

MORNINGSIDE DRIVE EXTENSION FROM FORT KING ROAD TO US HIGHWAY 301

ROUTE STUDY AND POND SITING ANALYSIS AND REPORT APPENDIX (Report 2 of 2)

**Work Order No.: X11196.10
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APPENDIX 1 – SOILS REPORT



United States
Department of
Agriculture

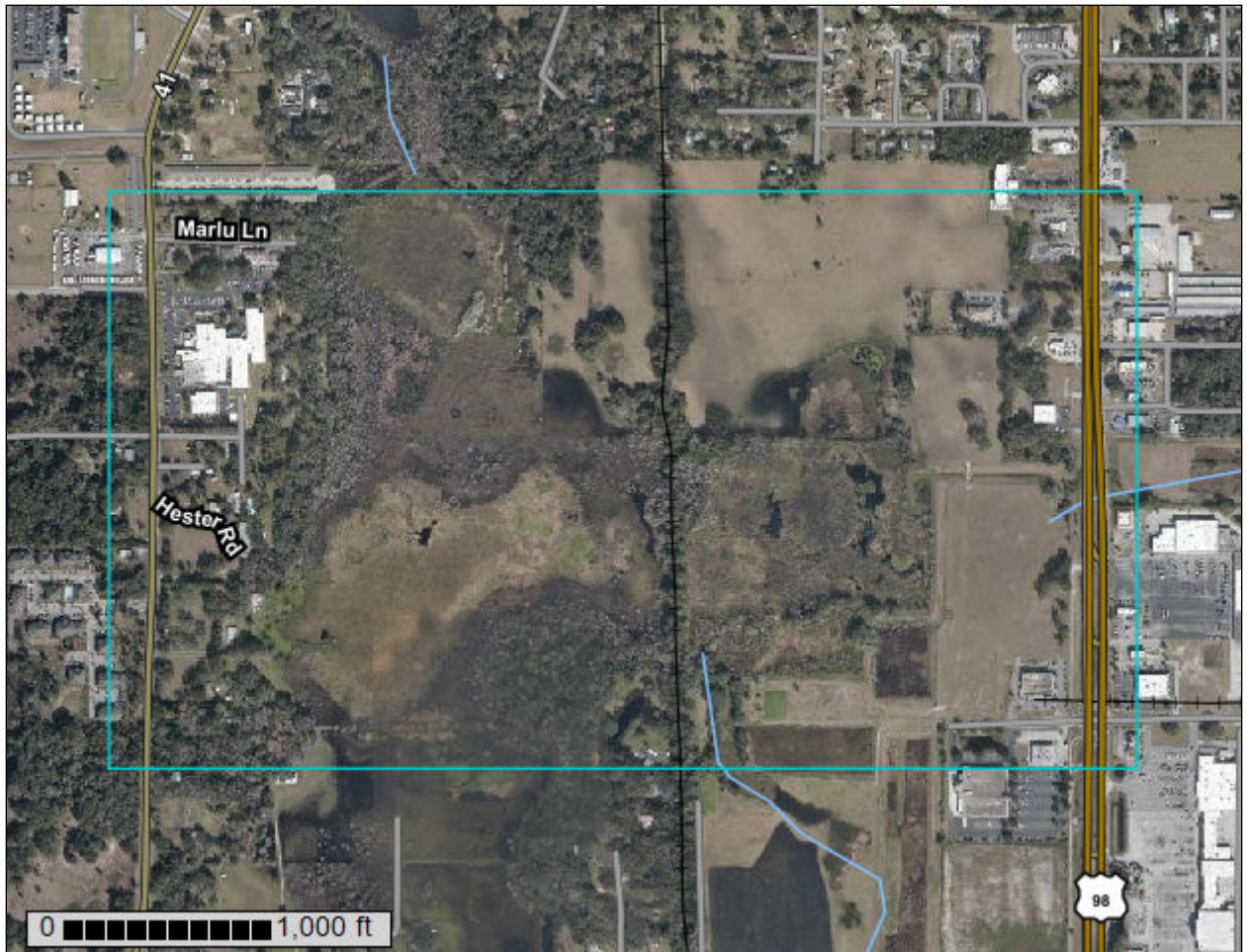
NRCS

Natural
Resources
Conservation
Service

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a joint effort of the United
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agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Pasco County, Florida**

Morningside Drive Extension



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

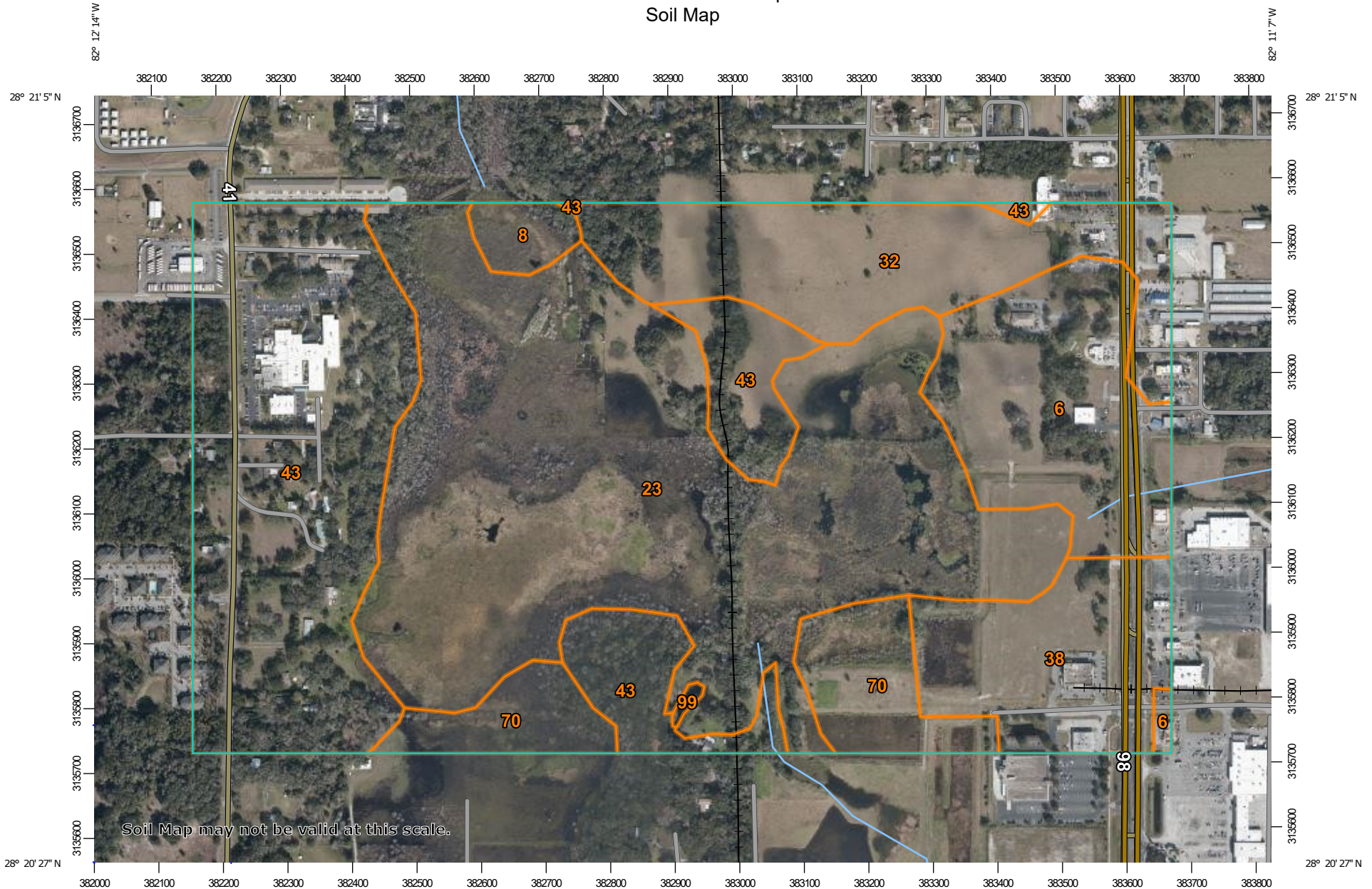
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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

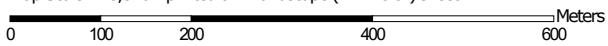
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:8,340 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Pasco County, Florida
 Survey Area Data: Version 19, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 19, 2019—Jan 29, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6	Tavares sand, 0 to 5 percent slopes	31.4	9.8%
8	Sellers mucky loamy fine sand	3.8	1.2%
23	Basinger fine sand, depression, 0 to 1 percent slopes	122.3	38.3%
32	Lake fine sand, 0 to 5 percent slopes	35.4	11.1%
38	Urban land, 0 to 2 percent slopes	23.8	7.5%
43	Arredondo fine sand, 0 to 5 percent slopes	82.8	25.9%
70	Placid fine sand	19.3	6.1%
99	Water	0.4	0.1%
Totals for Area of Interest		319.1	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit

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descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Pasco County, Florida

6—Tavares sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2v173
Elevation: 0 to 180 feet
Mean annual precipitation: 44 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 300 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Tavares and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tavares

Setting

Landform: Flats on marine terraces, ridges on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Interfluve, base slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Eolian or sandy marine deposits

Typical profile

A - 0 to 7 inches: sand
C - 7 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 50.02 in/hr)
Depth to water table: About 42 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)
Hydric soil rating: No

Minor Components

Apopka

Percent of map unit: 6 percent

Landform: Knolls on marine terraces, ridges on marine terraces

Landform position (two-dimensional): Shoulder, summit, footslope

Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL),
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

Hydric soil rating: No

Candler

Percent of map unit: 4 percent

Landform: Ridges on marine terraces, knolls on marine terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Interfluve, side slope, tread

Down-slope shape: Convex

Across-slope shape: Convex

Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R155XY002FL),
Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on ridges and
dunes of xeric uplands (G155XB111FL), Sandy soils on ridges and dunes of
xeric uplands (G154XB111FL)

Hydric soil rating: No

Adamsville

Percent of map unit: 3 percent

Landform: Knolls on flatwoods, rises on flatwoods

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve, rise, talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Upland Hardwood Hammock (R154XY008FL),
Upland Hardwood Hammock (R155XY008FL), Sandy soils on rises and knolls
of mesic uplands (G155XB131FL)

Hydric soil rating: No

Zolfo

Percent of map unit: 2 percent

Landform: Flats on marine terraces

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands
(G154XB131FL)

Hydric soil rating: No

8—Sellers mucky loamy fine sand

Map Unit Setting

National map unit symbol: bvcf
Elevation: 0 to 180 feet
Mean annual precipitation: 50 to 58 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 324 to 354 days
Farmland classification: Not prime farmland

Map Unit Composition

Sellers and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sellers

Setting

Landform: Drainageways on marine terraces, depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A1 - 0 to 9 inches: mucky loamy fine sand
A2 - 9 to 24 inches: fine sand
C - 24 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G154XB145FL)

Other vegetative classification: Freshwater Marshes and Ponds (R154XY010FL),
Sandy soils on stream terraces, flood plains, or in depressions
(G154XB145FL)
Hydric soil rating: Yes

Minor Components

Basinger, depressional

Percent of map unit: 5 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Freshwater Marshes and Ponds (R154XY010FL),
Sandy soils on stream terraces, flood plains, or in depressions
(G154XB145FL)
Hydric soil rating: Yes

23—Basinger fine sand, depressional, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2v16t
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 287 to 317 days
Farmland classification: Not prime farmland

Map Unit Composition

Basinger, depressional, and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Basinger, Depressional

Setting

Landform: Depressions on marine terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 3 inches: fine sand
E - 3 to 8 inches: fine sand
E/Bh - 8 to 24 inches: fine sand
C - 24 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 1 percent

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Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 50.02 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G154XB145FL)
Other vegetative classification: Freshwater Marshes and Ponds (R154XY010FL), Sandy soils on stream terraces, flood plains, or in depressions (G154XB145FL)
Hydric soil rating: Yes

Minor Components

Smyrna

Percent of map unit: 3 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R155XY003FL - South Florida Flatwoods
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Hydric soil rating: No

Immokalee, hydric

Percent of map unit: 3 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R154XY003FL - South Florida Flatwoods
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)
Hydric soil rating: Yes

Floridana, hydric

Percent of map unit: 2 percent
Landform: Depressions on marine terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G154XB245FL)

Hydric soil rating: Yes

32—Lake fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2v17f
Elevation: 10 to 200 feet
Mean annual precipitation: 44 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 300 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Lake and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lake

Setting

Landform: Ridges on marine terraces, hills on marine terraces
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Eolian deposits or sandy marine deposits

Typical profile

A - 0 to 9 inches: fine sand
C - 9 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 50.02 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

Custom Soil Resource Report

Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL),
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)
Hydric soil rating: No

Minor Components

Arredondo

Percent of map unit: 8 percent
Landform: Ridges on marine terraces, hills on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex, linear
Across-slope shape: Convex
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL),
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)
Hydric soil rating: No

Tavares

Percent of map unit: 5 percent
Landform: Ridges on marine terraces, flats on marine terraces
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic
uplands (G155XB121FL)
Hydric soil rating: No

Jonesville

Percent of map unit: 2 percent
Landform: Rises on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Shallow or moderately deep, sandy or loamy soils
on rises and ridges of mesic uplands (G154XB521FL)
Hydric soil rating: No

38—Urban land, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2x9fc
Elevation: 0 to 200 feet
Mean annual precipitation: 40 to 68 inches
Mean annual air temperature: 68 to 79 degrees F
Frost-free period: 345 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Flatwoods on marine terraces, hills on marine terraces, ridges on marine terraces, knolls on marine terraces, rises on marine terraces

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Interfluve, side slope, riser, talf, rise

Down-slope shape: Linear, convex

Across-slope shape: Linear

Parent material: No parent material

Interpretive groups

Land capability classification (irrigated): None specified

Forage suitability group: Forage suitability group not assigned (G155XB999FL)

Other vegetative classification: Forage suitability group not assigned (G155XB999FL)

Hydric soil rating: Unranked

Minor Components

Matlacha

Percent of map unit: 3 percent

Landform: Flats on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex, linear

Across-slope shape: Linear

Other vegetative classification: Forage suitability group not assigned (G155XB999FL)

Hydric soil rating: No

St. augustine

Percent of map unit: 3 percent

Landform: Marine terraces

Landform position (three-dimensional): Tread, rise

Down-slope shape: Linear

Across-slope shape: Convex

Other vegetative classification: Forage suitability group not assigned (G155XB999FL)

Hydric soil rating: No

Boca

Percent of map unit: 1 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear, convex

Across-slope shape: Concave, linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

Hydric soil rating: Yes

Custom Soil Resource Report

Immokalee

Percent of map unit: 1 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Riser, talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Hydric soil rating: No

Paola

Percent of map unit: 1 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Side slope, interfluve, riser
Down-slope shape: Convex, linear
Across-slope shape: Linear
Other vegetative classification: Sand Pine Scrub (R155XY001FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Hallandale

Percent of map unit: 1 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Hydric soil rating: Yes

Myakka

Percent of map unit: 1 percent
Landform: Drainageways on flatwoods on marine terraces
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear
Across-slope shape: Concave, linear
Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Hydric soil rating: No

Apopka

Percent of map unit: 1 percent
Landform: Hills on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve, side slope, riser
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R155XY002FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Pomello

Percent of map unit: 1 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Backslope, summit

Custom Soil Resource Report

Landform position (three-dimensional): Side slope, interfluve, riser

Down-slope shape: Convex, linear

Across-slope shape: Linear

Other vegetative classification: Sand Pine Scrub (R155XY001FL), Sandy soils on rises and knolls of mesic uplands (G155XB131FL)

Hydric soil rating: No

Adamsville

Percent of map unit: 1 percent

Landform: Rises on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Tread, rise

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Upland Hardwood Hammock (R155XY008FL), Sandy soils on rises and knolls of mesic uplands (G155XB131FL)

Hydric soil rating: No

Eaugallie

Percent of map unit: 1 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: No

43—Arredondo fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2w0q0

Elevation: 30 to 160 feet

Mean annual precipitation: 44 to 56 inches

Mean annual air temperature: 68 to 75 degrees F

Frost-free period: 290 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Arredondo and similar soils: 82 percent

Minor components: 18 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arredondo

Setting

Landform: Hills on marine terraces, ridges on marine terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope, interfluve, riser

Down-slope shape: Linear, convex

Across-slope shape: Linear, convex

Custom Soil Resource Report

Parent material: Sandy marine deposits and/or loamy marine deposits

Typical profile

A - 0 to 8 inches: fine sand
E - 8 to 62 inches: fine sand
Bt1 - 62 to 69 inches: loamy fine sand
Bt2 - 69 to 80 inches: sandy clay

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on ridges and dunes of xeric uplands
(G154XB111FL)
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL),
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)
Hydric soil rating: No

Minor Components

Candler

Percent of map unit: 7 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, tread
Down-slope shape: Convex, linear
Across-slope shape: Concave, convex, linear
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL),
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)
Hydric soil rating: No

Lake

Percent of map unit: 5 percent
Landform: Ridges, hills, marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex, linear
Across-slope shape: Linear
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL),
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)
Hydric soil rating: No

Sparr

Percent of map unit: 4 percent

Custom Soil Resource Report

Landform: Rises on marine terraces, flats on marine terraces

Landform position (three-dimensional): Interfluve, rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands
(G154XB131FL)

Hydric soil rating: No

Fort meade

Percent of map unit: 2 percent

Landform: Ridges on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex, linear

Across-slope shape: Linear

Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands
(G154XB111FL)

Hydric soil rating: No

70—Placid fine sand

Map Unit Setting

National map unit symbol: bvc6

Elevation: 50 to 210 feet

Mean annual precipitation: 50 to 58 inches

Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 324 to 354 days

Farmland classification: Not prime farmland

Map Unit Composition

Placid and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Placid

Setting

Landform: Drainageways on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Sandy marine deposits

Typical profile

A - 0 to 18 inches: fine sand

C - 18 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: High

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Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: A/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)

Other vegetative classification: Freshwater Marshes and Ponds (R154XY010FL), Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)

Hydric soil rating: Yes

Minor Components

Basinger

Percent of map unit: 10 percent

Landform: Drainageways on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Concave

Other vegetative classification: Slough (R154XY011FL), Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)

Hydric soil rating: Yes

Samsula

Percent of map unit: 10 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Freshwater Marshes and Ponds (R154XY010FL), Organic soils in depressions and on flood plains (G154XB645FL)

Hydric soil rating: Yes

99—Water

Map Unit Composition

Water (fresh): 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water (fresh)

Interpretive groups

Land capability classification (irrigated): None specified

Custom Soil Resource Report

Forage suitability group: Forage suitability group not assigned (G154XB999FL)

Other vegetative classification: Forage suitability group not assigned
(G154XB999FL)

Hydric soil rating: Unranked

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Construction Materials

This folder contains a collection of tabular reports that present soil interpretations related to sources of construction materials. The reports (tables) include all selected map units and components for each map unit, limiting features and interpretive ratings. Construction materials interpretations are tools designed to provide guidance to users in selecting a site for potential source of various materials. Individual soils or groups of soils may be selected as a potential source because they are close at hand, are the only source available, or they meets some or all of the physical or chemical properties required for the intended application. Example interpretations include roadfill, sand and gravel, topsoil and reclamation material.

