



City Commission Regular Meeting

Agenda

August 23, 2023 @ 3:30 pm

City Hall - Commission Chambers
401 S. Park Avenue

welcome

Agendas and all backup material supporting each agenda item are accessible via the city's website at cityofwinterpark.org/bpm and include virtual meeting instructions.

assistance & appeals

Persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Office ([407-599-3277](tel:407-599-3277)) at least 48 hours in advance of the meeting.

"If a person decides to appeal any decision made by the Board with respect to any matter considered at this hearing, a record of the proceedings is needed 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." (F.S. 286.0105).

please note

Times are projected and subject to change.

1. Meeting Called to Order**2. Invocation**

- a. [Pastor Mark Tutschulte, Action Church](#) 1 minute

Pledge of Allegiance**3. Approval of Agenda****4. Citizen Budget Comments****5. Mayor Report**

- a. [Green Business Award: TruGrit Traction](#) 10 minutes

6. City Manager Report

- a. [Update on Splash, Swim and Float Program](#) 5 minutes

7. City Attorney Report**8. Non-Action Items****9. Public Comments | 5 p.m. or soon thereafter**

(If the meeting ends earlier than 5:00 p.m., public comments will be at the end of the meeting)

(Three minutes are allowed for each speaker)

10. Consent Agenda

- a. [Approve the minutes of the regular meeting, August 9, 2023.](#) 1 minute

- b. [Approve the minutes of the work session, August 10, 2023](#) 1 minute

- c. [Approval of the following piggyback contracts:](#) 1 minute

1. Duval Ford - Bradford County Sheriff's Office Contract #BCSO 22-27-1.0 - Vehicle Purchasing Contract; For vehicle replacements to be repurposed within the City during the term of the Agreement through September 12, 2027; Amount: \$150,000
2. Fusus - GSA Contract #47QSWA18D003K - Video & Data Collaboration Platform & Services; Additional spend for goods and services during the term of the Agreement through April 12, 2028; Amount: \$119,647.28

- d. [Approval of the following contracts:](#) 1 minute

1. Singhofen & Associates Inc. - RFQ6-23 - Professional Stormwater Management Engineering Services; Task Order for Basin Study - Central Region; Amount: \$260,011
2. PNC Equipment Finance LLC - FY23-53 - Golf Cart Lease Agreement; For the Winter Park Pines golf cart lease for the term of the Agreement through September 26, 2024; Amount: \$715,000

11. Action Items Requiring Discussion

- | | |
|---|------------|
| a. Commission Budget Suggestions & Capital Update | 45 minutes |
|---|------------|

12. Public Hearings: Quasi-Judicial Matters

(Public participation and comment on these matters must be in-person.)

- | | |
|---|------------|
| a. Ordinance 3278-23 - authorizing the transfer of a small corner of Hopper Mini Park (1664 Orange Avenue) to FDOT for transportation improvements. (2nd reading) | 5 minutes |
| b. Resolution 2277-23 - Designating the home at 1714 Westchester Avenue, built in 1940, to the Winter Park Register of Historic Places. | 10 minutes |

13. Public Hearings: Non-Quasi Judicial Matters

(Public participation and comment on these matters may be virtual or in-person.)

- | | |
|--|------------|
| a. Ordinance 3279-23 - amending sections of Chapter 102, Utilities, relating to sewer impact fee deferral program; utility connection requirements for future annexations; reporting and maintenance of private lift stations; pre-treatment requirements for dental amalgams; and other code cleanup. (2nd reading) | 5 minutes |
| b. Ordinance - amending Chapter 2, Article V, Departments, creating new departments, renaming departments and updating department functions and responsibilities. (1st reading) | 5 minutes |
| c. Ordinance - amending Chapter 58, "Land Development Code", Article III, "Zoning" Section 58-71 "General provisions for residential zoning districts", to revise subsection (f) regarding the parking of boats, trailers and recreation vehicles to include vehicles over 25 feet. (1st reading) | 10 minutes |
| d. Resolution 2278-23 - Adopting the Transportation Master Plan | 20 minutes |

14. City Commission Reports

15. Summary of Meeting Actions

City Commission – Wednesday, August 23, 2023

16. Adjournment



item type	Invocation	meeting date	August 23, 2023
prepared by	Kim Breland	approved by	
board approval			
strategic objective			

subject

Pastor Mark Tutschulte, Action Church

motion / recommendation

background

alternatives / other considerations

fiscal impact



item type Mayor Report	meeting date August 23, 2023
prepared by Victoria Tabor	approved by Michelle del Valle, Randy Knight
board approval Completed	
strategic objective	

subject

Green Business Award: TruGrit Traction

motion / recommendation**background**

The Department of Natural Resources & Sustainability is recognizing the TruGrit Traction, as a Platinum level Green Businesses. Their efforts to generate and use renewable energy, operate electric and hybrid company vehicles, and utilize recyclable materials makes them stand out in our community. Mayor Anderson will present an award to TruGrit Traction after Mia Brady's brief presentation recognizing the green businesses.

alternatives / other considerations**fiscal impact****ATTACHMENTS:**

[Green Business Recognition TruGrit Traction.pdf](#)

Green Business Recognition Program



This program acknowledges Businesses in Winter Park that have made substantial efforts to be more sustainable in terms of building efficiency, waste reduction, and consumer choices

There are currently 25+ recognized business in Winter Park

Green Business Recognition Program



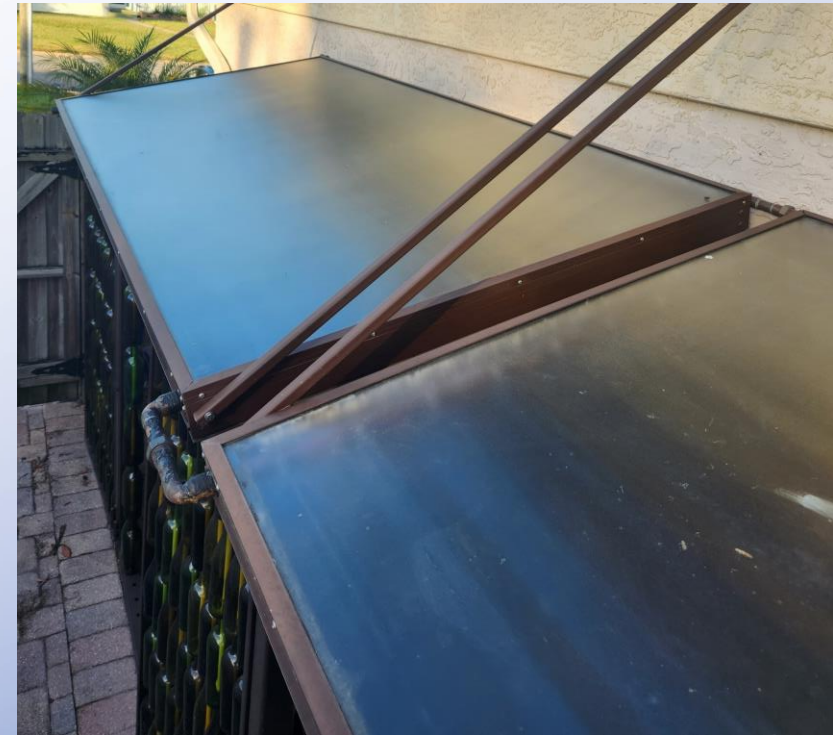
Sustainability pledge:

"TruGrit Traction (TGT) was founded in 2016 to supply high-quality high-performance traction products to the wastewater maintenance and trenchless piping industries. We pride ourselves on utilizing materials and suppliers from/in the United States. Nearly all of the materials we use in our engineered designs are recyclable. All of our products are RoHS-compliant (Reduction of Hazardous Materials)."





Energy and Water Conservation



Recyclable and RoHS-compliant products



Green Business Recognition Program



Platinum Recognition



PLATINUM



WINTER PARK

GREEN BUSINESS
recognition program

TruGrit Traction Inc.

TruGrit Traction (TGT) was founded in 2016 to supply high-quality, high-performance traction products to the wastewater maintenance and trenchless piping industries. We pride ourselves on utilizing materials and suppliers from/in the United States. Nearly all of the materials we use in our engineered designs are recyclable. All of our products are RoHS-compliant (Reduction of Hazardous Materials).

THANK YOU FOR YOUR OUTSTANDING EFFORTS 

THE CITY OF WINTER PARK **sustainability** DIVISION



item type City Manager Report	meeting date August 23, 2023
prepared by Rene Cranis	approved by
board approval	
strategic objective	

subject

Update on Splash, Swim and Float Program

motion / recommendation

background

Winter Park YMCA and staff will give a brief update on this program.

alternatives / other considerations

fiscal impact



item type	Consent Agenda	meeting date	August 23, 2023
prepared by	Rene Cranis	approved by	Michelle del Valle, Randy Knight
board approval	Completed		
strategic objective			

subject

Approve the minutes of the regular meeting, August 9, 2023.

motion / recommendation

background

alternatives / other considerations

fiscal impact

ATTACHMENTS:

[CC-min-2023-08-09.pdf](#)



City Commission Regular Meeting Minutes

August 9, 2023 at 3:30 p.m.

City Hall, Commission Chambers
401 S. Park Avenue | Winter Park, Florida

Present

Mayor Phil Anderson, Commissioners Marty Sullivan, Sheila DeCiccio, Kris Cruzada, and Todd Weaver; City Manager Randy Knight; Assistant City Manager Michelle del Valle and Deputy City Clerk Kim Breland.

1) Meeting Called to Order

Mayor Anderson called the meeting to order at 3:30 p.m.

2) Invocation

The invocation was given by Pastor Bruce Mayhew, Gateway Church, followed by Pledge of Allegiance.

3) Approval of Agenda

Motion made by Commissioner DeCiccio to approve the agenda; seconded by Commissioner Cruzada. Motion carried unanimously with a 5-0 vote.

4) Mayor Report

Mayor Anderson spoke about the privilege of watching Police Department promotions over the past year and commended all city staff for their recruitment and retention efforts which has led to fewer vacancies.

5) Citizen Budget Comments

6) City Manager Report

- a. Major (or long-term) project funding strategies.

Mr. Knight reviewed funding options for capital projects:

1. Bond issue. Requires a voter referendum that identifies projects to be funded. The deadline for a March 2024 referendum is December 12th which creates a tight timeline to develop a project list and adopt an ordinance.
2. CRA funds. Restricted to projects within the CRA and may require reallocating funds from other projects. Extension/expansion of the CRA would provide more flexibility.
3. Sale of property, i.e. old library and tree farm. No restrictions on the use of proceeds.
4. Designate a percentage of the operating millage for specific projects or purchase/improvement of parkland. Must be approved by the commission during the budget process; however, since the tentative millage rate has been set for FY 24, increasing

the rate would require notification to each taxpayer of the change. Although this option provides the most flexibility, it can be changed by a future commission. This could also be asked as a non-binding referendum to determine taxpayer support.

Mr. Knight responded to questions on the options and the old Library RFP.

7) City Attorney Report

Mr. Ardaman addressed decorum policies at the request of Commissioner Sullivan following reports of problems by the local media. He reviewed current policies with respect to public comments and media inquiries and state statutes relating to public comment. He read excerpts from Ordinance 2345-22 and Resolution 2233-20 that addresses decorum and removal of persons violating the rules and the manner for receiving public comment. He opined that meetings are managed appropriately by the commission and he does not see any legal issues with how public comment is received. Mayor Anderson asked Mr. Ardaman to email the section prohibiting personal, inflammatory or slanderous comments to the Commission.

8) Non-Action Items

a. Presentation from the Winter Park Public Library

Executive Library Director Melissa Schneider and Board of Trustees Chair Michael Voll gave a presentation on the Library. Mrs. Schneider reviewed the progress from 2018 to 2023 in visits, circulation, program attendance, and technology use. Mr. Voll pointed out that this progress is despite the impact of COVID.

Mrs. Schneider highlighted curriculum, meeting and study space usage and cardholder growth. Mr. Voll emphasized the 50% increase in cardholders since 2018 with a 40% growth in the last year with less staff than 2018. Mrs. Schneider provided information on the Library's literacy program, mentorship program, entrepreneurs and small business support with technology, spaces, tools and training, and senior programs. She reviewed the following funding scenarios for FY 24 and Mr. Voll provided details on each city scenario:

1. \$93k increase (17.5%)- Leaves service gaps resulting in reduced programs, lab access and assistance due to decreased staff. This option does not allow for Sunday operating hours.
2. \$350k increase (25%) – provides seven additional staff and increased access, programs and assistance and establishes six operating hours on Sunday.
3. \$200k increase (20%) – provides five additional staff and four operating hours on Sunday but with no classes, changes Friday and Saturday hours to close at 5pm, and provides limited access to labs.

Mr. Voll pointed out that 100% of the city's funding goes toward personnel costs, but covers only a portion of the personnel costs with the deficit funded by the Board. Mrs.

Schneider spoke about other funding sources such as fundraising, grants, endowments, special events, and the bookstore. She noted the Library's commitment to increase the revenue in each scenario by 17.5%, 25%, and 20%, respectively.

Mrs. Schneider and Mr. Voll responded to questions on the library's goals in each scenario and discussion followed on fundraising campaigns with different charitable organizations and commitments from other donors for technology and resources as opposed to staffing, which donors do not typically fund.

Mrs. Schneider reported on the Library's goal to become a Florida Star Library which will open grant opportunities and recent designation as a Family Place Library. She further explained revenue and fundraising targets.

Mayor Anderson explained level of service and inflationary cost of labor and spoke about increased cardholders, particularly within the CRA, and the mission of the CRA to assist with entrepreneurial assistance. Mrs. Schneider said they have spoken with staff regarding CRA support and summarized programs and outreach programs to low-income families.

Ryan Galbraith, 1818 Magnolia Avenue, spoke in favor the library and increasing city support to \$350k to provide Sunday hours and programs for the community.

9) Public Comments | 5 p.m. or soon thereafter (taken after Item 11a)

10) Consent Agenda

- a. Approve the minutes of the regular meeting, July 26, 2023
- b. Approve the minutes of the work session, July 27, 2023. **(Pulled by Commissioner Sullivan)**
- c. Approval of the following contracts:
 1. Pond & Company, Inc. - RFQ7-23 - Geotechnical & Environmental Consulting Services - For services on an as-needed basis during the term of the Agreement through May 11, 2024; Amount: \$400,000
 2. The Davey Tree Expert Company - ITN23-18 - Vegetation Management Services - For services on an as-needed basis during the term of the Agreement through December 19, 2023; Amount: \$500,000
 3. Geosyntec Consultants - RFQ6-23 - Professional Stormwater Management Engineering Services - Task Order for Stormwater Basin Study - Western Region; Amount: \$231,068.14 **(Pulled by Commissioner DeCiccio)**
- d. Approval of the following purchase:
 1. Gresco Utility Supply, Inc. - Transformers 50 KVA PAD, 120/240.

Commissioner DeCiccio pulled Item (c)3 for discussion and Commissioner Sullivan pulled Item 2.

Motion to approve the Consent Agenda subject to discussion made by Commissioner DeCiccio; seconded by Commissioner Weaver

Motion made by Commissioner DeCiccio to amend Item (c)3 to delete the word "or" on Page 5, Paragraph 9, seconded by Commissioner Weaver.

Commissioner DeCiccio addressed Paragraph 4 which states "Usage of additional parkland to increase flood storage will be considered" stating she does not want to preclude other alternatives than focusing on the expansion of the two lakes at MLK Park. She also asked for assurance that this study includes the drainage problems on Comstock Avenue.

Director of Public Works Charles Ramdatt explained this is one of three studies which combined will cover all of Winter Park urban stormwater model that guides future development of public infrastructure. Contractors for all three studies will be working simultaneously, but the studies may not be completed at the same time. Discussion followed on the study and opportunities and funding for improvements.

Motion to amend Item (c)3 carried unanimously with a 5-0 vote.

Commissioner Sullivan pointed out a scrivener's error on Page 2 of the July 27th work session minutes: The third line should read \$18.5m instead of \$418.5m.

Main motion carried unanimously with a 5-0 vote.

11) Action Items Requiring Discussion

- a. Agreement with Foundation of Kiwanis Club of Greater Orlando-Winter Park to release the restrictive covenant on the property located at 1925 Killarney Drive.

Mr. Knight provided the background of this agreement which allows the Foundation to sell the property at 1925 Killarney Drive. The agreement provides for the first \$250k, or 25%, of the proceeds to go to the local Boys and Girl Scouts of America through a trust over a 20-year period and the remainder of the proceeds would stay with the Foundation for local charitable purposes.

Mayor Anderson suggested inserting "local operations of" prior to "Boy Scouts of America..." in the third paragraph to ensure funds stay local. He further suggested, on Page 4, Item 5, adding Killarney Elementary programs and Edgewater High School programs to the list of current charities.

Shawn Casey, Kiwanis Foundation, said the Foundation provides \$1,000 scholarship to Valencia Community College, which is not on the list, works with Edgewater High School and have discussed establishing a scout troop at Killarney Elementary.

Motion made by Commissioner Weaver to approve the agreement with suggestions made by Mayor Anderson; seconded by Commissioner DeCiccio. Motion carried unanimously with a 5-0 vote.

9) Public Comments | 5 p.m. or soon thereafter (None.)

A recess was held from 4:59 to 5:07 p.m.

12) Public Hearings: Quasi-Judicial Matters

- a. Request of Cady Way Cottages LLC to re-establish the Conditional Use approval at 2281 Nairn Drive for a three-unit cluster housing project of two-story townhomes on property zoned R-2.

Assistant Director of Planning and Zoning Allison McGillis reviewed the request to re-establish the conditional use approval. The applicant has revised the plan which eliminates the need for rear setback variances. She confirmed that this meets drainage requirements.

There were no public comments.

Motion made by Commissioner DeCiccio to approve the request, seconded by Commissioner Sullivan. Upon a roll call vote, Commissioners Sullivan, DeCiccio, Cruzada and Weaver and Mayor Anderson voted yes. Motion carried unanimously with a 5-0 vote.

- b. Ordinance authorizing the transfer of a small corner of Hopper Mini Park (1664 Orange Avenue) to FDOT for transportation improvements. (1st reading)

Attorney Ardaman read the ordinance by title.

Engineer Hong Lim explained that FDOT is requesting a portion of the corner of Hopper Park at Orange Avenue and 17-92 for Orange Ave improvements from Clay to 17-92 which reduces the city's and CRA's financial commitment toward the cost of this project. He summarized the proposed improvements which include a roundabout and reducing the roadway to three lanes and adding a multi-person trail.

Motion made by Commissioner Sullivan to approve the ordinance, seconded by Commissioner Weaver. There were no public comments. Upon a roll call vote, Commissioners Sullivan, DeCiccio, Cruzada and Weaver and Mayor Anderson voted yes. Motion carried unanimously with a 5-0 vote.

13) Public Hearings: Non-Quasi-Judicial Matters

- a. Ordinance - amending sections of Chapter 102, Utilities, relating to sewer impact fee deferral program; utility connection requirements for future

annexations; reporting and maintenance of private lift stations; pre-treatment requirements for dental amalgams; and other code cleanup. (1st reading)

Attorney Ardaman read the ordinance by title. Director of Water and Wastewater Utility David Zusi clarified provisions of the ordinance.

Motion made by Commissioner DeCiccio to approve the ordinance, seconded by Commissioner Sullivan. There were no public comments. **Upon a roll call vote, Commissioners Sullivan, DeCiccio, Cruzada and Weaver and Mayor Anderson voted yes. Motion carried unanimously with a 5-0 vote.**

- b. ORDINANCE 3276-23 - AN ORDINANCE OF THE CITY OF WINTER PARK, FLORIDA, AMENDING CHAPTER 74, PERSONNEL, ARTICLE V, RETIREMENT AND PENSION PLANS, DIVISION 3, FIREFIGHTERS, OF THE CODE OF ORDINANCES OF THE CITY OF WINTER PARK; AMENDING SECTION 74-151, DEFINITIONS; AMENDING SECTION 74-157, PRE-RETIREMENT DEATH; AMENDING SECTION 74-158, DISABILITY; PROVIDING FOR COMPLIANCE WITH CHAPTER 2019-21, LAWS OF FLORIDA; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY OF PROVISIONS; REPEALING ALL ORDINANCES IN CONFLICT HERewith AND PROVIDING AN EFFECTIVE DATE. (2nd reading)
- c. ORDINANCE 3277-23- AN ORDINANCE OF THE CITY OF WINTER ARK, FLORIDA, AMENDING CHAPTER 74, PERSONNEL, ARTICLE V, RETIREMENT AND PENSION PLANS, DIVISION 4, POLICE OFFICERS, OF THE CODE OF ORDINANCES OF THE CITY OF WINTER PARK; AMENDING SECTION 74-201, DEFINITIONS; PROVIDING FOR COMPLIANCE WITH CHAPTER 2019-21, LAWS OF FLORIDA; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY OF PROVISIONS; REPEALING ALL ORDINANCES IN CONFLICT HERewith AND PROVIDING AN EFFECTIVE DATE. (2nd reading)

A simultaneous public hearing was held on these ordinances. Attorney Ardaman read the ordinances by title.

Motion made by Mayor Anderson to adopt Ordinance 3276-23, seconded by Commissioner Cruzada. There were no public comments. **Upon a roll call vote, Commissioners Sullivan, DeCiccio, Cruzada and Weaver and Mayor Anderson voted yes. Motion carried unanimously with a 5-0 vote**

Motion made by Mayor Anderson to adopt Ordinance 3277-23, seconded by Commissioner Sullivan. There were no public comments. **Upon a roll call vote, Commissioners Sullivan, DeCiccio, Cruzada and Weaver and Mayor Anderson voted yes. Motion carried unanimously with a 5-0 vote**

14) City Commission Reports

Commissioner DeCiccio –

- Asked for consensus for staff to repair lights at Park Avenue and Canton, install lights at Carver, Railroad and Webster, consider traffic calming devices for these streets used as cut-through to 17-92, and install a light at the community center. She suggested using CRA funds and asked that this be done prior to daylight savings and the holidays and to be done as quickly as possibly for the safety of residents and visitors. Staff to report on scope and acceleration at next meeting.

Commissioner Weaver –

- Addressed the proposal to divide the tree farm and sell as six residential lots which would require approval for septic or connection to existing sewer lines. Neighbors have expressed a desire for a small park in area and a concern that building Habitat for Humanity homes would decrease their property values. He noted that there is no city park west of 17-92 and should be considered. He supported keeping part of the tree farm for hurricane debris collection. (To be brought back for discussion.)

15) Summary of Meeting Actions

- Received presentation of WP Library
- Approve Consent Agenda with amendments to the Geosync agreement.
- Approved agreement with Kiwanis Foundation with amendments.
- Approved re-establishment of conditional use 2281Nairn Drive.
- Approved ordinance on first reading authorizing transfer of Hopper Park to FDOT.
- Approved ordinance on first reading amending Chapter 102, Utilities.
- Adopted ordinances amending the Firefighter and Police Officers' Pension.
- Staff to report on fixing lights and adding lights on certain streets.
- Place discussion on potential sale of a portion of the tree farm property.

16) Adjournment

The meeting was adjourned at 5:33 p.m.

Mayor Phillip M. Anderson

ATTEST:

City Clerk Rene Cranis



item type	Consent Agenda	meeting date	August 23, 2023
prepared by	Rene Cranis	approved by	Michelle del Valle, Randy Knight
board approval	Completed		
strategic objective			

subject

Approve the minutes of the work session, August 10, 2023

motion / recommendation

background

alternatives / other considerations

fiscal impact

ATTACHMENTS:

[CC-min-2023-08-10.pdf](#)



City Commission Work Session Minutes

August 10, 2023 at 1:00 p.m.

City Hall, Commission Chambers
401 S. Park Avenue | Winter Park, Florida

Present

Mayor Phil Anderson, Commissioners Marty Sullivan, Sheila DeCiccio, Kris Cruzada, and Todd Weaver; Orange County Representative Hal George; City Manager Randy Knight; Assistant City Manager Michelle del Valle; and Deputy City Clerk Kim Breland.

1) Call to Order

Mayor Anderson called the meeting to order at 1 p.m.

2) Discussion Item(s)

a. CRA Budget

Assistant Division Director of Economic Development/CRA Kyle Dudgeon presented the FY24 budget including expenditures, 10-Year Proforma, Capital Projects (MLK Enhancement (playground/splashpad) and 17-92 Streetscape project).

Mr. Dudgeon explained the city has been working on the West Meadow restrooms project with the Zyscovich Architects Group with goals to accomplish space activation, efficiency with staff operations, and provide a public amenity. The project has received positive feedback from merchants and Farmers Market vendors and said staff is looking for feedback from the commission in order to put funding in place and continue with the path of the design.

In response to questions, Mr. Dudgeon stated staff feels the \$2M budgeted for MLK park improvements is sufficient at this time based on estimates received. Staff will have a better understanding of costs once the design concept is approved. He confirmed the unity corner and MLK statue were previously funded and the project is moving forward.

Junior Architect Jenna Ims, Zyscovich, reviewed the conceptual design for West Meadow restrooms. She spoke about architectural elements in Central Park, the newest being the restroom facility. The building is proposed to be across the railroad tracks and will activate that area of the park will also have storage space for maintenance and adjacent seating area. Ms. Ims said the restroom design is reflective of the train station motifs and materials. Commissioner DeCiccio would like the design refined to be more consistent with the train station and central stage.

Commissioner Sullivan agreed with Commissioner DeCiccio and noted that what is built should be the design approved by the commission, which he feels did not happen with

Central Park stage. He does not feel the proposed restroom design is consistent with the train station and stage. He asked about the purpose of the elevated square space of the building. Ms. Ims explained the space is to provide maintenance storage and was designed as two pieces to provide prominence and better visibility from the tree canopy. Mr. Dudgeon added that the storage height is needed to store materials such as tall PVC pipes used for events.

Commissioner Weaver likes the design but feels it's missing the lattice trim, similar to the train station and stage. He asked what the budget is for the project. Staff responded to questions. Mr. Dudgeon responded \$750K has been allocated in the FY24 budget. He said revisions can be made with updates on design and costs at the November meeting. He explained that the decision to have four toilets and three sinks in each bathroom was based on efficiency and Director of Parks and Recreation Jason Seeley added that sinks are needed due to food handling at the farmers market and other events. Commissioner Cruzada suggested having changing stations in the restrooms and lower sinks for small children and ADA compliance.

Mayor Anderson said he is supportive of having restrooms but thought the original concept was to have a pavilion with restrooms attached. He questioned whether the commission should be guiding the architecture for the structure and asked the commission if they would like to delegate residents to act as an architectural review board for the project before it comes to the commission for final approval.

Commissioner Weaver expressed concern about the scope, footprint and amenities and agreed the original concept was to be a pavilion with restrooms.

Mayor Anderson would like to see a conceptual plan that shows a pavilion with restrooms and storage attached. Discussion followed on storage space needs and Mr. Seeley said the storage space would eliminate the need to keep a trailer on site with of the tables, chairs, tents, etc. used for events, as well as removing the pump station from Central Park.

Consensus was to have a design created of a pavilion with bathrooms for consideration. Discussion followed on the footprint of the structure, facility/stalls needs, location, storage/ utility needs, future expansion of the Farmers Market and operations. Mayor Anderson said he would like to visit the proposed location with staff to understand what the structure would look like and feels a work session may be needed.

Commissioner DeCiccio spoke about the lack of bathroom access at establishments on Park Avenue and the importance of having the proposed number of stalls per restroom in the conceptual design. She said having a pavilion would activate the West Meadow and be a great benefit to residents and visitors. Discussion continued on the footprint and location of the structure. Mayor Anderson stressed that a work session on the design should be scheduled before or after the next scheduled work session.

Mr. Dudgeon gave updates on miscellaneous enhancements in the city and spoke about plans to enclose dumpster space and gateway features projects in the CRA.

Commissioner Weaver spoke about the 17-92 streetscape project and asked if the city has any authority on utility location so they are not in bike paths and whether rules could be considered as a design guideline. Mr. Knight explained that the lack of right of way beyond sidewalk has contributed to this issue and cooperation from property owners or condemnation is needed to obtain the right of way beyond the city right-of-way.

Commissioner Weaver spoke about the need to dredge Lake Mendsen and the MLK park/parking lot enhancement. He asked if the project should be delayed until the stormwater analysis is done. Mr. Ramdatt said deepening Lake Mendsen will not add any storage and will have no negative impact on the parking lot. He said staff is conducting a comprehensive evaluation of the lake to determine the best course of action.

Commissioner DeCiccio would like to add a line item of \$350k for the Library which would allow for Sunday hours and have enough staff to do all needed functions. In addition, she would like to reallocate the funding for the post office to be used for infrastructure improvements including flood/drainage, and utilities.

Mayor Anderson summarized that the \$350k would be an annual expense under the general operating and community initiatives that would be a long-term annual expense and clarified that even if the CRA does expire in 2027, subject to a future commission, most of the expense items would continue but shift to the general fund. Mr. Dudgeon added funding for certain projects such as the Transportation Master Plan could be allocated from the 17-92 streetscape project

Mayor said reallocating funds for the post office is an easy way to lose the opportunity to purchase the property. He feels the old library property gives the city flexibility as a funding option of about \$6-10M should the post office ever become available for purchase. There is an additional \$7M allocated for the purchase of the post office from CRA reserves.

In-depth discussion followed on reallocating funds for stormwater infrastructure improvements in the CRA. Consensus is to add a line item to the budget for flood and stormwater control as a "TBD" with the understanding that once the scope of needed improvements and costs is available, money will be reallocated to that effort.

Commissioner DeCiccio would like funding allocated to electric infrastructure repairs such as street lights on Park Avenue. Staff will provide a plan for those repairs at the next commission meeting.

Discussion followed on what happens to recurring funds for non-profits in the CRA, should the CRA sunset. Mr. Knight said half of the money that goes into the CRA is the city's general fund taxes and the other half is the county's general fund taxes. The city would lose the county's share and the city's CRA funds would move into the general fund which is approximately \$5M a year and would cover any programs or ongoing capital projects the commission wishes to continue to fund.

Mayor Anderson summarized that a line item for flood and stormwater control and the Library request for an additional \$350k will be part of the budget discussion in the Community Redevelopment Agency meeting on August 23rd.

b. FY 24 Department Presentations

Director of Electric Utility Dan D'Alessandro gave a presentation on the department and reviewed the level of service with focus on service interruption and transparency, key performance indicators and issues related to supply chain constraints. He summarized accomplishments, spending and next year's goals (updating strategic plan) and major projects. He gave updates on drops to homes project and transmissions project.

Director of Water & Wastewater David Zusi provided information on the department, levels of service, service areas, accomplishments (infrastructure improvements, AMI integration, equipment repair and replacement) spending, key performance indicators. Goals for next year include continued water/sewer system improvements, GIS field mapping, and technology, and proposed reuse expansion areas. He responded to questions regarding reclaimed water expansion and water retention, funding needs for projects, and sewer capacity for septic to sewer conversion.

Commissioner Sullivan left the meeting at 3:05 p.m.

3) Adjournment

The meeting adjourned at 3:11 p.m.

Mayor Phillip M. Anderson

ATTEST:

City Clerk Rene Cranis



City Commission agenda item

item type Consent Agenda	meeting date August 23, 2023
prepared by Rebecca Watt	approved by Jennifer Maier, Michelle del Valle, Randy Knight
board approval Completed	
strategic objective Fiscal Stewardship.	

subject

Approval of the following piggyback contracts:

item list

1. Duval Ford - Bradford County Sheriff's Office Contract #BCSO 22-27-1.0 - Vehicle Purchasing Contract; For vehicle replacements to be repurposed within the City during the term of the Agreement through September 12, 2027; Amount: \$150,000
2. Fusus - GSA Contract #47QSWA18D003K - Video & Data Collaboration Platform & Services; Additional spend for goods and services during the term of the Agreement through April 12, 2028; Amount: \$119,647.28

motion / recommendation

Commission approve items as presented and authorize Mayor to execute.

background

1. The Originating Agency issued a formal solicitation to award this contract in FY22.
2. The Cooperative Purchasing Program issued a formal solicitation to award this contract in FY18.

alternatives / other considerations

N/A

fiscal impact

Total expenditures included in approved budgets.



City Commission agenda item

item type Consent Agenda	meeting date August 23, 2023
prepared by Rebecca Watt	approved by Jennifer Maier, Michelle del Valle, Randy Knight
board approval Completed	
strategic objective Fiscal Stewardship.	

subject

Approval of the following contracts:

item list

1. Singhofen & Associates Inc. - RFQ6-23 - Professional Stormwater Management Engineering Services; Task Order for Basin Study - Central Region; Amount: \$260,011
2. PNC Equipment Finance LLC - FY23-53 - Golf Cart Lease Agreement; For the Winter Park Pines golf cart lease for the term of the Agreement through September 26, 2024; Amount: \$715,000

motion / recommendation

Commission approve items as presented and authorize Mayor to execute.

background

1. A formal solicitation was issued to award this firm to perform stormwater professional services. This proposal outlines the Central Basin stormwater management development and design for the Chain of Lakes, including Lake Sue, Lake Berry, Lake Virginia, Lake Mizell, Lake Osceola, and Lake Maitland drainage basins.
2. The City purchased the Winter Park Pines Golf Course in May 2022 and assumed the ongoing lease for the golf carts.

alternatives / other considerations

N.A

fiscal impact

Total expenditures included in approved budgets.

ATTACHMENTS:

[TO_Central Stormwater Basin Study_Singhofen.pdf](#)

SCOPE OF SERVICES

Winter Park Central Basin Stormwater Master Plan Model Development and Conceptual Design Services

August 14, 2023

Background and Objective

Singhofen & Associates, Inc. (SAI or CONSULTANT) is pleased to provide the City of Winter Park (CITY) with this proposal to develop a stormwater management master plan for the Central Basin which includes the Chain of Lakes discharging to Lake Maitland and then the Lake Howell system. The Central Basin is approximately 7 square miles and generally includes Lake Sue, Lake Berry, Lake Virginia, Lake Mizell, Lake Osceola, and Lake Maitland (**Figure 1**).

The City experienced significant flooding during Hurricane Ian in 2022. This study is intended to establish a modeling tool that can be used to identify potential future flood risks and evaluate potential alternatives to mitigate those risks of flooding. Specifically, this study will evaluate establishing interconnections between the following lakes:

- Lake Sylvan to Lake Mizell
- Lake Grace to Lake Forest (an interconnect between Lakes Forest, Grace and Sue as an alternative)
- Lake Knowles to Lake Maitland
- Lake Chelton to Lake Sue

This scope of services defines work effort necessary to develop a stormwater master plan for the subject area in the City. The project will include the development of existing conditions model, evaluation of current and future flood risks, evaluation of the City's predicted level-of-service for roadways and structures, and the development of conceptual design solutions to mitigate flooding. This includes the development of an ICPR4 model and corresponding GIS geodatabase.

Figure 1 – Central Basin Study Area



Scope of Services

The CONSULTANT shall complete the following tasks as part of the Scope of Services to the City of Winter Park:

TASK 1. DATA COLLECTION AND REVIEW

Task 1.1 –Data Collection: The objective of this task is to gather additional pertinent data related to the project from the CITY and other applicable agencies. The data collected shall be reviewed to determine the significance of the information relative to defining the project design, hydrologic/hydraulic characteristics, wetlands, and surface water quantity within the project area. The following data sources will be collected and reviewed during this task:

- Land use and soils data (SJRWMD and NRCS)
- Rainfall data (NEXRAD, SJWMD, USGS, COUNTY)
- USGS National Hydrography Dataset (NHD)
- National Wetlands Inventory Dataset (NWI)
- ERP polygons (SJRWMD ftp)
- ERP digital datasets (SJRWMD)
- Record drawings, models, and reports (CITY)
- Historical water level information (CITY; if available)
 - Seasonal high water elevations
 - Lake levels
 - Historic high water elevations
 - Surveyed high water mark data
 - Flooding photos / videos / notes
 - Aerial imagery of flooding
 - Flooding complaint records
- FEMA Flood Insurance Rate Map (CITY or FEMA)
- FEMA Flood Insurance Studies (CITY or FEMA)
- USGS gage locations and data (USGS)
- COUNTY gage locations and data (COUNTY)
- Additional relevant small area studies and models (CITY and COUNTY)
- Stormwater infrastructure database (CITY)
- Stormwater infrastructure developed by Orange County within or adjacent to the project boundary (COUNTY)
- Current studies and models for the adjacent watersheds (COUNTY, CITY, Others)
- Existing Geotechnical Studies (CITY)
- Proposed development plans within the project boundary (CITY)
- Surveyed finished floor elevations (COUNTY/CITY, in GIS format)
- Critical asset information (point features with type and flood elevations populated) (CITY)

Additional notes regarding this scope element and the project as a whole:

1. **Study Area:** The approximate limits of the study area are shown in **Figure 1**. It is assumed that the modeled areas outside of the study area will be derived from other sources such as the Winter Park Chain of Lakes LOMR model (CDM 2012). The areas within the limits of the study area will be modeled at a level of detail that includes the primary drainage system and the lake interconnections sufficient to adequately represent the CITY's flood risks. The secondary drainage systems will not be included.
2. **Terrain Data:** The subject modeling efforts will utilize the new statewide terrain data from the FDEM/USGS that was recently released (flight dates from December 4th, 2018 to March 22nd, 2019). This data set is herein referred to as the 2018/2019 statewide LiDAR.
3. **Aerial Imagery:** The imagery from the 2018/2019 statewide LiDAR will be used for development of the citywide model.

4. Date Certain: The project date certain will coincide with the flight date for the 2018/2019 LiDAR.
5. Vertical Datum: The NAVD88 vertical datum will be used for all vertical elevations in the model and geodatabase (unless otherwise noted).
6. Datum Conversion: CONSULTANT, with the approval of the CITY, will establish a consistent procedure (e.g., conversion factor) for the conversion of data from NGVD29 to NAVD88.
7. GIS Data Structure: CONSULTANT will use the Southwest Florida Water Management District (SWFWMD) current GWIS data structure (GWISv2.1) for the project. The data structure will be used without modification except to include additional related tables that provide additional benefit to the modelers and the CITY. As a result, the project geodatabase will be compatible with SWFWMD's tools and with future version updates.
8. Model Tool: The watershed model will be developed using ICPR4.

It is assumed that the CITY will provide the data sets referenced above that are relevant to the CITY and will facilitate the acquisition of data from other entities (e.g., COUNTY, WMD, etc.) if needed.

Task 1.2 – Data Compilation and Mapping: CONSULTANT will document (catalog) the collected reference information and develop a GIS Map Document to manage and display the relevant drainage information.

Task 1 - Deliverables:

- *Summary list of reference documents collected and reviewed.*
- *Complete digital set of reference documents*

TASK 2. PROJECT GEODATABASE DEVELOPMENT

The objective of this task is to develop the model network utilizing the SWFWMD GWIS geodatabase structure. This will involve the following subtasks:

Task 2.1 – Areas of Known Flooding: CONSULTANT shall assemble available information from the CITY and the SJRWMD related to historic water levels, surveys, photos or videos of flooding, and any other available information including those listed below. A figure will be prepared to depict the flood prone areas within the project boundary.

- Seasonal high water elevations
- Lake levels
- Historic high water elevations
- Surveyed high water mark data
- Flooding photos / videos
- Aerial imagery of flooding
- Flooding complaint records

Task 2.2 – Model Network Development and Data Capture: This task involves the development the *ICPR_NODE*, *ICPR_LINK*, *ICPR_BASIN*, and *ICPR_XSECT* feature classes within the GWIS geodatabase.

- **ICPR_NODE**: Nodes will be used to represent storage in ponds and depressional areas (e.g., wetlands) that are a minimum of 1-acre in size. Storage areas that are less than an acre will be included within the network only when they are inline and part of the primary conveyance system. This task only includes the spatial placement of nodes at this point. Parameterization of the nodes will be completed as part of a subsequent task. Information on sub-type, SHWE, NWL, DHWE, and source information will be documented in the ADDL_MODEL_DATA table.
- **ICPR_LINK**: Links will be utilized to provide the conveyance between nodes shall represent canals, pipes, outfall structures, etc. This task includes conducting the hydraulic data capture from reference documents as well as the spatial development. The assumptions and the methodology for the development of each link type are as follows:

- Channels: Channel links will be used to represent the canals within the project basins and all information will come from previous model data (e.g., Winter Park Chain of Lakes LOMR model by CDM), the 2018 LiDAR/DEM, or survey. CONSULTANT will prioritize the channels requiring survey.
- Pipes: Pipe information will be captured from the collected construction plans, permits, survey, the City's infrastructure database, and the 2012 LOMR model. Pipes that are missing the vertical elevations (inverts) will be flagged for professional survey and pipes that are only missing dimensions will be identified as requiring field reconnaissance.
- Drop Structures: Drop structures are utilized to represent weir and pipe systems and shall be developed in the same way as the pipes.
- Weirs: Weir links are separated into two categories, structural and overland flow. Structural weirs representing man-made structures will be developed in the same way as pipes and drop structures. Overland weirs represent flow over pond banks, road crossings, or other natural locations (e.g., natural overland flow saddles). Information for overland weirs will typically be derived from the 2018/2019 LiDAR or, in key locations, survey.
- Bridges: Bridge links (if required) will be spatial only as all bridge information will be developed within HEC- RAS and imported into the ICPR model as a rating curve.
- Rating Curves: Rating curves will be used to represent pump stations within the project basins and all information will come from ERP data, previous models, data provided by the CITY, and/or survey. The CITY will provide all needed information for the CITY-owned and operated pumps (e.g., permit information, survey, pump curves, operating schedules, etc.). The CITY will identify any known county-owned and privately-owned pumps (if applicable). The CITY will facilitate obtaining any county-owned pump information. The CITY will also provide information regarding pump operating conditions during the selected calibration and verification storms (e.g., Hurricane Ian) vs pumps operational today (if applicable).
- **ICPR_BASIN:** Arc-Hydro tools will be utilized to develop the basins based on the 2018/2019 LiDAR information. In addition, plan and permit information will also be utilized to develop the basins. This task only includes the spatial development of the basins at this point. Parameterization of the basins will be completed as part of a subsequent task.
- **ICPR_XSEC:** Using aerial imagery and the project DEM, cross section line features will be developed to include geospatial locations and extent. Full development and parameterization of the cross sections will be completed as part of a subsequent task.
- **Notes/Assumptions:** The scope of work and associated fees are based on the following assumptions:
 - The development of groundwater model elements is not included in this scope of work.
 - It is assumed that there are no significant topographic voids within the project boundary.

Task 2.3 – Field Data Acquisition Needs and Approach Development: Based on the collected information and model network development, a field data acquisition approach will be developed. The field data acquisition needs identified will include locations where field reconnaissance and/or professional survey will need to be conducted. Field reconnaissance will be required for locations where the available information is suspect or missing measurements. For instance, if two plan sets contradict each other, field reconnaissance will be required to determine which plan set has the correct information. The field reconnaissance efforts will also facilitate the development of the professional survey needs. Professional survey will be required for structures where vertical elevation information is unavailable or unknown or at locations where cross section information is needed.

Task 2.4 – Quality Control: CONSULTANT will conduct QC reviews of the work conducted in **Task 2**.

Task 2.5 – Pre-Submittal Meeting: CONSULTANT will coordinate and attend a remote, web-based meeting with the CITY to present a summary of the work that was conducted and the deliverables that are being submitted. This will be a “walk through” of the deliverables and is intended to facilitate the CITY’s review.

Task 2 - Deliverables:

- *Summary map depicting historic water level information and flooding concerns*
- *Project DEM*
- *Project GDB with model elements (1D and 2D) and captured data*
- *Field Data Acquisition Plan*
- *Supporting documentation*

TASK 3. FIELD DATA ACQUISITION

The CONSULTANT will perform data acquisition based on the approach developed in **Task 2**.

Task 3.1 - Access Requirements Identification and Coordination: An access letter will be obtained from the CITY. It is anticipated that the CITY will identify any gated communities within the field data acquisition locations and facilitate access to these locations (e.g., notifying the HOAs and obtaining gage codes).

Task 3.2 - Field Reconnaissance Preparation: A sequencing plan will be developed for all structures to be addressed through field verification and measurement. Complete sets of field forms and maps will be prepared.

Task 3.3 – Infrastructure Field Verification/Measurement: Two-person teams will visit each of the hydraulic structures identified for field verification/measurement in the **Task 2** field data acquisition approach. The field teams will photograph, video, record measurements and descriptions (e.g., dimensions, shape, material, condition, end treatments, description of accessibility, maintenance issues, etc.), and document GPS coordinates at each inspected hydraulic feature. Sketches will be prepared for complex structures. If vertical elevation measurements are required, the field teams will document the requirement, and mark/photograph the locations for vertical elevations collection (control structures only) by a Professional Surveyor and Mapper (PSM). The CONSULTANT shall document any immediate maintenance needs and notify the CITY. This subtask assumes up to 2 days of field reconnaissance for two people. In addition, the budget for this task assumes drainage features and structures are reasonably easy to access.

Task 3.4 - Drainage Pattern Verification: Catchments were delineated in the office using various existing datasets including the project DEM, aerial imagery, CITY asset inventory data, and site development plans (ERPs), where available. It is anticipated that there will be locations where analyses of the existing datasets are inconclusive or did not provide information sufficient to determine drainage patterns. Two-person teams will visit these locations and look for drainage patterns, divides, and absence or presence of hydraulic or topographic features that may change the boundary. The findings will be documented with photographs and field notes. This subtask assumes up to 2 days of field reconnaissance for two people.

Task 3.5 - Field Data Post Processing: Following completion of the field data collection efforts, the data will be reviewed, the field forms will be finalized, and the photograph files will be renamed based on the HYDROCODE_DESC. In addition, a FieldRecon point feature class will be developed based on the GPS coordinates, the photos will be captioned, and the completed data sets for each feature will be combined into a single PDF, named based on the HYDROCODE_DESC, and hyperlinked to the appropriate model network element.

Task 3.6 - Incorporation of the Acquired Field Data: Following completion of the field data acquisition efforts and QC of the data sets, the data will be migrated to the project GWIS GDB. In addition, the field data acquisition requirements will be updated in GIS to reflect any remaining data acquisition needs (i.e., survey by a PSM).

Task 3.7 – Survey by a PSM: **NOT INCLUDED IN THIS SCOPE OF WORK.** Actual survey needs are unknown at the time of the development of this proposal. Therefore, the costs to conduct survey are not included in this scope of work. After the completion of Task 2 above, the CONSULTANT will provide a separate scope of work and fee proposal for conducting the required survey and incorporation of the survey data.

Task 3.8 – Quality Control: CONSULTANT will conduct QC reviews of the work conducted in **Task 3**.

Task 3 Deliverables:

- *Field verification documents*
- *Updated project geodatabase*

TASK 4. MODEL HYDRAULIC AND HYDROLOGIC PARAMETERIZATION

Model parameterization will include the following:

- Land use and soils
- Rainfall Excess (Green- Ampt and Vertical Layers)
- Time of Concentration (for 1-D basins)
- Node Storage
- Initial Conditions
- Boundary Conditions
- Channels
- Bridges
- Pipes
- Pumps
- Weirs (structural)
- Weirs (overland flow)
- Drop Structures
- Overland Flow Features

Task 4.1 – Update Soils: This includes downloading the most current soil features from USDA-NRCS and updating them based on the 2018/2019 aerials for new ponds or wetland features.

Task 4.2 - Update Landuse: This includes downloading the most current landuse features from SJRWMD and updating them based on the 2018/2019 aerial imagery.

Task 4.3 - Rainfall Excess: The CONSULTANT will select the runoff method and develop the associated runoff method parameters.

Task 4.4 - Time of Concentration: This includes calculating the TC values for each developed basin. TC flow line features will be developed based on the TR-55 methodology and elevations will be derived from the 2018/2019 Statewide LiDAR information. The TC line features and calculations will be provided within the deliverables.

Task 4.5 - Node Storage: CONSULTANT will calculate stage-area relationships for all subbasins throughout the watershed using the project DEM. The stage-area relationships will exclude storage accounted for in channel features in the model. The relationships will be developed using ArcHydro tools and based on the 2018/2019 LiDAR information.

Task 4.6 – Node Initial Conditions: Initial conditions will be established for the surface water system by conducting a design storm simulation (e.g., mean-annual) followed by an extended drawdown period to establish initial elevation as the minimum overflow elevation of the nodes. The resultant level-pool floodplain plots will be reviewed for the reasonableness of the initial elevations.

Task 4.7 – Node Warning Elevations: This includes establishing node warning elevations for all the modeled nodes. The warning stages will be set to facilitate the level of service (LOS) analysis to be conducted under a later task.

Task 4.8 - Boundary Condition Development: Node time series data (time-stage or time-flow) will be developed for each simulated storm at boundary nodes along the watershed exterior.

Task 4.9 - Channel Parameterization: This will involve cutting cross sections from the project terrain data, thinning sections, reviewing sections, combining sections with survey data, assigning Manning's values, calculating composite Manning's values, generating PDFs for supporting documentation, and migrating the data to the GWIS GDB. This also includes the development of channel exclusion polygons.

Task 4.10 - Pipes, Weirs (structural), Drop Structures: This effort involves calculating the associated losses and populating the remaining link parameters (e.g., solution algorithm, energy losses, inlet/outlet controls, etc.).

Task 4.11 - Weirs (Overland Flow): New cross section line features will be developed from the new subbasin feature class for the entire model. Cross section data for each overland flow weir will be derived from the project DEM. Some of these overland flow weir locations may be better represented using a short channel link instead. The CONSULTANT will determine the most appropriate method to model overland flow throughout the watershed.

Task 4.12 – Quality Control: QC reviews will be conducted on the work products developed under **Task 4**.

NOTE: As part of Task 4, CONSULTANT will incorporate the final Western Basin model (by Geosyntec) into the Central Basin model prior to overall model setup, execution and debugging.

Task 4 - Deliverables:

- *Updated Project GDB with model elements (1D and 2D) and parameterized feature classes (e.g., landuse, soils, TC line features, etc.)*

TASK 5. MODEL SETUP, EXECUTION, AND DEBUGGING

Task 5.1 – Generation of the ICPRv4 Model using GWIS: This task includes the creation of the ICPRv4 model by migrating from the project GWIS.

Task 5.2 – Model Setup and Initial Simulations: This task includes the setup of model simulations and then execution of initial simulations for QC purposes. The following preliminary simulations shall be developed and performed:

- 500-year/24-hr Storm
- No rainfall

Task 5.3 – Initial Flood Profiles and Level-Pool Floodplains: Flood profiles will be developed for the main reaches for the above referenced storms. These flood profiles will be generated using ICPR4. CONSULTANT will also develop the level pool floodplain plots (with no post processing) for the following:

- Initial Conditions
- 500-year/24-hr Floodplain

Task 5.4 – QC Review, Debug, and Stabilization: This is an iterative process until the model is deemed stable and representative of the existing conditions. As part of the stabilization/debugging process, CONSULTANT will identify and address the following potential issues based on the preliminary simulations and plots:

- Continuity Error (preferably less than 5%)
- Inadequate Simulation Time
- Flow Reversals or Sudden Change
- Instability
- Significant Initial Flows
- Node and Cross Section Extrapolations
- Missing Interconnections (glass walls)

Task 5.5 – Initial Conditions: Finalizing initial stages is also part of the stabilization process. A drawdown analysis will be conducted once the model has been debugged.

Task 5.6 – Update Project Geodatabase: This task includes the efforts to update the project geodatabase with the changes that were made to the ICPR model. This is intended to keep the project geodatabase up to date.

Task 5 - Deliverables:

- *Debugged and stabilized ICPR model (input and results)*
- *Project geodatabase*
- *Geodatabase containing level-pool floodplain plots*

TASK 6. MODEL CALIBRATION

Task 6.1 – Model Calibration Simulation: CONSULTANT will simulate one (1) historical rainfall event (Hurricane Ian) and compare the model results to the historical flooding data provided by the City and the available lake water elevation data. If necessary, CONSULTANT will adjust model parameters and rerun the model to evaluate results against readily available and suitable observations. CONSULTANT shall conduct the following under this scope of work:

- Set up and simulation of the selected calibration storm
- Address instability concerns
- Plot level pool floodplains (in GIS)
- Review the results and compare them to the measured/observed stages
- Evaluate and revise model parameters as needed to best represent the watershed

Task 6.2 – Update Project Geodatabase: This task includes the efforts to update the project geodatabase with the changes that were made to the ICPR model. This is intended to keep the project geodatabase up to date.

Task 6.3 – Quality Control: QC reviews will be conducted on the work products developed under **Tasks 5 and 6**.

Task 6 - Deliverables:

- *Final calibrated ICPR model (input and results)*
- *Updated project geodatabase*

TASK 7. EXISTING CONDITIONS FLOODPLAIN LEVEL OF SERVICE

Task 7.1 – Existing Conditions Model Execution: This task includes the setup and simulation of the design storms below. Rainfall depths will be based on NOAA Atlas-14. SJRWMD data will be used for the 96-hr storms. The SCS Type II Florida Mod distributions will be used. These values will be presented to the CITY for review and approval prior to their use.

- | | | |
|----------------|---------------|----------------|
| • 2-year 24-hr | • 25-yr 6-hr | • 100-yr 24-hr |
| • 10-yr 6-hr | • 25-yr 24-hr | • 100-yr 96-hr |
| • 10-yr 24-hr | • 25-yr 96-hr | • 500-yr 24-hr |

Task 7.2 – Data Tabulation and Level-Pool Floodplain Development: CONSULTANT will tabulate the peak stage data for each storm event and delineate “level-pool” floodplains using the peak stage results. These mappings will be approximate delineations from GIS raster processing. Significant post-processing clean-up and transitions will not be performed at this point.

Task 7.3 – Flood Protection LOS Analysis: Based on the existing condition H&H model results, the CONSULTANT will evaluate the flood protection LOS for infrastructure to identify flood prone locations and provide a baseline for evaluation of flood mitigation alternatives.

Task 7.4 – Quality Control: QC reviews will be conducted on the work products developed under **Task 7**.

Task 7.5 – Pre-Submittal Meeting: CONSULTANT will coordinate and attend a remote, web-based meeting with the CITY to present a summary of the work that was conducted and the deliverables that are being submitted. This will be a “walk through” of the deliverables and is intended to facilitate the CITY’s review.

Task 7 - Deliverables:

- *Existing condition level-pool floodplains*
- *Existing condition LOS analysis results*

TASK 8. CONCEPTUAL FLOOD CONTROL BMP DEVELOPMENT

Using the validated model, CONSULTANT will develop and evaluate design alternatives for flood control for the five (5) locations listed below. The proposed designs shall identify land acquisition, preliminary construction costs, construction constraints, and permit requirements. Development of construction plans is not included under this scope of work; however, a conceptual layout drawing will be developed for each design alternative.

Conceptual Lake Interconnection Alternatives:

- Lake Sylvan to Lake Mizell
- Lake Grace to Lake Forest (an interconnect between Lakes Forest, Grace and Sue as an alternative)
- Lake Knowles to Lake Maitland
- Lake Chelton to Lake Sue

Other Alternatives:

- Operation of the Lake Maitland control structure in advance of a storm

Task 8.1 – Flood Control BMP Development and Performance Evaluation: The CONSULTANT will develop conceptual design alternatives for each of the lake interconnections mentioned above. Each alternative will be evaluated using the validated model and simulations of the same design storms referenced above will be conducted. The LOS provided by the design alternatives will be compared to the baseline existing condition LOS.

Task 8.2 – Conceptual Design Figures: CONSULTANT will develop figures depicting the elements of each design alternative considered.

Task 8.3 – Conceptual Cost Estimates: CONSULTANT will develop engineers estimates of probable cost for each design alternative considered viable.

Task 8.4 – Design Alternatives Evaluation: CONSULTANT will evaluate each viable design alternative with respect to flood mitigation benefit, estimated cost, permitability, constructability, and land acquisition requirements.

Task 8.5 – Lake Maitland Control Structure Operation Evaluation: Using the validated model, the CONSULTANT will evaluate the option of operating the control structure at the Lake Maitland discharge to lower lake levels prior to a predicted storm event. The data will be tabulated, level-pool inundation maps will be developed, and the LOS benefit will be evaluated.

Task 8.6 – Quality Control: QC reviews will be conducted on the work products developed under **Task 8**.

Task 8.7 – Pre-Submittal Meeting: CONSULTANT will coordinate and attend a remote, web-based meeting with the CITY to present a summary of the work that was conducted and the deliverables that are being submitted. This is a walk-through of the deliverables and is intended to facilitate the CITY's review.

Task 8 - Deliverables:

- *Design conditions ICPR models (input and results files)*
- *Design condition level-pool floodplains for each design solution*
- *BMP conceptual layout figures*
- *Design condition LOS analysis tabulation*
- *Summary of the design alternatives evaluation*

TASK 9. REPORT DOCUMENTATION

Task 9.1 - Draft Report: CONSULTANT will prepare a draft Stormwater Master Plan Report that documents all elements of the stormwater study that have been conducted.

Task 9.2 - Final Report: CONSULTANT will incorporate the CITY's comments and finalize the report.

Task 9.3 – Quality Control: QC reviews will be conducted on the work products developed under **Task 9**.

Task 9 - Deliverables:

- *Draft Report (1 electronic copy).*
- *Draft - All electronic deliverables (models, GIS, etc.)*
- *Final Report (1 electronic copy)*
- *Final - All electronic deliverables (models, GIS, etc.)*

TASK 10. TRAINING - NOT INCLUDED

Task 10.1 – Training Development: CONSULTANT will develop a training workshop on the use of the Central Basin H&H model.

Task 10.2 – Training Workshop: CONSULTANT will conduct a workshop to train CITY staff on the use of the Central Basin H&H model (not training on the fundamentals of using ICPR) and the project geodatabase. This effort can be delivered on-site at the CITY or via a virtual format and assumes it will be up to 4 hours long.

Task 10 - Deliverables:

- *Workshop materials*

TASK 11. MEETINGS AND PRESENTATIONS

Task 11.1 – Public Meeting Presentation Development: The CONSULTANT will develop a PowerPoint presentation slide deck to summarize the results of the efforts described above.

Task 11.2 – Public Meeting Presentations: CONSULTANT will prepare for and deliver up to three (3) formal presentations (e.g., Lakes Boards or City Commission) discussing the stormwater master plan. This task includes attendance and delivering the presentation with 2 people (e.g., PM and Lead Modeler) at up to three (3) public meetings. However, this task does not include time for coordinating venues, preparation of display boards, development of videos, or providing extra staff for meetings/presentations/workshops.

Task 11.3 – Other Meetings: CONSULTANT will participate in up to two (2) additional meetings; one with the SJRWMD and the other with adjacent municipalities to coordinate these efforts.

TASK 12. PROJECT MANAGEMENT

Task 12.1 - Project Management, Status Reports and Client Updates: CONSULTANT will coordinate the project team (including internal staff and the CITY), monitor the project schedule and project budget, hold weekly progress meetings with staff, and provide status reports to the CITY at a minimum frequency of every two weeks.

Compensation

The compensation to be paid to the CONSULTANT for providing the services described in the above scope of work shall be on a “lump sum” basis. A detailed breakdown of the CONSULTANT’s estimated professional fees (including man-hours and rates) is included in the attached [Table 1](#). The CONSULTANT will submit invoices for work performed during each calendar month. Invoicing will be accompanied by a brief description of the work effort completed during the billing period. Should the CITY terminate a task or tasks, the Consultant will be compensated for the work performed up to the date of termination.

Schedule

The following scope tasks are anticipated to be completed sequentially in the order and durations listed in the table below:

Task	Task Duration	Duration from NTP
1 – Data Collection and Cataloging	4 weeks	4 weeks
2 – Project Geodatabase Development	8 weeks	12 weeks
3 – Field Data Acquisition	4 weeks	16 weeks
4 – Model H&H Parameterization	6 weeks	22 weeks
5 – Model Setup, Execution, and Debugging	2 weeks	24 weeks
6 – Model Calibration	4 weeks	28 weeks
7 – Existing Condition Floodplain LOS	6 weeks	34 weeks
8 – Conceptual Flood Control BMP Development	6 weeks	40 weeks
9 – Report Documentation - DRAFT REPORT	4 weeks	44 weeks
10 - Training	TBD	TBD
11 – Meetings and Presentations	TBD	TBD
12 – Project Management	Ongoing Throughout Project	

Table 1: SAI Fee Quotation
Central Basin Stormwater Master Plan
City Of Winter Park

Task		Professional Engineer IV	Professional Engineer II	Professional Engineer I	GIS Analyst III	GIS Analyst I	Administrative Assistant II	Man Hours By Activity	Cost By Activity
	Hourly Rate:	\$241.00	\$183.00	\$146.00	\$145.00	\$96.00	\$90.00		
1	DATA COLLECTION AND REVIEW	4.00	4.00	0.00	12.00	60.00	0.00	80.00	\$ 9,196.00
1.1	Data Collection	2.00	0.00	0.00	8.00	40.00	0.00	50.00	\$ 5,482.00
1.2	Data Compilation and Mapping	2.00	4.00	0.00	4.00	20.00	0.00	30.00	\$ 3,714.00
2	PROJECT GEODATABASE DEVELOPMENT	16.00	36.00	25.00	73.00	163.00	0.00	313.00	\$ 40,327.00
2.1	Areas of Known Flooding	1.00	8.00	0.00	8.00	16.00	0.00	33.00	\$ 4,401.00
2.2	Model Network Development and Data Capture	0.00	12.00	17.00	42.00	121.00	0.00	192.00	\$ 22,384.00
2.3	Field Data Acquisition Needs and Approach Development	0.00	12.00	8.00	19.00	26.00	0.00	65.00	\$ 8,615.00
2.4	Quality Control	15.00	0.00	0.00	0.00	0.00	0.00	15.00	\$ 3,615.00
2.5	Pre-Submittal Meeting	0.00	4.00	0.00	4.00	0.00	0.00	8.00	\$ 1,312.00
3	FIELD DATA ACQUISITION	13.00	26.00	12.00	83.00	87.00	0.00	221.00	\$ 30,030.00
3.1	Access Requirements Identification and Coordination	0.00	4.00	0.00	0.00	0.00	0.00	4.00	\$ 732.00
3.2	Field Reconnaissance Preparation	0.00	0.00	0.00	19.00	11.00	0.00	30.00	\$ 3,811.00
3.3	Infrastructure Field Verification/Measurement	2.00	8.00	0.00	24.00	24.00	0.00	58.00	\$ 7,730.00
3.4	Drainage Pattern Verification	0.00	8.00	0.00	24.00	24.00	0.00	56.00	\$ 7,248.00
3.5	Field Data Post Processing	0.00	2.00	0.00	8.00	12.00	0.00	22.00	\$ 2,678.00
3.6	Incorporation of the Acquired Field Data	0.00	4.00	12.00	8.00	16.00	0.00	40.00	\$ 5,180.00
3.7	Survey by a PSM: NOT INCLUDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$ -
3.8	Quality Control	11.00	0.00	0.00	0.00	0.00	0.00	11.00	\$ 2,651.00
4	MODEL H&H PARAMETERIZATION	14.00	24.00	34.00	42.00	80.00	0.00	194.00	\$ 26,500.00
4.1	Update Soils	0.00	1.00	0.00	2.00	4.00	0.00	7.00	\$ 857.00
4.2	Update Landuse	0.00	1.00	0.00	2.00	4.00	0.00	7.00	\$ 857.00
4.3	Rainfall Excess	0.00	2.00	6.00	0.00	0.00	0.00	8.00	\$ 1,242.00
4.4	Time of Concentration	0.00	2.00	0.00	6.00	12.00	0.00	20.00	\$ 2,388.00
4.5	Node Storage	0.00	2.00	0.00	4.00	6.00	0.00	12.00	\$ 1,522.00
4.6	Node Initial Conditions	0.00	0.00	4.00	4.00	12.00	0.00	20.00	\$ 2,316.00
4.7	Node Warning Elevations	0.00	0.00	4.00	4.00	12.00	0.00	20.00	\$ 2,316.00
4.8	Boundary Condition Development	4.00	8.00	12.00	0.00	0.00	0.00	24.00	\$ 4,180.00
4.9	Channel Parameterization	0.00	2.00	0.00	4.00	8.00	0.00	14.00	\$ 1,714.00

Table 1: SAI Fee Quotation
Central Basin Stormwater Master Plan
City Of Winter Park

Task		Professional Engineer IV	Professional Engineer II	Professional Engineer I	GIS Analyst III	GIS Analyst I	Administrative Assistant II	Man Hours By Activity	Cost By Activity
	Hourly Rate:	\$241.00	\$183.00	\$146.00	\$145.00	\$96.00	\$90.00		
4.10	Pipes, Weirs (structural), Drop Structures	0.00	4.00	4.00	8.00	22.00	0.00	38.00	\$ 4,588.00
4.11	Weirs (Overland Flow)	0.00	2.00	4.00	8.00	0.00	0.00	14.00	\$ 2,110.00
4.12	Quality Control	10.00	0.00	0.00	0.00	0.00	0.00	10.00	\$ 2,410.00
5	MODEL SETUP, EXECUTION, AND DEBUGGING	4.00	15.00	40.00	24.00	0.00	0.00	83.00	\$ 13,029.00
5.1	Generation of the ICPRv4 Model using GWIS	0.00	0.00	0.00	8.00	0.00	0.00	8.00	\$ 1,160.00
5.2	Model Setup and Initial Simulations	0.00	1.00	4.00	0.00	0.00	0.00	5.00	\$ 767.00
5.3	Initial Flood Profiles and Level-Pool Floodplains	0.00	2.00	16.00	8.00	0.00	0.00	26.00	\$ 3,862.00
5.4	QC Review, Debug, and Stabilization	4.00	8.00	16.00	0.00	0.00	0.00	28.00	\$ 4,764.00
5.5	Initial Conditions	0.00	2.00	4.00	4.00	0.00	0.00	10.00	\$ 1,530.00
5.6	Update Project Geodatabase	0.00	2.00	0.00	4.00	0.00	0.00	6.00	\$ 946.00
6	MODEL CALIBRATION	12.00	30.00	12.00	24.00	0.00	0.00	78.00	\$ 13,614.00
6.1	Model Calibration Simulation	8.00	28.00	12.00	16.00	0.00	0.00	64.00	\$ 11,124.00
6.2	Update Project Geodatabase	0.00	2.00	0.00	8.00	0.00	0.00	10.00	\$ 1,526.00
6.3	Quality Control	4.00	0.00	0.00	0.00	0.00	0.00	4.00	\$ 964.00
7	EXISTING CONDITIONS FLOODPLAIN LEVEL OF SERVICE	14.00	30.00	56.00	64.00	40.00	0.00	204.00	\$ 30,160.00
7.1	Existing Conditions Model Execution	0.00	0.00	8.00	0.00	0.00	0.00	8.00	\$ 1,168.00
7.2	Data Tabulation and Level-Pool Floodplain Development	0.00	8.00	16.00	24.00	40.00	0.00	88.00	\$ 11,120.00
7.3	Flood Protection LOS Analysis	0.00	16.00	32.00	40.00	0.00	0.00	88.00	\$ 13,400.00
7.4	Quality Control	10.00	0.00	0.00	0.00	0.00	0.00	10.00	\$ 2,410.00
7.5	Pre-Submittal Meeting	4.00	6.00	0.00	0.00	0.00	0.00	10.00	\$ 2,062.00
8	CONCEPTUAL FLOOD CONTROL BMP DEVELOPMENT	45.00	98.00	18.00	42.00	16.00	0.00	219.00	\$ 39,033.00
8.1	Flood Control BMP Development and Performance Evaluation	16.00	34.00	14.00	10.00	0.00	0.00	74.00	\$ 13,572.00
8.2	Conceptual Design Figures	4.00	8.00	4.00	16.00	16.00	0.00	48.00	\$ 6,868.00
8.3	Conceptual Cost Estimates	4.00	16.00	0.00	16.00	0.00	0.00	36.00	\$ 6,212.00
8.4	Design Alternatives Evaluation	4.00	16.00	0.00	0.00	0.00	0.00	20.00	\$ 3,892.00
8.5	Lake Maitland Control Structure Operation Evaluation	4.00	16.00	0.00	0.00	0.00	0.00	20.00	\$ 3,892.00
8.6	Quality Control	9.00	0.00	0.00	0.00	0.00	0.00	9.00	\$ 2,169.00
8.7	Pre-Submittal Meeting	4.00	8.00	0.00	0.00	0.00	0.00	12.00	\$ 2,428.00

Table 1: SAI Fee Quotation
Central Basin Stormwater Master Plan
City Of Winter Park

Task		Professional Engineer IV	Professional Engineer II	Professional Engineer I	GIS Analyst III	GIS Analyst I	Administrative Assistant II	Man Hours By Activity	Cost By Activity
	Hourly Rate:	\$241.00	\$183.00	\$146.00	\$145.00	\$96.00	\$90.00		
9	REPORT DOCUMENTATION	24.00	66.00	14.00	12.00	24.00	14.00	154.00	\$ 25,210.00
9.1	Draft Report	12.00	42.00	14.00	8.00	16.00	8.00	100.00	\$ 16,038.00
9.2	Final Report	4.00	24.00	0.00	4.00	8.00	6.00	46.00	\$ 7,244.00
9.3	Quality Control	8.00	0.00	0.00	0.00	0.00	0.00	8.00	\$ 1,928.00
10	TRAINING - NOT INCLUDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$ -
10.1	Training Development - NOT INCLUDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$ -
10.2	Training Workshop - NOT INCLUDED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$ -
11	MEETINGS AND PRESENTATIONS	28.00	44.00	0.00	4.00	8.00	0.00	84.00	\$ 16,148.00
11.1	Public Meeting Presentation Development	8.00	24.00	0.00	4.00	8.00	0.00	44.00	\$ 7,668.00
11.2	Public Meeting Presentations	12.00	12.00	0.00	0.00	0.00	0.00	24.00	\$ 5,088.00
11.3	Other Meetings	8.00	8.00	0.00	0.00	0.00	0.00	16.00	\$ 3,392.00
12	PROJECT MANAGEMENT	24.00	60.00	0.00	0.00	0.00	0.00	84.00	\$ 16,764.00
12.1	Project Management, Status Reports and Client Updates	24.00	60.00	0.00	0.00	0.00	0.00	84.00	\$ 16,764.00
	Total Estimated Labor	198.00	433.00	211.00	380.00	478.00	14.00	1714.00	\$ 260,011.00
	Other Direct Costs								\$ -
							@		\$ -
	TOTAL FEE COMPUTATION								\$ 260,011.00



City Commission agenda item

item type Action Items Requiring Discussion	meeting date August 23, 2023
prepared by Peter Moore	approved by Michelle del Valle, Randy Knight
board approval Completed	
strategic objective Fiscal Stewardship	

subject

Commission Budget Suggestions & Capital Update

motion / recommendation

Review the suggested changes and reach agreement on which items to include as part of the first reading for the budget ordinance in September.

background

Staff has received feedback from the Commission as well as provided updated figures from the state for their revenue estimates. The attached Budget Suggestions Matrix includes all comments received on the budget to-date and any additional changes will be presented at the meeting.

Staff has also included an updated look at the 5/25 Year Plan for informational purposes.

State revenue estimates provided an upside of almost \$500k, raising the overall General Fund contingency to about \$1.1 million. It is staff's recommendation that the various adjustments to the budget be examined individually at the Commission meeting and voted upon for inclusion in the final budget document that goes to first ordinance reading at the September 13th meeting.

alternatives / other considerations

fiscal impact

ATTACHMENTS:

[Budget Suggestions Matrix FY24.pdf](#)

ATTACHMENTS:

[5-25 Year Plan FY24 Update - 8-17-23.pdf](#)

City of Winter Park 2024 Proposed Budget Staff and Commission Changes and Recommendations					
Item Description	Recommendation	Fund (if known)	Financial Impact (Decrease)/Increase	Commissioner Comments	Staff Notes
Staff Adjustments to-date					
Municipal Revenue Sharing	Increase	General Fund	\$ 333,386	NA	Current year-end estimates for FY23 are tracking with historical totals of about \$1.5 million. The state is estimating an increase that is fairly significant. The most recent monthly collections from this source have been revised upwards by the state so it is possible that they will make an amendment to current year collections that will better support their FY24 increase. Staff would recommend adopting the state revenue estimate but with some caution that this seems to be an aggressive number.
Communication Services Tax	Increase	General Fund	\$ 148,744	NA	The state estimate of \$2.1 million is consistent with currently year expected collections and not unreasonable. Staff would recommend adopting this estimate.
Half-Cent Sales Tax	Decrease	General Fund	\$ (41,315)	NA	Staff and state estimates are fairly close to each other. For the current FY23, the state had estimated about \$4.7 million in collections, while staff had estimated \$5.7 million. Current collections seem in-line with the staff estimate at \$5.7 million. FY24 is largely regarded to see a spending slowdown, and estimates from staff and state reflect about an 11% drop in collections from the current year estimated totals. This size drop is on par with the decline seen during the great recession in FY09 and is a fairly negative estimate which should indicate future potential upside.
Local Option Gas Tax	Increase	General Fund	\$ 56,269	NA	The state estimate of \$946k is fairly consistent with current year expected collections and not unreasonable. Staff would recommend adopting this estimate.
Totals based on staff adjustments (General Fund Only)	Increase	General Fund	\$ 497,084	NA	Current estimates, if adopted, would add almost \$500k to the existing \$600k contingency, for a total of \$1.1 million. Adding \$1.1 million to reserves would raise the unencumbered funding percentage from 24.8% to 26.5%. The city has a goal of reaching 30%.
FDEP Grant Match for Mead Trail	Decrease	General Fund	\$ (150,000)	NA	The Parks Department has just learned that the trail grant is 4th ranked and could likely be funded. The City would require a match as part of that grant. Staff would suggest that this funding come from the expanded contingency.

