City of Palm Coast, Florida
Agenda Item

Agenda Date: August 19, 2026

Agenda Item:
D.4

Department COMMUNITY DEVELOPMENT **Division** PLANNING	**Amount** **Org/Account #**

Subject: A FUTURE LAND USE MAP (FLUM) AMENDMENT FOR 331.1+/- ACRES TO INCREASE THE MAXIMUM NUMBER OF DWELLING UNITS FROM 416 TO 743 AND AMENDING DESIGNATION FOR CERTAIN AREAS OF PLANNING AREA FROM RESIDENTIAL TO CONSERVATION AND FROM CONSERVATION TO RESIDENTIAL

Presenter: **Jose Papa, AICP, Senior Planner**

Attachments:

1. Staff Report
2. Current FLUM
3. Proposed FLUM
4. Current Zoning
5. Application Package and Responses from Applicant
6. Preliminary Environmental Site Analysis
7. Traffic Study
8. Ordinance-Seminole Trace FLUM Amendment
9. Exhibit A to Ordinance - Legal Description of Property
10. Exhibit B to Ordinance - Amended FLUM

Background:

The proposed FLUM amendment will increase the number of permitted dwelling units within the Seminole Trace Planning Area (formerly known as Cascades) from 416 to 743. Additionally, the proposed FLUM will rearrange the conservation and residential areas within the planning area. The FLUM amendment has a companion zoning map amendment requesting the subject area be rezoned from Single Family Residential-1 (SFR-1) and Preservation (PRS) to Master Planned Development (MPD) with a Development Agreement.

The proposed amendment was reviewed for the following:

Analysis of the proposed amendment's impacts on public facilities and infrastructure. Staff prepared an analysis of impacts on public facilities based on the current maximum development potential (416 units) against the proposed maximum development potential (743 units). As expected, the analysis shows net increases in the demand for public services and infrastructure. The increases will not cause any of the public services and infrastructure to fall below the adopted Level of Service.

• Impacts on the environmental/cultural resources. The proposed amendment will not have impacts on any significant environmental or cultural resources.
• No anticipated negative impacts on the local topography or prevent the proposed development permissible within the FLUM designation.
• Small area of project is within Special Flood Hazard Area.
• Any wetland impacts will be permitted through SJRWMD and FDEP.
• Site is not within an aquifer recharge area or within a wellhead protection zone(s).
• No impact to historic or cultural assets.
• No change on need for endangered species report.

Compatibility with surrounding land uses. The proposed FLUM designations are generally consistent with the surrounding properties.

Finally, the proposed amendment is consistent with comprehensive plan policies regarding:
• Efficient land use patterns and not increase cost of providing and maintaining public facilities.
• Encourage development in areas with available public facilities, infrastructure, and services.
• Designate urban densities and intensities in areas where planned or existing capacities are available.

Neighborhood Meeting
The applicant hosted a neighborhood meeting as required by Unified Land Development Code (LDC) Section 2.05.02 on August 11, 2026. Those in attendance expressed their concern about traffic safety and stormwater.

This is a legislative item.

Recommended Action:
STAFF RECOMMENDS THAT THE PLANNING AND LAND DEVELOPMENT REGULATION BOARD FIND THE PROPOSED AMENDMENT (APPLICATION #6419) CONSISTENT WITH THE COMPREHENSIVE PLAN AND RECOMMEND THAT CITY COUNCIL APPROVE THE PROPOSED AMENDMENT.

COMMUNITY DEVELOPMENT DEPARTMENT
COMPREHENSIVE PLAN AMENDMENT STAFF REPORT
PLANNING AND LAND DEVELOPMENT REGULATION BOARD
August 19, 2026

OVERVIEW

Case Number: 6419

Applicant: Michael Chiumento, Agent on behalf of Byrndog PCP, LLC and KL Seminole Trace, LLC (Owners)

Size of subject property: 331.1+/- acres

Property Description: A 331.1+/- acre parcel located 3 miles south of State Road 100 on the westside of Seminole Woods Blvd.

Property Owner: Byrndog PCP, LLC and KL Seminole Trace, LLC

Current FLUM Designation: Residential and Conservation with a site specific policy to limit the number of dwelling units to 416

Current Zoning Designation: Single Family Residential-1 and Preservation

Current Use: Vacant

Requested Action: A Future Land Use Map (FLUM) amendment to increase the maximum number of units for the Planning Area (to be called Seminole Trace formerly known as Cascades) from 416 to 743 and to amend designation of various areas from Conservation to Residential and Residential to Conservation.

There is a companion zoning map amendment that will change the zoning on the designated parcels from Single Family Residential-1 (SFR-1) and Preservation to Master Planned Development with a Development Agreement.

Recommendation: Staff recommends that the Planning and Land Development Regulation Board find the proposed amendment consistent with the Comprehensive Plan and recommend that City Council approve the proposed amendment.

Project Planner: José Papa, AICP, Senior Planner

ANALYSIS

BACKGROUND

The application is for a Comprehensive Plan amendment for a 331.1+/- acre planning area, to be called Seminole Trace (formerly Cascades) located approximately 3 miles south of State Road on the westside of Seminole Woods Blvd. The amendment is to increase the maximum number of dwelling units from 416 to 743. The proposed amendment also proposes to redraw the designated areas for Residential and Conservation which results in a net decrease of 4.5+/- acres of Conservation. It is important to note however that one of the smaller “Conservation” areas remain as Open Space/Wetland Preservation Area on the Cascades Plat. A brief history of land use and zoning amendments for the subject area follows.

In 2005 the subject property was under jurisdiction of Flagler County. The FLUM designation for the Cascades was amended to Flagler County designations of Residential Low Density/Rural Estate (1 du/gross acre) and Conservation. After the amendment to the FLUM designation, a PUD Agreement was approved by Flagler County in 2005 (called the Cascades at Grand Landings). The PUD agreement covered an area of +/-682.9 acres and permitted 416 single-family residential units. As part of the FLUM and PUD agreement approval, approximately 354 acres of mainly wetlands and environmentally sensitive areas was transferred to Flagler County in 2005.

In 2023, the Cascades Planning Area was the subject of an Annexation, FLUM and Zoning Map amendment. The annexation covered the entirety of the 331.1+/- acre site that is the subject of this Application. The FLUM and Zoning Map amendments was a process to provide the subject property with an appropriate City of Palm Coast Future Land Use Map (FLUM) and Zoning Map designation.

The request from the landowners consisted of a FLUM designation of Residential, and Conservation with a maximum number of dwelling units of 850 and a Zoning designation of Single Family-Residential-1 and Multi-family Residential-2, and Preservation for the Cascades Planning Area. The proposed FLUM and Zoning Map designations were approved by City Council at their first reading on August 16, 2023. At the second reading for the request on Nov. 7, 2023, City Council approved an amendment that reduced the number of maximum units within Cascade Planning Area to 416. Additionally, the approval for the proposed zoning map amendment eliminated the Multi-Family Residential-2 zoned areas and rezoned them to Single Family Residential-1.

Subsequent to the approvals, there was a request from the landowners to rehear the FLUM amendment with a claim that a 44+/- acre parcel was not subject for inclusion as part of the FLUM amendment which limits the Cascades to 416 units. Subsequently, City Council approved a FLUM amendment which removed the 44+/- acre parcel but kept the dwelling unit limitation at 416.

Since 2023, a 386 lot subdivision (Seminole Trace) has progressed through the platting process. Seminole Trace received final plat approval in May 2026.

Neighborhood Meeting
As required by the Land Development Code, a neighborhood meeting was hosted by the applicant. The neighborhood meeting was held on August 11, 2026 at Flagler/Palm Coast High School. The attendees expressed their concern about traffic safety and flooding.

DENSITY/INTENSITY AND POPULATION

Note: The analysis for comprehensive plan map amendments takes into consideration the maximum development potential under the current and proposed Future Land Use Map (FLUM) categories (including any policy to limit development).

The 331.1+/- acre subject property currently has a FLUM designation of Residential and Conservation with a site specific policy to have a maximum of 416 dwelling units. The proposed amendment will result in the subject property having a maximum number of 743 dwelling units and redrawing the Residential and Conservation areas.

As shown on Table 1 below, the proposed amendment results in a potential increase of 327 dwelling units and 818 persons (2.5 persons/dwelling unit).

TABLE 1 - FLUM DESIGNATION MAXIMUM DENSITY/INTENSITY ALLOWED (RESIDENTIAL USE)

		# of Acres	Maximum Density(1)	Maximum # of units(2)	Population (2.5 persons/dwelling unit)
Proposed FLUM:	**Residential & Conservation**	331	12 du/acre	743	1,858
Current FLUM:	**Residential & Conservation**	331	12 du/acre	416	1,040
NET CHANGE		0		327	818

Footnotes:
(1) Maximum densities are established in Comprehensive Plan.
(2) Maximum # of units for current and proposed FLUM designation are limited by specific policy.

PUBLIC FACILITIES AVAILABILITY /IMPACT ANALYSIS (BASED ON THEORETICAL YIELD OF MAXIMUM DEVELOPMENT POTENTIAL)

Objective 1.1.3-Evaluation of Amendments to the FLUM

Review proposed amendments to the Future Land Use Map (FLUM) based upon environmental conditions, the availability of facilities and services, school capacity, compatibility with surrounding uses, and other generally accepted land use planning principles.
Policy 1.1.3.2 - At a minimum, infrastructure availability and capacity, specified as follows, shall be considered when evaluating proposed FLUM amendments:

A. *Existing and future capacity of roadways based on functional classifications and best available data for traffic modeling. For the purposes of evaluating capacity, roadway improvements programmed in the FDOT 5-year Work Plan or listed in either the City or the County 5-year Capital Improvement Program shall be considered.*
B. *Large-scale, high-intensity commercial projects shall be concentrated at intersections of the following arterials*
C. *Existing and future availability and capacity of central utility systems.*
D. *Availability and capacity of receiving watercourses and drainage systems to convey design storm events.*

PUBLIC FACILITIES CAPACITY/IMPACT ANALYSIS

The analysis for comprehensive plan map amendments takes into consideration the development potential under the current and proposed FLUM designation to provide a net impact for the proposed FLUM amendment. The proposed amendment includes a note on the FLUM to limit the maximum number of units to 743. It is important to note that as a project progresses through the land development process (i.e. site plan/platting review, building permit review) the City and other review agencies will further conduct a more detailed analysis of the project impacts on the various public service and infrastructure. This ensures that a project's impacts are accommodated by the existing infrastructure closer to the time of its actual impact (Concurrency).

An analysis of the development potential under the existing and proposed FLUM (including policy to limit development on the subject parcel to 743 dwelling units) shows that the proposed amendment will result in an increase in the demand on public facilities.

The results of the net impact analysis are shown on Table 2, and are summarized below:

Transportation

The applicant submitted a Traffic Study which included the subject site. In addition to the potential traffic impacts from the project, the traffic study considered the impacts from recently approved developments in the area (Grand Landings Phase 5 and 6). The traffic study concludes that the project will not cause the roadway network to fall below the Level of Service (LOS).

As previously stated, as the project progresses through the development process a more detailed study of the project's impacts on the roadway network will be conducted. These additional items will include operational needs (potential turn lanes, traffic signals, roundabouts) necessary to maintain safe roadway operations.

Potable Water

The proposed FLUM amendment will have a maximum potential net increase in demand for potable water of 77,663 gallons/day (.078 MGD) As part of the site plan/plat review process, the property owner and/or developer will need to coordinate with the Utility Department to determine the appropriate engineering requirements (size of water line, pump stations, etc.) for potable water service.

Wastewater

The proposed FLUM amendment will have a maximum potential net increase in demand for sanitary sewer treatment of 67,035 gallons/day (.067 MGD). As part of the site plan/plat review process, the property owner and/or developer will need to coordinate with the Utility Department to determine the appropriate engineering requirements (size of sewer line, lift stations, etc.) for wastewater service.

Solid Waste

The proposed FLUM amendment will have a maximum potential net increase of 7,039 lbs. of solid waste/day. The City currently has an interlocal agreement with Volusia County for solid waste disposal. There is adequate capacity at the Volusia County landfill to accommodate the additional demand.

Public Recreation and Open Space

The proposed FLUM amendment will have a maximum potential net increase in demand of 6.5 acres of park facilities. The City currently has adequate capacity to accommodate the additional demand.

Public Schools

The proposed FLUM amendment will have a potential net increase in demand of 62 student stations. At the time of site plan review/plat process, the property owner and/or developer will need to coordinate with the School district to determine the current availability of student stations and if necessary, develop a proportionate-share mitigation agreement.

Stormwater

N/A. Stormwater treatment facilities are reviewed for consistency with LOS during site plan review. The LOS standards for stormwater quantity and quality, at a minimum, shall be the requirement established by the SJRWMD and other applicable regulatory requirements.

Table 2 Public Facilities Impact Analysis

***Proposed FLUM designation includes specific policy to limit development to 743 dwelling units.**

****Current FLUM development potential is based on current limit of 416 dwelling units.**

Density(1)	# of units or square feet of development	Transportation (PHT)(2)	Potable Water (GPD)(3)	Sanitary Sewer (GPD)(4)	Solid Waste (lbs./day)(5)	Recreation and Parks (8 acres/ 1000 pop.)(6)	Public Education (students)(7)	Stormwater Drainage(8)
Proposed FLUM designation*								
Residential & Conservation	743	721	176463	152315	15993	14.9	141	N/A
	Total	721	176463	152315	15993	14.9	141	N/A
Current FLUM designation**								
Residential & Conservation	416	404	98800	85280	8954	8.3	79	N/A
	Total	404	98800	85280	8954	8	79	
Net Change		**317**	**77,663**	**67,035**	**7,039**	**6.5**	**62**	**N/A**

Footnotes:

(1) Calculation of Density: Lot Size (acre)*# of units/acre, or determined by site specific policy

(2) Transportation: Single Family Residential - Detached, PM Peak Hour Trips (PHT), ITE Code 210 = 0.97 Trips/Unit, ITE Trip Generation Manual, 12th Edition

(3) Potable Water: Residential = # of units*2.5*95 gallons/capita/day

(4) Wastewater: Residential = # of units*2.5*82 gallons/capita/day

(5) Solid Waste: Residential Demand = # of units*2.50*8.61 lbs/capita/day

(6) Recreation and Parks: Residential Demand = # of units * 2.50 *8 acres/1000 persons

(7) Public Education Residential: = Based on multiplier provided by Flagler County School District.

(8) Stormwater/Drainage: Stormwater Treatment will be reviewed for consistency with adopted LOS, during site plan approval process.

Analysis: Staff recognizes that the construction of the units in the planning area will not occur all at once. While land use approvals establish what may be developed, they do not guarantee utility service at any particular point in time. Before development can proceed, developers must submit utility applications for service, and the City evaluates available capacity based on existing system conditions and projected demand. As capacity thresholds are approached, the City plans, designs and constructs additional infrastructure to ensure reliable service.

ENVIRONMENTAL/CULTURAL RESOURCES ANALYSIS

Objective 1.1.3-Evaluation of Amendments to the FLUM

Review proposed amendments to the Future Land Use Map (FLUM) based upon environmental conditions, the availability of facilities and services, school capacity, compatibility with surrounding uses, and other generally accepted land use planning principles.

Policy 1.1.3.1- At a minimum, the following environmental factors shall be evaluated each time FLUM amendments are proposed:

A. Topography and soil conditions including the presence of hydric soils.

B. Location and extent of floodplains and the Coastal Planning Area, including areas subject to seasonal or periodic flooding.

C. *Location and extent of wetlands, certain vegetative communities, and protected wildlife species.*
D. *Location and extent of other environmentally sensitive features.*
E. *Proximity to wellfields and aquifer recharge areas.*
F. *Impacts to potable water supply.*

The following sections discuss site conditions and original application materials. Staff has evaluated this information and established the following findings.

A. TOPOGRAPHY AND SOIL CONDITIONS

The analysis area is silviculture land with hydric soils throughout property. The site is bounded by Seminole Woods Boulevard to the south, Grand Landings subdivision and vacant property to the east, Grand Landings Phase 5 and 6 to the north, and preservation areas. According to the October 2022 Environmental Assessment, the land use proposal area does contain St. Johns River Water Management District (SJRWMD) and Florida Department of Environmental Protection (FDEP) jurisdictional wetlands; the total analysis area contains 230.31 acres of uplands, 3.30 acres of graded and drained roads, and 146.25 acres of wetlands. The wetlands detailed on the environmental assessment "Douglas – Cascades FLUCFCS/Existing Conditions Map" Figure, reflect the boundaries that were delineated in the field pursuant to state and federal guidelines (Chapter 62-340 F.A.C. and the 1987 Corps of Engineers Wetlands Delineation Manual). Further description of these features may be found in the Section C, Vegetative Communities. Since completion of the study, an approximately 160+/- acre area has been platted for single-family lots as "Seminole Trace Phase 1".

As detailed within the ERS report, the *Soil Survey of Flagler County, Florida* indicates seven (7) soil types within the property.

> **Analysis:** There are no indicators of unique topographical reliefs or soils that would be affected by the FLUM change.
>
> **FINDING:** It is not anticipated that the proposed FLUM change will negatively impact the local topography or prevent the proposed development permissible within the FLUM designation.

B. FLOODPLAINS

No floodplain information was provided in the ERS report. Federal Emergency Management Agency's (FEMA), Flood Insurance Rate Map (FIRM) source indicates that a small area within the subject property lies within a Special Flood Hazard Area (SFHA).

> **Analysis:** A portion of the Subject Property (at the western side) is located within Zone A.
>
> **FINDING**: The proposed FLUM change could potentially negatively impact the function of the SFHA, however, if floodplain is impacted, compensatory storage will be required within the same defined floodplain's hydrologic sub basin as the placement of the fill pursuant to section 10.02.11B Land Development Code.

C. VEGETATIVE COMMUNITIES

According to the ERS report, the assessment area is comprised of the following vegetative community types and features.

1. Pine Plantation (441): ± 230.31 acres
2. Hydric Pine Flatwoods (625): ± 146.25 acres
3. Graded/Drained Road (8145): ± 3.30 acres

Analysis: There are wetlands located on the property and any impacts will need to be permitted through St. Johns River Water Management District (SJRWMD) and/or the Florida Department of Environmental Protection (FDEP).

FINDING: There are extensive wetlands on the property of undetermined quality. The Uniform Mitigation Assessment Method (UMAM) sheets are required to determine quality on site. It is staff's opinion, and consistent with the Comprehensive Plan, that all potentially high quality wetlands that are larger than 10 acres are to be designated Conservation on the Future Land Use Map.

D. PROTECTED SPECIES DISTRIBUTION/ WILDLIFE UTILIZATION

The submitted ERS report documents that Potentially Occupied Gopher Tortoise (*Gopherus polyphemus*) burrows were located on-site. The wood stork (*Mycteria americana)* and Florida Black Bear (*Ursus americanus floridanus*) was noted as having a likely probability of occurrence.

Analysis: The ERS report stated that there is potential for wildlife to utilize the property as it is mostly surrounded by other vacant land, however, as previously mentioned an approximately 160 acre area has been platted as "Seminole Trace Phase 1" subdivision. Additionally, a 119+/- acre parcel to the east is currently in the process of amending its land use designation with Flagler County.

As stated in the report, wildlife utilization may change over time due to various factors as described above. To ensure that the referenced species and any potentially occurring species in the future, the Unified Land Development Code (Section 10.04.03.A, LDC) requires that a listed species study is performed by a Qualified Environmental Professional (QEP) at site plan or preliminary plat. Further, a study is valid for one year for the property that was investigate to capture any changes in wildlife utilization.

FINDING: The proposed FLUM amendment will not change the need to relocate the Gopher Tortoise prior to any development activities. This need remains no matter what the FLUM designation.

E. GROUNDWATER RESOURCE PROTECTION

According to City maintained data, the Subject Property contains three (3) known wellsites.

Analysis: The amendment is not within an aquifer recharge area but does have multiple wellsites located throughout the Subject Property.

FINDING: The proposed land use change is not anticipated to impact groundwater resources pursuant all guidelines are followed. These wellsite's will require a Primary Wellhead Protection Zone with a fixed 500-foot radial setback distance and be required to adhere to Restrictions within wellhead primary and secondary protection zones pursuant to section 10.03.05 of the Land Development Code.

F. HISTORICAL RESOURCES

A Cultural Resource report was provided. They performed 130 total shovel tests, which resulted in no archeological or historic resources being identified.

Analysis: Staff analyzed the cultural report that was provided.

FINDING: The report was found to be in order. It is staff's determination that based on this document the proposed FLUM amendment will have no adverse impact on historical or cultural resources.

LAND USE COMPATIBILITY ANALYSIS

Policy 1.1.3.3 – At a minimum, compatibility with proximate uses and development patterns shall be considered when evaluating proposed FLUM amendments.

A. *This policy shall not be construed to mean that different categories of uses are inherently incompatible; rather, it is intended to promote the use of transitional areas where densities and intensities can be appropriately scaled.*
B. *Buffers are encouraged as an effective means of transition between areas where there is a greater degree of disparity in terms of densities and intensities.*
C. *Impacts to the health, safety, and welfare of surrounding residents shall be considered.*

Surrounding Future Land Use Map Designation:
North: Residential (City of Palm Coast designation)
South: Residential (City of Palm Coast designation)
East: Agriculture & Timberlands (Flagler County designation)
West: Conservation (Flagler County designation)

Surrounding Zoning Designation:
North: Master Planned Development (City of Palm Coast designation)
South: Single Family Residential (City of Palm Coast designation)
East: Agriculture & New Rural Communities-Planned Unit Development (Flagler County designation)
West: Planned Unit Development (Flagler County designation)

Surrounding Property Existing Uses:
North: Vacant Single Family – Grand Landings Subdivision (City of Palm Coast)
South: Single Family Residential – Seminole Woods Neighborhood (across Seminole Woods Blvd.) (City of Palm Coast)
East: Vacant (Flagler County)
West: Vacant (Flagler County)

North

The parcels to the north are designated Residential on the Future Land Use Map (FLUM) with a zoning designation of Master Planned Development. These properties are more commonly known as Grand Landings. These lands are mainly vacant but are starting to be developed for single-family homes (attached and detached). The proposed FLUM amendment is consistent with the existing designation and will not have a detrimental impact on these parcels.

East

The area to the east of the subject property is within the boundaries of unincorporated Flagler County and are currently vacant with a Flagler County FLUM designation of Agriculture & Timberlands. Additionally, these properties are zoned Agriculture, and New Rural Communities-Planned Unit Development. Currently, there is an approximately 119 acre parcel in unincorporated Flagler County with a pending request for a FLUM amendment to Mixed Use High Density/High Intensity with a proposed density limit of 7 du/acre and a .40 Floor to Area Ratio (FAR). Based on these limits the development may have a maximum yield of 502 dwelling units and 829,730 sq. ft. of non-residential with 25% of project area remaining as open space.

South

Abutting the subject property to the south is Seminole Woods Blvd. (a 2-lane Major Collector roadway). Continuing across Seminole Woods Blvd. is the Seminole Woods neighborhood which was originally platted by ITT in the early 1970s as a single family residential neighborhood. These lots are zoned for single family use and continue to be developed as such. The proposed amendment will not hinder the continued development of the neighborhood for single family residential use.

West

Finally, the parcels to the west are within unincorporated Flagler County and currently have a FLUM designation of Conservation (Flagler County designation). These lands were conveyed to public ownership (Flagler County) in 2005 as part of a conveyance agreement between the property owners at the time (The Reserve, LLC) and Flagler County. The proposed FLUM amendment will not hinder the function of these areas for Conservation purposes.

Overall, staff does not find any incompatibility with the proposed increase in the maximum number of units from 416 to 743 as well as redesignating of different areas to Residential & Conservation.

CONSISTENCY WITH COMPREHENSIVE PLAN

In addition to being consistent with Objective 1.1.3 and Policy 1.1.3.3 which establishes the criteria for review of Future Land Use Map Amendments as provided in the previous section. The proposed amendment is consistent with the following policies in the Comprehensive Plan:

Policy 1.1.4.3 – Land use patterns are required to be efficient and not disproportionately increase the cost of providing and maintaining public facilities, as well as providing housing and transportation strategies that will foster energy conservation.

Analysis: The proposed amendment is consistent with Policy 1.1.4.3, the potential of additional residential use along a major collector (Seminole Woods Blvd.) is appropriate. Furthermore, Seminole Woods Blvd. as a collector road provides direct access to a major commercial corridor in the City (State Road 100), as well as one of the main north-south routes in the County (US-1). Finally, water and wastewater mains are within proximate distance of the project site and will be extended by the developer/property owner.

The additional number of dwelling units proposed in the amendment will add to the demand on the City's capacity for water and sewer treatment. The impact of this demand will be further reviewed and analyzed as part of the technical review process (either technical site plan or a plat) to determine if there is adequate capacity to serve any proposed development. Any deficiency in treatment capacity may require denial of a development order or a mitigation agreement to address the deficiency.

Policy 1.3.1.1 - The City shall ensure that the location and timing of new development is coordinated with the provision of public facilities through the use of growth management measures being included in the LDC such as development phasing, programming, and appropriate sizing of public facilities.

Analysis: The proposed amendment is consistent with Policy 1.3.1.1. As previously stated, the developer/landowner of the subject site will need to coordinate with the City Utilities Dept. to ensure that the available infrastructure can accommodate the proposed development program. Any need to extend water or wastewater mains to the site will be the responsibility of the developer/property owner. Additionally, more in-depth analysis of the demands on public facilities/infrastructure will occur during the site plan/platting phase of development. During this phase a concurrency test will occur to ensure that there is adequate infrastructure capacity including treatment to accommodate the impacts of proposed development.

Policy 5.1.3.2 – The City shall designate urban densities or intensities on the Future Land Use Map only in areas that have sufficient existing or planned capacity for potable water facilities and wastewater facilities where connection is available consistent with Policies 1.1.1.2 and 1.1.3.2. For the purposes of this Plan, any residential density exceeding one (1) dwelling unit per acre shall be deemed to be an urban density.

Analysis: The proposed amendment is consistent with Comprehensive Plan policy to create urban densities or intensities in areas that have sufficient existing or planned capacity for potable water and wastewater facilities.

Policy 5.2.2.3 – The City shall designate urban densities or intensities on the Future Land Use Map only in areas that have sufficient existing or planned capacity for sanitary sewer facilities and where connection is available as set forth in State law and City regulations. The City shall minimize the use of septic tanks in accordance with the provisions of Objective 5.2.3 and policies implementing that objective. For the purpose of this Plan, any residential density exceeding one (1) dwelling unit per acre shall be deemed to be an urban density.

Analysis: The proposed amendment is consistent with Comprehensive Plan policy above to designate urban densities or intensities in areas that have sufficient existing or planned capacity for sanitary sewer facilities.

Policy 6.1.9.10- The Conservation future land use designation shall be established on the FLUM to provide protection of wetland systems and other environmentally sensitive lands consistent with the Comprehensive Plan Goals, Objectives and Policies. This FLUM designation provides for preservation of large interconnected optimal wetland systems and other high quality environmentally sensitive areas. Conservation areas are generally a minimum of 10 acres in size, with most being substantially larger. Other areas, which may be classified Conservation, include natural water bodies and lakes, estuaries, oak hammocks and other large areas consisting of native vegetation areas, wildlife corridors, and aquifer recharge zones. Unlike most of the other land use designations that follow property lines, the boundaries of most areas assigned this land use designation have been drawn to encompass the environmentally sensitive area using best available aerial mapping data.

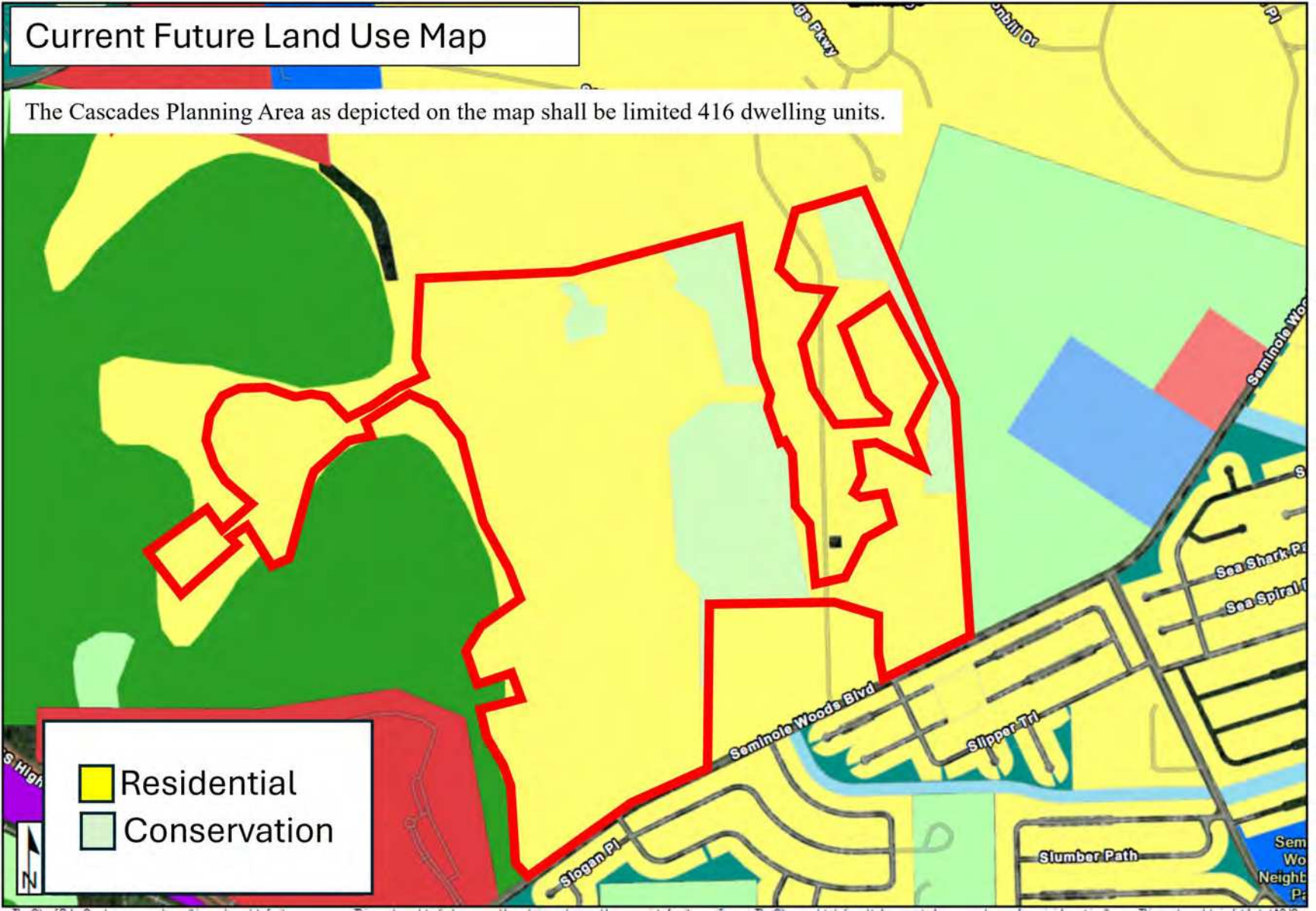
Analysis: The proposed realignment by the applicant will result in a net decrease of Conservation designated areas by 4.5+/- acres (from +/-63.8 to +/-59.2). As previously stated, some of the smaller Conservation areas, notably a 2.46 acre site remains as Open Space/Wetland Preservation Area on the Cascades Plat. The proposed amendment to create a connected "Conservation" area through the center of the planning area is appropriate and is consistent with the Comprehensive Plan policy for designating "Conservation" areas.

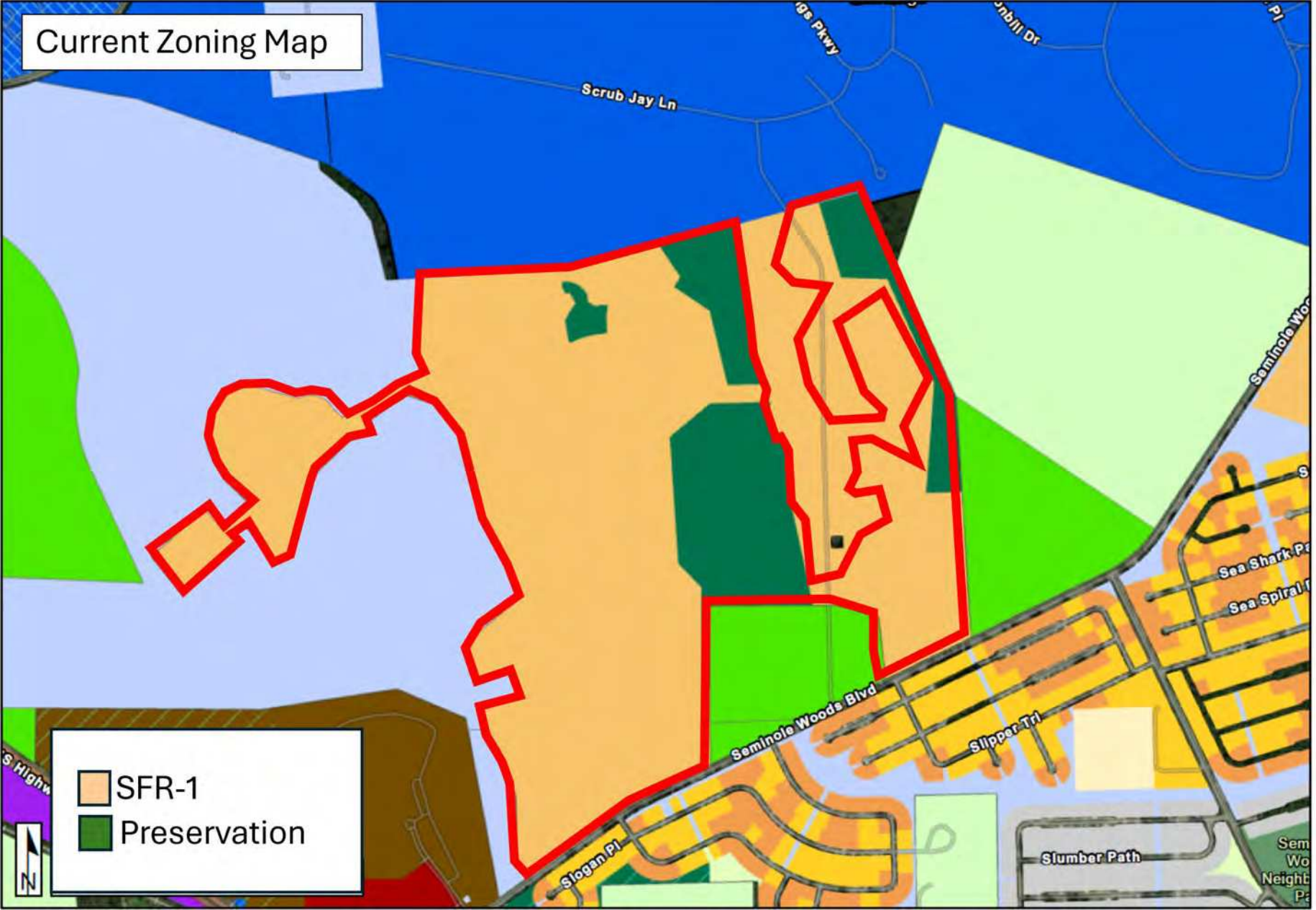
RECOMMENDATION

Staff recommends that the Planning and Land Development Regulation Board find the proposed amendment consistent with the Comprehensive Plan and recommend that City Council approve the proposed amendment.

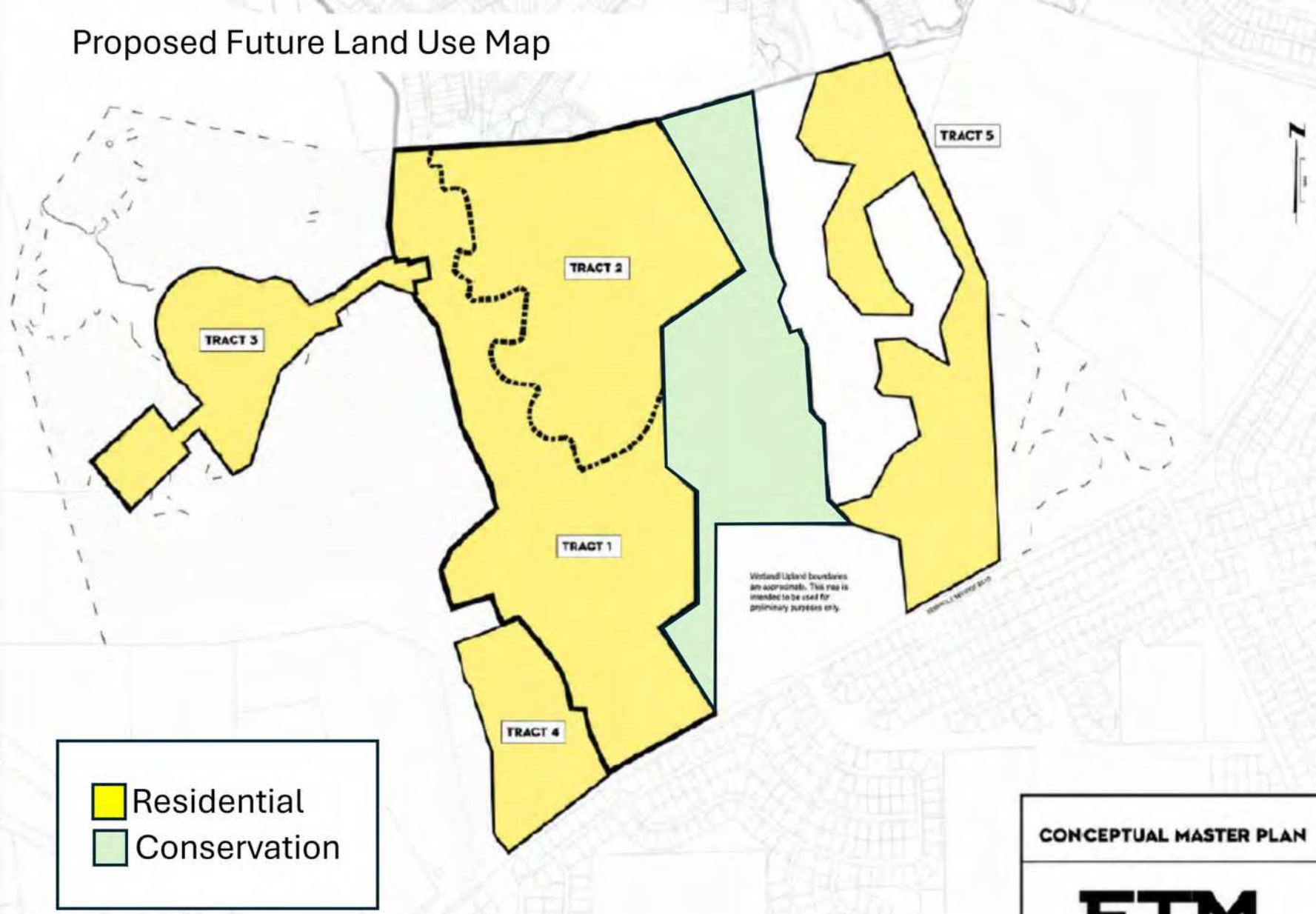
Current Future Land Use Map

The Cascades Planning Area as depicted on the map shall be limited 416 dwelling units.




Current Zoning Map
Scrub Jay Ln
Seminole Woods Blvd
Slipper Tri
Slogan Pl
Slumber Path
Sea Shark Pa
Sea Spiral
SFR-1
Preservation
N

Proposed Future Land Use Map



Note: Max residential units should be 743 units

COMMUNITY DEVELOPMENT DEPARTMENT USE ONLY

Application # _____ Submittal Date _____

Application Fee Paid ☐ Yes ☐ No Acceptance Date _____

Application Fee Amount $ _____ Project Manager _____

Notes _____

Future Land Use Map Amendment Application Form

PART A - REQUEST

A.1 **Project Name** Cascades

A.2 **Future Land Use Map (FLUM) Amendment Type** ☐ Large-Scale ☐ Small-Scale

A.3 **Subject Property Address** Seminole Woods Blvd.

A.4 **Parcel Identification Number(s)** See attached Exhibit "B"

	Existing	Proposed
A.5 **Use of Property**	Vacant/Residential	Residential
A.6 **FLUM Designation**	Residential	Residential
A.7 **Zoning District**	SFR-1	MPD

PART B - APPLICANT INFORMATION

B.1 **Applicant** ☑ Owner *(If Checked, Skip B.2 - B.4)* ☐ Authorized Agent

B.2 **Agent Name** Michael D. Chiumento III **Title** Attorney for Byrndog PCP, LLC

B.3 **Agent Company** Chiumento Law, PLLC

B.4 **Agent Address** 145 City Place, Suite 301, Palm Coast, FL 32164

B.5 **Contact Information** **Phone** (386) 445-8900 **Fax** (386) 445-6702

Email Address Michael3@legalteamforlife.com

B.6 **Owner Name** Byrndog PCP, LLC KL Seminole Trace, LLC & JTL Grand Landings Development, LLC

B.7 **Owner Address** _____

PART C - ADDITIONAL INFORMATION

C.1 **Contract for Sale or Option to Purchase** ☐ Yes ☐ No *(If Checked, Skip C.2 and C.3)*

C.2 **Parties Involved** _____

C.3 **Contract/Option** ☐ Contingent ☐ Absolute

C.4 **Pre-Application Meeting** **Date** _____ ☐ **Waived by Staff**

_____ Initials *(Staff Only)*

C.5 **Received and Read Applicant's Handbook** ☐ Yes ☐ No

PART D - DATA AND ANALYSIS CHECKLIST

Proof of Ownership / Property Information ❑ Original Recorded Warranty Deed
❑ Boundary Survey and Legal Description ❑ Development Timetable
❑ Sales or Option to Purchase Contract *(if applicable)*

Agent Authorization ❑ Signed and Notarized Authorization Form *(ONLY if Agent is Applicant)*

Density / Intensity and Population ❑ Density/Intensity and Population Analysis

Public Facilities Availability ❑ Traffic Data and Analysis ❑ Potable Water Data and Analysis
❑ Potable Water Availability Worksheet ❑ Wastewater Data and Analysis ❑ Letter from Utility Department
❑ Solid Waste Data and Analysis ❑ Public Recreation and Open Space Data and Analysis
❑ Public Schools Data and Analysis

Environmental and Cultural Resources ❑ Preliminary Environmental Site Assessment

Consistency with Comprehensive Plan ❑ Comprehensive Plan Consistency Analysis

Other ❑ Land Use Compatibility Analysis ❑ Intergovernmental Coordination Analysis
❑ Urban Sprawl Analysis *(May be Required)* ❑ List of Property Owners
❑ Proof of Meetings(s) with Neighborhood and Home Owners' Associations
❑ Letters of Support *(Optional)*

PART E - ACKNOWLEDGEMENTS, AUTHORIZATION, AND CERTIFICATION

By my signature hereto, I do hereby certify that the information contained in this Application is true and correct to the best of my knowledge, and understand that deliberate misrepresentation of such information will be grounds for denial or reversal of this application and/or revocation of any approval based upon this Application.

I hereby authorize City staff to enter upon my property at any reasonable time for the purposes of investigating and reviewing this request. I hereby agree to place a public notice sign (placard) on my property at a location(s) to be determined by City staff.

I further acknowledge that the City of Palm Coast may not defend any challenges to my proposed Future Land Use Map amendment (Comprehensive Plan Text amendment) and related development approvals, and that it may be my sole obligation to defend any and all actions and approvals, which authorize the use or development of my property. Submission of this form initiates a process and does not imply approval by the City of Palm Coast or any of its boards, commissions or staff.

I further acknowledge that I have read the information contained in this application form pertaining to proposed amendments to the official Zoning Map, official Future Land Use Map, and/or Comprehensive Plan and have had sufficient opportunity to inquire with regard to matters set forth therein and. Accordingly, I fully understand all applicable procedures and matters relating to this Application.

I hereby represent that I have the lawful right and authority to file this Application.

APPLICANT SIGNATURE(S) AND NOTARIZATION (if applicant is the property owner, all property owners must sign & signatures notarized) - *PLEASE USE BLUE INK*

Signature	Type or Print Name	Date
	Byrndog PCP, LLC	8-26-25

(SEAL)

State of Maine County of York

The foregoing application as acknowledge before me this 26th day of August, 2025 by Jeffrey R. Douglas, who is/are personally known to me, or who has/have produced Drivers License as identification.

Signature of Notary of Public

PART D - DATA AND ANALYSIS CHECKLIST

Proof of Ownership / Property Information ☐ Original Recorded Warranty Deed
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☐ Sales or Option to Purchase Contract *(if applicable)*

Agent Authorization ☐ Signed and Notarized Authorization Form *(ONLY if Agent is Applicant)*

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Public Facilities Availability ☐ Traffic Data and Analysis ☐ Potable Water Data and Analysis
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APPLICANT SIGNATURE(S) AND NOTARIZATION (if applicant is the property owner, all property owners must sign & signatures notarized) - *PLEASE USE BLUE INK*

Signature	Type or Print Name	Date
	David M. West, as Manager of JTL Grand Landings Development, LLC	8/21/25

Eric Phillip Hannaman
My Commission Expires
6/2/2026
Notary ID 131582651

Signature of Notary of Public

State of TEXAS County of DALLAS
The foregoing application as acknowledge before me this 21 day of August, 2025 by David M. West, who is/are personally known to me, or who has/have produced DRIVERS LICENSE as identification.

PART D - DATA AND ANALYSIS CHECKLIST

Proof of Ownership / Property Information ☐ Original Recorded Warranty Deed
☐ Boundary Survey and Legal Description ☐ Development Timetable
☐ Sales or Option to Purchase Contract *(if applicable)*

Agent Authorization ☐ Signed and Notarized Authorization Form *(ONLY if Agent is Applicant)*

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Public Facilities Availability ☐ Traffic Data and Analysis ☐ Potable Water Data and Analysis
☐ Potable Water Availability Worksheet ☐ Wastewater Data and Analysis ☐ Letter from Utility Department
☐ Solid Waste Data and Analysis ☐ Public Recreation and Open Space Data and Analysis
☐ Public Schools Data and Analysis

Environmental and Cultural Resources ☐ Preliminary Environmental Site Assessment

Consistency with Comprehensive Plan ☐ Comprehensive Plan Consistency Analysis

Other ☐ Land Use Compatibility Analysis ☐ Intergovernmental Coordination Analysis
☐ Urban Sprawl Analysis *(May be Required)* ☐ List of Property Owners
☐ Proof of Meetings(s) with Neighborhood and Home Owners' Associations
☐ Letters of Support *(Optional)*

PART E - ACKNOWLEDGEMENTS, AUTHORIZATION, AND CERTIFICATION

By my signature hereto, I do hereby certify that the information contained in this Application is true and correct to the best of my knowledge, and understand that deliberate misrepresentation of such information will be grounds for denial or reversal of this application and/or revocation of any approval based upon this Application.

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I hereby represent that I have the lawful right and authority to file this Application.

APPLICANT SIGNATURE(S) AND NOTARIZATION (if applicant is the property owner, all property owners must sign & signatures notarized) - *PLEASE USE BLUE INK*

Signature — Type or Print Name: KL Seminole Trace, LLC By:Kolter Group, LLC, as Manager — Date

Signature — Type or Print Name: James P. Harvey — Date: 08/25/2025

Signature — Type or Print Name — Date

BRYON T. LOPRESTE
MY COMMISSION # HH 456133
EXPIRES: January 27, 2028

State of FLORIDA County of HILLSBOROUGH

The foregoing application as acknowledge before me this 25 day of August, 2025 by James P. Harvey, who is/are personally ~~known to me, or~~ who has/have produced _____ as identification.

Signature of Notary of Public

EXHIBIT "A"

BYRNDOG PCP, LLC

A PART OF GOVERNMENT SECTIONS 29, 30, 31, AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: FOR A POINT OF REFERENCE, COMMENCE AT THE NORTHWEST CORNER OF SAID GOVERNMENT SECTION 32; THENCE SOUTH 00°45'50" WEST ALONG THE WEST LINE OF SAID SECTION 32, A DISTANCE OF 1224.55 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF SEMINOLE WOODS BOULEVARD (AN 80 FOOT RIGHT-OF-WAY AS NOW ESTABLISHED); THENCE NORTH 54°30'21" EAST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 193.37 FEET TO THE POINT OF BEGINNING; THENCE NORTH 47°42'22" WEST LEAVING SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 30.69 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 444.53 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 17°59'15" WEST AND A CHORD DISTANCE OF 334.30 FEET TO THE END OF SAID CURVE; THENCE NORTH 40°13'09" WEST, A DISTANCE OF 26.42 FEET; THENCE NORTH 03°30'47" EAST, A DISTANCE OF 112.57 FEET; THENCE NORTH 36°11'00" WEST, A DISTANCE OF 131.13 FEET; THENCE NORTH 59°28'43" EAST, A DISTANCE OF 82.30 FEET; THENCE NORTH 28°33'26" EAST, A DISTANCE OF 137.09 FEET; THENCE NORTH 66°49'26" EAST, A DISTANCE OF 38.00 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 144.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 10°05'15" WEST AND A CHORD DISTANCE OF 140.48 FEET TO THE END OF SAID CURVE; THENCE NORTH 63°53'15" WEST, A DISTANCE OF 132.81 FEET; THENCE NORTH 83°44'41" WEST, A DISTANCE OF 162.45 FEET; THENCE NORTH 17°06'30" WEST, A DISTANCE OF 292.28 FEET; THENCE NORTH 14°47'18" EAST, A DISTANCE OF 47.30 FEET; THENCE SOUTH 85°17'37" EAST, A DISTANCE OF 136.71 FEET; THENCE NORTH 61°12'04" EAST, A DISTANCE OF 15.52 FEET; THENCE SOUTH 18°34'29" EAST, A DISTANCE OF 65.03 FEET; THENCE NORTH 71°25'31" EAST, A DISTANCE OF 100.68 FEET; THENCE NORTH 21°33'01" WEST, A DISTANCE OF 82.53 FEET; THENCE NORTH 61°12'04" EAST, A DISTANCE OF 66.95 FEET; THENCE NORTH 41°21'12" EAST, A DISTANCE OF 40.07 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 320.48 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 216.74 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 26°54'34" WEST AND A CHORD DISTANCE OF 212.64 FEET TO THE END OF SAID CURVE; THENCE SOUTH 87°01'59" WEST, A DISTANCE OF 48.33 FEET; THENCE SOUTH 70°29'11" WEST, A DISTANCE OF 72.33 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 540.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH

29°18'27" WEST AND A CHORD DISTANCE OF 349.89 FEET TO THE END OF SAID CURVE; THENCE NORTH 42°24'06" WEST, A DISTANCE OF 51.18 FEET; THENCE NORTH 00°06'49" WEST, A DISTANCE OF 99.39 FEET; THENCE NORTH 26°40'30" EAST, A DISTANCE OF 70.76 FEET; THENCE NORTH 12°17'04" EAST, A DISTANCE OF 84.43 FEET; THENCE NORTH 23°30'30" EAST, A DISTANCE OF 101.77 FEET; THENCE SOUTH 66°15'40" EAST, A DISTANCE OF 103.83 FEET; THENCE NORTH 86°49'06" EAST, A DISTANCE OF 114.78 FEET TO A POINT ON A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 1183.21 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 164.50 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 05°19'07" WEST AND A CHORD DISTANCE OF 164.37 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 85.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 21°37'07" WEST AND A CHORD DISTANCE OF 85.33 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 51.63 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 25°26'59" WEST AND A CHORD DISTANCE OF 51.44 FEET TO THE END OF SAID CURVE; THENCE SOUTH 83°58'47" WEST, A DISTANCE OF 67.38 FEET; THENCE NORTH 03°17'29" WEST, A DISTANCE OF 32.58 FEET; THENCE NORTH 79°50'54" WEST, A DISTANCE OF 36.99 FEET; THENCE SOUTH 78°44'40" WEST, A DISTANCE OF 70.73 FEET; THENCE NORTH 15°30'24" WEST, A DISTANCE OF 133.32 FEET; THENCE NORTH 42°05'59" WEST, A DISTANCE OF 75.46 FEET; THENCE NORTH 49°14'06" EAST, A DISTANCE OF 113.35 FEET; THENCE NORTH 06°24'03" EAST, A DISTANCE OF 75.63 FEET; THENCE NORTH 15°17'20" WEST, A DISTANCE OF 151.75 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 520.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 116.24 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 49°06'01" WEST AND A CHORD DISTANCE OF 116.00 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 692.44 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 298.27 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 30°21'24" WEST AND A CHORD DISTANCE OF 295.97 FEET TO THE END OF SAID CURVE; THENCE NORTH 71°59'00" EAST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 582.44 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 85.58 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 13°48'41" WEST AND A CHORD DISTANCE OF 85.50 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 1214.67 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 53.51 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 10°51'33" WEST AND A CHORD DISTANCE OF 53.51 FEET TO THE END OF SAID CURVE; THENCE SOUTH 77°52'40" WEST, A

DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 507.88 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 20°56'54" WEST AND A CHORD DISTANCE OF 338.99 FEET TO THE END OF SAID CURVE; THENCE NORTH 29°41'42" WEST, A DISTANCE OF 11.82 FEET; THENCE SOUTH 69°27'08" WEST, A DISTANCE OF 39.11 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 855.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 188.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 63°08'36" WEST AND A CHORD DISTANCE OF 187.91 FEET TO THE END OF SAID CURVE; THENCE SOUTH 58°53'20" WEST, A DISTANCE OF 15.00 FEET; THENCE NORTH 31°30'01" WEST, A DISTANCE OF 97.29 FEET; THENCE SOUTH 72°01'17" WEST, A DISTANCE OF 73.49 FEET; THENCE SOUTH 53°56'11" WEST, A DISTANCE OF 170.90 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 13.83 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 56°12'02" WEST AND A CHORD DISTANCE OF 13.83 FEET TO THE END OF SAID CURVE; THENCE SOUTH 19°31'27" EAST, A DISTANCE OF 66.83 FEET; THENCE SOUTH 70°28'33" WEST, A DISTANCE OF 48.00 FEET; THENCE SOUTH 19°31'27" EAST, A DISTANCE OF 57.00 FEET; THENCE SOUTH 70°28'33" WEST, A DISTANCE OF 222.56 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 300.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 66.79 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 64°05'51" WEST AND A CHORD DISTANCE OF 66.66 FEET TO THE END OF SAID CURVE; THENCE SOUTH 44°42'49" EAST, A DISTANCE OF 38.23 FEET; THENCE SOUTH 04°24'29" EAST, A DISTANCE OF 57.39 FEET; THENCE SOUTH 23°08'51" WEST, A DISTANCE OF 157.59 FEET; THENCE SOUTH 84°09'56" WEST, A DISTANCE OF 88.02 FEET; THENCE NORTH 76°31'00" WEST, A DISTANCE OF 61.67 FEET; THENCE SOUTH 33°00'24" WEST, A DISTANCE OF 153.70 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 969.48 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 492.79 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 18°26'42" WEST AND A CHORD DISTANCE OF 487.50 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 387.77 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 77°43'25" WEST AND A CHORD DISTANCE OF 309.01 FEET TO THE END OF SAID CURVE; THENCE NORTH 53°04'12" EAST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 60.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 109.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 15°26'03" EAST AND A CHORD DISTANCE OF 95.03 FEET TO THE END OF SAID CURVE; THENCE NORTH 03°14'25" EAST, A DISTANCE

OF 35.46 FEET; THENCE NORTH 73°12'35" WEST, A DISTANCE OF 104.13 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 165.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 146.44 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 81°21'53" WEST AND A CHORD DISTANCE OF 141.68 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 55°56'21" WEST, A DISTANCE OF 44.41 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1135.30 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 36.63 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 55°09'11" WEST AND A CHORD DISTANCE OF 36.63 FEET TO THE END OF SAID CURVE; THENCE SOUTH 35°37'58" EAST, A DISTANCE OF 105.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1230.30 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 201.90 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 49°39'57" WEST AND A CHORD DISTANCE OF 201.67 FEET TO THE END OF SAID CURVE; THENCE SOUTH 48°17'05" EAST, A DISTANCE OF 46.94 FEET; THENCE SOUTH 14°59'46" WEST, A DISTANCE OF 62.44 FEET; THENCE SOUTH 12°20'37" EAST, A DISTANCE OF 15.93 FEET; THENCE SOUTH 46°22'21" EAST, A DISTANCE OF 32.63 FEET; THENCE SOUTH 01°00'31" WEST, A DISTANCE OF 79.06 FEET; THENCE NORTH 86°42'07" EAST, A DISTANCE OF 144.98 FEET; THENCE NORTH 41°20'41" EAST, A DISTANCE OF 36.82 FEET; THENCE SOUTH 70°48'37" EAST, A DISTANCE OF 121.06 FEET; THENCE SOUTH 02°33'13" WEST, A DISTANCE OF 60.02 FEET; THENCE SOUTH 36°07'13" WEST, A DISTANCE OF 85.92 FEET; THENCE NORTH 57°06'19" WEST, A DISTANCE OF 156.83 FEET; THENCE NORTH 33°12'18" EAST, A DISTANCE OF 29.33 FEET; THENCE SOUTH 86°42'07" WEST, A DISTANCE OF 131.46 FEET; THENCE SOUTH 24°24'44" WEST, A DISTANCE OF 18.02 FEET; THENCE NORTH 87°51'56" WEST, A DISTANCE OF 63.67 FEET; THENCE NORTH 13°11'13" WEST, A DISTANCE OF 74.87 FEET; THENCE NORTH 57°11'17" WEST, A DISTANCE OF 83.28 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 98.55 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 70°39'19" WEST AND A CHORD DISTANCE OF 97.55 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 220.37 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 58°05'32" WEST AND A CHORD DISTANCE OF 205.26 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 20°57'21" WEST, A DISTANCE OF 55.00 FEET; THENCE NORTH 59°29'11" EAST, A DISTANCE OF 88.23 FEET; THENCE NORTH 23°08'02" EAST, A DISTANCE OF 139.98 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 123.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 63°45'33" EAST AND A CHORD DISTANCE OF 121.28 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE

SOUTHEASTERLY, HAVING A RADIUS OF 1520.30 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 218.25 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 50°14'55" EAST AND A CHORD DISTANCE OF 218.06 FEET TO THE END OF SAID CURVE; THENCE SOUTH 35°36'42" EAST, A DISTANCE OF 105.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1415.30 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 38.04 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 55°09'49" EAST AND A CHORD DISTANCE OF 38.03 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 55°56'21" EAST, A DISTANCE OF 44.41 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 235.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 101.04 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 68°15'21" EAST AND A CHORD DISTANCE OF 100.26 FEET TO THE END OF SAID CURVE; THENCE NORTH 09°25'38" WEST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 345.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 154.89 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 86°33'56" EAST AND A CHORD DISTANCE OF 153.59 FEET TO THE END OF SAID CURVE; THENCE NORTH 25°17'37" EAST, A DISTANCE OF 11.36 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 779.93 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 710.66 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 38°04'25" WEST AND A CHORD DISTANCE OF 686.33 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 270.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 201.02 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 09°21'32" EAST AND A CHORD DISTANCE OF 196.41 FEET TO THE END OF SAID CURVE; THENCE NORTH 56°07'39" WEST, A DISTANCE OF 30.37 FEET; THENCE SOUTH 89°16'24" WEST, A DISTANCE OF 307.76 FEET; THENCE SOUTH 69°45'47" WEST, A DISTANCE OF 200.04 FEET; THENCE SOUTH 49°59'01" WEST, A DISTANCE OF 58.05 FEET; THENCE SOUTH 36°16'26" WEST, A DISTANCE OF 171.87 FEET; THENCE NORTH 87°01'20" WEST, A DISTANCE OF 167.32 FEET; THENCE NORTH 12°41'32" WEST, A DISTANCE OF 111.63 FEET; THENCE NORTH 17°24'53" EAST, A DISTANCE OF 146.82 FEET; THENCE NORTH 16°21'20" WEST, A DISTANCE OF 67.14 FEET; THENCE NORTH 42°05'14" WEST, A DISTANCE OF 101.85 FEET; THENCE NORTH 07°04'46" EAST, A DISTANCE OF 147.63 FEET; THENCE NORTH 18°27'49" EAST, A DISTANCE OF 237.18 FEET; THENCE SOUTH 73°05'38" EAST, A DISTANCE OF 76.78 FEET; THENCE SOUTH 44°03'10" EAST, A DISTANCE OF 292.20 FEET; THENCE SOUTH 28°55'57" EAST, A DISTANCE OF 299.86 FEET; THENCE NORTH 89°16'24" EAST, A DISTANCE OF 370.38 FEET; THENCE SOUTH 56°07'39" EAST, A DISTANCE OF 39.71 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 270.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 84.20 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 45°59'29" EAST AND A

CHORD DISTANCE OF 83.86 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 1000.03 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 113.81 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 51°39'56" EAST AND A CHORD DISTANCE OF 113.75 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 270.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 316.80 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 82°01'07" EAST AND A CHORD DISTANCE OF 298.93 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 508.58 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 258.11 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 78°54'27" EAST AND A CHORD DISTANCE OF 255.35 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 61.44 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 77°45'08" EAST AND A CHORD DISTANCE OF 61.20 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 270.57 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 65°27'11" EAST AND A CHORD DISTANCE OF 242.91 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 19°51'24" EAST, A DISTANCE OF 127.75 FEET; THENCE NORTH 70°28'33" EAST, A DISTANCE OF 236.93 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 115.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 27.62 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 63°35'43" EAST AND A CHORD DISTANCE OF 27.55 FEET TO THE END OF SAID CURVE; THENCE SOUTH 33°17'07" EAST, A DISTANCE OF 10.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 125.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 6.06 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 55°19'32" EAST AND A CHORD DISTANCE OF 6.06 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 53°56'11" EAST, A DISTANCE OF 24.79 FEET; THENCE NORTH 36°03'49" WEST, A DISTANCE OF 10.00 FEET; THENCE NORTH 53°56'11" EAST, A DISTANCE OF 179.95 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1035.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 280.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 61°41'40" EAST AND A CHORD DISTANCE OF 279.42 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 69°27'08" EAST, A DISTANCE OF 28.57 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 945.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 224.25 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 11°37'38" WEST AND A CHORD DISTANCE OF

223.72 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 545.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 77.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 00°44'46" WEST AND A CHORD DISTANCE OF 77.61 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 03°20'13" EAST, A DISTANCE OF 504.26 FEET; THENCE NORTH 86°33'58" EAST, A DISTANCE OF 1262.18 FEET; THENCE NORTH 74°58'14" EAST, A DISTANCE OF 1393.40 FEET; THENCE SOUTH 08°33'17" EAST, A DISTANCE OF 1204.63 FEET; THENCE SOUTH 21°31'33" EAST, A DISTANCE OF 231.71 FEET; THENCE SOUTH 19°36'50" WEST, A DISTANCE OF 119.80 FEET; THENCE SOUTH 23°03'10" EAST, A DISTANCE OF 266.90 FEET; THENCE NORTH 61°27'01" EAST, A DISTANCE OF 72.25 FEET; THENCE SOUTH 21°31'33" EAST, A DISTANCE OF 25.00 FEET; THENCE SOUTH 24°44'50" EAST, A DISTANCE OF 109.86 FEET; THENCE SOUTH 02°50'42" EAST, A DISTANCE OF 443.43 FEET; THENCE SOUTH 38°46'38" EAST, A DISTANCE OF 155.36 FEET; THENCE SOUTH 05°31'05" EAST, A DISTANCE OF 521.33 FEET; THENCE NORTH 73°59'21" EAST, A DISTANCE OF 259.08 FEET; THENCE NORTH 30°18'30" EAST, A DISTANCE OF 338.21 FEET; THENCE NORTH 56°02'13" EAST, A DISTANCE OF 256.60 FEET; THENCE NORTH 17°18'02" WEST, A DISTANCE OF 245.64 FEET; THENCE NORTH 87°58'47" WEST, A DISTANCE OF 188.15 FEET; THENCE NORTH 43°23'44" WEST, A DISTANCE OF 70.31 FEET; THENCE NORTH 15°25'25" EAST, A DISTANCE OF 131.43 FEET; THENCE NORTH 08°57'10" WEST, A DISTANCE OF 221.74 FEET; THENCE NORTH 87°20'40" EAST, A DISTANCE OF 215.08 FEET; THENCE SOUTH 61°08'13" EAST, A DISTANCE OF 365.39 FEET; THENCE NORTH 12°27'20" WEST, A DISTANCE OF 282.17 FEET; THENCE NORTH 22°28'43" EAST, A DISTANCE OF 424.41 FEET; THENCE NORTH 28°35'48" WEST, A DISTANCE OF 795.82 FEET; THENCE SOUTH 54°59'59" WEST, A DISTANCE OF 426.05 FEET; THENCE SOUTH 17°21'11" EAST, A DISTANCE OF 363.39 FEET; THENCE SOUTH 27°42'03" EAST, A DISTANCE OF 252.43 FEET; THENCE SOUTH 43°50'42" EAST, A DISTANCE OF 194.13 FEET; THENCE SOUTH 03°24'22" WEST, A DISTANCE OF 68.13 FEET; THENCE SOUTH 89°33'00" WEST, A DISTANCE OF 376.08 FEET; THENCE NORTH 40°54'31" WEST, A DISTANCE OF 373.09 FEET; THENCE NORTH 07°01'37" WEST, A DISTANCE OF 373.59 FEET; THENCE NORTH 27°35'02" EAST, A DISTANCE OF 477.92 FEET; THENCE NORTH 83°09'02" WEST, A DISTANCE OF 296.11 FEET; THENCE NORTH 39°33'00" WEST, A DISTANCE OF 205.29 FEET; THENCE NORTH 16°56'05" EAST, A DISTANCE OF 492.36 FEET; THENCE NORTH 75°07'44" EAST, A DISTANCE OF 547.25 FEET; THENCE SOUTH 24°13'34" EAST, A DISTANCE OF 1824.65 FEET; THENCE SOUTH 03°31'05" EAST, A DISTANCE OF 1951.81 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF SAID SEMINOLE WOODS BOULEVARD; THENCE SOUTH 64°15'15" WEST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 771.72 FEET; THENCE NORTH 06°32'52" WEST LEAVING SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 503.88 FEET; THENCE NORTH 74°26'31" WEST, A DISTANCE OF 350.75 FEET; THENCE SOUTH 89°59'26" WEST, A DISTANCE OF 1033.69 FEET; THENCE SOUTH 00°00'34" EAST, A DISTANCE OF 1283.56 FEET TO A POINT ON SAID NORTHWESTERLY RIGHT-OF-WAY LINE OF SEMINOLE WOODS BOULEVARD; THENCE SOUTH

64°15'15" WEST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 548.03 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 2000.00 FEET; THENCE SOUTHWESTERLY CONTINUING ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE AND ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 340.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 59°22'48" WEST AND A CHORD DISTANCE OF 339.87 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 54°30'21" WEST CONTINUING ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 721.45 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT

CASCADES-SINGLE FAMILY WEST PHASE 1

PART OF GOVERNMENT SECTIONS 29, 30 AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 29, THENCE NORTH 02°56’18” WEST ALONG THE WEST LINE OF SAID SECTION 29 A DISTANCE OF 278.18 FEET; THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 7.64 FEET TO THE POINT OF BEGINNING, THENCE NORTH 17°11’33” WEST, A DISTANCE OF 200.00 FEET, THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 300.00 FEET; THENCE NORTH 17°11’33” WEST, A DISTANCE OF 288.37 FEET, THENCE NORTH 30°45’57" EAST, A DISTANCE OF 156.00 FEET; THENCE NORTH 50°34’11” EAST, A DISTANCE OF 436.26 FEET; THENCE NORTH 16°53’57” WEST; A DISTANCE OF 207.43 FEET; THENCE NORTH 26°57’36” WEST, A DISTANCE OF 468.07 FEET; THENCE NORTH 15°17’20” WEST, A DISTANCE OF 724.55 FEET; THENCE NORTH 39°35’09” WEST; A DISTANCE OF 330.89 FEET, THENCE NORTH 26°47’41” WEST, A DISTANCE OF 266.83 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 945.00 FEET, AN ARC DISTANCE OF 204.23 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 11°01’12” WEST, 203.83 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 545.00 FEET, AN ARC DISTANCE OF 77.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 00°44’46” WEST, 77.61 FEET, TO THE POINT OF TANGENCY OF SAID CURVE THENCE NORTH 03°20’13” EAST, A DISTANCE OF 504.26 FEET, THENCE NORTH 86°33’58” EAST, A DISTANCE OF 276.06 FEET, THENCE SOUTH 09°42’36” WEST, A DISTANCE OF 94.29 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY, THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.67 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 33°15’05” EAST, 34.08 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, NORTHERLY, HAVING A RADIUS OF 163.47 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID

ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 87°45’39” WEST, 36.57 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 86°33’58” EAST, A DISTANCE OF 36.39 FEET; THENCE SOUTH 03°26’02” EAST, A DISTANCE OF 169.00 FEET; THENCE NORTH 86°53’07” EAST, A DISTANCE OF 100.02 FEET TO THE ARC OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 79.46 FEET, AN ARC DISTANCE OF 118.61’ FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 50°33’24” EAST, 107.90 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 10°57’01” EAST, A DISTANCE OF 355.49 FEET TO A POINT ON A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 91.03 FEET, AN ARC DISTANCE OF 25.74 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 18°18’00” WEST, 25.65 FEET TO A NON-TANGENT POINT BEARING SOUTH 41°59’33” EAST, A DISTANCE OF 46.73 FEET, THENCE NORTH 76°57'21” EAST, A DISTANCE OF 111.15 FEET; THENCE NORTH 76°39’46” EAST, A DISTANCE OF 50.00 FEET; THENCE SOUTH 13°08’10” EAST, A DISTANCE OF 17.04 FEET; THENCE NORTH 68°03’37” EAST, A DISTANCE OF 185.69 FEET; THENCE NORTH 76°20’49” EAST, A DISTANCE OF 56.75 FEET; THENCE SOUTH 13°40’24” EAST, A DISTANCE OF 13.56 FEET; THENCE TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 325.00 FEET, AN ARC DISTANCE OF 72.43 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°08’06” WEST, 72.28 FEET, TO A NON-TANGENT POINT BEARING NORTH 61°53’51” EAST, A DISTANCE OF 51.67 FEET TO A NON-TANGENT CURVE, LEADING SOUTHEASTERLY; THENCE SOUTHEASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 20.97 FEET, AN ARC DISTANCE OF 30.72 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 80°18’33” WEST, 28.04 FEET, TO A NON-TANGENCY POINT; THENCE SOUTH 31°43’36” EAST, A DISTANCE OF 50.42 FEET TO A NON-TANGENT CURVE LEADING SOUTHWESTERLY; THENCE SOUTHWESTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 25.13 FEET, AN ARC DISTANCE OF 37.09 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°10’50” EAST, 33.81 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 275.00 FEET, AN ARC DISTANCE OF 76.65 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°13’19" WEST, 76.41 FEET, TO A NON-TANGENT POINT BEARING SOUTH 85°52’14”, EAST, A DISTANCE OF 122.30 FEET; THENCE NORTH 06°18'16” WEST, A DISTANCE OF 16.16 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 50.22 FEET, AN ARC DISTANCE OF 67.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD

BEARING AND DISTANCE OF NORTH 30°56’07” EAST, 62.29 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 46.57 FEET, AN ARC DISTANCE OF 72.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 59°26’34” EAST, 65.18 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 04°53’10” EAST, A DISTANCE OF 66.69 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 724.36 FEET, AN ARC DISTANCE OF 34.62 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 06°53’25, EAST, 34.62 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 502.26 FEET, AN ARC DISTANCE OF 146.87 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°18’43” WEST, 146.35 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 24°13’30” EAST, A DISTANCE OF 197.82 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 55.00 FEET, AN ARC DISTANCE OF 80.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 17°33’29” WEST, 73.29 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 436.55 FEET, AN ARC DISTANCE OF 93.14 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 54°30’50” EAST, 92.96 FEET, TO A NON-TANGENT POINT BEARING SOUTH 37°16’33” EAST, A DISTANCE OF 120.89 FEET; THENCE SOUTH 44°32’37” EAST, A DISTANCE OF 50.02 FEET; THENCE SOUTH 65°23’31” EAST, A DISTANCE OF 517.00 FEET; THENCE SOUTH 04°26’11” EAST, A DISTANCE OF 540.96 FEET, THENCE SOUTH 47°18'59” EAST, A DISTANCE OF 280.03 FEET; THENCE SOUTH 00°00’00” EAST, A DISTANCE OF 783.09 FEET, THENCE SOUTH 58°20’26” WEST, A DISTANCE OF 341.06 FEET; THENCE SOUTH 37°53’13” EAST, A DISTANCE OF 141.57 FEET, THENCE SOUTH 35°34’53” WEST, A DISTANCE OF 557.52 FEET; THENCE SOUTH 81°24’26” WEST, A DISTANCE OF 95.82 FEET; THENCE SOUTH 03°37’43" EAST, A DISTANCE OF 42.09 FEET; THENCE SOUTH 86°22’17" WEST, A DISTANCE OF 67.55 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC CF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 75.00 FEET, AN ARC DISTANCE OF 92.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 03°02’28” WEST, 86.91 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 42.00 FEET, AN ARC DISTANCE OF 37.78 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 12°40’32” WEST, A DISTANCE OF 36.52 FEET, TO A NON-TANGENT POINT BEARING SOUTH 76°54’14’ WEST, A DISTANCE

OF 70.06 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 44.49 FEET, AN ARC DISTANCE OF 28.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°06’56” WEST, 28.48 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 88.00 FEET, AN ARC DISTANCE OF 58.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°16’28” WEST, 57.49 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 09°12’34” WEST, A DISTANCE OF 76.34 FEET, THENCE NORTH 08°44’20” WEST, A DISTANCE OF 32.20 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 117.69 FEET, AN ARC DISTANCE OF 30.20 FEET, SAID ARC BEING SUBTENDED BY CHORD BEARING AND DISTANCE OF NORTH 05°05’05” EAST, 30.11 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 14°56’11” EAST, A DISTANCE OF 35.76 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY; ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.19 FEET, AN ARC DISTANCE OF 8.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°21’58” EAST, 8.63 FEET TO A NON-TANGENT POINT BEARING SOUTH 80°14'31” WEST, A DISTANCE OF 110.59 FEET; THENCE NORTH 09°12’34” WEST, A DISTANCE OF 75.57 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 355.00 FEET, AN ARC DISTANCE OF 204.05 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 25°40'33” EAST, 201.25 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 42°08'32” WEST, A DISTANCE OF 198.02 FEET; THENCE NORTH 42°40’44" WEST, A DISTANCE OF 147.06 FEET; THENCE NORTH 39°55’26” WEST, A DISTANCE OF 35.58 FEET; THENCE NORTH 42°08’32” WEST, A DISTANCE OF 15.41 FEET; THENCE NORTH 40°55’16” WEST, A DISTANCE OF 18.97 FEET, THENCE NORTH 37°51’08” WEST, A DISTANCE OF 28.69 FEET; THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 105.21 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH

KL SEMINOLE TRACE, LLC, a Florida limited liability company

CASCADES-SINGLE FAMILY WEST PHASE 1

PART OF GOVERNMENT SECTIONS 29, 30 AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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DISTANCE OF NORTH 17°18’43” WEST, 146.35 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 24°13’30” EAST, A DISTANCE OF 197.82 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 55.00 FEET, AN ARC DISTANCE OF 80.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 17°33’29” WEST, 73.29 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 436.55 FEET, AN ARC DISTANCE OF 93.14 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 54°30’50” EAST, 92.96 FEET, TO A NON-TANGENT POINT BEARING SOUTH 37°16’33” EAST, A DISTANCE OF 120.89 FEET; THENCE SOUTH 44°32’37” EAST, A DISTANCE OF 50.02 FEET; THENCE SOUTH 65°23’31” EAST, A DISTANCE OF 517.00 FEET; THENCE SOUTH 04°26’11” EAST, A DISTANCE OF 540.96 FEET, THENCE SOUTH 47°18'59” EAST, A DISTANCE OF 280.03 FEET; THENCE SOUTH 00°00’00” EAST, A DISTANCE OF 783.09 FEET, THENCE SOUTH 58°20’26” WEST, A DISTANCE OF 341.06 FEET; THENCE SOUTH 37°53’13” EAST, A DISTANCE OF 141.57 FEET, THENCE SOUTH 35°34’53” WEST, A DISTANCE OF 557.52 FEET; THENCE SOUTH 81°24’26” WEST, A DISTANCE OF 95.82 FEET; THENCE SOUTH 03°37’43" EAST, A DISTANCE OF 42.09 FEET; THENCE SOUTH 86°22’17" WEST, A DISTANCE OF 67.55 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC CF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 75.00 FEET, AN ARC DISTANCE OF 92.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 03°02’28” WEST, 86.91 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 42.00 FEET, AN ARC DISTANCE OF 37.78 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 12°40’32” WEST, A DISTANCE OF 36.52 FEET, TO A NON-TANGENT POINT BEARING SOUTH 76°54’14’ WEST, A DISTANCE OF 70.06 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 44.49 FEET, AN ARC DISTANCE OF 28.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°06’56” WEST, 28.48 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 88.00 FEET, AN ARC DISTANCE OF 58.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°16’28” WEST, 57.49 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 09°12’34” WEST, A DISTANCE OF 76.34 FEET, THENCE NORTH 08°44’20” WEST, A DISTANCE OF 32.20 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 117.69 FEET, AN ARC DISTANCE OF 30.20 FEET, SAID ARC BEING SUBTENDED BY CHORD BEARING AND DISTANCE OF NORTH 05°05’05” EAST, 30.11 FEET,

TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 14°56’11” EAST, A DISTANCE OF 35.76 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY; ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.19 FEET, AN ARC DISTANCE OF 8.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°21’58” EAST, 8.63 FEET TO A NON-TANGENT POINT BEARING SOUTH 80°14'31” WEST, A DISTANCE OF 110.59 FEET; THENCE NORTH 09°12’34” WEST, A DISTANCE OF 75.57 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 355.00 FEET, AN ARC DISTANCE OF 204.05 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 25°40'33” EAST, 201.25 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 42°08'32” WEST, A DISTANCE OF 198.02 FEET; THENCE NORTH 42°40’44" WEST, A DISTANCE OF 147.06 FEET; THENCE NORTH 39°55’26” WEST, A DISTANCE OF 35.58 FEET; THENCE NORTH 42°08’32” WEST, A DISTANCE OF 15.41 FEET; THENCE NORTH 40°55’16” WEST, A DISTANCE OF 18.97 FEET, THENCE NORTH 37°51’08” WEST, A DISTANCE OF 28.69 FEET; THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 105.21 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH

JTL GRAND LANDINGS DEVELOPMENT, LLC, a Texas limited liability company

PART OF SECTION 29, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 29, THENCE N02°56'18"W ALONG THE WEST LINE OF SAID SECTION 29, A DISTANCE OF 1002.51 FEET; THENCE N89°59'26"E DEPARTING SAID WEST LINE A DISTANCE OF 1565.78 FEET TO THE NORTHWEST CORNER OF THOSE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 1459, PAGE 152, PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA; THENCE N89°59'26"E ALONG THE NORTH LINE OF SAID LANDS A DISTANCE OF 866.77 FEET; THENCE DEPARTING SAID NORTH LINE N00°00'34"W A DISTANCE OF 152.16 FEET TO THE POINT OF BEGINNING, SAID POINT BEING ON THOSE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 1887, PAGE 1476, PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA; THENCE ALONG SAID LANDS THE FOLLOWING CALLS AND DISTANCES, N73°59'21"E A DISTANCE OF 259.08 FEET; N30°18'30"E A DISTANCE OF 338.21 FEET; N56°02'13"E A DISTANCE OF 256.60 FEET; N17°18'02"W A DISTANCE OF 245.64 FEET; N87°58'47"W A DISTANCE OF 188.15 FEET; N43°23'44"W A DISTANCE OF 70.31 FEET; N15°25'25"E A DISTANCE OF 131.43 FEET; N08°57'10"W A DISTANCE OF 221.74 FEET; N87°20'40"E A DISTANCE OF 215.08 FEET; S61°08'13"E A DISTANCE OF 365.39 FEET; N12°27'20"W A DISTANCE OF 282.17 FEET; N22°28'43"E A DISTANCE OF 424.41 FEET; N28°35'48"W A DISTANCE OF 795.82 FEET; S54°59'59"W A DISTANCE OF 426.05 FEET; S17°21'11"E A DISTANCE OF 363.39 FEET; S27°42'03"E A DISTANCE OF 252.43 FEET; S43°50'42"E A DISTANCE OF 194.13 FEET; S03°24'22"W A DISTANCE OF 68.13 FEET; S89°33'00"W A DISTANCE OF 376.08 FEET; N40°54'31"W A DISTANCE OF 373.09 FEET; N07°01'37"W A DISTANCE OF 373.59 FEET; N27°35'02"E A DISTANCE OF 477.92 FEET; N83°09'02"W A DISTANCE OF 296.11 FEET; N39°33'00"W A DISTANCE OF 205.29 FEET; N16°56'05"E 492.36 FEET TO A POINT ON THE SOUTH LINE OF THOSE LANDS RECORDED IN OFFICIAL RECORDS BOOK 2362, PAGE 1118, PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA;; THENCE DEPARTING AFORESAID LANDS AND ALONG SAID SOUTH LINE S75°28'44"W A DISTANCE OF 492.32 FEET TO A POINT ON AFORESAID LANDS RECORDED IN OFFICIAL RECORDS BOOK 1887, PAGE 1476; THENCE ALONG SAID LANDS THE FOLLOWING CALLS AND DISTANCES, S08°33'17"E A DISTANCE OF 1204.63 FEET; S21°31'33"E A DISTANCE OF 231.71 FEET; S19°36'50"W A DISTANCE OF 119.80 FEET; S23°03'10"E A DISTANCE OF 266.90 FEET; N61°27'01"E A DISTANCE OF 72.25 FEET; S21°32'33"E A DISTANCE OF 25.00 FEET; S24°44'50"E A DISTANCE OF 109.86 FEET; S02°50'42"E A DISTANCE OF 443.43 FEET; S38°46'38"E A DISTANCE OF 155.36 FEET; S05°31'05"E A DISTANCE OF 521.33 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINING 1,929,259 SQUARE FEET AND/OR 44.29 ACRES MORE OR LESS.

EXHIBIT "B"

JTL GRAND LANDINGS DEVELOPMENT, LLC

29-12-31-0000-01010-0025 (44.06 acres)
29-12-31-0000-01010-0010 (0.23 acres)

BYRNDOG PCP, LLC

29-12-31-0000-01010-0021 (166.23 acres)
32-12-31-0650-000B0-0020 (20.67 acres)
30-12-31-0000-01020-0040 (35.89 acres)
31-12-31-0000-01070-0030 (2.80 acres)

KL SEMINOLE TRACE, LLC

29-12-31-0000-01020-0000 (105.52 acres)

Michael D. Chiumento
Michael D. Chiumento III
William J. Bosch
Vincent L. Sullivan
Diane A. Vidal, P.A.*
Kareen Movsesyan
Sydney N. Stoneburner
Eric R. Sloan
Thomas R. Pycraft *
Christy Earls

Christy Earls
Attorney
CEarls@legalteamforlife.com

145 City Place, Suite 301
Palm Coast, FL 32164
Tel. (386) 445-8900
Fax: (386) 445-6702

2 Camino Del Mar
Palm Coast, FL 32137

57 W. Granada Blvd.
Ormond Beach, FL 32174

CHIUMENTO LAW

Proudly serving Flagler and Volusia Counties for over 50 years

January 5, 2025

City of Palm Coast
Attn: Jose Papa
Via City Portal Only

RE: Cascades at Grand Landings – Comp Plan Amendment Application No. 6419

Dear Jose:

Please accept this letter as the Applicant's formal **cover letter** submitted in support of the enclosed **Future Land Use Map (FLUM) Amendment Application**, in accordance with the City of Palm Coast Applicant's Handbook for Future Land Use Map Amendments.

1. Subject Property Size
The subject property consists of approximately **380± acres**.

2. Existing Land Uses (Subject and Abutting Properties)
The subject property is currently utilized primarily as single-family residential, **silvicultural land**, with extensive upland and wetland areas. Abutting properties consist of a combination of **existing residential development**, **vacant land**, **conservation areas**, and lands planned for future residential development.

3. Existing Future Land Use Map Designations
The subject property is currently designated **Residential** and **Conservation** on the City of Palm Coast Future Land Use Map. Abutting properties carry a mix of **Residential** and **Conservation** designations consistent with the City's long-range planning framework.

4. Proposed Future Land Use Map Designation
The Applicant requests approval of a Future Land Use Map amendment to allow the subject property to be designated **Residential and Conservation**, with a policy limiting development to a **maximum of 780 dwelling units** within the Residential areas.

5. Justification for the Requested FLUM Amendment
The requested amendment is justified for the following reasons:

- The amendment is **consistent with the City of Palm Coast Comprehensive Plan**, including policies supporting residential development along major collector roadways such as **Seminole Woods Boulevard**.
- The site is appropriately located near existing and planned infrastructure, including **water and wastewater facilities**, and provides direct access to regional transportation corridors.
- The proposal maintains substantial **conservation areas**, protecting environmentally sensitive lands and complying with City, state, and federal environmental regulations.
- The planned development pattern is **compatible with surrounding land uses**, providing a logical transition between existing residential neighborhoods and preserved natural areas.
- The amendment supports **orderly growth**, efficient service delivery, and long-term land use planning objectives of the City.

The proposed Future Land Use Map amendment implements the City's adopted policies by balancing residential growth with environmental protection while ensuring adequate public facilities and infrastructure.

The Applicant respectfully requests that this application be reviewed for completeness and scheduled for consideration in accordance with the City's adopted procedures and applicable law. We appreciate the assistance of City staff throughout this process and remain available to provide any additional information that may be requested.

Sincerely,

Michael D. Chiumento III
Attorney
MDC/cm

Michael D. Chiumento
Michael D. Chiumento III
William J. Bosch
Vincent L. Sullivan
Christy Earls
Diane A. Vidal, P.A.*
Thomas R. Pycraft *

145 City Place, Suite 301
Palm Coast, FL 32164
Tel. (386) 445-8900
Fax: (386) 445-6702

2 Camino Del Mar
Palm Coast, FL 32137

57 W. Granada Blvd.
Ormond Beach, FL 32174

CHIUMENTO LAW

Michael D. Chiumento III
Managing Partner
Michael3@legalteamforlife.com

Proudly serving Flagler and Volusia Counties for over 50 years

June 16, 2026

City of Palm Coast
Attn: Jose Papa, Project Manager
160 Lake Avenue
Palm Coast, FL 32164
Via Portal

RE: Cascades at Grand Landings (Seminole Trace)
Future Land Use Amendment
Application Number 6419

Dear Mr. Papa:

On behalf of the applicant, please accept this response to the City's request for additional information dated January 14, 2026, regarding the above-referenced application. Each item has been addressed as follows:

1. **Transportation Impact Analysis (TIA)**

The Traffic Impact Analysis has been prepared by ETM in coordination with City staff and in accordance with the approved methodology. The analysis evaluates existing, background, and future conditions and concludes that the proposed development will not result in significant adverse impacts to the surrounding roadway network. Minor access improvements consisting of eastbound left-turn lanes at both project driveways are recommended and will be constructed in accordance with City standards.

2. **Potable Water Impact Analysis**

a. Per ETM **St. Johns River Water Management District Potable Water Availability Worksheet** doesn't exist.

b. A **Utility Department Level of Service (LOS) letter** has been requested and will be provided. The Applicant has coordinated with City Utilities to confirm service availability and

capacity. However, please remember that the City recently provided the adjacent project with a letter showing availability.

3. **Wastewater Impact Analysis**

A **Utility Department LOS letter addressing wastewater service capacity** has been requested and will be provided. Based on preliminary coordination with City Utilities, adequate capacity is anticipated to serve the proposed development without degradation of LOS. The requested coordination letter will be delivered to the City prior to the Planning Board meeting**.** However, please remember that the City recently provided the adjacent project with a letter showing availability.

4. **School Capacity Coordination**

A coordination request will be submitted to the Flagler County School District. Correspondence confirming the impact on school capacity will be provided upon receipt.

5. **FLUM Mapping and Amendment Materials**

The following materials are included with this submittal:

- Map depicting the subject property and surrounding area
    - provided
- Proposed FLUM Map amendment exhibit
    - Not needed, Not changing FLUM Map,
- Proposed FLUM text amendment (if applicable)
    - Not needed, no text amendment.

These materials accurately reflect the requested land use change and are consistent with the submitted application.

6. **Neighborhood Meeting Documentation (LDC Sec. 2.05.02)**

The required neighborhood meeting will be scheduled and conducted in accordance with LDC Section 2.05.02 **prior to Planning Board consideration**. Documentation of the meeting, including notices, attendance, and summary of comments, will be provided for the record in advance of the public hearing.

Amendment to Application and Subject Property

The Applicant hereby provides formal notice of a revision to the application to clarify the parties and property subject to the requested FLUM amendment. Specifically, **JTL Grand Landings Development** has withdrawn as an applicant to this request, and the real property associated with JTL Grand Landings Development, as more particularly described in **Exhibit "A"**, is hereby removed from the application. Accordingly, the application shall proceed solely with respect to

the property owned or controlled by KL Seminole Trace, LLC and Byrndog PCP, LLC as legally described in **Exhibit "B"**, which is incorporated herein by reference.
This modification reduces the geographic scope of the application descriptions, and supporting materials to conform to the boundary.

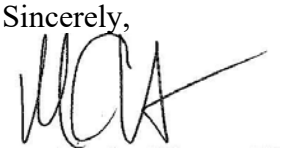
Conclusion and Completeness Position

The Applicant has made substantial progress in addressing all outstanding items and continues to coordinate with City staff and external agencies to finalize remaining documentation. The revision to the application described herein constitutes a reduction in scope and **does not represent a substantive change** to the requested FLUM amendment or its anticipated impacts.

Accordingly, the Applicant respectfully requests that the City continue processing the application under the existing review timeline and deem the application sufficient for further processing upon satisfaction of the remaining ministerial items identified above. We respectfully request to be placed on the **September Planning Board agenda**.

Please advise if any additional information is required at this stage.

Sincerely,



Michael D. Chiumento III
Managing Partner
MDC/cm

Enclosures

EXHIBIT "A"

PART OF SECTION 29, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 29, THENCE N02°56'18"W ALONG THE WEST LINE OF SAID SECTION 29, A DISTANCE OF 1002.51 FEET; THENCE N89°59'26"E DEPARTING SAID WEST LINE A DISTANCE OF 1565.78 FEET TO THE NORTHWEST CORNER OF THOSE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 1459, PAGE 152, PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA; THENCE N89°59'26"E ALONG THE NORTH LINE OF SAID LANDS A DISTANCE OF 866.77 FEET; THENCE DEPARTING SAID NORTH LINE N00°00'34"W A DISTANCE OF 152.16 FEET TO THE POINT OF BEGINNING, SAID POINT BEING ON THOSE LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 1887, PAGE 1476, PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA; THENCE ALONG SAID LANDS THE FOLLOWING CALLS AND DISTANCES, N73°59'21"E A DISTANCE OF 259.08 FEET; N30°18'30"E A DISTANCE OF 338.21 FEET; N56°02'13"E A DISTANCE OF 256.60 FEET; N17°18'02"W A DISTANCE OF 245.64 FEET; N87°58'47"W A DISTANCE OF 188.15 FEET; N43°23'44"W A DISTANCE OF 70.31 FEET; N15°25'25"E A DISTANCE OF 131.43 FEET; N08°57'10"W A DISTANCE OF 221.74 FEET; N87°20'40"E A DISTANCE OF 215.08 FEET; S61°08'13"E A DISTANCE OF 365.39 FEET; N12°27'20"W A DISTANCE OF 282.17 FEET; N22°28'43"E A DISTANCE OF 424.41 FEET; N28°35'48"W A DISTANCE OF 795.82 FEET; S54°59'59"W A DISTANCE OF 426.05 FEET; S17°21'11"E A DISTANCE OF 363.39 FEET; S27°42'03"E A DISTANCE OF 252.43 FEET; S43°50'42"E A DISTANCE OF 194.13 FEET; S03°24'22"W A DISTANCE OF 68.13 FEET; S89°33'00"W A DISTANCE OF 376.08 FEET; N40°54'31"W A DISTANCE OF 373.09 FEET; N07°01'37"W A DISTANCE OF 373.59 FEET; N27°35'02"E A DISTANCE OF 477.92 FEET; N83°09'02"W A DISTANCE OF 296.11 FEET; N39°33'00"W A DISTANCE OF 205.29 FEET; N16°56'05"E 492.36 FEET TO A POINT ON THE SOUTH LINE OF THOSE LANDS RECORDED IN OFFICIAL RECORDS BOOK 2362, PAGE 1118, PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA;; THENCE DEPARTING AFORESAID LANDS AND ALONG SAID SOUTH LINE S75°28'44"W A DISTANCE OF 492.32 FEET TO A POINT ON AFORESAID LANDS RECORDED IN OFFICIAL RECORDS BOOK 1887, PAGE 1476; THENCE ALONG SAID LANDS THE FOLLOWING CALLS AND DISTANCES, S08°33'17"E A DISTANCE OF 1204.63 FEET; S21°31'33"E A DISTANCE OF 231.71 FEET; S19°36'50"W A DISTANCE OF 119.80 FEET; S23°03'10"E A DISTANCE OF 266.90 FEET; N61°27'01"E A DISTANCE OF 72.25 FEET; S21°32'33"E A DISTANCE OF 25.00 FEET; S24°44'50"E A DISTANCE OF 109.86 FEET; S02°50'42"E A DISTANCE OF 443.43 FEET; S38°46'38"E A DISTANCE OF 155.36 FEET; S05°31'05"E A DISTANCE OF 521.33 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINING 1,929,259 SQUARE FEET AND/OR 44.29 ACRES MORE OR LESS.

EXHIBIT "B"

BYRNDOG PCP, LLC

A PART OF GOVERNMENT SECTIONS 29, 30, 31, AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: FOR A POINT OF REFERENCE, COMMENCE AT THE NORTHWEST CORNER OF SAID GOVERNMENT SECTION 32; THENCE SOUTH 00°45'50" WEST ALONG THE WEST LINE OF SAID SECTION 32, A DISTANCE OF 1224.55 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF SEMINOLE WOODS BOULEVARD (AN 80 FOOT RIGHT-OF-WAY AS NOW ESTABLISHED); THENCE NORTH 54°30'21" EAST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 193.37 FEET TO THE POINT OF BEGINNING; THENCE NORTH 47°42'22" WEST LEAVING SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 30.69 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 444.53 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 17°59'15" WEST AND A CHORD DISTANCE OF 334.30 FEET TO THE END OF SAID CURVE; THENCE NORTH 40°13'09" WEST, A DISTANCE OF 26.42 FEET; THENCE NORTH 03°30'47" EAST, A DISTANCE OF 112.57 FEET; THENCE NORTH 36°11'00" WEST, A DISTANCE OF 131.13 FEET; THENCE NORTH 59°28'43" EAST, A DISTANCE OF 82.30 FEET; THENCE NORTH 28°33'26" EAST, A DISTANCE OF 137.09 FEET; THENCE NORTH 66°49'26" EAST, A DISTANCE OF 38.00 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 144.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 10°05'15" WEST AND A CHORD DISTANCE OF 140.48 FEET TO THE END OF SAID CURVE; THENCE NORTH 63°53'15" WEST, A DISTANCE OF 132.81 FEET; THENCE NORTH 83°44'41" WEST, A DISTANCE OF 162.45 FEET; THENCE NORTH 17°06'30" WEST, A DISTANCE OF 292.28 FEET; THENCE NORTH 14°47'18" EAST, A DISTANCE OF 47.30 FEET; THENCE SOUTH 85°17'37" EAST, A DISTANCE OF 136.71 FEET; THENCE NORTH 61°12'04" EAST, A DISTANCE OF 15.52 FEET; THENCE SOUTH 18°34'29" EAST, A DISTANCE OF 65.03 FEET; THENCE NORTH 71°25'31" EAST, A DISTANCE OF 100.68 FEET; THENCE NORTH 21°33'01" WEST, A DISTANCE OF 82.53 FEET; THENCE NORTH 61°12'04" EAST, A DISTANCE OF 66.95 FEET; THENCE NORTH 41°21'12" EAST, A DISTANCE OF 40.07 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 320.48 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 216.74 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 26°54'34" WEST AND A CHORD DISTANCE OF 212.64 FEET TO THE END OF SAID CURVE; THENCE SOUTH 87°01'59" WEST, A DISTANCE OF 48.33 FEET; THENCE SOUTH 70°29'11" WEST, A DISTANCE OF 72.33 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 540.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 29°18'27" WEST AND A CHORD DISTANCE OF 349.89 FEET TO THE END OF SAID CURVE; THENCE NORTH 42°24'06" WEST, A DISTANCE OF 51.18 FEET; THENCE NORTH 00°06'49" WEST, A DISTANCE OF 99.39 FEET; THENCE NORTH 26°40'30" EAST,

A DISTANCE OF 70.76 FEET; THENCE NORTH 12°17'04" EAST, A DISTANCE OF 84.43 FEET; THENCE NORTH 23°30'30" EAST, A DISTANCE OF 101.77 FEET; THENCE SOUTH 66°15'40" EAST, A DISTANCE OF 103.83 FEET; THENCE NORTH 86°49'06" EAST, A DISTANCE OF 114.78 FEET TO A POINT ON A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 1183.21 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 164.50 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 05°19'07" WEST AND A CHORD DISTANCE OF 164.37 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 85.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 21°37'07" WEST AND A CHORD DISTANCE OF 85.33 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 51.63 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 25°26'59" WEST AND A CHORD DISTANCE OF 51.44 FEET TO THE END OF SAID CURVE; THENCE SOUTH 83°58'47" WEST, A DISTANCE OF 67.38 FEET; THENCE NORTH 03°17'29" WEST, A DISTANCE OF 32.58 FEET; THENCE NORTH 79°50'54" WEST, A DISTANCE OF 36.99 FEET; THENCE SOUTH 78°44'40" WEST, A DISTANCE OF 70.73 FEET; THENCE NORTH 15°30'24" WEST, A DISTANCE OF 133.32 FEET; THENCE NORTH 42°05'59" WEST, A DISTANCE OF 75.46 FEET; THENCE NORTH 49°14'06" EAST, A DISTANCE OF 113.35 FEET; THENCE NORTH 06°24'03" EAST, A DISTANCE OF 75.63 FEET; THENCE NORTH 15°17'20" WEST, A DISTANCE OF 151.75 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 520.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 116.24 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 49°06'01" WEST AND A CHORD DISTANCE OF 116.00 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 692.44 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 298.27 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 30°21'24" WEST AND A CHORD DISTANCE OF 295.97 FEET TO THE END OF SAID CURVE; THENCE NORTH 71°59'00" EAST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 582.44 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 85.58 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 13°48'41" WEST AND A CHORD DISTANCE OF 85.50 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 1214.67 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 53.51 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 10°51'33" WEST AND A CHORD DISTANCE OF 53.51 FEET TO THE END OF SAID CURVE; THENCE SOUTH 77°52'40" WEST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 507.88 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 20°56'54" WEST AND A CHORD DISTANCE OF 338.99 FEET TO THE END OF SAID CURVE; THENCE NORTH 29°41'42" WEST, A DISTANCE OF 11.82 FEET; THENCE SOUTH 69°27'08" WEST, A DISTANCE OF 39.11 FEET TO THE POINT OF CURVE OF A

CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 855.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 188.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 63°08'36" WEST AND A CHORD DISTANCE OF 187.91 FEET TO THE END OF SAID CURVE; THENCE SOUTH 58°53'20" WEST, A DISTANCE OF 15.00 FEET; THENCE NORTH 31°30'01" WEST, A DISTANCE OF 97.29 FEET; THENCE SOUTH 72°01'17" WEST, A DISTANCE OF 73.49 FEET; THENCE SOUTH 53°56'11" WEST, A DISTANCE OF 170.90 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 13.83 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 56°12'02" WEST AND A CHORD DISTANCE OF 13.83 FEET TO THE END OF SAID CURVE; THENCE SOUTH 19°31'27" EAST, A DISTANCE OF 66.83 FEET; THENCE SOUTH 70°28'33" WEST, A DISTANCE OF 48.00 FEET; THENCE SOUTH 19°31'27" EAST, A DISTANCE OF 57.00 FEET; THENCE SOUTH 70°28'33" WEST, A DISTANCE OF 222.56 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 300.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 66.79 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 64°05'51" WEST AND A CHORD DISTANCE OF 66.66 FEET TO THE END OF SAID CURVE; THENCE SOUTH 44°42'49" EAST, A DISTANCE OF 38.23 FEET; THENCE SOUTH 04°24'29" EAST, A DISTANCE OF 57.39 FEET; THENCE SOUTH 23°08'51" WEST, A DISTANCE OF 157.59 FEET; THENCE SOUTH 84°09'56" WEST, A DISTANCE OF 88.02 FEET; THENCE NORTH 76°31'00" WEST, A DISTANCE OF 61.67 FEET; THENCE SOUTH 33°00'24" WEST, A DISTANCE OF 153.70 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 969.48 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 492.79 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 18°26'42" WEST AND A CHORD DISTANCE OF 487.50 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 387.77 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 77°43'25" WEST AND A CHORD DISTANCE OF 309.01 FEET TO THE END OF SAID CURVE; THENCE NORTH 53°04'12" EAST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 60.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 109.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 15°26'03" EAST AND A CHORD DISTANCE OF 95.03 FEET TO THE END OF SAID CURVE; THENCE NORTH 03°14'25" EAST, A DISTANCE OF 35.46 FEET; THENCE NORTH 73°12'35" WEST, A DISTANCE OF 104.13 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 165.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 146.44 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 81°21'53" WEST AND A CHORD DISTANCE OF 141.68 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 55°56'21" WEST, A DISTANCE OF 44.41 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1135.30 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 36.63 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 55°09'11"

WEST AND A CHORD DISTANCE OF 36.63 FEET TO THE END OF SAID CURVE; THENCE SOUTH 35°37'58" EAST, A DISTANCE OF 105.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1230.30 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 201.90 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 49°39'57" WEST AND A CHORD DISTANCE OF 201.67 FEET TO THE END OF SAID CURVE; THENCE SOUTH 48°17'05" EAST, A DISTANCE OF 46.94 FEET; THENCE SOUTH 14°59'46" WEST, A DISTANCE OF 62.44 FEET; THENCE SOUTH 12°20'37" EAST, A DISTANCE OF 15.93 FEET; THENCE SOUTH 46°22'21" EAST, A DISTANCE OF 32.63 FEET; THENCE SOUTH 01°00'31" WEST, A DISTANCE OF 79.06 FEET; THENCE NORTH 86°42'07" EAST, A DISTANCE OF 144.98 FEET; THENCE NORTH 41°20'41" EAST, A DISTANCE OF 36.82 FEET; THENCE SOUTH 70°48'37" EAST, A DISTANCE OF 121.06 FEET; THENCE SOUTH 02°33'13" WEST, A DISTANCE OF 60.02 FEET; THENCE SOUTH 36°07'13" WEST, A DISTANCE OF 85.92 FEET; THENCE NORTH 57°06'19" WEST, A DISTANCE OF 156.83 FEET; THENCE NORTH 33°12'18" EAST, A DISTANCE OF 29.33 FEET; THENCE SOUTH 86°42'07" WEST, A DISTANCE OF 131.46 FEET; THENCE SOUTH 24°24'44" WEST, A DISTANCE OF 18.02 FEET; THENCE NORTH 87°51'56" WEST, A DISTANCE OF 63.67 FEET; THENCE NORTH 13°11'13" WEST, A DISTANCE OF 74.87 FEET; THENCE NORTH 57°11'17" WEST, A DISTANCE OF 83.28 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 98.55 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 70°39'19" WEST AND A CHORD DISTANCE OF 97.55 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 220.37 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 58°05'32" WEST AND A CHORD DISTANCE OF 205.26 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 20°57'21" WEST, A DISTANCE OF 55.00 FEET; THENCE NORTH 59°29'11" EAST, A DISTANCE OF 88.23 FEET; THENCE NORTH 23°08'02" EAST, A DISTANCE OF 139.98 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 123.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 63°45'33" EAST AND A CHORD DISTANCE OF 121.28 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1520.30 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 218.25 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 50°14'55" EAST AND A CHORD DISTANCE OF 218.06 FEET TO THE END OF SAID CURVE; THENCE SOUTH 35°36'42" EAST, A DISTANCE OF 105.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1415.30 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 38.04 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 55°09'49" EAST AND A CHORD DISTANCE OF 38.03 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 55°56'21" EAST, A DISTANCE OF 44.41 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 235.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 101.04 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF

NORTH 68°15'21" EAST AND A CHORD DISTANCE OF 100.26 FEET TO THE END OF SAID CURVE; THENCE NORTH 09°25'38" WEST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 345.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 154.89 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 86°33'56" EAST AND A CHORD DISTANCE OF 153.59 FEET TO THE END OF SAID CURVE; THENCE NORTH 25°17'37" EAST, A DISTANCE OF 11.36 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 779.93 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 710.66 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 38°04'25" WEST AND A CHORD DISTANCE OF 686.33 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 270.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 201.02 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 09°21'32" EAST AND A CHORD DISTANCE OF 196.41 FEET TO THE END OF SAID CURVE; THENCE NORTH 56°07'39" WEST, A DISTANCE OF 30.37 FEET; THENCE SOUTH 89°16'24" WEST, A DISTANCE OF 307.76 FEET; THENCE SOUTH 69°45'47" WEST, A DISTANCE OF 200.04 FEET; THENCE SOUTH 49°59'01" WEST, A DISTANCE OF 58.05 FEET; THENCE SOUTH 36°16'26" WEST, A DISTANCE OF 171.87 FEET; THENCE NORTH 87°01'20" WEST, A DISTANCE OF 167.32 FEET; THENCE NORTH 12°41'32" WEST, A DISTANCE OF 111.63 FEET; THENCE NORTH 17°24'53" EAST, A DISTANCE OF 146.82 FEET; THENCE NORTH 16°21'20" WEST, A DISTANCE OF 67.14 FEET; THENCE NORTH 42°05'14" WEST, A DISTANCE OF 101.85 FEET; THENCE NORTH 07°04'46" EAST, A DISTANCE OF 147.63 FEET; THENCE NORTH 18°27'49" EAST, A DISTANCE OF 237.18 FEET; THENCE SOUTH 73°05'38" EAST, A DISTANCE OF 76.78 FEET; THENCE SOUTH 44°03'10" EAST, A DISTANCE OF 292.20 FEET; THENCE SOUTH 28°55'57" EAST, A DISTANCE OF 299.86 FEET; THENCE NORTH 89°16'24" EAST, A DISTANCE OF 370.38 FEET; THENCE SOUTH 56°07'39" EAST, A DISTANCE OF 39.71 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 270.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 84.20 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 45°59'29" EAST AND A CHORD DISTANCE OF 83.86 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 1000.03 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 113.81 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 51°39'56" EAST AND A CHORD DISTANCE OF 113.75 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 270.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 316.80 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 82°01'07" EAST AND A CHORD DISTANCE OF 298.93 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 508.58 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 258.11 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 78°54'27" EAST AND A CHORD DISTANCE OF 255.35 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 200.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 61.44 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING

OF NORTH 77°45'08" EAST AND A CHORD DISTANCE OF 61.20 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 270.57 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 65°27'11" EAST AND A CHORD DISTANCE OF 242.91 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 19°51'24" EAST, A DISTANCE OF 127.75 FEET; THENCE NORTH 70°28'33" EAST, A DISTANCE OF 236.93 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 115.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 27.62 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 63°35'43" EAST AND A CHORD DISTANCE OF 27.55 FEET TO THE END OF SAID CURVE; THENCE SOUTH 33°17'07" EAST, A DISTANCE OF 10.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 125.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 6.06 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 55°19'32" EAST AND A CHORD DISTANCE OF 6.06 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 53°56'11" EAST, A DISTANCE OF 24.79 FEET; THENCE NORTH 36°03'49" WEST, A DISTANCE OF 10.00 FEET; THENCE NORTH 53°56'11" EAST, A DISTANCE OF 179.95 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1035.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 280.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 61°41'40" EAST AND A CHORD DISTANCE OF 279.42 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 69°27'08" EAST, A DISTANCE OF 28.57 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 945.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 224.25 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 11°37'38" WEST AND A CHORD DISTANCE OF 223.72 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 545.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 77.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 00°44'46" WEST AND A CHORD DISTANCE OF 77.61 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 03°20'13" EAST, A DISTANCE OF 504.26 FEET; THENCE NORTH 86°33'58" EAST, A DISTANCE OF 1262.18 FEET; THENCE NORTH 74°58'14" EAST, A DISTANCE OF 1393.40 FEET; THENCE SOUTH 08°33'17" EAST, A DISTANCE OF 1204.63 FEET; THENCE SOUTH 21°31'33" EAST, A DISTANCE OF 231.71 FEET; THENCE SOUTH 19°36'50" WEST, A DISTANCE OF 119.80 FEET; THENCE SOUTH 23°03'10" EAST, A DISTANCE OF 266.90 FEET; THENCE NORTH 61°27'01" EAST, A DISTANCE OF 72.25 FEET; THENCE SOUTH 21°31'33" EAST, A DISTANCE OF 25.00 FEET; THENCE SOUTH 24°44'50" EAST, A DISTANCE OF 109.86 FEET; THENCE SOUTH 02°50'42" EAST, A DISTANCE OF 443.43 FEET; THENCE SOUTH 38°46'38" EAST, A DISTANCE OF 155.36 FEET; THENCE SOUTH 05°31'05" EAST, A DISTANCE OF 521.33 FEET; THENCE NORTH 73°59'21" EAST, A DISTANCE OF 259.08 FEET; THENCE NORTH 30°18'30" EAST, A DISTANCE OF 338.21 FEET; THENCE NORTH 56°02'13" EAST, A DISTANCE OF 256.60 FEET; THENCE NORTH 17°18'02" WEST, A DISTANCE OF 245.64 FEET; THENCE NORTH 87°58'47" WEST, A DISTANCE OF 188.15 FEET; THENCE NORTH 43°23'44" WEST, A DISTANCE OF 70.31 FEET; THENCE NORTH

15°25'25" EAST, A DISTANCE OF 131.43 FEET; THENCE NORTH 08°57'10" WEST, A DISTANCE OF 221.74 FEET; THENCE NORTH 87°20'40" EAST, A DISTANCE OF 215.08 FEET; THENCE SOUTH 61°08'13" EAST, A DISTANCE OF 365.39 FEET; THENCE NORTH 12°27'20" WEST, A DISTANCE OF 282.17 FEET; THENCE NORTH 22°28'43" EAST, A DISTANCE OF 424.41 FEET; THENCE NORTH 28°35'48" WEST, A DISTANCE OF 795.82 FEET; THENCE SOUTH 54°59'59" WEST, A DISTANCE OF 426.05 FEET; THENCE SOUTH 17°21'11" EAST, A DISTANCE OF 363.39 FEET; THENCE SOUTH 27°42'03" EAST, A DISTANCE OF 252.43 FEET; THENCE SOUTH 43°50'42" EAST, A DISTANCE OF 194.13 FEET; THENCE SOUTH 03°24'22" WEST, A DISTANCE OF 68.13 FEET; THENCE SOUTH 89°33'00" WEST, A DISTANCE OF 376.08 FEET; THENCE NORTH 40°54'31" WEST, A DISTANCE OF 373.09 FEET; THENCE NORTH 07°01'37" WEST, A DISTANCE OF 373.59 FEET; THENCE NORTH 27°35'02" EAST, A DISTANCE OF 477.92 FEET; THENCE NORTH 83°09'02" WEST, A DISTANCE OF 296.11 FEET; THENCE NORTH 39°33'00" WEST, A DISTANCE OF 205.29 FEET; THENCE NORTH 16°56'05" EAST, A DISTANCE OF 492.36 FEET; THENCE NORTH 75°07'44" EAST, A DISTANCE OF 547.25 FEET; THENCE SOUTH 24°13'34" EAST, A DISTANCE OF 1824.65 FEET; THENCE SOUTH 03°31'05" EAST, A DISTANCE OF 1951.81 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF SAID SEMINOLE WOODS BOULEVARD; THENCE SOUTH 64°15'15" WEST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 771.72 FEET; THENCE NORTH 06°32'52" WEST LEAVING SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 503.88 FEET; THENCE NORTH 74°26'31" WEST, A DISTANCE OF 350.75 FEET; THENCE SOUTH 89°59'26" WEST, A DISTANCE OF 1033.69 FEET; THENCE SOUTH 00°00'34" EAST, A DISTANCE OF 1283.56 FEET TO A POINT ON SAID NORTHWESTERLY RIGHT-OF-WAY LINE OF SEMINOLE WOODS BOULEVARD; THENCE SOUTH 64°15'15" WEST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 548.03 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 2000.00 FEET; THENCE SOUTHWESTERLY CONTINUING ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE AND ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 340.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 59°22'48" WEST AND A CHORD DISTANCE OF 339.87 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 54°30'21" WEST CONTINUING ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 721.45 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT

CASCADES-SINGLE FAMILY WEST PHASE 1

PART OF GOVERNMENT SECTIONS 29, 30 AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 29, THENCE NORTH 02°56’18” WEST ALONG THE WEST LINE OF SAID SECTION 29 A DISTANCE OF 278.18 FEET; THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 7.64 FEET TO THE POINT OF BEGINNING, THENCE NORTH 17°11’33” WEST, A DISTANCE OF 200.00 FEET, THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 300.00 FEET; THENCE NORTH 17°11’33” WEST, A DISTANCE OF 288.37 FEET, THENCE NORTH 30°45’57" EAST, A DISTANCE OF 156.00 FEET; THENCE NORTH 50°34’11” EAST, A DISTANCE OF 436.26 FEET; THENCE NORTH 16°53’57” WEST; A DISTANCE OF 207.43 FEET; THENCE NORTH 26°57’36” WEST, A DISTANCE OF 468.07 FEET; THENCE NORTH 15°17’20” WEST, A DISTANCE

OF 724.55 FEET; THENCE NORTH 39°35’09” WEST; A DISTANCE OF 330.89 FEET, THENCE NORTH 26°47’41” WEST, A DISTANCE OF 266.83 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 945.00 FEET, AN ARC DISTANCE OF 204.23 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 11°01’12” WEST, 203.83 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 545.00 FEET, AN ARC DISTANCE OF 77.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 00°44’46” WEST, 77.61 FEET, TO THE POINT OF TANGENCY OF SAID CURVE THENCE NORTH 03°20’13” EAST, A DISTANCE OF 504.26 FEET, THENCE NORTH 86°33’58” EAST, A DISTANCE OF 276.06 FEET, THENCE SOUTH 09°42’36” WEST, A DISTANCE OF 94.29 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY, THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.67 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 33°15’05” EAST, 34.08 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, NORTHERLY, HAVING A RADIUS OF 163.47 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 87°45’39” WEST, 36.57 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 86°33’58” EAST, A DISTANCE OF 36.39 FEET; THENCE SOUTH 03°26’02” EAST, A DISTANCE OF 169.00 FEET; THENCE NORTH 86°53’07” EAST, A DISTANCE OF 100.02 FEET TO THE ARC OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 79.46 FEET, AN ARC DISTANCE OF 118.61’ FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 50°33’24” EAST, 107.90 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 10°57’01” EAST, A DISTANCE OF 355.49 FEET TO A POINT ON A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 91.03 FEET, AN ARC DISTANCE OF 25.74 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 18°18’00” WEST, 25.65 FEET TO A NON-TANGENT POINT BEARING SOUTH 41°59’33” EAST, A DISTANCE OF 46.73 FEET, THENCE NORTH 76°57'21” EAST, A DISTANCE OF 111.15 FEET; THENCE NORTH 76°39’46” EAST, A DISTANCE OF 50.00 FEET; THENCE SOUTH 13°08’10” EAST, A DISTANCE OF 17.04 FEET; THENCE NORTH 68°03’37” EAST, A DISTANCE OF 185.69 FEET; THENCE NORTH 76°20’49” EAST, A DISTANCE OF 56.75 FEET; THENCE SOUTH 13°40’24” EAST, A DISTANCE OF 13.56 FEET; THENCE TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 325.00 FEET, AN ARC DISTANCE OF 72.43 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°08’06” WEST, 72.28 FEET, TO A NON-TANGENT POINT BEARING NORTH 61°53’51” EAST, A DISTANCE OF 51.67 FEET TO A NON-TANGENT CURVE, LEADING SOUTHEASTERLY; THENCE SOUTHEASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 20.97 FEET, AN ARC

DISTANCE OF 30.72 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 80°18’33” WEST, 28.04 FEET, TO A NON-TANGENCY POINT; THENCE SOUTH 31°43’36” EAST, A DISTANCE OF 50.42 FEET TO A NON-TANGENT CURVE LEADING SOUTHWESTERLY; THENCE SOUTHWESTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 25.13 FEET, AN ARC DISTANCE OF 37.09 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°10’50” EAST, 33.81 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 275.00 FEET, AN ARC DISTANCE OF 76.65 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°13’19" WEST, 76.41 FEET, TO A NON-TANGENT POINT BEARING SOUTH 85°52’14”, EAST, A DISTANCE OF 122.30 FEET; THENCE NORTH 06°18'16” WEST, A DISTANCE OF 16.16 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 50.22 FEET, AN ARC DISTANCE OF 67.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 30°56’07” EAST, 62.29 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 46.57 FEET, AN ARC DISTANCE OF 72.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 59°26’34” EAST, 65.18 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 04°53’10” EAST, A DISTANCE OF 66.69 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 724.36 FEET, AN ARC DISTANCE OF 34.62 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 06°53’25, EAST, 34.62 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 502.26 FEET, AN ARC DISTANCE OF 146.87 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°18’43” WEST, 146.35 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 24°13’30” EAST, A DISTANCE OF 197.82 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 55.00 FEET, AN ARC DISTANCE OF 80.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 17°33’29” WEST, 73.29 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 436.55 FEET, AN ARC DISTANCE OF 93.14 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 54°30’50” EAST, 92.96 FEET, TO A NON-TANGENT POINT BEARING SOUTH 37°16’33” EAST, A DISTANCE OF 120.89 FEET; THENCE SOUTH 44°32’37” EAST, A DISTANCE OF 50.02 FEET; THENCE SOUTH 65°23’31” EAST, A DISTANCE OF 517.00 FEET; THENCE SOUTH 04°26’11” EAST, A DISTANCE OF 540.96 FEET, THENCE SOUTH 47°18'59” EAST, A DISTANCE OF 280.03 FEET; THENCE SOUTH 00°00’00” EAST, A DISTANCE OF 783.09 FEET, THENCE SOUTH 58°20’26” WEST, A DISTANCE OF 341.06 FEET; THENCE SOUTH 37°53’13” EAST, A

DISTANCE OF 141.57 FEET, THENCE SOUTH 35°34’53” WEST, A DISTANCE OF 557.52 FEET; THENCE SOUTH 81°24’26” WEST, A DISTANCE OF 95.82 FEET; THENCE SOUTH 03°37’43" EAST, A DISTANCE OF 42.09 FEET; THENCE SOUTH 86°22’17" WEST, A DISTANCE OF 67.55 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC CF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 75.00 FEET, AN ARC DISTANCE OF 92.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 03°02’28” WEST, 86.91 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 42.00 FEET, AN ARC DISTANCE OF 37.78 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 12°40’32” WEST, A DISTANCE OF 36.52 FEET, TO A NON-TANGENT POINT BEARING SOUTH 76°54’14’ WEST, A DISTANCE OF 70.06 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 44.49 FEET, AN ARC DISTANCE OF 28.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°06’56” WEST, 28.48 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 88.00 FEET, AN ARC DISTANCE OF 58.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°16’28” WEST, 57.49 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 09°12’34” WEST, A DISTANCE OF 76.34 FEET, THENCE NORTH 08°44’20” WEST, A DISTANCE OF 32.20 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 117.69 FEET, AN ARC DISTANCE OF 30.20 FEET, SAID ARC BEING SUBTENDED BY CHORD BEARING AND DISTANCE OF NORTH 05°05’05” EAST, 30.11 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 14°56’11” EAST, A DISTANCE OF 35.76 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY; ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.19 FEET, AN ARC DISTANCE OF 8.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°21’58” EAST, 8.63 FEET TO A NON-TANGENT POINT BEARING SOUTH 80°14'31” WEST, A DISTANCE OF 110.59 FEET; THENCE NORTH 09°12’34” WEST, A DISTANCE OF 75.57 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 355.00 FEET, AN ARC DISTANCE OF 204.05 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 25°40'33” EAST, 201.25 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 42°08'32” WEST, A DISTANCE OF 198.02 FEET; THENCE NORTH 42°40’44" WEST, A DISTANCE OF 147.06 FEET; THENCE NORTH 39°55’26” WEST, A DISTANCE OF 35.58 FEET; THENCE NORTH 42°08’32” WEST, A DISTANCE OF 15.41 FEET; THENCE NORTH 40°55’16” WEST, A DISTANCE OF 18.97 FEET, THENCE NORTH 37°51’08” WEST, A DISTANCE OF 28.69 FEET; THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 105.21 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH

KL SEMINOLE TRACE, LLC, a Florida limited liability company

CASCADES-SINGLE FAMILY WEST PHASE 1

PART OF GOVERNMENT SECTIONS 29, 30 AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 29, THENCE NORTH 02°56’18” WEST ALONG THE WEST LINE OF SAID SECTION 29 A DISTANCE OF 278.18 FEET; THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 7.64 FEET TO THE POINT OF BEGINNING, THENCE NORTH 17°11’33” WEST, A DISTANCE OF 200.00 FEET, THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 300.00 FEET; THENCE NORTH 17°11’33” WEST, A DISTANCE OF 288.37 FEET, THENCE NORTH 30°45’57" EAST, A DISTANCE OF 156.00 FEET; THENCE NORTH 50°34’11” EAST, A DISTANCE OF 436.26 FEET; THENCE NORTH 16°53’57” WEST; A DISTANCE OF 207.43 FEET; THENCE NORTH 26°57’36” WEST, A DISTANCE OF 468.07 FEET; THENCE NORTH 15°17’20” WEST, A DISTANCE OF 724.55 FEET; THENCE NORTH 39°35’09” WEST; A DISTANCE OF 330.89 FEET, THENCE NORTH 26°47’41” WEST, A DISTANCE OF 266.83 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 945.00 FEET, AN ARC DISTANCE OF 204.23 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 11°01’12” WEST, 203.83 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 545.00 FEET, AN ARC DISTANCE OF 77.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 00°44’46” WEST, 77.61 FEET, TO THE POINT OF TANGENCY OF SAID CURVE THENCE NORTH 03°20’13” EAST, A DISTANCE OF 504.26 FEET, THENCE NORTH 86°33’58” EAST, A DISTANCE OF 276.06 FEET, THENCE SOUTH 09°42’36” WEST, A DISTANCE OF 94.29 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY, THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.67 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 33°15’05” EAST, 34.08 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, NORTHERLY, HAVING A RADIUS OF 163.47 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 87°45’39” WEST, 36.57 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 86°33’58” EAST, A DISTANCE OF 36.39 FEET; THENCE SOUTH 03°26’02” EAST, A DISTANCE OF 169.00 FEET; THENCE NORTH 86°53’07” EAST, A DISTANCE OF 100.02 FEET TO THE ARC OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 79.46 FEET, AN ARC DISTANCE OF 118.61’ FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 50°33’24” EAST, 107.90 FEET, TO THE POINT OF TANGENCY OF SAID CURVE;

THENCE SOUTH 10°57’01” EAST, A DISTANCE OF 355.49 FEET TO A POINT ON A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 91.03 FEET, AN ARC DISTANCE OF 25.74 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 18°18’00” WEST, 25.65 FEET TO A NON-TANGENT POINT BEARING SOUTH 41°59’33” EAST, A DISTANCE OF 46.73 FEET, THENCE NORTH 76°57'21” EAST, A DISTANCE OF 111.15 FEET; THENCE NORTH 76°39’46” EAST, A DISTANCE OF 50.00 FEET; THENCE SOUTH 13°08’10” EAST, A DISTANCE OF 17.04 FEET; THENCE NORTH 68°03’37” EAST, A DISTANCE OF 185.69 FEET; THENCE NORTH 76°20’49” EAST, A DISTANCE OF 56.75 FEET; THENCE SOUTH 13°40’24” EAST, A DISTANCE OF 13.56 FEET; THENCE TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 325.00 FEET, AN ARC DISTANCE OF 72.43 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°08’06” WEST, 72.28 FEET, TO A NON-TANGENT POINT BEARING NORTH 61°53’51” EAST, A DISTANCE OF 51.67 FEET TO A NON-TANGENT CURVE, LEADING SOUTHEASTERLY; THENCE SOUTHEASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 20.97 FEET, AN ARC DISTANCE OF 30.72 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 80°18’33” WEST, 28.04 FEET, TO A NON-TANGENCY POINT; THENCE SOUTH 31°43’36” EAST, A DISTANCE OF 50.42 FEET TO A NON-TANGENT CURVE LEADING SOUTHWESTERLY; THENCE SOUTHWESTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 25.13 FEET, AN ARC DISTANCE OF 37.09 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°10’50” EAST, 33.81 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 275.00 FEET, AN ARC DISTANCE OF 76.65 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°13’19" WEST, 76.41 FEET, TO A NON-TANGENT POINT BEARING SOUTH 85°52’14”, EAST, A DISTANCE OF 122.30 FEET; THENCE NORTH 06°18'16” WEST, A DISTANCE OF 16.16 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 50.22 FEET, AN ARC DISTANCE OF 67.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 30°56’07” EAST, 62.29 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 46.57 FEET, AN ARC DISTANCE OF 72.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 59°26’34” EAST, 65.18 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 04°53’10” EAST, A DISTANCE OF 66.69 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 724.36 FEET, AN ARC DISTANCE OF 34.62 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 06°53’25, EAST, 34.62 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE

EASTERLY, HAVING A RADIUS OF 502.26 FEET, AN ARC DISTANCE OF 146.87 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°18’43” WEST, 146.35 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 24°13’30” EAST, A DISTANCE OF 197.82 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 55.00 FEET, AN ARC DISTANCE OF 80.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 17°33’29” WEST, 73.29 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 436.55 FEET, AN ARC DISTANCE OF 93.14 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 54°30’50” EAST, 92.96 FEET, TO A NON-TANGENT POINT BEARING SOUTH 37°16’33” EAST, A DISTANCE OF 120.89 FEET; THENCE SOUTH 44°32’37” EAST, A DISTANCE OF 50.02 FEET; THENCE SOUTH 65°23’31” EAST, A DISTANCE OF 517.00 FEET; THENCE SOUTH 04°26’11” EAST, A DISTANCE OF 540.96 FEET, THENCE SOUTH 47°18'59” EAST, A DISTANCE OF 280.03 FEET; THENCE SOUTH 00°00’00” EAST, A DISTANCE OF 783.09 FEET, THENCE SOUTH 58°20’26” WEST, A DISTANCE OF 341.06 FEET; THENCE SOUTH 37°53’13” EAST, A DISTANCE OF 141.57 FEET, THENCE SOUTH 35°34’53” WEST, A DISTANCE OF 557.52 FEET; THENCE SOUTH 81°24’26” WEST, A DISTANCE OF 95.82 FEET; THENCE SOUTH 03°37’43" EAST, A DISTANCE OF 42.09 FEET; THENCE SOUTH 86°22’17" WEST, A DISTANCE OF 67.55 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC CF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 75.00 FEET, AN ARC DISTANCE OF 92.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 03°02’28” WEST, 86.91 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 42.00 FEET, AN ARC DISTANCE OF 37.78 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 12°40’32” WEST, A DISTANCE OF 36.52 FEET, TO A NON-TANGENT POINT BEARING SOUTH 76°54’14’ WEST, A DISTANCE OF 70.06 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 44.49 FEET, AN ARC DISTANCE OF 28.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°06’56” WEST, 28.48 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 88.00 FEET, AN ARC DISTANCE OF 58.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°16’28” WEST, 57.49 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 09°12’34” WEST, A DISTANCE OF 76.34 FEET, THENCE NORTH 08°44’20” WEST, A DISTANCE OF 32.20 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 117.69 FEET, AN ARC DISTANCE OF 30.20 FEET, SAID ARC BEING SUBTENDED BY CHORD BEARING AND DISTANCE OF NORTH 05°05’05” EAST, 30.11 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 14°56’11” EAST, A DISTANCE OF 35.76 FEET TO THE ARC OF A CURVE

LEADING NORTHERLY; THENCE NORTHERLY; ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.19 FEET, AN ARC DISTANCE OF 8.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°21’58” EAST, 8.63 FEET TO A NON-TANGENT POINT BEARING SOUTH 80°14'31” WEST, A DISTANCE OF 110.59 FEET; THENCE NORTH 09°12’34” WEST, A DISTANCE OF 75.57 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 355.00 FEET, AN ARC DISTANCE OF 204.05 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 25°40'33” EAST, 201.25 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 42°08'32” WEST, A DISTANCE OF 198.02 FEET; THENCE NORTH 42°40’44" WEST, A DISTANCE OF 147.06 FEET; THENCE NORTH 39°55’26” WEST, A DISTANCE OF 35.58 FEET; THENCE NORTH 42°08’32” WEST, A DISTANCE OF 15.41 FEET; THENCE NORTH 40°55’16” WEST, A DISTANCE OF 18.97 FEET, THENCE NORTH 37°51’08” WEST, A DISTANCE OF 28.69 FEET; THENCE SOUTH 72°48’27” WEST, A DISTANCE OF 105.21 FEET TO THE POINT OF BEGINNING.

Michael D. Chiumento
Michael D. Chiumento III
William J. Bosch
Vincent L. Sullivan
Christy Earls
Diane A. Vidal, P.A.*
Thomas R. Pycraft *

145 City Place, Suite 301
Palm Coast, FL 32164
Tel. (386) 445-8900
Fax: (386) 445-6702

2 Camino Del Mar
Palm Coast, FL 32137

57 W. Granada Blvd.
Ormond Beach, FL 32174

CHIUMENTO LAW

Michael D. Chiumento III
Managing Partner
Michael3@legalteamforlife.com

Proudly serving Flagler and Volusia Counties for over 50 years

July 21, 2026

Jose Papa, Project Manager
City of Palm Coast
Community Development Department
160 Lake Avenue
Palm Coast, Florida 32164

Re: Response to Staff Comments – Third Submittal
Cascade at Grand Landings – Future Land Use Map Amendment (Small Scale)
Application No. 6419

Dear Mr. Papa:

On behalf of the Applicant, please accept the following responses to the outstanding staff comments regarding the above-referenced Future Land Use Map Amendment application. Revised plans and supporting materials are included with this resubmittal unless otherwise noted.

PLANNING PROJECT MANAGER

Comment 1
Letter from Utilities Department regarding impact on Level of Service for the Utility Department's existing service area.
Response:
Letter was requested and will be provided when the City's Utility Department responds. Please note that it is the applicant's and its engineers experience that such analysis is not done by the City Utility Department until an application for site plan or preliminary plat are submitted.

Comment 2
Coordination letter from the School District regarding school capacity.

Response:
Forthcoming.

Comment 3
Updated proposed FLUM map showing the area subject to the proposed amendment and proposed limits for development.

Response:
The Future Land Use Map has been revised to clearly identify the property subject to the requested amendment and the proposed development limits. Please see the revised FLUM Map included with this resubmittal.

Comment 4
Neighborhood Meeting Documentation pursuant to LDC Section 2.05.02.
Response:
The required neighborhood meeting occurred on April 14, 2026. The neighborhood meeting documentation and responses were previously submitted to the City under separate cover in July 2026. For the City's convenience, those materials are attached again with this resubmittal.

Comment 5
Update the proposed FLUM map to identify the area to be covered by the proposed Seminole Trace MPD and include a note regarding the cap on the number of dwelling units.
Response:
The proposed Future Land Use Map has been revised to identify the area that will be governed by the proposed Master Planned Development. The map has also been revised to include the applicable note regarding the maximum number of residential dwelling units permitted within the planning area, as reflected in the proposed amendment.

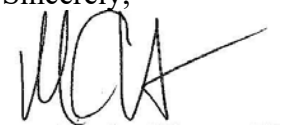
Comment 6
Resubmit Preliminary Environmental Site Assessment (PESA).
Response:
The Preliminary Environmental Site Assessment was previously resubmitted for the Cascades development and nothing has changed.

Comment 7
Additional comments may come from the Traffic Engineer.
Response:
The Applicant acknowledges this comment. Any traffic engineering comments received during the review process will be addressed as part of the continuing review of this application and, where applicable, through the subsequent Technical Site Plan and/or Preliminary Plat review process.

General Statement
The requested Future Land Use Map Amendment and the companion Master Planned Development application are intended to be reviewed together. The Future Land Use Map Amendment establishes the appropriate long-term land use designation for the property, while the companion MPD rezoning and subsequent technical site plan and preliminary plat applications will establish the detailed development standards, engineering design, and implementation requirements for the project.

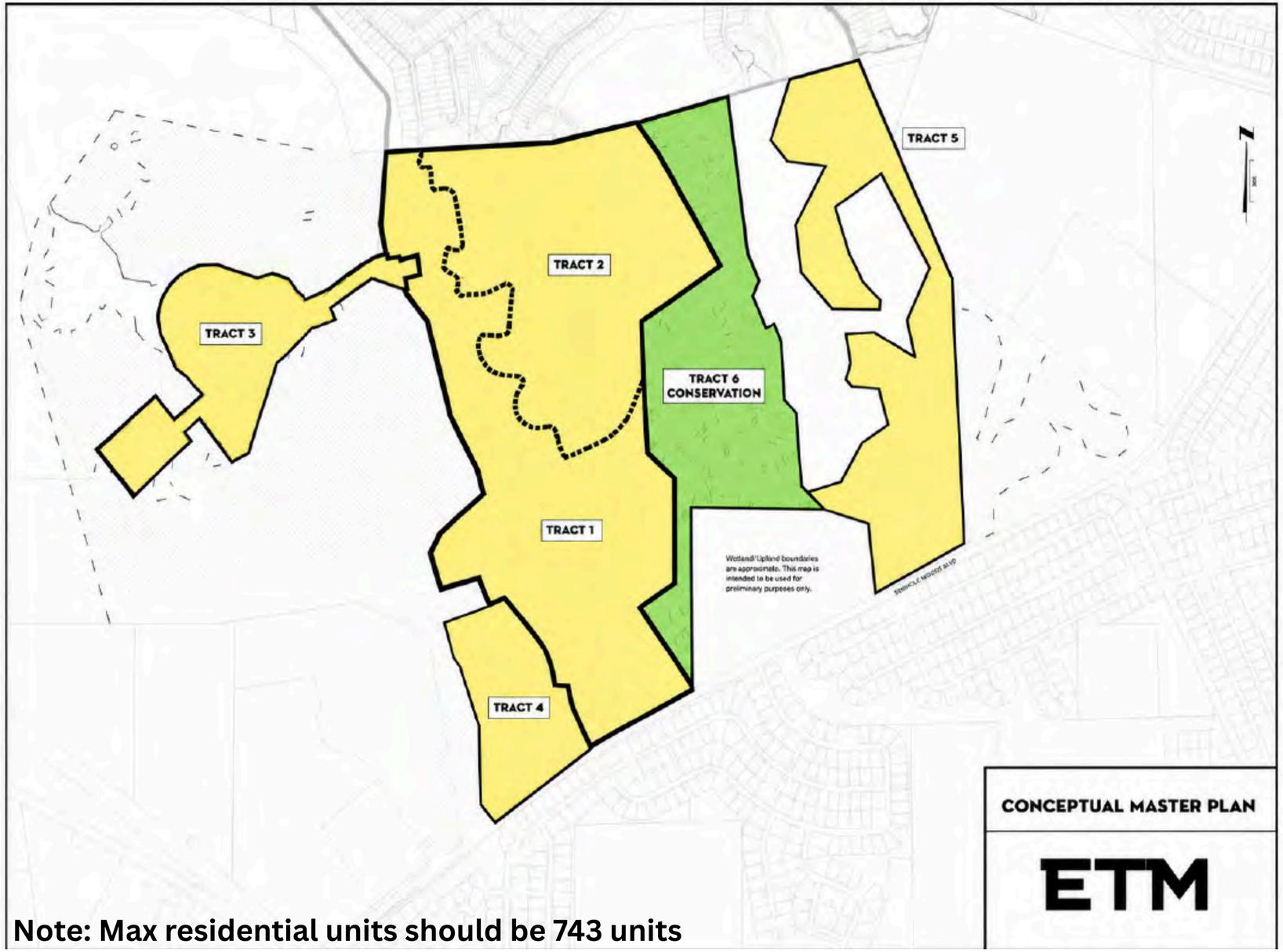
The Applicant appreciates staff's continued review of this application and respectfully requests that the application proceed toward public hearing.