Source of Reclamation Material, Roadfill, and Topsoil

This table gives information about the soils as potential sources of reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

The soils are rated *good*, *fair*, or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the table. Numerical ratings between 0.00 and 0.99 are given after the specified features. These numbers indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do

Custom Soil Resource Report

not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments. The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Information in this table is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this table. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Custom Soil Resource Report

Report—Source of Reclamation Material, Roadfill, and Topsoil

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation]

Source of Reclamation Material, Roadfill, and Topsoil—Pasco County, Florida							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6—Tavares sand, 0 to 5 percent slopes							
Tavares	85	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Exchange capacity	0.24
		Droughty	0.00			Too acid	0.99
		Low content of organic matter	0.07				
		Too acid	0.50				
8—Sellers mucky loamy fine sand							
Sellers	95	Poor		Poor		Poor	
		Too sandy	0.00	Wetness	0.00	Wetness	0.00
		Wind erosion	0.00			Too sandy	0.00
		Low content of organic matter	0.13			Exchange capacity	0.49
		Too acid	0.50			Too acid	0.60
23—Basinger fine sand, depressional, 0 to 1 percent slopes							
Basinger, depressional	92	Poor		Poor		Poor	
		Too sandy	0.00	Wetness	0.00	Wetness	0.00
		Wind erosion	0.00			Too sandy	0.00
		Low content of organic matter	0.05			Exchange capacity	0.30
		Too acid	0.68				

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Pasco County, Florida							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
32—Lake fine sand, 0 to 5 percent slopes							
Lake	85	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Exchange capacity	0.36
		Low content of organic matter	0.21			Too acid	0.88
		Droughty	0.25				
		Too acid	0.50				
38—Urban land, 0 to 2 percent slopes							
Urban land	85	Not rated		Not rated		Not rated	
43—Arredondo fine sand, 0 to 5 percent slopes							
Arredondo	82	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Exchange capacity	0.15
		Low content of organic matter	0.13			Too acid	0.98
		Too acid	0.54				
70—Placid fine sand							
Placid	80	Poor		Poor		Poor	
		Too sandy	0.00	Wetness	0.00	Wetness	0.00
		Wind erosion	0.00			Too sandy	0.00
		Low content of organic matter	0.13			Exchange capacity	0.34
		Too acid	0.50			Too acid	0.83
99—Water							
Water (fresh)	100	Not rated		Not rated		Not rated	

Soil Chemical Properties

This folder contains a collection of tabular reports that present soil chemical properties. The reports (tables) include all selected map units and components for each map unit. Soil chemical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil chemical properties include pH, cation exchange capacity, calcium carbonate, gypsum, and electrical conductivity.

Chemical Soil Properties

This table shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable cations plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced saturated hydraulic conductivity and aeration, and a general degradation of soil structure.

Custom Soil Resource Report

Chemical Soil Properties—Pasco County, Florida								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
6—Tavares sand, 0 to 5 percent slopes								
Tavares	0-7	—	0.7-1.3	3.5-6.0	0	0	0.0-2.0	0-4
	7-80	1.0-2.8	—	3.5-6.0	0	0	0.0-2.0	0-4
8—Sellers mucky loamy fine sand								
Sellers	0-9	—	0.6-7.3	3.5-5.5	0	0	0.0-2.0	0-4
	9-24	—	0.4-4.2	3.5-5.5	0	0	0.0-2.0	0-4
	24-80	—	0.1-4.9	3.5-5.5	0	0	0.0-2.0	0-4
23—Basinger fine sand, depressional, 0 to 1 percent slopes								
Basinger, depressional	0-3	0.1-4.1	—	3.5-7.3	0	0	0.0-2.0	0-4
	3-8	0.1-3.4	—	3.5-7.3	0	0	0.0-2.0	0-4
	8-24	0.1-4.5	—	3.5-7.3	0	0	0.0-2.0	0-4
	24-80	0.1-2.6	—	3.5-7.3	0	0	0.0-2.0	0-4
32—Lake fine sand, 0 to 5 percent slopes								
Lake	0-9	—	1.4-3.2	4.5-5.5	0	0	0.0-2.0	0-4
	9-80	—	0.4-2.0	4.5-5.5	0	0	0.0-2.0	0-4
38—Urban land, 0 to 2 percent slopes								
Urban land	—	—	—	—	—	—	—	—

Custom Soil Resource Report

Chemical Soil Properties—Pasco County, Florida								
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>	
43—Arredondo fine sand, 0 to 5 percent slopes								
Arredondo	0-8	—	0.2-1.6	4.5-6.0	0	0	0.0-2.0	0-4
	8-62	—	0.0-2.8	4.5-6.0	0	0	0.0-2.0	0-4
	62-69	—	1.9-4.2	4.5-6.0	0	0	0.0-2.0	0-4
	69-80	—	2.9-9.7	4.5-6.0	0	0	0.0-2.0	0-4
70—Placid fine sand								
Placid	0-18	—	0.1-7.7	3.5-6.0	0	0	0.0-2.0	0-4
	18-80	—	0.0-4.9	3.5-6.5	0	0	0.0-2.0	0-4
99—Water								
Water (fresh)	—	—	—	—	—	—	—	—

Soil Physical Properties

This folder contains a collection of tabular reports that present soil physical properties. The reports (tables) include all selected map units and components for each map unit. Soil physical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Hydrologic soil group is a group of soils having similar runoff potential under similar storm and cover conditions. The criteria for determining Hydrologic soil group is found in the National Engineering Handbook, Chapter 7 issued May 2007(<http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>). Listing HSGs by soil map unit component and not by soil series is a new concept for the engineers. Past engineering references contained lists of HSGs by soil series. Soil series are continually being defined and redefined, and the list of soil series names changes so frequently as to make the task of maintaining a single national list virtually impossible. Therefore, the criteria is now used to calculate the HSG using the component soil properties and no such national series lists will be maintained. All such references are obsolete and their use should be discontinued. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. These properties are depth to a seasonal high water table, saturated hydraulic conductivity after prolonged wetting, and depth to a layer with a very slow water transmission rate. Changes in soil properties caused by land management or climate changes also cause the hydrologic soil group to change. The influence of ground cover is treated independently. There are four hydrologic soil groups, A, B, C, and D, and three dual groups, A/D, B/D, and C/D. In the dual groups, the first letter is for drained areas and the second letter is for undrained areas.

The four hydrologic soil groups are described in the following paragraphs:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell

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potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Percentage of rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination. Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

References:

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American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

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Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash. The criteria for determining the hydrologic soil group for individual soil components is found in the National Engineering Handbook, Chapter 7 issued May 2007(<http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>). Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Engineering Properties—Pasco County, Florida														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
6—Tavares sand, 0 to 5 percent slopes														
Tavares	85	A	0-7	Sand	SM, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	95-98-100	73-79-100	5-14- 15	0-0 -14	NP
			7-80	Sand	SP-SM, SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	95-98-100	73-79-100	5-12- 13	0-0 -16	NP-0 -1
8—Sellers mucky loamy fine sand														
Sellers	95	A/D	0-9	Mucky loamy fine sand	SM, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	100-100-100	85-93-100	5-13- 20	0-7 -14	NP
			9-24	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	100-100-100	85-93-100	5-13- 20	0-7 -14	NP
			24-80	Sand, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	100-100-100	85-93-100	5-13- 20	0-7 -14	NP
23—Basinger fine sand, depressional, 0 to 1 percent slopes														
Basinger, depressional	92	A/D	0-3	Fine sand	SP-SM	A-2-4	0- 0- 0	0- 0- 0	100-100-100	95-100-100	87-89-96	2-12- 12	0-0 -33	NP-0 -1
			3-8	Fine sand	SP, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	95-100-100	87-91-96	2- 8- 12	0-0 -17	NP-0 -1
			8-24	Fine sand	SP, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	95-100-100	88-90-97	2-10- 13	0-0 -21	NP-0 -2
			24-80	Fine sand	SP, SP-SM	A-3	0- 0- 0	0- 0- 0	100-100-100	95-100-100	89-91-95	2- 8- 10	0-0 -14	NP

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Engineering Properties—Pasco County, Florida														
Map unit symbol and soil name	Pct. of map unit	Hydrologic group	Depth	USDA texture	Classification		Pct Fragments		Percentage passing sieve number—				Liquid limit	Plasticity index
					Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
			<i>In</i>				<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>	<i>L-R-H</i>
32—Lake fine sand, 0 to 5 percent slopes														
Lake	85	A	0-9	Fine sand	SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	100-100-100	85-85-100	7- 9- 11	0-14 -24	NP-1 -1
			9-80	Fine sand	SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	100-100-100	85-85-100	5- 9- 11	0-10 -18	NP-1 -1
43—Arredondo fine sand, 0 to 5 percent slopes														
Arredondo	82	A	0-8	Fine sand	SM, SP-SM	A-3, A-2-4	0- 0- 0	0- 0- 0	95-100-100	92-100-100	83-96-100	10-17-20	0-17 -22	NP-1 -3
			8-62	Fine sand	SM, SP-SM	A-3, A-2-4	0- 0- 0	0- 0- 0	95-100-100	92-100-100	82-96-100	8-11- 16	0-15 -19	NP-1 -3
			62-69	Loamy sand, sandy loam, loamy fine sand, fine sandy loam	SC-SM, SC	A-2-4, A-2-6	0- 0- 0	0- 0- 0	95-100-100	92-100-100	85-96-100	16-20-29	20-24 -29	6-8 -12
			69-80	Sandy loam, sandy clay, sandy clay loam	SC	A-6, A-7-6, A-2-4	0- 0- 0	0- 0- 0	95-100-100	92-100-100	82-97-100	31-41-49	25-45 -48	9-26-28
70—Placid fine sand														
Placid	80	A/D	0-18	Fine sand	SM, SP, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	100-100-100	90-95-100	1-11- 20	0-7 -14	NP
			18-80	Sand, fine sand, loamy fine sand	SM, SP, SP-SM	A-2-4, A-3	0- 0- 0	0- 0- 0	100-100-100	100-100-100	90-95-100	1-11- 20	0-7 -14	NP

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (*K_{sat}*), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (K_{sat}) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (*K_{sat}*) is considered in the design of soil drainage systems and septic tank absorption fields.

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Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

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Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service.
National soil survey handbook, title 430-VI. (<http://soils.usda.gov>)

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Three values are provided to identify the expected Low (L), Representative Value (R), and High (H).

Physical Soil Properties—Pasco County, Florida														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
6—Tavares sand, 0 to 5 percent slopes														
Tavares	0-7	93-94- 96	2- 4- 5	2- 2- 2	1.58-1.59-1.60	42.34-198.00-353.00	0.02-0.04-0.10	0.1- 0.1- 0.1	0.5- 1.5- 2.0	.10	.10	5	1	220
	7-80	95-96- 97	1- 2- 3	1- 2- 3	1.62-1.64-1.66	42.34-198.00-353.00	0.01-0.03-0.05	0.1- 0.1- 0.3	0.0- 0.2- 0.5	.05	.05			
8—Sellers mucky loamy fine sand														
Sellers	0-9	-78-	0-16- 30	1- 6- 10	1.25-1.40-1.55	42.00-92.00-141.00	0.15-0.18-0.20	0.0- 1.5- 2.9	5.0- 7.5-10.0	.15	.15	5	2	134
	9-24	-93-	0- 1- 15	1- 6- 10	1.30-1.43-1.55	42.00-92.00-141.00	0.10-0.13-0.15	0.0- 1.5- 2.9	1.0- 1.5- 2.0	.02	.02			
	24-80	-93-	0- 1- 15	1- 6- 10	1.45-1.58-1.70	42.00-92.00-141.00	0.03-0.06-0.08	0.0- 1.5- 2.9	0.0- 0.3- 0.5	.02	.02			

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Physical Soil Properties—Pasco County, Florida														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
23—Basinger fine sand, depressional, 0 to 1 percent slopes														
Basinger, depressional	0-3	90-92-100	0- 5- 10	0- 3- 4	1.40-1.48-1.55	42.34-91.74-353.00	0.03-0.07-0.10	0.0- 0.3- 0.5	0.5- 4.5- 8.0	.05	.05	5	1	250
	3-8	90-98-100	0- 1- 10	0- 1- 4	1.40-1.48-1.55	42.34-91.74-353.00	0.03-0.07-0.10	0.0- 0.2- 0.4	0.0- 0.3- 0.8	.02	.02			
	8-24	90-96-100	0- 1- 9	0- 3- 5	1.40-1.53-1.79	42.34-91.74-353.00	0.03-0.09-0.15	0.0- 0.2- 0.4	0.1- 1.3- 2.0	.02	.02			
	24-80	95-98-100	0- 1- 4	0- 1- 3	1.50-1.60-1.70	42.34-91.74-353.00	0.03-0.07-0.10	0.0- 0.1- 0.3	0.0- 0.2- 0.5	.02	.02			
32—Lake fine sand, 0 to 5 percent slopes														
Lake	0-9	92-95- 97	0- 2- 5	2- 3- 4	1.50-1.51-1.52	42.34-197.67-353.00	0.05-0.05-0.14	0.2- 0.2- 0.3	1.5- 2.1- 3.6	.02	.02	5	1	250
	9-80	92-94- 97	0- 2- 5	2- 4- 4	1.60-1.64-1.68	42.34-197.67-353.00	0.05-0.05-0.12	0.1- 0.2- 0.3	0.1- 0.3- 1.1	.02	.02			
38—Urban land, 0 to 2 percent slopes														
Urban land	—	—	—	—	—	—	—	—	—					

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Physical Soil Properties—Pasco County, Florida														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	<i>In</i>	<i>Pct</i>	<i>Pct</i>	<i>Pct</i>	<i>g/cc</i>	<i>micro m/sec</i>	<i>In/In</i>	<i>Pct</i>	<i>Pct</i>					
43—Arredondo fine sand, 0 to 5 percent slopes														
Arredondo	0-8	85-90- 99	0- 6- 10	1- 4- 7	1.56-1.57-1.58	42.00-92.00-141.00	0.05-0.07-0.08	0.1- 0.2- 0.4	0.0- 1.0- 2.0	.05	.05	5	1	250
	8-62	85-95- 99	0- 2- 10	1- 3- 7	1.56-1.58-1.60	42.00-92.00-141.00	0.05-0.06-0.08	0.0- 0.2- 0.6	0.0- 0.3- 0.5	.02	.02			
	62-69	65-86- 90	0- 1- 21	10-13- 18	1.62-1.65-1.68	14.00-28.00-42.00	0.10-0.12-0.15	0.5- 0.7- 1.0	0.0- 0.3- 0.5	.10	.10			
	69-80	55-62- 80	0- 1- 20	15-37- 40	1.62-1.66-1.71	4.00-23.00-42.00	0.12-0.13-0.17	0.7- 1.8- 2.1	0.0- 0.3- 0.5	.05	.05			
70—Placid fine sand														
Placid	0-18	-94-	0- 1- 15	0- 5- 10	1.20-1.30-1.40	42.00-92.00-141.00	0.15-0.18-0.20	0.0- 1.5- 2.9	2.0- 6.0-10.0	.02	.02	5	1	250
	18-80	-94-	0- 1- 15	0- 5- 10	1.30-1.45-1.60	42.00-92.00-141.00	0.05-0.07-0.08	0.0- 1.5- 2.9	0.0- 0.3- 0.5	.02	.02			
99—Water														
Water (fresh)	—	—	—	—	—	—	—	—	—					

Water Features

This folder contains tabular reports that present soil hydrology information. The reports (tables) include all selected map units and components for each map unit. Water Features include ponding frequency, flooding frequency, and depth to water table.

Hydrologic Soil Group and Surface Runoff

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

Report—Hydrologic Soil Group and Surface Runoff

Absence of an entry indicates that the data were not estimated. The dash indicates no documented presence.