Additional Suggestions					
Commissioner	Recommendation	Fund (if known)	Proposed Change	Commissioner Comments	Staff Notes
DeCiccio	Library Funding to Open on Sundays	CRA	\$ 350,000		Staff has added this suggestion based on the discussion at the CRA Agency worksession on 8/10/23. To accommodate this request, staff recommends reducing capital funding by \$200k and deferring the Hannibal Sq Connectivity to deliberations over the Transportation Master Plan, and to reduce CRA contingency by \$150k. Future years will be supported by reducing overall funding available for capital projects. This will be presented as part of the CRA Agency Meeting budget adoption on 8/23/23.
Anderson	Add an infrastructure placeholder to CRA CIP	CRA	TBD		Staff has added this suggestion based on the discussion at the CRA Agency worksession on 8/10/23. This is not a revision does not have any dollar impact currently, however it is a placeholder in the CRA CIP should other project priorities, such as stormwater, necessitate a reprioritization of existing project funding. The CRA Agency is able to amend its budget at any time and as further studies are completed this issue will be re-addressed.
DeCiccio	Raise Library operating support to 7%	General Fund	\$ 36,800	Library needs additional funding to support cost inflation in materials and labor.	The proposed budget contains a 5% increase to support cost-of-living adjustments for the operating support that comes from the city. This would result in an increase of just under \$37k and if approved, staff would recommend that this come from contingency.
DeCiccio	Construction Manager Position	General Fund	\$ 150,000	The city has numerous construction projects that would benefit from having in-house expertise and could improve project delivery timelines.	The city has numerous capital projects either planned or underway as a result of federal ARPA funding and awarded grants. Additional future projects falling under the Transportation Master Plan and Stormwater Plan studies could also benefit from more expertise on staff. If approved, staff would suggest funding this from the General Fund but supporting it from all the major funds as they would all benefit from the position. It would be housed under Public Works and funding through reimbursements in the CRA, Water, and Electric fund would assist with supporting the position.
DeCiccio	Community Service Officer Position	General Fund	\$75,000 plus vehicle and equipment	The Police department has one CSO already and it's working well, this would add a second.	CSO's cost less than a regular officer at an estimated \$75k in salary and benefits, \$10k in equipment, and about \$65k for a vehicle. Staff is suggesting that we fund this position starting in March of FY24 as the Police Department is in the process of onboarding some vacant positions. It would also allow for time to procure a vehicle. This would drop the overall impact to the General Fund in FY24 to about \$112k and staff would recommend taking this from contingency.
Sullivan	Acquire Ozarks Bank property	General Fund	\$ 6,000,000	Timing is an issue; potential close date is 12/18/23. Potential funding sources: temporarily borrow from reserves. Repay reserves with bond issue or with sale of City property.	If purchase of the site is approved, funding would need to be raised through debt issuance, sale of assets, or use of General Fund reserves. The city has about \$19 million in unencumbered General Fund reserves. A debt payment over a 15 year term on a \$6 million borrowing would cost about \$540k annually. Proceeds from any land asset sale could certainly be used for any purpose but the amount of revenue generated would depend upon the asset.
Sullivan	Sale of 6 "tree farm" residential sites	General Fund	\$ (1,200,000)	Estimated at \$200K per lot. Requires 4 votes (City property disposal)	If approved, staff believes the revenue generated from the sale is a reasonable estimate.
Sullivan	Full funding for three basin flooding studies	Various	\$ 600,000	The first study costs \$231K with two more to go. May be possible to integrate the 3 studies. Pay with stormwater or pursue grants.	Funding to support these studies has been identified with the first two studies underway. The first was approved for \$231k for Geosyntec and the second for Singhofen, at about \$260k, is up for approval on this Commission agenda. Funding for the studies is coming from a collection of sources including a \$300k allocation from ARPA, the CRA budget has set aside \$100k in contractual services to assist with costs in FY24, and the remaining \$200k is planned to come from reprioritized current funding set aside to do the Nicolet retention area for a cost of \$200k. Staff has been pursuing a public-private partnership option that may potentially pay for these pond costs.

Unfunded Projects: Short-Term 5-Year Time Horizon

Project	Est. Project Cost	Unfunded in 5 Years	Notes
Ozark Property - Acquisition	6,000,000	6,000,000	
Ozark Property - Improvements	2,000,000	2,000,000	
New Loader Truck for Forestry	215,000	215,000	
WP9 Lightning Shelter	70,000	70,000	
Cady Way Pickle ball court shade awning	160,000	160,000	
Parks Master Plan Update	125,000	125,000	
Stadium Lighting - 5 yr. CIP Plan	1,000,000	125,000	
Playground Restorations	100,000	10,000	
Mini Park Restorations	250,000	10,000	
Park Pavilion Replacement	325,000	85,000	
Expanded Brick and Paved road repair	500,000	500,000	
Transportation Master Plan: Technology Projects	1,125,000	700,000	Suggested by the Commission as an alternative to structured parking as part of the TMP.
Implementation of Smart City Recommendations	500,000	500,000	
MLK Park drainage area stormwater improvements	10,000,000	5,000,000	Discussed that this could be funded by reallocation in the CRA and potential grants or bond issue.
Winter Pines GC Drainage	500,000	500,000	Projects selected as representative of the Commission's desire to look for \$2 million in short-term stormwater improvements.
Canton Ave Drainage	500,000	500,000	
Woodside Ave, Eastern Parkway Drainage Improvement	500,000	500,000	
Laurel Road Re-design	500,000	500,000	
Station 61 Improvements (Canton)	250,000	250,000	
Station 64 Improvements (Howell Branch)	200,000	200,000	
Facility Replacement Account (roofs, painting, flooring, HVAC, etc)	2,650,000	150,000	
Total Projects with Unfunded	19,470,000	18,100,000	
Estimated Surplus Funds over next five years:			
CRA- Thru 2027 Sunset		912,005	May only be used within the geography of the CRA and in accordance with the CRA Plan
Stormwater CIP Funds - CIP Plan 24/28		-	No estimated surplus in stormwater funds above planned CIP needs
General Funds- CIP Plan 24/28		1,493,056	May be used for any purpose
Parks Acquisition/Impact Fund		1,701,160	May only be used for parks acquisition and improvements
Other Misc. Funded Sources		-	Includes grants, special revenues, and fundraising
Borrowed Funds/Sale of Assets		-	None planned at this time
Mobility Impact Fee		804,743	May only be used for transportation expansion projects
Total Estimated Funding Uncommitted		4,910,963	Not all estimated funds could necessarily be used for all currently unfunded projects.
Net Surplus/Deficit Assuming all Surplus Funding is Applicable		(13,189,037)	Deficit remaining if all surplus funds could be applied to proposed projects.

Funding Source Possibilities & Scenarios

General Fund Reserves		19,000,000	Each \$1 million spent would lower unencumbered reserves percentage by about 1.5%. The city is currently around 27%.
Borrow Funds		TBD	Interest rates have likely doubled to about 4%.
Sale of Land Assets		Varies	The city has some land assets that have been discussed as potential sales.
Special Assessments		TBD	Special assessments can be levied against properties that would benefit from a proposed improvement.
Grants & Infrastructure Bill		TBD	Many grant offerings are still being developed but may be a future source of funds.
CRA Expansion/Extension		est. \$60+ million	Expanding the CRA's timeline and geography would offer additional funding options.

5/25 Year Strategic Capital Plan		5 & 25 Year Summary				5-Yr Plan ('24 - '28) Estimated funding and currently identified CIP projects							
Non-Recurring Project Funding		Total Project Costs	5 Year Plan- Costs	Unfunded in 5 Years	6-25 Year Plan- Costs	CRA- Thru 2027 Sunset	Stormwater CIP Funds - CIP Plan 24/28	General Funds- CIP Plan 24/28	Parks Acquisition/ Impact Fund	Other Misc. Funded Sources	Borrowed Funds/Sale of Assets	Mobility Impact Fee	Notes
Est. Funding Available			55,614,191		64,755,546	22,922,233	3,500,000	13,563,056	1,701,160	11,873,000	-	2,054,743	Updated estimates based on 10 Yr. Proformas
Sum of Proposed Projects			(50,703,228)	(18,300,000)	(184,248,000)	(22,010,228)	(3,500,000)	(12,070,000)	-	(11,873,000)	-	(1,250,000)	
Surplus/Deficit (1 - 5 and 6 - 25 years)			(13,389,037)		(119,492,454)	912,005	-	1,493,056	1,701,160	-	-	804,743	Funds in each source category not currently encumbered.
Total Surplus/Deficit over 25 years			(132,881,490)			41%	6%	24%	3%	21%	0%	4%	Over half of planned funding in the next 5 years is CRA
Project Cost Summary		253,251,228	69,003,228		184,248,000								
1.0	Property Acquisition												
	Winter Park Playhouse Property	4,000,000	4,000,000	-	-					4,000,000			Currently awaiting the verdict of potential grant funding from Orange County through the TDT process.
	Purchase Properties along W. Fairbanks below MLK Park	9,000,000	-	-	9,000,000								Original \$3 million is no longer realistic and is likely in excess of \$9 million to purchase all properties on that block (excluding ORMC property).
	St. Andrews Church Property near Cady Way	2,000,000	-	-	2,000,000								Placeholder estimate. Currently not for sale Moved to long-term pending the determination of a business case. Discussions about the availability of this property and acquisition are still ongoing.
	Property on 436 near 7th hole of Pines course	2,600,000	-	-	2,600,000								
	Ozark Property - Acquisition	6,000,000	6,000,000	6,000,000	-								
	Replacement Land for Combined USPS Facility (half of the \$15 million est. cost is already in the CRA budget from past years.)	8,000,000	7,075,000	-	925,000	7,075,000							There is currently \$7 million reserved for this project already with another \$7 million identified in the CRA CIP. The original price was est. at \$15 million 3 yrs ago however \$1 million was allocated to 7 Oaks Park.
2.0	Parks Improvements												
	MLK Park Improvements	2,000,000	2,000,000	-	-	2,000,000							Project is currently underway. Proposed as part of CRA budget for FY24 \$320k in long term is supposed to be grant or fund raised.
	West Meadow Restroom & Storage Facility	750,000	750,000	-	-	750,000							
	Mead Gardens- Phase 2	6,000,000	300,000	-	5,700,000			300,000					Was deferred to long-term in 5 yr CIP Vehicle can be rented when needed. Future demand may warrant purchase.
	Mead Gardens - Lodge Terrace	265,000	-	-	265,000								
	New Loader Truck for Forestry	215,000	215,000	215,000	-								Placeholder for presumed improvement if property is acquired.
	Ozark Property - Improvements	2,000,000	2,000,000	2,000,000	-								
	Winter Pines Golf Course Improvements	1,000,000	1,000,000	-	-					1,000,000			Revenues from course expected to generate support for capital improvements at \$200k annually.
	WP9 Lightning Shelter	70,000	70,000	70,000	-								
	Cady Way Pickle ball court shade awning	160,000	160,000	160,000	-								Seat will be partially covered, this addition would cover the court. Must be completed by FY25.
	Parks Master Plan Update	125,000	125,000	125,000	-								
	Stadium Lighting - 5 yr. CIP Plan	1,000,000	1,000,000	125,000	-			500,000		375,000			Funded in CIP Funded in CIP
	Parks Capital Maintenance	675,000	675,000	-	-			675,000					
	Playground Restorations	100,000	100,000	10,000	-			90,000					Funded in CIP. Minor cost deferment which could just be eliminated. Funded in CIP. Minor cost deferment which could just be eliminated.
	Mini Park Restorations	250,000	250,000	10,000	-			240,000					
	Ward Park Improvements	100,000	100,000	-	-			100,000					Funded in CIP Funded in CIP
	Showalter Field Improvements	150,000	150,000	-	-			150,000					
	Tennis Center	425,000	425,000	-	-			425,000					Funded in CIP Funded in CIP
	Cady Way Pool	250,000	250,000	-	-			250,000					
	Park Pavilion Replacement	325,000	325,000	85,000	-			240,000					Funded in CIP In long-term needs in CIP.
	Lake Baldwin Improvements	350,000	-	-	350,000								

5/25 Year Strategic Capital Plan		5 & 25 Year Summary				5-Yr Plan ('24 - '28) Estimated funding and currently identified CIP projects							
Non-Recurring Project Funding		Total Project Costs	5 Year Plan-Costs	Unfunded in 5 Years	6-25 Year Plan-Costs	CRA- Thru 2027 Sunset	Stormwater CIP Funds - CIP Plan 24/28	General Funds- CIP Plan 24/28	Parks Acquisition/ Impact Fund	Other Misc. Funded Sources	Borrowed Funds/Sale of Assets	Mobility Impact Fee	Notes
Est. Funding Available			55,614,191		64,755,546	22,922,233	3,500,000	13,563,056	1,701,160	11,873,000	-	2,054,743	Updated estimates based on 10 Yr. Proformas
Sum of Proposed Projects			(50,703,228)	(18,300,000)	(184,248,000)	(22,010,228)	(3,500,000)	(12,070,000)	-	(11,873,000)	-	(1,250,000)	
Surplus/Deficit (1 - 5 and 6 - 25 years)			(13,389,037)		(119,492,454)	912,005	-	1,493,056	1,701,160	-	-	804,743	Funds in each source category not currently encumbered.
Total Surplus/Deficit over 25 years			(132,881,490)			41%	6%	24%	3%	21%	0%	4%	Over half of planned funding in the next 5 years is CRA
Project Cost Summary		253,251,228	69,003,228		184,248,000								
3.0	Transportation, Multi-Modal, and Calming Priorities												
	Sidewalk Bike path and Curb repairs (CIP)	2,700,000	2,700,000	-	-			2,700,000					1,250,000 This is funding currently set aside in the CIP. Goal of 11 lane miles annually. Placeholder option for increasing additional funding in short term. Additional funding was added in FY24 in anticipating of Transportation Master Plan. May be some funding Defer for discussions related to Transporation Master Plan. Project was estimated over 3 years ago, likely to be much higher when ready to proceed. Staff estimate is at least double. Itemized project listing on Transportation Master Plan Tab Itemized project listing on Transportation Master Plan Tab Itemized project listing on Transportation Master Plan Tab Itemized project listing on Transportation Master Plan Tab Itemized project listing on Transportation Master Plan Tab. Parking garage component moved to Parking Based on cost estimate in Transportation Master Plan, this cost should be increased to about \$4 - 6 million. This would likely be an annual operating cost of \$200 - \$300k.
	Expanded Brick and Paved road repair	500,000	500,000	500,000	-								
	Bicycle, Pedestrian, and Signalization Improvements	2,250,000	2,250,000	-				1,000,000					
	Hannibal Sq Connectivity	-	200,000	200,000	(200,000)	-							
	17/92 City Match & Decorative Lights and Landscaping	5,185,228	5,185,228	-	-	5,185,228							
	Transportation Master Plan: Sidewalk Projects	14,222,000	-	-	14,222,000								
	Transportation Master Plan: Shared Use Path & Greenway Projects	23,866,000	-	-	23,866,000								
	Transportation Master Plan: Crossing Projects	14,415,000	-	-	14,415,000								
	Transportation Master Plan: Roadway Reconfiguration & Streetscape Projects	69,480,000	-	-	69,480,000								
	Transportation Master Plan: Technology Projects	1,125,000	700,000	700,000	425,000								
	Fairbanks Denning Traffic Improvements -Pedestrian Crossing	4,000,000	-	-	4,000,000								
	Downtown Circulator	450,000	-	-	450,000								
4.0	Parking Expansion												
	Downtown Parking Garage	18,500,000	7,000,000	-	11,500,000	7,000,000							Defer the balance of a parking structure cost while parking technology and garage alternatives can be examined.
5.0	IT Cybersecurity and "Smart City" Investments												
	IT Infrastructure Upgrades Fund	950,000	950,000	-	-			950,000					Total project is current allocated plus est. 5 yr. spend.
	Implementation of Smart City Recommendations	500,000	500,000	500,000	-								Placeholder in anticipation of smart city recommendations.

5/25 Year Strategic Capital Plan		5 & 25 Year Summary				5-Yr Plan ('24 - '28) Estimated funding and currently identified CIP projects							
Non-Recurring Project Funding		Total Project Costs	5 Year Plan- Costs	Unfunded in 5 Years	6-25 Year Plan- Costs	CRA- Thru 2027 Sunset	Stormwater CIP Funds - CIP Plan 24/28	General Funds- CIP Plan 24/28	Parks Acquisition/ Impact Fund	Other Misc. Funded Sources	Borrowed Funds/Sale of Assets	Mobility Impact Fee	Notes
Est. Funding Available			55,614,191		64,755,546	22,922,233	3,500,000	13,563,056	1,701,160	11,873,000	-	2,054,743	Updated estimates based on 10 Yr. Proformas
Sum of Proposed Projects			(50,703,228)	(18,300,000)	(184,248,000)	(22,010,228)	(3,500,000)	(12,070,000)	-	(11,873,000)	-	(1,250,000)	
Surplus/Deficit (1 - 5 and 6 - 25 years)			(13,389,037)		(119,492,454)	912,005	-	1,493,056	1,701,160	-	-	804,743	Funds in each source category not currently encumbered.
Total Surplus/Deficit over 25 years			(132,881,490)			41%	6%	24%	3%	21%	0%	4%	Over half of planned funding in the next 5 years is CRA
Project Cost Summary		253,251,228	69,003,228		184,248,000								
6.0	Stormwater Projects												
	General Drainage Improvements	1,250,000	1,250,000	-	-		1,250,000						
	Canton at Knowles Drainage Improvements	250,000	250,000	-	-		250,000						
	Temple Dr Stormwater Replacement	700,000	700,000	-	-		700,000						
	Curb Implementation	250,000	250,000	-	-		250,000						
	Corrugated Metal Pipe Replacement	600,000	600,000	-	-		600,000						
	CDS Unit on Fawsett Road	200,000	200,000	-	-		200,000						
	Stirling Bridge Replacement	250,000	250,000	-	-		250,000						
	MLK Park drainage area stormwater improvements	10,000,000	10,000,000	5,000,000	-				5,000,000				The Commission suggested that this need be addressed partially through other funding sources such as reallocation in the CRA or potential grants.
	Lake Sylvan to Lake Mizell Interconnect	4,500,000	-	-	4,500,000								
	Lake Chelton to Lake Sue Interconnect	3,500,000	-	-	3,500,000								
	Lake Forrest neighborhood curb and drainage improvement.	2,000,000	-	-	2,000,000								
	Corrugated Pipe Replacement	1,500,000	-	-	1,500,000								
	Winter Pines GC Drainage	500,000	500,000	500,000	-								The Commission requested a \$2 million placeholder for short term stormwater needs. These projects have been selected by staff as representative of that amount, but are not necessarily the projects that would be pursued.
	Canton Ave Drainage	500,000	500,000	500,000	-								
	Woodside Ave, Eastern Parkway Drainage Improvement	500,000	500,000	500,000	-								
	Laurel Road Re-design	500,000	500,000	500,000	-								
	Nutrient Study Chain of Lakes	450,000	-	-	450,000								
	Chestnut Road Drainage	300,000	-	-	300,000								
	Lee Road Drain well Refurbishment	100,000	-	-	100,000								
	Addl. Bypass Pump- Lake levels	95,000	95,000	-	-					95,000			In hazard mitigation grant with OC In hazard mitigation grant with OC
	Storm Sewer Camera	80,000	80,000	-	-					80,000			
	Shepherd Ave Bubble up connection to gravity system	50,000	-	-	50,000								
	Venetian Way Exfiltration bubble up connection	50,000	-	-	50,000								
7.0	Public Safety Enhancements												
	Station 61 Improvements (Canton)	250,000	250,000	250,000	-								Previous estimate provided by Fire Dept. Was originally slated to be partially grant funded, now that opportunity is uncertain. However estimates to rebuild a station seem high at \$5.8 million for 3,000 SF.
	Station 62 Replacement (Lakemont)	5,800,000	-	-	5,800,000								
	Station 64 Improvements (Howell Branch)	200,000	200,000	200,000	-								Previous estimate provided by Fire Dept.
	Ravaudage/Killarney Area Annexation - New Fire Station	5,000,000	-	-	5,000,000								Does not include land cost. If built would go on new Wymore rd owned property with Training facility.
	Fire Safety and Equipment Fund	1,100,000	1,100,000	-	-			1,100,000					Funding for Dispatch and Station Alerting programs already underway
	Police Safety and Equipment Fund	850,000	850,000	-	-			850,000					Has funded police radios for past four years.
8.0	City Facilities												
	Weather Stations (3)	23,000	23,000	-	-					23,000			Hazard Mitigation Grant Funded from restricted bld permit revs.
	Building and Permitting Services Office at Howell Branch	1,300,000	1,300,000	-	-					1,300,000			
	City Hall - Major Renovation	2,000,000	-	-	2,000,000								This is listed in long-term in the CIP. Moved to long-term and could be funded as a debt issue. Below threshold so doesn't require referendum.
	Facility Replacement Account (roofs, painting, flooring, HVAC, etc)	2,650,000	2,650,000	150,000	-			2,500,000					City's provided funding for capital maintenance of facilities. May need to go higher as costs have climbed.

5/25 Year Strategic Capital Plan	5 & 25 Year Summary				5-Yr Plan ('24 - '28) Estimated funding and currently identified CIP projects							Notes
Non-Recurring Project Funding	Total Project Costs	5 Year Plan-Costs	Unfunded in 5 Years	6-25 Year Plan-Costs	CRA- Thru 2027 Sunset	Stormwater CIP Funds - CIP Plan 24/28	General Funds- CIP Plan 24/28	Parks Acquisition/ Impact Fund	Other Misc. Funded Sources	Borrowed Funds/Sale of Assets	Mobility Impact Fee	
		55,614,191		64,755,546	22,922,233	3,500,000	13,563,056	1,701,160	11,873,000	-	2,054,743	
		(50,703,228)	(18,300,000)	(184,248,000)	(22,010,228)	(3,500,000)	(12,070,000)	-	(11,873,000)	-	(1,250,000)	
		(13,389,037)		(119,492,454)	912,005	-	1,493,056	1,701,160	-	-	804,743	
		(132,881,490)			41%	6%	24%	3%	21%	0%	4%	
Project Cost Summary	253,251,228	69,003,228		184,248,000								
Subtotal- Non-Recurring Costs	253,251,228	69,003,228	18,300,000	184,248,000	22,010,228	3,500,000	12,070,000	-	11,873,000	-	1,250,000	

List of projects provided in the Draft Transportation Master Plan

TABLE 3: SIDEWALK PROJECTS				
Priority	Roadway	Location	Improvements	Cost Estimate
1	Loch Berry Road	Phelps Avenue to Lakemont Avenue	Both sides missing	\$1,892,000
2	Phelps Avenue	Loch Berry Road to Aloma Avenue	East side	\$445,000
3	Park Avenue	Ridgewood Avenue to City Limit (N)	Both sides incomplete	\$1,356,000
4	Wymore Road	Lee Road to City Limit (N)	Both sides missing	\$1,402,000
5	Louisiana Avenue	Park Avenue to Wilma Avenue	Both sides missing	\$76,000
6	Minnesota Avenue	Nicolet Avenue to Schultz Avenue	North side gap	\$267,000
7	Glenridge Way S	St. George Street to Lakemont Avenue	South side - includes boardwalk	\$1,544,000
8	Lakemont Avenue	Gray Avenue to Glenridge Way	West side - includes boardwalk	\$442,000
9	Park Avenue	Webster Avenue to Palmer Avenue	West side	\$253,000
10	Loch Berry Road	Lakemont Avenue to Darcy Drive	South side	\$259,000
11	Lake Sue Avenue	Winter Park Road to Laurel Road	North side	\$84,000
12	Palmer Avenue	Park Avenue to Old England Avenue	South side	\$105,000
13	Palmer Avenue	Alabama Drive to Temple Drive	North side	\$146,000
14	Park Avenue	Green Cove Road to Pennsylvania Avenue	North side	\$138,000
15	Park Avenue	Pennsylvania Avenue to Denning Drive	South side	\$317,000
16	Park Avenue	Palmer Avenue to New York Avenue	South side	\$232,000
17	Phelps Avenue	Aloma Avenue to Lakehurst Avenue	West side	\$259,000
18	Louisiana Avenue	Wilma Avenue to Denning Drive	Both sides	\$326,000
19	Stovin Avenue	Park Avenue to Palmer Avenue	North side	\$65,000
20	Temple Drive	Palmer Avenue to Woodmere Drive	West side	\$291,000
21	Temple Drive	Via Lugano to Howell Branch Road	West side	\$1,726,000
22	Temple Trail	Howell Branch Road To 300' N of Cove Trail	East side	\$426,000
23	Wymore Road	Franklin Avenue to Lee Road	West side	\$958,000
24	Virginia Drive	Dead End	Curb and sidewalk	\$688,000
25	Webster Avenue	Pennsylvania Avenue to Interlachen Avenue	South side	\$525,000
				\$14,222,000

TABLE 4: SHARED USE PATH & GREENWAY PROJECTS

Priority	Roadway	Location	Improvements	Cost Estimate
1	City Bike Map	Citywide	Finalize design and print map	\$100,000
2	Northeast Connector Trail	Lander Road to Suffield Drive	Shared use path	\$159,000
3	S Denning Drive	Minnesota Avenue to Mead Gardens	Shared use path	\$1,233,000
4	Routes: North & East	North/East of Webster Avenue	Signs, sharrows, traffic calming	\$142,000
5	St. Andrews Trail	SR 426 to Cady Way Trail	Shared use path	\$9,498,000
6	Routes: Downtown & West	Webster Avenue to Oxford Road	Signs, sharrows, traffic calming	\$209,000
7	Routes: South	South of Oxford Road	Signs, sharrows, traffic calming	\$142,000
8	Church Trail	Perth Lane to Lakemont Avenue	Shared use path	\$1,080,000
9	Railroad Trail	New York Avenue to Central Park	Shared use path	\$2,176,000
10	Railroad Trail	N. Denning Drive to New York Avenue	Shared use path	\$412,000
11	Ward Park Trail	Cady Way Trail to St. Andrews	Shared use path	\$602,000
12	17-92 Overpass	Solana Avenue	Overpass & shared use path	\$6,578,000
13	Howell Branch Road	Maitland City Line to Seminole Co. Line	Shared use path	\$1,535,000
14	Tennis Center Trail	Denning Drive to Melrose Avenue	Current City project	Underway
15	Cady Way	Reconfigure bikeway, Perth Lane to Cady Way Trail	Current City project	Underway
				\$23,866,000

TABLE 5: CROSSING PROJECTS

Priority	Roadway	Location	Improvements	Cost Estimate
1	Temple Drive	Via Salerno (brick pavers)	Curb ramps & RRFB	\$163,000
2	Pennsylvania Avenue	Melrose Avenue (brick pavers)	Curb ramps & RRFB	\$161,000
3	Lake Sue Avenue	Highland Avenue/Forest Road (brick pavers)	Curb ramps & RRFB	\$153,000
4	Fairbanks Avenue	Ohio Street (east leg)	Full median & signal	\$1,775,000
5	Fairbanks Avenue	Jackson Avenue	Full median & signal	\$1,821,000
6	Fairbanks Avenue	Shoreview Avenue	Full median & signal	\$1,775,000
7	Temple Drive	Whitesell Drive (brick pavers)	Curb ramps & RRFB	\$140,000
8	Howell Branch Road	Sanbina St/Mandan Trail	Full median & signal	\$1,967,000
9	Lakemont Avenue	Goodrich Avenue	Curb ramps & RRFB	\$155,000
10	Phelps Avenue	Lakehurst Avenue (brick pavers)	Curb ramps & RRFB	\$145,000
11	Lee Road	Turner Road	Full median & signal	\$1,904,000
12	Winter Park Road	Spring Lane/Wright Avenue	Curb ramps & RRFB	\$153,000
13	Lakemont Avenue	Oakhurst Avenue	Full median & signal	\$1,717,000
14	Lakemont Avenue	Loch Berry Road	Curb ramps & RRFB	\$171,000
15	Aloma Avenue	Strathy Lane (west leg)	Full median & signal	\$1,887,000
16	Glenridge Way	Stonehurst Road/ Brandywine Drive	Curb ramps & RRFB	\$160,000
17	Glenridge Way	St. George Street	Curb ramps & RRFB	\$168,000
				\$14,415,000

TABLE 6: ROADWAY RECONFIGURATION & STREETSCAPE PROJECTS

Priority	Roadway	Location	Improvements	Cost Estimate
1	Aloma Avenue	Park Avenue to Lakemont Avenue	Reconfiguration, pedestrian safety	Underway by FDOT
2	US 17/92	City Limits	Reconfiguration, streetscape, signals	Underway by FDOT
3	Morse Boulevard Study	US 17/92 to New York Avenue	Complete Streets study	\$300,000
4	Solana Avenue	US 17/92 to Denning Drive	Bike lanes	\$4,102,000
5	Lakemont Avenue	Glenridge Way to Glenridge Way	Roadway reconfiguration	\$12,942,000
6	Lakemont Avenue	Goodrich Avenue to City Limits	Complete Streets reconfiguration	\$6,082,000
7	Orange Avenue	US 17/92 to Pennsylvania	Complete Streets reconfiguration	\$6,200,000
8	Orange Avenue	Denning/Minnesota	Roundabout	\$7,400,000
9	Morse Boulevard	US 17/92 to New York Avenue	Complete Streets reconfiguration	\$12,000,000
10	Minnesota Avenue	Denning Drive to RR tracks	Bike lanes	\$785,000
11	Fairbanks Avenue	At Denning Drive	Add east and west turn lanes	\$1,169,000
12	Fairbanks Avenue	US 17/92 to Pennsylvania Avenue	Complete Streets reconfiguration	\$18,500,000
				\$69,480,000

TABLE 7: TECHNOLOGY PROJECTS

Priority	Project	Details	Cost Estimate
1	Traffic Management Center	Underway in partnership with Smart Cities and additional City Departments.	Cost TBD
2	Traffic Management Plan	Identify TMC & VMS locations, CAV readiness, fiber priority needs, emergency preemption, cybersecurity, and timing coordination plans	\$150,000
3	Signal Upgrades for Pedestrians	Hardware upgrades & timing plans for 6 locations - APS, LPI, phasing, etc.	\$300,000
4	Real-Time Parking Availability System: Garages	Pilot project to install equipment, operate, and evaluate system for a 1-year period	\$100,000
5	Gateway Variable Message Signs	4 locations	\$400,000
6	Real-Time Parking Availability System: On Street	Fee-based service	\$15,000
7	Universal Valet Program	1-year pilot project	\$60,000
8	Speed Feedback Signs	4 locations	\$100,000
9	Downtown Parking Garage & Transit Hub	TBD	\$18,500,000
			\$19,625,000

Assumptions For Funding Pools

Funding Source	Current Balance	Balances Dedicated Already	Available Balance	Annual Expectation	Available Funding over 5 years
Mobiliy Impact Fee	554,743	-	554,743	300,000	2,054,743
Park Impact Fee	1,086,744	(883,300)	203,444	75,000	578,444
Park Acquisition Fee	872,716	-	872,716	50,000	1,122,716



item type Public Hearings: Quasi-Judicial Matters (Public participation and comment on these matters must be in-person.)	meeting date August 23, 2023
prepared by Rene Cranis	approved by Michelle del Valle, Randy Knight
board approval Completed	
strategic objective	

subject

Ordinance 3278-23 - authorizing the transfer of a small corner of Hopper Mini Park (1664 Orange Avenue) to FDOT for transportation improvements. (2nd reading)

motion / recommendation

Approval

background

As part of the FDOT's US-17/92 Streetscape project, the city and CRA committed to a cost share for design and construction of this project. Included in the project's holistic improvements is the traffic signal upgrade at the intersection of US-17/92, Orange Ave, and Harmon Ave.

Initially incorporated as part of the overall scope, the traffic signal upgrade has the opportunity to be expedited because FDOT included these improvements in another state project called "Orange Avenue Improvements" from Clay Avenue to Orlando Avenue (FDOT Project #445691-1), which reduces financial commitment for both the city and CRA.

Included in the scope is an improvement to convert the traffic signal from span wires to mast arms. In order for this conversion to proceed, FDOT is requesting the city to donate a corner clip of Hooper Mini Park located at 1664 Orange Avenue due to the lack of space. FDOT will provide the coated black mast arms, at no charge, consistent with the other signals in the city, and the remainder of the 17/92 streetscape project when complete.

alternatives / other considerations

fiscal impact

ATTACHMENTS:

[Ordinance conveying portion of Hopper Mini Park.pdf](#)

ATTACHMENTS:

[City Deed for Parcel No. 100.1.pdf](#)

ORDINANCE 3278-23

AN ORDINANCE OF THE CITY OF WINTER PARK, FLORIDA, AUTHORIZING THE DONATION AND CONVEYANCE OF CITY-OWNED PROPERTY LOCATED AT THE CORNER OF ORANGE AVENUE AND U.S. HIGHWAY 17/92 TO THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Section 2.11 of the Charter of the City of Winter Park, Florida, authorizes the City Commission, by ordinance to convey or authorize by administrative action the conveyance of any lands of the City; and

WHEREAS, the State of Florida Department of Transportation proposes to construct or improve State Road No. 527, Section No. 75040, F.P. No. 445691 1 and State Road No. 15/600, Section 750330, F.P. 408429 2, in Orange County, Florida ("FDOT Project"); and

WHEREAS, it is necessary that certain lands now owned by City of Winter Park, Florida, as legally described in **Exhibit "A"** attached hereto ("Parcel 100") be acquired by the State of Florida Department of Transportation for the FDOT Project; and

WHEREAS, the State of Florida Department of Transportation has made application to said City to execute and deliver to the State of Florida Department of Transportation a deed, or deeds, in favor of the State of Florida Department of Transportation, conveying all rights, title and interest that said City has in and to said Parcel 100 required for transportation purposes and said request having been duly considered; and

WHEREAS, the City Commission deems it advisable and in the best interest of the public and citizens of the City to donate and convey the Property to the State of Florida Department of Transportation for the FDOT Project.

NOW, THEREFORE, BE IT ENACTED BY THE PEOPLE OF THE CITY OF WINTER PARK:

SECTION 1. The recitals stated hereinabove are incorporated herein by reference and are made fully a part of this Ordinance.

SECTION 2. The City Commission of the City of Winter Park hereby approves the donation and conveyance of the Parcel 100 to the State of Florida Department of Transportation.

SECTION 3. This Ordinance shall constitute the authorization by the City Commission pursuant to Section 2.11 of the Charter of the City of Winter Park, Florida, for the donation and conveyance of Parcel 100. The City Commission of the City of Winter Park hereby authorizes the execution of the deed of conveyance and other closing documents on behalf of the City by the City Manager as may be required to effectuate the donation and conveyance of Parcel 100. A certified copy of this Ordinance is to be forwarded forthwith to the State of Florida Department of Transportation at 719 South Woodland Blvd., DeLand, Florida, 32720-6834.

SECTION 4. This Ordinance shall become effective immediately upon its passage and adoption.

ADOPTED at a regular meeting of the City Commission of the City of Winter Park, Florida, held in City Hall, Winter Park, on this 23rd day of August 2023.

Mayor Phillip M. Anderson

ATTEST:

Rene Cranis, City Clerk

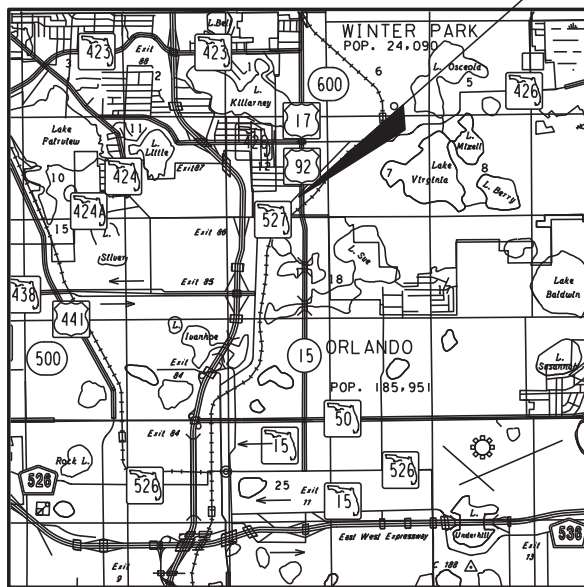
SKETCH OF DESCRIPTION FOR PARCEL 100

GENERAL NOTES

1. THIS SKETCH OF DESCRIPTION IS NOT A SURVEY.
2. THIS SKETCH OF DESCRIPTION WAS PREPARED TO GRAPHICALLY ILLUSTRATE THAT PORTION OF THE PRIVATE PARK, IN BLOCK 8, ORWIN MANOR WESTMINSTER SECTION, AS RECORDED IN PLAT BOOK J, PAGE 118 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, FOR THE PURPOSE OF THE F.D.O.T. TO PROVIDE RIGHT OF WAY EASEMENT, PARCEL 100.
3. THE SKETCH OF DESCRIPTION IS SUPPORTED BY A RIGHT OF WAY MAP FOR SR 15/600 (US 17/92), SECTION 75030, FINANCIAL PROJECT NUMBER 408429-1. COPIES OF THE RIGHT OF WAY MAP ARE FILED IN THE SURVEYING AND MAPPING UNIT OF THE FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT FIVE OFFICE, DELAND, FLORIDA.
4. THE BEARINGS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE 0901, NAD 1983, N.G.S. ADJUSTMENT OF 1990, FROM WHICH A BEARING OF NORTH 45°50'30" WEST IS DERIVED ON CENTERLINE OF SURVEY OF STATE ROAD 527 AS SHOWN ON RIGHT OF WAY MAP FOR SR 15/600 (US 17/92), SECTION 75030, FINANCIAL PROJECT NUMBER 408429-1.
5. UNLESS OTHERWISE NOTED ALL THE DATA DESIGNATED AS (F) IS TAKEN FROM THE RIGHT OF WAY MAP REFERENCED IN GENERAL NOTE No. 3 ABOVE.
6. ALL RECORDED PLATS, OFFICIAL RECORD BOOKS AND DEED BOOKS REFERENCED HEREON ARE FOUND IN THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
7. ATTENTION IS DIRECTED TO THE FACT THAT THESE MAPS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

(VICINITY MAP)

PROJECT AREA



TOWNSHIP 22 SOUTH,
RANGE 29 EAST
ORANGE COUNTY

LEGEND & ABBREVIATIONS

AC	= ACRE	N.T.S.	= NOT TO SCALE
B	= BASELINE	OR	= OFFICIAL RECORD
CB	= CHORD BEARING	O.R.B.	= OFFICIAL RECORD BOOK
COM.	= COMMERCIAL	PG	= PAGE
CONC.	= CONCRETE	PSM	= PROFESSIONAL SURVEYOR AND MAPPER
COR.	= CORNER		
CL	= CENTERLINE	PL	= PROPERTY LINE
(C)	= CALCULATED	(P)	= PLAT
C.M.	= CONCRETE MONUMENT	P.B.	= PLAT BOOK
C.R.	= COUNTY ROAD	P.C.	= POINT OF CURVE
D	= DEGREE	P.C.C.	= POINT OF COMPOUND CURVE
(D)	= DEED	P.I.	= POINT OF INTERSECTION
D.B.	= DEED BOOK	P.O.B.	= POINT OF BEGINNING
D.E.	= DRAINAGE EASEMENT	P.O.C.	= POINT OF COMMENCEMENT
EXIST.	= EXISTING	P.O.T.	= POINT ON TANGENT
ESMT	= EASEMENT	P.R.C.	= POINT OF REVERSE CURVE
E.D.E.	= EXISTING DRAINAGE EASEMENT	P.T.	= POINT OF TANGENCY
Δ	= CURVE DELTA ANGLE	R	= RADIUS
FND.	= FOUND	RES.	= RESIDENCE
(F)	= FIELD	RGE.	= RANGE
F.P.	= FINANCIAL PROJECT	RT.	= RIGHT
F.D.O.T.	= FLORIDA DEPARTMENT OF TRANSPORTATION	R/W	= RIGHT OF WAY
		SEC.	= SECTION
I.P.	= IRON PIPE	SF	= SQUARE FEET
I.R. & C.	= IRON ROD AND CAP	S.R.	= STATE ROAD
L	= LENGTH OF CURVE	SRD	= STATE ROAD DEPARTMENT
LB	= LICENSED BUSINESS	STA.	= STATION NUMBER
LT.	= LEFT	T	= TANGENT
L/A	= LIMITED ACCESS	TWP.	= TOWNSHIP
L.O.C.	= LIMITS OF CONSTRUCTION	T.B.	= TANGENT BEARING
MAINT.	= MAINTENANCE	U.E.	= UTILITY EASEMENT
NO.	= NUMBER		
N/A	= NOT APPLICABLE		
N&D	= NAIL & DISK		

FLORIDA DEPARTMENT OF TRANSPORTATION SKETCH OF DESCRIPTION - NOT A SURVEY

STATE ROAD NO. 15/600

ORANGE COUNTY

			BY		DATE	PREPARED BY: GPI GEOSPATIAL, INC. 3051 E. LIVINGSTON ST, SUITE 300 ORLANDO, FL, 32803	DATA SOURCE: SEE GENERAL NOTES	
			DRAWN	E.WHITTE	06/28/22			
REVISION			CHECKED	H.PETERS	07/11/22	F.P. NO. 408429-1	SECTION 75030	SHEET 1 OF 4 60

PARCEL 100

That part of:

The Private Park, in BLOCK 8, Orwin Manor Westminster Section, as recorded in Plat Book J, Page 118 of the Public Records of Orange County, Florida, being in Section 12, Township 22 South, Range 29 East, Orange County, Florida;

Described as follows:

COMMENCE at the Southwest corner of the Southeast one-quarter of Section 12, Township 22 South, Range 29 East, Orange County, Florida; thence North 00°42'25" West along the West line of the Southeast one-quarter of said Section 12, a distance of 32.39 feet to a point of intersection with the Southwest extension of the Centerline of Survey of State Road 527 (Orange Avenue) as shown on the Florida Department of Transportation Right of Way Maps for State Road 15/600 (US 17/92), Section 75030, Financial Project Number 408429-1; thence departing said West line of the Southeast one-quarter of said Section 12, run North 45°50'30" East along said Southwest extension and said Centerline, a distance of 1699.65 feet; thence departing said Centerline, South 44°08'41" East a distance of 40.09 feet to a point, on the Northwest line of Private Park, in BLOCK 8, Orwin Manor Westminster Section as recorded in Plat Book J, Page 118 of the Public Records of Orange County, Florida, said point also being the point of curvature of a curve, concave to the South, and the POINT OF BEGINNING; thence Northeasterly along the Northwestern line of said Private Park, and the arc of said curve, having a radius of 21.50 feet, a distance of 14.87 feet, with a chord bearing and distance of North 65°39'50" East and 14.57 feet, to the end of said curve, and a point on the existing right of way line as shown on the State Road Department, Right of Way Maps for State Road 15/600, Section 75030, Financial Project Number 408429-1; thence South 42°14'32" East, along said right of way line, a distance of 11.97 feet; thence South 00°40'45" East along said right of way line, a distance of 38.87 feet, to the point of cusp of a curve, concave to the Southwest; thence departing said right of way line, Northwesternly along the arc of said curve, having a radius of 25.00 feet, a distance of 58.24 feet, with a chord bearing and distance of North 67°24'43" West and 45.93 feet, to the end of said curve; thence North 44°08'41" West a distance of 2.91 feet to a point on the aforementioned Northwest line; thence North 45°51'19" East, along said Northwest line, a distance of 31.57 feet to the POINT OF BEGINNING.

CONTAINING 747 square feet, more or less.

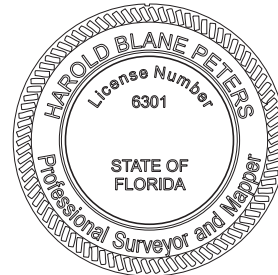
CERTIFICATION:

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE ATTACHED SKETCH OF DESCRIPTION OF PARCEL 100 IS TRUE, ACCURATE, AND PREPARED UNDER MY DIRECTION.

I FURTHER CERTIFY THAT SAID SKETCH OF DESCRIPTION IS IN COMPLIANCE WITH 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 472.027, FLORIDA STATUTES.

HAROLD B. PETERS
FLORIDA PROFESSIONAL SURVEYOR AND MAPPER NO. 6301
GPI GEOSPATIAL, INC.
3051 E. LIVINGSTON ST, SUITE 300
ORLANDO, FL, 32803

DATE:



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY HAROLD B. PETERS, PSM #6301, ON 06/28/22.

NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

			FLORIDA DEPARTMENT OF TRANSPORTATION			
			SKETCH OF DESCRIPTION - NOT A SURVEY			
			STATE ROAD NO. 15/600		ORANGE COUNTY	
			BY	DATE	PREPARED BY: GPI GEOSPATIAL, INC. 3051 E. LIVINGSTON ST, SUITE 300 ORLANDO, FL, 32803	DATA SOURCE: SEE GENERAL NOTES ON SHEET 1
			DRAWN	E.WHITTE	06/28/22	
			CHECKED	H.PETERS	07/11/22	
REVISION	BY	DATE	F.P. NO. 408429-1		SECTION 75030	SHEET 4 OF 4 63

03-BSD05-03/07

June 30, 2023

This instrument prepared by

Robin D. Derr

Under the direction of

DANIEL L. MCDERMOTT, ATTORNEY

Department of Transportation

719 South Woodland Boulevard

DeLand, Florida 32720-6834

PARCEL NO. 100.1

SECTION 75040 / 75030 / 75030

F.P. NO. 445691 1 / 408429 2 / 408429 1

STATE ROAD 527/15/600

COUNTY ORANGE

CITY DEED

THIS DEED, made this _____ day of _____, _____, by the CITY OF WINTER PARK, a Florida Municipal Corporation, grantor, to the STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, grantee: (Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors, and assigns of organizations).

WITNESSETH: That the grantor, for and in consideration of the sum of \$1.00 and other valuable considerations, receipt and sufficiency being hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in ORANGE County, Florida, viz:

See Exhibit A - Sketch of Description attached hereto and made a part hereof

TOGETHER with all tenements, hereditaments and appurtenances thereto belonging or in anyway appertaining.

TO HAVE AND TO HOLD, the same together with the appurtenances thereunto belonging or in anyway appertaining, and all the estate, right, title, interest, lien, equity and claim whatsoever of the said grantor, either in law or equity, to the said grantee forever.

PARCEL NO. 100.1
SECTION 75040 / 75030 / 75030
F.P. NO. 445691 1 / 408429 2 / 408429 1
PAGE 2

IN WITNESS WHEREOF, the said grantor has caused these presents to be executed in its name by its Mayor, and its seal to be hereto affixed, attested by its City Clerk, the date first above written.

Signed, sealed and delivered in
the presence of: Two witnesses
required by Florida Law

CITY OF WINTER PARK
A Florida Municipal Corporation

SIGNATURE LINE
PRINT/TYPE NAME: _____

By: _____
Its City Manager

SIGNATURE LINE
PRINT/TYPE NAME: _____

ATTEST: _____
Its City Clerk

ADDRESS OF GRANTOR:

STATE OF FLORIDA

COUNTY OF BREVARD

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this _____ day of _____, _____, by _____, City Manager, who is personally known to me or who has produced _____ as identification.

PRINT/TYPE NAME: _____
Notary Public in and for the
County and State last aforesaid.
My Commission Expires: _____
Serial No., if any: _____

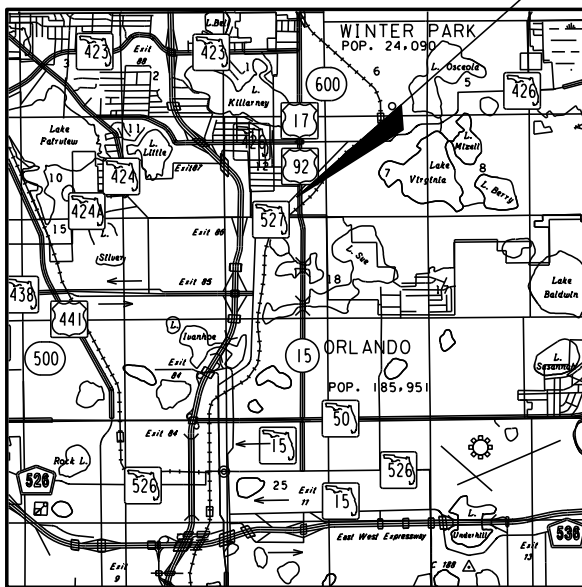
SKETCH OF DESCRIPTION FOR PARCEL 100

GENERAL NOTES

1. THIS SKETCH OF DESCRIPTION IS NOT A SURVEY.
2. THIS SKETCH OF DESCRIPTION WAS PREPARED TO GRAPHICALLY ILLUSTRATE THAT PORTION OF THE PRIVATE PARK, IN BLOCK 8, ORWIN MANOR WESTMINSTER SECTION, AS RECORDED IN PLAT BOOK J, PAGE 118 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, FOR THE PURPOSE OF THE F.D.O.T. TO PROVIDE RIGHT OF WAY EASEMENT, PARCEL 100.
3. THE SKETCH OF DESCRIPTION IS SUPPORTED BY A RIGHT OF WAY MAP FOR SR 15/600 (US 17/92), SECTION 75030, FINANCIAL PROJECT NUMBER 408429-1. COPIES OF THE RIGHT OF WAY MAP ARE FILED IN THE SURVEYING AND MAPPING UNIT OF THE FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT FIVE OFFICE, DELAND, FLORIDA.
4. THE BEARINGS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE 0901, NAD 1983, N.G.S. ADJUSTMENT OF 1990, FROM WHICH A BEARING OF NORTH 45°50'30" WEST IS DERIVED ON CENTERLINE OF SURVEY OF STATE ROAD 527 AS SHOWN ON RIGHT OF WAY MAP FOR SR 15/600 (US 17/92), SECTION 75030, FINANCIAL PROJECT NUMBER 408429-1.
5. UNLESS OTHERWISE NOTED ALL THE DATA DESIGNATED AS (F) IS TAKEN FROM THE RIGHT OF WAY MAP REFERENCED IN GENERAL NOTE No. 3 ABOVE.
6. ALL RECORDED PLATS, OFFICIAL RECORD BOOKS AND DEED BOOKS REFERENCED HEREON ARE FOUND IN THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
7. ATTENTION IS DIRECTED TO THE FACT THAT THESE MAPS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

(VICINITY MAP)

PROJECT AREA



TOWNSHIP 22 SOUTH,
RANGE 29 EAST
ORANGE COUNTY

LEGEND & ABBREVIATIONS

AC	= ACRE	N.T.S.	= NOT TO SCALE
B	= BASELINE	OR	= OFFICIAL RECORD
CB	= CHORD BEARING	O.R.B.	= OFFICIAL RECORD BOOK
COM.	= COMMERCIAL	PG	= PAGE
CONC.	= CONCRETE	PSM	= PROFESSIONAL SURVEYOR AND MAPPER
COR.	= CORNER		
CL	= CENTERLINE	P	= PROPERTY LINE
(C)	= CALCULATED	(P)	= PLAT
C.M.	= CONCRETE MONUMENT	P.B.	= PLAT BOOK
C.R.	= COUNTY ROAD	P.C.	= POINT OF CURVE
D	= DEGREE	P.C.C.	= POINT OF COMPOUND CURVE
(D)	= DEED	P.I.	= POINT OF INTERSECTION
D.B.	= DEED BOOK	P.O.B.	= POINT OF BEGINNING
D.E.	= DRAINAGE EASEMENT	P.O.C.	= POINT OF COMMENCEMENT
EXIST.	= EXISTING	P.O.T.	= POINT ON TANGENT
ESMT	= EASEMENT	P.R.C.	= POINT OF REVERSE CURVE
E.D.E.	= EXISTING DRAINAGE EASEMENT	P.T.	= POINT OF TANGENCY
Δ	= CURVE DELTA ANGLE	R	= RADIUS
FND.	= FOUND	RES.	= RESIDENCE
(F)	= FIELD	RGE.	= RANGE
F.P.	= FINANCIAL PROJECT	RT.	= RIGHT
F.D.O.T.	= FLORIDA DEPARTMENT OF TRANSPORTATION	R/W	= RIGHT OF WAY
		SEC.	= SECTION
I.P.	= IRON PIPE	SF	= SQUARE FEET
I.R. & C.	= IRON ROD AND CAP	S.R.	= STATE ROAD
L	= LENGTH OF CURVE	SRD	= STATE ROAD DEPARTMENT
LB	= LICENSED BUSINESS	STA.	= STATION NUMBER
LT.	= LEFT	T	= TANGENT
L/A	= LIMITED ACCESS	TWP.	= TOWNSHIP
L.O.C.	= LIMITS OF CONSTRUCTION	T.B.	= TANGENT BEARING
MAINT.	= MAINTENANCE	U.E.	= UTILITY EASEMENT
NO.	= NUMBER		
N/A	= NOT APPLICABLE		
N&D	= NAIL & DISK		

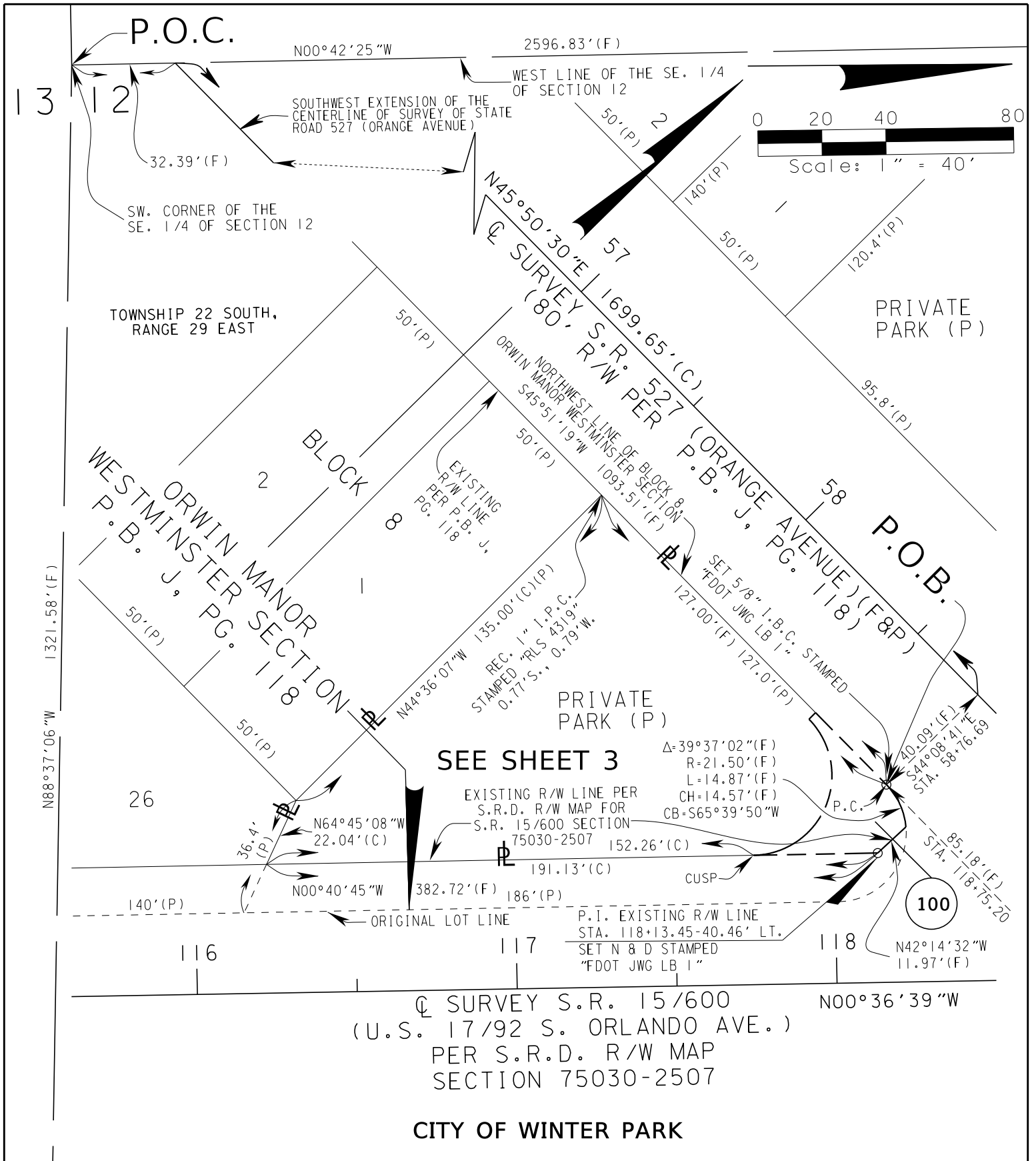
FLORIDA DEPARTMENT OF TRANSPORTATION SKETCH OF DESCRIPTION - NOT A SURVEY

STATE ROAD NO. 15/600

ORANGE COUNTY

			FLORIDA DEPARTMENT OF TRANSPORTATION						
			SKETCH OF DESCRIPTION - NOT A SURVEY						
			STATE ROAD NO. 15/600						
			ORANGE COUNTY						
				BY	DATE	PREPARED BY: GPI GEOSPATIAL, INC. 3051 E. LIVINGSTON ST, SUITE 300 ORLANDO, FL, 32803		DATA SOURCE: SEE GENERAL NOTES	
			DRAWN	E.WHITTE	06/28/22				
REVISION	BY	DATE	CHECKED	H.PETERS	07/11/22	F.P. NO. 408429-1		SECTION 75030	SHEET 1 OF 4

66



FLORIDA DEPARTMENT OF TRANSPORTATION				SKETCH OF DESCRIPTION PARCEL 100			
STATE ROAD NO. 15/600				ORANGE COUNTY			
	BY	DATE	PREPARED BY:	GPI GEOSPATIAL, INC. 3051 E. LIVINGSTON ST, SUITE 300 ORLANDO, FL, 32803	DATA SOURCE:	SEE GENERAL NOTES ON SHEET 1	
	DRAWN	E.WHITTE	06/28/22				
REVISION	BY	DATE	CHECKED	H.PETERS	07/11/22	F.P. NO. 408429-1	SECTION 75030 SHEET 2 OF 4 67

PARCEL 100

That part of:

The Private Park, in BLOCK 8, Orwin Manor Westminster Section, as recorded in Plat Book J, Page 118 of the Public Records of Orange County, Florida, being in Section 12, Township 22 South, Range 29 East, Orange County, Florida;

Described as follows:

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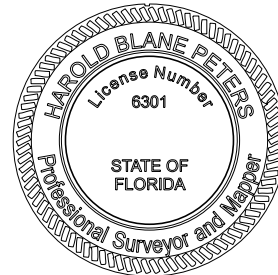
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HAROLD B. PETERS
FLORIDA PROFESSIONAL SURVEYOR AND MAPPER NO. 6301
GPI GEOSPATIAL, INC.
3051 E. LIVINGSTON ST, SUITE 300
ORLANDO, FL, 32803

DATE:



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY HAROLD B. PETERS, PSM #6301, ON 06/28/22.

NOT VALID WITHOUT ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

			FLORIDA DEPARTMENT OF TRANSPORTATION			
			SKETCH OF DESCRIPTION - NOT A SURVEY			
			STATE ROAD NO. 15/600		ORANGE COUNTY	
			BY	DATE	PREPARED BY: GPI GEOSPATIAL, INC. 3051 E. LIVINGSTON ST, SUITE 300 ORLANDO, FL, 32803	DATA SOURCE: SEE GENERAL NOTES ON SHEET 1
			DRAWN	E.WHITTE	06/28/22	
			CHECKED	H.PETERS	07/11/22	
REVISION	BY	DATE	F.P. NO. 408429-1		SECTION 75030	SHEET 4 OF 4 69



City Commission agenda item

item type Public Hearings: Quasi-Judicial Matters (Public participation and comment on these matters must be in-person.)	meeting date August 23, 2023
prepared by Corinna Lundgren	approved by Michelle del Valle, Randy Knight
board approval Completed	
strategic objective	

subject

Resolution 2277-23 - Designating the home at 1714 Westchester Avenue, built in 1940, to the Winter Park Register of Historic Places.

motion / recommendation

The Historic Preservation Board recommends approval of this historic designation.

background

Michael Tudor has voluntarily agreed to designate the home at 1714 Westchester Avenue to the Winter Park Register of Historic Places. This home is an example of the Minimal Traditional architectural style applied to a residence as was popular when this home was built in 1940 along with many others in the Orwin Manor neighborhood.

This one-story home is a total of 2,630 square feet with 2,114 square feet of living space as a three-bedroom, two-bath residence with an attached garage and open front porch. While there are no plans to do so at this time, the home could be expanded to the rear.

The Minimal Traditional architectural style was popular during the 1930's and 1940's across the nation. Many people coming out of the depression era had limited financial resources and these plain and simple homes were functional and popular for allowing home ownership. While those with more financial resources during that era might have been able to afford the Craftsman or Bungalow style homes with more exterior ornamentation, there were many young couples or blue-collar workers who built to the Minimal Traditional style in order to achieve home ownership. Orwin Manor has many Minimal Traditional homes along with Spanish Mission styles that were also popular during that era.

In this current residential market environment that emphasizes tear downs and rebuilds,

this designation will ensure that the scale and character of the original Orwin Manor homes remains in place. 1714 Westchester Avenue was originally constructed in 1940 as part of the Orwin Manor development, retains its original architectural integrity and is qualified for listing on the Winter Park Register of Historic Places.

alternatives / other considerations

fiscal impact

ATTACHMENTS:

[Resolution 2277-23_1714_Westchester_Ave..doc](#)

ATTACHMENTS:

[Site Pictures.pdf](#)

ATTACHMENTS:

[Location Map.pdf](#)

RESOLUTION 2277-23

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF WINTER PARK, FLORIDA, DESIGNATING THE PROPERTY LOCATED AT 1714 WESTCHESTER AVENUE, WINTER PARK, FLORIDA AS A HISTORIC RESOURCE ON THE WINTER PARK REGISTER OF HISTORIC PLACES.

WHEREAS, there are located within the City of Winter Park historic sites, areas, structures, buildings, improvements and appurtenances, both public and private, both on individual properties and in groupings, that serve as reminders of past eras, events, and persons important in local, state and national history; or that provide significant examples of past architectural styles and development patterns and that constitute unique and irreplaceable assets to the City; and

WHEREAS, the City Commission recognizes that the sites and properties of historical, cultural, archaeological, aesthetic and architectural merit contribute to the public health, welfare, economic well being and quality of life of the citizens of Winter Park; and

WHEREAS, there is the desire foster awareness and civic pride in the accomplishments of the past; and

WHEREAS, the Winter Park Historic Preservation Board has determined and recommended that the property at 1714 Westchester Avenue with the existing home built in 1940 is an example of the Minimal Traditional style architecture popular during that period.

NOW, THEREFORE, be it resolved by the City Commission of the City of Winter Park, Florida that:

SECTION 1. That the City Commission of the City of Winter Park hereby designates 1714 Westchester Avenue as a historic resource on the Winter Park Register of Historic Places.

ADOPTED at a regular meeting of the City Commission of the City of Winter Park held in City Hall, Winter Park on this 23rd day of August, 2023.

Phillip M. Anderson, Mayor

ATTEST:

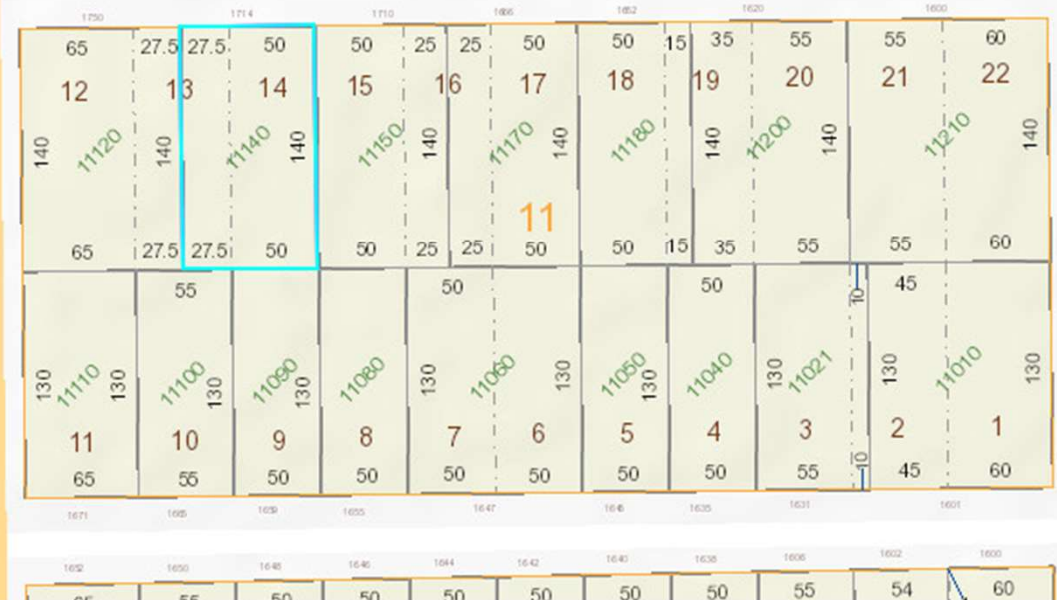
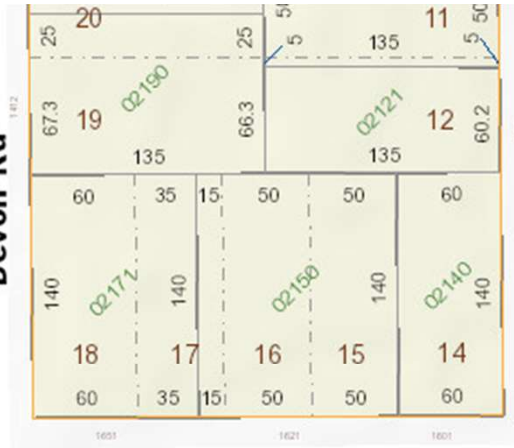
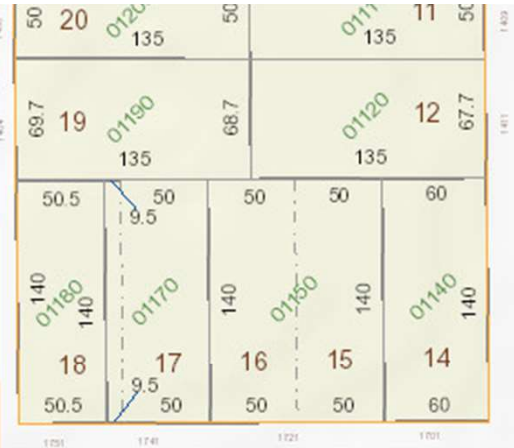
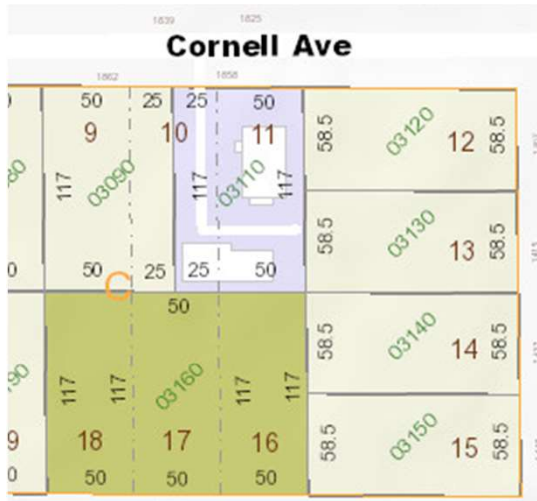
Rene Cranis, City Clerk

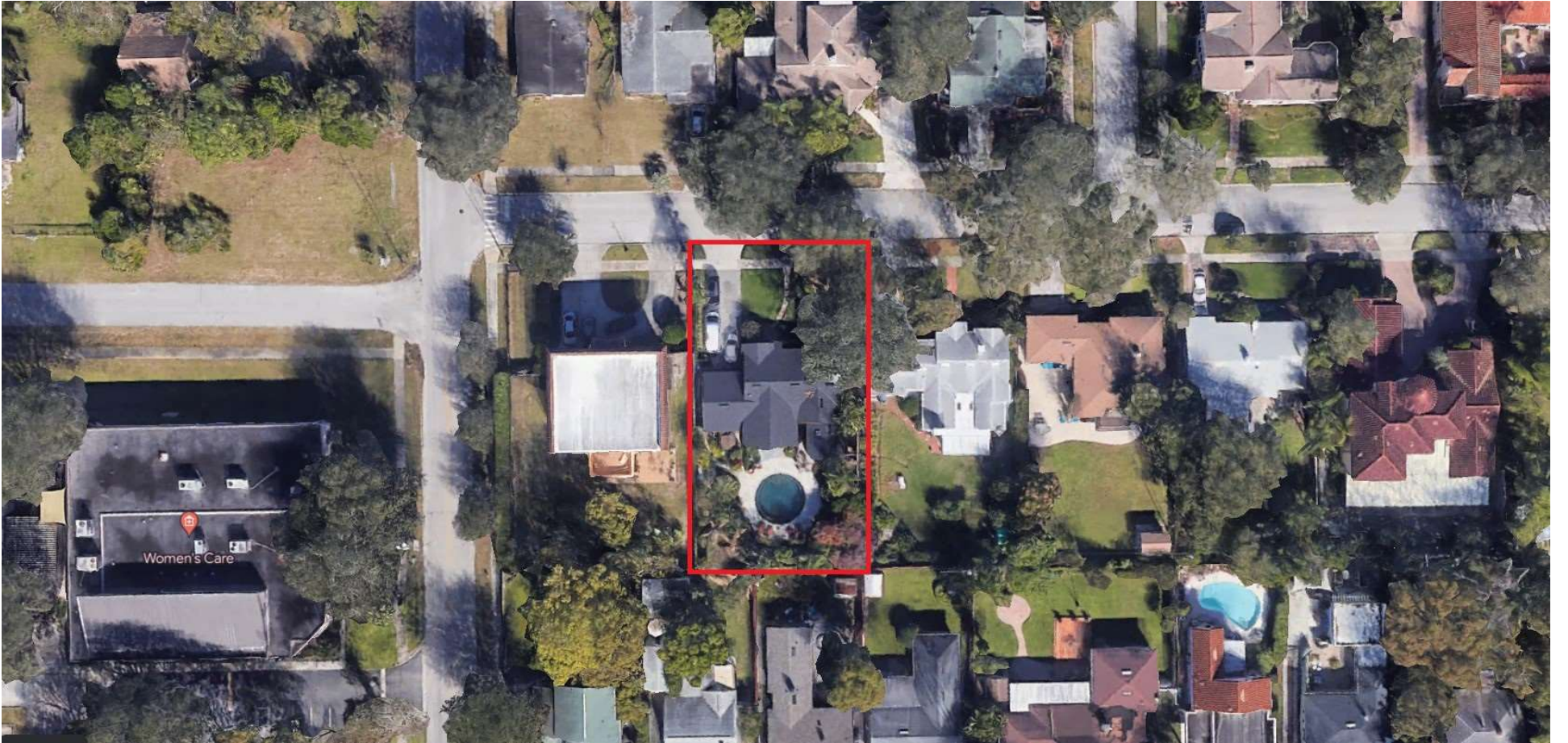














City Commission agenda item

item type Public Hearings: Non-Quasi Judicial Matters (Public participation and comment on these matters may be virtual or in-person.)	meeting date August 23, 2023
prepared by Rene Cranis	approved by Michelle del Valle, Randy Knight
board approval Completed	
strategic objective Improved public health related to management of private lift stations, and improved utility operations.	

subject

Ordinance 3279-23 - amending sections of Chapter 102, Utilities, relating to sewer impact fee deferral program; utility connection requirements for future annexations; reporting and maintenance of private lift stations; pre-treatment requirements for dental amalgams; and other code cleanup. (2nd reading)

motion / recommendation

Approval.

background

Sewer impact fee deferral program: Program allows customers to connect to existing city sewer with a 20% down payment of the impact fees and the remainder spread over 24 months.

Utility connection requirements for future annexations: this will require customers who are connecting to water or sewer to annex into the City of Winter Park once conditions are met or enter into an annexation agreement.

Reporting and maintenance of private lift stations: This program will require private lift stations that connect to city sewer to contract with a qualified person or firm to provide maintenance, maintain records, report sanitary sewer overflows to proper state agencies, allow for an annual inspection by city staff, and pay an annual administration fee.

Pre-treatment requirements for dental amalgams: This program requires all commercial customers who deal with dental amalgams to provide a ISO and ANSI/ADA approved pretreatment system as part of our industrial waste pretreatment program.

Other code cleanup: Move all reference to fees to the fee schedule adopted as part of the annual budget.

These changes are proposed to comply with recommendations of city staff, the Lake Killarney Board and Utility Advisory Board.

alternatives / other considerations

These changes are proposed to comply with recommendations of city staff, the Lake Killarney Board and Utility Advisory Board.

fiscal impact

Fiscal impact will be minimal. Most of the proposed new duties will be performed by an existing, but unfilled, position. The remainder will be covered by fees or are the responsibility of private customers.

