21.7	17.8	0.0	25.9	19.4	23.1	23.1	18.2	22.9	22.9
Incr Delay (d2), s/veh	1.2	0.0	1.9	0.2	0.0	29.0	0.6	1.5	1.5	0.5	2.2	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.8	0.5	0.0	11.3	0.5	4.4	4.5	0.7	5.7	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.9	0.0	23.6	18.0	0.0	54.9	20.0	24.6	24.6	18.7	25.1	25.1
LnGrp LOS	C		C	B		D	B	C	C	B	C	C
Approach Vol, veh/h		405			496			636			811	
Approach Delay, s/veh		23.0			51.9			24.3			24.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	28.9	10.1	28.0	9.6	27.2	8.8	29.3
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	42.0	9.0	22.0	9.0	36.0	9.0	22.0
Max Q Clear Time (g_c+I1), s	3.3	15.9	4.4	22.5	3.7	12.7	3.2	13.4
Green Ext Time (p_c), s	0.0	7.0	0.1	0.0	0.1	5.1	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	30.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

AM E_W Lt AM Peak Hour 8:57 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Timings
1: South Dillard St & East Story Rd

PM E_W Lt
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	203	61	256	48	622	58	700
Future Volume (vph)	57	203	61	256	48	622	58	700
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	3	8	7	4	1	6	5	2
Permitted Phases	8		4		6		2	
Detector Phase	3	8	7	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	2.0	7.0	2.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	8.0	25.0	8.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	8.0	27.0	8.0	27.0	9.0	45.0	15.0	51.0
Total Split (%)	8.4%	28.4%	8.4%	28.4%	9.5%	47.4%	15.8%	53.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	18.9	17.4	20.5	19.5	24.0	22.5	28.8	24.9
Actuated g/C Ratio	0.29	0.26	0.31	0.30	0.36	0.34	0.44	0.38
v/c Ratio	0.24	0.58	0.21	0.65	0.21	0.61	0.18	0.62
Control Delay (s/veh)	21.3	28.3	20.7	30.1	13.6	22.5	12.1	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.3	28.3	20.7	30.1	13.6	22.5	12.1	20.1
LOS	C	C	C	C	B	C	B	C
Approach Delay (s/veh)		27.1		28.7		22.0		19.5
Approach LOS		C		C		C		B

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 66	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay (s/veh): 23.0	Intersection LOS: C
Intersection Capacity Utilization 67.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



Queues
1: South Dillard St & East Story Rd

PM E_W Lt
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	283	62	347	48	703	59	798
v/c Ratio	0.24	0.58	0.21	0.65	0.21	0.61	0.18	0.62
Control Delay (s/veh)	21.3	28.3	20.7	30.1	13.6	22.5	12.1	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.3	28.3	20.7	30.1	13.6	22.5	12.1	20.1
Queue Length 50th (ft)	17	108	19	142	12	153	15	165
Queue Length 95th (ft)	48	213	51	#302	29	218	34	224
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	240	637	293	632	234	2174	387	2401
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.44	0.21	0.55	0.21	0.32	0.15	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

PM E_W Lt
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Future Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	205	78	62	259	88	48	628	75	59	707	91
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	227	306	117	274	314	107	248	939	112	297	1001	129
Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.03	0.29	0.29	0.05	0.32	0.32
Sat Flow, veh/h	1781	1291	491	1767	1325	450	1781	3197	381	1781	3167	407
Grp Volume(v), veh/h	58	0	283	62	0	347	48	349	354	59	396	402
Grp Sat Flow(s),veh/h/ln	1781	0	1782	1767	0	1775	1781	1777	1802	1781	1777	1797
Q Serve(g_s), s	1.5	0.0	9.0	1.7	0.0	11.5	1.2	10.7	10.8	1.4	12.2	12.2
Cycle Q Clear(g_c), s	1.5	0.0	9.0	1.7	0.0	11.5	1.2	10.7	10.8	1.4	12.2	12.2
Prop In Lane	1.00		0.28	1.00		0.25	1.00		0.21	1.00		0.23
Lane Grp Cap(c), veh/h	227	0	423	274	0	421	248	522	529	297	562	568
V/C Ratio(X)	0.26	0.00	0.67	0.23	0.00	0.82	0.19	0.67	0.67	0.20	0.71	0.71
Avail Cap(c_a), veh/h	227	0	601	274	0	599	283	1113	1129	463	1285	1299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	0.0	21.5	17.9	0.0	22.5	15.7	19.3	19.3	14.8	18.7	18.7
Incr Delay (d2), s/veh	0.6	0.0	1.8	0.4	0.0	6.3	0.4	1.5	1.5	0.3	1.6	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.7	0.7	0.0	5.2	0.4	4.2	4.2	0.5	4.7	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.9	0.0	23.4	18.3	0.0	28.8	16.1	20.8	20.8	15.1	20.4	20.4
LnGrp LOS	B		C	B		C	B	C	C	B	C	C
Approach Vol, veh/h		341			409			751			857	
Approach Delay, s/veh		22.6			27.2			20.5			20.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	25.7	8.0	20.8	9.2	24.3	8.0	20.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	45.0	2.0	21.0	9.0	39.0	2.0	21.0
Max Q Clear Time (g_c+I1), s	3.2	14.2	3.5	13.5	3.4	12.8	3.7	11.0
Green Ext Time (p_c), s	0.0	5.4	0.0	1.2	0.0	4.5	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

PM E_W Lt PM Peak Hour 8:57 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

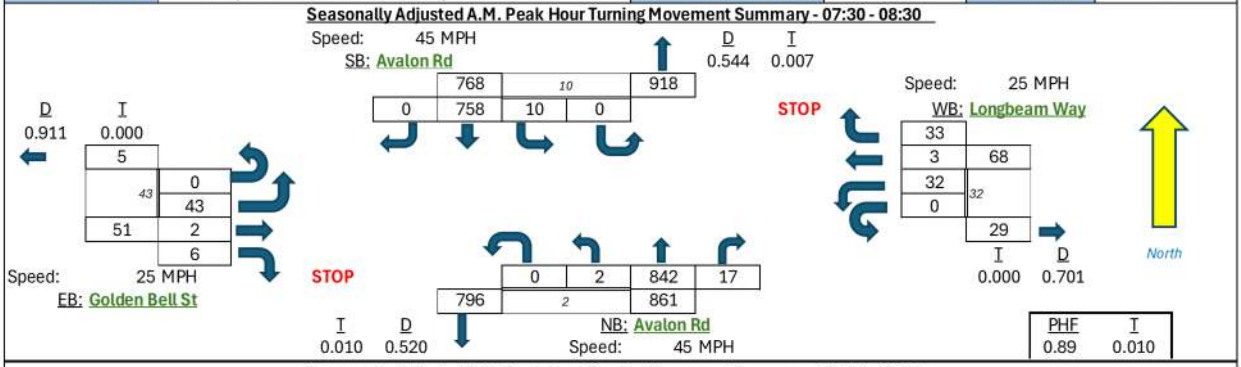
Attachment B

Summary of Vehicle Movements

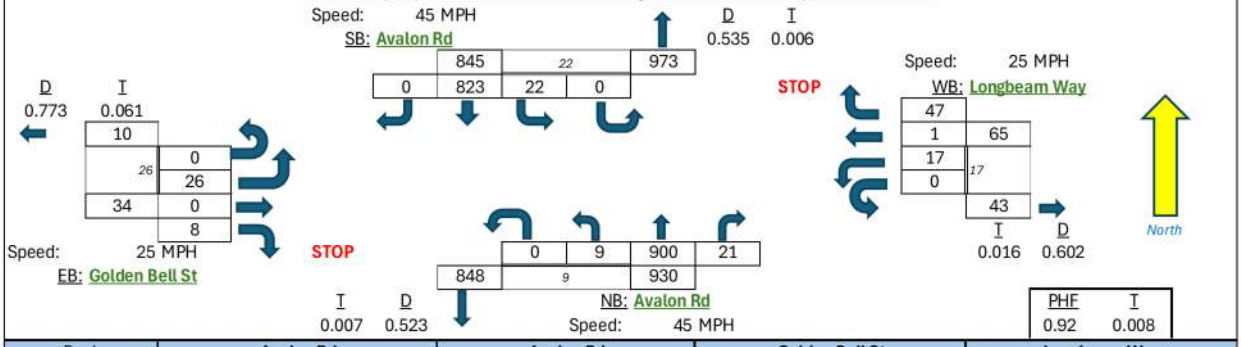
Luke Transportation Engineering Consultants

Project:	WG 3 Intersections		LTEC 25-0204		
N/S Road:	Avalon Rd	**Observer:**	LTEC		
E/W Road:	Golden Bell St	**Weather:**	Clear		
Date:	Tuesday, January 20, 2026	**Rd Condition:**	Ok		
City:	Winter Garden	**Signal:**	No	**Latitude:**	28°30'43.44"N
County:	Orange	**Major St Movement:**	North/South	**Longitude:**	81°37'12.59"W
FDOT SF:	1.02 (Note: If SF<1,default to 1.0)	**PM Pk Hr Factor:**	0.92	**Station #:**	2

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:30 - 08:30



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 17:00 - 18:00



Peak Hour Time Interval		Avalon Rd Northbound				Avalon Rd Southbound				Golden Bell St Eastbound				Longbeam Way Westbound			
		Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes		1		1	>	1		1	1	1		1	>	<		1	>
Length		235				345			190	75							
7:00	7:15	0	1	161	2	0	2	102	0	0	5	0	1	0	7	0	5
7:15	7:30	0	1	127	1	0	3	204	0	0	7	0	5	0	5	0	5
7:30	7:45	0	2	194	1	0	1	209	0	0	11	0	1	0	9	0	4
7:45	8:00	0	0	235	1	0	2	216	0	0	10	0	1	0	6	0	8
Hourly Sum		0	4	717	5	0	8	731	0	0	33	0	8	0	27	0	22
8:00	8:15	0	0	237	4	0	2	130	0	0	14	0	0	0	3	1	5
8:15	8:30	0	0	159	11	0	5	188	0	0	7	2	4	0	13	2	15
8:30	8:45	0	0	135	5	0	3	174	0	0	3	1	1	0	9	0	15
8:45	9:00	0	1	188	0	0	4	184	0	0	3	0	0	0	6	0	5
Hourly Sum		0	1	719	20	0	14	676	0	0	27	3	5	0	31	3	40
16:00	16:15	0	4	206	5	0	8	167	1	0	9	0	4	0	9	0	8
16:15	16:30	0	2	212	8	0	16	190	1	0	2	0	0	0	4	1	7
16:30	16:45	0	1	211	6	0	4	215	0	0	12	0	1	0	5	0	5
16:45	17:00	0	6	214	4	0	5	192	0	0	2	0	2	0	4	1	7
Hourly Sum		0	13	843	23	0	33	764	2	0	25	0	7	0	22	2	27
17:00	17:15	0	2	227	6	0	5	189	0	0	9	0	3	0	4	1	13
17:15	17:30	0	2	203	6	0	8	200	0	0	7	0	3	0	4	0	10
17:30	17:45	0	3	259	2	0	2	211	0	0	4	0	1	0	3	0	12
17:45	18:00	0	2	193	7	0	7	207	0	0	5	0	1	0	6	0	11
Hourly Sum		0	9	882	21	0	22	807	0	0	25	0	8	0	17	1	46
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
7:30	**8:30**	0	2	842	17	0	10	758	0	0	43	2	6	0	32	3	33
% Turns		0	0.2%	97.8%	2.0%	0	1.3%	98.7%		0	84.3%	3.9%	11.8%	0	47.1%	4.4%	48.5%
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
17:00	**18:00**	0	9	900	21	0	22	823	0	0	26	0	8	0	17	1	47
% Turns		0	1.0%	96.8%	2.3%	0	2.6%	97.4%		0	76.5%		23.5%	0	26.2%	1.5%	72.3%

Luke Transportation Engineering Consultants, 2026

Luke Transportation Consulting Engineers, Inc.
Volume Report with Midnight Totals

Data File	: D0120001.PRN		
Station	: N of Tucker Ranch Ent/Corscester St	Identification	: Counter 1
Start Date	: January 20, 2026	Start Time	: 00:00
Stop Date	: January 20, 2026	End Time	: 24:00
City/Town	: Winter Garden	County	: Orange
Location	: Avalon Road: North of Tucker Ranch Entrance/Corscester Street		

Northbound 20-Jan-26

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	10	8	4	3	10	21	56	173	149	159	98	98
30	8	4	3	4	8	26	49	125	114	161	98	74
45	3	3	3	1	18	43	79	144	136	136	114	112
00	8	2	1	4	21	70	115	189	91	122	98	133
Hour Total	29	17	11	12	57	160	299	631	490	578	408	417
End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	127	79	95	131	69	98	124	90	70	57	35	11
30	103	103	106	112	59	149	153	80	63	29	38	14
45	123	134	102	49	65	104	106	55	46	22	14	11
00	121	112	114	29	87	34	102	65	36	27	25	6
Hour Total	474	428	417	321	280	385	485	290	215	135	112	42

24 Hour Total Volume	6,693					
AM Peak Hour Begins	07:00	AM Peak Volume	631	Peak Hour Factor	0.83	
PM Peak Hour Begins	18:00	PM Peak Volume	485	Peak Hour Factor	0.79	

Southbound 20-Jan-26

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	8	8	3	3	3	10	33	70	86	80	59	58
30	7	3	0	5	4	10	34	61	88	79	65	65
45	4	2	1	1	9	13	37	70	90	77	60	65
00	5	3	3	6	5	28	57	89	99	65	63	88
Hour Total	24	16	7	15	21	61	161	290	363	301	247	276
End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	72	83	60	112	83	145	110	81	75	47	31	14
30	93	83	63	111	95	127	99	82	70	34	27	13
45	88	83	87	129	128	112	93	62	65	36	27	10
00	84	72	119	129	99	90	96	69	49	26	17	14
Hour Total	337	321	329	481	405	474	398	294	259	143	102	51

24 Hour Total Volume	5,376					
AM Peak Hour Begins	08:00	AM Peak Volume	363	Peak Hour Factor	0.92	
PM Peak Hour Begins	16:30	PM Peak Volume	499	Peak Hour Factor	0.86	

Two-Way Total 20-Jan-26

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	18	16	7	6	13	31	89	243	235	239	157	156
30	15	7	3	9	12	36	83	186	202	240	163	139
45	7	5	4	2	27	56	116	214	226	213	174	177
00	13	5	4	10	26	98	172	278	190	187	161	221
Hour Total	53	33	18	27	78	221	460	921	853	879	655	693
End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	199	162	155	243	152	243	234	171	145	104	66	25
30	196	186	169	223	154	276	252	162	133	63	65	27
45	211	217	189	178	193	216	199	117	111	58	41	21
00	205	184	233	158	186	124	198	134	85	53	42	20
Hour Total	811	749	746	802	685	859	883	584	474	278	214	93

24 Hour Total Volume	12,069					
AM Peak Hour Begins	07:45	AM Peak Volume	941	Peak Hour Factor	0.85	
PM Peak Hour Begins	16:45	PM Peak Volume	921	Peak Hour Factor	0.83	

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	1	0	3	2	1	0	0	0	0	7
00:30	0	0	0	0	0	0	0	2	5	6	0	2	0	0	0	15
00:45	0	0	0	0	0	0	0	4	6	3	0	0	0	0	0	13
01:00	0	0	0	0	0	0	0	1	3	2	1	0	0	0	0	7
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*7*	*17*	*13*	*2*	*2*	*0*	*0*	*0*	*42*
01:15	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	6
01:30	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	4
01:45	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	4
02:00	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*7*	*4*	*2*	*2*	*0*	*0*	*0*	*19*
02:15	0	0	0	0	0	0	2	1	0	1	1	0	0	0	0	5
02:30	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3
02:45	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*2*	*2*	*4*	*0*	*0*	*0*	*0*	*12*
03:15	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3
03:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
04:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*4*	*0*	*1*	*0*	*1*	*0*	*0*	*8*
04:15	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3
04:30	0	0	0	0	0	0	0	1	1	3	0	0	0	0	0	5
04:45	0	0	0	0	0	0	0	3	3	4	1	1	0	0	0	12
05:00	0	0	0	0	0	0	1	2	2	8	1	0	0	0	0	14
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*6*	*7*	*16*	*2*	*2*	*0*	*0*	*0*	*34*
05:15	0	0	0	0	0	0	1	3	5	5	0	0	0	0	0	14
05:30	0	0	0	0	0	0	0	1	9	9	1	0	0	0	0	20
05:45	0	0	0	0	0	0	0	3	6	12	0	1	0	0	0	22
06:00	0	0	0	0	0	0	0	7	6	13	4	4	1	0	0	35
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*14*	*26*	*39*	*5*	*5*	*1*	*0*	*0*	*91*
06:15	0	0	0	0	0	0	0	6	14	7	1	0	0	0	0	28
06:30	0	0	0	0	0	0	0	8	19	11	2	0	0	0	0	40
06:45	0	0	0	0	0	0	0	17	40	16	8	0	0	0	0	81
07:00	0	0	0	0	0	0	14	44	70	28	1	1	0	0	0	158
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*14*	*75*	*143*	*62*	*12*	*1*	*0*	*0*	*0*	*307*
07:15	0	0	0	0	0	0	3	40	81	28	1	0	0	0	0	153
07:30	0	0	0	0	0	0	4	36	70	22	5	0	0	0	0	137
07:45	0	0	0	0	0	0	13	61	99	15	8	0	0	0	0	196
08:00	0	0	0	0	0	0	8	101	95	14	2	2	0	0	0	222
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*28*	*238*	*345*	*79*	*16*	*2*	*0*	*0*	*0*	*708*
08:15	0	0	0	0	0	0	22	74	73	15	1	0	0	0	0	185
08:30	0	0	0	0	0	1	16	87	52	9	0	1	0	0	0	166
08:45	0	0	0	0	0	0	9	81	56	15	0	0	0	0	0	161
09:00	0	0	0	0	0	0	10	35	73	23	4	0	0	0	0	145
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*57*	*277*	*254*	*62*	*5*	*1*	*0*	*0*	*0*	*657*
09:15	0	0	0	0	0	2	25	68	70	20	2	0	0	0	0	187
09:30	0	0	0	0	0	1	6	39	54	24	5	0	0	0	0	129
09:45	0	0	0	0	0	3	17	52	68	14	1	0	0	0	0	155
10:00	0	0	0	0	0	0	2	19	61	28	3	0	0	0	0	113
Hourly Total	*0*	*0*	*0*	*0*	*0*	*6*	*50*	*178*	*253*	*86*	*11*	*0*	*0*	*0*	*0*	*584*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	0	0	0	0	2	30	59	28	5	0	0	0	0	124
10:30	0	0	0	0	5	7	2	10	12	2	0	0	0	0	0	38
10:45	0	0	0	0	0	0	5	45	62	15	2	0	0	0	0	129
11:00	0	0	0	0	0	0	6	30	55	26	2	1	0	0	0	120
Hourly Total	*0*	*0*	*0*	*0*	*5*	*7*	*15*	*115*	*188*	*71*	*9*	*1*	*0*	*0*	*0*	*411*
11:15	0	0	0	0	0	0	8	41	45	14	0	0	0	0	0	108
11:30	0	0	0	0	0	2	9	32	55	16	5	0	0	0	0	119
11:45	0	0	0	0	0	0	3	24	62	24	3	0	0	0	0	116
12:00	0	0	0	0	0	1	9	30	58	24	2	0	0	0	0	124
Hourly Total	*0*	*0*	*0*	*0*	*0*	*3*	*29*	*127*	*220*	*78*	*10*	*0*	*0*	*0*	*0*	*467*
12:15	0	0	0	0	0	0	2	25	80	22	4	0	0	0	0	133
12:30	0	0	0	0	0	2	8	30	46	29	6	2	0	0	0	123
12:45	0	0	0	0	0	0	2	47	57	30	2	0	0	0	0	138
13:00	0	0	0	0	0	0	6	23	50	20	7	1	0	0	1	108
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*18*	*125*	*233*	*101*	*19*	*3*	*0*	*0*	*1*	*502*
13:15	0	0	0	0	0	2	2	34	43	31	5	2	0	0	0	119
13:30	0	0	0	0	0	3	11	34	61	16	4	0	0	0	0	129
13:45	0	0	0	0	0	1	6	28	64	25	7	0	1	0	0	132
14:00	0	0	0	0	0	3	6	34	65	25	4	1	0	0	0	138
Hourly Total	*0*	*0*	*0*	*0*	*0*	*9*	*25*	*130*	*233*	*97*	*20*	*3*	*1*	*0*	*0*	*518*
14:15	0	0	0	0	0	2	3	39	51	23	6	0	0	0	0	124
14:30	0	0	0	0	0	0	8	36	74	34	6	0	0	0	0	158
14:45	0	0	0	0	0	0	8	49	69	24	3	0	0	0	0	153
15:00	0	0	0	0	0	2	20	49	73	19	6	0	0	0	0	169
Hourly Total	*0*	*0*	*0*	*0*	*0*	*4*	*39*	*173*	*267*	*100*	*21*	*0*	*0*	*0*	*0*	*604*
15:15	0	0	0	0	0	2	17	68	67	19	1	0	0	0	0	174
15:30	0	0	0	0	0	3	14	92	83	33	5	0	0	0	0	230
15:45	0	0	0	0	0	9	61	78	94	13	2	0	0	0	0	257
16:00	0	0	0	0	0	2	24	59	72	25	3	0	0	0	0	185
Hourly Total	*0*	*0*	*0*	*0*	*0*	*16*	*116*	*297*	*316*	*90*	*11*	*0*	*0*	*0*	*0*	*846*
16:15	0	0	0	0	0	0	17	50	83	37	3	0	0	0	0	190
16:30	0	0	0	0	0	1	15	48	95	29	1	0	0	0	0	189
16:45	0	0	0	0	0	0	2	59	89	52	1	1	0	0	0	204
17:00	0	0	0	0	0	0	14	49	101	35	3	0	0	0	0	202
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*48*	*206*	*368*	*153*	*8*	*1*	*0*	*0*	*0*	*785*
17:15	0	0	0	0	0	0	1	62	77	34	7	0	0	0	0	181
17:30	0	0	0	0	0	0	6	59	92	44	2	0	0	0	0	203
17:45	0	0	0	0	0	0	4	87	92	32	4	0	0	0	0	219
18:00	0	0	0	0	0	2	37	81	81	19	3	0	0	0	0	223
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*48*	*289*	*342*	*129*	*16*	*0*	*0*	*0*	*0*	*826*
18:15	0	0	0	0	0	0	6	32	90	38	6	2	1	0	0	175
18:30	0	0	0	0	0	0	3	28	80	39	2	0	0	0	0	152
18:45	0	0	0	1	3	1	4	27	70	36	10	0	0	0	0	152
19:00	0	0	0	0	0	0	7	38	68	17	1	1	0	0	0	132
Hourly Total	*0*	*0*	*0*	*1*	*3*	*1*	*20*	*125*	*308*	*130*	*19*	*3*	*1*	*0*	*0*	*611*
19:15	0	0	0	0	0	0	2	18	65	21	6	0	0	0	0	112
19:30	0	0	0	0	0	0	4	31	54	25	8	0	0	0	0	122
19:45	0	0	0	0	0	0	2	14	48	20	7	1	1	0	0	93
20:00	0	0	0	0	0	0	0	23	38	13	1	0	0	0	0	75
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*86*	*205*	*79*	*22*	*1*	*1*	*0*	*0*	*402*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	0	1	10	28	44	20	9	0	0	0	0	112
20:30	0	0	0	0	0	5	10	19	35	13	0	0	0	0	0	82
20:45	0	0	0	0	0	0	5	20	41	10	4	1	0	0	0	81
21:00	0	0	0	0	0	0	4	12	28	17	5	0	0	0	0	66
Hourly Total	*0*	*0*	*0*	*0*	*0*	*6*	*29*	*79*	*148*	*60*	*18*	*1*	*0*	*0*	*0*	*341*
21:15	0	0	0	0	0	0	1	24	46	19	2	0	0	0	0	92
21:30	0	0	0	0	0	0	2	13	29	17	2	0	0	0	0	63
21:45	0	0	0	0	0	0	2	19	26	10	1	0	0	0	0	58
22:00	0	0	0	0	0	0	1	11	12	15	1	1	0	0	0	41
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*67*	*113*	*61*	*6*	*1*	*0*	*0*	*0*	*254*
22:15	0	0	0	0	0	0	0	11	18	8	3	0	0	0	0	40
22:30	0	0	0	0	0	0	1	3	13	8	1	0	0	0	0	26
22:45	0	0	0	0	0	0	0	7	22	6	2	0	0	0	0	37
23:00	0	0	0	0	0	0	2	5	14	5	0	0	0	0	0	26
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*26*	*67*	*27*	*6*	*0*	*0*	*0*	*0*	*129*
23:15	0	0	0	0	0	0	1	5	11	4	2	1	0	0	0	24
23:30	0	0	0	0	0	0	0	3	7	8	1	0	0	0	0	19
23:45	0	0	0	0	0	0	0	2	2	5	1	1	0	0	0	11
00:00	0	0	0	0	0	0	0	2	7	9	3	0	0	0	0	21
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*12*	*27*	*26*	*7*	*2*	*0*	*0*	*0*	*75*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	0	0	1	8	58	559	2660	4093	1565	252	31	5	0	1	9233
Percentages	0.00	0.00	0.00	0.01	0.09	0.63	6.05	28.81	44.33	16.95	2.73	0.34	0.05	0.00	0.01	

Speed Summary

Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
9233	42.02	37.14	42.30	47.20	8607	5947	1854	289	37	6	1	1	35- 45
				Percentages	93.22	64.41	20.08	3.13	0.40	0.06	0.01	0.01	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:30-08:30	0	0	0	0	0	1	59	323	319	53	11	3	0	0	0	769
Percentages	0.00	0.00	0.00	0.00	0.00	0.13	7.67	42.00	41.48	6.89	1.43	0.39	0.00	0.00	0.00	*8.33*
15:15-16:15	0	0	0	0	0	14	116	279	332	108	13	0	0	0	0	862
Percentages	0.00	0.00	0.00	0.00	0.00	1.62	13.46	32.37	38.52	12.53	1.51	0.00	0.00	0.00	0.00	*9.34*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	0	1	0	5	0	0	0	0	0	6
00:30	0	0	0	0	0	0	0	2	5	1	2	0	0	0	0	10
00:45	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	1	5	2	0	0	0	0	0	8
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*5*	*11*	*8*	*2*	*0*	*0*	*0*	*0*	*27*
01:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
01:30	0	0	0	0	0	0	1	0	2	4	2	0	1	0	0	10
01:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	3
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*1*	*4*	*6*	*2*	*0*	*1*	*0*	*0*	*16*
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*0*	*0*	*0*	*0*	*0*	*4*
03:15	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	3
03:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
03:45	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5
04:00	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*3*	*6*	*1*	*3*	*0*	*0*	*0*	*15*
04:15	0	0	0	0	0	0	0	0	3	2	1	0	0	0	0	6
04:30	0	0	0	0	0	0	0	1	3	4	2	0	0	0	0	10
04:45	0	0	0	0	0	0	0	0	5	4	1	0	0	0	0	10
05:00	0	0	0	0	0	0	0	5	3	3	1	0	0	0	0	12
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*14*	*13*	*5*	*0*	*0*	*0*	*0*	*38*
05:15	0	0	0	0	0	0	0	2	4	6	3	0	0	0	0	15
05:30	0	0	0	0	0	0	0	2	6	6	2	1	0	0	0	17
05:45	0	0	0	0	0	0	0	3	17	13	0	0	0	0	0	33
06:00	0	0	0	0	0	0	0	0	19	9	5	1	1	0	0	35
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*7*	*46*	*34*	*10*	*2*	*1*	*0*	*0*	*100*
06:15	0	0	0	0	0	0	1	3	9	17	2	1	0	0	0	33
06:30	0	0	0	0	0	0	3	12	36	26	5	1	0	0	0	83
06:45	0	0	0	0	0	0	2	11	34	27	10	3	0	0	0	87
07:00	0	0	0	0	0	0	0	8	55	40	3	1	1	0	0	108
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*34*	*134*	*110*	*20*	*6*	*1*	*0*	*0*	*311*
07:15	0	0	0	0	0	0	0	13	55	37	7	2	1	0	0	115
07:30	0	0	0	0	0	1	13	59	74	25	1	1	0	0	0	174
07:45	0	0	0	0	0	23	52	85	61	9	7	0	0	0	0	237
08:00	0	19	24	35	70	57	9	1	0	0	0	0	0	0	0	215
Hourly Total	*0*	*19*	*24*	*35*	*70*	*81*	*74*	*158*	*190*	*71*	*15*	*3*	*1*	*0*	*0*	*741*
08:15	0	0	1	1	7	12	8	38	77	28	7	0	0	0	0	179
08:30	0	0	0	0	0	0	9	47	93	29	6	0	0	0	0	184
08:45	0	0	0	0	0	0	14	55	94	21	1	1	0	0	0	186
09:00	0	0	0	0	0	0	18	59	82	25	0	0	0	0	0	184
Hourly Total	*0*	*0*	*1*	*1*	*7*	*12*	*49*	*199*	*346*	*103*	*14*	*1*	*0*	*0*	*0*	*733*
09:15	0	0	0	0	0	0	3	52	70	31	6	1	0	0	0	163
09:30	0	0	0	0	0	0	4	36	45	27	5	0	0	0	0	117
09:45	0	0	0	0	0	0	0	18	68	33	8	0	0	0	0	127
10:00	0	0	0	0	0	0	0	23	42	36	5	1	0	0	0	107
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*7*	*129*	*225*	*127*	*24*	*2*	*0*	*0*	*0*	*514*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	0	0	1	0	0	22	49	33	4	0	0	0	0	109
10:30	0	0	0	0	0	0	1	27	27	10	0	0	0	0	0	65
10:45	0	0	1	0	0	0	0	23	55	25	3	0	0	0	0	107
11:00	0	0	0	0	0	0	3	52	42	15	2	2	0	0	0	116
Hourly Total	*0*	*0*	*1*	*0*	*1*	*0*	*4*	*124*	*173*	*83*	*9*	*2*	*0*	*0*	*0*	*397*
11:15	0	0	0	0	0	0	0	15	53	22	3	0	0	0	0	93
11:30	0	0	0	0	0	0	3	20	52	29	3	0	0	0	0	107
11:45	0	0	0	0	0	0	1	32	48	20	7	1	0	0	0	109
12:00	0	0	0	0	0	0	2	36	58	27	3	1	0	0	0	127
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*103*	*211*	*98*	*16*	*2*	*0*	*0*	*0*	*436*
12:15	0	0	0	0	0	0	2	20	48	37	3	4	0	0	0	114
12:30	0	0	0	0	0	0	4	19	74	37	12	1	0	0	0	147
12:45	0	0	0	0	0	0	1	23	65	37	3	0	0	0	0	129
13:00	0	0	0	0	0	0	3	28	35	34	12	0	0	0	0	112
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*10*	*90*	*222*	*145*	*30*	*5*	*0*	*0*	*0*	*502*
13:15	0	0	0	0	0	0	4	20	56	26	6	0	0	0	0	112
13:30	0	0	0	0	0	7	7	33	40	28	5	1	0	0	0	121
13:45	0	0	0	0	0	0	0	16	78	32	9	1	0	0	0	136
14:00	0	0	0	0	0	0	2	38	62	24	2	0	0	0	0	128
Hourly Total	*0*	*0*	*0*	*0*	*0*	*7*	*13*	*107*	*236*	*110*	*22*	*2*	*0*	*0*	*0*	*497*
14:15	0	0	0	0	0	1	14	41	70	17	4	0	0	0	0	147
14:30	0	0	0	0	0	0	7	32	57	36	9	0	1	0	0	142
14:45	0	0	0	0	0	0	4	30	84	35	10	1	0	0	0	164
15:00	0	0	0	0	0	0	9	47	95	21	4	0	0	0	0	176
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*34*	*150*	*306*	*109*	*27*	*1*	*1*	*0*	*0*	*629*
15:15	0	0	0	0	0	0	11	56	84	25	5	0	0	0	0	181
15:30	0	0	0	0	0	0	4	66	116	15	1	0	0	0	0	202
15:45	0	0	0	0	0	0	15	62	101	23	4	0	0	0	0	205
16:00	0	0	0	0	0	0	3	50	96	28	4	2	0	0	0	183
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*33*	*234*	*397*	*91*	*14*	*2*	*0*	*0*	*0*	*771*
16:15	0	0	0	0	0	0	3	61	90	39	2	0	0	0	0	195
16:30	0	0	0	0	0	0	2	66	105	31	2	1	0	0	0	207
16:45	0	0	0	0	0	0	1	46	85	52	6	0	0	0	0	190
17:00	0	0	0	0	0	0	3	46	105	45	0	0	1	1	0	201
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*9*	*219*	*385*	*167*	*10*	*1*	*1*	*1*	*0*	*793*
17:15	0	0	0	0	0	0	3	37	129	33	8	1	0	0	0	211
17:30	0	0	0	0	0	0	1	33	116	42	6	1	0	0	0	199
17:45	0	1	1	3	7	12	19	69	85	31	3	0	0	0	0	231
18:00	0	0	0	0	0	1	13	45	93	41	7	0	0	0	0	200
Hourly Total	*0*	*1*	*1*	*3*	*7*	*13*	*36*	*184*	*423*	*147*	*24*	*2*	*0*	*0*	*0*	*841*
18:15	0	0	0	0	0	0	5	56	102	25	8	3	0	0	0	199
18:30	0	0	0	0	0	0	6	32	100	37	5	0	0	0	0	180
18:45	0	0	0	0	0	0	6	20	71	34	8	0	0	0	0	139
19:00	0	0	0	0	0	0	0	30	62	40	6	0	0	0	0	138
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*17*	*138*	*335*	*136*	*27*	*3*	*0*	*0*	*0*	*656*
19:15	0	0	0	0	0	0	1	13	67	52	8	0	1	0	0	142
19:30	0	0	0	0	0	0	0	15	59	24	8	3	0	1	0	110
19:45	0	0	0	0	0	0	2	28	47	30	7	0	1	0	0	115
20:00	0	0	0	0	0	0	1	25	60	31	2	0	0	0	0	119
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*81*	*233*	*137*	*25*	*3*	*2*	*1*	*0*	*486*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	0	0	1	18	53	30	6	1	0	0	0	109
20:30	0	0	0	0	0	0	6	45	45	16	7	0	0	0	0	119
20:45	0	0	0	0	0	0	4	51	43	15	3	0	0	0	0	116
21:00	0	0	0	0	0	0	15	46	51	19	4	0	0	0	0	135
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*26*	*160*	*192*	*80*	*20*	*1*	*0*	*0*	*0*	*479*
21:15	0	0	0	0	0	0	3	10	40	20	2	0	0	0	0	75
21:30	0	0	0	0	0	0	4	21	32	17	1	0	0	0	0	75
21:45	0	0	0	0	0	0	0	11	38	8	3	0	0	0	0	60
22:00	0	0	0	0	0	0	6	15	19	10	0	1	2	0	0	53
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*13*	*57*	*129*	*55*	*6*	*1*	*2*	*0*	*0*	*263*
22:15	0	0	0	0	0	1	2	2	26	10	3	1	0	0	0	45
22:30	0	0	0	0	0	0	0	4	7	18	1	0	0	0	0	30
22:45	0	0	0	0	0	0	1	3	6	14	1	0	0	0	0	25
23:00	0	0	0	0	0	0	0	1	4	10	1	1	1	0	0	18
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*3*	*10*	*43*	*52*	*6*	*2*	*1*	*0*	*0*	*118*
23:15	0	0	0	0	0	0	0	6	3	4	0	0	0	0	0	13
23:30	0	0	0	0	0	0	0	5	3	5	0	0	0	0	0	13
23:45	0	0	0	0	0	0	1	4	4	1	1	0	0	0	0	11
00:00	0	0	0	0	0	0	0	1	3	2	0	1	0	0	0	7
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*16*	*13*	*12*	*1*	*1*	*0*	*0*	*0*	*44*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	20	27	39	85	115	348	2214	4273	1902	330	45	11	2	0	9411
Percentages	0.00	0.21	0.29	0.41	0.90	1.22	3.70	23.53	45.40	20.21	3.51	0.48	0.12	0.02	0.00	

Speed Summary

	Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
	9411	42.29	37.40	42.74	47.85	8777	6563	2290	388	58	13	2	0	35- 45
Percentages						93.26	69.74	24.33	4.12	0.62	0.14	0.02	0.00	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:30-08:30	0	19	25	36	77	92	78	171	231	66	20	0	0	0	0	815
Percentages	0.00	2.33	3.07	4.42	9.45	11.29	9.57	20.98	28.34	8.10	2.45	0.00	0.00	0.00	0.00	*8.66*
15:15-16:15	0	0	0	0	0	0	25	239	403	105	11	2	0	0	0	785
Percentages	0.00	0.00	0.00	0.00	0.00	0.00	3.18	30.45	51.34	13.38	1.40	0.25	0.00	0.00	0.00	*8.34*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	1	1	3	7	1	0	0	0	0	13
00:30	0	0	0	0	0	0	0	4	10	7	2	2	0	0	0	25
00:45	0	0	0	0	0	0	1	5	7	3	0	0	0	0	0	16
01:00	0	0	0	0	0	0	0	2	8	4	1	0	0	0	0	15
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*12*	*28*	*21*	*4*	*2*	*0*	*0*	*0*	*69*
01:15	0	0	0	0	0	0	0	2	3	3	0	0	0	0	0	8
01:30	0	0	0	0	0	0	1	1	3	6	2	0	1	0	0	14
01:45	0	0	0	0	0	0	0	1	1	0	1	2	0	0	0	5
02:00	0	0	0	0	0	0	1	1	4	1	1	0	0	0	0	8
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*5*	*11*	*10*	*4*	*2*	*1*	*0*	*0*	*35*
02:15	0	0	0	0	0	0	2	1	0	1	1	0	0	0	0	5
02:30	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3
02:45	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	4
03:00	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	4
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*4*	*4*	*4*	*0*	*0*	*0*	*0*	*16*
03:15	0	0	0	0	0	0	0	2	1	0	1	2	0	0	0	6
03:30	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	3
03:45	0	0	0	0	0	0	0	0	4	2	0	0	1	0	0	7
04:00	0	0	0	0	0	0	0	0	2	3	1	1	0	0	0	7
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*7*	*6*	*2*	*3*	*1*	*0*	*0*	*23*
04:15	0	0	0	0	0	0	0	0	4	3	1	1	0	0	0	9
04:30	0	0	0	0	0	0	0	2	4	7	2	0	0	0	0	15
04:45	0	0	0	0	0	0	0	3	8	8	2	1	0	0	0	22
05:00	0	0	0	0	0	0	1	7	5	11	2	0	0	0	0	26
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*12*	*21*	*29*	*7*	*2*	*0*	*0*	*0*	*72*
05:15	0	0	0	0	0	0	1	5	9	11	3	0	0	0	0	29
05:30	0	0	0	0	0	0	0	3	15	15	3	1	0	0	0	37
05:45	0	0	0	0	0	0	0	6	23	25	0	1	0	0	0	55
06:00	0	0	0	0	0	0	0	7	25	22	9	5	2	0	0	70
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*21*	*72*	*73*	*15*	*7*	*2*	*0*	*0*	*191*
06:15	0	0	0	0	0	0	1	9	23	24	3	1	0	0	0	61
06:30	0	0	0	0	0	0	3	20	55	37	7	1	0	0	0	123
06:45	0	0	0	0	0	0	2	28	74	43	18	3	0	0	0	168
07:00	0	0	0	0	0	0	14	52	125	68	4	2	1	0	0	266
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*20*	*109*	*277*	*172*	*32*	*7*	*1*	*0*	*0*	*618*
07:15	0	0	0	0	0	0	3	53	136	65	8	2	1	0	0	268
07:30	0	0	0	0	0	1	17	95	144	47	6	1	0	0	0	311
07:45	0	0	0	0	0	23	65	146	160	24	15	0	0	0	0	433
08:00	0	19	24	35	70	57	17	102	95	14	2	2	0	0	0	437
Hourly Total	*0*	*19*	*24*	*35*	*70*	*81*	*102*	*396*	*535*	*150*	*31*	*5*	*1*	*0*	*0*	*1449*
08:15	0	0	1	1	7	12	30	112	150	43	8	0	0	0	0	364
08:30	0	0	0	0	0	1	25	134	145	38	6	1	0	0	0	350
08:45	0	0	0	0	0	0	23	136	150	36	1	1	0	0	0	347
09:00	0	0	0	0	0	0	28	94	155	48	4	0	0	0	0	329
Hourly Total	*0*	*0*	*1*	*1*	*7*	*13*	*106*	*476*	*600*	*165*	*19*	*2*	*0*	*0*	*0*	*1390*
09:15	0	0	0	0	0	2	28	120	140	51	8	1	0	0	0	350
09:30	0	0	0	0	0	1	10	75	99	51	10	0	0	0	0	246
09:45	0	0	0	0	0	3	17	70	136	47	9	0	0	0	0	282
10:00	0	0	0	0	0	0	2	42	103	64	8	1	0	0	0	220
Hourly Total	*0*	*0*	*0*	*0*	*0*	*6*	*57*	*307*	*478*	*213*	*35*	*2*	*0*	*0*	*0*	*1098*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	0	0	1	0	2	52	108	61	9	0	0	0	0	233
10:30	0	0	0	0	5	7	3	37	39	12	0	0	0	0	0	103
10:45	0	0	1	0	0	0	5	68	117	40	5	0	0	0	0	236
11:00	0	0	0	0	0	0	9	82	97	41	4	3	0	0	0	236
Hourly Total	*0*	*0*	*1*	*0*	*6*	*7*	*19*	*239*	*361*	*154*	*18*	*3*	*0*	*0*	*0*	*808*
11:15	0	0	0	0	0	0	8	56	98	36	3	0	0	0	0	201
11:30	0	0	0	0	0	2	12	52	107	45	8	0	0	0	0	226
11:45	0	0	0	0	0	0	4	56	110	44	10	1	0	0	0	225
12:00	0	0	0	0	0	1	11	66	116	51	5	1	0	0	0	251
Hourly Total	*0*	*0*	*0*	*0*	*0*	*3*	*35*	*230*	*431*	*176*	*26*	*2*	*0*	*0*	*0*	*903*
12:15	0	0	0	0	0	0	4	45	128	59	7	4	0	0	0	247
12:30	0	0	0	0	0	2	12	49	120	66	18	3	0	0	0	270
12:45	0	0	0	0	0	0	3	70	122	67	5	0	0	0	0	267
13:00	0	0	0	0	0	0	9	51	85	54	19	1	0	0	1	220
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*28*	*215*	*455*	*246*	*49*	*8*	*0*	*0*	*1*	*1004*
13:15	0	0	0	0	0	2	6	54	99	57	11	2	0	0	0	231
13:30	0	0	0	0	0	10	18	67	101	44	9	1	0	0	0	250
13:45	0	0	0	0	0	1	6	44	142	57	16	1	1	0	0	268
14:00	0	0	0	0	0	3	8	72	127	49	6	1	0	0	0	266
Hourly Total	*0*	*0*	*0*	*0*	*0*	*16*	*38*	*237*	*469*	*207*	*42*	*5*	*1*	*0*	*0*	*1015*
14:15	0	0	0	0	0	3	17	80	121	40	10	0	0	0	0	271
14:30	0	0	0	0	0	0	15	68	131	70	15	0	1	0	0	300
14:45	0	0	0	0	0	0	12	79	153	59	13	1	0	0	0	317
15:00	0	0	0	0	0	2	29	96	168	40	10	0	0	0	0	345
Hourly Total	*0*	*0*	*0*	*0*	*0*	*5*	*73*	*323*	*573*	*209*	*48*	*1*	*1*	*0*	*0*	*1233*
15:15	0	0	0	0	0	2	28	124	151	44	6	0	0	0	0	355
15:30	0	0	0	0	0	3	18	158	199	48	6	0	0	0	0	432
15:45	0	0	0	0	0	9	76	140	195	36	6	0	0	0	0	462
16:00	0	0	0	0	0	2	27	109	168	53	7	2	0	0	0	368
Hourly Total	*0*	*0*	*0*	*0*	*0*	*16*	*149*	*531*	*713*	*181*	*25*	*2*	*0*	*0*	*0*	*1617*
16:15	0	0	0	0	0	0	20	111	173	76	5	0	0	0	0	385
16:30	0	0	0	0	0	1	17	114	200	60	3	1	0	0	0	396
16:45	0	0	0	0	0	0	3	105	174	104	7	1	0	0	0	394
17:00	0	0	0	0	0	0	17	95	206	80	3	0	1	1	0	403
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*57*	*425*	*753*	*320*	*18*	*2*	*1*	*1*	*0*	*1578*
17:15	0	0	0	0	0	0	4	99	206	67	15	1	0	0	0	392
17:30	0	0	0	0	0	0	7	92	208	86	8	1	0	0	0	402
17:45	0	1	1	3	7	12	23	156	177	63	7	0	0	0	0	450
18:00	0	0	0	0	0	3	50	126	174	60	10	0	0	0	0	423
Hourly Total	*0*	*1*	*1*	*3*	*7*	*15*	*84*	*473*	*765*	*276*	*40*	*2*	*0*	*0*	*0*	*1667*
18:15	0	0	0	0	0	0	11	88	192	63	14	5	1	0	0	374
18:30	0	0	0	0	0	0	9	60	180	76	7	0	0	0	0	332
18:45	0	0	0	1	3	1	10	47	141	70	18	0	0	0	0	291
19:00	0	0	0	0	0	0	7	68	130	57	7	1	0	0	0	270
Hourly Total	*0*	*0*	*0*	*1*	*3*	*1*	*37*	*263*	*643*	*266*	*46*	*6*	*1*	*0*	*0*	*1267*
19:15	0	0	0	0	0	0	3	31	132	73	14	0	1	0	0	254
19:30	0	0	0	0	0	0	4	46	113	49	16	3	0	1	0	232
19:45	0	0	0	0	0	0	4	42	95	50	14	1	2	0	0	208
20:00	0	0	0	0	0	0	1	48	98	44	3	0	0	0	0	194
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*167*	*438*	*216*	*47*	*4*	*3*	*1*	*0*	*888*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	0	1	11	46	97	50	15	1	0	0	0	221
20:30	0	0	0	0	0	5	16	64	80	29	7	0	0	0	0	201
20:45	0	0	0	0	0	0	9	71	84	25	7	1	0	0	0	197
21:00	0	0	0	0	0	0	19	58	79	36	9	0	0	0	0	201
Hourly Total	*0*	*0*	*0*	*0*	*0*	*6*	*55*	*239*	*340*	*140*	*38*	*2*	*0*	*0*	*0*	*820*
21:15	0	0	0	0	0	0	4	34	86	39	4	0	0	0	0	167
21:30	0	0	0	0	0	0	6	34	61	34	3	0	0	0	0	138
21:45	0	0	0	0	0	0	2	30	64	18	4	0	0	0	0	118
22:00	0	0	0	0	0	0	7	26	31	25	1	2	2	0	0	94
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*19*	*124*	*242*	*116*	*12*	*2*	*2*	*0*	*0*	*517*
22:15	0	0	0	0	0	1	2	13	44	18	6	1	0	0	0	85
22:30	0	0	0	0	0	0	1	7	20	26	2	0	0	0	0	56
22:45	0	0	0	0	0	0	1	10	28	20	3	0	0	0	0	62
23:00	0	0	0	0	0	0	2	6	18	15	1	1	1	0	0	44
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*6*	*36*	*110*	*79*	*12*	*2*	*1*	*0*	*0*	*247*
23:15	0	0	0	0	0	0	1	11	14	8	2	1	0	0	0	37
23:30	0	0	0	0	0	0	0	8	10	13	1	0	0	0	0	32
23:45	0	0	0	0	0	0	1	6	6	6	2	1	0	0	0	22
00:00	0	0	0	0	0	0	0	3	10	11	3	1	0	0	0	28
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*28*	*40*	*38*	*8*	*3*	*0*	*0*	*0*	*119*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	20	27	40	93	173	907	4874	8366	3467	582	76	16	2	1	18644
Percentages	0.00	0.11	0.14	0.21	0.50	0.93	4.86	26.14	44.87	18.60	3.12	0.41	0.09	0.01	0.01	

Speed Summary

Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
18644	42.16	37.26	42.52	47.55	17384	12510	4144	677	95	19	3	1	35- 45
				Percentages	93.24	67.10	22.23	3.63	0.51	0.10	0.02	0.01	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:30-08:30	0	19	25	36	77	93	137	494	550	119	31	3	0	0	0	1584
Percentages	0.00	1.20	1.58	2.27	4.86	5.87	8.65	31.19	34.72	7.51	1.96	0.19	0.00	0.00	0.00	*8.50*
15:15-16:15	0	0	0	0	0	14	141	518	735	213	24	2	0	0	0	1647
Percentages	0.00	0.00	0.00	0.00	0.00	0.85	8.56	31.45	44.63	12.93	1.46	0.12	0.00	0.00	0.00	*8.83*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC AM
2: Avalon Rd & Golden Bell St/Longbeam Way AM Peak Hour

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Future Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	-	-	-	235	-	-	345	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	2	7	36	3	37	2	946	19	11	852	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1826	1844	852	1835	1834	956	852	0	0	965	0	0
Stage 1	874	874	-	960	960	-	-	-	-	-	-	-
Stage 2	952	970	-	875	874	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	59	75	360	58	76	313	787	-	-	713	-	-
Stage 1	344	367	-	308	335	-	-	-	-	-	-	-
Stage 2	312	332	-	344	367	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	74	360	56	75	313	787	-	-	713	-	-
Mov Cap-2 Maneuver	157	188	-	170	192	-	-	-	-	-	-	-
Stage 1	339	361	-	307	334	-	-	-	-	-	-	-
Stage 2	271	331	-	330	361	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	34.71	29.83	0.02	0.13
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	787	-	-	157	293	220	713	-	-
HCM Lane V/C Ratio	0.003	-	-	0.308	0.031	0.347	0.016	-	-
HCM Ctrl Dly (s/v)	9.6	-	-	37.9	17.7	29.8	10.1	-	-
HCM Lane LOS	A	-	-	E	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.1	1.5	0	-	-

AM AM Peak Hour 9:29 am 03/13/2026 Jan 2026 Synchro 12 Report
JTR Page 4

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC PM
2: Avalon Rd & Golden Bell St/Longbeam Way PM Peak Hour

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Future Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	-	-	-	235	-	-	345	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	9	18	1	51	10	978	23	24	895	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1941	1963	895	1952	1952	990	895	0	0	1001	0	0
Stage 1	942	942	-	1009	1009	-	-	-	-	-	-	-
Stage 2	998	1021	-	942	942	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	48	62	334	48	64	299	758	-	-	692	-	-
Stage 1	310	336	-	289	318	-	-	-	-	-	-	-
Stage 2	289	309	-	315	341	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	59	334	45	61	299	758	-	-	692	-	-
Mov Cap-2 Maneuver	130	164	-	151	172	-	-	-	-	-	-	-
Stage 1	300	325	-	286	314	-	-	-	-	-	-	-
Stage 2	235	305	-	297	330	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	34.61	26.64	0.09	0.27
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	758	-	-	130	334	236	692	-	-
HCM Lane V/C Ratio	0.013	-	-	0.218	0.026	0.299	0.035	-	-
HCM Ctrl Dly (s/v)	9.8	-	-	40.3	16.1	26.6	10.4	-	-
HCM Lane LOS	A	-	-	E	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	1.2	0.1	-	-

PM PM Peak Hour 9:59 am 03/03/2026 Jan 2026 Synchro 12 Report
JTR Page 4

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

Intersection Control Evaluation Form 750-010-30

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms are to be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	WG 3 Intersections		FDOT Project #		
Submitted By	Joseph Roviaro	Agency/Company	LTEC	Date	3/13/2026
Email	jtr@ltec-fl.com	FDOT District	District 5	County	Orange
Project Locality (*City/Town/Village*)	Winter Garden				
Intersection Type	At-Grade Intersection	FDOT Context Classification	C3R - Suburban Residential		
		Project Type	Corridor Improvement Project		
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	*Existing Conditions Analysis AM Cap X and PM Cap X + PM Spice				
Project Setting Description (*Describe the area surrounding the intersection*)	Residential				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	During the data collection effort, the Pedestrian and Bicycle activity was observed to be minimal. However, due to the number of residential units in the surrounding area and the widening of Avalon Road with bike lanes and installation of a pedestrian path, the number of pedestrians and bicycles is expected to increase.				

Major Street Information

Roadway ID		Route Name(s)	Avalon Road			Milepoint		
Existing Control Type	Two-way Stop-Control		Existing AADT	20,467	Design Year AADT			
Design Vehicle	Intermediate Semitrailer (WB-40)		Control Vehicle	Intermediate Semitrailer (WB-50)				
Primary Functional Classification	Urban Major Collector				Design Speed (mph)	50		
Secondary Functional Classification (if app.)	Urban Minor Arterial				Target Speed (mph) [if app.]	45		
Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	2	Left	9
	Multi-Use Path?	No	Left-Through-Right		Through	842	Through	900
	Scheduled Bus Service?	No	Through-Right	1	Right	17	Right	21
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		1.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	1	Left	10	Left	22
	Multi-Use Path?	No	Left-Through-Right		Through	785	Through	823
	Scheduled Bus Service?	No	Through-Right		Right	0	Right	0
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		1.0%	

Minor Street Information

Roadway ID		Route Name(s)	Golden Bell St (EB)/Longbeam Way (WB)			Milepoint (if app.)		
Existing Control Type	Two-way Stop-Control		Existing AADT	1,400	Design Year AADT			
Design Vehicle	School Bus (S-BUS-36)		Control Vehicle	School Bus (S-BUS-36)				
Primary Functional Classification	Urban Local				Design Speed (mph)	30		
Secondary Functional Classification (if app.)	Urban Local				Target Speed (mph) [if app.]	25		
Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	43	Left	32
	Multi-Use Path?	No	Left-Through-Right		Through	2	Through	3
	Scheduled Bus Service?	No	Through-Right	1	Right	6	Right	33
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		1.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn					
	Crosswalk on Approach?	Yes	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	26	Left	17
	Multi-Use Path?	No	Left-Through-Right	1	Through	0	Through	1
	Scheduled Bus Service?	No	Through-Right		Right	8	Right	47
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		1.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)

Append the most recent five-years of crash data for the intersection from the Signal Four (S4) Analytics. If the crash data evidences any issues relating to safety performance, discuss briefly here:

A review of the most current 5-years of crash data revealed the following: 7 rear ends accidents with 1 injury and 2 angle accidents with 1 with a bike and an injury.

Control Strategy Evaluation

Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.

Control Strategy	CAP-X Outputs: V/C Ratio Weekday AM Peak	CAP-X Outputs: V/C Ratio Weekday PM Peak	CAP-X Outputs: Ped Accom. Score	CAP-X Outputs: Bike Accom. Score	SPICE Outputs: Crash Prediction Rank	SPICE Outputs: SSI Rank	Strategy to be Advanced?	Justification
Two-Way Stop-Control	0.69	0.60	3.55	3.99	2	3	No	Crash Prediction Rank and Safe System for Intersection (SSI) Rank outputs do not support an the Two-Way Stop Control for the intersection.
All-Way Stop-Control	1.20	1.29	4.11	4.66	1	1	Yes	Crash Prediction Rank and Safe System for Intersection (SSI) Rank outputs support an All Way Stop Control for the intersection.
Signalized Control	0.55	0.58	4.49	4.66	3	2	No	Minor street traffic volumes and current crash data do not meet the minimum warrants for a traffic signal.
Recommendation	A single control strategy is recommended							

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th AWSC
2: Avalon Rd & Golden Bell St/Longbeam Way

AM E_W Lt
AM Peak Hour

Intersection	
Intersection Delay, s/veh	310.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Future Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	2	7	36	3	37	2	946	19	11	852	0
Number of Lanes	1	1	0	0	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	2
HCM Control Delay, s/veh	15.1	15.4	376.2	283.4
HCM LOS	C	C	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	47%	100%	0%	0%
Vol Thru, %	0%	98%	0%	25%	4%	0%	100%	100%
Vol Right, %	0%	2%	0%	75%	49%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	859	43	8	68	10	758	0
LT Vol	2	0	43	0	32	10	0	0
Through Vol	0	842	0	2	3	0	758	0
RT Vol	0	17	0	6	33	0	0	0
Lane Flow Rate	2	965	48	9	76	11	852	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.004	1.778	0.12	0.02	0.176	0.022	1.569	0
Departure Headway (Hd)	8.151	7.626	11.244	10.149	10.453	8.47	7.959	7.959
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	442	483	321	355	345	425	468	0
Service Time	5.851	5.326	8.944	7.849	8.153	6.17	5.659	5.659
HCM Lane V/C Ratio	0.005	1.998	0.15	0.025	0.22	0.026	1.821	0
HCM Control Delay, s/veh	10.9	377.1	15.5	13.1	15.4	11.4	287	10.7
HCM Lane LOS	B	F	C	B	C	B	F	F
HCM 95th-tile Q	0	52	0.4	0.1	0.6	0.1	39	0

AM E_W Lt AM Peak Hour 8:57 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 1

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th AWSC
2: Avalon Rd & Golden Bell St/Longbeam Way

PM E_W Lt
PM Peak Hour

Intersection	
Intersection Delay, s/veh	328.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Future Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	9	18	1	51	10	978	23	24	895	0
Number of Lanes	1	1	0	0	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	2
HCM Control Delay, s/veh	14.5	14.7	388.1	300.2
HCM LOS	B	B	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	26%	100%	0%	0%
Vol Thru, %	0%	98%	0%	0%	2%	0%	100%	100%
Vol Right, %	0%	2%	0%	100%	72%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	921	26	8	65	22	823	0
LT Vol	9	0	26	0	17	22	0	0
Through Vol	0	900	0	0	1	0	823	0
RT Vol	0	21	0	8	47	0	0	0
Lane Flow Rate	10	1001	28	9	71	24	895	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.019	1.812	0.071	0.019	0.156	0.047	1.618	0
Departure Headway (Hd)	8.074	7.548	11.384	10.1	10.137	8.363	7.853	7.853
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	446	491	317	357	356	431	474	0
Service Time	5.774	5.248	9.084	7.8	7.837	6.063	5.553	5.553
HCM Lane V/C Ratio	0.022	2.039	0.088	0.025	0.199	0.056	1.888	0
HCM Control Delay, s/veh	10.9	391.8	15	13	14.7	11.5	307.9	10.6
HCM Lane LOS	B	F	B	B	B	B	F	F
HCM 95th-tile Q	0.1	54.4	0.2	0.1	0.5	0.1	42	0

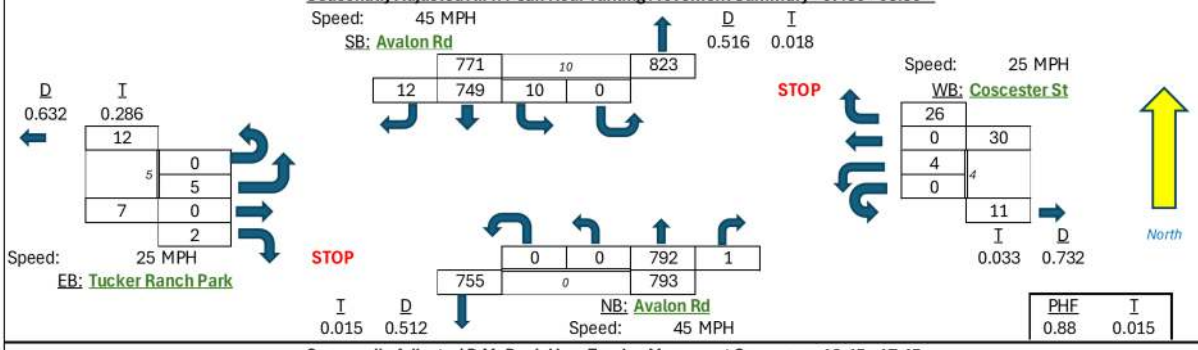
Attachment C

Summary of Vehicle Movements

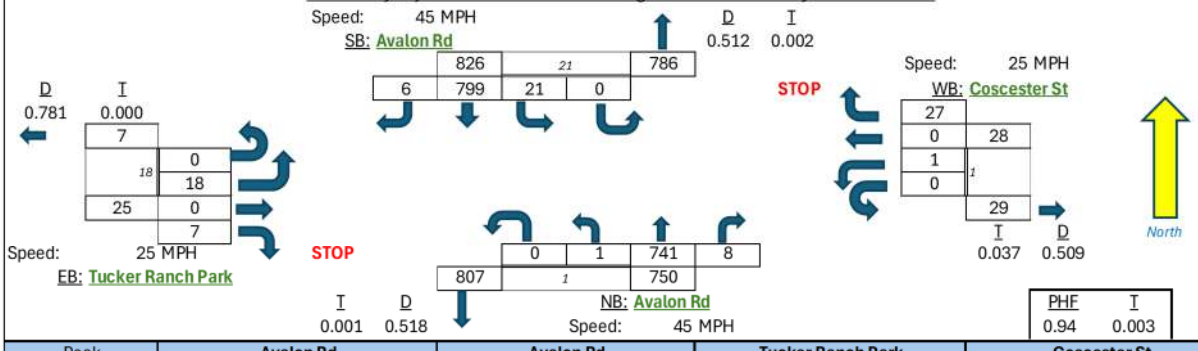
Luke Transportation Engineering Consultants

Project:	WG 3 Intersections	LTEC 25-0204	
N/S Road:	Avalon Rd	**Observer:**	LTEC
E/W Road:	Coscester St	**Weather:**	Clear
Date:	Tuesday, January 20, 2026	**Rd Condition:**	Ok
City:	Winter Garden	**Signal:**	No
County:	Orange	**Major St Movement:**	North/South
FDOT SF:	1.02 (Note: If SF<1,default to 1.0)	**PM Pk Hr Factor:**	0.95
		Latitude:	28°32'35.96"N
		Longitude:	81°36'28.70"W
		Station #:	3

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:30 - 08:30



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 16:45 - 17:45



Peak Hour Time Interval		Avalon Rd Northbound				Avalon Rd Southbound				Tucker Ranch Park Eastbound				Coscester St Westbound			
		Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes		<		1	>	<		1	>	1		1	>	1		1	>
Length																	
7:00	7:15	0	0	190	1	0	0	136	3	0	0	0	1	0	2	0	3
7:15	7:30	0	0	141	1	0	1	130	1	0	0	0	0	0	0	0	3
7:30	7:45	0	0	196	0	0	2	169	6	0	0	0	0	0	0	0	11
7:45	8:00	0	0	200	0	0	2	144	3	0	0	0	1	0	1	0	6
Hourly Sum		0	0	727	2	0	5	579	13	0	0	0	2	0	3	0	23
8:00	8:15	0	0	200	0	0	5	229	2	0	5	0	1	0	2	0	3
8:15	8:30	0	0	180	1	0	1	192	1	0	0	0	0	0	1	0	5
8:30	8:45	0	0	165	1	0	2	137	1	0	0	0	0	0	0	0	2
8:45	9:00	0	1	183	1	0	4	135	1	0	0	0	1	0	0	0	9
Hourly Sum		0	1	728	3	0	12	693	5	0	5	0	2	0	3	0	19
16:00	16:15	0	0	152	2	0	11	185	0	0	0	0	1	0	1	0	3
16:15	16:30	0	0	167	1	0	3	190	1	0	1	0	0	0	0	0	4
16:30	16:45	0	1	143	1	0	10	173	0	0	2	0	0	0	2	0	4
16:45	17:00	0	1	207	1	0	5	190	3	0	4	0	2	0	0	0	10
Hourly Sum		0	2	669	5	0	29	738	4	0	7	0	3	0	3	0	21
17:00	17:15	0	0	170	3	0	4	190	1	0	7	0	2	0	1	0	8
17:15	17:30	0	0	176	3	0	8	203	2	0	6	0	3	0	0	0	8
17:30	17:45	0	0	173	1	0	4	200	0	0	1	0	0	0	0	0	0
17:45	18:00	0	0	141	0	0	5	182	0	0	1	0	0	0	1	0	5
Hourly Sum		0	0	660	7	0	21	775	3	0	15	0	5	0	2	0	21
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
7:30	**8:30**	0	0	792	1	0	10	749	12	0	5	0	2	0	4	0	26
% Turns		0		99.9%	0.1%	0	1.3%	97.1%	1.6%	0	71.4%		28.6%	0	13.3%		86.7%
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
16:45	**17:45**	0	1	741	8	0	21	799	6	0	18	0	7	0	1	0	27
% Turns		0	0.1%	98.8%	1.1%	0	2.5%	96.7%	0.7%	0	72.0%		28.0%	0	3.6%		96.4%

Luke Transportation Engineering Consultants, 2026

HCM 7th TWSC AM
3: Avalon Rd & Tucker Ranch Park/Coscester St AM Peak Hour

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↓			↑↓			↑↓			↑↓	
Traffic Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Future Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	100	100	100
Heavy Vehicles, %	27	27	27	3	3	3	2	2	2	2	2	2
Mvmt Flow	6	0	2	5	0	30	0	900	1	10	749	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1675	1676	755	1670	1682	901	761	0	0	901	0	0
Stage 1	775	775	-	901	901	-	-	-	-	-	-	-
Stage 2	900	901	-	769	781	-	-	-	-	-	-	-
Critical Hdwy	7.37	6.77	6.47	7.13	6.53	6.23	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.37	5.77	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.37	5.77	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.743	4.243	3.543	3.527	4.027	3.327	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	66	83	371	76	94	335	851	-	-	754	-	-
Stage 1	355	374	-	332	356	-	-	-	-	-	-	-
Stage 2	301	325	-	392	404	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	59	81	371	74	92	335	851	-	-	754	-	-
Mov Cap-2 Maneuver	59	81	-	74	92	-	-	-	-	-	-	-
Stage 1	347	365	-	332	356	-	-	-	-	-	-	-
Stage 2	275	325	-	381	395	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	56.9	23.57	0	0.13
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	851	-	-	77	228	23	-	-
HCM Lane V/C Ratio	-	-	-	0.103	0.15	0.013	-	-
HCM Ctrl Dly (s/v)	0	-	-	56.9	23.6	9.8	0	-
HCM Lane LOS	A	-	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.5	0	-	-

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC PM
3: Avalon Rd & Tucker Ranch Park/Coscester St PM Peak Hour

Intersection												
Int Delay, s/veh	1.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⚜			⚜			⚜			⚜	
Traffic Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Future Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	92	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	19	0	7	1	0	29	1	788	9	22	850	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1688	1697	853	1689	1696	793	856	0	0	797	0	0
Stage 1	898	898	-	795	795	-	-	-	-	-	-	-
Stage 2	790	799	-	895	901	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.14	6.54	6.24	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.536	4.036	3.336	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	74	92	359	73	92	386	784	-	-	825	-	-
Stage 1	334	358	-	378	397	-	-	-	-	-	-	-
Stage 2	383	398	-	333	354	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	65	87	359	68	87	386	784	-	-	825	-	-
Mov Cap-2 Maneuver	65	87	-	68	87	-	-	-	-	-	-	-
Stage 1	317	340	-	377	396	-	-	-	-	-	-	-
Stage 2	354	397	-	309	336	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	66.36	17.02	0.01	0.24
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	2	-	-	84	329	46	-	-
HCM Lane V/C Ratio	0.001	-	-	0.316	0.091	0.027	-	-
HCM Ctrl Dly (s/v)	9.6	0	-	66.4	17	9.5	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.3	0.1	-	-

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

Intersection Control Evaluation Form 750-010-30

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms are to be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	WG 3 Intersections		FDOT Project #		
Submitted By	Joseph Roviaro	Agency/Company	LTEC	Date	3/13/2026
Email	jtr@ltec-fl.com	FDOT District	District 5	County	Orange
Project Locality (*City/Town/Village*)	Winter Garden				
Intersection Type	At-Grade Intersection	FDOT Context Classification	C3R - Suburban Residential		
		Project Type	Corridor Improvement Project		

Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	'Existing Conditions Analysis AM Cap X and PM Cap X + Spice
Project Setting Description (*Describe the area surrounding the intersection*)	Residential
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	During the data collection effort, the Pedestrian and Bicycle activity was observed to be minimal. However, due to the number of residential units in the surrounding area and the future widening of Avalon Road with bike lanes and installation of a pedestrian path, the number of pedestrians and bicycles is expected to increase.

Major Street Information

Roadway ID		Route Name(s)	Avalon Road			Milepoint	
Existing Control Type	Two-way Stop-Control		Existing AADT	12,310	Design Year AADT		
Design Vehicle	Intermediate Semitrailer (WB-40)		Control Vehicle	Intermediate Semitrailer (WB-50)			
Primary Functional Classification	Urban Major Collector				Design Speed (mph)	50	
Secondary Functional Classification (if app.)	Urban Minor Arterial				Target Speed (mph) [if app.]	45	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn					
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	0	Left	1
	Multi-Use Path?	No	Left-Through-Right	1	Through	792	Through	741
	Scheduled Bus Service?	No	Through-Right		Right	1	Right	8
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn					
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	10	Left	21
	Multi-Use Path?	No	Left-Through-Right	1	Through	749	Through	799
	Scheduled Bus Service?	No	Through-Right		Right	12	Right	6
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		2.0%	

Minor Street Information

Roadway ID		Route Name(s)	Tucker Ranch Ent (EB)/Coscester St (WB)			Milepoint (if app.)	
Existing Control Type	Two-way Stop-Control		Existing AADT	1,400	Design Year AADT		
Design Vehicle	School Bus (S-BUS-36)		Control Vehicle	School Bus (S-BUS-36)			
Primary Functional Classification	Urban Local				Design Speed (mph)	30	
Secondary Functional Classification (if app.)	Urban Local				Target Speed (mph) [if app.]	25	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn					
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	5	Left	18
	Multi-Use Path?	No	Left-Through-Right	1	Through	0	Through	0
	Scheduled Bus Service?	No	Through-Right		Right	2	Right	7
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		3.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn					
	Crosswalk on Approach?	Yes	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	1	Left	4
	Multi-Use Path?	No	Left-Through-Right	1	Through	0	Through	0
	Scheduled Bus Service?	No	Through-Right		Right	26	Right	27
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		4.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)

Append the most recent five-years of crash data for the intersection from the Signal Four (S4) Analytics. If the crash data evidences any issues relating to safety performance, discuss briefly here:

A review of the most current 5-years of crash data revealed the following: 10 rear ends accidents with 5 injuries, 1 angle accident with 1 injury, 1 sideswipe accident with no injury, and 1 off road accident with no injury.

Control Strategy Evaluation

Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.

Control Strategy	CAP-X Outputs: V/C Ratio Weekday AM Peak	CAP-X Outputs: V/C Ratio Weekday PM Peak	CAP-X Outputs: Ped Accom. Score	CAP-X Outputs: Bike Accom. Score	SPICE Outputs: Crash Prediction Rank	SPICE Outputs: SSI Rank	Strategy to be Advanced?	Justification
Two-Way Stop-Control	0.46	0.46	3.82	3.99	2	3	No	Crash Prediction Rank and Safe System for Intersection (SSI) Rank outputs do not support an the Two-Way Stop Control for the intersection.
All-Way Stop-Control	1.39	1.40	4.37	4.66	1	1	Yes	Crash Prediction Rank and Safe System for Intersection (SSI) Rank outputs support an All Way Stop Control for the intersection.
Signalized Control	0.48	0.48	4.62	4.66	3	2	No	Minor street traffic volumes and current crash data do not meet the minimum warrants for a traffic signal.
Recommendation	A single control strategy is recommended							

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	0	2	5	1	1	0	0	0	0	9
00:30	0	0	0	0	0	0	0	0	4	3	1	1	0	0	0	9
00:45	0	0	0	0	0	0	0	1	3	4	1	0	0	0	0	9
01:00	0	0	0	0	0	0	1	1	0	3	0	0	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*4*	*12*	*11*	*3*	*1*	*0*	*0*	*0*	*32*
01:15	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	3
01:30	0	0	0	0	0	0	1	3	0	2	0	0	0	0	0	6
01:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*3*	*2*	*5*	*0*	*1*	*0*	*0*	*0*	*13*
02:15	0	0	0	0	0	0	0	2	0	1	1	0	0	0	0	4
02:30	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3
02:45	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	4
03:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*4*	*2*	*1*	*0*	*1*	*0*	*0*	*12*
03:15	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
03:30	0	0	0	0	0	0	2	0	4	1	1	0	0	0	0	8
03:45	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*1*	*4*	*4*	*1*	*1*	*0*	*0*	*0*	*14*
04:15	0	0	0	0	0	0	1	5	2	4	1	0	0	0	0	13
04:30	0	0	0	0	0	0	2	0	2	3	0	0	0	0	0	7
04:45	0	0	0	0	0	0	0	3	2	4	2	0	0	0	0	11
05:00	0	0	0	0	0	0	1	1	5	6	0	0	0	2	0	15
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*9*	*11*	*17*	*3*	*0*	*0*	*2*	*0*	*46*
05:15	0	0	0	0	0	0	3	1	11	6	3	0	0	0	0	24
05:30	0	0	1	0	0	0	3	2	11	6	2	1	0	0	0	26
05:45	0	0	0	0	0	0	2	5	8	10	5	0	0	0	0	30
06:00	0	0	0	0	0	0	1	5	17	21	5	0	0	0	0	49
Hourly Total	*0*	*0*	*1*	*0*	*0*	*0*	*9*	*13*	*47*	*43*	*15*	*1*	*0*	*0*	*0*	*129*
06:15	0	0	0	0	0	0	2	5	17	8	4	1	0	0	0	37
06:30	0	0	0	0	0	0	3	8	24	10	2	1	0	0	0	48
06:45	0	0	0	0	0	0	4	23	43	11	4	0	0	0	0	85
07:00	0	0	0	0	0	0	8	56	59	16	3	1	0	0	0	143
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*17*	*92*	*143*	*45*	*13*	*3*	*0*	*0*	*0*	*313*
07:15	0	0	0	1	0	10	46	80	38	5	2	0	0	0	0	182
07:30	0	0	0	0	10	16	20	67	42	8	2	0	0	0	0	165
07:45	0	0	2	4	7	6	52	64	40	5	0	0	0	0	0	180
08:00	0	5	7	15	17	16	63	52	15	3	1	0	0	0	0	194
Hourly Total	*0*	*5*	*9*	*20*	*34*	*48*	*181*	*263*	*135*	*21*	*5*	*0*	*0*	*0*	*0*	*721*
08:15	0	0	0	1	1	36	75	50	13	4	0	0	0	0	0	180
08:30	0	23	40	19	17	21	39	10	2	2	0	0	0	0	0	173
08:45	0	31	52	78	25	19	4	1	3	0	0	0	0	0	0	213
09:00	0	13	53	55	52	5	3	1	0	0	0	0	0	0	0	182
Hourly Total	*0*	*67*	*145*	*153*	*95*	*81*	*121*	*62*	*18*	*6*	*0*	*0*	*0*	*0*	*0*	*748*
09:15	0	5	10	11	7	20	43	53	14	4	0	0	0	0	0	167
09:30	0	0	1	2	8	36	63	45	11	3	0	0	0	0	0	169
09:45	0	5	5	6	36	29	39	27	15	4	1	0	0	0	0	167
10:00	0	0	0	0	2	7	27	39	41	10	2	0	0	0	0	128
Hourly Total	*0*	*10*	*16*	*19*	*53*	*92*	*172*	*164*	*81*	*21*	*3*	*0*	*0*	*0*	*0*	*631*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	4	5	8	2	22	44	28	7	2	0	0	0	0	122
10:30	0	0	0	1	0	2	21	34	41	24	0	0	0	0	0	123
10:45	0	0	0	1	9	5	12	44	35	6	2	0	0	0	0	114
11:00	0	0	0	0	0	0	8	61	57	2	0	0	0	0	0	128
Hourly Total	*0*	*0*	*4*	*7*	*17*	*9*	*63*	*183*	*161*	*39*	*4*	*0*	*0*	*0*	*0*	*487*
11:15	0	0	0	0	0	3	16	45	35	9	1	0	0	0	0	109
11:30	0	0	0	0	0	1	12	40	33	15	2	0	0	0	0	103
11:45	0	0	1	0	1	8	21	43	24	14	0	0	0	0	0	112
12:00	0	0	0	0	9	14	31	37	30	7	0	0	0	0	0	128
Hourly Total	*0*	*0*	*1*	*0*	*10*	*26*	*80*	*165*	*122*	*45*	*3*	*0*	*0*	*0*	*0*	*452*
12:15	0	0	0	0	1	1	12	45	49	6	0	0	0	0	0	114
12:30	0	0	0	0	0	3	18	36	40	8	0	0	0	0	0	105
12:45	0	0	0	1	0	2	20	47	39	11	3	0	0	0	0	123
13:00	0	0	0	0	0	11	24	49	30	10	1	1	0	0	0	126
Hourly Total	*0*	*0*	*0*	*1*	*1*	*17*	*74*	*177*	*158*	*35*	*4*	*1*	*0*	*0*	*0*	*468*
13:15	0	0	0	0	0	3	24	52	42	8	1	0	0	0	0	130
13:30	0	0	0	0	1	10	11	39	32	7	1	0	0	0	0	101
13:45	0	0	0	0	0	3	20	37	37	7	1	0	0	0	0	105
14:00	0	0	0	0	0	6	30	67	42	7	0	0	0	0	0	152
Hourly Total	*0*	*0*	*0*	*0*	*1*	*22*	*85*	*195*	*153*	*29*	*3*	*0*	*0*	*0*	*0*	*488*
14:15	0	0	0	0	2	8	13	45	30	10	0	0	0	0	0	108
14:30	0	0	0	1	0	1	23	47	32	13	1	0	0	0	0	118
14:45	0	0	0	0	1	11	26	51	32	6	0	0	0	0	0	127
15:00	0	0	0	1	7	16	65	36	14	3	0	0	0	0	0	142
Hourly Total	*0*	*0*	*0*	*2*	*10*	*36*	*127*	*179*	*108*	*32*	*1*	*0*	*0*	*0*	*0*	*495*
15:15	0	0	0	0	4	39	69	44	6	5	0	0	0	0	0	167
15:30	0	10	17	15	20	31	44	28	4	0	0	0	0	0	0	169
15:45	0	30	59	68	17	1	3	2	2	0	0	0	0	0	0	182
16:00	0	17	65	64	8	2	3	3	0	0	0	1	0	0	0	163
Hourly Total	*0*	*57*	*141*	*147*	*49*	*73*	*119*	*77*	*12*	*5*	*0*	*1*	*0*	*0*	*0*	*681*
16:15	0	3	10	0	11	44	100	18	5	1	0	0	0	0	0	192
16:30	0	20	44	64	42	21	3	2	1	0	0	0	0	0	0	197
16:45	0	17	63	32	15	28	7	3	1	0	0	0	0	0	0	166
17:00	0	24	54	40	23	13	6	5	0	2	0	0	0	0	0	167
Hourly Total	*0*	*64*	*171*	*136*	*91*	*106*	*116*	*28*	*7*	*3*	*0*	*0*	*0*	*0*	*0*	*722*
17:15	0	4	16	21	12	20	31	32	18	4	0	0	0	0	0	158
17:30	0	24	48	60	8	1	4	4	3	0	0	0	0	0	0	152
17:45	0	1	14	15	17	32	34	32	16	2	0	0	0	0	0	163
18:00	0	6	35	28	17	25	27	23	7	0	0	0	0	0	0	168
Hourly Total	*0*	*35*	*113*	*124*	*54*	*78*	*96*	*91*	*44*	*6*	*0*	*0*	*0*	*0*	*0*	*641*
18:15	0	0	0	0	1	23	29	57	33	4	2	0	0	0	0	149
18:30	0	0	0	0	0	5	33	44	42	12	1	0	0	0	0	137
18:45	0	0	0	0	0	0	11	49	48	16	7	0	0	1	0	132
19:00	0	0	0	0	0	0	7	50	54	11	2	0	0	0	0	124
Hourly Total	*0*	*0*	*0*	*0*	*1*	*28*	*80*	*200*	*177*	*43*	*12*	*0*	*0*	*1*	*0*	*542*
19:15	0	0	0	0	0	0	2	27	37	22	5	0	0	0	0	93
19:30	0	0	0	0	0	0	12	28	35	22	2	0	0	0	0	99
19:45	0	0	0	0	0	1	4	29	36	14	3	0	0	0	0	87
20:00	0	0	0	0	0	0	5	18	23	16	1	0	0	0	0	63
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*23*	*102*	*131*	*74*	*11*	*0*	*0*	*0*	*0*	*342*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	0	0	4	31	19	10	0	0	0	0	0	64
20:30	0	0	0	0	0	0	12	25	22	8	0	0	0	1	0	68
20:45	0	0	0	0	0	0	9	29	22	0	1	0	0	1	0	62
21:00	0	0	0	0	0	0	2	14	10	8	5	0	0	0	0	39
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*27*	*99*	*73*	*26*	*6*	*0*	*0*	*2*	*0*	*233*
21:15	0	0	0	0	0	0	0	9	24	12	1	1	0	0	0	47
21:30	0	0	0	0	0	1	6	19	10	11	2	0	0	0	0	49
21:45	0	0	0	0	0	0	4	3	16	7	0	1	0	0	0	31
22:00	0	0	0	0	0	0	1	5	9	10	3	1	0	0	0	29
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*11*	*36*	*59*	*40*	*6*	*3*	*0*	*0*	*0*	*156*
22:15	0	0	0	0	0	0	4	10	5	16	3	0	0	0	0	38
22:30	0	0	0	0	0	0	0	4	8	10	3	1	0	0	0	26
22:45	0	0	0	0	0	2	4	3	7	0	0	0	0	0	0	16
23:00	0	0	0	0	0	0	0	4	9	7	2	0	0	0	0	22
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*8*	*21*	*29*	*33*	*8*	*1*	*0*	*0*	*0*	*102*
23:15	0	0	0	0	0	0	4	10	7	7	0	0	0	0	0	28
23:30	0	0	0	0	0	0	0	3	4	10	2	1	0	0	0	20
23:45	0	0	0	0	0	0	0	2	4	2	1	0	0	0	0	9
00:00	0	0	0	0	0	0	0	3	5	6	1	0	0	0	0	15
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*18*	*20*	*25*	*4*	*1*	*0*	*0*	*0*	*72*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	238	601	609	416	620	1423	2186	1711	610	106	14	1	5	0	8540
Percentages	0.00	2.79	7.04	7.13	4.87	7.26	16.66	25.60	20.04	7.14	1.24	0.16	0.01	0.06	0.00	

Speed Summary

Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
8540	33.64	18.90	36.66	43.73	4633	2447	736	126	20	6	5	0	35- 45
				Percentages	54.25	28.65	8.62	1.48	0.23	0.07	0.06	0.00	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:45-08:45	0	59	99	113	60	92	181	113	33	9	1	0	0	0	0	760
Percentages	0.00	7.76	13.03	14.87	7.89	12.11	23.82	14.87	4.34	1.18	0.13	0.00	0.00	0.00	0.00	*8.90*
15:30-16:30	0	70	178	196	78	68	109	25	8	1	0	1	0	0	0	734
Percentages	0.00	9.54	24.25	26.70	10.63	9.26	14.85	3.41	1.09	0.14	0.00	0.14	0.00	0.00	0.00	*8.59*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	0	2	6	2	2	0	0	0	0	12
00:30	0	0	0	0	0	0	1	1	2	5	1	1	0	0	0	11
00:45	0	0	0	0	0	0	2	2	1	6	2	0	0	0	0	13
01:00	0	0	0	0	0	0	0	1	4	4	3	1	0	0	0	13
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*6*	*13*	*17*	*8*	*2*	*0*	*0*	*0*	*49*
01:15	0	0	0	0	0	0	0	1	3	2	1	1	0	0	0	8
01:30	0	0	0	0	0	0	0	2	4	5	2	0	0	0	1	14
01:45	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*10*	*10*	*4*	*1*	*0*	*0*	*1*	*30*
02:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
02:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
02:45	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	4
03:00	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	4
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*2*	*4*	*1*	*0*	*0*	*0*	*0*	*10*
03:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	1	2	2	2	0	0	0	0	7
03:45	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
04:00	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*4*	*5*	*2*	*1*	*1*	*0*	*0*	*14*
04:15	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	4
04:30	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	5
04:45	0	0	0	0	0	0	0	1	2	3	1	0	0	0	0	7
05:00	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*6*	*7*	*4*	*0*	*0*	*0*	*1*	*21*
05:15	0	0	0	0	0	0	0	0	3	1	3	0	0	0	0	7
05:30	0	0	0	0	0	0	0	4	7	3	5	0	0	0	0	19
05:45	0	0	0	1	0	0	0	0	6	9	2	0	1	0	0	19
06:00	0	0	0	1	1	0	0	8	8	6	2	0	0	0	0	26
Hourly Total	*0*	*0*	*0*	*2*	*1*	*0*	*0*	*12*	*24*	*19*	*12*	*0*	*1*	*0*	*0*	*71*
06:15	0	0	0	0	0	0	0	7	12	5	3	0	0	0	0	27
06:30	0	0	0	0	0	1	2	5	14	17	5	0	0	0	0	44
06:45	0	0	0	0	0	0	4	14	21	18	5	0	0	0	0	62
07:00	0	0	0	7	6	4	5	27	19	18	5	1	0	0	0	92
Hourly Total	*0*	*0*	*0*	*7*	*6*	*5*	*11*	*53*	*66*	*58*	*18*	*1*	*0*	*0*	*0*	*225*
07:15	0	0	4	8	6	7	20	18	22	11	0	1	0	0	0	97
07:30	0	0	0	2	1	2	8	65	45	12	3	0	0	0	0	138
07:45	0	0	3	8	7	14	27	45	42	21	3	0	0	0	0	170
08:00	0	0	0	0	2	12	17	57	42	18	1	0	0	0	0	149
Hourly Total	*0*	*0*	*7*	*18*	*16*	*35*	*72*	*185*	*151*	*62*	*7*	*1*	*0*	*0*	*0*	*554*
08:15	0	0	0	1	10	20	45	84	18	1	1	1	0	0	0	181
08:30	0	0	0	0	3	28	52	54	29	8	0	0	0	0	0	174
08:45	0	5	9	14	8	8	46	38	19	3	0	0	0	0	0	150
09:00	0	2	2	16	15	29	30	38	11	3	2	0	0	0	0	148
Hourly Total	*0*	*7*	*11*	*31*	*36*	*85*	*173*	*214*	*77*	*15*	*3*	*1*	*0*	*0*	*0*	*653*
09:15	0	0	0	0	1	9	36	60	21	2	1	0	0	0	0	130
09:30	0	0	0	0	0	11	42	55	34	10	0	0	0	0	0	152
09:45	0	0	0	0	0	2	16	47	31	10	1	0	0	0	0	107
10:00	0	0	2	3	1	2	6	33	52	7	3	0	0	0	0	109
Hourly Total	*0*	*0*	*2*	*3*	*2*	*24*	*100*	*195*	*138*	*29*	*5*	*0*	*0*	*0*	*0*	*498*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	1	0	3	6	17	31	30	12	3	0	0	0	0	103
10:30	0	0	0	0	0	0	9	27	38	15	1	0	0	0	0	90
10:45	0	0	0	0	0	1	10	37	41	17	1	0	0	0	0	107
11:00	0	0	0	1	3	6	9	35	36	17	0	0	0	0	0	107
Hourly Total	*0*	*0*	*1*	*1*	*6*	*13*	*45*	*130*	*145*	*61*	*5*	*0*	*0*	*0*	*0*	*407*
11:15	0	0	2	3	1	11	4	34	40	14	1	0	0	0	0	110
11:30	0	0	0	1	3	4	9	55	30	8	1	0	0	0	0	111
11:45	0	0	0	1	2	2	10	50	43	13	1	0	0	0	0	122
12:00	0	0	0	0	2	12	16	28	35	18	1	0	0	0	0	112
Hourly Total	*0*	*0*	*2*	*5*	*8*	*29*	*39*	*167*	*148*	*53*	*4*	*0*	*0*	*0*	*0*	*455*
12:15	0	0	0	0	1	5	10	37	56	11	0	0	0	0	0	120
12:30	0	0	0	0	0	1	14	45	56	13	1	0	0	0	0	130
12:45	0	0	0	0	6	12	8	30	37	15	1	0	0	0	0	109
13:00	0	0	0	2	10	9	32	38	34	5	4	1	0	0	0	135
Hourly Total	*0*	*0*	*0*	*2*	*17*	*27*	*64*	*150*	*183*	*44*	*6*	*1*	*0*	*0*	*0*	*494*
13:15	0	0	0	0	0	0	9	33	63	21	2	0	0	0	0	128
13:30	0	0	0	0	0	0	18	38	47	9	0	0	0	0	0	112
13:45	0	0	2	3	13	6	36	45	23	11	3	0	0	0	0	142
14:00	0	0	0	0	0	7	18	50	40	12	2	0	0	0	0	129
Hourly Total	*0*	*0*	*2*	*3*	*13*	*13*	*81*	*166*	*173*	*53*	*7*	*0*	*0*	*0*	*0*	*511*
14:15	0	0	0	1	6	10	21	42	40	9	0	0	0	0	0	129
14:30	0	0	1	1	4	8	36	59	40	7	0	0	0	0	0	156
14:45	0	0	0	2	4	1	38	80	36	7	2	0	0	0	0	170
15:00	0	0	2	0	2	16	56	58	27	1	0	0	0	0	0	162
Hourly Total	*0*	*0*	*3*	*4*	*16*	*35*	*151*	*239*	*143*	*24*	*2*	*0*	*0*	*0*	*0*	*617*
15:15	0	0	0	0	4	39	66	54	28	5	1	0	0	0	0	197
15:30	0	0	1	1	1	16	83	72	24	0	0	0	0	0	0	198
15:45	0	1	3	2	1	9	54	51	25	2	0	0	0	0	0	148
16:00	0	1	0	1	1	30	73	54	9	6	0	0	0	0	0	175
Hourly Total	*0*	*2*	*4*	*4*	*7*	*94*	*276*	*231*	*86*	*13*	*1*	*0*	*0*	*0*	*0*	*718*
16:15	0	1	0	0	4	27	56	66	17	2	0	0	0	0	0	173
16:30	0	3	9	14	15	40	39	29	16	7	0	0	0	0	0	172
16:45	0	0	3	1	4	14	47	67	16	3	1	0	0	0	0	156
17:00	0	1	1	0	1	20	40	73	39	8	0	1	1	0	0	185
Hourly Total	*0*	*5*	*13*	*15*	*24*	*101*	*182*	*235*	*88*	*20*	*1*	*1*	*1*	*0*	*0*	*686*
17:15	0	2	2	0	0	2	35	83	47	10	1	0	0	0	0	182
17:30	0	2	1	0	1	13	73	68	22	4	0	0	0	0	0	184
17:45	0	0	0	1	1	11	42	81	46	8	1	0	0	0	0	191
18:00	0	1	0	0	1	31	47	49	44	8	1	0	0	0	0	182
Hourly Total	*0*	*5*	*3*	*1*	*3*	*57*	*197*	*281*	*159*	*30*	*3*	*0*	*0*	*0*	*0*	*739*
18:15	0	0	0	0	1	12	49	57	46	3	0	0	0	0	0	168
18:30	0	0	0	0	0	16	35	73	53	1	0	2	0	0	0	180
18:45	0	0	0	0	0	1	9	49	64	33	4	0	0	0	0	160
19:00	0	0	0	0	0	0	19	46	55	18	2	0	0	0	0	140
Hourly Total	*0*	*0*	*0*	*0*	*1*	*29*	*112*	*225*	*218*	*55*	*6*	*2*	*0*	*0*	*0*	*648*
19:15	0	0	0	0	0	1	16	65	43	10	0	0	0	0	0	135
19:30	0	0	0	0	0	0	4	16	34	33	4	0	0	0	0	91
19:45	0	1	4	1	3	1	27	51	45	6	1	0	0	0	0	140
20:00	0	0	0	0	0	4	12	52	37	13	4	0	0	0	0	122
Hourly Total	*0*	*1*	*4*	*1*	*3*	*6*	*59*	*184*	*159*	*62*	*9*	*0*	*0*	*0*	*0*	*488*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	1	4	10	61	32	9	2	1	0	0	0	120
20:30	0	0	0	0	0	3	11	69	47	9	2	0	0	0	0	141
20:45	0	0	0	0	0	0	7	43	36	20	3	1	0	0	0	110
21:00	0	0	0	0	0	0	6	35	33	11	4	0	0	0	0	89
Hourly Total	*0*	*0*	*0*	*0*	*1*	*7*	*34*	*208*	*148*	*49*	*11*	*2*	*0*	*0*	*0*	*460*
21:15	0	0	0	0	0	1	14	31	36	13	3	0	0	0	0	98
21:30	0	0	0	0	0	0	14	23	23	16	2	0	0	0	0	78
21:45	0	0	0	0	0	0	9	23	28	13	4	0	0	0	0	77
22:00	0	0	0	0	0	0	2	13	22	17	4	0	0	0	0	58
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*39*	*90*	*109*	*59*	*13*	*0*	*0*	*0*	*0*	*311*
22:15	0	0	0	0	0	0	0	9	19	8	3	1	0	0	0	40
22:30	0	0	0	0	0	0	0	6	10	9	3	0	0	0	0	28
22:45	0	0	0	0	0	0	0	5	10	15	3	0	0	0	0	33
23:00	0	0	0	0	0	0	2	1	7	9	3	1	0	0	0	23
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*21*	*46*	*41*	*12*	*2*	*0*	*0*	*0*	*124*
23:15	0	0	0	0	0	0	3	1	5	6	1	3	0	0	0	19
23:30	0	0	0	0	0	0	1	3	13	8	2	1	0	0	0	28
23:45	0	0	0	0	0	0	1	3	7	2	1	0	1	0	0	15
00:00	0	0	0	0	0	0	1	1	5	4	2	0	0	0	0	13
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*8*	*30*	*20*	*6*	*4*	*1*	*0*	*0*	*75*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	20	52	97	160	561	1646	3011	2326	810	150	19	4	0	2	8858
Percentages	0.00	0.23	0.59	1.10	1.81	6.33	18.58	33.99	26.26	9.14	1.69	0.21	0.05	0.00	0.02	

Speed Summary

Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
8858	38.28	32.07	38.51	44.41	6322	3311	985	175	25	6	2	2	35- 45
				Percentages	71.37	37.38	11.12	1.98	0.28	0.07	0.02	0.02	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:45-08:45	0	5	9	15	23	68	160	233	108	30	2	1	0	0	0	654
Percentages	0.00	0.76	1.38	2.29	3.52	10.40	24.46	35.63	16.51	4.59	0.31	0.15	0.00	0.00	0.00	*7.38*
15:30-16:30	0	6	12	17	21	106	222	200	67	17	0	0	0	0	0	668
Percentages	0.00	0.90	1.80	2.54	3.14	15.87	33.23	29.94	10.03	2.54	0.00	0.00	0.00	0.00	0.00	*7.54*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	0	4	11	3	3	0	0	0	0	21
00:30	0	0	0	0	0	0	1	1	6	8	2	2	0	0	0	20
00:45	0	0	0	0	0	0	2	3	4	10	3	0	0	0	0	22
01:00	0	0	0	0	0	0	1	2	4	7	3	1	0	0	0	18
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*10*	*25*	*28*	*11*	*3*	*0*	*0*	*0*	*81*
01:15	0	0	0	0	0	0	1	1	3	4	1	1	0	0	0	11
01:30	0	0	0	0	0	0	1	5	4	7	2	0	0	0	1	20
01:45	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	5
02:00	0	0	0	0	0	0	0	0	4	2	0	1	0	0	0	7
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*7*	*12*	*15*	*4*	*2*	*0*	*0*	*1*	*43*
02:15	0	0	0	0	0	0	0	3	0	1	1	0	0	0	0	5
02:30	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4
02:45	0	0	0	0	0	0	0	2	4	2	0	0	0	0	0	8
03:00	0	0	0	0	0	0	0	1	0	3	1	0	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*7*	*6*	*6*	*2*	*0*	*1*	*0*	*0*	*22*
03:15	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3
03:30	0	0	0	0	0	0	2	1	6	3	3	0	0	0	0	15
03:45	0	0	0	0	0	0	1	0	1	2	0	1	0	0	0	5
04:00	0	0	0	0	0	0	0	0	1	2	0	1	1	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*2*	*8*	*9*	*3*	*2*	*1*	*0*	*0*	*28*
04:15	0	0	0	0	0	0	1	6	3	5	1	0	0	0	1	17
04:30	0	0	0	0	0	0	2	1	4	4	1	0	0	0	0	12
04:45	0	0	0	0	0	0	0	4	4	7	3	0	0	0	0	18
05:00	0	0	0	0	0	0	1	1	6	8	2	0	0	2	0	20
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*12*	*17*	*24*	*7*	*0*	*0*	*2*	*1*	*67*
05:15	0	0	0	0	0	0	3	1	14	7	6	0	0	0	0	31
05:30	0	0	1	0	0	0	3	6	18	9	7	1	0	0	0	45
05:45	0	0	0	1	0	0	2	5	14	19	7	0	1	0	0	49
06:00	0	0	0	1	1	0	1	13	25	27	7	0	0	0	0	75
Hourly Total	*0*	*0*	*1*	*2*	*1*	*0*	*9*	*25*	*71*	*62*	*27*	*1*	*1*	*0*	*0*	*200*
06:15	0	0	0	0	0	0	2	12	29	13	7	1	0	0	0	64
06:30	0	0	0	0	0	1	5	13	38	27	7	1	0	0	0	92
06:45	0	0	0	0	0	0	8	37	64	29	9	0	0	0	0	147
07:00	0	0	0	7	6	4	13	83	78	34	8	2	0	0	0	235
Hourly Total	*0*	*0*	*0*	*7*	*6*	*5*	*28*	*145*	*209*	*103*	*31*	*4*	*0*	*0*	*0*	*538*
07:15	0	0	4	9	6	17	66	98	60	16	2	1	0	0	0	279
07:30	0	0	0	2	11	18	28	132	87	20	5	0	0	0	0	303
07:45	0	0	5	12	14	20	79	109	82	26	3	0	0	0	0	350
08:00	0	5	7	15	19	28	80	109	57	21	2	0	0	0	0	343
Hourly Total	*0*	*5*	*16*	*38*	*50*	*83*	*253*	*448*	*286*	*83*	*12*	*1*	*0*	*0*	*0*	*1275*
08:15	0	0	0	2	11	56	120	134	31	5	1	1	0	0	0	361
08:30	0	23	40	19	20	49	91	64	31	10	0	0	0	0	0	347
08:45	0	36	61	92	33	27	50	39	22	3	0	0	0	0	0	363
09:00	0	15	55	71	67	34	33	39	11	3	2	0	0	0	0	330
Hourly Total	*0*	*74*	*156*	*184*	*131*	*166*	*294*	*276*	*95*	*21*	*3*	*1*	*0*	*0*	*0*	*1401*
09:15	0	5	10	11	8	29	79	113	35	6	1	0	0	0	0	297
09:30	0	0	1	2	8	47	105	100	45	13	0	0	0	0	0	321
09:45	0	5	5	6	36	31	55	74	46	14	2	0	0	0	0	274
10:00	0	0	2	3	3	9	33	72	93	17	5	0	0	0	0	237
Hourly Total	*0*	*10*	*18*	*22*	*55*	*116*	*272*	*359*	*219*	*50*	*8*	*0*	*0*	*0*	*0*	*1129*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	5	5	11	8	39	75	58	19	5	0	0	0	0	225
10:30	0	0	0	1	0	2	30	61	79	39	1	0	0	0	0	213
10:45	0	0	0	1	9	6	22	81	76	23	3	0	0	0	0	221
11:00	0	0	0	1	3	6	17	96	93	19	0	0	0	0	0	235
Hourly Total	*0*	*0*	*5*	*8*	*23*	*22*	*108*	*313*	*306*	*100*	*9*	*0*	*0*	*0*	*0*	*894*
11:15	0	0	2	3	1	14	20	79	75	23	2	0	0	0	0	219
11:30	0	0	0	1	3	5	21	95	63	23	3	0	0	0	0	214
11:45	0	0	1	1	3	10	31	93	67	27	1	0	0	0	0	234
12:00	0	0	0	0	11	26	47	65	65	25	1	0	0	0	0	240
Hourly Total	*0*	*0*	*3*	*5*	*18*	*55*	*119*	*332*	*270*	*98*	*7*	*0*	*0*	*0*	*0*	*907*
12:15	0	0	0	0	2	6	22	82	105	17	0	0	0	0	0	234
12:30	0	0	0	0	0	4	32	81	96	21	1	0	0	0	0	235
12:45	0	0	0	1	6	14	28	77	76	26	4	0	0	0	0	232
13:00	0	0	0	2	10	20	56	87	64	15	5	2	0	0	0	261
Hourly Total	*0*	*0*	*0*	*3*	*18*	*44*	*138*	*327*	*341*	*79*	*10*	*2*	*0*	*0*	*0*	*962*
13:15	0	0	0	0	0	3	33	85	105	29	3	0	0	0	0	258
13:30	0	0	0	0	1	10	29	77	79	16	1	0	0	0	0	213
13:45	0	0	2	3	13	9	56	82	60	18	4	0	0	0	0	247
14:00	0	0	0	0	0	13	48	117	82	19	2	0	0	0	0	281
Hourly Total	*0*	*0*	*2*	*3*	*14*	*35*	*166*	*361*	*326*	*82*	*10*	*0*	*0*	*0*	*0*	*999*
14:15	0	0	0	1	8	18	34	87	70	19	0	0	0	0	0	237
14:30	0	0	1	2	4	9	59	106	72	20	1	0	0	0	0	274
14:45	0	0	0	2	5	12	64	131	68	13	2	0	0	0	0	297
15:00	0	0	2	1	9	32	121	94	41	4	0	0	0	0	0	304
Hourly Total	*0*	*0*	*3*	*6*	*26*	*71*	*278*	*418*	*251*	*56*	*3*	*0*	*0*	*0*	*0*	*1112*
15:15	0	0	0	0	8	78	135	98	34	10	1	0	0	0	0	364
15:30	0	10	18	16	21	47	127	100	28	0	0	0	0	0	0	367
15:45	0	31	62	70	18	10	57	53	27	2	0	0	0	0	0	330
16:00	0	18	65	65	9	32	76	57	9	6	0	1	0	0	0	338
Hourly Total	*0*	*59*	*145*	*151*	*56*	*167*	*395*	*308*	*98*	*18*	*1*	*1*	*0*	*0*	*0*	*1399*
16:15	0	4	10	0	15	71	156	84	22	3	0	0	0	0	0	365
16:30	0	23	53	78	57	61	42	31	17	7	0	0	0	0	0	369
16:45	0	17	66	33	19	42	54	70	17	3	1	0	0	0	0	322
17:00	0	25	55	40	24	33	46	78	39	10	0	1	1	0	0	352
Hourly Total	*0*	*69*	*184*	*151*	*115*	*207*	*298*	*263*	*95*	*23*	*1*	*1*	*1*	*0*	*0*	*1408*
17:15	0	6	18	21	12	22	66	115	65	14	1	0	0	0	0	340
17:30	0	26	49	60	9	14	77	72	25	4	0	0	0	0	0	336
17:45	0	1	14	16	18	43	76	113	62	10	1	0	0	0	0	354
18:00	0	7	35	28	18	56	74	72	51	8	1	0	0	0	0	350
Hourly Total	*0*	*40*	*116*	*125*	*57*	*135*	*293*	*372*	*203*	*36*	*3*	*0*	*0*	*0*	*0*	*1380*
18:15	0	0	0	0	2	35	78	114	79	7	2	0	0	0	0	317
18:30	0	0	0	0	0	21	68	117	95	13	1	2	0	0	0	317
18:45	0	0	0	0	0	1	20	98	112	49	11	0	0	1	0	292
19:00	0	0	0	0	0	0	26	96	109	29	4	0	0	0	0	264
Hourly Total	*0*	*0*	*0*	*0*	*2*	*57*	*192*	*425*	*395*	*98*	*18*	*2*	*0*	*1*	*0*	*1190*
19:15	0	0	0	0	0	1	18	92	80	32	5	0	0	0	0	228
19:30	0	0	0	0	0	0	16	44	69	55	6	0	0	0	0	190
19:45	0	1	4	1	3	2	31	80	81	20	4	0	0	0	0	227
20:00	0	0	0	0	0	4	17	70	60	29	5	0	0	0	0	185
Hourly Total	*0*	*1*	*4*	*1*	*3*	*7*	*82*	*286*	*290*	*136*	*20*	*0*	*0*	*0*	*0*	*830*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	1	4	14	92	51	19	2	1	0	0	0	184
20:30	0	0	0	0	0	3	23	94	69	17	2	0	0	1	0	209
20:45	0	0	0	0	0	0	16	72	58	20	4	1	0	1	0	172
21:00	0	0	0	0	0	0	8	49	43	19	9	0	0	0	0	128
Hourly Total	*0*	*0*	*0*	*0*	*1*	*7*	*61*	*307*	*221*	*75*	*17*	*2*	*0*	*2*	*0*	*693*
21:15	0	0	0	0	0	1	14	40	60	25	4	1	0	0	0	145
21:30	0	0	0	0	0	1	20	42	33	27	4	0	0	0	0	127
21:45	0	0	0	0	0	0	13	26	44	20	4	1	0	0	0	108
22:00	0	0	0	0	0	0	3	18	31	27	7	1	0	0	0	87
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*50*	*126*	*168*	*99*	*19*	*3*	*0*	*0*	*0*	*467*
22:15	0	0	0	0	0	0	4	19	24	24	6	1	0	0	0	78
22:30	0	0	0	0	0	0	0	10	18	19	6	1	0	0	0	54
22:45	0	0	0	0	0	2	4	8	17	15	3	0	0	0	0	49
23:00	0	0	0	0	0	0	2	5	16	16	5	1	0	0	0	45
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*10*	*42*	*75*	*74*	*20*	*3*	*0*	*0*	*0*	*226*
23:15	0	0	0	0	0	0	7	11	12	13	1	3	0	0	0	47
23:30	0	0	0	0	0	0	1	6	17	18	4	2	0	0	0	48
23:45	0	0	0	0	0	0	1	5	11	4	2	0	1	0	0	24
00:00	0	0	0	0	0	0	1	4	10	10	3	0	0	0	0	28
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*10*	*26*	*50*	*45*	*10*	*5*	*1*	*0*	*0*	*147*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	258	653	706	576	1181	3069	5197	4037	1420	256	33	5	5	2	17398
Percentages	0.00	1.48	3.75	4.06	3.31	6.79	17.64	29.87	23.20	8.16	1.47	0.19	0.03	0.03	0.01	

Speed Summary

Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
17398	36.00	27.41	37.74	44.12	10955	5758	1721	301	45	12	7	2	35- 45
				Percentages	62.97	33.10	9.89	1.73	0.26	0.07	0.04	0.01	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:45-08:45	0	64	108	128	83	160	341	346	141	39	3	1	0	0	0	1414
Percentages	0.00	4.53	7.64	9.05	5.87	11.32	24.12	24.47	9.97	2.76	0.21	0.07	0.00	0.00	0.00	*8.13*
15:30-16:30	0	76	190	213	99	174	331	225	75	18	0	1	0	0	0	1402
Percentages	0.00	5.42	13.55	15.19	7.06	12.41	23.61	16.05	5.35	1.28	0.00	0.07	0.00	0.00	0.00	*8.06*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th AWSC
3: Avalon Rd & Tucker Ranch Park/Coscester St

AM Split
AM Peak Hour

Intersection	
Intersection Delay, s/veh	100.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇳			⇳			⇳			⇳	
Traffic Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Future Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Heavy Vehicles, %	27	27	27	3	3	3	2	2	2	2	2	2
Mvmt Flow	6	0	2	5	0	30	0	900	1	10	749	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.2	10.5	131.5	69.1
HCM LOS	B	B	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	71%	13%	1%
Vol Thru, %	100%	0%	0%	97%
Vol Right, %	0%	29%	87%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	793	7	30	771
LT Vol	0	5	4	10
Through Vol	792	0	0	749
RT Vol	1	2	26	12
Lane Flow Rate	901	8	34	771
Geometry Grp	1	1	1	1
Degree of Util (X)	1.225	0.017	0.062	1.047
Departure Headway (Hd)	4.996	8.104	7.061	5.145
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	730	444	510	709
Service Time	2.996	6.104	5.061	3.145
HCM Lane V/C Ratio	1.234	0.018	0.067	1.087
HCM Control Delay, s/veh	131.5	11.2	10.5	69.1
HCM Lane LOS	F	B	B	F
HCM 95th-tile Q	31	0.1	0.2	18.8

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th AWSC
3: Avalon Rd & Tucker Ranch Park/Coscester St

PM Split
PM Peak Hour

Intersection	
Intersection Delay, s/veh	103.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Future Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Peak Hour Factor	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	19	0	7	1	0	29	1	788	9	22	850	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.1	10.6	84.9	125.8
HCM LOS	B	B	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	72%	4%	3%
Vol Thru, %	99%	0%	0%	97%
Vol Right, %	1%	28%	96%	1%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	750	25	28	826
LT Vol	1	18	1	21
Through Vol	741	0	0	799
RT Vol	8	7	27	6
Lane Flow Rate	798	27	30	879
Geometry Grp	1	1	1	1
Degree of Util (X)	1.096	0.053	0.055	1.209
Departure Headway (Hd)	5.205	7.685	7.145	5.112
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	702	469	504	721
Service Time	3.205	5.685	5.145	3.112
HCM Lane V/C Ratio	1.137	0.058	0.06	1.219
HCM Control Delay, s/veh	84.9	11.1	10.6	125.8
HCM Lane LOS	F	B	B	F
HCM 95th-tile Q	21.5	0.2	0.2	29.3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Traffic Engineering and Management, LLC
dba / Control Specialists

Construction, Service and Maintenance

707 Nicolet Ave, Suite 100A, Winter Park, FL 32789 Ph: (407) 628-1965 * Fax: (407) 628-1932

Project: WINTER GARDEN - DILLARD AT STORY
Description: Dillard St at Story Rd - Signal Modifications
Bid Date: 7/14/2026
Estimator: Tony Zirpoli
Contract #: N/A

ITEM	DESCRIPTION	BID QTY	U/M	UNIT BID	AMOUNT
101-1	Mobilization	1.000	LS	$1,800.00	$1,800.00
650-1-39	Vehicular Traffic Signal, F&I Polycarbonate, 5 Section Cluster, 1 Way	2.000	AS	$3,650.00	$7,300.00
650-1-60	Vehicular Traffic Signal, Remove-Poles To Remain	2.000	AS	$300.00	$600.00
660-4-31	Vehicle Detection System- Video, Install, Cabinet Equipment	1.000	EA	$1,400.00	$1,400.00
660-4-32	Vehicle Detection System- Video, Install, Above Ground Equipment	1.000	EA	$2,050.00	$2,050.00
670-5-400	Traffic Controller Assembly, Modify	1.000	AS	$1,450.00	$1,450.00
				TOTAL BID:	**$14,600.00**

Project Comments

1. Signal installation includes wiring. New signal assembly does not include backplates.
2. No permits are included other than an electrical permit for power service, if required.
3. This quotation is valid for 60 days after the stated bid date. Please request pricing verification after 60 days.

Signature: Tony Zirpoli

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Steve Pash, Assistant City Manager – Public Services

Via: Jon C. Williams, City Manager

Date: July 30, 2026 **Meeting Date:** August 13, 2026

Subject: Intersection Improvements
Avalon Rd & Tucker Ranch/Coscester St
Avalon Rd & Golden Bell St/Longbeam Way
Marsh Rd & Williams Rd
Avalon & S.R. 50

Issue: Staff have engaged a traffic consultant to analyze several intersections in the southwestern side of the City. The consultant was asked to look at temporary and final improvements.

Discussion: From these recommendations, staff are requesting to engage our design consultants and request a proposal for the following final improvements:

1. A round-about at Avalon Road & Tucker Ranch entrance/Coscester Street;
2. A round-about at Avalon & Golden Bell Street/Longbeam Way;
3. Increase the queue lengths on the south side of Avalon Road at the intersection of SR 50.
4. Lowering the speed limit on Avalon Road between State Road 50 and Tilden Road to 35 mph.

The temporary changes:

1. Install a 4-way stop sign at the intersection of Marsh Road & Williams Road until the future developments improve this intersection.
2. A four way stop at Avalon Road & Tucker Ranch entrance/Coscester Street.
3. A four way stop at Avalon & Golden Bell Street/Longbeam Way

Recommended Action: Staff recommend that City Commission approve the requests to work with our contract engineers to design the proposed final improvements.

Attachment(s)/References:

LTEC WG Intersection Analysis

M E M O R A N D U M

TO: Steve Pash- Assistant City Manager - Public Services
FROM: J. Antony Luke, PE
Joseph Thomas Roviaro
DATE: April 17, 2026
RE: City of Winter Garden Continuing Transportation Planning Engineering Services **-** Analysis of Three (3) Intersection Locations
(LTEC № 25-0204)

The City of Winter Garden staff requested a detailed operational analysis of traffic conditions at three (3) intersections within the City of Winter Garden: 1) South Dillard Street and East Story Road (Intersection #1), 2) Avalon Road and Golden Bell Street (gated entrance to Carriage Point Subdivision/Longbeam Way (entrance to Stone Creek Subdivision) (Intersection #2), and 3) Avalon Road and Tucker Ranch Park Entrance/Coscester Street (Intersection #3). The analysis involved procedures consistent with the latest version of the FDOT Manual on Intersection Control Evaluation (ICE) for the intersections of Avalon Road and Golden Bell Street /Longbeam Way and Avalon Road and Tucker Ranch Park Entrance/Coscester Street, which are both currently unsignalized. The intersection of South Dillard Street and East Story Road (Intersection #1) is signalized and involved an analysis to identify potential signal control and geometric improvements to improve the traffic operations.

This summary memorandum refers to each of the intersection locations as:

Study Intersection 1: South Dillard Street & East Story Road (Intersection #1),

Study Intersection 2: Avalon Road & Golden Bell Street/Longbeam Way (Intersection #2), and

Study Intersection 3: Avalon Road & Tucker Ranch Entrance/Coscester Street (Intersection #3).

The locations of the three (3) Study Intersections are shown in **Figure 1**.

This memorandum provides a summary of the following for the signalized Study Intersection #1 and will include the following components:

- Existing traffic volumes, operational conditions, and assessment of historic crash data and
- Development of a recommended concept for improvements and modifications to improve the existing operating conditions.

The summary for the unsignalized Study Intersection #2 and Study Intersection #3 will include the following components:

- Existing traffic volumes, operational conditions, and assessment of historic crash data,
- Assessment based on the FDOT ICE Stage 1 Screening procedures, and
- Development of a recommended concept for improvements and modifications to improve the existing operating conditions.

Study Intersection #1 (South Dillard Street & East Story Road)

- The location of Study Intersection #1 is shown in **Figure 1**, located about halfway between SR 50 and Plant Street, near the central business area of the city of Winter Garden. Dillard Street, near this intersection, is a five-lane north/south roadway with a center 2-way left-turn lane. East Story Road is a two-lane, undivided east/west roadway at this location. The eastbound approach has a separate 180-foot long left-turn lane (this includes the 50-foot taper) and the combination through/right-turn lane is a continuation of the eastbound lane. The westbound approach has a separate combination through/right-turn lane 145-foot long (this includes a 115-foot taper) while the left turn lane is a continuation of the westbound lane. The configuration of Study Intersection #1 is shown in the aerial map plan view in **Figure 2**.
- Dillard Street, near the intersection, serves a number of commercial uses with direct access driveways. East Story Road also contains direct access driveways for uses along the frontage, which are primarily commercial uses. The southeast quadrant of Study Intersection #1 contains a power substation, secured with a wall. The other quadrants of the intersection are developed with commercial uses.
- This intersection is controlled by a traffic signal (strain pole). The posted speed limit for Dillard Street near this intersection is 35 mph. The posted speed limit for East Story Road is 30 mph.

Intersection Volumes and Traffic Operations

- A field review was conducted at Study Intersection #1, including observation of traffic operations during the weekday peak traffic period. **Figure 2** also provides a summary of the AM and PM peak hour traffic volumes collected at Study Intersection #1. Weekday turning movement counts were collected at Study Intersection #1 over a weekday from 7:00 AM to 9:00 AM and 4:00 to 6:00 PM on Tuesday, January 20, 2026. Pedestrian and bicycle volumes were also collected at the intersection. Minimal pedestrian and bicycle volumes were observed at Study Intersection #1. **Figure 3** provides street views for each approach for Study Intersection #1. The City staff also provided existing signal timing plans for Study Intersection #1.
- Study Intersection #1 was analyzed under existing peak bour conditions using the procedures of the *7th Edition Highway Capacity Manual* for signalized intersections using the Synchro 12 software. The level of service (LOS), vehicular delays, and stacking were calculated over the weekday morning and afternoon peak hours. This analysis was completed for the various vehicular movements for the Study Intersection. **Table 1** provides the peak hour LOS analysis results for the Study Intersections. **Attachment A**

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

contains the summary turning movement counts, the existing timings sheet, and the Synchro analysis summaries for Study Intersection #1.

- As can be seen from **Table 1** study Intersection #1 operates at an acceptable Level of Service **C** or better during both the A.M. and P.M. peak periods. The 95th percentile queue length for the northbound and southbound auxiliary left-turn lanes on South Dillard Street is a maximum of two (2) vehicles (assume 25 feet per vehicle). This is well within the available existing northbound (180 feet) and southbound (100 feet) left-turn lane lengths. The 95th percentile queue length for the eastbound auxiliary left-turn lane on East Story Road is a maximum of four (4) vehicles and the 95th percentile queue length for the westbound auxiliary left-turn lane on East Story Road is a maximum of three (3) vehicles. However, it should be noted that due to the long queues for the through/right-turn movements, access to the east/west left turn lane is blocked.

Crash Data Review

- As can be seen from **Table 2** study Intersection #1 has had 55 crashes during the past 5 years (2021-2025). This is an average of 11 crashes per year. The majority of these crashes occurred on South Dillard Street, with only three on East Story Road, two westbound and one eastbound. Twenty-three or 41.8% are angle crashes (left-turn or right-turn) on South Dillard Street. Twenty-one or 38.2% are rear end with 19 on South Dillard Street and two on East Story Road. None of the crashes were fatal, 72.7% had no injuries, and 92.7% had property damage.

Recommended Improvements

- Based on the peak hour operational analysis of Study Intersection #1, signal phasing/timing options were evaluated to reduce the weekday peak hour vehicular delays and stacking for the critical movements. This analysis also considered impacts of potential signal phasing/timing changes to all the traffic movements for Study Intersection #1. Based on the results of the analysis, recommendations were developed for modifications to the signal phasing/timings modifications to the traffic controls.
- Two options are proposed; the first is to modify the side street (East Story Road) phasing to a split phase. Each side street movement would operate separately. The overall intersection phasing would be four-phase signal operation. Phase 1 would be protected north/south left turns, Phase 2 would be permissive north/south movements, Phase 3 would be protected eastbound movements, and Phase 4 would be protected westbound movements. This signal phasing would reduce vehicular conflicts for the east-west movements.
- The second option would be to install separate left-turn signal heads to allow protected east/west left-turns. The new signal phasing would be as follows: Phase 1 would be protected north/south left turns, Phase 2 would be permissive north/south movements, Phase 3 would be protected east/west left turns, and Phase 4 would be permissive east/west movements. This signal phasing would also reduce vehicular conflicts for the

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

east-west movements. Costs for each of the improvement options are expected to involve the limited addition of signal equipment, signal design modifications, and timing plan changes.

- As can be seen from **Table 3**, with the split phasing option, Study Intersection #1 would continue to operate at an acceptable LOS, although the LOS would be reduced to **E**. The analysis indicates that this modification would not result in longer vehicular delays during both the AM and PM peak periods. The 95th percentile queue lengths are similar for the northbound and southbound auxiliary left-turn lanes, a maximum of three (3) vehicles. This is still within the available existing northbound (180 feet) and southbound (100 feet) left-turn lane lengths. The 95th percentile queue length for the eastbound and westbound auxiliary left-turn lanes is a maximum of four (4) vehicles.
- Under the second option, with added eastbound and westbound separate left-turn signal heads, Intersection #1 operates at an acceptable LOS **C** for both AM & PM peak periods. The 95th percentile queue lengths for the northbound and southbound auxiliary left-turn lanes are a maximum of two (2) vehicles. And the 95th percentile queue length for the eastbound and westbound auxiliary left-turn lanes is a maximum of three (3) vehicles.
- Option 2 represents the recommended signal modification for the proposed intersection improvement as it has a better level of service and shorter delays.

Study Intersection 2 (Avalon Road & Golden Bell Street/Longbeam Way)

- The location of Study Intersection #2 is shown in **Figure 1**, located south of Marsh Road/Stoneybrook West Parkway in southwest Winter Garden. Avalon Road is a two-lane, undivided north/south roadway at this location. The configuration of Study Intersection #2 is shown in the aerial map plan view in **Figure 4**. Longbeam Way is the eastern approach to Study Intersection #2 and serves as a primary access to a residential subdivision (Stone Creek). Golden Bell Street also serves as a primary access to a gated residential subdivision (Carriage Pointe) on the west side of Avalon Road.
- Study Intersection #2 is under STOP sign control for the minor street (Golden Bell Street/Longbeam Way) approaches. The posted speed limit for Avalon Road near this intersection is 45 mph. Near this Study Intersection, there are no direct residential driveway connections to Avalon Road.
- Golden Bell Street is a gated local street which serves as direct access driveways and other local roadways within the Carriage Pointe subdivision. Longbeam Way is a short local roadway which connects to Avalon Road to Portcasetle Circle which provides direct driveway access to the homes in the Stone Creek subdivision. The posted speed limit for the local roadways is 25 mph.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Intersection Volumes and Traffic Operations

- A field review was conducted at Study Intersection #2, including observation of traffic operations during the weekday peak traffic period. **Figure 4** also provides a summary of the AM and PM peak hour traffic volumes collected at Study Intersection #2. Weekday turning movement counts were collected at Study Intersection #2 over a weekday from 7:00 AM to 9:00 AM and 4:00 to 6:00 PM on Tuesday, January 20, 2026. Pedestrian and bicycle volumes were also collected at the intersection. Minimal pedestrian and bicycle volumes were observed at Study Intersection #2. **Figure 5** provides street views for each approach for Study Intersection #2.
- An existing 24-hour speed count was conducted Tuesday, April 14, 2026, on Avalon Road just south of Study Intersection #2. The average speed for northbound traffic on Avalon Road is 42.02 mph, the 85th percentile speed is 47.20 mph and the 10 mph Pace is 35-45 mph. Only 20.08% of the northbound vehicles exceed the 45 mph posted speed. The average speed for southbound traffic on Avalon Road is 42.29 mph, the 85th percentile speed is 47.85 mph and the 10 mph Pace is 35-45 mph. Only 24.3% of the southbound vehicles exceed the 45 mph posted speed.
- Study Intersection #2 was analyzed under existing peak hour conditions using the procedures of the *7th Edition Highway Capacity Manual* for unsignalized intersections using the Synchro 12 software. The LOS, vehicular delays, and stacking were calculated over the weekday morning and afternoon peak hours. This analysis was completed for the various vehicular movements for the Study Intersection. **Table 1** also provides the peak hour LOS analysis results for Study Intersection #2. **Attachment B** contains the summary turning movement counts and the Synchro analysis summaries for Study Intersection #2.
- As can be seen from **Table 1** Study Intersection #2 operates at an acceptable Level of Service **E** or better for the minor street movements during both the AM and PM peak periods. The 95th percentile queue length for the northbound and southbound auxiliary left-turn lanes on Avalon Road is a maximum of two (2) vehicles. This is well within the available existing northbound (235 feet) and southbound (345 feet) left-turn lane lengths. The 95th percentile queue length for the eastbound auxiliary left-turn lane on Golden Bell Street is a maximum of two (2) vehicles and the 95th percentile queue length for the westbound minor street movements on Longbeam Way is a maximum of two (2) vehicles.

Crash Data Review

- As can be seen from **Table 2**, study Intersection #2 has had nine (9) crashes during the past 5 years (2021-2025). This is an average of 1.8 crashes per year. All of these crashes occurred on Avalon Road. Six or 66.7% are rear end with two or 22.2% being angle. None of the crashes were fatal, 77.8% had no injuries, and 100% had property damage.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Recommended Improvements

- A FDOT Stage 1 Intersection Control Evaluation (ICE) screening was performed for Study Intersection #2. As part of the Stage 1 ICE screening both a capacity Analysis for Planning of Junctions (Cap-X) and the Safety Performance for Intersection Control Evaluation (SPICE) evaluation was performed. A copy of the Stage 1 form is in **Attachment B**.
- As can be seen from **Table 3**, the all-Way Stop Control for Study Intersection #2 would shorten the minor street delays and improve the minor street level of service by provide gaps in the northbound/southbound traffic flow to allow the minor street traffic to safety turn onto Avalon Road.
- As documented in **Table 2**, the ICE Stage 1 screening supports an All-Way Stop Control for Study Intersection #2. An All-Way Stop Control represents the recommended traffic control modification for the proposed intersection improvement as it reduces speed, provides a safer pedestrian/cyclists crossing, and allows traffic to flow smoothly under the right-of-way rule. The cost for this improvement will involve the limited addition of signage and pavement marking design, sign equipment, and pavement markings.

Study Intersection 3 (Avalon Road & Coscester Street)

- As shown in **Figure 1**, this intersection is located south of SR 50 south of the Florida Turnpike Bridge, in west Winter Garden. Avalon Road is a north/south two-lane undivided roadway with a posted speed limit of 45mph. Coscester Street (east approach) is a two-lane undivided roadway with a posted speed limit of 26 mph. Tucker Ranch Entrance (west approach) is the entrance to the Tucked Ranch Recreation and Nature Complex, located on the west side of Avalon Road, which is currently under construction. Tucker Ranch entrance roadway is a two-lane undivided roadway with a 25 mph speed limit. Intersection #3 is under STOP sign control for the minor street (Coscester Street and Tucker Ranch) approaches. The configuration of Study Intersection #3 is shown in the aerial map plan view in **Figure 6**.
- Avalon Road serves as north-south route extending from north of SR 50, south through west Orange County to south of US 192 in Osceola County. Near this Study Intersection, Avalon Road and Tucker Ranch/Coscester Street provide direct access for limited homes with much of the adjacent properties undeveloped. The frontage properties fronting the quadrants of Study Intersection #3 are currently undeveloped. The City of Winter Garden is currently in the process of taking over maintenance of Avalon Road from Orange County, from the Florida Turnpike bridge south to the City Limit.

Intersection Volumes and Traffic Operations

- A field review was conducted at Study Intersection #3, including observation of traffic operations during the weekday peak traffic period. **Figure 6** also provides a summary of the AM and PM peak hour traffic volumes collected at Study Intersection #3. Weekday turning movement counts were collected at Study Intersection #3 over a weekday from 7:00 AM to 9:00 AM and 4:00 to 6:00 PM on Tuesday, January 20, 2026. Pedestrian and

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

bicycle volumes were also collected at the intersection. Minimal pedestrian and bicycle volumes were observed at Study Intersection #3. **Figure 7** provides street views for each approach for Study Intersection #3.

- An existing 24-hour speed count was conducted Tuesday, April 14, 2026, on Avalon Road just south of Study Intersection #3. The average speed for northbound traffic on Avalon Road is 33.64 mph, the 85th percentile speed is 43.73 mph and the 10 mph Pace is 35-45 mph. Only 8.62% of the northbound vehicles exceed the 45 mph posted speed. The average speed for southbound traffic on Avalon Road is 38.28 mph, the 85th percentile speed is 44.41 mph and the 10 mph Pace is 35-45 mph. Only 11.12% of the southbound vehicles exceed the 45 mph posted speed.
- Study Intersection #3 was analyzed under existing peak bour conditions using the procedures of the *7th Edition Highway Capacity Manual* for unsignalized intersections using the Synchro 12 software. The LOS, vehicular delays, and stacking were calculated over the weekday morning and afternoon peak hours. This analysis was completed for the various vehicular movements for the Study Intersection. **Table 1** also provides the peak hour LOS analysis results for Study Intersection #3. **Attachment C** contains the summary turning movement counts and the Synchro analysis summaries for Study Intersection #3.
- As can be seen from **Table 1** Study Intersection #3 operates at a deficient LOS **F** condition for the eastbound approach (Tucker Ranch) minor street movements during both the A.M. and P.M. peak periods.
- The westbound approach (Coscester Street) operates at an acceptable LOS **C** condition for the minor street movements during both the A.M. and P.M. peak periods.
- The Avalon Road north/south left-turn movements operate at acceptable LOS A conditions. However, this is due to the small number of vehicles currently making these movements.
- The 95th percentile queue length for all the approaches is a maximum of two (2) vehicles.

Crash Data Review

- As can be seen from **Table 2**, study Intersection #3 has had 13 crashes during the past 5 years (2021-2025). This is an average of 2.6 crashes per year. All but two of these crashes occurred on Avalon Road. Ten or 76.9% are rear end with one or 7.7% being angle. None of the crashes were fatal, 53.9% had no injuries, and 92.3% had property damage.

Recommended Improvements

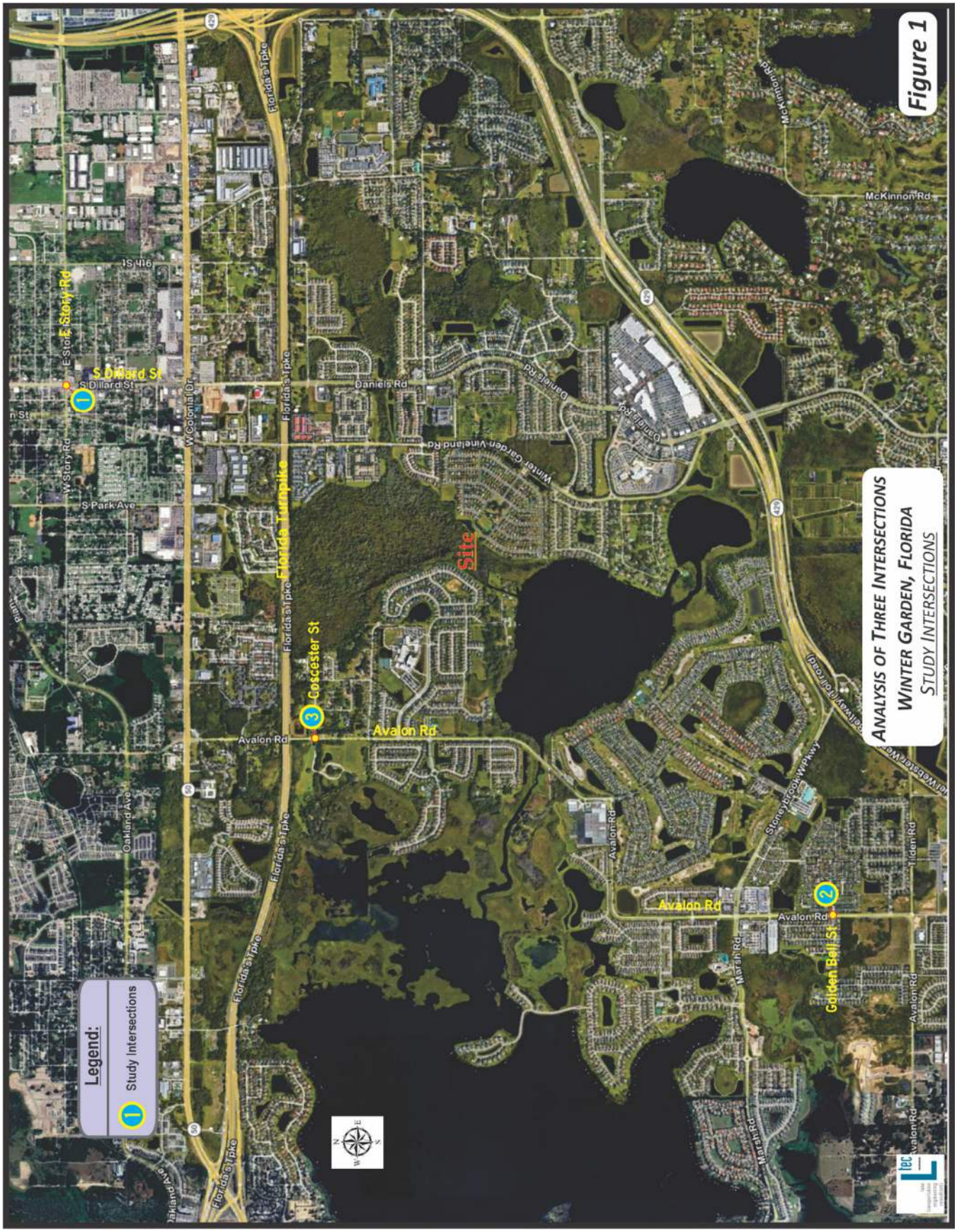
- A FDOT Stage 1 Intersection Control Evaluation (ICE) screening was performed for Study Intersection #3. As part of the Stage 1 ICE screening both a capacity Analysis for Planning of Junctions (Cap-X) and Safety Performance for Intersection Control Evaluation (SPICE)

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

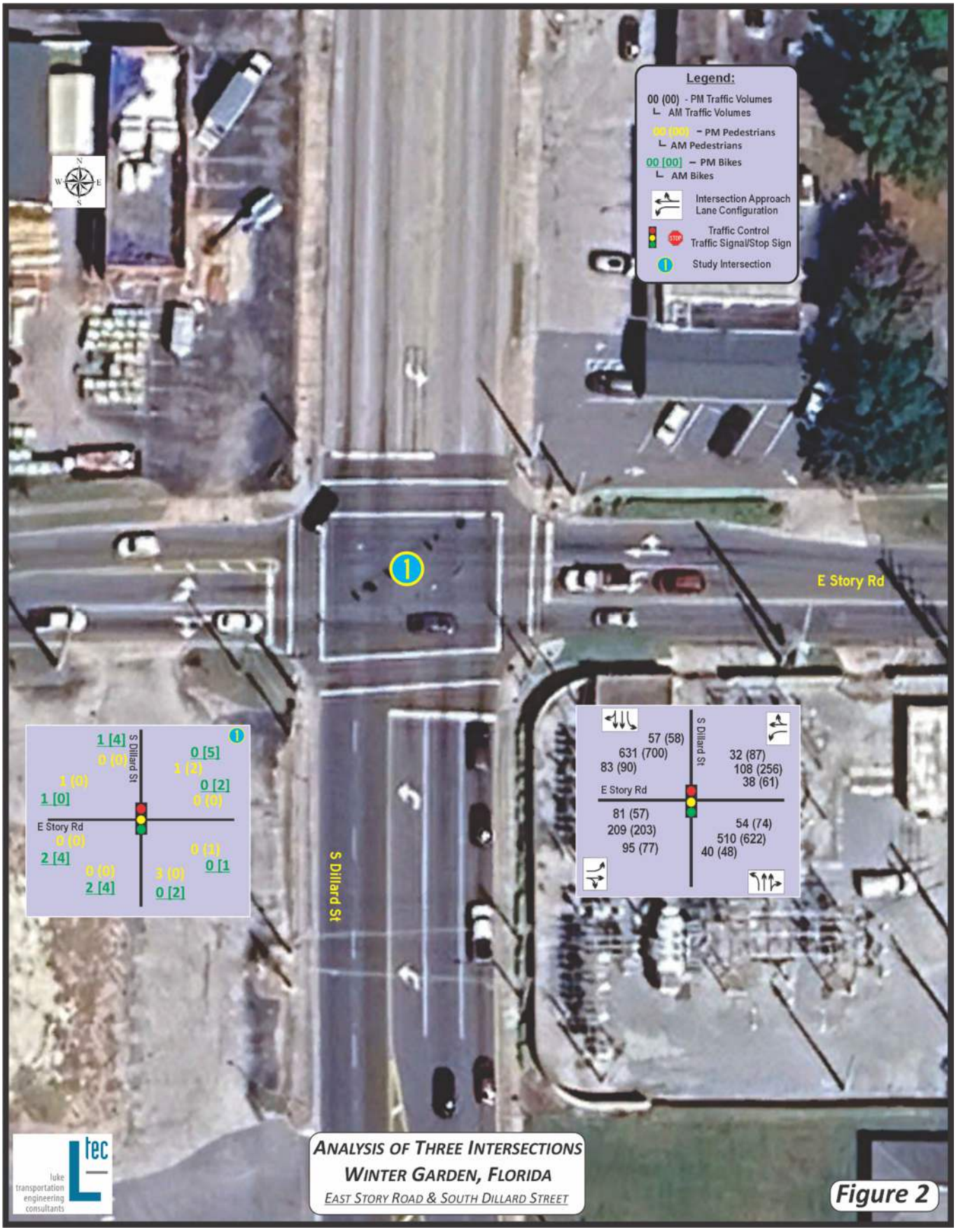
evaluation was performed. A copy of the Stage 1 form is in **Attachment C**.

- As can be seen from **Table 3**, the all-Way Stop Control for Study Intersection #3 would shorten the minor street delays and improve the minor street level of service by provide gaps in the northbound/southbound traffic flow to allow the minor street traffic to safety turn onto Avalon Road.
- As documented in **Table 2**, the ICE Stage 1 screening supports an All-Way Stop Control for Study Intersection #3. An All-Way Stop Control represents the recommended traffic control modification for the proposed intersection improvement as it reduces speed, provides a safer pedestrian/cyclists crossing, and allows traffic to flow smoothly under the right-of-way rule. The cost for this improvement will involve the limited addition of signage and pavement marking design, sign equipment, and pavement markings.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

TABLE 1

Study Intersections Existing (2026) Level of Service

Approach / Movement		Lanes	Turn Lane Length	Traffic Control	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGrp LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
1 - East Story Road (EB/WB) and South Dillard Street (NB/SB)												
EB	Left	1	130		27.9	0.34	C	82	23.6	0.22	C	63
	Thru	1			16.2	0.46	B	203	17.8	0.52	B	219
	Right	>										
WB	Left	1			19.8	0.11	B	38	21.5	0.20	C	64
	Thru	1	145		19.8	0.72	B	244	19.3	0.64	B	280
	Right	>										
NB	Left	1	180		17.4	0.70	B	31	13.4	0.16	B	32
	Thru	2			21.5	0.56	C	203	17.5	0.59	B	242
	Right	>			21.5	0.56	C		17.5	0.59	B	
SB	Left	1	100		16.2	0.19	B	40	12.6	0.17	B	37
	Thru	2			21.7	0.65	C	236	17.0	0.63	B	277
	Right	>			21.7	0.66	C		17.0	0.63	B	
Intersection Control Delay / LOS					20.5		C		17.7		B	
Approach / Movement		Lanes	Turn Lane Length	Traffic Control	Control Delay (s) (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)	Control Delay (s) (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
2 - Golden Bell Street (EB)/Longbeam Way (WB) and Avalon Road (NB/SB)												
EB	Left	1	75		37.9	0.31	E	30	40.3	0.22	E	20
	Thru	1		STOP	17.7	0.031	C	3	16.1	0.026	C	3
	Right	>										
WB	Left	<										
	Thru	1		STOP	29.8	0.347	D	38	26.6	0.299	D	30
	Right	>										
NB	Left	1	235		9.6	0.003	A	0	9.8	0.013	A	0
	Thru	1		Free Flow								
	Right	>										
SB	Left	1	345		10.1	0.016	B	0	10.4	0.035	B	3
	Thru	1		Free Flow								
	Right	1	190									
3 - Tucker Ranch Entrance (EB)/Coscester Street (WB) and Avalon Road (NB/SB)												
EB	Left	<										
	Thru	1		STOP	56.9	0.103	F	8	66.4	0.316	F	30
	Right	>										
WB	Left	<										
	Thru	1		STOP	23.6	0.015	C	13	17.0	0.091	C	8
	Right	>										
NB	Left	<										
	Thru	1		Free Flow	0.0	0.000	A	0	9.6	0.001	A	0
	Right	>										
SB	Left	<										
	Thru	1		Free Flow	0.0	0.000	A	0	9.5	0.027	A	8
	Right	>										

Luke Transportation Engineering Consultants, Inc., 2026

TABLE 2

1 - East Story Road (EB/WB) and South Dillard Street (NB/SB) - Crash Report Summary

Collision Type	2021	2022	2023	2024	2025	Total	Average	Percent
Rear End	5	4	4	5	3	21	4.20	38.2%
Angle	4	4	6	5	4	23	4.60	41.8%
Sideswipe	1	1	1	0	2	5	1.00	9.1%
Head-On	2	0	0	1	0	3	0.60	5.5%
Other	0	0	2	0	0	2	0.40	3.6%
Pedestrian	1	0	0	0	0	1	0.20	1.8%
Total Crashes	**13**	**9**	**13**	**11**	**9**	**55**	**11.00**	**100.0%**
Fatal	0	0	0	0	0	0	0.00	0.0%
No Injury	8	7	6	10	9	40	8.00	72.7%
Incapacitating Injury	5	2	7	1	0	15	3.00	27.3%
Property Damage	11	9	11	11	9	51	10.20	92.7%
AADT	23,253	22,647	24,235	24,593	27,251		24,396	
Crash Rate - MEV (1)	1.53	1.09	1.47	1.23	0.90		1.24	
(1) Intersection Million Entering Vehicles Formula: (1,000,000 x Crashes) ÷ (365 x Entering AADT) = MEV								

2 - Golden Bell Street (EB)/Longbeam Way (WB) and Avalon Road (NB/SB) - Crash Report Summary

Collision Type	2021	2022	2023	2024	2025	Total	Average	Percent
Rear End	1	1	0	3	1	6	1.20	66.7%
Angle	1	0	1	0	0	2	0.40	22.2%
Sideswipe	0	0	0	0	0	0	0.00	0.0%
Head-On	0	0	0	0	0	0	0.00	0.0%
Other	0	0	0	0	0	0	0.00	0.0%
Pedestrian	0	1	0	0	0	1	0.20	11.1%
Total Crashes	**2**	**2**	**1**	**3**	**1**	**9**	**1.80**	**100.0%**
Fatal	0	0	0	0	0	0	0.00	0.0%
No Injury	2	0	1	3	1	7	1.40	77.8%
Incapacitating Injury	0	2	0	0	0	2	0.40	22.2%
Property Damage	2	2	1	3	1	9	1.80	100.0%
AADT	18,482	18,577	20,177	20,467	14,200		18,381	
Crash Rate - MVMT (1)	1.10	1.09	0.50	1.49	0.71		0.99	
Statewide Average Crash Rate for a 2-Lane/2-Way Undivided					0.54			
(1) Intersection Million Entering Vehicles Formula: (1,000,000 x Crashes) ÷ (365 x Entering AADT) = MEV								

2 - Golden Bell Street (EB)/Longbeam Way (WB) and Avalon Road (NB/SB) - ICE Report Summary

ICE Traffic Control Alternative	Crash Type		Crash Prediction Rank	Safe System for Intersections Rank
	Fatal & Injury	Total		
2-Way Stop	1.06	2.49	2	3
All-Way Stop	0.82	2.14	1	1
Signal Control	1.52	2.91	3	2

3 - Tucker Ranch Entrance (EB)/Coscester Street (WB) and Avalon Road (NB/SB) - Crash Report Summary

Collision Type	2021	2022	2023	2024	2025	Total	Average	Percent
Rear End	2	3	0	2	3	10	2.00	76.9%
Angle	0	0	1	0	0	1	0.20	7.7%
Sideswipe	0	0	0	0	1	1	0.20	7.7%
Head-On	0	0	0	0	0	0	0.00	0.0%
Other	0	0	1	0	0	1	0.20	7.7%
Pedestrian	0	0	0	0	0	0	0.00	0.0%
Total Crashes	**2**	**3**	**2**	**2**	**4**	**13**	**2.60**	**100.0%**
Fatal	0	0	0	0	0	0	0.00	0.0%
No Injury	0	2	1	1	3	7	1.00	53.9%
Incapacitating Injury	2	1	1	1	1	6	1.20	46.2%
Property Damage	2	3	1	2	4	12	2.00	92.3%
AADT	16,638	17,901	17,820	17,748	12,310		16,483	
Crash Rate - MVMT (1)	1.37	1.91	1.28	1.29	3.71		1.80	
Statewide Average Crash Rate for a 2-Lane/2-Way Undivided					0.54			
(1) Intersection Million Entering Vehicles Formula: (1,000,000 x Crashes) ÷ (365 x Entering AADT) = MEV								

3 - Tucker Ranch Entrance (EB)/Coscester Street (WB) and Avalon Road (NB/SB) - ICE Report Summary

ICE Traffic Control Alternative	Crash Type		Crash Prediction Rank	Safe System for Intersections Rank
	Fatal & Injury	Total		
2-Way Stop	1.21	3.25	2	3
All-Way Stop	0.42	1.18	1	1
Signal Control	1.24	3.65	3	2

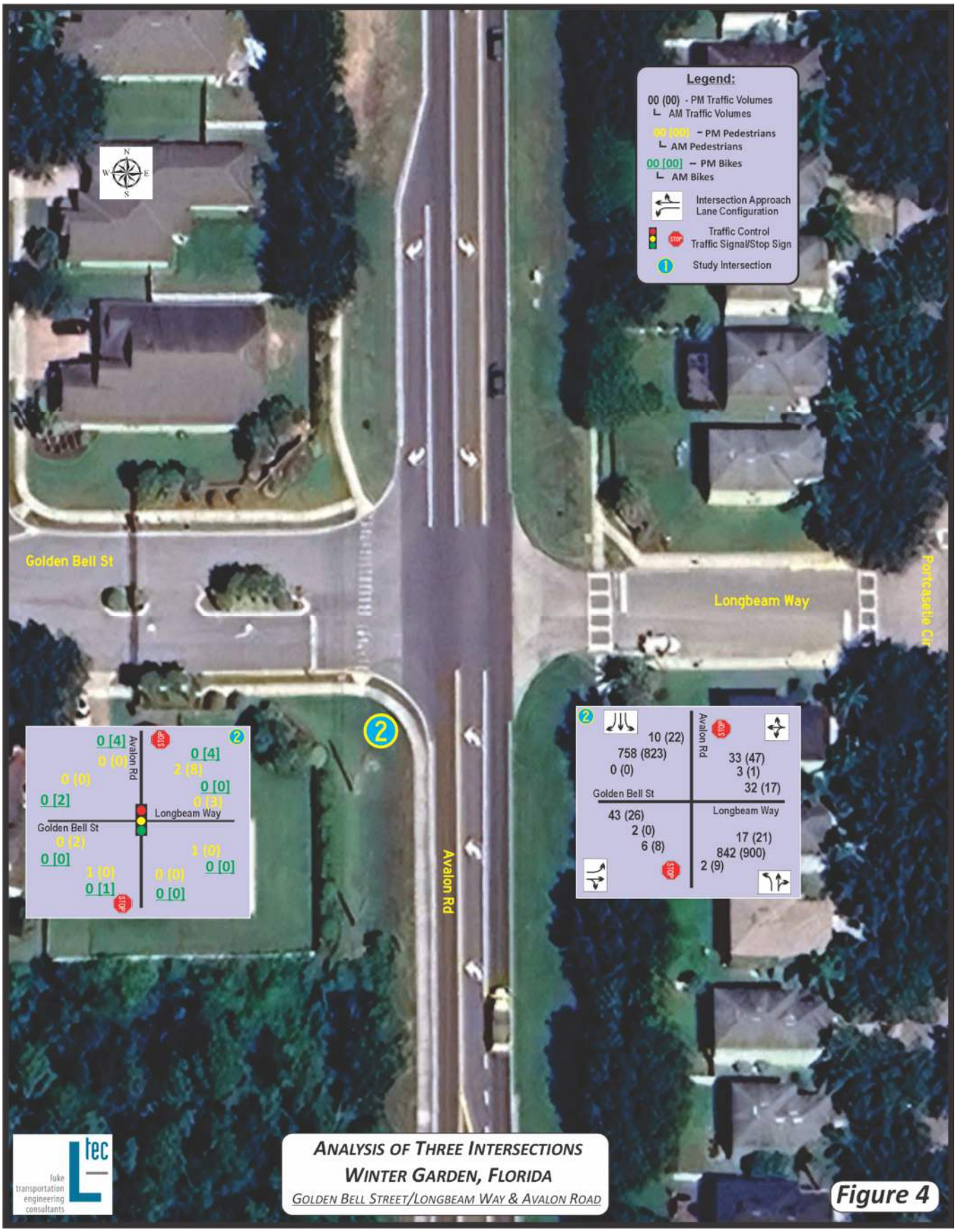
Luke Transportation Engineering Consultants, Inc., 2026

TABLE 3

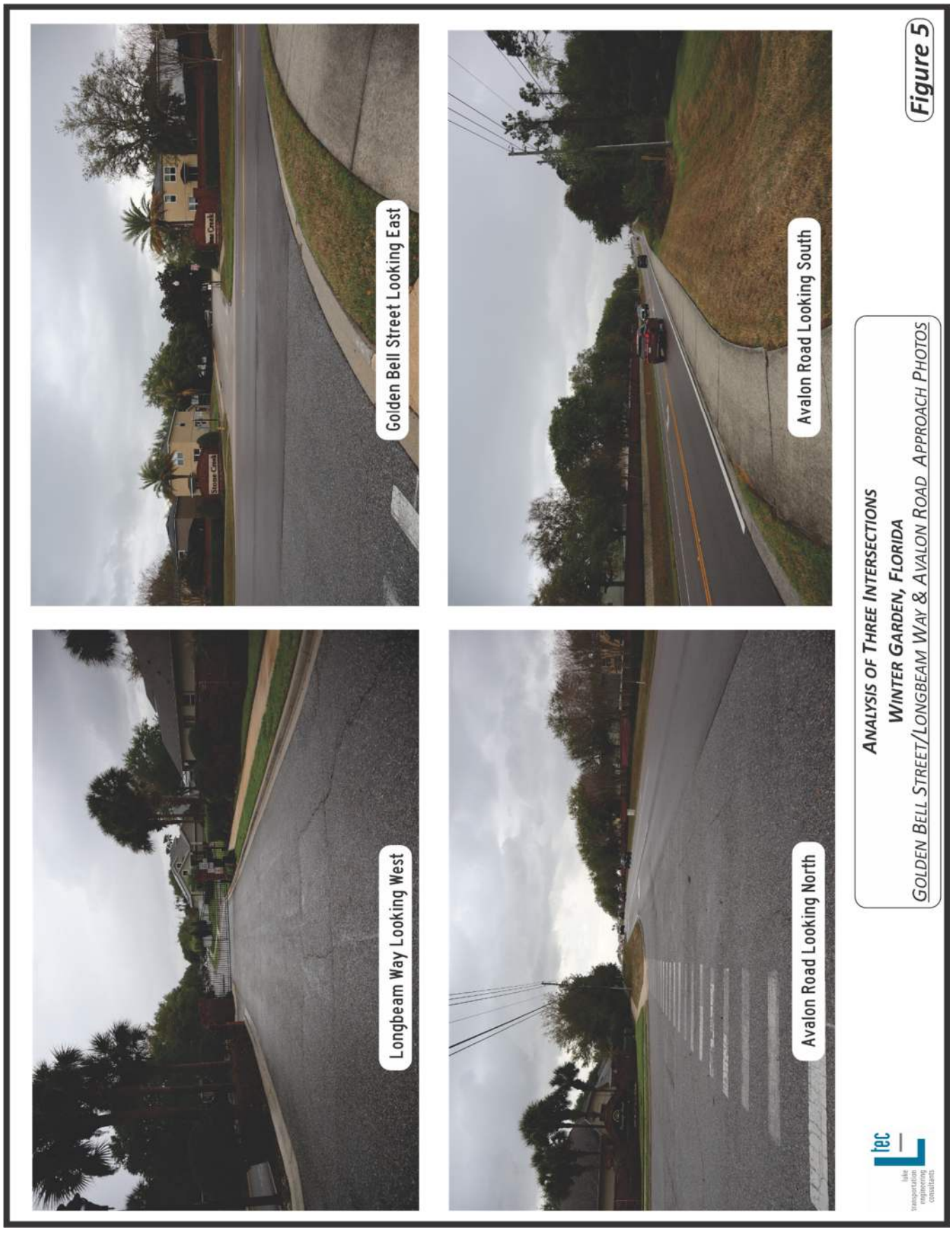
Study Intersections Improve (2026) Level of Service

Approach / Movement		Lanes	Turn Lane Length	Traffic Control	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGr pLOS	95th %ile Queue (Feet)	LnGrp Delay (d) (sec/veh)	LnGrp V/C Ratio	LnGr pLOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
1 - East Story Road (EB/WB) and South Dillard Street (NB/SB) - Split Phasing												
EB	Left	1	130		30.3	0.24	C	95	32.7	0.17	C	83
	Thru	1			57.0	0.89	E	373	46.9	0.83	D	351
	Right	>										
WB	Left	1	145		28.5	0.11	C	54	29.5	0.15	C	83
	Thru	1			194.1	1.31	F	494	44.3	0.84	D	424
	Right	>										
NB	Left	1	180		24.7	0.21	C	36	26.0	0.25	C	50
	Thru	2			30.1	0.61	C	228	32.9	0.69	C	344
	Right	>			30.1	0.61	C		32.9	0.69	C	
SB	Left	1	100		23.3	0.23	C	46	27.9	0.26	C	59
	Thru	2			31.2	0.72	C	271	33.6	0.75	C	387
	Right	>			31.2	0.73	C		33.6	0.75	C	
Intersection Control Delay / LOS					65.7		E		36.1		D	
1 - East Story Road (EB/WB) and South Dillard Street (NB/SB) - New E/W Left Turn Signals												
EB	Left	1	130		20.9	0.40	C	63	18.9	0.26	B	48
	Thru	1			23.6	0.58	C	272	23.4	0.67	C	213
	Right	>										
WB	Left	1	145		18.0	0.12	B	36	18.3	0.23	B	51
	Thru	1			54.9	0.95	D	392	28.8	0.82	C	302
	Right	>										
NB	Left	1	180		20.0	0.19	B	31	16.1	0.19	B	29
	Thru	2			24.6	0.58	C	206	20.8	0.67	C	218
	Right	>			24.6	0.59	C		20.5	0.67	C	
SB	Left	1	100		18.7	0.20	B	41	15.1	0.20	B	34
	Thru	2			25.1	0.69	C	242	20.4	0.71	C	224
	Right	>			25.1	0.69	C		20.4	0.71	C	
Intersection Control Delay / LOS					30.0		C		21.8		C	
Approach / Movement		Lanes	Turn Lane Length	Traffic Control	Control Delay (s) (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)	Control Delay (s) (sec/veh)	Lane V/C Ratio	Lane LOS	95th %ile Queue (Feet)
					A.M. Peak Hour				P.M. Peak Hour			
2 - Golden Bell Street (EB)/Longbeam Way (WB) and Avalon Road (NB/SB) - AWSC												
EB	Left	1	75		15.5	0.150	C	51	15.0	0.088	B	37
	Thru	1			13.1	0.025	B	27	13	0.025	B	36
	Right	>										
WB	Left	<										
	Thru	1			15.4	0.022	C	46	14.7	0.199	B	57
	Right	>										
NB	Left	1	235		10.9	0.005	B	0	10.9	0.022	B	3
	Thru	1			377.1	1.998	F		391.8	2.039	F	
	Right	>										
SB	Left	1	345		11.4	0.026	B	26	11.5	0.056	B	3
	Thru	1			287.0	1.821	F		307.9	1.888	F	
	Right	1	190		10.7	0.00			10.6	0.00		
Intersection Delay / LOS					310.9		F		328.7		F	
Entrance (EB)/Coscester Street (WB) and Avalon Road (NB/SB)												
EB	Left	<										
	Thru	1			11.2	0.018	B	38	11.1	0.058	B	43
	Right	>										
WB	Left	<										
	Thru	1			10.5	0.067	B	58	10.6	0.060	B	54
	Right	>										
NB	Left	<										
	Thru	1			131.5	1.234	F	258	84.9	1.137	F	210
	Right	>										
SB	Left	<										
	Thru	1			69.7	1.087	F	288	125.8	1.219	F	213
	Right	>										
Intersection Delay / LOS					100.5		F		103.2		F	

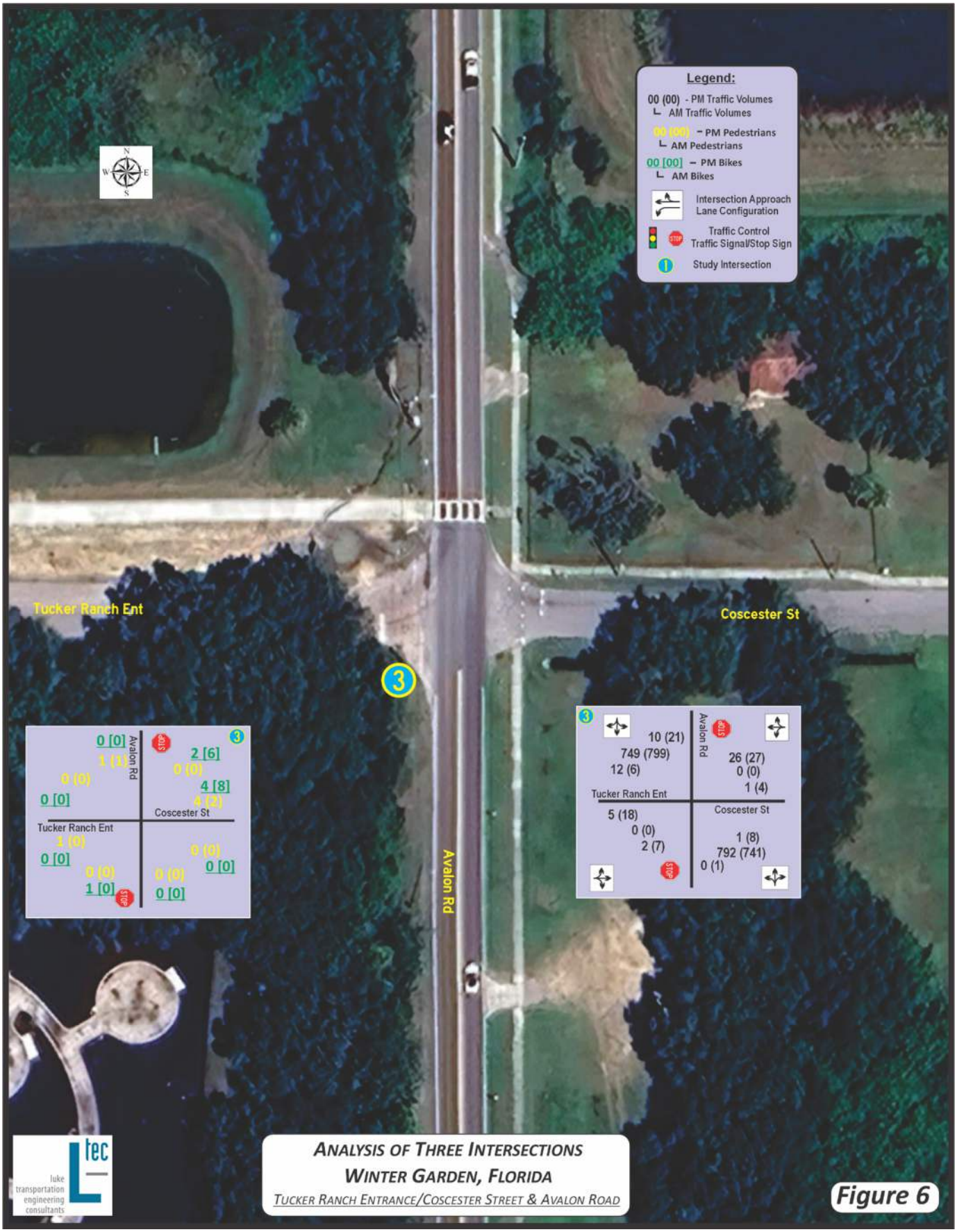
Luke Transportation Engineering Consultants, Inc., 2026



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com


Legend:
00 (00) - PM Traffic Volumes
AM Traffic Volumes
00 [00] - PM Pedestrians
AM Pedestrians
00 [00] - PM Bikes
AM Bikes
Intersection Approach Lane Configuration
Traffic Control Traffic Signal/Stop Sign
Study Intersection
Tucker Ranch Ent
Coscester St
Avalon Rd
0 [0]
1 (1)
0 (0)
0 [0]
2 [6]
0 (0)
4 [8]
4 (2)
Tucker Ranch Ent
1 (0)
0 [0]
0 (0)
1 [0]
0 (0)
0 [0]
0 (0)
0 [0]
Coscester St
10 (21)
749 (799)
12 (6)
26 (27)
0 (0)
1 (4)
5 (18)
0 (0)
2 (7)
1 (8)
792 (741)
0 (1)
ANALYSIS OF THREE INTERSECTIONS
WINTER GARDEN, FLORIDA
TUCKER RANCH ENTRANCE/COSCESTER STREET & AVALON ROAD
Figure 6



[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

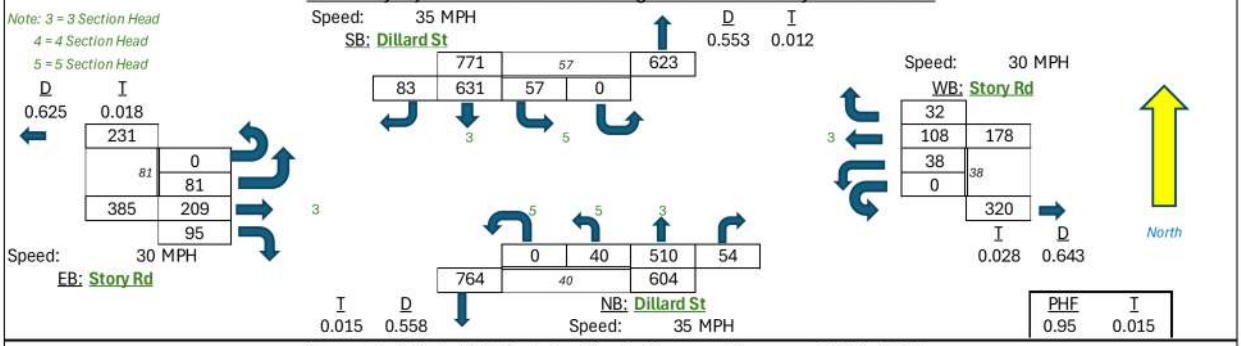
Attachment A

Summary of Vehicle Movements

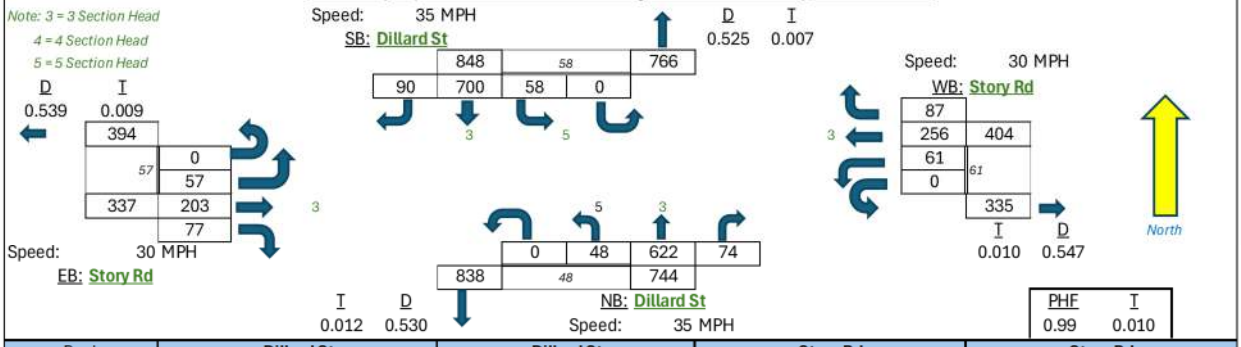
Luke Transportation Engineering Consultants

Project:	WG 3 Intersections		LTEC 25-0204		
N/S Road:	Dillard St	**Observer:**	LTEC		
E/W Road:	Story Rd	**Weather:**	Clear		
Date:	Tuesday, January 20, 2026	**Rd Condition:**	Ok		
City:	Winter Garden	**Signal:**	Yes	**Latitude:**	28°33'30.11"N
County:	Orange	**Major St Movement:**	-	**Longitude:**	81°35'0.91"W
FDOT SF:	1.02 (Note: If SF<1,default to 1.0)	**PM Pk Hr Factor:**	0.99	**Station #:**	1

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:45 - 08:45



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 16:30 - 17:30



Peak Hour Time Interval		Dillard St Northbound				Dillard St Southbound				Story Rd Eastbound				Story Rd Westbound			
		Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes		1		2	>	1		2	>	1		1	>	1		1	>
Length		180				100				130							145
7:00	7:15	0	5	69	5	0	8	107	10	0	22	40	21	0	3	12	1
7:15	7:30	0	5	80	14	0	8	121	20	0	21	34	14	0	3	21	5
7:30	7:45	0	5	99	10	0	10	137	16	0	21	50	15	0	6	21	4
7:45	8:00	0	8	142	13	0	14	150	14	0	22	55	21	0	3	24	9
Hourly Sum		0	23	390	42	0	40	515	60	0	86	179	71	0	15	78	19
8:00	8:15	0	11	120	15	0	11	158	24	0	18	53	23	0	12	25	8
8:15	8:30	0	12	133	19	0	11	156	24	0	17	56	23	0	14	32	5
8:30	8:45	0	8	105	6	0	20	155	19	0	22	41	26	0	8	25	9
8:45	9:00	0	13	135	7	1	9	111	14	0	18	54	23	0	8	32	11
Hourly Sum		0	44	493	47	1	51	580	81	0	75	204	95	0	42	114	33
16:00	16:15	0	20	123	17	0	9	165	15	0	12	45	18	0	20	56	15
16:15	16:30	0	10	141	11	1	10	173	14	0	18	53	25	0	13	62	17
16:30	16:45	0	10	143	16	0	14	180	25	0	16	60	13	0	10	79	14
16:45	17:00	0	5	175	15	0	13	156	19	0	18	55	21	0	17	62	24
Hourly Sum		0	45	582	59	1	46	674	73	0	64	213	77	0	60	259	70
17:00	17:15	0	19	131	20	0	25	185	23	0	9	32	21	0	14	64	20
17:15	17:30	0	13	161	22	0	5	165	21	0	13	52	20	0	19	46	27
17:30	17:45	0	12	134	12	0	8	143	19	0	17	55	21	0	17	93	23
17:45	18:00	0	15	166	12	0	9	136	7	0	10	53	21	0	25	108	13
Hourly Sum		0	59	592	66	0	47	629	70	0	49	192	83	0	75	311	83
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
7:45	**8:45**	0	40	510	54	0	57	631	83	0	81	209	95	0	38	108	32
% Turns		0	6.6%	84.4%	8.9%	0	7.4%	81.8%	10.8%	0	21.0%	54.3%	24.7%	0	21.3%	60.7%	18.0%
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
16:30	**17:30**	0	48	622	74	0	58	700	90	0	57	203	77	0	61	256	87
% Turns		0	6.5%	83.6%	9.9%	0	6.8%	82.5%	10.6%	0	16.9%	60.2%	22.8%	0	15.1%	63.4%	21.5%

Luke Transportation Engineering Consultants, 2026

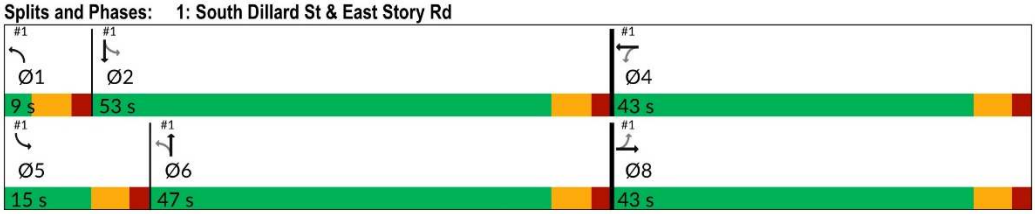
Timings
1: South Dillard St & East Story Rd

AM
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	209	38	108	40	510	57	631
Future Volume (vph)	81	209	38	108	40	510	57	631
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	25.0	25.0	25.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	43.0	43.0	43.0	43.0	9.0	47.0	15.0	53.0
Total Split (%)	41.0%	41.0%	41.0%	41.0%	8.6%	44.8%	14.3%	50.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	21.1	21.1	21.1	21.1	23.0	21.5	28.5	24.3
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.36	0.34	0.45	0.38
v/c Ratio	0.47	0.53	0.14	0.70	0.16	0.51	0.14	0.58
Control Delay (s/veh)	29.3	20.6	18.7	19.2	13.1	21.0	11.7	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.3	20.6	18.7	19.2	13.1	21.0	11.7	18.8
LOS	C	C	B	B	B	C	B	B
Approach Delay (s/veh)		22.5		19.2		20.5		18.2
Approach LOS		C		B		C		B

Intersection Summary	
Cycle Length: 105	
Actuated Cycle Length: 63.2	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay (s/veh): 19.8	Intersection LOS: B
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



AM AM Peak Hour 9:29 am 03/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 1

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Queues AM

1: South Dillard St & East Story Rd AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	85	320	40	456	42	594	60	751
v/c Ratio	0.47	0.53	0.14	0.70	0.16	0.51	0.14	0.58
Control Delay (s/veh)	29.3	20.6	18.7	19.2	13.1	21.0	11.7	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.3	20.6	18.7	19.2	13.1	21.0	11.7	18.8
Queue Length 50th (ft)	28	100	12	107	8	105	12	123
Queue Length 95th (ft)	82	203	38	244	31	203	40	236
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	354	1169	571	1125	269	2375	445	2588
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.27	0.07	0.41	0.16	0.25	0.13	0.29

Intersection Summary

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

AM
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Future Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	220	100	40	114	342	42	537	57	60	664	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	250	475	216	374	159	478	250	959	102	323	1013	133
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.03	0.30	0.30	0.05	0.32	0.32
Sat Flow, veh/h	935	1217	553	1051	409	1226	1781	3242	343	1781	3159	413
Grp Volume(v), veh/h	85	0	320	40	0	456	42	294	300	60	373	378
Grp Sat Flow(s),veh/h/ln	935	0	1771	1051	0	1635	1781	1777	1809	1781	1777	1796
Q Serve(g_s), s	5.8	0.0	9.2	2.0	0.0	16.1	1.1	9.5	9.5	1.6	12.3	12.3
Cycle Q Clear(g_c), s	21.8	0.0	9.2	11.2	0.0	16.1	1.1	9.5	9.5	1.6	12.3	12.3
Prop In Lane	1.00		0.31	1.00		0.75	1.00		0.19	1.00		0.23
Lane Grp Cap(c), veh/h	250	0	690	374	0	637	250	526	535	323	570	576
V/C Ratio(X)	0.34	0.00	0.46	0.11	0.00	0.72	0.17	0.56	0.56	0.19	0.65	0.66
Avail Cap(c_a), veh/h	393	0	963	536	0	889	284	1070	1089	469	1227	1240
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	15.5	19.6	0.0	17.6	17.0	20.2	20.2	15.8	19.9	19.9
Incr Delay (d2), s/veh	1.1	0.0	0.7	0.2	0.0	2.3	0.4	1.3	1.3	0.4	1.8	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.5	0.5	0.0	5.9	0.4	3.8	3.9	0.6	4.9	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.9	0.0	16.2	19.8	0.0	19.8	17.4	21.5	21.5	16.2	21.7	21.7
LnGrp LOS	C		B	B		B	B	C	C	B	C	C
Approach Vol, veh/h		405			496			636			811	
Approach Delay, s/veh		18.6			19.8			21.3			21.3	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	27.8		32.5	9.4	26.1		32.5				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	3.0	47.0		37.0	9.0	41.0		37.0				
Max Q Clear Time (g_c+I1), s	3.1	14.3		18.1	3.6	11.5		23.8				
Green Ext Time (p_c), s	0.0	7.5		4.4	0.1	5.5		2.7				
Intersection Summary												
HCM 7th Control Delay, s/veh			20.5									
HCM 7th LOS			C									

AM AM Peak Hour 9:29 am 03/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC AM
2: Avalon Rd & Golden Bell St/Longbeam Way AM Peak Hour

