Existing Conditions Technical Memorandum

Ocoee-Apopka Road Corridor Study

Harmon Road to South Hawthorne Avenue

Prepared for:

City of Apopka

Prepared by:
Vanasse Hangen Brustlin, Inc.
225 East Robinson Street, Suite 300
Orlando, FL 32801

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1. Introduction

The City of Apopka is conducting a corridor study on Ocoee-Apopka Road, County Road (CR) 437A, from Harmon Road to South Hawthorne Avenue. This study is being conducted in a public-private partnership in accordance with the approved planned development agreement “the Ridge”. This study is in partnership with Orange County.

Ocoee-Apopka Road is a key roadway within the City of Apopka, providing connection to State Road (SR) 429 and Keene Road to the south, and Hawthorne Avenue, Park Avenue, and the Apopka Downtown District to the north. Ocoee-Apopka Road currently serves several types of users including emergency responders (AdventHealth Apopka and Fire Station #6), residential (Emerson Park community), and distribution trucks. As the area continues to grow, the need to provide adequate facilities for the various users is integral to the safety and travel service for the surrounding community. This section of Ocoee-Apopka Road is owned and maintained by Orange County.

The study corridor location map is shown in Figure 1.

1.1. Study Objective

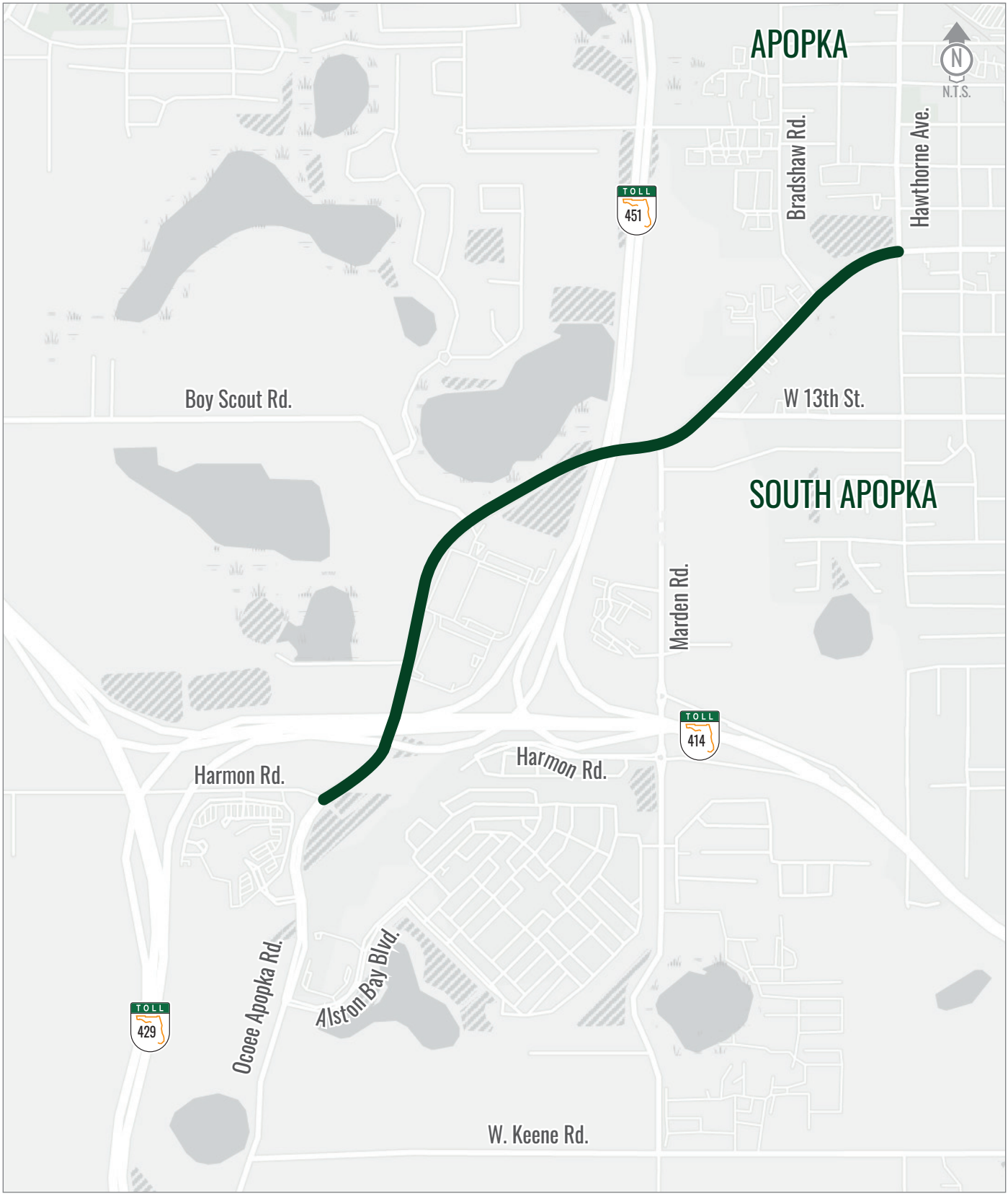
The objective of this study is to widen Ocoee-Apopka Road from two to four lanes to provide additional roadway capacity for the needs of existing and future users of the study corridor.

This corridor study will include an existing and future conditions analysis; alternatives development and analysis; right-of-way (ROW) surveying and mapping; and a recommended improvement concept and evaluation.

Ocoee-Apopka Road is an urban major collector serving local, regional, and national trips. It is one of the two main roads providing access to Downtown Apopka from Ocoee.

The primary goals of this study include the following:

- Improve safety
- Improve access management
- Increase roadway capacity for auto vehicles
- Accommodate future development
- Provide a complete street for the existing and future users (including bicyclists/pedestrians)
- Identify ROW needs while minimizing acquisition, where possible



Corridor Study - Harmon Rd. to Bradshaw Rd.

Figure 1

Ocoee Apopka Road Corridor Study
Location Map

2. Planned and Ongoing Projects

To understand which relevant projects are planned and programmed in the area, the study team reviewed the following documents:

- MetroPlan Orlando 2045 Metropolitan Transportation Plan (MTP) (Revised 03/09/2022)
- MetroPlan Orlando Transportation Improvement Plan (TIP) 2021/22-2025/26 (Revised 02/09/2022)
    - MetroPlan Orlando Prioritized Project List (PPL): 2026/27 – 2034/35 (Adopted 07/07/2021)
- FDOT District 5 Work Program (2021-25) (Adopted 07/01/2021)
- Central Florida Expressway Authority 2040 Master Plan
- Central Florida Expressway Authority Five Year Work Plan FY 2022-2026
- Orange County Comprehensive Plan: 2030 (Transportation Element)
- Orange County Trails Master Plan
- City of Apopka Trails Mater Plan

Relevant pages from the above planning documents are included in Appendix A.

2.1. MetroPlan Orlando 2045 MTP

Ten projects relating to the study corridor are included in the MetroPlan Orlando 2045 Metropolitan Transportation Plan (MTP). The ten projects are summarized in Table 1.

Table 1| MetroPlan Orlando 2045 MTP Programmed Projects Summary

Project Name	Project #	Limits	Length (miles)	Total Cost (2020 $'s Millions)	Phases	Funding Status
Ocoee-Apopka Road and Marden Road Operational / Safety	7315	Ocoee-Apopka Road at Marden Road	0.12	0.57	PE, ROW, ENV, CST, CEI	Funded (public-private partnership – currently in design)*
Ocoee-Apopka Road and Harmon Road Operational / Safety	7304	Ocoee-Apopka Road at Harmon Road	0.12	0.57	PE, ROW, ENV, CST, CEI	Funded (construction to begin 2022)*
West Michael Gladden Boulevard /Ocoee-Apopka Road (CR 437A) Safety Improvements	7302	West Michael Gladden Boulevard/Ocoee-Apopka Road from Park Ave to McCormick Road	4.31	10.79	PE, ROW, ENV, CST, CEI	Unfunded
Harmon Road Extension New 4 Lane Roadway	7571	Harmon Road from Ocoee-Apopka Road to Existing Harmon Road	0.35	5.47	PD&E, PE, ROW, ENV, CST, CEI	Funded (construction to begin 2022)*
Ocoee-Apopka Road Widen from 2 to 4 Lanes *(this project)*	7544	Ocoee-Apopka Road from Harmon Road to South Bradshaw Road	1.54	17.37	PD&E, PE, ROW, ENV, CST, CEI	Unfunded
West Michael Gladden Boulevard Complete Streets	4007	West Michael Gladden Boulevard from South Park Ave to South Bradshaw Road	0.70	1.54	PD&E, PE, ENV	Plan Period I (2026-2030)
				3.08	CST, CEI	Plan Period II (2031-2035)
				2.20	Local	Unfunded
West Michael Gladden Boulevard Operational / Safety	7467	West Michael Gladden Boulevard from South Bradshaw Road to South Central Avenue	0.57	2.72	PE, ROW, ENV, CST, CEI	Unfunded
Ocoee-Apopka Road and Keene Road Operational / Safety	7314	Ocoee-Apopka Road at Keene Road	0.12	0.57	PE, ROW, ENV, CST, CEI	Funded (public-private partnership – currently in design)*

Project Name	Project #	Limits	Length (miles)	Total Cost (2020 $'s Millions)	Phases	Funding Status
South Bradshaw Road ITS / Technology	3095	South Bradshaw Road from West Michael Gladden Boulevard to West Main Street	0.97	1.02	PE, CST, CEI	Unfunded
South Park Ave / Clarcona Road Complete Streets	4006	South Park Avenue from US 441 to Cleveland Street	1.27	2.79	PD&E, PE, ENV	Plan Period I (2026-2030)
				5.571	CST, CEI	Plan Period II (2031-2035)

PD&E = Project Development & Environmental; PE = Project Engineering; ROW = Right-of-Way; ENV = Environment; CST = Construction; CEI = Construction Engineering and Inspection; *Project update not included in MPO 2045 MTP

2.1.1. Freight Service

This section of Ocoee-Apopka Road is defined as a Freight Distribution Route within the Regional Freight Network by the MetroPlan Orlando's MTP Technical Series #4 *Existing Conditions & Area Profile*. South Bradshaw Road which intersects Ocoee-Apopka Road within the study limits is defined as a Freight Activity Center Street in the same report. The Regional Freight Network map taken from the MPO Online Data Viewer is included in Appendix A.

2.2. MetroPlan Orlando TIP FY 2021/22 – 2025/26

There are no projects relating to the study corridor included in the MetroPlan Orlando Transportation Improvement Program.

2.3. MetroPlan Orlando PPL FY 2026/27 – 2034/35

Twp projects relating to the study corridor were identified in the MetroPlan Orlando Project Priority List. A summary of the projects is included in Table 2.

Table 2| MetroPlan Orlando PPL 2026/27 – 2034/35 Projects Summary

Segment #	Roadway	Phases Funded	Priority Phase & Amount	Remaining Phases & Cost	Project Type	TPM Score	Priority Ranking
20109	**West Michael Gladden Boulevard** From South Park Avenue to South Bradshaw Road	PD&E	PE - $130,000	ROW, CST - $5,380,000	Complete Streets	2.717	#6 (Multimodal Complete Streets Safety – TMA Funded)
20101	**S Park Avenue / Clarcona Road** From US 441 / Main Street to Cleveland Street	N/A	PD&E - $490,000	PE, ROW, CST - $7,320,000	Complete Streets	2.613	#7 (Multimodal Complete Streets Safety – TMA Funded)

Note: These projects are anticipated for programming with MetroPlan Orlando TMA funds by Fiscal Year

2.4. FDOT Fiscal Year 2021/22-2025/26 Work Program

No programmed projects were found within the adopted or tentative FDOT 5-Year Work program.

2.5. Central Florida Expressway Authority 2040 Master Plan

One project relating to this corridor was identified in the Central Florida Expressway Authority (CFX) 2040 Master Plan and is summarized in Table 3.

Table 3| Central Florida Expressway Authority 2040 Master Plan Projects Summary

Project	Description	Estimated Total Cost
SR 429 From: SR 50 – To: SR 414	Widen to 6 Lanes	$175,000,000

2.6. Central Florida Expressway Authority Five Year Work Plan

One project near this corridor was identified in the CFX Five-Year Work Plan as shown in Table 4. One milling and resurfacing project along SR 451 is also reported as shown in Table 5.

Table 4| Central Florida Expressway Authority Five Year Work Plan Projects Summary

Project Number	Project	Work Description	Total Project Cost	Funded Phases	Funding Years
429-153	**SR 429** From: West Road – To: SR 414	Add Lanes Milling and Resurfacing	$124,680,000	Bidding, Construction, Partial Landscaping	2022 - 2025

Table 5| Central Florida expressway Authority Five Year Work Plan Resurfacing Project

Project Number	Project	Work Description	Total Project Cost	Funded Phases	Funding Years
451-767	**SR 451 Resurfacing** From: SR 414 – To: US 441	Mill & Resurface	$5,705,000	Design, Construction	2022-2023

2.7. Orange County Comprehensive Plan – Transportation Element

The Transportation Element of the 2030 Orange County Comprehensive Plan includes the Orange County Long Range Transportation Plan (LRTP) as Map 1, showing all planned and programmed county and state roadway projects; no projects are shown either within the study area or in its immediate vicinity. The LRTP Map is included in Appendix A.

Map 3B "Future Significant Pedestrian Facilities," of the Comprehensive Plan anticipates West 13th Street and Marden Road to contain significant pedestrian facilities in the future. The area to the east of the corridor is shown to contain the highest density of future significant pedestrian facilities within the limits of Orange County. The Future Significant Pedestrian Facilities map is included in Appendix A.

The following 'Goals, Objectives, and Policies' are specifically related to this project & study:

- **Goal T1:** A safe, accessible, convenient, efficient, and financially feasible multimodal transportation system which minimizes environmental impacts.
    - **Policy T1.1.5:** The County shall consider commercial vehicles, including buses and trucks with six or more tires, in the planning and design of the County's transportation system's capacity and operations to ensure freight mobility and efficiency.

- **Policy T1.3.12:** Based on annexation activity or other factors, the County shall coordinate with municipalities to pursue the appropriate jurisdictional transfer of roadways and associated drainage facilities to municipalities, consistent with Ch. 335, Florida Statutes, and relevant Joint Planning Area Agreements and/or developer's agreements, as applicable
- **Policy T1.3.2:** To ensure the Capital Improvements Program is responsive to transportation demands, priority for funding County transportation improvement projects shall be based on factors such as:
  - Safety for all users
  - Capacity or level of service deficiency
  - Right-of-Way availability/preservation
  - Partnership potential
  - Consistency with the Comprehensive Plan and coordination with Metro-Plan Orlando's Long Range Transportation Plan and Transportation Improvement Program and the Florida Department of Transportation's adopted work program
  - The use of alternative transit and non-motorized modes of transportation
  - Location is within the County's Urban Service Area, especially within the Alternative Mobility Areas and County-designated Activity Centers
  - Congestion relief on backlogged facilities to the extent possible
  - Optimal use of existing facilities
  - Support for emergency evacuation, response, and/or post-disaster recovery

- **Goal T2:** A concurrency management system and mobility strategy which ensures that the transportation facilities and services needed to support land use designations established in the Future Land Use Element are available.
  - **Objective T2.1:** The County will continue to ensure minimum level of service standards on County roads and State roads within unincorporated Orange County.

2.8. Orange County Trails Master Plan

The current Orange County Trails Master Plan (adopted in August 2012) does not include any planned trails near the study corridor. The Draft Orange County Trails Master Plan (dated May 2021) includes the proposed Lake Apopka Connector Trail which, at a distance approximately one mile south of the project limits, runs along Ocoee-Apopka Road. The Lake Apopka Connector Trail infographic from the Draft Orange County Trails Master Plan is included in Appendix A.

2.9. City of Apopka Trail Master Plan

The City of Apopka Trail Master Plan will connect the residents of Apopka with parks, community centers, conservation areas, the airport, the Superstop Bus Terminal, and more while tying the city into the network of trails within the Orange County trail system. The Ocoee-Apopka Connector Trail is expected within the study limits to run along the Ocoee-Apopka Road bridging into key intersections such as Harmon Road, Marden Road, and South Hawthorne Avenue where this trail is expected to continue. This trail will connect the study corridor to 16 out of the 25 centers and services listed in the City of Apopka Trails Master Plan Map in a two-mile radius. The City of Apopka Trails Master Plan maps are included in Appendix A.

2.10. Planning Consistency

Ocoee-Apopka Road from Harmon Road to South Bradshaw Road is to be widened from two to four lanes in the revised MPO MTP 2045 (March 2022), Project #7544, however, it is unfunded. The following study intersections are listed in the MTP for safety and operational improvements and are also both unfunded:

- #7315, Ocoee-Apopka Road at Marden Road
- #7304, Ocoee-Apopka Road at Harmon Road

Ocoee-Apopka Road from South Bradshaw Road to South Hawthorne Avenue is within the limit of the MPO MTP Project #4007 which is listed in Plan Period I & II for Complete Streets.

Overall Ocoee-Apopka Road from Harmon Road to South Hawthorne Avenue is fully within the limits of the MPO Project #7302 for safety improvements which is unfunded in the MPO MTP 2045 Revision.

This project is part of the Planned Development Agreement with the City of Apopka, known as "The Ridge," the Developer of the property has agreed to perform this preliminary design study in exchange for impact fee credits.

2.11. Related Studies & Ongoing Projects

Developments

There will be a natural grocer and other retail facilities built on the northeast side of the West Keene Road and Ocoee-Apopka Road intersection.

Orange County Drainage Studies

A study completed in 2004 by Orange County was conducted to consider improvements to correct drainage related issues along Ocoee-Apopka Road from West 13th Street to South Hawthorne Avenue. The recommendation of the study was to purchase property within the area to provide offsite stormwater capacity for the area.

A second study was conducted by Orange County in 2021 to address flooding concerns submitted by property owners along Ocoee-Apopka Road from West 13th Street to South Hawthorne Avenue. The recommendation of the study was to construct curb, gutter, and inlets along the south side of Ocoee-Apopka Road from South Hawthorne Avenue to just west of South Bradshaw Road. This design intends to capture run-off within the County-owned right of way and convey the water southwest within the existing County drainage infrastructure along Ocoee-Apopka Road. This drainage study evaluated Ocoee-Apopka Road as the existing two-lane facility.

Transportation

Other planned transportation improvements in the vicinity of the study corridor include:

- **Marden Road Intersection**
  - The City of Apopka is constructing a traffic signal at the intersection of Marden Road and Ocoee-Apopka Road. The project is being conducted in a public-private partnership with the development community. The project is currently in the design phase and anticipates to begin construction in early 2023.
- **Harmon Road Extension**
  - The City of Apopka is constructing the Harmon Road Extension to connect the existing Harmon Road east of Ocoee-Apopka Road to the existing Harmon Road and Ocoee-Apopka Road intersection. Design is completed and construction is expected to begin in summer of 2022.
- **Ocoee-Apopka Road Widening from West Keene Road to Alston Bay Boulevard**
  - The City of Apopka will be widening Ocoee-Apopka Road from West Keene Road to Alston Bay Boulevard which is around a half mile south of the study corridor.

- **Keene Road Intersection**
    - The City of Apopka plans to install a traffic signal at the intersection of Keene Road and Ocoee-Apopka Road. The project is being conducted in a public-private partnership with the development community.
- **CFX from SR 429 to Binion Road**
    - CFX recently conducted a feasibility study for providing access to SR 429 from Binion Road and found the project feasible. The Project Development & Environment Study phase began in 2022 and is expected to be completed in late 2022. Future phases of the project are anticipated to be included in the upcoming CFX Five-Year Work Program, FY 2023 – 2027, which is scheduled to be approved in May 2022.
- **Bronson Property "The Ridge"**
    - As part of this development, a new roadway will be introduced on the north side of Ocoee-Apopka Road in between the SR 414 overpass and Boy Scout Road. This roadway will bisect the Bronson property and connect to another proposed roadway which originates from Boy Scout Road.

3. Land Use and Development Patterns

3.1. Development Patterns

Development patterns were determined based on the existing and future land uses surrounding the study corridor. Existing land use data was gathered from GeoPlan Florida's Generalized Land Use Data for Florida (2018) and future land use data was provided by Orange County and the City of Apopka. Development in the area is expected to be primarily industrial with commercial development surrounding Boy Scout Road and a commercial development just north of Harmon Road.

Planned Developments

The need for this study arose from several planned developments anticipated within the area. The planned developments located within one mile of the study corridor are summarized in Table 6. A map showing the development locations is included in Appendix B.

Table 6| Development Project Summary

Development Name	Location	Type/Description	Acreage	Dwelling Units (DU) / Non-Residential Sq. Ft.
Summer House Apartments	On Marden Road south of Ocoee-Apopka Road	Site Plan – Multi-Family Apartments	16.08	264 DU
Lake Gem Commerce Center	On Marshall Lake Road west of Bradshaw Road	Subdivision Plan – Industrial Park	29	697,831 sq. ft.
Ivy Trails	At the South Binion Road and Lust Road intersection	Subdivision Plan – Single Family Subdivision	30.94	67 DU
Harmon on the Lake	On Binion Road north of Harmon Road	Site Plan - Multifamily Apts.	12.73	180 DU
The Ridge	West side of Ocoee-Apopka Road, north and south of Boy Scout Road to South Binion Road	Master Plan – 678 MF Units/643 TH and/or SF units	366	1,321 DU & 1,875,000 sq. ft.
Binion Reserve	On Binion Road north of Boy Scout Road	Subdivision Plan – Single Family Subdivision	21.36	44 DU
Faircloth Lakes	On Marshall Lake Road west of Bradshaw Road	Subdivision Plan – Single Family Subdivision	25	31 DU
Apex Apopka	On South Binion Road north of Harmon Road	Site Plan – Multi-Family Apartments	18.98	285 DU
Magnolia Terrace	On South Binion Road north of Harmon Road	Master Plan – 176 Townhomes/124 SF Homes	81.18	300 DU
Harmon Center	East side of Ocoee-Apopka Road north of Harmon Road	Site Plan – Commercial Center	2.93	24,990 sq. ft.
Emerson Point	On Marden Road south of Ocoee-Apopka Road	Master Plan – 128 Townhomes, 97 SF Homes	69.65	225 DU
Northstar	West side of Ocoee-Apopka Road, at Marden Road intersection	Site Plan – Warehouse	55.19	761,240 sq. ft.
Ocoee-Apopka Road Multifamily	West side of Ocoee-Apopka Road south of Harmon Road	Master Plan – Multifamily Apts.	21.56	304 DU
Marden Road Track & Field	On Marden Road south of Ocoee-Apopka Road	Site Plan – Track & Field	2.44	0

Source: City of Apopka Developments Map

3.2. Land Use and Context Classification

Existing Land Use

The existing land uses within 500 feet of the study corridor are summarized in Table 7 and illustrated in Figure 2.

Table 7| Generalized Existing Land Use

General Land Use	Acres (within 500 feet)	Percent Total
Vacant Nonresidential	68.96	38.49%
Industrial	51.81	28.92%
Agricultural	23.55	13.14%
Residential	15.63	8.72%
Utilities, Right of Way, Other	7.50	4.18%
Governmental	5.66	3.16%
Institutional	3.69	2.06%
Vacant Residential	1.07	0.60%
Recreational	0.598	0.33%
Commercial	0.71	0.40%
Total	179.178	100%

Source: GeoPlan Florida's Generalized Land Use Data for Florida (2020).

Future Land Use

The projected future land uses within 500 feet of the study corridor are summarized in Table 8 and illustrated in Figure 3.

Table 8| Future Land Use

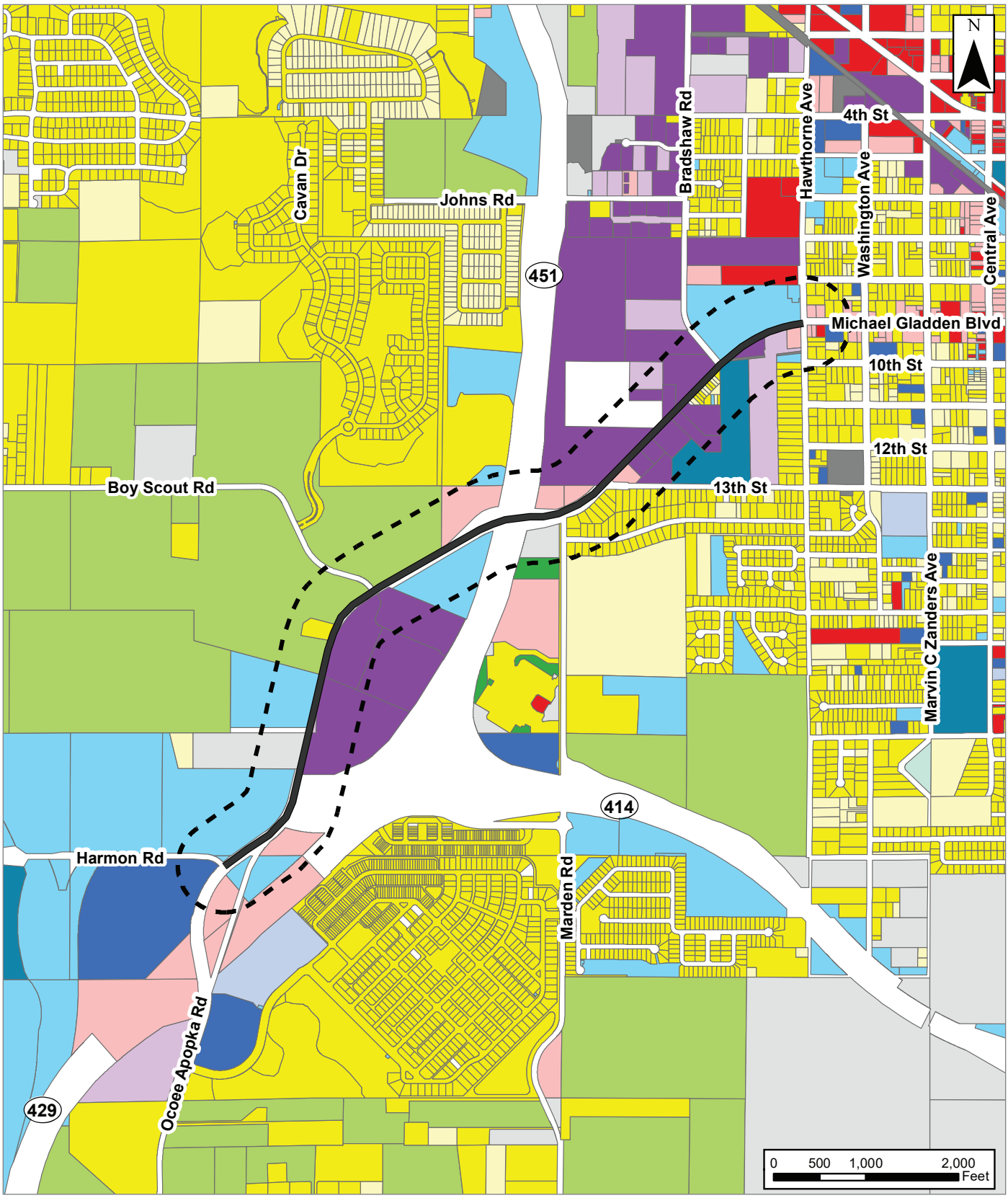
Future Land Use	Acres (within 300 feet)	Percent Total
Industrial	65.12	34.31%
Mixed Use	55.19	29.07%
Residential	25.37	13.37%
Commercial	33.15	17.46%
Rural	10.99	5.79%
Total	189.82	100%

Source: Orange County, City of Apopka

The discrepancy in the total acreage for existing and future land uses is due to slight differences in mapping the land uses by the different agencies. Comparing the land uses shown in Table 7 and Table 8, there is an expectation that many of the agricultural and vacant lands will be converted to industrial properties. Industrial lands are expected to expand from their current locations with considerable consolidation occurring in the north, while the more rural undeveloped lands in the middle and south become habitable and income generating mixed-use commercial and residential properties as shown in Figure 3. The future land use shows an expected mixed-use property along the north side of Ocoee-Apopka Road between South Bradshaw Road and South Hawthorne Avenue and on either side of Ocoee-Apopka after crossing Hawthorne Avenue, commercial developments fronting the corridor just outside of the study area.

Zoning

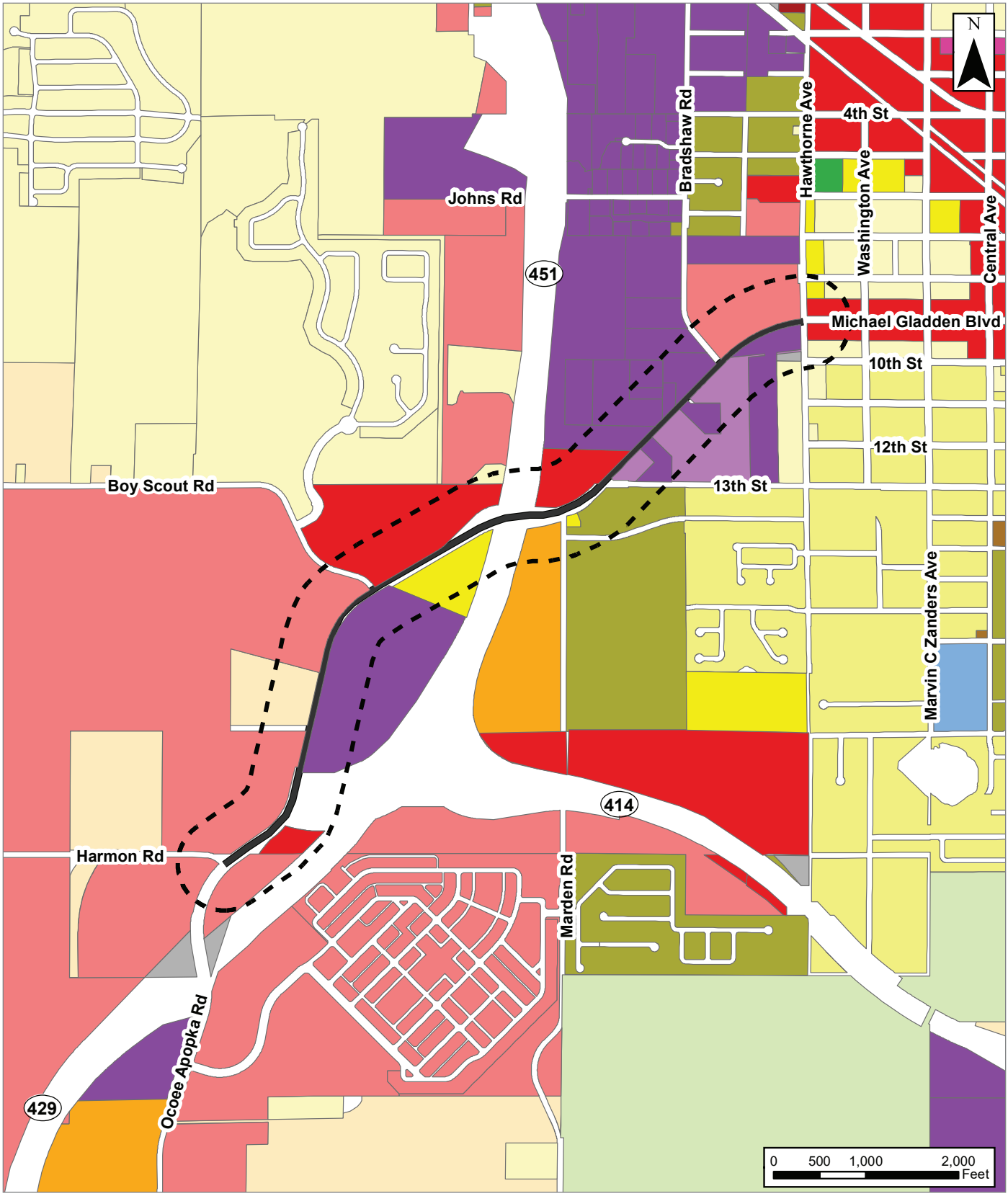
The City of Apopka's zoning records, provided in Appendix C, shows the corridor as primarily Light Industrial with a mixture of Planned Development, Residential Multi-Family, Community Commercial, & Transitional. Orange County has jurisdiction over some zoning along the corridor as well with zoning codes A-1, Citrus Rural District; R-1, Single-Family Dwelling District; R-3, Multiple-Family Dwelling District; and C-3, Wholesale Commercial District being found along the corridor primarily north of Marden Road. Ocoee-Apopka Road from South Bradshaw Road to South Hawthorne Avenue is zoned as Mixed-Use East Shore-Gateway Subdistrict. The subdistrict allows for a range of uses including multi-family, retail, light industrial, gas stations, and large-scale retailers when outparcels frame the street.



- Residential
- Commercial
- Industrial
- Institutional
- Governmental
- Agricultural
- Recreational
- Utilities, Rights-of-Way
- Vacant Residential
- Vacant Commercial
- Vacant Industrial
- Vacant Institutional
- Vacant Governmental
- Rivers and Lakes
- Other
- Study Area - 500' Buffer

Figure 2

Ocoee Apopka Road Corridor Study
Existing Land Use



Apopka FLU

- Residential High Density
- Residential Medium Density
- Residential Low Density
- Commercial
- Mixed Use
- Industrial
- Office
- Agriculture
- Parks and Recreation
- In Progress

Orange County FLU

- Commercial
- Industrial
- Institutional
- Rural
- Low Density Residential
- Low Medium Density Residential
- Medium Density Residential
- Study Area - 500' Buffer

Figure 3

Ocoee Apopka Road Corridor Study
Future Land Use

Context Classification

The first step to defining the design criteria for a roadway is to determine the context classification. The FDOT Context Classification (February 2022) guidebook provides detailed criteria to determine the context classification along state roadways. The City of Apopka has elected to incorporate this design criteria in their local roadway network.

The preliminary context classification determined by the FDOT Roadway Characteristics Inventory (RCI) for this corridor is C2-Rural; however, though the methods and guidelines in the *FDOT Context Classification Guide* the study team has assigned context classification based on planned projects and developments. The corridor from Harmon Road to Boy Scout Road is recommended for classification as C3C – Suburban Commercial; from Boy Scout Road to West 13th Street as C3R – Suburban Residential; and from West 13th Street to South Hawthorne Avenue as C3C – Suburban Commercial.

Table 9 provides details supporting the context classification recommendations for the study corridor.

Table 9| Context Classification Analysis

Segment Limits	Distinguishing Features	Future Land Use	Building Height (Stories)	Intersections per Square Mile	Predominant Future Land Use Along Roadway	Recommended Context Classification
From: Harmon Road To: Boy Scout Road	Rural, open road with large warehouses to the east, planned non-fronting planned development to the west	Mixed Use non-fronting (Residential/ Commercial), Industrial	1 to 2	20 – 100	Non-Residential	C3C – Suburban Commercial
From: Boy Scout Road To: West 13th Street	Rural road, short corridor with multifamily zoning and single-family homes at the north	Residential, Commercial	1 to 2	20 - 100	Residential	C3R – Suburban Residential
From: West 13th Street To: South Hawthorne Avenue	Mostly nonresidential uses with large building footprints with large parking lots	Industrial, Multi Use	1 to 2	20-100	Non-Residential	C3C – Suburban Commercial

4. Existing Roadway Characteristics

The existing condition characteristics of the Ocoee-Apopka Road study corridor were collected from desktop arial reviews as well as available data from the City of Apopka and Orange County. Within the project limits Ocoee-Apopka Road is a two-lane undivided urban major collector. The existing roadway characteristics are shown in Table 10. Condition diagrams depicting the existing roadway characteristics including intersection and driveway spacing, lane widths, apparent ROW, and multi-modal facilities are available in Appendix D.

Table 10| Roadway Characteristics

Characteristic	Observation
Roadway Maintaining Agency	Orange County
Functional Classification	Urban Major Collector
Level of Service (LOS) Target	E
Posted Speed Limit	35-45 mph
Major Intersections from south to north	Harmon Road, Boy Scout Road, Marden Road 13th Street, South Bradshaw Road, South Hawthorne Avenue
Land Uses	Public, Agricultural, Vacant Nonresidential, Industrial, Institutional, Residential
Lane Width	12 feet from Harmon Road to Distribution Center 11 feet from Distribution Center to West 13th Street 10 feet from West 13th Street to South Hawthorne Avenue
Median	None
Sidewalks	7-foot-wide concrete sidewalk at the Harmon Road intersection, 5-foot-wide sidewalk adjacent to the Oakmont Distribution Center, and a 4-foot-wide sidewalk from South Bradshaw Road Intersection to South Hawthorne Avenue
Shared Use Path and Bike Lanes	None
Access Management Type	Non-Restrictive

4.1. Access Management

The FDOT classifies access on state roadways using a seven-tier access management system established in Chapter 14-97, Administrative Rule of the Department of Transportation, State Highway System Access Management Classification System and Standards (Rule 14-97). The classification system ranges from Access Class 1, reserved for limited access freeways, to Access Class 7, assigned to lower priority state highways in areas that are already highly urbanized. This classification system assigns standards for driveway connections, spacing, median opening spacing, and signal spacing.

As it is not a state road, Ocoee-Apopka Road does not have an official FDOT Access Class. It should also be noted that the entire City of Apopka is exempt from meeting State transportation concurrency requirements. The access openings and spacings along the study corridor are shown in Table 11.

Table 11| Access Openings and Spacing

Connection	West Side Road/Connection	East Side Road/Connection	Intersecting Access Type	Distance from Previous Opening (feet)
1	Harmon Road	N/A	Public Side Street	-
2	N/A	Oakmont Distribution Center South Entrance	Private Business Driveway	1,720
3	N/A	Oakmont Distribution Center Middle Entrance	Private Business Driveway	730
4	Boy Scout Road	Oakmont Distribution Center North Entrance	Public Side Street	1,120
5	N/A	Marden Road	Public Side Street	2,250
6	West 13th Street	West 13th Street	Public Side Street	550
7	South Bradshaw Road	N/A	Public Side Street	1,790
8	South Hawthorne Avenue	South Hawthorne Avenue	Public Side Street	1,030

4.2. Lighting

Lighting is present in these locations:

- Behind the drainage swale on the southside of Ocoee-Apopka Road 100 feet north of Marden Road adjacent to the sidewalk
- Behind the drainage swale on the southside of Ocoee-Apopka Road 100 feet south of West 13th Street adjacent to the sidewalk
- In the northeast of the intersection Ocoee-Apopka Road/Bradshaw Road, on the east side of Bradshaw Road
- On the south side of Ocoee-Apopka Road, 20 feet south of the Ocoee-Apopka Road/South Hawthorne Avenue intersection
- In the northeast of the intersection Ocoee-Apopka Road/Hawthorne Avenue, on the east side of South Hawthorne Avenue

4.3. Bicycle and Pedestrian Infrastructure

Multi-Use Trail

There is no multi-use trail along the study corridor.

Bicycle Facilities

Paved shoulders are present along both sides of Ocoee-Apopka Road on the following segments:

- From Harmon Road to just north of SR 414
- From 900 feet north of Boy Scout Road to West 13th Street

There are no designated bicycle lanes on either side of Ocoee-Apopka Road throughout the study corridor.

Sidewalks

Seven-foot-wide concrete sidewalks are present on both sides of Ocoee-Apopka Road at the intersection of Harmon Road and extend south of the study corridor. A 5-foot-wide concrete sidewalk is present along the east side of Ocoee-Apopka Road from just north of the SR 414 overpass to Boy Scout Road where it extends another 100 feet to the north. The sidewalk is separated from the roadway by a 7-foot-wide utility strip. Lastly, a four-foot-wide concrete sidewalk is present on the west side of Ocoee-Apopka Road beginning at the intersection with Bradshaw Road and extending north to South Hawthorne Avenue, separated from the roadway by a utility strip and drainage swales.

4.4. Railroad Crossings

There are no railroad crossings within the study corridor, however there is a railroad track less than one half mile northeast of the Ocoee-Apopka Road and South Hawthorne Avenue intersection.

4.5. Transit Service and Infrastructure

Public Bus Terminal

The Apopka Superstop, a LYNX transfer terminal, is located 1 mile from the West 13th Street & Ocoee-Apopka intersection and there are 10 bus stops within a 1-mile radius from that intersection. This public transit infrastructure provides regional access throughout Central Florida.

Transit Routes

LYNX Route 405 travels through the study corridor from the AdventHealth Hospital to West 13th Street hourly. The LYNX route map for this bus route can be found in Appendix E.

Transit Stop Accommodations

There are no bus stops on Ocoee-Apopka Road within the study, however there is one stop located 1,000 feet south of Harmon Road on the west side of Ocoee-Apopka Road in front of the AdventHealth Hospital. Additionally, there are bus stops located on West 13th Street, approximately 0.25 mile east of Ocoee-Apopka Road.

4.6. Right-of-Way

Preliminary Right-of-Way (ROW) widths were determined using CFX As-Built plans and parcel lines from the GIS database of the Orange County Property Appraiser. As part of this study, Survey and Mapping is being conducted to determine ROW and will be documented in future reports. Table 12 summarizes the ROW widths by segment.

Table 12| Right-of-Way Summary

Start	End	ROW Width
Harmon Road	170' north of Harmon Road	Varies (120' - 122')
170' north of Harmon Road	780' north of Harmon Road (begin SR 414 underpass)	120'
780' north of Harmon Road (begin SR 414 underpass)	340' south of Oakmont Distribution Center South Entrance (end SR 414 underpass)	Varies (90' - 120')
340' south of Oakmont Distribution Center South Entrance (end SR 414 underpass)	290' south of Oakmont Distribution Center South Entrance	90'
290' south of Oakmont Distribution Center South Entrance	170' north of Boy Scout Road	60'
170' north of Boy Scout Road	850' north of Boy Scout Road	90'
850' north of Boy Scout Road	780' south of Marden Road (begin SR 451 underpass)	Varies (90' - 243')
780' south of Marden Road (begin State Road 451 underpass)	170' south of Marden Road (end State Road 451 underpass)	120'
170' south of Marden Road (end State Road 451 underpass)	West 13th Street	Varies (90' - 223')
West 13th Street	South Hawthorne Avenue	60'

Source: Orange County Property Appraiser, CFX As-Built plans

4.7. Typical Sections

The existing typical sections for Ocoee-Apopka Road are shown in Figure 4 through Figure 11. Dimensions were obtained using aerial imagery and are approximate.

Figure 4| Existing Typical Section – Ocoee-Apopka Road from Harmon Road to 170 feet north of Harmon Road

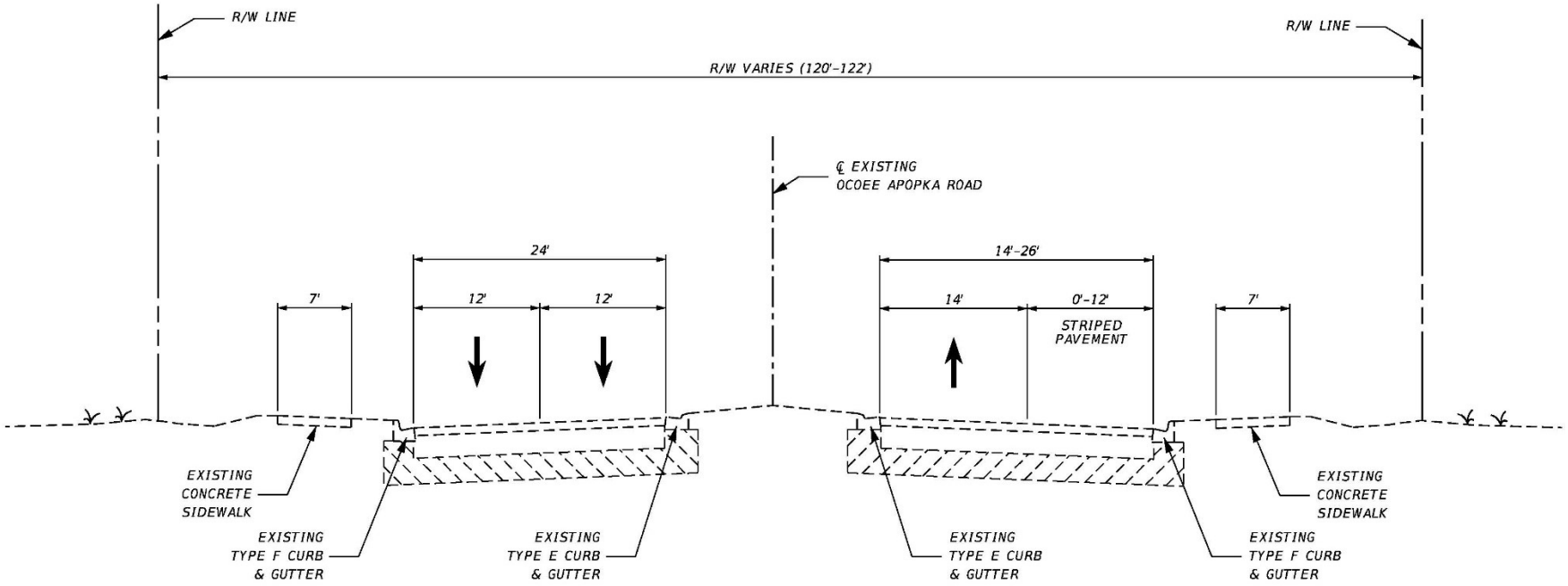


Figure 5| Existing Typical Section – Ocoee-Apopka Road from 170 feet north of Harmon Road to 340 feet south of Oakmont Distribution Center South Entrance

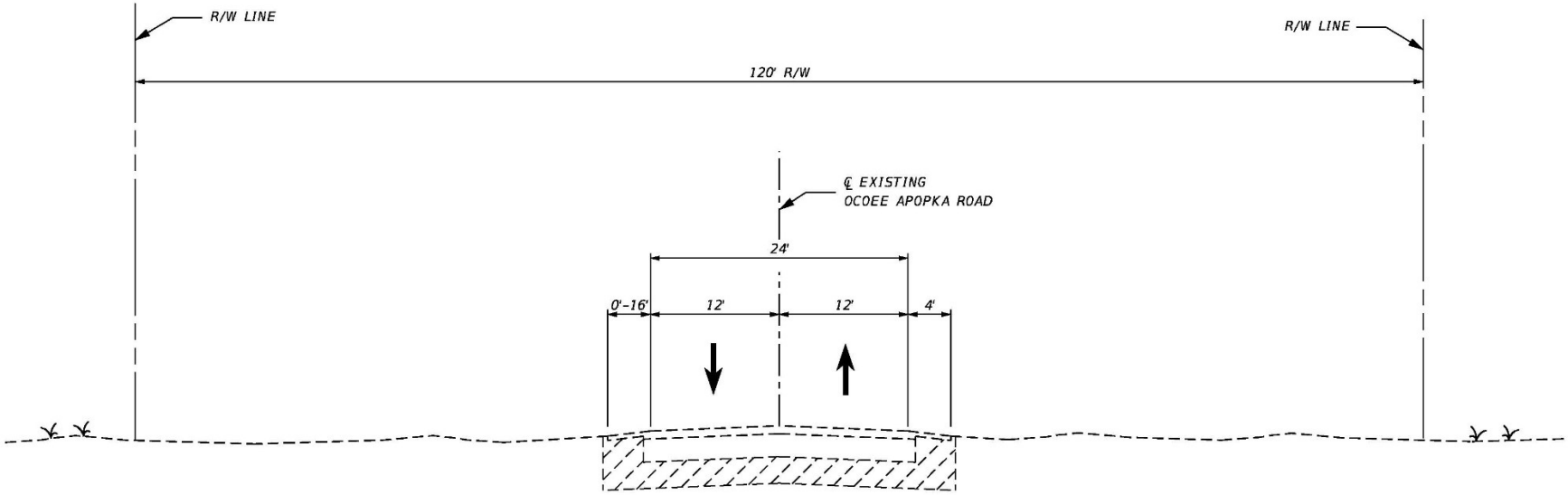


Figure 6| Existing Typical Section – Ocoee-Apopka Road from 360 feet south of Oakmont Distribution Center South Entrance to Oakmont Distribution Center Middle Entrance

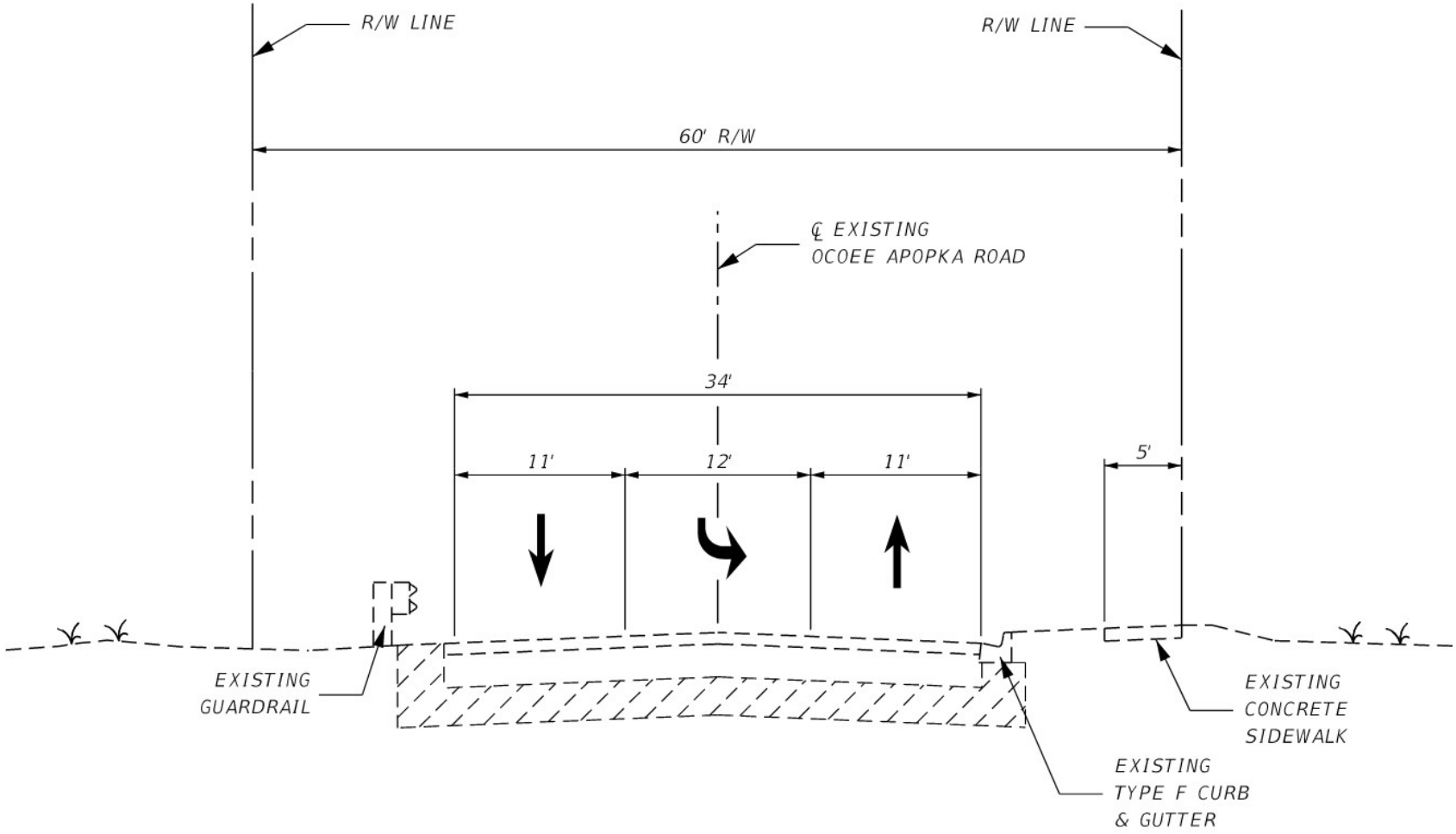


Figure 7| Existing Typical Section – Ocoee-Apopka Road from Oakmont Distribution Center Middle Entrance to Boy Scout Road

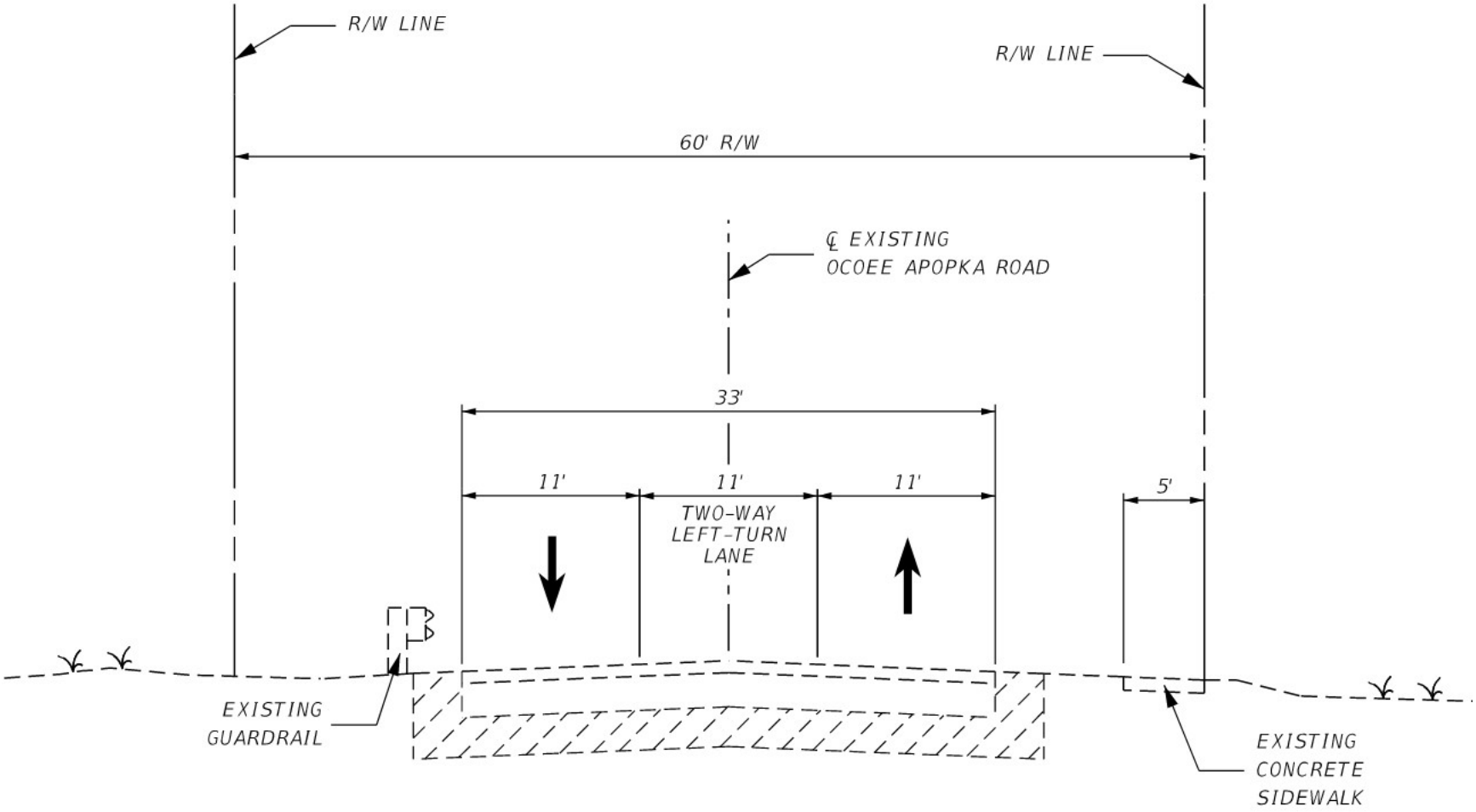


Figure 8| Existing Typical Section – Ocoee-Apopka Road from Boy Scout Road to 890 feet north of Boy Scout Road

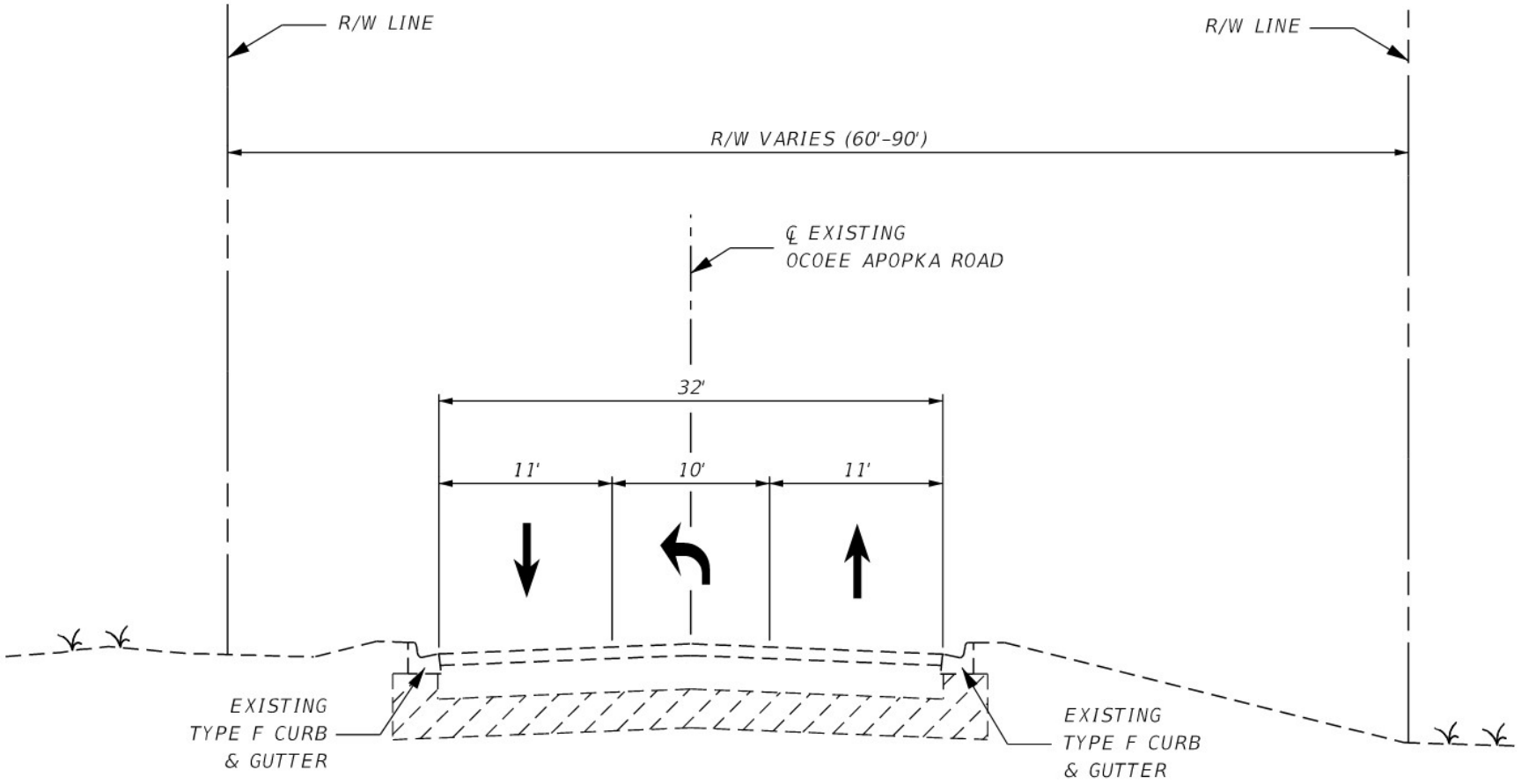


Figure 9| Existing Typical Section – Ocoee-Apopka Road from 890 feet north of Boy Scout Road to West 13th Street

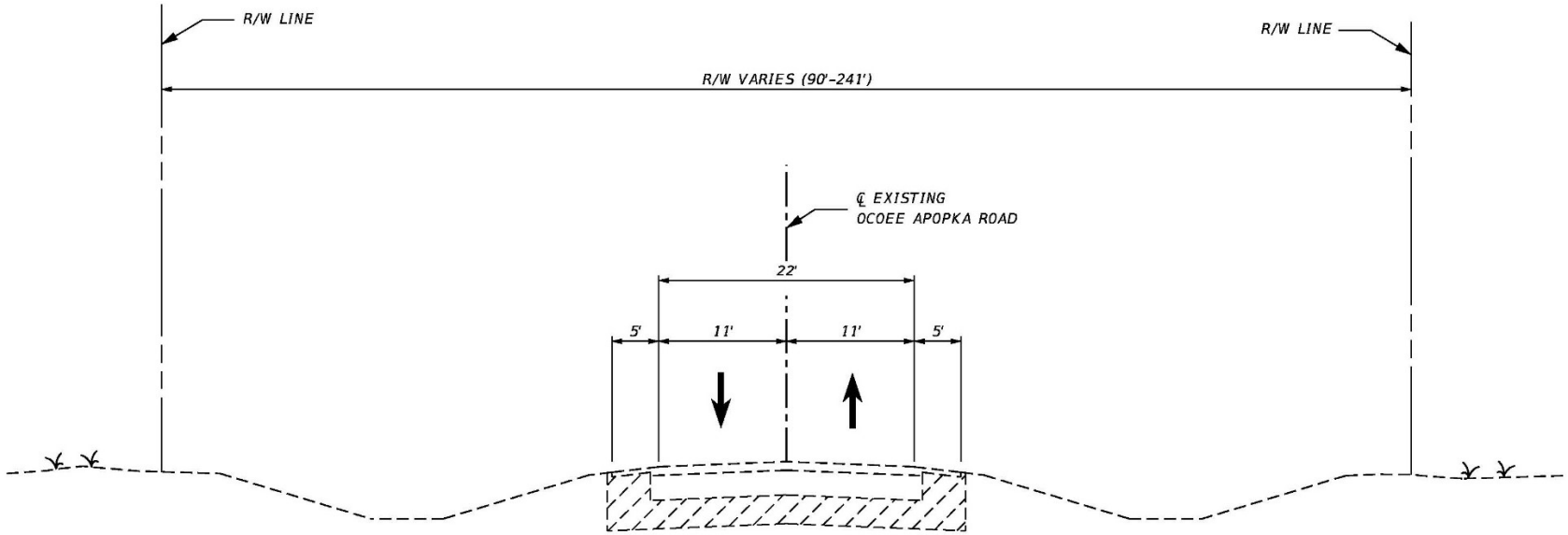


Figure 10| Existing Typical Section – Ocoee-Apopka Road from West 13th Street to South Bradshaw Road

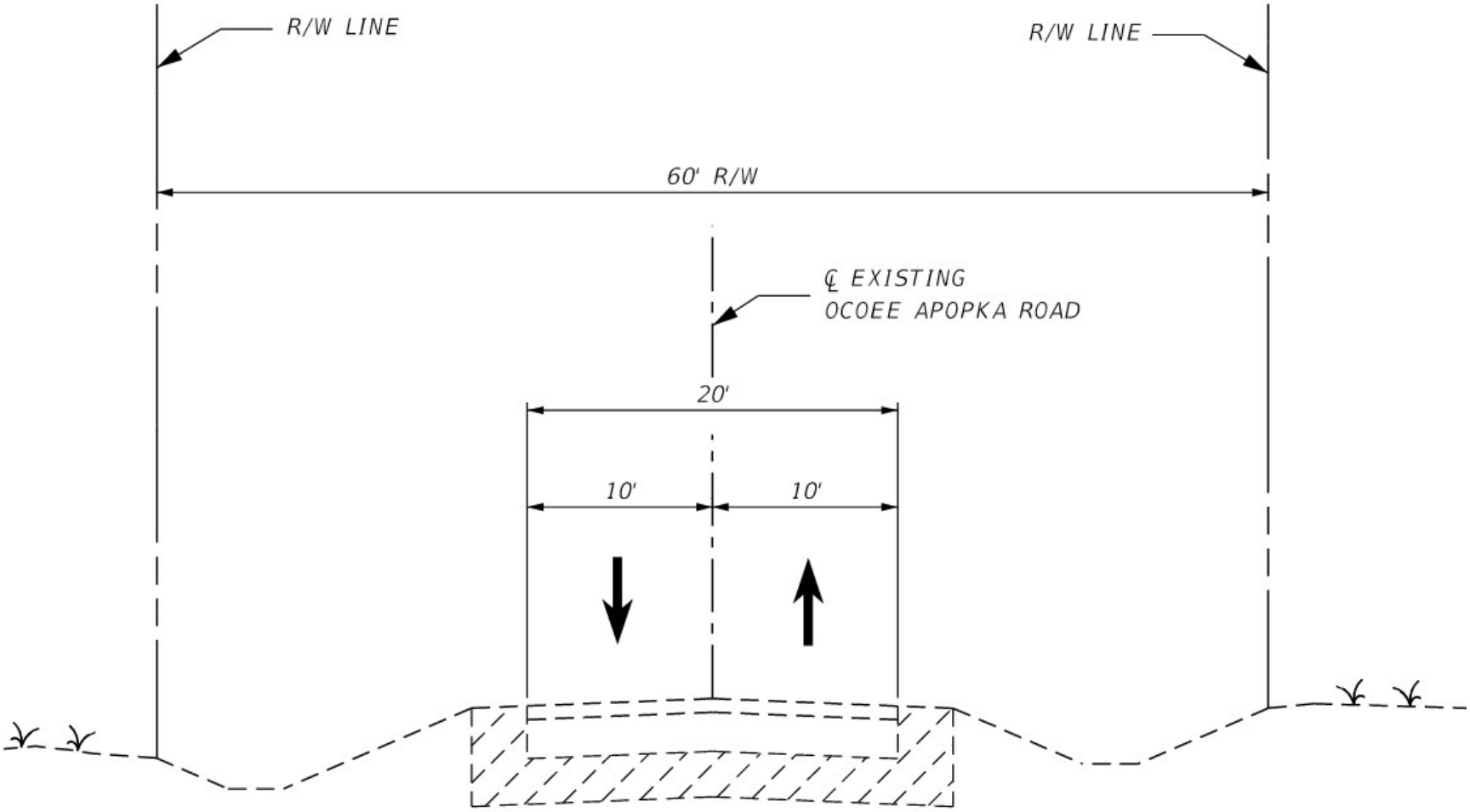
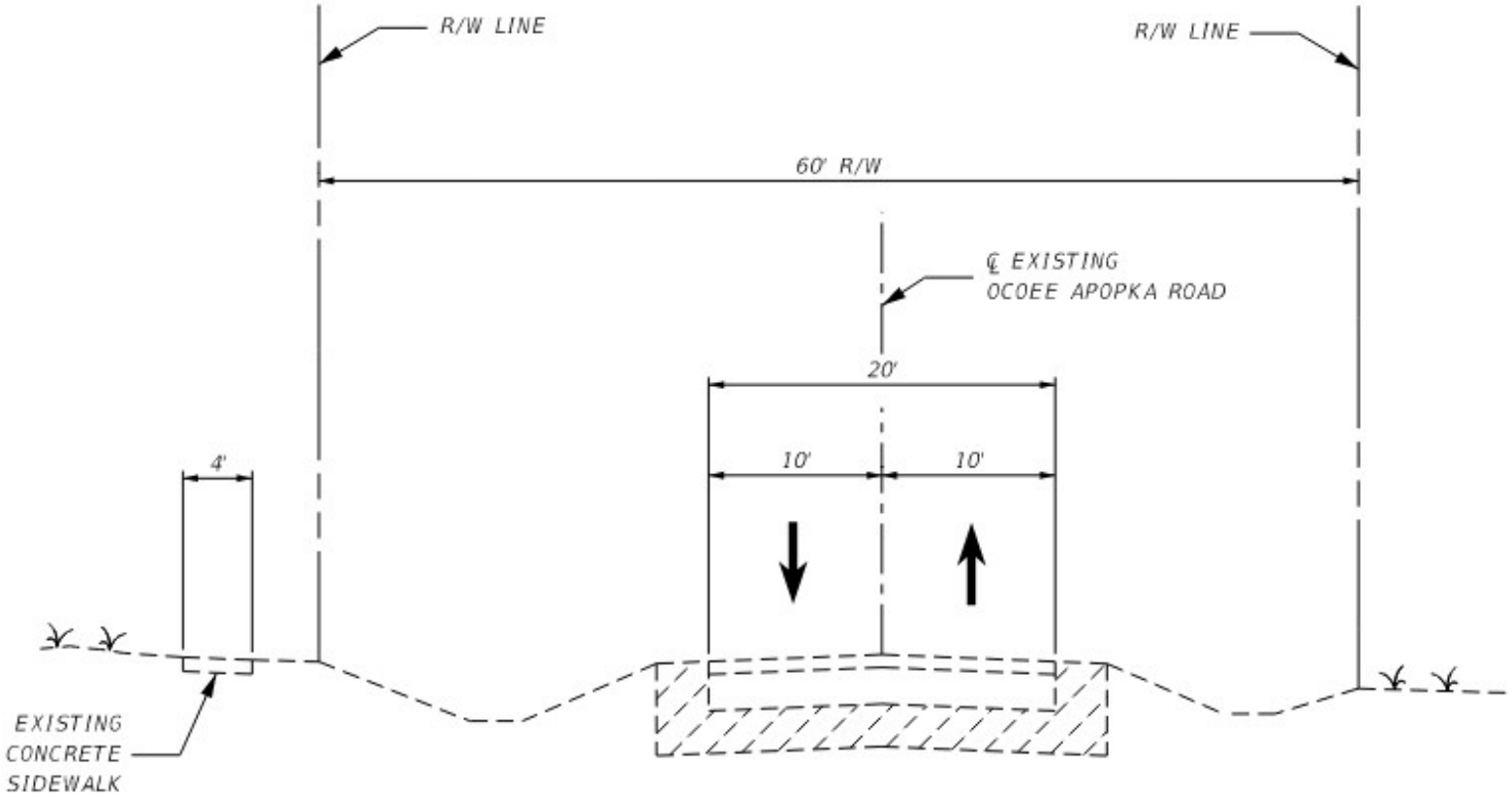


Figure 11| Existing Typical Section – Ocoee-Apopka Road from South Bradshaw Road to South Hawthorne Avenue



4.8. Speed Limits

For vehicles approaching the study corridor in the northbound direction, the posted speed limit along Ocoee-Apopka Road is 45-mph (posted south of Keene Road). A 35-mph posted speed limit sign is present in the northbound direction between West 13th Street and Bradshaw Road.

For vehicles approaching the study corridor in the southbound direction, the posted speed limit along Michael Gladden Boulevard is 30-mph (posted east of Washington Avenue). A 45-mph posted speed limit sign is present in the southbound travel direction, approximately 360 feet north of Harmon Road.