Custom Soil Resource Report

Hydrologic Soil Group and Surface Runoff—Pasco County, Florida			
Map symbol and soil name	Pct. of map unit	Surface Runoff	Hydrologic Soil Group
6—Tavares sand, 0 to 5 percent slopes			
Tavares	85	Negligible	A
8—Sellers mucky loamy fine sand			
Sellers	95	Negligible	A/D
23—Basinger fine sand, depressional, 0 to 1 percent slopes			
Basinger, depressional	92	Negligible	A/D
32—Lake fine sand, 0 to 5 percent slopes			
Lake	85	Very low	A
38—Urban land, 0 to 2 percent slopes			
Urban land	85	Very high	—
43—Arredondo fine sand, 0 to 5 percent slopes			
Arredondo	82	Very low	A
70—Placid fine sand			
Placid	80	High	A/D
99—Water			
Water (fresh)	100	—	—

References

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Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX 2 – MORNINGSIDE DRIVE WEST PLANS EXCERPT



COMPONENTS OF CONTRACT PLANS SET:

ROADWAY PLANS

INDEX OF ROADWAY PLANS

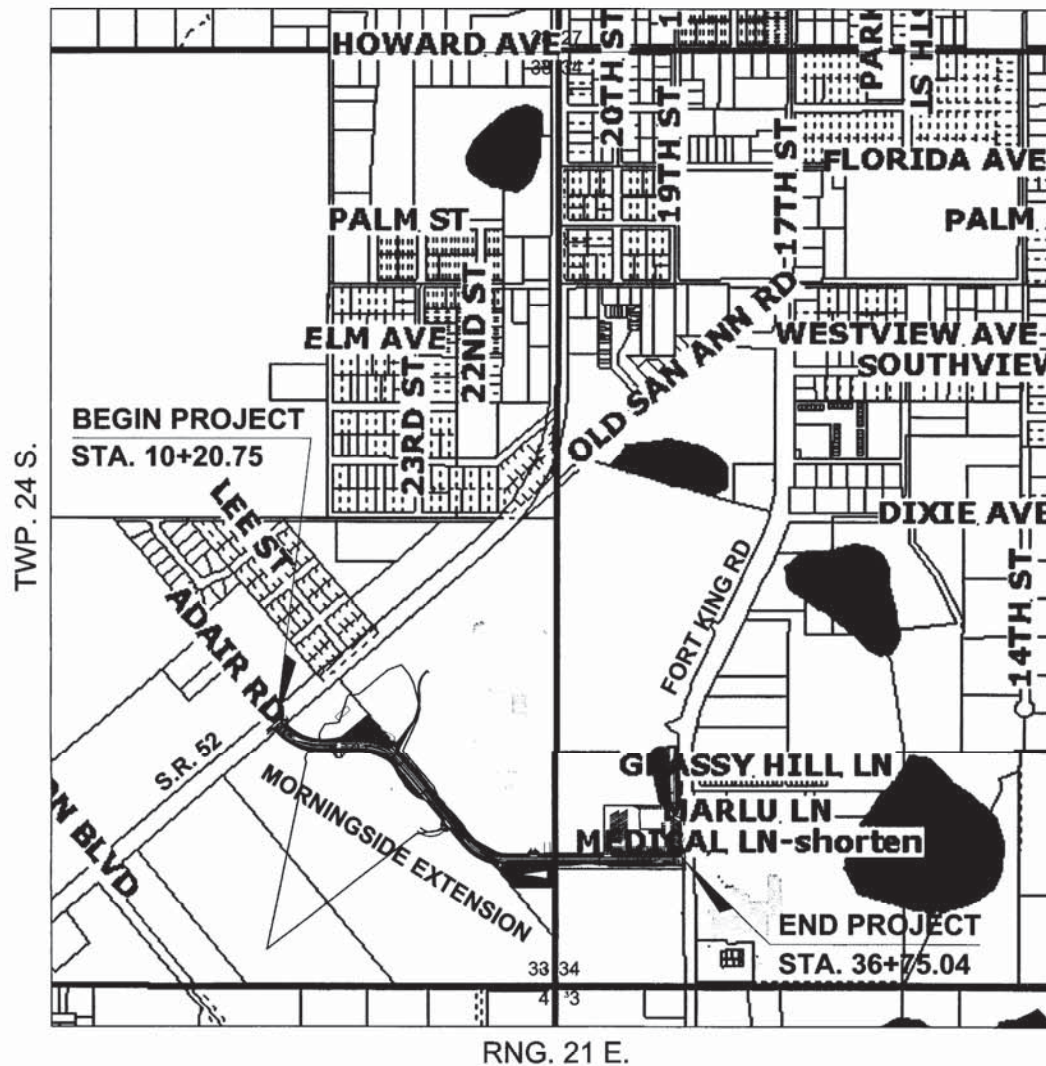
SHEET NO. SHEET DESCRIPTION

1	KEY SHEET
2	SUMMARY OF PAY ITEMS
3-4	DRAINAGE MAPS
5	TYPICAL SECTIONS
6	SUMMARY OF QUANTITIES
7-11	DEMOLITION
12-19	ROADWAY PLAN-PROFILE
20-23	DRAINAGE STRUCTURES
24-27	PONDS
28-30	CROSS SECTIONS
31-33	SIGNING AND PAVEMENT-MARKING
34	SWFWMD COMMENTS

GOVERNING SPECIFICATIONS: STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, ROADWAY AND TRAFFIC DESIGN STANDARDS, DATED JANUARY, 2010, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2010.

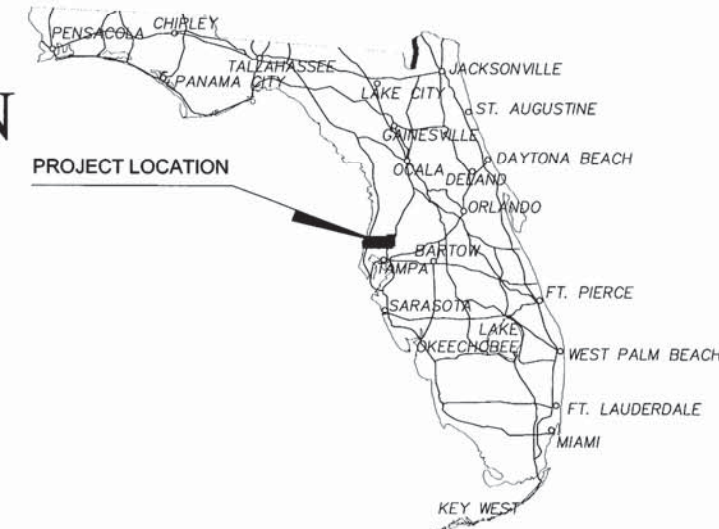
DADE CITY

PLANS OF PROPOSED MORNINGSIDE DRIVE EXTENSION (STATE ROAD 52 TO FORT KING ROAD) PROJECT NO.



LENGTH OF PROJECT		
	LINEAR FT.	MILES
ROADWAY	2,654.29	0.5027
BRIDGES		
NET LENGTH OF PROJ.	2,654.29	0.5027
EXCEPTIONS		
GROSS LENGTH OF PROJ.	2,654.29	0.5027

KEY SHEET REVISIONS		
DATE	BY	REVISIONS



FISCAL YEAR
2011

100%
Construction Plans
ISSUED: 6-3-2011

REV. DATE	DESCRIPTION
1 16/21/11	SWFWMD comments
2 17/28/11	SWFWMD comments



Morningside Drive
Extension

CONTRACT DATE:
July 2010

FILE OF RECORD



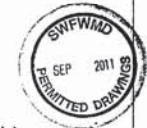
PREPARED BY
SPRING ENGINEERING, INC.
ENGINEERING • LAND PLANNING • ARCHITECTURE
3014 U.S. HWY 19, HOLIDAY, FL (727) 938-1516

PERMITTEE SHALL NOTIFY IN WRITING THE BRUNSWICK PERMITTING DEPARTMENT, SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, WHEN CONSTRUCTION BEGINS.

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

"These plans have been prepared in accordance with the 2010 version of the 'Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, State of Florida' and are in compliance with the standards therein except as noted on the plans. Any deviations noted on the plans substantially comply with the intent of the standards."

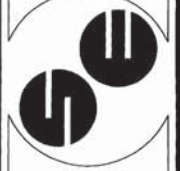
Roland P. Dove
ROLAND P. DOVE
Florida P.E. No. : 36933
Date : 7-29-2011



(SEAL)
"NOT VALID UNLESS EMBOSSED"

THIS DRAWING AND THE DESIGN SHOWN ARE THE PROPERTY OF SPRING ENGINEERING, INC. AND ARE NOT TO BE REPRODUCED, COPIED, PUBLISHED, OR USED IN WHOLE OR PART WITHOUT WRITTEN CONSENT. THEY ARE TO BE USED ONLY FOR THE SITE AND PROJECT IDENTIFIED AND SHALL BE RETURNED UPON REQUEST.

SPRING ENGINEERING, INC.
ENGINEERING • LAND PLANNING • ARCHITECTURE
3014 U.S. HWY 19, HOLIDAY, FL (727) 938-1516
FL COA NO. 00005156 & LICENSE NO. AA-C001747



KEY SHEET

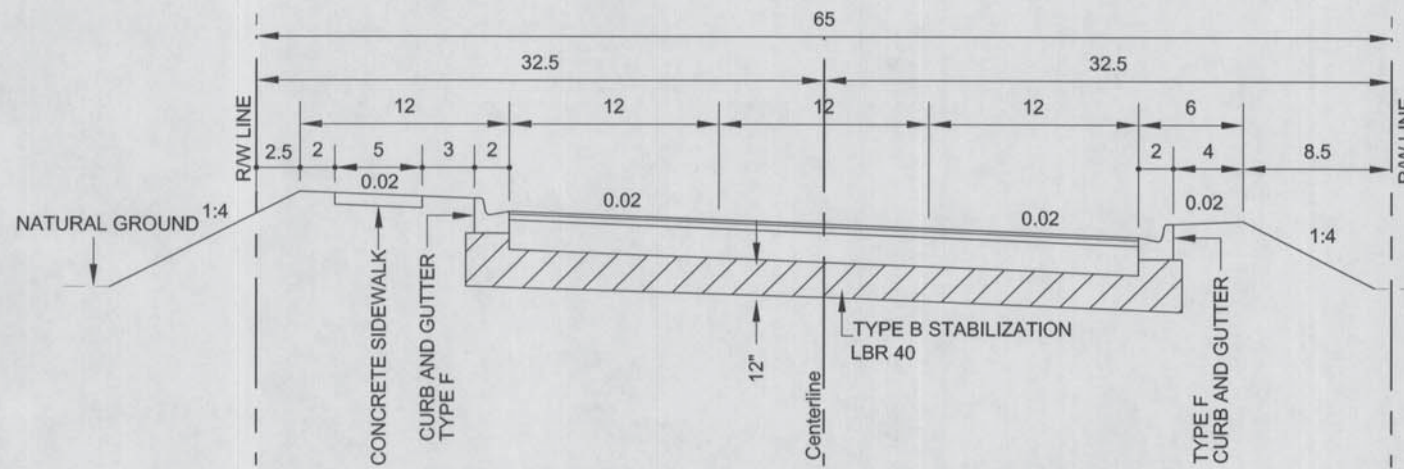
DESIGNED BY: ATP
DRAWN BY: ATP
CHECKED BY: RPD
JOB NUMBER
2010-20

SHEET
1

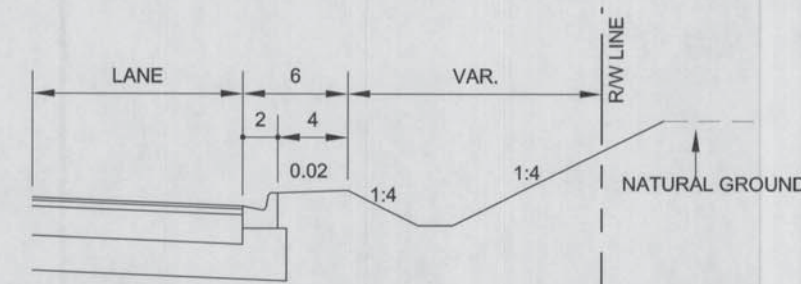
Construction Plans rev.2 - 28 JUL 2011

649530

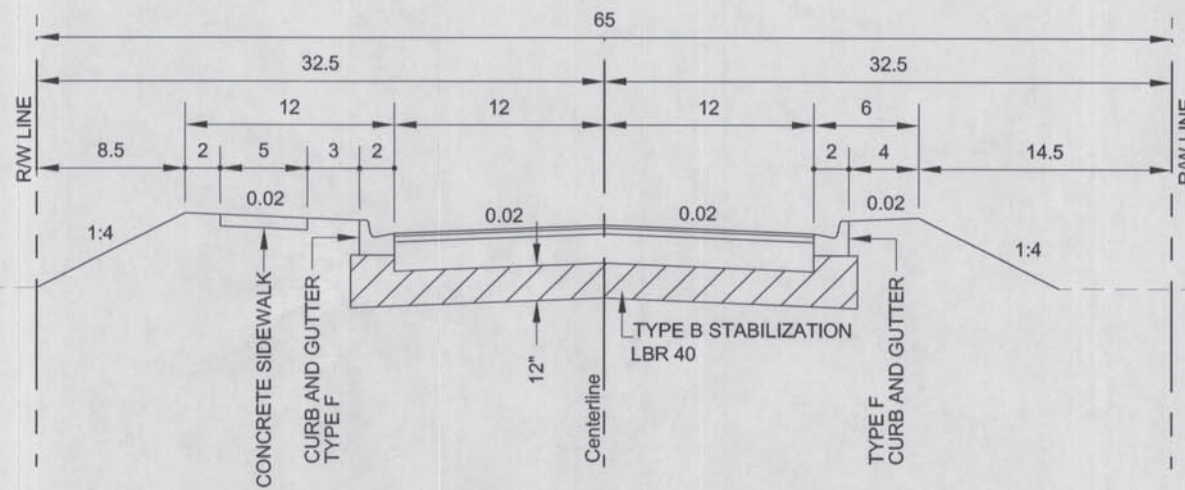
Construction Plans rev.2 - 28 JUL 2011



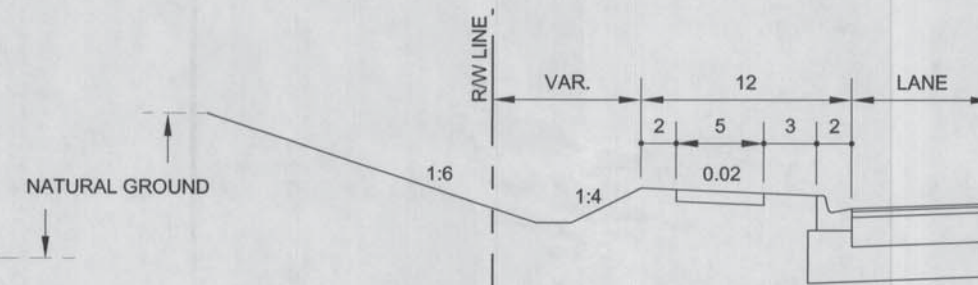
TYPICAL SECTION: STA. 11 to 18



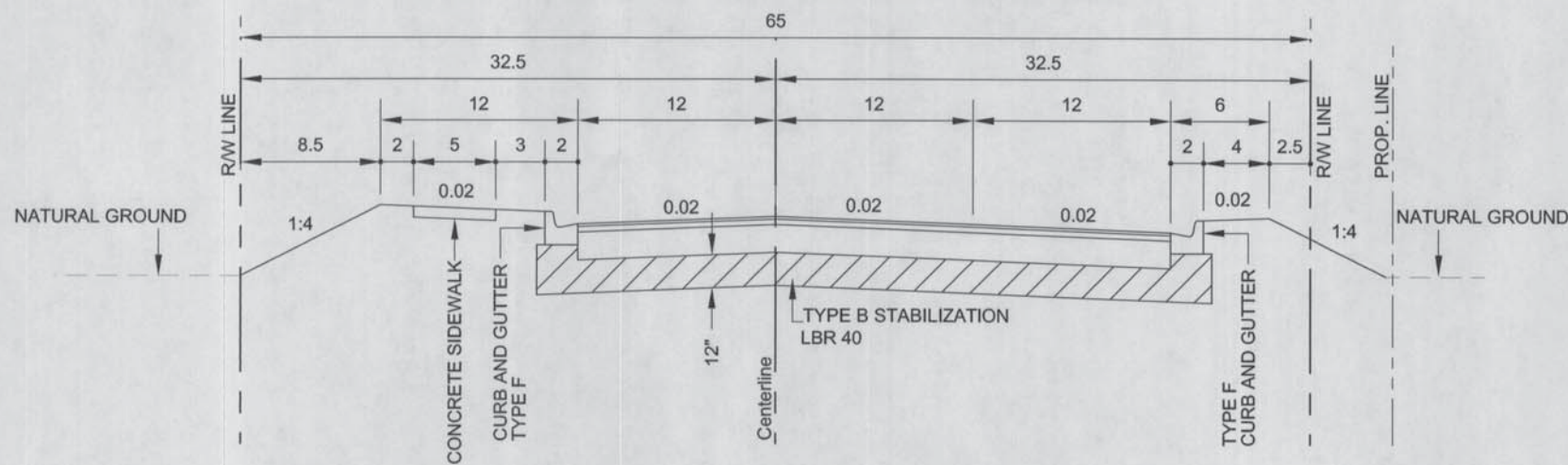
ALTERNATE A



TYPICAL SECTION: STA. 19 to 32



ALTERNATE B



TYPICAL SECTION: STA. 33 to 36

NEW CONSTRUCTION

12" TYPE B STABILIZATION (LBR 40)
 10" LIMEROCK BASE GROUP 9 (LBR 100)
 2" TYPE S STRUCTURAL PAVEMENT
 (SN = 3.64)

TRAFFIC DATA

ESTIMATED CURRENT YEAR = 2011 AADT = 0
 ESTIMATED OPENING YEAR = 2012 AADT = 2500
 ESTIMATED DESIGN YEAR = 2032 AADT = 4500
 DESIGN SPEED = 45 MPH

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100%
 Construction Plans
 ISSUED: 6-3-2011

REV. DATE	DESCRIPTION
1 6.21.11	SWFWMD comments
2 7.28.11	SWFWMD comments



**Morningside Drive
 Extension**

CONTRACT DATE:
 July 2010

SPRING ENGINEERING, INC.
 ENGINEERING • LAND PLANNING • ARCHITECTURE
 3014 U.S. HWY 19, HOLIDAY, FL (727) 938-1516
 FL COA NO. 00005158 & LICENSE NO. AA-C001747