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Future Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	-	-	-	235	-	-	345	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	2	7	36	3	37	2	946	19	11	852	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1826	1844	852	1835	1834	956	852	0	0	965	0	0
Stage 1	874	874	-	960	960	-	-	-	-	-	-	-
Stage 2	952	970	-	875	874	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	59	75	360	58	76	313	787	-	-	713	-	-
Stage 1	344	367	-	308	335	-	-	-	-	-	-	-
Stage 2	312	332	-	344	367	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	74	360	56	75	313	787	-	-	713	-	-
Mov Cap-2 Maneuver	157	188	-	170	192	-	-	-	-	-	-	-
Stage 1	339	361	-	307	334	-	-	-	-	-	-	-
Stage 2	271	331	-	330	361	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	34.71	29.83	0.02	0.13
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	787	-	-	157	293	220	713	-	-
HCM Lane V/C Ratio	0.003	-	-	0.308	0.031	0.347	0.016	-	-
HCM Ctrl Dly (s/v)	9.6	-	-	37.9	17.7	29.8	10.1	-	-
HCM Lane LOS	A	-	-	E	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.1	1.5	0	-	-

AM AM Peak Hour 9:29 am 03/13/2026 Jan 2026 Synchro 12 Report
JTR Page 4

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC AM
3: Avalon Rd & Tucker Ranch Park/Coscester St AM Peak Hour

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Future Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	100	100	100
Heavy Vehicles, %	27	27	27	3	3	3	2	2	2	2	2	2
Mvmt Flow	6	0	2	5	0	30	0	900	1	10	749	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1675	1676	755	1670	1682	901	761	0	0	901	0	0
Stage 1	775	775	-	901	901	-	-	-	-	-	-	-
Stage 2	900	901	-	769	781	-	-	-	-	-	-	-
Critical Hdwy	7.37	6.77	6.47	7.13	6.53	6.23	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.37	5.77	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.37	5.77	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.743	4.243	3.543	3.527	4.027	3.327	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	66	83	371	76	94	335	851	-	-	754	-	-
Stage 1	355	374	-	332	356	-	-	-	-	-	-	-
Stage 2	301	325	-	392	404	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	59	81	371	74	92	335	851	-	-	754	-	-
Mov Cap-2 Maneuver	59	81	-	74	92	-	-	-	-	-	-	-
Stage 1	347	365	-	332	356	-	-	-	-	-	-	-
Stage 2	275	325	-	381	395	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	56.9	23.57	0	0.13
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	851	-	-	77	228	23	-	-
HCM Lane V/C Ratio	-	-	-	0.103	0.15	0.013	-	-
HCM Ctrl Dly (s/v)	0	-	-	56.9	23.6	9.8	0	-
HCM Lane LOS	A	-	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.5	0	-	-

Timings
1: South Dillard St & East Story Rd

PM
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	203	61	256	48	622	58	700
Future Volume (vph)	57	203	61	256	48	622	58	700
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	25.0	25.0	25.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	50.0	50.0	50.0	50.0	30.0	50.0	30.0	50.0
Total Split (%)	38.5%	38.5%	38.5%	38.5%	23.1%	38.5%	23.1%	38.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	22.7	22.7	22.7	22.7	32.6	26.7	34.9	30.3
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.44	0.36	0.47	0.41
v/c Ratio	0.26	0.50	0.22	0.62	0.13	0.57	0.15	0.57
Control Delay (s/veh)	26.0	25.5	24.7	28.8	10.8	22.2	10.7	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.0	25.5	24.7	28.8	10.8	22.2	10.7	20.5
LOS	C	C	C	C	B	C	B	C
Approach Delay (s/veh)		25.6		28.2		21.4		19.8
Approach LOS		C		C		C		B

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 73.6	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay (s/veh): 22.6	Intersection LOS: C
Intersection Capacity Utilization 70.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



Queues PM

1: South Dillard St & East Story Rd PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	283	62	347	48	703	59	798
v/c Ratio	0.26	0.50	0.22	0.62	0.13	0.57	0.15	0.57
Control Delay (s/veh)	26.0	25.5	24.7	28.8	10.8	22.2	10.7	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.0	25.5	24.7	28.8	10.8	22.2	10.7	20.5
Queue Length 50th (ft)	21	105	22	139	10	140	12	162
Queue Length 95th (ft)	63	219	64	280	32	242	37	277
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	470	1151	577	1143	716	2164	715	2161
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.25	0.11	0.30	0.07	0.32	0.08	0.37

Intersection Summary

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

PM
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Future Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	205	78	62	259	88	48	628	75	59	707	91
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	265	395	150	314	405	138	292	1065	127	344	1129	145
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.03	0.33	0.33	0.05	0.36	0.36
Sat Flow, veh/h	1034	1291	491	1087	1325	450	1781	3197	381	1781	3167	407
Grp Volume(v), veh/h	58	0	283	62	0	347	48	349	354	59	396	402
Grp Sat Flow(s),veh/h/ln	1034	0	1782	1087	0	1775	1781	1777	1802	1781	1777	1797
Q Serve(g_s), s	3.0	0.0	7.7	2.9	0.0	9.9	1.0	9.5	9.5	1.2	10.8	10.8
Cycle Q Clear(g_c), s	12.8	0.0	7.7	10.6	0.0	9.9	1.0	9.5	9.5	1.2	10.8	10.8
Prop In Lane	1.00		0.28	1.00		0.25	1.00		0.21	1.00		0.23
Lane Grp Cap(c), veh/h	265	0	545	314	0	543	292	592	600	344	633	641
V/C Ratio(X)	0.22	0.00	0.52	0.20	0.00	0.64	0.16	0.59	0.59	0.17	0.63	0.63
Avail Cap(c_a), veh/h	728	0	1343	800	0	1337	972	1339	1358	982	1339	1354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	16.7	21.1	0.0	17.5	13.0	16.2	16.2	12.2	15.6	15.6
Incr Delay (d2), s/veh	0.6	0.0	1.1	0.4	0.0	1.8	0.4	1.3	1.3	0.3	1.5	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	3.0	0.7	0.0	3.9	0.4	3.6	3.6	0.4	4.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.6	0.0	17.8	21.5	0.0	19.3	13.4	17.5	17.5	12.6	17.0	17.0
LnGrp LOS	C		B	C		B	B	B	B	B	B	B
Approach Vol, veh/h		341			409			751			857	
Approach Delay, s/veh		18.8			19.6			17.2			16.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	26.8		23.9	9.1	25.4		23.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	24.0	44.0		44.0	24.0	44.0		44.0				
Max Q Clear Time (g_c+I1), s	3.0	12.8		12.6	3.2	11.5		14.8				
Green Ext Time (p_c), s	0.1	8.0		3.8	0.2	6.9		3.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			17.7									
HCM 7th LOS			B									

PM PM Peak Hour 9:59 am 03/03/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC PM
2: Avalon Rd & Golden Bell St/Longbeam Way PM Peak Hour

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Future Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	-	-	-	235	-	-	345	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	9	18	1	51	10	978	23	24	895	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1941	1963	895	1952	1952	990	895	0	0	1001	0	0
Stage 1	942	942	-	1009	1009	-	-	-	-	-	-	-
Stage 2	998	1021	-	942	942	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	48	62	334	48	64	299	758	-	-	692	-	-
Stage 1	310	336	-	289	318	-	-	-	-	-	-	-
Stage 2	289	309	-	315	341	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	59	334	45	61	299	758	-	-	692	-	-
Mov Cap-2 Maneuver	130	164	-	151	172	-	-	-	-	-	-	-
Stage 1	300	325	-	286	314	-	-	-	-	-	-	-
Stage 2	235	305	-	297	330	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	34.61	26.64	0.09	0.27
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	758	-	-	130	334	236	692	-	-
HCM Lane V/C Ratio	0.013	-	-	0.218	0.026	0.299	0.035	-	-
HCM Ctrl Dly (s/v)	9.8	-	-	40.3	16.1	26.6	10.4	-	-
HCM Lane LOS	A	-	-	E	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	1.2	0.1	-	-

PM PM Peak Hour 9:59 am 03/03/2026 Jan 2026 Synchro 12 Report
JTR Page 4

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC PM
3: Avalon Rd & Tucker Ranch Park/Coscester St PM Peak Hour

Intersection												
Int Delay, s/veh	1.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⚜			⚜			⚜			⚜	
Traffic Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Future Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	92	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	19	0	7	1	0	29	1	788	9	22	850	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1688	1697	853	1689	1696	793	856	0	0	797	0	0
Stage 1	898	898	-	795	795	-	-	-	-	-	-	-
Stage 2	790	799	-	895	901	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.14	6.54	6.24	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.536	4.036	3.336	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	74	92	359	73	92	386	784	-	-	825	-	-
Stage 1	334	358	-	378	397	-	-	-	-	-	-	-
Stage 2	383	398	-	333	354	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	65	87	359	68	87	386	784	-	-	825	-	-
Mov Cap-2 Maneuver	65	87	-	68	87	-	-	-	-	-	-	-
Stage 1	317	340	-	377	396	-	-	-	-	-	-	-
Stage 2	354	397	-	309	336	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	66.36	17.02	0.01	0.24
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	2	-	-	84	329	46	-	-
HCM Lane V/C Ratio	0.001	-	-	0.316	0.091	0.027	-	-
HCM Ctrl Dly (s/v)	9.6	0	-	66.4	17	9.5	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.3	0.1	-	-

PM PM Peak Hour 9:59 am 03/03/2026 Jan 2026 Synchro 12 Report
JTR Page 5

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

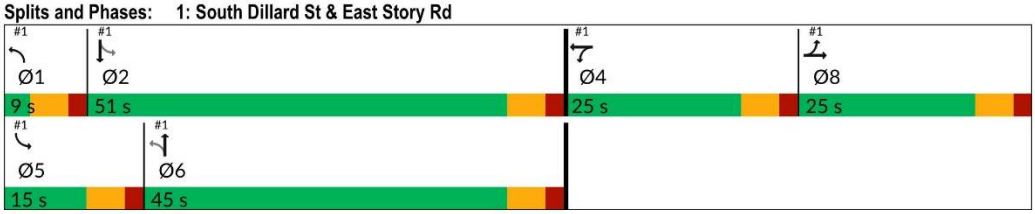
Timings
1: South Dillard St & East Story Rd

AM Split
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	209	38	108	40	510	57	631
Future Volume (vph)	81	209	38	108	40	510	57	631
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8	8	4	4	1	6	5	2
Permitted Phases					6		2	
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	25.0	25.0	25.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	25.0	25.0	25.0	25.0	9.0	45.0	15.0	51.0
Total Split (%)	22.7%	22.7%	22.7%	22.7%	8.2%	40.9%	13.6%	46.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	19.2	19.2	19.2	19.2	26.3	24.0	35.1	30.1
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.29	0.26	0.38	0.33
v/c Ratio	0.23	0.83	0.11	1.05	0.24	0.67	0.22	0.67
Control Delay (s/veh)	35.4	54.5	33.9	84.7	20.8	34.2	18.6	29.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	54.5	33.9	84.7	20.8	34.2	18.6	29.6
LOS	D	D	C	F	C	C	B	C
Approach Delay (s/veh)		50.5		80.6		33.4		28.8
Approach LOS		D		F		C		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 91.8	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay (s/veh): 44.7	Intersection LOS: D
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



AM Split AM Peak Hour 8:50 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 1

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Queues
1: South Dillard St & East Story Rd

AM Split
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	85	320	40	456	42	594	60	751
v/c Ratio	0.23	0.83	0.11	1.05	0.24	0.67	0.22	0.67
Control Delay (s/veh)	35.4	54.5	33.9	84.7	20.8	34.2	18.6	29.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	54.5	33.9	84.7	20.8	34.2	18.6	29.6
Queue Length 50th (ft)	44	179	20	~250	15	168	22	206
Queue Length 95th (ft)	95	#373	54	#494	36	228	46	271
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	370	386	367	436	176	1455	290	1675
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.83	0.11	1.05	0.24	0.41	0.21	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

AM Split
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Future Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	220	100	40	114	342	42	537	57	60	664	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	361	247	112	376	87	261	198	883	93	263	917	120
Arrive On Green	0.20	0.20	0.20	0.21	0.21	0.21	0.03	0.27	0.27	0.04	0.29	0.29
Sat Flow, veh/h	1781	1217	553	1767	409	1226	1781	3242	343	1781	3159	413
Grp Volume(v), veh/h	85	0	320	40	0	456	42	294	300	60	373	378
Grp Sat Flow(s),veh/h/ln	1781	0	1771	1767	0	1635	1781	1777	1809	1781	1777	1796
Q Serve(g_s), s	3.6	0.0	15.7	1.6	0.0	19.0	1.5	12.9	12.9	2.1	16.8	16.9
Cycle Q Clear(g_c), s	3.6	0.0	15.7	1.6	0.0	19.0	1.5	12.9	12.9	2.1	16.8	16.9
Prop In Lane	1.00		0.31	1.00		0.75	1.00		0.19	1.00		0.23
Lane Grp Cap(c), veh/h	361	0	359	376	0	348	198	484	493	263	516	521
V/C Ratio(X)	0.24	0.00	0.89	0.11	0.00	1.31	0.21	0.61	0.61	0.23	0.72	0.73
Avail Cap(c_a), veh/h	379	0	377	376	0	348	212	776	790	365	896	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	34.6	28.3	0.0	35.1	23.9	28.3	28.3	22.6	28.5	28.5
Incr Delay (d2), s/veh	0.5	0.0	22.4	0.2	0.0	158.9	0.8	1.8	1.7	0.6	2.8	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	13.7	1.3	0.0	34.8	1.2	9.3	9.5	1.6	11.6	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.3	0.0	57.0	28.5	0.0	194.1	24.7	30.1	30.1	23.3	31.2	31.2
LnGrp LOS	C		E	C		F	C	C	C	C	C	C
Approach Vol, veh/h		405			496			636			811	
Approach Delay, s/veh		51.4			180.7			29.7			30.6	
Approach LOS		D			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	31.9		25.0	9.9	30.3		24.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	3.0	45.0		19.0	9.0	39.0		19.0				
Max Q Clear Time (g_c+I1), s	3.5	18.9		21.0	4.1	14.9		17.7				
Green Ext Time (p_c), s	0.0	7.0		0.0	0.1	5.2		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	65.7
HCM 7th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

AM Split AM Peak Hour 8:50 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Timings
1: South Dillard St & East Story Rd

PM Split
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	203	61	256	48	622	58	700
Future Volume (vph)	57	203	61	256	48	622	58	700
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8	8	4	4	1	6	5	2
Permitted Phases					6		2	
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	25.0	25.0	25.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	32.0	32.0	37.0	37.0	12.0	46.0	15.0	49.0
Total Split (%)	24.6%	24.6%	28.5%	28.5%	9.2%	35.4%	11.5%	37.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	22.3	22.3	26.6	26.6	37.3	32.9	41.3	34.9
Actuated g/C Ratio	0.20	0.20	0.24	0.24	0.33	0.29	0.37	0.31
v/c Ratio	0.16	0.77	0.15	0.81	0.25	0.70	0.25	0.75
Control Delay (s/veh)	43.0	58.2	38.8	56.3	26.0	40.6	25.1	40.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.0	58.2	38.8	56.3	26.0	40.6	25.1	40.5
LOS	D	E	D	E	C	D	C	D
Approach Delay (s/veh)		55.6		53.7		39.7		39.5
Approach LOS		E		D		D		D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 111.6	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay (s/veh): 44.3	Intersection LOS: D
Intersection Capacity Utilization 70.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



PM Split PM Peak Hour 8:50 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 1

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Queues
1: South Dillard St & East Story Rd

PM Split
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	283	62	347	48	703	59	798
v/c Ratio	0.16	0.77	0.15	0.81	0.25	0.70	0.25	0.75
Control Delay (s/veh)	43.0	58.2	38.8	56.3	26.0	40.6	25.1	40.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.0	58.2	38.8	56.3	26.0	40.6	25.1	40.5
Queue Length 50th (ft)	39	210	40	258	24	270	29	307
Queue Length 95th (ft)	83	#351	83	#424	50	344	59	387
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	436	450	514	530	189	1283	250	1377
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.63	0.12	0.65	0.25	0.55	0.24	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

PM Split
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Future Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	205	78	62	259	88	48	628	75	59	707	91
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	341	247	94	411	308	105	191	909	108	230	939	121
Arrive On Green	0.19	0.19	0.19	0.23	0.23	0.23	0.03	0.28	0.28	0.04	0.30	0.30
Sat Flow, veh/h	1781	1291	491	1767	1325	450	1781	3197	381	1781	3167	407
Grp Volume(v), veh/h	58	0	283	62	0	347	48	349	354	59	396	402
Grp Sat Flow(s),veh/h/ln	1781	0	1782	1767	0	1775	1781	1777	1802	1781	1777	1797
Q Serve(g_s), s	2.6	0.0	14.6	2.7	0.0	17.9	1.8	16.7	16.8	2.2	19.3	19.4
Cycle Q Clear(g_c), s	2.6	0.0	14.6	2.7	0.0	17.9	1.8	16.7	16.8	2.2	19.3	19.4
Prop In Lane	1.00		0.28	1.00		0.25	1.00		0.21	1.00		0.23
Lane Grp Cap(c), veh/h	341	0	341	411	0	412	191	505	512	230	527	533
V/C Ratio(X)	0.17	0.00	0.83	0.15	0.00	0.84	0.25	0.69	0.69	0.26	0.75	0.75
Avail Cap(c_a), veh/h	484	0	484	572	0	575	251	742	753	324	798	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	37.2	29.2	0.0	35.1	25.1	30.5	30.5	24.1	30.5	30.5
Incr Delay (d2), s/veh	0.3	0.0	9.7	0.2	0.0	9.3	1.0	2.4	2.4	0.8	3.1	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	7.2	1.2	0.0	8.6	0.8	7.3	7.4	1.0	8.4	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.7	0.0	46.9	29.5	0.0	44.3	26.0	32.9	32.9	24.9	33.6	33.6
LnGrp LOS	C		D	C		D	C	C	C	C	C	C
Approach Vol, veh/h		341			409			751			857	
Approach Delay, s/veh		44.5			42.1			32.5			33.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	34.4		28.2	10.0	33.2		24.3				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	6.0	43.0		31.0	9.0	40.0		26.0				
Max Q Clear Time (g_c+I1), s	3.8	21.4		19.9	4.2	18.8		16.6				
Green Ext Time (p_c), s	0.0	7.0		2.4	0.1	6.0		1.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	36.1
HCM 7th LOS	D

PM Split PM Peak Hour 8:50 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Timings
1: South Dillard St & East Story Rd

AM E_W Lt
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	209	38	108	40	510	57	631
Future Volume (vph)	81	209	38	108	40	510	57	631
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	3	8	7	4	1	6	5	2
Permitted Phases	8		4		6		2	
Detector Phase	3	8	7	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	15.0	25.0	15.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	15.0	28.0	15.0	28.0	9.0	42.0	15.0	48.0
Total Split (%)	15.0%	28.0%	15.0%	28.0%	9.0%	42.0%	15.0%	48.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	30.3	25.7	27.7	22.5	24.3	22.1	32.5	27.9
Actuated g/C Ratio	0.39	0.33	0.35	0.29	0.31	0.28	0.42	0.36
v/c Ratio	0.31	0.54	0.10	0.80	0.20	0.62	0.18	0.62
Control Delay (s/veh)	19.4	28.7	16.9	34.0	16.9	28.7	15.3	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.4	28.7	16.9	34.0	16.9	28.7	15.3	24.0
LOS	B	C	B	C	B	C	B	C
Approach Delay (s/veh)		26.8		32.6		27.9		23.3
Approach LOS		C		C		C		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 78.3	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay (s/veh): 27.1	Intersection LOS: C
Intersection Capacity Utilization 73.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



AM E_W Lt AM Peak Hour 8:57 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 1

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Queues
1: South Dillard St & East Story Rd

AM E_W Lt
AM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	85	320	40	456	42	594	60	751
v/c Ratio	0.31	0.54	0.10	0.80	0.20	0.62	0.18	0.62
Control Delay (s/veh)	19.4	28.7	16.9	34.0	16.9	28.7	15.3	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.4	28.7	16.9	34.0	16.9	28.7	15.3	24.0
Queue Length 50th (ft)	27	140	12	168	13	146	18	177
Queue Length 95th (ft)	63	#272	36	#392	31	206	41	242
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	309	618	427	587	209	1662	346	1933
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.52	0.09	0.78	0.20	0.36	0.17	0.39

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

AM E_W Lt
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Future Volume (veh/h)	81	209	95	38	108	325	40	510	54	57	631	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	220	100	40	114	342	42	537	57	60	664	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	214	379	172	330	120	360	227	918	97	296	965	126
Arrive On Green	0.06	0.31	0.31	0.04	0.29	0.29	0.03	0.28	0.28	0.05	0.31	0.31
Sat Flow, veh/h	1781	1217	553	1767	409	1226	1781	3242	343	1781	3159	413
Grp Volume(v), veh/h	85	0	320	40	0	456	42	294	300	60	373	378
Grp Sat Flow(s),veh/h/ln	1781	0	1771	1767	0	1635	1781	1777	1809	1781	1777	1796
Q Serve(g_s), s	2.4	0.0	11.4	1.2	0.0	20.5	1.3	10.6	10.7	1.7	13.8	13.9
Cycle Q Clear(g_c), s	2.4	0.0	11.4	1.2	0.0	20.5	1.3	10.6	10.7	1.7	13.8	13.9
Prop In Lane	1.00		0.31	1.00		0.75	1.00		0.19	1.00		0.23
Lane Grp Cap(c), veh/h	214	0	551	330	0	480	227	503	512	296	543	549
V/C Ratio(X)	0.40	0.00	0.58	0.12	0.00	0.95	0.19	0.58	0.59	0.20	0.69	0.69
Avail Cap(c_a), veh/h	329	0	551	476	0	480	253	854	869	426	996	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	21.7	17.8	0.0	25.9	19.4	23.1	23.1	18.2	22.9	22.9
Incr Delay (d2), s/veh	1.2	0.0	1.9	0.2	0.0	29.0	0.6	1.5	1.5	0.5	2.2	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.8	0.5	0.0	11.3	0.5	4.4	4.5	0.7	5.7	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.9	0.0	23.6	18.0	0.0	54.9	20.0	24.6	24.6	18.7	25.1	25.1
LnGrp LOS	C		C	B		D	B	C	C	B	C	C
Approach Vol, veh/h		405			496			636			811	
Approach Delay, s/veh		23.0			51.9			24.3			24.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	28.9	10.1	28.0	9.6	27.2	8.8	29.3
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	42.0	9.0	22.0	9.0	36.0	9.0	22.0
Max Q Clear Time (g_c+I1), s	3.3	15.9	4.4	22.5	3.7	12.7	3.2	13.4
Green Ext Time (p_c), s	0.0	7.0	0.1	0.0	0.1	5.1	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	30.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

AM E_W Lt AM Peak Hour 8:57 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Timings
1: South Dillard St & East Story Rd

PM E_W Lt
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	203	61	256	48	622	58	700
Future Volume (vph)	57	203	61	256	48	622	58	700
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	3	8	7	4	1	6	5	2
Permitted Phases	8		4		6		2	
Detector Phase	3	8	7	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	2.0	7.0	2.0	7.0	2.0	15.0	5.0	15.0
Minimum Split (s)	8.0	25.0	8.0	25.0	8.0	45.0	15.0	45.0
Total Split (s)	8.0	27.0	8.0	27.0	9.0	45.0	15.0	51.0
Total Split (%)	8.4%	28.4%	8.4%	28.4%	9.5%	47.4%	15.8%	53.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	18.9	17.4	20.5	19.5	24.0	22.5	28.8	24.9
Actuated g/C Ratio	0.29	0.26	0.31	0.30	0.36	0.34	0.44	0.38
v/c Ratio	0.24	0.58	0.21	0.65	0.21	0.61	0.18	0.62
Control Delay (s/veh)	21.3	28.3	20.7	30.1	13.6	22.5	12.1	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.3	28.3	20.7	30.1	13.6	22.5	12.1	20.1
LOS	C	C	C	C	B	C	B	C
Approach Delay (s/veh)		27.1		28.7		22.0		19.5
Approach LOS		C		C		C		B

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 66	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay (s/veh): 23.0	Intersection LOS: C
Intersection Capacity Utilization 67.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: South Dillard St & East Story Rd



PM E_W Lt PM Peak Hour 8:57 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 1

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Queues
1: South Dillard St & East Story Rd

PM E_W Lt
PM Peak Hour

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	283	62	347	48	703	59	798
v/c Ratio	0.24	0.58	0.21	0.65	0.21	0.61	0.18	0.62
Control Delay (s/veh)	21.3	28.3	20.7	30.1	13.6	22.5	12.1	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.3	28.3	20.7	30.1	13.6	22.5	12.1	20.1
Queue Length 50th (ft)	17	108	19	142	12	153	15	165
Queue Length 95th (ft)	48	213	51	#302	29	218	34	224
Internal Link Dist (ft)		200		258		219		223
Turn Bay Length (ft)	130				175		100	
Base Capacity (vph)	240	637	293	632	234	2174	387	2401
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.44	0.21	0.55	0.21	0.32	0.15	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th Signalized Intersection Summary
1: South Dillard St & East Story Rd

PM E_W Lt
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Future Volume (veh/h)	57	203	77	61	256	87	48	622	74	58	700	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1930	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	205	78	62	259	88	48	628	75	59	707	91
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	227	306	117	274	314	107	248	939	112	297	1001	129
Arrive On Green	0.03	0.24	0.24	0.03	0.24	0.24	0.03	0.29	0.29	0.05	0.32	0.32
Sat Flow, veh/h	1781	1291	491	1767	1325	450	1781	3197	381	1781	3167	407
Grp Volume(v), veh/h	58	0	283	62	0	347	48	349	354	59	396	402
Grp Sat Flow(s),veh/h/ln	1781	0	1782	1767	0	1775	1781	1777	1802	1781	1777	1797
Q Serve(g_s), s	1.5	0.0	9.0	1.7	0.0	11.5	1.2	10.7	10.8	1.4	12.2	12.2
Cycle Q Clear(g_c), s	1.5	0.0	9.0	1.7	0.0	11.5	1.2	10.7	10.8	1.4	12.2	12.2
Prop In Lane	1.00		0.28	1.00		0.25	1.00		0.21	1.00		0.23
Lane Grp Cap(c), veh/h	227	0	423	274	0	421	248	522	529	297	562	568
V/C Ratio(X)	0.26	0.00	0.67	0.23	0.00	0.82	0.19	0.67	0.67	0.20	0.71	0.71
Avail Cap(c_a), veh/h	227	0	601	274	0	599	283	1113	1129	463	1285	1299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	0.0	21.5	17.9	0.0	22.5	15.7	19.3	19.3	14.8	18.7	18.7
Incr Delay (d2), s/veh	0.6	0.0	1.8	0.4	0.0	6.3	0.4	1.5	1.5	0.3	1.6	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.7	0.7	0.0	5.2	0.4	4.2	4.2	0.5	4.7	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.9	0.0	23.4	18.3	0.0	28.8	16.1	20.8	20.8	15.1	20.4	20.4
LnGrp LOS	B		C	B		C	B	C	C	B	C	C
Approach Vol, veh/h		341			409			751			857	
Approach Delay, s/veh		22.6			27.2			20.5			20.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	25.7	8.0	20.8	9.2	24.3	8.0	20.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	45.0	2.0	21.0	9.0	39.0	2.0	21.0
Max Q Clear Time (g_c+I1), s	3.2	14.2	3.5	13.5	3.4	12.8	3.7	11.0
Green Ext Time (p_c), s	0.0	5.4	0.0	1.2	0.0	4.5	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

PM E_W Lt PM Peak Hour 8:57 am 04/13/2026 Jan 2026
JTR

Synchro 12 Report
Page 3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

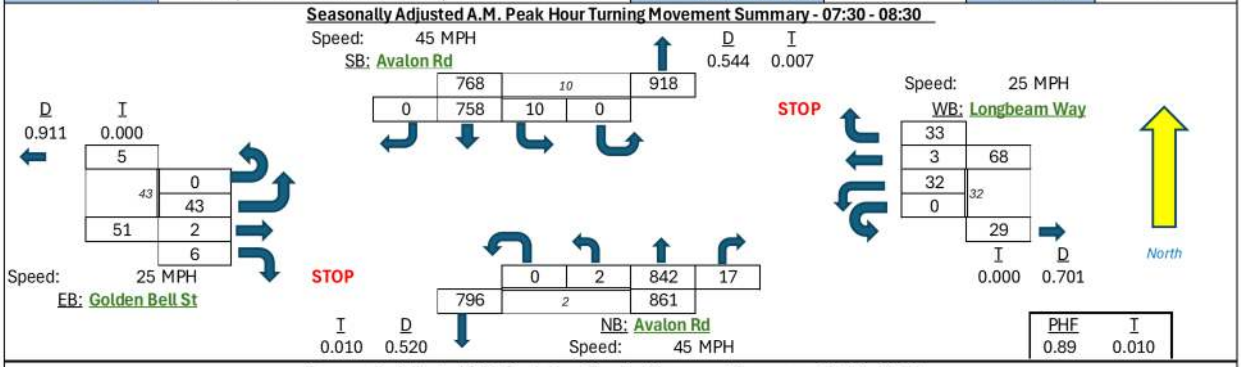
Attachment B

Summary of Vehicle Movements

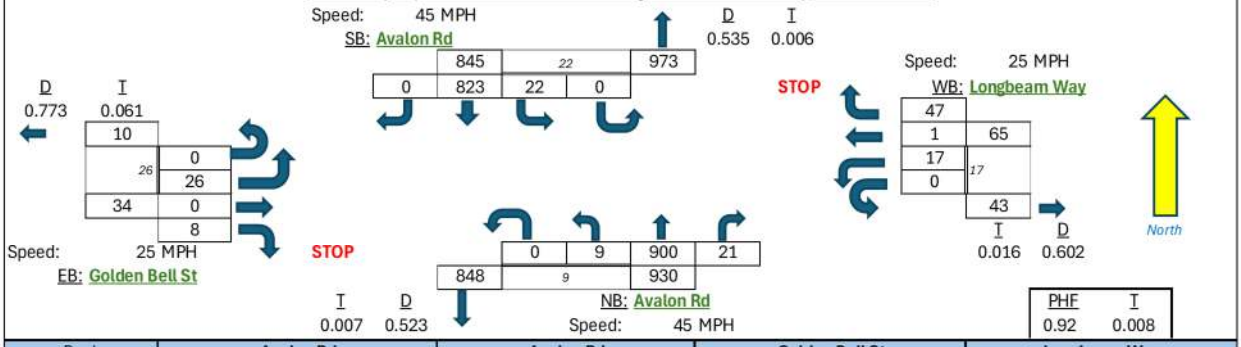
Luke Transportation Engineering Consultants

Project:	WG 3 Intersections		LTEC 25-0204		
N/S Road:	Avalon Rd	**Observer:**	LTEC		
E/W Road:	Golden Bell St	**Weather:**	Clear		
Date:	Tuesday, January 20, 2026	**Rd Condition:**	Ok		
City:	Winter Garden	**Signal:**	No	**Latitude:**	28°30'43.44"N
County:	Orange	**Major St Movement:**	North/South	**Longitude:**	81°37'12.59"W
FDOT SF:	1.02 (Note: If SF<1,default to 1.0)	**PM Pk Hr Factor:**	0.92	**Station #:**	2

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:30 - 08:30



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 17:00 - 18:00



Peak Hour Time Interval	Avalon Rd Northbound				Avalon Rd Southbound				Golden Bell St Eastbound				Longbeam Way Westbound			
	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes	1		1	>	1		1	1	1		1	>	<		1	>
Length	235				345			190	75							
7:00 7:15	0	1	161	2	0	2	102	0	0	5	0	1	0	7	0	5
7:15 7:30	0	1	127	1	0	3	204	0	0	7	0	5	0	5	0	5
7:30 7:45	0	2	194	1	0	1	209	0	0	11	0	1	0	9	0	4
7:45 8:00	0	0	235	1	0	2	216	0	0	10	0	1	0	6	0	8
Hourly Sum	0	4	717	5	0	8	731	0	0	33	0	8	0	27	0	22
8:00 8:15	0	0	237	4	0	2	130	0	0	14	0	0	0	3	1	5
8:15 8:30	0	0	159	11	0	5	188	0	0	7	2	4	0	13	2	15
8:30 8:45	0	0	135	5	0	3	174	0	0	3	1	1	0	9	0	15
8:45 9:00	0	1	188	0	0	4	184	0	0	3	0	0	0	6	0	5
Hourly Sum	0	1	719	20	0	14	676	0	0	27	3	5	0	31	3	40
16:00 16:15	0	4	206	5	0	8	167	1	0	9	0	4	0	9	0	8
16:15 16:30	0	2	212	8	0	16	190	1	0	2	0	0	0	4	1	7
16:30 16:45	0	1	211	6	0	4	215	0	0	12	0	1	0	5	0	5
16:45 17:00	0	6	214	4	0	5	192	0	0	2	0	2	0	4	1	7
Hourly Sum	0	13	843	23	0	33	764	2	0	25	0	7	0	22	2	27
17:00 17:15	0	2	227	6	0	5	189	0	0	9	0	3	0	4	1	13
17:15 17:30	0	2	203	6	0	8	200	0	0	7	0	3	0	4	0	10
17:30 17:45	0	3	259	2	0	2	211	0	0	4	0	1	0	3	0	12
17:45 18:00	0	2	193	7	0	7	207	0	0	5	0	1	0	6	0	11
Hourly Sum	0	9	882	21	0	22	807	0	0	25	0	8	0	17	1	46
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																
7:30 8:30	0	2	842	17	0	10	758	0	0	43	2	6	0	32	3	33
% Turns	0	0.2%	97.8%	2.0%	0	1.3%	98.7%		0	84.3%	3.9%	11.8%	0	47.1%	4.4%	48.5%
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																
17:00 18:00	0	9	900	21	0	22	823	0	0	26	0	8	0	17	1	47
% Turns	0	1.0%	96.8%	2.3%	0	2.6%	97.4%		0	76.5%		23.5%	0	26.2%	1.5%	72.3%

Luke Transportation Engineering Consultants, 2026

Luke Transportation Consulting Engineers, Inc.
Volume Report with Midnight Totals

Data File	: D0120001.PRN		
Station	: N of Tucker Ranch Ent/Corscester St	Identification	: Counter 1
Start Date	: January 20, 2026	Start Time	: 00:00
Stop Date	: January 20, 2026	End Time	: 24:00
City/Town	: Winter Garden	County	: Orange
Location	: Avalon Road: North of Tucker Ranch Entrance/Corscester Street		

Northbound 20-Jan-26

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	10	8	4	3	10	21	56	173	149	159	98	98
30	8	4	3	4	8	26	49	125	114	161	98	74
45	3	3	3	1	18	43	79	144	136	136	114	112
00	8	2	1	4	21	70	115	189	91	122	98	133
Hour Total	29	17	11	12	57	160	299	631	490	578	408	417
End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	127	79	95	131	69	98	124	90	70	57	35	11
30	103	103	106	112	59	149	153	80	63	29	38	14
45	123	134	102	49	65	104	106	55	46	22	14	11
00	121	112	114	29	87	34	102	65	36	27	25	6
Hour Total	474	428	417	321	280	385	485	290	215	135	112	42

24 Hour Total Volume	6,693					
AM Peak Hour Begins	07:00	AM Peak Volume	631	Peak Hour Factor	0.83	
PM Peak Hour Begins	18:00	PM Peak Volume	485	Peak Hour Factor	0.79	

Southbound 20-Jan-26

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	8	8	3	3	3	10	33	70	86	80	59	58
30	7	3	0	5	4	10	34	61	88	79	65	65
45	4	2	1	1	9	13	37	70	90	77	60	65
00	5	3	3	6	5	28	57	89	99	65	63	88
Hour Total	24	16	7	15	21	61	161	290	363	301	247	276
End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	72	83	60	112	83	145	110	81	75	47	31	14
30	93	83	63	111	95	127	99	82	70	34	27	13
45	88	83	87	129	128	112	93	62	65	36	27	10
00	84	72	119	129	99	90	96	69	49	26	17	14
Hour Total	337	321	329	481	405	474	398	294	259	143	102	51

24 Hour Total Volume	5,376					
AM Peak Hour Begins	08:00	AM Peak Volume	363	Peak Hour Factor	0.92	
PM Peak Hour Begins	16:30	PM Peak Volume	499	Peak Hour Factor	0.86	

Two-Way Total 20-Jan-26

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	18	16	7	6	13	31	89	243	235	239	157	156
30	15	7	3	9	12	36	83	186	202	240	163	139
45	7	5	4	2	27	56	116	214	226	213	174	177
00	13	5	4	10	26	98	172	278	190	187	161	221
Hour Total	53	33	18	27	78	221	460	921	853	879	655	693
End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	199	162	155	243	152	243	234	171	145	104	66	25
30	196	186	169	223	154	276	252	162	133	63	65	27
45	211	217	189	178	193	216	199	117	111	58	41	21
00	205	184	233	158	186	124	198	134	85	53	42	20
Hour Total	811	749	746	802	685	859	883	584	474	278	214	93

24 Hour Total Volume	12,069					
AM Peak Hour Begins	07:45	AM Peak Volume	941	Peak Hour Factor	0.85	
PM Peak Hour Begins	16:45	PM Peak Volume	921	Peak Hour Factor	0.83	

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	1	0	3	2	1	0	0	0	0	7
00:30	0	0	0	0	0	0	0	2	5	6	0	2	0	0	0	15
00:45	0	0	0	0	0	0	0	4	6	3	0	0	0	0	0	13
01:00	0	0	0	0	0	0	0	1	3	2	1	0	0	0	0	7
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*7*	*17*	*13*	*2*	*2*	*0*	*0*	*0*	*42*
01:15	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	6
01:30	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	4
01:45	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	4
02:00	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*7*	*4*	*2*	*2*	*0*	*0*	*0*	*19*
02:15	0	0	0	0	0	0	2	1	0	1	1	0	0	0	0	5
02:30	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3
02:45	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*2*	*2*	*4*	*0*	*0*	*0*	*0*	*12*
03:15	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3
03:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
04:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*4*	*0*	*1*	*0*	*1*	*0*	*0*	*8*
04:15	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3
04:30	0	0	0	0	0	0	0	1	1	3	0	0	0	0	0	5
04:45	0	0	0	0	0	0	0	3	3	4	1	1	0	0	0	12
05:00	0	0	0	0	0	0	1	2	2	8	1	0	0	0	0	14
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*6*	*7*	*16*	*2*	*2*	*0*	*0*	*0*	*34*
05:15	0	0	0	0	0	0	1	3	5	5	0	0	0	0	0	14
05:30	0	0	0	0	0	0	0	1	9	9	1	0	0	0	0	20
05:45	0	0	0	0	0	0	0	3	6	12	0	1	0	0	0	22
06:00	0	0	0	0	0	0	0	7	6	13	4	4	1	0	0	35
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*14*	*26*	*39*	*5*	*5*	*1*	*0*	*0*	*91*
06:15	0	0	0	0	0	0	0	6	14	7	1	0	0	0	0	28
06:30	0	0	0	0	0	0	0	8	19	11	2	0	0	0	0	40
06:45	0	0	0	0	0	0	0	17	40	16	8	0	0	0	0	81
07:00	0	0	0	0	0	0	14	44	70	28	1	1	0	0	0	158
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*14*	*75*	*143*	*62*	*12*	*1*	*0*	*0*	*0*	*307*
07:15	0	0	0	0	0	0	3	40	81	28	1	0	0	0	0	153
07:30	0	0	0	0	0	0	4	36	70	22	5	0	0	0	0	137
07:45	0	0	0	0	0	0	13	61	99	15	8	0	0	0	0	196
08:00	0	0	0	0	0	0	8	101	95	14	2	2	0	0	0	222
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*28*	*238*	*345*	*79*	*16*	*2*	*0*	*0*	*0*	*708*
08:15	0	0	0	0	0	0	22	74	73	15	1	0	0	0	0	185
08:30	0	0	0	0	0	1	16	87	52	9	0	1	0	0	0	166
08:45	0	0	0	0	0	0	9	81	56	15	0	0	0	0	0	161
09:00	0	0	0	0	0	0	10	35	73	23	4	0	0	0	0	145
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*57*	*277*	*254*	*62*	*5*	*1*	*0*	*0*	*0*	*657*
09:15	0	0	0	0	0	2	25	68	70	20	2	0	0	0	0	187
09:30	0	0	0	0	0	1	6	39	54	24	5	0	0	0	0	129
09:45	0	0	0	0	0	3	17	52	68	14	1	0	0	0	0	155
10:00	0	0	0	0	0	0	2	19	61	28	3	0	0	0	0	113
Hourly Total	*0*	*0*	*0*	*0*	*0*	*6*	*50*	*178*	*253*	*86*	*11*	*0*	*0*	*0*	*0*	*584*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	0	0	0	0	2	30	59	28	5	0	0	0	0	124
10:30	0	0	0	0	5	7	2	10	12	2	0	0	0	0	0	38
10:45	0	0	0	0	0	0	5	45	62	15	2	0	0	0	0	129
11:00	0	0	0	0	0	0	6	30	55	26	2	1	0	0	0	120
Hourly Total	*0*	*0*	*0*	*0*	*5*	*7*	*15*	*115*	*188*	*71*	*9*	*1*	*0*	*0*	*0*	*411*
11:15	0	0	0	0	0	0	8	41	45	14	0	0	0	0	0	108
11:30	0	0	0	0	0	2	9	32	55	16	5	0	0	0	0	119
11:45	0	0	0	0	0	0	3	24	62	24	3	0	0	0	0	116
12:00	0	0	0	0	0	1	9	30	58	24	2	0	0	0	0	124
Hourly Total	*0*	*0*	*0*	*0*	*0*	*3*	*29*	*127*	*220*	*78*	*10*	*0*	*0*	*0*	*0*	*467*
12:15	0	0	0	0	0	0	2	25	80	22	4	0	0	0	0	133
12:30	0	0	0	0	0	2	8	30	46	29	6	2	0	0	0	123
12:45	0	0	0	0	0	0	2	47	57	30	2	0	0	0	0	138
13:00	0	0	0	0	0	0	6	23	50	20	7	1	0	0	1	108
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*18*	*125*	*233*	*101*	*19*	*3*	*0*	*0*	*1*	*502*
13:15	0	0	0	0	0	2	2	34	43	31	5	2	0	0	0	119
13:30	0	0	0	0	0	3	11	34	61	16	4	0	0	0	0	129
13:45	0	0	0	0	0	1	6	28	64	25	7	0	1	0	0	132
14:00	0	0	0	0	0	3	6	34	65	25	4	1	0	0	0	138
Hourly Total	*0*	*0*	*0*	*0*	*0*	*9*	*25*	*130*	*233*	*97*	*20*	*3*	*1*	*0*	*0*	*518*
14:15	0	0	0	0	0	2	3	39	51	23	6	0	0	0	0	124
14:30	0	0	0	0	0	0	8	36	74	34	6	0	0	0	0	158
14:45	0	0	0	0	0	0	8	49	69	24	3	0	0	0	0	153
15:00	0	0	0	0	0	2	20	49	73	19	6	0	0	0	0	169
Hourly Total	*0*	*0*	*0*	*0*	*0*	*4*	*39*	*173*	*267*	*100*	*21*	*0*	*0*	*0*	*0*	*604*
15:15	0	0	0	0	0	2	17	68	67	19	1	0	0	0	0	174
15:30	0	0	0	0	0	3	14	92	83	33	5	0	0	0	0	230
15:45	0	0	0	0	0	9	61	78	94	13	2	0	0	0	0	257
16:00	0	0	0	0	0	2	24	59	72	25	3	0	0	0	0	185
Hourly Total	*0*	*0*	*0*	*0*	*0*	*16*	*116*	*297*	*316*	*90*	*11*	*0*	*0*	*0*	*0*	*846*
16:15	0	0	0	0	0	0	17	50	83	37	3	0	0	0	0	190
16:30	0	0	0	0	0	1	15	48	95	29	1	0	0	0	0	189
16:45	0	0	0	0	0	0	2	59	89	52	1	1	0	0	0	204
17:00	0	0	0	0	0	0	14	49	101	35	3	0	0	0	0	202
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*48*	*206*	*368*	*153*	*8*	*1*	*0*	*0*	*0*	*785*
17:15	0	0	0	0	0	0	1	62	77	34	7	0	0	0	0	181
17:30	0	0	0	0	0	0	6	59	92	44	2	0	0	0	0	203
17:45	0	0	0	0	0	0	4	87	92	32	4	0	0	0	0	219
18:00	0	0	0	0	0	2	37	81	81	19	3	0	0	0	0	223
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*48*	*289*	*342*	*129*	*16*	*0*	*0*	*0*	*0*	*826*
18:15	0	0	0	0	0	0	6	32	90	38	6	2	1	0	0	175
18:30	0	0	0	0	0	0	3	28	80	39	2	0	0	0	0	152
18:45	0	0	0	1	3	1	4	27	70	36	10	0	0	0	0	152
19:00	0	0	0	0	0	0	7	38	68	17	1	1	0	0	0	132
Hourly Total	*0*	*0*	*0*	*1*	*3*	*1*	*20*	*125*	*308*	*130*	*19*	*3*	*1*	*0*	*0*	*611*
19:15	0	0	0	0	0	0	2	18	65	21	6	0	0	0	0	112
19:30	0	0	0	0	0	0	4	31	54	25	8	0	0	0	0	122
19:45	0	0	0	0	0	0	2	14	48	20	7	1	1	0	0	93
20:00	0	0	0	0	0	0	0	23	38	13	1	0	0	0	0	75
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*8*	*86*	*205*	*79*	*22*	*1*	*1*	*0*	*0*	*402*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	0	1	10	28	44	20	9	0	0	0	0	112
20:30	0	0	0	0	0	5	10	19	35	13	0	0	0	0	0	82
20:45	0	0	0	0	0	0	5	20	41	10	4	1	0	0	0	81
21:00	0	0	0	0	0	0	4	12	28	17	5	0	0	0	0	66
Hourly Total	*0*	*0*	*0*	*0*	*0*	*6*	*29*	*79*	*148*	*60*	*18*	*1*	*0*	*0*	*0*	*341*
21:15	0	0	0	0	0	0	1	24	46	19	2	0	0	0	0	92
21:30	0	0	0	0	0	0	2	13	29	17	2	0	0	0	0	63
21:45	0	0	0	0	0	0	2	19	26	10	1	0	0	0	0	58
22:00	0	0	0	0	0	0	1	11	12	15	1	1	0	0	0	41
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*67*	*113*	*61*	*6*	*1*	*0*	*0*	*0*	*254*
22:15	0	0	0	0	0	0	0	11	18	8	3	0	0	0	0	40
22:30	0	0	0	0	0	0	1	3	13	8	1	0	0	0	0	26
22:45	0	0	0	0	0	0	0	7	22	6	2	0	0	0	0	37
23:00	0	0	0	0	0	0	2	5	14	5	0	0	0	0	0	26
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*26*	*67*	*27*	*6*	*0*	*0*	*0*	*0*	*129*
23:15	0	0	0	0	0	0	1	5	11	4	2	1	0	0	0	24
23:30	0	0	0	0	0	0	0	3	7	8	1	0	0	0	0	19
23:45	0	0	0	0	0	0	0	2	2	5	1	1	0	0	0	11
00:00	0	0	0	0	0	0	0	2	7	9	3	0	0	0	0	21
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*12*	*27*	*26*	*7*	*2*	*0*	*0*	*0*	*75*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	0	0	1	8	58	559	2660	4093	1565	252	31	5	0	1	9233
Percentages	0.00	0.00	0.00	0.01	0.09	0.63	6.05	28.81	44.33	16.95	2.73	0.34	0.05	0.00	0.01	

Speed Summary

Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
9233	42.02	37.14	42.30	47.20	8607	5947	1854	289	37	6	1	1	35- 45
				Percentages	93.22	64.41	20.08	3.13	0.40	0.06	0.01	0.01	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:30-08:30	0	0	0	0	0	1	59	323	319	53	11	3	0	0	0	769
Percentages	0.00	0.00	0.00	0.00	0.00	0.13	7.67	42.00	41.48	6.89	1.43	0.39	0.00	0.00	0.00	*8.33*
15:15-16:15	0	0	0	0	0	14	116	279	332	108	13	0	0	0	0	862
Percentages	0.00	0.00	0.00	0.00	0.00	1.62	13.46	32.37	38.52	12.53	1.51	0.00	0.00	0.00	0.00	*9.34*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	0	1	0	5	0	0	0	0	0	6
00:30	0	0	0	0	0	0	0	2	5	1	2	0	0	0	0	10
00:45	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	1	5	2	0	0	0	0	0	8
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*5*	*11*	*8*	*2*	*0*	*0*	*0*	*0*	*27*
01:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
01:30	0	0	0	0	0	0	1	0	2	4	2	0	1	0	0	10
01:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	3
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*1*	*4*	*6*	*2*	*0*	*1*	*0*	*0*	*16*
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*0*	*0*	*0*	*0*	*0*	*4*
03:15	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	3
03:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
03:45	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5
04:00	0	0	0	0	0	0	0	0	0	3	1	1	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*3*	*6*	*1*	*3*	*0*	*0*	*0*	*15*
04:15	0	0	0	0	0	0	0	0	3	2	1	0	0	0	0	6
04:30	0	0	0	0	0	0	0	1	3	4	2	0	0	0	0	10
04:45	0	0	0	0	0	0	0	0	5	4	1	0	0	0	0	10
05:00	0	0	0	0	0	0	0	5	3	3	1	0	0	0	0	12
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*14*	*13*	*5*	*0*	*0*	*0*	*0*	*38*
05:15	0	0	0	0	0	0	0	2	4	6	3	0	0	0	0	15
05:30	0	0	0	0	0	0	0	2	6	6	2	1	0	0	0	17
05:45	0	0	0	0	0	0	0	3	17	13	0	0	0	0	0	33
06:00	0	0	0	0	0	0	0	0	19	9	5	1	1	0	0	35
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*7*	*46*	*34*	*10*	*2*	*1*	*0*	*0*	*100*
06:15	0	0	0	0	0	0	1	3	9	17	2	1	0	0	0	33
06:30	0	0	0	0	0	0	3	12	36	26	5	1	0	0	0	83
06:45	0	0	0	0	0	0	2	11	34	27	10	3	0	0	0	87
07:00	0	0	0	0	0	0	0	8	55	40	3	1	1	0	0	108
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*34*	*134*	*110*	*20*	*6*	*1*	*0*	*0*	*311*
07:15	0	0	0	0	0	0	0	13	55	37	7	2	1	0	0	115
07:30	0	0	0	0	0	1	13	59	74	25	1	1	0	0	0	174
07:45	0	0	0	0	0	23	52	85	61	9	7	0	0	0	0	237
08:00	0	19	24	35	70	57	9	1	0	0	0	0	0	0	0	215
Hourly Total	*0*	*19*	*24*	*35*	*70*	*81*	*74*	*158*	*190*	*71*	*15*	*3*	*1*	*0*	*0*	*741*
08:15	0	0	1	1	7	12	8	38	77	28	7	0	0	0	0	179
08:30	0	0	0	0	0	0	9	47	93	29	6	0	0	0	0	184
08:45	0	0	0	0	0	0	14	55	94	21	1	1	0	0	0	186
09:00	0	0	0	0	0	0	18	59	82	25	0	0	0	0	0	184
Hourly Total	*0*	*0*	*1*	*1*	*7*	*12*	*49*	*199*	*346*	*103*	*14*	*1*	*0*	*0*	*0*	*733*
09:15	0	0	0	0	0	0	3	52	70	31	6	1	0	0	0	163
09:30	0	0	0	0	0	0	4	36	45	27	5	0	0	0	0	117
09:45	0	0	0	0	0	0	0	18	68	33	8	0	0	0	0	127
10:00	0	0	0	0	0	0	0	23	42	36	5	1	0	0	0	107
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*7*	*129*	*225*	*127*	*24*	*2*	*0*	*0*	*0*	*514*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	0	0	1	0	0	22	49	33	4	0	0	0	0	109
10:30	0	0	0	0	0	0	1	27	27	10	0	0	0	0	0	65
10:45	0	0	1	0	0	0	0	23	55	25	3	0	0	0	0	107
11:00	0	0	0	0	0	0	3	52	42	15	2	2	0	0	0	116
Hourly Total	*0*	*0*	*1*	*0*	*1*	*0*	*4*	*124*	*173*	*83*	*9*	*2*	*0*	*0*	*0*	*397*
11:15	0	0	0	0	0	0	0	15	53	22	3	0	0	0	0	93
11:30	0	0	0	0	0	0	3	20	52	29	3	0	0	0	0	107
11:45	0	0	0	0	0	0	1	32	48	20	7	1	0	0	0	109
12:00	0	0	0	0	0	0	2	36	58	27	3	1	0	0	0	127
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*103*	*211*	*98*	*16*	*2*	*0*	*0*	*0*	*436*
12:15	0	0	0	0	0	0	2	20	48	37	3	4	0	0	0	114
12:30	0	0	0	0	0	0	4	19	74	37	12	1	0	0	0	147
12:45	0	0	0	0	0	0	1	23	65	37	3	0	0	0	0	129
13:00	0	0	0	0	0	0	3	28	35	34	12	0	0	0	0	112
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*10*	*90*	*222*	*145*	*30*	*5*	*0*	*0*	*0*	*502*
13:15	0	0	0	0	0	0	4	20	56	26	6	0	0	0	0	112
13:30	0	0	0	0	0	7	7	33	40	28	5	1	0	0	0	121
13:45	0	0	0	0	0	0	0	16	78	32	9	1	0	0	0	136
14:00	0	0	0	0	0	0	2	38	62	24	2	0	0	0	0	128
Hourly Total	*0*	*0*	*0*	*0*	*0*	*7*	*13*	*107*	*236*	*110*	*22*	*2*	*0*	*0*	*0*	*497*
14:15	0	0	0	0	0	1	14	41	70	17	4	0	0	0	0	147
14:30	0	0	0	0	0	0	7	32	57	36	9	0	1	0	0	142
14:45	0	0	0	0	0	0	4	30	84	35	10	1	0	0	0	164
15:00	0	0	0	0	0	0	9	47	95	21	4	0	0	0	0	176
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*34*	*150*	*306*	*109*	*27*	*1*	*1*	*0*	*0*	*629*
15:15	0	0	0	0	0	0	11	56	84	25	5	0	0	0	0	181
15:30	0	0	0	0	0	0	4	66	116	15	1	0	0	0	0	202
15:45	0	0	0	0	0	0	15	62	101	23	4	0	0	0	0	205
16:00	0	0	0	0	0	0	3	50	96	28	4	2	0	0	0	183
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*33*	*234*	*397*	*91*	*14*	*2*	*0*	*0*	*0*	*771*
16:15	0	0	0	0	0	0	3	61	90	39	2	0	0	0	0	195
16:30	0	0	0	0	0	0	2	66	105	31	2	1	0	0	0	207
16:45	0	0	0	0	0	0	1	46	85	52	6	0	0	0	0	190
17:00	0	0	0	0	0	0	3	46	105	45	0	0	1	1	0	201
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*9*	*219*	*385*	*167*	*10*	*1*	*1*	*1*	*0*	*793*
17:15	0	0	0	0	0	0	3	37	129	33	8	1	0	0	0	211
17:30	0	0	0	0	0	0	1	33	116	42	6	1	0	0	0	199
17:45	0	1	1	3	7	12	19	69	85	31	3	0	0	0	0	231
18:00	0	0	0	0	0	1	13	45	93	41	7	0	0	0	0	200
Hourly Total	*0*	*1*	*1*	*3*	*7*	*13*	*36*	*184*	*423*	*147*	*24*	*2*	*0*	*0*	*0*	*841*
18:15	0	0	0	0	0	0	5	56	102	25	8	3	0	0	0	199
18:30	0	0	0	0	0	0	6	32	100	37	5	0	0	0	0	180
18:45	0	0	0	0	0	0	6	20	71	34	8	0	0	0	0	139
19:00	0	0	0	0	0	0	0	30	62	40	6	0	0	0	0	138
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*17*	*138*	*335*	*136*	*27*	*3*	*0*	*0*	*0*	*656*
19:15	0	0	0	0	0	0	1	13	67	52	8	0	1	0	0	142
19:30	0	0	0	0	0	0	0	15	59	24	8	3	0	1	0	110
19:45	0	0	0	0	0	0	2	28	47	30	7	0	1	0	0	115
20:00	0	0	0	0	0	0	1	25	60	31	2	0	0	0	0	119
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*81*	*233*	*137*	*25*	*3*	*2*	*1*	*0*	*486*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	0	0	1	18	53	30	6	1	0	0	0	109
20:30	0	0	0	0	0	0	6	45	45	16	7	0	0	0	0	119
20:45	0	0	0	0	0	0	4	51	43	15	3	0	0	0	0	116
21:00	0	0	0	0	0	0	15	46	51	19	4	0	0	0	0	135
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*26*	*160*	*192*	*80*	*20*	*1*	*0*	*0*	*0*	*479*
21:15	0	0	0	0	0	0	3	10	40	20	2	0	0	0	0	75
21:30	0	0	0	0	0	0	4	21	32	17	1	0	0	0	0	75
21:45	0	0	0	0	0	0	0	11	38	8	3	0	0	0	0	60
22:00	0	0	0	0	0	0	6	15	19	10	0	1	2	0	0	53
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*13*	*57*	*129*	*55*	*6*	*1*	*2*	*0*	*0*	*263*
22:15	0	0	0	0	0	1	2	2	26	10	3	1	0	0	0	45
22:30	0	0	0	0	0	0	0	4	7	18	1	0	0	0	0	30
22:45	0	0	0	0	0	0	1	3	6	14	1	0	0	0	0	25
23:00	0	0	0	0	0	0	0	1	4	10	1	1	1	0	0	18
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*3*	*10*	*43*	*52*	*6*	*2*	*1*	*0*	*0*	*118*
23:15	0	0	0	0	0	0	0	6	3	4	0	0	0	0	0	13
23:30	0	0	0	0	0	0	0	5	3	5	0	0	0	0	0	13
23:45	0	0	0	0	0	0	1	4	4	1	1	0	0	0	0	11
00:00	0	0	0	0	0	0	0	1	3	2	0	1	0	0	0	7
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*16*	*13*	*12*	*1*	*1*	*0*	*0*	*0*	*44*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	20	27	39	85	115	348	2214	4273	1902	330	45	11	2	0	9411
Percentages	0.00	0.21	0.29	0.41	0.90	1.22	3.70	23.53	45.40	20.21	3.51	0.48	0.12	0.02	0.00	

Speed Summary

	Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
	9411	42.29	37.40	42.74	47.85	8777	6563	2290	388	58	13	2	0	35- 45
Percentages						93.26	69.74	24.33	4.12	0.62	0.14	0.02	0.00	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:30-08:30	0	19	25	36	77	92	78	171	231	66	20	0	0	0	0	815
Percentages	0.00	2.33	3.07	4.42	9.45	11.29	9.57	20.98	28.34	8.10	2.45	0.00	0.00	0.00	0.00	*8.66*
15:15-16:15	0	0	0	0	0	0	25	239	403	105	11	2	0	0	0	785
Percentages	0.00	0.00	0.00	0.00	0.00	0.00	3.18	30.45	51.34	13.38	1.40	0.25	0.00	0.00	0.00	*8.34*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	1	1	3	7	1	0	0	0	0	13
00:30	0	0	0	0	0	0	0	4	10	7	2	2	0	0	0	25
00:45	0	0	0	0	0	0	1	5	7	3	0	0	0	0	0	16
01:00	0	0	0	0	0	0	0	2	8	4	1	0	0	0	0	15
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*12*	*28*	*21*	*4*	*2*	*0*	*0*	*0*	*69*
01:15	0	0	0	0	0	0	0	2	3	3	0	0	0	0	0	8
01:30	0	0	0	0	0	0	1	1	3	6	2	0	1	0	0	14
01:45	0	0	0	0	0	0	0	1	1	0	1	2	0	0	0	5
02:00	0	0	0	0	0	0	1	1	4	1	1	0	0	0	0	8
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*5*	*11*	*10*	*4*	*2*	*1*	*0*	*0*	*35*
02:15	0	0	0	0	0	0	2	1	0	1	1	0	0	0	0	5
02:30	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3
02:45	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	4
03:00	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	4
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*4*	*4*	*4*	*0*	*0*	*0*	*0*	*16*
03:15	0	0	0	0	0	0	0	2	1	0	1	2	0	0	0	6
03:30	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	3
03:45	0	0	0	0	0	0	0	0	4	2	0	0	1	0	0	7
04:00	0	0	0	0	0	0	0	0	2	3	1	1	0	0	0	7
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*7*	*6*	*2*	*3*	*1*	*0*	*0*	*23*
04:15	0	0	0	0	0	0	0	0	4	3	1	1	0	0	0	9
04:30	0	0	0	0	0	0	0	2	4	7	2	0	0	0	0	15
04:45	0	0	0	0	0	0	0	3	8	8	2	1	0	0	0	22
05:00	0	0	0	0	0	0	1	7	5	11	2	0	0	0	0	26
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*12*	*21*	*29*	*7*	*2*	*0*	*0*	*0*	*72*
05:15	0	0	0	0	0	0	1	5	9	11	3	0	0	0	0	29
05:30	0	0	0	0	0	0	0	3	15	15	3	1	0	0	0	37
05:45	0	0	0	0	0	0	0	6	23	25	0	1	0	0	0	55
06:00	0	0	0	0	0	0	0	7	25	22	9	5	2	0	0	70
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*21*	*72*	*73*	*15*	*7*	*2*	*0*	*0*	*191*
06:15	0	0	0	0	0	0	1	9	23	24	3	1	0	0	0	61
06:30	0	0	0	0	0	0	3	20	55	37	7	1	0	0	0	123
06:45	0	0	0	0	0	0	2	28	74	43	18	3	0	0	0	168
07:00	0	0	0	0	0	0	14	52	125	68	4	2	1	0	0	266
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*20*	*109*	*277*	*172*	*32*	*7*	*1*	*0*	*0*	*618*
07:15	0	0	0	0	0	0	3	53	136	65	8	2	1	0	0	268
07:30	0	0	0	0	0	1	17	95	144	47	6	1	0	0	0	311
07:45	0	0	0	0	0	23	65	146	160	24	15	0	0	0	0	433
08:00	0	19	24	35	70	57	17	102	95	14	2	2	0	0	0	437
Hourly Total	*0*	*19*	*24*	*35*	*70*	*81*	*102*	*396*	*535*	*150*	*31*	*5*	*1*	*0*	*0*	*1449*
08:15	0	0	1	1	7	12	30	112	150	43	8	0	0	0	0	364
08:30	0	0	0	0	0	1	25	134	145	38	6	1	0	0	0	350
08:45	0	0	0	0	0	0	23	136	150	36	1	1	0	0	0	347
09:00	0	0	0	0	0	0	28	94	155	48	4	0	0	0	0	329
Hourly Total	*0*	*0*	*1*	*1*	*7*	*13*	*106*	*476*	*600*	*165*	*19*	*2*	*0*	*0*	*0*	*1390*
09:15	0	0	0	0	0	2	28	120	140	51	8	1	0	0	0	350
09:30	0	0	0	0	0	1	10	75	99	51	10	0	0	0	0	246
09:45	0	0	0	0	0	3	17	70	136	47	9	0	0	0	0	282
10:00	0	0	0	0	0	0	2	42	103	64	8	1	0	0	0	220
Hourly Total	*0*	*0*	*0*	*0*	*0*	*6*	*57*	*307*	*478*	*213*	*35*	*2*	*0*	*0*	*0*	*1098*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	0	0	1	0	2	52	108	61	9	0	0	0	0	233
10:30	0	0	0	0	5	7	3	37	39	12	0	0	0	0	0	103
10:45	0	0	1	0	0	0	5	68	117	40	5	0	0	0	0	236
11:00	0	0	0	0	0	0	9	82	97	41	4	3	0	0	0	236
Hourly Total	*0*	*0*	*1*	*0*	*6*	*7*	*19*	*239*	*361*	*154*	*18*	*3*	*0*	*0*	*0*	*808*
11:15	0	0	0	0	0	0	8	56	98	36	3	0	0	0	0	201
11:30	0	0	0	0	0	2	12	52	107	45	8	0	0	0	0	226
11:45	0	0	0	0	0	0	4	56	110	44	10	1	0	0	0	225
12:00	0	0	0	0	0	1	11	66	116	51	5	1	0	0	0	251
Hourly Total	*0*	*0*	*0*	*0*	*0*	*3*	*35*	*230*	*431*	*176*	*26*	*2*	*0*	*0*	*0*	*903*
12:15	0	0	0	0	0	0	4	45	128	59	7	4	0	0	0	247
12:30	0	0	0	0	0	2	12	49	120	66	18	3	0	0	0	270
12:45	0	0	0	0	0	0	3	70	122	67	5	0	0	0	0	267
13:00	0	0	0	0	0	0	9	51	85	54	19	1	0	0	1	220
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*28*	*215*	*455*	*246*	*49*	*8*	*0*	*0*	*1*	*1004*
13:15	0	0	0	0	0	2	6	54	99	57	11	2	0	0	0	231
13:30	0	0	0	0	0	10	18	67	101	44	9	1	0	0	0	250
13:45	0	0	0	0	0	1	6	44	142	57	16	1	1	0	0	268
14:00	0	0	0	0	0	3	8	72	127	49	6	1	0	0	0	266
Hourly Total	*0*	*0*	*0*	*0*	*0*	*16*	*38*	*237*	*469*	*207*	*42*	*5*	*1*	*0*	*0*	*1015*
14:15	0	0	0	0	0	3	17	80	121	40	10	0	0	0	0	271
14:30	0	0	0	0	0	0	15	68	131	70	15	0	1	0	0	300
14:45	0	0	0	0	0	0	12	79	153	59	13	1	0	0	0	317
15:00	0	0	0	0	0	2	29	96	168	40	10	0	0	0	0	345
Hourly Total	*0*	*0*	*0*	*0*	*0*	*5*	*73*	*323*	*573*	*209*	*48*	*1*	*1*	*0*	*0*	*1233*
15:15	0	0	0	0	0	2	28	124	151	44	6	0	0	0	0	355
15:30	0	0	0	0	0	3	18	158	199	48	6	0	0	0	0	432
15:45	0	0	0	0	0	9	76	140	195	36	6	0	0	0	0	462
16:00	0	0	0	0	0	2	27	109	168	53	7	2	0	0	0	368
Hourly Total	*0*	*0*	*0*	*0*	*0*	*16*	*149*	*531*	*713*	*181*	*25*	*2*	*0*	*0*	*0*	*1617*
16:15	0	0	0	0	0	0	20	111	173	76	5	0	0	0	0	385
16:30	0	0	0	0	0	1	17	114	200	60	3	1	0	0	0	396
16:45	0	0	0	0	0	0	3	105	174	104	7	1	0	0	0	394
17:00	0	0	0	0	0	0	17	95	206	80	3	0	1	1	0	403
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*57*	*425*	*753*	*320*	*18*	*2*	*1*	*1*	*0*	*1578*
17:15	0	0	0	0	0	0	4	99	206	67	15	1	0	0	0	392
17:30	0	0	0	0	0	0	7	92	208	86	8	1	0	0	0	402
17:45	0	1	1	3	7	12	23	156	177	63	7	0	0	0	0	450
18:00	0	0	0	0	0	3	50	126	174	60	10	0	0	0	0	423
Hourly Total	*0*	*1*	*1*	*3*	*7*	*15*	*84*	*473*	*765*	*276*	*40*	*2*	*0*	*0*	*0*	*1667*
18:15	0	0	0	0	0	0	11	88	192	63	14	5	1	0	0	374
18:30	0	0	0	0	0	0	9	60	180	76	7	0	0	0	0	332
18:45	0	0	0	1	3	1	10	47	141	70	18	0	0	0	0	291
19:00	0	0	0	0	0	0	7	68	130	57	7	1	0	0	0	270
Hourly Total	*0*	*0*	*0*	*1*	*3*	*1*	*37*	*263*	*643*	*266*	*46*	*6*	*1*	*0*	*0*	*1267*
19:15	0	0	0	0	0	0	3	31	132	73	14	0	1	0	0	254
19:30	0	0	0	0	0	0	4	46	113	49	16	3	0	1	0	232
19:45	0	0	0	0	0	0	4	42	95	50	14	1	2	0	0	208
20:00	0	0	0	0	0	0	1	48	98	44	3	0	0	0	0	194
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*12*	*167*	*438*	*216*	*47*	*4*	*3*	*1*	*0*	*888*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Golden Bell St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	0	1	11	46	97	50	15	1	0	0	0	221
20:30	0	0	0	0	0	5	16	64	80	29	7	0	0	0	0	201
20:45	0	0	0	0	0	0	9	71	84	25	7	1	0	0	0	197
21:00	0	0	0	0	0	0	19	58	79	36	9	0	0	0	0	201
Hourly Total	*0*	*0*	*0*	*0*	*0*	*6*	*55*	*239*	*340*	*140*	*38*	*2*	*0*	*0*	*0*	*820*
21:15	0	0	0	0	0	0	4	34	86	39	4	0	0	0	0	167
21:30	0	0	0	0	0	0	6	34	61	34	3	0	0	0	0	138
21:45	0	0	0	0	0	0	2	30	64	18	4	0	0	0	0	118
22:00	0	0	0	0	0	0	7	26	31	25	1	2	2	0	0	94
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*19*	*124*	*242*	*116*	*12*	*2*	*2*	*0*	*0*	*517*
22:15	0	0	0	0	0	1	2	13	44	18	6	1	0	0	0	85
22:30	0	0	0	0	0	0	1	7	20	26	2	0	0	0	0	56
22:45	0	0	0	0	0	0	1	10	28	20	3	0	0	0	0	62
23:00	0	0	0	0	0	0	2	6	18	15	1	1	1	0	0	44
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*6*	*36*	*110*	*79*	*12*	*2*	*1*	*0*	*0*	*247*
23:15	0	0	0	0	0	0	1	11	14	8	2	1	0	0	0	37
23:30	0	0	0	0	0	0	0	8	10	13	1	0	0	0	0	32
23:45	0	0	0	0	0	0	1	6	6	6	2	1	0	0	0	22
00:00	0	0	0	0	0	0	0	3	10	11	3	1	0	0	0	28
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*28*	*40*	*38*	*8*	*3*	*0*	*0*	*0*	*119*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	20	27	40	93	173	907	4874	8366	3467	582	76	16	2	1	18644
Percentages	0.00	0.11	0.14	0.21	0.50	0.93	4.86	26.14	44.87	18.60	3.12	0.41	0.09	0.01	0.01	

Speed Summary

	Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
	18644	42.16	37.26	42.52	47.55	17384	12510	4144	677	95	19	3	1	35- 45
Percentages						93.24	67.10	22.23	3.63	0.51	0.10	0.02	0.01	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:30-08:30	0	19	25	36	77	93	137	494	550	119	31	3	0	0	0	1584
Percentages	0.00	1.20	1.58	2.27	4.86	5.87	8.65	31.19	34.72	7.51	1.96	0.19	0.00	0.00	0.00	*8.50*
15:15-16:15	0	0	0	0	0	14	141	518	735	213	24	2	0	0	0	1647
Percentages	0.00	0.00	0.00	0.00	0.00	0.85	8.56	31.45	44.63	12.93	1.46	0.12	0.00	0.00	0.00	*8.83*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC AM
2: Avalon Rd & Golden Bell St/Longbeam Way AM Peak Hour

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Future Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	-	-	-	235	-	-	345	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	2	7	36	3	37	2	946	19	11	852	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1826	1844	852	1835	1834	956	852	0	0	965	0	0
Stage 1	874	874	-	960	960	-	-	-	-	-	-	-
Stage 2	952	970	-	875	874	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	59	75	360	58	76	313	787	-	-	713	-	-
Stage 1	344	367	-	308	335	-	-	-	-	-	-	-
Stage 2	312	332	-	344	367	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	74	360	56	75	313	787	-	-	713	-	-
Mov Cap-2 Maneuver	157	188	-	170	192	-	-	-	-	-	-	-
Stage 1	339	361	-	307	334	-	-	-	-	-	-	-
Stage 2	271	331	-	330	361	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	34.71	29.83	0.02	0.13
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	787	-	-	157	293	220	713	-	-
HCM Lane V/C Ratio	0.003	-	-	0.308	0.031	0.347	0.016	-	-
HCM Ctrl Dly (s/v)	9.6	-	-	37.9	17.7	29.8	10.1	-	-
HCM Lane LOS	A	-	-	E	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.1	1.5	0	-	-

AM AM Peak Hour 9:29 am 03/13/2026 Jan 2026 Synchro 12 Report
JTR Page 4

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC PM
2: Avalon Rd & Golden Bell St/Longbeam Way PM Peak Hour

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Future Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	-	-	-	235	-	-	345	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	9	18	1	51	10	978	23	24	895	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1941	1963	895	1952	1952	990	895	0	0	1001	0	0
Stage 1	942	942	-	1009	1009	-	-	-	-	-	-	-
Stage 2	998	1021	-	942	942	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	48	62	334	48	64	299	758	-	-	692	-	-
Stage 1	310	336	-	289	318	-	-	-	-	-	-	-
Stage 2	289	309	-	315	341	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	59	334	45	61	299	758	-	-	692	-	-
Mov Cap-2 Maneuver	130	164	-	151	172	-	-	-	-	-	-	-
Stage 1	300	325	-	286	314	-	-	-	-	-	-	-
Stage 2	235	305	-	297	330	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	34.61	26.64	0.09	0.27
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	758	-	-	130	334	236	692	-	-
HCM Lane V/C Ratio	0.013	-	-	0.218	0.026	0.299	0.035	-	-
HCM Ctrl Dly (s/v)	9.8	-	-	40.3	16.1	26.6	10.4	-	-
HCM Lane LOS	A	-	-	E	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	1.2	0.1	-	-

PM PM Peak Hour 9:59 am 03/03/2026 Jan 2026 Synchro 12 Report
JTR Page 4

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

Intersection Control Evaluation Form 750-010-30

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms are to be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	WG 3 Intersections		FDOT Project #		
Submitted By	Joseph Roviaro	Agency/Company	LTEC	Date	3/13/2026
Email	jtr@ltec-fl.com	FDOT District	District 5	County	Orange
Project Locality (*City/Town/Village*)	Winter Garden				
Intersection Type	At-Grade Intersection	FDOT Context Classification	C3R - Suburban Residential		
			Project Type	Corridor Improvement Project	
Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	*Existing Conditions Analysis AM Cap X and PM Cap X + PM Spice				
Project Setting Description (*Describe the area surrounding the intersection*)	Residential				
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	During the data collection effort, the Pedestrian and Bicycle activity was observed to be minimal. However, due to the number of residential units in the surrounding area and the widening of Avalon Road with bike lanes and installation of a pedestrian path, the number of pedestrians and bicycles is expected to increase.				

Major Street Information

Roadway ID		Route Name(s)	Avalon Road			Milepoint		
Existing Control Type	Two-way Stop-Control		Existing AADT	20,467	Design Year AADT			
Design Vehicle	Intermediate Semitrailer (WB-40)		Control Vehicle	Intermediate Semitrailer (WB-50)				
Primary Functional Classification	Urban Major Collector				Design Speed (mph)	50		
Secondary Functional Classification (if app.)	Urban Minor Arterial				Target Speed (mph) [if app.]	45		
Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	2	Left	9
	Multi-Use Path?	No	Left-Through-Right		Through	842	Through	900
	Scheduled Bus Service?	No	Through-Right	1	Right	17	Right	21
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		1.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through	1	Left	10	Left	22
	Multi-Use Path?	No	Left-Through-Right		Through	785	Through	823
	Scheduled Bus Service?	No	Through-Right		Right	0	Right	0
	Bus Stop on Approach?	No	Right-Turn	1	Daily Truck %		1.0%	

Minor Street Information

Roadway ID		Route Name(s)	Golden Bell St (EB)/Longbeam Way (WB)			Milepoint (if app.)		
Existing Control Type	Two-way Stop-Control		Existing AADT	1,400	Design Year AADT			
Design Vehicle	School Bus (S-BUS-36)		Control Vehicle	School Bus (S-BUS-36)				
Primary Functional Classification	Urban Local				Design Speed (mph)	30		
Secondary Functional Classification (if app.)	Urban Local				Target Speed (mph) [if app.]	25		
Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn	1				
	Crosswalk on Approach?	Yes	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	43	Left	32
	Multi-Use Path?	No	Left-Through-Right		Through	2	Through	3
	Scheduled Bus Service?	No	Through-Right	1	Right	6	Right	33
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		1.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn					
	Crosswalk on Approach?	Yes	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	26	Left	17
	Multi-Use Path?	No	Left-Through-Right	1	Through	0	Through	1
	Scheduled Bus Service?	No	Through-Right		Right	8	Right	47
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		1.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)

Append the most recent five-years of crash data for the intersection from the Signal Four (S4) Analytics. If the crash data evidences any issues relating to safety performance, discuss briefly here:

A review of the most current 5-years of crash data revealed the following: 7 rear ends accidents with 1 injury and 2 angle accidents with 1 with a bike and an injury.

Control Strategy Evaluation

Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.

Control Strategy	CAP-X Outputs: V/C Ratio Weekday AM Peak	CAP-X Outputs: V/C Ratio Weekday PM Peak	CAP-X Outputs: Ped Accom. Score	CAP-X Outputs: Bike Accom. Score	SPICE Outputs: Crash Prediction Rank	SPICE Outputs: SSI Rank	Strategy to be Advanced?	Justification
Two-Way Stop-Control	0.69	0.60	3.55	3.99	2	3	No	Crash Prediction Rank and Safe System for Intersection (SSI) Rank outputs do not support an the Two-Way Stop Control for the intersection.
All-Way Stop-Control	1.20	1.29	4.11	4.66	1	1	Yes	Crash Prediction Rank and Safe System for Intersection (SSI) Rank outputs support an All Way Stop Control for the intersection.
Signalized Control	0.55	0.58	4.49	4.66	3	2	No	Minor street traffic volumes and current crash data do not meet the minimum warrants for a traffic signal.
Recommendation	A single control strategy is recommended							

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th AWSC
2: Avalon Rd & Golden Bell St/Longbeam Way

AM E_W Lt
AM Peak Hour

Intersection	
Intersection Delay, s/veh	310.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Future Vol, veh/h	43	2	6	32	3	33	2	842	17	10	758	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	2	7	36	3	37	2	946	19	11	852	0
Number of Lanes	1	1	0	0	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	2
HCM Control Delay, s/veh	15.1	15.4	376.2	283.4
HCM LOS	C	C	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	47%	100%	0%	0%
Vol Thru, %	0%	98%	0%	25%	4%	0%	100%	100%
Vol Right, %	0%	2%	0%	75%	49%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	2	859	43	8	68	10	758	0
LT Vol	2	0	43	0	32	10	0	0
Through Vol	0	842	0	2	3	0	758	0
RT Vol	0	17	0	6	33	0	0	0
Lane Flow Rate	2	965	48	9	76	11	852	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.004	1.778	0.12	0.02	0.176	0.022	1.569	0
Departure Headway (Hd)	8.151	7.626	11.244	10.149	10.453	8.47	7.959	7.959
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	442	483	321	355	345	425	468	0
Service Time	5.851	5.326	8.944	7.849	8.153	6.17	5.659	5.659
HCM Lane V/C Ratio	0.005	1.998	0.15	0.025	0.22	0.026	1.821	0
HCM Control Delay, s/veh	10.9	377.1	15.5	13.1	15.4	11.4	287	10.7
HCM Lane LOS	B	F	C	B	C	B	F	F
HCM 95th-tile Q	0	52	0.4	0.1	0.6	0.1	39	0

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th AWSC
2: Avalon Rd & Golden Bell St/Longbeam Way

PM E_W Lt
PM Peak Hour

Intersection	
Intersection Delay, s/veh	328.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Future Vol, veh/h	26	0	8	17	1	47	9	900	21	22	823	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	9	18	1	51	10	978	23	24	895	0
Number of Lanes	1	1	0	0	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	1	2
HCM Control Delay, s/veh	14.5	14.7	388.1	300.2
HCM LOS	B	B	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	26%	100%	0%	0%
Vol Thru, %	0%	98%	0%	0%	2%	0%	100%	100%
Vol Right, %	0%	2%	0%	100%	72%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	921	26	8	65	22	823	0
LT Vol	9	0	26	0	17	22	0	0
Through Vol	0	900	0	0	1	0	823	0
RT Vol	0	21	0	8	47	0	0	0
Lane Flow Rate	10	1001	28	9	71	24	895	0
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.019	1.812	0.071	0.019	0.156	0.047	1.618	0
Departure Headway (Hd)	8.074	7.548	11.384	10.1	10.137	8.363	7.853	7.853
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	446	491	317	357	356	431	474	0
Service Time	5.774	5.248	9.084	7.8	7.837	6.063	5.553	5.553
HCM Lane V/C Ratio	0.022	2.039	0.088	0.025	0.199	0.056	1.888	0
HCM Control Delay, s/veh	10.9	391.8	15	13	14.7	11.5	307.9	10.6
HCM Lane LOS	B	F	B	B	B	B	F	F
HCM 95th-tile Q	0.1	54.4	0.2	0.1	0.5	0.1	42	0

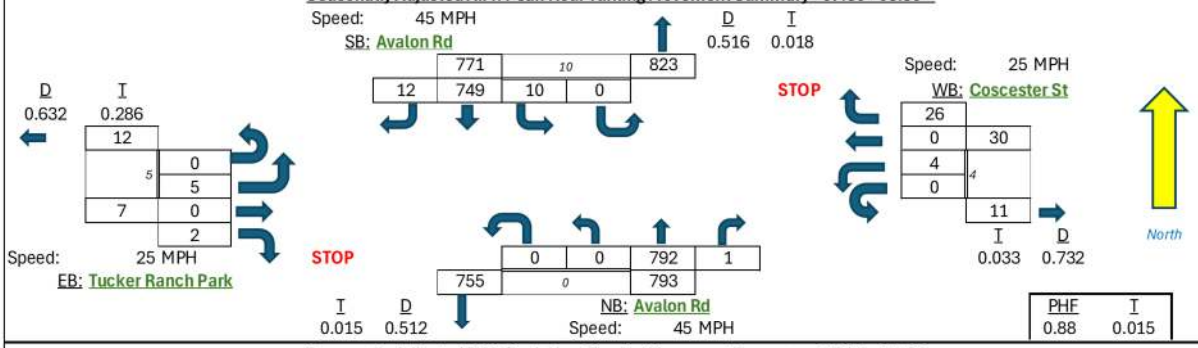
Attachment C

Summary of Vehicle Movements

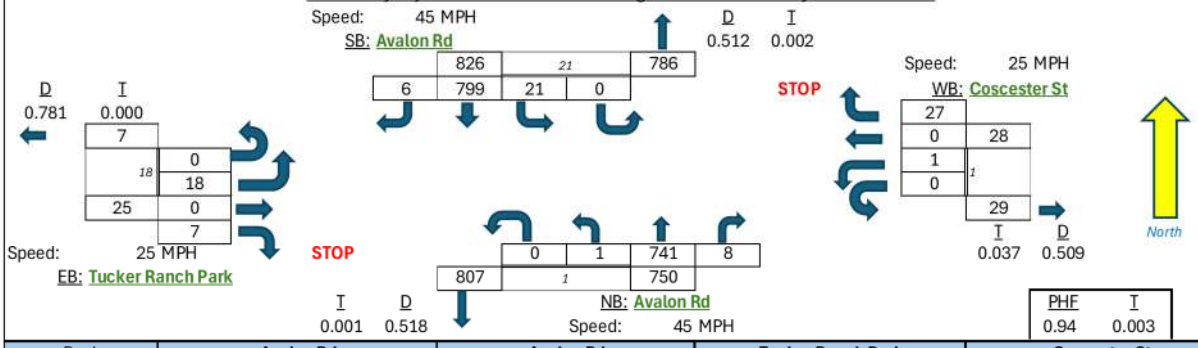
Luke Transportation Engineering Consultants

Project:	WG 3 Intersections	LTEC 25-0204	
N/S Road:	Avalon Rd	**Observer:**	LTEC
E/W Road:	Coscester St	**Weather:**	Clear
Date:	Tuesday, January 20, 2026	**Rd Condition:**	Ok
City:	Winter Garden	**Signal:**	No
County:	Orange	**Major St Movement:**	North/South
FDOT SF:	1.02 (Note: If SF<1,default to 1.0)	**PM Pk Hr Factor:**	0.95
		Latitude:	28°32'35.96"N
		Longitude:	81°36'28.70"W
		Station #:	3

Seasonally Adjusted A.M. Peak Hour Turning Movement Summary - 07:30 - 08:30



Seasonally Adjusted P.M. Peak Hour Turning Movement Summary - 16:45 - 17:45



Peak Hour Time Interval		Avalon Rd Northbound				Avalon Rd Southbound				Tucker Ranch Park Eastbound				Coscester St Westbound			
		Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt	Uturn	Lt	Thru	Rt
# Lanes		<		1	>	<		1	>	1		1	>	1		1	>
Length																	
7:00	7:15	0	0	190	1	0	0	136	3	0	0	0	1	0	2	0	3
7:15	7:30	0	0	141	1	0	1	130	1	0	0	0	0	0	0	0	3
7:30	7:45	0	0	196	0	0	2	169	6	0	0	0	0	0	0	0	11
7:45	8:00	0	0	200	0	0	2	144	3	0	0	0	1	0	1	0	6
Hourly Sum		0	0	727	2	0	5	579	13	0	0	0	2	0	3	0	23
8:00	8:15	0	0	200	0	0	5	229	2	0	5	0	1	0	2	0	3
8:15	8:30	0	0	180	1	0	1	192	1	0	0	0	0	0	1	0	5
8:30	8:45	0	0	165	1	0	2	137	1	0	0	0	0	0	0	0	2
8:45	9:00	0	1	183	1	0	4	135	1	0	0	0	1	0	0	0	9
Hourly Sum		0	1	728	3	0	12	693	5	0	5	0	2	0	3	0	19
16:00	16:15	0	0	152	2	0	11	185	0	0	0	0	1	0	1	0	3
16:15	16:30	0	0	167	1	0	3	190	1	0	1	0	0	0	0	0	4
16:30	16:45	0	1	143	1	0	10	173	0	0	2	0	0	0	2	0	4
16:45	17:00	0	1	207	1	0	5	190	3	0	4	0	2	0	0	0	10
Hourly Sum		0	2	669	5	0	29	738	4	0	7	0	3	0	3	0	21
17:00	17:15	0	0	170	3	0	4	190	1	0	7	0	2	0	1	0	8
17:15	17:30	0	0	176	3	0	8	203	2	0	6	0	3	0	0	0	8
17:30	17:45	0	0	173	1	0	4	200	0	0	1	0	0	0	0	0	0
17:45	18:00	0	0	141	0	0	5	182	0	0	1	0	0	0	1	0	5
Hourly Sum		0	0	660	7	0	21	775	3	0	15	0	5	0	2	0	21
A.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
7:30	**8:30**	0	0	792	1	0	10	749	12	0	5	0	2	0	4	0	26
% Turns		0		99.9%	0.1%	0	1.3%	97.1%	1.6%	0	71.4%		28.6%	0	13.3%		86.7%
P.M. Peak Hour Summary - Seasonally Adjusted with FDOT Factor Adjusment Factor																	
16:45	**17:45**	0	1	741	8	0	21	799	6	0	18	0	7	0	1	0	27
% Turns		0	0.1%	98.8%	1.1%	0	2.5%	96.7%	0.7%	0	72.0%		28.0%	0	3.6%		96.4%

Luke Transportation Engineering Consultants, 2026

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th TWSC AM
3: Avalon Rd & Tucker Ranch Park/Coscester St AM Peak Hour

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Future Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	100	100	100
Heavy Vehicles, %	27	27	27	3	3	3	2	2	2	2	2	2
Mvmt Flow	6	0	2	5	0	30	0	900	1	10	749	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1675	1676	755	1670	1682	901	761	0	0	901	0	0
Stage 1	775	775	-	901	901	-	-	-	-	-	-	-
Stage 2	900	901	-	769	781	-	-	-	-	-	-	-
Critical Hdwy	7.37	6.77	6.47	7.13	6.53	6.23	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.37	5.77	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.37	5.77	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.743	4.243	3.543	3.527	4.027	3.327	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	66	83	371	76	94	335	851	-	-	754	-	-
Stage 1	355	374	-	332	356	-	-	-	-	-	-	-
Stage 2	301	325	-	392	404	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	59	81	371	74	92	335	851	-	-	754	-	-
Mov Cap-2 Maneuver	59	81	-	74	92	-	-	-	-	-	-	-
Stage 1	347	365	-	332	356	-	-	-	-	-	-	-
Stage 2	275	325	-	381	395	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	56.9	23.57	0	0.13
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	851	-	-	77	228	23	-	-
HCM Lane V/C Ratio	-	-	-	0.103	0.15	0.013	-	-
HCM Ctrl Dly (s/v)	0	-	-	56.9	23.6	9.8	0	-
HCM Lane LOS	A	-	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.5	0	-	-

HCM 7th TWSC PM
3: Avalon Rd & Tucker Ranch Park/Coscester St PM Peak Hour

Intersection												
Int Delay, s/veh	1.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⚜			⚜			⚜			⚜	
Traffic Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Future Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	92	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	19	0	7	1	0	29	1	788	9	22	850	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1688	1697	853	1689	1696	793	856	0	0	797	0	0
Stage 1	898	898	-	795	795	-	-	-	-	-	-	-
Stage 2	790	799	-	895	901	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.14	6.54	6.24	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.536	4.036	3.336	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	74	92	359	73	92	386	784	-	-	825	-	-
Stage 1	334	358	-	378	397	-	-	-	-	-	-	-
Stage 2	383	398	-	333	354	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	65	87	359	68	87	386	784	-	-	825	-	-
Mov Cap-2 Maneuver	65	87	-	68	87	-	-	-	-	-	-	-
Stage 1	317	340	-	377	396	-	-	-	-	-	-	-
Stage 2	354	397	-	309	336	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	66.36	17.02	0.01	0.24
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	2	-	-	84	329	46	-	-
HCM Lane V/C Ratio	0.001	-	-	0.316	0.091	0.027	-	-
HCM Ctrl Dly (s/v)	9.6	0	-	66.4	17	9.5	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.3	0.1	-	-

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Florida Department of Transportation
Intersection Control Evaluation (ICE) Form
Stage 1: Screening

Intersection Control Evaluation Form 750-010-30

To fulfill the requirements of Stage 1 (Screening) of FDOT's ICE procedures, complete the following form and append all supporting documentation. Completed forms are to be submitted to the District Traffic Operations Engineer (DTOE) and District Design Engineer (DDE) for the project's approval.

Project Name	WG 3 Intersections		FDOT Project #		
Submitted By	Joseph Roviaro	Agency/Company	LTEC	Date	3/13/2026
Email	jtr@ltec-fl.com	FDOT District	District 5	County	Orange
Project Locality (*City/Town/Village*)	Winter Garden				
Intersection Type	At-Grade Intersection	FDOT Context Classification	C3R - Suburban Residential		
		Project Type	Corridor Improvement Project		

Project Purpose (*What is the catalyst for this project and why is it being undertaken?*)	'Existing Conditions Analysis AM Cap X and PM Cap X + Spice
Project Setting Description (*Describe the area surrounding the intersection*)	Residential
Multimodal Context (*Describe the pedestrian, bicycle, and transit activity in the area and the potential for activity based on surrounding land uses and development patterns*)	During the data collection effort, the Pedestrian and Bicycle activity was observed to be minimal. However, due to the number of residential units in the surrounding area and the future widening of Avalon Road with bike lanes and installation of a pedestrian path, the number of pedestrians and bicycles is expected to increase.

Major Street Information

Roadway ID		Route Name(s)	Avalon Road			Milepoint	
Existing Control Type	Two-way Stop-Control		Existing AADT	12,310	Design Year AADT		
Design Vehicle	Intermediate Semitrailer (WB-40)		Control Vehicle	Intermediate Semitrailer (WB-50)			
Primary Functional Classification	Urban Major Collector				Design Speed (mph)	50	
Secondary Functional Classification (if app.)	Urban Minor Arterial				Target Speed (mph) [if app.]	45	

Approach #1	Direction	Northbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn					
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	0	Left	1
	Multi-Use Path?	No	Left-Through-Right	1	Through	792	Through	741
	Scheduled Bus Service?	No	Through-Right		Right	1	Right	8
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		2.0%	
Approach #2	Direction	Southbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	One side of the approach	Left-Turn					
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	10	Left	21
	Multi-Use Path?	No	Left-Through-Right	1	Through	749	Through	799
	Scheduled Bus Service?	No	Through-Right		Right	12	Right	6
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		2.0%	

Minor Street Information

Roadway ID		Route Name(s)	Tucker Ranch Ent (EB)/Coscester St (WB)			Milepoint (if app.)	
Existing Control Type	Two-way Stop-Control		Existing AADT	1,400	Design Year AADT		
Design Vehicle	School Bus (S-BUS-36)		Control Vehicle	School Bus (S-BUS-36)			
Primary Functional Classification	Urban Local				Design Speed (mph)	30	
Secondary Functional Classification (if app.)	Urban Local				Target Speed (mph) [if app.]	25	

Approach #1	Direction	Eastbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Neither side of the approach	Left-Turn					
	Crosswalk on Approach?	No	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	5	Left	18
	Multi-Use Path?	No	Left-Through-Right	1	Through	0	Through	0
	Scheduled Bus Service?	No	Through-Right		Right	2	Right	7
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		3.0%	
Approach #2	Direction	Westbound	Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:	Both sides of the approach	Left-Turn					
	Crosswalk on Approach?	Yes	Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?	No	Through		Left	1	Left	4
	Multi-Use Path?	No	Left-Through-Right	1	Through	0	Through	0
	Scheduled Bus Service?	No	Through-Right		Right	26	Right	27
	Bus Stop on Approach?	No	Right-Turn		Daily Truck %		4.0%	
Approach #3	Direction		Number of Lanes		Study Period #1 Traffic Volumes		Study Period #2 Traffic Volumes	
	Sidewalks along:		Left-Turn					
	Crosswalk on Approach?		Left-Through		Weekday AM Peak		Weekday PM Peak	
	On-Street Bike Facilities?		Through		Left		Left	
	Multi-Use Path?		Left-Through-Right		Through		Through	
	Scheduled Bus Service?		Through-Right		Right		Right	
	Bus Stop on Approach?		Right-Turn		Daily Truck %			

Crash History (Existing Intersections Only)

Append the most recent five-years of crash data for the intersection from the Signal Four (S4) Analytics. If the crash data evidences any issues relating to safety performance, discuss briefly here:

A review of the most current 5-years of crash data revealed the following: 10 rear ends accidents with 5 injuries, 1 angle accident with 1 injury, 1 sideswipe accident with no injury, and 1 off road accident with no injury.

Control Strategy Evaluation

Provide a brief justification as to why each of the following control strategies should be advanced or not. Justification should consider potential environmental impacts.

Control Strategy	CAP-X Outputs: V/C Ratio Weekday AM Peak	CAP-X Outputs: V/C Ratio Weekday PM Peak	CAP-X Outputs: Ped Accom. Score	CAP-X Outputs: Bike Accom. Score	SPICE Outputs: Crash Prediction Rank	SPICE Outputs: SSI Rank	Strategy to be Advanced?	Justification
Two-Way Stop-Control	0.46	0.46	3.82	3.99	2	3	No	Crash Prediction Rank and Safe System for Intersection (SSI) Rank outputs do not support an the Two-Way Stop Control for the intersection.
All-Way Stop-Control	1.39	1.40	4.37	4.66	1	1	Yes	Crash Prediction Rank and Safe System for Intersection (SSI) Rank outputs support an All Way Stop Control for the intersection.
Signalized Control	0.48	0.48	4.62	4.66	3	2	No	Minor street traffic volumes and current crash data do not meet the minimum warrants for a traffic signal.
Recommendation	A single control strategy is recommended							

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	0	2	5	1	1	0	0	0	0	9
00:30	0	0	0	0	0	0	0	0	4	3	1	1	0	0	0	9
00:45	0	0	0	0	0	0	0	1	3	4	1	0	0	0	0	9
01:00	0	0	0	0	0	0	1	1	0	3	0	0	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*4*	*12*	*11*	*3*	*1*	*0*	*0*	*0*	*32*
01:15	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	3
01:30	0	0	0	0	0	0	1	3	0	2	0	0	0	0	0	6
01:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*3*	*2*	*5*	*0*	*1*	*0*	*0*	*0*	*13*
02:15	0	0	0	0	0	0	0	2	0	1	1	0	0	0	0	4
02:30	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3
02:45	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	4
03:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*4*	*2*	*1*	*0*	*1*	*0*	*0*	*12*
03:15	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
03:30	0	0	0	0	0	0	2	0	4	1	1	0	0	0	0	8
03:45	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*1*	*4*	*4*	*1*	*1*	*0*	*0*	*0*	*14*
04:15	0	0	0	0	0	0	1	5	2	4	1	0	0	0	0	13
04:30	0	0	0	0	0	0	2	0	2	3	0	0	0	0	0	7
04:45	0	0	0	0	0	0	0	3	2	4	2	0	0	0	0	11
05:00	0	0	0	0	0	0	1	1	5	6	0	0	0	2	0	15
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*9*	*11*	*17*	*3*	*0*	*0*	*2*	*0*	*46*
05:15	0	0	0	0	0	0	3	1	11	6	3	0	0	0	0	24
05:30	0	0	1	0	0	0	3	2	11	6	2	1	0	0	0	26
05:45	0	0	0	0	0	0	2	5	8	10	5	0	0	0	0	30
06:00	0	0	0	0	0	0	1	5	17	21	5	0	0	0	0	49
Hourly Total	*0*	*0*	*1*	*0*	*0*	*0*	*9*	*13*	*47*	*43*	*15*	*1*	*0*	*0*	*0*	*129*
06:15	0	0	0	0	0	0	2	5	17	8	4	1	0	0	0	37
06:30	0	0	0	0	0	0	3	8	24	10	2	1	0	0	0	48
06:45	0	0	0	0	0	0	4	23	43	11	4	0	0	0	0	85
07:00	0	0	0	0	0	0	8	56	59	16	3	1	0	0	0	143
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*17*	*92*	*143*	*45*	*13*	*3*	*0*	*0*	*0*	*313*
07:15	0	0	0	1	0	10	46	80	38	5	2	0	0	0	0	182
07:30	0	0	0	0	10	16	20	67	42	8	2	0	0	0	0	165
07:45	0	0	2	4	7	6	52	64	40	5	0	0	0	0	0	180
08:00	0	5	7	15	17	16	63	52	15	3	1	0	0	0	0	194
Hourly Total	*0*	*5*	*9*	*20*	*34*	*48*	*181*	*263*	*135*	*21*	*5*	*0*	*0*	*0*	*0*	*721*
08:15	0	0	0	1	1	36	75	50	13	4	0	0	0	0	0	180
08:30	0	23	40	19	17	21	39	10	2	2	0	0	0	0	0	173
08:45	0	31	52	78	25	19	4	1	3	0	0	0	0	0	0	213
09:00	0	13	53	55	52	5	3	1	0	0	0	0	0	0	0	182
Hourly Total	*0*	*67*	*145*	*153*	*95*	*81*	*121*	*62*	*18*	*6*	*0*	*0*	*0*	*0*	*0*	*748*
09:15	0	5	10	11	7	20	43	53	14	4	0	0	0	0	0	167
09:30	0	0	1	2	8	36	63	45	11	3	0	0	0	0	0	169
09:45	0	5	5	6	36	29	39	27	15	4	1	0	0	0	0	167
10:00	0	0	0	0	2	7	27	39	41	10	2	0	0	0	0	128
Hourly Total	*0*	*10*	*16*	*19*	*53*	*92*	*172*	*164*	*81*	*21*	*3*	*0*	*0*	*0*	*0*	*631*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	4	5	8	2	22	44	28	7	2	0	0	0	0	122
10:30	0	0	0	1	0	2	21	34	41	24	0	0	0	0	0	123
10:45	0	0	0	1	9	5	12	44	35	6	2	0	0	0	0	114
11:00	0	0	0	0	0	0	8	61	57	2	0	0	0	0	0	128
Hourly Total	*0*	*0*	*4*	*7*	*17*	*9*	*63*	*183*	*161*	*39*	*4*	*0*	*0*	*0*	*0*	*487*
11:15	0	0	0	0	0	3	16	45	35	9	1	0	0	0	0	109
11:30	0	0	0	0	0	1	12	40	33	15	2	0	0	0	0	103
11:45	0	0	1	0	1	8	21	43	24	14	0	0	0	0	0	112
12:00	0	0	0	0	9	14	31	37	30	7	0	0	0	0	0	128
Hourly Total	*0*	*0*	*1*	*0*	*10*	*26*	*80*	*165*	*122*	*45*	*3*	*0*	*0*	*0*	*0*	*452*
12:15	0	0	0	0	1	1	12	45	49	6	0	0	0	0	0	114
12:30	0	0	0	0	0	3	18	36	40	8	0	0	0	0	0	105
12:45	0	0	0	1	0	2	20	47	39	11	3	0	0	0	0	123
13:00	0	0	0	0	0	11	24	49	30	10	1	1	0	0	0	126
Hourly Total	*0*	*0*	*0*	*1*	*1*	*17*	*74*	*177*	*158*	*35*	*4*	*1*	*0*	*0*	*0*	*468*
13:15	0	0	0	0	0	3	24	52	42	8	1	0	0	0	0	130
13:30	0	0	0	0	1	10	11	39	32	7	1	0	0	0	0	101
13:45	0	0	0	0	0	3	20	37	37	7	1	0	0	0	0	105
14:00	0	0	0	0	0	6	30	67	42	7	0	0	0	0	0	152
Hourly Total	*0*	*0*	*0*	*0*	*1*	*22*	*85*	*195*	*153*	*29*	*3*	*0*	*0*	*0*	*0*	*488*
14:15	0	0	0	0	2	8	13	45	30	10	0	0	0	0	0	108
14:30	0	0	0	1	0	1	23	47	32	13	1	0	0	0	0	118
14:45	0	0	0	0	1	11	26	51	32	6	0	0	0	0	0	127
15:00	0	0	0	1	7	16	65	36	14	3	0	0	0	0	0	142
Hourly Total	*0*	*0*	*0*	*2*	*10*	*36*	*127*	*179*	*108*	*32*	*1*	*0*	*0*	*0*	*0*	*495*
15:15	0	0	0	0	4	39	69	44	6	5	0	0	0	0	0	167
15:30	0	10	17	15	20	31	44	28	4	0	0	0	0	0	0	169
15:45	0	30	59	68	17	1	3	2	2	0	0	0	0	0	0	182
16:00	0	17	65	64	8	2	3	3	0	0	0	1	0	0	0	163
Hourly Total	*0*	*57*	*141*	*147*	*49*	*73*	*119*	*77*	*12*	*5*	*0*	*1*	*0*	*0*	*0*	*681*
16:15	0	3	10	0	11	44	100	18	5	1	0	0	0	0	0	192
16:30	0	20	44	64	42	21	3	2	1	0	0	0	0	0	0	197
16:45	0	17	63	32	15	28	7	3	1	0	0	0	0	0	0	166
17:00	0	24	54	40	23	13	6	5	0	2	0	0	0	0	0	167
Hourly Total	*0*	*64*	*171*	*136*	*91*	*106*	*116*	*28*	*7*	*3*	*0*	*0*	*0*	*0*	*0*	*722*
17:15	0	4	16	21	12	20	31	32	18	4	0	0	0	0	0	158
17:30	0	24	48	60	8	1	4	4	3	0	0	0	0	0	0	152
17:45	0	1	14	15	17	32	34	32	16	2	0	0	0	0	0	163
18:00	0	6	35	28	17	25	27	23	7	0	0	0	0	0	0	168
Hourly Total	*0*	*35*	*113*	*124*	*54*	*78*	*96*	*91*	*44*	*6*	*0*	*0*	*0*	*0*	*0*	*641*
18:15	0	0	0	0	1	23	29	57	33	4	2	0	0	0	0	149
18:30	0	0	0	0	0	5	33	44	42	12	1	0	0	0	0	137
18:45	0	0	0	0	0	0	11	49	48	16	7	0	0	1	0	132
19:00	0	0	0	0	0	0	7	50	54	11	2	0	0	0	0	124
Hourly Total	*0*	*0*	*0*	*0*	*1*	*28*	*80*	*200*	*177*	*43*	*12*	*0*	*0*	*1*	*0*	*542*
19:15	0	0	0	0	0	0	2	27	37	22	5	0	0	0	0	93
19:30	0	0	0	0	0	0	12	28	35	22	2	0	0	0	0	99
19:45	0	0	0	0	0	1	4	29	36	14	3	0	0	0	0	87
20:00	0	0	0	0	0	0	5	18	23	16	1	0	0	0	0	63
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*23*	*102*	*131*	*74*	*11*	*0*	*0*	*0*	*0*	*342*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Northbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	0	0	4	31	19	10	0	0	0	0	0	64
20:30	0	0	0	0	0	0	12	25	22	8	0	0	0	1	0	68
20:45	0	0	0	0	0	0	9	29	22	0	1	0	0	1	0	62
21:00	0	0	0	0	0	0	2	14	10	8	5	0	0	0	0	39
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*27*	*99*	*73*	*26*	*6*	*0*	*0*	*2*	*0*	*233*
21:15	0	0	0	0	0	0	0	9	24	12	1	1	0	0	0	47
21:30	0	0	0	0	0	1	6	19	10	11	2	0	0	0	0	49
21:45	0	0	0	0	0	0	4	3	16	7	0	1	0	0	0	31
22:00	0	0	0	0	0	0	1	5	9	10	3	1	0	0	0	29
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*11*	*36*	*59*	*40*	*6*	*3*	*0*	*0*	*0*	*156*
22:15	0	0	0	0	0	0	4	10	5	16	3	0	0	0	0	38
22:30	0	0	0	0	0	0	0	4	8	10	3	1	0	0	0	26
22:45	0	0	0	0	0	2	4	3	7	0	0	0	0	0	0	16
23:00	0	0	0	0	0	0	0	4	9	7	2	0	0	0	0	22
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*8*	*21*	*29*	*33*	*8*	*1*	*0*	*0*	*0*	*102*
23:15	0	0	0	0	0	0	4	10	7	7	0	0	0	0	0	28
23:30	0	0	0	0	0	0	0	3	4	10	2	1	0	0	0	20
23:45	0	0	0	0	0	0	0	2	4	2	1	0	0	0	0	9
00:00	0	0	0	0	0	0	0	3	5	6	1	0	0	0	0	15
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*18*	*20*	*25*	*4*	*1*	*0*	*0*	*0*	*72*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	238	601	609	416	620	1423	2186	1711	610	106	14	1	5	0	8540
Percentages	0.00	2.79	7.04	7.13	4.87	7.26	16.66	25.60	20.04	7.14	1.24	0.16	0.01	0.06	0.00	

Speed Summary

	Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
	8540	33.64	18.90	36.66	43.73	4633	2447	736	126	20	6	5	0	35- 45
Percentages						54.25	28.65	8.62	1.48	0.23	0.07	0.06	0.00	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:45-08:45	0	59	99	113	60	92	181	113	33	9	1	0	0	0	0	760
Percentages	0.00	7.76	13.03	14.87	7.89	12.11	23.82	14.87	4.34	1.18	0.13	0.00	0.00	0.00	0.00	*8.90*
15:30-16:30	0	70	178	196	78	68	109	25	8	1	0	1	0	0	0	734
Percentages	0.00	9.54	24.25	26.70	10.63	9.26	14.85	3.41	1.09	0.14	0.00	0.14	0.00	0.00	0.00	*8.59*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	0	2	6	2	2	0	0	0	0	12
00:30	0	0	0	0	0	0	1	1	2	5	1	1	0	0	0	11
00:45	0	0	0	0	0	0	2	2	1	6	2	0	0	0	0	13
01:00	0	0	0	0	0	0	0	1	4	4	3	1	0	0	0	13
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*6*	*13*	*17*	*8*	*2*	*0*	*0*	*0*	*49*
01:15	0	0	0	0	0	0	0	1	3	2	1	1	0	0	0	8
01:30	0	0	0	0	0	0	0	2	4	5	2	0	0	0	1	14
01:45	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*10*	*10*	*4*	*1*	*0*	*0*	*1*	*30*
02:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
02:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
02:45	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	4
03:00	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	4
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*2*	*4*	*1*	*0*	*0*	*0*	*0*	*10*
03:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	1	2	2	2	0	0	0	0	7
03:45	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
04:00	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*4*	*5*	*2*	*1*	*1*	*0*	*0*	*14*
04:15	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	4
04:30	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	5
04:45	0	0	0	0	0	0	0	1	2	3	1	0	0	0	0	7
05:00	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*6*	*7*	*4*	*0*	*0*	*0*	*1*	*21*
05:15	0	0	0	0	0	0	0	0	3	1	3	0	0	0	0	7
05:30	0	0	0	0	0	0	0	4	7	3	5	0	0	0	0	19
05:45	0	0	0	1	0	0	0	0	6	9	2	0	1	0	0	19
06:00	0	0	0	1	1	0	0	8	8	6	2	0	0	0	0	26
Hourly Total	*0*	*0*	*0*	*2*	*1*	*0*	*0*	*12*	*24*	*19*	*12*	*0*	*1*	*0*	*0*	*71*
06:15	0	0	0	0	0	0	0	7	12	5	3	0	0	0	0	27
06:30	0	0	0	0	0	1	2	5	14	17	5	0	0	0	0	44
06:45	0	0	0	0	0	0	4	14	21	18	5	0	0	0	0	62
07:00	0	0	0	7	6	4	5	27	19	18	5	1	0	0	0	92
Hourly Total	*0*	*0*	*0*	*7*	*6*	*5*	*11*	*53*	*66*	*58*	*18*	*1*	*0*	*0*	*0*	*225*
07:15	0	0	4	8	6	7	20	18	22	11	0	1	0	0	0	97
07:30	0	0	0	2	1	2	8	65	45	12	3	0	0	0	0	138
07:45	0	0	3	8	7	14	27	45	42	21	3	0	0	0	0	170
08:00	0	0	0	0	2	12	17	57	42	18	1	0	0	0	0	149
Hourly Total	*0*	*0*	*7*	*18*	*16*	*35*	*72*	*185*	*151*	*62*	*7*	*1*	*0*	*0*	*0*	*554*
08:15	0	0	0	1	10	20	45	84	18	1	1	1	0	0	0	181
08:30	0	0	0	0	3	28	52	54	29	8	0	0	0	0	0	174
08:45	0	5	9	14	8	8	46	38	19	3	0	0	0	0	0	150
09:00	0	2	2	16	15	29	30	38	11	3	2	0	0	0	0	148
Hourly Total	*0*	*7*	*11*	*31*	*36*	*85*	*173*	*214*	*77*	*15*	*3*	*1*	*0*	*0*	*0*	*653*
09:15	0	0	0	0	1	9	36	60	21	2	1	0	0	0	0	130
09:30	0	0	0	0	0	11	42	55	34	10	0	0	0	0	0	152
09:45	0	0	0	0	0	2	16	47	31	10	1	0	0	0	0	107
10:00	0	0	2	3	1	2	6	33	52	7	3	0	0	0	0	109
Hourly Total	*0*	*0*	*2*	*3*	*2*	*24*	*100*	*195*	*138*	*29*	*5*	*0*	*0*	*0*	*0*	*498*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	1	0	3	6	17	31	30	12	3	0	0	0	0	103
10:30	0	0	0	0	0	0	9	27	38	15	1	0	0	0	0	90
10:45	0	0	0	0	0	1	10	37	41	17	1	0	0	0	0	107
11:00	0	0	0	1	3	6	9	35	36	17	0	0	0	0	0	107
Hourly Total	*0*	*0*	*1*	*1*	*6*	*13*	*45*	*130*	*145*	*61*	*5*	*0*	*0*	*0*	*0*	*407*
11:15	0	0	2	3	1	11	4	34	40	14	1	0	0	0	0	110
11:30	0	0	0	1	3	4	9	55	30	8	1	0	0	0	0	111
11:45	0	0	0	1	2	2	10	50	43	13	1	0	0	0	0	122
12:00	0	0	0	0	2	12	16	28	35	18	1	0	0	0	0	112
Hourly Total	*0*	*0*	*2*	*5*	*8*	*29*	*39*	*167*	*148*	*53*	*4*	*0*	*0*	*0*	*0*	*455*
12:15	0	0	0	0	1	5	10	37	56	11	0	0	0	0	0	120
12:30	0	0	0	0	0	1	14	45	56	13	1	0	0	0	0	130
12:45	0	0	0	0	6	12	8	30	37	15	1	0	0	0	0	109
13:00	0	0	0	2	10	9	32	38	34	5	4	1	0	0	0	135
Hourly Total	*0*	*0*	*0*	*2*	*17*	*27*	*64*	*150*	*183*	*44*	*6*	*1*	*0*	*0*	*0*	*494*
13:15	0	0	0	0	0	0	9	33	63	21	2	0	0	0	0	128
13:30	0	0	0	0	0	0	18	38	47	9	0	0	0	0	0	112
13:45	0	0	2	3	13	6	36	45	23	11	3	0	0	0	0	142
14:00	0	0	0	0	0	7	18	50	40	12	2	0	0	0	0	129
Hourly Total	*0*	*0*	*2*	*3*	*13*	*13*	*81*	*166*	*173*	*53*	*7*	*0*	*0*	*0*	*0*	*511*
14:15	0	0	0	1	6	10	21	42	40	9	0	0	0	0	0	129
14:30	0	0	1	1	4	8	36	59	40	7	0	0	0	0	0	156
14:45	0	0	0	2	4	1	38	80	36	7	2	0	0	0	0	170
15:00	0	0	2	0	2	16	56	58	27	1	0	0	0	0	0	162
Hourly Total	*0*	*0*	*3*	*4*	*16*	*35*	*151*	*239*	*143*	*24*	*2*	*0*	*0*	*0*	*0*	*617*
15:15	0	0	0	0	4	39	66	54	28	5	1	0	0	0	0	197
15:30	0	0	1	1	1	16	83	72	24	0	0	0	0	0	0	198
15:45	0	1	3	2	1	9	54	51	25	2	0	0	0	0	0	148
16:00	0	1	0	1	1	30	73	54	9	6	0	0	0	0	0	175
Hourly Total	*0*	*2*	*4*	*4*	*7*	*94*	*276*	*231*	*86*	*13*	*1*	*0*	*0*	*0*	*0*	*718*
16:15	0	1	0	0	4	27	56	66	17	2	0	0	0	0	0	173
16:30	0	3	9	14	15	40	39	29	16	7	0	0	0	0	0	172
16:45	0	0	3	1	4	14	47	67	16	3	1	0	0	0	0	156
17:00	0	1	1	0	1	20	40	73	39	8	0	1	1	0	0	185
Hourly Total	*0*	*5*	*13*	*15*	*24*	*101*	*182*	*235*	*88*	*20*	*1*	*1*	*1*	*0*	*0*	*686*
17:15	0	2	2	0	0	2	35	83	47	10	1	0	0	0	0	182
17:30	0	2	1	0	1	13	73	68	22	4	0	0	0	0	0	184
17:45	0	0	0	1	1	11	42	81	46	8	1	0	0	0	0	191
18:00	0	1	0	0	1	31	47	49	44	8	1	0	0	0	0	182
Hourly Total	*0*	*5*	*3*	*1*	*3*	*57*	*197*	*281*	*159*	*30*	*3*	*0*	*0*	*0*	*0*	*739*
18:15	0	0	0	0	1	12	49	57	46	3	0	0	0	0	0	168
18:30	0	0	0	0	0	16	35	73	53	1	0	2	0	0	0	180
18:45	0	0	0	0	0	1	9	49	64	33	4	0	0	0	0	160
19:00	0	0	0	0	0	0	19	46	55	18	2	0	0	0	0	140
Hourly Total	*0*	*0*	*0*	*0*	*1*	*29*	*112*	*225*	*218*	*55*	*6*	*2*	*0*	*0*	*0*	*648*
19:15	0	0	0	0	0	1	16	65	43	10	0	0	0	0	0	135
19:30	0	0	0	0	0	0	4	16	34	33	4	0	0	0	0	91
19:45	0	1	4	1	3	1	27	51	45	6	1	0	0	0	0	140
20:00	0	0	0	0	0	4	12	52	37	13	4	0	0	0	0	122
Hourly Total	*0*	*1*	*4*	*1*	*3*	*6*	*59*	*184*	*159*	*62*	*9*	*0*	*0*	*0*	*0*	*488*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Southbound

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	1	4	10	61	32	9	2	1	0	0	0	120
20:30	0	0	0	0	0	3	11	69	47	9	2	0	0	0	0	141
20:45	0	0	0	0	0	0	7	43	36	20	3	1	0	0	0	110
21:00	0	0	0	0	0	0	6	35	33	11	4	0	0	0	0	89
Hourly Total	*0*	*0*	*0*	*0*	*1*	*7*	*34*	*208*	*148*	*49*	*11*	*2*	*0*	*0*	*0*	*460*
21:15	0	0	0	0	0	1	14	31	36	13	3	0	0	0	0	98
21:30	0	0	0	0	0	0	14	23	23	16	2	0	0	0	0	78
21:45	0	0	0	0	0	0	9	23	28	13	4	0	0	0	0	77
22:00	0	0	0	0	0	0	2	13	22	17	4	0	0	0	0	58
Hourly Total	*0*	*0*	*0*	*0*	*0*	*1*	*39*	*90*	*109*	*59*	*13*	*0*	*0*	*0*	*0*	*311*
22:15	0	0	0	0	0	0	0	9	19	8	3	1	0	0	0	40
22:30	0	0	0	0	0	0	0	6	10	9	3	0	0	0	0	28
22:45	0	0	0	0	0	0	0	5	10	15	3	0	0	0	0	33
23:00	0	0	0	0	0	0	2	1	7	9	3	1	0	0	0	23
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*21*	*46*	*41*	*12*	*2*	*0*	*0*	*0*	*124*
23:15	0	0	0	0	0	0	3	1	5	6	1	3	0	0	0	19
23:30	0	0	0	0	0	0	1	3	13	8	2	1	0	0	0	28
23:45	0	0	0	0	0	0	1	3	7	2	1	0	1	0	0	15
00:00	0	0	0	0	0	0	1	1	5	4	2	0	0	0	0	13
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*6*	*8*	*30*	*20*	*6*	*4*	*1*	*0*	*0*	*75*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	20	52	97	160	561	1646	3011	2326	810	150	19	4	0	2	8858
Percentages	0.00	0.23	0.59	1.10	1.81	6.33	18.58	33.99	26.26	9.14	1.69	0.21	0.05	0.00	0.02	

Speed Summary

	Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
	8858	38.28	32.07	38.51	44.41	6322	3311	985	175	25	6	2	2	35- 45
Percentages						71.37	37.38	11.12	1.98	0.28	0.07	0.02	0.02	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:45-08:45	0	5	9	15	23	68	160	233	108	30	2	1	0	0	0	654
Percentages	0.00	0.76	1.38	2.29	3.52	10.40	24.46	35.63	16.51	4.59	0.31	0.15	0.00	0.00	0.00	*7.38*
15:30-16:30	0	6	12	17	21	106	222	200	67	17	0	0	0	0	0	668
Percentages	0.00	0.90	1.80	2.54	3.14	15.87	33.23	29.94	10.03	2.54	0.00	0.00	0.00	0.00	0.00	*7.54*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
00:15	0	0	0	0	0	0	0	4	11	3	3	0	0	0	0	21
00:30	0	0	0	0	0	0	1	1	6	8	2	2	0	0	0	20
00:45	0	0	0	0	0	0	2	3	4	10	3	0	0	0	0	22
01:00	0	0	0	0	0	0	1	2	4	7	3	1	0	0	0	18
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*10*	*25*	*28*	*11*	*3*	*0*	*0*	*0*	*81*
01:15	0	0	0	0	0	0	1	1	3	4	1	1	0	0	0	11
01:30	0	0	0	0	0	0	1	5	4	7	2	0	0	0	1	20
01:45	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	5
02:00	0	0	0	0	0	0	0	0	4	2	0	1	0	0	0	7
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*7*	*12*	*15*	*4*	*2*	*0*	*0*	*1*	*43*
02:15	0	0	0	0	0	0	0	3	0	1	1	0	0	0	0	5
02:30	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4
02:45	0	0	0	0	0	0	0	2	4	2	0	0	0	0	0	8
03:00	0	0	0	0	0	0	0	1	0	3	1	0	0	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*7*	*6*	*6*	*2*	*0*	*1*	*0*	*0*	*22*
03:15	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3
03:30	0	0	0	0	0	0	2	1	6	3	3	0	0	0	0	15
03:45	0	0	0	0	0	0	1	0	1	2	0	1	0	0	0	5
04:00	0	0	0	0	0	0	0	0	1	2	0	1	1	0	0	5
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*2*	*8*	*9*	*3*	*2*	*1*	*0*	*0*	*28*
04:15	0	0	0	0	0	0	1	6	3	5	1	0	0	0	1	17
04:30	0	0	0	0	0	0	2	1	4	4	1	0	0	0	0	12
04:45	0	0	0	0	0	0	0	4	4	7	3	0	0	0	0	18
05:00	0	0	0	0	0	0	1	1	6	8	2	0	0	2	0	20
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*4*	*12*	*17*	*24*	*7*	*0*	*0*	*2*	*1*	*67*
05:15	0	0	0	0	0	0	3	1	14	7	6	0	0	0	0	31
05:30	0	0	1	0	0	0	3	6	18	9	7	1	0	0	0	45
05:45	0	0	0	1	0	0	2	5	14	19	7	0	1	0	0	49
06:00	0	0	0	1	1	0	1	13	25	27	7	0	0	0	0	75
Hourly Total	*0*	*0*	*1*	*2*	*1*	*0*	*9*	*25*	*71*	*62*	*27*	*1*	*1*	*0*	*0*	*200*
06:15	0	0	0	0	0	0	2	12	29	13	7	1	0	0	0	64
06:30	0	0	0	0	0	1	5	13	38	27	7	1	0	0	0	92
06:45	0	0	0	0	0	0	8	37	64	29	9	0	0	0	0	147
07:00	0	0	0	7	6	4	13	83	78	34	8	2	0	0	0	235
Hourly Total	*0*	*0*	*0*	*7*	*6*	*5*	*28*	*145*	*209*	*103*	*31*	*4*	*0*	*0*	*0*	*538*
07:15	0	0	4	9	6	17	66	98	60	16	2	1	0	0	0	279
07:30	0	0	0	2	11	18	28	132	87	20	5	0	0	0	0	303
07:45	0	0	5	12	14	20	79	109	82	26	3	0	0	0	0	350
08:00	0	5	7	15	19	28	80	109	57	21	2	0	0	0	0	343
Hourly Total	*0*	*5*	*16*	*38*	*50*	*83*	*253*	*448*	*286*	*83*	*12*	*1*	*0*	*0*	*0*	*1275*
08:15	0	0	0	2	11	56	120	134	31	5	1	1	0	0	0	361
08:30	0	23	40	19	20	49	91	64	31	10	0	0	0	0	0	347
08:45	0	36	61	92	33	27	50	39	22	3	0	0	0	0	0	363
09:00	0	15	55	71	67	34	33	39	11	3	2	0	0	0	0	330
Hourly Total	*0*	*74*	*156*	*184*	*131*	*166*	*294*	*276*	*95*	*21*	*3*	*1*	*0*	*0*	*0*	*1401*
09:15	0	5	10	11	8	29	79	113	35	6	1	0	0	0	0	297
09:30	0	0	1	2	8	47	105	100	45	13	0	0	0	0	0	321
09:45	0	5	5	6	36	31	55	74	46	14	2	0	0	0	0	274
10:00	0	0	2	3	3	9	33	72	93	17	5	0	0	0	0	237
Hourly Total	*0*	*10*	*18*	*22*	*55*	*116*	*272*	*359*	*219*	*50*	*8*	*0*	*0*	*0*	*0*	*1129*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
10:15	0	0	5	5	11	8	39	75	58	19	5	0	0	0	0	225
10:30	0	0	0	1	0	2	30	61	79	39	1	0	0	0	0	213
10:45	0	0	0	1	9	6	22	81	76	23	3	0	0	0	0	221
11:00	0	0	0	1	3	6	17	96	93	19	0	0	0	0	0	235
Hourly Total	*0*	*0*	*5*	*8*	*23*	*22*	*108*	*313*	*306*	*100*	*9*	*0*	*0*	*0*	*0*	*894*
11:15	0	0	2	3	1	14	20	79	75	23	2	0	0	0	0	219
11:30	0	0	0	1	3	5	21	95	63	23	3	0	0	0	0	214
11:45	0	0	1	1	3	10	31	93	67	27	1	0	0	0	0	234
12:00	0	0	0	0	11	26	47	65	65	25	1	0	0	0	0	240
Hourly Total	*0*	*0*	*3*	*5*	*18*	*55*	*119*	*332*	*270*	*98*	*7*	*0*	*0*	*0*	*0*	*907*
12:15	0	0	0	0	2	6	22	82	105	17	0	0	0	0	0	234
12:30	0	0	0	0	0	4	32	81	96	21	1	0	0	0	0	235
12:45	0	0	0	1	6	14	28	77	76	26	4	0	0	0	0	232
13:00	0	0	0	2	10	20	56	87	64	15	5	2	0	0	0	261
Hourly Total	*0*	*0*	*0*	*3*	*18*	*44*	*138*	*327*	*341*	*79*	*10*	*2*	*0*	*0*	*0*	*962*
13:15	0	0	0	0	0	3	33	85	105	29	3	0	0	0	0	258
13:30	0	0	0	0	1	10	29	77	79	16	1	0	0	0	0	213
13:45	0	0	2	3	13	9	56	82	60	18	4	0	0	0	0	247
14:00	0	0	0	0	0	13	48	117	82	19	2	0	0	0	0	281
Hourly Total	*0*	*0*	*2*	*3*	*14*	*35*	*166*	*361*	*326*	*82*	*10*	*0*	*0*	*0*	*0*	*999*
14:15	0	0	0	1	8	18	34	87	70	19	0	0	0	0	0	237
14:30	0	0	1	2	4	9	59	106	72	20	1	0	0	0	0	274
14:45	0	0	0	2	5	12	64	131	68	13	2	0	0	0	0	297
15:00	0	0	2	1	9	32	121	94	41	4	0	0	0	0	0	304
Hourly Total	*0*	*0*	*3*	*6*	*26*	*71*	*278*	*418*	*251*	*56*	*3*	*0*	*0*	*0*	*0*	*1112*
15:15	0	0	0	0	8	78	135	98	34	10	1	0	0	0	0	364
15:30	0	10	18	16	21	47	127	100	28	0	0	0	0	0	0	367
15:45	0	31	62	70	18	10	57	53	27	2	0	0	0	0	0	330
16:00	0	18	65	65	9	32	76	57	9	6	0	1	0	0	0	338
Hourly Total	*0*	*59*	*145*	*151*	*56*	*167*	*395*	*308*	*98*	*18*	*1*	*1*	*0*	*0*	*0*	*1399*
16:15	0	4	10	0	15	71	156	84	22	3	0	0	0	0	0	365
16:30	0	23	53	78	57	61	42	31	17	7	0	0	0	0	0	369
16:45	0	17	66	33	19	42	54	70	17	3	1	0	0	0	0	322
17:00	0	25	55	40	24	33	46	78	39	10	0	1	1	0	0	352
Hourly Total	*0*	*69*	*184*	*151*	*115*	*207*	*298*	*263*	*95*	*23*	*1*	*1*	*1*	*0*	*0*	*1408*
17:15	0	6	18	21	12	22	66	115	65	14	1	0	0	0	0	340
17:30	0	26	49	60	9	14	77	72	25	4	0	0	0	0	0	336
17:45	0	1	14	16	18	43	76	113	62	10	1	0	0	0	0	354
18:00	0	7	35	28	18	56	74	72	51	8	1	0	0	0	0	350
Hourly Total	*0*	*40*	*116*	*125*	*57*	*135*	*293*	*372*	*203*	*36*	*3*	*0*	*0*	*0*	*0*	*1380*
18:15	0	0	0	0	2	35	78	114	79	7	2	0	0	0	0	317
18:30	0	0	0	0	0	21	68	117	95	13	1	2	0	0	0	317
18:45	0	0	0	0	0	1	20	98	112	49	11	0	0	1	0	292
19:00	0	0	0	0	0	0	26	96	109	29	4	0	0	0	0	264
Hourly Total	*0*	*0*	*0*	*0*	*2*	*57*	*192*	*425*	*395*	*98*	*18*	*2*	*0*	*1*	*0*	*1190*
19:15	0	0	0	0	0	1	18	92	80	32	5	0	0	0	0	228
19:30	0	0	0	0	0	0	16	44	69	55	6	0	0	0	0	190
19:45	0	1	4	1	3	2	31	80	81	20	4	0	0	0	0	227
20:00	0	0	0	0	0	4	17	70	60	29	5	0	0	0	0	185
Hourly Total	*0*	*1*	*4*	*1*	*3*	*7*	*82*	*286*	*290*	*136*	*20*	*0*	*0*	*0*	*0*	*830*

Roadway Count By Speed Bin Summary

Start Date: April 14, 2026 (Tuesday) **Start Time:** 00:00
Stop Date: April 14, 2026 (Tuesday) **Stop Time:** 24:00
County: Orange
Location: Avalon Rd: Sof Coscester St **Direction:** Two-way Total

04/14/2026 (Tue)

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
20:15	0	0	0	0	1	4	14	92	51	19	2	1	0	0	0	184
20:30	0	0	0	0	0	3	23	94	69	17	2	0	0	1	0	209
20:45	0	0	0	0	0	0	16	72	58	20	4	1	0	1	0	172
21:00	0	0	0	0	0	0	8	49	43	19	9	0	0	0	0	128
Hourly Total	*0*	*0*	*0*	*0*	*1*	*7*	*61*	*307*	*221*	*75*	*17*	*2*	*0*	*2*	*0*	*693*
21:15	0	0	0	0	0	1	14	40	60	25	4	1	0	0	0	145
21:30	0	0	0	0	0	1	20	42	33	27	4	0	0	0	0	127
21:45	0	0	0	0	0	0	13	26	44	20	4	1	0	0	0	108
22:00	0	0	0	0	0	0	3	18	31	27	7	1	0	0	0	87
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*50*	*126*	*168*	*99*	*19*	*3*	*0*	*0*	*0*	*467*
22:15	0	0	0	0	0	0	4	19	24	24	6	1	0	0	0	78
22:30	0	0	0	0	0	0	0	10	18	19	6	1	0	0	0	54
22:45	0	0	0	0	0	2	4	8	17	15	3	0	0	0	0	49
23:00	0	0	0	0	0	0	2	5	16	16	5	1	0	0	0	45
Hourly Total	*0*	*0*	*0*	*0*	*0*	*2*	*10*	*42*	*75*	*74*	*20*	*3*	*0*	*0*	*0*	*226*
23:15	0	0	0	0	0	0	7	11	12	13	1	3	0	0	0	47
23:30	0	0	0	0	0	0	1	6	17	18	4	2	0	0	0	48
23:45	0	0	0	0	0	0	1	5	11	4	2	0	1	0	0	24
00:00	0	0	0	0	0	0	1	4	10	10	3	0	0	0	0	28
Hourly Total	*0*	*0*	*0*	*0*	*0*	*0*	*10*	*26*	*50*	*45*	*10*	*5*	*1*	*0*	*0*	*147*

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Grand Total	0	258	653	706	576	1181	3069	5197	4037	1420	256	33	5	5	2	17398
Percentages	0.00	1.48	3.75	4.06	3.31	6.79	17.64	29.87	23.20	8.16	1.47	0.19	0.03	0.03	0.01	

Speed Summary

Total	Avg Spd	15%ile	50%ile	85%ile	>35	>40	>45	>50	>55	>60	>65	>70	10 MPH Pace
17398	36.00	27.41	37.74	44.12	10955	5758	1721	301	45	12	7	2	35- 45
				Percentages	62.97	33.10	9.89	1.73	0.26	0.07	0.04	0.01	

Peak Hour Totals

Speed (MPH)	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total
Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
07:45-08:45	0	64	108	128	83	160	341	346	141	39	3	1	0	0	0	1414
Percentages	0.00	4.53	7.64	9.05	5.87	11.32	24.12	24.47	9.97	2.76	0.21	0.07	0.00	0.00	0.00	*8.13*
15:30-16:30	0	76	190	213	99	174	331	225	75	18	0	1	0	0	0	1402
Percentages	0.00	5.42	13.55	15.19	7.06	12.41	23.61	16.05	5.35	1.28	0.00	0.07	0.00	0.00	0.00	*8.06*

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

HCM 7th AWSC
3: Avalon Rd & Tucker Ranch Park/Coscester St

AM Split
AM Peak Hour

Intersection	
Intersection Delay, s/veh	100.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Future Vol, veh/h	5	0	2	4	0	26	0	792	1	10	749	12
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.00	1.00	1.00
Heavy Vehicles, %	27	27	27	3	3	3	2	2	2	2	2	2
Mvmt Flow	6	0	2	5	0	30	0	900	1	10	749	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.2	10.5	131.5	69.1
HCM LOS	B	B	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	71%	13%	1%
Vol Thru, %	100%	0%	0%	97%
Vol Right, %	0%	29%	87%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	793	7	30	771
LT Vol	0	5	4	10
Through Vol	792	0	0	749
RT Vol	1	2	26	12
Lane Flow Rate	901	8	34	771
Geometry Grp	1	1	1	1
Degree of Util (X)	1.225	0.017	0.062	1.047
Departure Headway (Hd)	4.996	8.104	7.061	5.145
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	730	444	510	709
Service Time	2.996	6.104	5.061	3.145
HCM Lane V/C Ratio	1.234	0.018	0.067	1.087
HCM Control Delay, s/veh	131.5	11.2	10.5	69.1
HCM Lane LOS	F	B	B	F
HCM 95th-tile Q	31	0.1	0.2	18.8

HCM 7th AWSC
3: Avalon Rd & Tucker Ranch Park/Coscester St

PM Split
PM Peak Hour

Intersection	
Intersection Delay, s/veh	103.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Future Vol, veh/h	18	0	7	1	0	27	1	741	8	21	799	6
Peak Hour Factor	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	19	0	7	1	0	29	1	788	9	22	850	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.1	10.6	84.9	125.8
HCM LOS	B	B	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	72%	4%	3%
Vol Thru, %	99%	0%	0%	97%
Vol Right, %	1%	28%	96%	1%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	750	25	28	826
LT Vol	1	18	1	21
Through Vol	741	0	0	799
RT Vol	8	7	27	6
Lane Flow Rate	798	27	30	879
Geometry Grp	1	1	1	1
Degree of Util (X)	1.096	0.053	0.055	1.209
Departure Headway (Hd)	5.205	7.685	7.145	5.112
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	702	469	504	721
Service Time	3.205	5.685	5.145	3.112
HCM Lane V/C Ratio	1.137	0.058	0.06	1.219
HCM Control Delay, s/veh	84.9	11.1	10.6	125.8
HCM Lane LOS	F	B	B	F
HCM 95th-tile Q	21.5	0.2	0.2	29.3

[mailing address] po box 941556 maitland florida 32794-1556 • 2431 aloma avenue #307 winter park florida 32792 [phone] 407 423 8055 [web] Ltec-FL.com

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Steve Pash, Assistant City Manager – Public Services

Via: Jon C. Williams, City Manager

Date: July 30, 2026 **Meeting Date:** August 13, 2026

Subject: Water Meter Replacement Project

Issue:

Staff is requesting to purchase 1,225 water meters to finish the long-term project of replacing our meters.

Discussion:

For multiple years, staff have been working on purchasing and replacing all of the water meters in the system to Sensus meters that can be read through radio signals. Unfortunately, during Covid there were limits placed on how many we could purchase. Now Sensus has caught up with production, and we can purchase the remaining 1,225 meters needed to complete the budgeted project.

Recommended Action:

Staff recommend that City Commission approve the bid proposal from Core & Main to purchase 1,225 water meters, meter boxes, and cables for a total of $382,809.29.

Attachment(s)/References:

Core & Main Bid Proposal

Bid Proposal for Winter Garden 07/30/26

CUSTOMER

WINTER GARDEN, CITY OF
300 W PLANT ST
WINTER GARDEN, FL 34787

Job
Winter Garden 07/30/26
Winter Garden, FL
Bid Date: 07/30/2026
Bid #: 4905896

CONTACT

Sales Representative
Michael Benedict
(T) 407-291-1545
Michael.Benedict@coreandmain.com

Core & Main
6106 Beggs Rd
Orlando, FL 32810
(T) 4072911545

NOTES

Bid Proposal for Winter Garden 07/30/26

WINTER GARDEN, CITY OF
Job Location: Winter Garden, FL
Bid Date: 07/30/2026
Core & Main Bid #: 4905896

Core & Main
6106 Beggs Rd
Orlando, FL 32810
Phone: 4072911545
Fax: 4072912006

Seq#	Qty	Description	Units	Price	Ext Price
10	960	IPERL 3/4S 1G 7.5LL 7WHL 6' TRPL 2W CABLE SM I2S1GBXX OBSOLETE	EA	142.44	136,742.40
20	140	IPERL 1 1G 10.75LL 7WHL 6' TRPL 2W CABLE SM I4S1GBXX OBSOLETE	EA	221.03	30,944.20
30	125	OMNI+ R2 2 1G 17LL 9WHL 6' TRPL 3W CABLE	EA	815.86	101,982.50
		REG ID MATCHES MTR BODY ID SM R2X1XX1GXW0XXSD			
40	400	11X18 GLASSMASTER MB LID, AMR HOLE, TIER 8, NON-BOLTED, GRAY	EA	41.78	16,712.00
50	100	GLASMSTR 1118 MTR BOX STRAIGHT WALL TIER-8 S111812S2N081	EA	69.04	6,904.00
60	300	1517 GLASMASTER LID 1 AMR GREY	EA	47.17	14,151.00
70	50	GLASMASTER 1517 BOX STRAIGHT WALL	EA	113.63	5,681.50
80	125	17X30 LID AMR TIER 8 GRAY	EA	115.25	14,406.25
90	50	17X30X12 GLASMASTER SW MTR BOX NO MH, TIER 8 S173012SON08-1	EA	151.71	7,585.50
100	216	520M M2 S/POINT TC DP HR & LD PIT SET 5396353752203MI	EA	190.25	41,094.00
110	1	OMNI+ T2 4 1G 23LL 9WHL 6' TRPL 3W CABLE	EA	2,213.94	2,213.94
		REG ID MATCHES MTR BODY ID SM T4X1XX1GXW0XXSD			
120	200	IPERL/ALLY 6' TRPL 2W CABLE SM50546439001	EA	21.96	4,392.00
				Sub Total	**382,809.29**
				Tax	0.00
				Total	**382,809.29**

UNLESS OTHERWISE SPECIFIED HEREIN, PRICES QUOTED ARE VALID IF ACCEPTED BY CUSTOMER AND PRODUCTS ARE RELEASED BY CUSTOMER FOR MANUFACTURE WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THIS QUOTATION. CORE & MAIN LP RESERVES THE RIGHT TO INCREASE PRICES TO ADDRESS FACTORS, INCLUDING BUT NOT LIMITED TO, GOVERNMENT REGULATIONS, TARIFFS, TRANSPORTATION, FUEL AND RAW MATERIAL COSTS. DELIVERY WILL COMMENCE BASED UPON MANUFACTURER LEAD TIMES. ANY MATERIAL DELIVERIES DELAYED BEYOND MANUFACTURER LEAD TIMES MAY BE SUBJECT TO PRICE INCREASES AND/OR APPLICABLE STORAGE FEES. THIS BID PROPOSAL IS CONTINGENT UPON BUYER'S ACCEPTANCE OF SELLER'S TERMS AND CONDITIONS OF SALE, AS MODIFIED FROM TIME TO TIME, WHICH CAN BE FOUND AT: https://coreandmain.com/terms-of-sale/

THIS BID MAY INCLUDE GLOBALLY SOURCED (IMPORTED) MATERIALS THAT ARE SUBJECT TO CHANGING TARIFFS. PRICES ARE SUBJECT TO CHANGE DUE TO POTENTIAL ADDITIONAL TARIFFS IMPOSED BY THE U.S. GOVERNMENT. IF IMPOSED, PRICES WILL INCREASE BY THE SAME PERCENTAGE AND WILL BE EFFECTIVE ON THE DATE THAT THE NEW TARIFFS ARE IMPLEMENTED. THESE ITEMS SHOULD BE PURCHASED WITH HASTE TO AVOID ANY ADDITIONAL RISING TARIFF COSTS.

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Jim Monahan, P.E., City Engineer – Public Services

Via: Jon C. Williams, City Manager

Date: August 6, 2026 **Meeting Date:** August 13, 2026

Subject: Approve a Purchase Order for Mead and Hunt to design the Southwest Reclaimed Water Main Distribution Improvements Project

Issue: This proposal is for the design of a reclaimed water transmission main that will transmit reclaimed water from the Smith Street Storage Tank Pump Station located at 440 East Smith Street and tie into an existing 12-inch reclaimed main running adjacent to the east side of West Plant Street. The Southwest Reclaimed Water Main is a recommended short-term project (RW-3) described in the Reclaimed Water Facility Plan. Construction of the Reclaimed Water Facility Plan short-term projects will enable the City to utilize at least 90% of reclaimed water produced by the Crest Ave WWTP and discontinue use of Conserv II water as a supplemental reclaimed water supply.

Recommended Action:

Recommend approving a Purchase Order for Mead and Hunt, Inc., in the amount of $576,747.12 to design the Southwest Reclaimed Water Main.

Attachment(s)/References:

- Scope of Work from Mead and Hunt, Inc.
- Reclaimed Facility Plan (abbreviated)

June 18, 2026

Jim Monahan, PE
City Engineer
City of Winter Garden
300 West Plant Street
Winter Garden, FL 34787

Email: jmonahan1@cwgdn.com

Subject: SOUTHWEST RECLAIMED WATER MAIN DISTRIBUTION IMPROVEMENTS PROJECT ENGINEERING SCOPE AND FEE ESTIMATE

Dear Jim:

In accordance with your request, we are pleased to offer the enclosed engineering scope of services and fee estimate for new reclaimed water transmission\distribution mains along Smith St and Plant St. The enclosed scope and fee proposal is for: survey, planning, design, engineering, and geotechnical services associated with the Southwest Reclaimed Water Main Distribution Improvements Project (Project).

This project is defined as a Priority 1 project in the SRF Facility Plan amendment. It is an essential element of the City's reclaimed water management strategy and to maximize the beneficial use of the City's reclaimed water. Our firm has designed numerous reclaimed water transmission main projects in Florida; we understand the complexity of this type of construction and the critical design elements for a successful project. This project will increase beneficial utilization of effluent, decrease nutrient loading to Lake Apopka and benefit Wekiva Springs. Given its surface water and springs benefits, this project has a high probability of eligibility for grant funding from FDEP and/or SJRWMD. We have a dynamic funding team and have included funding assistance within this project scope.

We appreciate this opportunity to continue to be of service. If you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

MEAD AND HUNT, INC.

Brad Blais, PE
Vice President/Client Manager

Greg Taylor, PE
Senior Project Manager

BB/GT:bf

CITY OF WINTER GARDEN, FL
SCOPE OF SERVICES
FOR
SOUTHWEST RECLAIMED WATER MAIN DISTRIBUTION IMPROVEMENTS PROJECT

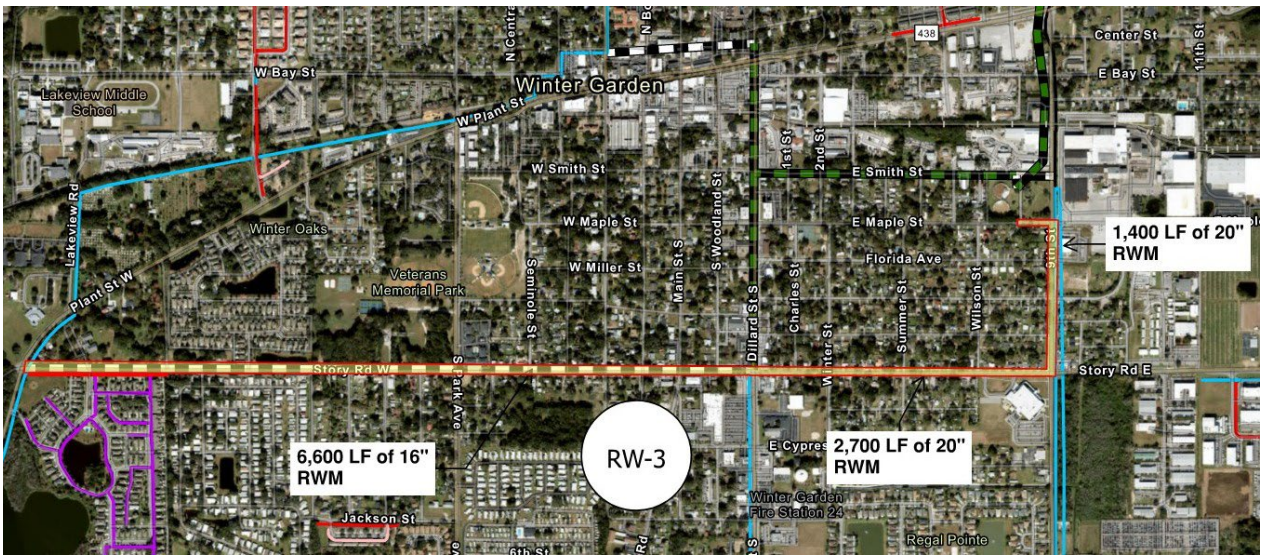
This Task Order is in conformance with the Continuing Contract for Professional Engineering Services RFQ 23-001 dated March 9, 2023, between the City of Winter Garden (CITY) and Mead & Hunt, Inc. (MEAD & HUNT) and is referred to herein as the Contract.

PROJECT UNDERSTANDING

The project involves the design for approximately 6,600 linear feet of 16-inch reclaimed water main and approximately 4,100 linear feet of 20-inch reclaimed water main as shown in Figure 1. There will be a connection to an existing 20-inch reclaimed water main at the southeast corner of E. Maple St. and 9th St. from a previous project, the Smith Street GST and Pump Station. The 20-inch pipe will continue south along 9th St. before turning west on E. Story Rd. The 20-inch pipe will continue west until it reaches Dillard St. The 20-inch will then downsize to a 16-inch pipe and continue west along W. Story Rd. until it connects to the existing reclaimed water main on Plant St.

This scope includes the engineering services for the survey, final design, permitting, and bid phase services. Construction administration services will be negotiated at a later phase.

Figure 1 – Reclaimed Water Main Improvements Area



SCOPE OF SERVICES

After receipt of authorization to proceed, MEAD & HUNT will provide the following services:

PHASE 1 – PROJECT MANAGEMENT

Project Kick-Off Meeting

MEAD & HUNT will coordinate and conduct one (1) in-person project kick-off meeting with the project team and CITY staff to review project goals, scope of work, team member roles, lines of communication, project schedule and administrative processes. Following the meeting, MEAD & HUNT will prepare a written project meeting summary of major points and distribute it to the attendees.

Project Coordination

MEAD & HUNT's Project Manager (PM) will monitor and manage the project budget, schedule, and scope throughout the estimated sixteen (16) month project duration. The PM will manage the development of project work and subconsultant efforts. The PM will provide project updates to the CITY via work activity reports on monthly invoices.

Subconsultant Work Coordination

MEAD & HUNT will coordinate with the subconsultants to manage and implement the Project. This phase includes up to two (2) internal project collaboration meetings between MEAD & HUNT and its subconsultants to coordinate and implement work efforts. The subconsultants that will be part of the project team are detailed in Subconsultants and Reimbursables Phase below.

Deliverables – Project Management

- Kick-Off Meeting Agenda and Summary
- Monthly Invoices

PHASE 2 – PRELIMINARY DESIGN

Survey Coordination

MEAD & HUNT will obtain the services of a licensed surveyor to conduct a site survey. The surveyor costs will be billed in the Subconsultants and Reimbursable section. MEAD & HUNT's coordination of the survey efforts and administration of the subconsultants contract are included herein.

Geotechnical Coordination

MEAD & HUNT will obtain the services of a geotechnical subconsultant. The geotechnical costs will be billed in the Subconsultants and Reimbursable section. MEAD & HUNT's coordination of the geotechnical efforts and administration of the subconsultants contract are included herein.

Utility Coordination

MEAD & HUNT will coordinate with existing utilities along the project route by submission of 30% or 60% electronic construction drawings to all utility companies identified by the Sunshine 811 Design Ticket and request markups of existing facilities ('Red/Green/Browns') and resolution of any identified conflicts with

the proposed improvements. MEAD & HUNT will discuss the potential conflicts with the utility company representatives to coordinate the relocation needs as needed. MEAD & HUNT will add information to the construction drawings based on the received utility markups and planned relocations. MEAD & HUNT will request updated Red/Green/Browns from the utility companies if the design significantly changes prior to final plans.

Preliminary Design

MEAD & HUNT will conduct site visits as appropriate to MEAD & HUNT to verify existing conditions and collect photographic and other data collection needed for the design. MEAD & HUNT will prepare a draft Preliminary Design Report (PDR) evaluating up to two design alternatives and budget level pricing. The preliminary design concepts detailed in the PDR will be viable options for a comparison of alternatives. A draft PDR will be submitted to the CITY for review and comment. It is assumed the CITY will conduct their review in a two-week period and a meeting will be held at the end of the CITY's review.

MEAD & HUNT will schedule and attend a draft PDR review meeting to discuss the CITY's comments on the draft PDR. Comments received will be incorporated into the final PDR and subsequent design documents. The PDR will include all relevant information needed to satisfy 30% design assumptions and project scope parameters including equipment selection.

Deliverables – Preliminary Design

- Draft Preliminary Design Report
- Preliminary Design Review Meeting Summary
- Final Preliminary Design Report (signed and sealed)

PHASE 3 – FINAL DESIGN

Task 1 – 60% Design Development

MEAD & HUNT will prepare 60% design level drawings and specifications. The CITY's standard front-end contract documents will be used and coordinated with MEAD & HUNT's technical specifications. MEAD & HUNT will develop an engineer's opinion of probable construction cost (EOPCC), suitable for the level of design. Upon completion of internal QA/QC, the 60% submittal package will be submitted to the CITY for review. The submittal will include the items shown in the deliverable section below. It is assumed the CITY will conduct a single review within a two-week period. At the end of the CITY's review period, MEAD & HUNT will schedule and attend a 60% design review meeting to review the CITY's consolidated comments on the design drawings and specifications. MEAD & HUNT will prepare a meeting agenda and a meeting summary to be distributed to attendees.

Deliverables – 60% Design Development

- 60% Design Drawings (electronic PDF format)
- 60% Specifications (electronic PDF format)
- 60% EOPCC (electronic PDF format)
- 60% Design Review Meeting Summary (electronic PDF format)

Task 2 – 90% Design Development

Based on the CITY's 60% review comments discussed at the 60% Design Review Meeting, MEAD & HUNT will prepare revised design drawings and specifications to 90% design level completion. MEAD & HUNT will prepare an updated EOPCC based upon the 90% submittal documents.

The 90% submittal package will be prepared and upon completion of QA/QC, be submitted to the CITY for review. The submittal will include the items shown in the deliverable section below. It is assumed the CITY will conduct a single review within a two-week period. At the end of the CITY's review period, MEAD & HUNT will schedule and attend a 90% design review meeting to review the CITY's consolidated comments on the design drawings and specifications. MEAD & HUNT will prepare a meeting agenda and a meeting summary to be distributed to attendees.

Deliverables – 90% Design Development

- 90% Design Drawings (electronic PDF format)
- 90% Specifications (electronic PDF format)
- 90% EOPCC (electronic PDF format)
- 90% Design Review Meeting Summary (electronic PDF format)

Task 3 – 100% Design Development

Based on the CITY's 90% review comments discussed at the 90% Design Review Meeting, MEAD & HUNT will prepare revised design drawings and specifications to 100% completion. MEAD & HUNT will prepare an updated EOPCC based upon the 100% submittal documents.

Upon completion of QA/QC, the 100% submittal package will be submitted to the CITY. The submittal will include the items shown in the deliverable section below.

Deliverables – 100% Design Development

- 100% Design Drawings (electronic PDF format), signed and sealed
- 100% Specifications (electronic PDF format), signed and sealed
- 100% EOPCC (electronic PDF format)

PHASE 4 – PERMITTING ASSISTANCE

MEAD & HUNT shall prepare and submit permit applications for the project as detailed below. All permit application fees will be paid by CITY. Other costs such as wetland/surface water mitigation, threatened and endangered species relocation, land leases, and other expenses resulting from permits will be paid by CITY. Upon receipt of the permits, MEAD & HUNT will review the permits for accuracy and notify the CITY and agency of any discrepancies found. CITY will be responsible for agency required or recommended public noticing, if not provided by agency.

Orange County Right-of-Way Use Permit

It is expected that an Orange County ROW Permit will be required to install the pipeline across County Road 438 (E. Plant St.). MEAD & HUNT will prepare and submit the permit application and supporting documents in accordance with the permit requirements. Permit applications will be submitted after the 90% design has been reviewed and accepted by the CITY.

MEAD & HUNT will respond to up to one (1) Request for Additional Information (RAI) as part of the permit application process.

Deliverables – Permitting

- County Right-of-Way Permit application

PHASE 5 – BIDDING ASSISTANCE

The CITY will be responsible for the overall solicitation for construction bids process, including any legal review of the bidding and contract documents (Division 0) and verifying compliance with CITY purchasing and contract policies (Division 0 and 1). The CITY will also be responsible for the request for bid advertisements, distribution of bidding documents, prebid meeting, and bid opening.

Bidding and Contract Documents

MEAD & HUNT will utilize CITY supplied templates, bid number, and dates (advertisement, prebid, bidder question deadline and bid opening) to prepare draft bidding and contract documents as Divisions 0 and 1 of the Project Manual and submit such to the CITY for review. Upon receipt of the CITY's review comments, MEAD & HUNT will prepare final bidding and contract documents and assemble the entire Project Manual and submit the Project Manual and Construction Drawings (denoted as "Bid Set") in electronic format to the CITY. The CITY will be responsible for distributing bidding documents to interested parties and administering the bid.

Pre-Bid Meeting

MEAD & HUNT will attend and lead in-person pre-bid meeting and present the project scope/intent; construction contract duration; design and permitting highlights and any special/supplemental conditions

specific to the project. MEAD & HUNT will prepare the pre-bid meeting agenda and a meeting summary. The CITY will distribute the meeting agenda and summary to interested parties.

Bid Addenda

MEAD & HUNT will prepare responses to potential bidders' questions during the bid period. MEAD & HUNT will prepare suggested responses and provide the CITY with a draft addendum for review. This scope of services assumes two (2) addenda will be completed. The CITY shall be responsible for distribution of addenda.

Bid Review and Recommendation of Award

The CITY will be responsible for receiving, opening, and recording the bids. Upon receipt of copies of the received bid documents from the CITY, MEAD & HUNT will evaluate the low bidder(s) submitted qualifications information and contact provided references to inquire about bidders' experience. MEAD & HUNT will prepare a tabulation of received bid prices, including unit prices, if applicable, and verify extended values and totals. MEAD & HUNT will also review submitted pricing for imbalances and other disparities. Based on that review, MEAD & HUNT will submit to the CITY the bid tabulation and a recommendation of award.

Deliverables – Bidding Assistance

- Bid Set Plans and Specifications
- Addenda to bid documents
- Bid Tabulation
- Recommendation of award

PHASE 6 – FUNDING ASSISTANCE

A CWSRF Facility Plan Amendment (PLAN) was prepared for the City's reclaimed water system and proposed improvements. This PLAN identifies, describes, and prioritizes reclaimed water system improvements required for effluent disposal and beneficial reclaimed water utilization. The Priority 1 projects include the Southwest Reclaimed Water Distribution Improvements project (RW-3). MEAD & HUNT will provide funding assistance to identify SRF and grant funding. This includes preparation of an RFI and loan application for this project. This assistance also includes preparation of up to three (3) grant applications and one (1) loan for this project. Funding compliance during construction will be provided on subsequent task authorizations during the construction phase.

PHASE 7 – SUBCONSULTANTS AND REIMBURSABLES

Items under this phase include out-of-pocket direct job expenses such as reproductions, postage, etc.

- Geotechnical – Soil borings and geotechnical evaluation will be performed by Nadic Engineering,

Inc. (Nadic). This will be billed at actual cost plus 10%.

- Survey – The design survey shall include the described route the width of the right-of-way along each roadway, underground utilities identified by surveyor, and topography of 1-ft contours. The survey will be performed by Voler Group. This work will be billed at actual cost plus 10%.

PHASE 8 – CONTINGENCY

If additional services are identified as needed or required during the duration of the project, MEAD & HUNT will request written approval from the CITY to utilize contingency funds for any additional work items. Contingency funds will be billed at time and expense. Additional work will be billed per the agreed upon contract hourly rates. MEAD & HUNT will not bill against the contingency funding without prior authorization from the CITY.

ASSUMPTIONS AND LIMITATIONS

MEAD & HUNT prepared this Scope of Work based on discussions with the City and with the following assumptions and limitations. If any of the below assumptions prove to be incorrect, MEAD & HUNT will consult with the CITY and as necessary or appropriate, modify this Scope of Work via a Scope Change.

- All piping shall either be DIP, HDPE, or PVC per CITY standards.
- Piping shall be installed in existing Rights-of-Way (ROWs).
- CITY will perform a single review of each deliverable and provide a consolidated set of review comments.
- CITY will protect MEAD & HUNT-supplied digital information or data, if any, from contamination, misuse, or changes.

EXCLUSIONS

This scope of services excludes all items not specifically described herein, including but not limited to:

- Easement Acquisition
- Construction Phase Services
- Special Studies
- Laboratory Services
- Value Engineering
- Redesign per Owner or Contractor
- Investigations
- Environmental
- Professional Services Acquisition Assistance
- Completed Project Assessment
- Site Security
- Fire Protection
- Zoning Modifications

SCHEDULE

Mead & Hunt estimates the work included in this task order will be completed in accordance with the schedule in Table 1.

Table 1 – Preliminary Project Schedule

Phase/Task	Duration to Complete (calendar days)	Commencing Upon
Phase 1 – Project Management	*492 days*	*Receipt of notice to proceed*
Phase 2 – Preliminary Design	*150 days*	*Receipt of notice to proceed*
Phase 3 – Final Design		
Task 1 – 60% Design	*81 days*	*CITY approval of Phase 2*
Task 2 – 90% Design	*63 days*	*60% review meeting*
Task 3 – 100% Design	*40 days*	*90% review meeting*
Phase 4 – Permitting Assistance	*45 days*	*CITY approval of 90% deliverable*
Phase 5 – Bidding Assistance	*122 days*	*CITY approval of 100% deliverable*
Phase 6 – Funding Assistance		

***The above timeframes do not include permitting agency review time.*

COMPENSATION

The not-to-exceed cost for this Scope of Services, including Contingency Funds, is $576,747.12. The fee is based on the breakdown in Table 2.

Table 2 – Fee Estimate Breakdown by Task

Phase/Task	Fee/Cost	Basis
Phase 1 – Project Management	*$ 38,431.50*	*Lump Sum*
Phase 2 – Preliminary Design	*$ 71,709.50*	*Lump Sum*
Phase 3 – Project Design	*$ 150,071.00*	*Lump Sum*
Phase 4 – Permitting Assistance	*$ 11,459.50*	*Lump Sum*
Phase 5 – Bidding Assistance	*$ 25,626.50*	*Lump Sum*
Phase 6 – Funding Assistance	*$ 16,230.00*	*Lump Sum*
Subtotal	*$ 313,528.00*	
Phase 7 – Subconsultants/Reimbursables	$ 231,866.12	*Actual cost plus 10%*
Phase 8 – Contingency at 10%	$ 31,353.00	*Time & Expenses*
TOTAL	**$ 576,747.12**	

AUTHORIZATION

The Scope of Services and Compensation stated in this proposal are valid for a period of thirty (30) days from date of submission. If authorization to proceed is not received during this period, this proposal may be withdrawn or modified by Mead & Hunt.

Signatures of authorized representatives of City of Winter Garden, FL and Mead & Hunt shall convert this proposal to an Agreement between the two parties, and receipt of one signed copy shall be considered authorization to proceed with the work described in the Scope of Services.

MEAD AND HUNT, INC.

By: _____
Author/Submitter

Name: Greg Taylor, PE

Title: Sr. Project Manager

Date: June 18, 2026

Approved by: **MEAD AND HUNT, INC.**

By: _____
Authorized Signer Review

Name: Brad T. Blais, PE

Title: Vice President/Client Manager

Date: June 18, 2026

Accepted by: **CITY OF WINTER GARDEN, FL**

By: _____

The above person is authorized to sign for the Owner and bind the Owner to the terms hereof.

Name: _____

Title: _____

Date: _____

PURSUANT TO FLORIDA STATUTE SECTION 558.0035, AN INDIVIDUAL EMPLOYEE OR AGENT OF MEAD & HUNT INC. MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

IF THE CONTRACTOR (MEAD & HUNT INC.) HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT (PROPOSAL), CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 300 WEST PLANT STREET, WINTER GARDEN, FL 34787, 407-656-4111, ROONISHA MARTIN, INTERIM CITY CLERK AT rmartin@cwdgn.com.

NADIC
ENGINEERING

February 24, 2026

Mead & Hunt
11315 Corporate Boulevard, Building 500
Orlando, FL 32817

Attention: Mr. Greg D. Taylor, P.E.

RE: Geotechnical Engineering Fee Proposal for
SW Reclaimed Water Distribution Improvements
City of Winter Garden, Florida
NADIC Proposal No. PQ.GEO-CV26013

Dear Mr. Taylor:

NADIC is pleased to submit this fee estimate to provide geotechnical engineering services for the proposed Reclaimed Water Distribution Improvements along West Story Road, South Dillard Street, East Smith Street, and East Newell Street in Winter Garden, Florida. We understand the total length of pipe replacement is approximately 2.5 miles and that the RWM pipes will be 16-inch to 20-inch in diameter. We also understand that the proposed pipelines will be installed using the "Open Cut" method of construction with exception to crossing West Plant Street, where Horizontal Directional Drilling (HDD) will be used. A summary of the improvement areas is as follows:

- West Story Road from Plant Street to South Dillard Street (6,500 linear feet)
- South Dillard Street from East Story Road to East Newell Street (3,400 linear feet)
- East Newell Street from North Dillard Street to North Lakeview Avenue (1,300 linear feet)
- East Smith Street from South Dillard Street to 250 feet before 9th Street (2,300 linear feet)

NADIC services for this project will consist of providing geotechnical engineering services for the proposed new RWM installation, including evaluation of existing soil and groundwater conditions and foundation design recommendations.

Geotechnical Project Approach

The geotechnical engineering services will be provided in general accordance with the Winter Garden Utilities Department requirements and guidelines. The geotechnical evaluation will begin with a review of all available project information, and the proposed geotechnical exploration program. Additional resources include the Orange County Soil Survey, published Geological Surveys and bulletins, historical geotechnical/boring information within the project area and any other pertinent information that could be provided by you or the City of Winter Garden, including construction records. We will also conduct a field reconnaissance to assess conditions with respect to the anticipated geotechnical exploration, foundation design and project construction.

The geotechnical project approach presented herein briefly discusses our understanding of the project based on the project scope provided via your email dated February 16, 2026.

The field-testing program will include Standard Penetration Test (SPT) borings. **NADIC** will stake the test locations and obtain utility clearance prior to field exploration. Visual classification of retrieved soil samples will be performed in the laboratory by a geotechnical engineer in accordance with ASTM Standards.

Field reconnaissance trips will be conducted to evaluate maintenance of traffic (MOT) and drill rig access concerns for the field exploration program.

Scope of Geotechnical Services

We understand the project will consist of providing design level geotechnical services for the proposed improvements. Based on this assumption, our understanding of the proposed project and experience with similar projects, our scope of services is provided below:

1. Coordination with Design Project Manager and attend project meetings, if necessary.
2. Coordination of boring locations, including field reconnaissance.
3. Mobilization of drill rig and men.
4. Provide maintenance of Traffic (MOT) during the drilling operations.
5. Perform a total of 27 Standard Penetration Test (SPT) borings to a depth of about 15 feet (spaced approximately every 500 feet) each for Open Cut and two (2) SPT borings to a depth of 30 feet for HDD method construction.
6. Collect groundwater level measurement and estimate normal wet seasonal high groundwater level.
7. Perform visual soil classification as per ASTM D-3282 and D-2487.
8. Perform laboratory tests on selected representative soil samples. Laboratory test will include grain-size analyses, organic content, Atterberg limits, corrosion series, and moisture content tests.

Based on the results of the field exploration and laboratory visual classification, a geotechnical engineering assessment regarding site suitability for the development will be formulated. The report will include the following:

1. Review of readily available published geologic and topographic information, including the appropriate Quadrangle Map published by the United States Geological Survey (USGS), the "Soil Survey of Orange County, Florida" published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) and Site Historical geotechnical engineering reports and data.
2. A Site Plan showing boring locations.
3. Report of Standard Penetration Test (SPT) Borings indicating the general subsurface conditions encountered at the proposed project site, noting any anomalies or features which could affect construction.
4. Discuss groundwater conditions encountered and estimated seasonal high groundwater levels.
5. Engineering evaluation of field and laboratory visual classification data as well as derivations of design soil/rock parameters and an interpretation of the subsurface conditions with respect to the proposed construction.
6. Temporary excavations, including recommended slopes, critical heights, etc., based on soil types, if necessary.

7. Pipeline Foundation, including settlement analysis and bearing capacity.
8. Dewatering recommendations based on soil types and groundwater levels, if necessary.
9. Backfill and bedding recommendation, including on site material suitability and availability.
10. Identification of critical design or construction details, including groundwater levels (seasonal fluctuations) and influence of construction on adjacent structures.
11. Submit draft and final geotechnical reports.

The geotechnical investigation and analysis report would contain the factual subsurface data including: the boring logs, detailed laboratory result sheets, and a summary of the laboratory data as well as evaluations and recommendations in the initial geotechnical report. The final evaluation shall be based on the actual design and shall consider both design parameters and constructability. If, in the opinion of the review professional, Consultant or City, additional geotechnical data is required for preparation of the final reports, the additional data shall be provided under an amendment to the subcontract. The final report shall indicate the anticipated performance of the subsurface material to be encountered on the project both during and after construction, under the loading conditions, use, and types of excavations anticipated. This assessment does not include contamination investigation of potential possible soil and groundwater contamination.

Schedule

We anticipate completing the itemized work in six (6) to seven (7) working weeks from your written notice to proceed. Utility clearance may take up to two (2) weeks. We will mobilize within one (1) week after utility clearance. Laboratory and report preparation should be completed within four (4) weeks after completion of field work.

Service Fee

It is proposed the fee for performance of the above-outlined services be determined on a unit price basis, in accordance with our attached Schedule of Services and Fees, and the work be performed pursuant to our General Conditions. Copies of our Schedule of Services and fees are enclosed herewith and incorporated by reference into this proposal. On the basis of the estimated quantities and the Schedule of Services and Fees, the estimated geotechnical service cost is **$33,909.38**.

Additional work required beyond the scope of services not included in this proposal, or as caused by factors beyond **NADIC**'s control, will be invoiced on a time and expense basis. Additional work will not be performed without prior authorization.

Limitations

This proposal is subject to the following limitations: (1) The site is accessible to the drilling equipment assumed in this proposal. If other type of drill rig is required due to site and/or weather conditions, appropriate adjustments to fees will be made. (2) **NADIC** bears no responsibility for damages to underground utilities and/or structures that are not located by the owner or Sunshine State One-Call. (3) Undisturbed samples, hydrometer, consolidation and

triaxial tests are not included unless stated in Attachment A. (4) Environmental condition exploration and evaluation are not included in this study.

We sincerely appreciate the opportunity of submitting this proposal, and look forward to working with you, Mead & Hunt and the City of Winter Garden. Please do not hesitate to contact the undersigned if you have any questions or if you need additional information.

Sincerely,
NADIC ENGINEERING SERVICES, INC.

Oliver D. Rosen, E.I.
Staff Engineer

Godwin N. Nnadi, Ph.D., P.E.
Principal Engineer

Nadic Engineering Services, Inc\Engineering - Geotechnical\...\PQ.GEO-CV26013 - Winter Garden RWM Improvements\Project Correspondence\Proposals_Contracts

Attachment:
Attachment A – Computation of Geotechnical Cost

ATTACHMENT A - COMPUTATION OF GEOTECHNICAL COST
SW RECLAIMED WATER DISTRUBUTION IMPROVEMENTS
CITY OF WINTER GARDEN, FLORIDA

Component/Unit Description	UNIT	QTY	RATE	TOTAL COST
I. FIELD EXPLORATION:				
1. Crew & Equipment Mobilization:				
603-Mobilization Asphalt Coring Equipment	Ea.	0	$416.00	$0.00
612-Mobilization Drill Rig Truck Mount	Ea.	1	$644.80	$644.80
610-Mobilization Drill Rig Track Mount	Ea.	0	$3,952.00	$0.00
706-MOT Portable Sign	Ea.	8	$67.60	$540.80
700-MOT Arrow Board/Advance Warning Vehicle	Ea.	0	$124.80	$0.00
701-MOT Attenuator Truck/Energy Absorption Vehic	Hr	0	$280.80	$0.00
708-MOT Channeling Devices - Cone	Ea.	45	$6.24	$280.80
712-MOT Support Vehicle	Hr	20	$129.60	$2,592.00
MOT Traffic Officer	Hr	0	$88.40	$0.00
2. Standard Penetration Test Borings(ASTM D-1586):				
478-Geo SPT Truck/Mud Bug 0-50 Ft	LF	465	$20.96	$9,746.40
479-Geo SPT Truck/Mud Bug 50-100 Ft	LF	0	$26.39	$0.00
Extra Samples SPT - Truck	Ea.	0	$62.11	$0.00
9. Truck and Crew:				
531-Geo Drilling Crew 2-Person	Hr	4	$342.21	$1,368.84
10. Site Reconnaissance/Utility Coordination:				
a. - Engineer	Hr	2	$118.30	$236.60
b. -Sr. Engineering Tech	Hr	8	$89.39	$715.12
11. GPS Rental:	Days	1	$104.00	$104.00
Pavement Cores (w/base)	Ea.	0	$291.20	$0.00
Totals for Field Exploration				**$16,229.36**
II. LABORATORY TESTING:				
1. Visual Exam./Stratify(ASTM D-2488):				
Engineer	hrs.	3	$118.30	$354.90
2. Grain Size Analysis:				
822- Soils Particle Anlys AASHTO T99 No Hydrome	Ea.	19	$120.13	$2,282.47
812 -Soils Material Finer then 200 sieve FM 1-T011	Ea.	2	$75.28	$150.56
819-Soil Organic Content Ignition FM 1-T 267:	Ea.	5	$57.67	$288.35
826-Soil Plastic Limit & Plasticity Index AASHTO T	Ea.	7	$57.67	$403.69
811-Soil Liquid Limit AASHTO T89:	Ea.	7	$57.67	$403.69

Nadic Engineering Services, Inc.
601 N. Hart Blvd.,
Orlando, FL. 32818
Phone: 407 521 4771
Fax: 407 521 4772

Component/Unit Description	UNIT	QTY	RATE	TOTAL COST
817-Soil Moisture Content AASHTO-T265):	Ea.	7	$23.04	$161.28
805-Soils Corrosion Series FM 5-550 to 5-553: (pH, Sulfate, Chloride, Resistivity)	Ea.	4	$258.44	$1,033.76
Totals for Laboratory Testing				**$5,078.70**
ENGINEERING AND TECHNICAL SERVICES:				
1. Chief Engineer:	hrs.	0	$257.65	$0.00
2. Senior Engineer:	hrs.	10	$217.75	$2,177.50
3. Project Engineer:	hrs.	35	$188.28	$6,589.80
4. Engineer	hrs	10	$118.30	$1,183.00
5. Sr. CADD/GIS Support:	hrs.	10	$104.20	$1,042.00
6. Senior Geotech Technician:	hrs.	18	$89.39	$1,609.02
7. Secretarial/Clerical:	hrs.	0	$66.28	$0.00
Totals for Engineering and Technical Services				**$12,601.32**
			Total - Lump Sum	**$33,909.38**

Nadic Engineering Services, Inc.
601 N. Hart Blvd.,
Orlando, FL. 32818
Phone: 407 521 4771
Fax: 407 521 4772

June 16, 2026

To
Greg Taylor
Senior Project Manager

Mead&Hunt
(321) 270-0336
Greg.Taylor@meadhunt.com

SW RECLAIMED DISTRIBUTION

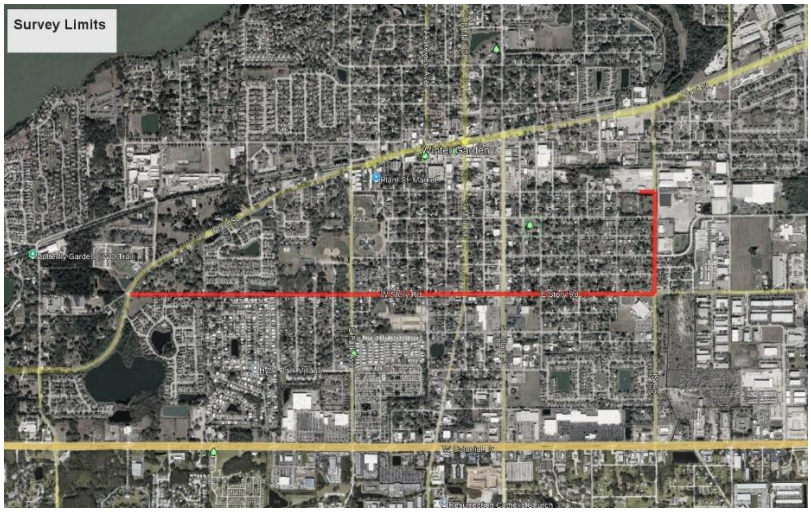
Proposal for Surveying and Mapping Services

Dear Greg,

We appreciate your consideration of voler GROUP, LLC to provide professional surveying services for the above-referenced project. Below we have outlined the scope of services, cost, and schedule for the project.