4.9. Structures

Six overhead structures along Ocoee-Apopka Road were observed using aerial imagery and the approximate area underneath them was measured in Google Earth. Four overhead structures are located approximately 1,000 feet north of Harmon Road, and two overhead structures are located approximately 550 feet west of Marden Road.

Table 13 depicts the to/from destinations of these structures.

Table 13| Overhead Structures Summary

From	To
Northbound SR 429	Northbound SR 451
Northbound SR 429 & Eastbound SR 414	Eastbound SR 414
Westbound SR 414	Westbound SR 414
Westbound SR 414 & Southbound SR 451	Westbound SR 414 & Southbound SR 429
Southbound SR 451	Southbound SR 451
Northbound SR 451	Northbound SR 451

Source: Google Earth Pro

4.10. Utilities

A Sunshine State One Call ticket with a 0.25-mile buffer was processed in March 2022 to identify a list of potential utility providers within the study corridor. The identified utility companies were contacted to obtain information about their infrastructure or facilities and each company's response is summarized in Table 14. The full information obtained on utilities is provided in Appendix F.

Table 14| Utility Agencies and Contact Information

Utility Company	Service Provided	Summary of Infrastructure/Facilities within Study Area
AT&T/Distribution Dino Farruggio (561) 997-0240 (561) 683-2729	Telephone	No Facilities present
Central Florida Expressway Authority Will Hawthorn (407) 690-5337	Fiber	No information provided.
Centurylink Bill McCloud (850) 599-1444	Fiber, Telephone	Active Facilities present along the length of the corridor.
Charter Communications Ramon Nunez (407) 215-5870	CATV, Fiber, Telephone	No Facilities present
City of Apopka Vladimir Simonovski (407) 703-1731	Sewer, Water	Active Facilities are present.
Duke Energy Jeffrey Trauth, Todd Khilmire, Sam Evans (407) 905-3376	Electric	Combination of overhead and underground Active electrical Facilities along the west side of the corridor. Overhead lines crossing the corridor to Marden Road.
Lake Apopka Natural Gas District Mingo Colon (407) 803-2553	Natural Gas	No information provided.
MCI Verizon MCIU01 Investigations (469) 886-4091	Communications Lines, Fiber	Active Facilities present along the corridor from Harmon Road to Boy Scout Road.
Zayo Group/Formerly Lightwave, LLC Henry Klobucar (406) 496-6510	Fiber	Active underground Facilities from the south side of Harmon Road along the east side of the corridor within the right-of-way until West 13th street.

Source: Sunshine State One Call

4.11. Community Resources

Schools and Public Facilities

There are no schools located along the study corridor; however, there are two schools located within a mile of the Ocoee-Apopka Road study corridor. Additionally, the John Bridges Community Center provides Pre-Kindergarten Services through the Head Start Program. Table 15 provides a summary of the location and age groups served by the schools.

Table 15| Schools & Childcare Services Near Study Area

School	Location	Age Group
Phillis Wheatley Elementary School	1475 Marvin C. Zanders Ave	2-years-old – 10-years-old
Central Florida Preparatory School	1800 Marden Road	3-years-old – 18-years-old
John Bridges Community Center	445 West 13th Street	3-years-old – 4-years-old

There are four community centers within one mile of the study corridor. Table 16 provides the name, location, and activities of each.

Table 16| Community Centers Near Study Area

Community Center	Location	Activities
Alonzo Williams Park/Billie Dean Community Center	225 M A Board Street	Basketball, Baseball/Softball, Playground, Soccer/Football Field
Apopka Community Center	West 5th Street	Rental Facility for Private Parties
John Bridges Community Center	445 West 13th Street	Board of County Commissioners & Community Action, Social Services and Life Skills Development, Training for G.ED., Vocational and Technical, Assistance with Utilities, Head Start School (ages 3-4), First Time Homebuyers Services
Hope CommUnity Center	800 South Hawthorne Avenue	Education Programs, Immigration Services, Youth & Families, Service Learning, Community Organizing

Emergency Services

AdventHealth Apopka, formerly known as Florida Hospital Apopka, is large multi service hospital located in the southwest corner of the Harmon Road and Ocoee-Apopka Road intersection. A quarter mile south of the hospital is the Apopka Health and Rehabilitation Center.

There is a fire station, Fire Station No. 6, currently located on the hospital property that is planned for relocation onto the Harmon Road extension once it is completed.

There is a government facility located within one mile of Ocoee-Apopka Road; Apopka City Hall is located at 120 E Main Street, approximately one mile northeast of the study corridor.

The locations of the schools and public facilities near the study corridor are shown in Figure 12.

Source: Google Maps

N

N.T.S.

Corridor Study - Harmon Rd. to Hawthorne Ave.

School

Public Facility

Figure 12

Ocoee Apopka Road Corridor Study
Schools and Public Facilities Location Map

5. Drainage Analysis

Ocoee-Apopka Road between Harmon Road and Hawthorne Avenue is within the jurisdiction of the St. Johns River Water Management District (SJRWMD). The road is located within the Ocklawaha Basin; and drains to Lake Semmes and Lake Fuller Drainage Basins.

Ocoee-Apopka Road between Harmon Road and Hawthorne Avenue is maintained by the Orange County Roads and Drainage Division, even though most of the surrounding property has been annexed by the City of Apopka. The properties along this study corridor consist of a mix of single-family homes and commercial facilities.

The stormwater system that serves this study corridor of the Ocoee-Apopka Road consists of a mix of curb and gutter conveyance and roadside swales and side drains. The road system receives runoff from the surrounding properties. Many of the commercial facilities that line the corridor have stormwater systems that discharge to the road's drainage system.

The segment of Ocoee-Apopka Road between Harmon Road and the north entrance of the Quality Custom Distribution Center, located at 1501 Ocoee-Apopka Road, drains to the SR 414 overpass, which is a low spot, and then to Lake Semmes, see Figure 13. This segment consists of roadside swales and side drains, except for the east segment of Ocoee-Apopka Road that fronts the Quality Custom Distribution Center. The segment that fronts Quality Custom Distribution Center has curb and gutter that connects to the Quality Custom Distribution Centers stormwater system outfall and then to the SR 414 over pass drainage system.

The segment of Ocoee-Apopka Road between the north entrance of the Quality Custom Distribution Center and Boy Scout Road is super elevated and drains to the east side of Ocoee-Apopka Road. The drainage system for the east side of this segment consists of a shallow swale that ties into a curb and gutter system approximately 200 feet south of Boy Scout Road, then crosses the east side of the intersection of Ocoee-Apopka Road and Boy Scout Road via a valley gutter. Both sides of Ocoee-Apopka Road, north of Boy Scout Road, have curb and gutter and drain to concrete flumes approximately 850 feet north of the intersection of Ocoee-Apopka Road and Boy Scout Road, see Figure 14. The flume on the west side of Ocoee-Apopka Road drains directly to Lake Fuller via overland flow. The flume on the east side drains to an open swale area, which eventually drains to Lake Fuller.

The segment of Ocoee-Apopka Road between the above-mentioned flumes and Marden Road drains to the SR 451 drainage system and ultimately discharges to Lake Fuller. This segment consists of roadside swales and side drains.

The segment of Ocoee-Apopka Road between Marden Road and Hawthorne Avenue drains from north to south and ultimately discharges to Lake Fuller. This segment consists of roadside swales and side drains, except for the east segment of Ocoee-Apopka Road where the commercial facilities end, and the single-family homes begin, see Figure 15. At this location a defined drainage system was not identified. Additionally, at this location there have been reports of flooding which have been and are currently being evaluated by consultants on the County's behalf.

An Environmental Resource Permit (ERP) for the Ocoee-Apopka Road was not found on the SJRWMD ERP portal. Based on a review of historical aerial images the road was constructed prior to 1985, and approximately 0.35 miles of the alignment were modified south of SR 414 in the late 1990s when SR 451 was constructed.

Figure 13| Stormwater conveyance system located southeast of Ocoee-Apopka Road and north of Harmon Road, SR 414 Overpass

Figure 14| Ocoee-Apopka Road between Boy Scout Road and SR 451 Overpass

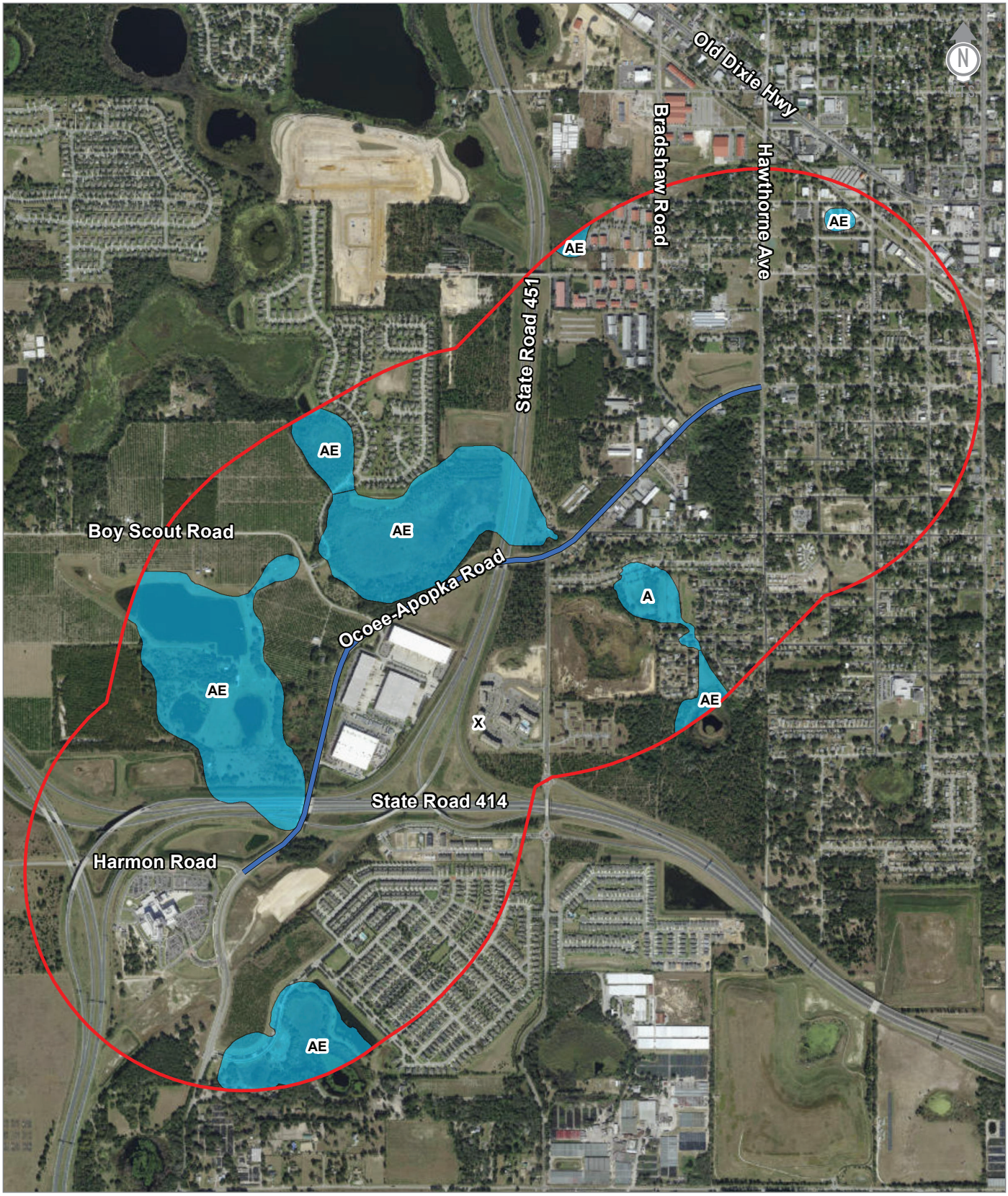
Figure 15| Southeast of Ocoee-Apopka Road near intersection with South Bradshaw Road, no stormwater conveyance system

5.1.1. FEMA Floodplains

To determine if the study area is within the FEMA flood hazard area, the FEMA FIRM Panel 12095C0120H (dated September 24, 2021) was reviewed. The project corridor is classified to be in Zone "X", which represents areas outside of the 0.2% annual chance floodplain. Three locations west of Ocoee-Apopka Road and outside of the project corridor, are in Zone "AE" and are shown in Figure 16:

- Pond to the north of Harmon Road and west of Ocoee-Apopka Road
- Lake Semmes and surrounding sub basins located to the west of Ocoee-Apopka Road
- Lake Fuller and surrounding sub basins located to the northwest of Ocoee-Apopka Road

The above are special flood hazard areas and are in Zone "AE" with base flood elevations of 69.3' and 70.6' NAVD88. These areas are subject to flooding by the 1% annual chance flood.



FEMA Floodplains (2020)

- Zone A - 100-Year Floodplain
- Zone AE - 100-Year Floodplain
- Zone X - Area of Minimal Flood Hazard
- Ocoee-Apopka Rd - Half-Mile Buffer
- Ocoee-Apopka Rd - Study Corridor

Figure 16

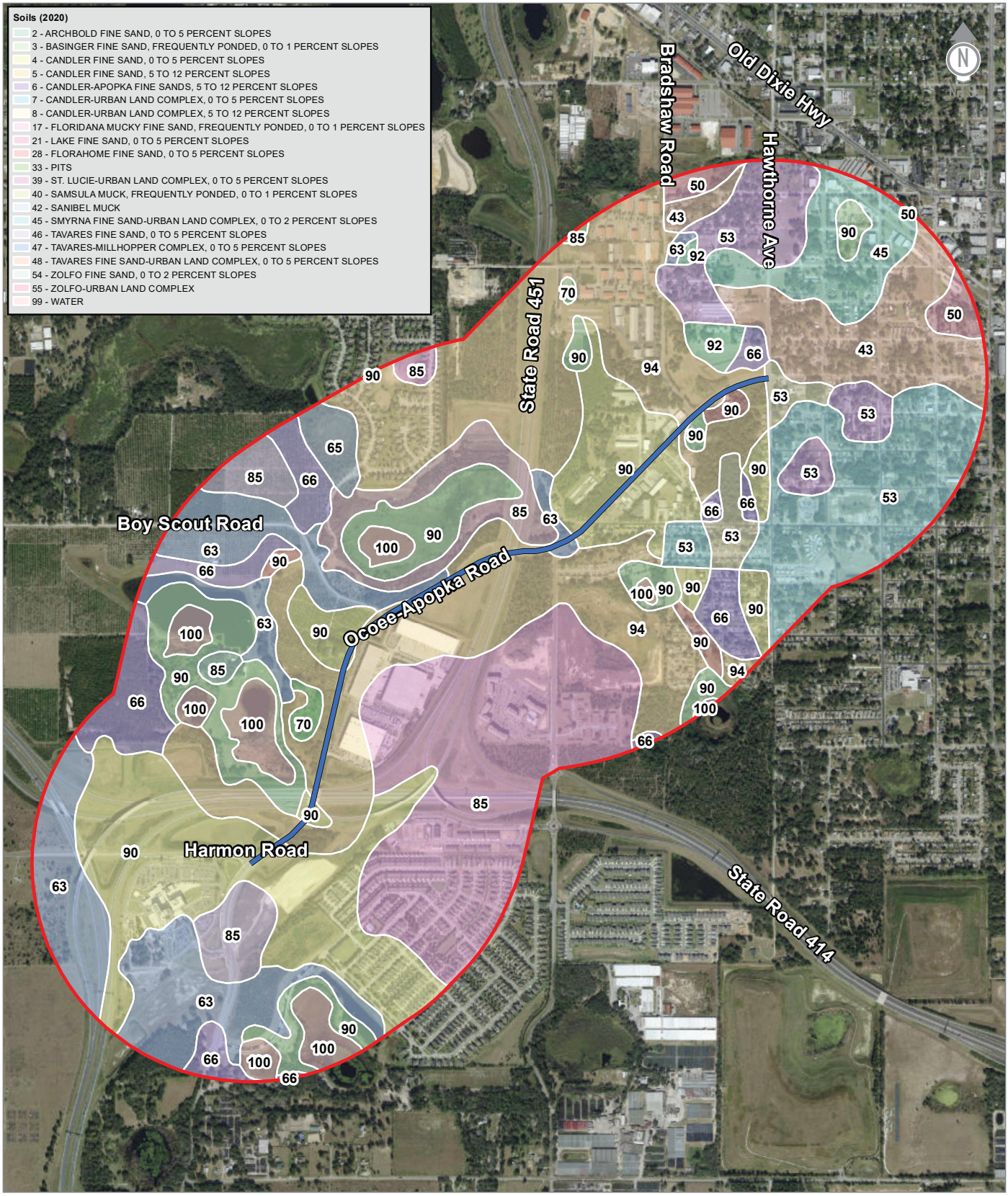
Ocoee Apopka Road Corridor Study
FEMA Floodplain Map

5.1.2. Soils

According to the USDA Web Soil Survey, the soils in the project corridor consist of the following:

- (3) Basinger Fine Sand, 0 to 1 percent slopes, Hydrologic Group – A/D
- (4) Candler Fine Sand, 0 to 5 percent slopes, Hydrologic Group – A
- (5) Candler Fine Sand, 5 to 12 percent slopes, Hydrologic Group – A
- (17) Floridian mucky fine sand, 0 to 1 percent slopes, Hydrologic Group – C/D
- (47) Tavares-Millhopper fine sands, 0 to 1 percent slopes, Hydrologic Group – A

Soils in hydrologic group A have a high infiltration rate when thoroughly wet, and a high rate of water transmission. Soils in hydrologic group C have a slow infiltration rate when thoroughly wet, and a slow rate of water transmission. Soils in hydrologic group D have a very slow infiltration water transmission rate. The study area primarily consists of soils in hydrologic group A, which represent low runoff potential, shown in Figure 17.



Ocoee-Apopka Rd - Half-Mile Buffer

Ocoee-Apopka Rd - Study Corridor

Figure 17

Ocoee Apopka Road Corridor Study
Soils Map

5.2. SJRWMD, Orange County, and City of Apopka Drainage Criteria

Proposed improvements to Ocoee-Apopka Road are subject to the St. John's River Water Management District (SJRWMD), Orange County and City of Apopka criteria that are current at the time of the improvements.

5.2.1. SJRWMD

Per the SJRWMD Permit Information Manual, water quantity criteria for the project area includes the following (at a minimum):

1. The post-development peak discharge rate must not exceed the pre-development peak rate of discharge for the mean annual 24- hour storm for systems serving both of the following:
    a. New construction area greater than 50% impervious (excluding waterbodies).
    b. Projects for the construction of new developments that exceed the thresholds in paragraphs 62-330.020(2)(b) or (c), F.A.C.
2. The post-development peak rate of discharge must not exceed the pre-development peak rate of discharge for the 25-year frequency, 24-hour duration storm.

Specific nutrient requirements may apply to the project since the study area outfalls to Class III water bodies. Stormwater may need to be treated prior to its discharge to the respective water bodies and adequate erosion and turbidity barriers will be needed during the proposed construction activities.

SJRWMD might require special criteria for proposed projects resulting from this study. Proposed projects in the Ocklawaha River Hydrologic Basin that do not qualify for a permit exemption or general permit may have to provide the following:

Storm Frequency

- The system shall meet applicable discharge criteria for 10-year and 25-year frequency storms. On-site storage and outlet capacity should be designed for the 25-year storm. Outlet capacity design should be checked and further refined, if necessary, for the 10-year storm.

Runoff Volume

- For systems utilizing pumped discharges, the post-development discharge volume during the four-day period beginning the third day of the four-day duration storm may exceed the pre-development discharge during the same period.

5.2.2. Orange County

Roadway Drainage Design

Curbs and gutters. All roadway drainage not considered suitable for swale and/or ditch type drainage shall be designed as one of the following:

Median: Type E Curb per FDOT Index 502-001, current edition.

Outer travel lane: Type F Curb per FDOT Index 502-001, current edition.

Runoff determination. The peak rates of runoff for which the pavement drainage system must be designed shall be determined by the rational method. The time of concentration, individual drainage areas and rainfall intensity amounts shall be submitted as part of the drainage plans. A separate Rational Runoff Coefficient (C) shall be determined for the specific contributing area to each inlet/catch basin within the proposed storm sewer system. A composite C value shall be computed for each contributing area based on an individual C

value of 0.9 for the estimated impervious portion of the actual area and an individual C value of 0.2 for the remaining pervious (grassed) portion of the actual area.

Stormwater spread into traveled lane. Inlets shall be located at all low points, intersections, and along continuous grades to prevent the spread of water from exceeding tolerable limits. The acceptable tolerable spread for a roadway with a design speed of 45 mph or less, includes keeping one-half (½) the traveled lane width clear.

Inlet types. The curb inlet types to be used shall be the latest version of the FDOT inlet types 1 and 2. Ditch bottom inlets shall be FDOT inlet types C, D, E and H. All ditch bottom inlets located within the right-of-way shall have traffic-bearing grates.

Low point inlets. Inlets shall be placed at all low points in the gutter grade and/or ditch, and as appropriate at intersections, median breaks, and on side streets where drainage would adversely flow onto the highway pavement.

Inlets shall also be placed ten to twenty feet prior to the level section in superelevation transitions, to avoid concentrated flows across the pavement.

Curb inlets, including inlet transitions, shall not be located within handicap drop curb locations or on curb returns.

Inlets in sag vertical curves that have no overflow outlet other than the storm drain system, (i.e., barrier wall, bridge abutment, cut sections) must have flanking inlets on one or both sides. The flanking inlets shall be located to satisfy spread criteria when the sag inlet is blocked.

Storm Sewer Design

Design storm drain frequency. The design storm frequency to be utilized for the design of pavement drainage shall set the hydraulic gradient line at 12 inches below gutter for a ten-year frequency storm.

Hydraulic gradient line computations. The hydraulic gradient line for the storm sewer system shall be computed taking into consideration the design tailwater on the system and the energy losses associated with entrance into and exit from the system, friction through the system, and turbulence in the individual manholes/catch-basins/junction boxes within the system. The energy losses associated with the turbulence in the individual manholes are minor for an open channel or gravity storm sewer system and can typically be overcome by adjusting (increasing) the upstream pipe invert elevations in a manhole by a small amount. However, the energy losses associated with the turbulence in the individual manholes can be significant for a pressure or surcharged storm sewer system and must be accounted for in establishing a reasonable hydraulic gradient line.

Minimum pipe size. The minimum size of pipe to be used in storm sewer systems is 18 inches. Designs shall be based upon six-inch increments in sizes above 18 inches.

Pipe grade. All storm sewers shall be designed and constructed to produce a minimum velocity of 2.5 feet per second (fps) when flowing full. No storm sewer system or portion thereof will be designed to produce velocities in excess of 20 fps for reinforced concrete pipe or 10 fps for metal pipe, and these maximums shall only be used when these outlet ends have sufficient erosion protection and/or energy dissipators.

Maximum lengths of pipe. The following maximum runs of pipe shall be used when spacing access structures of any type.

- 18 inches = 300 feet
- 24 inches to 36 inches = 400 feet

- 42 inches and larger = 200 feet

Design tailwater. All storm sewer systems shall be designed taking into consideration the tailwater of the receiving facility. In the case where the detention pond is the receiving facility, the design tailwater level can be estimated from the information generated by routing through the pond the hydrograph resulting from a ten-year frequency storm of duration equal to that used in designing the pond. The design tailwater level can be assumed to be the ten-year pond level corresponding to the time at which peak inflow occurs from the storm sewer into the pond.

Allowable materials. Storm sewers shall be reinforced concrete pipe (RCP) in accordance with the latest version of the FDOT Standard Specifications for Road and Bridge Construction.

Culvert Design

No new culverts, or culvert extensions are anticipated.

5.2.3. City of Apopka

- The post-development peak rate of discharge shall not exceed the predevelopment peak rate of discharge for the 25-year, 24-hour storm.
- Pollution abatement volume shall be in accordance with SJRWMD criteria.
- The City shall receive a copy of the SJRWMD permit before the City will grant an approval of final engineering plans.
- The 25-year/24-hour rainfall amount of 8.6 inches and the 100-year/24-hours rainfall amount of 11.3 inches shall be used in runoff calculations.

6. Environmental Analysis

6.1. Social

6.1.1. Demographics

Preliminary demographics data was gathered for the City of Apopka to determine the population characteristics for the study area and its surroundings. The data gathered includes population characteristics, socioeconomic data, and major employers and activity centers and was collected from the City of Apopka, the US Census Bureau, and the Florida Department of Health.

An overview of the demographics in Apopka is provided in Table 17 below. The demographics data provided by the City of Apopka is included in Appendix G.

Table 17| Apopka Demographics Overview

Category	Measure
Population	
Total Population	56,727
Population Density (Persons per Acre)	2.49
Households	
Total Households	20,311
Average Household Size	2.79
Household Density (Households per Acre)	0.89
Age	
Median Age	38 years
Population over 65	14.8%
Sex	
Male	49.7%
Female	50.3%
Race/Ethnicity	
White	43.7%
Hispanic or Latino	5.7%
Not Hispanic or Latino	38.0%
Black or African American	25.8%
Hispanic or Latino	1.0%
Not Hispanic or Latino	24.8%
Asian	3.1%
Two or More Races	15.7%
Other	11.7%
Income	
Median Household Income	$69,343
Persons Below Poverty	11.1%
Housing	
Total Housing Units	18,642
Owner-Occupied	74.5%
Renter-Occupied	25.5%
Vacant	7.1%
Limited English Proficiency (LEP)	
Block groups with >5% Spanish LEP surrounding study area	1 (10.91%)
Vehicle Ownership	
Households with No Vehicles	3.0%

Population Characteristics

Population data for the study area was collected from the City of Apopka and the US Census Bureau. The total population, number of households, average household size, and number of housing units were provided by the City of Apopka. The other population characteristic data was gathered from the 2020 American Community Survey (ACS) 5-Year Estimates and the 2020 US Census.

The demographics within the study area is provided in Table 18 below.

Table 18| Study Area Demographics

Category	Measure
Population	
Total Population	11,857
Population Density (Persons per Acre)	2.21
Households	
Total Households	3,496
Average Household Size	3.01
Household Density (Households per Acre)	0.65
Age	
Median Age	37 years
Population over 65	15.64%
Sex	
Male	51.94%
Female	48.06%
Race/Ethnicity	
White	30.05%
Hispanic or Latino	9.03%
Not Hispanic or Latino	21.02%
Black or African American	55.67%
Hispanic or Latino	2.46%
Not Hispanic or Latino	53.21%
Asian	3.35%
Two or More Races	2.90%
Other	8.03%
Income	
Median Household Income	$70,549
Persons Below Poverty	20.35%
Housing	
Total Housing Units	3,496
Owner-Occupied	68.48%
Renter-Occupied	31.52%
Vacant	0.00%
Limited English Proficiency (LEP)	
Spanish LEP Household	3.89%
Vehicle Ownership	
Households with No Vehicles	3.38%

Source: City of Apopka, US Census Bureau 2020 ACS, US 2020 Census

Age

Age data was collected from the US Census Bureau 2020 ACS Estimates. The median age within the study area is 37 years, 59.46% of the population falling between the ages of 18 and 65. Out of the total population in Apopka, 15.64% are over 65 years old, and 24.9% are under 18.

Race/Ethnicity

Race and ethnicity data was collected from the US Census Bureau 2020 ACS Estimates. The majority race within the study area is Black or African American (55.67%), followed by White (30.05%), and Asian (3.35%). The remaining 10.93% of people in the study area identify as Two or More Races (2.90%) or as some other race (8.03%). In total, 11.49% of the population in the study area are Hispanic, with 9.03% identifying as White Hispanic and 2.46% identifying as Black Hispanic.

Income

Income data was collected from the US Census Bureau 2020 ACS Estimates. The study area has a median household income of $70,549 and a poverty rate of 20.35% (the population which falls under the federal poverty line).

Education

Educational attainment data was gathered from the US Census Bureau 2020 ACS Estimates and is summarized in Table 19.

Table 19| Educational Attainment Data Summary

Demographic	Percentage of High School Graduates	Percentage of Bachelor's Degree Attainment
Age		
18 – 24	78%	8.9%
25 and older	87.5%	30.4%
Race/Ethnicity		
White	86.8%	29.2%
Not Hispanic or Latino	92.1%	33.8%
Black or African American	92.7%	30.4%
Hispanic or Latino Origin	73.4%	23.6%
Asian	91.4%	34.7%
Two or More Races	83.0%	27.2%
Other	78.9%	41.7%

Source: US Census Bureau 2020 ACS

Limited English Proficiency

LEP data for the area surrounding the study area was gathered from the US Census Bureau 2020 ACS Estimates. Four census block groups surround the study area. A summary of the percentages of Spanish LEP households by block group is shown in Table 20. As can be seen in the table, one block group north of Ocoee-Apopka Road has a Spanish LEP household percentage greater than 5% and the remaining block groups have Spanish LEP household percentages lower than 5%. A block group northeast of the study corridor, not included in the table, has a Spanish LEP household percentage of 45.55%. A map showing the percentage of Spanish LEP households by block group is included in Appendix G.

Table 20| Spanish LEP Household Percentages

Block Group #	Location	Percentage of Spanish LEP Households
120950175051	South side of Ocoee-Apopka Road between Harmon Road and South Hawthorne Avenue	2.15%
120950175064	North side of Ocoee-Apopka Road from Harmon Road to Boy Scout Road	10.91%
120950178101	North side of Ocoee-Apopka Road between Boy Scout Road and South Bradshaw Road	4.45%
120950176003	North side of Ocoee-Apopka Road from South Bradshaw Road to east of South Hawthorne Avenue	0.00%

Source: US Census Bureau 2020ACS Estimates

Health

Health data was collected from the Florida Department of Health. The average life expectancy for the census tract surrounding the study area is 80.0 years, for Orange County overall it is 80.1 years. This is slightly higher than the statewide life expectancy of 79.7 years. In Orange County, 12.4% of adults are active smokers (lower than the national rate of 17.1%), and 27.5% of adults are clinically obese (lower than the national rate of 31.9%). Death rates for the most common illness-related causes of death are also lower in Apopka than nationally, as shown in Table 21.

Table 21| Apopka Death Rates

Cause of Death	Death Rate per 100,000	
	Apopka	National
Cardiovascular	186.1	200
Cancer	153.7	185
Respiratory Disease	37.0	53
Diabetes	24.7	25

Source: Florida Department of Health (http://www.flhealthcharts.com)

Transportation

Transportation data was collected from the US Census Bureau 2020 ACS Estimates. Zero-car households make up 3.0% of the occupied households within Apopka. Of the 26,010 workers in Apopka, 3.5% rely on multi-modal transportation (biking, walking, public transit, etc.) to get to work.

Major Employers and Activity Centers

Major employers and activity centers within the study area were determined based on a desktop review. The largest activity centers are located just south of the study area, in-between SR 414 and SR 451, and in-between West 13th Street and South Bradshaw Road.

Just south of the study area is the AdventHealth Apopka Hospital and the Apopka Health and Rehabilitation Center. In-between SR 414 and SR 451 is approximately 6,800 square feet of warehouses. In-between West 13th Street and South Bradshaw Road is approximately 13 businesses in total along both sides of Ocoee-Apopka Road.

6.1.2. Historical and Cultural Resources

An evaluation of the FDEP Map Direct GIS application and Florida Geographic Data Library (FGDL) was conducted to determine presence of historical and cultural resources within the study area. The GIS data includes the following:

- Division of Historical Resources (DHR) Resource Groups in Florida (2021)
- DHR Historic Bridges in Florida (2021)
- DHR Historic Cemeteries in Florida (2021)
- DHR Historical Structure Locations in Florida (2021)
- DHR Field Survey Project Boundaries and Attributes in Florida (2021)

Based on the evaluation, there are approximately 89 documented historic structures and 11 Cultural Resources Assessment Survey (CRAS), or other historical/archaeological surveys identified within the study area (Exhibit 8, Appendix H). According to the DHR data, none of the 89 documented historic structures are eligible for listing on the National Register of Historical Places. Additionally, the eleven documented surveys conducted were associated with roadway, residential development, or utility projects.

6.2. Natural

A literature review and Geographic Information Systems (GIS) data layer searches were performed for the study area. Referenced materials include, but were not limited to, the following:

- St. Johns River Water Management District (SJRWMD) Florida Land Use, Cover and Forms Classification System (FLUCFCS) GIS data (2014)
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) database (2021)
- The United States Department of Agriculture/Natural Resources Conservation Service (USDA/NRCS) Soil Survey of Orange County, Florida (1989)
- USDA/NRCS Soils GIS Data for Orange County (SSURGO) (2018)
- Orange County Federal Emergency Management Agency (FEMA) GIS data (2022)
- FEMA Flood Insurance Rate Map (FIRM) Panel ID 12095C0120H (2021)
- USFWS Consultation Area GIS data layers
- Florida Fish and Wildlife Conservation Commission (FWC) Wildlife Occurrence System (2017)
- FWC Eagles Nest Locations data (2017)
- FWC Wading Bird Colony data (1999)
- FWC Florida Black Bear data (2021)
- USFWS Wood Stork Core Foraging Habitat data (2021)

6.2.1. Land Use

The study area is within a rapidly developing urbanized area with agricultural, residential, commercial, and industrial land use types. In addition, there are wetland and upland land use types within the study area. The study area also includes limited access interstate systems (SR 414, SR 451, SR 429). Table 22 lists and describes the SJRMWD land use types within the study area. Exhibit 2 depicts the location of the land use types within and adjacent to the study area and can be found in Appendix H.

Table 22| SJRWMD Land Use within the Study Area

FLUCFCS Code	Description	Acres
1100	Residential, Low Density - Less Than 2 Dwelling Units/Acre	5.94
1200	Medium Density Residential - 2-5 Units/Acre	266.23
1300	Residential, High Density - = 6 Units/Acre	113.95
1400	Commercial And Services	52.40
1480	Cemeteries	5.10
1550	Other Light Industrial	49.19
1590	Industrial Under Construction	20.96
1650	Reclaimed Lands	32.80
1700	Institutional	50.09
1900	Open Land	57.25
2130	Woodland Pastures	6.39
2150	Field Crops	14.97
2210	Citrus Groves	89.14
2320	Poultry Feeding Operations	14.27
2430	Ornamentals	1.16
3100	Herbaceous Upland (Non-Forested)	49.68
3300	Mixed Upland (Non-Forested)	21.47
4110	Pine Flatwoods	6.92
4340	Upland Mixed Coniferous/Hardwood	69.22
4410	Pine Plantation	111.48
4430	Forest Regeneration	20.61
5200	Lakes	1.10
5300	Reservoirs - Pits, Ponds, Dammed Systems	23.48
6300	Mixed Forested Wetland	0.75
6410	Freshwater Marsh	49.33
6430	Wet Prairies	11.81
6460	Mixed Scrub-Shrub Wetland	30.07
7400	Disturbed Land	24.74
8140	Roads (=4 Land Divided with Medians)	225.57
8200	Communications	1.36
8310	Electrical Power Facilities	4.46
8370	Surface Water Collection Basins	86.26

Source: SJRWMD FLUCFCS Data 2014

6.2.2. Soils

The soils within the study area were defined by using the National Resource Conservation Service (NRCS) Soil Survey Geographic Database (SSURGO) data and the Soil Survey of Orange County, Florida (1989). Of the 18 soils mapped within the study area, four (4) are designated as hydric soils by the NRCS Hydric Soils List (accessed 2022) and Hydric Soils of Florida Handbook (2007). In addition, two are not soils but mapped as pits and water. Table 23 lists and summarizes the soil types mapped within the study area, and Exhibit 3 (Appendix H) depicts the location of the soils mapped within the study area.

Table 23| Soils within the Study Area

Map Unit ID	Soil Description	Hydric (Yes/No)	Acres
2	Archbold Fine Sand, 0 To 5 Percent Slopes	NO	8.40
3	Basinger Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes	YES	96.58
4	Candler Fine Sand, 0 To 5 Percent Slopes	NO	245.50
5	Candler Fine Sand, 5 To 12 Percent Slopes	NO	350.74
6	Candler-Apopka Fine Sands, 5 To 12 Percent Slopes	NO	76.19
7	Candler-Urban Land Complex, 0 To 5 Percent Slopes	NO	79.10
8	Candler-Urban Land Complex, 5 To 12 Percent Slopes	NO	18.45
17	Floridana Mucky Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes	YES	38.60
21	Lake Fine Sand, 0 To 5 Percent Slopes	NO	202.94
28	Florahome Fine Sand, 0 To 5 Percent Slopes	NO	9.18
33	Pits	UNRANKED	5.56
39	St. Lucie-Urban Land Complex, 0 To 5 Percent Slopes	NO	47.73
40	Samsula Muck, Frequently Ponded, 0 To 1 Percent Slopes	YES	0.86
42	Sanibel Muck	YES	12.31
46	Tavares Fine Sand, 0 To 5 Percent Slopes	NO	58.12
47	Tavares-Millhopper Complex, 0 To 5 Percent Slopes	NO	168.88
48	Tavares-Urban Land Complex, 0 To 5 Percent Slopes	NO	48.07
54	Zolfo Fine Sand, 0 To 2 Percent Slopes	NO	3.50
55	Zolfo-Urban Land Complex	NO	0.94
99	Water	UNRANKED	46.54

Source: SJRWMD FLUCFCS Data 2014

6.2.3. Wetlands and Surface Waters

Activities in, on or over Waters of the United States (WOTUS), including wetlands, are regulated by state and federal agencies. In December 2020, the United States Environmental Protection Agency (EPA) approved the Florida Department of Environmental Protection's (FDEP) assumption of Section 404 permitting of the Clean Water Act (CWA) from the United States Army Corps of Engineers (USACE) on non-retained federal waters. A review of the FDEP GIS Retained Waters Screening Tool (accessed on February 15, 2022) was conducted to determine the regulatory agencies with jurisdiction over the wetlands and surface waters within the study area. Therefore, the SJRWMD will have state jurisdiction over the

wetlands within the study area, and the FDEP will have federal jurisdiction over the wetlands within the study area.

Based on the review of the SJRWMD Land Use, USFWS NWI, and NRCS Soils GIS data sets, there are five (5) wetland types identified within the study area, and two (2) surface waters identified within the study area. These wetlands and surface waters were classified using SJRWMD land use types. The wetlands and surface waters mapped within the study area are depicted in Exhibit 4 (Appendix H), and Table 24 describes the wetlands, surface waters and acreages within the study area. There are approximately 91.96 acres of wetlands within the study area and these wetlands represent six (6) percent of the study area.

A map of wetlands and surface waters can be found as Exhibit 4 in Appendix H.

Table 24| Wetlands and Surface Waters within the Study Area

FLUCFCS Code	Wetland Description	Acres
5200	Lakes	1.10
5300	Reservoirs - Pits, Ponds, Dammed Systems	23.48
6300	Mixed Forested Wetland	0.75
6410	Freshwater Marsh	49.33
6430	Wet Prairies	11.81
6440	Emergent Aquatic Vegetation	2.86
6460	Mixed Scrub-Shrub Wetland	27.22

Source: SJRWMD FLUCFCS Data 2014.

6.2.4. Floodplains

A review of the available Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps and GIS data was conducted for the study area. This review indicated that there are four (4) locations within the study area that are in the 100-Year Floodplain (Zone A and AE) (Exhibit 6, Appendix H). Zone A and AE area estimated to have 1% or greater chance of being flooded during any given year. Zone A and AE are approximately 217.12 acres in size, and these areas represent approximately 14% of the study area.

6.2.5. Contamination

Contamination concerns within the study area include citrus groves (herbicides/pesticides/heating oil), commercial, industrial, and health care facilities. Therefore, an evaluation of the FDEP Map Direct GIS application and Florida Geographic Data Library (FGDL) for hazardous, contamination, and above and underground storage tanks sites was conducted on February 14, 2021, to document hazard and contamination sites. These sites are depicted in Exhibit 7 (Appendix H) and the results are summarized below:

1. There are 16 National Pollutant Discharge Elimination System permits that were issued for either construction or industrial activities and these facilities are located throughout the study area. Of the 16 NPDES permit documented within the study area, 6 permits remain active.
2. Six (6) Resource Conservation and Recovery Act (RCRA) sites are documented within and adjacent to the study area. These sites are associated with healthcare and industrial businesses. The locations of these sites are determined by using the street address and does not reflect the actual location of the RCRA sites on these business's property.
3. One (1) biomedical waste site was identified within the study area. This site is associated with a funeral home at the northern end of the study area.

4. There are four (4) compliance and enforcement hazardous sites within the study area. These sites are closely related to healthcare and industrial facilities located at northern and southern ends of the study area.
5. One (1) petroleum contamination monitoring site was identified within the study area. This site is located at the southern end of the study area. According to the FDEP data, the site has been closed and remediation has been completed.
6. There are five (5) storage tank contamination sites within the study area. These sites are closely related to facilities that have bulk fuel storage for emergency generators, gas stations, etc. These facilities are located at the northern and southern ends of the study area.
7. One (1) Brownfield area was identified, and it is located at the north end of the study area. It was established by the City of Apopka as a community redevelopment area to reduce public health and environmental hazards on existing commercial and industrial sites that are abandoned or underused due to these hazards.

6.2.6. Protected Species

Based on the review of available GIS data and published information from both the USFWS and FWC, there are habitats within the study area that have the potential to support state and federally listed species (Exhibit 5, Appendix H). This review also considered certain environmentally sensitive resources like consultation areas and critical habitats. The study area is within the USFWS Consultation Areas for Florida Scrub Jay (*Aphelocoma coerulescens),* Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*), and Sand Skink (*Neoseps reynoldsi*). The study area is also located within two (2) USFWS wood stork Core Foraging Areas (Lawne Lake and Eagles Nest Pond). The nearest wood stork colony (Lawne Lake) is approximately eight (8) miles southeast of the study area. There are no documented USFWS critical habitats within the study area.

According to the USFWS Peninsular Florida Species Conservation and Consultation Guide for Sand Skink and Blue-tailed (Bluetail) Mole Skink (2020), the USFWS defines sand skink habitat as areas located within the consultation area, that contain the appropriate soils, and are located at or above 82 feet in elevation. Several portions within the study area meet the USFWS criteria for sand skink habitat. Furthermore, the USFWS Sand Skink Habitat GIS (2020) data was reviewed, and it indicated that there is approximately 1,116.93 acres of suitable sand skink habitat within the study area (Exhibit 5, Appendix H). Suitable skink habitat represents approximately 73% of the study area.

The bald eagle (*Haliaeetus leucocephalus*) was removed from the threatened and endangered list; however, it is still afforded protection under the Migratory Bird Treaty Act of 1918, Bald and Golden Eagle Protection Act of 1940, and 68A-16.002 Florida Administrative Code (FAC). According to FWC Bald Eagle Nesting data and Audubon Eagle Watch Program, one (1) bald eagle nest was documented immediately south of the study area, west of Ocoee-Apopka Road; however, the nest was not observed or located during the Audubon nest observation in 2021.

The Florida black bear (*Ursus americanus floridanus*) is not listed by the USFWS and was removed from FWC's list of threatened species in 2012; however, it is still protected by Chapter 68A-4.009, FAC. The study area is located within FWC Bear Management Unit "Frequent Bear Range," which includes areas that are the core of bear subpopulations, where bears spend a considerable amount of their time, and there is consistent presence of females with cubs. The review of the FWC's Florida Black Bear Roadkill and Florida Bear Related Call data indicated that one (1) Florida black bear was documented within the study area.

A review of the FWC Wading Bird Rookery data was conducted and no wading bird rookeries were identified within the study area. The nearest wading bird colony is approximately five (5) miles southwest of the study area, on the shoreline of Lake Apopka.

Given the undeveloped and developed nature of the study area, and species occurrence data, it is anticipated that multiple state and federally protected species may occur within the study area. The uplands within the study area have the potential to contain habitat suitable for the federally protected Florida scrub jay. sand skink and eastern indigo snake (*Drymarchon couperi*) and the state-protected gopher tortoise, Florida black bear, and southeastern American kestrel. Wetlands contain suitable habitat for the federally protected wood stork, along with numerous state-protected wading birds.

7. Existing Traffic Analysis

7.1. Existing Traffic Data and Characteristics

The following intersections were identified as the study area intersections:

- Ocoee-Apopka Road at South Hawthorne Avenue (unsignalized)
- Ocoee-Apopka Road at South Bradshaw Road (unsignalized)
- Ocoee-Apopka Road at West 13th Street (unsignalized)
- Ocoee-Apopka Road at Marden Road (unsignalized)
- Ocoee-Apopka Road at Boy Scout Road and North Entrance (unsignalized)
- Ocoee-Apopka Road at District Center Middle Entrance (unsignalized)
- Ocoee-Apopka Road at District Center South Entrance (unsignalized)
- Ocoee-Apopka Road at Harmon Road (unsignalized)

The existing intersection geometries for each of these intersections are provided in Figure 18. Existing traffic counts were collected in February and March of 2022 in the study area. 72-hour roadway classification and 48-hour volume counts were collected at the following locations:

- West Michael Gladden Boulevard east of South Hawthorne Avenue (48-hour volume count)
- Ocoee-Apopka Road east of South Hawthorne Avenue (48-hour volume count)
- Ocoee-Apopka Road east of South Bradshaw Road (48-hour volume count)
- Ocoee-Apopka Road west of West 13th Street (48-hour volume count)
- Ocoee-Apopka Road west of Marden Road (48-hour volume count)
- Ocoee-Apopka Road east of Boy Scout Road (72-hour classification count)
- Ocoee-Apopka Road north of Harmon Road (72-hour classification count)
- Ocoee-Apopka Road south of Harmon Road (48-hour volume count)

In addition, 72-hour volume counts collected in September and October of 2021 were obtained from Orange County at the following locations

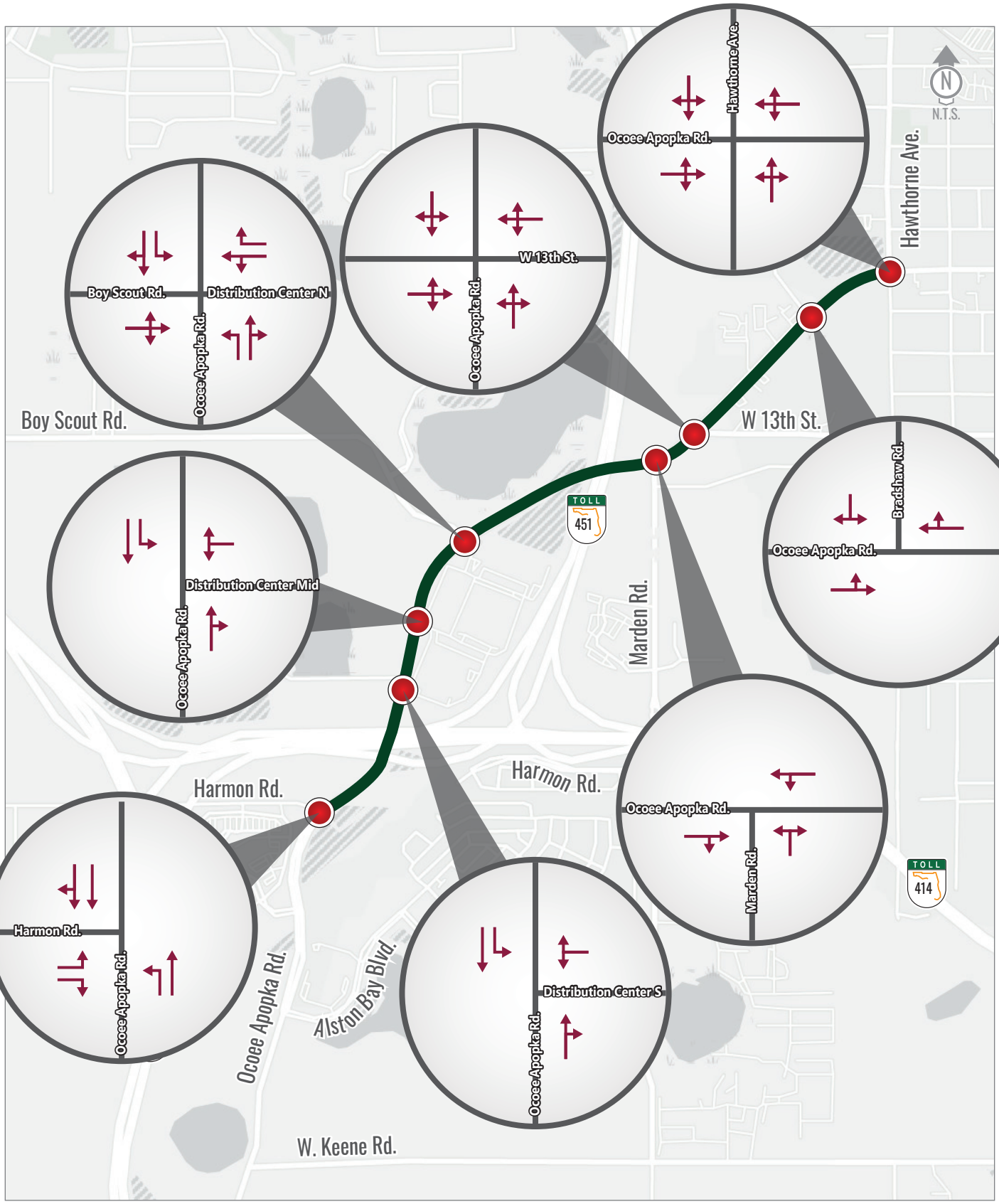
- Ocoee-Apopka Road east of South Bradshaw Road (72-hour volume count)
- Ocoee-Apopka Road east of West 13th Street (72-hour volume count)

The Annual Average Daily Traffic (AADTs) for all roadway segments were estimated using the roadway classification volume counts along with the applicable seasonal and axle adjustment factors obtained from the 2019 Florida Traffic Online (FTO) database. It is to be noted that seasonal and axle adjustment factors from the 2020 FTO were not used in this analysis due to the abnormal traffic conditions resulting from the COVID-19 pandemic during the year 2020. The existing AADTs are summarized in Table 25.

Table 25| Existing AADTs

Roadway Segment	Count Date	Source/Type	ADT	Axle Adj.	Seasonal Adj.	Adjusted AADT
Ocoee-Apopka Road						
South of Harmon Road	01/18/2022 to 1/19/2022	48-hour volume count	10,994	0.99	1.05	11,500
Harmon Road to Boy Scout Road	01/18/2022 to 1/20/2022	72-hour classification count	10,617	1.00	1.05	11,000
Boy Scout Road to Marden Road	01/18/2022 to 1/20/2022	72-hour classification count	10,256	1.00	1.05	11,000
Marden Road to South Bradshaw Road	9/14/2021 to 9/15/2021	72-hour volume count	12,178	0.99	1.01	12,000
South Bradshaw Road to South Hawthorn Avenue	10/19/2021 to 10/21/2021	72-hour volume count	7,405	0.99	1.05	7,700
East of South Hawthorne Avenue	03/02/2022 to 03/03/2022	48-hour volume count	7,737	0.99	0.98	7,500
Side Streets						
Harmon Road west of Ocoee-Apopka Road	01/18/2022 to 01/19/2022	48-hour volume count	3,619	0.99	1.05	3,800
Boy Scout Road west of Ocoee-Apopka Road	2/9/2022 to 2/10/2022	48-hour volume count	2,860	0.99	1.00	2,800
Marden Road South of Ocoee Apopka Road	01/18/2022 to 1/19/2022	48-hour volume count	5,059	0.99	1.05	5,300
West 13th Street south of Ocoee-Apopka Road	01/18/2022 to 1/19/2022	48-hour volume count	3,988	0.99	1.05	4,100
South Bradshaw Road north of Ocoee-Apopka Road	01/18/2022 to 1/19/2022	48-hour volume count	6,157	0.99	1.05	6,400
South Hawthorne Avenue north of Ocoee-Apopka Road	03/02/2022 to 03/03/2022	48-hour volume count	1,463	0.99	0.98	1,400
South Hawthorne Avenue south of Ocoee-Apopka Road	03/02/2022 to 03/03/2022	48-hour volume count	1,419	0.99	0.98	1,400

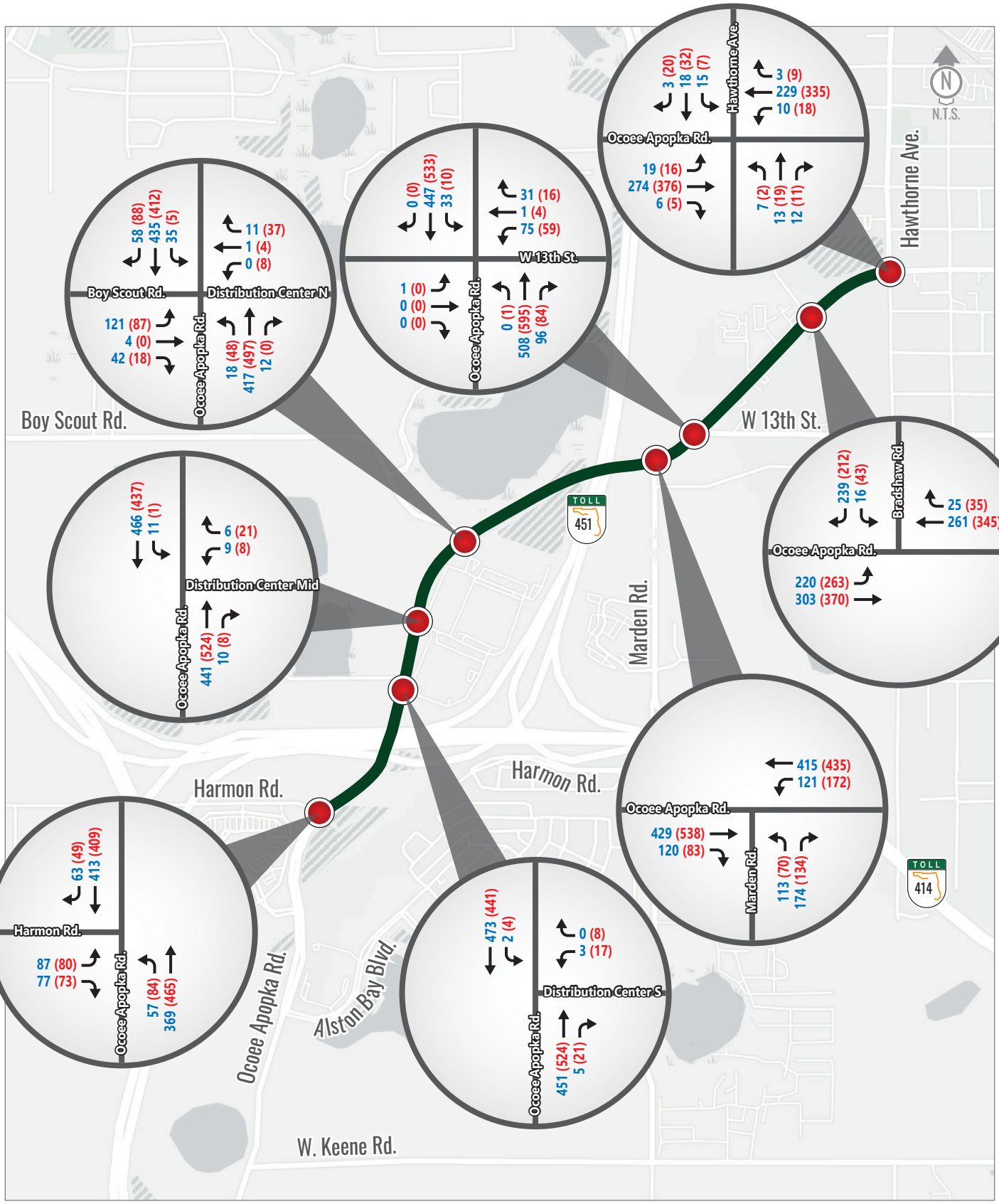
Weekday turning movement counts were collected at the study area intersections for the AM (7:00 - 9:00 AM) and PM (4:00 – 6:00 PM) peak hours. Count data is shown on Figure 19 and in Appendix J.



Lane Geometry

Figure 18

Ocoee Apopka Road Corridor Study
Existing Intersection Geometry



→ Traffic Movement

AM (PM) Peak Hour Traffic Volumes

Figure 19

Ocoee Apopka Road Corridor Study
Weekday Turning Movement Counts

7.2. Existing Operational Analysis (LOS)

Existing 2022 operational analyses were conducted to determine the Level of Service (LOS) for the roadway segments and the study corridor intersections. Peak hour two-way volumes along the different segments were compared against the latest Generalized Peak Hour Directional Service Volumes Tables from the 2020 FDOT Quality/Level of Service Handbook to obtain the arterial LOS. The LOS for the study area intersections were determined using the procedures as outlined in the Transportation Research Board's (TRB) – Highway Capacity Manual (HCM 6th) using Synchro Software (version 11.0).

7.2.1. Roadway Operational Analysis

To determine the year 2022 intersection LOS, the turning movement counts (TMCs) collected in the field were applied to the existing geometry. Using Synchro 11, HCM 6th Edition, analysis was conducted for the intersections with Ocoee-Apopka Road. Table 26 below gives a summary of the existing LOS for the worst major street/minor street results (delay and LOS) at the study intersections.

Table 26| Existing Roadway Level of Service for Ocoee-Apopka Road

Segment	Daily		AM Peak (Two Way)		PM Peak (Two Way)	
	AADT	LOS	Volume	LOS	Volume	LOS
South of Harmon Road	11,500	C	914	C	931	C
Harmon Road to Boy Scout Road	11,000	C	841	C	859	C
Boy Scout Road to Marden Road	11,000	C	1,064	C	1,032	C
Marden Road to Bradshaw Road	12,000	D	956	D	1,016	D
Bradshaw Road to Hawthorne Avenue	7,700	D	570	C	662	D
East of Hawthorne Avenue	7,500	D	557	C	681	D

As shown in Table 26, all roadway segments within the study area operate within acceptable LOS limits. Figure 20 illustrates the existing arterial LOS conditions.

C - Daily Level of Service

D - Daily Level of Service

Figure 20

Ocoee Apopka Road Corridor Study
Existing Arterial LOS Conditions

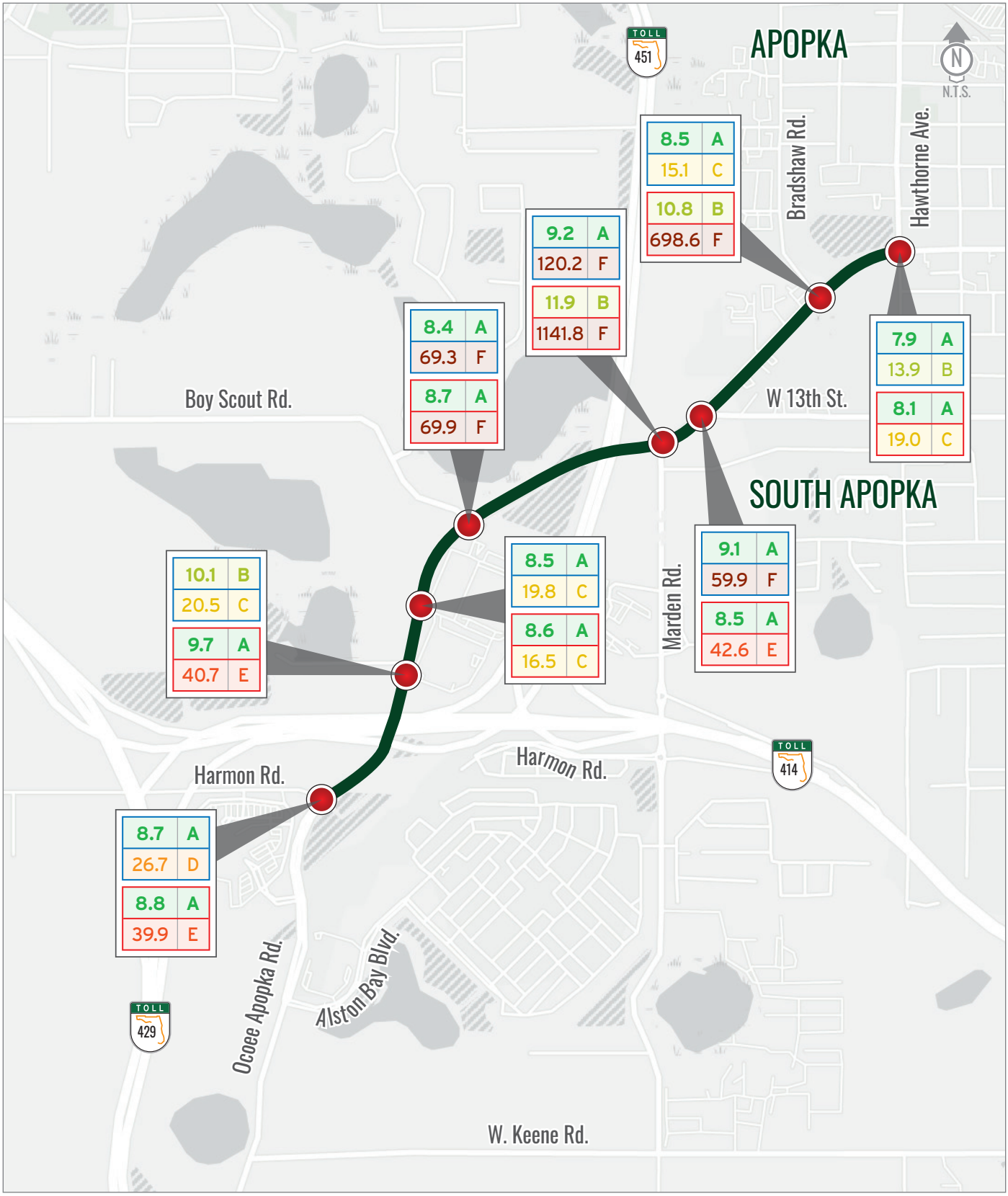
7.2.2. Intersectional Operational Analysis

To determine the year 2022 intersection LOS, the turning movement counts (TMCs) collected in the field were applied to the existing geometry. Using Synchro 11, HCM 6th Edition, analysis was conducted for the intersections with Ocoee-Apopka Road. Table 27 below gives a summary of the existing LOS for the worst major street/minor street results (delay and LOS) at the study intersections.

Table 27| Existing Intersection Level of Service

Intersection	Intersection Control Type	2022 AM Peak Hour		2022 PM Peak Hour	
		Delay	LOS	Delay	LOS
Ocoee-Apopka Road at Harmon Road	Unsignalized	8.7/26.7	A/D	8.8/39.9	A/E
Ocoee-Apopka Road at District Center South Entrance	Unsignalized	10.1/20.5	B/C	9.7/40.7	A/E
Ocoee-Apopka Road at District Center Middle Entrance	Unsignalized	8.5/19.8	A/C	8.6/16.5	A/C
Ocoee-Apopka Road at Boy Scout Road and North Entrance	Unsignalized	8.4/69.3	A/F	8.7/69.9	A/F
Ocoee-Apopka Road at Marden Road	Unsignalized	9.2/120.2	A/F	11.9/1141.8	B/F
Ocoee-Apopka Road at West 13th Street	Unsignalized	9.1/51.9	A/F	8.5/42.6	A/E
Ocoee-Apopka Road at South Bradshaw Road	Unsignalized	8.5/15.1	A/C	10.8/698.6	B/F
Ocoee-Apopka Road at South Hawthorne Avenue	Unsignalized	7.9/13.9	A/B	8.1/19.0	A/C

As shown above, all intersections operate at acceptable LOS conditions in the AM and PM peak hour, with exception of the intersections Boy Scout Road, Marden Road, West 13th Street, and South Bradshaw Road, which have movements from the side streets that operate at LOS F during either or both the peak hour periods. The existing intersection operations and volumes are illustrated in Figure 21. The Synchro summary sheets are provided in Appendix J.



AM Peak Hour

Delay	LOS	
Delay	LOS	Worst Movement on Major Street
Delay	LOS	Worst Movement on Minor Street

PM Peak Hour

Delay	LOS	
Delay	LOS	Worst Movement on Major Street
Delay	LOS	Worst Movement on Minor Street

A	LOS A
B	LOS B
C	LOS C
D	LOS D
E	LOS E
F	LOS F

Figure 21

Ocoee Apopka Road Corridor Study
Existing Intersection Operations & Volumes

7.3. Spot Speed Study

A spot speed study was conducted on the Ocoee-Apopka Road corridor on January 18th through 19th, 2022 between West 13th Street and South Bradshaw Road (north study location) and on January 26th through 27th, 2022 between the Distribution Center Middle and South Entrances (south study location). The locations of the spot speed data collection were selected where vehicles were most likely to be able to travel at free flow speeds. Speed data was compared with posted speed for the northbound direction, due to lack of signage for the southbound direction within the study area.

The results of the spot speed study are shown in Table 28. The factors used in interpreting spot speeds as defined below:

a) 85th Percentile Speed – The speed that 85% of the free flowing vehicles do not exceed.
b) 50th Percentile Speed – The speed that 50% of the free flowing vehicles do not exceed.
c) 10 mph Pace – A 10-mph range that includes the highest number of vehicles observed.

Table 28| Vehicle Spot Speed Summary

Location	Posted Speed* (mph)	Direction	Speed Factors (Day 1)			Speed Factors (Day 2)			Speed Factors (Average of 2 Days)		
			85th Percentile Speed (mph)	50th Percentile Speed (mph)	10 mph Pace	85th Percentile Speed (mph)	50th Percentile Speed (mph)	10 mph Pace	85th Percentile Speed (mph)	50th Percentile Speed (mph)	10 mph Pace
Ocoee-Apopka Road - between Distribution Center Middle and South Entrances	45	Northbound	48.6	42.3	40-49	49.2	43.3	40-49	48.9	42.8	40-49
		Southbound	52.7	46.5	40-49	53.0	47.0	40-49	52.9	46.8	40-49
		Combined	50.7	44.4	40-49	51.1	45.2	40-49	50.9	45.0	40-49
Ocoee-Apopka Road - between West 13th Street and South Bradshaw Road	35	Northbound	45.5	40.0	35-44	45.8	40.5	35-44	45.7	40.2	35-44
		Southbound	45.3	39.5	35-44	45.4	39.6	35-44	45.5	39.4	35-44
		Combined	45.4	39.8	35-44	45.6	40.0	35-44	45.5	39.8	35-44

*Spot speed study conducted in both directions utilizing northbound posted speed due to lack of posted speed in southbound direction (see section 4.8)

The spot speed study measured the instantaneous speeds of vehicles in free flow (either at the very front of a platoon or sufficiently distanced from other vehicles in front of them) using tube counters; thus, providing data on the speeds that drivers on the corridor aim for when unhindered by environmental factors that force them to slow down.

Between Distribution Center Middle and South Entrances (south study location)

The speed data reveals that vehicles traveling northbound and southbound within the posted 45 mph zone move at an 85th percentile speed of 48.9 mph and 52.9 mph, respectively. The 45-mph posted speed is above the 50th Percentile Speed for the northbound travel direction and is below the 50th Percentile Speed for the southbound travel direction. The 45-mph posted speed is within the 10 mph Pace. Based on the spot speed study data analysis, the operating speed along the study corridor at the south speed study location is above the posted speed of 45 mph.

Between West 13th Street and South Bradshaw Road (north study location)

The speed data reveals that vehicles traveling northbound and southbound within the posted 35 mph zone move at an 85th percentile speed of 45.7 mph and 45.5 mph, respectively. The 35-mph posted speed is below the 50th Percentile Speed from both travel directions. The 35-mph posted speed is within the lower limit of the 10 mph Pace. Based on the spot speed study data analysis, the operating speed along the study corridor at the north speed study location is above the posted speed of 35 mph.

8. Safety Analysis

8.1. Crash Summary

Crash data was obtained using Signal4 Analytics for the previous five years (January 01, 2017, to December 31, 2021) along Ocoee-Apopka Road from 250 feet south of the intersection with Harmon Road to 250 feet east of the intersection with South Hawthorne Avenue. Data from intersections within this segment was also collected using a 250-foot impact radius at each. The collected data was checked for any duplicates. The following sections provide highlights about the crash data.

8.1.1. Total Crashes

Along the analyzed segment of Ocoee-Apopka Road a total of 138 crashes, 56 of those resulting in injuries and one (1) resulting in a fatality, were reported over the five-year period within the study area, as illustrated in the following tables.

Table 29 provides a general summary of the crashes along the study corridor, including information on fatal, injury, nighttime, and wet condition crashes. 2021 was the year with the overall highest number of crashes, and the highest number of injury crashes. The number of nighttime crashes saw an increase over the average in 2021, exceeding the previous highest count in 2019.

Table 29| Crash Data Summary by Year

Year	Total Number of Crashes	Number of Injury Crashes	Total Number of Injuries	Number of Fatal Crashes	Total Number of Fatalities	Number of Nighttime Crashes	Number of Wet Condition Crashes
2017	20	7	9	0	0	6	1
2018	30	12	20	0	0	6	3
2019	31	17	25	1	1	13	6
2020	19	2	3	0	0	5	2
2021	38	18	25	0	0	13	5
Total	***138***	***56***	***82***	***1***	***1***	***43***	***17***
Average	**27.6**	**11.2**	**16.4**	**0.2**	**0.2**	**8.6**	**3.4**
Percent	-	**41%**	-	**1%**	-	**31%**	**12%**

Table 30 summarizes the number of crashes by harmful event along the study corridor. It was concluded from the analysis that the two most predominant crash types were Angle (49.3%) and Rear End (27.5%) crashes. The next most predominant crash types were Off Road (12.3%) and Left Turn (5.8%), which account for significantly fewer crashes than the two most predominant crash types.

Table 30| Crash Summary by Harmful Event

Crash Type	2017	2018	2019	2020	2021	2017-2021	Average Per Year	Percent
Pedestrian	1	0	0	0	0	1	0	0.7%
Bicycle	0	0	0	0	1	1	0	0.7%
Left Turn	1	2	1	0	4	8	2	5.8%
Off Road	1	4	6	4	2	17	3	12.3%
Rear End	6	11	10	2	9	38	8	27.5%
Angle	10	12	14	12	20	68	14	49.3%
Other	1	1	0	1	2	5	1	3.6%
Total	***20***	***30***	***31***	***19***	***38***	***138***	***28***	***100%***

8.1.2. Intersection Crash Summary

Table 31 provides a break-down of crashes by intersection, showing that 29% of the crashes occurred at the South Hawthorne Avenue intersection, 19% at the South Bradshaw Road intersection, and 14% at the Boy Scout Road intersection. Crashes at the study intersections (125 crashes) account for 91% of the total crashes, with the remaining 9% of the crashes (13 crashes) occurring outside of the intersection influence area on the roadway segments in between and at other minor intersections.