Sincerely,



Michael D. Chiumento III
MDC/cm
Attorney for Applicant

Proposed FLUM



Note: Max residential units should be 743 units

Michael D. Chiumento
Michael D. Chiumento III
William J. Bosch
Vincent L. Sullivan
Diane A. Vidal, of counsel
Kareen Movsesyan

Michael D. Chiumento III
Managing Partner
Michael3@legalteamforlife.com

CHIUMENTO LAW

145 City Place, Suite 301
Palm Coast, FL 32164
Tel. (386) 445-8900
Fax: (386) 445-6702

2 Camino Del Mar
Palm Coast, FL 32137

By Appointment Only:
57 W. Granada Blvd.
Ormond Beach, FL 32174

August 3, 2026

RE: Cascades at Grand Landings
Rezoning Master Planned Development Application Number 6418
Future Land Use Amendment Small Scale Application Number 6419

To Whom It May Concern:

Byrndog PCP, LLC and KL Seminole Trace, LLC are the owners of approximately 331.11 acres located in Seminole Woods area of Palm Coast off of Seminole Woods Parkway as further described on the attached **Exhibit "A".**

Currently, the owners have an application (#6418), into the City of Palm Coast to rezone the property from SFR-1 to MPD and increase the number of units by 327 which is consistent with the surrounding development. Application #6419 looks to remove the existing comprehensive plan policy. This request is subject to approval by the City Council, and has tentative public hearing dates scheduled as follows:

Planning and Land Development Regulation Board: August 19,2026 at 5:30pm.
City Council – First Reading: September 1, 2026 at 6pm.

As required by City Code, we will be having a neighborhood meeting on **Tuesday, August 11, 2026, at 6:00 p.m. at the "Bistro Room" – Room 106 (Building #6) of Flagler Palm Coast High School, 5500 FL – 100, Palm Coast, Florida 32164** (see attached **Exhibit "B"** with directions on how to enter the school) to answer any of your questions. It is open to the public.

Sincerely yours,

Michael D. Chiumento III

EXHIBIT "A"

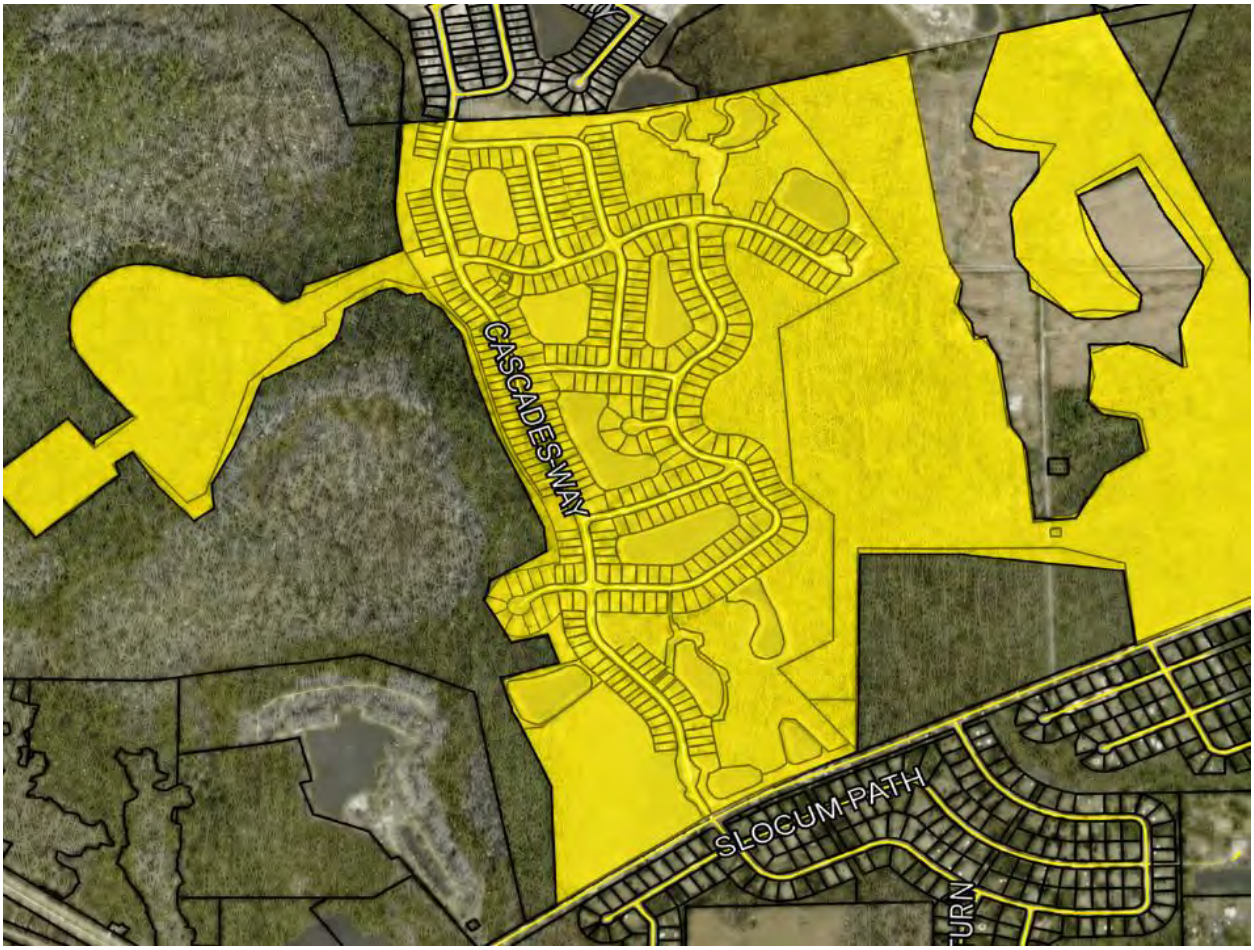
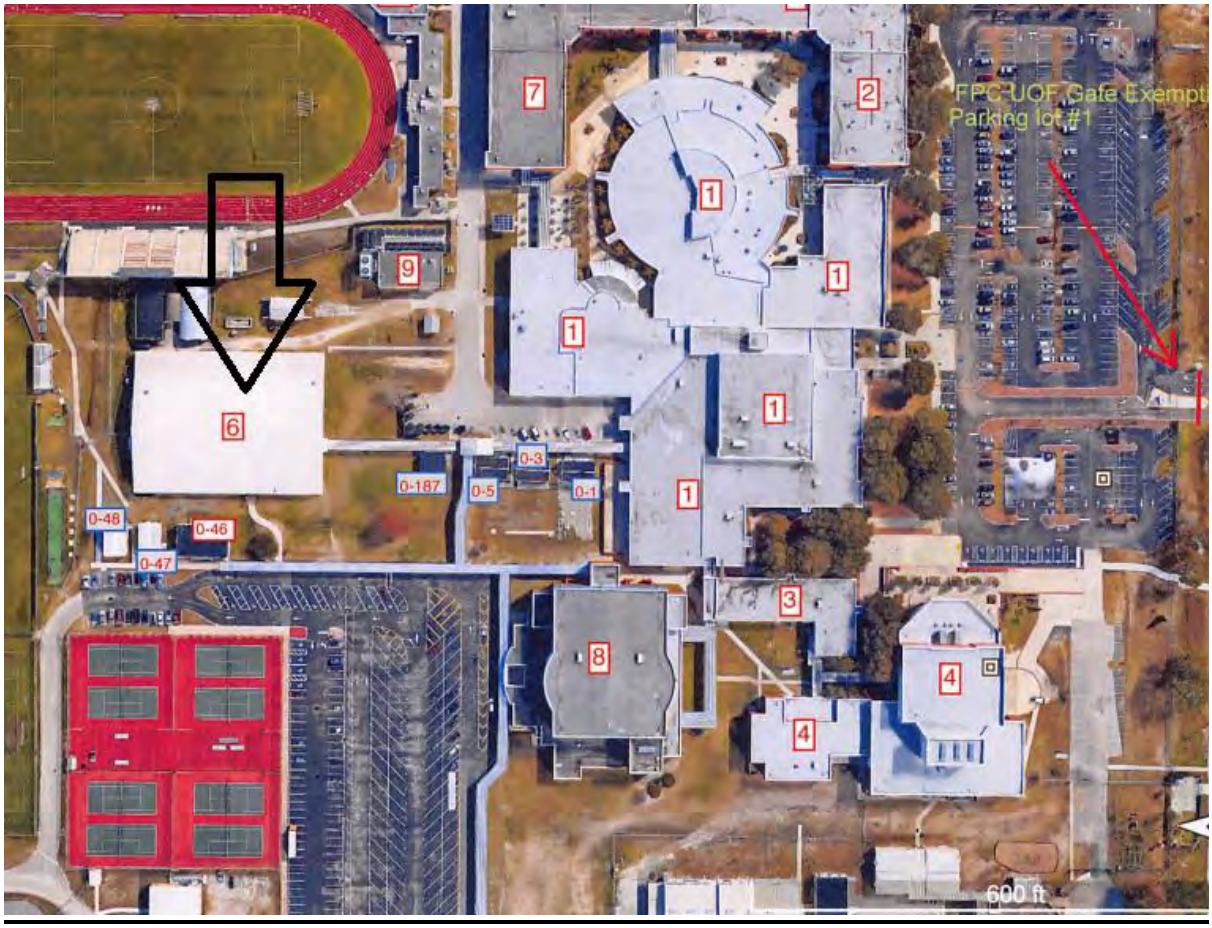


EXHIBIT "B"


FPC UOF Gate Exempt
Parking lot #1
7
2
1
1
1
1
1
9
6
0-3
0-187
0-5
0-1
0-48
0-46
0-47
3
8
4
4
600 ft

BYRNDOG PCP, LLC
180 BROOKHAVEN CT S
PALM COAST, FL 32164

CITY OF FLAGLER BEACH FLORIDA
PO BOX 70
FLAGLER BEACH, FL 32136

JTL GRAND LANDINGS DEVELOPMENT LLC
16660 DALLAS PARKWAY SUITE 1600
DALLAS, TX 75248

JTL GRAND LANDINGS HOLDINGS, LLC
16660 DALLAS PKWY SUITE 1600
DALLAS, TX 75248

SCHOOL BOARD OF FLAGLER COUNTY FLORIDA
3039 HIGHWAY 100 EAST (PO BOX 755)
BUNNELL, FL 32110

AARON WANDA LYNN
105 SLOGANEER TRAIL
PALM COAST, FL 32164

AGUERO VIVIANA PEREZ
& YUNIER E FALCON MARTINEZ W&H
34 SLIPPER ORCHID TRL E
PALM COAST, FL 32164

ALESSANDRI VICTOR RICHARD
& SHARON LEE H&W
35 E SLIPPER ORCHID TRAIL
PALM COAST, FL 32164

ALTMAN MAKSIM
104 NIGHTHAWK LANE
PALM COAST, FL 32164

ANDRADE MANUELA & ARTUR P H&W
20 SLIPPER FLOWER PATH E
PALM COAST, FL 32164

APOLLON MUSSET D & MEARRHA
APOLLON H&W
15 SLOCUM PATH
PALM COAST, FL 32164

AUCELLA MICHAEL JOSEPH & MELISSA
108 NIGHTHAWK LANE
PALM COAST, FL 32164

AXE CAP INVESTMENTS LLC
2991 E WHITE STAR AVENUE
ANAHEIM, CA 92806

BAIR JOSEPH KEVIN & DIANE KAY H&W
112 NIGHTHAWK LANE
PALM COAST, FL 32164

BEAUVOIR JONATHAN GEORGE &
JOAN LIZ PAINSON & MARIE LISA BEAU
6 SLIGO MILL CT
PALM COAST, FL 32164

BECKWITH HERBERT &
LOIS H&W
912 N PENINSULA DR
DAYTONA BEACH, FL 32118

BILELLO ANTHONY J
19 SLOCUM PATH
PALM COAST, FL 32164

BOYER CLIFTON C & DEBRA G H&W
121 NIGHTHAWK LANE
PALM COAST, FL 32164

BRADY HELENA
110 NIGHTHAWK LANE
PALM COAST, FL 32164

BYRNDOG PCP, LLC
180 BROOKHAVEN CT S
PALM COAST, FL 32164

CAIN JAMES C & BRITTNEY M H&W
17 SLOCUM PATH
PALM COAST, FL 32164

CARLSON JOSHUA
116 NIGHTHAWK LANE
PALM COAST, FL 32164

CATALANO MICHAEL & LISA H&W
18 SLIPPER FLOWER PATH
PALM COAST, FL 32164

CITY OF FLAGLER BEACH FLORIDA
P O BOX 70
FLAGLER BEACH, FL 32136

CITY OF FLAGLER BEACH FLORIDA
PO BOX 70
FLAGLER BEACH, FL 32136

CITY OF PALM COAST
160 LAKE AVENUE
PALM COAST, FL 32164

CONNELLY WANDA B
39 SLIPPER ORCHID TRAIL E
PALM COAST, FL 32164

CONWAY THOMAS & CAROLYN H&W
106 NIGHTHAWK LANE
PALM COAST, FL 32164

COOK RANDY D & VICTORIA B H&W
12 SLIPPERY ROCK PL
PALM COAST, FL 32164

CROWELL SUSAN JANET
107 NIGHTHAWK LN
PALM COAST, FL 32164

DAVIS WILLIAM
& NORRIE FULFORD JTWROS
6 SLIPPER ORCHARD TRAIL W
PALM COAST, FL 32164

DE LIMA ALEX OLIVEIRA RODRIGUES &
105 NIGHTHAWK LANE
PALM COAST, FL 32164

DELEO GIA
119 NIGHTHAWK LANE
PALM COAST, FL 32164

EBSCO INTEGRA WOODS LLC
C/O JMG REALTY, INC
6 CONCOURSE PKWY STE 600
ATLANTA, GA 30328

ELDER PATRICK & REBECCA
OSTALKIEWICZ
5 SLIPPER ORCHID TRAIL
PALM COAST, FL 32164

ETC CUSTODIAN FBO
KIM WEAGLEY IRA
11050 QUAKER STREET
CONSTANTINE, MI 49042

FKH SFR M LP
600 GALLERIA PARKWAY SUITE 300
ATLANTA, GA 30339

FKH SFR M LP
FIRSTKEY HOMES
600 GALLERIA PARKWAY SUITE 300
ATLANTA, GA 30339

FLAGLER COUNTY BOARD OF COUNTY
COMMISSIONERS
1769 E MOODY BLVD BLDG 2 SUITE 302
BUNNELL, FL 32110

FLOYD APRIL LENORE & MATTHEW JR
21 SLOCUM PATH
PALM COAST, FL 32164

FOLWELL RANDIE HONELLA &
& MICHAEL J W&H
30 SLIPPER ORCHID TRAIL E
PALM COAST, FL 32164

FORTE JESSICA ANN
2 SLIGO MILL COURT
PALM COAST, FL 32164

FREDERIC WADELINE &
NEHEMIE MOISE JTWROS
7 SLIPPERY ROCK PLACE
PALM COAST, FL 32164

GARRETT GREGORY J & LAARNI
ALVARADO GARRETT H&W
6 SLIPPERY ROCK PLACE
PALM COAST, FL 32164

GONZALEZ ERNESTO BORROTO
4 SLIPPER ORCHID TRL W
PALM COAST, FL 32164

GRAND LANDINGS MASTER HOMEOWN
7400 BAYMEADOWS WAY SUITE 317
JACKSONVILLE, FL 32256

GRAPER JOHN G
29 SLIPPER ORCHID TRAIL
PALM COAST, FL 32137

GUERRERO JONSON
& ANA N URRISTE
42 FAIRBANK LN
PALM COAST, FL 32137

HARVEY KIPPER SCOTT & ALICIA LIGU
115 NIGHTHAWK LANE
PALM COAST, FL 32164

HASHMY KHATIJA A
TRUSTEE
5401 N WAYNE
CHICAGO, IL 60640

HOLIDAY BUILDERS INC
2293 WEST EAU GALLIE BOULEVARD
MELBOURNE, FL 32935

HOTALING TAMMY & TODD R W&H
5 SLIPPER FLOWER PATH
PALM COAST, FL 32164

HOUTZ JEFFREY & DAWN LOUISE H&W
8 SLIPPERY ROCK PLACE
PALM COAST, FL 32164

HUBERT KAREN T
3 SLIPPER FLOWER PATH W
PALM COAST, FL 32164

JTL GRAND LANDINGS DEVELOPMENT
16660 DALLAS PARKWAY SUITE 1600
DALLAS, TX 75248

JTL GRAND LANDINGS DEVELOPMENT
LLC
16660 DALLAS PARKWAY SUITE 1600
DALLAS, TX 75248

JTL GRAND LANDINGS HOLDINGS, LLC
16660 DALLAS PKWY SUITE 1600
DALLAS, TX 75248

KASHCHEYEV YURIY M
& TATYANA Y RUZHYTSKA JTWROS
33 SLIPPER ORCHID TRL E
PALM COAST, FL 32164

KL SEMINOLE TRACE LLC
105 1ST STREET
DELRAY BEACH, FL 33444

KL SEMINOLE TRACE LLC
105 NE 1ST STREET
DELRAY BEACH, FL 33444

KOSIVI JOYCE
9 SLIPPERY ROCK PL
PALM COAST, FL 32164

LAGARE LAND TRUST
29 LAGARE STREET
PALM COAST, FL 32137

MAGGIO MICHAEL & MARCELLE H&W
50 MEADOWBROOK RD
BRICK, NJ 08723

MAYFIELD JOHN A
& KRISTEN LEWIS JTWROS
31 SLIPPER ORCHID TRAIL E
PALM COAST, FL 32164

MPC LOTS LLC
2379 BEVILLE ROAD
DAYTONA BEACH, FL 32119

MYERS DIANA JEAN
22 SLIPPER FLOWER PATH E
PALM COAST, FL 32164

NEWTON RENEE
2 SLIPPER ORCHID TRAIL
PALM COAST, FL 32164

PANIAGUA LILY C
172 NEWBURY ST
BROCKTON, MA 02301

PANIAGUA LILY
172 NEWBURY ST
BROCKTON, MA 02301

PIERRE LUCEY LUNIQUE
8 SLIGO MILL COURT
PALM COAST, FL 32164

REMISHEVSKIY LARISA & OLEG
REMISHEVSKIY W&H
36 SLIPPER ORCHID TRAIL E
PALM COAST, FL 32164

RISTESKI ZORAN
131 ORCHARD STREET
ELMWOOD PARK, NJ 07407

RODGERS JEANETTE
114 NIGHTHAWK LANE
PALM COAST, FL 32164

RODRIGUEZ VICTOR
& NILDA ESMERALDA H&W
4 SLIGO MILL COURT
PALM COAST, FL 32164

RUCHKIN VITALIY &
TATYANA SIDORKINA JTWROS
2360 BRIGHAM ST
BROOKLYN, NY 11229

SARKARY HOMI G
1 TALL TREE LANE
POUGHKEEPSIE, NY 12601

SCHOOL BOARD OF FLAGLER COUNTY
P O BOX 755
BUNNELL, FL 32110

SCHOOL BOARD OF FLAGLER
COUNTY FLORIDA
3039 HIGHWAY 100 EAST (PO BOX 755)
BUNNELL, FL 32110

SCHOOL BOARD OF FLAGLER
COUNTY FLORIDA
3039 HIGHWAY 100 EAST PO BOX 755
BUNNELL, FL 32110

SFR JV-2 2022-2 BORROWER LLC
TRICON RESIDENTIAL C/O RYAN LLC P
SCOTTSDALE, AZ 85261

SG FLAGLER HOLDINGS LLC
185 CYPRESS POINT PKWY
PALM COAST, FL 32164

SOFIO DAWN
& MICHAEL ROBERT AMERI JTWROS
103 NIGHTHAWK LANE
PALM COAST, FL 32164

STOLTZ WILLIAM ALAN & TERESA ANN
H&W
1 SLIPPERY ROCK PLACE
PALM COAST, FL 32164

STOLTZ WILLIAM ALAN & TERESA
ANN STOLTZ H&W
1 SLIPPERY ROCK PLACE
PALM COAST, FL 32164

THORNTON STEPHANIE ROSE & TRAVIS
109 NIGHTHAWK LANE
PALM COAST, FL 32164

ZHITNIKOV SERGEY
& SVETLANA ALTMAN H&W
457 GRAND LANDINGS PKWY
PALM COAST, FL 32164

BYRNDOG PCP, LLC
180 BROOKHAVEN CT S
PALM COAST, FL 32164

CITY OF FLAGLER BEACH FLORIDA
P O BOX 70
FLAGLER BEACH, FL 32136

CITY OF FLAGLER BEACH FLORIDA
PO BOX 70
FLAGLER BEACH, FL 32136

JTL GRAND LANDINGS DEVELOPMENT
16660 DALLAS PARKWAY SUITE 1600
DALLAS, TX 75248

JTL GRAND LANDINGS DEVELOPMENT LLC
16660 DALLAS PARKWAY SUITE 1600
DALLAS, TX 75248

JTL GRAND LANDINGS HOLDINGS, LLC
16660 DALLAS PKWY SUITE 1600
DALLAS, TX 75248

KL SEMINOLE TRACE LLC
105 1ST STREET
DELRAY BEACH, FL 33444

MPC LOTS LLC
2379 BEVILLE ROAD
DAYTONA BEACH, FL 32119

SCHOOL BOARD OF FLAGLER COUNTY FLORIDA
3039 HIGHWAY 100 EAST (PO BOX 755)
BUNNELL, FL 32110

BYRNDOG PCP, LLC
180 BROOKHAVEN CT S
PALM COAST, FL 32164

DREAM FINDERS HOMES LLC
14701 PHILIPS HIGHWAY SUITE 300
JACKSONVILLE, FL 32256

DREAM FINDERS HOMES LLC
14701 PHILIPS HWY
JACKSONVILLE, FL 32256

JTL GRAND LANDINGS DEVELOPMENT
16660 DALLAS PARKWAY SUITE 1600
DALLAS, TX 75248

JTL GRAND LANDINGS DEVELOPMENT LLC
16660 DALLAS PARKWAY SUITE 1600
DALLAS, TX 75248

KL SEMINOLE TRACE LLC
105 1ST STREET
DELRAY BEACH, FL 33444

KL SEMINOLE TRACE LLC
105 NE 1ST STREET
DELRAY BEACH, FL 33444

APOLLON MUSSET DENISARD &
MEARRHA APOLLON H&W
15 SLOCUM PATH
PALM COAST, FL 32164

BYRNDOG PCP, LLC
180 BROOKHAVEN CT S
PALM COAST, FL 32164

CITY OF PALM COAST
160 LAKE AVENUE
PALM COAST, FL 32164

COTTO CHRISTIAN
4 SLOCUM PATH
PALM COAST, FL 32164

DENTON JOLENE
3249 CLUBSIDE VIEW COURT
SNELLVILLE, GA 30039

DREAM FINDERS HOMES LLC
14701 PHILIPS HWY
JACKSONVILLE, FL 32256

EBSCO INTEGRA WOODS LLC
C/O JMG REALTY, INC
6 CONCOURSE PKWY STE 600
ATLANTA, GA 30328

FLAGLER COUNTY BOARD OF COUNTY
COMMISSIONERS
1769 E MOODY BLVD BLDG 2 SUITE 302
BUNNELL, FL 32110

FLORES OSWALDO F & DAYMARA
CAMALLERIS-VERDECIA H&W
4 SLOGAN PLACE
PALM COAST, FL 32164

GONCALVES JOSE M CORDEIRO
& PAULA CRISTINA ANDRE CACOILO G(
5 SLOCUM PATH
PALM COAST, FL 32164

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DELRAY BEACH, FL 33444

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105 NE 1ST STREET
DELRAY BEACH, FL 33444

MELENDEZ JOHN STEPHON
& EVELYN REYES JTWROS
2 SLOGAN PLACE
PALM COAST, FL 32164

MESSINA THERESA ANN & JOHN JR W&
6 SLOGAN PL
PALM COAST, FL 32164

MUNDY WILLIAM JAMES &
CHRISTINA MARIE MUNDY H&W
2 SLOCUM PATH
PALM COAST, FL 32164

OTLR BMO 2 LLC
11900 N BAYSHORE DRIVE
MIAMI, FL 33181

PAGAN DANIEL & KIMBERLY R H&W
4 SLOGANEER TRAIL
PALM COAST, FL 32164

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BUNNELL, FL 32110

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BUNNELL, FL 32110

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TRICON RESIDENTIAL C/O RYAN LLC P
SCOTTSDALE, AZ 85261

SHOCKLEY SARA IRLAND
3 SLOGAN PLACE
PALM COAST, FL 32164

SW PROPERTY HOLDINGS LLC
2379 BEVILLE ROAD
DAYTONA BEACH, FL 32119

BYRNDOG PCP, LLC
180 BROOKHAVEN CT S
PALM COAST, FL 32164

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KL SEMINOLE TRACE LLC
105 1ST STREET
DELRAY BEACH, FL 33444

KL SEMINOLE TRACE LLC
105 NE 1ST STREET
DELRAY BEACH, FL 33444

AME FAMILY HOLDINGS LLC
53013 E COLONIAL DR # 130
ORLANDO, FL 32807

BYRNDOG PCP, LLC
180 BROOKHAVEN CT S
PALM COAST, FL 32164

CITY OF PALM COAST
160 LAKE AVENUE
PALM COAST, FL 32164

EBSCO INTEGRA WOODS LLC
C/O JMG REALTY, INC
6 CONCOURSE PKWY STE 600
ATLANTA, GA 30328

FLAGLER COUNTY BOARD OF COUNTY
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1769 E MOODY BLVD BLDG 2 SUITE 302
BUNNELL, FL 32110

GIORDANO MICHAEL &
MARIA
130 NEW VALLEY RD
NEW CITY, NY 10956

GRAYBEAL STEVEN
22 SLOGAN PLACE
PALM COAST, FL 32164

JEAN ISNOR
& WALLY ALEXANDRE & MAX CHARLES
16 SLOGAN PLACE
PALM COAST, FL 32164

KL SEMINOLE TRACE LLC
105 NE 1ST STREET
DELRAY BEACH, FL 33444

MCDONALD GLADSTONE
96 INTERBORO PKWY
BROOKLYN, NY 11207

NEIMAND WOLFGANG &
NEREIDA NEIMAND
1837 W 5 TH ST
PISCATAWAY, NJ 08854

REID FLUERETTE &
KAYLA MONIQUE REID JTWROS
4019 GUNTHER AVENUE
BRONX, NY 10466

ROMULO AGNES A & ANTHONY W&H &
CHARLES ANTHONY ROMULO
28 BURNHAM DRIVE
FORDS, NJ 08863

SEAGATE HOMES LLC
185 CYPRESS POINT PKWY STE 7
PALM COAST, FL 32134

SHARPE JANE M
14 SLOGAN PLACE
PALM COAST, FL 32164

WANDZILAK MICHAEL DAVID &
GLORIA H&W
6 SLOGAN CT
PALM COAST, FL 32164

AARON WANDA LYNN
105 SLOGANEER TRAIL
PALM COAST, FL 32164

AGUILAR IRMA & ANNA TORRES
359 LINCOLN STREET
WORCESTER, MA 01605

AMBROSE RONALD & DIANNE H&W
11 SLOGANEER TRAIL
PALM COAST, FL 32164

AME FAMILY HOLDINGS LLC
53013 E COLONIAL DR # 130
ORLANDO, FL 32807

ANGERT YAKOV &
VICTORIA ANGERT
7375 SW 101ST AVE
BEAVERTON, OR 97008

APOLLON MUSSET D & MEARRHA
APOLLON H&W
15 SLOCUM PATH
PALM COAST, FL 32164

APOLLON MUSSET DENISARD &
MEARRHA APOLLON H&W
15 SLOCUM PATH
PALM COAST, FL 32164

BILELLO ANTHONY J
19 SLOCUM PATH
PALM COAST, FL 32164

BOTELHO ERIC
& MELISSA R ROSENTHAL JTWROS
23 SLOGANEER TRL
PALM COAST, FL 32164

BYRNDOG PCP, LLC
180 BROOKHAVEN CT S
PALM COAST, FL 32164

CAIN JAMES C & BRITTNEY M H&W
17 SLOCUM PATH
PALM COAST, FL 32164

CHAN KIMLEANG & SEAVKONG TANN A
103 SLOGANEER TRL
PALM COAST, FL 32164

CITY OF PALM COAST
160 LAKE AVENUE
PALM COAST, FL 32164

CONDUS THOMAS L &
PRESENTACION AMC
118 CHURCH STREET
LAKE RONKONKOMA, NY 11779

CORRALIZA PARBATIE
& EDDUNIO J CORRALIZA W&H
5 SLOGAN COURT
PALM COAST, FL 32164

COTTO CHRISTIAN
4 SLOCUM PATH
PALM COAST, FL 32164

DENTON JOLENE
3249 CLUBSIDE VIEW COURT
SNELLVILLE, GA 30039

DUBOIS DAVID A &
RHONDA M H&W
27 SLOGANEER TRL
PALM COAST, FL 32164

DUFFY CHRISTINA D
194 ADAMS WAY
SAYVILLE, NY 11782

EATON STEPHEN & SUSAN H&W
27 SLOCUM PATH
PALM COAST, FL 32164

EBSCO INTEGRA WOODS LLC
C/O JMG REALTY, INC
6 CONCOURSE PKWY STE 600
ATLANTA, GA 30328

FLAGLER COUNTY BOARD OF COUNTY
COMMISSIONERS
1769 E MOODY BLVD BLDG 2 SUITE 302
BUNNELL, FL 32110

FLAGLER COUNTY HOLDINGS LLC
PO BOX 351016
PALM COAST, FL 32135

FLORES OSWALDO F & DAYMARA
CAMALLERIS-VERDECIA H&W
4 SLOGAN PLACE
PALM COAST, FL 32164

FLOYD APRIL LENORE & MATTHEW JR
21 SLOCUM PATH
PALM COAST, FL 32164

GIORDANO MICHAEL &
MARIA
130 NEW VALLEY RD
NEW CITY, NY 10956

GONCALVES JOSE M CORDEIRO
& PAULA CRISTINA ANDRE CACOILO G
5 SLOCUM PATH
PALM COAST, FL 32164

GRAYBEAL STEVEN
22 SLOGAN PLACE
PALM COAST, FL 32164

HUTCHINS ALEXANDRIA ANN &
CHRISTINA ROSE HUTCHINS JTWROS
29 SLOGANEER TRL
PALM COAST, FL 32164

JACOBS BRANDON L
& DIANA E H&W
5 SLOGAN PLACE
PALM COAST, FL 32164

JEAN ISNOR
& WALLY ALEXANDRE & MAX CHARLES
16 SLOGAN PLACE
PALM COAST, FL 32164

KL SEMINOLE TRACE LLC
105 NE 1ST STREET
DELRAY BEACH, FL 33444

LAMBERT JOANNE TRUSTEE
150 STANDISH DRIVE
ORMOND BEACH, FL 32176

LAU AGNES
LIFE ESTATE
8 SLOCUM PATH
PALM COAST, FL 32164

MANJARRES CHASE & SALINA H&W
6 SLOCUM PATH
PALM COAST, FL 32164

MARKS KRISTINE A
8 SLOGANEER TRAIL
PALM COAST, FL 32164

MCDONALD GLADSTONE
96 INTERBORO PKWY
BROOKLYN, NY 11207

MELENDEZ JOHN STEPHON
& EVELYN REYES JTWROS
2 SLOGAN PLACE
PALM COAST, FL 32164

MESSINA THERESA ANN & JOHN JR W&
6 SLOGAN PL
PALM COAST, FL 32164

MITTEL FRED &
LYNNE H&W
25 SLOGANEER TRAIL
PALM COAST, FL 32164

MONTERO ALBERTO ZELEDON
& OLGA VIRGINIA MESEN MURILLO H&\
14 SLOCUM PATH
PALM COAST, FL 32164

MUNDY WILLIAM JAMES &
CHRISTINA MARIE MUNDY H&W
2 SLOCUM PATH
PALM COAST, FL 32164

NEIMAND WOLFGANG &
NEREIDA NEIMAND
1837 W 5 TH ST
PISCATAWAY, NJ 08854

OTLR BMO 2 LLC
11900 N BAYSHORE DRIVE
MIAMI, FL 33181

OTLR BMO 3 LLC
11900 N BAYSHORE DRIVE
MIAMI, FL 33181

OVERTON SCOTT GERALD SR &
JULIE ANNETTE OVERTON H&W
15 SLOGANEER TRAIL
PALM COAST, FL 32164

PAGAN DANIEL & KIMBERLY R H&W
4 SLOGANEER TRAIL
PALM COAST, FL 32164

PALM COAST SLOGAN LLC
304 S JONES BLVD #5313
LAS VEGAS, NV 89107

PANIAGUA LILY C
172 NEWBURY ST
BROCKTON, MA 02301

PANIAGUA LILY
172 NEWBURY ST
BROCKTON, MA 02301

RAMSARAN RICARDO
7 SLOGAN PLACE
PALM COAST, FL 32164

REID FLUERETTE &
KAYLA MONIQUE REID JTWROS
4019 GUNTHER AVENUE
BRONX, NY 10466

ROMULO AGNES A & ANTHONY W&H &
CHARLES ANTHONY ROMULO
28 BURNHAM DRIVE
FORDS, NJ 08863

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COUNTY FLORIDA
3039 HIGHWAY 100 EAST (PO BOX 755)
BUNNELL, FL 32110

SCHOOL BOARD OF FLAGLER
COUNTY FLORIDA
3039 HIGHWAY 100 EAST PO BOX 755
BUNNELL, FL 32110

SEAGATE HOMES LLC
185 CYPRESS POINT PKWY STE 7
PALM COAST, FL 32134

SFR JV-2 2022-2 BORROWER LLC
TRICON RESIDENTIAL C/O RYAN LLC P
SCOTTSDALE, AZ 85261

SG FLAGLER HOLDINGS LLC
185 CYPRESS POINT PKWY STE 7
PALM COAST, FL 32164

SHARPE JANE M
14 SLOGAN PLACE
PALM COAST, FL 32164

SHOCKLEY SARA IRLAND
3 SLOGAN PLACE
PALM COAST, FL 32164

SLOVAK JOHN L AND
HELLEN J (TRUSTEES)
200 W CR 330
BUNNELL, FL 32110

SMITH CONNOR CHRISTIAN
& ALEXANDRA MARIE MASON JTWROS
17 SLOGANEER TRL
PALM COAST, FL 32164

SW PROPERTY HOLDINGS LLC
2379 BEVILLE ROAD
DAYTONA BEACH, FL 32119

WANDZILAK MICHAEL DAVID &
GLORIA H&W
6 SLOGAN CT
PALM COAST, FL 32164

CARTER
ENVIRONMENTAL SERVICES

42 Masters Drive, St. Augustine, FL 32084
Tel: 904.540.1786
www.carterenv.com

October 18, 2022

BY EMAIL:
walker@douglaspd.com

Walker Douglas
Douglas Property & Development, Inc.
145 City Place, Suite 300
Palm Coast, FL 32164

SUBJECT: Environmental Assessment
Douglas - Cascades
Palm Coast, Flagler County, Florida
PINs: 29-12-31-0000-01010-0021, 29-12-31-0000-01010-0025, 30-12-31-0000-01020-0040, 31-12-31-0000-01070-0030, 32-12-31-0650-000B0-0020, 31-12-31-0000-01070-0000, & 30-12-31-0000-01020-0050

Dear Mr. Douglas,

Thank you for contacting Carter Environmental Services (CES). We appreciate the opportunity to be of service to you. The purpose of our work on the referenced property was to determine if there are any natural resource concerns that could potentially affect future development of the site. Specifically, this environmental assessment was focused on assessing the presence of or potential utilization by any threatened, endangered, or species of special concern (SSC) as listed by the U.S. Fish and Wildlife Service (FWS) or the Florida Fish and Wildlife Conservation Commission (FWC). CES also assessed the onsite wetlands from August through October of 2021. The results of this environmental assessment follow. Additionally, note that from 2006 to 2012, the site was permitted by the St. Johns River Water Management District (SJRWMD) under Permit No. 103071, sequences 1-4. All permit modifications have since expired, and no construction ever took place.

I trust that this information will be helpful in your preliminary planning. Please contact me if you have any questions or need additional information.

Sincerely,

Ryan A. Carter, PWS
Vice President

Enclosures: Location Map – Figure 1
Soils Map – Figure 2
FLUCFCS Map – Figure 3
FWC Bald Eagle Nest Locator Map – Figure 4
FNAI Biodiversity Matrix

1.0 CURRENT SITE CONDITIONS

The site appears to have been managed for silviculture for at least the past three decades, with pines growing on the northeastern portion of the site most recently harvested around 2015. From 2006 to 2012, the site was permitted by SJRWMD under Permit No. 103071, sequences 1-4. All permit modifications have since expired, and no construction ever took place.

The subject property totals approximately 379.85 acres and is generally bound by timberland and vacant commercial land to the north; wooded Flagler County-owned wetlands and timberland to the west; timberland and vacant land to the east; and Flagler County-owned timberland as well as Seminole Woods Boulevard, followed by single-family-home neighborhoods to the south (Figure 1). More specifically, the property is located in Sections 29, 30, & 32, Township 12 South, Range 31 East in Flagler County, Florida. On inspection, the property was observed to be comprised of both uplands and wetlands, with two upland community types and one wetland community, as documented by CES biologists. The species observed within the onsite communities were consistent with what is frequently found in pine plantations and hydric flatwoods in the area.

1.1 Wetlands

The site was previously permitted by SJRWMD under Permit No. 103071, sequences 1-4. We have a current application under review for wetland impacts at a portion of the site. That application has been assigned sequence 5 of this same permit number (103071-5).

1.2 Soils and Hydrology

Following a literature review, seven (7) soil types were mapped on-site (Figure 2). CES biologists were able to verify the presence and general extent of these soils on-site and they are consistent with the soil types found in the vicinity.

1.3 Vegetative Communities

CES characterized the habitat types on-site using the Florida Department of Transportation's *Florida Land Use Cover Form Classification System* (FLUCFCS). The locations and acreages of each type are depicted on the enclosed FLUCFCS Map (Figure 3).

CES staff noted two upland habitat types occurring on the property. Descriptions of these communities are as follows:

Pine Plantation (FLUCFCS 441) – This dominant community has a canopy of planted slash pine (*Pinus elliottii*) with an understory and groundcover of bitter gallberry (*Ilex glabra*), saw palmetto (*Serenoa repens*), and bracken fern (*Pteridium aquilinum*). On the subject property, large portions on the northeast section were more recently harvested (circa 2015).

Graded & Drained Roadway (FLUCFCS 8145) – This land classification category falls under the broader transportation category, which includes roads and highways. On the subject property, a semi-maintained dirt road spans the property from north to south on the eastern portion site.

CES staff noted one wetland habitat type occurring on the property. A description of this community is as follows:

Hydric Pine Flatwoods (FLUCFCS 625) – This community has a canopy of slash pine. The understory and groundcover are vegetated with scattered dahoon holly (*Ilex cassine*), loblolly bay (*Gordonia lasianthus*), fetterbush (*Lyonia lucida*), highbush blueberry (*Vaccinium corymbosum*), Virginia chain fern (*Woodwardia virginica*), and pipewort (*Eriocaulon* spp.).

2.0 PROTECTED SPECIES

A preliminary detailed characterization of the project site was conducted to identify probable habitat types and conditions on the site. References included the *Soil Survey of Flagler County, Florida,* aerial photographs, and the U.S. Geological Survey topographic map.

A review of federally and state-listed wildlife species was conducted using the most recent lists of endangered and threatened species for Flagler County, Florida. The lists were obtained from the following references:

- **U.S. Fish and Wildlife Service** (FWS)

  Flagler County Federally Listed Species, 2022.
- **Florida Fish and Wildlife Conservation Commission** (FWC)

  FWC 2018 list of Imperiled Species. Accessed online 2022.
- **Florida Natural Areas Inventory** (FNAI)

  Biodiversity Matrix online database. 2022. (See attached)

Based on these sources, a preliminary list of potentially occurring wildlife species was developed by understanding the preferred habitat for each of the species and the probability of the habitat occurrence in the project area. Biologists then conducted a limited pedestrian survey of the property to look for the presence of or potential utilization by any threatened, endangered or species of special concern (SSC) as listed by the U.S. Fish and Wildlife Service (FWS) or the Florida Fish and Wildlife Conservation Commission (FWC).

2.1 Protected Animal Species

2.1.1 Gopher Tortoise (*Gopherus polyphemus*)

CES determined it possible for gopher tortoises to exist on portions of the site based on the mapped soils, and during a site visit several burrows were identified near the northwestern boundary of the project area. Prior to initiation of any construction, CES will identify and map all potential gopher tortoise habitat on the site based on aerial photographs, soils maps, NWI maps, and other in-house resources. We will then conduct a pedestrian survey covering 100 percent of the project site's potential habitat pursuant to the methodologies of FWC to determine the extent of the on-site tortoise population. CES will ultimately relocate all tortoises to an FWC-permitted recipient site per permit requirements.

2.1.2 Wading Birds

A review of the current FWC internet database of wading bird colonies (FWC Wading Bird Rookeries, 2022) revealed no known colonies within a one-mile radius of the on-site wetlands. Also, the site is not located within an FWC-recognized wood stork (*Mycteria americana*) foraging area, with the nearest mapped wood stork colony located 13.7 miles to the southwest, at Lake Disston.

2.1.3 Bald Eagle (*Haliaeetus leucocephalus*)

Using the FWC Eagle Nest Locator Database (2022), CES found two bald eagle nests on record within a 5-mile radius the property, with the nearest nest located approximately 2.3 miles east of the property boundary (Figure 4). Further, no nests were located by CES biologists, and the likelihood of any bald eagles utilizing this site is low. While the bald eagle is not listed as threatened, endangered or as an SSC, it is protected by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Based on these acts, certain activities are regulated by FWS when they occur near an active nest during nesting season (1 October to 15 May).

2.2 Protected Plant Species

In addition to protected animal species, CES biologists reviewed the site for protected plant species, none of which were observed. No coordination would be required with any

regulatory agency if protected plant species were observed in the future. Currently no regulations exist for protected plant species occurring on privately owned land, unless the landowner is harvesting and engaging in the commercial sale of the protected plant species.

3.0 FUTURE DEVELOPMENT

3.1 Federal Permitting

3.1.1 U.S. Army Corps of Engineers (ACOE)

Per the state (DEP) assumption on December 22, 2020, ACOE retains jurisdiction over navigable and coastal waters, including wetlands less than 300 feet from navigable/tidal waters. CES asserts that the wetlands on this property do not fall under current ACOE jurisdiction**. No coordination will be required with ACOE at this time.**

3.1.2 U.S. Fish and Wildlife Service (FWS)

FWS handles permitting associated with adverse impacts to federally listed wildlife or its habitat. Generally, separate coordination is required with FWS and federal permits are contingent upon receiving authorization from FWS. **There are no anticipated impacts to any federally listed species at this time, and no coordination will be necessary with FWS.**

3.2 State Permitting

3.2.1 St. Johns River Water Management District (SJRWMD)

Most new developments require a permit from SJRWMD. The type of permit required varies with the project acreage and acreage of wetland impact proposed. Many new developments that entail less than one acre of wetland impact will require a Standard Environmental Resource Permit. This permit is typically staff approved and frequently takes three to five months to process.

Developments that entail more than one acre of wetland impact will require an Individual Environmental Resource Permit. This permit is approved by SJRWMD staff and frequently takes seven months or more to process.

Additionally, SJRWMD requires that the applicant provide reasonable assurance that the proposed development will not cause adverse secondary impacts to the remaining wetlands on-site. An undisturbed upland buffer (minimum 15-foot width and 25-foot average width) around the remaining wetlands on-site is commonly used to provide assurance to SJRWMD that secondary impacts will not occur. On March 22, 2022, CES applied to SJRWMD for and Environmental

Resource Permit on your behalf, and the application has been assigned no. 103071-5 through the permitting process. **Based on wetlands being present on the site and expectations of impacts, a permit will be required for the proposed project on the site, requiring continued coordination with SJRWMD.**

3.2.2 Florida Department of Environmental Protection (DEP)

As of December 2020, DEP assumed authority to issue permits in the state under Section 404 of the federal Clean Water Act. Generally speaking, FDEP now has permitting responsibility for non-navigable and non-coastal waters, including wetlands more than 300 feet from navigable/tidal waters. **As impacts to DEP jurisdictional wetlands are proposed, coordination with DEP and a State 404 permit will be required.**

3.2.3 Florida Fish and Wildlife Conservation Commission (FWC)

FWC handles permitting associated with adverse impacts to state listed wildlife or its habitat. Generally, separate coordination is required with FWC and state permits are contingent upon receiving authorization from FWC. **As gopher tortoise burrows have been observed on the site, a relocation permit will be required and all tortoises within 25 feet of proposed construction will be relocated prior to construction.**

3.3 Local Permitting

3.3.1 City of Palm Coast

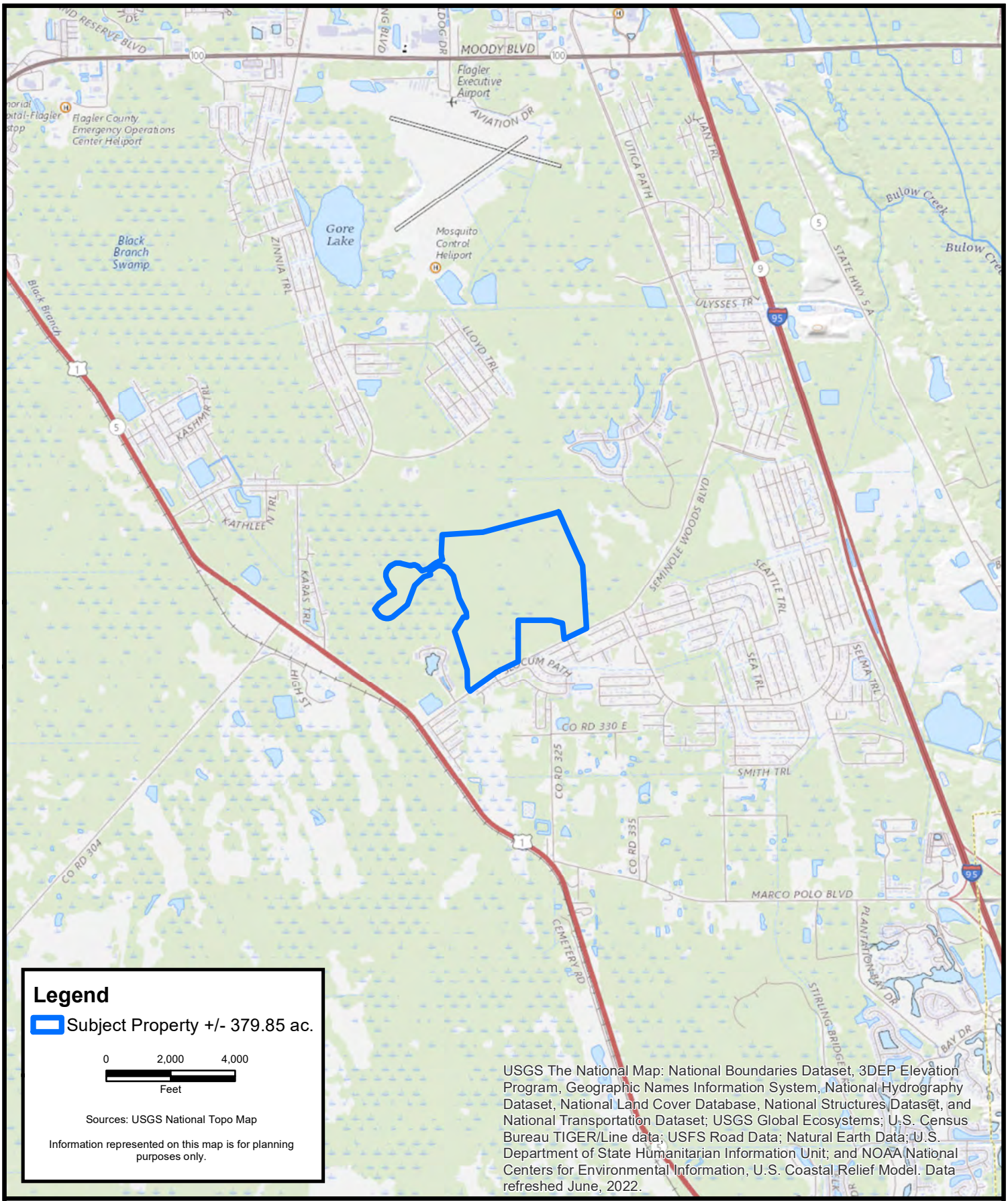
In addition to any State and Federal permitting required for the project, coordination will be required with the City of Palm Coast. Wetland impacts are typically assessed by the City, with emphasis placed on avoiding impacts to higher-quality wetlands and concentrating any wetland impacts to areas that provide a lesser ecological value. Impacts to higher-quality wetlands may not be allowed. Figure 3 depicts the onsite wetlands. **Because wetland impacts are proposed in conjunction with this project, a wetland quality assessment will be prepared for the City.**

4.0 RECOMMENDATIONS

Based on the assessment outlined above, this project has avoided many of the environmental issues associated with new developments and demonstrates responsible development practices by avoiding impacts to the majority of on-site wetlands. Gopher tortoise was the sole protected species located on the site; per the description above, all tortoise burrows on site will be mapped and all tortoises on site within 25 feet of proposed construction will be relocated to an FWC-

approved recipient site. No other protected species have been identified onsite, and the likelihood of any occurring is low.

Please call me at (904) 540-1786 if you have any questions or need additional information.



Legend

Subject Property +/- 379.85 ac.

0 2,000 4,000

Feet

Sources: USGS National Topo Map

Information represented on this map is for planning purposes only.

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed June, 2022.

CARTER ENVIRONMENTAL SERVICES, INC.

CES

42 Masters Drive
St. Augustine, FL 32084
904-540-1786

www.carterenv.com

Location Map

Douglas - Cascades

Project: 5.21253	Palm Coast, Florida	Date: Oct 18 2022	Figure: 1

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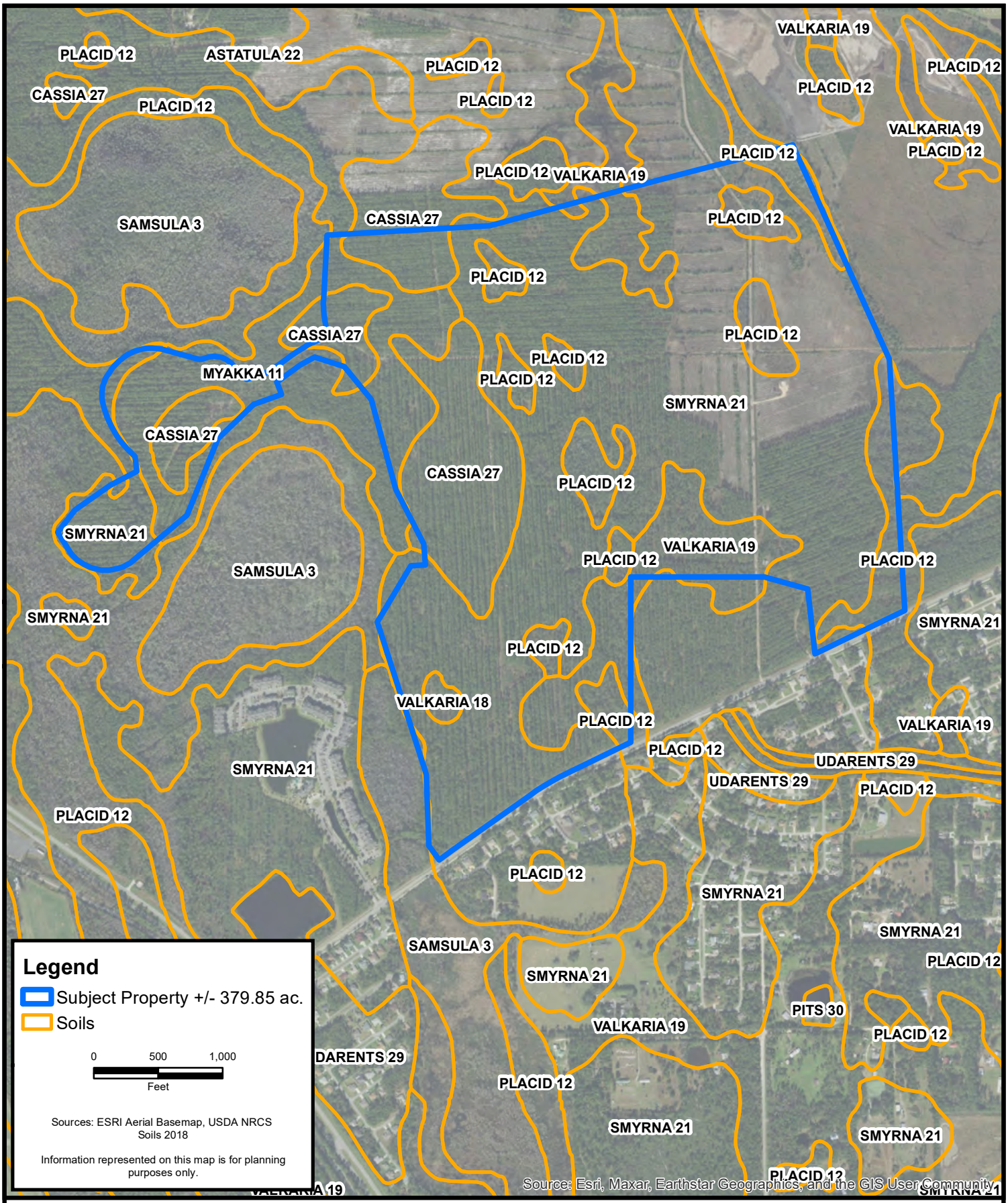

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St. Augustine, FL 32084
904-540-1786

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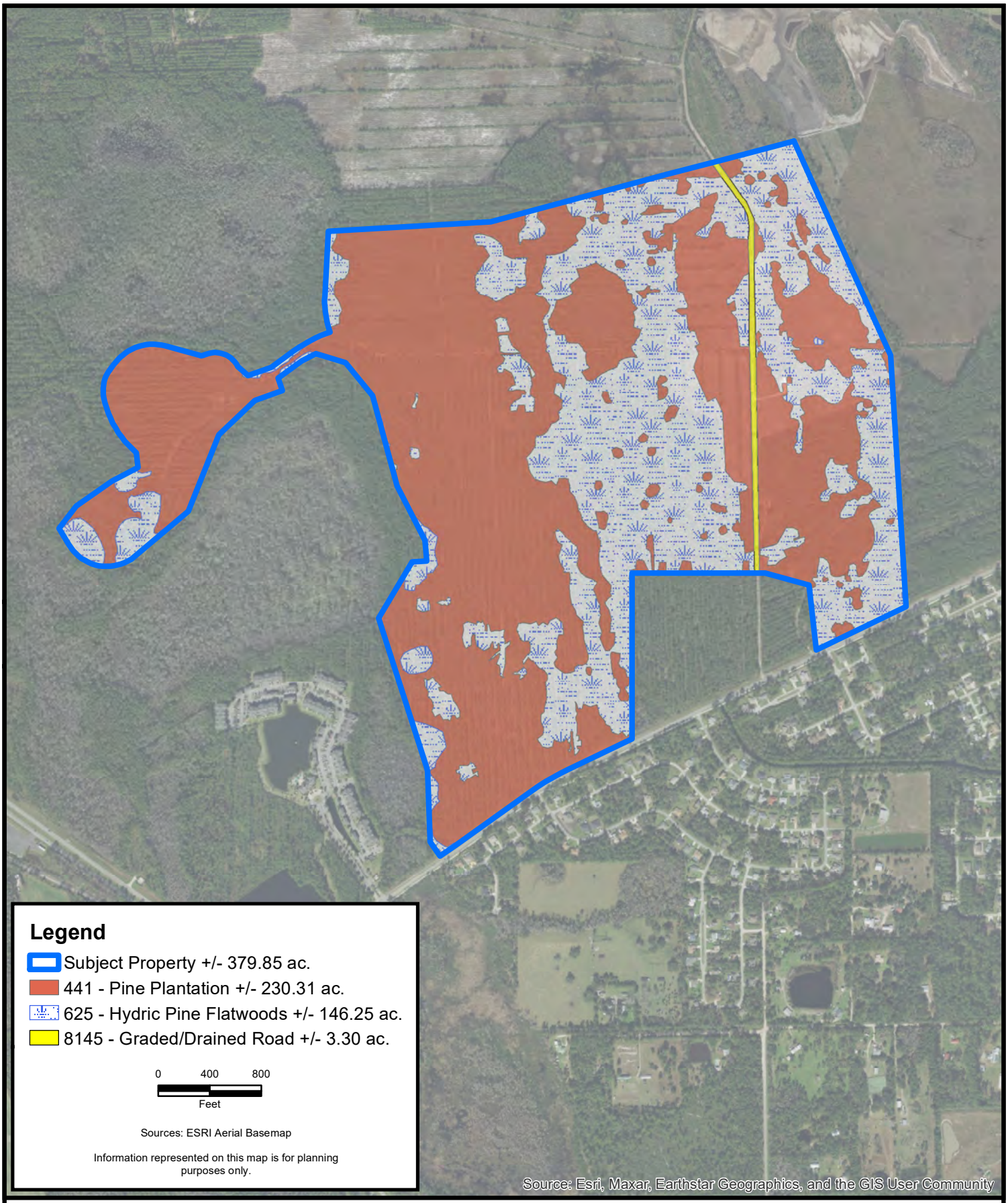
Soils Map

Douglas - Cascades

Project: 5.21253	Palm Coast, Florida	Date: Oct 18 2022	Figure: 2



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FLUCFCS/Existing Conditions Map

Douglas - Cascades

Project: 5.21253	Palm Coast, Florida	Date: Oct 18 2022	Figure: 3

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FWC Bald Eagle Nests

Douglas - Cascades

Project: 5.21253	Palm Coast, Florida	Date: Oct 18 2022	Figure: 4

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1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
850-681-9364 fax
www.fnai.org

Florida Natural Areas Inventory

Biodiversity Matrix Query Results

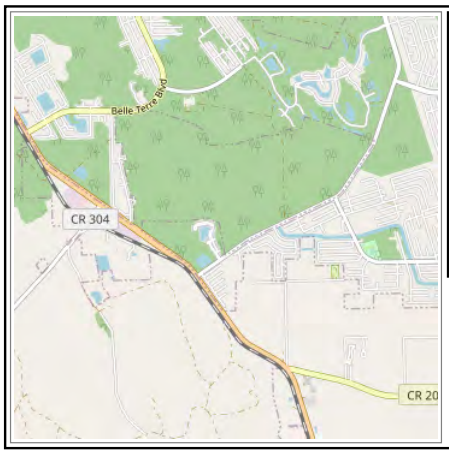
UNOFFICIAL REPORT

Created 10/18/2022

(Contact the FNAI Data Services Coordinator at 850.224.8207 or kbrinegar@fnai.fsu.edu for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

Report for 4 Matrix Units: 50194 , 50195 , 50524 , 50525



Descriptions

DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.

DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.

LIKELY - The species or community is *known* to occur in this vicinity, and is considered likely within this Matrix Unit because:

1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; *or*
2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.

POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.

Matrix Unit ID: 50194

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

3 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Mesic flatwoods	G4	S4	N	N
Mycteria americana Wood Stork	G4	S2	T	FT
Ursus americanus floridanus Florida Black Bear	G5T4	S4	N	N

Matrix Unit ID: 50195

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

3 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Mesic flatwoods	G4	S4	N	N
Mycteria americana Wood Stork	G4	S2	T	FT
Ursus americanus floridanus Florida Black Bear	G5T4	S4	N	N

Matrix Unit ID: 50524

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

3 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Mesic flatwoods	G4	S4	N	N
Mycteria americana Wood Stork	G4	S2	T	FT
Ursus americanus floridanus Florida Black Bear	G5T4	S4	N	N

Matrix Unit ID: 50525

0 **Documented** Elements Found

0 **Documented-Historic** Elements Found

3 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Mesic flatwoods	G4	S4	N	N
Mycteria americana Wood Stork	G4	S2	T	FT
Ursus americanus floridanus Florida Black Bear	G5T4	S4	N	N

Matrix Unit IDs: 50194 , 50195 , 50524 , 50525

20 **Potential** Elements Common to Any of the 4 Matrix Units

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Alligator mississippiensis American Alligator	G5	S4	SAT	FT(S/A)
Antigone canadensis pratensis Florida Sandhill Crane	G5T2	S2	N	ST
Arnoglossum diversifolium variable-leaved Indian-plantain	G2	S2	N	T
Asplenium x heteroresiliens Morzenti's spleenwort	G2	S1	N	N
Calopogon multiflorus many-flowered grass-pink	G2G3	S2S3	N	T
Centrosema arenicola sand butterfly pea	G2Q	S2	N	E
Conradina grandiflora large-flowered rosemary	G3	S3	N	T
Corynorhinus rafinesquii Rafinesque's Big-eared Bat	G3G4	S1	N	N
Deeringothamnus rugelii Rugel's pawpaw	G1	S1	E	E
Floodplain swamp	G4	S4	N	N
Gopherus polyphemus Gopher Tortoise	G3	S3	C	ST
Gymnopogon chapmanianus Chapman's skeletongrass	G3	S3	N	N
Lechea cernua nodding pinweed	G3	S3	N	T
Litsea aestivalis pondspice	G3?	S2	N	E
Matelea floridana Florida spiny-pod	G2	S2	N	E
Nemastylis floridana celestial lily	G2	S2	N	E
Neofiber alleni Round-tailed Muskrat	G2	S2	N	N
Nolina atopocarpa Florida beargrass	G3	S3	N	T
Pteroglossaspis ecristata giant orchid	G2G3	S2	N	T
Rudbeckia nitida St. John's blackeyed susan	G3	S2	N	E

Disclaimer

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

Unofficial Report

These results are considered unofficial. FNAI offers a Standard Data Request option for those needing certifiable data.

TRAFFIC IMPACT ASSESSMENT

SEMINOLE TRACE
for
KOLTER LAND PARTNERS LLC

PALM COAST, FL

ETM No. 21-224-09

SUBMITTED BY

14775 Old St. Augustine Road
Jacksonville, FL 32258
Phone: 904.642.8990
Fax: 904.646.9485

March 11th, 2026

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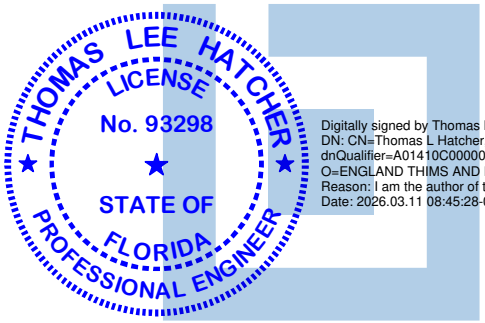

Digitally signed by Thomas L Hatcher
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Reason: I am the author of this document
Date: 2026.03.11 08:45:28-04'00'

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:
THOMAS L. HATCHER, PE, PTOE, PTP
FLORIDA PE NUMBER 93298

Software: Cube Version 6.4.5, CFRPM v7.0, Synchro/Sim Traffic v. 12

This work is intended solely for Kolter Land Partners LLC and the City of Palm Coast. The scope of work and related responsibilities is as defined in the Client Contract. Any use which a third party makes of the work, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Decisions made or actions taken as a result of our work shall be the responsibility of the parties directly involved in the decisions or action

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Introduction

The purpose of this traffic impact assessment is to identify the potential impact of Seminole Trace Development. The proposed project is located in the southern portion of the City of Palm Coast (COPC), south of SR-100 (Moody Boulevard) and the Flagler Executive Airport, on the north side of Seminole Woods Boulevard. **Figure 1** illustrates the location of the project. Seminole Trace will be developed in two phases and consist of approximately 461 single family residential dwelling units (DUs) and approximately 282 multi-family low rise DUs with expected completion by 2033. The proposed development will also be interconnected with Grand Landings Phase 5 & 6 situated to the north. **Figure 2** illustrates the site plan for the Seminole Trace development.

Study Methodology

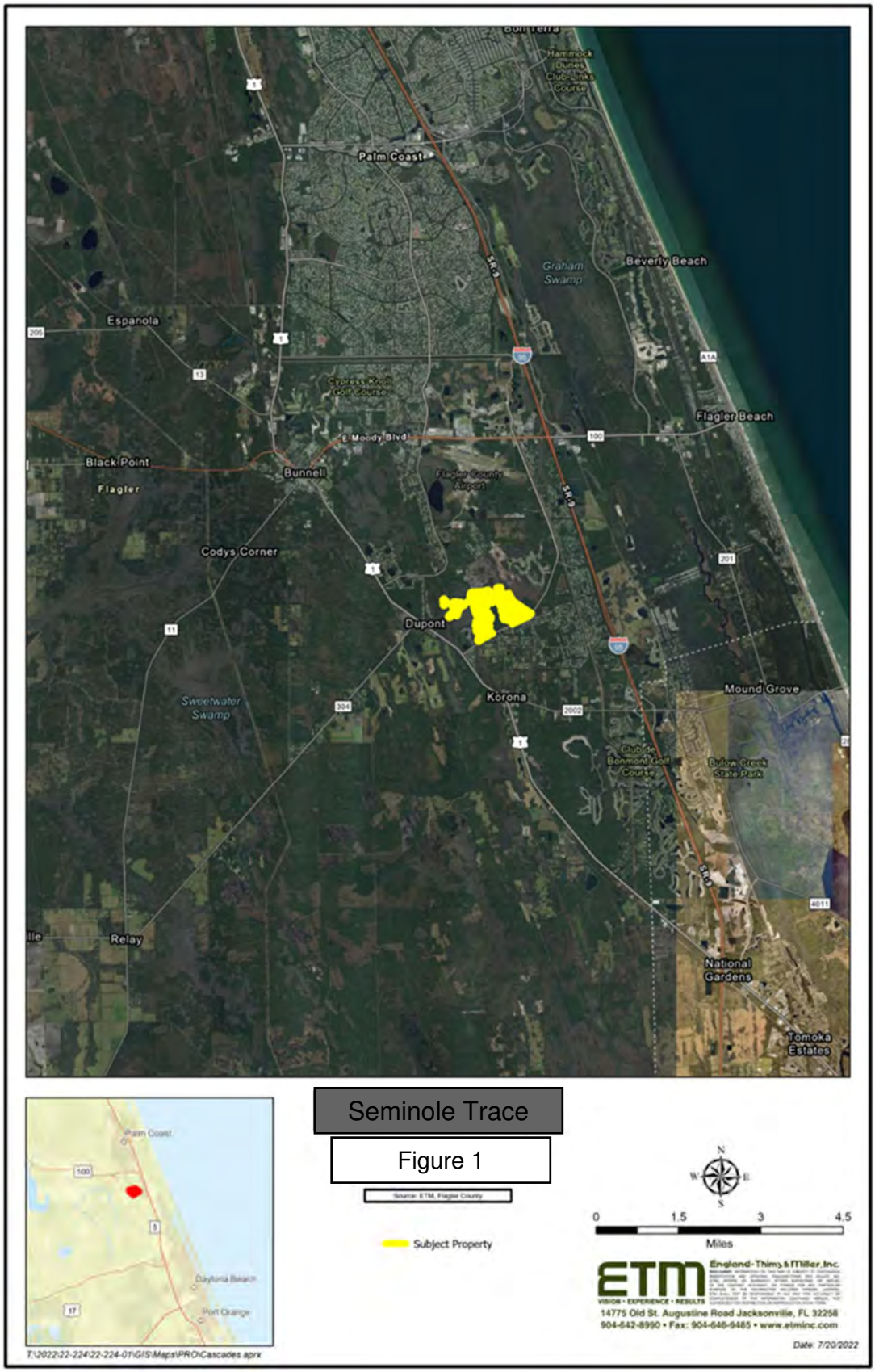
The traffic impact analysis will follow the requirements of the River to Sea TPO, as required by the City of Palm Coast. A detailed methodology was submitted to the City of Palm Coast on June 23, 2023, outlining the specific methodology to be used for this impact assessment. **Appendix A** contains the proposed study methodology. The study area for projects that will generate more than 100 PM peak hour net new external trips is determined where the project is anticipated to consume three percent (3%) or more of the adopted maximum service volume (MSV) on a roadway segment. **Table 1** presents the estimated gross trip generation for the project based on the trip rates and equations from the 12th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, including typical weekday and AM and PM peak hour conditions. As a single use residential project, there will not be any reduction of the gross traffic estimates for internal capture or pass-by traffic.