Project Understanding

To assist our client in the design of a reclaimed water line for the City of Winter Garden, volerGROUP will prepare a Topographic Survey, Apparent Right-of-Way, and Subsurface Utility Designation Quality Levels B and A, with up to thirty (30) soft digs al locations as determined by the client; on a corridor starting at the Smith St, heading east, then south along 9th St. and then west along Story Rd W. to Plant St. W. A length of approximately 12,100 LF.



Attachments and Exhibits

Exhibit A – Survey Limits
Exhibit B – Fee Table

SURVEYING SCOPE OF SERVICES

voler GROUP will provide all labor, equipment and resources necessary to provide the following scope of services.

Survey Control

voler GROUP will establish horizontal and vertical control monuments at acceptable intervals to facilitate project engineering. Horizontal coordinates will be referenced to Florida State Plane, North American Datum of 1983 (NAD83). Elevations will be referenced to North American Vertical Datum of 1988 (NAVD88).

Topographic Survey (50-Grid and/or Cross Sections)

The Topographic Survey will include the horizontal location and elevation of all above ground improvements, utilities, and accessible gravity systems.

The survey will be displayed at 1-foot contour intervals.

Apparent Right-of-Way

The survey will include the location of existing monuments along the right-of-way, property, and easement lines along the proposed route, to determine apparent property lines.

This is not a boundary survey, and no monuments will be set as part of this effort, the resulting lines should be only for reference purposes.

The Survey will be prepared in accordance with the State of Florida Standards of Practice, as set forth by the Board of Professional Surveyors and Mappers, Chapter 5J-17, Florida Administrative Code and per Section 472.027, Florida Statutes.

Survey Deliverables

- Survey(s) in Civil 3D 2024
- Survey(s) in PDF

Printed hard copies will be billed at an additional cost.

SUB-SURFACE UTILITY SCOPE OF SERVICES

Subsurface Utility Excavation (Quality Level A)

voler GROUP will perform up to thirty (30) soft excavation test holes at locations determined by the client, within the survey limits and limited to the grassy areas.

Each location will include a Sub-Surface Utility Report. The Report will include the horizontal location, pipe size, elevation, and depth of top of pipe from natural ground. The material will be noted only if visible.

A reference nail and disk, and stake will be set at ground level for each excavation.

Subsurface Utility Designation (Quality Level B)

voler GROUP will field mark (paint & flag) all public sub-surface utility mains discovered within the project limits.

The paint and flags will be surveyed and mapped.

Sub-Surface Utility Engineering Deliverables

- Field Sketches in PDF
- Sub-Surface Utility Report in PDF
- Survey of Designated Utilities in Civil 3D

Printed hard copies will be billed at an additional cost.

PROPOSED COST

Task	Cost
Survey Control	$8,912
Topographic Survey	$70,171
Right of Way	$20,707
Utility Designation	$43,187
Utility Testholes	$32,400
Total Estimated Cost	**$175,378**

SCHEDULE

Task	Duration (Weeks)
Field	14
Office	8
QA/QC	2
Total Duration	**24**

It is anticipated that Voler GROUP will begin work on the proposed scope of services within 10 days of receipt of your executed Notice to Proceed.

The proposed cost and schedule is valid for 45 days from the date submitted.

NOTES & EXCLUSIONS

If the client desires to change the proposed scope of services an additional fee will be negotiated.

Reimbursables such as shipping, printing, or overtime will be **Billed as an Extra Cost on a Time and Materials Basis.** voler GROUP will request approval from the client for these services.

Public entity or jurisdictional agency fees are to be paid directly by the client. These fees include, but are not limited to, platting, impact, re-zoning,

permitting, review and application fees. Voler GROUP has no control over the procedures of public entities or jurisdictional agencies, and therefore, cannot guarantee timing and outcome of permits and entitlements.

Thank you for this opportunity and we look forward to working with you on this exciting new project. Should you have any questions, please do not hesitate to call.

Sincerely,
Voler GROUP

Maria Santamarina

Maria Santamarina-Aris
Project Manager

Client Date

Exhibit A – Survey Limits

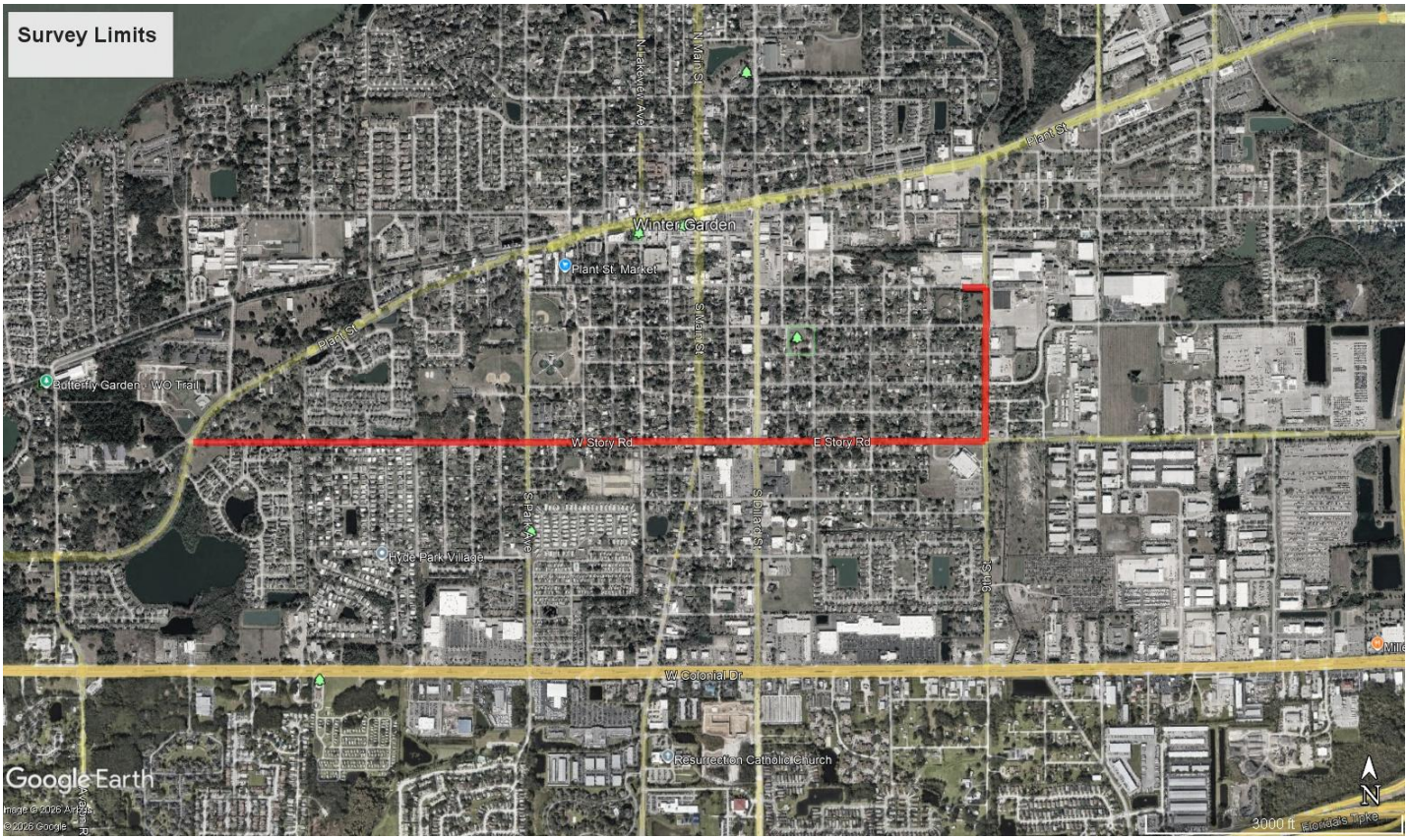


Exhibit B – Fee Table

	Field Service Items									
volerGROUP	Survey Crew (1-2)		Survey Crew (3)		SUE Crew (1-2)		SUE Crew (3)			
	$181.00		$225.00		$189.00		$256.00			
Service Item	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Subtotal - Hours	Subtotal - Fee
Survey Control	40	$7,240.00		$0.00		$0.00		$0.00	40	$7,240.00
Topographic Survey	245	$44,308.80		$0.00		$0.00		$0.00	245	$44,308.80
Right of Way	58	$10,425.60		$0.00		$0.00		$0.00	58	$10,425.60
Utility Designation	29	$5,212.80		$0.00	160	$30,240.00		$0.00	189	$35,452.80
Utility Testholes	24	$4,344.00	80	$18,000.00	24	$4,536.00		$0.00	128	$26,880.00
	395	*$71,531.20*	*80*	*$18,000.00*	*184*	*$34,776.00*	*0*	*$0.00*	*659*	*$124,307.20*

	Office Service Items									
volerGROUP	Mapping Technician		PSM		Survey PM		SUE PM			
	$97.00		$234.00		$134.00		$205.00			
Service Item	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Subtotal - Hours	Subtotal - Fee
Survey Control	10	$970.00	3	$702.00		$0.00		$0.00	13	$1,672.00
Topographic Survey	187	$18,158.40	29	$6,739.20	7	$964.80	0	$0.00	223	$25,862.40
Right of Way	58	$5,587.20	18	$4,212.00	4	$482.40	0	$0.00	79	$10,281.60
Utility Designation	50	$4,888.80	3	$631.80	0	$0.00	11	$2,214.00	64	$7,734.60
Utility Testholes	40	$3,880.00	0	$0.00	0	$0.00	8	$1,640.00	48	$5,520.00
	345	*$33,484.40*	*53*	*$12,285.00*	*11*	*$1,447.20*	*19*	*$3,854.00*	*427*	*$51,070.60*

Total Fee	*$175,377.80*

PREPARED BY

Mead & Hunt

FINAL DRAFT

Reclaimed Water Facility Plan

December 7, 2022

WINTER GARDEN

Executive Summary

New sewer and reclaimed water customers, Basin Management Action Plan (BMAP) requirements, consumptive use permit (CUP) conditions, and recent state legislation contribute to the need for new reclaimed water treatment, storage, pumping, transmission and distribution facilities. The existing reclaimed water distribution system requires expansion to serve new development and beneficially utilize additional effluent.

Winter Garden has a population of approximately 49,344 people and WWTP influent flows of approximately 4.0 MGD. This represents 85% of the Crest Ave. plant's rated capacity of 4.75 MGD. The public access reclaimed water system serves approximately 25,000 residential and commercial customers and has an average annual demand of approximately 4.16 MGD and a corresponding influent flow of 4.02 MGD. This demand is met by a combination of effluent from the Crest Ave. WWTP and PAR purchased from Orlando's Conserv II facility. The PAR system and RIBS serve as the City's only means of effluent disposal. Currently, effluent flows to the PAR system and RIBS is approximately equal at roughly 2.0 MGD sent to each.

Review of the data indicates that approximately 2.0 MGD of reclaimed water is being purchased annually from Conserv II. A total maximum daily load (TMDL) has been established for the Wekiwa and Rock Springs basin and the basin management action plan (BMAP) regulates effluent that is land applied within the basin. Specifically, land application of reclaimed water will be limited to PAR meeting advanced wastewater treatment (AWT) criteria. Effluent from Conserv II does not meet AWT and the Utilities Commission does not intend to upgrade treatment to AWT. The City of Winter Garden is upgrading and expanding their facilities to meet AWT; therefore, the PAR system serving existing and future customers must be capable of satisfying average and peak day demands. This will entail utilizing all available effluent and augmenting during peak irrigation periods.

The City has an existing surface water augmentation system that can be used to replace supplies currently being met by Conserv II. This plan includes significant additional storage, pumping and transmission projects that will improve the City's ability to harvest all of the PAR produced at Crest Ave., utilize the existing augmentation systems and also develop new surface water collection and treatment systems that can be used to meet new demands and seasonal needs.

This Plan also addresses wet weather storage and disposal requirements that are a necessary element of the permitted expansion currently being designed. FDEP requires a minimum of 3 days storage and or wet weather disposal capacity in order to meet effluent management requirements. Currently, the City has approximately 11.75 MG of wet weather disposal and storage. Ultimately, the City will need an additional 10.75 MG (22.5 MG total) of storage/disposal capacity to satisfy the proposed 7.5 MGD capacity.

Given that plant influent will increase gradually over the next 10 years, an initial increase of 7.5 MGD wet weather storage and disposal capacity is proposed. This will enable permitting of the entire 7.5 MGD treatment facility, with an annual average effluent limit of 6.5 MGD. This can be increased based upon future flows and growth. Planning and conceptual designs are included to allow for 'future' storage capacity of 4.0 MG to provide a total wet weather capacity of 23.25 MGD that will exceed the total required for proposed permitted treatment capacity. This future storage project, or alternative means of

effluent disposal, i.e. ASR, RIBS may be implemented in order to best meet the City's effluent disposal, aquifer recharge and overall water resource management goals and objectives.

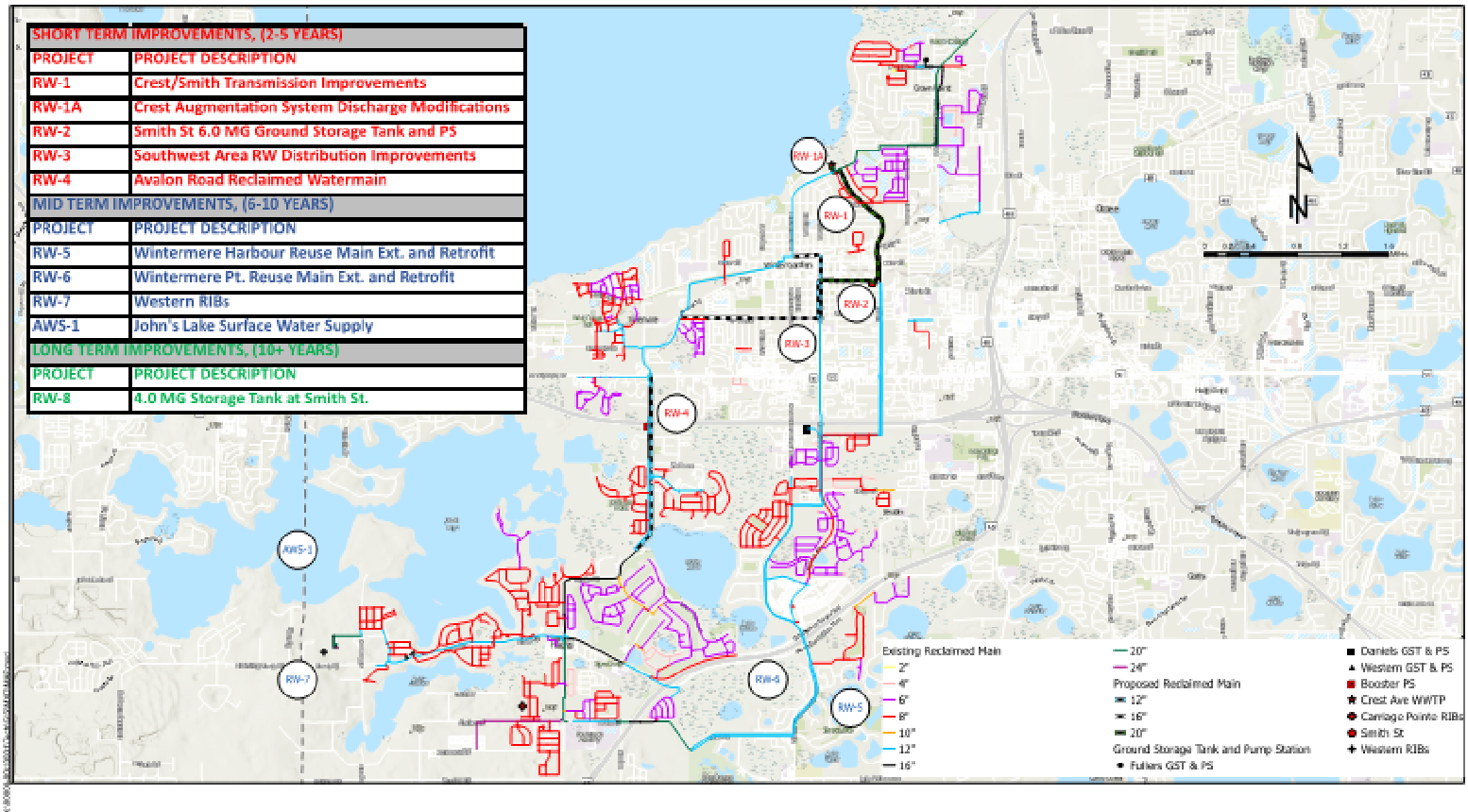
The City's WWTP is in the process of expanding from a 4.75 MGD AADF permitted capacity to a 7.5 MGD AADF permitted capacity. In conjunction, the City must terminate the use of Orange County's reclaimed water (Conserv II). Reclaimed water storage, pumping, and transmission improvements are needed to accommodate these changes. A list of the recommended reclaimed water projects with cost estimates is found in **Table 1**. The proposed projects are categorized by implementation schedule: short term (2-5 years), mid term (6-10 years) and long term (10+ years). Projects RW-5 and RW-6 are included in the City's Capital Improvement Plan.

TABLE 1: RECOMMENDED RECLAIMED WATER PROJECTS

SHORT TERM IMPROVEMENTS, (2-5 YEARS)		
PROJECT	**PROJECT DESCRIPTION**	**COST**
RW-1	Crest/Smith Transmission Improvements	$2,640,000
RW-1A	Crest Augmentation System Discharge Modifications	$96,000
RW-2	Smith St 6 MG Ground Storage Tank and PS	$6,540,000
RW-3	Southwest Area RW Distribution Improvements	$4,698,000
RW-4	Avalon Road Reclaimed Watermain	$2,130,000
Sub-total		**$16,104,000**
MID TERM IMPROVEMENTS, (6-10 YEARS)		
PROJECT	**PROJECT DESCRIPTION**	**COST**
RW-5	Wintermere Harbour Reuse Main Ext. and Retrofit	$1,530,000
RW-6	Wintermere Pt. Reuse Main Ext. and Retrofit	$3,006,000
RW-7	Western RIBs (includes $800K land acquisition)	$1,694,000
AWS-1	John's Lake Surface Water Supply	$1,257,600
Sub-total		**$7,487,600**
LONG TERM IMPROVEMENTS, (10+ YEARS)		
PROJECT	**PROJECT DESCRIPTION**	**COST**
RW-8	4 MG Ground Storage Tank at Smith St.	$4,000,000
Sub-total		**$4,000,000**

Figure 1 illustrates an overall outlook on the recommended reclaimed water projects.

SHORT TERM IMPROVEMENTS, (2-5 YEARS)	
PROJECT	PROJECT DESCRIPTION
RW-1	Crest/Smith Transmission Improvements
RW-1A	Crest Augmentation System Discharge Modifications
RW-2	Smith St 6.0 MG Ground Storage Tank and PS
RW-3	Southwest Area RW Distribution Improvements
RW-4	Avalon Road Reclaimed Watermain
MID TERM IMPROVEMENTS, (6-10 YEARS)	
PROJECT	PROJECT DESCRIPTION
RW-5	Wintermere Harbour Reuse Main Ext. and Retrofit
RW-6	Wintermere Pt. Reuse Main Ext. and Retrofit
RW-7	Western RIBs
AWS-1	John's Lake Surface Water Supply
LONG TERM IMPROVEMENTS, (10+ YEARS)	
PROJECT	PROJECT DESCRIPTION
RW-8	4.0 MG Storage Tank at Smith St.



These documents shall not be used for any purpose or project for which it is not intended. Mead & Hunt shall be indemnified by the client and held harmless from all claims, damages, liabilities, losses, and expenses, including attorneys' fees and costs, arising out of such misuse or reuse of the documents. Any other use or reuse by owner or by others will be at owner's sole risk and without liability or legal exposure to Mead & Hunt. In addition, unauthorized reproduction of these documents, in part or as a whole, is prohibited.

WG Reuse Facility Plan
Proposed Reclaimed Water Improvements

Mead & Hunt

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Kelly Carson, Planning Director

Via: City Manager Jon C. Williams

Date: July 29, 2026 **Meeting Date:** August 13, 2026

Subject: 12152 W Colonial Drive

ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN – NEW PARKING, LANDSCAPING, AND STORMWATER AREA

Site Plan Approval

PARCEL ID# 25-22-27-0000-00-033

Issue: The applicant is requesting approval of the Site Plan for a new parking area, new landscaping and stormwater area.

Discussion:

The proposed project will convert the existing 17,494 +/- square foot former furniture store into a medical facility. The new use requires additional parking, landscaping and stormwater improvements to the site.

The applicant plans to renovate the entire building including windows and doors, and provide a main access to the rear of the building.

The property totals 2.82 acres, is zoned C-2 (Arterial Commercial District) and has a COM (Commercial) Future Land Use Designation.

The property is located along State Route 50 (W Colonial Drive). The change of use and improvements to the site did not trigger a community meeting.

Recommended Action:

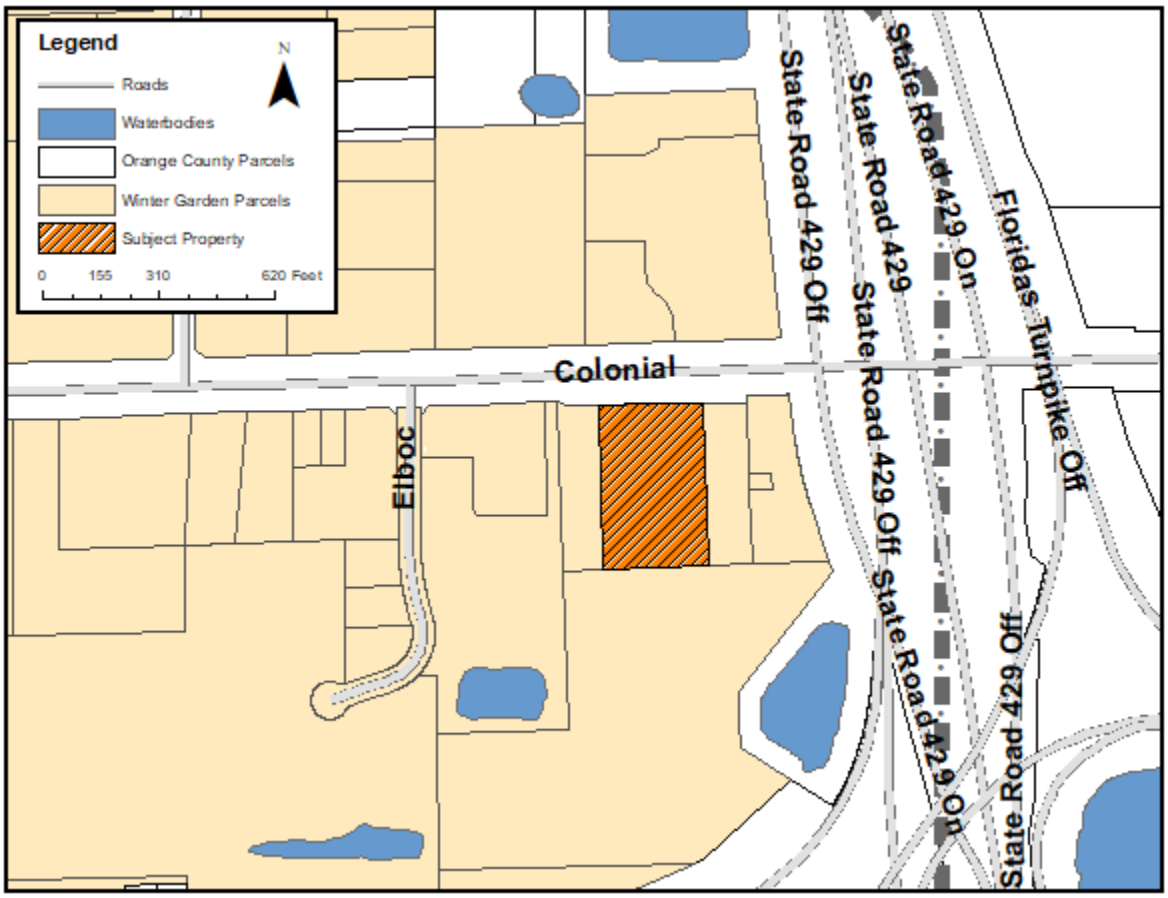
Staff recommends approval of the proposed site plan.

Attachment(s)/References:

Location Map
Construction Plans
Survey
Landscape Plans
Architectural Elevations
Final DRC combined comments

Location Map

12152 W Colonial Drive



CONSTRUCTION PLANS
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

STATEMENT OF OWNERSHIP:
THE PROPERTY AND ALL IMPROVEMENTS AS SHOWN ARE OWNED AND SHALL BE MAINTAINED BY OOC PROPERTY PARTNERS, LLC.

GENERAL STATEMENT:
THE CHARACTER AND INTENDED USE OF THIS DEVELOPMENT SHALL BE THE SITE WORK FOR A BUILDING CONVERSION ALONG WITH THE ASSOCIATED UTILITIES, PARKING, ACCESS ROADS AND WATER MANAGEMENT FACILITIES.

SITE DATA:

PROJECT NAME:	ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN
ADDRESS:	12152 WEST COLONIAL DRIVE WINTER GARDEN, FL 34787
OWNER/DEVELOPER ADDRESS:	25 W. CRYSTAL LAKE STREET, SUITE 200 ORLANDO, FL 32806-4476
TELEPHONE:	(407) 849-0025

ZONING/LAND USE DATA:

ZONING:	C-2 (SR 50 OVERLAY)
FUTURE LAND USE:	COM-COMMERCIAL
PROPOSED USE:	COMMERCIAL-MEDICAL
NUMBER OF STORIES:	ONE
MAX. BUILDING HEIGHT:	25 FEET
FAR:	0.142 *
BUILDING COVERAGE:	14.24% *
PHASING:	ONE PHASE
VEGETATION:	DEVELOPED SITE
WATER SERVICE:	CITY OF WINTER GARDEN
WASTEWATER SERVICE:	CITY OF WINTER GARDEN
SOILS:	42-SANIBEL MUCK 44-SMYRNA-SMYRNA WET FINE SAND, 0 TO 2 PERCENT SLOPES 54-ZOLFO FINE SAND, 0 TO 2 PERCENT SLOPES
STORMWATER MANAGEMENT:	ON-SITE DRY RETENTION POND
FLOOD ZONE:	X AND A (PER FEMA MAP 12095C0220 H)
FIRE:	WINTER GARDEN FIRE RESCUE DEPARTMENT STATION #24
SITE AREA:	122,842 SF=2.820 ACRES
IMPERVIOUS (PROPOSED/NEW):	37,351 SF=0.857 ACRES AT 30.41%
IMPERVIOUS (EXISTING):	36,245 SF=0.832 ACRES AT 29.51%
IMPERVIOUS (EXISTING TO BE REMOVED):	18,751 SF=0.430 ACRES AT 15.26%
IMPERVIOUS (TOTAL):	54,845 SF=1.259 ACRES AT 44.65%
BUILDING:	17,494 SF=0.402 ACRES AT 14.24%
PAVEMENT/SIDEWALKS:	37,351 SF=0.857 ACRES AT 30.41%
OPEN SPACE (TOTAL):	67,997 SF=1.561 ACRES AT 55.35%
WETLANDS TO REMAIN:	15,705 SF=0.360 ACRES AT 12.78%
OPEN SPACE (EXCLUDING WETLANDS TO REMAIN):	52,292 SF=1.200 ACRES AT 42.57%
OPEN SPACE (MINIMUM REQUIRED):	24,568 SF=0.564 ACRES AT 20%

SETBACKS/BUFFERS:

FRONT (STATE ROAD 50) (NORTH):	40 FEET/15 FEET
REAR (SOUTH):	20 FEET/0 FEET
SIDE (WEST):	20 FEET/0 FEET
SIDE (EAST):	20 FEET/0 FEET

PARKING REQUIREMENTS:

PARKING REQUIRED:	
MEDICAL OFFICE:	THREE SPACES PER 1,000 SF (17,494 SF)(3 SPACES PER 1,000 SF)/1,000=52 SPACES
TOTAL:	52 SPACES
REGULAR SPACES PROVIDED:	71
HANDICAPPED SPACES PROVIDED:	6
TOTAL SPACES PROVIDED:	77 SPACES

UTILITY COMPANIES:

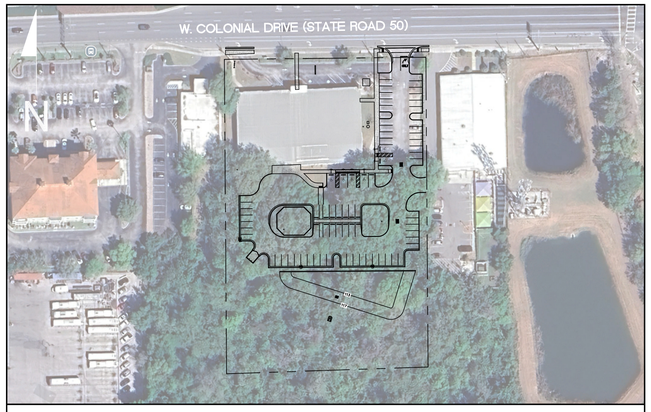
POWER:	DUKE ENERGY 452 E. CROWN POINT ROAD WINTER GARDEN, FL 33787 (407) 905-3321
SEWER:	CITY OF WINTER GARDEN 300 WEST PLANT STREET WINTER GARDEN, FL 34787 (407) 656-4111
WATER:	CITY OF WINTER GARDEN 300 WEST PLANT STREET WINTER GARDEN, FL 34787 (407) 656-4111
TELEPHONE:	AT&T-SOUTHEAST 450 N. GOLDENROD ROAD ORLANDO, FL 32807 (407) 380-0938
GAS:	LAKE APOPKA NATURAL GAS 1320 WINTER GARDEN-VINELAND ROAD WINTER GARDEN, FL 34778 (407) 656-2734

* INCLUDES WETLANDS AREA

25-22-27-0000-00-033
12152 WEST COLONIAL DRIVE
WINTER GARDEN, FLORIDA 34787



LOCATION MAP
NTS
SECTION 25, TOWNSHIP 22, RANGE 27



OVERALL SITE PLAN
1" = 100'

OWNER/DEVELOPER:
OOC PROPERTY PARTNERS, LLC
MR. CRAIG JONES, M.D.
25 W. CRYSTAL LAKE STREET, SUITE 200
ORLANDO, FL 32806-4476
(407) 849-0025

mitch collins, pe, inc.
801 east south street | p. 407.850.8557
orlando, fl 32801 | c. 407.448.8979
mitchcollins@
mitchcollinspe.com

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608,
STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS
LICENSE
No. 54608
STATE OF FLORIDA
PROFESSIONAL ENGINEER

LEGAL DESCRIPTION:
THE WEST 281.9 FEET OF THE EAST 396.9 FEET OF THE WEST 829.8 FEET OF THE NORTH 525.0 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 (LESS THE NORTH 75.0 FEET FOR STATE ROAD), SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

A PARCEL OF LAND BEING PRESENTLY DESCRIBED AS FOLLOWS AND TO BE MORE PARTICULARLY DESCRIBED AFTER SURVEY:

THE WEST 281.9 FEET OF THE EAST 396.9 FEET OF THE WEST 829.8 FEET OF THE NORTH 525.0 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 (LESS THE NORTH 75.0 FEET FOR STATE ROAD), SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

LESS AND EXCEPT THE FOLLOWING:

COMMENCE AT SMALL P-K NAIL AND DISK SET IN POURED CONCRETE IN ASPHALT CUT-OUT MARKING THE NORTHEAST COMER OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; THENCE RUN SOUTH 00°03'54" EAST ALONG THE NORTH-SOUTH CENTER-OF-SECTION LINE OF SAID SECTION 24 A DISTANCE OF 5329.27 FEET TO A POINT THE CENTERLINE OF SURVEY OF STATE ROAD 50 AS SHOWN ON FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 75050, FINANCIAL PROJECT NO. 4109831 1, SAID POINT ALSO BEING A POINT ON A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 32,740.45 FEET AND A CHORD BEARING OF NORTH 88°31'48" EAST; THENCE DEPARTING SAID NORTH-SOUTH LINE, FROM A TANGENT BEARING OF NORTH 88°57'45" EAST, RUN EASTERLY ALONG SAID CENTERLINE OF SURVEY AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 00°51'53" A DISTANCE OF 494.31 FEET TO THE POINT OF TANGENCY, SAID POINT ALSO BEING A POINT ON THE NORTH LINE OF THE NORTHEAST 1/4 OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID CURVE RUN NORTH 88°05'52" EAST ALONG SAID CENTERLINE OF SURVEY AND ALONG SAID NORTH LINE A DISTANCE OF 945.27 FEET TO A POINT ON THE NORTHERLY PROJECTION OF THE EAST LINE OF TYBRENT CENTER AS RECORDED IN PLAT BOOK 14, PAGE 3 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID CENTERLINE OF SURVEY AND SAID NORTH LINE, RUN SOUTH 00°22'27" EAST ALONG SAID NORTHERLY PROJECTION A DISTANCE OF 75.03 FEET TO A POINT ON THE EXISTING SOUTH RIGHT OF WAY LINE OF AFORESAID STATE ROAD 50 AS SHOWN ON THE AFORESAID RIGHT OF WAY MAP; THENCE RUN NORTH 88°05'52" EAST ALONG SAID EXISTING SOUTH RIGHT OF WAY LINE OF STATE ROAD 50 A DISTANCE OF 333.06 FEET TO A "POINT ON THE EAST LINE OF THE WEST 432. 9 FEET OF THE NORTH 525 FEET OF THE NORTHEAST 1/4 OF THE AFORESAID NORTHEAST 1/4 OF SECTION 25 FOR A POINT OF BEGINNING; THENCE CONTINUE NORTH 88°05'52" EAST ALONG SAID EXISTING SOUTH RIGHT OF WAY LINE OF STATE ROAD A DISTANCE OF 281.70 FEET TO A POINT ON THE WEST LINE OF THE EAST 115 FEET OF THE WEST 829.5 FEET OF THE NORTH 525 FEET OF SAID NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 25; THENCE DEPARTING SAID EXISTING SOUTH RIGHT OF WAY LINE, RUN SOUTH 00°22'17" EAST ALONG SAID WEST LINE A DISTANCE OF 17.17 FEET; THENCE DEPARTING SAID WEST LINE, RUN SOUTH 89°24'23" WEST A DISTANCE OF 281.60 FEET TO A POINT ON THE AFORESAID EAST LINE OF THE WEST 432. 9 FEET OF THE NORTH 525 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 25; THENCE RUN NORTH 00°22'17" WEST ALONG SAID EAST LINE A DISTANCE OF 10.73 FEET TO THE POINT OF BEGINNING.

ENGINEER:
MITCH COLLINS, P.E., INC.
801 E. SOUTH STREET
ORLANDO, FL 32801
407-850-8557

ARCHITECT:
INTERSTRUCT DESIGN, LLC
814 W. CHURCH STREET
ORLANDO, FL 32805
(407) 849-0025

SURVEYOR:
SUNSTATE SURVEYING, LLC
4751 STURBRIDGE CIRCLE
ORLANDO, FL 32812
(407) 928-8252

LANDSCAPE ARCHITECT:
PLACEMAKER DESIGN STUDIO, LLC
415 PLAZA DRIVE
DUNEDIN, FL 34698
(727) 726-6124

GENERAL REQUIREMENTS

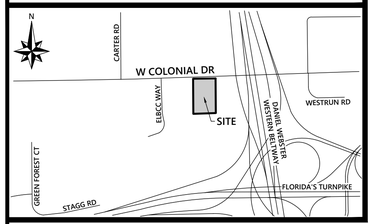
A. ALL GRAVITY SANITARY PIPE AND FITTINGS SHALL BE SDR 26.
B. ALL COMPACTION SHALL BE 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T-180).
C. AS-BUILT RECORD DRAWINGS SHALL COMPLY WITH CITY OF WINTER GARDEN REQUIREMENTS AVAILABLE ON-LINE (NOTE ON PLAN).
D. ALL STORM (>12") AND SANITARY LINES (>6") SHALL BE INSPECTED BY CCTV PRIOR TO COMPLETION.
E. USE CITY STANDARD DETAIL SHEETS FOR UTILITIES AND PUBLIC WORKS (SEE CITY WEBSITE).
F. IF THERMOPLASTIC PIPE IS USED IT SHALL MEET ALL CITY MATERIAL AND INSTALLATION REQUIREMENTS AS SPECIFIED IN THE CITY'S STANDARDS & SPECIFICATIONS INCLUDING CLASS I BEDDING, HP POLYPROPYLENE PIPE (NOT HDPE OR N-12), LASER PROFILING, INSTALLATION PER ASTM D2321, ETC. (SEE UNDER ON-LINE FORMS ON WEBSITE).
G. ALL UTILITIES SHALL BE UNDERGROUND PURSUANT TO CODE (SEC. 18-33) INCLUDING ELECTRICAL POWER, CABLE, TELEPHONE, ETC.

INDEX OF DRAWINGS

SHT. NO.	DESCRIPTION
	COVER SHEET
1	BOUNDARY AND TOPOGRAPHIC SURVEY
D1	DEMOLITION PLAN
C1	SITE LAYOUT PLAN
C1A	WETLAND IMPACT EXHIBIT
C2	GRADING AND DRAINAGE PLAN
C3	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
C4	UTILITY PLAN
C5	DETAILS AND NOTES
C6	DETAILS AND NOTES
C7	DETAILS AND NOTES
C8	DETAILS AND NOTES
C9	DETAILS AND NOTES
C10	DETAILS AND NOTES
C11	DETAILS AND NOTES
C12	DETAILS AND NOTES
C13	LIFT STATION DETAIL
L0	TREE INVENTORY PLAN
L1	LANDSCAPE PLAN
L2	LANDSCAPE NOTES AND PLANT SCHEDULE
L3	LANDSCAPE DETAILS
IR1	IRRIGATION PLAN
IR2	IRRIGATION NOTES AND DETAILS
IR3	IRRIGATION DETAILS
IR4	IRRIGATION SPECIFICATIONS

Map of Survey

VICINITY MAP (NOT TO SCALE)



PROPERTY DESCRIPTION

THE WEST 281.9 FEET OF THE EAST 396.9 FEET OF THE WEST 829.8 FEET OF THE NORTH 525.0 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 (LESS THE NORTH 75.0 FEET FOR STATE ROAD), SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

A PARCEL OF LAND BEING PRESENTLY DESCRIBED AS FOLLOWS AND TO BE MORE PARTICULARLY DESCRIBED AFTER SURVEY:

THE WEST 281.9 FEET OF THE EAST 396.9 FEET OF THE WEST 829.8 FEET OF THE NORTH 525.0 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 (LESS THE NORTH 75.0 FEET FOR STATE ROAD), SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

LESS AND EXCEPT THE FOLLOWING:

COMMENCE AT SMALL P-K NAIL AND DISK SET IN POURED CONCRETE IN ASPHALT CUT-OUT MARKING THE NORTHEAST COMER OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; THENCE RUN SOUTH 00°03'54" EAST ALONG THE NORTH-SOUTH CENTER-OF-SECTION LINE OF SAID SECTION 24 A DISTANCE OF 5329.27 FEET TO A POINT THE CENTERLINE OF SURVEY OF STATE ROAD 50 AS SHOWN ON FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 75050, FINANCIAL PROJECT NO. 410983 1, SAID POINT ALSO BEING A POINT ON A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 32,740.45 FEET AND A CHORD BEARING OF NORTH 88°31'48" EAST; THENCE DEPARTING SAID NORTH-SOUTH LINE, FROM A TANGENT BEARING OF NORTH 88°57'45" EAST, RUN EASTERLY ALONG SAID CENTERLINE OF SURVEY AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 00°51'53" A DISTANCE OF 494.11 FEET TO THE POINT OF TANGENCY, SAID POINT ALSO BEING A POINT ON THE NORTH LINE OF THE NORTHEAST 1/4 OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID CURVE RUN NORTH 88°05'52" EAST ALONG SAID CENTERLINE OF SURVEY AND ALONG SAID NORTH LINE A DISTANCE OF 945.27 FEET TO A POINT ON THE NORTHERLY PROJECTION OF THE EAST LINE OF TYBRENT CENTER AS RECORDED IN PLAT BOOK 14, PAGE 3 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID CENTERLINE OF SURVEY AND SAID NORTH LINE, RUN SOUTH 00°22'27" EAST ALONG SAID NORTHERLY PROJECTION A DISTANCE OF 75.03 FEET TO A POINT ON THE EXISTING SOUTH RIGHT OF WAY LINE OF AFORESAID STATE ROAD 50 AS SHOWN ON THE AFORESAID RIGHT OF WAY MAP; THENCE RUN NORTH 88°05'52" EAST ALONG SAID EXISTING SOUTH RIGHT OF WAY LINE OF STATE ROAD 50 A DISTANCE OF 333.06 FEET TO A "POINT ON THE EAST LINE OF THE WEST 432. 9 FEET OF THE NORTH 525 FEET OF THE NORTHEAST 1/4 OF THE AFORESAID NORTHEAST 1/4 OF SECTION 25 FOR A POINT OF BEGINNING; THENCE CONTINUE NORTH 88°05'52" EAST ALONG SAID EXISTING SOUTH RIGHT OF WAY LINE OF STATE ROAD A DISTANCE OF 281.70 FEET TO A POINT ON THE WEST LINE OF THE EAST 115 FEET OF THE WEST 829.5 FEET OF THE NORTH 525 FEET OF SAID NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 25; THENCE DEPARTING SAID EXISTING SOUTH RIGHT OF WAY LINE, RUN SOUTH 00°22'17" EAST ALONG SAID WEST LINE A DISTANCE OF 17.17 FEET; THENCE DEPARTING SAID WEST LINE, RUN SOUTH 89°24'23" WEST A DISTANCE OF 281.60 FEET TO A POINT ON THE AFORESAID EAST LINE OF THE WEST 432. 9 FEET OF THE NORTH 525 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 25; THENCE RUN NORTH 00°22'17" WEST ALONG SAID EAST LINE A DISTANCE OF 10.73 FEET TO THE POINT OF BEGINNING.

LAND AREA SUMMARY

UPLANDS CONTAINS 91,990 SQUARE FEET OR 2.112 ACRES MORE OR LESS.
WETLANDS CONTAINS 30,852 SQUARE FEET OR 0.708 ACRES MORE OR LESS.

TOTAL LAND AREA CONTAINS 122,842 SQUARE FEET OR 2.820 ACRES MORE OR LESS.

SCHEDULE B-II EXCEPTIONS

6. The terms, provisions, and conditions contained in that certain Stipulated Judgment, recorded in Official Records Book 10000, Page 9092 of the Public Records of Orange County, Florida. (DESCRIBES THE LESS AND EXCEPT PORTION OF PROPERTY. SHOWN HEREON.)

7. Terms and conditions of that certain Lease by and between National Retail Properties, LP (Landlord) and W.S. Badcock Corporation (Tenant) as evidenced by Memorandum of Lease recorded in Official Records Instrument No: 20220217173. (CONTAINS NO EASEMENTS TO DEPICT.)

SURVEY NOTES

1. Bearing Structure is assumed and based on the South Right-of-Way Line of W Colonial Drive, being N89°24'23"E, per description.

2. This survey reflects only matters of record as provided by the client or clients representative.

3. The surveyor has not physically located the underground utilities. This survey was made on the ground. Any underground utilities shown hereon have been located from observed surface utility features and/or drawings provided by client. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are shown as accurately as possible from information available.

4. This Survey was made with benefit of Fidelity National Title Insurance Company's Commitment No. 16-25-0231, effective August 14, 2025 at 8:00 AM.

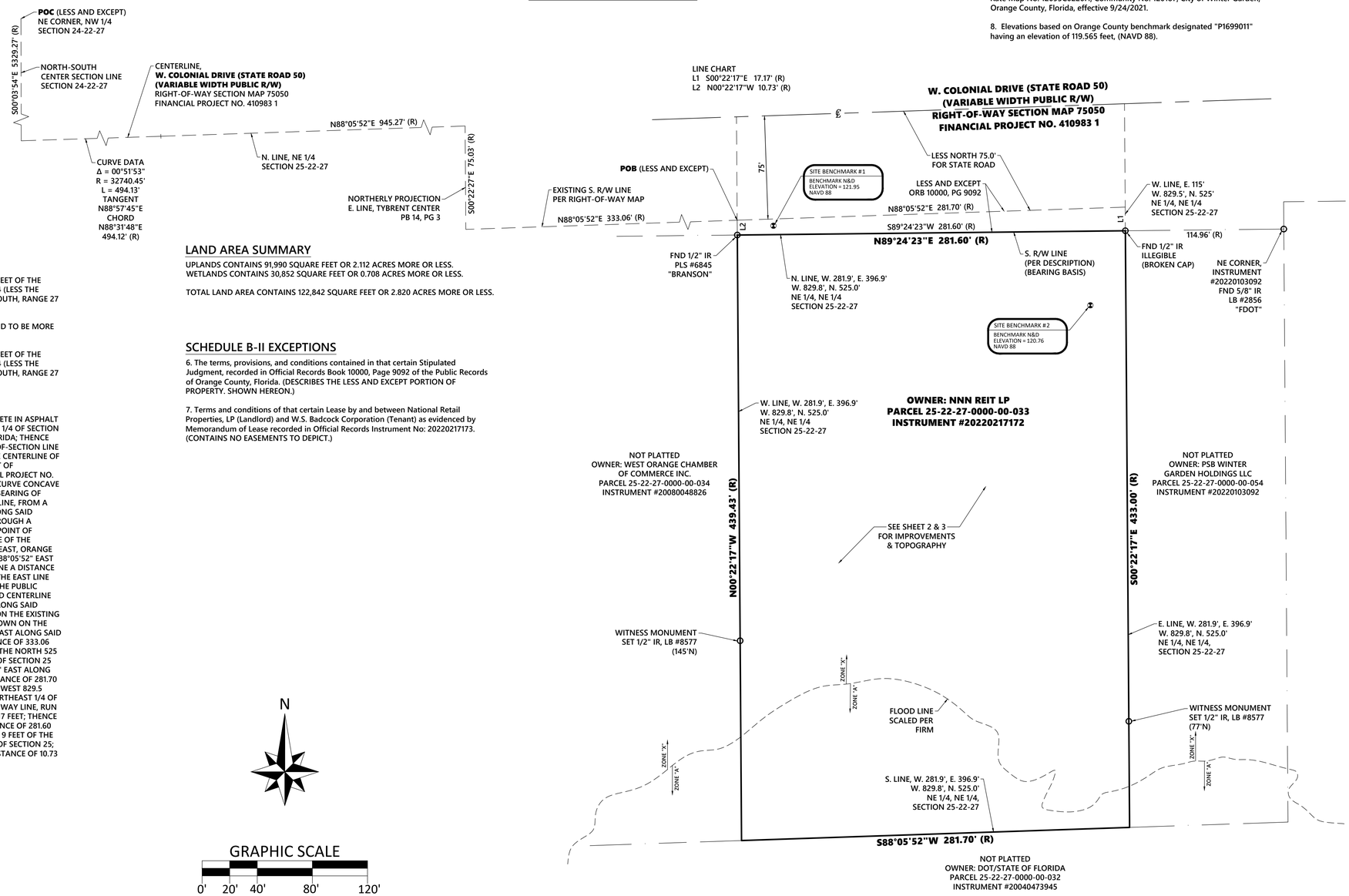
5. This survey is valid only for the parties to whom it is certified to. Liability to third parties may not be transferred or assigned.

6. This survey exceeds the accuracy requirements set forth in Florida Statutes.

7. Subject property lies in Zone "X" and Zone "A", based on Flood Insurance Rate Map No. 12095C0220H, Community No. 120187, City of Winter Garden, Orange County, Florida, effective 9/24/2021.

8. Elevations based on Orange County benchmark designated "P1699011" having an elevation of 119.565 feet, (NAVD 88).

DESCRIPTION KEY MAP



GRAPHIC SCALE

0' 20' 40' 80' 120'

1" = 40'

SURVEY DATE: 8/20/2025	SHEET 1 OF 3
PROJECT NUMBER: 2025-08-08-02	SCALE: 1" = 40'

SUNSTATE SURVEYING
4751 Sturbridge Circle
Orlando, Florida 32812
www.sunstatesurveying.com
Terrence@sunstatesurveying.com
Phone: 407-928-8252
LB #8577

COPYRIGHT © 2023 - 2026, SUNSTATE SURVEYING, LLC

REVISIONS

#	PROJECT NUMBER	REVISION	DATE
1	2025-08-08-02	ADD TITLE	9/10/25
2	2025-08-08-02	ADD INVERT DATA TO STORM STRUCTURES	9/20/25
3	2026-03-15-01	ADDITIONAL TOPO/TREES IN WETLAND AREA	3/28/26

LEGEND

A/C - AIR CONDITIONER
CLF - CHAIN LINK FENCE
CONC - CONCRETE
COVD - COVERED
CP - CONCRETE PAD
CW - CONCRETE WALKWAY
Δ - DELTA
DW - DRIVE WAY
ESMT - EASEMENT
FIRM - FLOOD INSURANCE RATE MAP
FDC - FIRE DEPARTMENT CONNECTION
FND - FOUND
HDPE - HIGH-DENSITY POLYETHYLENE
INV - INVERT
IR - IRON ROD
IP - IRON PIPE
L - ARC LENGTH
LB - LICENSED BUSINESS
LS - LICENSED SURVEYOR
MF - METAL FENCE
N&D - NAIL & DISC
NAVD - NORTH AMERICAN VERTICAL DATUM
ORB - OFFICIAL RECORDS BOOK
PB - PLAT BOOK
PG - PAGE
PLS - PROFESSIONALLY LICENSED SURVEYOR
PSM - PROFESSIONAL SURVEYOR AND MAPPER
PVC - POLYVINYL CHLORIDE (PLASTIC)
RCP - REINFORCED CONCRETE PIPE
R - RADIUS
R/W - RIGHT OF WAY
SDO - SHOWN FOR DIRECTION ONLY
(R) - RECORD DESCRIPTION
(M) - MEASURED

- BENCHMARK
- CENTERLINE
- LIGHT POLE
- ELECTRIC BOX
- ELECTRIC METER
- GUY WIRE ANCHOR
- UTILITY POLE
- FIBER OPTIC CABLE BOX
- BACKFLOW PREVENTER
- WATER METER
- WATER VALVE
- SEWER VALVE
- SANITARY MANHOLE
- TRAFFIC SIGN
- OAK TREE
- CRAPE MYRTLE

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR:
INTERSTRUCT ORLANDO, LLC

SITE ADDRESS:
12152 W COLONIAL DRIVE
WINTER GARDEN, FL 34787

COUNTY: ORANGE
SECTION: 25-22-27
SUBDIVISION: NOT PLATTED

TERRENCE W. RUTTER, JR., PSM 7371

"THE DATE OF SIGNATURE DOES NOT REVISE OR SUPERSEDE THE SURVEY DATE OR REVISION DATE."

THIS SURVEY MEETS THE "STANDARDS OF PRACTICE" AS REQUIRED BY CHAPTER 5J-17 FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.

"NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THIS FLORIDA LICENSED SURVEYOR AND MAPPER."

-OR-

THE ELECTRONIC SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRENCE W. RUTTER, JR., PSM 7371.

Map of Survey

SURVEY DATE: 8/20/2025	SHEET 2 OF 3
PROJECT NUMBER: 2025-08-08-02	SCALE: 1" = 20'

SUNSTATE SURVEYING
4751 Sturbridge Circle
Orlando, Florida 32812
www.sunstatesurveying.com
Terrence@sunstatesurveying.com
Phone: 407-928-8252
LB #8577

COPYRIGHT © 2023 - 2026, SUNSTATE SURVEYING, LLC

REVISIONS

#	PROJECT NUMBER	REVISION	DATE
1	2025-08-08-02	ADD TITLE	9/10/25
2	2025-08-08-02	ADD INVERT DATA TO STORM STRUCTURES	9/20/25
3	2026-03-15-01	ADDITIONAL TOPO/TREES IN WETLAND AREA	3/28/26

LINE CHART
L1 S00°22'17"E 17.17' (R)
L2 N00°22'17"W 10.73' (R)

W. COLONIAL DRIVE (STATE ROAD 50)
(VARIABLE WIDTH PUBLIC R/W)
RIGHT-OF-WAY SECTION MAP 75050
FINANCIAL PROJECT NO. 410983 1

LESS NORTH 75.0'
FOR STATE ROAD

SITE BENCHMARK #1
BENCHMARK N&D
ELEVATION = 121.95
NAVD 88

SITE BENCHMARK #2
BENCHMARK N&D
ELEVATION = 120.76
NAVD 88

POB (LESS AND EXCEPT)

N88°05'52"E 333.06' (R)

EXISTING S. R/W LINE
PER RIGHT-OF-WAY MAP

FND 1/2" IR
PLS #6845
"BRANSON"

N. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27

N88°05'52"E 281.70' (R)

N89°24'23"E 281.60' (R)
S89°24'23"W 281.60' (R)

LESS AND EXCEPT
ORB 10000, PG 9092

ACCESS

ACCESS
S. R/W LINE
(PER DESCRIPTION)
(BEARING BASIS)

W. LINE, E. 115'
W. 829.5', N. 525'
NE 1/4, NE 1/4
SECTION 25-22-27

114.96' (R)

NE CORNER,
INSTRUMENT
#20220103092
FND 5/8" IR
LB #2856
"FDOT"

FND 1/2" IR
ILLEGIBLE
(BROKEN CAP)

E. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4,
SECTION 25-22-27

1 STORY BLOCK
ADDRESS #12184

1 STORY BLOCK
ADDRESS #12152
17,494± SF
FFE=121.26

1 STORY BLOCK
ADDRESS #12100

BUILDING HEIGHT=22.4'±

OWNER: NNN REIT LP
PARCEL 25-22-27-0000-00-033
INSTRUMENT #20220217172

W. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27

NOT PLATTED
OWNER: WEST ORANGE CHAMBER
OF COMMERCE INC.
PARCEL 25-22-27-0000-00-034
INSTRUMENT #20080048826

NOT PLATTED
OWNER: PSB WINTER
GARDEN HOLDINGS LLC
PARCEL 25-22-27-0000-00-054
INSTRUMENT #20220103092

MATCH LINE

MATCH LINE

MATCH LINE

N00°22'17"W 439.43' (R)

S00°22'17"E 433.00' (R)

TOP=122.13
N. INV=116.64 (18" RCP)
E. INV=114.03 (28" RCP)
W. INV=114.00 (28" RCP)

TOP=120.10
S. INV=116.45

TOP=119.12
N. INV=115.42 (10" HDPE)
(FULL OF WATER,
COULD NOT FIND
ANY OTHER PIPES)

TOP=119.77
N. INV=115.73 (6" PVC)
S. INV=115.89 (8" PVC)

TOP=120.09
N. INV=115.07 (8" PVC)
W. INV=117.54 (2-1/2" PVC)
(FULL OF SEWAGE)

LIFT STATION

TOP=120.13
E. INV=118.08
(2-1/2" PVC)
(FULL OF SEWAGE)

Tree Chart

1-14" OAK	45-10" OAK
2-13" OAK	46-18" OAK
3-21" OAK	47-12" OAK
4-(2)25" OAK	48-26" OAK
5-14" OAK	49-65" OAK
6-40" OAK	50-36" OAK
7-15" OAK	51-(4)16" OAK
8-16" OAK	52-(3)25" OAK
9-32" OAK	53-12" OAK
10-37" OAK	54-13" OAK
11-8" OAK	55-16" OAK
12-11" OAK	56-30" OAK
13-14" OAK	57-22" OAK
14-8" OAK	58-11" OAK
15-13" OAK	59-18" OAK (UPROOTED)
16-(2)27" OAK	60-18" OAK
17-45" OAK	61-9" OAK
18-40" OAK	62-13" OAK
19-44" OAK	63-25" OAK (UPROOTED)
20-40" OAK	64-9" OAK
21-(4)26" OAK	65-9" OAK
22-18" OAK	66-20" OAK
23-15" OAK (UPROOTED)	67-11" OAK
24-16" OAK	68-15" OAK
25-11" OAK	69-13" OAK
26-21" OAK	70-21" OAK
27-16" OAK	71-13" OAK
28-8" OAK	72-14" OAK
29-(2)16" OAK	73-13" OAK
30-(2)15" OAK	74-13" OAK
31-8" OAK	75-10" OAK
32-9" OAK	76-19" OAK
33-19" OAK	77-12" OAK
34-11" OAK	78-15" OAK
35-30" OAK	79-48" OAK
36-9" OAK	80-11" OAK
37-11" OAK	81-15" OAK
38-43" OAK	82-12" OAK
39-15" OAK	83-8" OAK
40-16" OAK	84-10" OAK
41-18" OAK	85-12" OAK
42-13" OAK	86-14" OAK
43-(2)17" OAK	87-10" OAK
44-12" OAK	88-38" OAK

N

GRAPHIC SCALE
0' 10' 20' 40' 60'
1" = 20'

LEGEND

A/C	- AIR CONDITIONER	LS	- LICENSED SURVEYOR
CLF	- CHAIN LINK FENCE	MF	- METAL FENCE
CONC	- CONCRETE	N&D	- NAIL & DISC
COVD	- COVERED	NAVD	- NORTH AMERICAN VERTICAL DATUM
CP	- CONCRETE PAD	ORB	- OFFICIAL RECORDS BOOK
CW	- CONCRETE WALKWAY	PB	- PLAT BOOK
Δ	- DELTA	PG	- PAGE
DW	- DRIVE WAY	PLS	- PROFESSIONALLY LICENSED SURVEYOR
ESMT	- EASEMENT	PSM	- PROFESSIONAL SURVEYOR AND MAPPER
FIRM	- FLOOD INSURANCE RATE MAP	PVC	- POLYVINYL CHLORIDE (PLASTIC)
FDC	- FIRE DEPARTMENT CONNECTION	RCP	- REINFORCED CONCRETE PIPE
FND	- FOUND	R	- RADIUS
HDPE	- HIGH-DENSITY POLYETHYLENE	R/W	- RIGHT OF WAY
INV	- INVERT	SDO	- SHOWN FOR DIRECTION ONLY
IR	- IRON ROD	(R)	- RECORD DESCRIPTION
IP	- IRON PIPE	(M)	- MEASURED
L	- ARC LENGTH		
LB	- LICENSED BUSINESS		

- BENCHMARK
- CENTERLINE
- LIGHT POLE
- ELECTRIC BOX
- ELECTRIC METER
- GUY WIRE ANCHOR
- UTILITY POLE
- FIBER OPTIC CABLE BOX
- BACKFLOW PREVENTER
- WATER METER
- WATER VALVE
- SEWER VALVE
- SANITARY MANHOLE
- TRAFFIC SIGN
- OAK TREE
- CRAPE MYRTLE

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR:
INTERSTRUCT ORLANDO, LLC

SITE ADDRESS:
12152 W COLONIAL DRIVE
WINTER GARDEN, FL 34787

COUNTY: ORANGE
SECTION: 25-22-27
SUBDIVISION: NOT PLATTED

TERRENCE W. RUTTER, JR., PSM 7371

"THE DATE OF SIGNATURE DOES NOT REVISE OR SUPERSEDE THE SURVEY DATE OR REVISION DATE."

THIS SURVEY MEETS THE "STANDARDS OF PRACTICE" AS REQUIRED BY CHAPTER 5J-17 FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.

"NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THIS FLORIDA LICENSED SURVEYOR AND MAPPER."

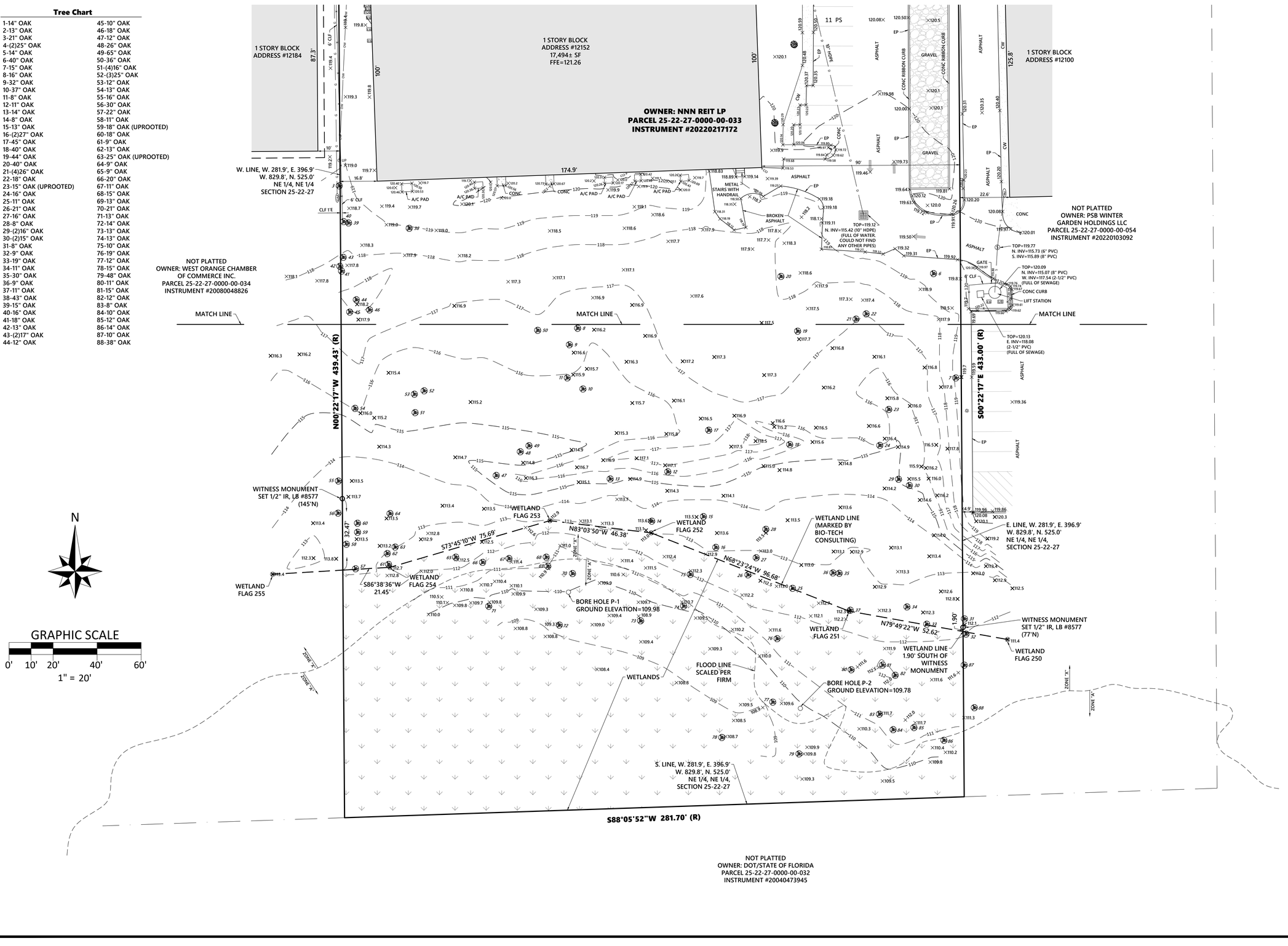
-OR-

THE ELECTRONIC SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRENCE W. RUTTER, JR., PSM 7371.

Map of Survey

Tree Chart

1-14" OAK	45-10" OAK
2-13" OAK	46-18" OAK
3-21" OAK	47-12" OAK
4-(2)25" OAK	48-26" OAK
5-14" OAK	49-65" OAK
6-40" OAK	50-36" OAK
7-15" OAK	51-(4)16" OAK
8-16" OAK	52-(3)25" OAK
9-32" OAK	53-12" OAK
10-37" OAK	54-13" OAK
11-8" OAK	55-16" OAK
12-11" OAK	56-30" OAK
13-14" OAK	57-22" OAK
14-8" OAK	58-11" OAK
15-13" OAK	59-18" OAK (UPROOTED)
16-(2)27" OAK	60-18" OAK
17-45" OAK	61-9" OAK
18-40" OAK	62-13" OAK
19-44" OAK	63-25" OAK (UPROOTED)
20-40" OAK	64-9" OAK
21-(4)26" OAK	65-9" OAK
22-18" OAK	66-20" OAK
23-15" OAK (UPROOTED)	67-11" OAK
24-16" OAK	68-15" OAK
25-11" OAK	69-13" OAK
26-21" OAK	70-21" OAK
27-16" OAK	71-13" OAK
28-8" OAK	72-14" OAK
29-(2)16" OAK	73-13" OAK
30-(2)15" OAK	74-13" OAK
31-8" OAK	75-10" OAK
32-9" OAK	76-19" OAK
33-19" OAK	77-12" OAK
34-11" OAK	78-15" OAK
35-30" OAK	79-48" OAK
36-9" OAK	80-11" OAK
37-11" OAK	81-15" OAK
38-43" OAK	82-12" OAK
39-15" OAK	83-8" OAK
40-16" OAK	84-10" OAK
41-18" OAK	85-12" OAK
42-13" OAK	86-14" OAK
43-(2)17" OAK	87-10" OAK
44-12" OAK	88-38" OAK



NOT PLATTED
OWNER: DOT/STATE OF FLORIDA
PARCEL 25-22-27-0000-00-032
INSTRUMENT #20040473945

SURVEY DATE: 8/20/2025	SHEET 3 OF 3
PROJECT NUMBER: 2025-08-08-02	SCALE: 1" = 20'

SUNSTATE SURVEYING
4751 Sturbridge Circle
Orlando, Florida 32812
www.sunstatesurveying.com
Terrence@sunstatesurveying.com
Phone: 407-928-8252
LB #8577

COPYRIGHT © 2023 - 2026, SUNSTATE SURVEYING, LLC

REVISIONS

#	PROJECT NUMBER	REVISION	DATE
1	2025-08-08-02	ADD TITLE	9/10/25
2	2025-08-08-02	ADD INVERT DATA TO STORM STRUCTURES	9/20/25
3	2026-03-15-01	ADDITIONAL TOPO/TREES IN WETLAND AREA	3/28/26

LEGEND

A/C - AIR CONDITIONER
CLF - CHAIN LINK FENCE
CONC - CONCRETE
COVD - COVERED
CP - CONCRETE PAD
CW - CONCRETE WALKWAY
Δ - DELTA
DW - DRIVE WAY
ESMT - EASEMENT
FIRM - FLOOD INSURANCE RATE MAP
FDC - FIRE DEPARTMENT CONNECTION
FND - FOUND
HDPE - HIGH-DENSITY POLYETHYLENE
INV - INVERT
IR - IRON ROD
IP - IRON PIPE
L - ARC LENGTH
LB - LICENSED BUSINESS
LS - LICENSED SURVEYOR
MF - METAL FENCE
N&D - NAIL & DISC
NAVD - NORTH AMERICAN VERTICAL DATUM
ORB - OFFICIAL RECORDS BOOK
PB - PLAT BOOK
PG - PAGE
PLS - PROFESSIONALLY LICENSED SURVEYOR
PSM - PROFESSIONAL SURVEYOR AND MAPPER
PVC - POLYVINYL CHLORIDE (PLASTIC)
RCP - REINFORCED CONCRETE PIPE
R - RADIUS
R/W - RIGHT OF WAY
SDO - SHOWN FOR DIRECTION ONLY
(R) - RECORD DESCRIPTION
(M) - MEASURED

- BENCHMARK
- CENTERLINE
- LIGHT POLE
- ELECTRIC BOX
- ELECTRIC METER
- GUY WIRE ANCHOR
- UTILITY POLE
- FIBER OPTIC CABLE BOX
- BACKFLOW PREVENTER
- WATER METER
- WATER VALVE
- SEWER VALVE
- SANITARY MANHOLE
- TRAFFIC SIGN
- OAK TREE
- CRAPE MYRTLE

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR:
INTERSTRUCT ORLANDO, LLC

SITE ADDRESS:
12152 W COLONIAL DRIVE
WINTER GARDEN, FL 34787

COUNTY: ORANGE
SECTION: 25-22-27
SUBDIVISION: NOT PLATTED

TERRENCE W. RUTTER, JR., PSM 7371

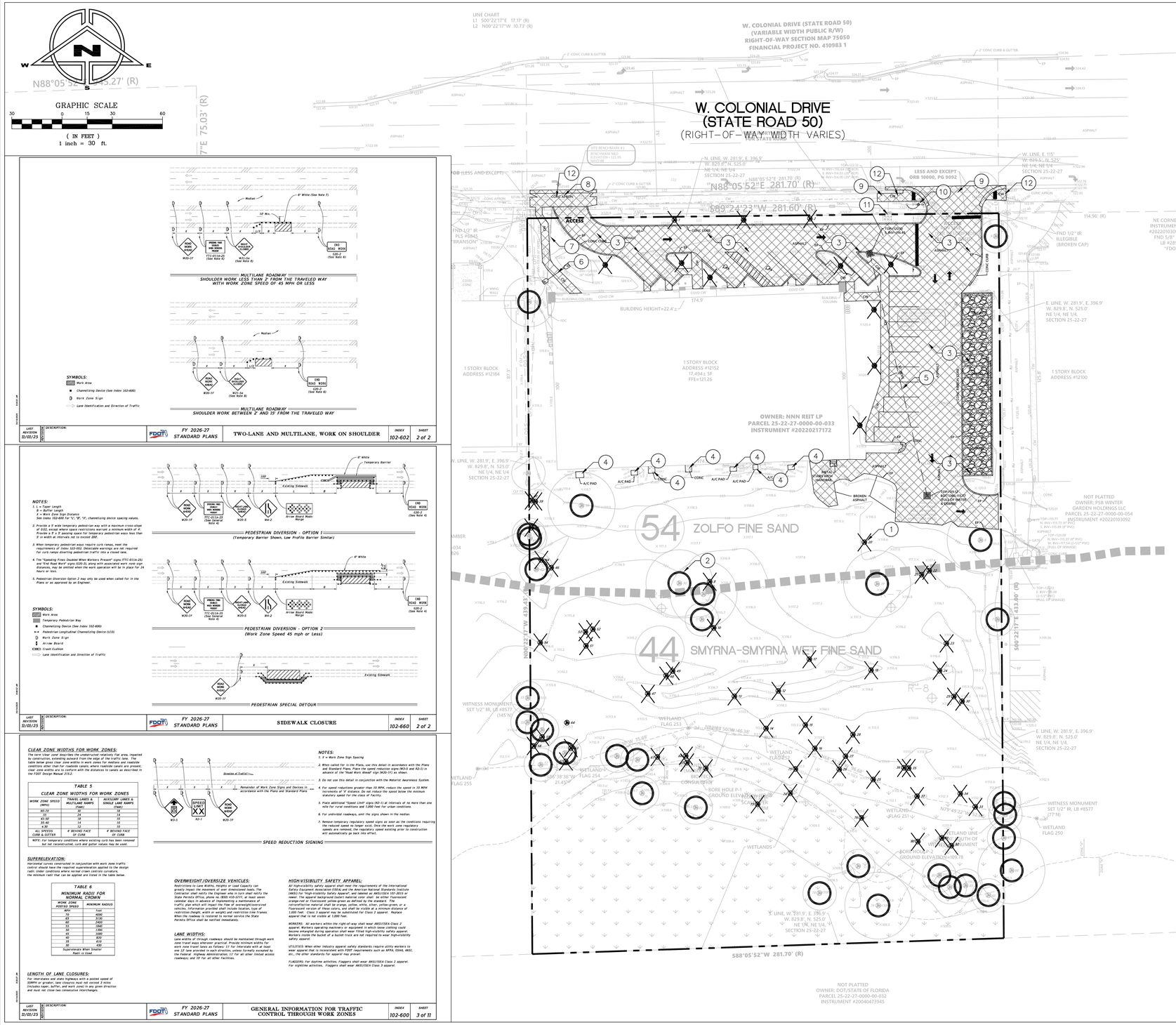
"THE DATE OF SIGNATURE DOES NOT REVISE OR SUPERSEDE THE SURVEY DATE OR REVISION DATE."

THIS SURVEY MEETS THE "STANDARDS OF PRACTICE" AS REQUIRED BY CHAPTER 5J-17 FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.

"NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THIS FLORIDA LICENSED SURVEYOR AND MAPPER."

-OR-

THE ELECTRONIC SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRENCE W. RUTTER, JR., PSM 7371.


LINE CHART
L1 S00°22'17"E 17.17' (R)
L2 N90°22'17"W 10.73' (R)
W. COLONIAL DRIVE (STATE ROAD 50)
(VARIABLE WIDTH PUBLIC R/W)
RIGHT-OF-WAY SECTION MAP 75050
FINANCIAL PROJECT NO. 410983 1
N88°05'52"E 75.03' (R)
GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.
W. COLONIAL DRIVE
(STATE ROAD 50)
(RIGHT-OF-WAY WIDTH VARIES)
N88°05'52"E 281.70' (R)
S89°24'23"W 281.60' (R)
N. LINE W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27
W. LINE, E. 115'
W. 829.5', N. 525'
NE 1/4, NE 1/4
SECTION 25-22-27
LESS AND EXCEPT
ORB 10000, PG 9092
Access
FND 1/2" IR
PLS #6845
"BRANSON"
FND 1/2" IR
ILLEGIBLE
(BROKEN CAP)
114.96' (R)
NE CORNER
INSTRUMENT
#20220103092
FND 5/8" IR
LB #2856
"FDOT"
E. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4,
SECTION 25-22-27
1 STORY BLOCK
ADDRESS #12184
1 STORY BLOCK
ADDRESS #12152
17,494± SF
FFE=121.26
1 STORY BLOCK
ADDRESS #12100
BUILDING HEIGHT=22.4'±
174.9'
87.3'
OWNER: NNN REIT LP
PARCEL 25-22-27-0000-00-033
INSTRUMENT #20220217172
NOT PLATTED
OWNER: PSB WINTER
GARDEN HOLDINGS LLC
PARCEL 25-22-27-0000-00-054
INSTRUMENT #20220103092
54 ZOLFO FINE SAND
44 SMYRNA-SMYRNA WET FINE SAND
N00°22'17"W 439.43' (R)
S00°22'17"E 439.80' (R)
WITNESS MONUMENT
SET 1/2" IR, LB #8577
(45°)
N82°03'50"W 46.38'
WETLAND
FLAG 253
WETLAND
FLAG 254
WETLAND
FLAG 255
WETLAND
FLAG 251
WETLAND
FLAG 250
WETLAND LINE
(SOUTH OF
INSTRUMENT
#20220103092)
WETLANDS
BORE HOLE B-1
GROUND ELEVATION=109.9'
BORE HOLE B-2
GROUND ELEVATION=109.9'
CONSULTEGRA
N79°49'23"W 21.45'
E. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4,
SECTION 25-22-27
S88°05'52"W 281.70' (R)
NOT PLATTED
OWNER: DOT/STATE OF FLORIDA
PARCEL 25-22-27-0000-00-032
INSTRUMENT #20040473945
SITE BENCHMARK #1
BENCHMARK NGVD
ELEVATION=123.95
(NAVD 88)
LOB (LESS AND EXCEPT)
CONC CURB & GUTTER
ASPHALT
CONC APRON
CONC CURB
BUILDING COLUMN
COVED CONC
WING WALL
EP
FDC
DW
CW
CONC
A/C PAD
BROKEN ASPHALT
CONCRETE PAD
(TOP=120.09'
N. RIM=115.97 (8" PVC)
N. INV=115.79 (8" PVC)
S. RIM=115.89 (8" PVC)
S. INV=115.69 (8" PVC)
ASPHALT
TOP=120.09
N. RIM=115.97 (8" PVC)
N. INV=115.79 (8" PVC)
S. RIM=115.89 (8" PVC)
S. INV=115.69 (8" PVC)
ASPHALT
TOP=120.09
N. RIM=115.97 (8" PVC)
N. INV=117.54 (12-1/2" PVC)
S. RIM=115.89 (8" PVC)
S. INV=115.69 (8" PVC)
(PULL OF SEWAGE)
TOP=120.09
N. RIM=115.97 (8" PVC)
N. INV=117.54 (12-1/2" PVC)
S. RIM=115.89 (8" PVC)
S. INV=115.69 (8" PVC)
(PULL OF SEWAGE)
TOP=120.09
N. RIM=115.97 (8" PVC)
N. INV=115.79 (8" PVC)
S. RIM=115.89 (8" PVC)
S. INV=115.69 (8" PVC)
ASPHALT

DETECTABLE WARNING MATS SHALL BE REQUIRED IN RIGHT-OF-WAY ONLY.

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

W. COLONIAL DRIVE (STATE ROAD 50) (RIGHT-OF-WAY WIDTH VARIES)

PROPOSED MEDICAL OFFICE
17,494 S.F.
F.F. EL.: 121.26

OWNER: NNN REIT LP
PARCEL 25-22-27-0000-00-033
INSTRUMENT #20220217172

WEST ORANGE CHAMBER OF COMMERCE, INC.
C-2
CHAMBER OF COMMERCE
25-22-27-0000-00-034

PSB WINTER GARDEN HOLDINGS, LLC
C-2
PETSUITES
25-22-27-0000-00-054

NOT PLATTED
OWNER: PSB WINTER GARDEN HOLDINGS LLC
PARCEL 25-22-27-0000-00-054
INSTRUMENT #20220103092

RETENTION POND

DEPARTMENT OF TRANSPORTATION
I-1
WETLANDS
25-22-27-0000-00-032

NOT PLATTED
OWNER: DOT/STATE OF FLORIDA
PARCEL 25-22-27-0000-00-032
INSTRUMENT #20040473945

SIGHT LINE PER FDOT DESIGN MANUAL 212.11

Tree Chart

1-14" OAK	45-10" OAK
2-11" OAK	46-18" OAK
3-21" OAK	47-12" OAK
4-(2)25" OAK	48-26" OAK
5-14" OAK	49-65" OAK
6-40" OAK	50-36" OAK
7-15" OAK	51-(4)16" OAK
8-16" OAK	52-(3)25" OAK
9-32" OAK	53-12" OAK
10-37" OAK	54-13" OAK
11-8" OAK	55-8" OAK
12-11" OAK	56-11" OAK
13-14" OAK	57-11" OAK
14-8" OAK	58-11" OAK
15-13" OAK	59-18" OAK
16-(2)27" OAK	60-18" OAK
17-45" OAK	61-9" OAK
18-40" OAK	62-13" OAK
19-44" OAK	63-25" OAK (UPROOTED)
20-46" OAK	64-10" OAK
21-(4)26" OAK	65-15" OAK
22-18" OAK	66-11" OAK
23-15" OAK (UPROOTED)	67-11" OAK
24-16" OAK	68-15" OAK
25-11" OAK	69-13" OAK
26-21" OAK	70-21" OAK
27-16" OAK	71-13" OAK
28-8" OAK	72-14" OAK

TRUCK TURN ANALYSIS
1" = 30'

WB-50

	Feet	
Tractor Width	8.00	Lock to Lock Time
Trailer Width	8.50	Steering Angle
Tractor Track	8.00	Articulating Angle
Trailer Track	8.50	

SIGN LEGEND

NO	TEXT	SYMBOL	SIZE
R1-1	STOP	STOP	30"x30"
R3-1	NO RIGHT TURN		24"x24"
R5-1	DO NOT ENTER	DO NOT ENTER	30"x30"
R6-1	ONE WAY	(SEE INDEX)	36"x12"
R3-7	LEFT LANE MUST TURN LEFT	(SEE INDEX)	30"x30"

ALL SIGNS SHALL CONFORM w/F.D.O.T. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

DETECTABLE WARNING MATS IN R/W SHALL BE ARMOR TILE (OR APPROVED ALTERNATE) YELLOW AND CAST IN PLACE ONLY. SURFACE-MOUNTED DETECTABLE WARNING MATS WILL NOT BE ACCEPTED.

INSTALL EXPANSION AND CONTROL JOINTS FOR ALL PROPOSED SIDEWALKS PER SIDEWALK DETAIL ON PLAN SHEET C11.

TYPICAL PARKING SPACE SHALL BE STRIPED WITH 4" WHITE STRIPING.

ALL PARKING SPACES, OTHER THAN HANDICAP SPACES SHALL BE 9' WIDE.

ALL RADII SHALL BE 5' UNLESS OTHERWISE NOTED.

ALL AFFECTED SIDEWALKS, RAMPS, AND CROSSWALKS, WILL BE BUILT AND INSPECTED TO MEET CURRENT ADA REQUIREMENTS.

SITE LEGEND

- HANDICAP PARKING
- PROPOSED DRAINAGE INLET
- PROPOSED CURB
- SITE BOUNDARY LINE
- EXISTING EASEMENT (DEPICTED ON PLAN)
- PROPOSED EASEMENT (DEPICTED ON PLAN)
- CENTER LINE OF ROAD
- EXISTING EDGE OF PAVEMENT
- TYP TYPICAL
- HC HANDICAP
- 10 # OF PARKING SPACES
- S/W SIDEWALK
- R5' 5' RADIUS
- L.F. LINEAR FEET
- S.F. SQUARE FEET
- B.O.C. BACK OF CURB
- PROPOSED ASPHALT PAVEMENT (SEE DETAIL)
- PROPOSED CONCRETE PAVEMENT (SEE DETAIL)

KEY NOTES: (#)

1. PROPOSED ASPHALT PAVEMENT (TYP) (SEE DETAIL, SHEET C5)
2. PROPOSED CONCRETE PAVEMENT (SEE DETAIL, SHEET C5)
3. PROPOSED FDOT TYPE "D" CURB (TYP) (SEE DETAIL, SHEET C11)
4. PROPOSED FDOT TYPE "F" CURB AND GUTTER (TYP) (SEE DETAIL, SHEET C11)
5. PROPOSED VALLEY GUTTER (SEE DETAIL, SHEET C11)
6. PROPOSED R1-1 (SEE LEGEND, THIS SHEET) AND 24" WIDE THERMOPLASTIC STOP BAR (INCLUDE FTP-034R-25 "RIGHT TURN ONLY" SIGN PER FDOT STANDARD PLANS INDEX 700-102 SHEET 5 OF 21)
7. CONNECT TO EXISTING CURB AND GUTTER (CONNECT AT NEAREST EXISTING JOINT)
8. EXISTING 5' WIDE CONCRETE SIDEWALK
9. PROPOSED 5' WIDE CONCRETE SIDEWALK (SEE DETAIL, SHEET C11)
10. CONNECT TO EXISTING SIDEWALK (CONNECT AT NEAREST EXISTING JOINT)
11. PROPOSED HANDICAP SPACE AND SIGN (TYP-6) (SEE DETAIL, SHEET C5)
12. PROPOSED CONCRETE WHEELSTOP (TYP) (2 FEET MINIMUM FROM FACE OF CURB/SIDEWALK) (SEE DETAIL, SHEET C5)
13. PROPOSED 7' WIDE CONCRETE SIDEWALK (SEE DETAIL, SHEET C11)
14. PROPOSED 6.5' WIDE CONCRETE SIDEWALK (SEE DETAIL, SHEET C11)
15. PROPOSED MASONRY DUMPSTER ENCLOSURE (SEE SEPARATE PLANS BY OTHERS) (TO BE PERMITTED SEPARATELY) (MUST MEET DIMENSIONAL REQUIREMENTS OF CITY OF WINTER GARDEN DUMPSTER LAYOUT DETAIL PER PLAN SHEET C12)
16. PROPOSED CURB CUT RAMP PER FDOT STANDARD PLANS INDEX 522-002, CR-F (SEE DETAIL, SHEET C5)
17. PROPOSED CURB CUT RAMP PER FDOT STANDARD PLANS INDEX 522-002, CR-C (SEE DETAIL, SHEET C5)
18. PROPOSED CURB CUT RAMP PER FDOT STANDARD PLANS INDEX 522-002, CR-E (SEE DETAIL, SHEET C5)
19. TRANSITION CURB DOWN AT 4:1 IN THIS AREA
20. TRANSITION FROM TYPE "F" CURB AND GUTTER TO TYPE "D" CURB IN THIS AREA
21. PROPOSED 12" WIDE WHITE THERMOPLASTIC CROSS-WALK STRIPING AT 7' ON CENTER PER FDOT STANDARD PLAN INDEX 711-001
22. PROPOSED CONCRETE SIDEWALK ADJACENT TO PARKING (SEE DETAIL, SHEET C5)
23. PROPOSED RETAINING WALL (TO BE DESIGNED AND PERMITTED SEPARATELY BY CONTRACTOR'S CONSULTANT)
24. CONNECT TO EXISTING CURB
25. CURB REVEAL VARIES FROM 0" TO 6" IN THIS AREA (TOP OF CURB ELEVATION SHALL NOT EXCEED 121.00 IN THIS AREA) (SEE PLAN SHEET C2)
26. SIDEWALK LEVEL WITH PAVEMENT IN THIS AREA (SEE PLAN SHEET C2)
27. PROPOSED CONCRETE AT ENTRY AREA (SEE ARCHITECTURAL PLANS)
28. PROPOSED MONUMENT SIGN (PLANS AND PERMITTING BY OTHERS)
29. PROPOSED TRANSFORMER PAD LOCATION (SEE SITE ELECTRICAL PLAN FOR EXACT LOCATION AND ADDITIONAL INFORMATION)
30. PROPOSED 24' WIDE CROSS-ACCESS EASEMENT
31. EXISTING WETLAND LINE
32. PROPOSED PAVEMENT IN FDOT RIGHT-OF-WAY (SEE DETAIL, SHEET C5)
33. CONNECT TO EXISTING SIDEWALK
34. PROPOSED 6" DOUBLE YELLOW THERMOPLASTIC STRIPING

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east swan street | t. 407.8508557
orlando, fl 32803 | fx. 407.448.8979
mitchcollins@
mitchcollinspe.com

SITE LAYOUT PLAN
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS LICENSE No. 54608 STATE OF FLORIDA PROFESSIONAL ENGINEER

SCALE: 1" = 30'	
DRAWN BY: M.C.	DATE: 9-5-25
CHECKED BY: M.C.	JOB NO: 225-027
SHEET NO: C1 OF C13	



NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY/SJRWMD	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east south street, fl. 407.8507557
orlando, fl 32801 fx. 407.448.8979
mitchcollins@
mitchcollinspe.com

WETLAND IMPACT EXHIBIT
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BRONSON M. COLLINS LICENSE No. 54608 STATE OF FLORIDA PROFESSIONAL ENGINEER

MITCH COLLINS, P.E.# 54608,
STATE OF FLORIDA, C.A.# 9523

DATE

SCALE: 1" = 30'	
DRAWN BY: M.C.	DATE: 9-5-25
CHECKED BY: M.C.	JOB NO: 225-027
SHEET NO: C1A OF C13	

ALL TOPOGRAPHIC INFORMATION IS BASED ON A SURVEY BY SUNSTATE SURVEYING, DATED 9-20-2025, USING DATUM 1988 (NAVD).

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

LINE CHART
L1 S00°22'17"E 17.17' (R)
L2 N00°22'17"W 10.73' (R)

W. COLONIAL DRIVE (STATE ROAD 50)
(VARIABLE WIDTH PUBLIC R/W)
RIGHT-OF-WAY SECTION MAP 75050
FINANCIAL PROJECT NO. 410983 1

N88°05'52"E 333.27' (R)
S00°22'27"E 75.03' (R)
N88°05'52"E 333.06' (R)
N88°05'52"E 281.70' (R)
S89°24'23"W 281.60' (R)
S88°05'52"W 281.70' (R)

W. COLONIAL DRIVE
(STATE ROAD 50)
(RIGHT-OF-WAY WIDTH VARIES)

SHEET C5 "B"
SHEET C5 "A"

POB (LESS AND EXCEPT)
N. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27
W. LINE, E. 115'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27
LESS AND EXCEPT
(INSTRUMENT #20220000, PUBLIC RECORDS)
E. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27
EXISTING S. R/W LINE
PER RIGHT-OF-WAY MAP
FND 1/2" IR
PLS #5845
"BRANSON"
FND 1/2" IR
ILLEGIBLE
(BROKEN CAP)
NE CORNER
INSTRUMENT
#20220103092
FND 5/8" IR
LB #2656
"FDOT"
114.96' (R)

ALL ROOF DRAINAGE SHALL BE ROUTED SOUTH TO DOWNSPOUTS AND TO UNDERGROUND STORM SYSTEM

PROPOSED
MEDICAL OFFICE
17,494 S.F.
F.F. EL.: 121.26

BUILDING HEIGHT=22.4'±

OWNER: NNN REIT LP
PARCEL 25-22-27-0000-00-033
INSTRUMENT #20220217172

WEST ORANGE CHAMBER
OF COMMERCE, INC.
C-2
CHAMBER OF COMMERCE
25-22-27-0000-00-034

PSB WINTER GARDEN
HOLDINGS, LLC
C-2
PETSUITES
25-22-27-0000-00-054

NOT PLATTED
OWNER: WEST ORANGE CHAMBER
OF COMMERCE INC.
PARCEL 25-22-27-0000-00-034
INSTRUMENT #20080048826

NOT PLATTED
OWNER: PSB WINTER
GARDEN HOLDINGS LLC
PARCEL 25-22-27-0000-00-054
INSTRUMENT #20220103092

1 STORY BLOCK
ADDRESS #12184

1 STORY BLOCK
ADDRESS #12100

RETENTION POND

DEPARTMENT OF TRANSPORTATION
I-1
WETLANDS
25-22-27-0000-00-032

NOT PLATTED
OWNER: DOT/STATE OF FLORIDA
PARCEL 25-22-27-0000-00-032
INSTRUMENT #20040473945

WITNESS MONUMENT
SET 1/2" IR, LB #8577
(345°N)

WETLAND
FLAG 255

WETLAND
FLAG 254

WETLAND
FLAG 251

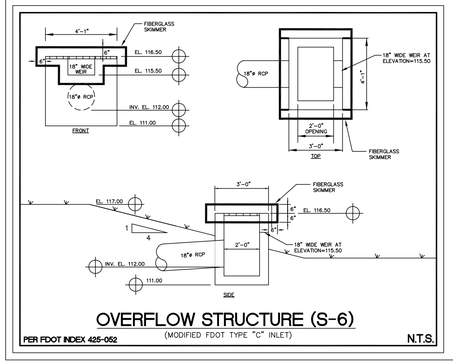
WETLAND
FLAG 250

E. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27

S. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27

Tree Chart

1-14" OAK	45-10" OAK
2-11" OAK	46-18" OAK
3-21" OAK	47-12" OAK
4-(2)25" OAK	48-26" OAK
5-14" OAK	49-65" OAK
6-40" OAK	50-36" OAK
7-15" OAK	51-(4)16" OAK
8-16" OAK	52-(3)25" OAK
9-32" OAK	53-12" OAK
10-37" OAK	54-13" OAK
11-8" OAK	55-8" OAK
12-11" OAK	56-11" OAK
13-14" OAK	57-(2)16" OAK
14-8" OAK	59-18" OAK
15-13" OAK	60-18" OAK
16-(2)27" OAK	61-9" OAK
17-45" OAK	62-13" OAK
18-40" OAK	63-25" OAK (UPROOTED)
19-44" OAK	64-10" OAK
20-46" OAK	65-10" OAK
21-(4)26" OAK	66-10" OAK
22-18" OAK	67-11" OAK
23-15" OAK (UPROOTED)	68-15" OAK
24-16" OAK	69-13" OAK
25-11" OAK	70-21" OAK
26-21" OAK	71-13" OAK
27-16" OAK	72-14" OAK
28-8" OAK	73-13" OAK
29-(2)16" OAK	74-13" OAK
30-(2)15" OAK	75-10" OAK
31-8" OAK	76-19" OAK
32-9" OAK	77-12" OAK
33-19" OAK	78-15" OAK
34-15" OAK	79-48" OAK
35-30" OAK	80-11" OAK
36-9" OAK	81-[illegible] OAK
37-11" OAK	82-[illegible] OAK
38-43" OAK	83-8" OAK
39-15" OAK	84-10" OAK
40-16" OAK	85-12" OAK
41-18" OAK	86-14" OAK
42-13" OAK	87-10" OAK
43-(2)17" OAK	88-38" OAK
44-12" OAK	



OVERFLOW STRUCTURE (S-6)
PER FDOT INDEX 425-052 (MODIFIED FDOT TYPE "C" INLET) N.T.S.

GRADING LEGEND

EL	ELEVATION
TYP	TYPICAL
LF	LINEAR FEET
●	STORM MANHOLE
•	CLEANOUT
INV.	INVERT ELEVATION
× 49.58	EXISTING ELEVATION
50.23	PROPOSED SPOT ELEVATION
50.23*	PROPOSED SPOT ELEVATION BASED ON EXISTING GRADE
50.73 / 50.23	PROPOSED SPOT ELEVATION (TOP OF SIDEWALK/ASPHALT)
	DRAINAGE INLET
	MITERED END SECTION
	DRAINAGE PIPE
	EXISTING EASEMENT (DEPICTED ON PLAN)
	PROPOSED EASEMENT (DEPICTED ON PLAN)
	SURFACE STORMWATER FLOW
HP	HIGH-PERFORMANCE POLYPROPYLENE PIPE
RCP	REINFORCED CONCRETE PIPE
F.F.	FINISHED FLOOR
S-1	STORM SEWER STRUCTURE ID
	PROPOSED CONCRETE PAVEMENT (SEE DETAIL)

KEY NOTES: (#)

1. PROPOSED 74 LF OF 24"ø RCP STORM PIPE AT 0.95%
2. PROPOSED 67 LF OF 24"ø RCP STORM PIPE AT 0.45%
3. PROPOSED 5 LF OF 24"ø RCP STORM PIPE AT 14.00%
4. PROPOSED 89 LF OF 18"ø RCP STORM PIPE AT 0.45%
5. PROPOSED 5 LF OF 18"ø RCP STORM PIPE AT 12.00%
6. PROPOSED OFF-LINE CLEANOUT AT INVERT ELEVATION 116.35 AND 227 LF OF 12"ø HP (PVC IS AN ACCEPTABLE ALTERNATE) AT 0.51%
7. PROPOSED 5 LF OF 6"ø HP AT 1.00% MINIMUM WITH WYE CONNECTION AT DOWNSTREAM END (TYP-8) (CONNECT TO ROOF DRAIN DOWNSPOUTS) (SEE SEPARATE PLUMBING PLANS) (INCLUDE CIRCULAR TO RECTANGULAR ADAPTER)
8. GRADE AT 4:1 AS SHOWN AND SOD
9. PROPOSED YARD DRAIN (12"ø CAST IRON DOME GRATE) (GRATE ELEVATION=116.00; INVERT ELEVATION=114.30) AND 55 LF OF 12"ø HP AT 0.36%
10. PROPOSED YARD DRAIN (12"ø CAST IRON DOME GRATE) (GRATE ELEVATION=117.00; INVERT ELEVATION=114.70) AND 20 LF OF 12"ø HP AT 1.00%
11. REGRADE AREA AT 10:1 SLOPE AS SHOWN AND SOD/LANDSCAPE PER LANDSCAPE PLANS (ENSURE THAT NO REMNANT PAVEMENT BASE EXISTS IN AREA)
12. PROVIDE MINIMUM 18" DEEP ROCK (4" TO 6") IN THIS AREA (APPROXIMATELY 180 SF)
13. GRADE AT 3:1 AS SHOWN AND SOD
14. PROPOSED 34 LF OF 18"ø RCP STORM PIPE AT 7.35%
15. PROPOSED SPREADER SWALE (SEE DETAIL, SHEET C5)
16. CONNECT STORM PIPE THROUGH RETAINING WALL AT THIS LOCATION AT INVERT ELEVATION=113.50 (CONTRACTOR TO COORDINATE DIRECTLY WITH WALL DESIGNER FOR THIS WORK)

STORM STRUCTURE TABULATION

STRUCTURE	TYPE OF STRUCTURE	GRATE EL.	N. INV.	S. INV.	E. INV.	W. INV.	NOTES
S - 1	TYPE "E"	119.30	--	115.20	--	115.20	(FDOT INDEX 425-052)
S - 2	TYPE "E"	118.20	114.50	114.50	--	114.50	(FDOT INDEX 425-052)
S - 3	TYPE "9"	117.00	114.20	114.20	--	--	(FDOT INDEX 425-024)
S - 4	TYPE "9"	117.50	--	--	114.50	--	(FDOT INDEX 430-021)
S - 5	TYPE "9"	117.00	--	114.10	--	114.10	(FDOT INDEX 425-024)
S - 6	TYPE "C"	116.50	--	112.00	--	--	(FDOT INDEX 425-052) (OVERFLOW)
S - 7	MES	--	109.50	--	--	--	(FDOT INDEX 430-021)

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY/S.JRWMD	M.C.
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---

mitch collins, pe, inc.
801 east south street, fl. 407.8501857
orlando, fl 32801 c. 407.448.8979
mitchcollinspe@
mitchcollinspe.com

GRADING AND DRAINAGE PLAN
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE WINTER GARDEN, FLORIDA

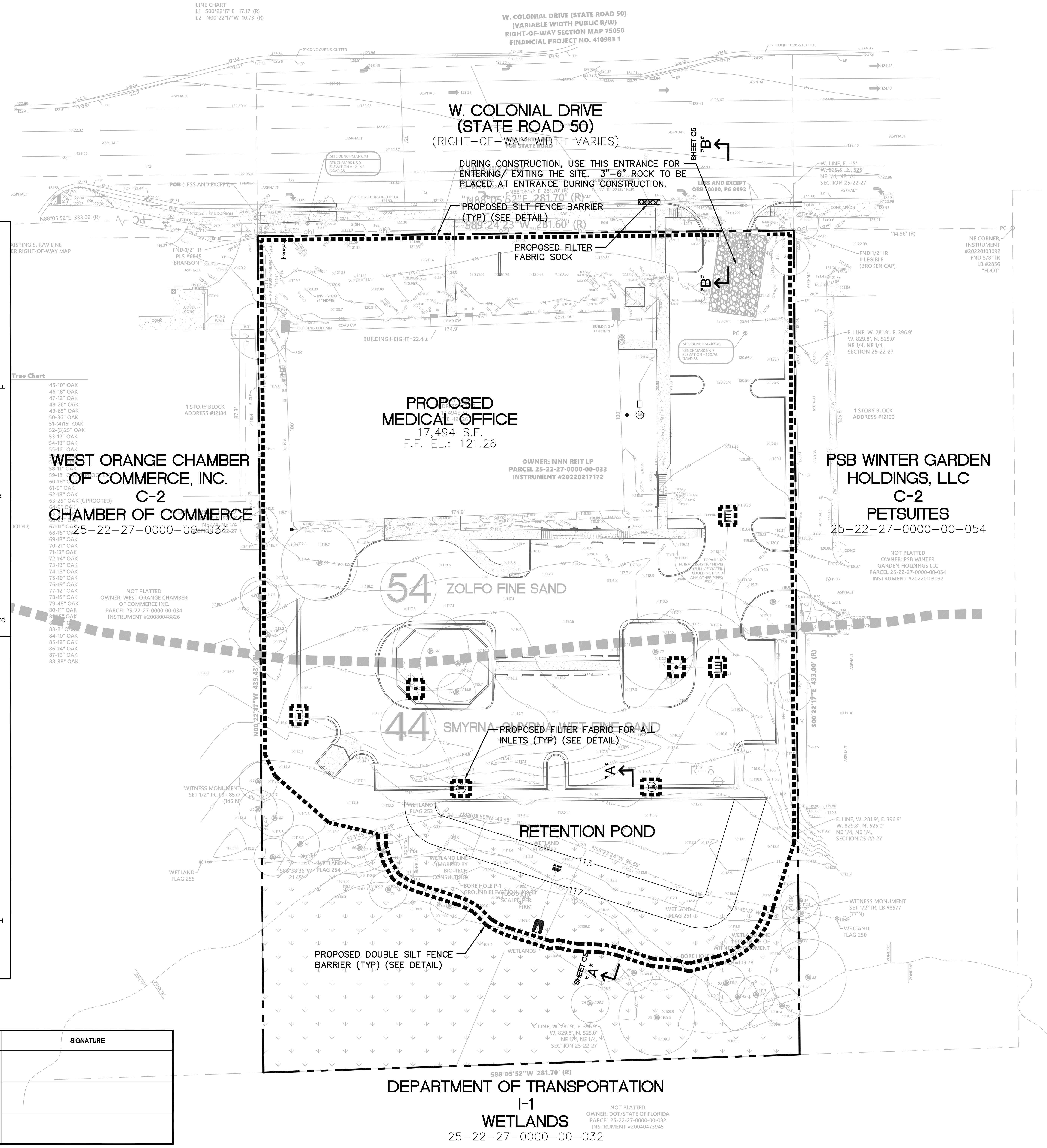
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

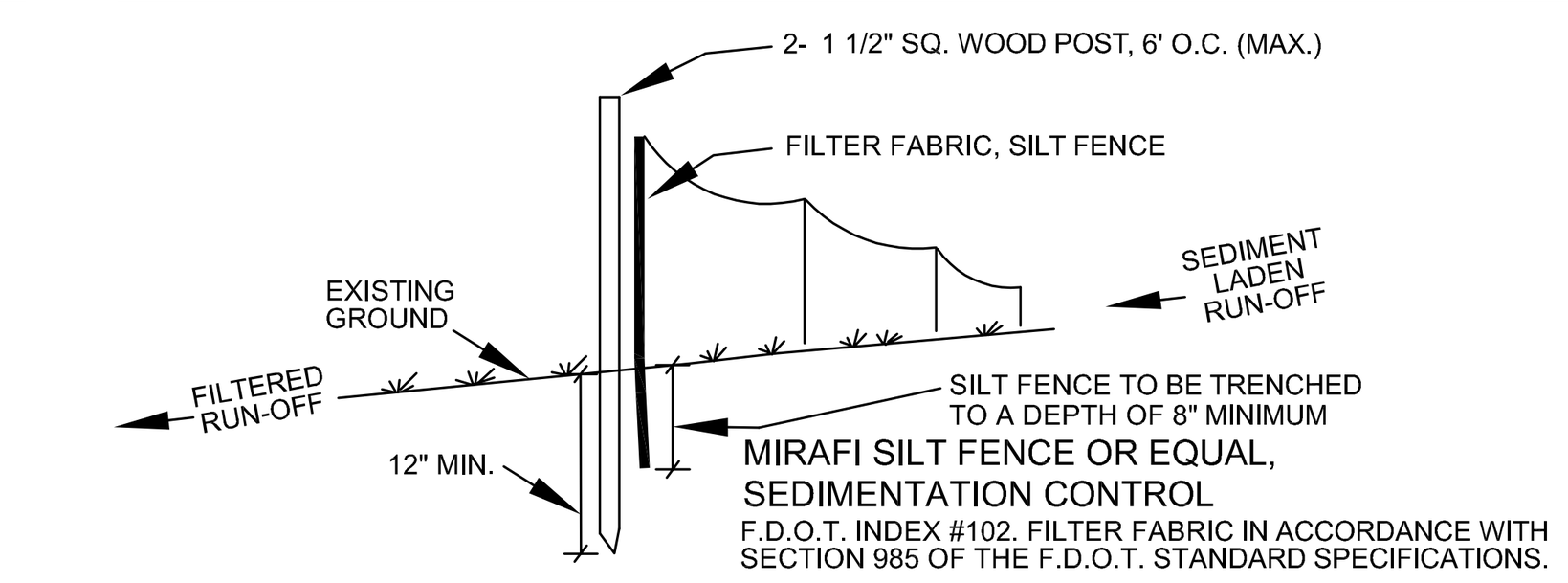
MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS LICENSE No. 54608 STATE OF FLORIDA PROFESSIONAL ENGINEER

SCALE: 1" = 30'
DRAWN BY: M.C. DATE: 9-5-25
CHECKED BY: M.C. JOB NO: 225-027
SHEET NO: C2 OF C13





NOTES:
1. TEMPORARY EROSION CONTROL STRUCTURE TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY ENGINEER OR AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURE MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY CONTRACTOR.
2. CONSTRUCT STORMWATER SYSTEMS BEFORE ANY BUILDING OR ROAD CONSTRUCTION IS STARTED.
   a.) PROTECT SYSTEM FROM SILTING AND DEBRIS BY METHODS PROVIDED IN DETAILS.
   b.) PROTECT SWALE BOTTOM FROM SEALING BY EXCAVATING ALL SILT DEPOSITS DURING CONSTRUCTION. THIS SHALL BE DONE BEFORE SOD & SEEDING & MULCHING IS FINISHED
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS,
4. TRENCHING OF SILT FENCE IS REQUIRED UNLESS ADVERSE CONDITIONS EXIST THAT RENDER TRENCHING IMPRACTICAL. SUCH CONDITIONS SHALL BE EVALUATED BY CITY REPRESENTATIVE. 5. AREAS WHERE A DOUBLE FENCE IS REQUIRED THE FENCING SHALL BE A MINIMUM OF 3 FEET APART.

SILT FENCE DETAIL

NOT TO SCALE

THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF-SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.

PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICAL TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.

TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDIENCY IN LIEU OF PERMANENT MEASURES.

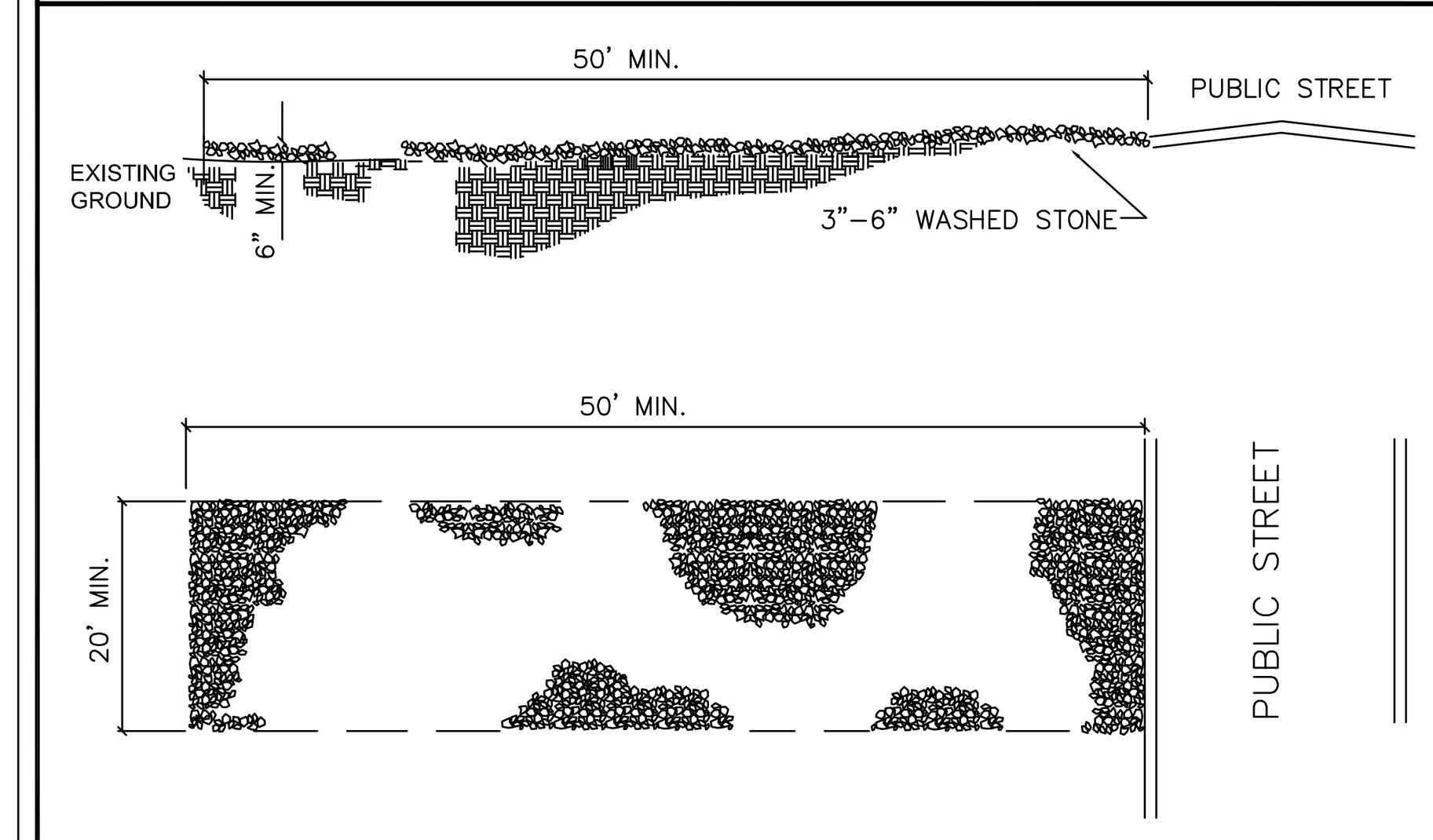
EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT.

NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCKPILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATERCOURSE BY RUNOFF OR HIGH WATER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.



STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

NOTES:
1. A STABILIZED ENTRANCE PAD 50' MINIMUM IN LENGTH AND 20' MINIMUM IN WIDTH OF 3"-6" ROCK SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. 3"-6" ROCK SHALL BE A MINIMUM OF 6" THICK.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL AGGREGATE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.

CONTRACTOR CERTIFICATIONS:

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER.

NAME	TITLE	COMPANY NAME, ADDRESS, PHONE NO	DATE	SIGNATURE

LOCATION:

SITE LOCATION: 12152 WEST COLONIAL DRIVE WINTER GARDEN, FL 34787

DISTURBED AREA: 104,276 SF=2.394 ACRES

LAT/LONG: 28°33'3"/81°33'39"

OUTFALL LOCATION: FLORIDA'S TURNPIKE

CONSTRUCTION SEQUENCE:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AS REQUIRED
3. STOCKPILE TOPSOIL IF REQUIRED
4. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
5. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICAL
6. INSTALL STORM SEWER
7. CONSTRUCT BUILDING AND OTHER UNDERGROUND UTILITIES
8. INSTALL PAVEMENT AND CURBING
9. INSTALL LANDSCAPING AND SOD
10. REMOVE ACCUMULATED SEDIMENT FROM BASINS
11. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY BMP MEASURES

SOIL TYPES:

42–SANIBEL MUCK
44–SMYRNA–SMYRNA WET FINE SAND, 0 TO 2 PERCENT SLOPES
54–ZOLFO FINE SAND, 0 TO 2 PERCENT SLOPES

DEWATERING METHODS AND LOCATIONS:

DEWATERING SHALL BE UTILIZED ONLY IF NECESSARY BY MEANS OF A WELL POINT SYSTEM. DISCHARGE FROM THE WELL POINT SYSTEM SHALL BE DIRECTED TO THE PROPOSED DRAINAGE STRUCTURES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR WELL POINT SYSTEM PRIOR TO CONSTRUCTION.

EROSION TEMPORARY MEASURES (BMP'S):

A. SILT FENCE BARRIERS SHALL BE USED TO PROTECT PROPOSED INLETS PER DETAILS
B. FILTER FABRIC BARRIERS SHALL BE USED AT THE PERIMETER/LIMITS OF THE PROPOSED CONSTRUCTION TO PREVENT SEDIMENT FROM LEAVING THE PROJECT BOUNDARIES OR DISCHARGING INTO OFF–SITE DRAINAGE FACILITIES
C. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY
D. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF–SITE SHALL BE PROTECTED FROM SEDIMENT–LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET
E. TEMPORARY SEEDING AND MULCHING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE–EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING. SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH B ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF THE SEED AND MULCH.
F. MAINTENANCE: SLL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT CONTROL SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
G. GRAVEL CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO A MINIMUM DEPTH OF 4 INCHES TO PREVENT SEDIMENT FROM LEAVING CONSTRUCTION SITE.

PERMANENT EROSION CONTROL MEASURES (BMP'S):

A. PERMANENT SODDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SODDED. THE SEEDING MIX MUST PROVIDE BOTH LONG–TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.
B. MAINTENANCE OF STORMWATER MANAGEMENT SYSTEM: THE PERMITTED STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED, CLEANED AND INSPECTED IN ACCORDANCE WITH THE SJRWMD PERMIT.

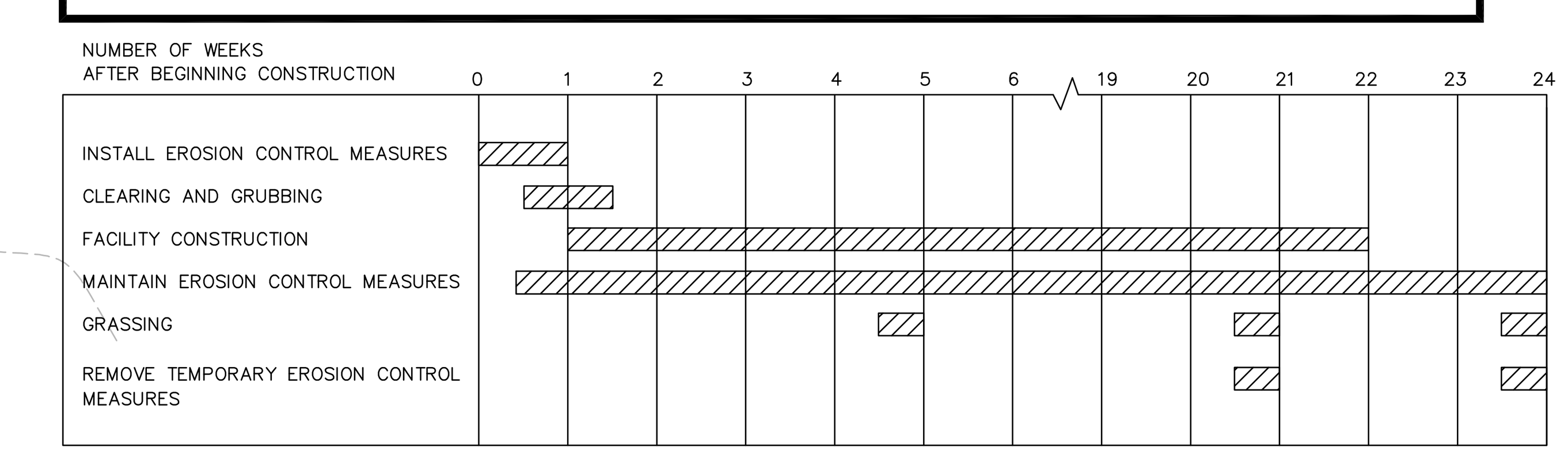
INSPECTIONS:

A. CONSTRUCTION SITE WILL BE INSPECTED FOR EROSION PROBLEMS DAILY AFTER EACH RAINFALL GREATER THAN 0.5 INCHES. A RAIN GAGE WILL BE ON SITE TO MEASURE THE RAINFALL AMOUNTS.
B. ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS OR SOMEONE APPOINTED BY THE SUPERINTENDENT. AT LEAST ONCE AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
C. ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OR REPORTED.
D. BUILT UP SEDIMENT WILL BE REMOVED FROM THE SILT FENCE WHEN IT HAS REACHED ONE–THIRD THE HEIGHT OF THE FENCE.
E. THE SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
F. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
G. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION CONTROL PLANS OR STORMWATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED. THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON–COMPLIANCE.
H. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ON–SITE IN GOOD WORKING ORDER AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORTS.

ADDITIONAL NOTES:

A. NON–STORMWATER DISCHARGES:
IT IS EXPECTED THAT THE FOLLOWING NON–STORMWATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:
1. PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
2. UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).
ALL NON–STORMWATER DISCHARGES WILL BE DIRECTED TO THE PROPOSED DRAINAGE STRUCTURES/SWALES.
B. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL IF IT BECOMES NECESSARY TO MEET THE STATE AND LOCAL STANDARDS.
C. OPERATOR AND/OR RESPONSIBLE AUTHORITY: OOC PROPERTY PARTNERS, LLC

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NPDES PERMIT COVERAGE FOR PROJECT.



NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY/SJRWMD	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east south street
orlando, fl 32801
p. 407.850.8557
c. 407.448.8979
mitchcollins@mitchcollinspe.com

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

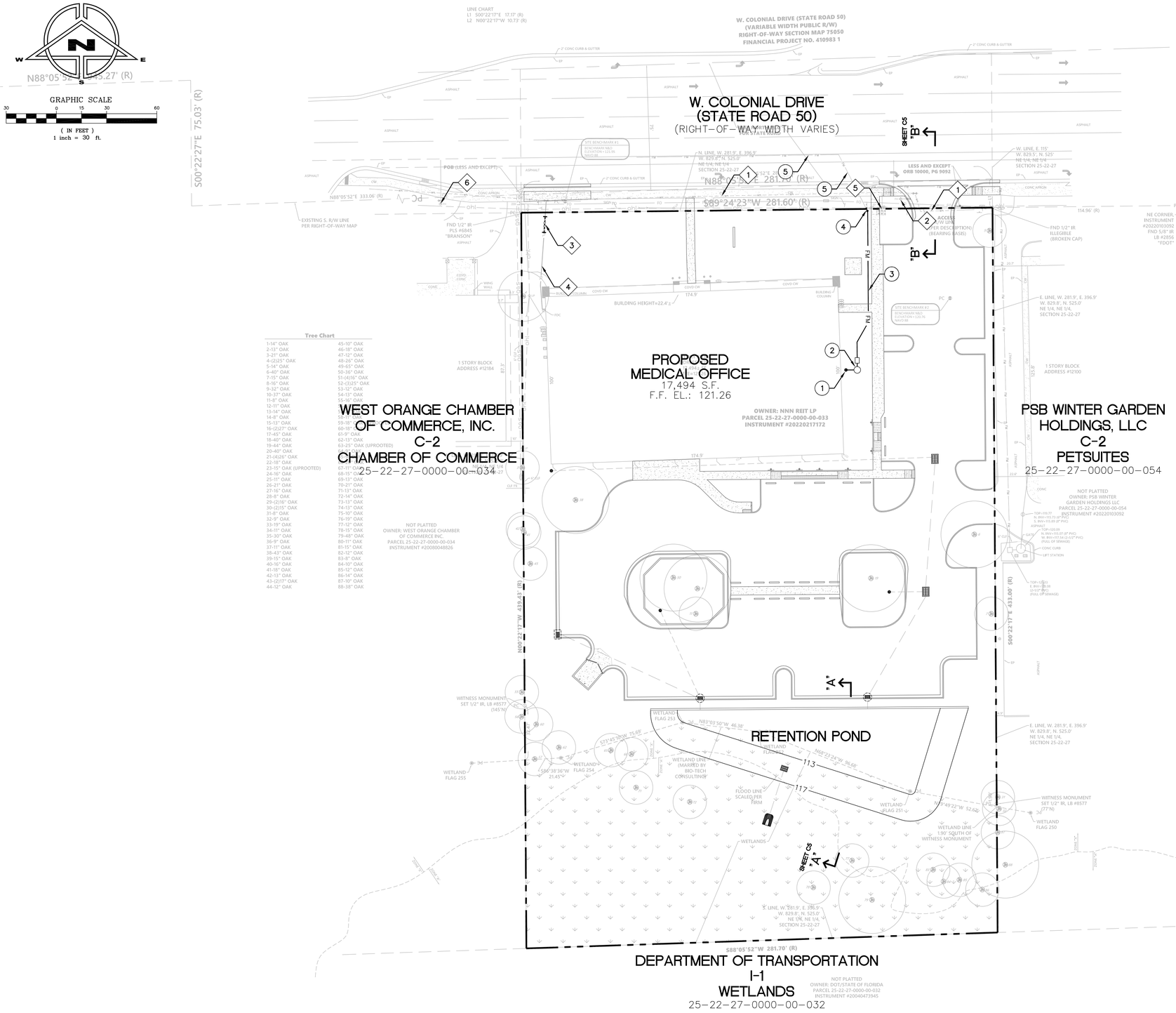
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608,
STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS LICENSE No. 54608 STATE OF FLORIDA PROFESSIONAL ENGINEER

SCALE: 1" = 30'	
DRAWN BY: M.C.	DATE: 9-5-25
CHECKED BY: M.C.	JOB NO: 225-027
SHEET NO: C3 OF C13	



Tree Chart

1-14" OAK	45-10" OAK
2-13" OAK	46-18" OAK
3-21" OAK	47-12" OAK
4-(2)25" OAK	48-26" OAK
5-14" OAK	49-65" OAK
6-40" OAK	50-36" OAK
7-15" OAK	51-(4)16" OAK
8-16" OAK	52-(3)25" OAK
9-32" OAK	53-12" OAK
10-37" OAK	54-13" OAK
11-8" OAK	55-8" OAK
12-11" OAK	56-11" OAK
13-14" OAK	57-11" OAK
14-8" OAK	58-11" OAK
15-13" OAK	59-18" OAK
16-(2)27" OAK	60-18" OAK
17-45" OAK	61-9" OAK
18-40" OAK	62-13" OAK
19-44" OAK	63-25" OAK (UPROOTED)
20-46" OAK	64-10" OAK
21-(4)26" OAK	65-10" OAK
22-18" OAK	66-10" OAK
23-15" OAK (UPROOTED)	67-11" OAK
24-16" OAK	68-15" OAK
25-11" OAK	69-13" OAK
26-21" OAK	70-21" OAK
27-16" OAK	71-13" OAK
28-8" OAK	72-14" OAK
29-(2)16" OAK	73-13" OAK
30-(2)15" OAK	74-13" OAK
31-8" OAK	75-10" OAK
32-9" OAK	76-19" OAK
33-19" OAK	77-12" OAK
34-11" OAK	78-15" OAK
35-30" OAK	79-48" OAK
36-9" OAK	80-11" OAK
37-11" OAK	81-15" OAK
38-43" OAK	82-12" OAK
39-15" OAK	83-8" OAK
40-16" OAK	84-10" OAK
41-18" OAK	85-12" OAK
42-13" OAK	86-14" OAK
43-(2)17" OAK	87-10" OAK
44-12" OAK	88-38" OAK

UTILITY LEGEND

●	PROPOSED SANITARY MANHOLE
•	PROPOSED CLEANOUT
⋈	PROPOSED GATE VALVE
	PROPOSED FIRE HYDRANT
▶	PROPOSED REDUCER
●	PROPOSED BLOWOFF
⬡	PROPOSED WATER METER
▭	PROPOSED BACKFLOW PREVENTER
WL	WATER LINE
FL	FIRE LINE
LF	LINEAR FEET
- - - - - -	EXISTING EASEMENT (DEPICTED ON PLAN)
— — — — —	PROPOSED EASEMENT (DEPICTED ON PLAN)

KEY NOTES (WATER): (#)

1. EXISTING 12"ø PVC WATER MAIN
2. RELOCATED EXISTING FIRE HYDRANT (SEE PLAN SHEET D1)
3. PROPOSED 4" DDCVA (POINT OF SERVICE AND F.D.C.) (SEE DETAIL) (SIZE TO BE CONFIRMED BY FIRE ENGINEER BEFORE THIS MATERIAL IS ORDERED)
4. EXISTING 4"ø PVC FIRE LINE
5. EXISTING DOMESTIC AND IRRIGATION METERS AND BFP'S
6. EXISTING FIRE HYDRANT

KEY NOTES (SEWER): (#)

1. PROPOSED IN-LINE CLEANOUT AT INVERT ELEVATION 116.10 AND 5 LF OF 6"ø PVC SANITARY LINE AT 2.00%
2. PROPOSED LIFT STATION (TOP ELEVATION=120.65; INVERT ELEVATION=116.00) (SEE SHEET C12)
3. PROPOSED 89 LF OF 2"ø PVC SANITARY FORCE MAIN
4. CONNECT TO EXISTING 4"ø PVC SANITARY FORCE MAIN AT THIS LOCATION (USE 2"X4" REDUCER AND INSTALL 2" VALVE AT RIGHT-OF-WAY LINE) AND REMOVE ANY EXISTING FORCE MAIN UPSTREAM OF THIS LOCATION
5. EXISTING 4"ø PVC FORCE MAIN

FIRE FLOW CALCULATIONS

PER NFPA 1, 18.4.5.2.1 (FFPC, 8TH EDITION)	
BUILDING AREA:	17,494 SF
TYPE OF CONSTRUCTION:	II(000), UNPROTECTED, SPRINKLERED
REQUIRED FIRE FLOW DEMAND: (TABLE 18.4.5.2.1 – NFPA 1 (FFPC 8th edition))	2,750 GPM
FIRE SPRINKLER SYSTEM PROVIDED? (REDUCE NFF 75% WITH SPRINKLER SYSTEM)	YES
REQUIRED FIRE FLOW DEMAND (ADJUSTED):	687.5 GPM
REQUIRED FIRE FLOW DEMAND:	**1,000 GPM**
NUMBER OF HYDRANTS REQUIRED:	**ONE**
NUMBER OF HYDRANTS PROVIDED:	**TWO (TWO EXISTING FIRE HYDRANTS)**

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY/SJRWMD	M.C.
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---

mitch collins, pe, inc.
801 east south street, fl: 407.8507557
orlando, fl 32801 fx: 407.448.8979
mitchcollins@
mitchcollinspe.com

UTILITY PLAN
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BRONSON M. COLLINS LICENSE No. 54608 STATE OF FLORIDA PROFESSIONAL ENGINEER

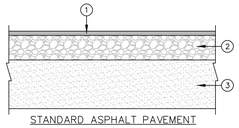
MITCH COLLINS, P.E.# 54608,
STATE OF FLORIDA, C.A.# 9523

DATE

SCALE: 1" = 30'

DRAWN BY:	DATE:
M.C.	9-5-25
CHECKED BY:	JOB NO:
M.C.	225-027

SHEET NO: C4 OF C13



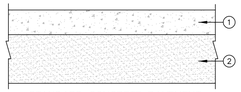
STANDARD ASPHALT PAVEMENT

1. 1.5" F.D.O.T. TYPE SP 9.5 ASPHALT CONCRETE
2. 6" LIMEROCK (LBR=120) COMPACTED TO 98% OF THE MODIFIED PROCTOR MAX. DENSITY (AASHTO T-180)
3. 12" STABILIZED SUB-BASE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAX. DENSITY (ASTM D-1557, AASHTO T-180)

ON-SITE PAVEMENT DETAIL (KEYNOTE #1, SHEET C1)

(FOR ASPHALT SURFACE ON SITE)

N.T.S.



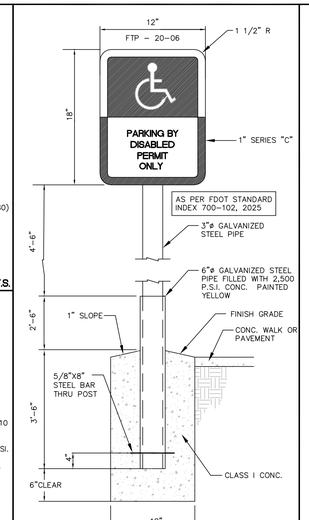
STANDARD CONCRETE PAVEMENT

1. 6" OR 8" (SEE PLAN SHEET C-1) PORTLAND CEMENT (6x6 10/10 WWF) DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CURRENT PORTLAND CEMENT ASSOCIATION RECOMMENDED METHODS WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI. PROVIDE CONTRACTION JOINTS AT A MAXIMUM SPACING OF 12 FEET. PROVIDE EXPANSION JOINTS PER GEOTECHNICAL REPORT.
2. SUBGRADE CONSISTING OF FREE DRAINING NATURAL FINE SAND OR FINE SAND FILL. SUBGRADE (LBR=40) TO BE COMPACTED TO A MINIMUM DENSITY OF 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (ASTM D-1557).

ON-SITE PAVEMENT DETAIL (KEYNOTE #2, SHEET C1)

(FOR CONCRETE SURFACE ON SITE)

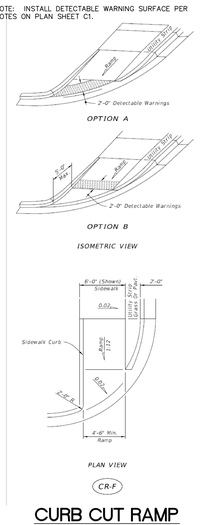
N.T.S.



HANDICAP SIGN DETAIL (KEYNOTE #11 SHEET C1)

N.T.S.

NOTE: INSTALL DETECTABLE WARNING SURFACE PER NOTES ON PLAN SHEET C1.



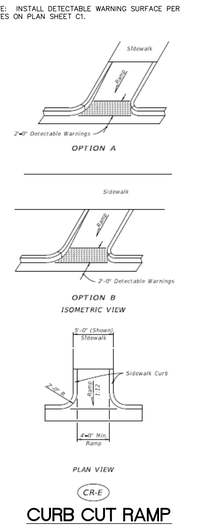
CR-F

CURB CUT RAMP (KEYNOTE #16, SHEET C1)

(PER FDOT STANDARD INDEX 522-002)

N.T.S.

NOTE: INSTALL DETECTABLE WARNING SURFACE PER NOTES ON PLAN SHEET C1.

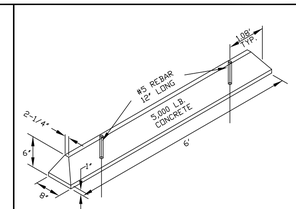


CR-E

CURB CUT RAMP (KEYNOTE #18, SHEET C1)

(PER FDOT STANDARD INDEX 522-002)

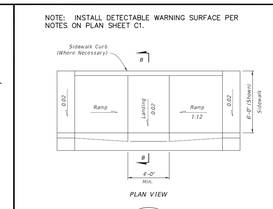
N.T.S.



PRECAST CONC. WHEEL STOP (KEYNOTE #12, SHEET C1)

N.T.S.

NOTE: INSTALL DETECTABLE WARNING SURFACE PER NOTES ON PLAN SHEET C1.

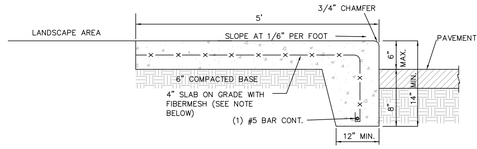


CR-C

CURB CUT RAMP (KEYNOTE #17, SHEET C1)

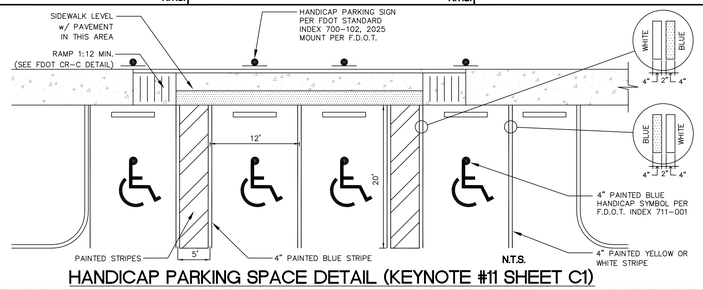
(PER FDOT STANDARD INDEX 522-002)

N.T.S.



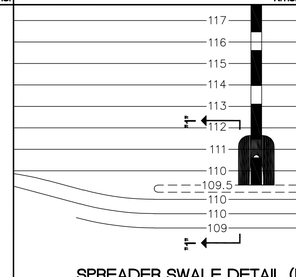
TYPICAL SIDEWALK ADJACENT TO PARKING (KEYNOTE #22, SHEET C1)

N.T.S.



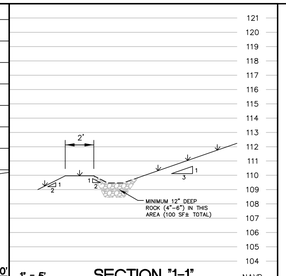
HANDICAP PARKING SPACE DETAIL (KEYNOTE #11 SHEET C1)

N.T.S.



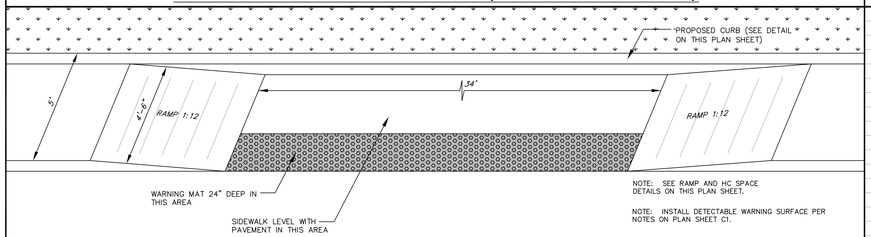
SPREADER SWALE DETAIL (KEYNOTE #15, SHEET C2)

1" = 10' NAVD



SECTION "1-1"

1" = 5' NAVD

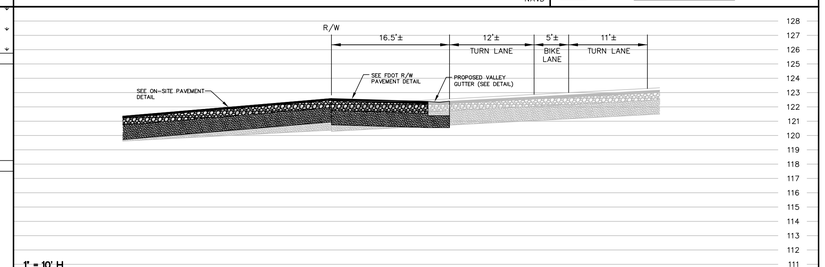


NOTE: SEE RAMP AND HC SPACE DETAILS ON THIS PLAN SHEET.

NOTE: INSTALL DETECTABLE WARNING SURFACE PER NOTES ON PLAN SHEET C1.

CURB CUT RAMP DETAIL (KEYNOTE #17, SHEET C1)

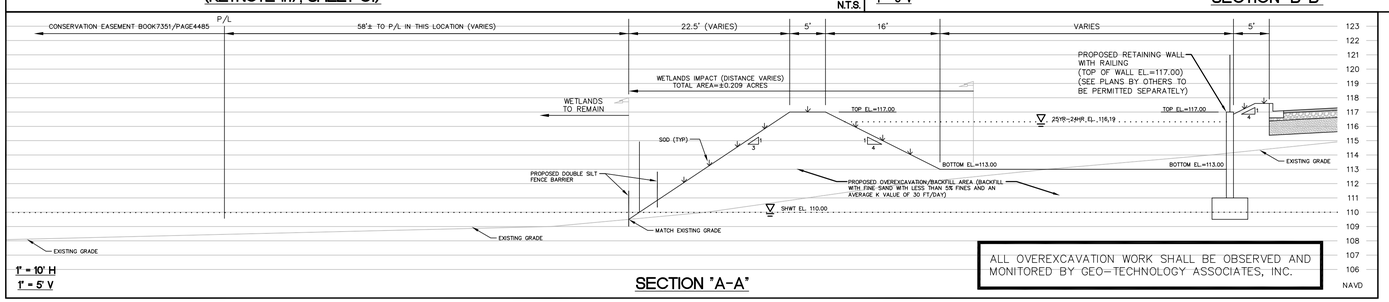
N.T.S.



1" = 10' H
1" = 5' V

NAVD

SECTION "B-B"



1" = 10' H
1" = 5' V

NAVD

ALL OVEREXCAVATION WORK SHALL BE OBSERVED AND MONITORED BY GEO-TECHNOLOGY ASSOCIATES, INC.

SECTION "A-A"

GENERAL NOTES:

1. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, HE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE WORK PERFORMED FOR THIS PROJECT.

2. THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING FACILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND/OR MEASURING. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN.

3. WHEN ANY EXISTING UTILITY REQUIRES ADJUSTMENT OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE PROPER UTILITY COMPANY AND COORDINATE HIS WORK ACCORDINGLY. THERE SHALL BE NO CLAIM MADE BY THE CONTRACTOR FOR ANY COSTS CAUSED BY DELAYS IN CONSTRUCTION DUE TO THE ADJUSTMENT OR RELOCATION OF EXISTING UTILITIES.

4. ALL TRAFFIC CONTROLS ON THIS PROJECT SHALL ADHERE TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND F.D.O.T. STANDARDS.

5. THE OWNER, THE STATE, THE CITY AND THE COUNTY SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.

6. THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT OR THE EXISTING RIGHTS-OF-WAY OR EASEMENTS ADJACENT TO THIS CONSTRUCTION SITE AND SHALL NOT TRESPASS UPON OTHER PRIVATE PROPERTY WITHOUT THE CONSENT OF THE OWNER.

7. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES, ORDINANCES AND STANDARDS SPECIFICATIONS OF ALL GOVERNMENTAL AGENCIES THAT HAVE THE RESPONSIBILITY OF REVIEWING PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF ALL ITEMS PER THESE PLANS AND SPECIFICATION IN THIS LOCATION.

8. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS AS REQUIRED FOR CONSTRUCTION OF THIS PROJECT.

9. THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION MATERIAL OR PROVIDE ALL SUITABLE FILL MATERIAL AS APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER. THE COST SHALL BE INCLUDED IN THE CONTRACTOR'S BID FOR THE PROJECT.

10. EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH ANY LOCAL AND/OR STATE REQUIREMENTS. PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ADJACENT PROPERTIES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE PROTECTIVE MEASURES SO AS NOT TO CAUSE ANY MUD, SILT OR DEBRIS TO AFFECT ANY ADJACENT PUBLIC OR PRIVATE PROPERTY. ANY MUD, SILT OR DEBRIS THAT DOES AFFECT ANY ADJACENT PROPERTY SHALL BE REMOVED IMMEDIATELY.

11. ALL WORK SHALL BE GUARANTEED BY THE CONTRACTOR TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS AND IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR A PERIOD SPECIFIED BY THE LOCAL MUNICIPALITY (MINIMUM OF ONE YEAR) FROM THE DATE OF WRITTEN ACCEPTANCE FROM THE OWNER OF THAT PORTION OF THE TOTAL PROJECT WHICH THE CONTRACTOR HAS CONTRACTED TO COMPLETE. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY WORK OR MATERIAL FOUND TO BE DEFECTIVE UPON WRITTEN NOTICE FROM EITHER THE DESIGN ENGINEER OR THE LOCAL MUNICIPALITY ENGINEER.

12. CONTRACTOR TO VERIFY THAT THE PLANS AND SPECIFICATIONS THAT HE IS BUILDING FROM ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHER, TO VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED BY ALL APPLICABLE PERMIT-ISSUING GOVERNMENTAL AGENCIES AND THE OWNER. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING THE FINAL APPROVAL AND PERMITS, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE DONE AT THE CONTRACTOR'S SOLE EXPENSE.

13. SHOULD THE CONTRACTOR ENCOUNTER ANY CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT-ISSUING GOVERNMENTAL AGENCIES, HE SHALL SEEK CLARIFICATION IN WRITING FROM THE DESIGN ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR, IF ANY EXPENSES OCCUR DUE TO THESE CONFLICTS.

14. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL EXISTING UTILITIES OR STRUCTURES AT THE PROJECT SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF ANY UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE PROPER UTILITY COMPANY IMMEDIATELY UPON ANY BREAKAGE OR DAMAGE TO ANY EXISTING UTILITY LINE OR APPURTENANCES OR ANY INTERRUPTION OF SERVICE. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IN WRITING SO THAT THE CONFLICT MAY BE RESOLVED.

15. UNLESS NOTED OTHERWISE, ALL DIMENSIONS SHOWN ON THESE PLANS ARE TO THE FACE OF CURB.

16. THE LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES AS SHOWN ARE BASED UPON THE BEST AVAILABLE RECORDS AT THE TIME THE PLANS WERE PREPARED AND ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL PUBLIC AND/OR PRIVATE UTILITY COMPANIES SERVING THE PROJECT AREA TO DETERMINE THE PRESENT EXTENT AND EXACT LOCATIONS OF THEIR FACILITIES BEFORE BEGINNING WORK. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OF THESE FACILITIES DURING THE COURSE OF THE WORK.

17. THE CONTRACTOR IS TO INSTALL THE SANITARY SEWER AND WATER LEAD(S) TO A DISTANCE OF WITHIN 5 FEET OUTSIDE OF ANY BUILDING AND PLACE A CLEANOUT FOR SEWER AND A GATE VALVE FOR WATER WITH CAST IRON COVER AND BOX OUTSIDE OF BUILDING. CONTRACTOR SHALL VERIFY ALL UTILITY CONNECTION LOCATIONS WITH ARCHITECTURAL PLANS PRIOR TO SUBMITTING ANY BID TO THE OWNER. IF CONFLICTS IN UTILITY LINE CONNECTIONS TO BUILDING ARE DISCOVERED BY CONTRACTOR DURING THE BID PROCESS OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND ARCHITECT IN WRITING IMMEDIATELY.

18. ALL PROPOSED STORM PIPES LOCATED WITHIN THE F.D.O.T. RIGHT-OF-WAY, SHALL BE WRAPPED WITH FILTER FABRIC PER F.D.O.T. STANDARD INDEX 280.

19. ALL STRIPING WITHIN ANY F.D.O.T. RIGHT-OF-WAY SHALL BE LEAD-FREE THERMOPLASTIC IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX 17346.

20. CONTRACTOR SHALL NOTIFY THE LOCAL F.D.O.T. OFFICE AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION AND ANY LANE CLOSURES IN THE F.D.O.T. RIGHT-OF-WAY.

21. IF AN M.O.T. IS REQUIRED, THE SETUP MUST BE SUPERVISED BY A PERSON CERTIFIED BY THE APPROPRIATE GOVERNMENTAL ENTITIY.

22. AS-BUILT PLANS SHALL BE REQUIRED IF ANY CHANGES TO THE PROPOSED CONSTRUCTION OCCUR DURING CONSTRUCTION.

23. IF ANY F.D.O.T. CONSTRUCTION IS NECESSARY, AN ENGINEER'S CERTIFICATION SHALL BE SUBMITTED TO F.D.O.T. WITHIN 30 DAYS OF PROJECT COMPLETION. CONTRACTOR SHALL SUPPLY ENGINEER WITH APPROPRIATE AS-BUILT INFORMATION, CERTIFIED BY A REGISTERED SURVEYOR IF ANY F.D.O.T. CERTIFICATIONS ARE NECESSARY.

24. ALL CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST DESIGN STANDARDS AND THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

25. AFTER CONSTRUCTION IN FDOT RIGHT-OF-WAY IS COMPLETE, CONTRACTOR SHALL SUPPLY FDOT WITH CERTIFIED COPIES OF ALL DENSITY REPORTS.

26. ALL DISTURBED AREAS IN FDOT RIGHT-OF-WAY SHALL BE REGRADED AND SODDED WITH ARGENTINE BAHIA.

27. ANY AND ALL DISTURBED AREAS, ON SITE OR OFF SITE, SHALL BE SODDED.

28. ALL TEST RESULTS TO BE FURNISHED BY CONTRACTOR IF REQUIRED BY LOCAL PERMITTING AGENCY.

29. CONTRACTOR TO UNCOVER AND EXPOSE ANY PROPOSED UTILITY CONNECTIONS FROM POINT OF CONNECTION TO RIGHT-OF-WAY AND/OR UTILITY EASEMENT BOUNDARY PRIOR TO PLACEMENT OF ANY UTILITY LINES ON THE PROJECT SITE.

30. GENERAL CONTRACTOR MUST VISIT THE SITE PRIOR TO SUBMITTING A BID TO THE OWNER ON THIS PROJECT TO FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS. HE MUST BE IMMEDIATELY REPORT ANY CONFLICTS TO THE DESIGN ENGINEER OR THE OWNER.

31. ALL CONSTRUCTION METHODS AND OPERATIONS FOR THIS PROJECT MUST BE DONE BY THE CONTRACTOR IN SUCH A MANNER AS TO PROTECT ANY AND ALL ADJACENT EXISTING BUILDINGS AND SITE ELEMENTS. ANY EXISTING ELEMENTS DAMAGED DURING CONSTRUCTION MUST BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S SOLE EXPENSE.

32. ANY PAVEMENT IN F.D.O.T. RIGHT-OF-WAY DAMAGED BY CONTRACTOR'S OPERATIONS MUST BE REPAVED TO MATCH EXISTING PAVEMENT SECTION (SEE DRAWINGS). ALL PAVEMENT MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. ALL NEW PAVEMENT IN RIGHT-OF-WAY MUST BE SLOPED TO MAINTAIN EXISTING DRAINAGE CHARACTERISTICS.

33. THE CONTRACTOR SHALL MAINTAIN ONE CLEAN SET OF MARKED PLANS ON SITE SHOWING ANY AND ALL CHANGES AND "AS-BUILT" INFORMATION WHICH WILL BE SUBMITTED TO THE DESIGN ENGINEER UPON COMPLETION OF THE PROJECT.

34. IF ANY F.D.E.P. PERMITS ARE REQUIRED FOR THIS PROJECT, THE CONTRACTOR SHALL SUPPLY THE DESIGN ENGINEER WITH AN "AS-BUILT" SURVEY, SIGNED AND SEALED BY A STATE REGISTERED SURVEYOR. THIS SURVEY SHALL INCLUDE ANY WATER AND/OR SEWER CONSTRUCTION COMPLETED WITH THIS PROJECT. THIS SHALL INCLUDE ANY AND ALL UNDERGROUND PRESSURE LINES. IF LOCAL UTILITY COMPANY HAS MORE DETAILED "AS-BUILT" REQUIREMENTS, THEN THE CONTRACTOR SHALL PROVIDE "AS-BUILT" INFORMATION TO THE DESIGN ENGINEER IN ACCORDANCE WITH THE LOCAL UTILITY COMPANY REQUIREMENTS. THESE AS-BUILTS SHALL BE REQUIRED WITHIN 20 DAYS OF THE WATER/SEWER WORK BEING COMPLETED.

35. IF ANY F.D.E.P. PERMITS ARE REQUIRED FOR THIS PROJECT, THE CONTRACTOR SHALL SUPPLY TO THE DESIGN ENGINEER ANY REQUIRED BACTERIOLOGICAL OR PRESSURE TESTS REQUIRED BY THE F.D.E.P. PERMIT.

36. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE THE DESIGN ENGINEER WITH ANY NECESSARY INFORMATION NECESSARY FOR THE DESIGN ENGINEER TO OBTAIN ANY NECESSARY CERTIFICATIONS. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE CONDITIONS INCLUDED WITH ANY AND ALL PERMITS REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT.

37. ALL EXISTING ASPHALT PAVEMENT, TOP SOIL, ORGANIC CONTAMINATED OR WET SOILS OR OTHER DELETERIOUS MATERIALS MUST BE TOTALLY REMOVED FROM SITE. ANY EXISTING SOILS ADEQUATE FOR USE AS FILL MAY BE RETAINED, REPROCESSED AND REINSTALLED AS COMPACTED FILL.

38. SITE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING WITHIN ALL PROPOSED LANDSCAPE AREAS. GRADING WITHIN THESE AREAS SHALL BE AT OR ABOVE THE PROPOSED GRADE AT NEAREST BACK OF CURB OR SIDEWALK.

39. ALL SUBGRADE BENEATH PROPOSED BUILDING AND PAVEMENT SHALL BE PREPARED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEER'S REPORT AND SHALL BE NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY (MODIFIED PROCTOR) PER ASTM D-1557-78 (TO DEPTHS OF UP TO 3 FEET BELOW BUILDING AND 2 FEET BELOW PAVEMENT.

40. ENGINEER'S CERTIFICATION REQUIRED 30 DAYS AFTER COMPLETION OF PROJECT.

41. ALL LANDSCAPE AREAS TO BE GRADED WITH CLEAN FILL, ABSENT OF ANY PAVEMENT BASE MATERIALS.

42. SITE CONTRACTOR SHALL REQUEST SOIL REPORT FROM GENERAL CONTRACTOR OR OWNER PRIOR TO SUBMITTAL OF BID FOR THIS PROJECT.

43. ALL BOUNDARY AND TOPOGRAPHIC SURVEYING INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY SUNSTATE SURVEYING, DATED 9-20-2025.

44. M.O.T. SETUP MUST BE SUPERVISED BY A CERTIFIED PERSON.

45. TEST RESULTS ARE REQUIRED UPON REQUEST.

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H-23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY/FDOT	M.C.
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---

mitch collins, pe, inc.
801 east south street ph. 407.850.8557
orlando, fl 32801 fx. 407.448.8979
mitchcollins@mitchcollinspe.com

DETAILS AND NOTES

FOR

ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE

WINTER GARDEN, FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS * LICENSE * No. 54608 * STATE OF FLORIDA * PROFESSIONAL ENGINEER *

SCALE: AS SHOWN	
DRAWN BY: M.C.	DATE: 9-5-25
CHECKED BY: M.C.	JOB NO: 225-027
SHEET NO: C5	OF C13

CITY OF WINTER GARDEN - GENERAL NOTES:

1. ALL UTILITY SYSTEMS AND IMPROVEMENTS CONSTRUCTED IN THE CITY OF WINTER GARDEN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUAL OF STANDARDS AND SPECIFICATIONS FOR UTILITY CONSTRUCTION FOR THE CITY OF WINTER GARDEN, TO BE REFERRED TO AS MSS/CWG. THE LATEST EDITION AT THE TIME PERMITS ARE APPROVED SHALL BE EFFECTIVE FOR THE DURATION OF THE SUBJECT WORK OR PROJECT DEVELOPMENT.
2. THE CITY OF WINTER GARDEN GENERAL NOTES AND DETAILS ARE PROVIDED FOR THE CONVENIENCE OF FIELD PERSONNEL. THEY DO NOT INCLUDE ALL REQUIREMENTS OF THE MSS/CWG. THE CONTRACTOR SHALL REFER TO THE FULL TEXT OF THE MSS/CWG FOR FURTHER DETAIL AND CLARITY WHEN NEEDED.
3. ANY REQUEST FOR VARIANCE OR NONCOMPLIANCE FROM THE MSS/CWG NOTED ABOVE MUST BE APPROVED BY THE CITY ENGINEER OR UTILITIES DIRECTOR.
4. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN CLOSE PROXIMITY TO WATER, WASTEWATER, RECLAIMED WATER AND OTHER UTILITY SYSTEMS. THE CONTRACTOR SHALL COORDINATE UTILITY LOCATIONS WITH RESPECTIVE UTILITY OWNERS AND/OR CALL "SUNSHINE ONE CALL", 1-800-432-4770 A MINIMUM OF 72 HOURS IN ADVANCE.
5. CONTRACTOR'S DAMAGE OF WINTER GARDEN UTILITY SYSTEM: THE CONTRACTOR SHALL IMMEDIATELY NOTIFY AND REPORT DAMAGE TO THE CITY OF WINTER GARDEN UTILITY DIVISION, (NO MESSAGE) PHONE # 407-656-4100.
6. IMMEDIATE REPAIR OF DAMAGED UTILITY SYSTEM: THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY DAMAGE TO THE CITY OF WINTER GARDEN UTILITY SYSTEM AS REQUIRED BY THE UTILITY OWNER AT CONTRACTOR'S COST. IN CASE OF UNRESPONSIVE ACTION BY THE CONTRACTOR, THE CITY RESERVES RIGHT TO REPAIR DAMAGE. THE CONTRACTOR SHALL REIMBURSE THE CITY OF WINTER GARDEN OF ALL REPAIR COST.
7. ADVANCE NOTIFICATION OF CONSTRUCTION: THE CONTRACTOR SHALL NOTIFY CITY OF WINTER GARDEN, UTILITY DIVISION, PH.# 407-656-4100, AT LEAST SEVEN (7) CALENDAR DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY.
8. ADVANCE NOTIFICATION OF UTILITY CONNECTION: THE CONTRACTOR SHALL NOTIFY THE CITY OF WINTER GARDEN AT LEAST SEVEN CALENDAR DAYS IN ADVANCE TO SCHEDULE CONNECTIONS TO UTILITY SYSTEM.
9. UTILITY VALVE OPERATION: ONLY CITY OF WINTER GARDEN UTILITY PERSONNEL SHALL OPERATE VALVES AND FIRE HYDRANTS. THE CONTRACTOR, WHEN NEEDED, SHALL CALL THE CITY TO REQUEST VALVE OPERATIONS AT LEAST TWO (2) DAYS IN ADVANCE OF CONSTRUCTION WORK.
10. OPERATIONS INVOLVING WATER OR WASTEWATER FACILITIES INCLUDING PUMPING STATIONS: THE CONTRACTOR SHALL COORDINATE AT LEAST TWO (2) WEEKS IN ADVANCE, ANY CONSTRUCTION OPERATION THAT MAY REQUIRE THE DISCONTINUATION OF SERVICE OR OPERATION OF A FACILITY. THE CITY WILL PROVIDE PERSONNEL TO OPERATE THE CITY FACILITIES.
11. REQUIRED TESTING BY CONTRACTOR: THE CONTRACTOR SHALL NOTIFY THE CITY OF WINTER GARDEN AT LEAST TWO (2) DAYS PRIOR TO SAMPLING ACTIVITIES FOR PURPOSE OF TESTING AS REQUIRED BY THE CITY. THE CONTRACTOR SHALL NOT TEST OR SAMPLE WITHOUT OBSERVATION BY CITY INSPECTION PERSONNEL.
12. TEMPORARY OR CONSTRUCTION WATER SERVICE CONNECTIONS PROVIDED BY FIRE HYDRANT CONNECTION: THE CITY WILL PROVIDE METER ON FIRE HYDRANT. THE CONTRACTOR SHALL PROVIDE NON-REFUNDABLE ACCOUNT INITIATION FEE, A REFUNDABLE SECURITY DEPOSIT FOR THE METER APPARATUS AND PAY ALL COST FOR WATER USED.
13. ALL AS-BUILT MEASUREMENTS & ELEVATIONS ARE TO BE MADE BY A LICENSED LAND SURVEYOR.

CITY OF WINTER GARDEN - WATER SYSTEM NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL A CITY APPROVED BACKFLOW DEVICE ASSEMBLY AT EACH CONNECTION POINT TO THE CITY WATER SYSTEM.
2. THE CONTRACTOR SHALL HYDROSTATICALLY TEST ALL WATER MAINS AND SERVICE LATERALS AT 150 PSI FOR A TWO HOUR PERIOD. TESTING MUST BE OBSERVED BY A CITY INSPECTOR.
3. THE CONTRACTOR SHALL INSTALL WARNING TAPE OVER ALL NEW WATER MAINS. WARNING TAPE SHALL BE AS FOLLOWS: NON-DETECTABLE, SIZE 3" WITH "WATER LINE BELOW", MUST BE PLACED 8" TO 12" BELOW FINISHED GRADE ON ALL PVC WATER MAINS, LATERALS AND HEADER TEES, NUMBER 10 GAUGE TRACER WIRE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH DUCT TAPE, AT LEAST FIVE TIMES PER JOINT. THE TRACER WIRE SHALL ALSO BE ATTACHED TO ALL PVC LATERALS AND ATTACHED TO THE OUTSIDE OF EACH VALVE BOX SO THAT A PIPE LOCATOR CAN BE CONNECTED TO IT.
4. THE CONTRACTOR SHALL INSTALL WATER MAINS PER MoSS/CoWG SPECIFICATIONS. SOLVENT CEMENTED JOINTS AND THRUST BLOCKS ON PIPING SYSTEMS SHALL NOT BE ALLOWED.
5. THE CONTRACTOR SHALL INSTALL ALL WATER MAINS TO A MINIMUM DEPTH OF 36 INCHES AND A MAXIMUM DEPTH OF 42 INCHES BELOW FINAL GRADE.
6. THE CONTRACTOR SHALL INSTALL ALL SERVICE LATERALS A UNIFORM DISTANCE APART, LOCATED ON PROPERTY LOT LINE AT 90° FROM THE WATER MAIN. SERVICE LATERALS SHALL BE SEPARATELY CONNECTED TO THE WATER MAIN, NOT SPLICED TOGETHER.
7. THE CONTRACTOR SHALL CUT A "W" INTO CONCRETE CURB, LOCATED INSIDE OF A PAINTED BLUE SQUARE, LOCATED DIRECTLY IN FRONT OF EACH SERVICE LATERAL.
8. THE CONTRACTOR SHALL INSTALL CURB STOP, IN METER BOX, CURB STOP SHALL BE SET 8" BELOW FINISHED GRADE.
9. THE CONTRACTOR SHALL PROVIDE AND INSTALL IN-LINE VALVES ON WATER MAINS AT 1,000 FOOT MAXIMUM SPACING BETWEEN VALVES. VALVES SHALL BE LOCATED ON ALL TEE'S AND CROSSES. WATER MAINS SHALL BE PLACED UNDER SIDEWALKS WHERE POSSIBLE.
10. ALL WATERMAINS SHALL BE CLEANED BY PIGGING THE LINE WITH A FOAM PIG (MINIMUM OF 2 IN SERIES, 1 FLUSH). A FULL BORE FLUSH MAY BE REQUIRED AFTER PIGGING TO ENSURE THE PIPE IS CLEAN AND READY FOR SERVICE. THE CONTRACTOR SHALL COORDINATE LINE PIGGING AND FULL BORE FLUSH WITH THE CITY INSPECTOR.
11. THE CONTRACTOR SHALL DEMONSTRATE THAT LOCATION WIRE INSTALLED OVER ALL WATER MAINS IS IN WORKING CONDITION AT TIME OF ACCEPTANCE BY THE CITY.
12. ALL NEW SUBDIVISION CONSTRUCTION SHALL INSTALL DOUBLE POTABLE WATER SERVICES AT THE PROPERTY LINES.

CITY OF WINTER GARDEN - WASTEWATER SYSTEM NOTES:

1. SANITARY SEWER MAINS AND SERVICES SHALL BE PVC SDR-26 (MINIMUM). FITTINGS SHALL BE SDR-26. DUCTILE IRON IS NOT APPROVED FOR SANITARY SEWERS.
2. ALL SERVICES SHALL BE 6" (MINIMUM) DIAMETER AND TERMINATE AT THE PROPERTY LINE WITH 6" CLEAN OUT. (36" TO 48" DEEP AT LOT LINE)
3. MAGNETIC TAPE MUST BE PLACED 2' ABOVE THE TOP OF PIPE FOR THE ENTIRE LENGTH OF ALL MAINS AND SERVICES.
4. ALL SANITARY MANHOLES SHALL BE PAINTED INSIDE AND OUT WITH "BITUMASTIC SUPER SERVICE BLACK", BY KOPPERS OR APPROVED EQUAL. MANHOLES RECEIVING FLOW FROM FORCE MAINS SHALL BE LINED WITH FIBERGLASS, HDPE OR EPOXY AT THE PRECASTERS FACILITY.
5. ALL PIPE CONNECTIONS TO PRE-CAST MANHOLES SHALL BE MADE USING A FLEXIBLE EPDM RUBBER BOOT AND STAINLESS STEEL STRAP OR CAST IN BOOT BY A-LOK, Z-LOK OR EQUAL.
6. CONNECTIONS MADE TO EXISTING MANHOLES SHALL BE CORE BORED WITH A MINIMUM 6" BORE AND CONNECTION SEALED WITH FLEXIBLE BOOT AND STAINLESS STEEL CLAMP.
7. DEAD END MANHOLES SHALL HAVE A MINIMUM OF 5 FEET OF COVER FROM FINISHED GRADE TO OUTLET PIPE INVERT.
8. ALL PRECAST SEWER MANHOLES SHALL HAVE A 4 FOOT MINIMUM HIGH BARREL CONE SECTIONS SHALL BE 3 FOOT MAXIMUM. CONCRETE DONUTS FOR EXTENDING ARE ACCEPTABLE TO RAISE MANHOLES UP TO 1 FOOT MAXIMUM.
9. THE CONTRACTOR SHALL PROVIDE AND INSTALL BALLCENTRIC PLUG VALVES IN FORCE MAINS AT 1000 FOOT MAXIMUM SPACING BETWEEN VALVES. VALVES SHALL BE LOCATED AT ALL TEES AND CROSSES.
10. THE CONTRACTOR SHALL CUT A "S" INTO CONCRETE CURB LOCATED INSIDE OF A PAINTED GREEN SQUARE BOX, IN FRONT OF EACH SERVICE LOCATION.
11. THE CONTRACTOR SHALL PROVIDE TV INSPCTION OF ALL SANITARY SEWER MAINS AFTER SYSTEM IS COMPLETED, THOROUGHLY CLEANED, DRAINED AND FULLY VISIBLE. TV INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS. FAULTY INSPECTION DUE TO POOR CONDITIONS WILL REQUIRE REINSPECTION BY CONTRACTOR.
12. THE CONTRACTOR SHALL PROVIDE A (WARRANTY) TV INSPECTION AT THE TWO YEAR IN SERVICE MILESTONE FOR EACH SYSTEM.
13. THE CONTRACTOR SHALL PROVIDE SANITARY SEWER TESTING, EXFILTRATION OR AIR, AS REQURED BY DESIGN ENGINEER AND SUBMIT CERTIFIED RESULTS TO THE CITY ENGINEER.
14. GRAVITY SEWERS DEPTHS SHALL NOT EXCEED 18 FEET.
15. THE DESIGN ENGINEER SHALL PROVIDE A MINIMUM OF ONE FOOT OF FREEBOARD BETWEEN THE LOWEST FINISHED FLOOR ELEVATION AND THE TOP ELEVATION OF THE WET WELL.
16. ALL PENETRATIONS INTO CONCRETE STRUCTURES SHALL BE PRE-CAST OR CORE-DRILLED.
17. WARRANTY – ALL MATERIALS & EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR SHALL BE WARRANTED FOR A PERIOD OF TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE THEREOF AGAINST DEFECTIVE MATERIALS, DESIGN, AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE CITY OF FAILURE OF ANY PART OF THE WARRANTED EQUIPMENT OR MATERIALS DURING THE WARRANTY PERIOD, THE AFFECTED PART, PARTS, OR MATERIALS SHALL BE PROMPTLY REPLACED BY THE CONTRACTOR WITH NEW PARTS OR MATERIALS AT NO EXPENSE TO THE CITY. IN THE EVENT THE CONTRACTOR FAILS TO MAKE THE NECESSARY REPLACEMENT OR REPAIRS IMMEDIATELY AFTER NOTIFICATION, THE CITY MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.

CITY OF WINTER GARDEN - RECLAIMED WATER SYSTEM NOTES:

1. ALL PRIVATE RECLAIMED WATER SYSTEMS SHALL HAVE A CITY APPROVED BACKFLOW DEVICE ASSEMBLY AT EACH CONNECTION POINT WHEN CONNECTED TO THE CITY POTABLE WATER SYSTEM.
2. ALL MAINS AND SERVICE LATERALS SHALL BE HYDROSTATICALLY TESTED AT 150 PSI FOR A TWO HOUR PERIOD.
3. WARNING TAPE, NON-DETECTABLE, SIZE 3" WITH "REUSE WATER LINE BELOW", MUST BE PLACED 8" TO 12" BELOW FINISHED GRADE ON ALL PVC WATER MAINS, LATERALS AND HEADER TEES, NUMBER 10 GAUGE TRACER WIRE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH DUCT TAPE, AT LEAST FIVE TIMES PER JOINT. THE TRACER WIRE SHALL ALSO BE ATTACHED TO ALL PVC LATERALS AND ATTACHED TO THE OUTSIDE OF EACH VALVE BOX SO THAT A PIPE LOCATOR CAN BE CONNECTED TO IT. THE CONTRACTOR SHALL DEMONSTRATE THE LOCATE WIRE TO BE IN WORKING CONDITION AT PROJECT COMPLETION.
4. THE CONTRACTOR SHALL INSTALL RECLAIMED WATER MAINS PER MoSS/CoWG. SOLVENT CEMENTED JOINTS AND THRUST BLOCKS SHALL NOT BE ALLOWED.
5. REUSE WATER MAIN SHALL BE BURIED TO A MINIMUM DEPTH OF 36" AND A MAXIMUM DEPTH 42" BELOW FINAL GRADE.
6. SERVICE LATERALS MUST BE LOCATED A UNIFORM DISTANCE APART AND ALIGNED TO PROPERTY LOT LINE AT 90° FROM THE RECLAIMED WATERMAIN.
7. CUSTOMER SERVICE LATERALS SHALL NOT BE SPLICED TOGETHER BETWEEN THE WATER MAIN AND CURB STOP.
8. THE CONTRACTOR SHALL CUT CURB A "R" INTO CONCRETE CURB LOCATED INSIDE OF A PAINTED SQUARE (PURPLE), DIRECTLY IN FRONT OF EACH SERVICE LATERAL AND VALVE.
9. THE CONTRACTOR SHALL SET DEPTH OF CURB STOP, IN METER BOX, 8" BELOW FINISHED GRADE.
10. THE CONTRACTOR SHALL INSTALL VALVE(S) IN MAIN, NO MORE THAN 1,000 FEET APART IN BETWEEN TEES AND CROSSES. VALVES SHALL BE PROVIDED AT EACH TEE OR CROSS LOCATED IN MAIN LINE.
11. RECLAIMED WATER MAINS MAY BE LOCATED UNDER SIDEWALKS. RECLAIMED MAINS LOCATED UNDER PAVEMENT SHOULD BE MINIMIZED.
12. ALL WATERMAINS SHALL BE CLEANED BY PIGGING THE LINE WITH A FOAM PIG (MINIMUM OF 2 IN SERIES, 1 FLUSH). A FULL BORE FLUSH MAY BE REQUIRED AFTER PIGGING TO ENSURE THE PIPE IS CLEAN AND READY FOR SERVICE. THE CONTRACTOR SHALL COORDINATE LINE PIGGING AND FULL BORE FLUSH WITH THE CITY INSPECTOR.
13. RECLAIMED WATERMAIN MAINS SHALL BE 8 INCH DIAMETER MINIMUM, 4 INCH IS ALLOWED ON DEAD END RUNS SERVING LESS THAN 20 HOMES. THE DESIGN ENGINEER SHALL SUBMIT HYDRAULIC CALCULATIONS THAT DEMONSTRATE THE PROPOSED SYSTEM WILL PROVIDE REQUIRED FLOWS AND MAINTAIN SYSTEM ABOVE MINIMUM PRESSURE. PEAK IRRIGATION RATE SHALL BE SIX(6) TIMES GREATER THAN THE AVERAGE IRRIGATION RATE OF FLOW.
14. RECLAIMED WATER SYSTEM COMPONENTS INCLUDING PIPE, VALVE BOX TOPS AND METER BOX TOPS SHALL BE RECLAIMED PURPLE IN COLOR.

CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION OF SEWER LINES

GENERAL:

1. ALL NEW SANITARY SEWER LINES, PRIVATE OR CITY MAINTAINED, IN THE CITY OF WINTER GARDEN'S SERVICE AREA SHALL BE INSPECTED BY CLOSED CIRCUIT TV INSPECTION BY THE CONTRACTOR WITH A CITY INSPECTOR PRESENT PRIOR TO BEING ACCEPTED BY THE CITY.

REQUIREMENTS PRIOR TO INSPECTION RELEASE:

1. ALL ELEMENTS OF THE SEWER SYSTEM MUST BE INSTALLED AND BE COMPLETELY FINISHED, INCLUDING MAIN SEWER LINES, LATERALS, CLEAN OUTS, AND MANHOLES PRIOR TO CCTV INSPECTION.
2. ALL SEWER LINES SHALL BE COMPLETELY CLEANED OF ALL DEBRIS, SAND, WATER, ETC. PRIOR TO THE CCTV INSPECTION. ANY OBJECT OR MATTER THAT PREVENTS CCTV INSPECTION FROM VIEWING CONDITION OF PIPELINE IS CONSIDERED AN OBSTRUCTION REQUIRING ADDITIONAL CLEANING. WHEN CCTV VIEW IS OBSTRUCTED, INSPECTION SHALL BE TERMINATED. THE CONTRACTOR SHALL CLEAN THE SEWER SYSTEM COMPLETELY AND RESCHEDULE CCTV RE-INSPECTION WITH THE CITY.
3. A HYDRAULIC SEWER CLEANER SHALL NOT BE USED DURING THE CCTV INSPECTION. IF LINES ARE FOUND TO BE OBSCURED BY WATER OR DEBRIS DURING THE CCTV INSPECTION, THE INSPECTION SHALL BE TERMINATED AND RESCHEDULED TO A TIME WHEN SEWER CLEANING IS COMPLETE.
4. WHEN A SEWER LINE IS UNDER A PAVED AREA, THE AREA SHALL BE COMPACTED AND PRIMED BEFORE THE SYSTEM SHALL BE RELEASED FOR TV INSPECTION.

TELEVISION EQUIPMENT MINIMUM REQUIREMENTS:

1. THE CLOSED CIRCUIT TV CAMERA SHALL PRODUCE A CLEAR COLOR PICTURE ON THE MONITOR AND ON THE DVD RECORDING. THE CAMERA SHALL BE ABLE TO SHOW DETAIL TO THE POINT THAT ALL JOINTS AND ANY DEFECTS MAY BE READILY SEEN AT THE TIME OF THE INSPECTION. THE CAMERA SHALL STOP AND PAN AT EACH JOINT FOR COMPLETE 360 DEGREE INSPECTION.
2. REFER TO APPENDIX B OF THE REFERENCED STANDARDS FOR SPECIFICATION OF CLOSED CIRCUIT TELEVISION INSPECTION EQUIPMENT.
3. THE VIDEO RECORDER SHALL PRODUCE A NO NOISE STILL PICTURE, AND PROVDE BOTH AUDIO AND VIDEO DURING THE INSPECTION.
4. A MEASURING DEVICE, APPROVED BY THE CITY, TO CHECK THE GRADE OF THE PIPE DURING THE INSPECTION, SHALL BE REQUIRED. GAUGE DEPTH, 0" TO 2" MIN. WITH 1/2" MARKINGS.
5. AUDIO OF THE INSPECTION SHALL BE SIMULTANEOUSLY RECORDED ON DVD DISC. THE AUDIO SHALL CONSIST OF ORDINARY DESCRIPTION AND COMMENTARY. A TAPE WILL BE GIVEN TO THE INSPECTOR ON SITE AT THE END OF THE DAY.