ATTACHMENTS:

[Ordinance amending Chapter_102_Utility.doc](#)

ORDINANCE 3279-23

AN ORDINANCE OF THE CITY OF WINTER PARK, FLORIDA AMENDING ARTICLE I OF CHAPTER 102 OF THE CITY OF WINTER PARK CODE OF ORDINANCES; AMENDING SECTION 102-60 OF ARTICLE III OF CHAPTER 102 OF THE CITY OF WINTER PARK CODE OF ORDINANCES; AMENDING SECTIONS 102-93 THROUGH 102-100 OF DIVISION 1 OF ARTICLE IV OF CHAPTER 102 OF THE CITY OF WINTER PARK CODE OF ORDINANCES; AMENDING SECTIONS 102-132, 102-134 AND 102-135 OF DIVISION 3 OF ARTICLE IV OF CHAPTER 102 OF THE CITY OF WINTER PARK CODE OF ORDINANCES; PROVIDING FOR CONFLICTS, SEVERABILITY, CODIFICATION, AND AN EFFECTIVE DATE.

WHEREAS, the City of Winter Park (hereinafter referred to as the “City”) finds that it is necessary to amend Chapter 102 “Utilities” of the City’s Code of Ordinances (“Code”) as set forth in this Ordinance; and

WHEREAS, the City desires to require new sewer and water connections and services for properties located outside of the City limits to either annex into the City or execute an annexation agreement as a pre-condition to obtaining sewer and/or water connection and services from the City; and

WHEREAS, the City recognizes the need for easement encroachment agreements when a property owner’s improvements are within a City drainage or utility easement and desires to establish a process for which encroachment agreements shall be entered into; and

WHEREAS, the City desires to amend Chapter 102 to strengthen the provisions regarding the collection of unpaid utility service fees, impact fees and connection fees and concerning enforcement of the requirements of Chapter 102; and

WHEREAS, the City desires to amend Chapter 102 to require annual permitting, inspection and maintenance of private lift stations; and

WHEREAS, the City finds it beneficial to coordinate with other local governments when a property is served by utilities from both the City and another local government, and the City desires to establish a process by which the City can provide joint billing and collection services with the other local government; and

WHEREAS, the City desires to readopt Section 102-2 of the City Code since it sunsetted under its own terms; and

WHEREAS, the City has determined that this Ordinance is in the best interest of the City and necessary for the protection of the health, safety, and general welfare of the citizens of Winter Park, Florida.

NOW, THEREFORE, IT IS HEREBY ORDAINED BY THE CITY OF WINTER PARK, FLORIDA, AS FOLLOWS:

SECTION I: Recitals. The above recitals are true and correct, are adopted and incorporated herein, and constitute the legislative findings of the City Commission of the City of Winter Park.

SECTION II: Amendment. Article I of Chapter 102 of the City of Winter Park Code of Ordinances are hereby amended as follows (underlined language are additions; ~~stricken through~~ language are deletions; provisions not shown are not being amended); the sunset subsection (7) of Section 102-2 is eliminated and Section 102-2 is reestablished and readopted into the code without future sunseting;

Chapter 102 – UTILITIES

ARTICLE I. - IN GENERAL

Sec. 102-1. - Stormwater management.

Wherever stormwater drainage is required under this chapter, the stormwater management system shall be designed and maintained in accordance with the provisions of all ordinances.

Sec. 102-2. - ~~West Fairbanks Avenue Water~~/Sewer Impact Fee Deferral Program.

There is hereby established, subject to the terms and conditions stated herein, the ~~West Fairbanks Avenue Water~~/Sewer Impact Fee Deferral Program (the "program").

- (1) *Purpose.* The purpose of the program is to incentivize economic development, encourage use of city utility service, and provide an incentive for customers on septic tanks to connect to and use city sewer where available. ~~to business owners to relocate or expand existing business to the West Fairbanks Corridor.~~
- (2) *Description of the benefit extended to approved applicants.* If an applicant is accepted into the program, then the applicant will receive the benefit provided herein with respect to ~~water~~/sewer impact fees owed. The applicant will only pay 20 percent of the assessed ~~water and~~ sewer impact fees otherwise due in full at the time of permitting, with the remaining 80 percent due to be paid in 24 equal monthly installments, ~~with the first payment due on the date of the issuance of a temporary or final certificate of occupancy, whichever occurs first.~~
- (3) *Eligibility to participate in the program.* Eligible participants will include both commercial uses and residential properties, including multi-family uses treated by the city as a commercial use, ~~and businesses within the designated West Fairbanks Avenue district, more particularly described in a map of the West Fairbanks Avenue District, maintained in the city's department of public works, (hereinafter the "West Fairbanks Avenue District").~~ However, in order to be eligible, the applicant must be assessed at least \$1,000.00 in ~~water~~/sewer impact fees.
- (4) *Program requirements.*
 - a. The applicant must be a business or property owner whose property is currently being served by a septic tank for wastewater purposes located in the West Fairbanks Avenue District.
 - b. The applicant must be assessed an impact fee of at least \$1,000.00 as the result of an assessment issued by the city's ~~water and~~ wastewater department.
 - c. The applicant must contract to use city sewer and water service.
 - d. The applicant must contract to use city electric service if it is available to the address.
 - e. If the property is not located within the City of Winter Park's municipal boundary at the time of application, the applicant must agree to annex into the City of Winter Park (See Section 102-3).
 - f. The applicant must be in good standing with the city, including no outstanding code enforcement prosecutions, fines or liens, and must be current on all

outstanding taxes and fees owed to the City of Winter Park at the time of application.

- (5) *Application and contract.* The city manager or his designee is authorized to develop an application form that is consistent with the requirements of the program, and that is not in conflict with these requirements. The city manager or his designee is also directed to develop in consultation with the city attorney a form contract that each approved applicant must enter as a condition of participating in the program. The requirements for the application and contract shall include the following provisions:
- a. The applicant and the party entering the contract must be an owner or authorized agent on behalf of the property that is participating in the program. If requested by the owner, the tenant may also become a party to the contract.
 - b. The application and contract must make provision for the applicant being in good standing with the city with regard to financial and compliance matters.
 - d. The application and contract will include provisions for annexation into the City of Winter Park if the property is not currently located within the municipal boundary.
 - d. The application and contract will include a binding commitment to use utility service available to the property and to make payments of the utility service in accordance with the requirements of the City of Winter Park and its utility divisions.
 - e. The application and contract will have provisions requiring payment of the deferred 80 percent of impact fees, commencing with the receipt of a temporary or final certificate of occupancy, whichever is first, with the balance being paid in 24 equal monthly installments. The applicant will agree to a lien, in the nature of an assessment or enforcement lien, recorded in the event that the applicant defaults in making payments due to the city pursuant to the program.
 - f. The city manager is directed to make both the form contract and form application available on the city's website. The city manager shall make provision for promoting the program so that eligible participants are reasonably made aware of the availability of the program for qualified applicants.
 - g. The city manager and the mayor are authorized to sign program agreements entered with qualified and approved applicants. The city manager shall make provision for reporting to the city commission the extent of participation in the program and the status and degree of fulfillment of program requirements, including payment of deferred impact fees.
- (6) *Municipal discretion.* The City of Winter Park has the sole authority to determine eligibility of any applicant pursuant to these program guidelines. The city manager or his designee may make minor procedural changes to the manner in which the program is implemented, but any change made by the city manager or his designee should be reported to the city commission, and no change will be made that is substantive or material in relationship to the overall scope of the program without obtaining prior approval from the city commission. Any material change in the program that deviates

from the specific requirements as provided in this section will require an amendment by ordinance. Nothing in this section is intended to prevent the city from adopting and providing other incentives or grant programs related to the conversion of septic tanks to city sewer connection and service.

~~(7) *Sunset.* This is a temporary incentive program and applications will only be accepted through August 1, 2015. This section will sunset on August 1, 2017, unless the program is extended by action of the city commission of the City of Winter Park.~~

~~(8) *Additional general conditions.*~~

- a. Impact fee credits only vest equal to the amount of fees actually paid. If the applicant defaults or for any other reason fails to make full payment due, the property will only receive credit for the amount of funds actually collected.
- b. A property that has participated in the program may not be deannexed out of the City of Winter Park, to the fullest extent allowed by law.

Sec. 102-3.- New Sewer or Water Service Outside City Limits.

The city will not provide new water and/or wastewater connections or services to or for any property located outside the city limits unless otherwise agreed to in an annexation agreement executed by the city and the owner(s) of the property desiring to obtain such new water and/or wastewater connections or services. If application is made for water or wastewater utilities connection or service (or a combination thereof) to property located outside the city boundaries that is contiguous to the existing city boundaries or is within an enclave surrounded by the city's boundaries, the property owner shall simultaneously annex the property into the city as a prerequisite to the provision of water or wastewater utilities connection or service to the property. If application is made for water or wastewater utilities connection or service (or a combination thereof) to property located outside the city boundaries that is not contiguous to the existing city boundaries, the property owner shall simultaneously execute an annexation agreement, in a form acceptable to the city and binding upon the property, giving the city the right to annex the property into the city limits when the prerequisites of annexation under general law are met. Such annexation agreement will also require the property owner to agree not to voluntarily annex the property into another municipality. Failure of the property owner to annex the property into the city limits pursuant to the annexation agreement shall constitute grounds to terminate water and/or wastewater service to the property. "Application" for water or wastewater utilities service shall include any and all applications for water and/or wastewater connection or service, to reactivate prior water and/or wastewater service, or to add additional water and/or wastewater service, including the addition of additional water meters, new fixtures or water and/or wastewater service capacity. Application" for water or wastewater utilities service includes an attempt to circumvent a formal application or request for water and/or wastewater connections or services, including a property owner's, tenant's or occupant's use of a prior water and/or wastewater connection or service of previous owner, tenant or occupant. Without limiting the foregoing, the requirements of this subsection also apply to properties within the city's territorial service area for water and/or wastewater services.

Sec. 102-4.- Customer Acceptance of Conditions of Service.

The obtainment of utility services from the city or connection of city utility services to a property shall act to grant the properly authorized agent of the city free access to the property for which utilities are connected at all reasonable hours for the purpose of: (i) reading, repairing, removing, reinstalling, or examining utility meters, (ii) inspecting, maintaining, repairing, removing, reinstalling or inspecting utility service lines and connections, or (iii) making such other inspection of the property and utility improvements as the city may determine necessary to properly maintain and service the public utilities system and for protection of the health and general welfare of the utility customer and general public. By accepting utility services from the city, customers agree to comply with and that they are subject to the provisions of this chapter regardless of whether the property connected to utility services is located within or outside the jurisdictional limits of the city.

Sec. 102-5. - Easement Encroachment Agreements.

The city manager shall have the authority to approve and execute agreements authorizing by license the encroachment of a property owner's improvements within a city drainage or utility easement with terms (including without limitation, incorporating the requirements of this section) and in a form acceptable to the city manager and city attorney. The authorization of an encroachment within a city easement shall not restrict the city in any manner from accessing, maintaining, repairing or reconstructing the city's utilities and other improvements and facilities located within the city's easements pursuant to the city's full rights under the applicable easement. The city shall not be required to repair or reconstruct the property owner's encroaching improvements if such is damaged by virtue of the city's operation, accessing, maintenance, repair and reconstruction of the city's utilities, improvements or facilities, or exercise of the city's rights under the city's easement. The property owner shall as a condition of any easement encroachment agreement be required to acknowledge its acceptance of the risks involved in encroachment into the city's easement, agree to correct any damage the property owner or its agents or the encroaching improvements cause to the city's improvements within the easement, and to indemnify and hold harmless the city, its officers, agents and employees, from and against all claims, damages, losses and expenses, including reasonable attorney's fees, arising out of or resulting from the encroachment within the city's easement. The city manager may require a property owner to pay an application fee and to reimburse the city for its attorneys' fees relating to consideration and preparation of an easement encroachment agreement. This provision does not create a right for any property owner to obtain an easement encroachment agreement. The city's determination of whether to authorize an easement encroachment is purely matter of administrative discretion and a function of the city's propriety and property interest in its easements and improvements therein.

Sec. 102-6. - Collection of Water and Sewer Impact and Connection Fees.

In the event that water or sewer impact fees, connection fees, meter or water or sewer service installation charges under this chapter or any portion or combination thereof, are not paid when

due for any reason, including by mistake or inadvertence, the city shall have the right to proceed to collect such fees and charges as follows:

(1) The city shall serve, by certified mail-return receipt requested and regular U.S. mail, a notice of non-payment upon the building permit applicant at the address set forth in the building permit application, and then current owner of the property based on the ownership information appearing on the Orange County Property Appraiser website. Provided the city sends the notice of non-payment, the applicant's and/or current owner's failure to receive delivery of such notice of non-payment shall not invalidate or otherwise impact the city's ability to collect the outstanding amount owed and place and foreclose a notice of lien against the applicable property.

(2) The notice of non-payment shall contain:

(i) A description of the property;

(ii) Advise the applicant and the property owner of the amount due and the fee and/or charges that were not paid; and

(iii) Advise that in the event the fees and/or charges are not paid within thirty (30) calendar days from the date of the notice of non-payment, that a notice of lien against the applicable property for which the building permit was secured may be recorded in the official records of the county and such notice of lien may be foreclosed upon by the city to collect the outstanding sums owed plus accrued interest and attorneys' fees and other collection expenses.

(3) If the amount set forth in the notice of non-payment is not paid within thirty (30) days from the date of the notice of non-payment, then

(i) The outstanding balance owed to the city shall accrue interest at the rate of twelve percent (12%) per annum until such amount is paid in full;

(ii) The city may proceed to record a notice of lien against the applicable property in the official records of the county. Once recorded, the notice of lien shall constitute a lien against the property described therein. The lien shall be coequal with the liens of all state, county, district and municipal taxes, superior in priority to all other recorded liens and claims whether recorded prior to or after the city's lien, except as otherwise provided by law, until paid as provided herein; and

(iii) A copy of the notice of lien shall be served by U.S. Mail to the applicant and the property owner at the same addresses as set forth in subsection (1) above.

(6) After the expiration of thirty (30) days from the date of recording of the notice of lien, a suit may be filed to foreclose said lien. Such foreclosure proceedings shall be instituted and prosecuted in conformity with the procedures for the foreclosure of liens as set forth in the Florida Statutes. The city shall also have the right to bring an action for monetary judgment to collect past due amounts owed.

(7) The owner shall be responsible for and the city shall be entitled to reimbursement for the payment of all collection expenses and costs, including attorneys' fees and litigation costs and recording and filing fees, incurred by the city in the collection of fees and charges, filing of liens and in actions to foreclose such liens or actions for a monetary judgment.

(8) If impact fees, connection fees, meter or water or sewer service installation charges, or any portion or combination thereof, have not been paid when due, the city shall have the right

to, without notice, immediately withhold the issuance of and not process for review any certificate of occupancy, development permit or development order applications associated with the development and property at issue and may issue and enforce a stop work order on construction associated with the development and property at issue until such fees and charges and the city's associated collection costs are paid in full. Further, the city may refuse to provide or discontinue utility services to the property at issue until such fees and charges and the city's associated collection costs are paid in full.

(9) The collection and enforcement procedures set forth in this section shall be cumulative with, supplemental to and in addition to, any applicable procedures provided in any other ordinance or administrative regulations of the city, any applicable law or administrative regulation of the state, or any agreement. Failure of the city to follow the procedure set forth in this section shall not constitute a waiver of its rights to proceed under any other ordinances or administrative regulations of the city, any applicable law or administrative regulation of the state, or any agreement.

Sec. 102-7. Injunctive relief.

Whenever any person has violated or continues to violate the provisions of this chapter or any order or permit issued hereunder, the city may petition the circuit court for the issuance of a preliminary and/or permanent injunction which restrains or compels the activities on the part of the violator.

Sec. 102-8. - Interlocal Cooperation.

Certain properties serviced by city utilities are also provided utility services by other local governments. As a matter of convenience and interlocal cooperation, the city may enter into agreements with other local government utility service providers for the city to provide billing and collection services for such other local government utility services provided to mutual customers so that such customers receive a joint invoice. In the event the city performs billing and collection services for other utility service providers, the rates charged to customers for each utility service will be governed by the applicable local government utility service provider's rates, fees and charges. In the event of nonpayment of a joint invoice for both city utilities and another local government's utility services, the city shall have the right to disconnect any one or more of the city's utilities services as the result of nonpayment until such amounts are paid in full along with the right to take any other remedies as may be permitted by law or in equity.

Sec. 102-9. - Amendment to Fees, Charges & Penalties.

The city commission shall have the authority to modify from time to time the rates, fees, charges and penalties set forth in this chapter and to establish and modify utility service related fees and charges by way of ordinance, resolution or otherwise by approval of a fee schedule, and the failure of a person or customer to pay any such applicable fees, charges and penalties when due shall be a violation of this chapter and subject to the enforcement and collection provisions hereof.

Sec. 102-10.- Oversizing.

The city may require a development to install utility main lines, a lift station or any portion thereof to a size larger or length longer than ordinarily required as determined by the Water & Wastewater Department Director (referred to as "oversize" or "oversizing"). In the event the city requires a development to oversize main lines or a lift station, or any portion thereof, the city shall reimburse the owner or developer for the additional reasonable costs incurred for oversizing the main lines or lift station, at an amount approved as reasonable by the Water & Wastewater Department Director. Provided such is within the city manager's purchasing authority, the city manager may authorize the expenditure of city funds for reimbursements to cause oversizing to occur. The city may require the owner(s) and developer of property or development to enter into an agreement with the city concerning sewer connections, installation of main lines or lift stations, reimbursement of any oversizing costs and other matters relating to the provisions of this section.

Sec. 102-11.- Rules & Policies.

The city manager is hereby authorized to adopt and enforce administrative rules and policies to implement the provisions of this chapter as the city manager deems necessary and appropriate provided such are consistent with the intent and purpose of this chapter. Rules and policies adopted by the city manager pursuant to this section are subject to rescission or modification by vote of the city commission.

Secs. 102-~~312~~—102-25. - Reserved.

SECTION III: Amendment. Section 102-60 of Article III of Chapter 102 of the City of Winter Park Code of Ordinances is hereby amended as follows (underlined language are additions; ~~stricken through~~ language are deletions; provisions not shown are not being amended):

Chapter 102 – UTILITIES

ARTICLE III. – WATER SERVICE

Sec. 102-60. - Collection of water service fees and charges; liens.

(a) Collection of water service fees and charges. Water service fees and charges shall be charged and collected as provided by sections 102-134, ~~and this section~~102-135 and other applicable provisions of this chapter. The city shall have the right to disconnect a property from water and/or wastewater services if service fees and/or charges are not paid when due. ~~If a representative of the city arrives at the service address to disconnect service for nonpayment~~

~~and the customer tenders payment instead of having the service disconnected, a service charge as prescribed by the city commission shall be charged and collected in addition to all past due water, sewer, refuse and related charges. When water service is disconnected due to nonpayment, service shall not be reconnected until all past due water, sewer, refuse and related fees, charges and penalties are fully paid, together with a reconnection charge as prescribed by the city commission. In accordance with section 180.135, Fla. Stat. the city may not refuse or discontinue water and sewer services to the owner of any rental unit or to a tenant or prospective tenant of such rental unit for nonpayment of water service charges incurred by a former occupant of the rental unit who contracted directly with the city for such water services and provided such former occupant was not the property owner and provided the provisions of section 102-134(f) do not apply.~~

(b) Lien.

(1) The city shall have a lien on all lands or premises served by its water system for all service fees, surcharges or penalties imposed under this article and service charges for such water facilities until paid, which lien shall be prior to all other liens on such lands or premises except the lien of state, county and municipal taxes and municipal liens for other municipal services such as sewer and refuse, and shall be on a parity with the lien of such state, county and municipal taxes and other municipal liens. Such lien shall arise at the time of connection of water service to such lands or premises and shall be due and payable at the time of delinquency of any unpaid water fees and service charges. Interest shall accrue on unpaid liens at the rate of 12 percent per annum. The city shall be entitled to institute foreclosure proceedings in accordance with the procedures set forth in section 102-135. The city will not record a notice of lien for water service fee and charges that is not permitted by section 180.135, Fla. Stat.

(2) The city shall serve, by certified mail-return receipt requested and regular U.S. Mail, a notice of non-payment to the customer at the service address and the current owner of the property based on the ownership information appearing on the Orange County Property Appraiser website. Provided the city sends the notice of non-payment, the customer's and/or current owner's failure to receive delivery of such notice of non-payment shall not invalidate or otherwise impact the city's ability to place and foreclose a notice of lien against the applicable property.

(3) The notice of non-payment shall contain:

(i) A description of the property;

(ii) Advise the customer and the property owner of the amount due and the fee and/or charges that were not paid; and

(iii) Advise that in the event the fees and/or charges are not paid within thirty (30) calendar days from the date of the notice of non-payment, that a notice of lien may be recorded in the official records of the county and such notice of lien may be foreclosed upon by the city to collect the outstanding sums owed plus accrued interest and attorneys' fees and other collection expenses.

(4) If the amount set forth in the notice of non-payment is not paid within thirty (30) days from the date of the notice of non-payment, then

(i) The outstanding balance owed to the city shall accrue interest at the rate of twelve percent (12%) per annum until such amount is paid in full;

(ii) The city may proceed to record a notice of lien against the applicable property in the official records of the county; and

(iii) A copy of the notice of lien shall be served by U.S. Mail to the customer and the property owner at the same addresses as set forth in subsection (2) above.

(5) After the expiration of thirty (30) days from the date of recording of the notice of lien, a suit may be filed to foreclose said lien. Such foreclosure proceedings shall be instituted and prosecuted in conformity with the procedures for the foreclosure of liens as set forth in the Florida Statutes. The city shall also have the right to bring an action for monetary judgment to collect past due amounts owed.

(6) The owner shall be responsible for and the city shall be entitled to reimbursement for the payment of all collection expenses and costs, including attorneys' fees and litigation costs and recording and filing fees, incurred by the city in the collection of fees and charges, filing of liens and in actions to foreclose such liens or actions for a monetary judgment.

(7) The collection and enforcement procedures set forth in this section shall be cumulative with, supplemental to and in addition to, any applicable procedures provided in any other ordinance or administrative regulations of the city, any applicable law or administrative regulation of the state, or any agreement. Failure of the city to follow the procedure set forth in this section shall not constitute a waiver of its rights to proceed under any other ordinances or administrative regulations of the city, any applicable law or administrative regulation of the state, or any agreement.

SECTION IV: Amendment. Sections 102-93 through 102-101 of Division 1 of Chapter 102 of the City of Winter Park Code of Ordinances and Sections 102-132, 102-134 and 102-135 of Division 3 of Article IV of Chapter 102 of the City of Winter Park Code of Ordinances are hereby amended as follows (underlined language are additions; ~~stricken through~~ language are deletions; provisions not shown are not being amended):

Chapter 102 – UTILITIES

DIVISION 1. - GENERALLY

Sec. 102-93. Use of public sewers required.

- (a) It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner on public or private property within the city or in any area under the jurisdiction of the city any human or animal excrement, garbage or other objectionable waste.

- (b) It shall be unlawful to discharge to any natural outlet within the city or in any area under the jurisdiction of the city any sewage except where suitable treatment has been provided in accordance with the provisions of this article.
- (c) Except as provided in this article, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of sewage.
- (d) Flush toilets shall be required within the city in all houses, buildings or structures used for human occupancy, employment, recreation or other purposes, and such flush toilets shall be connected to the public sanitary sewer at the owner's expense as and when required by the provisions of section 102-94(c), subject, however, to the following exceptions and limitations: If the house, building or structure is not situated on property abutting a street, alley or road right-of-way wherein there is located a public sanitary sewer or if the house, building or structure is not within 100 feet of the public sanitary sewer, such connections shall not be required; further, if the connection of the house, building or structure requires unusual and costly plumbing such as a lift station, force main or similar plumbing facilities, either the city shall bear such expense and allocate its costs through the public sanitary sewer system or no connection shall be required.

Sec. 102-94. Private sewage disposal.

- (a) Where a public sanitary sewer is not available under the provisions of section 102-93(d), the building sewer shall be connected to a private sewage disposal system complying with the provisions of this section and section 102-95, if applicable, and no sewer fees and charges provided for in sections 102-131 and 102-132 shall be imposed.
- (b) The type, capacities, location and layout of a private sewage disposal system shall comply with all state and county requirements.
- (c) Notwithstanding the provisions of section 102-93, existing residences, places of business and other structures served by adequate private sewage disposal systems, including septic tanks, constructed prior to the construction and availability of a public sanitary sewer shall not be required to connect to the public sanitary sewer until such time as the private sewage disposal system requires maintenance or repair or is abandoned or is condemned by regulatory health authorities. When such private sewage disposal system becomes inoperative, requires maintenance or repair, is abandoned or is condemned by regulatory health authorities, connection with the public sanitary sewer shall be made within 15 days following notice by the city to the property owner. If such connection is not made, the city shall cause all water service thereto to be discontinued until such connection is provided and until all connection and reconnection charges are paid.
- (d) The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times at no expense to the city.
- (e) The owners of private sanitary sewer collection systems within the utility service area shall be responsible for the proper maintenance and operation of said systems. The owners shall be required to maintain said systems to minimize inflow and infiltration.

- (f) Any person seeking a permit from the city for installation of a private collection system or owning a private sewer collection system on the effective date of this article shall record in the public records of Orange County a document delineating the private collection system and indicating the exact location of any and all lift stations included within the system. The owner shall provide a copy of the recorded document to the city utility department. The utility department will maintain documents pertaining to private collection systems located within the utility service area.
- (g) The owners of private collection systems shall be required to develop and follow a sewerage spill contingency plan for such systems addressing and remediating sewerage spills caused by but not limited to line failure, line collapse, line obstruction, surcharge, power failure and/or mechanical failure. A copy of this plan shall be provided to the utility department.
- ~~(h) The owner of private sanitary lift stations shall provide a copy of the contract with a reputable person or firm experienced in the operation, maintenance, and repairs of lift stations for review prior to committing to contract for service. The contractor must provide proof of a minimum of two years' experience in lift station operation and maintenance to include pump and electrical experience. The contractor must have access to equipment to pull and service pumps as well as well pumping and hauling lift station waste. The contractor must be able to have a 24-hour, seven-days-a-week response time and be able to respond to site within two hours after notification of spill or overflow. The owners of all private lift stations shall maintain a written maintenance record and shall make same available to the city in the enforcement of the provisions of this section. These records shall be maintained for a period of three years.~~
- ~~(i) Provide the City of Winter Park with a 24-hour emergency contact phone number of the property owner and contractor.~~
- ~~(j) Upon expiration or change of status of the contractor, the owner of the private sanitary lift station must notify the City of Winter Park Industrial Waste division within 72 hours of change.~~
- ~~(k) The owner of the private sanitary lift station must have a sign posted on or adjacent to the lift station, preferably on the control panel, with lettering legible from a distance of 30 feet. The sign is to include the following:
 - ~~(1) Private lift station;~~
 - ~~(2) In case of emergency call _____;~~
 - ~~(3) Owner or business name and phone number;~~
 - ~~(4) Contractor's name and phone number;~~
 - ~~(5) The city will provide the owner of the private lift station a unique identification number for the lift station sign.~~~~
- ~~(l) The city will conduct annual inspections on private lift stations and charge an annual inspection fee. The annual inspection fee will be incorporated in the City of Winter Park Fee~~

~~Schedule. The city will have the right to inspect all private wastewater collection systems and appurtenances, and discontinue sewer service if the private wastewater collection system is not maintained in a sanitary and effective operating condition or if the public sewer facilities may be harmed thereby.~~

(m) No statement contained in this section shall be construed to interfere with any additional requirements that may be imposed by the health officer of the county.

Sec. 102-95. Reporting and Maintenance Requirements for Private Lift Stations.

(a) Purpose. The purpose of this section is to monitor the use of privately owned lift stations within the City. Nothing contained herein is intended to replace or affect the jurisdiction and enforcement of the Florida Department of Environmental Protection or Orange County Health Department, or any other governmental agency charged with administering, regulating, or enforcing matters relating to the construction of wastewater collection and treatment facilities.

(b) Definitions. The following words, terms and phrases, when used in this section, shall have the meaning ascribed to them in this subsection, except where the context clearly indicates a different meaning:

Annual station inspection. The required yearly inspection and certification of all mechanical, structural, and electrical components of certain privately owned lift stations located within the City.

Dwelling, multifamily. A building designed for or occupied exclusively by three or more families.

Dwelling, one-family. A building designed for or occupied exclusively by one family.

Dwelling, two-family. A building designed for or occupied exclusively by two families.

Florida Department of Environmental Protection (FDEP). The State of Florida Department of Environmental Protection, or, where appropriate, the term may also be used as designation for the administrator or other duly authorized official of such state agency. The FDEP serves as the primary compliance and enforcement authority within the state for matters relating to the construction of wastewater collection and treatment facilities. Furthermore, the FDEP serves as the main investigation agency for all sewage spills within lands or waters of the state.

Health hazard. Any condition or action which creates, or may create, a danger to the health, safety, and welfare of the general public. For the purpose of this section, sanitary sewage spills from private lift station facilities onto lands within the City or into waters in or bordering the City will constitute an imminent danger to public health and will be classified as a health hazard.

Orange County Health Department or OCHD. The state health department unit located within Orange County, or, where appropriate, the term may also be used as designation for the administrator or other duly authorized official of such state agency. The OCHD serves as

the primary authority within the county for assessing and determining the appropriate level of public health risk for any accident, outbreak, catastrophe, or natural disaster.

Privately owned lift station or POLS. A mechanical apparatus owned and/or operated by a person or entity other than the City, and designed for the conveyance of sanitary sewage from its origin on private property to publicly owned infrastructure such as a gravity sewer main, sewage force main, lift station, or pumping station. Apparatus may be a package lift station, grinder pump system, or pump station, etc. located on nonpublic property within the corporate boundaries of the City.

(c) *Registration and Registration Certificate.* For any property containing an existing privately owned lift station, the property owner shall register with the City and obtain a registration certificate for such POLS on or before December 31, 2023. Property owners shall register and obtain a registration certificate for all new POLS within ninety (90) days of installation. The property owner shall be required to renew the registration certificate each year. An administrative fee for such registration is authorized to be charged by the City, the amount of which shall be set by resolution and may be amended from time to time. Such registration fee shall include a late fee for any property owner who does not obtain or renew a POLS registration certificate within the time limits imposed by this Division.

(d) *Maintenance Contractor.* At the time of registration of a POLS, the property owner must provide the City with a copy of the contract with a reputable person or firm experienced in the operation, maintenance, and repairs of lift stations for review prior to committing to contract for service. The contractor must provide proof of a minimum of two years' experience in lift station operation and maintenance to include pump and electrical experience. The contractor must have access to equipment to pull and service pumps as well as well pumping and hauling lift station waste. The contractor must be able to have a 24-hour, seven-days-a-week response time and be able to respond to site within two hours after notification of spill or overflow. The owners of all private lift stations shall maintain a written maintenance record and shall make same available to the city in the enforcement of the provisions of this section. These records shall be maintained for a period of three years. Also, the City is to be provided a 24-hour emergency contact phone number of the property owner and contractor. Upon expiration or change of status of the contractor, the owner of the private sanitary lift station must notify the City of Winter Park Industrial Waste division within 72 hours of change.

(e) *Signage.* The owner of the POLS must have a sign posted on or adjacent to the lift station, preferably on the control panel, with lettering legible from a distance of 30 feet. The sign is to include the following:

- (1) Private lift station;
- (2) In case of emergency call _____;
- (3) Owner or business name and phone number;
- (4) Contractor's name and phone number;

(5) The city will provide the owner of the private lift station a unique identification number for the lift station sign.

(f) Agreement. For all new POLS and before connection of the POLS to the City's wastewater system, the property owner shall be required to enter into an agreement with the City regarding the property owners and its successors and assigns obligations under this section.

(g) Annual Inspection. For any property containing a privately owned lift station, the property owner shall obtain an annual inspection on such POLS, certifying that the POLS meets all mechanical, structural, and electrical requirements of the state, except those POLS exempted under subsection (h). Proof of such annual inspection shall be required to obtain an annual registration certificate from the City. Thereafter, the annual station inspection shall be performed within sixty (60) days of the expiration of such registration certificate. The property owner must submit a report to the City certifying the POLS is in proper operating order meeting all state requirements and all needed maintenance/repairs have been completed. This certification of the results from each annual inspection shall be submitted to the City prior to the expiration of the annual registration certificate. Such inspections shall be conducted and certified by a State of Florida licensed Professional Engineer or a State licensed master plumber at the property owner's sole expense.

(h) Exemption from Inspection and Registration Certificate. A property containing only a one-family dwelling or a two-family dwelling shall be exempt from (1) the annual inspection requirements of subsection (g), and (2) the signage requirements of subsection (e). Properties containing a townhouse or multifamily dwelling, which is serviced by a common or community privately owned lift station, shall not qualify for the exemption as outlined in this subsection and shall be required to comply with the reporting requirements.

(i) Right-of-entry. As a condition of connecting a POLS to the City's wastewater system, the property owner grants to the City and its code compliance officers, employees and agents a right-of-entry for inspection and monitoring of a POLS for compliance with this Division.

(j) Sewage Overflow or Spill Reporting. The owner of a private sewage collection system shall be responsible for notifying the Orange County Environmental Protection Department and the Florida Department of Environmental Protection with copy of such notification to the city in the event that a sewage overflow or spill occurs within the owner's system within 36 hours of the event taking place. The owner shall take whatever measures are necessary to protect the public health and the environment from contamination as a result of a sewage overflow. The owner shall clean-up overflows or spills as soon as possible after their discovery.

(k) Penalty. Any property owner who does not obtain and maintain a registration certificate as required by this section shall be deemed to be in violation of the City Code. Any property owner violating this section or section 102-94 may be subject to enforcement by the Code Compliance Board and be subject to the rules and procedures of that board, including being subjected to a fine, in an amount as the Code Compliance Board may determine. In addition to the above, any

property owner failing to obtain the required annual inspection or failing to provide certification of compliance as required by this section, will be reported to the FDEP, OCHD, or any other governmental agency, deemed appropriate by the City Manager or his/her designee. Further, if any violation of Section 102-94 or this section is not corrected within a reasonable period of time as prescribed by the City, the City may, after written notice to the property owner, cause the disconnection of the POLS from the City's wastewater system. Nothing herein shall limit the City's other rights and remedies afforded by law for a violation of Section 102-94 or this section.

Sec. 102-956. Building sewers and connections.

- (a) No unauthorized person shall uncover, make any connections with or opening into, use, alter or disturb any public sewer or appurtenances thereof without first obtaining a written permit from the building official.
- (b) There shall be two classes of sewer permits as follows:
 - (1) For residential service; and
 - (2) For commercial service and service to establishments producing industrial wastes.

In either case, the owner or his agent shall make application on a special form furnished by the city. The permit application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the building official. A permit fee for a residential building sewer permit and a permit fee for a commercial or industrial building sewer permit shall be paid to the city at the time the application is filed, which fees shall be as prescribed by the city commission. The permit fee shall pay the administrative cost in processing the permit application and the cost of sewer lateral location and shall be in addition to the other costs and expenses incident to the installation and connection to the building sewer, such as the cost of time and materials required and county right-of-way utilization fees.

- (c) All costs and expenses incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.
- (d) A separate and independent building sewer shall be provided for every building. This shall not apply if one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard or driveway. In such situation, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.
- (e) Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the building official, to meet all requirements of this article.
- (f) The size, slope, alignment and materials of construction of a building sewer and the methods to be used in excavating, placing of the pipe, jointing, testing and backfilling the trench shall all conform to the requirements of the building and plumbing codes or other applicable rules and regulations of the city. In the absence of code provisions or in

amplification thereof, the materials and procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No. 9 shall apply.

- (g) Whenever possible, the building sewer shall be brought to the building at an elevation below any basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.
- (h) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.
- (i) The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing codes or other applicable rules and regulations of the city or the procedures set forth in appropriate specifications of the ASTM and the WPCF Manual of Practice No. 9. All such connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the building official before installation.
- (j) The applicant for the sewer permit shall notify the building official when the building sewer is ready for inspection and connection to the sanitary sewer. The connection shall be made under the inspection and approval of the building official or his representative.
- (k) All excavations for building sewer installation shall be adequately guarded with barricades and lights to protect the public from hazard. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the city.

Sec. 102-967. Protection from damage.

No person shall maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the sewage works.

Sec. 102-978. Unauthorized use of sewer system.

It shall be unlawful for any person to tap, cut or in any way use any line, branch or part of the sanitary sewer system without obtaining a written permit and paying all fees, rates and charges established by the city.

Sec. 102-989. ~~Renewal of occupational license~~ Business tax receipt subject to evaluation for adequate pollution control facilities.

After any ~~occupational license~~ new business tax receipt is issued, a copy of the business tax receipt application shall be forwarded to the environmental division, wastewater utility for a determination of the potential impacts such business or related activity may have on the wastewater utility system., ~~and if alteration of occupational use or activities would create pollution problems, modification of the facilities such as grease traps and other pretreatment~~

facilities may be required as a condition of receiving wastewater service from the city. Where facilities require updating or additional equipment to meet pollution standards, such changes shall be made prior to the renewal of any business tax receipt ~~occupational license~~.

Sec. 102-100. Requirements for dental facilities that remove or place amalgam fillings.

(a) Definitions. For the purposes of this section the following words and phrases shall be as defined herein.

Amalgam separator is a device that employs filtration, settlement, centrifugation, or ion exchange to remove amalgam and its metal constituents from a dental office vacuum system before it discharges to the sewer.

Amalgam waste means and includes non-contact amalgam (amalgam scrap that has not been in contact with the patient); contact amalgam (including, but not limited to, extracted teeth containing amalgam); amalgam sludge captured by chairside traps, vacuum pump filters, screens, and other amalgam trapping devices; used amalgam capsules; and leaking or unusable amalgam capsules.

ANSI/ADA Standard No. 108 is the American National Standards Institute and American Dentistry association standard for amalgam separators.

Existing source is any facility subject to this section whose first discharge to the sewer collection system occurred on or before July 14, 2017.

ISO 11143 is the International Organization for Standardization's standard for amalgam separators.

New source is any facility subject to this section whose first discharge to the sewer system occurs after July 1, 2023 and must comply immediately upon commencement of discharge.

(b) All owners and operators of dental facilities that remove or place amalgam fillings shall comply with the following reporting and waste management practices:

- (1) For existing sources, the one-time compliance report is due no later than January 31, 2023 or no later than 90 days after transfer of ownership.
- (2) For new sources, the one-time compliance report is due within 90 days of the start of discharge to the sewer collection system.
- (3) No person shall rinse chairside traps, vacuum screens, or amalgam separators equipment in a sink or other connection to the sanitary sewer.
- (4) Owners and operators of dental facilities shall ensure that all staff members who handle amalgam waste are trained in the proper handling, management and disposal of mercury-containing material and fixer-containing solutions and shall maintain training records that shall be available for inspection by the superintendent or designee during normal business hours.
- (5) Amalgam waste shall be stored and managed in accordance with the instructions of the recycler or hauler of such materials.

- (6) Bleach and other chlorine-containing disinfectants shall not be used to disinfect the vacuum line system.
- (7) The use of bulk mercury is prohibited. Only pre-capsulated dental amalgam is permitted.
- (c) All owners and operators of dental vacuum suction systems, except as set forth in subsections (d) and (e) of this section, shall comply with the following:
 - (1) An ISO 11143 or ANSI/ADA Standard No. 108 certified amalgam separator or equivalent device shall be installed for each dental vacuum suction system on or before July 14, 2020; provided, however, that all dental facilities that are newly constructed on and after the effective date of this ordinance shall include an installed ISO 11143 or ANSI/ADA Standard No. 108 certified amalgam separator device. The installed device must be ISO 11143 or ANSI/ADA Standard No. 108 certified as capable of removing a minimum of 95 percent of amalgam. The amalgam separator system shall be certified at flow rates comparable to the flow rate of the actual vacuum suction system operation. Neither the separator device nor the related plumbing shall include an automatic flow bypass. For facilities that require an amalgam separator that exceeds the practical capacity of ISO 11143 test methodology, a non-certified separator will be accepted, provided that smaller units from the same manufacturer and of the same technology are ISO-certified.
 - (2) Proof of certification and installation records shall be submitted to the city manager or designee within 30 days of installation.
 - (3) Amalgam separators shall be maintained in accordance with manufacturer recommendations. Installation, certification, and maintenance records shall be available for immediate inspection upon request therefor by the city manager or designee during normal business hours. Records shall be maintained for a minimum of three years.
- (d) Facilities with vacuum suction systems that meet all the following conditions may apply to the city manager for an exemption to the requirements of subsection (c) of this section:
 - (1) The system is a dry vacuum pump system with an air-water separator.
 - (2) The sedimentation tank is non-bottom draining, with the drain above the anticipated maximum level of accumulated sludge.
 - (3) Evidence of regular pump outs by a licensed hauler (a minimum of once a year, or more often if either directed by the manufacturer or necessary to keep solids from exiting through the drain) is maintained and open to inspection by the city manager or designee during normal business hours.
 - (4) The system has no direct discharge pipe to the sewer on the bottom of the sedimentation tank.

An owner or operator whose facility meets conditions (1) through (4) may apply for this exemption by written letter to the city manager or designee. The city manager or designee will review the system and, if the exemption is approved, shall provide a written letter of exemption.

An exemption obtained pursuant to this subsection (d) shall expire upon installation of a new vacuum system. Upon expiration of the exemption, the facility shall comply with subsection (c) of this section before commencing further operation.

(e) Dental dischargers that exclusively practice one or more of the following specialties are not subject to the requirements of this section: (1) Orthodontics; (2) Periodontics; (3) Oral and maxillofacial surgery; (4) Radiology; (5) Oral pathology or oral medicine; (6) Endodontistry and prosthodontistry.

(f) Dental practices that do not place dental amalgam, and do not remove amalgam except in limited emergency or unplanned, unanticipated circumstances, are exempt from the requirements of this part, provided the dental practice:

(1) Submits the following statement to the city, signed by a responsible corporate officer, general partner, proprietor, or a duly authorized representative by the applicable compliance deadline as established by the city manager or designee:

"This facility is a dental discharger subject to this rule and does not place or remove dental amalgam except in limited emergency or unplanned, unanticipated circumstances. I am a responsible corporate officer, a general partner or proprietor (if the facility is a partnership or sole proprietorship), or a duly authorized representative in accordance with the requirements of § 403.12(l) of the above named dental facility, and 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 gather and evaluate 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."

(2) Removes dental amalgam for limited emergency or unplanned, unanticipated circumstances; and

(3) The dental practice notifies the city of any changes affecting the applicability of this certification.

(g) Disposal of hauled waste from dental facilities to the sanitary sewer is prohibited.

Secs. 102-~~99~~101—102-110. Reserved.

ARTICLE IV. - SEWERS AND SEWAGE DISPOSAL

DIVISION 3. - RATES AND CHARGES

Ordinance 3279-23

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Sec. 102-132. Schedule of fees.

(a) *Established.* There is established a uniform schedule of fees for the use or availability for use, as provided in sections 102-93 and 102-94, of the services and facilities of the sanitary sewer system payable by each dwelling unit, business establishment, church, hospital and every other type of private or public building, structure or activity producing sewage and wastes. As required by federal regulations, this fee schedule shall be reviewed no less than every two years to ensure that sufficient revenues are being generated to pay the total operation and maintenance costs of the sewer system including replacement and to ensure that each user class is paying its proportionate share of such costs based on the proportionate contribution of the user class to the total wastewater loading from all user classes. Furthermore, each user shall be notified at least annually in conjunction with a regular bill of the rate and that portion of the user charge which is attributable to wastewater treatment services.

(b) *Definitions.* Unless the context specifically provides otherwise, the meaning of terms used in this section shall be as follows:

Dwelling unit means a house, apartment, group of rooms or a single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants do not live and eat with any other persons in the structure, and which quarters have either:

- (1) Direct access from the outside of the building or through a common hall; or
- (2) Complete kitchen facilities for the exclusive use of the occupants.

Multiple dwellings means structures occupied or intended for use as living quarters, containing more than one dwelling unit, but does not include hotels, motels or similar living quarters which do not contain dwelling units.

Residences means structures occupied or intended for use as single-family living quarters, containing no more than one dwelling unit.

(c) *Monthly fees.* Any user receiving sewer service from systems owned and controlled by the city shall pay a monthly fee at the rates as set forth in a city commission ordinance or resolution as may be amended from time to time. follows:

	FY-05	FY-06	FY-07
Percent increase from previous year	8.00%	8.00%	8.00%

Inside the City Limits

WATER – WATER RS/ML			
Thousand			
Gallons			
Per Unit	FY 05	FY 06	FY 07
0—4	\$0.71	\$0.77	\$0.54
5—8	1.07	1.16	1.26
9—12	1.51	1.64	1.78
13—20	2.06	2.23	2.41
21 & >	2.62	2.83	3.06
Base ERM Charge	6.78	7.33	7.92
Additional Unit Charge	2.47	2.67	2.89
WATER – WATER CM/PU			
Rate			
Block	FY 05	FY 06	FY 07
1	\$0.62	\$0.67	\$0.73
2	0.71	0.77	0.84
3	1.07	1.16	1.26
4	1.51	1.64	1.78
5	2.06	2.23	2.41
WATER – WATER IRR			
Thousand			
Gallons	FY 05	FY 06	FY 07
0—4	\$1.51	\$1.64	\$1.78
5—8	2.06	2.23	2.41
9 & >	2.61	2.82	3.05
SEWER – ALL INSIDE			
	FY 05	FY 06	FY 07
Volume Charge	\$4.01	\$4.34	\$4.69
Base ERM Charge	8.01	8.66	9.36
Additional Unit Charge	4.93	5.33	5.76

Outside City Limits

WATER - WATER RS/ML			
Thousand			
Gallons			
Per Unit	FY 05	FY 06	FY 07
0—4	\$0.89	\$0.96	\$1.05
5—8	1.34	1.45	1.58
9—12	1.89	2.05	2.23
13—20	2.58	2.79	3.01
21 & >	3.28	3.54	3.83
Base ERM Charge	8.48	9.16	9.90
Additional Unit Charge	3.09	3.34	3.61
WATER - WATER CM/PU			
Rate			
Block	FY 05	FY 06	FY 07
1	\$0.78	\$0.84	\$0.91
2	0.89	0.96	1.05
3	1.34	1.45	1.58
4	1.89	2.05	2.23
5	2.58	2.79	3.01
WATER - WATER IRR			
Thousand			
Gallons	FY 05	FY 06	FY 07
0—4	\$1.89	\$2.05	\$2.23
5—8	2.58	2.79	3.01
9 & >	3.26	3.53	3.81
SEWER - ALL OUTSIDE			
	FY 05	FY 06	FY 07
Volume Charge	\$5.01	\$5.43	\$5.86
Base ERM Charge	10.01	10.83	11.70
Additional Unit Charge	6.16	6.66	7.20

Note: All rates are effective the beginning of their respective fiscal years.
ERM — Equivalent Residential Meter

Increasing Block Structure Price Breaks by Meter Size
Based on AWWA Equivalent Meter Ratio

		Usage Up To				Usage Over:
Meter Size Inches	Equivalent Meter Ratio	Block 1	Block 2	Block 3	Block 4	Block 5
		(1000 gallons/month)	(1000 gallons/month)	(1000 gallons/month)	(1000 gallons/month)	(1000 gallons/month)
0.75	1	4	8	12	20	21
1	2.5	10	20	30	50	51
1.5	5	20	40	60	100	101
2	8	32	64	96	160	161
3	16	64	128	192	320	321
4	25	100	200	300	500	501
6	50	200	400	600	1,000	1,001

- (d) *Outside city rates.* Outside city rates shall be 125 percent of the inside city rates, ~~as reflected in the above tables.~~
- (e) *Maximum usage charge, residential.* The maximum monthly sewer charge for residential customers shall not exceed an amount computed on the basis of 12,000 gallons of metered water consumption per dwelling unit. The usage charge is in addition to the monthly readiness-to-serve charge for the water meter currently in use. If there is an inoperative meter, a maximum usage charge may be established by the superintendent in order to facilitate billing the sewer usage charge to the customer. For residential and multiple dwelling units served by a single water meter which have separate water meters for irrigation purposes for which the sewage usage charge is not billed or for which a non-metered alternative water source (e.g., lake or well) is used for irrigation purposes, there shall be no maximum usage charge associated with nonirrigation water use.
- (f) *Applicability.* Rates and charges provided for in this section shall not apply to water billings for such meters as have been determined by the city to have no relationship to the use of the sanitary sewer system. Such determination shall be based upon an application submitted by the user to the city, which application shall be accompanied by evidence that the water passing through such water meter is not connected to the sanitary sewer system and is not connected to septic tanks in areas where the sanitary sewer system is available as defined in this article.

- (g) *Rates for persons deemed users but not connected to system.* For persons deemed users in accordance with section 102-133 but who are not connected to any line of the sanitary sewer system, the monthly rate shall be equivalent to the readiness-to-serve charge for service both inside the city or outside the city.
- (h) *Billing frequency.* The city manager is authorized to bill users either monthly or quarterly. Quarterly fees shall be determined by multiplying the minimum and maximum monthly fees or usage requirements by three, with the sewer usage fee per 1,000 gallons of metered water being the same as for monthly billing.
- (i) *Adjustment of rates.* In order to ensure that the city derives sufficient revenue to offset future changes in operation and maintenance charges for sewage disposal at treatment plants now owned by the city, the rates per 1,000 gallons of water consumed shall be adjusted, if approved by a majority of the city commission, to incorporate any change in the operation and maintenance costs billed to the city for the use of such plants. The city manager shall be responsible for computing the necessary adjustment and advising the city commission of its magnitude immediately upon being informed of a change in these charges. The adjusted rate shall take effect no sooner than the date charges to the city are increased or 30 days after the city commission is notified of the pending increase, whichever occurs later.
- (j) *Automatic index adjustment.* The rates established in subsection (c) above for sewer service shall be adjusted annually, on or before October 1 of each year, in accordance with the Florida Public Service Commission Deflator Index. The automatic index adjustment shall be determined on an annual basis and shall be applied to such sewer rates and charges which are in effect immediately prior to the effective date of each such automatic annual adjustment. The effective date of the adjusted sewer rates and charges shall be October 1 of each year unless the city commission, after public hearing, determines that the automatic index adjustment is not necessary for the fiscal soundness of the sanitary sewer system.

Sec. 102-134. - Collections; penalties for nonpayment.

- (a) An initial deposit shall be required ~~as set forth in this section~~ at the time the property is first connected to the water or sewer system or when an owner or tenant has previously failed to pay water, sewer or sanitation service fees due the city within the time limits established in this article. All commercial accounts will be required to place and maintain a deposit in either the amount stated in this section or in an amount equal to three months average billing, whichever is greater. Deposits required by this section are a guarantee that all sums of money due to the city for service furnished to the user making such deposit will be fully paid. Upon the payment of all such sums the city shall, upon the discontinuance of service, refund to the person making such deposit the amount of such deposit less any water, sewer and sanitation fees and penalties still due the city. Deposits shall be returned to residential customers making the deposit after two years of service if the user has not been delinquent in making timely water, sewer and sanitation sewer fee payments to the city. Deposits

required by this section will be determined by resolution by the city commission, as may be amended from time to time.

REQUIRED DEPOSITS

~~(1) Inside city property owner-occupied property:*~~

Water Meter Size (inches)	With Sewer and Garbage	With Sewer	Without Sewer
¾	\$ 135.00	\$ 105.00	\$ 60.00
1	150.00	120.00	85.00
1½	180.00	150.00	105.00
2		420.00*	145.00*
3		510.00*	225.00*
4		600.00*	330.00*
6		885.00*	600.00*

~~(2) Inside city property tenant-occupied property:*~~

Water Meter Size (inches)	With Sewer and Garbage	With Sewer	Without Sewer
¾	\$ 135.00	\$ 105.00	\$ 60.00
1	150.00	120.00	85.00
1½	180.00	150.00	105.00
2		420.00*	145.00*
3		510.00*	225.00*
4		600.00*	330.00*
6		885.00*	600.00*

~~(3) Outside city property owner-occupied property:*~~

Water Meter Size (inches)	With Sewer and Garbage	With Sewer	Without Sewer
3/4		\$ 145.00	\$ 75.00
1		165.00	100.00
1 1/2		195.00	130.00
2		570.00*	165.00*
3		675.00*	270.00*
4		780.00*	375.00*
6		1,140.00*	690.00*

~~(4) Outside city property tenant-occupied property:*~~

Water Meter Size (inches)	With Sewer and Garbage	With Sewer	Without Sewer
3/4		\$ 145.00	\$ 75.00
1		165.00	100.00
1 1/2		195.00	130.00
2		570.00*	165.00*
3		675.00*	270.00*
4		780.00*	375.00*
6		1,140.00*	690.00*

~~* In addition to the applicable deposit set forth in the city commission resolution, the city manager or finance director may, at his sole discretion, prescribe an additional deposit or require the user to post a surety bond and hold any deposit indefinitely for any commercial account based on unusual anticipated consumption.~~

(b) Nonpayment of water, sewer or any other utility service fees, penalties or charges is declared to be a violation of this chapter article. Nonpayment of water, sewer or any other utility service fees, surcharges, penalties or charges for owner- or tenant-occupied property for a period of 25 days after the billing date shall be considered delinquent and shall constitute grounds for the suspension of water service until payment of fees, interest, penalties and any related service charges are made. However, no suspension of water

service under this article shall be required by the city except upon written authorization signed by the city manager or his/her designee. Furthermore, nonpayment of water, sewer or any other utility service fees, penalties or charges for a period of 60 days for owner- or tenant-occupied property shall constitute grounds for the suspension of sewer service, when authorized in writing by the city manager. When sewer service is suspended, the county health department shall be immediately notified.

- (c) ~~If a representative of the city arrives at the service address to disconnect service for nonpayment and the customer tenders payment instead of having service disconnected, a service charge of \$10.00 shall be charged and collected in addition to all past due water, sewer, refuse and related charges. When service is disconnected due to nonpayment, service shall not be reconnected until all past due water, sewer, refuse and related charges and penalties are fully paid, together with a reconnection charge of \$25.00 as proscribed by city commission resolution.~~
- (d) In accordance with section 180.135, Fla. Stat. the city may not refuse or discontinue water or sewer services to the owner of any rental unit or to a tenant or prospective tenant of such rental unit for nonpayment of sewer service charges incurred by a former occupant of the rental unit who contracted directly with the city for such sewer services and provided such former occupant was not the property owner and provided the provisions of subsection (f) do not apply.
- ~~(de)~~ The penalties and remedies contained in this section shall be cumulative and shall be in addition to any and all other penalties and remedies contained in this Code for the violation thereof.
- (f) The city may refuse water and sewer service to any prospective customer that is "related entity" to current or former water or sewer service customer who has a delinquent water or sewer service account until such delinquent account is paid in full. For the purpose of this subsection, "related entity" means any entity for which: (i) has any one or more of the same members, officers or directors as a delinquent water or sewer service customer; (ii) any member, officer or director of such entity has a delinquent water or sewer service account; (iii) is a parent or subsidiary entity of a delinquent water or sewer service customer; or (iv) is the same entity as a delinquent water or sewer service customer but may operate under a different name whether by way of merger, name change or different fictitious name. The city may rely on a review of the State of Florida, Department of State, Division of Corporations records for making determinations of related entity status. The city shall have the right to require a prospective customer sign a sworn statement attesting that such prospective customer is not a related entity to any current or former water or sewer service customer who has a delinquent water or service account, and in the event the city later determines such sworn statement to be untrue, the city shall have the right to immediately disconnect water and sewer services until the delinquent service account(s) is paid in full.

Sec. 102-135. - Liens.

- (a) The city shall have a lien on all lands or premises served by its sewer system for all service fees, penalties imposed under this article and service charges for such sewer facilities until paid, which lien shall be prior to all other liens on such lands or premises, except the lien of state, county and municipal taxes and municipal liens for other municipal services such as water and refuse, and shall be on a parity with the lien of such state, county and municipal taxes and other municipal liens. Such lien shall arise at the time of connection of sewer service to such lands or premises and shall be due and payable at the time of delinquency of any unpaid sewer fees and service charges. ~~Interest shall accrue on unpaid liens at the rate of 12 percent per annum. The city will not record a lien for sewer service fees and charges that is not permitted by section 180.135, Fla. Stat.~~
- ~~(b) The city shall be entitled to institute foreclosure proceedings at any time after a lien is attached and is delinquent for a period of 30 days, such proceedings to be in accordance with law, and the city shall be entitled to collect reasonable attorneys' fees from the owner for services rendered by the city's attorneys in the institution and prosecution of such foreclosure proceedings.~~
- ~~(c) Liens created under this section shall, upon the request of the user or the owner of the property affected and upon payment of all delinquent fees, including lawful interest thereon, and all penalties imposed, be released by a certificate signed by the city manager or the city finance director and bearing the seal of the city. The issuance of such certificate shall constitute prima facie evidence of the existence or nonexistence of any such delinquent fees and shall, in the absence of fraud perpetrated by the party requesting the certificate, be binding upon the city as to the existence or nonexistence of any lien created under this section.~~
- (b) The city shall serve, by certified mail-return receipt requested and regular U.S. Mail, a notice of non-payment to the customer at the service address and the current owner of the property based on the ownership information appearing on the Orange County Property Appraiser website. Provided the city sends the notice of non-payment, the customer's and/or current owner's failure to receive delivery of such notice of non-payment shall not invalidate or otherwise impact the city's ability to place and foreclose a notice of lien against the applicable property.
- (c) The notice of non-payment shall contain:
- (i) A description of the property;
 - (ii) Advise the customer and the property owner of the amount due and the fee and/or charges that were not paid; and
 - (iii) Advise that in the event the fees and/or charges are not paid within thirty (30) calendar days from the date of the notice of non-payment, that a notice of lien may be recorded in the official records of the county and such notice of lien may be foreclosed upon by the city to collect the outstanding sums owed plus accrued interest and attorneys' fees and other collection expenses.
- (d) If the amount set forth in the notice of non-payment is not paid within thirty (30) days from the date of the notice of non-payment, then
- (i) The outstanding balance owed to the city shall accrue interest at the rate of twelve percent (12%) per annum until such amount is paid in full;

- (ii) The city may proceed to record a notice of lien against the applicable property in the official records of the county; and
 - (iii) A copy of the notice of lien shall be served by U.S. Mail to the customer and the property owner at the same addresses as set forth in subsection (b) above.
- (e) After the expiration of thirty (30) days from the date of recording of the notice of lien, a suit may be filed to foreclose said lien. Such foreclosure proceedings shall be instituted and prosecuted in conformity with the procedures for the foreclosure of liens as set forth in the Florida Statutes. The city shall also have the right to bring an action for monetary judgment to collect past due amounts owed.
- (f) The owner shall be responsible for and the city shall be entitled to reimbursement for the payment of all collection expenses and costs, including attorneys' fees and litigation costs and recording and filing fees, incurred by the city in the collection of fees and charges, filing of liens and in actions to foreclose such liens or actions for a monetary judgment.
- (g) The collection and enforcement procedures set forth in this section shall be cumulative with, supplemental to and in addition to, any applicable procedures provided in any other ordinance or administrative regulations of the city, any applicable law or administrative regulation of the state, or any agreement. Failure of the city to follow the procedure set forth in this section shall not constitute a waiver of its rights to proceed under any other ordinances or administrative regulations of the city, any applicable law or administrative regulation of the state, or any agreement.

SECTION V: Conflicts. If any Ordinances or parts of Ordinances are in conflict herewith, this Ordinance shall control to the extent of the conflict.

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

SECTION VII: Codification. Sections II, III and IV of this Ordinance shall be codified and made a part of the City of Winter Park Code of Ordinances; the Sections of this Ordinance may be renumbered or re-lettered to accomplish such intention; the word "*Ordinance*" may be changed to "*Section*," "*Article*," "*Division*" or another appropriate word. The City Clerk is given liberal authority to correct scrivener's errors, such as incorrect Code cross-references, grammatical, typographical, and similar errors when codifying this Ordinance.

SECTION VIII: Effective Date. This Ordinance will become effective immediately following approval by the City Commission at its second reading.

PASSED AND ADOPTED on second reading this 23rd day of August 2023.

Phillip M. Anderson, Mayor

ATTEST:

Rene Cranis, City Clerk



City Commission agenda item

item type Public Hearings: Non-Quasi Judicial Matters (Public participation and comment on these matters may be virtual or in-person.)	meeting date August 23, 2023
prepared by Rene Cranis	approved by Michelle del Valle, Randy Knight
board approval Completed	
strategic objective	

subject

Ordinance - amending Chapter 2, Article V, Departments, creating new departments, renaming departments and updating department functions and responsibilities. (1st reading)

motion / recommendation

Approve

background

The City Charter calls for the City Commission to establish departments by name and purpose.

Sec. 1.04. - Organization of city government.

The city commission shall divide the services and functions of the city into departments and shall designate these by name and purpose.

In its July 26, 2023, meeting the commission confirmed the appointment of directors of new departments. The attached ordinance amends Chapter 2, Article V of the City Code to reflect these new departments and updates other departments and functions to reflect current operations.

alternatives / other considerations

fiscal impact

ATTACHMENTS:

[Amending City Departments.pdf](#)

ORDINANCE

AN ORDINANCE OF THE CITY OF WINTER PARK, FLORIDA AMENDING CHAPTER 2, ARTICLE V, DEPARTMENTS, CREATING NEW DEPARTMENTS; RENAMING DEPARTMENTS; PROVIDING FOR THE SERVICES AND FUNCTIONS OF DEPARTMENTS; PROVIDING FOR CODIFICATION, SEVERABILITY AND AN EFFECTIVE DATE.

WHEREAS, under Section 1.04 of the Charter of the City of Winter Park, the city commission is to divide the services and functions of the city into departments, and to designate these by name and function; and

WHEREAS, the city commission desires to amend Article V of Chapter 2 of the Code of Ordinances to add new departments and to amend departments and their functions to reflect existing departments and functions.

NOW THEREFORE, BE IT ENACTED by the people of the City of Winter Park, Florida as follows:

Section 1. Recitals. The recitals set forth above are hereby adopted and incorporated by reference.

Section 2. Amendment. Article V of Chapter 2 of the City of Winter Park Code of Ordinances is hereby amended as follows: (underlined language are additions; ~~stricken through~~ language are deletions).

ARTICLE V. DEPARTMENTS

Sec. 2-156. Departmental organization.

The services and functions of the city shall be divided into the following Departments and heads thereof:

- (1) ~~Department of public safety-director of public safety.~~
- (12) Department of police-~~chief of police.~~
- (23) Department of fire-~~fire chief.~~
- (34) Department of public works and transportation-~~director of public works.~~
- (45) Department of planning and community development zoning-~~director of planning and community development.~~
- (56) Department of parks and recreation-~~director of parks and recreation.~~
- (67) Department of finance-~~finance director.~~
- (78) Department of human resources-~~director of human resources.~~
- (89) Department of water and wastewater utilities-~~director of water and wastewater utilities.~~

- ~~(9) Department of electric facilities utility-director of electric utilities.~~
- ~~(10) Department of building, permitting services and code enforcement.~~
- ~~(11) Department of communications.~~
- ~~(12) Department of office of management and budget.~~
- ~~(13) Department of natural resources and sustainability.~~
- ~~(14) Department of information technology.~~

~~Sec. 2-157. Department of public safety.~~

- ~~(a) The department of public safety shall contain the department of police and department of fire and shall be under the direction of the director of public safety in accordance with Section 4.08 of the Charter, subject to the supervision of the city manager and the civil service board as provided by the Charter. In addition, the department of police and department of fire shall be under the direction of the chief of police and fire chief respectively, in accordance with Section 4.07 of the Charter. The department of police shall be responsible for the enforcement and maintenance of law and order. The department of fire shall be charged with the prevention of fires and the protection of life and property against fire including the performance of various miscellaneous public services of an emergency medical nature. The creation of a public safety director shall not require the city manager to appoint a director of public safety, and such office may remain vacant from time to time as determined by the city manager and city commission.~~
- ~~(b) The office of public safety director is hereby established. The public safety director shall be the executive head of the police and fire departments with power to direct the activities of both those departments subject to the provisions of this Code and the Charter. The public safety director shall be in command of the police and fire departments and the chiefs of the police and fire departments shall be answerable to the public safety director. If the public safety director is a certified firefighter, in accordance with the provisions of F.S. ch. 175, he shall be eligible for participation in the firefighters pension trust fund. Otherwise he shall be eligible for participation in the police officers retirement fund.~~

~~Sec. 2-1578. Police department.~~

~~The chief of police shall be the head of the police department, appointed by the city manager and confirmed by the city commission and civil service board according to code. The police chief will have the authority to appoint designees in accordance with city policies and departmental guidelines to manage affairs in the absence of the chief. The police chief is required to attend city commission meetings and is accountable to the official appointing them. The chief will hold ultimate responsibility for policing activities, overseeing police operations, ensuring public safety, and efficient resource deployment.and as such shall appoint his subordinates in accordance with the civil~~

~~service code. Upon request by the city manager or city commission, the chief will attend the meetings of the city commission. He shall make reports and be responsible to the official appointing him. He shall have the authority for cause to suspend any employee of the police force and shall report the suspension to the official by whom he is appointed, with his recommendations.~~

The police chief oversees the delivery of:

- (1) Proactive police patrols targeting the prevention of crime;
- (2) Documentation of crimes, records management and investigations;
- (3) Enforcement of State and local laws through arrests, civil citations and transmittal of charges to the State Attorney's Office;
- (4) Community policing efforts to build trust through partnership with community members; and
- (5) Emergency preparedness, emergency response, training and resource management.

Sec. 2-1589. Fire department.

~~The fire chief shall be the head of the fire department, appointed by the city manager and confirmed by the city commission and civil service board according to code. The fire chief will have the authority to appoint designees in accordance with city policies and departmental guidelines to manage affairs in the absence of the chief. The fire chief is required to attend city commission meetings upon request and is accountable to the official appointing them. The chief will hold ultimate responsibility for fire suppression activities, overseeing firefighting operations, ensuring personnel safety, and efficient resource deployment and as such shall appoint his subordinates in accordance with the civil service code. Upon request by the city manager or the city commission, the chief will attend the meetings of the city commission. He shall make reports and be responsible to the official appointing him. He shall have the authority for cause to suspend any employee of the fire department and shall report the suspension to the official by whom he is appointed, with his recommendations.~~

The fire chief oversees the delivery of:

- (1) Fire Suppression and protection of property;
- (2) Emergency medical services and patient transportation when necessary, ensuring proper equipment and training for personnel;
- (3) Fire inspections, investigations, and records management, working closely to identify fire hazards and ensure compliance with safety regulations and fire safety codes; and

- (4) Emergency management, to include the overall emergency preparedness, mitigation efforts, response coordination, resource management, training, and public education to safeguard the community during emergencies.

Sec. 2-15960. Department of public works and transportation.

Subject to the supervision of the city manager, the department of public works and transportation shall be responsible for all matters relating to the following:

- (1) Construction, management, maintenance and operation of the physical properties of the city, including all engineering services;
- (2) Repair and maintenance of city streets;
- (3) Stormwater management and related functions;
- (4) Surveying and related services; and Operation of the city garage and maintenance and provision for automotive equipment owned by the city; and
- (5) Planning and Operation of the public transportation systems provided by the city.

Sec. 2-1601. Department of planning and ~~community development zoning~~.

Subject to the supervision of the city manager, the department of planning and ~~community development zoning~~ shall be responsible for all matters relating to the following:

- ~~(1) Building;~~
- ~~(2) Housing;~~
- ~~(3) Planning and zoning, including issuing of permits relating thereto; and~~
- ~~(4) Enforcement of codes regulating such functions.~~
- (1) Land Development and Zoning Code compliance including issuance of permits related thereto;
- (2) Historic Preservation and Affordable/Workforce Housing;
- (3) Comprehensive Plan preparation and implementation, including issuing of permits relating thereto;
- (4) Administration of requests involving Comprehensive Plan and Land Development Code amendments, Subdivision approvals, Conditional Uses and Zoning Code variances; and
- (5) Staff to the Planning and Zoning Board, Historic Preservation Board, and Board of Adjustment.

Sec. 2-1612. Department of parks and recreation.

Subject to the supervision of the city manager, the department of parks and recreation shall be responsible for the following:

- (1) ~~The p~~Parks maintenance, urban forestry, landscaping and playground maintenance;
- (2) Recreation facilities, playing fields, golf courses, tennis complex, pools and cemeteries of the city and such other recreation areas and facilities as may be made available to carry out the city's recreational programs; and
- (3) ~~The p~~Planning, promoting, organization and supervision of the city's parks and recreation programs and major parks improvement, renovation and acquisitions.

Sec. 2-1623. Department of finance.

- (a) Subject to the supervision of the city manager, the department of finance shall be responsible for preparing and keeping all financial records of the city, utility billing and customer service, and exercising oversight of the City's fleet maintenance operations.
- (b) The finance director shall perform the following duties:
 - ~~(1) Maintain current accounts of the amounts appropriated each year and the sums spent out of each appropriation;~~
 - ~~(2) Assist in the preparation of the annual appropriations and tax levy ordinances in time for their enactment and filing;~~
 - ~~(3) Maintain accounts showing the fiscal condition of the city, including the current and anticipated revenues and expenses of all city funds and accounts; and~~
 - ~~(4) Exercise general supervision regarding the proper management of the fiscal concerns of the respective city offices and departments.~~
 - (1) Recommend and implement sound fiscal policies;
 - (2) Provide City Management, the City Commission and its boards, with reports which demonstrate fiscal accountability in accordance with the highest administrative standards;
 - (3) Maintain a sound accounting system for protecting the City's assets by recording and reporting financial transactions in accordance with generally accepted accounting principles, Government Accounting Standards Board pronouncements, and other legally mandated standards; and
 - (4) Invest the City's excess funds in compliance with the City's adopted investment policy to achieve the objectives of preserving principal, providing liquidity to

meet the City's obligations, and to earn a market rate of return throughout budgetary and economic cycles.

Sec. 2-1634. Department of human resources.

Subject to the supervision of the city manager, the department of human resources shall be responsible for the following:

- (1) Employment;
- (2) Salaried Compensation and classification administration;
- ~~(3) Job classifications;~~
- ~~(4) Benefit administration and workers compensation insurance;~~
- ~~(5) Employee performance evaluation and general training;~~
- ~~(6) Employee training;~~
- ~~(7) Employee relations;~~
- ~~(8) Maintenance of personnel records; and~~
- ~~(9) Other matters relating generally to personnel and employee benefits.~~

Sec. 2-1645. Department of water and wastewater utilities.

Subject to the supervision of the city manager, the department of water and wastewater utilities shall be responsible for all matters relating to the construction, management, maintenance and operation of the city water distribution and wastewater systems, including all engineering services.

Sec. 2-1656. Department of electric utilities.

~~Subject to the supervision of the city manager, the department of electric utilities shall be responsible for all matters relating to the construction, management, maintenance and operation of the city electric distribution system, including all engineering services.~~

Subject to the supervision of the city manager, the department of electric utility shall be responsible for the following:

- (1) Construction and maintenance of the City electrical distribution system;
- (2) Engineering services for the City electrical distribution system;
- (3) Negotiation and execution of bulk power through purchase power agreements;
and
- (4) Conversion of the entire electrical infrastructure from overhead construction to a total underground distribution system within the boundaries of the City's electrical distribution system.

Sec. 2-166 Department of Building, permitting services and code enforcement

Subject to the supervision of the city manager, the department of building, permitting services and code enforcement shall be responsible for the following:

- (1) Building and permitting:
 - a. Processing of permits and review for compliance with the applicable state codes, laws and ordinances associated with the built environment;
 - b. Conducting required inspections associated with issued permits for compliance with all local and state laws; and
 - c. Issuance of a Certificate of Occupancy or Completion when applicable for the project.
- (2) Code enforcement:
 - a. Recognize and process violations related to local ordinances and the adopted Property Maintenance Code;
 - b. Respond to complaints related to violations of local ordinances and the adopted Property Maintenance Code; and
 - c. Obtain compliance of violations through all legal remedies available.

Sec. 2-167 Department of communications

Subject to the supervision of the city manager, the department of communications shall be responsible for the following:

- (1) Inform residents, guests, media and staff of city-related news, events, projects, programs, and arts and cultural amenities; and
- (2) Develop and provide citywide information using the most effective print, online and digital communication tools.

Sec. 2-168. Department of the office of management & budget.

Subject to the supervision of the city manager, the department of the office of management & budget shall be responsible for all matters relating to the following:

- (1) Budgeting and strategic resource management;
- (2) Community Redevelopment Agency;
- (3) Economic Development; and
- (4) Procurement, contracting, and negotiations.

Sec. 2-169. Department of natural resources and sustainability.

Subject to the supervision of the city manager, the department of natural resources and sustainability shall be responsible for all matters relating to the following:

- (1) The management, regulation and protection of the city's lakes and waterways that includes wetlands utilizing best management practices;
- (2) Shoreline protection permitting that includes docks, boathouses, seawalls, revetments, and vegetation and the enforcement of codes regulating such functions;
- (3) Collection, analysis, reporting and data storage of all biological and ambient water quality sampling events;
- (4) The planning, promoting, organization and supervision of the city's sustainability action plan and programs which contains long-term objectives and short-term actions for helping the City achieve targets related to sustainability;
- (5) Management and supervision of the city's solid waste services and waste diversion programs; and
- (6) The organization and execution of city sponsored events including community outreach and engagement.