TYPICAL SECTION

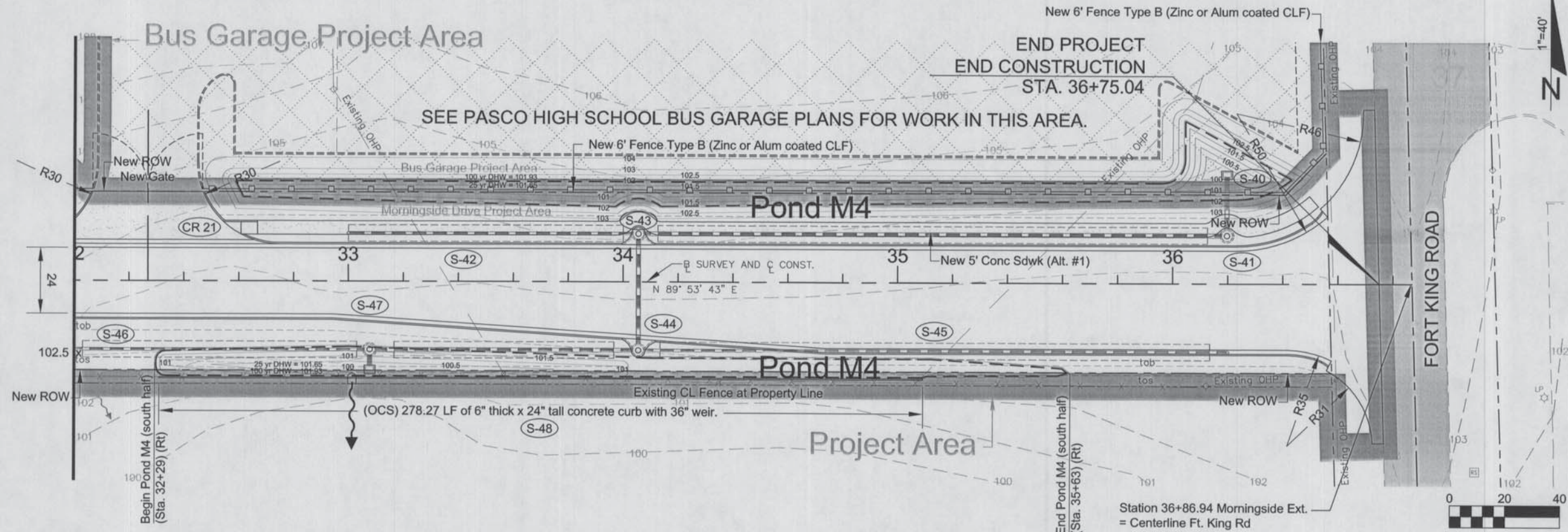
DESIGNED BY: ATP
 DRAWN BY: ATP
 CHECKED BY: RPD
 JOB NUMBER
 2010-20

SHEET

5



Construction Plans rev.2 - 28 JUL 2011



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100%
Construction Plans
ISSUED: 6-3-2011

REV	DATE	DESCRIPTION
1	6.21.11	SWFWMD comments
2	7.28.11	SWFWMD comments
3	7.29.11	Pasco County
4	8.19.11	SWFWMD draft comments

ROLAND P. DOVE, P.E.
FL REG. NO. 36933

**Morningside Drive
Extension**

CONTRACT DATE:
July 2010

SPRING ENGINEERING, INC.
ENGINEERING • LAND PLANNING • ARCHITECTURE
3014 U.S. HWY 19, HOLIDAY, FL (727) 938-1516
FL COA NO. 00005158 & LICENSE NO. AA-C001747



Morningside
Drive Extension
PLAN-PROFILE
DESIGNED BY: ATP
DRAWN BY: ATP
CHECKED BY: RPD
JOB NUMBER
2010-20
SHEET

SWFWMD
Received
AUG 22 2011
BRO/REG

APPENDIX 3 – ROADWAY PLANS EXCERPT FOR US 301

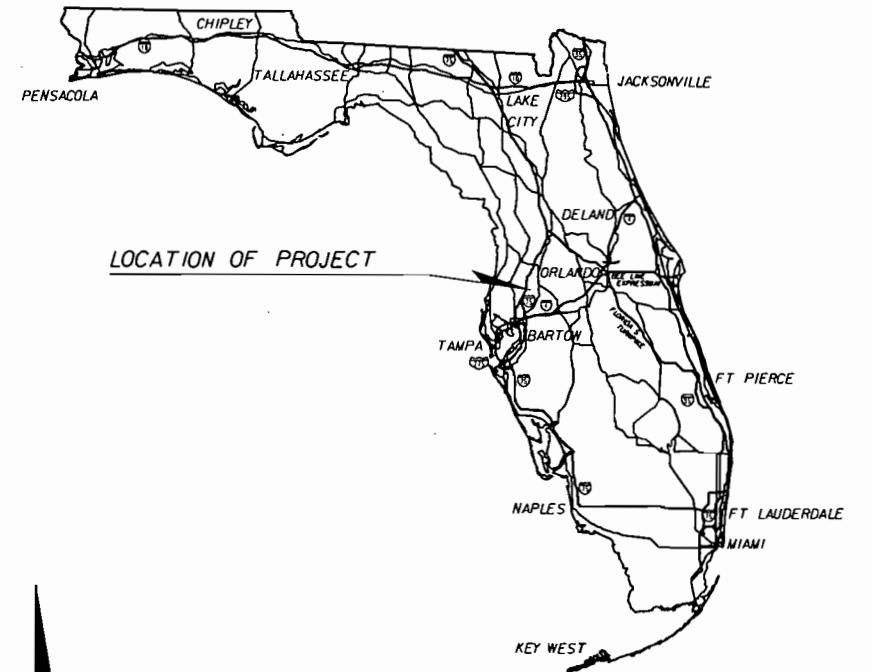
COMPONENTS OF CONTRACT PLANS SET

SIGNING AND PAVEMENT MARKING PLANS
SIGNALIZATION PLANS

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

FINANCIAL PROJECT ID 416624-1-52-01
PASCO COUNTY (14050)
STATE ROAD NO. 41 (US301)



LOCATION OF PROJECT

A DETAILED INDEX APPEARS ON THE
KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

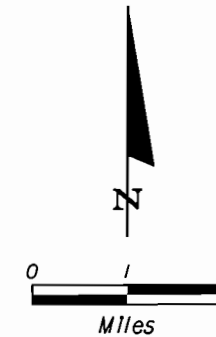
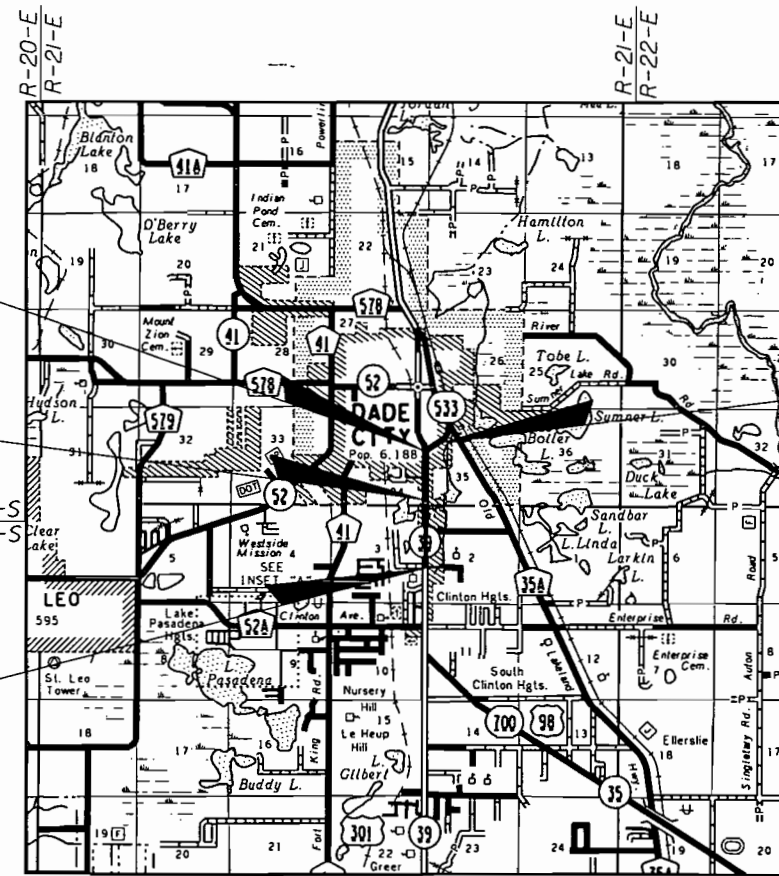
SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	NOTES TO REVIEWER
3	SUMMARY OF PAY ITEMS
4	DRAINAGE MAP (PARTIAL)
5	TYPICAL SECTION
6	SPECIAL DETAILS
7 - 8	SUMMARY OF QUANTITIES
9	SUMMARY OF DRAINAGE STRUCTURES
10	OPTIONAL MATERIALS TABULATION
11	GENERAL NOTES
12	PROJECT LAYOUT
13	REFERENCE POINTS
14 - 22	PLAN SHEETS
23 - 25	DRAINAGE STRUCTURES
26 - 83	CROSS SECTIONS
84 - 88	BOX CULVERT DATA SHEETS

STA. 762+89.08 @ CONST. US 301
STA. 49+35.90 @ SURVEY SR 533

STATION EQUATION
STA. 743+16.82 Bk. =
STA. 743+10.05 Ah.

T-24-S
T-25-S

BEGIN PROJECT
STA. 706+08.26
MP 12.399



END PROJECT
STA. 106+21.60
MP 0.00

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS DATED 2008,
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION DATED 2010,
AS AMENDED BY CONTRACT DOCUMENTS.

APPLICABLE DESIGN STANDARDS MODIFICATIONS: 07/09/09
For Design Standards Modifications click on
"Design Standards" at the following web site:
<http://www.dot.state.fl.us/rddesign/>

ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:
GREGORY J. PESCHONG, P.E.
INFRASTRUCTURE ENGINEERS, INC.
2121 OLD HICKORY TREE ROAD
SAINT CLOUD, FLORIDA 34772

PLANS PREPARED BY:
INFRASTRUCTURE ENGINEERS, INC.
2121 OLD HICKORY TREE ROAD
SAINT CLOUD, FLORIDA 34772
PHONE: (407) 957-1660
FAX: (407) 957-8744
FL CERT. NO. 6876
VENDOR NO. F593221706-001
CONTRACT NO. C8L40

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

EX 6693

90% SUBMITTAL
DECEMBER 14, 2009

THIS IS A LUMP SUM PROJECT

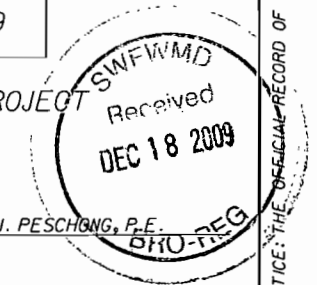
PROJECT LENGTH IS BASED ON @ OF CONSTRUCTION

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	6007.13	1.138
BRIDGES	-	-
NET LENGTH OF PROJECT	6007.13	1.138
EXCEPTIONS	-	-
GROSS LENGTH OF PROJECT	6007.13	1.138

KEY SHEET REVISIONS	
DATE	DESCRIPTION

ROADWAY PLANS
ENGINEER OF RECORD: GREGORY J. PESCHONG, P.E.

P.E. NO.: 42691

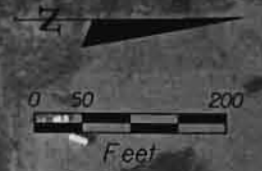


FISCAL YEAR	SHEET NO.
10	1

FDOT PROJECT MANAGER: STEPHANIE PIERCE

FILE OF RECORD

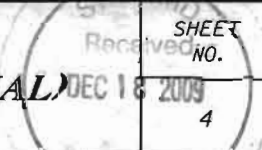
NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.



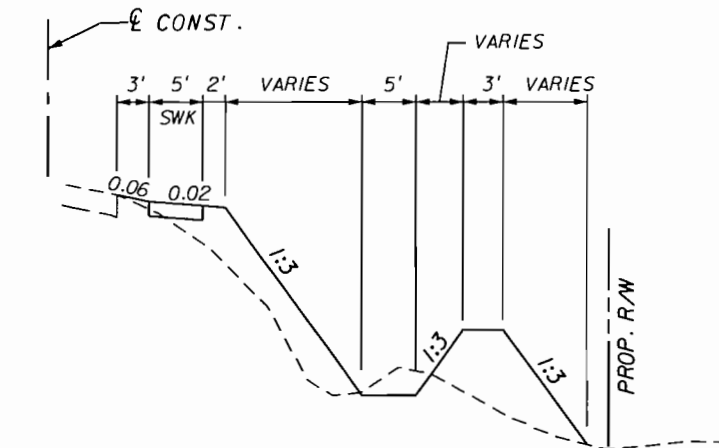
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION


 Gregory J. Paschong, P.E. - No. 42891
 2121 Old Hickory Truss Road
 St. Cloud, Florida 34772
 PH: 407.957.1880
 Fax: 407.957.8744
 FL Certificate of Authorization No. 6878
INFRASTRUCTURE ENGINEERS, INC.

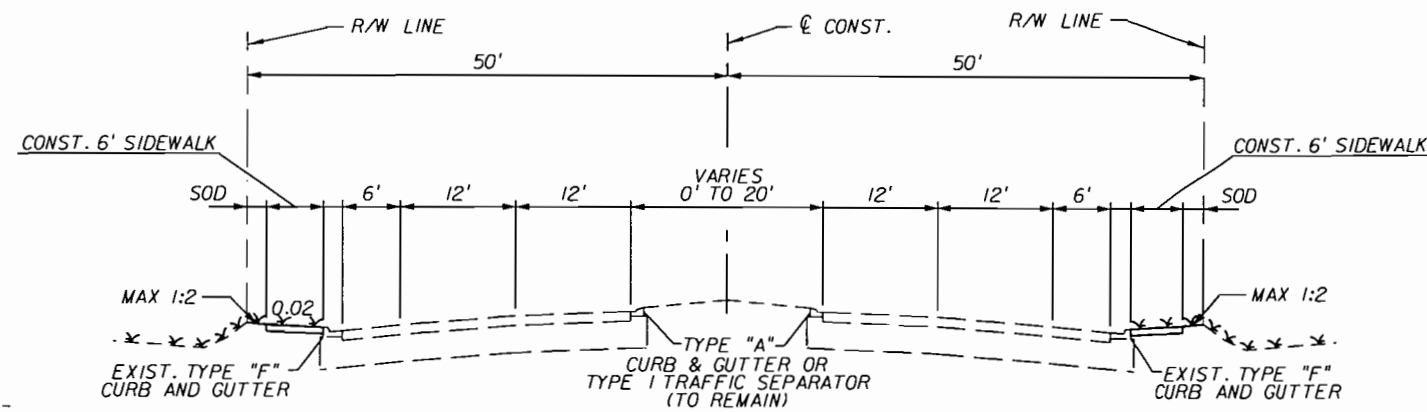
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
US 301	PASCO	416624-1-52-01

DRAINAGE MAP (PARTIAL)
 SHEET NO. 4
 DEC 16 2009


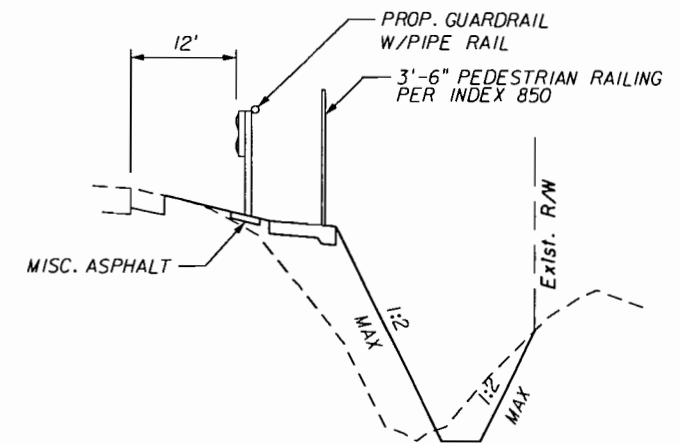
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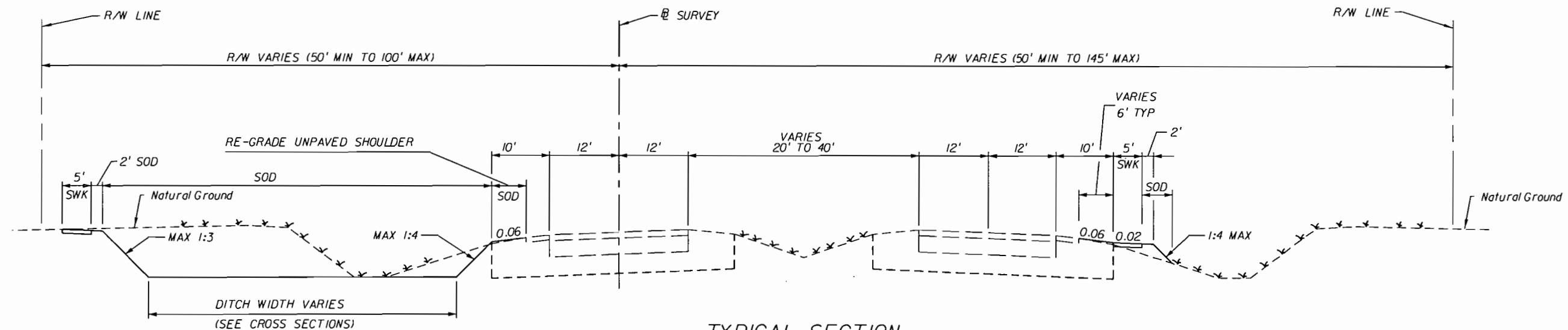
TYPICAL SECTION
BY-PASS
STA. 103+03.98 TO STA. 106+21.60



TYPICAL SECTION
US 301
STA. 739+43.57 TO STA. 759+87.02
STA. 100+00.00 TO STA. 103+03.98
DESIGN SPEED = 45 MPH



GUARDRAIL DETAIL



TYPICAL SECTION
US 301
STA. 706+08.26 TO STA. 739+43.57
DESIGN SPEED = 50 MPH

TRAFFIC DATA

CURRENT YEAR = 2006 AADT = 32,000
 ESTIMATED OPENING YEAR = 2011 AADT = 32,600
 ESTIMATED DESIGN YEAR = 2031 AADT = 35,000
 K = 9.38% D = 56.87% T = 6.50% (24 HOUR)
 DESIGN HOUR T = 3.25%

NOTE: SOD ALL DISTURBED AREAS.