PROCEDURE FOR TELEVSING:

1. THE CITY'S ENGINEERING INSPECTION DIVISION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS NOTICE PRIOR TO THE TIME PLANNED FOR THE TV INSPECTION TO COMMENCE. A DEFINITE TIME AND DATE WILL BE AGREED UPON BY THE CONTRACTOR AND INSPECTOR AT THAT TIME.
2. NO INSPECTION SHALL COMMENCE WITHOUT THE PRESENCE OF THE INSPECTOR, EXCEPT WHEN PRIOR ARRANGEMENTS HAVE BEEN MADE BETWEEN THE CONTRACTOR, INSPECTOR, AND THE CITY. TV INSPECTION SHALL BE PERFORMED BY THE CONTRACTOR AT THE EXPENSE OF THE CONTRACTOR.
3. ALL CCTV INSPECTIONS SHALL COMMENCE UP STREAM OF THE SYSTEM TO PREVENT FOREIGN SUBSTANCES FROM ENTERING A SECTION PREVIOUSLY TELEVISED. THE CAMERA SHALL BE STARTED FROM THE DOWNSTREAM MANHOLE AND PROCEED UPSTREAM IN DIRECTION OPPOSING THE NORMAL FLOW IN THE LINE. THIS PROCEDURE WILL ALLOW FOR THE VIEWING OF THE SERVICE LATERALS.
4. BEFORE THE CAMERA IS PLACED IN THE SEWER LINE, WATER WITH YELLOW OR ORANGE DYE SHALL BE PUT INTO THE UPSTREAM MANHOLE OF THE SECTION BEING TELEVISED. CAMERA WILL HAVE A GAUGE SHOWING 1/2" MARKS FROM 1/2" TO 2-1/2". THIS WILL ENABLE THE CAMERA TO DETECT ANY CHANGES IN GRADE THAT MAY BE PRESENT IN THE SYSTEM.
5. THE CCTV AND DVD RECORDER SHALL BE TURNED ON BEFORE THE CAMERA IS PLACED IN THE MANHOLE FOR INSPECTION AND SHALL NOT BE TURNED OFF UNTIL THE CAMERA IS REMOVED FROM THE MANHOLE. THE CAMERA SHALL BE MOVED THROUGH THE LINE UNDER THE CONTROL OF THE CCTV CAMERA OPERATOR. THE CAMERA SHALL BE DRAWN THROUGH THE LINE AT A RATE NOT TO EXCEED THIRTY (30) FEET PER MINUTE AND SHALL STOP AT ALL SERVICE CONNECTIONS AND PIPE JOINTS IN THE PIPELINE.
6. A DVD RECORDING SHALL BE MADE OF THE ENTIRE SYSTEM BEING TELEVISED. THIS SHALL BECOME THE PROPERTY OF THE CITY UPON COMPLETION OF THE TV INSPECTION (NOT A COPY). THE TAPE(S) SHALL BE LABELED IN SUCH A MANNER THAT STATES THE PROJECT NAME, DATE OF INSPECTION AND LINE SECTION ACCORDING TO CONSTRUCTION PLANS CONTAINED ON EACH TAPE. A WRITTEN REPORT SHALL ACCOMPANY THE DVD DISC.

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER*		SANITARY SEWER (GRAVITY)		SANITARY SEWER (FORCEMAIN)		STORM WATER		ACCEPTABLE VARIANCES
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	
POTABLE WATER	--	--	3'	12"	6'	12"	6'	12"	3'	6" A 12" B	SEE GENERAL NOTES: NO. 4 & 5
RECLAIMED WATER*	3'	12"	--	--	3'	6" A 12" B	3'	12"	--	--	
SANITARY SEWER (GRAVITY)	6'	12"	3'	6" A 12" B	--	--	--	--	--	--	
SANITARY SEWER (FORCEMAIN)	6'	12"	3'	12"	--	--	--	--	--	--	

GENERAL NOTES:

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.), THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.

*2. FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 162-610, CHAPTER III. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.

3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.
   A. DENOTES POTABLE WATER ABOVE RECLAIMED WATER, SANITARY SEWER OR STORM WATER; OR RECLAIMED WATER ABOVE SANITARY SEWER.
   B. DENOTES POTABLE WATER BELOW RECLAIMED WATER, SANITARY SEWER OR STORM WATER; OR RECLAIMED WATER BELOW SANITARY SEWER.
4. UTILITY SEPARATION – VERTICAL CLEARANCE MITIGATION
   A. WHERE WATER AND GRAVITY SANITARY SEWER MAINS CROSS WITH LESS THAN REQUIRED VERTICAL CLEARANCE OR THE SEWER MAIN IS ABOVE THE WATER MAIN, THE SANITARY SEWER WILL BE 20 FEET OF EITHER:
      A.1. DUCTILE IRON PIPE, CENTERED ON THE POINT OF CROSSING, OR;
      A.2. CONCRETE ENCASED VITRIFIED CLAY, OR;
      A.3. PVC PIPE UPGRADED TO WATER MAIN STANDARDS AND PRESSURE TESTED.
   B. WHERE WATER MAINS AND STORM SEWER PIPES CROSS WITH LESS THAN REQUIRED VERTICAL CLEARANCE, THE WATER MAIN SHALL BE 20 FEET OF DUCTILE IRON PIPE CENTERED ON THE POINT OF CROSSING.
   C. SEPARATION REQUIREMENTS BETWEEN FORCE MAINS AND POTABLE WATER MAINS MUST BE MAINTAINED UNLESS APPROVED IN ADVANCE BY THE DEPARTMENT.
5. UTILITY SEPARATION – HORIZONTAL SEPARATION MITIGATION
   A. WHEN A WATER MAIN PARALLELS A GRAVITY SANITARY SEWER MAIN, A SEPARATION (MEASURED EDGE TO EDGE) OF AT LEAST SIX FEET SHOULD BE MAINTAINED. WHERE THIS SEPARATION IS NOT MET, ONE OF THE FOLLOWING MUST OCCUR.
      A.1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER, OR:
      A.2. IF BOTH SANITARY SEWER AND POTABLE WATER MAINS ARE PROPOSED AND THE ABOVE (1.) IS NOT MET, THE SANITARY SEWER PIPES SHALL BE UPGRADED TO THE EQUIVALENT PIPE MATERIAL AS THE WATER MAIN AND PRESSURE TESTED.
      A.3. IF THE SANITARY SEWER IS EXISTING AND THE POTABLE WATER MAIN IS PROPOSED, THE WATER MAIN SHALL, AT A MINIMUM, BE UPGRADED TO DUCTILE IRON PIPE, CONSTRUCTED IN SEPARATE TRENCHES, LAID AT A HIGHER ELEVATION THAN THE SANITARY SEWER, AND UTILIZE STAGGERED JOINTS.
   B. SEPARATION REQUIREMENTS BETWEEN FORCE MAINS AND POTABLE WATER MAINS MUST BE MAINTAINED UNLESS APPROVED IN ADVANCE BY THE DEPARTMENT.
6. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.

CITY OF WINTER GARDEN - TRUST RESTRAINT TABLE

RESTRAINED FORCE MAIN PIPE TABLE

MINIMUM LENGTH(FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

	PIPE SIZE								
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	19	25	30	34	44	52	60	70	80
45° BEND	8	10	12	14	18	21	25	30	34
22-1/2° BEND	4	5	6	7	9	10	12	14	16
11-1/4° BEND	2	3	4	5	6	7	8	9	10
PLUG, DEAD END OR BRANCH OF TEE	40	52	63	72	93	111	130	155	178
VALVE	20	25	32	36	47	56	78	116	89

RESTRAINED WATER AND RECLAIMED PIPE TABLE

MINIMUM LENGTH(FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

	PIPE SIZE								
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	29	37	44	51	65	77	89	105	120
45° BEND	12	15	18	21	27	32	37	44	50
22-1/2° BEND	6	7	9	10	13	15	18	21	24
11-1/4° BEND	3	4	5	6	7	8	9	10	12
PLUG, DEAD END OR BRANCH OF TEE	59	77	93	108	138	166	194	231	265
VALVE	59	77	93	108	138	166	194	231	265

THRUST RESTRAINT NOTES:

1. THE TABLES INDICATE MINIMUM LENGTHS OF RESTRAINED JOINTS ON EACH SIDE OF FITTINGS AND CHANGES IN DIRECTION. WHERE PRACTICAL, FULL LENGTHS OF RESTRAINED PIPE SHALL BE LAID TO ACHIEVE THE REQUIRED MINIMUM RESTRAINT.
2. WHERE COMBINATIONS OF FITTINGS ARE USED, THE PIPING BETWEEN THE FITTINGS SHALL BE RESTRAINED. THE MINIMUM RESTRAINED LENGTH OF PIPE REQUIRED UPSTREAM AND DOWNSTREAM OF THE COMBINATION OF FITTINGS SHALL BE DETERMINED ON THE BASIS OF ONE EQUIVALENT FITTING (I.E., 2-45 DEGREE BENDS WILL BE CONSIDERED AS THOUGH A 90° BEND WERE LOCATED MIDWAY BETWEEN THE TWO 45° BENDS).
3. FOR PIPE THAT IS ENCASED IN POLYETHYLENE, RESTRAINED JOINTS MINIMUM LENGTHS SHALL BE INCREASED BY 50 PERCENT.
4. FOR FITTINGS OTHER THAN THOSE PRESENTED IN THE ABOVE TABLES, RESTRAINED JOINT LENGTHS SHALL BE DETERMINED IN ACCORDANCE WITH "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION. RESTRAINED JOINT LENGTHS FOR A GIVEN PRESSURE RANGE SHALL BE BASED ON THE MAXIMUM PRESSURE FOR THE TEST PRESSURE RANGE, SM (SAND SILT) SOIL, 3-FEET DEPTH, LAYING CONDITION NO. 3 AND FACTOR OF SAFETY OF 1.5.
5. IN-LINE VALVES: PROVIDE MECHANICAL RESTRAINT ON EACH SIDE OF THE VALVE.
6. ALL RECLAIMED WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 150 PSI. ALL WASTEWATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 100 PSI.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	Revised General Notes	4/4/14
2	Revised Water & Reuse Notes	4/4/14

REVISIONS

CITY OF WINTER GARDEN, FLORIDA

STANDARDS AND SPECIFICATIONS

FOR UTILITY CONSTRUCTION

STANDARD DETAILS FOR UTILITY SYSTEMS

DATE: JANUARY 2024

SHEET: 1

1 OF 11

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east north street, fl. 407.8501557
orlando, fl 32803 fx. 407.448.8979
mitchcollins@mitchcollinspe.com

DETAILS AND NOTES
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

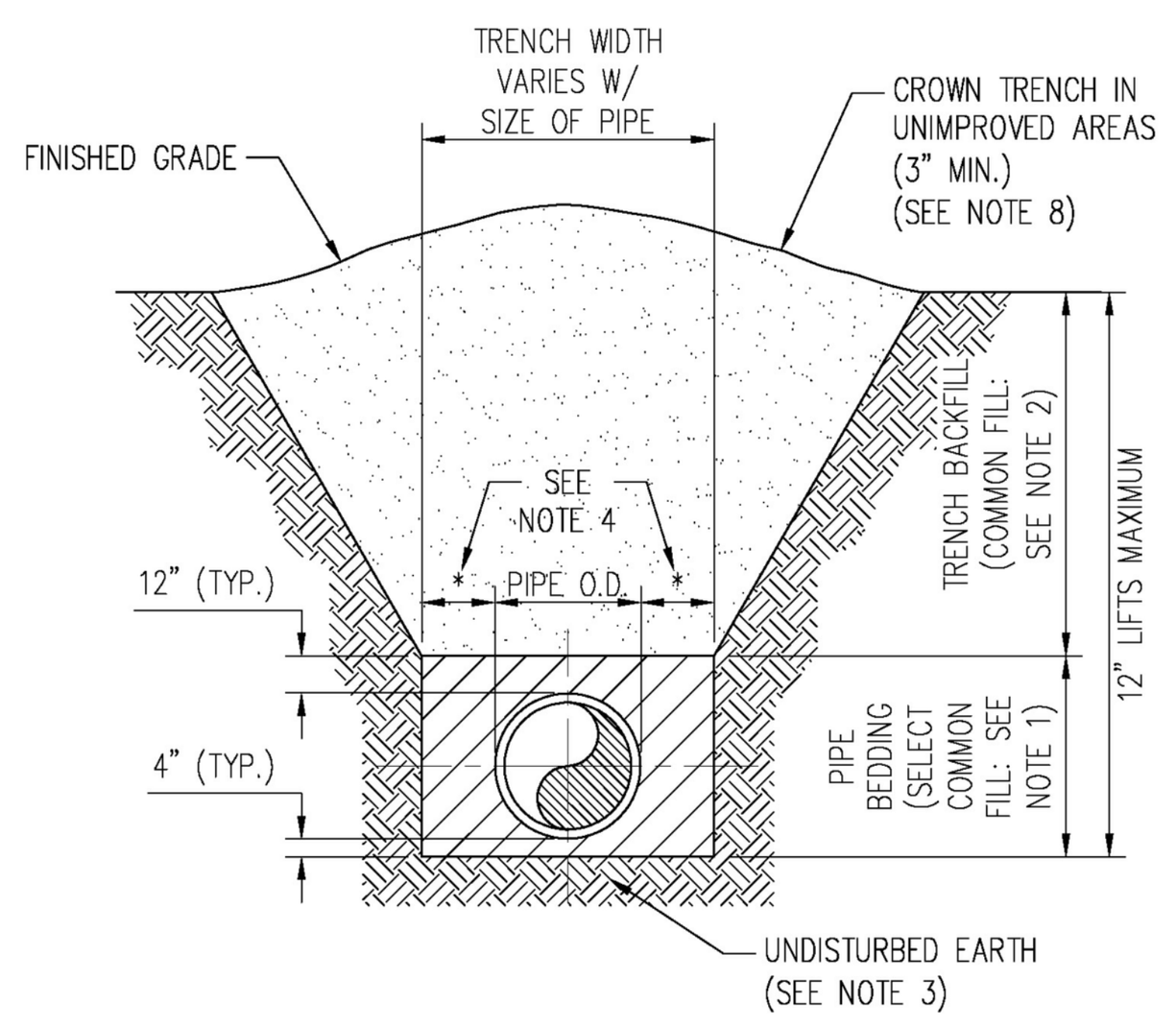
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS * LICENSE * No. 54608 * STATE OF FLORIDA * PROFESSIONAL ENGINEER

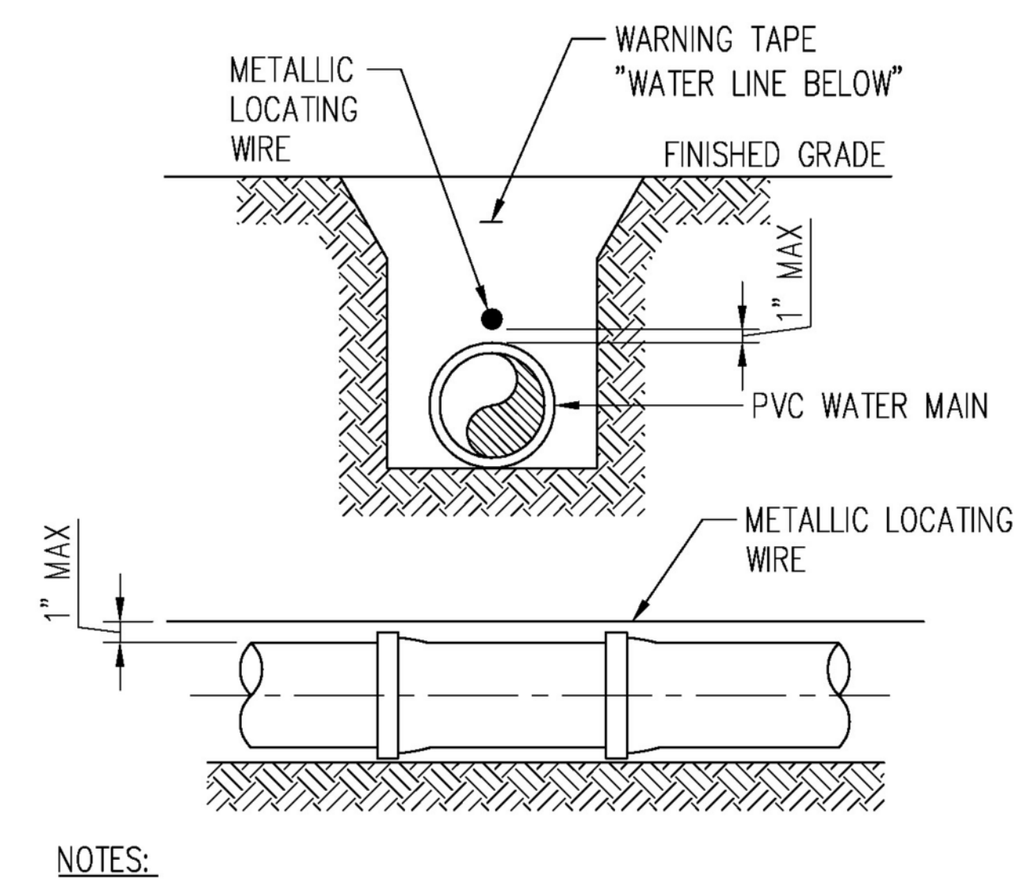
SC



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING MAY BE REQUIRED AS DIRECTED BY THE CITY OF WINTER GARDEN.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE CITY OF WINTER GARDEN MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

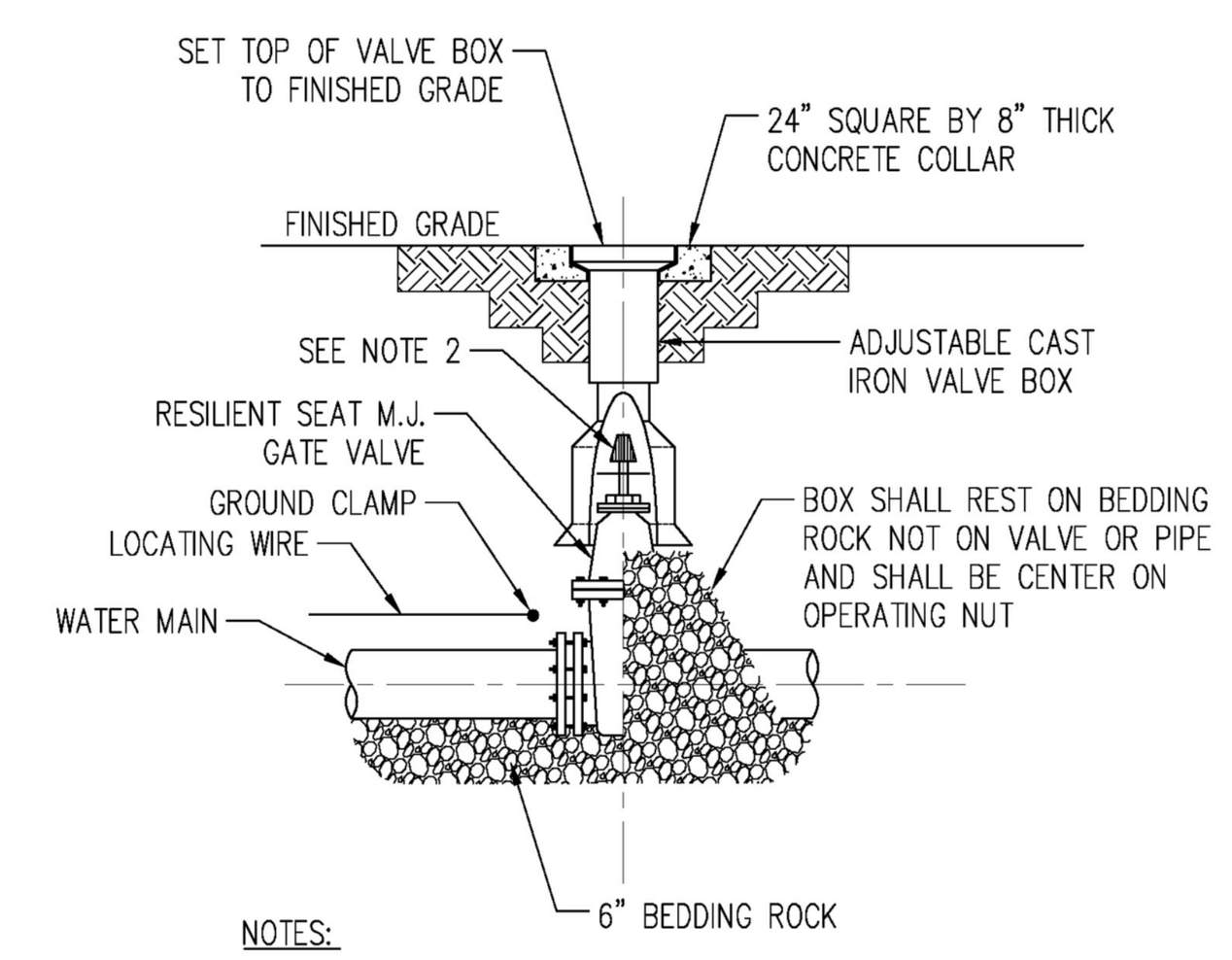
1 STANDARD BEDDING DETAIL
N.T.S.



NOTES:

1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE ATTACHED TO THE TOP OF PIPE WITH DUCT TAPE, AT LEAST 5 TIMES PER JOINT.
2. LOCATING ROD SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING ABOVE TOP OF BOX ½" SO AS NOT TO INTERFERE WITH VALVE OPERATION.

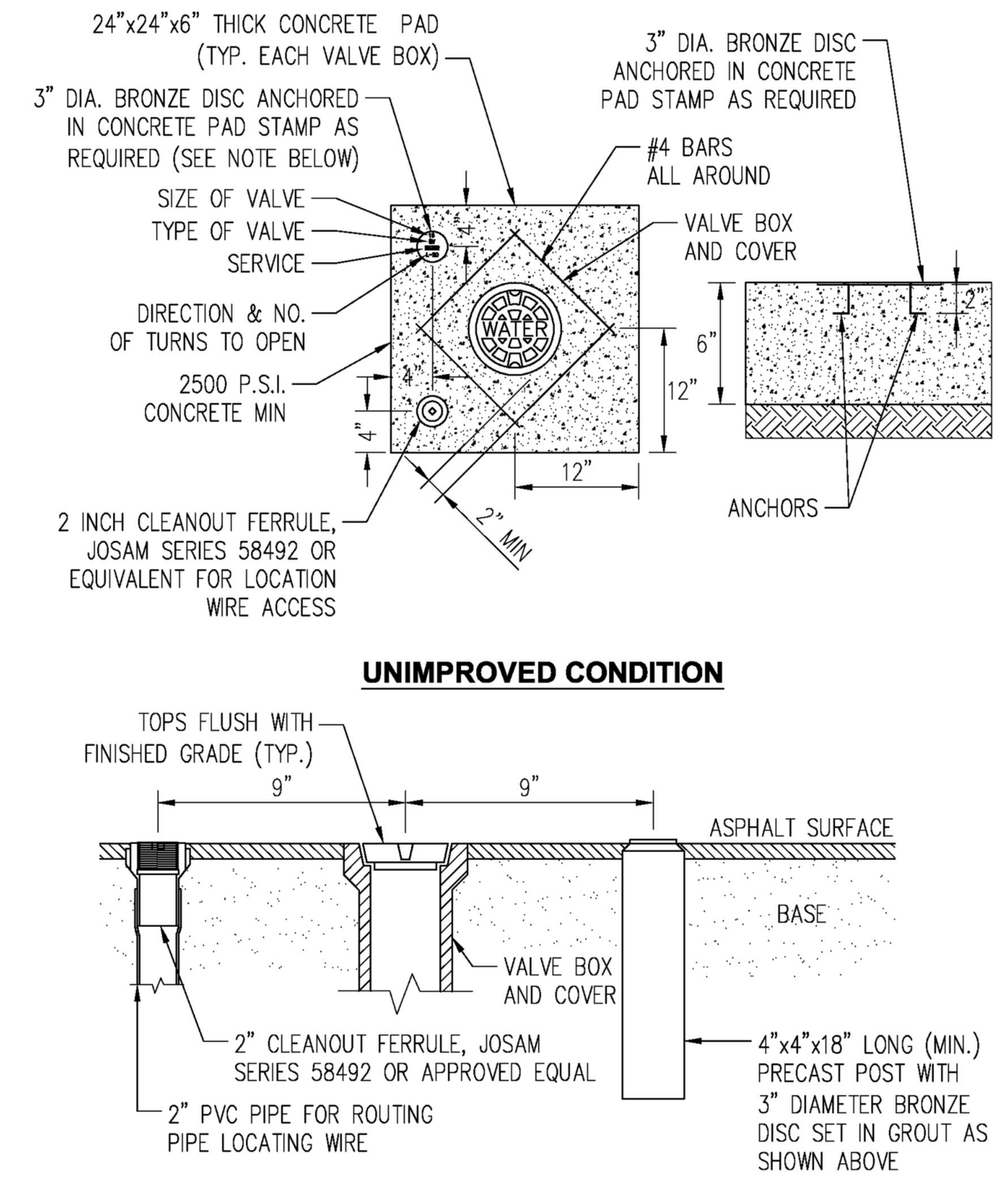
2 PVC PIPE LOCATING WIRE DETAIL
N.T.S.



NOTES:

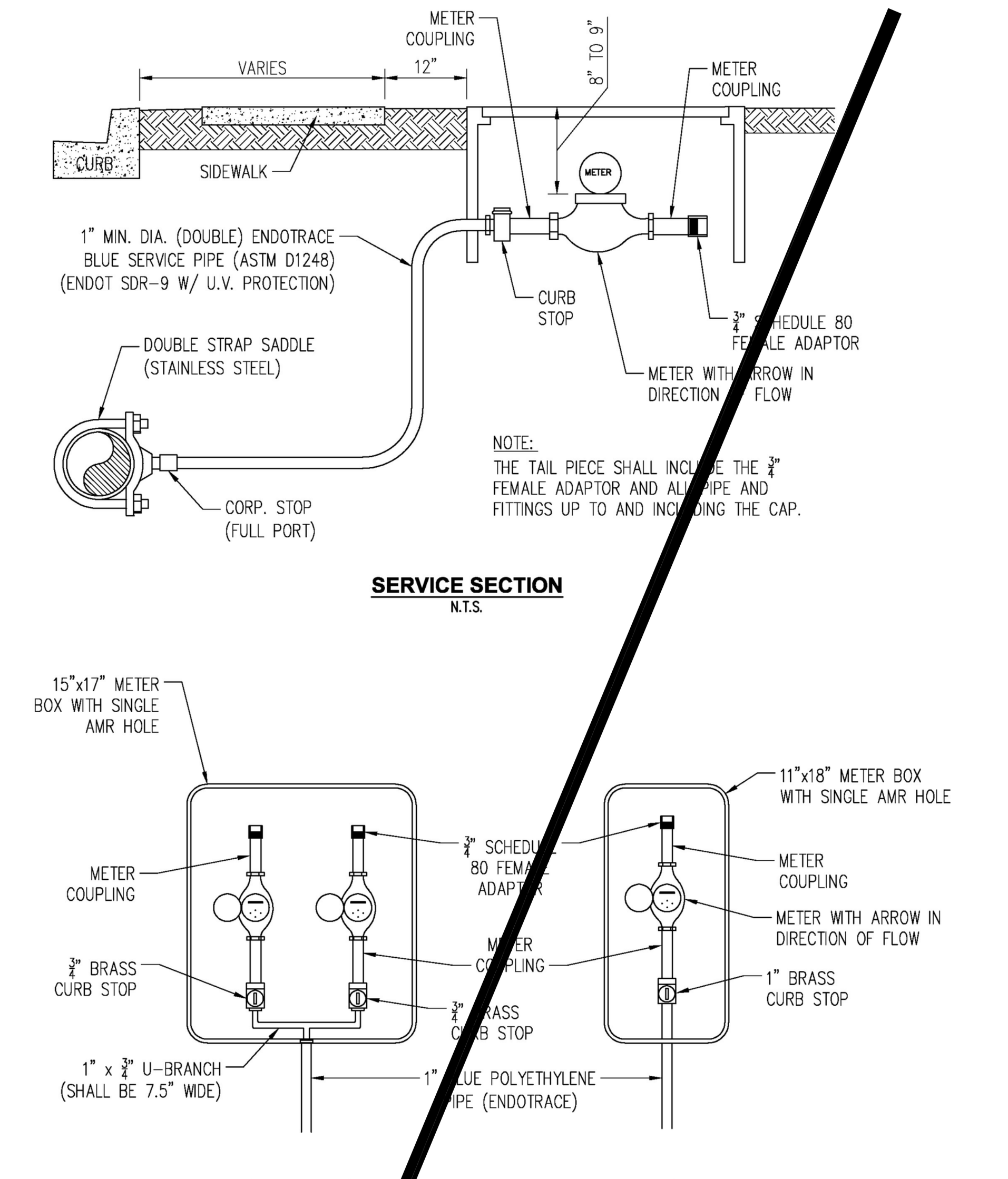
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.

3 GATE VALVE & BOX DETAIL
N.T.S.



NOTE:
BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.

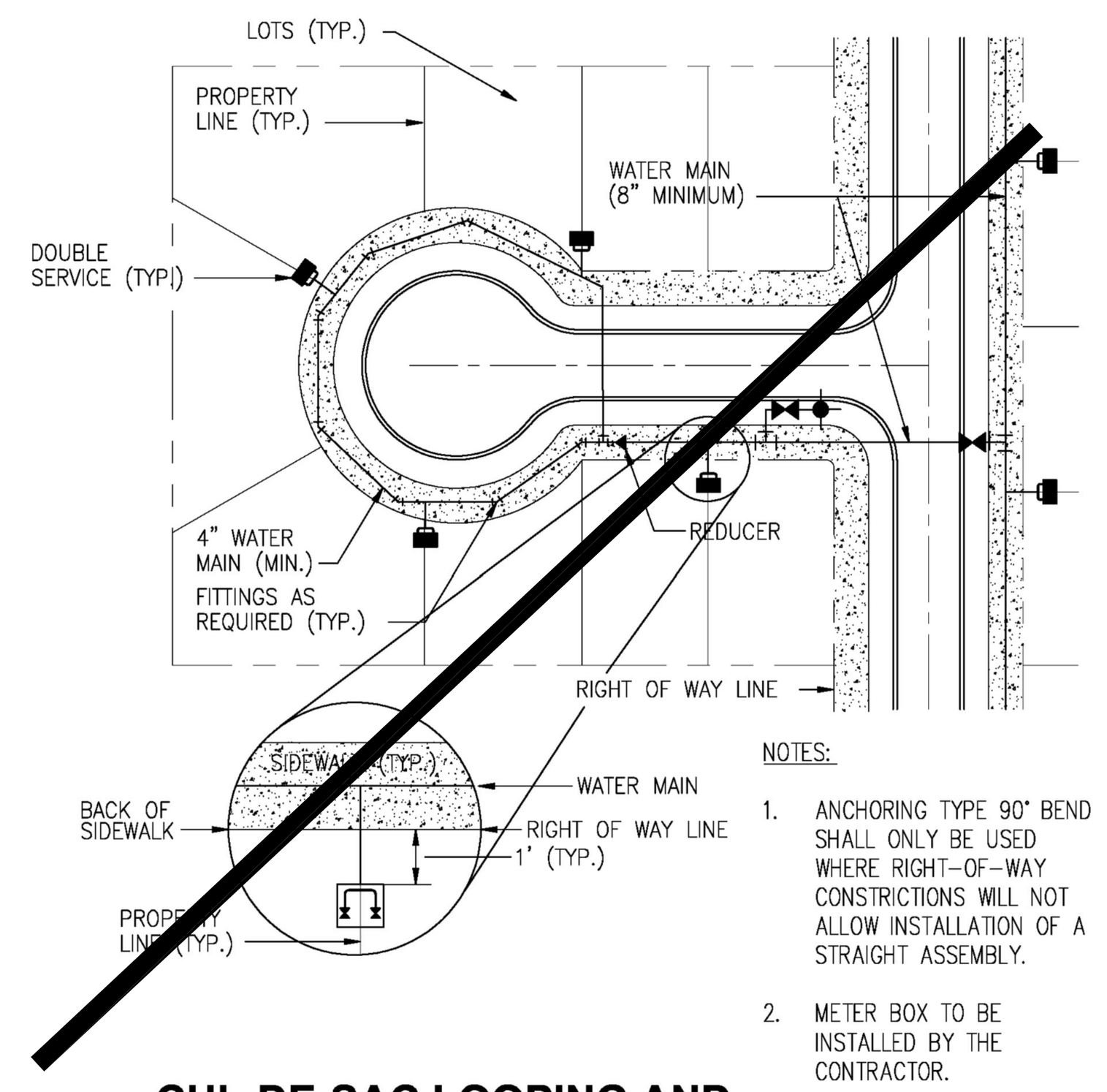
7 VALVE BOX COLLAR
N.T.S.



NOTES:

1. ALL FITTINGS BETWEEN THE WATER MAIN AND THE METER COUPLING SHALL BE BRASS WITH COMPRESSION/PACK JOINT CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE IN A METER BOX ASSEMBLY, WHICH SHALL BE PLACED TO GRADE IN THE UTILITY EASEMENT AT THE PROPERTY LINE(S) OF THE LOT(S) TO BE SERVED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION TO AND INCLUDING THE METER BOX ASSEMBLY. THE CITY SHALL FURNISH THE METER AND THE TAIL PIECE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING THE METER BOX ASSEMBLY TO FINISH GRADE AND MAKING ANY GRADE ADJUSTMENTS TO THE METER BOX IF REGRADING OCCURS.
5. ALL SERVICE LINES SHALL BE POLY ENDOTRACE PIPE AND SHALL BE BLUE IN COLOR W/WIRE.
6. THE POINT OF CONNECTION IS LOCATED ONE FOOT BEYOND THE METER BOX. THE PLUMBER/CUSTOMER SHALL BE RESPONSIBLE FOR MAINTENANCE BEYOND THE POINT OF CONNECTION.
7. IN NO CASE IS METER TO BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.

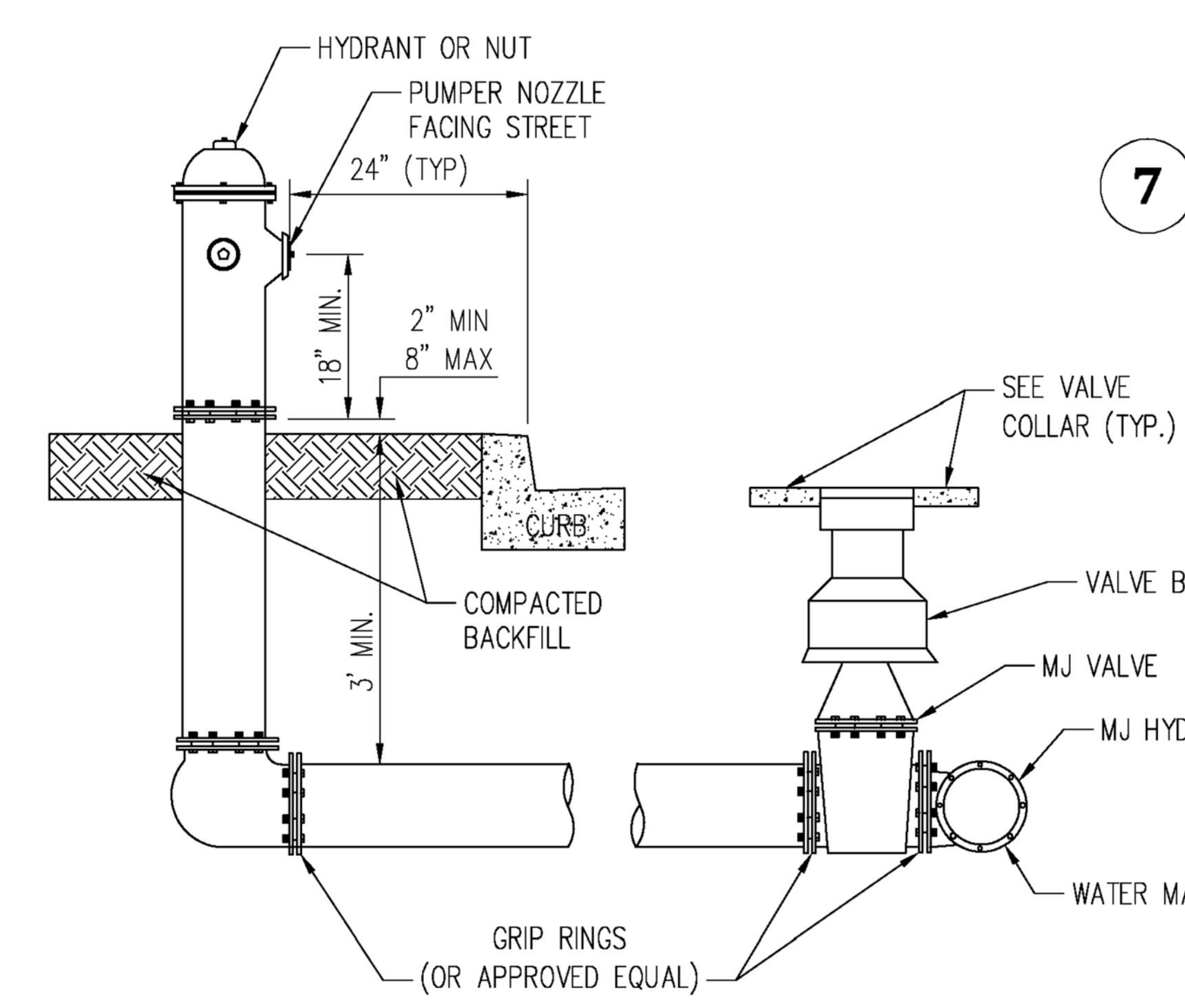
8 WATER SERVICE DETAIL
N.T.S.



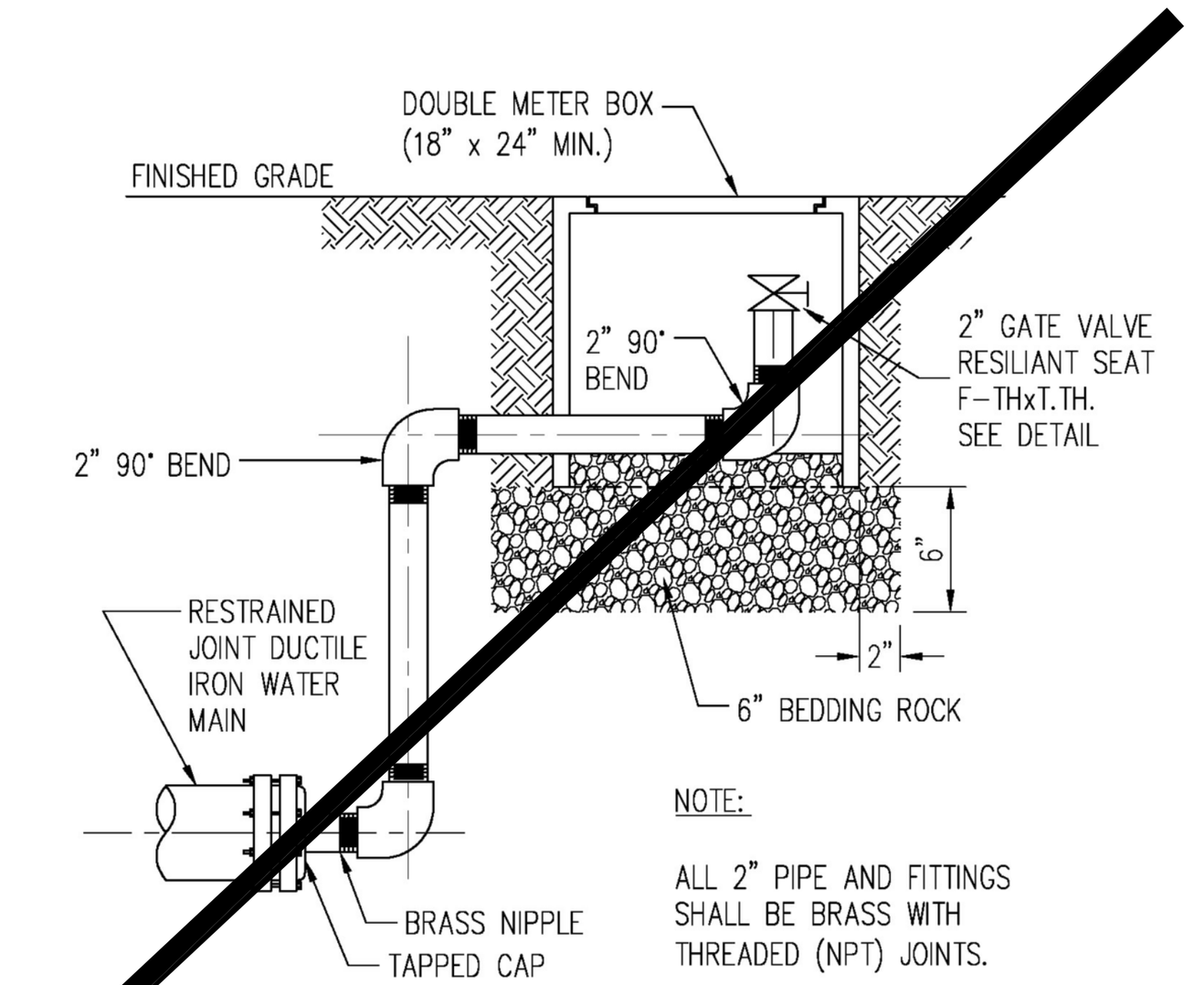
NOTES:

1. ANCHORING TYPE 90° BEND SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRICTIONS WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.
2. METER BOX TO BE INSTALLED BY THE CONTRACTOR.

5 CUL-DE-SAC LOOPING AND METER BOX PLACEMENT DETAIL
N.T.S.



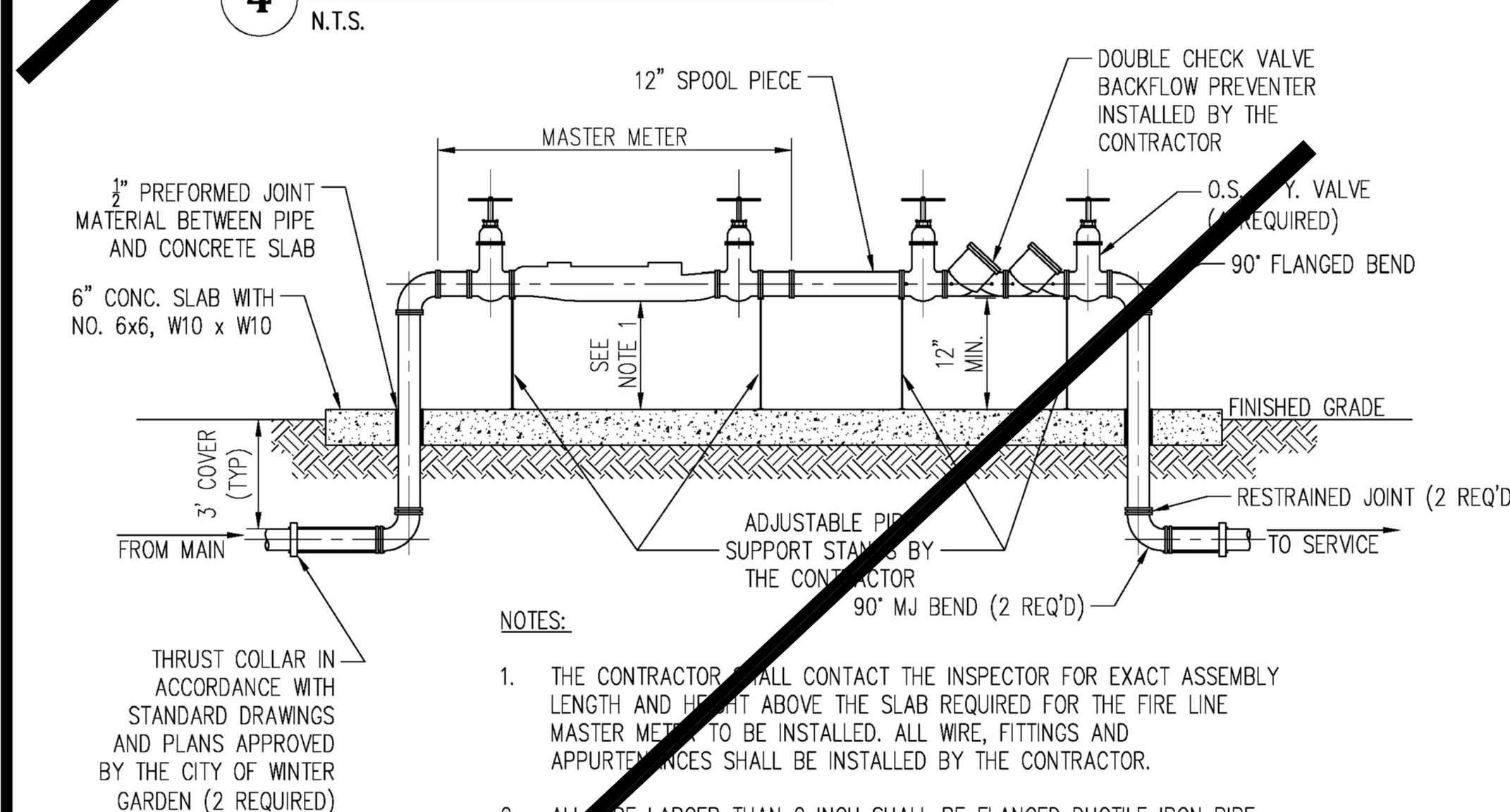
6 FIRE HYDRANT ASSEMBLY
N.T.S.



NOTE:

ALL 2" PIPE AND FITTINGS SHALL BE BRASS WITH THREADED (NPT) JOINTS.

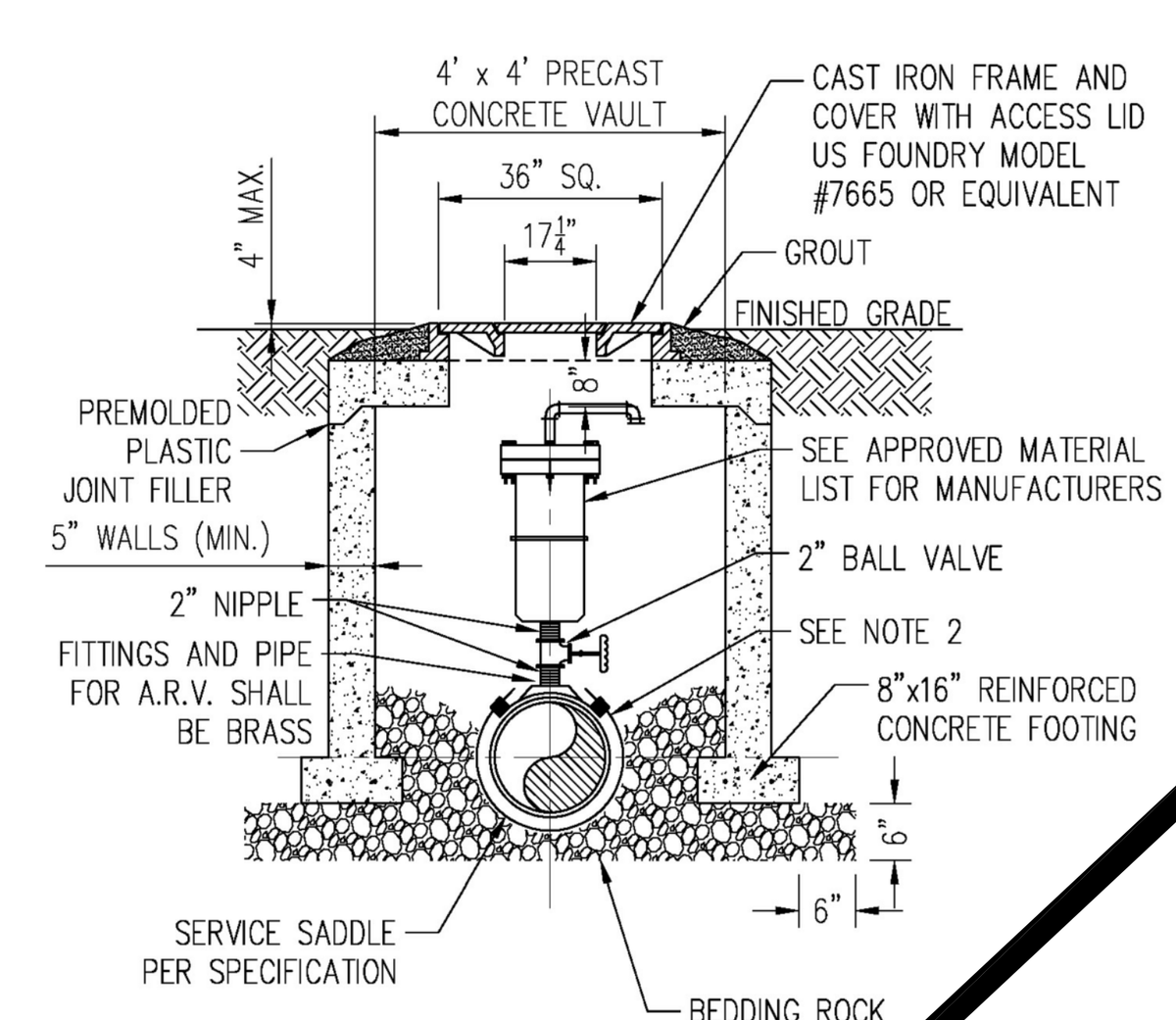
4 BLOWOFF VALVE DETAIL
N.T.S.



NOTES:

1. THE CONTRACTOR SHALL CONTACT THE INSPECTOR FOR EXACT ASSEMBLY LENGTH AND HEIGHT ABOVE THE SLAB REQUIRED FOR THE FIRE LINE MASTER METER TO BE INSTALLED. ALL WIRE, FITTINGS AND APPURTENANCES SHALL BE INSTALLED BY THE CONTRACTOR.
2. ALL PIPE LARGER THAN 2 INCH SHALL BE FLANGED DUCTILE IRON PIPE.
3. SENSUS METER REQUIRED.
4. 2" BYPASS METER SHALL BE CONSTRUCTED ON ALL MASTER METER ASSEMBLIES THREE INCHES AND LARGER.

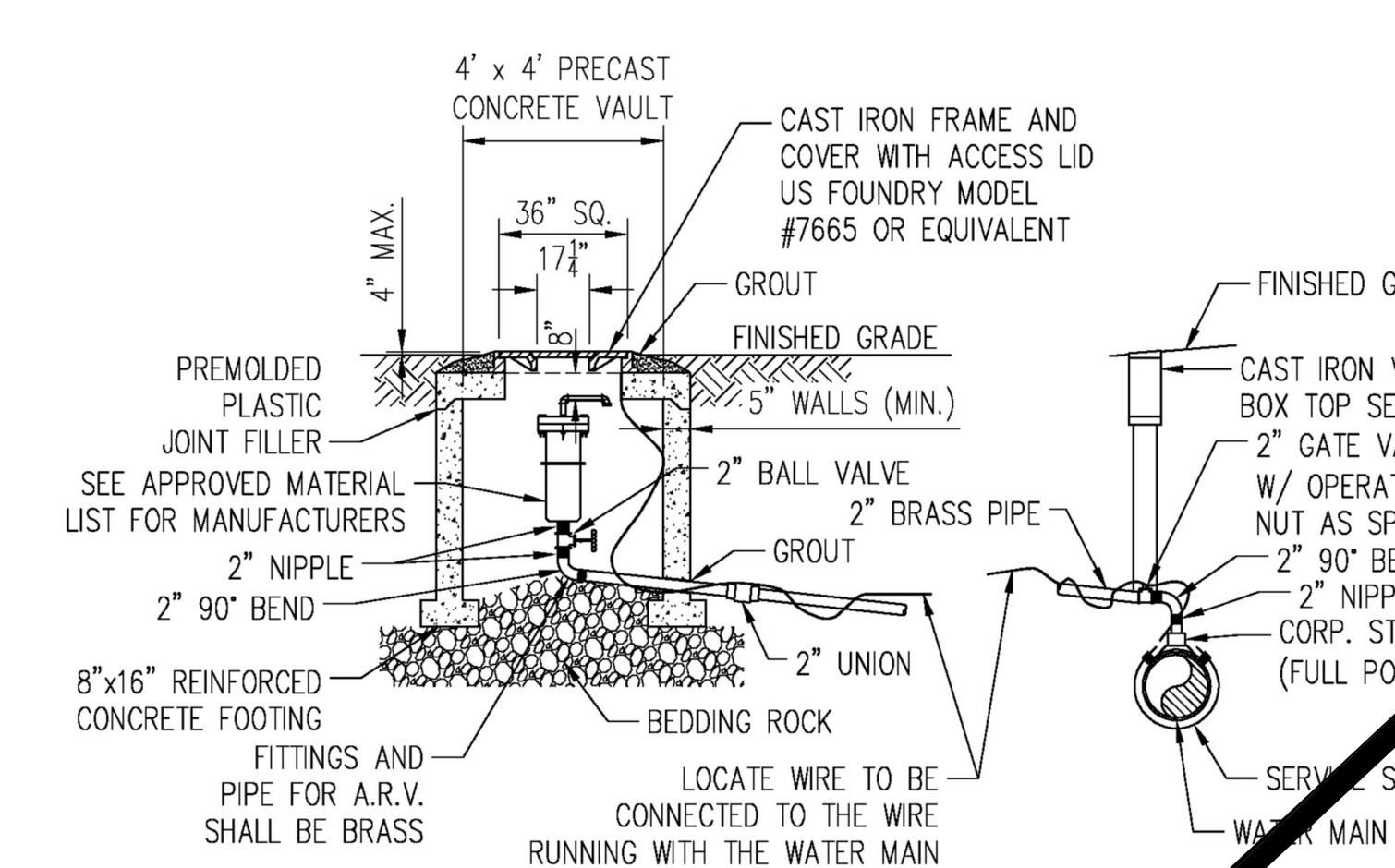
9 MASTER METER ASSEMBLY
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 3.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION AND "POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.

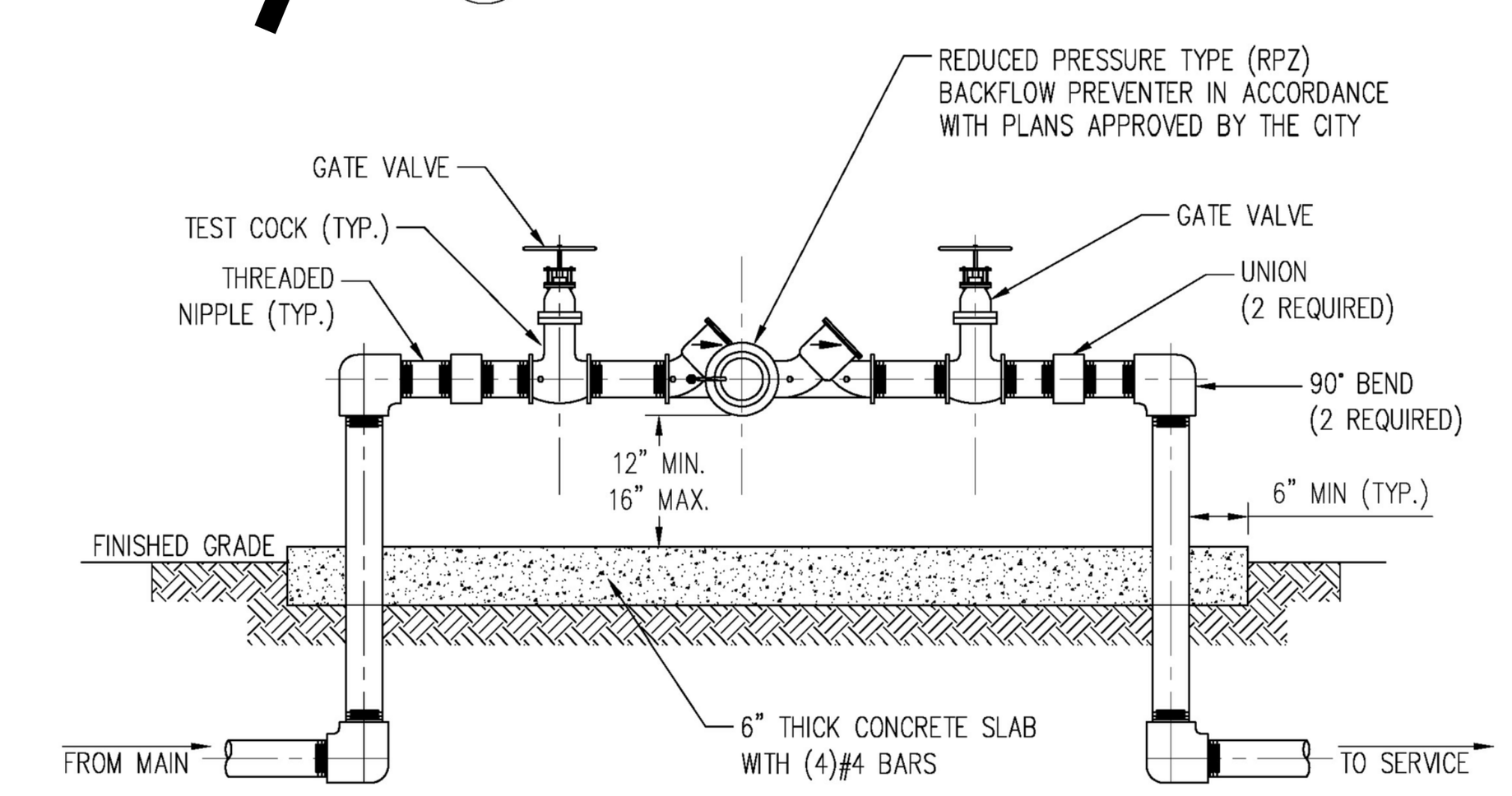
10 AIR RELEASE VALVE & VAULT
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION, "SEWER" "RECLAIMED WATER OR POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.
8. LOCATE WIRE IN THE ARV VAULT SHALL BE SPLICED TO THE WIRE RUNNING WITH THE WATER MAIN AND EXCESS WIRE TO BE PLACED IN ARV VAULT. THE POINT OF CONNECTION AT THE MAIN SHALL HAVE A WATER PROOF CONNECTOR.

11 OFFSET AIR RELEASE VALVE ASSEMBLY
N.T.S.



NOTES:

1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 80 PVC. NO GALVANIZED PIPE WILL BE APPROVED.
2. ALL PIPE LARGER THAN 2" SHALL BE FLANGED DUCTILE IRON PIPE.
3. NO GALVANIZED PIPE ALLOWED.

12 BACKFLOW PREVENTER ASSEMBLY
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	Water Service	4/4/14
2	ARV Detail	4/4/14
3	Service Detail Update	1/24

REVISIONS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR UTILITY CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
POTABLE WATER SYSTEMS

DATE
JANUARY 2024
SHEET
2
2 OF 11

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east south street
orlando, fl 32801
p. 407.850.8557
c. 407.448.8979
mitchcollins@mitchcollinspe.com

DETAILS AND NOTES
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE

WINTER GARDEN, FLORIDA

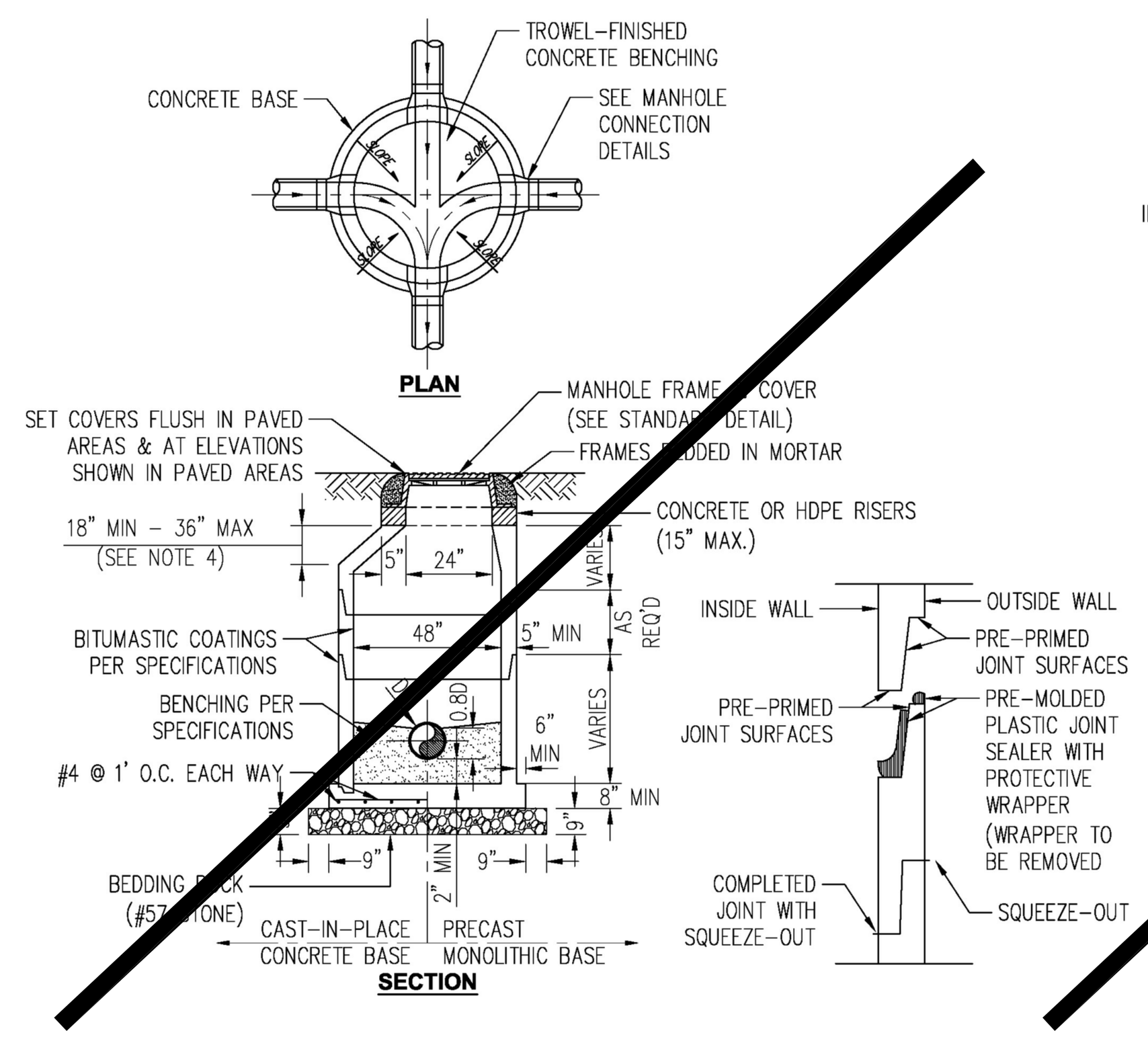
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608,
STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS
LICENSE
No. 54608
STATE OF FLORIDA
PROFESSIONAL ENGINEER

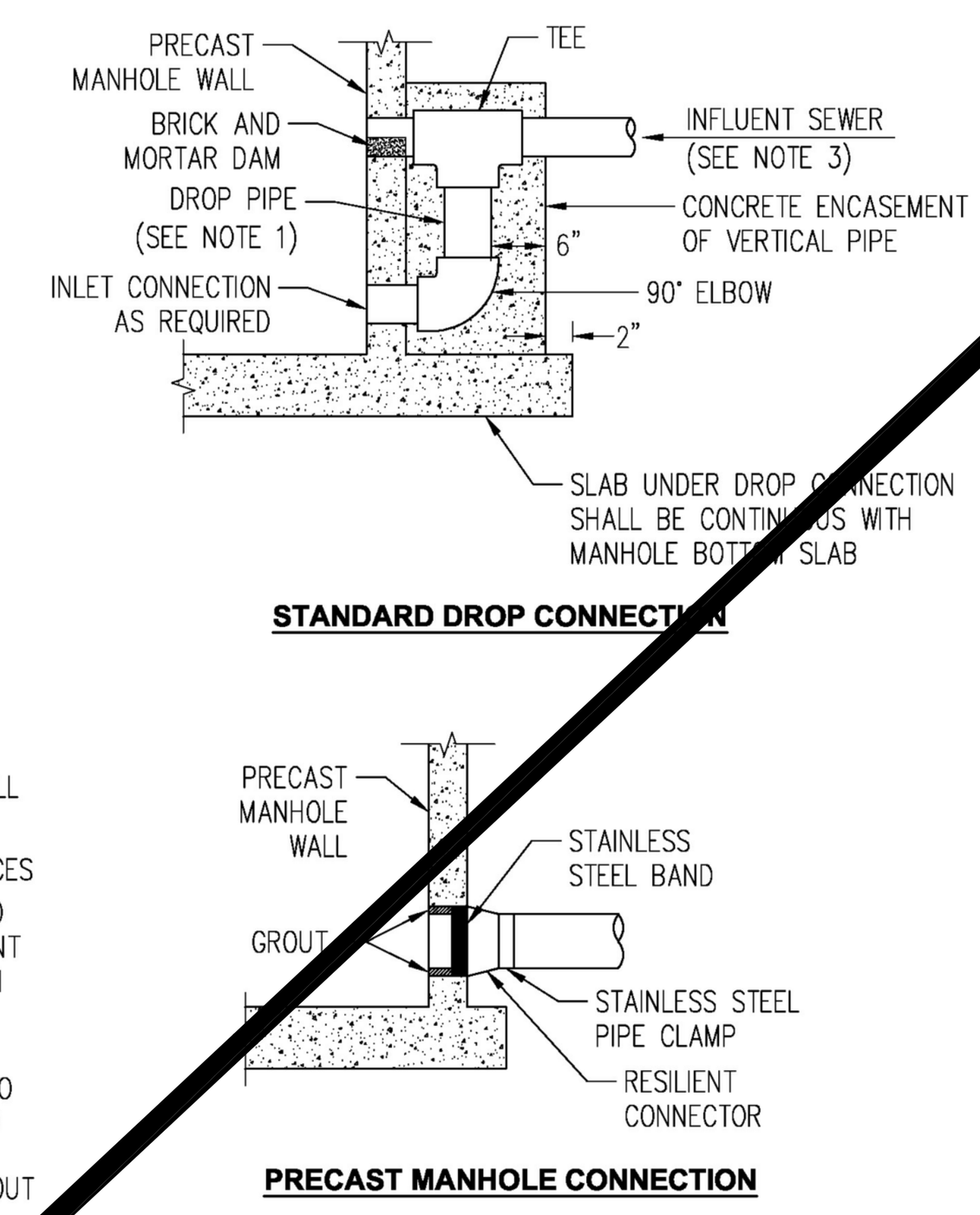
SCALE: AS SHOWN	
DRAWN BY: M.C.	DATE: 9-5-25
CHECKED BY: M.C.	JOB NO: 225-027
SHEET NO: C7 OF C13	



NOTES:

1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS. ALL DROPS TO BE OUTSIDE OF THE MANHOLE.
2. E-Z RAPP OUTSIDE ALL JOINTS
3. GROUT WITH NON-SHRINKING GROUT INSIDE JOINTS
4. NO CONES OVER 3 FT. TALL
5. ALL PRECAST CONCRETE SHALL BE COATED INSIDE AND OUTSIDE WITH COAL TAR EPOXY, MINIMUM 16 MIL DMT.

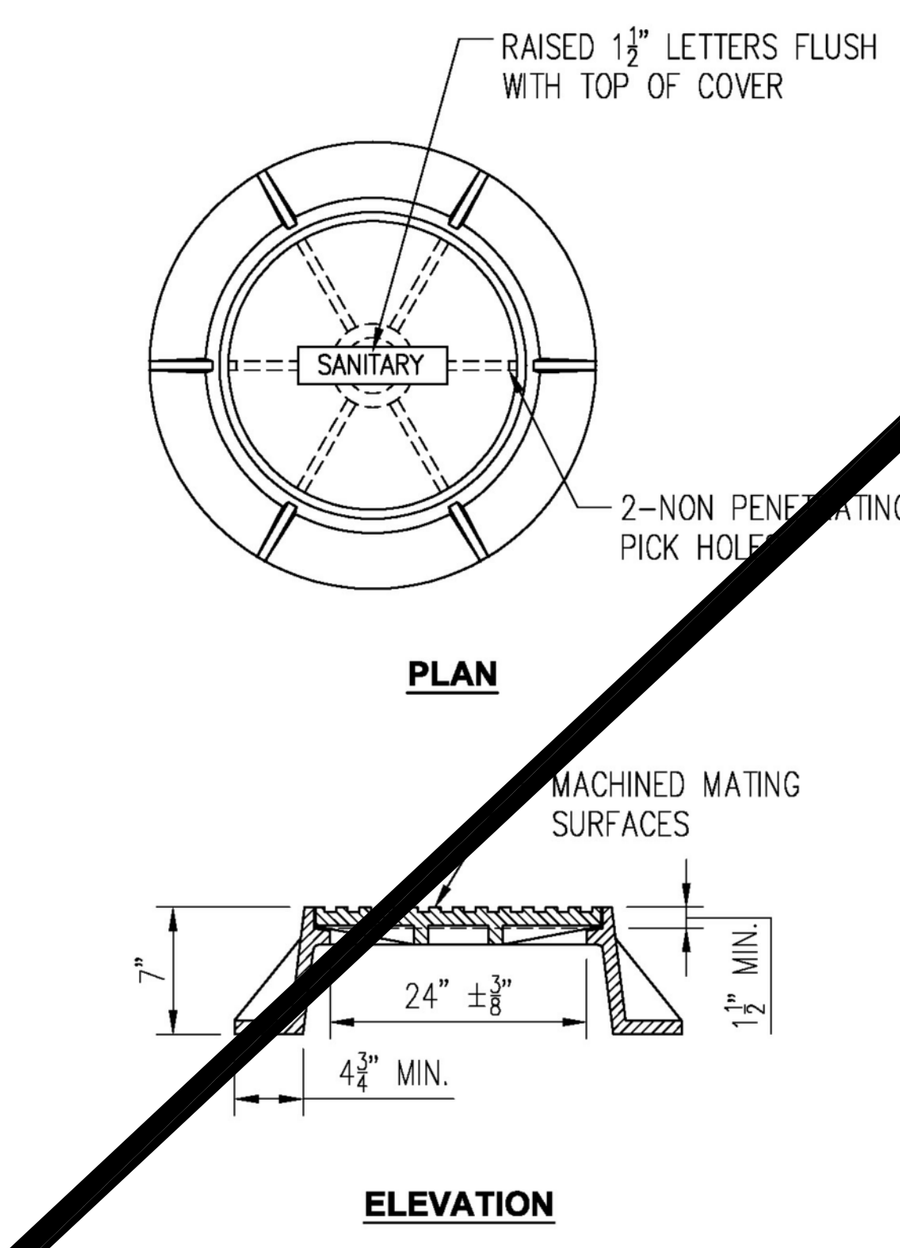
1 PRECAST CONCRETE SANITARY MANHOLE
N.T.S.



NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 2' OR MORE ABOVE THEN MANHOLE INVERT.

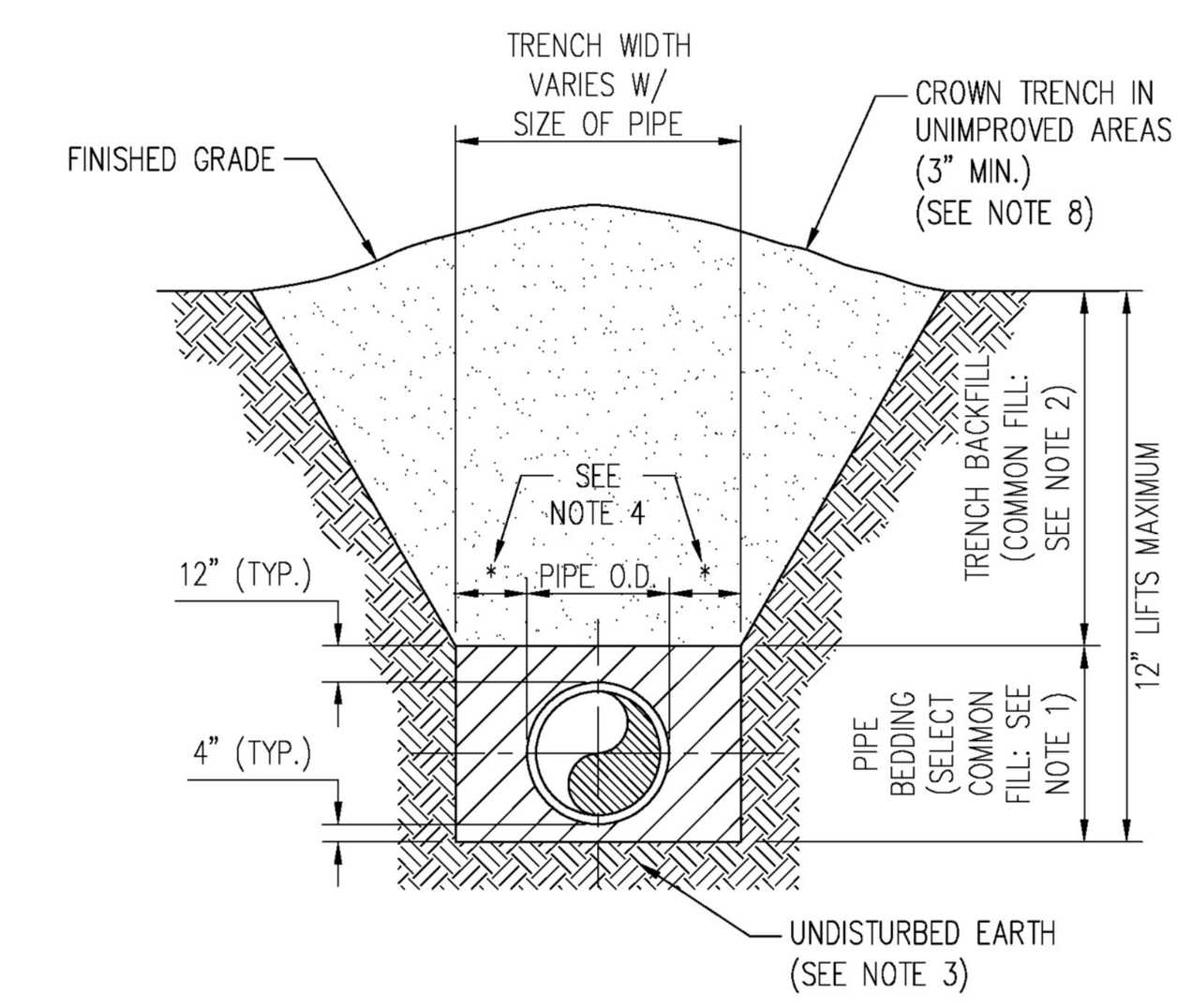
2 MANHOLE CONNECTION DETAIL
N.T.S.



NOTES:

1. MANHOLE FRAME & COVER SHALL BE 24" OPENINGS, USE #AS-225 AS MANUFACTURED BY U.S. FOUNDRY & MFG. CORP. OR COMPOSITE ACCESS PRODUCTS H-25 PRODUCT.
2. RAIN STOPPER LIDS OR RAIN GUARD LIDS (LFVHS) REQUIRED.

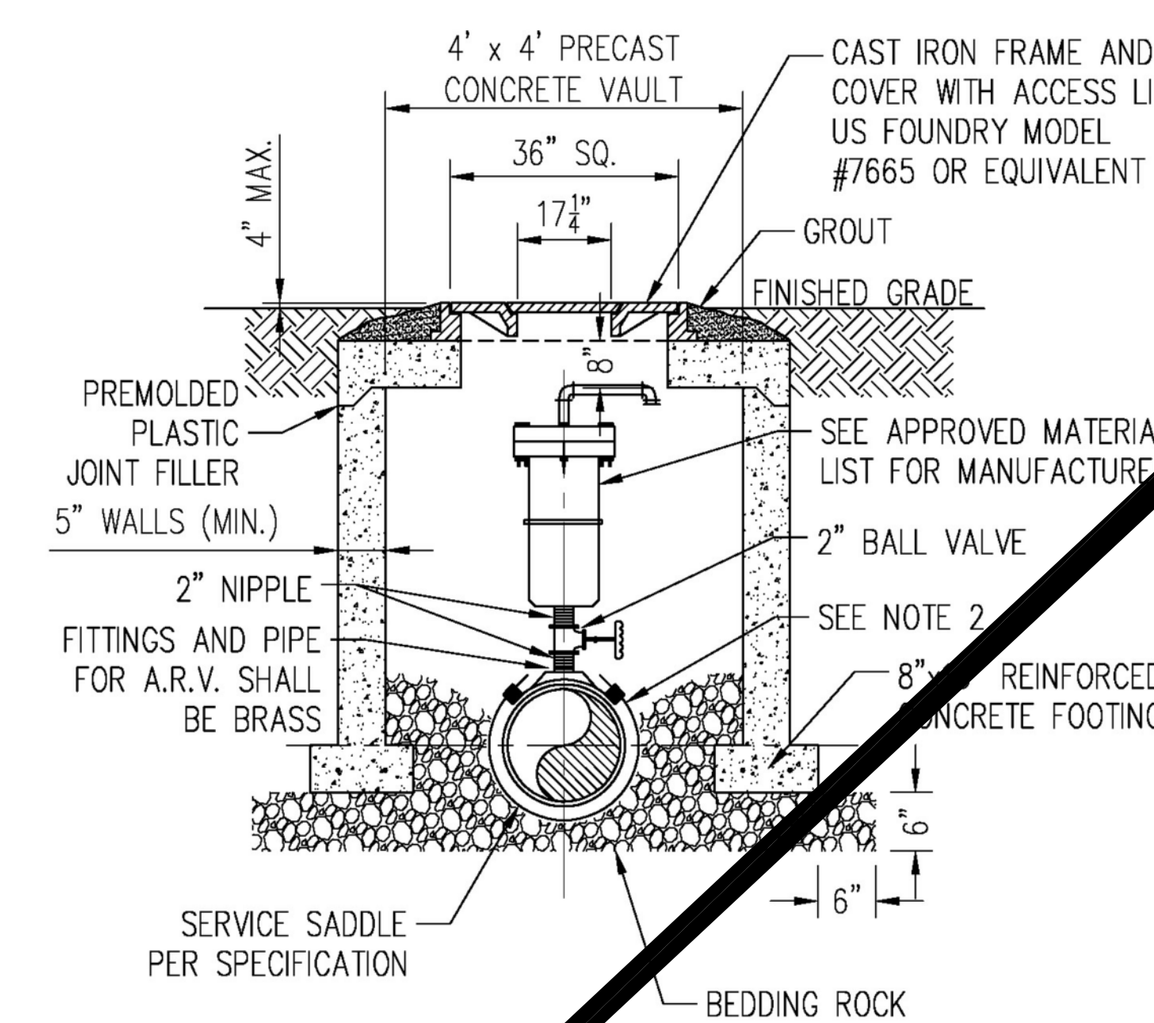
3 MANHOLE FRAME AND COVER
N.T.S.



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING MAY BE REQUIRED AS DIRECTED BY THE CITY OF WINTER GARDEN.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE CITY OF WINTER GARDEN MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

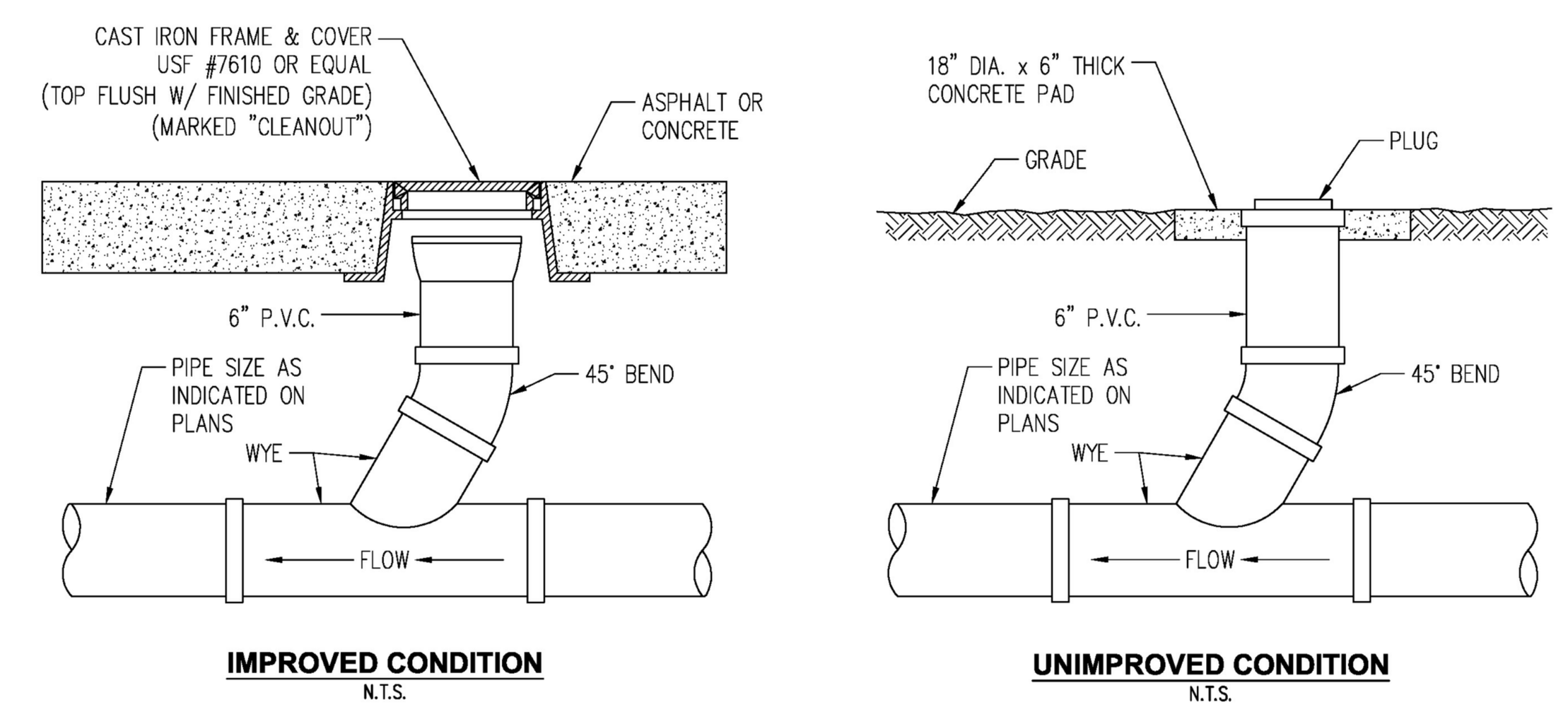
4 STANDARD BEDDING DETAIL
N.T.S.



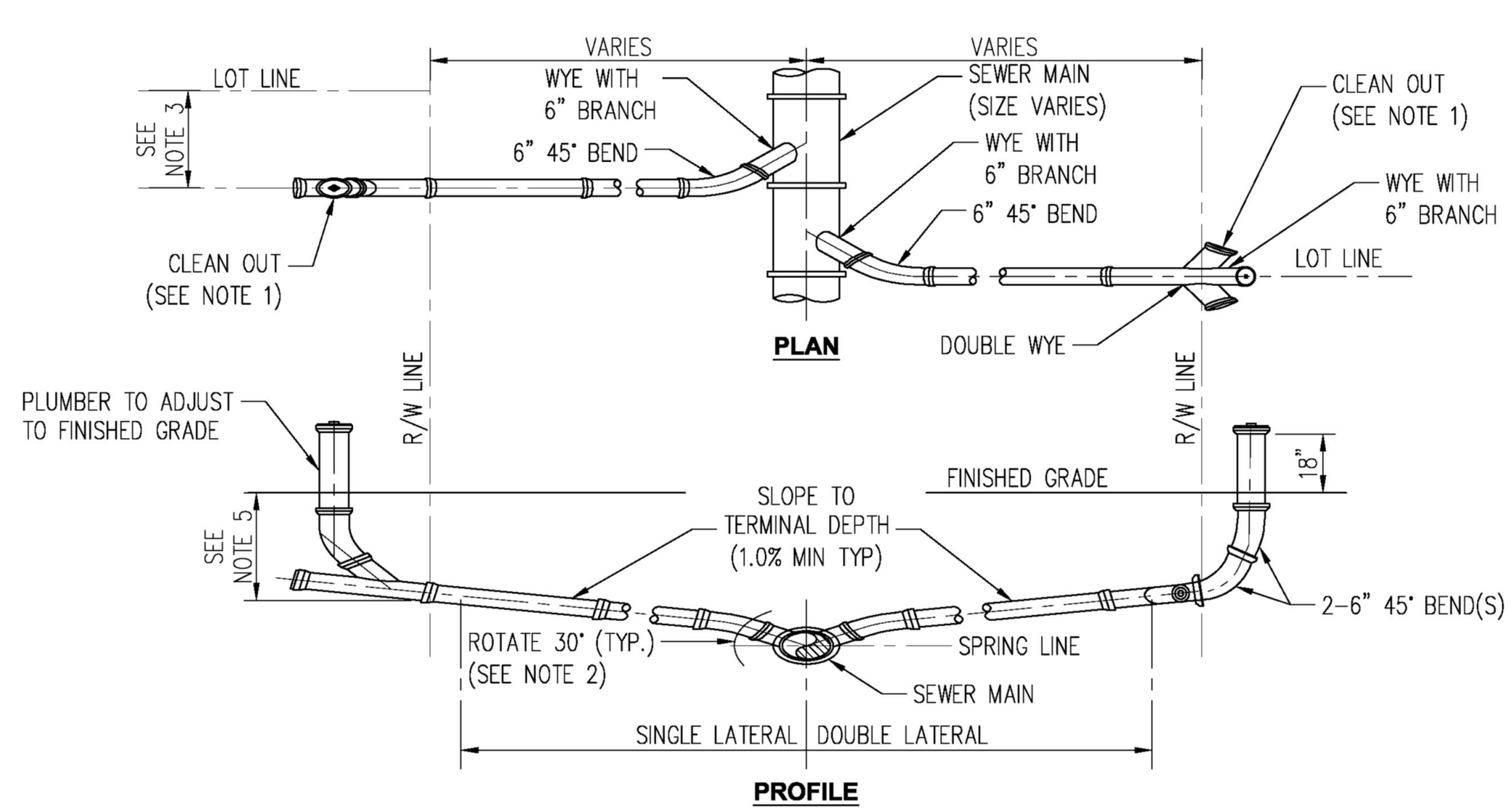
NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 3.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION AND "WASTEWATER".
7. NO GALVANIZED PIPE/VALVES.

5 AIR RELEASE VALVE & VAULT
N.T.S.



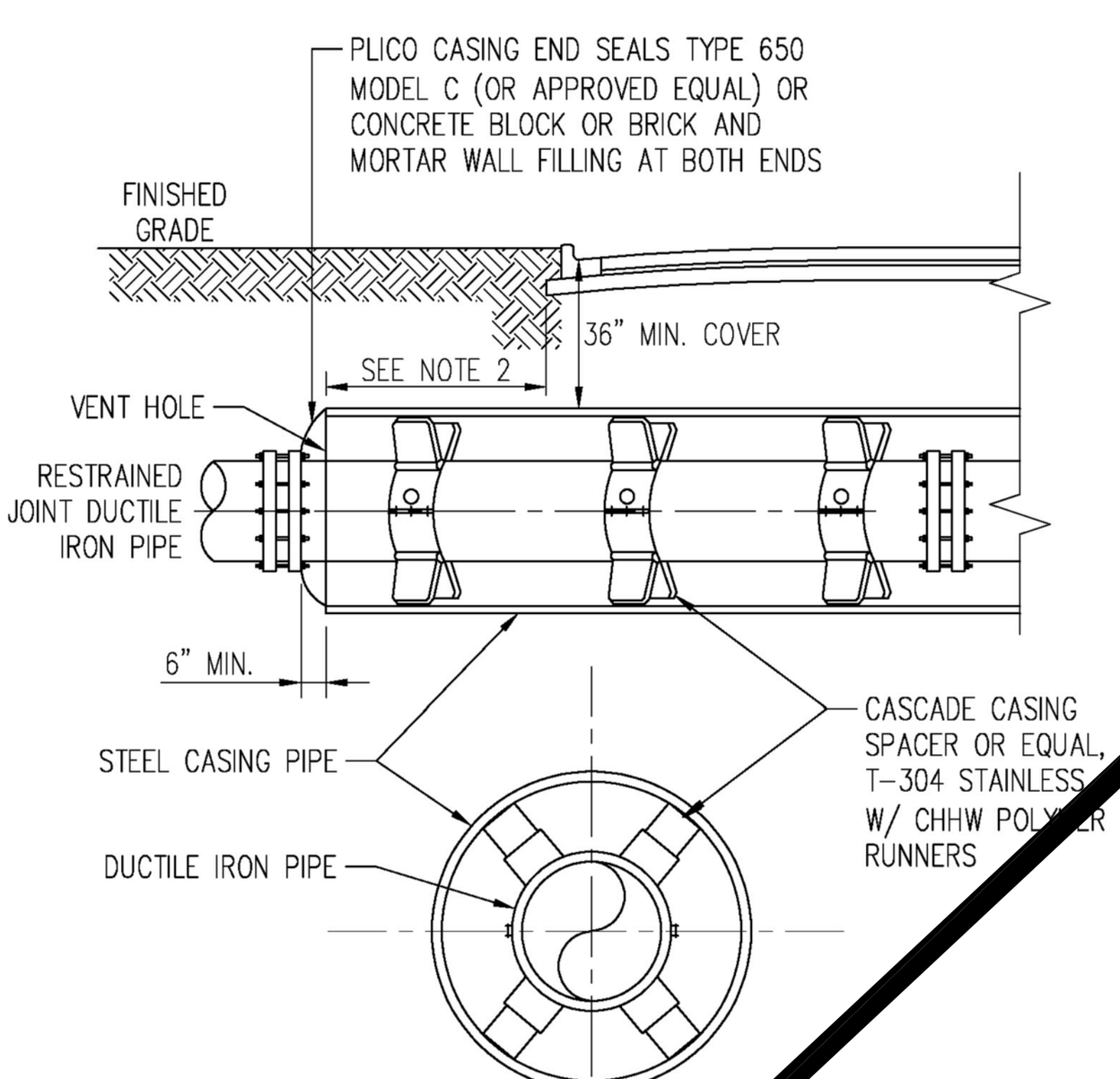
6 SANITARY SEWER CLEAN OUT DETAIL
N.T.S.



NOTES:

1. CLEANOUT SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
3. WYES AND 45° BENDS SHALL BE PVC (SDR 26).
4. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE, 25' MAXIMUM.
5. 4' TYP TERMINAL DEPTH (3' MIN) REQUIRED FOR SERVICE AT RIGHT-OF-WAY.

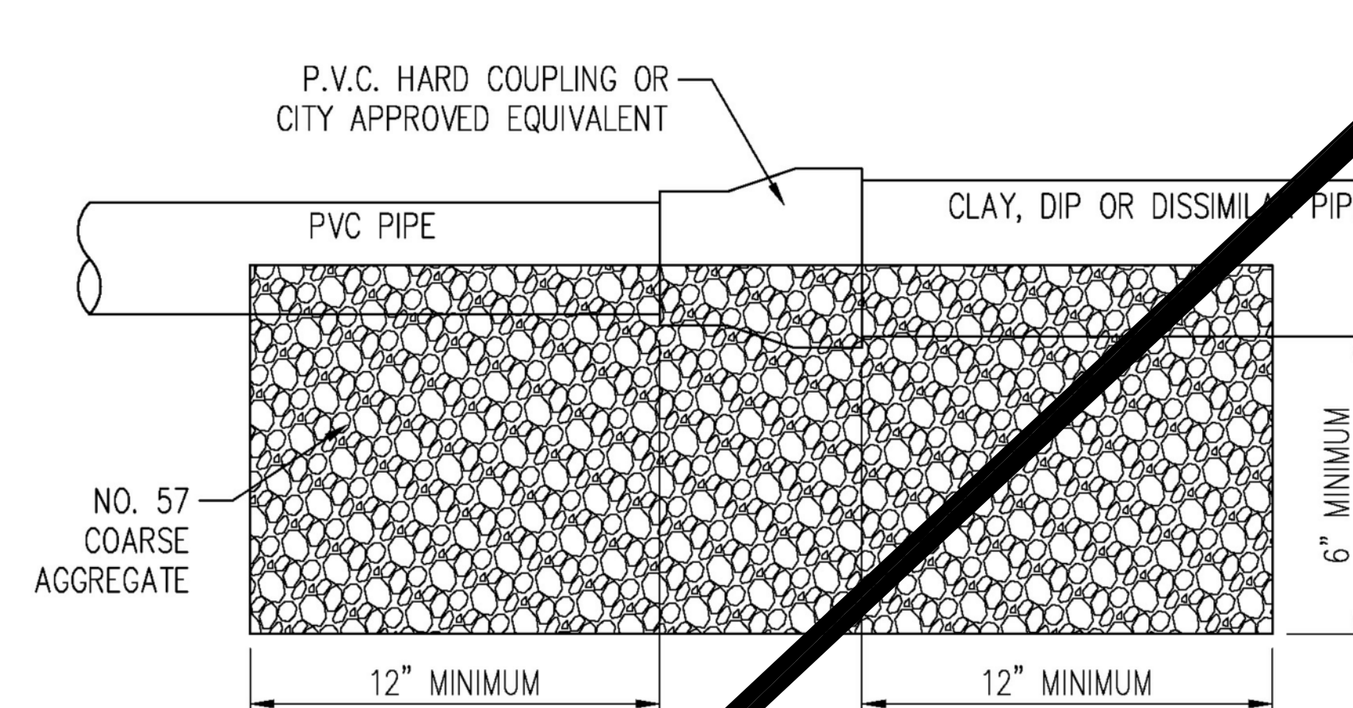
7 SANITARY SEWER SERVICE LATERAL DETAIL
N.T.S.



NOTES:

1. WHERE PRACTICAL, CASING SHALL EXTEND 8' BEYOND EDGE OF PAYMENT AND SHALL NOT BE LESS THAN 6' BEYOND EDGE OF PAYMENT IN ANY CASE.
2. CASING SPACERS AND END SEALS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
3. DESIGN ENGINEER TO DETERMINE NEED FOR SACRIFICIAL ANODE (S) FOR CORROSION CONTROL.

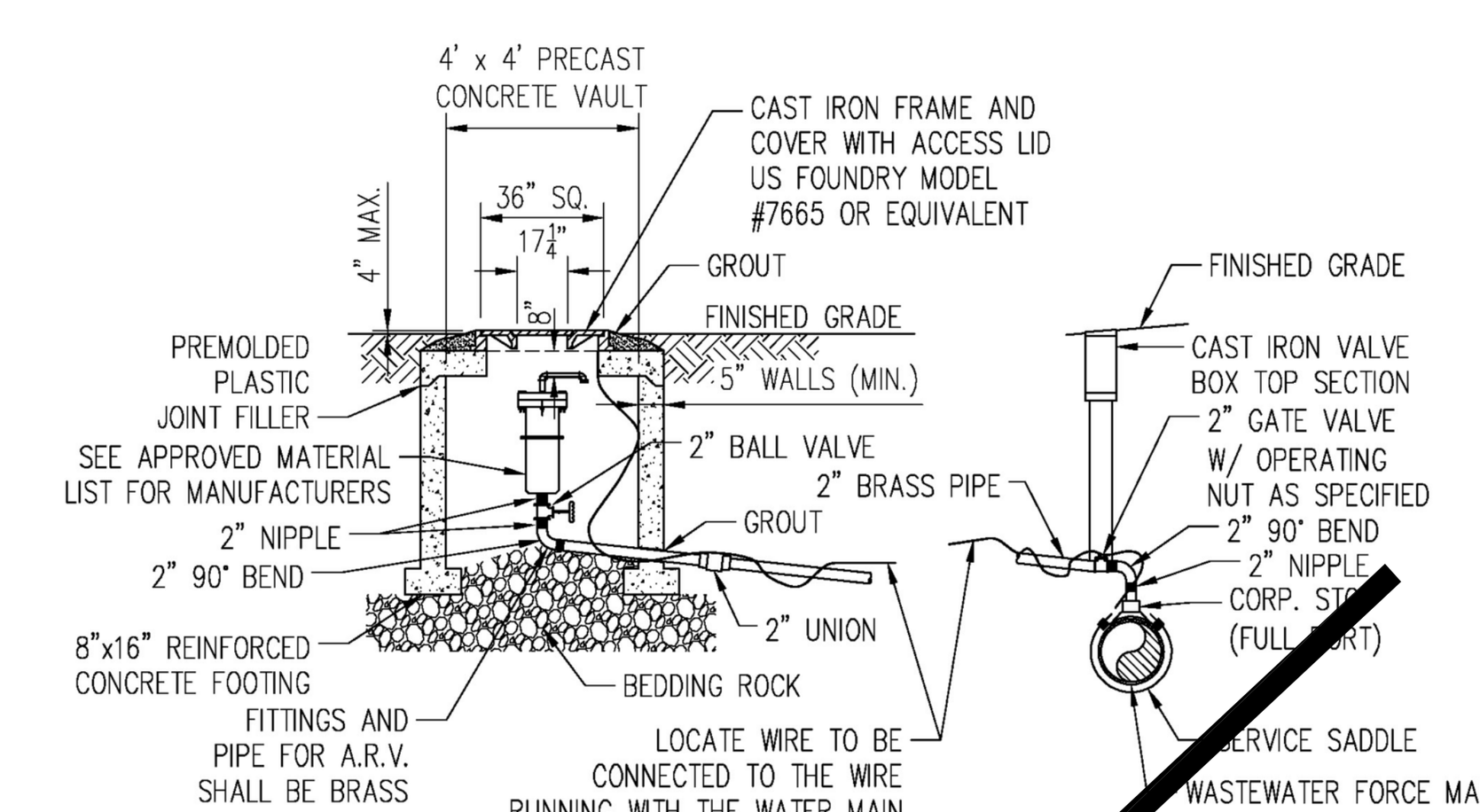
8 SEWER MAIN STEEL CASING DETAIL
N.T.S.



NOTE:

1. FIELD VERIFY MATERIALS OF EXISTING PIPES TO SELECT PROPER CONNECTOR.
2. HARD COUPLING OR APPROVED EQUIVALENT FOR ALL PIPE MATERIALS, UNLESS APPROVED IN WRITING BY THE CITY.

9 SEWER MAIN CONNECTION DETAIL
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION, "SEWER" "RECLAIMED WATER OR POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.
8. LOCATE WIRE IN THE ARV VAULT SHALL BE SPLICED TO THE WIRE RUNNING WITH THE MAIN AND EXCESS WIRE TO BE PLACED IN ARV VAULT. THE POINT OF CONNECTION AT THE MAIN SHALL HAVE A WATER PROOF CONNECTOR.

10 OFFSET AIR RELEASE VALVE ASSEMBLY
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	Sanitary Manhole	4/7/14
2	Offset ARV Detail	4/7/14
3	MH Ring & Cover	1/24

REVISIONS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR UTILITY CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
WASTEWATER SYSTEMS

DATE
JANUARY 2024
SHEET
3
3 OF 11

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east south street
orlando, fl 32801
p. 407.850.8557
c. 407.448.8979
mitchcollins@mitchcollinspe.com

DETAILS AND NOTES
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE
WINTER GARDEN, FLORIDA

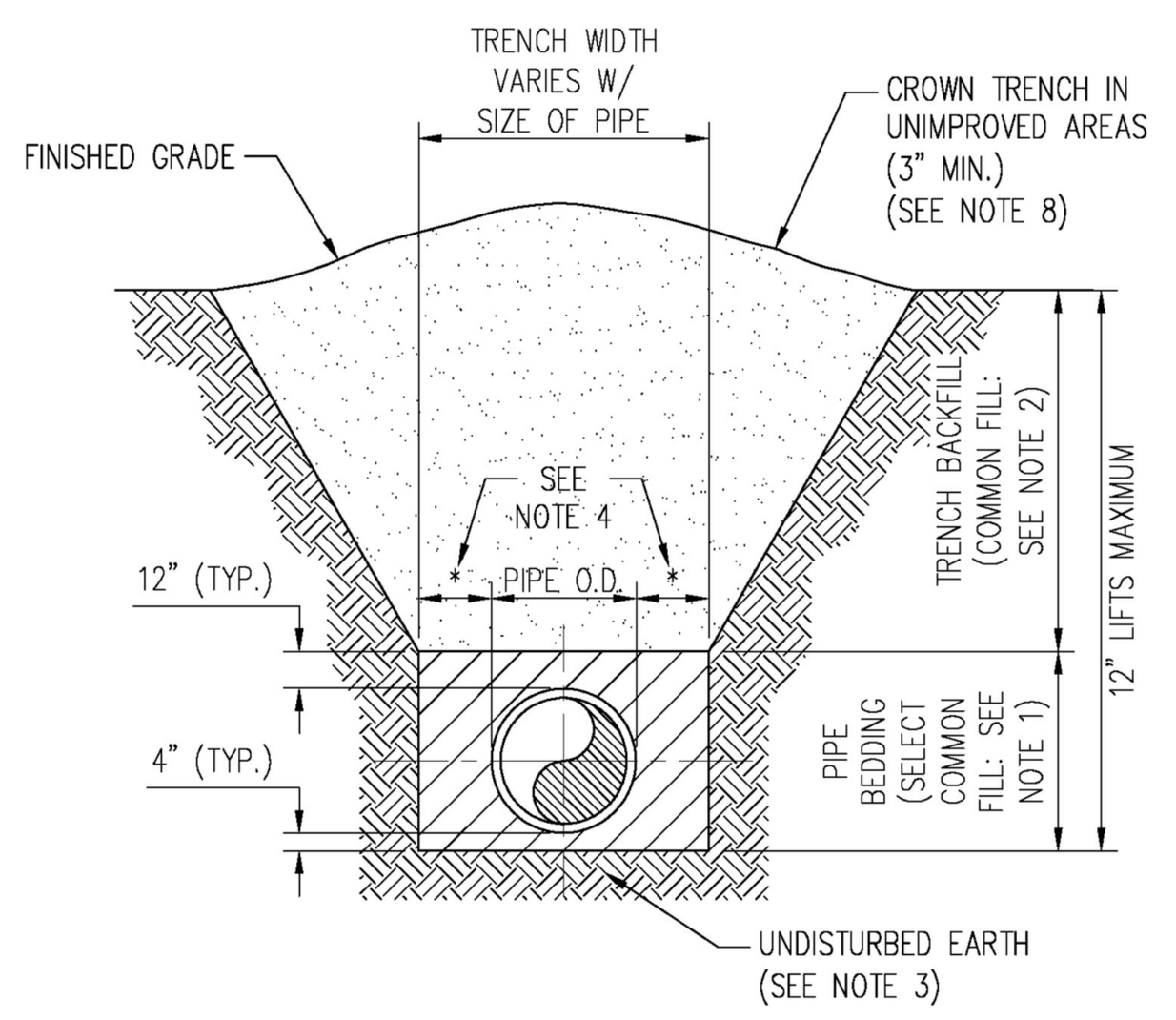
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608,
STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS LICENSE No. 54608 STATE OF FLORIDA PROFESSIONAL ENGINEER

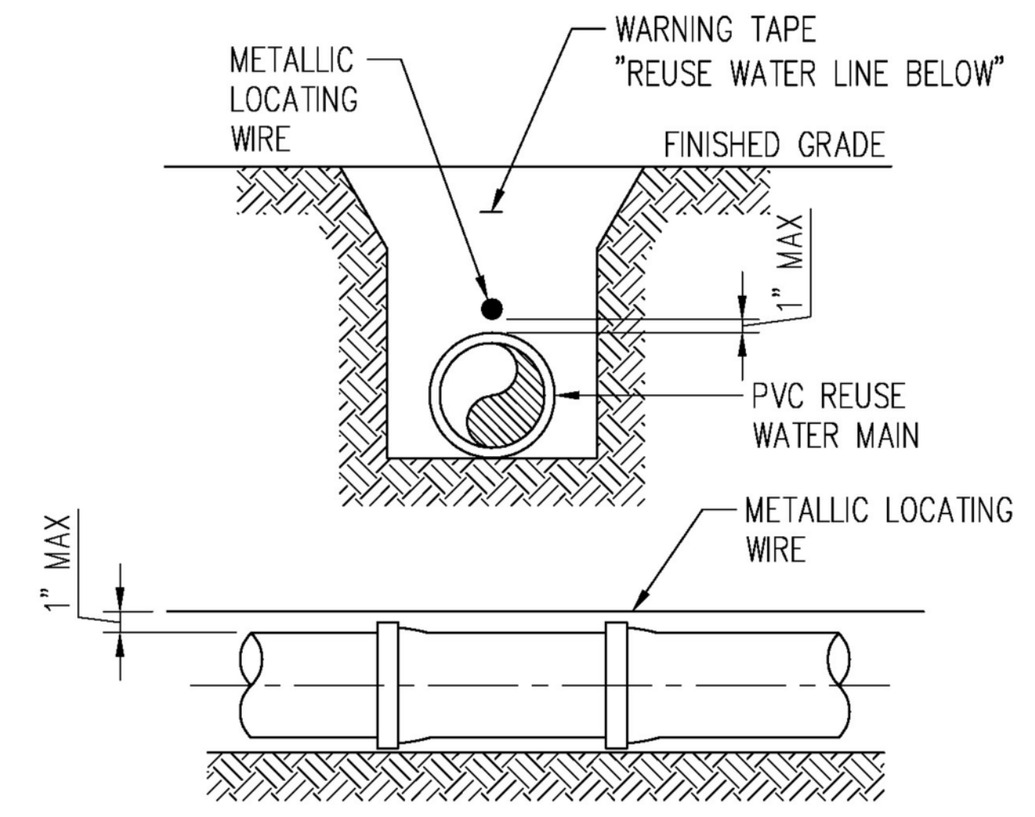
SCALE: AS SHOWN	
DRAWN BY: M.C.	DATE: 9-5-25
CHECKED BY: M.C.	JOB NO: 225-027
SHEET NO: C8 OF C13	



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING MAY BE REQUIRED AS DIRECTED BY THE CITY OF WINTER GARDEN.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE CITY OF WINTER GARDEN MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

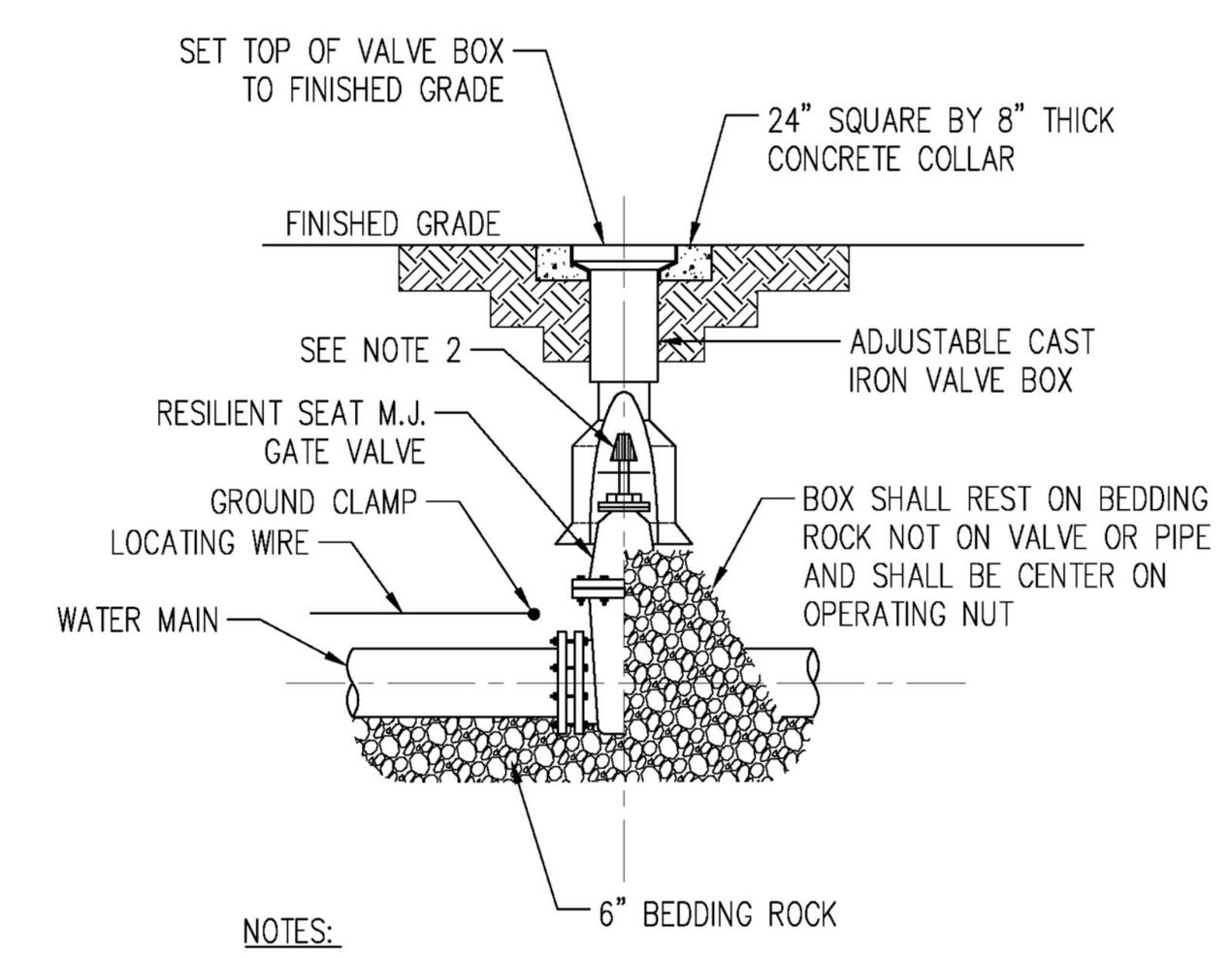
1 STANDARD BEDDING DETAIL
N.T.S.



NOTES:

1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE ATTACHED TO THE TOP OF PIPE WITH DUCT TAPE, AT LEAST 5 TIMES PER JOINT.
2. LOCATING ROD SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING ABOVE TOP OF BOX ½" SO AS NOT TO INTERFERE WITH VALVE OPERATION.

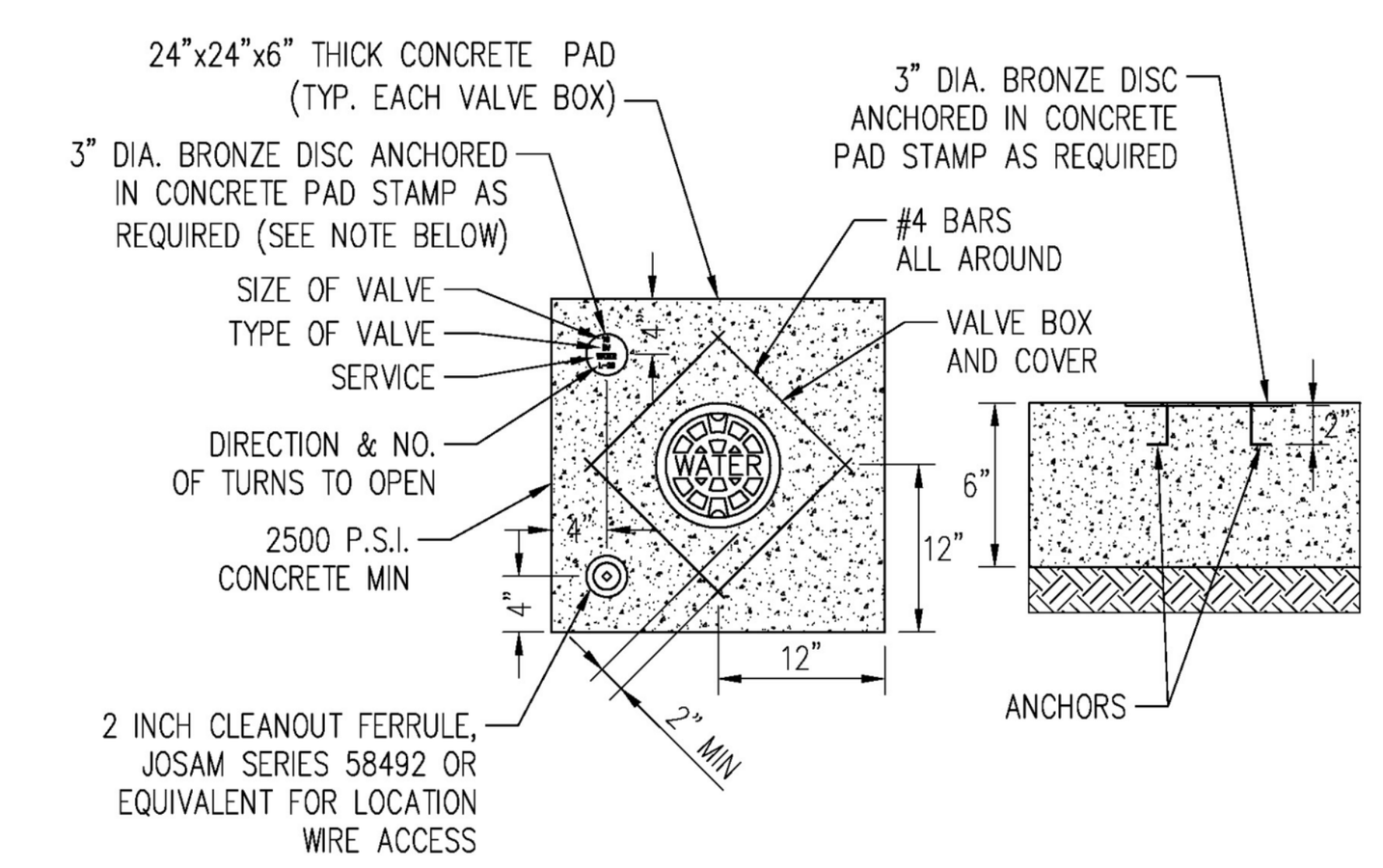
2 PVC PIPE LOCATING WIRE DETAIL
N.T.S.



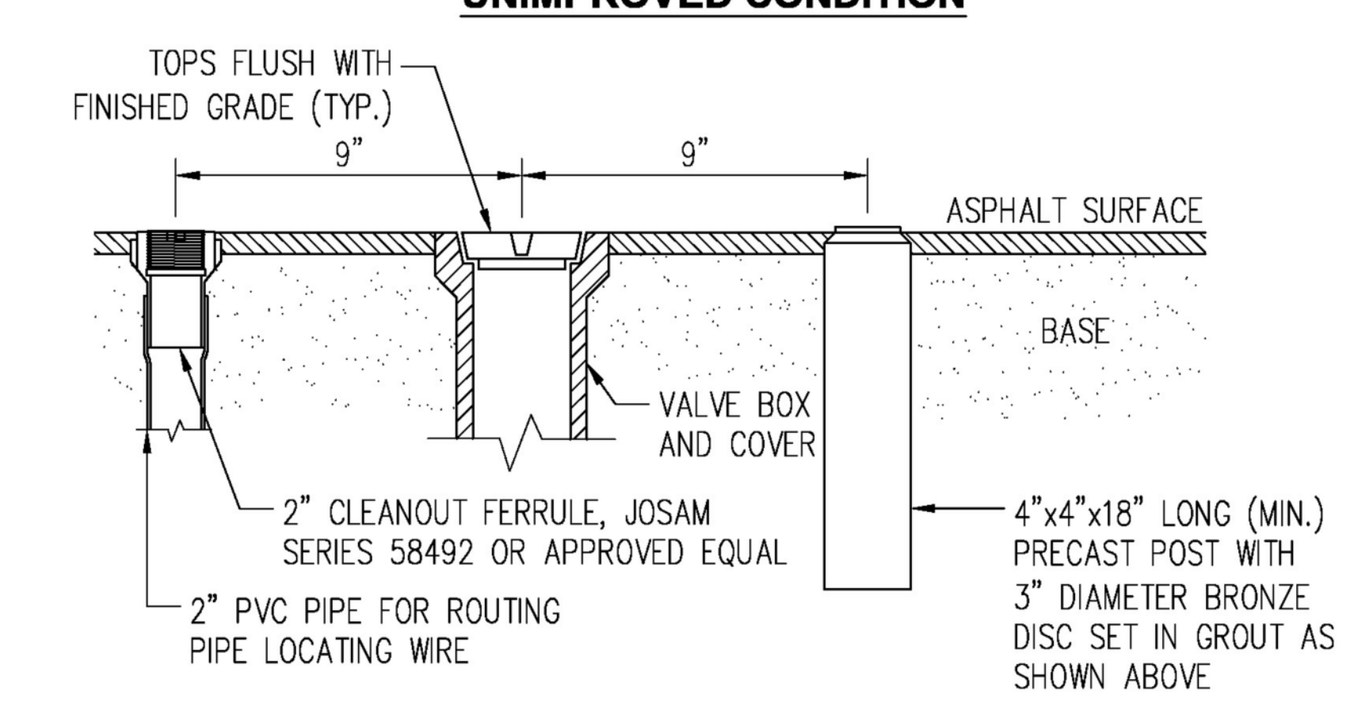
NOTES:

1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.

3 GATE VALVE & BOX DETAIL
N.T.S.



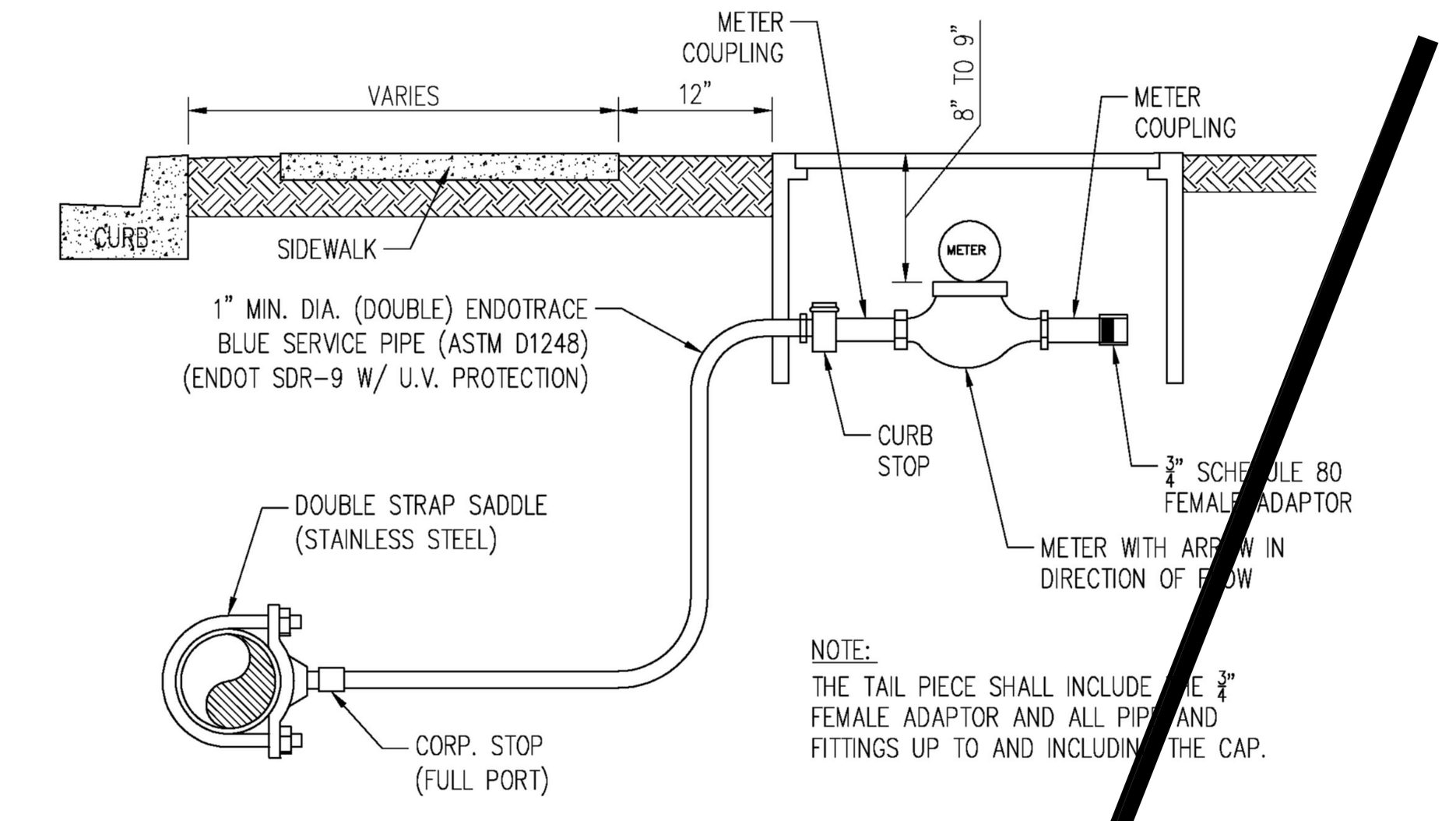
UNIMPROVED CONDITION



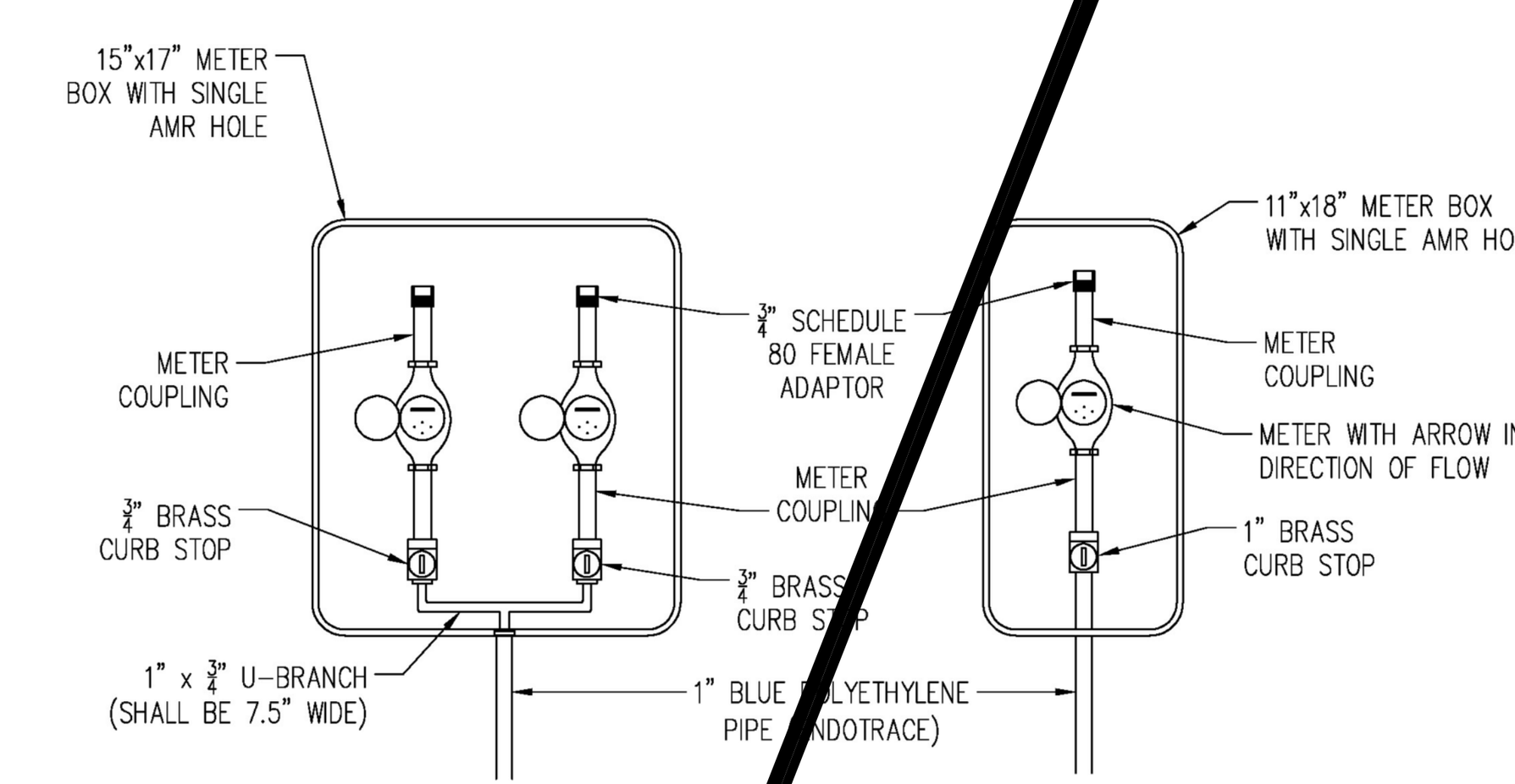
IMPROVED CONDITION

NOTE:
BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.

4 VALVE BOX COLLAR
N.T.S.



SERVICE SECTION
N.T.S.



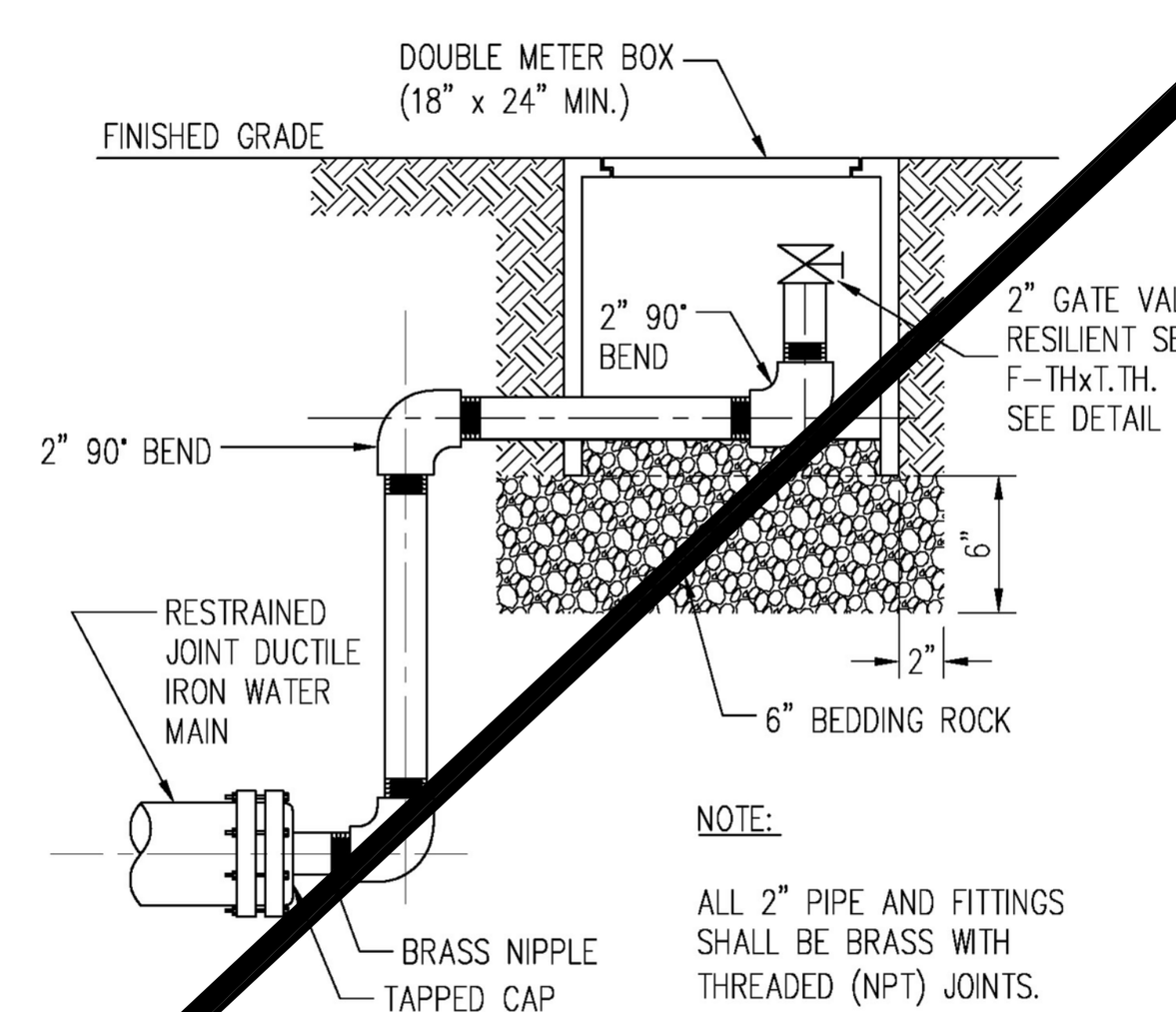
DOUBLE SERVICE (TOP VIEW)
N.T.S.

SINGLE SERVICE (TOP VIEW)
N.T.S.

NOTES:

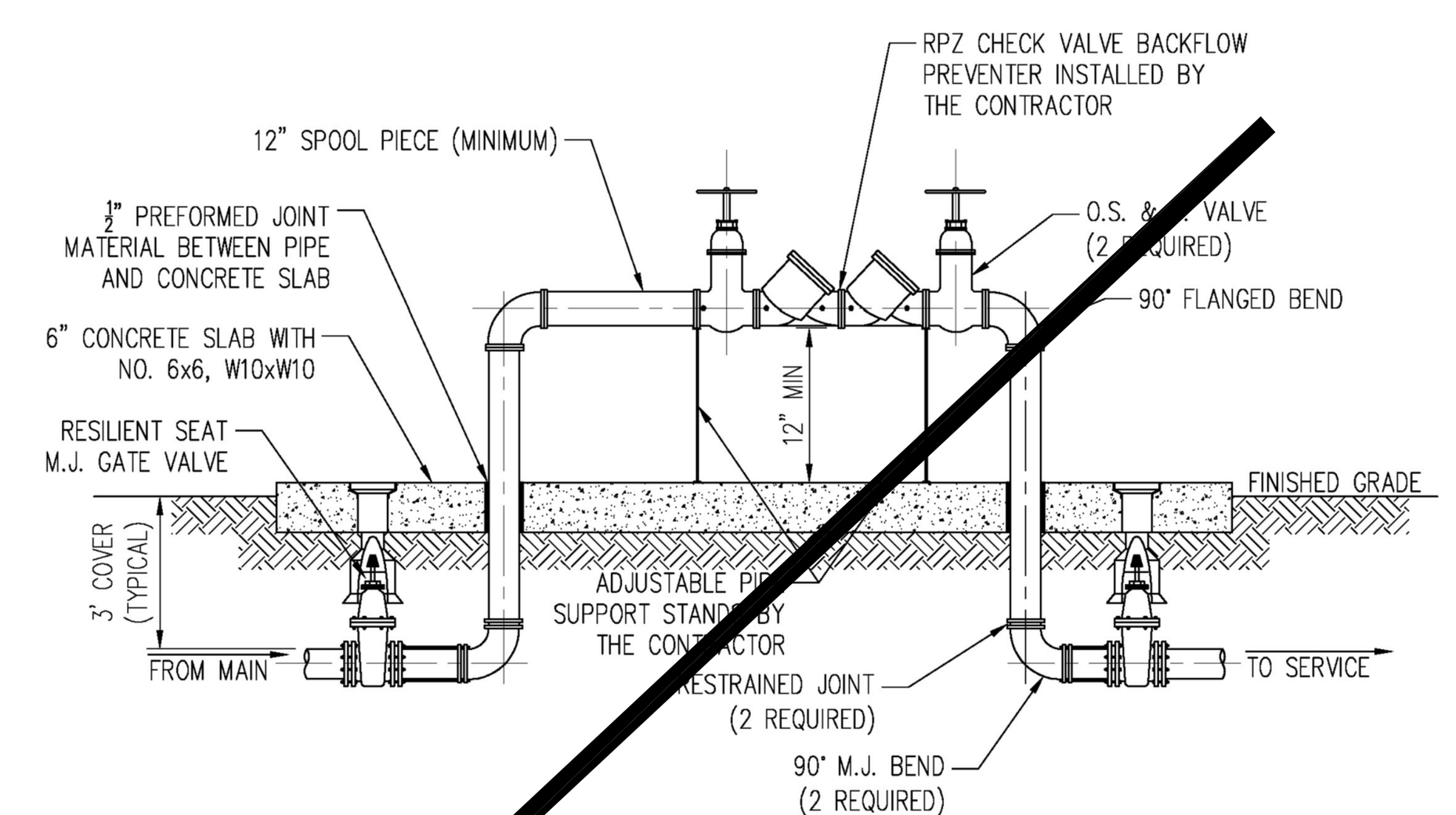
1. ALL FITTINGS BETWEEN THE WATER MAIN AND THE METER COUPLING SHALL BE BRASS WITH COMPRESSION/PACK JOINT CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE IN A METER BOX ASSEMBLY, WHICH SHALL BE PLACED TO GRADE IN THE UTILITY EASEMENT AT THE PROPERTY LINE(S) OF THE LOT(S) TO BE SERVED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION TO AND INCLUDING THE METER BOX ASSEMBLY. THE CITY SHALL FURNISH THE METER AND THE TAIL PIECE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING THE METER BOX ASSEMBLY TO FINISH GRADE AND MAKING ANY GRADE ADJUSTMENTS TO THE METER BOX IF REGRADING OCCURS.
5. ALL SERVICE LINES SHALL BE POLY ENDOTRACE PIPE AND SHALL BE BLUE IN COLOR W/WIRE.
6. THE POINT OF CONNECTION IS LOCATED ONE FOOT BEYOND THE METER BOX. THE PLUMBER/CUSTOMER SHALL BE RESPONSIBLE FOR MAINTENANCE BEYOND THE POINT OF CONNECTION.
7. IN NO CASE IS METER TO BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.

6 WATER SERVICE DETAIL
N.T.S.



NOTE:
ALL 2" PIPE AND FITTINGS SHALL BE BRASS WITH THREADED (NPT) JOINTS.

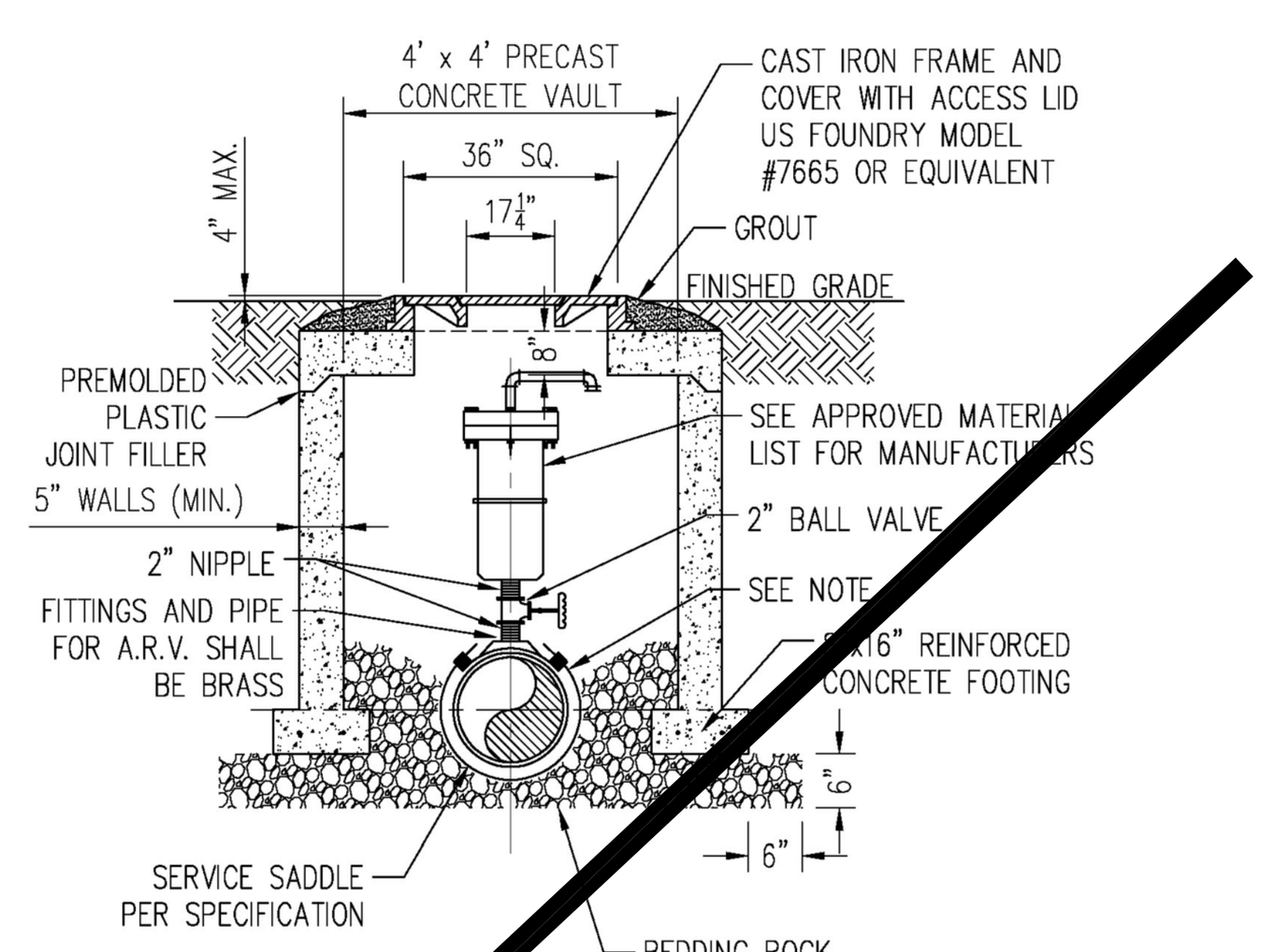
5 BLOWOFF VALVE DETAIL
N.T.S.



NOTES:

1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 80 PVC. NO GALVANIZED PIPE ALLOWED.
2. ALL PIPE LARGER THAN 2 INCH SHALL BE FLANGED DUCTILE IRON PIPE.
3. RECLAIMED WATER JUMPER SHALL BE SIZE ON SIZE.

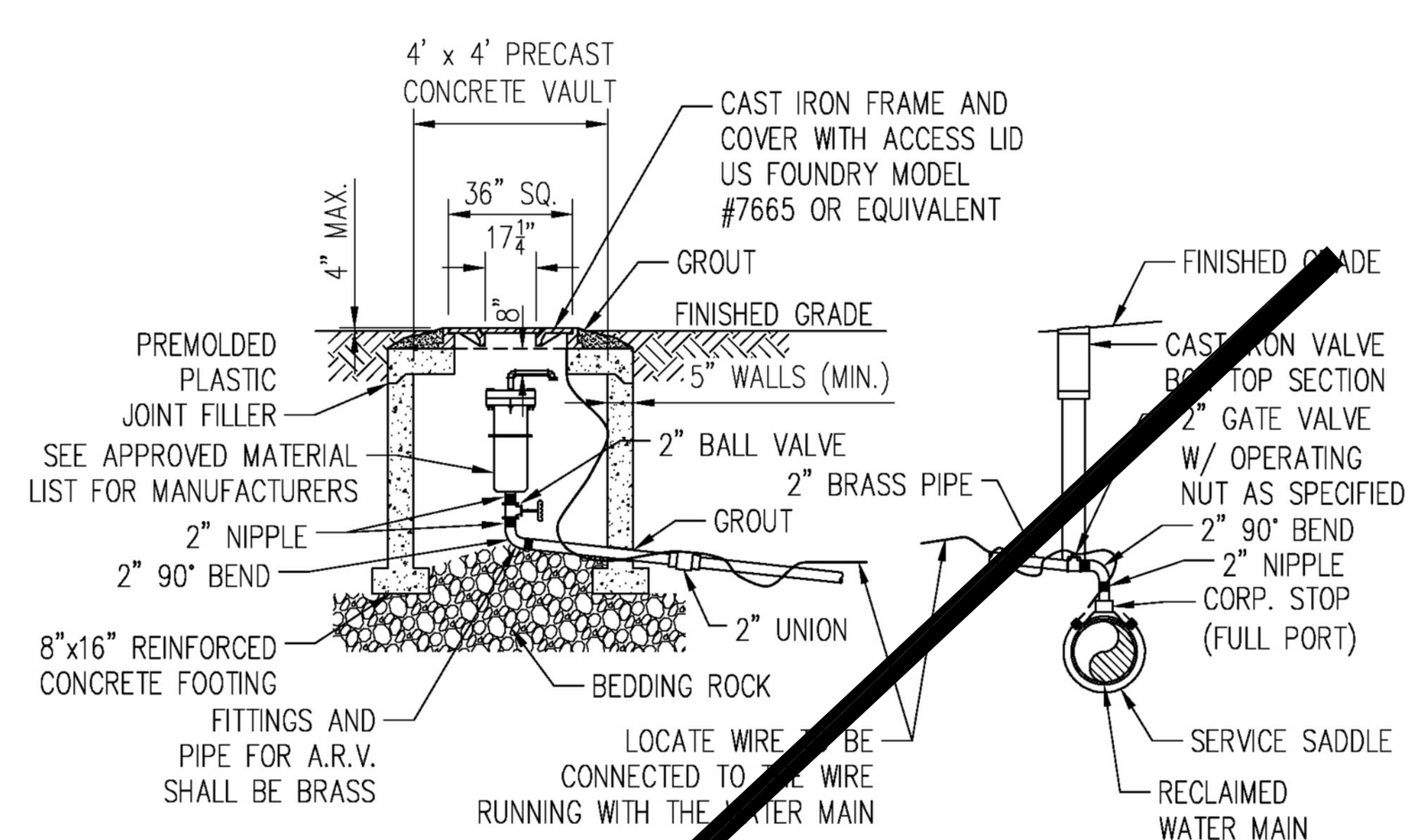
7 RECLAIMED WATER JUMPER CONNECTION
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 3.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION AND "RECLAIMED WATER".
7. NO GALVANIZED PIPE/VALVES.

8 AIR RELEASE VALVE & VAULT
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION, "SEWER" "RECLAIMED WATER OR POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.
8. LOCATE WIRE IN THE ARV VAULT SHALL BE SPLICED TO THE WIRE RUNNING WITH THE WATER MAIN AND EXCESS WIRE TO BE PLACED IN ARV VAULT. THE POINT OF CONNECTION AT THE MAIN SHALL HAVE A WATER PROOF CONNECTOR.

9 OFFSET AIR RELEASE VALVE ASSEMBLY
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	Water Meter Service	4/7/14
2	ARV Detail	4/7/14

REVISIONS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR UTILITY CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
POTABLE WATER SYSTEMS

DATE
JANUARY 2024
SHEET
8
8 OF 11

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east south street
orlando, fl 32801
p. 407.850.8557
c. 407.448.8979
mitchcollins@mitchcollinspe.com

DETAILS AND NOTES
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE
WINTER GARDEN, FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

DATE

BRONSON M. COLLINS
LICENSE No. 54608
STATE OF FLORIDA
PROFESSIONAL ENGINEER

SCALE: AS SHOWN	
DRAWN BY: M.C.	DATE: 9-5-25
CHECKED BY: M.C.	JOB NO: 225-027
SHEET NO: C9 OF C13	

GENERAL NOTES:

1. ALL NEW STORM AND SANITARY SEWER LINES IN THE CITY OF WINTER GARDEN SHALL BE SUBJECTED TO CLOSED CIRCUIT TV INSPECTION PRIOR TO BEING ACCEPTED BY THE CITY, WHETHER PRIVATE OR CITY MAINTAINED. ALL STORM SEWER PIPE SHALL BE REINSPECTED AT THE YEAR END, COST TO BE PAID BY THE OWNER.

2. PIPE MATERIAL SHALL BE AS SHOWN ON THE CONSTRUCTION PLANS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

3. CONTRACTOR AND OWNER ARE RESPONSIBLE FOR ENSURING THAT ALL CITY, COUNTY, STATE (FDEP, FDOT, SJRWMD, ETC.), AND FEDERAL PERMITS HAVE BEEN ISSUED FOR THE PROJECT.

4. ALL STORM SYSTEM MUST BE WATER-TIGHT WITH ALL JOINTS WRAPPED.

5. STORM SYSTEM WILL BE CLEANED PRIOR TO BEING TV'D.

6. THE OWNER SHALL KEEP A COPY OF THE WATER MANAGEMENT DISTRICT PERMIT, NPDES, NOI AND SWPP PLAN IN A CONSPICUOUS LOCATION ON THE JOB SITE AT ALL TIMES.

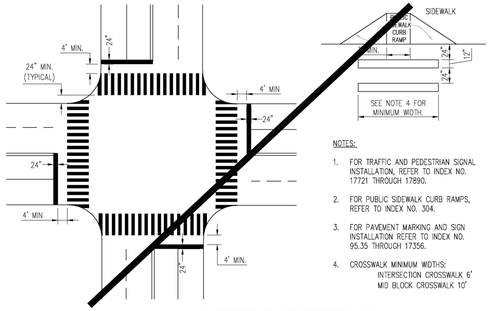
7. ALL STORM SEWER MANHOLES FRAME & COVER SHALL BE ASTM 225.

8. CLEAN SAND SHALL CONSIST OF MATERIAL HAVING LESS THAN 5% PASSING THE #200 SIEVE.

9. ONLY CONCRETE RISER RINGS WILL BE ALLOWED TO BE PLACED FOR STORM MANHOLES. ALL RISER RINGS SHALL BE SEALED TO THE STRUCTURE USING WRAPID SEAL. NO MORE THAN 15" WILL BE ALLOWED.

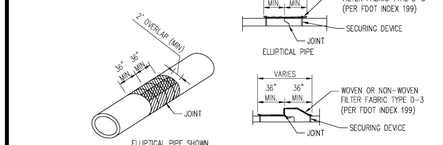
10. STORM SEWER PIPES SHALL MEET ASTM C76 & ASTM C507.

11. ALL STORM SEWER STRUCTURE SECTIONS SHALL BE SEALED WITH WRAPID SEAL.



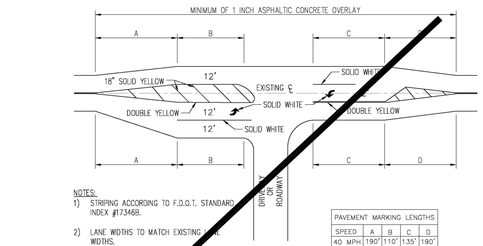
NOTES:
1. FOR TRAFFIC AND PEDESTRIAN SIGNAL INSTALLATION, REFER TO INDEX NO. 17721 THROUGH 17890.
2. FOR PUBLIC SIDEWALK CURB RAMPS, REFER TO INDEX NO. 304.
3. FOR PAVEMENT MARKING AND SIGN INSTALLATION REFER TO INDEX NO. 95.35 THROUGH 17356.
4. CROSSWALK MINIMUM WIDTHS: INTERSECTION CROSSWALK 6' MID BLOCK CROSSWALK 10'

1 TYPICAL CROSSWALK
N.T.S.



Cost of filter fabric jacket to be included in cost of pipe culverts.
FOR ALL PIPE TYPES - CONCRETE PIPE SHOWN

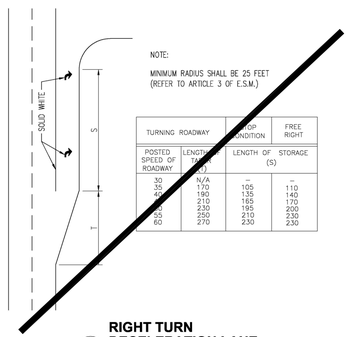
2 FILTER FABRIC JACKET
N.T.S.



NOTES:
1) STRIPING ACCORDING TO F.D.O.T. STANDARD INDEX #17346B.
2) LANE WIDTHS TO MATCH EXISTING LANE WIDTHS.
3) MINIMUM RADIUS SHALL BE 25 FEET (REFER TO ARTICLE 3 OF E.S.M.)
4) ALL ROADWAY PAVEMENT MARKING SHALL BE THERMOPLASTIC.

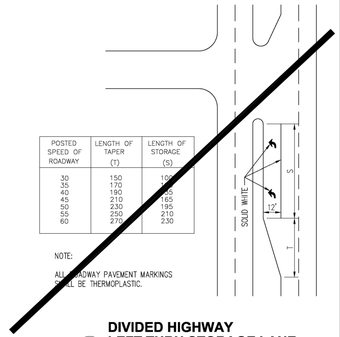
PAVEMENT MARKING LENGTHS				
SPEED	A	B	C	D
40 MPH	190'	110'	135'	190'
45 MPH	210'	140'	165'	210'
50 MPH	230'	170'	195'	230'
55 MPH	250'	200'	210'	250'

3 TYPICAL INTERSECTION
N.T.S.



TURNING ROADWAY		STOP CONDITION	FREE RIGHT
POSTED SPEED OF ROADWAY	LENGTH OF TAPER (T)	LENGTH OF STORAGE (S)	
30	N/A	--	--
35	170	105	110
40	190	135	140
45	210	165	170
50	230	195	200
55	250	210	230
60	270	230	230

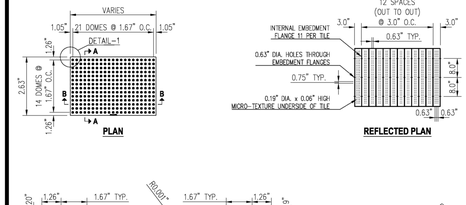
4 RIGHT TURN DECELERATION LANE
N.T.S.

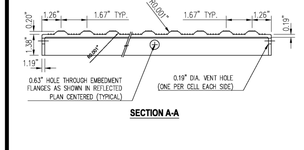


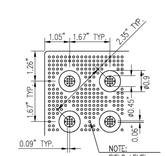
POSTED SPEED OF ROADWAY	LENGTH OF TAPER (T)	LENGTH OF STORAGE (S)
30	150	100
35	170	105
40	190	135
45	210	165
50	230	195
55	250	210
60	270	230

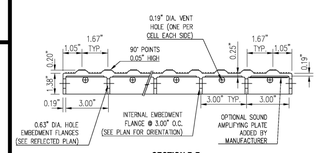
NOTE:
ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.

5 DIVIDED HIGHWAY LEFT TURN STORAGE LANE
N.T.S.



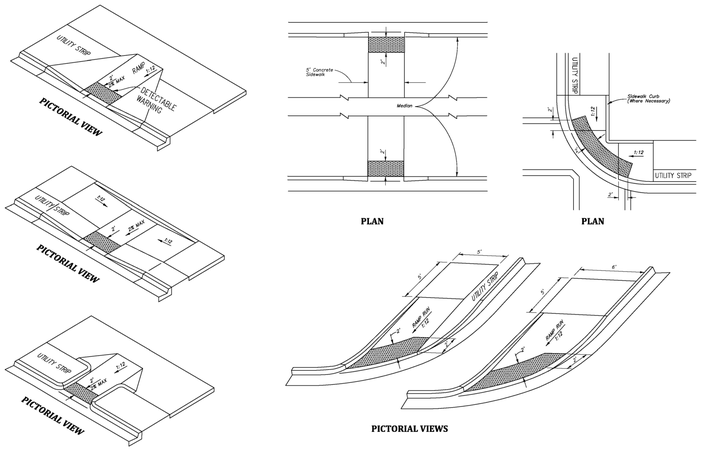




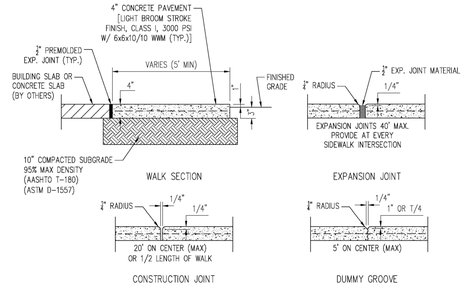


NOTE:
1. CURB RAMP DETECTABLE WARNING TILE SHALL BE ARMOR TILE OR EQUAL.
2. ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB.

8 DETECTABLE WARNING DETAIL
N.T.S.



6 CURB RAMPS & DETECTABLE WARNING PLACEMENT
N.T.S.



7 SIDEWALK DETAILS
N.T.S.



PLATE SHALL BE ADDED TO STORM WATER INLETS AS REQUIRED BY THE CITY.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES, AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
REV-5-0525		

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR ROADWAY & DRAINAGE CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
PUBLIC SERVICES

DATE
JANUARY 2024

SHEET
9
9 OF 11

DATE	REVISION	BY
5-29-26	AS PER CITY	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east kaley street ph. 407.8508557
orlando, fl 32801 fx. 407.448.8979
mitchcollins@mitchcollinspe.com

DETAILS AND NOTES
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BRONSON M. COLLINS LICENSE No. 54608 STATE OF FLORIDA PROFESSIONAL ENGINEER

MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

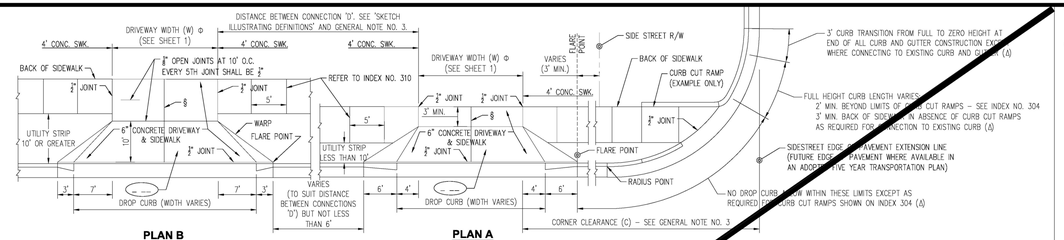
DATE

SCALE: AS SHOWN

DRAWN BY:	DATE:
M.C.	9-5-25
CHECKED BY:	JOB NO:
M.C.	225-027

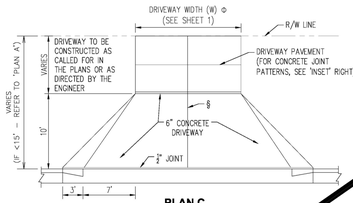
SHEET NO: C10 OF C13

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

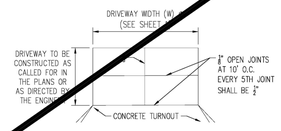


PLAN B
TURNOUT WITH SIDEWALK AND UTILITY STRIP (10' OR GREATER)

PLAN A
TURNOUT WITH SIDEWALK AND UTILITY STRIP (LESS THAN 10')



PLAN C
TURNOUT WITHOUT SIDEWALK



JOINT PATTERN WHEN CONCRETE DRIVE CONSTRUCTED INSET

FOOTNOTES:
ALL ¾" JOINTS SHALL BE CONSTRUCTED WITH PREFORMED JOINT FILLER.
§ OPEN JOINTS PLACED AT EQUAL (20' MAX.) INTERVALS FOR DRIVEWAYS OVER 20' WIDE. JOINTS IN CURB AND GUTTER TO MATCH JOINTS IN DRIVEWAYS.
Δ WHEN CONNECTING TO SIDESTREET CURB AND GUTTER SECTIONS, THE NO DROP CURB LIMITS SHOULD EXTEND BACK TO THE SIDESTREET RADIUS POINT. WITH OR WITHOUT CURB AND GUTTER, NO DRIVEWAY SHOULD ENCROACH ON THE CORNER RADIUS.
Φ DRIVEWAYS (6" CONCRETE) SHALL BE OF A UNIFORM WIDTH (W) TO THE RIGHT OF WAY LINE.
(—.—) ALPHA–NUMERIC IDENTIFICATION OF A FLARED DRIVEWAY TYPE SPECIFICALLY CALLED FOR IN THE PLANS, SEE SHEETS 3 AND 4.

SPECIAL NOTES FOR URBAN FLARED TURNOUTS

1. DRIVEWAY 6" CONCRETE PAVEMENT AND DROP CURB SHALL MEET THE MATERIAL AND CONSTRUCTION REQUIREMENTS OF SECTIONS 522 AND 520 RESPECTIVELY OF THE FDOT STANDARD SPECIFICATIONS. THE DRIVEWAY FOUNDATION SHALL MEET THE REQUIREMENT OF SUBARTICLE 522-4.
2. FOR DETAILS OF DROP CURB AND CURB CUT RAMP REFER TO INDEXES NOS. 300 AND 304 RESPECTIVELY.
3. WHERE TURNOUTS ARE CONSTRUCTED IN AN EXISTING CURB AND GUTTER, THE EXISTING CURB AND GUTTER SHALL BE REMOVED EITHER TO THE NEAREST JOINT BEYOND FLARE POINT OR TO THE EXTENT THAT NO REMAINING SECTION LESS THAN 5 FEET LONG AND, DROP CURB CONSTRUCTED IN ACCORDANCE WITH NOTES NOS. 1 AND 2.
4. COST FOR PREFORMED JOINT FILLER SHALL BE INCLUDED IN THE COST FOR THE CONCRETE PAVEMENT (CONCRETE SIDEWALK, 6" THICK).
5. FOR TURNOUTS WITH RADIAL RETURNS SEE THE REQUIREMENTS UNDER THE "SUMMARY OF GEOMETRIC REQUIREMENTS FOR TURNOUTS", THE "GENERAL NOTES", THE DETAILS OF "RURAL TURNOUT CONSTRUCTION" AND THE DETAIL OF "LIMITS OF CLEARING & GRUBBING, STABILIZATION AND BASE AT INTERSECTIONS".
6. DEPARTMENT MAINTENANCE OF PAVEMENT SHALL EXTEND OUT TO THE RIGHT OF WAY OR 2 FEET BACK OF SIDEWALK, WHICHEVER DISTANCE IS LESS.
7. THE MAINTENANCE AND OPERATION OF HIGHWAY LIGHTING, TRAFFIC SIGNALS, ASSOCIATED EQUIPMENT, AND OTHER NECESSARY DEVICES SHALL BE THE RESPONSIBILITY OF A PUBLIC AGENCY.
8. ALL PAVEMENT MARKINGS ON THE STATE HIGHWAYS, INCLUDING ACCELERATION AND DECELERATION LANE MARKINGS, AND SIGNING INSTALLED FOR THE OPERATION OF THE STATE HIGHWAY SHALL BE MAINTAINED BY THE DEPARTMENT.
9. ALL SIGNING AND MARKING INSTALLED FOR THE OPERATION OF THE CONNECTION (SUCH AS STOP BARS AND STOP SIGNS FOR THE CONNECTION) SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.
10. TURNOUTS WILL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SIDEWALK CONCRETE (6" THICK), SY.

DESIGN NOTES FOR URBAN FLARED TURNOUTS

1. DRIVEWAYS INDICATED AS 'ADVERSE APPLICATIONS' ARE THOSE WITH SLOPES THAT CAN CAUSE OVERHANG DRAG FOR REPRESENTATIVE STANDARD PASSENGER VEHICLES UNDER FULLY LOADED CONDITIONS; OR, THOSE WITH SLOPES THAT CAN CAUSE DRIVERS WHO ARE LEAVING THE ROADWAY TO SLOW OR PAUSE TO THE EXTENT THAT TRAFFIC DEMAND VOLUMES WILL BE IMPEDED.

DRIVEWAYS INDICATED AS 'MARGINAL APPLICATIONS' ARE THOSE WITH SLOPES THAT CAN CAUSE OVERHANG DRAG FOR REPRESENTATIVE STANDARD PASSENGER VEHICLES UNDER FULLY LOADED CONDITIONS WHEN THE DRIVEWAY IS LOCATED ON THE LOW SIDE OF FULLY SUPERELEVATED ROADWAYS.

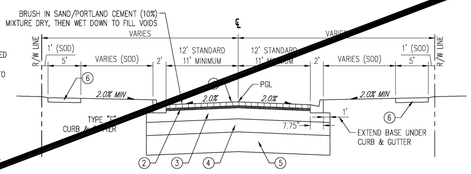
DRIVEWAYS INDICATED AS 'GENERAL APPLICATIONS' ARE THOSE WITH SLOPES THAT CAN READILY ACCOMMODATE REPRESENTATIVE STANDARD PASSENGER VEHICLES AND THOSE AND THOSE THAT CAN ACCOMMODATE REPRESENTATIVE STANDARD TRUCKS, VANS, BUSSES AND RECREATIONAL VEHICLES OPERATING UNDER NORMAL CROWN AND SUPERELEVATION CONDITIONS.

2. THE STANDARD FLARED DRIVEWAYS ON THIS INDEX MAY NOT ACCOMMODATE VEHICLES WITH LOW BEDS, LOW UNDERCARRIAGE OR LOW APPENDAGE FEATURES. WHERE SUCH VEHICLES ARE DESIGN VEHICLES DRIVEWAYS ARE TO HAVE SITE SPECIFIC FLARE DESIGNS OR CATEGORY ~~~ DESIGNS.
3. WHEN SPECIFIC FLARE TYPE DRIVEWAYS ARE TO BE CONSTRUCTED, THE TYPE SHALL BE DESIGNATED IN THE PLANS USING THE ASSIGNED ALPHA–NUMERIC DESIGNATION.

Note: See sheet 1 for 'GENERAL NOTES'

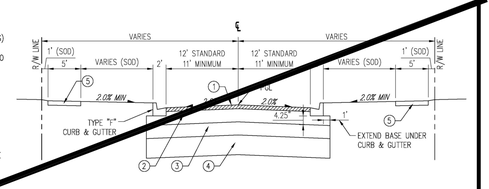
PAVEMENT DESIGN

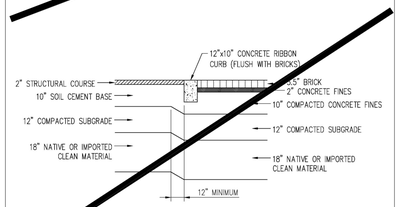
1. 3.5" BRICKS
2. 1"– 2" LOOSE CONCRETE FINES LEVELING BED
3. 10" BASE – COMPACTED CONCRETE FINES TO 98% MAX. DENSITY (AASHTO T–134). ASPHALTIC PRIME COAT APPLIED AT 0.15 GAL./SF
4. 12" COMPACTED SUBGRADE (98% DENSITY) AASHTO T–180 AND LBR 40
5. 18" OF NATIVE OR IMPORTED MATERIAL HAVING LESS THAN 5% PASSING #200 SIEVE COMPACTED TO 98% PER AASHTO T–180
6. 4" THICK CONCRETE SIDEWALK



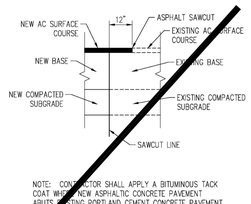
PAVEMENT DESIGN

1. 2" TYPE S–1 STRUCTURAL COURSE (2 LIFTS)
2. 10" BASE TYPE SOIL CEMENT COMPACTED TO 98% MAX. DENSITY (AASHTO T–134). ASPHALTIC PRIME COAT APPLIED AT 0.15 GAL./SF 300 PSI 7–DAY COMPRESSIVE STRENGTH
3. 12" COMPACTED SUBGRADE (98% DENSITY) AASHTO T–180 AND LBR 40
4. 18" OF NATIVE OR IMPORTED MATERIAL HAVING LESS THAN 5% PASSING #200 SIEVE COMPACTED TO 98% PER AASHTO T–180
5. 4" THICK CONCRETE SIDEWALK



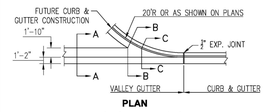


1 RIBBON CURB WITH BRICK PAVERS N.T.S.

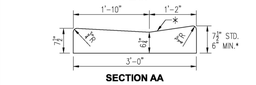


NOTE: CONTRACTOR SHALL APPLY A BITUMINOUS TACK COAT WHERE NEW ASPHALTIC CONCRETE PAVEMENT ABUTS EXISTING PORTLAND CEMENT CONCRETE PAVEMENT.

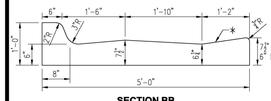
1 SAWCUT TYPCIAL DETAIL N.T.S.



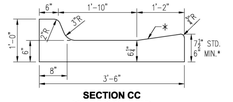
PLAN



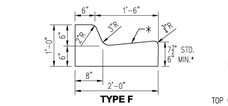
SECTION AA



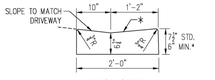
SECTION BB



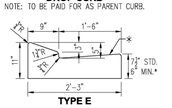
SECTION CC
VALLEY GUTTER



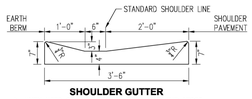
TYPE F



DROP CURB
NOTE: TO BE PAID FOR AS PARENT CURB.



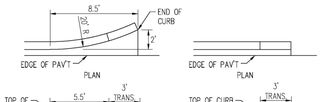
TYPE E



SHOULDER GUTTER
* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

CONCRETE CURB AND GUTTER

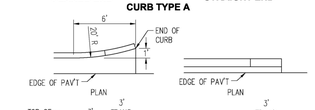
NOTE: FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, CONCRETE SHOWN. FOR DETAILS DEPICTING USAGE ADJACENT TO FLEXIBLE PAVEMENT, SEE DIAGRAM RIGHT. EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURB & GUTTER AND CONCRETE PAVEMENT ONLY, SEE DIAGRAM RIGHT.



FLARED END

STRAIGHT END

CURB TYPE A

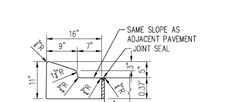


FLARED END

STRAIGHT END

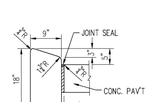
CURB AND GUTTER TYPES E & F

CURB AND GUTTER ENDINGS

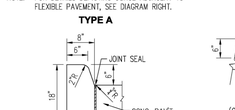


NOTE: FOR DETAILS DEPICTING USAGE ADJACENT TO FLEXIBLE PAVEMENT, SEE DIAGRAM RIGHT.

TYPE A



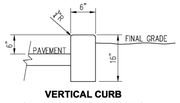
TYPE B



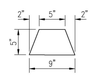
TYPE D

NOTE: FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, CONCRETE SHOWN. EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURBS AND CONCRETE PAVEMENT ONLY, SEE DIAGRAM RIGHT.

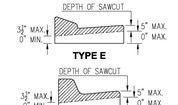
CONCRETE CURB



VERTICAL CURB
(COMMERCIAL PARKING AREAS ONLY)
NOTE: VERTICAL DIMENSION SHALL BE 10" FOR DROP OR HEADER CURB APPLICATIONS.

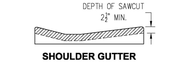


ASPHALTIC CONCRETE CURB



TYPE E

TYPE F



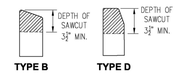
SHOULDER GUTTER

NOTE: SAWCUTS SHOULD BE AVOIDED WITHIN VALLEY GUTTER AND WITHIN CURB AND GUTTER ENDINGS.

CONTRACTION JOINT IN CURB AND GUTTER

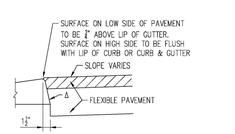


TYPE A



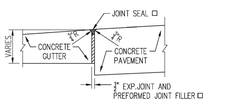
TYPE B TYPE D

CONTRACTION JOINT IN CURB



Δ – APPLIES TO BOTH HIGH AND LOW SIDES OF PAVEMENT, LOW SIDE SHOWN.

CURB & GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT



□ – APPLIES TO BOTH HIGH AND LOW SIDES OF PAVEMENT, LOW SIDE SHOWN.

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT

GENERAL NOTES

1. FOR CURB,GUTTER,AND CURB AND GUTTER PROVIDE ¾" – 1" CONTRACTION JOINTS AT 10' CENTERS (MAX.). CONTRACTION JOINTS ADJACENT TO CONCRETE PAVEMENT ON TANGENTS AND FLAT CURVES ARE TO MATCH THE PAVEMENT JOINTS, WITH INTERMEDIATE JOINTS NOT TO EXCEED 10' CENTERS. CURB,GUTTER AND CURB & GUTTER EXPANSION JOINTS SHALL BE LOCATED IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS.
2. ENDS OF CURBS TYPES B AND D SHALL TRANSITION FROM FULL TO ZERO HEIGHTS IN 3 FEET.

No.	ITEM	DATE
1	Brick Typical Section	4/4/14

RWY–5–02S

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR ROADWAY & DRAINAGE CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
PUBLIC SERVICES

DATE
JANUARY 2024
SHEET
10
10 OF 11

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY	M.C.
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---

mitch collins, pe, inc.
801 east kaley street, fl. 407.8508557
orlando, fl 32801 fax. 407.448.8979
mitchcollins@
mitchcollinspe.com

DETAILS AND NOTES
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

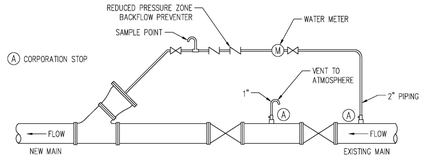
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

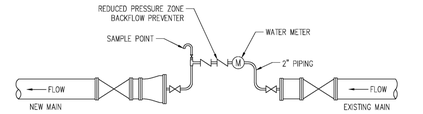
DATE

BRONSON M. COLLINS LICENSE No. 54608 STATE OF FLORIDA PROFESSIONAL ENGINEER

SCALE: AS SHOWN
DRAWN BY: M.C.
DATE: 9-5-25
CHECKED BY: M.C.
JOB NO: 225-027
SHEET NO: C11 OF C13



OPTION "A"



OPTION "B"

EXCEPT AS INDICATED BELOW FOR SHORT LENGTHS, EACH SECTION OF PIPELINE SHALL BE THOROUGHLY CLEANED WITH ONE POLYURETHANE FOAM PIG EACH TIME.

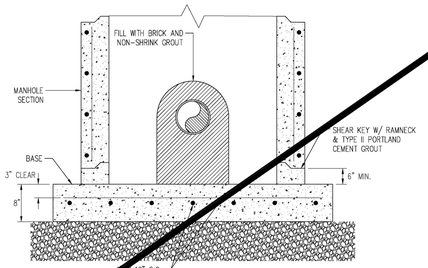
A CITY REPRESENTATIVE SHALL BE PRESENT AT THE TIME OF INSERTION AND EXIT OF THE PIGS. LINES SHALL BE PIGGED AND/OR FLUSHED UNTIL THE WATER RUNS CLEAN AND IS APPROVED BY THE CITY REPRESENTATIVE. THE CITY REPRESENTATIVE SHALL BE GIVEN 48 HOURS MINIMUM NOTICE PRIOR TO PIGGING OR FLUSHING.

ON SHORT LENGTHS OF PIPELINE (100' MAX) CLEANING MAY BE ACCOMPLISHED BY FLUSHING WITH WATER AT A MINIMUM VELOCITY OF 2.5 FEET PER SECOND. WATER REQUIRED FOR TESTING AND CLEANING SHALL BE SUPPLIED BY THE CITY AT THE CONTRACTOR'S EXPENSE. WATER SHALL BE FROM A POTABLE SOURCE SATISFACTORY TO THE CITY.

NOTES:

1. REDUCER TO BE NEW MAIN SIZE PLUS 2" LARGER.
2. WYE TO BE PLUGGED AND RESTRAINED AT THE END OF PIGGING.
3. AT THE END OF THE PROJECT, ALL CORPORATIONS TO BE REMOVED AND CORPORATION PLUGS TO BE INSTALLED.
4. SAMPLE POINT TO BE LOCATED AFTER BACKFLOW PREVENTER.
5. ALL MATERIALS, PIPE, AND FITTINGS SHALL CONFORM THE THE CITY OF WINTER GARDEN STANDARDS.
6. INSTALL REDUCER WITH PIG INSERTED. ONLY ONE PIG WILL BE ALLOWED TO BE RUN THROUGH THE MAIN AT A TIME. PIPE EXTENSIONS MAY BE REQUIRED.
7. PIGGING PROCEDURE SHALL BE PERFORMED AT LEAST TWICE.

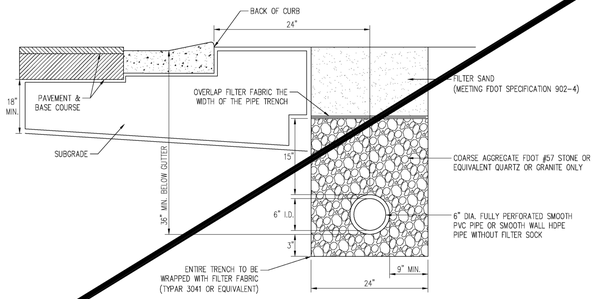
1 PIPE PIGGING DETAIL
N.T.S.