Sec. 2-170. Department of information technology.

Subject to the supervision of the city manager, the information technology department shall be responsible for all matters relating to the design, procurement, implementation, governance, operation, security, and availability of the city's technology infrastructure and related data.

Secs. 2-17167—2-185. Reserved.

Section 3. Codification. Section 2 shall be codified in the City Code. Any section, paragraph number, letter or heading within the Code may be changed or modified as necessary to effectuate the codification. Grammatical, typographical and similar or like errors may be corrected in the Code, and additions, alterations and omissions not affecting a material substantive change in the construction or meaning of this Ordinance may be freely made.

Section 4. Severability. If any section, subsection, sentence, clause, phrase or portion 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 portion or portions hereof or hereto.

Section 5. Conflicts. In the event of any conflict between this Ordinance, or any part thereof, with any of the provisions of other City Ordinances or the City Code, this Ordinance shall control.

Section 6. Effective Date. This Ordinance shall become effective immediately upon adoption of the City Commission of the City of Winter Park, Florida.

Passed and adopted this ____ day of _____, 2023.

Philip M. Anderson, Mayor

Attest:

Rene Cranis, City Clerk



City Commission agenda item

item type Public Hearings: Non-Quasi Judicial Matters (Public participation and comment on these matters may be virtual or in-person.)	meeting date August 23, 2023
prepared by Allison McGillis	approved by Michelle del Valle, Randy Knight
board approval Completed	
strategic objective	

subject

Ordinance - amending Chapter 58, "Land Development Code", Article III, "Zoning" Section 58-71 "General provisions for residential zoning districts", to revise subsection (f) regarding the parking of boats, trailers and recreation vehicles to include vehicles over 25 feet. (1st reading)

motion / recommendation

Planning & Zoning Board recommendation is for approval.

background

Staff was directed at the June 28th Commission meeting to bring back a discussion item on amending Sec. 58-71 to prohibit the parking of limousine style vehicles within residential zoning districts. Subsequently, at the July 12th Commission meeting, the Commission directed staff to amend the code as presented in the attached Ordinance, which was recommended for approval by the Planning & Zoning Board on August 1st.

The amendments to Sec. 58-71 subsection (f) as shown in the attached Ordinance are copied below.

(f) Boats, trailers, vehicles over 25 feet, and recreational vehicles.

(1) Boats, trailers of any type, vehicles over 25 feet, recreational vehicles, as defined in state statutes (including campers, travel trailers and motor homes) and similar vehicles shall not be parked or stored within any residential district including public rights-of-way, except as hereinafter specifically permitted. Under no circumstances shall any boat, trailer, or recreational vehicle be slept in or otherwise used for lodging or habitation while parked or stored within a residential district.

(2) Boats and boat trailers may be parked if stored entirely within a carport, garage or enclosed structure. Recreational vehicles (including campers, travel trailers, and motor homes), vehicles over 25 feet, and trailers (other than boat trailers) may be parked if stored entirely within a garage or other enclosed structure. As used herein, a garage or other enclosed structure shall mean a structure having at least 75 percent opaqueness.

(3) Boats, trailers and recreational vehicles having an overall length of 32 feet or less, or vehicles over 25 feet, may be parked in a private driveway within a residential district for an aggregate of not more than 24 hours during any one calendar week.

(4) The parking of boats, trailers, vehicles over 25 feet, and recreational vehicles in side and rear lot areas is permitted only if fences, walls and landscape screening, including hedges, trees, etc., having at least 65 percent opaqueness of the view of the boat, trailer or recreational vehicle shall be constructed and planted so as to buffer adjacent residential properties.

(5) Residents may allow their guests to park a boat, trailer or recreational vehicle having a length of 32 feet or less for up to 48 hours in the driveway or behind the main structure of the lot on which it is parked. If additional time is needed, the Code Compliance Manager shall be notified no later than 24 hours after such vehicle is so parked.

alternatives / other considerations

fiscal impact

ATTACHMENTS:

[Limo Ordinance - 1st Reading.docx](#)

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF WINTER PARK, FLORIDA AMENDING CHAPTER 58, "LAND DEVELOPMENT CODE", ARTICLE III, "ZONING" SECTION 58-71 "GENERAL PROVISIONS FOR RESIDENTIAL ZONING DISTRICTS", TO REVISE SUBSECTION (F) REGARDING THE PARKING OF BOATS, TRAILERS AND RECREATION VEHICLES TO INCLUDE VEHICLES OVER 25 FEET, PROVIDING FOR CODIFICATION, SEVERABILITY, CONFLICTS AND AN EFFECTIVE DATE.

WHEREAS, the City Commission of the City of Winter Park deems it necessary for the general welfare of the City to amend the City of Winter Park Land Development Code as set forth in this Ordinance;

WHEREAS, the City Commission hereby finds that this Ordinance serves a legitimate government purpose and is in the best interests of the public health, safety, and welfare of the citizens of Winter Park, Florida;

WHEREAS, the City Commission hereby finds that the land development regulations adopted herein are consistent with the Comprehensive Plan;

NOW THEREFORE, BE IT ENACTED by the City Commission of the City of Winter Park, Florida, after due notice and public hearing, that:

SECTION 1. That Chapter 58 "Land Development Code", Article III, "Zoning" of the Code of Ordinances, Section 58-71 "General provisions for residential zoning districts" is hereby amended as shown below (underlined language are additions; ~~stricken through~~ language are deletions; subsections not included are not being modified):

Sec. 58-71. General provisions for residential zoning districts.

(f) Boats, trailers, vehicles over 25 feet, and recreational vehicles.

- (1) Boats, trailers of any type, vehicles over 25 feet, recreational vehicles, as defined in state statutes (including campers, travel trailers and motor homes) and similar vehicles shall not be parked or stored within any residential district including public rights-of-way, except as hereinafter specifically permitted. Under no circumstances shall any boat, trailer, or recreational vehicle be slept in or otherwise used for lodging or habitation while parked or stored within a residential district.
- (2) Boats and boat trailers may be parked if stored entirely within a carport, garage or enclosed structure. Recreational vehicles (including campers, travel trailers, and motor homes), vehicles over 25 feet, and trailers (other than boat trailers) may be parked if stored entirely within a garage or other enclosed structure. As used herein, a garage or other enclosed structure shall mean a structure having at least 75 percent opaqueness.

- (3) Boats, trailers and recreational vehicles having an overall length of 32 feet or less, or vehicles over 25 feet, may be parked in a private driveway within a residential district for an aggregate of not more than 24 hours during any one calendar week.
- (4) The parking of boats, trailers, vehicles over 25 feet, and recreational vehicles in side and rear lot areas is permitted only if fences, walls and landscape screening, including hedges, trees, etc., having at least 65 percent opaqueness of the view of the boat, trailer or recreational vehicle shall be constructed and planted so as to buffer adjacent residential properties.
- (5) Residents may allow their guests to park a boat, trailer or recreational vehicle having a length of 32 feet or less for up to 48 hours in the driveway or behind the main structure of the lot on which it is parked. If additional time is needed, the Code Compliance Manager shall be notified no later than 24 hours after such vehicle is so parked.

SECTION 2. CODIFICATION. Section 1 of this Ordinance shall be incorporated into the City of Winter Park Code of Ordinances.

SECTION 3. SEVERABILITY. The divisions, sections, subsections, paragraphs, sentences, clauses and phrases of this Ordinance are severable, and if any phrase, clause, sentence, paragraph, subsection, section, or division of this Ordinance shall be declared invalid, unconstitutional or unenforceable by the valid judgment or decree of a court of competent jurisdiction, such invalidity, unconstitutionality or unenforceability shall not affect any of the remaining phrases, clauses, sentences, paragraphs, subsections, sections, and divisions of this Ordinance. The City Clerk is given liberal authority to ensure proper codification of this Ordinance, including the right to correct scrivener's errors.

SECTION 4. CONFLICTS. In the event of a conflict between this Ordinance and any other ordinance of the City of Winter Park, this Ordinance shall control to the extent of such conflict.

SECTION 5. EFFECTIVE DATE. This Ordinance shall take effect immediately upon its passage and in accordance with Florida law.

ADOPTED at a regular meeting of the City Commission of the City of Winter Park, Florida held in City Hall, Winter Park, on this ____ day of _____ 2023.

By: _____
Mayor Phil Anderson

ATTEST:

By: _____
Rene Cranis, City Clerk



item type Public Hearings: Non-Quasi Judicial Matters (Public participation and comment on these matters may be virtual or in-person.)	meeting date August 23, 2023
prepared by Hongmyung Lim	approved by Michelle del Valle, Randy Knight
board approval Completed	
strategic objective	

subject

Resolution 2278-23 - Adopting the Transportation Master Plan

motion / recommendation

Approval

background

The City of Winter Park Transportation Master Plan is a strategic approach to investing in safe, efficient, and attractive travel choices for residents and visitors, which is intended to guide community decisions in a balanced approach that considers all transportation users. This will create a roadmap depicting where the City of Winter Park is today and where it would like to be in the future, in regard to achieving current and future transportation goals and targets.

alternatives / other considerations**fiscal impact****ATTACHMENTS:**

[Resolution-2278-23_TMP.docx](#)

ATTACHMENTS:

[City of Winter Park - Transportation Master Plan - August 2023.pdf](#)

ATTACHMENTS:

[Winter Park TMP - Appendix - Cost Estimates.pdf](#)

ATTACHMENTS:

RESOLUTION 2278-23

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF WINTER PARK, FLORIDA, ADOPTING A TRANSPORTATION MASTER PLAN; PROVIDING FOR SEVERABILITY, NON-LIMITATION OF AUTHORITY, AND AN EFFECTIVE DATE.

WHEREAS, The City of Winter Park Transportation Master Plan is a strategic approach to investing in safe, efficient, and attractive travel choices for residents and visitors, which is intended to guide community decisions in a balanced approach that considers all transportation users; and

WHEREAS, the purpose of the Transportation Master Plan is to create a roadmap depicting where the City is today and where it would like to be in the future, in regards to achieving current and future transportation goals and targets; and

WHEREAS, the Transportation Master Plan is supported by the Transportation Advisory Board; and

WHEREAS, the Transportation Master Plan is a living document intended to evolve over time and is divided into four categories: Transportation Network Baseline, Transportation Metrics, Capital Projects, Implementation Guidance; and

WHEREAS, the Transportation Master Plan contains long term objectives and short-term goals for helping the City achieve targets related to transportation; and

NOW, THEREFORE, be it resolved by the City Commission of the City of Winter Park, Florida that:

SECTION 1. Recitals. The foregoing recitals are hereby ratified and confirmed as being true and correct and are hereby made a part of this Resolution.

SECTION 2. Transportation Master Plan. The City Commission hereby adopts the Transportation Master Plan attached to this Resolution in order to achieve the city's current and future transportation goals.

SECTION 3. Severability. If any section, subsection, sentence, clause, phrase, word or provision of this Resolution 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 Resolution.

SECTION 4. Effective date. This Resolution and the Transportation Master Plan shall become effective immediately upon adoption of this Resolution by the City Commission of the City of Winter Park, Florida.

ADOPTED at a regular meeting of the City Commission of the City of Winter Park held in City Hall, Winter Park on this 23rd day of August, 2023.

Mayor Phillip M. Anderson

ATTEST:

City Clerk Rene Cranis



City of Winter Park

Transportation Master Plan

August 2023



ACKNOWLEDGEMENTS

Mayor

Phil Anderson

City Commissioners

Marty Sullivan
Sheila DeCiccio
Kris Cruzada
Todd Weaver

Transportation Advisory Board

Jennifer Adams
Rachel Andre, Vice-Chair
Michael Dively
Jeffrey Osleeb, Chair
Ruben A Paige
Katie Reishmann
Michael Sasse
Jeffrey Sievers

City Departments/Staff

Randy Knight, City Manager
Charles Ramdatt, Director of Public Works & Transportation
Hongmyung Lim, Engineer II
Keith Moore, Transportation Planner
Allison McGillis, Assistant Director of Planning and Zoning
Kyle Dudgeon, Assistant Division Director CRA/Economic Development
Jeff Marcum, Sergeant



EXECUTIVE SUMMARY

The City of Winter Park Transportation Master Plan (TMP) is a strategic approach to investing in safe, efficient, and attractive travel choices for residents and visitors. The TMP is intended to guide community decisions in a balanced approach that considers all transportation users. The TMP presents a baseline overview of Winter Park's existing transportation networks for various modes of travel, measuring the safety, network connectivity, and operations of the transportation system to identify issues and directly inform the prioritization of projects based on the identified needs and opportunities.

Starting from the analysis of existing conditions, the TMP identifies lists of prioritized projects by type of investment, along with planning-level cost estimates for each project. Table 1 presents an overview of the 20-year and annual spending targets required to complete the full set of recommended projects. The capital projects within each project category ([Map 1](#)) are the physical infrastructure needed to connect and improve the transportation networks for all modes of travel.

TABLE 1: SUMMARY OF CAPITAL PROJECTS

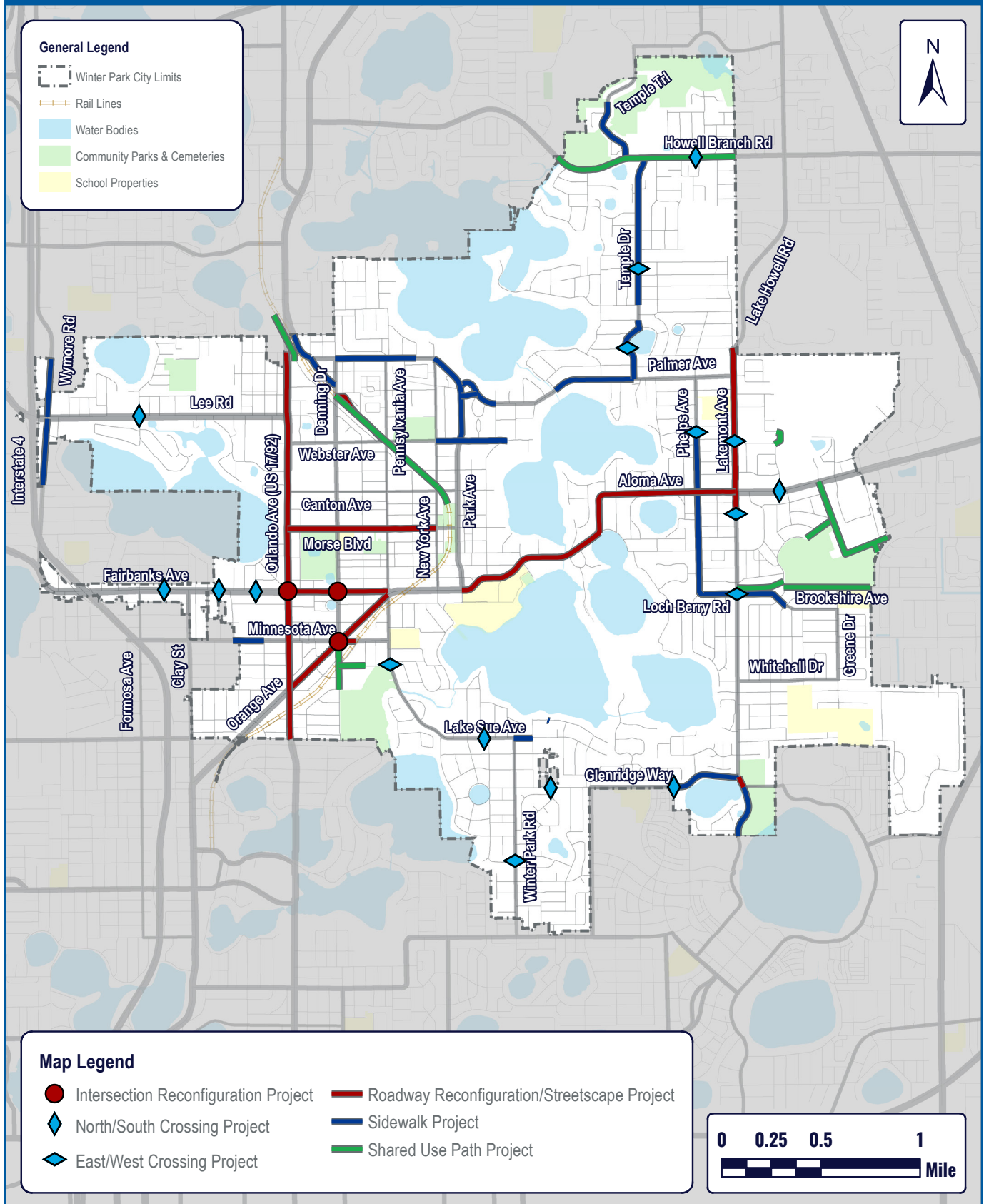
Project Category	20-Year Cost Estimate	Annual Cost Estimate
Sidewalk Projects	\$14,222,000	\$711,100
Shared Use Path & Greenway Projects	\$23,866,000	\$1,193,300
Crossing Projects	\$14,415,000	\$720,750
Roadway Reconfiguration & Streetscape Projects	\$69,480,000	\$3,474,000
Technology Projects	\$19,625,000	\$981,250
Capital Projects Total	\$141,608,000	\$7,080,400

The recommendations have in part been pulled from projects that have been long needed and studied in Winter Park. New project concepts have been developed based on review of the baseline operations in collaboration with City staff. Special attention is given to identifying a network of greenway routes ([Map 2](#)) as well as strategic technology investments. Projects have been assigned prioritization within each category to indicate the relative timeline for completion. Project prioritization within each category reflects a combination of factors including the analysis of the existing transportation networks, feedback received at presentations, a planning-level review of constructability, and potential for significant progress on developing connected networks across all parts of Winter Park.

All projects have been subsequently screened for feasibility and conformance with the applicable local, state, and federal design standards and guidance. Cost estimates for each recommendation are included in Appendix B. The planning-level cost estimates include percentage-based multipliers applied to the construction costs for unknowns, design, maintenance of traffic, and construction inspection. Notably, the TMP identifies the likely elements to be included with each project but does not include detailed design alternatives for individual locations.

Finally, the TMP provides targeted guidance for the implementation of recommended projects, policies, funding strategies, and design following the latest best practices.

Map 1 - Executive Summary - All Projects



Map 2 - Executive Summary - Greenway Route Concept

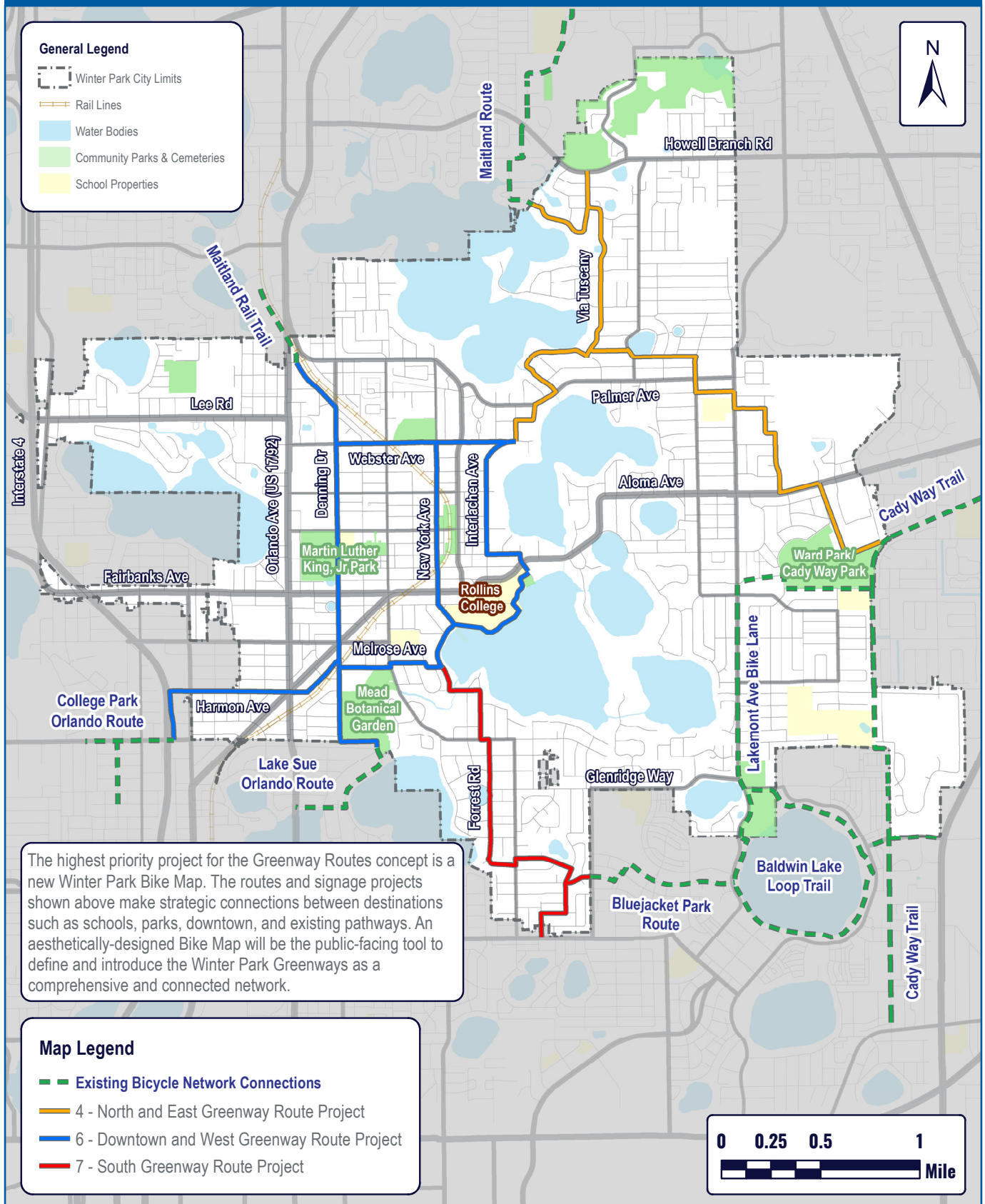


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APPENDIX: WINTER PARK COMPREHENSIVE PLAN – TRANSPORTATION ELEMENT

INTRODUCTION

TRANSPORTATION MASTER PLAN OVERVIEW

The City of Winter Park Transportation Master Plan, hereinafter referred to as the TMP, is an update to the 2011 Traffic and Transportation Plan. The TMP identifies policies and investment priorities to provide safe, efficient, and attractive travel choices for residents and visitors. The plan is intended to guide community decisions in a balanced approach that considers all transportation users. Reflecting the current conditions, the TMP builds upon and updates the analysis completed under the 2018 Mobility Plan study effort. During the update process, there was an opportunity to scratch completed projects off the list, re-evaluate the needs, and identify new project opportunities. The TMP was developed in close coordination with City staff, Transportation Advisory Board, and City Commission. The project team received valuable feedback from the City Commission and Transportation Advisory Board, who advised consideration of the following factors to guide the development of new project recommendations and priorities:

- Address both future demographics and large numbers of elderly people on foot.
- Consider evolving technologies for traffic signals and prepare for the future needs of autonomous, connected, and electric vehicles.
- Identify tools to address traffic speed and pass-through traffic.
- Provide guidance toward latest best practices and design standards.
- Promote access to downtown and SunRail.

The TMP begins with a baseline overview of Winter Park's existing transportation networks for various modes of travel and measures the operations and safety of the networks. Starting from the analysis of existing conditions, the TMP identifies lists of prioritized projects by type of investment, along with planning-level cost estimates for each project. Special attention was given to identifying a network of greenway routes as well as strategic technology investments. Notably, the TMP identifies the likely elements to be included with each project but does not include detailed design alternatives for individual locations. Finally, the TMP provides targeted guidance for the implementation of recommended projects, policies, funding strategies, and design following the latest best practices.

COMPREHENSIVE PLAN – TRANSPORTATION ELEMENT

The Comprehensive Plan is Winter Park's guiding document addressing community growth and the policies that dictate public infrastructure, including transportation. The existing transportation element of the Comprehensive Plan (See Appendix A) references the need for multimodal transportation options and identifies the following transportation goals:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Goal 2-1: Balanced Transportation System
▶ Objective 2-1.1: Safe & Balanced Multimodal System. • Goal 2-2: Safe Transportation Network
▶ Objective 2-2.1: Safety for All Modes of Transportation. | <ul style="list-style-type: none"> • Goal 2-3: Pursuit of Technology & Innovation
▶ Objective 2-3.1: Innovative Transportation Infrastructure. • Goal 2-4: Funding Opportunities
▶ Objective 2-4.1: Funding Partnerships. |
|--|---|

TRANSPORTATION NETWORK BASELINE

This chapter provides an overview of the existing transportation conditions within Winter Park. Highlighting Winter Park's assets provides context for ongoing investments and establishes a baseline for identifying needs.

CITY CONTEXT

Winter Park is a desirable place to live with a high quality of life driven by the thriving downtown, high-quality neighborhoods, scenic lakes, and proximity to the many amenities of the broader Orlando Metro area. Tree-lined brick streets, lively storefronts, and engaging architecture provide a walker's paradise and invite exploration. Maintaining and expanding that walkability is a key concern for Winter Park.

An overview of Winter Park's land uses and key destinations such as schools are shown in [Map 3](#). Areas where greater than 20% of the population are aged 65 and over are shown in [Map 4](#), further emphasizing the demand for streets that are walkable and comfortable for all.

Recent years have seen an investment in projects such as enhanced pedestrian crossings and the initiation of SunRail commuter service that brings people downtown without cars. Further efforts to improve mobility and safety for people outside cars include the creation of a wide pathway and enhanced crossings along Denning Drive, connecting neighborhoods to parks and other civic destinations. A recent transportation focus of the City has been working with the Florida Department of Transportation (FDOT) District 5 to address State Road (SR) 426, particularly moderating traffic speeds and increasing pedestrian access along the section between Park Avenue and Lakemont Avenue.

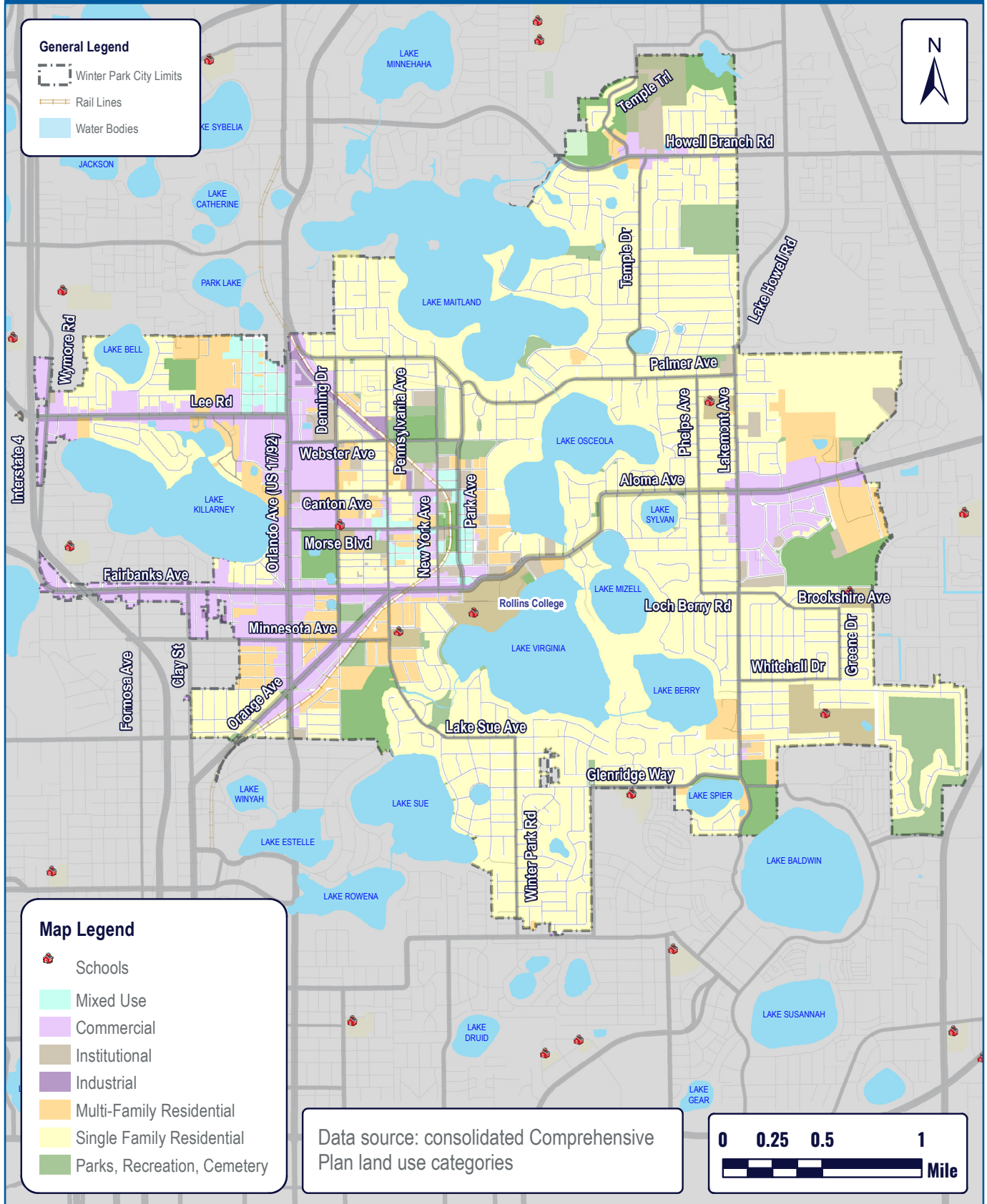
ROADWAY NETWORK

Winter Park's roadway network plays a significant role in the daily movement of people and goods throughout the city. It is useful to categorize the streets by arterial-collector-local functional classifications based on the roles they serve and how they connect the network. Functional classification carries with it expectations about roadway design, including its speed, capacity, and relationship to existing and future land use development. The functional classification of roadways in Winter Park is shown in [Map 5](#).

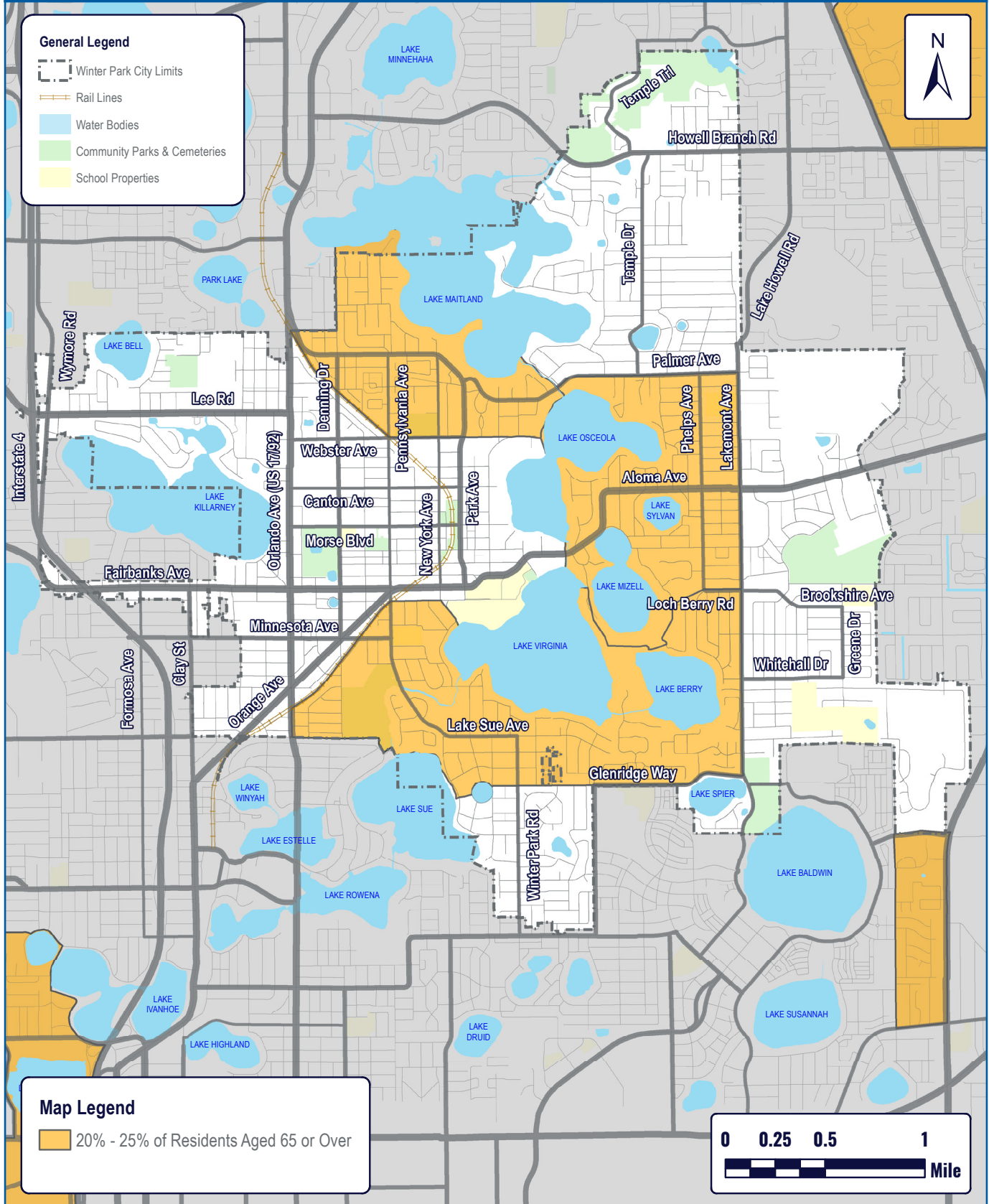
Winter Park's roadway network features two primary, multi-lane roadway corridors that traverse the city: US Highway 17/92 running north-south to the west of downtown and SR 426 (Fairbanks Avenue/Aloma Avenue) running east-west through the city. US 17/92 is a commercial corridor whereas SR 426 traverses several land use contexts including commercial strips, downtown, and single family residential. Additional key roadway links include Lee Road connecting I-4 to US 17/92 and Howell Branch Road running east-west across the northern end of Winter Park. Orange Avenue connects Orlando to downtown Winter Park with a traditional main street of storefronts. Further emphasizing their importance for regional travel, the above roadways form the officially designated freight routes and are managed by the Florida Department of Transportation (FDOT) or Orange County, except for the portion of Orange Avenue east of US 17/92 which is not a freight route and is owned and maintained by the City of Winter Park. The ownership of roadways and existing designated freight routes are shown in [Map 6](#).

Notably, a north-south chain of lakes divides Winter Park into halves, with downtown and the commercial areas along US 17/92 to the west, and predominantly single-family residential neighborhoods to the east. Due to the lakes, there are limited routes that connect downtown with the eastern half of the city. The major connection is the primary arterial of SR 426 as noted above. Palmer Avenue to the north and Pennsylvania Avenue/Glenridge Avenue to the south are the other two route options. Lakemont Avenue is the north-south connection between these routes along the east side of Winter Park. Where not broken up by lakes, the rest of Winter Park's roadways form a well-connected network of two-lane local streets.

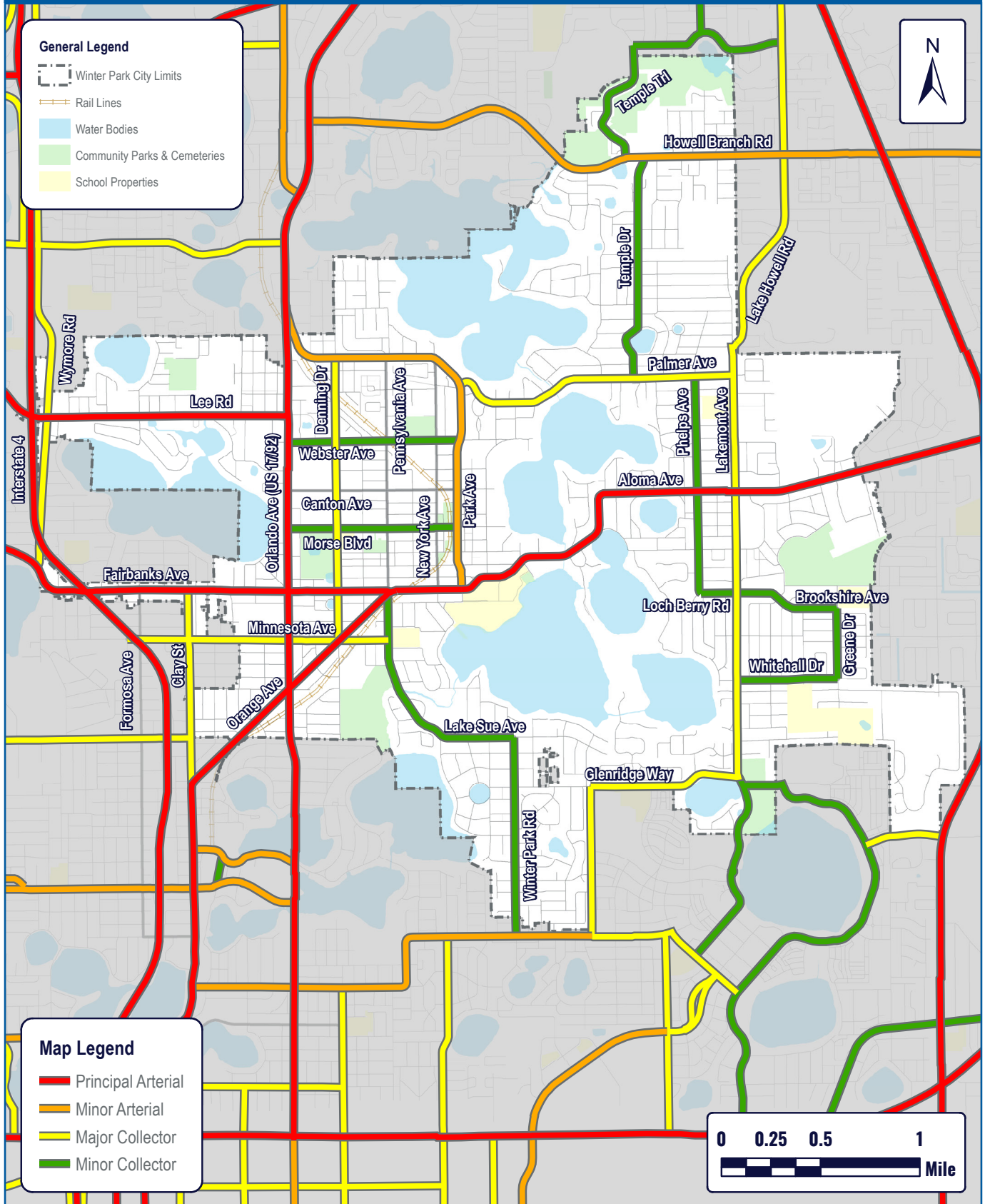
Map 3 – Land Use Context



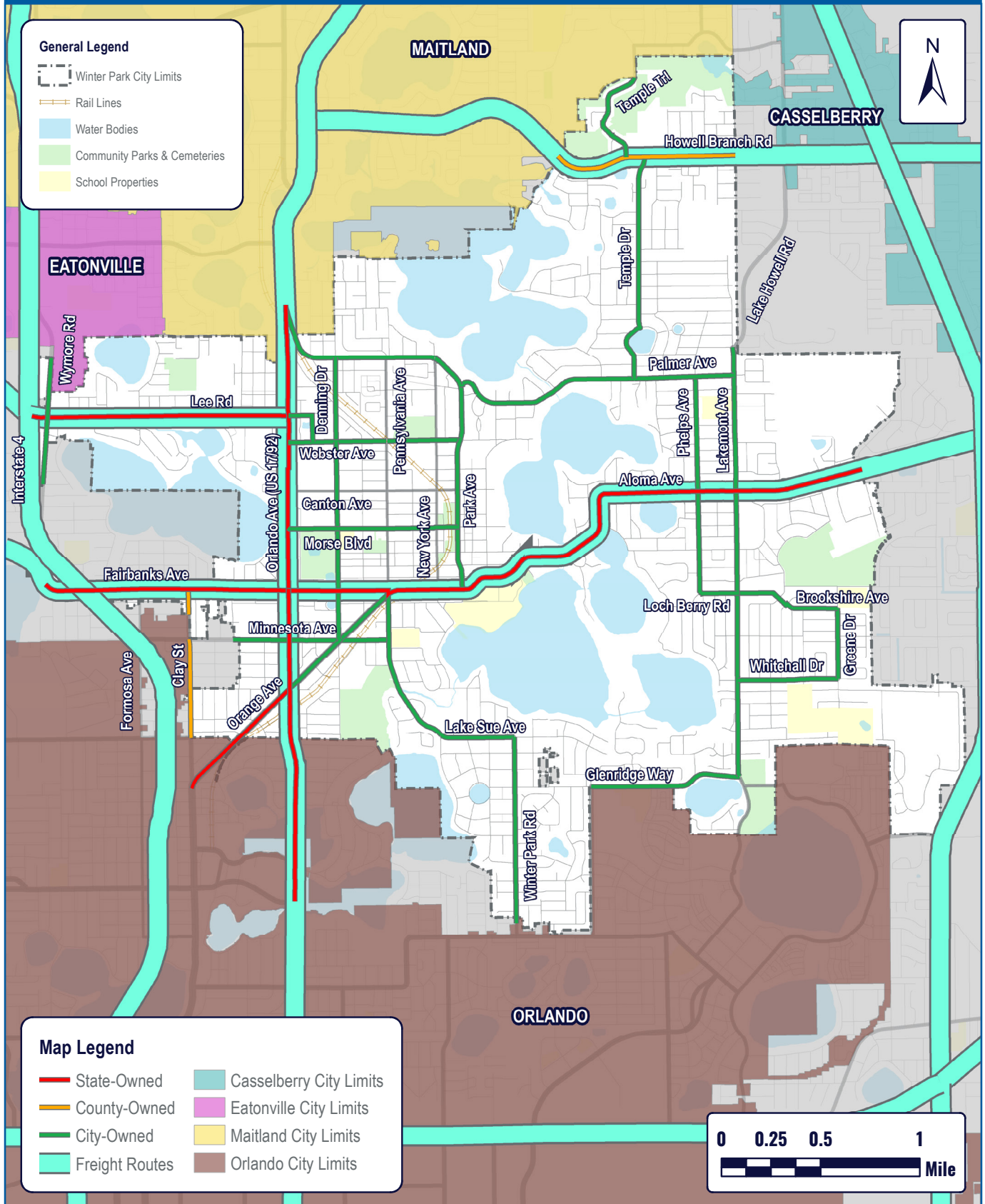
Map 4 – Areas with Concentration of Population Aged 65 and Over



Map 5 – Roadway Functional Classifications



Map 6 – Roadway Ownership & Existing Freight Routes



WALKING & BICYCLING NETWORK

Winter Park's pedestrian network consists largely of sidewalks. As shown in the Sidewalk Inventory ([Map 7](#)), there are sidewalks on both sides of most City streets. Some streets have physical constraints with sidewalks on only one side. The streets without any sidewalks tend to be low speed and low volume residential streets.

The primary shared use path in Winter Park follows Denning Drive and represents a significant investment and priority of the City ([Figure 1](#)). The other connected system of pathways is the Cady Way Trail along the eastern edge of Winter Park and Lake Baldwin to the southeast. Several segments of roadways have designated bike lanes, Shared Lane Markings (aka "sharrows"), or signage indicating bicycle routes; however, there is no cohesive network of bicycle facilities or routes that connect between primary destinations such as downtown, major parks, or schools. The existing bicycle routes, shared use paths, and enhanced crossings are shown in [Map 8](#).



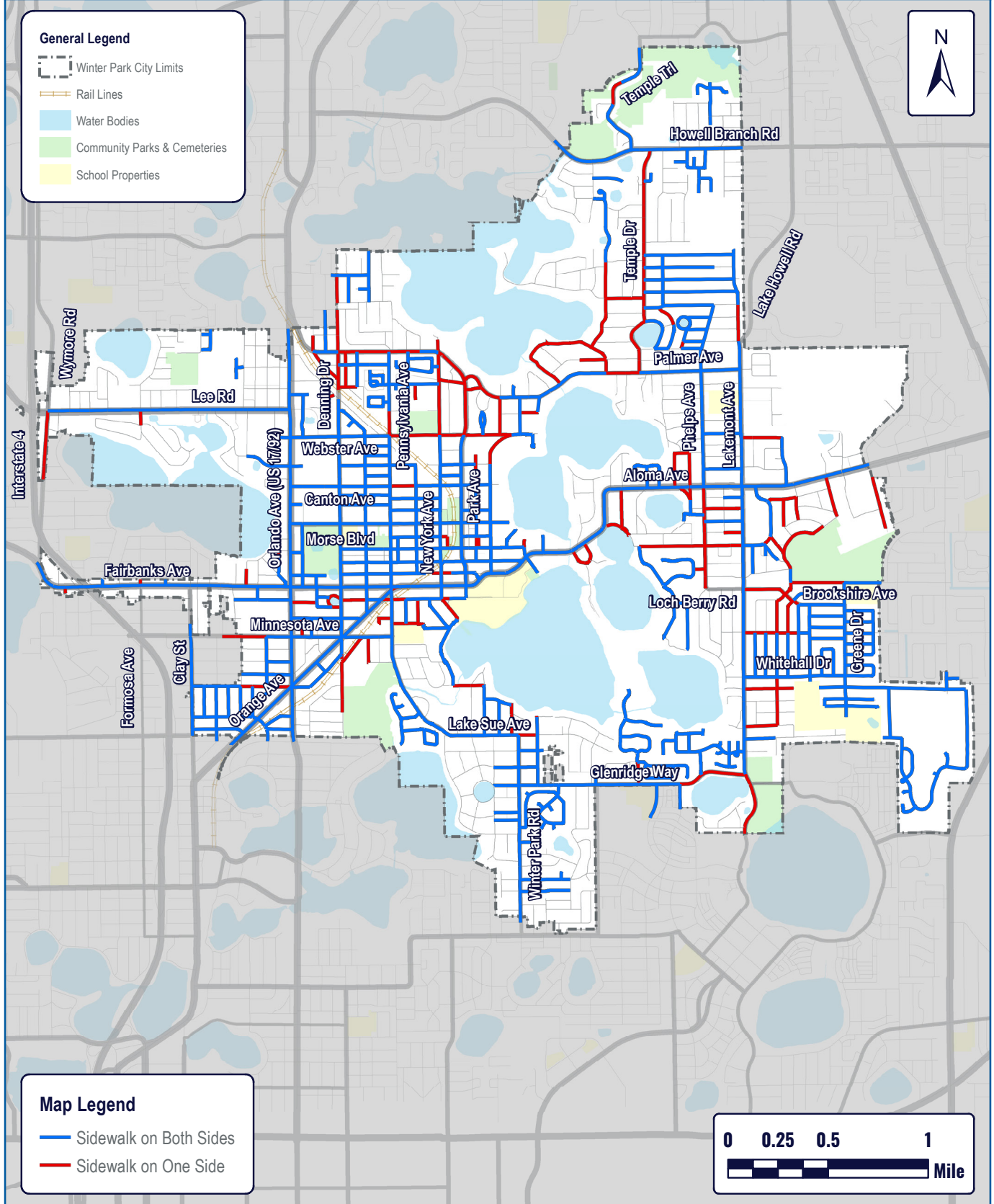
Figure 1 - Denning Drive shared use path and enhanced crossing.

Throughout Winter Park, there are islands of ideal walking and bicycling conditions, but there are also barriers such as large roadways that prevent these comfortable areas from connecting to one another. Winter Park has made investments into enhanced crossing infrastructure in a number of locations to make those crossings safer and more comfortable. The enhancements include dedicated signals for pedestrians, median refuge islands, rectangular rapid flashing beacons (RRFB), continuously flashing warning signs at crossings, and low signs (aka "paddles") mounted directly on the roadway surface between travel lanes at crossings. [Figure 2](#) shows the dedicated pedestrian signal across Orange Avenue.

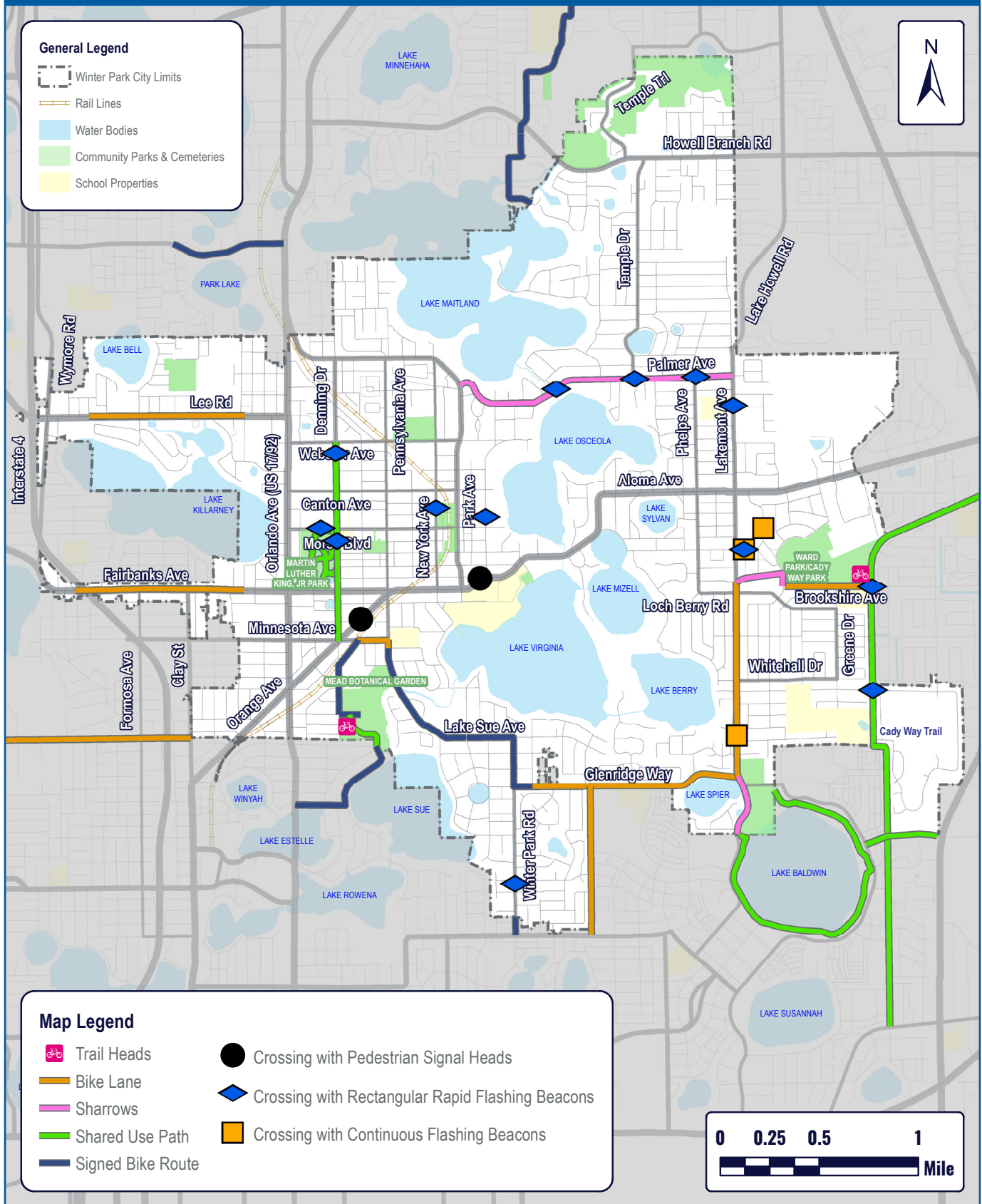


Figure 2 - Signalized pedestrian crossing along Orange Avenue.

Map 7 – Sidewalk Inventory



Map 8 – Bicycle Route, Shared Use Path & Crossing Inventory



TRAFFIC SIGNALS & TECHNOLOGY

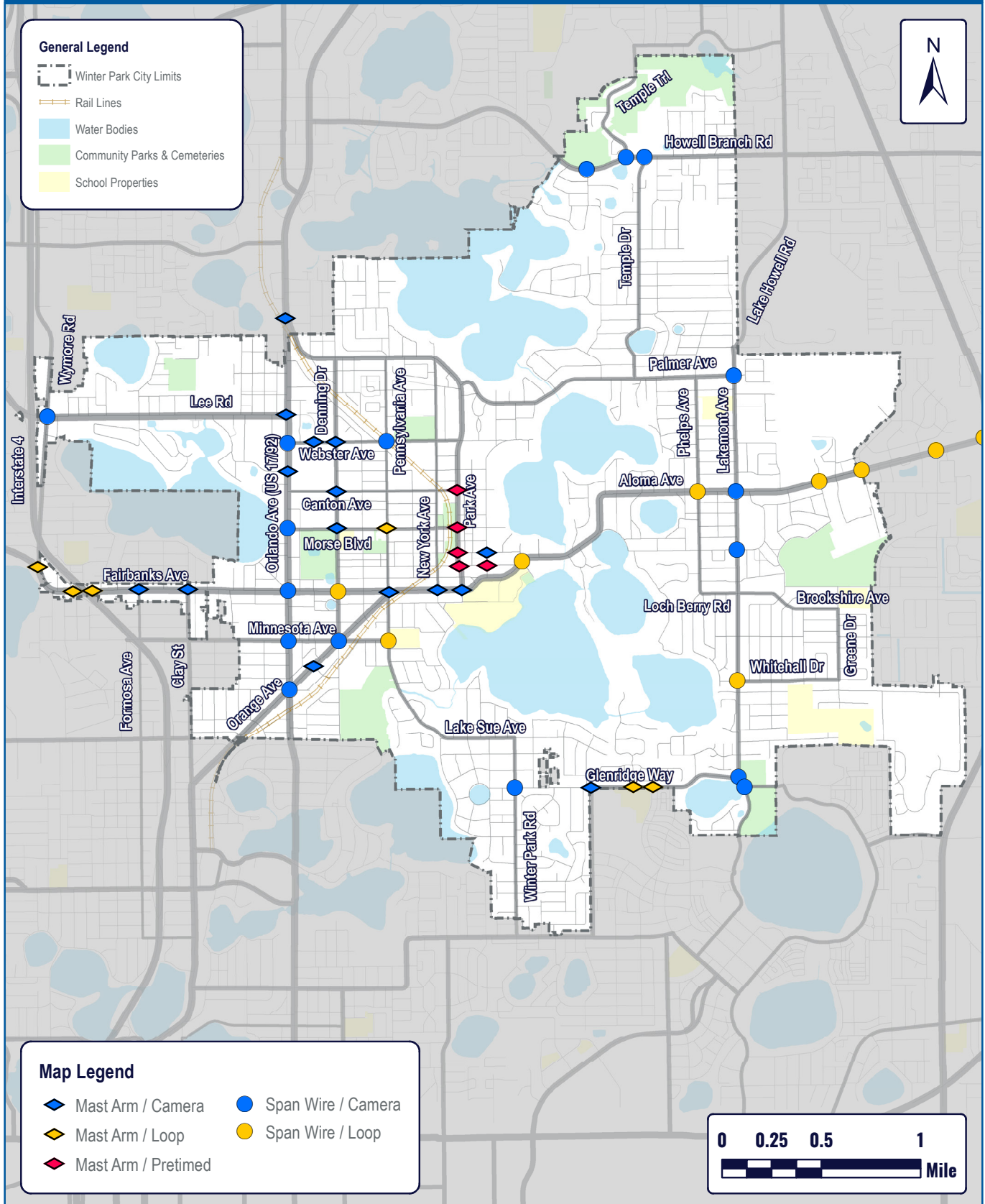
There are 47 traffic signals operational within Winter Park ([Map 9](#)). The City owns 27 of the signals and the State of Florida owns 20 of the signals, but they are all maintained by the City of Winter Park. The signals operate pre-timed along Park Avenue, with the rest of the signals having the capability for actuation by video or loop detection. The existing historic traffic signals along Park Avenue are shown in [Figure 3](#).



Figure 3 - Legacy traffic signal equipment along Park Avenue

Fiber optic cables provide a way to collect data from traffic devices and to communicate between devices. The benefits of using fiber transmission include bigger bandwidth, faster speeds at longer distances, higher resistance, and increased security. The cables typically run through conduits installed underground. Junction boxes are installed at locations where cables are spliced. Information published by FDOT and shown in [Figure 4](#) indicates that there are existing traffic data fiber cable installations along I-4, Lee Road, US 17/92 north of Lee Road, and along the railroad line.

Map 9 – Traffic Signal Inventory



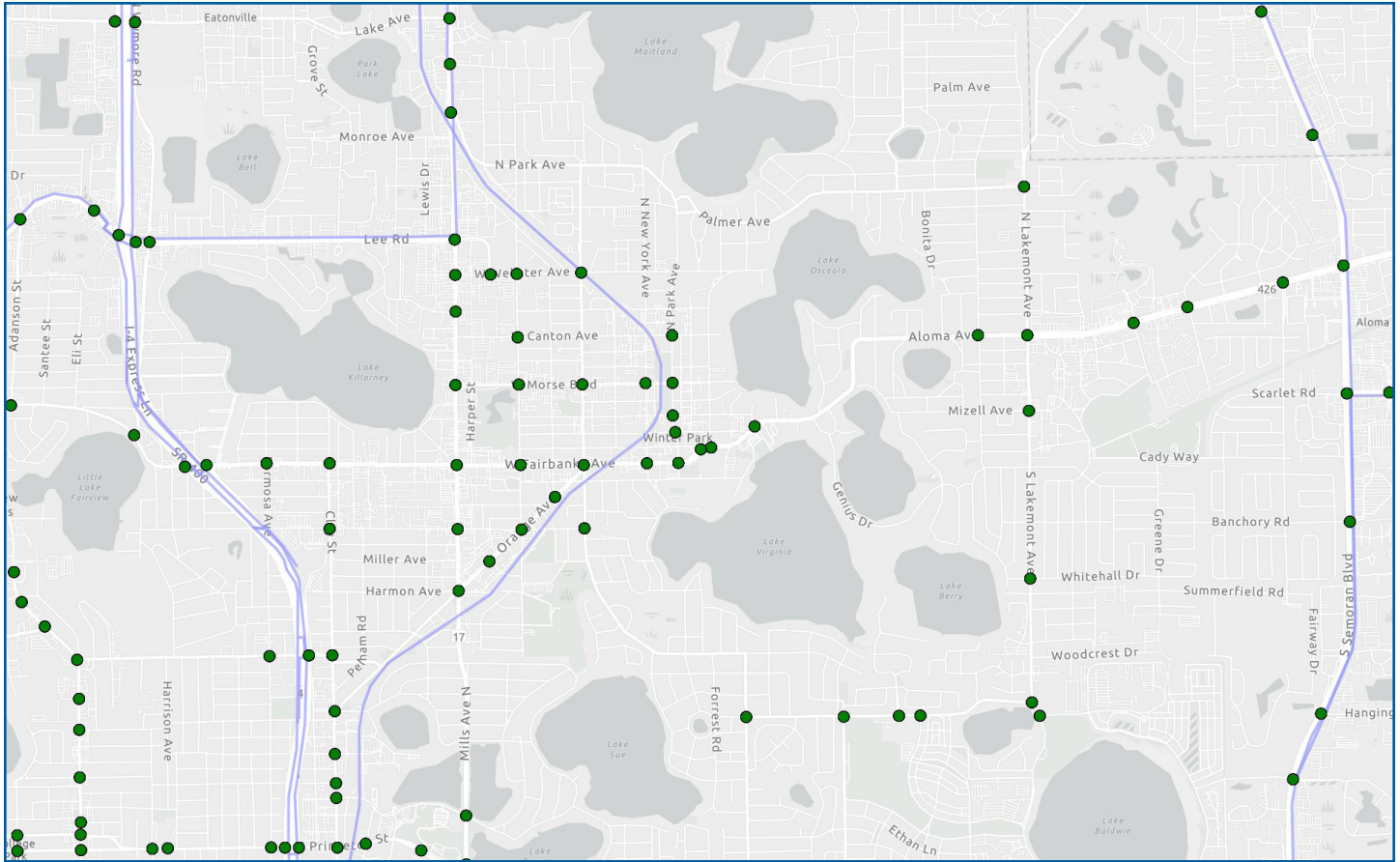


Figure 4 - Locations of existing fiber cables for traffic signal communications. (Source FDOT District 5: <https://noemi.cflsmartroads.com/div/>)

TRANSIT

Winter Park's transit services are provided by LYNX buses, SunRail commuter rail, and Amtrak long distance rail. LYNX is the public agency charged with providing public transportation services to the general public in the Orlando, Florida metropolitan area -- Orange County, Seminole County, and Osceola County. LYNX provides an array of transportation services in the form of fixed route bus services, door-to-door paratransit services, carpool/vanpool services, school pool matching services, and community shuttle service to special events. LYNX serves an area of approximately 2,500 square miles with a resident population of more than 2.3 million people. Small portions of Lake and Polk counties are served as well.

Seven LYNX bus routes operate within Winter Park with one route operating on 30-minute headways and the rest operating on 60-minute headways. An excerpt of the LYNX system map showing the routes within Winter Park is shown in [Figure 5](#). Five of the routes converge on the Winter Park Village bus transfer center.

SunRail provides commuter rail service to downtown Winter Park with trains scheduled every 30 minutes (northbound and southbound) during the morning and afternoon peak periods. Mid-day service is every 2 hours. Service runs from 5:30 am to 9:30 pm on weekdays. SunRail does not operate on weekends except on some occasions. Amtrak operates long distance rail with daily service to the Winter Park station on the Silver Meteor and Silver Star national routes.

- LYNX 30-minute service in Winter Park:
 - Route 102 (Orlando – WP Village – Fern Park)
- LYNX 60-minute service in Winter Park:
 - Route 1 (WP Village – Maitland – Altamonte Mall)
 - Route 6 (Runs along General Rees Ave, Glenridge Wy, and Lakemont Ave)
 - Route 9 (Calvary Towers – WP Village – Rosemont)
 - Route 13 (Runs along General Rees Ave, Glenridge Wy, and Lakemont Ave)
 - Route 23 (Calvary Towers – Rosemont – Springs Village)
 - Route 443 (Advent Health – WP Village – Rosemont)

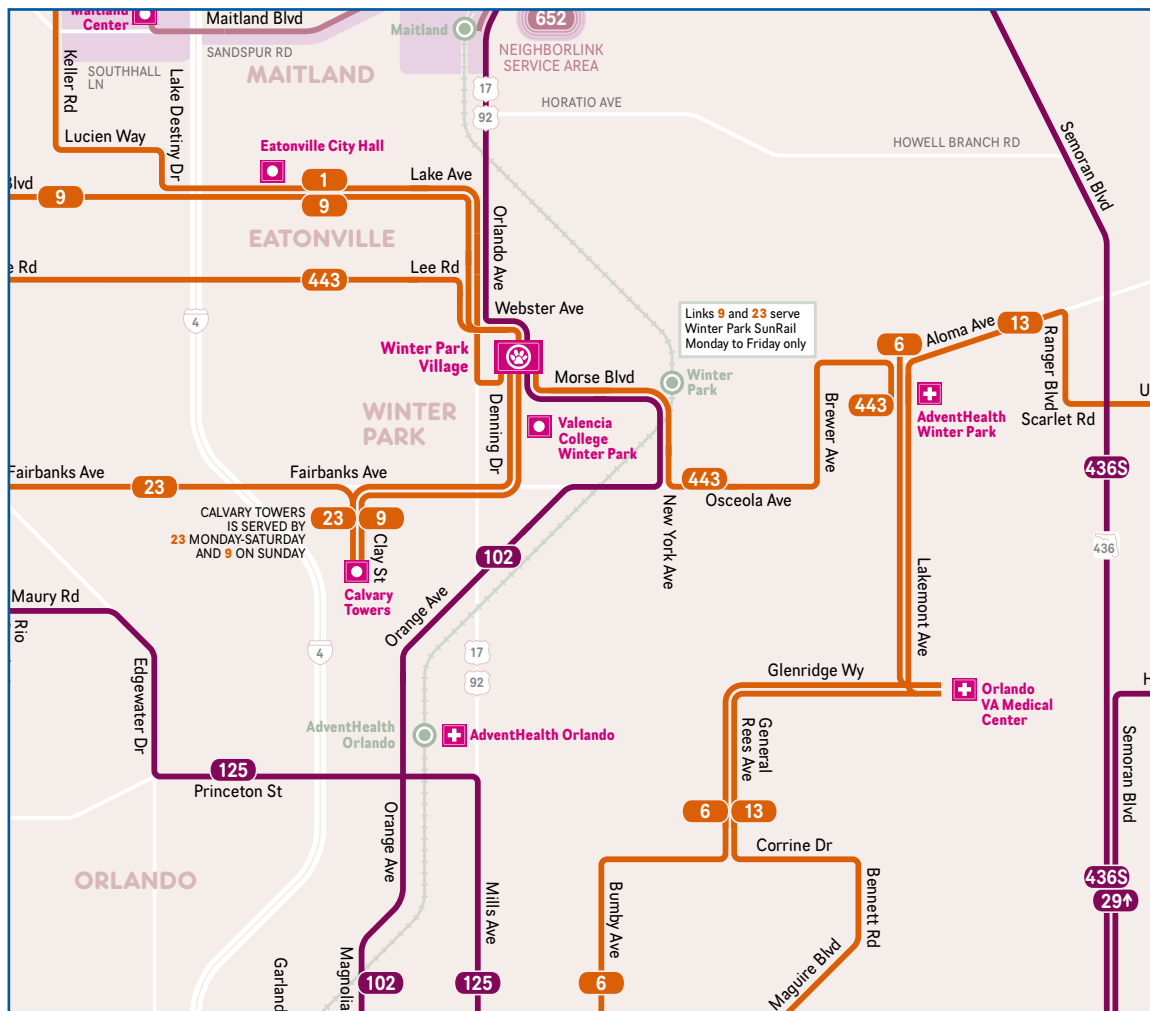


Figure 5 - LYNX Transit Routes through Winter Park (<https://www.golynx.com/maps-schedules/map-gallery.shtml>)

TRANSPORTATION METRICS

The previous chapter identified the baseline of existing transportation infrastructure in Winter Park. This chapter examines and measures the operation and performance of that infrastructure. The purpose of measuring performance is to identify issues and directly inform the prioritization of projects. The evaluation and corresponding factors considered for prioritizing projects fall under the following three categories:

- Traffic safety
- Network quality and connectivity
- Operational reliability

TRAFFIC SAFETY

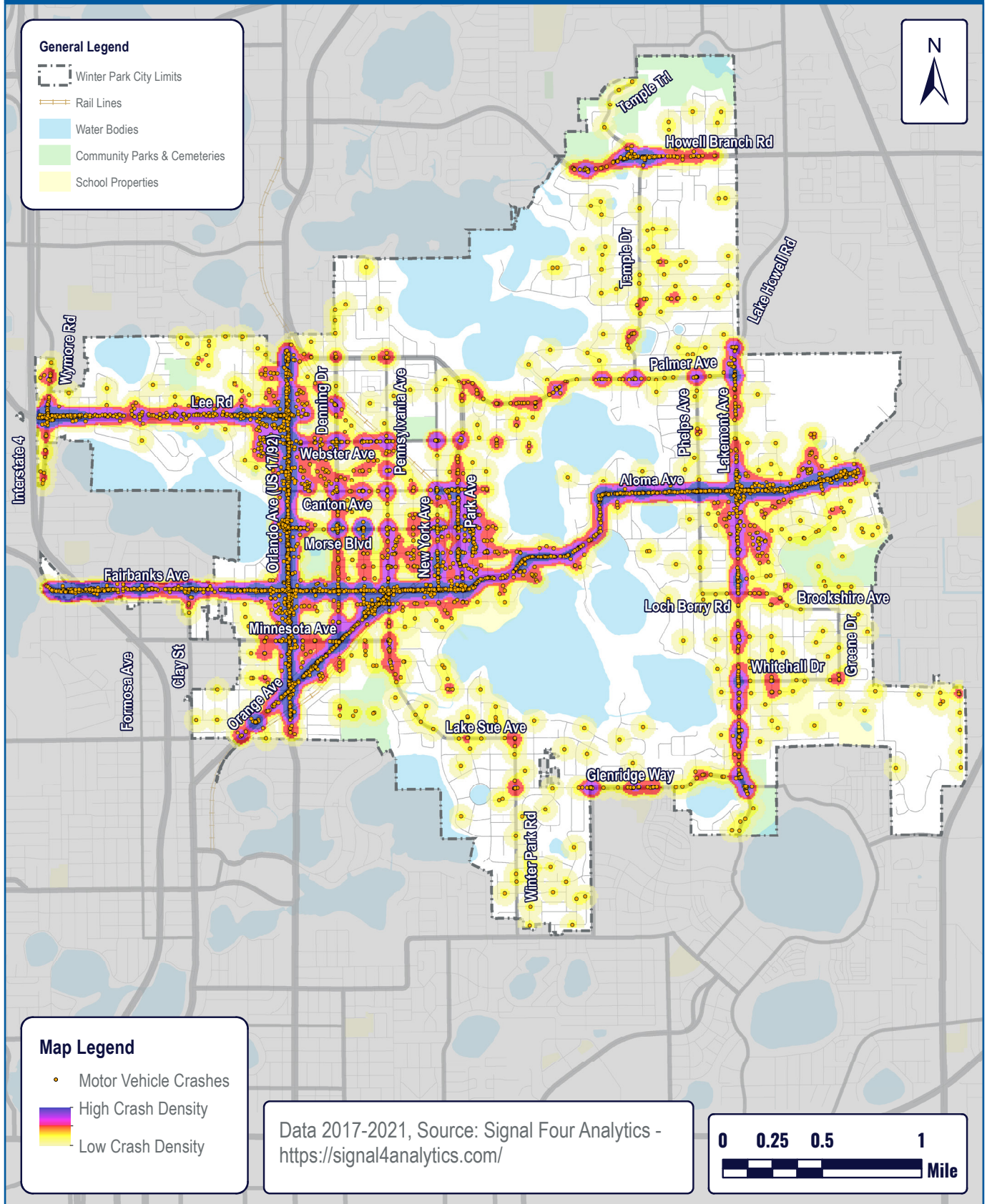
The primary metric for evaluating Winter Park's transportation system is safety. A reduction in vehicle related crashes, injuries, and fatalities has a major impact on public health. It is estimated that in the first half of life, more Americans die from motor vehicle crashes than any other cause, including cancer or the flu. These injuries and fatalities often cause a shift in productivity, decreased property values, and a disruption to social services, further breaking down the health of a community.

A review of traffic crash locations across Winter Park shows that incidents happen in all parts of the city. Overall, the concentrations of motor vehicle crashes are greater as the volumes and speeds of traffic increases ([Map 10](#)). Crashes involving vulnerable roadway users such as pedestrians and bicyclists are clustered in commercial areas, which is where higher numbers of people are walking ([Map 11](#)). In both instances, the proportional concentration of crashes relative to use indicates that systemic changes are needed to address the root causes of traffic crashes.

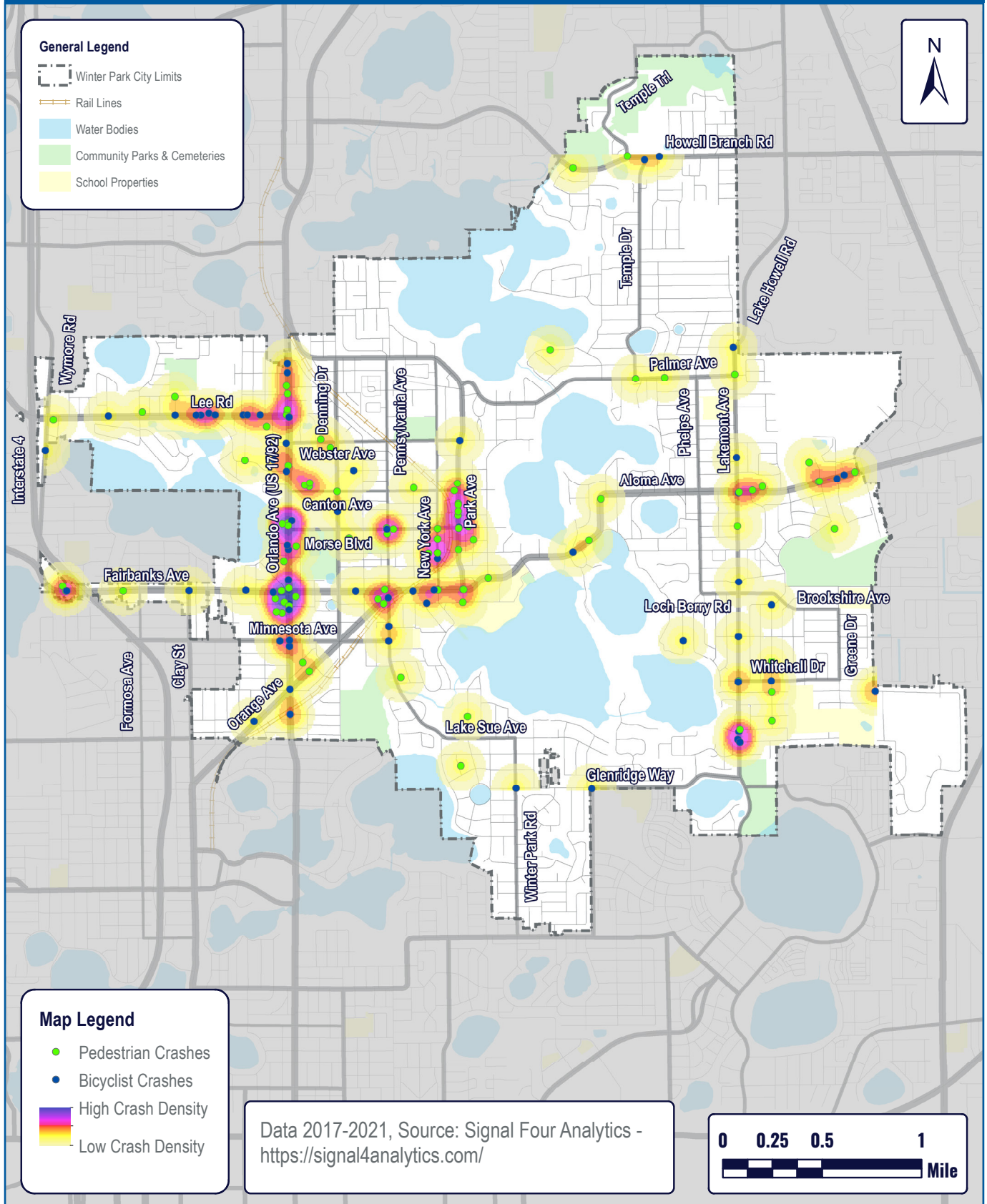
For both motorists and people outside of cars, the impact of lower traffic speeds on injury reduction is evident. Particularly in commercial areas where pedestrian traffic is greatest and encouraged, designing streets using a context-sensitive maximum operating speed for motorists can be expected to decrease crash severity and improve safety. The posted speed limits within Winter Park are shown in [Map 12](#).