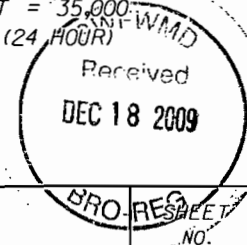
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

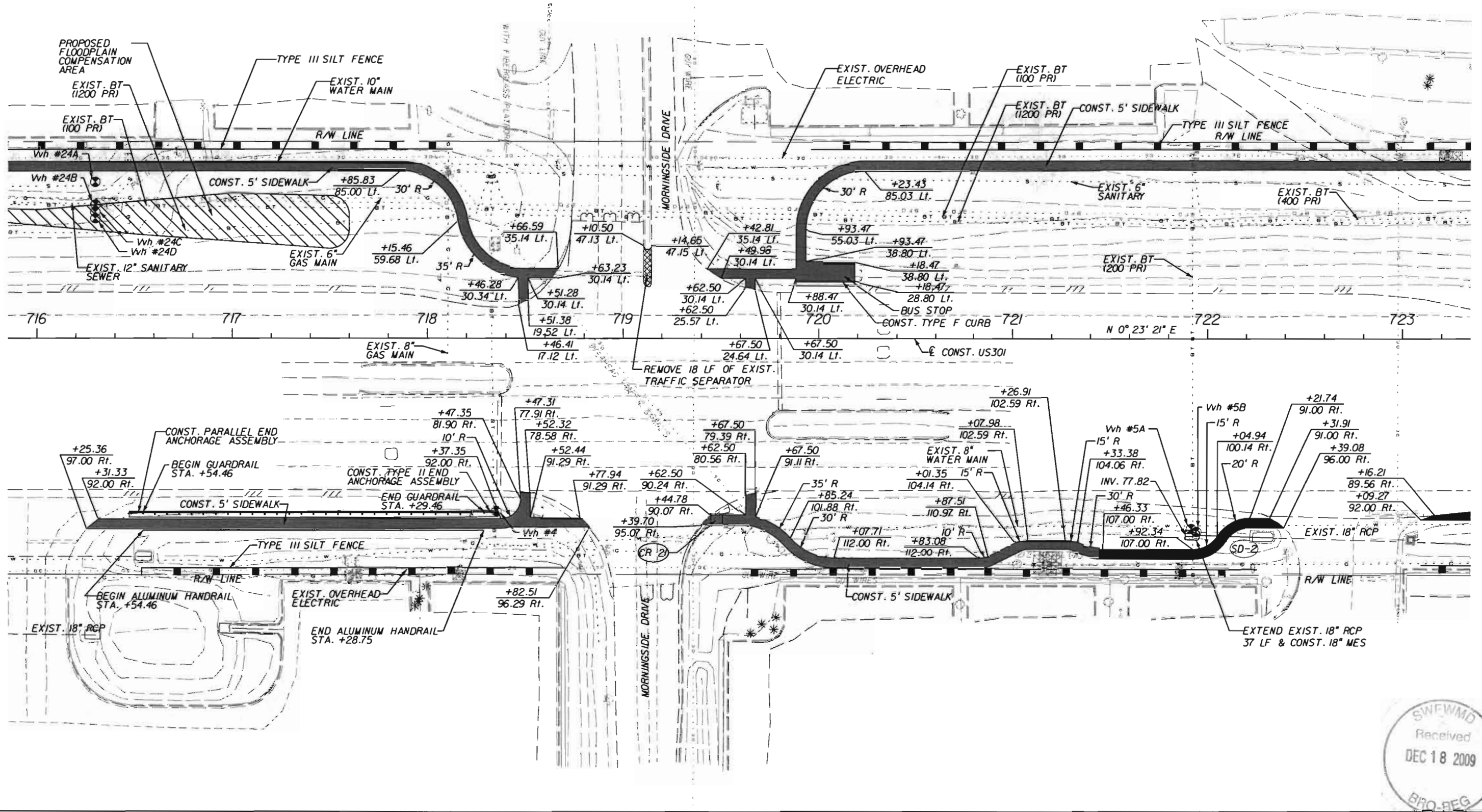
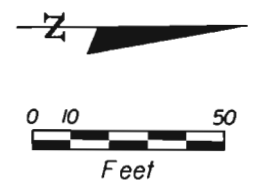


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
US 301	PASCO	416624-1-52-01

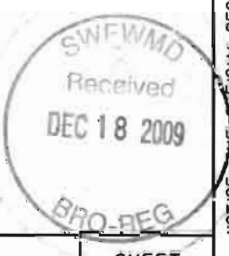
TYPICAL SECTION

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.





NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6105-23.003, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION


 Gregory J. Peschong, P.E. - No. 42691
 2121 Old Hickory Tree Road
 St. Cloud, Florida 34172
 Ph: 407.957.1860
 Fax: 407.957.8744
 FL Certificate of Authorization No. 6876
INFRASTRUCTURE ENGINEERS, INC.

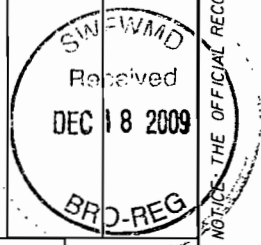
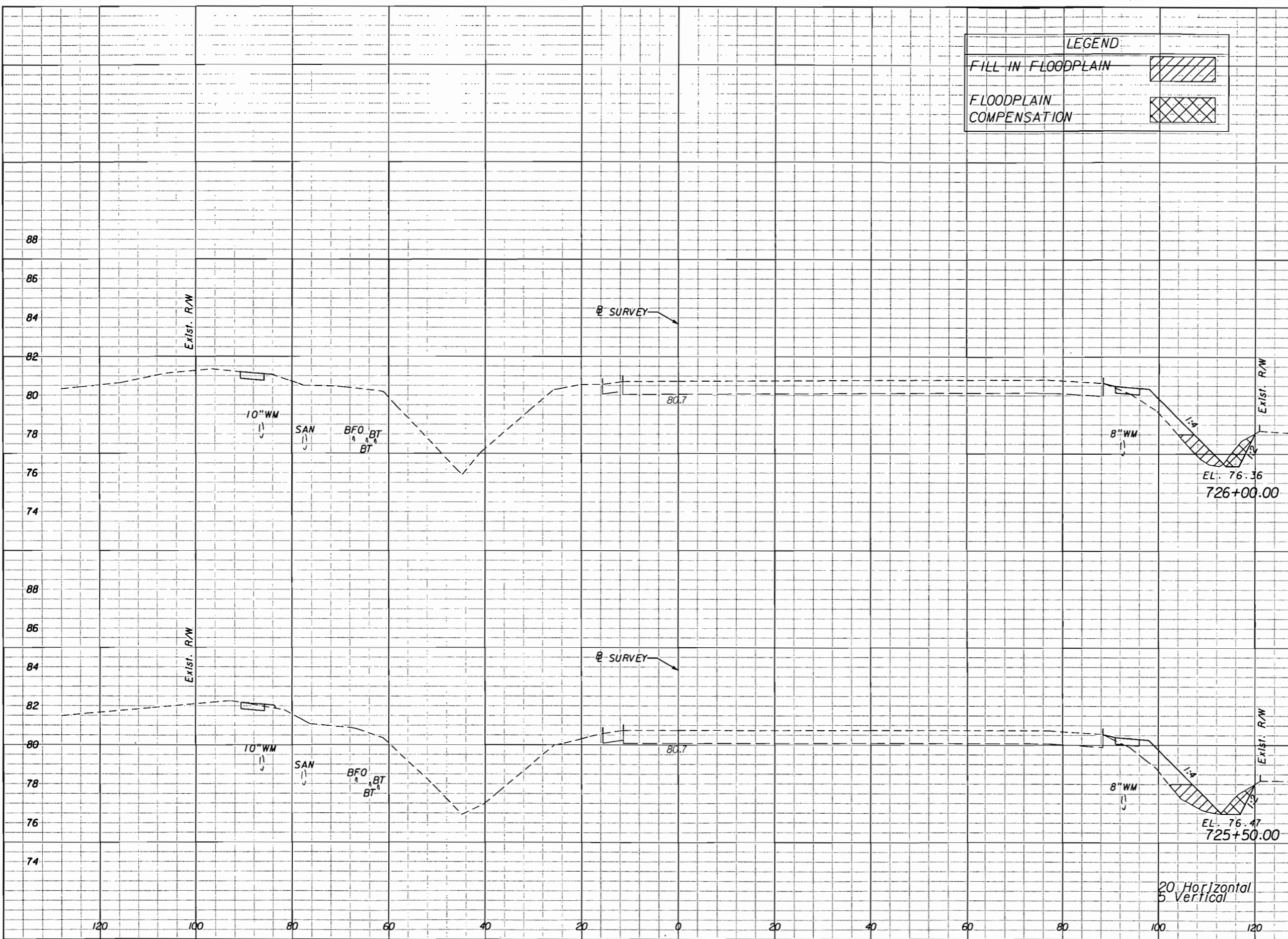
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
US 301	PASCO	416624-1-52-01

PLAN SHEET (3 OF 9)

SHEET NO.	16
-----------	----

LEGEND	
FILL IN FLOODPLAIN	
FLOODPLAIN COMPENSATION	

Regular Exc.		Embankment	
A	V	A	V



NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Gregory J. Peschong, P.E. - No. 42691
 2121 Old Hickory Tree Road
 St. Cloud, Florida 34772
 Ph: 407.957.1660
 Fax: 407.957.8744
 FL Certificate of Authorization No. 6876
INFRASTRUCTURE ENGINEERS, INC.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
US 301	PASCO	416624-1-52-01

CROSS SECTIONS

SHEET NO.
45



LEGEND	
FILL IN FLOODPLAIN	
FLOODPLAIN COMPENSATION	

Regular Exc. Embankment

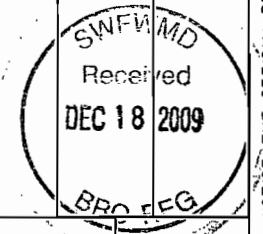
Regular	Exc.	Embankment
A	V	A V

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Gregory J. Peschong, P.E. - No. 42691
 2121 Old Hickory Tree Road
 St. Cloud, Florida 34772
 Ph: 407.957.1860
 Fax: 407.957.8744
 FL Certificate of Authorization No. 6876
INFRASTRUCTURE ENGINEERS, INC.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
US 301	PASCO	416624-1-52-01

CROSS SECTIONS
 SHEET NO. 46



NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

APPENDIX 4 – MDS & US 301 SIGNAL PLAN EXCERPT

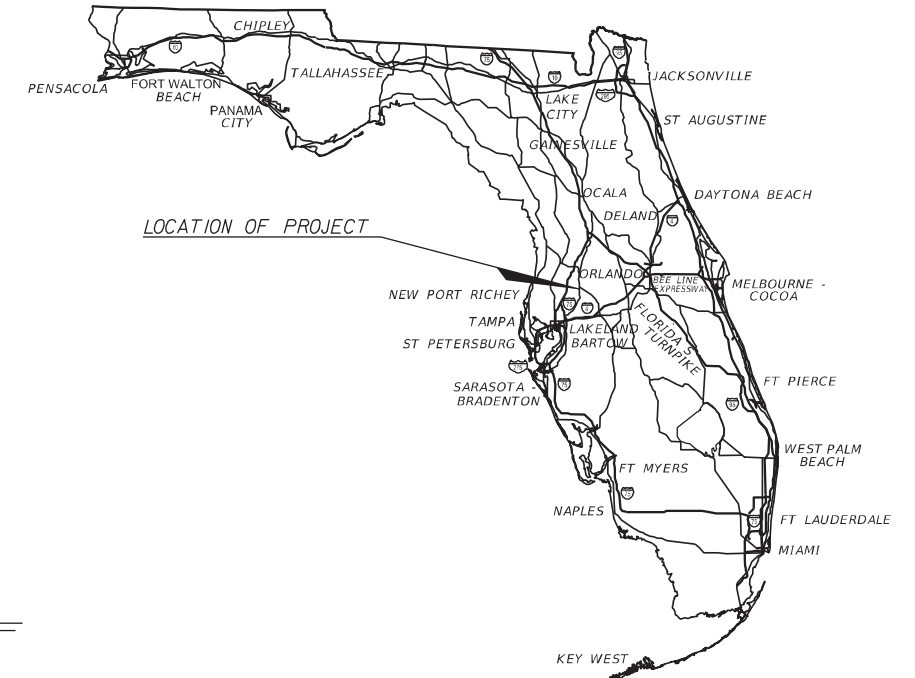
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

FINANCIAL PROJECT ID 431243-1-52-01
FINANCIAL PROJECT ID 431243-1-52-02
(FEDERAL FUNDS)
PASCO COUNTY (14050)

STATE ROAD NO. 39/700/35 (US 301/98)
FROM NORTH OF KOSSIK ROAD TO BOUGAINVILLEA AVENUE

SIGNALIZATION PLANS



INDEX OF SIGNALIZATION PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	TABULATION OF QUANTITIES
T-3	GENERAL NOTE SHEET
T-4 - T-9	SIGNALIZATION PLAN SHEET
△ T-9A - T-9C	PORTABLE TRAFFIC MONITORING SITE
T-10 - T-13	GUIDE SIGN WORK SHEET
T-14	CONCRETE STRAIN POLE SCHEDULE
T-15 - T-16	SIGN BRACKET ARM ASSEMBLY
T-17	SIGN BRACKET ARM SIGN PANEL DETAILS
T-18 - T-21	REPORT OF CORE BORINGS
T-22	LIGHTING GENERAL NOTE SHEET
T-23	POLE DATA AND LEGEND SHEET
T-24	SERVICE POINT DETAIL SHEET

**SIGNALIZATION
SHOP DRAWINGS TO BE SUBMITTED TO:**

ROCHELLE PYRON GARRETT, P.E.
FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 7 TRAFFIC DESIGN OFFICE
11201 NORTH MCKINLEY DRIVE
TAMPA, FLORIDA 33612
PHONE NO. (813) 975-6000

PLANS PREPARED BY:

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 7 TRAFFIC DESIGN OFFICE
11201 NORTH MCKINLEY DRIVE
TAMPA, FLORIDA 33612
PHONE NO. (813) 975-6000

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

KEY SHEET REVISIONS	
DATE	DESCRIPTION
12/09/15	PORTABLE TRAFFIC MONITORING SITES ADDED

SIGNALIZATION PLANS
ENGINEER OF RECORD: ROCHELLE PYRON GARRETT, P.E.

P.E. NO.: 57691

FISCAL YEAR	SHEET NO.
14	T-1

FDOT PROJECT MANAGER: MICHAEL MACKINNON, P.E.

CONTROLLER TIMINGS								
MOVEMENT NUMBER	1	2	3	4	5	6	7	8
MINIMUM GREEN		20		7	7	20		7
EXTENSION		6		4	4	6		4
MAXIMUM GREEN I		50		20	30	50		20
MAXIMUM GREEN II								
YELLOW CLEARANCE		5.1		4.7	5.1	5.1		4.7
ALL RED		2.0		2.3	2.0	2.0		2.3
PEDESTRIAN WALK		7		8		7		8
PED. CLEARANCE		26		30		20		28
RECALL		MIN				MIN		
FLASH OPERATION		YEL		RED		YEL		RED

*EXISTING CONTROLLER TIMINGS

SPEED LIMIT US 301 IS 50 MPH

SPEED LIMIT ON MORNINGSIDE DRIVE IS 45 MPH

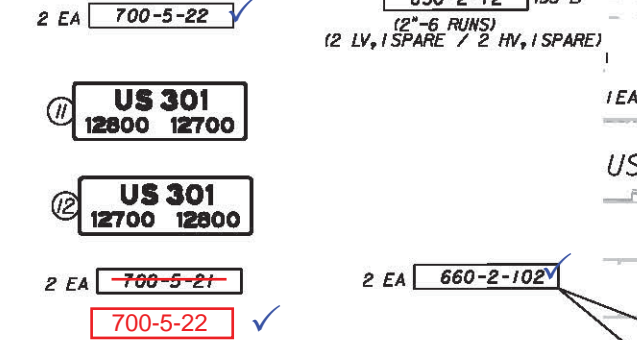
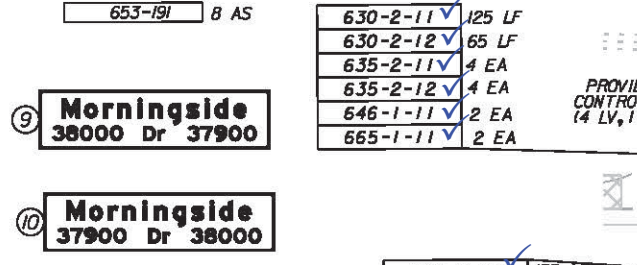
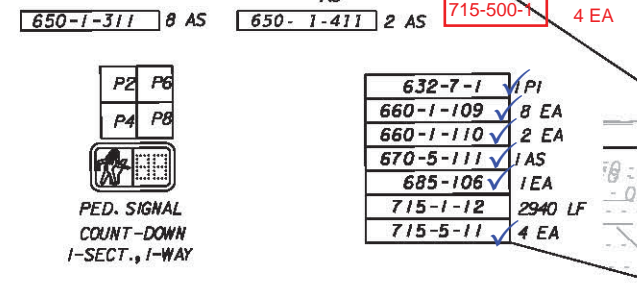
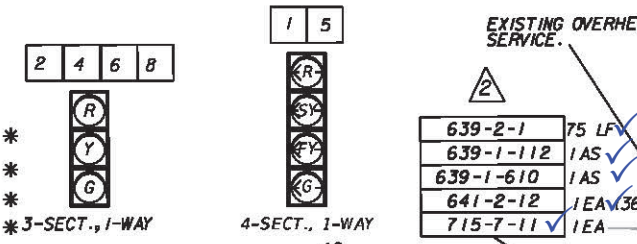
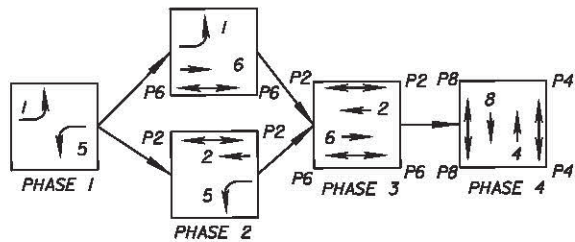
CONTROLLER OPERATION NOTES:

1. THE MAJOR STREET IS U.S. 301. THE MINOR STREET IS MORNINGSIDE DRIVE.
2. CONTROLLER CABINET SHALL BE WIRED FOR STANDARD SIGNAL OPERATING PLAN 10 BUT OPERATE AS SHOWN.
3. SIGNAL TIMINGS AND DELAY TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTMENT AS DIRECTED BY THE ENGINEER.