Table 31| Crash Summary by Intersection

Intersection	2017	2018	2019	2020	2021	2017-2021	Average Per Year	Percent
Harmon Road	0	2	1	0	3	6	1	4%
Distribution Center South Entrance	0	1	2	1	1	5	1	4%
Distribution Center Middle Entrance	0	0	1	0	0	1	0	1%
Boy Scout Road	2	3	4	4	7	20	4	14%
Marden Road	1	4	2	2	9	18	4	13%
West 13th Street	2	1	3	2	1	9	2	7%
South Bradshaw Road	6	5	5	3	7	26	5	19%
South Hawthorne Avenue	6	12	9	5	8	40	8	29%
Total	*17*	*28*	*27*	*17*	*36*	*125*	*25*	*91%*

8.1.3. Bicycle and Pedestrian Crashes

One crash involving a bicycle and one crash involving a pedestrian occurred within the study corridor between 2017 and 2021. Of these two crashes, both involved injuries and neither involved fatalities. Table 32 provides details of these crashes. Crash diagrams (as provided in the Appendix I) show where these crashes occurred.

Table 32| Bicycle and Pedestrian Crash Summary

Crash Type	Severity	Report Number	Intersection	Weather Condition	Lighting Condition	Alcohol/Drug Related	Bike/Ped Facility at Location
Pedestrian	Injury	89503326	Boy Scout Road	Clear	Dark - Not Lighted	No	No
Bicycle	Injury	85434260	West 13th Street	Clear	Dark - Lighted	No	No

8.1.4. Fatal Crashes Summary

One crash within the Ocoee-Apopka Road study corridor between 2017 and 2021 was fatal. Table 33 below summarizes the data for this crash, with a more detailed narrative following.

Table 33| Summary of Fatal Crashes

Crash Type	Report Number	Intersection	Number of Additional Injuries	Weather Condition	Lighting Condition	Alcohol/Drug Related
Angle	89117750	South Hawthorne Avenue	1	Cloudy	Dark - Lighted	No

Fatal Crash Narrative:

- **89117750 – Angle**: Vehicle 1 – a sedan – was traveling northbound on South Hawthorne Avenue, approaching the intersection with Ocoee-Apopka Road, at a high rate of speed. Vehicle 2 – a passenger van – was traveling eastbound on Ocoee-Apopka Road. Vehicle 1 ran the stop sign at the intersection which resulted in the front of vehicle 2 striking the left side of vehicle 1. Vehicle 1 spun off the road and remained upright. Vehicle 2 spun clockwise and then overturned, partially ejecting the passenger. The driver of vehicle 2 was transported to the hospital and sustained fatal injuries. The driver of vehicle 1 fled the scene with possible passengers. Vehicle 1 was discovered to be reported stolen by the owner.

8.2. Crash Rate Summary

Segment crash rates in crashes per million vehicle-miles traveled were calculated for the Ocoee-Apopka Road study corridor to compare the actual crash rate of the corridor to the statewide average crash rate for similar facilities during the study period. Each transition in crash rate category or

AADT requires a break in the segment crash rate calculation, resulting in two segments for the study corridor. The first segment extends from the southern end of the project corridor at Harmon Road to Boy Scout Road and the second segment extends from Boy Scout Road to the northern end of the project corridor at South Hawthorne Avenue. The statewide average crash rate was extracted from the FDOT CAR system. Table 34 below provides a summary of crash rates along the corridor.

Table 34| Crash Rate Analysis Summary

From/To	Number of Crashes [1]	Length (miles)	AADT[4]	ACR[2]	Crash Rate Category	AVG[3]	High Crash Segment?
Harmon Road to Boy Scout Road	30	0.677	6,000	4.047	Urban 2-3 lane 2 way Undivided	2.908	Yes
Boy Scout Road to South Hawthorne Avenue	108	1.076	10,400	5.288	Urban 2-3 lane 2 way Undivided	2.908	Yes

1. Number of crashes from January 1, 2017, to December 31, 2021.
2. Average Crash Rate = (N*1,000,000)/(365*Y*AADT*L), where N = number of crashes, Y = number of years, AADT = Annual Average Daily Traffic, and L = Length of the segment in miles.
3. AVG = Statewide Average Crash Rate for Corresponding Category.
4. Data obtained from Historical AADTs.
5. Segment counts include "from" intersection, but do not include "to" intersection.

As shown in Table 34, all segments within the Ocoee-Apopka Road study corridor experience an average crash rate higher than the statewide average for similar facilities, with the two segments having an average crash rate that exceeds the statewide average. No abnormal trends were identified with the exception of South Hawthorne Avenue where 29% of all crashes occurred and where a higher number were angle crashes. This could be attributed to potential sight distance issues at South Hawthorne Avenue caused by the curve along Ocoee-Apopka Road which has both horizontal and vertical components.

9. Opportunities and Constraints

9.1. Opportunities

The widening of Ocoee-Apopka Road to a four-lane divided roadway would significantly increase the capacity and safety of the roadway to both motorists and non-motorists. Increased capacity would ease congestion currently experienced and support the needs of the anticipated future traffic as a result of the many planned developments coming to the area. The addition on landscaping to the medians can increase the aesthetic appeal of the study corridor while encouraging slower speeds. The addition of sidewalks along the corridor where they are lacking will improve pedestrian safety along the corridor.

The inclusion of a multi-use trail along the study corridor would be consistent with the City of Apopka Trail Master Plan and provide the surrounding community with connections to the current Lake Apopka Loop Trail, the Lake Apopka Connector Trail and the West Orange Trail effectively tying this corridor into the vast trail network which spans across Orange County and continues into the Counties of Osceola, Lake, Seminole, and Brevard.

There is an opportunity to improve existing drainage conditions with the recommended improvements for this study. Stormwater ponds should be considered for appropriate stormwater conveyance.

9.2. Constraints

Outside of the constraints within the existing ROW, the overhead structures for SR 414 and SR 451 limit the available room to accommodate the widening and multi-modal facilities. Impacts to the existing overhead structures should be avoided, as project costs increase significantly with structural impacts.

Appendices

Appendix A

Planning Document Excerpts

MTP ID#	County	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) *Shown in Millions*	Existing TIP: 2020-2025		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
							Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
3225	Orange	Oak Ridge Rd From: Millenia Blvd - To: S John Young Pkwy	Operational / Safety	1.51	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.07		$ -		$ -		$ -		$ -	PE	$ 2.20
					ROW	$ 1.61		$ -		$ -		$ -		$ -	ROW	$ 3.30
					ENV	$ 0.54		$ -		$ -		$ -		$ -	ENV	$ 1.10
					CST	$ 3.58		$ -		$ -		$ -		$ -	CST	$ 7.33
					CEI	$ 0.36		$ -		$ -		$ -		$ -	CEI	$ 0.73
3237	Orange	Central Blvd From: Orange Blossom Trl - To: Division Ave N	Operational / Safety	1.01	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.72		$ -		$ -		$ -		$ -	PE	$ 1.47
					ROW	$ 1.07		$ -		$ -		$ -		$ -	ROW	$ 2.20
					ENV	$ 0.36		$ -		$ -		$ -		$ -	ENV	$ 0.73
					CST	$ 2.39		$ -		$ -		$ -		$ -	CST	$ 4.90
					CEI	$ 0.24		$ -		$ -		$ -		$ -	CEI	$ 0.49
3232	Orange	Robinson St From: Orange Blossom Trl - To: N Hughey Ave	Operational / Safety	0.88	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.63		$ -		$ -		$ -		$ -	PE	$ 1.28
					ROW	$ 0.94		$ -		$ -		$ -		$ -	ROW	$ 1.93
					ENV	$ 0.31		$ -		$ -		$ -		$ -	ENV	$ 0.64
					CST	$ 2.09		$ -		$ -		$ -		$ -	CST	$ 4.28
					CEI	$ 0.21		$ -		$ -		$ -		$ -	CEI	$ 0.43
B34	Orange	TSM&O Improvements Bundle # B34 From: - To:	ITS/Technology improvements on Major Blvd from Universal Blvd to S Kirkman Rd; ITS/Technology improvements on Major Blvd from S Kirkman Rd to Vineland Rd; ITS/Technology improvements on Universal Blvd from Hollywood Way to Vineland Rd; ITS/Technology improvements on Universal Blvd from International Dr to Vineland Rd	3.33	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.75		$ -		$ -		$ -		$ -	PE	$ 1.54
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 2.50		$ -		$ -		$ -		$ -	CST	$ 5.12
					CEI	$ 0.25		$ -		$ -		$ -		$ -	CEI	$ 0.51
3001	Orange	Narcoossee Rd From: Tyson Rd - To: Orange / Osceola CL	Operational / Safety	2.32	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.65		$ -		$ -		$ -		$ -	PE	$ 3.39
					ROW	$ 2.48		$ -		$ -		$ -		$ -	ROW	$ 5.08
					ENV	$ 0.83		$ -		$ -		$ -		$ -	ENV	$ 1.69
					CST	$ 5.51		$ -		$ -		$ -		$ -	CST	$ 11.30
					CEI	$ 0.55		$ -		$ -		$ -		$ -	CEI	$ 1.13
3002	Orange	Narcoossee Rd From: SR 417 - To: Tyson Rd	Operational / Safety	1.60	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.14		$ -		$ -		$ -		$ -	PE	$ 2.34
					ROW	$ 1.71		$ -		$ -		$ -		$ -	ROW	$ 3.51
					ENV	$ 0.57		$ -		$ -		$ -		$ -	ENV	$ 1.17
					CST	$ 3.80		$ -		$ -		$ -		$ -	CST	$ 7.79
					CEI	$ 0.38		$ -		$ -		$ -		$ -	CEI	$ 0.78
3095	Orange	Bradshaw Ave From: Michael Gladden Blvd - To: W Main St	ITS/Technology	0.97	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.22		$ -		$ -		$ -		$ -	PE	$ 0.45
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.73		$ -		$ -		$ -		$ -	CST	$ 1.50
					CEI	$ 0.07		$ -		$ -		$ -		$ -	CEI	$ 0.15
B17	Orange	TSM&O Improvements Bundle # B17 From: - To:	Operational / Safety improvements on Pine Hills Rd from Silver Star Rd to Clarcona Ocoee Rd; Operational / Safety improvements on Pine Hills Rd from Old Winter Garden Rd to Silver Star Rd	4.83	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 3.44		$ -		$ -		$ -		$ -	PE	$ 7.05
					ROW	$ 5.16		$ -		$ -		$ -		$ -	ROW	$ 10.58
					ENV	$ 1.72		$ -		$ -		$ -		$ -	ENV	$ 3.53
					CST	$ 11.47		$ -		$ -		$ -		$ -	CST	$ 23.52
					CEI	$ 1.15		$ -		$ -		$ -		$ -	CEI	$ 2.35

MTP ID#	County	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) *Shown in Millions*	Existing TIP: 2020-2025		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
							Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
4004	Seminole	E Church Ave From: N Ronald Reagan Blvd - To: US 17/92	Complete Streets w/Shared Use Path	1.18	PD&E	$ 0.59	PD&E	$ 0.59		$ -		$ -		$ -		$ -
					PE	$ 1.77	PE	$ 1.77		$ -		$ -		$ -		$ -
					ROW			$ -	ROW	$ -		$ -		$ -		$ -
					ENV	$ 0.89		$ -	ENV	$ 1.17		$ -		$ -		$ -
					CST	$ 5.91		$ -		$ -	CST	$ 4.00		$ -	Local	$ 2.20
					CEI	$ 0.59		$ -		$ -	CEI	$ 0.92		$ -		$ -
1807	Seminole	Goldsboro Community Gateway (S. Pomegranate Ave.) From: SR 46 - To: Persimmon Ave./8th St.	New 2 Lane Roadway	0.52	PD&E	$ 0.25	PD&E	$ 0.25		$ -		$ -		$ -		$ -
					PE	$ 0.76	PE	$ 0.76		$ -		$ -		$ -		$ -
					ROW			$ -	ROW	$ -		$ -		$ -		$ -
					ENV	$ 0.38		$ -	ENV	$ 0.50		$ -		$ -		$ -
					CST	$ 2.547		$ -	CST	$ 3.36		$ -		$ -		$ -
					CEI	$ 0.25		$ -	CEI	$ 0.34		$ -		$ -		$ -
596	Orange	Virginia Drive, Forest Avenue & Corrine Drive From: US 17/92/Mills Ave. - To: Bennett Rd	Complete Streets w/Shared Use Path	2.10	PD&E	$ 1.05	PD&E	$ 1.05		$ -		$ -		$ -		$ -
					PE	$ 3.15	PE	$ 3.15		$ -		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV	$ 1.58		$ -	ENV	$ 2.08		$ -		$ -		$ -
					CST	$ 10.50		$ -	CST	$ 4.00		$ -		$ -	Local	$ 1.28
					CEI	$ 1.05		$ -	CEI	$ 1.39		$ -		$ -		$ -
453	Orange	Virginia Drive From: SR 527/Orange Ave. - To: US 17/92/Mills Ave.	Complete Streets	0.50	PD&E	$ 0.20	PD&E	$ 0.20		$ -		$ -		$ -		$ -
					PE	$ 0.60	PE	$ 0.60		$ -		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV	$ 0.30		$ -	ENV	$ 0.40		$ -		$ -		$ -
					CST	$ 2.000		$ -	CST	$ 2.64		$ -		$ -		$ -
					CEI	$ 0.20		$ -	CEI	$ 0.26		$ -		$ -		$ -
4005	Orange	W Gore St From: S Rio Grande Ave. - To: Delaney Ave	Complete Streets	1.61	PD&E	$ 0.65		$ -	PD&E	$ 0.85		$ -		$ -		$ -
					PE	$ 1.94		$ -	PE	$ 2.56		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV	$ 0.97		$ -	ENV	$ 1.28		$ -		$ -		$ -
					CST	$ 6.45		$ -		$ -	CST	$ 4.00		$ -	Local	$ 2.20
					CEI	$ 0.65		$ -		$ -	CEI	$ 1.00		$ -		$ -
4012	Osceola	N Central Ave From: Martin Luther King Blvd - To: W Donegan Ave	Complete Streets	1.51	PD&E	$ 0.60	PD&E	$ 0.60		$ -		$ -		$ -		$ -
					PE	$ 1.81		$ -	PE	$ 2.39		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV	$ 0.91		$ -	ENV	$ 1.20		$ -		$ -		$ -
					CST	$ 6.045		$ -		$ -	CST	$ 4.00		$ -	Local	$ 2.20
					CEI	$ 0.60		$ -		$ -	CEI	$ 0.94		$ -		$ -
4007	Orange	W Michael Gladden Blvd From: S Park Ave - To: Bradshaw Rd	Complete Streets	0.70	PD&E	$ 0.28		$ -	PD&E	$ 0.37		$ -		$ -		$ -
					PE	$ 0.84		$ -	PE	$ 1.11		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV	$ 0.42		$ -	ENV	$ 0.55		$ -		$ -		$ -
					CST	$ 2.80		$ -		$ -	CST	$ 4.00		$ -	Local	$ 2.20
					CEI	$ 0.28		$ -		$ -	CEI	$ 0.43		$ -		$ -
4006	Orange	S Park Ave / Clarcona Rd From: US 441 / Main St - To: Cleveland St	Complete Streets	1.27	PD&E	$ 0.51		$ -	PD&E	$ 0.67		$ -		$ -		$ -
					PE	$ 1.52		$ -	PE	$ 2.00		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV	$ 0.76		$ -	ENV	$ 1.00		$ -		$ -		$ -
					CST	$ 5.061		$ -		$ -	CST	$ 4.00		$ -	Local	$ 2.20
					CEI	$ 0.51		$ -		$ -	CEI	$ 0.78		$ -		$ -

MTP ID#	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) Shown in Millions	Existing TIP: 2020-2025		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
						Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
7207	Clarcona-Ocoee Rd From: Hiawassee Rd - To: Powers Dr	Operational	0.55	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.16		$ -		$ -		$ -		$ -	PE	$ 0.34
				ROW	$ 0.25		$ -		$ -		$ -		$ -	ROW	$ 0.51
				ENV	$ 0.08		$ -		$ -		$ -		$ -	ENV	$ 0.17
				CST	$ 0.55		$ -		$ -		$ -		$ -	CST	$ 1.13
				CEI	$ 0.05		$ -		$ -		$ -		$ -	CEI	$ 0.11
7172	L.B. McLeod Rd From: John Young Pkwy - To: Rio Grande Ave	Operational	1.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.34		$ -		$ -		$ -		$ -	PE	$ 0.69
				ROW	$ 0.51		$ -		$ -		$ -		$ -	ROW	$ 1.04
				ENV	$ 0.17		$ -		$ -		$ -		$ -	ENV	$ 0.35
				CST	$ 1.12		$ -		$ -		$ -		$ -	CST	$ 2.31
				CEI	$ 0.11		$ -		$ -		$ -		$ -	CEI	$ 0.23
7544	Ocoee-Apopka Rd From: Harmon Rd - To: Bradshaw Rd	Widen from 2 to 4 lanes	1.54	PD&E	$ 0.83		$ -		$ -		$ -		$ -	PD&E	$ 1.70
				PE	$ 2.48		$ -		$ -		$ -		$ -	PE	$ 5.09
				ROW	$ 3.72		$ -		$ -		$ -		$ -	ROW	$ 7.63
				ENV	$ 1.24		$ -		$ -		$ -		$ -	ENV	$ 2.54
				CST	$ 8.27		$ -		$ -		$ -		$ -	CST	$ 16.95
				CEI	$ 0.83		$ -		$ -		$ -		$ -	CEI	$ 1.70
7260	Wetherbee Rd From: Orange Blossom Trl - To: Florida's Turnpike	Operational	0.86	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.26		$ -		$ -		$ -		$ -	PE	$ 0.53
				ROW	$ 0.39		$ -		$ -		$ -		$ -	ROW	$ 0.79
				ENV	$ 0.13		$ -		$ -		$ -		$ -	ENV	$ 0.26
				CST	$ 0.86		$ -		$ -		$ -		$ -	CST	$ 1.76
				CEI	$ 0.09		$ -		$ -		$ -		$ -	CEI	$ 0.18
7254	Turkey Lake Rd From: Sand Lake Rd - To: Wallace Rd	Operational	0.92	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.27		$ -		$ -		$ -		$ -	PE	$ 0.56
				ROW	$ 0.41		$ -		$ -		$ -		$ -	ROW	$ 0.84
				ENV	$ 0.14		$ -		$ -		$ -		$ -	ENV	$ 0.28
				CST	$ 0.92		$ -		$ -		$ -		$ -	CST	$ 1.88
				CEI	$ 0.09		$ -		$ -		$ -		$ -	CEI	$ 0.19
7188	Daniels Rd From: Fowler Grove Blvd - To: Roper Rd	Operational	0.92	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.28		$ -		$ -		$ -		$ -	PE	$ 0.56
				ROW	$ 0.41		$ -		$ -		$ -		$ -	ROW	$ 0.85
				ENV	$ 0.14		$ -		$ -		$ -		$ -	ENV	$ 0.28
				CST	$ 0.92		$ -		$ -		$ -		$ -	CST	$ 1.88
				CEI	$ 0.09		$ -		$ -		$ -		$ -	CEI	$ 0.19
7168	Hiawassee Rd From: Westpointe Blvd - To: MetroWest Blvd	Operational	0.68	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.20		$ -		$ -		$ -		$ -	PE	$ 0.42
				ROW	$ 0.31		$ -		$ -		$ -		$ -	ROW	$ 0.63
				ENV	$ 0.10		$ -		$ -		$ -		$ -	ENV	$ 0.21
				CST	$ 0.68		$ -		$ -		$ -		$ -	CST	$ 1.39
				CEI	$ 0.07		$ -		$ -		$ -		$ -	CEI	$ 0.14
7291	Metrowest Multi-Purpose Path Phase 1 From: Hiawassee Rd at Metrowest Blvd - To: Hiawassee Rd at Turkey Lake Park Entrance	Safety Improvements	1.24	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.46		$ -		$ -		$ -		$ -	PE	$ 0.95
				ROW	$ 0.70		$ -		$ -		$ -		$ -	ROW	$ 1.43
				ENV	$ 0.23		$ -		$ -		$ -		$ -	ENV	$ 0.48
				CST	$ 1.55		$ -		$ -		$ -		$ -	CST	$ 3.17
				CEI	$ 0.15		$ -		$ -		$ -		$ -	CEI	$ 0.32

MTP ID#	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) Shown in Millions	Existing TIP: 2020-2025		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
						Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
7238	Orange Ave From: Wetherbee Rd - To: Tradeport Dr	Operational	2.05	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.62		$ -		$ -		$ -		$ -	PE	$ 1.26
				ROW	$ 0.92		$ -		$ -		$ -		$ -	ROW	$ 1.89
				ENV	$ 0.31		$ -		$ -		$ -		$ -	ENV	$ 0.63
				CST	$ 2.05		$ -		$ -		$ -		$ -	CST	$ 4.21
				CEI	$ 0.21		$ -		$ -		$ -		$ -	CEI	$ 0.42
7238	Orange Ave From: Wetherbee Rd - To: Tradeport Dr	Operational	2.05	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.62		$ -		$ -		$ -		$ -	PE	$ 1.26
				ROW	$ 0.92		$ -		$ -		$ -		$ -	ROW	$ 1.89
				ENV	$ 0.31		$ -		$ -		$ -		$ -	ENV	$ 0.63
				CST	$ 2.05		$ -		$ -		$ -		$ -	CST	$ 4.21
				CEI	$ 0.21		$ -		$ -		$ -		$ -	CEI	$ 0.42
7249	Thompson Rd From: Semoran Blvd - To: Votaw Rd	Operational	0.75	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.22		$ -		$ -		$ -		$ -	PE	$ 0.46
				ROW	$ 0.34		$ -		$ -		$ -		$ -	ROW	$ 0.69
				ENV	$ 0.11		$ -		$ -		$ -		$ -	ENV	$ 0.23
				CST	$ 0.75		$ -		$ -		$ -		$ -	CST	$ 1.53
				CEI	$ 0.07		$ -		$ -		$ -		$ -	CEI	$ 0.15
7302	Michael Gladden Blvd/Ocoee Apopka Rd (CR 437A) From: Park Ave - To: McCormick Rd	Safety Improvements	4.31	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 1.62		$ -		$ -		$ -		$ -	PE	$ 3.32
				ROW	$ 2.43		$ -		$ -		$ -		$ -	ROW	$ 4.97
				ENV	$ 0.81		$ -		$ -		$ -		$ -	ENV	$ 1.66
				CST	$ 5.39		$ -		$ -		$ -		$ -	CST	$ 11.05
				CEI	$ 0.54		$ -		$ -		$ -		$ -	CEI	$ 1.11
7315	Ocoee Apopka Rd and Marden Rd From: Ocoee Apopka Rd and Marden Rd - To: -	Operational / Safety	0.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.09		$ -		$ -		$ -		$ -	PE	$ 0.18
				ROW	$ 0.13		$ -		$ -		$ -		$ -	ROW	$ 0.26
				ENV	$ 0.04		$ -		$ -		$ -		$ -	ENV	$ 0.09
				CST	$ 0.28		$ -		$ -		$ -		$ -	CST	$ 0.58
				CEI	$ 0.03		$ -		$ -		$ -		$ -	CEI	$ 0.06
7526	Summerlake Park Blvd From: Porter Rd - To: Summerlake Groves St	Widen from 2 to 4 lanes	0.80	PD&E	$ 0.43		$ -		$ -		$ -		$ -	PD&E	$ 0.88
				PE	$ 1.28		$ -		$ -		$ -		$ -	PE	$ 2.63
				ROW	$ 1.92		$ -		$ -		$ -		$ -	ROW	$ 3.94
				ENV	$ 0.64		$ -		$ -		$ -		$ -	ENV	$ 1.31
				CST	$ 4.27		$ -		$ -		$ -		$ -	CST	$ 8.76
				CEI	$ 0.43		$ -		$ -		$ -		$ -	CEI	$ 0.88
7169	Horatio Ave/Howell Branch From: Orlando Ave - To: Thistle Lane	Operational	1.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.34		$ -		$ -		$ -		$ -	PE	$ 0.69
				ROW	$ 0.50		$ -		$ -		$ -		$ -	ROW	$ 1.03
				ENV	$ 0.17		$ -		$ -		$ -		$ -	ENV	$ 0.34
				CST	$ 1.12		$ -		$ -		$ -		$ -	CST	$ 2.30
				CEI	$ 0.11		$ -		$ -		$ -		$ -	CEI	$ 0.23
7329	Horatio Ave and Swoope Ave From: Horatio Ave and Swoope Ave - To: -	Operational / Safety	0.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.09		$ -		$ -		$ -		$ -	PE	$ 0.18
				ROW	$ 0.13		$ -		$ -		$ -		$ -	ROW	$ 0.26
				ENV	$ 0.04		$ -		$ -		$ -		$ -	ENV	$ 0.09
				CST	$ 0.28		$ -		$ -		$ -		$ -	CST	$ 0.58
				CEI	$ 0.03		$ -		$ -		$ -		$ -	CEI	$ 0.06

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						Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
7403	Ocoee Apopka Rd From: Fullers Cross Rd - To: West Rd	Widen from 2 to 4 Lanes	0.60	PD&E	$ 0.32		$ -		$ -		$ -		$ -	PD&E	$ 0.66
				PE	$ 0.96		$ -		$ -		$ -		$ -	PE	$ 1.98
				ROW	$ 1.45		$ -		$ -		$ -		$ -	ROW	$ 2.96
				ENV	$ 0.48		$ -		$ -		$ -		$ -	ENV	$ 0.99
				CST	$ 3.21		$ -		$ -		$ -		$ -	CST	$ 6.59
				CEI	$ 0.32		$ -		$ -		$ -		$ -	CEI	$ 0.66
7425	Ocoee-Apopka Rd From: Silver Star Rd - To: Palm Dr	Widen from 2 to 4 Lanes	2.04	PD&E	$ 1.09		$ -		$ -		$ -		$ -	PD&E	$ 2.24
				PE	$ 3.28		$ -		$ -		$ -		$ -	PE	$ 6.73
				ROW	$ 4.92		$ -		$ -		$ -		$ -	ROW	$ 10.09
				ENV	$ 1.64		$ -		$ -		$ -		$ -	ENV	$ 3.36
				CST	$ 10.94		$ -		$ -		$ -		$ -	CST	$ 22.42
				CEI	$ 1.09		$ -		$ -		$ -		$ -	CEI	$ 2.24
7397	Bluford Ave From: Geneva St - To: Delaware St	Complete Streets	0.42	PD&E	$ 0.17		$ -		$ -		$ -		$ -	PD&E	$ 0.35
				PE	$ 0.51		$ -		$ -		$ -		$ -	PE	$ 1.04
				ROW	$ 0.76		$ -		$ -		$ -		$ -	ROW	$ 1.56
				ENV	$ 0.25		$ -		$ -		$ -		$ -	ENV	$ 0.52
				CST	$ 1.69		$ -		$ -		$ -		$ -	CST	$ 3.47
				CEI	$ 0.17		$ -		$ -		$ -		$ -	CEI	$ 0.35
7396	Bluford Ave From: SR 50 / Colonial Dr - To: Geneva St	Complete Streets	0.62	PD&E	$ 0.25		$ -		$ -		$ -		$ -	PD&E	$ 0.51
				PE	$ 0.75		$ -		$ -		$ -		$ -	PE	$ 1.53
				ROW	$ 1.12		$ -		$ -		$ -		$ -	ROW	$ 2.30
				ENV	$ 0.37		$ -		$ -		$ -		$ -	ENV	$ 0.77
				CST	$ 2.49		$ -		$ -		$ -		$ -	CST	$ 5.11
				CEI	$ 0.25		$ -		$ -		$ -		$ -	CEI	$ 0.51
7467	Michael Gladden Blvd From: Bradshaw Rd - To: South Central Ave	Operational / Safety	0.57	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.41		$ -		$ -		$ -		$ -	PE	$ 0.84
				ROW	$ 0.61		$ -		$ -		$ -		$ -	ROW	$ 1.26
				ENV	$ 0.20		$ -		$ -		$ -		$ -	ENV	$ 0.42
				CST	$ 1.36		$ -		$ -		$ -		$ -	CST	$ 2.80
				CEI	$ 0.14		$ -		$ -		$ -		$ -	CEI	$ 0.28
7504	Schofield Rd From: SR 429 - To: Avalon Rd	Complete Streets / Safety / Ops	0.43	PD&E	$ 0.21		$ -		$ -		$ -		$ -	PD&E	$ 0.44
				PE	$ 0.64		$ -		$ -		$ -		$ -	PE	$ 1.31
				ROW	$ 0.96		$ -		$ -		$ -		$ -	ROW	$ 1.97
				ENV	$ 0.32		$ -		$ -		$ -		$ -	ENV	$ 0.66
				CST	$ 2.14		$ -		$ -		$ -		$ -	CST	$ 4.38
				CEI	$ 0.21		$ -		$ -		$ -		$ -	CEI	$ 0.44
7423	Econlockhatchee Trl From: Lee Vista Blvd - To: Curry Ford Rd	Complete Streets / Safety / Ops	2.33	PD&E	$ 1.17		$ -		$ -		$ -		$ -	PD&E	$ 2.39
				PE	$ 3.50		$ -		$ -		$ -		$ -	PE	$ 7.17
				ROW	$ 5.25		$ -		$ -		$ -		$ -	ROW	$ 10.76
				ENV	$ 1.75		$ -		$ -		$ -		$ -	ENV	$ 3.59
				CST	$ 11.66		$ -		$ -		$ -		$ -	CST	$ 23.91
				CEI	$ 1.17		$ -		$ -		$ -		$ -	CEI	$ 2.39
7474	Overstreet Rd From: Winter Garden-Vineland Rd - To: Londale Blvd	Operational / Safety	1.33	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.95		$ -		$ -		$ -		$ -	PE	$ 1.94
				ROW	$ 1.42		$ -		$ -		$ -		$ -	ROW	$ 2.91
				ENV	$ 0.47		$ -		$ -		$ -		$ -	ENV	$ 0.97
				CST	$ 3.15		$ -		$ -		$ -		$ -	CST	$ 6.46
				CEI	$ 0.32		$ -		$ -		$ -		$ -	CEI	$ 0.65

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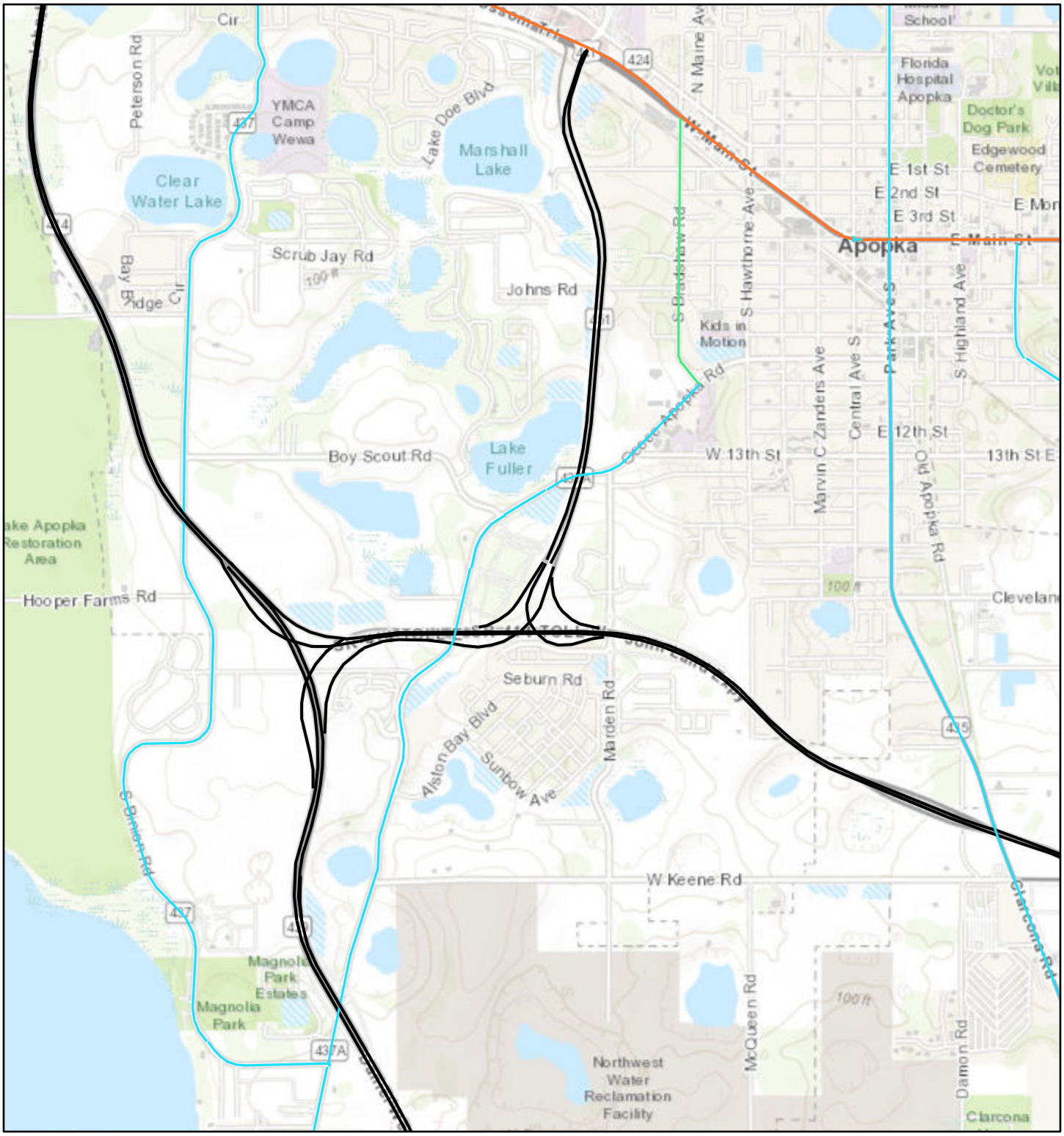
						Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
7125	Lancaster Rd From: Orange Blossom Trl - To: Winegard Rd	Operational / Safety	0.77	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.55		$ -		$ -		$ -		$ -	PE	$ 1.12
				ROW	$ 0.82		$ -		$ -		$ -		$ -	ROW	$ 1.68
				ENV	$ 0.27		$ -		$ -		$ -		$ -	ENV	$ 0.56
				CST	$ 1.82		$ -		$ -		$ -		$ -	CST	$ 3.74
				CEI	$ 0.18		$ -		$ -		$ -		$ -	CEI	$ 0.37
7304	Ocoee Apopka Rd and Harmon Rd From: Ocoee Apopka Rd and Harmon Rd - To: -	Operational / Safety	0.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.09		$ -		$ -		$ -		$ -	PE	$ 0.18
				ROW	$ 0.13		$ -		$ -		$ -		$ -	ROW	$ 0.26
				ENV	$ 0.04		$ -		$ -		$ -		$ -	ENV	$ 0.09
				CST	$ 0.28		$ -		$ -		$ -		$ -	CST	$ 0.58
				CEI	$ 0.03		$ -		$ -		$ -		$ -	CEI	$ 0.06
7314	Ocoee Apopka Rd and Keene Rd From: Ocoee Apopka Rd and Keene Rd - To: -	Operational / Safety	0.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.09		$ -		$ -		$ -		$ -	PE	$ 0.18
				ROW	$ 0.13		$ -		$ -		$ -		$ -	ROW	$ 0.26
				ENV	$ 0.04		$ -		$ -		$ -		$ -	ENV	$ 0.09
				CST	$ 0.28		$ -		$ -		$ -		$ -	CST	$ 0.58
				CEI	$ 0.03		$ -		$ -		$ -		$ -	CEI	$ 0.06
7338	Catherine Ross/Winters Landing Dr From: Oakland Ave - To: -	Safety Improvements	0.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.04		$ -		$ -		$ -		$ -	PE	$ 0.09
				ROW	$ 0.07		$ -		$ -		$ -		$ -	ROW	$ 0.14
				ENV	$ 0.02		$ -		$ -		$ -		$ -	ENV	$ 0.05
				CST	$ 0.15		$ -		$ -		$ -		$ -	CST	$ 0.31
				CEI	$ 0.01		$ -		$ -		$ -		$ -	CEI	$ 0.03
7339	Tubb St From: Oakland Ave - To: -	Safety Improvements	0.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.04		$ -		$ -		$ -		$ -	PE	$ 0.09
				ROW	$ 0.07		$ -		$ -		$ -		$ -	ROW	$ 0.14
				ENV	$ 0.02		$ -		$ -		$ -		$ -	ENV	$ 0.05
				CST	$ 0.15		$ -		$ -		$ -		$ -	CST	$ 0.31
				CEI	$ 0.01		$ -		$ -		$ -		$ -	CEI	$ 0.03
7101	Dowden Rd Fiber Optic Communications From: West end of Dowden Rd - To: East end of Dowden Rd	ITS/Technology	5.99	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 1.35		$ -		$ -		$ -		$ -	PE	$ 2.76
				ROW	$ -		$ -		$ -		$ -		$ -		$ -
				ENV	$ -		$ -		$ -		$ -		$ -		$ -
				CST	$ 4.49		$ -		$ -		$ -		$ -	CST	$ 9.20
				CEI	$ 0.45		$ -		$ -		$ -		$ -	CEI	$ 0.92
7312	Lester Rd/Vick Rd Intersection From: Lester Rd and Vick Rd - To: -	Operational / Safety	0.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.09		$ -		$ -		$ -		$ -	PE	$ 0.18
				ROW	$ 0.13		$ -		$ -		$ -		$ -	ROW	$ 0.26
				ENV	$ 0.04		$ -		$ -		$ -		$ -	ENV	$ 0.09
				CST	$ 0.28		$ -		$ -		$ -		$ -	CST	$ 0.58
				CEI	$ 0.03		$ -		$ -		$ -		$ -	CEI	$ 0.06
7350	Marsh Rd From: Williams Rd - To: -	Safety Improvements	0.12	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.04		$ -		$ -		$ -		$ -	PE	$ 0.09
				ROW	$ 0.07		$ -		$ -		$ -		$ -	ROW	$ 0.14
				ENV	$ 0.02		$ -		$ -		$ -		$ -	ENV	$ 0.05
				CST	$ 0.15		$ -		$ -		$ -		$ -	CST	$ 0.31
				CEI	$ 0.01		$ -		$ -		$ -		$ -	CEI	$ 0.03

MTP ID#	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) Shown in Millions	Existing TIP: 2020-2025		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
						Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
7565	Dowden Rd Southern Extension From: SR 417 - To: Dowden Rd Terminus	New 4 Lane Roadway	3.09	PD&E	$ 2.33		$ -		$ -		$ -		$ -	PD&E	$ 4.78
				PE	$ 6.99		$ -		$ -		$ -		$ -	PE	$ 14.33
				ROW	$ 10.48		$ -		$ -		$ -		$ -	ROW	$ 21.49
				ENV	$ 3.49		$ -		$ -		$ -		$ -	ENV	$ 7.16
				CST	$ 23.29		$ -		$ -		$ -		$ -	CST	$ 47.75
				CEI	$ 2.33		$ -		$ -		$ -		$ -	CEI	$ 4.78
7566	Lee Vista Blvd East Extension From: - - To: -	New 4 Lane Roadway	0.55	PD&E	$ 0.41		$ -		$ -		$ -		$ -	PD&E	$ 0.85
				PE	$ 1.24		$ -		$ -		$ -		$ -	PE	$ 2.55
				ROW	$ 1.87		$ -		$ -		$ -		$ -	ROW	$ 3.83
				ENV	$ 0.62		$ -		$ -		$ -		$ -	ENV	$ 1.28
				CST	$ 4.15		$ -		$ -		$ -		$ -	CST	$ 8.51
				CEI	$ 0.41		$ -		$ -		$ -		$ -	CEI	$ 0.85
7567	President Barack Obama Pkwy - Phase 2 From: Metro West Blvd - To: Raleigh St	New 4 Lane Roadway	0.82	PD&E	$ 0.62		$ -		$ -		$ -		$ -	PD&E	$ 1.28
				PE	$ 1.87		$ -		$ -		$ -		$ -	PE	$ 3.83
				ROW	$ 2.80		$ -		$ -		$ -		$ -	ROW	$ 5.74
				ENV	$ 0.93		$ -		$ -		$ -		$ -	ENV	$ 1.91
				CST	$ 6.22		$ -		$ -		$ -		$ -	CST	$ 12.75
				CEI	$ 0.62		$ -		$ -		$ -		$ -	CEI	$ 1.28
7568	President Barack Obama Pkwy - Phase 3 From: Raleigh St - To: Old Winter Garden Rd	New 4 Lane Roadway	1.19	PD&E	$ 0.89		$ -		$ -		$ -		$ -	PD&E	$ 1.83
				PE	$ 2.68		$ -		$ -		$ -		$ -	PE	$ 5.50
				ROW	$ 4.03		$ -		$ -		$ -		$ -	ROW	$ 8.25
				ENV	$ 1.34		$ -		$ -		$ -		$ -	ENV	$ 2.75
				CST	$ 8.95		$ -		$ -		$ -		$ -	CST	$ 18.34
				CEI	$ 0.89		$ -		$ -		$ -		$ -	CEI	$ 1.83
7569	President Barack Obama Pkwy - Phase 4 From: Old Winter Garden Rd - To: SR 50 / Colonial Dr	New 4 Lane Roadway	0.52	PD&E	$ 0.39		$ -		$ -		$ -		$ -	PD&E	$ 0.80
				PE	$ 1.17		$ -		$ -		$ -		$ -	PE	$ 2.40
				ROW	$ 1.75		$ -		$ -		$ -		$ -	ROW	$ 3.60
				ENV	$ 0.58		$ -		$ -		$ -		$ -	ENV	$ 1.20
				CST	$ 3.90		$ -		$ -		$ -		$ -	CST	$ 7.99
				CEI	$ 0.39		$ -		$ -		$ -		$ -	CEI	$ 0.80
7570	Wetherbee Rd Extension From: Boggy Creek Rd - To: Heintzelman Blvd	New 4 Lane Roadway	1.03	PD&E	$ 0.77		$ -		$ -		$ -		$ -	PD&E	$ 1.59
				PE	$ 2.32		$ -		$ -		$ -		$ -	PE	$ 4.76
				ROW	$ 3.48		$ -		$ -		$ -		$ -	ROW	$ 7.14
				ENV	$ 1.16		$ -		$ -		$ -		$ -	ENV	$ 2.38
				CST	$ 7.74		$ -		$ -		$ -		$ -	CST	$ 15.87
				CEI	$ 0.77		$ -		$ -		$ -		$ -	CEI	$ 1.59
7571	Harmon Rd Extension From: Ocoee Apopka Rd - To: Existing Harmon Rd	New 4 Lane Roadway	0.35	PD&E	$ 0.26		$ -		$ -		$ -		$ -	PD&E	$ 0.53
				PE	$ 0.78		$ -		$ -		$ -		$ -	PE	$ 1.60
				ROW	$ 1.17		$ -		$ -		$ -		$ -	ROW	$ 2.40
				ENV	$ 0.39		$ -		$ -		$ -		$ -	ENV	$ 0.80
				CST	$ 2.61		$ -		$ -		$ -		$ -	CST	$ 5.34
				CEI	$ 0.26		$ -		$ -		$ -		$ -	CEI	$ 0.53
7572	Peterson Rd Extension From: Extend Peterson Rd to the west to Shelby Industrial Dr to Eastern Terminus - To: -	New 4 Lane Roadway	1.05	PD&E	$ 0.79		$ -		$ -		$ -		$ -	PD&E	$ 1.62
				PE	$ 2.37		$ -		$ -		$ -		$ -	PE	$ 4.86
				ROW	$ 3.55		$ -		$ -		$ -		$ -	ROW	$ 7.29
				ENV	$ 1.18		$ -		$ -		$ -		$ -	ENV	$ 2.43
				CST	$ 7.90		$ -		$ -		$ -		$ -	CST	$ 16.19
				CEI	$ 0.79		$ -		$ -		$ -		$ -	CEI	$ 1.62

Regional Freight Network



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1:36,112

0 0.28 0.55 1.1 mi

0 0.42 0.85 1.7 km

Regional Freight Network

- Limited Access Facilities
- Regional Freight Mobility Corridors
- Freight Distribution Routes
- Freight Activity Center Streets

County of Orange, FL, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, METI/NASA, EPA, USDA

Web AppBuilder for ArcGIS

County of Orange, FL, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, METI/NASA, EPA, USDA | Acknowledgement of LYNX would be appreciated in products derived from these data. | Florida

MetroPlan Orlando Prioritized Project List
Multimodal Complete Streets Safety - TMA Funded

Projects in blue are anticipated for programming with MetroPlan Orlando TMA funds by Fiscal Year

Segment #	Rank	TPM Score	Roadway:	From:	To:	Project Type	County	Phases Funded	Priority Phase	Phase Amount	Remaining Phase(s)	Remaining Cost
	1		MetroPlan Orlando UPWP			$1,000,000 a year from 2026 to 2045 of TMA funds included in MetroPlan Orlando's UPWP to support performance-based planning, data collection and monitoring, corridor and sub-area planning and feasibility studies.	Region Wide	N/A	N/A	$ 1,000,000	N/A	$ 9,000,000
	2		MetroPlan Orlando Safety Emphasis Program			$1,000,000 a year from 2026 to 2045 of TMA funds allocated to addressing regional safety issues off the State Highway System. For funding eligibility, local agencies must complete concept development and prepare a design scope.	Region Wide	N/A	N/A	$ 1,000,000	N/A	$ 9,000,000
30151	3	2.872	N Central Ave	Martin Luther King Blvd	W Donegan Ave	Complete Streets	Osceola	PD&E	PE	$ 280,000	ROW & CST	$ 6,990,000
10191	4	2.655	E Church Ave	N Ronald Reagan Blvd	US 17/92	Complete Streets w/Shared Use Path	Seminole	PD&E & PE	ROW	$ 1,600,000	CST	$ 4,620,000
20085	5	2.634	Old Dixie Highway	Vick Rd	Hawthorne Ave	Complete Streets	Orange	N/A	PD&E	$ 260,000	PE, ROW & CST	$ 5,760,000
20109	6	2.717	W Michael Gladden Blvd	S Park Ave	Bradshaw Rd	Complete Streets	Orange	PD&E	PE	$ 130,000	ROW & CST	$ 5,380,000
20101	7	2.613	S Park Ave / Clarcona Rd	US 441 / Main St	Cleveland St	Complete Streets	Orange	N/A	PD&E	$ 490,000	PE, ROW & CST	$ 7,320,000
30039	8	2.494	Buenaventura Blvd	Simpson Road	Osceola Pkwy	Complete Streets	Osceola	N/A	PD&E	$ 920,000	PE, ROW & CST	$ 10,230,000
10216	9	2.440	North St	Raymond Ave.	S Ronald Reagan Blvd	Complete Streets	Seminole	N/A	PD&E	$ 950,000	PE, ROW & CST	$ 10,420,000
10201	10	2.134	Winter Park Dr	Red Bug Lakes Rd	SR 434	Complete Streets / Safety / Ops	Seminole	PD&E	PE	$ 870,000	ROW & CST	$ 10,820,000
30292	11	1.714	Poinciana Blvd	Lizzia Brown Rd	Trafalgar Blvd	Complete Streets	Osceola	N/A	PD&E	$ 380,000	PE, ROW & CST	$ 7,100,000
20866	12	1.696	W Gore St	S Rio Grande Ave.	Delaney Ave	Complete Streets - local unfunded 2,200,000	Orange	N/A	PD&E	$ 530,000	PE, ROW & CST	$ 7,600,000

4.6 EXISTING CAPITAL INVESTMENTS WILL BE NEEDED

$2 billion worth of capital investments are anticipated through the Master Plan 2040 horizon year for the existing system. These improvements, summarized in **Table 4-5**, will allow us to keep pace with the growing travel demand and provide necessary renewal of the System.

TABLE 4-5
EXISTING SYSTEM IMPROVEMENT NEEDS COST SUMMARY FY 2020 TO FY 2040

SYSTEM ELEMENT	IMPROVEMENT	COST EST. (million)
Capacity Improvement		
SR 417		
I-Drive to Boggy Creek Road	Widen to 6 lanes	$240.0
Boggy Creek Road to SR 528	Widen to 6 lanes	$225.0
SR 429		
Seidel Road to CR 535	Widen to 6 lanes	$200.0
CR 535 to SR 50	Widen to 6 lanes	$100.0
SR 50 to SR 414	Widen to 6 lanes	$175.0
SR 528		
SR 436 to SR 417	Widen to 8 lanes	$125.0
SR 417 to Innovation Way	Widen to 6 lanes	$100.0
Innovation Way to SR 520	Widen to 6 lanes	$275.0
		$1,440.0
Interchange Improvement		
SR 429 / CR 535	Interchange Improvement	$15.0
SR 417 / Narcoossee Road	Interchange Improvement	$15.0
SR 528 / Dallas Boulevard	Interchange Improvement	$30.0
		$60.0
Renewal and Replacement Program		
System Wide R&R Requirements	n/a	$500.0
		$2,000.0

Central Florida Expressway Authority
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Existing System Improvements Summary (2 of 4)

Page	Project Number	Project Name	Project Description				Project Cost (thousand $) by Fiscal Year *							Total	Fund Source	Project Phases Funded
			From	To	Length (miles)	Work Description	21/22		22/23		23/24	24/25	25/26			
							E	U	E	U	U	U	U			
13	429-152	SR 429 Widening from Florida's Turnpike to West Road	Florida's Turnpike	West Road	6.1	Add Lanes, Mill & Resurface	5	39,519	0	52,692	52,946	25,040	108	170,310	CF	Bidding, Construction, & Partial Landscaping
14	429-153	SR 429 Widening from West Road to SR 414	West Road	SR 414	3.4	Add Lanes, Mill & Resurface	0	4,324	0	51,768	51,959	16,553	76	124,680	CF	Bidding, Construction, & Partial Landscaping
15	528-143	SR 528 / SR 436 Interchange & Widening	SR 436	Goldenrod Road	3.4	Ramps, Add Lanes, Mill & Resurface	37,049	4	25,005	72	1,452	116	29	63,727	CF	Construction & Landscaping
16	528-168	SR 528 Widening from Goldenrod to Narcoossee Road	Goldenrod Road	Narcoosse Road	1.8	Add Lanes, Mill & Resurface	1,584	0	396	5,210	20,849	383	16	28,438	CF	Design, Construction, & Partial Landscaping
17	528-160	SR 528 Widening from Narcoossee Road to SR 417	Narcoosse Road	SR 417	1.8	Add Lanes, Mill & Resurface	5	10,248	0	3,603	8	4	0	13,868	CF	Bidding, Construction, & Landscaping
18	528-161	SR 528 Widening from SR 417 to Innovation Way	SR 417	Innovation Way	3.2	Add Lanes, Mill & Resurface	2,560	0	615	8,190	32,385	10,590	32	54,372	CF	Design, Construction, & Partial Landscaping
19	-	SR 528 Widening Study	Innovation Way	SR 520	11.5	PD&E Study	0	0	0	0	0	222	222	444	SP	PD&E Study
20	538-165	SR 538 Widening from Ronald Reagan Parkway to Cypress Parkway	Ronald Reagan Parkway	Cypress Parkway	7.2	Add Lanes, Mill & Resurface	43,520	0	37,488	184	7,076	72	54	88,394	SP	Design-Build & Landscaping
21	408-828	SR 408 Landscaping from Good Homes to East of Hiawassee	Good Homes Road	Hiawassee Road	1.8	Landscaping	96	0	16	0	0	0	0	112	CF	Maintenance
22	408-830	SR 408 Landscaping from SR 417 to Alafaya Trail	SR 417	Alafaya Trail	4.1	Landscaping & Water Service	5	2,031	0	108	81	0	0	2,225	CF	Bidding, Installation & Maintenance
23	408-831	SR 408 / SR 417 Interchange Landscaping	SR 408/SR 417	Lake Underhill Road	-	Landscaping	5	1,798	0	72	54	0	0	1,929	CF	Bidding, Installation & Maintenance
24	-	SR 417 Landscaping from Econ Trail to County Line	Econlockhatchee Trail	County Line	2.3	Landscaping	72	10	0	740	28	14	0	864	SP	Design, Installation & Maintenance
						Encumbered Total	84,901		63,520							
						Unencumbered Total		57,934		122,639	166,838	52,994	537			
						SUB-TOTALS (Page 2)	142,835		186,159		166,838	52,994	537			

* Construction Costs Escalated at 2.6% for FY 2022, 2.7% for FY 2023, 2.8% for 2024, 2.9% for FY 2025, and 3.0% for FY 2026. In general, all other costs escalated at an average of 2.7% per year.
E = Encumbered costs from projects under contracts from previous fiscal years
U = Unencumbered costs

Central Florida Expressway Authority
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Renewal and Replacement Projects Summary (1 of 3)

Page	Project Number	Project Name	Project Description				Project Cost (thousand $) by Fiscal Year *							Total	Fund Source	Project Phases Funded
			From	To	Length (miles)	Work Description	21/22		22/23		23/24	24/25	25/26			
							E	U	E	U	U	U	U			
122	408-763	SR 408 Resurfacing	Yucatan Drive	SR 417	2.6	Mill & Resurface	5	5,339	0	2,667	0	0	0	8,011	RR	Bidding & Construction
123	408-764	SR 408 Resurfacing	East of Woodbury Rd.	North of SR 50 (East)	1.3	Mill & Resurface	230	2,612	0	0	0	0	0	2,842	RR	Bidding & Construction
124	-	SR 408 Resurfacing	Good Homes Road	Hiawassee Road	1.8	Mill & Resurface	0	0	0	0	0	0	149	149	RR	Partial Design
125	-	SR 408 Resurfacing	Lake Underhill	Yucatan Drive	1.8	Mill & Resurface	0	0	0	0	0	0	206	206	RR	Partial Design
126	417-760	SR 417 Resurfacing	SR 528	North of Berry Dease Road	4.4	Mill & Resurface	5	15,324	0	0	0	0	0	15,329	RR	Bidding & Construction
127	417-761	SR 417 Resurfacing	SR 408	Canal E-4 Bridge	2.1	Mill & Resurface	5	7,378	0	0	0	0	0	7,383	RR	Bidding & Construction
128	599-759	SR 417 South Access Road Slope Repair	-	-	-	Slope Repair	5	3,634	0	0	0	0	0	3,639	RR	Bidding & Construction
129	417-751	SR 417 Bridge over SR 528 Preservation	SR 417 / SR 528	-	-	Bridge Repair	1,568	0	0	0	0	0	0	1,568	RR	Construction
130	-	SR 429/414 Resurfacing	SR 414	US 441	3.0	Mill & Resurface	0	0	0	628	12,070	0	0	12,698	RR	Design & Construction
131	-	SR 429 Resurfacing	US 441	Kelly Park Road	4.3	Mill & Resurface	0	0	0	0	0	0	194	194	RR	Partial Design
132	-	SR 429 Resurfacing	Kelly Park Road	North of CR 435	3.4	Mill & Resurface	0	0	0	0	0	0	160	160	RR	Partial Design
133	451-767	SR 451 Resurfacing	SR 414	US 441	1.7	Mill & Resurface	447	5	0	5,253	0	0	0	5,705	RR	Design & Construction
						Encumbered Total	2,265		0							
						Unencumbered Total		34,292		8,548	12,070	0	709			
						SUB-TOTALS (Page 1)	36,557		8,548		12,070	0	709			

* Construction Costs Escalated at 2.6% for FY 2022, 2.7% for FY 2023, 2.8% for 2024, 2.9% for FY 2025, and 3.0% for FY 2026. In general, all other costs escalated at an average of 2.7% per year.
E = Encumbered costs from projects under contracts from previous fiscal years
U = Unencumbered costs

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Project Information

Current Status :	Bidding	Priority: 1	
Date Originated :	3/14/17		
Last Revision :	4/19/21		
Fund Source :	CF		
Length (miles) :	3.4		
From:	West Road	To: SR 414	

Project Name / Number :	SR 429 Widening from West Road to SR 414	# 429-153	
Route Number :	SR 429		
Project Category :	Existing System Improvements		
Work Description :	Add Lanes, Mill & Resurface		
Phases Funded :	Bidding, Construction, & Partial Landscaping		

Activity	2021				2022				2023				2024				2025				2026			
Bidding																								
Construction																								
Toll Equipment																								
Landscaping																								

Cash Flow (in thousands $) :

Activity	Total $	2021				2022				2023				2024				2025				2026			
EAL	12,702					5	455	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	46	46							
Construction	105,000						3,750	11,250	11,250	11,250	11,250	11,250	11,250	11,250	11,250	11,250									
Toll Equipment	1,800															1,800									
Landscaping	1,809												84	84	10		773	773	17	17	17	17	17		
TOTAL	121,311			FY 21/22 Total =	4,210			FY 22/23 Total =	50,400			FY 23/24 Total =	50,578			FY 24/25 Total =	16,055			FY 25/26 Total =	68			
				Encumbered =	-			Encumbered =	-																

Inflated Cash Flow (in thousands $) :

Activity	Total $	2021				2022				2023				2024				2025				2026			
EAL	13,040					5	467	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	47	47							
Construction	107,856						3,852	11,556	11,556	11,556	11,556	11,556	11,556	11,556	11,556	11,556									
Toll Equipment	1,800															1,800									
Landscaping	1,984												90	90	11		849	849	19	19	19	19	19		
TOTAL	124,680			FY 21/22 Total =	4,324			FY 22/23 Total =	51,768			FY 23/24 Total =	51,959			FY 24/25 Total =	16,553			FY 25/26 Total =	76			
				Encumbered =	-			Encumbered =	-																

Remarks: EAL includes bidding, construction engineering & inspection, administration, and post-design services.
Construction phase estimated at 28 months.
Landscaping includes design, bidding, and installation and 8 quarter maintenance.
Estimated total construction cost (2021 $): $105 M

Central Florida Expressway Authority
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Project Information

Current Status :	Design	Priority: 1	
Date Originated :	1/19/17		
Last Revision :	2/8/21		
Fund Source :	RR		
Length (miles) :	1.7		
From:	SR 414	To: US 441	

Project Name / Number :	SR 451 Resurfacing	# 451-767
Route Number :	SR 451	
Project Category :	Renewal and Replacement Projects	
Work Description :	Mill & Resurface	
Phases Funded :	Design & Construction	

Activity	2021				2022				2023				2024				2025				2026			
Design																								
Bidding																								
Construction																								

Cash Flow (in thousands $) :

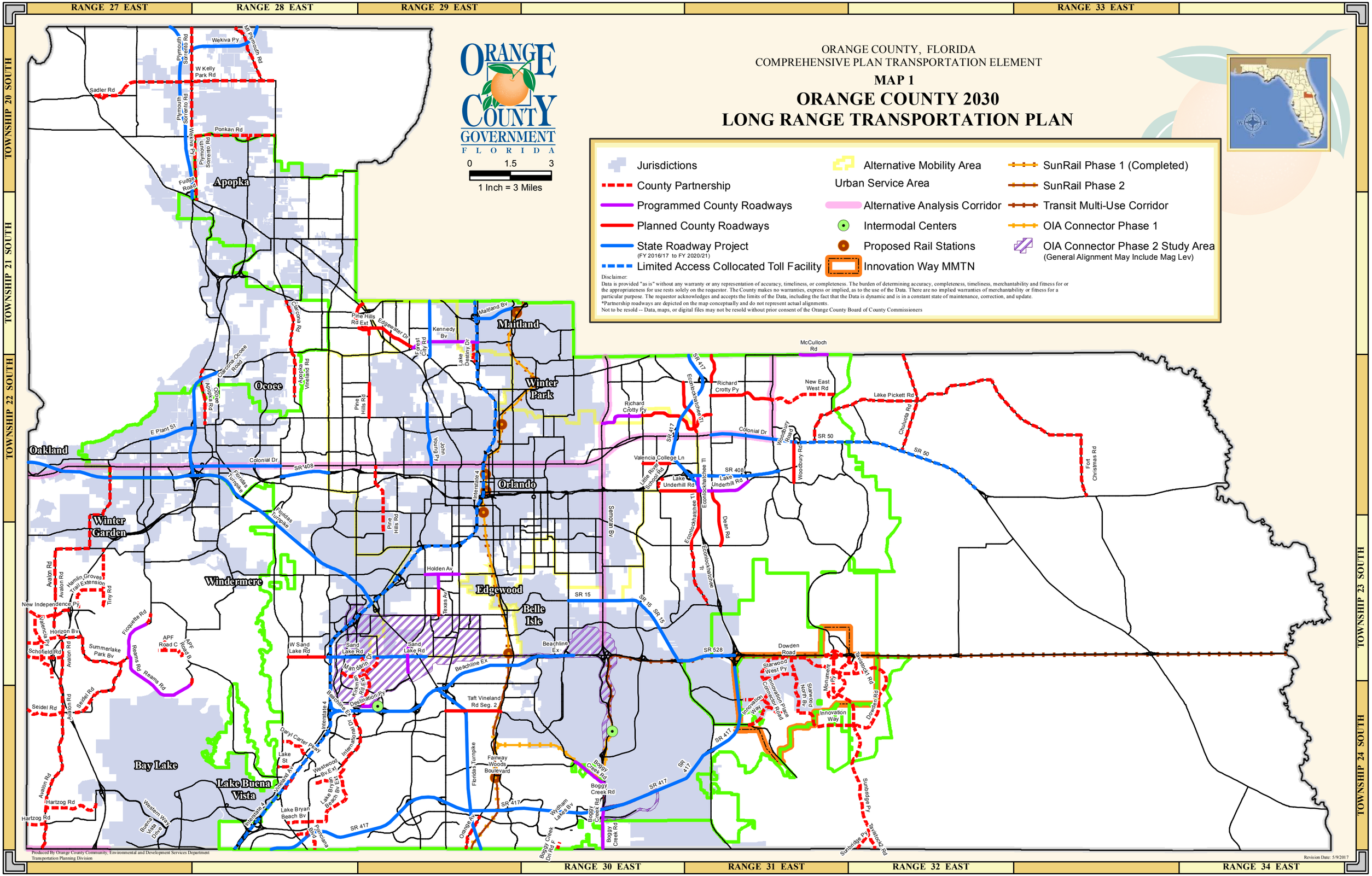
Activity	Total $	2021				2022				2023				2024				2025				2026			
EAL	997			149	149	149	5	5	270	270															
Construction	4,500								2,250	2,250															
TOTAL	5,497			FY 21/22 Total =		452		FY 22/23 Total =		5,045	FY 23/24 Total =		-	FY 24/25 Total =		-	FY 25/26 Total =		-						
				Encumbered =		447		Encumbered =		-															

Inflated Cash Flow (in thousands $) :

Activity	Total $	2021				2022				2023				2024				2025				2026			
EAL	1,019			149	149	149	5	5	281	281															
Construction	4,686								2,343	2,343															
TOTAL	5,705			FY 21/22 Total =		452		FY 22/23 Total =		5,253	FY 23/24 Total =		-	FY 24/25 Total =		-	FY 25/26 Total =		-						
				Encumbered =		447		Encumbered =		-															

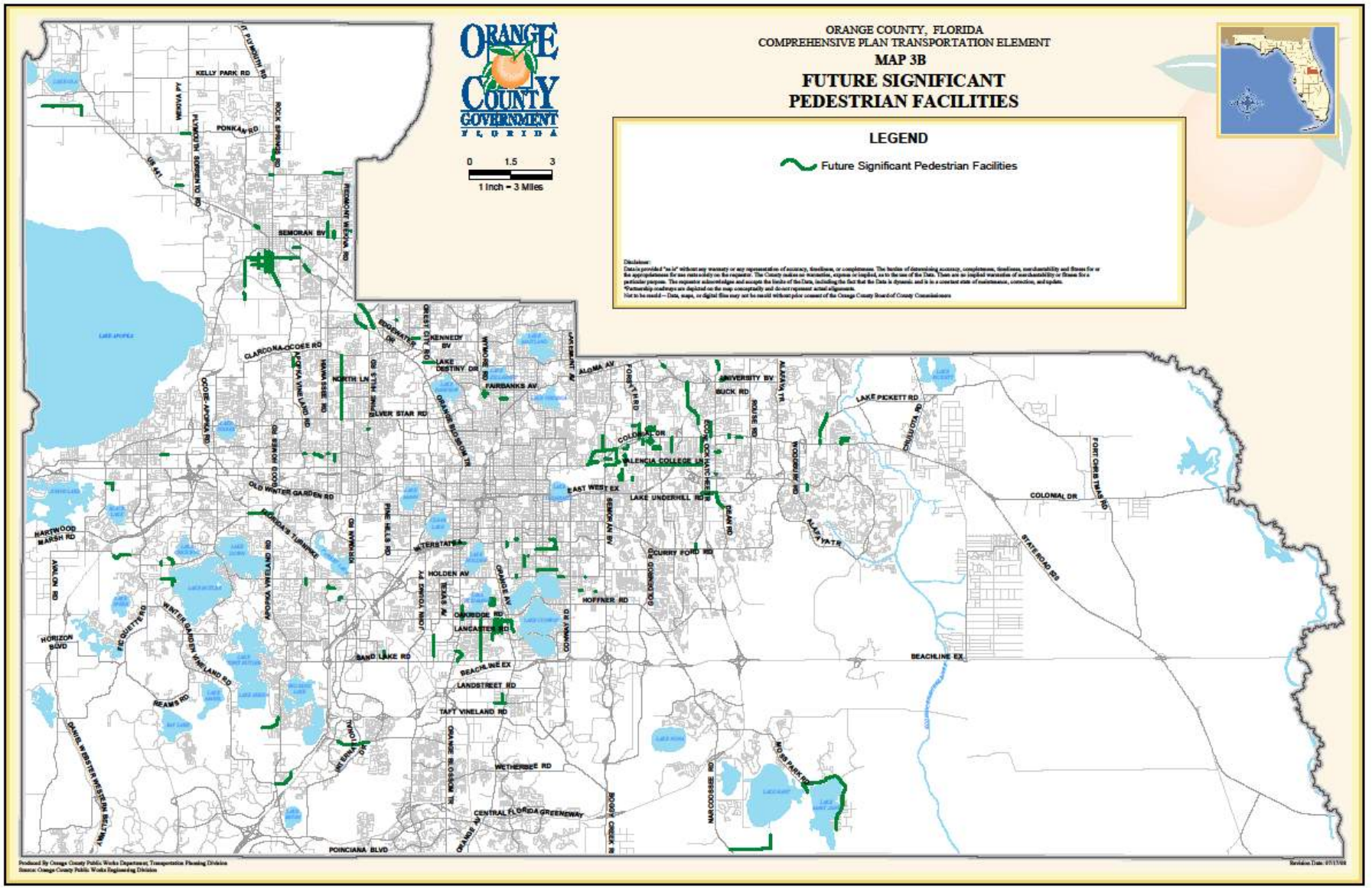
Remarks: EAL includes PD&E study, design, bidding, construction engineering & inspection, administration, and post-design services.
Includes replacement of single post signs within resurfacing limits. Includes resurfacing SR 451 mainline, ramps, and SR 414/SR 429 System Interchange Ramps, matching 429-153 and 414-754 project limits.