Vision Zero is a worldwide planning initiative that establishes the target of completely eliminating traffic crash fatalities. MetroPlan Orlando was awarded a 2022 Safe Streets and Roads for All (SS4A) federal grant to develop Vision Zero Safety Action Plans for each jurisdiction across the MPO planning area. Building upon the TMP metrics and work program, Winter Park will collaborate with MetroPlan Orlando to conduct community engagement and follow a data-driven process to identify low-cost, high-impact solutions with a goal of fully eliminating traffic fatalities.

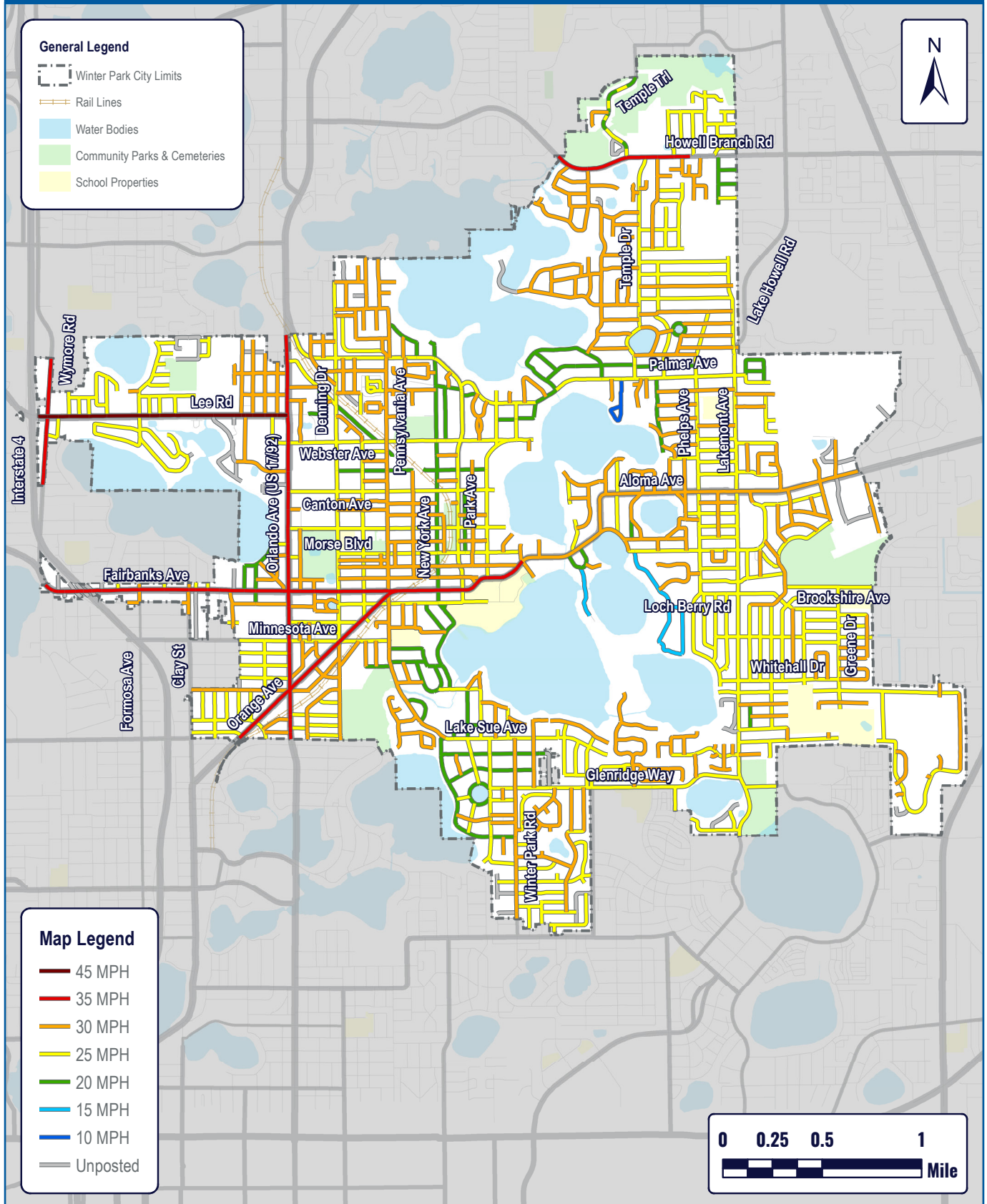
Map 10 – Motor Vehicle Crashes (2017-2021)



Map 11 – Vulnerable Roadway User Crashes (2017-2021)



Map 12 – Posted Speed Limits



NETWORK QUALITY AND CONNECTIVITY

Connectivity refers to the level of connectedness within the transportation system. Regardless of mode choice, it is essential to have an uninterrupted path of travel between your starting point and your destination. A truly robust transportation network provides continuous, comfortable routes for all forms of transportation, including motor vehicles, transit systems, bicycles, and pedestrians. Unfortunately, we do not live in an ideal environment; therefore, it is important that connectivity be evaluated to identify gaps within the network. Obstacles can come in a variety of forms. For example, congestion can be a temporary hindrance for motorists traversing the roadways. Alternatively, a missing curb ramp becomes a permanent barrier for disabled people traveling along the sidewalk.

The City of Winter Park has a robust roadway network with arterial and collector roadways traversing the city, complemented by a grid network of local streets in the downtown and in surrounding neighborhoods. Motorists have largely unhindered access throughout the city; however, there are some obstacles to vehicular travel within the city. The chain of lakes at the center of Winter Park limits the number of east-west connections. The lakes are a permanent barrier that cannot be addressed by adding roadways to the network. Congestion during peak hours and events acts as a temporal hindrance for vehicular travel within Winter Park. The ability to make left turns along the major arterials can become considerably challenging during congested times where there are few gaps in opposing traffic. Special events bring the added challenge of finding parking, which can sometimes result in cars circling city streets, thereby exacerbating traffic concerns.

The connectivity for people on foot or bicycle is more dependent on personal experience and the relative comfort of the environment provided. Whereas the roadway network for motorists is measured in miles, the connectivity of the transportation system for people in a wheelchair is measured in inches and a missing curb ramp or section of sidewalk can prevent travel entirely. Alternatively, the lack of a marked crossing at a particular location could discourage able-bodied people from crossing simply because they feel it is unsafe to do so. Providing a connected network of comfortable facilities and routes is a primary objective and factor for prioritizing City investments and projects in the next chapter.

It is useful to measure the actual conditions experienced by people walking and bicycling, which leads to measuring the Level of Traffic Stress for people walking or bicycling as presented in the following sections.

Pedestrian Level of Traffic Stress

The leading contemporary method used to evaluate conditions for people walking is Pedestrian Level of Traffic Stress (LTS). Based on empirical research over the past decade, the pedestrian LTS for a given street spans from conditions that are comfortable and appealing to all users to conditions that may be impassable for some people and used only due to limited route options. [Figure 6](#) graphically shows the decreasing types of pedestrians that feel comfortable as the pedestrian LTS worsens.

Sidewalks on both sides of the street with lower traffic speeds and more separation/buffer from the roadway are preferred for safety and comfort.

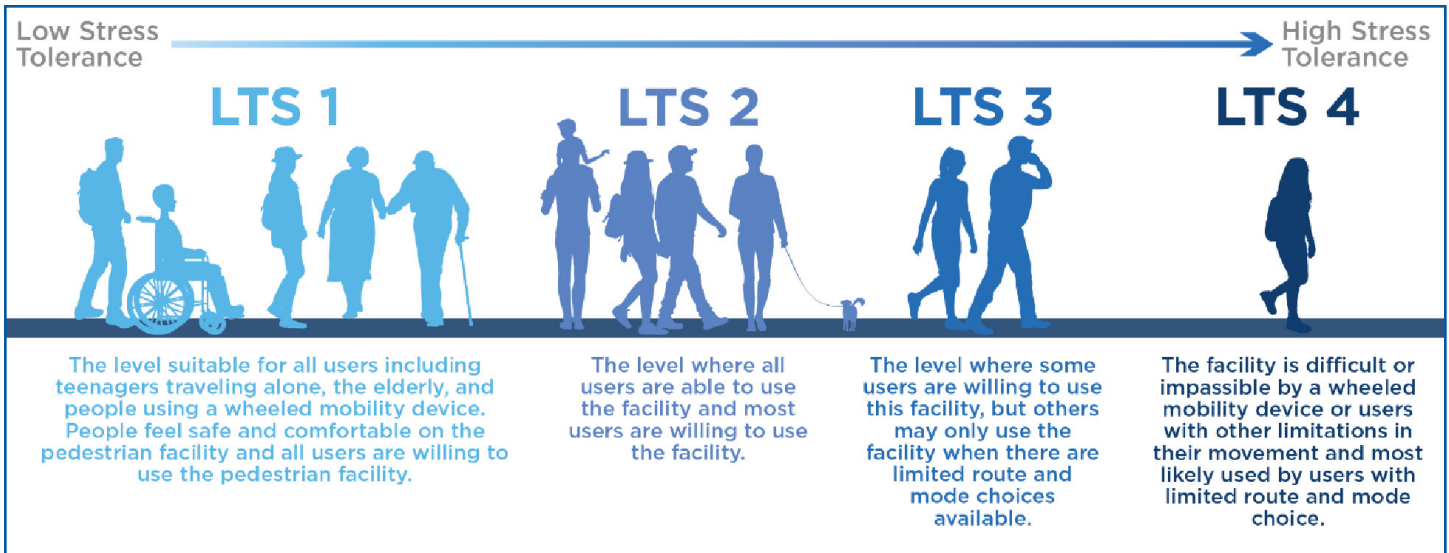


Figure 6 - Pedestrian Level of Traffic Stress by user type. (Source: FDOT 2023 Multimodal Quality/Level of Service Handbook)

Most residential streets generally provide comfortable conditions for walking because of the low traffic volumes and speeds. Utilizing data for the roadways functionally classified as collectors and arterials as summarized in the Transportation Network Baseline chapter and following the latest guidance published by FDOT in 2023, the following factors determine the pedestrian LTS for a given street, with the results shown in [Map 13](#).

- Presence and width of sidewalk adequately on one or both sides.
- Posted speed limit.
- Presence of lateral and/or vertical separation between the roadway edge and sidewalk.

Bicycle Level of Traffic Stress

Different people have different levels of comfort bicycling in traffic. Industry practice has identified four generalized types of bicyclists based on skill and experience level: children and elderly, interested but concerned, enthused and confident, strong and fearless. The small proportion of the population who consider themselves strong and fearless bicyclists can navigate even the most stressful streets, but most bicyclist types cannot, which can decrease the viability of bicycling even short distances. An evaluation of the relative comfort of a given street for bicycling by these defined user groups is accomplished by mapping the Bicycle Level of Traffic Stress (LTS). [Figure 7](#) shows the decreasing range of bicyclists that feel comfortable on a given roadway as the bicycle LTS worsens.

Bicycle LTS is calculated by utilizing data for the roadways functionally classified as collectors and arterials as summarized in the Transportation Network Baseline chapter. Following the latest guidance published by FDOT in 2023, calibrated to the roadway network conditions experienced by bicyclists in Winter Park, the following factors determine the bicycle LTS for a given street, with the results shown in [Map 14](#).

- Posted speed limit.
- Number of travel lanes.
- Volume of motor vehicles.
- Type of land use - commercial or residential.
- The presence, width, and vertical separation of an existing bicycle facility.

Low speed and low traffic streets are preferred whether or not there is a dedicated bicycle facility, and more separation is preferred when there is a dedicated bicycle facility.

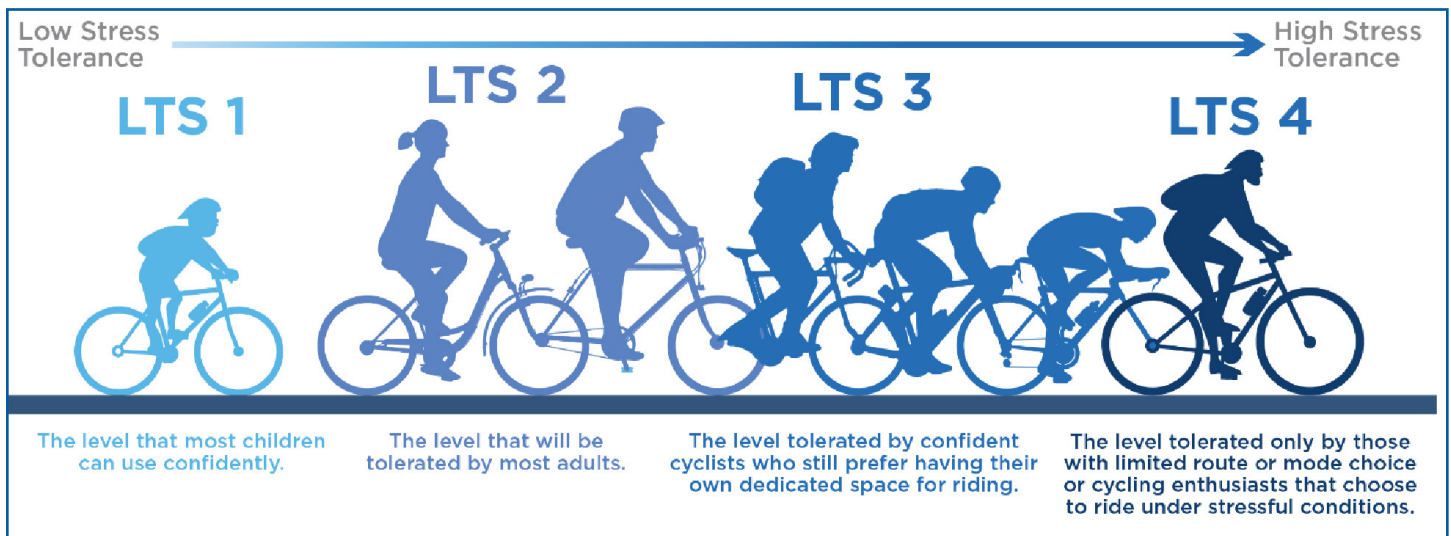
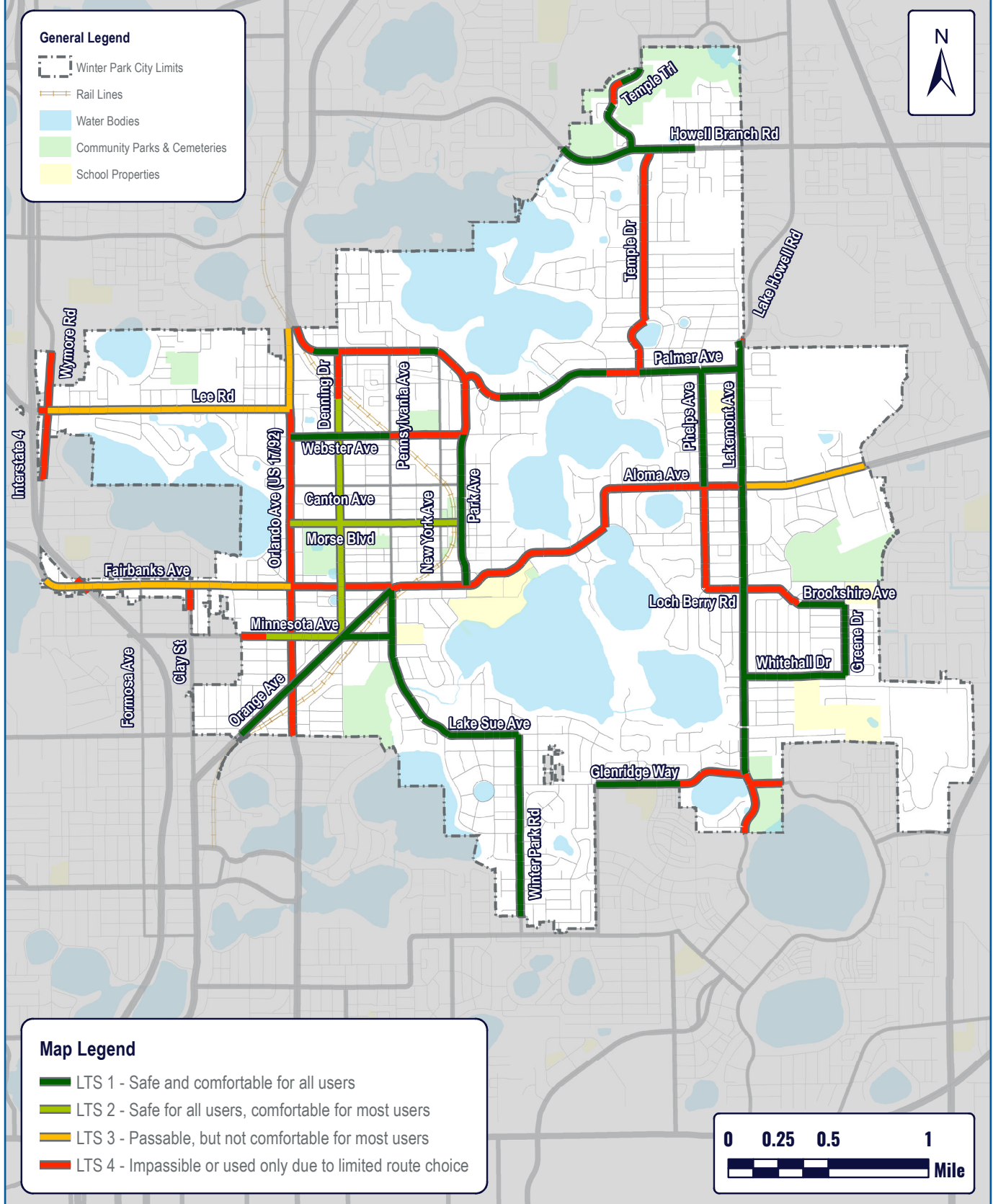
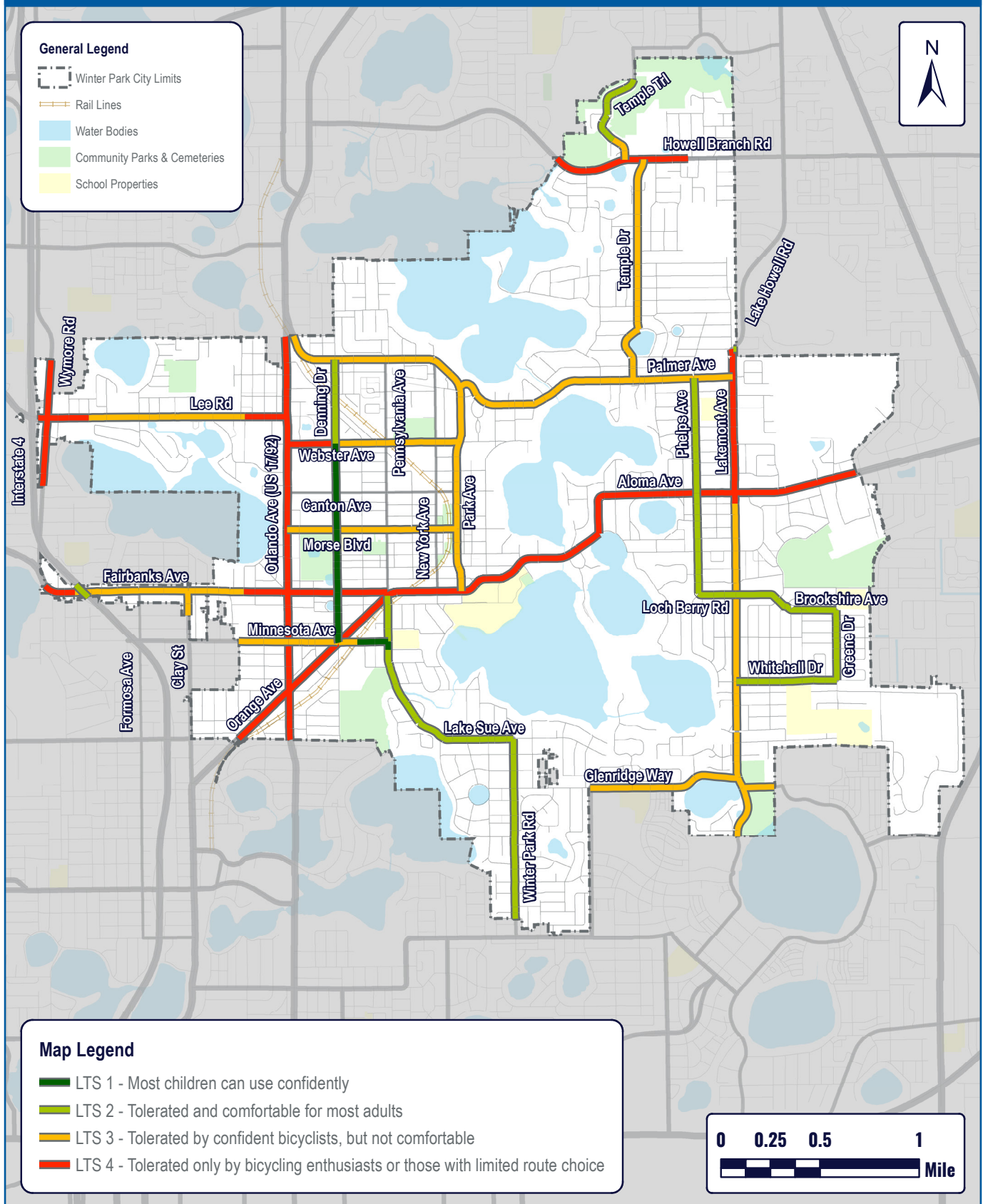


Figure 7 - Bicycle Level of Traffic Stress by user type. (Source: FDOT 2023 Multimodal Quality/Level of Service Handbook)

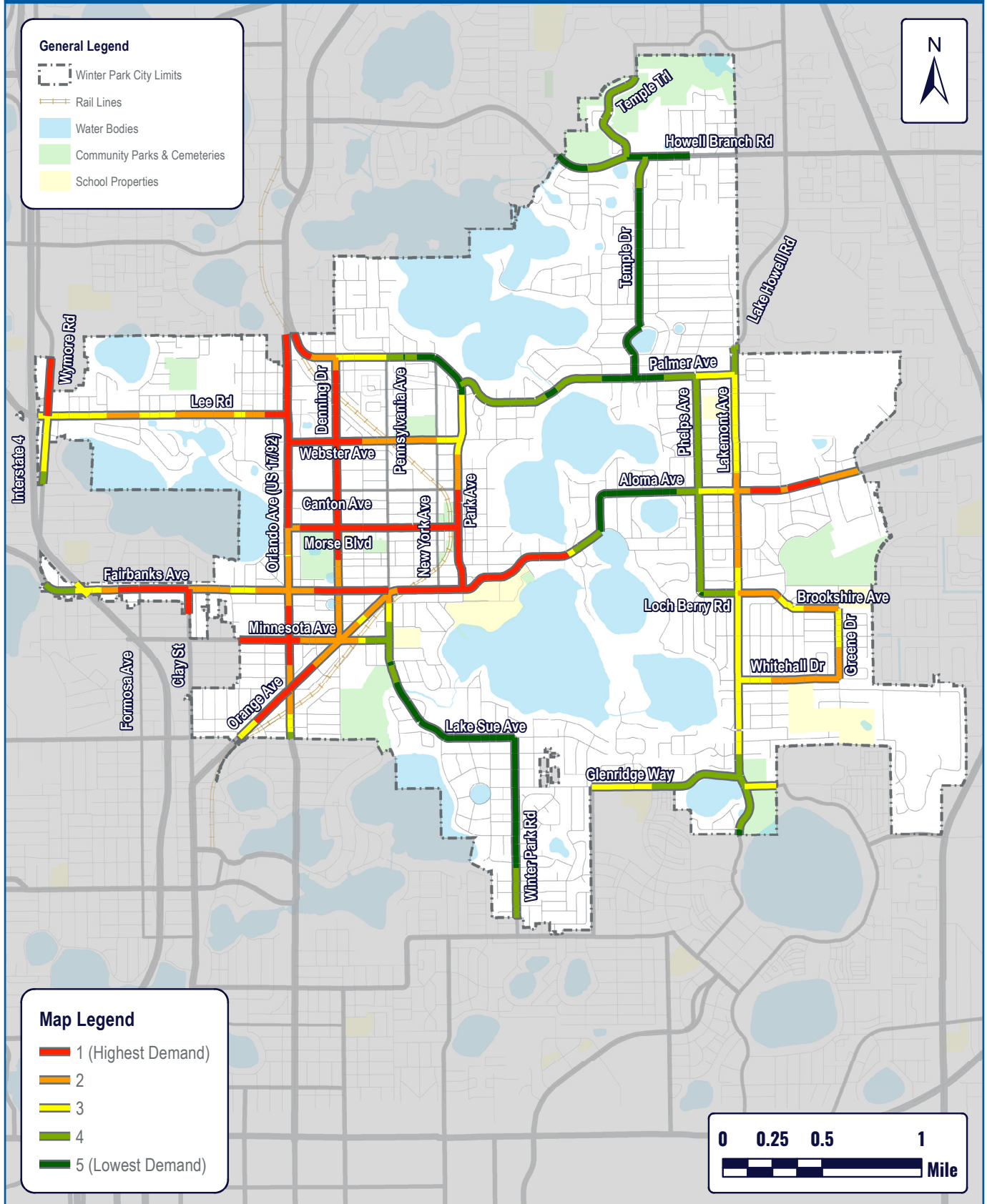
Map 13 – Pedestrian Level of Traffic Stress (LTS)



Map 14 – Bicycle Level of Traffic Stress (LTS)



Map 15 – Pedestrian Latent Demand



Pedestrian Latent Demand

The City would like to see more travel accomplished through active modes like walking and bicycling. While calculating LTS can measure the existing comfort of a roadway segment, there is a need to identify where there is a high propensity for walking based on proximity to trip origins and destinations. A useful way to visualize Winter Park's land use mix and demand for walking is via Pedestrian Latent Demand. The resulting map reflects the land use mix likely to encourage walking, based on projected 2045 data for employment, population, and school enrollment ([Map 15](#)).

OPERATIONAL RELIABILITY

The third and final way to measure the operations of Winter Park's transportation system is by counting usage and comparing it to capacity where applicable. Motor vehicles are made of metal and have designated travel lanes, making them easy to count. Similarly, transit ridership can be measured by capturing the number of people getting on or off at stops and stations. By contrast, people walking and bicycling are notoriously difficult to count. Correspondingly, vulnerable roadway user crashes and pedestrian latent demand introduced in the previous sections are valuable proxies for understanding where people are, or would like to be, walking and bicycling.

Traffic & Technology

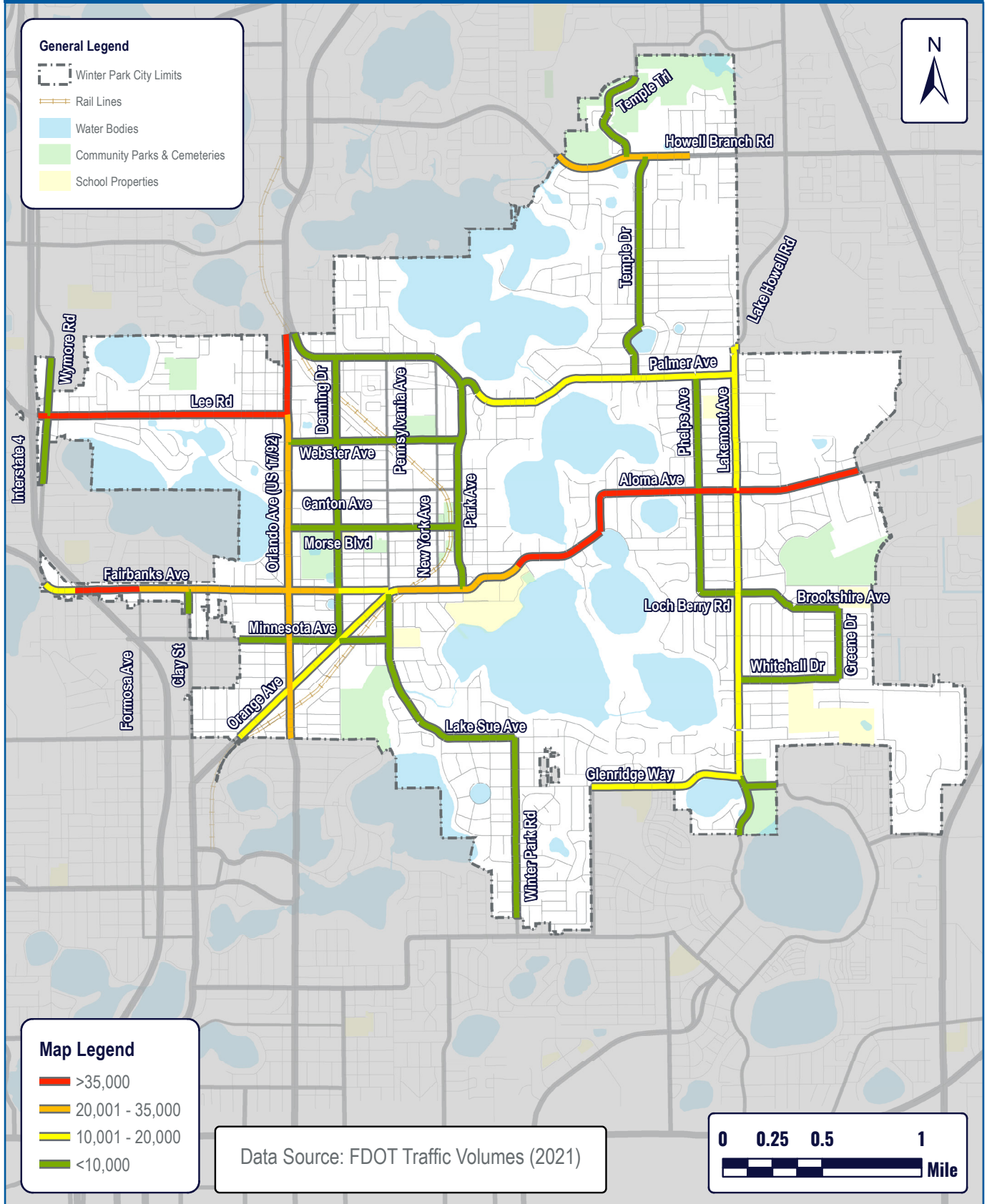
Annual Average Daily Traffic (AADT) ([Map 16](#)) is the measure used to approximate the daily volume of motor vehicle traffic carried on a segment of roadway. AADT is determined by collecting 24-hour traffic counts at multiple times in a year and then averaging the counts to account for seasonal fluctuations. An analysis and planning tool called Level of Service (LOS) ([Map 17](#)) puts the AADT in context by comparing the measured traffic volume with each roadway's expected capacity. Evaluating the resulting LOS scores can then help identify parts of the roadway network that may expect to be congested during peak hours.

The system-level calculation of LOS completed in the TMP follows the Generalized Tables method within the FDOT 2023 Multimodal Quality/Level of Service Handbook. The method establishes LOS score thresholds for the range typical land use contexts found across Florida. Winter Park's typical land use most closely aligns with the C4-Urban General category within FDOT's Context Classification system. A roadway's measured AADT is then adjusted based on whether there are medians, left turn lanes, right turn lanes, and whether the roadway is a state highway. Each roadway segment in Winter Park has thus been assigned a LOS score based on the roadway configuration adjusted AADT, the number of travel lanes, and the C4 land use context.

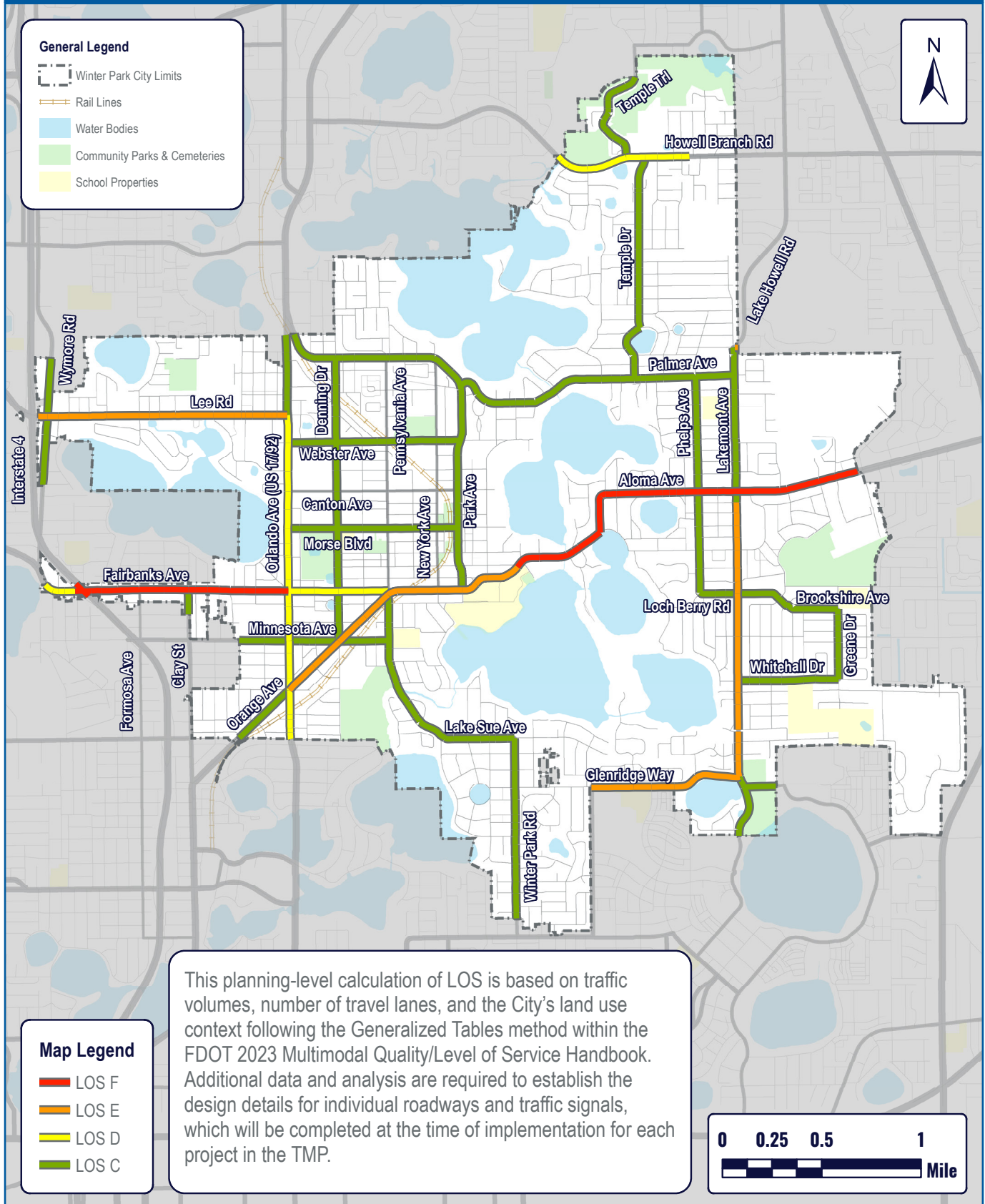
As compared to the generalized calculations completed for the TMP at a systemwide network level and using AADT, it should be noted that additional data and analysis is needed for the design of individual roadways and traffic signals. The collection of peak-hour traffic counts and analysis of individual intersection operations can quantify the extent of peak hour traffic congestion and inform specific design needs. That data collection and analysis will correspondingly be completed at the time of implementation and design for each of the projects in the TMP.

Every second matters when responding to an emergency situation, and intersections can create bottlenecks that slow emergency response times. Emergency Vehicle Preemption provides a way for fire, rescue, and police vehicles to communicate with traffic signals to help clear intersections for approaching emergency vehicles. Winter Park currently uses Opticom GPS system and is working with FDOT and product vendors to complete the last set of signals. At this time, the Opticom system is considered adequate to serve the needs and no additional emergency vehicle preemption technology is recommended.

Map 16 – Annual Average Daily Traffic (AADT)



Map 17 – Motor Vehicle Level of Service (LOS)



Transit

Over the last few years, there have been changes in the travel patterns of LYNX customers due to the introduction of SunRail, an improving economy, low gas prices, and the COVID-19 pandemic. More than 79,000 rides were provided systemwide by LYNX each weekday pre-pandemic. Post pandemic sees 55,000 rides provided systemwide by LYNX each weekday. The following ranking shows the FY 2022 ridership of LYNX routes that pass through Winter Park.

- LYNX 30-minute service in Winter Park:
 - Route 102 (Orlando – WP Village – Fern Park) – 353,661 rides
- LYNX 60-minute service in Winter Park:
 - Route 13 (Runs along General Rees Ave, Glenridge Wy, and Lakemont Ave) – 149,254 rides
 - Route 443 (Advent Health – WP Village – Rosemont) – 141,648 rides
 - Route 9 (Calvary Towers – WP Village – Rosemont) – 86,169 rides
 - Route 23 (Calvary Towers – Rosemont – Springs Village) – 71,683 rides
 - Route 1 (WP Village – Maitland – Altamonte Mall) – 42,208 rides
 - Route 6 (Runs along General Rees Ave, Glenridge Wy, and Lakemont Ave) – 20,162 rides

The Winter Park station has the second highest ridership in the SunRail system of 16 stations. 75,770 people got on or off SunRail at the Winter Park station from July 2021-May 2022, compared to the busiest station which reported 85,413 riders at the downtown Orlando LYNX terminal. On Amtrak, Winter Park station served 12,993 riders from October 2020-September 2021.

CAPITAL PROJECTS

The capital projects outlined in the following section are the physical infrastructure needed to connect and improve the transportation networks for all modes of travel. The recommendations were pulled largely from projects that have been long needed and studied in Winter Park. New project concepts were developed based on review of the baseline operations in collaboration with City staff. All projects have been subsequently screened for feasibility and conformance with the applicable local, state, and federal design standards and guidance.

The projects are grouped into categories of similar types of facilities. Projects have been assigned prioritization within each category to indicate the relative project readiness and order that they would be pursued for implementation. However, it is essential to note that each project included in the TMP could be implemented whenever the opportunity arises through funding opportunities, adjacent development, or any other newly identified considerations. Project prioritization within each category was developed through a combination of factors including the transportation metrics introduced in the previous chapter, feedback received at presentations, a planning-level review of constructability, and potential for significant progress on developing connected networks across all parts of Winter Park.

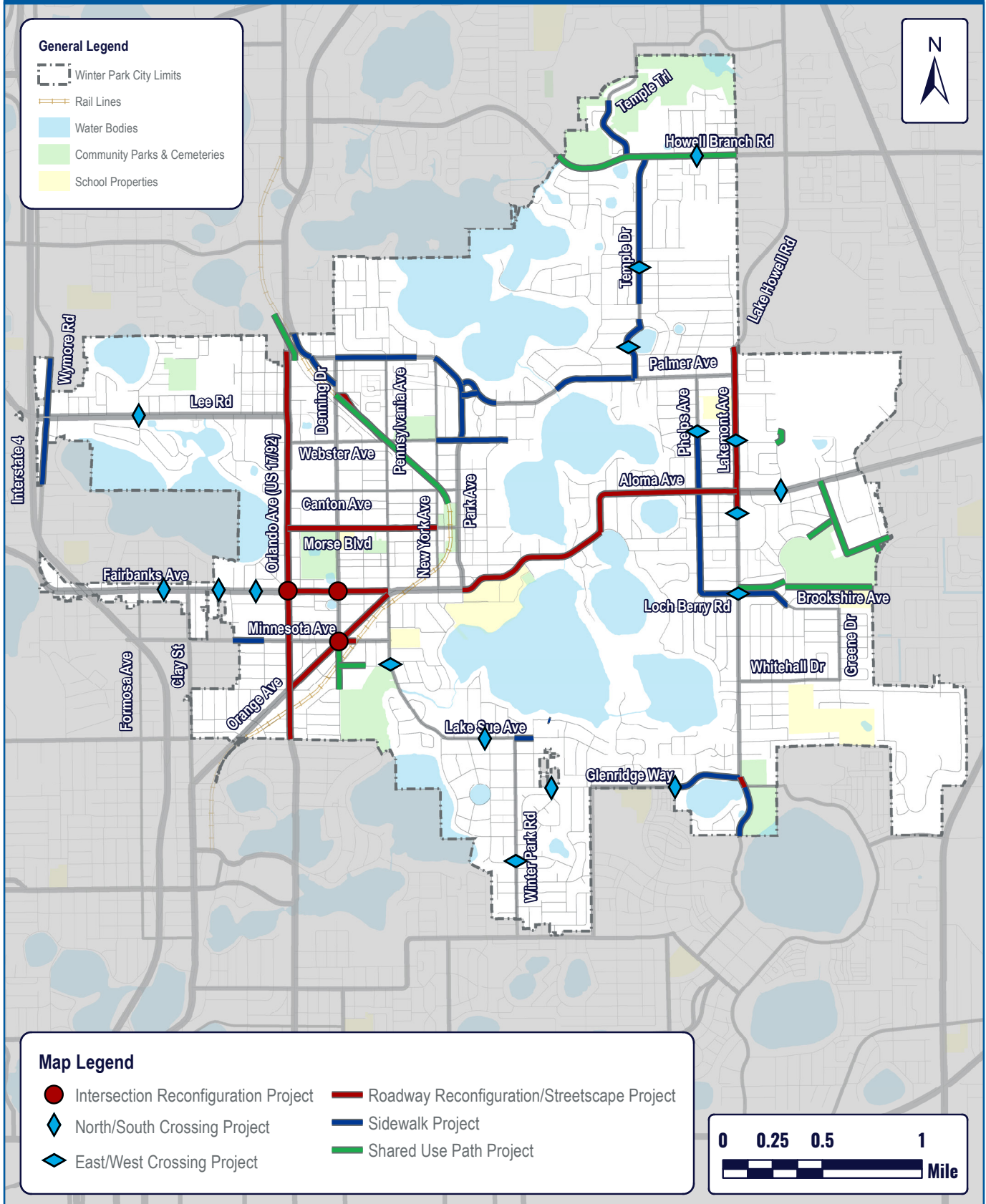
Cost estimates for each recommendation are included in Appendix B. The estimates have been developed using pay items and expected unit costs sourced from FDOT District 7, the FDOT's Long Range Estimating (LRE) system, and engineering judgement. The planning-level estimates include percentage-based multipliers applied to the construction costs for unknowns, design, maintenance of traffic, and construction inspection. Any needed right-of-way acquisition is not included in the estimates.

The five categories of projects and the total cost estimate for all projects are summarized in [Table 2](#). The TMP identifies a suite of new transportation projects that are cumulatively expected to cost over \$150M over the planning horizon of 20 years. To implement the full work program would correspondingly require an annual investment of approximately \$7M. All Projects are shown on [Map 18](#).

TABLE 2: SUMMARY OF CAPITAL PROJECTS

Project Category	20-Year Cost Estimate	Annual Cost Estimate
Sidewalk Projects	\$14,222,000	\$711,100
Shared Use Path & Greenway Projects	\$23,866,000	\$1,193,300
Crossing Projects	\$14,415,000	\$720,750
Roadway Reconfiguration & Streetscape Projects	\$69,480,000	\$3,474,000
Technology Projects	\$19,625,000	\$981,250
Capital Projects Total	\$141,608,000	\$7,080,400

Map 18 – All Projects



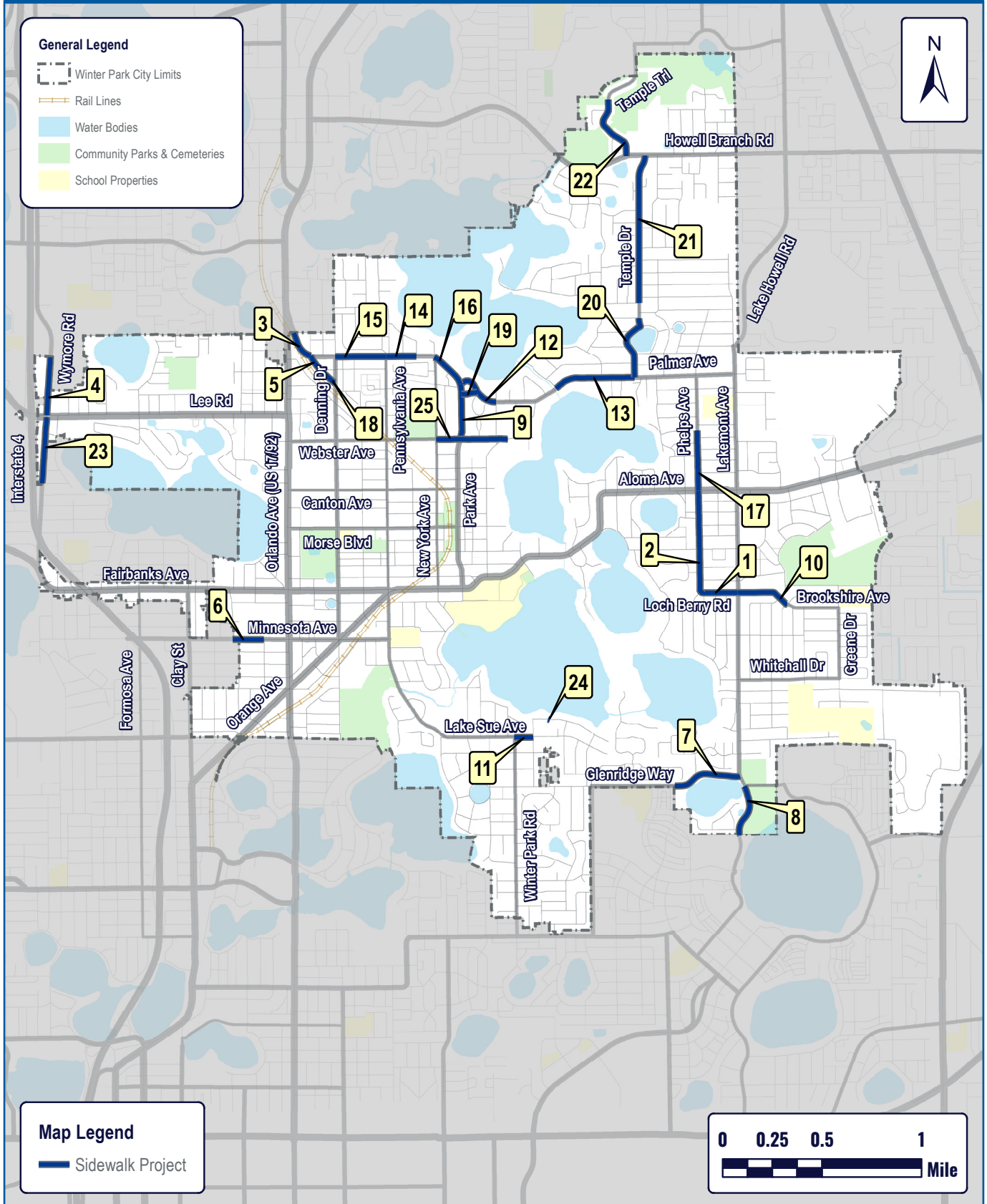
SIDEWALK PROJECTS

The first category of projects is sidewalks, reflecting the value placed on walking. While Winter Park has a robust and quality network of sidewalks, the following projects fill gaps in the network. Network quality and connectivity was introduced in the Transportation Metrics chapter. Correspondingly, the highest priority sidewalk projects are roadways where they are missing from both sides of the street or to fill gaps in the network and allow continuous travel. Moving down the list of priorities are projects that add sidewalk to streets with existing sidewalk on one side and more fully complete the network. The TMP sidewalk projects are shown on [Map 19](#) and listed in [Table 3](#).

TABLE 3: SIDEWALK PROJECTS

Priority	Roadway	Location	Improvements	Cost Estimate
1	Loch Berry Road	Phelps Avenue to Lakemont Avenue	Both sides missing	\$1,892,000
2	Phelps Avenue	Loch Berry Road to Aloma Avenue	East side	\$445,000
3	Park Avenue	Ridgewood Avenue to City Limit (N)	Both sides incomplete	\$1,356,000
4	Wymore Road	Lee Road to City Limit (N)	Both sides missing	\$1,402,000
5	Louisiana Avenue	Park Avenue to Wilma Avenue	Both sides missing	\$76,000
6	Minnesota Avenue	Nicolet Avenue to Schultz Avenue	North side gap	\$267,000
7	Glenridge Way S	St. George Street to Lakemont Avenue	South side - includes boardwalk	\$1,544,000
8	Lakemont Avenue	Gray Avenue to Glenridge Way	West side - includes boardwalk	\$442,000
9	Park Avenue	Webster Avenue to Palmer Avenue	West side	\$253,000
10	Loch Berry Road	Lakemont Avenue to Darcy Drive	South side	\$259,000
11	Lake Sue Avenue	Winter Park Road to Laurel Road	North side	\$84,000
12	Palmer Avenue	Park Avenue to Old England Avenue	South side	\$105,000
13	Palmer Avenue	Alabama Drive to Temple Drive	North side	\$146,000
14	Park Avenue	Green Cove Road to Pennsylvania Avenue	North side	\$138,000
15	Park Avenue	Pennsylvania Avenue to Denning Drive	South side	\$317,000
16	Park Avenue	Palmer Avenue to New York Avenue	South side	\$232,000
17	Phelps Avenue	Aloma Avenue to Lakehurst Avenue	West side	\$259,000
18	Louisiana Avenue	Wilma Avenue to Denning Drive	Both sides	\$326,000
19	Stovin Avenue	Park Avenue to Palmer Avenue	North side	\$65,000
20	Temple Drive	Palmer Avenue to Woodmere Drive	West side	\$291,000
21	Temple Drive	Via Lugano to Howell Branch Road	West side	\$1,726,000
22	Temple Trail	Howell Branch Road To 300' N of Cove Trail	East side	\$426,000
23	Wymore Road	Franklin Avenue to Lee Road	West side	\$958,000
24	Virginia Drive	Dead End	Curb and sidewalk	\$688,000
25	Webster Avenue	Pennsylvania Avenue to Interlachen Avenue	South side	\$525,000
				\$14,222,000

Map 19 – Sidewalk Projects



SHARED USE PATH & GREENWAY PROJECTS

Building upon the sidewalk network, shared use paths provide similar connections for people walking, but have added width to accommodate greater numbers of people walking as well as people riding bicycles. Shared use paths may follow roadways, but they may also follow their own alignments or make connections through green spaces. The highest priority shared use path projects make connections that do not exist, providing safer and shorter travel route options for people walking or bicycling. The TMP Shared Use Path Projects are shown in [Table 4](#) and [Map 20](#). The Greenway Route Projects are shown in [Table 4](#) and [Map 21](#). Several shared use path projects are currently underway and have progressed through several stages of planning, design, and funding.

- **Denning Drive** – pathway along the west side between Webster Avenue and Solana Avenue. Construction is imminent, so not included in the list of projects with a cost estimate.
- **St. Andrews Trail** – Pathway leading along St. Andrews Boulevard from Aloma Avenue south to the Parks and Recreation Maintenance Facility, then continuing east with connections to the Cady Way Trail.
- **Tennis Center Trail** – Pathway along the south side of the park connecting Denning Drive to Melrose Avenue.
- **Cady Way** - Reconfiguration of the separated bikeway between Perth Lane and the Cady Way Trail.

Bicycling is flexible, meaning multiple types of facilities can meet travel needs. Sidewalks, shared use paths, and designated on-street bicycle routes can all provide safe and comfortable route options. While shared use paths are designed to be comfortable for all ages and experience levels, some of the most desirable places to bicycle are low-speed and low-traffic volume roadways. Identifying these roadway segments as part of a connected network called Greenway Routes can expand bicycle travel options where it is not necessary or desirable to create dedicated, exclusive space for bicycling on these streets. These Greenway Routes projects connect key destinations and parks, build on the City's successful traffic calming deployments, and further discourage pass-through traffic on neighborhood streets. A system of greenway routes includes three main design tools:

- Traffic calming in coordination with the Speed Management & Traffic Calming Policy,
- Enhanced crossings at larger streets (addressed as its own projects category), and
- Wayfinding and other signage/mapping.

A comprehensive system of wayfinding signs ([Figure 8](#)), accompanied by a City Bike Map, can tie all of these different types of facilities together. Further, designating routes and providing guidance to people bicycling can lead them to the safest crossing locations where the routes must cross larger roadways. [Figure 9](#) provides an example of a bike map that shows connected and comfortable routes, which also provides the needed details of crossings and what types of facilities to expect on each route. To provide clear direction on the system of routes, the highest priority recommended project in this category is to create a City of Winter Park Bike Map, which in addition to the graphic design of the map product, includes the effort of finalizing the Greenway Routes to be used in those corresponding projects. A City of Winter Park Bike Map would also be a public-facing tool to educate people about accessing civic destinations such as parks, schools, and SunRail without needing a car.

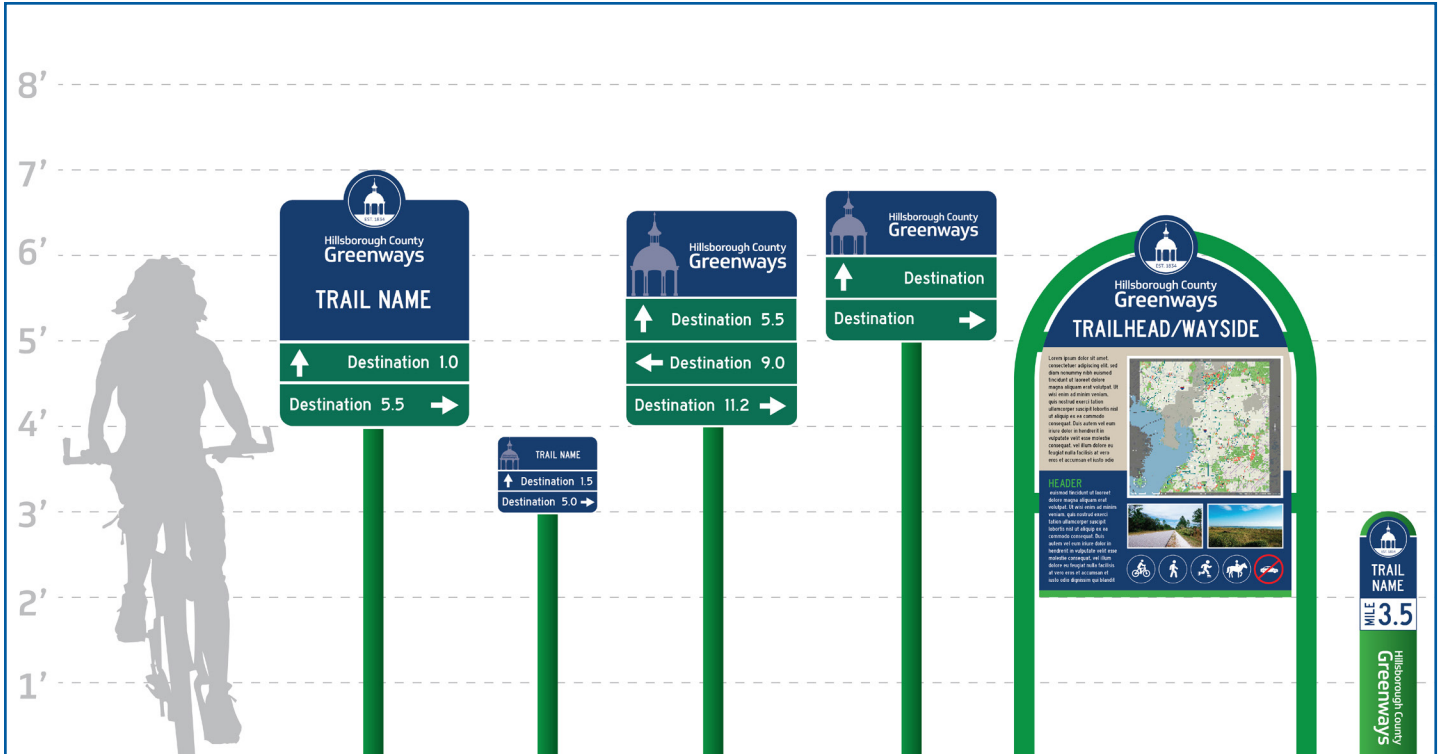


Figure 8 - Example unified system of greenway route wayfinding signage.

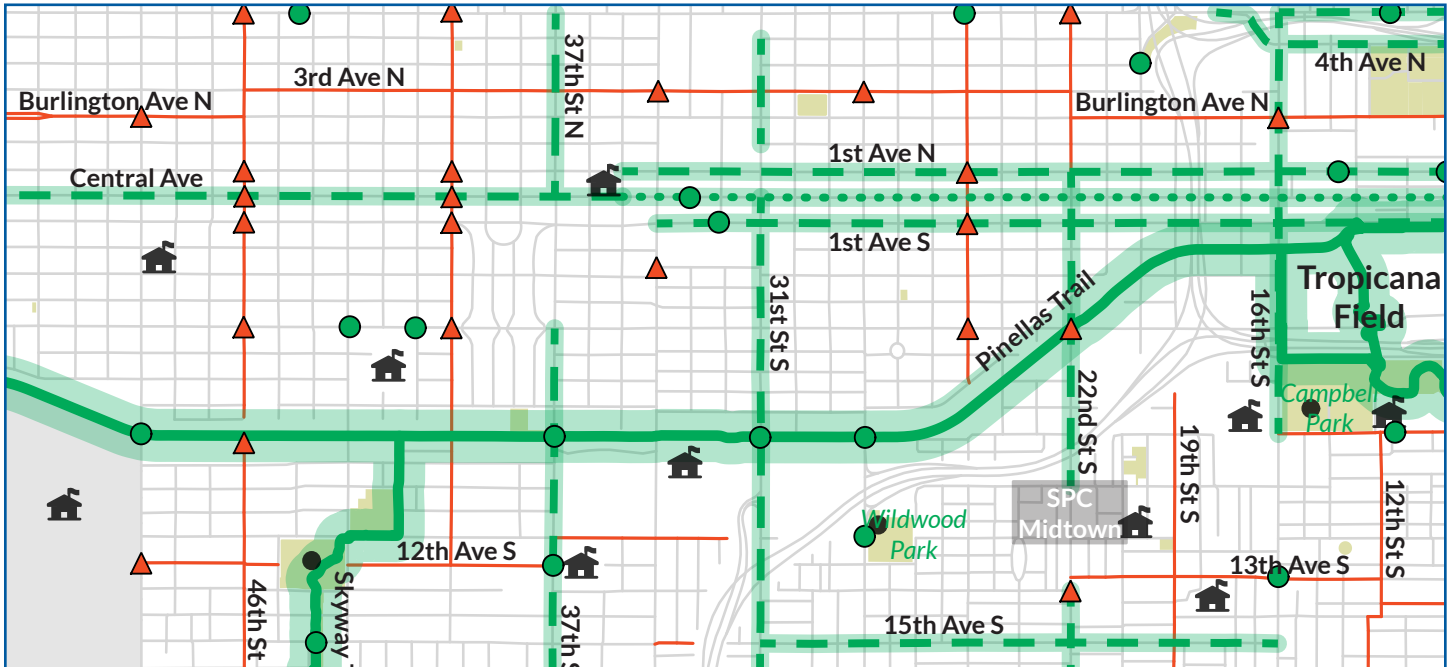
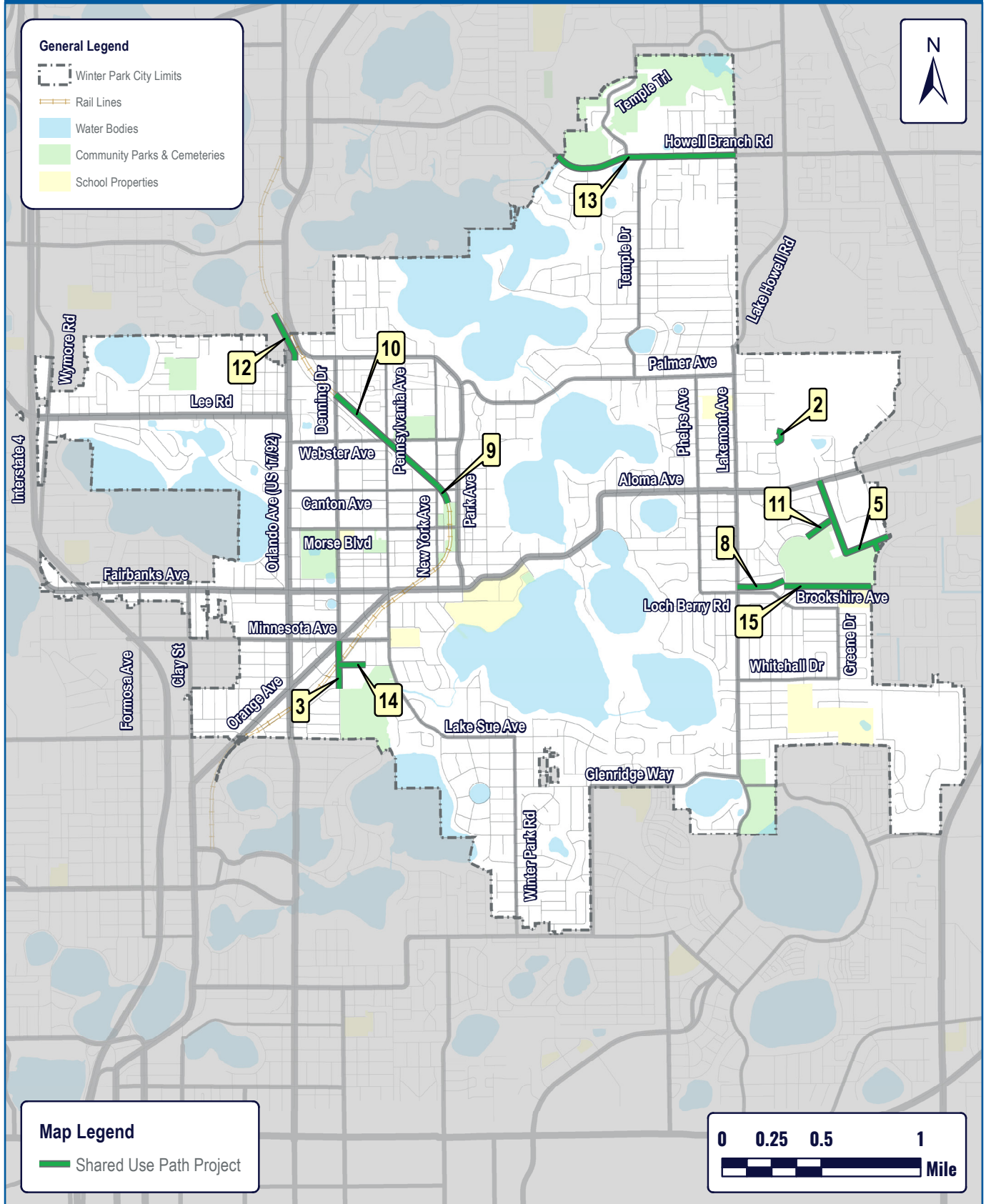


Figure 9 - Snapshot of the St. Petersburg Bike Map, showing facilities, routes, and crossings. (https://www.stpete.org/residents/parks___recreation/cycling_walking_trails.php)

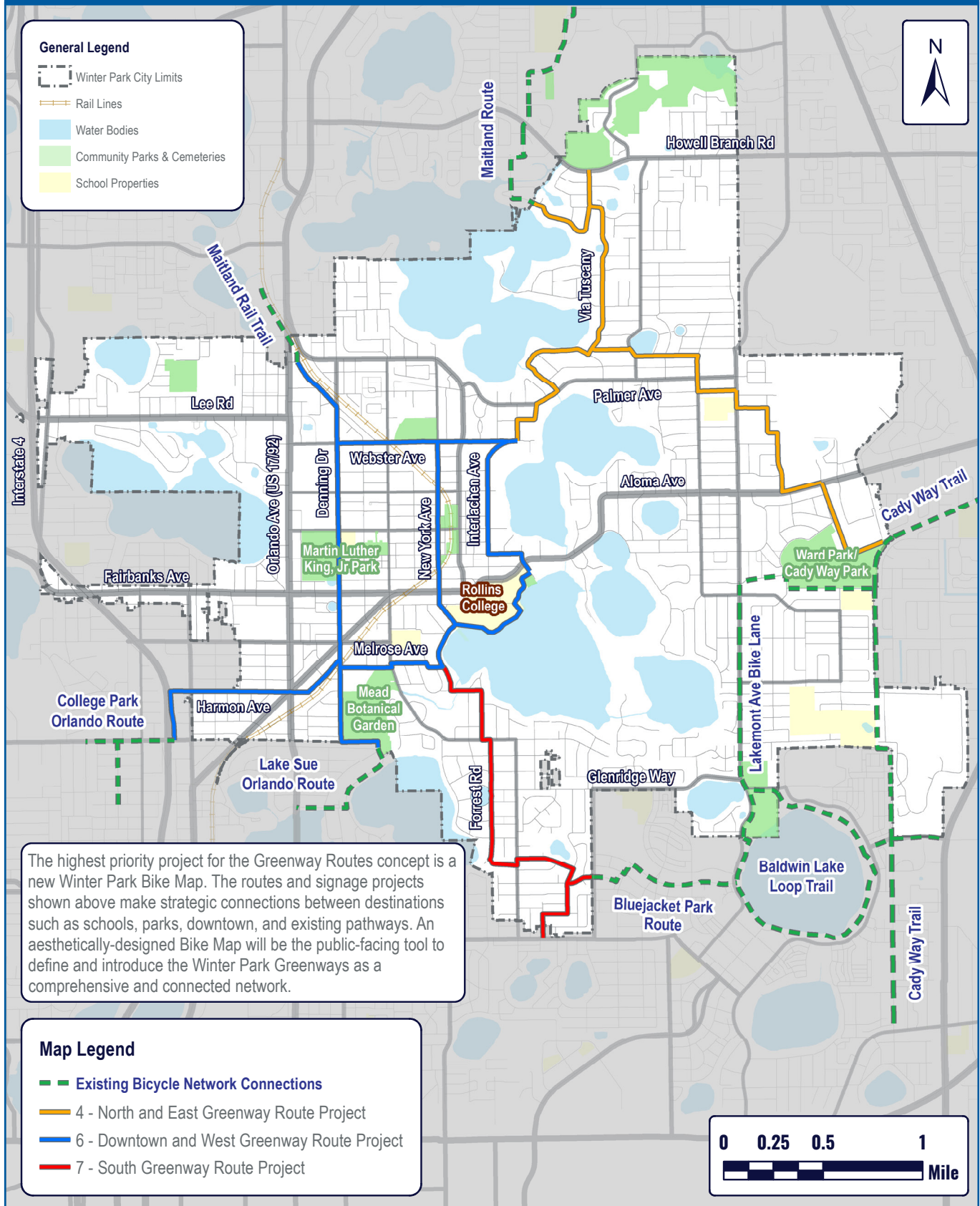
TABLE 4: SHARED USE PATH & GREENWAY PROJECTS

Priority	Roadway	Location	Improvements	Cost Estimate
1	City Bike Map	Citywide	Finalize design and print map	\$100,000
2	Northeast Connector Trail	Lander Road to Suffield Drive	Shared use path	\$159,000
3	S Denning Drive	Minnesota Avenue to Mead Gardens	Shared use path	\$1,233,000
4	Routes: North & East	North/East of Webster Avenue	Signs, sharrows, traffic calming	\$142,000
5	St. Andrews Trail	SR 426 to Cady Way Trail	Shared use path	\$9,498,000
6	Routes: Downtown & West	Webster Avenue to Oxford Road	Signs, sharrows, traffic calming	\$209,000
7	Routes: South	South of Oxford Road	Signs, sharrows, traffic calming	\$142,000
8	Church Trail	Perth Lane to Lakemont Avenue	Shared use path	\$1,080,000
9	Railroad Trail	New York Avenue to Central Park	Shared use path	\$2,176,000
10	Railroad Trail	N. Denning Drive to New York Avenue	Shared use path	\$412,000
11	Ward Park Trail	Cady Way Trail to St. Andrews	Shared use path	\$602,000
12	17-92 Overpass	Solana Avenue	Overpass & shared use path	\$6,578,000
13	Howell Branch Road	Maitland City Line to Seminole Co. Line	Shared use path	\$1,535,000
14	Tennis Center Trail	Denning Drive to Melrose Avenue	Current City project	Underway
15	Cady Way	Reconfigure bikeway, Perth Lane to Cady Way Trail	Current City project	Underway
				\$23,866,000

Map 20 – Shared Use Path Projects



Map 21 – Greenway Route Projects



CROSSING PROJECTS

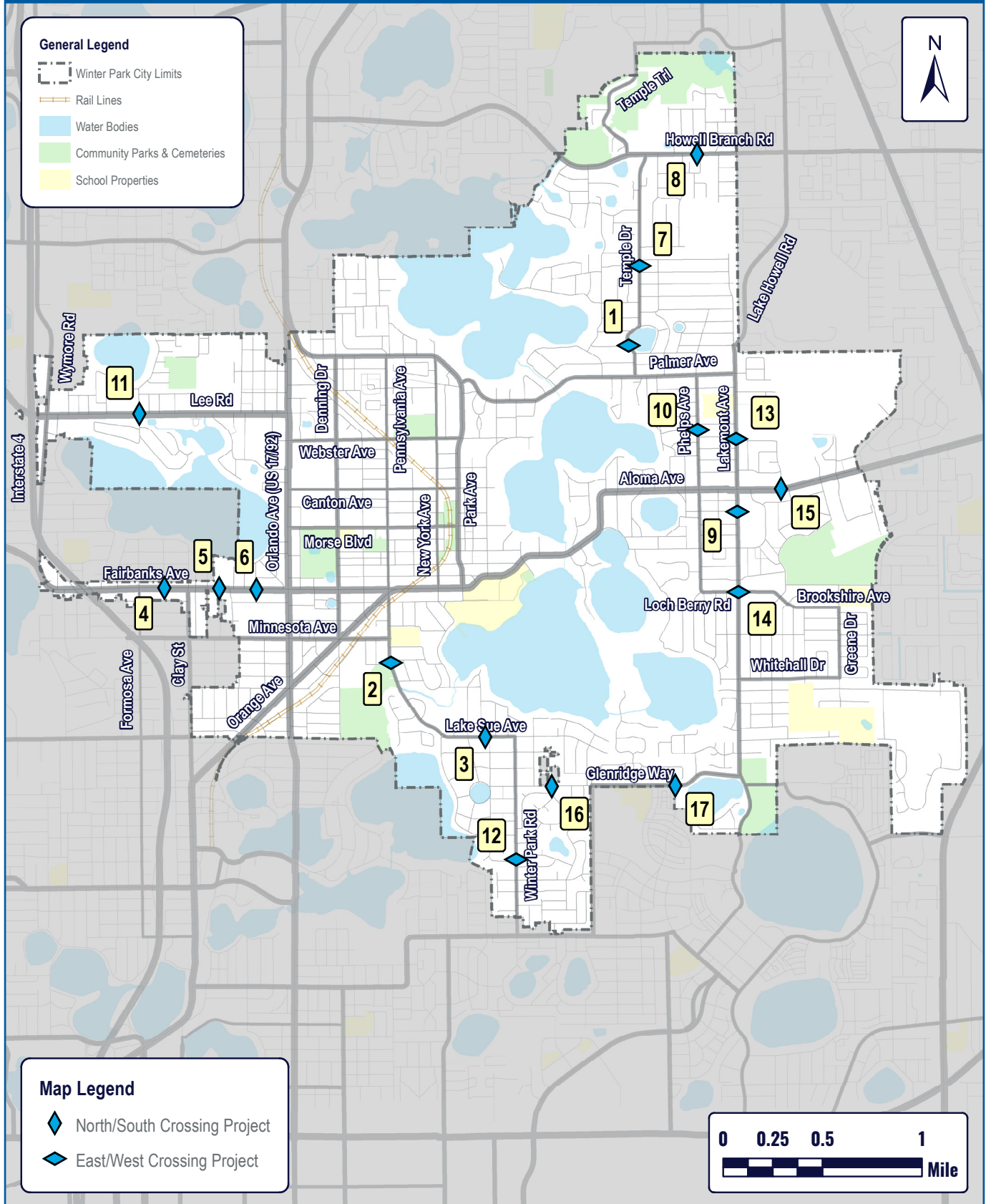
By identifying the barriers between the areas of connected sidewalks, shared use paths, and Greenway Routes, crossing infrastructure can be planned to overcome the obstacles. The highest priority projects in this category provide crossings in locations that tie together greenway routes. Following that, the next highest priority is providing opportunities for people to cross the large arterial streets without going at least a mile out of their way. The crossing projects are shown in [Table 5](#) and [Map 22](#).