Table 1
Seminole Trace
Project Trip Generation Estimates

CFRPMv7 TAZ	Land Use Code	Description	Quantity	Units	Trip Generation				
					Period	Rate/Equation	Total	Entering	Exiting
1353	210	Single Family Residential	461	DUs	Daily	T = 8.07(X) + 265.45	3,986	1,993	1,993
					AM Peak	T = 0.67(X) + 5.59	314	85	229
					PM Peak	Ln(t) = 0.92ln(x) + 0.33	393	244	149
1353	220	Multifamily Housing (Low-Rise) - Not Close to Rail	282	DUs	Daily	T = 5.63(X) + 120.45	1,708	854	854
					AM Peak	T = 0.35(X) + 12.93	112	27	85
					PM Peak	T = 0.48(X) + 7.35	143	89	54
1353	Total		743	DUs	Daily		5,694	2,847	2,847
					AM Peak		426	112	314
					PM Peak		536	333	203

Source: 12th edition of the Institute of Transportation Engineers ***Trip Generation Manual***

Figure 1 – Project Location Map



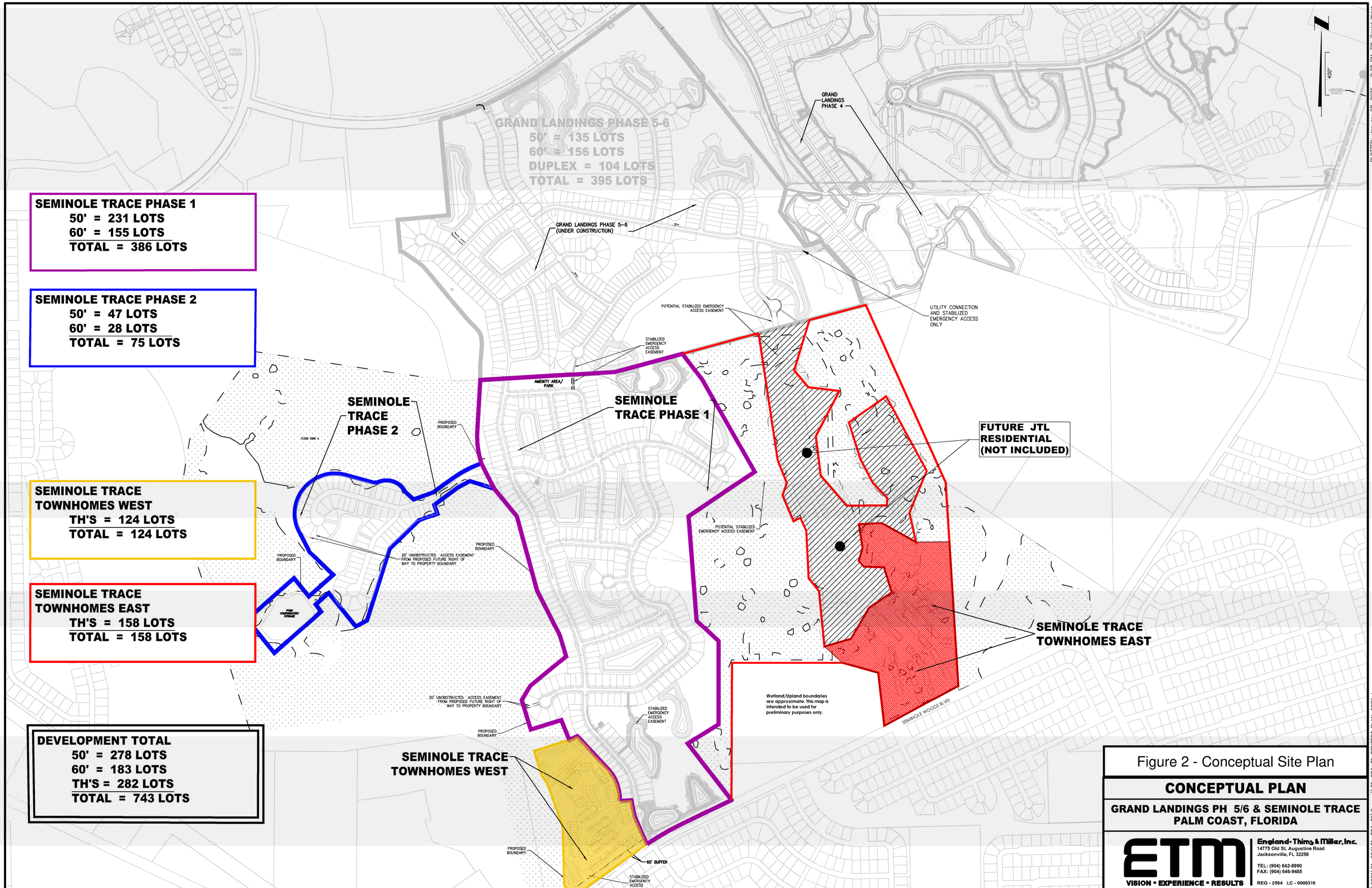


Figure 2 - Conceptual Site Plan

CONCEPTUAL PLAN

GRAND LANDINGS PH 5/6 & SEMINOLE TRACE
PALM COAST, FLORIDA

ETM
VISION • EXPERIENCE • RESULTS
England-Thims & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8990
FAX: (904) 646-9485
REG - 2584 LC - 0000316

PLOTTED: January 28, 2026 – 2:28 PM, BY: Daniel Welch
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Significance Calculations

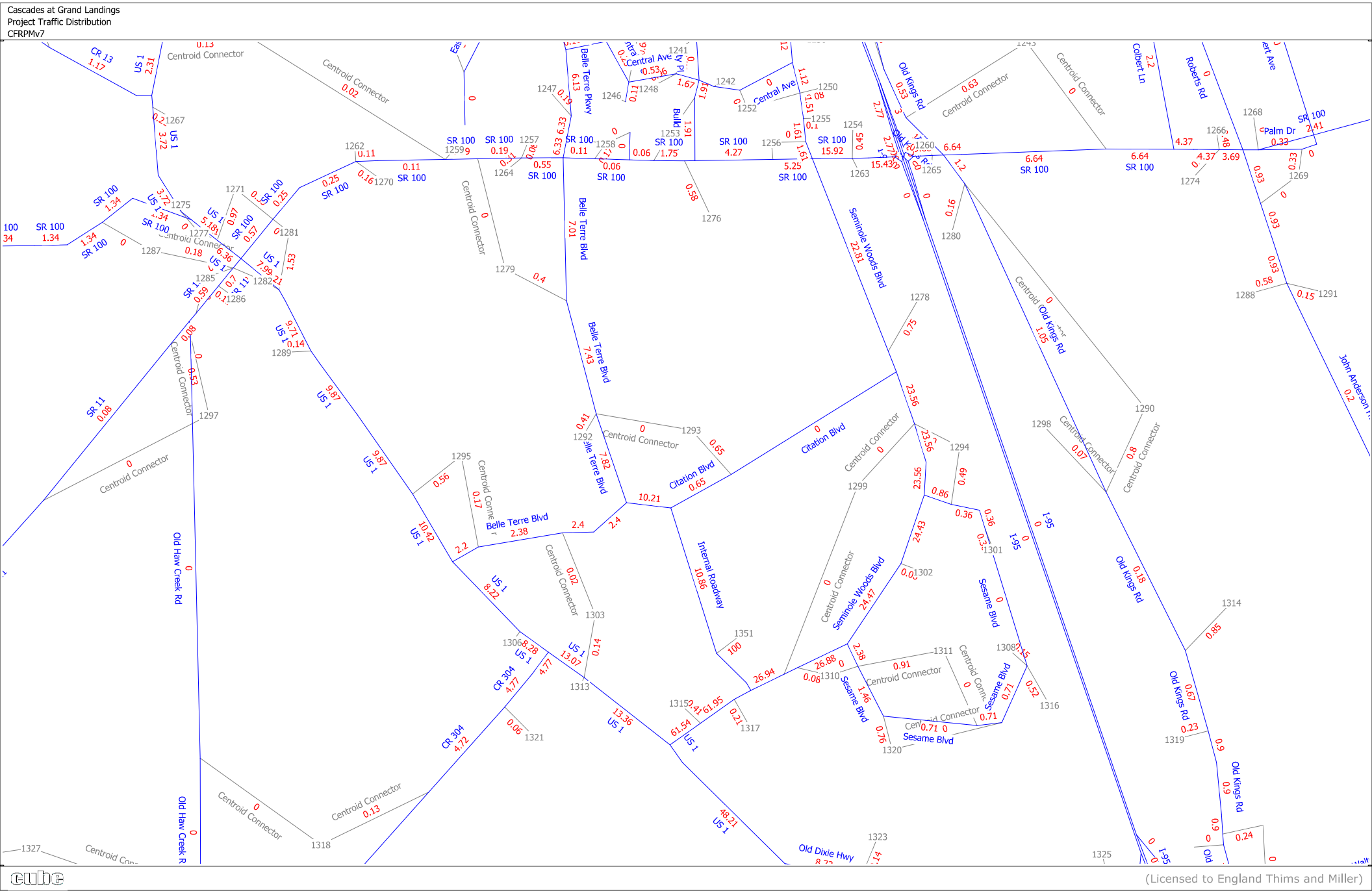
A select link analysis was conducted for a new traffic analysis zone (TAZ 1351) that contains the land use data for Seminole Trace added to the 2030 data set for version 7 of the Central Florida Regional Planning Model (CFRPMv7). The distribution of project traffic was calculated and used to determine where the project is expected to consume three percent (3%) or more of the adopted MSV. **Figure 3** illustrates the distribution of project traffic while. **Appendix B** contains a printout of the distribution extracted from the CFRPMv7, as well as an AADT printout. The percentage of project traffic was multiplied by the external traffic to be generated by Seminole Trace to calculate the project traffic on each roadway segment in the vicinity of the project. As shown, the addition of the segment of Citation Boulevard extension from its current eastern terminus to Seminole Woods Boulevard does not significantly alter the project traffic distribution. This value was then compared to the MSV to determine if the project will consume three percent (3%) or more of the MSV on each road segment. **Table 2** illustrates these calculations and whether Seminole Trace is significant. **Appendix C** contains the 2024 Transportation Facility Status Report used in the analysis.

Table 2
Seminole Trace
Significance Calculations

Link	Roadway	Segment	Typical Section	Maintaining Agency	LOS Standard	Peak Hour MSV	Project Traffic Distribution	PM Peak Hour		
								Project Traffic	Percent MSV	Significant (≥ 3%)
						(vph)	(%)	(vph)	(%)	
1260	Belle Terre Parkway	East Hampton Boulevard to SR 100	4ln - Div	COPC	D	3,580	6.33%	34	0.95%	NO
1263	Belle Terre Blvd.	SR 100 to Zebulas Trail	2-ln - UnDiv	COPC	D	2,170	7.01%	38	1.75%	NO
1265	Belle Terre Blvd.	Zebulas Trail to Zaun Trail	2-ln - UnDiv	COPC	D	2,170	7.43%	40	1.84%	NO
1270	Belle Terre Blvd.	Zaun Trail to Citation Parkway	2-ln - UnDiv	COPC	D	2,170	7.82%	42	1.94%	NO
1275	Belle Terre Blvd.	Citation Parkway to US 1	2-ln - UnDiv	COPC	D	2,170	2.40%	13	0.60%	NO
4300	Bulldog Drive	SR 100 to Central Avenue	2-ln - UnDiv	COPC	D	1,330	1.91%	10	0.75%	NO
3312	Citation Parkway	Belle Terre Parkway to Laguna Forest Lane	2-ln - UnDiv	COPC	D	2,170	10.21%	55	2.53%	NO
3315	Citation Parkway	Seminole Woods Parkway to Sesame Boulevard	2-ln - UnDiv	COPC	D	2,170	0.86%	5	0.23%	NO
251	I-95 (SR 9)	Palm Coast City Limit to Palm Coast Parkway	6ln - Div	FDOT	C	8,370	0.00%	0	0.00%	NO
292	I-95 (SR 9)	Palm Coast Parkway to SR 100	6ln - Div	FDOT	C	8,370	5.77%	31	0.37%	NO
255	I-95 (SR 9)	SR 100 to Old Dixie Highway	6ln - Div	FDOT	C	8,370	0.00%	0	0.00%	NO
3325	Seminole Woods Parkway	SR 100 to Ulaturn Place	4ln - Div	COPC	D	5,900	22.81%	122	2.07%	NO
3300	Seminole Woods Parkway	Ulaturn Place to Citation Parkway	4ln - Div	COPC	D	5,900	23.56%	126	2.14%	NO
3310	Seminole Woods Parkway	Citation Parkway to Sesame Boulevard	2-ln - UnDiv	COPC	D	2,170	24.47%	131	6.04%	YES
3305	Seminole Woods Parkway	Sesame Boulevard to US 1	2-ln - UnDiv	COPC	D	2,170	62.18%	333	15.35%	YES
3320	Sesame Boulevard	Seminole Woods Parkway to terminus	2-ln - UnDiv	COPC	D	2,170	2.38%	13	0.60%	NO
3560	State Road 100	John Anderson Drive to Colbert Lane	4ln - Div	FDOT	D	3,580	4.37%	23	0.64%	NO
3550	State Road 100	Colbert Lane to Tuscany Blvd.	4ln - Div	FDOT	D	3,580	6.64%	36	1.01%	NO
3540	State Road 100	Tuscany Blvd. to Old Kings Road	4ln - Div	FDOT	D	3,580	6.64%	36	1.01%	NO
3530	State Road 100	Old Kings Road to I-95	4ln - Div	FDOT	D	3,580	9.66%	52	1.45%	NO
3525	State Road 100	I-95 to Memorial Medical Parkway	4ln - Div	FDOT	C	3,420	15.43%	83	2.43%	NO
3520	State Road 100	Memorial Medical Pkwy to Seminole Woods Park	4ln - Div	FDOT	C	3,420	15.92%	85	2.49%	NO
3515	State Road 100	Seminole Woods Pkwy to Bulldog Drive	4ln - Div	FDOT	C	3,420	5.25%	28	0.82%	NO
3510	State Road 100	Bulldog Drive to Landings Blvd.	4ln - Div	FDOT	C	3,420	2.36%	13	0.38%	NO
3505	State Road 100	Landings Blvd. to Belle Terre Parkway	4ln - Div	FDOT	C	3,420	0.11%	1	0.03%	NO
3500	State Road 100	Belle Terre Parkway to Palm Coast City Limits	4ln - Div	FDOT	C	3,420	0.55%	3	0.09%	NO
4100	Town Center Blvd.	SR 100 to Hospital Drive	4ln - Div	COPC	D	5,900	1.61%	9	0.15%	NO
101	US1 (SR5)	Palm Coast City Limit to Belle Terre Parkway	4ln - Div	FDOT	D	3,580	10.42%	56	1.56%	NO
3750	US1 (SR5)	Belle Terre Parkway to DuPont Road	4ln - Div	FDOT	D	3,580	8.28%	44	1.23%	NO
3755	US1 (SR5)	DuPont Road to Seminole Woods Parkway	4ln - Div	FDOT	D	3,580	13.36%	72	2.01%	NO
235	US1 (SR5)	Seminole Woods Parkway to Palm Coast City Lim	4ln - Div	FDOT	D	3,580	48.21%	258	7.21%	YES

= Significantly Impacted Link
Source: 2024 Transportation Facility Status Report, CFRPMv7.0

Figure 3 – Project Traffic Distribution Map



cube

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Existing Conditions

As indicated in **Table 2**, the following roadway segment and intersections are significantly impacted by the project and were included in this analysis.

Roadway Segments

- Seminole Woods Parkway from Citation Boulevard to Sesame Boulevard
- Seminole Woods Parkway from Sesame Boulevard to US 1 (SR 5)
- US 1 (SR 5) from Seminole Woods Parkway to Palm Coast City Limits

Intersections

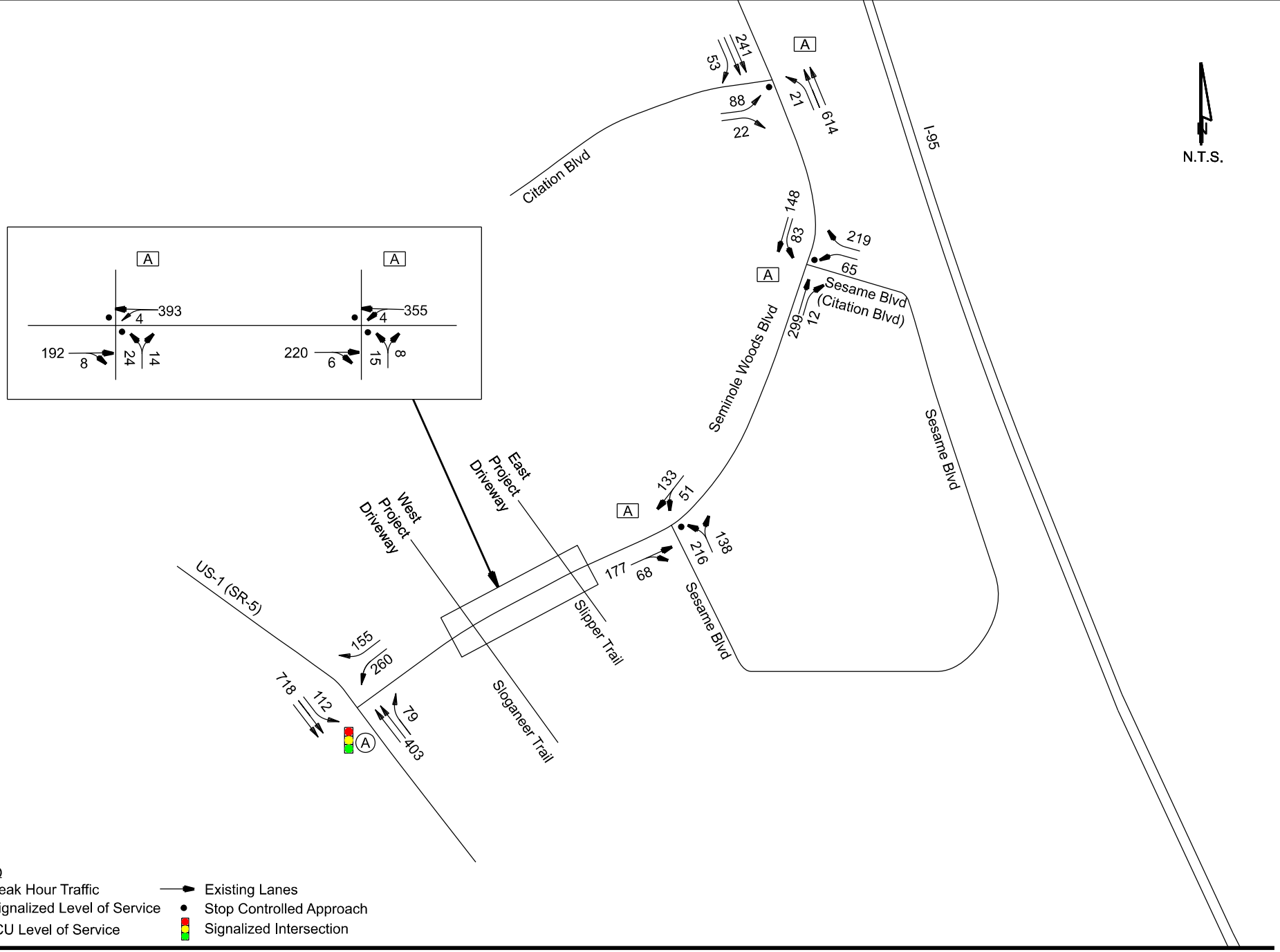
- Citation Boulevard at Seminole Woods Boulevard
- US-1 at Seminole Woods Boulevard
- Seminole Woods Boulevard at Sloganeer Trail (West Project Driveway)
- Seminole Woods Boulevard at Slipper Trail (East Project Driveway)
- Seminole Woods Boulevard and Sesame Boulevard (South)
- Seminole Woods Boulevard and Sesame Boulevard (North)

Traffic counts were collected during the morning (AM) and afternoon (PM) peak hours at the intersection of Seminole Woods Boulevard and Sesame Boulevard (North) on February 26, 2026, while all other intersections were collected during the AM and PM peak hours on February 11, 2026. These counts are presented in **Appendix D**. **Table 3** depicts the existing PM peak hour traffic on each impacted segment along with the level of service based on the *2024 Transportation Facility Status Report* (TFSR) for the City of Palm Coast (COPC). The segment volumes were taken from the 2024 TFSR as well. Traffic counts were annualized with their respective seasonal factors. **Appendix E** contains the FDOT Seasonal Factor Report. **Figure 4** and **Figure 5** present the existing AM and PM peak hour turning movement volumes at the study intersections, along with the current lane configurations and the corresponding Level of Service (LOS) results. LOS for both peak hours was determined in accordance with the methodologies and procedures outlined in the *Highway Capacity Manual 7th Edition*, with operational analyses performed using *Synchro/SimTraffic* software.

Table 3
Seminole Trace
Segment - 2026 Existing Traffic Volumes

Link	Roadway	Segment	LOS Standard	PM Peak Hour		
				MSV (vph)	Existing Volume (vph)	Level of Service
3310	Seminole Woods Parkway	Citation Parkway to Sesame Boulevard	D	2,170	918	C
3305	Seminole Woods Parkway	Sesame Boulevard to US 1	D	2,170	994	C
235	US1 (SR5)	Seminole Woods Parkway to Palm Coast City Limit	D	3,580	2,005	C

Source: COPC 2024 Transportation Facility Status Report



LEGEND

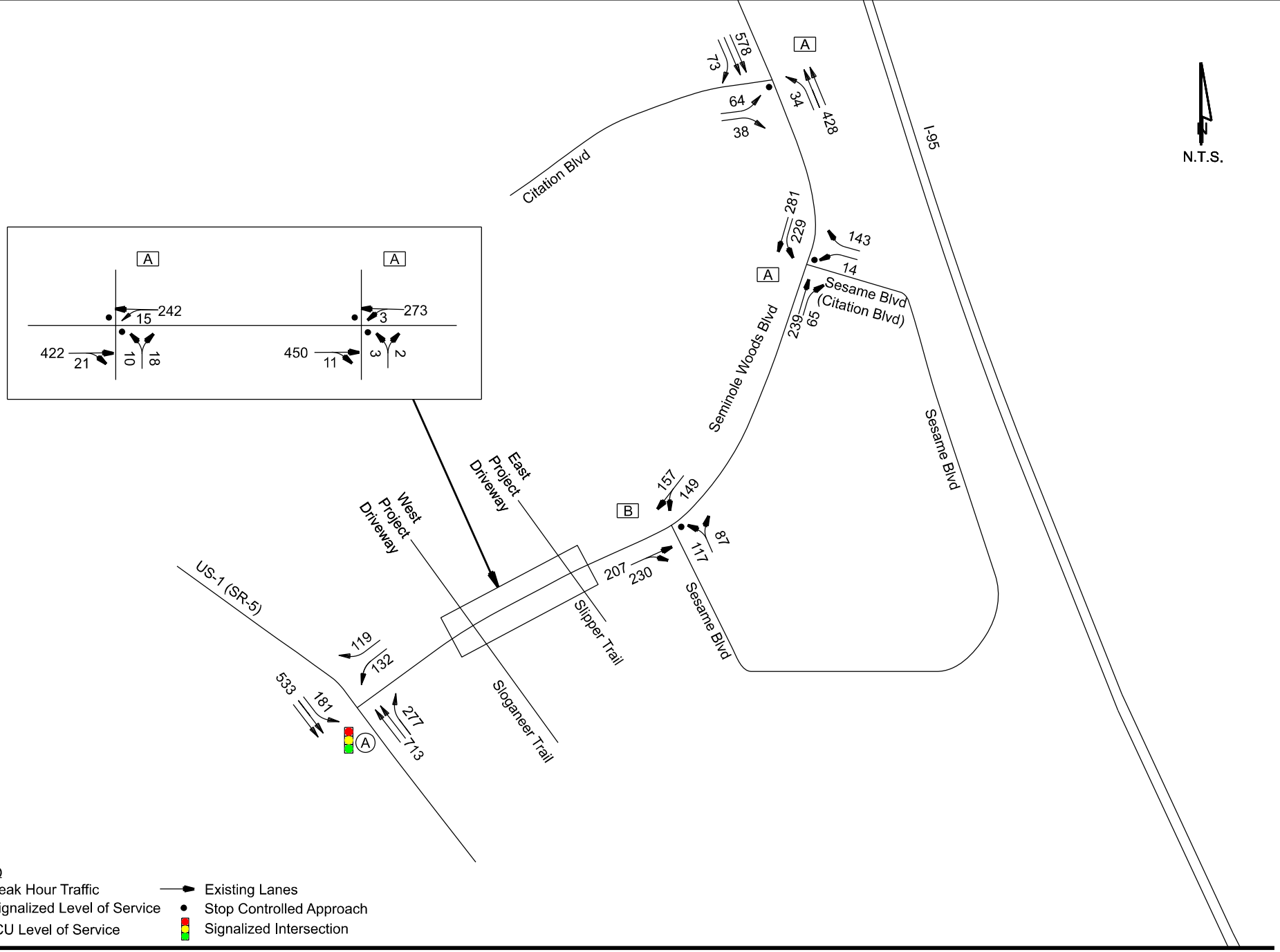
XXX	Peak Hour Traffic	→	Existing Lanes
(X)	Signalized Level of Service	•	Stop Controlled Approach
[X]	ICU Level of Service		Signalized Intersection

ETM
England-Thims & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8990
FAX: (904) 646-9485
CA - 00002584 LC - 0000316

Traffic Impact Assessment
Seminole Trace

AM Peak Hour Existing Volumes (2026)

Figure 4



LEGEND

XXX	Peak Hour Traffic	→	Existing Lanes
(X)	Signalized Level of Service	•	Stop Controlled Approach
[X]	ICU Level of Service		Signalized Intersection

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14775 Old St. Augustine Road
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CA - 00002584 LC - 0000316

Traffic Impact Assessment
Seminole Trace

PM Peak Hour Existing Volumes (2026)

Figure 5

As shown, all the study segments of Seminole Woods Parkway and US-1 (SR-5) are currently operating at an acceptable LOS. The intersection analysis also indicates that the impacted intersections are currently operating at an acceptable level of service. Copies of the Synchro printouts for the AM and PM existing conditions are contained in **Appendix F**.

Background Traffic Estimates

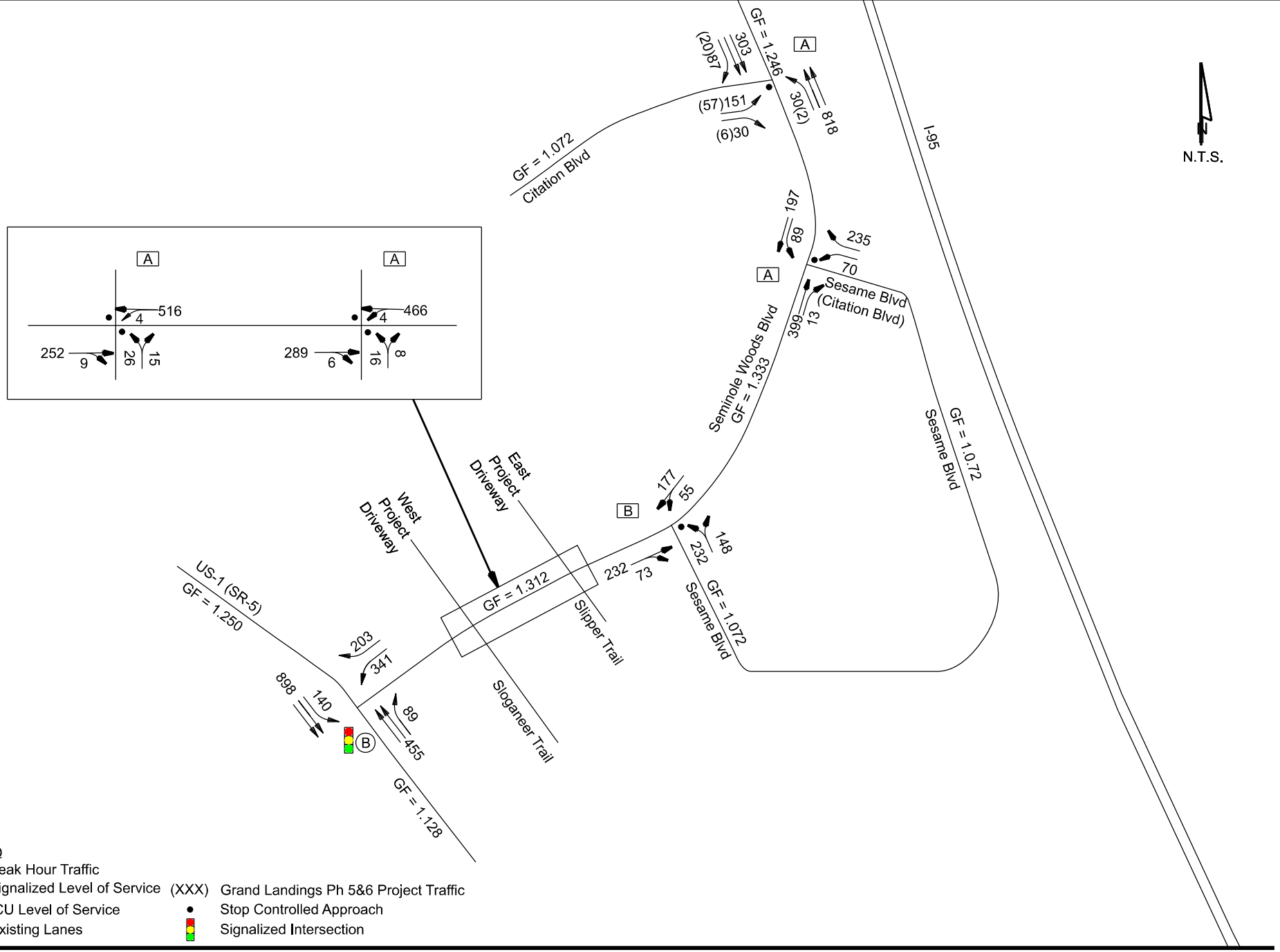
2033 background traffic volume estimates, trips associated with non-project growth, were estimated by adding the PM Peak Hour Vested trips to the existing PM peak hour volumes. The turning movement volumes at the intersections were factored up based on the percentage increase in traffic with the addition of the vested trips on each approach. If the approach isn't included in the Transportation Facilities Status Report or if there were no vested trips, a growth rate of one percent per year (1%/yr) was used to expand the existing turning movement volumes. Grand Landings Phase 5 and 6 was included in the background at the intersection of Citation Blvd & Seminole Woods Blvd. The report text for Grand Landings Phase 5 and 6 traffic study is included in **Appendix G**. **Table 4** illustrates the background traffic volumes (2033) for the roadway segments on which the project is significant.

As shown in **Table 4**, none of the roadway segments are projected to fail under existing and committed traffic volumes. **Figure 6** and **Figure 7** illustrate the estimated turning movement volumes on the intersections as specified in the methodology for the AM and PM background traffic conditions respectively. **Appendix H** provides the Synchro analysis printouts for both peak periods under background traffic conditions.

Table 4
Seminole Trace
Segment - 2033 Background Traffic Volumes

Link	Roadway	Segment	LOS Standard	PM Peak Hour						
				MSV	Existing Volume	Vested Traffic	Grand Landings 5 & 6	Background Traffic	Growth Factor	Level of Service
				(vph)	(vph)	(vph)	(vph)	(vph)		
3310	Seminole Woods Parkway	Citation Parkway to Sesame Boulevard	D	2,170	918	306	6	1,230	1.333	C
3305	Seminole Woods Parkway	Sesame Boulevard to US 1	D	2,170	994	310	4	1,308	1.312	C
235	US1 (SR5)	Seminole Woods Parkway to Palm Coast City Limit	D	3,580	2,005	325	0	2,330	1.162	C

Source: 2024 Transportation Facility Status Report, Grand Landings Phase 5 & 6 Traffic Impact Analysis
Note: Growth Factor calculated by dividing background traffic (without Grand Landings 5 & 6) by existing traffic
Growth Factors used to expand turning movement counts at the study intersections
If the link does not include vested trips, a growth rate of one percent per year (1%/year) was used to expand the turning movement counts
PM peak hour growth factors were applied equivalently to the AM peak hour.



LEGEND

XXX Peak Hour Traffic

(X) Signalized Level of Service

[X] ICU Level of Service

Existing Lanes

(XXX) Grand Landings Ph 5&6 Project Traffic

Stop Controlled Approach

Signalized Intersection

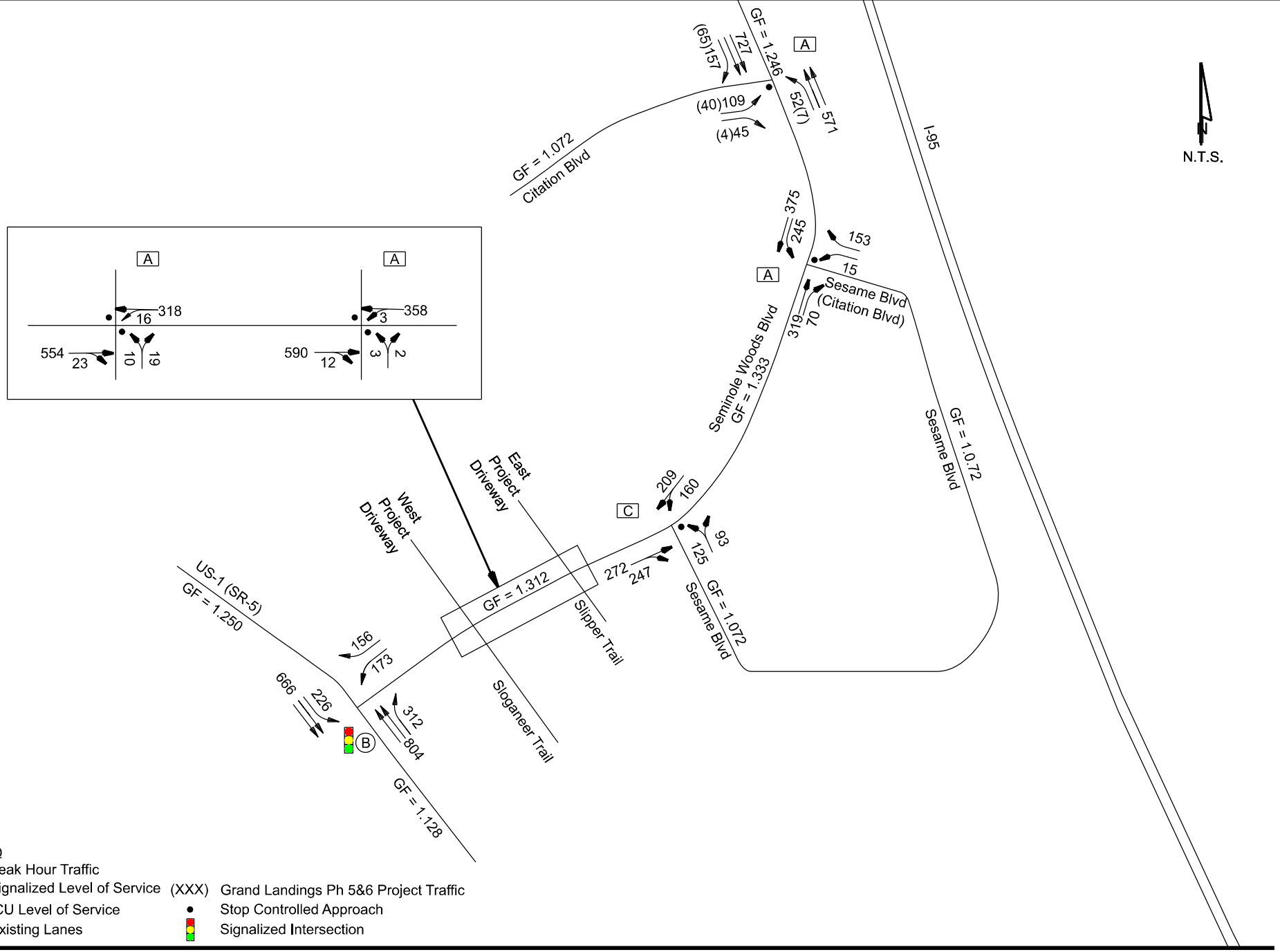
ETM

England-Thims & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8990
FAX: (904) 646-9485
CA - 00002584 LC - 0000316

Traffic Impact Assessment
Seminole Trace

AM Peak Hour Background Volumes (2033)

Figure 6



LEGEND

XXX Peak Hour Traffic

(X) Signalized Level of Service

[X] ICU Level of Service

Existing Lanes

(XXX) Grand Landings Ph 5&6 Project Traffic

Stop Controlled Approach

Signalized Intersection

ETM

England-Thims & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8990
FAX: (904) 646-9485
CA - 00002584 LC - 0000316

Traffic Impact Assessment
Seminole Trace

PM Peak Hour Background Volumes (2033)

Figure 7

Trip Generation Estimates

Project traffic volume estimates were developed using the trip generation equations contained in the 12th edition of the Institute of Transportation's (ITE) *Trip Generation Manual*. **Table 1** illustrates the calculation of the gross daily, AM peak hour and PM peak hour traffic associated with the Seminole Trace development.

Traffic Distribution and Assignment Methodology

Total project traffic was assigned to the area roadway network using traffic distribution patterns developed using the CFRPMv7.0. **Figure 8** illustrates the distribution of project traffic at each of the study intersections. Project traffic volumes between the western and eastern driveway onto Seminoles Woods Boulevard were pro-rated based off development quantities within phases.

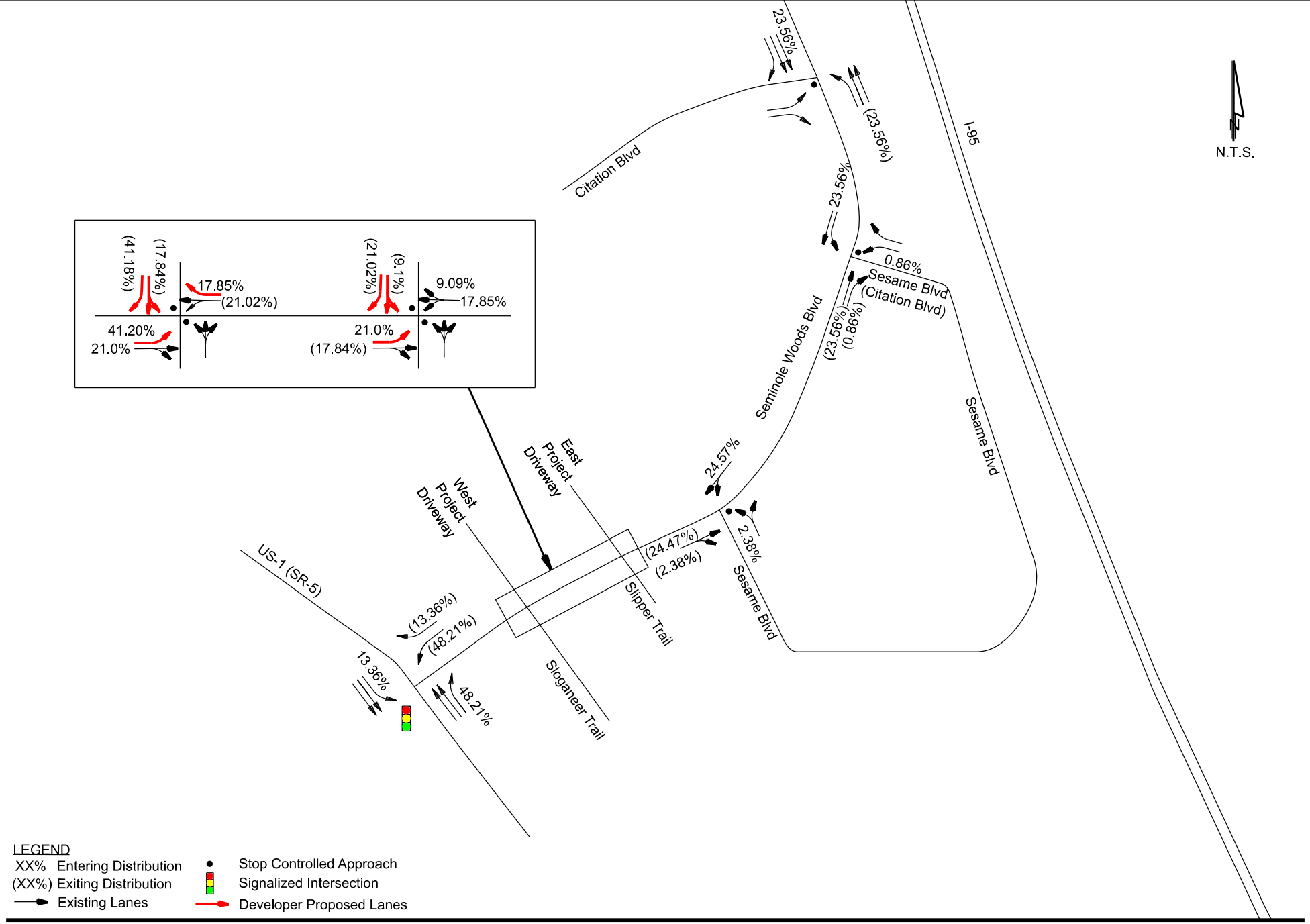
Total Traffic Conditions

Table 5 below illustrates the operating conditions on the significantly impacted roadway segment. As shown, none of the roadway segments are anticipated to fail in the total traffic conditions. **Figure 9** and **Figure 10** illustrate the estimated turning movement volumes on the intersections as specified in the methodology for the AM and PM total traffic conditions respectively. Copies of the Synchro printouts for the AM and PM total traffic conditions are included in **Appendix J**. The volume calculations are provided in **Appendix K.**

Table 5
Seminole Trace
Segment - 2033 Total Traffic Volumes

Link	Roadway	Segment	LOS Standard	PM Peak Hour					
				MSV	Background Traffic	Project Traffic Distribution	Project Traffic	Total Traffic	Level of Service
				(vph)	(vph)	(%)	(vph)	(vph)	
3310	Seminole Woods Parkway	Citation Parkway to Sesame Boulevard	D	2,170	1,230	24.47%	131	1,361	C
3305	Seminole Woods Parkway	Sesame Boulevard to US 1	D	2,170	1,308	62.18%	333	1,641	D
235	US1 (SR5)	Seminole Woods Parkway to Palm Coast City Limit	D	3,580	2,330	48.21%	258	2,588	C

Source: 2024 Transportation Facility Status Report, Grand Landings Phase 5 & 6 Traffic Impact Analysis



LEGEND

XX% Entering Distribution

(XX%) Exiting Distribution

Existing Lanes

Stop Controlled Approach

Signalized Intersection

Developer Proposed Lanes

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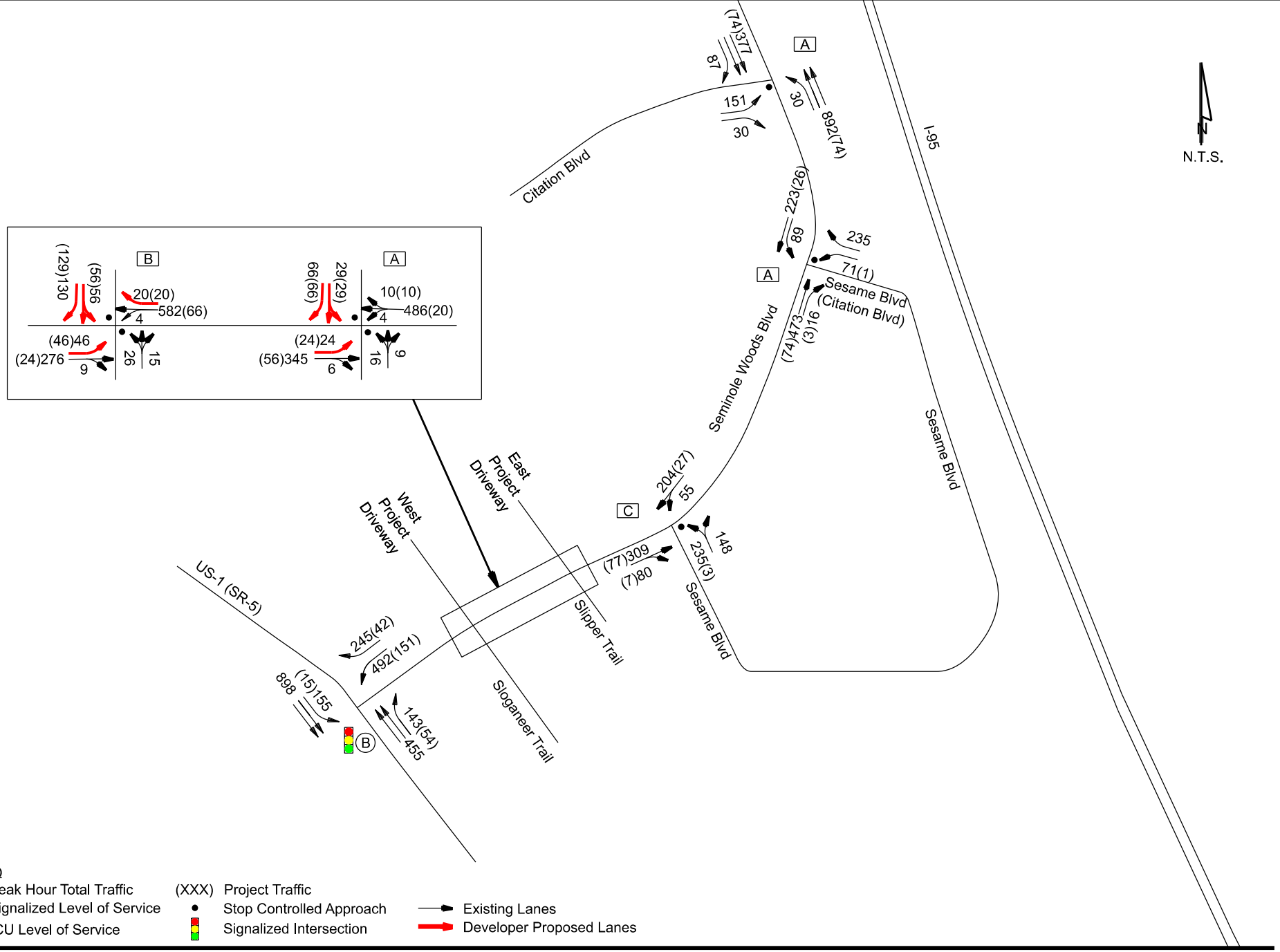
England-Thimg & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8990
FAX: (904) 646-9485
CA - 00002584 LC - 0000316

Traffic Impact Assessment
Seminole Trace

Peak Hour
Traffic Distribution

Figure 8



LEGEND

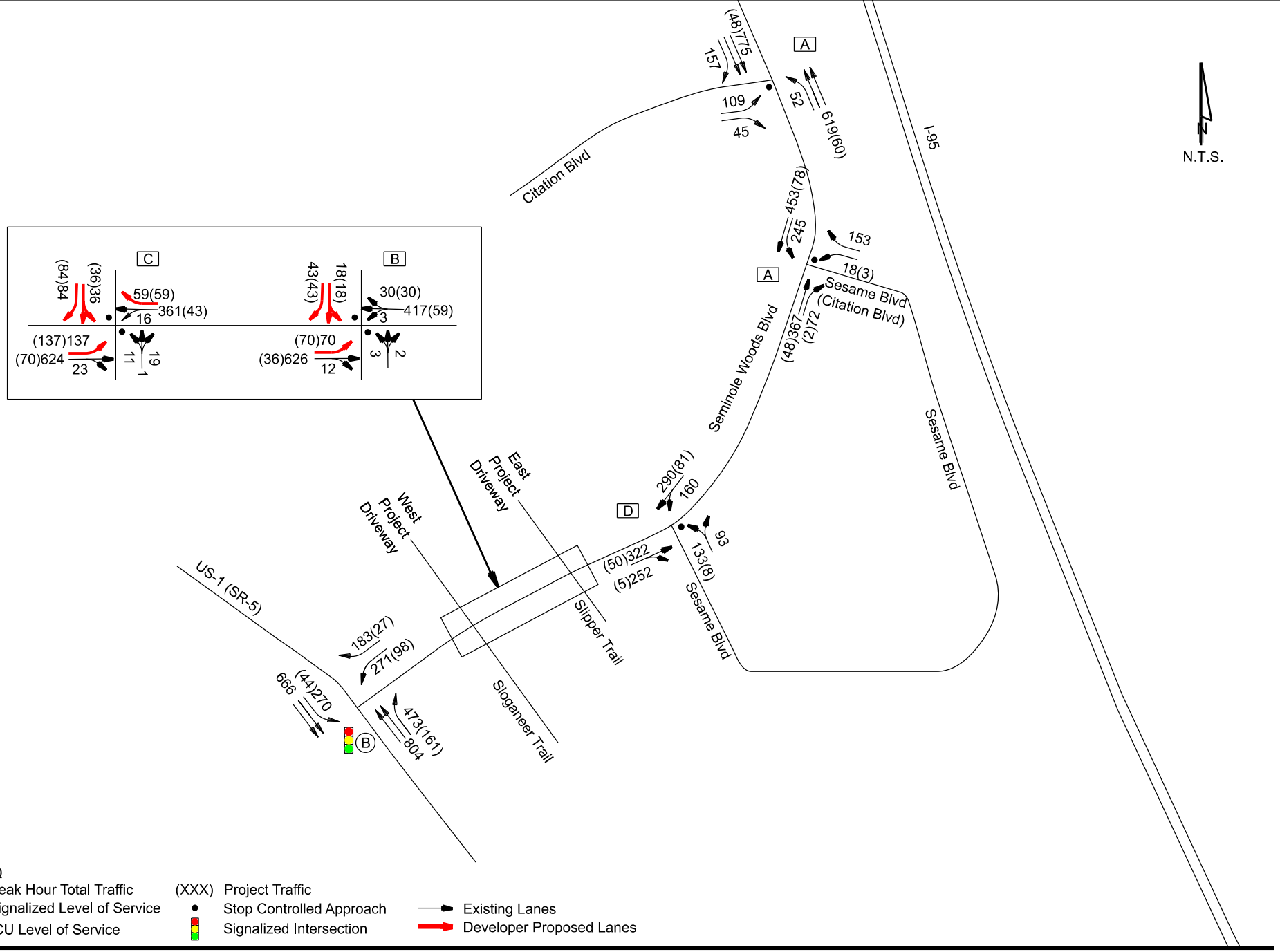
XXX	Peak Hour Total Traffic	(XXX)	Project Traffic		
(X)	Signalized Level of Service	•	Stop Controlled Approach	→	Existing Lanes
[X]	ICU Level of Service		Signalized Intersection	→	Developer Proposed Lanes

ETM
England-Thims & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8990
FAX: (904) 646-9485
CA - 00002584 LC - 0000316

Traffic Impact Assessment
Seminole Trace

AM Peak Hour Total Traffic Estimates (2033)

Figure 9



LEGEND

XXX	Peak Hour Total Traffic	(XXX)	Project Traffic		
(X)	Signalized Level of Service	•	Stop Controlled Approach	→	Existing Lanes
[X]	ICU Level of Service		Signalized Intersection	→	Developer Proposed Lanes

ETM
England-Thims & Miller, Inc.
14775 Old St. Augustine Road
Jacksonville, FL 32258
TEL: (904) 642-8990
FAX: (904) 646-9485
CA - 00002584 LC - 0000316

Traffic Impact Assessment
Seminole Trace

PM Peak Hour Total Traffic Estimates (2033)

Figure 10

Access Improvements

Seminole Woods Boulevard in the vicinity of the project entrances is a 2-lane roadway with an AADT greater than 5,000 vehicles per day and a posted speed limit of 55 miles per hour. In accordance with the City of Palm Coast Turn Lane Technical Guidelines, an eastbound left turn lane is warranted at both the western driveway, which aligns with Sloganeer Trail, and at the eastern driveway which aligns with Slipper Trail. A westbound right turn lane is not warranted at either access point based on the projected turning movement volumes. The west entrance, eastbound left turn lane is recommended to provide a 100-ft taper and a full width storage length of 295-ft for a total length of 395-ft. The east entrance, eastbound left turn lane is recommended to provide a 100-ft taper and a full width storage length of 210-ft for a total length of 310-ft. **Table 6** below details turn lane lengths for each project access.

Table 6
Seminole Trace
Recommended Turn Lane Lengths

Movement	Number of Lanes	AADT (vpd)	Posted Speed Limit (mph)	Peak Hour Turning Volumes (vph)	Warranted?	Recommended Taper Length (ft)	Recommended Deceleration Length (ft)	Storage Length Dimension Table (SLDT) (ft)	Deceleration Length + SLDT (ft)	Recommended Turn Lane Length (ft)
Western Driveway at Seminole Woods Parkway										
Westbound Right Turn	2	>5,000	55	59	No	N/A	N/A	N/A	N/A	N/A
Eastbound Left Turn				137	Yes	100	135	155.5	290.5	395
Eastern Driveway at Seminole Woods Parkway										
Westbound Right Turn	2	>5,000	55	30	No	N/A	N/A	N/A	N/A	N/A
Eastbound Left Turn				70	Yes	100	135	75	210	310

Construction Timing

Per discussions with COPC staff, ETM has included the construction timing of the proposed access improvements. Per the COPC Turn Lane Standards about construction timing "*Turn lanes shall be constructed with the infrastructure and prior to the vertical construction of any buildings unless the City allows some of the vertical building construction prior to completion of the turn lanes. When a project is phased, the turn lanes shall be constructed with the earliest phase that the turn lane meets at least 50% of the criteria for requiring the turn lane.*" In accordance with this guidance, ETM's proposal entails the construction of access improvements at the western project driveway as part of the infrastructure development for Seminole Trace Phase 1 and Phase 2. Furthermore, ETM's plan also involves the construction of access enhancements at the eastern project driveway in conjunction with the infrastructure development within Seminole Trace Phase 3.

Conclusions and Recommendations

Based upon the analysis, the project is not anticipated to significantly impact the operation of the surrounding roadway network. ETM recommends the installation of an eastbound left turn lane at the western project driveway and an eastbound left turn lane at the eastern project driveway. No additional improvements are recommended at this time.

Appendix A
Traffic Impact Study Methodology

ETM
VISION • EXPERIENCE • RESULTS
www.etminc.com
tel 904-642-8990 • fax 904-646-9485
14775 Old St. Augustine Road • Jacksonville, Florida 32258

June 6, 2023

Mr. Michael Grunewald
Traffic Engineer
City of Palm coast
160 Lake Avenue
Palm Coast, FL 32164

Re: Cascades at Grand Landings – Traffic Impact Analysis Methodology, Palm Coast, Florida
ETM No. 21-224

Dear Mr. Grunewald:

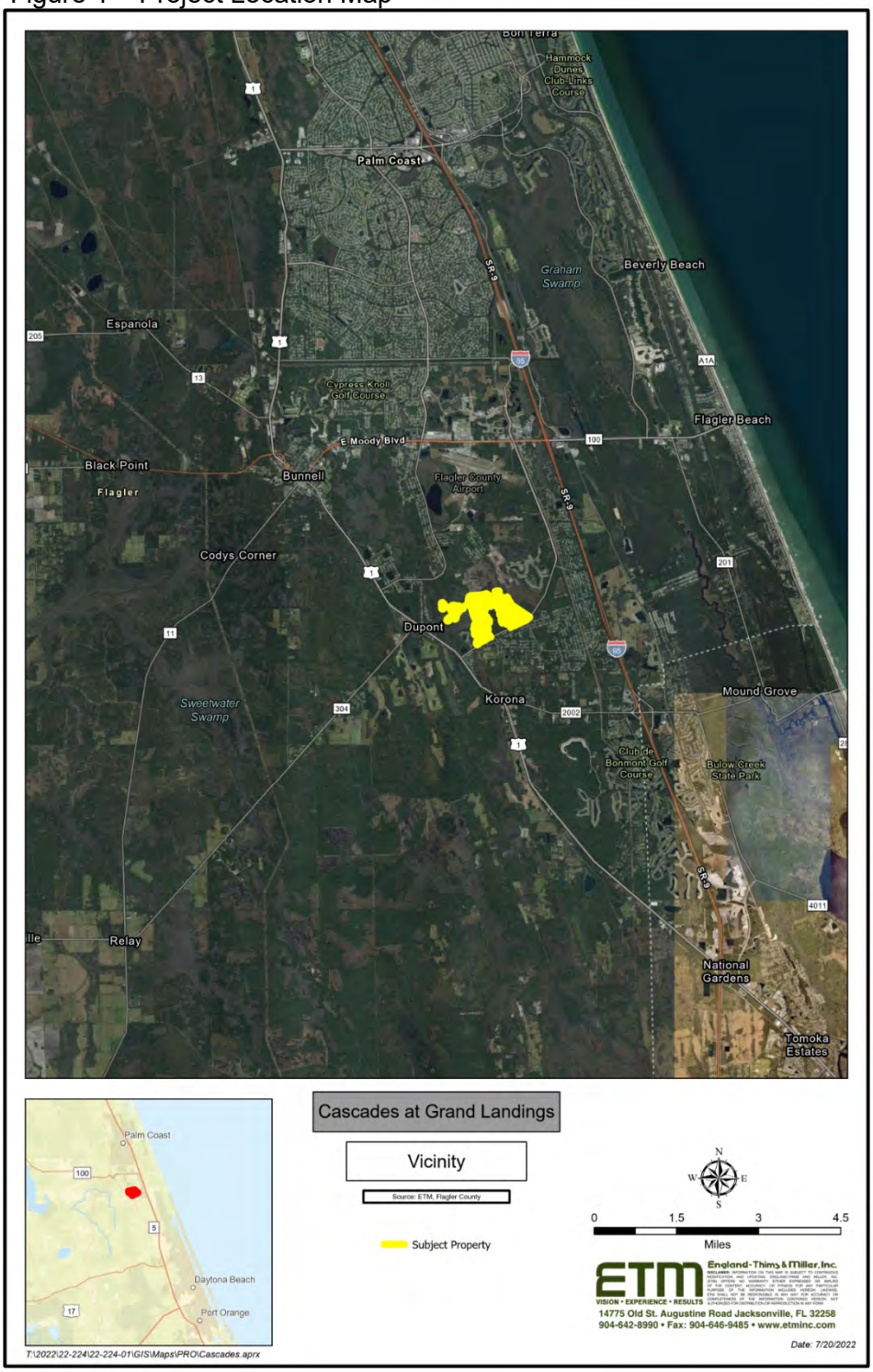
England, Thims & Miller, Inc. (ETM) has been retained by Byrndog, PCP LLC to prepare a Traffic Impact Analysis (TIA) for the proposed Cascades at Grand Landings development. The proposed project is located on the north of Seminole Woods Boulevard to the south of Flagler Executive Airport in the City of Palm Coast, Florida, between US 1 to the West and Seminole Woods Boulevard to the East. The primary access to the external roadway network will be located on Seminole Woods Boulevard, however the development will have a secondary access through the Grand Landings Phase 5 and 6 development to the north. A general location map is attached as **Figure 1** and the conceptual site plan as **Figure 2**.

The purpose of performing the TIA is to provide the necessary traffic operational information to obtain transportation concurrency for the proposed development illustrated in the conceptual site plan and to identify the potential impacts of the project. The project is expected to be fully developed and fully occupied by 2030 and will consist of approximately 557 single family dwelling units and 333 multifamily dwelling units.

The City of Palm Coast has adopted the River to Sea Transportation Planning Organization (R2CTPO) TIA guidelines. In accordance with these guidelines, this letter outlines the proposed methodology used to guide the analysis.

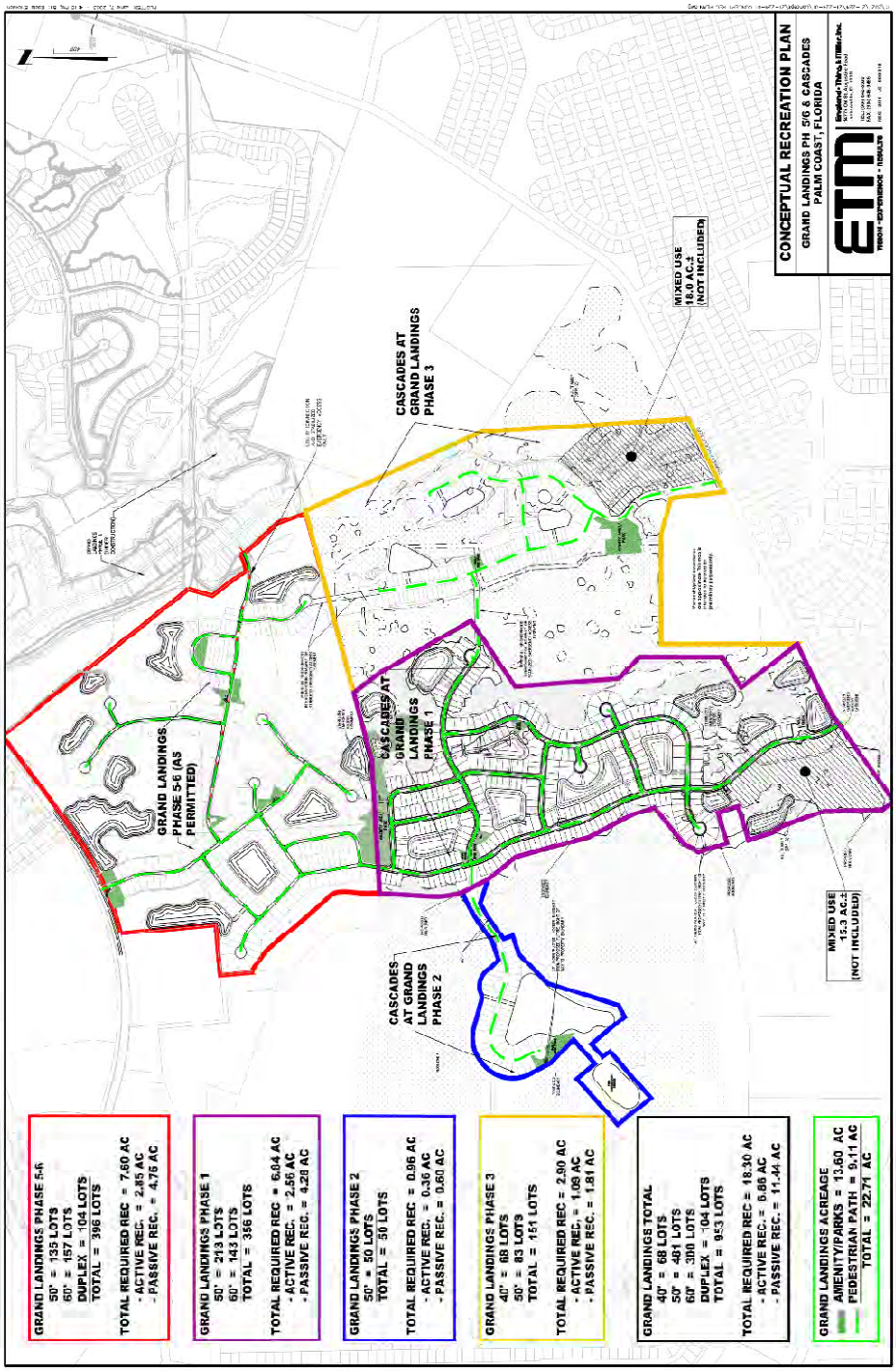
Re: Cascades at Grand Landings – Traffic Impact Analysis Methodology, Palm Coast, Florida ETM No. 21-224

Figure 1 – Project Location Map



Re: Cascades at Grand Landings – Traffic Impact Analysis Methodology, Palm Coast, Florida ETM No. 21-224

Figure 2 – Conceptual Site Plan



Re: Cascades at Grand Landings – Traffic Impact Analysis Methodology, Palm Coast, Florida ETM No. 21-224

Analysis Period

Roadway Segments and ***Intersections*** will be analyzed based on the PM peak-hour two-way traffic. The analysis will be conducted for the 2023 existing conditions, 2030 background conditions and 2030 full build-out conditions. The analysis will be based on the latest concurrency information, as obtained from the City of Palm Coast and the Florida Department of Transportation (FDOT).

Turning Movement Counts (TMCs) will be ordered at the following intersections:

- Belle Terre Boulevard at Citation Parkway
- Citation Boulevard at Project Driveways (future conditions)
- US 1 at Seminole Woods Boulevard
- Seminole Woods Boulevard at Slipper Trail (Project Driveway)
- Seminole Woods Boulevard at Sloganeer Trail (Project Driveway)
- Seminole Woods Boulevard at Sesame Boulevard

Traffic Volumes

The analysis will be based on the latest traffic information, obtained from the City of Palm Coast Public Works and/or Development Services Departments and FDOT.

Project Trip Distribution

The Central Florida Regional Planning Model, version 7.0 was used to obtain the project trip distribution. The 2030 socio-economic (S/E) data sets were modified to include the proposed development and used a select link analysis to generate the distribution of the project's traffic. The project traffic distribution is graphically displayed in **Figure 3.**

Trip Generation

The PM peak-hour trip generation of the proposed development was determined by using the Institute of Transportation Engineer's (ITE) ***Trip Generation Manual***, 11th edition. The proposed trip generation for the proposed development is shown in **Table 1**.

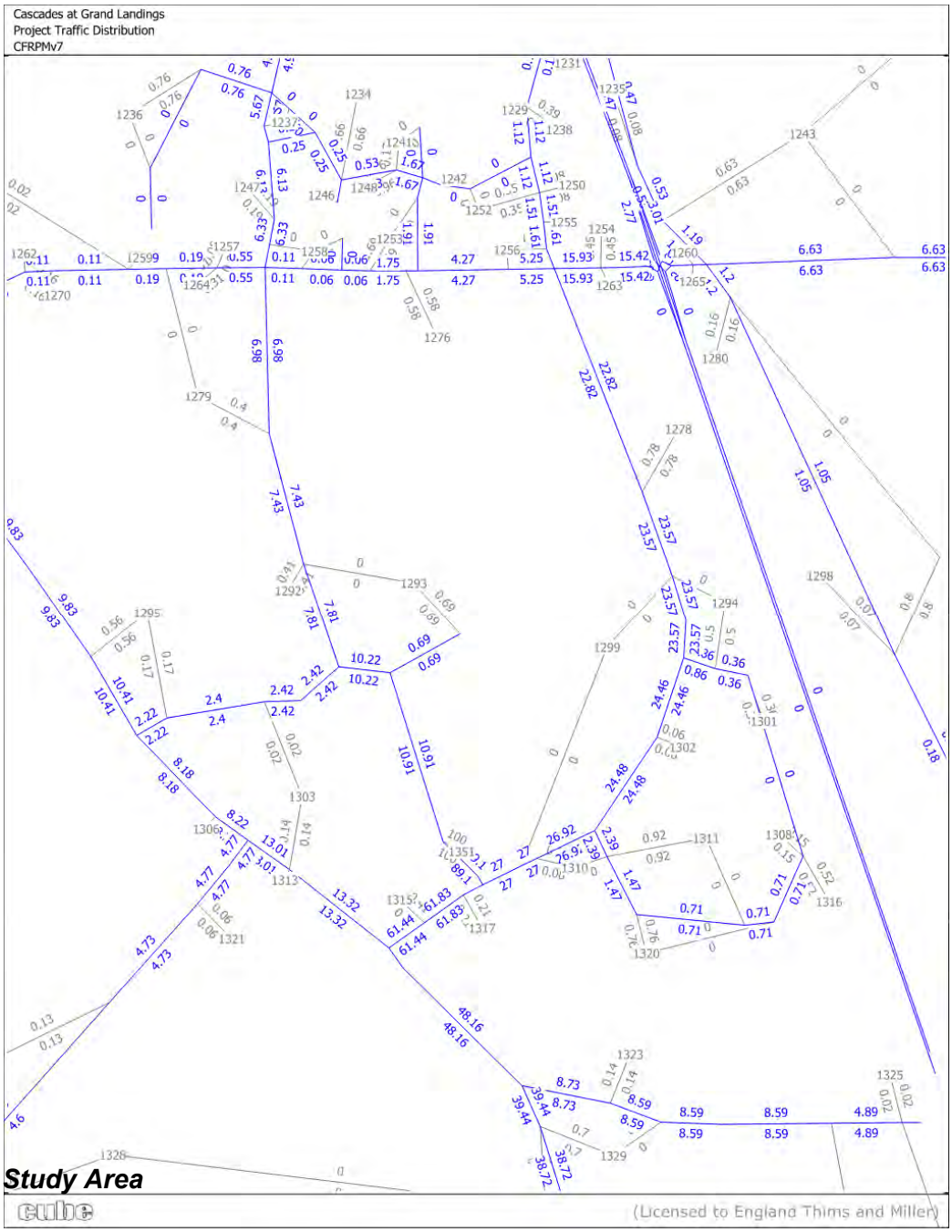
Table 1
Cascades at Grand Landings
Project Trip Generation Estimates

CFRPMv7 TAZ	Land Use Code	Description	Quantity	Units	Trip Generation				
					Period	Rate/Equation	Total	Entering	Exiting
1353	210	Single Family Residential	557	DUs	Daily	Ln(t) = 0.92ln(x) + 2.68	4,899	2,450	2,449
					AM Peak	Ln(t) = 0.91ln(x) + 0.12	356	89	267
					PM Peak	Ln(t) = 0.94ln(x) + 0.27	499	314	185
1353	220	Multifamily Housing (Low-Rise) - Not Close to Rail	333	DUs	Daily	T = 6.41(X) + 75.31	2,210	1,105	1,105
					AM Peak	T = 0.31(X) + 22.85	126	30	96
					PM Peak	T = 0.43(X) + 20.55	164	103	61
1353	Total		890	DUs	Daily		7,109	3,555	3,554
					AM Peak		482	119	363
					PM Peak		663	417	246

Source: 11th edition of the Institute of Transportation Er 619/100

Re: Cascades at Grand Landings – Traffic Impact Analysis Methodology, Palm Coast, Florida ETM No. 21-224

Figure 3 – Project Traffic Distribution



Re: Cascades at Grand Landings – Traffic Impact Analysis Methodology, Palm Coast, Florida ETM No. 21-224

Per the R2CTPO guidelines, projects which generate more than 100 PM peak-hour two-way trips must include all roadway segments that are impacted by the proposed project to a level of three percent (3%) or more of the adopted maximum service volume (MSV) of roadway segment.