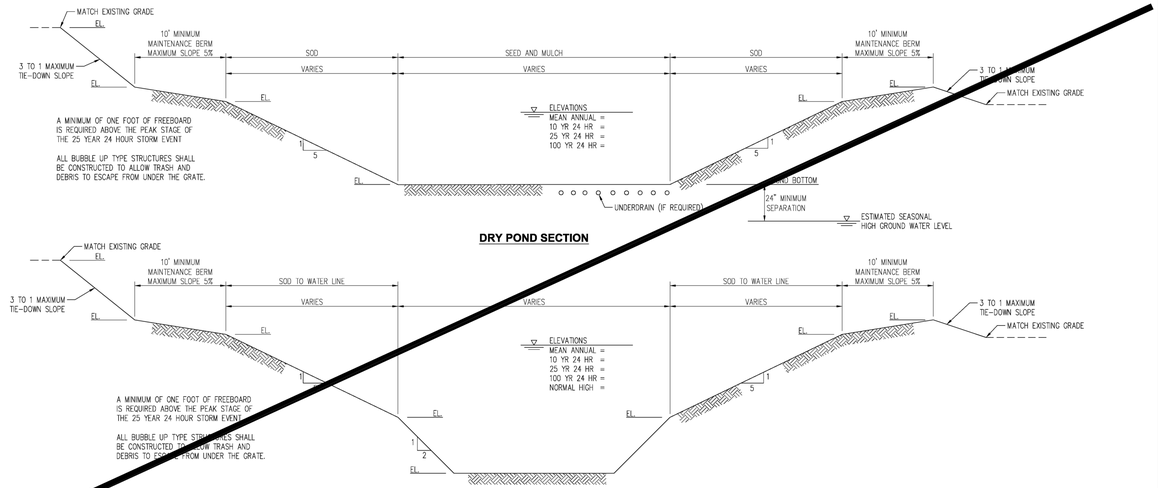
NOTES:

1. CONSTRUCT NEW MANHOLE OVER EXISTING SEWER, SLIDE BASE UNDER PIPE AND SET MANHOLE SECTION ON TOP.
2. FOR ADDITIONAL DETAILS NOT SHOWN, SEE "GRAVITY SEWER MANHOLE STANDARD.
3. AT THE END OF THE PROJECT, ALL CORPORATIONS TO BE REMOVED AND CORPORATION PLUGS TO BE INSTALLED. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT OF EXISTING SEWER DURING INSTALLATION OF MANHOLE.

2 GRAVITY SEWER DOGHOUSE MANHOLE
N.T.S.



3 UNDERDRAIN DETAIL
N.T.S.



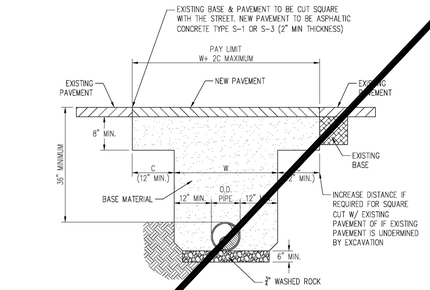
DRY POND SECTION

WET POND SECTION

4 POND SECTIONS
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.



W = O.D. OF PIPE + 12" MIN. AT BOTH SIDES OF PIPE

C = VARIES W/ SOIL TYPE
(CONTACT ENGINEER OF RECORD FOR DETERMINATION IN THE FIELD)

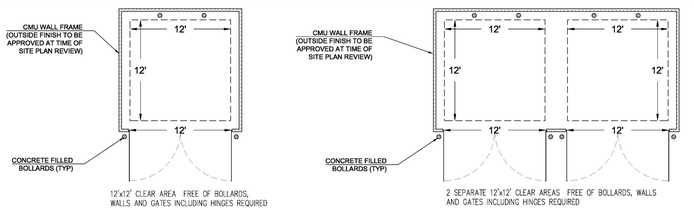
NOTE:
ALL BACKFILL COMPACTION SHALL BE 98% OF MAXIMUM DENSITY.

5 PAVEMENT RESTORATION DETAIL
N.T.S.



THE BACKGROUND COLOR SHALL BE RETROREFLECTIVE GREEN AND THE LETTERING AND BORDER SHALL BE RETROREFLECTIVE WHITE.

6 STREET SIGN BLADE DETAIL
N.T.S.



7 DUMPSTER LAYOUT DETAIL
N.T.S.

DATE
ITEM
No.
REV-S-SIZS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR UTILITY CONSTRUCTION

STANDARD DETAILS
FOR
MISCELLANEOUS DETAILS

DATE
JANUARY 2024
SHEET
11
11 OF 11

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	AS PER CITY	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east south street, llc 407.8508557
orlando, fl 32801 fx 407.448.8979
mitchcollins@mitchcollinspe.com

DETAILS AND NOTES
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

BRONSON M. COLLINS — LICENSE No. 54608 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

DATE

SCALE: AS SHOWN
DRAWN BY: M.C.
DATE: 9-5-25
CHECKED BY: M.C.
JOB NO: 225-027
SHEET NO: C12 OF C13

RILEY & Company, Inc. (Duplex LS) ©

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS & RILEY & COMPANY GUARD PRO IV MONITORING SYSTEM

(No Substitutions - No Alternates)

RILEY & COMPANY, INC. / GUARD PRO IV MONITORING SYSTEM:
GUARD PRO IV offers a remote control and maintenance solution which allows you to create a decentralized system to monitor and control devices. Up to eight (8) different lift station inputs can be monitored and up to eight (8) outputs can be controlled remotely. The GUARD PRO IV can also notify up to eight (8) different recipients via sms text and/or email.

PUMPS: ***SPECIFICATION***

Submersible grinder pumps shall be installed in the H-20 FRP wet well utilizing a dual slide rail system.

The pumps shall be capable of pumping materials normally found in domestic and commercial wastewater.

Stator winding shall be open type with Class H insulation and shall be heat -shrink fitted into the stator housing. The use of pins, bolts and other fastening devices is not acceptable.

A heat sensor thermostat shall be attached to the top end of the motor winding and shall be connected in series with a magnectic contactor coil in the control panel. If the winding temperature exceeeds 140° C, the motor shall shut off but shall automtically reset when the temperature drops below the threshhold. Two heat sensors shall be used on 3 phase motors. Upper & lower mechanical seals shall have Silicon Carbide vs Silicon Carbide.

CONTROL PANEL: ***SPECIFICATION***

The Enclosure shall be NEMA 4X, minimum 30" high x 20" wide x 10" deep with a 3 point latching system.
The enclosure shall have external mounting feet to allow for wall mounting.
The following components shall be mounted through the enclosure:
1- ea. Red Alarm Beacon (Light) LED 360 Degree viewable range, NEMA 4X
1- ea. Alarm Horn (minimum 95 DCB), ROHS 3 Compliant, NEMA 4X
1- ea. Generator Receptacle w/ weatherproof cover 60A Minimum. Shall meet UL 1682, UL 1686 and UL486E Compliance.

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.
The following components shall be mounted to back panel:
1- ea. Guard Pro IV Monitoring Unit
2- ea. IEC Style Motor Contactors
1- ea. Volt Monitor (1 Ph) Phase Monitor (3 Ph) w/2 N/O & 1 N/C Contacts
1- ea. Alternator w/ Pump Lead Switch
1- ea. Control Transformer (480 Volt Only) (Min. 500VA)
1- ea. Model RCBB5AH Battery Back-Up w/ Smart Charger (UPS) - 24 Hr Min.
20- ea. Terminals For Field Connections
6- ea. Terminals For Motor Connections (Single Phase Only)
7- ea. Grounding Lugs
1-ea. Lightning and Surge Protection shall meet the UL 1449 2nd Edition

The inner door shall have a continuous aluminum piano hinge.
The following components shall be mounted through the inner door:
1- ea. Main Circuit Breaker - UL489
1- ea. Emergency Circuit Breaker - UL 489
1- ea. Mechanical Interlock For Emergency And Main Breakers (UL Listed)
2- ea. Short Circuit Protectors w/ Auxiliary Contacts
1- ea. Control Circuit Breaker & GFCI Circuit Breaker - UL 489
1- ea. GFI Duplex Convenience Outlet - NEMA 5-15R
2- ea. Elapsed Time Meter, Non-Resettable

MISCELLANEOUS: All wiring on the back panel shall be contained within the wiring duct. All wiring between the inner door and the back panel shall be contained with in a plastic spiral wrap. Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting. The control panel must be manufactured in-house by the lift station supplier and be a TUV (UL508A Certified) facility.

WET WELL: ***SPECIFICATION***

Wet Well FRP Wall Laminate must be designed to withstand wall collapse or buckling based on third party specifications and the assumptions below.

**Hydrostatic Pressure: 62.4 lbs. Per SQ Ft.*
**Saturated Soil Weight: 120 lbs. Per Cubic Ft.*
**Soil Modulus: 700 lbs Per SQ Ft.*
**Pipe Stiffness as Specified in ASTM D 3753*

The wet well FRP laminate must be constructed to withstand or exceed two times the assumed loading for the complete depth of the structure.

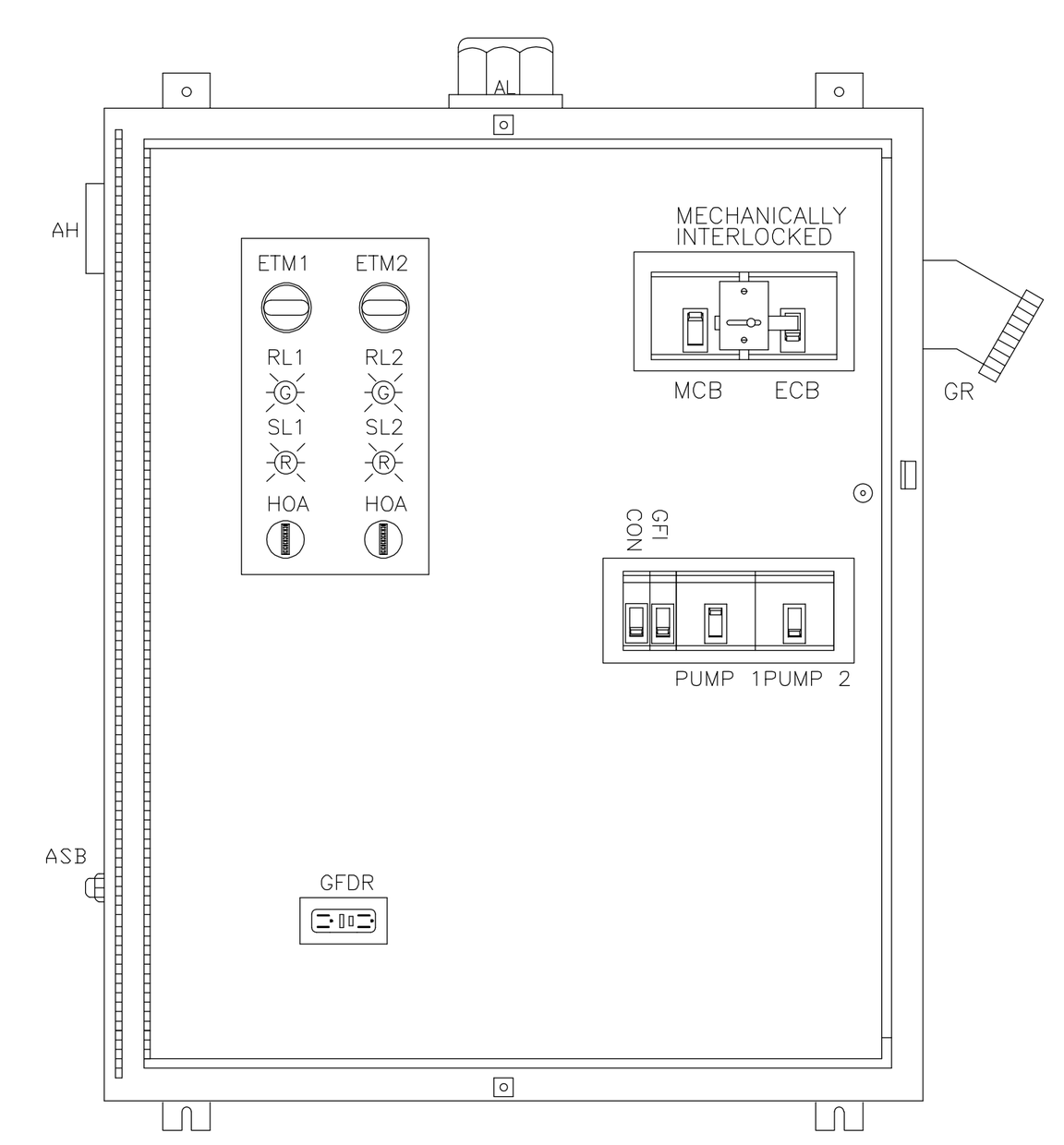
The cover shall be constructed of ¼ inch thick finished aluminum, diamond plate pattern with 300 series stainless steel hardware. The hatch shall have a positive means of locking the door open in the vertical position via a hold open arm and shall be made of a non-corrosive material. The cover shall be mounted with minimum of six 300 series stainless steel fasteners. The access hatch cover shall have a lift handle and a means of locking.

The prefabricated FRP lift station manufacturer shall guarantee the prefabricated lift station per approved drawings for a period of one year from the date of delivery.

INSPECTION & TESTING:
A factory representative shall be provided for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of the complete system. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump motor and cable is intact. The pumps and the controls shall be checked for mechanical reliability and proper operation.

EXECUTION:
Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the engineered drawings.

05/13/26 SR



1. OUTER DOOR REMOVED TO SHOW DEADFRONT LAYOUT NEMA TYPE 4X ENCLOSURE ALL HARDWARE STAINLESS STEEL ACTUAL LAYOUT/ORIENTATION MAY VARY.
2. ENCLOSURE SIZE WILL BE 30" X 20" X 10" MINIMUM. CONTROL PANEL SHALL HAVE A 3 POINT LATCHING SYSTEM

NO SUBSTITUTIONS / NO ALTERNATES

STATION DESIGN CONDITIONS		
PRIMARY PUMP CAPACITY	28	GPM
PRIMARY TDH	82	'TDH
RUN-OUT PUMP CAPACITY	72	GPM
RUN-OUT TDH	52	'TDH
PUMP MODEL #	HOMA RC20056	
R.P.M.	3450	
HORSEPOWER	2.5	
ELECTRICAL VOLTS / PHASE	208V/3Φ	
PUMP DISCHARGE SIZE	2"	

STATION ELEVATIONS AND DIMENSIONS		
100 YEAR FLOOD ELEVATION		Zone X
WET WELL DIAMETER	(A)	72"
INVERT DIAMETER	(B)	6"
TOP OF WET WELL	(C)	120.65'
INLET / INVERT	(D)	116.00'
HIGH LEVEL ALARM (HLA)	(E)	115.50'
2nd PUMP ON (LAG)	(F)	115.00'
1st PUMP ON (LEAD)	(G)	114.50'
PUMPS OFF (OFF)	(H)	113.94'
BOTTOM OF WET WELL	(I)	111.65'
GUIDE RAIL DIAMETER	(J)	½"
DISCHARGE PIPE DIAMETER	(K)	2"
F.M. PIPE DIAMETER	(L)	2"
REDUCER (If Required)	(M)	n/a

STATION MANUFACTURING MATERIALS	
DISCHARGE/RISER PIPE	HDPE
INLET PIPE	PVC
GUIDE RAIL	304 SS
WET WELL	FRP ASTM D-3753
WET WELL HATCH COVER	300 LBS PSF ALUM
CABLE BRACKET	304 SS
LIFTING CHAIN	304 SS
PLUG VALVE	CAST IRON
SWING CHECK VALVE	CAST IRON
VALVE BOX	FRP
VALVE BOX HATCH COVER	300 LBS PSF ALUM

STATION VALVE BOX SIZES	
(36" x 36" x 36" DEEP)	FOR 2" DISCHARGE
(48" x 48" x 36" DEEP)	FOR 3" DISCHARGE
(48" x 48" x 36" DEEP)	FOR 4" DISCHARGE

STATION HATCH OPENINGS			
WET WELL DIA.	60"	72"	96"
	36" x 30"	48" x 36"	60" x 48"

CONCRETE BALLAST REQUIREMENTS		
CUBIC YARDS OF CONCRETE REQUIRED	(V)	1.91 yds³
CIRCUMFERENCE DIMENSION - WIDTH	(W)	12.0"
CIRCUMFERENCE DIMENSION - HEIGHT	(X)	12.0"
BASE SLAB DIMENSION - HEIGHT	(Y)	12.0"
BASE SLAB DIMENSION - LENGTH & WIDTH	(Z)	72.0"

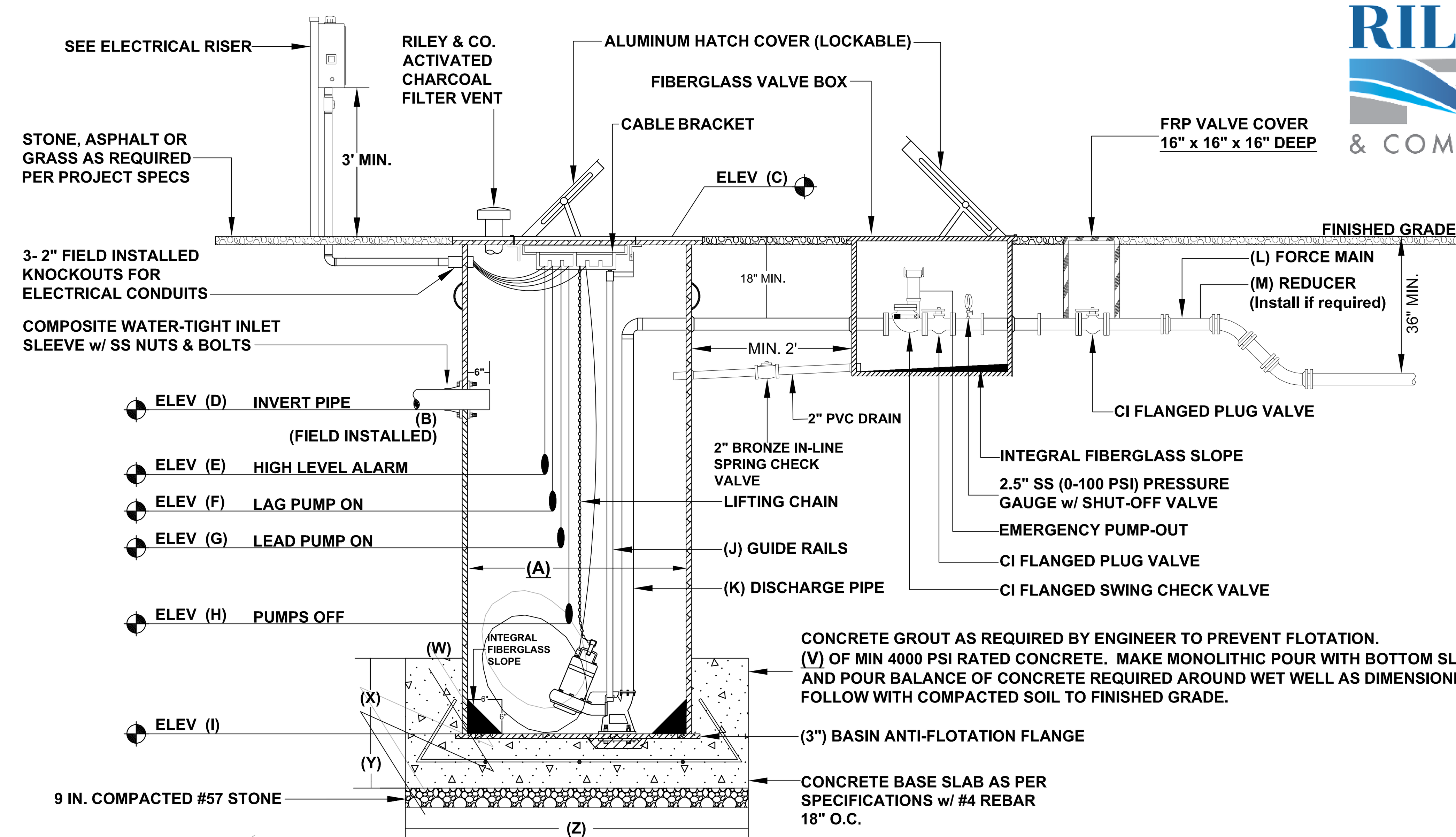
18" × 24"

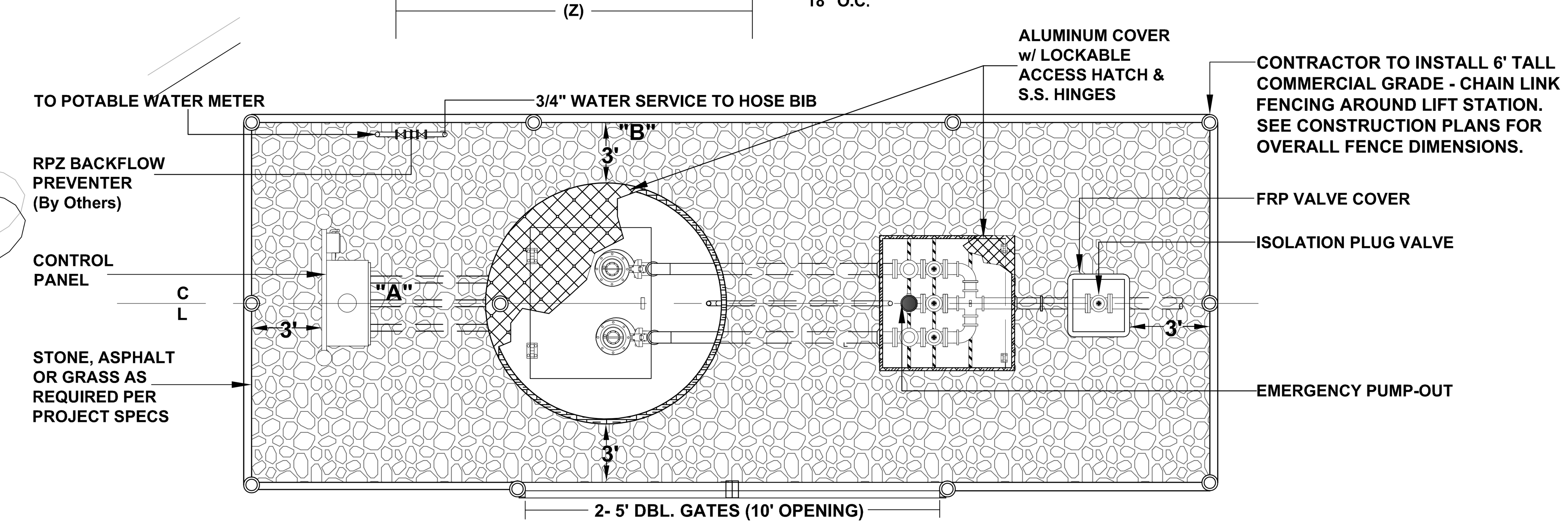
PRIVATE
SANITARY SEWER PUMP STATION
IN CASE OF EMERGENCY CONTACT THE FOLLOWING NUMBERS:
FACILITY OWNED BY:
NAME: ____________
PHONE NUMBER: ____________
FACILITY MAINTAINED BY:
NAME: ____________
PHONE NUMBER: ____________
STATION NUMBER: ____________

NOTE: CONTRACTOR MUST SUPPLY INFORMATION SIGN AT START-UP.

LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED

PRIOR TO START-UP, OWNER MUST HAVE A MINIMUM 1 YR. PREVENTIVE MAINTENANCE CONTRACT WITH A REPUTABLE LIFT STATION MAINTENANCE COMPANY.

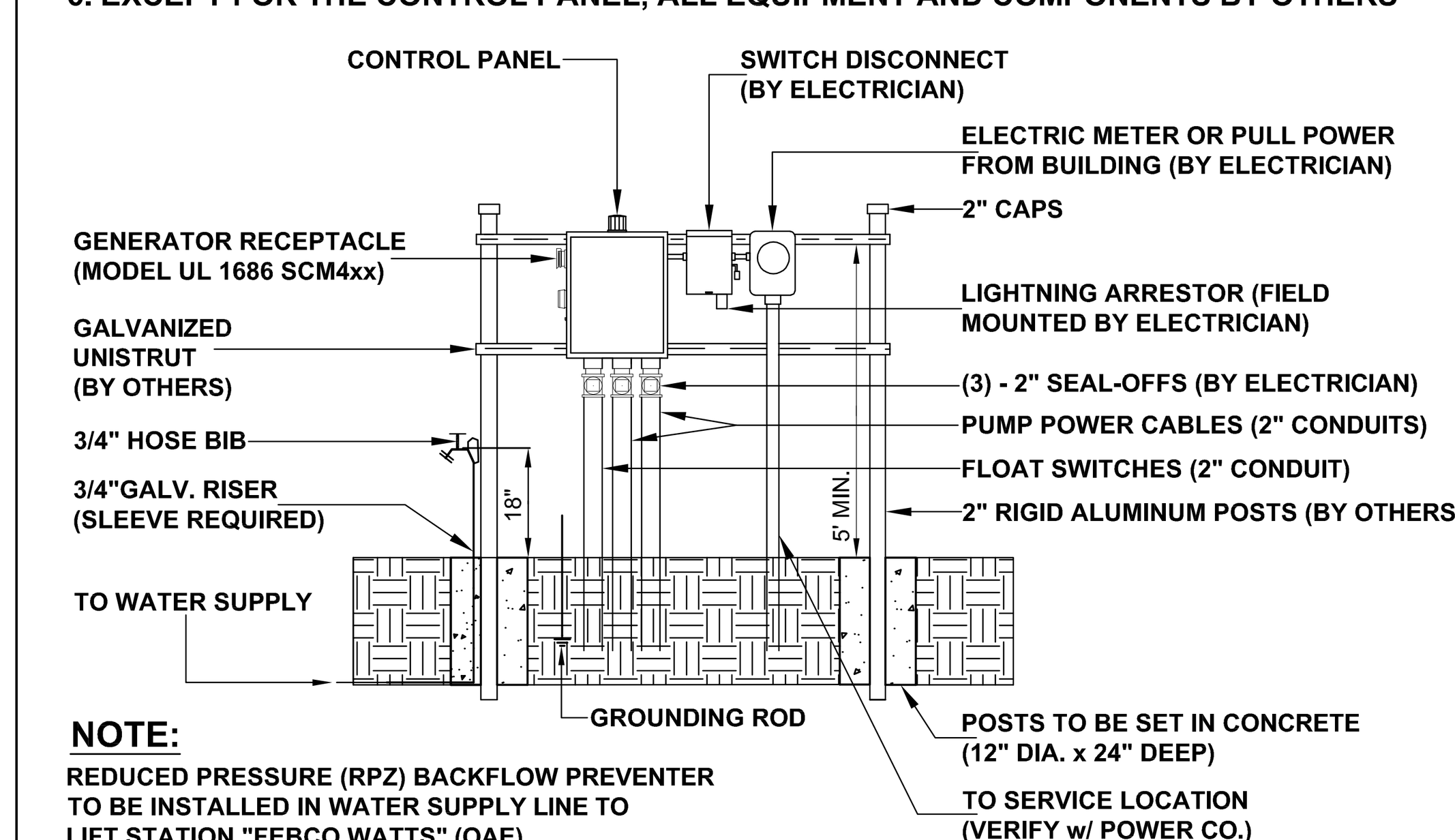




NOTE: PUMP CONTROL PANEL SHALL BE LOCATED A MIN. OF 3 FEET FROM WET WELL PERIMETER AT POINT "A" OR "B"

ELECTRICIAN NOTES:

1. DRAWING NOT TO SCALE
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
3. ELECTRICIAN TO INSTALL SWITCH DISCONNECT & LIGHTNING ARRESTOR
4. CONTRACTOR SHALL VERIFY POWER SUPPLY PRIOR TO ORDERING EQUIPMENT
5. NEUTRAL TO BE SUPPLIED FOR 3Φ/208-230V OR 1Φ/208-230V
6. EXCEPT FOR THE CONTROL PANEL, ALL EQUIPMENT AND COMPONENTS BY OTHERS



NOTE:
REDUCED PRESSURE (RPZ) BACKFLOW PREVENTER TO BE INSTALLED IN WATER SUPPLY LINE TO LIFT STATION "FEBCO WATTS" (OAE)

ELECTRICAL RISER FOR ILLUSTRATION PURPOSES ONLY

For Lift Station Proposal:
Please Contact Chase Rachal
(407) 265-9963
c.rachal@rileyandco.com

THIS IS A COPYRIGHTED DRAWING. ANY CHANGES OR MODIFICATIONS WITHOUT WRITTEN APPROVAL FROM RILEY & COMPANY IS STRICTLY PROHIBITED. ©

NOTE: REPRODUCTION OF THIS PLAN IS INVALID UNLESS CONTAINING ORIGINAL SIGNATURE AND EMBOSSED WITH ENGINEER'S SEAL AS PER CHAPTER 21H.23.002 FLORIDA ADMINISTRATIVE CODE.

DATE	REVISION	BY
5-29-26	UPDATED POWER	M.C.
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

mitch collins, pe, inc.
801 east south street
orlando, fl 32801
p. 407.850.8557
c. 407.448.8979
mitchcollins@mitchcollinspe.com

LIFT STATION DETAIL
FOR
ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN

12152 WEST COLONIAL DRIVE — WINTER GARDEN, FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MITCH COLLINS, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MITCH COLLINS, P.E.# 54608, STATE OF FLORIDA, C.A.# 9523

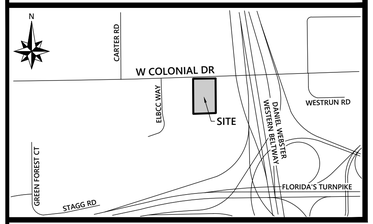
DATE

BRONSON M. COLLINS ★ LICENSE No. 54608 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER

SCALE: AS SHOWN	
DRAWN BY: M.C.	DATE: 9-5-25
CHECKED BY: M.C.	JOB NO: 225-027
SHEET NO: C13 OF C13	

Map of Survey

VICINITY MAP (NOT TO SCALE)



PROPERTY DESCRIPTION

THE WEST 281.9 FEET OF THE EAST 396.9 FEET OF THE WEST 829.8 FEET OF THE NORTH 525.0 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 (LESS THE NORTH 75.0 FEET FOR STATE ROAD), SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

A PARCEL OF LAND BEING PRESENTLY DESCRIBED AS FOLLOWS AND TO BE MORE PARTICULARLY DESCRIBED AFTER SURVEY:

THE WEST 281.9 FEET OF THE EAST 396.9 FEET OF THE WEST 829.8 FEET OF THE NORTH 525.0 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 (LESS THE NORTH 75.0 FEET FOR STATE ROAD), SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

LESS AND EXCEPT THE FOLLOWING:

COMMENCE AT SMALL P-K NAIL AND DISK SET IN POURED CONCRETE IN ASPHALT CUT-OUT MARKING THE NORTHEAST COMER OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; THENCE RUN SOUTH 00°03'54" EAST ALONG THE NORTH-SOUTH CENTER-OF-SECTION LINE OF SAID SECTION 24 A DISTANCE OF 5329.27 FEET TO A POINT THE CENTERLINE OF SURVEY OF STATE ROAD 50 AS SHOWN ON FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION 75050, FINANCIAL PROJECT NO. 410983 1, SAID POINT ALSO BEING A POINT ON A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 32,740.45 FEET AND A CHORD BEARING OF NORTH 88°31'48" EAST; THENCE DEPARTING SAID NORTH-SOUTH LINE, FROM A TANGENT BEARING OF NORTH 88°57'45" EAST, RUN EASTERLY ALONG SAID CENTERLINE OF SURVEY AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 00°51'53" A DISTANCE OF 494.11 FEET TO THE POINT OF TANGENCY, SAID POINT ALSO BEING A POINT ON THE NORTH LINE OF THE NORTHEAST 1/4 OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID CURVE RUN NORTH 88°05'52" EAST ALONG SAID CENTERLINE OF SURVEY AND ALONG SAID NORTH LINE A DISTANCE OF 945.27 FEET TO A POINT ON THE NORTHERLY PROJECTION OF THE EAST LINE OF TYBRENT CENTER AS RECORDED IN PLAT BOOK 14, PAGE 3 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID CENTERLINE OF SURVEY AND SAID NORTH LINE, RUN SOUTH 00°22'27" EAST ALONG SAID NORTHERLY PROJECTION A DISTANCE OF 75.03 FEET TO A POINT ON THE EXISTING SOUTH RIGHT OF WAY LINE OF AFORESAID STATE ROAD 50 AS SHOWN ON THE AFORESAID RIGHT OF WAY MAP; THENCE RUN NORTH 88°05'52" EAST ALONG SAID EXISTING SOUTH RIGHT OF WAY LINE OF STATE ROAD 50 A DISTANCE OF 333.06 FEET TO A "POINT ON THE EAST LINE OF THE WEST 432. 9 FEET OF THE NORTH 525 FEET OF THE NORTHEAST 1/4 OF THE AFORESAID NORTHEAST 1/4 OF SECTION 25 FOR A POINT OF BEGINNING; THENCE CONTINUE NORTH 88°05'52" EAST ALONG SAID EXISTING SOUTH RIGHT OF WAY LINE OF STATE ROAD A DISTANCE OF 281.70 FEET TO A POINT ON THE WEST LINE OF THE EAST 115 FEET OF THE WEST 829.5 FEET OF THE NORTH 525 FEET OF SAID NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 25; THENCE DEPARTING SAID EXISTING SOUTH RIGHT OF WAY LINE, RUN SOUTH 00°22'17" EAST ALONG SAID WEST LINE A DISTANCE OF 17.17 FEET; THENCE DEPARTING SAID WEST LINE, RUN SOUTH 89°24'23" WEST A DISTANCE OF 281.60 FEET TO A POINT ON THE AFORESAID EAST LINE OF THE WEST 432. 9 FEET OF THE NORTH 525 FEET OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 25; THENCE RUN NORTH 00°22'17" WEST ALONG SAID EAST LINE A DISTANCE OF 10.73 FEET TO THE POINT OF BEGINNING.

LAND AREA SUMMARY

UPLANDS CONTAINS 91,990 SQUARE FEET OR 2.112 ACRES MORE OR LESS.
WETLANDS CONTAINS 30,852 SQUARE FEET OR 0.708 ACRES MORE OR LESS.

TOTAL LAND AREA CONTAINS 122,842 SQUARE FEET OR 2.820 ACRES MORE OR LESS.

SCHEDULE B-II EXCEPTIONS

6. The terms, provisions, and conditions contained in that certain Stipulated Judgment, recorded in Official Records Book 10000, Page 9092 of the Public Records of Orange County, Florida. (DESCRIBES THE LESS AND EXCEPT PORTION OF PROPERTY. SHOWN HEREON.)

7. Terms and conditions of that certain Lease by and between National Retail Properties, LP (Landlord) and W.S. Badcock Corporation (Tenant) as evidenced by Memorandum of Lease recorded in Official Records Instrument No: 20220217173. (CONTAINS NO EASEMENTS TO DEPICT.)

SURVEY NOTES

1. Bearing Structure is assumed and based on the South Right-of-Way Line of W Colonial Drive, being N89°24'23"E, per description.

2. This survey reflects only matters of record as provided by the client or clients representative.

3. The surveyor has not physically located the underground utilities. This survey was made on the ground. Any underground utilities shown hereon have been located from observed surface utility features and/or drawings provided by client. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are shown as accurately as possible from information available.

4. This Survey was made with benefit of Fidelity National Title Insurance Company's Commitment No. 16-25-0231, effective August 14, 2025 at 8:00 AM.

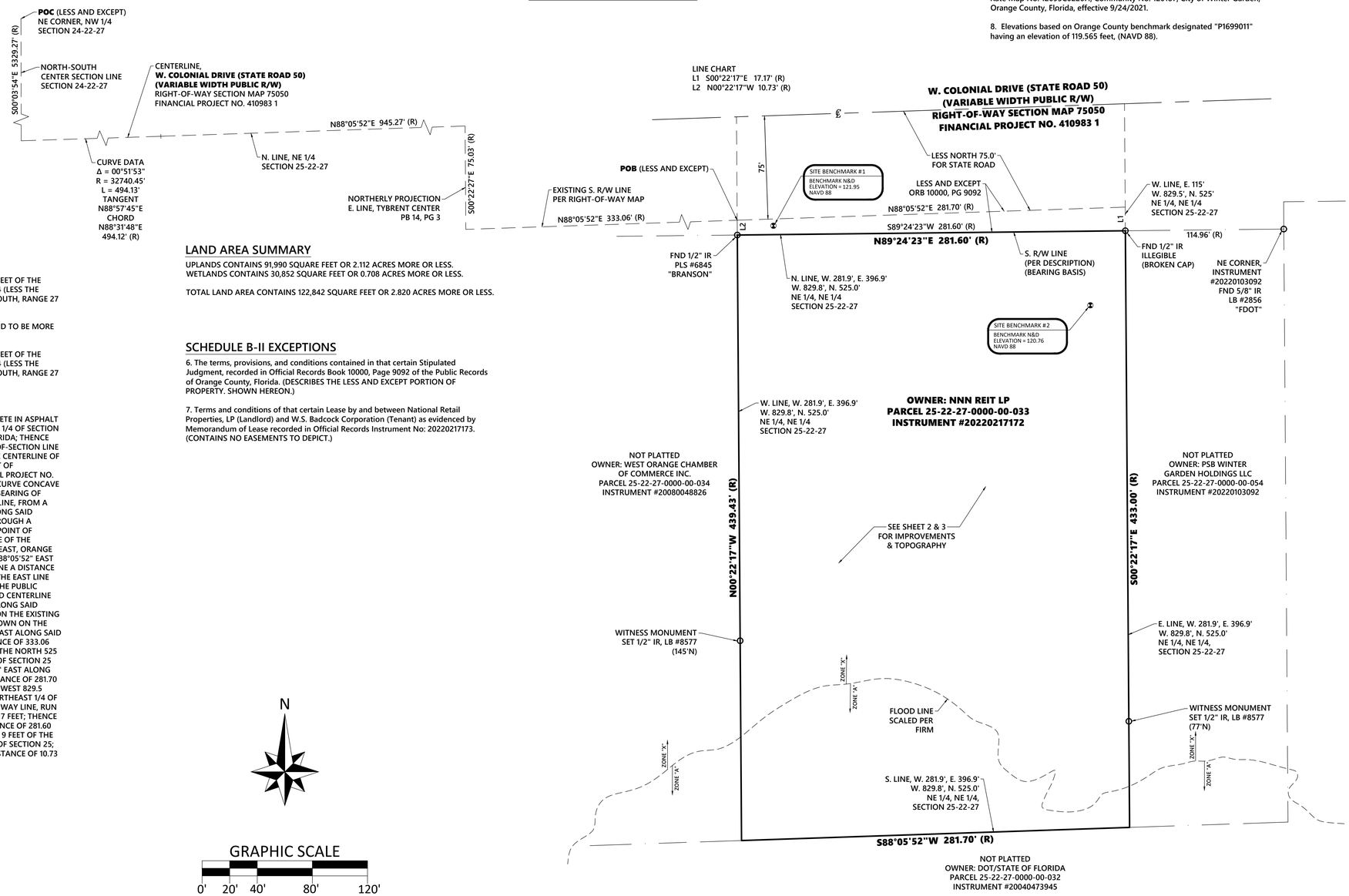
5. This survey is valid only for the parties to whom it is certified to. Liability to third parties may not be transferred or assigned.

6. This survey exceeds the accuracy requirements set forth in Florida Statutes.

7. Subject property lies in Zone "X" and Zone "A", based on Flood Insurance Rate Map No. 12095C0220H, Community No. 120187, City of Winter Garden, Orange County, Florida, effective 9/24/2021.

8. Elevations based on Orange County benchmark designated "P1699011" having an elevation of 119.565 feet, (NAVD 88).

DESCRIPTION KEY MAP



GRAPHIC SCALE

0' 20' 40' 80' 120'

1" = 40'

SURVEY DATE: 8/20/2025	SHEET 1 OF 3
PROJECT NUMBER: 2025-08-08-02	SCALE: 1" = 40'

SUNSTATE SURVEYING
4751 Sturbridge Circle
Orlando, Florida 32812
www.sunstatesurveying.com
Terrence@sunstatesurveying.com
Phone: 407-928-8252
LB #8577

COPYRIGHT © 2023 - 2026, SUNSTATE SURVEYING, LLC

REVISIONS

#	PROJECT NUMBER	REVISION	DATE
1	2025-08-08-02	ADD TITLE	9/10/25
2	2025-08-08-02	ADD INVERT DATA TO STORM STRUCTURES	9/20/25
3	2026-03-15-01	ADDITIONAL TOPO/TREES IN WETLAND AREA	3/28/26

LEGEND

A/C	- AIR CONDITIONER	LS	- LICENSED SURVEYOR
CLF	- CHAIN LINK FENCE	MF	- METAL FENCE
CONC	- CONCRETE	N&D	- NAIL & DISC
COVD	- COVERED	NAVD	- NORTH AMERICAN VERTICAL DATUM
CP	- CONCRETE PAD	ORB	- OFFICIAL RECORDS BOOK
CW	- CONCRETE WALKWAY	PB	- PLAT BOOK
Δ	- DELTA	PG	- PAGE
DW	- DRIVE WAY	PLS	- PROFESSIONALLY LICENSED SURVEYOR
ESMT	- EASEMENT	PSM	- PROFESSIONAL SURVEYOR AND MAPPER
FIRM	- FLOOD INSURANCE RATE MAP	PVC	- POLYVINYL CHLORIDE (PLASTIC)
FDC	- FIRE DEPARTMENT CONNECTION	RCP	- REINFORCED CONCRETE PIPE
FND	- FOUND	R	- RADIUS
HDPE	- HIGH-DENSITY POLYETHYLENE	R/W	- RIGHT OF WAY
INV	- INVERT	SDO	- SHOWN FOR DIRECTION ONLY
IR	- IRON ROD	(R)	- RECORD DESCRIPTION
IP	- IRON PIPE	(M)	- MEASURED
L	- ARC LENGTH		
LB	- LICENSED BUSINESS		

- BENCHMARK
- CENTERLINE
- LIGHT POLE
- ELECTRIC BOX
- ELECTRIC METER
- GUY WIRE ANCHOR
- UTILITY POLE
- FIBER OPTIC CABLE BOX
- BACKFLOW PREVENTER
- WATER METER
- WATER VALVE
- SEWER VALVE
- SANITARY MANHOLE
- TRAFFIC SIGN
- OAK TREE
- CRAPE MYRTLE

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR:
INTERSTRUCT ORLANDO, LLC

SITE ADDRESS:
12152 W COLONIAL DRIVE
WINTER GARDEN, FL 34787

COUNTY: ORANGE
SECTION: 25-22-27
SUBDIVISION: NOT PLATTED

TERRENCE W. RUTTER, JR., PSM 7371

"THE DATE OF SIGNATURE DOES NOT REVISE OR SUPERSEDE THE SURVEY DATE OR REVISION DATE."

THIS SURVEY MEETS THE "STANDARDS OF PRACTICE" AS REQUIRED BY CHAPTER 5J-17 FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.

"NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THIS FLORIDA LICENSED SURVEYOR AND MAPPER."

-OR-

THE ELECTRONIC SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRENCE W. RUTTER, JR., PSM 7371.

Map of Survey

SURVEY DATE: 8/20/2025	SHEET 2 OF 3
PROJECT NUMBER: 2025-08-08-02	SCALE: 1" = 20'

SUNSTATE SURVEYING
4751 Sturbridge Circle
Orlando, Florida 32812
www.sunstatesurveying.com
Terrence@sunstatesurveying.com
Phone: 407-928-8252
LB #8577

COPYRIGHT © 2023 - 2026, SUNSTATE SURVEYING, LLC

REVISIONS

#	PROJECT NUMBER	REVISION	DATE
1	2025-08-08-02	ADD TITLE	9/10/25
2	2025-08-08-02	ADD INVERT DATA TO STORM STRUCTURES	9/20/25
3	2026-03-15-01	ADDITIONAL TOPO/TREES IN WETLAND AREA	3/28/26

LINE CHART
L1 S00°22'17"E 17.17' (R)
L2 N00°22'17"W 10.73' (R)

W. COLONIAL DRIVE (STATE ROAD 50)
(VARIABLE WIDTH PUBLIC R/W)
RIGHT-OF-WAY SECTION MAP 75050
FINANCIAL PROJECT NO. 410983 1

LESS NORTH 75.0'
FOR STATE ROAD

SITE BENCHMARK #1
BENCHMARK N&D
ELEVATION = 121.95
NAVD 88

SITE BENCHMARK #2
BENCHMARK N&D
ELEVATION = 120.76
NAVD 88

POB (LESS AND EXCEPT)

N. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27

W. LINE, E. 115'
W. 829.5', N. 525'
NE 1/4, NE 1/4
SECTION 25-22-27

LESS AND EXCEPT
ORB 10000, PG 9092

N88°05'52"E 333.06' (R)
N88°05'52"E 281.70' (R)
N89°24'23"E 281.60' (R)
S89°24'23"W 281.60' (R)
114.96' (R)
N00°22'17"W 439.43' (R)
S00°22'17"E 433.00' (R)

EXISTING S. R/W LINE
PER RIGHT-OF-WAY MAP

ACCESS
ACCESS
S. R/W LINE
(PER DESCRIPTION)
(BEARING BASIS)

FND-1/2" IR
PLS #6845
"BRANSON"

FND 1/2" IR
ILLEGIBLE
(BROKEN CAP)

NE CORNER,
INSTRUMENT
#20220103092
FND 5/8" IR
LB #2856
"FDOT"

E. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4,
SECTION 25-22-27

W. LINE, W. 281.9', E. 396.9'
W. 829.8', N. 525.0'
NE 1/4, NE 1/4
SECTION 25-22-27

1 STORY BLOCK
ADDRESS #12184

1 STORY BLOCK
ADDRESS #12152
17,494± SF
FFE=121.26

1 STORY BLOCK
ADDRESS #12100

BUILDING HEIGHT=22.4'±

OWNER: NNN REIT LP
PARCEL 25-22-27-0000-00-033
INSTRUMENT #20220217172

NOT PLATTED
OWNER: WEST ORANGE CHAMBER
OF COMMERCE INC.
PARCEL 25-22-27-0000-00-034
INSTRUMENT #20080048826

NOT PLATTED
OWNER: PSB WINTER
GARDEN HOLDINGS LLC
PARCEL 25-22-27-0000-00-054
INSTRUMENT #20220103092

TOP=120.10
S. INV=116.45

TOP=122.13
N. INV=116.64 (18" RCP)
E. INV=114.03 (28" RCP)
W. INV=114.00 (28" RCP)

TOP=119.12
N. INV=115.42 (10" HDPE)
(FULL OF WATER,
COULD NOT FIND
ANY OTHER PIPES)

TOP=119.77
N. INV=115.73 (6" PVC)
S. INV=115.89 (8" PVC)

TOP=120.09
N. INV=115.07 (8" PVC)
W. INV=117.54 (2-1/2" PVC)
(FULL OF SEWAGE)

LIFT STATION

TOP=120.13
E. INV=118.08
(2-1/2" PVC)
(FULL OF SEWAGE)

MATCH LINE

Tree Chart

1-14" OAK	45-10" OAK
2-13" OAK	46-18" OAK
3-21" OAK	47-12" OAK
4-(2)25" OAK	48-26" OAK
5-14" OAK	49-65" OAK
6-40" OAK	50-36" OAK
7-15" OAK	51-(4)16" OAK
8-16" OAK	52-(3)25" OAK
9-32" OAK	53-12" OAK
10-37" OAK	54-13" OAK
11-8" OAK	55-16" OAK
12-11" OAK	56-30" OAK
13-14" OAK	57-22" OAK
14-8" OAK	58-11" OAK
15-13" OAK	59-18" OAK (UPROOTED)
16-(2)27" OAK	60-18" OAK
17-45" OAK	61-9" OAK
18-40" OAK	62-13" OAK
19-44" OAK	63-25" OAK (UPROOTED)
20-40" OAK	64-9" OAK
21-(4)26" OAK	65-9" OAK
22-18" OAK	66-20" OAK
23-15" OAK (UPROOTED)	67-11" OAK
24-16" OAK	68-15" OAK
25-11" OAK	69-13" OAK
26-21" OAK	70-21" OAK
27-16" OAK	71-13" OAK
28-8" OAK	72-14" OAK
29-(2)16" OAK	73-13" OAK
30-(2)15" OAK	74-13" OAK
31-8" OAK	75-10" OAK
32-9" OAK	76-19" OAK
33-19" OAK	77-12" OAK
34-11" OAK	78-15" OAK
35-30" OAK	79-48" OAK
36-9" OAK	80-11" OAK
37-11" OAK	81-15" OAK
38-43" OAK	82-12" OAK
39-15" OAK	83-8" OAK
40-16" OAK	84-10" OAK
41-18" OAK	85-12" OAK
42-13" OAK	86-14" OAK
43-(2)17" OAK	87-10" OAK
44-12" OAK	88-38" OAK

N

GRAPHIC SCALE
0' 10' 20' 40' 60'
1" = 20'

LEGEND

A/C	- AIR CONDITIONER
CLF	- CHAIN LINK FENCE
CONC	- CONCRETE
COVD	- COVERED
CP	- CONCRETE PAD
CW	- CONCRETE WALKWAY
Δ	- DELTA
DW	- DRIVE WAY
ESMT	- EASEMENT
FIRM	- FLOOD INSURANCE RATE MAP
FDC	- FIRE DEPARTMENT CONNECTION
FND	- FOUND
HDPE	- HIGH-DENSITY POLYETHYLENE
INV	- INVERT
IR	- IRON ROD
IP	- IRON PIPE
L	- ARC LENGTH
LB	- LICENSED BUSINESS
LS	- LICENSED SURVEYOR
MF	- METAL FENCE
N&D	- NAIL & DISC
NAVD	- NORTH AMERICAN VERTICAL DATUM
ORB	- OFFICIAL RECORDS BOOK
PB	- PLAT BOOK
PG	- PAGE
PLS	- PROFESSIONALLY LICENSED SURVEYOR
PSM	- PROFESSIONAL SURVEYOR AND MAPPER
PVC	- POLYVINYL CHLORIDE (PLASTIC)
RCP	- REINFORCED CONCRETE PIPE
R	- RADIUS
R/W	- RIGHT OF WAY
SDO	- SHOWN FOR DIRECTION ONLY
(R)	- RECORD DESCRIPTION
(M)	- MEASURED

- BENCHMARK
- CENTERLINE
- LIGHT POLE
- ELECTRIC BOX
- ELECTRIC METER
- GUY WIRE ANCHOR
- UTILITY POLE
- FIBER OPTIC CABLE BOX
- BACKFLOW PREVENTER
- WATER METER
- WATER VALVE
- SEWER VALVE
- SANITARY MANHOLE
- TRAFFIC SIGN
- OAK TREE
- CRAPE MYRTLE

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR:
INTERSTRUCT ORLANDO, LLC

SITE ADDRESS:
12152 W COLONIAL DRIVE
WINTER GARDEN, FL 34787

COUNTY: ORANGE
SECTION: 25-22-27
SUBDIVISION: NOT PLATTED

TERRENCE W. RUTTER, JR., PSM 7371

"THE DATE OF SIGNATURE DOES NOT REVISE OR SUPERSEDE THE SURVEY DATE OR REVISION DATE."

THIS SURVEY MEETS THE "STANDARDS OF PRACTICE" AS REQUIRED BY CHAPTER 5J-17 FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.

"NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THIS FLORIDA LICENSED SURVEYOR AND MAPPER."

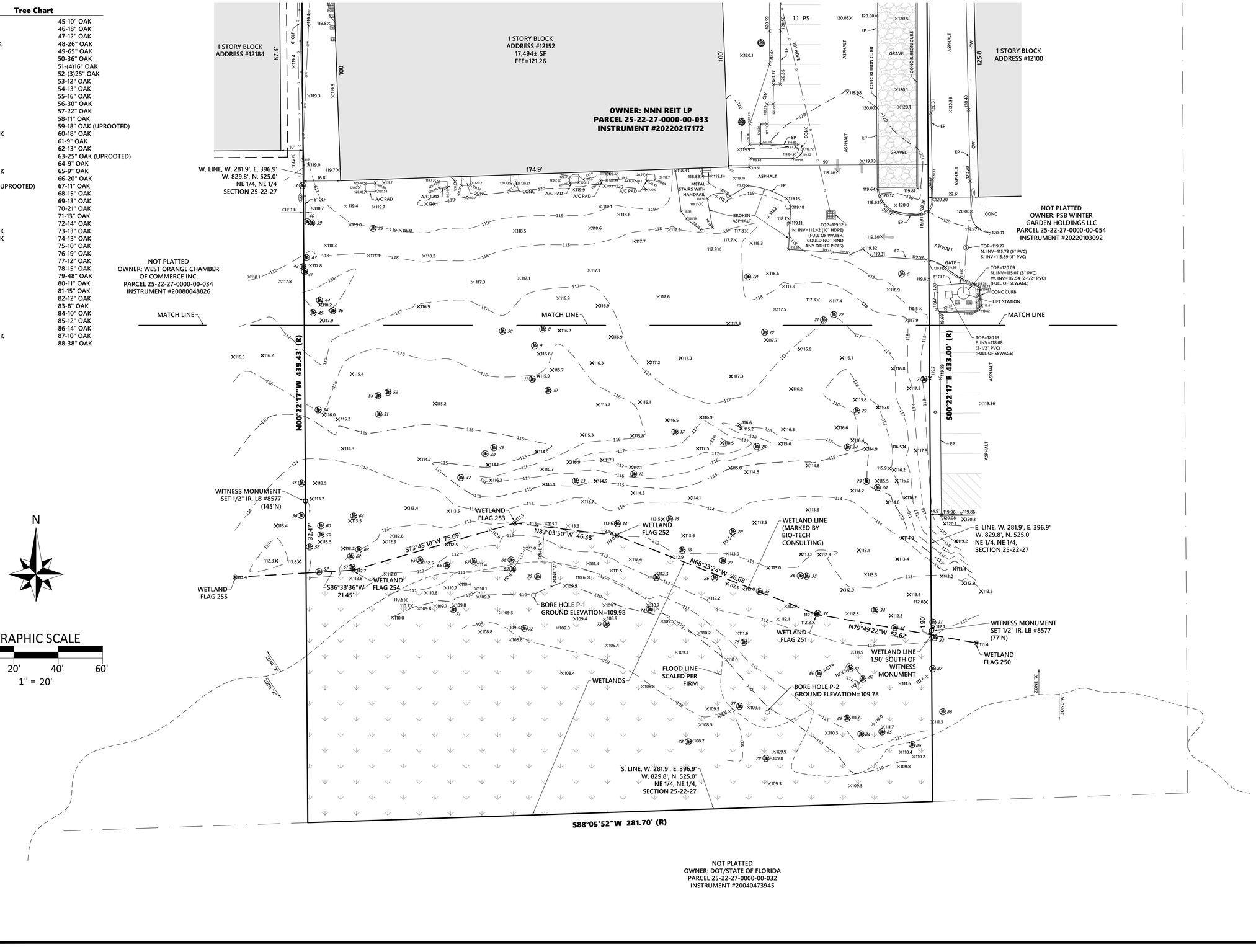
-OR-

THE ELECTRONIC SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRENCE W. RUTTER, JR., PSM 7371.

Map of Survey

Tree Chart

1-14" OAK	45-10" OAK
2-13" OAK	46-18" OAK
3-21" OAK	47-12" OAK
4-(2)25" OAK	48-26" OAK
5-14" OAK	49-65" OAK
6-40" OAK	50-36" OAK
7-15" OAK	51-(4)16" OAK
8-16" OAK	52-(3)25" OAK
9-32" OAK	53-12" OAK
10-37" OAK	54-13" OAK
11-8" OAK	55-16" OAK
12-11" OAK	56-30" OAK
13-14" OAK	57-22" OAK
14-8" OAK	58-11" OAK
15-13" OAK	59-18" OAK (UPROOTED)
16-(2)27" OAK	60-18" OAK
17-45" OAK	61-9" OAK
18-40" OAK	62-13" OAK
19-44" OAK	63-25" OAK (UPROOTED)
20-40" OAK	64-9" OAK
21-(4)26" OAK	65-9" OAK
22-18" OAK	66-20" OAK
23-15" OAK (UPROOTED)	67-11" OAK
24-16" OAK	68-15" OAK
25-11" OAK	69-13" OAK
26-21" OAK	70-21" OAK
27-16" OAK	71-13" OAK
28-8" OAK	72-14" OAK
29-(2)16" OAK	73-13" OAK
30-(2)15" OAK	74-13" OAK
31-8" OAK	75-10" OAK
32-9" OAK	76-19" OAK
33-19" OAK	77-12" OAK
34-11" OAK	78-15" OAK
35-30" OAK	79-48" OAK
36-9" OAK	80-11" OAK
37-11" OAK	81-15" OAK
38-43" OAK	82-12" OAK
39-15" OAK	83-8" OAK
40-16" OAK	84-10" OAK
41-18" OAK	85-12" OAK
42-13" OAK	86-14" OAK
43-(2)17" OAK	87-10" OAK
44-12" OAK	88-38" OAK



SURVEY DATE: 8/20/2025	SHEET 3 OF 3
PROJECT NUMBER: 2025-08-08-02	SCALE: 1" = 20'

SUNSTATE SURVEYING
4751 Sturbridge Circle
Orlando, Florida 32812
www.sunstatesurveying.com
Terrence@sunstatesurveying.com
Phone: 407-928-8252
LB #8577

COPYRIGHT © 2023 - 2026, SUNSTATE SURVEYING, LLC

REVISIONS

#	PROJECT NUMBER	REVISION	DATE
1	2025-08-08-02	ADD TITLE	9/10/25
2	2025-08-08-02	ADD INVERT DATA TO STORM STRUCTURES	9/20/25
3	2026-03-15-01	ADDITIONAL TOPO/TREES IN WETLAND AREA	3/28/26

LEGEND

A/C - AIR CONDITIONER	LS - LICENSED SURVEYOR
CLF - CHAIN LINK FENCE	MF - METAL FENCE
CONC - CONCRETE	N&D - NAIL & DISC
COVD - COVERED	NAVD - NORTH AMERICAN VERTICAL DATUM
CP - CONCRETE PAD	
CW - CONCRETE WALKWAY	ORB - OFFICIAL RECORDS BOOK
Δ - DELTA	PB - PLAT BOOK
DW - DRIVE WAY	PG - PAGE
ESMT - EASEMENT	PLS - PROFESSIONALLY LICENSED SURVEYOR
FIRM - FLOOD INSURANCE RATE MAP	
FDC - FIRE DEPARTMENT CONNECTION	PSM - PROFESSIONAL SURVEYOR AND MAPPER
FND - FOUND	PVC - POLYVINYL CHLORIDE (PLASTIC)
HDPE - HIGH-DENSITY POLYETHYLENE	RCP - REINFORCED CONCRETE PIPE
INV - INVERT	R - RADIUS
IR - IRON ROD	R/W - RIGHT OF WAY
IP - IRON PIPE	SDO - SHOWN FOR DIRECTION ONLY
L - ARC LENGTH	(R) - RECORD DESCRIPTION
LB - LICENSED BUSINESS	(M) - MEASURED

- BENCHMARK
- CENTERLINE
- LIGHT POLE
- ELECTRIC BOX
- ELECTRIC METER
- GUY WIRE ANCHOR
- UTILITY POLE
- FIBER OPTIC CABLE BOX
- BACKFLOW PREVENTER
- WATER METER
- WATER VALVE
- SEWER VALVE
- SANITARY MANHOLE
- TRAFFIC SIGN
- OAK TREE
- CRAPE MYRTLE

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR:
INTERSTRUCT ORLANDO, LLC

SITE ADDRESS:
12152 W COLONIAL DRIVE
WINTER GARDEN, FL 34787

COUNTY: ORANGE
SECTION: 25-22-27
SUBDIVISION: NOT PLATTED

TERRENCE W. RUTTER, JR., PSM 7371

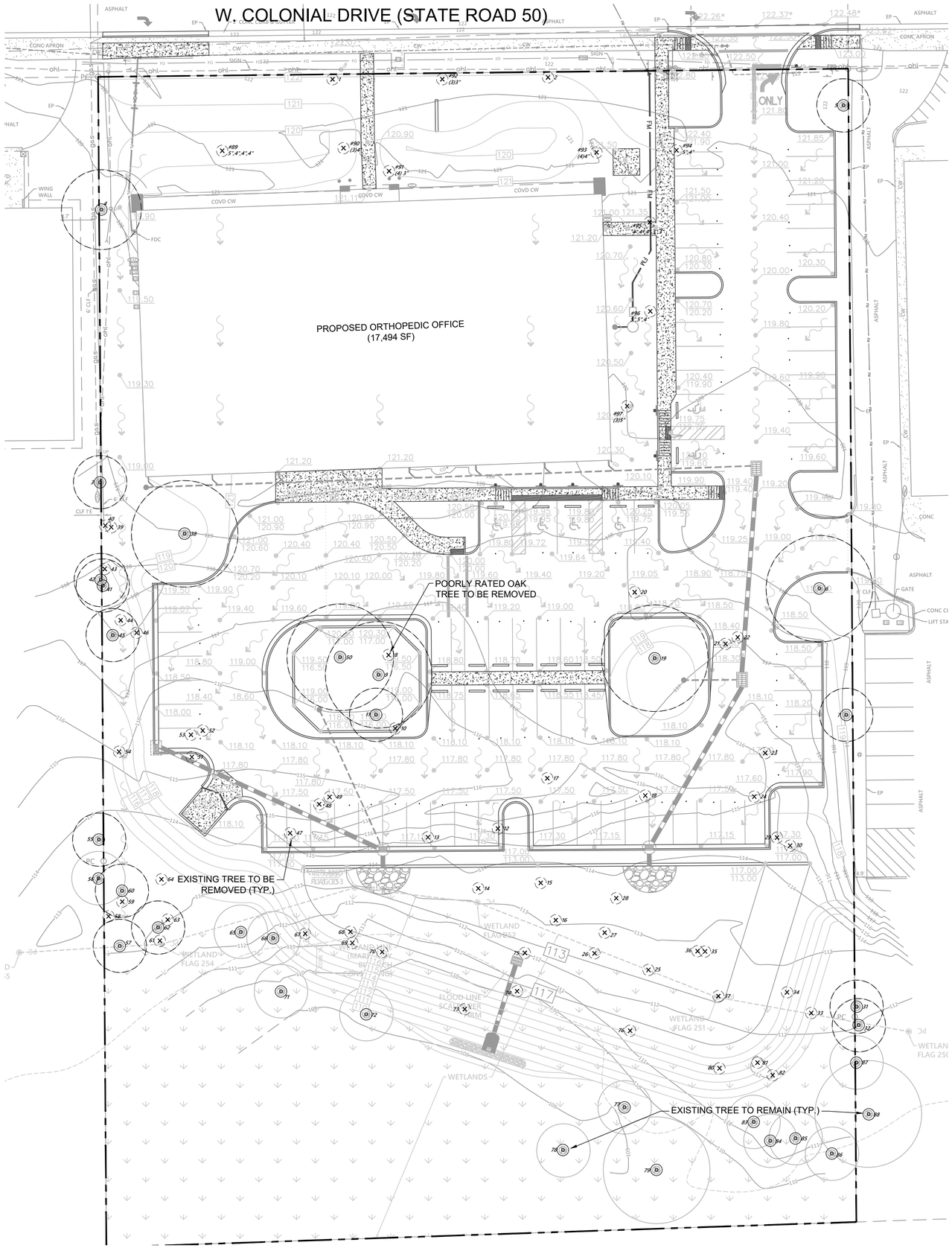
"THE DATE OF SIGNATURE DOES NOT REVISE OR SUPERSEDE THE SURVEY DATE OR REVISION DATE."

THIS SURVEY MEETS THE "STANDARDS OF PRACTICE" AS REQUIRED BY CHAPTER 5J-17 FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.

"NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THIS FLORIDA LICENSED SURVEYOR AND MAPPER."

-OR-

THE ELECTRONIC SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRENCE W. RUTTER, JR., PSM 7371.



TREE INVENTORY*

ID #	SIZE (INCHES)	BOTANICAL NAME	COMMON NAME	PRESERVED	REMOVED	MITIGATION REQUIRED	REPLACEMENT TREES
11	8	*CELTIS LAEVIGATA*	SUGARBERRY	PRESERVED		NOT APPLICABLE	
14	8	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
28	8	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
31	8	*QUERCUS LAURIFOLIA*	LAUREL OAK	PRESERVED		NOT APPLICABLE	
83	8	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
32	9	*QUERCUS LAURIFOLIA*	LAUREL OAK	PRESERVED		NOT APPLICABLE	
36	9	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
61	9	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
64	9	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
65	9	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
45	10	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
75	10	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
84	10	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
87	10	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
12	11	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
25	11	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
34	11	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
37	11	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
58	11	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
67	11	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
80	11	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
44	12	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
47	12	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
53	12	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
77	12	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
81	12	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
85	12	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
2	13	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
15	13	*DEAD*	DEAD		REMOVED	NOT APPLICABLE	
42	13	*MELIA AZEDARACH*	CHINABERRY	PRESERVED		NOT APPLICABLE	
54	13	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
62	13	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
69	13	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
71	13	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
73	13	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
1	14	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
5	14	*QUERCUS LAURIFOLIA*	LAUREL OAK	PRESERVED		NOT APPLICABLE	
13	14	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
72	14	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
74	14	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
86	14	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
7	15	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
23	15	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
39	15	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
68	15	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
78	15	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
81	15	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
8	16	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
24	16	*QUERCUS NIGRA*	WATER OAK		REMOVED	**YES**	2
27	16	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
40	16	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
55	16	*QUERCUS LAURIFOLIA*	LAUREL OAK	PRESERVED		NOT APPLICABLE	
22	18	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
41	18	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
46	18	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
59	18	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
60	18	*ACER RUBRUM*	RED MAPLE	PRESERVED		NOT APPLICABLE	
33	19	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
76	19	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
66	20	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
3	21	*QUERCUS LAURIFOLIA*	LAUREL OAK	PRESERVED		NOT APPLICABLE	
26	21	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
70	21	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
57	22	*ACER RUBRUM*	RED MAPLE	PRESERVED		NOT APPLICABLE	
63	25	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
48	26	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
35	30	*QUERCUS LAURIFOLIA*	LAUREL OAK		REMOVED	**YES**	2
56	30	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE	PRESERVED		NOT APPLICABLE	
9	32	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
50	36	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
10	37	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
88	38	*QUERCUS SPP.*	OAK TREE	PRESERVED		NOT APPLICABLE	
6	40	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
18	40	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
20	40	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
38	43	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
19	44	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
17	45	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
79	48	*QUERCUS SPP.*	OAK TREE		REMOVED	**YES**	2
49	65	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
30	(2) 15	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
29	(2) 16	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
43	(2) 17	*MELIA AZEDARACH*	CHINABERRY		REMOVED	N.A. (RESTRICTED STOCK)	
4	(2) 25	*QUERCUS VIRGINIANA*	LIVE OAK	PRESERVED		NOT APPLICABLE	
16	(2) 27	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
52	(3) 25	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
92	(3) 3	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2
90	(3) 4	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2
97	(3) 5	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2
51	(4) 16	*ENTEROLOBIUM CYCLOCARPUM*	EARPOD TREE		REMOVED	N.A. (RESTRICTED STOCK)	
21	(4) 26	*QUERCUS VIRGINIANA*	LIVE OAK		REMOVED	**YES**	2
91	(4) 3	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2
92	(4) 4	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2
95	4, 4, 4, 3, 3	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2
94	5, 4	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2
89	5, 4, 4, 4	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2
96	5, 5, 4	*LAGERSTROEMIA INDICA*	CRAPE MYRTLE		REMOVED	**YES**	2

CITY OF WINTER GARDEN CODE OF ORDINANCES

SEC. 114-74(a). - RELOCATION OR REPLACEMENT

AS A CONDITION OF GRANTING A PERMIT UNDER THIS ARTICLE, THE APPLICANT MAY BE REQUIRED, WHERE PRACTICAL, TO RELOCATE THE TREE BEING REMOVED ELSEWHERE ON THE SAME SITE OR MAY BE REQUIRED TO REPLACE THE TREE ON A TWO-FOR-ONE BASIS WITH SUITABLE REPLACEMENT TREES. THE REPLACEMENT TREES SHALL HAVE AT LEAST EQUAL SHADE POTENTIAL AND SHALL BE MINIMUM OF TEN FEET HIGH AT THE TIME OF PLANTING.

TOTAL TREES REMOVED (EXCLUDING RESTRICTED STOCK) = 42 TREES
TOTAL REPLACEMENT TREES REQUIRED = (84) TEN-FEET HIGH MIN. TREES (TWO-FOR-ONE BASIS)

SEE SHEET L1 FOR LANDSCAPE PLAN

NOTES

1. PROTECTIVE BARRIERS SHALL BE ERECTED PRIOR TO CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION ACTIVITY IS TERMINATED.
2. NO SIGNS, BUILDING PERMITS, WIRES OR OTHER ATTACHMENTS OF ANY KIND SHALL BE ATTACHED TO ANY PROTECTED TREE OR PALM.
3. ALL TRUNKS OF EXISTING TREES AND PALMS TO REMAIN SHALL BE CLEAR OF VINES AND INVASIVE VEGETATION.
4. RESTORE GRADES TO PRE-REMOVAL CONDITION WHERE EXCAVATION OF ROOTS AND STUMPS RESULT IN DEPRESSIONS AND HOLES. DEPRESSIONS AND HOLES SHALL BE FILLED WITH SOIL SUITABLE FOR PLANTING IN ACCORDANCE WITH LANDSCAPE NOTES, DETAILS, AND SPECIFICATIONS.
5. USE CAUTION WHEN REMOVING PLANT MATERIAL SO THAT EXISTING IRRIGATION, UTILITIES, AND STRUCTURES TO REMAIN ARE NOT DAMAGED. CONTRACTOR SHALL REPAIR OR REPLACE EXISTING FACILITIES DAMAGED BY DEMOLITION ACTIVITIES.
6. THE PROJECT SHALL COMPLY WITH ALL CITY OF WINTER GARDEN TREE PROTECTION REQUIREMENTS.
7. WHEN THE CRITICAL ROOT ZONE WILL BE DISTURBED, AFFECTED ROOTS MUST BE SEVERED BY CLEAN PRUNING CUTS AT THE POINT WHERE CONSTRUCTION IMPACTS THE ROOTS. ROOTS CAN BE PRUNED BY UTILIZING TRENCHING EQUIPMENT DESIGNED FOR THIS PURPOSE OR BY HAND DIGGING A TRENCH AND PRUNING ROOTS WITH A PRUNING SAW, CHAIN SAW, OR OTHER EQUIPMENT DESIGNED FOR TREE PRUNING. ROOTS LOCATED WITHIN THE CRITICAL ROOT ZONE THAT WILL BE IMPACTED BY CONSTRUCTION MUST BE PRUNED TO A DEPTH OF 18 INCHES BELOW THE EXISTING GRADE OR TO THE DEPTH OF DISTURBANCE IF LESS THAN 18 INCHES FROM THE EXISTING GRADE. WHEN UNDERGROUND UTILITIES LINES ARE TO BE INSTALLED WITHIN THE CRITICAL ROOT ZONE, THE ROOT PRUNING REQUIREMENTS MAY BE WAIVED IF THE LINES ARE INSTALLED VIA TUNNELING OR DIRECTIONAL BORING AS OPPOSED TO OPEN TRENCHING.
8. A TREE REMOVAL PERMIT IS REQUIRED FOR THE REMOVAL OF THE PROTECTED TREES.

EXISTING TREES	
(D)	EXISTING TREE TO REMAIN
(X)	EXISTING TREE TO BE REMOVED

NORTH

GRAPHIC SCALE 0' 10' 20' 40'

CALL SUNSHINE
811
IT'S THE LAW IN FLORIDA

BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA
AT LEAST TWO FULL BUSINESS DAYS
BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive, Dunedin, Florida 34698
Phone: (727) 726-6124
LA6667069

Contact: Chris Anuszkiewicz

Web-Site www.placemakerdesignstudio.com

Prepared For:

Interstruct Design LLC
814 W. Church Street
Orlando, Florida 32805

Contact: Ryan Young, AIA
Phone: (407) 849-0025

Copyright: The content of these drawings are owned by and the property of PlaceMaker Design Studio, LLC and were created for the exclusive use of this project.

Orlando Othopaedic Center at Winter Garden

12152 COLONIAL DR.
WINTER GARDEN, FLORIDA

Seal

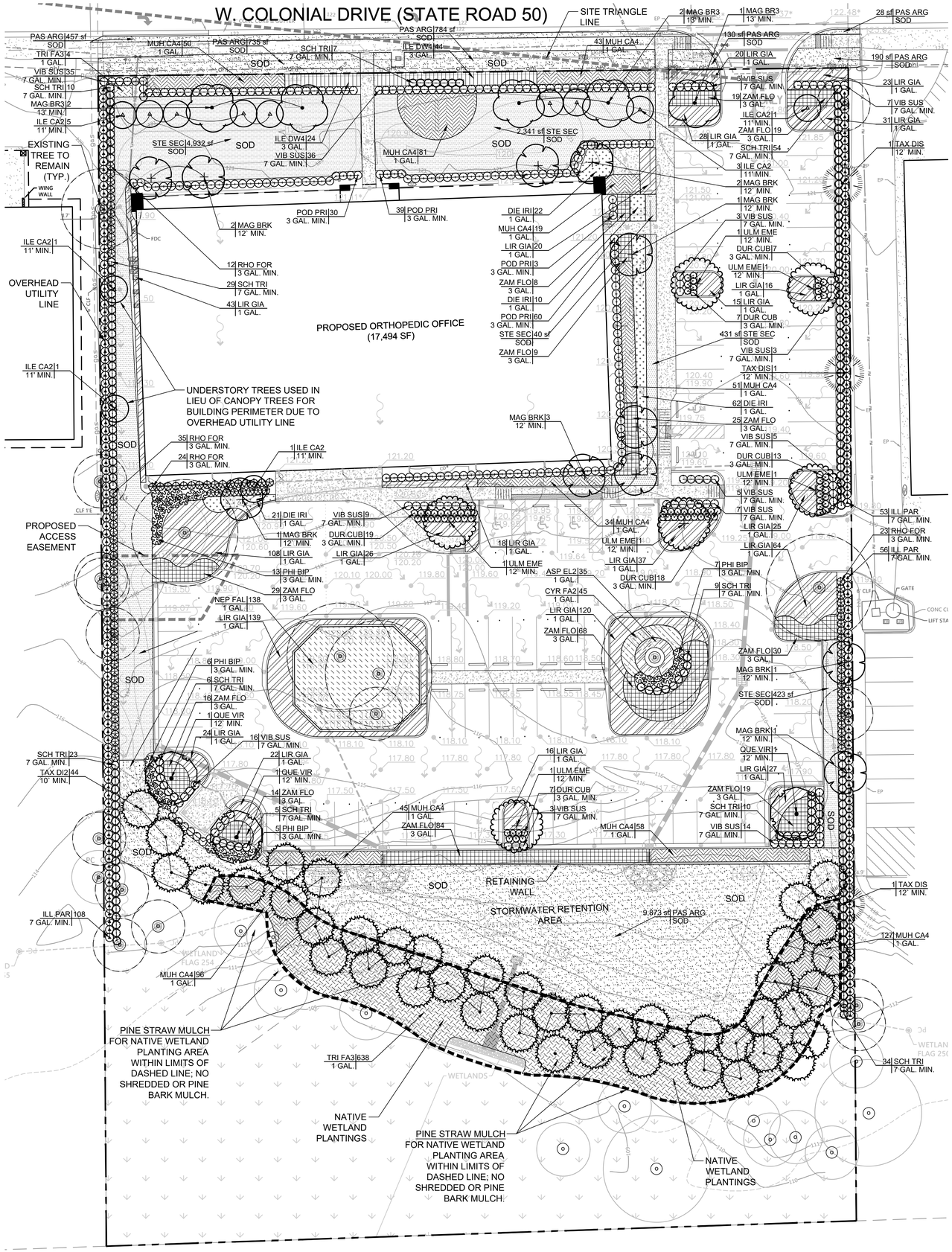
PERMIT SUBMITTAL

REV	DATE	DESCRIPTION
5		
4		
3		
2	7/02/2026	CITY COMMENTS
1	5/26/2026	DRC COMMENTS

Date:	**APRIL 8, 2026**
Job No.:	**7012**
Drawn By:	**GLA**
Checked By:	**CJA**

Sheet Title
TREE INVENTORY PLAN

Sheet No.
L0



ZONING: COMMERCIAL (C-2)
SITE CONSTRUCTION AREA: 122,842 S.F. ~ 2.82 AC.
CITY OF WINTER GARDEN CODE OF ORDINANCES

SEC. 114-74(a). - RELOCATION OR REPLACEMENT

AS A CONDITION OF GRANTING A PERMIT UNDER THIS ARTICLE, THE APPLICANT MAY BE REQUIRED, WHERE PRACTICAL, TO RELOCATE THE TREE BEING REMOVED ELSEWHERE ON THE SAME SITE OR MAY BE REQUIRED TO REPLACE THE TREE ON A TWO-FOR-ONE BASIS WITH SUITABLE REPLACEMENT TREES. THE REPLACEMENT TREES SHALL HAVE AT LEAST EQUAL SHADE POTENTIAL AND SHALL BE MINIMUM OF TEN FEET HIGH AT THE TIME OF PLANTING.

TOTAL TREES REMOVED (EXCLUDING RESTRICTED STOCK) = 42 TREES
TOTAL REPLACEMENT TREES REQUIRED / PROVIDED = (84) TEN-FEET HIGH MIN. TREES (TWO-FOR-ONE BASIS)

SEE SHEET L0 FOR TREE INVENTORY PLAN

SEC. 118-1522. - BUILDING OPEN AREAS

A MINIMUM TEN-FOOT WIDE LANDSCAPE AREA SHALL BE LOCATED AROUND ALL BUILDINGS. A FIVE-FOOT SIDEWALK MAY BE INCLUDED IN THIS BUFFER AREA. AN AVERAGE OF ONE CANOPY TREE SHALL BE LOCATED FOR EVERY 50 LINEAR FEET OF BUILDING PERIMETER. ALL EDGES OF BUILDINGS SHALL HAVE A FOUNDATION PLANTING OF SHRUBS AND GROUNDCOVERS AS A MINIMUM. SHRUBS AND GROUNDCOVERS SHALL COMPRISE AT LEAST 30 PERCENT OF THE REQUIRED GREEN SPACE. REQUIRED / PROVIDED

SEC. 118-1523. - LANDSCAPE BUFFER ALONG PUBLIC STREETS

A MINIMUM 15-FOOT WIDE LANDSCAPE BUFFER IS REQUIRED FOR PARCELS ALONG ANY PUBLIC STREETS AND REQUIRES 50 PERCENT COVERAGE WITH SHRUBS AND GROUNDCOVER. REQUIRED / PROVIDED

ONE CANOPY TREE PER 70 LF OR FRACTION THEREOF
281.60 LF / 70 LF X 1 = 4.02 CANOPY TREES REQUIRED
5 CANOPY TREES PROVIDED

THREE UNDERSTORY TREES PER 100 LF
281.60 LF / 100 LF X 3 = 8.45 UNDERSTORY TREES REQUIRED
9 UNDERSTORY TREES PROVIDED

(33) THREE-GALLON PLANTS PER 100 LF, A CONTINUOUS HEDGE AT LEAST 36 INCHES HIGH AT TIME OF PLANTING
281.60 LF / 100 X 33 = 92.93 THREE-GALLON (MIN.) PLANTS REQUIRED
93 THREE-GALLON (MIN.) PLANTS PROVIDED

SEC. 118-1524. - LANDSCAPE BUFFERS BETWEEN PARCELS

REAR YARD BUFFER REQUIREMENTS

EXISTING VEGETATION TO REMAIN.

SIDE YARD BUFFER REQUIREMENTS

A MINIMUM FIVE-FOOT WIDTH LANDSCAPE BUFFER IS REQUIRED FOR SIDE PROPERTY BOUNDARIES AND SHALL BE PLANTED IN ACCORDANCE WITH TABLE 3.4.2. SHRUBS AND GROUNDCOVER SHALL COMPRISE AT LEAST 50 PERCENT OF THE LANDSCAPED AREAS. REQUIRED / PROVIDED

WEST SIDE YARD
ONE CANOPY TREE PER 50 LF
327 LF / 50 LF X 1 = 6.54 CANOPY TREES REQUIRED
7 EXISTING CANOPY TREES PROVIDED

(33) THREE-GALLON PLANTS, A CONTINUOUS HEDGE AT LEAST 36 INCHES HIGH AT TIME OF PLANTING
327 LF / 50 X 33 = 215.82 THREE-GALLON PLANTS REQUIRED
216 THREE-GALLON PLANTS PROVIDED

EAST SIDE YARD
ONE CANOPY TREE PER 50 LF
336 LF / 50 LF X 1 = 6.72 CANOPY TREES REQUIRED
2 EXISTING CANOPY TREES AND 5 PLANTED CANOPY TREES = 7 CANOPY TREES PROVIDED

(33) THREE-GALLON PLANTS, A CONTINUOUS HEDGE AT LEAST 36 INCHES HIGH AT TIME OF PLANTING
336 LF / 50 X 33 = 221.76 THREE-GALLON PLANTS REQUIRED
222 THREE-GALLON PLANTS PROVIDED

SEC. 118-1525. - PARKING LOT LANDSCAPING

ONE CANOPY TREE PER TEN PARKING SPACES. NO PARKING ROW SHALL EXTEND MORE THAN 12 SPACES WITHOUT A TREE ISLAND BREAK. REQUIRED / PROVIDED

PLANTING AREAS SHALL BE PROVIDED EQUAL TO OR GREATER THAN TEN PERCENT OF THE PAVED AREA WITHIN THE PROJECT SITE, NOT INCLUDING BUILDING SQUARE FOOTAGE OR RETENTION PONDS. REQUIRED / PROVIDED

TOTAL PAVED AREA = 36,661 SF
36,661 SF X 0.10 = 3,666 (10%) SF REQUIRED
8,791 (24%) SF PROVIDED

ONE CANOPY TREE FOR EACH 50 LINEAR FEET OF PEDESTRIAN WALKWAY NOT ASSOCIATED WITH A REQUIRED BUFFER OR BUILDING FRONTAGE PLANTING. REQUIRED / PROVIDED

SEC. 118-1526. - WALKWAYS AND PEDESTRIAN CONNECTIONS

PEDESTRIAN WALKWAYS SHALL BE LANDSCAPED WITH ADDITIONAL SHADE OR UNDERSTORY TREES EQUAL TO AN AVERAGE OF ONE TREE PER 50 LINEAR FEET OF WALKWAY, UNLESS THE WALKWAY IS ADJACENT OR INCLUDED WITHIN AN EXISTING COMPLIANT BUFFER OR FRONTAGE PLANTING. REQUIRED / PROVIDED

ONE CANOPY TREE SHALL BE PLANTED FOR EACH 200 SQUARE FEET OF SEPARATE ADDITIONAL LANDSCAPED AREA. REQUIRED / PROVIDED

NOTES

1. SEE SHEET L0 FOR TREE INVENTORY.
2. SEE SHEET L1 FOR LANDSCAPE PLAN. SEE SHEET L2 FOR LANDSCAPE NOTES. SEE SHEET L3 FOR LANDSCAPE DETAILS.
4. IRRIGATION PLAN: UNDERGROUND IRRIGATION SYSTEM TO ENSURE 100% COVERAGE FOR ALL SHRUBS, GROUNDCOVERS, GRASSES, TREES, AND TURF AREAS. SEE SHEET L2 AND IR1-IR4 FOR IRRIGATION REQUIREMENTS.
5. SOD ALL DISTURBED AREAS.
6. THE PROJECT SHALL COMPLY WITH ALL CITY OF WINTER GARDEN LANDSCAPE, TREE PROTECTION, AND TREE PLANTING REQUIREMENTS.

NORTH

0' 10' 20' 40'
GRAPHIC SCALE

CALL SUNSHINE
811
IT'S THE LAW IN FLORIDA

BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA AT LEAST TWO FULL BUSINESS DAYS BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive, Dunedin, Florida 34698
Phone: (727) 726-6124
LA6667069

Contact: Chris Anuszkiewicz

Web-Site www.placemakerdesignstudio.com

Prepared For:

Interstruct Design LLC
814 W. Church Street
Orlando, Florida 32805

Contact: Ryan Young, AIA
Phone: (407) 849-0025

Copyright: The content of these drawings are owned by and the property of PlaceMaker Design Studio, LLC and were created for the exclusive use of this project.

Orlando Othopaedic Center at Winter Garden

12152 COLONIAL DR.
WINTER GARDEN, FLORIDA

Seal

REGISTERED LANDSCAPE ARCHITECT
CHRISTOPHER JEREMIAH ANUSZKIEWICZ
LA6667069
STATE OF FLORIDA

The seal appearing on this document was authorized by Christopher J. Anuszkiewicz, LA6667069 on 4/6/2026.

PERMIT SUBMITTAL

REV	DATE	DESCRIPTION
5		
4		
3		
2	7/02/2026	CITY COMMENTS
1	5/26/2026	DRC COMMENTS

Date:	**APRIL 8, 2026**
Job No.:	**7012**
Drawn By:	**GLA**
Checked By:	**CJA**

Sheet Title

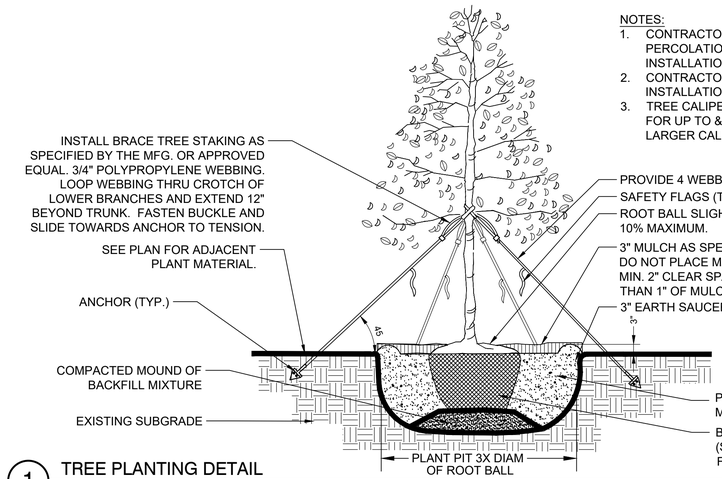
LANDSCAPE PLAN

Sheet No.

L1

LANDSCAPE NOTES

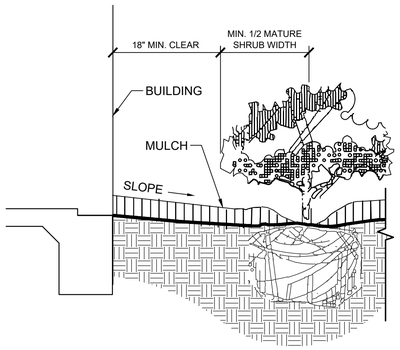
1. PLANS HAVE BEEN PREPARED ON DATA PROVIDED BY THE PROJECT SURVEY, ENGINEER AND/OR ARCHITECT AND ARE ONLY AS ACCURATE AS THE DATA PROVIDED BY ANOTHER PROFESSIONAL. THE LANDSCAPE ARCHITECT SHALL NOT BE RESPONSIBLE FOR FIELD DISCREPANCIES OCCURRING DUE TO ERRORS, INACCURACIES AND/OR OMISSIONS IN THE BASE INFORMATION PROVIDED BY OTHERS OR CANNOT BE HELD RESPONSIBLE FOR SAME DUE TO DATA NOT PROVIDED PRIOR TO THE PREPARATION OF THE LANDSCAPE ARCHITECTURAL PLANS IN A TIMELY MANNER.
2. CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION, INCLUDING UNDERGROUND UTILITIES, PRIOR TO INITIATING PLANTING AND IRRIGATION INSTALLATION. REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT IMMEDIATELY. FIELD ADJUST LOCATION OF PLANT MATERIAL AND/OR IRRIGATION AS NECESSARY TO AVOID DAMAGE TO ALL EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES SHALL BE COMPLETED AT THE CONTRACTORS EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
3. CONTRACTOR TO VERIFY PROPERTY LINES AND SETBACKS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL STAKE AND LOCATE THE PROPERTY LINES AND SHALL VERIFY PLAN DIMENSIONS AND FIELD CONDITIONS ARE CONSISTENT. CONTRACTOR SHALL VERIFY THESE PLANS ARE THE MOST UP TO DATE AND THAT THEY HAVE BEEN APPROVED AND ACCEPTED BY THE OWNER BEFORE COMMENCING CONSTRUCTION.
4. ALL CONSTRUCTION SHALL CONFORM TO MEET ALL FEDERAL, STATE, AND LOCAL CODES, REGULATIONS AND ORDINANCES THAT HAVE JURISDICTION OVER THE PROJECT WITHOUT ADDITIONAL COST TO OWNER. CONTRACT SHALL ABIDE BY THE SAFETY STANDARDS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT AND AMENDMENTS. THE OWNER, OWNER'S REPRESENTATIVE, AND LANDSCAPE ARCHITECT SHALL BE HELD HARMLESS FROM ANY ACCIDENT, INJURY OR ANY OTHER INCIDENT RESULTING FROM COMPLIANCE OR NON-COMPLIANCE WITH THESE STANDARDS. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL AND STATE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS, ANSI Z133, AND APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS.
5. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY "SUNSHINE" AND ANY OTHER INTERESTED AGENCIES OR PARTIES OF HIS INTENT TO EXCAVATE AND TO OBTAIN FROM ALL AGENCIES OR OTHER INTERESTED PARTIES LOCATIONS OF ALL EXISTING UTILITIES OF EVERY KIND IN THE AREAS WHERE HE INTENDS OR PLANS TO EXCAVATE. SUCH LOCATIONS SHALL BE OBTAINED PRIOR TO STARTING CONSTRUCTION AND SHALL BE MAINTAINED DURING CONSTRUCTION.
6. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND THE COST FOR SUCH ARE TO BE INCLUDED AS PART OF THE BID. UNLESS STIPULATED SPECIFICALLY BY THE OWNER, ANY APPLICABLE FEES OR FINANCIAL REQUIREMENTS ARE TO BE PAID BY THE CONTRACTOR FOR ALL REQUIRED PERMITS FOR ANY INSTALLATION OR CONSTRUCTION WORK DESCRIBED IN THESE DOCUMENTS.
7. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ALL EXISTING GRASSES, GROUNDCOVERS, AND SHRUBS WHERE NEW PLANTINGS ARE PROPOSED. CONTRACTOR SHALL VERIFY ALL PLANT MATERIAL OR ITEMS TO BE REMOVED AND/OR PROTECTED ITEMS WITH OWNER'S REPRESENTATIVE PRIOR TO BID. THIS MAY INCLUDED BUT NOT BE LIMITED TO: SOD, SOIL, PLANT MATERIAL, STUMPS, ETC. CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ANY TREES DAMAGED WITH SAME SPECIES AND SIZE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AND GOVERNING AGENCY. THE WORK DESCRIBED IN THESE DRAWINGS INCLUDES THE FURNISHING OF ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY AND INCIDENTAL TO THE INSTALLATION AND PREPARATION OF PLANTING AREAS, SOIL TREATMENT, PLANTS, LAWN AREAS, PROTECTION OF EXISTING AND PROPOSED PLANTS, HAULING AND SPREADING OF TOPSOIL (INCLUDING IMPORTATION, AMENDING, AND PREPARATION), FINISH GRADING, REMOVAL AND / OR TRANSPLANTING OF EXISTING PLANTS AS INDICATED, WARRANTY, REPLACEMENT OF REJECTED PLANTS AND/OR MATERIALS, AND ALL RELATED ITEMS AS REQUIRED TO COMPLETE THE WORK AS INDICATED ON THE PLANS AND FULLFILLING ALL WARRANTY PROVISIONS DESCRIBED HEREIN.
8. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT IN ORDER NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTOR'S OWN WORK.
9. THE OWNER OR LANDSCAPE ARCHITECT (AT ANY TIME PRIOR TO FINAL ACCEPTANCE) SHALL HAVE THE RIGHT TO REJECT ANY AND ALL WORK AND MATERIALS WHICH, IN HIS OPINION, DO NOT MEET THE REQUIREMENTS OF THE PLANTING PLAN, DETAILS, AND THESE SPECIFICATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO HAVE PLANT MATERIAL INSPECTED PRIOR TO PLANTING. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT PLANTS AFTER DELIVERY AND AT PROJECT COMPLETION.
10. THE LANDSCAPE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL WORK AS SHOWN ON THE PLAN AND CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY OF ANY CONFLICTS AND ADJUST AS PER THE LANDSCAPE ARCHITECT'S OR OWNER'S DIRECTION.
11. THE LANDSCAPE CONTRACTOR SHALL CONTROL RUNOFF AND EROSION DURING CONSTRUCTION THROUGH THE USE OF SEDIMENT BASINS, STRAW OR HAY BALES AS APPROPRIATE. THE LANDSCAPE CONTRACTOR SHALL SPRINKLE OR OTHERWISE MANUALLY APPLY WATER TO AFFECTED CONSTRUCTION AREA TO CONTROL BOTH SIGNIFICANT WIND EROSION AND FUGITIVE DUST.
12. THE LANDSCAPE CONTRACTOR SHALL ASSURE DRAINAGE AND PERCOLATION OF ALL PLANTING PITS AND LANDSCAPE AREAS PRIOR TO INSTALLATION OF PLANT MATERIAL. FOR PERCOLCATION TESTING, A 24" DEEP HOLD HOLE SHALL BE FILLED WITH WATER UNTIL IT DRAINS COMPLETELY. THE HOLE SHALL IMMEDIATELY BE FILLED AGAIN WITH WATER. IF WATER TAKES MORE THAN 15 MINUTES TO DRAIN, CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT TO DETERMINE THE APPROPRIATE REMEDIATION. CORRECT IF REQUIRED TO ASSURE PERCOLATION. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ALL PLANTS DUE TO INADEQUATE DRAINAGE CONDITIONS. ALL SOIL SHALL BE OF A WELL-DRAINING NATURE.
13. EXCEPT FOR PLANTINGS IN SURFACE WATER MANAGEMENT AREAS, THE SPECIFIED DEPTH OF ORGANIC MULCH, MEASURED AFTER WATERING-IN, SHALL BE PLACED AND MAINTAINED AROUND ALL NEWLY INSTALLED CANOPY TREES, ACCENT TREES, PALM TREES, AND SHRUBS. EACH TREE SHALL HAVE ORGANIC MULCH NO LESS THAN 36 INCHES BEYOND ITS TRUNK IN ALL DIRECTIONS; HOWEVER, THE MULCH SHALL BE KEPT AWAY FROM THE TRUNKS AND STEMS OF PLANTS SO AS TO AVOID CONDITIONS THAT MAY BE CONDUCIVE TO COLLAR ROT, BASAL CANKER OR OTHER FUNGI. EXISTING TREES THAT ARE PROPOSED TO REMAIN SHALL ALSO HAVE THE SAME MULCH TREATMENT.
14. THE LANDSCAPE CONTRACTOR SHALL EXAMINE THE SOILS OF ALL PLANTING AREAS PRIOR TO SUBMITTING BIDS FOR THE SUITABILITY TO SUSTAIN HEALTHY PLANT GROWTH AS CALLED FOR ON THE PLANTING PLAN, DETAILS, AND THESE SPECIFICATIONS. ANY REQUIRED AMENDMENTS AND ADDITIVES SHALL BE INCLUDED AS PART OF THE BID.
15. NO SUBSTITUTIONS SHALL BE MADE TO THE PLANTING PLAN, DETAILS OR THESE SPECIFICATIONS WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT.
16. GUYING / STAKING PRACTICES SHALL NOT PERMIT NAILS, SCREWS, WIRES, ETC., TO PENETRATE OUTER SURFACE OF TREE OR PALM. TREES OR PALMS REJECTED DUE TO THIS PRACTICE SHALL BE REPLACED WITH INSPECTOR ON SITE.
17. TREE INSTALLATION: ALL REQUIRED TREES SHALL BE INSTALLED 1"-2" ABOVE FINISHED GRADE. TREES INSTALLED OR BURIED TOO DEEPLY SHALL BE RESET TO THIS STANDARD. REMOVE THE TOP 1/3 OF THE WIRE BASKET ON ALL B&B TREE STOCK.
18. LANDSCAPE, IRRIGATION, AND TREE PROTECTION IMPLEMENTATION AND SPECIFICATIONS SHALL BE GOVERNED UNDER THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 (PART 1 - PART 9), THE COMPANION BEST MANAGEMENT PRACTICES, ANSI Z-133, LOCAL GOVERNING JURISDICTIONS AND ORDINANCES, AND FLORIDA TREES CODES. ALL TREE TRIMMING SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
19. PLANT MATERIAL
    - 19.1. ALL TREES, PALMS, SHRUBS, GROUND COVERS AND OTHER PLANTS SHALL CONFORM TO THE STANDARD OF FLORIDA NO. 1 OR BETTER AS GIVEN IN THE LATEST EDITION OF GRADES AND STANDARDS FOR NURSERY PLANTS BY FLORIDA DEPARTMENT OF AGRICULTURE, PART I AND II. PLANT MATERIAL SHALL ALSO CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. (ANSI) BULLETIN Z 60.1 - 1990 AND AS REVISED. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
    - 19.2. ALL CONTAINER AND CALIPER SIZES NOTED ON PLANT LIST ARE MINIMUM. CONTRACTOR SHALL PROVIDE LARGER CONTAINER MATERIAL IF NECESSARY, AT NO COST TO OWNER, TO CONFORM TO PLANT SIZE AND ALL SPECIFICATIONS. BOTH MINIMUM DIMENSIONAL SPECIFICATION AND MINIMUM CONTAINER SPECIFICATION SHALL BE MET. THE LANDSCAPE CONTRACTOR AGREES TO MEET ALL MINIMUM PLANT SPECIFICATIONS AND SHALL ACCOUNT FOR THIS IN THE BID.
    - 19.2. ALL PLANTS SHALL BE CONTAINER GROWN EXCEPT AS NOTED ON PLAN. BARE ROOT TREES ARE NOT ACCEPTABLE. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC AND LIGHT CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT AND THE SITE. TREES GROWN IN GROW BAGS OR GROW BAG TYPE MATERIAL MUST HAVE THE GROW BAG REMOVED ENTIRELY PRIOR TO PLANTING. BALLED AND BURLAPPED MATERIAL SHALL HAVE THE BURLAP REMOVED. WIRE CAGES, STRAPS, ETC. MUST BE CUT AND REMOVED PRIOR TO INSTALLATION.
    - 19.3. SOD SHALL MEET AMERICAN SOD PRODUCERS ASSOCIATION STANDARDS FOR NURSERY GROWN SOD FOR THICKNESS OF CUT, PAD SIZE, STRENGTH OF SECTIONS, MOISTURE CONTENT AND THATCH. SOD SHALL BE GUARANTEED TO BE UNIFORM IN COLOR, LEAF TEXTURE, AND SHOOT DENSITY AND FREE OF WEEDS, DISEASE, FUNGUS, INSECTS OR OTHER IMPERFECTIONS AND SUFFICIENTLY KNITTED TO SUSTAIN GROWTH. SOD SHALL BE MOWED FOR FINAL ACCEPTANCE.
    - 19.4. TYPICALLY, SHRUB AND GROUNDCOVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A TRIANGULAR SPACING CONFIGURATION (STAGGERED SPACING).
20. QUANTITIES, LOCATION AND SUBSTITUTIONS: THE LANDSCAPE CONTRACTOR SHALL FURNISH AND INSTALL ALL PLANTS AS SHOWN ON THE DRAWINGS, AS SPECIFIED, AND IN THE QUANTITIES LISTED ON THE PLANT SCHEDULE. IN THE EVENT OF A VARIATION BETWEEN THE PLANT SCHEDULE AND THE ACTUAL NUMBER OF PLANTS SHOWN ON THE PLANTING PLAN, THE HIGHER QUANTITY SHALL PREVAIL.THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST THE NUMBER AND LOCATIONS OF THE DESIGNATED TYPES AND SPECIES OF PLANTS TO BE USED AT ANY OF THE LOCATIONS SHOWN. THE OWNER SHALL RECEIVE A CREDIT OR DEBIT FOR THE UNIT PRICE OF THE PLANT MATERIAL. NO SUBSTITUTION OF PLANT MATERIAL, TYPES, SPECIFICATIONS OR SIZES WILL BE PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT. THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO NOT ACCEPT PLANT MATERIAL THAT DOES NOT, IN THE OPINION OF THE OWNER AND/OR LANDSCAPE ARCHITECT, MEET THE SPECIFICATIONS HEREIN.
21. IRRIGATION: UNLESS SPECIFICALLY NOTED OTHERWISE, ALL EXISTING AND PROPOSED TREES, SHRUBS, AND GROUNDCOVERS SHALL BE IRRIGATED WITH AN AUTOMATIC, UNDERGROUND IRRIGATION SYSTEM. SYSTEM SHALL BE EQUIPPED WITH A RAIN SENSOR DEVICE CONNECTED TO AN IRRIGATION CONTROLLER(S), AS PER STATE OF FLORIDA REGULATIONS. AFTER PLANT ESTABLISHMENT, THE CONTROLLER SHALL BE PROGRAMMED TO OPERATE IN COMPLIANCE WITH APPLICABLE WATERING RESTRICTIONS. IRRIGATION SHALL PROVIDE 100% COVERAGE TO PROPOSED LANDSCAPING AREAS AND SOD AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, AND PERMITTING THE IRRIGATION SYSTEM IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE BUILDING CODES. THE COST OF INSTALLATION, PERMITTING, AND CREATING AS-BUILT DRAWINGS SHALL BE INCLUDED IN THE BID PRICE FOR IRRIGATION.
    - 21.1. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING ALL EXISTING AND PROPOSED PLANT MATERIAL AS REQUIRED BY OWNER'S REPRESENTATIVE TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION. CONTRACTOR SHALL TEMPORARILY WATER ANY NON IRRIGATED LAWN AREAS AS REQUIRED FOR ESTABLISHMENT.
    - 21.2. IRRIGATION LINES SHALL BE HAND DUG AROUND EXISTING TREES AND TUNNELED BENEATH TREE ROOTS OF EXISTING TREES, RATHER THAN TRENCHED.
    - 21.3. TREE BUBBLERS,TURF ZONES AND SHRUB/GROUNCOVER ZONES SHALL BE ON SEPARATE ZONES. SEE IRRIGATION SHEETS FOR ADDITIONAL REQUIREMENTS.
22. FERTILIZATION: PROVIDE FERTILIZER UNIFORM IN COMPOSITION, DRY, AND IN A FREE FLOWING CONDITION FOR APPLICATION BY SUITABLE EQUIPMENT, AND DELIVER IN UNOPENED BAGS OR CONTAINERS, EACH FULLY LABELED.
    - 22.1. CONTRACTOR SHALL CONDUCT A SOIL TEST PRIOR TO APPLICATION OF ANY SOIL AMENDMENTS, FERTILIZERS AND BACKFILL MIXTURES. FERTILIZE LANDSCAPE PLANTS AND TURF COMPLYING WITH STATE AND LOCAL FERTILIZER LAWS AND CODES AND AT A RATE AS RECOMMENDED BY THE SOIL TEST.
    - 22.1. FERTILIZE TREES, SHRUBS, AND GROUND COVERS WITH A COMPLETE, ORGANIC, SLOW-RELEASE, FERTILIZER.
    - 22.2. FERTILIZE TURF WITH A COMPLETE, ORGANIC, SLOW-RELEASE, FERTILIZER. PROVIDE AT LEAST 50% OF THE PHOSPHORIC ACID FROM NORMAL SUPER PHOSPHATE OR AN EQUIVALENT SOURCE PROVIDING A MINIMUM OF TWO UNITS OF SULFUR. THE AMOUNTS OF SULFUR AND ALL OTHER CHEMICAL SHALL BE INDICATED ON THE QUANTITATIVE ANALYSIS CARD ATTACHED TO THE UNOPENED BAG.
23. SOIL PREPARATION AND SOIL MIX
    - 23.1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE, PRIOR TO BID, THE QUANTITY OF SOIL, BACKFILL, AND AMENDMENTS REQUIRED TO MEET THE PROJECT REQUIREMENTS AND THE CONTRACT DOCUMENTS SOIL SPECIFICATIONS. CONTRACTOR SHALL TEST THE EXISTING SOILS AS OUTLINED IN CONTRACT DOCUMENTS. CONTRACTOR SHALL REVIEW EXISTING SOIL ON SITE, THE PROJECT TOP SOIL SPECIFICATIONS, AND EVALUATE IF EXISTING SOILS WILL BE USED AND/OR AMENDED AND WHETHER IMPORTED TOP SOIL IS REQUIRED ON THE PROJECT BASED ON THE CONTRACT DOCUMENTS SOIL SPECIFICATIONS, RECOMMENDED LAB SOIL TEST RESULTS, AND THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION. REGARDLESS OF THE CONTRACTOR'S MEANS AND METHODS, ALL SOIL SHALL MEET THE PROJECT SPECIFICATIONS OUTLINED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL ASSUME THE EXPENSE OF MEETING THE SOIL SPECIFICATIONS ON THE PROJECT AND DETERMINE THE QUANTITY OF IMPORTED TOP SOIL, QUANTITY OF USABLE ONSITE TOP SOIL, AND DETERMINE REQUIRED AMENDMENTS AND/OR MODIFICATIONS TO THE SOIL TO MEET THE PROJECT'S SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS REQUIRED TO CONFORM TO THE PROJECT'S SOIL REQUIREMENTS AND SOIL ADJUSTMENTS.
    - 23.2. CONTRACTOR SHALL TEST SOILS BY OBTAINING FIVE (5) OR MORE SAMPLES OF THE EXISTING SOILS PROPOSED FOR PLANTING FROM ANY STRIPPING STOCKPILES OR AREAS TO RECEIVE PLANTINGS AFTER ROUGH GRADING. CONFIRM LOCATIONS WITH LANDSCAPE ARCHITECT PRIOR TO COLLECTING SAMPLES. SOIL TEST SHALL BE PERFORMED IN ACCORDANCE WITH STATE AND LOCAL RECOMMENDATIONS AND LAWS AND SHALL BE PERFORMED BY A STATE ACCREDITED LAB FOR AGRICULTURAL SOIL TESTING. A COMPLETE SOIL TEST REPORT SHALL BE PROVIDED OF THE CHEMICAL ANALYSIS INDICATING NUTRIENT COMPOSITION, PH, AND PHYSICAL ANALYSIS OF SOIL TEXTURE IN ORDER TO PROVIDE REQUIRED AMENDMENTS TO MEET THE PROJECT SPECIFICATIONS FOR SOIL AND BACKFILL MIX. SOIL TEST SHALL INCLUDE THE LAB'S RECOMMENDATIONS. CONTRACTOR SHALL PROVIDE AN PROPOSED BACKFILL MIX SAMPLE ALONG WITH SPECIFICATIONS OF PROPOSED MIX, MATERIAL DATA SHEETS, TEST RESULTS FOR ORGANIC MATERIAL, FERTILIZERS, PLUS ANY AMENDMENTS REQUIRED TO BRING THE EXISTING SOILS TO SPECIFICATION AND IN ACCORDANCE WITH THE LABS RECOMMENDATIONS.
    - 23.3. CONTRACTOR SHALL PERFORM A PROCTOR DENSITY TEST AND SOIL COMPOSITION TEST PRIOR TO INSTALLATION OF LANDSCAPE AND IRRIGATION WORK. IF COMPACTION EXCEEDS 80% OR SOILS ARE OF AN ANAEROBIC NATURE THEN CONTRACTOR SHALL REMEDIATE BY BY LOOSENING THE SOILS AND RECOMPACT SOILS TO 75%-80% MAXIMUM. CONTRACTOR SHALL PERFORM A PERCOLATION TEST FOR POSITIVELY DRAINING SOILS IN ALL LANDSCAPE AREAS.
        - 23.3.1. IF SOIL COMPOSITIONS TEST INDICATE LESS THAN 4% ORGANIC CONTENT, AND/OR A SAND CONTENT OF LESS THAN 45%, THEN CONTRACTOR SHALL REMEDIATE ALL LANDSCAPE SOILS TO THOSE PERCENTAGES. IF SOILS TEST REVEALS DEFICIENCIES IN ORGANIC CONTENT AND/OR SAND, CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT ON PROPOSED SOLUTIONS TO CORRECT CONDITION. AN ACCEPTABLE SOLUTION TO CORRECT LOW SAND PERCENTAGES IS TO INCORPORATE CLEAN SILICA SAND (SALT-FREE AND CONTAINING NO EXTRANEOUS MATTER) TO A DEPTH OF 24" THROUGHOUT THE LANDSCAPE AREAS BY GENTLY LIFTING THE EXISTING DIRT TO WORK THE SAND IN AT 45% TOTAL COMPOSITION. CONTRACTOR SHALL NOT TILL OR OVER HOMOGENIZE THE SOILS TO MAINTAIN SOIL TEXTURES.AFTER MIXING SAND AND EXISTING SOIL, 3 INCHES OF COMPOST IS TO BE GENTLY WORKED INTO THE ROUGH SURFACE TO A DEPTH OF 6 INCHES. FINISH GRADING TO A COMPACTION OF 75%-80% MAXIMUM PROCTOR DENSITY.
        - 23.3.2. WHEN SOILS ARE DEFICIENT IN COMPOST ONLY (COMMON IN MOST CASES), CONTRACTOR SHALL PREPARE SOILS BY MIXING 3 INCHES OF COMPOST TO A DEPTH OF 6 INCHES. FINISH GRADING TO A COMPACTION OF 75%-80% MAXIMUM PROCTOR DENSITY.
        - 23.3.3. COMPOST SHALL BE CERTIFIED AS TO CONTENT, PH, SALT AND BE FULLY COMPOSTED AND BE SOURCED FROM A STATE LICENSED COMPOST SUPPLIER. SUPPLIER AND PRODUCT MUST BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO BID.
    - 23.4. CONTRACTOR TO ENSURE TOTAL WEED ERADICATION. ANY HERBICIDE OR PEST CONTROL TREATMENT APPLIED SHALL BE BY A STATE CERTIFIED PEST AND CONTROL OPERATOR OF LAWN AND ORNAMENTAL. APPROVED HERBICIDE SHALL BE APPLIED ACCORDING TO MANUFACTURER'S RATE AND SPECIFICATION WITHIN LIMITS OF ALL AREAS TO BE PLANTED. PROTECT EXISTING PLANTS TO REMAIN FROM OVERSPRAY OR SPRAY WITHIN ROOT ZONE. A LICENSED PEST AND CONTROL OPERATOR OF LAWN AND ORNAMENTAL SHALL APPLY APPROVED PRE-EMERGENT HERBICIDE IN ACCORDANCE WITH THE MANUFACTURER'S RATE AND SPECIFICATIONS.
    - 23.5. BEFORE PLACING ANY TOPSOIL OR BACKFILL WITHIN LANDSCAPE BEDS, RAKE SUBSOIL SURFACE CLEAR OF STONES (1 INCH DIAMETER AND LARGER), DEBRIS, RUBBISH, REMAINS OF REMOVED PLANT MATERIAL, AND ALL REMAINING CONSTRUCTION DEBRIS TO A DEPTH OF 6". CONTAMINATED SOILS SHALL BE REMOVED AND REPLACED TO THEIR FULL DEPTHS AND EXTENTS.
    - 23.2. SCARIFY SUBSOIL TO A DEPTH OF 3 INCHES.
    - 23.3. LANDSCAPE BEDS IN PARKING LOT ISLANDS AND AREAS SURROUNDED BY HARDSCAPE (SHRUBS AND GROUNDCOVERS): LANDSCAPE AREA SHALL BE ROUGH GRADED TO AN ELEVATION OF 16 INCHES BELOW THE TOP OF ADJACENT HARDSCAPE FOR FINAL FINISHED GRADE TO PROVIDE 12 INCHES OF BACKFILL MIXTURE. 3 INCHES OF MULCH WITH A 1 INCH REVEAL ON THE CURB, ADJOINING SIDEWALK, OR OTHER HARDSCAPE FEATURE. THE GENERAL CONTRACTOR SHALL COORDINATE GRADING AND THE INSTALLATION BACKFILL MIXTURE. ROCK AND AGGREGATE BASE IN LANDSCAPE AREA SHALL BE REMOVED PRIOR TO BACKFILL PLACEMENT. SEE SPECIFICATIONS FOR BACKFILL MIXTURE. CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT PRIOR TO PREPARING ANY PARKING LOT ISLAND THAT WOULD IMPACT EXISTING TREE ROOTS.
    - 23.2. PLANTING LANDSCAPE BEDS (SHRUBS AND GROUNDCOVERS): ALL LANDSCAPE BEDS SHALL INCLUDE SOIL THAT MEETS THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL COORDINATE GRADING TO ALLOW SOIL PLACEMENT AS REQUIRED AND 3 INCHES OF MULCH WITH A 1 INCH REVEAL ON THE CURB, ADJOINING SIDEWALK, OR OTHER HARDSCAPE FEATURE. MULCH AND SOIL SHALL NOT BE IMMEDIATELY ELEVATED OVER ADJACENT HARDSCAPE. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS AND SOD AREAS. IF NECESSARY, THE GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND GRADING OF TOPSOIL AND MULCH. SEE SPECIFICATIONS FOR BACKFILL MIXTURE AND SOIL SPECIFICATIONS. CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT PRIOR TO PREPARING ANY LANDSCAPE BEDS THAT WOULD IMPACT EXISTING TREE ROOTS.
    - 23.3. PLANTING LAWNS: REMOVE ANY EXISTING SUB-BASE OR COMPACTED MATERIALS TO EXPOSE A FRIABLE SOIL LAYER. LOOSEN SOIL/TOPSOIL OF LAWN AREAS TO MINIMUM DEPTH OF 6". ADD 3" TOPSOIL OR ORGANIC MATERIAL AS REQUIRED FROM ORGANIC MATTER CHECK. TILL INTO TOP 6" OF EXISTING SOIL. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS AND SOD AREAS. IF NECESSARY, THE GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND GRADING OF TOPSOIL. SEE SPECIFICATIONS FOR BACKFILL MIXTURE.
    - 23.4. FINISH GRADE ALL PREPARED TOPSOIL AREAS TO A SMOOTH, EVEN SURFACE ASSURING POSITIVE DRAINAGE AWAY FROM THE STRUCTURES AND ELIMINATE ANY LOW AREAS WHICH MAY COLLECT WATER. SEE CIVIL GRADING PLANS.
    - 23.5. BACKFILL MIXTURE:
        - 23.0.1. PRIOR TO BID, CONTRACTOR SHALL DETERMINE THE NEED FOR IMPORTED TOPSOIL AND INCLUDE IN BID IF NECESSARY. IF EXISTING ONSITE TOPSOIL IS USED AND/OR AMENDED, IT SHALL ALSO MEET THE PROJECT SPECIFICATIONS.
        - 23.0.2. TREES, ROYAL PALMS, SHRUBS, GROUNDCOVERS, LAWNS: 45% SAND, 45% TOPSOIL, 10% PEAT HUMUS.
        - 23.0.3. ALL OTHER PALMS: 3/4 SAND, 1/4 TOPSOIL
        - 23.0.4. SAND SHALL BE CLEAN, SILICA, SALT-FREE AND CONTAINING NO EXTRANEOUS MATTER.
        - 23.0.5. TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS THAT WOULD BE HARMFUL TO PLANT GROWTH, SHALL BE FREE OF NEMATODES, SHALL BE OF UNIFORM QUALITY, AND SHALL BE FRIABLE FERTILE SOIL WITH REPRESENTATIVE CHARACTERISTICS OF AREA SOILS. IT SHOULD BE FREE OF HEAVY CLAY, SILT, STONE, EXCESS LINE, SHELL ROCK, PLANT ROOTS, WEEDS, DEBRIS OR OTHER FOREIGN MATTER. IT SHALL NOT CONTAIN NOXIOUS PLANT GROWTH (SUCH AS BERMUDA, TORPEDO OR NUT GRASS). IT SHALL TEST BETWEEN THE PH RANGE OF 5.5 TO 7.0 UNLESS OTHERWISE SPECIFIED AND CONTAIN NO TOXIC RESIDUE OR SUBSTANCES THAT WOULD ENDANGER PLANT GROWTH. OBTAIN TOPSOIL ONLY FROM NATURALLY, WELL-DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH NOT LESS THAN 4".
            - 23.0.5.1. SOIL AMENDMENTS: SOIL TESTING SHALL BE PERFORMED IN ALL PLANTING AREAS (INCLUDING SODDED AREAS) PRIOR TO CONSTRUCTION WITH RESULTS SUBMITTED TO LANDSCAPE ARCHITECT. SOIL AMENDMENTS SHALL BE ADDED AS NECESSARY PER THE LAB RESULT RECOMMENDATIONS AND TO MEET THE FOLLOWING PARAMETERS:
                - 23.0.5.1.1. PH RANGE: 5.5-7.0
                - 23.0.5.1.2. ORGANIC MATTER: 2.0-5.0%
                - 23.0.5.1.3. SOLUBLE SALT LEVEL: LESS THAN 2 MMHO/CM.
                - 23.0.5.1.4. SOIL CHEMISTRY SUITABLE FOR GROWING THE PLANTS SPECIFIED.
        - 23.0.6. PEAT HUMUS SHALL BE DECOMPOSED PEAT WITH NO IDENTIFIABLE FIBERS OR IF AVAILABLE, MUCK MAY BE SUBSTITUTED AND SHALL BE FREE FROM STONES, EXCESSIVE PLANT ROOTS, DEBRIS OR OTHER FOREIGN MATTER. MUCK SHALL NOT BE OVERLY SATURATED WITH WATER. HUMUS SHALL BE OF GOOD QUALITY, MATURE, DARK COLOR, OF HUMUS-LIKE QUALITY, AND HAVE PLEASANT SOIL SMELL.
        - 23.0.7. BACKFILL MIX SAMPLES AND LABORATORY SOIL TESTS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT OF RECORD FOR APPROVAL. CONTRACTOR SHALL TAKE RESPONSIBILITY FOR PERFORMING PERCOLATION TESTS PRIOR TO BACKFILLING WITH APPROVED PLANTING SOIL.
24. SOD INSTALLATION: LAY SOD TO FORM A SOLID MASS WITH TIGHTLY-FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS. DO NOT OVERLAY EDGES. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. REMOVE EXCESS SOD TO AVOID SMOTHERING OF ADJACENT GRASS. PROVIDE SOD PAD TOP FLUSH WITH ADJACENT CURBS, SIDEWALKS, DRAINS AND SEED AREAS.
    - 24.1. DO NOT LAY DORMANT SOD OR INSTALL SOD ON SATURATED SOIL.
    - 24.2. INSTALL INITIAL ROW OF SOD IN A STRAIGHT LINE, BEGINNING AT BOTTOM OF SLOPES, PERPENDICULAR TO DIRECTION OF THE SLOPED AREA. PLACE SUBSEQUENT ROWS PARALLEL TO AND LIGHTLY AGAINST PREVIOUSLY INSTALLED ROW.
    - 24.3. PEG SOD ON SLOPES GREATER THAN 3 TO 1 TO PREVENT SLIPPAGE AT A RATE OF 2 STAKES PER YD. OF SOD.
    - 24.4. WATER SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER LAYING.
    - 24.5. ROLL WITH LIGHT LAWN ROLLER TO ENSURE CONTACT WITH SUBGRADE.
    - 24.6. SOD INDICATED AREAS WITHIN CONTRACT LIMITS AND AREAS ADJOINING CONTRACT LIMITS DISTURBED AS A RESULT OF CONSTRUCTION OPERATIONS.
    - 24.7. TOP DRESS ALL SEAMS OF SODDED AREA WITH SPECIFIED TOPSOIL.
25. MULCH: ALL MULCH BED QUANTITIES TO BE DETERMINED BY CONTRACTOR. CONTRACTOR SHALL MULCH ALL PLAN



NOTES:
1. CONTRACTOR SHALL ASSURE FREE DRAINAGE / PERCOLATION OF ALL PLANTINGS PITS PRIOR TO INSTALLATION. AUGER FOR PERCOLATION AS REQUIRED.
2. CONTRACTOR SHALL STAKE LOCATIONS OF TREES PRIOR TO INSTALLATION FOR APPROVAL BY LANDSCAPE ARCHITECT.
3. TREE CALIPER SIZE SHALL BE MEASURED AT 6" ABOVE GRADE FOR UP TO & INCLUDING 4" CAL. AND 12" ABOVE GRADE FOR LARGER CALIPER TREES.

1 TREE PLANTING DETAIL

1" = 1'-0" P-WI4-06

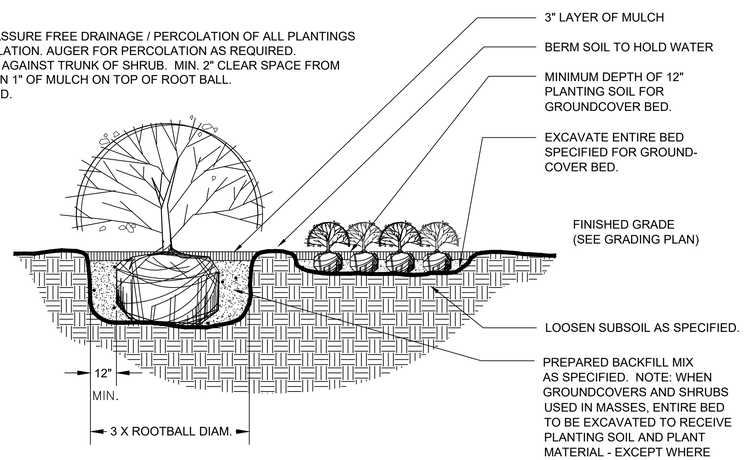


NOTES:
1. CLEAR ZONE: 36" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.
2. INSTALL SPECIFIED MULCH: 18" MIN. FROM BUILDING. SPECIFIED MULCH TO BE INSTALLED AT A DEPTH OF 3" (MIN.)

4 PLANTINGS ADJACENT TO BUILDINGS

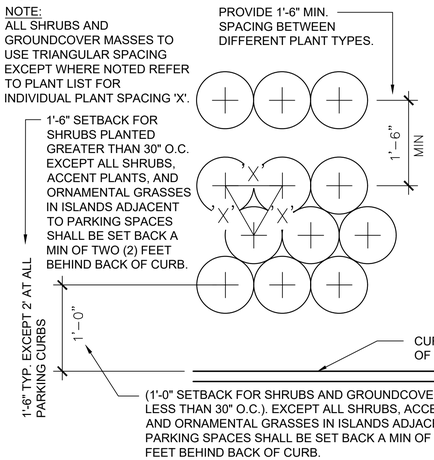
NTS P-WI4-16

NOTES:
1. CONTRACTOR SHALL ASSURE FREE DRAINAGE / PERCOLATION OF ALL PLANTINGS PITS PRIOR TO INSTALLATION. AUGER FOR PERCOLATION AS REQUIRED.
2. DO NOT PLACE MULCH AGAINST TRUNK OF SHRUB. MIN. 2" CLEAR SPACE FROM TRUNK. NO MORE THAN 1" OF MULCH ON TOP OF ROOT BALL.
3. FERTILIZE AS SPECIFIED.



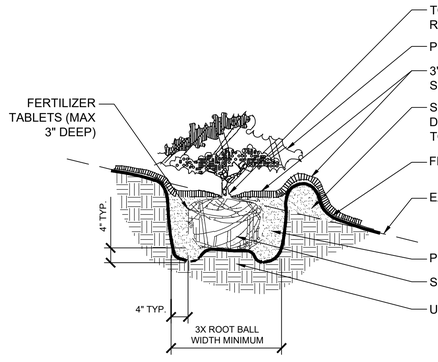
2 SHRUB AND GROUNDCOVER PLANTING

1" = 1'-0" P-WI4-08



3 TYPICAL PLANT SPACING

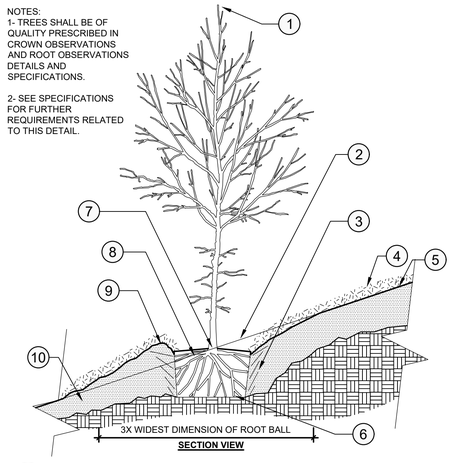
1" = 1'-0" P-WI4-01



NOTES:
1. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.
2. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.
3. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.

5 SHRUB/GROUNDCOVER PLANTING ON A SLOPE

3/4" = 1'-0" P-WI4-07



URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

6 TREE ON SLOPE - UNMODIFIED SOIL SLOPE 5% (20:1) TO 50%

1/2" = 1'-0" P-WI4-12

CALL SUNSHINE
811
IT'S THE LAW IN FLORIDA

BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA
AT LEAST TWO FULL BUSINESS DAYS
BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive, Dunedin, Florida 34698
Phone: (727) 726-6124
LA6667069
Contact: Chris Anuszkiewicz
Web-Site www.placemakerdesignstudio.com

Prepared For:

Interstruct Design LLC
814 W. Church Street
Orlando, Florida 32805
Contact: Ryan Young, AIA
Phone: (407) 849-0025

Copyright: The content of these drawings are owned by and the property of PlaceMaker Design Studio, LLC and were created for the exclusive use of this project.

Orlando Othopaedic Center at Winter Garden

12152 COLONIAL DR.
WINTER GARDEN, FLORIDA

Seal



The seal appearing on this document was authorized by Christopher J. Anuszkiewicz, LA6667069 on 4/6/2026.

PERMIT SUBMITTAL

REV	DATE	DESCRIPTION
4		
3		
2	7/02/2026	CITY COMMENTS
1	5/26/2026	DRC COMMENTS

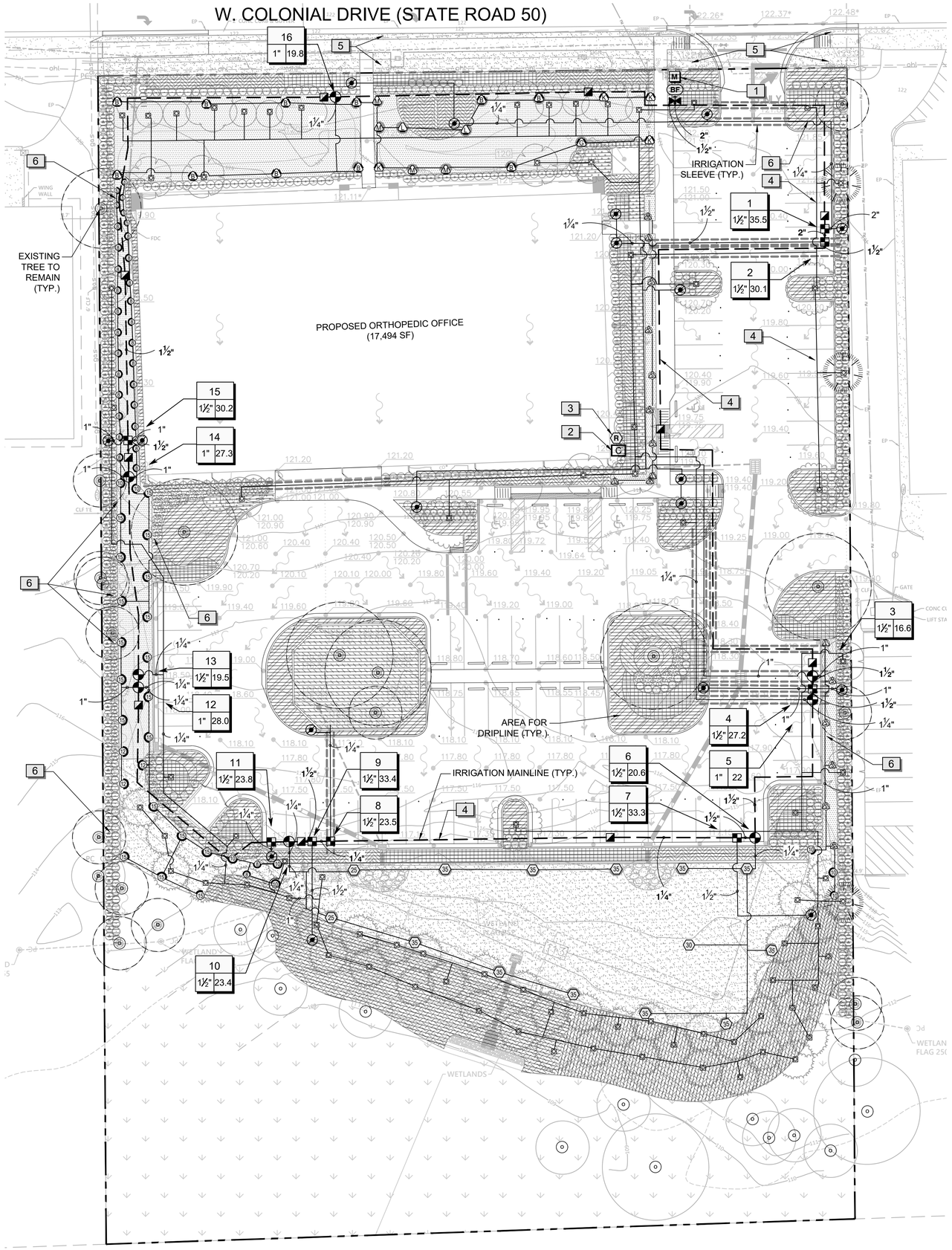
Date:	**APRIL 8, 2026**
Job No.:	**7012**
Drawn By:	**GLA**
Checked By:	**CJA**

Sheet Title

LANDSCAPE DETAILS

Sheet No.

L3



IRRIGATION SCHEDULE

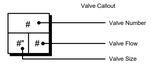
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	16	30
Q H F	Rain Bird 1806-PRS 5 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	6	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	26	30
Q T H TQ F	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	8	30
Q T H TQ F	Rain Bird 1806-PRS 12 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	3	30
Q T H TQ F	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet. Pressure Regulating.	19	30
1401 1402 1404	Hunter MP1000 PROS-06-PRS40-CV Turf Rotator, 6in. pop-up with check valve, pressure regulated to 40 psi, MP Rotator nozzle on PRS40 body. M=Maroon adj arc 90 to 210, L=Light Blue 210 to 270 arc, O=Olive 360 arc.	6	35
1401 1402 1404	Hunter MP2000 PROS-06-PRS40-CV Turf Rotator, 6in. pop-up with factory installed check valve, pressure regulated to 40 psi, MP Rotator nozzle on PRS40 body. K=Black adj arc 90-210, G=Green adj arc 210-270, R=Red 360 arc.	5	35
1401 1402 1404	Hunter MP3000 PROS-06-PRS40-CV Turf Rotator, 6in. pop-up with factory installed check valve, pressure regulated to 40 psi, MP Rotator nozzle on PRS40 body. B=Blue adj arc 90-210, Y=Yellow adj arc 210-270, A=Gray 360 arc.	11	35
1401 1402 1404	Rain Bird 1804-PRS-1400 Flood Flood Bubbler 4in. popup with pressure regulating device. Install w/ PA-80 adapter.	83	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	RADIUS
25	Hunter I-20-06-MPR 25 Turf Rotor, 6in. Pop-Up. Adjustable and Full Circle. Plastic Riser. Drain Check Valve. MPR Nozzle.	2	35	24'
30	Hunter I-20-06-MPR 30 Turf Rotor, 6in. Pop-Up. Adjustable and Full Circle. Plastic Riser. Drain Check Valve. MPR Nozzle.	1	35	30'
35	Hunter I-20-06-MPR 35 Turf Rotor, 6in. Pop-Up. Adjustable and Full Circle. Plastic Riser. Drain Check Valve. MPR Nozzle.	11	35	34'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	Rain Bird XCZ-150-LCS High Flow Control Zone Kit with low minimum inlet pressure requirements, for Large Commercial Drip Zones. 1-1/2in. PEB Globe Valve with high-capacity filter and Pressure Regulating system (PRS) fixed at 40psi. Flow range: 20 - 62 GPM.	8	
	Pipe Transition Point in Drip Box Pipe transition point from PVC lateral to drip tubing with riser in 6in. drip box.	18	
	Area to Receive Dripline Rain Bird XFDe-09-12 XFDe On-Surface Pressure Compensating Landscape Dripline. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 18" apart, with emitters offset for triangular pattern. UV & Kink Resistant. Use XF insert fittings.	23,684 sf	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PEB 1in., 1-1/2in., 2in. Plastic Industrial Remote Control Valve. Low Flow Operating Capability, Globe Configuration.	8
	Rain Bird 44-LRC 1in. Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Locking Thermoplastic Rubber Cover, and 2-Piece Body.	10
	NIBCO 4660-T 1-1/4"-4" PVC Isolation Ball Valve. Same size as mainline pipe.	1
BF	Backflow Preventer Device 1" Approved backflow preventer device per industry standards and applicable codes. See pump assembly Detail 7, Sheet IR3 .	1
C	Rain Bird ESP4ME3 with (2) ESP-SM3 (1) ESP-SM6 16 Station, Hybrid Modular Outdoor Controller. For Residential or Light Commercial Use. LNK WiFi Module and Flow Sensor Ready.	1
R	Rain Bird WR2-RFC Wireless Rain and Freeze Sensor Combo, includes 1 receiver and 1 rain/freeze sensor transmitter.	1
M	Water Meter 1" POTABLE WATER CONNECTION. Irrigation system is designed based on assumed static water pressure of 65 PSI prior to point of connection and maximum flow rate of 37 GPM. Verify pressure and flow rate.	1
	Irrigation Lateral Line: PVC Class 200 SDR 21 All lateral lines shall be a minimum of one (1) inch unless otherwise indicated on the plans.	
	Irrigation Mainline: PVC Schedule 40	
	Pipe Sleeve: PVC Schedule 40 Sleeve size shall be two (2) times the diameter of pipe(s) to be sleeved below all paved surfaces. Extend sleeves 12 inches beyond edges of paving.	

Valve Callout



REFERENCE NOTES SCHEDULE

CODE	DESCRIPTION
1	INSTALL NEW IRRIGATION POINT OF CONNECTION AT POTABLE WATER SUPPLY. COORDINATE INSTALLATION OF 1" CITY IRRIGATION WATER METER AND 2" SERVICE LINE MINIMUM PER CITY REQUIREMENTS. SEE CIVIL SHEETS FOR POINT OF CONNECTION.
2	IRRIGATION CONTROLLER. VERIFY FINAL LOCATION OF CONTROLLER AND RAIN SENSOR WITH OWNER'S REPRESENTATIVE. COORDINATE ELECTRICAL CONNECTION AS REQUIRED.
3	RAIN SENSOR TO BE INSTALLED ON ROOF AND IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL ENSURE RAINFALL IS NOT OBSTRUCTED BY ARCHITECTURAL OR MECHANICAL FEATURES.
4	IRRIGATION MAINLINE AND/OR LATERAL LINE SHOWN OUTSIDE LANDSCAPE AREA FOR GRAPHIC CLARITY. ALL MAINLINE PIPES, LATERAL PIPES, AND VALVE BOXES TO BE INSTALLED WITHIN LANDSCAPE AREA. ALL IRRIGATION PIPES TO BE SLEEVED UNDER PAVEMENT AND WALKWAYS.
5	HAND WATER BAHIA SOD IN RIGHT-OF-WAY FOR ESTABLISHMENT (TYP.).
6	DO NOT TRENCH WITHIN THE DRIPLINE OF EXISTING TREES TO REMAIN. LOCATE IRRIGATION LINES TO AVOID INSTALLATION WITHIN THE DRIPLINE OF ANY EXISTING TREES TO REMAIN. TUNNELING BY AIR SPADE OR HAND DIGGING, RATHER THAN TRENCHING, SHALL BE USED WITHIN THE DRIPLINE OF EXISTING TREES TO REMAIN WHERE UNDERGROUND INSTALLATIONS ARE REQUIRED (TYP.).

CRITICAL ANALYSIS

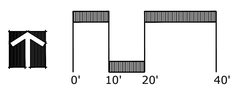
Generated: 2026-07-02 09:54

P.O.C. NUMBER: 01
Water Source Information: POTABLE WATER CONNECTION. Irrigation system is designed based on assumed static water pressure of 65 PSI prior to point of connection and maximum flow rate of 37 GPM. Verify pressure and flow rate.

FLOW AVAILABLE	
Water Meter Size:	1"
Flow Available	37.5 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	65 PSI
Elevation Change:	5.00 ft
Service Line Size:	2"
Length of Service Line:	20 ft
Pressure Available:	63 PSI
DESIGN ANALYSIS	
Flow Velocity:	3.9 Ft.sec.
Maximum Multi-valve Flow:	0 GPM
Flow Available at POC:	37.5 GPM
Residual Flow Available:	37.5 GPM
Critical Station:	7
Design Pressure:	30 PSI
Friction Loss:	1.21 PSI
Fittings Loss:	0.12 PSI
Elevation Loss:	0 PSI
Loss through Valve:	5 PSI
Pressure Req. at Critical Station:	36.3 PSI
Loss for Fittings:	0.5 PSI
Loss for Main Line:	4.97 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	10.4 PSI
Loss for Water Meter:	6.66 PSI
Critical Station Pressure at POC:	58.9 PSI
Pressure Available:	63 PSI
Residual Pressure Available:	4.11 PSI

NOTES

1. SEE SHEET L0 FOR TREE INVENTORY.
2. SEE SHEET L1 FOR LANDSCAPE PLAN. SEE SHEET L2 FOR LANDSCAPE NOTES. SEE SHEET L3 FOR LANDSCAPE DETAILS.
3. IRRIGATION PLAN: UNDERGROUND IRRIGATION SYSTEM TO ENSURE 100% COVERAGE FOR ALL SHRUBS, GROUNDCOVERS, GRASSES, TREES, AND TURF AREAS. SEE SHEET L2 AND IR1-IR4 FOR IRRIGATION REQUIREMENTS.
4. VERIFY ALL SYSTEM REQUIREMENTS PRIOR TO BID. IRRIGATION ZONE AREAS ARE AN ESTIMATE. CONTRACTOR SHALL VERIFY TOTAL AREA REQUIRED PRIOR TO BID.
5. IRRIGATION SLEEVES MAY NOT BE SHOWN TO ENSURE CLARITY OF LINE WORK. CONTRACTOR TO INSTALL ALL IRRIGATION PIPE AND CONTROL WIRES IN SLEEVES BELOW ALL PAVED SURFACES. SLEEVE SIZE SHALL BE TWO (2) TIMES THE DIAMETER OF PIPE(S) TO BE SLEEVED.
6. TREE BUBBLERS,TURF ZONES AND SHRUB ZONES SHALL BE ON SEPARATE ZONES. PROVIDE RAIN BIRD OR HUNTER COMMERCIAL GRADE CONTROL VALVES.
7. IRRIGATION HEADS, CONTROLLERS, CONTROL VALVES, QUICK COUPLERS, AND ACCESSORIES SHALL BE HUNTER OR RAIN BIRD NEW COMMERCIAL GRADE PRODUCTS.
8. IRRIGATION LINES SHALL BE TUNNELED BENEATH TREE ROOTS OF EXISTING TREES, RATHER THAN TRENCHED.



NORTH GRAPHIC SCALE

CALL SUNSHINE
811
IT'S THE LAW IN FLORIDA

BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA AT LEAST TWO FULL BUSINESS DAYS BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive, Dunedin, Florida 34698
Phone: (727) 726-6124
LA6667069

Contact: Chris Anuszkiewicz
Web-Site www.placemakerdesignstudio.com

Prepared For:

Interstruct Design LLC
814 W. Church Street
Orlando, Florida 32805

Contact: Ryan Young, AIA
Phone: (407) 849-0025

Copyright: The content of these drawings are owned by and the property of PlaceMaker Design Studio, LLC and were created for the exclusive use of this project.

Orlando Othopaedic Center

12152 COLONIAL DR.
WINTER GARDEN, FLORIDA

Seal



The seal appearing on this document was authorized by Christopher J. Anuszkiewicz, LA6667069 on 4/6/2026.

PERMIT SUBMITTAL

REV	DATE	DESCRIPTION
4		
3		
2	7/02/2026	CITY COMMENTS
1	5/26/2026	DRC COMMENTS

Date:	**APRIL 8, 2026**
Job No.:	**7012**
Drawn By:	**GLA**
Checked By:	**CJA**

Sheet Title

IRRIGATION PLAN

Sheet No.

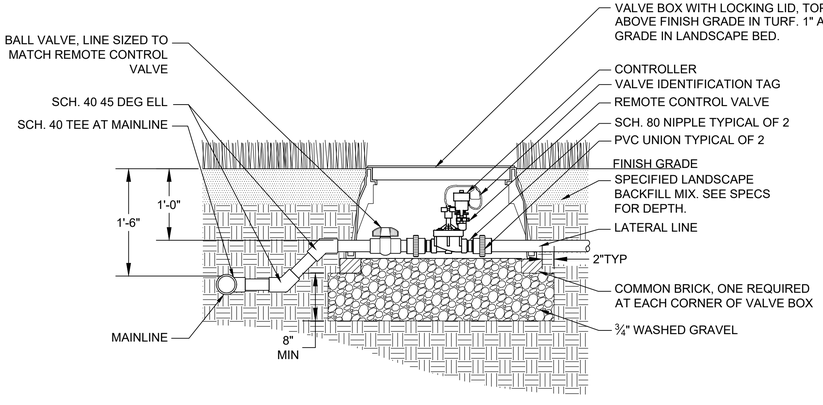
IR1

IRRIGATION NOTES

1. ALL WORK SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL REGULATIONS AND CODES FOR THE LOCATION OF WORK. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED TO COMPLETE WORK.
2. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND THE COST FOR SUCH ARE TO BE INCLUDED AS PART OF THE BID.
3. THE CONTRACTOR SHALL INSPECT THE SITE AND VERIFY CONDITIONS AND DIMENSIONS PRIOR TO DESIGN AND CONSTRUCTION. ESTIMATED LINEAR FEET AND SQUARE FEET QUANTITIES IN IRRIGATION SCHEDULE DO NOT TAKE GRADE CHANGES INTO ACCOUNT. CONTRACTOR SHALL VERIFY ALL TOTAL QUANTITIES REQUIRED FOR COMPLETION OF WORK PRIOR TO BID.
4. THE IRRIGATION CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS AND MATERIAL CUT SHEET UPON INSTALLATION COMPLETION AS AS A TERM OF FINAL ACCEPTANCE. THIS COST SHALL BE ACCOMMODATED IN THE BID.
5. IRRIGATION PLANS ARE SCHEMATIC REPRESENTATIONS ONLY. FIELD ADJUST LINES TO AVOID CONFLICT WITH UTILITIES.
6. IRRIGATION SYSTEM IS DESIGNED BASED ON ASSUMED WATER PRESSURE OF **65 PSI** AT POINT OF CONNECTION. VERIFY ACTUAL PRESSURE AND FLOW RATE PRIOR TO BID SUBMISSION AND NOTIFY OWNER'S REPRESENTATIVE IF DIFFERENCES ARISE BETWEEN ACTUAL PRESSURE AND DESIGN PRESSURE. CONTRACTOR SHALL PROVIDE A BOOSTER PUMP IF REQUIRED.
7. IRRIGATION IS COORDINATED WITH THE PLANTING PLAN AND SITE IMPROVEMENTS AND IS DESIGNED WITH TRIANGULAR SPACING GIVING HEAD TO HEAD COVERAGE. COORDINATE IRRIGATION HEAD LAYOUT WITH NEW PLANT MATERIALS, LOCATE SPRAY HEADS 30" FROM BASE OF TREE. DO NOT ALTER HEAD LOCATION, PIPE LAYOUT, OR VALVE LOCATION WITHOUT APPROVAL FROM THE CONSTRUCTION MANAGER. NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES OCCUR BETWEEN THE PLANS AND FIELD CONDITIONS.
8. COORDINATE IRRIGATION POINTS OF CONNECTION AND LOCATION OF AUTOMATIC CONTROL VALVES WITH PROJECT MANAGER. COORDINATE ALL WORK WITH OTHER TRADES, I.E. ELECTRICAL, MASONRY, ETC.
9. USE 45 ELLS INSTEAD OF 90 ELLS ON ALL MAINLINES 2-1/2" AND LARGER. INSTALL CONCRETE THRUST BLOCKS AT ALL MAINLINE CHANGES IN DIRECTION. POUR MINIMUM OF 1 CUBIC FOOT OF CONCRETE ON UNDISTURBED SOIL. WRAP PIPE IN PLASTIC WRAP PRIOR TO COVERING WITH CONCRETE.
10. THIS SYSTEM SHALL BE AUTOMATED AND SHALL AVOID THE APPLICATION (OR INDIRECT RUNOFF) OF WATER IN IMPERVIOUS AREAS AND EXISTING NATIVE VEGETATION.
11. ALL COMPONENTS OF IRRIGATION SYSTEM SHALL BE INSTALLED AND PROPERLY ADJUSTED TO PROVIDE ADEQUATE COVERAGE AND MINIMIZATION OF OVER SPRAY ONTO WALKS, BUILDINGS, PARKING AREAS, ETC.
12. IRRIGATION HEADS IN PLANTING BEDS SHALL BE 12" POP-UP MINIMUM AND 6" POP-UP MINIMUM IN SOD AREAS. RISERS, IF INSTALLED, SHALL BE PVC CONSISTENT WITH LATERAL PIPING. INSTALL QUICK COUPLERS AS REQUIRED OR AS NOTED.
13. INSTALL ALL IRRIGATION PIPE AND CONTROL WIRES IN SLEEVE BELOW ALL PAVED SURFACES UNLESS OTHERWISE INDICATED ON THE PLANS. SLEEVE SIZE WILL BE TWO (2) TIMES THE DIAMETER OF PIPE(S) TO BE SLEEVED. INSTALL SLEEVES PRIOR TO PLACEMENT OF PAVEMENTS AND PAVEMENT SUB-BASE.
14. PROVIDE POSITIVE DRAINAGE OF MAINLINE. PLACE MANUAL DRAIN AT LOW POINTS IN MAINLINE. IDENTIFY LOCATIONS ON AS-BUILTS.
15. ALL VALVE BOXES AND COVERS SHALL HAVE LOCKING LIDS AND A WATERPROOF, FADE-RESISTANT TAG. ALL QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES. VALVE BOXES AND COVERS SHALL BE GREEN.
16. CONTRACTOR TO INSTALL CONTROLLER, PUMP EQUIPMENT, AND ALL IRRIGATION ACCESSORIES AS REQUIRED. CONTRACTOR TO FURNISH CONTROL WIRES FROM VALVES TO CONTROLLER. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING 110 VOLT SERVICE FROM BUILDING AND CONNECTION TO CONTROLLER SERVICE.
17. INSTALL ONE (1) ADDITIONAL RED CONTROL WIRE AND ONE (1) ADDITIONAL WHITE CONTROL WIRE FROM CONTROLLER TO END OF MAINLINE.
18. CONTROLLER GROUNDING: ALL GROUNDING AND INSTALLATION OF EQUIPMENT SPECIFIED, SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTROLLER SHALL BE GROUNDED TO GROUND RODS WITH LESS THAN 10 OHMS RESISTANCE. PROVIDE 5/8" DIAMETER X 8' LONG COPPER CLAD STEEL GROUND RODS WITH 15' PRE-WELDED #6 AWG INSULATED GREEN-YELLOW WIRE (PAIGE ELECTRIC PART # 182000716). THE RODS ARE TO BE DRIVEN INTO THE GROUND IN A VERTICAL POSITION OR AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES AT A LOCATION 10 FEET FROM THE ELECTRONIC EQUIPMENT, THE GROUND PLATE, OR THE WIRES AND CABLES CONNECTED TO SAID EQUIPMENT. THE GROUNDING RODS SHALL BE COVERED BY A VALVE BOX. INSTALL ALL GROUNDING CIRCUIT COMPONENTS IN STRAIGHT LINES. REFERENCE THE GROUNDING DETAILS AND/OR PAIGE ELECTRIC WIRING GUIDE HTTPS://WWW.PAIGEWIRE.COM.
19. THE RAIN SHUTOFF DEVICE SHALL BE INSTALLED TO MEET LOCAL CODES AND/OR MINIMUM MANUFACTURER'S RECOMMENDATIONS. OBSTRUCTIONS, VANDALISM AND EASE OF SERVICE SHALL BE CONSIDERED IN LOCATING THE DEVICE. ALL WIRING BETWEEN THE RAIN SWITCH AND THE IRRIGATION CONTROLLER SHALL BE ENCLOSED IN 1/2" PVC ELECTRICAL CONDUIT. VERIFY FINAL LOCATION WITH OWNER'S REPRESENTATIVE.
20. IRRIGATION SLEEVING TO BE A MINIMUM OF SCHEDULE 40 PVC AND SHALL BE COORDINATED BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL BE BE RESPONSIBLE FOR SLEEVING INSTALLATION UNLESS THIS WORK IS IN THE IRRIGATION SCOPE OF WORK. SLEEVING SHALL BE CLEARLY MARKED, FLAGGED, OR OTHERWISE DELINEATED ABOVE GRADE TO AVOID DAMAGE AND PROVIDE EASE OF LOCATION FOR FUTURE WORK. SLEEVES SHALL BE INSTALLED AT THE FOLLOWING DEPTHS: 24 INCHES, EXCEPT SLEEVES BENEATH VEHICULAR TRAFFIC SHALL BE INSTALLED AT 36 INCHES.
21. PIPE SIZING SHALL BE DETERMINED BY THE FRICTION LOSS METHOD AND WATER VELOCITY SHALL NOT EXCEED 5 CUBIC FEET PER SECOND. CONSTANT PRESSURE PIPING SHALL BE SCH 40 PVC. ALL PIPE SIZES INDICATED ARE MINIMUMS. CONTRACTOR MAY NOT DECREASE PIPE SIZE. LARGER PIPES MAY BE USED AT NO ADDITIONAL COST TO OWNER.
22. BACKFLOW PREVENTER AS REQUIRED PER INDUSTRY STANDARDS AND APPLICABLE CODES.
23. THE IRRIGATION SYSTEM SHALL BE PROPERLY MAINTAINED AND CONTRACTOR TO PROGRAM AUTOMATIC CONTROLLER CONSISTENT WITH WATER SCHEDULES ESTABLISHED BY THE PREVAILING WATER MANAGEMENT DISTRICT, OR THE MUNICIPALITY, WHICHEVER IS MORE RESTRICTIVE.
24. VERIFY INSTALLATION AND PARTS WARRANTY PRIOR TO CONTRACT EXECUTION.
25. THESE PLANS DO NOT EXPRESS OR IMPLY IN ANY WAY ANY TYPE OF TRADE WARRANTY OR MATERIAL GUARANTEE FROM THE MANUFACTURER AND NEITHER OFFERS ANY TYPE OF INSTALLATION WARRANTY NOR GUARANTEE OF ANY TYPE FOR THE FINISHED WORK. STARTING FROM THE DAY THE CONTRACTOR SIGNS CONTRACT CONTINUING IN PERPETUITY THE LANDSCAPE ARCHITECT HAVING NEITHER AFFILIATION WITH NOR CONTROL OVER EITHER THE CONTRACTOR OR HIS STAFF WILL BE HELD HARMLESS FOR ACTIONS OF THE CONTRACTOR AND HIS STAFF THAT MAY DAMAGE PROPERTY OR CAUSE PERSONAL BODILY INJURY. BY ACCEPTING THIS CONTRACT THE CONTRACTOR ACKNOWLEDGES HIS LIABILITY TO PAY THE FULL AMOUNT OF ANY AND ALL DAMAGE CLAIMS FILED AGAINST THE OWNERS PROPERTY, PROPERTY ADJACENT TO THE OWNER'S PROPERTY OR FOR ANY AND ALL PERSONAL INJURIES THAT RESULT DURING OR FROM THE INSTALLATION OF OR SUBSEQUENT OPERATION OF THIS SPRINKLER SYSTEM. CONTRACTOR SHALL INDEMNIFY THE LANDSCAPE ARCHITECT AND PAY ALL LEGAL FEES, FINES, COURT SETTLEMENTS, ANY AND ALL OTHER COSTS MENTIONED OR NOT MENTIONED HEREIN THAT MAY HAVE RESULTED FROM PROPERTY DAMAGE, PERSONAL BODILY INJURY OR ANY OTHER DAMAGE OR INJURY CAUSED DURING THE INSTALLATION OR OPERATION OF THIS SPRINKLER SYSTEM.
26. THE PURPOSE OF THIS IRRIGATION PLAN IS TO PROVIDE A PHYSICAL LAYOUT OF IRRIGATION EQUIPMENT TO ASSIST THE CONTRACTOR IN ACCURATELY ESTIMATING THE MATERIAL COST TO BID THE SPRINKLER SYSTEM. THE DESIGN INTENT IS TO PROVIDE THE CONTRACTOR WITH A DIAGRAMMATIC LAYOUT OF SPRINKLER EQUIPMENT, WHICH WILL PROVIDE ADEQUATE WATER COVERAGE FOR THE LANDSCAPE MATERIALS WITHIN THE SCOPE OF WORK UNDER THIS CONTRACT. THESE PLANS AND THE MATERIALS SPECIFIED ARE SUBJECT TO CHANGE WITHOUT NOTICE. PRIOR TO BIDDING THIS CONTRACT THE CONTRACTOR WILL VERIFY ALL IRRIGATION MATERIAL MODEL NUMBERS, DIMENSIONS, COMPATIBILITY OF COMPONENT ASSEMBLIES, MAINLINE AND ZONE HYDRAULICS, ELECTRICAL COMPONENTS, WIRING, ALL SLEEVES, WATER AND ELECTRICAL SOURCES, WATER PRESSURE AND G.P.M. AVAILABLE AND APPLICABLE SITE CONDITIONS, WHICH MAY ADVERSELY AFFECT EITHER THE COST OR PERFORMANCE OF THIS SPRINKLER SYSTEM. IF A CONFLICT IS FOUND THE CONTRACTOR WILL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING AND WILL NOT START THE WORK UNTIL THE OWNER HAS RESOLVED THE CONFLICT AND ISSUED IN WRITING A "NOTICE TO PROCEED". IF A CONFLICT IS FOUND AFTER THE CONTRACT HAS BEEN SIGNED THE CONTRACTOR WILL RESOLVE THE CONFLICT AT HIS OWN EXPENSE AND AT NO ADDITIONAL COST TO THE OWNER. SLEEVING UNDER SIDEWALKS MAY NOT BE SHOWN OR CALLED OUT DUE TO LACK OF SPACE ON PLANS. ONCE A BID HAS BEEN GIVEN TO THE OWNER FROM THE CONTRACTOR CHANGE ORDERS FOR EITHER ADDITIONAL MATERIALS OR TO CHANGE TO MATERIALS THAT ARE NOT FOUND ON THIS PLAN IS NOT ACCEPTABLE AND WILL NOT BE ALLOWED.
27. GUARANTEE: LANDSCAPE CONTRACTOR SHALL WARRANTY LAWNS AFTER INSTALLATION FOR 45 DAYS FOLLOWING ACCEPTANCE OF SITE BY OWNER'S REPRESENTATIVE. WARRANTY TREES AND SHRUBS FOR ONE YEAR FOLLOWING ACCEPTANCE OF SITE BY OWNER'S REPRESENTATIVE. MAINTAIN MATERIALS AFTER INSTALLATION FOR 45 DAYS FOLLOWING ACCEPTANCE OF SITE BY OWNER'S REPRESENTATIVE. REPLACE ALL UNHEALTHY OR DEAD PLANT MATERIAL FOUND DURING WARRANTY PERIOD. WARRANTY IRRIGATION SYSTEM MATERIALS AND LABOR FOR ONE YEAR FOLLOWING ACCEPTANCE OF SITE BY OWNER'S REPRESENTATIVE.
28. TEMPORARY IRRIGATION FOR LANDSCAPE MATERIAL WITHOUT IRRIGATION: CONTRACTOR SHALL COORDINATE AND PROVIDE PROVISIONS FOR TEMPORARY IRRIGATION. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING ALL EXISTING AND PROPOSED PLANT MATERIAL TO SUPPLEMENT RAINFALL AS REQUIRED DURING CONSTRUCTION AND 90 DAY PLANT ESTABLISHMENT PERIOD (90 DAYS AFTER FINAL ACCEPTANCE). LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS UNTIL PLANT MATERIAL IS FULLY ESTABLISHED. CONTRACTOR SHALL REPLACE ANY PLANT MATERIAL LOST FROM INADEQUATE WATERING DURING 90 DAY ESTABLISHMENT PERIOD.

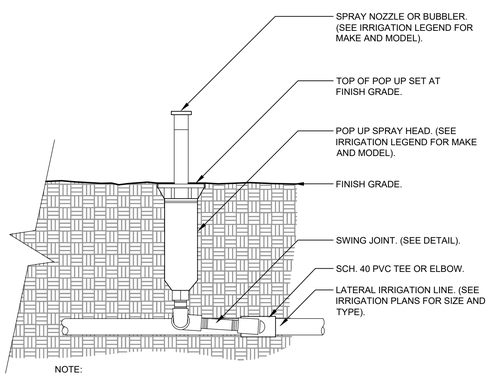
VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	DESIGN PSI	PSI	PSI @ POC	PRECIP
1	Rain Bird XCZ-150-LCS	1-1/2"	Area for Dripline	35.48	30	38.4	57.4	0.96 in/h
2	Rain Bird XCZ-150-LCS	1-1/2"	Area for Dripline	30.08	30	37.4	54.0	0.96 in/h
3	Rain Bird PEB	1-1/2"	Turf Spray	16.61	30	35.8	51.3	1.42 in/h
4	Rain Bird XCZ-150-LCS	1-1/2"	Area for Dripline	27.15	30	36.3	54.6	0.96 in/h
5	Rain Bird PEB	1"	Bubbler	22	30	39.0	55.0	1.7 in/h
6	Rain Bird PEB	1-1/2"	Turf Rotor	20.55	35	40.3	56.3	0.62 in/h
7	Rain Bird XCZ-150-LCS	1-1/2"	Area for Dripline	33.32	30	36.3	58.9	0.96 in/h
8	Rain Bird XCZ-150-LCS	1-1/2"	Area for Dripline	23.49	30	36.1	53.2	0.96 in/h
9	Rain Bird XCZ-150-LCS	1-1/2"	Area for Dripline	33.38	30	35.9	58.8	0.96 in/h
10	Rain Bird PEB	1-1/2"	Turf Rotor	23.44	35	40.5	57.5	0.62 in/h
11	Rain Bird XCZ-150-LCS	1-1/2"	Area for Dripline	23.82	30	35.1	52.3	0.96 in/h
12	Rain Bird PEB	1"	Turf Spray	27.96	30	36.8	56.4	1.19 in/h
13	Rain Bird PEB	1-1/2"	Bubbler	19.5	30	39.1	54.7	1.7 in/h
14	Rain Bird PEB	1"	Turf Spray	27.28	30	35.4	54.5	1.39 in/h
15	Rain Bird XCZ-150-LCS	1-1/2"	Area for Dripline	30.17	30	35.2	56	0.96 in/h
16	Rain Bird PEB	1"	Turf Rotary	19.77	35	38.5	53.2	0.35 in/h



5 REMOTE CONTROL VALVE

N.T.S. P-WI4-04



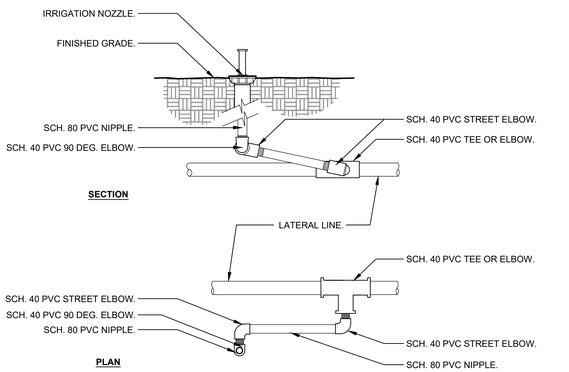
NOTE:
1- 6" POP UPS SHALL BE USED IN TURF AREAS.

2- CONTRACTOR SHALL SETTLE SOIL AROUND THE POP UP AFTER INSTALLATION.

3- ALL SCH. 40 PVC TO SCH. 80 PVC CONNECTIONS SHALL BE MADE USING TEFLON TAPE.

1 POP-UP SPRAY HEAD

1 1/2" = 1'-0" P-WI4-27

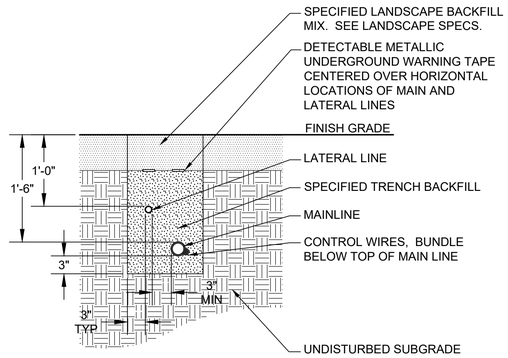


NOTE:
1- ALL THREADED CONNECTIONS FROM SCH. 40 PVC TO SCH. 80 PVC SHALL BE MADE USING TEFLON TAPE.

2- RAINBIRD TSJ SERIES OR HUNTER SWING JOINTS OR APPROVED EQUAL SHALL BE USED PER APPROVAL BY THE OWNER'S REPRESENTATIVE.

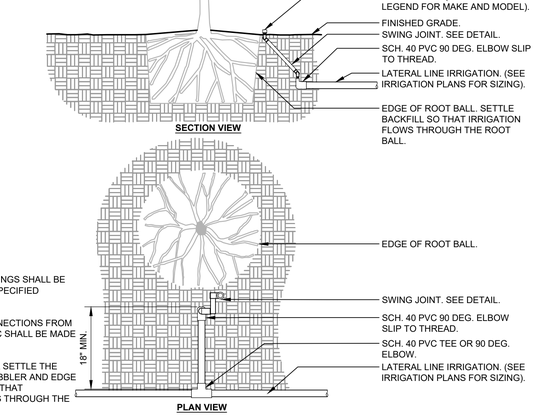
2 SWING JOINT

3" = 1'-0" P-WI4-26



3 TYPICAL TRENCHING

N.T.S. P-WI4-05



NOTES:
1- ALL IRRIGATION FITTINGS SHALL BE SCH. 40 PVC UNLESS SPECIFIED OTHERWISE.

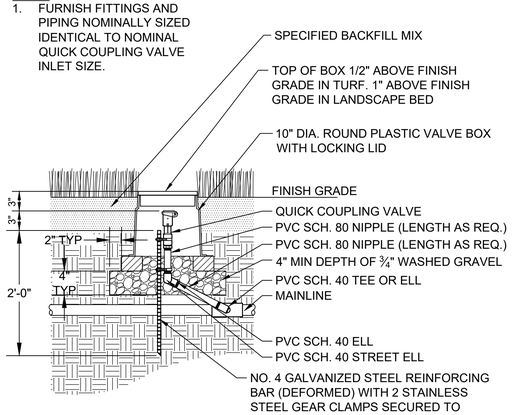
2- ALL THREADED CONNECTIONS FROM SCH. 40 TO SCH. 80 PVC SHALL BE MADE USING TEFLON TAPE.

3- CONTRACTOR SHALL SETTLE THE AREA AROUND THE BUBBLER AND EDGE OF THE ROOT BALL SO THAT ALL IRRIGATION FLOWS THROUGH THE ROOT BALL.

4 IRRIGATION BUBBLER WITH LAYOUT

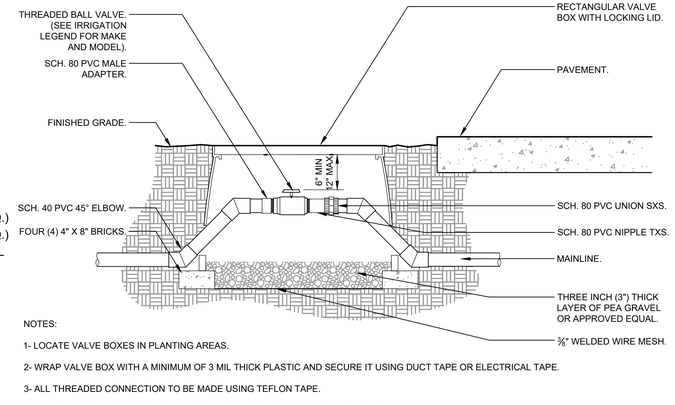
3/4" = 1'-0" P-WI4-02

NOTE:
1. FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.



6 QUICK COUPLER

N.T.S. P-WI4-03



NOTES:
1- LOCATE VALVE BOXES IN PLANTING AREAS.

2- WRAP VALVE BOX WITH A MINIMUM OF 3 MIL THICK PLASTIC AND SECURE IT USING DUCT TAPE OR ELECTRICAL TAPE.

3- ALL THREADED CONNECTION TO BE MADE USING TEFLON TAPE.

4- ALL CHANGES IN ELEVATION SHALL BE MADE USING SCH. 40 PVC 45° ELBOWS.

7 BALL VALVE - 3" AND SMALLER

1 1/2" = 1'-0" P-WI4-38

CALL SUNSHINE
811
IT'S THE LAW IN FLORIDA

BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA AT LEAST TWO FULL BUSINESS DAYS BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive, Dunedin, Florida 34698
Phone: (727) 726-6124
LA6667069

Contact: Chris Anuszkiewicz

Web-Site www.placemakerdesignstudio.com

Prepared For:

Interstruct Design LLC
814 W. Church Street
Orlando, Florida 32805

Contact: Ryan Young, AIA
Phone: (407) 849-0025

Copyright: The content of these drawings are owned by and the property of PlaceMaker Design Studio, LLC and were created for the exclusive use of this project.

Orlando Othopaedic Center at Winter Garden

12152 COLONIAL DR. WINTER GARDEN, FLORIDA

Seal



The seal appearing on this document was authorized by Christopher J. Anuszkiewicz, LA6667069 on 4/6/2026.

PERMIT SUBMITTAL

REV	DATE	DESCRIPTION
1		
2		
3		
4	7/02/2026	CITY COMMENTS
5	5/26/2026	DRC COMMENTS

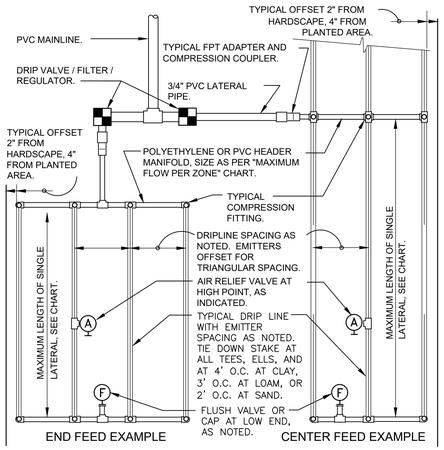
Date:	**APRIL 8, 2026**
Job No.:	**7012**
Drawn By:	**GLA**
Checked By:	**CJA**

Sheet Title

IRRIGATION NOTES AND DETAILS

Sheet No.

IR2



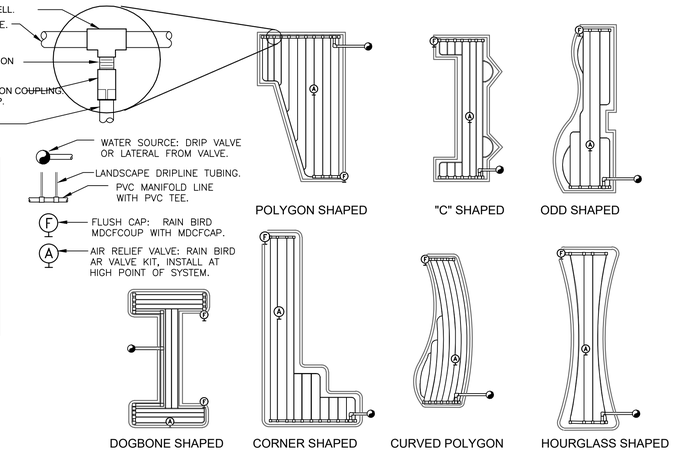
MAXIMUM LATERAL LENGTH (FEET)						
	EMITTER FLOW RATE GPH					
	12" SPACING		18" SPACING		24" SPACING	
PSI	0.6	0.9	0.6	0.9	0.6	0.9
10	125	96	175	135	218	171
20	249	191	350	171	442	340
30	307	236	434	333	550	422
40	350	268	495	380	627	171
50	125	96	175	135	218	171
60	125	96	175	135	218	171

GRID PRECIPITATION RATES (IN/HR)			
EMITTER SPACING	LATERAL SPACING	EMITTER FLOW RATE	
		0.6	0.9
12	12	0.96	1.44
18	18	0.69	1.03
24	24	0.28	0.41

LATERAL FLOW PER 100 FT (GPM)			
EMITTER FLOW	12" SPACING	18" SPACING	24" SPACING
0.6 GPH	1.0 GPM	0.67 GPM	0.50 GPM
0.9 GPH	1.5 GPM	1.0 GPM	0.75 GPM

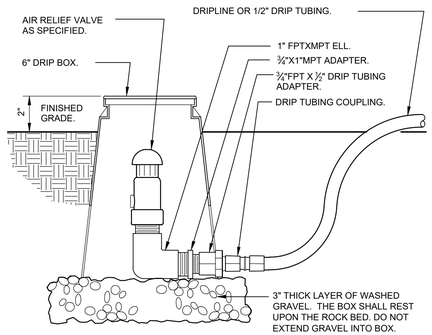
MAXIMUM FLOW PER ZONE		
	MAX GPM	PSI LOSS
SCHEDULE 40 PVC HEADER SIZE		
1/2"	4.7 GPM	7.7 PSI
3/4"	8.3 GPM	5.6 PSI
1"	13.5 GPM	4.2 PSI
1-1/2"	33.9 GPM	2.9 PSI
2"	52.4 GPM	1.9 PSI
POLY PIPE HEADER SIZE		
1/2"	4.7 GPM	8.8 PSI
3/4"	8.3 GPM	6.3 PSI
1"	13.5 GPM	4.8 PSI
1-1/2"	31.8 GPM	2.9 PSI
2"	52.4 GPM	2.2 PSI

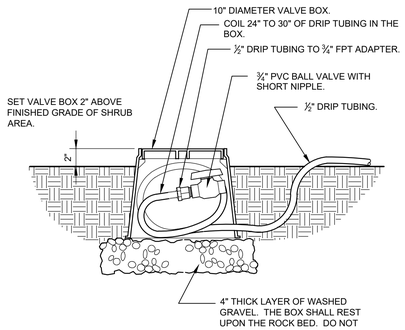
SLOPED CONDITION NOTE:
1. DRIPLINE LATERALS SHOULD FOLLOW THE CONTOURS OF THE SLOPE WHENEVER POSSIBLE.
2. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
3. NORMAL SPACING WITHIN THE TOP ⅔ OF SLOPE.
4. INSTALL DRIPLINE AT 25% GREATER SPACING AT THE BOTTOM ⅓ OF THE SLOPE.
5. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE THE BOTTOM ⅓ ON A SEPARATE VALVE.

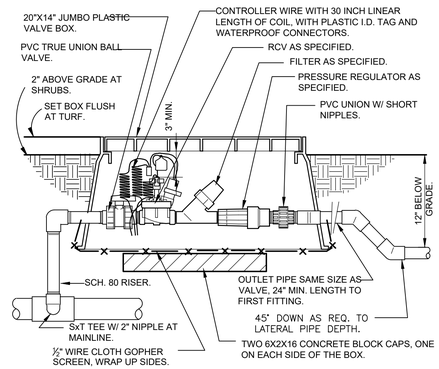


1 TYPICAL RAIN BIRD DRIPLINE REQUIREMENTS

N.T.S. P-WI4-15

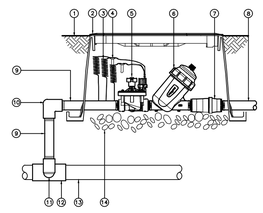






2 ZONE CONTROL

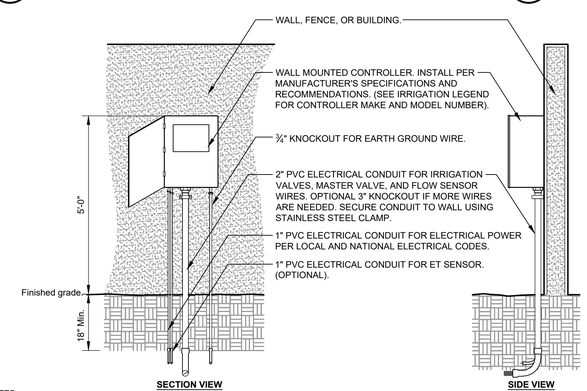
3" = 1'-0" P-WI4-13



1. FINISH GRADE/TOP OF MULCH
2. JUMBO VALVE BOX WITH COVER: RAIN BIRD VB-JUMBO
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1 1/2" PEB VALVE (INCLUDED IN XCZ-150-LCS KIT)
6. 1 1/2" FILTER - RAIN BIRD LARGE CAPACITY SCREEN FILTER (INCLUDED IN XCZ-150-LCS KIT)
7. 1 1/2" HIGH FLOW PRESSURE REGULATOR (INCLUDED IN XCZ-150-LCS KIT)
8. LATERAL PIPE
9. PVC SCH 80 NIPPLE 1 1/2"
10. PVC SCH 40 ELBOW
11. PVC SCH 80 NIPPLE (2" LENGTH, HIDDEN) AND PVC 40 ELBOW
12. PVC SCH 40 TEE OR ELBOW
13. MAINLINE PIPE
14. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

3 DRIP AIR RELIEF VALVE IN BOX

3" = 1'-0" P-WI4-11



NOTES:
1- COMMON AND CONTROLLER WIRE TO BE BUNDLED USING ELECTRICAL TAPE AT 10'-0" ON CENTER.