SIGNALIZATION NOTES:

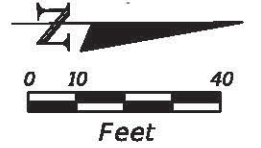
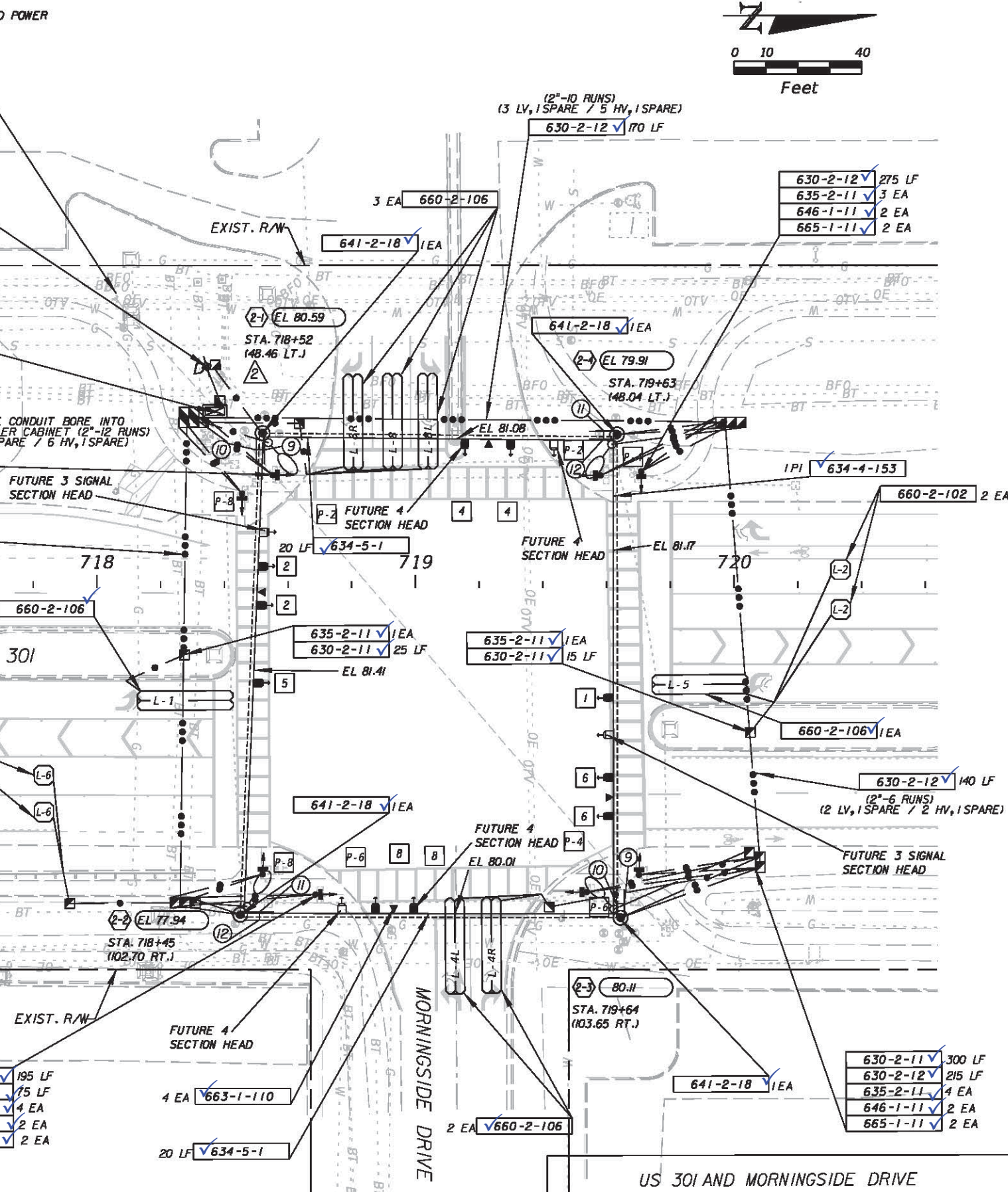
1. STATIONS AND OFFSETS ARE BASED ON THE BASE LINE OF CONSTRUCTION FOR U.S. 301.
2. TYPE "F" DETECTORS SHALL BE 6' X 30' AND PLACED 6' AHEAD OF THE APPROPRIATE STOP BAR. TYPE "B" LOOPS DETECTOR SHALL BE 6'X6' AND PLACED 50' BEHIND THE APPROPRIATE STOP BAR.
3. INSTALL INTERCONNECT ANTENNA ASSEMBLY TO POLE NUMBER 2-1.
4. POWER FOR TRAFFIC SIGNAL AND LIGHTING SERVICED THROUGH A SINGLE METER. SEE DETAIL ON SHEET T-24.

(S.O.P.) STANDARD SIGNAL OPERATING PLAN 7



DETECTOR ZONE			
LOOP DETECTOR	ZONE	NO. OF LOOPS	DELAY TIME (SEC)
4R	L-4R	1	10
4L	L-4L	1	4
8R	L-8R	1	10

SIGNALIZATION REMOVAL ITEMS	
690-10	16 EA
690-20	8 EA
690-31	8 EA
690-34-1	2 EA
690-50	1 EA
690-70	8 EA
690-80	1 EA
690-90	1 PI
690-100	1 PI



REVISIONS		ROCHELLE PYRON GARRETT, P.E. P.E. LICENSE NUMBER 57691 FLORIDA DEPARTMENT OF TRANSPORTATION 11201 NORTH MCKINLEY DRIVE TAMPA, FLORIDA 33612	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO. T-8
DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
04/07/15	2 CONSOLIDATE SIGNAL AND LIGHTING POWER SERVICE		39/35/700	PASCO	431243-1-52-01	

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

APPENDIX 5 – TRAFFIC TECHNICAL MEMORANDUM

TRAFFIC TECHNICAL MEMORANDUM

MORNINGSIDE DRIVE EXTENSION ROUTE STUDY AND POND SITING REPORT FROM FORT KING ROAD TO US 301

Prepared For

*PASCO COUNTY ENGINEERING SERVICES
PROJECT MANAGEMENT*

Prepared By



*LINCKS & ASSOCIATES, INC.
Engineers - Planners
Tampa, Florida*

TRAFFIC TECHNICAL MEMORANDUM

MORNINGSIDE DRIVE EXTENSION
ROUTE STUDY AND POND SITING REPORT
FROM FORT KING ROAD TO US 301

Prepared For

PASCO COUNTY ENGINEERING SERVICES
PROJECT MANAGEMENT

Prepared By

LINCKS & ASSOCIATES, INC.
5023 West Laurel Street
Tampa, Florida 33607
813-289-0039
State of Florida Authorization No. EB0004638

February, 2021

Project No. 20128

ali Digitally signed
by ali
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600012EAA Date:
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This item has been electronically signed and sealed by Ali Altefi, P.E. on the time and date stamp using the digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Ali Altefi, P.E.
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Tampa, Florida 33607



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APPENDIX

Appendix – A	2045 Transportation Cost Affordable Plan Highway Vision Plan
Appendix – B	48 Hour Traffic Counts Intersection Traffic Counts
Appendix - C	D Factor T Factor Seasonal Factors Axle Factors
Appendix – D	Intersection Analysis (Existing)
Appendix – E	FDOT Generalized Capacity Tables
Appendix – F	2045 Model Adjustments 2045 Model Volumes (with Morningside Extension) 2045 Model Volumes (without Morningside Extension) 2015 Model Volumes Model Correction Factor
Appendix – G	Intersection Analysis (2045)
Appendix – H	NCHRP Report #279
Appendix – I	FDOT Design Manual Exhibit 212-1



Section 1.0

INTRODUCTION

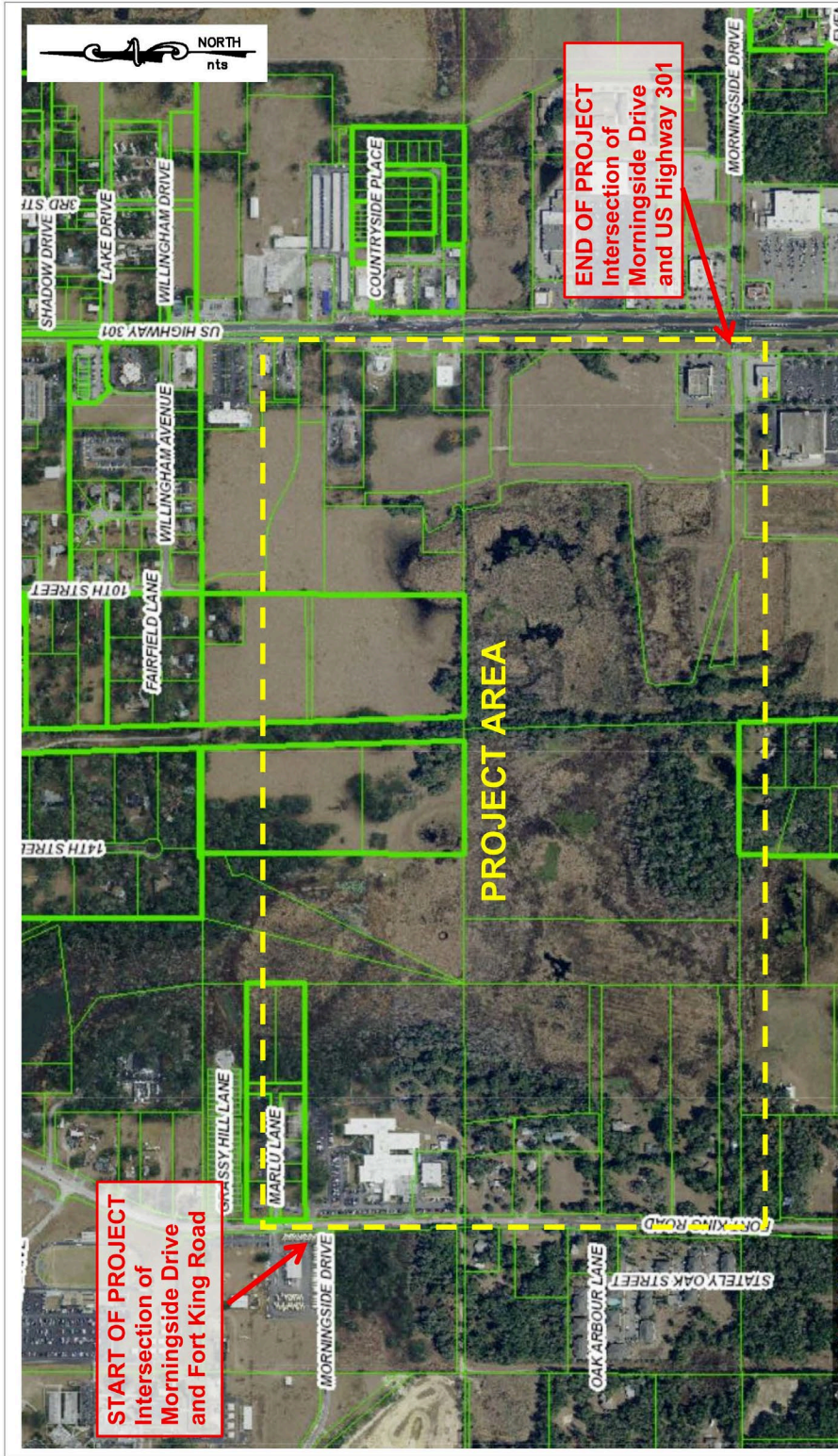
The purpose of this memorandum is to document the Traffic Operational Analysis results for the segment of Morningside Drive from SR 52 to US 301 and the intersections of Morningside Drive and SR 52, Morningside Drive and Fort King Road and Morningside Drive and US 301. This information will be included in the Route Study and Pond Siting Analysis Report (RSPSAR) for Morningside Drive Extension from Fort King Road to US 301. The study area is shown on Figure 1-1.

1.1 TRANSPORTATION PLAN CONSISTENCY

The construction of Morningside Drive Extension as a two (2) lane road from Fort King Road to US 301 is identified in the Pasco County Metropolitan Planning Organization (MPO) 2045 Cost Affordable Long-Range Transportation Plan (LRTP). In addition, the Pasco County Highway Vision Plan and Functional Classification Map included in the County's Comprehensive Plan shows Morningside Drive as a future collector roadway.

Sheets from the referenced LRTP and the County's Comprehensive Plan are provided in the Appendix A.





Base aerial maps provided by Pasco County Property Appraiser web site, <http://maps.pascopa.com/>; downloaded November 10, 2020

NO.	DATE	REVISIONS	DESCRIPTION	NAME	DATE
				Christie Banfill	
				Christie Banfill	
				Paul Mandel, PE	
				PAUL MANDEL, P.E.	

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Christie Banfill	Christie Banfill
Paul Mandel, PE	Paul Mandel, PE

CHECKED BY:	CHECKED BY:
Christie Banfill	Christie Banfill
Paul Mandel, PE	Paul Mandel, PE

SUPERVISED BY:	SUPERVISED BY:
Paul Mandel, P.E.	Paul Mandel, P.E.

PROJECT AREA	SHEET NO.
Project Area Map	

MORNINGSIDE DRIVE EXTENSION



FIGURE 1-1
PROJECT LOCATION

Section 2.0

EXISTING ROADWAY CONDITIONS

2.1 EXISTING ROADWAY CHARACTERISTICS

The following describes the characteristics of the roadway network in the study area:

SR 52

SR 52 is currently a state, two (2) lane undivided rural roadway that runs in a north-south direction in the vicinity of existing Morningside Drive. According to Pasco County Highway Vision Plan and Functional Classification Map, SR 52 is classified as a collector roadway. The posted speed limit on SR 52 is 45 MPH in the vicinity of Morningside Drive.

Fort King Road

Fort King Road is a County, two (2) lane undivided rural roadway that runs in a north-south direction. According to Pasco County Highway Vision Plan and Functional Classification Map, Fort King Road is classified as a collector roadway. The posted speed limit on Fort King Road is 35 MPH in the vicinity of Morningside Drive.

US 301

US 301 is currently a State, four (4) lane divided rural roadway that runs in a north-south direction. According to Pasco County Highway Vision Plan and Functional Classification Map, US 301 is classified as an arterial roadway. The posted speed limit on US 301 is 45 MPH in the vicinity of Morningside Drive.

Morningside Drive

Morningside Drive is currently a County, two (2) lane undivided roadway that runs in an east-west direction with urban cross section from SR 52 to Fort King Road and rural cross section east of US 301. According to Pasco County Highway Vision Plan and Functional Classification Map, Morningside Drive is classified as a collector roadway. The posted speed limit on Morningside Drive is 30 MPH between SR 52 and Fort King Road and 45 MPH east of US 301.



2.2 *EXISTING INTERSECTION TRAFFIC CONTROLS*

SR 52 and Morningside Drive/Adair Road

SR 52 and Morningside Drive intersection is currently a four-leg intersection with stop-sign control on Morningside Drive on the east side of SR 52 and Adair Road on the west side of SR 52. There are exclusive southbound and northbound left turn lanes on SR 52 and exclusive westbound left turn lane and a shared westbound through and right turn lane on Morningside Drive. There is a shared eastbound left/through/right lane on Adair Road.

Fort King Road and Morningside Drive

Fort King Road and Morningside Drive intersection is currently a three-leg intersection with stop-sign control on Morningside Drive. The Advent Health hospital driveway is located immediately to the north side of this intersection, and on the east side of Fort King Road. There are no exclusive turn lanes on Fort King Road. The hospital's access driveway, which also serves as the emergency room access driveway, is located south of the intersection, on the east side of Fort King Road. There is an exclusive eastbound left turn lane on Morningside Drive.

US 301 and Morningside Drive

US 301 and Morningside Drive is a four-leg intersection and is currently signalized. There are exclusive northbound and southbound left turn lanes and a southbound right turn lane on US 301. The Morningside Drive leg on the east side of US 301 has an exclusive right turn lane and a shared left and through lane. There is an existing retail center driveway located on the west side of this intersection and aligns with Morningside Drive located on the east side of this intersection. This driveway has exclusive eastbound left and right turn lanes and a through lane.

Figure 2-1 illustrates the existing geometry at the intersections described above.

2.3 *TRAFFIC DATA COLLECTION*

Traffic data and characteristics for the study area were obtained from FDOT Traffic Information Online and traffic counts. Daily vehicle counts were conducted for 48 hours and peak hour turning movement counts were conducted from 7:00 AM to 9:00 AM and from 4:00 to 6:00 PM for the morning and evening street peak hours, respectively. All counts were taken on Tuesday, Wednesday, or Thursday only to represent typical weekday traffic conditions. Traffic counts were conducted at the following locations:



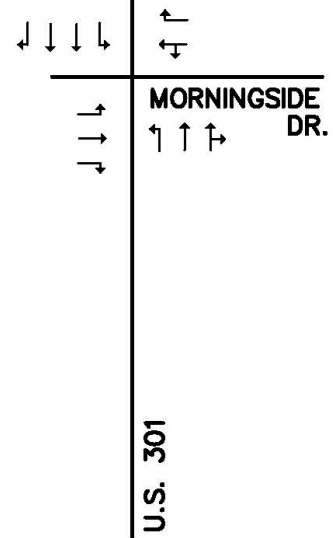
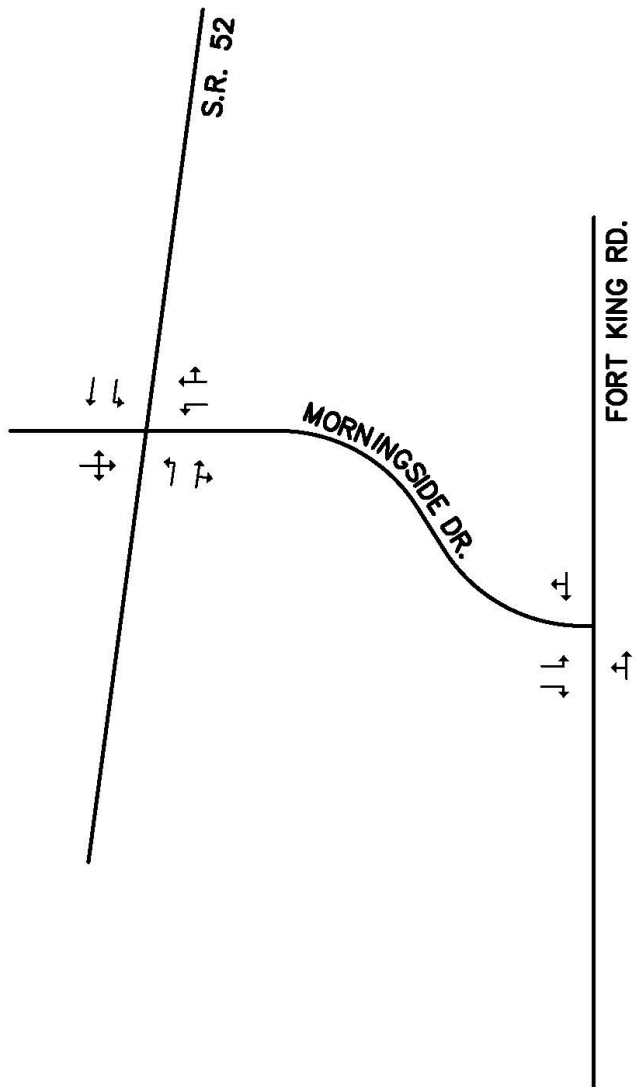


FIGURE 2-1
EXISTING INTERSECTION
LANE GEOMETRY



Two Day Bi-Directional Machine Counts

- SR 52 – North of Morningside Drive (2)
- SR 52 – South of Morningside Drive (1)
- US 301 – North of Morningside Drive (2)
- Fort King Road – North of Morningside Drive (2)
- Fort King Road – South of Morningside Drive (2)
- Morningside Drive – East of SR 52 (2)
- Morningside Drive – East of US 301 (2)

(1) FDOT Counts: February 4-5, 2019

(2) Other Counts: September 22-23, 2020

Intersection Counts

- Morningside Drive and SR 52
- Morningside Drive and Fort King Road
- Morningside Drive and US 301

Counts Date: October 1, 2020

Figure 2-2 provides the location and type of each traffic count conducted in the study area.