Estimated total construction cost (2021 $): $4.5 M



RANGE 27 EAST
RANGE 28 EAST
RANGE 29 EAST
RANGE 33 EAST
RANGE 30 EAST
RANGE 31 EAST
RANGE 32 EAST
RANGE 34 EAST
TOWNSHIP 20 SOUTH
TOWNSHIP 21 SOUTH
TOWNSHIP 22 SOUTH
TOWNSHIP 23 SOUTH
TOWNSHIP 24 SOUTH
ORANGE COUNTY GOVERNMENT FLORIDA
0 1.5 3
1 Inch = 3 Miles
ORANGE COUNTY, FLORIDA
COMPREHENSIVE PLAN TRANSPORTATION ELEMENT
MAP 1
ORANGE COUNTY 2030
LONG RANGE TRANSPORTATION PLAN
Jurisdictions
County Partnership
Programmed County Roadways
Planned County Roadways
State Roadway Project
(FY 2016/17 to FY 2020/21)
Limited Access Collocated Toll Facility
Alternative Mobility Area
Urban Service Area
Alternative Analysis Corridor
Intermodal Centers
Proposed Rail Stations
Innovation Way MMTN
SunRail Phase 1 (Completed)
SunRail Phase 2
Transit Multi-Use Corridor
OIA Connector Phase 1
OIA Connector Phase 2 Study Area
(General Alignment May Include Mag Lev)
Disclaimer:
Data is provided "as is" without any warranty or any representation of accuracy, timeliness, or completeness. The burden of determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requestor. The County makes no warranties, express or implied, as to the use of the Data. There are no implied warranties of merchantability or fitness for a particular purpose. The requestor acknowledges and accepts the limits of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction, and update.
*Partnership roadways are depicted on the map conceptually and do not represent actual alignments.
Not to be resold -- Data, maps, or digital files may not be resold without prior consent of the Orange County Board of County Commissioners
Apopka
Ocoee
Maitland
Winter Park
Oakland
Orlando
Winter Garden
Windermere
Edgewood
Belle Isle
Bay Lake
Lake Buena Vista
Produced By Orange County Community, Environmental and Development Services Department
Transportation Planning Division
Revision Date: 5/9/2017

Map 3B Transportation Element Future Significant Pedestrian Facilities



TM 9

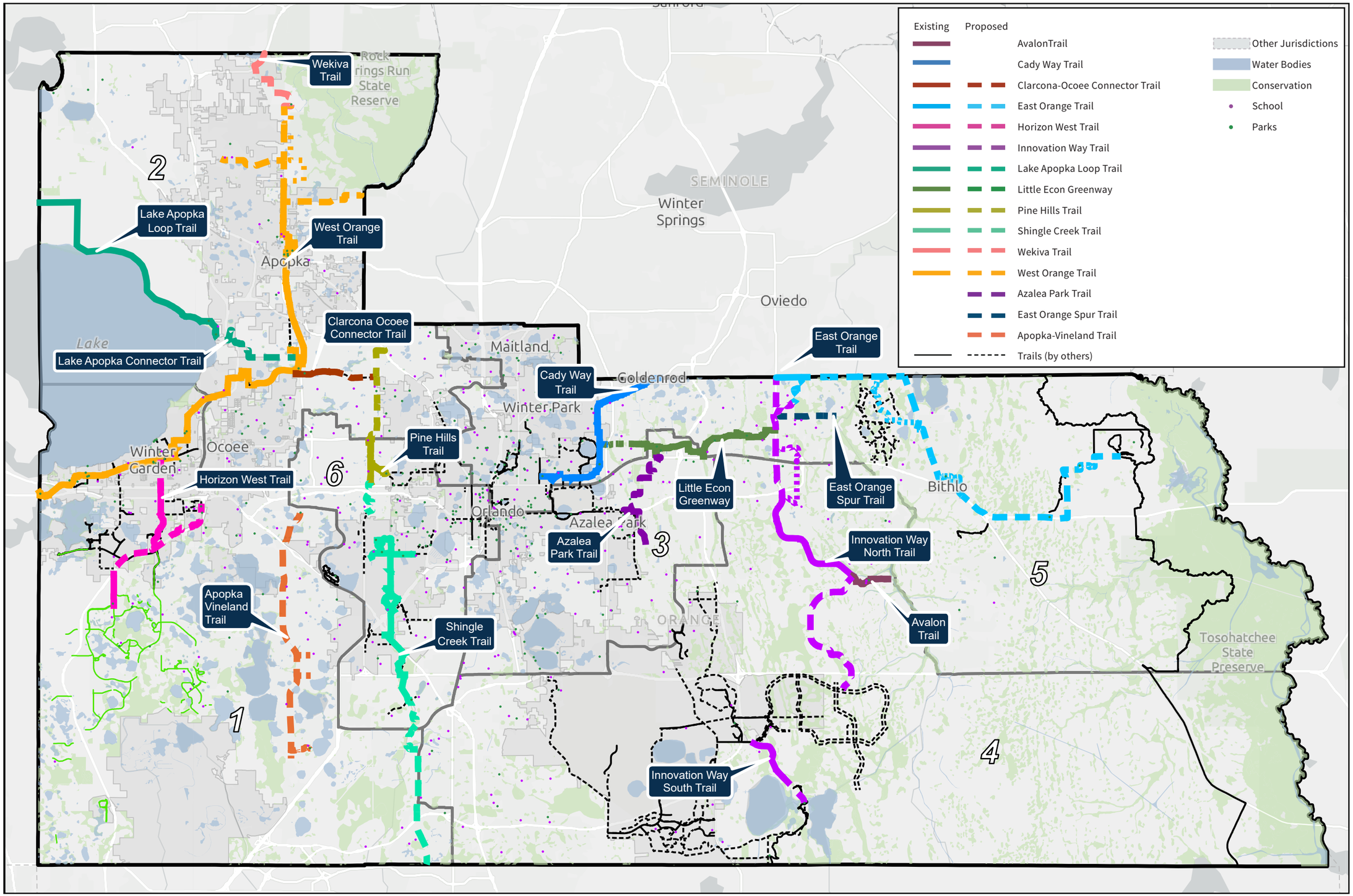
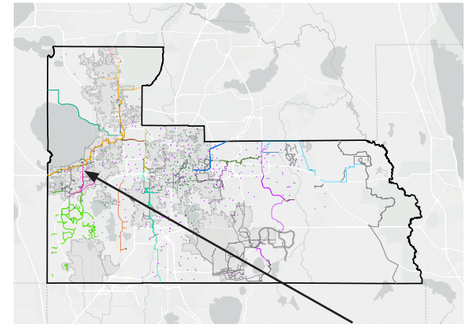


Figure 4: Proposed Trails Master Plan



6. Lake Apopka Connector Trail

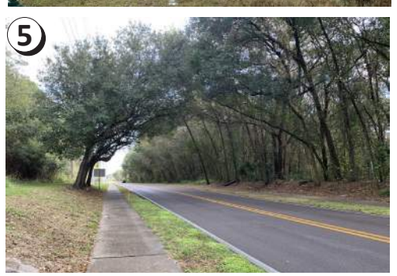
The proposed Lake Apopka Connector Trail is 4.3 miles long. The portion of the trail maintained by Orange County begins at Sheaf Road and ends near Harmon Road. This segment generally follows S Binion Road and provides access to the Lake Apopka Loop Trailhead, Magnolia Park and the UF/IFAS Mid-Florida Research and Education Center.

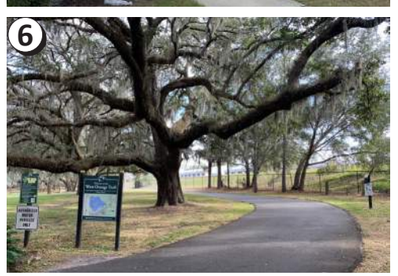
The proposed extension connects to the existing trail at Magnolia Park and the University of Florida Mid-Florida Research & Education Center. The proposed trail continues east, crosses under SR 429 and along the City of Apopka boundary south east to McCormick Road. The trail corridor then follows McCormick Road east until is connects to the existing West Orange Trail at the Clarcona Horse Park. There is no transit service along the proposed corridor.

This trail is currently in design.

Legend

- Lake Apopka Connector Trail (Design)
- Existing Orange County Trail
- Proposed Orange County Trail
- Lake Apopka Loop Trail (maintained by SJRWMD)
- Schools
- Parks
- Existing Trailhead

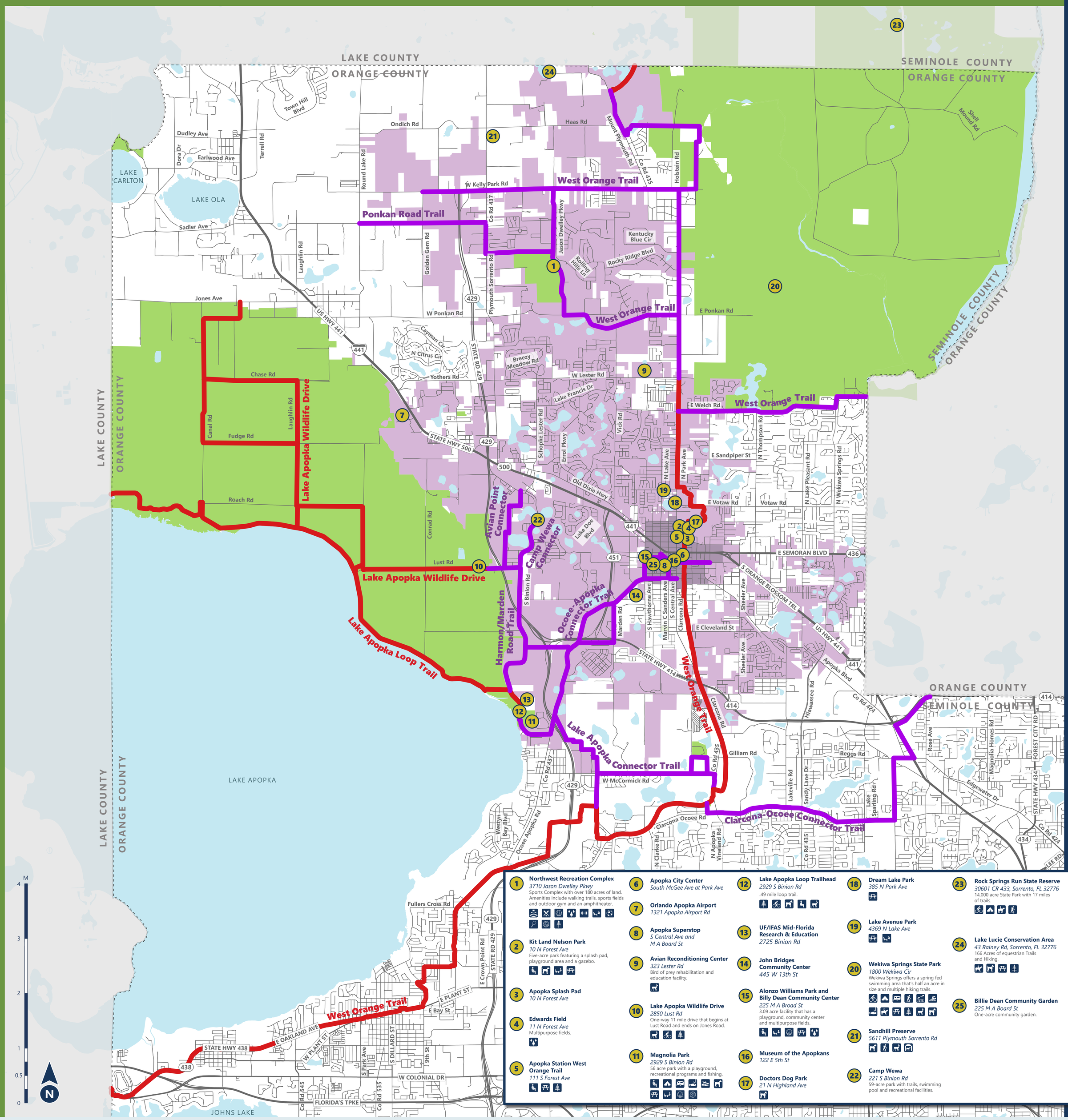




City of Apopka Trails
MASTER PLAN

JANUARY 2022

www.apopka.net



1. **Northwest Recreation Complex**
   3710 Jason Dwelley Pkwy
   Sports Complex with over 180 acres of land. Amenities include walking trails, sports fields and outdoor gym and an amphitheater.
2. **Kit Land Nelson Park**
   10 N Forest Ave
   Five-acre park featuring a splash pad, playground area and a gazebo.
3. **Apopka Splash Pad**
   10 N Forest Ave
4. **Edwards Field**
   11 N Forest Ave
   Multipurpose fields.
5. **Apopka Station West Orange Trail**
   111 S Forest Ave
6. **Apopka City Center**
   South McGee Ave at Park Ave
7. **Orlando Apopka Airport**
   1321 Apopka Airport Rd
8. **Apopka Superstop**
   S Central Ave and M A Board St
9. **Avian Reconditioning Center**
   323 Lester Rd
   Bird of prey rehabilitation and education facility.
10. **Lake Apopka Wildlife Drive**
    2850 Lust Rd
    One-way 11 mile drive that begins at Lust Road and ends on Jones Road.
11. **Magnolia Park**
    2929 S Binion Rd
    56 acre park with a playground, recreational programs and fishing.
12. **Lake Apopka Loop Trailhead**
    2929 S Binion Rd
    .49 mile loop trail.
13. **UF/IFAS Mid-Florida Research & Education**
    2725 Binion Rd
14. **John Bridges Community Center**
    445 W 13th St
15. **Alonzo Williams Park and Billy Dean Community Center**
    225 M A Broad St
    3.09 acre facility that has a playground, community center and multipurpose fields.
16. **Museum of the Apopkans**
    122 E 5th St
17. **Doctors Dog Park**
    21 N Highland Ave
18. **Dream Lake Park**
    385 N Park Ave
19. **Lake Avenue Park**
    4369 N Lake Ave
20. **Wekiwa Springs State Park**
    1800 Wekiwa Cir
    Wekiwa Springs offers a spring fed swimming area that's half an acre in size and multiple hiking trails.
21. **Sandhill Preserve**
    5611 Plymouth Sorrento Rd
22. **Camp Wewa**
    221 S Binion Rd
    59-acre park with trails, swimming pool and recreational facilities.
23. **Rock Springs Run State Reserve**
    30601 CR 433, Sorrento, FL 32776
    14,000 acre State Park with 17 miles of trails.
24. **Lake Lucie Conservation Area**
    43 Rainey Rd, Sorrento, FL 32776
    166 Acres of equestrian Trails and Hiking.
25. **Billie Dean Community Garden**
    225 M A Board St
    One-acre community garden.

LEGEND

Existing Trails · Planned Trails · Orange County Boundaries

Parks · Downtown District · City of Apopka

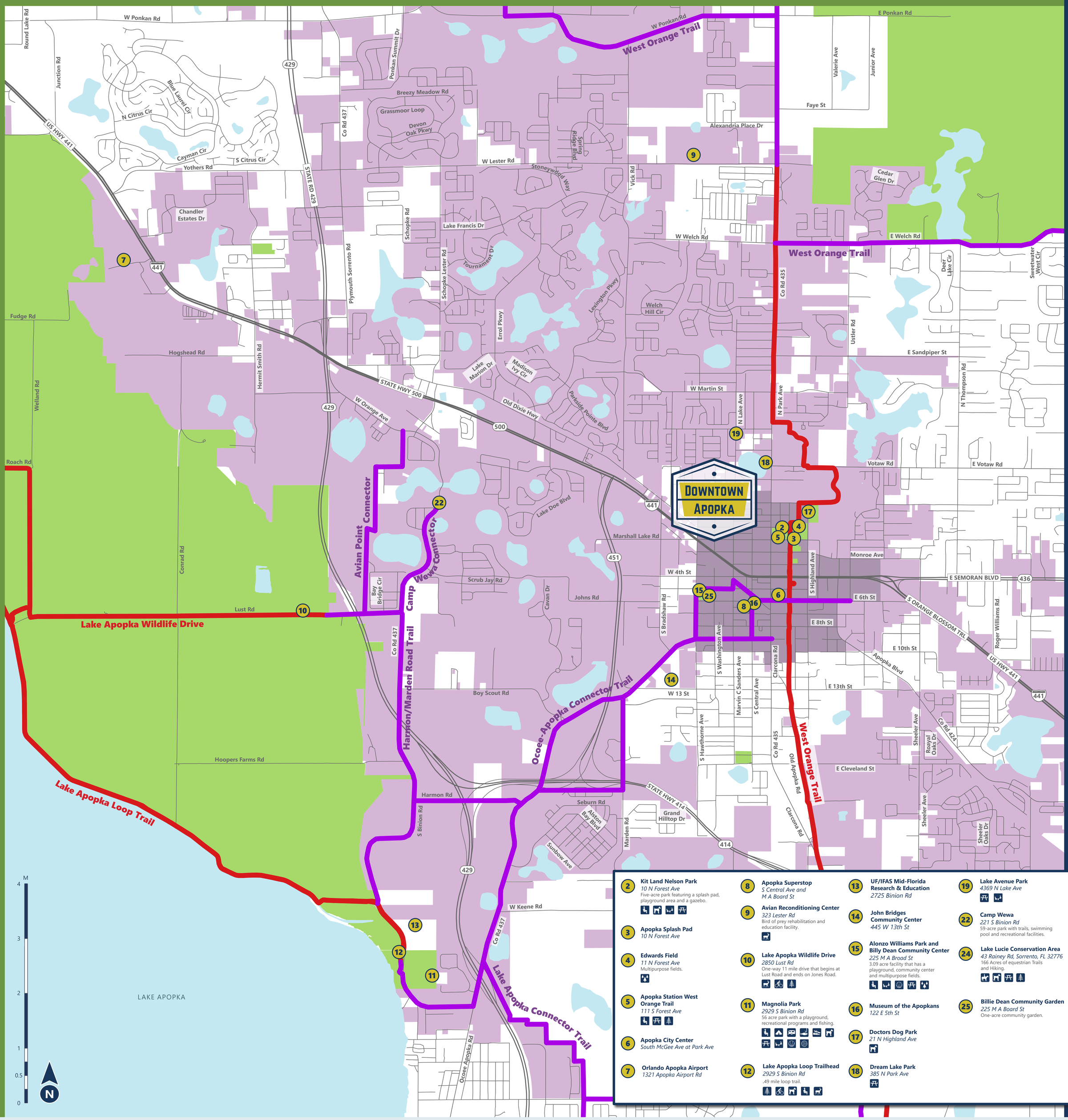
Amphitheater · Baseball · Basketball · Benches · Bicycling · Boat Ramp · Camping · Dogs on Leash · Equestrian Cells · Fishing · Gym · Hiking · Horseback Riding · Multipurpose Fields · Paddling · Picnic Tables · Playground · RV · Soccer · Swimming · Tennis · Trails · Volleyball · Wildlife

RS&H

City of Apopka Trails
MASTER PLAN

JANUARY 2022

www.apopka.net



2 Kit Land Nelson Park
10 N Forest Ave
Five-acre park featuring a splash pad, playground area and a gazebo.

3 Apopka Splash Pad
10 N Forest Ave

4 Edwards Field
11 N Forest Ave
Multipurpose fields.

5 Apopka Station West Orange Trail
111 S Forest Ave

6 Apopka City Center
South McGee Ave at Park Ave

7 Orlando Apopka Airport
1321 Apopka Airport Rd

8 Apopka Superstop
S Central Ave and M A Board St

9 Avian Reconditioning Center
323 Lester Rd
Bird of prey rehabilitation and education facility.

10 Lake Apopka Wildlife Drive
2850 Lust Rd
One-way 11 mile drive that begins at Lust Road and ends on Jones Road.

11 Magnolia Park
2929 S Binion Rd
56 acre park with a playground, recreational programs and fishing.

12 Lake Apopka Loop Trailhead
2929 S Binion Rd
.49 mile loop trail.

13 UF/IFAS Mid-Florida Research & Education
2725 Binion Rd

14 John Bridges Community Center
445 W 13th St

15 Alonzo Williams Park and Billy Dean Community Center
225 M A Broad St
3.09 acre facility that has a playground, community center and multipurpose fields.

16 Museum of the Apopkans
122 E 5th St

17 Doctors Dog Park
21 N Highland Ave

18 Dream Lake Park
385 N Park Ave

19 Lake Avenue Park
4369 N Lake Ave

22 Camp Wewa
221 S Binion Rd
59-acre park with trails, swimming pool and recreational facilities.

24 Lake Lucie Conservation Area
43 Rainey Rd, Sorrento, FL 32776
166 Acres of equestrian Trails and Hiking.

25 Billie Dean Community Garden
225 M A Board St
One-acre community garden.

LEGEND

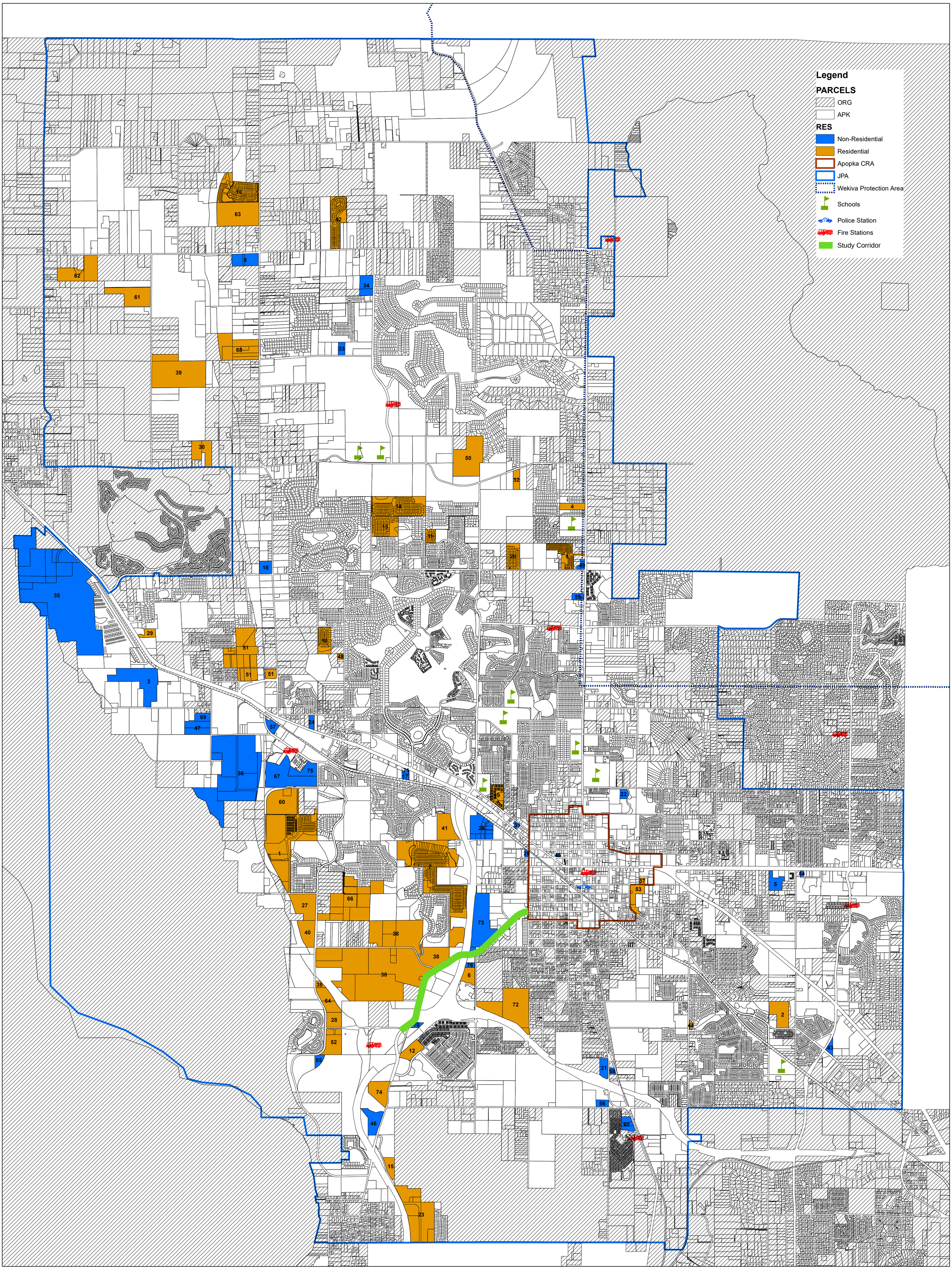
Existing Trails
Planned Trails
Parks
Downtown District
City of Apopka
Amphitheater
Baseball
Basketball
Benches
Bicycling
Boat Ramp
Camping
Dogs on Leash
Equestrian Cells
Fishing
Gym
Hiking
Horseback Riding
Multipurpose Fields
Paddling
Picnic Tables
Playground
RV
Soccer
Swimming
Tennis
Trails
Volleyball
Wildlife

RS&H

Appendix B

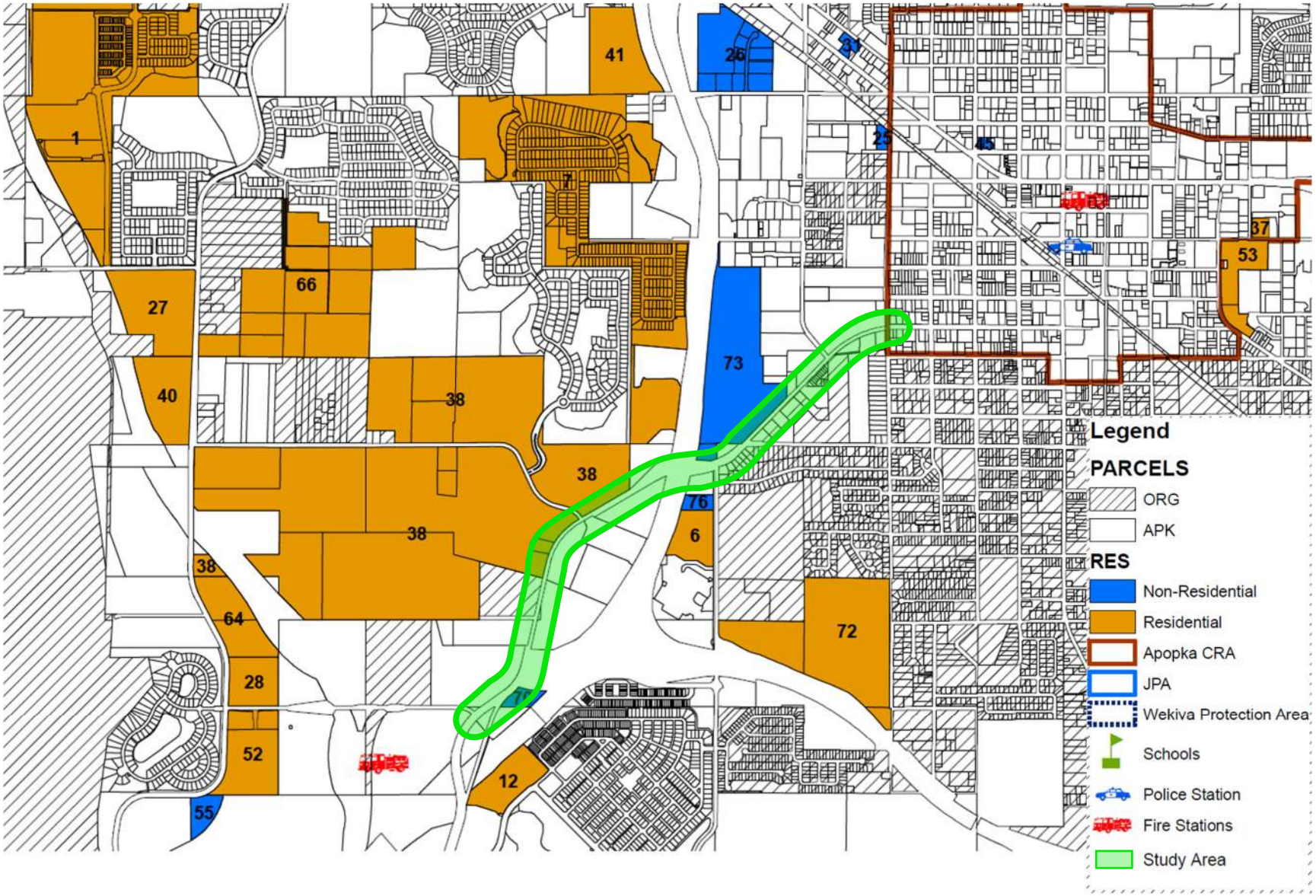
Development Location Map

Development Projects



Total Dwelling Units: 8,563
Total Non-Residential Sq. Ft: 12,175,914
Date: July 6, 2021

Development Map Detail



Apopka Development Projects 7/6/2021

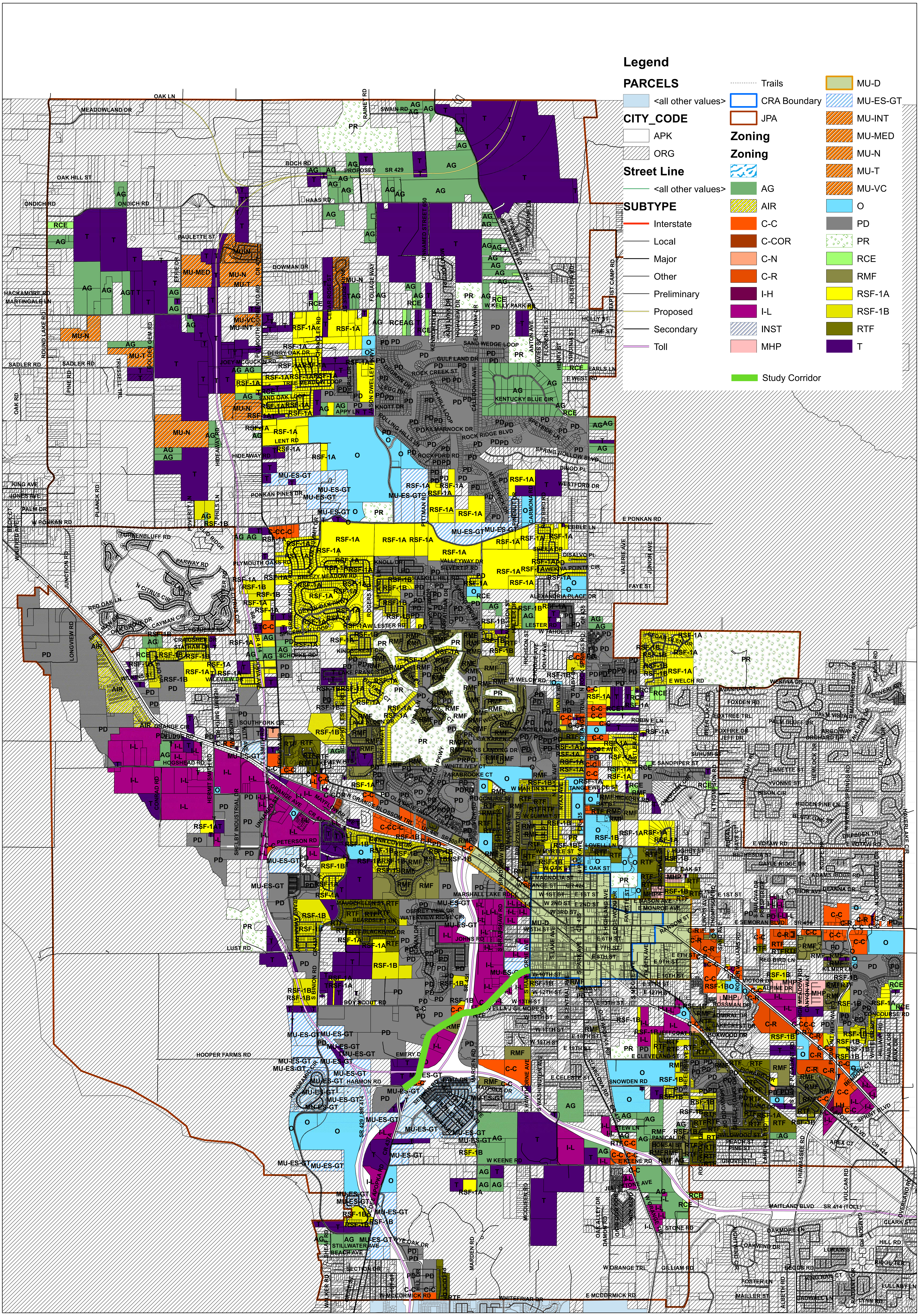
ID	Project Name	Project Type	Acreage	Dwelling Units	Description	Non-Res. Sq. Ft.	Applicant Name	Applicant Email	Applicant #	Status
1	Avian Pointe	PUD Amendment	128	758	480 MF Units / 222 TH Units / 56 SF Units	0	Frank Bombeeck	fb@mercury-advisors.com	813-321-1984	Construction
2	Monarchs at Lake Pleasant	PUD	23.67	126	126 Apartments	0	Chad Linn	clinn@linnengineering.com	407-775-5194	Planned
3	Advent Health Industrial Complex	Site Plan	53.82	0	Industrial Park	455,387	Cameron Haumann	choumann@dwma.com	407-644-4068	Planned
4	Hammock at Rock Springs	PUD	9.59	19	Single Family Subdivision	0	Momtaz Barq	ovallemc@terramaxinc.com	407-578-2763	Planned
5	Fairfield Inn, Self-Storage, & Culvers	Site Plan	12	0	Hotel, Self Storage Facility, Culver's	116,650	Stuart Anderson	klewis@interplanllc.com	407-645-5008	Planned
6	Summer House Apartments	Site Plan	16.08	264	Multi-Family Apartments	0	Luke Classon	lclasson@appianfl.com	407-960-5868	Planned
7	Lakeside	Subdivision Plan	154	301	Single Family Subdivision	0	Luke Classon	lclasson@appianfl.com	407-960-5868	Construction
8	Publix & Retail	Site Plan	18	0	Publix and Various Retail	68,231	Geoff Summit	geoff@glseng.com	407-323-0705	Construction
9	San Sebastian Reserve	Subdivision Plan	23	112	Single Family Subdivision	0	Richard Wohlfarth	rwohlfarth@wcgroup.co	407-350-9090	Construction
10	Legacy Hills	Subdivision Plan	20	48	Single Family Subdivision	0	Claude Cassagnol	clcassagnol@gtc.us	407-244-5664	Planned
11	Country Crossing Estates	Subdivision Plan	7	24	Single Family Subdivision	0	James Fraser	jfraserpe@earthlink.net	407-719-6040	Construction
12	Residences at Emerson Park	Subdivision Plan	24	103	Townhome Subdivision	0	Leah Fitzpatrick	lfitzpatrick@vhb.com	407-893-4728	Planned
13	Carriage Hill Ph. 1	Subdivision Plan	30.58	72	Single Family Subdivision	0	Christopher Allen	callen@dewberry.com	321-354-9739	Construction
14	Vista Reserve	Subdivision Plan	61	153	Single Family Subdivision	0	Chadwyck Moorehead	chad@madden-eng.com	407-629-8330	Construction
15	Ascend Oakpointe	Site Plan	10.27	240	Apartment Complex	0	David Evans	permitting@evansenginc.com	407-872-1515	Planned
16	Bridle Path	Subdivision Plan	51	152	Single Family Subdivision	0	Erica Hughes	ehughes@vhb.com	407-893-4769	Construction
17	Legacy Station Lot 3	Site Plan	2.4	0	Medical Office	8,000	Selby Weeks	sweeks@klimaweeks.com	407-478-8750	Construction
18	West Apopka Self Storage	Site Plan	9	0	Self Storage Site	71,107	Robert Bliss	rblissmd@yahoo.com	407-595-2552	Construction
19	Hidden Lake	Subdivision Plan	16	92	Townhome Subdivision	0	Chadwyck Moorehead	chad@madden-eng.com	407-629-8330	Construction
20	Bridlewood	Subdivision Plan	20	52	Single Family Subdivision	0	Luke Classon	lclasson@appianfl.com	407-960-5868	Construction
21	Coral Hills Self-Storage	Site Plan	9	0	Self Storage Site	52,875	Larry Poliner	larry@rceconsultants.net	407-452-8633	Construction
22	Seventh Day Adventist	Site Plan	4.31	0	Church Addition	17,470	Stanley Hill	stanleyhill@bellsouth.net	904-419-1001	Planned
23	Oak Point	Subdivision Plan	69	238	118 SF Units / 120 TH Units	0	Evans Engineering	permitting@evansenginc.com	407-872-1515	Construction
24	Iglesia Getsemani	Site Plan	2	0	Place of Worship	12,000	Bernardino Mateos	bernardomateo@yahoo.com	407-310-8672	Planned
25	S&F Electronics	Site Plan	1.37	0	Warehouse	9,200	Ken Ehlers	kehlers@comcast.com	407-448-3412	Planned
26	Lake Gem Commerce Center	Subdivision Plan	29	0	Industrial Park	697,831	Al Tehrani	algtehrani@yahoo.com	407-948-0811	Construction
27	Clonts Farm	Subdivision Plan	30.94	72	Single Family Subdivision	0	Justin Allen	juallen@khov.com	321-263-2608	Planned
28	Binion Road Multifamily (Peckett)	Site Plan	12.73	180	Multifamily Apts.	0	Brent Lenzen	brent.lenzen@kimley-horn.com	407-898-1511	Planned
29	Winward Hills	Subdivision Plan	67.76	101	Single Family Subdivision	0	Luke Classon	lclasson@appianfl.com	407-960-5868	Planned
30	Nottingham Subdivision	Subdivision Plan	23.4	46	Single Family Subdivision	0	Luke Classon	lclasson@appianfl.com	407-960-5868	Planned
31	Express Car Wash	Site Plan	1.65	0	Express Car Wash	4,290	Michael J. Palmer	mpalmer@synergycivileng.com	727-470-1344	Planned
32	Ponkan Reserve	Subdivision Plan	7.47	14	Single Family Subdivision	0	Charles Hiott	chiott@besandh.com	352-343-8481	Planned
33	Renewal Church	Site Plan	5	0	Place of Worship	10,400	Don Sabiston	don@sabistonengineering.com	407-884-6764	Construction
34	K-8 School	Site Plan	15.09	0	Jason Dwelley K-8 School	TBD	Amelia Huckeba	ahuckeba@klimaweeks.com	321-946-6651	Planned
35	Rubright	Master Plan	349.37	0	Industrial Park	4,500,000	Kathy Hattaway	hisaacs@poulosandbennett.com	407-487-2594	Planned
36	Mid Florida Logistics Park	PUD	189	0	Industrial Park	2,406,095	Dave Schmitt	dsemailbox@dseorl.com	407-207-9088	Construction
37	Hannibal Square Apartments	Site Plan	2.23	24	Townhome Subdivision	0	Karin Leissing	karin@harriscivilengineers.com	407-629-4777	Planned
38	Bronson Property	Master Plan	366	1,321	678 MF Units/643 TH and/or SF units	1,875,000	John Prowell	jprowell@vhb.com	407-893-4764	Planned
39	Park View Place	Subdivision Plan	91.94	282	Single Family Subdivision	0	Jimmy Crawford	jcrawford@cmhlawyers.com	352-432-8644	Planned
40	Binion Reserve	Subdivision Plan	21.36	44	Single Family Subdivision	0	June Engineering		407-905-8180	Planned
41	Faircloth Lakes	Subdivision Plan	25	31	Single Family Subdivision	0	Jim Fraser	jfraserpe@earthlink.net	407-719-6040	Planned
42	Oaks at Kelly Park	Subdivision Plan	39	124	Single Family Subdivision	0	Geoff Summit	geoff@glseng.com	407-323-0705	Construction
43	Sebastian Moving Company	Site Plan	3.87	0	Moving Company	20,000	Brad Alexander	brad.alexander@exolimited	239-281-1066	Planned
44	Sheeler Pointe	Subdivision Plan	2	5	Single Family Subdivision	0	Timothy Schutz	tim.schutz.pe@gmail.com	407-595-7314	Planned
45	South Lake Office Retail	Site Plan	0.81	0	Office Building	11,587	Tuan Huynh	tuan@rcefl.com	407-340-5713	Planned
46	Western Beltway	Site Plan	18.07	0	Warehouse	189,000	Sam Sebaali	ssebaali@feg-inc.us	407-895-0324	Planned
47	Hermit Smith Warehouse	Site Plan	19.61	0	Warehouse	290,000	Jason Lewis	jason.lewis@kimley-horn.com	863-226-6860	Planned
48	Lake Standish Estates	Subdivision Plan	1.88	3	Single Family Subdivision		Heath Frank	ucffliguy@gmail.com	321-696-1156	Planned
49	Gateway Plaza	Site Plan	3.36	0	Shopping Plaza	32,430	Ashish Kapadia	ashish@vbrogroup.com	407-830-1975	Planned
50	Rock Springs Preserve	Subdivision Plan	35	111	Single Family Subdivision	0	Geoff Summit	geoff@glseng.com	407-323-0705	Planned
51	Floridian Town Center	Subdivision Plan	77.29	1000	Mixed Use Subdivision	0	Tony Benge	mark.wilkie@colliercompanies.com	352-416-1443	Planned
52	Alta East Shore Apts.	Subdivision Plan	24.4	285	Multifamily Apts.	0	David Stokes	dstokes@madden-eng.com	407-629-8330	Construction
53	City Center Apts	Subdivision Plan	13	192	Multifamily Apts.	0				Conceptual
54	Double O's	Site Plan	1.02	0	Coffee Shop	640	Selby Weeks	sweeks@klimaweeks.com	407-478-8750	Planned
55	SJRWM Apopka Service Center	Site Plan	4.99	0	Office Building	17,337	Wood Environment & Infrastructure		407-522-7570	Planned
56	Sanctuary Medicinals	Site Plan	17.69	0	Medical Marijuana Cultivation Site	43,917	Sam Sebaali	ssebaali@feg-inc.us	407-895-0324	Planned

ID	Project Name	Project Type	Acreage	Dwelling Units	Description	Non-Res. Sq. Ft.	Applicant Name	Applicant Email	Applicant #	Status
57	List Industries	Site Plan	6.55	0	Warehouse	85,680	Rodney Gadd	projects@gaddcivil.com	863-940-9979	Planned
58	Menol Transport	Site Plan	2.24	0	Semi-Truck Parking Area	0	Larry Poliner	larry@rceconsultants.net	407-452-8633	Planned
59	Retail at Rock Springs & Tanglewood	Subdivision Plan	4.59	0	Retail Center	12,888	Ronald Henson	ronald.henson@avidgroup.com	407-468-4104	Planned
60	Coke Property Subdivision	Subdivision Plan	41.85	200	Single Family & Townhome Subdivision	0	Geoff Summit	geoff@glseng.com	407-323-0705	Planned
61	Golden Orchard Estates	Subdivision Plan	35.56	165	Single Family Subdivision	0	Geoff Summit	geoff@glseng.com	407-323-0705	Construction
62	Oakview	Rezoning/Master Plan	39.6	114	Single Family Subdivision	0	Ben Snyder	bsnyder@hcpland.com	407-988-1408	Planned
63	Orlando Beltway East	Subdivision Plan	56.51	202	Single Family & Townhome Subdivision	0	Leah Fitzpatrick	lfitzpatrick@vhb.com	407-893-4728	Planned
64	Apex Apopka	Site Plan	18.98	285	Multi-Family Apartments	0	Chris Leppert	chris.leppert@kimley-horn.com	407-223-3663	Planned
65	Clarcona Office Warehouse	Site Plan	9.39	0	Warehouse/Office	48,000	Andrew Gerdom	andrewgerdom@yahoo.com	317-407-5337	Planned
66	Magnolia Terrace	Master Plan	81.18	300	176 Townhomes/124 SF Homes	0	Brian Kittle	Brian.Kittle@meritagehomes.com	407-721-8640	Planned
67	Crossroads 429	Site Plan	50.4	0	Warehouse	280,437	George Stock	George.stock@stockassoc.com	636-530-9100	Planned
68	Plymouth Sorrento Assemblage	Subdivision Plan	50.77	179	Single Family Subdivision	0	Aaron Struckmeyer	Aaron.Struckmeyer@Pultegroup.com	407-661-2201	Planned
69	700 Hermit Smith Warehouse	Site Plan	7.38	0	Warehouse	34,996	Andrew Gerdom	andrewgerdom@yahoo.com	317-407-5337	Planned
70	Harmon Center	Site Plan	2.93	0	Commercial Center	24,990	DRDevelopment Investments, LLC	dower@arint.com	407-353-0333	Planned
71	Legacy Station Lot 2	Site Plan	1.31	0	Restaurant & Dental Office	7,464	Selby Weeks	sweeks@klimaweeks.com	407-478-8750	Planned
72	Emerson Point	Master Plan	69.65	225	128 Townhomes, 97 SF Homes	0	Ricardo Diaz	rdiaz@mihomes.com	407-531-5176	Planned
73	Northstar	Site Plan	55.19	0	Warehouse	761,240	Sam Sebaali	ssebaali@feg-inc.us	407-895-0324	Planned
74	Ocoee-Apopka Road Multifamily	Master Plan	21.56	304	Multifamily Apts.	0	Tad Dixon	tad@ftcommercial.net	321-594-6771	Planned
75	Roadmaster	Site Plan	15.53	0	Drivers School	10,772	Jody Green	jgreen@werner.com	402-895-6640	Planned
76	Marden Road Track & Field	Site Plan	2.44	0	Track & Field	0	Luke Classon	lclasson@appianfl.com	407-960-5868	Planned
				Total Dwelling Units: 8,563		**Total Non-Residential Sq. Ft.: 12,175,914**				

Appendix C

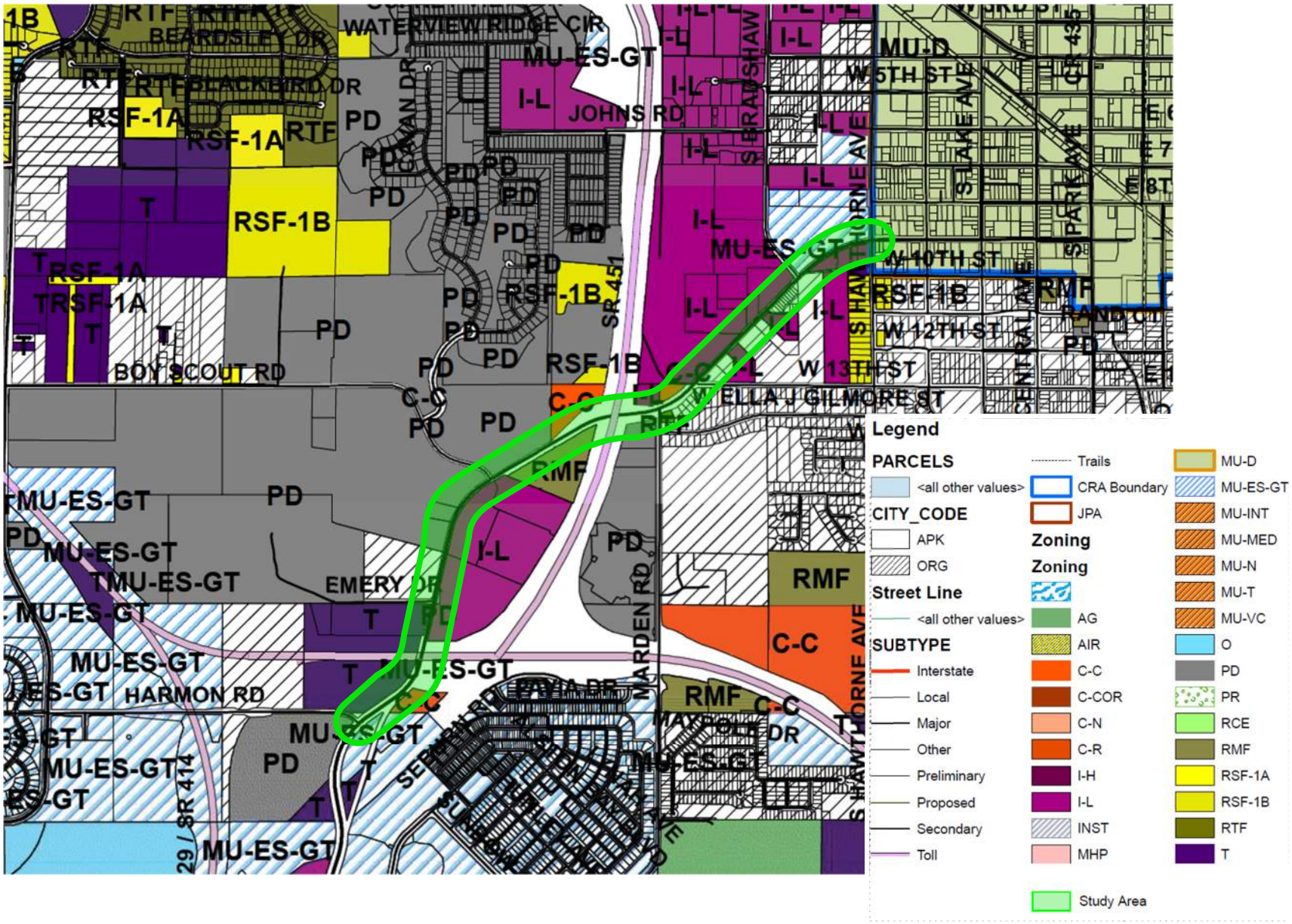
Zoning Maps

Zoning Map

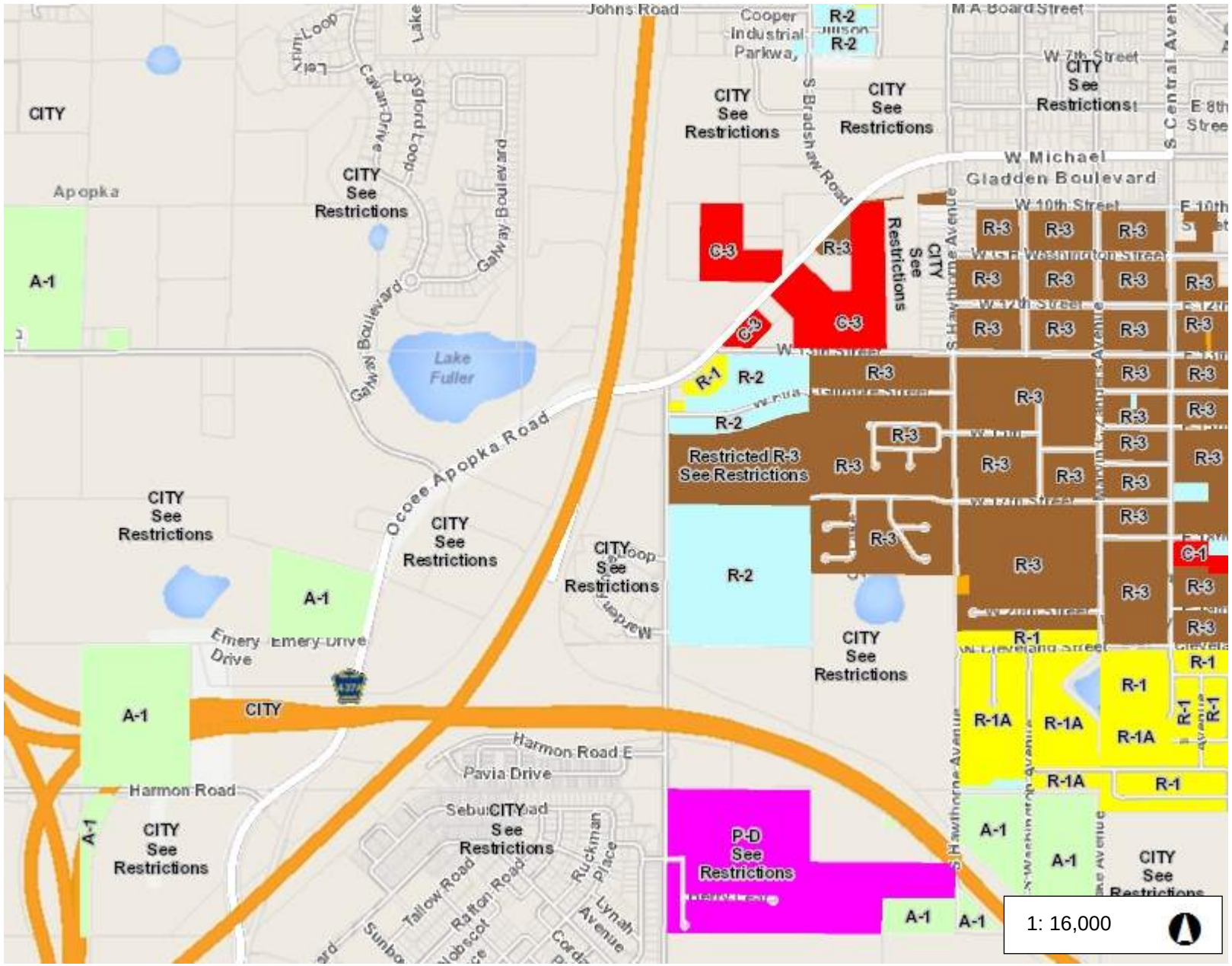


(THIS MAP IS FOR REFERENCE PURPOSES ONLY AND IS NOT TO SCALE)

Zoning Map Detail



Orange County InfoMap Public 8.5 x 11 Print



Legend

Zoning

- Agricultural Residential
- Citrus Rural
- Commercial
- Farmland Rural
- Industrial
- Mobile Home Residential
- Multiple-Family Dwelling District
- Neighborhood Activity Corridor
- Neighborhood Center
- Neighborhood Residential
- Planned Development
- Professional Office
- Residential
- Residential Cluster
- Residential District
- Residential Low-Density
- University Residential

Primary Streets (8,001 - 16,00

- Floridas Turnpike
- Floridas Turnpike On Ramp N
- I-4
- State Road 408
- State Road 414
- State Road 417

1: 16,000

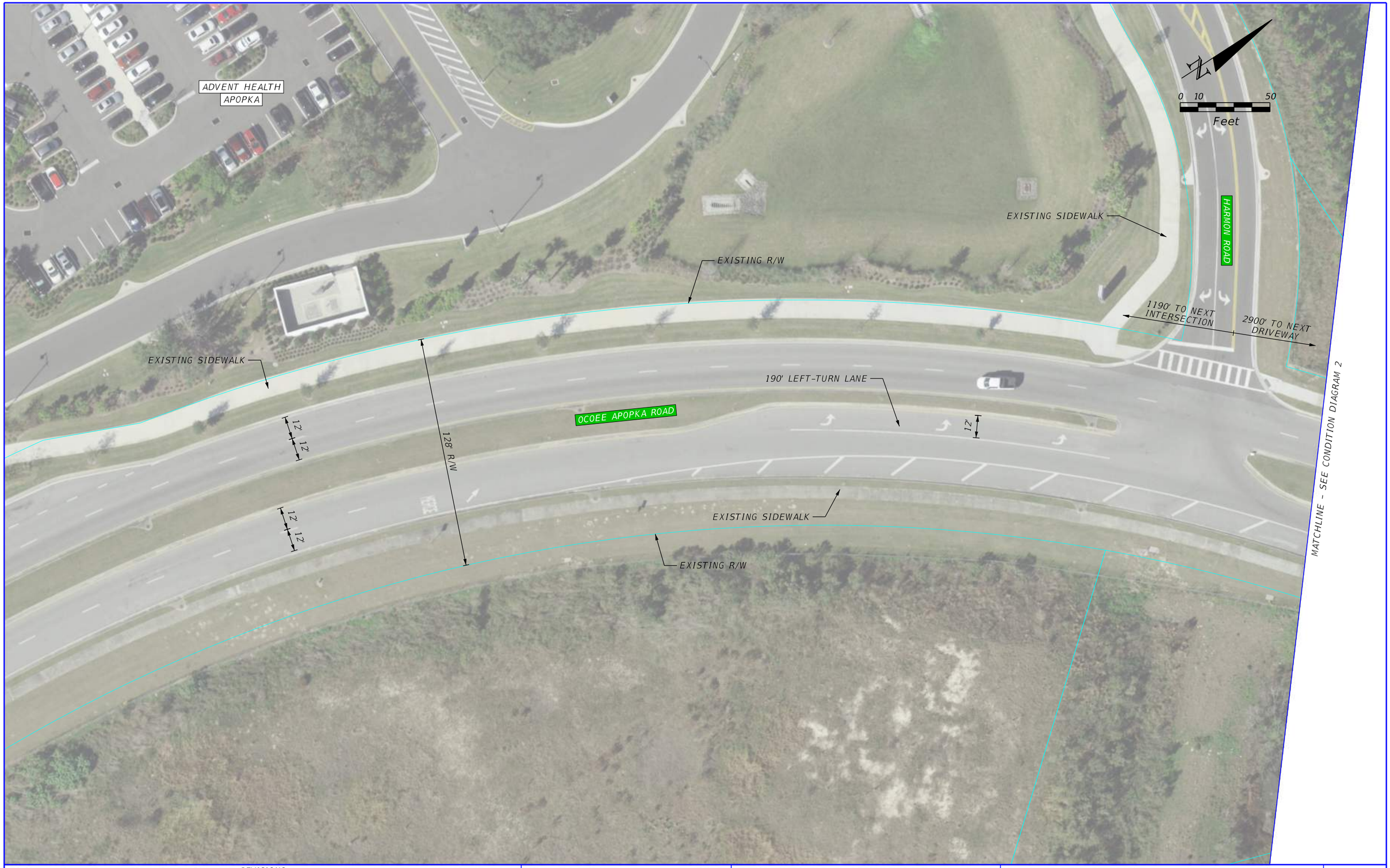
Notes

0.5 0 0.25 0.5 Miles

NAD_1983_StatePlane_Florida_East_FIPS_0901_Feet
Orange County, FL BCC

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

Appendix D
Condition Diagrams



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 1

SHEET NO.

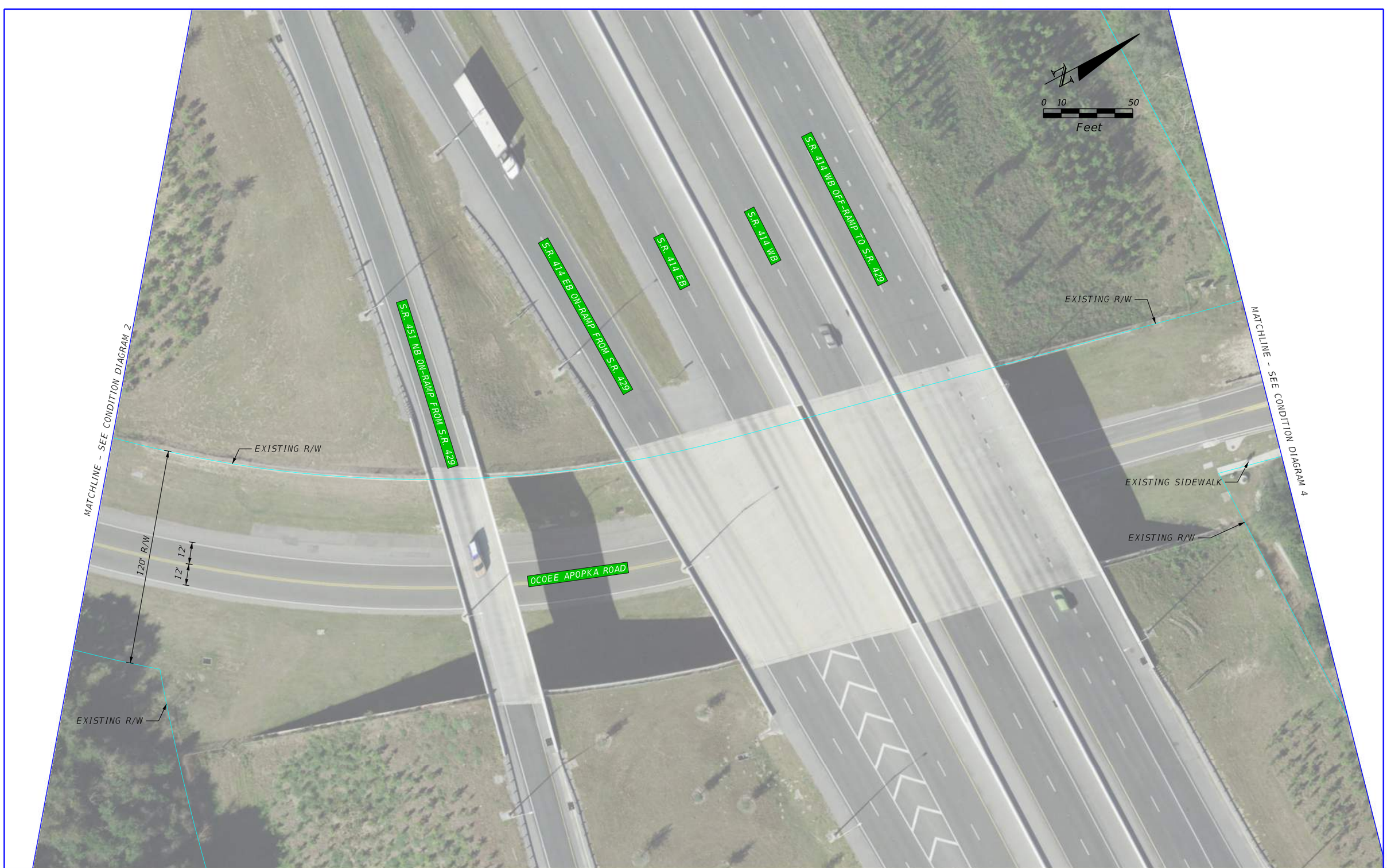
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 2

SHEET NO.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 3

SHEET NO.

mzoellner 3/1/2022 11:27:51 AM CD 3 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Condition Diagrams\Condition Diagrams.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 4

SHEET NO.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 5

SHEET NO.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 6

SHEET NO.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 7

SHEET NO.

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 8

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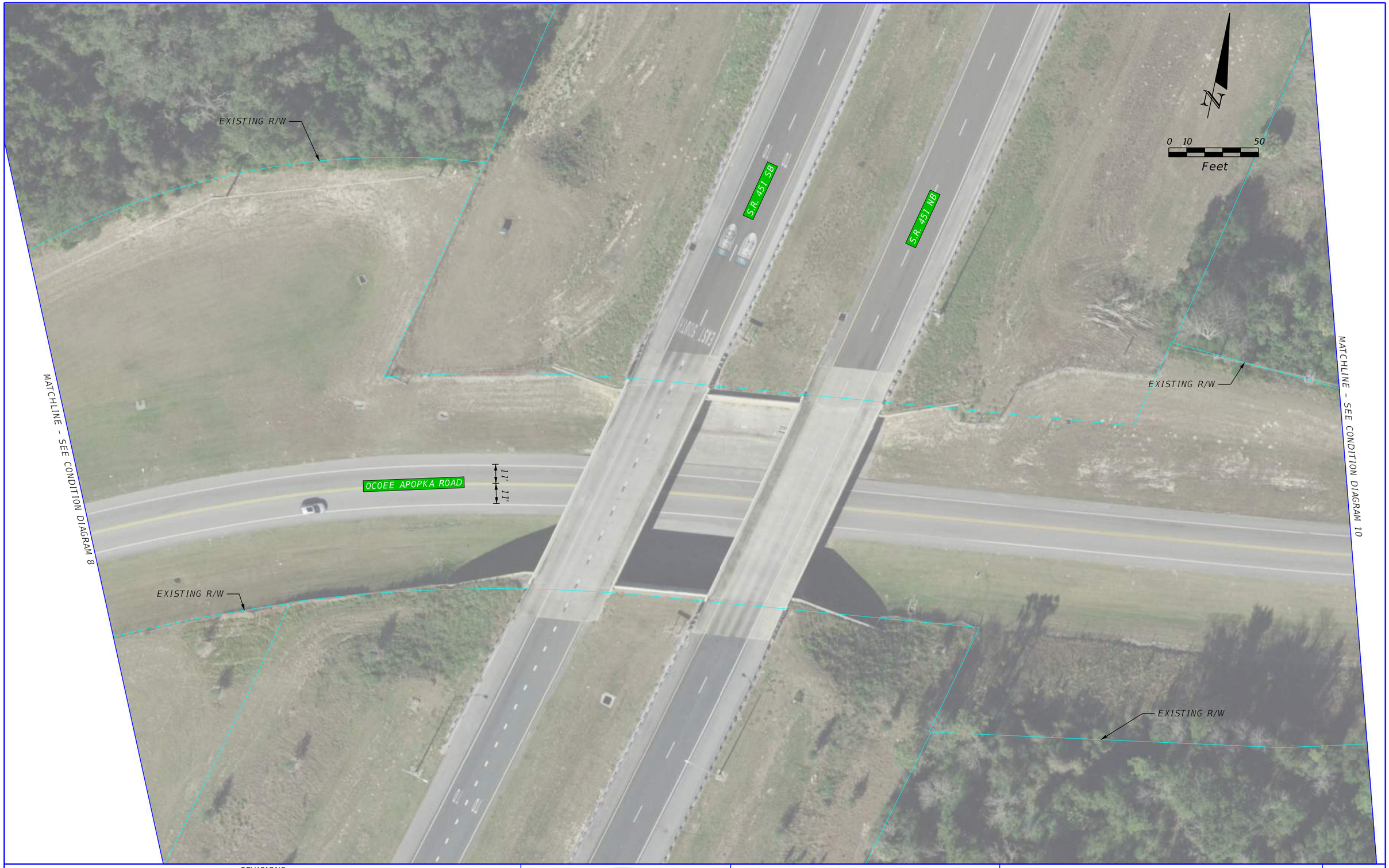


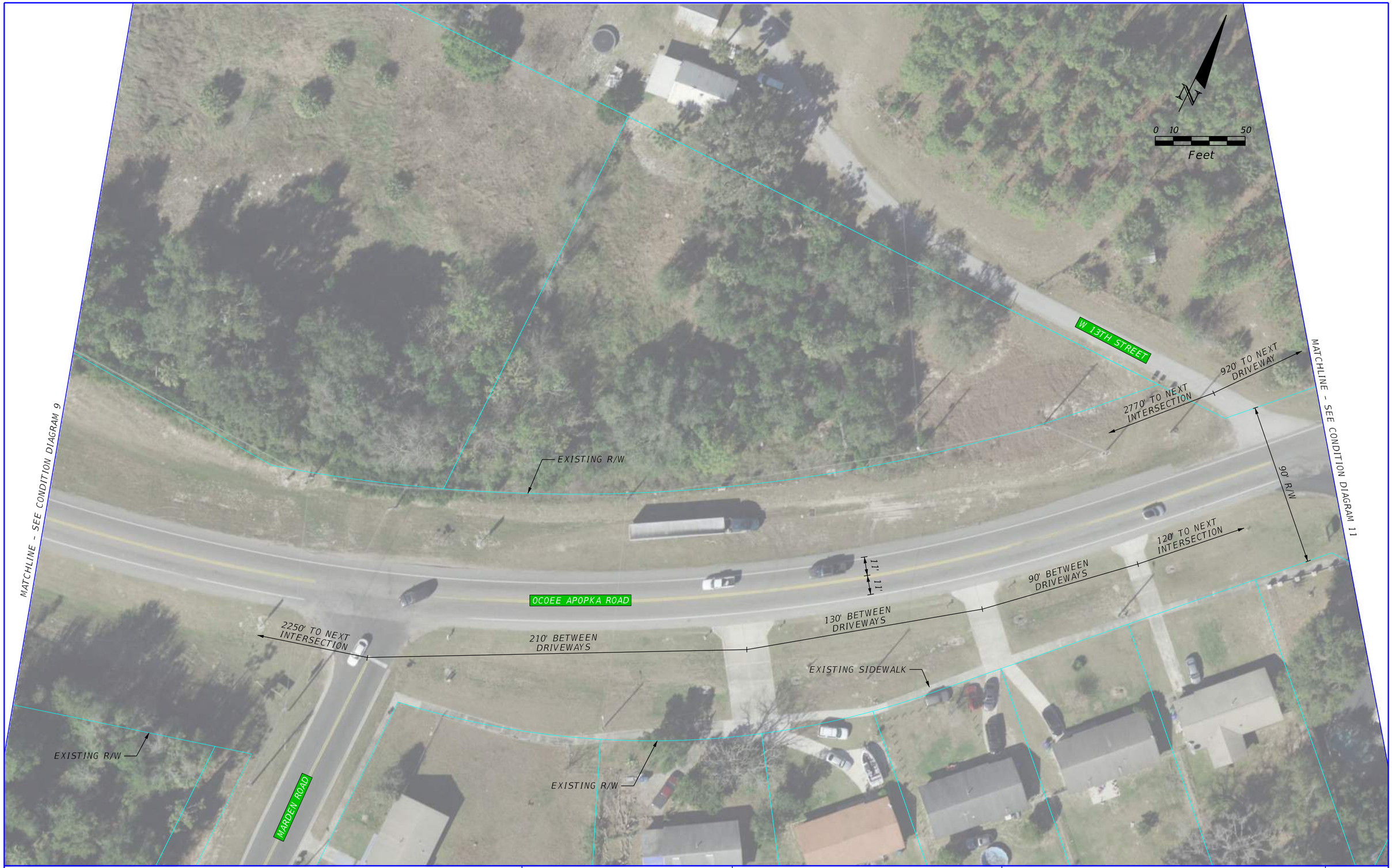
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 9

SHEET NO.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 10

SHEET NO.

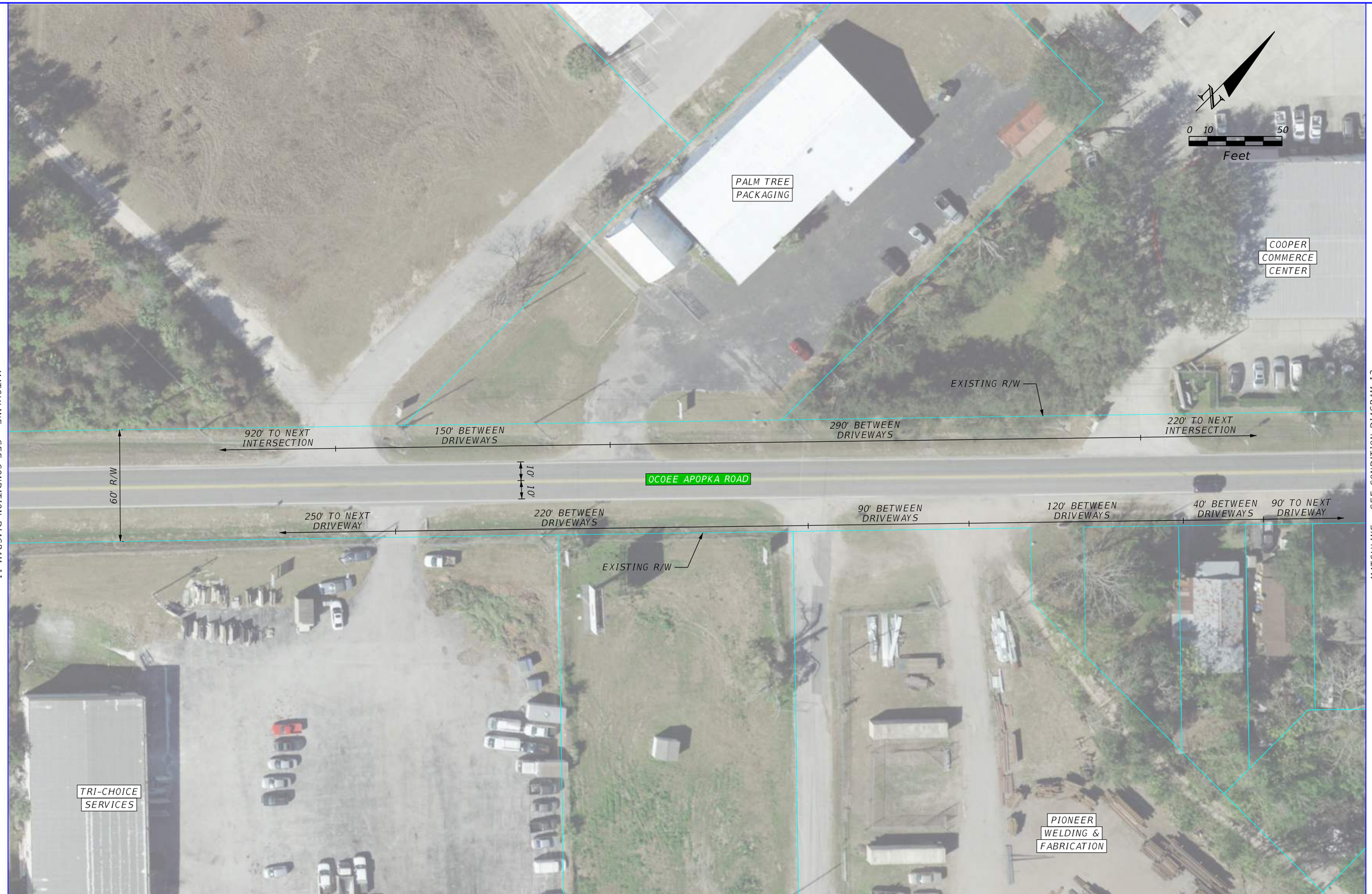
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 11

SHEET NO.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 12

SHEET NO.

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 13

SHEET NO.