2- GROUNDING RODS SHALL BE LOCATED BETWEEN 8"- 0" TO 12'- 0" AWAY FROM THE CONTROLLER. GROUNDING RODS SHALL BE ⅝" IN DIAMETER X 8' IN LENGTH. CONNECT THE GROUNDING ROD TO THE CONTROLLER USING 6 GAUGE BARE COPPER WIRE OR PER THE MANUFACTURER'S SPECIFICATIONS.SEE GROUNDING ROD DETAIL.

3- WHEN AN ET STATION IS SPECIFIED, ET STATION SHALL BE INSTALLED NO FURTHER THAN 90' AWAY FROM THE CONTROLLER AND A MINIMUM OF 15' OFF OF THE GROUND, OUT FROM UNDER ANY OVERHEAD OBSTRUCTIONS SUCH AS, BUT NOT LIMITED TO, BUILDING OVERHANGS, TREES, OR UTILITIES.

7 WALL MOUNTED CONTROLLER

1/2" = 1'-0" P-WI4-37

4 DRIP FLUSH VALVE

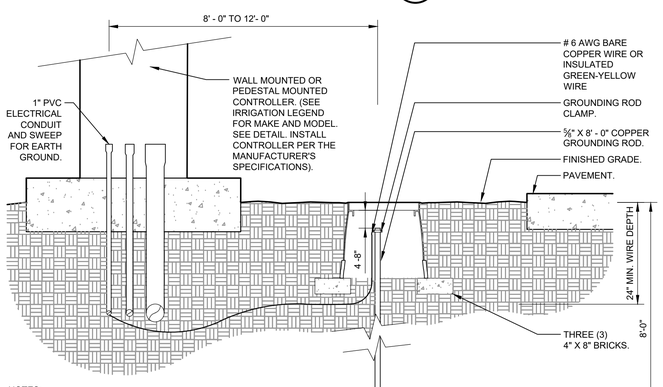
1 1/2" = 1'-0" P-WI4-19

5 1" DRIP VALVE/FILTER/REGULATOR

1 1/2" = 1'-0" P-WI4-23

6 1.5" COMMERCIAL DRIP CONTROL ZONE KIT

N.T.S. P-WI4-33



NOTES:
1- ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.

2- GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS THE IRRIGATION MAINLINES OR LATERAL LINES.

3- VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.

4- INSTALL GROUNDING ROD PER THE CONTROLLER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

8 GROUNDING ROD

1 1/2" = 1'-0" P-WI4-28

CALL SUNSHINE
811
IT'S THE LAW IN FLORIDA

BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA AT LEAST TWO FULL BUSINESS DAYS BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive, Dunedin, Florida 34698
Phone: (727) 726-6124
LA6667069

Contact: Chris Anuszkiewicz

Web-Site www.placemakerdesignstudio.com

Prepared For:

Interstruct Design LLC
814 W. Church Street
Orlando, Florida 32805

Contact: Ryan Young, AIA
Phone: (407) 849-0025

Copyright: The content of these drawings are owned by and the property of PlaceMaker Design Studio, LLC and were created for the exclusive use of this project.

Orlando Othopaedic Center at Winter Garden

12152 COLONIAL DR.
WINTER GARDEN, FLORIDA

Seal



The seal appearing on this document was authorized by Christopher J. Anuszkiewicz, LA6667069 on 4/6/2026.

PERMIT SUBMITTAL

REV	DATE	DESCRIPTION
3		
4		
5		
2	7/02/2026	CITY COMMENTS
1	5/26/2026	DRC COMMENTS

Date:	**APRIL 8, 2026**
Job No.:	**7012**
Drawn By:	**GLA**
Checked By:	**CJA**

Sheet Title

IRRIGATION DETAILS

Sheet No.

IR3

IRRIGATION SPECIFICATIONS

PLANTING IRRIGATION

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

A. Scope:
1. The Work specified in this Section consists of the furnishing of all labor, drawings, transportation, materials and equipment necessary to install fully operational underground irrigation systems in proposed sod and landscape areas.
2. Obtain all permits and pay all required fees to any regulatory agency having jurisdiction over the work. Inspections required by local ordinances during the course of construction shall be scheduled as required. On completion of the work, satisfactory evidence shall be furnished to the Landscape Architect to show that all work has been installed in accordance with the ordinances and code requirements.
3. Submit unit price breakdowns as required for all irrigation components in the event additional areas will be added or deleted. This submittal shall be included with the Bid.
4. If any error or discrepancy is found in the Plans and Specifications, the Contractor shall refer the same to the Landscape Architect for an interpretation and decision. In resolving conflicts between the Plans and Specifications, THE PLANS SHALL GOVERN over the Specifications. The Owner's representative shall have the right to correct apparent errors or omissions in the Plans and Specifications and to make such interpretations as deemed necessary for the proper fulfillment of the intent of the Plans and Specifications.
5. Contractor to verify the required meters, water supply, water pressure, development fees, point of connection installation fees, and local code requirements prior to bidding. Contractor shall pay all fees required for installation of the point of connection and shall coordinate installation with the regulatory agency which has jurisdiction over the work.

B. Related Work
1. Trees, Plants and Groundcovers
2. Sodding

1.2 DRAWINGS

A. The Drawings indicate areas of proposed landscaping. All landscaped areas including sod areas and proposed landscaping will be irrigated, unless otherwise noted on the plans. See limit of work on the plan sheets. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, proposed planting, and existing trees to remain. Deviations shall be brought to the Landscape Architect's attention.

B. The Contractor shall carefully investigate the structural and finished conditions affecting all of this work and plan his operations accordingly, furnishing all offsets, fittings and sleeves which may be required.

C. The Contractor shall coordinate with all other trades to preclude any potential conflicts and to coordinate construction scheduling.

D. All materials and methods called for on the Drawings by notes and/or details, and/or as required to form a complete operational system shall be furnished and installed whether or not specifically mentioned in these specifications.

E. Any obstructions, grade differences or discrepancies shall be brought to the attention of the Engineer prior to construction. In the event that notification is not performed, the Contractor shall assume full responsibility for any and all revisions necessary.

F. Irrigation plans are schematic only. Contractor shall submit shop drawings for any changes proposed to the plans as provided.

G. Contractor to provide as-built plans of all newly installed material, including bubblers, sprayheads, rotors, valves, pipes, meters and controllers at 20 scale on standard 24x36 plan sheets

1.3 PERFORMANCE REQUIREMENTS

A. Irrigation zone control shall be automatic operation with controller and automatic control valves.

B. Location of Sprinklers and Specialties: Design is approximate. Make minor adjustments necessary to avoid plantings and obstructions such as signs and light standards.

1.4 SUBMITTALS

A. General:
1. Forward submittals in sufficient time to permit proper consideration and approval action. Time submissions to assure adequate lead time for procurement required items. Delays attributed to untimely and rejected submittals will not serve as a basis for extending contract time for completion.
2. Materials, fabricated articles and the like shall match those of approved submittals.
3. Wherever the terms "approve," "approval" or "approved" are used in this Specification, they shall mean the approval of the Landscape Architect of record in writing, and that the product or products apparently meet the requirements of the drawings and specifications on the basis of the product data, shop drawings, project record documents, samples, or operations and maintenance manuals submitted.

B. Product Data:
1. Submit three (3) copies of all items herein specified for review and approval by the Landscape Architect. Include information sufficient to evidence full compliance with specification requirements. After item has been approved, no change in brand or make will be permitted. The submittals shall include the following:
   a. Each type of pipe and size (lateral, electrical conduit, sleeving and other).
   b. Each type of fitting and size lateral conduit and other).
   c. Each wire type (power, communication, control valve).
   d. Each controller, required components (grounding, lightning protection) and accessories.
   e. Irrigation Controller(s) and accessories (decoders, surge protection, and other)
   f. Each type of nozzle, sprayhead ,and rotor
   g. Each valve type and size (control).
   h. Each type and size valve box.
   i. PVC cement, primer and Teflon tape.
   j. Quick coupler, key and hose connetor.
   k. Detector tape.
   l. Rain Sensor.

C. Record Copy Drawings: During the course of installation, carefully show all field changes in red line on a print of the irrigation system as installed. This drawing shall be labeled "Record Copy", and shall be made available for inspection.

D. Upon completion of the work of this section and as a condition of its acceptance, the Contractor shall deliver to the Owner's Representative the following:
1. As-Built Drawings: Submit three prints and one reproducible and electronic file (PDF) of as-built drawings. As-built drawings shall clearly show all original components of the Record Copy and all changes documented in the Record Copy. Main lines, drain valves, valve boxes, and valve markers and other buried equipment shall be positively located by a minimum of two dimensions each from fixed reference points. In addition, the following information shall be included for any Drip or Low Volume Irrigation systems:
   a. Emitter schedule (number of emitters per plant type)
   b. Emitter layout chars.
2. Operations and Maintenance Manual: Prepare and deliver to the Landscape Architect within fourteen (14) calendar days prior to completion of construction, a minimum of three (3) hard cover binders with three rings containing the following:
   a. Contractor's name, address and telephone number.
   b. Catalog cuts of all irrigation materials installed.
   c. The duration of the guarantee period.
   d. The name and address of the local manufacturer's representative.
   e. List and description of complete operating instructions and routine maintenance procedures, start-up, and recommended schedule of operation including average application rates, with seasonal adjustments for each zone.
   f. Provide maintenance personnel with instruction for major equipment and provide evidence this service has been rendered in writing to the Landscape Architect at conclusion of project construction.
   g. Troubleshooting guide.
   h. Letter of warranty, dated as of the Final Inspection, shall be included in the Operations and Maintenance Manual.
3. Controller Reference Chart: Submit one chart for each controller installed on site showing the area covered by each sprinkler zone. The chart shall be a reduced copy of the as-built drawings, color coded to differentiate zone areas, sized to fit the controller door, and hermetically sealed between 20 mil. plastic sheets.
4. Supplemental Equipment: Submit two each of keys to the following: quick coupling valves, quick coupling valve lids, valve markers, manual drain valves, valve boxes, and controller cabinets.

1.5 QUALITY ASSURANCE

A. Other manufacturers than those specified may only be substituted if approved by the Landscape Architect. Any deviations from the specifications or design changes must be shown to comply with the system design intent and identify any necessary performance changes that are resultant from the deviation.

B. The Contractor shall store all PVC pipe and fittings out of direct sunlight and protect from physical damage.

C. The Contractor shall store and protect all specified components from adverse weather conditions until installation is complete.

D. The Contractor shall handle all components as directed by the manufacturer's handling and installation instructions. Damage from transportation or other handling of materials shall be the responsibility of the Contractor.

E. All local, municipal and state laws and rules and regulations governing or relating to any potion of this work are hereby incorporated into and made part of these specifications and the Contractor shall carry out their provisions. Any specifications herein contained, shall not be construed to conflict with the above rules, regulations or requirements.

F. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

1.6 PROJECT CONDITIONS

A. Inspection of the site: The Contractor shall inspect the site prior to construction and verify the extent of work required. Commencement of construction by the Contractor designates acceptance of the site conditions apparent at outset.

B. The Contractor shall verify the locations of all existing utilities, structures, and services before commencing work. The location of utilities, structures and services shown on these plans are approximate only. Any discrepancies between these plans and the actual field conditions shall be reported to the Owner's Representative immediately.

C. Weather Limitations: Soil work shall be performed only when weather conditions do not detrimentally affect the quality of work.

D. Project Limits: Areas, as specified within which work is to be performed.

E. The Contractor shall protect all areas of work defined on the drawings and any existing on-site vegetation, structures, utilities, etc. All damage as a result of work under this contract shall be repaired at not cost to the Owner. The Contractor shall be responsible for the provision of traffic control, barricades, safety guards, and any other structures or improvements necessary for the complete protection of the public.

F. The Contractor shall verify, locate and protect all existing utilities, vegetation, and features on and adjacent to the project site during construction and shall repair, at their own expense; all damage as a result of construction activities.

G. The Contractor shall, at all times, take adequate precautions to keep rock, dirt, gravel, debris, and all other foreign materials from entering piping, valves and other irrigation equipment.

H. All trenching or other work under the limb spread of any and all trees shall be performed by hand or by other methods so that no limbs or branches are damaged in any way. Trenching around existing plant material shall be performed by hand so as to minimize root disturbance. Buildings, walks, walls and other property shall be protected from damage. Open ditches left exposed shall be flared and barricaded by the Contractor.

I. The Contractor shall verify the "Point of Connection" for the irrigation system with the Owner's representative prior to design of the system.

1.7 COORDINATION

A. Coordinate with other trades affecting or affected by work of this section.

B. Verify that sleeving and other conduits, of sizes and types specified, are installed as required.

1.8 GUARANTEE

A. The Contractor guarantees that all new irrigation components installed, as part of this work shall be free from defects in materials, design and workmanship for a period of one year from the Date of Substantial Completion.

B. Upon notice from the Owner's Representative of failure on any part of this equipment during the guarantee period, due to faulty installation procedures, new replacement parts shall be promptly furnished and installed by the Contractor at no additional cost to the Owner. Damages to property or site improvements resulting from the failure of specified components shall be repaired promptly, at no additional cost to the Owner.

C. The Contractor shall be responsible for grade settlement, and / or erosion of soil surfaces resulting from defects in irrigation installation throughout the specified warranty period.

PART 2 - PRODUCTS

2.1 GENERAL PRODUCT REQUIREMENTS

A. Materials and equipment shall be new, delivered to site in original factory condition, and as specified in the plans and this section.

2.2 GALVANIZED PIPE

A. Galvanized pipe shall be threaded and hot dip galvanized standard steel pipe Schedule 30 standard weight.

2.3 GALVANIZED FITTINGS

A. Galvanized fittings shall be threaded and hot dip galvanized standard steel schedule 40 standard weight.

2.4 PLASTIC PIPE

A. All plastic pipe shall be polyvinyl chloride (PVC) continuously bearing the seal of the National Sanitation Foundation, with the exception of polyethylene pipe specified as follows.
1. Poly Chloride (PVC) pipe
   a. Lateral Lines: PVC Class 200, Type 1, NSF approved, solvent weld pipe meeting requirements of ASTM D2241-00.
   b. Main Lines: PVC Pipe: ASTM D 1785, PVC 1120 compound, Schedule 40.
   c. Sleeves: PVC Pipe: ASTM D 1785, PVC 1120 compound, Schedule 40.

B. Risers and Nipples: PVC, Type, Schedule 80 one piece, standard weight with molded threads, both ends, ASTM D1784-99a, D2464-99

C. Electrical Conduit: PVC Schedule 40 electrical conduit, standard weight, minimum 1-1/2 inch nominal diameter unless otherwise required.

D. Polyethylene Pipe and fittings: flexible, thick walled designed to withstand 400 psi burst pressure test. Quality and wall thickness equivalent to RainBird SP Series, or approved equal. Sized per manufacturer's specified velocity tolerances.

2.5 PLASTIC FITTINGS

A. For Polyethylene Pipe: As specified by manufacturer of polyethylene pipe.

B. For PVC Class 200 Pipe: PVC Schedule 40 meeting the requirements of ASTM D2466-01.

C. For PVC Schedule 40 Pipe: Schedule 80 meeting the requirements of ASTM D2464-99 PVC.

D. Manufactured Swing Joints 3/4 inch (or greater in size shall be RanBird TSJ series or approved equal).

2.6 PIPE JOINING COMPOUNDS

A. Cement and Primer for Solvent Weld Joints: As recommended by manufacturer of PVC pipe.

B. Teflon Tape for Threaded Joints (PVC or galvanized): DuPont or approved equal.

2.7 ELECTRICAL CONTROL WIRE AND CONNECTORS

A. Wire: Single strand copper, UL approved for direct burial. Sized in accordance with manufacturer's specifications. Control (hot) wires shall be red and common (ground) wire shall be white. Spare wire shall be black.

B. Wire Connectors and Sealant: UL approved for direct burial. Use a 3M DBOB for solenoid connections. Use a 3M DBR/y-6 for two wire connections when two system is specified. A valve box shall be used for all underground wire splices.

C. Install all above-ground wire runs and wire entries into buildings in conduit.

D. Power to controller is by contractor.

2.8 AUTOMATIC CONTROLLER

A. Automatic Controller: Provide models and product types shown on plans. Controller shall have ability for all zones to fully operate and meet both normal and specified low volume system requirements and as required by site conditions.
1. Controller shall be capable of a minimum of 2 start times per station per day and be equipped with a minimum 7-day watering cycle
2. Controller must be suitable either indoor or outdoor mounting. The Contractor shall coordinate with the Owner's Representative to identify location for Controller mount and provide appropriate, lockable cabinet for location

2.9 VALVES, FILTERS, PRESSURE REGULATORS

A. Electric Valves: Provide models and product types shown on plans.

B. Master Valve: Provide models and product types shown on plans.

C. Gate Valves: Bronze fully guided flexible wedge with renewable seat rings and non-rising stem with cross or hand-wheel type handle. Champion, Hammon, Buckner or approved equal.

D. Manual Valves: Manufactured as follows: PVC Schedule 40 ball valves unless otherwise indicated.

E. Remote Control Valve(s): Normally closed 24 VAC solenoid actuated globe pattern, spring-loaded diaphragm type. The valve shall be pressure rated up to 200 psi at 150 degrees F.
   a. Provide models and product types shown on plans.

F. Manual Drain Valve: 3/4 inch size bronze angle valve with rising stem and cross type handle. Hammond, Buckner or approved equal.

G. Quick Coupling Valve: Provide models and product types shown on plans. Locking-Top Option: Vandal-resistant locking feature. Include one matching key(s).

H. Backflow Prevention Device: Verify local code requirements. Double check type, as manufactured by the following:
1. Watts Water Technologies
2. Wilkins Water Control Products
3. Or approved equal

2.10 VALVE BOXES

A. Plastic valve box with locking green lid, sized to provide a minimum of 3 inches clear on all sides of the valve to facilitate access, maintenance, repair or removal. Ametek, Carson, or approved equal.

B. Wire splices not made at sprinkler valves shall be placed in a Carson 920-12B 10" round valve box with a Carson green lid or approved equal.

2.11 PIPING JOINING MATERIALS

A. Pipe-Flange Gasket Materials: AWWA C110, rubber, flat face, 1/8 inch thick unless otherwise indicated; full-face or ring type unless otherwise indicated.

B. Metal, Pipe-Flange Bolts and Nuts: ASME B18.2.1, carbon steel unless otherwise indicated.

C. Brazing Filler Metals: AWS A5.8/A5.8M, BCuP Series, copper-phosphorus alloys for general-duty brazing unless otherwise indicated.

D. Solder Filler Metals: ASTM B 32, lead-free alloys. Include water-flushable flux according to ASTMB 813.

E. Solvent Cements for Joining PVC Piping: ASTM D 2564. Include primer according to ASTMF 656.

F. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer unless otherwise indicated.

2.12 RAIN SHUTOFF DEVICE

A. Manufacturer: Provide model and manufacturer shown on the plans.
1. The unit shall be mounted on an aluminum bracket with a thermoplastic housing and weather proof switch. Location and placement of this device shall be approved by the owner's representative prior to installation.
2. Rainfall shutoff device shall meet State Code (FS373.62).

2.13 IRRIGATION HEADS

A. General Requirements: Designed for uniform coverage over entire spray area indicated at available water pressure.

B. Plastic, Pop-up, Gear-Drive Rotary Sprinklers:
1. Manufacturers: Heads shall be the size and type noted on the plans.

C. Plastic, Pop-up Spray Sprinklers:
1. Manufacturers: Heads shall be the size and type noted on the plans.

2.14 OTHER MATERIALS

A. Rain Sensor: Provide model and manufacturer shown on plans and details.

B. Drainage Backfill: Cleaned gravel or crushed stone, graded from 3/4 inch minimum to 3 inches maximum.

C. Valve Marker: Locking type RainBird, Weathermatic, Buckner or approved equal.

D. Manual Drain Valve key: Minimum length 30 inches

E. Tracer Wire: Alarmatape or approved equal.

F. Pipe Backfill: Clean, dry friable topsoil void of stones larger than 1" in diameter and other material deleterious to specified pipe. Soil shall be suitable for compaction to eliminate settlement conditions of specified finish grades.

G. All other materials, not specifically described, but required for a complete and proper irrigation system installation, shall be new and of first quality and must be approved by the Owner's Representative prior to installation on site.

H. Water Source:
1. Existing Potable Water Line
2. Water Meter - Per City's Standards and Specs

PART 3 - EXECUTION

3.1 PREPARATION

K. Prior to all work of this section, the Contractor shall carefully inspect all previous installed work and verify that all such work is complete to the point where specified installation may properly commence.

L. Verify that the irrigation system may be installed in accordance with all pertinent codes, regulations, the referenced standards and manufacturer's specifications.

3.2 TRENCHING

A. Stake out the location of each run of pipe, sprinkler heads, sprinkler valves and isolation valves prior to trenching. Excavation shall be open vertical construction sufficiently wide to provide free working space around the work installed and to provide ample space for backfilling and tamping. Trenches for pipe shall be cut to required grade lines and compacted to provide accurate grade and uniform bearing for the full length of the line. The bottom of trenches shall be free of rock or other sharp- edged objects.

B. Minimum cover shall be 18" for mainline pipe and 12" for lateral line pipe. All pipe lines shall have a 6" minimum clearance from each other and from lines of other crafts. Minimum clearances shall conform with all applicable municipal and agency requirements. Backfill shall be compacted to undisturbed soils, and shall conform to adjacent grades without dips, sunken areas, lumps or other irregularities.

C. Hand Trench Work: Conduct under limb spread of trees or use other method so that no limbs or `branches are damaged in any way. Maintain the trenching or excavation a minimum of twenty feet from the trunk of any existing tree or shrub.

D. Pavement/ Sidewalk Minor Sleeving: PVC sleeves shall be utilized beneath all sidewalk crossings. PVC laterals pipe sleeving shall be installed a minimum of 12" Depth. Mainlines shall be a minimum of 18" and sleeves will be 24" below finish grade (36" below vehicular surfaces), and shall extend a minimum of 12" beyond edge of sidewalk.

3.3 PIPE INSTALLATION

A. Provide minimum cover over top of underground piping according to the following:
1. Irrigation Mainline Piping: 18 inches.
2. Lateral line Piping: 12 inches.
3. Sleeves: 24 inches.
4. Sleeves beneath vehicular traffic: 36 inches

B. Install thrust blocks and other bracing at all change in pipe directions and as necessary on all mainline piping.

C. Install piping free of sags and bends.

3.4 PIPING CONNECTIONS

A. Solvent weld PVC pipe only during non- freeze weather. Solvent weld PVC pipes only under cover in rainy weather. Do not allow flooding of welded piping until manufacturer's cure time has elapsed.

B. Air temperature of PVC mating surfaces for plastic pipe and fittings shall be between 40 degrees F and 100 degrees F.

C. Do not use solvent cement on threaded joints. Wrap with minimum of three wraps of Teflon tape in accordance with manufacturer's specifications.

D. Follow manufacturer's instructions for solvent welding of PVC pipe and fittings to achieve tight and inseparable joints.

E. Cementing plastic pipe:
1. Cut all ends squarely with approved pipe cutting tool. Bevel ends with deburring tool.
2. Clean all pipe ends prior to assembly.
3. Clear all pipe lengths of dirt and debris. Protect from contamination.
4. Do not use excess primer and solvent when joining pipe ends.
5. Insert pipe ends to full depth of fitting, hold tightly as necessary to insure full depth bonding.
6. Allow 15 minutes curing time following joint assembly prior to moving or handling jointed pipe.
7. Install slip and/or barbed fittings for drip system components per manufacturer's specifications.

F. Allow joints to cure at least 24 hours at temperatures above 40 deg F before testing.

3.5 BACKFILLING

A. Initial backfill on PVC lines shall be pulverized native soil, free of foreign matter. Within radius of 4" of the pipe shall be clean soil or sand. Plant locations shall take precedence over sprinkler and pipe locations. Coordinate the placing of specimen trees and shrubs with the routing of lines and final head locations.

B. Leave trenches slightly mounded to allow for settlement after the backfilling is completed. Clean the site of the work continuously of excess waste materials as the backfilling progresses, and leave in a neat condition. No trenches shall be left open for a period of more than 48 hours. Protect open trenches as required. Conform with all applicable code requirements.

C. Carefully backfill excavated materials approved for back-filling, consisting of earth, loam, sandy clay, sand and other approved materials, free of rock and debris over 1" in size. Backfill within all landscape beds shall be Prepared Topsoil.

D. Conform to the requirements of Earthwork Specifications for methods and required compacting percentages, for roads and paving. See Civil plans and specifications.

E. Hand place the first 6" of backfill or to top of pipe and mechanically compact so as to secure the position of the pipe and wire.

F. No wheel rolling will be allowed. Remove rock or debris extracted from backfill material and dispose of off site. Fill all voids left in backfill with approved backfill material.

3.6 BACKFLOW PREVENTION DEVICE INSTALLATION

A. Comply with state and local codes. Conceal in planting beds where possible.

3.7 AUTOMATIC IRRIGATION CONTROLLER INSTALLATION

A. Install controller in accordance with manufacturer's specifications, and respective State and Local codes. Coordinate controller location with owner prior to installation.

3.8 WIRING INSTALLATION

A. Tracer Wires
1. Install tracer wire on all nonmetallic (plastic) irrigation mainline.
2. Place tracer wire on the bottom of the trench under the vertical position of the pipe. Splice and solder joints and cover them with insulation type tape.
3. Tracer wire shall follow the mainline pipe and branch lines and terminate in the valve box with the control wires.

B. Remote Control Wiring:
1. Provide one control wire and one common ground wire to service each valve in system. Provide 3o inch minimum expansion loop at each valve to permit removal and maintenance of valves.
2. Install control wires and irrigation piping in common trench wherever possible.
3. Control wire splices shall not be permitted on wire runs of less than 300 feet. All splicing shall occur within valve or junction boxes. Splices shall be made waterproof by following manufacturer's instructions for wire connections and sealant.
4. Numbering and tagging; Identify direct burial control wires from remote control valves to terminal strips of controller at terminal strip by tagging wire with number of connected valve.

3.9 VALVE INSTALLATION

A. Install as shown on drawings. Valve and valve box locations shall be located in a manner so as not to interrupt plant massing or groups, hedge lines or otherwise alter the character of the proposed plantings.
1. Place valves and valve boxes in low growing ground cover areas offset from adjacent paving by a minimum of 2 times the specified groundcover spacing.
2. In public areas where valve boxes may be readily visible to the public, verify their location with Owner's Representative prior to installation.

B. Install quick coupling valve as shown on drawings. Quick coupling valves shall be installed along mainline at intervals not exceeding 100 feet as to allow manual watering of landscape area with a 50 foot hose.

C. Drain Valves: Install one manual drain valve at all low points in mainline to allow for complete drainage of mainline.

D. Gate Valve: Install as shown on drawings and details.

3.10 SPRINKLER INSTALLATION

A. Install in accordance with manufacturer's specifications.

B. Install sprinklers after hydrostatic test is completed.

C. Install all sprinklers on flexible risers, using flexible polyethylene pipe or PVC swing joints.

D. Sprinklers located on slopes which are less than three percent shall be installed plumb. Those that are located on slopes greater than three percent shall be installed at an angle midway between plumb and perpendicular to the slope.

3.11 RAINFALL SHUTOFF DEVICE

A. Install per manufacturer's recommendations near the control equipment. Rain sensor shall be installed on building fascia or parapet if at all practical. The rain sensor can also be placed on a wall but must extend out a minimum of 18 inches from the wall. Sensors can also be place on other stationary structures, such as posts or fences. The vertical area directly above the rain sensor shall be unobstructed to the sky and shall be installed above the height of sprinkler spray. Verify installation location with owner's representative.

B. In systems pressurized by a pump, provisions shall be made to ensure shutoff device does not allow pump to activate.

3.12 IDENTIFICATION

A. Identify system components.

B. Equipment Nameplates and Signs: Install engraved plastic-laminate equipment nameplates and signs on each automatic controller. Text: In addition to identifying unit, distinguish between multiple units, inform operator of operational requirements, indicate safety and emergency precautions, and warn of hazards and improper operations.

C. Warning Tapes: Arrange for installation of continuous, underground, detectable warning tapes over underground piping during backfilling of trenches.

3.13 PRESSURE TESTING

A. Conduct test in presence of Owner's Representative.

B. Test shall be conducted with backflow prevention, quick couplers, control valves and manual drain valves in place and prior to backfilling. Laterals will be visually inspected for proper solvent welds and leaks prior to backfilling but no pressure test will be required.

C. Correct defects and retest until Owner's Representative approves.

D. Notify Owner's Representative a minimum of 24 hours in advance when requesting inspection of pressure test.

3.14 ADJUSTING

A. Adjust settings of controllers. Contractor shall calculate three irrigation programs: Spring / Early Summer, Summer, Late Summer / Early Fall. System operation requirements shall be based on annual precipitation rates, plant material maturation requirements, solar exposure and topography and soil conditions. Submit seasonal controller program with as-built record drawings and include a laminated copy of program at controller location in controller cabinet. Include total application quantities in inches per week for all zones, for establishment and normal operation.

B. Adjust automatic control valves to provide flow rate at rated operating pressure required for each sprinkler circuit.

C. Balancing and Adjustment:
1. Balance and adjust the various components of the system so the overall operation of the system is most efficient. This includes a synchronization of the controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, and individual station adjustments on the controllers.

3.15 FINAL INSPECTION

A. Thoroughly clean, adjust and balance the installed irrigation system. Adjust spray pattern of nozzles to reduce throw of water onto buildings, structures, vehicles, and paved surfaces. Monitor and re-adjust system operation until components operate continually as specified.

B. The Contractor shall operate the system in the presence of the Owner's Representative to demonstrate satisfactory performance and coverage. The Contractor shall give the Owner's Representative a minimum of 48 hours advance notice when requesting final inspection.

C. The Contractor shall demonstrate complete operation of the system, including controller operating program, start-up, and deliver all supplemental equipment to the Owner's designated operating personnel.

3.16 MAINTENANCE AND WARRANTY

A. The Contractor shall provide a one-year maintenance and warranty period. The warranty period shall start on the day following the date of written acceptance of system installation by the Owner's Representative.

B. Review site conditions and plant vitality on a monthly basis and adjust the watering schedule and components and necessary to maintain plant health.

C. Repair and adjust system throughout warranty period, and prior to turning maintenance schedule over to Owner's operating personnel.

END OF SECTION - PLANTING IRRIGATION

CALL SUNSHINE
811
IT'S THE LAW IN FLORIDA

BEFORE YOU DIG!
CALL SUNSHINE STATE ONE CALL OF FLORIDA
AT LEAST TWO FULL BUSINESS DAYS
BEFORE DIGGING OR DISTURBING EARTH
1-800-432-4770

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive, Dunedin, Florida 34698
Phone: (727) 726-6124
LA6667069

Contact: Chris Anuszkiewicz

Web-Site www.placemakerdesignstudio.com

Prepared For:

Interstruct Design LLC
814 W. Church Street
Orlando, Florida 32805

Contact: Ryan Young, AIA
Phone: (407) 849-0025

Copyright: The content of these drawings are owned by and the property of PlaceMaker Design Studio, LLC and were created for the exclusive use of this project.

Orlando Othopaedic Center at Winter Garden

12152 COLONIAL DR. WINTER GARDEN, FLORIDA

Seal



The seal appearing on this document was authorized by Christopher J. Anuszkiewicz, LA6667069 on 4/6/2026.

PERMIT SUBMITTAL

REV	DATE	DESCRIPTION
1		
2		
3		
4	7/02/2026	CITY COMMENTS
5	5/26/2026	DRC COMMENTS

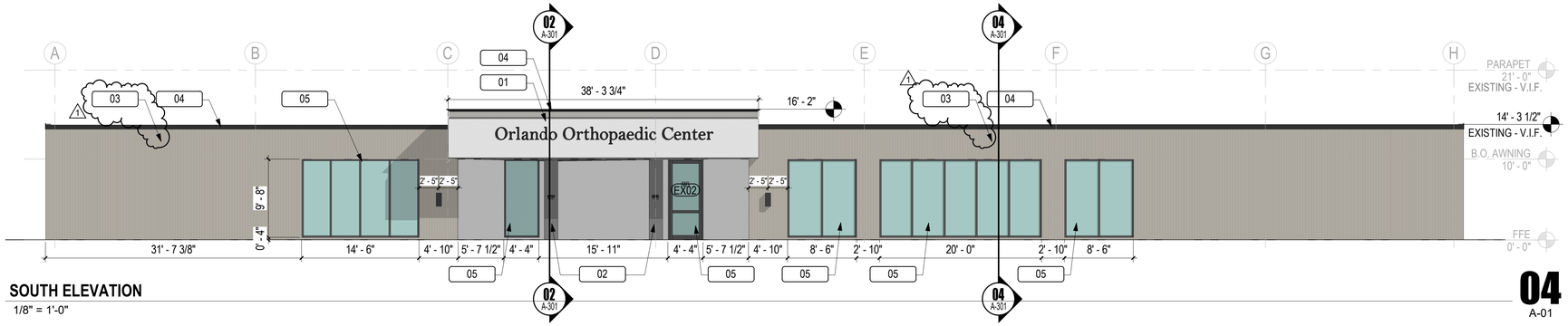
Date: APRIL 8, 2026
Job No.: 7012
Drawn By: GLA
Checked By: CJA

Sheet Title

IRRIGATION SPECIFICATIONS

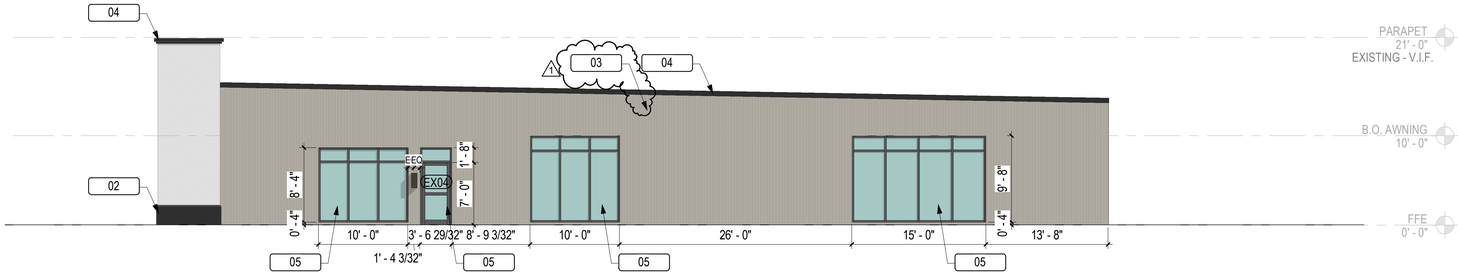
Sheet No.

IR4



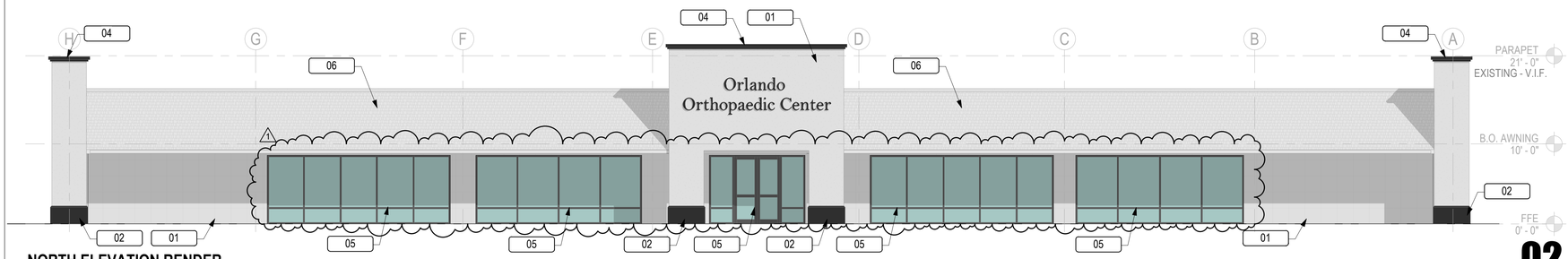
SOUTH ELEVATION
1/8" = 1'-0"

04
A-01



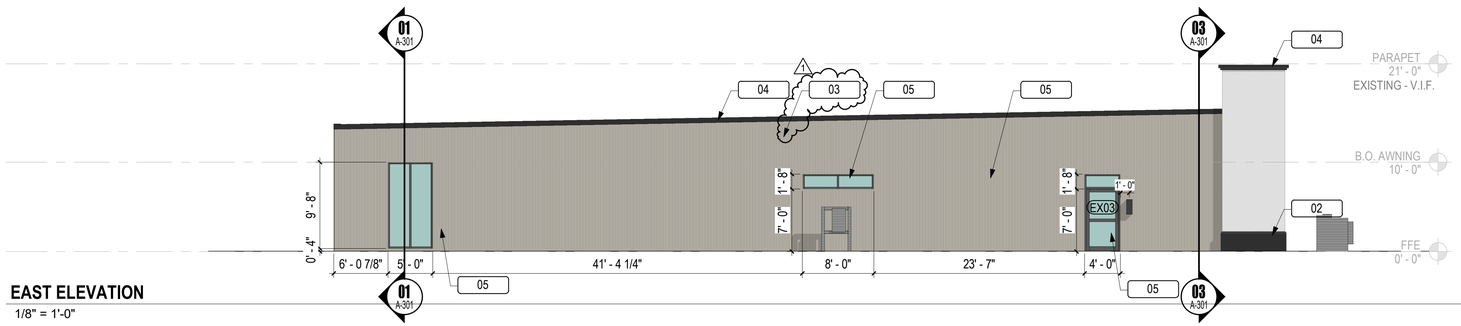
WEST ELEVATION
1/8" = 1'-0"

03
A-01



NORTH ELEVATION RENDER
1/8" = 1'-0"

02
A-01



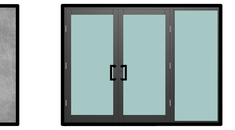
EAST ELEVATION
1/8" = 1'-0"

01
A-01



01
2-COAT STUCCO - PAINTED WHITE - SW 6196

04
ANODIZED ALUMINUM - BLACK



02
2-COAT STUCCO - PAINTED GREY - SW 7071

05
ALUMINUM EXTRUDED STOREFRONT - ANODIZED / BLACK



03
CORRUGATED METAL PANELS - RAL 7032 OR SIMILAR

06
PAINTED BARREL TILE - PAINTED WHITE - SW 7056

MATERIAL LEGEND
1 1/2" = 1'-0"

00
A-01



1/8" = 1'-0"

INTERSTRUCT
DESIGN + BUILD
INTERSTRUCT DESIGN, LLC
814 WEST CHURCH STREET
ORLANDO, FL 32805
P. 407.849.0025
F. 407.849.0024
LIC NO. AA26001814

STATE OF FLORIDA · RYAN KEITH YOUNG · AR 94696 · REGISTERED ARCHITECT

ISSUE DATE: 04/07/26

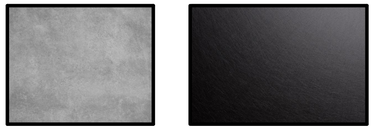
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY RYAN K. YOUNG USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY ELECTRONIC COPIES

PROJECT :
ORLANDO ORTHOPAEDIC CENTER - WINTER GARDEN
12152 W. COLONIAL DR
WINTER GARDEN, FL 34787

NO.	DESCRIPTION	DATE
1	DRC REVIEW COMMENTS	06/04/26

DRAWING TITLE :
BUILDING ELEVATIONS

DRAWING NUMBER: 1
A-01

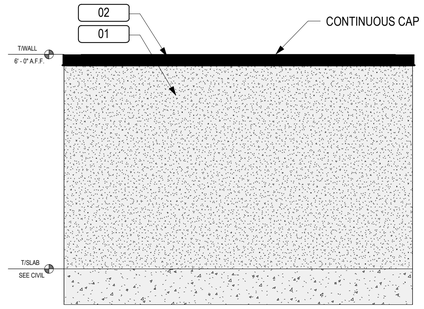


01
2-COAT STUCCO - PAINTED
GREY - SW 7071

02
ANODIZED ALUMINUM - BLACK

MATERIAL LEGEND

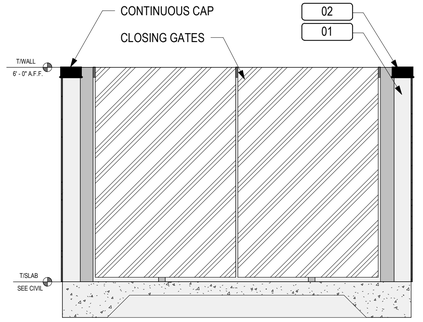
A-105



DUMPSTER SIDE ELEVATION (TYP.)

3/8" = 1'-0"

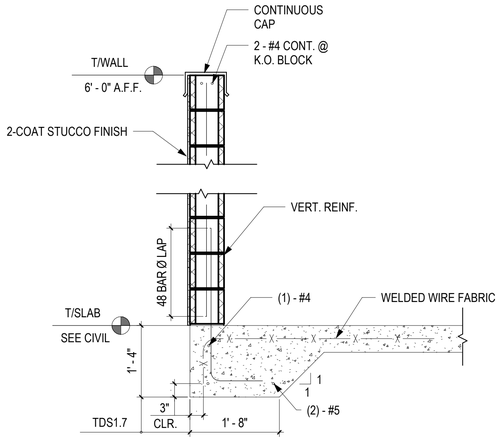
05
A-105



DUMPSTER FRONT ELEVATION

3/8" = 1'-0"

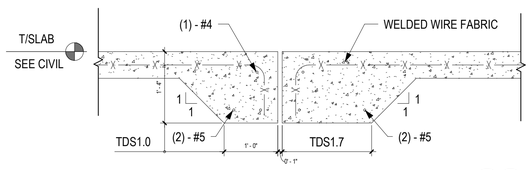
04
A-105



DUMPSTER WALL SECTION

3/4" = 1'-0"

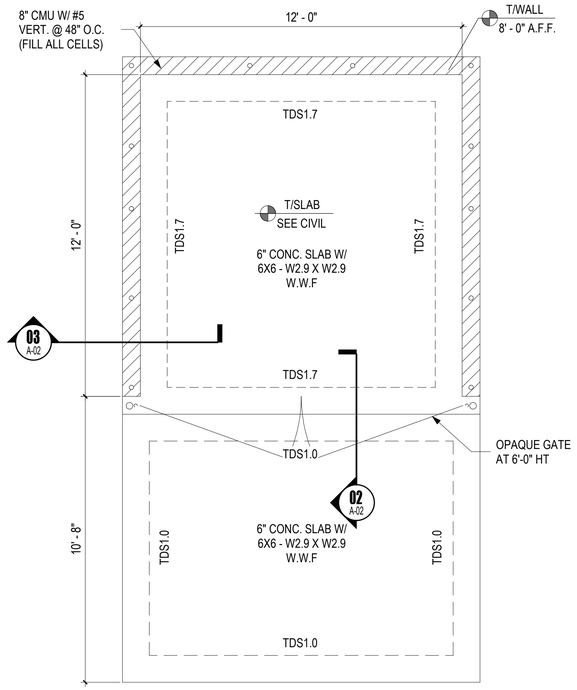
03
A-105



DUMPSTER DETAIL SECTION

3/4" = 1'-0"

02
A-105



DUMPSTER FOUNDATION PLAN

3/8" = 1'-0"

01
A-105

0 1 2 4
3/4" = 1'-0"

0 2 4 8
3/8" = 1'-0"

INTERSTRUCT
DESIGN + BUILD

INTERSTRUCT DESIGN, LLC
814 WEST CHURCH STREET
ORLANDO, FL 32805
P. 407.849.0025
F. 407.849.0024
LIC NO. AA26001814

STATE OF FLORIDA · RYAN KEITH YOUNG · REGISTERED ARCHITECT · AR 94696

ISSUE DATE: 04/07/26

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY RYAN K. YOUNG USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY ELECTRONIC COPIES

PROJECT :
ORLANDO ORTHOPAEDIC CENTER - WINTER GARDEN
12152 W. COLONIAL DR.
WINTER GARDEN, FL 34787

NO.	DESCRIPTION	DATE
-	ISSUE FOR PERMIT	05/20/26

DRAWING TITLE :
DUMPSTER ENCLOSURE

DRAWING NUMBER: -
A-105



EAST RENDERING **05** A-03



NORTHEAST RENDERING **04** A-03



NORTH ELEVATION **03** A-03

2



SOUTH RENDERED PERSPECTIVE **02** A-03



SOUTH RENDERED ELEVATION **01** A-03

INTERSTRUCT
DESIGN + BUILD
INTERSTRUCT DESIGN, LLC
814 WEST CHURCH STREET
ORLANDO, FL 32805
P. 407.849.0025
F. 407.849.0024
LIC NO. AA26001814

STATE OF FLORIDA · RYAN KEITH YOUNG · AR 94696 · REGISTERED ARCHITECT

ISSUE DATE: 04/07/26

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY RYAN K. YOUNG USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED BY ELECTRONIC COPIES

PROJECT :
ORLANDO ORTHOPAEDIC CENTER - WINTER GARDEN
12152 W. COLONIAL DR
WINTER GARDEN, FL 34787

NO.	DESCRIPTION	DATE
1	DRC REVIEW COMMENTS	06/04/26
2	DRC REVIEW COMMENTS	07/02/26

DRAWING TITLE :
BUILDING RENDERINGS

DRAWING NUMBER: 2
A-03

CITY OF WINTER GARDEN

Development Review Committee

(407) 656-4111 - FAX (407) 877-2363

M E M O R A N D U M

TO: KELLY CARSON, PLANNING DIRECTOR
FROM: DEVELOPMENT REVIEW COMMITTEE
DATE: JULY 17, 2026
SUBJECT: REVIEW OF SITE PLAN
12152 W COLONIAL DRIVE (ORLANDO ORTHOPAEDIC CENTER AT WINTER GARDEN) SPA – 3rd REVIEW – STAFF ONLY

Pursuant to your request, we have reviewed the revised site plan dated 7/02/26 for compliance with the City's stormwater and site requirements. This plan proposes converting the existing ±17,494 s.f. former furniture store into a medical office on the developed 2.82 acre C-2 zoned parcel with associated parking, stormwater and utility improvements. This was submitted in response to our comments dated 6/19/26 and DRC meeting of 7/01/26 where it was referred to staff review only.

ENGINEERING COMMENTS

We again recommend approval of the site plan, subject to approval by all other departments and the following conditions and comments. Underlined comments shall be addressed prior to pre-con (permits):

1. Planning Department shall review and comment on parking count, setbacks, landscaping, buffering, lighting and signage, and C-2 zoning and SR 50 overlay requirements.
2. General Requirements (as noted):
    a. All gravity sanitary pipe and fittings shall be SDR 26.
    b. All compaction shall be 98% of the modified proctor maximum density (AASHTO T-180).
    c. As-built record drawings shall comply with City of Winter Garden requirements available on-line (note on plan).
    d. All Storm (>12") and Sanitary lines (>6") shall be inspected by CCTV prior to completion.
    e. Use City Standard Detail sheets for utilities and public works (see City website).
    f. If Thermoplastic pipe is used it shall meet all City material and installation requirements as specified in the City's Standards & Specifications including Class I bedding, HP polypropylene pipe (**not HDPE or N-12**), laser profiling, installation per ASTM D2321, etc. (see under on-line forms on website).
    g. All utilities shall be underground pursuant to Code (Sec. 18-33) including electrical power, cable, telephone, etc.
3. Sheet C4 – Utility Plan:
    a. The plans show existing potable and irrigation meters will be used. If new or upsized meters are required, additional impact fees will be assessed. *Response states existing meters are to be used.*

4. Minimum 5' wide concrete sidewalks are required along all project frontages. **Existing sidewalks, curbs & pavement will be checked at completion and any damaged sections shall be replaced.** Internal sidewalks shall connect to the public sidewalks in the right-of-way per ADA (as shown).
5. Tree removal shall adhere to the City's Tree Protection Ordinance – separate review, approval and permit is required. Coordinate with the Planning & Building Departments on any tree removal and protection. Additional landscaping and tree replacement may be required with final plan.
6. The site shall be served by City water, sewer and reuse. All utilities required for the development shall be run to the site at the Developer's expense, including potable water, reclaimed water and sanitary sewer. Final plans shall detail all connections including fire protection, reuse water and domestic water supply. All irrigation on the site shall be designed to be supplied by reclaimed water. All on-site utilities, including lift station, shall be privately owned and maintained.
7. Fire protection shall be reviewed and approved by the Fire and Building Departments. Fire sprinkler systems will be required on all buildings over 6,000 s.f. with Point of Service (POS), backflow prevention, etc. as shown. All work downstream of the POS shall be performed by a licensed fire sprinkler contractor as noted.
8. Any signs, screen walls or **retaining walls** shall require a separate permit from the Building Department.
9. Streetlighting both internally and on all street frontages is required pursuant to City Code – dark skies lighting is required. A photometric plan has been provided for review by Planning Department.
10. All dumpsters shall be enclosed and shall provide 12' minimum inside clearance (each way inside of bollards and gate hardware), and access by solid waste vehicles. Coordinate additional requirements with Public Services Department, Solid Waste Division. **City Solid Waste Department does not service commercial compactors; all solid waste needs to be collected by the City using City issued dumpsters (excluding medical waste)**.
11. Provide permit or modification from SJRWMD for stormwater as well as permits or exemptions from FDOT (driveway, utilities, and drainage); also provide permits or exemptions from FDEP for water and sewer; FDEP NPDES NOI required.

PLANNING COMMENTS

12. Note – Road impact fees totaling **$9,849.13** for the medical use must be paid prior to occupancy.

STANDARD GENERAL CONDITIONS

13. All construction shall conform to City of Winter Garden Standards, Specifications and Ordinances.
14. The City of Winter Garden will inspect private site improvements only to the extent that they connect to City owned/maintained systems (roadways, drainage, utilities, etc.). It is the responsibility of the Owner and Design Engineer to ensure that privately owned and maintained systems are constructed to the intended specifications. The City is not responsible for the operation and maintenance of privately owned systems, to include, but not be limited to, roadways, parking lots, drainage, stormwater ponds or on-site utilities.
15. No fill or runoff will be allowed to discharge onto adjacent properties; existing drainage patterns shall not be altered. The applicant should note that if approval is granted, the City of Winter Garden is not granting rights or easements for drainage from, or onto, property owned by others. Obtaining permission, easements or other approvals that may be required to drain onto private property is the Owner/Developer's responsibility. Should the flow of stormwater runoff from, or onto adjacent

properties be unreasonable or cause problems, the City will not be responsible and any corrective measures required will be the responsibility of the Owner. Site construction shall adhere to the City of Winter Garden erosion and sediment control requirements as contained in Chapter 106 - Stormwater. If approval is granted by the City of Winter Garden, it does not waive any permits that may be required by federal, state, regional, county, municipal or other agencies that may have jurisdiction.

16. The Owner and Contractor are responsible for meeting all provisions of ADA and Florida Accessibility Code, including accessible route sidewalks that will connect to public sidewalks.
17. The Contractor is responsible for the notification, location and protection of all utilities that may exist within the project limits.
18. Approval by the DRC and City Commission (site plan) will be required prior to issuance of site or building permit(s).
19. After final plan approval, a preconstruction meeting will be required prior to any commencement of construction. The applicant shall provide an erosion control and street lighting plan at the preconstruction meeting and shall pay all engineering review and inspection fees prior to construction. Inspection fees in the amount of 2.25% of the cost of all site improvements shall be paid prior to issuance of the site or building permit.
20. Additional comments may be generated at subsequent reviews.

Please review this information and contact our office with any questions. Thank you.

END OF MEMORANDUM

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Kelly Carson, Planning Director

Via: City Manager Jon C. Williams

Date: August 6, 2026 **Meeting Date:** August 13, 2026

Subject: 1680 Marcel Drive (WG Basketball Academy)
Site Plan Approval
PARCEL ID# 26-22-27-1989-04-000

Issue: The applicant is requesting approval of the Site Plan.

Discussion:

The applicant is proposing to build a two-story 21,800 square foot indoor basketball academy, with associated site improvements such as parking and enhanced landscaping, in the Daniels Commerce Center commercial subdivision (Lot 4).

The subject property is approximately 1.49 acres in size, is zoned C-2 (Arterial Commercial District), and has a COM (Commercial) Future Land Use Designation.

Recommended Action:

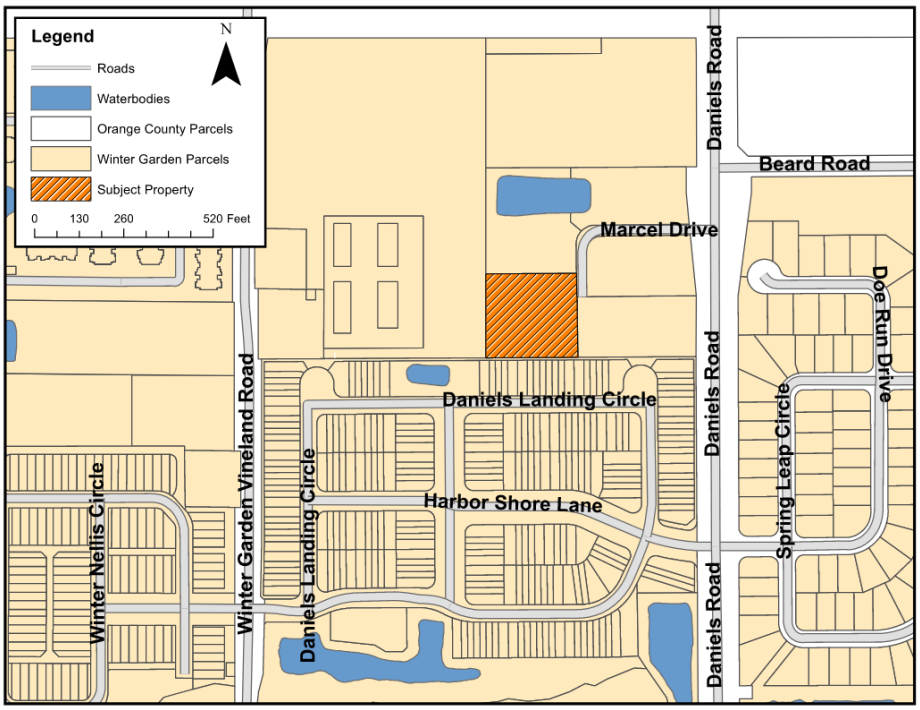
Staff recommends approval of the proposed Site Plan subject to the conditions of the DRC staff report dated Jun 26, 2026. Development of the property is consistent with the City's Comprehensive Plan and the property's C-2 zoning requirements.

Attachment(s)/References:

Location Map
Construction Plans
Architectural Elevations
Final DRC combined comments

Location Map

1680 Marcel Drive



WINTER GARDEN BASKETBALL ACADEMY

1680 MARCEL DRIVE
WINTER GARDEN, FL 34787

VICINITY MAP



LEGAL DESCRIPTION

LOT 4, DANIELS COMMERCE CENTER, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 104, PAGE 66, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

REVISION ISSUE LOG

REV #	ISSUE DATE	DESCRIPTION	AFFECTED SHEETS	REMARKS	BY
1	5-15-26	WMD/CITY COMMENTS	C0.1, C0.2, C1.0, C3.0, C3.1		CB

SHEET INDEX

SHT. NO.	DESCRIPTION
C0.0	COVER SHEET
	CIVIL DRAWINGS
C0.1	GENERAL NOTES
C0.2	SITE DEMOLITION PLAN
C1.0	SITE DIMENSION PLAN
C2.0	SITE UTILITY PLAN
C3.0	GRADING & DRAINAGE PLAN
C3.1	STORMWATER POLLUTION PREVENTION PLAN
C4.0	DETAILS
C4.1	CITY OF WINTER GARDEN NOTES
C4.2	CITY OF WINTER GARDEN DETAILS
C4.3	CITY OF WINTER GARDEN DETAILS
C4.4	CITY OF WINTER GARDEN DETAILS
C4.5	CITY OF WINTER GARDEN DETAILS
C4.6	CITY OF WINTER GARDEN DETAILS
SL1	SITE LIGHTING PLAN
TD-1	TREE DISPOSITION PLAN
TD-2	TREE DISPOSITION SPECIFICATIONS & DETAILS
LP-1	LANDSCAPE PLANTING PLAN
LP-2	LANDSCAPE PLANTING SPECIFICATIONS & DETAILS
-	SURVEY

LOCATION MAP



OWNER & CONSULTANTS

OWNER
DIJON REAL ESTATE, LLC
15805 SHADDOCK DRIVE, SUITE 110
WINTER GARDEN, FL 34787
CONTACT: BERNARD VASCONCELOS
EMAIL: BERNARD@CAVALCANTIMANAGEMENT.COM

ARCHITECT
RABITS & ROMANO ARCHITECTURE, PLANNING & DESIGN
5205 SOUTH ORANGE AVENUE, SUITE 200
ORLANDO, FL 32809
407-490-0350
CONTACT: FULVIO ROMANO

CIVIL ENGINEER
INTERPLAN LLC
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407-645-5008
CONTACT: CHRIS BLURTON
EOR: STUART ANDERSON, P.E.

LANDSCAPE ARCHITECT
EVERGREEN DESIGN GROUP, INC.
P.O. BOX 3686
CHAPEL HILL, NC 27515
800-680-6630
CONTACT: RODNEY MCNABB

SURVEYOR
IRELAND & ASSOCIATES SURVEYING, INC.
800 CURRENCY CIR, STE 1020
LAKE MARY, FL 32746
407.678.3366

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON
LICENSE
No. 60848
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:26-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

PROJECT NO: 2025.0704
DATE: 5/26/2026

C0.0
COVER SHEET

CHECKED: CDB DRAWN: GFC

COPYRIGHT © 2026 INTERPLAN LLC RESERVES COPYRIGHT & OTHER RIGHTS RESTRICTING THESE DOCUMENTS TO THE ORIGINAL SITE OR PURPOSE FOR WHICH THEY WERE PREPARED. REPRODUCTIONS, CHANGES OR ASSIGNMENT ARE PROHIBITED.

KEVCAB - 05/27/2026 8:54:06 AM

EROSION CONTROL NOTES

ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL COMPLETION OF CONSTRUCTION.

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM WITH LOCAL CITY/COUNTY AND WATER MANAGEMENT DISTRICT SPECIFICATIONS, SUBJECT TO AUTHORIZED AND APPROVED VARIANCES, WAIVERS AND/OR CONDITIONAL CHANGES.

2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN, CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTATION OF SILT OFF THE SITE.

3. ALL AREAS AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITION, UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.

5. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL PROVIDE TREE PROTECTION BARRIERS TO MEET THE REQUIREMENTS OF LOCAL SPECIFICATIONS.

6. THE CONTRACTOR SHALL SELECTIVELY CLEAR ONLY THE AREAS REQUIRED FOR CONSTRUCTION AND STABILIZE ANY POTENTIAL EROSION AREAS IMMEDIATELY FOLLOWING COMPLETION OF CONSTRUCTION.

7. CONTRACTOR SHALL KEEP ANY AND ALL SAND, SILT OR OTHER DEBRIS FROM MOVING OFF-SITE. USE AND MAINTAIN SILT FENCE JUST INSIDE OF PROPERTY LINE.

8. CONTRACTOR SHALL BLOCK INTRUSION OF SAND, SILT OR OTHER DEBRIS INTO ANY DRAINAGE OR SANITARY SEWER STRUCTURE OR PIPING ON OR ADJACENT TO SITE.

9. ALL CLEARED AREAS FOR IMPROVEMENT AND/OR CONSTRUCTION SHALL BE WATERED TO PREVENT WIND EROSION.

10. FOR ADDITIONAL INFORMATION AND DETAILS, SEE F.D.O.T. INDEX NO. 102.

11. UNLESS SPECIFIED, SILT FENCES MAY BE USED IN LIEU OF HAY BARRIERS.

12. ADDITIONAL POSTS AND RAILS MAY BE NECESSARY TO SECURE AND SUPPORT BARRIERS.

13. ADDITIONAL BARRIER LENGTHS MAY BE REQUIRED BY THE COUNTY ENGINEER OR BY REGULATORY AGENCIES.

14. FILTER FABRIC MUST BE INSTALLED UNDER ALL INLET GRATES, AT ALL TIMES WHEN INLETS ARE NOT PROTECTED BY SILT FENCE OR HAY BALES, UNTIL THE LIMEROCK BASE IS FINISHED AND PRIMED.

15. THE CONTRACTOR IS REQUIRED TO HAVE THE EROSION CONTROL PLAN POSTED IN A VISIBLE LOCATION ON THE CONSTRUCTION SITE AT ALL TIMES.

16. NON STORMWATER DISCHARGES SUCH AS FIRE HYDRANT FLUSHING, ETC SHALL BE DISCHARGED TO EXISTING UNDERGROUND STORMWATER FACILITY.

17. ANY POTENTIALLY HAZARDOUS CHEMICALS BROUGHT ONTO THE JOB SITE WILL BE LIMITED AND KEPT IN ORIGINAL CONTAINER WITH MSDS LABEL.

18. NO SILT SHALL BE TRACKED ONTO PUBLIC ROADWAYS. ANY SILT DEPOSITED ON PUBLIC ROADWAYS SHALL BE REMOVED BY THE END OF THE WORK DAY.

DEMOLITION NOTES

1. PRIOR TO COMMENCEMENT OF DEMOLITION THE CONTRACTOR WILL COORDINATE HIS ACTIVITIES WITH ALL THE UTILITY COMPANIES SERVING THIS AREA. CONTRACTOR IS TO COORDINATE FULLY WITH UTILITY COMPANIES ON EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO EXCAVATION.

2. THE CONTRACTOR IS TO COMPLETELY REMOVE AND DISPOSE OF ALL STRUCTURES AND BUILDINGS THAT IS SO INDICATED INCLUDING FOUNDATIONS, TIMBER AND BRUSH, EXCEPT AS OTHERWISE INDICATED; STUMPS AND ROOTS; EXISTING PAVEMENT; OTHER STRUCTURES AS SHOWN OR REASONABLY IMPLIED IN THE DRAWINGS.

3. EXCEPT IN AREAS WHERE EXISTING TREES SHALL BE PRESERVED, A MINIMUM DEPTH OF REMOVAL SHALL BE (2) FOOT BELOW SUBGRADE IN ROADWAY AREAS AND TO ORIGINAL SOILS ELSEWHERE. WHERE EXISTING BUILDINGS ARE TO BE DEMOLISHED, ALL TRACES OF FOUNDATIONS AND UNDERGROUND UTILITIES ARE TO BE REMOVED (UNLESS OTHERWISE NOTED ON PLANS). THE CONTRACTOR IS RESPONSIBLE FOR PROPER DISPOSAL OF ALL WASTE MATERIAL.

4. WHERE PAVING OR STRUCTURES ARE TO BE REMOVED WHICH ABUT OR ARE A PART OF CONNECTED FACILITIES (THAT ARE OFF-SITE), RESTORATION OF ANY DAMAGE THAT MIGHT RESULT FROM DEMOLITION IS TO BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.

5. THE LOCATION OF ALL EXISTING UTILITIES, STORM DRAINAGE AND TREES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE OWNER OR ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY. PRIOR TO THE START OF DEMOLITION THE CONTRACTOR SHALL VISIT THE SITE AND DETERMINE THE EXISTANCE & LOCATION OF ALL STRUCTURES, UTILITIES & TREES SHOWN OR NOT ON THE PLANS, WHICH WOULD NEED TO BE REMOVED OR PRESERVED.

6. THE CONTRACTOR IS TO COORDINATE THE RELOCATION OR REMOVAL OF ALL OVERHEAD/UNDERGROUND UTILITIES, UTILITY POLES, LIGHTS AND LINES IN THE RIGHT-OF-WAY AND ON THE PROPERTY WITH THE APPROPRIATE SERVICE PROVIDER.

7. THE CONTRACTOR SHALL REFERENCE AND RESTORE PROPERTY CORNERS AND LAND MARKERS DISTURBED DURING CONSTRUCTION. (UNDER THE DIRECTION OF A FLORIDA REGISTERED LAND SURVEYOR).

UTILITY SEPARATION NOTES

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

(C) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

(D) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE; HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

(C) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

(A) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.

(B) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

UTILITY NOTES

PRIOR TO COMMENCING ANY CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES, INCLUDING WITHOUT LIMITATION POTABLE WATER, RECLAIMED WATER, SANITARY SEWER, AND SERVICE UTILITIES, AT POINTS OF CONNECTION, POINTS OF CROSSING, AND/OR POTENTIAL CONFLICT. NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS.

A. GENERAL

1. THE LOCATIONS OF EXISTING UTILITIES, SUCH AS WATER MAINS, SEWERS, GAS LINES, ETC., SHOWN ON THE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION AND ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER AND OWNER ASSUME NO LIABILITY FOR ACCURACY AND COMPLETENESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND TO HAVE THEIR FACILITIES LOCATED IN THE FIELD PRIOR TO ANY WORK.

2. DUE TO GRAPHIC LIMITATIONS OF THE DRAWING SCALE, ALL STORM SEWER, DRAINAGE, WATER AND SANITARY SEWER MAINS, SERVICES, LATERALS, CONNECTIONS, AND APPURTENANCES DEPICTED HEREIN -- UNLESS OTHERWISE LOCATED BY DIMENSIONS -- REFLECT SCHEMATIC LOCATIONS ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL LOCATIONS IN ACTUAL CONSTRUCTION AND INSTALLATION OF THE PROPOSED IMPROVEMENTS, INCLUDING ANY REQUISITE COORDINATION WITH THE RESPECTIVE GOVERNING AGENCY/UTILITY PROVIDER.

3. ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF WINTER GARDEN, AND WILL BE SUBJECT TO THEIR INSPECTION AND ACCEPTANCE.

4. CONTRACTOR SHALL INSPECT PIPING AND MATERIALS BEFORE INSTALLATION TO DETECT APPARENT DEFECTS. MARK DEFECTIVE MATERIALS WITH WHITE PAINT AND PROMPTLY REMOVE FROM SITE.

5. LAY SEWER PIPING BEGINNING AT LOW POINT OF SYSTEM (CONNECTION TO OFF SITE SYSTEM OR PUMP STATION), TRUE TO GRADES AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERTS. PLACE BELL ENDS OR GROOVE ENDS OF PIPING FACING UPSTREAM.

6. CLEAR INTERIOR OF PIPE OF DIRT AND OTHER SUPERFLUOUS MATERIAL AS WORK PROGRESSES. MAINTAIN SWAB OR DRAG IN LINE AND PULL PAST EACH JOINT AS IT IS COMPLETED. PLACE PLUGS IN ENDS OF UNCOMPLETED CONDUIT WHENEVER WORK STOPS.

7. MAINTAIN 36" COVER OVER MAINS, AND 30" OVER SERVICES/LATERALS.

8. WHEN PROPOSED CONSTRUCTION OCCURS AT EXISTING MANHOLES, INLETS, VAULTS, AND OTHER STRUCTURES, THE CONTRACTOR SHALL MODIFY THE STRUCTURES, FRAMES, AND GRATES TO MEET THE PROPOSED GRADES UNLESS OTHERWISE DIRECTED.

9. INSTALL CONTINUOUS LOCATOR TAPE/WIRE, LOCATED DIRECTLY OVER POTABLE WATER MAINS AND SANITARY SEWER MAINS AT 6" TO 8" ABOVE PIPE.

10. WHERE APPLICABLE, UTILITY TRENCHES CROSSING PAVEMENT AREAS SHALL BE BACK FILLED WITH COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH A.A.S.H.T.O.-T-99.

11. CONTRACTOR SHALL PROVIDE SLEEVES FOR IRRIGATION LINES UNDER PAVEMENT. COORDINATE WITH GENERAL CONTRACTOR.

12. ALL TRENCHES EXCAVATED FOR THE PURPOSES OF UTILITY/STORM INSTALLATION SHALL BE KEPT DRY FOR THE DURATION OF UTILITY/STORM CONSTRUCTION. DEWATERING OF UTILITY/STORM TRENCHES MAY BE REQUIRED TO PREVENT FLOTATION OF UTILITY/STORM PIPES DURING INSTALLATION.

13. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN CONSTRUCTION IS COMPLETE FOR WATER, WASTEWATER AND STORMWATER SYSTEMS SO TIMELY CERTIFICATIONS MAY BE INITIATED. SATISFACTORY BACTERIOLOGICAL TEST RESULTS, PRESSURE TEST RESULTS, AND AN AS BUILT SURVEY SHALL BE SUBMITTED TO ENGINEER PRIOR TO FINAL CERTIFICATION.

14. SUITABLE COUPLINGS COMPLYING WITH ASTM SPECIFICATIONS ARE REQUIRED FOR JOINING DISSIMILAR MATERIALS.

15. DEFLECTION TESTS ARE REQUIRED FOR ALL FLEXIBLE PIPE. TESTING REQUIREMENTS: 1) NO PIPE SHALL EXCEED A DEFLECTION OF 5%; 2) USING A RIGID BALL OR MANDREL FOR THE DEFLECTION TEST WITH A DIAMETER NOT LESS THEN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE; 3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.

B. MATERIALS (WATER)

1. SERVICE PIPE SHALL BE POLYETHYLENE (PE), DR9.

2. WATER MAINS SHALL BE PVC ASTM C900, DR 18 WITH INTEGRAL BELLS AND ELASTOMERIC JOINTS PER ASTM C3139 AND GASKETS PER ASTM F477.

3. DUCTILE IRON PIPE (D.I.P.), IF REQUIRED, SHALL CONFORM TO ANSI/AWWA A21.51/C151, CLASS 50 (MIN.) PIPE FOR ALL SIZES.

4. CORPORATION STOPS SHALL BE 1 1/2" BRASS, EQUIPPED WITH CONNECTIONS COMPATIBLE WITH SERVICE PIPE AND THREADED IN ACCORDANCE WITH SPECIFICATIONS IN AWWA C800. CURB STOPS SHALL BE SIZED TO MATCH THE METER SIZE AND CONFORM WITH AWWA C800 AND AWWA C901.

5. FITTINGS SHALL BE BRASS, CAST AND MACHINED IN ACCORDANCE WITH AWWA C800 AND AWWA C901, WITH COMPATIBLE PIPE CONNECTIONS.

6. SERVICE SADDLES SHALL BE USED FOR ALL SERVICE LINE TAPS. SERVICE SADDLES SHALL BE DOUBLE STRAP, ANCHORED BY A MINIMUM FOUR (4) BOLT PATTERN ON A DUCTILE IRON SADDLE BODY. FOR PVC PIPE, DOUBLE STRAPS SHALL BE CORROSION RESISTANT ALLOY STEEL, SIZED EXACTLY TO THE PIPE OUTSIDE DIAMETER. SEALING GASKETS SHALL BE BUNA-N RUBBER.

7. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED USING BLUE AS A PREDOMINANT COLOR.

C. MATERIALS (SEWER)

1. ALL GRAVITY SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE PIPE (PVC) CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.

2. ALL FITTINGS AND ACCESSORIES SHALL BE MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR PRIOR-APPROVED EQUAL.

3. BEDDING AND INITIAL BACK FILL OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER.

D. MATERIALS (STORM)

1. REINFORCED CONCRETE PIPE (RCP): O-RING PIPE SHALL CONFORM TO ASTM C 76 (CLASS III, UNLESS OTHERWISE SPECIFIED) AND AASHTO M 170 STANDARD SPECIFICATIONS, AND ASTM C 443 STANDARD SPECIFICATION FOR JOINTS FOR RCP USING RUBBER GASKETS.

2. ELLIPTICAL RCP SHALL CONFORM TO ASTM C 507 (CLASS III) AND AASHTO M 207 STANDARD SPECIFICATIONS.

3. HDPE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M-25 (3"-10"), M-294 (12" AND LARGER), TYPE S (CORRUGATED OUTSIDE - SMOOTH INSIDE, 4"-60"), AND MP7 (60" TYPE S).

A. BELL/SPIGOT GASKET FOR HDPE PIPE SHALL BE SOIL/SILT TIGHT PER AASHTO SECTION 26 WITH RUBBER GASKET MEETING ASTM F-477.

4. PVC STORM SEWER PIPE (12" OR LESS) AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE PIPE (PVC) CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.

GENERAL NOTES

A. GENERAL

1. ALL INFRASTRUCTURE AND IMPROVEMENTS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE LOCAL JURISDICTION AND WILL BE SUBJECT TO THEIR INSPECTION AND ACCEPTANCE.

2. SITE LOCATION: 1680 MARCEL DRIVE, WINTER GARDEN, FL 34787

3. THIS SITE LIES IN FLOOD ZONE X, F.I.R.M. PANEL 12095C0215H, DATED 9/24/2021.

4. BOUNDARY, TOPOGRAPHIC, AND TREE SURVEY BY IRELAND & ASSOCIATES SURVEYING, INC.

5. BENCHMARK - REFER TO TOPOGRAPHIC SURVEY BY IRELAND & ASSOCIATES SURVEYING, INC.

6. LEGAL DESCRIPTION SHOWN HEREIN IS FURNISHED BY SURVEYOR, AND IS INCLUDED FOR PERMITTING AND APPROVAL PURPOSES, AND AS A COURTESY FOR THE CONTRACTOR. INTERPLAN LLC. ASSUMES NO LIABILITY FOR ITS ACCURACY OR COMPLETENESS.

7. SITE GEOTECHNICAL INVESTIGATION PERFORMED BY TIERRA, INC. INTERPLAN LLC. ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, ACCURACY AND COMPLETENESS OF THEIR WORK. THE CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL ENGINEER'S REPORT FOR THIS SITE AND COMPLY WITH RECOMMENDATIONS CONTAINED THEREIN. IF ADDITIONAL SERVICES ARE REQUIRED, THE CONTRACTOR SHALL MAKE A REQUEST TO THE OWNER.

8. CONTRACTOR SHALL PROVIDE AND INSTALL EROSION CONTROL DEVICES (SILT FENCE OR OTHER METHODS) AT LIMITS OF CONSTRUCTION AND AROUND EACH STORM INLET PRIOR TO CONSTRUCTION, AND SHALL MAINTAIN SAID EROSION CONTROL DEVICES DURING CONSTRUCTION, ALL IN CONFORMANCE WITH CURRENT LOCAL, COUNTY AND STATE CRITERIA.

9. THE SITE SHALL BE CLEARED AS MAY BE NOTED ON THE PLANS, OF ALL OBSTRUCTIONS AND DELETERIOUS MATERIAL SUCH AS FENCES, WALLS, FOUNDATIONS, LOGS, SHRUBS, BRUSH, WEEDS, OTHER VEGETATION, AND ACCUMULATION OF RUBBISH OF WHATEVER NATURE. OFF-SITE DISPOSAL, INCLUDING ANY HAZARDOUS MATERIAL ENCOUNTERED, SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL RULES AND REGULATIONS.

10. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY INTERPLAN LLC. OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS PRIOR TO START OF CONSTRUCTION.

11. THE CONTRACTOR SHALL REMAIN SOLELY RESPONSIBLE FOR ANY DESIGN CHANGES WHICH HE MAY INCORPORATE INTO THE PLANS WITHOUT PRIOR WRITTEN CONSENT AND/OR APPROVAL FROM THE OWNER AND THE ENGINEER.

12. THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN EACH EXISTING RIGHT OF WAY WITH THE CITY OF WINTER GARDEN AND THE FLORIDA DEPARTMENT OF TRANSPORTATION.

13. SCS SOILS: SMYRNA-SMYRNA, WET, FINE SAND, 0 TO 2 PERCENT SLOPES, ZOLFO FINE SAND, 0 TO 2 PERCENT SLOPES, SANIBEL MUCK

14. STORMWATER MANAGEMENT IS PROVIDED BY OFF-SITE RETENTION.

15. THE CONTRACTOR SHALL RESTORE OFF-SITE AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE CONDITION EXISTING PRIOR TO COMMENCEMENT OF CONSTRUCTION.

16. ALL DISTURBED AREAS SHALL BE SODDED.

17. AT LEAST 30 DAYS PRIOR TO ANTICIPATED COMPLETION OF SITE CONSTRUCTION, THE FINAL CERTIFICATION PROCESS WILL BEGIN. THE CONTRACTOR SHALL PROVIDE DOCUMENTS AND INFORMATION, IN A TIMELY MANNER, TO ENGINEER, INCLUDING, WITHOUT LIMITATION:
a. SURVEYED "AS-BUILTS" PER AS-BUILT SURVEY SCOPE IN SPEC MANUAL.
b. COMPACTION AND DENSITY TEST REPORTS, AND
c. PRESSURE TESTING AND BACTERIOLOGICAL TESTING RESULTS, AS REQUIRED, FOR WATER DISTRIBUTION AND/OR WASTEWATER COLLECTION/TRANSMISSION SYSTEMS.

THE CONTRACTOR SHALL HAVE TWO (2) SETS OF AS-BUILT PLANS, SIGNED AND SEALED BY SURVEYOR OF RECORD, ON SITE THE DAY OF THE CIVIL ENGINEERING FINAL PUNCH LIST INSPECTION. THE GENERAL CONTRACTOR IS TO GIVE THE TWO AS-BUILT PLANS TO THE REPRESENTATIVE FROM INTERPLAN COMPLETING THE INSPECTION. IF ANY DEFICIENCIES ARE NOTED, ONE SET OF RED-LINED AS-BUILT PLANS WILL BE GIVEN TO THE GC FOR REVISIONS TO BE MADE. REVISED AS-BUILTS WILL NEED TO BE FORWARDED TO INTERPLAN BEFORE ANY CERTIFICATIONS CAN BE INITIATED.

18. ALL TRAFFIC CONTROL DEVICES, EQUIPMENT AND INSTALLATION SHALL MEET THE REQUIREMENTS OF THE LOCAL JURISDICTION AND/OR FLORIDA DEPARTMENT OF TRANSPORTATION.

19. PARKING STALLS SHALL CONFORM WITH LOCAL CODE. ACCESSIBLE PARKING SPACES AND ACCESS ROUTES SHALL FURTHER CONFORM WITH CURRENT ADA REQUIREMENTS.

20. HANDICAP PAVEMENT MARKINGS AND SIGNAGE SHALL CONFORM WITH CURRENT ADA REQUIREMENTS AND LOCAL ORDINANCE.

21. LANDSCAPE SHALL BE TRIMMED TO ENSURE SIGHT VISIBILITY OF TRAFFIC CONTROL DEVICES.

22. ALL PAVEMENT IS DIMENSIONED TO FACE OF CURB.

23. ALL BUILDING DIMENSIONS AND TIES ARE TO OUTSIDE FACE. SEE ARCHITECTURAL PLANS.

24. ALL CURB RETURN RADII ARE 5' UNLESS NOTED.

25. BUILDING AND SITE IMPROVEMENTS ARE PARALLEL AND PERPENDICULAR TO WEST PROPERTY LINE.

GC NOTE:

A COPY OF THIS SHEET C0.1 SHALL BE PROVIDED TO ALL BIDDERS AND SUB-CONTRACTORS.

SITE DATA

SITE AREA	65,320 SF	1.50 AC	
EXISTING			
IMPERVIOUS { PAVEMENT/SIDEWALKS	344 SF	1% }	1%
IMPERVIOUS { BUILDING	0 SF	0% }	
TOTAL IMPERVIOUS	344 SF		
OPEN SPACE (GREEN)	64,976 SF	99%	
PROPOSED			
IMPERVIOUS { PAVEMENT/SIDEWALKS	24,805 SF	37% }	70%
IMPERVIOUS { BUILDING	21,449 SF	33% }	
TOTAL IMPERVIOUS	45,630 SF		
OPEN SPACE (GREEN)	19,690 SF	30%	
ZONING	(C-2) - ARTERIAL COMMERCIAL DISTRICT		
FLOOR AREA RATIO	F.A.R. = 0.33		

BUILDING HEIGHT	MAX. ALLOWED	PROPOSED
	3 STORIES	1 STORY 36 FT

BUILDING SETBACKS	REQUIRED	PROVIDED
FRONT (EAST)	40 FT	85 FT
SIDE (NORTH)	20 FT	76 FT
SIDE (SOUTH)	20 FT	30 FT
REAR (WEST)	10 FT	15 FT
LANDSCAPE BUFFER		
FRONT (EAST)	10 FT	10 FT
SIDE (NORTH)	5 FT	5 FT
SIDE (SOUTH)	20 FT	25 FT
REAR (WEST)	10 FT	10 FT

PARKING REQUIRED	REQUIRED	PROVIDED
RETAIL (3 SPACES/1,000 SF)	64 SPACES	64 SPACES
PARKING PROVIDED		
REGULAR		61
HANDICAP		3
TOTAL		64

LEGENDS

	PROPOSED
PROPOSED CONTOUR MEET EXISTING GRADE	71.50 MEG
EDGE OF PAVEMENT	EOP
SIDEWALK	SW
GRADE BREAK	GB
HIGH POINT	HP
SPOT ELEVATION	12.66
DIRECTION OF FLOW AND PERCENT SLOPE	1.0%
STORM SEWER & INLET	
YARD DRAIN INLET	
DOWN SPOUT DRAINS	DSD
SANITARY SEWER & MANHOLE	SS
GREASE TRAP	
CLEANOUT	C.O.
FORCE MAIN	FM
WATER SERVICE	W
WATER MAIN	WM
FIRE HYDRANT	
DDCVA	
FDC	
WATER METER	
BACKFLOW PREVENTION DEVICE (BFP)	
GATE VALVE	
REDUCER	
UNDERGROUND TELEPHONE	UGT
UNDERGROUND ELECTRIC	UGE
SITE LIGHTING	
TRANSFORMER	T
AIR CONDITIONING UNIT	AC
PARKING SPACE TOTALS	8
DETAIL NUMBER / SHEET NUMBER	2 / C4
ZONING	B-3
CURRENT LAND USE	VACANT

DISINFECTING & TESTING NOTES

WATER MAINS THAT ARE INCLUDED IN THIS PROJECT THAT WILL BE CONSTRUCTED OF POLYVINYL CHLORIDE PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C605. ALL OTHER WATER MAINS INCLUDED IN THIS PROJECT WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600.

LEAKAGE TESTS ARE REQUIRED AS FOLLOWS: 1) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE PIPE; 2) EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET; 3) AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C 828 FOR CLAY PIPE, ASTM C 924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES.

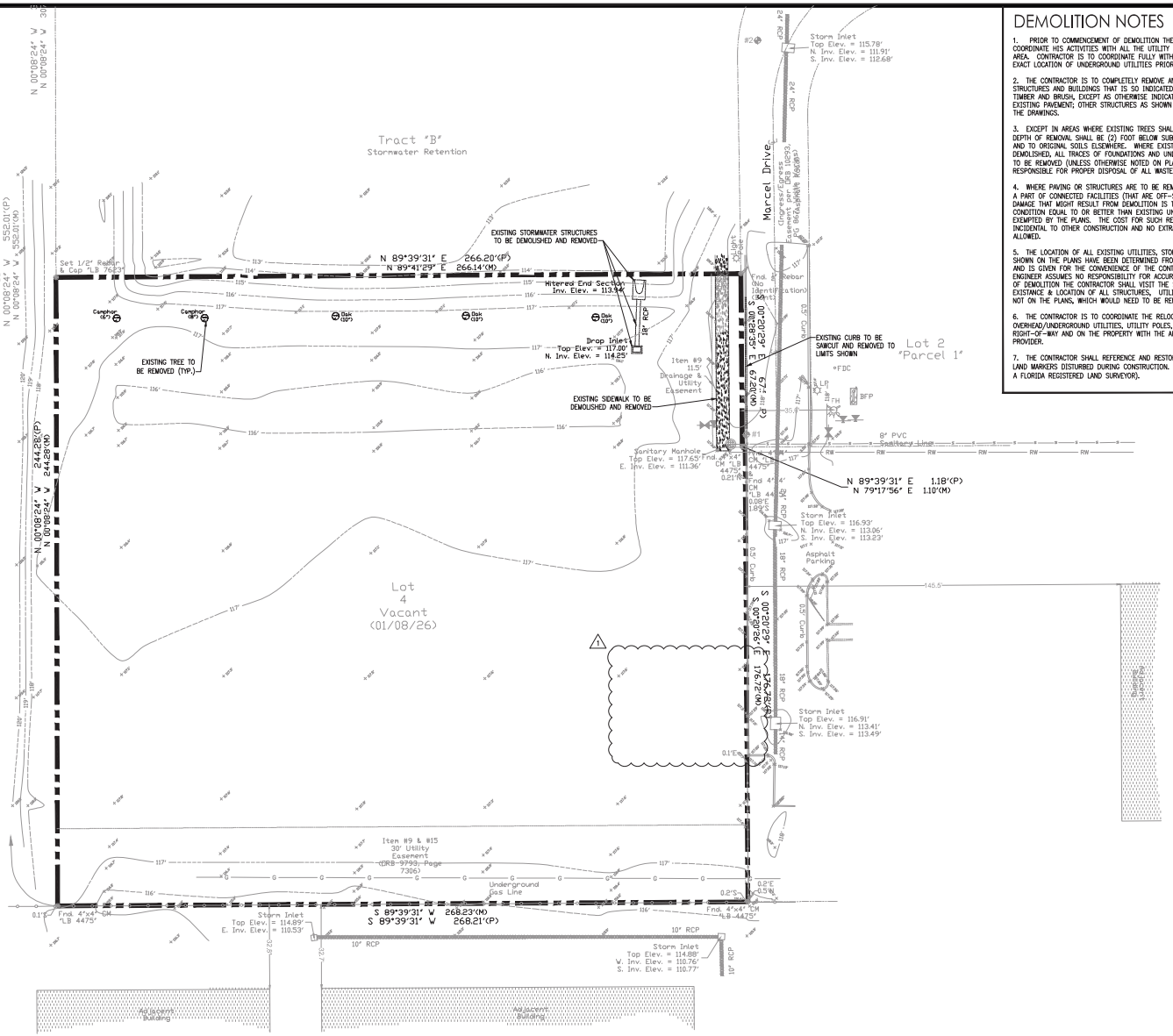
DISINFECTION OF THE WATER DISTRIBUTION SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C651 DISINFECTING WATER MAINS. SATISFACTORY BACTERIOLOGICAL TEST RESULTS SHALL BE SUBMITTED TO ENGINEER PRIOR TO FINAL CERTIFICATION.

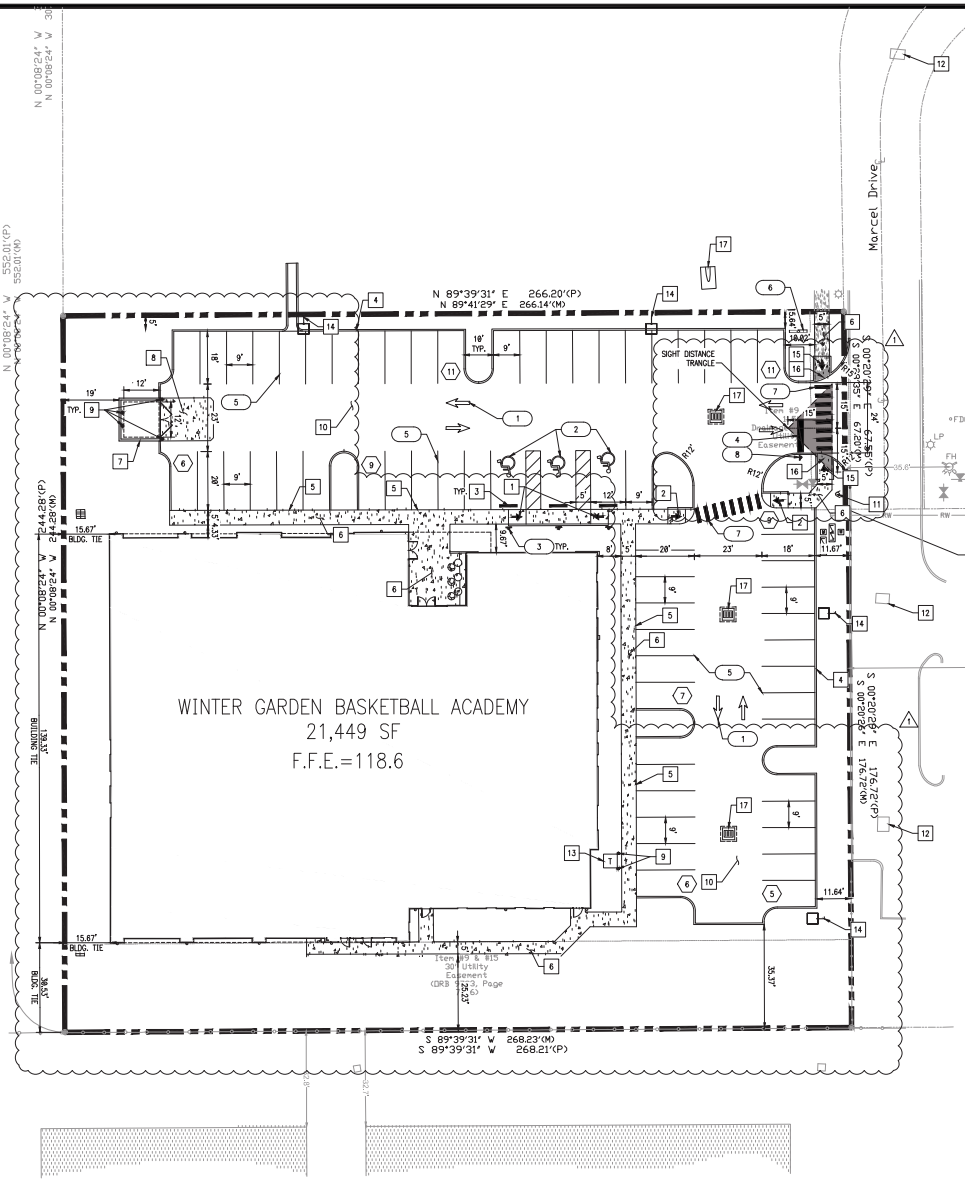
THE CONTRACTOR SHALL MAKE PROVISIONS TO PROTECT THE ACTIVE EXISTING MAIN FROM BACKFLOW CONTAMINATION DURING FILLING, FLUSHING, AND TESTING OF THE NEW MAIN, AS SPECIFIED IN AWWA C651-92.

CONTRACTOR SHALL UTILIZE A JUMPER CONNECTION DURING WATER MAIN TESTING. ALTERNATE TYPES OF BACKFLOW PREVENTION MAY BE UTILIZED AS APPROVED BY INSPECTION STAFF AND ENGINEER.

UTILITY CONTACTS

WATER/ SEWER	CITY OF WINTER GARDEN 300 W PLANT ST, WINTER GARDEN, FL 34787 CONTACT: ARTHUR MILLER


Tract "B"
Stormwater Retention
Marcel Drive
Lot 4
Vacant
(01/08/26)
Lot 2
"Parcel 1"
N 00°08'24" W 552.01'(P)
N 00°08'24" W 552.01'(M)
"BB"
N 00°08'24" W 244.28'(P)
N 00°08'24" W 244.28'(M)
Set 1/2" Rebar & Cap "LB 7623"
N 89°39'31" E 266.20'(P)
N 89°41'29" E 266.14'(M)
EXISTING STORMWATER STRUCTURES TO BE DEMOLISHED AND REMOVED
Mitered End Section
Inv. Elev. = 113.54'
18" RCP
Drop Inlet
Top Elev. = 117.00'
N. Inv. Elev. = 114.85'
EXISTING TREE TO BE REMOVED (TYP.)
Item #9
11.5'
Drainage & Utility Easement
EXISTING SIDEWALK TO BE DEMOLISHED AND REMOVED
EXISTING CURB TO BE SAWCUT AND REMOVED TO LIMITS SHOWN
Sanitary Manhole
Top Elev. = 117.65'
E. Inv. Elev. = 111.36'
8" PVC
Sanitary Line
N 89°39'31" E 1.18'(P)
N 79°17'56" E 1.10'(M)
Storm Inlet
Top Elev. = 116.93'
N. Inv. Elev. = 113.06'
S. Inv. Elev. = 113.23'
Asphalt Parking
S 00°08'24" E 1762.27'(P)
S 00°08'24" E 1762.28'(M)
Storm Inlet
Top Elev. = 116.91'
N. Inv. Elev. = 113.41'
S. Inv. Elev. = 113.49'
Item #9 & #15
30' Utility Easement
(ORB 9799, Page 7306)
Underground Gas Line
S 89°39'31" W 268.23'(M)
S 89°39'31" W 268.21'(P)
Fnd. 4"x4" CM "LB 4475"
Storm Inlet
Top Elev. = 114.89'
E. Inv. Elev. = 110.53'
10" RCP
Storm Inlet
Top Elev. = 114.88'
W. Inv. Elev. = 110.76'
S. Inv. Elev. = 110.77'
Adjacent Building
Adjacent Building
Storm Inlet
Top Elev. = 115.78'
N. Inv. Elev. = 111.91'
S. Inv. Elev. = 112.68'
Marcel Drive (Ingress/Egress, Publix Easement, PG 9799/7306)
Fnd. No Identification (West)
Rebar
Light Pole
Caughman 67'
Oak (20')
Oak (10')
Oak (15')
Oak (10')
Oak (10')
Oak (10



TRAFFIC CONTROL & SIGNAGE

1. DIRECTIONAL ARROW (11 C4.0) (TYP.)
2. HANDICAP PAVEMENT SYMBOLS (12 C4.0) (TYP.)
3. HANDICAP SIGN (13 C4.0)
4. 24" WIDE WHITE STOP BAR (TYP.)
5. PAVEMENT STRIPING (4" WHITE) (TYP.)
6. MONUMENT SIGNAGE
7. 24" WIDE WHITE CROSSWALK STRIPING
8. 30" STOP SIGN (R1-1)

- ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

- WORK DONE WITHIN PUBLIC R.O.W. SUBJECT TO CITY OF WINTER GARDEN REVIEW AND APPROVAL.

SITE NOTES

1. SIDEWALK HANDICAP RAMP (17 C4.0)
2. CORNER RAMP (15 C4.0)
3. WHEEL STOP (9 C4.0)
4. 6" CURB (5 C4.0) (TYP.)
5. MONOLITHIC CURB AND SIDEWALK (6 C4.0)
6. CONCRETE SIDEWALK (7 C4.0)
7. DUMPSTER ENCLOSURE (7 C4.6, 2 C4.0, 3 C4.0)
8. CONCRETE APRON (8 C4.0)
9. BOLLARD (4 C4.0)
10. ASPHALT PAVEMENT (10 C4.0)
11. PROPOSED FIRE HYDRANT
12. EXISTING DRAINAGE STRUCTURES
13. PROPOSED TRANSFORMER PAD
14. LIGHT POLE
15. HANDICAP END RAMP (14 C4.0)
16. CURB RAMP DETECTABLE WARNING (6 C4.4, 8 C4.4)
17. PROPOSED DRAINAGE STRUCTURES

REFER TO SHEET C0.1 FOR GENERAL NOTES, SPECIFICATIONS, AND LEGENDS, IN ADDITION TO SITE-SPECIFIC NOTES AND REQUIREMENTS.

NORTH

20' 0 20' 40'

GRAPHIC SCALE

SITE DIMENSION PLAN

1"=20'

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY. STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:32-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

1 5-15-26 WMD/CITY COMMENTS
NO. DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

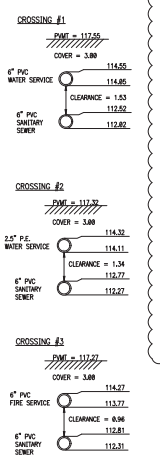
PROJECT NO: 2025.0704
DATE: 5/26/2026

C1.0
SITE DIMENSION PLAN

CHECKED: CDB DRAWN: GFC

KEVCAB - 05/27/2026 8:54:18 AM

COPYRIGHT ©2026 INTERPLAN LLC. RESERVES COPYRIGHT & OTHER RIGHTS IN THESE DOCUMENTS TO THE EXTENT ALLOWED BY LAW. ALL OWNERSHIP OR USE OF THESE DOCUMENTS IS NOT TRANSFERRED. REPRODUCTIONS, CHANGES OR ADDITIONS ARE PROHIBITED.



CITY OF WINTER GARDEN NOTES:

a) ALL GRAVITY SANITARY PIPE AND FITTINGS SHALL BE SDR 26.

b) ALL COMPACTION SHALL BE 98% OF THE MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T-180).

c) AS-BUILT RECORD DRAWINGS SHALL COMPLY WITH CITY OF WINTER GARDEN REQUIREMENT AVAILABLE ON-LINE.

d) ALL STORM (>12") AND SANITARY LINES (>6") SHALL BE INSPECTED BY CCTV PRIOR TO COMPLETION.

e) USE CITY STANDARD DETAIL SHEETS AND PUBLIC WORKS (SEE CITY WEBSITE).

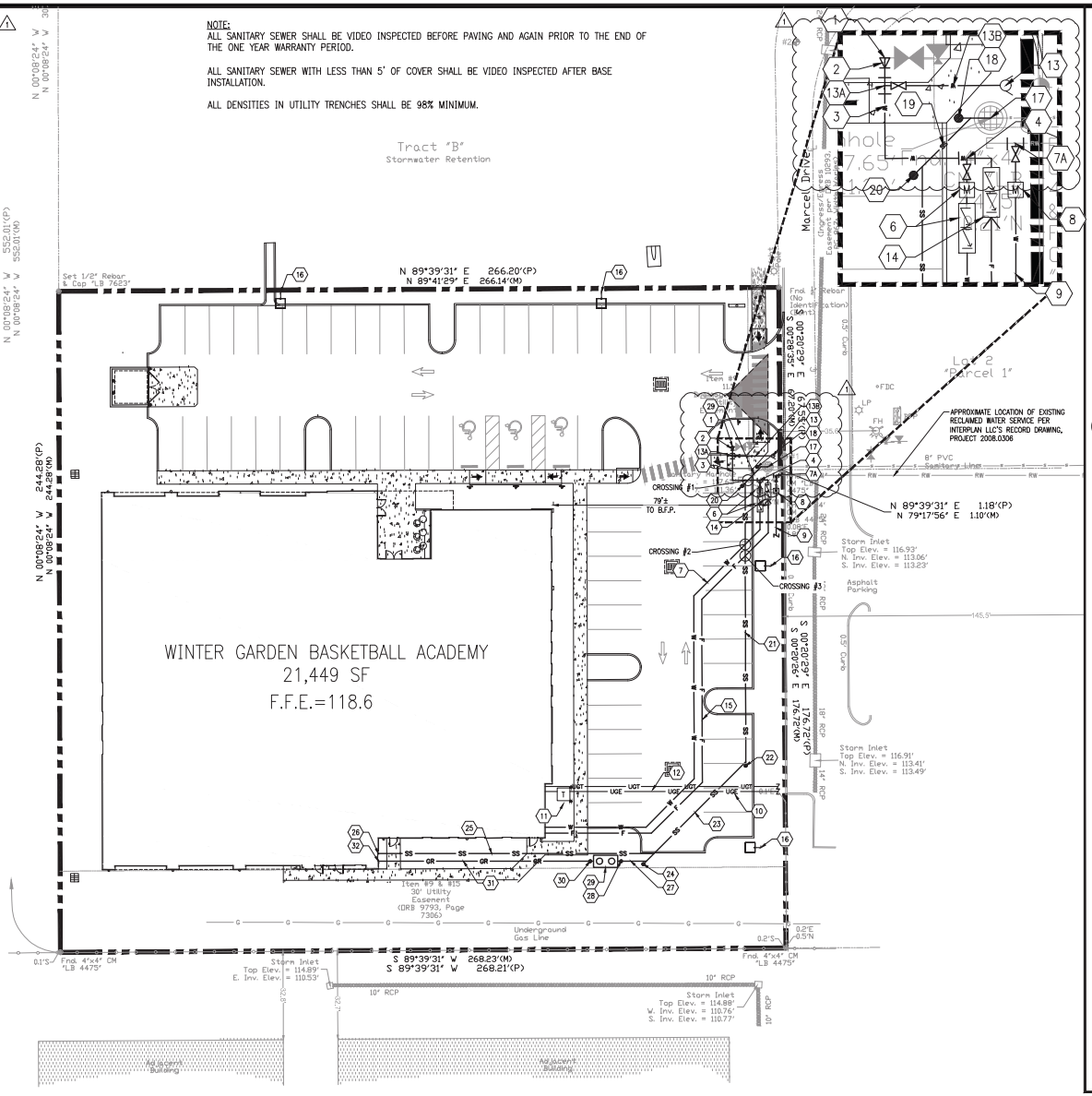
f) IF THERMOPLATIC PIPS IS USED IT SHALL MEET ALL CITY MATERIAL AND INSTALLATION REQUIREMENTS AS SPECIFIED IN THE CITY'S STANDARDS & SPECIFICATIONS INCLUDING CLASS 1 BEDDING, HP POLYPROPYLENE PIPE (NOT HDPE OR N-12), LASER PROFILING, INSTALLATION PER ASTM D2321, ETC. (SEE UNDER ON-LINE FORMS ON WEBSITE).

g) ALL UTILITIES SHALL BE UNDERGROUND PPURSUANT TO CODE (SEC. 18-33) INCLUDING ELECTRICAL POWER, CABLE, TELEPHONE, ETC.

NOTE:
ALL SANITARY SEWER SHALL BE VIDEO INSPECTED BEFORE PAVING AND AGAIN PRIOR TO THE END OF THE ONE YEAR WARRANTY PERIOD.

ALL SANITARY SEWER WITH LESS THAN 5' OF COVER SHALL BE VIDEO INSPECTED AFTER BASE INSTALLATION.

ALL DENSITIES IN UTILITY TRENCHES SHALL BE 98% MINIMUM.



SITE UTILITY NOTES

DOMESTIC WATER

1. CONNECT TO EXISTING 8" WATER MAIN STUB-OUT (8/C4.2)
2. 8"x6" REDUCER
3. 6" PVC WATER MAIN TO TEE (1/C4.2)
4. 6" X 2" X 6" TEE
5. NOT USED
6. 1.5" WATER METER AND 2" RPZ BACKFLOW PREVENTER (12/C4.2)
7. 2" P.E. WATER SERVICE TO BUILDING (1/C4.2)

IRRIGATION

7A. WET TAP EXISTING 4" RECLAIM WATER SERVICE WITH 1.5" TAPPING SADDLE & GATE VALVE

8. 1" IRRIGATION METER
9. 1.5" P.E. IRRIGATION SERVICE (SEE IRRIGATION SITE PLAN)

ELECTRIC

10. CONTRACTOR SHALL COORDINATE UNDERGROUND ELECTRICAL SERVICE WITH ELECTRIC PROVIDER FOR CONDUIT SIZE, CONNECTION POINT AND APPROVED TRANSFORMER LOCATION.
11. TRANSFORMER PAD. CONTRACTOR TO COORDINATE WITH ELECTRIC PROVIDER FOR FINAL LOCATION OF TRANSFORMER TO BE SET.

PHONE

12. CONTRACTOR SHALL COORDINATE UNDERGROUND TELEPHONE SERVICE WITH TELEPHONE PROVIDER FOR CONDUIT SIZE, CONNECTION POINT.

FIRE

13. PROPOSED FIRE HYDRANT (6/C4.2)
13A. 6" X 6" TEE
13B. 14 LF - 6" DR-18 PVC FIRE LINE TO HYDRANT W/ GATE VALVE (1/C4.2)
14. 6" DOUBLE DETECTOR CHECK VALVE W/ FIRE DEPARTMENT CONNECTION (18/C4.0)
15. 6" DR-14 FIRE LINE TO BUILDING (1/C4.2)

STREET LIGHT

16. LIGHT POLE (SEE ELECTRICAL SITE PLAN)

SANITARY SEWER

17. EXISTING SANITARY SEWER MANHOLE RIM = 117.65± INV. OUT (E) = 111.36 CORE DRILL & CONNECT @ 111.96 NOTE: CONTRACTOR TO VERIFY SIZE, LOCATION, INVERTS, AND CONDITION AT START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES (2/C4.3)
18. C.O. INV. ELEV. = 111.98 (6/C4.3) (TYP.)
19. 10 LF - 6" PVC @ 1% SLOPE
20. C.O. INV. ELEV. = 112.08
21. 104 LF - 6" PVC @ 1% SLOPE (18/C4.0) (TYP.)
22. C.O. INV. ELEV. = 113.12
23. 54 LF - 6" PVC @ 1% SLOPE
24. C.O. INV. ELEV. = 113.66
25. 98 LF - 4" PVC @ 2% SLOPE
26. CONNECT SEWER TO BUILDING @ INV. ELEV. = 115.58
27. 9 LF - 4" PVC @ 2% SLOPE
28. C.O. INV. ELEV. = 113.84
29. 1,000 GAL GREASE INTERCEPTOR (REFERENCE PLUMBING PLANS) RIM =117.7± IN = 114.84 OUT = 113.84
30. C.O. INV. ELEV. = 114.04
31. 78 LF - 4" PVC @ 2% SLOPE
32. CONNECT GREASE TO BUILDING @ INV. ELEV. = 115.6

REFER TO SHEET C0.1 FOR GENERAL NOTES, SPECIFICATIONS, AND LEGENDS, IN ADDITION TO SITE-SPECIFIC NOTES AND REQUIREMENTS.

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATEONE @ 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

Sunshine811
Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked.
Check positive response codes before you dig!

NORTH

20' 0 20' 40'

GRAPHIC SCALE

SITE UTILITY PLAN

1" = 20'

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:33-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO. DATE REMARKS

REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

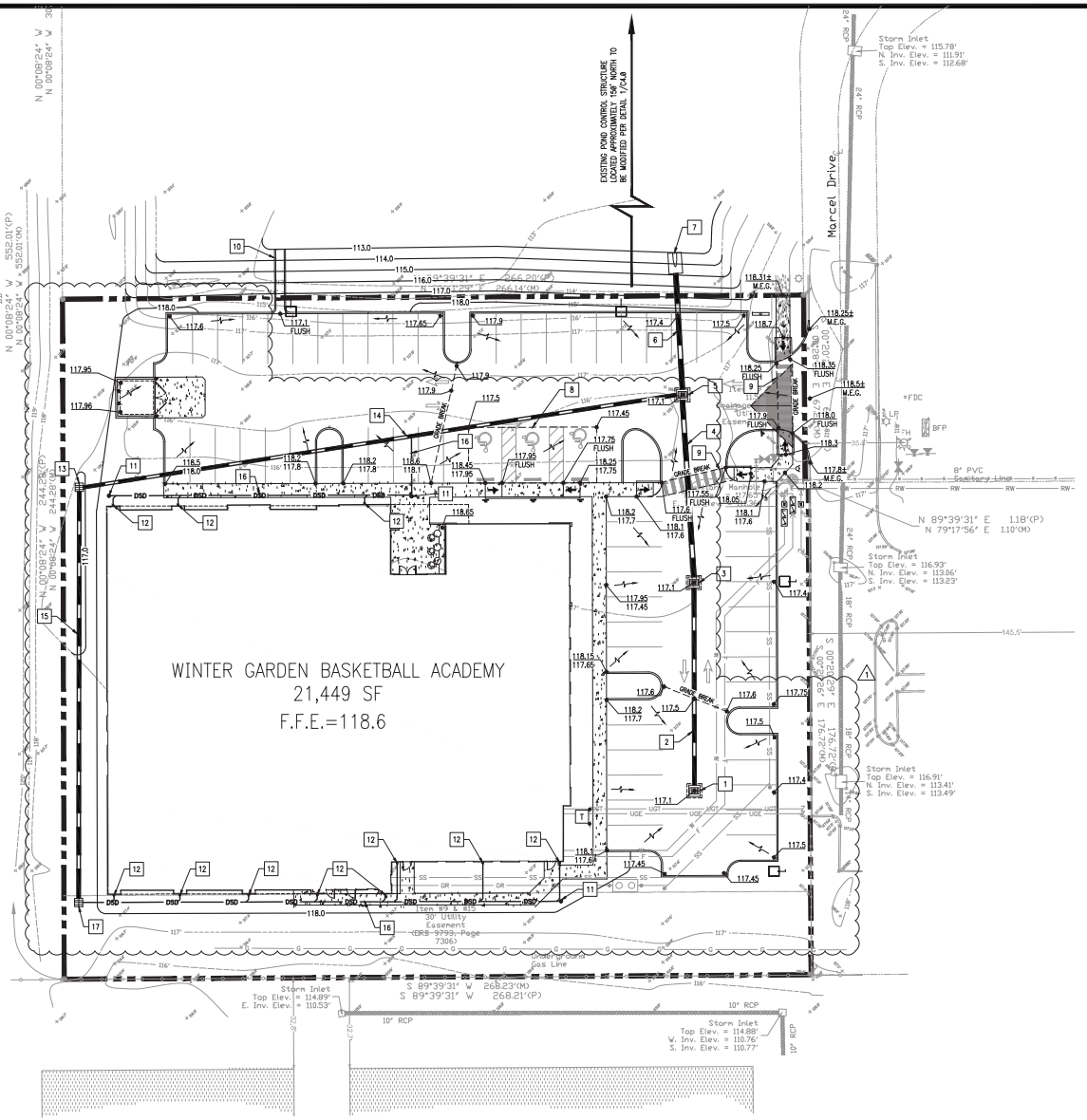
PROJECT NO: 2025.0704
DATE: 5/26/2026

C2.0
SITE UTILITY PLAN

CHECKED: CDB DRAWN: GFC

COPYRIGHT ©2026 INTERPLAN LLC - RESERVES COPYRIGHT & OTHER RIGHTS ASSERTED HEREIN. THESE DOCUMENTS TO THE EXTENT ALLOWED BY LAW, INCLUDING BUT NOT LIMITED TO THE ARCHITECTURAL WORKS PROTECTION ACT (ADDED BY AMENDMENT TO 17 U.S.C.), ARE PROTECTED AS ARCHITECTURAL WORKS AND MAY NOT BE REPRODUCED, CHANGED OR USED IN ANY WAY WHATSOEVER WITHOUT THE PRIOR WRITTEN PERMISSION OF INTERPLAN LLC.

KEVCAB - 05/27/2026 8:54:22 AM



DRAINAGE STRUCTURE TABLE

1. INLET #1
   F.D.O.T. TYPE 'F' STORMWATER INLET (19 / C4.0)
   GRATE ELEV. = 117.1
   INV ELEV. (N) = 113.86
2. 71 LF 15" P.P. PIPE @ 0.25% SLOPE
3. INLET #2
   F.D.O.T. TYPE 'F' STORMWATER INLET (19 / C4.0)
   GRATE ELEV. = 117.1
   INV ELEV. (S) = 113.68
   INV ELEV. (N) = 113.68
4. 64 LF 18" P.P. PIPE @ 0.25% SLOPE
5. INLET #3
   F.D.O.T. TYPE 'F' STORMWATER INLET (19 / C4.0)
   GRATE ELEV. = 117.1
   INV ELEV. (S) = 113.32
   INV. ELEV. (N) = 113.12
   INV. ELEV. (W) = 113.32
6. 49 LF 18" P.P. PIPE @ 0.25% SLOPE
7. MITERED END SECTION
   INV. ELEV. = 113.8
   PER FDOT INDEX 430-020
8. HANDICAP ZONE – MAX. 2.0% SLOPE IN ANY DIRECTION.
9. ACCESSIBLE ROUTE MAX. 2% CROSS SLOPE, 5% IN DIRECTION OF TRAVEL
10. CURB FLUME (16 / C4.0)
11. CLEANOUT FOR ROOF DRAIN
12. 6" PVC @ 0.2% SLOPE
13. YARD DRAIN
    GRATE ELEV. = 116.85
    INV ELEV. (IN) = 113.95
    INV. ELEV. (OUT) = 113.75
14. 216 LF 15" P.P. PIPE @ 0.2% SLOPE
15. 146 LF 15" P.P. PIPE @ 0.2% SLOPE
16. 12" PVC @ 0.2% SLOPE
17. YARD DRAIN
    GRATE ELEV. = 117.5
    INV ELEV. (IN) = 114.44
    INV. ELEV. (OUT) = 114.24

DOWNSPOUTS PIPE INFORMATION

NOTE:
CONTRACTOR SHALL FIELD VERIFY LOCATION, INVERT ELEVATION, MATERIALS AND PIPE SIZE BEFORE CONSTRUCTION BEGINS.

CONTRACTOR SHALL BEGIN STORMWATER PIPING CONSTRUCTION AT THE POINT OF CONNECTION OF EXISTING STORMWATER SYSTEM.

6" BELOW BASE MINIMUM HDPE PIPE COVER.

WHEN ANY ROOTS OR EXISTING TREE ARE ENCOUNTERED DURING LAND CLEARING AND/OR GRADING OF THE SITE, THE ROOTS MUST BE CUT OFF EVENLY WITH CLEAN SHARP PRUNING TOOLS. THE CONTRACTOR/DEVELOPER SHALL MINIMIZE THE DAMAGE TO EXISTING TREE ROOT SYSTEMS.

ALL STORM SEWERS SHALL BE VIDEO INSPECTED BEFORE PAVING AND AGAIN PRIOR TO THE END OF THE ONE YEAR WARRANTY PERIOD.

ALL STORM SEWERS WITH LESS THAN 5' OF COVER SHALL BE VIDEO INSPECTED AFTER BASE INSTALLATION.

ALL DENSITIES IN STORM TRENCHES SHALL BE 98% MINIMUM.

REFER TO SHEET C0.1 FOR GENERAL NOTES, SPECIFICATIONS, AND LEGENDS, IN ADDITION TO SITE-SPECIFIC NOTES AND REQUIREMENTS.

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT SUNSHINE STATEONE. @ 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

Sunshine811

Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked.

Check positive response codes before you dig!

NORTH

20' 0 20' 40'

GRAPHIC SCALE

SITE GRADING & DRAINAGE PLAN

1" = 20'

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:35-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

1 5-15-26 WMD/CITY COMMENTS
NO. DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

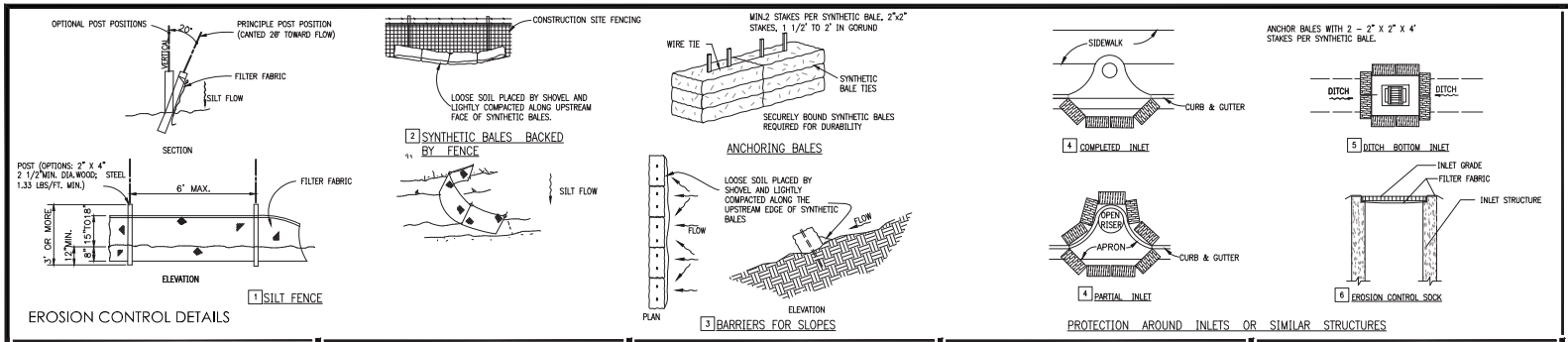
PROJECT NO: 2025.0704
DATE: 5/26/2026

C3.0
GRADING & DRAINAGE PLAN

CHECKED: CDB DRAWN: GFC

COPYRIGHT © 2026 INTERPLAN LLC. THESE DOCUMENTS ARE AND SHALL REMAIN THE PROPERTY OF INTERPLAN LLC. THESE DOCUMENTS WERE PREPARED FOR USE IN CONNECTION WITH THE PROJECT DESCRIBED HEREIN AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF INTERPLAN LLC. ANY REUSE WITHOUT SUCH AUTHORIZATION WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO INTERPLAN LLC. ANY MODIFICATIONS TO THESE DOCUMENTS BY ANYONE OTHER THAN INTERPLAN LLC IS STRICTLY PROHIBITED. ANY MODIFICATIONS MADE TO THESE DOCUMENTS WITHOUT THE WRITTEN PERMISSION OF INTERPLAN LLC SHALL RELIEVE INTERPLAN LLC OF ALL LIABILITY RESULTING FROM SUCH MODIFICATIONS. ANY CHANGES OR DEVIATIONS ARE RECORDED.

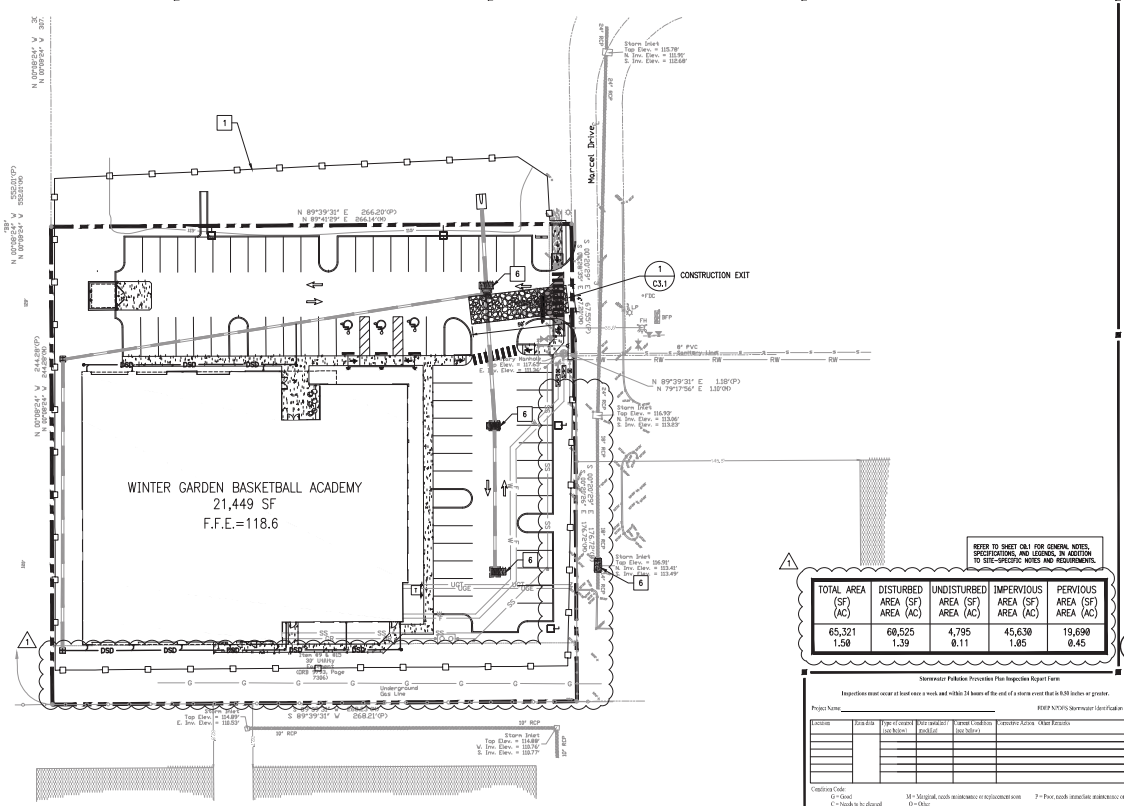
KEVCAB - 05/27/2026 8:54:26 AM



POLLUTION CONTROL NOTES

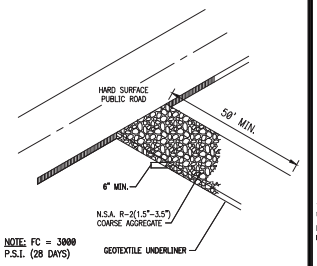
ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL COMPLETION OF CONSTRUCTION.

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM WITH LOCAL CITY/COUNTY AND WATER MANAGEMENT DISTRICT SPECIFICATIONS, SUBJECT TO AUTHORIZED AND APPROVED VARIANCES, WAIVERS AND/OR CONDITIONS OF SITE PERMITS.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN, CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTATION OF SILT OFF THE SITE.
3. ALL AREAS AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITION, UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE PLANS AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
5. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL PROVIDE TREE PROTECTION BARRIERS TO MEET THE REQUIREMENTS OF LOCAL SPECIFICATIONS.
6. THE CONTRACTOR SHALL SELECTIVELY CLEAR ONLY THE AREAS REQUIRED FOR CONSTRUCTION AND STABILIZE ANY POTENTIAL EROSION AREAS IMMEDIATELY FOLLOWING COMPLETION OF CONSTRUCTION.
7. CONTRACTOR SHALL KEEP ANY AND ALL SAND, SILT OR OTHER DEBRIS FROM MOVING OFF-SITE. USE AND MAINTAIN SILT FENCE JUST INSIDE OF PROPERTY LINE.
8. CONTRACTOR SHALL BLOCK INTRUSION OF SAND, SILT OR OTHER DEBRIS INTO ANY DRAINAGE OR SANITARY SEWER STRUCTURE OR PIPING ON OR ADJACENT TO SITE.
9. ALL CLEARED AREAS FOR IMPROVEMENT AND/OR CONSTRUCTION SHALL BE WATERED TO PREVENT WIND EROSION.
10. FOR ADDITIONAL INFORMATION AND DETAILS, SEE F.D.O.T. INDEX NO. 102.
11. UNLESS SPECIFIED, SILT FENCES MAY BE USED IN LIEU OF SYNTHETIC BARRIERS.
12. ADDITIONAL POSTS AND RAILS MAY BE NECESSARY TO SECURE AND SUPPORT BARRIERS.
13. ADDITIONAL BARRIER LENGTHS MAY BE REQUIRED BY THE COUNTY ENGINEER OR BY REGULATORY AGENCIES.
14. FILTER FABRIC MUST BE INSTALLED UNDER ALL INLET GRATES, AT ALL TIMES WHEN INLETS ARE NOT PROTECTED BY SILT FENCE OR SYNTHETIC BALES, UNTIL THE LIMEROCK BASE IS FINISHED AND PRIMED.
15. THE CONTRACTOR IS REQUIRED TO HAVE THIS PLAN ALONG WITH A COPY OF THE NPDES NOTICE OF INTENT POSTED IN A VISIBLE LOCATION ON THE CONSTRUCTION SITE AT ALL TIMES.
16. "CONTRACTOR IS REQUIRED BY NPDES TO KEEP A LOG ON SITE FOR THE SOIL EROSION AND SEDIMENT CONTROL MEASURES INDICATED ON THE PLAN. THE LOG SHALL CONTAIN DATES FOR: INSTALLATION OF CONTROL MEASURES, MAJOR SITE CONSTRUCTION ACTIVITIES, INSPECTION ON AT LEAST A WEEKLY BASIS AND INSPECTION AFTER ANY RAINFALL EVENT THAT IS 1/2" OR GREATER".
17. THE CONTRACTOR IS REQUIRED TO SUBMIT A COPY OF THIS LOG ALONG WITH A NOTICE OF TERMINATION TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION UPON THE COMPLETION OF CONSTRUCTION.



REFER TO SHEET C0.1 FOR GENERAL NOTES, SPECIFICATIONS, AND LEGENDS, IN ADDITION TO SITE-SPECIFIC NOTES AND REQUIREMENTS.

TOTAL AREA (SF) (AC)	DISTURBED AREA (SF) AREA (AC)	UNDISTURBED AREA (SF) AREA (AC)	IMPERVIOUS AREA (SF) AREA (AC)	PERVIOUS AREA (SF) AREA (AC)
65,321 1.50	60,525 1.39	4,795 0.11	45,630 1.05	19,690 0.45



NOTE: FC = 3000 P.S.I. (28 DAYS)

1 CRUSHED STONE CONSTRUCTION EXIT
NTS

Stormwater Pollution Prevention Plan Inspection Report Form

Inspections must occur at least once a week and within 24 hours of the end of a storm event that is 0.50 inches or greater.

Project Name: _____ (FDEP NPDES Stormwater Identification Number: FLR) _____

Location	Item date	Type of control (see below)	Date control last modified	General Conditions (see below)	Corrective Action Other Remarks

Condition Code: G = Good; C = Needs to be cleaned; M = Marginal, needs maintenance or replacement soon; P = Poor, needs immediate maintenance or replacement; O = Other

Control Type Codes:

1. Silt Fence	10. Storm drain inlet protection	19. Reinforced soil retaining system	28. Tree protection
2. Earth dikes	11. Vegetative Buffer strip	20. Gabion	29. Detention pond
3. Protected Inversion	12. Vegetative preservation area	21. Sediment Basin	30. Retention pond
4. Swale	13. Retention Pond	22. Temporary road use	31. Water diversion (soundwalls)
5. Sediment Trap	14. Construction entrance stabilization	23. Permanent seed mat	32. Dam
6. Check dam	15. Perimeter dike	24. Mulch	33. Sand Bag
7. Subsurface drain	16. Curb and gutter	25. Vehicle tracks	34. Other
8. Pipe slope drain	17. Paved road surface	26. Geotextile	
9. Level spreaders	18. Rock outlet protection	27. Riprap	

Inspector information:

Name _____ Qualification _____ Date _____

The above signature also shall certify that this facility is in compliance with the Stormwater Pollution Prevention Plan and the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities if there are no any indicators of non-compliance identified above.

* * * * * * *

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name (Responsible Authority) Date

ENGINEER'S CERTIFICATIONS:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

STUART ANDERSON, P.E. 060848 Date

OWNER/AGENT CERTIFICATIONS:

I HAVE REVIEWED THIS PLAN AND AGREE TO COMPLY WITH THE REQUIREMENTS SHOWN HEREON.

OWNER/AUTHORIZED REPRESENTATIVE Date

NORTH

30' 0 30' 60'

GRAPHIC SCALE

SWPPP / STORMWATER POLLUTION PREVENTION PLAN

1" = 30'

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE ENGINEERING PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:36-04'00'

STUART ANDERSON REG.# 60848

"This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies."

1 5-15-26 WMD/CITY COMMENTS
NO. DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

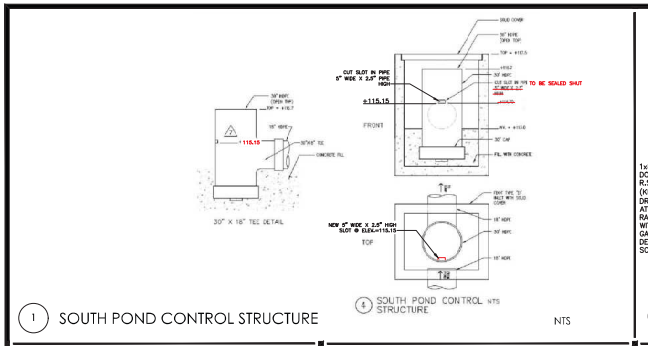
PROJECT NO: 2025.0704
DATE: 5/26/2026

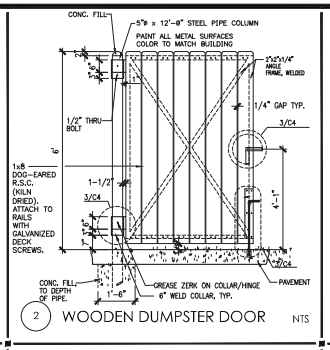
C3.1
STORMWATER POLLUTION PREVENTION PLAN

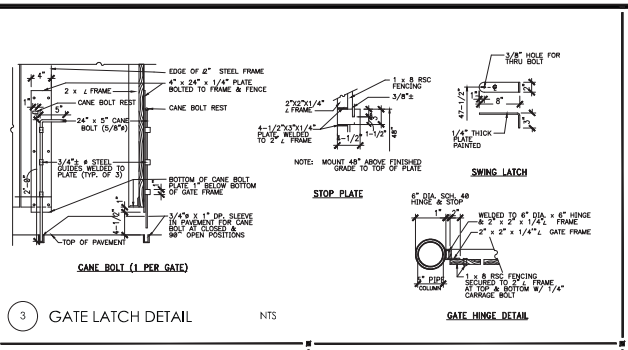
CHECKED: CDB DRAWN: GFC

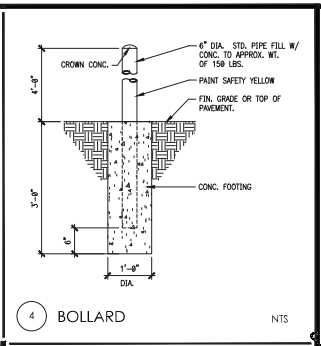
COPYRIGHT ©2026 INTERPLAN LLC - RESERVES COPYRIGHT & OTHER RIGHTS IN THESE DOCUMENTS TO THE FULLEST EXTENT PERMITTED BY LAW. THESE DOCUMENTS OR PARTS THEREOF MAY NOT BE REPRODUCED, CHANGED OR ASSIGNED TO ANY PERSON OR ENTITY WITHOUT THE EXPRESS WRITTEN PERMISSION AND ADJUSTMENT OF COMPENSATION BY INTERPLAN LLC.

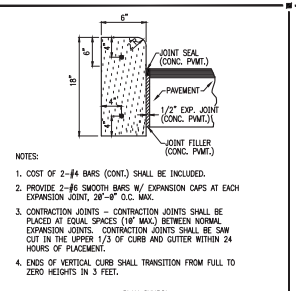
KEVCAB - 05/27/2026 8:54:29 AM

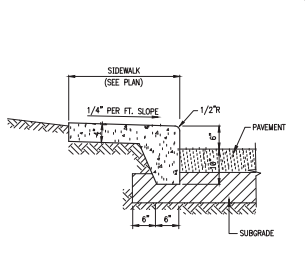


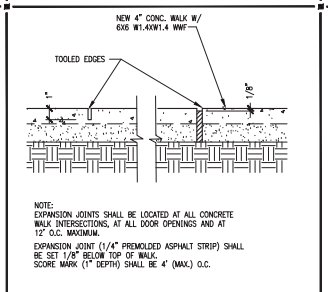


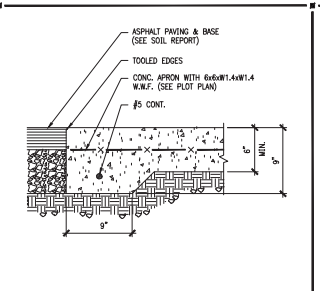


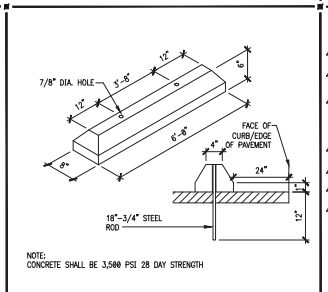






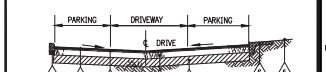


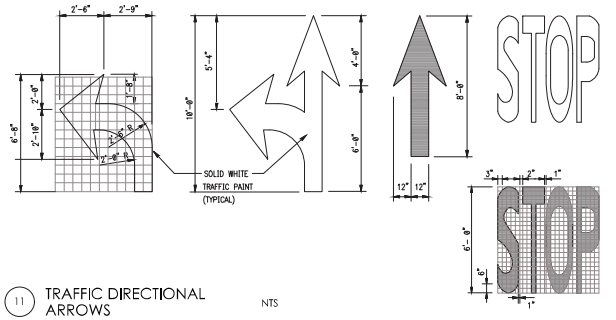


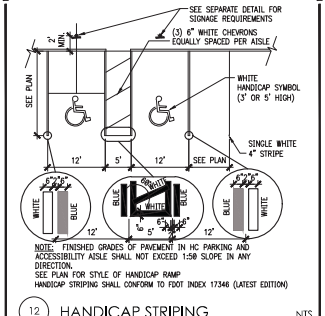


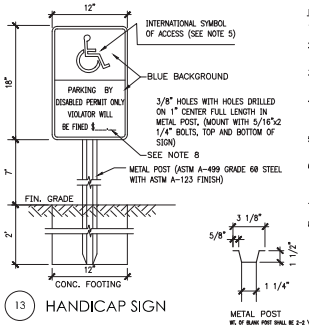
KEY TO TYPICAL PAVEMENT SECTIONS

1. 1-1/2" TYPE S-III ASPHALTIC CONCRETE – F.D.O.T. SECTION 331
2. NOT USED
3. 8" LIMEROCK BASE COURSE STABILIZED TO A MINIMUM LIMEROCK BEARING RATIO (LBR) OF 100 AND COMPACTED TO 95% OF THE MODIFIED PROCTOR MAX. DRY DENSITY (AASHTO T-180). FDOT SECTION 200. DENSITY TEST SHALL BE PERFORMED EVERY 5,000 SQUARE FEET.
4. 12" TYPE B STABILIZED SUBBASE STABILIZED TO A MIN. LIMEROCK BEARING RATIO (LBR) OF 40 AND COMPACTED TO 98% F.D.O.T. SECTION 160.
5. GRASS AREA
6. SIDEWALK
7. 6" VERTICAL CURB









NOTES:

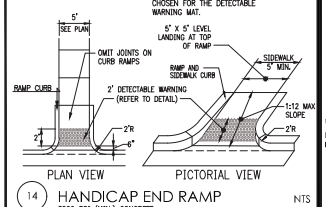
1. ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE.
2. METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS WASHERS AND SCREWS MUST BE RUSTPROOF.
3. CONCRETE FOR FOOTING SHALL BE PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 p.s.i.
4. SIGNS WILL BE FABRICATED BY USING REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDER APPLIED TO A SHEET ALUMINUM BACKING (.080) IN THICKNESS.
5. MESSAGE LETTERING SHALL BE UPPER CASE (WHITE)(SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. THE SYMBOL IS COMPOSED OF TWO ELEMENTS, A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. 595a, COLOR #15180).
7. SIGN POST SHALL BE MIN. 1" CLEAR FROM BACK OF WHEEL STOP OR CURB.
8. CONTRACTOR SHALL VERIFY FINE AMOUNT WITH LOCAL ORDINANCE.

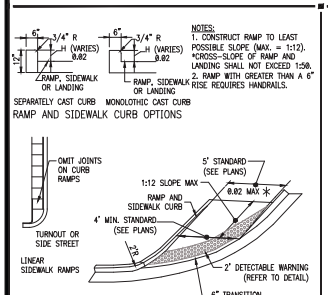
NOTE 1:
REFERENCE FDOT INDEX 522-002, PAGE 1, GENERAL AND DESIGN NOTES FOR RAMPS IN R.O.W.

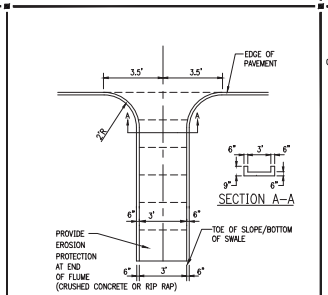
NOTE 2:
CONSTRUCT RAMP TO LEAST POSSIBLE SLOPE (MAX = 1:12). CROSS SLOPE OF RAMP AND LANDING SHALL NOT EXCEED 1:50.

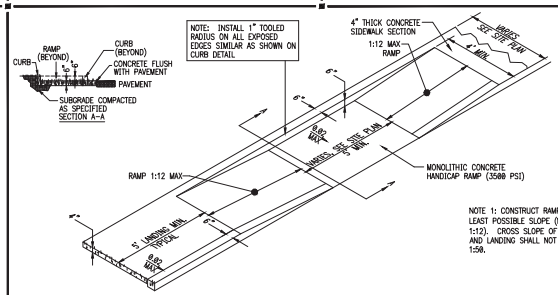
NOTE 3:
RAMP GREATER THAN A 6" RISE REQUIRES HANDRAILS.

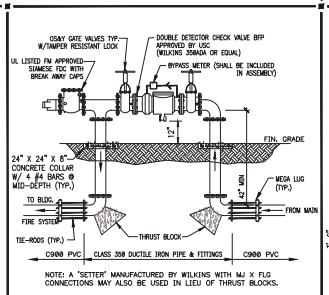
NOTE 4:
ENTIRE RAMP SURFACE (OUTSIDE OF DETECTABLE WARNING) SHALL CONTRAST IN COLOR BY 70% FROM THAT OF THE SIDEWALK. RECOMMENDED COLORS ARE RED OR YELLOW TO MATCH THE COLOR CHOSEN FOR THE DETECTABLE WARNING MAT.

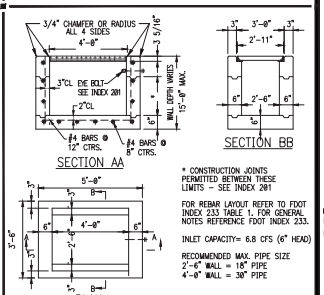












INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY. STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:
STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA
STUART ANDERSON REG.# 60848
Digitally signed by STUART A Anderson
Date: 2026.05.27 15:35:37-04'00'
This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO. DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

PROJECT NO: 2025.0704
DATE: 5/26/2026

C4.0
DETAILS

CHECKED: CDB DRAWN: GFC

KEVCAB - 05/27/2026 8:54:37 AM

COPYRIGHT ©2026 INTERPLAN LLC - ALL RIGHTS RESERVED. COPYRIGHT & OTHER RIGHTS ASSERTED. THESE DOCUMENTS AND THE IDEAS, DESIGNS AND ARRANGEMENTS INDICATED HEREIN WERE PREPARED, AND ARE THE PROPERTY OF INTERPLAN LLC. NO PART OF THE CONTENTS OF THESE DOCUMENTS MAY BE USED, COPIED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF INTERPLAN LLC. ALL RIGHTS RESERVED. UNAUTHORIZED USE OF THESE DOCUMENTS WILL CONSTITUTE A VIOLATION OF THE U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO LEGAL ACTION.

CITY OF WINTER GARDEN - GENERAL NOTES:

1. ALL UTILITY SYSTEMS AND IMPROVEMENTS CONSTRUCTED IN THE CITY OF WINTER GARDEN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUAL OF STANDARDS AND SPECIFICATIONS FOR UTILITY CONSTRUCTION FOR THE CITY OF WINTER GARDEN, TO BE REFERRED TO AS MSS/CWG, THE LATEST EDITION AT THE TIME PERMITS ARE APPROVED SHALL BE EFFECTIVE FOR THE DURATION OF THE SUBJECT WORK OR PROJECT DEVELOPMENT.
2. THE CITY OF WINTER GARDEN GENERAL NOTES AND DETAILS ARE PROVIDED FOR THE CONVENIENCE OF FIELD PERSONNEL. THEY DO NOT INCLUDE ALL REQUIREMENTS OF THE MSS/CWG. THE CONTRACTOR SHALL REFER TO THE FULL TEXT OF THE MSS/CWG FOR FURTHER DETAIL AND CLARITY WHEN NEEDED.
3. ANY REQUEST FOR VARIANCE OR NONCOMPLIANCE FROM THE MSS/CWG NOTED ABOVE MUST BE APPROVED BY THE CITY ENGINEER OR UTILITIES DIVISION.
4. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN CLOSE PROXIMITY TO WATER, WASTEWATER, RECLAIMED WATER AND OTHER UTILITY SYSTEMS. THE CONTRACTOR SHALL COORDINATE UTILITY LOCATIONS WITH RESPECTIVE UTILITY OWNERS AND/OR CALL "SUNSHINE ONE CALL", 1-800-432-4770 A MINIMUM OF 72 HOURS IN ADVANCE.
5. CONTRACTOR'S DAMAGE OF WINTER GARDEN UTILITY SYSTEM: THE CONTRACTOR SHALL IMMEDIATELY NOTIFY AND REPORT DAMAGE TO THE CITY OF WINTER GARDEN UTILITY DIVISION, (NO MESSAGE, PHONE # 407-656-4100.
6. IMMEDIATE REPAIR OF DAMAGED UTILITY SYSTEM: THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY DAMAGE TO THE CITY OF WINTER GARDEN UTILITY SYSTEM AS REQUIRED BY THE UTILITY OWNER AT CONTRACTOR'S COST. IN CASE OF UNRESPONSIVE ACTION BY THE CONTRACTOR THE CITY RESERVES RIGHT TO REPAIR DAMAGE. THE CONTRACTOR SHALL REIMBURSE THE CITY OF WINTER GARDEN OF ALL REPAIR COST.
7. ADVANCE NOTIFICATION OF CONSTRUCTION: THE CONTRACTOR SHALL NOTIFY CITY OF WINTER GARDEN, UTILITY DIVISION, PH.# 407-656-4100, AT LEAST SEVEN (7) CALENDAR DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY.
8. ADVANCE NOTIFICATION OF UTILITY CONNECTION: THE CONTRACTOR SHALL NOTIFY THE CITY OF WINTER GARDEN AT LEAST SEVEN CALENDAR DAYS IN ADVANCE TO SCHEDULE CONNECTIONS TO UTILITY SYSTEM.
9. UTILITY VALVE OPERATION: ONLY CITY OF WINTER GARDEN UTILITY PERSONNEL SHALL OPERATE VALVES AND FIRE HYDRANTS. THE CONTRACTOR, WHEN NEEDED, SHALL CALL THE CITY TO REQUEST VALVE OPERATIONS AT LEAST TWO (2) DAYS IN ADVANCE OF CONSTRUCTION WORK.
10. OPERATIONS INVOLVING WATER OR WASTEWATER FACILITIES INCLUDING PUMPING STATIONS: THE CONTRACTOR SHALL COORDINATE AT LEAST TWO (2) WEEKS IN ADVANCE, ANY CONSTRUCTION OPERATION THAT MAY REQUIRE THE SHUTDOWN OR CHANGE OR OPERATION OF A FACILITY. THE CITY WILL PROVIDE PERSONNEL TO OPERATE THE CITY FACILITIES.
11. REQUIRED TESTING BY CONTRACTOR: THE CONTRACTOR SHALL NOTIFY THE CITY OF WINTER GARDEN AT LEAST TWO (2) DAYS PRIOR TO SAMPLING ACTIVITIES FOR PURPOSE OF TESTING AS REQUIRED BY THE CITY. THE CONTRACTOR SHALL NOT TEST OR SAMPLE WITHOUT OBSERVATION BY CITY INSPECTION PERSONNEL.
12. TEMPORARY OR CONSTRUCTION WATER SERVICE CONNECTIONS PROVIDED BY FIRE HYDRANT CONNECTION: THE CITY WILL PROVIDE, AT NO CHARGE, THE CONTRACTOR SHALL PROVIDE NON-REFUNDABLE ACCOUNT INITIATION FEE, A REFUNDABLE SECURITY DEPOSIT FOR THE METER APPARATUS AND PAY ALL COST FOR WATER USED.
13. ALL AS-BUILT MEASUREMENTS & ELEVATIONS ARE TO BE MADE BY A LICENSED LAND SURVEYOR.

CITY OF WINTER GARDEN - WATER SYSTEM NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL A CITY APPROVED BACKFLOW DEVICE ASSEMBLY AT EACH CONNECTION POINT TO THE CITY WATER SYSTEM.
2. THE CONTRACTOR SHALL HYDROSTATICALLY TEST ALL WATER MAINS AND SERVICE LATERALS AT 150 PSI FOR A TWO HOUR PERIOD. TESTING MUST BE OBSERVED BY A CITY INSPECTOR.
3. THE CONTRACTOR SHALL INSTALL WARNING TAPE OVER ALL NEW WATER MAINS. WARNING TAPE SHALL BE AS FOLLOWS: NON-DETECTABLE, SIZE 3" WITH "WATER LINE BELOW", MUST BE PLACED 8" TO 12" BELOW FINISHED GRADE ON ALL PVC WATER MAINS, LATERALS AND HEADER TEES, NUMBER 10 GAUGE TRACER WIRE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH DUCT TAPE, AT LEAST FIVE TIMES PER JOINT. THE TRACER WIRE SHALL ALSO BE ATTACHED TO ALL PVC LATERALS AND ATTACHED TO THE OUTSIDE OF EACH VALVE BOX SO THAT A PIPE LOCATOR CAN BE CONNECTED TO IT.
4. THE CONTRACTOR SHALL INSTALL WATER MAINS PER MSS/CWG SPECIFICATIONS. SOLVENT CEMENTED JOINTS AND THRUST BLOCKS ON PIPING SYSTEMS SHALL NOT BE ALLOWED.
5. THE CONTRACTOR SHALL INSTALL ALL WATER MAINS TO A MINIMUM DEPTH OF 36 INCHES AND A MAXIMUM DEPTH OF 42 INCHES BELOW FINAL GRADE.
6. THE CONTRACTOR SHALL INSTALL ALL SERVICE LATERALS A UNIFORM DISTANCE APART, LOCATED ON PROPERTY LOT LINE AT 90° FROM THE WATER MAIN. SERVICE LATERALS SHALL BE SEPARATELY CONNECTED TO THE WATER MAIN, NOT SPLICED TOGETHER.
7. THE CONTRACTOR SHALL CUT A "W" INTO CONCRETE CURB, LOCATED INSIDE OF A PAINTED BLUE SQUARE, LOCATED DIRECTLY IN FRONT OF EACH SERVICE LATERAL.
8. THE CONTRACTOR SHALL INSTALL CURB STOP, IN METER BOX, CURB STOP SHALL BE SET 8" BELOW FINISHED GRADE.
9. THE CONTRACTOR SHALL PROVIDE AND INSTALL IN-LINE VALVES ON WATER MAINS AT 1,000 FOOT MAXIMUM SPACING BETWEEN VALVES. VALVES SHALL BE LOCATED ON ALL TEES AND CROSSES. WATER MAINS SHALL BE PLACED UNDER SIDEWALKS WHERE POSSIBLE.
10. ALL WATERMAINS SHALL BE CLEANED BY PIGGING THE LINE WITH A FOAM PIG (MINIMUM OF 2 IN SERIES, 1 FLUSH). A FULL BORE FLUSH MAY BE REQUIRED AFTER PIGGING TO ENSURE THE PIPE IS CLEAN AND READY FOR SERVICE. THE CONTRACTOR SHALL COORDINATE UNI PIGGING AND FULL BORE FLUSH WITH THE CITY INSPECTOR.
11. THE CONTRACTOR SHALL DEMONSTRATE THAT LOCATION WIRE INSTALLED OVER ALL WATER MAINS IS IN WORKING CONDITION AT TIME OF ACCEPTANCE BY THE CITY.
12. ALL NEW SUBDIVISION CONSTRUCTION SHALL INSTALL DOUBLE POTABLE WATER SERVICES AT THE PROPERTY LINES.

CITY OF WINTER GARDEN - WASTEWATER SYSTEM NOTES:

1. SANITARY SEWER MAINS AND SERVICES SHALL BE PVC SDR 26 (MINIMUM). FITTINGS SHALL BE SDR 26. DUCTILE IRON IS NOT APPROVED FOR SANITARY SEWERS.
2. ALL SERVICES SHALL BE 6" (MINIMUM) DIAMETER AND TERMINATE AT THE PROPERTY LINE WITH 6" CLEAN OUT. (36" TO 48" DEEP AT LOT LINE)
3. MAGNETIC TAPE MUST BE PLACED 2' ABOVE THE TOP OF PIPE FOR THE ENTIRE LENGTH OF ALL MAINS AND SERVICES.
4. ALL SANITARY MANHOLES SHALL BE PAINTED INSIDE AND OUT WITH "BITUMASTIC SUPER SERVICE BLACK", BY KOPPERS OR APPROVED EQUAL. MANHOLES RECEIVING FLOW FROM FORCE MAINS SHALL BE LINED WITH FIBERGLASS, HDPE OR EPOXY AT THE PRECASTERS FACILITY.
5. ALL PIPE CONNECTIONS TO PRE-CAST MANHOLES SHALL BE MADE USING A FLEXIBLE EPDM RUBBER BOOT AND STAINLESS STEEL STRAP OR CAST IN BOOT BY A-LOK, Z-LOK OR EQUAL.
6. CONNECTIONS MADE TO EXISTING MANHOLES SHALL BE CORE BORED WITH A MINIMUM 6" BORE AND CONNECTION SEALED WITH FLEXIBLE BOOT AND STAINLESS STEEL CLAMP.
7. DEAD END MANHOLES SHALL HAVE A MINIMUM OF 5 FEET OF COVER FROM FINISHED GRADE TO OUTLET PIPE INVERT.
8. ALL PRECAST SEWER MANHOLES SHALL HAVE A 4 FOOT MINIMUM HIGH BARREL CONE SECTIONS SHALL BE 3 FOOT MAXIMUM. CONCRETE DONUTS FOR EXTENDING ARE ACCEPTABLE TO RAISE MANHOLES UP TO 1 FOOT MAXIMUM.
9. THE CONTRACTOR SHALL PROVIDE AND INSTALL BALLCENTRIC FLAP VALVES IN FORCE MAINS AT 1000 FOOT MAXIMUM SPACING BETWEEN VALVES. VALVES SHALL BE LOCATED AT ALL TEES AND CROSSES.
10. THE CONTRACTOR SHALL CUT A "S" INTO CONCRETE CURB LOCATED INSIDE OF A PAINTED GREEN SQUARE BOX, IN FRONT OF EACH SERVICE LOCATION.
11. THE CONTRACTOR SHALL PROVIDE TV INSPECTION OF ALL SANITARY SEWER MAINS AFTER SYSTEM IS COMPLETED, THOROUGHLY CLEANED, DRAINED AND FULLY VISIBLE. TV INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS. FAULTY INSPECTION DUE TO POOR CONDITIONS WILL REQUIRE REINSPECTION BY CONTRACTOR
12. THE CONTRACTOR SHALL PROVIDE A (WARRANTY) TV INSPECTION AT THE TWO YEAR IN SERVICE MILESTONE FOR EACH SYSTEM.
13. THE CONTRACTOR SHALL PROVIDE SANITARY SEWER TESTING, EXFILTRATION OR AIR, AS REQUIRED BY DESIGN ENGINEER AND SUBMIT CERTIFIED RESULTS TO THE CITY ENGINEER.
14. GRAVITY SEWERS DEPTHS SHALL NOT EXCEED 18 FEET.
15. THE DESIGN ENGINEER SHALL PROVIDE A MINIMUM OF ONE FOOT OF FREEBOARD BETWEEN THE LOWEST FINISHED FLOOR ELEVATION AND THE TOP ELEVATION OF THE ACT WELL.
16. ALL PENETRATIONS INTO CONCRETE STRUCTURES SHALL BE PRE-CAST OR CORE-DRILLED.
17. WARRANTY – ALL MATERIALS & EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR SHALL BE WARRANTED FOR A PERIOD OF TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE THEREOF AGAINST DEFECTIVE MATERIALS, DESIGN, AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE CITY OF FAILURE OF ANY PART OF THE WARRANTED EQUIPMENT OR MATERIALS DURING THE WARRANTY PERIOD, THE AFFECTED PART, PARTS, OR MATERIALS SHALL BE PROMPTLY REPLACED BY THE CONTRACTOR WITH NEW PARTS OR MATERIALS AT NO EXPENSE TO THE CITY. IN THE EVENT THE CONTRACTOR FAILS TO MAKE THE NECESSARY REPLACEMENT OR REPAIRS IMMEDIATELY AFTER NOTIFICATION, THE CITY MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.

CITY OF WINTER GARDEN - RECLAIMED WATER SYSTEM NOTES:

1. ALL PRIVATE RECLAIMED WATER SYSTEMS SHALL HAVE A CITY APPROVED BACKFLOW DEVICE ASSEMBLY AT EACH CONNECTION POINT WHEN CONNECTED TO THE CITY POTABLE WATER SYSTEM.
2. ALL MAINS AND SERVICE LATERALS SHALL BE HYDROSTATICALLY TESTED AT 150 PSI FOR A TWO HOUR PERIOD.
3. WARNING TAPE, NON-DETECTABLE, SIZE 3" WITH "RECLAIMED WATER LINE BELOW", MUST BE PLACED 8" TO 12" BELOW FINISHED GRADE ON ALL PVC WATER MAINS, LATERALS AND HEADER TEES, NUMBER 10 GAUGE TRACER WIRE SHALL BE ATTACHED TO THE TOP OF THE PIPE WITH DUCT TAPE, AT LEAST FIVE TIMES PER JOINT. THE TRACER WIRE SHALL ALSO BE ATTACHED TO ALL PVC LATERALS AND ATTACHED TO THE OUTSIDE OF EACH VALVE BOX SO THAT A PIPE LOCATOR CAN BE CONNECTED TO IT. THE CONTRACTOR SHALL DEMONSTRATE THE LOCATE WIRE TO BE IN WORKING CONDITION AT PROJECT COMPLETION.
4. THE CONTRACTOR SHALL INSTALL RECLAIMED WATER MAINS PER MSS/CWG. SOLVENT CEMENTED JOINTS AND THRUST BLOCKS SHALL NOT BE ALLOWED.
5. REUSE WATER MAIN SHALL BE BURIED TO A MINIMUM DEPTH OF 36" AND A MAXIMUM DEPTH 42" BELOW FINAL GRADE.
6. SERVICE LATERALS MUST BE LOCATED A UNIFORM DISTANCE APART AND ALIGNED TO PROPERTY LOT LINE AT 90° FROM THE RECLAIMED WATERMAIN.
7. CUSTOMER SERVICE LATERALS SHALL NOT BE SPLICED TOGETHER BETWEEN THE WATER MAIN AND CURB STOP.
8. THE CONTRACTOR SHALL CUT CURB A "R" INTO CONCRETE CURB LOCATED INSIDE OF A PAINTED SQUARE (PURPLE), DIRECTLY IN FRONT OF EACH SERVICE LATERAL AND VALVE.
9. THE CONTRACTOR SHALL SET DEPTH OF CURB STOP, IN METER BOX, 8" BELOW FINISHED GRADE.
10. THE CONTRACTOR SHALL INSTALL VALVE(S) IN MAIN, NO MORE THAN 1,000 FEET APART IN MAINLINE TEES AND CROSSES. VALVES SHALL BE PROVIDED AT EACH TEE OR CROSS LOCATED IN MAIN LINE.
11. RECLAIMED WATER MAINS MAY BE LOCATED UNDER SIDEWALKS. RECLAIMED MAINS LOCATED UNDER PAVEMENT SHOULD BE MINIMIZED.
12. ALL WATERMAINS SHALL BE CLEANED BY PIGGING THE LINE WITH A FOAM PIG (MINIMUM OF 2 IN SERIES, 1 FLUSH). A FULL BORE FLUSH MAY BE REQUIRED AFTER PIGGING TO ENSURE THE PIPE IS CLEAN AND READY FOR SERVICE. THE CONTRACTOR SHALL COORDINATE UNI PIGGING AND FULL BORE FLUSH WITH THE CITY INSPECTOR.
13. RECLAIMED WATERMAIN MAINS SHALL BE 8 INCH DIAMETER MINIMUM. 4 INCH IS ALLOWED ON DEAD END RUNS SERVING LESS THAN 20 HOMES. THE DESIGN ENGINEER SHALL SUBMIT HYDRAULIC CALCULATIONS THAT DEMONSTRATE THE PROPOSED SYSTEM WILL PROVIDE REQUIRED FLOWS AND MAINTAIN SYSTEM ABOVE MINIMUM PRESSURE. PEAK IRRIGATION RATE SHALL BE SIX(6) TIMES GREATER THAN THE AVERAGE IRRIGATION RATE OF FLOW.
14. RECLAIMED WATER SYSTEM COMPONENTS INCLUDING PIPE, VALVE BOX TOPS AND METER BOX TOPS SHALL BE RECLAIMED PURPLE IN COLOR.

CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION OF SEWER LINES

GENERAL:

1. ALL NEW SANITARY SEWER LINES, PRIVATE OR CITY MAINTAINED, IN THE CITY OF WINTER GARDEN'S SERVICE AREA SHALL BE INSPECTED BY CLOSED CIRCUIT TV INSPECTION BY THE CONTRACTOR WITH A CITY INSPECTOR PRESENT PRIOR TO BEING ACCEPTED BY THE CITY.

REQUIREMENTS PRIOR TO INSPECTION RELEASE:

1. ALL ELEMENTS OF THE SEWER SYSTEM MUST BE INSTALLED AND BE COMPLETELY FINISHED, INCLUDING MAIN SEWER LINES, LATERALS, CLEAN OUTS, AND MANHOLES PRIOR TO CCTV INSPECTION.
2. ALL SEWER LINES SHALL BE COMPLETELY CLEANED OF ANY DEBRIS, SAND, WATER, ETC. PRIOR TO THE CCTV INSPECTION. ANY OBJECT OR MATTER THAT PREVENTS CCTV INSPECTION FROM VIEWING CONDITION OF PIPELINE IS CONSIDERED AN OBSTRUCTION REQUIRING ADDITIONAL CLEANING. WHEN CCTV VIEW IS OBSTRUCTED, INSPECTION SHALL BE TERMINATED. THE CONTRACTOR SHALL CLEAN THE SEWER SYSTEM COMPLETELY AND RESCHEDULE CCTV RE-INSPECTION WITH THE CITY.
3. A HYDRAULIC SEWER CLEANER SHALL NOT BE USED DURING THE CCTV INSPECTION IF LINES ARE FOUND TO BE OBSCURED BY WATER OR DEBRIS DURING THE CCTV INSPECTION, THE INSPECTION SHALL BE TERMINATED AND RESCHEDULED TO A TIME WHEN SEWER CLEANING IS COMPLETE.
4. WHEN A SEWER LINE IS UNDER A PAVED AREA, THE AREA SHALL BE COMPACTED AND PRIMED BEFORE THE SYSTEM SHALL BE RELEASED FOR TV INSPECTION.

TELEVISION EQUIPMENT MINIMUM REQUIREMENTS:

1. THE CLOSED CIRCUIT TV CAMERA SHALL PRODUCE A CLEAR COLOR PICTURE ON THE MONITOR AND ON THE DVD RECORDING. THE CAMERA SHALL BE ABLE TO SHOW DETAIL TO THE POINT THAT ALL JOINTS AND ANY DEFECTS MAY BE READILY SEEN AT THE TIME OF THE INSPECTION. THE CAMERA SHALL STOP AND PAN AT EACH JOINT FOR COMPLETE 360 DEGREE INSPECTION.
2. REFER TO APPENDIX B OF THE REFERENCED STANDARDS FOR SPECIFICATION OF CLOSED CIRCUIT TELEVISION INSPECTION EQUIPMENT.
3. THE VIDEO RECORDER SHALL PRODUCE A NO NOISE STILL PICTURE, AND PROVIDE BOTH AUDIO AND VIDEO DURING THE INSPECTION.
4. A MEASURING DEVICE, APPROVED BY THE CITY, TO CHECK THE GRADE OF THE PIPE DURING THE INSPECTION, SHALL BE REQUIRED. GAUGE DEPTH 0" TO 7" MIN. WITH 1/2" MARKINGS.
5. AUDIO OF THE INSPECTION SHALL BE SIMULTANEOUSLY RECORDED ON DVD DISC. THE AUDIO SHALL CONSIST OF ORDINARY DESCRIPTION AND COMMENTARY. A TAPE WILL BE GIVEN TO THE INSPECTOR ON SITE AT THE END OF THE DAY.

PROCEDURE FOR TELEVISING:

1. THE CITY'S ENGINEERING INSPECTION DIVISION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS NOTICE PRIOR TO THE TIME PLANNED FOR THE TV INSPECTION TO COMMENCE. A DEFINITE TIME AND DATE WILL BE AGREED UPON BY THE CONTRACTOR AND INSPECTOR AT THAT TIME.
2. NO INSPECTION SHALL COMMENCE WITHOUT THE PRESENCE OF THE INSPECTOR, EXCEPT WHEN PRIOR ARRANGEMENTS HAVE BEEN MADE BETWEEN THE CONTRACTOR, INSPECTOR, AND THE CITY. TV INSPECTION SHALL BE PERFORMED BY THE CONTRACTOR AT THE EXPENSE OF THE CONTRACTOR.
3. ALL CCTV INSPECTIONS SHALL COMMENCE UP STREAM OF THE SYSTEM TO PREVENT FOREIGN SUBSTANCES FROM ENTERING A SECTION PREVIOUSLY TELEVISED. THE CAMERA SHALL BE STARTED FROM THE DOWNSTREAM MANHOLE AND PROCEED UPSTREAM IN DIRECTION OPPOSING THE NORMAL FLOW IN THE LINE. THIS PROCEDURE WILL ALLOW FOR THE VIEWING OF THE SERVICE LATERALS.
4. BEFORE THE CAMERA IS PLACED IN THE SEWER LINE, WATER WITH YELLOW OR ORANGE DYE SHALL BE PUT INTO THE UPSTREAM MANHOLE OF THE SECTION BEING INSPECTED. CAMERA WILL HAVE A GAUGE SHOWING 1/2" MARKS FROM 1/2" TO 2-1/2". THIS WILL ENABLE THE CAMERA TO DETECT ANY CHANGES IN GRADE THAT MAY BE PRESENT IN THE SYSTEM.
5. THE CCTV AND DVD RECORDER SHALL BE TURNED ON BEFORE THE CAMERA IS PLACED IN THE MANHOLE FOR INSPECTION AND SHALL NOT BE TURNED OFF UNTIL THE CAMERA IS REMOVED FROM THE MANHOLE. THE CAMERA SHALL BE MOVED THROUGH THE LINE UNDER THE CONTROL OF THE CCTV CAMERA OPERATOR. THE CAMERA SHALL BE DRAWN THROUGH THE LINE AT A RATE NOT TO EXCEED THIRTY (30) FEET PER MINUTE AND SHALL STOP AT ALL SERVICE CONNECTIONS AND PIPE JOINTS IN THE PIPELINE.
6. A DVD RECORDING SHALL BE MADE OF THE ENTIRE SYSTEM BEING TELEVISED. THIS SHALL BECOME THE PROPERTY OF THE CITY UPON COMPLETION OF THE TV INSPECTION (NOT A COPY). THE TAPE(S) SHALL BE LABELED IN SUCH A MANNER THAT STATES THE PROJECT NAME, DATE OF INSPECTION AND LINE SECTION according TO CONSTRUCTION PLANS CONTAINED ON EACH TAPE. A WRITTEN REPORT SHALL ACCOMPANY THE DVD DISC.

CITY OF WINTER GARDEN - TRUST RESTRAINT TABLE

RESTRAINED FORCE MAIN PIPE TABLE

MIN MUM LENGTH(FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)	PIPE SIZE								
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	19	25	30	34	44	52	60	70	80
45° BEND	8	10	12	14	18	21	25	30	34
22-1/2° BEND	4	5	6	7	9	10	12	14	16
11-1/4° BEND	2	3	4	5	6	7	8	9	10
PLUG, DEAD END OR BRANCH OF TEE	40	52	63	72	93	111	130	155	178
VALVE	20	25	32	36	47	56	78	116	89

RESTRAINED WATER AND RECLAIMED PIPE TABLE

MIN MUM LENGTH(FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)	PIPE SIZE								
	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	29	37	44	51	65	77	89	105	120
45° BEND	12	15	18	21	27	32	37	44	50
22-1/2° BEND	6	7	9	10	13	15	18	21	24
11-1/4° BEND	3	4	5	6	7	8	9	10	12
PLUG, DEAD END OR BRANCH OF TEE	59	77	93	108	138	166	194	231	265
VALVE	59	77	93	108	138	166	194	231	265

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

PROPOSED UTILITY	POTABLE WATER		RECLAIMED WATER ✱2		SANITARY SEWER (GRAVITY)		SANITARY SEWER (FORCEMAIN)		STORM WATER		ACCEPTABLE VARIANCES
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	
POTABLE WATER	--	--	3'	12"	6'	12"	6'	12"	3'	6" A 12" B	SEE GENERAL NOTES: NO. 4 & 5
RECLAIMED WATER ✱	3'	12"	--	--	3'	6" A 12" B	3'	12"	--	--	
SANITARY SEWER (GRAVITY)	6'	12"	3'	6" A 12" B	--	--	--	--	--	--	
SANITARY SEWER (FORCEMAIN)	6'	12"	3'	12"	--	--	--	--	--	--	

GENERAL NOTES:

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
2. ✱2 FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS RECLAIMED WATER AS DEFINED BY F.A.C. 62-610, CHAPTER 62-610 OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.
   A. DENOTES POTABLE WATER ABOVE RECLAIMED WATER, SANITARY SEWER OR STORM WATER, OR RECLAIMED WATER ABOVE SANITARY SEWER.
   B. DENOTES POTABLE WATER BELOW RECLAIMED WATER, SANITARY SEWER OR STORM WATER, OR RECLAIMED WATER BELOW SANITARY SEWER.
4. UTILITY SEPARATION – VERTICAL CLEARANCE MITIGATION
   A. WHERE WATER AND GRAVITY SANITARY SEWER MAINS CROSS WITH LESS THAN REQUIRED VERTICAL CLEARANCE OR THE SEWER MAIN IS ABOVE THE WATER MAIN, THE SANITARY SEWER WILL BE 20 FEET OF EITHER:
      A.1. DUCTILE IRON PIPE, CENTERED ON THE POINT OF CROSSING, OR;
      A.2. CONCRETE ENCASED VERIFIED CLAY, OR;
      A.3. PVC PIPE UPGRADED TO WATER MAIN STANDARDS AND PRESSURE TESTED.
   B. WHERE WATER MAINS AND STORM SEWER PIPES CROSS WITH LESS THAN REQUIRED VERTICAL CLEARANCE, THE WATER MAIN SHALL BE 20 FEET OF DUCTILE IRON PIPE CENTERED ON THE POINT OF CROSSING.
   C. SEPARATION REQUIREMENTS BETWEEN FORCE MAINS AND POTABLE WATER MAINS MUST BE MAINTAINED UNLESS APPROVED IN ADVANCE BY THE DEPARTMENT.
5. UTILITY SEPARATION – HORIZONTAL SEPARATION MITIGATION
   A. WHEN A WATER MAIN PARALLELS A GRAVITY SANITARY SEWER MAIN, A SEPARATION (MEASURED EDGE TO EDGE) OF AT LEAST SIX FEET SHOULD BE MAINTAINED. WHERE THIS SEPARATION IS NOT MET, ONE OF THE FOLLOWING MUST OCCUR:
      A.1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER, OR;
      A.2. IF BOTH SANITARY SEWER AND POTABLE WATER MAINS ARE PROPOSED AND THE ABOVE (1.) IS NOT MET, THE SANITARY SEWER PIPES SHALL BE UPGRADED TO THE EQUIVALENT PIPE MATERIAL AS THE WATER MAIN AND PRESSURE TESTED.
      A.3. IF THE SANITARY SEWER IS EXISTING AND THE POTABLE WATER MAIN IS PROPOSED, THE WATER MAIN SHALL AT A MINIMUM, BE UPGRADED TO DUCTILE IRON PIPE, CONSTRUCTED IN SEPARATE TRENCHES, LAID AT A HIGHER ELEVATION THAN THE SANITARY SEWER, AND UTILIZE STANDARD JOINTS.
   B. SEPARATION REQUIREMENTS BETWEEN FORCE MAINS AND POTABLE WATER MAINS MUST BE MAINTAINED UNLESS APPROVED IN ADVANCE BY THE DEPARTMENT.
6. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.

THRUST RESTRAINT NOTES:

1. THE TABLES INDICATE MINIMUM LENGTHS OF RESTRAINED JOINTS ON EACH SIDE OF FITTINGS AND CHANGES IN DIRECTION. WHERE PRACTICAL, FULL LENGTHS OF RESTRAINED PIPE SHALL BE LAID TO ACHIEVE THE REQUIRED MINIMUM LENGTHS SHOWN.
2. WHERE COMBINATIONS OF FITTINGS ARE USED, THE PIPING BETWEEN THE FITTINGS SHALL BE RESTRAINED. THE MINIMUM RESTRAINED LENGTH OF PIPE REQUIRED UPSTREAM AND DOWNSTREAM OF THE COMBINATION OF FITTINGS SHALL BE DETERMINED ON THE BASIS OF ONE EQUIVALENT FITTING (I.E., 2-45 DEGREE BENDS WILL BE CONSIDERED AS THOUGH A 90° BEND WERE LOCATED MIDWAY BETWEEN THE TWO 45° BENDS).
3. FOR PIPE THAT IS ENCASED IN POLYETHYLENE, RESTRAINED JOINTS MINIMUM LENGTHS SHALL BE INCREASED BY 50 PERCENT.
4. FOR FITTINGS OTHER THAN THOSE PRESENTED IN THE ABOVE TABLES, RESTRAINED JOINT LENGTHS SHALL BE DETERMINED IN ACCORDANCE WITH "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION. RESTRAINED JOINT LENGTHS FOR A GIVEN PRESSURE RANGE SHALL BE BASED ON THE MAXIMUM PRESSURE FOR THE TEST PRESSURE RANGE, SAFETY FACTOR AND SOIL TYPE (SAND SILT) SOIL 3-FEET DEPTH, LAYING CONDITION NO. 3 AND FACTOR OF SAFETY OF 1.5.
5. IN-LINE VALVES: PROVIDE MECHANICAL RESTRAINT ON EACH SIDE OF THE VALVE.
6. ALL RECLAIMED WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 150 PSI. ALL WASTEWATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 100 PSI.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	Revised Comments/Notes	3/4/24
2	Revised Water & Reuse Notes	5/4/24

REVISIONS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR UTILITY CONSTRUCTION

STANDARD DETAILS
FOR
UTILITY SYSTEMS

DATE
JANUARY 2024
SHEET
1
1 OF 11

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA
Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:39-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO. DATE REMARKS
REVISIONS

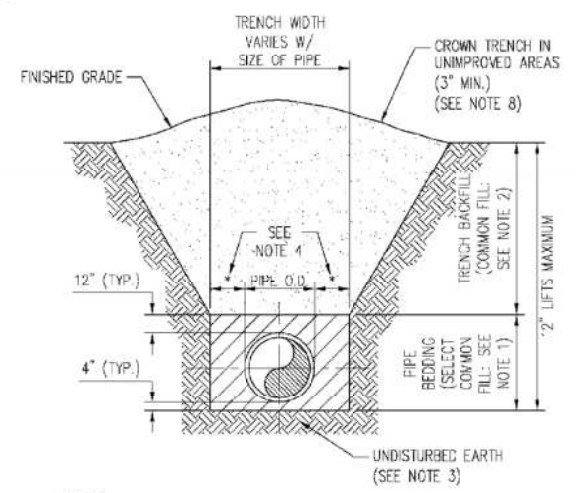
CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

PROJECT NO: 2025.0704
DATE: 5/26/2026

C4.1
CITY OF WINTER GARDEN NOTES

CHECKED: CDB DRAWN: GFC

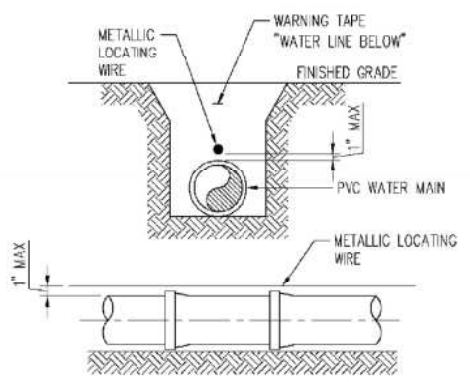
COPYRIGHT ©2026 INTERPLAN LLC. ALL RIGHTS RESERVED. COPYRIGHT & OTHER RIGHTS IN THESE PLANS AND DOCUMENTS DO NOT CONSTITUTE PUBLICATION OR OTHERWISE LIMIT OR IMPAIR COMMON LAW, STATUTORY AND OTHER RIGHTS IN THE EVENT OF UNAUTHORI



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING MAY BE REQUIRED AS DIRECTED BY THE CITY OF WINTER GARDEN.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE CITY OF WINTER GARDEN MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

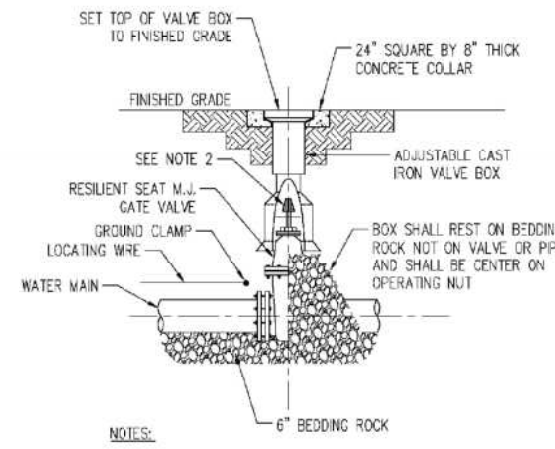
1 STANDARD BEDDING DETAIL
N.T.S.