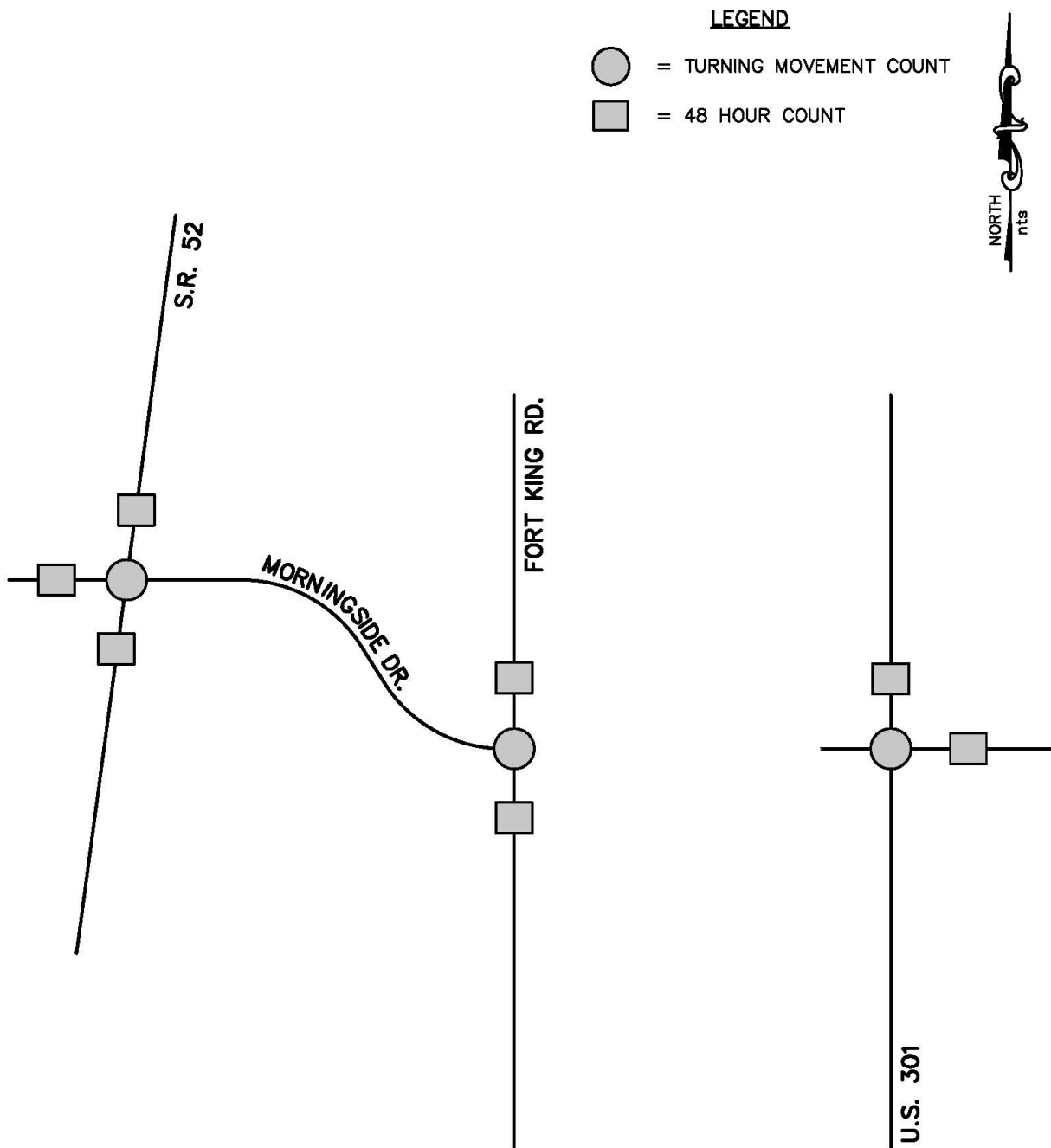
2.4 DESIGN TRAFFIC CHARACTERISTICS

The Existing year (2019 and 2020) traffic counts were utilized to develop the peak hour traffic characteristics. These factors provide the ratio of the Annual Average Daily Traffic (AADT) that occurs during the design hour K-factor, the proportion of traffic traveling in the peak direction D-Factor during the design hour and the percentage of trucks during the design hour T-factor.

2.4.1 DESIGN HOUR K-FACTOR

Based on information obtained from the FDOT Traffic Information Online, a standard K-Factor of 9.0 percent was used for the development of the future year Design Hour Volumes (DHV) for this study. This is the recommended K-Factor for urbanized and transitioning to urbanized areas, and it represents a typical weekday peak hour.





**FIGURE 2-2
TRAFFIC COUNT
LOCATIONS**



2.4.2 *DIRECTIONAL DISTRIBUTION D-FACTOR*

The Directional Distribution Factor, D-Factor, is a representation of the percentage of vehicles traveling in the peak direction during the peak hour of the day. The D-Factor used in the analysis was derived by considering existing measured traffic characteristics from traffic counts. All relevant traffic data collected for the project are provided in the Appendix C.

The average D-Factor of 0.53 was used for the segment of Morningside Drive which does not exist today. Table 2-1 represents the calculation of D-Factor used to compute the Directional Design Hour Volumes (DDHV).

2.4.3 *TRUCK PERCENTAGE T-FACTOR*

The T-Factor is the percentage of trucks during the design hour. The percentage of trucks in the design hourly volume were determined utilizing the percentage of trucks in the existing turning movement counts and assumption that those percentages will remain constant through the design year. A T-Factor of 6% was calculated and provided in Appendix C.

2.5 *EXISTING TRAFFIC VOLUMES*

The existing Average Annual Daily Traffic (AADT) volumes were obtained by applying the weekly Seasonal Factor (SF) and Axle Correction Factor, as documented in FDOT's Florida Traffic Information Online to the Average Daily Counts (ADT) and provided in the Appendix C. Figure 2-3 shows the Existing Year AADT for the roadway segments adjacent to the Morningside Drive intersections and Table 2-2 illustrates the calculation of the Existing Year AADT's.

The existing AM and PM peak hour turning movement counts are shown in Figure 2-4. The existing AM and PM peak hour turning movement counts were converted to peak season utilizing FDOT peak season adjustment factors, as shown in Figure 2-5.

2.6 *EXISTING CONDITIONS TRAFFIC OPERATIONS ANALYSIS*

Traffic operations analysis for the AM and PM peak hours were conducted to document the levels of service (Level of Service) within the study area for the Existing Year (2020). Level of Service is a qualitative measure of traffic operations. Level of Service designations range from A to F, with Level of Service A representing the best operating



TABLE 2-1

D FACTORS

<u>Location</u>	<u>D Factor (1)</u>
Morningside Dr East of SR 52	0.51
Morningside Dr East of US 301	<u>0.55</u>
Average	0.53

Source: (1) Based on 48 hour traffic counts.



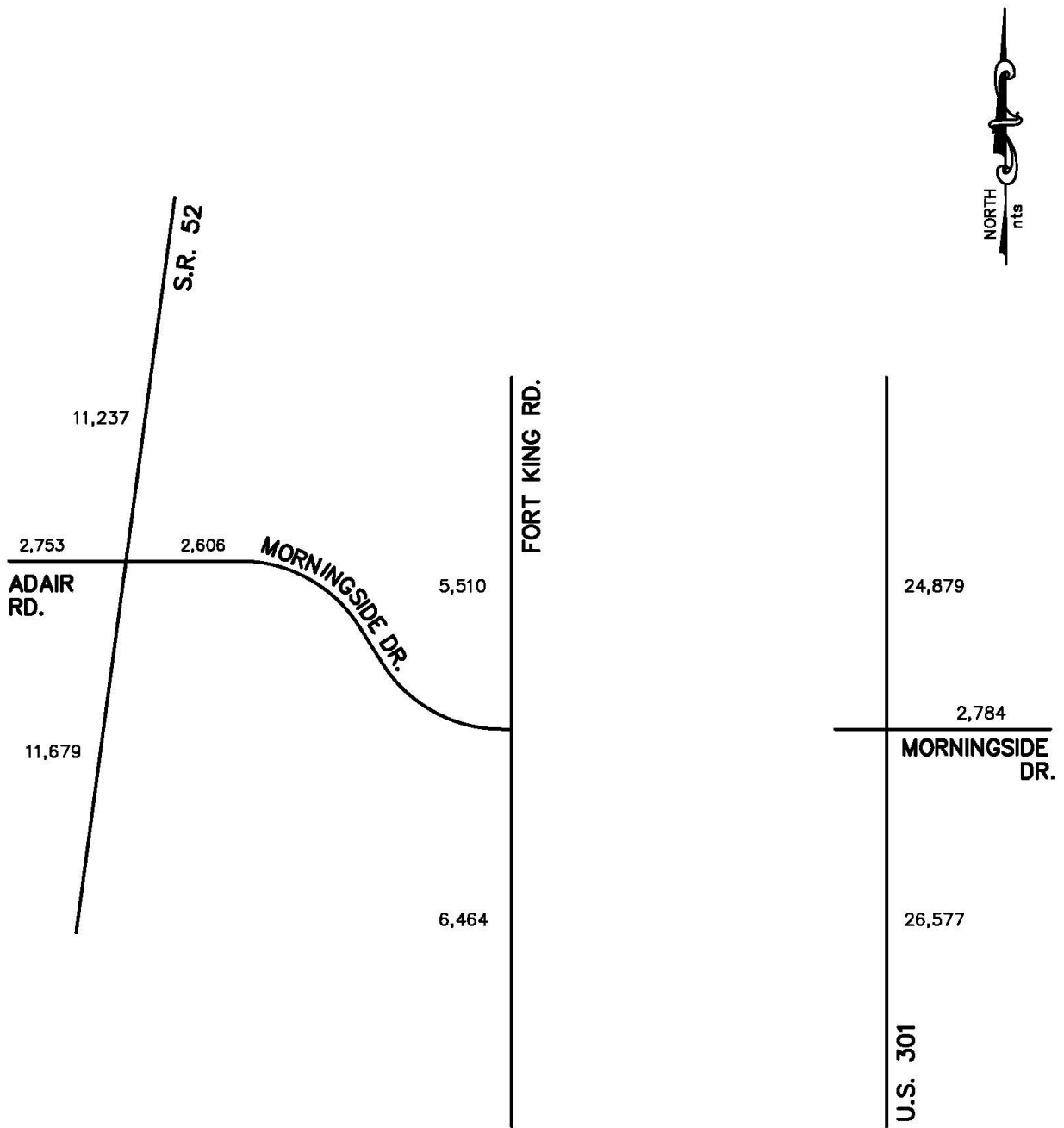


FIGURE 2-3
EXISTING YEAR 2020
AVERAGE ANNUAL DAILY
TRAFFIC (AADT)



TABLE 2-2

EXISTING YEAR AADT CALCULATION

<u>Location</u>	<u>Count Date</u>	<u>Existing ADT</u>	<u>Average ADT</u>	<u>Seasonal Factor</u>	<u>Axle Factor</u>	<u>Existing Year AADT</u>
SR 52 North of Morningside Dr	Sept. 22, 2020	10,707	10,817	1.06	0.98	11,237
	Sept. 23, 2020	10,927				
SR 52 South of Morningside Dr	Feb. 11, 2020	12,402	12,286	0.97	0.98	11,679
	Feb. 12, 2020	12,169				
Fort King Road North of Morningside Dr	Sept. 22, 2020	5,708	5,775	1.06	0.90 (2)	5,510
	Sept. 23, 2020	5,842				
Fort King Rd South of Morningside Dr	Sept. 22, 2020	6,758	6,775	1.06	0.90 (2)	6,464
	Sept. 23, 2020	6,792				
Morningside Dr East of SR 52	Sept. 22, 2020	2,748	2,732	1.06	0.90 (2)	2,606
	Sept. 23, 2020	2,716				
Morningside Dr East of US 301	Sept. 22, 2020	2,937	2,919	1.06	0.90 (2)	2,784
	Sept. 23, 2020	2,901				
US 301 North of Morningside Dr	Sept. 22, 2020	24,385	24,449	1.06	0.96	24,879
	Sept. 23, 2020	24,513				
US 301 South of Morningside Dr	Oct. 1, 2020	25,311 (1)	25,311	1.05	-	26,577
Adair Rd West of SR 52	Oct. 1, 2020	2,622(1)	2,622	1.05	-	2,753

1) Based on PM peak turning movement count and K = 0.09.

2) Based on eastern Pasco data by FDOT.



LEGEND

12/12 = AM/PM TRAFFIC

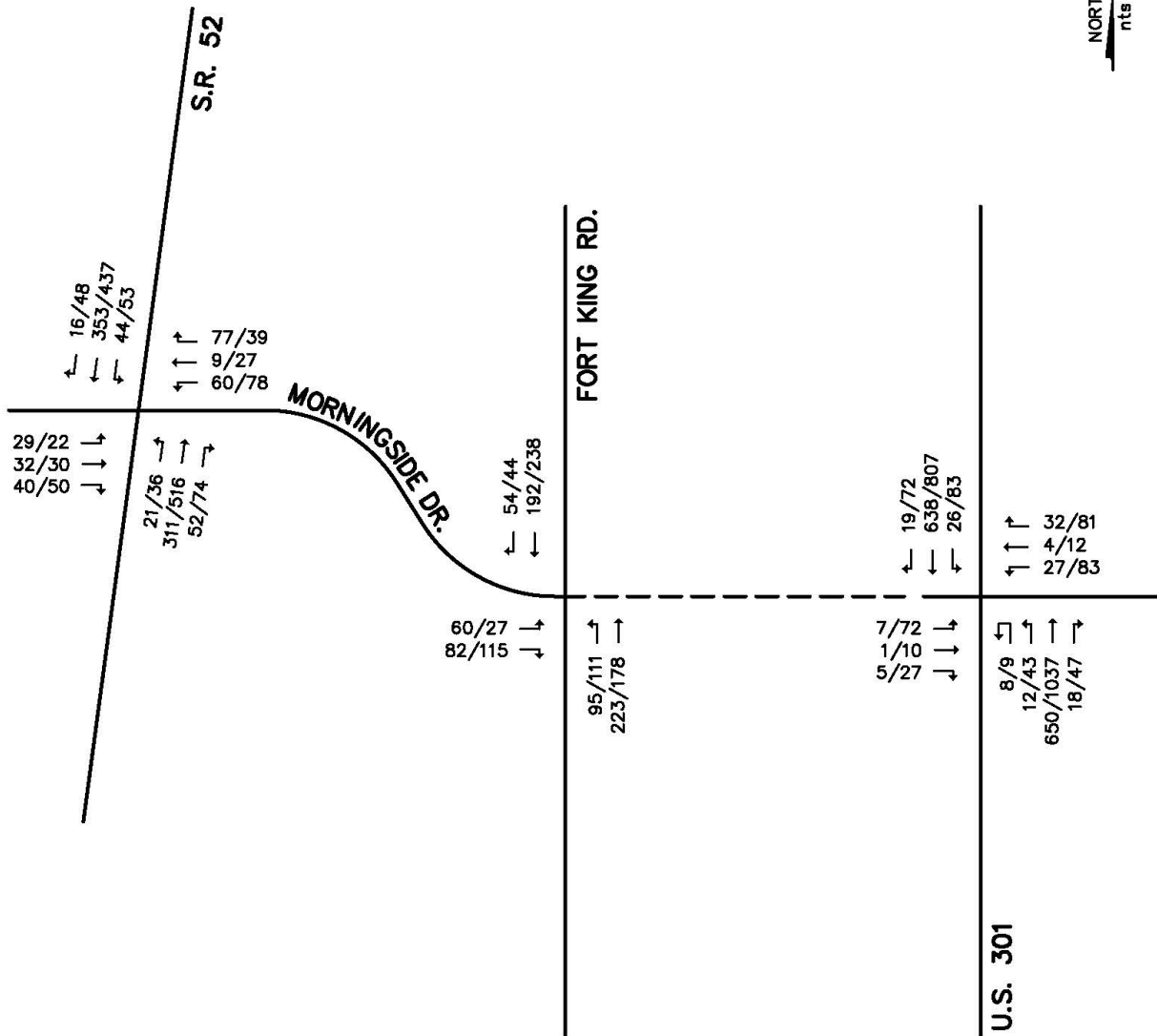
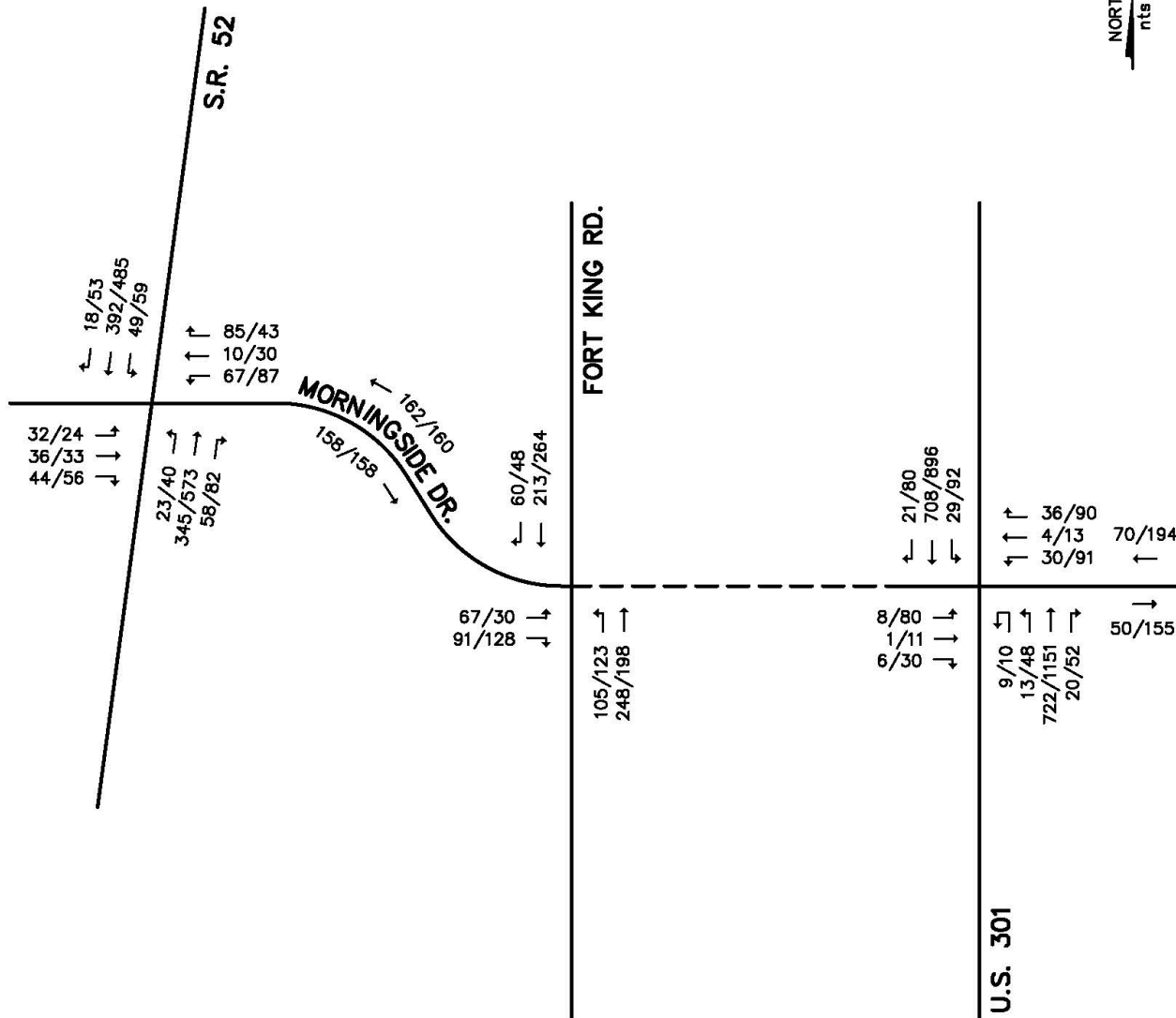