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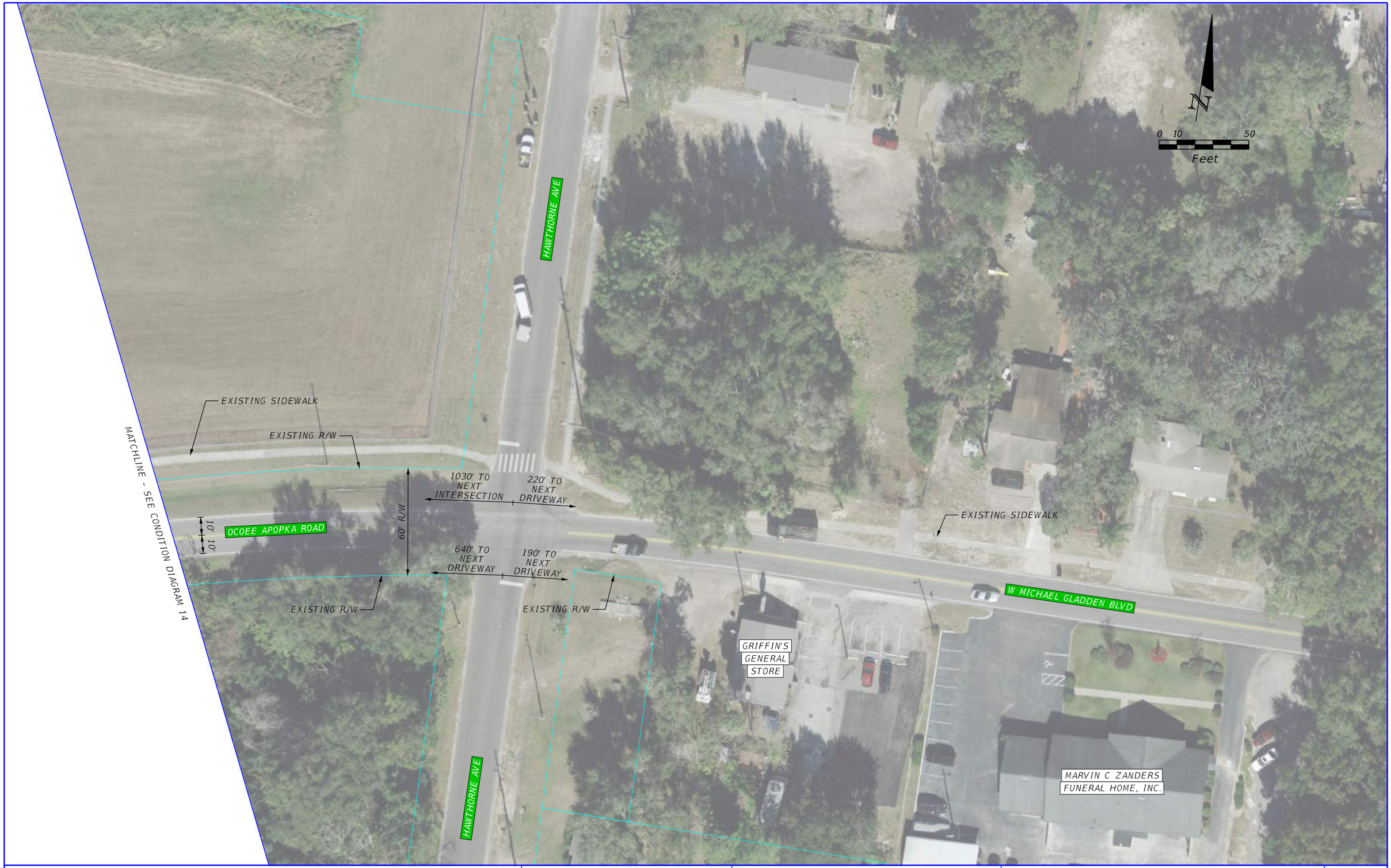
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 14

SHEET NO.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CONDITION DIAGRAM 15

SHEET NO.

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Appendix E

Lynx Transit Maps

WELCOME ABOARD!

LYNX operates 83 Links to great places throughout Central Florida. If you don't see your destination here, **CONTACT US** and we can connect you to the right Link for your trip.

Riding LYNX is also easy on your wallet. You can pay for your trip as you board the bus:

ONE RIDE	ALL-DAY
$2.00 Regular	**$4.50** Regular
$1.00 with LYNX discount fare ID	**$2.25** with LYNX discount fare ID

Link 709 and LYMMO are currently Fare Free.

Please see individual Link schedules for more information.

EXACT FARE REQUIRED
No change given.

Ready to roll? Look inside for more info...

Public Notice of Title VI Rights
The Central Florida Regional Transportation Authority d/b/a LYNX:

- LYNX operates its programs and services without regard to race, color, and national origin in accordance with Title VI of the Civil Rights Act. Any person who believes she or he has been aggrieved by any unlawful discriminatory practice under Title VI may file a complaint with LYNX.
- For more information on LYNX' Civil Rights Program, and the procedures to file a complaint, contact, 407-841-2279 ext. 6117, email Title6officer@golynx.com, or visit our administrative office at 455 N. Garland Avenue, Orlando, Florida 32801. For more information, visit www.golynx.com
- A complainant may file a complaint directly with the Federal Transit Administration Office of Civil Rights, Attention Title VI Program Coordinator, East Building, 5th Floor-TCR, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- If information is needed in another language, contact 407-841-2279 ext. 6117.

LYNX®

LYNX is the public transit provider for Orange, Osceola and Seminole counties. Additional connectivity with Lake and Polk counties.

CONTACT US for information on fares, bus stops, schedules and trip planning:

407-841-5969 *phone*

golynx.com *web*

THANK YOU FOR RIDING LYNX!

BROCHURE

A APOPKA SUPERSTOP

Links 44, 106, 405, 436N, NeighborLink 652

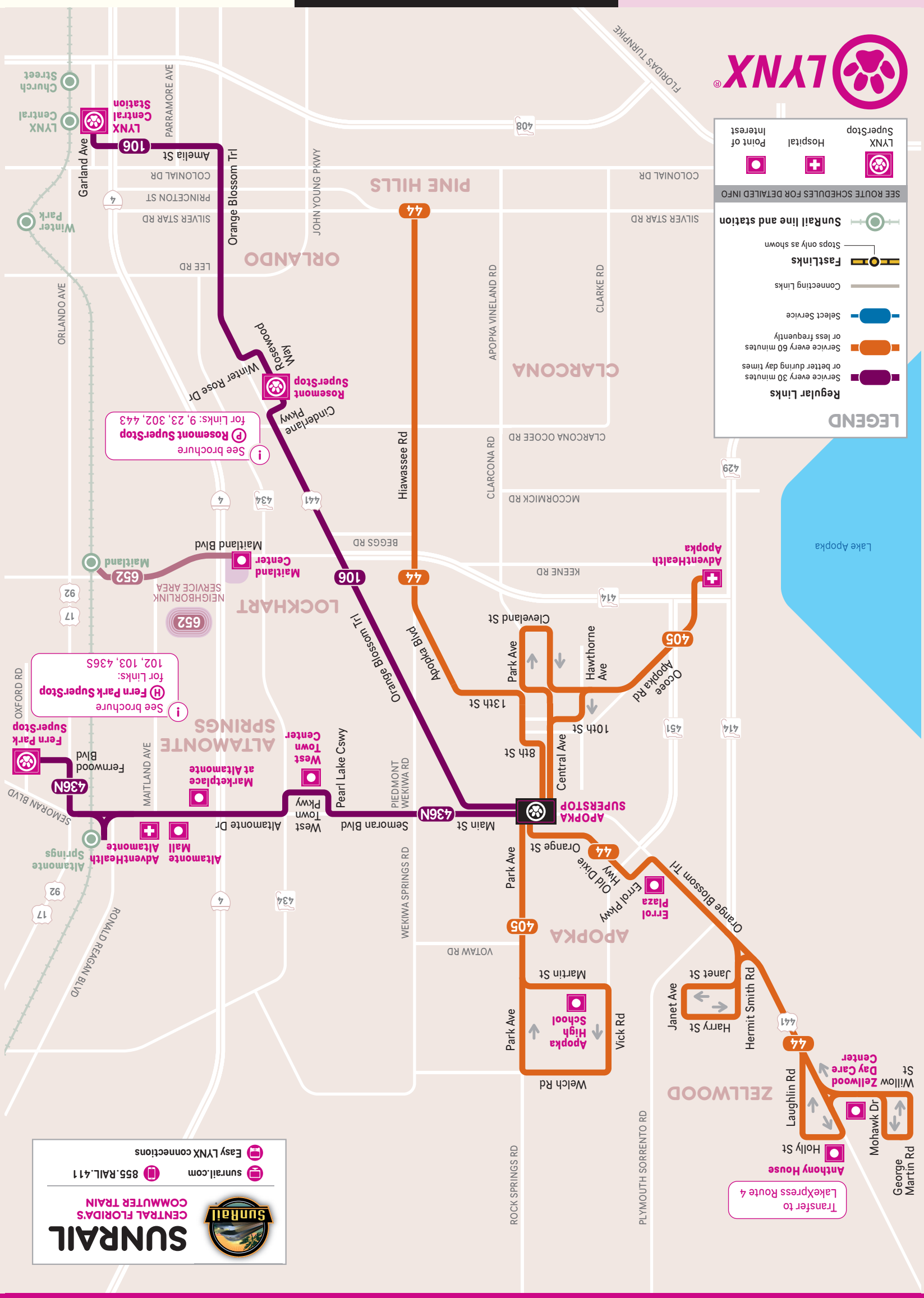
DIRECT SERVICE TO:

- Altamonte Springs SunRail
- Downtown Orlando
- Fern Park SuperStop
- AdventHealth Apopka
- Rosemont SuperStop
- Zellwood

LYNX®

Effective: APRIL 2021

Other accessible formats available upon request



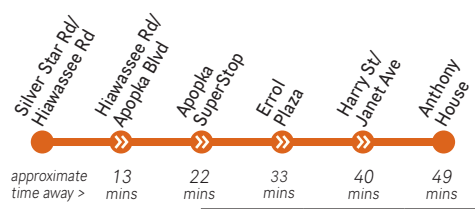
BUS SERVICE FREQUENCY

To plan your trip or view full bus schedule visit **golynx.com**

EFFECTIVE APRIL 2021 - ALL BUS SERVICE FREQUENCIES ARE APPROXIMATE AND SUBJECT TO CHANGE

Times indicate departures from the BEGINNING of the route. Diagrams show major points on each Link – buses make additional local stops along the way.

44 NORTHBOUND
to Zellwood



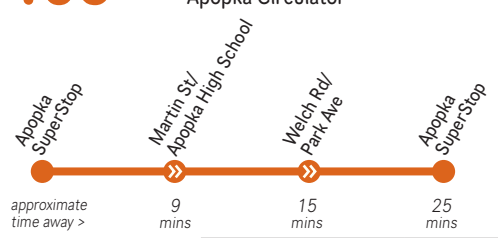
MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:25 am*	5:25 am*	NO SERVICE
ALL-DAY	:25	:25	
LAST TRIP	7:25 pm	7:25 pm	

* *First trip from Harry St/Janet Ave at 5:07 am*

44 SOUTHBOUND
to Pine Hills

MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:20 am	5:20 am	NO SERVICE
ALL-DAY	:20	:20	
LAST TRIP	8:20 pm	8:20 pm	

405 NORTHSIDE
Apopka Circulator



MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:10 am	5:15 am	5:15 am
DAY	5–7 am	:10	:15	:15
	7 am–8 pm	:15		
LAST TRIP		7:15 pm	7:15 pm	7:15 pm

405 SOUTHSIDE
Apopka Circulator

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:45 am	4:45 am	4:45 am
DAY	5 am–1 pm	:45	:45	:45
	1–7 pm			
EVE	7–8 pm	:40	:40	:45
NIGHT	8 pm–12 am	:30	:35	--
LAST TRIP		12:30 am	8:35 pm	7:45 pm

106 INBOUND
to LYNX Central Station

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:25 am	4:55 am	4:50 am
DAY	4–5 am	:25, :55	:25, :55	:50
	5–6 am	:20, :35, :50		
	6–7 am	:05, :20, :35, :48	:20, :50	
	7–8 am	:00, :15, :30, :45		
	8–9 am	:00, :15, :45		
	9 am–5 pm	:15, :45		
	5–7:30 pm	:20, :50		
EVE	7:30–10 pm	:55	:50	:00
NIGHT	11 pm–12 am	:00	--	--
LAST TRIP		12:00 am	9:50 pm	8:00 pm

106 OUTBOUND
to Apopka SuperStop

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:45 am	4:45 am	4:45 am
DAY	5 am–4 pm	:15, :45	:15, :45	:45
EVE	4–7 pm	:00, :15, :30, :45		
	7–8 pm	:15, :45	:45	--
NIGHT	8–11 pm	:45		
LAST TRIP		11:45 pm	9:45 pm	7:45 pm

652 NEIGHBORLINK
Maitland Center

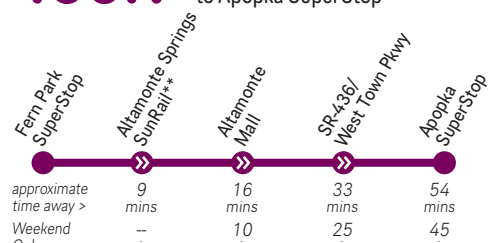
NeighborLink 652 *is based at the Maitland SunRail Station and provides curb-to-curb service to the Maitland Center with advanced reservations.*

Passengers must call 407-244-0808 at least two hours in advance to arrange a pickup in the curb-to-curb service area of Maitland Center or use the NeighborLink app.

	MONDAY–FRIDAY ONLY
AM TRIPS depart	6:35, 7:35, 8:35 am
DAY	NO SERVICE
PM TRIPS arrive	5:10, 6:15, 7:00 pm

At SunRail Station

436N WESTBOUND
to Apopka SuperStop

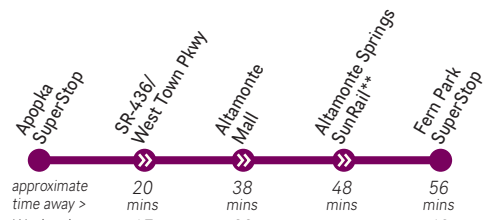


MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:05 am*	5:25 am*	6:55 am
DAY	5 am–7 pm	:05, :35	:25, :55	:55
EVE	7–8 pm		:20, :50	
	8–9 pm		:35, :58	
NIGHT	9–10 pm	:05, :40	:28	--
	10–11 pm	:25	:00, :30	
	11 pm–12 am	:10, :40		
LAST TRIP		12:20 am	12:00 am	8:55 pm

* *First trip departs from SR-436/West Town Pkwy at 5:05 am (Mon-Fri) and 4:30 am (Sat).*

** *Altamonte Springs SunRail Station served Monday–Friday only*

436N EASTBOUND
to Fern Park SuperStop



MINS AFTER THE HOUR		MON–FRI	SAT	SUN
FIRST TRIP		4:30 am	4:40 am	6:50 am
DAY	5–8 am	:00, :30	:10, :40	:50
	8 am–12 pm	:25, :55		
	12 pm–5 pm	:20, :50		
	5 pm–6 pm	:25, :55		
	6–7 pm	:30		
EVE	7–8 pm	:00, :30	:10, :43	
	8–9 pm	:05, :55	:10, :40	
NIGHT	9–10 pm	:25, :55	:17, :40	--
LAST TRIP		9:55 pm	9:40 pm	8:50 pm

** *Altamonte Springs SunRail Station served Monday–Friday only*

LYNX Bus Tracker | LYNX PawPass | LYNX See & Say | NeighborLink

Download our apps to help you pay your fare, report safety and security concerns, get real-time information and schedule your NeighborLink ride.

Download on the App Store | GET IT ON Google Play

CAN'T FIND YOUR LINK?

LYNX has 21 brochures, listed below, to help you find your bus. Each one shows the Links serving a certain area, like Fern Park, or a particular service, like LYMMO. You can also use the table to the right, which shows each Link and the brochure it appears on. Note that some Links are shown on more than one brochure.

LYNX BUS SERVICE BROCHURES

- (A) Apopka SuperStop
- (B) Colonial Plaza SuperStop
- (C) Colonial Dr East/West
- (D) Colonial Dr West/West Oaks Mall
- (E) Destination Parkway
- (F) Dixie Belle Dr & Gatlin Ave
- (G) FastLink Services
- (H) Fern Park SuperStop
- (I) Florida Mall SuperStop
- (K) Kissimmee Intermodal Station
- (L) LYNX Central Station
- (M) LYMMO
- (N) Orlando International Airport
- (O) Poinciana Walmart Center
- (P) Rosemont SuperStop
- (Q) Sanford Seminole Centre
- (R) SunRail Connections
- (S) UCF Area
- (T) Disney Area
- (U) Washington Shores SuperStop
- (V) Winter Park Village Area

QUESTIONS?

Visit us online
golynx.com

Give us a call
407.841.LYNX

Like us on Facebook
facebook.com/golynx

Follow us on Twitter
@lynxbusorlando

Link	Brochure
1	(R)(V)
3	(F)(L)
6	(B)(F)
7	(I)(L)
8	(E)(L)
9	(P)(R)(V)
10	(K)
11	(L)(N)(R)
13	(B)(L)(S)
15	(L)(S)
18	(K)(L)(R)
20	(L)(U)
21	(L)(U)
23	(P)(R)(V)
24	(U)
25	(L)(U)
26	(K)(O)
28	(C)(L)
29	(C)(L)
34	(Q)(R)
36	(L)(U)
37	(I)
38	(E)(L)
40	(L)(R)(U)

Link	Brochure
42	(E)(I)(N)(R)
44	(A)
45	(Q)(R)
46E	(Q)(R)
46W	(Q)(R)
48	(C)(L)
49	(C)(L)
50	(L)(T)
51	(B)(L)(N)
54	(D)(L)
55	(K)
56	(K)(T)
57	(K)(U)
58	(E)
102	(H)(L)(R)(V)
103	(H)(Q)
104	(C)(L)(S)
105	(C)(D)(L)
106	(A)(L)(P)
107	(I)(L)
108	(I)(K)
111	(E)(I)(N)(R)
125	(D)(L)(R)
155	(K)(R)

Link	Brochure
300	(L)(T)
301	(T)
302	(P)(T)
303	(T)(U)
304	(T)
305	(T)
306	(O)(R)(T)
313	(B)(L)
319	(L)(U)
405	(A)
426	(O)
434	(R)(S)
436N	(A)(H)(R)
436S	(F)(H)(N)
443	(P)(R)(V)
709	(K)

Link	Brochure
FastLink	
407	(G)(N)(K)
418	(G)(I)(R)
441	(G)(I)(K)(L)
LYMMO	
(L)(M)	Orange Line
(L)(M)	Lime Line
(M)	Grapefruit Line
NeighborLink	
601	(O)
604	(O)(R)
611	(D)
612	(C)(D)
613	(D)
621	(S)
622	(S)
631	(K)(R)
632	(K)(R)
641	(E)
651	(Q)(R)
652	(A)(H)(R)(V)

Appendix F

Utilities

Ticket : 073200864 Rev:000 Taken: 03/14/22 08:36ET

State: FL Cnty: ORANGE GeoPlace: APOPKA
CallerPlace: APOPKA
Subdivision:

Address :
Street : OCOEE APOPKA RD
Cross 1 : HARMON RD
Within 1/4 mile: Y
Cross 2 : S HAWTHORNE AVE

Locat: ALL UTILITIES ALONG CORRIDOR BELOW OR ABOVE GROUND
:
Remarks : IN RESPONSE TO RECEIPT OF A DESIGN TICKET, SSOCOF PROVIDES THE
ORIGINATOR OF THE DESIGN TICKET WITH A LIST OF SSOCOF MEMBERS IN THE VICINITY
OF THE DESIGN PROJECT. SSOCOF DOES NOT NOTIFY SSOCOF MEMBERS OF THE RECEIPT BY
SSOCOF OF A DESIGN TICKET. IT IS THE SOLE RESPONSIBILITY OF THE DESIGN
ENGINEER TO CONTACT SSOCOF MEMBERS TO REQUEST INFORMATION ABOUT THE LOCATION OF
SSOCOF MEMBERS' UNDERGROUND FACILITIES. SUBMISSION OF A DESIGN TICKET WILL NOT
SATISFY THE REQUIREMENT OF CHAPTER 556, FLORIDA STATUTES, TO NOTIFY SSOCOF OF
AN INTENT TO EXCAVATE OR DEMOLISH. THAT INTENT MUST BE MADE KNOWN SPECIFICALLY
TO SSOCOF IN THE MANNER REQUIRED BY LAW. IN AN EFFORT TO SAVE TIME ON FUTURE
CALLS, SAVE YOUR DESIGN TICKET NUMBER IF YOU INTEND TO BEGIN EXCAVATION WITHIN
90 DAYS OF YOUR DESIGN REQUEST. THE DESIGN TICKET CAN BE REFERENCED, AND THE
INFORMATION ON IT CAN BE USED TO SAVE TIME WHEN YOU CALL IN THE EXCAVATION
REQUEST.
*** LOOKUP BY BETWEEN ***
:
Grids   : 2839A8131C   2839A8131D   2839B8131A   2839B8131B   2839B8131C
Grids   : 2839B8132D   2839C8131A   2839C8132D   2839D8132C   2839D8132D
Grids   : 2840D8131D

Work date: 03/14/22 Time: 08:31ET Hrs notc: 000 Category: 6 Duration: UNKNOWN
Due Date : 03/16/22 Time: 23:59ET Exp Date : 04/13/22 Time: 23:59ET
Work type: DESIGN Boring: N White-lined: N
Ug/Oh/Both: U Machinery: N Depth: UNK Permits: N N/A
Done for : DESIGN

Company : VANASSE, HANGEN, BRUSTLIN, INC. (VHB) Type: CONT
Co addr : 225 E ROBINSON ST
Co addr2: SUITE 300
City   : ORLANDO State: FL Zip: 32801
Caller : DONOVAN MORRELL Phone: 407-965-0547
BestTime:
Mobile : 407-965-0547
Email   : DMORRELL@VHB.COM

Submitted: 03/14/22 08:36ET Oper: DON Chan: WEB
Mbrs : BH1956 CNTL01 COA591 FLW941 FPC322 LAN491 MCIU01 OCE979 SBF02

* Responses are current as of 03/17/2022 02:19 PM

Ex. Circum	Service Area	Utility Type(s)	Contact	Alternate Contact	Emergency Contact	Positive Response
No	CHARTER COMMUNICATIONS BH1956	CATV, FIBER, TELEPHONE	JOHN SMITH (407) 532-8520	JOHN SMITH (407) 532-8520	JOHN SMITH (407) 532-8520	Clear No Facilities
No	CENTURYLINK CNTL01	FIBER, TELEPHONE	BILL MCCLOUD (850) 599-1444	RYAN EGAN (918) 547-0063	CABLE PROTECTION CENTER (877) 366-8344 x3	
No	CITY OF APOPKA COA591	SEWER, WATER	VLADIMIR SIMONOVSKI (407) 703-1731		JORGE GARCIA (407) 703-1731 x697	Active Facilities are present - the member has active facilities within the area described by the noticed demolition. DO NOT demolish until the member notifies you the site is clear
No	ZAYO GROUP / FORMERLY LIGHTWAVE, LLC FLW941	FIBER	HENRY KLOBUCAR (406) 496-6510	STAKE CENTER / LOUIS SIMONE (772) 579-8956	JON RAY (813) 417-2184	
No	DUKE ENERGY FPC322	ELECTRIC	DUKE'S CUSTOMER SERVICE CENTER (407) 629-1010	USIC DISPATCH (800) 778-9140	DUKE'S CUSTOMER SERVICE CENTER (407) 629-1010	
No	LAKE APOPKA NATURAL GAS DISTRICT LAN491	NATURAL GAS	PATRICK NGUYEN (407) 656-2734	TOM MASON (407) 656-2734	SCOTT MARTIN	Unmarked - Member does not have accurate information to perform the requested locate - please contact the utility for further details per 556.105 (7)(a), F.S.
No	MCI MCIU01	COMMUNICATION LINES, FIBER	MCIU01 INVESTIGATIONS	NATIONAL FIBER SECURITY DEPARTMENT (800) 624-9675	NATIONAL FIBER SECURITY DEPARTMENT (800) 624-9675	
No	CENTRAL FLORIDA EXPRESSWAY AUTHORITY OCE979	FIBER	WILL HAWTHORNE (407) 690-5337	CHIRAYU AMIN (407) 992-5790	WILLIAM COLLINS (407) 832-9626	
No	A T & T/ DISTRIBUTION SBF02	TELEPHONE	DINO FARRUGGIO (561) 683-2729	DINO FARRUGGIO (561) 683-2729		Clear No Facilities

Centurylink Utility Response – 3/14/2022

From: cl_irth_comm@irth.com
Sent: Monday, March 14, 2022 8:48 AM
To: Donovan Morrell
Subject: [External] Ticket 073200864 - Centurylink Locate Notification

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Ocoee-Apopka

==========

To: VANASSE, HANGEN, BRUSTLIN, INC. (V Attn: DONOVAN MORRELL
Voice: 4079650547 Fax:
Re: Centurylink Locate Notification

This is an important message from CenturyLink replying to your request to locate our underground facilities in an area described on the one call center ticket. If you have any questions please call CenturyLink at 1-800-283-4237

==========

Ticket: 073200864
County: ORANGE Place: APOPKA
Address: OCOEE APOPKA RD

CNTL01:
Attached is the map of Centurylink facilities in the proposed excavation area.
Please contact CenturyLink at 303-260-4929 if you have further questions

==========

Centurylink

==========

This message was generated by an automated system. Please do not reply to this email.

From: cl_irth_comm@irth.com
Sent: Monday, March 14, 2022 8:47 AM
To: Donovan Morrell
Subject: [External] Seq# 1: 073200864 for CNTL01
Attachments: Design Legend.png; Screenshot 2021-10-15 135647.png

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Ocoee-Apopka

CNTL01 00226 CALL SUNSHINE 03/14/22 08:37:37ET 073200864-000 DESIGN STREET Ticket : 073200864 Rev:000 Taken: 03/14/22 08:36ET

State: FL Cnty: ORANGE GeoPlace: APOPKA
CallerPlace: APOPKA
Subdivision:

Address :
Street : OCOEE APOPKA RD
Cross 1 : HARMON RD
Within 1/4 mile: Y
Cross 2 : S HAWTHORNE AVE

Locat: ALL UTILITIES ALONG CORRIDOR BELOW OR ABOVE GROUND
:
Remarks : IN RESPONSE TO RECEIPT OF A DESIGN TICKET, SSOCOF PROVIDES THE ORIGINATOR OF THE DESIGN TICKET WITH A LIST OF SSOCOF MEMBERS IN THE VICINITY OF THE DESIGN PROJECT. SSOCOF DOES NOT NOTIFY SSOCOF MEMBERS OF THE RECEIPT BY SSOCOF OF A DESIGN TICKET. IT IS THE SOLE RESPONSIBILITY OF THE DESIGN ENGINEER TO CONTACT SSOCOF MEMBERS TO REQUEST INFORMATION ABOUT THE LOCATION OF SSOCOF MEMBERS' UNDERGROUND FACILITIES. SUBMISSION OF A DESIGN TICKET WILL NOT SATISFY THE REQUIREMENT OF CHAPTER 556, FLORIDA STATUTES, TO NOTIFY SSOCOF OF AN INTENT TO EXCAVATE OR DEMOLISH. THAT INTENT MUST BE MADE KNOWN SPECIFICALLY TO SSOCOF IN THE MANNER REQUIRED BY LAW. IN AN EFFORT TO SAVE TIME ON FUTURE CALLS, SAVE YOUR DESIGN TICKET NUMBER IF YOU INTEND TO BEGIN EXCAVATION WITHIN
90 DAYS OF YOUR DESIGN REQUEST. THE DESIGN TICKET CAN BE REFERENCED, AND THE INFORMATION ON IT CAN BE USED TO SAVE TIME WHEN YOU CALL IN THE EXCAVATION REQUEST.
*** LOOKUP BY BETWEEN ***
:
Grids : 2839A8131C 2839A8131D 2839B8131A 2839B8131B 2839B8131C
Grids : 2839B8132D 2839C8131A 2839C8132D 2839D8132C 2839D8132D
Grids : 2840D8131D

Work date: 03/14/22 Time: 08:31ET Hrs notc: 000 Category: 6 Duration: UNKNOWN Due Date : 03/16/22 Time: 23:59ET Exp Date : 04/13/22 Time: 23:59ET Work type: DESIGN Boring: N White-lined: N
Ug/Oh/Both: U Machinery: N Depth: UNK Permits: N N/A Done for : DESIGN

Company : VANASSE, HANGEN, BRUSTLIN, INC. (VHB) Type: CONT Co addr : 225 E ROBINSON ST Co addr2: SUITE 300
City : ORLANDO State: FL Zip: 32801
Caller : DONOVAN MORRELL Phone: 407-965-0547
BestTime:
Mobile : 407-965-0547
Email : DMORRELL@VHB.COM

Submitted: 03/14/22 08:36ET Oper: DON Chan: WEB Mbrs : BH1956 CNTL01 COA591 FLW941 FPC322 LAN491 MCIU01 OCE979 SBF02

Duke Energy Utility Response – 3/01/2022

From: Guillen, Gonzalo A <Gonzalo.Guillen@duke-energy.com>
Sent: Tuesday, March 1, 2022 6:18 PM
To: Donovan Morrell
Subject: RE: [External] RE: 44131828 RGB_DOT_ORANGE_COUNTY_ROADWAY_IMPROVEMENTS_OCOEE-APOPKA_CORRIDOR
Attachments: OcoeeApopkaRoadCorridorStudyConceptSheets_RGB_rev1-qrr.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Donovan;

Here as requested

Best Regards,

Gonzalo A. Guillen
Engineer III (E.I., PMP, MBA) | Asset Design- Central
GGUILL1@DUKE-ENERGY.COM
Office: 407-464-1281 Cell: 407-280-3465

From: Donovan Morrell <dmorrell@vhb.com>
Sent: Tuesday, March 1, 2022 4:40 PM
To: Guillen, Gonzalo A <Gonzalo.Guillen@duke-energy.com>
Subject: RE: [External] RE: 44131828 RGB_DOT_ORANGE_COUNTY_ROADWAY_IMPROVEMENTS_OCOEE-APOPKA_CORRIDOR

Good Afternoon Gonzalo,

The limits of our project have been extended by 1000 feet as of today and we will need the information on your utilities within the area. I am providing a new link to our plan sheets which will expire in 21 days: Duke Energy.

Inside the folder you will find:

- "Utility Coordination Plan Sheets," which is our official updated plan sheets without any of your utility information and
- "OcoeeApopkaRoadCorridorStudyConceptSheets_RGB_rev1-q," which is the plan sheets you returned to us but edited to include the City of Apopka Logo and Name in addition to the two new sheets we need information on.

I leave the choice up to you. Please reach out if you have any questions.

Sincerely,
Donovan Morrell

From: Gonzalo.Guillen@duke-energy.com <Gonzalo.Guillen@duke-energy.com>
Sent: Wednesday, February 16, 2022 1:35 PM
To: Donovan Morrell <dmorrell@vhb.com>
Cc: defdistributiongov@duke-energy.com
Subject: [External] RE: 44131828 RGB_DOT_ORANGE_COUNTY_ROADWAY_IMPROVEMENTS_OCOEE-APOPKA_CORRIDOR

http://dmaxp01.duke-energy.com/dmaxp01/ui/maximo.jsp?event=loadapp&value=PLUSDWOTRK&uniqueid=59712876&additionalevent=gototab&changetab=1357328138892

Donavan:

Attaching a Markup, greenlines

Showing apparent location of our facilities, surveys on future plans will need to be done on your plans

Let me know if there is anything else we can do for you.

Best Regards,

Gonzalo A. Guillen
Engineer III (E.I., PMP, MBA) | Asset Design- Central
GGUILL1@DUKE-ENERGY.COM
Office: 407-464-1281 Cell: 407-280-3465

From: DEFDistributionGOV <DEFDistributionGOV@duke-energy.com>
Sent: Wednesday, February 16, 2022 9:53 AM
To: Guillen, Gonzalo A <Gonzalo.Guillen@duke-energy.com>
Cc: DEFDistributionGOV <DEFDistributionGOV@duke-energy.com>
Subject: 44131828 RGB_DOT_ORANGE_COUNTY_ROADWAY_IMPROVEMENTS_OCOEE-APOPKA_CORRIDOR

Good Morning Gonzalo

This has been logged in and assigned WO 44131828 to the project. You may access Plans link below and Maximo too large to attach to these email.

Thank You,

Vivian Castro-Cintron, BBA
Highway Relocation Support
3250 Bonnet Creek
Orlando, FL 32830
Office: 407-319-6889

New Highway Relocation Project Submittal E-Mail address – DEFDistributionGOV@Duke-Energy.com & DEFTransmissionGOV@Duke-Energy.com

From: Donovan Morrell <dmorrell@vhb.com>
Sent: Tuesday, February 15, 2022 1:42 PM
To: DEFDistributionGOV <DEFDistributionGOV@duke-energy.com>
Cc: Kevin Freeman <KFreeman@VHB.com>
Subject: [EXTERNAL] Ocoee-Apopka Corridor Study Initial Utility Contact

***** CAUTION! EXTERNAL SENDER *** STOP. ASSESS. VERIFY!!** Were you expecting this email? Are grammar and spelling correct? Does the content make sense? Can you verify the sender? If suspicious report it, then do not click links, open attachments or enter your ID or password.

Good afternoon,

Attached is your initial contact letter for the Ocoee-Apopka Corridor Study. You can use the following link to view and download the study area, please note this link will expire in 21 days.

Ocoee Apopka Road Corridor Study Concept Sheets.pdf

If you have any questions, please do not hesitate to contact me. Thank you for your time.

Sincerely,

Donovan Morrell

Donovan Morrell
PD&E Transportation Designer

225 E. Robinson Street, Suite 300
Landmark Center Two
Orlando, FL 32801-4326
P 407.965.0517 **| F** 407.839.4008
mzoellner@vhb.com

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 1

SHEET NO.

mzoellner 2/3/2022 2:08:45 PM UC 1 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

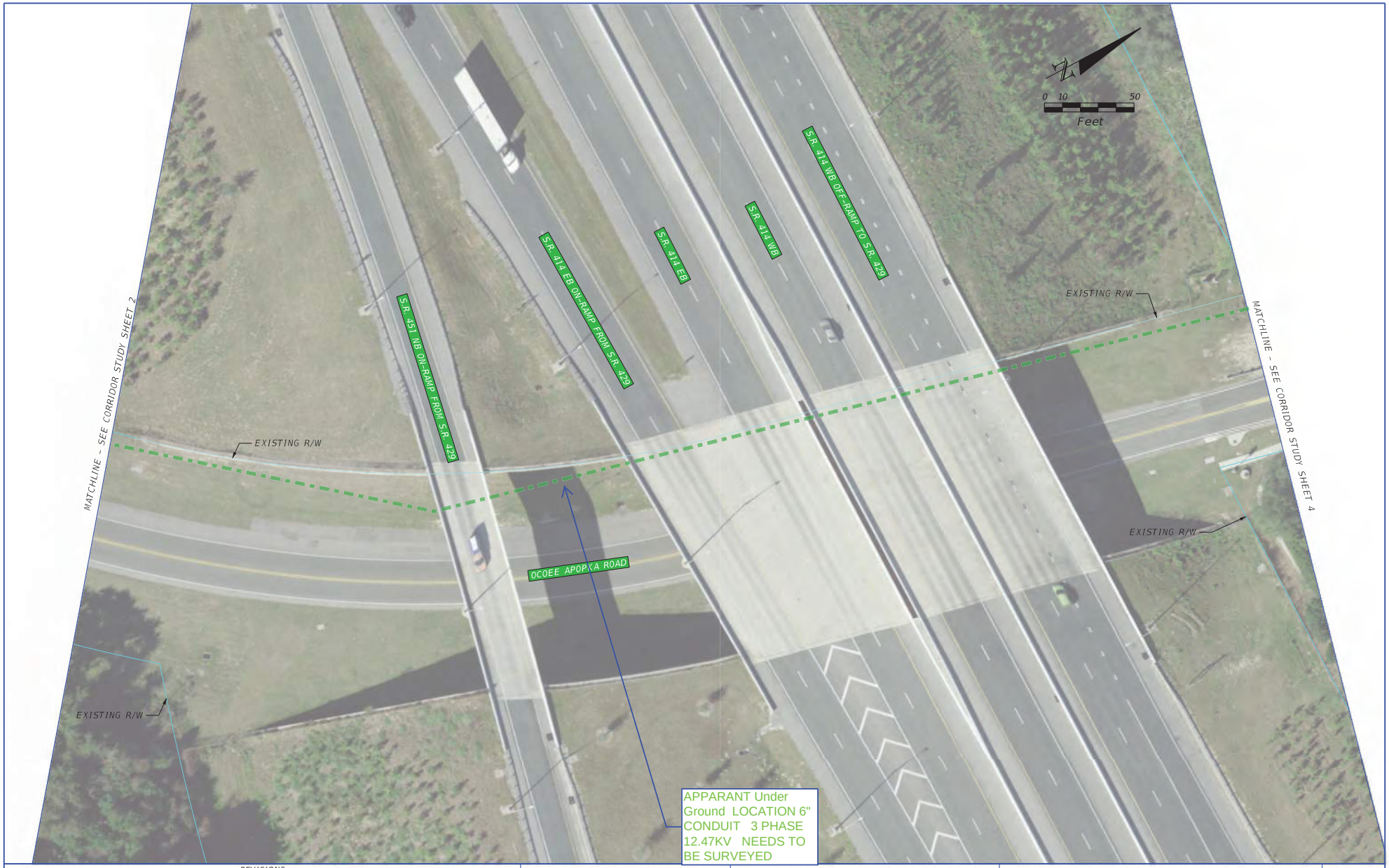
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 2

SHEET NO.

mzoellner 2/3/2022 2:09:26 PM UC 2 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 3

SHEET NO.

mzoellner 2/3/2022 2:09:47 PM UC 3 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 4

SHEET NO.

mzoellner 2/3/2022 2:10:12 PM UC 4 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 5

SHEET NO.

mzoellner 2/3/2022 2:10:54 PM UC 5 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 6

SHEET NO.

mzoellner 2/3/2022 2:11:31 PM UC 6 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 7

SHEET NO.

mzoellner 2/3/2022 2:12:19 PM UC 7 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

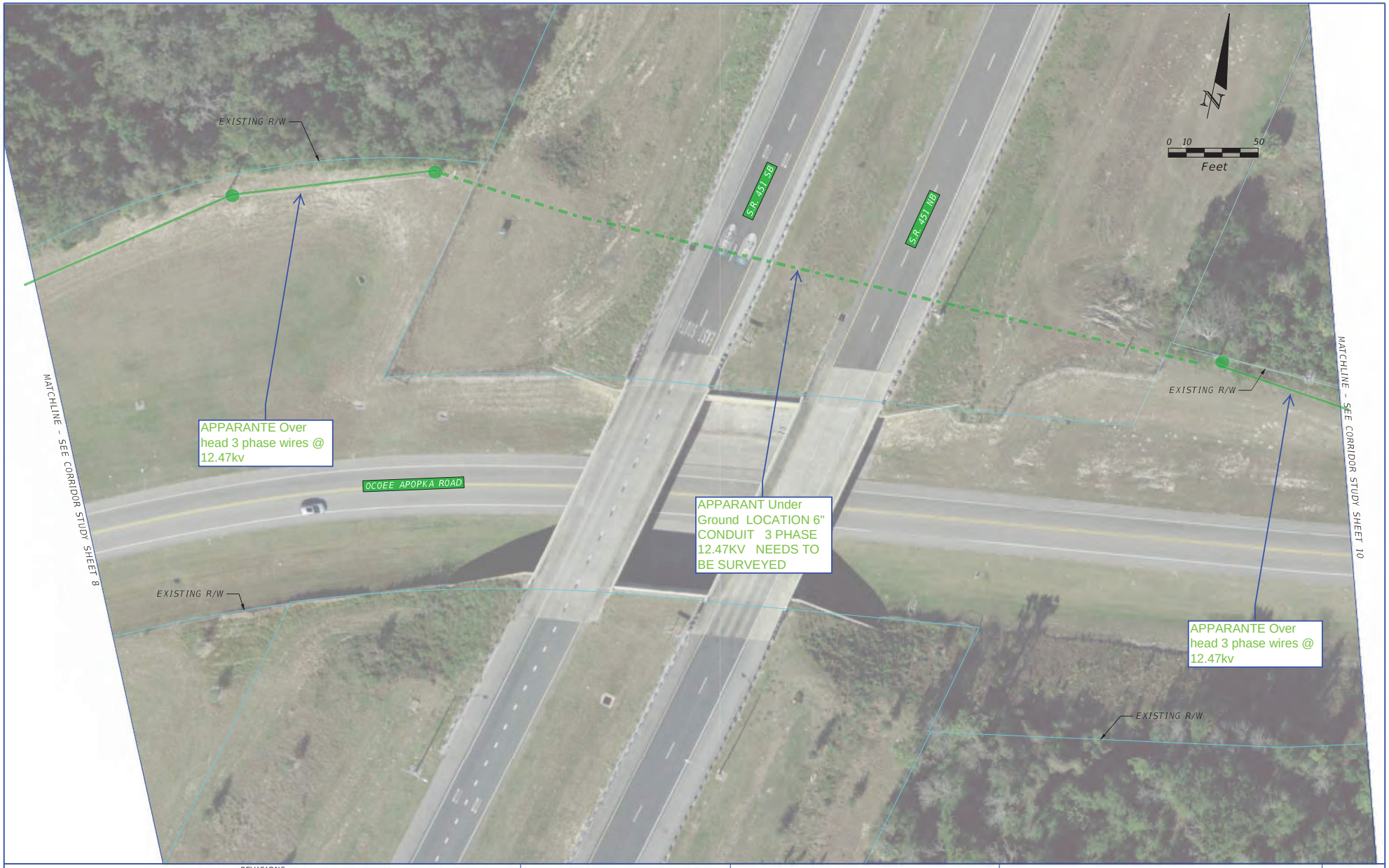
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 8

SHEET NO.

mzoellner 2/3/2022 2:12:38 PM UC 8 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 9

SHEET NO.

mzoellner 2/3/2022 2:12:57 PM UC 9 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 10

SHEET NO.

mzoellner 2/3/2022 2:13:11 PM UC 10 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 11

SHEET NO.

mzoellner 2/3/2022 2:13:29 PM UC 11 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 12

SHEET NO.

mzoellner 2/3/2022 2:13:49 PM UC 12 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

MATCHLINE - SEE CORRIDOR STUDY SHEET 12

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 13

SHEET NO.

mzoellner 2/3/2022 2:14:11 PM UC 13 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Utility Coordination Sheets\Utility Coordination Plan Sheets.dgn

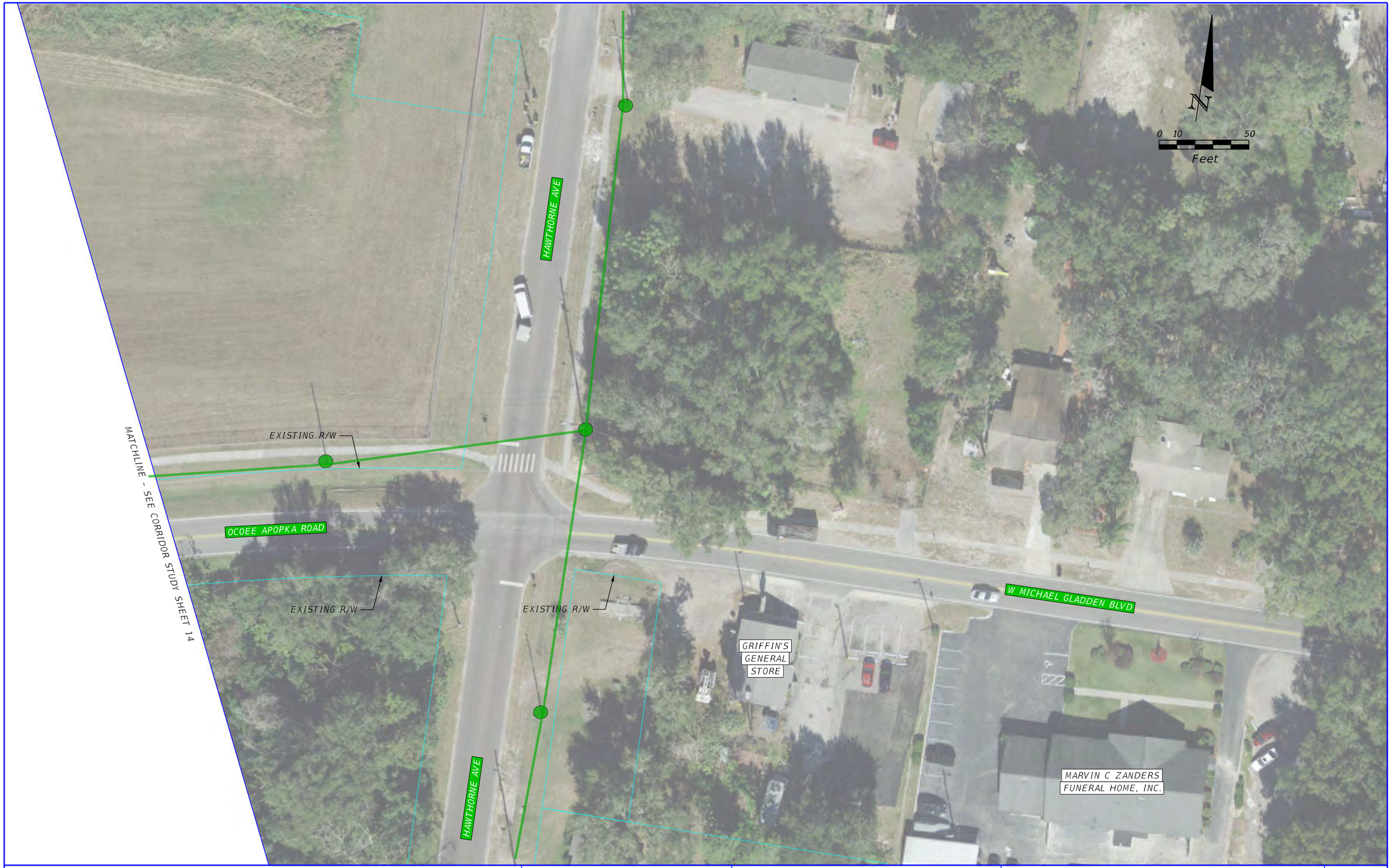
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD
CORRIDOR STUDY SHEET 14

SHEET NO.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CORRIDOR STUDY SHEET 15

SHEET NO.

MCI Verizon Utility Response – 3/02/2022

From: Travis Van Wyk <TWyk@asginc.us>

Sent: Wednesday, March 2, 2022 8:21 AM

To: Donovan Morrell

Subject: RE: [External] Investigations Ticket#2321-2022 Ocoee-Apopka Corridor Study Initial Utility Contact

Attachments: harmon.PNG; emery.PNG; boy scout.PNG

Follow Up Flag: Follow up

Flag Status: Flagged

Hello,

I have attached where the cables are in the extend area.

Travis Van Wyk
GIS Technician I

ASG
3301 Matrix Drive Suite 100
Richardson, TX 75082

Plan, Design, Build, Service.

From: Donovan Morrell <dmorrell@vhb.com>
Sent: Tuesday, March 1, 2022 3:50 PM
To: Travis Van Wyk <TWyk@asginc.us>
Subject: RE: [External] Investigations Ticket#2321-2022 Ocoee-Apopka Corridor Study Initial Utility Contact

Hello,

Our project limits have been extended an additional 1000 feet North and we need to clarify whether you have utilities in this area. Your previous graphic did not follow the road up that direction however it is mutually beneficial for us to be certain. This is a link to our concept sheets which include the full scope of our project: Ocoee-Apopka Plan Sheets. This link expires in 21 days, when you have a chance

please send an updated graphic showing your utilities in the vicinity. Again, it is only an additional 1000 feet.

If you have any questions don't hesitate to contact me.

Thank you,

Donovan Morrell

From: Travis Van Wyk <TWyk@asginc.us>
Sent: Tuesday, February 22, 2022 1:34 PM
To: Donovan Morrell <dmorrell@vhb.com>
Subject: [External] Investigations Ticket#2321-2022 Ocoee-Apopka Corridor Study Initial Utility Contact

Hello, Donovan

Investigations Ticket#2321-2022

Verizon business (MCI) does have facilities in the area.

Please see attached.

This Investigation Ticket has been forwarded to the local Verizon OSP Engineer:

Tim Cole	407-506-8635

Call Before You Dig!

Regards,

Travis Van Wyk
GIS Technician I
ASG
3301 Matrix Drive Suite 100
Richardson, TX 75082

Plan, Design, Build, Service.

From: Donovan Morrell <dmorrell@vhb.com>
Sent: Tuesday, February 15, 2022 12:39 PM
To: ASG Investigations Team <asg.investigationsteam@asginc.us>
Cc: Investigations@verizon.com; Kevin Freeman <KFreeman@VHB.com>
Subject: Ocoee-Apopka Corridor Study Initial Utility Contact

Good afternoon,

Attached is your initial contact letter for the Ocoee-Apopka Corridor Study. You can use the following link to view and download the study area, please note this link will expire in 21 days.

Ocoee Apopka Road Corridor Study Concept Sheets.pdf

If you have any questions, please do not hesitate to contact me. Thank you for your time.

Sincerely,

Donovan Morrell
Donovan Morrell
PD&E Transportation Designer

225 E. Robinson Street, Suite 300
Landmark Center Two
Orlando, FL 32801-4326
P 407.965.0517 **| F** 407.839.4008
mzoellner@vhb.com

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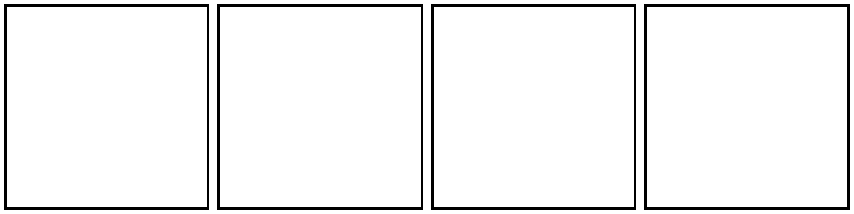

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Zayo Group Utility Response – 02/16/2022

From: Henry Klobucar <henry.klobucar@zayo.com>
Sent: Wednesday, February 16, 2022 10:24 AM
To: Donovan Morrell
Subject: [External] RE: Ocoee-Apopka Corridor Study Initial Utility Contact
Attachments: FL.kmz

Follow Up Flag: Follow up
Flag Status: Flagged

From: Donovan Morrell <dmorrell@vhb.com>
Sent: Tuesday, February 15, 2022 11:29 AM
To: Henry.Klobucar@zayo.com
Cc: Kevin Freeman <KFreeman@VHB.com>
Subject: Ocoee-Apopka Corridor Study Initial Utility Contact

Good afternoon Mr. Klobucar,

Attached is your initial contact letter for the Ocoee-Apopka Corridor Study. You can use the following link to view and download the study area, please note this link will expire in 21 days.

Ocoee Apopka Road Corridor Study Concept Sheets.pdf

If you have any questions, please do not hesitate to contact me. Thank you for your time.

Sincerely,

Donovan Morrell
Donovan Morrell
PD&E Transportation Designer

vhb 225 E. Robinson Street, Suite 300
Landmark Center Two
Orlando, FL 32801-4326
P 407.965.0517 | **F** 407.839.4008
mzoellner@vhb.com

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Vanasse Hangen Brustlin, Inc. | info@vhb.com

Appendix G

Apopka Demographics Data

City of Apopka
Statistical Information

Year		Population	# Change	Households
1990 Census	City	13,611		5,712 (2.382 pph)
2000 Census	"	26,642	+ 13,031	10,019 (2.659 pph)
2010 Census	"	41,542	+ 14,900	15,707 (2.644 pph)
2011 April	"	42,089	+ 547	16,058 (2.621 pph)
2012 April	"	42,805	+ 716	16,277 (2.629 pph)
2013 April	"	44,129	+ 1,321	16,312 (2.705 pph)
2014 April	"	45,699	+ 1,570	16,781 (2.723 pph)
2015 April	"	46,571	+ 872	17,715 (2.628 pph)
2016 April	"	47,826	+ 1,255	18,075 (2.645 pph)
2017 April	"	49,750	+ 1,924	18,369 (2.708 pph)
2018 April	"	51,676	+ 1,926	19,279 (2.680 pph)
2019 April	"	52,404	+ 728	19,537 (2.682 pph)
2020 April	"	53,632	+ 1,228	19,920 (2.692 pph)
2020 Census	"	54,874	+ 13,332 (2010-2020)	20,204 (2.715 pph)-city est.
2021 April	"	56,727	+ 1,853	20,311 (2.79 pph)

1990 Census,	Orange County	677,491		254,852 (2.658 pph)
2000 Census	"	896,344	+ 218,853	336,286 (2.665 pph)
2010 Census	"	1,145,956	+ 249,612	421,847 (2.716 pph)

Complied by:
The City of Apopka
Community Development Dept.
Apopka City Hall
120 E. Main St.
Apopka, FL 32704-1229
Phone: (407) 703-1712
Fax: (407)703-1791
www.Apopka.net

District 2 Population: 114,729 (1990 Census) 2010 Estimate: 183,152

- April City & County Data supplied by: University of Florida Bureau of Economic and Business Research, (352) 392-0171
- 2011-2015 Household data supplied by U.S. Census Factfinder
- Person Per Household (pph), 2010 Census: 2.644 (pph) (41,542 pop ÷ 15,707 Housing Units)

Population:

1990 Census	13,611	2000 Census	26,642	2010 Census	41,542
2000 Census	26,642	2010 Census	41,542	2020 Census	54,874
	13,031 = 95.7% Increase		14,900 = 56% Increase		13,332 = 32% Increase

Residential Housing Units:

1990 Census, Housing Units: 5,712
2000 " " " 10,019 Total Units
9,448 = 60.45% Increase

2000 Census, Housing Units: 10,019
2010 " " " 15,707 Total Units
5,688 = 56.77% increase

2010 Census Housing Units: 15,707
2020 APK est. Housing Units: 20,204
4,497 = 28.63% increase

Acres*:

1990	8,214.80 (12.83 sq. mi.)	2011: 21,183 ac. (33.09 sq. mi.)	2016: 21,952.09 ac (34.300 sq. mi.)
2000	15,864.58 (25.60 sq. mi.)	2012: 21,196 ac. (33.12 sq. mi.)	2017: 22,071.66 ac (34.486 sq. mi.)
2010	21,099.47 (32.97 sq. mi.)	2013: 21,625 ac. (33.79 sq. mi.)	2018: 22,221.30 ac (34.721 sq. mi.)
2020	22,751.86 (35.54 sq. mi.)	2014: 21,768.94 ac (34.014 sq. mi.)	2019: 22,728.19 ac (35.512 sq. mi.)
1,652.39 = 33% Increase		2015: 21,876.83 ac (34.176 sq. mi.)	2020: 22,751.86 ac (35.549 sq. mi.)

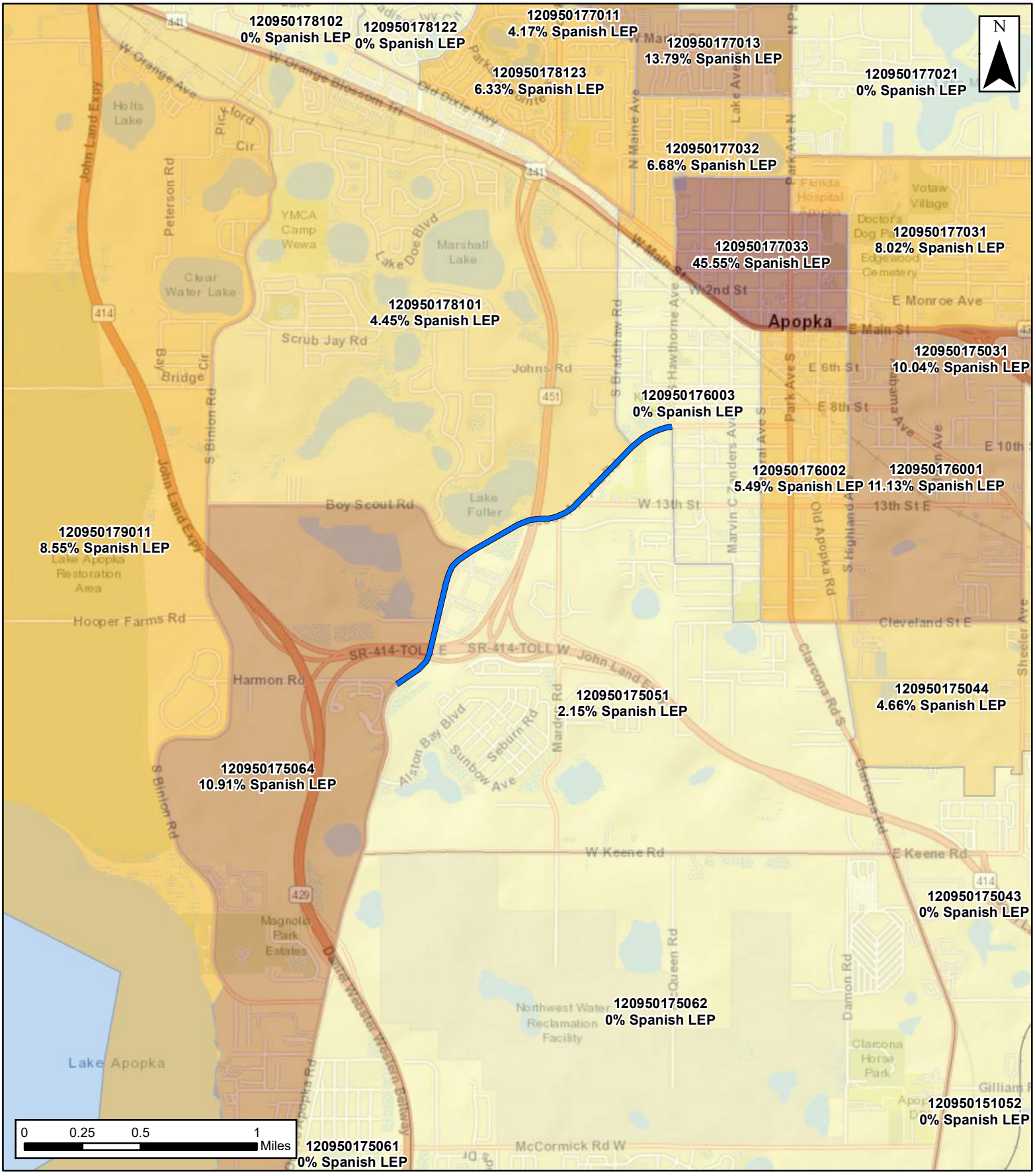
* Area Information as of December 31st for each year

Location Data:

Latitude: 28 Degrees 37 Minutes North
Longitude: 81 Degrees 30 Minutes West
Altitude: 143.0 at the Orlando Apopka Airport (X04)

FY 2021 Millage Rates:

Taxing Authority	Millage Rate
Public Schools: By State Law (Rle)	3.4890
Public Schools: By Local Board	3.2480
Orange County (General)	4.4347
City Of Apopka	4.1876
Library - Operating Budget	0.3748
St. Johns Water Management District	0.2189
Total Tax Millage:	**15.9530**



Percent Spanish LEP by Block Group

- 0.00% - 2.50%
- 2.51% - 4.99%
- 5.00% - 10.00%
- 10.01% - 15.00%
- 15.01% - 45.55%
- Ocoee Apopka Rd - Study Area

Ocoee Apopka Road

from Harmon Rd to Hawthorne Ave

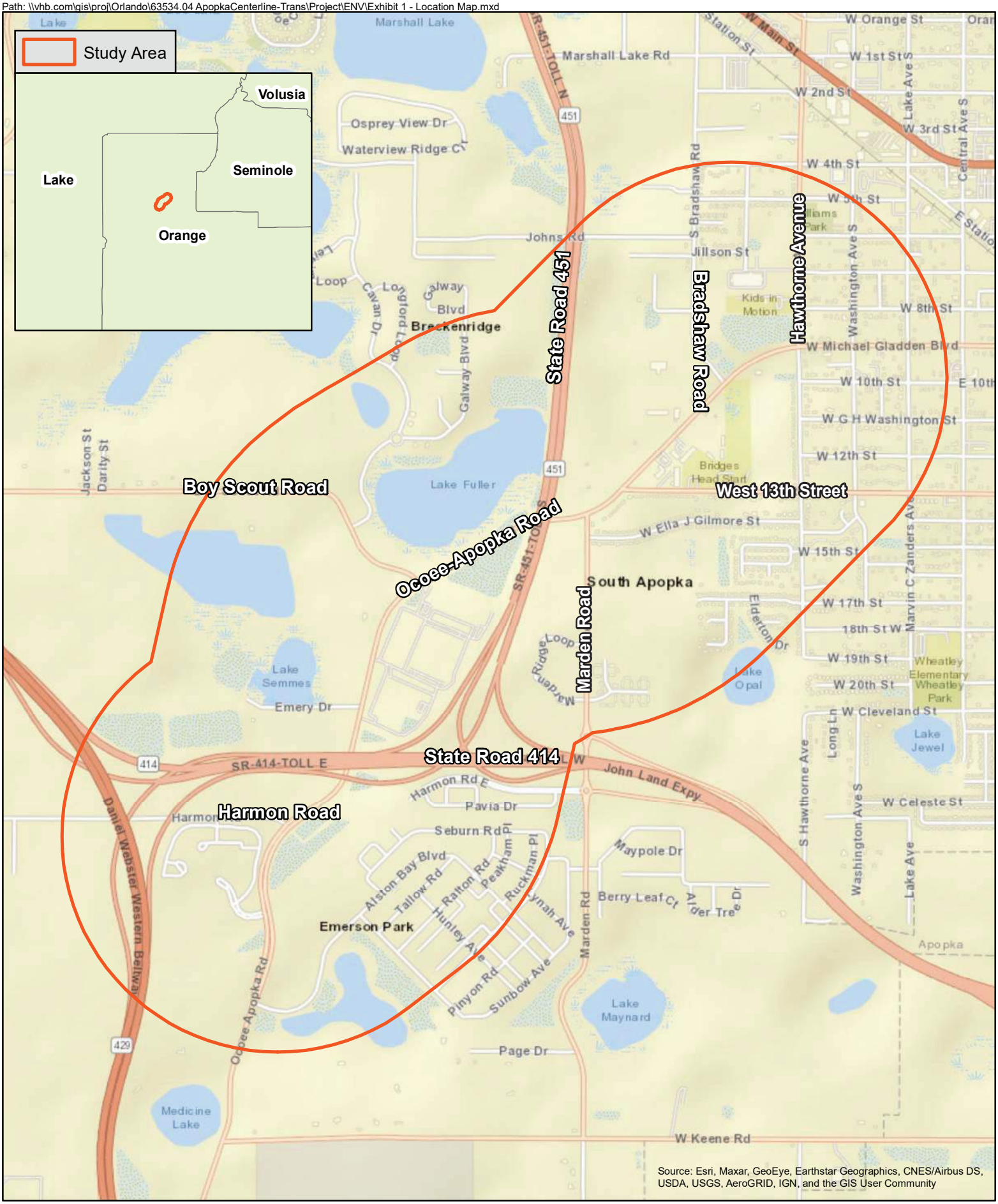
Percent Limited English Proficiency - Households

Sources: US Census (2020), ACS 5-Year Estimate: C16002, Household Language by Household Limited English Speaking Status (2020).
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Appendix H

Environmental Analysis Maps

Path: \\vhb.com\gis\proj\Orlando\63534.04 ApopkaCenterline-Trans\Project\ENV\Exhibit 1 - Location Map.mxd



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

225 East Robinson Street, Suite 300
Orlando, Florida 32801 | 407.839.4006

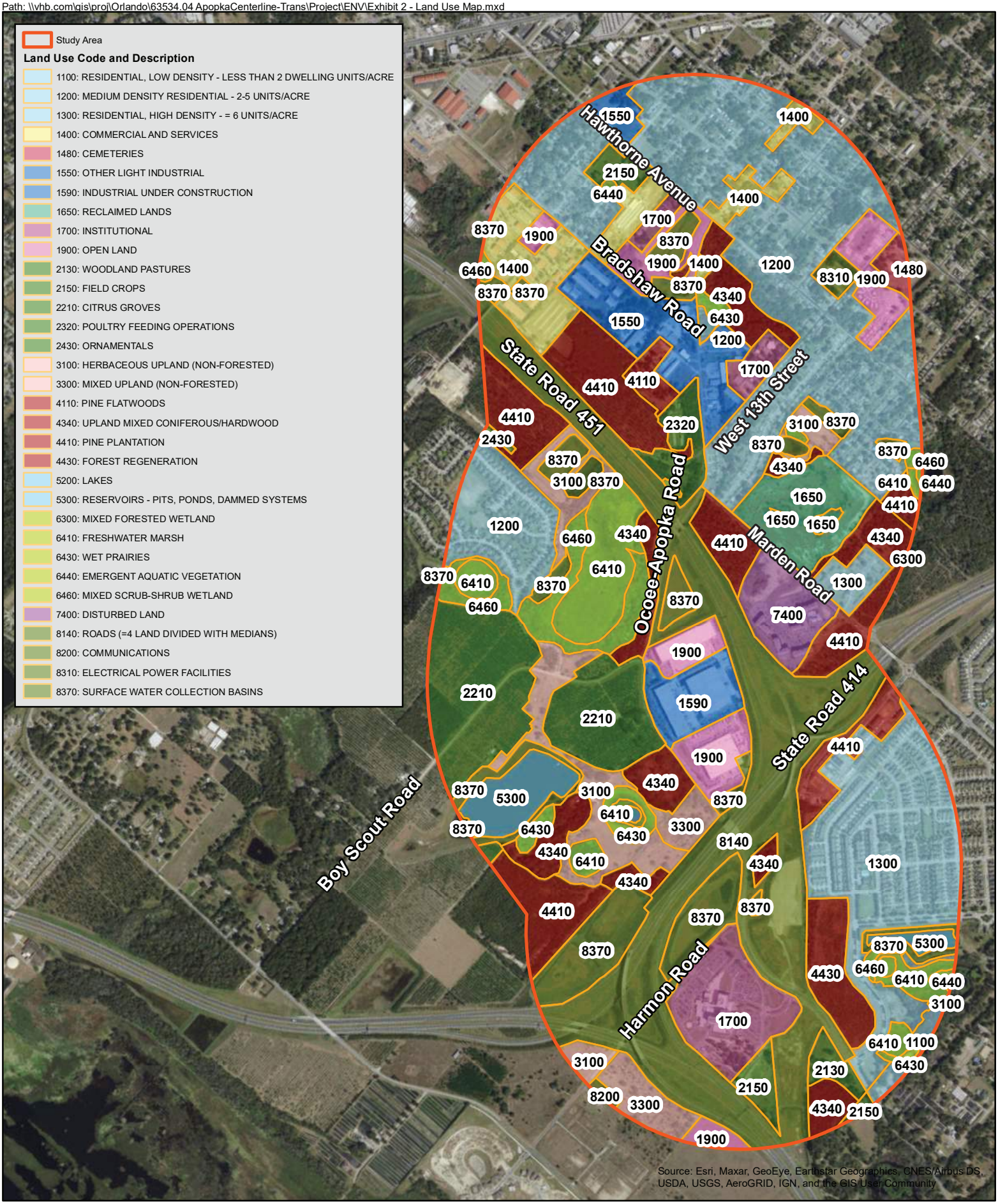
Ocoee-Apopka Road
Orange County, FL
Project Location Map
March 2021

Exhibit 1

0 750 1,500 Feet

N

Path: \\vhb.com\gis\proj\Orlando\63534.04 ApopkaCenterline-Trans\Project\ENV\Exhibit 2 - Land Use Map.mxd



225 East Robinson Street, Suite 300
Orlando, Florida 32801 | 407.839.4006

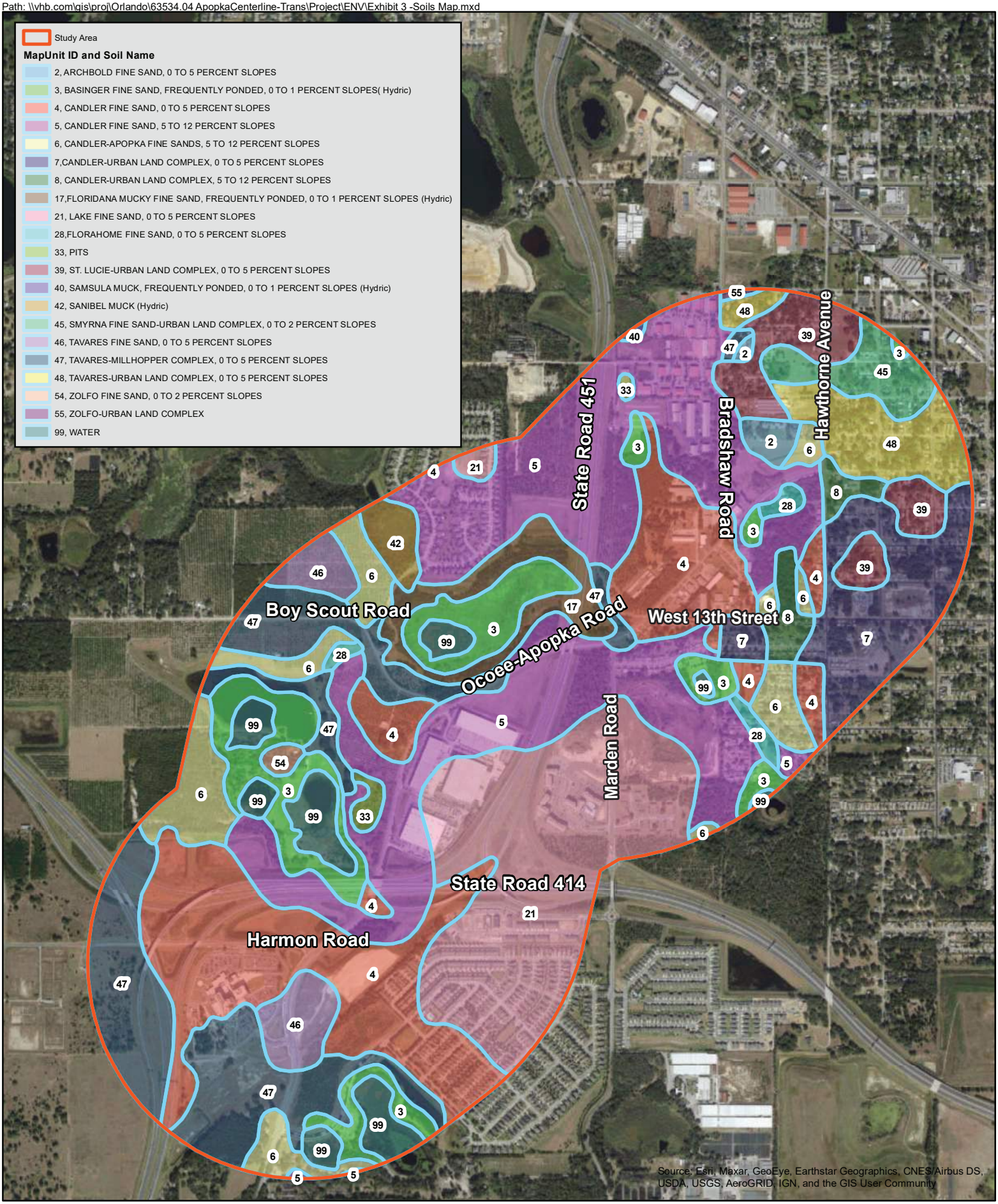
Source:
SJRWMD FLUCFCS Data 2014

Ocoee-Apopka Road
Orange County, FL
Land Use Map
March 2021

Exhibit 2

0 425 850 Feet

Path: \\vhb.com\gis\proj\Orlando\63534.04 ApopkaCenterline-Trans\Project\ENV\Exhibit 3 -Soils Map.mxd