NOTES:

1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE ATTACHED TO THE TOP OF PIPE WITH DUCT TAPE, AT LEAST 5 TIMES PER JOINT.
2. LOCATING ROD SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING ABOVE TOP OF BOX ½" SO AS NOT TO INTERFERE WITH VALVE OPERATION.

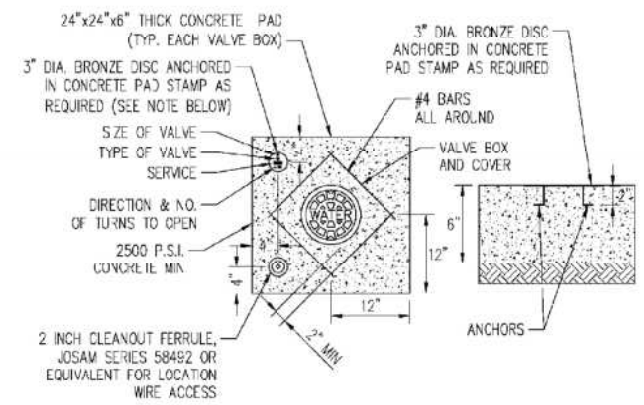
2 PVC PIPE LOCATING WIRE DETAIL
N.T.S.



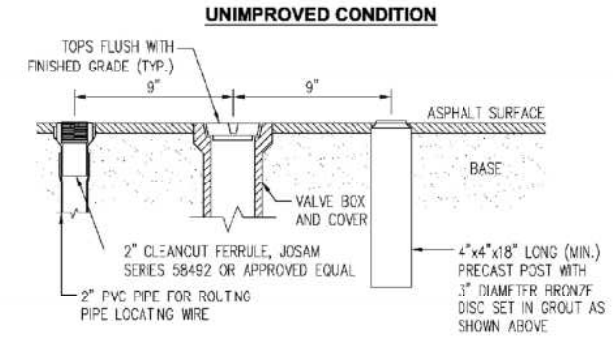
NOTES:

1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.

3 GATE VALVE & BOX DETAIL
N.T.S.



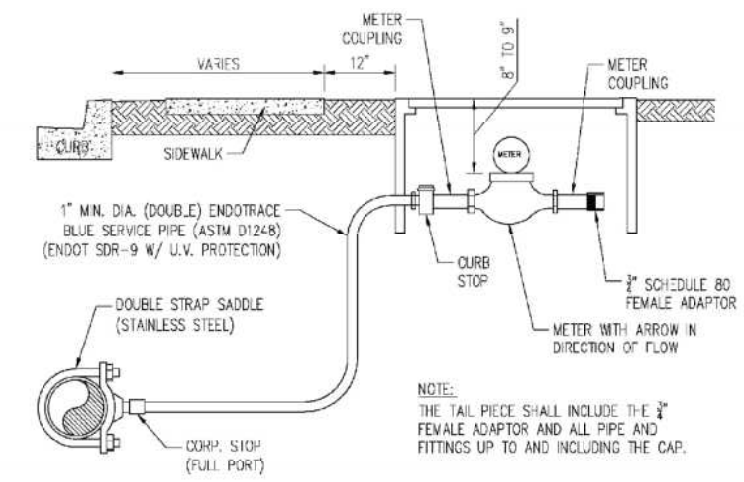
UNIMPROVED CONDITION



IMPROVED CONDITION

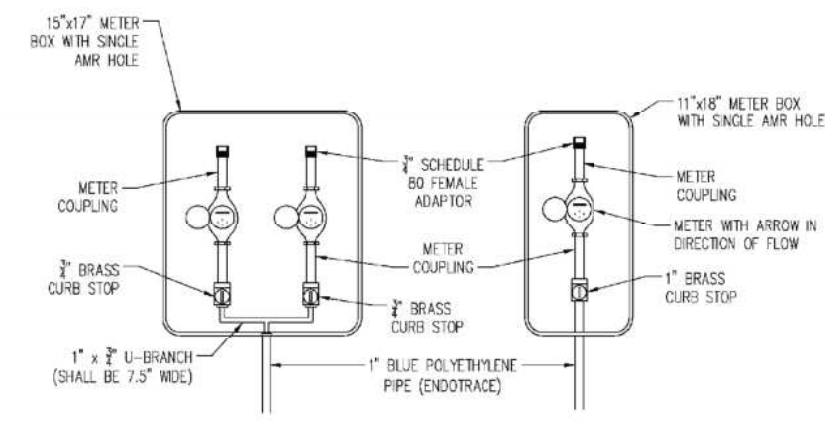
NOTE:
BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.

7 VALVE BOX COLLAR
N.T.S.



NOTE:
THE TAIL PIECE SHALL INCLUDE THE ¾" FEMALE ADAPTOR AND ALL PIPE AND FITTINGS UP TO AND INCLUDING THE CAP.

SERVICE SECTION
N.T.S.



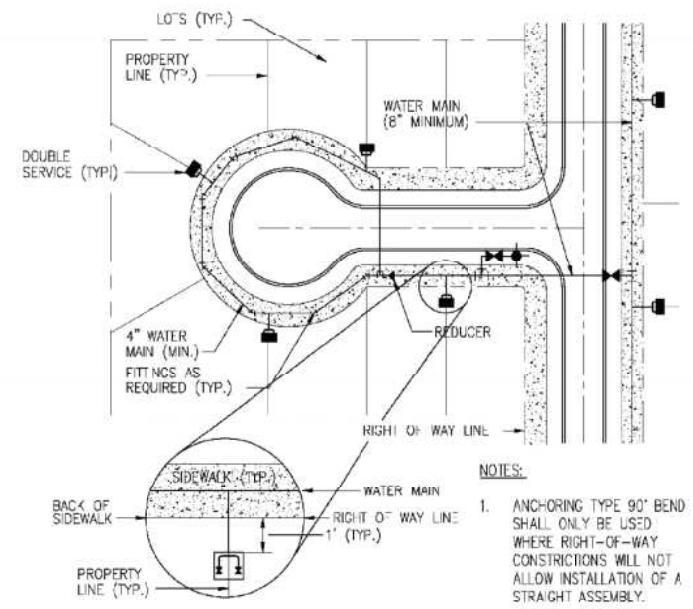
DOUBLE SERVICE (TOP VIEW)
N.T.S.

SINGLE SERVICE (TOP VIEW)
N.T.S.

NOTES:

1. ALL FITTINGS BETWEEN THE WATER MAIN AND THE METER COUPLING SHALL BE BRASS WITH COMPRESSION/PACK JOINT CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE IN A METER BOX ASSEMBLY, WHICH SHALL BE PLACED TO GRADE IN THE UTILITY EASEMENT AT THE PROPERTY LINE(S) OF THE LOT(S) TO BE SERVED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION TO AND INCLUDING THE METER BOX ASSEMBLY. THE CITY SHALL FURNISH THE METER AND THE TAIL PIECE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING THE METER BOX ASSEMBLY TO FINISH GRADE AND MAKING ANY GRADE ADJUSTMENTS TO THE METER BOX IF REGRADING OCCURS.
5. ALL SERVICE LINES SHALL BE POLY ENDOTRACE PIPE AND SHALL BE BLUE IN COLOR W/WIRE.
6. THE POINT OF CONNECTION IS LOCATED ONE FOOT BEYOND THE METER BOX. THE PLUMBER/CUSTOMER SHALL BE RESPONSIBLE FOR MAINTENANCE BEYOND THE POINT OF CONNECTION.
7. IN NO CASE IS METER TO BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.

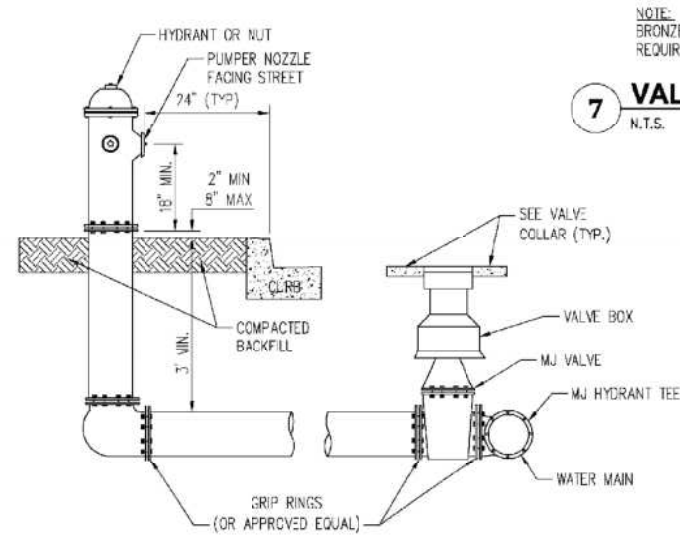
8 WATER SERVICE DETAIL
N.T.S.



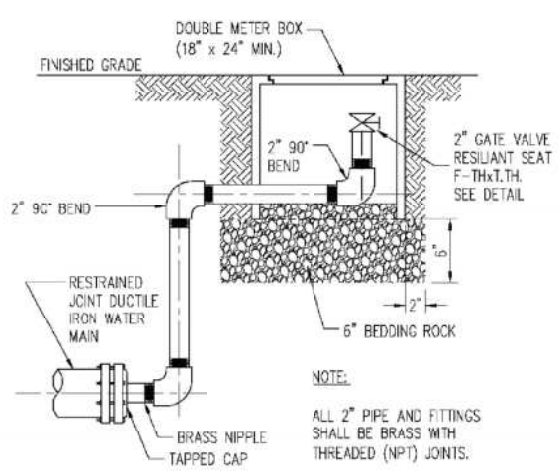
NOTES:

1. ANCHORING TYPE 90° BEND SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRICTIONS WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.
2. METER BOX TO BE INSTALLED BY THE CONTRACTOR.

5 CUL-DE-SAC LOOPING AND METER BOX PLACEMENT DETAIL
N.T.S.

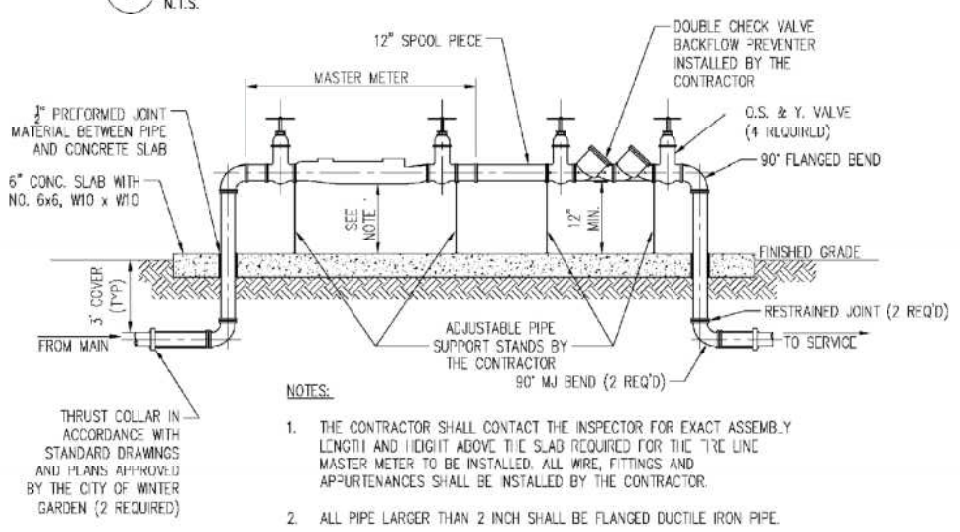


6 FIRE HYDRANT ASSEMBLY
N.T.S.



NOTE:
ALL 2" PIPE AND FITTINGS SHALL BE BRASS WITH THREADED (NPT) JOINTS.

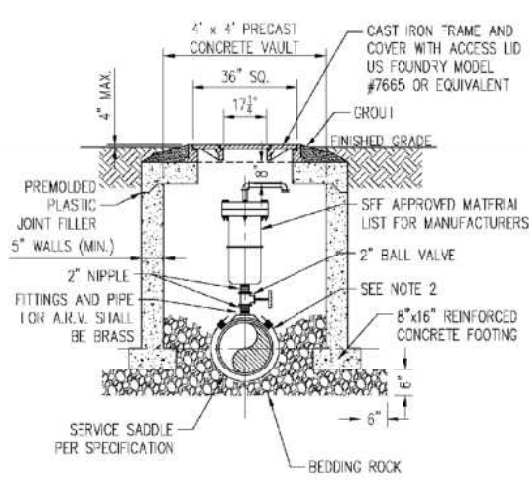
4 BLOWOFF VALVE DETAIL
N.T.S.



NOTES:

1. THE CONTRACTOR SHALL CONTACT THE INSPECTOR FOR EXACT ASSEMBLY LENGTH AND HEIGHT ABOVE THE SLAB REQUIRED FOR THE FIRE LINE MASTER METER TO BE INSTALLED. ALL WIRE, FITTINGS AND APPURTENANCES SHALL BE INSTALLED BY THE CONTRACTOR.
2. ALL PIPE LARGER THAN 2 INCH SHALL BE FLANGED DUCTILE IRON PIPE.
3. SENSUS METER REQUIRED.
4. 2" BYPASS METER SHALL BE CONSTRUCTED ON ALL MASTER METER ASSEMBLIES THREE INCHES AND LARGER.

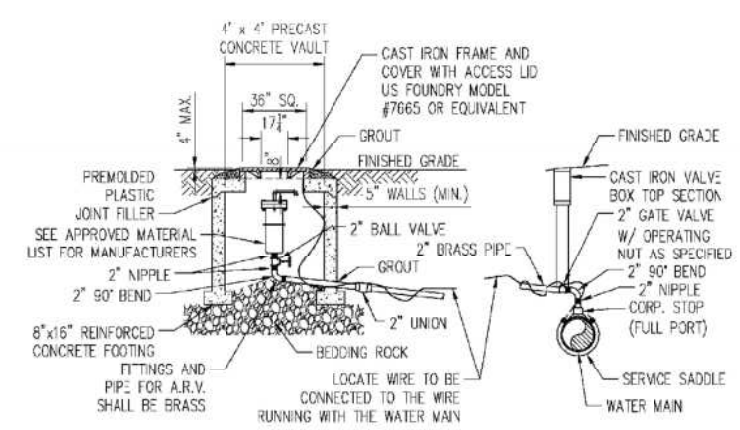
9 MASTER METER ASSEMBLY
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 3.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION AND "POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.

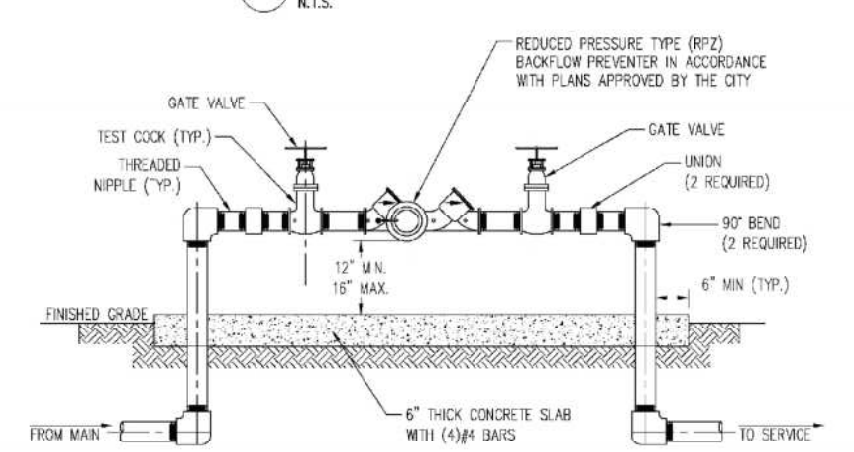
10 AIR RELEASE VALVE & VAULT
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION, "SEWER" "RECLAIMED WATER OR POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.
8. LOCATE WIRE IN THE ARV VAULT SHALL BE SPLICED TO THE WIRE RUNNING WITH THE WATER MAIN AND EXCESS WIRE TO BE PLACED IN ARV VAULT. THE POINT OF CONNECTION AT THE MAIN SHALL HAVE A WATER PROOF CONNECTOR.

11 OFFSET AIR RELEASE VALVE ASSEMBLY
N.T.S.



NOTES:

1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 80 PVC. NO GALVANIZED PIPE WILL BE APPROVED.
2. ALL PIPE LARGER THAN 2" SHALL BE FLANGED DUCTILE IRON PIPE.
3. NO GALVANIZED PIPE ALLOWED.

12 BACKFLOW PREVENTER ASSEMBLY
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	Water Service	4/4/14
2	ARV Detail	4/4/14
3	Service Detail Update	1/24

REVISIONS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR UTILITY CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
POTABLE WATER SYSTEMS

DATE
JANUARY 2024
SHEET
2
2 OF 11

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:40-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

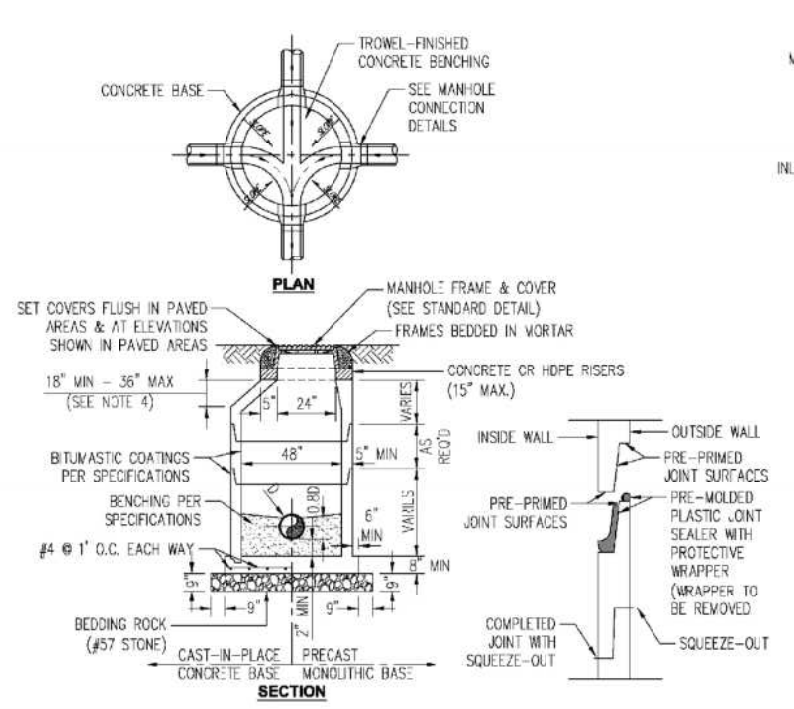
PROJECT NO: 2025.0704
DATE: 5/26/2026

C4.2
CITY OF WINTER GARDEN DETAILS

CHECKED: CDB DRAWN: GFC

KEVCAB - 05/27/2026 8:54:46 AM

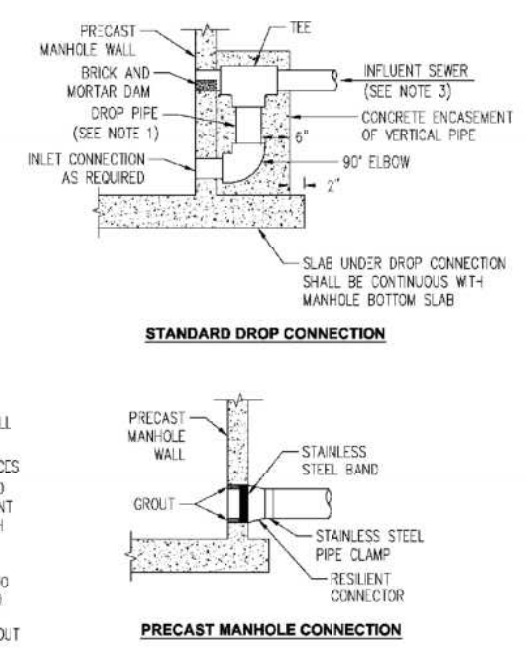
COPYRIGHT © 2026 INTERPLAN LLC RESERVES COPYRIGHT & OTHER RIGHTS RESTRICTING THESE DOCUMENTS TO THE ORIGINAL SITE OR PURPOSE FOR WHICH THEY WERE PREPARED. REPRODUCTIONS, CHANGES OR ASSIGNMENTS ARE PROHIBITED.



NOTES:

1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS. ALL DROPS TO BE OUTSIDE OF THE MANHOLE.
2. E-Z RAPP OUTSIDE ALL JOINTS
3. GROUT WITH NON-SHRINKING GROUT INSIDE JOINTS
4. NO CONES OVER 3 FT. TALL
5. ALL PRECAST CONCRETE SHALL BE COATED INSIDE AND OUTSIDE WITH COAL TAR EPOXY, MINIMUM 16 MIL DMT.

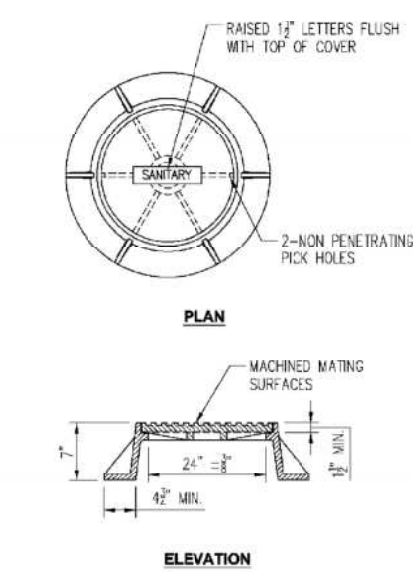
1 PRECAST CONCRETE SANITARY MANHOLE
N.T.S.



NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 2' OR MORE ABOVE THEN MANHOLE INVERT.

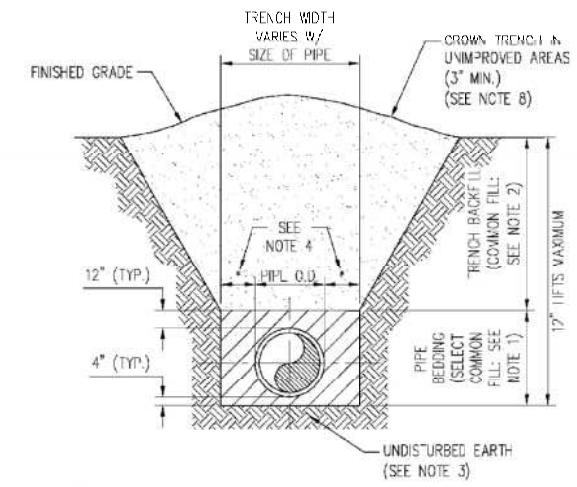
2 MANHOLE CONNECTION DETAIL
N.T.S.



NOTES:

1. MANHOLE FRAME & COVER SHALL BE 24" OPENINGS, USE #AS-225 AS MANUFACTURED BY U.S. FOUNDRY & MFG. CORP. OR COMPOSITE ACCESS PRODUCTS H-25 PRODUCT.
2. RAIN STOPPER LIDS OR RAIN GUARD LIDS (LFVHS) REQUIRED.

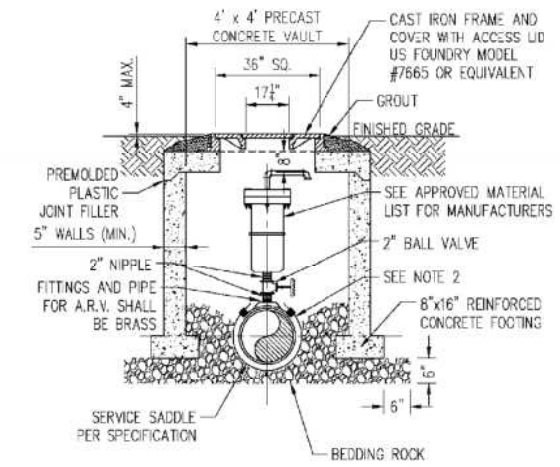
3 MANHOLE FRAME AND COVER
N.T.S.



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180 AND CONTAINING NO MORE THAN 5% PASSING #200 SIEVE.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING MAY BE REQUIRED AS DIRECTED BY THE CITY OF WINTER GARDEN.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE CITY OF WINTER GARDEN MANUAL OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY OF WINTER GARDEN RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

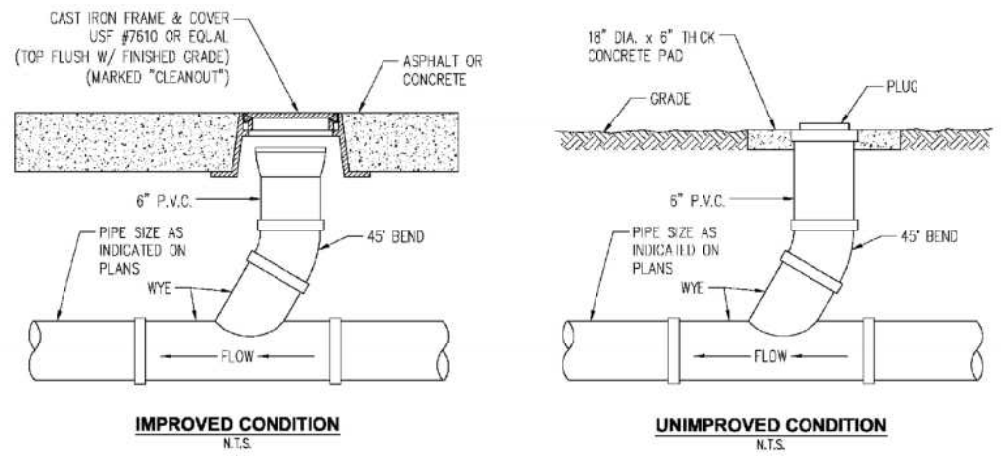
4 STANDARD BEDDING DETAIL
N.T.S.



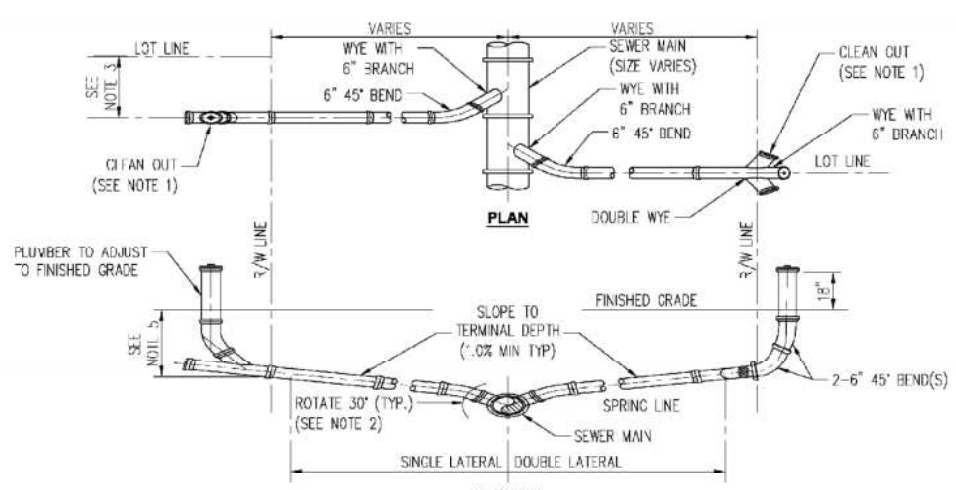
NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 3.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION AND "WASTEWATER".
7. NO GALVANIZED PIPE/VALVES.

5 AIR RELEASE VALVE & VAULT
N.T.S.



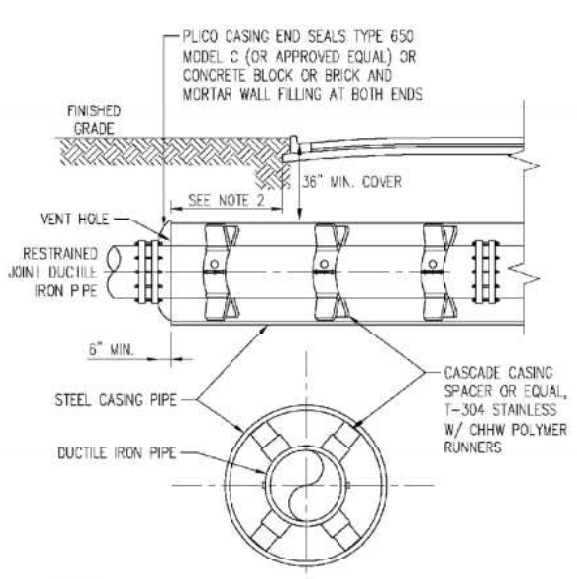
6 SANITARY SEWER CLEAN OUT DETAIL
N.T.S.



NOTES:

1. CLEANOUT SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
3. WYES AND 45° BENDS SHALL BE PVC (SDR 26).
4. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE, 25' MAXIMUM.
5. 4' TYP TERMINAL DEPTH (3' MIN) REQUIRED FOR SERVICE AT RIGHT-OF-WAY.

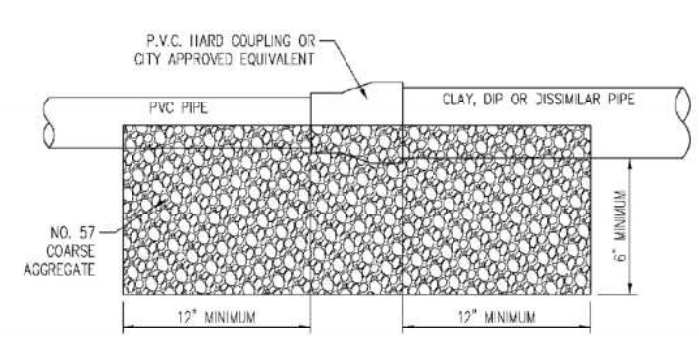
7 SANITARY SEWER SERVICE LATERAL DETAIL
N.T.S.



NOTES:

1. WHERE PRACTICAL, CASING SHALL EXTEND 8' BEYOND EDGE OF PAYMENT AND SHALL NOT BE LESS THAN 6' BEYOND EDGE OF PAYMENT IN ANY CASE.
2. CASING SPACERS AND END SEALS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
3. DESIGN ENGINEER TO DETERMINE NEED FOR SACRIFICIAL ANODE (S) FOR CORROSION CONTROL.

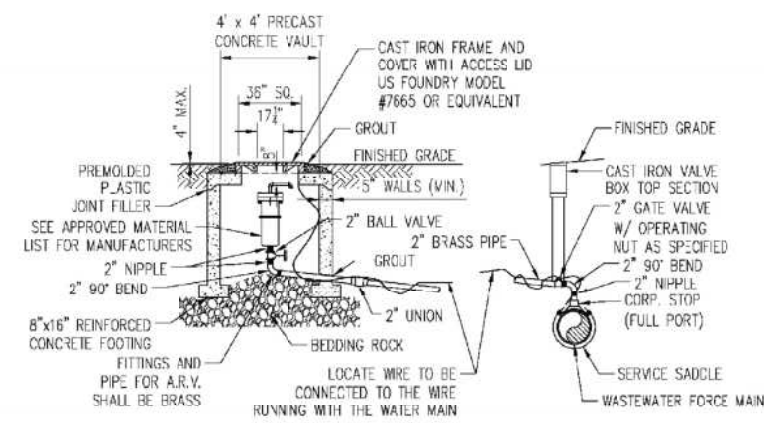
8 SEWER MAIN STEEL CASING DETAIL
N.T.S.



NOTE:

1. FIELD VERIFY MATERIALS OF EXISTING PIPES TO SELECT PROPER CONNECTOR.
2. HARBCO COUPLING OR APPROVED EQUIVALENT FOR ALL PIPE MATERIALS, UNLESS APPROVED IN WRITING BY THE CITY.

9 SEWER MAIN CONNECTION DETAIL
N.T.S.



NOTES:

1. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
2. DOUBLE STRAP SADDLE AND WRAP WITH TWO LAYERS OF WIDE PLASTIC OR POLY TAPE WITH STAINLESS STEEL STRAP.
3. PIPE INSTALLATION SHALL BE SUCH THAT THE A.R.V. IS LOCATED AT THE HIGHEST POINT IN THE RESPECTIVE SEGMENT.
4. INTERIOR AND EXTERIOR CONCRETE SURFACES SHALL RECEIVE PROTECTIVE COATING AS SPECIFIED FOR VALVE VAULTS.
5. CAST IRON FRAME, COVER AND ACCESS LID SHALL BE INSTALLED FLUSH WITH FINISHED GRADE.
6. COVER SHALL READ "WINTER GARDEN UTILITIES DIVISION, "SEWER" "RECLAIMED WATER OR POTABLE WATER".
7. NO GALVANIZED PIPE/VALVES.
8. LOCATE WIRE IN THE ARV VAULT SHALL BE SPLICED TO THE WIRE RUNNING WITH THE MAIN AND EXCESS WIRE TO BE PLACED IN ARV VAULT. THE POINT OF CONNECTION AT THE MAIN SHALL HAVE A WATER PROOF CONNECTOR.

10 OFFSET AIR RELEASE VALVE ASSEMBLY
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

No.	ITEM	DATE
1	Sanitary Manhole	4/7/14
2	Offset ARV Detail	4/7/14
3	MH Ring & Cover	1/24

REVISIONS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR UTILITY CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
WASTEWATER SYSTEMS

DATE
JANUARY 2024
SHEET
3
3 OF 11

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:41-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

PROJECT NO: 2025.0704
DATE: 5/26/2026

C4.3
CITY OF WINTER GARDEN DETAILS

CHECKED: CDB DRAWN: GFC

KEVCAB - 05/27/2026 8:54:52 AM

COPYRIGHT © 2026 INTERPLAN LLC RESERVES COPYRIGHT & OTHER RIGHTS RESTRICTING THESE DOCUMENTS TO THE ORIGINAL SITE OR PURPOSE FOR WHICH THEY WERE PREPARED. REPRODUCTIONS, CHANGES OR ASSIGNMENTS ARE PROHIBITED.

GENERAL NOTES:

1. ALL NEW STORM AND SANITARY SEWER LINES IN THE CITY OF WINTER GARDEN SHALL BE SUBJECTED TO CLOSED CIRCUIT TV INSPECTION PRIOR TO BEING ACCEPTED BY THE CITY, WHETHER PRIVATE OR CITY MAINTAINED. ALL STORM SEWER PIPE SHALL BE REINSPECTED AT THE YEAR END, COST TO BE PAID BY THE OWNER.

2. PIPE MATERIAL SHALL BE AS SHOWN ON THE CONSTRUCTION PLANS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

3. CONTRACTOR AND OWNER ARE RESPONSIBLE FOR ENSURING THAT ALL CITY, COUNTY, STATE (FDEP, FDOT, SJRWMD, ETC.), AND FEDERAL PERMITS (IF ANY) HAVE BEEN ISSUED FOR THE PROJECT.

4. ALL STORM SYSTEM MUST BE WATER-TIGHT WITH ALL JOINTS WRAPPED.

5. STORM SYSTEM WILL BE CLEANED PRIOR TO BEING TV'D.

6. THE OWNER SHALL KEEP A COPY OF THE WATER MANAGEMENT DISTRICT PERMIT, NPDES, NOI AND SWPP PLAN IN A CONSPICUOUS LOCATION ON THE JOB SITE AT ALL TIMES.

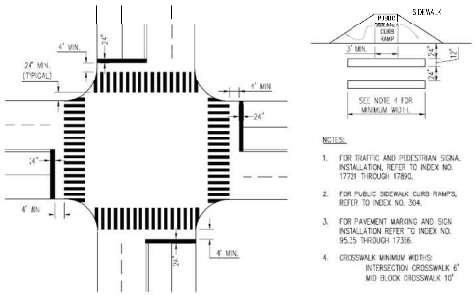
7. ALL STORM SEWER MANHOLES FRAME & COVER SHALL BE ASTM 225.

8. CLEAN SAND SHALL CONSIST OF MATERIAL HAVING LESS THAN 5% PASSING THE #200 SIEVE.

9. ONLY CONCRETE RISER RINGS WILL BE ALLOWED TO BE PLACED FOR STORM MANHOLES. ALL RISER RINGS SHALL BE SEALED TO THE STRUCTURE USING WRAPID SEAL. NO MORE THAN 15" WILL BE ALLOWED.

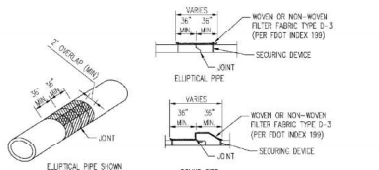
10. STORM SEWER PIPES SHALL MEET ASTM C76 & ASTM C507.

11. ALL STORM SEWER STRUCTURE SECTIONS SHALL BE SEALED WITH WRAPID SEAL.



NOTES:
1. FOR TRAFFIC AND PEDESTRIAN SIGNAL INSTALLATION, REFER TO INDEX NO. 17731 THROUGH 17890.
2. FOR PUBLIC SIDEWALK CURB RAMPS, REFER TO INDEX NO. 304.
3. FOR PAVEMENT MARKING AND SIGN INSTALLATION REFER TO INDEX NO. 95135 THROUGH 17356.
4. CROSSWALK MINIMUM WIDTHS: INTERSECTION CROSSWALK 6' MID BLOCK CROSSWALK 10'

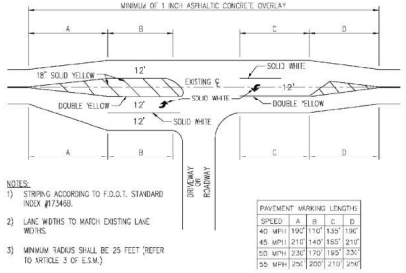
1 TYPICAL CROSSWALK
N.T.S.



Cost of filter fabric jacket to be included in cost of pipe culverts.

FOR ALL PIPE TYPES - CONCRETE PIPE SHOWN

2 FILTER FABRIC JACKET
N.T.S.

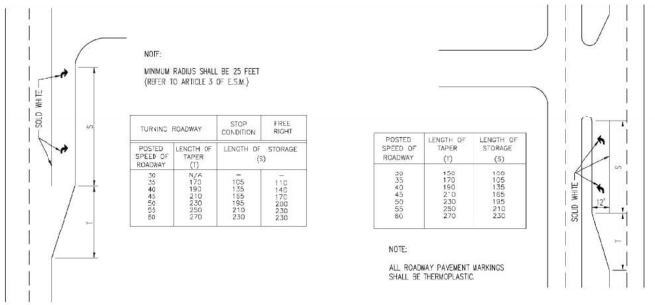


NOTES:
1) STRIPING ACCORDING TO F.D.O.T. STANDARD INDEX #17346D.
2) LANE WIDTHS TO MATCH EXISTING LANE WIDTHS.
3) MINIMUM RADIUS SHALL BE 25 FEET (REFER TO ARTICLE 3 OF E.S.M.)
4) ALL ROADWAY PAVEMENT MARKING SHALL BE THERMOPLASTIC.

PAVEMENT MARKING LENGTHS

SPEED	A	B	C	D
40 MPH	190'	110'	135'	190'
45 MPH	210'	140'	165'	210'
50 MPH	230'	170'	195'	230'
55 MPH	250'	200'	210'	250'

3 TYPICAL INTERSECTION
N.T.S.



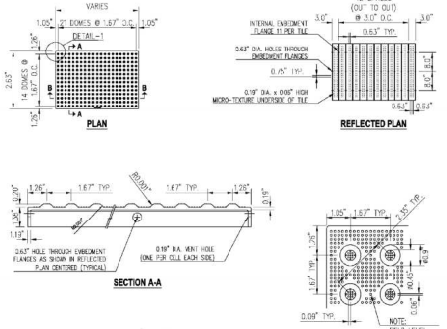
TURNING ROADWAY		STOP CONDITION	FREE RIGHT
POSTED SPEED OF ROADWAY	LENGTH OF TAPER (T)	LENGTH OF (S)	STORAGE
30	N/A	–	–
35	170	105	110
40	190	135	140
45	210	165	170
50	230	195	200
55	250	210	230
60	270	230	230

4 RIGHT TURN DECELERATION LANE
N.T.S.

POSTED SPEED OF ROADWAY	LENGTH OF TAPER (T)	LENGTH OF STORAGE (S)
30	150	105
35	170	105
40	190	135
45	210	165
50	230	195
55	250	210
60	270	230

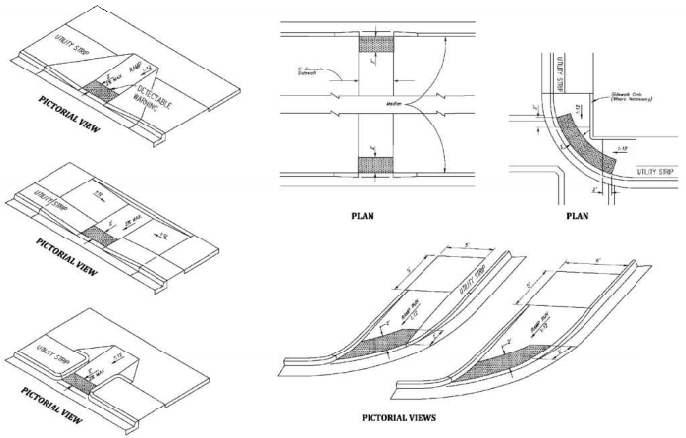
NOTE:
ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC

5 DIVIDED HIGHWAY LEFT TURN STORAGE LANE
N.T.S.

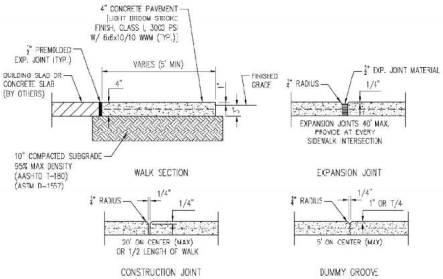


NOTE:
1. CURB RAMP DETECTABLE WARNING TILE SHALL BE ARMOR TILE OR EQUAL.
2. ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 MM) FROM THE BACK OF CURB.

8 DETECTABLE WARNING DETAIL
N.T.S.



6 CURB RAMPS & DETECTABLE WARNING PLACEMENT
N.T.S.



7 SIDEWALK DETAILS
N.T.S.

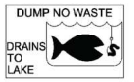


PLATE SHALL BE ADDED TO STORMWATER INLETS AS REQUIRED BY THE CITY.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEER'S DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

DATE
RLV — 5 — 05/15

ITEM
No.

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR ROADWAY & DRAINAGE
CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
PUBLIC SERVICES

DATE
JANUARY 2024
SHEET
9
9 OF 11

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by STUART A Anderson
Date: 2026.05.27 15:35:43-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO.	DATE	REMARKS

REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

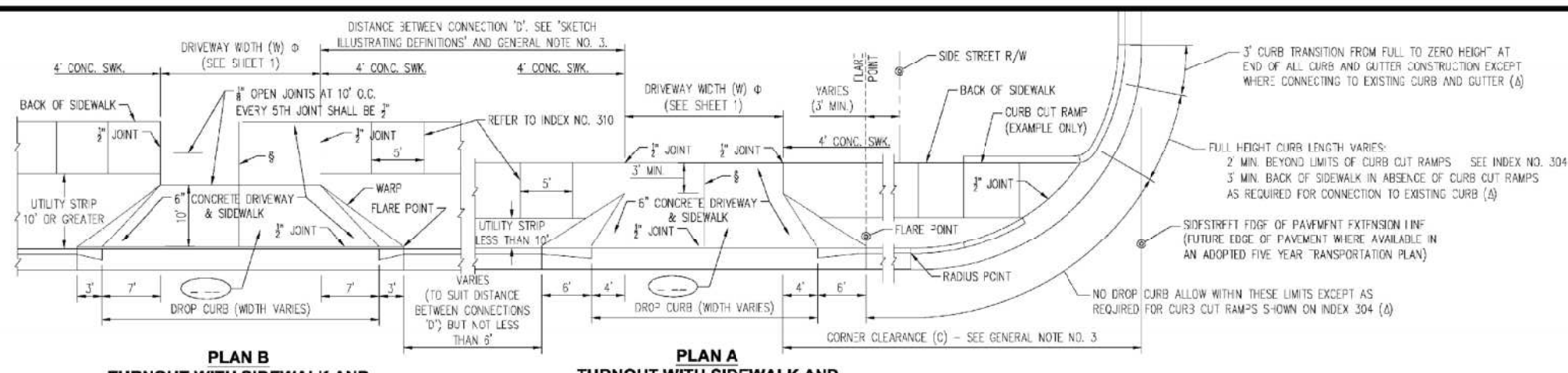
PROJECT NO: 2025.0704
DATE: 5/26/2026

C4.4
CITY OF WINTER GARDEN DETAILS

CHECKED: CDB DRAWN: GFC

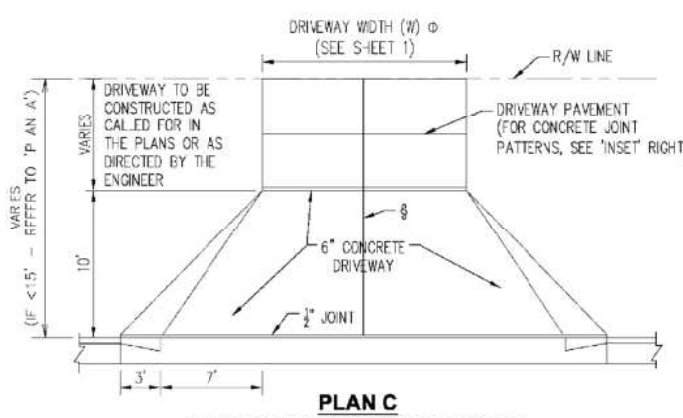
COPYRIGHT ©2026 INTERPLAN LLC. ALL RIGHTS RESERVED. THESE DRAWINGS AND SPECIFICATIONS ARE AND SHALL REMAIN THE PROPERTY OF INTERPLAN LLC. THESE DRAWINGS AND SPECIFICATIONS ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF INTERPLAN LLC. VISUAL CONTACT WITH THESE DRAWINGS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. ANY UNAUTHORIZED USE, REPRODUCTION, CHANGE OR ALTERATION IS STRICTLY PROHIBITED.

KEVCAB - 05/27/2026 8:55:02 AM

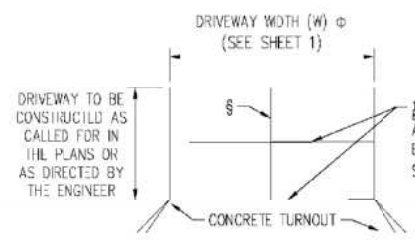


PLAN B
TURNOUT WITH SIDEWALK AND UTILITY STRIP (10' OR GREATER)

PLAN A
TURNOUT WITH SIDEWALK AND UTILITY STRIP (LESS THAN 10')



PLAN C
TURNOUT WITHOUT SIDEWALK



JOINT PATTERN WHEN CONCRETE DRIVE CONSTRUCTED
INSET

FOOTNOTES:

ALL ½" JOINTS SHALL BE CONSTRUCTED WITH PREFORMED JOINT FILLER.

§ OPEN JOINTS PLACED AT EQUAL (20' MAX.) INTERVALS FOR DRIVEWAYS OVER 20' WIDE. JOINTS IN CURB AND GUTTER TO MATCH JOINTS IN DRIVEWAYS.

Δ WHEN CONNECTING TO SIDESTREET CURB AND GUTTER SECTIONS, THE NO DROP CURB LIMITS SHOULD EXTEND BACK TO THE SIDESTREET RADIUS POINT. WITH OR WITHOUT CURB AND GUTTER, NO DRIVEWAY SHOULD ENCROACH ON THE CORNER RADIUS.

Φ DRIVEWAYS (6" CONCRETE) SHALL BE OF A UNIFORM WIDTH (W) TO THE RIGHT OF WAY LINE.

(– –) ALPHA-NUMERIC IDENTIFICATION OF A FLARED DRIVEWAY TYPE SPECIFICALLY CALLED FOR IN THE PLANS, SEE SHEETS 3 AND 4.

SPECIAL NOTES FOR URBAN FLARED TURNOUTS

1. DRIVEWAY 6" CONCRETE PAVEMENT AND DROP CURB SHALL MEET THE MATERIAL AND CONSTRUCTION REQUIREMENTS OF SECTIONS 522 AND 520 RESPECTIVELY OF THE FDOT STANDARD SPECIFICATIONS. THE DRIVEWAY FOUNDATION SHALL MEET THE REQUIREMENT OF SUBARTICLE 522-4.

2. FOR DETAILS OF DROP CURB AND CURB CUT RAMPS REFER TO INDEXES NOS. 300 AND 304 RESPECTIVELY.

3. WHERE TURNOUTS ARE CONSTRUCTED WITHIN EXISTING CURB AND GUTTER, THE EXISTING CURB AND GUTTER SHALL BE REMOVED EITHER TO THE NEAREST JOINT BEYOND THE FLARE POINT OR TO THE EXTENT THAT NO REMAINING SECTION IS LESS THAN 5 FEET LONG; AND, DROP CURB CONSTRUCTED IN ACCORDANCE WITH NOTES NOS. 1 AND 2.

4. COST FOR PREFORMED JOINT FILLER SHALL BE INCLUDED IN THE COST FOR THE CONCRETE PAVEMENT (CONCRETE SIDEWALK, 6" THICK).

5. FOR TURNOUTS WITH RADIAL RETURNS SEE THE REQUIREMENTS UNDER THE "SUMMARY OF GEOMETRIC REQUIREMENTS FOR TURNOUTS", THE "GENERAL NOTES", THE DETAILS OF "RURAL TURNOUT CONSTRUCTION" AND THE DETAIL OF "LIMITS OF CLEARING & GRUBBING, STABILIZATION AND BASE AT INTERSECTIONS".

6. DEPARTMENT MAINTENANCE OF PAVEMENT SHALL EXTEND OUT TO THE RIGHT OF WAY OR 2 FEET BACK OF SIDEWALK, WHICHEVER DISTANCE IS LESS.

7. THE MAINTENANCE AND OPERATION OF HIGHWAY LIGHTING, TRAFFIC SIGNALS, ASSOCIATED EQUIPMENT, AND OTHER NECESSARY DEVICES SHALL BE THE RESPONSIBILITY OF A PUBLIC AGENCY.

8. ALL PAVEMENT MARKINGS ON THE STATE HIGHWAYS, INCLUDING ACCELERATION AND DECELERATION LANE MARKINGS, AND SIGNING INSTALLED FOR THE OPERATION OF THE STATE HIGHWAY SHALL BE MAINTAINED BY THE DEPARTMENT.

9. ALL SIGNING AND MARKING INSTALLED FOR THE OPERATION OF THE CONNECTION (SUCH AS STOP BARS AND STOP SIGNS FOR THE CONNECTION) SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.

10. TURNOUTS WILL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SIDEWALK CONCRETE (6" THICK), SY.

DESIGN NOTES FOR URBAN FLARED TURNOUTS

1. DRIVEWAYS INDICATED AS 'ADVERSE APPLICATIONS' ARE THOSE WITH SLOPES THAT CAN CAUSE OVERHANG DRAG FOR REPRESENTATIVE STANDARD PASSENGER VEHICLES UNDER FULLY LOADED CONDITIONS; OR, THOSE WITH SLOPES THAT CAN CAUSE DRIVERS WHO ARE LEAVING THE ROADWAY TO SLOW OR PAUSE TO THE EXTENT THAT TRAFFIC DEMAND VOLUMES WILL BE IMPEDED.

DRIVEWAYS INDICATED AS 'MARGINAL APPLICATIONS' ARE THOSE WITH SLOPES THAT CAN CAUSE OVERHANG DRAG FOR REPRESENTATIVE STANDARD PASSENGER VEHICLES UNDER FULLY LOADED CONDITIONS WHEN THE DRIVEWAY IS LOCATED ON THE LOW SIDE OF FULLY SUPERELEVATED ROADWAYS.

DRIVEWAYS INDICATED AS 'GENERAL APPLICATIONS' ARE THOSE WITH SLOPES THAT CAN READILY ACCOMMODATE REPRESENTATIVE STANDARD PASSENGER VEHICLES AND THOSE AND THOSE THAT CAN ACCOMMODATE REPRESENTATIVE STANDARD TRUCKS, VANS, BUSSES AND RECREATIONAL VEHICLES OPERATING UNDER NORMAL CROWN AND SUPERELEVATION CONDITIONS.

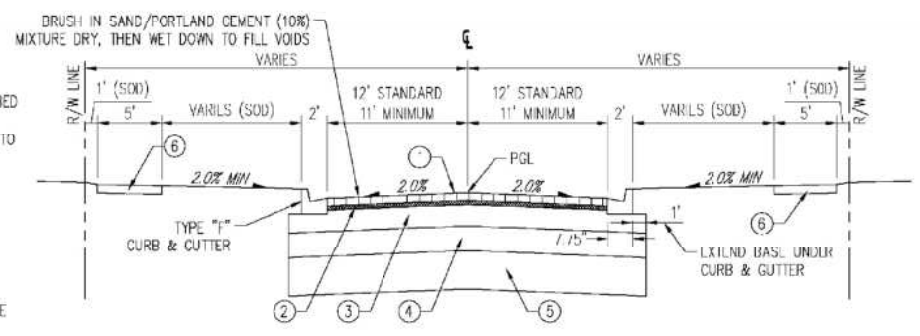
2. THE STANDARD FLARED DRIVEWAYS ON THIS INDEX MAY NOT ACCOMMODATE VEHICLES WITH LOW BEDS, LOW UNDERCARRIAGE OR LOW APPENDAGE FEATURES. WHERE SUCH VEHICLES ARE DESIGN VEHICLES DRIVEWAYS ARE TO HAVE SITE SPECIFIC FLARE DESIGNS OR CATEGORY ~~~ DESIGNS.

3. WHEN SPECIFIC FLARE TYPE DRIVEWAYS ARE TO BE CONSTRUCTED, THE TYPE SHALL BE DESIGNATED IN THE PLANS USING THE ASSIGNED ALPHA-NUMERIC DESIGNATION.

Note: See sheet 1 for 'GENERAL NOTES'

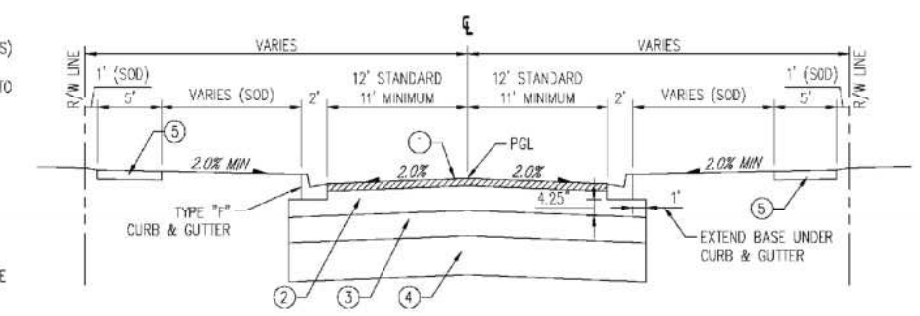
○ PAVEMENT DESIGN

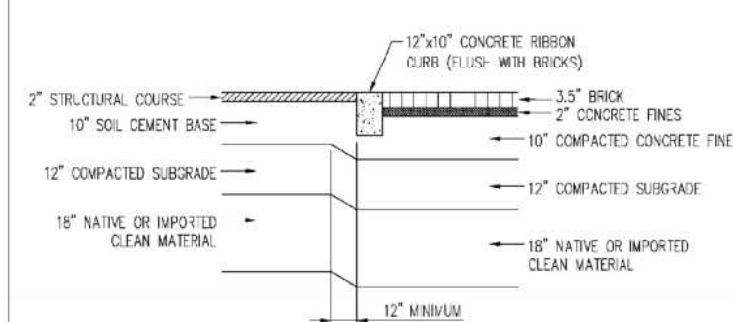
1. 3.5" BRICKS
2. 1"- 2" LOOSE CONCRETE FINES LEVELING BED
3. 10" BASE – COMPACTED CONCRETE FINES TO 98% MAX. DENSITY (AASHTO T-134). ASPHALTIC PRIME COAT APPLIED AT 0.15 GAL/SF
4. 12" COMPACTED SUBGRADE (98% DENSITY) AASHTO T-180 AND LBR 40
5. 18" OF NATIVE OR IMPORTED MATERIAL HAVING LESS THAN 5% PASSING #200 SIEVE COMPACTED TO 98% PER AASHTO T-180
6. 4" THICK CONCRETE SIDEWALK



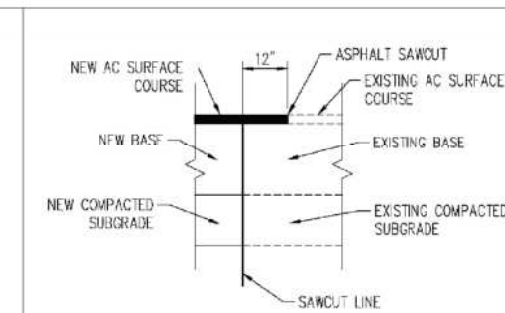
○ PAVEMENT DESIGN

1. 2" TYPE S-1 STRUCTURAL COURSE (2 LIFTS)
2. 10" BASE TYPE SOIL CEMENT COMPACTED TO 98% MAX. DENSITY (AASHTO T-134). ASPHALTIC PRIME COAT APPLIED AT 0.15 GAL/SF 300 PSI 7-DAY COMPRESSIVE STRENGTH
3. 12" COMPACTED SUBGRADE (98% DENSITY) AASHTO T-180 AND LBR 40
4. 18" OF NATIVE OR IMPORTED MATERIAL HAVING LESS THAN 5% PASSING #200 SIEVE COMPACTED TO 98% PER AASHTO T-180
5. 4" THICK CONCRETE SIDEWALK



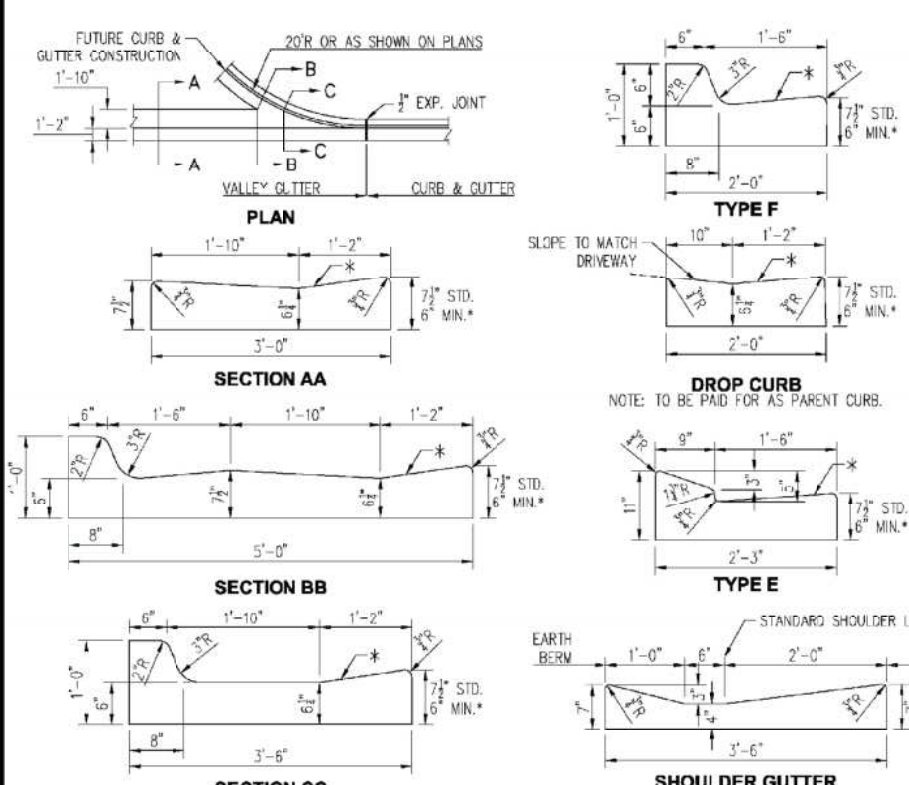


1 RIBBON CURB WITH BRICK PAVERS
N.T.S.



NOTE: CONTRACTOR SHALL APPLY A BITUMINOUS TACK COAT WHERE NEW ASPHALTIC CONCRETE PAVEMENT ABUTS EXISTING PORTLAND CEMENT CONCRETE PAVEMENT.

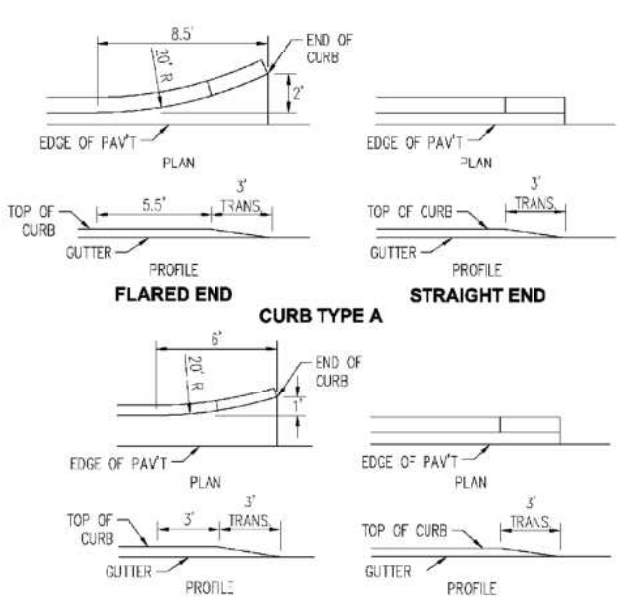
1 SAWCUT TYPCIAL DETAIL
N.T.S.



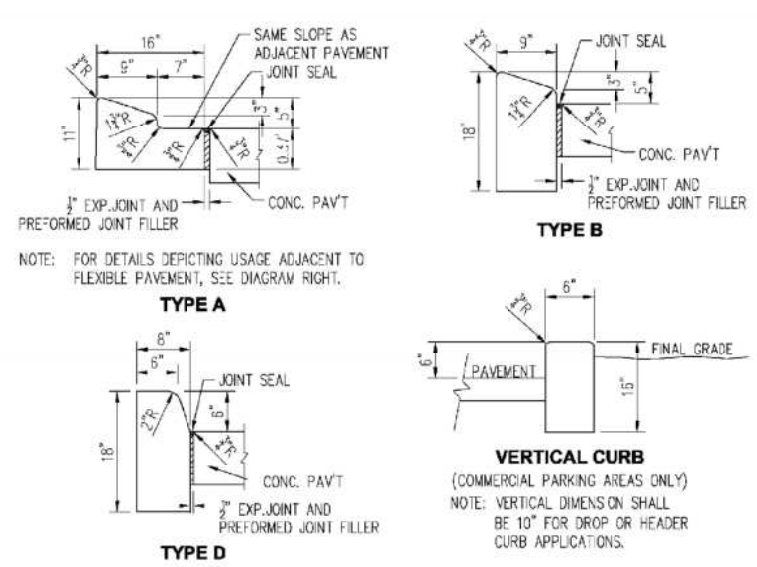
* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

CONCRETE CURB AND GUTTER

NOTE: FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, CONCRETE SHOWN. FOR DETAILS DEPICTING USAGE ADJACENT TO FLEXIBLE PAVEMENT, SEE DIAGRAM RIGHT. EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURB & GUTTER AND CONCRETE PAVEMENT ONLY, SEE DIAGRAM RIGHT.



CURB AND GUTTER ENDINGS

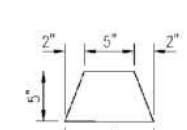


NOTE: FOR DETAILS DEPICTING USAGE ADJACENT TO FLEXIBLE PAVEMENT, SEE DIAGRAM RIGHT.

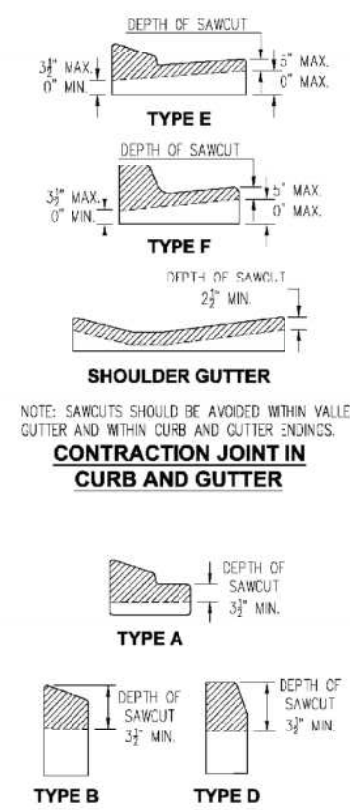
NOTE: VERTICAL DIMENSION SHALL BE 10" FOR DROP OR HEADER CURB APPLICATIONS.

NOTE: FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, CONCRETE SHOWN. EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURBS AND CONCRETE PAVEMENT ONLY, SEE DIAGRAM RIGHT.

CONCRETE CURB



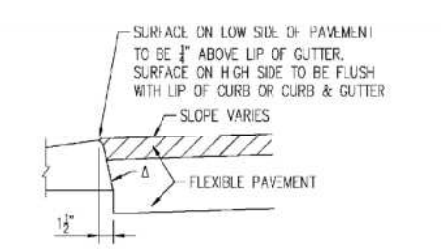
ASPHALTIC CONCRETE CURB



NOTE: SAWCUTS SHOULD BE AVOIDED WITHIN VALLEY GUTTER AND WITHIN CURB AND GUTTER ENDINGS.

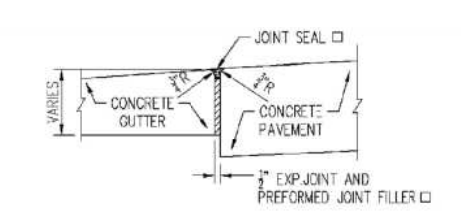
CONTRACTION JOINT IN CURB AND GUTTER

CONTRACTION JOINT IN CURB



Δ – APPLIES TO BOTH HIGH AND LOW SIDES OF PAVEMENT, LOW SIDE SHOWN.

CURB & GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT



□ – APPLIES TO BOTH HIGH AND LOW SIDES OF PAVEMENT, LOW SIDE SHOWN.

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT

GENERAL NOTES

1. FOR CURB,GUTTER,AND CURB AND GUTTER PROVIDE ⅛" – ¼" CONTRACTION JOINTS AT 10' CENTERS (MAX.). CONTRACTION JOINTS ADJACENT TO CONCRETE PAVEMENT ON TANGENTS AND FLAT CURVES ARE TO MATCH THE PAVEMENT JOINTS, WITH INTERMEDIATE JOINTS NOT TO EXCEED 10' CENTERS. CURB,GUTTER AND CURB & GUTTER EXPANSION JOINTS SHALL BE LOCATED IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS.

2. ENDS OF CURBS TYPES B AND D SHALL TRANSITION FROM FULL TO ZERO HEIGHTS IN 3 FEET.

No.	ITEM	DATE
1	Brick Typical Section	4/4/14

REVISIONS

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR ROADWAY & DRAINAGE CONSTRUCTION

WINTER GARDEN

STANDARD DETAILS
FOR
PUBLIC SERVICES

DATE
JANUARY 2024
SHEET
10
10 OF 11

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:
STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER
Digitally signed by Stuart A Anderson Date: 2026.05.27 15:35:44-04'00'
STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

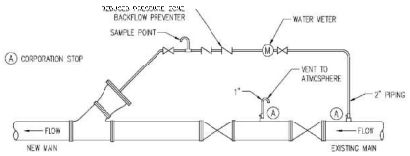
PROJECT NO: 2025.0704
DATE: 5/26/2026

C4.5
CITY OF WINTER GARDEN DETAILS

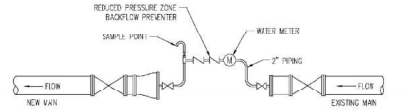
CHECKED: CDB DRAWN: GFC

KEVCAB - 05/27/2026 8:55:08 AM

COPYRIGHT © 2026 INTERPLAN LLC RESERVES COPYRIGHT & OTHER RIGHTS RESTRICTING THESE DOCUMENTS TO THE ORIGINAL SITE OR PURPOSE FOR WHICH THEY WERE PREPARED. REPRODUCTIONS, CHANGES OR ASSIGNMENTS ARE PROHIBITED.



OPTION "A"



OPTION "B"

EXCEPT AS INDICATED BELOW FOR SHORT LENGTHS, EACH SECTION OF PIPELINE SHALL BE THOROUGHLY CLEANED WITH ONE POLYURETHANE FOAM PIG EACH TIME.

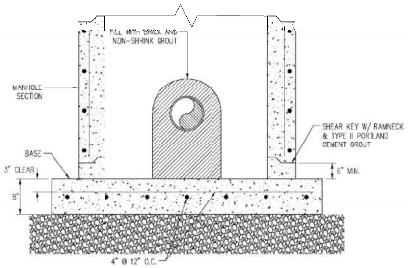
A CITY REPRESENTATIVE SHALL BE PRESENT AT THE TIME OF INSERTION AND EXIT OF THE PIGS. LINES SHALL BE PIGGED AND/OR FLUSHED UNTIL THE WATER RUNS CLEAN AND IS APPROVED BY THE CITY REPRESENTATIVE. THE CITY REPRESENTATIVE SHALL BE GIVEN 48 HOURS MINIMUM NOTICE PRIOR TO PIGGING OR FLUSHING.

ON SHORT LENGTHS OF PIPELINE (100' MAX) CLEANING MAY BE ACCOMPLISHED BY FLUSHING WITH WATER AT A MINIMUM VELOCITY OF 2.5 FEET PER SECOND. WATER REQUIRED FOR TESTING AND CLEANING SHALL BE SUPPLIED BY THE CITY AT THE CONTRACTOR'S EXPENSE. WATER SHALL BE FROM A POTABLE SOURCE SATISFACTORY TO THE CITY.

NOTES:

1. REDUCER TO BE NEW MAIN SIZE PLUS 2" LARGER.
2. WYE TO BE PLUGGED AND RESTRAINED AT THE END OF PIGGING.
3. AT THE END OF THE PROJECT, ALL CORPORATIONS TO BE REMOVED AND CORPORATION PLUGS TO BE INSTALLED.
4. SAMPLE POINT TO BE LOCATED AFTER BACKFLOW PREVENTER.
5. ALL MATERIALS, PIPE, AND FITTINGS SHALL CONFORM THE THE CITY OF WINTER GARDEN STANDARDS.
6. INSTALL REDUCER WITH PIG INSIDE. ONLY ONE PIG WILL BE ALLOWED TO BE RUN THROUGH THE MAIN AT A TIME. PIPE EXTENSION CAP MAY BE REQUIRED.
7. PIGGING PROCEDURE TO BE PERFORMED AT LEAST TWICE.

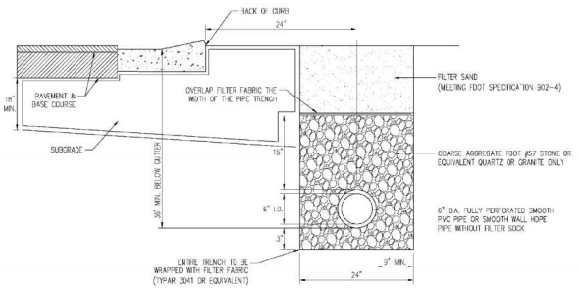
1 PIPE PIGGING DETAIL
N.T.S.



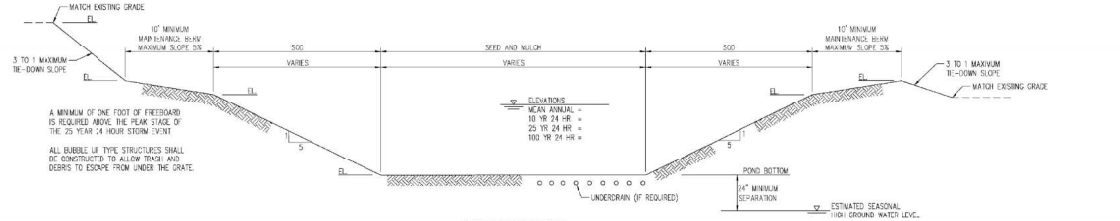
NOTES:

1. TO CONSTRUCT NEW MANHOLE OVER EXISTING SEWER, SLIDE BASE UNDER PIPE AND SET MANHOLE SECTION ON TOP.
2. FOR ADDITIONAL DETAILS NOT SHOWN, SEE "GRAVITY SEWER MANHOLE STANDARD.
3. AT THE END OF THE PROJECT ALL CORPORATIONS TO BE REMOVED AND CORPORATION PLUGS TO BE INSTALLED. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT OF EXISTING SEWER DURING INSTALLATION OF MANHOLE.

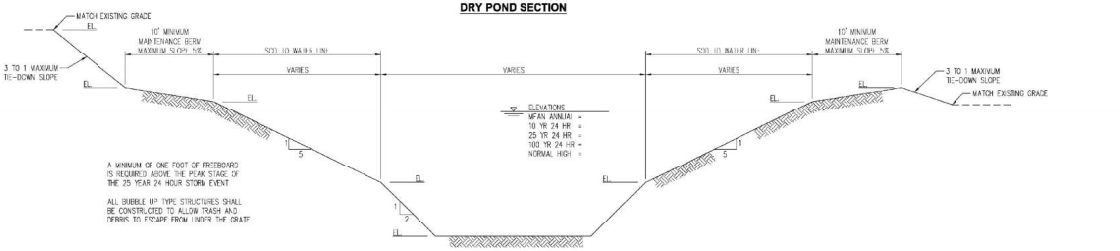
2 GRAVITY SEWER DOGHOUSE MANHOLE
N.T.S.



3 UNDERDRAIN DETAIL
N.T.S.



DRY POND SECTION

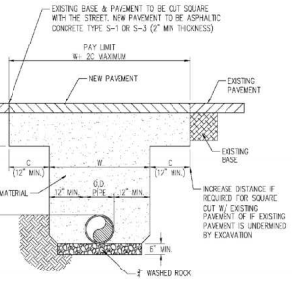


WET POND SECTION

4 POND SECTIONS
N.T.S.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS:

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.



W = O.D. OF PIPE + 12" MIN. AT BOTH SIDES OF PIPE

C = VARIES W/ SOIL TYPE
(CONTACT ENGINEER OF RECORD FOR DETERMINATION IN THE FIELD)

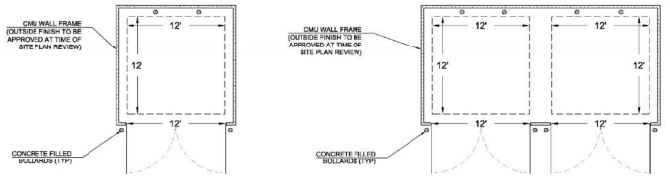
NOTE:
ALL BACKFILL COMPACTION SHALL BE 98% OF MAXIMUM DENSITY.

5 PAVEMENT RESTORATION DETAIL
N.T.S.



THE BACKGROUND COLOR SHALL BE RETROREFLECTIVE GREEN AND THE LETTERING AND BORDER SHALL BE RETROREFLECTIVE WHITE.

6 STREET SIGN BLADE DETAIL
N.T.S.



7 DUMPSTER LAYOUT DETAIL
N.T.S.

CITY OF WINTER GARDEN, FLORIDA
STANDARDS AND SPECIFICATIONS
FOR UTILITY CONSTRUCTION

STANDARD DETAILS
FOR
MISCELLANEOUS DETAILS

DATE
JANUARY 2024
SHEET
11
11 OF 11

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Stuart A Anderson
Date: 2026.05.27 15:35:45-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO.	DATE	REMARKS

REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

PROJECT NO: 2025.0704
DATE: 5/26/2026

C4.6
CITY OF WINTER GARDEN DETAILS

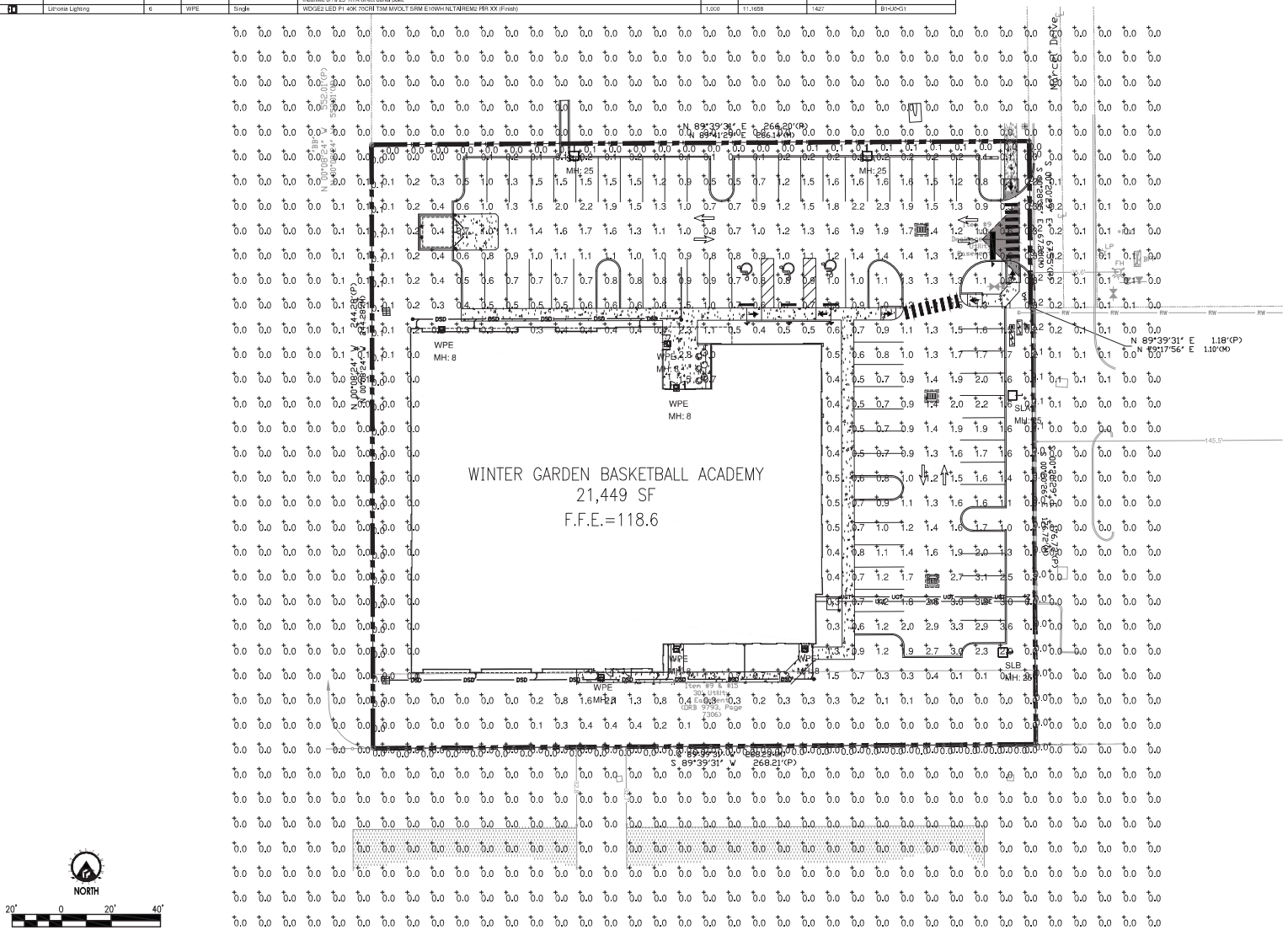
CHECKED: CDB DRAWN: GFC

COPYRIGHT © 2026 INTERPLAN LLC. RESERVES COPYRIGHT & OTHER RIGHTS IN THESE TECHNICAL DOCUMENTS TO THE EXTENT ALLOWED BY LAW. UNAUTHORIZED REPRODUCTION, CHANGE OR USE OF THESE DOCUMENTS MAY RESULT IN CIVIL AND CRIMINAL PENALTIES AND WILL BE PROSECUTED TO THE MAXIMUM EXTENT POSSIBLE UNDER THE LAW.

KEVCAB - 05/27/2026 8:56:13 AM

Landreth Lighting Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Property Line Summary	Illuminance	Fc	0.03	0.3	0.0	N.A.	N.A.
Parking Lot Summary	Illuminance	Fc	1.28	3.3	0.1	12.80	33.00

Landreth Lighting Luminaire Schedule									
Symbol	[MANUFAC]	Qty	Label	Arrangement	Description	LLF	Lum. Watts	Lum. Lumens	BUG Rating
	Lithonia Lighting	3	SLA	Single	DSX0 LED P5 40K 70CRI BLC4 MVOLT RPA NLTAIR2 PIRHN XX (Finish) To be mounted on a 25' RTA direct burial pole.	1.000	90.12	9081	B0-U0-G3
	Lithonia Lighting	1	SLB	Single	DSX0 LED P5 40K 70CRI LCCO MVOLT RPA NLTAIR2 PIRHN XX (Finish) To be mounted on a 25' RTA direct burial pole.	1.000	90.12	8674	B1-U0-G2
	Lithonia Lighting	6	WPE	Single	WDGE2 LED P1 40K 70CRI TSM MVOLT SRM E10WH NLTAIREME PIR XX (Finish)	1.000	11.1658	1427	B1-U0-G1



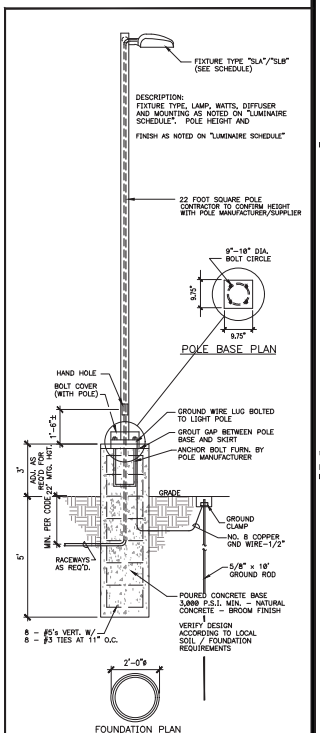
NORTH

20' 0 20' 40'

GRAPHIC SCALE

SITE LIGHTING PLAN

1"=20'



NOTES:

ALL CONCRETE POLE BASES TO BE INSTALLED AT MIN. 24"-36" BEHIND BACK OF CONCRETE CURB.

POLE SHALL BE CAPABLE OF WITHSTANDING 140 MPH WIND SPEED.

SITE LIGHTING POLE PERMIT WILL BE SUBMITTED UNDER A SEPARATE APPLICATION AND AT A LATER DATE.

1 SITE LIGHTING POLE AND BASE
NTS

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

STUART A. ANDERSON LICENSE No. 60848 STATE OF FLORIDA

Digitally signed by STUART A Anderson
Date: 2026.05.27 15:35:46-04'00'

STUART ANDERSON REG.# 60848

This item has been digitally signed and sealed by Stuart Anderson on the date adjacent to the seal. Signature must be verified on any electronic copies.

NO.	DATE	REMARKS

REVISIONS

CAVALCANTI MANAGEMENT

1680 MARCEL DRIVE
WINTER GARDEN, FL

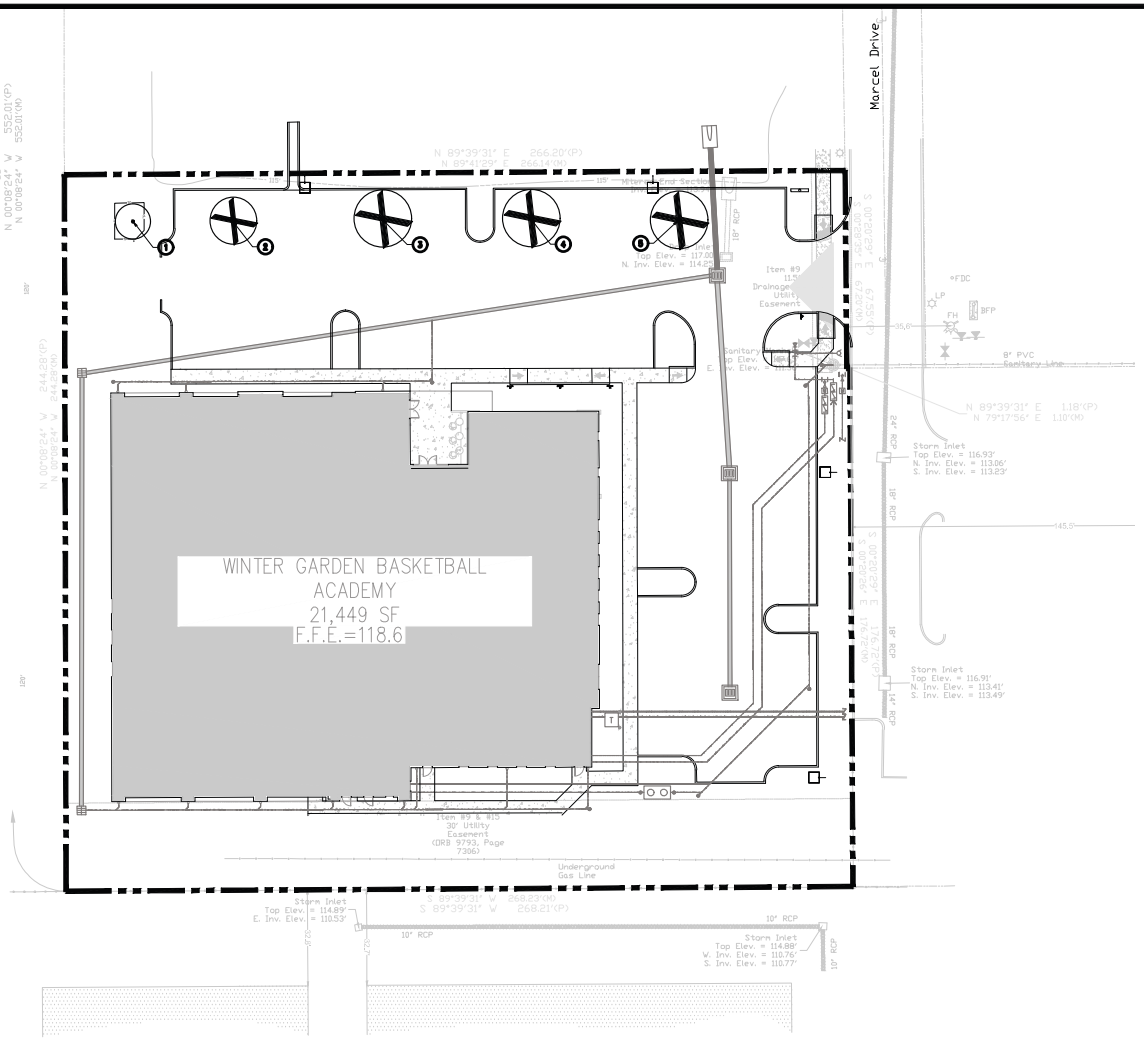
PROJECT NO: 2025.0704
DATE: 5/26/2026

SL1
SITE LIGHTING PLAN

CHECKED: CDB DRAWN: GFC

COPYRIGHT ©2026 INTERPLAN LLC - ALL RIGHTS RESERVED. COPYRIGHT & OTHER RIGHTS EXIST IN THESE DOCUMENTS TO THE EXTENT PERMITTED BY LAW. ANY USE OF THESE DOCUMENTS FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY WERE PREPARED, REPRODUCTION, CHANGES OR ADDITIONS ARE PROHIBITED.

KEVCAB - 05/27/2026 8:55:18 AM



NOTE: TREE PROTECTION FOR ANY PRESERVED OR RELOCATED TREES MUST BE PROVIDED PER DETAILS AND SPECIFICATIONS ON SHEET TD-2. THESE MUST BE UP PRIOR TO THE COMMENCEMENT OF ANY WORK AND MAINTAINED THROUGHOUT CONSTRUCTION.

NOTE: ALL TREE TRIMMING MUST BE APPROVED BY THE OWNER AND LOCAL JURISDICTION PRIOR TO COMMENCEMENT OF WORK. ALL TREE TRIMMING MUST BE DONE BY AN ISA CERTIFIED ARBORIST IN ACCORDANCE WITH LOCAL TREE PRESERVATION ORDINANCE.

National Presence. Local Expertise.
EVERGREEN DESIGN GROUP
800.880.6830
www.evergreendesigngroup.com
FL LA 6666711

Digitally signed by Jennifer N Miller
Reason: LA6667079, State of Florida
Date: 2026.05.26 16:17:43 -04'00'

NORTH

Scale 1" = 20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

TREE DISPOSITION PLAN

LEGEND

EXISTING TREE TO BE REMAIN

EXISTING TREE TO BE REMOVED

TREE PROTECTION FENCE

TREE INVENTORY CHART

TREE NO.	BOTANICAL NAME	COMMON NAME	DBH (in inches)	DISPOSITION	REPLACEMENT REQ'D	COMMENTS
1	Cinnamomum camphora	Camphor	6	PRESERVE	0	
2	Cinnamomum camphora	Camphor	8	REMOVE	2	
3	Quercus spp.	Oak	10	REMOVE	2	
4	Quercus spp.	Oak	10	REMOVE	2	
5	Quercus spp.	Oak	10	REMOVE	2	
				TOTAL REPLACEMENT TREES:	8	

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660

ARCHITECTURE
ENGINEERING
PERMITTING

220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

REGISTERED LANDSCAPE ARCHITECT
JENNIFER N. MILLER
LA 6667079
FLORIDA

NO DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

PROJECT NO: 2025.0704
DATE: 5/26/2026

TD-1

CHECKED: CDB DRAWN: GFC

COPYRIGHT © 2026 INTERPLAN LLC RESERVES COPYRIGHT & OTHER RIGHTS RESTRICTING THIS DOCUMENT TO THE ORIGINAL USE OR PURPOSE FOR WHICH IT WAS PREPARED. REPRODUCTIONS, CHANGES OR ASSIGNMENT ARE PROHIBITED.

TREE PROTECTION SPECIFICATIONS

MATERIALS

1. FABRIC: 4 FOOT HIGH ORANGE PLASTIC FENCING AS SHOWN ON THE PLANS AND SHALL BE WOVEN WITH 2 INCH MESH OPENINGS SUCH THAT IN A VERTICAL DIMENSION OF 23 INCHES ALONG THE DIAGONALS OF THE OPENINGS THERE SHALL BE AT LEAST 7 MESHES.
2. POSTS: POSTS SHALL BE A MINIMUM OF 72 INCHES LONG AND STEEL 'T' SHAPED WITH A MINIMUM WEIGHT OF 1.3 POUNDS PER LINEAR FOOT.
3. TIE WIRE: WIRE FOR ATTACHING THE FABRIC TO THE T-POSTS SHALL BE NOT LESS THAN NO. 12 GAUGE GALVANIZED WIRE.
4. USED MATERIALS: PREVIOUSLY-USED MATERIALS, MEETING THE ABOVE REQUIREMENTS AND WHEN APPROVED BY THE OWNER, MAY BE USED.

CONSTRUCTION METHODS

1. ALL TREES AND SHRUBS SHOWN TO REMAIN WITHIN THE PROXIMITY OF THE CONSTRUCTION SITE SHALL BE PROTECTED PRIOR TO BEGINNING ANY DEVELOPMENT ACTIVITY.
2. EMPLOY THE SERVICES OF AN ISA (INTERNATIONAL SOCIETY OF ARBORICULTURE) CERTIFIED ARBORIST AND OBTAIN ALL REQUIRED PERMITS TO PRUNE THE EXISTING TREES FOR CLEANING, RAISING AND THINNING, AS MAY BE REQUIRED.
3. PROTECTIVE FENCING SHALL BE ERECTED OUTSIDE THE CRITICAL ROOT ZONE (CRZ, EQUAL TO 1' FROM THE TRUNK FOR EVERY 1" OF DBH) AT LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE LANDSCAPE CONSULTANT AND/OR CITY ARBORIST, AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS. FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. TREES IN CLOSE PROXIMITY SHALL BE FENCED TOGETHER, RATHER THAN INDIVIDUALLY.
4. PROTECTIVE FENCE LOCATIONS IN CLOSE PROXIMITY TO STREET INTERSECTIONS OR DRIVES SHALL ADHERE TO THE APPLICABLE JURISDICTION'S SIGHT DISTANCE CRITERIA.
5. THE PROTECTIVE FENCING SHALL BE ERECTED BEFORE SITE WORK COMMENCES AND SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PHASE.
6. THE INSTALLATION POSTS SHALL BE PLACED EVERY 6 FEET ON CENTER AND EMBEDDED TO 18 INCHES DEEP. MESH FABRIC SHALL BE ATTACHED TO THE INSTALLATION POSTS BY THE USE OF SUFFICIENT WIRE TIES TO SECURELY FASTEN THE FABRIC TO THE T-POSTS TO HOLD THE FABRIC IN A STABLE AND UPRIGHT POSITION.
7. WITHIN THE CRZ:
   a. DO NOT CLEAR, FILL OR GRADE IN THE CRZ OF ANY TREE.
   b. DO NOT STORE, STOCKPILE OR DUMP ANY JOB MATERIAL, SOIL OR RUBBISH UNDER THE SPREAD OF THE TREE BRANCHES.
   c. DO NOT PARK OR STORE ANY EQUIPMENT OR SUPPLIES UNDER THE TREE CANOPY.
   d. DO NOT SET UP ANY CONSTRUCTION OPERATIONS UNDER THE TREE CANOPY (SUCH AS PIPE CUTTING AND THREADING, MORTAR MIXING, PAINTING OR LUMBER CUTTING).
   e. DO NOT NAIL OR ATTACH TEMPORARY SIGNS METERS, SWITCHES, WIRES, BRACING OR ANY OTHER ITEM TO THE TREES.
   f. DO NOT PERMIT RUNOFF FROM WASTE MATERIALS INCLUDING SOLVENTS, CONCRETE WASHOUTS, ASPHALT TACK COATS (MC-30 OIL), ETC. TO ENTER THE CRZ. BARRIERS ARE TO BE PROVIDED TO PREVENT SUCH RUNOFF SUBSTANCES FROM ENTERING THE CRZ WHENEVER POSSIBLE, INCLUDING IN AN AREA WHERE RAIN OR SURFACE WATER COULD CARRY SUCH MATERIALS TO THE ROOT SYSTEM OF THE TREE.
8. ROUTE UNDERGROUND UTILITIES TO AVOID THE CRZ. IF DIGGING IS UNAVOIDABLE, BORE UNDER THE ROOTS, OR HAND DIG TO AVOID SEVERING THEM.
9. WHERE EXCAVATION IN THE VICINITY OF TREES MUST OCCUR, SUCH AS FOR IRRIGATION INSTALLATION, PROCEED WITH CAUTION, AND USING HAND TOOLS ONLY.
10. THE CONTRACTOR SHALL NOT CUT ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATION OCCURS NEAR EXISTING TREES. ALL ROOTS LARGER THAN ONE INCH IN DIAMETER ARE TO BE CUT CLEANLY. FOR OAKS ONLY, ALL WOUNDS SHALL BE PAINTED WITH WOUND SEALER WITHIN 30 MINUTES
11. REMOVE ALL TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS BY HAND.
12. TREES DAMAGED OR KILLED DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED AT THE CONTRACTOR'S EXPENSE AND TO THE PROJECT OWNER'S AND LOCAL JURISDICTION'S SATISFACTION.
13. ANY TREE REMOVAL SHALL BE APPROVED BY THE OWNER AND LOCAL JURISDICTION PRIOR TO ITS REMOVAL, AND THE CONTRACTOR SHALL HAVE ALL REQUIRED PERMITS FOR SUCH ACTIVITIES.
14. COVER EXPOSED ROOTS AT THE END OF EACH DAY WITH SOIL, MULCH OR WET BURLAP.
15. IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DUING CONSTRUCTION AND WHERE HEAVY TRAFFIC IS ANTICIPATED, COVER THE SOIL WITH EIGHT INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. THIS EIGHT INCH DEPTH OF MULCH SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
16. WATER ALL TREES IMPACTED BY CONSTRUCTION ACTIVITIES, DEEPLY ONCE A WEEK DURING PERIODS OF HOT DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
17. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.
18. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TREE PROTECTION FENCING WHEN ALL THREATS TO THE EXISTING TREES FROM CONSTRUCTION-RELATED ACTIVITIES HAVE BEEN REMOVED.

TREE PROTECTION GENERAL NOTES

(A) PRIOR TO THE LAND CLEARING STAGE OF DEVELOPMENT, THE CONTRACTOR SHALL CLEARLY MARK ALL PROTECTED TREES FOR WHICH A TREE REMOVAL PERMIT HAS NOT BEEN ISSUED AND SHALL ERECT BARRIERS FOR THE PROTECTION OF THE TREES ACCORDING TO THE FOLLOWING:
(1) AROUND AN AREA AT OR GREATER THAN A SIX-FOOT RADIUS OF ALL SPECIES OF MANGROVES AND PROTECTED CABBAGE PALMS;
(2) AROUND AN AREA AT OR GREATER THAN THE FULL DRIPLINE OF ALL PROTECTED NATIVE PINES;
(3) AROUND AN AREA AT OR GREATER THAN TWO-THIRDS OF THE DRIPLINE OF ALL OTHER PROTECTED SPECIES.

(B) NO PERSON SHALL ATTACH ANY SIGN, NOTICE OR OTHER OBJECT TO ANY PROTECTED TREE OR FASTEN ANY WIRES, CABLES, NAILS OR SCREWS TO ANY PROTECTED TREE IN ANY MANNER THAT COULD PROVE HARMFUL TO THE PROTECTED TREE, EXCEPT AS NECESSARY IN CONJUNCTION WITH ACTIVITIES IN THE PUBLIC INTEREST.

(C) DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE CONTRACTOR SHALL NOT CAUSE OR PERMIT THE CLEANING OF EQUIPMENT OR MATERIAL WITHIN THE OUTSIDE PERIMETER OF THE CROWN (DRIPLINE) OR ON THE NEARBY GROUND OF ANY TREE OR GROUP OF TREES WHICH IS TO BE PRESERVED. WITHIN THE OUTSIDE PERIMETER OF THE CROWN (DRIPLINE) OF ANY TREE OR ON NEARBY GROUND, THE CONTRACTOR SHALL NOT CAUSE OR PERMIT STORAGE OF BUILDING MATERIAL AND/OR EQUIPMENT, OR DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF THE TREE.

(D) NO PERSON SHALL PERMIT ANY UNNECESSARY FIRE OR BURNING WITHIN 30 FEET OF THE DRIPLINE OF A PROTECTED TREE.

(E) ANY LANDSCAPING ACTIVITIES WITHIN THE BARRIER AREA SHALL BE ACCOMPLISHED WITH HAND LABOR.

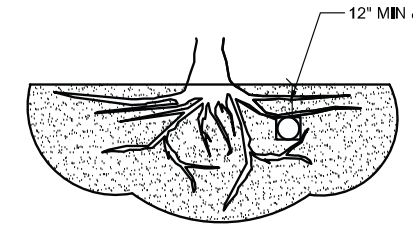
(F) PRIOR TO ISSUING A CERTIFICATE OF OCCUPANCY OR COMPLIANCE FOR ANY DEVELOPMENT, BUILDING OR STRUCTURE, ALL TREES DESIGNATED TO BE PRESERVED THAT WERE DESTROYED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR WITH TREES OF EQUIVALENT DIAMETER AT BREAST HEIGHT TREE CALIPER AND OF THE SAME SPECIES AS SPECIFIED BY THE CITY STAFF, BEFORE OCCUPANCY OR USE, UNLESS APPROVAL FOR THEIR REMOVAL HAS BEEN GRANTED UNDER PERMIT.

(G) THE CITY STAFF MAY CONDUCT PERIODIC INSPECTIONS OF THE SITE DURING LAND CLEARANCE AND CONSTRUCTION.

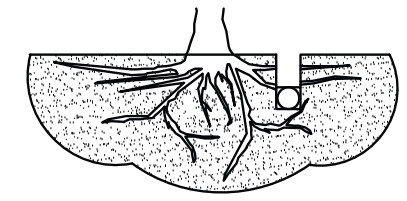
(H) IF, IN THE OPINION OF THE CITY STAFF, DEVELOPMENT ACTIVITIES WILL SO SEVERELY STRESS SLASH PINES OR ANY OTHER PROTECTED TREE SUCH THAT THEY ARE MADE SUSCEPTIBLE TO INSECT ATTACK, PREVENTATIVE SPRAYING OF THESE TREES BY THE CONTRACTOR MAY BE REQUIRED.

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES, THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE ENGINEER.

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.

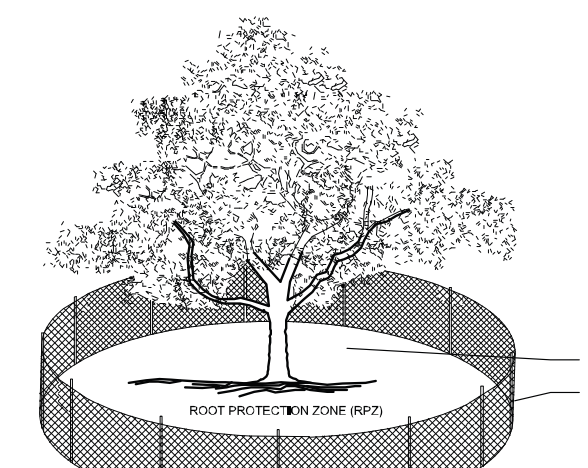


TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

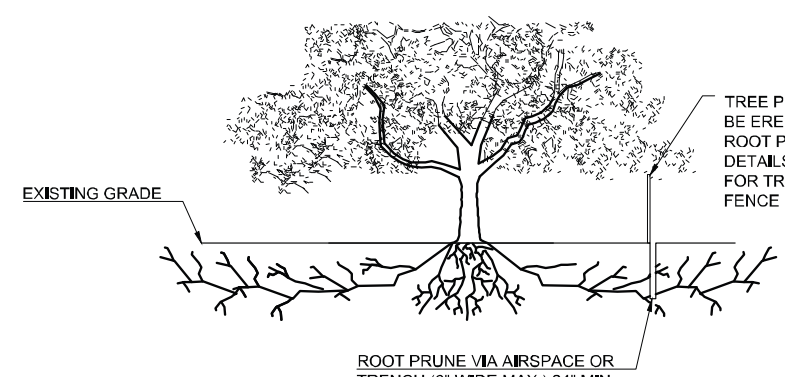
C — BORING THROUGH ROOT PROTECTION ZONE
SCALE: NOT TO SCALE



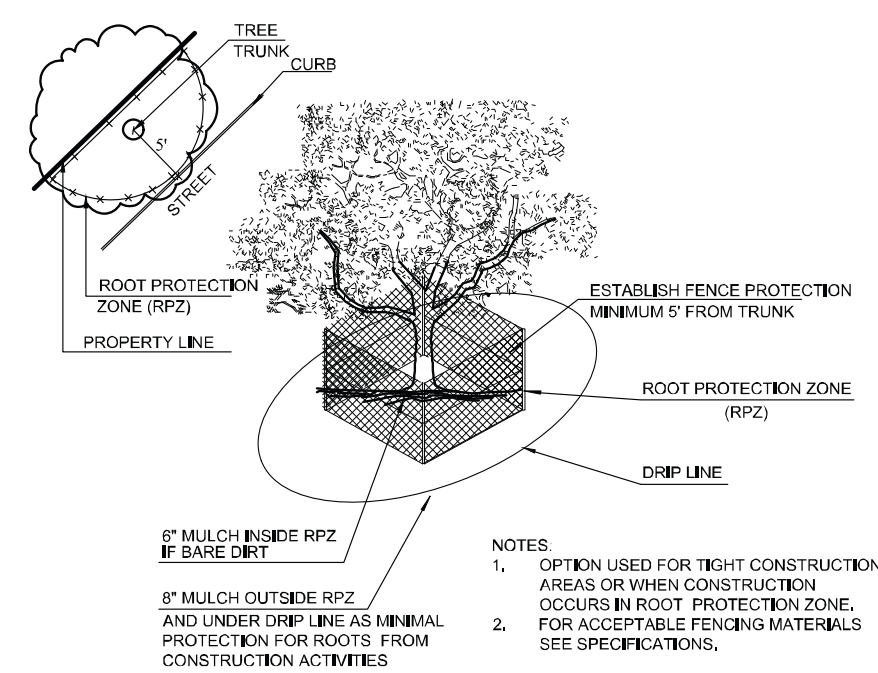
NOTES:
1. THE FENCING LOCATION SHOWN ABOVE IS DIAGRAMATIC ONLY AND WILL CONFORM TO THE DRIP LINE AND BE LIMITED TO PROJECT BOUNDARY. WHERE MULTIPLE ADJACENT TREES WILL BE ENCLOSED BY FENCING, THE FENCING SHALL BE CONTINUOUS AROUND ALL TREES.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

A — TREE PROTECTION FENCE
SCALE: NOT TO SCALE

NOTES
1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRE-CONSTRUCTION MEETING.
2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRE-CONSTRUCTION MEETING AND FLAGGED PRIOR TO ROOT PRUNING.
3. EXACT LOCATION OF ROOT PRUNING SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FORESTRY INSPECTOR .
4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FORESTRY INSPECTOR.
5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT. ROT PRUNING METHODS AND MEANS MUST BE IN ACCORDANCE WITH ANSI STANDARD A3000.
6. ALL PRUNING MUST BE EXECUTED AT LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FORESTRY INSPECTOR.
7. SUPPLEMENTAL WATERING MAY BE REQUIRED FOR ROOT PRUNED TREES THROUGHOUT THE GROWING SEASON DURING CONSTRUCTION AND SUBSEQUENT WARRANTY AND MAINTENANCE PERIOD.



D — ROOT PRUNING DETAIL
SCALE: NOT TO SCALE



NOTES:
1. OPTION USED FOR TIGHT CONSTRUCTION AREAS OR WHEN CONSTRUCTION OCCURS IN ROOT PROTECTION ZONE.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

B — TREE PROTECTION FENCE - TIGHT CONSTRUCTION
SCALE: NOT TO SCALE

National Presence, Local Expertise.
EVERGREEN DESIGN GROUP
800.680.6630
www.evergreendesigngroup.com
FL LA 6666711

Digitally signed by Jennifer N Miller
Reason: LA6667079, State of Florida
Date: 2026.05.26 16:17:33 -04'00'

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE ENGINEERING PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:
REGISTERED LANDSCAPE ARCHITECT JENNIFER N. MILLER LA 6667079 STATE OF FLORIDA

NO DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

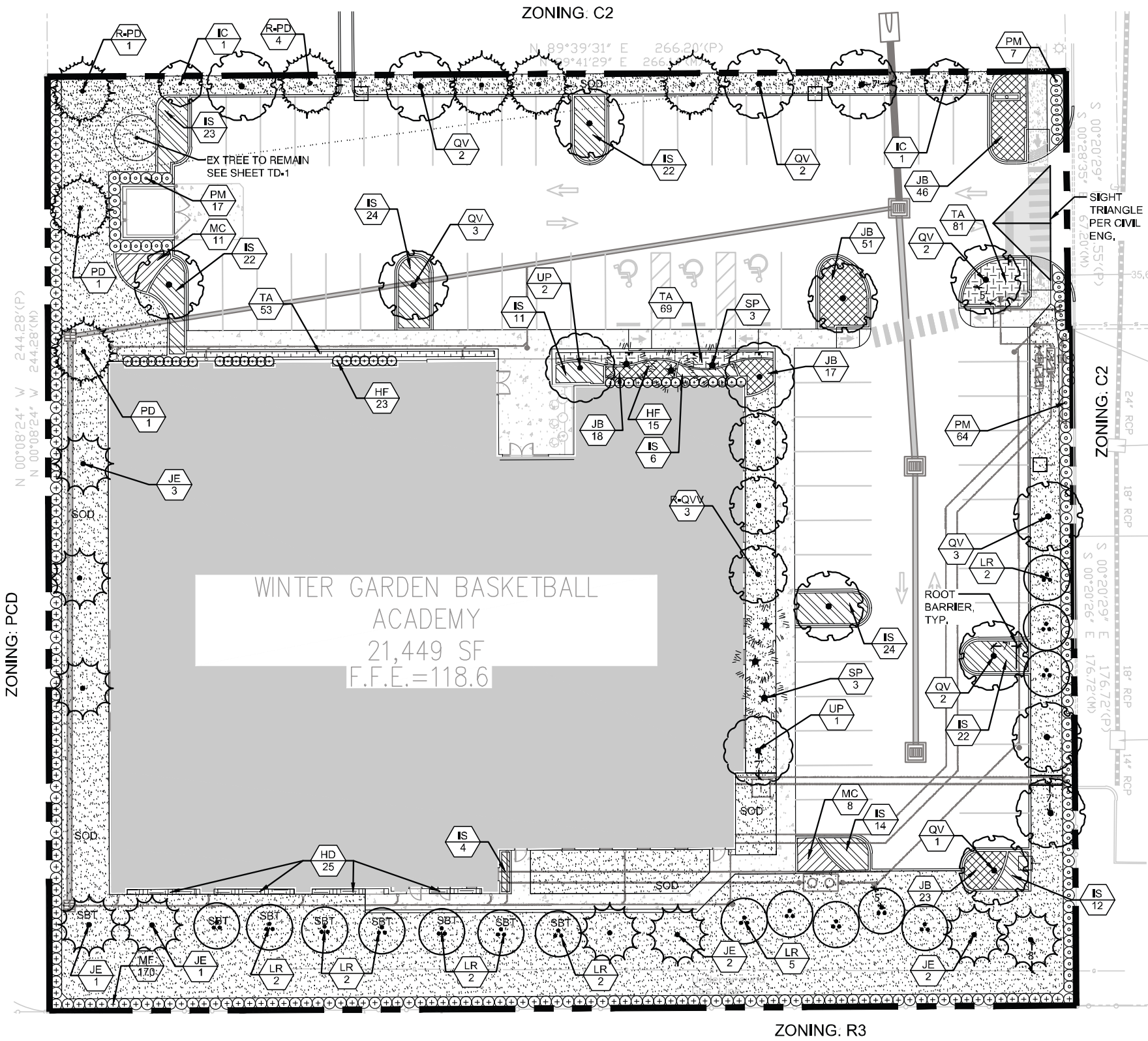
PROJECT NO: 2025.0704
DATE: 5/26/2026

TD-2

CHECKED: CDB DRAWN: GFC

TREE DISPOSITION SPECIFICATIONS & DETAILS

COPYRIGHT © 2026 INTERPLAN LLC RESERVES COPYRIGHT & OTHER RIGHTS RESTRICTING THESE DOCUMENTS TO THE ORIGINAL SITE OR PURPOSE FOR WHICH THEY WERE PREPARED. REPRODUCTIONS, CHANGES OR ASSIGNMENTS ARE PROHIBITED.



NORTH

0' 10' 20' 40'

Scale 1" = 20'

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

LEGEND

SBT- SOUTH BUFFER TREE

ROOT BARRIERS

THE CONTRACTOR SHALL INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING, CURBS, WATER, STORM, OR SANITARY SEWER UTILITIES. ROOT BARRIERS SHALL BE "CENTURY" OR "DEEP-ROOT" 24" DEEP PANELS (OR EQUAL). BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. INSTALL PANELS PER MANUFACTURER'S RECOMMENDATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

MULCHES

AFTER ALL PLANTING IS COMPLETE, CONTRACTOR SHALL INSTALL 3" THICK LAYER OF 1-1/2" SHREDDED WOOD MULCH, NATURAL (UNDYED), OVER LANDSCAPEFABRIC IN ALL PLANTING AREAS (EXCEPT FOR TURF AND SEEDED AREAS). CONTRACTOR SHALL SUBMIT SAMPLES OF ALL MULCHES TO LANDSCAPE ARCHITECT AND OWNER FOR APPROVAL PRIOR TO CONSTRUCTION. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER MULCH HAS BEEN INSTALLED (SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE "GENERAL GRADING AND PLANTING NOTES" AND SPECIFICATIONS).

National Presence, Local Expertise.
EVERGREEN DESIGN GROUP
800.680.6630
www.evergreendesigngroup.com
FL LA 6666711

Digitally signed by Jennifer N Miller
Reason: LA6667079, State of Florida
Date: 2026.05.26 16:17:21 -04'00'

LANDSCAPE CALCULATIONS

ZONING: C-2

TOTAL SITE AREA: 65,320.3 SF 1.5 AC
TOTAL PERVIOUS AI 19,391.6 SF
TOTAL BUILDING AR 21,625.0 SF
TOTAL PAVED ARE/ 24,303.7 SF

SEC. 118-1522 BUILDING OPEN AREAS

			REQUIRED	PROVIDED
BUILDING PERIMETER - DOOR OPENINGS (LF):	255.2	1 CANOPY TREE / 50 LF	5	5*
REQ. LANDSCAPE AREA AT 10' WIDE - 5' SIDEWALK - DOOR OPEN	2,551.7	MIN. 30% OF GREENSPACE IN SHRUBS/GROUNDCOVERS (SF)	765.5	985.0
		*3 SHADE TREES & 6 PALM TREES AT 3:1 (2) PROV		

SEC. 118-1524 LANDSCAPE AREAS BETWEEN PARCELS

			REQUIRED	PROVIDED
SIDE YARD - NORTH 5' WIDE COORDINATED BUFFER ADJ. COMMERCIAL	257.0 LF			
		1 CANOPY TREE / 50 LF, 3" CAL, 12' HT, 30 GAL	5.1	5*
		33 SHRUBS / 50 LF, CONTINUOUS MIN. 36" HT AT PLANTING, 3 GAL., 90% OPACITY IN 1 YR	169.6	CONTINUOUS HEDGE
		*4 SHADE TREES & 2 UNDERSTORY TREES AT 2:1 (1) PROV.		
SIDE YARD - EAST 10' WIDE BUFFER, MARCEL DR ROW	180.3 LF			
		1 CANOPY TREE / 50 LF, 3" CAL, 12' HT, 30 GAL	3.6	4*
		33 SHRUBS / 50 LF, CONTINUOUS MIN. 36" HT AT PLANTING, 3 GAL., 90% OPACITY IN 1 YR	119.0	CONTINUOUS HEDGE
		*3 SHADE TREES & 2 UNDERSTORY TREES AT 2:1 (1) PROV.		
SIDE YARD - WEST 5' WIDE COORDINATED BUFFER ADJ. COMMERCIAL	245.0 LF			
		1 CANOPY TREE / 50 LF, 3" CAL, 12' HT, 30 GAL	4.9	5.0
		33 SHRUBS / 50 LF, CONTINUOUS MIN. 36" HT AT PLANTING, 3 GAL., 90% OPACITY IN 1 YR	161.7	CONTINUOUS HEDGE
REAR YARD - SOUTH 10' WIDE ADJ. RESIDENTIAL	268.2 LF			
		1 CANOPY TREE / 50 LF, 3" CAL, 12' HT, 30 GAL	5.4	12*
		33 SHRUBS / 50 LF, CONTINUOUS MIN. 36" HT AT PLANTING, 3 GAL., 90% OPACITY IN 1 YR	177.0	CONTINUOUS HEDGE
		AND 6' HT FENCE	YES	YES
		*6 SHADE TREES & 12 UNDERSTORY TREES AT 2:1 (6) PROV AS SCREENING		

SEC.118-1525 PARKING LOT LANDSCAPING

			REQUIRED	PROVIDED
PARKING SPACES:	64.0	1 CANOPY TREE / 10 SPACES, 2" CAL, 12' HT, 30 GAL	6.4	9*
		*1 EXISTING TREE & 8 PROP.		
PAVED AREA (SF):	24,303.7	EA EQUAL OR GREATER THAN 10% OF PAVED AREA IN PROJECT SITE (NOT INCL BUILDING OR RETENTION)	2,430.4	19,391.6
		40% OF REQ LANDSCAPE AREA IN SHRUBS/GROUNDCOVER VS. SOD	972.1	3,035.5

SEC. 118-1529 STORAGE AREAS AND SITE UTILITIES

		REQUIRED	PROVIDED
STORAGE AND DUMPSTER/SOLID WASTE AREAS	*24" HT HEDGE AT PLANTING, REACHING 36"-42" HT AND 90% OPACITY IN 1 YR*	YES	YES
ABOVE-GROUND UTILITIES	*24" HT HEDGE AT PLANTING DESIGNED TO ALLOW MAINT, REACHING 36"-42" HT AND 90% OPACITY IN 1 YR*	YES	YES

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL/DBH	HEIGHT	SPREAD	NATIVE
TREES								
IC	2	ILEX CASSINE	DAHOON HOLLY	15 GAL. MIN.	1.5" CAL MIN	7` MIN.	FULL	YES
JE	9	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	CONT.	3" CAL. MIN.	10` MIN.	FULL	YES
LR	15	LAGERSTROEMIA INDICA X FAURIEI `TUSCARORA`	TUSCARORA CRAPE MYRTLE MULTI-TRUNK	15 GAL. MIN.	3-5 CANES, 3" CAL MIN	7` MIN.	FULL	YES
PD	2	PINUS ELLIOTTII DENSA	S. FLORIDA SLASH PINE	CONT.	3" CAL. MIN.	8` MIN.	FULL	YES
QV	15	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	30 GAL MIN	2" CAL. MIN.	12` MIN.	FULL	YES
R-QVV	3	REPLACEMENT QUERCUS VIRGINIANA QVITA	HIGHRISE LIVE OAK	30 GAL MIN	2" CAL. MIN.	8` MIN.	FULL	YES
R-PD	5	REPLACMENT PINUS ELLIOTTII DENSA	S. FLORIDA SLASH PINE	CONT.	3" CAL. MIN.	8` MIN.	FULL	YES
UP	3	ULMUS PARVIFOLIA	LACEBARK ELM	CONT.	3" CAL. MIN.	10` MIN.	FULL	YES
PALM TREES								
SP	6	SABAL PALMETTO	CABBAGE PALMETTO	---	B&B	10' CT		YES

CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	HEIGHT	SPREAD	NATIVE
SHRUBS								
HF	38	HAMELIA PATENS	FIREBUSH	5 GAL MIN	30" OC	30" HT MIN	FULL	YES
MF	170	MYRCIANTHES FRAGRANS	SIMPSON'S STOPPER	3 GAL. MIN.	36" OC	6' HT MIN	FULL	YES
PM	88	PODOCARPUS MACROPHYLLUS	YEW PODOCARPUS	7 GAL. MIN.	36" OC	36" MIN.	FULL	NO
SOD/SEED								
SOD	15,735 SF	STENOTAPHRUM SECUNDATUM `FLORATAM`	FLORATAM ST. AUGUSTINE GRASS	SOLID SOD				
SMALL SHRUBS & GROUNDCOVERS								
HD	25	HELIANTHUS DEBILIS	DUNE SUNFLOWER	1 GAL. MIN.	24" OC	FULL		YES
IS	184	ILEX VOMITORIA `STOKES DWARF`	STOKES DWARF YAUPON HOLLY	3 GAL. MIN.	30" OC	12" HT. MIN		YES
JB	155	JUNIPERUS CONFERTA 'BLUE PACIFIC'	BLUE PACIFIC SHORE JUNIPER	3 GAL. MIN.	24" OC	6" MIN.		NO
MC	19	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	3 GAL. MIN.	36' OC	FULL		YES
TA	203	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	1 GAL. MIN.	18" OC	FULL		NO

ALL PLANTS SHALL MEET, OR EXCEED, FLORIDA NO. 1 GRADE AND MEET, OR EXCEED, ALL SPECIFICATIONS PROVIDED.
PLANT QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN THE CASE OF A DISCREPANCY, THE DRAWING SHALL TAKE PRECEDENCE.

LANDSCAPE PLAN

GENERAL GRADING AND PLANTING NOTES

1. BY SUBMITTING A PROPOSAL FOR THE LANDSCAPE PLANTING SCOPE OF WORK, THE CONTRACTOR CONFIRMS THAT HE HAS READ, AND WILL COMPLY WITH, THE ASSOCIATED NOTES, SPECIFICATIONS, AND DETAILS WITH THIS PROJECT.
2. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING VEGETATION (EXCEPT WHERE NOTED TO REMAIN).
3. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS.
   a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION.
   b. CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL.
   c. THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (**BASED ON A SOIL TEST**, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED.
   d. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE, IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
   e. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
   f. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
4. ALL PLANT LOCATIONS ARE DIAGRAMMATIC. ACTUAL LOCATIONS SHALL BE VERIFIED WITH THE LANDSCAPE ARCHITECT OR DESIGNER PRIOR TO PLANTING. THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT ALL REQUIREMENTS OF THE PERMITTING AUTHORITY ARE MET (I.E., MINIMUM PLANT QUANTITIES, PLANTING METHODS, TREE PROTECTION METHODS, ETC.).
   a. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DETERMINING PLANT QUANTITIES; PLANT QUANTITIES SHOWN ON LEGENDS AND CALLOUTS ARE FOR GENERAL INFORMATION ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE PLANT LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN (FOR INDIVIDUAL SYMBOLS) OR CALLOUT (FOR GROUNDCOVER PATTERNS) SHALL TAKE PRECEDENCE.
   b. **NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT.** IF SOME OF THE PLANTS ARE NOT AVAILABLE, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING (VIA PROPER CHANNELS).
   c. THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE REPRESENTATIVE PHOTOS OF ALL PLANTS PROPOSED FOR THE PROJECT. THE CONTRACTOR SHALL ALLOW THE LANDSCAPE ARCHITECT AND THE OWNER/OWNER'S REPRESENTATIVE TO INSPECT, AND APPROVE OR REJECT, ALL PLANTS DELIVERED TO THE JOBSITE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR SUBMITTALS.
5. CONTRACTOR SHALL PROVIDE AND INSTALL SOLID SOD IN ALL RIGHT-OF-WAYS AND PARKWAYS (UNLESS NOT ALLOWED BY THE LOCAL JURISDICTION) AND SHALL PROVIDE WATERING AND MAINTENANCE UNTIL THE TURF IS ESTABLISHED AND HAS BEEN ACCEPTED BY OWNER.
6. THE CONTRACTOR SHALL MAINTAIN THE LANDSCAPE IN A HEALTHY CONDITION FOR 90 DAYS AFTER ACCEPTANCE BY THE OWNER. REFER TO SPECIFICATIONS FOR CONDITIONS OF ACCEPTANCE FOR THE START OF THE MAINTENANCE PERIOD, AND FOR FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD.
7. SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.

IRRIGATION CONCEPT

1. AN AUTOMATIC IRRIGATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL BY THE TIME OF FINAL INSPECTION. THE ENTIRE IRRIGATION SYSTEM SHALL BE INSTALLED BY A LICENSED AND QUALIFIED IRRIGATION CONTRACTOR.
2. THE IRRIGATION SYSTEM WILL OPERATE ON THE LOWEST QUALITY WATER SOURCE AVAILABLE (RECLAIMED OR SHALLOW WELL), AND THE SYSTEM WILL HAVE BACKFLOW PREVENTION DEVICES INSTALLED TO PREVENT CONTAMINATION OF THE WATER SOURCE WHERE REQUIRED BY THE JURISDICTIONAL AUTHORITY. POTABLE WATER SHALL NOT BE USED FOR LANDSCAPE IRRIGATION. IF THE IRRIGATION SYSTEM WILL OPERATE ON POTABLE WATER, THE SYSTEM WILL HAVE APPROPRIATE BACKFLOW PREVENTION DEVICES INSTALLED TO PREVENT CONTAMINATION OF THE POTABLE SOURCE.
3. ALL NON-TURF PLANTED AREAS SHALL BE DRIP IRRIGATED. SODDED AND SEEDED AREAS SHALL BE IRRIGATED WITH SPRAY OR ROTOR HEADS AT 100% HEAD-TO-HEAD COVERAGE.
4. ALL PLANTS SHARING SIMILAR HYDROZONE CHARACTERISTICS SHALL BE PLACED ON A VALVE DEDICATED TO PROVIDE THE NECESSARY WATER REQUIREMENTS SPECIFIC TO THAT HYDROZONE.
5. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED, TO THE MAXIMUM EXTENT POSSIBLE, TO CONSERVE WATER BY USING THE FOLLOWING DEVICES AND SYSTEMS: MATCHED PRECIPITATION RATE TECHNOLOGY ON ROTOR AND SPRAY HEADS (WHEREVER POSSIBLE), RAIN SENSORS, AND MULTI-PROGRAM COMPUTERIZED IRRIGATION CONTROLLERS FEATURING SENSORY INPUT CAPABILITIES.

INTERPLAN
INTERPLAN LLC
AR99238
CA 8660
ARCHITECTURE
ENGINEERING
PERMITTING
220 E. CENTRAL PKWY, STE 4000
ALTAMONTE SPRINGS, FL 32701
407.645.5008

SEAL:

REGISTERED LANDSCAPE ARCHITECT
JENNIFER N. MILLER
LA 6667079
STATE OF FLORIDA

NO DATE REMARKS
REVISIONS

CAVALCANTI MANAGEMENT
1680 MARCEL DRIVE
WINTER GARDEN, FL

PROJECT NO: 2025.0704
DATE: 5/26/2026

LP-1

CHECKED: MNB DRAWN: RNK

COPYRIGHT © 2026 INTERPLAN LLC RESERVES COPYRIGHT & OTHER RIGHTS RESTRICTING THESE DOCUMENTS TO THE ORIGINAL SITE OR PURPOSE FOR WHICH THEY WERE PREPARED. REPRODUCTIONS, CHANGES OR ASSIGNMENTS ARE PROHIBITED.

PLANTING SPECIFICATIONS

GENERAL

A. QUALIFICATIONS OF LANDSCAPE CONTRACTOR
   1. ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.
   2. A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES.
   3. THE LANDSCAPE CONTRACTOR SHALL HOLD A VALID CONTRACTOR'S LICENSE ISSUED BY THE APPROPRIATE LOCAL JURISDICTION.

B. SCOPE OF WORK
   1. WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HEREIN AND / OR SHOWN ON THE LANDSCAPE PLANS, NOTES AND DETAILS.
   2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION.
   3. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK.

PRODUCTS

A. ALL MANUFACTURED PRODUCTS SHALL BE NEW.
B. CONTAINER AND BALLED-AND-BURLAPPED PLANTS
   1. FURNISH NURSERY-GROWN PLANTS COMPLYING WITH ANSI Z60.1-2014, PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD INJURIES, ABRASIONS, AND DISFIGUREMENT. ALL PLANTS WITHIN A SPECIES SHALL HAVE SIMILAR SIZE, AND SHALL BE OF A FORM TYPICAL FOR THE SPECIES. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR CLIMATIC CONDITIONS.
   2. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED ROOT SYSTEMS, NONE APPEARING FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS J-SHAPED ROOTS).
   3. TREES MAY BE PLANTED FROM CONTAINERS OR BALLED-AND-BURLAPPED (B&B), UNLESS SPECIFIED ON THE PLANTING LEGEND. BARE-ROOT TREES ARE NOT ACCEPTABLE.
   4. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTABLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED, THE LANDSCAPE ARCHITECT AND OWNER SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABILITY OF PLANT MATERIAL.
   5. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED, PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
   6. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER.
   7. MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL. WHERE CALIPER MEASUREMENTS ARE USED, THE CALIPER SHALL BE CALCULATED AS ONE-HALF OF THE SUM OF THE CALIPER OF THE LARGEST TRUNKS.
   8. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED SHALL BE REJECTED.
C. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH A DENSITY OF 3/4" TO 1", EACH PALLET OF SOD TO BE NEATLY ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.
D. TOPSOIL: SANDY TO CLAY LOAM TOPSOIL FREE OF STONES LARGER THAN ONE INCH, FOREIGN MATTER, PLANTS, ROOTS, AND SEEDS,
E. COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, pH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT, 100 PERCENT PASSING THROUGH SIX-INCH SIEVE, SOLUBLE SALT CONTENT OF 5 TO 10 DECISIEMENS/M, NOT EXCEEDING 10 DECISIEMENS/M, AND FREE OF SUBSTANCES TOXIC TO PLANTINGS, NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE USED.
F. FERTILIZER: GRANULAR FERTILIZER CONSISTING OF NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER NUTRIENTS IN PROPORTIONS, AMOUNTS, AND RELEASE RATES RECOMMENDED IN A SOIL REPORT FROM A QUALIFIED SOIL-TESTING AGENCY (SEE BELOW).
G. MULCH: SIZE AND TYPE AS INDICATED ON PLANS, FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS.
H. TREE STAKING AND GUYING
   1. STAKES: 8' LONG GREEN METAL T-POSTS.
   2. GUY AND TWINE: ASTM A 641, CLASS 1, GALVANIZED-STEEL WIRE, 2-STRAND, TWISTED, 0.106 INCH DIAMETER.
   3. STRAP CHAFING GUARD: REINFORCED NYLON OR CANVAS AT LEAST 1-1/2 INCH WIDE WITH GROMMETS TO PROTECT TREE TRUNKS FROM DAMAGE.
I. PREEMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PREEMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PREEMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

METHODS

A. SOIL PREPARATION
   1. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN 1-INCH OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST.
   2. SOIL TESTING.
      a. AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES FROM THE PROJECT'S LANDSCAPE AREAS TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY. EACH SAMPLE SUBMITTED TO THE LAB SHALL CONSIST OF NO LESS THAN ONE QUART OF SOIL, TAKEN FROM BETWEEN THE SOIL SURFACE AND 6" DEPTH. IF NO SAMPLE LOCATIONS ARE INDICATED ON THE PLANS, THE CONTRACTOR SHALL TAKE A MINIMUM OF THREE SAMPLES FROM VARIOUS REPRESENTATIVE LOCATIONS FOR TESTING.
      b. THE CONTRACTOR SHALL HAVE THE SOIL TESTING REPORT AND ITS RESULTS FOR THE FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, pH, ORGANIC MATTER CONTENT, SALT (ECE) LEVEL, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT.
      c. THE CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES.
      d. THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): SOIL AMENDMENTS, INCLUDING TYPES AND RATES; RECOMMENDATIONS FOR GENERAL ORNAMENTAL PLANTS, XERIC PLANTS, TURF, AND NATIVE SITES, AS WELL AS PREVAILING FERTILITY AND PLANTING RECOMMENDATIONS FOR ANY OTHER SOIL-RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE.
   3. THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS, ANY CHANGES IN COST DUE TO THE SOIL REPORT RECOMMENDATIONS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT.
   4. FOR BIDDING PURPOSES ONLY, THE SOIL PREPARATION SHALL CONSIST OF THE FOLLOWING:
      a. TURF: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING:
      b. NITROGEN STABILIZED ORGANIC AMENDMENT • 4 CU. YDS. PER 1,000 S.F.
      c. PREPLANT TURF FERTILIZER (16-20-0 OR SIMILAR, SLOW RELEASE, ORGANIC) • 15 LBS PER 1,000 S.F.
      d. "CLAY BUSTER" OR EQUAL • USE MANUFACTURER'S RECOMMENDED RATE
      e. TREES, SHRUBS, AND PERENNIALS: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING:
      f. NITROGEN STABILIZED ORGANIC AMENDMENT • 4 CU. YDS. PER 1,000 S.F.
      g. 13-13-13 FERTILIZER (OR SIMILAR, ORGANIC, SLOW RELEASE) • 10 LBS. PER CU. YD.
      h. "CLAY BUSTER" OR EQUAL • USE MANUFACTURER'S RECOMMENDED RATE
      i. IRON SULPHATE • 2 LBS. PER CU. YD.
   5. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS.
      a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/- 0.1' OF FINISH GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION.
      b. CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL.
      c. THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (BASED ON A SOIL TEST, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED.
      d. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE ADJACENT FINISH SURFACE. IN ORDER TO ALLOW FOR PROPER MULCH DEPTH, TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
      e. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS, TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
      f. SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
   6. ONCE SOIL PREPARATION IS COMPLETE, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THERE ARE NO DEBRIS, TRASH, OR STONES LARGER THAN 1" REMAINING IN THE TOP 8" OF SOIL.

B. SUBMITTALS
   1. THE CONTRACTOR SHALL PROVIDE SUBMITTALS AND SAMPLES, IF REQUIRED, TO THE LANDSCAPE ARCHITECT, AND RECEIVE APPROVAL IN WRITING FOR SUCH SUBMITTALS BEFORE WORK COMMENCES.
   2. SUBMITTALS SHALL INCLUDE PHOTOS OF PLANTS WITH A RULER OR MEASURING STICK FOR SCALE. PHOTOS OR SAMPLES OF ANY REQUIRED MULCHES, AND SOIL TEST RESULTS AND PREPARATION RECOMMENDATIONS FROM THE TESTING LAB (INCLUDING COMPOST AND FERTILIZER RATES AND TYPES, AND OTHER AMENDMENTS FOR TREE/SHRUB, TURF, AND SEED AREAS AS MAY BE APPROPRIATE).
   3. SUBMITTALS SHALL ALSO INCLUDE MANUFACTURER CUT SHEETS FOR PLANTING ACCESSORIES SUCH AS TREE STAKES AND TIES, EDGING, AND LANDSCAPE FABRICS, (IF ANY).
   4. WHERE MULTIPLE ITEMS ARE SHOWN ON A PAGE, THE CONTRACTOR SHALL CLEARLY INDICATE THE ITEM BEING CONSIDERED.

C. GENERAL PLANTING
   1. REMOVE ALL NURSERY TAGS AND STAKES FROM PLANTS.
   2. EXCEPT IN AREAS TO BE PLANTED WITH ORNAMENTAL GRASSES, APPLY PRE-EMERGENT HERBICIDES AT THE MANUFACTURER'S RECOMMENDED RATE.
   3. TRENCHING NEAR EXISTING TREES
      a. CONTRACTOR SHALL NOT DISTURB ROOTS 1-1/2" AND LARGER IN DIAMETER WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS. TRUNKS, AND BRANCHES. THE CRZ IS DEFINED AS A CIRCULAR AREA EXTENDING OUTWARD FROM THE TREE TRUNK, WITH A RADIUS EQUAL TO 1' FOR EVERY 1" OF TRUNK DIAMETER AT 4.5' BREAST HEIGHT (4.5' ABOVE THE AVERAGE GRADE AT THE TRUNK).
      b. ALL EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ.
      c. ALTER ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER, WHERE TREE ROOTS 1-1/2" AND LARGER IN DIAMETER ARE ENCOUNTERED IN THE FIELD. TUNNEL UNDER SUCH ROOTS. WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS.
      d. ALL SEVERED ROOTS SHALL BE HAND PRUNED WITH SHARP TOOLS AND ALLOWED TO AIR-DRY. DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS.

D. TREE PLANTING
   1. TREE PLANTING HOLES SHALL BE EXCAVATED TO A MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE ROOTBALL AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL LESS TWO TO FOUR INCHES.
   2. SCARIFY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE TREE. REMOVE ANY GLAZING THAT MAY HAVE BEEN CAUSED DURING THE EXCAVATION OF THE HOLE. FOR CONTAINER AND B&B TREES, TO REMOVE ANY POTENTIALLY GIRDLING ROOTS AND OTHER ROOT DEFECTS, THE CONTRACTOR SHALL SHAVE A 1" LAYER OFF OF THE SIDES AND BOTTOM OF THE ROOTBALL OF ALL TREES JUST BEFORE PLACING THEM IN THE PLANTING PIT. DO NOT "TEASE" ROOTS OUT FROM THE ROOTBALL.
   3. INSTALL THE TREE ON UNDISTURBED SUBGRADE SO THAT THE TOP OF THE ROOTBALL IS TWO TO FOUR INCHES ABOVE THE SURROUNDING GRADE.
   4. BACKFILL THE TREE HOLE USING THE EXISTING TOPSOIL FROM ON-SITE. ROCKS LARGER THAN 1" DIA. AND ALL OTHER DEBRIS SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKFILL. SHOULD ADDITIONAL SOIL BE REQUIRED TO ACCOMPLISH THE TASK, USE STORED TOPSOIL FROM ON-SITE OR IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IMPORTED TOPSOIL SHALL BE OF LIKE TEXTURAL CLASS AND QUALITY AS THE ON-SITE SOIL.
   5. TREES SHALL NOT BE STAKED UNLESS LOCAL CONDITIONS (SUCH AS HEAVY WINDS OR SLOPES) REQUIRE STAKES TO SUPPORT THE TREES. IF STAKES ARE REQUIRED, USE THE MINIMUM NUMBER OF TREE STAKES (BEYOND THE MINIMUMS LISTED BELOW) WILL BE LEFT TO THE LANDSCAPE CONTRACTOR'S DISCRETION, SHOULD ANY TREES FALL OR LEAN, THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN THE TREE, REPLACE IF SEVERELY BECOME DAMAGED, TREE STAKING SHALL ADHERE TO THE FOLLOWING GUIDELINES:
      a. 1"-2" TREES: TWO STAKES PER TREE
      b. 2-1/2"-3" TREES: THREE STAKES PER TREE
      c. TREES OVER 4" CALIPER: GUY AS NEEDED
      d. MULTI-TRUNK TREES: THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS NEEDED TO STABILIZE THE TREE.
   7. UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASIN AROUND THE TREE, COVER THE BOTTOM OF THE TREE BASIN WITH MULCH (TYPE AND DEPTH PER PLANS).

E. SHRUB, PERENNIAL AND GROUNDCOVER PLANTING
   1. DIG PLANTING HOLES TWICE AS WIDE AND 2" LESS DEEP THAN EACH PLANT'S ROOTBALL. INSTALL THE PLANT IN THE HOLE. BACKFILL AROUND THE PLANT WITH SOIL AMENDED PER SOIL TEST RECOMMENDATIONS.
   2. WHEN PLANTING IS COMPLETE, INSTALL MULCH (TYPE AND DEPTH PER PLANS) OVER ALL PLANTING BEDS, COVERING THE ENTIRE PLANTING AREA.

F. SODDING
   1. SOD VARIETY TO BE AS SPECIFIED ON THE LANDSCAPE PLAN.
   2. LAY SOD WITHIN 24 HOURS FROM THE TIME OF STRIPPING. DO NOT LAY IF THE GROUND IS FROZEN.
   3. LAY THE SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS TIGHTLY. DO NOT OVERLAP, STAGGER STRIPS TO START JOINTS IN ADJACENT COURSES.
   4. ROLL THE SOD TO ENSURE GOOD CONTACT OF THE SOD'S ROOT SYSTEM WITH THE SOIL UNDERNEATH.
   5. WATER THE SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING TO OBTAIN AT LEAST SIX INCHES OF PENETRATION INTO THE SOIL BELOW THE SOD.

G. MULCH
   1. INSTALL MULCH TOPDRESSING, TYPE AND DEPTH PER MULCH NOTE, IN ALL PLANTING AREAS AND TREE RINGS.
   2. DO NOT INSTALL MULCH WITHIN 6" OF TREE ROOT FLARE, EXCEPT AS MAY BE NOTED ON THESE PLANS. MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS, MULCH COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF WALL.

H. CLEAN UP
   1. DURING LANDSCAPE PREPARATION AND PLANTING, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS IN A NEAT, ORDERLY CONDITION.
   2. DISPOSE LEGALLY OF ALL EXCAVATED MATERIALS OFF THE PROJECT SITE.

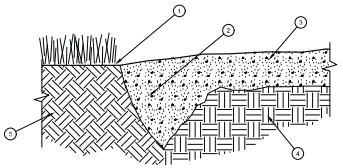
I. INSPECTION AND ACCEPTANCE
   1. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL REMOVE FROM THE SITE ALL EQUIPMENT AND SURPLUS MATERIALS FOR OWNER'S FINAL ACCEPTANCE.
   2. WHEN THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S SATISFACTION WITHIN 24 HOURS.
   3. THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN REINSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE, AT THAT TIME, A WRITTEN NOTIFICATION OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.

J. LANDSCAPE MAINTENANCE
   1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS, STARTING IMMEDIATELY AFTER PLANTING AND CONTINUING UNTIL FINAL ACCEPTANCE BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETTING OF PLANTS THAT HAVE SETTLED, MOWING AND AERATION OF LAWNS, WEEDING, TRIMMING FOR EDGES AND INSECT AND DISEASES, REPLACEMENT OF MULCH, REMOVAL OF LITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO FAULTY PARTS AND/OR MATERIALS, AND THE APPROPRIATE USE OF ALL PESTICIDES.
   2. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER WITH SEASONAL ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.
   3. SHOULD SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF PLANTS AT NO ADDITIONAL COST TO THE OWNER.
   4. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
      a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.
      b. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
      c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED.

K. WARRANTY PERIOD, PLANT GUARANTEE AND REPLACEMENTS
   1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, AND IRRIGATION SYSTEMS FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE (60 DAYS FOR ANNUAL PLANTS). THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER, ANY PLANTS WHICH DIE IN THAT TIME, OR REPAIR ANY PORTIONS OF THE IRRIGATION SYSTEM WHICH OPERATES IMPROPERLY.
   2. AFTER THE INITIAL MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD, THE LANDSCAPE CONTRACTOR SHALL ONLY BE RESPONSIBLE FOR REPLACEMENT OF PLANTS WHEN PLANT DEATH CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY HUMAN ACTIONS.

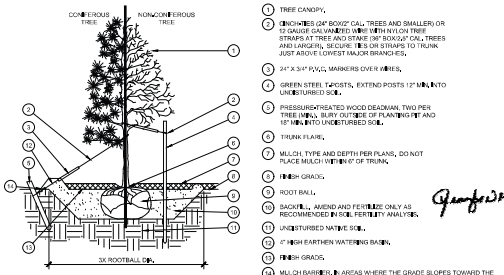
L. PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.

LANDSCAPE SPECIFICATIONS & DETAILS



1. FINISH GRADE FOR LAWN
2. EARTH/SPADE EDGE WITH 3"-4" OF MULCH AT EDGE (FLUSH WITH TOP OF LAWN).
3. MULCH PER SPECIFICATIONS
4. SOIL MIX PER SPECIFICATIONS
5. EXISTING SOIL

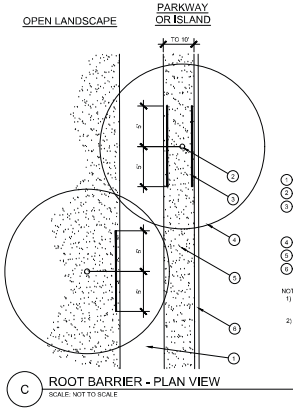
A EARTH/SPADE EDGE
SCALE: NOT TO SCALE



1. TREE CANOPY.
2. (2) INCH-DIA. (24" BOX/2" CAL. TREES AND SMALLER) OR 12 GAUGE GALVANIZED WIRE WITH NYLON TREE STRAPS AT TREE AND STAKE (36" BOX/3-4" CAL. TREES AND LARGER), SECURE TIES OR STRAPS TO TRUNK JUST ABOVE LOWEST MAJOR BRANCHES.
3. 24" X 3/4" P.V.C. MARKERS OVER WIRES.
4. GREEN STEEL T-POSTS, EXTEND POSTS 12" MIN. INTO UNDISTURBED SOIL.
5. PRESSURE-TREATED WOOD DEADMAN, TWO PER TREE (MIN.), BURY OUTSIDE OF PLANTING PIT AND 18" MIN. INTO UNDISTURBED SOIL.
6. TRUNK FLARE.
7. MULCH, TYPE AND DEPTH PER PLANS, DO NOT PLACE MULCH WITHIN 6" OF TRUNK.
8. FINISH GRADE.
9. ROOT BALL.
10. BACKFILL, AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.
11. UNDISTURBED NATIVE SOIL.
12. 4" HIGH EARTHEN WATERING BASIN.
13. FINISH GRADE.
14. MULCH BARRIER, IN AREAS WHERE THE GRADE SLOPES TOWARD THE FOOT RIGHT OF WAY, CONSTRUCT A 4" HIGH BERM TO CONTAIN MULCH, NO MULCH MAY BE PLACED WHERE IT COULD WASH INTO THE FOOT RIGHT OF WAY.

NOTES:
1. SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING TREE.
2. REMOVE EXCESS SOIL APPLIED ON TOP OF THE ROOTBALL THAT COVERS THE ROOT FLARE. THE PLANTING HOLE DEPTH SHALL BE SUCH THAT THE ROOTBALL RESTS ON UNDISTURBED SOIL, AND THE ROOT FLARE IS 2"-4" ABOVE FINISH GRADE.
3. FOR B&B TREES, CUT OFF BOTTOM 1/3 OF WIRE BASKET BEFORE PLACING TREE IN HOLE. CUT OFF AND REMOVE REMAINDER OF BASKET AFTER TREE IS SET IN HOLE. REMOVE ALL NYLON TIES, TWINE, ROPE, AND OTHER PACKING MATERIAL. REMOVE AS MUCH BURLAP FROM AROUND ROOTBALL AS IS PRACTICAL.
4. REMOVE ALL NURSERY STAKES AFTER PLANTING.
5. FOR TREES 36" BOX/2-1/2" CAL. AND LARGER, USE THREE STAKES OR DEADMEN (AS APPROPRIATE), SPACED EVENLY AROUND TREE.
6. STAKING SHALL BE SLIGHT ENOUGH TO PREVENT TRUNK FROM BENDING, BUT LOOSE ENOUGH TO ALLOW SOME TRUNK MOVEMENT IN WIND.

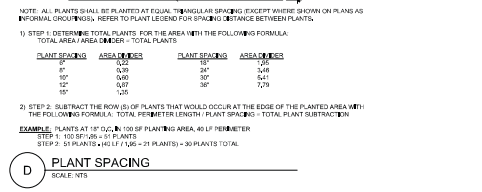
B TREE PLANTING
SCALE: NOT TO SCALE



1. TYPICAL WALKWAY OR PAVING
2. TREE TRUNK
3. LINEAR ROOT BARRIER MATERIAL, SEE PLANTING NOTES FOR TYPE AND MANUFACTURER, INSTALL PER MANUFACTURER'S SPECIFICATIONS.
4. TREE CANOPY
5. TYPICAL PLANTING AREA
6. TYPICAL CURB AND GUTTER

NOTES:
1) INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING OR CURBS.
2) BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE, UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

C ROOT BARRIER - PLAN VIEW
SCALE: NOT TO SCALE



NOTE: ALL PLANTS SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING (EXCEPT WHERE SHOWN ON PLANS AS INFORMAL GROUPINGS). REFER TO PLANT LEGEND FOR SPACING DISTANCE BETWEEN PLANTS.

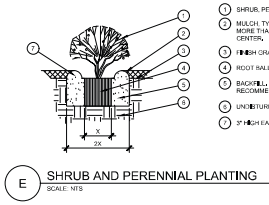
1) STEP 1: DETERMINE TOTAL PLANTS FOR THE AREA WITH THE FOLLOWING FORMULA:
TOTAL AREA / AREA DIVIDER = TOTAL PLANTS

PLANT SPACING	AREA DIVIDER	PLANT SPACING	AREA DIVIDER
6"	0.23	18"	2.60
8"	0.39	24"	3.46
10"	0.60	30"	5.41
12"	0.87	36"	7.79
15"	1.35		

2) STEP 2: SUBTRACT THE ROW (S) OF PLANTS THAT WOULD OCCUR AT THE EDGE OF THE PLANTED AREA WITH THE FOLLOWING FORMULA: TOTAL PERIMETER LENGTH / PLANT SPACING = TOTAL PLANT SUBTRACTION

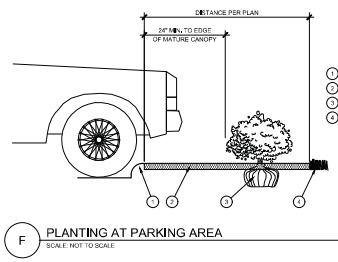
EXAMPLE: PLANTS AT 18" O.C. IN 100 SF PLANTING AREA, 40 LF PERIMETER
STEP 1: 100 SF / 1.35 = 51 PLANTS
STEP 2: 51 PLANTS = (40 LF / 18" = 21 PLANTS) = 30 PLANTS TOTAL

D PLANT SPACING
SCALE: NTS



1. SHRUB, PERENNIAL, OR ORNAMENTAL GRASS.
2. MULCH, TYPE AND DEPTH PER PLANS. PLACE NO MORE THAN 1" OF MULCH WITHIN 6" OF PLANT CENTER.
3. FINISH GRADE.
4. ROOT BALL.
5. BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.
6. UNDISTURBED NATIVE SOIL.
7. 3" HIGH EARTHEN WATERING BASIN.

E SHRUB AND PERENNIAL PLANTING
SCALE: NTS


DISTANCE

ALTA/NSPS Land Title Survey

Legal Description:

LOT 4, DANIELS COMMERCE CENTER, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 104, PAGE 66, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

Flood Disclaimer:

BY PERFORMING A SEARCH WITH THE LOCAL GOVERNING MUNICIPALITY OR WWW.FEMA.GOV, THE PROPERTY APPEARS TO BE LOCATED IN ZONE X. THIS PROPERTY WAS FOUND IN CITY OF WINTER GARDEN, COMMUNITY NUMBER 120187, DATED 9/25/2009.

Property Address:
1680 Marcel Dr, Winter Garden, FL 34787

Graphic Scale: 0' 15' 30' 60'
Scale: 1"=30'

-Site Benchmark Information-

#1
Found Nail & Disk "LB 7623" in concrete curb.
Elevation: 118.27'

#2
Set Nail & Disk "LB 7623" in concrete curb.
Elevation: 117.65'

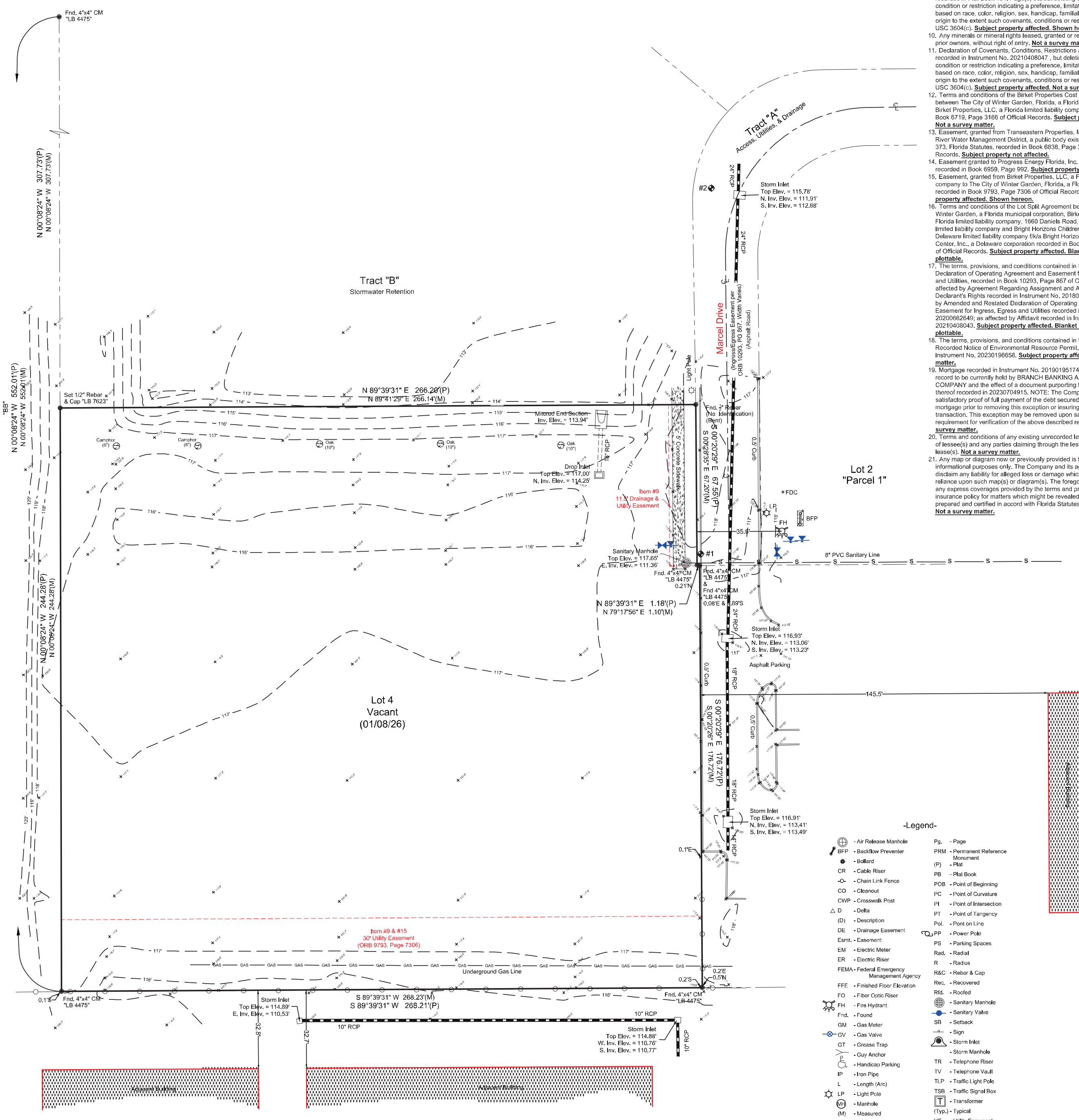
-Benchmark Information-

Orange County Benchmark
Benchmark: C1346065
Elevation: 116.75'
(Elevations are based upon NGVD 29 Datum)

Schedule B-II (Exceptions)

Issued by: First American Title Insurance Company
File No.: 12671-2824750
Issuing Office: 1540 International Pkwy, Suite 1020, Lake Mary, FL 32746
Effective Date: August 24, 2025 @ 8:00 AM

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the Public Records or attaching subsequent to the Effective Date but prior to the date the proposed insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment. **Not a survey matter.**
2. Any rights, interests, or claims of parties in possession of the land not shown by the Public Records. **None provided at time of survey.**
3. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the land. **Shown hereon if applicable.**
4. Any lien, for services, labor, or materials in connection with improvements, repairs or renovations provided before, on, or after Date of Policy, not shown by the Public Records. **Not a survey matter.**
5. Any dispute as to the boundaries caused by a change in the location of any water body within or adjacent to the Land prior to Date of Policy, and any adverse claim to all or part of the Land that is, at Date of Policy, or was previously under water. **Subject property not affected.**
6. Taxes or special assessments not shown as liens in the Public Records or in the records of the local tax collecting authority, at Date of Policy. **Not a survey matter.**
7. Any minerals or mineral rights leased, granted or retained by current or prior owners. **Not a survey matter.**
8. Taxes and assessments for the year 2025 and subsequent years, which are not yet due and payable. **Not a survey matter.**
9. Restrictions, dedications, conditions, reservations, easements and other matters shown on the plat of DANIELS COMMERCE CENTER, as recorded in Plat Book 104, Page(s) 66, but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 3604(c). **Subject property affected. Shown hereon.**
10. Any minerals or mineral rights leased, granted or retained by current or prior owners, without right of entry. **Not a survey matter.**
11. Declaration of Covenants, Conditions, Restrictions and Easements, recorded in Instrument No. 20210408047 , but deleting any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin to the extent such covenants, conditions or restrictions violate 42 USC 3604(c). **Subject property affected. Not a survey matter.**
12. Terms and conditions of the Birket Properties Cost Share Agreement between The City of Winter Garden, Florida, a Florida municipality and Birket Properties, LLC, a Florida limited liability company recorded in Book 6719, Page 3166 of Official Records. **Subject property affected. Not a survey matter.**
13. Easement, granted from Transeastern Properties, Inc. to St. Johns River Water Management District, a public body existing under Chapter 373, Florida Statutes, recorded in Book 6838, Page 352 of Official Records. **Subject property not affected.**
14. Easement granted to Progress Energy Florida, Inc. by instrument recorded in Book 6959, Page 992. **Subject property not affected.**
15. Easement, granted from Birket Properties, LLC, a Florida limited liability company to The City of Winter Garden, Florida, a Florida municipality, recorded in Book 9793, Page 7306 of Official Records. **Subject property affected. Shown hereon.**
16. Terms and conditions of the Lot Split Agreement between The City of Winter Garden, a Florida municipal corporation, Birket Properties, LLC, a Florida limited liability company, 1660 Daniels Road, LLC, a Florida limited liability company and Bright Horizons Children's Centers LLC, a Delaware limited liability company f/k/a Bright Horizons Children's Center, Inc., a Delaware corporation recorded in Book 10293, Page 854 of Official Records. **Subject property affected. Blanket in nature, not plottable.**
17. The terms, provisions, and conditions contained in that certain Declaration of Operating Agreement and Easement for Ingress, Egress and Utilities, recorded in Book 10293, Page 867 of Official Records; as affected by Agreement Regarding Assignment and Assumption of Declarant's Rights recorded in Instrument No. 20180718689; as affected by Amended and Restated Declaration of Operating Agreement and Easement for Ingress, Egress and Utilities recorded in Instrument No. 20200662649; as affected by Affidavit recorded in Instrument No. 20210408043. **Subject property affected. Blanket in nature, not plottable.**
18. The terms, provisions, and conditions contained in that certain Recorded Notice of Environmental Resource Permit, recorded in Instrument No. 20230196658. **Subject property affected. Not a survey matter.**
19. Mortgage recorded in Instrument No. 20190195174 which appears of record to be currently held by BRANCH BANKING AND TRUST COMPANY and the effect of a document purporting to be a release thereof recorded in 20230704915. NOTE: The Company will require satisfactory proof of full payment of the debt secured by the said mortgage prior to removing this exception or insuring the contemplated transaction. This exception may be removed upon satisfaction of the requirement for verification of the above described release. **Not a survey matter.**
20. Terms and conditions of any existing unrecorded lease(s), and all rights of lessee(s) and any parties claiming through the lessee(s) under the lease(s). **Not a survey matter.**
21. Any map or diagram now or previously provided is for reference and informational purposes only. The Company and its agents expressly disclaim any liability for alleged loss or damage which may result from reliance upon such map(s) or diagram(s). The foregoing does not limit any express coverages provided by the terms and provisions of any title insurance policy for matters which might be revealed by a survey prepared and certified in accord with Florida Statutes Section 472.027. **Not a survey matter.**



-Legend-

	- Air Release Manhole	Pg.	- Page
BFP	- Backflow Preventer	PRM	- Permanent Reference Monument
	- Bollard	(P)	- Plat
CR	- Cable Riser	PB	- Plat Book
-O-	- Chain Link Fence	POB	- Point of Beginning
CO	- Cleanout	PC	- Point of Curvature
CWP	- Crosswalk Post	PI	- Point of Intersection
△ D	- Delta	PT	- Point of Tangency
(D)	- Description	PoL	- Pont on Line
DE	- Drainage Easement	PP	- Power Pole
Esmt.	- Easement	PS	- Parking Spaces
EM	- Electric Meter	Rad.	- Radial
ER	- Electric Riser	R	- Radius
FEMA	- Federal Emergency Management Agency	R&C	- Rebar & Cap
FFE	- Finished Floor Elevation	Rec.	- Recovered
FO	- Fiber Optic Riser	Rfd.	- Roofed
FH	- Fire Hydrant		- Sanitary Manhole
Fnd.	- Found		- Sanitary Valve
GM	- Gas Meter	SB	- Setback
GV	- Gas Valve		- Sign
GT	- Grease Trap		- Storm Inlet
	- Guy Anchor		- Storm Manhole
	- Handicap Parking	TR	- Telephone Riser
IP	- Iron Pipe	TV	- Telephone Vault
L	- Length (Arc)	TLP	- Traffic Light Pole
LP	- Light Pole	TSB	- Traffic Signal Box
MH	- Manhole		- Transformer
(M)	- Measured	(Typ.)	- Typical
MES	- Mitered End Section	UE	- Utility Easement
N&D	- Nail & Disk	WM	- Water Meter
N.R.	- Non-Radial	WV	- Water Valve
ORB	- Official Records Book		- Well
OHE	- Overhead Electric		- Wood Fence
		WPB	- Wire Pull Box

-Legend-

RCP - Reinforced Concrete Pipe

Tree Note:

Oak - Denotes Tree Type
(18") - Diameter of Tree measured at Chest Height

Gross Land Area:	21820.08 Square Feet ± or 0.501 Acres ±.
Setback Requirements:	Front: *Not provided at time of survey* Side: *Not provided at time of survey* Rear: *Not provided at time of survey*
Zoning:	C-2
Square footage of Buildings:	0.00 Square Feet ±.
Parking Space Size:	(Standard) 00 Parking Stalls found at time of Survey (Handicap) 00 Parking Stalls found at time of Survey

In the process of conducting the fieldwork, no of earth moving work, building construction or building additions within recent months were observed.
In the process of conducting the fieldwork, no evidence of recent street or sidewalk construction or repairs were observed.
In the process of conducting the fieldwork, no evidence of site use as a solid waste dump, sump or sanitary landfill were observed.
In the process of conducting the fieldwork, no evidence of cemeteries and/or burial grounds were observed.
In the process of conducting the fieldwork, no evidence of any water features were observed.
In the process of conducting the fieldwork, no evidence of wetland delineation markers were observed.
Vehicular Access to Subject Property is provided by: Marcel Drive

Revisions
Added Address - 09/24/25
Update Topography - 01/12/26
Locate Utilities - 01/15/26

Field Date: 09/21/25	Date Completed: 09/24/25
Drawn By: JW	File Number: IS-57570

-Legend-

C	- Calculated	PC	- Point of Curvature
℄	- Centerline	Pg.	- Page
CB	- Concrete Block	PI	- Point of Intersection
CM	- Concrete Monument	P.O.B.	- Point of Beginning
Conc.	- Concrete	P.O.L.	- Point on Line
D	- Description	PP	- Power Pole
DE	- Drainage Easement	PRM	- Permanent Reference Monument
Esmt.	- Easement	PT	- Point of Tangency
F.E.M.A.	- Federal Emergency Management Agency	R	- Radius
FFE	- Finished Floor Elevation	Rad.	- Radial
Fnd.	- Found	R&C	- Rebar & Cap
IP	- Iron Pipe	Rec.	- Recovered
L	- Length (Arc)	Rfd.	- Roofed
M	- Measured	Set Rebar	- Set ½" Rebar & Cap "LB 7623"
N&D	- Nail & Disk	Typ.	- Typical
N.R.	- Non-Radial	UE	- Utility Easement
ORB	- Official Records Book	WM	- Water Meter
P	- Plat	△	- Delta (Central Angle)
P.B.	- Plat Book	—O—	- Chain Link Fence
—□—	- Wood Fence		

-Notes-

- >Survey is Based upon the Legal Description from provided Title Commitment.
- >Subject to any Easements and/or Restrictions of Record.
- >Bearing Basis shown hereon, is Assumed and Based upon the Line Denoted with a "BB".
- >Building Ties are NOT to be used to reconstruct Property Lines.
- >Fence Ownership is NOT determined.
- >Roof Overhangs, Underground Utilities and/or Footers have NOT been located UNLESS otherwise noted.
- >Septic Tanks and/or Drainfield locations are approximate and MUST be verified by appropriate Utility Location Companies.
- >Use of This Survey for Purposes other than Intended, Without Written Verification, Will be at the User's Sole Risk and Without Liability to the Surveyor. Nothing Hereon shall be Construed to give ANY Rights or Benefits to Anyone Other than those Certified.
- >Flood Zone Determination Shown Heron is Given as a Courtesy, and is Subject to Final Approval by F.E.M.A. This Determination may be affected by Flood Factors and/or other information NEITHER known by NOR given to this Surveying Company at the time of this Endeavor. Ireland & Associates Surveying Inc. and the signing surveyor assume NO Liability for the Accuracy of this Determination.

ALTA/NSPS CERTIFICATION

Certified to:
CHRIS BLURTON

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(b), 7(a), 7(b)(1), 8, 9, 11(b), 13, 16, and 18 of Table A thereof.

The fieldwork was completed on 09/21/2025.

Date of Plat or Map: 09/24/2025.

I further certify, to the best of my knowledge and belief, that the boundary and/or topographic survey shown hereon was prepared in accordance with the "standards of practice" for surveying and mapping in the state of Florida as set forth by the Florida board of professional surveyors and mappers in chapter 5j-17, Florida Administrative Code, pursuant to section 472.027, Florida Statutes.

Patrick K. Ireland, PSM 6637 — FOR THE FIRM LB# 7623

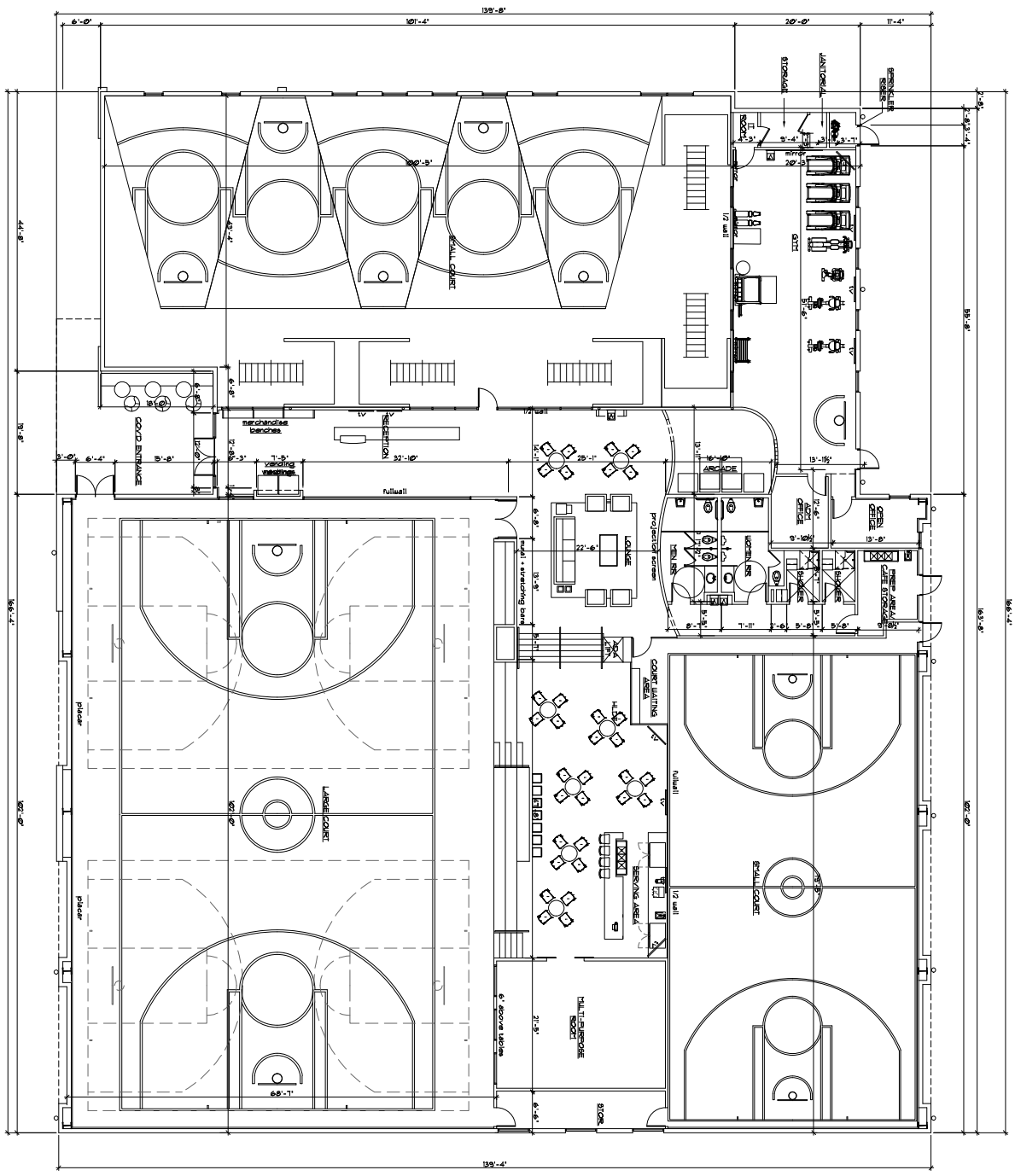
PATRICK IRELAND — PROFESSIONAL LAND SURVEYOR & MAPPER — CERTIFICATE NO. 6637 — STATE OF FLORIDA

This Survey is intended ONLY for the use of Said Certified Parties.
This Survey NOT VALID UNLESS Signed and Embossed with Surveyor's Seal.