Using the estimated pm peak hour project trips and the project trip distribution, the project on each roadway segment in the area was estimated and compared to the MSV to determine which roadway segments in the area will be significantly impacted by the project. **Table 2** depicts the significance test on the major roadway network in the vicinity of the project.

Table 2
Cascades at Grand Landings
Significance Calculations

Link	Roadway	Segment	Typical Section	Maintaining Agency	LOS Standard	Peak Hour MSV	Project Traffic Distribution	PM Peak Hour		
								Project Traffic	Percent MSV	Significant (≥ 3%)
						(vph)	(%)	(vph)	(%)	
1260	Belle Terre Parkway	East Hampton Boulevard to SR 100	4ln - Div	COPC	D	3,580	6.33%	42	1.17%	NO
1263	Belle Terre Blvd.	SR 100 to Zebulas Trail	2-ln - UnDiv	COPC	D	2,170	6.98%	46	2.12%	NO
1265	Belle Terre Blvd.	Zebulas Trail to Zaun Trail	2-ln - UnDiv	COPC	D	2,170	6.98%	46	2.12%	NO
1270	Belle Terre Blvd.	Zaun Trail to Citation Parkway	2-ln - UnDiv	COPC	D	2,170	7.81%	52	2.40%	NO
1275	Belle Terre Blvd.	Citation Parkway to US 1	2-ln - UnDiv	COPC	D	2,170	2.42%	16	0.74%	NO
4300	Bulldog Drive	SR 100 to Central Avenue	2-ln - UnDiv	COPC	D	1,330	1.91%	13	0.98%	NO
3312	Citation Parkway	Belle Terre Parkway to Laguna Forest Lane	2-ln - UnDiv	COPC	D	2,170	10.22%	68	3.13%	YES
251	I-95 (SR 9)	Palm Coast City Limit to Palm Coast Parkway	6ln - Div	FDOT	C	10,060	0.00%	0	0.00%	NO
292	I-95 (SR 9)	Palm Coast Parkway to SR 100	6ln - Div	FDOT	C	10,060	2.77%	18	0.18%	NO
255	I-95 (SR 9)	SR 100 to Old Dixie Highway	6ln - Div	FDOT	C	10,060	0.00%	0	0.00%	NO
3325	Seminole Woods Parkway	SR 100 to Ulaturn Place	4ln - Div	COPC	D	5,900	22.82%	151	2.56%	NO
3300	Seminole Woods Parkway	Ulaturn Place to Citation Parkway	4ln - Div	COPC	D	5,900	23.57%	156	2.64%	NO
3310	Seminole Woods Parkway	Citation Parkway to Sesame Boulevard	2-ln - UnDiv	COPC	D	2,170	24.46%	162	7.47%	YES
3305	Seminole Woods Parkway	Sesame Boulevard to US 1	2-ln - UnDiv	COPC	D	2,170	62.08%	412	18.99%	YES
3320	Sesame Boulevard	Seminole Woods Parkway to terminus	2-ln - UnDiv	COPC	D	2,170	2.39%	16	0.74%	NO
3560	State Road 100	John Anderson Drive to Colbert Lane	4ln - Div	FDOT	D	3,580	6.75%	45	1.26%	NO
3550	State Road 100	Colbert Lane to Tuscany Blvd.	4ln - Div	FDOT	D	3,580	9.02%	60	1.68%	NO
3540	State Road 100	Tuscany Blvd. to Old Kings Road	4ln - Div	FDOT	D	3,580	6.63%	44	1.23%	NO
3530	State Road 100	Old Kings Road to I-95	4ln - Div	FDOT	D	3,580	9.66%	64	1.79%	NO
3525	State Road 100	I-95 to Memorial Medical Parkway	4ln - Div	FDOT	D	3,580	15.42%	102	2.85%	NO
3520	State Road 100	Memorial Medical Pkwy to Seminole Woods P	4ln - Div	FDOT	D	3,580	15.93%	106	2.96%	NO
3515	State Road 100	Seminole Woods Pkwy to Bulldog Drive	4ln - Div	FDOT	D	3,580	5.25%	35	0.98%	NO
3510	State Road 100	Bulldog Drive to Landings Blvd.	4ln - Div	FDOT	D	3,580	2.35%	16	0.45%	NO
3505	State Road 100	Landings Blvd. to Belle Terre Parkway	4ln - Div	FDOT	D	3,580	0.11%	1	0.03%	NO
3500	State Road 100	Belle Terre Parkway to Palm Coast City Limits	4ln - Div	FDOT	D	3,580	0.55%	4	0.11%	NO
4100	Town Center Blvd.	SR 100 to Hospital Drive	4ln - Div	COPC	D	5,900	1.61%	11	0.19%	NO
101	US1 (SR5)	Palm Coast City Limit to Belle Terre Parkway	4ln - Div	FDOT	D	3,580	10.41%	69	1.93%	NO
3750	US1 (SR5)	Belle Terre Parkway to DuPont Road	4ln - Div	FDOT	D	3,580	8.18%	54	1.51%	NO
3755	US1 (SR5)	DuPont Road to Seminole Woods Parkway	4ln - Div	FDOT	D	3,580	13.32%	88	2.46%	NO
235	US1 (SR5)	Seminole Woods Parkway to Palm Coast City L	4ln - Div	FDOT	D	3,580	48.16%	319	8.91%	YES

= **Significantly Impacted Link**
Source: FDOT Quality/Level of Service Handbook, CFRPMv7

As indicated in **Table 2**, the following roadway segment and intersections are significantly impacted by the project and will be included in this analysis.

Roadway Segments

- Citation Parkway from Belle Terre Parkway to Laguna Forest Lane
- Seminole Woods Parkway from Citation Parkway to Sesame Boulevard
- Seminole Woods Parkway from Sesame Boulevard to US 1 (SR 5)
- US 1 (SR 5) from Seminole Woods Parkway to Palm Coast City Limits

Intersections

- Belle Terre Boulevard at Citation Parkway
- Citation Parkway at Project Driveways (future conditions)
- US 1 at Seminole Woods Boulevard
- Seminole Woods Boulevard at Slipper Trail (Project Driveway)
- Seminole Woods Boulevard at Sloganeer Trail (Project Driveway)
- Seminole Woods Boulevard at Sesame Boulevard

Total Traffic

2030 background traffic volume estimates, trips associated with non-project growth, for the road segments was calculated as the total of existing segment volumes plus the vested traffic. Intersection turning movements were estimated using a growth rate. The growth factor was calculated for each intersection approach by dividing the total PM peak hour trips (existing plus vested) by the existing PM peal hour volumes. The turning movement volumes at the intersections were expanded based on these growth factors.

Segment Analysis – Existing, Background and Total PM Peak Hour Traffic Conditions

The existing, background and total traffic volumes on each significantly impacted roadway segment will be compared to the maximum service volume for the segment to determine if the facility is operating at an acceptable level of service. A link specific capacity analysis may be conducted to determine the actual service volumes for a specific roadway segment (if authorized by the applicant). The procedures outlined in the most recent FDOT Quality/Level of Service Handbook will be used to conduct the analysis.

Intersection Analysis – Existing, Background and Total PM Peak Hour Traffic Conditions

An operational analysis of the existing and future PM Peak Hour traffic will be analyzed utilizing

Re: Cascades at Grand Landings – Traffic Impact Analysis Methodology, Palm Coast, Florida ETM No. 21-224

the methodologies and procedures contained in the 6th edition of the Highway Capacity Manual using the Synchro/Sim Traffic Software for signalized intersections. The operating conditions of existing, background and total traffic will be tabulated in the TIA Report. The need for turn lanes will be based on FDOT's turn lane requirements.

Access Analysis

Access to the proposed development will be from Seminole Woods Parkway. The entrance will be analyzed for right and left turn lanes.

Alternative Travel Modes Analysis

The availability of alternative travel modes to and from the proposed development, inclusive of Paratransit, will be identified and discussed. Both pedestrian and bicycle mobility external to the site will also be included in the TIA.

Improvements

If warranted, appropriate roadway and intersection improvements will be identified at built-out of the project including site access improvements. Mitigation or proportionate fair share calculations for significant and adverse impacts to City facilities will be made in accordance with the City of Palm Coast Engineering and Construction process and procedures.

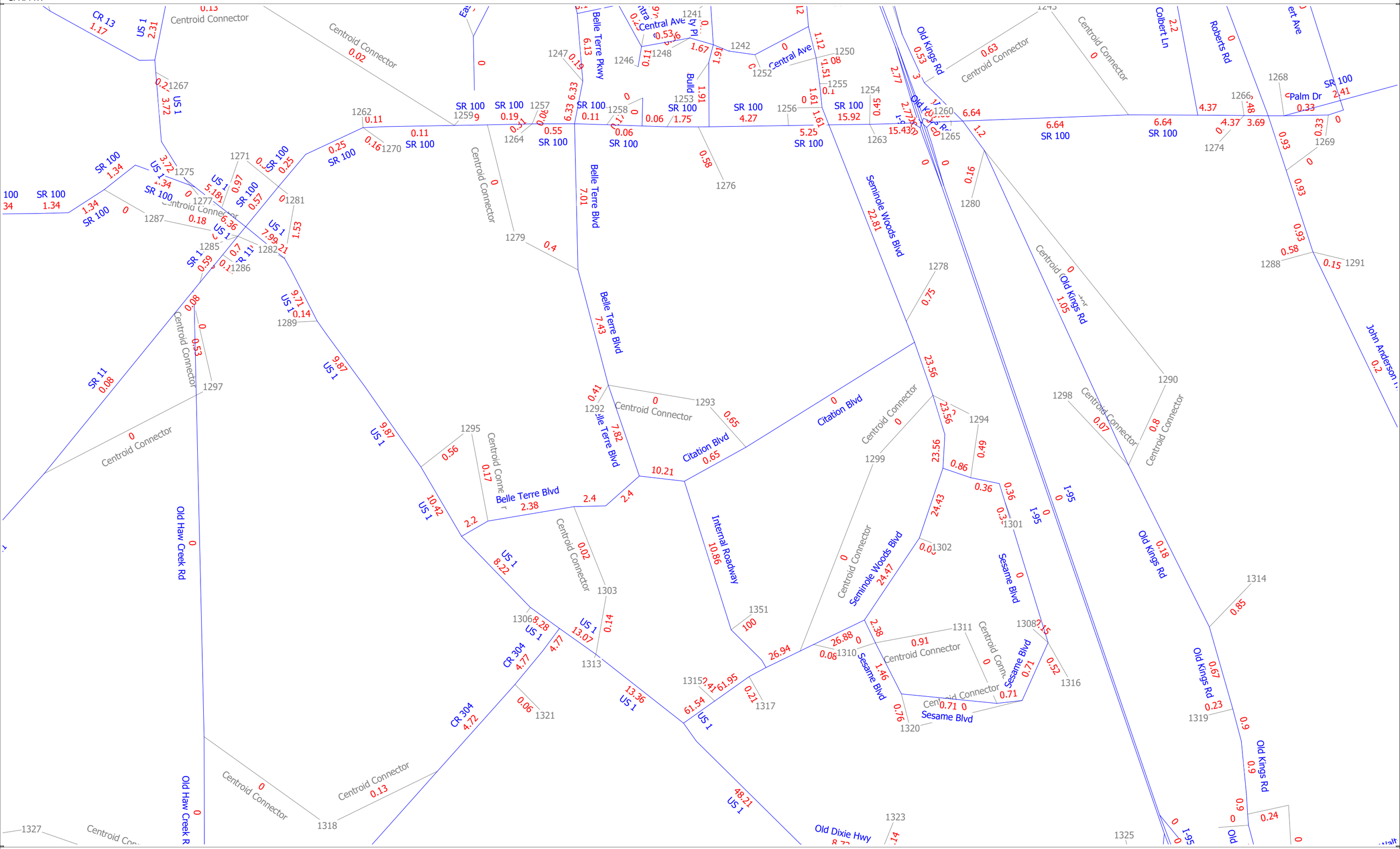
Please review the proposed methodology and advise if the City of Palm Coast is in agreement with the methodology as proposed. If you have any questions or need additional information, please advise.

Sincerely,
ENGLAND, THIMS & MILLER, INC.

Thomas L. Hatcher, P.E., PTOE, PTP
Transportation Engineer

Appendix B
Project Traffic Distribution Model Plot

Cascades at Grand Landings
Project Traffic Distribution
CFRPMv7



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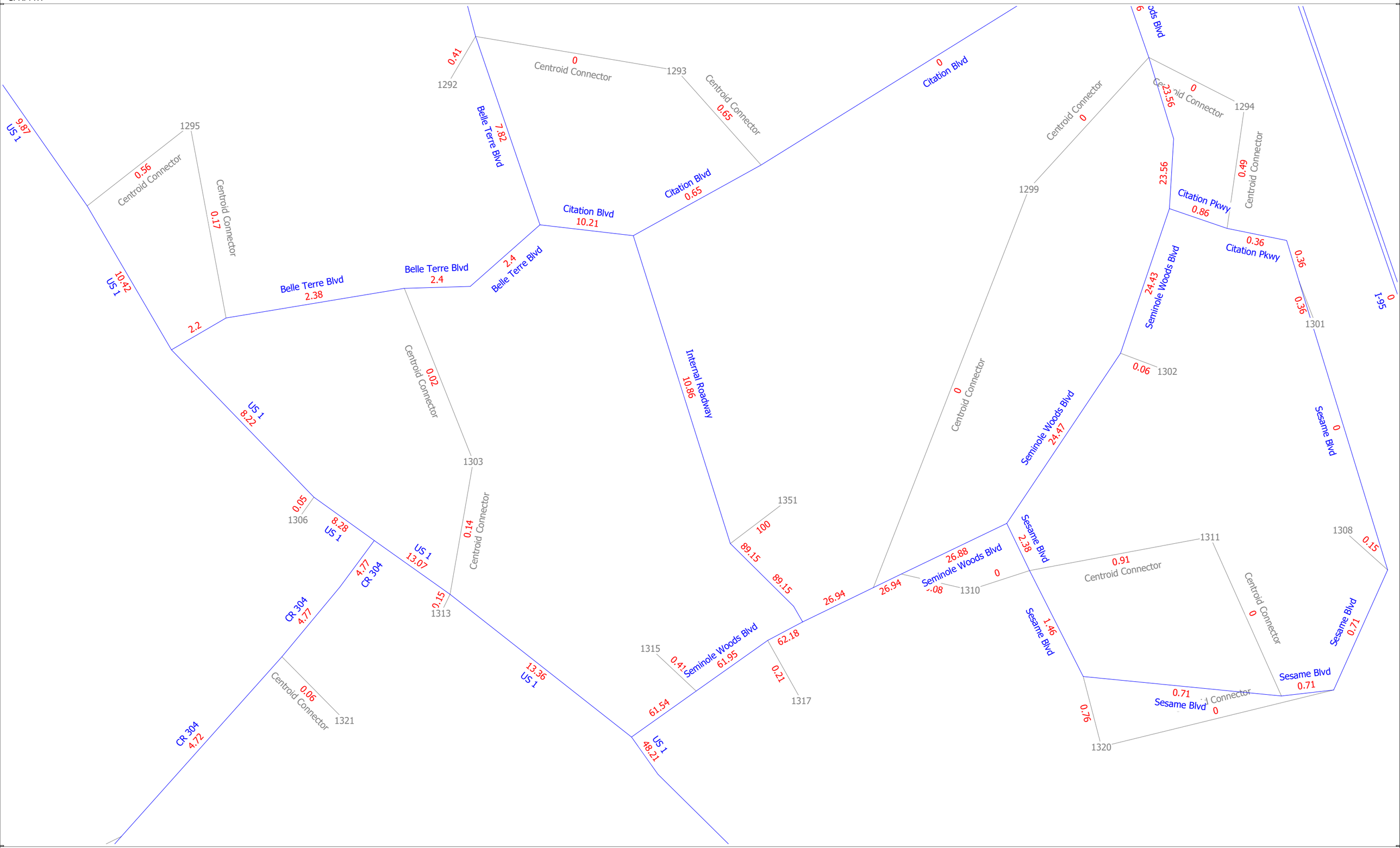
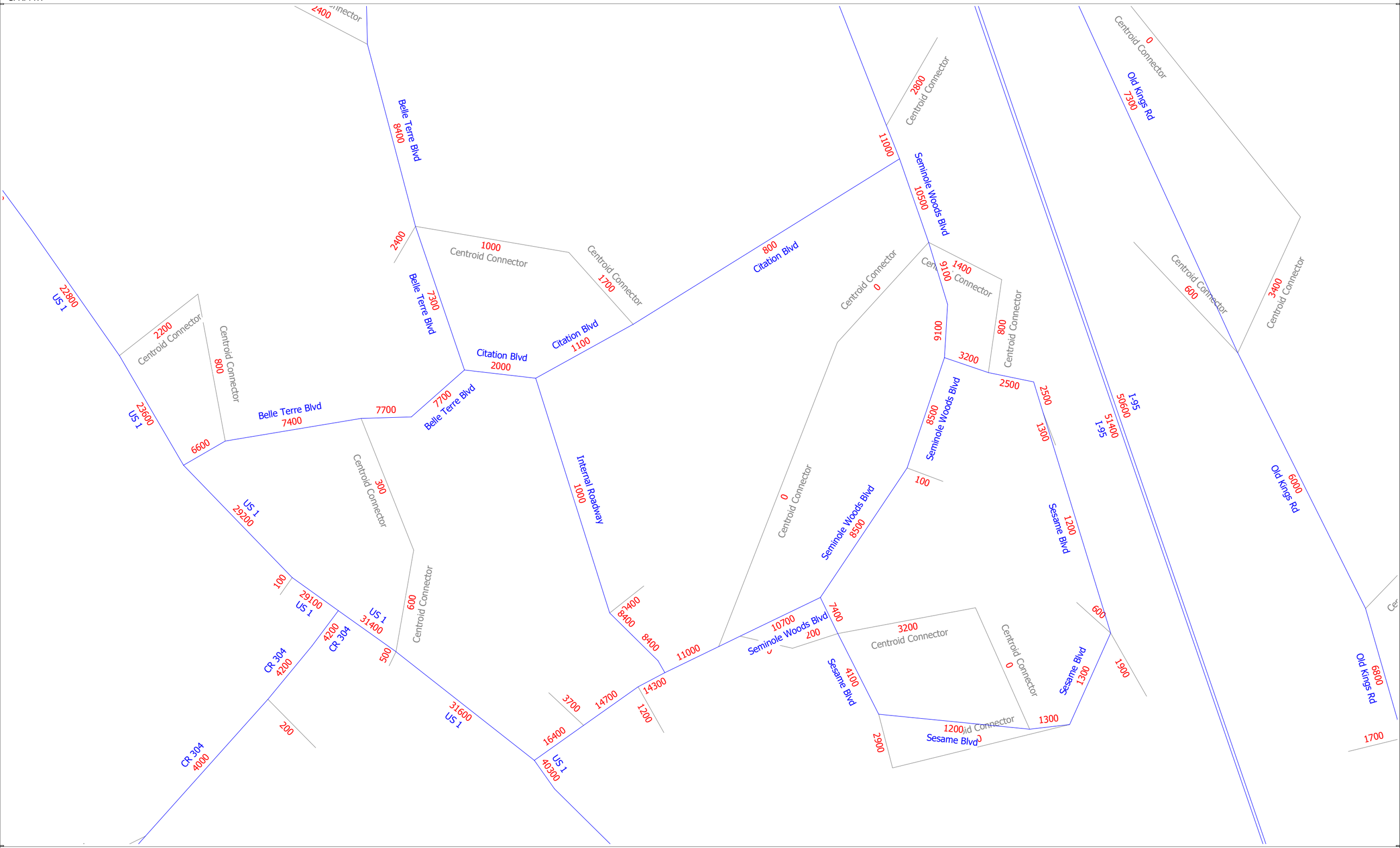
Cascades at Grand Landings
Project Traffic Distribution
CFRPMv7



Cascades at Grand Landings
AADT
CFRPMv7



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Appendix C
2024 Transportation Facility Status Report

Transportation Facility Status Report

Published May 19, 2024

Citywide Traffic Counts Fall 2023 / Vested trips through December 31, 2023

Link	Facility	Facility Type	Classification	Length (miles)	Number of Lanes	Divided	Turn Lanes Left	Turn Lanes Right	Signals	Signals / Mile	Speed Limit	2023 AADT	K (actual)	PMPH Trips	PMPH Vested Trips	Total PMPH Trips	FDOT Current Service Volumes (2012) A	B	C	D	E	Adopted LOS	LOS w/o Vested Trips	LOS with Vested Trips
	Belle Terre Parkway																							
1200	Matanzas Woods Parkway to Bird of Paradise Drive			1.86								7,814	0.1029	804	367	1,171							C	C
1205	Bird of Paradise Drive to Pine Lakes Parkway (North)	Arterial	Class 1	0.71	4	Yes	Yes	Yes	5	1.28	45	16,208	0.0908	1,472	367	1,839	*	**	3,420	3,580	***	D	C	C
1210	Pine Lakes Parkway (North) to Bellaire Drive			0.85								14,871	0.0955	1,420	252	1,672							C	C
1215	Bellaire Drive to Palm Coast Parkway(WB)			0.48								18,724	0.0897	1,680	314	1,994							C	C
		Segment Length:		3.90																				
1220	Palm Coast Parkway (WB) to Palm Coast Parkway (EB)			0.22								22,150	0.0878	1,945	271	2,216							C	C
1225	Palm Coast Parkway (EB) to Cypress Point Parkway		Class 1	0.13	4	Yes	Yes	Yes	5	8.06	45	21,694	0.0826	1,792	363	2,155	*	**	3,420	3,580	***	D	C	C
1230	Cypress Point Parkway to Pine Lakes Parkway (South)			0.27								35,119	0.083	2,897	378	3,275							C	C
		Segment Length:		0.62																				
1240	Pine Lakes Parkway (South) to Parkview Drive			1.03								31,904	0.0841	2,683	353	3,036							C	C
1245	Parkview Drive to White View Parkway			1.02								27,740	0.0855	2,372	375	2,747							C	C
1250	White View Parkway to Rymfire Drive	Arterial	Class 1	0.92	4	Yes	Yes	Yes	7	1.38	45	28,101	0.0894	2,512	428	2,940	*	**	3,420	3,580	***	D	C	C
1252	Rymfire Drive to Royal Palms Parkway			0.53								30,109	0.0942	2,836	412	3,248							C	C
1254	Royal Palms Parkway to East Hampton Boulevard			0.52								30,628	0.0908	2,781	384	3,165							C	C
1260	East Hampton Boulevard to SR 100			1.04								25,394	0.0873	2,217	269	2,486							C	C
		Segment Length:		5.06																				
	Belle Terre Blvd.																							
1263	SR 100 to Zebulas Trail			0.21								9,353	0.0898	840	179	1,019							C	C
1265	Zebulas Trail to Zaun Trail	Arterial	UFH	0.84	2	No	n.a.	n.a.	n.a.	n.a.	50	7,688	0.0879	676	167	843	*	770	1,530	2,170	2,990	D	B	C
1270	Zaun Trail to Citation Parkway			1.37								5,297	0.0967	512	167	679							B	B
1275	Citation Parkway to US 1			1.31								4,301	0.106	456	184	640							B	B
		Segment Length:		3.73																				
	Bird of Paradise Drive																							
2420	Matanzas Woods Parkway to Birchwood Drive	Collector	UFH	1.31	2	No	n.a.	n.a.	n.a.	n.a.	30	4,494	0.1362	612	0	612	*	770	1,530	2,170	2,990	D	B	B
2430	Birchwood Drive to Belle Terre Parkway			1.01								7,069	0.1019	720	0	720							B	B
		Segment Length:		2.32																				
	Bulldog Drive																							
4300	SR 100 to Central Avenue			0.54								5,384	0.1635	880	84	964	*	**	660	1,330	1,410	D	C	C
4310	Central Avenue to Lake Avenue	Collector	Class 2	0.28	2	No	No	No	1	1.11	25	1386	0.127	176	0	176								
4320	Lake Avenue to terminus			0.08																				
		Segment Length:		0.90																				
	Central Avenue																							
4400	Belle Terre Parkway to Market Avenue			0.35								4,233	0.1288	545	292	837							C	C
4410	Market Avenue to Lake Avenue	Collector	Class 2	0.11	4	Yes	Yes	No	2	2.90	25	4,777	0.1398	668	292	960	*	**	1,310	2,920	3,040	D	C	C
4420	Lake Avenue to Landings Blvd.			0.23								5,804	0.096	557	215	772							C	C
		Segment Length:		0.69																				
4430	Landings Blvd to Park Street			0.33								4,712	0.1452	684	292	976							D	D
4440	Park Street to Bulldog Drive	Collector	Class 2	0.16	2	no	no	no	0	0.00	20	4,543	0.1453	660	292	952	*	**	660	1,330	1,410	D	C	D
4450	Bulldog Drive to Brookhaven Drive			0.29								3,084	0.1401	432	292	724							C	D
4460	Brookhaven Drive to Town Center Blvd.			0.41								3,084	0.1401	432	292	724							C	D
		Segment Length:		1.19																				
	Citation Parkway																							
3312	Belle Terre Parkway to Laguna Forest Lane	Collector	UFH	0.77	2	No	n.a.	n.a.	n.a.	n.a.	35	1,687	0.1067	180	0	180	*	770	1,530	2,170	2,990	D	B	B
~~3315~~	~~Seminole Woods Parkway to Sesame Boulevard~~			0.41							40	~~1,564~~	~~0.089~~	~~139~~	~~0~~	~~139~~								
		Segment Length:		1.18																				
	Club House Drive																							
1300	Palm Harbor Parkway to Palm Coast Parkway (WB)	Collector	Class 2	1.65	2	No	Yes	No	1	0.56	35	4,825	0.0895	432	80	512	*	**	660	1,330	1,410	D	C	C
1310	Palm Coast Parkway (WB) to Palm Coast Parkway (EB)			0.15								3,293	0.102	336	78	414							C	C
		Segment Length:		1.80																				

Link	Facility	Facility Type	Classification	Length (miles)	Number of Lanes	Divided	Turn Lanes Left	Turn Lanes Right	Signals	Signals / Mile	Speed Limit	2023 AADT	K (actual)	PMPH Trips	PMPH Vested Trips	Total PMPH Trips	FDOT Current Service Volumes (2012) A	B	C	D	E	Adopted LOS	LOS w/o Vested Trips	LOS with Vested Trips
	Colbert Lane																							
3105	Palm Coast Parkway (WB) to Palm Coast Parkway (EB)		Class 2	0.20							30	4,167	0.1056	440	9	449	*	**	660	1,330	1,410		C	C
3110	Palm Coast Parkway (EB) to Waterside Parkway (N)			1.70							45	9,199	0.1061	976	6	982							C	C
3120	Waterside Parkway (N) to Waterside Park (S)	Arterial	UFH	1.40	2	No	n.a.	n.a.	n.a.	n.a.		5,191	0.0955	496	1	497						D	B	B
3125	Waterside Park (S) to South Park Road			0.60							55	5,788	0.1071	620	1	621	*	770	1,530	2,170	2,990		B	B
3130	South Park Road to Roberts Road			1.87								6,371	0.086	548	1	549							B	B
3135	Roberts Road to SR 100			1.29								4,289	0.1007	432	1	433							B	B
			Segment Length:	7.06																				
	Cypress Point Parkway																							
4200	Belle Terre Parkway to Pine Cone Drive			0.22								18,853	0.0893	1,684	65	1,749							D	D
4205	Pine Cone Drive to Cypress Edge (S)	Arterial	Class 2	0.29	4	Yes	Yes	No	3	3.80	35	17,801	0.0854	1,520	65	1,585	*	**	1,310	2,920	3,040	D	D	D
4210	Cypress Edge (S) to Cypress Edge (N)			0.16								17,801	0.0854	1,520	65	1,585							D	D
4215	Cypress Edge (N) to Palm Coast Parkway			0.12								20,966	0.0914	1,916	65	1,981							D	D
			Segment Length:	0.79																				
	Farmsworth Drive																							
2716	Old Kings Road to Florida Park Drive	Collector	Class 2*	0.90	2	No	n.a.	n.a.	n.a.	n.a.	30	2,376	0.1061	252	0	252	*	**	600	1,200	1,270	D	C	C
	Farragut Drive																							
2717	Old Kings Road to Florida Park Drive	Collector	Class 2*	0.97	2	No	n.a.	n.a.	n.a.	n.a.	30	1,045	0.0995	104	0	104	*	**	600	1,200	1,270	D	C	C
	Fleetwood Drive																							
2714	Old Kings Road to Florida Park Drive	Collector	Class 2*	0.94	2	No	n.a.	n.a.	n.a.	n.a.	30	2,329	0.0962	224	0	224	*	**	600	1,200	1,270	D	C	C
	Florida Park Drive																							
2090	Palm Harbor Parkway to Forest Hill Drive			0.32								5,055	0.0942	476	27	503							C	C
2100	Forest Hill Drive to Fleetwood Drive			0.64								7,122	0.091	648	24	672							C	D
2105	Fleetwood Drive to Farragut Drive	Collector	Class 1	0.25	2	No	Yes	No	1	0.52	30	7,122	0.091	648	24	672	*	**	660	1,330	1,410	D	C	D
2110	Farragut Drive to Palm Coast Parkway (WB)			0.63								9,172	0.0925	848	25	873							D	D
2120	Palm Coast Parkway (WB) to Palm Coast Parkway (EB)			0.08								5,066	0.1003	508	67	575							C	C
			Segment Length:	1.92																				
	Forest Grove Drive																							
4000	Old Kings Road (W) to Old Kings Road (E)	Collector	Class 2*	0.59	2	No	n.a.	n.a.	n.a.	n.a.	30	1,704	0.1713	292	0	292	*	**	600	1,200	1,270	D	C	C
~~4010~~	~~Old Kings Road (E) to Palm Harbor Parkway~~			~~0.41~~								~~0~~	~~0.094~~	~~———~~	~~289~~	~~———~~ ~~289~~								
			Segment Length:	1.00																				
	Frontier Drive																							
2712	Old Kings Road (E) to Palm Harbor Parkway	Collector	Class 2*	1.14	2	No	n.a.	n.a.	n.a.	n.a.	30	3,657	0.1072	392	0	392	*	**	600	1,200	1,270	D	C	C
	Hargrove Grade Road																							
3707	US 1 to RR Xing	Collector	Class 2*	1.00	2	No	n.a.	n.a.	n.a.	n.a.	35	3,304	0.1501	496	0	496	*	**	600	1,200	1,270	D	C	C
	I-95 (SR 9)																							
251	Palm Coast City Limit to Palm Coast Parkway			7.64								66,798	0.131	8,751	25	8,776							D	D
292	Palm Coast Parkway to SR 100	Arterial	Freeway	5.80	6	Yes	n.a.	n.a.	n.a.	n.a.	70	78,040	0.106	8,272	329	8,601	*	6,130	8,370	10,060	11,100	C	C	D
255	SR 100 to Old Dixie Highway			5.26								78,768	0.132	10,397	312	10,709							D	E
			Segment Length:	18.70																				
	Lakeview Boulevard																							
3925	London Drive to Matanzas Woods Parkway	Collector	UFH	1.33	2	No	n.a.	n.a.	n.a.	n.a.	n.a.	5,008	0.0926	464	0	464	*	770	1,530	2,170	2,990	D	B	B

Link	Facility	Facility Type	Classification	Length (miles)	Number of Lanes	Divided	Turn Lanes Left	Turn Lanes Right	Signals	Signals / Mile	Speed Limit	2023 AADT	K (actual)	PMPH Trips	PMPH Vested Trips	Total PMPH Trips	FDOT Current Service Volumes (2012) A	B	C	D	E	Adopted LOS	LOS w/o Vested Trips	LOS with Vested Trips
	Landings Blvd.																							
4500	SR 100 to Central Avenue	Collector	UFH	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			-	0	-								
4510	Central Avenue to Lake Avenue			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			-	0	-								
	Lake Avenue																							
4550	Market Avenue to Landings Blvd.	Collector	UFH	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			-	0	-								
4560	Landings Blvd.to City Place Drive			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			-	0	-								
4570	City Place Drive to Town Center Blvd.			n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			-	0	-								
	Market Avenue																							
4600	Belle Terre Parkway to Central Avenue	Collector	UFH	0.28	2	No	n.a.	n.a.	n.a.	n.a.	25	2,990	0.103	308	0	308	*	770	1,530	2,170	2,990	**D**	B	B
4610	Central Avenue to Lake Avenue													-	0	-								
			Segment Length:	0.28																				
	Matanzas Woods Parkway																							
2400	US 1 to Belle Terre Parkway	Arterial	Class 1	1.06	2	No	Yes	No	3	0.33	45	6,514	0.1069	696	321	1,017	*	**	1,510	1,600	***	**D**	C	C
2410	Belle Terre Parkway to Bird of Paradise Drive			0.80								10,120	0.1067	1,080	183	1,263							C	C
2415	Bird of Paradise Drive to I-95 SB			0.10								13,880	0.1182	1,641	337	1,978							E	E
2416	I-95 SB to I-95 NB			0.29								12,690	0.1157	1,468	305	1,773							C	E
2417	I-95 NB to Old King Rd Extension			0.23								12,168	0.1351	1,644	305	1,949							E	E
2418	Old Kings Rd Extension at Matanzas HS Entrance			0.52								8,208	0.1896	1,556	305	1,861							D	E
			Segment Length:	3.00																				
	Old Kings Road																							
2700	US 1 to Princess Place Preserve Entrance	Arterial	UFH	1.55	2	No	n.a.	n.a.	n.a.	n.a.	55	1,598	0.1127	180	49	229	*	770	1,530	2,170	2,990	**D**	B	B
2702	Princess Place Preserve Entrance to Forest Grove Drive			3.01								6,707	0.0823	552	49	601							B	B
2705	Forest Grove Drive to Farmsworth Drive			1.55							45	7,405	0.0956	708	222	930							B	C
2707	Farmsworth Drive to Frontier Drive			0.39								9,730	0.0958	932	222	1,154							C	C
2710	Frontier Drive to Fleetwood Drive			0.46							35	12,513	0.0879	1,100	220	1,320							C	C
2715	Fleetwood Drive to Farragut Drive			0.65								16,203	0.0857	1,389	220	1,609							C	D
			Segment Length:	7.61																				
2720	Farragut Drive to Palm Coast Parkway	Arterial	Class 1	0.39	4	Yes	Yes	Yes	1	2.56	35	23,893	0.084	2,007	199	2,206	*	**	3,420	3,580	**	**D**	C	C
			Segment Length:	0.39																				
2730	Palm Coast Parkway to Utility Drive	Arterial	UFH	0.63	2	No	n.a.	n.a.	n.a.	n.a.	35	15,971	0.0829	1,324	224	1,548	*	770	1,530	2,170	2,990	**D**	C	D
2735	Utility Drive to Oak Trails Boulevard			0.25							45	9,556	0.0892	852	224	1,076							C	C
2740	Oak Trails Boulevard to Hidden Lake Blvd			3.35								9,332	0.0883	824	257	1,081								
2743	Hidden Lake Blvd to Town Center Drive			0.20								9,645	0.0887	856	257	1,113							C	C
2745	Town Center Boulevard to SR 100			1.61	4	Yes						9,891	0.087	861	251	1,112	*	3,300	4,660	5,900	6,530		B	B
2750	SR 100 to Palm Coast City Limit			0.30	2	No					50	9,422	0.1414	1,332	88	1,420	*	770	1,530	2,170	2,990		C	C
			Segment Length:	6.34																				
	Palm Coast Parkway																							
2800	US 1 to Pine Lakes Parkway	Arterial	Class 1	0.53	4	Yes	Yes	Yes	1	1.89	45	15,106	0.0988	1,492	922	2,414	*	**	3,420	3,580	***	**D**	C	C
	Palm Coast Parkway (Eastbound)																							
2815	Pine Lakes Parkway to Belle Terre Parkway	Arterial	Class 1 (One Way)	1.22	2	One Way	Yes	No	2	1.06	45	13,199	0.0949	1,253	478	1,731	*	**	2,050	2,150	***	**D**	C	C
2825	Belle Terre Parkway to Cypress Point Parkway			0.66	3						40	19,308	0.0849	1,639	321	1,960	*	**	3,150	3,240	***		C	C
			Segment Length:	1.88																				
	Palm Coast Parkway (Westbound)																							
2820	Cypress Point Parkway to Belle Terre Parkway	Arterial	Class 1 (One Way)	0.65	3	One Way	Yes	No	2	1.10	40	18,837	0.0941	1,773	321	2,094	*	**	3,150	3,240	***	**D**	C	C
2810	Belle Terre Parkway to Pine Lakes Parkway			1.16	2						45	12,729	0.087	1,107	478	1,585	*	**	2,050	2,150	***		C	C
			Segment Length:	1.81																				
	Palm Coast Parkway																							
2826	Cypress Point Parkway to I-95 South Bound Ramps			0.27								48,983	0.0846	4,144	562	4,706							C	C

Link	Facility	Facility Type	Classification	Length (miles)	Number of Lanes	Divided	Turn Lanes Left	Turn Lanes Right	Signals	Signals / Mile	Speed Limit	2023 AADT	K (actual)	PMPH Trips	PMPH Vested Trips	Total PMPH Trips	FDOT Current Service Volumes (2012) A	B	C	D	E	Adopted LOS	LOS w/o Vested Trips	LOS with Vested Trips
2827	I-95 South Bound Ramps to I-95 North Bound Ramps	Arterial	Class 1	0.39	6	Yes	Yes	Yes	3	3.33	40	40,003	0.0968	3,872	240	4,112	*	**	5,250	5,390	***	D	C	C
2830	I-95 North Bound Ramps to Old Kings Road			0.24								48,084	0.0819	3,938	262	4,200							C	C
			Segment Length:	0.90																				
	Palm Coast Parkway (Eastbound)																							
2845	Old Kings Road to Florida Park Drive			0.34								16,857	0.0847	1,428	155	1,583							C	C
2855	Florida Park Drive to Club House Drive	Arterial	Class 1 (One Way)	0.26	2	One Way	Yes	Yes	3	1.69	45	13,953	0.0903	1,260	188	1,448	*	**	3,150	3,240	***	D	C	C
2865	Club House Drive to Colbert Lane			0.25								11,633	0.0908	1,056	122	1,178							C	C
2875	Colbert Lane to Palm Harbor Parkway			0.93								7,301	0.0893	652	130	782							C	C
			Segment Length:	1.78																				
	Palm Coast Parkway (Westbound)																							
2870	Palm Harbor Parkway to Colbert Lane			0.65								7,938	0.0821	652	119	771							C	C
2860	Colbert Lane to Club House Drive	Arterial	Class 1 (One Way)	0.32	2						45	11,333	0.08	907	113	1,020	*	**	2,050	2,150	***	D	C	C
2850	Club House Drive to Florida Park Drive			0.28								14,148	0.0888	1,256	150	1,406							C	C
2840	Florida Park Drive to Old Kings Road			0.33		One Way	Yes	No	3	1.90	40	18,891	0.0881	1,664	132	1,796							C	C
			Segment Length:	1.58																				
	Palm Coast Parkway (Hammock Dunes Parkway)																							
2880	Palm Harbor Parkway to SR A1A	Arterial	Class 1	1.11	2	No	Yes	Yes	1	0.90	45	14,253	0.0856	1,220	125	1,345	*	**	1,510	1,600	***	D	C	C
	Palm Harbor Parkway																							
2890	Matanzas HS Entrance to Cris Lane			0.60								6,731	0.1129	760	217	977							B	C
2895	Cris Lane to Fellowship Lane	Collector	UFH	0.70	2	No	n.a.	n.a.	n.a.	n.a.	45	6,916	0.1087	752	217	969	*	770	1,530	2,170	2,990	D	B	C
2900	Fellowship Lane to Florida Park Drive			0.70								7,727	0.0958	740	217	957							B	C
2910	Florida Park Drive to Club House Drive			1.78								6,994	0.0938	656	173	829							B	C
			Segment Length:	3.78																				
2920	Club House Drive to Palm Coast Parkway	Collector	Class 2	0.75	2	No	No	No	2	2.67	35	6,394	0.0857	548	181	729	*	**	660	1,330	1,410	D	C	D
	Pine Lakes Parkway																							
3000	Belle Terre Parkway (N) to Palm Coast Parkway			1.21								5,585	0.0931	520	21	541							C	C
3002	Palm Coast Parkway to Commerce Boulevard	Collector	Class 1	0.15	2	No	Yes	Yes	2	0.40	45	10,271	0.0931	956	30	986	*	**	1,510	1,600	***	D	C	C
3010	Commerce Boulevard to White Mill Drive			1.85								10,752	0.09	968	35	1,003							C	C
3020	White Mill Drive to Belle Terre Parkway (S)			1.81								13,192	0.0879	1,160	22	1,182							C	C
			Segment Length:	5.02																				
	Ravenwood Drive																							
3911	White View Parkway to Rymfire Drive	Collector	UFH	0.56	2	No	n.a.	n.a.	n.a.	n.a.	45	5,939	0.0855	508	0	508	*	770	1,530	2,170	2,990	D	B	B
	Royal Palms Parkway																							
3200	US 1 to Rymfire Drive			0.68								7,140	0.1042	744	178	922							C	C
3210	Rymfire Drive to Belle Terre Parkway	Arterial	Class 1	2.05	2	No	Yes	No	1	0.23	55	5,412	0.1027	556	178	734	*	**	1,510	1,600	***	D	C	C
3212	Belle Terre Parkway to Town Center Boulevard			1.57							45	8,824	0.0993	876	146	1,022							C	C
			Segment Length:	4.30																				
	Rymfire Drive																							
3215	Royal Palms Parkway to Ravenwood Drive	Collector	UFH	1.71	2	No	n.a.	n.a.	n.a.	0.00	45	5,606	0.1042	584	0	584	*	770	1,530	2,170	2,990	D	B	B
3225	Ravenwood Drive to Belle Terre Parkway			1.34								11,401	0.0895	1,020	0	1,020							C	C
			Segment Length:	3.05																				
	Seminole Woods Parkway																							
3325	SR 100 to Ulaturn Place			0.95	4							14,303	0.09	1,287	384	1,671	*	3,300	4,660	5,900	6,530		B	B
3300	Ulaturn Place to Citation Parkway	Collector	UFH	1.45		Yes	n.a.	n.a.	n.a.	n.a.	50	12,272	0.09	1,104	381	1,485						D	B	B
3310	Citation Parkway to Sesame Boulevard			1.15	2							4,536	0.1349	612	306	918	*	770	1,530	2,170	2,990		B	B
3305	Sesame Boulevard to US 1			1.37		No						6,959	0.0983	684	310	994							B	B
			Segment Length:	4.92																				

Link	Facility	Facility Type	Classification	Length (miles)	Number of Lanes	Divided	Turn Lanes Left	Turn Lanes Right	Signals	Signals / Mile	Speed Limit	2023 AADT	K (actual)	PMPH Trips	PMPH Vested Trips	Total PMPH Trips	FDOT Current Service Volumes (2012) A	B	C	D	E	Adopted LOS	LOS w/o Vested Trips	LOS with Vested Trips
	Sesame Boulevard																							
3320	Seminole Woods Parkway to terminus	Collector	UFH	2.92	2	No	n.a.	n.a.	n.a.	n.a.	45	6,170	0.1031	636	0	636	*	770	1,530	2,170	2,990	**D**	B	B
	State Road 100																							
3560	John Anderson Drive to Colbert Lane			1.17								23,062	0.0846	1,951	232	2,183							C	C
3550	Colbert Lane to Tuscany Blvd.	Arterial	State Class 1	0.46	4	Yes	Yes	No	2	0.74	55	24,630	0.0888	2,187	252	2,439	*	**	3,420	3,580	***	**D**	C	C
3540	Tuscany Blvd. to Old Kings Road			1.07								24,346	0.0729	1,775	252	2,027							C	C
			Segment Length:	2.70																				
3530	Old Kings Road to I-95			0.49							55	27,565	0.0663	1,828	408	2,236						**D**	C	C
3525	I-95 to Memorial Medical Parkway			0.27								37,732	0.0859	3,241	747	3,988							C	F
3520	Memorial Medical Pkwy to Seminole Woods Parkway			0.35							50	34,523	0.1013	3,497	745	4,242							D	F
3515	Seminole Woods Pkwy to Bulldog Drive	Arterial	State Class 1	0.27	4	Yes	Yes	No	6	1.96		34,279	0.0629	2,156	249	2,405	*	**	3,420	3,580	***	**C**	C	C
3510	Bulldog Drive to Landings Blvd.			0.78							55	32,283	0.0814	2,628	232	2,860							C	C
3505	Landings Blvd. to Belle Terre Parkway			0.45								28,600	0.0892	2,551	232	2,783							C	C
3500	Belle Terre Parkway to Palm Coast City Limits			0.45								32,025	0.0814	2,607	236	2,843							C	C
			Segment Length:	3.06																				
	Town Center Blvd.																							
4100	SR 100 to Hospital Drive			0.29	4							7,242	0.1265	916	686	1,602	*	3,300	4,660	5,900	6,530		B	B
4110	Hospital Drive to Central Avenue			0.39		Yes						7,129	0.1246	888	648	1,536							B	B
4120	Central Avenue to Lake Avenue	Collector	UFH	0.30			n.a.	n.a.	n.a.	n.a.	25	6,810	0.1521	1,036	35	1,071						**D**	C	C
4130	Lake Avenue to Royal Palm Parkway			0.59	2							6,409	0.1267	812	35	847	*	770	1,530	2,170	2,990		C	C
4140	Royal Palm Parkway to Old Kings Road			0.25		No						10,206	0.0909	928	390	1,318							C	C
			Segment Length:	1.82																				
	Tuscany Blvd.																							
4145	Old Kings Road to SR100	Collector	Class 1	2.01	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			-	0	-								
	US1 (SR5)																							
3700	St. Johns County Line to Old Kings Road			0.76							60	13,684	0.1117	1,529	508	2,037							C	C
3702	Old Kings Road to Matanzas Woods Parkway			2.61							65	15,505	0.096	1,488	739	2,227							C	C
3705	Matanzas Woods Parkway to Palm Coast Parkway	Arterial	State Class 1	3.65	4	Yes	Yes	No	3	0.25		18,687	0.0955	1,785	1,383	3,168	*	**	3,420	3,580	***	**D**	C	C
3710	Palm Coast Parkway to White View Parkway			2.11							60	20,783	0.0943	1,960	545	2,505							C	C
3720	White View Parkway to Royal Palms Parkway			1.78								22,118	0.093	2,057	463	2,520							C	C
3725	Royal Palms Parkway to Espanola Road			1.07								24,367	0.0913	2,225	273	2,498							C	C
			Segment Length:	11.98																				
101	Palm Coast City Limit to Belle Terre Parkway			0.57								14,567	0.0901	1,312	264	1,576							C	C
3750	Belle Terre Parkway to DuPont Road	Arterial	State Class 1	0.9	4	Yes	Yes	No	2	0.69	60	17,288	0.085	1,469	490	1,959	*	**	3,420	3,580	***	**D**	C	C
3755	DuPont Road to Seminole Woods Parkway			1.04								19,314	0.0994	1,920	281	2,201							C	C
235	Seminole Woods Parkway to Palm Coast City Limit			0.37								18,084	0.0929	1,680	325	2,005							C	C
			Segment Length:	2.88																				
	White Mill Drive																							
3915	Pine Lakes Parkway to White View Parkway	Collector	UFH	0.39	2	No	n.a.	n.a.	n.a.	n.a.	40	5,014	0.0902	452	18	470	*	770	1,530	2,170	2,990	**D**	B	B
	White View Parkway																							
3920	US 1 to White Mill Drive			0.88	4	Yes					45	8,964	0.0982	880	10	890	*	**	3,420	3,580	***		C	C
3910	White Mill Drive to Belle Terre Parkway	Arterial	Class 1	1.53	2	No	Yes	No	1	0.28	50	8,446	0.0928	784	23	807	*	**	1,510	1,600	***	**D**	C	C
3900	Belle Terre Parkway to Pritchard Drive			1.11							45	8,277	0.0797	660	5	665							C	C
			Segment Length:	3.52																				

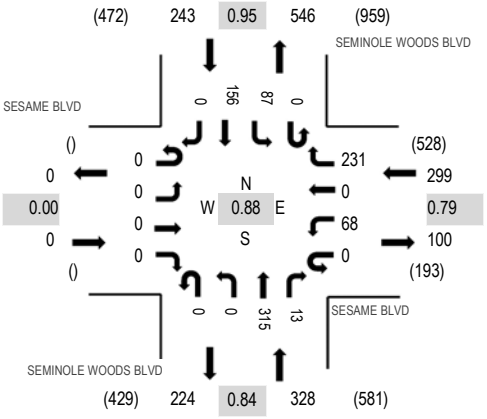
Freeway = Interstate Highway, State = State Highway, UFH = Uninterrupted Flow Highway, Class 1 = 40 mph or higher speed limit, Class 2 = 35 mph or lower speed limit, PMPH = P.M. Peak Hour, K (actual) = Measured Peak Hour Factor.

Appendix D
Turning Movement Counts

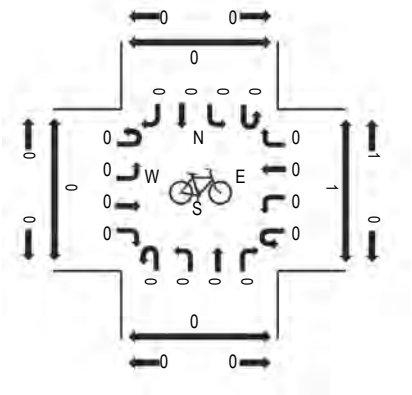
(303) 216-2439
www.alltrafficdata.net

Location: 1 SEMINOLE WOODS BLVD & SESAME BLVD AM
Date: Thursday, February 26, 2026
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

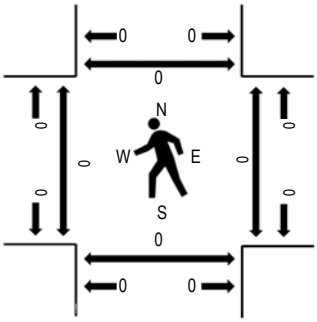
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SESAME BLVD Eastbound				SESAME BLVD Westbound				SEMINOLE WOODS BLVD Northbound				SEMINOLE WOODS BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	20	0	35	0	0	50	0	0	9	26	0	140	793	0	0	0	0
7:15 AM	0	0	0	0	0	11	0	41	0	0	63	6	0	20	41	0	182	850	0	0	0	0
7:30 AM	0	0	0	0	0	20	0	75	0	0	94	4	0	17	36	0	246	870	0	0	0	0
7:45 AM	0	0	0	0	0	23	0	53	0	0	89	4	0	14	42	0	225	830	0	0	0	0
8:00 AM	0	0	0	0	0	14	0	44	0	0	67	2	0	30	40	0	197	788	0	0	0	0
8:15 AM	0	0	0	0	0	11	0	59	0	0	65	3	0	26	38	0	202		0	0	0	0
8:30 AM	0	0	0	0	0	11	0	51	0	0	69	7	0	21	47	0	206		0	0	0	0
8:45 AM	0	0	0	0	0	6	0	54	0	0	50	8	0	22	43	0	183		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	4
Lights	0	0	0	0	0	68	0	228	0	0	305	12	0	76	151	0	840
Mediums	0	0	0	0	0	0	0	3	0	0	9	1	0	9	4	0	26
Total	0	0	0	0	0	68	0	231	0	0	315	13	0	87	156	0	870

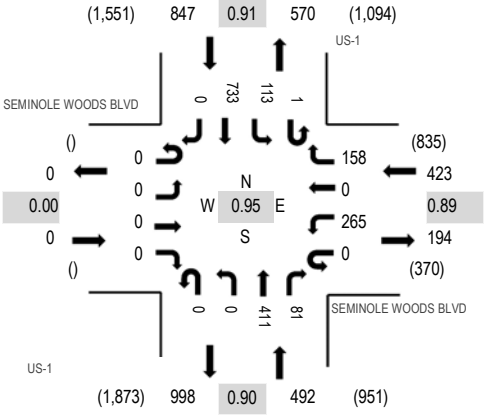
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				1.0%				3.4%				6.6%			3.4%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	3.2%	7.7%	0.0%	12.6%	3.2%	0.0%	3.4%
Peak Hour Factor		0.00				0.79				0.84				0.95			0.88
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.77	0.00	0.00	0.84	0.63	0.00	0.83	0.89	0.00	0.88

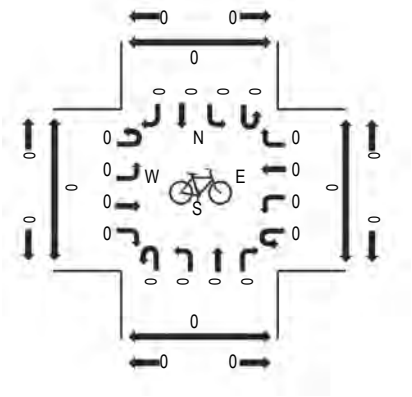
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 US-1 & SEMINOLE WOODS BLVD AM
Date: Wednesday, February 11, 2026
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

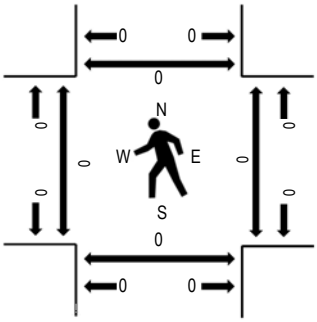
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEMINOLE WOODS BLVD Eastbound				SEMINOLE WOODS BLVD Westbound				US-1 Northbound				US-1 Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	89	0	29	0	0	66	20	0	27	151	0	382	1,743	0	0	0	0
7:15 AM	0	0	0	0	0	73	0	29	0	0	90	17	0	27	206	0	442	1,762	0	0	0	0
7:30 AM	0	0	0	0	0	78	0	51	0	0	96	17	0	31	190	0	463	1,746	0	0	0	0
7:45 AM	0	0	0	0	0	59	0	49	0	0	109	25	0	31	183	0	456	1,666	0	0	0	0
8:00 AM	0	0	0	0	0	55	0	29	0	0	116	22	1	24	154	0	401	1,594	0	0	0	0
8:15 AM	0	0	0	0	0	67	0	33	0	0	125	22	0	24	155	0	426		0	0	0	0
8:30 AM	0	0	0	0	0	57	0	44	0	0	81	22	0	18	161	0	383		0	0	0	0
8:45 AM	0	0	0	0	0	52	0	41	0	0	105	18	0	25	143	0	384		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	14	0	0	5	20	0	39
Lights	0	0	0	0	0	264	0	155	0	0	367	78	1	99	690	0	1,654
Mediums	0	0	0	0	0	1	0	3	0	0	30	3	0	9	23	0	69
Total	0	0	0	0	0	265	0	158	0	0	411	81	1	113	733	0	1,762

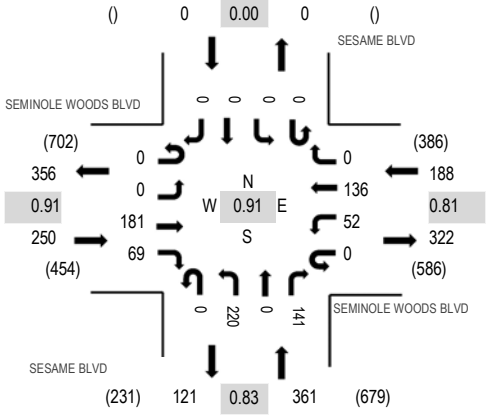
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.9%				9.6%				6.7%			6.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	1.9%	0.0%	0.0%	10.7%	3.7%	0.0%	12.4%	5.9%	0.0%	6.1%
Peak Hour Factor		0.00				0.89				0.90				0.91			0.95
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.79	0.00	0.00	0.89	0.91	0.25	0.94	0.89	0.00	0.95

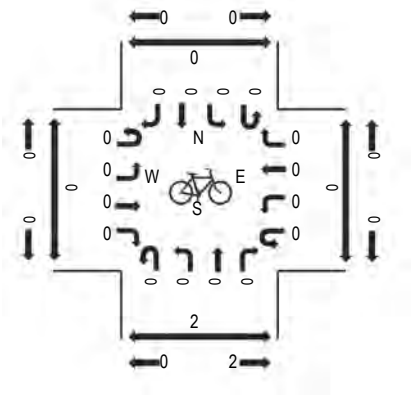
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 SESAME BLVD & SEMINOLE WOODS BLVD AM
Date: Wednesday, February 11, 2026
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

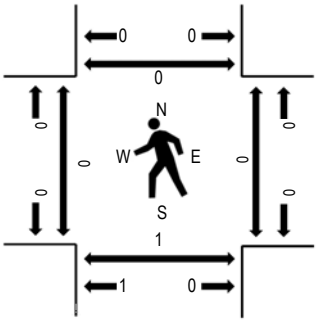
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEMINOLE WOODS BLVD Eastbound				SEMINOLE WOODS BLVD Westbound				SESAME BLVD Northbound				SESAME BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	31	19	0	5	32	0	0	59	0	24	0	0	0	0	170	788	0	0	1	0
7:15 AM	0	0	48	16	0	12	32	0	0	59	0	26	0	0	0	0	193	799	0	0	0	0
7:30 AM	0	0	40	16	0	12	40	0	0	59	0	53	0	0	0	0	220	795	0	0	1	0
7:45 AM	0	0	55	14	0	11	35	0	0	56	0	34	0	0	0	0	205	772	0	0	0	0
8:00 AM	0	0	38	23	0	17	29	0	0	46	0	28	0	0	0	0	181	731	0	0	0	0
8:15 AM	0	0	36	15	0	17	48	0	0	47	0	26	0	0	0	0	189		0	0	0	0
8:30 AM	0	0	40	16	0	15	39	0	0	55	0	32	0	0	0	0	197		0	0	0	0
8:45 AM	0	0	34	13	0	10	32	0	0	34	0	41	0	0	0	0	164		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lights	0	0	170	65	0	50	134	0	0	217	0	137	0	0	0	0	773
Mediums	0	0	7	4	0	2	2	0	0	3	0	4	0	0	0	0	22
Total	0	0	181	69	0	52	136	0	0	220	0	141	0	0	0	0	799

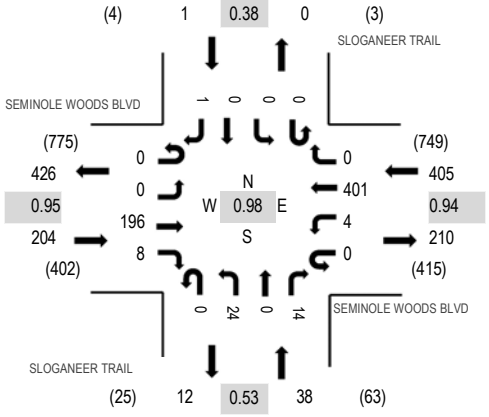
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		6.0%				2.1%				1.9%				0.0%			3.3%
Heavy Vehicle %	0.0%	0.0%	6.1%	5.8%	0.0%	3.8%	1.5%	0.0%	0.0%	1.4%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	3.3%
Peak Hour Factor		0.91				0.81				0.83				0.00			0.91
Peak Hour Factor	0.00	0.00	0.82	0.75	0.00	0.88	0.79	0.00	0.00	0.99	0.00	0.67	0.00	0.00	0.00	0.00	0.91

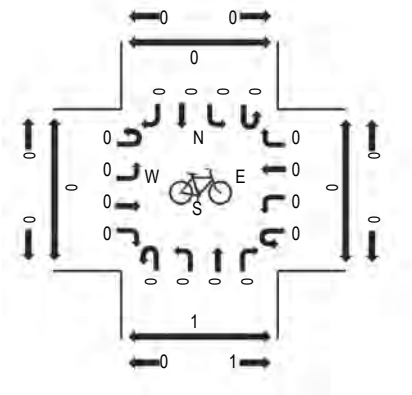
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 SLOGANEER TRAIL & SEMINOLE WOODS BLVD AM
Date: Wednesday, February 11, 2026
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

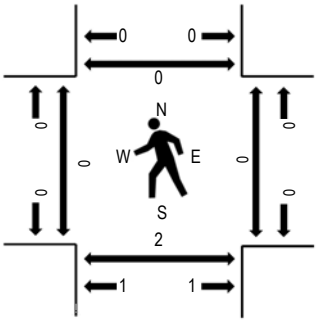
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEMINOLE WOODS BLVD Eastbound				SEMINOLE WOODS BLVD Westbound				SLOGANEER TRAIL Northbound				SLOGANEER TRAIL Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	42	3	0	1	102	0	0	15	0	3	0	0	0	0	166	648	0	0	1	0
7:15 AM	0	0	48	1	0	1	94	0	0	3	0	6	0	0	0	1	154	620	0	0	0	0
7:30 AM	0	0	49	4	0	2	106	0	0	3	0	2	0	0	0	0	166	619	0	0	1	0
7:45 AM	0	0	57	0	0	0	99	0	0	3	0	3	0	0	0	0	162	599	0	0	0	0
8:00 AM	0	0	55	1	0	1	76	0	0	2	0	3	0	0	0	0	138	570	0	0	0	0
8:15 AM	0	0	49	2	0	4	92	3	0	1	0	1	0	1	0	0	153		0	0	0	0
8:30 AM	0	0	50	1	0	0	84	0	0	5	0	4	0	0	0	2	146		0	0	0	0
8:45 AM	0	0	39	1	0	3	81	0	0	6	0	3	0	0	0	0	133		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lights	0	0	180	6	0	3	398	0	0	24	0	13	0	0	0	1	625
Mediums	0	0	13	2	0	1	3	0	0	0	0	1	0	0	0	0	20
Total	0	0	196	8	0	4	401	0	0	24	0	14	0	0	0	1	648

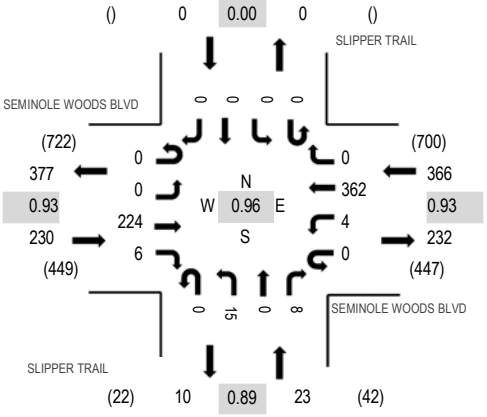
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		8.8%				1.0%				2.6%				0.0%			3.5%
Heavy Vehicle %	0.0%	0.0%	8.2%	25.0%	0.0%	25.0%	0.7%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	3.5%
Peak Hour Factor		0.95				0.94				0.53				0.38			0.98
Peak Hour Factor	0.00	0.00	0.93	0.50	0.00	0.50	0.95	0.25	0.00	0.40	0.00	0.58	0.00	0.25	0.00	0.25	0.98

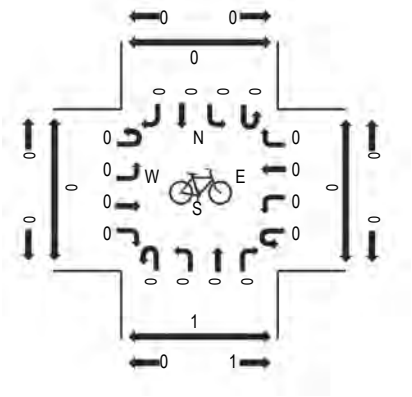
(303) 216-2439
www.alltrafficdata.net

Location: 5 SLIPPER TRAIL & SEMINOLE WOODS BLVD AM
Date: Wednesday, February 11, 2026
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

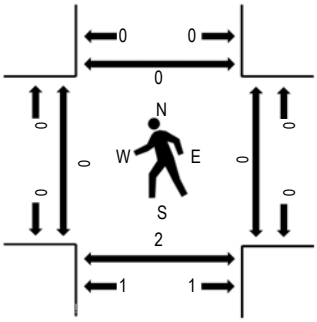
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEMINOLE WOODS BLVD Eastbound				SEMINOLE WOODS BLVD Westbound				SLIPPER TRAIL Northbound				SLIPPER TRAIL Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	46	2	0	0	88	0	0	2	0	2	0	0	0	0	140	619	0	0	1	0
7:15 AM	0	0	59	1	0	1	89	0	0	3	0	3	0	0	0	0	156	618	0	0	0	0
7:30 AM	0	0	55	2	0	2	96	0	0	5	0	2	0	0	0	0	162	615	0	0	1	0
7:45 AM	0	0	64	1	0	1	89	0	0	5	0	1	0	0	0	0	161	605	0	0	0	0
8:00 AM	0	0	60	1	0	2	70	0	0	5	0	1	0	0	0	0	139	572	0	0	0	0
8:15 AM	0	0	49	3	0	2	94	0	0	4	0	1	0	0	0	0	153		0	0	0	0
8:30 AM	0	0	54	2	0	1	92	0	0	2	0	1	0	0	0	0	152		0	0	0	0
8:45 AM	0	0	49	1	0	0	73	0	0	5	0	0	0	0	0	0	128		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lights	0	0	204	4	0	4	358	0	0	15	0	8	0	0	0	0	593
Mediums	0	0	17	2	0	0	4	0	0	0	0	0	0	0	0	0	23
Total	0	0	224	6	0	4	362	0	0	15	0	8	0	0	0	0	619

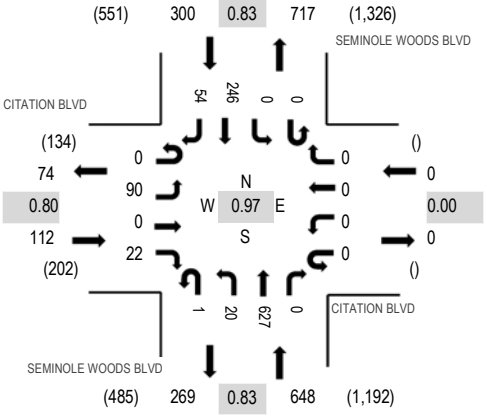
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		9.6%				1.1%				0.0%				0.0%			4.2%
Heavy Vehicle %	0.0%	0.0%	8.9%	33.3%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%
Peak Hour Factor		0.93				0.93				0.89				0.00			0.96
Peak Hour Factor	0.00	0.00	0.93	0.58	0.00	0.88	0.94	0.00	0.00	0.95	0.00	0.67	0.00	0.00	0.00	0.00	0.96

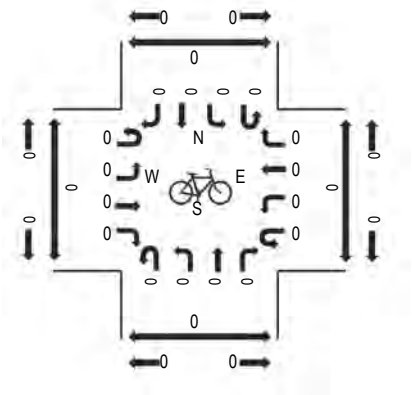
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 SEMINOLE WOODS BLVD & CITATION BLVD AM
Date: Wednesday, February 11, 2026
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