A core element of the TMP is the City's desire to follow current and emerging best practices for design. Correspondingly, the crossing projects will require careful and detailed design customized to each location, pursuing progressively more intensive infrastructure as the traffic speed and volume increases on the roadway being crossed. The enhancement of crossings should include Rectangular Rapid Flashing Beacons (RRFBs) at a minimum across neighborhood streets. The projects proposed for crossing multi-lane roadways include both full median refuge islands and overhead mast arms to hold signalization equipment for controlled rather than permissive yielding operations. In all cases, the crossing projects should include needed night-time lighting, sidewalk connections, and site planning such as the relocation of bus stops to be far side of the crossing.

TABLE 5: CROSSING PROJECTS

Priority	Roadway	Location	Improvements	Cost Estimate
1	Temple Drive	Via Salerno (brick pavers)	Curb ramps & RRFB	\$163,000
2	Pennsylvania Avenue	Melrose Avenue (brick pavers)	Curb ramps & RRFB	\$161,000
3	Lake Sue Avenue	Highland Avenue/Forest Road (brick pavers)	Curb ramps & RRFB	\$153,000
4	Fairbanks Avenue	Ohio Street (east leg)	Full median & signal	\$1,775,000
5	Fairbanks Avenue	Jackson Avenue	Full median & signal	\$1,821,000
6	Fairbanks Avenue	Shoreview Avenue	Full median & signal	\$1,775,000
7	Temple Drive	Whitesell Drive (brick pavers)	Curb ramps & RRFB	\$140,000
8	Howell Branch Road	Sanbina St/Mandan Trail	Full median & signal	\$1,967,000
9	Lakemont Avenue	Goodrich Avenue	Curb ramps & RRFB	\$155,000
10	Phelps Avenue	Lakehurst Avenue (brick pavers)	Curb ramps & RRFB	\$145,000
11	Lee Road	Turner Road	Full median & signal	\$1,904,000
12	Winter Park Road	Spring Lane/Wright Avenue	Curb ramps & RRFB	\$153,000
13	Lakemont Avenue	Oakhurst Avenue	Full median & signal	\$1,717,000
14	Lakemont Avenue	Loch Berry Road	Curb ramps & RRFB	\$171,000
15	Aloma Avenue	Strathy Lane (west leg)	Full median & signal	\$1,887,000
16	Glenridge Way	Stonehurst Road/Brandywine Drive	Curb ramps & RRFB	\$160,000
17	Glenridge Way	St. George Street	Curb ramps & RRFB	\$168,000
				\$14,415,000

Map 22 - Crossing Projects



ROADWAY RECONFIGURATION & STREETSCAPE PROJECTS

The broad category of roadway reconfiguration incorporates diverse projects such as streetscape enhancements, Complete Streets reconfigurations, and motor vehicle operational improvements. The highest priority projects in this category are in the areas of highest pedestrian demand and are intended to improve multi-modal connectivity between neighborhoods and destinations. The roadway reconfiguration and streetscape projects are shown in [Table 6](#) and [Map 23](#).

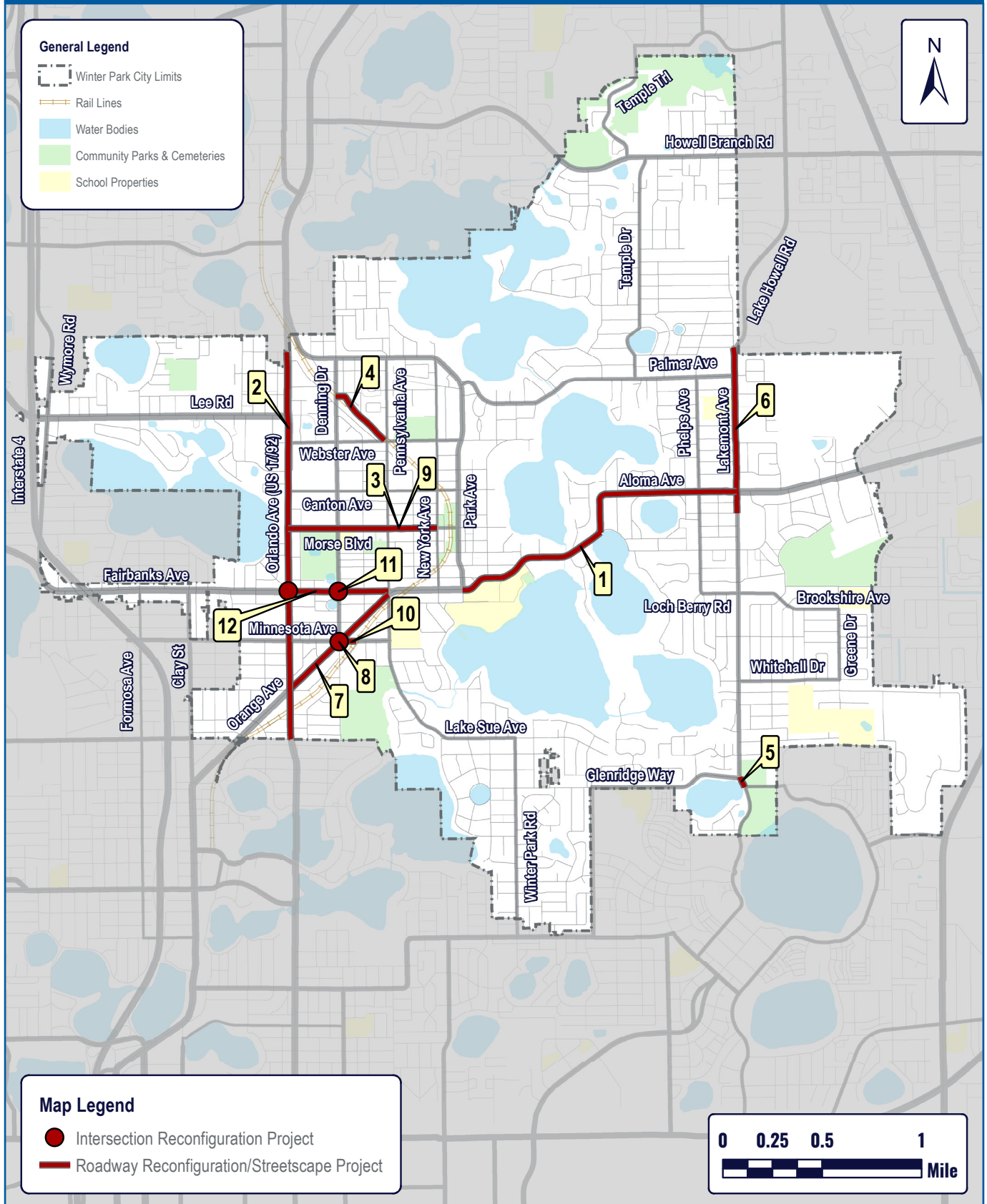
Several roadway reconfiguration projects are currently underway and have progressed through several stages of planning, design, and funding.

- **SR 426 Coalition study and improvements by FDOT** – Evaluating Aloma Avenue between Park Avenue and Lakemont Avenue to identify improvements that would moderate vehicle speeds, improve the safety and comfort of accessing side streets, provide buffers to the sidewalks along Aloma Avenue, and add pedestrian crossing locations. This study effort and community engagement process has proceeded in parallel with the development of this TMP. The project is shown as the City’s top reconfiguration and streetscape priority with the cost attributed to FDOT.
- **US 17/92 reconfiguration and improvements by FDOT** – Streetscape enhancements and new traffic signals through Winter Park. Addition of a second eastbound left turn lane from Fairbanks Avenue. The project is shown as the City’s second highest reconfiguration and streetscape priority with the cost attributed to FDOT.
- **Orange Avenue** – The corridor between US 17/92 and Pennsylvania Avenue has been studied for Complete streets reconfigurations, to include lane re-allocation for a center left turn lane along with enhanced parking and pedestrian crossings. A focus of those studies has been a roundabout at the intersection with Denning Drive and Minnesota Avenue.

TABLE 6: ROADWAY RECONFIGURATION & STREETScape PROJECTS

Priority	Roadway	Location	Improvements	Cost Estimate
1	Aloma Avenue	Park Avenue to Lakemont Avenue	Reconfiguration, pedestrian safety	Underway by FDOT
2	US 17/92	City Limits	Reconfiguration, streetscape, signals	Underway by FDOT
3	Morse Boulevard Study	US 17/92 to New York Avenue	Complete Streets study	\$300,000
4	Solana Avenue	US 17/92 to Denning Drive	Bike lanes	\$4,102,000
5	Lakemont Avenue	Glenridge Way to Glenridge Way	Roadway reconfiguration	\$12,942,000
6	Lakemont Avenue	Goodrich Avenue to City Limits	Complete Streets reconfiguration	\$6,082,000
7	Orange Avenue	US 17/92 to Pennsylvania	Complete Streets reconfiguration	\$6,200,000
8	Orange Avenue	Denning/Minnesota	Roundabout	\$7,400,000
9	Morse Boulevard	US 17/92 to New York Avenue	Complete Streets reconfiguration	\$12,000,000
10	Minnesota Avenue	Denning Drive to RR tracks	Bike lanes	\$785,000
11	Fairbanks Avenue	At Denning Drive	Add east and west turn lanes	\$1,169,000
12	Fairbanks Avenue	US 17/92 to Pennsylvania Avenue	Complete Streets reconfiguration	\$18,500,000
				\$69,480,000

Map 23 – Roadway Reconfiguration & Streetscape Projects



TECHNOLOGY PROJECTS

Technology enhancements offer another approach to enhancing network connectivity and can be implemented as an alternative to constructing new network facilities or as a complementary solution alongside other measures. Technology projects explored as part of this plan are not tied to specific locations. Rather, the recommendations are intended to enhance the system with guidance regarding design and implementation provided in a later section of this report. The highest priority projects within this category include creating a Traffic/Event Management Center (TMC) to be supported by a detailed traffic management plan that will establish the protocols and detailed investments needed to maximize the existing technology infrastructure. The next priorities are to implement technology upgrades to improve pedestrian safety and to pursue pilot projects that will gather and apply information to enhance parking operations in Winter Park.

This chapter includes detailed descriptions of the priority Technology Projects below in [Table 7](#). Further guidance for the implementation and design of technology investments in general is included in the following Implementation chapter.

TABLE 7: TECHNOLOGY PROJECTS

Priority	Project	Details	Cost Estimate
1	Traffic Management Center	Underway in partnership with Smart Cities and additional City Departments.	Cost TBD
2	Traffic Management Plan	Identify TMC & VMS locations, CAV readiness, fiber priority needs, emergency preemption, cybersecurity, and timing coordination plans	\$150,000
3	Signal Upgrades for Pedestrians	Hardware upgrades & timing plans for 6 locations - APS, LPI, phasing, etc.	\$300,000
4	Real-Time Parking Availability System: Garages	Pilot project to install equipment, operate, and evaluate system for a 1-year period	\$100,000
5	Gateway Variable Message Signs	4 locations	\$400,000
6	Real-Time Parking Availability System: On Street	Fee-based service	\$15,000
7	Universal Valet Program	1-year pilot project	\$60,000
8	Speed Feedback Signs	4 locations	\$100,000
9	Downtown Parking Improvements	TBD	\$18,500,000
			\$19,625,000

Traffic Management Center

The City is actively developing a Traffic/Event Management Center (TMC.) The enterprise TMC is being established collaboratively across multiple Departments and in coordination with the broader Smart Cities initiative. The TMC and associated communication infrastructure would allow staff to not only observe traffic conditions, but also provide a mechanism for real time monitoring and managing other critical City systems, such as police, fire, water, wastewater, electric, and stormwater/lakes.

Traffic Management Plan

Managing traffic within Winter Park is a complex task that, to be done well, requires coordination of a variety of tasks. First, it is important to understand the end goals for the network so that the right equipment can be selected to achieve those goals. Next, communication plans must be established to identify where equipment should be located in the field. Finally, it is important to identify policies and procedures that will help City staff manage traffic operations efficiently and effectively. Developing a Traffic Management Plan will allow the City to evaluate the existing system, establish goals for how to manage traffic, establish protocols for the planned TMC, and identify a pathway to achieve desired outcomes. Components that should be incorporated within the plan are outlined below.

Communication plays an important role in managing congestion and traffic flow within Winter Park. By establishing a plan for managing traffic during peak hours and events, strategic approaches can maximize the space allocated to moving traffic without expensive and disruptive roadway widening projects. Fiber optic cables are a reliable means to allow communication between traffic control devices. Benefits include bigger bandwidth and higher speeds versus other methods of interconnect. Fiber optic communications will play a critical role in connecting field equipment with the proposed TMC, enhancing the City's situational awareness of traffic conditions.

A communications plan for the traffic signals would outline technologies that Winter Park would like to implement and preferences for how the signal interconnections should be constructed. The plan would be developed in close coordination with FDOT District 5 and the surrounding jurisdictions to ensure that their projects and plans are in line with the City's desires for the signal system. A robust traffic communications system allows traffic signals to be synchronized so that signal timing plans can operate more efficiently. These systems also allow signals to send data to TMCs where staff can monitor signal equipment and respond more quickly to malfunctions. TMCs can also be designed to allow staff to respond to traffic events such as crashes or to monitor traffic associated with planned events. Additionally, signal communication systems enhance signal preemption for transit and emergency vehicles. The Traffic Management Plan should consider how the signal communications system will function with a TMC.

As Winter Park looks to implement new smart technologies to manage traffic and allow communication between motor vehicles, signals, and non-motorized users, it is important to ensure that systems are protected from cyber security threats. Systems that run on cloud-based platforms can be more vulnerable to attacks versus other systems such as Access Point Name (APN) cellular modems. The Traffic Management Plan provides the opportunity to integrate information security at all levels of the system.

Throughout the year, Winter Park hosts a variety of community events that draw visitors from the surrounding areas. Effective management of event traffic can enhance visitors' experience. By creating

an event traffic management plan, Winter Park can more efficiently manage traffic during events and can ensure that details are not overlooked in the event planning process. The elements that could be addressed in such a plan would include procedures for setting up road closures during events, defining detours for through traffic, and accommodating parking associated with the event. The plan could establish communication protocols and guidelines including details such as who to coordinate with as well as how to notify residents and visitors of the event traffic management plan. An event plan can be helpful when unplanned circumstances arise because preferred detour routes can be identified ahead of time.

Connected and Autonomous Vehicle (CAV) technologies continue to advance and will likely play a larger role in our transportation networks in the future. Though there is still uncertainty regarding when and how CAV technologies will be implemented, the Traffic Management Plan can begin to consider future advancements in technology by evaluating how current City policies and procedures might be impacted.

Signal Upgrades for Pedestrians

Non-motorized users are particularly vulnerable at intersections where pedestrian and bicycle routes must cross vehicular paths. While traffic signals provide an added level of control for busy intersections, there are supplemental technologies that can be implemented to further enhance the safety of both pedestrians and motor vehicles.

Pedestrian Countdown Signals (PCSSs) are square-shaped pedestrian signal heads that display a numerical countdown of the seconds remaining alongside the flashing “don’t walk” indication. The intent of these devices is to provide additional information to crossing pedestrians.

Accessible Pedestrian Signals (APS) are equipment directed towards pedestrians at traffic signals to provide audible and/or vibrotactile indicators for pedestrian “walk” and “don’t walk” intervals. These systems are intended to assist visually or audibly impaired persons in crossing the intersection. Additional features of APS are dynamic buttons that provide both tactile and audible responses to confirm that a button press has been logged ([Figure 10](#)). The equipment can also register the button being held down as a request for additional time to cross for someone with a disability, and correspondingly add time to the pedestrian “walk” phase. APS installations at existing traffic signals should be prioritized at intersections with high traffic volumes and more complex crossing conditions, such as complicated signal phasing or complex crossing geometries.

Leading Pedestrian Intervals (LPIs) are a signal timing option that allow pedestrians a set interval (typically from 3 to 7 seconds) of “walk” time before a concurrent green signal is provided to motor vehicles. This measure allows pedestrians to establish a presence within the crosswalk and helps reduce the risk of conflicts between pedestrians and turning vehicles. LPIs are considered a proven safety countermeasure for reducing vehicle-pedestrian crashes at signalized intersections.



Figure 10 - Accessible Pedestrian Signal (APS) push buttons. (<https://commons.wikimedia.org/wiki/File:PedestrianSignalPushButton.jpg>)

Real-Time Parking Availability System: Garages

There are many options for parking management systems that rely on sensors installed in parking areas to indicate which parking spaces are occupied or available. Some systems require installation of sensors in individual parking spaces while there are other options that use post-mounted sensors that monitor parking lot entry/exit or a portion of a parking lot.

Winter Park could work with parking lot and/or garage owners to identify a location or locations where a pilot project could be used to evaluate the efficacy of a particular parking sensor system. Investing in a pilot project will allow Winter Park to identify both benefits and challenges associated with a particular system with minimal investment in hardware and operation. An added benefit after even just one year of a pilot program is that the service provider would provide analytics to help officials understand how existing parking is being utilized. The data analytics provided as part of the service could be used in making decisions about a long-term parking management system.

Gateway Variable Message Signs

Winter Park should identify key locations where variable message signs can be installed to manage traffic during special events. Signs should be erected to direct traffic to parking locations and/or to direct through traffic to detours around blocked roads. Locations where permanent signs might be considered are at the perimeter of the central business district in advance of junctions where traffic can be directed to routes that avoid road closures.

Signs should be selected that fit with Winter Park's unique character. Once locations have been identified, portable message signs could be used to test the locations, if desired.

Real-Time Parking Availability System: On-Street

Today there are service providers who can manage applications that predict where parking is likely to be available. The app can be run on a mobile-phone and directs drivers to either on-street or off-street locations where they are most likely to find parking near their desired destination (Figure 11). The selected service provider would perform an initial data collection and analysis task and create the app for Winter Park. This type of parking management system would not involve any investments in hardware installation. Rather, the app would use cellular data to predict where parking is available. Winter Park could invest in the use of this service on a trial basis. An added benefit of this service is that the vendors typically provide data analytics to the City as part of the program. These analytics could help Winter Park enhance its understanding of parking demand and how parking is being used within the city and inform decisions about long-term parking solutions.



Figure 11 - Real-Time Parking Availability App (<https://www.pxfuel.com/en/free-photo-xdtig>)

Universal Valet Program

Universal Valet is a ticketless valet system that allows users to drop their car at a specified valet stand. Instead of issuing a paper ticket, the service provider would give the customer a link to use for retrieving their vehicle. A benefit of this system is that drivers can retrieve their vehicle from any location within the service area. For example, a customer could leave their car at a stand on the south end of Park Avenue. The customer could then enjoy an evening in downtown Winter Park, perhaps dining at a restaurant and shopping along Park Avenue. Eventually ending their evening at the north end of Park Avenue, the customer could simply retrieve their vehicle using the link instead of walking back to the valet stand, and the valet would bring the vehicle to the customer.

A Universal Valet service would help to reduce the number of drivers circling the downtown area looking for parking. Additionally, Winter Park could select strategic locations for valet stands to reduce the amount of traffic driving through Winter Park. This type of system could serve residents and visitors on a typical weekend evening or other peak times when there is a lot of activity in downtown. Additionally, this system could be used during events to reduce the stress of drivers trying to find parking and to control the flow of traffic around the event.

Prior to implementing a Universal Valet service, Winter Park should work with local business owners and merchants to ensure community support for the program and identify any possible conflicts with existing valet contracts currently held by businesses in the downtown area.

Speed Feedback Signs

Speed feedback signs are digital signs that can be added below a speed limit sign. Speed feedback signs are an effective measure that can be installed within school zones and other locations with identified safety issues to alert drivers when they are exceeding the speed limit. A detector senses the speeds of approaching vehicles and can alert the passing driver to their speed as it relates to the posted speed limit. If a vehicle is traveling above a set threshold, typically 10 mph over the speed limit, the sign can flash a “Slow Down” message.

Winter Park would need to identify locations where speed feedback signs should be installed. A pilot project on a major collector could be considered to evaluate the effectiveness of a sign. Speed feedback signs can be considered at locations where there is a desire to emphasize that drivers travel at slower speeds. For example, in areas where there is a higher volume of pedestrian and or bicycle activity, slower speeds can be important for reducing the risk of severe injury or fatality for vulnerable users.

Downtown Parking Improvements

This project is a placeholder for future investment in parking-related infrastructure. The above recommendations include a TMC, real-time availability systems for parking on-street and in garages, and a universal valet system. Each of those investments will collect and use data to efficiently manage the existing transportation and parking infrastructure, yielding results that will be useful for identifying the needed future investments that will utilize this funding source.

IMPLEMENTATION GUIDANCE

Supporting the capital projects and physical infrastructure identified in the previous chapter, Winter Park employs administrative efforts to improve transportation in the city through the implementation of programs and policies that address the TMP goals. This chapter introduces those policies, identifies opportunities for new policies, and provides guidance on the funding strategies and best practice design considerations that will help advance and ensure the effectiveness of the capital investments.

CITY PLANS, PROGRAMS & POLICIES

The following subsections provide an overview snapshot of the ongoing planning efforts, programs, and policies relevant to meeting the City's transportation goals. The City Code and website should be referenced to acquire the current versions of all referenced documents and to confirm the status of adoption.

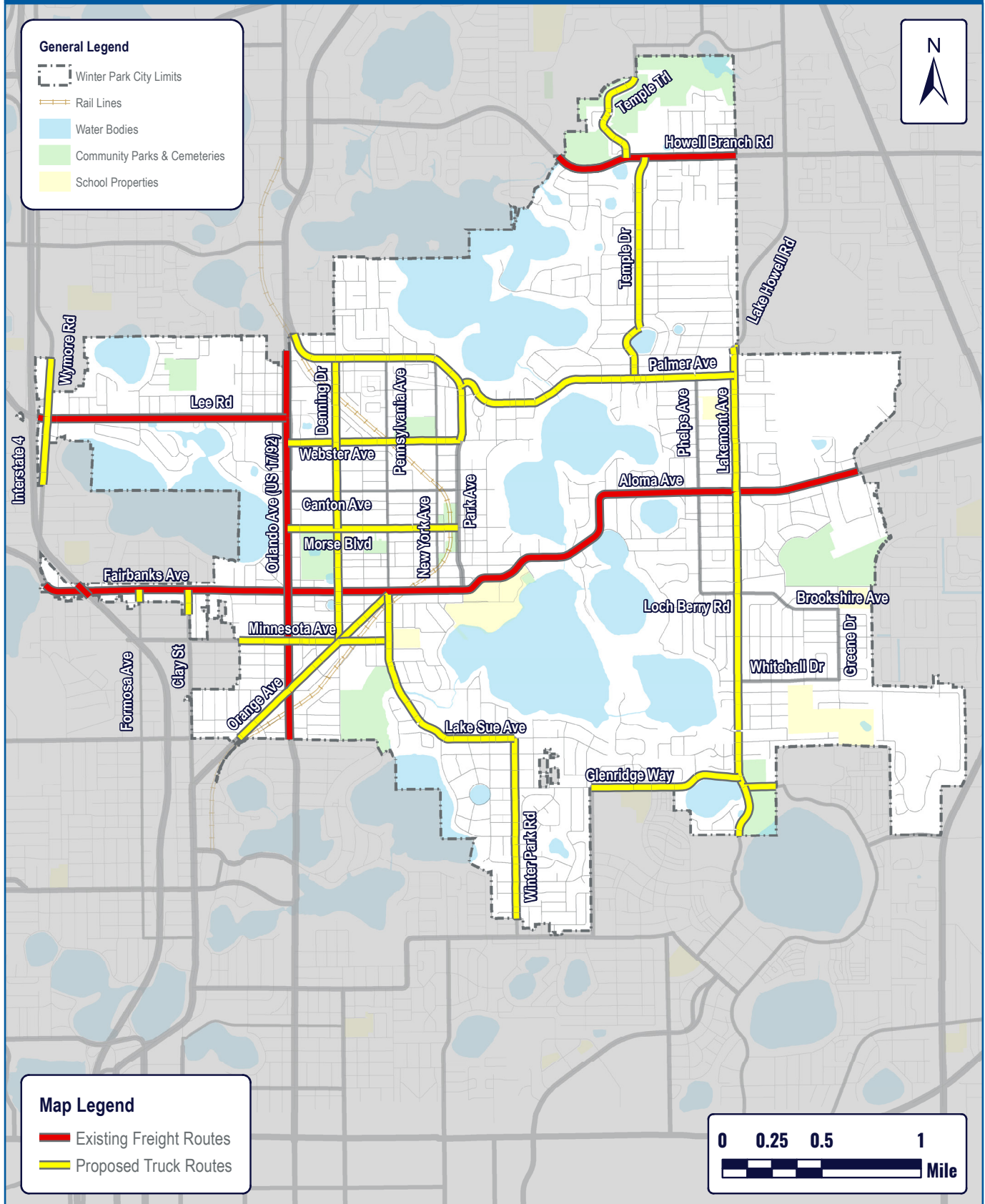
Comprehensive Plan Update

Winter Park is currently in the initial stages of creating an updated Comprehensive Plan that will include a citywide long-term planning effort. The TMP can form the basis of the transportation element of that plan update. Several existing City and regional programs and planning efforts may further support the TMP goals.

Freight Route & Truck Route Updates

The City's designated Freight Routes are regional roadways suitable for through commercial traffic. However, there is a need to identify the routes that delivery and other smaller commercial vehicles should follow until they reach their local street destinations. These secondary commercial routes can be defined as "Truck Routes" with the proposed network shown on [Map 23](#). The proposed Truck Routes for Winter Park consist of a subset of the roadways functionally classified as Collectors and Arterials as shown on [Map 4](#) in the Transportation Network Baseline chapter.

Map 23 – Freight Route & Truck Route Updates



ADA Transition Plan

The City of Winter Park Americans with Disabilities Act (ADA) Transition Plan for the Public Rights-of-Way (ROW) documents the City's goals and objectives in order to ensure that existing and future pedestrian facilities within the ROW are accessible for all people including those with disabilities. The ideal conclusion to this process is the elimination of barriers and the acceptance of requirements of ADA as an everyday reality in all future work. Working in tandem with the TMP, and following the provisions of the ADA Transition Plan, the City shall continue to procure all necessary design and construction contracts required for sidewalk improvements to satisfy all ADA sections and provisions as they pertain to public rights-of-way.

Speed Management & Traffic Calming Policy

The purpose of the Speed Management & Traffic Calming Policy is to improve safety for pedestrians, bicyclists, and motorists by utilizing speed management measures to reduce vehicle speeds and unsafe motorist behaviors in a neighborhood. This policy provides procedures on how residents are able to request a neighborhood traffic study from the City and outlines the parameters of the study, analysis process, and the steps of implementation as a City funded project.

The roadway characteristics that make an ideal bicycling route are fundamentally the same as traffic calming where motor vehicle speeds and volumes are moderated. The Greenway Route Projects identified in the TMP present a strategic opportunity to deploy traffic calming proactively as a part of those projects.

Sidewalk Policy

Many areas of Winter Park were developed in the past without sidewalks on one or both sides of the street. From time to time, city residents have requested the construction of new sidewalks along the local roads. The intent of the Sidewalk Policy is to clearly delineate who bears the cost for such construction, as well as establish the official process and procedures for sidewalk requests from residents.

Street Brick Policy

The purpose of the Street Brick Policy is to provide a means by which residents that currently live on an asphalt or asphalt covered brick street can obtain a brick street without unduly burdening the city's limited street repair funds. The intent of the policy is to define who bears the cost for the brick street surface upgrade.

PARTNER AGENCY PLANS, PROGRAMS & POLICIES

MetroPlan Orlando

MetroPlan Orlando leads regional planning efforts to create a balanced transportation system in Central Florida, which they accomplish through a series of formalized planning processes and documents. The City will work with MetroPlan Orlando to incorporate TMP projects into the corresponding regional plans and funding lists. The key regional planning documents and efforts are summarized below. The current versions of these routinely-updated documents can be found on the MetroPlan Orlando website at: <https://metroplanorlando.org/>.

The Metropolitan Transportation Plan (MTP) establishes the vision of Central Florida's entire transportation system for Orange, Osceola and Seminole Counties. The MTP identifies current and future transportation needs for a 25-year horizon. After coordinating with local government and transportation agency partners, the cost feasible plan includes a list of projects the region can afford. Projects must be included in the plan to receive federal and state funding. The plan is updated every five years to reflect the changing dynamics of the region.

Once long-term needs are determined by the long range plan, projects are identified on the Prioritized Project List (PPL), a project funding waiting list. Updated annually, the PPL contains a list of unfunded highway, transit, bicycle, and pedestrian projects that have been ranked for funding.

When funding becomes available, the project/project phase moves from the PPL waiting list into the five-year funding program, the Transportation Improvement Program (TIP). The TIP is updated annually and sets the schedule for improvements to the region's transportation system over the next five years. The TIP assigns available funding to specific projects and covers all modes of transportation.

In addition to coordinating the processes to identify, prioritize, and allocate funding to projects as described above, MetroPlan Orlando leads topical planning efforts focused on issues such as safety. Vision Zero is a worldwide planning initiative that establishes the target of completely eliminating traffic crash fatalities. MetroPlan Orlando was awarded a 2022 Safe Streets and Roads for All (SS4A) federal grant to develop Vision Zero Safety Action Plans for each jurisdiction across the MPO planning area. Building upon the TMP metrics and work program, Winter Park will collaborate with MetroPlan Orlando to conduct community engagement and follow a data-driven process to identify low-cost, high-impact solutions with a goal of fully eliminating traffic fatalities.

LYNX

The LYNX Transit Development Plan (TDP) FY2023-2032 Major Update was adopted in September 2022. The plan calls for a hierarchy of services that include enhancements to the existing local bus and on-demand services, with the addition of commuter and regional express services, limited-stop routes, and community circulators. Over the next 20 years, the vision is to double the amount of bus-based transit service available to the Central Florida region. Within Winter Park, the TDP shows US 17/92 as a Primary Corridor. This includes LYNX Route 102, which is the highest ridership bus route that passes through Winter Park, including a stop at the Winter Park SunRail station. A future bus transfer center in the vicinity of Lee Road and Webster Avenue is shown as an unfunded need.

FUNDING SOURCES AND STRATEGIES

The TMP outlines the strategy for Winter Park to achieve a balanced, safe, and efficient transportation system. The preceding projects and policies are direct actions that move the City towards those goals, but resources are needed to advance that work program. Goal 4 of the Comprehensive Plan recognizes that practical need, stating that "The City will pursue innovative funding strategies to implement a balanced and safe transportation system." This section introduces the currently available funding sources and identifies several funding strategies to be pursued.

The City's current funding for transportation reflects the need for ongoing operations and maintenance. Recurring programmatic spending for these needs is shown in the annual budget. Below are the

recurring annual budget appropriations as of FY 2027. Note that the Planning & Transportation recurring budget appropriations are anticipated to increase in future budgets.

- Public Works “Pavement Resurfacing, Brick Repairs” - \$1,178,861 (Local option gas tax)
- Public Works “Sidewalk, Bike path & Curb Repairs” - \$600,000 (Local option gas tax)
- Planning & Transportation “Bicycle & Pedestrian Improvements” - \$100,000 (General Fund)
- Planning & Transportation “Signalization Upgrades, Pedestrian Signals” - \$100,000 (General Fund)

Transportation projects are often large investments and require additional funds beyond the annual maintenance appropriations. Additional funds are available and programmed by the City for discrete transportation projects including Multimodal Impact Fees collected through the land development process and Tax Increment Financing (TIF) funds collected through the Community Redevelopment Agency (CRA). For example, though the CRA funds are used for needs beyond transportation, funding in the amount of \$7,140,000 is available through the CRA in FY 2027.

The TMP identifies a suite of new transportation projects that are cumulatively expected to cost \$141,608,000 over the planning horizon of 20 years. To implement the full work program would correspondingly require an annual investment of \$7,080,400. The above funding sources such as Multimodal Impact Fees and CRA funds may be used for any required local match to leverage the outside funding sources described below.

The first requirement for many transportation funding sources is for the project seeking funds to be shown and prioritized in the appropriate agency planning documents, which is achieved through this TMP. The next step for funding eligibility is that projects should be coordinated with FDOT and MetroPlan Orlando, the designated Metropolitan Planning Organization (MPO) for the region. Utilizing the information provided in the TMP Transportation Network Baseline chapter, roadway management and ownership will determine which agencies must be involved in the planning and funding processes for each project. By coordinating with MetroPlan Orlando and adding TMP projects into the regional plans and priority lists detailed in the previous section, Winter Park may tap into external funding sources such as State and Federal grants/loans.

Regarding which specific funding sources to target, the largest buckets of federal funding are apportioned to States based on formulas specified by law and then distributed to local agencies and projects through the MPO process. The available federal funding categories and grant programs are routinely updated to reflect evolving trends and priorities. The best approach to pursue federal funding for TMP projects is to have them added to the MPO plans so they will be in line for whatever programmatic federal funds are available when they reach the top of the priority list.

There are a handful of competitive federal grant programs that bypass or run in parallel with the typical MPO process and programmatic federal funding sources. Some of the programs deliver funds directly to local agencies on a faster time line. It is noteworthy that the competitive grant programs evolve and change more quickly than those allocated through the routine MPO process. The current competitive funding programs reflect a national emphasis on equitable non-motorized safety, which is fully in line with the goals and work program of the TMP. One example is Safe Streets and Roads for All (SS4A) that funds safety action plans and projects. Notably, SS4A is the source of funds

MetroPlan Orlando is using for the forthcoming Vision Zero Safety Action Plans. Another competitive grant program that the City should consider is the next iteration of the program oriented towards economic development, currently known as the Better Utilizing Investments to Leverage Development (BUILD) Transportation Grants Program.

DESIGN GUIDANCE

Several existing sets of minimum criteria and design guidance underlie the design of public streets in Winter Park. At the national level, the Manual of Uniform Traffic Control Devices (MUTCD) sets the minimum criteria, and the various publications of the American Association of State and Highway Transportation Officials (AASHTO) provide the most generally-accepted design guidance. Together, these materials form the basis of the design standards produced by FDOT for use in the State of Florida. FDOT then produces the Florida Design Manual (FDM) for use on State highways and the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (also referred to as the “Florida Greenbook”) for all other public streets.

The goals of Winter Park’s Comprehensive Plan guide judgments when design decisions require tradeoffs between design elements. The Florida Greenbook provides the following guidance, which emphasizes that context should drive the selection of appropriate design elements and values for each street:

“Users of this Manual are cautioned that the strict application of exact numerical values, conditions or use information taken from portions of the text may not be appropriate for all circumstances. Individual references to design values or concepts should not be used out of context or without supporting engineering judgement.”

Cities around the world provide examples of many street configurations that successfully go beyond bare minimums to safely accommodate multiple user groups as fits the community’s context and needs. A number of additional resources are available that provide supplementary guidance to the minimum criteria introduced above. FHWA has produced several documents that give examples and guidance for engineers including: “Achieving Multimodal Networks,” the “Separated Bike Lane Planning and Design Guide,” and the “Bikeway Selection Guide.” The National Association of City Transportation Officials (NACTO) have produced further guidance including the “Urban Street Design Guide,” the “Urban Bikeway Design Guide,” and the “Transit Street Design Guide.” It is a professional responsibility of street designers to utilize the full range of available guidance when selecting the appropriate design elements and criteria to be used for each street.

Pedestrians & Bicyclists

Since pedestrian facilities enable other transportation modes to be successful, Winter Park must first prioritize and provide pedestrian accommodations on all streets. This includes crossings, streetscape improvements, and access management to preserve the pedestrian realm within the streetscape. A core principle of this plan is that context should drive the appropriate design elements, and that the goal is to create comfortable and safe routes for people outside cars. In some contexts, comfort requires physically separated bikeways and in other contexts, only wayfinding and simple markings are appropriate. In all contexts, the needs of an aging population will be considered in the planning and design of any project impacting the City’s streets and transportation network.

The proposed Public Right of Way Accessibility Guidelines (PROWAG) are currently being finalized and will require Accessible Pedestrian Signals (APS) to be installed at all newly constructed or reconstructed intersections that include visual pedestrian signals. APS should be installed at all new signal installations and at all full signal upgrades. For non-standard locations that present added difficulties for vision impaired persons navigating the crossing, an engineering study should be performed to determine the needs of both the average pedestrian in general as well as pedestrians with vision impairments or other disabilities that affect their ability to navigate the intersection. As a special consideration, at-grade railroad crossings should be evaluated to ensure that safety measures and clearly defined pathways are adequate to serve pedestrians with hearing and vision impairments.

Pedestrian access and safety can be maximized at traffic signals with short cycle lengths and pedestrian phase on automatic recall where feasible. LPIs can also be implemented with actuated pedestrian phases to provide a head start to pedestrians at locations where one of the above circumstances is present but pedestrian volumes are lower. When installing an LPI, APS should also be considered to alert vision impaired pedestrians of the leading WALK time. Otherwise, vision impaired pedestrians will likely start walking when they hear parallel traffic begin to move, which could put them at increased risk for a conflict with a turning vehicle. Automated detection can also be considered for locations where there is a low rate of compliance with using active pedestrian detection systems. Automated pedestrian detection and including the pedestrian walk phase on automatic recall should be considered for locations where there are ADA challenges that make accessing a pedestrian pushbutton difficult or impossible for some users.

An often-overlooked element of supporting and encouraging travel by bicycle is the provision of adequate and quality bicycle parking. Winter Park could update existing requirements for long term bicycle parking within buildings to add guidance and requirements for lockers/showers in offices and other applicable uses, limiting the percentage of required long term spaces that may be hanging, and clarifying that in-unit spaces do not reduce the quantity of long term required in a separate bike room or storage area.

Target Design Speed

There is a consensus that excessive traffic speeds are a concern across all parts of Winter Park. Police enforcement of speeds in all locations, and at all times, is not a reasonable expectation, nor is it an efficient means of addressing the underlying system-wide issue of excessive motor vehicle speeds. A guiding principle of this TMP is that motor vehicle speeds must be moderated in areas where people walking or bicycling is a priority.

Design decisions should use the maximum desired operating speed as controlling design criteria to encourage self-regulation of appropriate motorist speeds and to reflect the desired modal priority of each corridor. This self-regulation of speed will ultimately create a safer space resulting in fewer people injured or killed by traffic crashes.

Brick Streets

The brick streets of Winter Park are one of the most charming elements of the historic and desirable neighborhoods. While charming, brick surfaces can present challenges for people needing mobility support or those using wheeled vehicles. Mature landscaping and trees contribute to the charm, but also limit the physical space available for adding sidewalks. In such cases, an optional design element is to reconfigure and widen the gutter pans of curbs to include a flat area that is wide enough

for someone to walk, push a stroller, or ride a bicycle. The configuration as shown in [Figure 12](#) from Lakeland retains the charm of brick while also providing a space for movement by people outside motor vehicles. This configuration is presented not as a recommended treatment for all brick streets, but as an option to be evaluated where brick streets require reconstruction and sidewalks are not feasible.

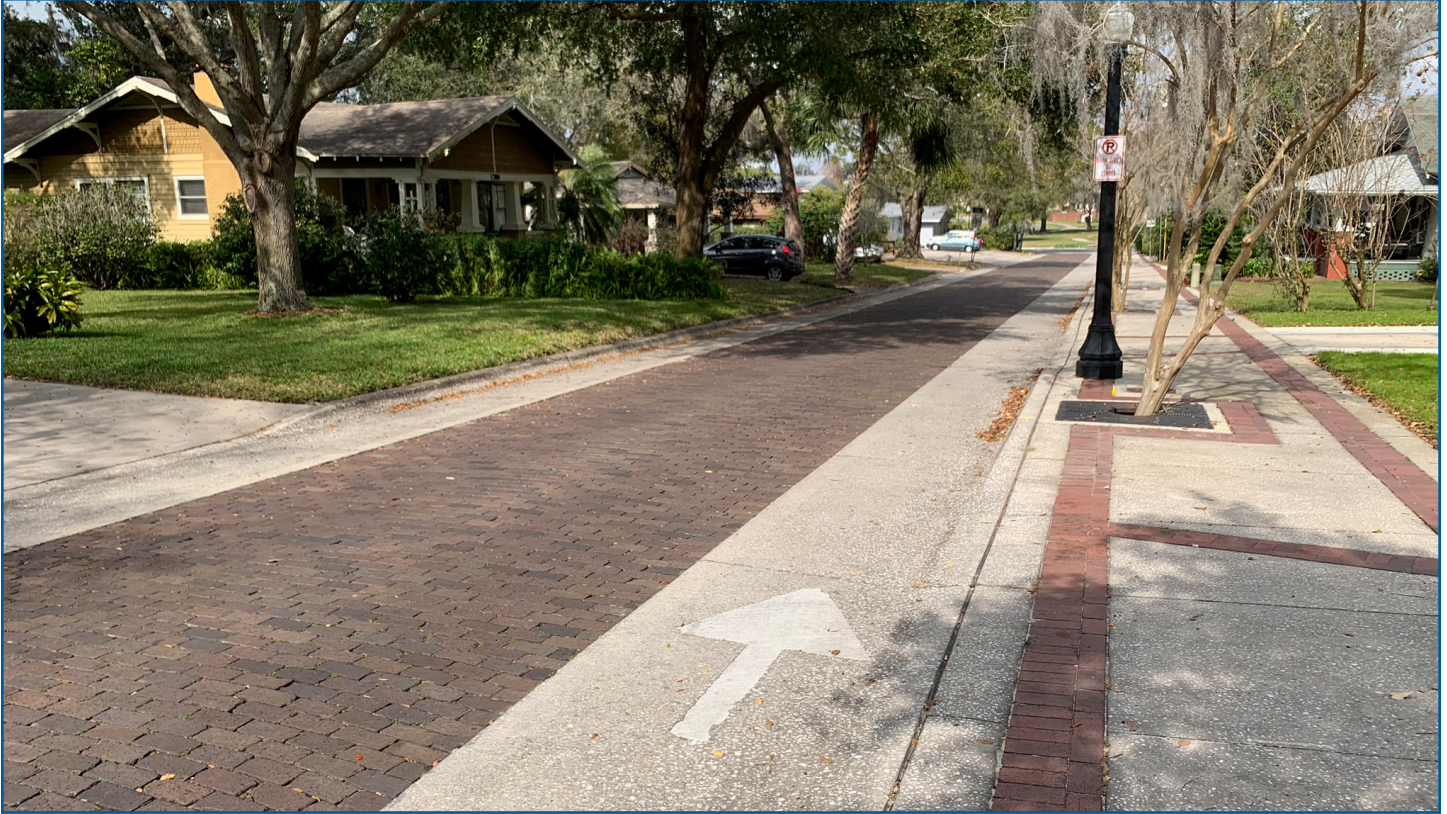


Figure 12 - Example of expanded concrete gutter plan for pedestrians and bicyclists in Lakeland, Florida.

Traffic Signals

As Winter Park looks to replace and/or upgrade existing signals or to install new traffic signals, the selection of signal equipment, particularly signal controllers and cabinets, should be made with safety and future technology needs in mind. The following content provides guidance towards the City's desired signal controller equipment. Winter Park currently uses Siemens and Eagle based controllers to operate existing traffic signals; however, Tactics is not used to manage the signals – which means there is no ability to monitor signal controllers and activity remotely. Adjacent communities use Q-Free signal controllers which have better interconnect and communication abilities. As Winter Park makes upgrades to traffic signals, the existing controllers should be phased out and all upgrades and new signals should specify Q-Free controllers. This will provide better options for communicating with signals in neighboring communities and jurisdictional partners. Additionally, this will aid in City efforts to manage traffic signals by allowing for remote monitoring.

As connected and autonomous vehicle technologies advance and as traffic control technologies adapt to manage smarter vehicles and communities, there will likely be a need to house additional hardware in traffic signal cabinets. FDOT District 5 staff indicated that new traffic signals should be designed to specify larger signal cabinets so that space for additional hardware will be readily available in the future.

At this time, Winter Park does not need to begin replacing all cabinets; however, if there are damaged cabinets at existing traffic signals that need to be replaced, or if there are new traffic signals being constructed, larger cabinets should be specified instead of the current style of cabinets. Much of the industry is shifting to Advanced Traffic Controller Cabinets (ATCC).

Connected Vehicles, Autonomous Vehicles, and Adaptive Signals

Connected and Autonomous Vehicle (CAV) technologies are expected to provide considerable safety and mobility improvements in the future; however, these technologies are currently evolving at a rapid pace. Many of the technologies can become outdated within a five-year period. Because of the shortened life span of these technologies, the benefit of investing in new hardware is not always cost-effective.

A variety of CAV technologies are still being researched and undergoing pilot testing. FDOT District 5 currently has projects underway to evaluate connected vehicle technologies that would improve traffic management and enhance roadway safety for all users. As part of the PedSafe project, FDOT is developing a collision avoidance system to prevent pedestrian and bicycle collisions. The SR 434 CV Pilot project located in Seminole County is examining the role of connected vehicle technologies with applications including preemption, Transit Signal Priority, and other traffic signal operations metrics. This project has been a starting point for the PedSafe project. The I-75 FRAME (Florida's Regional Advanced Mobility Elements) project is looking at ways to enhance traffic management in the event of an emergency through real-time communication with motorists. The University of Central Florida (UCF) is leading the FUTURe CITY (Fostering Smart Urban Transformation and Ubiquitous Resilience with Connected Infrastructure and Technology) initiative which focuses on implementing smart technologies in urban environments.

Several vendors are offering pilot deployments of automated transit vehicles. The walkable downtown core of Winter Park is an ideal setting for automated transit services should a vendor pilot or funding program opportunity arise.

At this time, it would be prudent for Winter Park to follow these and other research initiatives and pilot projects that are exploring CAV technologies. As these technologies mature, Winter Park can begin to evaluate which systems would be best suited for meeting the needs of the local community. In preparation for technology shifts, coordinating with FDOT District 5 can ensure that investments in new traffic signal equipment are made with future uses in mind. Additionally, Winter Park should review existing policies that could be impacted by emerging CAV technologies.

Intersection Collision Avoidance Safety Program (iCASP) is a red-light running crash prevention system that predicts when a vehicle might run a red light and then holds the perpendicular red phase to reduce the risk of a collision. The system can be implemented in tandem with red light running cameras to document near miss collisions. iCASP should be considered at intersections where there is a history of red-light running crashes or where there is a higher risk of red-light running crashes. Locations can be identified through a review of crash data for signalized intersections.

Automated pedestrian detection systems are a form of passive pedestrian detection that will automatically place a call for a pedestrian signal when a pedestrian is present within a specified area at the roadway crossing. These systems do not require any action on the part of the pedestrian and

can, therefore, especially benefit people who have difficulty accessing a pedestrian push button. These devices can also be used to track pedestrian progress in the crosswalk and adjust the WALK phase to provide additional time for individuals who cross at a slower-than-average pace.

Electric Vehicle Charging

The share of Electric Vehicles (EVs) on the road continues to grow, and with it the demand for EV charging stations is growing. The City Code should be referenced for the current requirements to accommodate EVs in private land development or redevelopment. Charging technologies are still in a state of rapid evolution, with new ideas being researched. As well, there are different types of chargers made to serve different vehicle models.

Because charging stations typically require a longer period of time to charge the vehicle battery versus the time needed to fill a standard fuel tank, many communities are exploring new opportunities for EV charging that differ from the typical fueling station design. For example, charging stations can be installed in parking locations close to retail stores and restaurants, thereby allowing the driver to engage in other activities while the vehicle charges. With its proximity to I-4 and its unique character, including numerous shopping and restaurant options, Winter Park could be a prime location for both travelers and nearby residents to stop and recharge vehicles.

Because the technologies are still rapidly advancing, Winter Park staff shall carefully evaluate how EV charging can and should be installed. One of the first steps in developing an EV charging policy or program is to coordinate with utility providers to understand the local capacity for providing EV charging. This initial step can help Winter Park identify any needed utility improvements that should be implemented prior to the installation of EV charging stations. Additionally, the utility providers might be able to help identify the preferred locations for installing charging stations based on access to electric utility lines.

One element that should be carefully considered is the location of EV charging stations intended for general public use. For example, if a charging station is installed at a curbside location, the ability to change how that section of curb is used in the future will be limited. Additionally, curbside EV charging stations could impact the turnover rate of on-street parking.

EVALUATING PROGRESS

The baseline network and performance measure metrics are a starting point to determine the success of transportation projects. For those performance measures in which data may not be available, a methodology to begin data gathering will be developed. More complex performance measures will likely require interagency coordination to collect the necessary data and to improve accuracy. Though some of this data is already gathered regularly, other performance measures may require special studies or dedicated staff time for appropriate data collection.



Figure 13 - Reallocation of roadway space for pedestrians and congregating in downtown Winter Park.

Sidewalk Projects					
Priority	Roadway	Segment	Length (ft)	Improvements	COST
1	Loch berry Road	Phelps Avenue to Lakemont Avenue	1900	Sidewalk Construction (Both sides missing)	\$ 1,892,000.00
2	Phelps Avenue	Loch berry Road to Aloma Avenue	2750	Sidewalk Construction (East Side)	\$ 445,000.00
3	Park Avenue	Ridgewood Avenue to City Limit (N)	1650	Sidewalk Construction (Both Sides incomplete)	\$ 1,356,000.00
4	Wymore Road	Lee Road to City Limit (N)	3100	Sidewalk Construction (Both Sides missing)	\$ 1,402,000.00
5	Louisiana Avenue	Park Avenue to Wilma Avenue	450	Sidewalk Construction (Both Sides missing)	\$ 76,000.00
6	Minnesota Avenue	Nicolet Avenue to Schultz Avenue	825	Sidewalk Construction (North Side gap)	\$ 267,000.00
7	Glenridge Way S	St. George Street to Lakemont Avenue	1850	Sidewalk Construction (South Side - includes boardwalk)	\$ 1,544,000.00
8	Lakemont Avenue	Gray Avenue to Glenridge Way	1700	Sidewalk Construction (West Side - includes boardwalk)	\$ 442,000.00
9	Park Avenue	Webster Avenue to Palmer Avenue	1550	Sidewalk Construction (West Side)	\$ 253,000.00
10	Loch berry Road	Lakemont Avenue to Darcy Drive	1600	Sidewalk Construction (South Side)	\$ 259,000.00
11	Lake Sue Avenue	Winter Park Road to Laurel Road	500	Sidewalk Construction (North Side)	\$ 84,000.00
12	Palmer Avenue	Park Avenue to Old England Avenue	650	Sidewalk Construction (South Side)	\$ 105,000.00
13	Palmer Avenue	Alabama Drive to Temple Drive	900	Sidewalk Construction (North Side)	\$ 146,000.00
14	Park Avenue	Green Cove Road to Pennsylvania Avenue	850	Sidewalk Construction (North Side)	\$ 138,000.00
15	Park Avenue	Pennsylvania Avenue to Denning Drive	1350	Sidewalk Construction (South Side)	\$ 317,000.00
16	Park Avenue	Palmer Avenue to New York Avenue	1000	Sidewalk Construction (South Side)	\$ 232,000.00
17	Phelps Avenue	Aloma Avenue to Lakehurst Avenue	1600	Sidewalk Construction (West Side)	\$ 259,000.00
18	Louisiana Avenue	Wilma Avenue to Denning Drive	1000	Sidewalk Construction (Both Sides)	\$ 326,000.00
19	Stovin Avenue	Park Avenue to Palmer Avenue	400	Sidewalk Construction (North Side)	\$ 65,000.00
20	Temple Drive	Palmer Avenue to Woodmere Drive	1800	Sidewalk Construction (West Side)	\$ 291,000.00
21	Temple Drive	Via Lugano to Howell Branch Road	3950	Sidewalk Construction (West Side)	\$ 1,726,000.00
22	Temple Trail	Howell Branch Road To 300' N of Cove Trail	1650	Sidewalk Construction (East Side)	\$ 426,000.00
23	Wymore Road	Franklin Avenue to Lee Road	1800	Sidewalk Construction (West Side)	\$ 958,000.00
24	Virginia Dr.	Dead End	1000	Sidewalk Construction	\$ 688,000.00
25	Webster Avenue	Pennsylvania Avenue to Interlachen Avenue	3250	Sidewalk Construction (South Side)	\$ 525,000.00

Sidewalk - 1					
Loch Berry Road - from Phelps Avenue to Lakemont Avenue (0.36 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	3800.00	LF	\$ 3.00	\$ 11,400.00
110-1-1	Clearing and Grubbing	1.44	AC	\$ 31,506.62	\$ 45,350.44
120-1	Regular Excavation	689.47	CY	\$ 5.84	\$ 4,026.50
120-6	Embankment	1509.20	CY	\$ 11.07	\$ 16,706.89
400-0-11	Concrete Class NS, Gravity Wall	269.89	CY	\$ 1,329.82	\$ 358,900.28
515-1-1	Pipe Handrail - Guiderail, Steel	1900.00	LF	\$ 131.42	\$ 249,698.00
522-1	Concrete Sidewalk (4" Thick)	2677.27	SY	\$ 74.73	\$ 200,072.59
527-2	Detectable Warnings	71.97	SF	\$ 38.74	\$ 2,788.11
570-1-2	Performance Turf, Sod	2534.10	SY	\$ 4.72	\$ 11,960.97

Segments Construction Sub-Totals	\$ 900,903.78
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Mobilization (10%)	\$ 90,090.38
Maintenance of Traffic (10%)	\$ 90,090.38
Project Unknowns (25%)	\$ 270,271.14

Project Construction Total	\$ 1,351,355.68
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Final Design / Engineering (25%)	\$ 337,838.92
Construction Engineering Inspection (CEI) (15%)	\$ 202,703.35

GRAND TOTAL	\$ 1,891,897.95
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 2,270,277.54
5 years Estimated Project Cost	1.5	\$ 2,837,846.92

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 2					
Phelps Avenue - from Loch berry Road to Aloma Avenue (0.52 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	2750.00	LF	\$ 3.00	\$ 8,250.00
110-1-1	Clearing and Grubbing	1.04	AC	\$ 31,506.62	\$ 32,819.40
120-1	Regular Excavation	498.96	CY	\$ 5.84	\$ 2,913.92
120-6	Embankment	1092.19	CY	\$ 11.07	\$ 12,090.52
522-1	Concrete Sidewalk (4" Thick)	1937.50	SY	\$ 74.73	\$ 144,789.38
527-2	Detectable Warnings	52.08	SF	\$ 38.74	\$ 2,017.71
570-1-2	Performance Turf, Sod	1833.89	SY	\$ 4.72	\$ 8,655.96

Segments Construction Sub-Totals	\$ 211,536.88
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Mobilization (10%)	\$ 21,153.69
Maintenance of Traffic (10%)	\$ 21,153.69
Project Unknowns (25%)	\$ 63,461.06

Project Construction Total	\$ 317,305.31
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Final Design / Engineering (25%)	\$ 79,326.33
Construction Engineering Inspection (CEI) (15%)	\$ 47,595.80

GRAND TOTAL	\$ 444,227.44
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 533,072.93
5 years Estimated Project Cost	1.5	\$ 666,341.16

NOTES:

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2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 3					
Park Avenue - from Ridgewood Avenue to City Limit (N) (0.31 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	3300.00	LF	\$ 3.00	\$ 9,900.00
110-1-1	Clearing and Grubbing	1.25	AC	\$ 31,506.62	\$ 39,383.28
120-1	Regular Excavation	598.75	CY	\$ 5.84	\$ 3,496.70
120-6	Embankment	1310.63	CY	\$ 11.07	\$ 14,508.62
400-0-11	Concrete Class NS, Gravity Wall	234.38	CY	\$ 1,329.82	\$ 358,900.28
515-1-1	Pipe Handrail - Guiderail, Steel	1650.00	LF	\$ 131.42	\$ 32,855.00
522-1	Concrete Sidewalk (4" Thick)	2325.00	SY	\$ 74.73	\$ 173,747.25
527-2	Detectable Warnings	62.50	SF	\$ 38.74	\$ 2,421.25
570-1-2	Performance Turf, Sod	2200.67	SY	\$ 4.72	\$ 10,387.16

Segments Construction Sub-Totals	\$ 645,599.53
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Mobilization (10%)	\$ 64,559.95
Maintenance of Traffic (10%)	\$ 64,559.95
Project Unknowns (25%)	\$ 193,679.86

Project Construction Total	\$ 968,399.30
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Final Design / Engineering (25%)	\$ 242,099.83
Construction Engineering Inspection (CEI) (15%)	\$ 145,259.90

GRAND TOTAL	\$1,355,759.02
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$1,626,910.83
5 years Estimated Project Cost	1.5	\$2,033,638.53

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 4					
Wymore Road - from Lee Road to City Limit (N) (0.59 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	6200.00	LF	\$ 3.00	\$ 18,600.00
110-1-1	Clearing and Grubbing	2.35	AC	\$ 31,506.62	\$ 73,992.82
120-1	Regular Excavation	1124.92	CY	\$ 5.84	\$ 6,569.56
120-6	Embankment	2462.39	CY	\$ 11.07	\$ 27,258.62
400-0-11	Concrete Class NS, Gravity Wall	84.00	CY	\$ 1,329.82	\$ 111,704.88
515-1-1	Pipe Handrail - Guiderail, Steel	600.00	LF	\$ 131.42	\$ 78,852.00
522-1	Concrete Sidewalk (4" Thick)	4368.18	SY	\$ 74.73	\$ 326,434.23
527-2	Detectable Warnings	117.42	SF	\$ 38.74	\$ 4,549.02
570-1-2	Performance Turf, Sod	4134.59	SY	\$ 4.72	\$ 19,515.26

Segments Construction Sub-Totals	\$ 667,476.38
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Mobilization (10%)	\$ 66,747.64
Maintenance of Traffic (10%)	\$ 66,747.64
Project Unknowns (25%)	\$ 200,242.91

Project Construction Total	\$ 1,001,214.57
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Final Design / Engineering (25%)	\$ 250,303.64
Construction Engineering Inspection (CEI) (15%)	\$ 150,182.19

GRAND TOTAL	\$ 1,401,700.40
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 1,682,040.48
5 years Estimated Project Cost	1.5	\$ 2,102,550.60

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 5					
Louisiana Avenue - from Park Avenue to Wilma avenue (0.32 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	450.00	LF	\$ 3.00	\$ 1,350.00
110-1-1	Clearing and Grubbing	0.17	AC	\$31,506.62	\$ 5,370.45
120-1	Regular Excavation	81.65	CY	\$ 5.84	\$ 476.82
120-6	Embankment	178.72	CY	\$ 11.07	\$ 1,978.45
522-1	Concrete Sidewalk (4" Thick)	317.05	SY	\$ 74.73	\$ 23,692.81
527-2	Detectable Warnings	8.52	SF	\$ 38.74	\$ 330.17
526-1-1	Pavers, Architectural, Roadway	10.00	SY	\$ 120.85	\$ 1,208.50
570-1-2	Performance Turf, Sod	300.09	SY	\$ 4.72	\$ 1,416.43

Segments Construction Sub-Totals	\$ 35,823.63
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Mobilization (10%)	\$ 3,582.36
Maintenance of Traffic (10%)	\$ 3,582.36
Project Unknowns (25%)	\$ 10,747.09

Project Construction Total	\$ 53,735.44
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Final Design / Engineering (25%)	\$ 13,433.86
Construction Engineering Inspection (CEI) (15%)	\$ 8,060.32

GRAND TOTAL	\$ 75,229.61
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 90,275.54
5 years Estimated Project Cost	1.5	\$ 112,844.42

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 6					
Minnesota Avenue - from Nicolet Avenue to Schultz Avenue (0.16MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1650.00	LF	\$ 3.00	\$ 4,950.00
110-1-1	Clearing and Grubbing	0.63	AC	\$ 31,506.62	\$ 19,691.64
120-1	Regular Excavation	299.38	CY	\$ 5.84	\$ 1,748.35
120-6	Embankment	655.31	CY	\$ 11.07	\$ 7,254.31
522-1	Concrete Sidewalk (4" Thick)	1162.50	SY	\$ 74.73	\$ 86,873.63
527-2	Detectable Warnings	31.25	SF	\$ 38.74	\$ 1,210.63
570-1-2	Performance Turf, Sod	1100.33	SY	\$ 4.72	\$ 5,193.58

Segments Construction Sub-Totals	\$ 126,922.13
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Mobilization (10%)	\$ 12,692.21
Maintenance of Traffic (10%)	\$ 12,692.21
Project Unknowns (25%)	\$ 38,076.64

Project Construction Total	\$ 190,383.19
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Final Design / Engineering (25%)	\$ 47,595.80
Construction Engineering Inspection (CEI) (15%)	\$ 28,557.48

GRAND TOTAL	\$ 266,536.46
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 319,843.76
5 years Estimated Project Cost	1.5	\$ 399,804.69

NOTES:

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2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 7					
Glenridge Way S - from St. George Street to Lakemont Avenue (0.35 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1850.00	LF	\$ 3.00	\$ 5,550.00
110-1-1	Clearing and Grubbing	0.70	AC	\$ 31,506.62	\$ 22,078.50
120-1	Regular Excavation	335.66	CY	\$ 5.84	\$ 1,960.27
120-6	Embankment	734.74	CY	\$ 11.07	\$ 8,133.62
400-0-11	Concrete Class NS, Gravity Wall	262.78	CY	\$ 1,329.82	\$ 349,455.54
515-1-1	Pipe Handrail - Guiderail, Steel	1850.00	LF	\$ 131.42	\$ 243,127.00
522-1	Concrete Sidewalk (4" Thick)	1303.41	SY	\$ 74.73	\$ 97,403.76
527-2	Detectable Warnings	35.04	SF	\$ 38.74	\$ 1,357.37
570-1-2	Performance Turf, Sod	1233.71	SY	\$ 4.72	\$ 5,823.10

Segments Construction Sub-Totals	\$ 734,889.16
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Mobilization (10%)	\$ 73,488.92
Maintenance of Traffic (10%)	\$ 73,488.92
Project Unknowns (25%)	\$ 220,466.75

Project Construction Total	\$ 1,102,333.75
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Final Design / Engineering (25%)	\$ 275,583.44
Construction Engineering Inspection (CEI) (15%)	\$ 165,350.06

GRAND TOTAL	\$ 1,543,267.25
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 1,851,920.70
5 years Estimated Project Cost	1.5	\$ 2,314,900.87

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 8					
Lakemont Avenue - from Gray Avenue to Glenridge Way (0.32 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1700.00	LF	\$ 3.00	\$ 5,100.00
110-1-1	Clearing and Grubbing	0.64	AC	\$ 31,506.62	\$ 20,288.35
120-1	Regular Excavation	308.45	CY	\$ 5.84	\$ 1,801.33
120-6	Embankment	675.17	CY	\$ 11.07	\$ 7,474.14
400-0-11	Concrete Class NS, Gravity Wall	35.00	CY	\$ 1,329.82	\$ 46,543.70
515-1-1	Pipe Handrail - Guiderail, Steel	250.00	LF	\$ 131.42	\$ 32,855.00
522-1	Concrete Sidewalk (4" Thick)	1197.73	SY	\$ 74.73	\$ 89,506.16
527-2	Detectable Warnings	32.20	SF	\$ 38.74	\$ 1,247.31
570-1-2	Performance Turf, Sod	1133.68	SY	\$ 4.72	\$ 5,350.96

Segments Construction Sub-Totals	\$ 210,166.95
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Mobilization (10%)	\$ 21,016.70
Maintenance of Traffic (10%)	\$ 21,016.70
Project Unknowns (25%)	\$ 63,050.09

Project Construction Total	\$ 315,250.43
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Final Design / Engineering (25%)	\$ 78,812.61
Construction Engineering Inspection (CEI) (15%)	\$ 47,287.56

GRAND TOTAL	\$ 441,350.60
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 529,620.71
5 years Estimated Project Cost	1.5	\$ 662,025.89

NOTES:

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3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 9					
Park Avenue - from Webster Avenue to Palmer Avenue (0.29 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1550.00	LF	\$ 3.00	\$ 4,650.00
110-1-1	Clearing and Grubbing	0.59	AC	\$ 31,506.62	\$ 18,498.20
120-1	Regular Excavation	281.23	CY	\$ 5.84	\$ 1,642.39
120-6	Embankment	615.60	CY	\$ 11.07	\$ 6,814.65
522-1	Concrete Sidewalk (4" Thick)	1092.05	SY	\$ 74.73	\$ 81,608.56
527-2	Detectable Warnings	29.36	SF	\$ 38.74	\$ 1,137.25
526-1-1	Pavers, Architectural, Roadway	10.00	SY	\$ 120.85	\$ 1,208.50
570-1-2	Performance Turf, Sod	1033.65	SY	\$ 4.72	\$ 4,878.82

Segments Construction Sub-Totals	\$ 120,438.38
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Mobilization (10%)	\$ 12,043.84
Maintenance of Traffic (10%)	\$ 12,043.84
Project Unknowns (25%)	\$ 36,131.51

Project Construction Total	\$ 180,657.56
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Final Design / Engineering (25%)	\$ 45,164.39
Construction Engineering Inspection (CEI) (15%)	\$ 27,098.63

GRAND TOTAL	\$ 252,920.59
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 303,504.71
5 years Estimated Project Cost	1.5	\$ 379,380.88

NOTES:

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2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 10					
Loch Berry Road - from Lakemont Avenue to Darcy drive (0.30 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1600.00	LF	\$ 3.00	\$ 4,800.00
110-1-1	Clearing and Grubbing	0.61	AC	\$ 31,506.62	\$ 19,094.92
120-1	Regular Excavation	290.30	CY	\$ 5.84	\$ 1,695.37
120-6	Embankment	635.45	CY	\$ 11.07	\$ 7,034.48
522-1	Concrete Sidewalk (4" Thick)	1127.27	SY	\$ 74.73	\$ 84,241.09
527-2	Detectable Warnings	30.30	SF	\$ 38.74	\$ 1,173.94
570-1-2	Performance Turf, Sod	1066.99	SY	\$ 4.72	\$ 5,036.20

Segments Construction Sub-Totals	\$ 123,076.00
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Mobilization (10%)	\$ 12,307.60
Maintenance of Traffic (10%)	\$ 12,307.60
Project Unknowns (25%)	\$ 36,922.80

Project Construction Total	\$ 184,614.00
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Final Design / Engineering (25%)	\$ 46,153.50
Construction Engineering Inspection (CEI) (15%)	\$ 27,692.10

GRAND TOTAL	\$ 258,459.60
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 310,151.52
5 years Estimated Project Cost	1.5	\$ 387,689.40

NOTES:

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2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 11					
Lake Sue Avenue - from Winter Park Road to Laurel Road (0.09 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	500.00	LF	\$ 3.00	\$ 1,500.00
110-1-1	Clearing and Grubbing	0.19	AC	\$ 31,506.62	\$ 5,967.16
120-1	Regular Excavation	90.72	CY	\$ 5.84	\$ 529.80
120-6	Embankment	198.58	CY	\$ 11.07	\$ 2,198.28
522-1	Concrete Sidewalk (4" Thick)	352.27	SY	\$ 74.73	\$ 26,325.34
527-2	Detectable Warnings	9.47	SF	\$ 38.74	\$ 366.86
526-1-1	Pavers, Architectural, Roadway	10.00	SY	\$ 120.85	\$ 1,208.50
570-1-2	Performance Turf, Sod	333.43	SY	\$ 4.72	\$ 1,573.81

Segments Construction Sub-Totals	\$ 39,669.75
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Mobilization (10%)	\$ 3,966.98
Maintenance of Traffic (10%)	\$ 3,966.98
Project Unknowns (25%)	\$ 11,900.93

Project Construction Total	\$ 59,504.63
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Final Design / Engineering (25%)	\$ 14,876.16
Construction Engineering Inspection (CEI) (15%)	\$ 8,925.69

GRAND TOTAL	\$ 83,306.48
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 99,967.77
5 years Estimated Project Cost	1.5	\$ 124,959.71

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 12					
Palmer Avenue - from Park Avenue to Old England Avenue (0.12 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	650.00	LF	\$ 3.00	\$ 1,950.00
110-1-1	Clearing and Grubbing	0.25	AC	\$ 31,506.62	\$ 7,757.31
120-1	Regular Excavation	117.94	CY	\$ 5.84	\$ 688.74
120-6	Embankment	258.15	CY	\$ 11.07	\$ 2,857.76
522-1	Concrete Sidewalk (4" Thick)	457.95	SY	\$ 74.73	\$ 34,222.94
527-2	Detectable Warnings	12.31	SF	\$ 38.74	\$ 476.91
570-1-2	Performance Turf, Sod	433.47	SY	\$ 4.72	\$ 2,045.96

Segments Construction Sub-Totals	\$ 49,999.63
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Mobilization (10%)	\$ 4,999.96
Maintenance of Traffic (10%)	\$ 4,999.96
Project Unknowns (25%)	\$ 14,999.89

Project Construction Total	\$ 74,999.44
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Final Design / Engineering (25%)	\$ 18,749.86
Construction Engineering Inspection (CEI) (15%)	\$ 11,249.92

GRAND TOTAL	\$ 104,999.21
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 125,999.06
5 years Estimated Project Cost	1.5	\$ 157,498.82

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 13					
Palmer Avenue - from Alabama Drive to Temple Drive (0.17 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	900.00	LF	\$ 3.00	\$ 2,700.00
110-1-1	Clearing and Grubbing	0.34	AC	\$ 31,506.62	\$ 10,740.89
120-1	Regular Excavation	163.30	CY	\$ 5.84	\$ 953.65
120-6	Embankment	357.44	CY	\$ 11.07	\$ 3,956.90
522-1	Concrete Sidewalk (4" Thick)	634.09	SY	\$ 74.73	\$ 47,385.61
527-2	Detectable Warnings	17.05	SF	\$ 38.74	\$ 660.34
570-1-2	Performance Turf, Sod	600.18	SY	\$ 4.72	\$ 2,832.86

Segments Construction Sub-Totals	\$ 69,230.25
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Mobilization (10%)	\$ 6,923.03
Maintenance of Traffic (10%)	\$ 6,923.03
Project Unknowns (25%)	\$ 20,769.08

Project Construction Total	\$ 103,845.38
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Final Design / Engineering (25%)	\$ 25,961.34
Construction Engineering Inspection (CEI) (15%)	\$ 15,576.81

GRAND TOTAL	\$ 145,383.53
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 174,460.23
5 years Estimated Project Cost	1.5	\$ 218,075.29

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 14					
Park Avenue - from Green Cove Road to Pennsylvania Avenue (0.32 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	850.00	LF	\$ 3.00	\$ 2,550.00
110-1-1	Clearing and Grubbing	0.32	AC	\$ 31,506.62	\$ 10,144.18
120-1	Regular Excavation	154.22	CY	\$ 5.84	\$ 900.67
120-6	Embankment	337.59	CY	\$ 11.07	\$ 3,737.07
522-1	Concrete Sidewalk (4" Thick)	598.86	SY	\$ 74.73	\$ 44,753.08
527-2	Detectable Warnings	16.10	SF	\$ 38.74	\$ 623.66
570-1-2	Performance Turf, Sod	566.84	SY	\$ 4.72	\$ 2,675.48

Segments Construction Sub-Totals	\$ 65,384.13
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Mobilization (10%)	\$ 6,538.41
Maintenance of Traffic (10%)	\$ 6,538.41
Project Unknowns (25%)	\$ 19,615.24

Project Construction Total	\$ 98,076.19
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Final Design / Engineering (25%)	\$ 24,519.05
Construction Engineering Inspection (CEI) (15%)	\$ 14,711.43

GRAND TOTAL	\$ 137,306.66
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 164,768.00
5 years Estimated Project Cost	1.5	\$ 205,959.99

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 15					
Park Avenue - from Pennsylvania Avenue to Denning Drive (0.26 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1350.00	LF	\$ 3.00	\$ 4,050.00
110-1-1	Clearing and Grubbing	0.51	AC	\$ 31,506.62	\$ 16,111.34
120-1	Regular Excavation	244.94	CY	\$ 5.84	\$ 1,430.47
120-6	Embankment	536.16	CY	\$ 11.07	\$ 5,935.34
522-1	Concrete Sidewalk (4" Thick)	951.14	SY	\$ 74.73	\$ 71,078.42
527-2	Detectable Warnings	25.57	SF	\$ 38.74	\$ 990.51
548-12	Retaining Wall System, Permanent, Excluding Barrier	1050.00	SF	\$ 44.62	\$ 46,851.00
570-1-2	Performance Turf, Sod	900.27	SY	\$ 4.72	\$ 4,249.29

Segments Construction Sub-Totals	\$ 150,696.38
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Mobilization (10%)	\$ 15,069.64
Maintenance of Traffic (10%)	\$ 15,069.64
Project Unknowns (25%)	\$ 45,208.91

Project Construction Total	\$ 226,044.56
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Final Design / Engineering (25%)	\$ 56,511.14
Construction Engineering Inspection (CEI) (15%)	\$ 33,906.68

GRAND TOTAL	\$ 316,462.39
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 379,754.87
5 years Estimated Project Cost	1.5	\$ 474,693.58