225 East Robinson Street, Suite 300
Orlando, Florida 32801 | 407.839.4006

Source:
NCRS Soils Data 2018

Ocoee-Apopka Road
Orange County, FL
Soils Map
March 2021

Exhibit 3

0 425 850 Feet

N

Path: \\vhb.com\gis\proj\Orlando\63534.04 ApopkaCenterline-Trans\Project\ENV\Exhibit 4 - Wetland Map.mxd

225 East Robinson Street, Suite 300
Orlando, Florida 32801 | 407.839.4006

Source:
SJRWMD FLUCFCS Data 2014

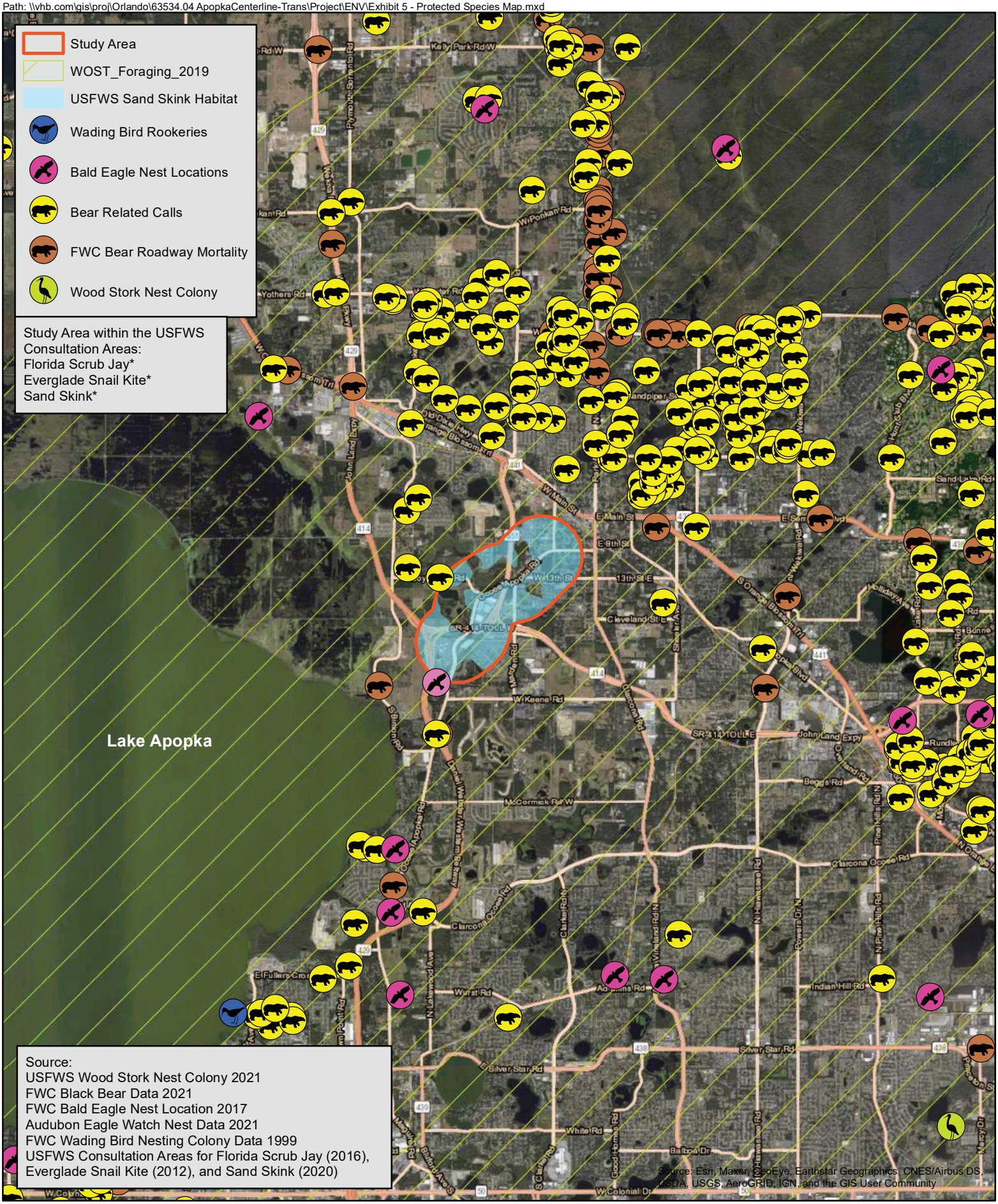
Ocoee-Apopka Road
Orange County, FL
Wetlands Map
March 2021

Exhibit 4

0 425 850 Feet

N

Path: \\vhb.com\gis\proj\Orlando\63534.04 ApopkaCenterline-Trans\Project\ENV\Exhibit 5 - Protected Species Map.mxd



225 East Robinson Street, Suite 300
Orlando, Florida 32801 | 407.839.4006

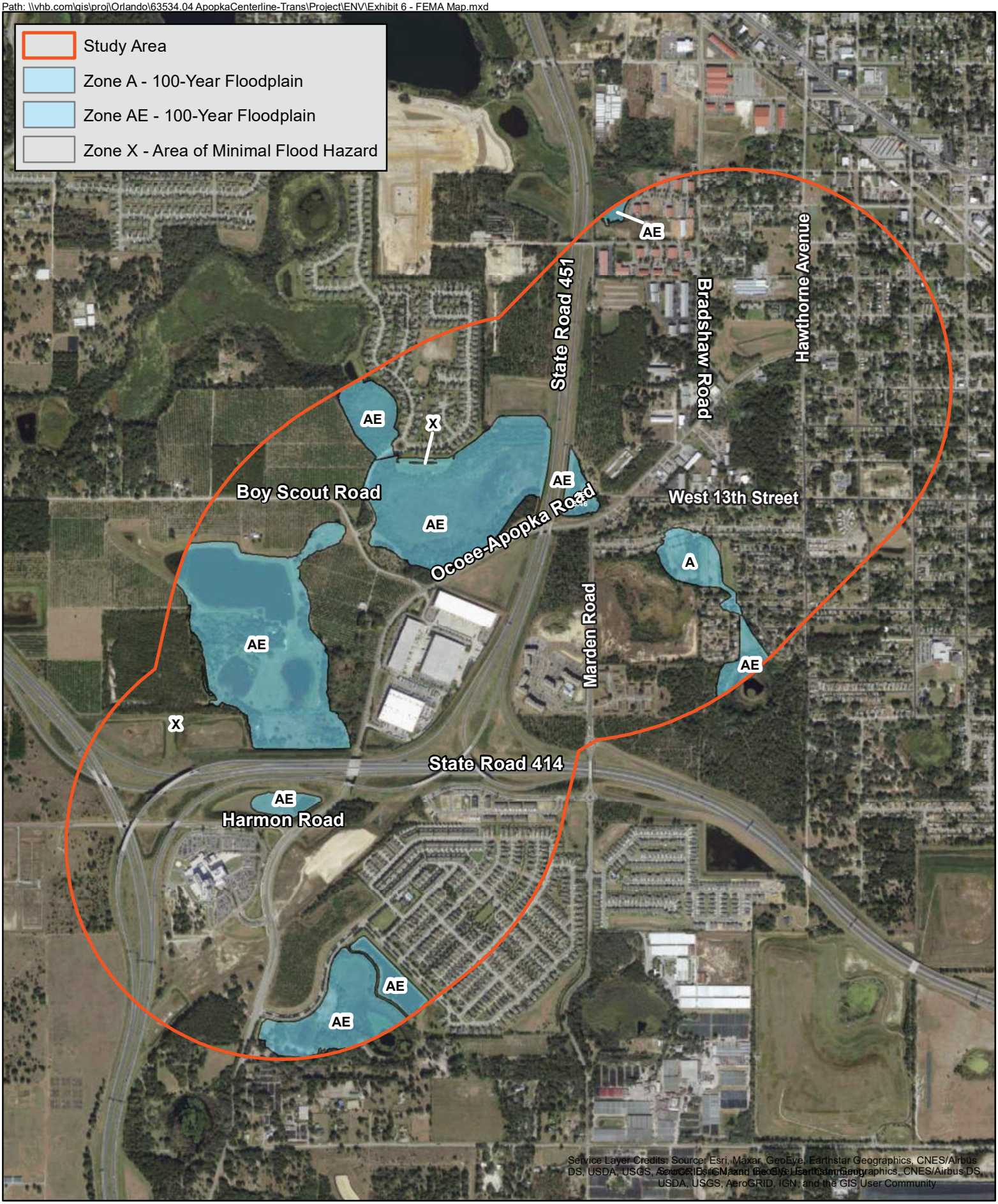
Ocoee-Apopka Road
Orange County, FL
Protected Species Map
March 2021

Exhibit 5

0 4,000 8,000 Feet

N

Path: \\vhb.com\gis\proj\Orlando\63534.04 ApopkaCenterline-Trans\Project\ENV\Exhibit 6 - FEMA Map.mxd



225 East Robinson Street, Suite 300
Orlando, Florida 32801 | 407.839.4006

Source:
Orange CountyFEMA Floodplains Data 2022

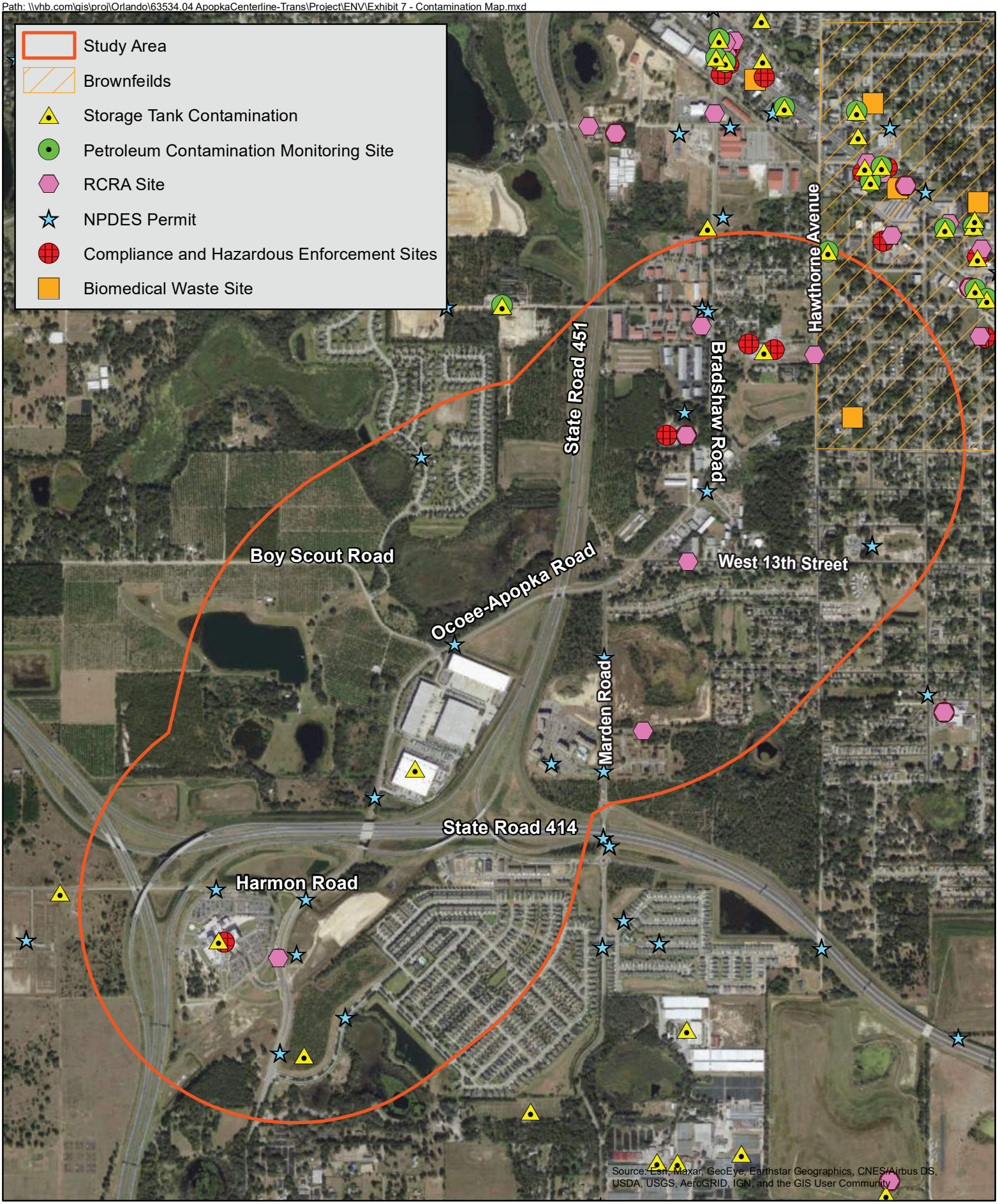
Ocoee-Apopka Road
Orange County, FL
FEMA Floodplain Map
March 2021

Exhibit 6

0 700 1,400 Feet

N

Path: \\vhb.com\gis\proj\Orlando\63534.04 ApopkaCenterline-Trans\Project\ENV\Exhibit 7 - Contamination Map.mxd



225 East Robinson Street, Suite 300
Orlando, Florida 32801 | 407.839.4006

Source:
ESRI Aerial Photography 2021
FDEP Contamination Sites Data 2021

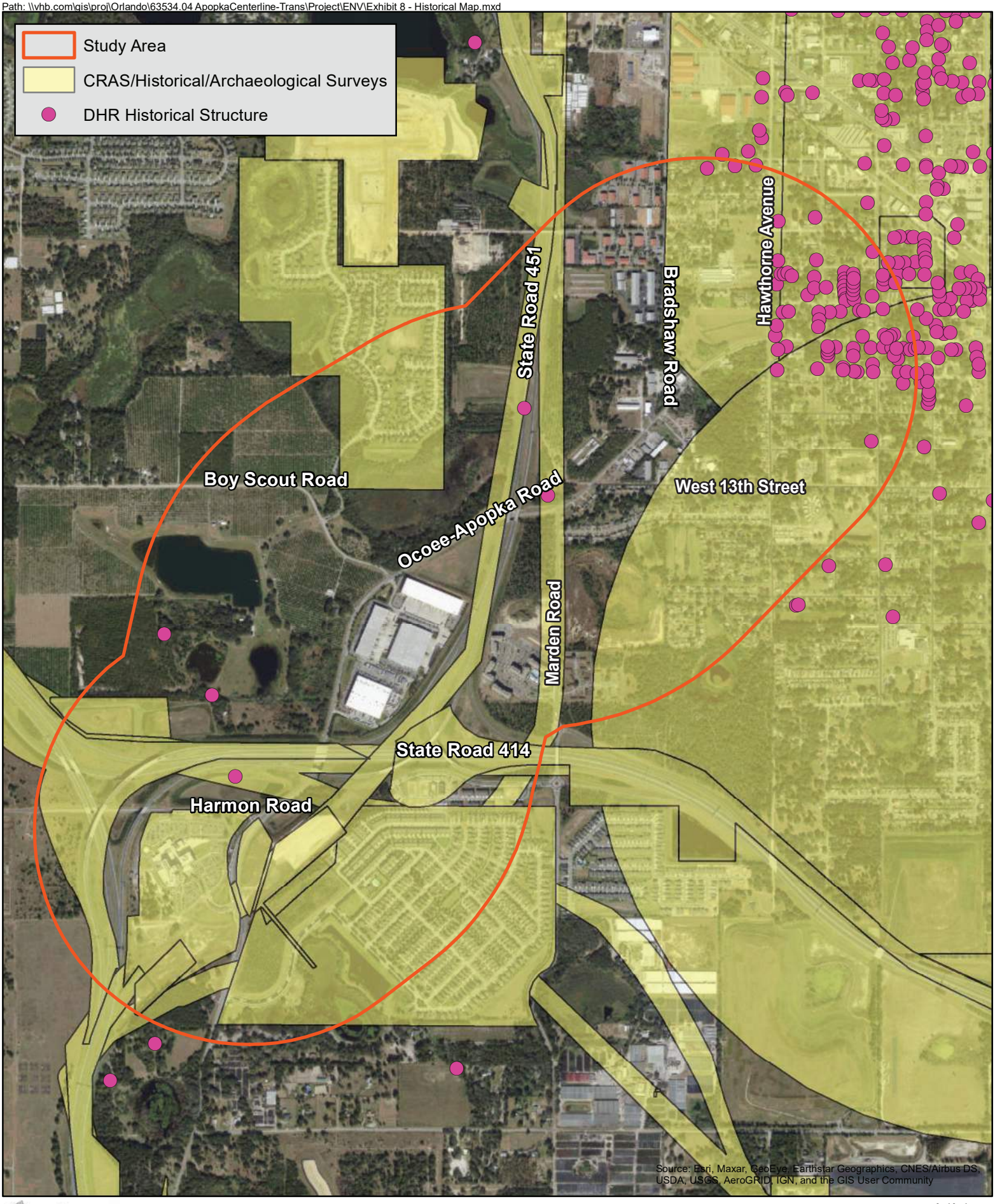
Ocoee-Apopka Road
Orange County, FL
Contamination Map
March 2021

Exhibit 7

0 700 1,400 Feet

N

Path: \\vhb.com\gis\proj\Orlando\63534.04 ApopkaCenterline-Trans\Project\ENV\Exhibit 8 - Historical Map.mxd



225 East Robinson Street, Suite 300
Orlando, Florida 32801 | 407.839.4006

Source:
FDEP Contamination Sites Data 2021

Ocoee-Apopka Road
Orange County, FL
Historical and Cultural Resources Map
March 2021

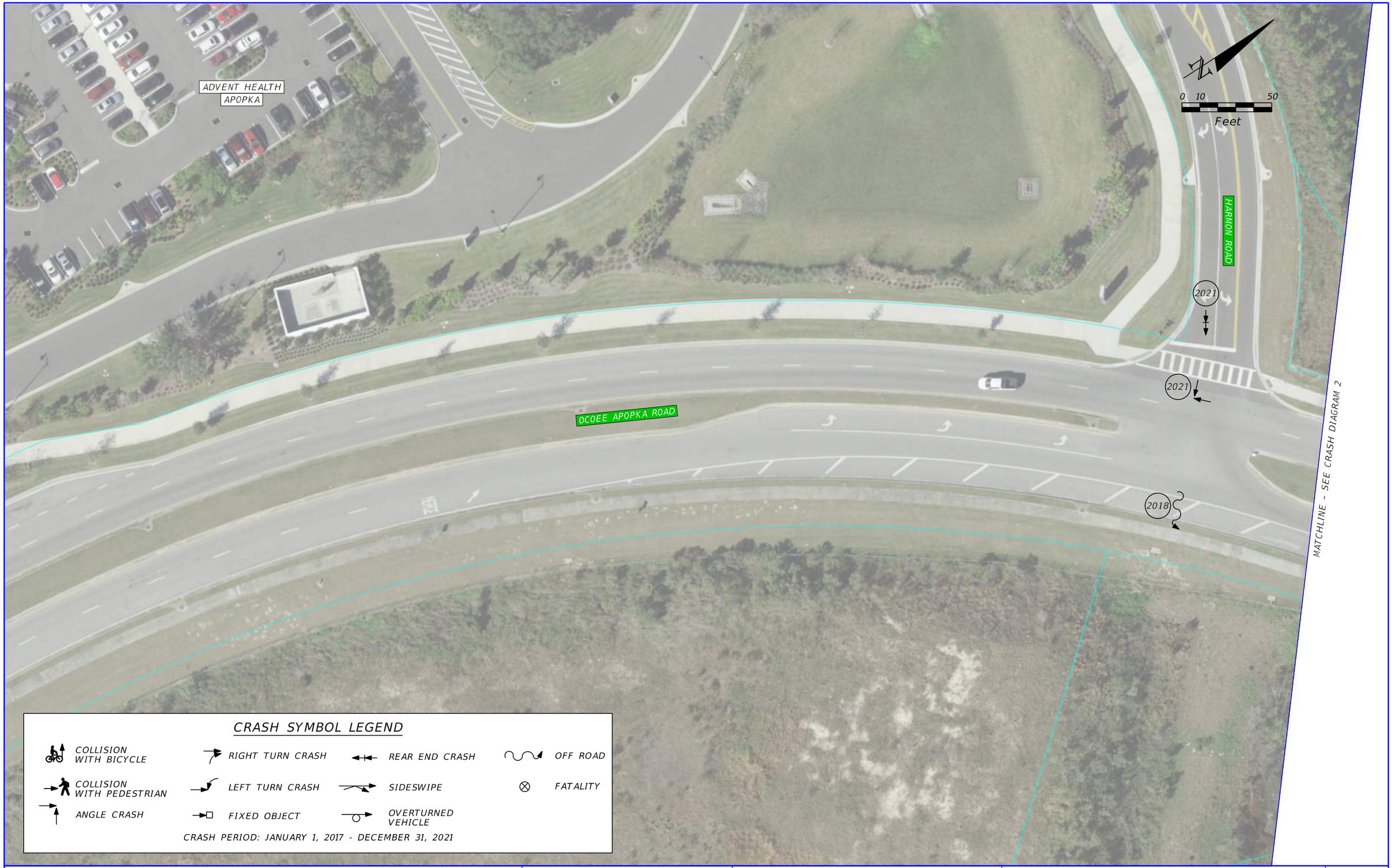
Exhibit 8

0 700 1,400 Feet

N

Appendix I

Crash Diagrams



CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 1

SHEET NO.

CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

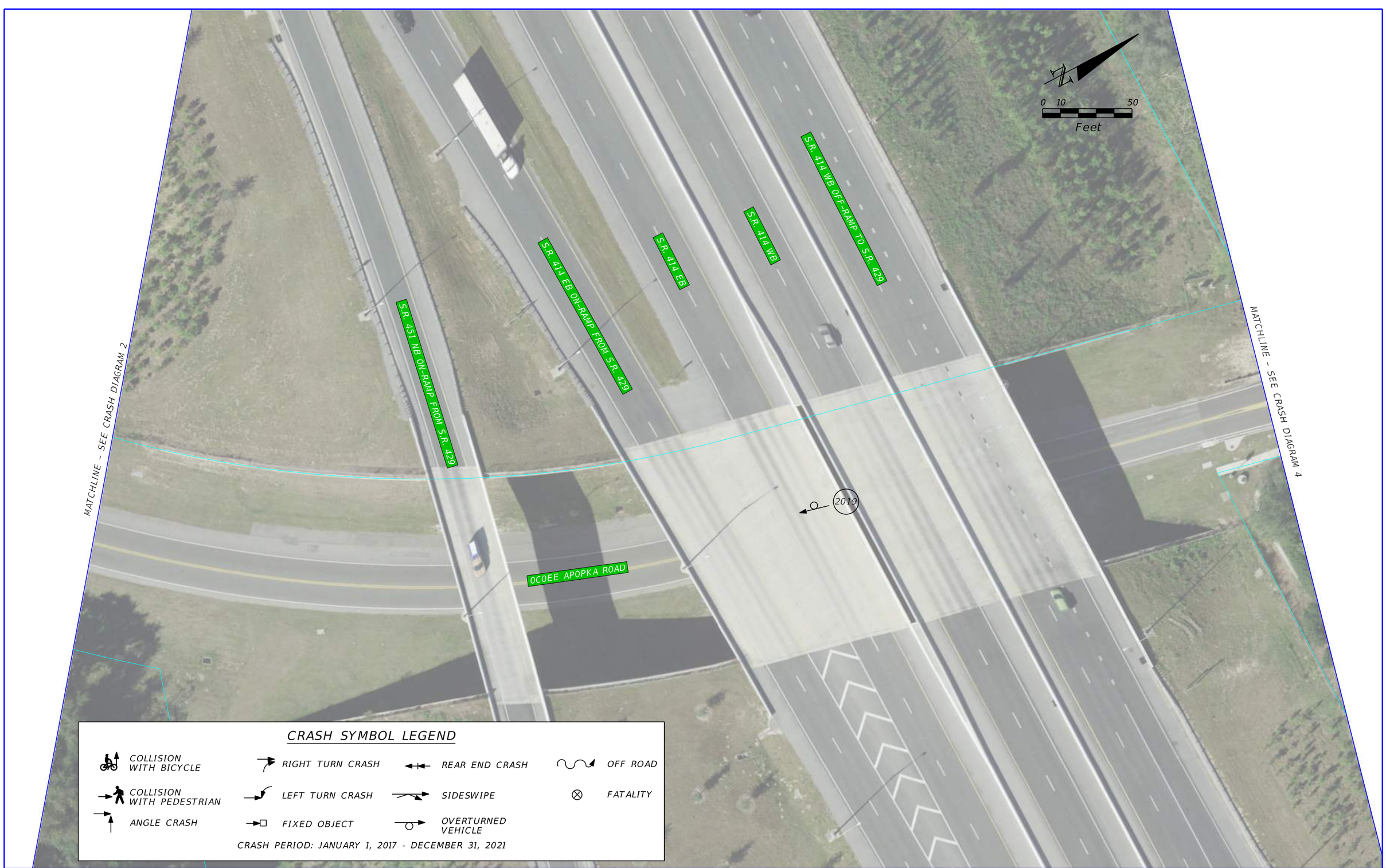
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 2

SHEET NO.



CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 3

SHEET NO.

MATCHLINE - SEE CRASH DIAGRAM 3

MATCHLINE - SEE CRASH DIAGRAM 5

CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 4

SHEET NO.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 5

SHEET NO.

CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 6

SHEET NO.

CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 7

SHEET NO.

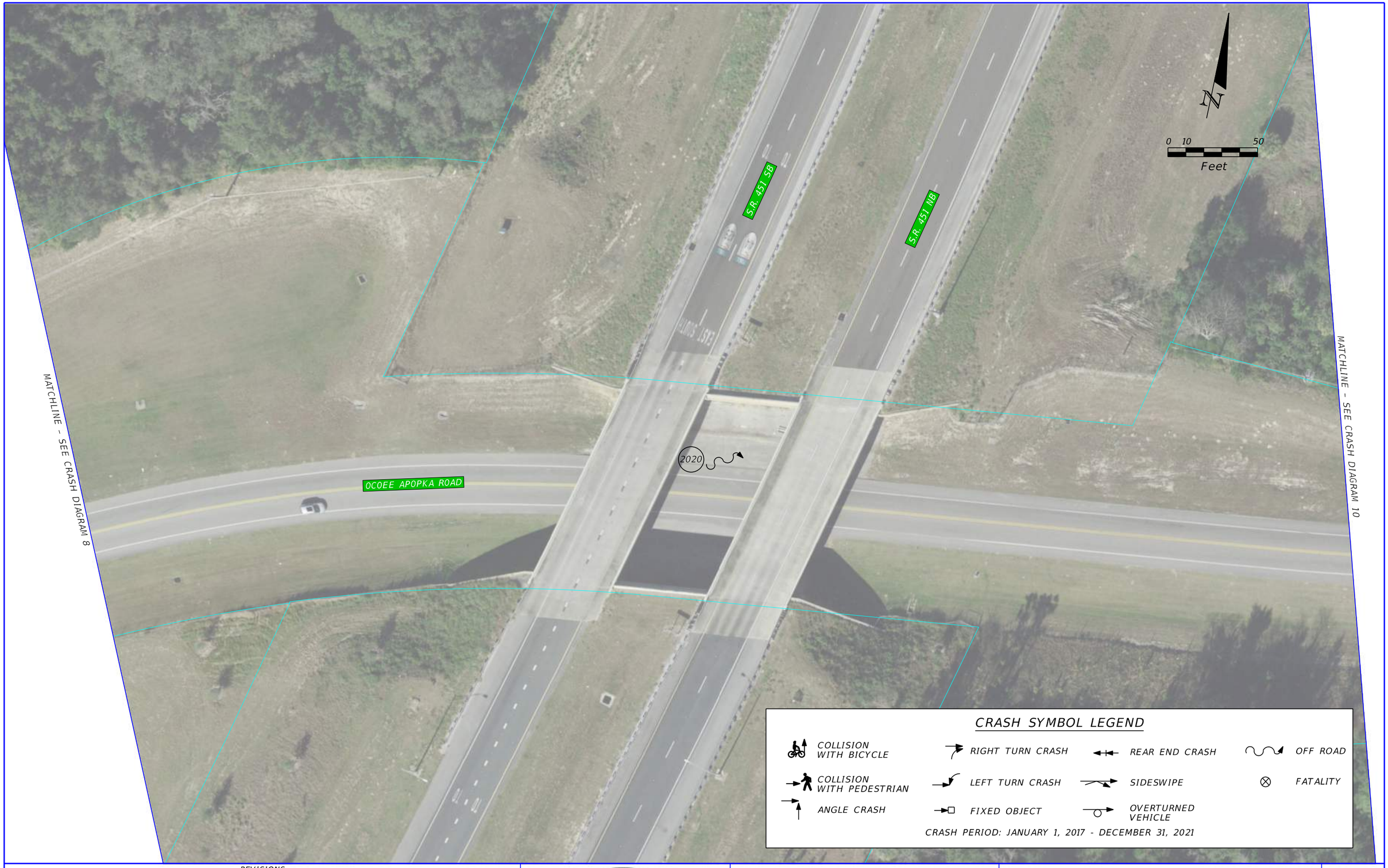
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 8

SHEET NO.



CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

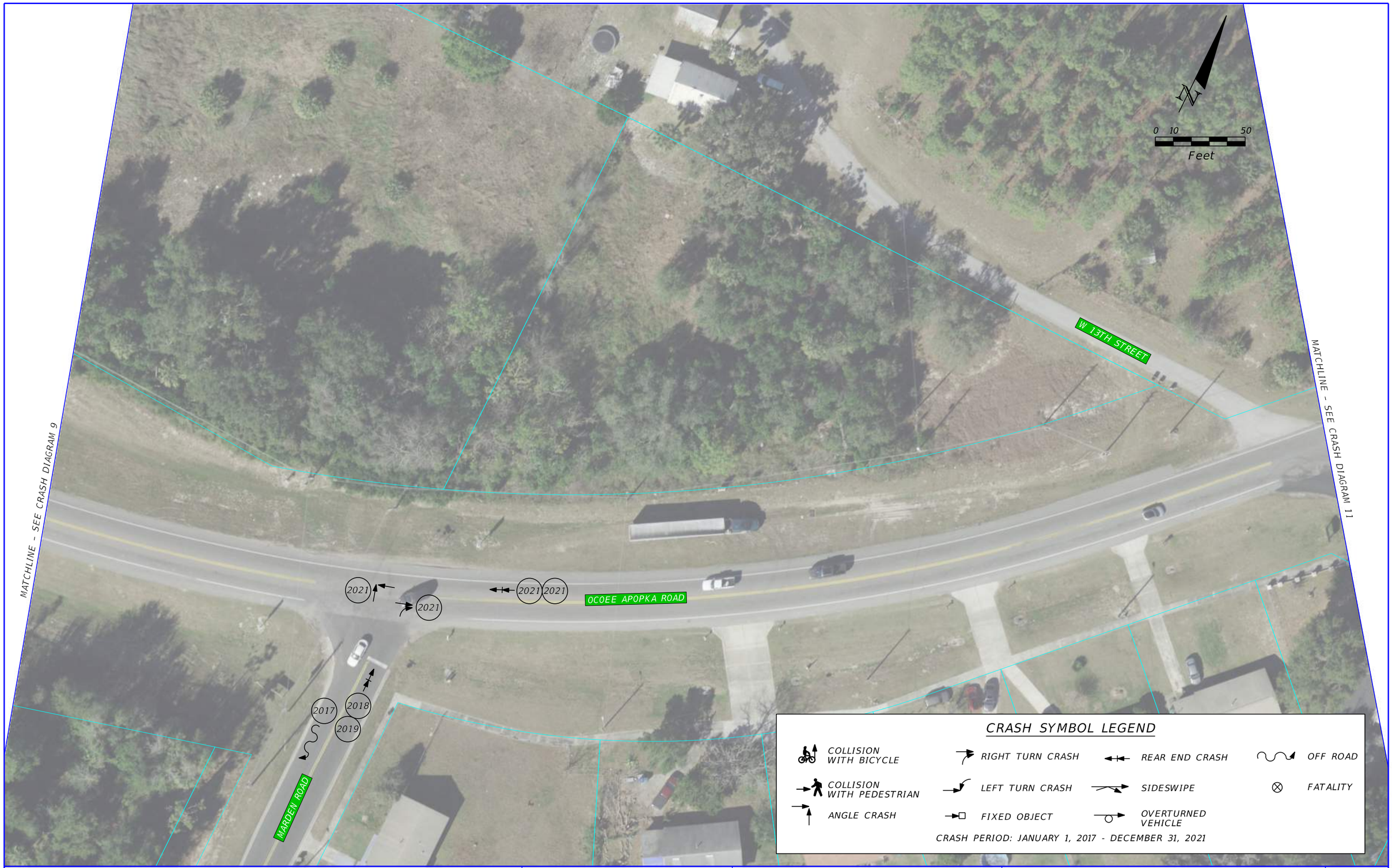
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 9

SHEET NO.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 10

SHEET NO.

CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 11

SHEET NO.

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MATCHLINE - SEE CRASH DIAGRAM 11

MATCHLINE - SEE CRASH DIAGRAM 13

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

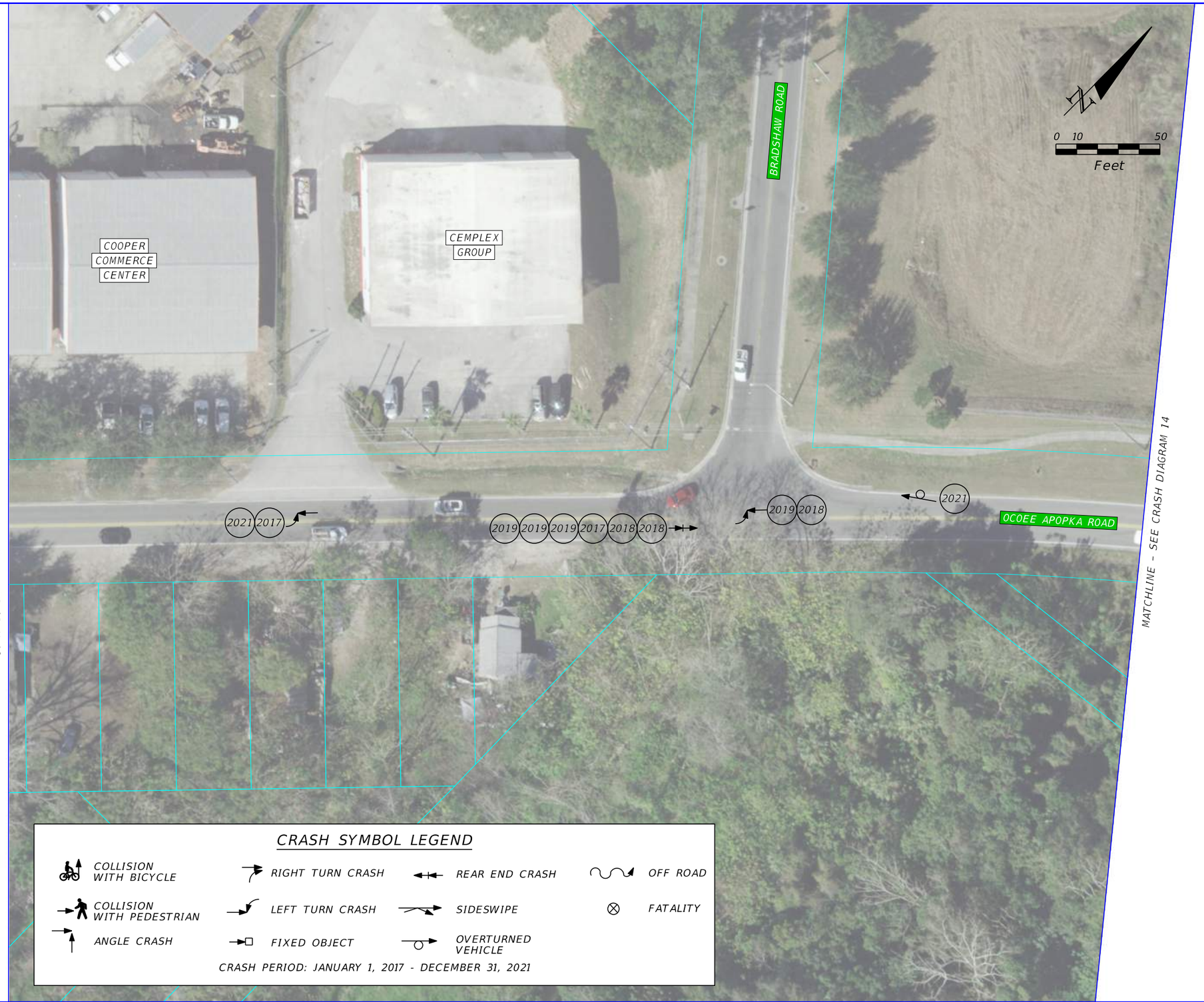
CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 12

SHEET NO.

mzoellner 3/15/2022 12:56:44 PM CD 12 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Crash Diagrams\Crash Diagrams.dgn



CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 13

SHEET NO.

CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 14

SHEET NO.

CRASH SYMBOL LEGEND

- COLLISION WITH BICYCLE
- COLLISION WITH PEDESTRIAN
- ANGLE CRASH
- RIGHT TURN CRASH
- LEFT TURN CRASH
- FIXED OBJECT
- REAR END CRASH
- SIDESWIPE
- OVERTURNED VEHICLE
- OFF ROAD
- FATALITY

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2021

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF APOPKA

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
CR 437A	ORANGE	

OCOEE APOPKA ROAD CRASH DIAGRAM 15

SHEET NO.

mzoellner 3/21/2022 9:52:03 AM CD 15 \\vhb\gbl\proj\Orlando\63534.04 ApopkaCenterline-Trans\cad\te\eng\Existing Conditions\Crash Diagrams\Crash Diagrams.dgn

Appendix J

Existing Traffic Analysis

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Boy Scout Rd north ent

Date January 18, 2022 **Trucks**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	1	0	0	0	2	0	0	1	0
7:15 AM - 7:30 AM	0	0	0	0	0	1	0	1	0	0	2	1
7:30 AM - 7:45 AM	0	0	2	0	0	0	2	3	0	0	3	1
7:45 AM - 8:00 AM	0	0	1	0	0	0	0	8	0	0	4	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	1	7	0	0	7	2
8:15 AM - 8:30 AM	0	0	0	1	0	0	0	4	0	2	4	0
8:30 AM - 8:45 AM	1	0	0	0	0	0	0	5	0	0	6	2
8:45 AM - 9:00 AM	1	0	0	1	0	0	1	4	0	0	6	2
TOTAL	2	0	3	3	0	1	4	34	0	2	33	8
Peak Hour												
7:15 AM - 8:15 AM	**0**	**0**	**3**	**0**	**0**	**1**	**3**	**19**	**0**	**0**	**16**	**4**
	0%	0%	38%	0%	0%	3%	21%	5%	0%	0%	4%	8%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	0	1	0	0	0	0	5	1	2	4	1
4:15 PM - 4:30 PM	1	0	2	2	1	0	0	1	0	0	4	0
4:30 PM - 4:45 PM	0	0	1	1	0	0	1	2	0	1	1	1
4:45 PM - 5:00 PM	0	0	1	0	0	1	0	1	0	1	2	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	3	0	2	0	0
TOTAL	1	0	5	3	1	1	1	14	1	6	13	2
Peak Hour												
4:30 PM - 5:30 PM	**0**	**0**	**2**	**1**	**0**	**1**	**1**	**5**	**0**	**2**	**3**	**1**
	0%	0%	6%	1%	0%	6%	2%	1%	0%	67%	1%	1%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Boy Scout Rd north ent

Date January 18, 2022 **U-Turns & RTOR**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	1	0	0
TOTAL	0	0	0	0	0	0	0	0	0	1	0	0
Peak Hour												
8:00 AM - 9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	1	0	0	0	0	0
Peak Hour												
4:15 PM - 5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Boy Scout Rd north ent

Date January 18, 2022 **All Vehicles**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	1	21	0	7	4	69	1	3	65	9
7:15 AM - 7:30 AM	0	0	1	15	0	11	2	96	2	5	112	12
7:30 AM - 7:45 AM	0	0	4	34	0	10	9	97	5	5	108	10
7:45 AM - 8:00 AM	0	1	4	27	4	11	3	110	3	17	102	18
8:00 AM - 8:15 AM	0	0	2	40	0	8	3	93	2	7	95	16
8:15 AM - 8:30 AM	0	0	1	33	1	6	4	89	0	5	98	11
8:30 AM - 8:45 AM	1	0	1	15	0	10	6	73	0	1	61	19
8:45 AM - 9:00 AM	1	0	0	17	0	3	1	79	0	1	75	15
TOTAL	2	1	14	202	5	66	32	706	13	44	716	110
Peak Hour												
7:15 AM - 8:15 AM	**0**	**1**	**11**	**116**	**4**	**40**	**17**	**396**	**12**	**34**	**417**	**56**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	2	0	4	16	0	3	8	101	1	4	74	29
4:15 PM - 4:30 PM	1	0	9	18	1	2	6	90	0	3	79	25
4:30 PM - 4:45 PM	5	1	25	26	0	5	9	117	0	1	85	27
4:45 PM - 5:00 PM	0	1	4	14	0	6	11	112	0	3	84	18
5:00 PM - 5:15 PM	2	1	7	24	0	3	14	115	0	1	108	19
5:15 PM - 5:30 PM	1	1	0	20	0	3	12	131	0	0	74	21
5:30 PM - 5:45 PM	1	1	2	17	0	3	7	112	1	2	85	23
5:45 PM - 6:00 PM	0	0	1	17	0	0	8	102	1	5	89	16
TOTAL	12	5	52	152	1	25	75	880	3	19	678	178
Peak Hour												
4:30 PM - 5:30 PM	**8**	**4**	**36**	**84**	**0**	**17**	**46**	**475**	**0**	**5**	**351**	**85**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Bradshaw Rd

Date January 18, 2022 **Trucks**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:15 AM - 7:30 AM	0	0	0	0	0	3	0	2	0	0	1	0
7:30 AM - 7:45 AM	0	0	0	1	0	1	1	1	0	0	1	0
7:45 AM - 8:00 AM	0	0	0	0	0	3	3	3	0	0	3	0
8:00 AM - 8:15 AM	0	0	0	0	0	4	0	2	0	0	0	1
8:15 AM - 8:30 AM	0	0	0	1	0	1	3	2	0	0	2	1
8:30 AM - 8:45 AM	0	0	0	0	0	2	5	3	0	0	1	1
8:45 AM - 9:00 AM	0	0	0	0	0	4	6	2	0	0	2	0
TOTAL	0	0	0	2	0	18	18	16	0	0	11	3
Peak Hour												
7:30 AM - 8:30 AM	**0**	**0**	**0**	**2**	**0**	**9**	**7**	**8**	**0**	**0**	**6**	**2**
	0%	0%	0%	15%	0%	4%	3%	3%	0%	0%	2%	9%

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	3	1	3	0	0	1	0
4:15 PM - 4:30 PM	0	0	0	0	0	4	0	3	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	1	3	0	0	4	1
4:45 PM - 5:00 PM	0	0	0	2	0	1	2	0	0	0	1	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	3	0	2	3	0
TOTAL	0	0	0	2	0	8	4	12	0	2	9	1
Peak Hour												
5:00 PM - 6:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**2**	**3**	**0**
	0%	0%	0%	0%	0%	0%	0%	1%	0%	67%	1%	0%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopka Rd	**&**	Bradshaw Rd
Date	January 18, 2022		**U-Turns & RTOR**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
7:00 AM - 8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	1	0	0
Peak Hour												
3:30 PM - 4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Bradshaw Rd

Date January 18, 2022 **All Vehicles**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	1	0	42	43	40	0	0	40	7
7:15 AM - 7:30 AM	0	0	0	1	0	77	43	66	0	0	48	1
7:30 AM - 7:45 AM	0	0	0	4	0	52	54	74	0	0	73	4
7:45 AM - 8:00 AM	0	0	0	3	0	58	42	84	0	0	75	8
8:00 AM - 8:15 AM	0	0	0	3	0	55	49	68	0	0	54	7
8:15 AM - 8:30 AM	0	0	0	5	0	65	67	65	0	0	49	5
8:30 AM - 8:45 AM	0	0	0	3	0	54	48	54	0	0	36	8
8:45 AM - 9:00 AM	0	0	0	0	0	37	47	46	0	0	62	1
TOTAL	0	0	0	20	0	440	393	497	0	0	437	41
Peak Hour												
7:30 AM - 8:30 AM	**0**	**0**	**0**	**15**	**0**	**230**	**212**	**291**	**0**	**0**	**251**	**24**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	5	0	43	42	77	0	0	48	7
4:15 PM - 4:30 PM	0	0	0	3	0	67	36	90	0	1	62	3
4:30 PM - 4:45 PM	0	0	0	9	0	55	67	100	0	0	54	9
4:45 PM - 5:00 PM	0	0	0	9	0	49	59	76	0	0	48	7
5:00 PM - 5:15 PM	0	0	0	6	0	64	56	79	0	0	64	5
5:15 PM - 5:30 PM	0	0	0	9	0	47	80	85	0	0	47	3
5:30 PM - 5:45 PM	0	0	0	5	0	49	61	70	0	0	69	5
5:45 PM - 6:00 PM	0	0	1	21	0	44	56	170	1	5	161	21
TOTAL	0	0	1	67	0	418	457	747	1	6	553	60
Peak Hour												
5:00 PM - 6:00 PM	**0**	**0**	**1**	**41**	**0**	**204**	**253**	**404**	**1**	**5**	**341**	**34**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Orlando
Intersection	coee Apopka rd	&	center entrance
Date	Thursday, February 17, 2022 4:0C		**All Vehicles**
Time Period	16:00 to 18:00		

VHB Project #: 63534.04

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	120	2	0	74	0
16:15 - 16:30	0	110	0	0	78	0
16:30 - 16:45	0	119	3	1	101	0
16:45 - 17:00	0	109	1	0	94	0
17:00 - 17:15	0	146	2	0	113	0
17:15 - 17:30	0	130	2	1	110	0
17:30 - 17:45	0	129	3	0	99	0
17:45 - 18:00	0	107	3	3	72	0
	0	970	16	5	741	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	0	0	5	0	2
16:15 - 16:30	0	0	0	0	0	0
16:30 - 16:45	0	0	0	2	0	2
16:45 - 17:00	0	0	0	4	0	4
17:00 - 17:15	0	0	0	2	0	8
17:15 - 17:30	0	0	0	1	0	5
17:30 - 17:45	0	0	0	1	0	3
17:45 - 18:00	0	0	0	0	0	1
	0	0	0	15	0	25

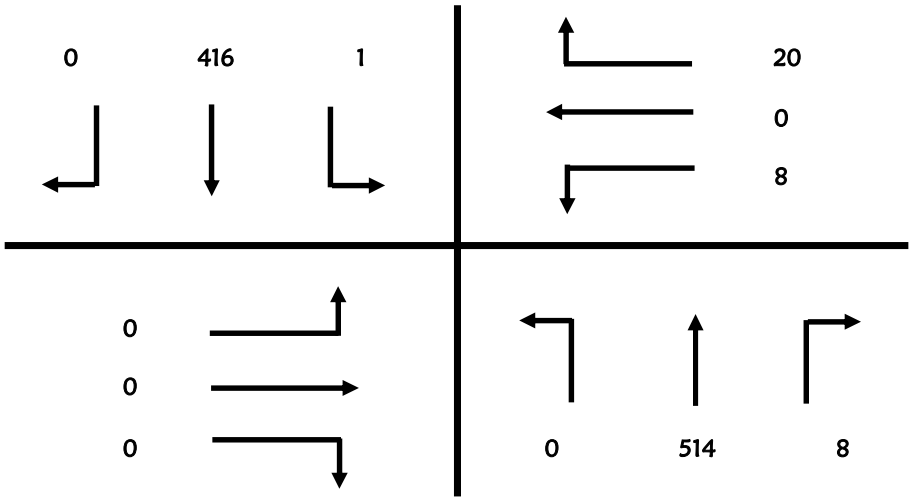
North / South
coee Apopka rd

East / West
center entrance

Peak Hour
16:45 - 17:45

Peak Hour Factor
0.89

Total Pk Hr Voume
967



Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange		**City**	Orlando	
Intersection	coee Apopka rd		&	center entrance	
Date	Thursday, February 17, 2022 4				
Time Period	16:00	to	18:00	**Trucks**	

VHB Project #: 63534

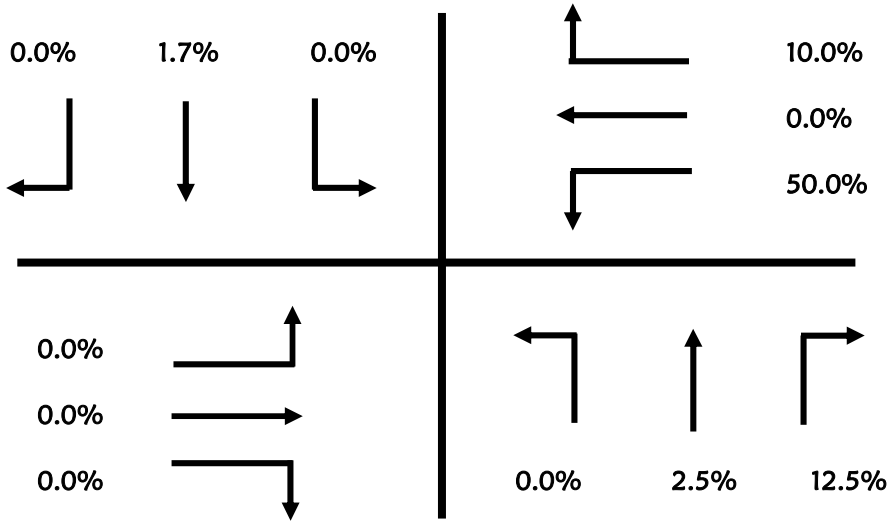
Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	4	1	0	2	0
16:15 - 16:30	0	1	0	0	3	0
16:30 - 16:45	0	4	3	0	4	0
16:45 - 17:00	0	2	1	0	2	0
17:00 - 17:15	0	5	0	0	2	0
17:15 - 17:30	0	3	0	0	1	0
17:30 - 17:45	0	3	0	0	2	0
17:45 - 18:00	0	2	2	0	3	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	0	0	1	0	0
16:15 - 16:30	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0
16:45 - 17:00	0	0	0	3	0	0
17:00 - 17:15	0	0	0	0	0	1
17:15 - 17:30	0	0	0	0	0	1
17:30 - 17:45	0	0	0	1	0	0
17:45 - 18:00	0	0	0	0	0	0

North / South
coee Apopka rd

East / West
center entrance

Peak Hour
16:45 - 17:45



Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange		**City**	Orlando	
Intersection	coee Apopka rd		&	center entrance	
Date	Thursday, February 17, 2022 4:(				
Time Period	16:00	to	18:00	**U-Turn & RTOR**	

VHB Project #: 63534.04

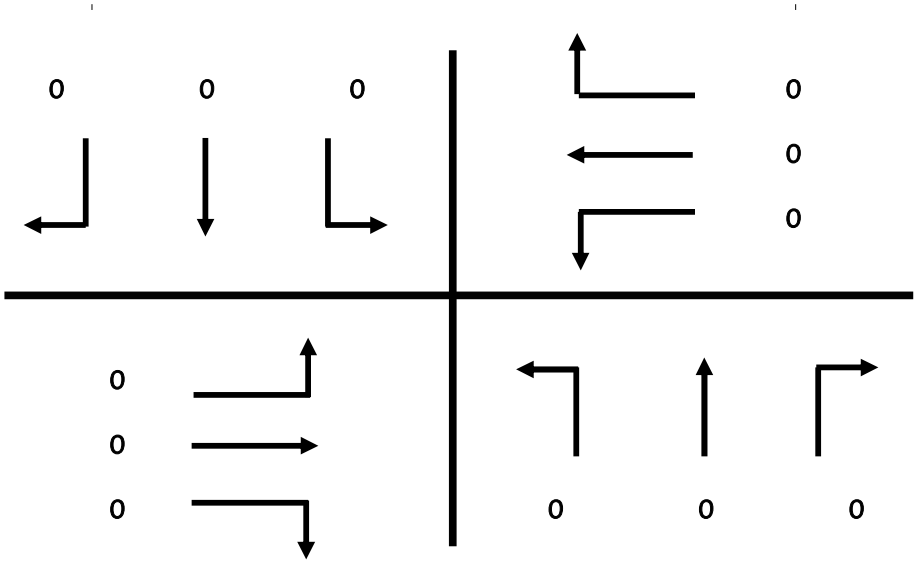
Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	0	0	0	0	0
16:15 - 16:30	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0
17:00 - 17:15	0	0	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
16:00 - 16:15	0	0	0	0	0	0
16:15 - 16:30	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0
17:00 - 17:15	0	0	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0

North / South
coee Apopka rd

East / West
center entrance

Peak Hour
16:45 - 17:45



Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopka Rd	**&**	Dist Center Mid Ent
Date	January 18, 2022		**Trucks**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	**Through**	**Right**	**Left**	**Through**	**Right**	**Left**	**Through**	**Right**	**Left**	**Through**	**Right**
7:00 AM - 7:15 AM	0	0	2	0	1	0	0	0	0	1	0	1
7:15 AM - 7:30 AM	0	1	1	0	2	0	0	0	0	3	0	0
7:30 AM - 7:45 AM	0	4	3	0	1	0	0	0	0	1	0	1
7:45 AM - 8:00 AM	0	6	0	1	5	0	0	0	0	2	0	0
8:00 AM - 8:15 AM	0	7	0	0	6	0	0	0	0	1	0	1
8:15 AM - 8:30 AM	0	5	1	0	6	0	0	0	0	1	0	2
8:30 AM - 8:45 AM	0	3	2	0	6	0	0	0	0	0	0	2
8:45 AM - 9:00 AM	0	5	0	0	8	0	0	0	0	1	0	1
TOTAL	0	31	9	1	35	0	0	0	0	10	0	8
Peak Hour												
7:15 AM - 8:15 AM	**0**	**18**	**4**	**1**	**14**	**0**	**0**	**0**	**0**	**7**	**0**	**2**
	0%	5%	67%	10%	3%	0%	0%	0%	0%	350%	0%	50%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	**Through**	**Right**	**Left**	**Through**	**Right**	**Left**	**Through**	**Right**	**Left**	**Through**	**Right**
4:00 PM - 4:15 PM	0	3	0	1	3	0	0	0	0	0	0	1
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	3	0	2	3	0
TOTAL	0	3	0	1	3	0	0	3	0	2	3	1
Peak Hour												
5:00 PM - 6:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**2**	**3**	**0**
	0%	0%	0%	0%	0%	0%	0%	2%	0%	67%	2%	0%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopka Rd	**&**	Dist Center Mid Ent
Date	January 18, 2022		**U-Turns & RTOR**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
7:00 AM - 8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
2:00 PM - 3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Dist Center Mid Ent

Date January 18, 2022 **All Vehicles**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	65	3	0	67	0	0	0	0	2	0	3
7:15 AM - 7:30 AM	0	91	1	1	113	0	0	0	0	5	0	2
7:30 AM - 7:45 AM	0	110	6	2	121	0	0	0	0	1	0	1
7:45 AM - 8:00 AM	0	118	1	2	111	0	0	0	0	2	0	0
8:00 AM - 8:15 AM	0	99	2	6	98	0	0	0	0	1	0	3
8:15 AM - 8:30 AM	0	86	1	1	110	0	0	0	0	2	0	2
8:30 AM - 8:45 AM	0	83	6	3	67	0	0	0	0	2	0	4
8:45 AM - 9:00 AM	0	77	3	1	89	0	0	0	0	1	0	2
TOTAL	0	729	23	16	776	0	0	0	0	16	0	17
Peak Hour												
7:15 AM - 8:15 AM	**0**	**418**	**10**	**11**	**443**	**0**	**0**	**0**	**0**	**9**	**0**	**6**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	87	2	1	47	0	0	0	0	1	0	2
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	1	21	0	44	56	170	1	5	161	21
TOTAL	0	87	3	22	47	44	56	170	1	6	161	23
Peak Hour												
5:00 PM - 6:00 PM	**0**	**0**	**1**	**21**	**0**	**44**	**56**	**170**	**1**	**5**	**161**	**21**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopla Rd	**&**	Dist Center South Ent
Date	January 18, 2022		**Trucks**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	3	2	0	3	0	0	0	0	1	0	0
7:15 AM - 7:30 AM	0	2	0	1	4	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	7	0	0	1	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	5	3	1	7	0	0	0	0	1	0	0
8:00 AM - 8:15 AM	0	8	0	0	6	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	6	0	1	6	0	0	0	0	1	0	0
8:30 AM - 8:45 AM	0	4	1	1	5	0	0	0	0	0	0	1
8:45 AM - 9:00 AM	0	5	0	0	9	0	0	0	0	0	0	0
TOTAL	0	40	6	4	41	0	0	0	0	3	0	1
Peak Hour												
7:15 AM - 8:15 AM	**0**	**22**	**3**	**2**	**18**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0%	5%	150%	0%	4%	0%	0%	0%	0%	50%	0%	0%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	4	0	0	4	0	0	0	0	2	0	0
4:15 PM - 4:30 PM	0	1	1	0	3	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	7	1	0	3	0	0	0	0	2	0	0
4:45 PM - 5:00 PM	0	0	0	0	4	0	0	0	0	1	0	0
5:00 PM - 5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	1	1	0	1	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	2	2	0	5	0	0	0	0	1	0	0
TOTAL	0	17	5	0	21	0	0	0	0	6	0	0
Peak Hour												
5:00 PM - 6:00 PM	**0**	**5**	**3**	**0**	**7**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0%	1%	18%	0%	1%	0%	0%	0%	0%	7%	0%	0%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopla Rd	**&**	Dist Center South Ent
Date	January 18, 2022		**U-Turns & RTOR**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
7:00 AM - 8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
2:00 PM - 3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopla Rd	**&**	Dist Center South Ent
Date	January 18, 2022		**All Vehicles**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	65	2	0	75	0	0	0	0	2	0	1
7:15 AM - 7:30 AM	0	95	1	1	115	0	0	0	0	1	0	0
7:30 AM - 7:45 AM	0	113	0	0	125	0	0	0	0	1	0	0
7:45 AM - 8:00 AM	0	119	3	1	108	0	0	0	0	1	0	0
8:00 AM - 8:15 AM	0	103	1	0	104	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	85	3	1	109	0	0	0	0	3	0	0
8:30 AM - 8:45 AM	0	90	1	1	65	0	0	0	0	1	0	2
8:45 AM - 9:00 AM	0	78	2	0	93	0	0	0	0	1	0	0
TOTAL	0	748	13	4	794	0	0	0	0	10	0	3
Peak Hour												
7:15 AM - 8:15 AM	**0**	**430**	**5**	**2**	**452**	**0**	**0**	**0**	**0**	**3**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	115	0	0	73	0	0	0	0	2	0	0
4:15 PM - 4:30 PM	0	91	1	0	82	0	0	0	0	1	0	0
4:30 PM - 4:45 PM	0	117	1	0	101	0	0	0	0	2	0	1
4:45 PM - 5:00 PM	0	119	0	1	84	0	0	0	0	2	0	0
5:00 PM - 5:15 PM	0	132	1	0	108	0	0	0	0	0	0	1
5:15 PM - 5:30 PM	0	138	0	0	77	0	0	0	0	0	0	1
5:30 PM - 5:45 PM	0	120	3	0	80	0	0	0	0	1	0	0
5:45 PM - 6:00 PM	0	212	16	4	210	0	0	0	0	15	0	6
TOTAL	0	1,044	22	5	815	0	0	0	0	23	0	9
Peak Hour												
5:00 PM - 6:00 PM	**0**	**602**	**20**	**4**	**475**	**0**	**0**	**0**	**0**	**16**	**0**	**8**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Harmon Rd

Date January 18, 2022 **Trucks**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	2	3	0	0	4	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	3	0	0	3	1	1	0	1	0	0	0
7:30 AM - 7:45 AM	2	4	0	0	2	0	0	0	1	0	0	0
7:45 AM - 8:00 AM	1	7	0	0	4	4	2	0	0	0	0	0
8:00 AM - 8:15 AM	0	6	0	0	5	1	1	0	2	0	0	0
8:15 AM - 8:30 AM	2	2	0	0	7	0	1	0	2	0	0	0
8:30 AM - 8:45 AM	1	4	0	0	5	0	1	0	1	0	0	0
8:45 AM - 9:00 AM	4	3	0	0	7	2	1	0	0	0	0	0
TOTAL	12	32	0	0	37	8	7	0	7	0	0	0
Peak Hour												
7:15 AM - 8:15 AM	**3**	**20**	**0**	**0**	**14**	**6**	**4**	**0**	**4**	**0**	**0**	**0**
	6%	6%	0%	0%	4%	11%	5%	0%	6%	0%	0%	0%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	3	3	0	0	6	1	2	0	0	0	0	0
4:15 PM - 4:30 PM	0	1	0	0	2	0	1	0	0	0	0	0
4:30 PM - 4:45 PM	1	5	0	0	5	1	2	0	1	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	4	1	0	0	1	0	0	0
5:00 PM - 5:15 PM	1	1	0	0	1	0	1	0	2	0	0	0
5:15 PM - 5:30 PM	0	2	0	0	0	0	0	0	1	0	0	0
5:30 PM - 5:45 PM	0	2	0	0	0	1	0	0	0	0	0	0
5:45 PM - 6:00 PM	1	2	0	0	2	1	0	3	0	2	0	0
TOTAL	6	16	0	0	20	5	6	3	5	2	0	0
Peak Hour												
5:00 PM - 6:00 PM	**2**	**7**	**0**	**0**	**3**	**2**	**1**	**3**	**3**	**2**	**0**	**0**
	2%	2%	0%	0%	1%	4%	1%	3%	4%	67%	0%	0%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopka Rd	**&**	Harmon Rd
Date	January 18, 2022		**U-Turns & RTOR**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	1	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
7:15 AM - 8:15 AM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	1	0	0	0	0	0	0	0	0
Peak Hour												
4:45 PM - 5:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Harmon Rd

Date January 18, 2022 **All Vehicles**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	18	52	0	0	74	3	14	0	31	0	0	0
7:15 AM - 7:30 AM	14	75	0	0	107	9	21	0	23	0	0	0
7:30 AM - 7:45 AM	14	90	0	0	114	12	27	0	21	0	0	0
7:45 AM - 8:00 AM	14	109	0	0	90	21	18	0	15	0	0	0
8:00 AM - 8:15 AM	13	81	0	0	86	19	18	0	15	0	0	0
8:15 AM - 8:30 AM	13	73	0	0	102	11	16	0	14	0	0	0
8:30 AM - 8:45 AM	10	78	0	0	53	13	12	0	16	0	0	0
8:45 AM - 9:00 AM	13	63	0	0	75	20	17	0	8	0	0	0
TOTAL	109	621	0	0	701	108	143	0	143	0	0	0
Peak Hour												
7:15 AM - 8:15 AM	**55**	**355**	**0**	**0**	**397**	**61**	**84**	**0**	**74**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	22	94	0	0	66	11	18	0	14	0	0	0
4:15 PM - 4:30 PM	20	81	0	0	72	10	17	0	15	0	0	0
4:30 PM - 4:45 PM	16	100	0	0	89	15	13	0	14	0	0	0
4:45 PM - 5:00 PM	14	107	0	0	79	7	16	0	13	0	0	0
5:00 PM - 5:15 PM	24	114	0	0	94	14	22	0	28	0	0	0
5:15 PM - 5:30 PM	19	121	0	0	68	11	16	0	12	0	0	0
5:30 PM - 5:45 PM	24	105	0	0	66	15	23	0	17	0	0	0
5:45 PM - 6:00 PM	25	92	0	0	73	14	17	0	14	0	0	0
TOTAL	164	814	0	0	607	97	142	0	127	0	0	0
Peak Hour												
4:45 PM - 5:45 PM	**81**	**447**	**0**	**0**	**307**	**47**	**77**	**0**	**70**	**0**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Orlando

Intersection Ocoee Apopka Rd **&** Hawthorne Ave

Date March 2, 2022 **Trucks**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	1	1	0	0	1	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:30 AM - 7:45 AM	0	2	0	0	1	0	0	4	0	0	0	0
7:45 AM - 8:00 AM	0	1	0	0	0	0	1	1	0	0	1	1
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	3	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	3	0	0	3	0
8:30 AM - 8:45 AM	0	0	0	0	1	0	0	1	0	0	1	0
8:45 AM - 9:00 AM	0	0	0	0	0	1	1	1	1	0	3	1
TOTAL	0	3	0	0	2	1	3	12	1	0	13	2
Peak Hour												
7:15 AM - 8:15 AM	**0**	**3**	**0**	**0**	**1**	**0**	**1**	**6**	**0**	**0**	**5**	**1**
	0%	30%	0%	0%	6%	0%	6%	2%	0%	0%	2%	50%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	3	0	0	2	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	1	3	0	0	1	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	1	0	0	2	1
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM - 5:30 PM	0	0	0	0	0	1	0	1	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	3	0	0	0	0
TOTAL	0	0	0	0	0	1	1	13	0	0	7	1
Peak Hour												
4:30 PM - 5:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**3**	**1**
	0%	0%	0%	0%	0%	5%	0%	1%	0%	0%	1%	13%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Orlando

Intersection Ocoee Apopka Rd **&** Hawthorne Ave

Date March 2, 2022 **U-Turns & RTOR**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
7:00 AM - 8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
2:00 PM - 3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Orlando

Intersection Ocoee Apopka Rd **&** Hawthorne Ave

Date March 2, 2022 **All Vehicles**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	3	4	3	0	3	3	5	44	0	2	55	0
7:15 AM - 7:30 AM	3	2	1	0	3	5	5	77	1	2	62	1
7:30 AM - 7:45 AM	1	5	2	0	4	6	7	72	1	4	47	0
7:45 AM - 8:00 AM	3	5	4	1	9	1	4	77	2	3	62	2
8:00 AM - 8:15 AM	0	1	5	1	2	3	3	54	2	1	63	0
8:15 AM - 8:30 AM	1	8	6	0	2	4	3	68	0	2	53	2
8:30 AM - 8:45 AM	3	5	3	0	5	8	1	65	1	0	47	2
8:45 AM - 9:00 AM	1	5	3	1	3	1	7	56	2	1	47	2
TOTAL	15	35	27	3	31	31	35	513	9	15	436	9
Peak Hour												
7:15 AM - 8:15 AM	**7**	**13**	**12**	**2**	**18**	**15**	**19**	**280**	**6**	**10**	**234**	**3**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	3	5	1	8	3	2	73	1	4	53	2
4:15 PM - 4:30 PM	1	1	3	1	4	2	5	85	4	2	62	1
4:30 PM - 4:45 PM	0	4	1	2	4	6	3	96	2	3	53	2
4:45 PM - 5:00 PM	0	4	1	0	8	6	3	70	0	7	46	3
5:00 PM - 5:15 PM	1	5	4	1	10	4	5	97	0	4	76	1
5:15 PM - 5:30 PM	1	6	5	4	11	4	5	80	3	4	65	3
5:30 PM - 5:45 PM	1	6	2	1	5	7	4	70	1	3	53	3
5:45 PM - 6:00 PM	1	8	2	0	8	4	5	73	4	2	57	2
TOTAL	5	37	23	10	58	36	32	644	15	29	465	17
Peak Hour												
4:30 PM - 5:30 PM	**2**	**19**	**11**	**7**	**33**	**20**	**16**	**343**	**5**	**18**	**240**	**9**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopka Rd	**&**	Marden Rd
Date	January 18, 2022		**Trucks**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	1	0	0	0	0	0	1	0	1	0
7:15 AM - 7:30 AM	1	0	2	0	0	0	0	1	0	2	2	0
7:30 AM - 7:45 AM	2	0	1	0	0	0	0	3	2	1	1	0
7:45 AM - 8:00 AM	1	0	2	0	0	0	0	4	1	1	7	0
8:00 AM - 8:15 AM	3	0	1	0	0	0	0	7	1	4	5	0
8:15 AM - 8:30 AM	3	0	2	0	0	0	0	5	3	0	3	0
8:30 AM - 8:45 AM	1	0	0	0	0	0	0	3	1	0	6	0
8:45 AM - 9:00 AM	2	0	3	0	0	0	0	3	2	3	7	0
TOTAL	13	0	12	0	0	0	0	26	11	11	32	0
Peak Hour												
7:30 AM - 8:30 AM	**9**	**0**	**6**	**0**	**0**	**0**	**0**	**19**	**7**	**6**	**16**	**0**
	9%	0%	4%	0%	0%	0%	0%	5%	6%	5%	4%	0%