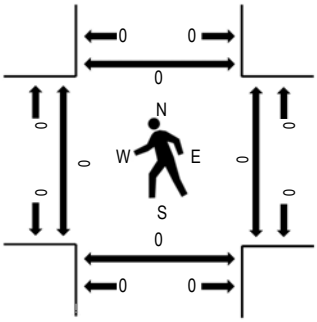
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	CITATION BLVD Eastbound				CITATION BLVD Westbound				SEMINOLE WOODS BLVD Northbound				SEMINOLE WOODS BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	14	0	0	0	0	0	0	0	0	116	0	0	0	32	16	178	932	0	1	0	0
7:15 AM	0	20	0	1	0	0	0	0	0	2	136	0	0	0	41	12	212	1,025	0	0	0	0
7:30 AM	0	31	0	4	0	0	0	0	0	4	169	0	0	0	44	16	268	1,060	0	0	0	0
7:45 AM	0	16	0	4	0	0	0	0	0	10	186	0	0	0	52	6	274	1,056	0	0	0	0
8:00 AM	0	21	0	9	0	0	0	0	1	2	138	0	0	0	80	20	271	1,013	0	0	0	0
8:15 AM	0	22	0	5	0	0	0	0	0	4	134	0	0	0	70	12	247		0	0	0	0
8:30 AM	0	17	0	12	0	0	0	0	0	4	150	0	1	0	67	13	264		0	0	0	0
8:45 AM	0	22	0	4	0	0	0	0	0	3	133	0	0	0	59	10	231		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	6
Lights	0	85	0	19	0	0	0	0	1	20	606	0	0	0	234	50	1,015
Mediums	0	1	0	3	0	0	0	0	0	0	19	0	0	0	12	4	39
Total	0	90	0	22	0	0	0	0	1	20	627	0	0	0	246	54	1,060

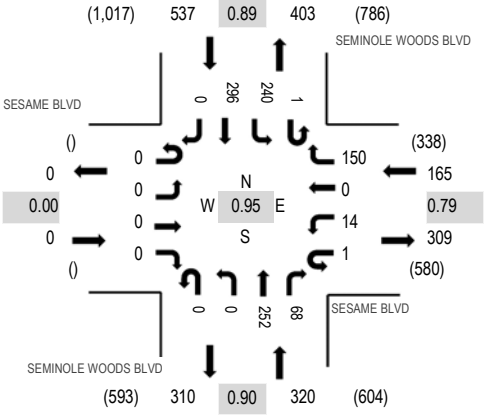
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		7.1%				0.0%				3.2%				5.3%			4.2%
Heavy Vehicle %	0.0%	5.6%	0.0%	13.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	4.9%	7.4%	4.2%
Peak Hour Factor		0.80				0.00				0.83				0.83			0.97
Peak Hour Factor	0.00	0.73	0.00	0.63	0.00	0.00	0.00	0.00	0.25	0.50	0.85	0.00	0.25	0.00	0.86	0.69	0.97

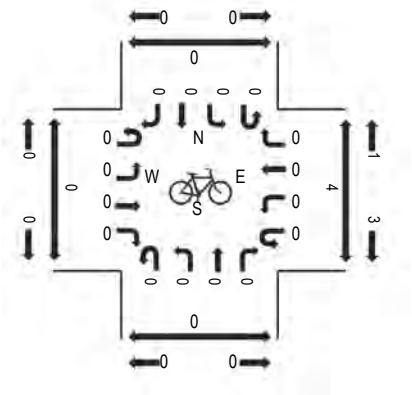
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 SEMINOLE WOODS BLVD & SESAME BLVD PM
Date: Thursday, February 26, 2026
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

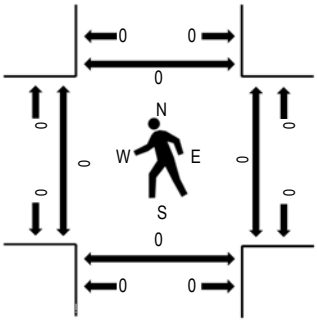
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SESAME BLVD Eastbound				SESAME BLVD Westbound				SEMINOLE WOODS BLVD Northbound				SEMINOLE WOODS BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	2	0	37	0	0	56	7	0	57	66	0	225	995	0	0	0	0
4:15 PM	0	0	0	0	0	4	0	38	0	0	66	12	0	48	74	0	242	1,022	0	0	0	0
4:30 PM	0	0	0	0	0	3	0	31	0	0	65	25	1	62	71	0	258	1,019	0	0	0	0
4:45 PM	0	0	0	0	0	3	0	45	0	0	58	13	0	76	75	0	270	1,010	0	0	0	0
5:00 PM	0	0	0	0	1	4	0	36	0	0	63	18	0	54	76	0	252	964	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	32	0	0	62	19	0	53	72	0	239		0	0	0	0
5:30 PM	0	0	0	0	0	14	0	43	0	0	57	13	0	65	57	0	249		0	0	0	0
5:45 PM	0	0	0	0	0	6	0	38	0	0	58	12	0	45	65	0	224		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	1	14	0	148	0	0	249	67	1	238	295	0	1,013
Mediums	0	0	0	0	0	0	0	2	0	0	3	1	0	2	1	0	9
Total	0	0	0	0	1	14	0	150	0	0	252	68	1	240	296	0	1,022

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				1.2%				1.3%				0.6%			0.9%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	1.2%	1.5%	0.0%	0.8%	0.3%	0.0%	0.9%
Peak Hour Factor		0.00				0.79				0.90				0.89			0.95
Peak Hour Factor	0.00	0.00	0.00	0.00	0.25	0.45	0.00	0.87	0.00	0.00	0.95	0.75	0.25	0.82	0.97	0.00	0.95

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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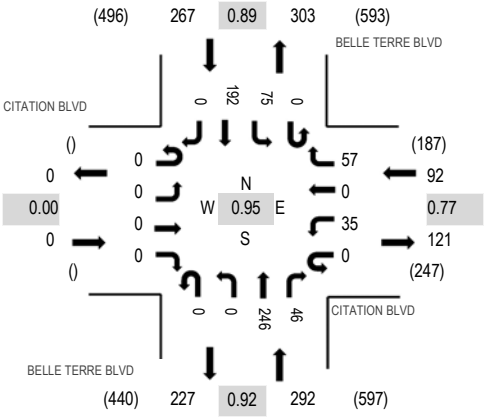
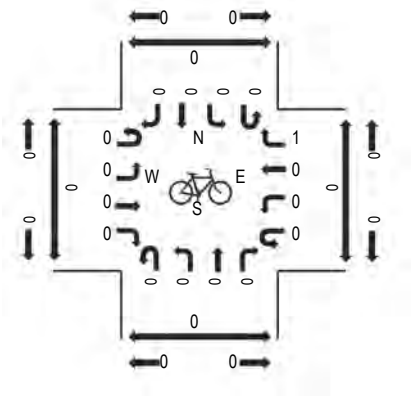
Location: 1 BELLE TERRE BLVD & CITATION BLVD PM
Date: Wednesday, February 11, 2026
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

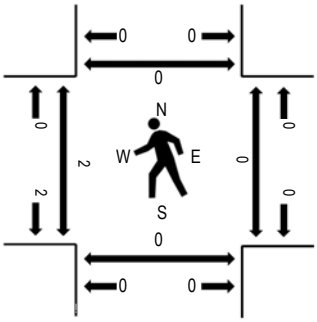
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	CITATION BLVD Eastbound				CITATION BLVD Westbound				BELLE TERRE BLVD Northbound				BELLE TERRE BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	18	0	13	0	0	61	16	0	19	38	0	165	638	0	0	0	0
4:15 PM	0	0	0	0	0	7	0	15	0	0	62	19	0	14	41	0	158	645	0	0	0	0
4:30 PM	0	0	0	0	0	7	0	12	0	0	57	15	0	14	53	0	158	642	2	0	0	0
4:45 PM	0	0	0	0	0	7	0	14	0	0	64	5	0	24	43	0	157	651	0	0	0	0
5:00 PM	0	0	0	0	0	9	0	22	0	0	55	11	0	23	52	0	172	642	0	0	0	0
5:15 PM	0	0	0	0	0	11	0	13	0	0	63	11	0	11	46	0	155		0	0	0	0
5:30 PM	0	0	0	0	0	8	0	8	0	0	64	19	0	17	51	0	167		2	0	0	0
5:45 PM	0	0	0	0	0	12	0	11	0	0	59	16	0	13	37	0	148		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Lights	0	0	0	0	0	34	0	54	0	0	244	46	0	74	189	0	641
Mediums	0	0	0	0	0	1	0	2	0	0	2	0	0	1	3	0	9
Total	0	0	0	0	0	35	0	57	0	0	246	46	0	75	192	0	651

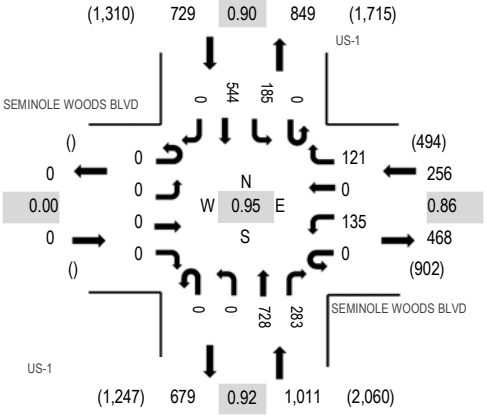
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				4.3%				0.7%				1.5%			1.5%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	5.3%	0.0%	0.0%	0.8%	0.0%	0.0%	1.3%	1.6%	0.0%	1.5%
Peak Hour Factor		0.00				0.77				0.92				0.89			0.95
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.72	0.00	0.00	0.96	0.75	0.00	0.78	0.92	0.00	0.95

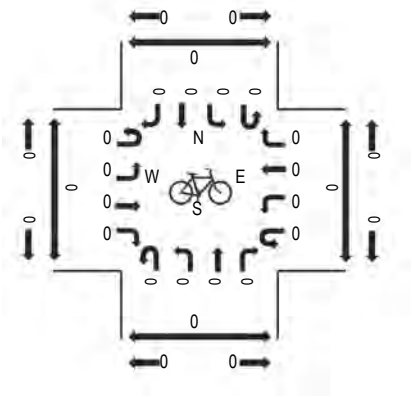
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 US-1 & SEMINOLE WOODS BLVD PM
Date: Wednesday, February 11, 2026
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

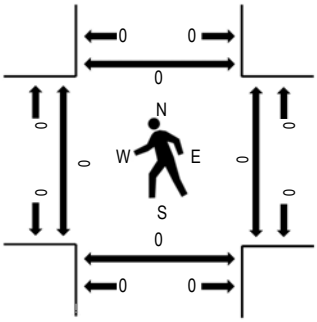
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEMINOLE WOODS BLVD Eastbound				SEMINOLE WOODS BLVD Westbound				US-1 Northbound				US-1 Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	34	0	24	0	0	192	63	0	36	118	0	467	1,969	0	0	0	0
4:15 PM	0	0	0	0	0	49	0	27	0	0	192	73	0	46	139	0	526	1,995	0	0	0	0
4:30 PM	0	0	0	0	0	33	0	34	0	0	191	80	0	52	138	0	528	1,996	0	0	0	0
4:45 PM	0	0	0	0	0	31	0	28	0	0	179	59	0	36	115	0	448	1,922	0	0	0	0
5:00 PM	0	0	0	0	0	23	0	31	0	0	165	72	0	48	154	0	493	1,895	0	0	0	0
5:15 PM	0	0	0	0	0	48	0	28	0	0	193	72	0	49	137	0	527		0	0	0	0
5:30 PM	0	0	0	0	0	20	0	24	0	0	195	84	0	34	97	0	454		0	0	0	0
5:45 PM	0	0	0	0	0	29	0	31	0	0	181	69	0	29	82	0	421		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	6	0	0	1	8	0	16
Lights	0	0	0	0	0	135	0	112	0	0	707	283	0	182	517	0	1,936
Mediums	0	0	0	0	0	0	0	8	0	0	15	0	0	2	19	0	44
Total	0	0	0	0	0	135	0	121	0	0	728	283	0	185	544	0	1,996

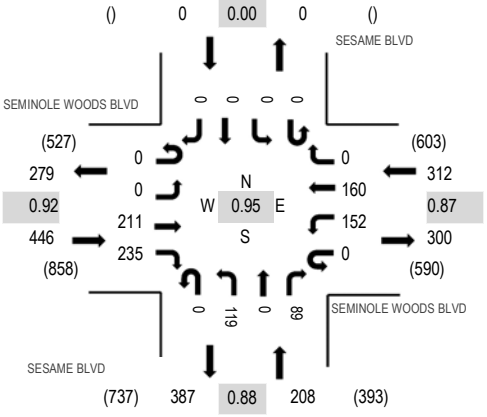
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				3.5%				2.1%				4.1%			3.0%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.4%	0.0%	0.0%	2.9%	0.0%	0.0%	1.6%	5.0%	0.0%	3.0%
Peak Hour Factor		0.00				0.86				0.92				0.90			0.95
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.89	0.00	0.00	0.98	0.88	0.00	0.89	0.89	0.00	0.95

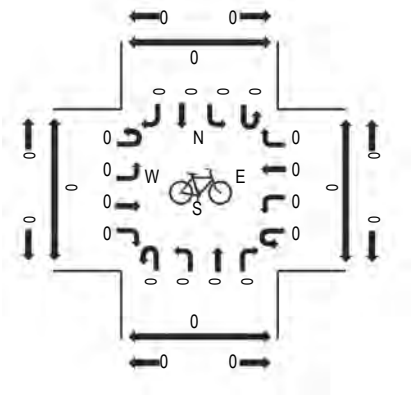
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 SESAME BLVD & SEMINOLE WOODS BLVD PM
Date: Wednesday, February 11, 2026
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

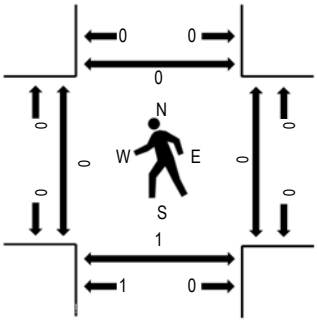
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEMINOLE WOODS BLVD Eastbound				SEMINOLE WOODS BLVD Westbound				SESAME BLVD Northbound				SESAME BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	47	47	0	27	45	0	0	28	0	20	0	0	0	0	214	922	0	0	0	0
4:15 PM	0	0	62	46	0	34	43	0	0	22	0	24	0	0	0	0	231	961	0	0	0	0
4:30 PM	0	0	54	67	0	26	41	0	0	32	0	27	0	0	0	0	247	966	0	0	0	0
4:45 PM	0	0	45	44	0	55	37	0	0	25	0	24	0	0	0	0	230	949	0	0	1	0
5:00 PM	0	0	52	67	0	47	38	0	0	28	0	21	0	0	0	0	253	932	0	0	0	0
5:15 PM	0	0	60	57	0	24	44	0	0	34	0	17	0	0	0	0	236		0	0	0	0
5:30 PM	0	0	47	69	0	39	26	0	0	28	0	21	0	0	0	0	230		0	0	0	0
5:45 PM	0	0	48	46	0	42	35	0	0	21	0	21	0	0	0	0	213		0	0	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
Lights	0	0	209	232	0	150	155	0	0	117	0	87	0	0	0	0	950
Mediums	0	0	2	2	0	2	5	0	0	1	0	2	0	0	0	0	14
Total	0	0	211	235	0	152	160	0	0	119	0	89	0	0	0	0	966

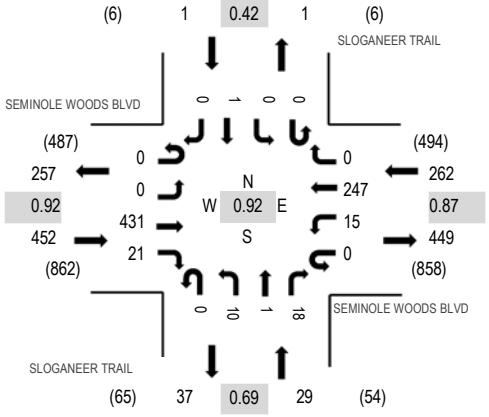
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		1.1%				2.2%				1.9%				0.0%			1.7%
Heavy Vehicle %	0.0%	0.0%	0.9%	1.3%	0.0%	1.3%	3.1%	0.0%	0.0%	1.7%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	1.7%
Peak Hour Factor		0.92				0.87				0.88				0.00			0.95
Peak Hour Factor	0.00	0.00	0.86	0.87	0.00	0.75	0.92	0.00	0.00	0.88	0.00	0.89	0.00	0.00	0.00	0.00	0.95

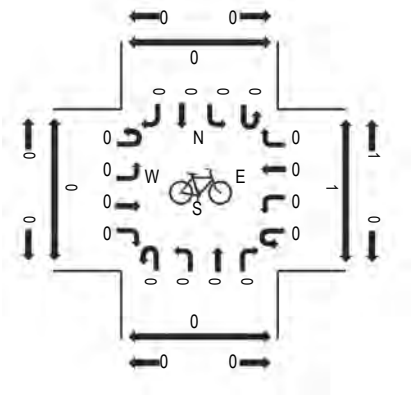
(303) 216-2439
www.alltrafficdata.net

Location: 4 SLOGANEER TRAIL & SEMINOLE WOODS BLVD PM
Date: Wednesday, February 11, 2026
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

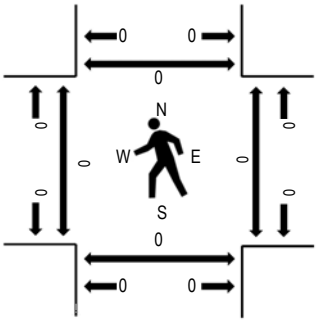
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEMINOLE WOODS BLVD Eastbound				SEMINOLE WOODS BLVD Westbound				SLOGANEER TRAIL Northbound				SLOGANEER TRAIL Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	90	4	0	1	55	1	0	0	0	2	0	0	1	0	154	698	0	0	2	0
4:15 PM	0	1	104	4	0	6	59	1	0	10	0	2	0	0	1	2	190	731	0	0	0	0
4:30 PM	0	0	116	4	0	1	71	0	0	3	1	2	0	0	0	0	198	744	0	0	0	0
4:45 PM	0	0	81	8	0	7	47	0	0	4	0	8	0	0	1	0	156	713	0	0	0	0
5:00 PM	0	0	119	4	0	4	57	0	0	1	0	2	0	0	0	0	187	718	0	0	0	0
5:15 PM	0	0	115	5	0	3	72	0	0	2	0	6	0	0	0	0	203		0	0	0	0
5:30 PM	0	0	110	1	0	7	44	0	0	0	0	4	0	0	1	0	167		0	0	1	0
5:45 PM	0	1	94	1	0	1	56	1	0	4	0	3	0	0	0	0	161		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Lights	0	0	431	20	0	15	238	0	0	9	1	17	0	0	1	0	732
Mediums	0	0	0	1	0	0	8	0	0	1	0	1	0	0	0	0	11
Total	0	0	431	21	0	15	247	0	0	10	1	18	0	0	1	0	744

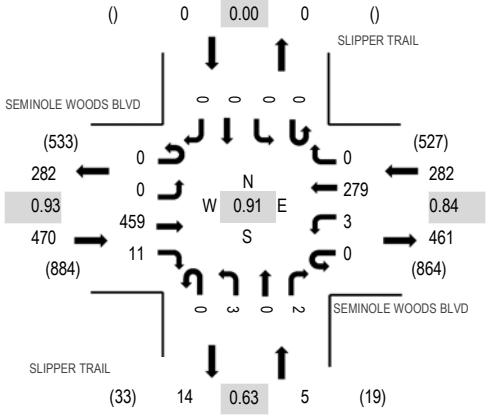
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.2%				3.4%				6.9%				0.0%			1.6%
Heavy Vehicle %	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	3.6%	0.0%	0.0%	10.0%	0.0%	5.6%	0.0%	0.0%	0.0%	0.0%	1.6%
Peak Hour Factor		0.92				0.87				0.69				0.42			0.92
Peak Hour Factor	0.00	0.25	0.92	0.66	0.00	0.75	0.86	0.50	0.00	0.45	0.25	0.63	0.00	0.00	0.75	0.25	0.92

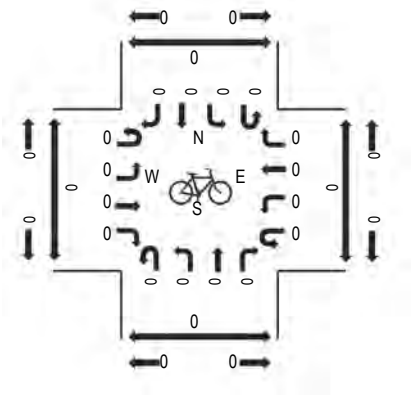
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 SLIPPER TRAIL & SEMINOLE WOODS BLVD PM
Date: Wednesday, February 11, 2026
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

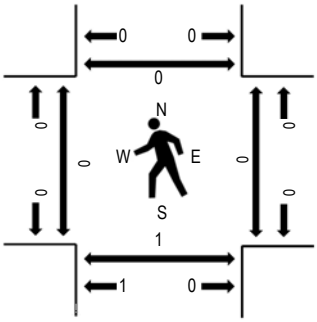
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SEMINOLE WOODS BLVD Eastbound				SEMINOLE WOODS BLVD Westbound				SLIPPER TRAIL Northbound				SLIPPER TRAIL Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	92	5	0	0	67	0	0	2	0	1	0	0	0	0	167	707	0	0	2	0
4:15 PM	0	0	102	6	0	2	65	0	0	2	0	2	0	0	0	0	179	727	0	0	0	0
4:30 PM	0	0	127	0	0	0	70	0	0	1	0	0	0	0	0	0	198	757	0	0	0	0
4:45 PM	0	0	93	4	0	1	63	0	0	0	0	2	0	0	0	0	163	728	0	0	1	0
5:00 PM	0	0	121	2	0	1	63	0	0	0	0	0	0	0	0	0	187	723	0	0	0	0
5:15 PM	0	0	118	5	0	1	83	0	0	2	0	0	0	0	0	0	209		0	0	0	0
5:30 PM	0	0	110	3	0	0	52	0	0	3	0	1	0	0	0	0	169		0	0	0	0
5:45 PM	0	0	94	2	0	1	58	0	0	2	0	1	0	0	0	0	158		0	0	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Lights	0	0	455	11	0	3	272	0	0	3	0	2	0	0	0	0	746
Mediums	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	0	9
Total	0	0	459	11	0	3	279	0	0	3	0	2	0	0	0	0	757

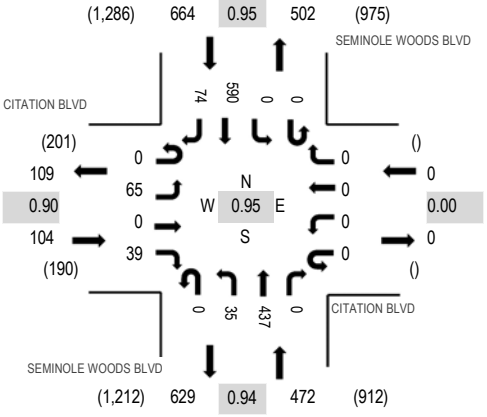
Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.9%				2.5%				0.0%				0.0%			1.5%
Heavy Vehicle %	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
Peak Hour Factor		0.93				0.84				0.63				0.00			0.91
Peak Hour Factor	0.00	0.00	0.90	0.63	0.00	0.50	0.84	0.00	0.00	0.58	0.00	0.63	0.00	0.00	0.00	0.00	0.91

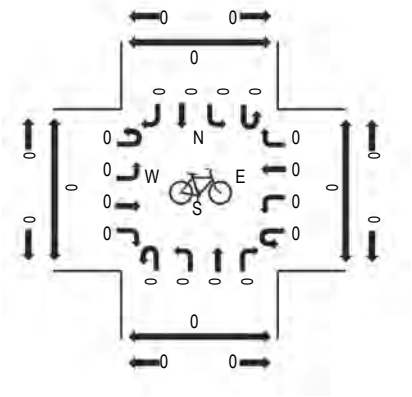
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 SEMINOLE WOODS BLVD & CITATION BLVD PM
Date: Wednesday, February 11, 2026
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

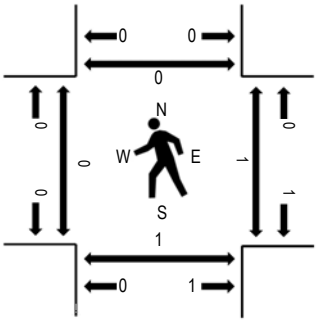
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	CITATION BLVD Eastbound				CITATION BLVD Westbound				SEMINOLE WOODS BLVD Northbound				SEMINOLE WOODS BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	11	0	12	0	0	0	0	0	6	84	0	0	0	133	13	259	1,173	0	0	0	0
4:15 PM	0	15	0	13	0	0	0	0	0	16	110	0	0	0	137	10	301	1,240	0	1	0	0
4:30 PM	0	15	0	8	0	0	0	0	0	5	115	0	0	0	148	17	308	1,233	0	0	1	0
4:45 PM	0	15	0	9	0	0	0	0	0	9	99	0	0	0	151	22	305	1,209	0	0	0	0
5:00 PM	0	20	0	9	0	0	0	0	0	5	113	0	0	0	154	25	326	1,215	0	0	0	0
5:15 PM	0	7	0	9	0	0	0	0	0	2	111	0	0	0	141	24	294		0	0	0	0
5:30 PM	0	19	0	5	0	0	0	0	0	5	110	0	0	0	132	13	284		0	0	0	0
5:45 PM	0	16	0	7	0	0	0	0	0	7	115	0	0	0	144	22	311		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Lights	0	64	0	37	0	0	0	0	0	34	426	0	0	0	584	72	1,217
Mediums	0	1	0	2	0	0	0	0	0	1	10	0	0	0	6	1	21
Total	0	65	0	39	0	0	0	0	0	35	437	0	0	0	590	74	1,240

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		2.9%				0.0%				2.5%				1.2%			1.9%
Heavy Vehicle %	0.0%	1.5%	0.0%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	2.5%	0.0%	0.0%	0.0%	1.0%	2.7%	1.9%
Peak Hour Factor		0.90				0.00				0.94				0.95			0.95
Peak Hour Factor	0.00	0.81	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.56	0.98	0.00	0.00	0.00	0.96	0.88	0.95

Appendix E
FDOT Seasonal Factor Report

2024 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 7300 FLAGLER COUNTYWIDE

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2024 - 01/06/2024	1.04	1.09
2	01/07/2024 - 01/13/2024	1.05	1.11
3	01/14/2024 - 01/20/2024	1.07	1.13
4	01/21/2024 - 01/27/2024	1.04	1.09
5	01/28/2024 - 02/03/2024	1.02	1.07
6	02/04/2024 - 02/10/2024	1.00	1.05
7	02/11/2024 - 02/17/2024	0.98	1.03
* 8	02/18/2024 - 02/24/2024	0.97	1.02
* 9	02/25/2024 - 03/02/2024	0.95	1.00
*10	03/03/2024 - 03/09/2024	0.94	0.99
*11	03/10/2024 - 03/16/2024	0.93	0.98
*12	03/17/2024 - 03/23/2024	0.94	0.99
*13	03/24/2024 - 03/30/2024	0.94	0.99
*14	03/31/2024 - 04/06/2024	0.95	1.00
*15	04/07/2024 - 04/13/2024	0.95	1.00
*16	04/14/2024 - 04/20/2024	0.96	1.01
*17	04/21/2024 - 04/27/2024	0.96	1.01
*18	04/28/2024 - 05/04/2024	0.97	1.02
*19	05/05/2024 - 05/11/2024	0.97	1.02
*20	05/12/2024 - 05/18/2024	0.98	1.03
21	05/19/2024 - 05/25/2024	0.99	1.04
22	05/26/2024 - 06/01/2024	0.99	1.04
23	06/02/2024 - 06/08/2024	1.00	1.05
24	06/09/2024 - 06/15/2024	1.01	1.06
25	06/16/2024 - 06/22/2024	1.01	1.06
26	06/23/2024 - 06/29/2024	1.01	1.06
27	06/30/2024 - 07/06/2024	1.01	1.06
28	07/07/2024 - 07/13/2024	1.02	1.07
29	07/14/2024 - 07/20/2024	1.02	1.07
30	07/21/2024 - 07/27/2024	1.02	1.07
31	07/28/2024 - 08/03/2024	1.02	1.07
32	08/04/2024 - 08/10/2024	1.02	1.07
33	08/11/2024 - 08/17/2024	1.02	1.07
34	08/18/2024 - 08/24/2024	1.02	1.07
35	08/25/2024 - 08/31/2024	1.03	1.08
36	09/01/2024 - 09/07/2024	1.03	1.08
37	09/08/2024 - 09/14/2024	1.04	1.09
38	09/15/2024 - 09/21/2024	1.05	1.11
39	09/22/2024 - 09/28/2024	1.03	1.08
40	09/29/2024 - 10/05/2024	1.02	1.07
41	10/06/2024 - 10/12/2024	1.00	1.05
42	10/13/2024 - 10/19/2024	0.99	1.04
43	10/20/2024 - 10/26/2024	0.99	1.04
44	10/27/2024 - 11/02/2024	1.00	1.05
45	11/03/2024 - 11/09/2024	1.00	1.05
46	11/10/2024 - 11/16/2024	1.00	1.05
47	11/17/2024 - 11/23/2024	1.01	1.06
48	11/24/2024 - 11/30/2024	1.02	1.07
49	12/01/2024 - 12/07/2024	1.03	1.08
50	12/08/2024 - 12/14/2024	1.03	1.08
51	12/15/2024 - 12/21/2024	1.04	1.09
52	12/22/2024 - 12/28/2024	1.05	1.11
53	12/29/2024 - 12/31/2024	1.07	1.13

* PEAK SEASON

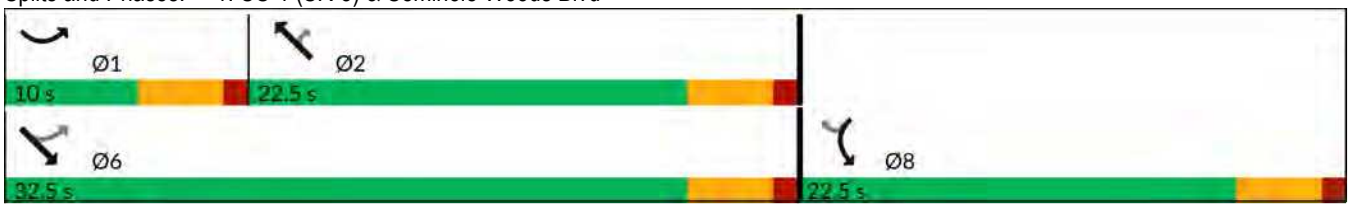
Appendix F
Synchro Printouts - Existing Traffic Conditions

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	112	718	403	79	260	155
Future Volume (vph)	112	718	403	79	260	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			330	0	440
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.409				0.950	
Satd. Flow (perm)	762	3539	3539	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				86		168
Link Speed (mph)		30	30		30	
Link Distance (ft)		1284	3295		2822	
Travel Time (s)		29.2	74.9		64.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	122	780	438	86	283	168
Shared Lane Traffic (%)						
Lane Group Flow (vph)	122	780	438	86	283	168
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	32.5	22.5	22.5	22.5	22.5
Total Split (%)	18.2%	59.1%	40.9%	40.9%	40.9%	40.9%
Maximum Green (s)	5.5	28.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	Max	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	29.0	29.0	21.0	21.0	13.0	13.0
Actuated g/C Ratio	0.57	0.57	0.41	0.41	0.25	0.25
v/c Ratio	0.23	0.39	0.30	0.12	0.63	0.32
Control Delay (s/veh)	7.3	7.5	12.6	4.3	23.1	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.3	7.5	12.6	4.3	23.1	4.7
LOS	A	A	B	A	C	A
Approach Delay (s/veh)		7.4	11.3		16.3	
Approach LOS		A	B		B	

Intersection Summary	
Area Type:	Other
Cycle Length: 55	
Actuated Cycle Length: 51	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay (s/veh): 10.6	Intersection LOS: B
Intersection Capacity Utilization 43.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: US-1 (SR-5) & Seminole Woods Blvd



Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	112	718	403	79	260	155
Future Volume (veh/h)	112	718	403	79	260	155
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	780	438	86	283	168
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	621	2117	1476	658	379	337
Arrive On Green	0.08	0.60	0.42	0.42	0.21	0.21
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	122	780	438	86	283	168
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	1.6	5.3	3.9	1.6	7.0	4.4
Cycle Q Clear(g_c), s	1.6	5.3	3.9	1.6	7.0	4.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	621	2117	1476	658	379	337
V/C Ratio(X)	0.20	0.37	0.30	0.13	0.75	0.50
Avail Cap(c_a), veh/h	678	2117	1476	658	682	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.7	4.9	9.2	8.5	17.3	16.3
Incr Delay (d2), s/veh	0.2	0.5	0.5	0.4	3.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.3	1.3	0.5	2.8	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.8	5.4	9.7	8.9	20.3	17.4
LnGrp LOS	A	A	A	A	C	B
Approach Vol, veh/h		902	524		451	
Approach Delay, s/veh		5.5	9.5		19.2	
Approach LOS		A	A		B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.5	24.0				32.5	14.5
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.5	18.0				28.0	18.0
Max Q Clear Time (g_c+I1), s	3.6	5.9				7.3	9.0
Green Ext Time (p_c), s	0.0	2.5				5.5	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.9
HCM 7th LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	192	8	4	393	0	24	0	14	0	0	1
Future Volume (vph)	0	192	8	4	393	0	24	0	14	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	0		165	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994						0.951				0.850
Flt Protected								0.969				
Satd. Flow (prot)	1863	1852	0	0	1863	1863	0	1717	0	0	1863	1583
Flt Permitted								0.969				
Satd. Flow (perm)	1863	1852	0	0	1863	1863	0	1717	0	0	1863	1583
Link Speed (mph)		55			55			30			30	
Link Distance (ft)		2822			2497			302			828	
Travel Time (s)		35.0			31.0			6.9			18.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	209	9	4	427	0	26	0	15	0	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	218	0	0	431	0	0	41	0	0	0	1
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		60	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 37.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	220	6	4	355	15	8
Future Volume (vph)	220	6	4	355	15	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.996				0.951	
Flt Protected				0.999	0.969	
Satd. Flow (prot)	1855	0	0	1861	1717	0
Flt Permitted				0.999	0.969	
Satd. Flow (perm)	1855	0	0	1861	1717	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	2497			1960	501	
Travel Time (s)	31.0			24.3	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	7	4	386	16	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	246	0	0	390	25	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	177	68	51	133	216	138
Future Volume (vph)	177	68	51	133	216	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.962				0.947	
Flt Protected				0.986	0.970	
Satd. Flow (prot)	1792	0	0	1837	1711	0
Flt Permitted				0.986	0.970	
Satd. Flow (perm)	1792	0	0	1837	1711	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	1960			302	1059	
Travel Time (s)	24.3			3.7	24.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	74	55	145	235	150
Shared Lane Traffic (%)						
Lane Group Flow (vph)	266	0	0	200	385	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	65	219	299	12	83	148
Future Volume (vph)	65	219	299	12	83	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270	0		400	380	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	1863	1583	1770	1863
Link Speed (mph)	30		55			55
Link Distance (ft)	1503		2954			1014
Travel Time (s)	34.2		36.6			12.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	238	325	13	90	161
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	238	325	13	90	161
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60		60	60	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	88	22	21	614	241	53
Future Volume (vph)	88	22	21	614	241	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	325	445			400
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583
Link Speed (mph)	30			55	55	
Link Distance (ft)	3339			1714	1134	
Travel Time (s)	75.9			21.2	14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	96	24	23	667	262	58
Shared Lane Traffic (%)						
Lane Group Flow (vph)	96	24	23	667	262	58
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

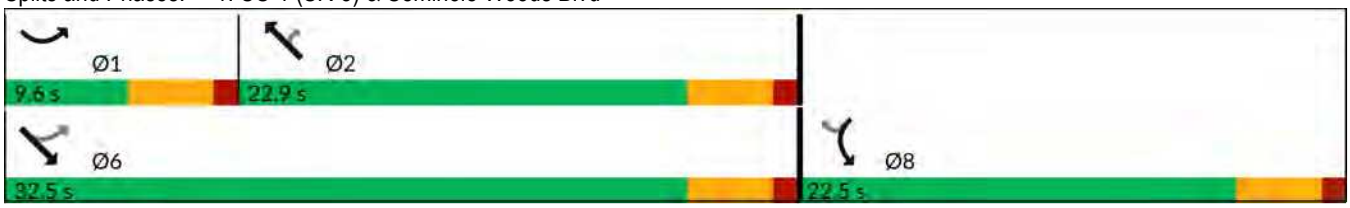
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	181	533	713	277	132	119
Future Volume (vph)	181	533	713	277	132	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			330	0	440
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.251				0.950	
Satd. Flow (perm)	468	3539	3539	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				301		129
Link Speed (mph)		30	30		30	
Link Distance (ft)		1284	3295		2822	
Travel Time (s)		29.2	74.9		64.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	197	579	775	301	143	129
Shared Lane Traffic (%)						
Lane Group Flow (vph)	197	579	775	301	143	129
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.6	32.5	22.9	22.9	22.5	22.5
Total Split (%)	17.5%	59.1%	41.6%	41.6%	40.9%	40.9%
Maximum Green (s)	5.1	28.0	18.4	18.4	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	Max	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	31.0	31.9	21.4	21.4	9.0	9.0
Actuated g/C Ratio	0.66	0.68	0.46	0.46	0.19	0.19
v/c Ratio	0.44	0.24	0.48	0.34	0.42	0.32
Control Delay (s/veh)	7.6	4.6	11.7	3.0	20.1	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.6	4.6	11.7	3.0	20.1	6.2
LOS	A	A	B	A	C	A
Approach Delay (s/veh)		5.4	9.3		13.5	
Approach LOS		A	A		B	

Intersection Summary	
Area Type: Other	
Cycle Length: 55	
Actuated Cycle Length: 47	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay (s/veh): 8.4	Intersection LOS: A
Intersection Capacity Utilization 48.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: US-1 (SR-5) & Seminole Woods Blvd



Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	181	533	713	277	132	119
Future Volume (veh/h)	181	533	713	277	132	119
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	197	579	775	301	143	129
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	558	2330	1580	705	238	212
Arrive On Green	0.11	0.66	0.44	0.44	0.13	0.13
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	197	579	775	301	143	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	2.1	2.9	6.6	5.6	3.2	3.3
Cycle Q Clear(g_c), s	2.1	2.9	6.6	5.6	3.2	3.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	558	2330	1580	705	238	212
V/C Ratio(X)	0.35	0.25	0.49	0.43	0.60	0.61
Avail Cap(c_a), veh/h	583	2330	1580	705	751	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.1	3.0	8.4	8.1	17.4	17.4
Incr Delay (d2), s/veh	0.4	0.3	1.1	1.9	2.4	2.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	2.1	1.7	1.3	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.5	3.3	9.5	10.0	19.9	20.3
LnGrp LOS	A	A	A	B	B	C
Approach Vol, veh/h		776	1076		272	
Approach Delay, s/veh		3.8	9.7		20.1	
Approach LOS		A	A		C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.0	23.5			32.5	10.2
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	5.1	18.4			28.0	18.0
Max Q Clear Time (g_c+I1), s	4.1	8.6			4.9	5.3
Green Ext Time (p_c), s	0.1	4.5			4.1	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	422	21	15	242	0	10	1	18	0	1	0
Future Volume (vph)	0	422	21	15	242	0	10	1	18	0	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	0		165	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993						0.916				
Flt Protected					0.997			0.983				
Satd. Flow (prot)	1863	1850	0	0	1857	1863	0	1677	0	0	1863	1863
Flt Permitted					0.997			0.983				
Satd. Flow (perm)	1863	1850	0	0	1857	1863	0	1677	0	0	1863	1863
Link Speed (mph)		55			55			30			30	
Link Distance (ft)		2822			2497			302			828	
Travel Time (s)		35.0			31.0			6.9			18.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	459	23	16	263	0	11	1	20	0	1	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	482	0	0	279	0	0	32	0	0	1	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		60	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	450	11	3	273	3	2
Future Volume (vph)	450	11	3	273	3	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.946	
Flt Protected					0.971	
Satd. Flow (prot)	1857	0	0	1863	1711	0
Flt Permitted					0.971	
Satd. Flow (perm)	1857	0	0	1863	1711	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	2497			1960	501	
Travel Time (s)	31.0			24.3	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	12	3	297	3	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	501	0	0	300	5	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	207	230	149	157	117	87
Future Volume (vph)	207	230	149	157	117	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.929				0.942	
Flt Protected				0.976	0.972	
Satd. Flow (prot)	1730	0	0	1818	1706	0
Flt Permitted				0.976	0.972	
Satd. Flow (perm)	1730	0	0	1818	1706	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	1960			302	1059	
Travel Time (s)	24.3			3.7	24.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	225	250	162	171	127	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	475	0	0	333	222	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.3%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	14	143	239	65	229	281
Future Volume (vph)	14	143	239	65	229	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270	0		400	380	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	1863	1583	1770	1863
Link Speed (mph)	30		55			55
Link Distance (ft)	1503		2954			1014
Travel Time (s)	34.2		36.6			12.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	155	260	71	249	305
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	155	260	71	249	305
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60		60	60	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	64	38	34	428	578	73
Future Volume (vph)	64	38	34	428	578	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	325	445			400
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583
Link Speed (mph)	30			55	55	
Link Distance (ft)	3339			1714	1134	
Travel Time (s)	75.9			21.2	14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	41	37	465	628	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	41	37	465	628	79
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 32.9%	ICU Level of Service A
Analysis Period (min) 15	

Appendix G
Grand Landings Phase 5 and 6 Traffic Study Report
Text

Grand Landings Phase 5 & 6
Palm Coast, Florida

Traffic Impact Analysis

Prepared for: Douglas Property and Development, Inc.

By: LTG, Inc.
May 2022

LTG Engineering & Planning

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with LTG, Inc., a corporation authorized to operate as an engineering business, EB 0009227, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Grand Landings Phase 5 & 6 – Traffic Impact Analysis
LOCATION: Palm Coast, Florida
CLIENT: Douglas Property and Development, Inc.
JOB #: 5516.02

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

Prepared by:
LTG, Inc.
1450 W. Granada Blvd, Suite 2
Ormond Beach, FL 32174
Certificate of Authorization 9227
386/257-2571

NELSON D. CAPARAS
LICENSE
No 79854
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Nelson Caparas

Digitally signed by Nelson Caparas
DN: CN=Nelson Caparas, dnQualifier=A01410D00000017ED5136600000B615F, O=LASSITER TRANSPORTATION GROUP INC, C=US
Date: 2022.05.09 17:00:17-04'00'

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

LTG, INC.
1450 W. GRANADA BLVD, SUITE 2
ORMOND BEACH, FL 32174
CERTIFICATE OF AUTHORIZATION 9227
NELSON D. CAPARAS, P.E. NO. 79854

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1

INTRODUCTION

LTG, Inc. (LTG) was retained by Douglas Property and Development, Inc. to prepare a Traffic Impact Analysis (TIA) for the proposed Grand Landings Phase 5 and Phase 6 development. The development is located on Citation Boulevard in the City of Palm Coast, Florida. Figure 1 shows the location of the project relative to the surrounding road network.

Build-out of the proposed development is anticipated by year 2027. Access for the proposed development will be provided from Citation Boulevard and Grand Landings Parkway. A preliminary site plan is attached as Appendix A.

Study Area

The following roadway segments and intersections are included in the analysis as determined during the transportation methodology. A copy of the approved methodology letter is attached as Appendix B.

Roadway Segments:

- Belle Terre Boulevard from Zebulas Trail to US 1
- Citation Boulevard from Belle Terre Boulevard to Laguna Forest Lane
- Seminole Woods Boulevard from SR 100 to US 1
- Sesame Boulevard South from Seminole Woods Boulevard to Sesame Boulevard North
- Sesame Boulevard North from Seminole Woods Boulevard to Sesame Boulevard South
- US 1 from Kankakee Trail to 0.40 miles south of Seminole Woods Boulevard

Intersections:

- Citation Boulevard at Belle Terre Boulevard
- Seminole Woods Boulevard at Grand Landings Parkway
- Seminole Woods Boulevard at Sesame Boulevard North
- Seminole Woods Boulevard at Sesame Boulevard South
- SR 100 at Belle Terre Boulevard
- SR 100 at Seminole Woods Boulevard
- US 1 at Seminole Woods Boulevard
- US 1 at Belle Terre Boulevard
- Citation Boulevard at Project Driveway (future conditions)

Study Procedures

Standard engineering and planning procedures were used to determine the impacts of this project. Reference data was obtained from the Florida Department of Transportation (FDOT), Flagler County Planning and Zoning Department, the Institute of Transportation Engineers (ITE), the River to Sea Transportation Planning Organization (R2CTPO), the City of Palm Coast, and the National Cooperative Highway Research Program (NCHRP).

Planned Roadway Improvements

Information on programmed or planned roadway improvements in the area of interest was obtained from FDOT, Flagler County, the City of Palm Coast, and previously approved projects. The Citation Boulevard Extension, which will connect Seminole Woods Boulevard to Belle Terre Boulevard, is anticipated to be completed by project build-out.

Grand Landings Phases 5 & 6	N NTS	**Site Location Map**		LTG Engineering & Planning
		Project No.: 5516.02	Figure: 1	1450 W. Granada Blvd., Suite 2, Ormond Beach, Florida 32174 Telephone: 386.257.2571 Fax: 386.257.6996

2

EXISTING ROADWAY ANALYSIS

Turning movement counts (TMCs) were conducted during the a.m. and p.m. peak-hours on February 2, 2022 and February 15, 2022 at the study area intersections. The raw count data is attached as Appendix C. The FDOT's Seasonal Factor (SF) for the week the TMCs were collected equates to 0.92. the FDOT SF was less than 1.0, a minimum SF of 1.0 was applied to the counts.

Unsignalized Intersection Analysis

The existing operating conditions at the unsignalized intersections were analyzed using *Highway Capacity Software 2010, Version 2022* (HCS). This software utilizes the procedures outlined in Chapter 20 of the Highway Capacity Manual (6th Edition) titled, "Two-Way Stop-Controlled Intersections". Table 1 shows the existing AM and PM peak-hour level of service (LOS) at the study area intersections. The HCS summary sheets are attached as Appendix D. As indicated, the unsignalized intersections are currently operating within acceptable LOS.

Table 1
Existing AM and PM Peak-Hour LOS - Unsignalized Intersection
Grand Landings Phase 5 & 6

Intersection	Adopted LOS	AM Peak-Hour			PM Peak-Hour		
		Critical Approach	Delay	LOS	Critical Approach	Delay	LOS
Citation Boulevard at Belle Terre Boulevard	E	WB	12.5	B	WB	12.6	B
Seminole Woods Boulevard at Grand Landings Parkway	E	EB	12.7	B	EB	13.5	B
Seminole Woods Boulevard at Sesame Boulevard North	E	WB	13.1	B	WB	14.3	B
Seminole Woods Boulevard at Sesame Boulevard South	E	NB	13.3	B	NB	16.4	C

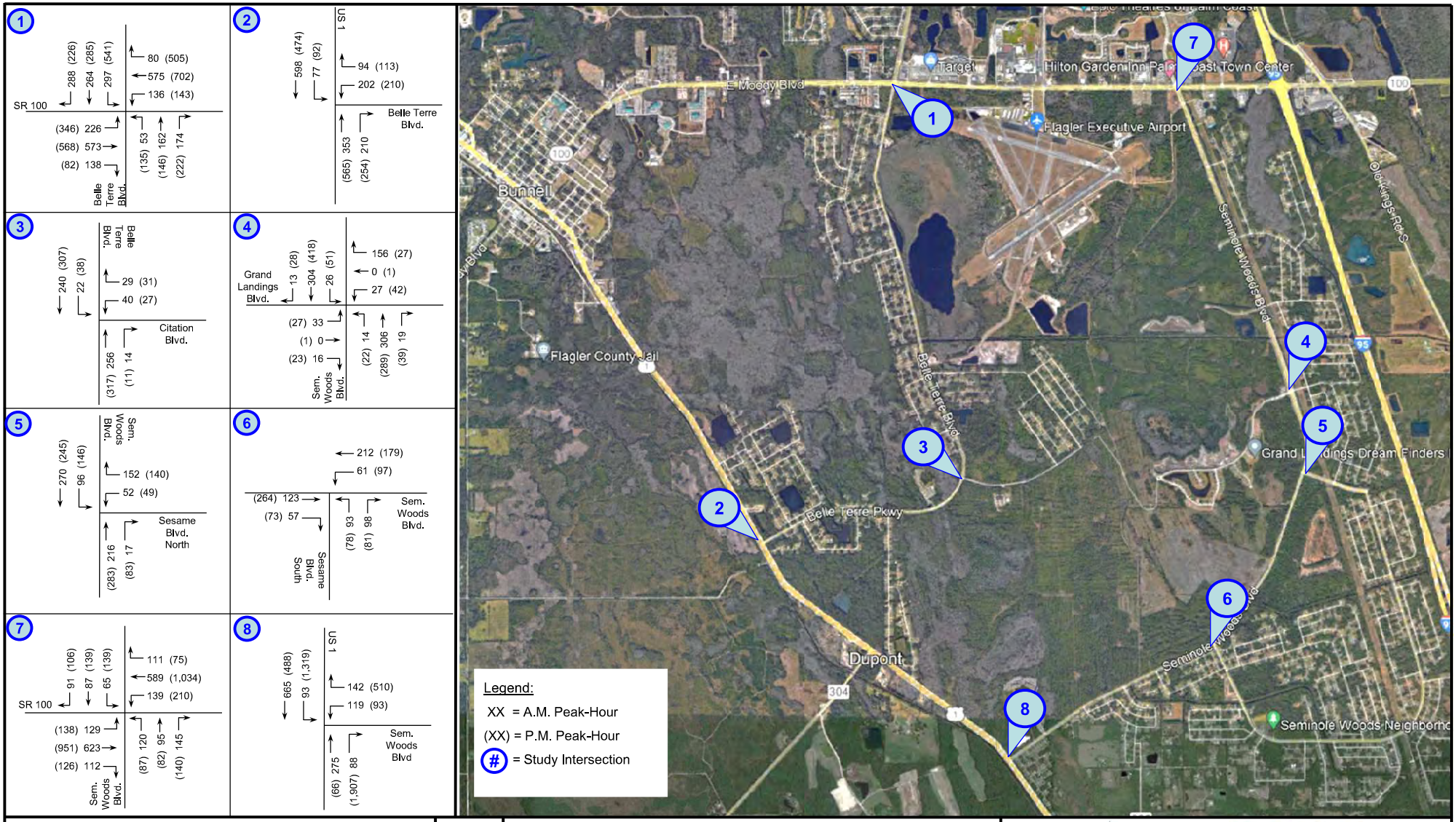
Signalized Intersection Analysis

The existing operating conditions at the signalized intersections were analyzed using HCS, which utilizes the procedures outlined in Chapter 19 of the *Highway Capacity Manual 6th Edition*, titled "Signalized Intersections". Table 2 shows the existing LOS and volume to capacity ratios (v/c) at the study area intersections. The signal timings are provided in Appendix E and the HCS summary sheets are provided in Appendix F.

Table 2
Existing AM and PM Peak-Hour LOS - Signalized Intersections
Grand Landings Phase 5 & 6

Intersection	Adopted LOS	AM Peak-Hour			PM Peak-Hour		
		Delay (sec.)	LOS	V/C greater than 1.0?	Delay (sec.)	LOS	V/C greater than 1.0?
SR 100 at Belle Terre Boulevard	D	50.3	D	No	53.0	D	No
US 1 at Belle Terre Boulevard	D	12.4	B	No	13.8	B	No
SR 100 at Seminole Woods Boulevard	D	37.0	C	No	41.5	D	No
US 1 at Seminole Woods Boulevard	D	11.6	B	No	13.6	B	No

As indicated in the table, the signalized study area intersections are currently operating within the adopted LOS.



Grand Landings
Phase 5 &6

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2022 Existing A.M. & P.M. Turning Movement Counts

Project Number: 5516.02

Figure 2

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Roadway Segment Analysis

Roadway level of service describes the operating condition determined from the number of vehicles passing over a given section of roadway during a specified time period. It is a qualitative measurement of several factors, which include speed, travel time, traffic interruptions, freedom to maneuver, driver comfort, convenience, safety and vehicle operating costs. Six service levels have been established as standards by which to gauge roadway performance, designated by the letters A through F. The LOS categories are defined as follows:

Level of Service A: *Free flow, individual users virtually unaffected by the presence of others*
Level of Service B: *Stable flow with a high degree of freedom to select operating conditions*
Level of Service C: *Flow remains stable, but with significant interactions with others*
Level of Service D: *High-density stable flow in which the freedom to maneuver is severely restricted*
Level of Service E: *This condition represents the capacity level of the road*
Level of Service F: *Forced flow in which the traffic exceeds the amount that can be served*

The 2018 Average Annual Daily Traffic (AADT) for the study roadway segments was obtained from FDOT Traffic Online. The existing levels of service for the study area road segments are shown in Table 3.

Table 3
Existing PM Peak-Hour LOS – Roadway Segments
Grand Landings Phase 5 & 6

Roadway	Segment		No. of Lanes	Adopted LOS	Peak-Hour Two-Way Capacity*	2019 AADT	K-Factor	Existing Peak-Hour Two-Way Volume	V/C Ratio	Existing Volume Exceed Adopted LOS?
	From:	To:								
Belle Terre Boulevard	SR 100	Zebulas Trail	2	D	1,120	7,200	0.090	648	0.58	No
	Zebulas Trail	Zuan Trail	2	D	1,120	6,900	0.090	621	0.55	No
	Zuan Trail	Citation Boulevard	2	D	1,120	6,200	0.090	558	0.50	No
	Citation Boulevard	US 1	2	D	1,120	4,500	0.090	405	0.36	No
Citation Boulevard	Belle Terre Boulevard	Laguna Forest Lane	2	D	931	600	0.090	54	0.06	No
US 1	Kankakee Trail	0.4 miles S of Seminole Woods Blvd	4	D	3,580	14,000	0.090	1,260	0.35	No
Seminole Woods Boulevard	SR 100	Ulaturn Place	4	D	3,222	10,900	0.090	981	0.30	No
	Ulaturn Place	Citation Parkway	4	D	3,222	7,900	0.090	711	0.22	No
	Citation Parkway	Sesame Boulevard	2	D	1,120	6,000	0.090	540	0.48	No
	Sesame Boulevard	US 1	2	D	1,120	5,600	0.090	504	0.45	No
Sesame Boulevard	Seminole Woods Boulevard	Terminus	2	D	1,120	1,500	0.090	135	0.12	No
Citation Parkway	Seminole Woods Boulevard	Sesame Boulevard	4	D	3,222	2,900	0.090	261	0.08	No

**Capacities obtained from 2020 FDOT Quality/Level of Service Tables: Table 4: Generalized Peak-Hour Two-Way Volumes for Florida's Urbanized Areas.*
***Existing AADT provided by the City of Palm Coast AADT Data*

As indicated in Table 3, all study area roadway segments currently operate within an acceptable level of service during the PM peak-hour.

3

2027 FUTURE TRAFFIC CONDITIONS

Traffic in the area is expected to grow due to local development approvals and population growth. The following section documents the methods used to project future 2027 background traffic.

Background Traffic

Traffic growth rates from historic City of Palm Coast's 2019 Average Annual Daily Traffic (AADT) counts from the past five years were determined for each study area roadway segment using FDOT's *Traffic Trends* software. Table 3 presents the average annual growth rates and the growth rate applied to the factored existing traffic volumes to project background traffic the year 2024. As agreed in the methodology phase of the analysis, the minimum growth rate to be used is two percent (2%). The FDOT *Traffic Trends* analysis worksheets are attached as Appendix G.

Table 4
Annual Growth Rates
Grand Landings Phase 5 & 6

Roadway	Segment		Average Annual Growth Rate	Applied Growth Rate
Belle Terre Boulevard	SR 100	Zebulas Trail	1.44%	2.00%
	Zebulas Trail	Zuan Trail	4.58%	4.58%
	Zuan Trail	Citation Boulevard	4.55%	4.55%
	Citation Boulevard	US 1	5.40%	5.40%
Citation Boulevard	Belle Terre Boulevard	Laguna Forest Lane	4.17%	4.17%
US 1	Kankakee Trail	0.4 miles S of Seminole Woods Blvd	1.25%	2.00%
Seminole Woods Boulevard	SR 100	Ulaturn Place	4.55%	4.55%
	Ulaturn Place	Sesame Boulevard North	1.52%	2.00%
	Sesame Boulevard North	Sesame Boulevard South	6.04%	6.04%
	Sesame Boulevard South	US 1	2.63%	2.63%
Sesame Boulevard South	Seminole Woods Boulevard	Sesame Boulevard North	8.33%	8.33%
Sesame Boulevard North	Seminole Woods Boulevard	Sesame Boulevard South	3.33%	3.33%

4

2027 BACKGROUND FUTURE ROADWAY ANALYSIS

The study area intersections and roadway segments were analyzed based on the future roadway conditions to determine potential impacts and to investigate mitigation requirements. The results of the analysis are presented below. Figures 3A-3B depict the total 2027 background volumes.

2027 Background – Unsignalized Intersection Analysis

The unsignalized intersections were analyzed to determine the operating conditions under 2027 background conditions and the results are presented in Table 5. The HCS summary sheets are included in Appendix H. As indicated, under background conditions, the unsignalized intersections are anticipated to operate within an acceptable LOS.

Table 5
2027 Background AM and PM Peak-Hour LOS - Unsignalized Intersection
Grand Landings Phase 5 & 6

Intersection	Adopted LOS	AM Peak-Hour			PM Peak-Hour		
		Critical Approach	Delay	LOS	Critical Approach	Delay	LOS
Citation Boulevard at Belle Terre Boulevard	E	WB	20.4	C	WB	26.0	D
Seminole Woods Boulevard at Grand Landings Parkway	E	WB	13.3	B	WB	14.4	B
Seminole Woods Boulevard at Sesame Boulevard North	E	WB	15.5	C	WB	17.9	C
Seminole Woods Boulevard at Sesame Boulevard South	E	NB	16.7	C	NB	23.5	C

2027 Background – Signalized Intersection Analysis

The signalized intersections were analyzed to determine the operating conditions under 2027 background conditions and the results are presented in Table 6. The HCS summary sheets are included in Appendix I.

Table 6
2027 Background AM and PM Peak-Hour LOS - Signalized Intersections
Grand Landings Phase 5 & 6

Intersection	Adopted LOS	AM Peak-Hour			PM Peak-Hour		
		Delay (sec.)	LOS	V/C greater than 1.0?	Delay (sec.)	LOS	V/C greater than 1.0?
SR 100 at Belle Terre Boulevard	D	53.1	D	No	64.7	E	Yes
US 1 at Belle Terre Boulevard	D	14.6	B	No	19.1	B	No
SR 100 at Seminole Woods Boulevard	D	39.1	D	No	45.4	D	No
US 1 at Seminole Woods Boulevard	D	12.2	B	No	16.0	B	No

As indicated in the table above, the signalized study area intersection of SR 100 at Belle Terre Boulevard is anticipated to operate outside the adopted LOS and with v/c ratios greater than 1.0. The intersection was analyzed with the following improvements:

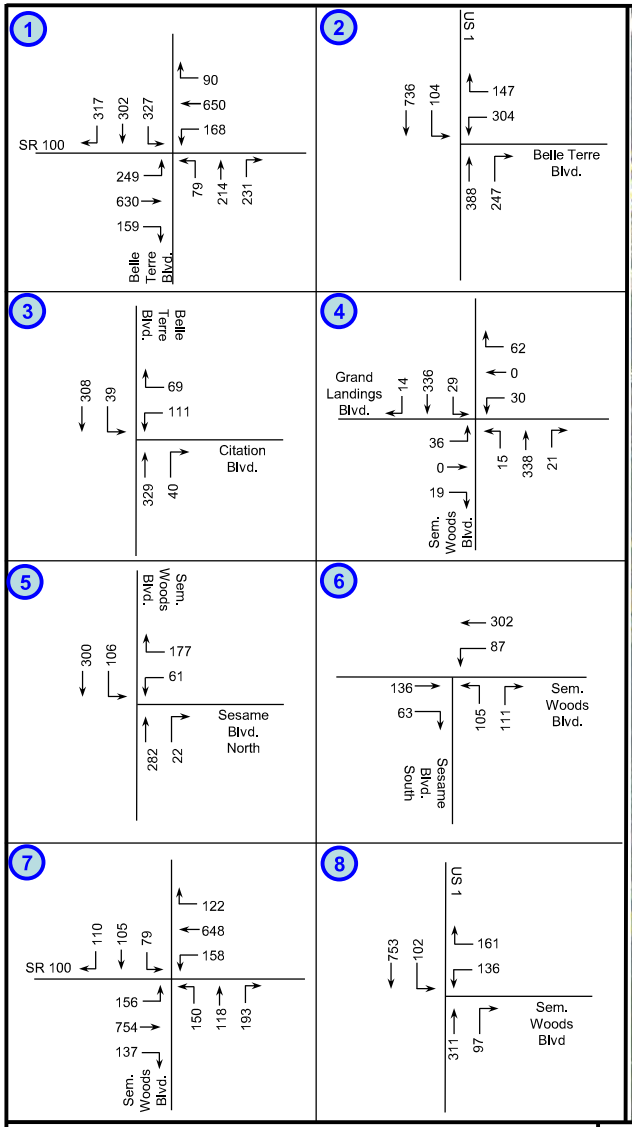
<u>SR 100 Belle Terre Boulevard:</u>

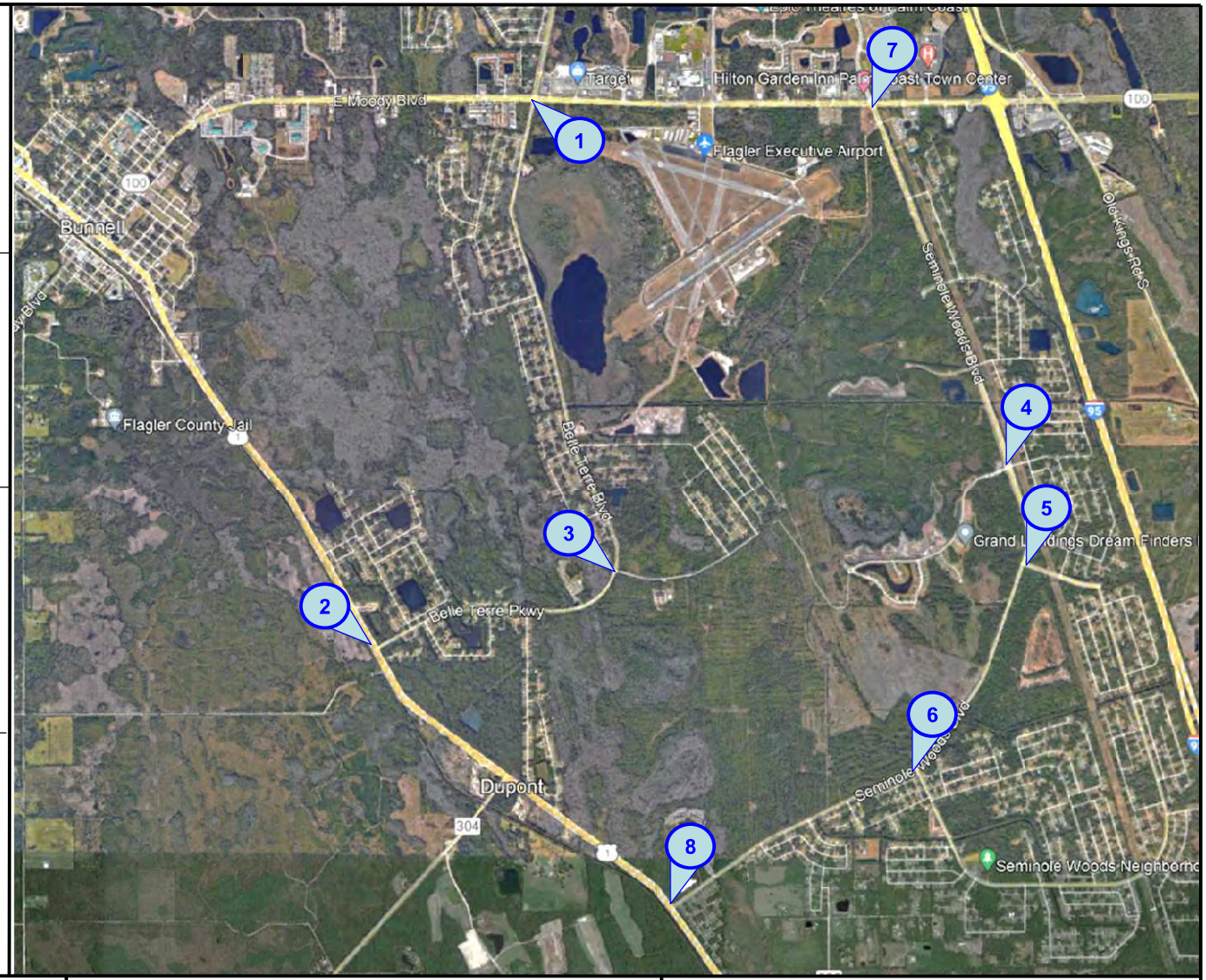
- Add westbound right-turn overlap phase
- Optimize signal timing splits

The analysis of the intersection with the improvements listed above are provided in Table 7. The HCS summary sheets are located in Appendix J.