Ireland & Associates Surveying, Inc.
800 Currency Circle Suite 1020
Lake Mary, Florida 32746
www.irelandsurveying.com
Office: 407.678.3366
Fax: 407.320.8165

PROPOSED FLOOR PLAN

1/8"=1'-0"



SHEET
A101
OF
-

SIGN/SEAL
Digitally signed by Fulvio Romano
Date: 2026.05.18 10:13:44 -04'00'
DATE

RABITS & ROMANO
ARCHITECTURE
PLANNING AND DESIGN
AA26002490

5205 SOUTH ORANGE AVE.
SUITE 200 ORLANDO , FL. 32809
TEL - 407-490-0350
FAX - 407-232-6000
info@rabits-architect.com
www.rabits-architect.com

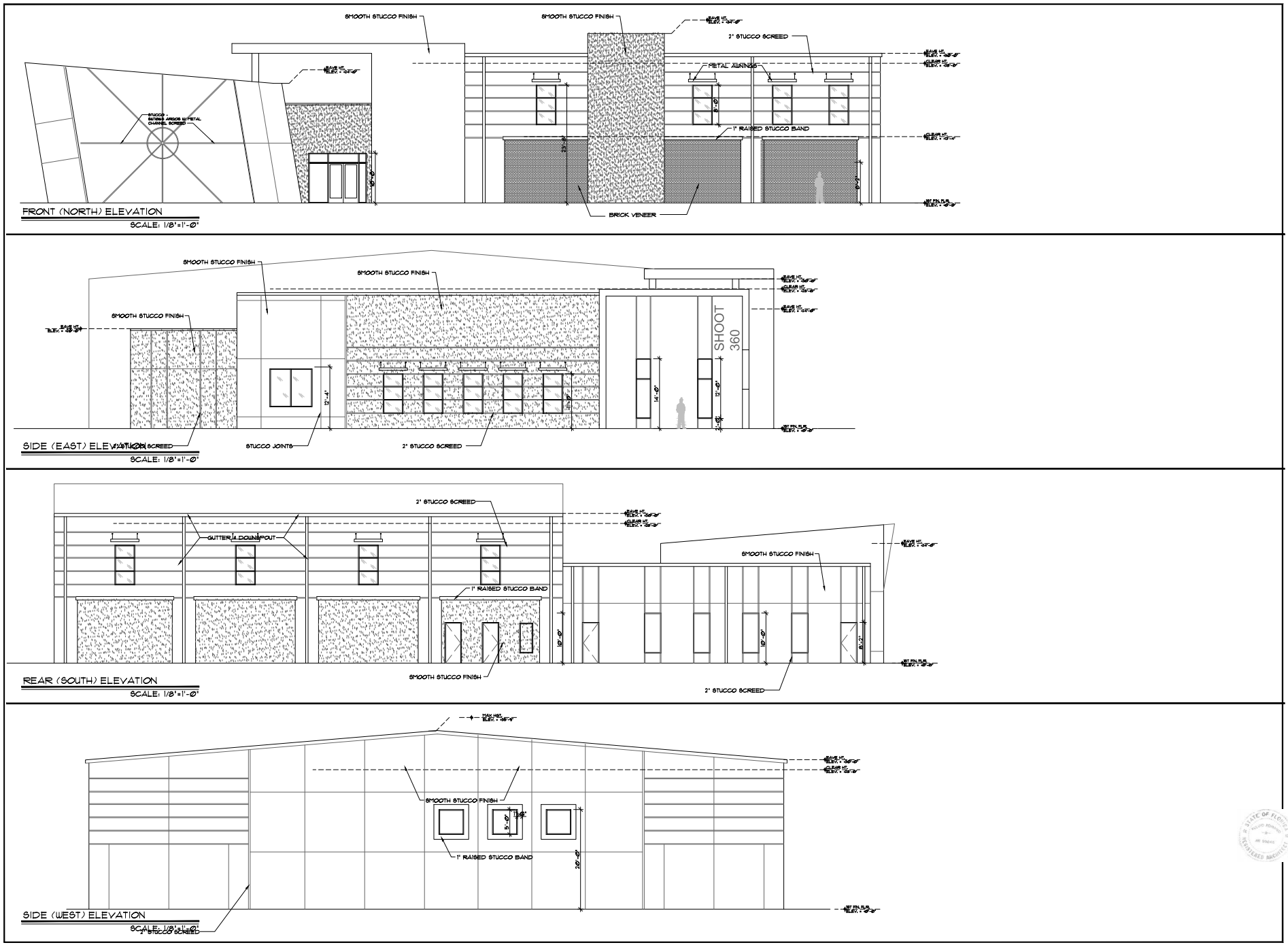
NEW BUILDING FOR:
BASKETBALL ACADEMY
1680 MARCEL DRIVE
WINTER GARDEN , FLORIDA

FLOOR PLAN

PROJECT NO
--

DATE
1-9-2026

REVISIONS
1
2
3
4
5
6
7
8



REVISIONS

PROJECT NO: --

DATE: 10-2026

ELEVATIONS

NEW BUILDING FOR:
BASKETBALL ACADEMY
1680 MARCEL DRIVE
WINTER GARDEN, FLORIDA

RABITS & ROMANO
ARCHITECTURE
PLANNING AND DESIGN
5205 SOUTH ORANGE AVE.
SUITE 200 ORLANDO, FL 32809
TEL - 407-490-0350
FAX - 407-232-6000
info@rabits-architect.com
www.rabits-architect.com
AA26002490

SIGN/SEAL
Digitally signed by Fulvio Romano
Date: 2026.05.18 10:26:16 -04'00'
DATE

SHEET
A201
OF
-

RENDERING

SCALE:NTS

RENDERING

SCALE:NTS

SHEET
A202
OF
-

SIGN/SEAL
Digitally signed by Fulvio Romano
Date: 2026.05.18 10:27:00 -04'00'
DATE

RABITS & ROMANO
ARCHITECTURE
PLANNING AND DESIGN
AA26002490

5205 SOUTH ORANGE AVE.
SUITE 200 ORLANDO , FL. 32809

TEL - 407-490-0350
FAX - 407-232-6000

info@rabits-architect.com
www.rabits-architect.com

NEW BUILDING FOR:

BASKETBALL ACADEMY

1680 MARCEL DRIVE
WINTER GARDEN , FLORIDA

RENDERINGS

PROJECT NO
--

DATE
[illegible]

REVISIONS

1	
2	
3	
4	
5	
6	
7	
8	

RENDERING

SCALE:NTS



RENDERING

SCALE:NTS



SHEET
A203
OF
-

SIGN/SEAL
Digitally signed by Fulvio Romano
Date: 2026.05.18 10:27:27 -04'00'
DATE

RABITS & ROMANO
ARCHITECTURE
PLANNING AND DESIGN
AA26002490

5205 SOUTH ORANGE AVE.
SUITE 200 ORLANDO , FL. 32809

TEL - 407-490-0350
FAX - 407-232-6000

info@rabits-architect.com
www.rabits-architect.com

NEW BUILDING FOR:

BASKETBALL ACADEMY

1680 MARCEL DRIVE
WINTER GARDEN , FLORIDA

RENDERINGS

PROJECT NO
--

DATE
[illegible]

REVISIONS

1	
2	
3	
4	
5	
6	
7	
8	

CITY OF WINTER GARDEN

DEVELOPMENT REVIEW COMMITTEE

300 West Plant Street - Winter Garden, Florida 34787-3011
(407) 656-4111

M E M O R A N D U M

TO: KELLY CARSON, PLANNING DIRECTOR
FROM: DEVELOPMENT REVIEW COMMITTEE
DATE: JUNE 26, 2026
SUBJECT: 1680 MARCEL DRIVE – BASKETBALL ACADEMY
SITE PLAN APPROVAL – 2nd REVIEW

Pursuant to your request, we have reviewed the revised site plan dated 5/27/26 for compliance with the City's stormwater and site requirements. The plan proposes a 21,449 s.f. 1-story (35.75' height) indoor basketball academy building on the 1.50 acre, C-2 zoned vacant lot in Daniels Commerce Center. This was submitted in response to our site plan review of 4/13/26 and DRC meeting of 4/22/26 where it was referred to another full DRC review. Site plan reviews for a different project were performed and approved for this site in 2022 and never built.

ENGINEERING COMMENTS

We recommend approval of the site plan, subject to approval by all other departments and the following conditions and comments. Underlined comments shall be addressed prior to pre-con (utility fees) :

1. The Planning Department shall review and approve proposed uses/zoning, setbacks, parking, landscaping, buffering, lighting, traffic review, signage and C-2 zoning requirements.

2. Previous applications for this site stated that this lot is to be re-platted – please clarify. If re-platting is required, site plan approval shall be contingent on the preliminary plat being approved by the Planning & Zoning Board. Final re-plat shall be approved and recorded prior to issuance of the certificate of occupancy for the site/building.

   Written response & attendance at DRC stated that no re-platting is requested for this proposal.

3. A separate tree removal permit is required to remove any trees. Coordinate with Planning & Building Departments. No trees may be planted over or within 5 feet of any utility lines. Only sod or shrubs may be planted over utility lines.

4. Landscaping shall not encroach on required sight lines at intersections or driveways. Design Engineer has provided certification that sight distance requirements are being met. All irrigation on the site shall be designed to be supplied by reclaimed water (available).

5. General Requirements (as noted):
   a. All gravity sanitary pipe and fittings shall be SDR 26.
   b. All compaction shall be 98% of the modified proctor maximum density (AASHTO T-180).
   c. As-built record drawings shall comply with City of Winter Garden requirements available on-line (note on plan).
   d. All Storm (>12") and Sanitary lines (>6") shall be inspected by CCTV prior to completion.
   e. Use City Standard Detail sheets for utilities and public works (see City website).
   f. If Thermoplastic pipe is used it shall meet all City material and installation requirements as specified in the City's Standards & Specifications including Class I bedding, HP polypropylene pipe (**not HDPE or N-12**), laser profiling, installation per ASTM D2321, etc. (see under on-line forms on website).

g. All utilities shall be underground pursuant to Code (Sec. 18-33) including electrical power, cable, telephone, etc.

6. Response states all previously observed organics (muck) have been removed. If organic soils are discovered during construction they shall be removed under the supervision of a Florida registered Professional Engineer and certified.

7. Drainage: Maximum impervious surface for C-2 zoning is 70% and must be supported by the St. Johns River Water Management District permit. SJRWMD permit modification will be required.

8. Sheet C3.0 – Site Grading & Drainage:
   a. See above General Requirements: If Thermoplastic pipe is used it shall meet all City material and installation requirements as specified in the City's Standards & Specifications including Class I bedding, HP polypropylene pipe (**not HDPE or N-12**), laser profiling, installation per ASTM D2321, etc. (see under on-line forms on website).
   b. Include bedding detail per ASTM D2321.

9. All utilities shall conform to Chapter 78 of the City Code. Impact fees will be required for any utility connections and shall be paid prior to issuance of building permit and City execution of FDEP permit applications. The site shall be served by City water, sewer and reuse. All utilities required for the development shall be run to the site at the Developer's expense, including potable water, reclaimed water and sanitary sewer. Confirm previous impact fee payments with Building & Utility Billing Departments; a true-up payment may be required.

   All irrigation shall be designed to be connected to existing reclaimed water mains.

10. 100% of all required water and sewer impact fees shall be paid prior to City execution of FDEP permits and issuance of site or building permits. Based on the meter sizes shown (1.5" potable meter; 1" irrigation meter) impact fee shall be as follows:

1" Irrigation meter	1 ea.@ $6,713.00	=	$6,713.00
1.5" Potable meter	1 ea. @ $6,713.00	=	$6,713.00
Wastewater for 1.5" meter	1 ea. @ $29,213.00	=	$29,213.00
	TOTAL	**=**	**$42,639.00**

   (does not include connection/installation fee; coordinate with Utility Billing for any existing credits)

11. Permit modification shall be provided from SJRWMD for stormwater and FDEP for water, wastewater and NPDES NOI. Drainage shall comply with the overall development design.

12. Fire sprinkler systems will be required on all buildings ≥ 6,000 s.f. with Point of Service (POS), backflow prevention, etc. shown. All work downstream of the POS shall be performed by a licensed fire sprinkler contractor. Fire Department approval required.

13. All dumpsters shall be enclosed and shall provide 12' minimum inside clearance (each way inside of bollards or gate hardware), and access by solid waste vehicles. Coordinate additional requirements with Public Services Department, Solid Waste Division.

14. Any signs, screen walls or retaining walls shall require a separate permit from the Building Department.

15. All underdrain pipe, if used, shall be double wall HDPE pipe or PVC pipe.

16. Site lighting will be required as well as street lighting on all street frontages if not existing; all

lighting shall meet dark skies requirements per City Code. A photometric plan has been provided for Planning Department review.

17. Minimum 5' wide concrete sidewalks shall be constructed along all street frontages pursuant to City Code. Existing sidewalks, curbs, & pavement will be checked at completion and any damaged sections shall be replaced.

18. Internal sidewalks shall connect to the public sidewalks in the right-of-way per ADA.

PLANNING COMMENTS

19. Please note: The applicant and/or future property owners will be responsible in replacing any landscaping that may need to be removed from the south landscape buffer due to any maintenance or repairs within the easement.

20. All major site plans require a community meeting. This will be held in the City Commission chambers at City Hall and will be coordinated by staff.

21. **Note:** Signs shall be permitted separately. All signage shall adhere to City Code Chapter 102 – Signs.

FIRE COMMENTS

22. Any commercial building over 6000 Sq. Ft shall be provided with a dedicated Fire Sprinkler System and a monitored Fire Alarm System.

23. Lock Box shall be no higher than 7' from the finish floor and shall be monitored by the Fire Alarm System or Burglar Alarm System.

24. Fire Department Connections shall be a minimum of 40 ft. off the building. Fire Hydrants shall be no more than 150 ft. away from Fire Department Connections.

25. Both fire Department Connection's and hydrants shall be on the same side of the road or driveway.

26. Fire Department Connection's shall be stand-alone off the Backflow with tamper switch

27. Fire Lanes shall be established around Fire Dept. Connections.

28. Where Point of Service is established by the engineer of record, a CD in PDF format shall be required to be submitted to the building department for fire permitting purposes by licensed underground contractors with a Class V license.

29. New construction over 12,000 sq. ft. of construction type IIb or higher, or specialty use structure as determined by the AHJ; shall provide a site survey test to determine the available signal strength for Two-way radio communication compliance per State Statue 633.202 (Any 18) and NFPA-1 (2018 Edition).

STANDARD GENERAL CONDITIONS

30. The Owner is responsible for meeting all provisions of ADA and Florida Accessibility Code.

31. All work shall conform to City of Winter Garden standards and specifications.

32. Fencing, shall meet all City requirements for height, type, etc. Chain link fencing, if used, shall be vinyl coated per Code.

33. The City of Winter Garden will inspect private site improvements only to the extent that they connect to City owned/maintained systems (roadways, drainage, utilities, etc.). It is the responsibility of the Owner and Design Engineer to ensure that privately owned and maintained systems are constructed to the intended specifications. The City is not responsible for the operation and maintenance of privately owned systems, to include, but not be limited to, roadways, parking lots, drainage, stormwater ponds or on-site utilities.

34. The Contractor is responsible for the notification, location and protection of all utilities that may exist within the project limits.

35. No fill or runoff will be allowed to discharge onto adjacent properties; existing drainage patterns shall not be altered. The applicant should note that if approval is granted, the City of Winter Garden is not granting rights or easements for drainage from, or onto, property owned by others. Obtaining permission, easements or other approvals that may be required to drain onto private property is the Owner/Developer's responsibility. Should the flow of stormwater runoff from, or onto adjacent properties be unreasonable or cause problems, the City will not be responsible and any corrective measures required will be the responsibility of the Owner. Site construction shall adhere to the City of Winter Garden erosion and sediment control requirements as contained in Chapter 106 - Stormwater. If approval is granted by the City of Winter Garden, it does not waive any permits that may be required by federal, state, regional, county, municipal or other agencies that may have jurisdiction.

36. After final plan approval, a preconstruction meeting will be required prior to any commencement of construction. The applicant shall provide an erosion control and street lighting plan at the preconstruction meeting and shall pay all engineering review and inspection fees prior to construction. Inspection fees in the amount of **2.25%** of the cost of all site improvements shall be paid prior to issuance of the building permit.

Additional comments may be generated at subsequent reviews
Please review this information and contact our office if you have any questions. Thank you.

END OF MEMORANDUM

THE CITY OF WINTER GARDEN

CITY COMMISSION AGENDA ITEM

From: Kelly Carson, Planning Director

Via: City Manager Jon C. Williams

Date: July 30, 2026 **Meeting Date:** August 13, 2026

Subject: **Billboard Removal and Relocation – Special Exception Permit & Agreement**

Issue: The applicant is requesting this Special Exception Permit and agreement to build a new digital billboard consistent with the City's billboard removal and relocation requirements.

Discussion:

The applicant desires to remove two existing single-faced billboard signs located at 1101 E. Plant Street, Winter Garden, FL 34787, and 14909 W. Colonial Drive, Winter Garden, FL 34787, and to construct a new double-sided digital billboard on a property located at W. Colonial Drive Parcel ID #25-22-27-9384-01-183.

Recommended Action:

Staff recommends approval of the Special Exception Permit and agreement to remove the billboards located at 1101 E. Plant Street and 14909 W. Colonial Drive and construct a new double-sided digital billboard on the property located at W. Colonial Drive Parcel ID #25-22-27-9384-01-183, subject to the conditions of the agreement and the Staff Report.

Attachment(s)/References:

Relocation & Reconstruction Agreement & Exhibits
Staff Report

Prepared by:
Paul S. Figg, Esquire
Berger Singerman LLP
201 E. Las Olas Blvd., Suite 1500
Fort Lauderdale, Florida 33301

Return to:
City Clerk
City of Winter Garden
300 W Plant Street
Winter Garden, Florida 34787

BILLBOARD RELOCATION AND RECONSTRUCTION AGREEMENT

THIS BILLBOARD RELOCATION AND RECONSTRUCTION AGREEMENT (the "Agreement") is made and entered into this ____ day of _____, 2026 (the "Effective Date"), by and between the **City of Winter Garden,** a Florida municipal corporation, whose address is 300 West Plant Street, Winter Garden, Florida 34787 (the "City"), and **Outfront Media, LLC**, a Delaware limited liability company authorized to do business in the State of Florida, whose address is 405 Lexington Avenue, 14th Floor, New York, New York 10174 ("Outfront"). The City and Outfront may be individually referred to herein as "Party" and collectively referred to herein as "the Parties."

WHEREAS, it is the policy of the City to encourage owners of legally non-conforming signs to enter into relocation and reconstruction agreements that allow the City to accomplish the public goals of protecting, improving and ensuring highway safety, views, aesthetics and business/investment, without the expenditure of public funds while allowing the continued maintenance of private investment in signage as a medium of commercial and noncommercial communication; and

WHEREAS, pursuant to Section 70.20, Florida Statutes (2025), of the Bert J. Harris, Jr., Private Property Rights Protection Act, cities are encouraged to enter into relocation and reconstruction agreements that allow governmental entities to undertake public projects and accomplish public goals without the expenditure of public funds while allowing the continued maintenance of private investment in signage as a medium of commercial and non-commercial communication and authorizes such "relocation and reconstruction" of billboards by agreement, ordinance, or resolution; and

WHEREAS, Section 102-94(b) of the City Code of Ordinances (the "Code"), provides that a single billboard may be eliminated and replaced with a digital billboard where the City finds that an extraordinary benefit to the City exists in accordance with Section 102-94 and other applicable provisions of Chapter 102 of the Code upon the City Commission's grant of a special exception and approval of, and pursuant to, a relocation and reconstruction agreement, and provided the additional minimum requirements set forth in the Code are met; and

WHEREAS, Outfront desires to remove existing billboards located on the following properties:

- 1101 E. Plant Street (designated as Tax Parcel ID # 13-22-27-0000-00-009) (the "**Plant Street Site**"); and
- 14909 W. Colonial Drive (designated as Tax Parcel ID # 22-22-27-0000-00-024 ("**Colonial Drive Site**")

WHEREAS, the Plant Street Site has a single sign structure with a double-faced billboard, and the Colonial Drive Site has a low single sign structure with a single billboard facing east (each an "Existing Billboard" and together, the "Existing Billboards");

WHEREAS, Outfront identified property (Parcel ID 25-22-27-9384-01-183) located on West Colonial Drive, which property is more particularly described on **Exhibit "A"** attached hereto and incorporated herein by reference (the "Property"), as more appropriate for locations for billboards than the Plant Street and Colonial Drive Sites;

WHEREAS, eGreen Conservation, LLC has leased the Property to Outfront for the erection of a single sign structure with two digital multi-message display billboards (the "New Digital Billboards");

WHEREAS, the annexation of the Property into the City, and conversion of the Property to a revenue-generating and taxable use will facilitate the preservation of the remainder of the Property for open space;

WHEREAS, the removal of the Existing Billboard from the Plant Street Site, which is owned by the City, will free up the Plant Street Site for future City use;

WHEREAS, the elimination of the Existing Billboards and restoration of the Plant Street and Colonial Drive Sites through landscaping and hardscaping will improve the aesthetic character of the City;

WHEREAS, the New Digital Billboards, which will be located in a more desirable area for commercial activities, will be compatible with the surrounding uses and will not create traffic hazards or parking problems;

WHEREAS, the replacement of the Existing Billboards with the New Digital Billboards will protect and enhance highway safety and be less obtrusive;

WHEREAS, the removal of the Existing Billboards and replacement with the New Digital Billboards will provide the City with the opportunity to advertise City events and provide public and emergency service messaging beneficial to the public;

WHEREAS, in light of the foregoing, applying general public health, safety, and welfare concerns in accordance with Section 102-92(4) of the Code, the City Commission finds that the replacement of the Existing Billboards on the Plant Street and Colonial Drive Sites with the New Digital Billboards on the Property will provide an extraordinary benefit to the City;

WHEREAS, the City Commission finds that the criteria set forth in Sections 118-96 through 118-102 of the Code relating to special exceptions have been met with respect to the New Digital Billboards;

WHEREAS, in accordance with section 102-94 of the Code, Outfront and the City desire to enter into a relocation and reconstruction agreement that will provide for removal of the Existing Billboards from the Plant Street and Colonial Drive Sites and construction of the New Digital Billboards on the Property in accordance with the requirements set forth in Florida and federal law;

NOW, THEREFORE, in consideration of the premises hereof and of the mutual covenants herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. ***RECITALS***. The above recitals are true and correct and form a material part of this Agreement.

2. ***INSTALLATION OF NEW DIGITAL BILLBOARDS.*** Conditioned upon Outfront's full compliance of its obligations under this Agreement, the City hereby agrees that Outfront may construct the New Digital Billboards, which includes two (2) back-to-back faces, each of which shall be permitted to include a digital display upon application, approval, and in accordance with Florida and federal law. The New Digital Billboards may be constructed on the Property and must be constructed in accordance with this Agreement, the Code, and Florida and federal law.

3. ***REMOVAL OF EXISTING BILLBOARD.*** Outfront represents and warrants that the Existing Billboards are owned by Outfront and that Outfront has the right to terminate the billboard leases or easements and permanently remove the Existing Billboards as contemplated by this Agreement. The Parties agree that the Existing Billboard shall be removed in the manner and upon the conditions set forth below:

(A) Subject to a force majeure event, the Existing Billboards shall be removed within ninety (90) days following the issuance of all final and non-appealable City, State, federal and any other required governmental and other required permits and approvals required

for the construction and operation of the New Digital Billboards (the "New Digital Billboard Permit(s)"). In no event shall content be displayed on the New Digital Billboards unless and until the Existing Billboards are fully removed.

(B) Prior to removing the Existing Billboards, all required permits or approvals for the removal of the Existing Billboards shall be obtained.

(C) All above-ground and surface portions of the Existing Billboards must be removed.

(D) The Existing Billboards and any right, title, and interest therein or right to place a billboard, whether by lease, license or other right, at the location of the Existing Billboards by virtue of the status of the Existing Billboards as a nonconforming billboards pursuant to section 102-92(4) of the Code shall be forever terminated and shall not be or have been assigned, transferred or given to any other entity, affiliate, subsidiary, person or party.

(E) The New Digital Billboards will at all times be operated and maintained lawfully and in a manner that is in full compliance with the Code, federal, state and local laws, rules and regulations.

(F) Outfront shall furnish proof of removal of the Existing Billboards in the form of photographs showing the sign location before and after the Existing Billboards are removed. Outfront also agrees to grant the City access, upon reasonable notice, to the location of the Existing Billboards to confirm and verify adequate removal at the City's discretion.

(G) Outfront shall provide the City with a written release executed by the fee simple property owner of the Colonial Drive Site, in form and substance reasonably satisfactory to the City, no later than the date of issuance of the first New Digital Billboard Permit, agreeing that it (for itself and its successors and assigns) waives and releases any right or claim to install, place or operate any new billboard on the Colonial Drive Site and waives and releases any rights, claims, demands, actions, or causes of action to receive from the City any monetary or equitable relief concerning the removal of the Existing Billboards or the prohibition from installing, placing or operating any new billboard on the Colonial Drive Site.

(H) Outfront expressly waives any rights, claims, demands, actions, or causes of action to receive from the City any compensation for the removal of the Existing Billboards and any attorneys and experts' fees and costs. Such waiver also includes, but is not limited to, any claims for just or full compensation predicated on Sections 70.001, 70.20, 479.15 or 479.24, Florida Statutes, or under the Florida or federal constitutions, or any other federal, state, or local law. Nothing herein shall be construed to limit Outfront's rights to just compensation with respect to the New Digital Billboards and in the event any governmental entity (including the City) undertakes a partial or total condemnation involving land, signs or other improvements owned by Outfront with respect to the New Digital Billboards, Outfront

shall be entitled to the full compensation due to it as permitted by law, including by not limited to Sections 479.15 and 479.24, Florida Statutes.

(I) At Outfront's sole expense, Outfront agrees to protect, defend, indemnify and hold harmless the City, its officers, employees, agents and representatives from and against any and all liabilities, losses, judgments, damages, interest, suits, actions, disputes and claims, including without limitation reasonable attorneys' fees and experts' fees and costs at both the trial and appellate levels, from, by or through any third party or otherwise caused, in whole or in part, by the removal of the Existing Billboards or the re-erection, replacement, or re-establishment of a billboard (other than the New Digital Billboard) at the Existing Billboards' removal location or other locations based upon or related to the Existing Billboards' status as a nonconforming signs pursuant to Section 102-92(4) of the Code, including without limitation, concerning property owners' claims of rights to reestablish a billboard at or near the location of the Existing Billboard (collectively, the "Claims").

As part of this indemnification and hold harmless provision, the City has the right to select and direct the attorneys and experts to represent the City defending the Claims, at Outfront's sole expense, provided the rates for the attorneys and experts selected by the City shall be reasonable. Further, the City has the right to make all decisions relating to its defense except for final settlement of the Claims. For final settlement of the Claims, Outfront must be presented with the opportunity to review and consent which consent will not be unreasonably withheld, and if Outfront unreasonably withholds such consent, Outfront shall be responsible for all additional costs, fees, and liability incurred thereafter. Third party means any person, persons, company(ies), corporation(s), partnership(s), trust(s) and other entity(ies) other than the City and Outfront.

(J) The Parties acknowledge and agree that the Existing Billboards are nonconforming signs and may not be rebuilt at the Plant Street or Colonial Drive Sites or other locations, other than the Property pursuant to this Agreement. Outfront agrees that, other than the New Digital Billboards, it will not erect, re-erect, or replace a billboard sign or a digital billboard sign at the Plant Street or Colonial Drive Sites or other locations based on rights or claims related to the Existing Billboards or the Plant Street or Colonial Drive Sites.

4. ***NEW DIGITAL BILLBOARDS CONSTRUCTION AND PERFORMANCE STANDARDS.*** Outfront will commence construction of the New Digital Billboard within 180 days following receipt of all New Digital Billboards Permits. The New Digital Billboards shall be constructed in accordance with the following construction requirements, consistent with City Code § 102-94:

(A) Each sign face shall have a nominal display area of not greater than 378 square feet, excluding cabinet and trim.

(B) The top of the New Digital Billboards shall not exceed forty (40) feet in height above ground level. The width of the copy area of the New Digital Billboards shall not exceed thirty-six (36) feet. The height of the copy area of the New Digital Billboards shall not exceed ten (10) feet, six (6) inches.

(C) The construction and location of the New Digital Billboards on the Property shall be as shown on **Exhibit "B"** attached hereto.

(D) The New Digital Billboards may be internally or externally illuminated.

(E) The New Digital Billboards may be constructed, at Outfront's option, utilizing either traditional sign faces, or digital/changeable sign faces, or a combination thereof.

5. ***LANDSCAPING AND HARDSCAPING.*** Outfront agrees to screen the base of the sign structure for the New Digital Billboards with landscaping and hardscaping within sixty (60) days of illumination of the New Digital Billboards. The Parties shall agree upon the type of landscaping and hardscaping in connection with issuance of building permits for the New Digital Billboards. The Parties expressly agree that Outfront shall not be responsible for any ongoing maintenance of the additional landscaping and hardscaping following initial installation.

6. ***REMOVAL OR RELOCATION OF THE NEW DIGITAL BILLBOARDS.*** In the event that Outfront later desires to relocate the New Digital Billboards on the Property from the proposed location on which such sign is to be constructed, Outfront must obtain approval from the City.

7. ***LIMITED REBUILD RIGHT; REMOVAL.*** Outfront shall have the right to obtain a permit to rebuild the New Digital Billboards if destroyed for any reason, so long as there is no increase in sign area, height, location, and so long as built in compliance with this Agreement and no removal of any additional signs shall be required. If such sign is rebuilt pursuant to this section, it must comply with all the requirements of the then applicable City Code and this Agreement. In accordance with section 102-94 of the City Code, Outfront may remove the digital billboard sign faces only for the period required for the limited purposes of maintenance or service or as otherwise provided in this Agreement. Outfront may elect at any time or from time to time to operate the New Digital Billboards with traditional static sign faces. During such times of removal, Outfront may substitute no more than one (1) traditional static sign face for each face of the New Digital Billboards.

8. ***ISSUANCE OF BUILDING PERMITS BY BUILDING OFFICIAL; COMPLIANCE WITH CITY CODES; CITY ISSUANCE OF PERMIT.*** The City shall issue all applicable permits, if any are required by the City, or equivalent documentation otherwise reasonably acceptable to the City for: (A) the removal of the Existing Billboards and restoration of the Plant Street and Colonial Drive Sites through landscaping and hardscaping, upon receipt of proper application; and (B) the construction, illumination and operation of the New Digital Billboards, upon

payment of the normal fees currently charged by the City for issuance of such permits and in accordance with and in compliance with the Code and applicable state and federal law.

9. ***PUBLIC SERVICE ANNOUNCEMENTS.*** Outfront shall agree to use one (1) spot in a standard eight (8)-spot rotation on one face of the New Digital Billboard for two (2) separate two-week periods each calendar year for as long as Outfront operates a digital face on the New Digital Billboard to display City-sponsored event announcements and non-commercial public service announcements to promote the civic interests of the City ("City Messages") with no charge for advertising space, subject to the following conditions and parameters:

(A) The City shall notify Outfront at least thirty (30) days before the proposed display date, and the City shall be responsible for providing Outfront with its City Messages and for any costs associated with providing Outfront associated artwork in acceptable format, and will be subject to Outfront's standard advertising copy rejection and removal policies which allow Outfront the right to approve or disapprove copy and remove copy once posted or displayed, provided that such approval shall not be unreasonably withheld, conditioned, or delayed.

(B) The City shall not charge for, or exchange goods or services for, any sign space granted on the digital displays.

(C) The City must submit "camera ready art" utilizing formats and protocols acceptable to Outfront from time to time or pay production costs. All copy shall be submitted to Outfront at least ten (10) business days in advance.

(D) If at any time in the future Outfront removes the digital display(s) from the sign structure or Outfront is unable to operate the digital display(s) due to force majeure, regulatory action, or circumstances beyond Outfront's reasonable control, the advertising spot commitments in this section shall be automatically suspended during the removal or inoperability period and Outfront shall be under no obligation whatsoever to provide the City any type of free advertising space during such period. If Outfront voluntarily removes the digital display(s) or replaces them with static faces, Outfront shall provide the City with equivalent advertising space on the replacement faces for the same periods set forth above. However, at any time Outfront operates the digital display(s) with electronic/digital technology, the advertising spot commitment shall remain in place.

(E) It is expressly understood and agreed that City Messages may not include any names, logos or marks associated with any third party non-governmental person or entity or any products or services associated with any third party non-governmental person or entity.

(F) Any unused space will be forfeited and shall not roll over.

(G) The City shall and hereby does agree to indemnify, defend and hold harmless Outfront for, from and against, any claims, costs (including, but not limited to, court costs and reasonable attorneys' fees), losses, actions or liabilities arising from or in connection with any third party claims arising out of the content of the City Messages, including but not limited to any allegation that any portion of any City Message infringes or violates the rights, including but not limited to, copyright, trademark, trade secret or any similar right, of any third party ("City Messages Claims"). Nothing herein is intended to waive the City's sovereign immunity. This indemnity shall not include Outfront's lost profits or consequential damages or any similar right of any third party.

As part of this indemnification and hold harmless provision, Outfront has the right to select and direct the attorneys and experts to represent the Outfront defending the City Messages Claims, at the City's sole expense, provided the rates for the attorneys and experts selected by Outfront shall be reasonable. Further, Outfront has the right to make all decisions relating to its defense except for final settlement of the City Message Claims. For final settlement of the City Messages Claims, the City must be presented with the opportunity to review and consent which consent will not be unreasonably withheld. Third party means any person, persons, company(ies), corporation(s), partnership(s), trust(s) and other entity(ies) other than the City and Outfront.

(H) In addition to the foregoing, Outfront agrees to display emergency messages on the digital displays in accordance with local and regional protocols, i.e., amber alerts, evacuations notices, homeland security and public safety alerts, but not routine traffic alerts or notices.

10. ***VISUAL ACCESS.*** The City agrees that the City and the City's agents, employees, or other persons acting on the City's behalf, shall not place any objects, plants, trees, vegetation, or other improvements in a right-of-way in proximity to the New Digital Billboards that causes any unreasonable obstruction of the view of the display faces on the New Digital Billboards. Notwithstanding the preceding, the Parties agree all plants, trees, vegetation, and other improvements in the right-of-way and in proximity to the New Digital Billboards may remain in existence. Moreover, to the extent any existing plants, trees, vegetation, or other improvements located in the right-of-way and in proximity to the New Digital Billboards are destroyed, removed, or demolished, the Parties agree that same may be replaced with the same or similar-type plants, trees, vegetation, and other improvements. Except as otherwise provided herein, the City agrees not to plant any additional vegetation within the right-of-way in proximity to the New Digital Billboards with a height in excess of five (5) feet unless agreed to by Outfront in writing.

11. ***SPECIFIC PERFORMANCE; SOLE REMEDY.*** The Parties hereto shall have the right to enforce the terms and conditions of this Agreement only and exclusively by an action for specific performance, other than both Parties' right to recover attorneys' fees and experts' fees and costs against the other Party where provided for in this Agreement.

12. ***ATTORNEYS' FEES.*** In the event that any Party finds it necessary to commence an action against the other Party because of a breach by any Party of any terms of this Agreement, the prevailing Party shall be entitled to recover from the non-prevailing Party its reasonable attorneys' fees and costs incurred in connection therewith, at both trial and appellate levels. Notwithstanding the preceding, in the event that any Party finds it necessary to commence an action against the other Party regarding or relating to the legality of this Agreement or any provision contained in this Agreement or any conflict between this Agreement or any provision contained in this Agreement and established Florida or federal law, the Parties shall be responsible for and shall bear their own attorneys' fees, experts' fees, and any costs.

13. ***AUTHORITY.*** Each Party represents and warrants to the other that it has all necessary power and authority to enter into and consummate the terms and conditions of this Agreement and that, upon recording of this Agreement, this Agreement shall be valid and binding upon the Parties hereto and their successors in interest.

14. ***GOVERNING LAW AND VENUE.*** This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. Any and all legal action necessary to enforce this Agreement will be held in Orange County, Florida.

15. ***SUCCESSORS AND ASSIGNS.*** This Agreement and the terms and conditions hereof shall be binding upon and insure to the benefit of the City and Outfront and their respective successors in interest. Outfront agrees to not transfer or otherwise convey any ownership interest in the New Digital Billboard referenced in this Agreement unless the transferee shall execute an agreement to be bound by the terms and conditions of this Agreement, which agreement is subject to review and approval by the City.

16. ***RECORDING.*** This Agreement shall be recorded by the City in the official land records of Orange County, Florida.

17. ***SEVERABILITY.*** The Parties agree and acknowledge:

(A) The rights conferred upon Outfront under this Agreement to construct, maintain, and operate the New Digital Billboard shall not be affected by any future sign regulations enacted by the City that may otherwise alter the terms and conditions of this Agreement.

(B) If any provision of this Agreement is held by a court of competent jurisdiction to be illegal, invalid, or unenforceable, then said provision shall be severed, and the remaining provisions shall remain in full force and effect so long as the general intent of this Agreement is met.

(C) This section shall apply to all portions of this Agreement. To the extent any language in this Agreement is deemed inconsistent or contrary to this section, the language contained in this section shall control.

18. ***CONSIDERATION.*** Outfront and the City affirm that the only consideration for executing this Agreement is stated herein and that no other promise or agreement of any kind, oral or written, has been made to or with them by any person or entity.

19. ***VOLUNTARY EXECUTION; INTERPRETATION.*** Outfront and the City represent and agree each has thoroughly discussed all aspects of this Agreement with its attorneys, and it has carefully read and fully understands all of the provisions of this Agreement and that it is voluntarily entering into this Agreement. Outfront and the City further agree that if any ambiguities are contained herein, then in resolving such ambiguity, no weight shall be given in favor of or against either Party on account of its drafting of this Agreement.

20. ***MODIFICATIONS.*** No waiver or modification of any term or conditions of this Agreement shall be valid or binding unless in writing and executed by Outfront and the City.

21. ***THIRD PARTY BENEFICIARIES.*** This Agreement is meant for the sole benefit of the Parties hereto and their successors and assigns and no other person or entity shall have any rights of action hereunder.

22. ***ENTIRE AGREEMENT.*** This is the entire agreement between the City and Outfront, and no verbal or written assurance or promise is effective or binding unless included in this document.

23. ***COUNTERPARTS.*** This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which shall constitute one instrument.

24. ***APPROVAL OF CITY COMMISSION.*** This Agreement is subject to and contingent upon the City's approval and finalization of annexation of the Property and the City Commission's approval of a special exception for the New Digital Billboards.

IN WITNESS WHEREOF, the Parties have caused these presents to be executed as of the date and year set forth below the Parties' signatures below.

Signed, sealed and delivered in the presence of:	CITY OF WINTER GARDEN
_____	_____
Signature	By: John Rees, Mayor
_____	
Print Name	Attest:

_____
Signature

_____
Print Name

_____
Ronisha Martin, City Clerk

Date:

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing instrument was acknowledged before me this ____ of _____, 2026, by John Rees, as the Mayor of the CITY OF WINTER GARDEN, FLORIDA, on behalf of the City.

_____
Notary Public
Print Name:_____
My commission expires:_____
Personally Known ___
OR Produced Identification _____

Signed, sealed and delivered
in the presence of:

OUTFRONT MEDIA LLC

By: _____

Title:_____

Date:_____

_____
Signature

_____
Print Name

_____
Signature

_____
Print Name

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ of _____, 2026, by _____, as _____ of Outfront Media LLC, an authorized signor on behalf of the company.

_____

Notary Public
Print Name:_____
My commission expires:_____
Personally Known ___
OR Produced Identification _____

EXHIBIT "A"
[Legal Description/Sketch of Property]

EXHIBIT "A"
(Legal Description)
Regarding Orange County Parcel ID Number: 25-22-27-9384-01-183

BEING COMMONLY DESCRIBED AS BELOW:

Lot 18, Block "A", Winter Garden Manor, according to the plat thereof as recorded in Plat Book L, Page 117 of the Public Records of Orange County, Florida, LESS AND EXCEPT, that portion deeded to W. L. Story and Lena M. Story in Official Records Book 1473, Page 717, and LESS AND EXCEPT, that portion deeded to Edward E. Fischer and Mary A. Fischer and William D. Hartzog and Josephine R. Hartzog, husband and wife in Official Records Book 1830, Page 269 and LESS AND EXCEPT, that portion deeded to Dexter D. Busching and Laura E. Busching, his wife in Official Records Book 3000, Page 498, and LESS AND EXCEPT, that portion deeded to State of Florida Department of Transportation in Official
Records Book 8433, Page 3317, of the public records of Orange County, Florida, which is more particularly described as follows:

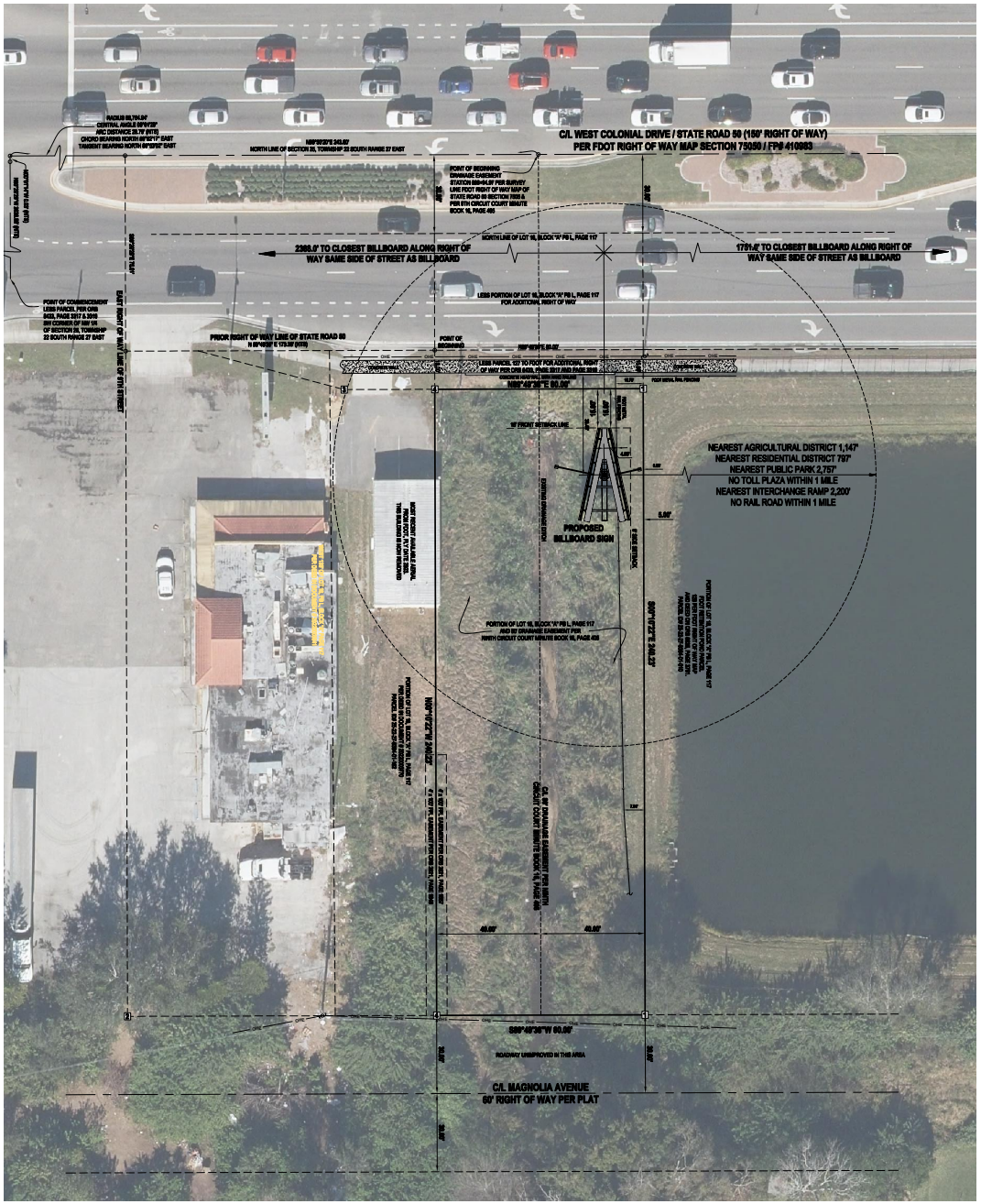
Commence at a 3-inch iron pipe with a 3-inch aluminum disk stamped "O.C. ENG. DEPT CONTROL 1/4-S25, S26-T22S-R27E 1980", approximately 2 feet above ground marking the Southwest corner of the Northwest 1/4 of Section 25, Township 22 South, Range 27 East, Orange County, Florida; thence run North 00°29'29" West along the West line of said Northwest 1/4 of Section 25 a distance of 2638.58 feet to the Northwest corner of said Northwest 1/4 of Section 25; thence departing said West line of the Northwest 1/4 of Section 25 run North 00°01'14" East along the West line of the Southwest 1/4 of Section 24, Township 22 South, Range 27 East, Orange County, Florida, a distance of 0.03 feet to a point on the Centerline of Survey of State Road 50 as shown on Florida Department of Transportation Right of Way Map Section 75050, Financial Project No. 4109831, said point also being a point on a non-tangent curve concave Northerly having a radius of 68,754.94 feet and a chord bearing of North 89°52'17" East; thence departing said West line of the Southwest 1/4 of Section 24 from a tangent bearing of North 89°53'02" East, run Easterly along said Centerline of Survey and along the arc of said curve through a central angle of 00°01'29" a distance of 29.79 feet to a point on the Northerly projection of the East right of way line of 9th Street; thence departing said Centerline of Survey and said curve, run South 00°29'59" East along said Northerly projection a distance of 75.01 feet to the intersection of the East right of way line of 9th Street with the existing South right of way line of aforesaid State Road 50 as shown on the aforesaid Right of Way Map; thence run North 89°49'38" East along said existing South right of way line of State Road 50 a distance of 173.38 feet to a point on the West line of an 80-foot Drainage Easement as described in Ninth Circuit Court Minute Book 16, Pages 405 for a Point of Beginning; thence continue North 89°49'38" East along said existing South right of way line of State Road 50 a distance of 80.00 feet to a point on the East line of said 80-foot Drainage Easement; thence departing said existing South right of way line of State Road 50, run South 00°10'22" East along said East line a distance of 15.00 feet; thence departing said East line, run South 89°49'38" West parallel with said existing South right of way line of State Road 50 a distance of 80.00 feet to a point on the aforesaid West line of said 80-foot Drainage Easement; thence run North 00°10'22" West also on said West line a distance of 15.00 feet to the Point of Beginning.

EXHIBIT 'A' (Con't)

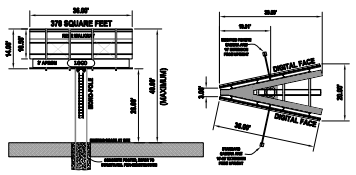
ORANGE COUNTY PARCEL ID NUMBER: 25-22-27-9384-01-183

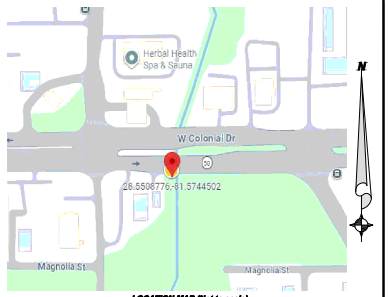


EXHIBIT "B"
[New Digital Billboard Location]



PROFILE VIEW SCALE 1" = 20' **PLAN VIEW SCALE 1" = 20'**





LOCATION MAP (Not to scale)

SIGN / SITE LOCATION DATA

1) Owner	HURLEY, MARIE SUE
2) Mailing Address:	315 Magnolia St Windermere, FL 34786-5837
3) Site Address:	(Vacant / Unassigned) W Colonial Dr Orlando, Florida
4) Warranty Deed:	Deed Book 915, PAGE 11 Public Records of Orange County
5) Property Control #:	25-22-27-0364-01-169
6) Zoning District:	Orange County
7) General Location:	Intersection of 6th Street & W Colonial Drive Orlando, Florida.
8) Highway Location:	S. Side of W Colonial Dr (SR 50) 0.25± East of 5th Street
9) Right of Way width:	Varies / 150 feet ±
10) Future Land Use	Commercial
11) Zoning	C-3 Commercial
12) Section data	Section 25, Township 22S, Range 27E
13) Geodetic Location	Latitude: N 28.55977765545355 Longitude: W -81.57743634568734

LEGAL DESCRIPTION PER TITLE COMMITMENT

Lot 16, Block "A", Winter Garden Manor, according to the plat thereof as recorded in Plat Book L, Page 117 of the Public Records of Orange County, Florida, LESS AND EXCEPT, that portion deeded to W. L. Story and Lena M. Story in Official Records Book 1473, Page 717, and LESS AND EXCEPT, that portion deeded to Edward E. Fischer and Mary A. Fischer and William D. Herzog and Josephine R. Herzog, husband and wife in Official Records Book 1830, Page 389 and LESS AND EXCEPT, that portion deeded to Dexter D. Buesking and Laura E. Buesking, his wife in Official Records Book 3000, Page 486, and LESS AND EXCEPT, that portion deeded to State of Florida Department of Transportation in Official Records Book 8455, Page 3317, of the public records of Orange County, Florida, which is more particularly described as follows:

Commence at a 3-inch iron pipe with a 3-inch aluminum disk stamped "O.C. ENG. DEPT CONTROL 1/4-S25, S26-T22S-R27E 1996", approximately 2 feet above ground marking the Southwest corner of the Northwest 1/4 of Section 25, Township 22 South, Range 27 East, Orange County, Florida; thence run North 00°29'29" West along the West line of said Northwest 1/4 of Section 25 a distance of 2638.28 feet to the Northwest corner of said Northwest 1/4 of Section 25; thence departing said West line of the Northwest 1/4 of Section 25 run North 89°01'14" East along the West line of the Southwest 1/4 of Section 24, Township 22 South, Range 27 East, Orange County, Florida, a distance of 0.03 feet to a point on the Centerline of Survey of State Road 50 as shown on Florida Department of Transportation Right of Way Map Section 75050, Financial Project No. 4109931, said point also being a point on a non-tangent curve concave Northerly having a radius of 66,764.94 feet and a chord bearing of North 89°53'17" East; thence departing said West line of the Southwest 1/4 of Section 24 from a tangent bearing of North 89°53'52" East, run Easterly along said Centerline of Survey and along the arc of said curve through a central angle of 00°01'29" a distance of 29.75 feet to a point on the Northerly projection of the East right of way line of 9th Street; thence departing said Centerline of Survey and said curve, run South 00°29'29" East along said Northerly projection a distance of 75.01 feet to the Intersection of the East right of way line of 9th Street with the existing South right of way line of aforesaid State Road 50 as shown on the aforesaid Right of Way Map; thence run North 89°49'39" East along said existing South right of way line of State Road 50 a distance of 173.38 feet to a point on the West line of an 80-foot Drainage Easement as described in Ninth Circuit Court Minute Book 16, Pages 488 for a Point of Beginning; thence continue North 89°49'39" East along said existing South right of way line of State Road 50 a distance of 80.00 feet to a point on the East line of said 80-foot Drainage Easement; thence departing said existing South right of way line of State Road 50, run South 00°10'22" East along said East line a distance of 15.00 feet; thence departing said East line, run South 89°49'39" West parallel with said existing South right of way line of State Road 50 a distance of 80.00 feet to a point on the aforesaid West line of said 80-foot Drainage Easement; thence run North 00°10'22" West along said West line a distance of 15.00 feet to the Point of Beginning.

ABBREVIATIONS

FDOT = Florida Department of Transportation
NTS = Not to Scale Dimension
L.B. = Licensed Business
C/L = Centerline
ORB = Official Record Book
PB = Plat Book

LEGEND

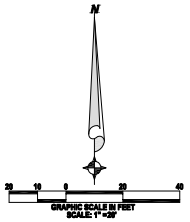
= Wood Power Pole
Metal Rail Fence
OHE — Overhead Electric Line

PROPERTY CORNER & CONTROL DATA

1 = Found 5/8" Iron Rod & Cap Stamped LB 2856
2 = Found 1" Iron Pipe, No identification
3 = Found PK Nail & Washer Stamped LB 2856
4 = Found 1/2" Iron Pipe, No identification

SURVEYOR'S NOTES

1. The current and expected use of the site is Commercial and meets the accuracy standards for such as required by the Florida Minimum Technical Standards per FAC chapter J5-17.
2. The Specific purpose of this survey is to provide data for permitting of a billboard sign. Notice, this sketch of survey depicts the complete limits of the legal description. For the purpose of this presentation, only the property lines and improvements adjacent to the proposed billboard have been field surveyed. This does not constitute a complete boundary survey of the overall legal description and improvements located therein.
3. The overall Property contains 19,218 square feet / 0.44 acres more or less.
4. Foundations, Footers and other Underground Facilities not located, unless otherwise shown.
5. Encroachments as shown: Not determined for the purpose of this Survey.
6. Existing easements and rights-of-way as shown hereon are per title Commitment, unless otherwise shown.
7. Distances and angles / bearings shown hereon are per description and agree with the survey measurements unless otherwise specified.
8. The Bearing base is the East Line of subject site and all other bearings are relative thereto.
9. No search of the Public Records by this Surveyor.
10. This survey cannot be transferred or assigned, unless authorized by Daniel L. Stanton, Professional Surveyor and Mapper PSM # 5986.
11. Additions or Deletions to this sketch other than by the signing surveyor are prohibited.
12. Not valid without the signature and original raised seal of a Florida licensed surveyor and mapper.



I HEREBY CERTIFY that this survey was made under my responsible charge and meets the Minimum Technical Standards as set forth by the Florida Board of Professional Surveyors and Mappers in Chapter J5-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

DANIEL L. STANTON
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATION NO. 5986

D. L. STANTON, Inc.
SURVEYING & MAPPING

Licensed Surveying Business # LB 2856
1907 SW Vanguard Lake Blvd.
Port Saint Lucie FL 34953
Telephone: (561) 863-1863
Email: DLStanton@bellsouth.net

BOUNDARY SURVEY AND BILLBOARD SITE PLAN
Thornton Site / (Vacant / Unassigned) W Colonial Drive
Orlando, Florida 34787

REFERENCE: L/17	REVISIONS:	SCALE: 1" = 20'
OFFICE: DLS		DWG. NUMBER: 25-008
DATE OF SURVEY: 1/16/25		SHEET 1 OF 1

CITY OF WINTER GARDEN

PLANNING & ZONING DIVISION

300 West Plant Street - Winter Garden, Florida 34787-3011 • (407) 656-4111

STAFF REPORT

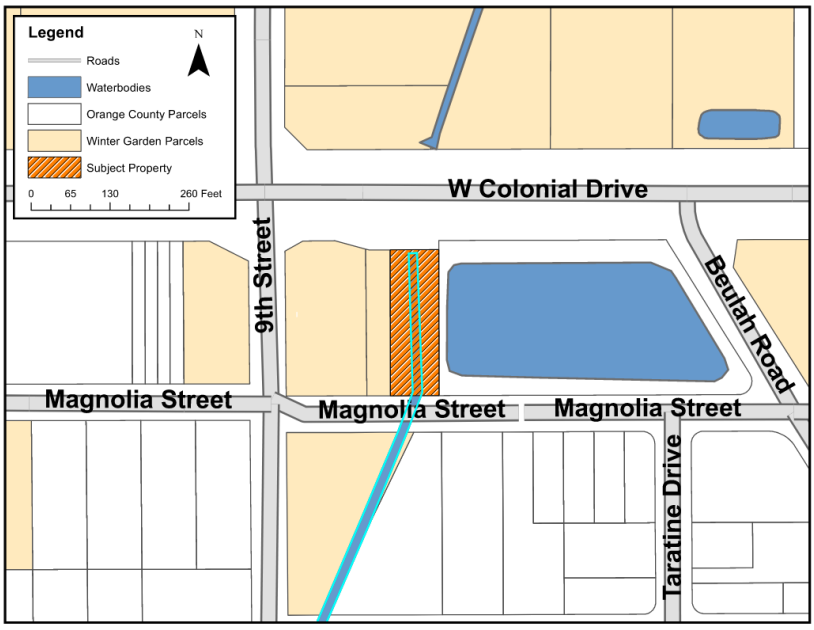
TO: CITY COMMISSION
PREPARED BY: AMBER McDONALD, PLANNER II
DATE: AUGUST 13, 2026
SUBJECT: SPECIAL EXCEPTION PERMIT
W. Colonial Drive (Digital Billboard Replacement)
PARCEL ID # 25-22-27-9384-01-183
1101 E. Plant Street and 14909 W. Colonial Drive (Billboard Removal)
PARCEL ID # 13-22-27-0000-00-009 & 22-22-27-0000-00-024

APPLICANT: BERGER SINGERMAN

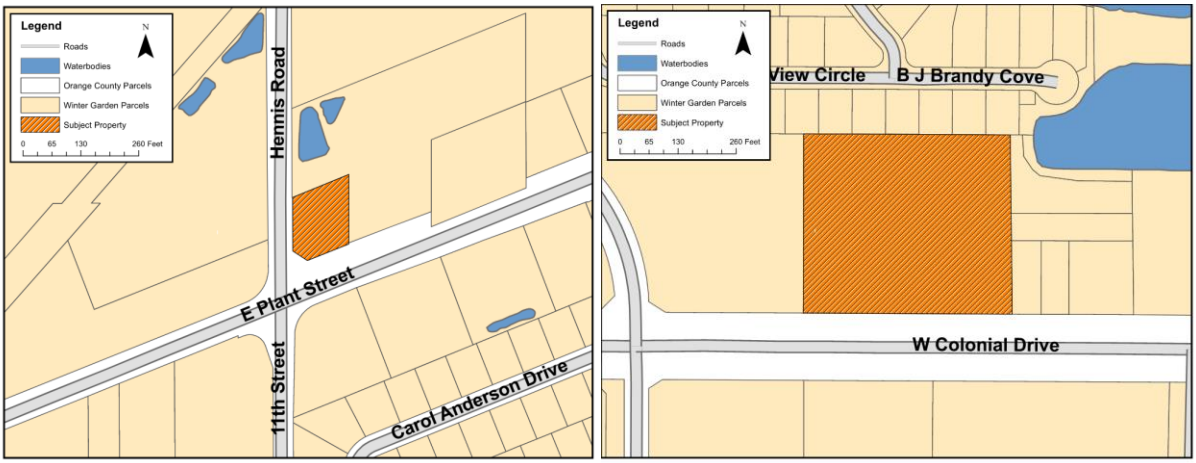
INTRODUCTION

The purpose of this report is to evaluate the proposed special exception permit for compliance with the City of Winter Garden Code of Ordinances and Comprehensive Plan.

The subject property where the replacement digital billboard is proposed to be constructed is located at W. Colonial Drive Parcel ID# 25-22-27-9384-01-183. The map below depicts the location of the subject property within the City of Winter Garden municipal limits:



There are two subject properties where billboards are being removed located at 1101 E. Plant Street and 14909 W. Colonial Drive. The maps below depict the locations of the subject properties within the City of Winter Garden municipal limits:



While new billboards are prohibited, Section 102-92(4) of the City Code states that the city commission shall have the authority to grant a special exception to this subsection subject to the requirements of section 102-94 and sections 118-96 through 118-102 in those instances where at least two existing legally nonconforming billboard signs are being eliminated and being replaced with a single billboard sign or a single digital billboard that the City Commission finds less obtrusive, improves the aesthetic character of the city, provides other benefits to the city, and is placed in a more desirable location. This proposal removes two existing billboards and replaces one of those billboards with a modern digital billboard.

This request is for a Special Exception Permit to allow removal of two existing billboard signs located at 1101 E. Plant Street, Winter Garden, FL 34787, and 14909 W. Colonial Drive, Winter Garden, FL 34787, respectively (collectively, the "Existing Signs"), and to construct a new double-faced billboard on a property located at W. Colonial Drive Parcel ID# 25-22-27-9384-01-183.

EXISTING / PROPOSED USE

The property at 1101 E. Plant Street currently contains one double-faced non-conforming billboard. The property located at 14909 W. Colonial Drive currently contains one single-faced billboard and a modular building. Previously this location was a landscape supply store that sold mulch and aggregate that is no longer operational. Outfront Media, LLC is requesting this special exception to allow the removal of the existing signs and construction of a new double-sided digital billboard with 378 square feet of copy area on each side at W. Colonial Drive Parcel ID# 25-22-27-9384-01-183.

Section 102-94 of the City Code has provisions that encourage the removal of non-conforming signs. The owners must enter into a relocation and reconstruction agreement to eliminate at least two billboards and replace with a digital billboard that is designed to protect the public health,

safety, and welfare, install the digital billboard in a desirable location that is less obtrusive, improves or protects the aesthetic character of the city, protects or improves highway safety, thereby enhancing the removal and replacement locations.

This section, along with the relocation and reconstruction agreement provide that: i) the billboard construction and removal must occur within a specified time period; ii) details regarding the elimination and removal of the billboards and billboard sign structures; iii) mechanisms to ensure that the removed billboards cannot be re-erected or replaced; and iv) recitation of provisions of the proposed relocation agreement showing that the City may utilize the digital billboard from time-to-time, etc. All of these requirements are in the proposed relocation and reconstruction agreement and are a condition of this Special Exception.

Section 118-96 through 118-102 has specific Special Exception criteria including: such use is compatible to surrounding uses, will not create traffic hazards or parking problems, or does not deviate from the terms of this chapter. The proposed digital billboard is replacing two existing billboards with a new digital billboard that will not create any traffic hazards, parking problems, or will it deviate from Chapter 118.

Section 118-100 of the City Code also looks at "the effect of the special exception use on surrounding uses" which would certainly include the character, zoning, aesthetics, traffic, neighboring or proximate businesses/residences, etc. of the location where the digital billboard is to be placed. As previously stated, staff believes that with the relocation and reconstruction agreement, and with the proper building permits, the proposed digital billboard meets the criteria for Special Exceptions. In addition, the existing non-conforming billboards located at 1101 E. Plant Street and 14909 W. Colonial Drive cannot be replaced.

ADJACENT LAND USE AND ZONING

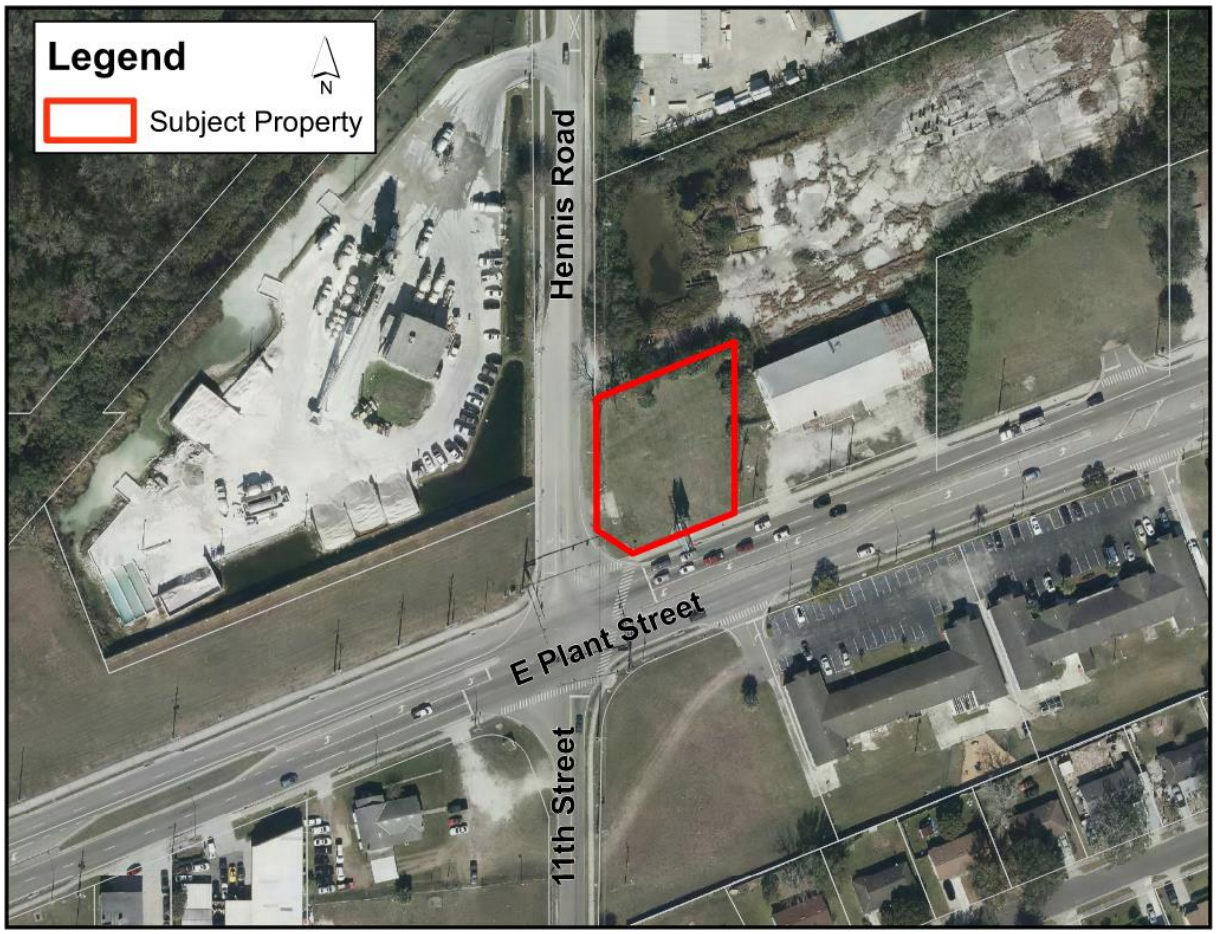
The property to the west of the subject property is vacant, carries a PCD (Planned Commercial Development) designation and is within the City's municipal limits. The property to the east is a FDOT retention pond, zoned C-3 and located within Unincorporated Orange County. The property to the north is a gas station, zoned C-2 and within the City's municipal limits. There are two properties to the south of the subject property. The first is a vacant property, zoned PCD (Planned Commercial Development) and resides within the City's municipal limits. The second property to the south is developed with a single-family residence, zoned R-1 and located within Unincorporated Orange County.

SUMMARY

City Staff recommends approval of the proposed special exception permit to allow the removal of the non-conforming billboards located at 1101 E Plant Street and 14909 W Colonial Drive and the construction of a new double-sided digital billboard at W. Colonial Drive Parcel ID# 25-22-27-9384-01-183 subject to the following condition:

1) The special exception shall not become or be effective unless and until the relocation and reconstruction agreement approved by the City is fully executed by all parties, remains in full force and effect and is recorded in the public records of Orange County, Florida.

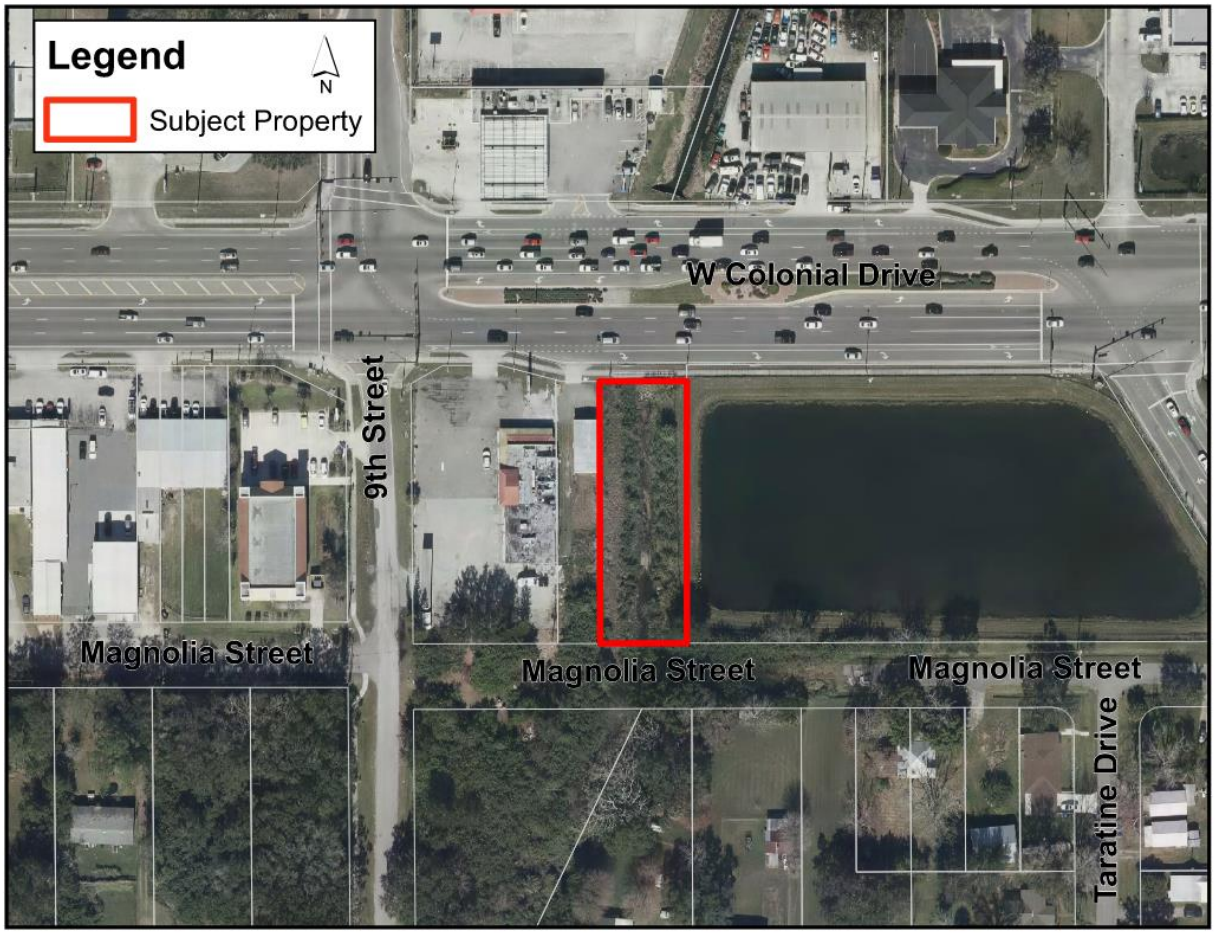
AERIAL PHOTO
1101 E. Plant Street



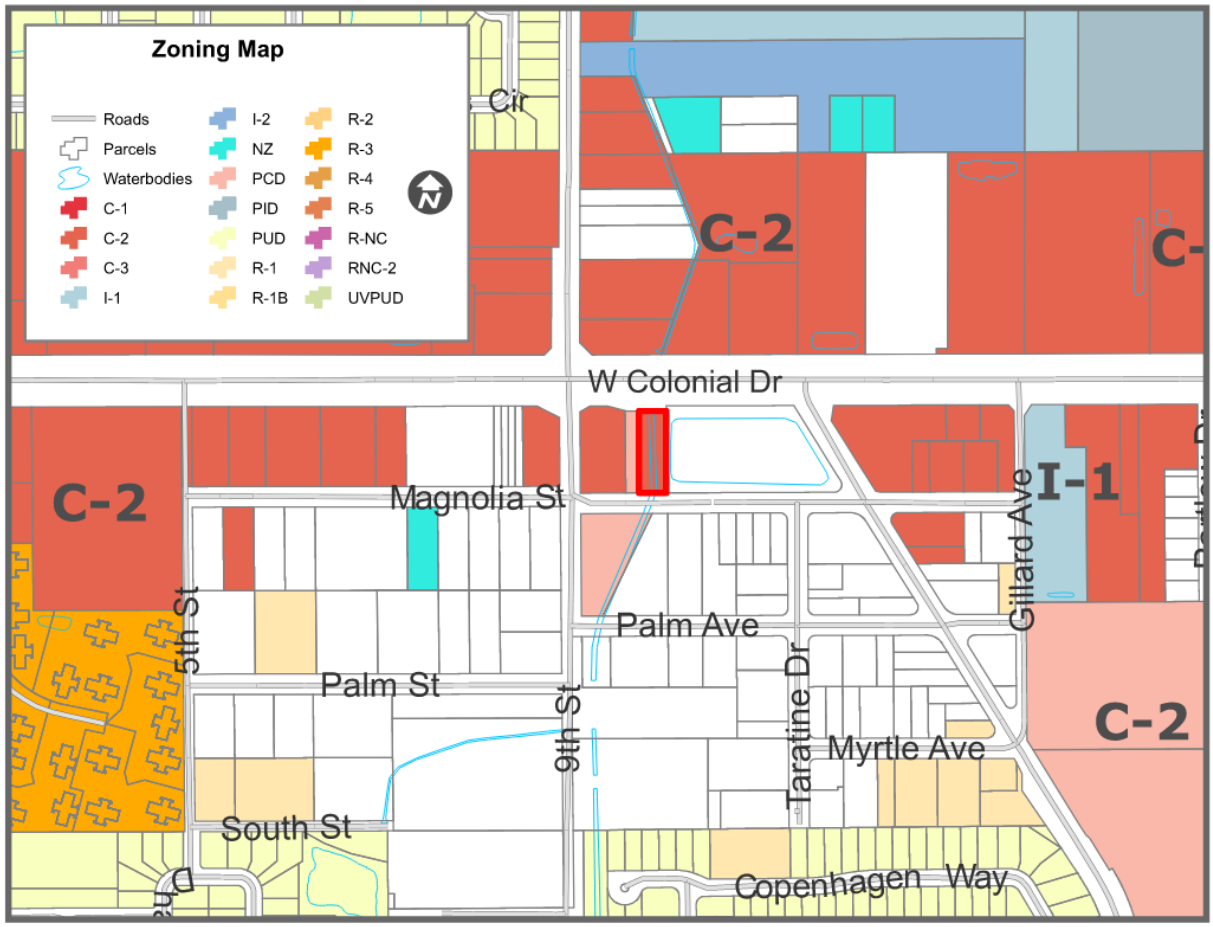
AERIAL PHOTO
14909 W. Colonial Drive



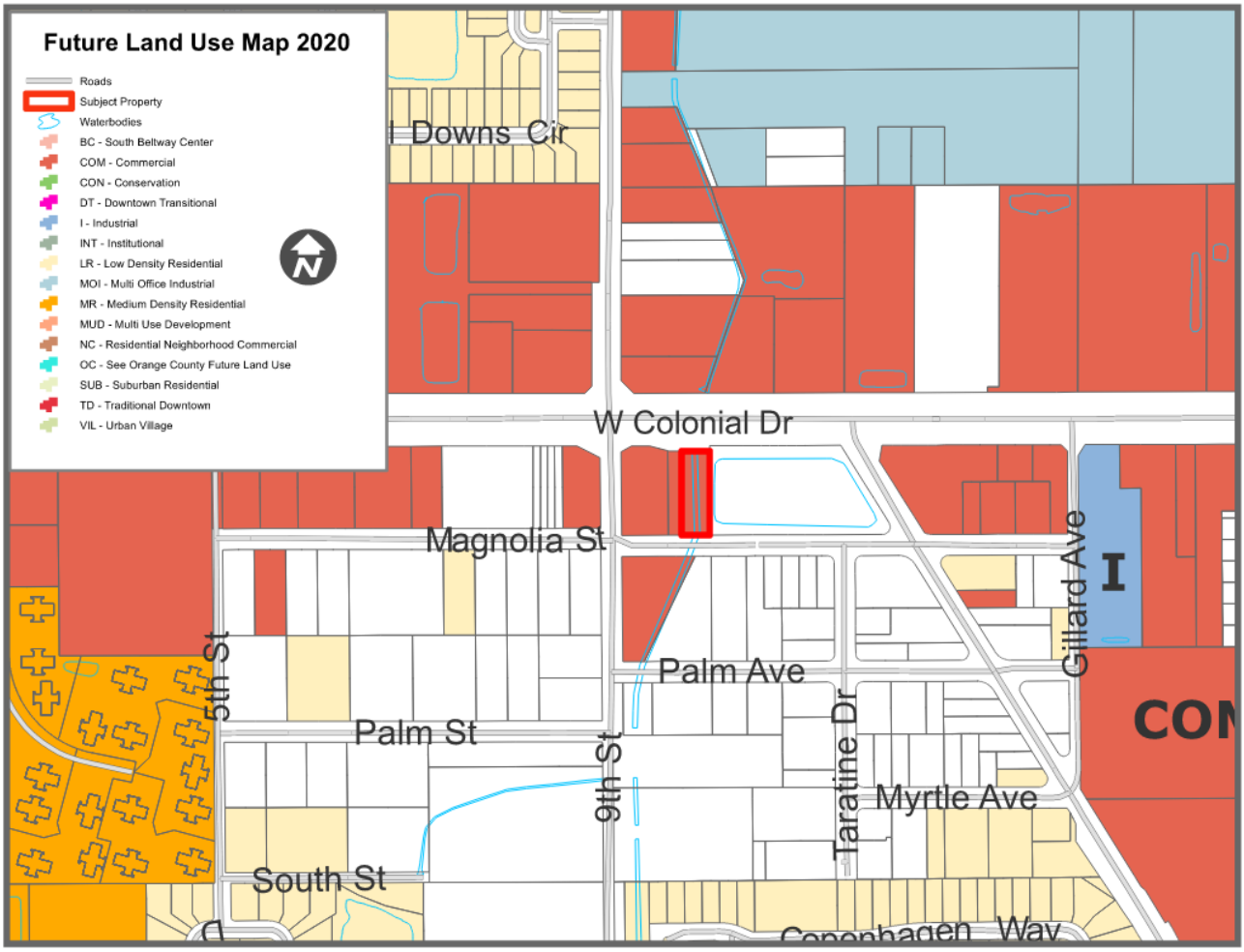
AERIAL PHOTO
W. Colonial Drive



ZONING MAP
W. Colonial Drive



FUTURE LAND USE MAP
W. Colonial Drive



SITE PHOTO
1101 E. Plant Street (Billboard Removal)



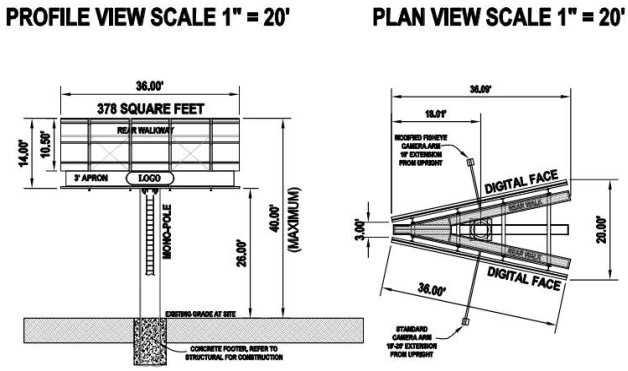
SITE PHOTO
14909 W. Colonial Drive (Billboard Removal)

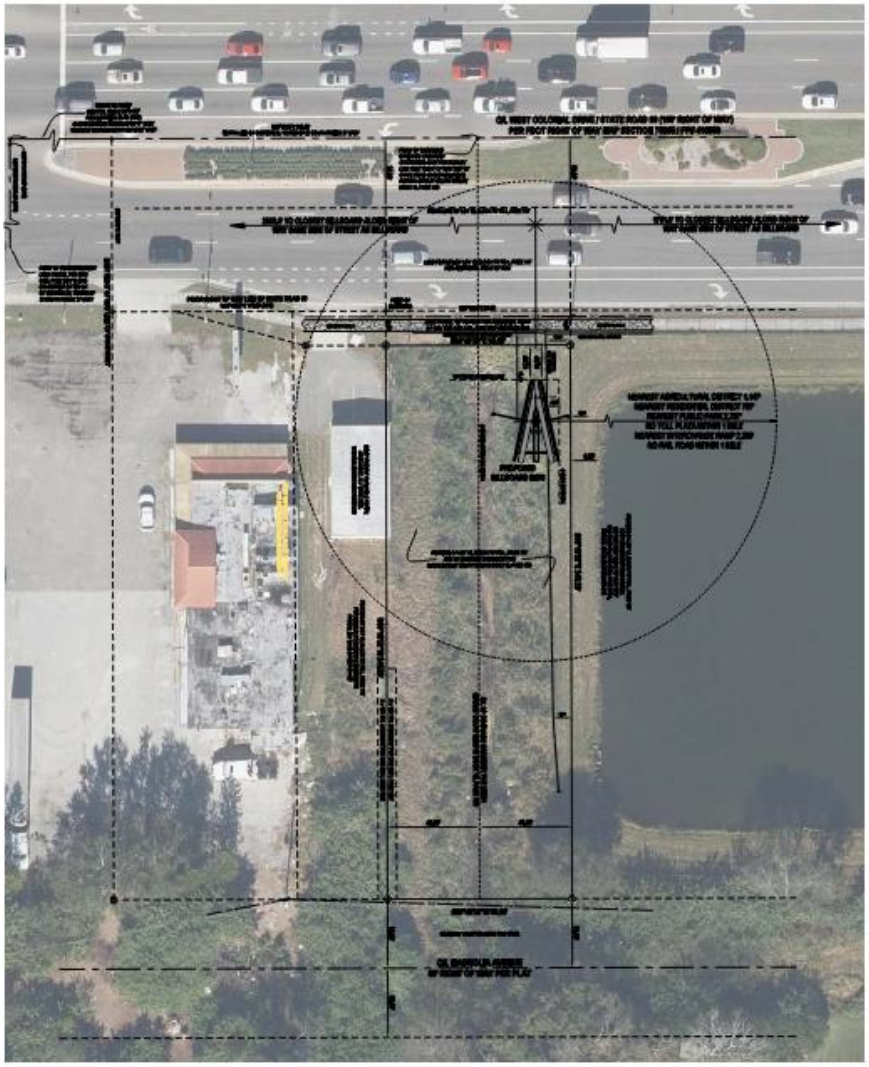


SITE PHOTO
W. Colonial Drive (Digital Billboard Replacement Location)



SITE PLAN





END OF STAFF REPORT

THE CITY OF WINTER GARDEN

COMMUNITY REDEVELOPMENT AGENCY (CRA) AGENDA ITEM

From: Marc Hutchinson, Economic Development Director

Via: Jon C. Williams, City Manager

Date: August 5, 2026 **Meeting Date:** August 13, 2026

Subject: JJ's Grocery Commercial Revitalization Project – 95 Center Street

*** Item Presented as Information Only to the CRA Advisory Board Due to No Quorum***

Issue: This agenda item is for the proposed conversion of JJ's Grocery, located at 95 Center Street, into a daycare facility. This project aligns with the City's ongoing revitalization efforts in the Historic East Winter Garden Neighborhood. If approved, it will continue the progress made along Center Street, including the recently completed Dysons Plaza project situated two parcels to the east.

JJ's Grocery has been closed for an extended period, and the property owner, Ms. Laquitta Kegler—who also operates a licensed daycare facility in Orlando—has approached the City with a request in a change of use from an existing retail grocery to daycare facility. The property has an RNC-2 zoning classification which allows for daycare operations and supports neighborhood-friendly commercial activity.

This type of use fills a significant need in the community, as many families must travel outside the neighborhood to secure reliable and affordable childcare. The City views this proposed conversion as an appropriate and beneficial use that advances the continued revitalization of Center Street.

As a part of the licensing requirements, daycare facilities must provide a dedicated playground area. The existing JJ's property cannot accommodate the required space. To address this constraint, the property owner at 95 Center Street and Bethlehem Missionary Baptist Church, located directly behind the site at 60 North Street, executed a five-year ground lease on June 15, 2026. This agreement provides approximately 1,598 square feet needed to meet the playground requirement and will allow the project to move forward in compliance with DCF regulations.

To prepare the necessary construction documents for the daycare conversion, the City recommends engaging Dragonfly Architecture, LLC to provide architectural and engineering services which was anticipated and included in the current budget.

Recommended Action: Motion to approve engagement with Dragonfly Architecture, LLC to provide architectural and engineering services in the amount not to exceed **$48,900**.

Attachments/References:

JJ's Grocery Property Detail

Dragonfly Architecture, LLC Proposal

Survey of Adjoining 60 North Street Property - For Required Daycare Playground

Ground Lease Agreement – Granting Partial Use of Property for Required Playground

JJ's Groceries – Commercial Conversion Project from Retail to Daycare Use

95 Center Street Property Detail

Parcel 13-22-27-5260-00-051 X

Print Date: 07/09/2026 System Refresh Date: 07/09/2026

Previous | Next | Print | Map | Street | Birdeye | Trim | Port | Estimate | Taxes | FEMA | Plat | Sketch | Share | Favorite

95 Center St 13-22-27-5260-00-051

Name(s):
KEGLER LAQUITTA S

Physical Street Address:
95 Center St

Property Use:
1100 - Retail 1-story Store

Mailing Address On File:
1122 Pine Falls Ln
Ocoee, FL 34761-1444
Incorrect Mailing Address?

Postal City and Zip:
Winter Garden, FL 34787

Municipality:
Winter Garden

Property Name:
Jj's Grocery, Food And Lotto Services, Inc.



Upload Photos

View 2025 Property Record Card

PROPERTY FEATURES | VALUES, EXEMPTIONS AND TAXES | SALES | MARKET STATS | LOCATION

2026 Values will be available in August of 2026. To see the certified values, go to the Values, Exemptions and Taxes Tab.

View Plat

Property Description

J S LOVELESS ADDITION TO WINTER GARDEN D/90 E1/2 OF S1/2 OF LOT 5

Total Land Area GIS Calculated Notice

7,499 sqft (+/-) | 0.17 acres (+/-)

Land

Land Use Code	Zoning	Land Units	Unit Price	Land Value	Class Unit Price	Class Value
1100 - Retail 1-story Store	WG-RNC-2	7500 Code Undefined	Working Value...	Working Value...	Working Value...	Working Value...

« « 1 » »

Page 1 of 1 (Total Records: 1)

Building

View Winter Garden Permits

More Details

Model Code:	4 - Commercial	**Actual Year Built:**	1970	**Gross Area:**	2472 sqft
Type Code:	1100 - Retail 1-Story Store	**Beds:**	0	**Living Area:**	2440 sqft
Building Value:	Working Value...	**Baths:**	0	**Exterior Wall:**	Conc/Cindr
Estimated New Cost:	Working Value...	**Floors:**	1	**Interior Wall:**	Drywall

« « 1 » »

Page 1 of 1 (Total Records:1)

Extra Features

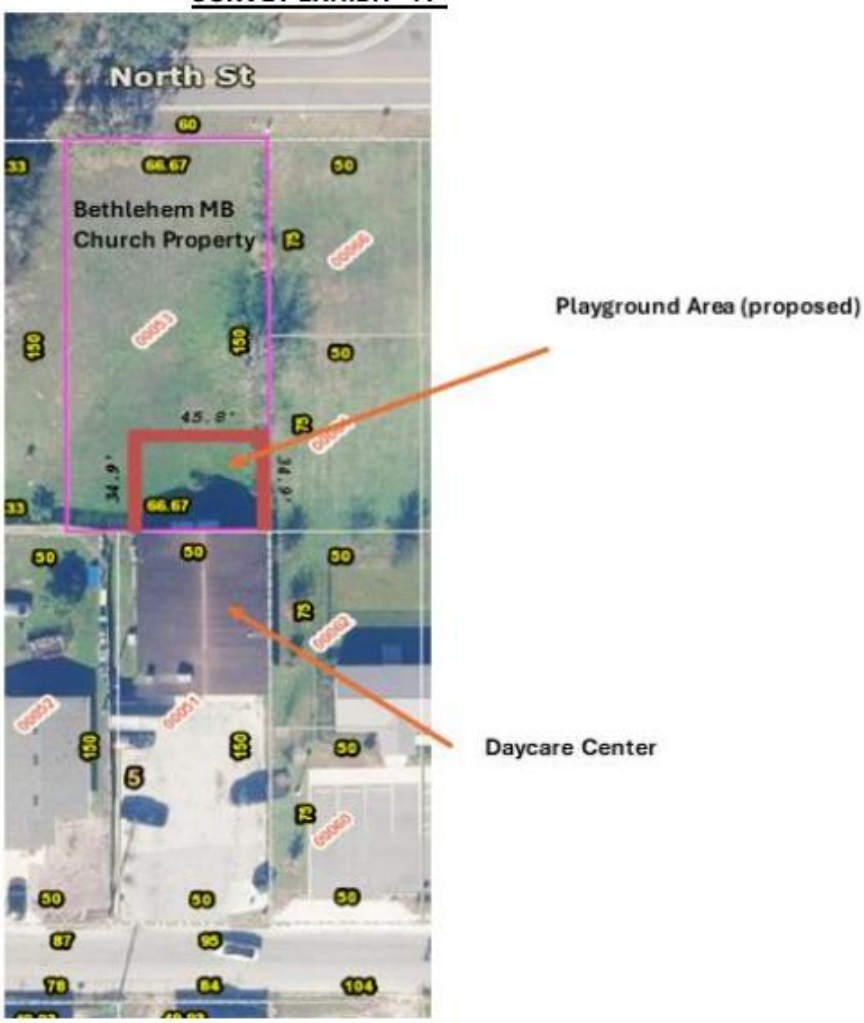
Description	Date Built	Units	Xfob Value
6030 - Null	01/01/1970	4305 Unit(s)	Working Value...
6040 - Null	01/01/1970	128 Unit(s)	Working Value...

« « 1 » »

Page 1 of 1 (Total Records: 2)

Proposed Daycare Facility Layout

SURVEY EXHIBIT "A"



Aeriel Map View - Center Street



JJ's Grocery/Daycare Facility

Completed Dyson's Plaza

June 3, 2025

ATTN:
Marc Hutchinson
Economic Development Director
City of Winter Garden
300 W. Plant Street
Winter Garden, FL 34787

RE: **95 CENTER STREET RENOVATION**

Dear Mr. Hutchinson,

Thank you for considering Dragonfly Architecture (DA) for your project needs. This proposal includes Architectural & Engineering professional services for the renovation of an existing market building located at 95 Center Street in Winter Garden, FL.

Based on our discussions and additional information you have provided, the following outline describes the limits of the scope of work, the services we will be providing, and the associated fees for the work.

SCOPE OF WORK

The City of Winter Garden is partnering with a local business owner to repurpose an existing building that was once used as a local marketplace. The building is currently unoccupied and has remained as such for some time. The local business owner, who is also the building owner, wishes to convert the space into a Daycare facility. The new facility is intended to provide childcare services for a range of children, aged infants through 12 years old. The City will work with the Owner to provide the necessary accommodation for site improvements that will support the new business.

The following outlines the program and scope of work:

- Convert the existing marketplace building, approximately 2,500 sf into a new Daycare facility. Remove all existing kitchen equipment, refrigeration equipment, electrical systems, mechanical systems, plumbing systems, lighting, and interior non-load bearing partitions. Only the shell, exterior walls & roof and load bearing interior wall structure is to remain
- Design and engineer a new Daycare facility with the following program:

- Facility to accommodate a minimum of 40 to a maximum of 45 children and up to 8 staff members
- Provide a covered porch entry tied into the existing roof for improved entry sequence
- 1 small kitchen (including a 28-cu ft refrigerator, standard oven w/hood, 3-compartment sink or dishwasher, storage & counterspace for food preparation)
- 1 employee unisex ADA bathroom
- 3 children's unisex ADA stalls with 2 general use lavatories
- 1 washing area for infants
- 1 hi/low electric drinking fountain (height to accommodate children)
- 1 Janitors closet with utilities (HVAC Air handler for split system. Water heaters are assumed to be tankless. Gas heaters will be explored as an option if there is an existing gas line connection)
- 1 open multipurpose room approximately 1,500 sf (This accommodates the required 35 sf of space per child by the state of Florida). The classroom will need to be divided for various aged children and their age specific required activities. This is to be verified with the Owner's assumed needs.
- 1 small office (Optional. This will be decided during the Schematic Design phase)
- 1 small lobby reception
- 1 storage closet
- Parking striping plan for onsite surface parking (includes 1 ADA parking space)
- Fenced in area for trash receptacles and HVAC condensing unit on the west side of the building.
- Power and structural support for building signage will be included in the design

- The scope of work will require a change of use classification. The new classification is considered a special use

In addition to the above scope, the following will be provided:

- DA and the Engineering consulting team documentation to include annotated plans for existing conditions, demolition construction, and new construction, elevations, sections, details, schedules and specifications.
- Code analysis: The project will be developed in compliance with the 2023 Florida Building Code (FBC), Existing, 8th edition and the Florida Building Code (FBC), Building, 8th edition. All other applicable state building codes and local ordinances & codes will also be incorporated into the design of the project
- Coordination for project facilitation with the engineering consulting team
- Coordinatiion with the City of Winter Garden and Business Owner for project facilitation

- Permitting support and coordination for submission of the required documentation for permit approval – See Permitting Assistance under Scope Process and Services section of this proposal

SCOPE PROCESS AND SERVICES

Design services will be provided through the construction document phase. The following phases and services are anticipated for this project.

Site Analysis

DA and the consulting team will perform an on-site analysis of the existing conditions. Existing conditions will be documented through observations, photography, and annotation. The recoded data will be used in the creation of the base plan for the new project scope of work.

Schematic Design

DA and the consulting team will develop the project characteristics, features, and purpose by working closely with the Owner, the Owner's contractor and/or the Owner's agent. This phase will include concept plans with overall dimensions and areas, annotated elevations calling out the building heights and material palate, and the structural, mechanical, electrical and plumbing systems basis of design. Building code requirements and any additional local codes or ordinances of the Authority Having Jurisdiction (AHJ) will also be implemented during this phase. A schematic design package for Owner review and approval will be issued.

Design Development

Once the Schematic Design package is approved, DA and the consulting team will advance document development to the point of being graphically complete except for minor coordination items. This phase includes overall plans that are dimensioned and annotated. Enlarged plans will also be advanced along with building sections, building elevations, and limited standard details and schedules. This phase focuses on the direction the project will be developed for construction. Structural, mechanical, electrical, and plumbing engineering will also be advanced and include but not be limited to foundations and building construction systems, points of utility service connections, initial riser diagrams and systems layout, as well as annotations, schedules and standard detailing. A design development package for Owner review and approval will be issued.

Construction Documents

This phase of document development builds upon the approved design development package. DA and the consulting team will prepare construction documents for the permitting and construction of the project. The drawings shall include but not be limited to the complete architectural building configuration, dimensions & annotations, elevations, sections & details, schedules, materials and assemblies, structural systems and details, mechanical, electrical and plumbing systems' equipment sizes, locations and distribution. Civil engineering site plans with utility connections and details will also be advanced and provided during this phase of document development. The specifications will be advanced and shall define the project's procedures, materials, and system standards. A submittal package for final Owner approval will be provided during this phase.

Permitting Assistance

DA will assist with the submission of the final construction document package to the local authority having jurisdiction for permitting approval. This includes the filing of the permit application, establishing login credentials for digital submissions (if applicable), the submission of required documents for approvals, monitoring the approval process, and responding and distribution to the appropriate party any comments the local authorities may have. Permitting assistance is provided until a permit is granted.

Architectural & Engineering Team

The following consultants are anticipated under our scope and included with this proposal:

- Architecture/Interior Design – Dragonfly Architecture, LLC
- Structural Engineering – Domanski Consulting, LLC
- Mechanical/Electrical/Plumbing/Fire Protection Engineering – MiGre Engineering, LLC
- Civil Engineering/Landscape Architecture – Burkett Engineering, Inc.

DOCUMENT DEVELOPMENT TIMELINE

DA anticipates the document development time for all phases to take approximately (10) weeks to complete. A final schedule for document completion is to be agreed upon. The following estimated timeline provides project milestones, durations, and Owner review and approval timeframes.

PROPOSED SCHEDULE (ESTIMATED)

Site Analysis (Includes the creation of base plans)	TBD	(3 days)
Schematic Design	TBD	(2 weeks)
Owner Review and Approval	TBD	(1 week)
Design Development	TBD	(3 weeks)
Owner Review and Approval	TBD	(1 week)
50% Construction Documents	TBD	(2.5 weeks)
Owner Review and Approval	TBD	(2 days)
90% Construction Documents	TBD	(2.5 weeks)
Owner Review and Approval	TBD	(2 days)
IFP	TBD	(3 days)

SCOPE CLARIFICATIONS, EXCLUSIONS & ADDITIONAL SERVICES

1. Revit software will be used for the development of documentation. LOD 300 is anticipated.
2. A site analysis is required prior to the start of work. This visit includes architecture, structure, mechanical, electrical, plumbing, and civil engineering team members to record and document the existing conditions. The City has indicated there are no existing permitted drawings of the existing building on file. The recorded observations will be used to create the base plans for the scope of work.
3. Fees are based on the limited information known about the existing conditions at this time. Should there be a need for additional services arising from the site analysis or further discussions with the City and Building Owner, fees would be adjusted and an addendum to this agreement would be issued.
4. The existing building does not have a fire protection system. DA has confirmed with the Assistant Chief Fire Marshal that a fire alarm and sprinkler system will be required for this change of use occupancy. A fire protection performance design is included for permit approval. It is understood there is an existing hydrant located near the existing building, and it will be possible to connect to the existing fire main to add a sprinkler system. The engineered system is considered a deferred submittal, and a fire protection engineer will need to be hired independently to provide the required

signed and sealed system engineered documentation. DA recommends this service to be provided by H & W Alarm Fire and Security or other reputable fire protection providers. This service will be contracted directly under a separate agreement through the General Contractor and is not included in this proposal.

5. A fire booster pump system design is not included.
6. It is understood the City of Winter Garden is the client for this project and will be developing the project for a local business Owner.
7. Due to the age of the building, there are site related restrictions that do not allow for the requirements of the current land development code to be implemented. The site falls within the City of Winter Garden's masterplan overlay. They will work with the architecture and engineering team to develop the project to accommodate the code regulations on a case-by-case basis.
8. The following services are not included for this project: Geotechnical Engineering, Environmental/Biological services, Dredge & Fill permitting, Transportation Planning/Studies, Surveying, SJRWMD application & processing, FEMA CLOMR and/or LOMR applications, Natural gas design, Postal Addressing, and Signage.
9. Interior Design services are limited to the selection of interior finishes, fixtures, and color palette. Furniture, fixture, and equipment procurement are provided by others. Limited detailing will be provided for millwork, acoustic treatments, reflected ceiling detailing and themed architectural embellishments.
10. (1) In person meeting with DA, the City project representatives, and the Building Owner are included. If additional meetings and consultants are requested, an addendum to this agreement will be issued. Trips would be based on the trip rate and number of trips required plus reimbursable expenses.
11. Value Engineering, bidding, and negotiations are not included.
12. Additional on-site meetings other than what is provided in this proposal are not included. Should that be required or requested, an addendum to this agreement would be issued. Trips would be based on the trip rate and number of days required plus reimbursable expenses.
13. To the fullest extent permitted by law, the Owner agrees that the total liability, in the aggregate, of Architect and Architect's officers, directors, employees, agents, and consultants to the Owner and anyone claiming by, through or under the Owner, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to the Architect's services, the Project or this Agreement, from any cause or causes whatsoever, including but not limited to, negligence, strict liability, breach of contract or breach of warranty shall not exceed the total compensation received by the Architect under this Agreement, or the total amount of $25,000, whichever is greater. Higher limits are available for an additional fee.

PURSUANT TO SECTION 558.0035 FLORIDA STATUTES, DRAGONFLY ARCHITECTURE, LLC IS THE RESPONSIBLE PARTY FOR THE PROFESSIONAL SERVICES IT AGREES TO PROVIDE UNDER THIS AGREEMENT. NO INDIVIDUAL PROFESSIONAL EMPLOYEE, DIRECTOR, OFFICER, OR PRINCIPAL SHALL BE INDIVIDUALLY LIABLE FOR NEGLIGENCE ARISING OUT OF THIS CONTRACT.

14. Site lighting is not included. This service is available for an additional fee.
15. Structural engineering services does not include design of sheathing, shoring, scaffolding, formwork and other means and methods of construction, material testing, specialty engineering of heavy timber, wood trusses, precast concrete or aluminum framing, design of towers, Porte Cochere, landscaping walls, exterior covered walkways, and misc. structures outside the building envelope, and the design of miscellaneous iron items such as stairs, ladders, catwalks and railings.
16. The Architect's services shall neither have control over or charge of, nor be responsible for, the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Contractor's Work.
17. Construction Administration services are not included in this agreement. DA recommends providing these services which can be negotiated under a separate agreement if requested.
18. Limited Civil Engineering is provided for this project. These services are limited to:
    - A set of Construction Plans to include: (cover, notes abbreviations, site plan & utility connection and details.) 4 sheets Signed and Sealed. (No grading plan, will grade to existing patterns)
    - Answer and respond to one round of comments. Revision of plans and RTC letter.
19. The following Civil Engineering services are not included in this scope of work but can be provided for an additional fee if deemed necessary or requested: Additional concepts or layouts, right-of-way permitting or design, geotechnical analysis, capacity encumbrance letter, landscaping, traffic study, stormwater design, irrigation design, any offsite improvements or design, grading, utility design, additional meetings and coordination, additional layouts or site plans, FDEP permits, WMD permits, rezoning land use changes, meetings for DRC, P&Z & CC, and any other task other than what is listed in the included services.
20. Owner approval is required prior to submitting the documents to the Authority Having Jurisdiction for permit review.

21. A childcare/Daycare facility is required to include an outdoor play area that meets the following requirements per the Florida Department of Children and Families 2021 Child Care Facility Handbook:
    - A playground must accommodate a minimum ½ of the licensed capacity of the program.
    - A minimum of 45 sf of usable play area per child is required.

    This requirement is not provided by DA or its consulting team. It is understood the City of Winter Garden will be providing this under separate cover.
22. Professional grade 3-D renderings are not included. See included fee schedule for optional services available.

HOURLY RATES

Fees are based on the program provided by the Owner at this time. Additional services may be necessary and can be provided. Should this be needed and/or the scope be redefined, compensation for these services will be handled on a negotiated basis or at an hourly rate as follows:

President	$225.00
Senior Director	$160.00
Project Manager/Architect	$135.00
Project Designer	$125.00
Interior Designer	$125.00
Construction Administrator	$100.00
Project Coordinator	$ 80.00
Marketing Coordinator/Graphic Designer	$ 80.00
Administrative Assistant	$ 50.00

Trip Rate

Architecture	$ 800/day/person
Structure	$ 800/day/person
MEP/FP	$ 800/day/person
Civil	$ 650/day/person

INVOICING

Progress invoices will be billed monthly based on the percentage of completion for each service provided in the Design Services Fee Schedule section of this proposal. A service charge of 1.5% shall be added to all unpaid balances outstanding after thirty days.

REIMBURSABLE EXPENSES

DA shall be reimbursed for all out-of-pocket expenses. These expenses include but are not limited to project travel, postage, courier services, photography, etc.

FEE GUARANTEE

All rates and fees quoted shall be effective for a period of six (6) months, after which time they may be renegotiated with the Owner.

FEE SCHEDULE

For the above services, we propose the following fees:

Design Services		
Site Analysis (A, S, MEP/FP)	$	4,900
Civil Site & Utility Plan	$	4,500
Schematic Design (A, S, MEP/FP)	$	8,000
Design Development (A, S, MEP/FP)	$	13,500
Construction Documents (A, S, MEP/FP)	$	17,000
Permitting (A, S, MEP/FP)	$	1,000
Total	**$**	**48,900**

Optional Additional Services Available		
3-D Lifestyle renderings	$	2,500/ea.
2-D Site Plan Rendering	$	500/ea.
2-D Floor plan Rendering	$	500/ea.
2-D Elevation Rendering	$	500/ea.
3-D Birdseye Site Plan Renderings	$	4,000/ea.
Graphics for Marketing	$	1,500 – 4,000
(Includes Building plans & Elevation Renderings)		

On behalf of Dragonfly Architecture, we appreciate the opportunity to work with you and look forward to a successful project. If accepted, DA will generate an AIA based contract agreement for execution. Should you have any questions or require additional information, do not hesitate to contact us at your convenience.

Sincerely,



Gary Badge | CCBM
Director of Architecture



Kevin Moore | RA
Architect of Record

By signing the below, you agree to the terms and conditions established within this agreement.

Agreed to this _____ day of _____, 2025.

OWNER

By: _____
Signature of Authorized Representative

_____
Printed Name and Title

CC: File

DRAGONFLY ARCHITECTURE, LLC
399 East Burleigh Blvd, Unit 125 Tavares, Florida 32778
Tel: 407-257-9533 Cell: 407-952-9517 gary@dragonfly-arch.com

BOUNDARY & TOPOGRAPHIC SURVEY

LYING IN A PORTION OF
SECTION 13, TOWNSHIP 22 SOUTH, RANGE 27 EAST
CITY OF WINTER GARDEN, ORANGE COUNTY, FLORIDA

SURVEYOR'S REPORT

1. THIS SURVEY REPRESENTS A BOUNDARY AND TOPOGRAPHIC SURVEY AS DESCRIBED BY STANDARDS OF PRACTICE FOR SURVEYING AND MAPPING, CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODES. THE PURPOSE OF THIS SURVEY IS TO ESTABLISH THE EXISTING LIMITS OF THE LEGAL DESCRIPTION SHOWN HEREON BY ESTABLISHING OR RE-ESTABLISHING CORNERS, MONUMENTS AND BOUNDARY LINES AND THE HORIZONTAL AND VERTICAL SPATIAL RELATIONSHIP OF THE NATURAL OR MANMADE FEATURES SHOWN HEREON. THE INFORMATION SHOWN HEREON REPRESENTS THE RESULTS OF A FIELD SURVEY COMPLETED ON THE DATE INDICATED BELOW AND CAN ONLY BE CONSIDERED AS A REPRESENTATION OF THE GENERAL CONDITIONS PRESENT AT THE TIME OF SURVEY. THIS SURVEY WAS COMPLETED USING A COMBINATION OF CONVENTIONAL SURVEY METHODS AND GLOBAL POSITIONING SYSTEM (GPS).

2. BEARINGS AND COORDINATES SHOWN HEREON ARE RELATIVE TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983/2011 ADJUSTMENT (NAD83/11), FLORIDA EAST, HAVING A BEARING OF NORTH 89°45'07" EAST ALONG THE NORTH RIGHT OF WAY LINE OF CENTER STREET, J.S. LOVELESS SUBDIVISION, PLAT BOOK D, PAGE 90, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. HORIZONTAL CONTROL WAS ESTABLISHED USING REAL TIME KINEMATIC (RTK) GLOBAL POSITIONING SYSTEM (GPS) USING THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) FLORIDA PERMANENT REFERENCE NETWORK (FPRN). THE HORIZONTAL ACCURACY STANDARD FOR THIS SURVEY IS 1 FOOT IN 10,000 FEET. THIS SURVEY EXCEEDS THIS STANDARD.

3. ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS ESTABLISHED USING REAL TIME KINEMATIC (RTK) GLOBAL POSITIONING SYSTEM (GPS) USING THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) FLORIDA PERMANENT REFERENCE NETWORK (FPRN) AND GEOID MODEL FPRNGD18. CONVENTIONAL LEVELS WERE RUN BETWEEN CONTROL POINTS TO VERIFY GPS DERIVED ELEVATIONS.

VERTICAL LEVEL RUNS FOR THIS PROJECT HAVE A CLOSURE ERROR OF LESS THAN 0.05 FEET TIMES THE SQUARE ROOT OF THE DISTANCE IN MILES STANDARD FOR VERTICAL CONTROL.

4. HORIZONTAL POSITION INFORMATION FOR VERTICAL CONTROL POINTS, IF SHOWN TO THE NEAREST FOOT FOR COORDINATES POSITIONS AND/OR STATION AND OFFSET ARE FOR RECON PURPOSES ONLY AND ARE NOT INTENDED FOR USE AS HORIZONTAL CONTROL.

5. ALL RECORDING REFERENCES SHOWN ON THIS SURVEY REFER TO THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, UNLESS OTHERWISE NOTED.

6. UNLESS IT BEARS THE ORIGINAL SIGNATURE AND ORIGINAL RAISED SEAL OR AN ELECTRONIC SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER, THIS DRAWING, SKETCH, PLAT, OR MAP IS FOR INFORMATION PURPOSES ONLY AND IS NOT VALID.

7. THIS SURVEY MAY HAVE BEEN REPRODUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED INFORMATION. THIS SURVEY MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1/20 OR SMALLER.

8. ADDITIONS OR DELETIONS TO THIS SURVEY AND/OR GENERAL NOTES BY ANY OTHER THAN THE SURVEYOR AND MAPPER IN RESPONSIBLE CHARGE, ARE PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE SURVEYOR AND MAPPER IN RESPONSIBLE CHARGE.

9. LAST DATE OF FIELD SURVEY: DECEMBER 9, 2024, SMA FIELD BOOK: 0112-01, PAGES: 50-51.

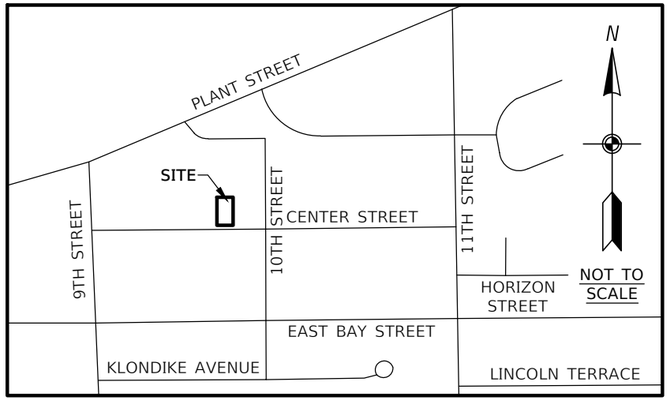
10. ALL TREES HAVING A DIAMETER OF 6" OR LARGER LYING WITHIN THE BOUNDARY LIMITS WERE LOCATED WITH SIZE AND TYPE NOTATED. THE VARIOUS TYPES OF TREES LOCATED ON THIS SURVEY ARE BASED ON COMMON KNOWLEDGE OF TREE SPECIES. TREES ARE IRREGULAR IN NATURE, DIAMETERS SHOWN HEREON ARE APPROXIMATE AND WERE MEASURED AT BREAST HEIGHT. HEDGES, GROUND COVER, ORNAMENTAL PLANTS, AND SPRINKLER HEADS WERE NOT INCLUDED AS PART OF THIS SURVEY.

11. THE SYMBOLS SHOWN HEREON AND IN THE LEGEND ARE NOT SHOWN TO SCALE AND DO NOT REPRESENT THE ACTUAL SHAPE OR SIZE OF THE FEATURE IT REPRESENTS. THE SYMBOLS HAVE BEEN PLOTTED AT THE CENTER OF THE FIELD LOCATION.

12. THIS SURVEY CANNOT BE RELIED UPON BY INDIVIDUAL OR ENTITIES OTHER THAN THE INDIVIDUALS OR ENTITIES THE SURVEY HAS BEEN CERTIFIED TO WITHOUT WRITTEN PERMISSION FROM THE SIGNING SURVEYOR.

13. FENCES AND WALL DIMENSIONS INCLUDING HEIGHT ARE APPROXIMATE. THE SURVEYOR DID NOT DETERMINE THE OWNERSHIP OF WALLS AND FENCES SHOWN HEREON.

14. ACCORDING TO THE FLOOD INSURANCE RATE MAP (FIRM), DATED SEPTEMBER 24, 2021, LOCATED ON COMMUNITY PANEL NUMBER 120187-0205-H, MAP NUMBER 12095C0205H, THIS PROPERTY APPEARS TO BE LOCATED IN FLOOD ZONE "X".



LOCATION MAP

LEGAL DESCRIPTION

PER LANDS DESCRIBED IN DOCUMENT NUMBER 20210269972, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

"THE EAST 1/2 OF THE SOUTH 1/2 OF LOT 5, LOVELESS SUBDIVISION, IN THE SOUTHWEST 1/4 OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN PLAT BOOK D, PAGE 90, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA."

CONTAINING 7,493 SQUARE FEET, MORE OR LESS.

PREPARED FOR:

CITY OF WINTER GARDEN

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT A SURVEY OF THE PROPERTY SHOWN HEREON WAS MADE UNDER MY SUPERVISION AND THAT THE SURVEY MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027 OF THE FLORIDA STATUTES AND THAT THE SURVEY SHOWN HEREON IS A TRUE AND ACCURATE REPRESENTATION THEREOF TO THE BEST OF MY KNOWLEDGE AND BELIEF, SUBJECT TO NOTES AND NOTATIONS SHOWN.

JEFFREY M. SCHWARTZ
PROFESSIONAL SURVEYOR & MAPPER LICENSE NUMBER: LS6618
SCHWARTZ, MAYLONE & ASSOCIATES, LLC (SMA)
PROFESSIONAL SURVEYOR & MAPPER BUSINESS LICENSE NUMBER: LB8538

SEE SHEET SV2 FOR FOR BOUNDARY AND TOPOGRAPHIC SURVEY, LEGEND & ABBREVIATIONS

BOUNDARY & TOPOGRAPHIC SURVEY	95 CENTER STREET WINTER GARDEN	REVISION / BY / DATE	SMA SURVEYING & MAPPING	SCHWARTZ, MAYLONE AND ASSOCIATES, LLC. 4240 AUDUBON AVENUE DE LEON SPRINGS, FLORIDA 32130 PHONE: 407-417-3505 WWW.SMASURVEY.COM	DATE: 12/23/2024 · PROJECT NUMBER: 0112-1-10 · DRAWN: L. SCHWARTZ · CHECKED: J. SCHWARTZ · SCALE: NOT TO SCALE · SHEET SV1 OF SV2

NW CORNER OF THE SOUTH 1/2 OF LOT 4
FND 5/8" IRC
"BSA LB 1221"
FND 1" IP NO ID
0.18'S, 0.06'W
FND 4"X4" CM
TOP BROKEN, NO ID
0.22'S, 0.68'E

N89°43'43"E 199.91'(F) 200.00'(S1)
150.17'(F)

REMAINDER OF LOT 5
(NOT INCLUDED)

BUILDING OVERHANG
0.8' NORTH OF PROPERTY LINE

4' GATE

STUMP

BUILDING OVERHANG 1.1' NORTH
AND 0.3' EAST OF PROPERTY LINE

FND 1" IP NO ID
N:1539339.00
E:472027.64
BUILDING CORNER 0.3' SOUTH
AND 1.7' WEST

6' CLF

FND 5/8" IRC
"BSM LB7274"
6' CLF 0.3' NORTH

49.74'(F)

BUILDING CORNER
0.6' SOUTH

AC UNIT

ELECTRIC METER

HOSE BIB

CONC SLAB

BUILDING OVERHANG
(TYPICAL)

1 STORY CONC
BLOCK BUILDING
(COMMERCIAL)
#95 CENTER STREET

3/4" BACK FLOW
PREVENTER

AC UNIT

REMAINDER OF LOT 5
(NOT INCLUDED)

GAS METER

GREASE
CONTAINER

CONC SWK

BUILDING CORNER
1.1' WEST

BUILDING OVERHANG
0.9' EAST OF PROPERTY LINE

J.S. LOVELESS
SUBDIVISION
PB D, PG 90

NEW COVERED
PORCH

9'-0"

HANDICAP
PARKING SPOT

EAST 1/2 OF THE
SOUTH 1/2 OF LOT 5

N00°06'46"E
150.07'(C)

NEW PROPOSED
PARKING

BROKEN ASPHALT
PARKING LOT
W/ FADED LANE LINES

END 4' WF
BEGIN 6' WF

LANDS DESCRIBED IN
DOCUMENT #20210269972
AREA=7,493 SQUARE FEET ±

4' WF

CONC SLAB
W/ DUMPSTER

SITE BENCHMARK 1
SE CORNER OF LOT 6
FND N&D "LB 8106"
N:1539189
E:472128
EL=120.38'(NAVD88)

UNABLE TO SET PROPERTY
CORNER WITHOUT DAMAGING
CONCRETE DRIVE APRON
WITNESS CORNER:
FND 5/8" IRC "BSM LB7274"
N00°06'46"E 0.50'(C)

49.79'(C)

50.11'(C)

FND 5/8" IRC
"BSM LB7274"

CONC DRIVE
APPRON

SITE BENCHMARK 2
FND 4"X4" CM W/ N&D "PRM LB6723"
N:1539159.02, E:472027.41
EL=120.56'(NAVD88)
(NOT SHOWN TO SCALE)

N
0 10 20
SCALE: 1"=20'

LEGEND AND ABBREVIATIONS

AC	=	AIR CONDITION
BC	=	BACK OF CURB
(C)	=	CALCULATED INFORMATION
CLF	=	CHAIN LINK FENCE
CONC	=	CONCRETE
CM	=	CONCRETE MONUMENT
E:	=	EASTING
EP	=	EDGE OF PAVEMENT
EL	=	ELEVATION
(F)	=	FIELD INFORMATION
FND	=	FOUND
ID	=	IDENTIFICATION
IP	=	IRON PIPE
IR	=	IRON ROD
IRC	=	IRON ROD WITH CAP
LL	=	LANE LINE
LB	=	LICENSED BUSINESS
LS	=	LICENSED SURVEYOR
N&D	=	NAIL AND DISK
NAVD88	=	NORTH AMERICAN VERTICAL DATUM OF 1988
N:	=	NORTHING
PG	=	PAGE
PB	=	PLAT BOOK
(P)	=	PLAT INFORMATION
±	=	PLUS OR MINUS
R/W	=	RIGHT OF WAY
SWK	=	SIDEWALK
(S1)	=	SURVEY PREPARED BY BOWYER SINGLETON AND ASSOCIATES AS SHOWN IN SITE IMPROVEMENT PLANS FOR BETHLEHEM MISSIONARY CHURCH DATED AUGUST 2005
W/	=	WITH
WF	=	WOOD FENCE

= BOLLARD
= CLEANOUT
121 = CONTOUR LINE
OE = OVERHEAD WIRES
= POWER POLE
= SINGLE SUPPORT SIGN
+120.6 = SPOT SHOT
= TELEPHONE PEDESTAL
= WATER METER

LOT 3

N00°08'15"W 150.01'(F) 150.00'(S1)

LOT 4

LOT 6

S00°01'42"E 150.11'(F)

SW CORNER
OF LOT 3
FND 5/8" IRC
"BSA LB 1221"
N:1539187.70
E:471728.03

FND 5/8" IR
NO ID

FND 5/8" IRC
"BSM LB7274"
0.43' NORTH

N89°48'18"E
100.06'(F)
100'(P)

N89°45'07"E 99.72'(C) 100'(P) 99.60'(S1)

S89°46'23"W
99.90'(C) 100'(P)

S89°46'23"W 100.00'(F) 100'(P)

BASIS OF BEARINGS
(NORTH RIGHT OF WAY
LINE OF CENTER STREET)

CENTER STREET(F)
30' FOOT STREET PER PB D, PG 90

ASPHALT
CROWN

SEE SHEET SV1 FOR SURVEYOR'S REPORT

BOUNDARY & TOPOGRAPHIC SURVEY

95 CENTER STREET WINTER GARDEN

REVISION	BY	DATE

SMA SURVEYING & MAPPING

SCHWARTZ, MAYLONE AND ASSOCIATES, LLC.
4240 AUDUBON AVENUE
DE LEON SPRINGS, FLORIDA 32130
PHONE: 407-417-3505
WWW.SMASURVEY.COM

DATE: 12/23/2024
PROJECT NUMBER: 0112-1-10
DRAWN: L. SCHWARTZ
CHECKED: J. SCHWARTZ

SCALE: 1"=20'

SHEET SV2 OF SV2

LEGAL DESCRIPTION:

ALL THAT TRACT OR PARCEL OF LAND LYING IN SECTION 13, TOWNSHIP 22 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, BEING A PORTION OF THE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 7349, PAGE 4812 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 5/8" IRON ROD AND CAP STAMPED "BSM LB7274" MARKING THE SOUTHEAST CORNER OF LOT 5, J.S. LOVELESS SUBDIVISION, AS RECORDED IN PLAT BOOK D, PAGE 90 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE NORTH 00°01'42" WEST ALONG THE EAST LINE OF SAID LOT 5, A DISTANCE OF 150.11 FEET TO A FOUND 1" IRON PIPE MARKING THE SOUTHEAST CORNER OF THE NORTH 1/2 OF SAID LOT 5 AND THE **POINT OF BEGINNING**; THENCE SOUTH 89°43'43" WEST ALONG THE SOUTH LINE OF THE NORTH 1/2 OF SAID LOT 5, A DISTANCE OF 45.80 FEET; THENCE NORTH 00°01'42" WEST ALONG A LINE 45.80 FEET WEST AND PARALLEL TO SAID EAST LINE, A DISTANCE OF 34.90 FEET; THENCE NORTH 89°43'43" EAST ALONG A LINE 34.90 FEET NORTH OF AND PARALLEL TO SAID SOUTH LINE, A DISTANCE OF 45.80 FEET TO A POINT ON SAID EAST LINE; THENCE SOUTH 00°01'42" EAST ALONG SAID EAST LINE, A DISTANCE OF 34.90 FEET TO THE **POINT OF BEGINNING.**

CONTAINING 1,598 SQUARE FEET, MORE OR LESS

GENERAL NOTES:

1. THE PURPOSE OF THIS SKETCH IS TO DELINEATE THE DESCRIPTION ATTACHED HERETO. THIS SKETCH IS NOT A SURVEY.

2. THE BEARINGS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE (0901), 1983 NORTH AMERICAN DATUM, 2011 ADJUSTMENT, DERIVING A BEARING OF NORTH 00°01'42" WEST ALONG THE EAST LINE OF LOT 5, J.S. LOVELESS SUBDIVISION, AS RECORDED IN PLAT BOOK D, PAGE 90 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

3. UNLESS IT BEARS THE ORIGINAL SIGNATURE AND RAISED SEAL OR AN ELECTRONIC SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER, THIS SKETCH IS FOR INFORMATIONAL PURPOSES ONLY.

4. THIS SKETCH MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

5. THIS SKETCH WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT. THE LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT OF WAYS, EASEMENTS, OWNERSHIPS OR OTHER INSTRUMENTS OF RECORD.

6. ALL RECORDING REFERENCES SHOWN ON THIS SKETCH REFER TO THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, UNLESS OTHERWISE NOTED.

SEE SHEET 2 FOR SKETCH OF DESCRIPTION

REVISION	BY	DATE

I HEREBY CERTIFY THAT THIS LEGAL DESCRIPTION AND SKETCH IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER CERTIFY THAT THIS LEGAL DESCRIPTION AND SKETCH MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES. SUBJECT TO NOTES AND NOTATIONS SHOWN HEREON.

JEFFREY SCHWARTZ, PROFESSIONAL SURVEYOR & MAPPER LICENSE NUMBER: LS6618 DATE

DATE: 10/22/2025

PROJECT NUMBER: 73001

DRAWN: D. HEATH

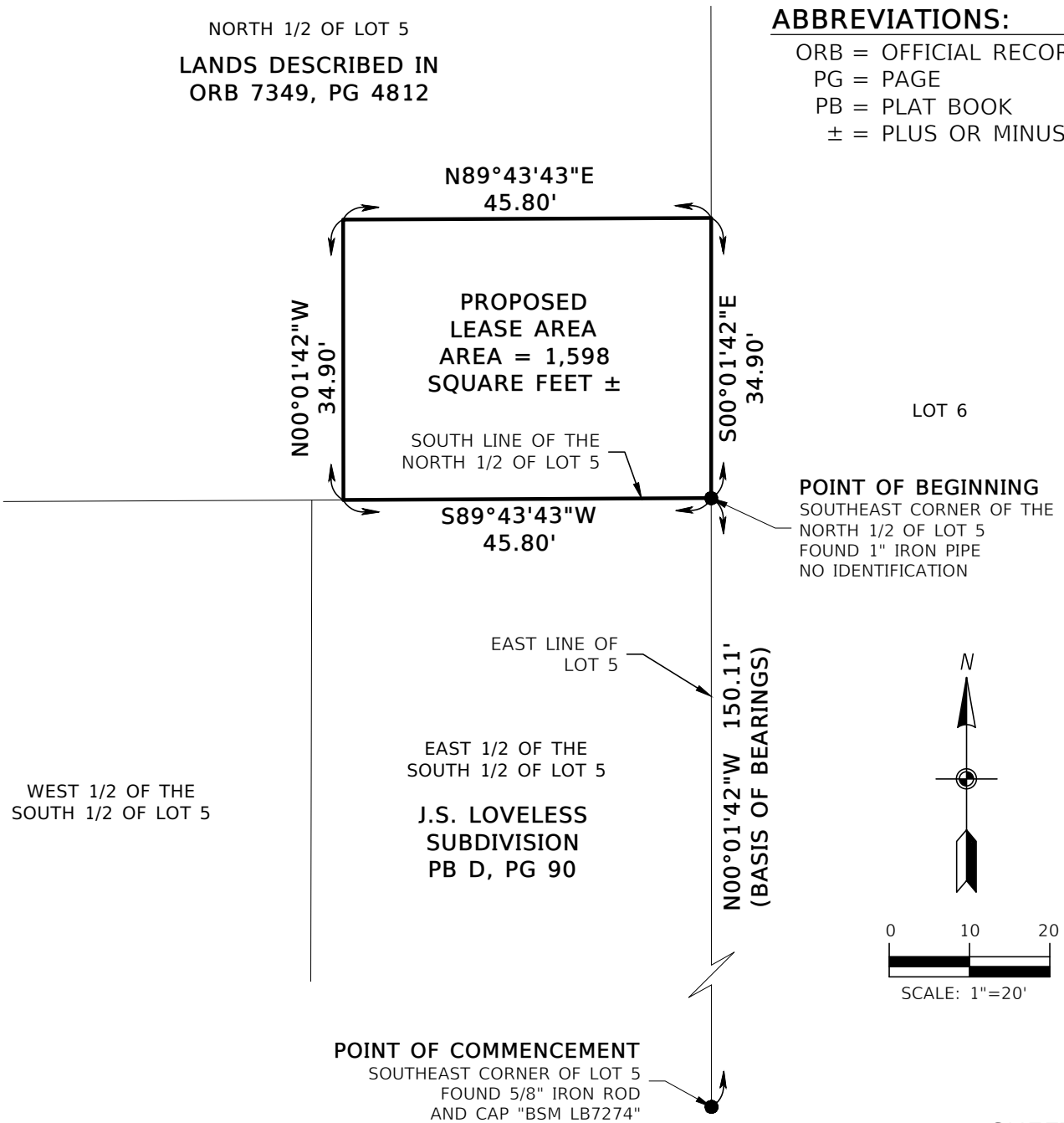
CHECKED: J. SCHWARTZ

60 NORTH STREET
WINTER GARDEN

SSMC™
SUE • SURVEY • GIS
SOUTHEASTERN SURVEYING AND MAPPING CORPORATION
6500 ALL AMERICAN BOULEVARD, ORLANDO, FLORIDA 32810
PROFESSIONAL SURVEYOR & MAPPER
BUSINESS LICENSE NUMBER: LB2108

SKETCH OF DESCRIPTION

SECTION 13, TOWNSHIP 22 SOUTH, RANGE 27 EAST



ABBREVIATIONS:

ORB = OFFICIAL RECORDS BOOK
PG = PAGE
PB = PLAT BOOK
± = PLUS OR MINUS

SEE SHEET 1 FOR LEGAL DESCRIPTION AND GENERAL NOTES

DATE: 10/22/2025
PROJECT NUMBER: 73001
DRAWN: D. HEATH
CHECKED: J. SCHWARTZ

60 NORTH STREET
WINTER GARDEN

SSMC™
SUE • SURVEY • GIS
SOUTHEASTERN SURVEYING AND MAPPING CORPORATION
6500 ALL AMERICAN BOULEVARD, ORLANDO, FLORIDA 32810
PROFESSIONAL SURVEYOR & MAPPER
BUSINESS LICENSE NUMBER: LB2108

GROUND LEASE AGREEMENT

This Ground Lease Agreement ("Lease") is made and entered into this 15 day of June 2026, 2026, by and between **Bethlehem Missionary Baptist Church, Inc.**, a Florida not-for-profit corporation, having an address at 60 North Street, Winter Garden, Florida ("Lessor"), and **Adventure Educational Academy Elite #2, Corp.**, a Florida Not for Profit Corporation, having an address at 95 Center Street, Winter Garden, Florida ("Lessee"). Lessee is operated by the President, Ms. Laquitta Kegler, who is executing this Lease in her authorized capacity on behalf of Lessee.

RECITALS

WHEREAS, Lessor is the fee simple owner of certain real property located at 60 North Street, Winter Garden, Florida, identified for property appraiser purposes as Parcel No. 13-22-27-5260-00-053 (the "Lessor Property"); and

WHEREAS, Lessee owns or controls certain real property located at 95 Center Street, Winter Garden, Florida, identified for property appraiser purposes as Parcel No. 13-22-27-5260-00-051 (the "Lessee Property"); and

WHEREAS, Lessee intends to convert the existing structure located on the Lessee Property from a former retail/grocery use to a licensed daycare facility, and applicable state regulations require such facility to include an outdoor playground area meeting certain minimum size and safety requirements, as depicted on the survey attached hereto as Exhibit A; and

WHEREAS, the Lessee Property does not contain sufficient area to accommodate a code-compliant playground, and it is therefore necessary for Lessee to utilize a portion of the adjoining Lessor Property for that purpose, as depicted on the survey attached hereto as Exhibit B; and

WHEREAS, Lessor is willing to lease a portion of the Lessor Property to Lessee for the limited purpose of constructing, installing, and operating a playground to serve the daycare facility, subject to the terms and conditions set forth herein; and

WHEREAS, the proposed use is consistent with the revitalization goals for the Historic East Winter Garden Neighborhood, as reflected in the East Winter Garden Neighborhood Plan adopted in 2018 and updated in 2022; and

WHEREAS, Lessee acknowledges that the Community Redevelopment Agency (CRA) of Winter Garden intends to provide grant assistance for the daycare project; however, the CRA is not a party to this Lease and shall have no obligations or liabilities hereunder, and Lessor shall have no obligations or liabilities with respect to any such grant assistance, application, administration, compliance, reimbursement, recapture, audit, or reporting obligation;

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. **Recitals.** The above-referenced recitals are true and correct and are hereby incorporated into this Lease.

2. **Term and Renewals.** The initial term of this Lease shall be five (5) years, beginning on the date of execution, unless earlier terminated in accordance with this Lease. The Lease may be renewed upon mutual written agreement of the parties. Lessee acknowledges that it may require approximately six (6) to eight (8) months after the Effective Date to complete planning, permitting, approvals, improvements, and readiness for lawful occupancy and use, and that all such matters shall be completed at Lessee's sole cost and risk.

3. **Use.** Lessor hereby leases to Lessee an approximately 1,598 square foot portion of the real property located at 60 North Street, Winter Garden, Florida, as depicted on the attached survey and illustration (the "Premises"). The Premises shall be used solely for the construction, installation, and operation of a playground area serving a licensed daycare facility operated at 95 Center Street, Winter Garden, Florida, and for no other purpose without Lessor's prior written consent. Lessee accepts the Premises in its "AS IS, WHERE IS" condition, with all faults, and without any representation or warranty by Lessor as to suitability for Lessee's intended use, zoning, code compliance, drainage, soil, utilities, access, playground suitability, or ability to obtain any permit, approval, inspection, license, or certificate.

4. **Rent.** Lessee shall pay Lessor base rent in the amount of $500.00 per month, in advance on the first (1st) day of each month during the Term, beginning on the Rent Commencement Date. The "Rent Commencement Date" shall mean the date the applicable Certificate of Occupancy approval, or other legally required occupancy approval for Lessee's daycare operations and related playground use, is issued. Lessee shall promptly deliver written evidence of such approval to Lessor. Prior to the Rent Commencement Date, Lessee shall remain responsible for all non-rent obligations arising under this Lease, including insurance, indemnity, maintenance, permitting, code compliance, and restoration obligations. All rent shall be paid without setoff, deduction, counterclaim, or abatement, except as expressly stated in this Lease.

5. **Security Deposit.** Upon execution of this Lease, Lessee shall deposit with Lessor the sum of $2,000.00 as a security deposit. Of that amount, $500.00 shall be nonrefundable and fully earned by Lessor upon execution of this Lease as consideration for administrative costs and reservation of the Premises. The remaining security deposit may be held by Lessor in a non-interest-bearing account. No interest shall accrue or be payable to Lessee on any portion of the security deposit. Lessee acknowledges and agrees that Lessor may commingle the security deposit with Lessor's other funds and may use the security deposit for Lessor's business purposes, provided that Lessor remains obligated to account for the refundable portion in accordance with this Lease. Lessor may apply the refundable portion of the security deposit to unpaid rent, damage, cleanup, restoration, removal of improvements, lien claims, attorneys' fees and costs recoverable under this Lease, or any other sums due from Lessee. If any portion of the refundable security deposit is applied, Lessee shall restore the deposit to the required amount within five (5) business days after written demand.

6. **Improvements/Ownership.** All playground structures, surfacing, fencing, and related improvements installed by Lessee shall be deemed leasehold improvements and personal property of Lessee, not fixtures, provided Lessee remains in compliance with the terms of this Lease. All plans, specifications, contractors, subcontractors, and material changes to the Premises shall be subject to Lessor's prior written approval, which may be granted, conditioned, or withheld in Lessor's reasonable discretion. Lessee shall perform all work in a good and workmanlike manner, in compliance with all applicable laws, codes, permits, licensing standards, grant conditions

applicable to Lessee, and manufacturer requirements. Lessee shall keep the Premises and the Lessor Property free and clear of all construction liens, claims of lien, and encumbrances arising from Lessee's work.

7. **Maintenance.** Lessee shall be solely responsible for: installation of the playground; ongoing maintenance and repair; any required inspections; replacement of worn or damaged equipment; keeping the Premises clean, safe, and free of hazards; and maintaining the Premises in compliance with all legal, licensing, and safety requirements applicable to the daycare and playground use. Lessee shall, at its sole expense, promptly repair any damage to the Premises or the Lessor Property caused by Lessee or Lessee's agents, employees, contractors, invitees, or use of the Premises.

8. **Governmental Approvals; CRA; No Lessor Role.** Lessee shall be solely responsible, at Lessee's sole cost and expense, for obtaining, maintaining, and complying with all permits, licenses, approvals, inspections, code requirements, daycare licensing requirements, playground requirements, zoning approvals, and governmental authorizations necessary for Lessee's intended use of the Premises. Lessee shall also be solely responsible for all matters involving the City of Winter Garden, the Winter Garden Community Redevelopment Agency, any grant program, and any other governmental or quasi-governmental funding source related in any way to Lessee's daycare project, business operations, improvements, or use of the Premises. Lessor is not a party to, and shall have no responsibility for, any grant application, grant agreement, reimbursement request, matching funds obligation, reporting requirement, inspection, audit, recapture claim, compliance review, or other matter related to any City or CRA funding or assistance. Nothing in this Lease shall be construed to make Lessor a co-applicant, co-grantee, partner, joint venturer, sponsor, developer, contractor, operator, manager, or participant in Lessee's project or in any City or CRA program. Lessee shall not represent to any person or entity that Lessor has endorsed, guaranteed, sponsored, or assumed any obligation relating to Lessee's grant, project financing, licensing, construction, or operations. Lessee shall have no claim against Lessor for any denial, delay, suspension, reduction, recapture, or termination of any grant, incentive, permit, license, or approval.

9. **Shared/Priority Use by Lessor.** Lessor shall have reasonable rights to use the playground and equipment during times when the daycare is closed, provided such use does not damage the improvements or interfere with Lessee's lawful operations. In the event of an emergency or unforeseen circumstance affecting Lessor's property or congregation, Lessor shall have priority use rights to the Premises and playground area. Notwithstanding the foregoing, any such use by Lessor shall not impose upon Lessor any duty to maintain, supervise, inspect, repair, or secure the Premises, all of which shall remain the sole responsibility of Lessee except to the extent caused solely by Lessor's gross negligence or intentional misconduct.

10. **Insurance.** Lessee, at its sole cost and expense, shall procure and maintain throughout the Term, and during any earlier entry or construction period, commercial general liability insurance covering bodily injury and property damage with limits of not less than One Million Dollars ($1,000,000) per occurrence and Two Million Dollars ($2,000,000) aggregate, arising out of or in connection with Lessee's use, occupancy, maintenance, construction, installation, and operation of the Premises. Such policy shall include contractual liability coverage sufficient to support Lessee's indemnity obligations under this Lease. Bethlehem Missionary Baptist Church, and its pastors, trustees, officers, directors, members, employees, agents, and volunteers, shall be named as

additional insureds and certificate holders on a primary and noncontributory basis. Lessee shall provide Lessor with a Certificate of Insurance and applicable endorsements evidencing the required coverage prior to taking possession of the Premises, prior to any work on the Premises, and upon each renewal of coverage. Failure to maintain the required insurance shall be a material default under this Lease.

11. **Assignment and Subletting.** Lessee shall not assign, sublease, mortgage, pledge, encumber, or transfer any interest in this Lease or the Premises, including in connection with the sale of the Lessee's adjacent property or any change in ownership or control of Lessee, without the prior written consent of Lessor, which may be granted or denied in Lessor's sole discretion. Any purported assignment, sublease, mortgage, pledge, encumbrance, or transfer in violation of this Paragraph shall be void and shall constitute a material default under this Lease.

12. **Indemnification.** To the fullest extent permitted by law, Lessee shall defend, indemnify, and hold harmless Lessor, Bethlehem Missionary Baptist Church, and Lessor's pastors, trustees, officers, directors, members, employees, agents, volunteers, successors, and assigns, from and against any and all claims, demands, causes of action, liabilities, damages, losses, fines, penalties, judgments, settlements, costs, and expenses, including attorneys' fees, appellate fees, expert fees, and court costs, arising out of or related to: (a) Lessee's use, occupancy, construction, installation, operation, maintenance, repair, or presence on the Premises; (b) any act or omission of Lessee or Lessee's officers, owners, employees, contractors, subcontractors, agents, invitees, guests, students, children, parents, vendors, or licensees; (c) any injury to persons, including minors, or damage to property occurring in, on, at, or about the Premises in connection with Lessee's activities; (d) any violation of law, code, permit, licensing standard, daycare regulation, playground requirement, governmental directive, or grant condition applicable to Lessee; (e) any lien, claim, or charge arising from Lessee's work, improvements, or operations; and (f) any matter involving the City of Winter Garden, the CRA, or any grant or public funding connected in any way with Lessee's project or operations. Lessee's duty to defend is immediate upon written notice of a claim and is separate from and in addition to Lessee's duty to indemnify and hold harmless. Without limiting the foregoing, Lessee shall defend, indemnify, and hold harmless Lessor from any audit, investigation, enforcement action, reimbursement demand, recapture claim, clawback, code action, or administrative proceeding involving any City, CRA, state, or federal authority arising from or related to Lessee's project, use of the Premises, or any grant or public assistance. Notwithstanding the foregoing, Lessee shall not be required to indemnify Lessor to the extent a final judgment determines that a claim was caused solely by the gross negligence or intentional misconduct of Lessor. The provisions of this Paragraph shall survive expiration or earlier termination of this Lease.

13. **Applicable Law.** The laws of the State of Florida shall govern the validity, performance, and enforcement of this Lease. The parties further agree that any and all litigation arising from the terms of this Lease and the subject matter contained herein shall be filed and heard in a court of competent jurisdiction located in Orange County, Florida. The invalidity or unenforceability of any provision of this Lease shall not affect or impair any other provision.

14. **Termination.** Either Lessor or Lessee may terminate this Lease upon the occurrence of a material breach by the other party, provided that the non-breaching party gives written notice describing the breach in reasonable detail and the breaching party fails to cure such breach within thirty (30) days after receipt of such notice, or within such longer period as may be reasonably

necessary to cure if the breaching party commences cure within the initial thirty (30)-day period and thereafter diligently pursues such cure to completion.

Lessee shall notify Lessor in writing within fifteen (15) business days of any suspension, revocation, probation, citation, enforcement action, or other impairment, or threatened impairment, affecting Lessee's daycare license. Failure to timely provide such notice and/or to cure the condition giving rise to such impairment, to the extent curable, shall constitute a material breach of this Lease.

This Lease shall automatically terminate upon (i) the permanent revocation, suspension, or non-renewal of Lessee's daycare license, or (ii) the permanent abandonment of the daycare use at the Lessee Property. In the event Lessee fails to maintain the insurance required under this Lease, and such failure is not cured within fifteen (15) days after written notice from Lessor, Lessor may, in addition to any other remedies available, terminate this Lease immediately.

In the event of a government-ordered closure, safety violation, or condition at the Premises that poses an imminent threat to health or safety, Lessor shall provide notice to Lessee and Lessee shall immediately take all reasonable steps to correct such condition. If such condition is not cured within a reasonable time, considering the nature and severity of the violation, Lessor may terminate this Lease upon written notice.

If Lessee has not obtained all approvals necessary to lawfully operate the daycare and playground use within eight (8) months after the Effective Date, Lessor may terminate this Lease upon written notice to Lessee. Upon such termination, Lessor shall retain the $500.00 nonrefundable portion of the deposit, and the remainder of the refundable deposit shall be returned less any amounts properly applied under this Lease.

Upon termination for any reason, Lessee shall remove all playground improvements and restore the Premises to a condition reasonably similar to that which existed prior to installation, ordinary wear and tear excepted, unless the parties mutually agree in writing that some or all improvements shall remain.

15. **Independent Counsel; Opportunity to Review.** Lessee acknowledges that this Lease is a legally binding document and that Lessee has had the opportunity to consult with independent legal counsel of Lessee's choosing regarding the terms and effect of this Lease, including but not limited to provisions relating to indemnification, insurance, default, and remedies. Lessee further acknowledges that Lessor has not provided Lessee with legal advice, that Lessee has either consulted with such counsel or voluntarily elected not to do so, and that Lessee enters into this Lease freely, voluntarily, and with full understanding of its terms.

16. **Miscellaneous.** Nothing contained in this Lease shall be deemed or construed to create a partnership, joint venture, agency, fiduciary relationship, or other special relationship between Lessor and Lessee. No provision of this Lease is intended to benefit or may be enforced by the City of Winter Garden, the CRA, any grant administrator, or any other third party. Lessee shall not record this Lease or any memorandum thereof without Lessor's prior written consent. This Lease constitutes the entire agreement between the parties concerning the Premises and supersedes all prior negotiations and understandings relating thereto. No amendment or modification of this Lease shall be effective unless in writing and signed by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Ground Lease Agreement as of the 15 day of June, 2026

Jimmy L. Turner (407) 376-9995

LESSOR:
Bethlehem Missionary Baptist Church, Inc., a Florida not-for-profit corporation

By: Jimmy Mincey 407 765-9489
Name: Jimmy Mincey
Title: Chairman of Trustee

LESSEE:
Adventure Educational Academy Elite #2, Corp., a Florida not-for-profit corporation

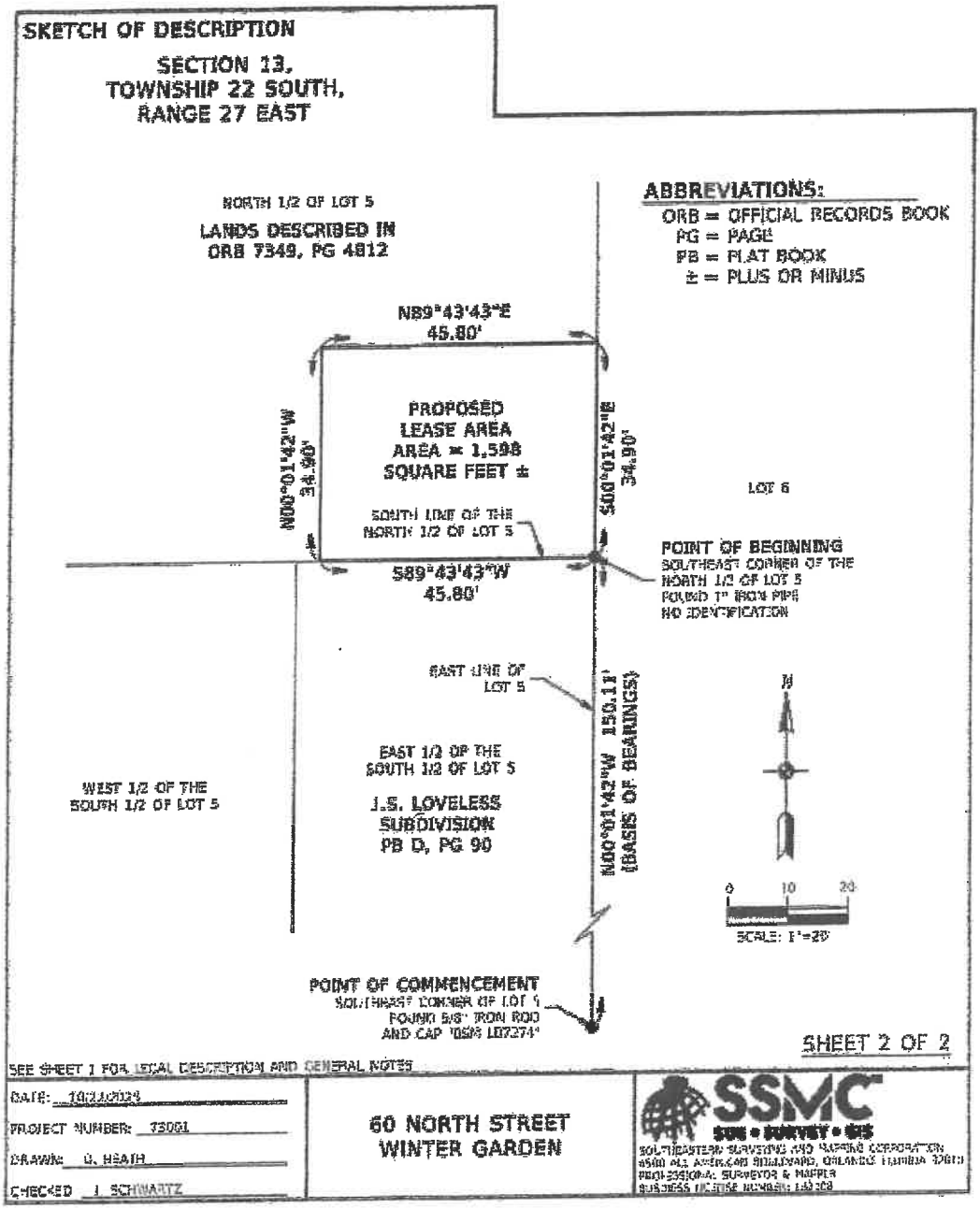
By: _____
Name: Ms. Laquitta Kegler, President
Title: _____
Date: 6/15/26

Exhibit references

- Exhibit A, Lessee Property survey or legal description, if included in the transaction documents.
- Exhibit B, Lease area survey and legal description for the Premises.

Exhibit A

60 North Street Survey - Lease Area Survey



x Laquitta Kegler 6/15/26

Jimmy Minery 6/15/26

Jimmy L. Turner 6/15/26

THE CITY OF WINTER GARDEN

COMMUNITY REDEVELOPMENT AGENCY (CRA) AGENDA ITEM

From: Marc Hutchinson, Economic Development Director

Via: Jon C. Williams, City Manager

Date: August 5, 2026 **Meeting Date:** August 13, 2026

Subject: Habitat for Humanity Neighborhood Revitalization Grant Funding Request

*** Item Presented as Information Only to the CRA Advisory Board Due to No Quorum***

Issue: The neighborhood revitalization program through the West Orange Habitat for Humanity has been an initiative supported by the City since 2023 providing minor home repairs and improvements for non-habitat homeowners in the Historic East Witner Garden Neighborhood. The program has completed improvements on 40 homes to date and targets 20 homes each year. Scope of improvements include landscaping (drought-tolerant grass, trees, bushes, flowers and edibles), exterior painting, pressure washing as well as minor repairs to doors, soffits and windows. Grant funding requested for 20 additional homes in the upcoming cycle (July 31, 2026 – July 31, 2027) is **$30,000** and will again target non-habitat homes in the Historic East Winter Garden Neighborhood.

Recommended Action: Motion to approve grant funding for Habitat's Neighborhood Revitalization program in the amount not to exceed **$30,000**.

Attachments/References:

Grant Agreement

Funding Request/Proposal (Scope)

Before & After Examples (Previous Grant Cycle)

GRANT AGREEMENT BETWEEN CITY OF WINTER GARDEN
&
WEST ORANGE HABITAT FOR HUMANITY, INC.

THIS GRANT AGREEMENT (the "Agreement") is entered into by and between the City of Winter Garden, with its principal address located at 300 West Plant Street, Winter Garden, FL 34787 (the City), and West Orange Habitat for Humanity, Inc., a Florida Not For Profit Corporation, with its principal address located at 13369 W. Colonial, Orlando, FL 34787 (the Grantee).

RECITALS:

WHEREAS, the City desires to continue to engage with and build mutually beneficial partnerships throughout the Historic East Winter Garden Neighborhood;

WHEREAS, Grantee is a 501(c)(3) research and engagement institute serving the social good by working with communities to build economic and racial equity through true change;

WHEREAS, the City has previously worked with the Grantee on similar projects before with positive results for residents and families;

WHEREAS, the City desires to grant up to a total of $30,000 to the Grantee for the purpose of providing minor home improvements to qualified residents as part of the Neighborhood Revitalization Program, particularly described in the Statement of Work attached hereto and incorporated herein as **Exhibit A**;

WHEREAS, the City expressly finds and has determined that such grant assistance inures to the benefit of the public at large and the Historic East Winter Garden Neighborhood; and

NOW THEREFORE, for and in consideration of the promises, mutual covenants, and agreements contained in this Agreement by and between the Parties and for the mutual benefit of the City and the Grantee, the Parties agree as follows:

Section 1. Recitals. The foregoing Recitals are true and correct and form a material part of the Agreement upon which the Parties relied.

Section 2. Term. This term of the grant period will be from July 31, 2026 through July 31, 2027.

Section 3. Grant. Pursuant to the terms and conditions of this Agreement, the City agrees to provide a **not-to-exceed amount of thirty thousand dollars ($30,000)** (the Grant Funds) to the Grantee for the performance of those services described in the Statement of Work attached hereto as **Exhibit A.** The City will pay the Grant Funds to the Grantee pursuant to that Fee Schedule also set forth in such **Exhibit A.**

Section 4. Conditions for Receipt of Grant Funds. Though Grant Funds are to be paid pursuant to the schedule set forth in **Exhibit A**, such funds may be withheld or not paid by the City if:

(a) The Grantee fails to perform satisfactorily pursuant to this Agreement or the Statement of Work attached hereto as **Exhibit A;**

(b) The City determines, based upon knowledge and belief, that one or more principals, officers, or employees of the Grantee has misappropriated or misused or is misappropriating or misusing Grant Funds or other funds of the Grantee; or

(c) The Grantee breaches any obligation set forth in this Agreement, including any exhibits, addenda, or amendments thereto.

Section 5. Notice. Any notice delivered with respect to this Agreement must be in writing and will be deemed to be delivered (whether or not actually received) when (i) hand-delivered to the persons designated below, (ii) when deposited in the United States Mail, postage prepaid, certified mail, return-receipt requested addressed to the person at the address for the party as set forth below, or such other address or to such other person as the Party may have specified by written notice to the other Party delivered according to this Section:

As to the City:

City Manager
City of Winter Garden

300 West Plant Street
Winter Garden, FL 34787

As to the Grantee:

Marilyn Hattaway, Executive Director
West Orange Habitat for Humanity, Inc.
13369 W. Colonial Drive
Winter Garden, FL 34787

Section 6. Parties Bound. This Agreement is binding upon and inures to the benefit of the City and the Grantee (the "Parties"). This Agreement may not be assigned to another Grantee or successor in interest to the Grantee absent the written consent of the City. Failure to obtain such consent provides the City with the right to recover any and all Grant funds provided pursuant to this Agreement directly from the Grantee.

Section 7. Conflict of Interest.

(a) The Parties must not engage in any action that would create a conflict of interest in the performance of their respective obligations pursuant to this Agreement or that would violate or cause third parties to violate the provisions of Part III, Chapter 112, Florida Statutes (2019), as may be amended, relating to ethics in government.

(b) Each Party hereby certifies that no officer, agent, or employee of that Party has any material interest (as defined in § 112.312(15), Florida Statutes (2020)), as may be amended from time to time, as over 5% either directly or indirectly, in the business of the other Party to be conducted here, and that no such person will have any such interest at any time during the term of this Agreement.

(c) Each Party has the continuing duty to report to the other Party any information that indicates a possible violation of this Section.

Section 8. Dispute Resolution / Governing Law. This Agreement is governed by the laws of Florida. If a dispute arises between the Parties pursuant to this Agreement, either Party to this Agreement may notify the other Party in writing that it wishes to commence formal

dispute resolution with respect to any unresolved problem under this Agreement. The Parties agree to submit the dispute to a Florida Certified Circuit Court Civil Mediator for mediation within sixty (60) days following the date of such notice. If the dispute cannot be resolved by mediation, the dispute may be filed as a civil action in the appropriate court for the 19* Judicial Circuit in and for Orange County, Florida, or, if brought in federal court, the Middle District of Florida, Orlando Division. The Parties further agree that any such action will be tried before a court located in Orange County, Florida, and the Parties hereby waive the right to jury trial as to such action.

Section 9. Public Records. The Parties acknowledge that any records generated, kept, or maintained pursuant to this Agreement are public records subject to the disclosure requirements of Article I, § 24 of the Florida Constitution and Chapter 119, Florida Statutes, unless otherwise made statutorily exempt or confidential, in which case, the Parties agree to maintain the exempt or confidential nature of any such records. All such public records must be maintained as required by law and preserved pursuant to the appropriate retention schedule as established by the Florida Department of State, Division of Library Services. The Grantee agrees to indemnify and hold the City harmless from and against any damages, penalties, sanctions, or attorneys' fees or costs arising from the Grantee's failure to appropriately maintain public records or otherwise timely respond to public records requests.

Section 10. Audit Rights. The Grantee agrees to maintain such financial records and other such records as may be prescribed by the City or by any applicable state or local laws and as are necessary in order to record complete and correct entries related to the expenditure of grant funds pursuant to this Agreement. The City shall, upon provision of reasonable notice to the Grantee, have the right to audit the books, records, and accounts of the Grantee for the purposes of assuring compliance with the terms and conditions of this Agreement. All such financial records must be preserved for a minimum period of three (3) years or longer if required

by the applicable retention schedule established by the Florida Department of State, Division of Library Services. If an audit demonstrates that all or any portion of the Grant Funds were not spent in accordance with the terms and conditions of this Agreement, the Grantee will be liable for and return such funds within 14 days to the City upon the Grantee's receipt of written notice from the City.

Section 11. Indemnification. Grantee shall, at its own expense, indemnify and hold harmless the City and its public officials (elected and appointed), successors and assigns, agents, officers, and employees, from and against all claims of every kind and nature (including losses incurred or suffered in consequences either of bodily injury to a person or damage to property) and damages, losses, and expenses, including, but not limited to attorney's fees, arising out of or resulting from the acts or omissions of the Grantee, including anyone directly or indirectly employed by the Grantee or anyone for whose acts the Grantee may be liable, in the performance of the Services performed by the Grantee, except that the Grantee will not be required to indemnify, defend, and hold harmless the City if such claim, damage, loss and expense is the result of the sole negligence of the City, or of anyone directly or indirectly employed by the City or anyone for whose acts the City may be liable.

Section 12. Sovereign Immunity. The City expressly retains all rights, benefits and immunities of sovereign immunity in accordance with Section 768.28, Florida Statutes. Notwithstanding anything set forth in any section of this Agreement to the contrary, nothing in such Agreement shall be deemed as a waiver of immunity or limits of liability of the City beyond any statutory limited waiver of immunity or limits of liability, which may have been or may be adopted by the Florida Legislature, and the cap on the amount and liability of the City for damages, regardless of the number or nature of claims in tort, equity, or contract, may not exceed the dollar amount set by the legislature for tort. Nothing in this agreement may inure to the benefit of any third party for the purpose of allowing any claim against the City, which claim would otherwise be barred under the doctrine of sovereign immunity or by operation of law.

IN WITNESS WHEREOF, the Parties have made and executed this Grant Agreement between the City of Winter Garden and the Polis Institute, Inc., as set forth below.

THE CITY OF WINTER GARDEN

ATTEST:

Ronisha Martin, City Clerk

SIGNED:

By: _____
Jon C. Williams, City Manager

(SEAL)

WEST ORANGE HABITAT FOR HUMANITY, INC.

ATTEST:

By: Gayle L. Fleming
Gayle L. Fleming

SIGNED:

By: Marilyn Hattaway, CEO
Marilyn Hattaway, ~~Executive Director~~ CEO

(SEAL)

GAYLE L. FLEMING
MY COMMISSION # HH 458106
EXPIRES: November 26, 2027

EXHIBIT A

West Orange Habitat For Humanity
Neighborhood Revitalization Program Proposal/Scope

June 11, 2026
West Orange Habitat for Humanity
TO: Marc Hutchison, City of Winter Garden
From: Marilyn Hattaway, CEO, West Orange Habitat for Humanity

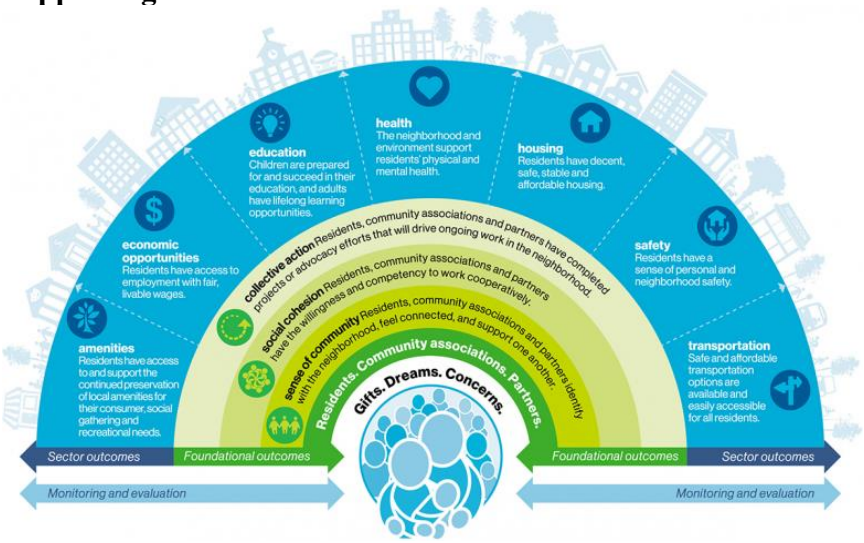
FUNDING REQUEST – Neighborhood Revitalization

Funding Request:	$30,000.00
Use of Funds:	Funding will be directed to Neighborhood Revitalization Fee Schedule: $30,000.00 on July 31, 2026
Goal:	**20 homes** - July 31, 2026 - July 31, 2027
Partners:	**City of Winter Garden,** One Winter Garden, Maxey Community Center, HELP CDC, Church of the Messiah, Kingdom Culture, Mildred Dixon Center, Simply Health**care**, Healthy West Orange, Matthew's Hope.



Project Funding Narrative
What is Neighborhood Revitalization (NR)?
Neighborhood Revitalization is a program in which West Orange Habitat for Humanity works collaboratively with stakeholders, community leaders, partners and homeowners to initiate and complete exterior home improvement projects on low-income area homes within the community.

Supporting Documentation:



What is the purpose of NR? Why do NR?
At Habitat for Humanity, we have a vision that one day everyone will have a decent place to live. While traditionally, this has been accomplished through new construction projects. If we are truly to reach this vision, the entire community needs to be uplifted and involved. Neighborhood Revitalization accomplishes this by providing an array of services to homeowners in order to improve the quality of life for the residents in the East Winter Garden neighborhood. This program is important to the community because it fosters a shared sense of ownership, social cohesion, and pride that grows into collective action

What is the goal of NR?
Following the Quality-of-Life Framework provided by Habitat for Humanity International, the goal of Neighborhood Revitalization is to:

1. Measurably improve the quality of life for the residents of the East Winter Garden community
2. Serve more families through housing with an array of services like exterior revitalization, landscaping, and minor home repairs.

June 11, 2026
West Orange Habitat for Humanity
TO: Marc Hutchison, City of Winter Garden
From: Marilyn Hattaway, CEO, West Orange Habitat for Humanity

FUNDING REQUEST – Neighborhood Revitalization

3. Be a catalyst to build community and attract investment through intracommunity leadership and civic engagement
4. Increase understanding or relationship between housing and economic, social, and physical well-being.

Project Timeline, Evaluation, Budget
Timeline:
Neighborhood Revitalization will consist of 4 stages: Intake, Assessment, Action, and Engagement & Evaluation. These stages will include revitalization projects on 10 homes.

Intake *(2 weeks)*

- NR homes identified and selected through team members comprised of community partners from referrals (church, community partners) or community-identified through NR leader.
- Eligibility of homeowners
  - House Owned by Homeowners **not** Rented – NOT HABITAT HOMES.
  - Demonstration of need for program elements
  - Willingness to partner through small investment and volunteer participation
  - Additional requirements

Assessment *(3 weeks)*

- House is Assessed for Exterior Issues (e.g.: minor exterior repairs, condition of lawn & landscaping) & Documentation on the Intake Form
- Before Photos
- Work with Homeowner to Develop Plan for Revitalization Project
- Homeowner Partnership Agreement
  - Landscaping
    - Drought-Tolerant Grass
    - Bushes, Flowers
    - Trees
    - Edibles (Rosemary, Thyme)
    - Other: _____
  - Pressure Washing
  - Painting
  - Minor Exterior Repairs
    - Soffit Spot Replacement
    - Fascia Spot Replacement
    - Caulking
    - Other: _____

Action *(12 weeks)*

- NR homes are established and put on the build calendar
- Collection of $100 from partner homeowner
- NR projects occur Wednesday, Friday, or Saturdays
- Sweat Equity as volunteer participation of partner homeowner
- After Photos

June 11, 2026
West Orange Habitat for Humanity
TO: Marc Hutchison, City of Winter Garden
From: Marilyn Hattaway, CEO, West Orange Habitat for Humanity

FUNDING REQUEST – Neighborhood Revitalization

Evaluation & Engagement *(3 weeks)*

- Survey Collection
- Small community event at the Maxey Center or public venue (biannual)
    - Lead in partnership with community NR leader
    - Invite NR past partners & New interested homeowners
    - Focus on Education & New Opportunities
    - Feedback
    - Recruitment for the next NR cycle
    - Food & Drinks
    - Contest with prizes (Before & After)

Budget/Cost: What tools are needed for a traditional NR project?

- Landscaping
    - Drought-Tolerant Grass (Zoysia EL Toro $300.00/pallet)
        - Trees
        - Flowers
        - Bushes
        - Edibles
- Painting
        - 1” Paint Brush (tight corners, fine detail work) (8)
        - 2” Paint Brush, straight (fascia, soffit) (8)
        - 2” Paint Brush, angled (window frames, door frames, cracks) (8)
        - 3” Paint Brush (siding, doors, walls) (8)
        - 5 gal. Bucket Paint (2)
        - 1 gal. Bucket Paint (2)
        - 5 gal. Steel Paint Can Grid (4)
        - 4.5 in. Plastic Mini Roller Tray (4)
        - 12 in. Plastic Deluxe Roller Tray (4)
        - 4 in. Rollers (8)
        - 9 in. Rollers (6)
        - 4 in. Roller Frames (8)
        - 9 in. Roller Frames (6)
        - Ladders
- Pressure Washing
- Minor Exterior Repairs
        - Soffit/Fascia
        - Caulk
        - Caulking Guns
        - Additional lumber, materials, supplies, as identified

Exterior lawn signage for each home
Printing, Collaterals, Signage, Overhead Costs.

Neighborhood Revitalization Program

Before & After Examples (2024- 2025 Grant Cycle)

















THE CITY OF WINTER GARDEN

COMMUNITY REDEVELOPMENT AGENCY (CRA) AGENDA ITEM

From: Marc Hutchinson, Economic Development Director

Via: Jon C. Williams, City Manager

Date: August 5, 2026 **Meeting Date:** August 13, 2026

Subject: Zanders Park Renovations – Old Playground Demo/Conversion to Open Gathering Space (General Fund Reimbursement)

*** Item Presented as Information Only to the CRA Advisory Board Due to No Quorum***

Issue: Zanders Park improvements and amenity upgrades have been a priority focus in the overall revitalization effort of the Historic East Winter Garden Neighborhood. To date, improvements have included installation of new playground equipment (relocating play from the back of the park to the front), resurfacing of 1 basketball court (plus brand-new hoops) and installation of three pickleball courts - a conversion of the other remaining basketball court. Part of the planned improvements also include the demolition of the old playground equipment and converting the area into an open gathering space. The proposed cost submitted by T.D. Thomson Construction, Inc. is **$68,831.25**. and includes removal of old equipment, existing rubber matting, concrete footers and the new installation of brick pavers and sod. However, due to the progressive unsafe condition of the area and high foot traffic/activities surrounding the space, staff was compelled to commence work sooner rather than later. Consequently, the City's General Fund was used temporarily to cover the cost and now needs to be reimbursed by the CRA.

Recommended Action: Motion to approve reimbursement of the General Fund by the CRA for the Zanders Park renovation work of the old playground area in the amount not to exceed **$68,831.25**.

Attachments/References:

T.D. Thomson Construction, Inc Proposal

Old Playground Area - Before Pictures

T. D.THOMSON CONSTRUCTION INC.

Estimate

Remitt To
PO BOx 1239
Sorrento FL 32776

Date	Estimate #
5/14/2026	100-307

Name / Address

City of Winter Garden
Att: Laura Coar
300 W. Plant Street
Winter Garden Fl 34787

Project

Zander Park -Demo Playground

Description	Qty	Unit	Rate	Total
MOBILIZATION	1	LS	1,500.00	1,500.00
MOT	1	LS	250.00	250.00
REMOVAL FENCE	1	LS	350.00	350.00
REMOVE AND HAUL OF RUBBER MATTING	4,400	SF	1.50	6,600.00
DEMO PLAY GROUND AND HAUL OFF	1	LS	13,500.00	13,500.00
REMOVE CONCRETE FOOTERS	1	LS	5,500.00	5,500.00
HAUL IN CONCRETE FINES	245	SY	29.45	7,215.25
INSTALL BRICK PAVERS	4,400	SF	7.44	32,736.00
TEMPORARY ORANGE SAFETY FENCE	1	LS	500.00	500.00
SOD	800	SF	0.85	680.00

NOTES*
CITY IS TO INSTALL FENCE
PAVERS TO BE INSTALL ON TOP OF EXISTING CONCRETE SURFACE (UNKNOWN CONDITION OF THE CONCRETE)
ONLY ABOVE INCLUDED

Approved: Eric C. Williams June 26, 26

tdthomson92@gmail.com 407-654-8388

Total $68,831.25

This quote is based on the availability of materials.
This quote is good for 30 days.

Zanders Park Renovations – Old Playground Demolition & Open Space Improvement

Before Pictures (Facing West)





THE CITY OF WINTER GARDEN

COMMUNITY REDEVELOPMENT AGENCY (CRA) AGENDA ITEM

From: Marc Hutchinson, Economic Development Director

Via: Jon C. Williams, City Manager

Date: August 4, 2026 **Meeting Date:** August 13, 2026

Subject: Zanders Park Renovations – Park Furniture Purchase

Issue: Zanders Park improvements and amenity upgrades remain a focus in the overall revitalization effort of the Historic East Winter Garden Neighborhood. Currently underway is the renovation work of the old playground area which includes the installation of brick pavers and sod to replace the old playground surface. Once the brick paver work is completed, the space will need to be outfitted with park furniture throughout and under the nearby pavilion to include 6 benches, 12 picnic tables (both hexagonal and rectangular in style) plus 4 additional tables with ADA accommodations. Other items include 4 32-gallon trash receptacles and 2 surface mounted park grills. The total cost to purchase these items is **$28,976.69** and will be installed by staff.

Recommended Action: Motion to approve the purchase of park furniture for the Zanders Park renovation in the amount not to exceed **$28,976.69**.

Attachments/References:

Park Furiniture Purchase Quote – From the Park Catalog

Highland Products Group/The Park Catalog
931 Village Blvd Ste 905-354
West Palm Beach, FL 33409
Phone : 561-620-7878
Email : sales@theparkcatalog.com

Quote#131934

Sales Rep: Carrie Georgopoulos
Email: Carrie@theparkcatalog.com
Phone: 888-447-2401 Ext 60307

Quote Date
Jul 22, 2026

Quote Expiration Date
Aug 20, 2026 (29 days)

Bill to:
Edgardo Gonzalez
City of Winter Garden Fl.
300 West Plant Street
Winter Garden, Florida, 34787
United States
T: 407-656-4111
C: 321-508-3247

Ship to:
Edgardo Gonzalez
City of Winter Garden Fl.
238 West Plant Street
Winter Garden, Florida, 34787
United States
T: 407-656-4111
C: 321-508-3247

	Product Name	Item #	QTY	Price	Your Price	Unit Discount	Subtotal
1	**Comfort Park Avenue Recycled Plastic Bench** Color: Cedar Size: 4 Ft. Engraving Option: No Engraving	289-4010-1-3	6	$534.00	$470.00	$64.00	$2,820.00
2	**6' Hexagonal Recycled Plastic Picnic Table** Top and Seat Color: Cedar Frame Color: Black Size: 6 Ft.	289-4005-1-3-8	6	$1,226.00	$1,071.00	$155.00	$6,426.00
3	**6' Hexagonal Recycled Plastic Picnic Table** Top and Seat Color: Cedar Frame Color: Black Size: 6 Ft. - ADA	289-4005-2-3-8	2	$1,195.00	$1,045.00	$150.00	$2,090.00
4	**Kids A-Frame Table** Slat Color: Cedar	289-2019-3	2	$692.00	$605.00	$87.00	$1,210.00
5	**Standard Round Recycled Plastic Receptacle** Color: Cedar Receptacle Capacity: 32-Gallon Liner Option: 32 Gallon LID AND LINER INCLUDED	289-4002-2-3	4	$667.00	$585.00	$82.00	$2,340.00
6	**1008 Sq. Large Group Park Grill with Utility Shelf** Shelf Option: No Additional Shelf Base Option: Surface Mount Base	136-1049-1839269	2	$959.00	$843.00	$116.00	$1,686.00
7	**Walk-Through Recycled Plastic Picnic Table** Color: Cedar Size: 6 Ft.	289-4004-1-3	6	$1,211.00	$1,055.00	$156.00	$6,330.00
8	**Walk-Through Recycled Plastic Picnic Table** Color: Cedar Size: 6 Ft. - ADA	289-4004-2-3	2	$1,486.00	$1,285.00	$201.00	$2,570.00

Quote Notes:

NOTIFY BEFORE DELIVERY AND LIFTGATE INCL IN FREIGHT
EST

Total Discount	-$3,686.00
Subtotal	$25,472.00
Shipping & Handling	$3,504.69
Tax	$0.00
Grand Total	$28,976.69

This quote comes with our BEST PRICE GUARANTEE! If we are not your lowest delivered quote for equivalent product, we will BEAT it! (Exclusions may apply)

Any questions contact us at 888-447-2401 or Carrie@theparkcatalog.com

PAY NOW
WITH A CREDIT CARD

Quote Expiration Date: Aug 20, 2026

IF YOUR QUOTE HAS EXPIRED, PLEASE CONTACT YOUR SALES REP BEFORE SUBMITTING PAYMENT

Click to Print

(1)

The Park Catalog
931 Village Blvd Ste 905-354, West
Palm Beach, FL 33409
877-232-8230
noreply@theparkcatalog.com



Comfort Park Avenue Recycled Plastic Bench

$534.00

Request a quote

Quick Overview

Best Price Guarantee

Bulk Discount

Free Expert Consultation 800-695-3503

Request a quote

Size

4 Ft.

Engraving Option

Choose an Option...

Color *

Cedar + $0.00

$534.00

Need Help? Chat with a representative now.

(2)



Actual product may vary from image shown.
Please contact an expert for more info: 866-280-9894



6' Hexagonal Recycled Plastic Picnic Table

ADA Version
(will be Cedar + Black Color
like Non-ADA Version)



Actual product may vary from image shown.
Please contact an expert for more info: 866-280-9894



6' Hexagonal Recycled Plastic Picnic Table

thepark AND FACILITIES CATALOG

Home > Kids A-Frame Table

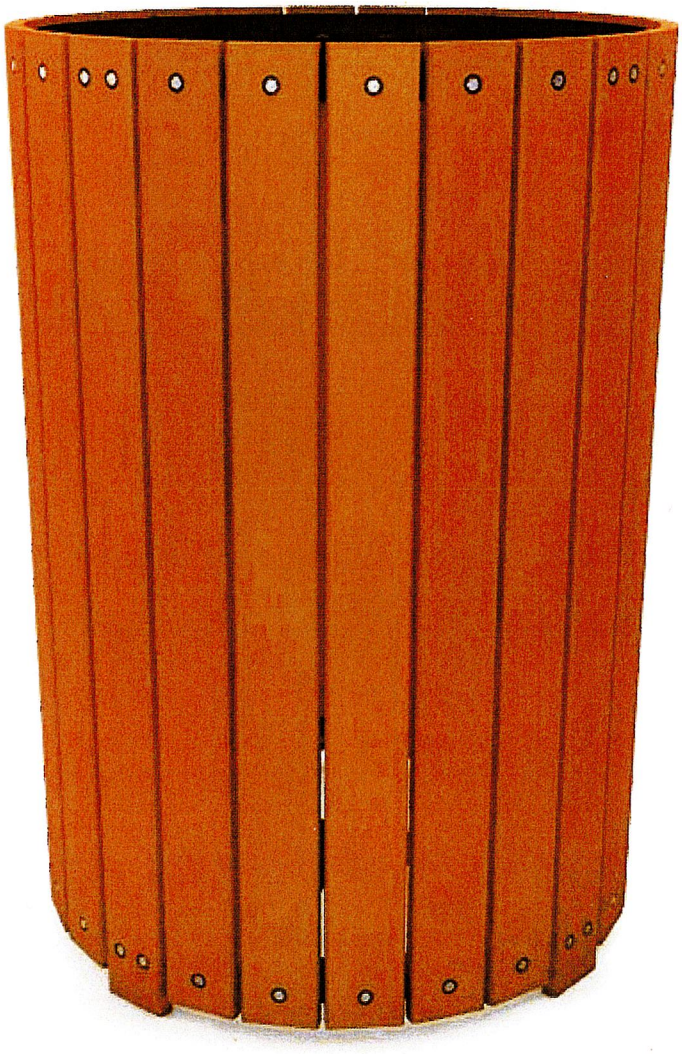


Need Help? Chat with a representative now.

5

thepark AND FACILITIES CATALOG

Home > Standard Round Recycled Plastic Receptacle

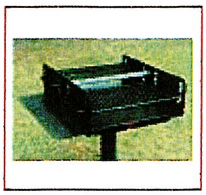


Need Help? Chat with a representative now.

thepark AND FACILITIES CATALOG



Need Help? Chat with a representative now.



1008 Sq. Large Group Park Grill with Utility Shelf

$959.00 / each

Request a quote

- Easy-to-use 4-level adjustable cooking grate
- 5 Year Warranty
- Coil-spring grip handles
- High-Temp Black Powder Coated finish
- 360-degree rotation in either direction
- Includes all welded construction: 3/16" thick (7 ga.) steel grill firebox with die-formed reinforcing flanges, substancial bracing and ring reinforcement to dissipate heat
- Portable 4-wheel caster base
- Embedded base post is 4-1/2" OD x 40" long
- Optional: A second bolt on utility shelf

ITEM # #136-1049 PRINT

PRODUCT RESOURCES VIEW SPEC SHEET

OPTIONS

7



Need Help? Chat with a representative now.

thepark AND FACILITIES CATALOG

8

Home > 8-Ft. Recycled Plastic Walk-Thru Picnic Table with ADA Compliant Frame



Need Help? Chat with a representative now.