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 16					
Park Avenue - from Palmer Avenue to New York Avenue (0.19 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1000.00	LF	\$ 3.00	\$ 3,000.00
110-1-1	Clearing and Grubbing	0.38	AC	\$ 31,506.62	\$ 11,934.33
120-1	Regular Excavation	181.44	CY	\$ 5.84	\$ 1,059.61
120-6	Embankment	397.16	CY	\$ 11.07	\$ 4,396.55
522-1	Concrete Sidewalk (4" Thick)	704.55	SY	\$ 74.73	\$ 52,650.68
526-1-1	Pavers, Architectural, Roadway	10.00	SY	\$ 120.85	\$ 1,208.50
527-2	Detectable Warnings	37.88	SF	\$ 38.74	\$ 1,467.42
548-12	Retaining Wall System, Permanent, Excluding Barrier	700.00	SF	\$ 44.62	\$ 31,234.00
570-1-2	Performance Turf, Sod	666.87	SY	\$ 4.72	\$ 3,147.62

Segments Construction Sub-Totals	\$ 110,098.71
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Mobilization (10%)	\$ 11,009.87
Maintenance of Traffic (10%)	\$ 11,009.87
Project Unknowns (25%)	\$ 33,029.61

Project Construction Total	\$ 165,148.07
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Final Design / Engineering (25%)	\$ 41,287.02
Construction Engineering Inspection (CEI) (15%)	\$ 24,772.21

GRAND TOTAL	\$ 231,207.30
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 277,448.75
5 years Estimated Project Cost	1.5	\$ 346,810.94

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 17					
Phelps Avenue - from Aloma Avenue to Lakehurst Avenue (0.30 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1600.00	LF	\$ 3.00	\$ 4,800.00
110-1-1	Clearing and Grubbing	0.61	AC	\$ 31,506.62	\$ 19,094.92
120-1	Regular Excavation	290.30	CY	\$ 5.84	\$ 1,695.37
120-6	Embankment	635.45	CY	\$ 11.07	\$ 7,034.48
522-1	Concrete Sidewalk (4" Thick)	1127.27	SY	\$ 74.73	\$ 84,241.09
527-2	Detectable Warnings	30.30	SF	\$ 38.74	\$ 1,173.94
570-1-2	Performance Turf, Sod	1066.99	SY	\$ 4.72	\$ 5,036.20

Segments Construction Sub-Totals	\$ 123,076.00
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Mobilization (10%)	\$ 12,307.60
Maintenance of Traffic (10%)	\$ 12,307.60
Project Unknowns (25%)	\$ 36,922.80

Project Construction Total	\$ 184,614.00
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Final Design / Engineering (25%)	\$ 46,153.50
Construction Engineering Inspection (CEI) (15%)	\$ 27,692.10

GRAND TOTAL	\$ 258,459.60
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 310,151.52
5 years Estimated Project Cost	1.5	\$ 387,689.40

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 18					
Louisiana Avenue - from Wilma Avenue to Denning Drive (0.19 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	2000.00	LF	\$ 3.00	\$ 6,000.00
110-1-1	Clearing and Grubbing	0.76	AC	\$ 31,506.62	\$ 23,868.65
120-1	Regular Excavation	362.88	CY	\$ 5.84	\$ 2,119.21
120-6	Embankment	794.32	CY	\$ 11.07	\$ 8,793.10
522-1	Concrete Sidewalk (4" Thick)	1409.09	SY	\$ 74.73	\$ 105,301.36
527-2	Detectable Warnings	37.88	SF	\$ 38.74	\$ 1,467.42
526-1-1	Pavers, Architectural, Roadway	10.00	SY	\$ 120.85	\$ 1,208.50
570-1-2	Performance Turf, Sod	1333.74	SY	\$ 4.72	\$ 6,295.25

Segments Construction Sub-Totals	\$ 155,053.50
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Mobilization (10%)	\$ 15,505.35
Maintenance of Traffic (10%)	\$ 15,505.35
Project Unknowns (25%)	\$ 46,516.05

Project Construction Total	\$ 232,580.25
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Final Design / Engineering (25%)	\$ 58,145.06
Construction Engineering Inspection (CEI) (15%)	\$ 34,887.04

GRAND TOTAL	\$ 325,612.35
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 390,734.82
5 years Estimated Project Cost	1.5	\$ 488,418.53

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 19					
Stovin Avenue - from Park Avenue to Palmer Avenue (0.08 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	400.00	LF	\$ 3.00	\$ 1,200.00
110-1-1	Clearing and Grubbing	0.15	AC	\$ 31,506.62	\$ 4,773.73
120-1	Regular Excavation	72.58	CY	\$ 5.84	\$ 423.84
120-6	Embankment	158.86	CY	\$ 11.07	\$ 1,758.62
522-1	Concrete Sidewalk (4" Thick)	281.82	SY	\$ 74.73	\$ 21,060.27
527-2	Detectable Warnings	7.58	SF	\$ 38.74	\$ 293.48
570-1-2	Performance Turf, Sod	266.75	SY	\$ 4.72	\$ 1,259.05

Segments Construction Sub-Totals	\$ 30,769.00
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Mobilization (10%)	\$ 3,076.90
Maintenance of Traffic (10%)	\$ 3,076.90
Project Unknowns (25%)	\$ 9,230.70

Project Construction Total	\$ 46,153.50
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Final Design / Engineering (25%)	\$ 11,538.38
Construction Engineering Inspection (CEI) (15%)	\$ 6,923.03

GRAND TOTAL	\$ 64,614.90
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 77,537.88
5 years Estimated Project Cost	1.5	\$ 96,922.35

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 20					
Temple Drive - from Palmer Avenue to Woodmere Drive (0.34 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1800.00	LF	\$ 3.00	\$ 5,400.00
110-1-1	Clearing and Grubbing	0.68	AC	\$ 31,506.62	\$ 21,481.79
120-1	Regular Excavation	326.59	CY	\$ 5.84	\$ 1,907.29
120-6	Embankment	714.89	CY	\$ 11.07	\$ 7,913.79
522-1	Concrete Sidewalk (4" Thick)	1268.18	SY	\$ 74.73	\$ 94,771.23
527-2	Detectable Warnings	34.09	SF	\$ 38.74	\$ 1,320.68
570-1-2	Performance Turf, Sod	1200.36	SY	\$ 4.72	\$ 5,665.72

Segments Construction Sub-Totals	\$ 138,460.50
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Mobilization (10%)	\$ 13,846.05
Maintenance of Traffic (10%)	\$ 13,846.05
Project Unknowns (25%)	\$ 41,538.15

Project Construction Total	\$ 207,690.75
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Final Design / Engineering (25%)	\$ 51,922.69
Construction Engineering Inspection (CEI) (15%)	\$ 31,153.61

GRAND TOTAL	\$ 290,767.05
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 348,920.46
5 years Estimated Project Cost	1.5	\$ 436,150.58

NOTES:

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2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 21					
Temple Drive - from Via Lugano to Howell Branch Road (0.75 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	3950.00	LF	\$ 3.00	\$ 11,850.00
110-1-1	Clearing and Grubbing	1.50	AC	\$ 31,506.62	\$ 47,140.59
120-1	Regular Excavation	716.69	CY	\$ 5.84	\$ 4,185.44
120-6	Embankment	1568.78	CY	\$ 11.07	\$ 17,366.38
400-0-11	Concrete Class NS, Gravity Wall	561.08	CY	\$ 1,329.82	\$ 358,900.28
515-1-1	Pipe Handrail - Guiderail, Steel	1200.00	LF	\$ 131.42	\$ 157,704.00
522-1	Concrete Sidewalk (4" Thick)	2782.95	SY	\$ 74.73	\$ 207,970.19
526-1-1	Pavers, Architectural, Roadway	10.00	SY	\$ 120.85	\$ 1,208.50
527-2	Detectable Warnings	74.81	SF	\$ 38.74	\$ 2,898.16
570-1-2	Performance Turf, Sod	2634.13	SY	\$ 4.72	\$ 12,433.11

Segments Construction Sub-Totals	\$ 821,656.66
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Mobilization (10%)	\$ 82,165.67
Maintenance of Traffic (10%)	\$ 82,165.67
Project Unknowns (25%)	\$ 246,497.00

Project Construction Total	\$1,232,484.99
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Final Design / Engineering (25%)	\$ 308,121.25
Construction Engineering Inspection (CEI) (15%)	\$ 184,872.75

GRAND TOTAL	\$1,725,478.98
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$2,070,574.78
5 years Estimated Project Cost	1.5	\$2,588,218.48

NOTES:

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2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 22					
Temple Trail - from Howell Branch Road To 300' N of Cove Trail (0.31 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1650.00	LF	\$ 3.00	\$ 4,950.00
110-1-1	Clearing and Grubbing	0.63	AC	\$ 31,506.62	\$ 19,691.64
120-1	Regular Excavation	299.38	CY	\$ 5.84	\$ 1,748.35
120-6	Embankment	655.31	CY	\$ 11.07	\$ 7,254.31
400-0-11	Concrete Class NS, Gravity Wall	21.00	CY	\$ 1,329.82	\$ 27,926.22
458 -1-24	Bridge Deck Expansion Joint, Rehabilitation, Finger Joint	50.00	LF	\$ 562.00	\$ 28,100.00
515-1-1	Pipe Handrail - Guiderail, Steel	150.00	LF	\$ 131.42	\$ 19,713.00
522-1	Concrete Sidewalk (4" Thick)	1162.50	SY	\$ 74.73	\$ 86,873.63
527-2	Detectable Warnings	31.25	SF	\$ 38.74	\$ 1,210.63
570-1-2	Performance Turf, Sod	1100.33	SY	\$ 4.72	\$ 5,193.58

Segments Construction Sub-Totals	\$ 202,661.35
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Mobilization (10%)	\$ 20,266.13
Maintenance of Traffic (10%)	\$ 20,266.13
Project Unknowns (25%)	\$ 60,798.40

Project Construction Total	\$ 303,992.02
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Final Design / Engineering (25%)	\$ 75,998.00
Construction Engineering Inspection (CEI) (15%)	\$ 45,598.80

GRAND TOTAL	\$ 425,588.82
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 510,706.59
5 years Estimated Project Cost	1.5	\$ 638,383.24

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 23					
Wymore Road - from Franklin Avenue to Lee Road (0.34 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1800.00	LF	\$ 3.00	\$ 5,400.00
110-1-1	Clearing and Grubbing	0.68	AC	\$ 31,506.62	\$ 21,481.79
120-1	Regular Excavation	326.59	CY	\$ 5.84	\$ 1,907.29
120-6	Embankment	714.89	CY	\$ 11.07	\$ 7,913.79
400-0-11	Concrete Class NS, Gravity Wall	140.00	CY	\$ 1,329.82	\$ 186,174.80
515-1-1	Pipe Handrail - Guiderail, Steel	1000.00	LF	\$ 131.42	\$ 131,420.00
522-1	Concrete Sidewalk (4" Thick)	1268.18	SY	\$ 74.73	\$ 94,771.23
527-2	Detectable Warnings	34.09	SF	\$ 38.74	\$ 1,320.68
570-1-2	Performance Turf, Sod	1200.36	SY	\$ 4.72	\$ 5,665.72

Segments Construction Sub-Totals	\$ 456,055.30
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Mobilization (10%)	\$ 45,605.53
Maintenance of Traffic (10%)	\$ 45,605.53
Project Unknowns (25%)	\$ 136,816.59

Project Construction Total	\$ 684,082.95
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Final Design / Engineering (25%)	\$ 171,020.74
Construction Engineering Inspection (CEI) (15%)	\$ 102,612.44

GRAND TOTAL	\$ 957,716.13
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$1,149,259.36
5 years Estimated Project Cost	1.5	\$1,436,574.20

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 24					
Virginia Drive dead end					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	1000.00	LF	\$ 3.00	\$ 3,000.00
110-1-1	Clearing and Grubbing	0.38	AC	\$ 31,506.62	\$ 11,934.33
120-1	Regular Excavation	181.44	CY	\$ 5.84	\$ 1,059.61
120-6	Embankment	397.16	CY	\$ 11.07	\$ 4,396.55
515-1-1	Pipe Handrail - Guiderail, Steel	2000.00	LF	\$ 131.42	\$ 262,840.00
520-1-10	Concrete Curb & Gutter, Type F	56.00	LF	\$ 48.88	\$ 2,737.28
522-1	Concrete Sidewalk (4" Thick)	704.55	SY	\$ 74.73	\$ 52,650.68
527-2	Detectable Warnings	18.94	SF	\$ 38.74	\$ 733.71
570-1-2	Performance Turf, Sod	666.87	SY	\$ 4.72	\$ 3,147.62

Segments Construction Sub-Totals	\$ 327,565.45
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Mobilization (10%)	\$ 32,756.55
Maintenance of Traffic (10%)	\$ 32,756.55
Project Unknowns (25%)	\$ 98,269.64

Project Construction Total	\$ 491,348.18
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Final Design / Engineering (25%)	\$ 122,837.05
Construction Engineering Inspection (CEI) (15%)	\$ 73,702.23

GRAND TOTAL	\$ 687,887.45
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 825,464.94
5 years Estimated Project Cost	1.5	\$1,031,831.18

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Sidewalk - 25					
Webster Avenue - from Pennsylvania Avenue to Interlachen Avenue (0.62 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	3250.00	LF	\$ 3.00	\$ 9,750.00
110-1-1	Clearing and Grubbing	1.23	AC	\$ 31,506.62	\$ 38,786.56
120-1	Regular Excavation	589.68	CY	\$ 5.84	\$ 3,443.72
120-6	Embankment	1290.77	CY	\$ 11.07	\$ 14,288.79
522-1	Concrete Sidewalk (4" Thick)	2289.77	SY	\$ 74.73	\$ 171,114.72
527-2	Detectable Warnings	61.55	SF	\$ 38.74	\$ 2,384.56
570-1-2	Performance Turf, Sod	2167.33	SY	\$ 4.72	\$ 10,229.78

Segments Construction Sub-Totals	\$ 249,998.13
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Mobilization (10%)	\$ 24,999.81
Maintenance of Traffic (10%)	\$ 24,999.81
Project Unknowns (25%)	\$ 74,999.44

Project Construction Total	\$ 374,997.19
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Final Design / Engineering (25%)	\$ 93,749.30
Construction Engineering Inspection (CEI) (15%)	\$ 56,249.58

GRAND TOTAL	\$ 524,996.06
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 629,995.28
5 years Estimated Project Cost	1.5	\$ 787,494.09

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path and Greenway Projects				
Priority	Roadway	Location	Improvements	Cost Estimate
1	City Bike Map	Citywide	Finalize design and print map	\$ 100,000.00
2	Northeast Connector Trail	Lander Road to Suffield Drive	Shared-use path	\$ 159,000.00
3	S Denning Drive	Minnesota Avenue to Mead Gardens	Shared-use path	\$ 1,233,000.00
4	Routes: North & East	North/east of Webster Ave	Signs, sharrows, traffic calming	\$ 142,000.00
5	St. Andrews Trail	SR 426 to Cady Way Trail	Shared-use path	\$ 9,498,000.00
6	Routes: Downtown & West	Webster Ave to Oxford Rd	Signs, sharrows, traffic calming	\$ 209,000.00
7	Routes: South	South of Oxford Rd	Signs, sharrows, traffic calming	\$ 142,000.00
8	Church Trail	Perth Lane to Lakemont Avenue	Shared-use path	\$ 1,080,000.00
9	Railroad Trail	New York Avenue to Central Park	Shared-use path	\$ 2,176,000.00
10	Railroad Trail	N. Denning Drive to New York Avenue	Shared-use path	\$ 412,000.00
11	Ward Park Trail	Cady Way to St. Andrews	Shared-use path	\$ 602,000.00
12	17-92 overpass	Solana Avenue	Overpass & Shared-use path	\$ 6,578,000.00
13	Howell Branch Road	Maitland City Line to Seminole Co. Line	Shared-use path	\$ 1,535,000.00
14	Tennis Center Trail	Denning Drive to Melrose Avenue	Current City project	underway
15	Cady Way	Reconfigure bikeway, Perth Lane to Cady Way Trail	Current City project	underway

Shared Use Path & Greenway - 2					
Northeast Connector Trail - from Lander Road to Suffield Drive (0.09 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	500	LF	\$ 3.00	\$ 1,500.00
110-1-1	CLEARING & GRUBBING	0.35	AC	\$ 31,506.62	\$ 10,949.74
120-1	REGULAR EXCAVATION	311	CY	\$ 5.84	\$ 1,816.70
120-6	EMBANKMENT	227	CY	\$ 11.07	\$ 2,513.81
160-4	TYPE B STABILIZATION	889	SY	\$ 9.61	\$ 8,542.23
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	639	SY	\$ 74.73	\$ 47,744.11
527-2	DETECTABLE WARNINGS	9	SF	\$ 38.74	\$ 366.86
570-1-2	PERFORMANCE TURF, SOD	402	SY	\$ 4.72	\$ 1,896.11
Segments Construction Sub-Totals					\$ 75,329.56
Mobilization (10%)				\$	7,532.96
Maintenance of Traffic (10%)				\$	7,532.96
Project Unknowns (25%)				\$	22,598.87
Project Construction Total				\$	112,994.34
Final Design / Engineering (25%)				\$	28,248.59
Construction Engineering Inspection (CEI) (15%)				\$	16,949.15
GRAND TOTAL				\$	158,192.08

Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 189,830.50
5 years Estimated Project Cost	1.5	\$ 237,288.12

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 3					
South Denning Drive - from Minnesota Avenue to Mead Gardens (0.24 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
N/A	RAILROAD CROSSING	1.00	LS	\$ 100,000.00	\$ 100,000.00
104-10-3	SEDIMENT BARRIER	1250	LF	\$ 3.00	\$ 3,750.00
104-18	INLET PROTECTION SYSTEM	3	EA	\$ 204.95	\$ 679.29
110-1-1	CLEARING & GRUBBING	0.87	AC	\$ 31,506.62	\$ 27,374.36
120-1	REGULAR EXCAVATION	1555	CY	\$ 5.84	\$ 9,083.52
120-6	EMBANKMENT	1135	CY	\$ 11.07	\$ 12,569.06
160-4	TYPE B STABILIZATION	2222	SY	\$ 9.61	\$ 21,355.56
425-1-451	INLETS, CURB, TYPE J-5,	1	EA	\$ 15,367.32	\$ 15,367.32
425-1-521	INLETS, DT BOT, TYPE C,	2	EA	\$ 9,367.26	\$ 18,734.52
425-2-71	MANHOLES, J-7,	1	EA	\$ 17,255.74	\$ 17,255.74
430-175-112	PIPE CULV, OPT MATL, ROUND, 12"S/CD	151	LF	\$ 670.17	\$ 100,906.28
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	203	LF	\$ 309.73	\$ 62,767.25
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1250	LF	\$ 48.88	\$ 61,100.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1597	SY	\$ 74.73	\$ 119,360.28
527-2	DETECTABLE WARNINGS	24	SF	\$ 38.74	\$ 917.14
570-1-2	PERFORMANCE TURF, SOD	1004	SY	\$ 4.72	\$ 4,740.27
711-14191	THERMOPLASTIC, PREFORMED, 6" WHITE, RAILROAD DYNAMIC ENVELOPE	136	LF	\$ 5.83	\$ 792.24
711-14193	THERMOPLASTIC, PREFORMED, 12" WHITE ON ASPHALT PAVEMENT, RAILROAD DYNAMIC ENVELOPE	939	LF	\$ 10.58	\$ 9,938.79

Segments Construction Sub-Totals	\$ 586,691.62
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Mobilization (10%)	\$ 58,669.16
Maintenance of Traffic (10%)	\$ 58,669.16
Project Unknowns (25%)	\$ 176,007.49

Project Construction Total	\$ 880,037.44
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Final Design / Engineering (25%)	\$ 220,009.36
Construction Engineering Inspection (CEI) (15%)	\$ 132,005.62

GRAND TOTAL	\$ 1,232,052.41
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 1,478,462.89
5 years Estimated Project Cost	1.5	\$ 1,848,078.62

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 4					
Greenway Route: North and East of Webster Avenue					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
700-1-11	SINGLE POST SIGN, F&I GM,	39.00	AS	\$ 510.78	\$ 19,920.42
700-1-12	SINGLE POST SIGN, F&I GM, 12-20	7.00	AS	\$ 1,716.78	\$ 12,017.46
700-1-60	SINGLE POST SIGN, REMOVE	5.00	AS	\$ 53.25	\$ 266.25
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	40.00	EA	\$ 179.27	\$ 7,170.80

Segments Construction Sub-Totals	\$ 39,374.93
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Mobilization (10%)	\$ 3,937.49
Maintenance of Traffic (10%)	\$ 3,937.49
Project Unknowns (25%)	\$ 11,812.48

Project Construction Total	\$ 59,062.40
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Final Design / Engineering (25%)	\$ 14,765.60
Enhancements/Landscaping/Traffic calming (100%)	\$ 59,062.40
Construction Engineering Inspection (CEI) (15%)	\$ 8,859.36

GRAND TOTAL	\$ 141,749.75
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 170,099.70
5 years Estimated Project Cost	1.5	\$ 212,624.62

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

ENGINEER'S ESTIMATE OF PROBABLE COST

St. Andrews Trail

6/28/2022

	PAY ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	GENERAL					
	102-1	MOT	LS	1	10%	\$743,719.73
	101-1	MOBILIZATION	LS	1	15%	\$1,227,137.56
					SUBTOTAL	\$1,970,857.29

2	ROADWAY					
	104-99	EROSION AND SEDIMENT CONTROL	LS	1	\$20,000.00	\$20,000.00
	110-1-1	CLEARING & GRUBBING	LS	1	\$90,000.00	\$90,000.00
	110-1-98	SELECTIVE PRUNING	MH	96	\$75.00	\$7,200.00
	110-1-99	SELECTIVE DEBRIS REMOVAL	MH	96	\$80.00	\$7,680.00
	110-4-10	REMOVAL OF EXIST CONC	SY	527	\$44.74	\$23,577.98
	120-99	EARTHWORK	LS	1	\$400,000.00	\$400,000.00
	160-4	TYPE B STABILIZATION	SY	219	\$13.05	\$2,857.95
	285-706	OPTIONAL BASE, BASE GROUP 06	SY	219	\$19.10	\$4,182.90
	334-1-52	SUPERPAVE ASPHALTIC CONC, TRAFFIC B, PG76-22	TN	24	\$133.19	\$3,196.56
	520-2-4	CONCRETE CURB, TYPE D	LF	207	\$48.12	\$9,960.84
	522-1	CONCRETE SIDEWALK, 4"	SY	4,415	\$62.75	\$277,041.25
	522-2	CONCRETE SIDEWALK, 6", DRIVEWAY	SY	157	\$82.50	\$12,952.50
	527-2	DETECTABLE WARNINGS	SF	41	\$32.88	\$1,348.08
	548-20	SEGMENTAL CONCRETE RETAINING WALL SYSTEM	SF	995	\$65.00	\$64,675.00
	550-10-222	FENCING, TYPE B, 6.0', W/ VINYL COATING	LF	868	\$42.00	\$36,456.00
	550-10-228	FENCING, TYPE B, 6.0', RESET EXISTING	LF	82	\$15.00	\$1,230.00
	570-1-2	PERFORMANCE TURF, SOD	SY	18200	\$3.87	\$70,434.00
	700-1-11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	5	\$424.65	\$2,123.25
	711-11-125	THERMOPLASTIC, STD, WHITE, SOLID FOR STOP LINE, 24"	LF	16	\$5.98	\$95.68
					SUBTOTAL	\$1,035,011.99

3	DRAINAGE					
	400-4-1	CONC. CLASS IV, CULVERTS (CBC)	CY	2,322	\$1,860.15	\$4,319,268.30
	415-1-1	REINFORCING STEEL, ROADWAY (CBC)	LB	375,418	\$1.49	\$559,372.82
	425-1-521	INLETS, DITCH BOTTOM, TYPE C	EA	12	\$5,202.29	\$62,427.48
	425-1-523	INLETS, DITCH BOTTOM, TYPE C, J BOT.	EA	2	\$7,500.00	\$15,000.00
	425-2-91	MANHOLES, J-8, <10'	EA	4	\$14,121.23	\$56,484.92
	425-2-92	MANHOLES, J-8, >10'	EA	6	\$23,328.90	\$139,973.40
	425-2-93	MANHOLES, J-8, PARTIAL	EA	1	\$4,806.00	\$4,806.00
	430-175-112	PIPE CULV, OPT MATL, ROUND, 12" S/CD	LF	4	\$158.93	\$635.72
	430-175-115	PIPE CULV, OPT MATL, ROUND, 15" S/CD	LF	15	\$243.07	\$3,646.05
	430-175-118	PIPE CULV, OPT MATL, ROUND, 18" S/CD	LF	240	\$132.82	\$31,876.80
	430-175-124	PIPE CULV, OPT MATL, ROUND, 24" S/CD	LF	16	\$184.08	\$2,945.28
	430-175-136	PIPE CULV, OPT MATL, ROUND, 36" S/CD	LF	22	\$230.71	\$5,075.62
	430-175-142	PIPE CULV, OPT MATL, ROUND, 42" S/CD	LF	8	\$250.00	\$2,000.00
	430-175-154	PIPE CULV, OPT MATL, ROUND, 54" S/CD	LF	14	\$500.00	\$7,000.00
	430-175-160	PIPE CULV, OPT MATL, ROUND, 60" S/CD	LF	156	\$800.00	\$124,800.00
	430-175-172	PIPE CULV, OPT MATL, ROUND, 72" S/CD	LF	963	\$1,000.00	\$963,000.00
	430-175-272	PIPE CULV, OPT MATL, OTHER SHAPE - ELIP/ARCH, 72" S/CD	LF	25	\$2,500.00	\$62,500.00
	430-984-143	MITERED END SECTION, ROUND, 60" SD	EA	1	\$9,500.00	\$9,500.00
					SUBTOTAL	\$6,370,312.39

4	LANDSCAPE					
	999-AR	ACER RUBRUM 'FLAME'/'FLAME' RED MAPLE/45 GAL. 2.5"	EA	2	\$225.00	\$450.00
	999-QV	QUERCUS VIRGINIANA/LIVE OAK/65 GAL. 3"	EA	5	\$1,050.00	\$5,250.00
	999-CC	CERCIS CANADENSIS/REDBUD/30 GAL. 2"	EA	11	\$330.00	\$3,630.00
	999-IC	ILEX CASSINE/DAHOON HOLLY/30 GAL. 2"	EA	19	\$315.00	\$5,985.00
	999-IV	ILEX VOMITORIA/YAUPON HOLLY/30 GAL. 2"	EA	6	\$290.00	\$1,740.00
	999-IF	ILLICUM FLORIDANUM/FLORIDA ANISE/7 GAL. 24-30"	EA	171	\$36.00	\$6,156.00
	999-JP	JUNIPERUS CHINENSIS 'PARSONII'/PARSON'S JUNIPER/3 GAL.	EA	14	\$12.00	\$168.00
	999-VO	VIBURNUM ODORATISSIMUM/SWEET VIBURNUM/7 GAL. 24-30"	EA	177	\$36.00	\$6,372.00
	999-VD	VIBURNUM OBOVATUM 'DENSEA', 'MS SCHILLERS'/WALTER'S VIBURNUM/3 GAL.	EA	35	\$11.00	\$385.00
	999-ZF	ZAMIA FLORIDANA/COONTIE/3 GAL.	EA	6	\$22.00	\$132.00
	999-TA	TRACHELOSPERUM ASIATICUM 'MINIMA'/DWARF ASIATIC JASMINE/1 GAL.	EA	583	\$2.65	\$1,544.95
	999-TF	TRIPSACUM FLORIDANUM/DWARF FAKAHATCHEE GRASS/1 GAL.	EA	12	\$5.00	\$60.00
					SUBTOTAL	\$31,872.95

BASE BID TOTAL:

\$9,408,054.62

5	ADDITIVE PAY ITEMS					
	120-99A	EARTHWORK	LS	1	\$25,000.00	\$25,000.00
	520-2-4A	CONCRETE CURB, TYPE D	LF	44	\$48.12	\$2,117.28
	522-1A	CONCRETE SIDEWALK, 4"	SY	662	\$62.75	\$41,540.50
	522-99	FIBER REINFORCEMENT FOR CONCRETE SIDEWALK	LS	1	\$5,000.00	\$5,000.00
	526-1-1	PAVERS, ROADWAY	SY	105	\$120.18	\$12,618.90
	570-1-2A	PERFORMANCE TURF, SOD	SY	750	\$3.87	\$2,902.50
					SUBTOTAL	\$89,179.18

ADDITIVE BID TOTAL:	\$89,179.18
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SOURCE: FDOT HISTORICAL ITEM AVERAGE UNIT COST AREA 8 (06/01/2021 - 05/31/2022)

GRAND TOTAL:	\$9,497,233.80
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NOTE:

PREPARED BY: BMJ
CHECKED BY: SPD
APPROVED BY: SMK

Shared Use Path & Greenway - 6					
Greenway Route: Downtown and West from Webster Avenue to Oxford Road					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
700-1-11	SINGLE POST SIGN, F&I GM,	58	AS	\$ 510.78	\$ 29,625.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20	10	AS	\$ 1,716.78	\$ 17,167.80
700-1-60	SINGLE POST SIGN, REMOVE	7	AS	\$ 53.25	\$ 372.75
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	60	EA	\$ 179.27	\$ 10,756.20

Segments Construction Sub-Totals	\$ 57,921.99
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Mobilization (10%)	\$ 5,792.20
Maintenance of Traffic (10%)	\$ 5,792.20
Project Unknowns (25%)	\$ 17,376.60

Project Construction Total	\$ 86,882.99
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Final Design / Engineering (25%)	\$ 21,720.75
Enhancements/Landscaping/Traffic calming (100%)	\$ 86,882.99
Construction Engineering Inspection (CEI) (15%)	\$ 13,032.45

GRAND TOTAL	\$ 208,519.16
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 250,223.00
5 years Estimated Project Cost	1.5	\$ 312,778.75

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 7					
Greenway Route: South of Oxford Road					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
700-1-11	SINGLE POST SIGN, F&I GM,	39	AS	\$ 510.78	\$ 19,920.42
700-1-12	SINGLE POST SIGN, F&I GM, 12-20	7	AS	\$ 1,716.78	\$ 12,017.46
700-1-60	SINGLE POST SIGN, REMOVE	5	AS	\$ 53.25	\$ 266.25
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	40	EA	\$ 179.27	\$ 7,170.80

Segments Construction Sub-Totals	\$ 39,374.93
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Mobilization (10%)	\$ 3,937.49
Maintenance of Traffic (10%)	\$ 3,937.49
Project Unknowns (25%)	\$ 11,812.48

Project Construction Total	\$ 59,062.40
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Final Design / Engineering (25%)	\$ 14,765.60
Enhancements/Landscaping/Traffic calming (100%)	\$ 59,062.40
Construction Engineering Inspection (CEI) (15%)	\$ 8,859.36

GRAND TOTAL	\$ 141,749.75
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 170,099.70
5 years Estimated Project Cost	1.5	\$ 212,624.62

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 8					
Church Trail - from Perth Lane to Lakemont Avenue (0.24 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	1250	LF	\$ 3.00	\$ 3,750.00
110-1-1	CLEARING & GRUBBING	0.87	AC	\$ 31,506.62	\$ 27,374.36
120-1	REGULAR EXCAVATION	778	CY	\$ 5.84	\$ 4,541.76
120-6	EMBANKMENT	568	CY	\$ 11.07	\$ 6,284.53
160-4	TYPE B STABILIZATION	2222	SY	\$ 9.61	\$ 21,355.56
425-1-451	INLETS, CURB, TYPE J-5,	1	EA	\$ 15,367.32	\$ 15,367.32
425-1-521	INLETS, DT BOT, TYPE C,	2	EA	\$ 9,367.26	\$ 18,734.52
425-2-71	MANHOLES, J-7,	1	EA	\$ 17,255.74	\$ 17,255.74
430-175-112	PIPE CULV, OPT MATL, ROUND, 12"S/CD	151	LF	\$ 670.17	\$ 100,906.28
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	203	LF	\$ 309.73	\$ 62,767.25
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1250	LF	\$ 48.88	\$ 61,100.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1597	SY	\$ 74.73	\$ 119,360.28
527-2	DETECTABLE WARNINGS	24	SF	\$ 38.74	\$ 917.14
550-10354	FENCING, TYPE R, 8.1-10.0', WITH PARTIAL ENCLOSURE, TYPE R ONLY	67	LF	\$ 568.04	\$ 37,923.13
550-60215	FENCE GATE, TYPE B, SINGLE, 20.1-24.0' OPENING	2	EA	\$ 5,900.00	\$ 11,800.00
570-1-2	PERFORMANCE TURF, SOD	1004	SY	\$ 4.72	\$ 4,740.27

Segments Construction Sub-Totals	\$ 514,178.14
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Mobilization (10%)	\$ 51,417.81
Maintenance of Traffic (10%)	\$ 51,417.81
Project Unknowns (25%)	\$ 154,253.44

Project Construction Total	\$ 771,267.22
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Final Design / Engineering (25%)	\$ 192,816.80
Construction Engineering Inspection (CEI) (15%)	\$ 115,690.08

GRAND TOTAL	\$ 1,079,774.10
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
5 years Estimated Project Cost	1.2	\$ 1,295,728.92
20 years Estimated Project Cost	1.5	\$ 1,619,661.15

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 9					
Railroad Trail - from New York Avenue to Central Park (0.25 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	1300	LF	\$ 3.00	\$ 3,900.00
110-1-1	CLEARING & GRUBBING	0.90	AC	\$ 31,506.62	\$ 28,469.33
120-1	REGULAR EXCAVATION	809	CY	\$ 5.84	\$ 4,723.43
120-6	EMBANKMENT	590	CY	\$ 11.07	\$ 6,535.91
160-4	TYPE B STABILIZATION	2311	SY	\$ 9.61	\$ 22,209.79
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4	1661	SY	\$ 74.73	\$ 124,134.69
527-2	DETECTABLE WARNINGS	25	SF	\$ 38.74	\$ 953.83
570-1-2	PERFORMANCE TURF, SOD	1044	SY	\$ 4.72	\$ 4,929.88
Segments Construction Sub-Totals				\$	195,856.86

Mobilization (10%)	\$	19,585.69
Maintenance of Traffic (10%)	\$	19,585.69
Project Unknowns (25%)	\$	58,757.06

Project Construction Total	\$	293,785.29
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Final Design / Engineering (25%)	\$	73,446.32
Construction Engineering Inspection (CEI) (15%)	\$	44,067.79

GRAND TOTAL	\$	411,299.41
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 493,559.29
5 years Estimated Project Cost	1.5	\$ 616,949.12

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 10					
Railroad Trail - from North Denning Drive to New York Avenue (0.67 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	3550	LF	\$ 3.00	\$ 10,650.00
110-1-1	CLEARING & GRUBBING	2.47	AC	\$ 31,506.62	\$ 77,743.18
120-1	REGULAR EXCAVATION	2209	CY	\$ 5.84	\$ 12,898.60
120-6	EMBANKMENT	1612	CY	\$ 11.07	\$ 17,848.07
160-4	TYPE B STABILIZATION	6311	SY	\$ 9.61	\$ 60,649.80
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	4536	SY	\$ 74.73	\$ 338,983.20
527-2	DETECTABLE WARNINGS	67	SF	\$ 38.74	\$ 2,604.68
104-18	INLET PROTECTION SYSTEM	9	EA	\$ 204.95	\$ 1,929.17
425-1-451	INLETS, CURB, TYPE J-5,	1	EA	\$ 15,367.32	\$ 10,332.19
425-1-521	INLETS, DT BOT, TYPE C,	1	EA	\$ 9,367.26	\$ 12,596.13
425-2-71	MANHOLES, J-7,	1	EA	\$ 17,255.74	\$ 11,601.87
430-175-112	PIPE CULV, OPT MATL, ROUND, 12"S/CD	428	LF	\$ 670.17	\$ 286,573.83
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	576	LF	\$ 309.73	\$ 178,259.00
570-1-2	PERFORMANCE TURF, SOD	2852	SY	\$ 4.72	\$ 13,462.37
Segments Construction Sub-Totals					\$1,036,132.09

Mobilization (10%)	\$ 103,613.21
Maintenance of Traffic (10%)	\$ 103,613.21
Project Unknowns (25%)	\$ 310,839.63

Project Construction Total	\$1,554,198.13
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Final Design / Engineering (25%)	\$ 388,549.53
Construction Engineering Inspection (CEI) (15%)	\$ 233,129.72

GRAND TOTAL	\$2,175,877.38
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$2,611,052.86
5 years Estimated Project Cost	1.5	\$3,263,816.07

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 11					
Ward Park Trail - from Cady Way to St. Andrews Boulevard (0.36 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	1900	LF	\$ 3.00	\$ 5,700.00
110-1-1	CLEARING & GRUBBING	1.32	AC	\$ 31,506.62	\$ 41,609.03
120-1	REGULAR EXCAVATION	1182	CY	\$ 5.84	\$ 6,903.48
120-6	EMBANKMENT	863	CY	\$ 11.07	\$ 9,552.49
160-4	TYPE B STABILIZATION	3378	SY	\$ 9.61	\$ 32,460.46
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	2428	SY	\$ 74.73	\$ 181,427.63
527-2	DETECTABLE WARNINGS	36	SF	\$ 38.74	\$ 1,394.05
570-1-2	PERFORMANCE TURF, SOD	1527	SY	\$ 4.72	\$ 7,205.21

Segments Construction Sub-Totals	\$ 286,252.34
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Mobilization (10%)	\$ 28,625.23
Maintenance of Traffic (10%)	\$ 28,625.23
Project Unknowns (25%)	\$ 85,875.70

Project Construction Total	\$ 429,378.51
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Final Design / Engineering (25%)	\$ 107,344.63
Construction Engineering Inspection (CEI) (15%)	\$ 64,406.78

GRAND TOTAL	\$ 601,129.91
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 721,355.89
5 years Estimated Project Cost	1.5	\$ 901,694.87

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 12					
17-92 Pedestrian Overpass Solana Avenue to Maitland					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
N/A	PEDESTRIAN OVERPASS	12800.00	SQ FT	\$ 240.00	\$ 3,072,000.00
104-10-3	SEDIMENT BARRIER	400	LF	\$ 3.00	\$ 1,200.00
110-1-1	CLEARING & GRUBBING	0.28	AC	\$ 31,506.62	\$ 8,759.79
120-1	REGULAR EXCAVATION	249	CY	\$ 5.84	\$ 1,453.36
120-6	EMBANKMENT	182	CY	\$ 11.07	\$ 2,011.05
160-4	TYPE B STABILIZATION	711	SY	\$ 9.61	\$ 6,833.77
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4'	511	SY	\$ 74.73	\$ 38,195.25
527-2	DETECTABLE WARNINGS	8	SF	\$ 38.74	\$ 293.48
570-1-2	PERFORMANCE TURF, SOD	321	SY	\$ 4.72	\$ 1,516.88
Segments Construction Sub-Totals					\$ 3,132,263.59

Mobilization (10%)	\$	313,226.36
Maintenance of Traffic (10%)	\$	313,226.36
Project Unknowns (25%)	\$	939,679.08

Project Construction Total	\$	4,698,395.38
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Final Design / Engineering (25%)	\$	1,174,598.85
Construction Engineering Inspection (CEI) (15%)	\$	704,759.31

GRAND TOTAL	\$	6,577,753.54
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
5 years Estimated Project Cost	1.2	\$ 7,893,304.25
20 years Estimated Project Cost	1.5	\$ 9,866,630.31

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Shared Use Path & Greenway - 13					
Howell Branch Road - from Maitland City Line to Seminole County Line (0.92 MI)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	4850	LF	\$ 3.00	\$ 14,550.00
110-1-1	CLEARING & GRUBBING	3.37	AC	\$ 31,506.62	\$ 106,212.52
120-1	REGULAR EXCAVATION	3017	CY	\$ 5.84	\$ 17,622.03
120-6	EMBANKMENT	2203	CY	\$ 11.07	\$ 24,383.98
160-4	TYPE B STABILIZATION	8622	SY	\$ 9.61	\$ 82,859.58
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	6197	SY	\$ 74.73	\$ 463,117.89
527-2	DETECTABLE WARNINGS	92	SF	\$ 38.74	\$ 3,558.50
570-1-2	PERFORMANCE TURF, SOD	3897	SY	\$ 4.72	\$ 18,392.25
Segments Construction Sub-Totals					\$ 730,696.76

Mobilization (10%)	\$ 73,069.68
Maintenance of Traffic (10%)	\$ 73,069.68
Project Unknowns (25%)	\$ 219,209.03

Project Construction Total	\$ 1,096,045.14
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Final Design / Engineering (25%)	\$ 274,011.28
Construction Engineering Inspection (CEI) (15%)	\$ 164,406.77

GRAND TOTAL	\$ 1,534,463.19
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
5 years Estimated Project Cost	1.2	\$ 1,841,355.83
20 years Estimated Project Cost	1.5	\$ 2,301,694.79

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing Projects					
Priority	Roadway	Segment	No. of lanes	Improvements	COST
1	Temple Drive	Via Salerno (brick pavers)	2	Curb ramps & RRFB	\$ 163,000.00
2	Pennsylvania Ave	Melrose Ave (brick pavers)	2	Curb ramps & RRFB	\$ 161,000.00
3	Lake Sue Ave	Highland Ave/Forest Rd (brick pavers)	2	Curb ramps & RRFB	\$ 153,000.00
4	Fairbanks Ave	Ohio St (east leg)	5	Full median & signal	\$ 1,775,000.00
5	Fairbanks Ave	Jackson Ave	5	Full median & signal	\$ 1,821,000.00
6	Fairbanks Ave	Shoreview Ave	5	Full median & signal	\$ 1,775,000.00
7	Temple Drive	Whitesell Drive (brick pavers)	2	Curb ramps & RRFB	\$ 140,000.00
8	Howell Branch Rd	Sanbina St/Mandan Trail	5	Full median & signal	\$ 1,967,000.00
9	Lakemont Avenue	Goodrich Avenue	3	Curb ramps & RRFB	\$ 155,000.00
10	Phelps Avenue	Lakehurst Avenue (brick pavers)	2	Curb ramps & RRFB	\$ 145,000.00
11	Lee Rd	Turner Rd	6	Full median & signal	\$ 1,904,000.00
12	Winter Park Rd	Spring Ln/Wright Ave	2	Curb ramps & RRFB	\$ 153,000.00
13	Lakemont Avenue	Oakhurst Ave	4	Full median & signal	\$ 1,717,000.00
14	Lakemont Avenue	Loch Berry Rd	2	Curb ramps & RRFB	\$ 171,000.00
15	Aloma Ave	Strathy Ln (west leg)	4	Full median & signal	\$ 1,887,000.00
16	Glenridge Way	Stonehurst Rd/Brandywine Dr	2	Curb ramps & RRFB	\$ 160,000.00
17	Glenridge Way	St. George St	2	Curb ramps & RRFB	\$ 168,000.00

Crossing - 1					
Temple Drive at/near Via Salerno					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	64.80	LF	\$ 3.00	\$ 194.39
110-1-1	CLEARING & GRUBBING	0.04	AC	\$ 31,506.62	\$ 1,331.41
120-1	REGULAR EXCAVATION	9.02	CY	\$ 5.84	\$ 52.65
120-6	EMBANKMENT	19.30	CY	\$ 11.07	\$ 213.63
520-1-10	CONCRETE CURB & GUTTER, TYPE F	225.38	LF	\$ 48.88	\$ 11,016.40
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	154.95	SY	\$ 74.73	\$ 11,579.13
527-2	DETECTABLE WARNINGS	67.61	SF	\$ 38.74	\$ 2,619.32
570-1-2	PERFORMANCE TURF, SOD	986.02	SF	\$ 4.72	\$ 4,654.02
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL- SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	176.08	LF	\$ 3.24	\$ 570.48
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	6.00	EA	\$ 179.27	\$ 1,075.62

Segments Construction Sub-Totals	\$ 77,155.91
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Mobilization (10%)	\$ 7,715.59
Maintenance of Traffic (10%)	\$ 7,715.59
Project Unknowns (25%)	\$ 23,146.77

Project Construction Total	\$ 115,733.87
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Final Design / Engineering (25%)	\$ 28,933.47
Construction Engineering Inspection (CEI) (15%)	\$ 17,360.08

GRAND TOTAL	\$ 162,027.42
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 194,432.90
5 years Estimated Project Cost	1.5	\$ 243,041.13

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 2					
Pennsylvania Ave at/near Melrose Ave					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	63.89	LF	\$ 3.00	\$ 191.67
110-1-1	CLEARING & GRUBBING	0.04	AC	\$ 31,506.62	\$ 1,312.78
120-1	REGULAR EXCAVATION	8.89	CY	\$ 5.84	\$ 51.91
120-6	EMBANKMENT	19.03	CY	\$ 11.07	\$ 210.64
520-1-10	CONCRETE CURB & GUTTER, TYPE F	222.22	LF	\$ 48.88	\$ 10,862.22
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	152.78	SY	\$ 74.73	\$ 11,417.08
527-2	DETECTABLE WARNINGS	66.67	SF	\$ 38.74	\$ 2,582.67
570-1-2	PERFORMANCE TURF, SOD	972.22	SF	\$ 4.72	\$ 4,588.89
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL- SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	173.61	LF	\$ 3.24	\$ 562.50
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	6.00	EA	\$ 179.27	\$ 1,075.62

Segments Construction Sub-Totals	\$ 76,650.97
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Mobilization (10%)	\$ 7,665.10
Maintenance of Traffic (10%)	\$ 7,665.10
Project Unknowns (25%)	\$ 22,995.29

Project Construction Total	\$ 114,976.46
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Final Design / Engineering (25%)	\$ 28,744.11
Construction Engineering Inspection (CEI) (15%)	\$ 17,246.47

GRAND TOTAL	\$ 160,967.04
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 193,160.45
5 years Estimated Project Cost	1.5	\$ 241,450.56

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 3					
Lake Sue Ave at/near Highland Ave					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	56.86	LF	\$ 3.00	\$ 170.58
110-1-1	CLEARING & GRUBBING	0.04	AC	\$ 31,506.62	\$ 1,168.37
120-1	REGULAR EXCAVATION	7.91	CY	\$ 5.84	\$ 46.20
120-6	EMBANKMENT	16.93	CY	\$ 11.07	\$ 187.47
520-1-10	CONCRETE CURB & GUTTER, TYPE F	197.78	LF	\$ 48.88	\$ 9,667.38
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	135.97	SY	\$ 74.73	\$ 10,161.20
527-2	DETECTABLE WARNINGS	59.33	SF	\$ 38.74	\$ 2,298.57
570-1-2	PERFORMANCE TURF, SOD	865.28	SF	\$ 4.72	\$ 4,084.11
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL- SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	154.51	LF	\$ 3.24	\$ 500.63
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	5.00	EA	\$ 179.27	\$ 896.35

Segments Construction Sub-Totals	\$ 72,558.41
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Mobilization (10%)	\$ 7,255.84
Maintenance of Traffic (10%)	\$ 7,255.84
Project Unknowns (25%)	\$ 21,767.52

Project Construction Total	\$ 108,837.62
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Final Design / Engineering (25%)	\$ 27,209.41
Construction Engineering Inspection (CEI) (15%)	\$ 16,325.64

GRAND TOTAL	\$ 152,372.67
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 182,847.20
5 years Estimated Project Cost	1.5	\$ 228,559.00

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 4					
Fairbanks Ave at/near Ohio St					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	733.02	LF	\$ 3.00	\$ 2,199.06
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$ 4,570.14	\$ 9,140.28
104-18	INLET PROTECTION SYSTEM	3.00	EA	\$ 204.95	\$ 614.85
107-1	LITTER REMOVAL	0.83	AC	\$ 42.64	\$ 35.52
107-2	MOWING	0.83	AC	\$ 56.49	\$ 47.05
110-1-1	CLEARING & GRUBBING	1.67	AC	\$ 31,506.62	\$ 52,488.69
120-1	REGULAR EXCAVATION	671.94	CY	\$ 5.84	\$ 3,924.11
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1292.56	CY	\$ 31.00	\$ 40,069.39
160-4	TYPE B STABILIZATION	1187.49	SY	\$ 9.61	\$ 11,411.82
285-709	OPTIONAL BASE,BASE GROUP 09	1004.24	SY	\$ 31.65	\$ 31,784.17
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	1303.15	SY	\$ 4.12	\$ 5,368.97
337-7-83	ASPH CONC FC,TRAFFIC C.FC-12.5.PG 76-22	182.44	TN	\$ 164.67	\$ 30,042.57
520-1-10	CONCRETE CURB & GUTTER, TYPE F	871.85	LF	\$ 48.88	\$ 42,616.08
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	407.23	SY	\$ 74.73	\$ 30,432.62
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	58.31	LF	\$ 36.89	\$ 2,151.00
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	985.69	LF	\$ 15.83	\$ 15,603.50
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	739.96	LF	\$ 34.21	\$ 25,314.13
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	11.11	LF	\$ 45.20	\$ 502.01
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND,2-12 FIBERS	24.99	LF	\$ 4.07	\$ 101.71
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND,13-48 FIBERS	1828.94	LF	\$ 3.28	\$ 5,998.94
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	6.00	EA	\$ 53.84	\$ 323.04
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	2.00	EA	\$ 1,509.12	\$ 3,018.24
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	2.00	EA	\$ 101.96	\$ 203.92
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	2.00	EA	\$ 1,640.60	\$ 3,281.20
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	1086.76	LF	\$ 87.20	\$ 94,765.43
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	7.00	EA	\$ 2,802.06	\$ 19,614.42
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	2.00	EA	\$ 5,589.94	\$ 11,179.88
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	3.00	EA	\$ 1,714.65	\$ 5,143.95
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	27.77	LF	\$ 8.99	\$ 249.62
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	6.00	EA	\$ 1,664.67	\$ 9,988.02
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	3.00	EA	\$ 2,047.93	\$ 6,143.79
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	1.00	EA	\$ 6,750.20	\$ 6,750.20
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	2.00	EA	\$ 13,003.79	\$ 26,007.58
663-1-111	PREMPTION SYSTEM, OPTICAL, CABINET	1.00	EA	\$ 6,596.11	\$ 6,596.11
663-1-112	PREMPTION SYSTEM, OPTICAL, DETECTOR	2.00	EA	\$ 4,220.32	\$ 8,440.64
663-1-121	PREMPTION SYSTEM, GPS, CABINET	1.00	EA	\$ 7,794.98	\$ 7,794.98
663-1-122	PREMPTION SYSTEM, GPS, DETECTOR	2.00	EA	\$ 6,745.08	\$ 13,490.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINI	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	3.00	EA	\$ 957.16	\$ 2,871.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00	EA	\$ 4,942.88	\$ 9,885.76
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	173.54	LF	\$ 3.24	\$ 562.26
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	6.00	EA	\$ 179.27	\$ 1,075.62
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	229.07	LF	\$ 16.56	\$ 3,793.39
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.15	GM	\$ 6,356.61	\$ 970.74
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.11	GM	\$ 2,159.14	\$ 239.80
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.15	GM	\$ 6,336.51	\$ 967.67

Segments Construction Sub-Totals	\$ 845,168.45
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Mobilization (10%)	\$ 84,516.84
Maintenance of Traffic (10%)	\$ 84,516.84
Project Unknowns (25%)	\$ 253,550.53

Project Construction Total	\$ 1,267,752.67
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Final Design / Engineering (25%)	\$ 316,938.17
Construction Engineering Inspection (CEI) (15%)	\$ 190,162.90

GRAND TOTAL	\$ 1,774,853.74
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	Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
	2 years Estimated Project Cost	1.2	\$ 2,129,824.49
	5 years Estimated Project Cost	1.5	\$ 2,662,280.61

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 5					
Fairbanks Ave at/near Jackson Ave					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	769.58	LF	\$ 3.00	\$ 2,308.75
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$ 4,570.14	\$ 9,140.28
104-18	INLET PROTECTION SYSTEM	3.00	EA	\$ 204.95	\$ 614.85
107-1	LITTER REMOVAL	0.87	AC	\$ 42.64	\$ 37.29
107-2	MOWING	0.87	AC	\$ 56.49	\$ 49.40
110-1-1	CLEARING & GRUBBING	1.75	AC	\$ 31,506.62	\$ 55,106.86
120-1	REGULAR EXCAVATION	705.45	CY	\$ 5.84	\$ 4,119.84
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1357.03	CY	\$ 31.00	\$ 42,068.08
160-4	TYPE B STABILIZATION	1246.73	SY	\$ 9.61	\$ 11,981.05
285-709	OPTIONAL BASE,BASE GROUP 09	1054.33	SY	\$ 31.65	\$ 33,369.59
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	1368.15	SY	\$ 4.12	\$ 5,636.78
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	191.54	TN	\$ 164.67	\$ 31,541.12
520-1-10	CONCRETE CURB & GUTTER, TYPE F	915.34	LF	\$ 48.88	\$ 44,741.80
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	427.55	SY	\$ 74.73	\$ 31,950.62
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	61.22	LF	\$ 36.89	\$ 2,258.29
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	1034.86	LF	\$ 15.83	\$ 16,381.81
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	776.87	LF	\$ 34.21	\$ 26,576.81
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	11.66	LF	\$ 45.20	\$ 527.05
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTAL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND,2-12 FIBERS	26.24	LF	\$ 4.07	\$ 106.78
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND,13-48 FIBERS	1920.17	LF	\$ 3.28	\$ 6,298.17
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	6.00	EA	\$ 53.84	\$ 323.04
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	2.00	EA	\$ 1,509.12	\$ 3,018.24
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	2.00	EA	\$ 101.96	\$ 203.92
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	2.00	EA	\$ 1,640.60	\$ 3,281.20
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	1140.97	LF	\$ 87.20	\$ 99,492.40
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	7.00	EA	\$ 2,802.06	\$ 19,614.42
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	2.00	EA	\$ 5,589.94	\$ 11,179.88
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	3.00	EA	\$ 1,714.65	\$ 5,143.95
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	29.15	LF	\$ 8.99	\$ 262.07
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	6.00	EA	\$ 1,664.67	\$ 9,988.02
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	3.00	EA	\$ 2,047.93	\$ 6,143.79
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	1.00	EA	\$ 6,750.20	\$ 6,750.20
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	2.00	EA	\$ 13,003.79	\$ 26,007.58
663-1-111	PREMPTION SYSTEM, OPTICAL, CABINET	1.00	EA	\$ 6,596.11	\$ 6,596.11
663-1-112	PREMPTION SYSTEM, OPTICAL, DETECTOR	2.00	EA	\$ 4,220.32	\$ 8,440.64
663-1-121	PREMPTION SYSTEM, GPS, CABINET	1.00	EA	\$ 7,794.98	\$ 7,794.98
663-1-122	PREMPTION SYSTEM, GPS, DETECTOR	2.00	EA	\$ 6,745.08	\$ 13,490.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEF	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	3.00	EA	\$ 957.16	\$ 2,871.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00	EA	\$ 4,942.88	\$ 9,885.76
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	182.19	LF	\$ 3.24	\$ 590.31
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	6.00	EA	\$ 179.27	\$ 1,075.62
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	240.50	LF	\$ 16.56	\$ 3,982.60
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.16	GM	\$ 6,356.61	\$ 1,019.16
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.12	GM	\$ 2,159.14	\$ 251.76
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.16	GM	\$ 6,336.51	\$ 1,015.93

Segments Construction Sub-Totals	\$ 866,824.65
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Mobilization (10%)	\$ 86,682.47
Maintenance of Traffic (10%)	\$ 86,682.47
Project Unknowns (25%)	\$ 260,047.40

Project Construction Total	\$ 1,300,236.98
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Final Design / Engineering (25%)	\$ 325,059.24
Construction Engineering Inspection (CEI) (15%)	\$ 195,035.55

GRAND TOTAL	\$ 1,820,331.77
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 2,184,398.12
5 years Estimated Project Cost	1.5	\$ 2,730,497.65

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the

Crossing - 6					
Fairbanks Ave at/near Shoreview Ave					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	733.02	LF	\$ 3.00	\$ 2,199.06
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$ 4,570.14	\$ 9,140.28
104-18	INLET PROTECTION SYSTEM	3.00	EA	\$ 204.95	\$ 614.85
107-1	LITTER REMOVAL	0.83	AC	\$ 42.64	\$ 35.52
107-2	MOWING	0.83	AC	\$ 56.49	\$ 47.05
110-1-1	CLEARING & GRUBBING	1.67	AC	\$ 31,506.62	\$ 52,488.69
120-1	REGULAR EXCAVATION	671.94	CY	\$ 5.84	\$ 3,924.11
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1292.56	CY	\$ 31.00	\$ 40,069.39
160-4	TYPE B STABILIZATION	1187.49	SY	\$ 9.61	\$ 11,411.82
285-709	OPTIONAL BASE,BASE GROUP 09	1004.24	SY	\$ 31.65	\$ 31,784.17
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	1303.15	SY	\$ 4.12	\$ 5,368.97
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	182.44	TN	\$ 164.67	\$ 30,042.57
520-1-10	CONCRETE CURB & GUTTER, TYPE F	871.85	LF	\$ 48.88	\$ 42,616.08
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	407.23	SY	\$ 74.73	\$ 30,432.62
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	58.31	LF	\$ 36.89	\$ 2,151.00
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	985.69	LF	\$ 15.83	\$ 15,603.50
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	739.96	LF	\$ 34.21	\$ 25,314.13
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	11.11	LF	\$ 45.20	\$ 502.01
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND,2-12 FIBERS	24.99	LF	\$ 4.07	\$ 101.71
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND,13-48 FIBERS	1828.94	LF	\$ 3.28	\$ 5,998.94
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	6.00	EA	\$ 53.84	\$ 323.04
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	2.00	EA	\$ 1,509.12	\$ 3,018.24
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	2.00	EA	\$ 101.96	\$ 203.92
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	2.00	EA	\$ 1,640.60	\$ 3,281.20
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	1086.76	LF	\$ 87.20	\$ 94,765.43
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	7.00	EA	\$ 2,802.06	\$ 19,614.42
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	2.00	EA	\$ 5,589.94	\$ 11,179.88
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	3.00	EA	\$ 1,714.65	\$ 5,143.95
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	27.77	LF	\$ 8.99	\$ 249.62
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	6.00	EA	\$ 1,664.67	\$ 9,988.02
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	3.00	EA	\$ 2,047.93	\$ 6,143.79
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	1.00	EA	\$ 6,750.20	\$ 6,750.20
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	2.00	EA	\$ 13,003.79	\$ 26,007.58
663-1-111	PREMPTION SYSTEM, OPTICAL, CABINET	1.00	EA	\$ 6,596.11	\$ 6,596.11
663-1-112	PREMPTION SYSTEM, OPTICAL, DETECTOR	2.00	EA	\$ 4,220.32	\$ 8,440.64
663-1-121	PREMPTION SYSTEM, GPS, CABINET	1.00	EA	\$ 7,794.98	\$ 7,794.98
663-1-122	PREMPTION SYSTEM, GPS, DETECTOR	2.00	EA	\$ 6,745.08	\$ 13,490.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFIN	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	3.00	EA	\$ 957.16	\$ 2,871.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00	EA	\$ 4,942.88	\$ 9,885.76
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	173.54	LF	\$ 3.24	\$ 562.26
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	6.00	EA	\$ 179.27	\$ 1,075.62
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	229.07	LF	\$ 16.56	\$ 3,793.39
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.15	GM	\$ 6,356.61	\$ 970.74
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.11	GM	\$ 2,159.14	\$ 239.80
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.15	GM	\$ 6,336.51	\$ 967.67

Segments Construction Sub-Totals	\$ 845,168.45
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Mobilization (10%)	\$ 84,516.84
Maintenance of Traffic (10%)	\$ 84,516.84
Project Unknowns (25%)	\$ 253,550.53

Project Construction Total	\$1,267,752.67
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Final Design / Engineering (25%)	\$ 316,938.17
Construction Engineering Inspection (CEI) (15%)	\$ 190,162.90

GRAND TOTAL	\$1,774,853.74
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$2,129,824.49
5 years Estimated Project Cost	1.5	\$2,662,280.61

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 7					
Temple Drive at/near Whitesell Drive					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	Sediment Barrier	46.00	LF	\$ 3.00	\$ 138.00
110-1-1	Clearing & Grubbing	0.03	AC	\$ 31,506.62	\$ 945.20
120-1	Regular Excavation	6.40	CY	\$ 5.84	\$ 37.38
120-6	Embankment	13.70	CY	\$ 11.07	\$ 151.66
520-1-10	Concrete Curb & Gutter, Type F	160.00	LF	\$ 48.88	\$ 7,820.80
522-1	Concrete Sidewalk And Driveways, 4"	110.00	SY	\$ 74.73	\$ 8,220.30
527-2	Detectable Warnings	48.00	SF	\$ 38.74	\$ 1,859.52
570-1-2	Performance Turf, Sod	700.00	SF	\$ 4.72	\$ 3,304.00
654-2-28	Midblock Crosswalk: Rec Rapid Flashing Beacon, Furnish/Install- Solar, Sign Assembly- Back-Back Accessible Detector	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	Thermoplastic, Standard, White, Solid, 12" For Crosswalk And Roundabout	125.00	LF	\$ 3.24	\$ 405.00
711-11-160	Thermoplastic, Standard, White, Message Or Symbol	4.00	EA	\$ 179.27	\$ 717.08

Segments Construction Sub-Totals	\$ 66,331.33
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Mobilization (10%)	\$ 6,633.13
Maintenance of Traffic (10%)	\$ 6,633.13
Project Unknowns (25%)	\$ 19,899.40

Project Construction Total	\$ 99,497.00
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Final Design / Engineering (25%)	\$ 24,874.25
Construction Engineering Inspection (CEI) (15%)	\$ 14,924.55

GRAND TOTAL	\$ 139,295.80
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 167,154.96
5 years Estimated Project Cost	1.5	\$ 208,943.70

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 8					
Howell Branch Rd at/near Sanbina St					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	875.29	LF	\$ 3.00	\$ 2,625.86
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$ 4,570.14	\$ 9,140.28
104-18	INLET PROTECTION SYSTEM	4.00	EA	\$ 204.95	\$ 819.80
107-1	LITTER REMOVAL	0.99	AC	\$ 42.64	\$ 42.41
107-2	MOWING	0.99	AC	\$ 56.49	\$ 56.19
110-1-1	CLEARING & GRUBBING	1.99	AC	\$ 31,506.62	\$ 62,675.67
120-1	REGULAR EXCAVATION	802.35	CY	\$ 5.84	\$ 4,685.70
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1543.42	CY	\$ 31.00	\$ 47,846.03
160-4	TYPE B STABILIZATION	1417.96	SY	\$ 9.61	\$ 13,626.62
285-709	OPTIONAL BASE, BASE GROUP 09	1199.14	SY	\$ 31.65	\$ 37,952.83
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	1556.06	SY	\$ 4.12	\$ 6,410.98
337-7-83	ASPH CONC FC, TRAFFIC C, FC-12.5, PG 76-22	217.85	TN	\$ 164.67	\$ 35,873.22
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1041.06	LF	\$ 48.88	\$ 50,886.99
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	486.27	SY	\$ 74.73	\$ 36,338.97
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	69.63	LF	\$ 36.89	\$ 2,568.47
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	1176.99	LF	\$ 15.83	\$ 18,631.82
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	883.57	LF	\$ 34.21	\$ 30,227.08
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	13.26	LF	\$ 45.20	\$ 599.44
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	29.84	LF	\$ 4.07	\$ 121.45
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND, 13-48 FIBERS	2183.90	LF	\$ 3.28	\$ 7,163.21
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	7.00	EA	\$ 53.84	\$ 376.88
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	2.00	EA	\$ 1,509.12	\$ 3,018.24
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	2.00	EA	\$ 101.96	\$ 203.92
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	2.00	EA	\$ 1,640.60	\$ 3,281.20
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	1297.68	LF	\$ 87.20	\$ 113,157.47
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	8.00	EA	\$ 2,802.06	\$ 22,416.48
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	2.00	EA	\$ 5,589.94	\$ 11,179.88
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	3.00	EA	\$ 1,714.65	\$ 5,143.95
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	33.15	LF	\$ 8.99	\$ 298.06
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL, F&I ALUMINUM, 3 S 1 W	7.00	EA	\$ 1,664.67	\$ 11,652.69
650-1-16	VEH TRAF SIGNAL, F&I ALUMINUM, 4 S 1 W	4.00	EA	\$ 2,047.93	\$ 8,191.72
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	1.00	EA	\$ 6,750.20	\$ 6,750.20
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	2.00	EA	\$ 13,003.79	\$ 26,007.58
663-1-111	PREMPTION SYSTEM, OPTICAL, CABINET	1.00	EA	\$ 6,596.11	\$ 6,596.11
663-1-112	PREMPTION SYSTEM, OPTICAL, DETECTOR	2.00	EA	\$ 4,220.32	\$ 8,440.64
663-1-121	PREMPTION SYSTEM, GPS, CABINET	1.00	EA	\$ 7,794.98	\$ 7,794.98
663-1-122	PREMPTION SYSTEM, GPS, DETECTOR	2.00	EA	\$ 6,745.08	\$ 13,490.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	3.00	EA	\$ 957.16	\$ 2,871.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00	EA	\$ 4,942.88	\$ 9,885.76
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	207.22	LF	\$ 3.24	\$ 671.38
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	7.00	EA	\$ 179.27	\$ 1,254.89
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	273.53	LF	\$ 16.56	\$ 4,529.60
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.18	GM	\$ 6,356.61	\$ 1,159.14
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.13	GM	\$ 2,159.14	\$ 286.34
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.18	GM	\$ 6,336.51	\$ 1,155.47

Segments Construction Sub-Totals	\$ 936,382.70
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Mobilization (10%)	\$ 93,638.27
Maintenance of Traffic (10%)	\$ 93,638.27
Project Unknowns (25%)	\$ 280,914.81

Project Construction Total	\$1,404,574.05
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Final Design / Engineering (25%)	\$ 351,143.51
Construction Engineering Inspection (CEI) (15%)	\$ 210,686.11

GRAND TOTAL	\$1,966,403.68
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$2,359,684.41
5 years Estimated Project Cost	1.5	\$2,949,605.51

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the

Crossing - 9					
Lakemont Avenue at/near Goodrich Avenue					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	58.27	LF	\$ 3.00	\$ 174.80
110-1-1	CLEARING & GRUBBING	0.04	AC	\$ 31,506.62	\$ 1,197.25
120-1	REGULAR EXCAVATION	8.11	CY	\$ 5.84	\$ 47.34
120-6	EMBANKMENT	17.35	CY	\$ 11.07	\$ 192.10
520-1-10	CONCRETE CURB & GUTTER, TYPE F	202.67	LF	\$ 48.88	\$ 9,906.35
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	139.33	SY	\$ 74.73	\$ 10,412.38
527-2	DETECTABLE WARNINGS	60.80	SF	\$ 38.74	\$ 2,355.39
570-1-2	PERFORMANCE TURF, SOD	886.67	SF	\$ 4.72	\$ 4,185.07
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL- SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	158.33	LF	\$ 3.24	\$ 513.00
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	6.00	EA	\$ 179.27	\$ 1,075.62

Segments Construction Sub-Totals	\$ 73,520.34
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Mobilization (10%)	\$ 7,352.03
Maintenance of Traffic (10%)	\$ 7,352.03
Project Unknowns (25%)	\$ 22,056.10

Project Construction Total	\$ 110,280.51
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Final Design / Engineering (25%)	\$ 27,570.13
Construction Engineering Inspection	\$ 16,542.08

GRAND TOTAL	\$ 154,392.72
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 185,271.26
5 years Estimated Project Cost	1.5	\$ 231,589.07

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 10					
Phelps Avenue at/near Lakehurst Avenue					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	49.83	LF	\$ 3.00	\$ 149.50
110-1-1	CLEARING & GRUBBING	0.03	AC	\$ 31,506.62	\$ 1,023.97
120-1	REGULAR EXCAVATION	6.93	CY	\$ 5.84	\$ 40.49
120-6	EMBANKMENT	14.84	CY	\$ 11.07	\$ 164.30
520-1-10	CONCRETE CURB & GUTTER, TYPE F	173.33	LF	\$ 48.88	\$ 8,472.53
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	119.17	SY	\$ 74.73	\$ 8,905.33
527 2	DETECTABLE WARNINGS	52.00	SF	\$ 38.74	\$ 2,014.48
570-1-2	PERFORMANCE TURF, SOD	758.33	SF	\$ 4.72	\$ 3,579.33
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL- SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	135.42	LF	\$ 3.24	\$ 438.75
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	5.00	EA	\$ 179.27	\$ 896.35

Segments Construction Sub-Totals	\$ 68,645.12
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Mobilization (10%)	\$ 6,864.51
Maintenance of Traffic (10%)	\$ 6,864.51
Project Unknowns (25%)	\$ 20,593.54

Project Construction Total	\$ 102,967.69
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Final Design / Engineering (25%)	\$ 25,741.92
Construction Engineering Inspection (CEI) (15%)	\$ 15,445.15

GRAND TOTAL	\$ 144,154.76
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 172,985.71
5 years Estimated Project Cost	1.5	\$ 216,232.14

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 11					
Lee Rd at/near Turner Rd					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	824.69	LF	\$ 3.00	\$ 2,474.06
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$ 4,570.14	\$ 9,140.28
104-18	INLET PROTECTION SYSTEM	4.00	EA	\$ 204.95	\$ 819.80
107-1	LITTER REMOVAL	0.94	AC	\$ 42.64	\$ 39.96
107-2	MOWING	0.94	AC	\$ 56.49	\$ 52.94
110-1-1	CLEARING & GRUBBING	1.87	AC	\$ 31,506.62	\$ 59,052.41
120-1	REGULAR EXCAVATION	755.96	CY	\$ 5.84	\$ 4,414.82
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1454.20	CY	\$ 31.00	\$ 45,080.07
160-4	TYPE B STABILIZATION	1335.99	SY	\$ 9.61	\$ 12,838.87
285-709	OPTIONAL BASE, BASE GROUP 09	1129.82	SY	\$ 31.65	\$ 35,758.78
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	1466.11	SY	\$ 4.12	\$ 6,040.36
337-7-83	ASPH CONC FC, TRAFFIC C, FC-12.5, PG 76-22	205.26	TN	\$ 164.67	\$ 33,799.40
520-1-10	CONCRETE CURB & GUTTER, TYPE F	980.88	LF	\$ 48.88	\$ 47,945.23
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	458.16	SY	\$ 74.73	\$ 34,238.22
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	65.60	LF	\$ 36.89	\$ 2,419.98
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	1108.95	LF	\$ 15.83	\$ 17,554.72
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	832.50	LF	\$ 34.21	\$ 28,479.66
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	12.50	LF	\$ 45.20	\$ 564.78
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	28.11	LF	\$ 4.07	\$ 114.43
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND, 13-48 FIBERS	2057.65	LF	\$ 3.28	\$ 6,749.10
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	7.00	EA	\$ 53.84	\$ 376.88
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	2.00	EA	\$ 1,509.12	\$ 3,018.24
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	2.00	EA	\$ 101.96	\$ 203.92
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	2.00	EA	\$ 1,640.60	\$ 3,281.20
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	1222.66	LF	\$ 87.20	\$ 106,615.87
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	8.00	EA	\$ 2,802.06	\$ 22,416.48
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	2.00	EA	\$ 5,589.94	\$ 11,179.88
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	3.00	EA	\$ 1,714.65	\$ 5,143.95
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	31.24	LF	\$ 8.99	\$ 280.83
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL, F&I ALUMINUM, 3 S 1 W	7.00	EA	\$ 1,664.67	\$ 11,652.69
650-1-16	VEH TRAF SIGNAL, F&I ALUMINUM, 4 S 1 W	4.00	EA	\$ 2,047.93	\$ 8,191.72
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	1.00	EA	\$ 6,750.20	\$ 6,750.20
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	2.00	EA	\$ 13,003.79	\$ 26,007.58
663-1-111	PREMPTION SYSTEM, OPTICAL, CABINET	1.00	EA	\$ 6,596.11	\$ 6,596.11
663-1-112	PREMPTION SYSTEM, OPTICAL, DETECTOR	2.00	EA	\$ 4,220.32	\$ 8,440.64
663-1-121	PREMPTION SYSTEM, GPS, CABINET	1.00	EA	\$ 7,794.98	\$ 7,794.98
663-1-122	PREMPTION SYSTEM, GPS, DETECTOR	2.00	EA	\$ 6,745.08	\$ 13,490.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFIN	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	3.00	EA	\$ 957.16	\$ 2,871.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00	EA	\$ 4,942.88	\$ 9,885.76
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	195.24	LF	\$ 3.24	\$ 632.57
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	7.00	EA	\$ 179.27	\$ 1,254.89
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	257.71	LF	\$ 16.56	\$ 4,267.75
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.17	GM	\$ 6,356.61	\$ 1,092.13
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.12	GM	\$ 2,159.14	\$ 269.79
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.17	GM	\$ 6,336.51	\$ 1,088.67

Segments Construction Sub-Totals	\$ 906,412.92
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Mobilization (10%)	\$ 90,641.29
Maintenance of Traffic (10%)	\$ 90,641.29
Project Unknowns (25%)	\$ 271,923.88

Project Construction Total	\$1,359,619.39
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Final Design / Engineering (25%)	\$ 339,904.85
Construction Engineering Inspection (CEI) (15%)	\$ 203,942.91

GRAND TOTAL	\$1,903,467.14
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$2,284,160.57
5 years Estimated Project Cost	1.5	\$2,855,200.71

NOTES:

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2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 12					
Winter Park Rd at/near Spring Ln					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	56.86	LF	\$ 3.00	\$ 170.58
110-1-1	CLEARING & GRUBBING	0.04	AC	\$ 31,506.62	\$ 1,168.37
120-1	REGULAR EXCAVATION	7.91	CY	\$ 5.84	\$ 46.20
120-6	EMBANKMENT	16.93	CY	\$ 11.07	\$ 187.47
520-1-10	CONCRETE CURB & GUTTER, TYPE F	197.78	LF	\$ 48.88	\$ 9,667.38
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	135.97	SY	\$ 74.73	\$ 10,161.20
527-2	DETECTABLE WARNINGS	59.33	SF	\$ 38.74	\$ 2,298.57
570-1-2	PERFORMANCE TURF, SOD	865.28	SF	\$ 4.72	\$ 4,084.11
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL- SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	154.51	LF	\$ 3.24	\$ 500.63
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	5.00	EA	\$ 179.27	\$ 896.35

Segments Construction Sub-Totals	\$ 72,558.41
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Mobilization (10%)	\$ 7,255.84
Maintenance of Traffic (10%)	\$ 7,255.84
Project Unknowns (25%)	\$ 21,767.52

Project Construction Total	\$ 108,837.62
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Final Design / Engineering (25%)	\$ 27,209.41
Construction Engineering Inspection (CEI) (15%)	\$ 16,325.64

GRAND TOTAL	\$ 152,372.67
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 182,847.20
5 years Estimated Project Cost	1.5	\$ 228,559.00

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 13					
Lakemont Ave at/near Oakhurst Ave					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	685.76	LF	\$ 3.00	\$ 2,057.27
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$ 4,570.14	\$ 9,140.28
104-18	INLET PROTECTION SYSTEM	3.00	EA	\$ 204.95	\$ 614.85
107-1	LITTER REMOVAL	0.78	AC	\$ 42.64	\$ 33.23
107-2	MOWING	0.78	AC	\$ 56.49	\$ 44.02
110-1-1	CLEARING & GRUBBING	1.56	AC	\$ 31,506.62	\$ 49,104.22
120-1	REGULAR EXCAVATION	628.61	CY	\$ 5.84	\$ 3,671.08
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1209.22	CY	\$ 31.00	\$ 37,485.71
160-4	TYPE B STABILIZATION	1110.92	SY	\$ 9.61	\$ 10,675.99
285-709	OPTIONAL BASE, BASE GROUP 09	939.49	SY	\$ 31.65	\$ 29,734.73
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	1219.12	SY	\$ 4.12	\$ 5,022.78
337-70-4	ASPH CONC FC, TRAFFIC C.F.C-12.5, PG 76-22	170.68	TN	\$ 164.67	\$ 28,105.43
521-1-10	CONCRETE CURB & GUTTER, TYPE F	815.63	LF	\$ 48.88	\$ 39,868.20
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	380.98	SY	\$ 74.73	\$ 28,470.32
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	54.55	LF	\$ 36.89	\$ 2,012.30
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	922.13	LF	\$ 15.83	\$ 14,597.38
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	692.25	LF	\$ 34.21	\$ 23,681.87
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	10.39	LF	\$ 45.20	\$ 469.64
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	23.38	LF	\$ 4.07	\$ 95.15
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND, 13-48 FIBERS	1711.01	LF	\$ 3.28	\$ 5,612.12
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	6.00	EA	\$ 53.84	\$ 323.04
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	2.00	EA	\$ 1,509.12	\$ 3,018.24
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	2.00	EA	\$ 101.96	\$ 203.92
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	2.00	EA	\$ 1,640.60	\$ 3,281.20
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	1016.69	LF	\$ 87.20	\$ 88,654.96
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	7.00	EA	\$ 2,802.06	\$ 19,614.42
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	2.00	EA	\$ 5,589.94	\$ 11,179.88
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	3.00	EA	\$ 1,714.65	\$ 5,143.95
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	25.98	LF	\$ 8.99	\$ 233.52
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL, F&I ALUMINUM, 3 S 1 W	6.00	EA	\$ 1,664.67	\$ 9,988.02
650-1-16	VEH TRAF SIGNAL, F&I ALUMINUM, 4 S 1 W	3.00	EA	\$ 2,047.93	\$ 6,143.79
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	1.00	EA	\$ 6,750.20	\$ 6,750.20
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	2.00	EA	\$ 13,003.79	\$ 26,007.58
663-1-111	PREMPTION SYSTEM, OPTICAL, CABINET	1.00	EA	\$ 6,596.11	\$ 6,596.11
663-1-112	PREMPTION SYSTEM, OPTICAL, DETECTOR	2.00	EA	\$ 4,220.32	\$ 8,440.64
663-1-121	PREMPTION SYSTEM, GPS, CABINET	1.00	EA	\$ 7,794.98	\$ 7,794.98
663-1-122	PREMPTION SYSTEM, GPS, DETECTOR	2.00	EA	\$ 6,745.08	\$ 13,490.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	3.00	EA	\$ 957.16	\$ 2,871.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00	EA	\$ 4,942.88	\$ 9,885.76
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	162.35	LF	\$ 3.24	\$ 526.01
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	6.00	EA	\$ 179.27	\$ 1,075.62
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	214.30	LF	\$ 16.56	\$ 3,548.79
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.14	GM	\$ 6,356.61	\$ 908.14
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.10	GM	\$ 2,159.14	\$ 224.34
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.14	GM	\$ 6,336.51	\$ 905.27

Segments Construction Sub-Totals	\$	817,173.84
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Mobilization (10%)	\$	81,717.38
Maintenance of Traffic (10%)	\$	81,717.38
Project Unknowns (25%)	\$	245,152.15

Project Construction Total	\$	1,225,760.77
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Final Design / Engineering (25%)	\$	306,440.19
Construction Engineering Inspection (CEI) (15%)	\$	183,864.11

GRAND TOTAL	\$	1,716,065.07
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 2,059,278.09
5 years Estimated Project Cost	1.5	\$ 2,574,097.61

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.