Table 7
2027 Build-Out PM Peak-Hour LOS - Signalized Intersections Improved
Grand Landings Phase 5 & 6

Intersection	Adopted LOS	PM Peak-Hour		
		Delay (sec.)	LOS	V/C greater than 1.0?
SR 100 at Belle Terre Boulevard	D	53.2	D	No





Grand Landings
Phase 5 & 6

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2027 Background
A.M. Peak-Hour Volumes

Project Number: 5516.02

Figure 3A

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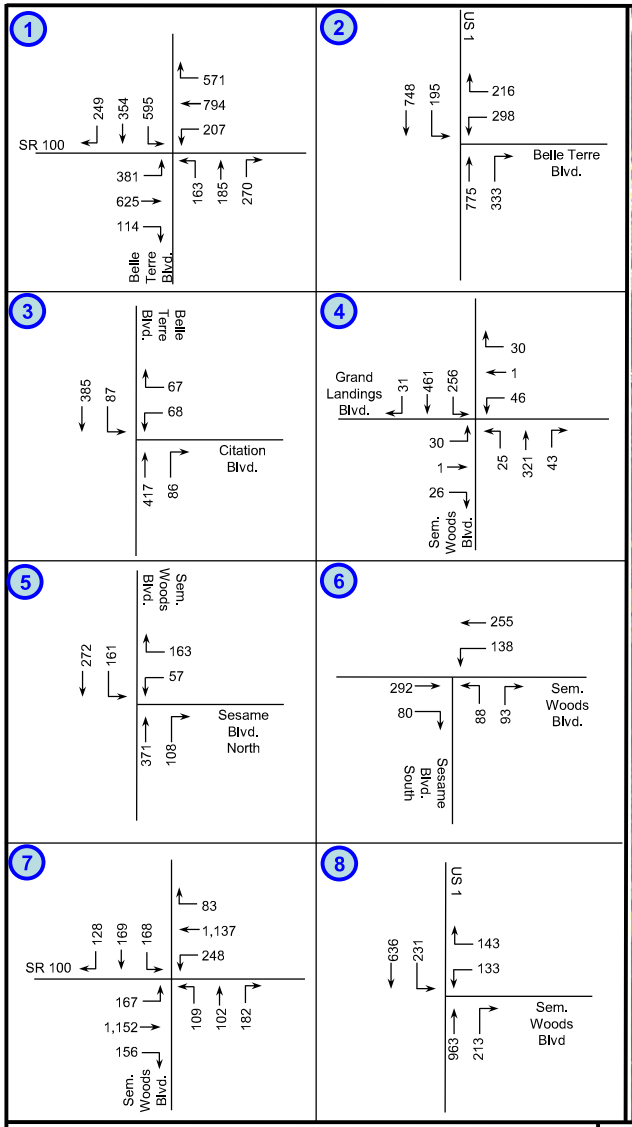

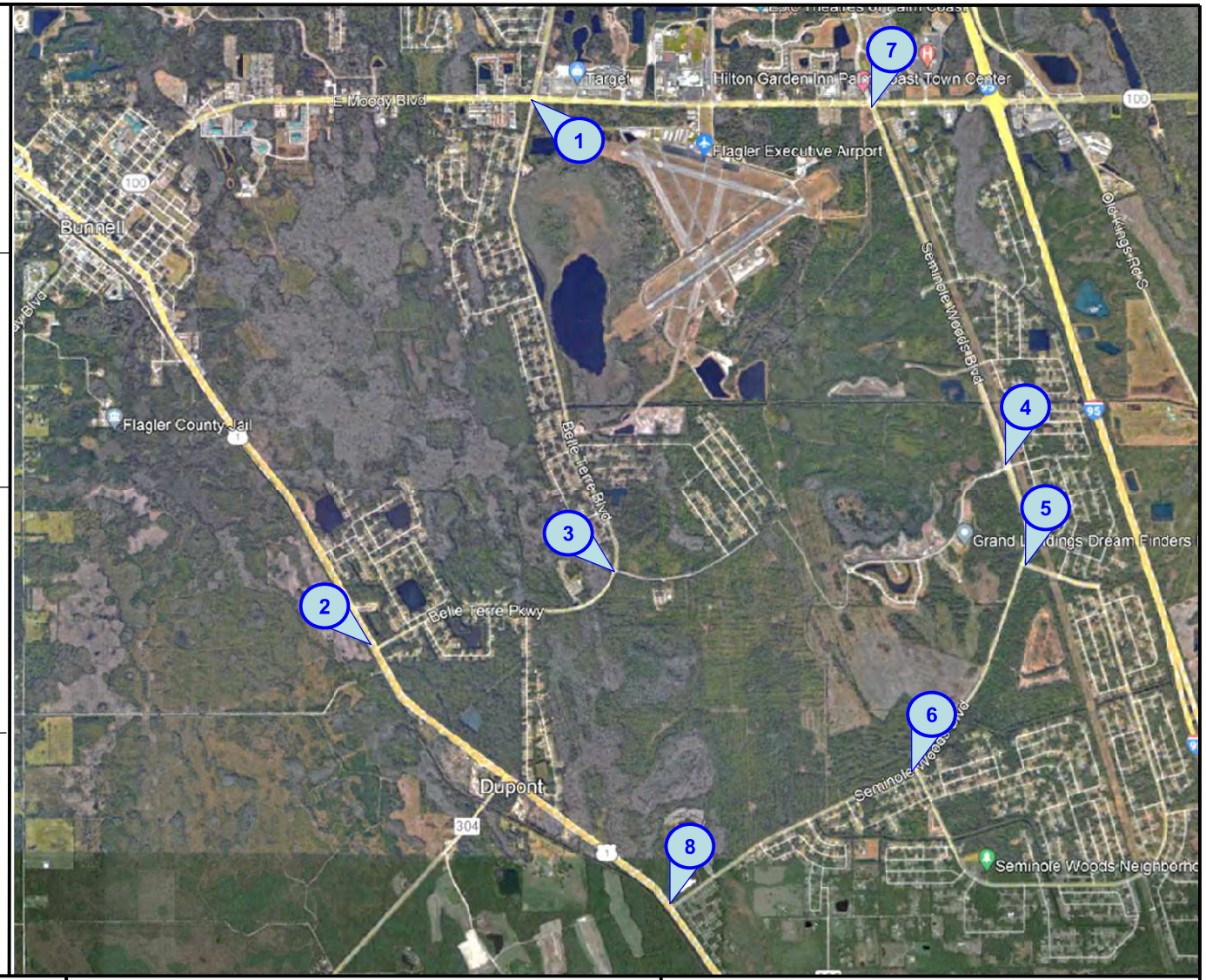

Grand Landings
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2027 Background
P.M. Peak-Hour Volumes

Project Number: 5516.02

Figure 3B

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2027 Background – Roadway Segment Analysis

The study area roadway segments were analyzed under 2027 background conditions to determine the anticipated two-way peak-hour LOS. The results are provided in Table 8. The two-way capacity of the roadway and the projected future 2027 background traffic volumes are included in Table 8. The future background traffic includes a growth factor and the vested trips on each segment. The Grand Landings Phase 4 trips were included as vested trips and distributed in following with the model trip distribution illustrated on Figure 4. As indicated, the study area roadway segments are anticipated to operate within the adopted LOS under background conditions.

Table 8
2027 Background PM Peak-Hour LOS - Roadway Segments
Grand Landings Phase 5 & 6

Roadway	Segment		No. of Lanes	Adopted LOS	Peak-Hour Two-Way Capacity	Existing PM Peak-Hour Two-Way Volume	Applied Growth (%)	Vested Traffic	2027 Background Traffic	Background PM Volume Exceed Adopted LOS?
Belle Terre Boulevard	SR 100	Zebulas Trail	2	D	1,120	648	2.00%	172	924	No
	Zebulas Trail	Zuan Trail	2	D	1,120	621	4.58%	160	1,009	No
	Zuan Trail	Citation Boulevard	2	D	1,120	558	4.55%	160	921	No
	Citation Boulevard	US 1	2	D	1,120	405	5.40%	177	757	No
Citation Boulevard	Belle Terre Boulevard	Laguna Forest Lane	2	D	931	54	4.17%	0	72	No
US 1	Kankakee Trail	0.4 miles S of Seminole Woods Blvd	4	D	3,580	1,260	2.00%	544	2,006	No
Seminole Woods Boulevard	SR 100	Ulaturn Place	4	D	3,222	981	4.55%	300	1,638	No
	Ulaturn Place	Citation Parkway	4	D	3,222	711	2.00%	267	1,092	No
	Citation Parkway	Sesame Boulevard	2	D	1,120	540	6.04%	231	1,032	No
	Sesame Boulevard	US 1	2	D	1,120	504	2.63%	234	844	No
Sesame Boulevard	Seminole Woods Boulevard	Terminus	2	D	1,120	135	8.33%	2	227	No
Citation Parkway	Seminole Woods Boulevard	Sesame Boulevard	4	D	3,222	261	3.33%	1	331	No

5

2027 BUILD-OUT ROADWAY ANALYSIS

The study area intersections and roadway segments were analyzed based on the roadway conditions at the time of project build-out to determine potential impacts of project-generated trips and investigate mitigation requirements.

Project Trip Generation

The daily, AM and PM peak-hour trip generation for the development was determined using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The daily, a.m. and p.m. peak-hour total project trip generation is provided in Table 9.

Table 9
Project Trip Generation
Grand Landings Phase 5 & 6

Time Period	Land Use	ITE LUC	Trip Rate Equation	Quantity (X)	Total Trips (T)	Percent Entering	Percent Exiting	Entering Trips	Exiting Trips
Daily	Single Family Residential	210	Ln(T) = 0.92 Ln(X) + 2.68	399 DU	3,604	50%	50%	1,802	1,802
A.M. Peak-Hour			Ln(T) = 0.91 Ln(X) + 0.12		262	26%	74%	68	194
P.M. Peak-Hour			Ln(T) = 0.94 Ln(X) + 0.27		365	63%	37%	230	135

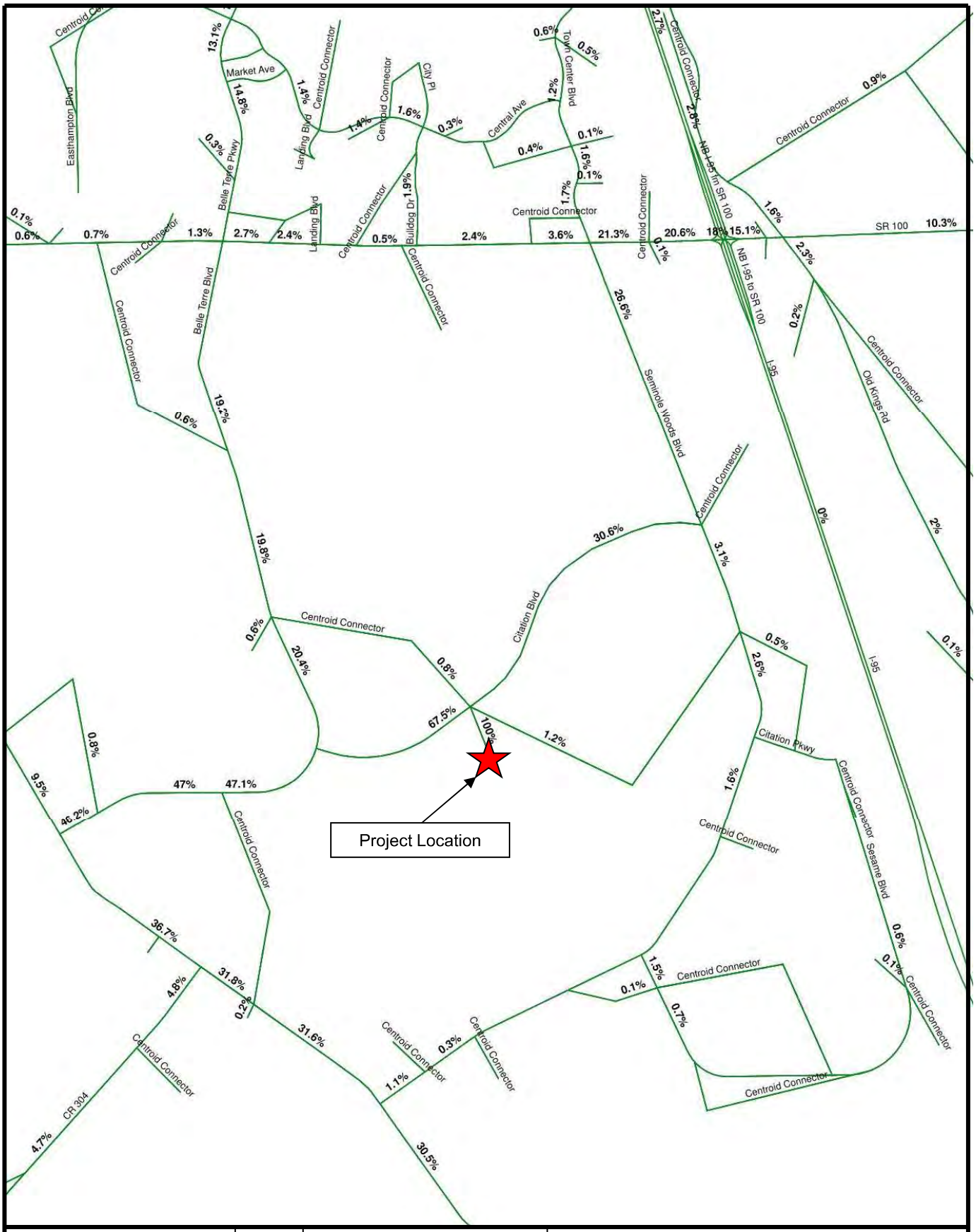
DU = Dwelling Units

Project Trip Distribution

In following with the City of Palm Coast, the development trip distribution will follow the percent volume distribution of the existing traffic on the adjacent roadways. The resulting project trip distribution is shown in Figure 4.

Project Trip Assignment

Using the trip distribution, the a.m. and p.m. peak-hour project trips were assigned to the study area roadway network. The 2024 background turning movements at the intersections were determined using the applied growth rates provided in Table 3. Figures 5A, and 5B graphically depict the total 2024 build-out traffic.



Grand Landings Phase 5 & 6	N NTS	**Project Trip Distribution**		LTG Engineering & Planning
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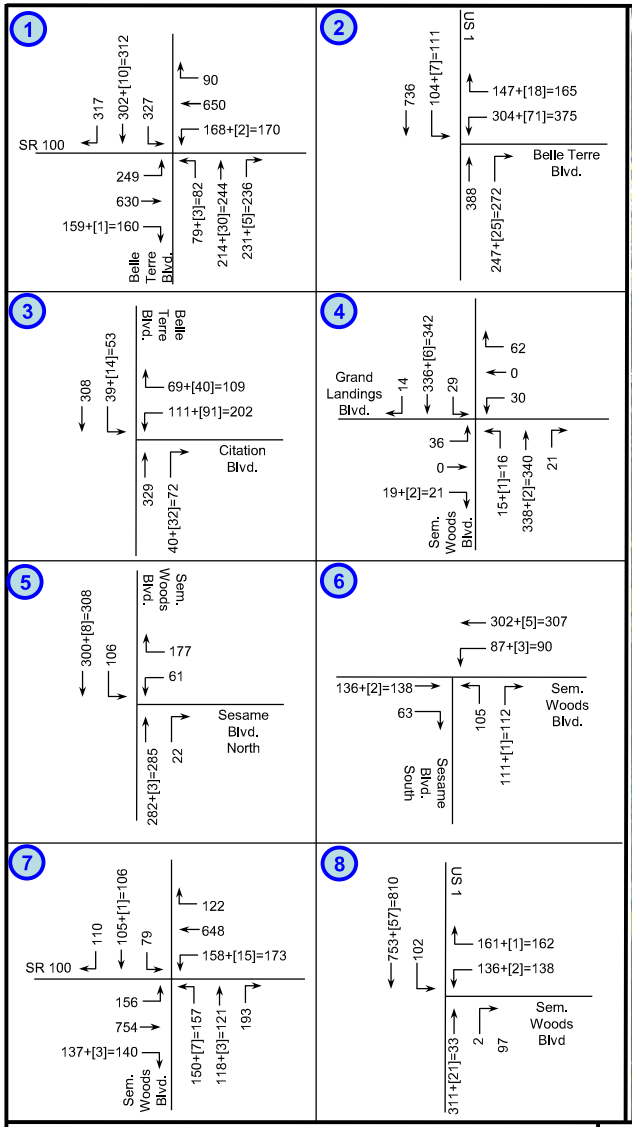

A.M. Peak-Hour		
Enter	Exit	Total
68	194	262

Grand Landings
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2027 Build-Out
A.M. Peak-Hour Volumes

Project Number: 5516.02

Figure 5A

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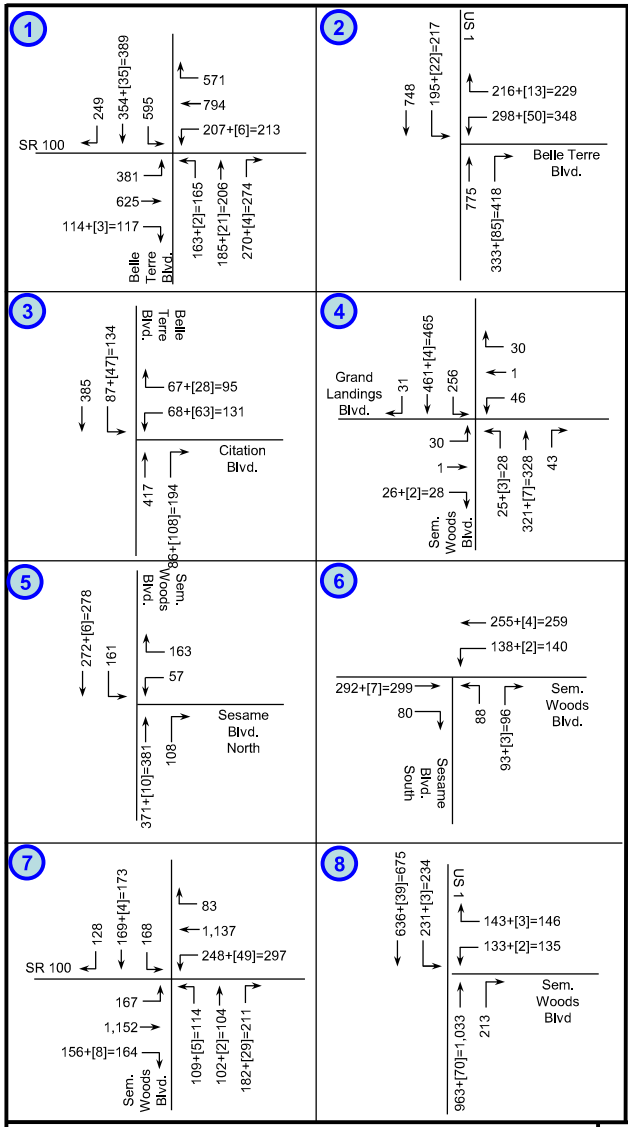

P.M. Peak-Hour		
Enter	Exit	Total
230	135	365

Grand Landings
Phase 5 & 6

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2027 Build-Out
P.M. Peak-Hour Volumes

Project Number: 5516.02

Figure 5B

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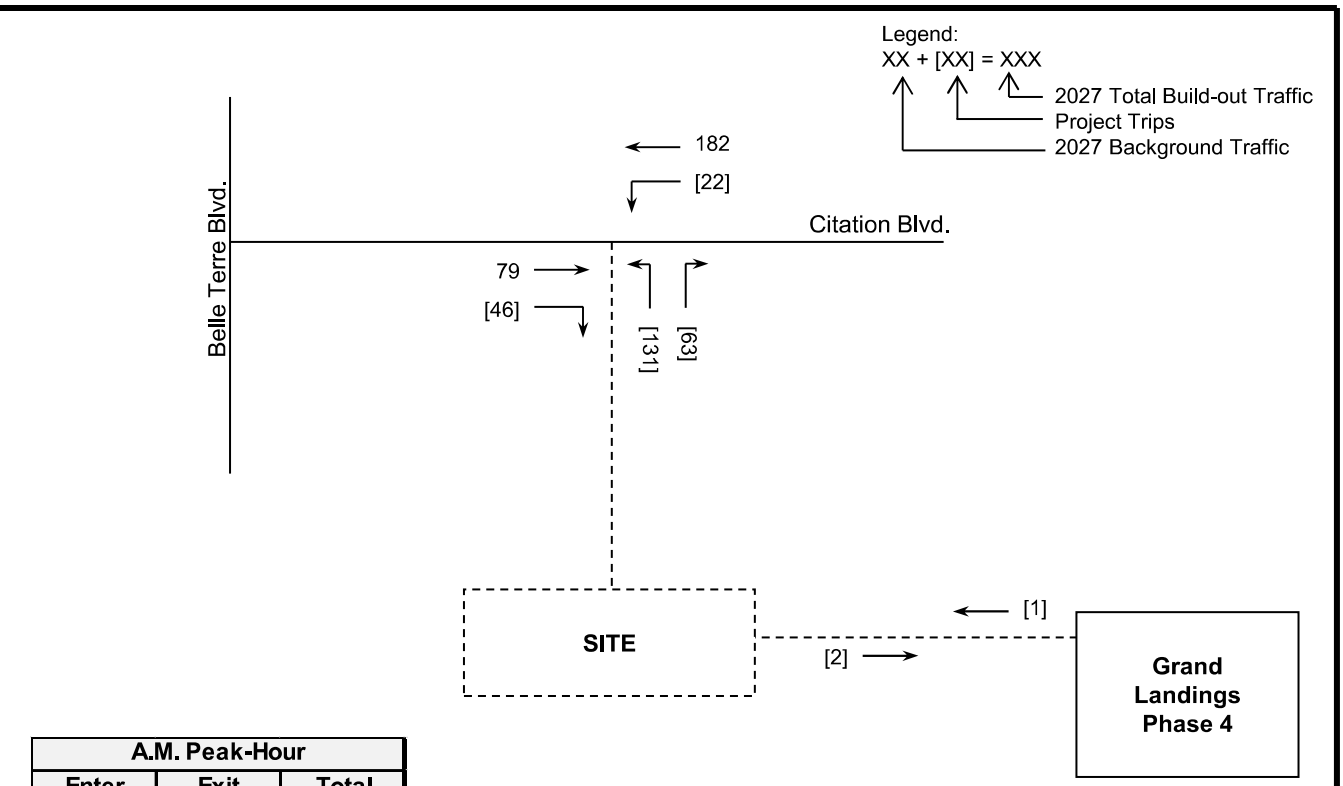
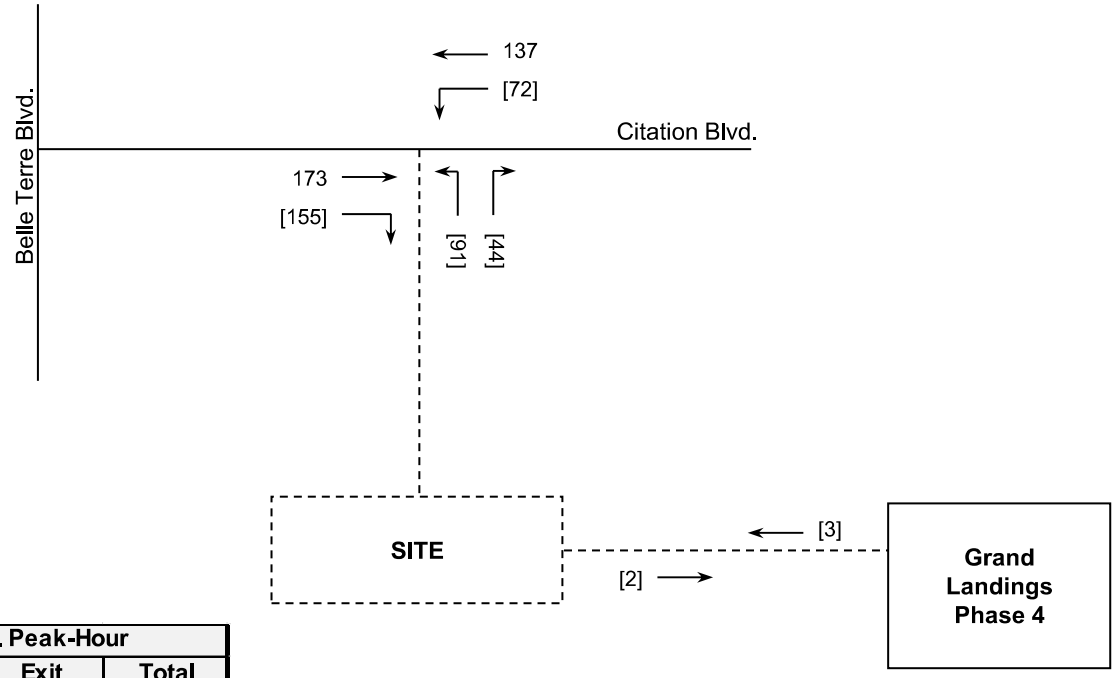


A.M. Peak-Hour		
Enter	Exit	Total
68	194	262



P.M. Peak-Hour		
Enter	Exit	Total
230	135	365

Grand Landings Phase 5 & 6

N

NTS

2027 Build-Out A.M. & P.M. Peak-Hour Volumes

Project No.: 5516.02 | Figure: 5C

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Unsignalized Intersections Analysis

The unsignalized intersections and project driveways were analyzed to determine the operating conditions under 2027 build-out conditions, and the results are presented in Table 10. The HCS summary sheets are included in Appendix K.

Table 10
2027 Build-Out A.M. and P.M. Peak-Hour LOS – Unsignalized Intersections
Grand Landings Phase 5 & 6

Intersection	Adopted LOS	A.M. Peak-Hour			P.M. Peak-Hour		
		Critical Approach	Delay (sec.)	LOS	Critical Approach	Delay (sec.)	LOS
Citation Boulevard at Belle Terre Boulevard	E	WB	49.9	E	WB	126.6	F
Seminole Woods Boulevard at Grand Landings Parkway	E	WB	13.4	B	WB	14.7	B
Seminole Woods Boulevard at Sesame Boulevard North	E	WB	15.7	C	WB	18.2	C
Seminole Woods Boulevard at Sesame Boulevard South	E	NB	17.0	C	NB	24.3	C
Citation Boulevard at Project Driveway	E	NB	11.7	B	NB	13.1	B

As indicated in Table 10, the unsignalized intersection of Citation Boulevard at Belle Terre Boulevard is anticipated to operate outside of the adopted LOS during the p.m. peak-hour. The intersection was re-evaluated with the following improvement:

Citation Boulevard at Belle Terre Boulevard

- Add exclusive westbound right-turn lane

Table 11 depicts the a.m. and p.m. peak-hour level of service under build-out conditions with an exclusive westbound right-turn lane. The HCS summary sheets are contained in Appendix L.

Table 11
2027 Build-Out P.M. Peak-Hour LOS – Intersection Improvements
Grand Landings Phase 5 & 6

Intersection	Adopted LOS	PM Peak-Hour		
		Critical Approach	Delay (sec.)	LOS
Citation Boulevard at Belle Terre Boulevard	E	WB	63.6	F

It is common that unsignalized intersections operate at higher levels of service with higher delay on the minor street approaches during peak-hour when conflicted with high major street volumes. While the westbound approach is expected to experience a delay of 80.0 seconds in the p.m. peak-hour, the v/c ratios are less than 1.0; therefore, this is considered acceptable.

Signalized Intersections Analysis

The signalized intersections were analyzed under 2027 build-out conditions to determine the operational LOS upon completion of the proposed project and to investigate potential mitigation requirements to be fulfilled by the applicant. The results of the analysis are provided in Table 12. The HCS summary sheets are included in Appendix M.

Table 12
2027 Build-Out AM and PM Peak-Hour LOS - Signalized Intersections
Grand Landings Phase 5 & 6

Intersection	Adopted LOS	A.M. Peak-Hour			P.M. Peak-Hour		
		Delay (sec.)	LOS	V/C greater than 1.0?	Delay (sec.)	LOS	V/C greater than 1.0?
SR 100 at Belle Terre Boulevard	D	53.6	D	No	53.9	D	No
US 1 at Belle Terre Boulevard	D	18.1	B	No	22.4	C	No
SR 100 at Seminole Woods Boulevard	D	40.2	D	No	48.1	D	No
US 1 at Seminole Woods Boulevard	D	12.2	B	No	16.4	B	No

As indicated in Table 12, all study area intersections are expected to operate within acceptable levels of service under 2027 build-out conditions.

Roadway Segment Analysis

The study area roadway segments were analyzed under 2027 build-out conditions based on two-way peak-hour capacity. The 2027 build-out volume includes background and project traffic along each segment. The results of the analysis are provided in Table 13. As indicated, the study area roadway segments are anticipated to operate within the adopted LOS.

Table 13
2027 Build-Out PM Peak-Hour LOS – Roadway Segments
Grand Landings Phase 5 & 6

Roadway	Segment		No. of Lanes	Adopted LOS	Peak-Hour Two-Way Capacity at Adopted LOS	Existing PM Peak-Hour Two-Way Volume	2027 Background Traffic	Project Distribution	Project Trips	2027 Build-Out Traffic	2027 Build-Out Traffic Exceed Adopted LOS?
Belle Terre Boulevard	SR 100	Zebulas Trail	2	D	1,120	648	924	19.2%	62	986	No
	Zebulas Trail	Zuan Trail	2	D	1,120	621	1,009	19.8%	64	1,073	No
	Zuan Trail	Citation Boulevard	2	D	1,120	558	921	20.4%	66	987	No
	Citation Boulevard	US 1	2	D	1,120	405	757	47.1%	153	910	No
Citation Boulevard	Belle Terre Boulevard	Laguna Forest Lane	2	D	931	54	72	67.5%	219	291	No
US 1	Kankakee Trail	0.4 miles S of Seminole Woods Blvd	4	D	3,580	1,260	2,006	36.7%	119	2,125	No
Seminole Woods Boulevard	SR 100	Ulaturn Place	4	D	3,222	981	1,638	26.6%	97	1,735	No
	Ulaturn Place	Citation Parkway	4	D	3,222	711	1,092	3.1%	11	1,103	No
	Citation Parkway	Sesame Boulevard	2	D	1,120	540	1,032	1.6%	6	1,038	No
	Sesame Boulevard	US 1	2	D	1,120	504	844	1.1%	4	848	No
Sesame Boulevard	Seminole Woods Boulevard	Terminus	2	D	1,120	135	227	1.5%	5	232	No
Citation Parkway	Seminole Woods Boulevard	Sesame Boulevard	4	D	3,222	261	331	0.5%	2	333	No

Site Access Analysis

Access to the development is proposed via a full access driveway to Citation Boulevard. The turn lane storage and taper lengths were determined using guidance provided by the November 2020 Palm Coast Turn Lane Technical Guidelines (Guidelines). Deceleration lanes will be provided at all intersections and/or access points adjacent to the proposed development as required by the Guidelines.

Per these guidelines with a posted limit of 30 miles per-hour (mph), AADT of 600 along Citation Boulevard, the anticipated left-turn volumes exceed the threshold and therefore meets the requirements for a left-turn lane at the project driveway. Based on the guidelines set for the storage length and the length of the turn lane taper, a Citation Boulevard westbound left-turn lane 75-feet in storage length plus a 75-foot taper will be required at the site driveway. A Citation Boulevard eastbound right turn lane 75-foot taper at the site driveway.

Alternative Mode Analysis

Per the R2CTPO TIA guidelines, present and programmed bike, pedestrian, and transit mobility options in the immediate area have been evaluated. At this time, there is no sidewalk connectivity near the proposed development.

Flagler County offers public transportation services, Flagler County Public Transportation (FCPT), that provides specialized transportation throughout Flagler County. FCTP is a demand response, shared ride, and door-to-door service with normal operating hours from 6 AM to 6 PM Monday through Friday, 8 AM to 6 PM on Saturdays, and restricted services on Sundays. However, same day services are not available. FCPT operates within the border of Flagler County with a few medical exceptions. FCPT offers services to Volusia County, St. Augustine, Jacksonville and Gainesville on select days and times. Riders are required to provide advanced notice, or reservations, to use the service. Although there are no fixed routes or schedules provided, the proposed site would be eligible to utilize this public transportation system.

6

CONCLUSION & RECOMMENDATIONS

This study was conducted to evaluate the impact the proposed Grand Landings Phase 5 & 6 development would have on the surrounding roadway network in the City of Palm Coast. The development will generate 262 AM peak-hour and 365 PM peak-hour trips. The results of the study are summarized in Table 15, below.

Table 14
Intersection Improvements to Restore Adopted Standards
Grand Landings Phase 5 & 6

Intersection	When Improvement Required	
	2027 Background	2027 Build-Out
SR 100 at Belle Terre Boulevard	• Add westbound overlap phase • Optimize signal timing splits	
Citation Boulevard at Belle Terre Boulevard		• Add exclusive westbound right-turn lane 155 feet in length including the 50-foot taper

Based on the Palm Coast Turn Lane Technical Guidelines (November 2020) guidelines for a 2-lane roadway with an AADT less than 5,000 and a speed limit of 30 mph, the anticipated volumes exceed the thresholds and therefore meets the requirements for a right-turn lane and a left-turn at the project driveway. Turn lanes will be required at the project driveway in following with the Turn Lane Guidelines. The Citation Boulevard westbound approach will require a westbound left turn lane with a 150-foot deceleration/storage length plus a 75-foot taper. The Citation Boulevard eastbound approach will require a 75-foot eastbound right turn lane taper and no deceleration lane.

If deemed necessary by the agencies, the recommended improvements eligible for proportionate share (PS), the estimated improvement cost, and PS calculations are to be negotiated once the TIA results are accepted by agencies. Based on the results of the TIA and identified improvements, the planned Grand Landings Phase 5 and 6 development is recommended for approval.

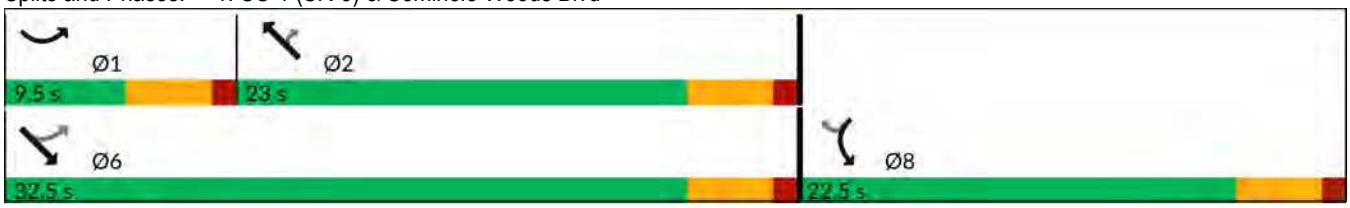
Appendix H
Synchro Printouts - Background Traffic Conditions

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	140	898	455	89	341	203
Future Volume (vph)	140	898	455	89	341	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			330	0	440
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.369				0.950	
Satd. Flow (perm)	687	3539	3539	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				97		221
Link Speed (mph)		30	30		30	
Link Distance (ft)		1284	3295		2822	
Travel Time (s)		29.2	74.9		64.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	976	495	97	371	221
Shared Lane Traffic (%)						
Lane Group Flow (vph)	152	976	495	97	371	221
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.5	32.5	23.0	23.0	22.5	22.5
Total Split (%)	17.3%	59.1%	41.8%	41.8%	40.9%	40.9%
Maximum Green (s)	5.0	28.0	18.5	18.5	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	Max	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	28.1	28.1	20.7	20.7	14.8	14.8
Actuated g/C Ratio	0.54	0.54	0.40	0.40	0.28	0.28
v/c Ratio	0.32	0.51	0.35	0.14	0.74	0.36
Control Delay (s/veh)	8.8	9.3	13.5	4.2	26.2	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.8	9.3	13.5	4.2	26.2	4.4
LOS	A	A	B	A	C	A
Approach Delay (s/veh)		9.2	12.0		18.1	
Approach LOS		A	B		B	

Intersection Summary	
Area Type: Other	
Cycle Length: 55	
Actuated Cycle Length: 52	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay (s/veh): 12.2	Intersection LOS: B
Intersection Capacity Utilization 51.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: US-1 (SR-5) & Seminole Woods Blvd



Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	140	898	455	89	341	203
Future Volume (veh/h)	140	898	455	89	341	203
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	152	976	495	97	371	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	557	1994	1361	607	460	410
Arrive On Green	0.09	0.56	0.38	0.38	0.26	0.26
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	152	976	495	97	371	221
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	2.3	8.3	5.0	2.0	9.7	6.0
Cycle Q Clear(g_c), s	2.3	8.3	5.0	2.0	9.7	6.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	557	1994	1361	607	460	410
V/C Ratio(X)	0.27	0.49	0.36	0.16	0.81	0.54
Avail Cap(c_a), veh/h	578	1994	1361	607	643	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.1	6.6	11.0	10.1	17.3	15.9
Incr Delay (d2), s/veh	0.3	0.9	0.8	0.6	5.2	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.4	1.8	0.7	4.1	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.4	7.5	11.8	10.7	22.5	17.0
LnGrp LOS	A	A	B	B	C	B
Approach Vol, veh/h		1128	592		592	
Approach Delay, s/veh		7.5	11.6		20.5	
Approach LOS		A	B		C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.9	23.6				32.5	17.4
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.0	18.5				28.0	18.0
Max Q Clear Time (g_c+I1), s	4.3	7.0				10.3	11.7
Green Ext Time (p_c), s	0.0	2.8				6.7	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	11.9
HCM 7th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	252	9	4	516	0	26	0	15	0	0	1
Future Volume (vph)	0	252	9	4	516	0	26	0	15	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	0		165	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995						0.951				0.850
Flt Protected								0.969				
Satd. Flow (prot)	1863	1853	0	0	1863	1863	0	1717	0	0	1863	1583
Flt Permitted								0.969				
Satd. Flow (perm)	1863	1853	0	0	1863	1863	0	1717	0	0	1863	1583
Link Speed (mph)		55			55			30			30	
Link Distance (ft)		2822			2497			302			828	
Travel Time (s)		35.0			31.0			6.9			18.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	274	10	4	561	0	28	0	16	0	0	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	0	0	565	0	0	44	0	0	0	1
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		60	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	289	6	4	466	16	8
Future Volume (vph)	289	6	4	466	16	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.953	
Flt Protected					0.968	
Satd. Flow (prot)	1857	0	0	1863	1718	0
Flt Permitted					0.968	
Satd. Flow (perm)	1857	0	0	1863	1718	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	2497			1960	501	
Travel Time (s)	31.0			24.3	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	314	7	4	507	17	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	321	0	0	511	26	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	232	73	55	177	232	148
Future Volume (vph)	232	73	55	177	232	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.947	
Flt Protected				0.988	0.970	
Satd. Flow (prot)	1803	0	0	1840	1711	0
Flt Permitted				0.988	0.970	
Satd. Flow (perm)	1803	0	0	1840	1711	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	1960			302	1059	
Travel Time (s)	24.3			3.7	24.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	252	79	60	192	252	161
Shared Lane Traffic (%)						
Lane Group Flow (vph)	331	0	0	252	413	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.9%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	235	399	13	89	197
Future Volume (vph)	70	235	399	13	89	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270	0		400	380	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	1863	1583	1770	1863
Link Speed (mph)	30		55			55
Link Distance (ft)	1503		2954			1014
Travel Time (s)	34.2		36.6			12.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	255	434	14	97	214
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	255	434	14	97	214
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60		60	60	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	151	30	30	818	303	87
Future Volume (vph)	151	30	30	818	303	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	325	445			400
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583
Link Speed (mph)	30			55	55	
Link Distance (ft)	3339			1714	1134	
Travel Time (s)	75.9			21.2	14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	33	33	889	329	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	164	33	33	889	329	95
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

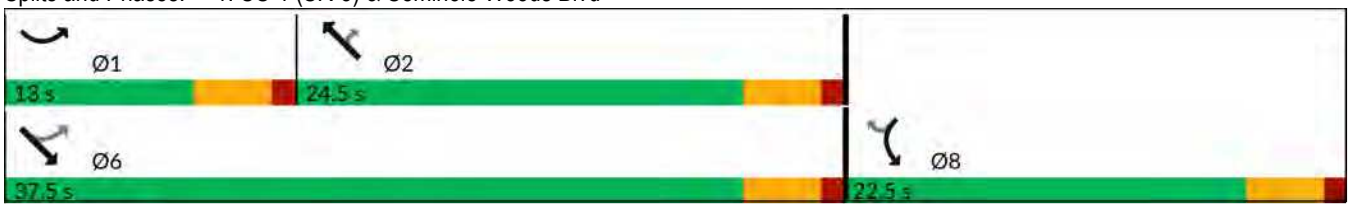
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 37.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	226	666	804	312	173	156
Future Volume (vph)	226	666	804	312	173	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			330	0	440
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.182				0.950	
Satd. Flow (perm)	339	3539	3539	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				339		170
Link Speed (mph)		30	30		30	
Link Distance (ft)		1284	3295		2822	
Travel Time (s)		29.2	74.9		64.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	246	724	874	339	188	170
Shared Lane Traffic (%)						
Lane Group Flow (vph)	246	724	874	339	188	170
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	13.0	37.5	24.5	24.5	22.5	22.5
Total Split (%)	21.7%	62.5%	40.8%	40.8%	37.5%	37.5%
Maximum Green (s)	8.5	33.0	20.0	20.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	Max	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	33.1	33.1	20.6	20.6	10.8	10.8
Actuated g/C Ratio	0.63	0.63	0.39	0.39	0.20	0.20
v/c Ratio	0.58	0.33	0.63	0.41	0.52	0.37
Control Delay (s/veh)	11.7	5.6	16.4	3.7	24.1	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.7	5.6	16.4	3.7	24.1	6.1
LOS	B	A	B	A	C	A
Approach Delay (s/veh)		7.2	12.9		15.5	
Approach LOS		A	B		B	

Intersection Summary	
Area Type: Other	
Cycle Length: 60	
Actuated Cycle Length: 52.9	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: US-1 (SR-5) & Seminole Woods Blvd



Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	226	666	804	312	173	156
Future Volume (veh/h)	226	666	804	312	173	156
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	246	724	874	339	188	170
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	516	2352	1664	742	281	250
Arrive On Green	0.10	0.66	0.47	0.47	0.16	0.16
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	246	724	874	339	188	170
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	3.1	4.3	8.6	7.2	5.0	5.0
Cycle Q Clear(g_c), s	3.1	4.3	8.6	7.2	5.0	5.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	516	2352	1664	742	281	250
V/C Ratio(X)	0.48	0.31	0.53	0.46	0.67	0.68
Avail Cap(c_a), veh/h	635	2352	1664	742	643	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.2	3.6	9.3	9.0	19.8	19.8
Incr Delay (d2), s/veh	0.7	0.3	1.2	2.0	2.8	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.9	2.9	2.4	2.1	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.9	3.9	10.5	11.0	22.5	23.1
LnGrp LOS	A	A	B	B	C	C
Approach Vol, veh/h		970	1213		358	
Approach Delay, s/veh		4.7	10.7		22.8	
Approach LOS		A	B		C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.7	27.8			37.5	12.4
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	8.5	20.0			33.0	18.0
Max Q Clear Time (g_c+I1), s	5.1	10.6			6.3	7.0
Green Ext Time (p_c), s	0.2	4.9			5.5	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	10.1
HCM 7th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	554	23	16	318	0	10	1	19	0	1	0
Future Volume (vph)	0	554	23	16	318	0	10	1	19	0	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	360		0	0		165	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994						0.914				
Flt Protected					0.998			0.984				
Satd. Flow (prot)	1863	1852	0	0	1859	1863	0	1675	0	0	1863	1863
Flt Permitted					0.998			0.984				
Satd. Flow (perm)	1863	1852	0	0	1859	1863	0	1675	0	0	1863	1863
Link Speed (mph)		55			55			30			30	
Link Distance (ft)		2822			2497			302			828	
Travel Time (s)		35.0			31.0			6.9			18.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	602	25	17	346	0	11	1	21	0	1	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	627	0	0	363	0	0	33	0	0	1	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		60	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 45.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	590	12	3	358	3	2
Future Volume (vph)	590	12	3	358	3	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.946	
Flt Protected					0.971	
Satd. Flow (prot)	1857	0	0	1863	1711	0
Flt Permitted					0.971	
Satd. Flow (perm)	1857	0	0	1863	1711	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	2497			1960	501	
Travel Time (s)	31.0			24.3	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	641	13	3	389	3	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	654	0	0	392	5	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	272	247	160	209	125	93
Future Volume (vph)	272	247	160	209	125	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.936				0.942	
Flt Protected				0.979	0.972	
Satd. Flow (prot)	1744	0	0	1824	1706	0
Flt Permitted				0.979	0.972	
Satd. Flow (perm)	1744	0	0	1824	1706	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	1960			302	1059	
Travel Time (s)	24.3			3.7	24.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	296	268	174	227	136	101
Shared Lane Traffic (%)						
Lane Group Flow (vph)	564	0	0	401	237	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 71.9%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	153	319	70	245	375
Future Volume (vph)	15	153	319	70	245	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270	0		400	380	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	1863	1583	1770	1863
Link Speed (mph)	30		55			55
Link Distance (ft)	1503		2954			1014
Travel Time (s)	34.2		36.6			12.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	166	347	76	266	408
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	166	347	76	266	408
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60		60	60	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	109	45	52	571	727	157
Future Volume (vph)	109	45	52	571	727	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	325	445			400
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583
Link Speed (mph)	30			55	55	
Link Distance (ft)	3339			1714	1134	
Travel Time (s)	75.9			21.2	14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	49	57	621	790	171
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	49	57	621	790	171
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 39.5%	ICU Level of Service A
Analysis Period (min) 15	

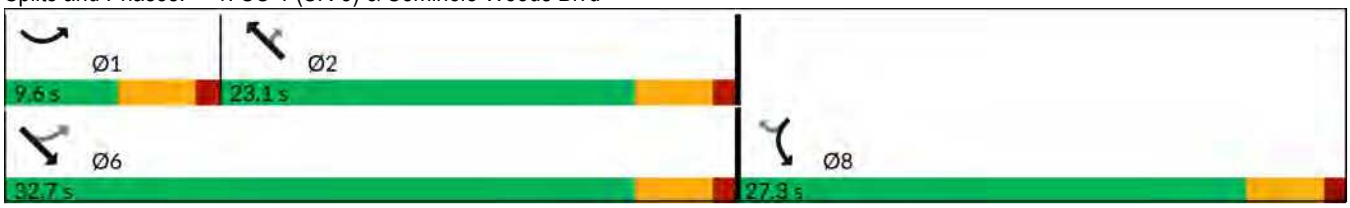
Appendix I
Synchro Printouts - Total Traffic Conditions

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	155	898	455	143	492	245
Future Volume (vph)	155	898	455	143	492	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			330	0	440
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.352				0.950	
Satd. Flow (perm)	656	3539	3539	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				155		266
Link Speed (mph)		30	30		30	
Link Distance (ft)		1284	3295		2822	
Travel Time (s)		29.2	74.9		64.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	168	976	495	155	535	266
Shared Lane Traffic (%)						
Lane Group Flow (vph)	168	976	495	155	535	266
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.6	32.7	23.1	23.1	27.3	27.3
Total Split (%)	16.0%	54.5%	38.5%	38.5%	45.5%	45.5%
Maximum Green (s)	5.1	28.2	18.6	18.6	22.8	22.8
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	Max	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	28.3	28.3	20.8	20.8	20.5	20.5
Actuated g/C Ratio	0.49	0.49	0.36	0.36	0.35	0.35
v/c Ratio	0.40	0.56	0.39	0.23	0.85	0.36
Control Delay (s/veh)	12.2	12.5	16.5	4.3	32.7	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.2	12.5	16.5	4.3	32.7	3.6
LOS	B	B	B	A	C	A
Approach Delay (s/veh)		12.4	13.6		23.1	
Approach LOS		B	B		C	

Intersection Summary	
Area Type: Other	
Cycle Length: 60	
Actuated Cycle Length: 57.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 16.0	Intersection LOS: B
Intersection Capacity Utilization 59.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: US-1 (SR-5) & Seminole Woods Blvd



Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	155	898	455	143	492	245
Future Volume (veh/h)	155	898	455	143	492	245
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	976	495	155	535	266
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	483	1772	1185	528	610	543
Arrive On Green	0.09	0.50	0.33	0.33	0.34	0.34
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	168	976	495	155	535	266
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	3.2	10.7	6.1	4.1	16.0	7.5
Cycle Q Clear(g_c), s	3.2	10.7	6.1	4.1	16.0	7.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	483	1772	1185	528	610	543
V/C Ratio(X)	0.35	0.55	0.42	0.29	0.88	0.49
Avail Cap(c_a), veh/h	491	1772	1185	528	718	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	9.8	14.6	13.9	17.5	14.7
Incr Delay (d2), s/veh	0.4	1.2	1.1	1.4	10.6	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.7	2.4	1.5	7.5	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.4	11.0	15.7	15.3	28.1	15.4
LnGrp LOS	B	B	B	B	C	B
Approach Vol, veh/h		1144	650		801	
Approach Delay, s/veh		11.0	15.6		23.9	
Approach LOS		B	B		C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.3	23.4				32.7	23.9
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	5.1	18.6				28.2	22.8
Max Q Clear Time (g_c+I1), s	5.2	8.1				12.7	18.0
Green Ext Time (p_c), s	0.0	2.8				6.3	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	16.1
HCM 7th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	276	8	4	582	20	26	0	15	56	0	130
Future Volume (vph)	46	276	8	4	582	20	26	0	15	56	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.850		0.951				0.850
Flt Protected	0.950							0.969			0.950	
Satd. Flow (prot)	1770	1855	0	0	1863	1583	0	1717	0	0	1770	1583
Flt Permitted	0.950							0.969			0.950	
Satd. Flow (perm)	1770	1855	0	0	1863	1583	0	1717	0	0	1770	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2822			2497			302			554	
Travel Time (s)		64.1			56.8			6.9			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	300	9	4	633	22	28	0	16	61	0	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	309	0	0	637	22	0	44	0	0	61	141
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60		9	15		60	15		60	60		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	345	6	4	486	10	16	0	9	29	0	66
Future Volume (vph)	24	345	6	4	486	10	16	0	9	29	0	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.997			0.950			0.907	
Flt Protected	0.950							0.969			0.985	
Satd. Flow (prot)	1770	1857	0	0	1857	0	0	1715	0	0	1664	0
Flt Permitted	0.950							0.969			0.985	
Satd. Flow (perm)	1770	1857	0	0	1857	0	0	1715	0	0	1664	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2497			1960			501			428	
Travel Time (s)		56.8			44.5			11.4			9.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	375	7	4	528	11	17	0	10	32	0	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	382	0	0	543	0	0	27	0	0	104	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60		60	60		60	60		60	60		60
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	309	80	55	204	235	148
Future Volume (vph)	309	80	55	204	235	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.972				0.948	
Flt Protected				0.989	0.970	
Satd. Flow (prot)	1811	0	0	1842	1713	0
Flt Permitted				0.989	0.970	
Satd. Flow (perm)	1811	0	0	1842	1713	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1960			302	1059	
Travel Time (s)	44.5			6.9	24.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	336	87	60	222	255	161
Shared Lane Traffic (%)						
Lane Group Flow (vph)	423	0	0	282	416	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.0%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	71	235	473	16	89	223
Future Volume (vph)	71	235	473	16	89	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270	0		400	380	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	1863	1583	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	1503		2954			1014
Travel Time (s)	34.2		67.1			23.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	77	255	514	17	97	242
Shared Lane Traffic (%)						
Lane Group Flow (vph)	77	255	514	17	97	242
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60		60	60	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	151	30	30	892	377	87
Future Volume (vph)	151	30	30	892	377	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	325	445			400
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583
Link Speed (mph)	30			55	55	
Link Distance (ft)	3339			1714	1134	
Travel Time (s)	75.9			21.2	14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	33	33	970	410	95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	164	33	33	970	410	95
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

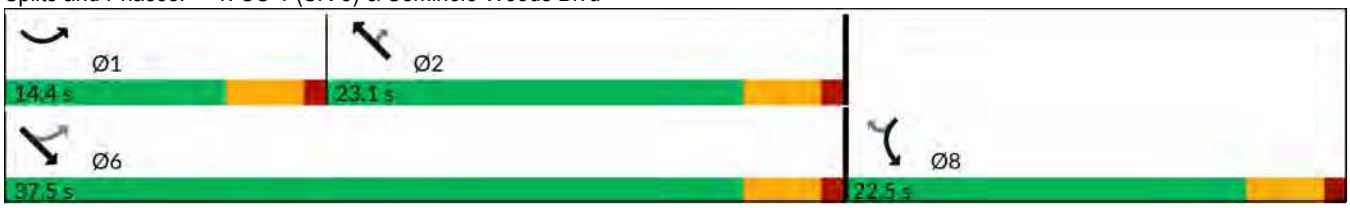
Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 39.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	270	666	804	473	271	183
Future Volume (vph)	270	666	804	473	271	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	330			330	0	440
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Flt Permitted	0.167				0.950	
Satd. Flow (perm)	311	3539	3539	1583	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				514		199
Link Speed (mph)		30	30		30	
Link Distance (ft)		1284	3295		2822	
Travel Time (s)		29.2	74.9		64.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	724	874	514	295	199
Shared Lane Traffic (%)						
Lane Group Flow (vph)	293	724	874	514	295	199
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Detector Phase	1	6	2	2	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	14.4	37.5	23.1	23.1	22.5	22.5
Total Split (%)	24.0%	62.5%	38.5%	38.5%	37.5%	37.5%
Maximum Green (s)	9.9	33.0	18.6	18.6	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	Max	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	33.1	33.1	19.5	19.5	13.9	13.9
Actuated g/C Ratio	0.59	0.59	0.35	0.35	0.25	0.25
v/c Ratio	0.70	0.35	0.71	0.58	0.67	0.37
Control Delay (s/veh)	19.4	7.0	21.2	4.9	27.2	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.4	7.0	21.2	4.9	27.2	5.2
LOS	B	A	C	A	C	A
Approach Delay (s/veh)		10.6	15.2		18.3	
Approach LOS		B	B		B	

Intersection Summary	
Area Type: Other	
Cycle Length: 60	
Actuated Cycle Length: 56	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay (s/veh): 14.1	Intersection LOS: B
Intersection Capacity Utilization 63.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: US-1 (SR-5) & Seminole Woods Blvd



Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	270	666	804	473	271	183
Future Volume (veh/h)	270	666	804	473	271	183
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	293	724	874	514	295	199
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	495	2197	1450	647	380	338
Arrive On Green	0.13	0.62	0.41	0.41	0.21	0.21
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	293	724	874	514	295	199
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	4.5	5.2	10.3	15.2	8.3	6.0
Cycle Q Clear(g_c), s	4.5	5.2	10.3	15.2	8.3	6.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	495	2197	1450	647	380	338
V/C Ratio(X)	0.59	0.33	0.60	0.79	0.78	0.59
Avail Cap(c_a), veh/h	602	2197	1450	647	601	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	4.9	12.4	13.8	19.8	18.9
Incr Delay (d2), s/veh	1.1	0.4	1.9	9.7	3.4	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.4	3.8	6.2	3.5	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.6	5.3	14.3	23.6	23.2	20.5
LnGrp LOS	A	A	B	C	C	C
Approach Vol, veh/h		1017	1388		494	
Approach Delay, s/veh		6.5	17.7		22.1	
Approach LOS		A	B		C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	11.2	26.3				37.5	15.9
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	9.9	18.6				33.0	18.0
Max Q Clear Time (g_c+I1), s	6.5	17.2				7.2	10.3
Green Ext Time (p_c), s	0.3	1.1				5.4	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	14.6
HCM 7th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	624	23	16	361	59	11	1	19	36	1	84
Future Volume (vph)	137	624	23	16	361	59	11	1	19	36	1	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995				0.850		0.917				0.850
Flt Protected	0.950				0.998			0.983			0.954	
Satd. Flow (prot)	1770	1853	0	0	1859	1583	0	1679	0	0	1777	1583
Flt Permitted	0.950				0.998			0.983			0.954	
Satd. Flow (perm)	1770	1853	0	0	1859	1583	0	1679	0	0	1777	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2822			2497			302			554	
Travel Time (s)		64.1			56.8			6.9			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	149	678	25	17	392	64	12	1	21	39	1	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	149	703	0	0	409	64	0	34	0	0	40	91
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60		9	15		60	15		60	60		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 72.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	626	12	3	417	30	3	0	2	18	0	43
Future Volume (vph)	70	626	12	3	417	30	3	0	2	18	0	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.991			0.946			0.905	
Flt Protected	0.950							0.971			0.985	
Satd. Flow (prot)	1770	1857	0	0	1846	0	0	1711	0	0	1660	0
Flt Permitted	0.950							0.971			0.985	
Satd. Flow (perm)	1770	1857	0	0	1846	0	0	1711	0	0	1660	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2497			1960			501			428	
Travel Time (s)		56.8			44.5			11.4			9.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	680	13	3	453	33	3	0	2	20	0	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	693	0	0	489	0	0	5	0	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60		60	60		60	60		60	60		60
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 63.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	322	252	160	290	133	93
Future Volume (vph)	322	252	160	290	133	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.941				0.945	
Flt Protected				0.983	0.971	
Satd. Flow (prot)	1753	0	0	1831	1709	0
Flt Permitted				0.983	0.971	
Satd. Flow (perm)	1753	0	0	1831	1709	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1960			302	1059	
Travel Time (s)	44.5			6.9	24.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	350	274	174	315	145	101
Shared Lane Traffic (%)						
Lane Group Flow (vph)	624	0	0	489	246	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 79.5%		ICU Level of Service D	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	18	153	367	72	245	453
Future Volume (vph)	18	153	367	72	245	453
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	270	0		400	380	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	1863	1583	1770	1863
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	1863	1583	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	1503		2954			1014
Travel Time (s)	34.2		67.1			23.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	166	399	78	266	492
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	166	399	78	266	492
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60	60		60	60	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	109	45	52	619	775	157
Future Volume (vph)	109	45	52	619	775	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	325	445			400
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1770	3539	3539	1583
Link Speed (mph)	30			55	55	
Link Distance (ft)	3339			1714	1134	
Travel Time (s)	75.9			21.2	14.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	49	57	673	842	171
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	49	57	673	842	171
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.8%	ICU Level of Service A
Analysis Period (min) 15	

Appendix J
Volume Calculation Spreadsheet

AM Peak
Seminole Trace
Volume Calculations

Dates	SF
2/11/2024 - 2/17/2024	0.98
2/25/2024 - 3/2/2024	0.95

AM Trip Gen	
Entering	112
Exiting	314

CITATION BLVD & SEMINOLE WOODS BLVD

1	CITATION BLVD				N/A				SEMINOLE WOODS BLVD				SEMINOLE WOODS BLVD				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
07:30 AM - 08:30 AM	0	90	0	22	0	0	0	0	1	20	627	0	0	0	246	54	1,060
w/ SF	0	88	0	22	0	0	0	0	1	20	614	0	0	0	241	53	1,039
w/ GF	0	94	0	24	0	0	0	0	1	27	818	0	0	0	303	67	1,334
Grand Landings		57		6						2						20	85
Background	0	151	0	30	0	0	0	0	1	29	818	0	0	0	303	87	1,419
% Ent		0.00%		0.00%													0
% Exit										0.00%	23.56%				23.56%	0.00%	0
Proj Ent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proj Exit	0	0	0	0	0	0	0	0	0	0	74	0	0	0	74	0	148
Project Traffic	0	0	0	0	0	0	0	0	0	0	74	0	0	0	74	0	148
Total	0	151	0	30	0	0	0	0	1	29	892	0	0	0	377	87	1,567

GF EB	1.072
GF WB	1.000
GF NB	1.333
GF SB	1.257

SEMINOLE WOODS BLVD & US-1 (SR-5)

2	N/A				SEMINOLE WOODS BLVD				US-1 (SR-5)				US-1 (SR-5)				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
07:15 AM - 08:15 AM	0	0	0	0	0	265	0	158	0	0	411	81	1	113	733	0	1,762
w/ SF	0	0	0	0	0	260	0	155	0	0	403	79	1	111	718	0	1,727
w/ GF	0	0	0	0	0	341	0	203	0	0	455	89	1	139	898	0	2,126
% Ent												48.21%		13.36%			1
% Exit						48.21%		13.36%									1
Proj Ent	0	0	0	0	0	0	0	0	0	0	0	54	0	15	0	0	69
Proj Exit	0	0	0	0	0	151	0	42	0	0	0	0	0	0	0	0	193
Project Traffic	0	0	0	0	0	151	0	42	0	0	0	54	0	15	0	0	262
Total	0	0	0	0	0	492	0	245	0	0	455	143	1	154	898	0	2,388

GF EB	1.000
GF WB	1.312
GF NB	1.128
GF SB	1.250

SEMINOLE WOODS BLVD & PROJECT DRIVEWAY/SLOGANEER TRAIL

3	SEMINOLE WOODS BLVD				SEMINOLE WOODS BLVD				Sloganeer Trail				West Project Driveway				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
07:00 AM - 08:00 AM	0	0	196	8	0	4	401	0	0	24	0	14	0	0	0	1	648
w/ SF	0	0	192	8	0	4	393	0	0	24	0	14	0	0	0	1	636
w/ GF	0	0	252	9	0	4	516	0	0	26	0	15	0	0	0	1	823
% Ent		41.12%	21.00%					17.85%			0.00%						1
% Exit							21.02%							17.84%	0.00%	41.18%	1
Proj Ent	0	46	24	0	0	0	0	20	0	0	0	0	0	0	0	0	90
Proj Exit	0	0	0	0	0	0	66	0	0	0	0	0	0	56	0	129	251
Project Traffic	0	46	24	0	0	0	66	20	0	0	0	0	0	56	0	129	341
Total	0	46	276	9	0	4	582	20	0	26	0	15	0	56	0	130	1,164

GF EB	1.312
GF WB	1.312
GF NB	1.072
GF SB	1.072

SEMINOLE WOODS BLVD & PROJECT DRIVEWAY/SLIPPER TRAIL

4	Seminole Woods Blvd				Seminole Woods Blvd				Slipper Trail				East Project Driveway				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
07:00 AM - 08:00 AM	0	0	224	6	0	4	362	0	0	15	0	8	0	0	0	0	619
w/ SF	0	0	220	6	0	4	355	0	0	15	0	8	0	0	0	0	608
w/ GF	0	0	289	6	0	4	466	0	0	16	0	9	0	0	0	0	790
% Ent		21.00%					17.85%	9.09%									0
% Exit			17.84%											9.10%		21.02%	0
Proj Ent	0	24	0	0	0	0	20	10	0	0	0	0	0	0	0	0	54
Proj Exit	0	0	56	0	0	0	0	0	0	0	0	0	0	29	0	66	151
Project Traffic	0	24	56	0	0	0	20	10	0	0	0	0	0	29	0	66	205
Total	0	24	345	6	0	4	486	10	0	16	0	9	0	29	0	66	995

GF EB	1.312
GF WB	1.312
GF NB	1.072
GF SB	1.072

SEMINOLE WOODS BLVD & SESAME BLVD

5	SEMINOLE WOODS BLVD				SEMINOLE WOODS BLVD				SESAME BLVD (SOUTH)				N/A				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
07:15 AM - 08:15 AM	0	0	181	69	0	52	136	0	0	220	0	141	0	0	0	0	799
w/ SF	0	0	177	68	0	51	133	0	0	216	0	138	0	0	0	0	783
w/ GF	0	0	232	73	0	55	177	0	0	232	0	148	0	0	0	0	917
% Ent							24.47%			2.38%							0
% Exit			24.47%	2.38%													0
Proj Ent	0	0	0	0	0	0	27	0	0	3	0	0	0	0	0	0	30
Proj Exit	0	0	77	7	0	0	0	0	0	0	0	0	0	0	0	0	84
Project Traffic	0	0	77	7	0	0	27	0	0	3	0	0	0	0	0	0	114
Total	0	0	309	80	0	55	204	0	0	235	0	148	0	0	0	0	1,031

GF EB	1.312
GF WB	1.333
GF NB	1.072
GF SB	1.000

SEMINOLE WOODS BLVD & CITATION PKWY (SESAME BLVD)

6	N/A				SESAME BLVD (CITATION BLVD)				SEMINOLE WOODS BLVD				SEMINOLE WOODS BLVD				
2/26/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
07:30 AM - 08:30 AM	0	0	0	0	0	68	0	231	0	0	315	13	0	87	156	0	870
w/ SF	0	0	0	0	0	65	0	219	0	0	299	12	0	83	148	0	826
w/ GF	0	0	0	0	0	70	0	235	0	0	399	13	0	89	197	0	1,003
% Ent						0.86%									23.56%		0
% Exit											23.56%	0.86%					0
Proj Ent	0	0	0	0	0	1	0	0	0	0	0	0	0	0	26	0	27
Proj Exit	0	0	0	0	0	0	0	0	0	0	74	3	0	0	0	0	77
Project Traffic	0	0	0	0	0	1	0	0	0	0	74	3	0	0	26	0	104
Total	0	0	0	0	0	71	0	235	0	0	473	16	0	89	223	0	1,107

GF EB	1.000
GF WB	1.072
GF NB	1.333
GF SB	1.333

PM Peak
Seminole Trace
Volume Calculations

Dates	SF
2/11/2024 - 2/17/2024	0.98
2/25/2024 - 3/2/2024	0.95

PM Trip Gen	
Entering	333
Exiting	203

CITATION BLVD & SEMINOLE WOODS BLVD

1	CITATION BLVD				N/A				SEMINOLE WOODS BLVD				SEMINOLE WOODS BLVD				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
04:15 PM - 05:15 PM	0	65	0	39	0	0	0	0	0	35	437	0	0	0	590	74	1,240
w/ SF	0	64	0	38	0	0	0	0	0	34	428	0	0	0	578	73	1,215
w/ GF	0	69	0	41	0	0	0	0	0	45	571	0	0	0	727	92	1,545
Grand Landings		40		4						7						65	116
Background	0	109	0	45	0	0	0	0	0	52	571	0	0	0	727	157	1,661
% Ent		0.00%		0.00%													0
% Exit										0.00%	23.56%				23.56%	0.00%	0
Proj Ent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proj Exit	0	0	0	0	0	0	0	0	0	0	48	0	0	0	48	0	96
Project Traffic	0	0	0	0	0	0	0	0	0	0	48	0	0	0	48	0	96
Total	0	109	0	45	0	0	0	0	0	52	619	0	0	0	775	157	1,757

GF EB	1.072
GF WB	1.000
GF NB	1.333
GF SB	1.257

SEMINOLE WOODS BLVD & US-1 (SR-5)

2	N/A				SEMINOLE WOODS BLVD				US-1 (SR-5)				US-1 (SR-5)				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
04:30 PM - 05:30 PM	0	0	0	0	0	135	0	121	0	0	728	283	0	185	544	0	1,996
w/ SF	0	0	0	0	0	132	0	119	0	0	713	277	0	181	533	0	1,955
w/ GF	0	0	0	0	0	173	0	156	0	0	804	312	0	226	666	0	2,337
% Ent												48.21%		13.36%			1
% Exit						48.21%		13.36%									1
Proj Ent	0	0	0	0	0	0	0	0	0	0	0	161	0	44	0	0	205
Proj Exit	0	0	0	0	0	98	0	27	0	0	0	0	0	0	0	0	125
Project Traffic	0	0	0	0	0	98	0	27	0	0	0	161	0	44	0	0	330
Total	0	0	0	0	0	271	0	183	0	0	804	473	0	270	666	0	2,667

GF EB	1.000
GF WB	1.312
GF NB	1.128
GF SB	1.250

SEMINOLE WOODS BLVD & PROJECT DRIVEWAY/SLOGANEER TRAIL

3	SEMINOLE WOODS BLVD				SEMINOLE WOODS BLVD				Sloganeer Trail				West Project Driveway				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
04:30 PM - 05:30 PM	0	0	431	21	0	15	247	0	0	10	1	18	0	0	1	0	744
w/ SF	0	0	422	21	0	15	242	0	0	10	1	18	0	0	1	0	730
w/ GF	0	0	554	23	0	16	318	0	0	11	1	19	0	0	1	0	943
% Ent		41.12%	21.00%					17.85%			0.00%						1
% Exit							21.02%							17.84%	0.00%	41.18%	1
Proj Ent	0	137	70	0	0	0	0	59	0	0	0	0	0	0	0	0	266
Proj Exit	0	0	0	0	0	0	43	0	0	0	0	0	0	36	0	84	163
Project Traffic	0	137	70	0	0	0	43	59	0	0	0	0	0	36	0	84	429
Total	0	137	624	23	0	16	361	59	0	11	1	19	0	36	1	84	1,372

GF EB	1.312
GF WB	1.312
GF NB	1.072
GF SB	1.072

SEMINOLE WOODS BLVD & PROJECT DRIVEWAY/SLIPPER TRAIL

4	Seminole Woods Blvd				Seminole Woods Blvd				Slipper Trail				East Project Driveway				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
04:30 PM - 05:30 PM	0	0	459	11	0	3	279	0	0	3	0	2	0	0	0	0	757
w/ SF	0	0	450	11	0	3	273	0	0	3	0	2	0	0	0	0	742
w/ GF	0	0	590	12	0	3	358	0	0	3	0	2	0	0	0	0	968
% Ent		21.00%					17.85%	9.09%									0
% Exit			17.84%											9.10%		21.02%	0
Proj Ent	0	70	0	0	0	0	59	30	0	0	0	0	0	0	0	0	159
Proj Exit	0	0	36	0	0	0	0	0	0	0	0	0	0	18	0	43	97
Project Traffic	0	70	36	0	0	0	59	30	0	0	0	0	0	18	0	43	256
Total	0	70	626	12	0	3	417	30	0	3	0	2	0	18	0	43	1,224

GF EB	1.312
GF WB	1.312
GF NB	1.072
GF SB	1.072

SEMINOLE WOODS BLVD & SESAME BLVD

5	SEMINOLE WOODS BLVD				SEMINOLE WOODS BLVD				SESAME BLVD (SOUTH)				N/A				
2/11/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
04:30 PM - 05:30 PM	0	0	211	235	0	152	160	0	0	119	0	89	0	0	0	0	966
w/ SF	0	0	207	230	0	149	157	0	0	117	0	87	0	0	0	0	947
w/ GF	0	0	272	247	0	160	209	0	0	125	0	93	0	0	0	0	1,106
% Ent							24.47%			2.38%							0
% Exit			24.47%	2.38%													0
Proj Ent	0	0	0	0	0	0	81	0	0	8	0	0	0	0	0	0	89
Proj Exit	0	0	50	5	0	0	0	0	0	0	0	0	0	0	0	0	55
Project Traffic	0	0	50	5	0	0	81	0	0	8	0	0	0	0	0	0	144
Total	0	0	322	252	0	160	290	0	0	133	0	93	0	0	0	0	1,250

GF EB	1.312
GF WB	1.333
GF NB	1.072
GF SB	1.000

SEMINOLE WOODS BLVD & CITATION PKWY (SESAME BLVD)

6	N/A				SESAME BLVD (CITATION BLVD)				SEMINOLE WOODS BLVD				SEMINOLE WOODS BLVD				
2/26/2026	Eastbound				Westbound				Northbound				Southbound				
Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
04:15 PM - 05:15 PM	0	0	0	0	1	14	0	150	0	0	252	68	1	240	296	0	1,022
w/ SF	0	0	0	0	1	13	0	143	0	0	239	65	1	228	281	0	971
w/ GF	0	0	0	0	1	14	0	153	0	0	319	70	1	244	375	0	1,177
% Ent						0.86%									23.56%		0
% Exit											23.56%	0.86%					0
Proj Ent	0	0	0	0	0	3	0	0	0	0	0	0	0	0	78	0	81
Proj Exit	0	0	0	0	0	0	0	0	0	0	48	2	0	0	0	0	50
Project Traffic	0	0	0	0	0	3	0	0	0	0	48	2	0	0	78	0	131
Total	0	0	0	0	1	17	0	153	0	0	367	72	1	244	453	0	1,308

GF EB	1.000
GF WB	1.072
GF NB	1.333
GF SB	1.333

Appendix K
City of Palm Coast Turn Lane Technical Guidelines
November 10, 2020

Palm Coast Draft Turn Lane Technical Guidelines on November 10, 2020

The purpose of this document is to assist the City and design professionals regarding turn lane design as part of a development for a property accessing a City street. It determines:

a) when a turn lane is required to be built as a condition of access to the City street, and
b) the required dimensions of the turn lane.