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	1	0	0	0	0	5	4	1	6	0
4:15 PM - 4:30 PM	1	0	5	0	0	0	0	1	1	4	2	0
4:30 PM - 4:45 PM	1	0	3	0	0	0	0	3	3	2	4	0
4:45 PM - 5:00 PM	0	0	1	0	0	0	0	1	0	0	3	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
5:30 PM - 5:45 PM	1	0	2	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	1	0	1	0	0	0	0	4	0	2	4	0
TOTAL	4	0	13	0	0	0	0	17	8	9	19	0
Peak Hour												
5:00 PM - 6:00 PM	**2**	**0**	**3**	**0**	**0**	**0**	**0**	**7**	**0**	**2**	**4**	**0**
	3%	0%	2%	0%	0%	0%	0%	1%	0%	1%	1%	0%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopka Rd	**&**	Marden Rd
Date	January 18, 2022		**U-Turns & RTOR**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
7:00 AM - 8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
2:00 PM - 3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** Marden Rd

Date January 18, 2022 **All Vehicles**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	5	0	31	0	0	0	0	63	18	22	65	0
7:15 AM - 7:30 AM	25	0	29	0	0	0	0	88	23	27	98	0
7:30 AM - 7:45 AM	22	0	38	0	0	0	0	95	30	20	108	0
7:45 AM - 8:00 AM	22	0	47	0	0	0	0	118	25	27	112	0
8:00 AM - 8:15 AM	30	0	37	0	0	0	0	101	36	32	99	0
8:15 AM - 8:30 AM	35	0	45	0	0	0	0	96	24	37	78	0
8:30 AM - 8:45 AM	16	0	28	0	0	0	0	82	20	31	62	0
8:45 AM - 9:00 AM	14	0	26	0	0	0	0	76	18	19	88	0
TOTAL	169	0	281	0	0	0	0	719	194	215	710	0
Peak Hour												
7:30 AM - 8:30 AM	**109**	**0**	**167**	**0**	**0**	**0**	**0**	**410**	**115**	**116**	**397**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	18	0	24	0	0	0	0	101	19	29	82	0
4:15 PM - 4:30 PM	13	0	28	0	0	0	0	100	11	54	94	0
4:30 PM - 4:45 PM	22	0	44	0	0	0	0	138	25	29	102	0
4:45 PM - 5:00 PM	15	0	27	0	0	0	0	117	21	29	81	0
5:00 PM - 5:15 PM	24	0	32	0	0	0	0	121	26	38	105	0
5:15 PM - 5:30 PM	11	0	37	0	0	0	0	140	15	37	72	0
5:30 PM - 5:45 PM	16	0	24	0	0	0	0	116	16	42	95	0
5:45 PM - 6:00 PM	16	0	36	17	0	0	8	195	23	48	183	16
TOTAL	135	0	252	17	0	0	8	1,028	156	306	814	16
Peak Hour												
5:00 PM - 6:00 PM	**67**	**0**	**129**	**17**	**0**	**0**	**8**	**572**	**80**	**165**	**455**	**16**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Orange **City** Apopka

Intersection Ocoee Apopka Rd **&** W 13th St

Date January 18, 2022 **Trucks**

VHB Project #: 63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	3	0	0	3	0	0	0	0	1	0	0
7:30 AM - 7:45 AM	0	3	1	0	2	0	0	0	0	1	0	0
7:45 AM - 8:00 AM	0	6	3	0	8	0	0	0	0	1	0	1
8:00 AM - 8:15 AM	0	6	2	0	7	0	0	0	0	2	0	0
8:15 AM - 8:30 AM	0	4	2	0	2	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	3	0	0	4	0	0	0	0	3	0	0
8:45 AM - 9:00 AM	0	6	2	0	4	0	0	0	0	2	0	0
TOTAL	0	32	10	0	31	0	0	0	0	10	0	1
Peak Hour												
7:30 AM - 8:30 AM	**0**	**19**	**8**	**0**	**19**	**0**	**0**	**0**	**0**	**4**	**0**	**1**
	0%	4%	10%	0%	5%	0%	0%	0%	0%	6%	0%	3%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	2	3	1	4	0	0	0	0	3	1	0
4:15 PM - 4:30 PM	0	3	1	0	4	0	0	0	0	1	0	0
4:30 PM - 4:45 PM	0	5	1	0	4	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	4	0	0	1	0	0	0	0	1	0	0
5:00 PM - 5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	2	0	0	1	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	2	0	2	0	0	0	0	1	0	0
TOTAL	0	17	8	1	16	0	0	0	0	6	1	0
Peak Hour												
4:30 PM - 5:30 PM	**0**	**10**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0%	2%	3%	0%	1%	0%	0%	0%	0%	2%	0%	0%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopka Rd	**&**	W 13th St
Date	January 18, 2022		**U-Turns & RTOR**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	1	0	0	0	0	0	1	0	0
Peak Hour												
7:15 AM - 8:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

Mid-day

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour												
11:00 AM - 12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	2	0	0	0	0	0	0	0	0
Peak Hour												
3:45 PM - 4:45 PM	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Orange	**City**	Apopka
Intersection	Ocoee Apopka Rd	**&**	W 13th St
Date	January 18, 2022		**All Vehicles**
		VHB Project #:	63534.04

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	87	10	4	83	0	0	0	0	15	0	6
7:15 AM - 7:30 AM	0	121	6	3	114	0	0	0	0	11	0	3
7:30 AM - 7:45 AM	0	118	17	4	107	0	0	0	0	11	0	7
7:45 AM - 8:00 AM	0	131	34	9	116	0	0	0	0	25	0	6
8:00 AM - 8:15 AM	0	120	24	13	101	0	1	0	0	22	0	12
8:15 AM - 8:30 AM	0	119	17	6	106	0	0	0	0	14	1	5
8:30 AM - 8:45 AM	0	87	17	4	78	0	0	0	0	8	0	4
8:45 AM - 9:00 AM	0	104	9	5	80	0	0	0	0	12	0	6
TOTAL	0	887	134	48	785	0	1	0	0	118	1	49
Peak Hour												
7:30 AM - 8:30 AM	**0**	**488**	**92**	**32**	**430**	**0**	**1**	**0**	**0**	**72**	**1**	**30**

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	1	104	15	3	108	0	0	0	0	14	2	4
4:15 PM - 4:30 PM	0	119	14	1	129	0	0	0	0	9	2	6
4:30 PM - 4:45 PM	0	149	24	4	106	0	0	0	0	18	3	0
4:45 PM - 5:00 PM	0	139	16	0	108	0	0	0	0	11	0	4
5:00 PM - 5:15 PM	0	130	22	5	126	0	0	0	1	16	1	6
5:15 PM - 5:30 PM	1	154	19	1	96	0	0	0	0	12	0	5
5:30 PM - 5:45 PM	0	129	14	3	106	0	0	0	0	20	1	5
5:45 PM - 6:00 PM	0	108	15	4	124	0	0	0	0	14	0	6
TOTAL	2	1,032	139	21	903	0	0	0	1	114	9	36
Peak Hour												
4:30 PM - 5:30 PM	**1**	**572**	**81**	**10**	**436**	**0**	**0**	**0**	**1**	**57**	**4**	**15**

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	1
COUNT LOCATION	Boy Scout Road to Marden Road
VHB PROJECT #	63534.04
Equipment ID	319

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	February 9, 2022	**Start Time**	12:00 AM
End Date	February 11, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total	EB	WB
ADT	2,860	1,382	1,478

Peak Hour 7:15 AM to 8:15 AM

Peak Hour Total	EB	WB
237	164	73

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 8.29% **D =** 69.2%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	1
COUNT LOCATION	Boy Scout Road to Marden Road
VHB PROJECT #	63534.04
Equipment ID	319

HOUR END AT	HOURLY VOLUME DIRECTION (EB)	HOURLY VOLUME DIRECTION (WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (EB)	DISTRIBUTION PERCENT DIRECTION (WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	7	14	21	0.51%	0.95%	0.73%
2:00 AM	5	9	14	0.36%	0.61%	0.49%
3:00 AM	5	8	13	0.36%	0.54%	0.45%
4:00 AM	5	6	11	0.36%	0.41%	0.38%
5:00 AM	14	3	17	1.01%	0.20%	0.59%
6:00 AM	25	12	37	1.81%	0.81%	1.29%
7:00 AM	98	37	135	7.09%	2.50%	4.72%
8:00 AM	156	59	215	11.29%	3.99%	7.52%
9:00 AM	133	77	210	9.62%	5.21%	7.34%
10:00 AM	75	67	142	5.43%	4.53%	4.97%
11:00 AM	64	61	125	4.63%	4.13%	4.37%
12:00 PM	74	65	139	5.35%	4.40%	4.86%
1:00 PM	78	83	161	5.64%	5.62%	5.63%
2:00 PM	87	78	165	6.30%	5.28%	5.77%
3:00 PM	79	98	177	5.72%	6.63%	6.19%
4:00 PM	87	109	196	6.30%	7.37%	6.85%
5:00 PM	87	127	214	6.30%	8.59%	7.48%
6:00 PM	79	145	224	5.72%	9.81%	7.83%
7:00 PM	79	126	205	5.72%	8.53%	7.17%
8:00 PM	59	101	160	4.27%	6.83%	5.59%
9:00 PM	36	82	118	2.60%	5.55%	4.13%
10:00 PM	28	61	89	2.03%	4.13%	3.11%
11:00 PM	18	37	55	1.30%	2.50%	1.92%
12:00 AM	4	13	17	0.29%	0.88%	0.59%
TOTALS	**1,382**	**1,478**	**2,860**	**100.01%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : February 9, 2022
Stop Date : February 9, 2022
County : Orange
Location : Boy Scout Road to Marden Road

Start Time 00:00
Stop Time 24:00

VHB Project #: 63534.04

9-Feb-22 **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	3	0	1	2	6	16	34	42	19	21	14
30	4	0	1	1	2	1	23	44	31	16	12	21
45	2	1	1	2	5	7	26	37	32	24	12	13
00	0	0	3	2	4	13	33	32	28	12	20	18
Hr Total	**7**	**4**	**5**	**6**	**13**	**27**	**98**	**147**	**133**	**71**	**65**	**66**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	22	26	20	19	22	17	30	15	12	9	6	1
30	26	20	19	20	20	19	13	10	6	5	5	2
45	17	29	23	18	22	17	14	15	10	5	5	0
00	12	18	21	13	16	23	19	11	6	7	7	4
Hr Total	**77**	**93**	**83**	**70**	**80**	**76**	**76**	**51**	**34**	**26**	**23**	**7**

24 Hour Total : 1,338
AM Peak Hour begins : 7:15 AM Peak Volume : 155 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 13:00 PM Peak Volume : 93 PM PeaK Hour Factor : 0.80

9-Feb-22 **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	1	1	1	0	1	4	8	18	12	17	15
30	4	0	0	0	1	4	7	23	16	22	14	17
45	2	4	3	1	1	5	6	13	18	17	14	20
00	2	2	3	2	1	5	16	20	23	15	13	16
Hr Total	**13**	**7**	**7**	**4**	**3**	**15**	**33**	**64**	**75**	**66**	**58**	**68**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	16	27	21	25	21	40	38	32	24	19	9	5
30	15	20	31	33	30	29	26	18	24	19	11	8
45	9	18	26	18	41	32	29	19	18	15	12	10
00	21	15	31	30	22	31	34	25	22	11	5	1
Hr Total	**61**	**80**	**109**	**106**	**114**	**132**	**127**	**94**	**88**	**64**	**37**	**24**

24 Hour Total : 1,449
AM Peak Hour begins : 8:00 AM Peak Volume : 75 AM Peak Hour Factor : 0.82
PM Peak Hour begins : 16:15 PM Peak Volume : 133 PM PeaK Hour Factor : 0.81

9-Feb-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	4	1	2	2	7	20	42	60	31	38	29
30	8	0	1	1	3	5	30	67	47	38	26	38
45	4	5	4	3	6	12	32	50	50	41	26	33
00	2	2	6	4	5	18	49	52	51	27	33	34
Hr Total	**20**	**11**	**12**	**10**	**16**	**42**	**131**	**211**	**208**	**137**	**123**	**134**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	38	53	41	44	43	57	68	47	36	28	15	6
30	41	40	50	53	50	48	39	28	30	24	16	10
45	26	47	49	36	63	49	43	34	28	20	17	10
00	33	33	52	43	38	54	53	36	28	18	12	5
Hr Total	**138**	**173**	**192**	**176**	**194**	**208**	**203**	**145**	**122**	**90**	**60**	**31**

24 Hour Total : 2,787
AM Peak Hour begins : 7:15 AM Peak Volume : 229 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 17:15 PM Peak Volume : 219 PM PeaK Hour Factor : 0.81

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : February 10, 2022
Stop Date : February 10, 2022
County : Orange
Location : Boy Scout Road to Marden Road

Start Time 00:00
Stop Time 24:00

VHB Project #: 63534.04

11-Feb-22 **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	0	0	0	3	2	15	37	46	19	15	25
30	2	1	1	0	0	1	23	37	38	20	15	18
45	1	2	1	2	2	9	24	39	25	21	12	18
00	2	0	3	0	8	10	35	49	21	17	20	18
Hr Total	**6**	**3**	**5**	**2**	**13**	**22**	**97**	**162**	**130**	**77**	**62**	**79**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	17	19	16	34	26	21	19	13	12	7	3	0
30	19	24	18	26	22	24	20	25	8	4	7	0
45	21	17	20	16	28	17	21	13	6	9	1	0
00	19	19	19	26	18	18	18	15	11	8	0	0
Hr Total	**76**	**79**	**73**	**102**	**94**	**80**	**78**	**66**	**37**	**28**	**11**	**0**

24 Hour Total : 1,382
AM Peak Hour begins : 7:30 AM Peak Volume : 172 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 15:00 PM Peak Volume : 102 PM PeaK Hour Factor : 0.75

11-Feb-22 **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	1	5	2	0	2	8	7	25	15	18	11
30	3	5	2	0	0	0	8	17	16	16	16	18
45	1	4	0	1	0	2	7	12	20	19	13	11
00	2	0	1	3	1	2	15	16	16	17	14	19
Hr Total	**13**	**10**	**8**	**6**	**1**	**6**	**38**	**52**	**77**	**67**	**61**	**59**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	27	18	17	25	34	34	27	33	15	14	10	1
30	21	15	20	28	32	36	36	30	24	16	12	0
45	26	18	26	30	43	46	34	25	19	15	11	0
00	29	22	22	27	30	40	25	18	16	11	0	0
Hr Total	**103**	**73**	**85**	**110**	**139**	**156**	**122**	**106**	**74**	**56**	**33**	**1**

24 Hour Total : 1,456
AM Peak Hour begins : 7:45 AM Peak Volume : 77 AM Peak Hour Factor : 0.77
PM Peak Hour begins : 17:00 PM Peak Volume : 156 PM PeaK Hour Factor : 0.85

11-Feb-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	8	1	5	2	3	4	23	44	71	34	33	36
30	5	6	3	0	0	1	31	54	54	36	31	36
45	2	6	1	3	2	11	31	51	45	40	25	29
00	4	0	4	3	9	12	50	65	37	34	34	37
Hr Total	**19**	**13**	**13**	**8**	**14**	**28**	**135**	**214**	**207**	**144**	**123**	**138**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	44	37	33	59	60	55	46	46	27	21	13	1
30	40	39	38	54	54	60	56	55	32	20	19	0
45	47	35	46	46	71	63	55	38	25	24	12	0
00	48	41	41	53	48	58	43	33	27	19	0	0
Hr Total	**179**	**152**	**158**	**212**	**233**	**236**	**200**	**172**	**111**	**84**	**44**	**1**

24 Hour Total : 2,838
AM Peak Hour begins : 7:15 AM Peak Volume : 241 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 15:45 PM Peak Volume : 238 PM PeaK Hour Factor : 0.84

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : February 9, 2022
Stop Date : February 10, 2022
County : Orange
Location : Boy Scout Road to Marden Road

Start Time 00:00
Stop Time 24:00

VHB Project #: 63534.04

AVERAGE **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	2	0	1	3	4	16	36	44	19	18	20
30	3	1	1	1	1	1	23	41	35	18	14	20
45	2	2	1	2	4	8	25	38	29	23	12	16
00	1	0	3	1	6	12	34	41	25	15	20	18
Hr Total	**7**	**5**	**5**	**5**	**14**	**25**	**98**	**156**	**133**	**75**	**64**	**74**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	20	23	18	27	24	19	25	14	12	8	5	1
30	23	22	19	23	21	22	17	18	7	5	6	1
45	19	23	22	17	25	17	18	14	8	7	3	0
00	16	19	20	20	17	21	19	13	9	8	4	2
Hr Total	**78**	**87**	**79**	**87**	**87**	**79**	**79**	**59**	**36**	**28**	**18**	**4**

24 Hour Total : 1,382
AM Peak Hour begins : 7:15 AM Peak Volume : 164 AM Peak Hour Factor : 0.93
PM Peak Hour begins : 14:30 PM Peak Volume : 92 PM PeaK Hour Factor : 0.85

AVERAGE **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	1	3	2	0	2	6	8	22	14	18	13
30	4	3	1	0	1	2	8	20	16	19	15	18
45	2	4	2	1	1	4	7	13	19	18	14	16
00	2	1	2	3	1	4	16	18	20	16	14	18
Hr Total	**14**	**9**	**8**	**6**	**3**	**12**	**37**	**59**	**77**	**67**	**61**	**65**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	22	23	19	25	28	37	33	33	20	17	10	3
30	18	18	26	31	31	33	31	24	24	18	12	4
45	18	18	26	24	42	39	32	22	19	15	12	5
00	25	19	27	29	26	36	30	22	19	11	3	1
Hr Total	**83**	**78**	**98**	**109**	**127**	**145**	**126**	**101**	**82**	**61**	**37**	**13**

24 Hour Total : 1,478
AM Peak Hour begins : 8:00 AM Peak Volume : 77 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 17:00 PM Peak Volume : 145 PM PeaK Hour Factor : 0.93

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	3	3	3	3	6	22	44	66	33	36	33
30	7	4	2	1	2	3	31	61	51	37	29	38
45	4	6	3	3	5	12	32	51	48	41	26	32
00	3	1	5	4	7	16	50	59	45	31	34	36
Hr Total	**21**	**14**	**13**	**11**	**17**	**37**	**135**	**215**	**210**	**142**	**125**	**139**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	42	46	37	52	52	56	58	47	32	25	15	4
30	41	40	45	54	52	55	48	42	31	23	18	5
45	37	41	48	41	67	56	50	36	27	22	15	5
00	41	38	47	49	43	57	49	35	28	19	7	3
Hr Total	**161**	**165**	**177**	**196**	**214**	**224**	**205**	**160**	**118**	**89**	**55**	**17**

24 Hour Total : 2,860
AM Peak Hour begins : 7:15 AM Peak Volume : 237 AM Peak Hour Factor : 0.90
PM Peak Hour begins : 17:15 PM Peak Volume : 226 PM PeaK Hour Factor : 0.97

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	2
COUNT LOCATION	Bradshaw Road north of Ocoee Apopka Road
VHB PROJECT #	63534.04
Equipment ID	123

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	January 18, 2022	**Start Time**	12:00 AM
End Date	January 20, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total	NB	SB
ADT	6,157	3,110	3,047

Peak Hour 4:30 PM to 5:30 PM

Peak Hour Total	NB	SB
534	277	257

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 8.67% **D =** 51.9%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	2
COUNT LOCATION	Bradshaw Road north of Ocoee Apopka Road
VHB PROJECT #	63534.04
Equipment ID	123

HOUR END AT	HOURLY VOLUME DIRECTION (NB)	HOURLY VOLUME DIRECTION (SB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB)	DISTRIBUTION PERCENT DIRECTION (SB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	19	18	37	0.61%	0.59%	0.60%
2:00 AM	12	11	23	0.39%	0.36%	0.37%
3:00 AM	3	14	17	0.10%	0.46%	0.28%
4:00 AM	12	8	20	0.39%	0.26%	0.32%
5:00 AM	20	20	40	0.64%	0.66%	0.65%
6:00 AM	81	66	147	2.60%	2.17%	2.39%
7:00 AM	160	155	315	5.14%	5.09%	5.12%
8:00 AM	217	238	455	6.98%	7.81%	7.39%
9:00 AM	251	220	471	8.07%	7.22%	7.65%
10:00 AM	147	152	299	4.73%	4.99%	4.86%
11:00 AM	122	135	257	3.92%	4.43%	4.17%
12:00 PM	151	134	285	4.86%	4.40%	4.63%
1:00 PM	153	173	326	4.92%	5.68%	5.29%
2:00 PM	166	180	346	5.34%	5.91%	5.62%
3:00 PM	216	193	409	6.95%	6.33%	6.64%
4:00 PM	228	205	433	7.33%	6.73%	7.03%
5:00 PM	238	228	466	7.65%	7.48%	7.57%
6:00 PM	269	233	502	8.65%	7.65%	8.15%
7:00 PM	238	177	415	7.65%	5.81%	6.74%
8:00 PM	163	152	315	5.24%	4.99%	5.12%
9:00 PM	107	137	244	3.44%	4.50%	3.96%
10:00 PM	66	118	184	2.12%	3.87%	2.99%
11:00 PM	40	52	92	1.29%	1.71%	1.49%
12:00 AM	31	28	59	1.00%	0.92%	0.96%
TOTALS	**3,110**	**3,047**	**6,157**	**100.01%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022 Start Time 00:00
Stop Date : January 18, 2022 Stop Time 24:00
County : Orange
Location : Bradshaw Road north of Ocoee Apopka Road

VHB Project #: 63534.04

18-Jan-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	3	0	3	1	6	32	47	60	44	24	35
30	3	3	1	4	3	9	27	46	77	31	42	45
45	2	5	0	2	8	20	38	57	50	23	38	30
00	6	2	1	4	7	45	66	53	55	27	26	43
Hr Total	**17**	**13**	**2**	**13**	**19**	**80**	**163**	**203**	**242**	**125**	**130**	**153**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	40	31	63	45	44	62	64	35	22	22	15	8
30	28	37	58	57	47	82	65	30	26	14	9	9
45	29	39	49	54	80	65	69	51	22	11	11	8
00	38	44	64	65	69	56	61	35	22	18	4	6
Hr Total	**135**	**151**	**234**	**221**	**240**	**265**	**259**	**151**	**92**	**65**	**39**	**31**

24 Hour Total : 3,043
AM Peak Hour begins : 7:30 AM Peak Volume : 247 AM Peak Hour Factor : 0.80
PM Peak Hour begins : 16:30 PM Peak Volume : 293 PM PeaK Hour Factor : 0.89

18-Jan-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	4	4	1	3	1	12	34	51	65	36	30	28
30	6	1	1	4	3	15	41	74	63	43	40	24
45	2	2	4	1	4	18	44	52	53	44	26	36
00	6	3	5	1	9	21	43	61	33	24	34	36
Hr Total	**18**	**10**	**11**	**9**	**17**	**66**	**162**	**238**	**214**	**147**	**130**	**124**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	40	44	41	55	50	73	57	65	45	61	10	5
30	43	35	49	51	64	55	32	38	35	33	13	8
45	31	43	48	60	67	51	52	29	31	23	15	3
00	49	38	65	44	54	50	44	26	29	15	9	7
Hr Total	**163**	**160**	**203**	**210**	**235**	**229**	**185**	**158**	**140**	**132**	**47**	**23**

24 Hour Total : 3,031
AM Peak Hour begins : 7:15 AM Peak Volume : 252 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 16:15 PM Peak Volume : 258 PM PeaK Hour Factor : 0.88

18-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	10	7	1	6	2	18	66	98	125	80	54	63
30	9	4	2	8	6	24	68	120	140	74	82	69
45	4	7	4	3	12	38	82	109	103	67	64	66
00	12	5	6	5	16	66	109	114	88	51	60	79
Hr Total	**35**	**23**	**13**	**22**	**36**	**146**	**325**	**441**	**456**	**272**	**260**	**277**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	80	75	104	100	94	135	121	100	67	83	25	13
30	71	72	107	108	111	137	97	68	61	47	22	17
45	60	82	97	114	147	116	121	80	53	34	26	11
00	87	82	129	109	123	106	105	61	51	33	13	13
Hr Total	**298**	**311**	**437**	**431**	**475**	**494**	**444**	**309**	**232**	**197**	**86**	**54**

24 Hour Total : 6,074
AM Peak Hour begins : 7:30 AM Peak Volume : 488 AM Peak Hour Factor : 0.87
PM Peak Hour begins : 16:30 PM Peak Volume : 542 PM PeaK Hour Factor : 0.92

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 19, 2022 Start Time 00:00
Stop Date : January 19, 2022 Stop Time 24:00
County : Orange
Location : Bradshaw Road north of Ocoee Apopka Road

VHB Project #: 63534.04

20-Jan-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	11	4	2	3	2	7	24	52	61	58	20	33
30	3	2	1	1	4	3	26	60	73	33	27	34
45	4	1	0	2	3	25	40	63	79	37	34	46
00	2	2	1	3	8	45	65	55	44	40	32	35
Hr Total	**20**	**9**	**4**	**9**	**17**	**80**	**155**	**230**	**257**	**168**	**113**	**148**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	42	44	46	47	56	61	62	47	34	19	11	10
30	48	35	60	42	54	74	61	42	27	11	10	3
45	32	50	44	67	68	78	49	43	36	23	10	8
00	47	49	45	76	56	57	45	42	24	12	7	9
Hr Total	**169**	**178**	**195**	**232**	**234**	**270**	**217**	**174**	**121**	**65**	**38**	**30**

24 Hour Total : 3,133
AM Peak Hour begins : 7:45 AM Peak Volume : 268 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 17:15 PM Peak Volume : 271 PM PeaK Hour Factor : 0.87

20-Jan-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	4	2	3	0	3	8	26	65	64	39	35	26
30	4	4	3	0	2	21	38	68	64	35	32	40
45	2	2	2	3	5	14	40	46	49	50	26	32
00	8	2	8	3	11	22	43	58	46	31	46	46
Hr Total	**18**	**10**	**16**	**6**	**21**	**65**	**147**	**237**	**223**	**155**	**139**	**144**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	42	53	48	49	45	86	57	42	43	26	13	7
30	44	46	41	42	43	46	39	23	29	31	10	9
45	41	57	55	61	74	51	33	46	29	26	14	11
00	55	41	37	46	56	52	38	31	32	18	16	5
Hr Total	**182**	**197**	**181**	**198**	**218**	**235**	**167**	**142**	**133**	**101**	**53**	**32**

24 Hour Total : 3,020
AM Peak Hour begins : 7:00 AM Peak Volume : 237 AM Peak Hour Factor : 0.87
PM Peak Hour begins : 16:30 PM Peak Volume : 262 PM PeaK Hour Factor : 0.76

20-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	15	6	5	3	5	15	50	117	125	97	55	59
30	7	6	4	1	6	24	64	128	137	68	59	74
45	6	3	2	5	8	39	80	109	128	87	60	78
00	10	4	9	6	19	67	108	113	90	71	78	81
Hr Total	**38**	**19**	**20**	**15**	**38**	**145**	**302**	**467**	**480**	**323**	**252**	**292**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	84	97	94	96	101	147	119	89	77	45	24	17
30	92	81	101	84	97	120	100	65	56	42	20	12
45	73	107	99	128	142	129	82	89	65	49	24	19
00	102	90	82	122	112	109	83	73	56	30	23	14
Hr Total	**351**	**375**	**376**	**430**	**452**	**505**	**384**	**316**	**254**	**166**	**91**	**62**

24 Hour Total : 6,153
AM Peak Hour begins : 7:45 AM Peak Volume : 503 AM Peak Hour Factor : 0.92
PM Peak Hour begins : 16:30 PM Peak Volume : 521 PM PeaK Hour Factor : 0.89

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022 Start Time 00:00
Stop Date : January 19, 2022 Stop Time 24:00
County : Orange
Location : Bradshaw Road north of Ocoee Apopka Road

VHB Project #: 63534.04

AVERAGE **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	4	1	3	2	7	28	50	61	51	22	34
30	3	3	1	3	4	6	27	53	75	32	35	40
45	3	3	0	2	6	23	39	60	65	30	36	38
00	4	2	1	4	8	45	66	54	50	34	29	39
Hr Total	**19**	**12**	**3**	**12**	**20**	**81**	**160**	**217**	**251**	**147**	**122**	**151**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	41	38	55	46	50	62	63	41	28	21	13	9
30	38	36	59	50	51	78	63	36	27	13	10	6
45	31	45	47	61	74	72	59	47	29	17	11	8
00	43	47	55	71	63	57	53	39	23	15	6	8
Hr Total	**153**	**166**	**216**	**228**	**238**	**269**	**238**	**163**	**107**	**66**	**40**	**31**

24 Hour Total : 3,110
AM Peak Hour begins : 7:45 AM Peak Volume : 255 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 16:30 PM Peak Volume : 277 PM PeaK Hour Factor : 0.89

AVERAGE **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	4	3	2	2	2	10	30	58	65	38	33	27
30	5	3	2	2	3	18	40	71	64	39	36	32
45	2	2	3	2	5	16	42	49	51	47	26	34
00	7	3	7	2	10	22	43	60	40	28	40	41
Hr Total	**18**	**11**	**14**	**8**	**20**	**66**	**155**	**238**	**220**	**152**	**135**	**134**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	41	49	45	52	48	80	57	54	44	44	12	6
30	44	41	45	47	54	51	36	31	32	32	12	9
45	36	50	52	61	71	51	43	38	30	25	15	7
00	52	40	51	45	55	51	41	29	31	17	13	6
Hr Total	**173**	**180**	**193**	**205**	**228**	**233**	**177**	**152**	**137**	**118**	**52**	**28**

24 Hour Total : 3,047
AM Peak Hour begins : 7:15 AM Peak Volume : 245 AM Peak Hour Factor : 0.86
PM Peak Hour begins : 16:15 PM Peak Volume : 260 PM PeaK Hour Factor : 0.81

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	13	7	3	5	4	17	58	108	126	89	55	61
30	8	6	3	5	7	24	67	124	139	71	71	72
45	5	5	3	4	11	39	81	109	116	77	62	72
00	11	5	8	6	18	67	109	114	90	62	69	80
Hr Total	**37**	**23**	**17**	**20**	**40**	**147**	**315**	**455**	**471**	**299**	**257**	**285**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	82	87	100	98	98	142	120	95	72	65	25	15
30	82	77	104	97	105	129	99	67	59	45	22	15
45	67	95	99	122	145	123	102	85	59	42	26	15
00	95	87	106	116	118	108	94	68	54	32	19	14
Hr Total	**326**	**346**	**409**	**433**	**466**	**502**	**415**	**315**	**244**	**184**	**92**	**59**

24 Hour Total : 6,157
AM Peak Hour begins : 7:45 AM Peak Volume : 495 AM Peak Hour Factor : 0.89
PM Peak Hour begins : 16:30 PM Peak Volume : 534 PM PeaK Hour Factor : 0.92

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	3
COUNT LOCATION	Harmon Road to Boy Scout Road
VHB PROJECT #	63534.04
Equipment ID	51

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	January 18, 2022	**Start Time**	12:00 AM
End Date	January 20, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total	EB	WB
ADT	3,619	1,757	1,862

Peak Hour 7:15 AM to 8:15 AM

Peak Hour Total	EB	WB
285	172	113

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 7.88% **D =** 60.4%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	3
COUNT LOCATION	Harmon Road to Boy Scout Road
VHB PROJECT #	63534.04
Equipment ID	51

HOUR END AT	HOURLY VOLUME DIRECTION (EB)	HOURLY VOLUME DIRECTION (WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (EB)	DISTRIBUTION PERCENT DIRECTION (WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	22	24	46	1.25%	1.29%	1.27%
2:00 AM	15	16	31	0.85%	0.86%	0.86%
3:00 AM	7	9	16	0.40%	0.48%	0.44%
4:00 AM	13	15	28	0.74%	0.81%	0.77%
5:00 AM	22	9	31	1.25%	0.48%	0.86%
6:00 AM	35	30	65	1.99%	1.61%	1.80%
7:00 AM	105	102	207	5.98%	5.48%	5.72%
8:00 AM	174	109	283	9.90%	5.85%	7.82%
9:00 AM	122	107	229	6.94%	5.75%	6.33%
10:00 AM	100	99	199	5.69%	5.32%	5.50%
11:00 AM	92	91	183	5.24%	4.89%	5.06%
12:00 PM	91	73	164	5.18%	3.92%	4.53%
1:00 PM	99	98	197	5.63%	5.26%	5.44%
2:00 PM	113	91	204	6.43%	4.89%	5.64%
3:00 PM	88	104	192	5.01%	5.59%	5.31%
4:00 PM	79	123	202	4.50%	6.61%	5.58%
5:00 PM	112	116	228	6.37%	6.23%	6.30%
6:00 PM	130	136	266	7.40%	7.30%	7.35%
7:00 PM	80	152	232	4.55%	8.16%	6.41%
8:00 PM	93	111	204	5.29%	5.96%	5.64%
9:00 PM	63	86	149	3.59%	4.62%	4.12%
10:00 PM	41	76	117	2.33%	4.08%	3.23%
11:00 PM	37	51	88	2.11%	2.74%	2.43%
12:00 AM	24	34	58	1.37%	1.83%	1.60%
TOTALS	**1,757**	**1,862**	**3,619**	**99.99%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022
Stop Date : January 18, 2022
County : Orange
Location : Harmon Road to Boy Scout Road

Start Time 00:00
Stop Time 24:00

VHB Project #: 63534.04

18-Jan-22 **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	8	2	1	1	3	12	16	47	37	22	27	19
30	3	6	2	3	5	6	20	39	30	30	17	15
45	2	6	2	3	4	10	33	48	28	16	23	30
00	7	0	3	5	6	8	35	34	25	30	33	16
Hr Total	**20**	**14**	**8**	**12**	**18**	**36**	**104**	**168**	**120**	**98**	**100**	**80**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	25	28	16	15	28	36	31	20	21	6	12	8
30	22	24	19	26	27	21	22	24	8	10	9	3
45	24	31	25	22	33	40	31	22	17	9	9	4
00	21	25	20	24	29	24	19	16	16	7	3	5
Hr Total	**92**	**108**	**80**	**87**	**117**	**121**	**103**	**82**	**62**	**32**	**33**	**20**

24 Hour Total : 1,715
AM Peak Hour begins : 6:45 AM Peak Volume : 169 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 16:45 PM Peak Volume : 126 PM PeaK Hour Factor : 0.79

18-Jan-22 **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	4	2	1	0	6	10	22	29	20	24	15
30	2	4	1	2	2	9	33	22	25	20	29	13
45	5	3	2	5	3	4	30	27	21	25	14	20
00	9	5	2	4	1	10	29	33	30	29	25	15
Hr Total	**23**	**16**	**7**	**12**	**6**	**29**	**102**	**104**	**105**	**94**	**92**	**63**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	12	18	18	23	31	39	42	31	22	19	12	5
30	29	27	25	35	33	30	33	28	13	22	11	8
45	23	21	24	28	33	39	35	21	24	13	11	4
00	28	17	22	26	21	39	29	25	21	12	12	10
Hr Total	**92**	**83**	**89**	**112**	**118**	**147**	**139**	**105**	**80**	**66**	**46**	**27**

24 Hour Total : 1,757
AM Peak Hour begins : 6:15 AM Peak Volume : 114 AM Peak Hour Factor : 0.86
PM Peak Hour begins : 17:30 PM Peak Volume : 153 PM PeaK Hour Factor : 0.91

18-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	15	6	3	2	3	18	26	69	66	42	51	34
30	5	10	3	5	7	15	53	61	55	50	46	28
45	7	9	4	8	7	14	63	75	49	41	37	50
00	16	5	5	9	7	18	64	67	55	59	58	31
Hr Total	**43**	**30**	**15**	**24**	**24**	**65**	**206**	**272**	**225**	**192**	**192**	**143**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	37	46	34	38	59	75	73	51	43	25	24	13
30	51	51	44	61	60	51	55	52	21	32	20	11
45	47	52	49	50	66	79	66	43	41	22	20	8
00	49	42	42	50	50	63	48	41	37	19	15	15
Hr Total	**184**	**191**	**169**	**199**	**235**	**268**	**242**	**187**	**142**	**98**	**79**	**47**

24 Hour Total : 3,472
AM Peak Hour begins : 7:00 AM Peak Volume : 272 AM Peak Hour Factor : 0.91
PM Peak Hour begins : 17:30 PM Peak Volume : 270 PM PeaK Hour Factor : 0.85

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 19, 2022 Start Time 00:00
Stop Date : January 19, 2022 Stop Time 24:00
County : Orange
Location : Harmon Road to Boy Scout Road

VHB Project #: 63534.04

20-Jan-22 **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	8	3	3	3	3	6	16	36	42	24	22	30
30	6	6	2	2	8	6	16	47	24	23	16	28
45	5	3	0	5	4	9	39	57	30	36	22	28
00	3	2	1	3	9	11	35	37	27	18	20	13
Hr Total	**22**	**14**	**6**	**13**	**24**	**32**	**106**	**177**	**123**	**101**	**80**	**99**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	27	33	19	19	21	48	15	26	24	11	11	12
30	21	27	22	15	22	41	16	30	10	13	14	2
45	30	29	29	22	18	25	15	26	17	12	8	6
00	27	27	23	14	43	23	11	21	12	11	5	6
Hr Total	**105**	**116**	**93**	**70**	**104**	**137**	**57**	**103**	**63**	**47**	**38**	**26**

24 Hour Total : 1,756
AM Peak Hour begins : 7:15 AM Peak Volume : 183 AM Peak Hour Factor : 0.80
PM Peak Hour begins : 16:45 PM Peak Volume : 157 PM PeaK Hour Factor : 0.82

20-Jan-22 **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	11	4	2	3	1	3	13	18	19	26	26	15
30	5	4	2	4	2	16	22	29	31	25	15	18
45	5	2	2	4	3	4	30	24	26	22	20	23
00	2	4	3	5	4	6	34	41	32	28	28	24
Hr Total	**23**	**14**	**9**	**16**	**10**	**29**	**99**	**112**	**108**	**101**	**89**	**80**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	21	24	29	25	17	35	35	38	29	21	19	7
30	24	28	28	32	31	27	40	31	21	21	17	12
45	33	28	29	34	36	35	50	26	24	18	7	8
00	23	16	30	41	28	27	37	19	17	23	12	14
Hr Total	**101**	**96**	**116**	**132**	**112**	**124**	**162**	**114**	**91**	**83**	**55**	**41**

24 Hour Total : 1,917
AM Peak Hour begins : 7:45 AM Peak Volume : 117 AM Peak Hour Factor : 0.71
PM Peak Hour begins : 18:15 PM Peak Volume : 165 PM PeaK Hour Factor : 0.83

20-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	19	7	5	6	4	9	29	54	61	50	48	45
30	11	10	4	6	10	22	38	76	55	48	31	46
45	10	5	2	9	7	13	69	81	56	58	42	51
00	5	6	4	8	13	17	69	78	59	46	48	37
Hr Total	**45**	**28**	**15**	**29**	**34**	**61**	**205**	**289**	**231**	**202**	**169**	**179**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	48	57	48	44	38	83	50	64	53	32	30	19
30	45	55	50	47	53	68	56	61	31	34	31	14
45	63	57	58	56	54	60	65	52	41	30	15	14
00	50	43	53	55	71	50	48	40	29	34	17	20
Hr Total	**206**	**212**	**209**	**202**	**216**	**261**	**219**	**217**	**154**	**130**	**93**	**67**

24 Hour Total : 3,673
AM Peak Hour begins : 7:15 AM Peak Volume : 296 AM Peak Hour Factor : 0.91
PM Peak Hour begins : 16:45 PM Peak Volume : 282 PM PeaK Hour Factor : 0.85

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022
Stop Date : January 19, 2022
County : Orange
Location : Harmon Road to Boy Scout Road

Start Time 00:00
Stop Time 24:00

VHB Project #: 63534.04

AVERAGE **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	8	3	2	2	3	9	16	42	40	23	25	25
30	5	6	2	3	7	6	18	43	27	27	17	22
45	4	5	1	4	4	10	36	53	29	26	23	29
00	5	1	2	4	8	10	35	36	26	24	27	15
Hr Total	**22**	**15**	**7**	**13**	**22**	**35**	**105**	**174**	**122**	**100**	**92**	**91**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	26	31	18	17	25	42	23	23	23	9	12	10
30	22	26	21	21	25	31	19	27	9	12	12	3
45	27	30	27	22	26	33	23	24	17	11	9	5
00	24	26	22	19	36	24	15	19	14	9	4	6
Hr Total	**99**	**113**	**88**	**79**	**112**	**130**	**80**	**93**	**63**	**41**	**37**	**24**

24 Hour Total : 1,757
AM Peak Hour begins : 7:00 AM Peak Volume : 174 AM Peak Hour Factor : 0.82
PM Peak Hour begins : 16:45 PM Peak Volume : 142 PM PeaK Hour Factor : 0.85

AVERAGE **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	4	2	2	1	5	12	20	24	23	25	15
30	4	4	2	3	2	13	28	26	28	23	22	16
45	5	3	2	5	3	4	30	26	24	24	17	22
00	6	5	3	5	3	8	32	37	31	29	27	20
Hr Total	**24**	**16**	**9**	**15**	**9**	**30**	**102**	**109**	**107**	**99**	**91**	**73**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	17	21	24	24	24	37	39	35	26	20	16	6
30	27	28	27	34	32	29	37	30	17	22	14	10
45	28	25	27	31	35	37	43	24	24	16	9	6
00	26	17	26	34	25	33	33	22	19	18	12	12
Hr Total	**98**	**91**	**104**	**123**	**116**	**136**	**152**	**111**	**86**	**76**	**51**	**34**

24 Hour Total : 1,862
AM Peak Hour begins : 7:30 AM Peak Volume : 115 AM Peak Hour Factor : 0.78
PM Peak Hour begins : 17:45 PM Peak Volume : 152 PM PeaK Hour Factor : 0.88

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	17	7	4	4	4	14	28	62	64	46	50	40
30	9	10	4	6	9	19	46	69	55	50	39	38
45	9	8	3	9	7	14	66	79	53	50	40	51
00	11	6	5	9	11	18	67	73	57	53	54	35
Hr Total	**46**	**31**	**16**	**28**	**31**	**65**	**207**	**283**	**229**	**199**	**183**	**164**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	43	52	42	41	49	79	62	58	49	29	28	16
30	49	54	48	55	57	60	56	57	26	34	26	13
45	55	55	54	53	61	70	66	48	41	27	18	11
00	50	43	48	53	61	57	48	41	33	27	16	18
Hr Total	**197**	**204**	**192**	**202**	**228**	**266**	**232**	**204**	**149**	**117**	**88**	**58**

24 Hour Total : 3,619
AM Peak Hour begins : 7:15 AM Peak Volume : 285 AM Peak Hour Factor : 0.90
PM Peak Hour begins : 16:45 PM Peak Volume : 270 PM PeaK Hour Factor : 0.85

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	0
COUNT LOCATION	Hawthorne Ave - North of Ocoee Apopka Rd
VHB PROJECT #	63534.04
Equipment ID	1

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	March 2, 2022	**Start Time**	12:00 AM
End Date	March 4, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total	NB	SB
ADT	1,463	753	710

Peak Hour 5:15 PM to 6:15 PM

Peak Hour Total	NB	SB
123	68	55

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 8.41% **D =** 55.3%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	0
COUNT LOCATION	Hawthorne Ave - North of Ocoee Apopka Rd
VHB PROJECT #	63534.04
Equipment ID	1

HOUR END AT	HOURLY VOLUME DIRECTION (NB)	HOURLY VOLUME DIRECTION (SB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB)	DISTRIBUTION PERCENT DIRECTION (SB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	6	8	14	0.80%	1.13%	0.96%
2:00 AM	4	3	7	0.53%	0.42%	0.48%
3:00 AM	1	3	4	0.13%	0.42%	0.27%
4:00 AM	4	4	8	0.53%	0.56%	0.55%
5:00 AM	3	3	6	0.40%	0.42%	0.41%
6:00 AM	12	10	22	1.59%	1.41%	1.50%
7:00 AM	24	22	46	3.19%	3.10%	3.14%
8:00 AM	47	40	87	6.24%	5.63%	5.95%
9:00 AM	46	31	77	6.11%	4.37%	5.26%
10:00 AM	45	29	74	5.98%	4.08%	5.06%
11:00 AM	37	26	63	4.91%	3.66%	4.31%
12:00 PM	38	39	77	5.05%	5.49%	5.26%
1:00 PM	46	40	86	6.11%	5.63%	5.88%
2:00 PM	45	40	85	5.98%	5.63%	5.81%
3:00 PM	44	47	91	5.84%	6.62%	6.22%
4:00 PM	43	56	99	5.71%	7.89%	6.77%
5:00 PM	47	52	99	6.24%	7.32%	6.77%
6:00 PM	65	56	121	8.63%	7.89%	8.27%
7:00 PM	62	56	118	8.23%	7.89%	8.07%
8:00 PM	49	52	101	6.51%	7.32%	6.90%
9:00 PM	27	39	66	3.59%	5.49%	4.51%
10:00 PM	26	28	54	3.45%	3.94%	3.69%
11:00 PM	22	16	38	2.92%	2.25%	2.60%
12:00 AM	10	10	20	1.33%	1.41%	1.37%
TOTALS	**753**	**710**	**1,463**	**100.00%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 2, 2022 Start Time 00:00
Stop Date : March 2, 2022 Stop Time 24:00
County : Orange
Location : Hawthorne Ave - North of Ocoee Apopka Rd

VHB Project #: 63534.04

2-Mar-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	2	0	1	0	2	5	9	5	12	3	9
30	2	1	0	1	1	2	3	7	13	9	11	9
45	2	0	0	0	0	2	7	12	10	8	9	11
00	0	1	0	1	1	7	9	16	14	6	10	8
Hr Total	**5**	**4**	**0**	**3**	**2**	**13**	**24**	**44**	**42**	**35**	**33**	**37**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	14	11	8	15	5	12	15	18	6	14	8	5
30	8	9	10	5	11	13	15	14	7	4	5	0
45	9	14	11	16	12	13	11	7	8	6	4	2
00	16	14	9	7	11	17	21	14	5	2	4	0
Hr Total	**47**	**48**	**38**	**43**	**39**	**55**	**62**	**53**	**26**	**26**	**21**	**7**

24 Hour Total : 707
AM Peak Hour begins : 8:15 AM Peak Volume : 49 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 18:15 PM Peak Volume : 65 PM PeaK Hour Factor : 0.77

2-Mar-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	0	0	0	1	2	3	5	8	6	11	12
30	0	0	0	0	1	2	5	9	6	5	8	10
45	4	2	0	1	0	6	6	9	10	13	2	6
00	4	0	0	2	0	4	4	10	5	10	6	11
Hr Total	**9**	**2**	**0**	**3**	**2**	**14**	**18**	**33**	**29**	**34**	**27**	**39**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	15	8	5	15	12	17	11	16	9	21	6	4
30	8	10	9	9	5	17	12	10	8	6	3	1
45	4	7	18	19	14	14	12	9	7	2	6	0
00	14	9	13	15	13	11	14	11	8	5	5	3
Hr Total	**41**	**34**	**45**	**58**	**44**	**59**	**49**	**46**	**32**	**34**	**20**	**8**

24 Hour Total : 680
AM Peak Hour begins : 9:30 AM Peak Volume : 42 AM Peak Hour Factor : 0.81
PM Peak Hour begins : 16:30 PM Peak Volume : 61 PM PeaK Hour Factor : 0.90

2-Mar-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	2	0	1	1	4	8	14	13	18	14	21
30	2	1	0	1	2	4	8	16	19	14	19	19
45	6	2	0	1	0	8	13	21	20	21	11	17
00	4	1	0	3	1	11	13	26	19	16	16	19
Hr Total	**14**	**6**	**0**	**6**	**4**	**27**	**42**	**77**	**71**	**69**	**60**	**76**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	29	19	13	30	17	29	26	34	15	35	14	9
30	16	19	19	14	16	30	27	24	15	10	8	1
45	13	21	29	35	26	27	23	16	15	8	10	2
00	30	23	22	22	24	28	35	25	13	7	9	3
Hr Total	**88**	**82**	**83**	**101**	**83**	**114**	**111**	**99**	**58**	**60**	**41**	**15**

24 Hour Total : 1,387
AM Peak Hour begins : 7:30 AM Peak Volume : 79 AM Peak Hour Factor : 0.76
PM Peak Hour begins : 18:15 PM Peak Volume : 119 PM PeaK Hour Factor : 0.85

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 3, 2022 Start Time 00:00
Stop Date : March 3, 2022 Stop Time 24:00
County : Orange
Location : Hawthorne Ave - North of Ocoee Apopka Rd

VHB Project #: 63534.04

4-Mar-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	2	0	1	0	0	7	11	12	11	12	11
30	1	1	0	1	1	2	5	5	13	13	13	5
45	2	0	1	1	0	5	5	18	14	11	5	9
00	1	1	0	1	2	3	7	16	10	18	10	13
Hr Total	**5**	**4**	**1**	**4**	**3**	**10**	**24**	**50**	**49**	**53**	**40**	**38**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	12	14	10	16	11	16	19	14	11	10	10	4
30	9	9	8	9	17	16	13	12	5	1	5	1
45	12	5	8	7	14	18	14	8	3	5	6	1
00	9	11	22	8	12	22	15	9	6	8	2	3
Hr Total	**42**	**39**	**48**	**40**	**54**	**72**	**61**	**43**	**25**	**24**	**23**	**9**

24 Hour Total : 761
AM Peak Hour begins : 7:30 AM Peak Volume : 59 AM Peak Hour Factor : 0.82
PM Peak Hour begins : 17:15 PM Peak Volume : 75 PM PeaK Hour Factor : 0.85

4-Mar-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	1	0	1	1	1	5	8	8	0	7	11
30	1	0	1	0	0	0	4	13	8	9	2	9
45	0	1	1	0	0	2	7	11	7	7	12	11
00	4	0	2	2	2	1	7	13	9	8	3	4
Hr Total	**5**	**2**	**4**	**3**	**3**	**4**	**23**	**45**	**32**	**24**	**24**	**35**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	11	12	13	11	9	13	17	14	11	3	4	4
30	10	9	7	12	19	18	20	11	16	4	4	1
45	12	14	11	18	12	12	12	17	8	8	0	3
00	6	8	17	10	18	9	14	14	10	6	3	2
Hr Total	**39**	**43**	**48**	**51**	**58**	**52**	**63**	**56**	**45**	**21**	**11**	**10**

24 Hour Total : 701
AM Peak Hour begins : 7:00 AM Peak Volume : 45 AM Peak Hour Factor : 0.87
PM Peak Hour begins : 18:00 PM Peak Volume : 63 PM PeaK Hour Factor : 0.79

4-Mar-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	3	0	2	1	1	12	19	20	11	19	22
30	2	1	1	1	1	2	9	18	21	22	15	14
45	2	1	2	1	0	7	12	29	21	18	17	20
00	5	1	2	3	4	4	14	29	19	26	13	17
Hr Total	**10**	**6**	**5**	**7**	**6**	**14**	**47**	**95**	**81**	**77**	**64**	**73**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	23	26	23	27	20	29	36	28	22	13	14	8
30	19	18	15	21	36	34	33	23	21	5	9	2
45	24	19	19	25	26	30	26	25	11	13	6	4
00	15	19	39	18	30	31	29	23	16	14	5	5
Hr Total	**81**	**82**	**96**	**91**	**112**	**124**	**124**	**99**	**70**	**45**	**34**	**19**

24 Hour Total : 1,462
AM Peak Hour begins : 7:30 AM Peak Volume : 99 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 17:15 PM Peak Volume : 131 PM PeaK Hour Factor : 0.91

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 2, 2022 Start Time 00:00
Stop Date : March 3, 2022 Stop Time 24:00
County : Orange
Location : Hawthorne Ave - North of Ocoee Apopka Rd

VHB Project #: 63534.04

AVERAGE **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	2	0	1	0	1	6	10	9	12	8	10
30	2	1	0	1	1	2	4	6	13	11	12	7
45	2	0	1	1	0	4	6	15	12	10	7	10
00	1	1	0	1	2	5	8	16	12	12	10	11
Hr Total	**6**	**4**	**1**	**4**	**3**	**12**	**24**	**47**	**46**	**45**	**37**	**38**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	13	13	9	16	8	14	17	16	9	12	9	5
30	9	9	9	7	14	15	14	13	6	3	5	1
45	11	10	10	12	13	16	13	8	6	6	5	2
00	13	13	16	8	12	20	18	12	6	5	3	2
Hr Total	**46**	**45**	**44**	**43**	**47**	**65**	**62**	**49**	**27**	**26**	**22**	**10**

24 Hour Total : 753
AM Peak Hour begins : 7:30 AM Peak Volume : 53 AM Peak Hour Factor : 0.83
PM Peak Hour begins : 17:15 PM Peak Volume : 68 PM PeaK Hour Factor : 0.85

AVERAGE **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	1	0	1	1	2	4	7	8	3	9	12
30	1	0	1	0	1	1	5	11	7	7	5	10
45	2	2	1	1	0	4	7	10	9	10	7	9
00	4	0	1	2	1	3	6	12	7	9	5	8
Hr Total	**8**	**3**	**3**	**4**	**3**	**10**	**22**	**40**	**31**	**29**	**26**	**39**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	13	10	9	13	11	15	14	15	10	12	5	4
30	9	10	8	11	12	18	16	11	12	5	4	1
45	8	11	15	19	13	13	12	13	8	5	3	2
00	10	9	15	13	16	10	14	13	9	6	4	3
Hr Total	**40**	**40**	**47**	**56**	**52**	**56**	**56**	**52**	**39**	**28**	**16**	**10**

24 Hour Total : 710
AM Peak Hour begins : 7:15 AM Peak Volume : 41 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 16:30 PM Peak Volume : 62 PM PeaK Hour Factor : 0.86

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	3	0	2	1	3	10	17	17	15	17	22
30	3	1	1	1	2	3	9	17	20	18	17	17
45	4	2	2	2	0	8	13	25	21	20	14	19
00	5	1	1	3	3	8	14	28	19	21	15	19
Hr Total	**14**	**7**	**4**	**8**	**6**	**22**	**46**	**87**	**77**	**74**	**63**	**77**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	26	23	18	29	19	29	31	31	19	24	14	9
30	18	19	17	18	26	33	30	24	18	8	9	2
45	19	21	25	31	26	29	25	21	14	11	8	4
00	23	22	31	21	28	30	32	25	15	11	7	5
Hr Total	**86**	**85**	**91**	**99**	**99**	**121**	**118**	**101**	**66**	**54**	**38**	**20**

24 Hour Total : 1,463
AM Peak Hour begins : 7:30 AM Peak Volume : 90 AM Peak Hour Factor : 0.80
PM Peak Hour begins : 17:15 PM Peak Volume : 123 PM PeaK Hour Factor : 0.93

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	3
COUNT LOCATION	Hawthorne Ave South of Ocoee Apopka Rd
VHB PROJECT #	63534.04
Equipment ID	9

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	March 2, 2022	**Start Time**	12:00 AM
End Date	March 4, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total	NB	SB
ADT	1,419	668	751

Peak Hour 6:30 PM to 7:30 PM

Peak Hour Total	NB	SB
125	60	65

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 8.81% **D =** 52.0%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	3
COUNT LOCATION	Hawthorne Ave South of Ocoee Apopka Rd
VHB PROJECT #	63534.04
Equipment ID	9

HOUR END AT	HOURLY VOLUME DIRECTION (NB)	HOURLY VOLUME DIRECTION (SB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB)	DISTRIBUTION PERCENT DIRECTION (SB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	5	10	15	0.75%	1.33%	1.06%
2:00 AM	3	4	7	0.45%	0.53%	0.49%
3:00 AM	3	4	7	0.45%	0.53%	0.49%
4:00 AM	4	3	7	0.60%	0.40%	0.49%
5:00 AM	3	3	6	0.45%	0.40%	0.42%
6:00 AM	16	8	24	2.40%	1.07%	1.69%
7:00 AM	27	15	42	4.04%	2.00%	2.96%
8:00 AM	42	30	72	6.29%	3.99%	5.07%
9:00 AM	46	31	77	6.89%	4.13%	5.43%
10:00 AM	29	33	62	4.34%	4.39%	4.37%
11:00 AM	32	28	60	4.79%	3.73%	4.23%
12:00 PM	29	40	69	4.34%	5.33%	4.86%
1:00 PM	31	39	70	4.64%	5.19%	4.93%
2:00 PM	29	47	76	4.34%	6.26%	5.36%
3:00 PM	43	51	94	6.44%	6.79%	6.62%
4:00 PM	40	47	87	5.99%	6.26%	6.13%
5:00 PM	50	61	111	7.49%	8.12%	7.82%
6:00 PM	48	58	106	7.19%	7.72%	7.47%
7:00 PM	55	57	112	8.23%	7.59%	7.89%
8:00 PM	50	62	112	7.49%	8.26%	7.89%
9:00 PM	34	49	83	5.09%	6.52%	5.85%
10:00 PM	24	30	54	3.59%	3.99%	3.81%
11:00 PM	17	26	43	2.54%	3.46%	3.03%
12:00 AM	8	15	23	1.20%	2.00%	1.62%
TOTALS	**668**	**751**	**1,419**	**100.02%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 2, 2022 Start Time 00:00
Stop Date : March 2, 2022 Stop Time 24:00
County : Orange
Location : Hawthorne Ave South of Ocoee Apopka Rd

VHB Project #: 63534.04

2-Mar-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	1	0	0	1	4	6	11	8	8	5	6
30	2	1	1	2	1	2	9	4	14	6	7	9
45	2	0	1	2	0	4	10	8	11	4	7	7
00	0	1	0	1	1	4	6	9	8	7	8	7
Hr Total	**6**	**3**	**2**	**5**	**3**	**14**	**31**	**32**	**41**	**25**	**27**	**29**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	10	9	13	13	8	11	15	16	7	7	5	2
30	6	6	9	7	10	13	13	16	11	6	4	1
45	4	6	12	14	10	9	13	7	6	6	1	1
00	15	6	6	13	7	10	13	10	8	3	3	1
Hr Total	**35**	**27**	**40**	**47**	**35**	**43**	**54**	**49**	**32**	**22**	**13**	**5**

24 Hour Total : 620
AM Peak Hour begins : 7:45 AM Peak Volume : 42 AM Peak Hour Factor : 0.75
PM Peak Hour begins : 18:30 PM Peak Volume : 58 PM PeaK Hour Factor : 0.91

2-Mar-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	0	0	0	1	4	4	4	6	6	8	9
30	0	1	0	1	1	0	5	8	6	9	10	9
45	2	2	2	0	0	3	4	9	6	9	3	10
00	3	0	0	1	0	2	3	11	6	8	4	9
Hr Total	**8**	**3**	**2**	**2**	**2**	**9**	**16**	**32**	**24**	**32**	**25**	**37**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	10	10	8	7	12	14	10	21	9	13	7	7
30	6	6	15	8	12	16	8	12	12	7	5	2
45	3	10	14	15	8	10	16	12	12	5	3	2
00	13	7	13	13	18	15	14	14	10	5	7	5
Hr Total	**32**	**33**	**50**	**43**	**50**	**55**	**48**	**59**	**43**	**30**	**22**	**16**

24 Hour Total : 673
AM Peak Hour begins : 11:00 AM Peak Volume : 37 AM Peak Hour Factor : 0.93
PM Peak Hour begins : 18:30 PM Peak Volume : 63 PM PeaK Hour Factor : 0.75

2-Mar-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	1	0	0	2	8	10	15	14	14	13	15
30	2	2	1	3	2	2	14	12	20	15	17	18
45	4	2	3	2	0	7	14	17	17	13	10	17
00	3	1	0	2	1	6	9	20	14	15	12	16
Hr Total	**14**	**6**	**4**	**7**	**5**	**23**	**47**	**64**	**65**	**57**	**52**	**66**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	20	19	21	20	20	25	25	37	16	20	12	9
30	12	12	24	15	22	29	21	28	23	13	9	3
45	7	16	26	29	18	19	29	19	18	11	4	3
00	28	13	19	26	25	25	27	24	18	8	10	6
Hr Total	**67**	**60**	**90**	**90**	**85**	**98**	**102**	**108**	**75**	**52**	**35**	**21**

24 Hour Total : 1,293
AM Peak Hour begins : 7:30 AM Peak Volume : 71 AM Peak Hour Factor : 0.89
PM Peak Hour begins : 18:30 PM Peak Volume : 121 PM PeaK Hour Factor : 0.82

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 3, 2022 Start Time 00:00
Stop Date : March 3, 2022 Stop Time 24:00
County : Orange
Location : Hawthorne Ave South of Ocoee Apopka Rd

VHB Project #: 63534.04

4-Mar-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	1	0	0	0	1	2	19	7	12	14	6
30	1	0	0	1	1	3	5	6	11	8	10	3
45	2	0	1	0	0	6	8	13	11	4	5	8
00	0	1	1	1	1	5	8	12	19	8	5	10
Hr Total	**3**	**2**	**2**	**2**	**2**	**15**	**23**	**50**	**48**	**32**	**34**	**27**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	3	9	10	8	13	17	12	18	14	7	6	3
30	3	7	6	8	20	12	13	13	5	5	4	1
45	10	3	10	6	19	12	11	8	8	5	6	2
00	9	10	17	8	11	9	19	9	7	6	3	3
Hr Total	**25**	**29**	**43**	**30**	**63**	**50**	**55**	**48**	**34**	**23**	**19**	**9**

24 Hour Total : 668
AM Peak Hour begins : 8:15 AM Peak Volume : 53 AM Peak Hour Factor : 0.70
PM Peak Hour begins : 16:15 PM Peak Volume : 67 PM PeaK Hour Factor : 0.84

4-Mar-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	1	0	2	0	1	2	6	10	3	4	9
30	2	1	1	0	1	0	2	4	10	9	9	9
45	1	1	0	0	0	0	5	7	7	8	13	15
00	6	0	4	1	2	4	3	10	10	12	4	8
Hr Total	**10**	**3**	**5**	**3**	**3**	**5**	**12**	**27**	**37**	**32**	**30**	**41**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	12	23	9	7	13	18	17	20	14	7	10	4
30	13	13	12	16	23	17	20	17	16	8	6	2
45	12	11	16	13	13	13	8	8	10	9	7	4
00	7	10	13	15	20	11	20	17	13	5	4	3
Hr Total	**44**	**57**	**50**	**51**	**69**	**59**	**65**	**62**	**53**	**29**	**27**	**13**

24 Hour Total : 787
AM Peak Hour begins : 11:00 AM Peak Volume : 41 AM Peak Hour Factor : 0.68
PM Peak Hour begins : 16:15 PM Peak Volume : 74 PM PeaK Hour Factor : 0.80

4-Mar-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	2	0	2	0	2	4	25	17	15	18	15
30	3	1	1	1	2	3	7	10	21	17	19	12
45	3	1	1	0	0	6	13	20	18	12	18	23
00	6	1	5	2	3	9	11	22	29	20	9	18
Hr Total	**13**	**5**	**7**	**5**	**5**	**20**	**35**	**77**	**85**	**64**	**64**	**68**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	15	32	19	15	26	35	29	38	28	14	16	7
30	16	20	18	24	43	29	33	30	21	13	10	3
45	22	14	26	19	32	25	19	16	18	14	13	6
00	16	20	30	23	31	20	39	26	20	11	7	6
Hr Total	**69**	**86**	**93**	**81**	**132**	**109**	**120**	**110**	**87**	**52**	**46**	**22**

24 Hour Total : 1,455
AM Peak Hour begins : 8:00 AM Peak Volume : 85 AM Peak Hour Factor : 0.73
PM Peak Hour begins : 16:15 PM Peak Volume : 141 PM PeaK Hour Factor : 0.82

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 2, 2022 Start Time 00:00
Stop Date : March 3, 2022 Stop Time 24:00
County : Orange
Location : Hawthorne Ave South of Ocoee Apopka Rd

VHB Project #: 63534.04

AVERAGE **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	1	1	0	0	1	3	4	15	8	10	10	6
30	2	1	1	2	1	3	7	5	13	7	9	6
45	2	0	1	1	0	5	9	11	11	4	6	8
00	0	1	1	1	1	5	7	11	14	8	7	9
Hr Total	**5**	**3**	**3**	**4**	**3**	**16**	**27**	**42**	**46**	**29**	**32**	**29**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	7	9	12	11	11	14	14	17	11	7	6	3
30	5	7	8	8	15	13	13	15	8	6	4	1
45	7	5	11	10	15	11	12	8	7	6	4	2
00	12	8	12	11	9	10	16	10	8	5	3	2
Hr Total	**31**	**29**	**43**	**40**	**50**	**48**	**55**	**50**	**34**	**24**	**17**	**8**

24 Hour Total : 668
AM Peak Hour begins : 8:15 AM Peak Volume : 48 AM Peak Hour Factor : 0.86
PM Peak Hour begins : 18:30 PM Peak Volume : 60 PM PeaK Hour Factor : 0.88

AVERAGE **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	1	0	1	1	3	3	5	8	5	6	9
30	1	1	1	1	1	0	4	6	8	9	10	9
45	2	2	1	0	0	2	5	8	7	9	8	13
00	5	0	2	1	1	3	3	11	8	10	4	9
Hr Total	**10**	**4**	**4**	**3**	**3**	**8**	**15**	**30**	**31**	**33**	**28**	**40**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	11	17	9	7	13	16	14	21	12	10	9	6
30	10	10	14	12	18	17	14	15	14	8	6	2
45	8	11	15	14	11	12	12	10	11	7	5	3
00	10	9	13	14	19	13	17	16	12	5	6	4
Hr Total	**39**	**47**	**51**	**47**	**61**	**58**	**57**	**62**	**49**	**30**	**26**	**15**

24 Hour Total : 751
AM Peak Hour begins : 11:00 AM Peak Volume : 40 AM Peak Hour Factor : 0.77
PM Peak Hour begins : 18:30 PM Peak Volume : 65 PM PeaK Hour Factor : 0.77

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	2	0	1	2	6	7	20	16	15	16	15
30	3	2	2	3	2	3	11	11	21	16	19	15
45	4	2	2	1	0	7	14	19	18	13	14	21
00	5	1	3	2	2	8	10	22	22	18	11	18
Hr Total	**15**	**7**	**7**	**7**	**6**	**24**	**42**	**72**	**77**	**62**	**60**	**69**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	18	26	21	18	24	30	28	38	23	17	15	9
30	15	17	22	20	33	30	27	30	22	14	10	3
45	15	16	26	24	26	23	24	18	18	13	9	5
00	22	17	25	25	28	23	33	26	20	10	9	6
Hr Total	**70**	**76**	**94**	**87**	**111**	**106**	**112**	**112**	**83**	**54**	**43**	**23**

24 Hour Total : 1,419
AM Peak Hour begins : 7:30 AM Peak Volume : 78 AM Peak Hour Factor : 0.89
PM Peak Hour begins : 18:30 PM Peak Volume : 125 PM PeaK Hour Factor : 0.82

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	4
COUNT LOCATION	Marden Road south of Ocoee Apopka Road
VHB PROJECT #	63534.04
Equipment ID	54

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	January 18, 2022	**Start Time**	12:00 AM
End Date	January 20, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total		NB	SB
ADT	5,059		2,196	2,863
Peak Hour	7:15 AM	to	8:15 AM	
	Peak Hour Total		**NB**	**SB**
	409		189	220

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 8.08% **D =** 53.8%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	4
COUNT LOCATION	Marden Road south of Ocoee Apopka Road
VHB PROJECT #	63534.04
Equipment ID	54

HOUR END AT	HOURLY VOLUME DIRECTION (NB)	HOURLY VOLUME DIRECTION (SB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB)	DISTRIBUTION PERCENT DIRECTION (SB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	1	18	19	0.05%	0.63%	0.38%
2:00 AM	1	13	14	0.05%	0.45%	0.28%
3:00 AM	4	9	13	0.18%	0.31%	0.26%
4:00 AM	3	16	19	0.14%	0.56%	0.38%
5:00 AM	12	11	23	0.55%	0.38%	0.45%
6:00 AM	34	40	74	1.55%	1.40%	1.46%
7:00 AM	131	112	243	5.97%	3.91%	4.80%
8:00 AM	183	196	379	8.33%	6.85%	7.49%
9:00 AM	163	231	394	7.42%	8.07%	7.79%
10:00 AM	127	121	248	5.78%	4.23%	4.90%
11:00 AM	124	135	259	5.65%	4.72%	5.12%
12:00 PM	120	130	250	5.46%	4.54%	4.94%
1:00 PM	137	136	273	6.24%	4.75%	5.40%
2:00 PM	153	172	325	6.97%	6.01%	6.42%
3:00 PM	170	175	345	7.74%	6.11%	6.82%
4:00 PM	173	202	375	7.88%	7.06%	7.41%
5:00 PM	140	228	368	6.38%	7.96%	7.27%
6:00 PM	149	238	387	6.79%	8.31%	7.65%
7:00 PM	136	207	343	6.19%	7.23%	6.78%
8:00 PM	118	157	275	5.37%	5.48%	5.44%
9:00 PM	68	127	195	3.10%	4.44%	3.85%
10:00 PM	14	95	109	0.64%	3.32%	2.15%
11:00 PM	20	59	79	0.91%	2.06%	1.56%
12:00 AM	15	35	50	0.68%	1.22%	0.99%
TOTALS	**2,196**	**2,863**	**5,059**	**100.02%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022 Start Time 00:00
Stop Date : January 18, 2022 Stop Time 24:00
County : Orange
Location : Marden Road south of Ocoee Apopka Road

VHB Project #: 63534.04

18-Jan-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	7	25	29	39	25	32	18
30	0	0	2	2	2	12	32	54	44	39	32	41
45	0	0	5	0	4	7	34	47	38	28	39	35
00	0	1	0	0	6	14	49	50	42	26	32	33
Hr Total	**0**	**1**	**7**	**2**	**12**	**40**	**140**	**180**	**163**	**118**	**135**	**127**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	27	34	26	58	40	27	7	32	9	5	3	1
30	27	34	34	54	46	34	30	35	17	0	5	5
45	33	33	37	36	20	24	29	26	14	0	7	5
00	35	50	45	39	36	28	31	8	12	0	11	0
Hr Total	**122**	**151**	**142**	**187**	**142**	**113**	**97**	**101**	**52**	**5**	**26**	**11**

24 Hour Total : 2,074
AM Peak Hour begins : 7:15 AM Peak Volume : 190 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 14:30 PM Peak Volume : 194 PM PeaK Hour Factor : 0.84