2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.

3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.

4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 14					
Lakemont Ave at/near Loch Berry Rd					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	71.92	LF	\$ 3.00	\$ 215.76
110-1-1	CLEARING & GRUBBING	0.05	AC	\$ 31,506.62	\$ 1,477.81
120-1	REGULAR EXCAVATION	10.01	CY	\$ 5.84	\$ 58.44
120-6	EMBANKMENT	21.42	CY	\$ 11.07	\$ 237.12
520-1-10	CONCRETE CURB & GUTTER, TYPE F	250.16	LF	\$ 48.88	\$ 12,227.76
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	171.98	SY	\$ 74.73	\$ 12,852.37
527-2	DETECTABLE WARNINGS	75.05	SF	\$ 38.74	\$ 2,907.34
570-1-2	PERFORMANCE TURF, SOD	1094.44	SF	\$ 4.72	\$ 5,165.78
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL-SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	195.44	LF	\$ 3.24	\$ 633.21
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	7.00	EA	\$ 179.27	\$ 1,254.89

Segments Construction Sub-Totals	\$ 81,302.57
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Mobilization (10%)	\$ 8,130.26
Maintenance of Traffic (10%)	\$ 8,130.26
Project Unknowns (25%)	\$ 24,390.77

Project Construction Total	\$ 121,953.86
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Final Design / Engineering (25%)	\$ 30,488.46
Construction Engineering Inspection (CEI) (15%)	\$ 18,293.08

GRAND TOTAL	\$ 170,735.40
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 204,882.48
5 years Estimated Project Cost	1.5	\$ 256,103.10

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 15					
Aloma Ave at/near Strathly Ln					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	810.67	LF	\$ 3.00	\$ 2,432.00
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$ 4,570.14	\$ 9,140.28
104-18	INLET PROTECTION SYSTEM	4.00	EA	\$ 204.95	\$ 819.80
107-1	LITTER REMOVAL	0.92	AC	\$ 42.64	\$ 39.28
107-2	MOWING	0.92	AC	\$ 56.49	\$ 52.04
110-1-1	CLEARING & GRUBBING	1.84	AC	\$ 31,506.62	\$ 58,048.56
120-1	REGULAR EXCAVATION	743.11	CY	\$ 5.84	\$ 4,339.77
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	1429.48	CY	\$ 31.00	\$ 44,313.74
160-4	TYPE B STABILIZATION	1313.28	SY	\$ 9.61	\$ 12,620.62
285-709	OPTIONAL BASE, BASE GROUP 09	1110.61	SY	\$ 31.65	\$ 35,150.91
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	1441.18	SY	\$ 4.12	\$ 5,937.68
337-7-83	ASPH CONC FC, TRAFFIC C, FC-12.5, PG 76-22	201.77	TN	\$ 164.67	\$ 33,224.84
520-1-10	CONCRETE CURB & GUTTER, TYPE F	964.20	LF	\$ 48.88	\$ 47,130.19
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	450.37	SY	\$ 74.73	\$ 33,656.20
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	64.48	LF	\$ 36.89	\$ 2,378.85
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	1090.10	LF	\$ 15.83	\$ 17,256.30
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	818.34	LF	\$ 34.21	\$ 27,995.53
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	12.28	LF	\$ 45.20	\$ 555.18
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	27.64	LF	\$ 4.07	\$ 112.48
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND, 13-48 FIBERS	2022.67	LF	\$ 3.28	\$ 6,634.37
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	7.00	EA	\$ 53.84	\$ 376.88
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	2.00	EA	\$ 1,509.12	\$ 3,018.24
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	2.00	EA	\$ 101.96	\$ 203.92
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	2.00	EA	\$ 1,640.60	\$ 3,281.20
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	1201.87	LF	\$ 87.20	\$ 104,803.48
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	8.00	EA	\$ 2,802.06	\$ 22,416.48
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	2.00	EA	\$ 5,589.94	\$ 11,179.88
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	3.00	EA	\$ 1,714.65	\$ 5,143.95
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	30.71	LF	\$ 8.99	\$ 276.06
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL, F&I ALUMINUM, 3 S 1 W	7.00	EA	\$ 1,664.67	\$ 11,652.69
650-1-16	VEH TRAF SIGNAL, F&I ALUMINUM, 4 S 1 W	4.00	EA	\$ 2,047.93	\$ 8,191.72
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	1.00	EA	\$ 6,750.20	\$ 6,750.20
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	2.00	EA	\$ 13,003.79	\$ 26,007.58
663-1-111	PREMPTION SYSTEM, OPTICAL, CABINET	1.00	EA	\$ 6,596.11	\$ 6,596.11
663-1-112	PREMPTION SYSTEM, OPTICAL, DETECTOR	2.00	EA	\$ 4,220.32	\$ 8,440.64
663-1-121	PREMPTION SYSTEM, GPS, CABINET	1.00	EA	\$ 7,794.98	\$ 7,794.98
663-1-122	PREMPTION SYSTEM, GPS, DETECTOR	2.00	EA	\$ 6,745.08	\$ 13,490.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	3.00	EA	\$ 957.16	\$ 2,871.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.00	EA	\$ 4,942.88	\$ 9,885.76
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	191.92	LF	\$ 3.24	\$ 621.82
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	7.00	EA	\$ 179.27	\$ 1,254.89
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	253.33	LF	\$ 16.56	\$ 4,195.20
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.17	GM	\$ 6,356.61	\$ 1,073.56
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.12	GM	\$ 2,159.14	\$ 265.20
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.17	GM	\$ 6,336.51	\$ 1,070.17

Segments Construction Sub-Totals	\$	898,109.61
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Mobilization (10%)	\$	89,810.96
Maintenance of Traffic (10%)	\$	89,810.96
Project Unknowns (25%)	\$	269,432.88

Project Construction Total	\$	1,347,164.41
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Final Design / Engineering (25%)	\$	336,791.10
Construction Engineering Inspection (CEI) (15%)	\$	202,074.66

GRAND TOTAL	\$	1,886,030.18
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 2,263,236.21
5 years Estimated Project Cost	1.5	\$ 2,829,045.27

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.

2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.

3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.

4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 16					
Glenridge Way at/near Stonehurst Rd					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	62.92	LF	\$ 3.00	\$ 188.76
110-1-1	CLEARING & GRUBBING	0.04	AC	\$ 31,506.62	\$ 1,292.86
120-1	REGULAR EXCAVATION	8.75	CY	\$ 5.84	\$ 51.12
120-6	EMBANKMENT	18.74	CY	\$ 11.07	\$ 207.44
520-1-10	CONCRETE CURB & GUTTER, TYPE F	218.85	LF	\$ 48.88	\$ 10,697.42
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	150.46	SY	\$ 74.73	\$ 11,243.86
527-2	DETECTABLE WARNINGS	65.66	SF	\$ 38.74	\$ 2,543.48
570-1-2	PERFORMANCE TURF, SOD	957.47	SF	\$ 4.72	\$ 4,519.26
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL- SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	170.98	LF	\$ 3.24	\$ 553.97
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	6.00	EA	\$ 179.27	\$ 1,075.62

Segments Construction Sub-Totals	\$ 76,111.21
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Mobilization (10%)	\$ 7,611.12
Maintenance of Traffic (10%)	\$ 7,611.12
Project Unknowns (25%)	\$ 22,833.36

Project Construction Total	\$ 114,166.81
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Final Design / Engineering (25%)	\$ 28,541.70
Construction Engineering Inspection (CEI) (15%)	\$ 17,125.02

GRAND TOTAL	\$ 159,833.54
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 191,800.24
5 years Estimated Project Cost	1.5	\$ 239,750.31

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Crossing - 17					
Glenridge Way at/near St. George St					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	69.21	LF	\$ 3.00	\$ 207.62
110-1-1	CLEARING & GRUBBING	0.05	AC	\$ 31,506.62	\$ 1,422.06
120-1	REGULAR EXCAVATION	9.63	CY	\$ 5.84	\$ 56.23
120-6	EMBANKMENT	20.61	CY	\$ 11.07	\$ 228.17
520-1-10	CONCRETE CURB & GUTTER, TYPE F	240.72	LF	\$ 48.88	\$ 11,766.43
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	165.50	SY	\$ 74.73	\$ 12,367.48
527-2	DETECTABLE WARNINGS	72.22	SF	\$ 38.74	\$ 2,797.66
570-1-2	PERFORMANCE TURF, SOD	1053.15	SF	\$ 4.72	\$ 4,970.88
654-2-28	MIDBLOCK CROSSWALK: REC RAPID FLASHING BEACON, FURNISH/INSTALL- SOLAR, SIGN ASSEMBLY- BACK-BACK ACCESSIBLE DETECTOR	2.00	AS	\$ 20,000.00	\$ 40,000.00
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	188.06	LF	\$ 3.24	\$ 609.32
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	7.00	EA	\$ 179.27	\$ 1,254.89

Segments Construction Sub-Totals	\$ 79,791.65
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Mobilization (10%)	\$ 7,979.16
Maintenance of Traffic (10%)	\$ 7,979.16
Project Unknowns (25%)	\$ 23,937.49

Project Construction Total	\$ 119,687.47
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Final Design / Engineering (25%)	\$ 29,921.87
Construction Engineering Inspection (CEI) (15%)	\$ 17,953.12

GRAND TOTAL	\$ 167,562.46
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 201,074.96
5 years Estimated Project Cost	1.5	\$ 251,343.70

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Roadway Reconfiguration Projects					
Priority	Roadway Facility	Segment	Length(ft)	Improvements	Cost
1	Aloma Avenue	Park Avenue to Lakemont Avenue	9,000	Reconfiguration, Pedestrian Safety	Underway by FDOT
2	US 17/92	City Limits	11,000	Reconfiguration, Streetscape, Signals	Underway by FDOT
3	Morse Boulevard Study	US 17/92 to New York Avenue	4,000	Complete Streets Study	\$300,000.00
4	Solana Avenue	US 17/92 to Denning Drive	2,500	Bike Lanes	\$4,102,000
5	Lakemont Avenue	Glenridge Way to Glenridge Way	3,400	Roadway Reconfiguration	\$12,942,000.00
6	Lakemont Avenue	Goodrich Ave to City Limits	4,400	Complete Streets Reconfiguration	\$6,082,000.00
7	Orange Avenue	US 17/92 to Pennsylvania	3,700	Complete Streets Reconfiguration	\$6,200,000.00
8	Orange Avenue	Denning/Minnesota	N/A	Roundabout	\$7,400,000.00
9	Morse Boulevard	US 17/92 to New York Avenue	N/A	Complete Streets Reconfiguration	\$12,000,000.00
10	Minnesota Avenue	Denning Drive to RR tracks	500	Bike Lanes	\$785,000.00
11	Fairbanks Avenue	At Denning Drive	N/A	Add East and West turn lanes	\$1,169,000
12	Fairbanks Avenue	US 17/92 to Pennsylvania Avenue	N/A	Complete Streets Reconfiguration	\$18,500,000

Roadway Reconfiguration & Streetscape - 4					
Solana Avenue - from 17/92 to Denning Drive					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	2500	LF	\$ 3.00	\$ 7,500.00
104-11	FLOATING TURBIDITY BARRIER	24	LF	\$ 17.39	\$ 411.70
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	24	LF	\$ 7.67	\$ 181.58
104-15	SOIL TRACKING PREVENTION DEVICE	1	EA	\$ 4,570.14	\$ 4,570.14
104-18	INLET PROTECTION SYSTEM	6	EA	\$ 204.95	\$ 1,261.53
107-1	LITTER REMOVAL	0.28	AC	\$ 42.64	\$ 12.11
107-2	MOWING	0.28	AC	\$ 56.49	\$ 16.05
110-1-1	CLEARING & GRUBBING	2	AC	\$ 31,506.62	\$ 52,660.21
120-1	REGULAR EXCAVATION	2292	CY	\$ 5.84	\$ 13,383.33
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	4408	CY	\$ 31.00	\$ 136,658.33
160-4	TYPE B STABILIZATION	4050	SY	\$ 9.61	\$ 38,920.50
285-709	OPTIONAL BASE,BASE GROUP 09	3425	SY	\$ 31.65	\$ 108,401.25
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	4444	SY	\$ 4.12	\$ 18,311.11
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	733	TN	\$ 151.24	\$ 110,909.33
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	622	TN	\$ 164.67	\$ 102,461.46
425-1-351	INLETS, CURB, TYPE P-5,	9	EA	\$ 10,231.27	\$ 87,198.32
425-1-451	INLETS, CURB, TYPE J-5,	2	EA	\$ 15,367.32	\$ 36,380.97
425-1-521	INLETS, DT BOT, TYPE C,	1	EA	\$ 9,367.26	\$ 11,088.14
425-1-541	INLETS, DT BOT, TYPE D,	2	EA	\$ 7,752.68	\$ 15,505.36
425-2-41	MANHOLES, P-7,	1	EA	\$ 8,196.07	\$ 9,701.79
425-2-71	MANHOLES, J-7,	1	EA	\$ 17,255.74	\$ 17,255.74
430-175-112	PIPE CULV, OPT MATL, ROUND, 12"S/CD	458	LF	\$ 670.17	\$ 307,161.25
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	1197	LF	\$ 309.73	\$ 370,737.42
430-175-154	PIPE CULV, OPT MATL, ROUND, 54"S/CD	47	LF	\$ 575.84	\$ 27,265.15
430-515-100	STRAIGHT CONC ENDW 15", SINGLE, 0 ROUND	2	EA	\$ 6,648.36	\$ 13,296.72
430-542-100	STRAIGHT CONC ENDW 42", SINGLE, 0 ROUND	1	EA	\$ 12,500.00	\$ 12,500.00
430-554-100	STRAIGHT CONC ENDW 54", SINGLE, 0 ROUND	1	EA	\$ 12,500.00	\$ 12,500.00
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2500	LF	\$ 48.88	\$ 122,200.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1389	SY	\$ 74.73	\$ 103,791.73
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	199	LF	\$ 36.89	\$ 7,336.08
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1	EA	\$ 5,700.00	\$ 5,700.00
570-1-2	PERFORMANCE TURF, SOD	3090	SY	\$ 4.72	\$ 14,586.11
630-2-11	CONDUIT, F&I, OPEN TRENCH	1250	LF	\$ 15.83	\$ 19,787.50
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	248	LF	\$ 34.21	\$ 8,487.71
635-2-11	PULL & SPLICE BOX, F&I, 13" X 24"	8	EA	\$ 1,380.90	\$ 11,442.12
700-1-11	SINGLE POST SIGN, F&I GM,	4	AS	\$ 510.78	\$ 2,176.62
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 S F	1	AS	\$ 1,716.78	\$ 1,716.78
700-1-50	SINGLE POST SIGN, RELOCATE	1	AS	\$ 319.19	\$ 319.19
700-1-60	SINGLE POST SIGN, REMOVE	4	AS	\$ 53.25	\$ 226.92
700-2 14	MULTI- POST SIGN, F&I GM, 31-50 SF	4	AS	\$ 7,223.24	\$ 28,892.96
700-2-60	MULTI- POST SIGN, REMOVE	3	AS	\$ 950.11	\$ 2,850.33
706-1-3	RAISED PAVMT MARK, TYPE B	160	EA	\$ 4.43	\$ 707.92
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1	GM	\$ 1,320.40	\$ 1,250.38
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1	GM	\$ 725.79	\$ 1,030.95
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1	GM	\$ 6,356.61	\$ 6,356.61
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	1	GM	\$ 2,159.14	\$ 1,533.48

Solana Avenue - from 17/92 to Denning Drive (CONTINUED)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	4565	LF	\$ 3.20	\$ 14,609.09
715-61-342	LIGHT POLE CMPLT,STD,F&I, 40'MH,12'ARM L	8	EA	\$ 9,167.66	\$ 75,963.09
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8	EA	\$ 725.88	\$ 6,014.63

Segments Construction Sub-Totals	\$ 1,953,229.69
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Mobilization (10%)	\$ 195,322.97
Maintenance of Traffic (10%)	\$ 195,322.97
Project Unknowns (25%)	\$ 585,968.91

Project Construction Total	\$ 2,929,844.54
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Final Design / Engineering (25%)	\$ 732,461.13
Construction Engineering Inspection (CEI) (15%)	\$ 439,476.68

GRAND TOTAL	\$ 4,101,782.35
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 4,922,138.82
5 years Estimated Project Cost	1.5	\$ 6,152,673.53

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Roadway Reconfiguration & Streetscape - 5					
Lakemont Avenue and Glenridge Way					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	12389.39	LF	\$ 3.00	\$ 37,168.18
110-1-1	CLEARING & GRUBBING	7.74	AC	\$ 31,506.62	\$ 243,932.10
120-1	REGULAR EXCAVATION	9527.30	CY	\$ 5.84	\$ 55,639.45
120-6	EMBANKMENT	2538.52	CY	\$ 11.07	\$ 28,101.38
160-4	TYPE B STABILIZATION	21347.65	SY	\$ 9.61	\$ 205,150.93
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	10438.97	SY	\$ 74.73	\$ 780,104.38
527-2	DETECTABLE WARNINGS	170.25	SF	\$ 38.74	\$ 6,595.63
570-1-2	PERFORMANCE TURF, SOD	12740.35	SY	\$ 4.72	\$ 60,134.44
104-11	FLOATING TURBIDITY BARRIER	64.39	LF	\$ 17.39	\$ 1,119.81
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	64.39	LF	\$ 7.67	\$ 493.90
104-15	SOIL TRACKING PREVENTION DEVICE	0.64	EA	\$ 4,570.14	\$ 2,942.89
104-18	INLET PROTECTION SYSTEM	16.74	EA	\$ 204.95	\$ 3,431.36
107-1	LITTER REMOVAL	0.77	AC	\$ 42.64	\$ 32.95
107-2	MOWING	0.77	AC	\$ 56.49	\$ 43.65
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	11990.67	CY	\$ 31.00	\$ 371,710.67
285-709	OPTIONAL BASE,BASE GROUP 09	9316.00	SY	\$ 31.65	\$ 294,851.40
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	12088.89	SY	\$ 4.12	\$ 49,806.21
334-1-53	SUPERPAVE ASPH CONIC, TRAF C, PG76-22	1994.67	TN	\$ 151.24	\$ 301,673.39
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1692.45	TN	\$ 164.67	\$ 278,695.18
425-1-351	INLETS, CURB, TYPE P-5,	23.18	EA	\$ 10,231.27	\$ 237,179.44
425-1-451	INLETS, CURB, TYPE J-5,	6.44	EA	\$ 15,367.32	\$ 98,956.23
425-1-521	INLETS, DT BOT, TYPE C,	3.22	EA	\$ 9,367.26	\$ 30,159.74
425-1-541	INLETS, DT BOT, TYPE D,	0.64	EA	\$ 7,752.68	\$ 4,992.26
425-2-41	MANHOLES, P-7,	3.22	EA	\$ 8,196.07	\$ 26,388.86
425-2-71	MANHOLES, J-7,	0.64	EA	\$ 17,255.74	\$ 11,111.65
430-175-112	PIPE CULV, OPT MATL, ROUND, 12"S/CD	1246.67	LF	\$ 670.17	\$ 835,478.60
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	3255.76	LF	\$ 309.73	\$ 1,008,405.79
430-175-154	PIPE CULV, OPT MATL, ROUND, 54"S/CD	128.79	LF	\$ 575.84	\$ 74,161.21
430-515-100	STRAIGHT CONC ENDW 15", SINGLE, 0 ROUND	0.64	EA	\$ 6,648.36	\$ 4,281.14
430-542-100	STRAIGHT CONC ENDW 42", SINGLE, 0 ROUND	0.64	EA	\$ 12,500.00	\$ 8,049.24
430-554-100	STRAIGHT CONC ENDW 54", SINGLE, 0 ROUND	0.64	EA	\$ 12,500.00	\$ 8,049.24
520-1-10	CONCRETE CURB & GUTTER, TYPE F	6800.00	LF	\$ 48.88	\$ 332,384.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	540.91	LF	\$ 36.89	\$ 19,954.14
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	0.64	EA	\$ 5,700.00	\$ 3,670.45
635-2-11	PULL & SPLICE BOX, F&I, 13" X 24"	22.54	EA	\$ 1,380.90	\$ 31,122.56
700-1-11	SINGLE POST SIGN, F&I GM,	11.59	AS	\$ 510.78	\$ 5,920.40
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 S F	1.29	AS	\$ 1,716.78	\$ 2,211.00
700-1-50	SINGLE POST SIGN, RELOCATE	1.29	AS	\$ 319.19	\$ 411.08
700-1-60	SINGLE POST SIGN, REMOVE	11.59	AS	\$ 53.25	\$ 617.22
700-2 14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.29	AS	\$ 7,223.24	\$ 9,302.66
700-2-60	MULTI- POST SIGN, REMOVE	1.29	AS	\$ 950.11	\$ 1,223.63
706-1-3	RAISED PAVMT MARK, TYPE B	434.66	EA	\$ 4.43	\$ 1,925.54
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.70	GM	\$ 1,320.40	\$ 3,571.08
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	4.06	GM	\$ 725.79	\$ 2,944.40
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	1.35	GM	\$ 6,356.61	\$ 8,595.87
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	2.03	GM	\$ 2,159.14	\$ 4,379.62
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	12417.73	LF	\$ 3.20	\$ 39,736.73
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	22.54	EA	\$ 725.88	\$ 16,359.80
715-61-342	LIGHT POLE CMLPT,STD,F&I, 40'MH,12'ARM L	22.54	EA	\$ 9,167.66	\$ 206,619.61
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	3921.59	LF	\$ 15.83	\$ 62,078.78
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	1082.46	LF	\$ 34.21	\$ 37,031.08
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	5.15	LF	\$ 45.20	\$ 232.85
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	0.64	PI	\$ 9,209.38	\$ 5,930.28
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND,2-12 FIBERS	11.59	LF	\$ 4.07	\$ 47.18

Lakemont Ave. and Glenridge Way (CONTINUED)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND, 13-48 FIBERS	848.33	LF	\$ 3.28	\$ 2,782.51
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	2.58	EA	\$ 53.84	\$ 138.68
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	0.64	EA	\$ 1,509.12	\$ 971.78
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	0.64	EA	\$ 101.96	\$ 65.66
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	0.64	EA	\$ 1,640.60	\$ 1,056.45
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	504.08	LF	\$ 87.20	\$ 43,955.41
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	3.09	EA	\$ 2,802.06	\$ 8,660.91
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	0.64	EA	\$ 5,589.94	\$ 3,599.58
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	1.16	EA	\$ 1,714.65	\$ 1,987.44
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	0.64	AS	\$ 4,640.41	\$ 2,988.14
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	12.88	LF	\$ 8.99	\$ 115.78
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	0.64	EA	\$ 10,450.00	\$ 6,729.17
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	0.64	EA	\$ 2,224.20	\$ 1,432.25
641-2-13	PRESTRESSED CONCRETE POLE, F&I, TYPE P-III	0.52	EA	\$ 10,339.55	\$ 5,326.43
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	2.58	EA	\$ 2,665.22	\$ 6,864.96
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	0.64	EA	\$ 67,914.18	\$ 43,732.62
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	0.64	EA	\$ 73,953.74	\$ 47,621.73
650-1-14	VEH TRAF SIGNAL, F&I ALUMINUM, 3 S 1 W	5.15	EA	\$ 1,664.67	\$ 8,575.57
650-1-16	VEH TRAF SIGNAL, F&I ALUMINUM, 4 S 1 W	2.58	EA	\$ 2,047.93	\$ 5,274.97
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	2.58	EA	\$ 979.46	\$ 2,522.85
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	0.39	EA	\$ 6,750.20	\$ 2,608.03
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	2.58	EA	\$ 13,003.79	\$ 33,494.61
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	2.58	EA	\$ 2,182.10	\$ 5,620.56
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	0.64	AS	\$ 45,695.48	\$ 29,425.12
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	0.64	EA	\$ 7,787.02	\$ 5,014.37
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	0.64	EA	\$ 4,501.80	\$ 2,898.89
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	0.64	EA	\$ 9,761.21	\$ 6,285.63
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	2.58	EA	\$ 957.16	\$ 2,465.41
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	2.58	EA	\$ 4,942.88	\$ 12,731.66
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	117.84	LF	\$ 3.24	\$ 381.80
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	15.45	LF	\$ 6.62	\$ 102.31
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	1.29	EA	\$ 179.27	\$ 230.88
711-11-170	THERMOPLASTIC, STANDARD, WHITE, ARROW	2.58	EA	\$ 90.11	\$ 232.10
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	108.18	LF	\$ 16.56	\$ 1,791.49

Segments Construction Sub-Totals	\$ 6,162,797.00
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Mobilization (10%)	\$ 616,279.70
Maintenance of Traffic (10%)	\$ 616,279.70
Project Unknowns (25%)	\$ 1,848,839.10

Project Construction Total	\$ 9,244,195.50
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Final Design / Engineering (25%)	\$ 2,311,048.88
Construction Engineering Inspection (CEI) (15%)	\$ 1,386,629.33

GRAND TOTAL	\$12,941,873.70
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$15,530,248.44
5 years Estimated Project Cost	1.5	\$19,412,810.55

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Roadway Reconfiguration & Streetscape - 6					
Lakemont Avenue from Goodrich Avenue to City Limits					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	4200.00	LF	\$ 3.00	\$ 12,600.00
104-11	FLOATING TURBIDITY BARRIER	39.77	LF	\$ 17.39	\$ 691.65
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	39.77	LF	\$ 7.67	\$ 305.06
104-15	SOIL TRACKING PREVENTION DEVICE	0.40	EA	\$ 4,570.14	\$ 1,817.67
104-18	INLET PROTECTION SYSTEM	10.34	EA	\$ 204.95	\$ 2,119.37
107-1	LITTER REMOVAL	0.48	AC	\$ 42.64	\$ 20.35
107-2	MOWING	0.48	AC	\$ 56.49	\$ 26.96
110-1-1	CLEARING & GRUBBING	2.81	AC	\$ 31,506.62	\$ 88,469.16
120-1	REGULAR EXCAVATION	3850.00	CY	\$ 5.84	\$ 22,484.00
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	7406.00	CY	\$ 31.00	\$ 229,586.00
160-4	TYPE B STABILIZATION	6804.00	SY	\$ 9.61	\$ 65,386.44
285-709	OPTIONAL BASE,BASE GROUP 09	5754.00	SY	\$ 31.65	\$ 182,114.10
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	7466.67	SY	\$ 4.12	\$ 30,762.66
334-1-53	SUPERPAVE ASPH CONIC, TRAF C, PG76-22	1232.00	TN	\$ 151.24	\$ 186,327.68
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1045.33	TN	\$ 164.67	\$ 172,135.26
425-1-351	INLETS, CURB, TYPE P-5,	14.32	EA	\$ 10,231.27	\$ 146,493.18
425-1-451	INLETS, CURB, TYPE J-5,	3.98	EA	\$ 15,367.32	\$ 61,120.02
425-1-521	INLETS, DT BOT, TYPE C,	1.99	EA	\$ 9,367.26	\$ 18,628.07
425-1-541	INLETS, DT BOT, TYPE D,	0.40	EA	\$ 7,752.68	\$ 3,083.45
425-2-41	MANHOLES, P-7,	1.99	EA	\$ 8,196.07	\$ 16,299.00
425-2-71	MANHOLES, J-7,	0.40	EA	\$ 17,255.74	\$ 6,863.08
430-175-112	PIPE CULV, OPT MATL, ROUND, 12"S/CD	770.00	LF	\$ 670.17	\$ 516,030.90
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	2010.91	LF	\$ 309.73	\$ 622,838.87
430-175-154	PIPE CULV, OPT MATL, ROUND, 54"S/CD	79.55	LF	\$ 575.84	\$ 45,805.45
430-515-100	STRAIGHT CONC ENDW 15", SINGLE, 0 ROUND	0.40	EA	\$ 6,648.36	\$ 2,644.23
430-542-100	STRAIGHT CONC ENDW 42", SINGLE, 0 ROUND	0.40	EA	\$ 12,500.00	\$ 4,971.59
430-554-100	STRAIGHT CONC ENDW 54", SINGLE, 0 ROUND	0.40	EA	\$ 12,500.00	\$ 4,971.59
520-1-10	CONCRETE CURB & GUTTER, TYPE F	4200.00	LF	\$ 48.88	\$ 205,296.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	2333.33	SY	\$ 74.73	\$ 174,370.10
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	334.09	LF	\$ 36.89	\$ 12,324.61
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	0.40	EA	\$ 5,700.00	\$ 2,267.05
570-1-2	PERFORMANCE TURF, SOD	5191.67	SY	\$ 4.72	\$ 24,504.66
630-2-11	CONDUIT, F&I, OPEN TRENCH	2100.00	LF	\$ 15.83	\$ 33,243.00
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	416.82	LF	\$ 34.21	\$ 14,259.35
635-2-11	PULL & SPLICE BOX, F&I, 13" X 24"	13.92	EA	\$ 1,380.90	\$ 19,222.76
700-1-11	SINGLE POST SIGN, F&I GM,	7.16	AS	\$ 510.78	\$ 3,656.72
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 S F	0.80	AS	\$ 1,716.78	\$ 1,365.62
700-1-50	SINGLE POST SIGN, RELOCATE	0.80	AS	\$ 319.19	\$ 253.90
700-1-60	SINGLE POST SIGN, REMOVE	7.16	AS	\$ 53.25	\$ 381.22
700-2 14	MULTI- POST SIGN, F&I GM, 31-50 SF	0.80	AS	\$ 7,223.24	\$ 5,745.76
700-2-60	MULTI- POST SIGN, REMOVE	0.80	AS	\$ 950.11	\$ 755.77
706-1-3	RAISED PAVMT MARK, TYPE B	268.47	EA	\$ 4.43	\$ 1,189.30
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.79	GM	\$ 1,320.40	\$ 2,364.72
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.69	GM	\$ 725.79	\$ 1,949.74
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.90	GM	\$ 6,356.61	\$ 5,692.06
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	1.34	GM	\$ 2,159.14	\$ 2,900.12
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7669.77	LF	\$ 3.20	\$ 24,543.27
715-61-342	LIGHT POLE CMPLT,STD,F&I, 40'MH,12'ARM L	13.92	EA	\$ 9,167.66	\$ 127,617.99
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	13.92	EA	\$ 725.88	\$ 10,104.58
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	810.00	LF	\$ 15.83	\$ 12,822.30
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	633.00	LF	\$ 34.21	\$ 21,654.93
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	8.00	LF	\$ 45.20	\$ 361.60
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND,2-12 FIBERS	18.00	LF	\$ 4.07	\$ 73.26
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND,13-48 FIBERS	1317.40	LF	\$ 3.28	\$ 4,321.07

Lakemont Avenue from Aloma Avenue to Pine Avenue (CONTINUED)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	4.00	EA	\$ 53.84	\$ 215.36
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	1.00	EA	\$ 1,509.12	\$ 1,509.12
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	1.00	EA	\$ 101.96	\$ 101.96
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	1.00	EA	\$ 1,640.60	\$ 1,640.60
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	782.80	LF	\$ 87.20	\$ 68,260.16
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	4.80	EA	\$ 2,802.06	\$ 13,449.89
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	1.00	EA	\$ 5,589.94	\$ 5,589.94
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	1.80	EA	\$ 1,714.65	\$ 3,086.37
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	20.00	LF	\$ 8.99	\$ 179.80
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
641-2-13	PRESTRESSED CONCRETE POLE, F&I, TYPE P-III	0.80	EA	\$ 10,339.55	\$ 8,271.64
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL, F&I ALUMINUM, 3 S 1 W	8.00	EA	\$ 1,664.67	\$ 13,317.36
650-1-16	VEH TRAF SIGNAL, F&I ALUMINUM, 4 S 1 W	4.00	EA	\$ 2,047.93	\$ 8,191.72
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	0.60	EA	\$ 6,750.20	\$ 4,050.12
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	4.00	EA	\$ 13,003.79	\$ 52,015.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CAPACITOR	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	4.00	EA	\$ 957.16	\$ 3,828.64
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	4.00	EA	\$ 4,942.88	\$ 19,771.52
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	183.00	LF	\$ 3.24	\$ 592.92
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	24.00	LF	\$ 6.62	\$ 158.88
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	2.00	EA	\$ 179.27	\$ 358.54
711-11-170	THERMOPLASTIC, STANDARD, WHITE, ARROW	4.00	EA	\$ 90.11	\$ 360.44
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	168.00	LF	\$ 16.56	\$ 2,782.08

Segments Construction Sub-Totals	\$ 3,118,604.10
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Mobilization (10%)	\$ 311,860.41
Maintenance of Traffic (10%)	\$ 311,860.41
Project Unknowns (25%)	\$ 935,581.23

Project Construction Total	\$ 4,677,906.15
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Final Design / Engineering (25%)	\$ 701,685.92
Construction Engineering Inspection (CEI) (15%)	\$ 701,685.92

GRAND TOTAL	\$ 6,081,278.00
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 7,297,533.60
5 years Estimated Project Cost	1.5	\$ 9,121,917.00

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Lane Repurposing Opinion of Probable Cost
Orange Avenue - Orlando Avenue to Fairbanks Avenue

Item	Is Item Needed?	Price / Mile	Distance/ Factor	Cost
Sediment Barrier	Yes	\$17,952	0.7	\$12,614
Floating Turbidity Barrier	Yes	\$1,250	0.7	\$878
Staked Turbidity Barrier	Yes	\$380	0.7	\$267
Soil Tracking Prevention Device	Yes	\$2,500	1.0	\$2,500
Inlet Protection System	Yes	\$3,120	0.7	\$2,192
Litter Removal	Yes	\$18	0.7	\$13
Mowing	Yes	\$30	0.7	\$21
Clearing & Grubbing	Minimal	\$77,660	0.35	\$27,284
Regular Excavation	Yes - excavate roadway for median, to move curb	\$48,400	0.7	\$34,008
Borrow Excavation, Truck Measure	No	--	--	--
Type B Stabilization	Minimal	\$82,842	0.20	\$16,568
Optional Base - Group 9	Minimal	\$319,147	0.20	--
Milling Existing, 3"	Yes	\$67,115	0.7	\$47,158
Superpave, Traffic D PG76-22	Yes, but reduced amount	\$389,910	0.20	\$77,982
Asph Conc FC, Traf C, FC 12.5, PG 76-22	Yes, but reduced amount	\$351,062	0.35	\$123,337
Conc Class II, Endwalls	No	--	--	--
Inlets, Curb, Type P-5	Add MH for every location with an existing inlet	\$187,200	0.7	\$131,536
Inlets, Curb, Type J-5		\$78,000	0.7	\$54,807
Inlets DT Bot, Type C		\$18,000	0.7	\$12,648
Inlets DT Bot, Type D		\$3,900	0.7	\$2,740
Manholes, P-7		\$36,000	1.1	\$37,943
Manholes, J-7		\$7,100	1.1	\$7,483
Desilting Pipe, 0-24"	Yes	\$2,625	0.7	\$1,844
Desilting Pipe, 25-36"	Yes	\$4,560	0.7	\$3,204
Pipe Culvert, Round, 12" S/CD	Assume we can use 1/2 of existing storm pipes	\$160,688	0.35	\$56,454
Pipe Culvert, Round, 42" S/CD		\$758,400	0.35	\$266,445
Pipe Culvert, Round, 60" S/CD		\$60,000	0.35	\$21,080
Concrete C&G - Type F	Yes, also need Type E for Median	\$211,200	1.1	\$237,440
Concrete SW & Driveways	Yes	\$234,667	0.7	\$164,889
Fencing, Type B Std	No	\$14,280	--	--
Fence Gate, Typ B, Slide/Cant, 18-20' open	No	\$1,800	--	--
Performance Turf / Sod	Yes	\$36,549	0.7	\$25,681
Conduit, F&I, Trench	No	\$35,376	--	--
Conduit, F&I, Directional Bore		\$19,912	--	--
Pull & Splice Box		\$23,800	--	--
Signal Modification - Orange & Fairbanks	Remove / adjust signal heads	\$50,000	\$1	\$50,000
Signs - F&I, Relocate, Remove	Yes	\$19,920	0.7	\$13,997
RMPs	Yes	\$945	0.7	\$664
Pavement Markings	Yes	\$23,414	0.5	\$10,858
Lighting	Adjusting / Relocating Poles at Intersections for Ped Lighting Criteria	\$508,433	0.2	\$88,976
Subtotal				\$1,533,514
MOT (15%)	Higher than LRE due to urban constraints. FDOT at 10%			\$230,027
Mobilization (15%)				\$230,027
Utility Adjustment (10%)	Not in LRE, but it's a typical cost			\$153,351
Miscellaneous Construction Items (10%)	Not in LRE, but it's a typical cost			\$153,351
Contingency (10%)	Not in LRE, but it's a typical cost			\$153,351
Construction Total				\$2,453,622
Design (20%)				\$490,724.42
Post Design (4%)				\$98,144.88
CEI (12%)				\$294,434.65
Project Total				\$3,336,926

Distance is 7/10 of a mile, so a Distance Factor of 0.7 indicates that the item quantity is constant. Other values indicate that the quantity was factored up or down.

NOTE: UNIT RATES BASED ON FDOT LRE COST PER MILE MODEL FOR WIDENING 2-LANES TO 4-LANES DIVIDED URBAN, WITH CURB AND GUTTER

Because the Engineer does not control the cost of labor, materials, equipment or services furnished by others, methods of determining prices, or competitive bidding or market conditions, any opinions rendered as to costs, including but not limited to opinions as to the costs of construction and materials, shall be made on the basis of its experience and represent its judgment as an experienced and qualified professional, familiar with the industry. The Engineer cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinions of cost. The cost of ROW acquisition and impact to adjacent property was not included.

Winter Park Roundabout Opinion of Probable Cost

Item	Unit	Quantity	Unit Price	Cost
Clearing and Grubbing	AC	1.57	\$ 12,305.00	\$ 20,000.00
Earthwork	CY	5,052.06	\$ 10.00	\$ 51,000.00
Type B Stabilization	SY	4,066.06	\$ 6.00	\$ 25,000.00
Base	SY	4,066.06	\$ 22.00	\$ 90,000.00
Pavement (3 1/2")	TN	782.72	\$ 120.00	\$ 94,000.00
Concrete Apron (6")	SY	309.86	\$ 80.00	\$ 25,000.00
Curbing	LF	3,008.9	\$ 27.00	\$ 82,000.00
Sidewalk	SY	1,048.70	\$ 45.00	\$ 48,000.00
Curb inlets	EA	12.0	\$ 6,000.00	\$ 72,000.00
Manholes	EA	6.0	\$ 6,000.00	\$ 36,000.00
24" pipe	LF	1,200.0	\$ 90.00	\$ 108,000.00
Sod	SY	2,114.51	\$ 3.00	\$ 7,000.00
Traffic Separator, Varied Width	SY	348.82	\$ 100.00	\$ 35,000.00
Signing and Pavement Markings	LS	1.0	\$ 30,000.00	\$ 30,000.00
Subtotal				723,000.00
MOT (35%)				254,000.00
Mobilization (15%)				109,000.00
Utility Adjustment (25%)				181,000.00
Light Poles (15%)				109,000.00
Miscellaneous Construction Items (20%)				145,000.00
Landscape and Hardscape (40%)				290,000.00
Contingency (20%)				145,000.00
Construction Total				1,956,000.00
Design (30%)				587,000.00
Post Design (4%)				79,000.00
CEI (12%)				235,000.00
Project Total				2,857,000.00

NOTE: UNIT RATES BASED ON FDOT AREA 08 ITEM AVERAGE UNIT COSTS FROM 2019/09/01 TO 2020/02/29

Because the Engineer does not control the cost of labor, materials, equipment or services furnished by others, methods of determining prices, or competitive bidding or market conditions, any opinions rendered as to costs, including but not limited to opinions as to the costs of construction and materials, shall be made on the basis of its experience and represent its judgment as an experienced and qualified professional, familiar with the industry. The Engineer cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinions of cost. The cost of ROW acquisition and impact to adjacent property was not included.

Roadway Reconfiguration & Streetscape - 10					
Minnesota Avenue - from Denning Drive to Railroad Tracks (0.09Mi)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
104-10-3	SEDIMENT BARRIER	500.00	LF	\$ 3.00	\$ 1,500.00
104-11	FLOATING TURBIDITY BARRIER	4.73	LF	\$ 17.39	\$ 82.34
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	4.73	LF	\$ 7.67	\$ 36.32
104-15	SOIL TRACKING PREVENTION DEVICE	0.05	EA	\$ 4,570.14	\$ 216.39
104-18	INLET PROTECTION SYSTEM	1.23	EA	\$ 204.95	\$ 252.31
107-1	LITTER REMOVAL	0.06	AC	\$ 42.64	\$ 2.42
107-2	MOWING	0.06	AC	\$ 56.49	\$ 3.21
110-1-1	CLEARING & GRUBBING	0.33	AC	\$ 31,506.62	\$ 10,532.04
120-1	REGULAR EXCAVATION	458.33	CY	\$ 5.84	\$ 2,676.67
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	881.67	CY	\$ 31.00	\$ 27,331.67
526-1-1	Pavers, Architectual, Roadway	20.00	SY	\$ 120.85	\$ 2,417.00
160-4	TYPE B STABILIZATION	810.00	SY	\$ 9.61	\$ 7,784.10
285-709	OPTIONAL BASE,BASE GROUP 09	685.00	SY	\$ 31.65	\$ 21,680.25
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	888.89	SY	\$ 4.12	\$ 3,662.22
334-1-53	SUPERPAVE ASPH CONIC, TRAF C, PG76-22	146.67	TN	\$ 151.24	\$ 22,181.87
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	124.44	TN	\$ 164.67	\$ 20,492.29
425-1-351	INLETS, CURB, TYPE P-5,	1.70	EA	\$ 10,231.27	\$ 17,439.66
425-1-451	INLETS, CURB, TYPE J-5,	0.47	EA	\$ 15,367.32	\$ 7,276.19
425-1-521	INLETS, DT BOT, TYPE C,	0.24	EA	\$ 9,367.26	\$ 2,217.63
425-1-541	INLETS, DT BOT, TYPE D,	0.05	EA	\$ 7,752.68	\$ 367.08
425-2-41	MANHOLES, P-7,	0.24	EA	\$ 8,196.07	\$ 1,940.36
425-2-71	MANHOLES, J-7,	0.05	EA	\$ 17,255.74	\$ 817.03
430-175-112	PIPE CULV, OPT MATL, ROUND, 12"S/CD	91.67	LF	\$ 670.17	\$ 61,432.25
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	239.39	LF	\$ 309.73	\$ 74,147.48
430-175-154	PIPE CULV, OPT MATL, ROUND, 54"S/CD	9.47	LF	\$ 575.84	\$ 5,453.03
430-515-100	STRAIGHT CONC ENDW 15", SINGLE, 0 ROUND	0.05	EA	\$ 6,648.36	\$ 314.79
430-542-100	STRAIGHT CONC ENDW 42", SINGLE, 0 ROUND	0.05	EA	\$ 12,500.00	\$ 591.86
430-554-100	STRAIGHT CONC ENDW 54", SINGLE, 0 ROUND	0.05	EA	\$ 12,500.00	\$ 591.86
520-1-10	CONCRETE CURB & GUTTER, TYPE F	500.00	LF	\$ 48.88	\$ 24,440.00
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	277.78	SY	\$ 74.73	\$ 20,758.35
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	39.77	LF	\$ 36.89	\$ 1,467.22
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	0.05	EA	\$ 5,700.00	\$ 269.89
570-1-2	PERFORMANCE TURF, SOD	618.06	SY	\$ 4.72	\$ 2,917.22
630-2-11	CONDUIT, F&I, OPEN TRENCH	250.00	LF	\$ 15.83	\$ 3,957.50
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	49.62	LF	\$ 34.21	\$ 1,697.54
635-2-11	PULL & SPLICE BOX, F&I, 13" X 24"	1.66	EA	\$ 1,380.90	\$ 2,288.42
700-1-11	SINGLE POST SIGN, F&I GM,	0.85	AS	\$ 510.78	\$ 435.32
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 S F	0.09	AS	\$ 1,716.78	\$ 162.57
700-1-50	SINGLE POST SIGN, RELOCATE	0.09	AS	\$ 319.19	\$ 30.23
700-1-60	SINGLE POST SIGN, REMOVE	0.85	AS	\$ 53.25	\$ 45.38
700-2 14	MULTI- POST SIGN, F&I GM, 31-50 SF	0.09	AS	\$ 7,223.24	\$ 684.02
700-2-60	MULTI- POST SIGN, REMOVE	0.09	AS	\$ 950.11	\$ 89.97
706-1-3	RAISED PAVMT MARK, TYPE B	31.96	EA	\$ 4.43	\$ 141.58
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.19	GM	\$ 1,320.40	\$ 250.08
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.28	GM	\$ 725.79	\$ 206.19
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.09	GM	\$ 6,356.61	\$ 601.95
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.14	GM	\$ 2,159.14	\$ 306.70
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	913.07	LF	\$ 3.20	\$ 2,921.82
715-61-342	LIGHT POLE CMPLT,STD,F&I, 40'MH,12'ARM L	1.66	EA	\$ 9,167.66	\$ 15,192.62
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	1.66	EA	\$ 725.88	\$ 1,202.93
0104 10 3	SEDIMENT BARRIER	1134.00	LF	\$ 3.00	\$ 3,402.00

Minnesota Avenue - from Denning Way to Railroad Tracks (CONTINUED)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
0104 11	FLOATING TURBIDITY BARRIER	50.00	LF	\$ 17.39	\$ 869.50
0110 1 1	CLEARING & GRUBBING	1.10	AC	\$ 31,506.62	\$ 34,625.78
0120 1	REGULAR EXCAVATION	1450.00	CY	\$ 5.84	\$ 8,468.00
0120 6	EMBANKMENT	900.00	CY	\$ 11.07	\$ 9,963.00
0160 4	TYPE B STABILIZATION	3546.60	SY	\$ 9.61	\$ 34,082.83
0285709	OPTIONAL BASE,BASE GROUP 09	2528.00	SY	\$ 31.65	\$ 80,011.20
0327 70 6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	784.20	SY	\$ 3.32	\$ 2,603.54
0334 1 53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	177.13	TN	\$ 151.24	\$ 26,789.14
0337 7 83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	375.44	TN	\$ 164.67	\$ 61,823.70
0350 5	CLEANING & SEALING JOINTS - CONC PVMT	132.60	LF	\$ 7.04	\$ 933.50
0350 30 13	CONC PAVEMENT FOR ROUNDABOUT APRON, 12"	212.74	SY	\$ 100.00	\$ 21,273.65
0400 0 11	CONC CLASS NS, GRAVITY WALL	59.00	CY	\$ 1,329.82	\$ 78,459.38
0425 1311	INLETS, CURB, TYPE P-1, <10'	2.00	EA	\$ 15,381.19	\$ 30,762.38
0425 1351	INLETS, CURB, TYPE P-5, <10'	3.00	EA	\$ 10,231.27	\$ 30,693.81
0425 1361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	\$ 9,934.79	\$ 9,934.79
0425 1411	INLETS, CURB TYPE J-1, <10'	2.00	EA	\$ 29,952.06	\$ 59,904.12
0425 1531	INLETS, DT BOT, TYPE C MOD- BACK, <10'	1.00	EA	\$ 6,200.00	\$ 6,200.00
0425 1711	INLETS, GUTTER, TYPE V, <10'	1.00	EA	\$ 10,000.63	\$ 10,000.63
0425 1881	INLETS, BARRIER WALL, RIG, C&G, <=10'	2.00	EA	\$ 7,020.00	\$ 14,040.00
0425 2 61	MANHOLES, P-8, <10'	2.00	EA	\$ 9,655.70	\$ 19,311.40
0425 2 91	MANHOLES, J-8, <10'	2.00	EA	\$ 13,582.24	\$ 27,164.48
0430175115	PIPE CULV, OPT MATL, ROUND, 15"S/CD	8.00	LF	\$ 286.27	\$ 2,290.16
0430175118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	733.00	LF	\$ 121.25	\$ 88,876.25
0430175130	PIPE CULV, OPT MATL, ROUND, 30"S/CD	58.00	LF	\$ 328.54	\$ 19,055.32
0430175136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	106.00	LF	\$ 273.94	\$ 29,037.64
0430536100	STRAIGHT CONC ENDW 36", SINGLE, 0 ROUND	1.00	EA	\$ 8,500.00	\$ 8,500.00
0515 1 2	PIPE HANDRAIL - GUIDERAIL, ALUMINUM	176.00	LF	\$ 60.88	\$ 10,714.88
0520 1 7	CONCRETE CURB & GUTTER, TYPE E	480.01	LF	\$ 55.56	\$ 26,669.36
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	929.50	LF	\$ 48.88	\$ 45,433.96
0520 2 4	CONCRETE CURB, TYPE D	178.20	LF	\$ 46.20	\$ 8,232.84
0520 2 8	CONCRETE CURB, TYPE RA	263.10	LF	\$ 124.00	\$ 32,624.40
0520 5 11	TRAF SEP CONC-TYPE I, 4' WIDE	112.90	LF	\$ 84.35	\$ 9,523.12
0521 1 11	MEDIAN CONC BARRIER, 38" HEIGHT	105.30	LF	\$ 481.82	\$ 50,735.65
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	358.10	SY	\$ 99.92	\$ 35,781.35
0527 2	DETECTABLE WARNINGS	152.00	SF	\$ 38.74	\$ 5,888.48
0536 85 24	GUARDRAIL END TREATMENT- PARA APP TERM	1.00	EA	\$ 3,738.23	\$ 3,738.23
0570 1 2	PERFORMANCE TURF, SOD	1126.70	SY	\$ 4.72	\$ 5,318.02
0700 1 11	SINGLE POST SIGN, F&I GM, <12 SF	31.00	AS	\$ 510.78	\$ 15,834.18
0700 1 12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	\$ 1,716.78	\$ 3,433.56
0700 1 13	SINGLE POST SIGN, F&I GM, 21-30 SF	4.00	AS	\$ 2,173.28	\$ 8,693.12
0700 1 50	SINGLE POST SIGN, RELOCATE	2.00	AS	\$ 319.19	\$ 638.38
0700 1 60	SINGLE POST SIGN, REMOVE	14.00	AS	\$ 53.25	\$ 745.50
0700 2 50	MULTI- POST SIGN, RELOCATE	1.00	AS	\$ 6,826.84	\$ 6,826.84
0706 1 3	RAISED PAVEMENT MARKER, TYPE B	75.00	EA	\$ 4.43	\$ 332.25
0710 11290	PAINTED PAVT MARK,STD,YELLOW,ISLAND NOSE	88.60	SF	\$ 3.48	\$ 308.33
0710 90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1.00	LS	\$ 29,434.48	\$ 29,434.48
0711 11123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	96.60	LF	\$ 3.24	\$ 312.98
0711 11160	THERMOPLASTIC, STD, WHITE, MESSAGE	4.00	EA	\$ 179.27	\$ 717.08
0711 11224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	53.20	LF	\$ 5.33	\$ 283.56
0711 14125	THERMOPLASTIC, PREFORM, WHITE, SOLID,24"	120.70	LF	\$ 16.56	\$ 1,998.79
0711 14160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE	2.00	EA	\$ 254.27	\$ 508.54
0711 14170	THERMOPLASTIC, PREFORMED, WHITE, ARROW	2.00	EA	\$ 167.62	\$ 335.24
0711 16101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	0.36	GM	\$ 5,392.28	\$ 1,959.02
0711 16133	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 12"	0.05	GM	\$ 3,360.31	\$ 160.62
0711 16201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	0.37	GM	\$ 5,432.37	\$ 1,996.94
0630 2 11	CONDUIT, F&I, OPEN TRENCH	430.00	LF	\$ 15.83	\$ 6,806.90
0630 2 12	CONDUIT, F&I, DIRECTIONAL BORE	140.00	LF	\$ 34.21	\$ 4,789.40
0635 2 11	PULL & SPLICE BOX, F&I, 13" x 24"	9.00	EA	\$ 1,380.90	\$ 12,428.10
0639 1111	ELECTRICAL POWER SRV,F&I,OH,M,FURNISHED	1.00	AS	\$ 3,000.00	\$ 3,000.00
0639 2 1	ELECTRICAL SERVICE WIRE, F&I	50.00	LF	\$ 8.99	\$ 449.50
0641 2 11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	\$ 1,989.70	\$ 1,989.70
0715 1 11	LIGHTING CONDUCTORS,F&I,INSUL, NO.10 OR<	2694.00	LF	\$ 1.01	\$ 2,720.94

Minnesota Avenue - from Denning Way to Railroad Tracks (CONTINUED)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
0715 5 21	LUMINAIRE & BRACKET ARM, REPLACE L & ARM	5.00	EA	\$ 3,933.56	\$ 19,667.80
0715 5 51	LUMINAIRE & BRACKET ARM, REMOVE L & ARM	6.00	EA	\$ 401.29	\$ 2,407.74
0715 61311	LIGHT POLE COMPLETE, F&I, STANDARD POLE STANDARD FOUNDATION, 40' MOUNTING HEIGHT, 8' ARM LENGTH	5.00	EA	\$ 8,784.95	\$ 43,924.75
0715 62311	LIGHT POLE COMPLETE, F&I, STANDARD POLE STANDARD FOUNDATION, 40' MOUNTING HEIGHT, 10' ARM LENGTH	1.00	EA	\$ 12,852.20	\$ 12,852.20
0715500 11	POLE CABLE DIST SYS, ALT, CONVENTIONAL	6.00	EA	\$ 2,689.99	\$ 16,139.94
0630 2 11	CONDUIT, F&I, OPEN TRENCH	72.00	LF	\$ 15.83	\$ 1,139.76
0630 2 12	CONDUIT, F&I, DIRECTIONAL BORE	64.00	LF	\$ 34.21	\$ 2,189.44
0633 3 12	FIBER OPTIC CONN HDWR, SPLICE TRAY	1.00	EA	\$ 101.96	\$ 101.96
0633 3 16	FIBER OPTIC CONN HDWR, PATCH PANEL- FIE	1.00	EA	\$ 1,943.72	\$ 1,943.72
0635 2 11	PULL & SPLICE BOX, F&I, 13" x 24"	1.00	EA	\$ 1,380.90	\$ 1,380.90
0635 2 12	PULL & SPLICE BOX, F&I, 24" X 36"	3.00	EA	\$ 2,802.06	\$ 8,406.18
0639 1620	ELECTRICAL POWER SRV, REM UND	1.00	AS	\$ 836.61	\$ 836.61
0641 2 12	PREST CNC POLE, F&I, TYP P-II SRV POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
0646 1 60	ALUMINUM SIGNALS POLE, REMOVE	1.00	EA	\$ 375.29	\$ 375.29
0646 2115	ALUMINUM POLE- INDEX 695-001, F&I, 15'	2.00	EA	\$ 4,200.00	\$ 8,400.00
0649 26 5	STEEL MAST ARM ASSEMBLY, REMOVE	1.00	EA	\$ 13,678.38	\$ 13,678.38
0670 5600	TRAF CNTL ASSEM, REMOVE	2.00	AS	\$ 1,147.43	\$ 2,294.86
0676 3 10	SMALL EQUIPMENT ENCLOSURE, F&I, >10X13X11	1.00	EA	\$ 1,759.76	\$ 1,759.76
0682 1133	ITS CCTV CAMERA, F&I, DOME ENCL-NP.	1.00	EA	\$ 6,737.47	\$ 6,737.47
0684 1 1	MANAGED FIELD ETHERNET SWITCH, F&I	1.00	EA	\$ 4,501.80	\$ 4,501.80
0633 6	FIBER OPTIC CABLE LOCATOR	1.00	DA	\$ 255.41	\$ 255.41

Segments Construction Sub-Totals	\$ 373,507.80
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Mobilization (10%)	\$ 37,350.78
Maintenance of Traffic (10%)	\$ 37,350.78
Project Unknowns (25%)	\$ 112,052.34

Project Construction Total	\$ 560,261.71
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Final Design / Engineering (25%)	\$ 140,065.43
Construction Engineering Inspection (CEI) (15%)	\$ 84,039.26

GRAND TOTAL	\$ 784,366.39
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 941,239.67
5 years Estimated Project Cost	1.5	\$ 1,176,549.58

NOTES:

1. This opinion of probable cost is based solely on conceptual level analysis and typical scopes of work for similar projects. Actual construction costs may vary significantly based on project specifics determined during the final design process and the market conditions at the time of bidding.
2. Pay items and unit prices are based on 6-month historical average costs published by FDOT for the local region, Orange County historical average costs, and engineering judgement.
3. This opinion of probable cost does not include costs associated with right-of-way acquisition, easements, reimbursable utility relocation costs, permitting fees, or any costs associated with environmental or species mitigation requirements.
4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

Roadway Reconfiguration & Streetscape - 11					
Fairbanks Avenue at Denning Drive					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
110-1-1	CLEARING & GRUBBING	1.72	AC	\$ 31,506.62	\$ 54,191.39
120-1	REGULAR EXCAVATION	902.46	CY	\$ 5.84	\$ 5,270.37
160-4	TYPE B STABILIZATION	1353.69	SY	\$ 9.61	\$ 13,008.96
285-709	OPTIONAL BASE,BASE GROUP 09	1353.69	SY	\$ 31.65	\$ 42,844.29
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	4879.48	SY	\$ 4.12	\$ 20,103.46
334-1-53	SUPERPAVE ASPH CONIC, TRAF C, PG76-22	402.56	TN	\$ 151.24	\$ 60,883.17
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	402.56	TN	\$ 164.67	\$ 66,289.56
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1049.00	LF	\$ 48.88	\$ 51,275.12
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	541.42	SY	\$ 74.73	\$ 40,460.32
630-2-11	CONDUIT, F&I, OPEN TRENCH	40.00	LF	\$ 15.83	\$ 633.20
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	40.00	LF	\$ 34.21	\$ 1,368.40
635-2-11	PULL & SPLICE BOX, F&I, 13" X 24"	15.00	EA	\$ 1,380.90	\$ 20,713.50
700-1-11	SINGLE POST SIGN, F&I GM,	5.00	AS	\$ 510.78	\$ 2,553.90
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 S F	5.00	AS	\$ 1,716.78	\$ 8,583.90
700-1-50	SINGLE POST SIGN, RELOCATE	5.00	AS	\$ 319.19	\$ 1,595.95
700-1-60	SINGLE POST SIGN, REMOVE	5.00	AS	\$ 53.25	\$ 266.25
700-2 14	MULTI- POST SIGN, F&I GM, 31-50 SF	5.00	AS	\$ 7,223.24	\$ 36,116.20
700-2-60	MULTI- POST SIGN, REMOVE	5.00	AS	\$ 950.11	\$ 4,750.55
706-1-3	RAISED PAVMT MARK, TYPE B	5.00	EA	\$ 4.43	\$ 22.15
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	10.00	GM	\$ 1,320.40	\$ 13,204.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	10.00	GM	\$ 725.79	\$ 7,257.90
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	10.00	GM	\$ 6,356.61	\$ 63,566.10
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	10.00	GM	\$ 2,159.14	\$ 21,591.40
715-61-342	LIGHT POLE CMPLT,STD,F&I, 40'MH,12'ARM L	2.00	EA	\$ 9,167.66	\$ 18,335.32
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00	EA	\$ 725.88	\$ 1,451.76
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	810.00	LF	\$ 15.83	\$ 12,822.30
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	633.00	LF	\$ 34.21	\$ 21,654.93
630-2-14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	8.00	LF	\$ 45.20	\$ 361.60
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	1.00	PI	\$ 9,209.38	\$ 9,209.38
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND,2-12 FIBERS	18.00	LF	\$ 4.07	\$ 73.26
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND,13-48 FIBERS	1317.40	LF	\$ 3.28	\$ 4,321.07
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	4.00	EA	\$ 53.84	\$ 215.36
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	1.00	EA	\$ 1,509.12	\$ 1,509.12
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	1.00	EA	\$ 101.96	\$ 101.96
633-3-15	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	1.00	EA	\$ 1,640.60	\$ 1,640.60
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	782.80	LF	\$ 87.20	\$ 68,260.16
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	4.80	EA	\$ 2,802.06	\$ 13,449.89
635-2-13	PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE	1.00	EA	\$ 5,589.94	\$ 5,589.94
635-2-14	PULL & SPLICE BOX, F&I, 17" X 30" COVER SIZE	1.80	EA	\$ 1,714.65	\$ 3,086.37
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND	1.00	AS	\$ 4,640.41	\$ 4,640.41
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	20.00	LF	\$ 8.99	\$ 179.80
639-4-6	EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY	1.00	EA	\$ 10,450.00	\$ 10,450.00
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	1.00	EA	\$ 2,224.20	\$ 2,224.20
641-2-13	PRESTRESSED CONCRETE POLE, F&I, TYPE P-III	0.80	EA	\$ 10,339.55	\$ 8,271.64
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$ 2,665.22	\$ 10,660.88
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	1.00	EA	\$ 67,914.18	\$ 67,914.18
649-21-6	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'	1.00	EA	\$ 73,953.74	\$ 73,953.74
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	8.00	EA	\$ 1,664.67	\$ 13,317.36
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	4.00	EA	\$ 2,047.93	\$ 8,191.72
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	EA	\$ 979.46	\$ 3,917.84
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	0.60	EA	\$ 6,750.20	\$ 4,050.12
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL	4.00	EA	\$ 13,003.79	\$ 52,015.16
665-1-12	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE	4.00	EA	\$ 2,182.10	\$ 8,728.40
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	1.00	AS	\$ 45,695.48	\$ 45,695.48
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	1.00	EA	\$ 7,787.02	\$ 7,787.02
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	1.00	EA	\$ 4,501.80	\$ 4,501.80

Fairbanks Avenue at Denning Avenue (CONTINUED)					
Pay Item Number	Description	Quantity	Unit of Measure	Unit Price	Cost
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL	1.00	EA	\$ 9,761.21	\$ 9,761.21
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	4.00	EA	\$ 957.16	\$ 3,828.64
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	4.00	EA	\$ 4,942.88	\$ 19,771.52
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.20	GM	\$ 1,320.40	\$ 264.08
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.30	GM	\$ 725.79	\$ 217.74
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	183.00	LF	\$ 3.24	\$ 592.92
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	24.00	LF	\$ 6.62	\$ 158.88
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	2.00	EA	\$ 179.27	\$ 358.54
711-11-170	THERMOPLASTIC, STANDARD, WHITE, ARROW	4.00	EA	\$ 90.11	\$ 360.44
711-14-125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	168.00	LF	\$ 16.56	\$ 2,782.08
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.10	GM	\$ 6,356.61	\$ 635.66
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.15	GM	\$ 2,159.14	\$ 323.87

Segments Construction Sub-Totals	\$ 556,337.11
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Mobilization (10%)	\$ 55,633.71
Maintenance of Traffic (10%)	\$ 55,633.71
Project Unknowns (25%)	\$ 166,901.13

Project Construction Total	\$ 834,505.66
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Final Design / Engineering (25%)	\$ 208,626.41
Construction Engineering Inspection (CEI) (15%)	\$ 125,175.85

GRAND TOTAL	\$ 1,168,307.92
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Inflation-Adjusted Estimate	Inflation Factor	Adjusted Cost
2 years Estimated Project Cost	1.2	\$ 1,401,969.51
5 years Estimated Project Cost	1.5	\$ 1,752,461.88

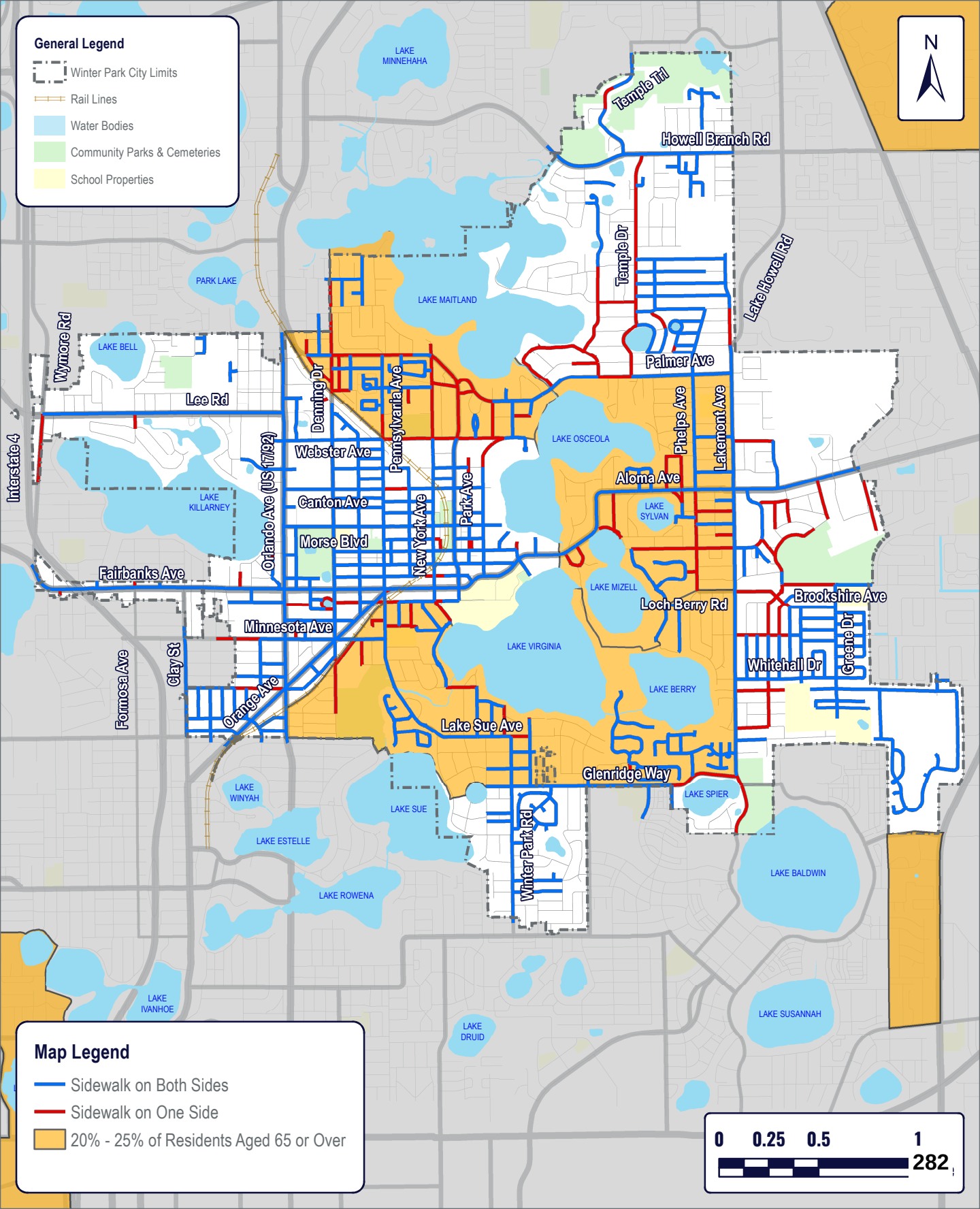
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4. Due to current conditions in the construction industry, we have used inflation factors higher than the FDOT work program factors to account for some of the uncertainty.

General Legend

- Winter Park City Limits
- Rail Lines
- Water Bodies
- Community Parks & Cemeteries
- School Properties

N



Map Legend

- Sidewalk on Both Sides
- Sidewalk on One Side
- 20% - 25% of Residents Aged 65 or Over