These guidelines provide guidance for developers on what to expect for design and construction requirements on a roadway connecting to their driveway (entrance) when developing a property.

Turn lanes for left-turning and right-turning traffic are desirable for the safe execution of speed change maneuvers. Turn lanes also allow for the storage and protection of left-turning or right-turning vehicles while allowing through traffic to pass safely with minimal induced delay.

Deceleration lanes shall be provided at all intersection and/or access points adjacent to the project on all City-maintained and privately-maintained roadways as required by these guidelines. (Turn lanes along Flagler County owned roadways will be determined by Flagler County after receiving input from the City.) However, these guidelines shall not be construed in any manner to allow a left-turn lane and/or a right-turn lane into a project where such turning movement is not approved by the City.

All table values referenced in this document presume design of a single turn lane. The City will use the latest edition of the Florida Department of Transportation's (FDOT's) publication: "Standard Plans and Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways" (commonly referred to as the "Florida Greenbook") as a design reference. The City will be the sole judge, when backed by engineering analysis, to define whether a multi-lane turn lane design is adequate in dimension.

Turn Volume Thresholds that Require the Addition of a Dedicated Left Turn Lane from the City Street

A left turn lane shall be provided at each access driveway of the project when a Left-Turning Vehicle (LTV) count during a Peak Hour (Weekday AM, Weekday PM, Weekend Mid-Day) from the City roadway entering that driveway meets or exceeds the criteria below. The roadway column in the table below shall be utilized for the type and volume of traffic on the roadway from where the turn would originate and shall be based on the Average Annual Daily Traffic (AADT) from the City's bi-annual traffic counts and projected forward including background traffic from other projects, as determined by the City, until the time when the project and its driveway are reasonably expected to finish construction and be open.

Left Turn Lane Thresholds

Posted Speed Limit	2 Lane Roadways AADT of 5,000 or less	2 Lane Roadways AADT over 5,000	4+ Lane Roadways AADT of 10,000 or less	4+ Lane Roadways AADT over 10,000
Up to 25 mph	40 LTV/Peak Hour	35 LTV/Peak Hour	50 LTV/Peak Hour	40 LTV/Peak Hour
30 - 35 mph	30 LTV/Peak Hour	25 LTV/Peak Hour	35 LTV/Peak Hour	25 LTV/Peak Hour
40 + mph	20 LTV/Peak Hour	15 LTV/Peak Hour	25 LTV/Peak Hour	20 LTV/Peak Hour

Turn Volume Thresholds that Require the Addition of a Dedicated Right Turn Lane from the City Street

A right turn lane shall be provided at each access driveway of the project when a Right-Turning Vehicle (RTV) count during a Peak Hour (Weekday AM, Weekday PM, Weekend Mid-Day) from the City roadway entering that driveway meets or exceeds the criteria below. The roadway column in the table below shall be utilized for the type and volume of traffic on the roadway from where the turn would originate and shall be based on the AADT from the City's bi-annual traffic counts and projected forward including background

traffic from other projects, as determined by the City, until the time when the project and its driveway are reasonably expected to finish construction and be open.

Right Turn Lane Thresholds

Posted Speed	2 Lane Roadways	2 Lane Roadways	4+ Lane Roadways	4+ Lane Roadways
Limit	**AADT of 5,000 or less**	**AADT over 5,000**	**AADT of 10,000 or less**	**AADT over 10,000**
Up to 25 mph	175 RTV/Peak Hour	150 RTV/Peak Hour	155 RTV/Peak Hour	120 RTV/Peak Hour
30 - 35 mph	120 RTV/Peak Hour	100 RTV/Peak Hour	100 RTV/Peak Hour	70 RTV/Peak Hour
40 + mph	70 RTV/Peak Hour	60 RTV/Peak Hour	60 RTV/Peak Hour	40 RTV/Peak Hour

Other Criteria

When a project's driveway meets at least 75% of the above thresholds for Peak Hour (Weekday AM, Weekday PM or Weekend Mid-Day) left or right turns and at least one of the following criteria is also present, the City, in its sole judgment, may require the developer to provide the turn lane.

1. Sight distance is limited due to curves or hills or other unalterable object.
2. The intersection or driveway is just after a signalized intersection where acceleration or driver expectancy would make a separate right turn desirable (this would also be the case downstream soon after a dual left-turn lane onto a four-lane roadway).
3. At least 50% higher than normal crash experience (or 33% above normal rear-end collisions) or the City has determined that this roadway section has a Level of Service (LOS) of D or lower.
4. Severe skewed angle of the intersection so that right-turn traffic has to slow more than would be expected for a 90-degree turn.
5. The turn-lane into the project occurs at an existing or proposed signalized intersection where adequate right-of-way exists or is available from the development.

Construction Timing

Turn lanes shall be constructed with the infrastructure and prior to the vertical construction of any buildings unless the City allows some of the vertical building construction prior to completion of the turn lanes. When a project is phased, the turn lanes shall be constructed with the earliest phase that the turn lane meets at least 50% of the criteria for requiring the turn lane.

Turn Lane Design Standards

A turn lane shall consist of the following components: A taper and a full width lane length of a turn lane. The total length of the turn lane shall be the taper length plus the full width lane length.

A taper shall be the longitudinal length of a development of a lane from zero width to full width. Find the length of taper required in the tables below (See Sections *Left turn Lane Table* and *Right Turn Lane Table*).

Turn lane widths shall be a minimum of 11 feet on roadways where the posted speed is 40 mph or less (see exceptions in next sentence).

Turn lane widths, when turn lanes are required, shall be a minimum of 12 feet on roadways where at least one condition below is present:

1. Where the posted speed is 45 mph or greater.
2. With more than two lanes of opposing traffic.
3. With medians at least 16 feet wide separating opposing traffic lanes.

Turn lane length shall be measured along the lane segment constructed at full lane width. The required turn lane length of right turn lanes and left turn lanes exiting the City street shall be determined by choosing the greater of:

1. The minimum full width turn lane length. The minimum full width turn lane length shall be 75 feet.
2. The calculation of full width turn lane length based on conditions in the following tables. Total required full width turn lane length shall be the sum of the deceleration length dimension (See Left Turn Lane Table; See Right Turn Lane Table) plus the storage length dimension (see Storage Length Dimension Table - SLDT).

Shorter turn lanes will not be allowed except under special circumstances as approved by the City.

Storage Length Dimension Table For Unsignalized Intersections*

Largest Peak Hour Volume in Vehicles Per Hour (vph)	Storage Length (feet)*
Up to 25	30
26 to 50	50
51 to 75	75
76 to 100	100
Every additional increment, or partial increment, of 50 vph	75

**Per FDOT Greenbook*

Dimensions in the SLDT presume the traffic in the turn lane consists of less than 5% heavy vehicles (where a heavy vehicle is any vehicle longer than 34 feet including a trailer). If heavy vehicle percentage will be between 5% and 20% of turning vehicles, increase storage length by 20%. If heavy vehicle percentage will be greater than 20% of turning vehicles, increase storage length by 100%.

<u>Left Turn Lane Length</u>

The requirements for lengths of tapers, deceleration and storage for left turn lanes are based on the speed limit of the road and are shown in the following table:

Left Turn Lane Table For Unsignalized Intersections*

Posted Speed Limit Of Roadway (mph)	Length of Taper (feet)	Length of Deceleration (feet)	Length of Storage (feet)*
Up to 25	50	0	100% of SLDT Value
30	75	0	100% of SLDT Value
35	75	75	100% of SLDT Value
40	90	75	100% of SLDT Value
45	100	100	100% of SLDT Value
50	100	135	100% of SLDT Value

**For 2 Lane Roadways less than 5,000 ADT and for 4-Lane Roadways less than 10,000 ADT, reduce the 100% qualification to 70%.Per FDOT Greenbook*

Total required full width turn lane length shall be the sum of the deceleration length dimension plus the storage length dimension. The taper is not considered part of the full width turn lane length.

Right Turn Lane Length

The requirements for lengths of tapers, deceleration and storage for right turn lanes are based on the speed limit of the road and are shown in the following table:

Right Turn Lane Table For Unsignalized Intersections*

Posted Speed Limit Of Roadway (mph)	Length of Taper (feet)	Length of Deceleration (feet)	Length of Storage (feet) Stop Condition	Length of Storage (feet) Free Flow
Up to 25	50	0	50% of SLDT Value	0
30	75	0	50% of SLDT Value	0
35	100	75	50% of SLDT Value	25% of SLDT Value
40	100	75	60% of SLDT Value	30% of SLDT Value
45	100	100	75% of SLDT Value	35% of SLDT Value
50 +	100	135	80% of SLDT Value	45% of SLDT Value

**Per FDOT Greenbook*

Total required full width turn lane length shall be the sum of the deceleration length dimension plus the storage length dimension. The taper is not considered part of the full width turn lane length. Right turn lane lengths at traffic signal controlled intersections shall be based on queue lengths determined through an engineering traffic study.

Deviations

The City may grant a deviation from these guidelines in part or in whole after determining that any of the following conditions make compliance infeasible:

1. Right-of-way constraints do not permit the installation of the turn lane or to its full dimensions. This does not include cases where the developer is unwilling to provide the developer's own property from the development under consideration for additional right-of-way to construct or compensate for the turn lane.
2. Existing topographic or roadway geometric features would cause construction of the turn lane to be prohibitively expensive if constructed to standards.
3. Unusual roadway features would cause a turn lane to be detrimental to the health, safety and general welfare of the public. This could include a case where a right-turn lane could negatively impact bicyclists or pedestrians.
4. Such turn lane or in its full dimension would require removal of a specimen or historic tree as described in Section 11.02.04.A of the Land Development Code or significantly impact a high quality wetland.

Calculation Examples

Example 1

A 30 mph 2 lane 2-way road. AADT of 4,000. Heavy Truck percentage into property: 15%. Largest Peak Hour projected left turns: 32 vph. Largest Peak Hour Projected Right Turns 62 vph.

Compare to Turn Volumes Threshold Tables

Is Left Turn lane required? 32 vph > 30 LTV threshold Yes. Left turn lane is required.

Is Right Turn lane required? 62 vph < 120 RTV threshold. No. Right turn lane is not required.

Calculate Left turn Length

See Left Turn Lane Table

For 30 mph,

Taper = 75 feet

Deceleration Length = 0 feet

SLDT for 32 vph = 50 feet

Truck factor for 5 to 20% trucks = 1.2

Full width length = 0 + (1.2 * 50) = 60 feet round up to nearest 10 feet → 60 feet

Final answer: Left turn lane length = 50 foot taper plus 60 feet full width lane = 110 feet.

Full width lane = 11 feet for 30 mph road with no special conditions.

Note: The transition from the typical two-lane width to the beginning of taper is covered in the FDOT Greenbook, which is referenced as the design guidelines for the transition.

Example 2

A 45 mph 4 lane road with divided median. AADT of 12,800. Heavy Truck percentage into property: 2 to 4%. Largest Peak Hour projected Left turns: 44 vph. Largest Peak Hour Projected Right Turns 164 vph.

Compare to Turn Volumes Threshold Tables

Is Left Turn lane required? 44 vph > 20 LTV threshold Yes. Left turn lane is required.

Is Right Turn lane required? 164 vph > 40 RTV threshold Yes. Right turn lane is required.

Calculate Left turn Length

See Left Turn Lane Table

For 45 mph

Taper = 100 feet

Deceleration Length = 100 feet (deceleration occurs in taper)

SLDT for 44 vph = 50 feet

Truck factor for 2-4% trucks = 1.0

Full width length = 100 + (1.0 * 50) = 150 feet round up to nearest 10 feet → 150 feet

Final answer: Left turn lane length = 100 foot taper plus 150 feet full width lane = 250 feet.

Full width lane = 12 feet for 45 mph road

Calculate Right Turn Length

See Right Turn Lane Table

For 45 mph

Taper = 100 feet

Deceleration Length = 100 feet (deceleration occurs in taper)

SLDT for 164 vph = 100 feet plus two units of 50 vph = 100 + (2.0*75) = 250 feet

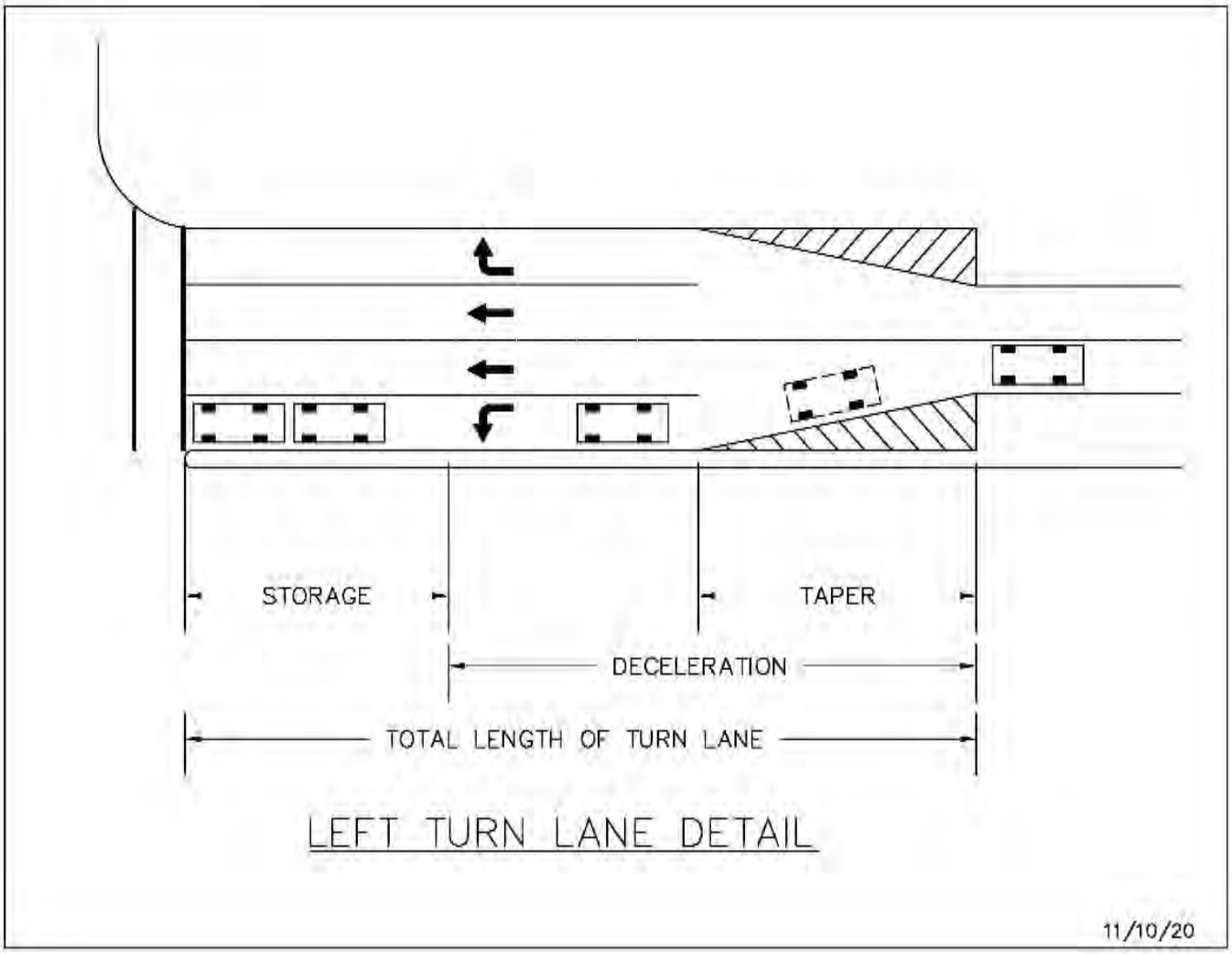
Truck factor for 2-4% trucks = 1.0

Full width length = 100 + (1.0 *((0.75) * 250)) = 100 + 187.5 feet = 287.5 feet round up to nearest 10 feet -> 290 feet

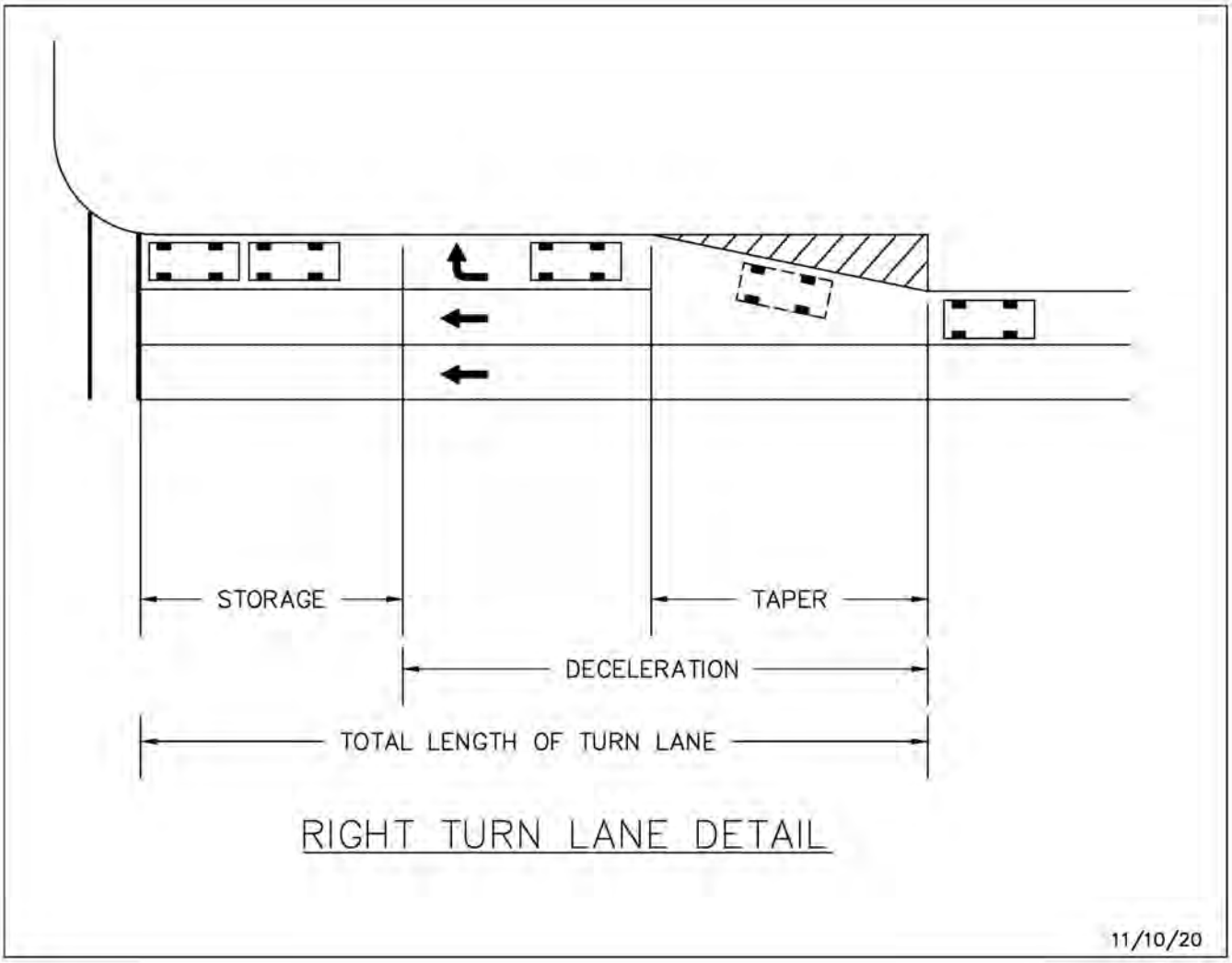
Final answer: Right turn lane length = 100 foot taper plus 290 feet full width lane = 390 feet.

Full width lane = 12 feet for 45 mph road.

Left Turn Lane Detail



Right Turn Lane Detail



ORDINANCE 2026-XX
SEMINOLE TRACE – FUTURE LAND USE MAP AMENDMENT
APPLICATION NO. 6419

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALM COAST, FLORIDA, PROVIDING FOR THE AMENDMENT OF THE CITY OF PALM COAST 2050 COMPREHENSIVE PLAN, AS PREVIOUSLY AMENDED, PURSUANT TO SECTION 163, FLORIDA STATUTES; AMENDING DESIGNATION OF PORTIONS OF A 331.1+/- ACRE AREA TO BE KNOWN AS "SEMINOLE TRACE" FROM RESIDENTIAL TO CONSERVATION AND FROM CONSERVATION TO RESIDENTIAL AND AMENDING A NOTE ON THE FUTURE LAND USE MAP (FLUM) FROM A DENSITY LIMIT OF 416 DWELLING UNITS TO 743 DWELLING UNITS; AS DESCRIBED IN MORE DETAIL IN THE LEGAL DESCRIPTION WHICH IS AN EXHIBIT TO THIS ORDINANCE; PROVIDING FOR SEVERABILITY, CODIFICATION, CONFLICTS, AND AN EFFECTIVE DATE

WHEREAS, the City Council of the City of Palm Coast enacted Ordinance 2025-06, adopting the *City of Palm Coast 2050 Comprehensive Plan* which includes the City of Palm Coast Future Land Use Map (FLUM), which Plan and FLUM have been amended from time-to-time; and

WHEREAS, Section 163.3161 et seq., Florida Statutes established the Community Planning Act; and

WHEREAS, Section 163.3184, Florida Statutes, establishes a process for adoption of comprehensive plans or plan amendments amending the future land use designation of property; and

WHEREAS, the City of Palm Coast is desirous of amending the future land use map to amend the maximum number of dwelling units in the Cascades Planning Area from 416 to 743; and

WHEREAS, the City of Palm Coast Planning and Land Development Regulation Board (PLDRB) acting as the City's Local Planning Agency, considered the proposed map amendments at a public hearing on August 19, 2026, and voted to recommend **Approval/Denial** of the proposed Comprehensive Plan Amendment; and

WHEREAS, on September 1, 2026, and _____, 2026, the City of Palm Coast City Council held public hearings on this Comprehensive Plan amendment after due public notice and upon thorough and complete consideration and deliberation, adopted the proposed Comprehensive Plan amendment; and

WHEREAS, the Comprehensive Plan amendments adopted by this Ordinance complies with the requirements of the Community Planning Act, the State Comprehensive Plan as set forth in Chapter 187, Florida Statutes, as well as other applicable law, and is consistent with the goals, objectives, and policies and the overall land use plan of the City's *Comprehensive Plan*; and

WHEREAS, the City Council of the City of Palm Coast hereby reaffirms its commitment to the goal of enacting and implementing sound growth management practices within the City; and

WHEREAS, the City Council of the City of Palm Coast finds that this Ordinance is in the best interests of the health, safety, and welfare of the citizens of Palm Coast.

NOW, THEREFORE, IT IS HEREBY ORDAINED BY THE CITY OF PALM COAST, FLORIDA, THAT THE FUTURE LAND USE MAP IS AMENDED AS FOLLOWS:

SECTION 1. LEGISLATIVE AND ADMINISTRATIVE FINDINGS. The above recitals (whereas clauses) are hereby adopted as the legislative and administrative findings of the City Council.

SECTION 2. FUTURE LAND USE MAP AMENDED. The 331.1+/- acres subject area, generally located north/west of Seminole Woods Blvd. as depicted and legally described in "Exhibit A", attached hereto, is hereby amended to allow a maximum of 743 dwelling units for the Seminole Trace Planning Area.

SECTION 3. SEVERABILITY. It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this Ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this Ordinance shall be declared unconstitutional by the valid judgment or decree of a court of competent

jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Ordinance.

SECTION 4. CODIFICATION. It is the intention of the City Council of the City of Palm Coast, Florida, and it is hereby ordained that the provisions of this Ordinance shall become and be made a part of the Code of Ordinance of the City of Palm Coast, Florida; that the Sections of this Ordinance may be renumbered or re-lettered to accomplish such intention; that the word, "Ordinance" may be changed to Section," "Article," or other appropriate word.

SECTION 5. CONFLICTS. All ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed

SECTION 6. EFFECTIVE DATE. The effective date of this plan amendment, if the amendment is not timely challenged, shall be 31 days after the state land planning agency notifies the local government that the plan amendment package is complete. If timely challenged, this amendment shall become effective on the date the state land planning agency or the Administration Commission enters a final order determining this adopted amendment to be in compliance. No development orders, development permits, or land uses dependent on this amendment may be issued or commence before it has become effective. If a final order of noncompliance is issued by the Administration Commission, this amendment may nevertheless be made effective by adoption of a resolution affirming its effective status, a copy of which resolution shall be sent to the state land planning agency.

APPROVED on first reading this 1st day of September 2026.

ADOPTED on second reading after due public notice and hearing this _____ day of _____, 2026.

ATTEST: CITY OF PALM COAST

_____ _____

KALEY COOK, CITY CLERK MICHAEL NORRIS, MAYOR

APPROVED AS TO FORM AND LEGALITY

_____
MARCUS DUFFY, CITY ATTORNEY

Attachment:
Exhibit "A" – Legal Description of Subject Property
Exhibit "B" – Amended Future Land Use Map

EXHIBIT A

LEGAL DESCRIPTION

EXHIBIT B

AMENDED FUTURE LAND USE MAP

EXHIBIT "A"

BYRNDOG PCP, LLC

A PART OF GOVERNMENT SECTIONS 29, 30, 31, AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: FOR A POINT OF REFERENCE, COMMENCE AT THE NORTHWEST CORNER OF SAID GOVERNMENT SECTION 32; THENCE SOUTH 00°45'50" WEST ALONG THE WEST LINE OF SAID SECTION 32, A DISTANCE OF 1224.55 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF SEMINOLE WOODS BOULEYARD (AN 80 FOOT RIGHT-OF-WAY AS NOW ESTABLISHED); THENCE NORTH 54°30'21" EAST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 193.37 FEET TO THE POINT OF BEGINNING; THENCE NORTH 47°42'22" WEST LEAVING SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 30.69 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 444.53 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 17°59'15" WEST AND A CHORD DISTANCE OF 334.30 FEET TO THE END OF SAID CURVE; THENCE NORTH 40°13'09" WEST, A DISTANCE OF 26.42 FEET; THENCE NORTH 03°30'47" EAST, A DISTANCE OF 112.57 FEET; THENCE NORTH 36°11'00" WEST, A DISTANCE OF 131.13 FEET; THENCE NORTH 59°28'43" EAST, A DISTANCE OF 82.30 FEET; THENCE NORTH 28°33'26" EAST, A DISTANCE OF 137.09 FEET; THENCE NORTH 66°49'26" EAST, A DISTANCE OF 38.00 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 144.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 10°05'15" WEST AND A CHORD DISTANCE OF 140.48 FEET TO THE END OF SAID CURVE; THENCE NORTH 63°53'15" WEST, A DISTANCE OF 132.81 FEET; THENCE NORTH 83°44'41" WEST, A DISTANCE OF 162.45 FEET; THENCE NORTH 17°06'30" WEST, A DISTANCE OF 292.28 FEET; THENCE NORTH 14°47'18" EAST, A DISTANCE OF 47.30 FEET; THENCE SOUTH 85°17'37" EAST, A DISTANCE OF 136.71 FEET; THENCE NORTH 61°12'04" EAST, A DISTANCE OF 15.52 FEET; THENCE SOUTH 18°34'29" EAST, A DISTANCE OF 65.03 FEET; THENCE NORTH 71°25'31" EAST, A DISTANCE OF 100.68 FEET; THENCE NORTH 21°33'01" WEST, A DISTANCE OF 82.53 FEET; THENCE NORTH 61°12'04" EAST, A DISTANCE OF 66.95 FEET; THENCE NORTH 41°21'12" EAST, A DISTANCE OF 40.07 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAYING A RADIUS OF 320.48 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 216.74 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 26°54'34" WEST AND A CHORD DISTANCE OF 212.64 FEET TO THE END OF SAID CURVE; THENCE SOUTH 87°01'59" WEST, A DISTANCE OF 48.33

FEET; THENCE SOUTH 70°29'11" WEST, A DISTANCE OF 72.33 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAYING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 540.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 29°18'27" WEST AND A CHORD DISTANCE OF 349.89 FEET TO THE END OF SAID CURVE; THENCE NORTH 42°24'06" WEST, A DISTANCE OF 51.18 FEET; THENCE NORTH 00°06'49" WEST, A DISTANCE OF 99.39 FEET; THENCE NORTH 26°40'30" EAST, A DISTANCE OF 70.76 FEET; THENCE NORTH 12°17'04" EAST, A DISTANCE OF 84.43 FEET; THENCE NORTH 23°30'30" EAST, A DISTANCE OF 101.77 FEET; THENCE SOUTH 66°15'40" EAST, A DISTANCE OF 103.83 FEET; THENCE NORTH 86°49'06" EAST, A DISTANCE OF 114.78 FEET TO A POINT ON A CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 1183.21 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 164.50 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 05°19'07" WEST AND A CHORD DISTANCE OF 164.37 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAYING A RADIUS OF 200.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 85.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 21°37'07" WEST AND A CHORD DISTANCE OF 85.33 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAYING A RADIUS OF 175.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 51.63 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 25°26'59" WEST AND A CHORD DISTANCE OF 51.44 FEET TO THE END OF SAID CURVE; THENCE SOUTH 83°58'47" WEST, A DISTANCE OF 67.38 FEET; THENCE NORTH 03°17'29" WEST, A DISTANCE OF 32.58 FEET; THENCE NORTH 79°50'54" WEST, A DISTANCE OF 36.99 FEET; THENCE SOUTH 78°44'40" WEST, A DISTANCE OF 70.73 FEET; THENCE NORTH 15°30'24" WEST, A DISTANCE OF 133.32 FEET; THENCE NORTH 42°05'59" WEST, A DISTANCE OF 75.46 FEET; THENCE NORTH 49°14'06" EAST, A DISTANCE OF 113.35 FEET; THENCE NORTH 06°24'03" EAST, A DISTANCE OF 75.63 FEET; THENCE NORTH 15°17'20" WEST, A DISTANCE OF 151.75 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 520.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 116.24 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 49°06'01" WEST AND A CHORD DISTANCE OF 116.00 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAYING A RADIUS OF 692.44 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 298.27 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 30°21'24" WEST AND A CHORD DISTANCE OF 295.97 FEET TO THE END OF SAID CURVE; THENCE NORTH 71°59'00" EAST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAYING A RADIUS OF 582.44 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 85.58 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF

NORTH 13°48'41" WEST AND A CHORD DISTANCE OF 85.50 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 1214.67 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 53.51 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 10°51'33" WEST AND A CHORD DISTANCE OF 53.51 FEET TO THE END OF SAID CURVE; THENCE SOUTH 77°52'40" WEST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAYING A RADIUS OF 170.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 507.88 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 20°56'54" WEST AND A CHORD DISTANCE OF 338.99 FEET TO THE END OF SAID CURVE; THENCE NORTH 29°41'42" WEST, A DISTANCE OF 11.82 FEET; THENCE SOUTH 69°27'08" WEST, A DISTANCE OF 39.11 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 855.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 188.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 63°08'36" WEST AND A CHORD DISTANCE OF 187.91 FEET TO THE END OF SAID CURVE; THENCE SOUTH58°53'20" WEST, A DISTANCE OF 15.00FEET; THENCENORTH31°30'01" WEST,ADISTANCE OF 97.29 FEET; THENCE SOUTH 72°01'17" WEST, A DISTANCE OF 73.49 FEET; THENCE SOUTH 53°56'11" WEST, A DISTANCE OF 170.90 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAYING A RADIUS OF 175.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 13.83 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 56°12'02" WEST AND A CHORD DISTANCE OF 13.83 FEET TO THE END OF SAID CURVE; THENCE SOUTH 19°31'27" EAST, A DISTANCE OF 66.83 FEET; THENCE SOUTH 70°28'33" WEST, A DISTANCE OF 48.00 FEET; THENCE SOUTH 19°31'27" EAST, A DISTANCE OF 57.00 FEET; THENCE SOUTH 70°28'33" WEST, A DISTANCE OF 222.56 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAYING A RADIUS OF 300.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 66.79 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 64°05'51" WEST AND A CHORD DISTANCE OF 66.66 FEET TO THE END OF SAID CURVE; THENCE SOUTH 44°42'49" EAST, A DISTANCE OF 38.23 FEET; THENCE SOUTH 04°24'29" EAST, A DISTANCE OF 57.39 FEET; THENCE SOUTH23°08'51" WEST, A DISTANCE OF 157.59FEET; THENCE SOUTH 84°09'56" WEST, A DISTANCE OF 88.02 FEET; THENCE NORTH 76°31'00" WEST, A DISTANCE OF 61.67 FEET; THENCE SOUTH 33°00'24" WEST, A DISTANCE OF 153.70 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAYING A RADIUS OF 969.48 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 492.79 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 18°26'42" WEST AND A CHORD DISTANCE OF 487.50 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 170.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE

OF 387.77 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 77°43'25" WEST AND A CHORD DISTANCE OF 309.01 FEET TO THE END OF SAID CURVE; THENCE NORTH 53°04'12" EAST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 60.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 109.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 15°26'03" EAST AND A CHORD DISTANCE OF 95.03 FEET TO THE END OF SAID CURVE; THENCE NORTH 03°14'25" EAST, A DISTANCE OF 35.46 FEET; THENCE NORTH 73°12'35" WEST, A DISTANCE OF 104.13 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 165.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 146.44 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 81°21'53" WEST AND A CHORD DISTANCE OF 141.68 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 55°56'21" WEST, A DISTANCE OF 44.41 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1135.30 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 36.63 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 55°09'1 1" WEST AND A CHORD DISTANCE OF 36.63 FEET TO THE END OF SAID CURVE; THENCE SOUTH 35°37'58" EAST, A DISTANCE OF 105.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAYING A RADIUS OF 1230.30 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 201.90 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 49°39'57" WEST AND A CHORD DISTANCE OF 201.67 FEET TO THE END OF SAID CURVE; THENCE SOUTH 48°17'05" EAST, A DISTANCE OF 46.94 FEET; THENCE SOUTH 14°59'46" WEST, A DISTANCE OF 62.44 FEET; THENCE SOUTH 12°20'37" EAST, A DISTANCE OF 15.93 FEET; THENCE SOUTH 46°22'21" EAST, A DISTANCE OF 32.63 FEET; THENCE SOUTH 01°00'31" WEST, A DISTANCE OF 79.06 FEET; THENCE NORTH 86°42'07" EAST, A DISTANCE OF 144.98 FEET; THENCE NORTH 41°20'41" EAST, A DISTANCE OF 36.82 FEET; THENCE SOUTH 70°48'37" EAST, A DISTANCE OF 121.06 FEET; THENCE SOUTH 02°33'13" WEST, A DISTANCE OF 60.02 FEET; THENCE SOUTH 36°07'13" WEST, A DISTANCE OF 85.92 FEET; THENCE NORTH 57°06'19" WEST, A DISTANCE OF 156.83 FEET; THENCE NORTH 33°12'18" EAST, A DISTANCE OF 29.33 FEET; THENCE SOUTH 86°42'07" WEST, A DISTANCE OF 131.46 FEET; THENCE SOUTH 24°24'44" WEST, A DISTANCE OF 18.02 FEET; THENCE NORTH 87°51'56" WEST, A DISTANCE OF 63.67 FEET; THENCE NORTH 13°11'13" WEST, A DISTANCE OF 74.87 FEET; THENCE NORTH 57°11'17" WEST, A DISTANCE OF 83.28 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAYING A RADIUS OF 200.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 98.55 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 70°39'19" WEST AND A CHORD DISTANCE OF 97.55 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAYING A RADIUS OF 170.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC

DISTANCE OF 220.37 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 58°05'32" WEST AND A CHORD DISTANCE OF 205.26 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 20°57'21" WEST, A DISTANCE OF 55.00 FEET; THENCE NORTH 59°29'11" EAST, A DISTANCE OF 88.23 FEET; THENCE NORTH 23°08'02" EAST, A DISTANCE OF 139.98 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAYING A RADIUS OF 200.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 123.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 63°45'33" EAST AND A CHORD DISTANCE OF 121.28 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAYING A RADIUS OF 1520.30 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 218.25 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 50°14'55" EAST AND A CHORD DISTANCE OF 218.06 FEET TO THE END OF SAID CURVE; THENCE SOUTH 35°36'42" EAST, A DISTANCE OF 105.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAYING A RADIUS OF 1415.30 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 38.04 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 55°09'49" EAST AND A CHORD DISTANCE OF 38.03 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 55°56'21" EAST, A DISTANCE OF 44.41 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAYING A RADIUS OF 235.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 101.04 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 68°15'21" EAST AND A CHORD DISTANCE OF 100.26 FEET TO THE END OF SAID CURVE; THENCE NORTH 09°25'38" WEST, A DISTANCE OF 110.00 FEET TO A POINT ON A CURVE, CONCAVE SOUTHERLY, HAYING A RADIUS OF 345.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 154.89 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 86°33'56" EAST AND A CHORD DISTANCE OF 153.59 FEET TO THE END OF SAID CURVE; THENCE NORTH 25°17'37" EAST, A DISTANCE OF 11.36 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 779.93 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 710.66 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 38°04'25" WEST AND A CHORD DISTANCE OF 686.33 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 270.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 201.02 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 09°21'32" EAST AND A CHORD DISTANCE OF 196.41 FEET TO THE END OF SAID CURVE; THENCE NORTH 56°07'39" WEST, A DISTANCE OF 30.37 FEET; THENCE SOUTH 89°16'24" WEST, A DISTANCE OF 307.76 FEET; THENCE SOUTH 69°45'47" WEST, A DISTANCE OF 200.04 FEET; THENCE SOUTH 49°59'01" WEST, A DISTANCE OF 58.05 FEET; THENCE SOUTH 36°16'26" WEST, A DISTANCE OF 171.87 FEET; THENCE NORTH 87°01'20" WEST, A DISTANCE OF 167.32 FEET; THENCE NORTH 12°41'32" WEST, A

DISTANCE OF 111.63 FEET; THENCE NORTH 17°24'53" EAST, A DISTANCE OF 146.82 FEET; THENCE NORTH 16°21'20" WEST, A DISTANCE OF 67.14 FEET; THENCE NORTH 42°05'14" WEST, A DISTANCE OF 101.85 FEET; THENCE NORTH 07°04'46" EAST, A DISTANCE OF 147.63 FEET; THENCE NORTH 18°27'49" EAST,ADISTANCEOF 237.18 FEET; THENCE SOUTH73°05'38" EAST, A DISTANCE OF 76.78 FEET; THENCE SOUTH 44°03'10" EAST, A DISTANCE OF 292.20 FEET; THENCE SOUTH 28°55'57" EAST, A DISTANCE OF 299.86 FEET; THENCE NORTH 89°16'24" EAST, A DISTANCE OF 370.38 FEET; THENCE SOUTH 56°07'39" EAST, A DISTANCE OF 39.71 FEET TO A POINT ON A CURVE, CONCAVE SOUTHEASTERLY, HAYING A RADIUS OF 270.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 84.20 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 45°59'29" EAST AND A CHORD DISTANCE OF 83.86 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAYING A RADIUS OF 1000.03 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 113.81 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 51°39'56" EAST AND A CHORD DISTANCE OF 113.75 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHERLY, HAYING A RADIUS OF 270.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 316.80 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 82°01'07" EAST AND A CHORD DISTANCE OF 298.93 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE NORTHEASTERLY, HAYING A RADIUS OF 508.58 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 258.11 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 78°54'27" EAST AND A CHORD DISTANCE OF 255.35 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAYING A RADIUS OF 200.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 61.44 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 77°45'08" EAST AND A CHORD DISTANCE OF 61.20 FEET TO THE POINT OF REVERSE CURVE OF A CURVE, CONCAVE SOUTHWESTERLY, HAYING A RADIUS OF 170.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 270.57 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 65°27'1 1 " EAST AND A CHORD DISTANCE OF 242.91 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 19°51'24" EAST, A DISTANCE OF 127.75 FEET; THENCE NORTH 70°28'33" EAST, A DISTANCE OF 236.93 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 115.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 27.62 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 63°35'43" EAST AND A CHORD DISTANCE OF 27.55 FEET TO THE END OF SAID CURVE; THENCE SOUTH 33°17'07" EAST, A DISTANCE OF 10.00 FEET TO A POINT ON A CURVE, CONCAVE NORTHWESTERLY, HAYING A RADIUS OF 125.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 6.06 FEET, SAID ARC

BEING SUBTENDED BY A CHORD BEARING OF NORTH 55°19'32" EAST AND A CHORD DISTANCE OF 6.06 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 53°56'11" EAST, A DISTANCE OF 24.79 FEET; THENCE NORTH 36°03'49" WEST, A DISTANCE OF 10.00 FEET; THENCE NORTH 53°56'11" EAST, A DISTANCE OF 179.95 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 1035.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 280.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 61°41'40" EAST AND A CHORD DISTANCE OF 279.42 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 69°27'08" EAST, A DISTANCE OF 28.57 FEET TO A POINT ON A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 945.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 224.25 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 11°37'38" WEST AND A CHORD DISTANCE OF 223.72 FEET TO THE POINT OF COMPOUND CURVE OF A CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 545.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 77.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF NORTH 00°44'46" WEST AND A CHORD DISTANCE OF 77.61 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 03°20'13" EAST, A DISTANCE OF 504.26 FEET; THENCE NORTH 86°33'58" EAST, A DISTANCE OF 1262.18 FEET; THENCE NORTH 74°58'14" EAST, A DISTANCE OF 1393.40 FEET; THENCE SOUTH 08°33'17" EAST, A DISTANCE OF 1204.63 FEET; THENCE SOUTH 21°31'33" EAST, A DISTANCE OF 231.71 FEET; THENCE SOUTH 19°36'50" WEST, A DISTANCE OF 119.80 FEET; THENCE SOUTH 23°03'10" EAST, A DISTANCE OF 266.90 FEET; THENCE NORTH 61°27'01" EAST, A DISTANCE OF 72.25 FEET; THENCE SOUTH 21°31'33" EAST, A DISTANCE OF 25.00 FEET; THENCE SOUTH 24°44'50" EAST, A DISTANCE OF 109.86 FEET; THENCE SOUTH 02°50'42" EAST, A DISTANCE OF 443.43 FEET; THENCE SOUTH 38°46'38" EAST, A DISTANCE OF 155.36 FEET; THENCE SOUTH 05°31'05" EAST, A DISTANCE OF 521.33 FEET; THENCE NORTH 73°59'21" EAST, A DISTANCE OF 259.08 FEET; THENCE NORTH 30°18'30" EAST, A DISTANCE OF 338.21 FEET; THENCE NORTH 56°02'13" EAST, A DISTANCE OF 256.60 FEET; THENCE NORTH 17°18'02" WEST, A DISTANCE OF 245.64 FEET; THENCE NORTH 87°58'47" WEST, A DISTANCE OF 188.15 FEET; THENCE NORTH 43°23'44" WEST, A DISTANCE OF 70.31 FEET; THENCE NORTH 15°25'25" EAST, A DISTANCE OF 131.43 FEET; THENCE NORTH 08°57'10" WEST, A DISTANCE OF 221.74 FEET; THENCE NORTH 87°20'40" EAST, A DISTANCE OF 215.08 FEET; THENCE SOUTH 61°08'13" EAST, A DISTANCE OF 365.39 FEET; THENCE NORTH 12°27'20" WEST, A DISTANCE OF 282.17 FEET; THENCE NORTH 22°28'43" EAST, A DISTANCE OF 424.41 FEET; THENCE NORTH 28°35'48" WEST, A DISTANCE OF 795.82 FEET; THENCE SOUTH 54°59'59" WEST, A DISTANCE OF 426.05 FEET; THENCE SOUTH 17°21'11" EAST, A DISTANCE OF 363.39 FEET; THENCE SOUTH 27°42'03" EAST, A DISTANCE OF 252.43 FEET; THENCE SOUTH 43°50'42" EAST, A DISTANCE OF 194.13 FEET; THENCE SOUTH 03°24'22" WEST, A DISTANCE OF 68.13 FEET; THENCE SOUTH

89°33'00" WEST, A DISTANCE OF 376.08 FEET; THENCE NORTH 40°54'31" WEST, A DISTANCE OF 373.09 FEET; THENCE NORTH 07°01'37" WEST, A DISTANCE OF 373.59 FEET; THENCE NORTH 27°35'02" EAST, A DISTANCE OF 477.92 FEET; THENCE NORTH 83°09'02" WEST, A DISTANCE OF 296.11 FEET; THENCE NORTH 39°33'00" WEST, A DISTANCE OF 205.29 FEET; THENCE NORTH 16°56'05" EAST, A DISTANCE OF 492.36 FEET; THENCE NORTH 75°07'44" EAST, A DISTANCE OF 547.25 FEET; THENCE SOUTH 24°13'34" EAST, A DISTANCE OF 1824.65 FEET; THENCE SOUTH 03°31'05" EAST, A DISTANCE OF 1951.81 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF SAID SEMINOLE WOODS BOULEVARD; THENCE SOUTH 64°15'15" WEST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 771.72 FEET; THENCE NORTH 06°32'52" WEST LEAVING SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 503.88 FEET; THENCE NORTH 74°26'31" WEST, A DISTANCE OF 350.75 FEET; THENCE SOUTH 89°59'26" WEST, A DISTANCE OF 1033.69 FEET; THENCE SOUTH 00°00'34" EAST, A DISTANCE OF 1283.56 FEET TO A POINT ON SAID NORTHWESTERLY RIGHT-OF-WAY LINE OF SEMINOLE WOODS BOULEVARD; THENCE SOUTH 64°15'15" WEST ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 548.03 FEET TO THE POINT OF CURVE OF A CURVE, CONCAVE SOUTHEASTERLY, HAYING A RADIUS OF 2000.00 FEET; THENCE SOUTHWESTERLY CONTINUING ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE AND ALONG THE ARC OF SAID CURVE, AN ARC DISTANCE OF 340.28 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING OF SOUTH 59°22'48" WEST AND A CHORD DISTANCE OF 339.87 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 54°30'21" WEST CONTINUING ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 721.45 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT

CASCADES-SINGLE FAMILY WEST PHASE 1

PART OF GOVERNMENT SECTIONS 29, 30 AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 29, THENCE NORTH 02°56'18" WEST ALONG THE WEST LINE OF SAID SECTION 29 A DISTANCE OF 278.18 FEET; THENCE SOUTH 72°48'27" WEST, A DISTANCE OF 7.64 FEET TO THE POINT OF BEGINNING, THENCE NORTH 17°11'33" WEST, A DISTANCE OF 200.00 FEET, THENCE SOUTH 72°48'27" WEST, A DISTANCE OF 300.00 FEET; THENCE NORTH 17°11'33" WEST, A DISTANCE OF 288.37 FEET, THENCE NORTH 30°45'57" EAST, A DISTANCE OF 156.00 FEET; THENCE NORTH 50°34'11" EAST, A DISTANCE OF 436.26 FEET; THENCE NORTH 16°53'57" WEST; A DISTANCE OF 207.43 FEET; THENCE NORTH 26°57'36" WEST, A DISTANCE OF 468.07 FEET; THENCE NORTH 15°17'20" WEST, A DISTANCE OF 724.55 FEET; THENCE NORTH 39°35'09" WEST; A DISTANCE OF 330.89 FEET, THENCE NORTH 26°47'41" WEST, A DISTANCE OF 266.83 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY,

HAVING A RADIUS OF 945.00 FEET, AN ARC DISTANCE OF 204.23 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 11°01'12" WEST, 203.83 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 545.00 FEET, AN ARC DISTANCE OF 77.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 00°44'46" WEST, 77.61 FEET, TO THE POINT OF TANGENCY OF SAID CURVE THENCE NORTH 03°20'13" EAST, A DISTANCE OF 504.26 FEET, THENCE NORTH 86°33'58" EAST, A DISTANCE OF 276.06 FEET, THENCE SOUTH 09°42'36" WEST, A DISTANCE OF 94.29 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY, THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAYING A RADIUS OF 22.67 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 33°15'05" EAST, 34.08 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, NORTHERLY, HAVING A RADIUS OF 163.47 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 87°45'39" WEST, 36.57 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 86°33'58" EAST, A DISTANCE OF 36.39 FEET; THENCE SOUTH 03°26'02" EAST, A DISTANCE OF 169.00 FEET; THENCE NORTH 86°53'07" EAST, A DISTANCE OF 100.02 FEET TO THE ARC OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE SOUTHWESTERLY, HAYING A RADIUS OF 79.46 FEET, AN ARC DISTANCE OF 118.61' FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 50°33'24" EAST, 107.90 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 10°57'01" EAST, A DISTANCE OF 355.49 FEET TO A POINT ON A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 91.03 FEET, AN ARC DISTANCE OF 25.74 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 18°18'00" WEST, 25.65 FEET TO A NON-TANGENT POINT BEARING SOUTH 41°59'33" EAST, A DISTANCE OF 46.73 FEET, THENCE NORTH 76°57'21"EAST, ADISTANCEOF 111.15 FEET; THENCENORTH76°39'46"EAST, A DISTANCE OF 50.00 FEET; THENCE SOUTH 13°08'10" EAST, A DISTANCE OF 17.04 FEET; THENCE NORTH 68°03'37" EAST, A DISTANCE OF 185.69 FEET; THENCE NORTH 76°20'49" EAST, A DISTANCE OF 56.75 FEET; THENCE SOUTH 13°40'24" EAST, A DISTANCE OF 13.56 FEET; THENCE TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 325.00 FEET, AN ARC DISTANCE OF 72.43 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°08'06" WEST, 72.28 FEET, TO A NON-TANGENT POINT BEARING NORTH 61°53'51" EAST, A DISTANCE OF 51.67 FEET TO A NON-TANGENT CURVE, LEADING SOUTHEASTERLY; THENCE

SOUTHEASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 20.97 FEET, AN ARC DISTANCE OF 30.72 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 80°18'33" WEST, 28.04 FEET, TO A NON-TANGENCY POINT; THENCE SOUTH 31°43'36" EAST, A DISTANCE OF 50.42 FEET TO A NON-TANGENT CURVE LEADING SOUTHWESTERLY; THENCE SOUTHWESTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 25.13 FEET, AN ARC DISTANCE OF 37.09 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°10'50" EAST, 33.81 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAYING A RADIUS OF 275.00 FEET, AN ARC DISTANCE OF 76.65 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°13'19" WEST, 76.41 FEET, TO A NON-TANGENT POINT BEARING SOUTH 85°52'14", EAST, A DISTANCE OF 122.30 FEET; THENCE NORTH 06°18'16" WEST, A DISTANCE OF 16.16 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 50.22 FEET, AN ARC DISTANCE OF 67.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 30°56'07" EAST, 62.29 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 46.57 FEET, AN ARC DISTANCE OF 72.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 59°26'34" EAST, 65.18 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 04°53'10" EAST, A DISTANCE OF 66.69 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 724.36 FEET, AN ARC DISTANCE OF 34.62 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 06°53'25, EAST, 34.62 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 502.26 FEET, AN ARC DISTANCE OF 146.87 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°18'43" WEST, 146.35 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 24°13'30" EAST, A DISTANCE OF 197.82 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAYING A RADIUS OF 55.00 FEET, AN ARC DISTANCE OF 80.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 17°33'29" WEST, 73.29 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAYING A RADIUS OF 436.55 FEET, AN ARC DISTANCE OF 93.14 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND

DISTANCE OF NORTH 54°30'50" EAST, 92.96 FEET, TO A NON-TANGENT POINT BEARING SOUTH 37°16'33" EAST, A DISTANCE OF 120.89 FEET; THENCE SOUTH 44°32'37" EAST, A DISTANCE OF 50.02 FEET; THENCE SOUTH 65°23'31" EAST, A DISTANCE OF 517.00 FEET; THENCE SOUTH 04°26'11" EAST, A DISTANCE OF 540.96 FEET, THENCE SOUTH 47°18'59" EAST, A DISTANCE OF 280.03 FEET; THENCE SOUTH 00°00'00" EAST, A DISTANCE OF 783.09 FEET, THENCE SOUTH 58°20'26" WEST, A DISTANCE OF 341.06 FEET; THENCE SOUTH 37°53'13" EAST, A DISTANCE OF 141.57 FEET, THENCE SOUTH 35°34'53" WEST, A DISTANCE OF 557.52 FEET; THENCE SOUTH 81°24'26" WEST, A DISTANCE OF 95.82 FEET; THENCE SOUTH 03°37'43" EAST, A DISTANCE OF 42.09 FEET; THENCE SOUTH 86°22'17" WEST, A DISTANCE OF 67.55 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC CF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 75.00 FEET, AN ARC DISTANCE OF 92.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 03°02'28" WEST, 86.91 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAYING A RADIUS OF 42.00 FEET, AN ARC DISTANCE OF 37.78 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 12°40'32" WEST, A DISTANCE OF 36.52 FEET, TO A NON-TANGENT POINT BEARING SOUTH 76°54'14' WEST, A DISTANCE OF 70.06 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAYING A RADIUS OF 44.49 FEET, AN ARC DISTANCE OF 28.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°06'56" WEST, 28.48 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 88.00 FEET, AN ARC DISTANCE OF 58.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°16'28" WEST, 57.49 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 09°12'34" WEST, A DISTANCE OF 76.34 FEET, THENCE NORTH 08°44'20" WEST, A DISTANCE OF 32.20 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 117.69 FEET, AN ARC DISTANCE OF 30.20 FEET, SAID ARC BEING SUBTENDED BY CHORD BEARING AND DISTANCE OF NORTH 05°05'05" EAST, 30.11 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 14°56'11" EAST, A DISTANCE OF 35.76 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY; ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.19 FEET, AN ARC DISTANCE OF 8.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°21'58" EAST, 8.63 FEET TO A NON-TANGENT POINT BEARING SOUTH 80°14'31" WEST, A DISTANCE OF 110.59 FEET; THENCE NORTH 09°12'34" WEST, A DISTANCE OF 75.57 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE

NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAYING A RADIUS OF 355.00 FEET, AN ARC DISTANCE OF 204.05 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 25°40'33" EAST, 201.25 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 42°08'32" WEST, A DISTANCE OF 198.02 FEET; THENCE NORTH 42°40'44" WEST, A DISTANCE OF 147.06 FEET; THENCE NORTH 39°55'26" WEST, A DISTANCE OF 35.58 FEET; THENCE NORTH 42°08'32" WEST, A DISTANCE OF 15.41 FEET; THENCE NORTH 40°55'16" WEST, A DISTANCE OF 18.97 FEET, THENCE NORTH 37°51'08" WEST, A DISTANCE OF 28.69 FEET; THENCE SOUTH 72°48'27" WEST, A DISTANCE OF 105.21 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH

KL SEMINOLE TRACE, LLC, a Florida limited liability company

CASCADES-SINGLE FAMILY WEST PHASE 1

PART OF GOVERNMENT SECTIONS 29, 30 AND 32, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 29, THENCE NORTH 02°56'18" WEST ALONG THE WEST LINE OF SAID SECTION 29 A DISTANCE OF 278.18 FEET; THENCE SOUTH 72°48'27" WEST, A DISTANCE OF 7.64 FEET TO THE POINT OF BEGINNING, THENCE NORTH 17°11'33" WEST, A DISTANCE OF 200.00 FEET, THENCE SOUTH 72°48'27" WEST, A DISTANCE OF 300.00 FEET; THENCE NORTH 17°11'33" WEST, A DISTANCE OF 288.37 FEET, THENCE NORTH 30°45'57" EAST, A DISTANCE OF 156.00 FEET; THENCE NORTH 50°34'11" EAST, A DISTANCE OF 436.26 FEET; THENCE NORTH 16°53'57" WEST; A DISTANCE OF 207.43 FEET; THENCE NORTH 26°57'36" WEST, A DISTANCE OF 468.07 FEET; THENCE NORTH 15°17'20" WEST, A DISTANCE OF 724.55 FEET; THENCE NORTH 39°35'09" WEST; A DISTANCE OF 330.89 FEET, THENCE NORTH 26°47'41" WEST, A DISTANCE OF 266.83 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 945.00 FEET, AN ARC DISTANCE OF 204.23 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 11°01'12" WEST, 203.83 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 545.00 FEET, AN ARC DISTANCE OF 77.67 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 00°44'46" WEST, 77.61 FEET, TO THE POINT OF TANGENCY OF SAID CURVE THENCE NORTH 03°20'13" EAST, A DISTANCE OF 504.26 FEET,

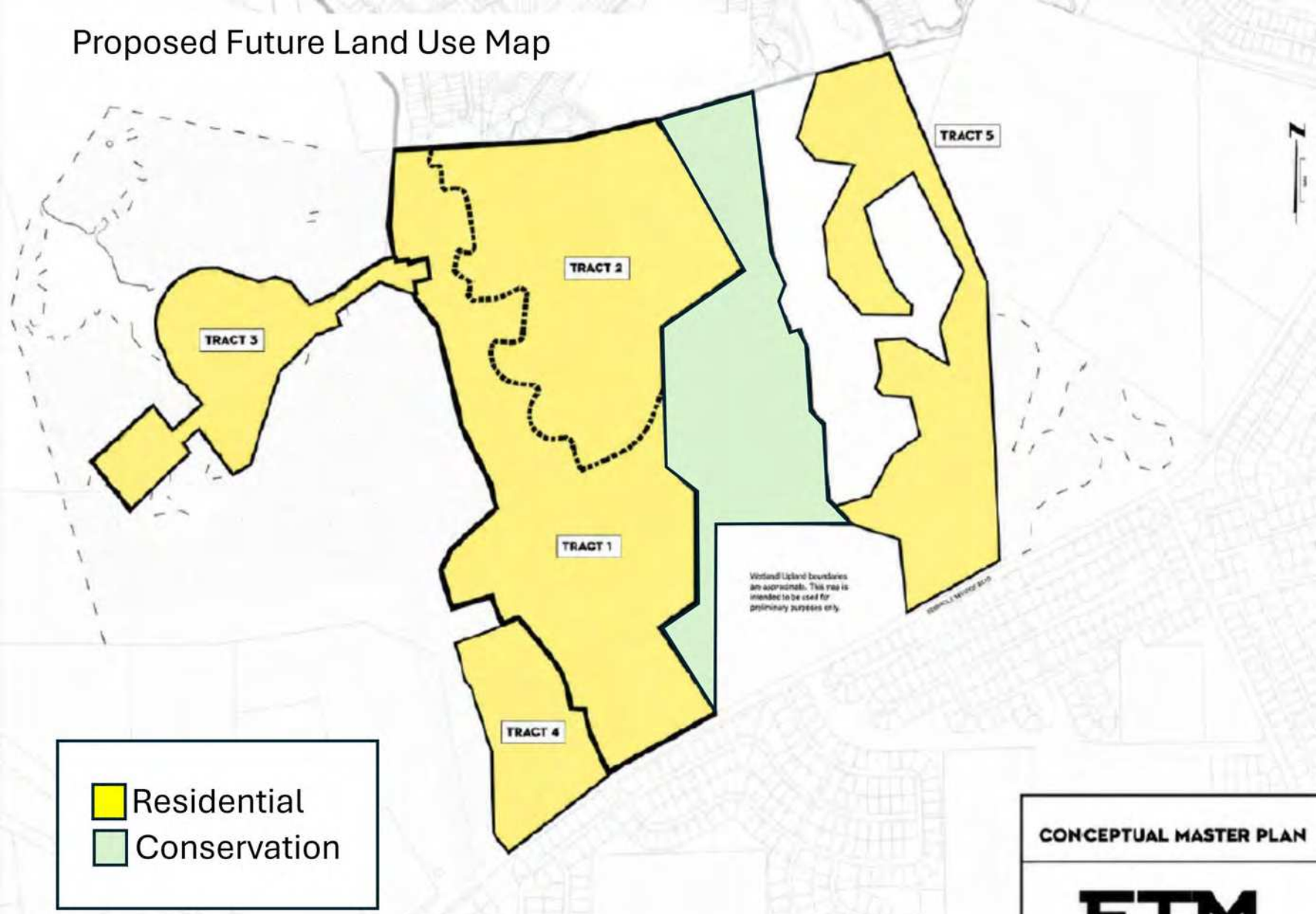
THENCE NORTH 86°33'58" EAST, A DISTANCE OF 276.06 FEET, THENCE SOUTH 09°42'36" WEST, A DISTANCE OF 94.29 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY, THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.67 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 33°15'05" EAST, 34.08 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, NORTHERLY, HAVING A RADIUS OF 163.47 FEET, AN ARC DISTANCE OF 38.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 87°45'39" WEST, 36.57 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 86°33'58" EAST, A DISTANCE OF 36.39 FEET; THENCE SOUTH 03°26'02" EAST, A DISTANCE OF 169.00 FEET; THENCE NORTH 86°53'07" EAST, A DISTANCE OF 100.02 FEET TO THE ARC OF A CURVE LEADING EASTERLY; THENCE EASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 79.46 FEET, AN ARC DISTANCE OF 118.61' FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 50°33'24" EAST, 107.90 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 10°57'01" EAST, A DISTANCE OF 355.49 FEET TO A POINT ON A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 91.03 FEET, AN ARC DISTANCE OF 25.74 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 18°18'00" WEST, 25.65 FEET TO A NON-TANGENT POINT BEARING SOUTH 41°59'33" EAST, A DISTANCE OF 46.73 FEET, THENCE NORTH 76°57'21"EAST, ADISTANCEOF 111.15 FEET; THENCENORTH76°39'46"EAST, A DISTANCE OF 50.00 FEET; THENCE SOUTH 13°08'10" EAST, A DISTANCE OF 17.04 FEET; THENCE NORTH 68°03'37" EAST, A DISTANCE OF 185.69 FEET; THENCE NORTH 76°20'49" EAST, A DISTANCE OF 56.75 FEET; THENCE SOUTH 13°40'24" EAST, A DISTANCE OF 13.56 FEET; THENCE TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 325.00 FEET, AN ARC DISTANCE OF 72.43 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°08'06" WEST, 72.28 FEET, TO A NON-TANGENT POINT BEARING NORTH 61°53'51" EAST, A DISTANCE OF 51.67 FEET TO A NON-TANGENT CURVE, LEADING SOUTHEASTERLY; THENCE SOUTHEASTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 20.97 FEET, AN ARC DISTANCE OF 30.72 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 80°18'33" WEST, 28.04 FEET, TO A NON-TANGENCY POINT; THENCE SOUTH 31°43'36" EAST, A DISTANCE OF 50.42 FEET TO A NON-TANGENT CURVE LEADING SOUTHWESTERLY; THENCE SOUTHWESTERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 25.13 FEET, AN ARC DISTANCE OF 37.09 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND

DISTANCE OF NORTH 17°10'50" EAST, 33.81 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 275.00 FEET, AN ARC DISTANCE OF 76.65 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°13' 19" WEST, 76.41 FEET, TO A NON-TANGENT POINT BEARING SOUTH 85°52'14", EAST, A DISTANCE OF 122.30 FEET; THENCE NORTH 06°18'16" WEST, A DISTANCE OF 16.16 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 50.22 FEET, AN ARC DISTANCE OF 67.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 30°56'07" EAST, 62.29 FEET, TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 46.57 FEET, AN ARC DISTANCE OF 72.19 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 59°26'34" EAST, 65.18 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 04°53'10" EAST, A DISTANCE OF 66.69 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 724.36 FEET, AN ARC DISTANCE OF 34.62 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 06°53'25, EAST, 34.62 FEET; TO THE POINT OF COMPOUND CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 502.26 FEET, AN ARC DISTANCE OF 146.87 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 17°18'43" WEST, 146.35 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE SOUTH 24°13'30" EAST, A DISTANCE OF 197.82 FEET, TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAYING A RADIUS OF 55.00 FEET, AN ARC DISTANCE OF 80.22 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 17°33'29" WEST, 73.29 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAYING A RADIUS OF 436.55 FEET, AN ARC DISTANCE OF 93.14 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 54°30'50" EAST, 92.96 FEET, TO A NON-TANGENT POINT BEARING SOUTH 37°16'33" EAST, A DISTANCE OF 120.89 FEET; THENCE SOUTH 44°32'37" EAST, A DISTANCE OF 50.02 FEET; THENCE SOUTH 65°23'31" EAST, A DISTANCE OF 517.00 FEET; THENCE SOUTH 04°26'11" EAST, A DISTANCE OF 540.96 FEET, THENCE SOUTH 47°18'59" EAST, A DISTANCE OF 280.03 FEET; THENCE SOUTH 00°00'00" EAST, A DISTANCE OF 783.09 FEET, THENCE SOUTH 58°20'26" WEST, A DISTANCE OF 341.06 FEET; THENCE SOUTH 37°53'13" EAST, A DISTANCE OF 141.57 FEET, THENCE SOUTH 35°34'53" WEST, A DISTANCE OF 557.52 FEET; THENCE SOUTH

81°24'26" WEST, A DISTANCE OF 95.82 FEET; THENCE SOUTH 03°37' 43" EAST, A DISTANCE OF 42.09 FEET; THENCE SOUTH 86°22'17" WEST, A DISTANCE OF 67.55 FEET TO THE ARC OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC CF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 75.00 FEET, AN ARC DISTANCE OF 92.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 03°02'28" WEST, 86.91 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING SOUTHERLY; THENCE SOUTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 42.00 FEET, AN ARC DISTANCE OF 37.78 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF SOUTH 12°40'32" WEST, A DISTANCE OF 36.52 FEET, TO A NON-TANGENT POINT BEARING SOUTH 76°54'14' WEST, A DISTANCE OF 70.06 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAYING A RADIUS OF 44.49 FEET, AN ARC DISTANCE OF 28.99 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°06'56" WEST, 28.48 FEET; TO THE POINT OF REVERSE CURVATURE OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 88.00 FEET, AN ARC DISTANCE OF 58.56 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 28°16'28" WEST, 57.49 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 09°12'34" WEST, A DISTANCE OF 76.34 FEET, THENCE NORTH 08°44'20" WEST, A DISTANCE OF 32.20 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE EASTERLY, HAYING A RADIUS OF 117.69 FEET, AN ARC DISTANCE OF 30.20 FEET, SAID ARC BEING SUBTENDED BY CHORD BEARING AND DISTANCE OF NORTH 05°05'05" EAST, 30.11 FEET, TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 14°56'11" EAST, A DISTANCE OF 35.76 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY; ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE, EASTERLY, HAVING A RADIUS OF 22.19 FEET, AN ARC DISTANCE OF 8.69 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 20°21'58" EAST, 8.63 FEET TO A NON-TANGENT POINT BEARING SOUTH 80°14'31" WEST, A DISTANCE OF 110.59 FEET; THENCE NORTH 09°12'34" WEST, A DISTANCE OF 75.57 FEET TO THE ARC OF A CURVE LEADING NORTHERLY; THENCE NORTHERLY, ALONG AND AROUND THE ARC OF SAID CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 355.00 FEET, AN ARC DISTANCE OF 204.05 FEET, SAID ARC BEING SUBTENDED BY A CHORD BEARING AND DISTANCE OF NORTH 25°40'33" EAST, 201.25 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE NORTH 42°08'32" WEST, A DISTANCE OF 198.02 FEET; THENCE NORTH 42°40'44" WEST, A DISTANCE OF 147.06 FEET; THENCE NORTH 39°55'26" WEST, A DISTANCE OF 35.58 FEET; THENCE NORTH 42°08'32" WEST, A DISTANCE OF 15.41 FEET; THENCE NORTH 40°55'16" WEST, A DISTANCE OF 18.97 FEET, THENCE NORTH 37°51'08" WEST, A

DISTANCE OF 28.69 FEET; THENCE SOUTH 72°48'27" WEST, A DISTANCE OF 105.21 FEET TO THE POINT OF BEGINNING.

Proposed Future Land Use Map



Note: Max residential units should be 743 units