18-Jan-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	5	0	7	1	8	22	42	70	15	32	32
30	5	6	1	3	3	9	23	50	65	25	33	38
45	4	5	1	2	1	11	31	50	53	32	31	31
00	5	2	5	2	5	11	44	52	42	23	27	25
Hr Total	**20**	**18**	**7**	**14**	**10**	**39**	**120**	**194**	**230**	**95**	**123**	**126**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	39	39	39	52	49	67	44	45	42	25	24	12
30	33	33	35	48	66	51	52	35	34	23	9	6
45	31	47	42	46	56	57	58	37	33	28	16	9
00	30	43	62	53	48	67	54	40	20	17	6	6
Hr Total	**133**	**162**	**178**	**199**	**219**	**242**	**208**	**157**	**129**	**93**	**55**	**33**

24 Hour Total : 2,804
AM Peak Hour begins : 7:45 AM Peak Volume : 240 AM Peak Hour Factor : 0.86
PM Peak Hour begins : 17:00 PM Peak Volume : 242 PM PeaK Hour Factor : 0.90

18-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	5	0	7	1	15	47	71	109	40	64	50
30	5	6	3	5	5	21	55	104	109	64	65	79
45	4	5	6	2	5	18	65	97	91	60	70	66
00	5	3	5	2	11	25	93	102	84	49	59	58
Hr Total	**20**	**19**	**14**	**16**	**22**	**79**	**260**	**374**	**393**	**213**	**258**	**253**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	66	73	65	110	89	94	51	77	51	30	27	13
30	60	67	69	102	112	85	82	70	51	23	14	11
45	64	80	79	82	76	81	87	63	47	28	23	14
00	65	93	107	92	84	95	85	48	32	17	17	6
Hr Total	**255**	**313**	**320**	**386**	**361**	**355**	**305**	**258**	**181**	**98**	**81**	**44**

24 Hour Total : 4,878
AM Peak Hour begins : 7:30 AM Peak Volume : 417 AM Peak Hour Factor : 0.96
PM Peak Hour begins : 14:45 PM Peak Volume : 401 PM PeaK Hour Factor : 0.91

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 19, 2022 Start Time 00:00
Stop Date : January 19, 2022 Stop Time 24:00
County : Orange
Location : Marden Road south of Ocoee Apopka Road

VHB Project #: 63534.04

20-Jan-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	1	5	23	50	52	43	26	27
30	2	0	0	0	2	6	24	54	25	34	32	32
45	0	0	0	1	1	3	33	41	42	22	23	29
00	0	1	0	2	6	14	41	40	42	35	32	22
Hr Total	**2**	**1**	**0**	**3**	**10**	**28**	**121**	**185**	**161**	**134**	**113**	**110**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	36	31	48	47	27	50	45	41	17	10	2	4
30	40	36	58	44	30	43	46	38	19	8	4	8
45	36	50	41	31	39	46	51	24	24	1	5	5
00	36	35	51	35	39	44	32	30	24	2	1	0
Hr Total	**148**	**152**	**198**	**157**	**135**	**183**	**174**	**133**	**84**	**21**	**12**	**17**

24 Hour Total : 2,282
AM Peak Hour begins : 7:15 AM Peak Volume : 187 AM Peak Hour Factor : 0.87
PM Peak Hour begins : 14:00 PM Peak Volume : 198 PM PeaK Hour Factor : 0.85

20-Jan-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	4	4	1	7	2	5	14	49	70	32	33	29
30	5	2	3	2	3	9	18	52	74	33	37	29
45	3	1	3	5	1	15	31	47	42	49	30	37
00	3	0	3	2	5	11	39	48	43	31	45	36
Hr Total	**15**	**7**	**10**	**16**	**11**	**40**	**102**	**196**	**229**	**145**	**145**	**131**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	28	47	48	56	59	71	69	33	39	20	17	14
30	36	47	38	51	52	60	45	33	23	25	12	9
45	30	43	47	51	62	55	44	46	30	27	11	10
00	42	44	35	44	63	46	46	44	30	23	19	2
Hr Total	**136**	**181**	**168**	**202**	**236**	**232**	**204**	**156**	**122**	**95**	**59**	**35**

24 Hour Total : 2,873
AM Peak Hour begins : 7:30 AM Peak Volume : 239 AM Peak Hour Factor : 0.81
PM Peak Hour begins : 16:30 PM Peak Volume : 256 PM PeaK Hour Factor : 0.90

20-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	4	4	1	7	3	10	37	99	122	75	59	56
30	7	2	3	2	5	15	42	106	99	67	69	61
45	3	1	3	6	2	18	64	88	84	71	53	66
00	3	1	3	4	11	25	80	88	85	66	77	58
Hr Total	**17**	**8**	**10**	**19**	**21**	**68**	**223**	**381**	**390**	**279**	**258**	**241**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	64	78	96	103	86	121	114	74	56	30	19	18
30	76	83	96	95	82	103	91	71	42	33	16	17
45	66	93	88	82	101	101	95	70	54	28	16	15
00	78	79	86	79	102	90	78	74	54	25	20	2
Hr Total	**284**	**333**	**366**	**359**	**371**	**415**	**378**	**289**	**206**	**116**	**71**	**52**

24 Hour Total : 5,155
AM Peak Hour begins : 7:15 AM Peak Volume : 404 AM Peak Hour Factor : 0.83
PM Peak Hour begins : 16:30 PM Peak Volume : 427 PM PeaK Hour Factor : 0.88

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022 Start Time 00:00
Stop Date : January 19, 2022 Stop Time 24:00
County : Orange
Location : Marden Road south of Ocoee Apopka Road

VHB Project #: 63534.04

AVERAGE **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	1	6	24	40	46	34	29	23
30	1	0	1	1	2	9	28	54	35	37	32	37
45	0	0	3	1	3	5	34	44	40	25	31	32
00	0	1	0	1	6	14	45	45	42	31	32	28
Hr Total	**1**	**1**	**4**	**3**	**12**	**34**	**131**	**183**	**163**	**127**	**124**	**120**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	32	33	37	53	34	39	26	37	13	8	3	3
30	34	35	46	49	38	39	38	37	18	4	5	7
45	35	42	39	34	30	35	40	25	19	1	6	5
00	36	43	48	37	38	36	32	19	18	1	6	0
Hr Total	**137**	**153**	**170**	**173**	**140**	**149**	**136**	**118**	**68**	**14**	**20**	**15**

24 Hour Total : 2,196
AM Peak Hour begins : 7:15 AM Peak Volume : 189 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 14:30 PM Peak Volume : 189 PM PeaK Hour Factor : 0.89

AVERAGE **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	5	1	7	2	7	18	46	70	24	33	31
30	5	4	2	3	3	9	21	51	70	29	35	34
45	4	3	2	4	1	13	31	49	48	41	31	34
00	4	1	4	2	5	11	42	50	43	27	36	31
Hr Total	**18**	**13**	**9**	**16**	**11**	**40**	**112**	**196**	**231**	**121**	**135**	**130**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	34	43	44	54	54	69	57	39	41	23	21	13
30	35	40	37	50	59	56	49	34	29	24	11	8
45	31	45	45	49	59	56	51	42	32	28	14	10
00	36	44	49	49	56	57	50	42	25	20	13	4
Hr Total	**136**	**172**	**175**	**202**	**228**	**238**	**207**	**157**	**127**	**95**	**59**	**35**

24 Hour Total : 2,863
AM Peak Hour begins : 7:30 AM Peak Volume : 239 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 16:15 PM Peak Volume : 243 PM PeaK Hour Factor : 0.88

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	5	1	7	3	13	42	86	116	58	62	54
30	6	4	3	4	5	18	49	105	105	66	67	71
45	4	3	5	5	4	18	65	93	88	66	62	66
00	4	2	4	3	11	25	87	95	85	58	68	59
Hr Total	**19**	**14**	**13**	**19**	**23**	**74**	**243**	**379**	**394**	**248**	**259**	**250**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	66	76	81	107	88	108	83	76	54	31	24	16
30	69	75	83	99	97	95	87	71	47	28	16	15
45	66	87	84	83	89	91	91	67	51	29	20	15
00	72	87	97	86	94	93	82	61	43	21	19	4
Hr Total	**273**	**325**	**345**	**375**	**368**	**387**	**343**	**275**	**195**	**109**	**79**	**50**

24 Hour Total : 5,059
AM Peak Hour begins : 7:15 AM Peak Volume : 409 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 16:15 PM Peak Volume : 388 PM PeaK Hour Factor : 0.90

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	2
COUNT LOCATION	8 Hr Volume Count - Michael Gladen - East of Hawthorne Ave
VHB PROJECT #	63534.04
Equipment ID	21

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	March 2, 2022	**Start Time**	12:00 AM
End Date	March 4, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total	EB	WB
ADT	7,737	3,772	3,965

Peak Hour 4:30 PM to 5:30 PM

Peak Hour Total	EB	WB
681	312	369

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 8.80% **D =** 54.2%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	2
COUNT LOCATION	8 Hr Volume Count - Michael Gladen - East of Hawthorne Ave
VHB PROJECT #	63534.04
Equipment ID	21

HOUR END AT	HOURLY VOLUME DIRECTION (EB)	HOURLY VOLUME DIRECTION (WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (EB)	DISTRIBUTION PERCENT DIRECTION (WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	23	29	52	0.61%	0.73%	0.67%
2:00 AM	11	14	25	0.29%	0.35%	0.32%
3:00 AM	12	11	23	0.32%	0.28%	0.30%
4:00 AM	10	14	24	0.27%	0.35%	0.31%
5:00 AM	25	20	45	0.66%	0.50%	0.58%
6:00 AM	119	53	172	3.15%	1.34%	2.22%
7:00 AM	200	121	321	5.30%	3.05%	4.15%
8:00 AM	252	280	532	6.68%	7.06%	6.88%
9:00 AM	233	268	501	6.18%	6.76%	6.48%
10:00 AM	174	197	371	4.61%	4.97%	4.80%
11:00 AM	175	191	366	4.64%	4.82%	4.73%
12:00 PM	184	213	397	4.88%	5.37%	5.13%
1:00 PM	197	220	417	5.22%	5.55%	5.39%
2:00 PM	220	230	450	5.83%	5.80%	5.82%
3:00 PM	204	247	451	5.41%	6.23%	5.83%
4:00 PM	250	307	557	6.63%	7.74%	7.20%
5:00 PM	281	334	615	7.45%	8.42%	7.95%
6:00 PM	293	350	643	7.77%	8.83%	8.31%
7:00 PM	269	294	563	7.13%	7.41%	7.28%
8:00 PM	205	206	411	5.43%	5.20%	5.31%
9:00 PM	168	148	316	4.45%	3.73%	4.08%
10:00 PM	132	99	231	3.50%	2.50%	2.99%
11:00 PM	80	76	156	2.12%	1.92%	2.02%
12:00 AM	55	43	98	1.46%	1.08%	1.27%
TOTALS	**3,772**	**3,965**	**7,737**	**99.99%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 2, 2022 Start Time 00:00
Stop Date : March 2, 2022 Stop Time 24:00
County : Orange
Location : 8 Hr Volume Count - Michael Gladen - East of Hawthorne Ave

VHB Project #: 63534.04

2-Mar-22 **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	11	1	1	1	6	12	36	60	71	38	40	39
30	1	2	0	2	4	22	62	67	52	39	45	45
45	5	1	8	3	9	35	54	49	55	44	42	39
00	6	4	1	3	9	44	56	65	51	44	49	51
Hr Total	**23**	**8**	**10**	**9**	**28**	**113**	**208**	**241**	**229**	**165**	**176**	**174**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	42	61	58	53	61	88	63	70	57	38	22	19
30	51	60	36	71	67	75	77	46	43	48	21	9
45	42	38	57	63	65	56	63	36	31	34	17	13
00	56	62	58	70	79	60	69	40	35	17	20	13
Hr Total	**191**	**221**	**209**	**257**	**272**	**279**	**272**	**192**	**166**	**137**	**80**	**54**

24 Hour Total : 3,714
AM Peak Hour begins : 7:15 AM Peak Volume : 252 AM Peak Hour Factor : 0.89
PM Peak Hour begins : 16:30 PM Peak Volume : 307 PM PeaK Hour Factor : 0.87

2-Mar-22 **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	13	2	1	4	4	8	25	45	59	45	39	48
30	6	1	3	1	5	10	30	75	82	46	38	56
45	6	2	3	2	5	14	25	74	69	60	48	64
00	8	2	2	2	5	14	35	84	55	52	57	48
Hr Total	**33**	**7**	**9**	**9**	**19**	**46**	**115**	**278**	**265**	**203**	**182**	**216**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	69	52	60	64	82	98	77	58	43	31	17	14
30	37	51	72	74	94	96	72	49	36	19	19	10
45	46	63	64	72	89	77	63	58	41	25	16	13
00	53	70	64	74	81	75	68	41	32	21	16	9
Hr Total	**205**	**236**	**260**	**284**	**346**	**346**	**280**	**206**	**152**	**96**	**68**	**46**

24 Hour Total : 3,907
AM Peak Hour begins : 7:30 AM Peak Volume : 299 AM Peak Hour Factor : 0.89
PM Peak Hour begins : 16:30 PM Peak Volume : 364 PM PeaK Hour Factor : 0.93

2-Mar-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	24	3	2	5	10	20	61	105	130	83	79	87
30	7	3	3	3	9	32	92	142	134	85	83	101
45	11	3	11	5	14	49	79	123	124	104	90	103
00	14	6	3	5	14	58	91	149	106	96	106	99
Hr Total	**56**	**15**	**19**	**18**	**47**	**159**	**323**	**519**	**494**	**368**	**358**	**390**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	111	113	118	117	143	186	140	128	100	69	39	33
30	88	111	108	145	161	171	149	95	79	67	40	19
45	88	101	121	135	154	133	126	94	72	59	33	26
00	109	132	122	144	160	135	137	81	67	38	36	22
Hr Total	**396**	**457**	**469**	**541**	**618**	**625**	**552**	**398**	**318**	**233**	**148**	**100**

24 Hour Total : 7,621
AM Peak Hour begins : 7:15 AM Peak Volume : 544 AM Peak Hour Factor : 0.91
PM Peak Hour begins : 16:30 PM Peak Volume : 671 PM PeaK Hour Factor : 0.90

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 3, 2022 Start Time 00:00
Stop Date : March 3, 2022 Stop Time 24:00
County : Orange
Location : 8 Hr Volume Count - Michael Gladen - East of Hawthorne Ave

VHB Project #: 63534.04

4-Mar-22 **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	4	4	3	4	2	17	24	53	61	48	41	54
30	5	3	0	0	2	18	53	56	65	46	39	46
45	6	3	5	1	11	39	43	67	51	38	48	44
00	5	2	4	4	7	49	70	85	58	49	45	47
Hr Total	**20**	**12**	**12**	**9**	**22**	**123**	**190**	**261**	**235**	**181**	**173**	**191**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	51	55	54	52	60	87	65	71	52	32	20	18
30	51	52	42	51	75	74	83	54	37	32	21	15
45	54	64	48	67	73	84	60	46	36	37	28	13
00	45	47	54	72	81	59	56	46	43	25	10	8
Hr Total	**201**	**218**	**198**	**242**	**289**	**304**	**264**	**217**	**168**	**126**	**79**	**54**

24 Hour Total : 3,789
AM Peak Hour begins : 7:30 AM Peak Volume : 278 AM Peak Hour Factor : 0.82
PM Peak Hour begins : 16:45 PM Peak Volume : 326 PM PeaK Hour Factor : 0.94

4-Mar-22 **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	8	3	8	1	14	26	52	71	43	62	34
30	4	4	2	4	4	9	28	83	70	54	47	55
45	5	4	4	3	7	17	30	76	70	53	40	63
00	8	4	1	1	7	17	41	70	58	40	48	55
Hr Total	**24**	**20**	**10**	**16**	**19**	**57**	**125**	**281**	**269**	**190**	**197**	**207**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	63	65	48	84	68	105	87	56	30	36	20	8
30	59	52	54	82	80	93	77	54	44	27	24	10
45	45	45	69	84	102	83	67	53	35	16	17	6
00	67	59	62	79	71	71	75	41	33	21	20	14
Hr Total	**234**	**221**	**233**	**329**	**321**	**352**	**306**	**204**	**142**	**100**	**81**	**38**

24 Hour Total : 3,976
AM Peak Hour begins : 7:15 AM Peak Volume : 300 AM Peak Hour Factor : 0.90
PM Peak Hour begins : 16:30 PM Peak Volume : 371 PM PeaK Hour Factor : 0.88

4-Mar-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	11	12	6	12	3	31	50	105	132	91	103	88
30	9	7	2	4	6	27	81	139	135	100	86	101
45	11	7	9	4	18	56	73	143	121	91	88	107
00	13	6	5	5	14	66	111	155	116	89	93	102
Hr Total	**44**	**32**	**22**	**25**	**41**	**180**	**315**	**542**	**504**	**371**	**370**	**398**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	114	120	102	136	128	192	152	127	82	68	40	26
30	110	104	96	133	155	167	160	108	81	59	45	25
45	99	109	117	151	175	167	127	99	71	53	45	19
00	112	106	116	151	152	130	131	87	76	46	30	22
Hr Total	**435**	**439**	**431**	**571**	**610**	**656**	**570**	**421**	**310**	**226**	**160**	**92**

24 Hour Total : 7,765
AM Peak Hour begins : 7:15 AM Peak Volume : 569 AM Peak Hour Factor : 0.92
PM Peak Hour begins : 16:30 PM Peak Volume : 686 PM PeaK Hour Factor : 0.89

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : March 2, 2022 Start Time 00:00
Stop Date : March 3, 2022 Stop Time 24:00
County : Orange
Location : 8 Hr Volume Count - Michael Gladen - East of Hawthorne Ave

VHB Project #: 63534.04

AVERAGE **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	8	3	2	3	4	15	30	57	66	43	41	47
30	3	3	0	1	3	20	58	62	59	43	42	46
45	6	2	7	2	10	37	49	58	53	41	45	42
00	6	3	3	4	8	47	63	75	55	47	47	49
Hr Total	**23**	**11**	**12**	**10**	**25**	**119**	**200**	**252**	**233**	**174**	**175**	**184**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	47	58	56	53	61	88	64	71	55	35	21	19
30	51	56	39	61	71	75	80	50	40	40	21	12
45	48	51	53	65	69	70	62	41	34	36	23	13
00	51	55	56	71	80	60	63	43	39	21	15	11
Hr Total	**197**	**220**	**204**	**250**	**281**	**293**	**269**	**205**	**168**	**132**	**80**	**55**

24 Hour Total : 3,772
AM Peak Hour begins : 7:15 AM Peak Volume : 261 AM Peak Hour Factor : 0.87
PM Peak Hour begins : 16:45 PM Peak Volume : 313 PM PeaK Hour Factor : 0.89

AVERAGE **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	10	5	2	6	3	11	26	49	65	44	51	41
30	5	3	3	3	5	10	29	79	76	50	43	56
45	6	3	4	3	6	16	28	75	70	57	44	64
00	8	3	2	2	6	16	38	77	57	46	53	52
Hr Total	**29**	**14**	**11**	**14**	**20**	**53**	**121**	**280**	**268**	**197**	**191**	**213**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	66	59	54	74	75	102	82	57	37	34	19	11
30	48	52	63	78	87	95	75	52	40	23	22	10
45	46	54	67	78	96	80	65	56	38	21	17	10
00	60	65	63	77	76	73	72	41	33	21	18	12
Hr Total	**220**	**230**	**247**	**307**	**334**	**350**	**294**	**206**	**148**	**99**	**76**	**43**

24 Hour Total : 3,965
AM Peak Hour begins : 7:15 AM Peak Volume : 296 AM Peak Hour Factor : 0.94
PM Peak Hour begins : 16:30 PM Peak Volume : 369 PM PeaK Hour Factor : 0.90

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	18	8	4	9	7	26	56	106	131	87	92	88
30	8	6	3	4	8	30	87	141	135	93	85	102
45	12	5	11	5	16	53	77	133	123	98	89	106
00	14	6	5	6	14	63	101	152	112	93	100	101
Hr Total	**52**	**25**	**23**	**24**	**45**	**172**	**321**	**532**	**501**	**371**	**366**	**397**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	113	117	110	127	136	190	146	128	92	69	40	30
30	99	108	102	139	158	170	155	102	80	63	43	22
45	94	105	120	143	165	150	127	97	72	57	40	23
00	111	120	119	148	156	133	135	84	72	42	33	23
Hr Total	**417**	**450**	**451**	**557**	**615**	**643**	**563**	**411**	**316**	**231**	**156**	**98**

24 Hour Total : 7,737
AM Peak Hour begins : 7:15 AM Peak Volume : 557 AM Peak Hour Factor : 0.92
PM Peak Hour begins : 16:30 PM Peak Volume : 681 PM PeaK Hour Factor : 0.90

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	5
COUNT LOCATION	Ocoee Apopka Road South of Harmon Road
VHB PROJECT #	63534.04
Equipment ID	60

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	January 18, 2022	**Start Time**	12:00 AM
End Date	January 20, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total	NB	SB
ADT	10,994	5,621	5,373

Peak Hour 4:30 PM to 5:30 PM

Peak Hour Total	NB	SB
931	512	419

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 8.47% **D =** 55.0%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	5
COUNT LOCATION	Ocoee Apopka Road South of Harmon Road
VHB PROJECT #	63534.04
Equipment ID	60

HOUR END AT	HOURLY VOLUME DIRECTION (NB)	HOURLY VOLUME DIRECTION (SB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB)	DISTRIBUTION PERCENT DIRECTION (SB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	51	37	88	0.91%	0.69%	0.80%
2:00 AM	26	27	53	0.46%	0.50%	0.48%
3:00 AM	30	26	56	0.53%	0.48%	0.51%
4:00 AM	32	33	65	0.57%	0.61%	0.59%
5:00 AM	46	66	112	0.82%	1.23%	1.02%
6:00 AM	108	181	289	1.92%	3.37%	2.63%
7:00 AM	239	380	619	4.25%	7.07%	5.63%
8:00 AM	395	503	898	7.03%	9.36%	8.17%
9:00 AM	371	387	758	6.60%	7.20%	6.89%
10:00 AM	273	299	572	4.86%	5.56%	5.20%
11:00 AM	246	245	491	4.38%	4.56%	4.47%
12:00 PM	255	236	491	4.54%	4.39%	4.47%
1:00 PM	282	288	570	5.02%	5.36%	5.18%
2:00 PM	303	330	633	5.39%	6.14%	5.76%
3:00 PM	357	313	670	6.35%	5.83%	6.09%
4:00 PM	409	320	729	7.28%	5.96%	6.63%
5:00 PM	459	379	838	8.17%	7.05%	7.62%
6:00 PM	511	376	887	9.09%	7.00%	8.07%
7:00 PM	444	288	732	7.90%	5.36%	6.66%
8:00 PM	282	208	490	5.02%	3.87%	4.46%
9:00 PM	202	187	389	3.59%	3.48%	3.54%
10:00 PM	135	147	282	2.40%	2.74%	2.57%
11:00 PM	87	73	160	1.55%	1.36%	1.46%
12:00 AM	78	44	122	1.39%	0.82%	1.11%
TOTALS	**5,621**	**5,373**	**10,994**	**100.02%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022 Start Time 00:00
Stop Date : January 18, 2022 Stop Time 24:00
County : Orange
Location : Ocoee Apopka Road South of Harmon Road

VHB Project #: 63534.04

18-Jan-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	14	9	3	12	12	16	37	73	100	71	56	70
30	7	6	2	6	16	22	62	98	89	55	77	61
45	11	6	16	7	11	23	65	98	92	62	63	60
00	13	10	11	6	10	38	76	129	84	71	55	79
Hr Total	**45**	**31**	**32**	**31**	**49**	**99**	**240**	**398**	**365**	**259**	**251**	**270**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	59	74	80	78	117	141	126	92	62	38	30	11
30	62	73	89	126	100	142	125	70	52	33	19	27
45	75	92	82	93	119	128	101	76	43	23	17	25
00	70	75	111	120	121	116	97	56	40	29	14	12
Hr Total	**266**	**314**	**362**	**417**	**457**	**527**	**449**	**294**	**197**	**123**	**80**	**75**

24 Hour Total : 5,631
AM Peak Hour begins : 7:15 AM Peak Volume : 425 AM Peak Hour Factor : 0.82
PM Peak Hour begins : 16:45 PM Peak Volume : 532 PM PeaK Hour Factor : 0.94

18-Jan-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	4	4	11	13	31	60	110	105	81	60	45
30	10	8	7	10	9	24	106	131	123	97	76	57
45	8	9	10	8	20	65	110	135	71	79	58	80
00	11	1	6	7	28	55	97	108	89	62	74	60
Hr Total	**38**	**22**	**27**	**36**	**70**	**175**	**373**	**484**	**388**	**319**	**268**	**242**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	81	82	74	82	83	127	95	69	51	60	12	6
30	89	74	74	85	88	80	59	71	42	44	16	8
45	52	78	82	73	110	85	78	39	55	31	18	9
00	71	75	80	70	92	90	62	44	39	20	10	11
Hr Total	**293**	**309**	**310**	**310**	**373**	**382**	**294**	**223**	**187**	**155**	**56**	**34**

24 Hour Total : 5,368
AM Peak Hour begins : 7:00 AM Peak Volume : 484 AM Peak Hour Factor : 0.90
PM Peak Hour begins : 16:15 PM Peak Volume : 417 PM PeaK Hour Factor : 0.82

18-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	23	13	7	23	25	47	97	183	205	152	116	115
30	17	14	9	16	25	46	168	229	212	152	153	118
45	19	15	26	15	31	88	175	233	163	141	121	140
00	24	11	17	13	38	93	173	237	173	133	129	139
Hr Total	**83**	**53**	**59**	**67**	**119**	**274**	**613**	**882**	**753**	**578**	**519**	**512**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	140	156	154	160	200	268	221	161	113	98	42	17
30	151	147	163	211	188	222	184	141	94	77	35	35
45	127	170	164	166	229	213	179	115	98	54	35	34
00	141	150	191	190	213	206	159	100	79	49	24	23
Hr Total	**559**	**623**	**672**	**727**	**830**	**909**	**743**	**517**	**384**	**278**	**136**	**109**

24 Hour Total : 10,999
AM Peak Hour begins : 7:15 AM Peak Volume : 904 AM Peak Hour Factor : 0.95
PM Peak Hour begins : 16:30 PM Peak Volume : 932 PM PeaK Hour Factor : 0.87

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 19, 2022 Start Time 00:00
Stop Date : January 19, 2022 Stop Time 24:00
County : Orange
Location : Ocoee Apopka Road South of Harmon Road

VHB Project #: 63534.04

20-Jan-22 **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	23	7	4	7	5	16	44	81	109	76	43	49
30	17	4	3	5	8	20	50	95	96	66	56	61
45	8	4	5	10	14	37	62	100	91	70	68	70
00	6	6	12	7	14	43	80	115	78	73	71	59
Hr Total	**54**	**21**	**24**	**29**	**41**	**116**	**236**	**391**	**374**	**285**	**238**	**239**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	72	74	71	88	97	124	110	80	60	37	26	20
30	58	80	70	91	124	135	125	74	52	36	19	20
45	83	68	112	113	122	124	105	62	57	43	24	15
00	83	68	96	107	117	110	98	53	37	29	23	24
Hr Total	**296**	**290**	**349**	**399**	**460**	**493**	**438**	**269**	**206**	**145**	**92**	**79**

24 Hour Total : 5,564
AM Peak Hour begins : 7:30 AM Peak Volume : 420 AM Peak Hour Factor : 0.91
PM Peak Hour begins : 16:45 PM Peak Volume : 500 PM PeaK Hour Factor : 0.93

20-Jan-22 **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	6	7	8	8	22	71	133	115	75	68	56
30	8	10	5	5	14	37	88	154	98	65	36	58
45	11	10	8	8	15	60	108	118	88	87	55	59
00	8	4	4	6	21	65	118	113	83	51	62	54
Hr Total	**33**	**30**	**24**	**27**	**58**	**184**	**385**	**518**	**384**	**278**	**221**	**227**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	55	76	87	79	89	128	88	56	56	50	30	19
30	77	102	73	76	92	96	68	47	38	40	19	8
45	74	89	61	85	105	72	71	51	55	23	23	14
00	77	82	91	87	98	72	51	37	36	25	15	10
Hr Total	**283**	**349**	**312**	**327**	**384**	**368**	**278**	**191**	**185**	**138**	**87**	**51**

24 Hour Total : 5,322
AM Peak Hour begins : 6:45 AM Peak Volume : 523 AM Peak Hour Factor : 0.85
PM Peak Hour begins : 16:30 PM Peak Volume : 427 PM PeaK Hour Factor : 0.83

20-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	29	13	11	15	13	38	115	214	224	151	111	105
30	25	14	8	10	22	57	138	249	194	131	92	119
45	19	14	13	18	29	97	170	218	179	157	123	129
00	14	10	16	13	35	108	198	228	161	124	133	113
Hr Total	**87**	**51**	**48**	**56**	**99**	**300**	**621**	**909**	**758**	**563**	**459**	**466**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	127	150	158	167	186	252	198	136	116	87	56	39
30	135	182	143	167	216	231	193	121	90	76	38	28
45	157	157	173	198	227	196	176	113	112	66	47	29
00	160	150	187	194	215	182	149	90	73	54	38	34
Hr Total	**579**	**639**	**661**	**726**	**844**	**861**	**716**	**460**	**391**	**283**	**179**	**130**

24 Hour Total : 10,886
AM Peak Hour begins : 7:15 AM Peak Volume : 919 AM Peak Hour Factor : 0.92
PM Peak Hour begins : 16:30 PM Peak Volume : 925 PM PeaK Hour Factor : 0.92

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022 Start Time 00:00
Stop Date : January 19, 2022 Stop Time 24:00
County : Orange
Location : Ocoee Apopka Road South of Harmon Road

VHB Project #: 63534.04

AVERAGE **Northbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	19	8	4	10	9	16	41	77	105	74	50	60
30	12	5	3	6	12	21	56	97	93	61	67	61
45	10	5	11	9	13	30	64	99	92	66	66	65
00	10	8	12	7	12	41	78	122	81	72	63	69
Hr Total	**51**	**26**	**30**	**32**	**46**	**108**	**239**	**395**	**371**	**273**	**246**	**255**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	66	74	76	83	107	133	118	86	61	38	28	16
30	60	77	80	109	112	139	125	72	52	35	19	24
45	79	80	97	103	121	126	103	69	50	33	21	20
00	77	72	104	114	119	113	98	55	39	29	19	18
Hr Total	**282**	**303**	**357**	**409**	**459**	**511**	**444**	**282**	**202**	**135**	**87**	**78**

24 Hour Total : 5,621
AM Peak Hour begins : 7:15 AM Peak Volume : 423 AM Peak Hour Factor : 0.87
PM Peak Hour begins : 16:45 PM Peak Volume : 517 PM PeaK Hour Factor : 0.93

AVERAGE **Southbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	8	5	6	10	11	27	66	122	110	78	64	51
30	9	9	6	8	12	31	97	143	111	81	56	58
45	10	10	9	8	18	63	109	127	80	83	57	70
00	10	3	5	7	25	60	108	111	86	57	68	57
Hr Total	**37**	**27**	**26**	**33**	**66**	**181**	**380**	**503**	**387**	**299**	**245**	**236**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	68	79	81	81	86	128	92	63	54	55	21	13
30	83	88	74	81	90	88	64	59	40	42	18	8
45	63	84	72	79	108	79	75	45	55	27	21	12
00	74	79	86	79	95	81	57	41	38	23	13	11
Hr Total	**288**	**330**	**313**	**320**	**379**	**376**	**288**	**208**	**187**	**147**	**73**	**44**

24 Hour Total : 5,373
AM Peak Hour begins : 7:00 AM Peak Volume : 503 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 16:15 PM Peak Volume : 421 PM PeaK Hour Factor : 0.82

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	27	13	10	20	20	43	107	199	215	152	114	111
30	21	14	9	14	24	52	153	240	204	142	123	119
45	20	15	20	17	31	93	173	226	172	149	123	135
00	20	11	17	14	37	101	186	233	167	129	131	126
Hr Total	**88**	**53**	**56**	**65**	**112**	**289**	**619**	**898**	**758**	**572**	**491**	**491**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	134	153	157	164	193	261	210	149	115	93	49	29
30	143	165	154	190	202	227	189	131	92	77	37	32
45	142	164	169	182	229	205	178	114	105	60	42	32
00	151	151	190	193	214	194	155	96	77	52	32	29
Hr Total	**570**	**633**	**670**	**729**	**838**	**887**	**732**	**490**	**389**	**282**	**160**	**122**

24 Hour Total : 10,994
AM Peak Hour begins : 7:15 AM Peak Volume : 914 AM Peak Hour Factor : 0.95
PM Peak Hour begins : 16:30 PM Peak Volume : 931 PM PeaK Hour Factor : 0.89

Traffic Count Data

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	6
COUNT LOCATION	13th St east of Ocoee Apopka Rd
VHB PROJECT #	63534.04
Equipment ID	114

TYPE OF COUNT: 48-Hour APPROACH VOLUME COUNT

TIME OF COUNT:

Start Date	January 18, 2022	**Start Time**	12:00 AM
End Date	January 20, 2022	**End Time**	12:00 AM

VOLUME AVERAGES

	Total	EB	WB
ADT	3,988	2,070	1,918

Peak Hour 7:45 AM to 8:45 AM

Peak Hour Total	EB	WB
402	214	188

MEASURED TRAVEL CHARACTERISTICS

Peak to Daily Ratio

K = 10.08% **D =** 53.2%

Hourly Distribution of Traffic Volumes

Vanasse Hangen Brustlin, Inc.

PROJECT	Ocoee Apopka Centerline
LOCATION CODE	6
COUNT LOCATION	13th St east of Ocoee Apopka Rd
VHB PROJECT #	63534.04
Equipment ID	114

HOUR END AT	HOURLY VOLUME DIRECTION (EB)	HOURLY VOLUME DIRECTION (WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (EB)	DISTRIBUTION PERCENT DIRECTION (WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	14	18	32	0.68%	0.94%	0.80%
2:00 AM	10	13	23	0.48%	0.68%	0.58%
3:00 AM	8	11	19	0.39%	0.57%	0.48%
4:00 AM	10	14	24	0.48%	0.73%	0.60%
5:00 AM	17	14	31	0.82%	0.73%	0.78%
6:00 AM	43	44	87	2.08%	2.29%	2.18%
7:00 AM	77	71	148	3.72%	3.70%	3.71%
8:00 AM	161	138	299	7.78%	7.19%	7.50%
9:00 AM	182	170	352	8.79%	8.86%	8.83%
10:00 AM	95	94	189	4.59%	4.90%	4.74%
11:00 AM	80	69	149	3.86%	3.60%	3.74%
12:00 PM	78	82	160	3.77%	4.28%	4.01%
1:00 PM	109	99	208	5.27%	5.16%	5.22%
2:00 PM	123	114	237	5.94%	5.94%	5.94%
3:00 PM	136	130	266	6.57%	6.78%	6.67%
4:00 PM	161	136	297	7.78%	7.09%	7.45%
5:00 PM	160	153	313	7.73%	7.98%	7.85%
6:00 PM	165	151	316	7.97%	7.87%	7.92%
7:00 PM	143	132	275	6.91%	6.88%	6.90%
8:00 PM	112	107	219	5.41%	5.58%	5.49%
9:00 PM	64	61	125	3.09%	3.18%	3.13%
10:00 PM	50	42	92	2.42%	2.19%	2.31%
11:00 PM	37	31	68	1.79%	1.62%	1.71%
12:00 AM	35	24	59	1.69%	1.25%	1.48%
TOTALS	**2,070**	**1,918**	**3,988**	**100.01%**	**100.00%**	**100.00%**

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022 Start Time 00:00
Stop Date : January 18, 2022 Stop Time 24:00
County : Orange
Location : 13th St east of Ocoee Apopka Rd

VHB Project #: 63534.04

18-Jan-22 **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	4	2	4	2	5	10	30	67	29	20	24
30	5	2	0	2	6	11	13	27	51	11	21	14
45	2	6	4	2	3	12	21	38	33	25	23	21
00	0	1	4	2	5	16	29	65	34	28	16	22
Hr Total	**16**	**13**	**10**	**10**	**16**	**44**	**73**	**160**	**185**	**93**	**80**	**81**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	27	39	30	39	34	46	46	41	19	15	10	10
30	29	31	40	48	35	36	36	30	22	15	10	3
45	31	22	23	37	46	37	31	21	13	9	8	8
00	24	30	34	38	30	48	20	17	9	13	11	13
Hr Total	**111**	**122**	**127**	**162**	**145**	**167**	**133**	**109**	**63**	**52**	**39**	**34**

24 Hour Total : 2,045
AM Peak Hour begins : 7:30 AM Peak Volume : 221 AM Peak Hour Factor : 0.83
PM Peak Hour begins : 17:00 PM Peak Volume : 167 PM PeaK Hour Factor : 0.87

18-Jan-22 **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	6	5	3	2	4	12	27	62	25	18	19
30	4	6	2	4	7	12	14	31	60	15	19	16
45	5	4	3	4	4	14	18	33	40	22	22	22
00	5	4	3	2	6	15	26	56	30	26	15	25
Hr Total	**20**	**20**	**13**	**13**	**19**	**45**	**70**	**147**	**192**	**88**	**74**	**82**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	24	33	26	34	37	44	44	37	21	10	9	6
30	31	34	35	39	41	38	40	31	20	12	9	6
45	28	20	30	35	40	35	32	25	15	11	7	4
00	26	25	33	33	35	45	25	18	5	10	9	5
Hr Total	**109**	**112**	**124**	**141**	**153**	**162**	**141**	**111**	**61**	**43**	**34**	**21**

24 Hour Total : 1,995
AM Peak Hour begins : 7:45 AM Peak Volume : 218 AM Peak Hour Factor : 0.88
PM Peak Hour begins : 17:30 PM Peak Volume : 164 PM PeaK Hour Factor : 0.91

18-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	15	10	7	7	4	9	22	57	129	54	38	43
30	9	8	2	6	13	23	27	58	111	26	40	30
45	7	10	7	6	7	26	39	71	73	47	45	43
00	5	5	7	4	11	31	55	121	64	54	31	47
Hr Total	**36**	**33**	**23**	**23**	**35**	**89**	**143**	**307**	**377**	**181**	**154**	**163**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	51	72	56	73	71	90	90	78	40	25	19	16
30	60	65	75	87	76	74	76	61	42	27	19	9
45	59	42	53	72	86	72	63	46	28	20	15	12
00	50	55	67	71	65	93	45	35	14	23	20	18
Hr Total	**220**	**234**	**251**	**303**	**298**	**329**	**274**	**220**	**124**	**95**	**73**	**55**

24 Hour Total : 4,040
AM Peak Hour begins : 7:45 AM Peak Volume : 434 AM Peak Hour Factor : 0.84
PM Peak Hour begins : 17:30 PM Peak Volume : 331 PM PeaK Hour Factor : 0.89

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 19, 2022
Stop Date : January 19, 2022
County : Orange
Location : 13th St east of Ocoee Apopka Rd

Start Time 00:00
Stop Time 24:00

VHB Project #: 63534.04

20-Jan-22 **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	4	2	4	1	7	15	32	60	26	19	17
30	2	1	1	4	9	6	21	35	46	27	17	17
45	1	0	0	0	3	15	22	31	41	20	18	17
00	2	1	2	1	3	12	21	63	30	22	24	22
Hr Total	**10**	**6**	**5**	**9**	**16**	**40**	**79**	**161**	**177**	**95**	**78**	**73**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	22	31	43	46	38	50	38	38	18	16	7	11
30	30	34	30	50	47	39	52	28	13	10	11	13
45	27	23	39	29	39	42	30	18	22	11	8	3
00	26	34	32	34	50	30	32	29	9	8	6	7
Hr Total	**105**	**122**	**144**	**159**	**174**	**161**	**152**	**113**	**62**	**45**	**32**	**34**

24 Hour Total : 2,052
AM Peak Hour begins : 7:45 AM Peak Volume : 210 AM Peak Hour Factor : 0.83
PM Peak Hour begins : 16:15 PM Peak Volume : 186 PM PeaK Hour Factor : 0.93

20-Jan-22 **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	4	2	0	3	2	6	11	25	42	25	15	20
30	4	2	2	4	1	15	18	29	38	28	10	21
45	4	0	2	2	2	10	21	31	33	22	18	20
00	3	2	3	5	3	10	20	44	34	23	19	18
Hr Total	**15**	**6**	**7**	**14**	**8**	**41**	**70**	**129**	**147**	**98**	**62**	**79**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	19	29	38	33	33	33	31	28	20	9	6	8
30	21	30	32	37	41	35	33	31	16	10	6	6
45	25	25	34	28	40	41	35	20	15	12	4	7
00	22	31	30	31	38	29	21	22	8	8	8	5
Hr Total	**87**	**115**	**134**	**129**	**152**	**138**	**120**	**101**	**59**	**39**	**24**	**26**

24 Hour Total : 1,800
AM Peak Hour begins : 7:45 AM Peak Volume : 157 AM Peak Hour Factor : 0.89
PM Peak Hour begins : 16:00 PM Peak Volume : 152 PM PeaK Hour Factor : 0.93

20-Jan-22 **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	9	6	2	7	3	13	26	57	102	51	34	37
30	6	3	3	8	10	21	39	64	84	55	27	38
45	5	0	2	2	5	25	43	62	74	42	36	37
00	5	3	5	6	6	22	41	107	64	45	43	40
Hr Total	**25**	**12**	**12**	**23**	**24**	**81**	**149**	**290**	**324**	**193**	**140**	**152**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	41	60	81	79	71	83	69	66	38	25	13	19
30	51	64	62	87	88	74	85	59	29	20	17	19
45	52	48	73	57	79	83	65	38	37	23	12	10
00	48	65	62	65	88	59	53	51	17	16	14	12
Hr Total	**192**	**237**	**278**	**288**	**326**	**299**	**272**	**214**	**121**	**84**	**56**	**60**

24 Hour Total : 3,852
AM Peak Hour begins : 7:45 AM Peak Volume : 367 AM Peak Hour Factor : 0.86
PM Peak Hour begins : 16:15 PM Peak Volume : 338 PM PeaK Hour Factor : 0.96

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : January 18, 2022
Stop Date : January 19, 2022
County : Orange
Location : 13th St east of Ocoee Apopka Rd

Start Time 00:00
Stop Time 24:00

VHB Project #: 63534.04

AVERAGE **Eastbound Volume for Lane 1**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	7	4	2	4	2	6	13	31	64	28	20	21
30	4	2	1	3	8	9	17	31	49	19	19	16
45	2	3	2	1	3	14	22	35	37	23	21	19
00	1	1	3	2	4	14	25	64	32	25	20	22
Hr Total	**14**	**10**	**8**	**10**	**17**	**43**	**77**	**161**	**182**	**95**	**80**	**78**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	25	35	37	43	36	48	42	40	19	16	9	11
30	30	33	35	49	41	38	44	29	18	13	11	8
45	29	23	31	33	43	40	31	20	18	10	8	6
00	25	32	33	36	40	39	26	23	9	11	9	10
Hr Total	**109**	**123**	**136**	**161**	**160**	**165**	**143**	**112**	**64**	**50**	**37**	**35**

24 Hour Total : 2,070
AM Peak Hour begins : 7:45 AM Peak Volume : 214 AM Peak Hour Factor : 0.84
PM Peak Hour begins : 16:15 PM Peak Volume : 172 PM PeaK Hour Factor : 0.90

AVERAGE **Westbound Volume for Lane 2**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	5	4	3	3	2	5	12	26	52	25	17	20
30	4	4	2	4	4	14	16	30	49	22	15	19
45	5	2	3	3	3	12	20	32	37	22	20	21
00	4	3	3	4	5	13	23	50	32	25	17	22
Hr Total	**18**	**13**	**11**	**14**	**14**	**44**	**71**	**138**	**170**	**94**	**69**	**82**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	22	31	32	34	35	39	38	33	21	10	8	7
30	26	32	34	38	41	37	37	31	18	11	8	6
45	27	23	32	32	40	38	34	23	15	12	6	6
00	24	28	32	32	37	37	23	20	7	9	9	5
Hr Total	**99**	**114**	**130**	**136**	**153**	**151**	**132**	**107**	**61**	**42**	**31**	**24**

24 Hour Total : 1,918
AM Peak Hour begins : 7:45 AM Peak Volume : 188 AM Peak Hour Factor : 0.90
PM Peak Hour begins : 16:15 PM Peak Volume : 157 PM PeaK Hour Factor : 0.96

AVERAGE **Total Volume for All Lanes**

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	12	8	5	7	4	11	25	57	116	53	37	41
30	8	6	3	7	12	23	33	61	98	41	34	35
45	7	5	5	4	6	26	42	67	74	45	41	40
00	5	4	6	6	9	27	48	114	64	50	37	44
Hr Total	**32**	**23**	**19**	**24**	**31**	**87**	**148**	**299**	**352**	**189**	**149**	**160**

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	47	66	69	77	71	87	80	73	40	26	17	18
30	56	65	69	87	82	75	81	60	36	24	19	14
45	56	46	63	65	83	78	65	43	33	22	14	12
00	49	60	65	68	77	76	49	43	16	20	18	15
Hr Total	**208**	**237**	**266**	**297**	**313**	**316**	**275**	**219**	**125**	**92**	**68**	**59**

24 Hour Total : 3,988
AM Peak Hour begins : 7:45 AM Peak Volume : 402 AM Peak Hour Factor : 0.87
PM Peak Hour begins : 16:15 PM Peak Volume : 329 PM PeaK Hour Factor : 0.95

ANNUAL VEHICLE CLASSIFICATION REPORT

VHB PROJECT NO: 63534.04
LOCATION CODE: 1
COUNT LOCATION: Ocoee Apopka Road & Distribution Center South Entrance
EQUIPMENT ID: -

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	33	0.31%
Class 2	Cars	6,513	61.35%
Class 3	Pick-Ups & Vans	2,437	22.95%
Class 4	Buses	146	1.38%
Class 5	2 Axle, Single Unit Trucks	1,007	9.48%
Class 6	3 Axle, Single Unit Trucks	64	0.60%
Class 7	4 Axle, Single Unit Trucks	23	0.22%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	177	1.67%
Class 9	3 Axle Tractor with 2 Axle Trailer	205	1.93%
Class 10	3 Axle Tractor with 3 Axle Trailer	9	0.08%
Class 11	5 Axle Multi Trailer	3	0.03%
Class 12	6 Axle Multi Trailer	0	0.00%
Class 13	7 or more Axles	0	0.00%
Class 14	Not Used	0	0.00%
Class 15	Other	0	0.00%
TOTALS		**10,617**	**100.00%**

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

VHB PROJECT NO: 63534.04
LOCATION CODE: 1
COUNT LOCATION: Ocoee Apopka Road & Distribution Center South Entrance
EQUIPMENT ID: -

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	46	40	85	0.87%	0.74%	0.80%
2:00 AM	28	24	52	0.54%	0.45%	0.49%
3:00 AM	22	26	48	0.41%	0.49%	0.45%
4:00 AM	27	24	51	0.51%	0.44%	0.48%
5:00 AM	36	38	74	0.68%	0.71%	0.70%
6:00 AM	69	144	213	1.31%	2.70%	2.01%
7:00 AM	171	347	519	3.25%	6.50%	4.89%
8:00 AM	355	459	814	6.73%	8.59%	7.66%
9:00 AM	416	425	841	7.89%	7.95%	7.92%
10:00 AM	273	322	595	5.18%	6.02%	5.60%
11:00 AM	243	256	499	4.61%	4.80%	4.70%
12:00 PM	247	251	498	4.68%	4.70%	4.69%
1:00 PM	260	271	531	4.94%	5.07%	5.00%
2:00 PM	284	301	585	5.39%	5.63%	5.51%
3:00 PM	303	294	597	5.74%	5.51%	5.62%
4:00 PM	379	339	718	7.19%	6.34%	6.76%
5:00 PM	430	356	785	8.15%	6.66%	7.40%
6:00 PM	484	374	859	9.18%	7.01%	8.09%
7:00 PM	412	319	731	7.81%	5.96%	6.88%
8:00 PM	295	232	527	5.59%	4.35%	4.96%
9:00 PM	209	197	406	3.96%	3.69%	3.82%
10:00 PM	127	170	297	2.40%	3.19%	2.80%
11:00 PM	93	86	179	1.76%	1.61%	1.69%
12:00 AM	65	48	113	1.24%	0.89%	1.06%
TOTALS	5,274	5,344	10,617	100.0%	100.0%	100.0%

TRAFFIC COUNT DATA

VHB PROJECT NO:	63534.04
LOCATION CODE:	1
COUNT LOCATION:	Ocoee Apopka Road & Distribution Center South Entrance
EQUIPMENT ID:	-

TYPE OF COUNT: 72 Hour Classification Count

TIME OF COUNT:

Start Date:	1/18/2022	Start Time:	Midnight
End Date:	1/20/2022	End Time:	Midnight

VOLUMES:

		Peak Hour Time:	7:30 AM
Average Daily:	10,617	Average Peak Hour:	916
Daily Truck Avg:	1,634	Max Hour Truck Avg:	154
		Peak Hour Truck Avg:	142

TRAVEL CHARACTERISTICS:

K MEASURED		D MEASURED	
K=	8.6%	D=	52.1%
T Max Hour	16.8%	T daily	15.4%
T med (max)	11.5%	T med Daily	10.9%
T heavy (max)	5.3%	T heavy Daily	4.5%
T Peak Hour	15.5%		
T med Peak Hour	11.5%	Axle Factor	0.97
T heavy Peak Hour	4.0%		

ANNUAL VEHICLE CLASSIFICATION REPORT

VHB PROJECT NO: 63534.04
LOCATION CODE: 1
COUNT LOCATION: Ocoee Apopka Road & Distribution Center South Entrance
EQUIPMENT ID: -

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	135	1.32%
Class 2	Cars	7,121	69.43%
Class 3	Pick-Ups & Vans	1,920	18.72%
Class 4	Buses	187	1.82%
Class 5	2 Axle, Single Unit Trucks	563	5.49%
Class 6	3 Axle, Single Unit Trucks	97	0.95%
Class 7	4 Axle, Single Unit Trucks	15	0.15%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	154	1.50%
Class 9	3 Axle Tractor with 2 Axle Trailer	59	0.58%
Class 10	3 Axle Tractor with 3 Axle Trailer	3	0.03%
Class 11	5 Axle Multi Trailer	1	0.01%
Class 12	6 Axle Multi Trailer	1	0.01%
Class 13	7 or more Axles	0	0.00%
Class 14	Not Used	0	0.00%
Class 15	Other	0	0.00%
TOTALS		**10,256**	**100.00%**

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

VHB PROJECT NO: 63534.04
LOCATION CODE: 1
COUNT LOCATION: Ocoee Apopka Road & Marden Road
EQUIPMENT ID: -

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	46	38	84	0.87%	0.76%	0.82%
2:00 AM	31	27	58	0.59%	0.55%	0.57%
3:00 AM	28	37	65	0.52%	0.75%	0.63%
4:00 AM	48	28	76	0.92%	0.56%	0.74%
5:00 AM	42	59	101	0.80%	1.18%	0.98%
6:00 AM	128	219	347	2.43%	4.40%	3.38%
7:00 AM	295	440	735	5.60%	8.83%	7.17%
8:00 AM	520	544	1,064	9.85%	10.93%	10.37%
9:00 AM	503	458	961	9.54%	9.19%	9.37%
10:00 AM	302	326	628	5.73%	6.54%	6.12%
11:00 AM	224	195	419	4.24%	3.91%	4.08%
12:00 PM	147	88	235	2.78%	1.77%	2.29%
1:00 PM	98	13	111	1.85%	0.27%	1.08%
2:00 PM	124	16	140	2.34%	0.32%	1.36%
3:00 PM	167	70	237	3.16%	1.41%	2.31%
4:00 PM	286	218	504	5.42%	4.38%	4.92%
5:00 PM	438	324	761	8.30%	6.50%	7.42%
6:00 PM	557	475	1,032	10.55%	9.54%	10.06%
7:00 PM	447	440	887	8.47%	8.83%	8.65%
8:00 PM	318	329	647	6.03%	6.61%	6.31%
9:00 PM	210	255	465	3.99%	5.12%	4.54%
10:00 PM	135	208	343	2.56%	4.18%	3.34%
11:00 PM	96	105	201	1.82%	2.11%	1.96%
12:00 AM	87	67	154	1.64%	1.35%	1.50%
TOTALS	5,275	4,981	10,256	100.0%	100.0%	100.0%

TRAFFIC COUNT DATA

VHB PROJECT NO:	63534.04
LOCATION CODE:	1
COUNT LOCATION:	Ocoee Apopka Road south of Marden Road
EQUIPMENT ID:	-

TYPE OF COUNT: 72 Hour Classification Count

TIME OF COUNT:

Start Date:	1/18/2022	Start Time:	Midnight
End Date:	1/20/2022	End Time:	Midnight

VOLUMES:

		Peak Hour Time:	7:15 AM
Average Daily:	10,256	Average Peak Hour:	1,097
Daily Truck Avg:	1,080	Max Hour Truck Avg:	125
		Peak Hour Truck Avg:	115

TRAVEL CHARACTERISTICS:

K MEASURED		D MEASURED	
K=	10.7%	D=	50.9%
T Max Hour	11.4%	T daily	10.5%
T med (max)	7.2%	T med Daily	7.3%
T heavy (max)	4.2%	T heavy Daily	3.2%
T Peak Hour	10.5%		
T med Peak Hour	6.8%	Axle Factor	0.98
T heavy Peak Hour	3.6%		

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	87	77	57	369	413	63
Future Vol, veh/h	87	77	57	369	413	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	200	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	6	6	6	4	10
Mvmt Flow	95	84	62	401	449	68

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	974	449	517	0	-	0
Stage 1	449	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.45	6.26	4.16	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.354	2.254	-	-	-
Pot Cap-1 Maneuver	276	602	1029	-	-	-
Stage 1	637	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	259	602	1029	-	-	-
Mov Cap-2 Maneuver	259	-	-	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	587	-	-	-	-	-

Approach	EB	NE	SW
HCM Control Delay, s	19.8	1.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	EBLn1	EBLn2	SWT	SWR
Capacity (veh/h)	1029	-	259	602	-	-
HCM Lane V/C Ratio	0.06	-	0.365	0.139	-	-
HCM Control Delay (s)	8.7	-	26.7	11.9	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.6	0.5	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	6	441	10	11	466
Future Vol, veh/h	9	6	441	10	11	466
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	78	33	5	40	10	3
Mvmt Flow	10	6	474	11	12	501

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1005	480	0	0	485	0
Stage 1	480	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	7.18	6.53	-	-	4.2	-
Critical Hdwy Stg 1	6.18	-	-	-	-	-
Critical Hdwy Stg 2	6.18	-	-	-	-	-
Follow-up Hdwy	4.202	3.597	-	-	2.29	-
Pot Cap-1 Maneuver	196	528	-	-	1038	-
Stage 1	491	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	194	528	-	-	1038	-
Mov Cap-2 Maneuver	194	-	-	-	-	-
Stage 1	491	-	-	-	-	-
Stage 2	459	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.8	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	260	1038	-
HCM Lane V/C Ratio	-	-	0.062	0.011	-
HCM Control Delay (s)	-	-	19.8	8.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	451	5	2	473
Future Vol, veh/h	3	0	451	5	2	473
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	460	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	33	0	5	60	100	4
Mvmt Flow	3	0	485	5	2	509

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1001	488	0	0	490	0
Stage 1	488	-	-	-	-	-
Stage 2	513	-	-	-	-	-
Critical Hdwy	6.73	6.2	-	-	5.1	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	3.3	-	-	3.1	-
Pot Cap-1 Maneuver	236	584	-	-	711	-
Stage 1	558	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	235	584	-	-	711	-
Mov Cap-2 Maneuver	235	-	-	-	-	-
Stage 1	558	-	-	-	-	-
Stage 2	541	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	235	711	-
HCM Lane V/C Ratio	-	-	0.014	0.003	-
HCM Control Delay (s)	-	-	20.5	10.1	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	10.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	18	417	12	35	435	58	121	4	42	0	1	11
Future Vol, veh/h	18	417	12	35	435	58	121	4	42	0	1	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	480	-	-	420	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	18	5	0	0	4	8	0	0	3	0	0	27
Mvmt Flow	20	453	13	38	473	63	132	4	46	0	1	12

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	536	0	0	466	0	0	1087	1087	505	1106	1112	460
Stage 1	-	-	-	-	-	-	581	581	-	500	500	-
Stage 2	-	-	-	-	-	-	506	506	-	606	612	-
Critical Hdwy	4.28	-	-	4.1	-	-	7.1	6.5	6.23	7.1	6.5	6.47
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.362	-	-	2.2	-	-	3.5	4	3.327	3.5	4	3.543
Pot Cap-1 Maneuver	956	-	-	1106	-	-	195	218	565	190	211	553
Stage 1	-	-	-	-	-	-	503	503	-	557	546	-
Stage 2	-	-	-	-	-	-	552	543	-	487	487	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	956	-	-	1106	-	-	182	206	565	165	200	553
Mov Cap-2 Maneuver	-	-	-	-	-	-	182	206	-	165	200	-
Stage 1	-	-	-	-	-	-	492	486	-	545	535	-
Stage 2	-	-	-	-	-	-	528	532	-	428	470	-

Approach	EB	WB	SE	NW
HCM Control Delay, s	0.4	0.6	69.3	12.6
HCM LOS			F	B

Minor Lane/Major Mvmt	NWLn1	NWLn2	EBL	EBT	EBR	WBL	WBT	WBR	SELn1
Capacity (veh/h)	200	553	956	-	-	1106	-	-	220
HCM Lane V/C Ratio	0.005	0.022	0.02	-	-	0.034	-	-	0.825
HCM Control Delay (s)	23.1	11.7	8.8	-	-	8.4	-	-	69.3
HCM Lane LOS	C	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0	0.1	0.1	-	-	0.1	-	-	6.2

Intersection	
Int Delay, s/veh	5.4

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	16	239	220	303	261	25
Future Vol, veh/h	16	239	220	303	261	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	15	4	3	3	2	9
Mvmt Flow	17	252	232	319	275	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1071	288	301	0	-	0
Stage 1	288	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Critical Hdwy	6.55	6.24	4.13	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.336	2.227	-	-	-
Pot Cap-1 Maneuver	231	746	1254	-	-	-
Stage 1	732	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	179	746	1254	-	-	-
Mov Cap-2 Maneuver	179	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	429	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	15.1	3.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1254	-	622	-	-
HCM Lane V/C Ratio	0.185	-	0.432	-	-
HCM Control Delay (s)	8.5	0	15.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.7	-	2.2	-	-

Intersection	
Int Delay, s/veh	26

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	429	120	121	415	113	174
Future Vol, veh/h	429	120	121	415	113	174
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	6	5	4	9	4
Mvmt Flow	456	128	129	441	120	185

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	584	0	1219	520
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	699	-
Critical Hdwy	-	-	4.15	-	6.49	6.24
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	-	-	2.245	-	3.581	3.336
Pot Cap-1 Maneuver	-	-	976	-	193	552
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	480	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	976	-	159	552
Mov Cap-2 Maneuver	-	-	-	-	159	-
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	396	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	120.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	280	-	-	976	-
HCM Lane V/C Ratio	1.09	-	-	0.132	-
HCM Control Delay (s)	120.2	-	-	9.2	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	12.4	-	-	0.5	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	75	1	31	0	508	96	33	447	0
Future Vol, veh/h	1	0	0	75	1	31	0	508	96	33	447	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	6	0	3	0	4	9	0	5	0
Mvmt Flow	1	0	0	84	1	35	0	571	108	37	502	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1219	1255	502	1201	1201	625	502	0	0	679	0	0
Stage 1	576	576	-	625	625	-	-	-	-	-	-	-
Stage 2	643	679	-	576	576	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.16	6.5	6.23	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.16	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.16	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.554	4	3.327	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	159	173	573	159	186	483	1073	-	-	923	-	-
Stage 1	506	505	-	466	480	-	-	-	-	-	-	-
Stage 2	465	454	-	496	505	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	141	163	573	152	176	483	1073	-	-	923	-	-
Mov Cap-2 Maneuver	141	163	-	152	176	-	-	-	-	-	-	-
Stage 1	506	477	-	466	480	-	-	-	-	-	-	-
Stage 2	430	454	-	468	477	-	-	-	-	-	-	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	30.7	51.9	0	0.6
HCM LOS	D	F		

Minor Lane/Major Mvmt	NEL	NET	NER	EBLn1	WBLn1	SWL	SWT	SWR
Capacity (veh/h)	1073	-	-	141	190	923	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.633	0.04	-	-
HCM Control Delay (s)	0	-	-	30.7	51.9	9.1	0	-
HCM Lane LOS	A	-	-	D	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	3.6	0.1	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	19	274	6	10	229	3	7	13	12	2	18	15
Future Vol, veh/h	19	274	6	10	229	3	7	13	12	2	18	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	6	2	0	0	2	34	0	23	0	0	6	0
Mvmt Flow	21	308	7	11	257	3	8	15	13	2	20	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	260	0	0	315	0	0	653	636	312	649	638	259
Stage 1	-	-	-	-	-	-	354	354	-	281	281	-
Stage 2	-	-	-	-	-	-	299	282	-	368	357	-
Critical Hdwy	4.16	-	-	4.1	-	-	7.1	6.73	6.2	7.1	6.56	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.73	-	6.1	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.73	-	6.1	5.56	-
Follow-up Hdwy	2.254	-	-	2.2	-	-	3.5	4.207	3.3	3.5	4.054	3.3
Pot Cap-1 Maneuver	1282	-	-	1257	-	-	383	369	733	386	389	785
Stage 1	-	-	-	-	-	-	667	595	-	730	671	-
Stage 2	-	-	-	-	-	-	714	641	-	656	621	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1282	-	-	1257	-	-	351	358	733	359	377	785
Mov Cap-2 Maneuver	-	-	-	-	-	-	351	358	-	359	377	-
Stage 1	-	-	-	-	-	-	654	583	-	715	664	-
Stage 2	-	-	-	-	-	-	671	635	-	615	609	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.3	13.9	13.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	441	1282	-	-	1257	-	-	483
HCM Lane V/C Ratio	0.082	0.017	-	-	0.009	-	-	0.081
HCM Control Delay (s)	13.9	7.9	0	-	7.9	0	-	13.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	80	73	84	465	409	49
Future Vol, veh/h	80	73	84	465	409	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	200	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	4	2	2	1	4
Mvmt Flow	91	83	95	528	465	56

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1183	465	521	0	-	0
Stage 1	465	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Critical Hdwy	6.41	6.24	4.12	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.336	2.218	-	-	-
Pot Cap-1 Maneuver	210	593	1045	-	-	-
Stage 1	634	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	191	593	1045	-	-	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	576	-	-	-	-	-
Stage 2	485	-	-	-	-	-

Approach	EB	NE	SW
HCM Control Delay, s	26.6	1.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	EBLn1	EBLn2	SWT	SWR
Capacity (veh/h)	1045	-	191	593	-	-
HCM Lane V/C Ratio	0.091	-	0.476	0.14	-	-
HCM Control Delay (s)	8.8	-	39.9	12.1	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.3	-	2.3	0.5	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	21	524	8	1	437
Future Vol, veh/h	8	21	524	8	1	437
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	50	10	3	13	0	2
Mvmt Flow	9	24	589	9	1	491

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1087	594	0	0	598	0
Stage 1	594	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Critical Hdwy	6.9	6.3	-	-	4.1	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.95	3.39	-	-	2.2	-
Pot Cap-1 Maneuver	194	490	-	-	989	-
Stage 1	469	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	194	490	-	-	989	-
Mov Cap-2 Maneuver	194	-	-	-	-	-
Stage 1	469	-	-	-	-	-
Stage 2	525	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	345	989	-
HCM Lane V/C Ratio	-	-	0.094	0.001	-
HCM Control Delay (s)	-	-	16.5	8.6	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	8	524	21	4	441
Future Vol, veh/h	17	8	524	21	4	441
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	460	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	61	61	61	61	61	61
Heavy Vehicles, %	7	0	1	18	0	1
Mvmt Flow	28	13	859	34	7	723

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1613	876	0	0	893	0
Stage 1	876	-	-	-	-	-
Stage 2	737	-	-	-	-	-
Critical Hdwy	6.47	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	111	351	-	-	768	-
Stage 1	399	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	110	351	-	-	768	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	460	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	40.7	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	141	768	-
HCM Lane V/C Ratio	-	-	0.291	0.009	-
HCM Control Delay (s)	-	-	40.7	9.7	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0	-

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	48	497	0	5	412	88	87	0	18	8	4	37
Future Vol, veh/h	48	497	0	5	412	88	87	0	18	8	4	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	480	-	-	420	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	1	0	40	1	1	0	0	6	1	0	6
Mvmt Flow	53	552	0	6	458	98	97	0	20	9	4	41

Major/Minor	Major1			Major2			Minor2			Minor1		
Conflicting Flow All	556	0	0	552	0	0	1200	1177	507	1187	1226	552
Stage 1	-	-	-	-	-	-	519	519	-	658	658	-
Stage 2	-	-	-	-	-	-	681	658	-	529	568	-
Critical Hdwy	4.12	-	-	4.5	-	-	7.1	6.5	6.26	7.11	6.5	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.11	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.11	5.5	-
Follow-up Hdwy	2.218	-	-	2.56	-	-	3.5	4	3.354	3.509	4	3.354
Pot Cap-1 Maneuver	1015	-	-	853	-	-	163	193	558	166	180	526
Stage 1	-	-	-	-	-	-	544	536	-	455	464	-
Stage 2	-	-	-	-	-	-	444	464	-	535	510	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1015	-	-	853	-	-	141	182	558	153	169	526
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	182	-	153	169	-
Stage 1	-	-	-	-	-	-	516	532	-	431	440	-
Stage 2	-	-	-	-	-	-	384	440	-	512	506	-

Approach	EB	WB	SE	NW
HCM Control Delay, s	0.8	0.1	69.9	16.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NWLn1	NWLn2	EBL	EBT	EBR	WBL	WBT	WBR	SELn1
Capacity (veh/h)	158	526	1015	-	-	853	-	-	162
HCM Lane V/C Ratio	0.084	0.078	0.053	-	-	0.007	-	-	0.72
HCM Control Delay (s)	29.9	12.4	8.7	-	-	9.2	-	-	69.9
HCM Lane LOS	D	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.3	0.3	0.2	-	-	0	-	-	4.4

Intersection	
Int Delay, s/veh	142.7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	43	212	263	370	345	35
Future Vol, veh/h	43	212	263	370	345	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	64	316	393	552	515	52

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1879	541	567	0	-	0
Stage 1	541	-	-	-	-	-
Stage 2	1338	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	79	545	1015	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	247	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 35	545	1015	-	-	-
Mov Cap-2 Maneuver	~ 35	-	-	-	-	-
Stage 1	259	-	-	-	-	-
Stage 2	247	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 698.6	4.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1015	-	158	-	-
HCM Lane V/C Ratio	0.387	-	2.409	-	-
HCM Control Delay (s)	10.8	0	$ 698.6	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q(veh)	1.8	-	32.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	164.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	538	83	172	435	70	134
Future Vol, veh/h	538	83	172	435	70	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	1	0	1	1	3	2
Mvmt Flow	769	119	246	621	100	191

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	888	0	1942	829
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	1113	-
Critical Hdwy	-	-	4.11	-	6.43	6.22
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.209	-	3.527	3.318
Pot Cap-1 Maneuver	-	-	767	-	~ 71	370
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	313	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	767	-	~ 36	370
Mov Cap-2 Maneuver	-	-	-	-	~ 36	-
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	160	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	$ 1141.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	88	-	-	767	-
HCM Lane V/C Ratio	3.312	-	-	0.32	-
HCM Control Delay (s)	$ 1141.8	-	-	11.9	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	29.2	-	-	1.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	59	4	16	1	595	84	10	533	0
Future Vol, veh/h	0	0	0	59	4	16	1	595	84	10	533	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	2	0	0	0	2	3	0	1	0
Mvmt Flow	0	0	0	61	4	17	1	620	88	10	555	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1252	1285	555	1241	1241	664	555	0	0	708	0	0
Stage 1	575	575	-	666	666	-	-	-	-	-	-	-
Stage 2	677	710	-	575	575	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	151	166	535	152	176	464	1026	-	-	900	-	-
Stage 1	507	506	-	449	460	-	-	-	-	-	-	-
Stage 2	446	440	-	503	506	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	141	163	535	150	173	464	1026	-	-	900	-	-
Mov Cap-2 Maneuver	141	163	-	150	173	-	-	-	-	-	-	-
Stage 1	506	498	-	448	459	-	-	-	-	-	-	-
Stage 2	425	439	-	495	498	-	-	-	-	-	-	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	0	42.6	0	0.2
HCM LOS	A	E		

Minor Lane/Major Mvmt	NEL	NET	NER	EBLn1	WBLn1	SWL	SWT	SWR
Capacity (veh/h)	1026	-	-	-	175	900	-	-
HCM Lane V/C Ratio	0.001	-	-	-	0.47	0.012	-	-
HCM Control Delay (s)	8.5	0	-	0	42.6	9	0	-
HCM Lane LOS	A	A	-	A	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	2.2	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	376	5	18	335	9	2	19	11	7	32	20
Future Vol, veh/h	16	376	5	18	335	9	2	19	11	7	32	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	1	0	0	1	11	0	0	0	0	0	5
Mvmt Flow	18	432	6	21	385	10	2	22	13	8	37	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	438	0	0	933	908	435	921	906	390
Stage 1	-	-	-	-	-	-	471	471	-	432	432	-
Stage 2	-	-	-	-	-	-	462	437	-	489	474	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.345
Pot Cap-1 Maneuver	1175	-	-	1133	-	-	248	277	625	253	278	652
Stage 1	-	-	-	-	-	-	577	563	-	606	586	-
Stage 2	-	-	-	-	-	-	584	583	-	564	561	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1175	-	-	1133	-	-	207	265	625	225	266	652
Mov Cap-2 Maneuver	-	-	-	-	-	-	207	265	-	225	266	-
Stage 1	-	-	-	-	-	-	565	552	-	594	572	-
Stage 2	-	-	-	-	-	-	515	569	-	520	550	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.4	17.6	19
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	323	1175	-	-	1133	-	-	324
HCM Lane V/C Ratio	0.114	0.016	-	-	0.018	-	-	0.209
HCM Control Delay (s)	17.6	8.1	0	-	8.2	0	-	19
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.8