FIGURE 2-4
EXISTING YEAR 2020
AM/PM TURNING
MOVEMENT VOLUMES



LEGEND

12/12 = AM/PM PEAK HOUR TRAFFIC



**FIGURE 2-5
PEAK SEASON 2020
AM/PM PEAK HOUR TURNING
MOVEMENT VOLUMES**

conditions and Level of Service F representing the worst operating conditions. The existing conditions analysis was performed using the methodologies described in Chapters 18 and 19, signalized and unsignalized intersections of the Transportation Research Board (TRB) Special Report, the 2010 Highway Capacity Manual, and HCS Software for unsignalized intersections and SYNCHRO for signalized intersections.

2.6.1 INTERSECTION OPERATIONS ANALYSIS

An intersection capacity analysis was conducted at the following intersections:

- Morningside Drive/Adair Road and SR 52
- Morningside Drive and Fort King Road
- Morningside Drive and US 301

The turning movement counts provided in Figure 2-5 were used to perform the operational analysis. Level of Service Standard D or better, for each movement was considered acceptable for the purpose of the analysis.

As shown in Table 2-3, the intersections operate within an acceptable Level of Service during AM and PM peak hours except for the following:

Morningside Drive and SR 52/Adair Road intersection

- Eastbound left, through and right movements during the AM and PM peak hours
- Westbound through and right movements during the PM peak hour
- Westbound left movement during the AM and PM peak hours

Morningside Drive and Fort King Road

- Eastbound left movement during the AM peak hour

The SYNCHRO and Highway Capacity Software (HCS) output files are provided in the Appendix D.

2.6.2 SEGMENT ANALYSIS

Roadway segment analysis was conducted for the following roadway segments:



TABLE 2-3
 INTERSECTION ANALYSIS
 (2020 EXISTING PEAK SEASON)

Intersection	Movement	AM LOS		PM LOS	
		Left	Through	Left	Through
Morningside Dr/A dair Rd and SR 52	EB	F	F	F	F
	WB	F	B	F	E
	NB	A	*	A	*
	SB	A	*	A	*
Morningside Dr and Fort King Rd	EB	E	-	C	B
	NB	A	A	A	A
Morningside Dr and US 301	EB	D	D	D	C
	WB	D	D	D	D
	NB	A	A	A	C
	SB	A	A	B	A

* Free flow, therefore LOS was not calculated.



- Morningside Drive from SR 52 to Fort King Road
- Morningside Drive from US 301 to Old Lakeland Highway

The analysis was conducted utilizing the peak season peak hour volumes and the latest version of FDOT Generalized Capacity Tables. Table 2-4 illustrates the results of the analysis. As shown, Morningside Drive is expected to operate at an acceptable Level of Service, during the AM and PM peak hours.



TABLE 2-4
 SEGMENT LOS ANALYSIS
 (PEAK SEASON TRAFFIC)

<u>Road</u>	<u>From</u>	<u>To</u>	<u>No. of Lanes</u>	<u>Capacity (1)</u>	<u>AM Peak Hour Volume (3)</u>	<u>LOS</u>	<u>PM Peak Hour Volume (3)</u>	<u>LOS</u>
Morningside Dr	SR 52	Fort King Rd	2 LU (2)	1,440	320	C	318	C
Morningside Dr	US 301	Old Lakeland Hwy	2 LU (2)	1,440	120	C	349	C

(1) Based on FDOT 2020 Generalized Capacity Tables and 40 MPH or higher posted speed limit.

(2) 2 LU: 2 lane undivided.

(3) Based on Figure 2-5 volumes.



Section 3.0

TRAFFIC FORECASTS

This section describes the travel demand modeling procedure, as well as the development of future year traffic. The year of the forecast was assumed to be 2045.

3.1 FUTURE TRAVEL DEMAND

The development of future year traffic projections involved the review of the current adopted 2045 Florida Standard Urban Transportation Model Structure (FSUTMS) travel demand model [Tampa Bay Regional Planning Model (TBRPM 9.0)]. The TBRPM is recognized by FDOT District Seven, as well as the Tampa Bay Area MPOs, as the accepted travel demand forecasting tool. The roadway network used reflects the latest available adopted Cost Affordable LRTPs for all counties in the region.

The TBRPM 9.0 model 2045 land use data and roadway traffic volume loadings were adjusted based on comments received by City of Dade City staff and review of Traffic Analysis Zones (TAZ) boundaries and centroid connections in the vicinity of Morningside Drive. The following specific adjustments were made:

- 1) Dade City staff requested 180 additional dwelling units to be added to TAZ #2045. The new extension of Morningside Drive will bisect TAZ #2045 which was causing unrealistic traffic loadings, therefore a new TAZ #2500 was created.
- 2) The additional 180 dwelling units were added to TAZ #2500 and the land uses in TAZ #2045 were modified by mainly transferring non-residential land use data to TAZ #2500 based on land use characteristics and expected growth of the area.
- 3) The location of one of the centroid connections to SR 52 for TAZ #2400 was adjusted to represent Adair Road located on the westside of SR 52.

The documentation of the above changes is provided in the Appendix F.

The model volumes were compared to existing AADT's for all segments within the study area, as shown in Table 3-1. As shown, there are segments where the future AADTs are less than existing AADTs. This was expected because of future construction of



TABLE 3-1

PRELIMINARY GROWTH RATE

<u>Location</u>	<u>Existing AADT</u>	<u>2045 Model/AADT</u>	<u>2045 Model/AADT (1)</u>	<u>Average Annual Growth Rate</u>
SR 52 North of Morningside Dr	11,237	11,297	10,732	Negative
SR 52 South of Morningside Dr	11,679	13,430	12,759	0.36
Fort King Road North of Morningside Dr	5,510	4,858	4,615	Negative
Fort King Rd South of Morningside Dr	6,464	2,117	2,011	Negative
Morningside Dr East of SR 52	2,606	4,769	4,531	2.95
Morningside Dr East of Fort King Road	-	1,855	1,762	-
Morningside Dr West of US 301	-	2,057	1,954	-
Morningside Dr East of US 301	2,784	545	518	Negative
US 301 North of Morningside Dr	24,879	28,655	27,222	0.38
US 301 South of Morningside Dr	26,577	29,824	28,334	0.26
Adair Rd	2,753	2,131	2,024	Negative

1) Based on MOCF of 0.95



Clinton Avenue Extension (realigned SR 52) which is a major east-west roadway and is expected to result in significant traffic division in the area. Furthermore, this area of the County is not expected to experience significant growth compared to central and south market areas. After discussions with County staff, it was decided to apply an average growth rate to existing turning moving counts to obtain the future travel demand. The calculation of the average growth rate was based on 2015 Model Volumes and 2045 Model Volumes (without Morningside Drive Extension). An average annual growth rate of 1.32 percent was calculated and used in the analysis, as shown in Table 3-2.

3.2 FUTURE YEAR DHVS AND DDHVS

The following methodology was utilized to obtain the DDHV for the intersections in the study area.

1. The average growth rate was applied to existing peak season turning movement counts to obtain the initial DDHV's.
2. The 2045 Model ADT for the new segment of Morningside Drive was converted to AADT based on MOCF and further converted to AM and PM DDHV by applying appropriate K and D factors.
3. The final 2045 turning movements were estimated utilizing the combination of model approach DDHV's for new segment of Morningside Drive, the estimated growth rate, and the general expected travel patterns in the area.

Figure 3-1 represents the year 2045 Directional Design Hour Volumes (DDHVs) used in the analysis.



TABLE 3-2

AVERAGE ANNUAL GROWTH RATE

<u>Location</u>	<u>2015 Model Volume</u>	<u>2045 Model Volume</u>	<u>Average Annual Growth Rate</u>
SR 52 North of Morningside Dr	7,420	11,299	1.74
SR 52 South of Morningside Dr	7,974	13,368	2.25
Morningside Dr East of SR 52	2,606	4,553	2.49
US 301 North of Morningside Dr	24,879	28,955	0.55
US 301 South of Morningside Dr	26,577	28,798	0.28
Fort King Rd North of Morningside Dr	3,358	4,705	1.34
Fort King Rd South of Morningside Dr	3,056	3,572	0.56
		Average	1.32



Section 4.0

FUTURE CONDITIONS

TRAFFIC OPERATIONS ANALYSIS

A future conditions traffic operations analysis was conducted to evaluate the performance of the following intersections and segments.

Intersections:

- Morningside Drive/Adair Road and SR 52
- Morningside Drive and Fort King Road
- Morningside Drive and US 301

Segments:

- Morningside Drive from SR 52 to Fort King Road
- Morningside Drive from Fort King Road to US 301
- Morningside Drive from US 301 to Old Lakeland Highway

The future conditions intersection analysis was performed using Synchro software for signalized intersections and roundabouts and HCS Software for unsignalized intersections and FDOT Generalized Capacity Tables was utilized for segment analysis.

The Level of Service standard of D was assumed for the analysis.

4.1 OPERATIONS ANALYSIS FOR INTERSECTIONS

Based on discussions with Pasco County staff three configurations were used to evaluate the study intersections per the following:



<u>Intersection</u>	<u>Option A Unsignalized</u>	<u>Option B Signalized</u>	<u>Option C Roundabout</u>
Morningside Drive/Adair Road and SR52	✓	✓	-
Morningside Drive and Fort King Road	✓	✓	✓
Morningside Drive and US 301	-	✓	-

The HCS and SYNCHRO output files are provided in Appendix G.

SR 52 and Morningside Drive/Adair Road

Option A - Unsignalized

Unsignalized intersection analysis was conducted using HCS software and lane geometry in Figure 4-1. Table 4-1 provides Level of Service results. The results indicate that all movements are projected to operate at or above acceptable Level of Service during AM and PM peak hours through design year (2045) except for the following:

- Eastbound left, through and right movements during the AM and PM peak hours
- Westbound left movement during the AM and PM peak hours
- Westbound through and right movements during the PM peak hour

Option B – Signalized

The signalized intersection analysis was conducted using the SYNCHRO Software and the lane geometry shown in Figure 4-1. Table 4-2 provides Level of Service results. The results indicate that the conventional signalized intersection with the assumption that a signal is warranted should operate at or above acceptable Level of Service during the AM and PM peak hours through the Design Year (2045).

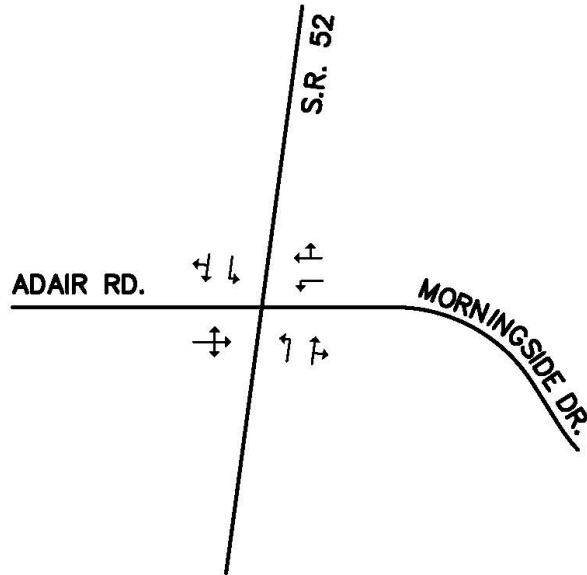
Fort King Road and Morningside Drive

Option A – Unsignalized

The unsignalized intersection analysis was conducted using HCS Software and the lane geometry shown in Figure 4-2. In addition, based on NCHRP Report # 279, a northbound left turn lane and southbound left turn lane are warranted, which was included in the analysis. A westbound left turn lane is not warranted. However, it is



OPTION A - UNSIGNALIZED



OPTION B - SIGNALIZED

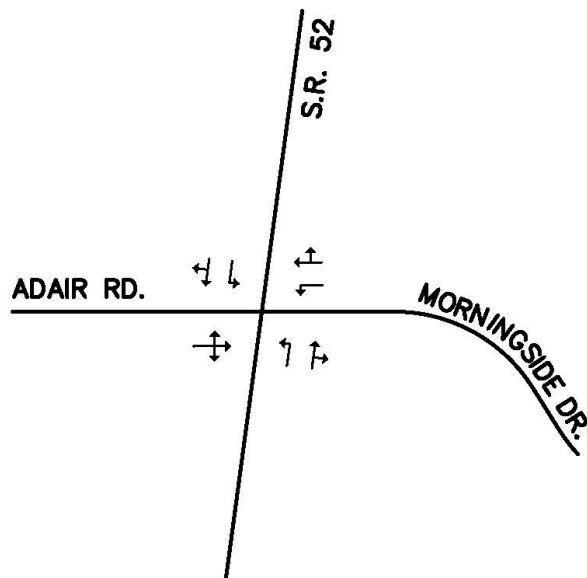


FIGURE 4-1
LANE GEOMETRY
(S.R. 52 AND
MORNINGSIDE DR./ADAIR RD.)



TABLE 4-1
 INTERSECTION ANALYSIS - UNSIGNALIZED (OPTION A)
 (2045 TRAFFIC)

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		Left	Through	Right	Left	Through	Right
Morningside Dr/Adair Rd and SR 52	EB	F	F	F	F	F	F
	WB	F	C	C	F	F	F
	NB	A	*	*	A	*	*
	SB	A	*	*	B	*	*
Morningside Dr and Fort King Rd	EB	F	E	E	F	C	C
	WB	F	D	D	F	D	D
	NB	A	*	*	A	*	*
	SB	A	*	*	A	*	*

* Free flow, therefore LOS was not calculated.

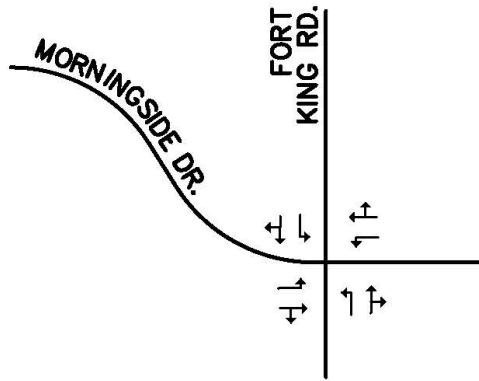


TABLE 4-2
 INTERSECTION ANALYSIS - SIGNALIZED (OPTION B)
 (2045 TRAFFIC)

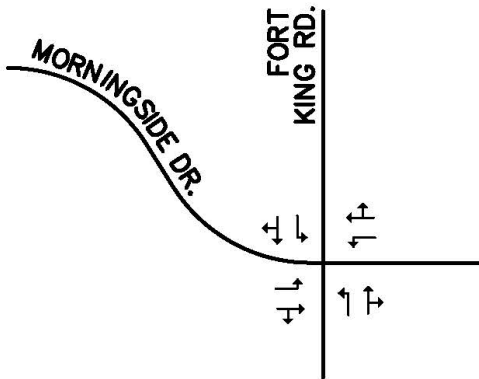
Intersection	Movement	AM Peak Hour			PM Peak Hour		
		Left	Through	Right	Left	Through	Right
Morningside Dr/Adair Rd and SR 52	EB	C	C	C	B	B	B
	WB	C	A	A	D	B	B
	NB	A	A	A	A	B	B
	SB	A	A	A	B	A	A
Morningside Dr and US 301	EB	D	D	A	D	C	A
	WB	D	D	A	D	D	A
	NB	A	B	B	C	C	C
	SB	A	B	A	D	B	A
Morningside Dr and Fort King Rd	EB	B	A	A	B	A	A
	WB	A	A	A	B	A	A
	NB	A	A	A	A	A	A
	SB	A	A	A	A	A	A



OPTION A - UNSIGNALIZED



OPTION B - SIGNALIZED



OPTION C - ROUNDABOUT

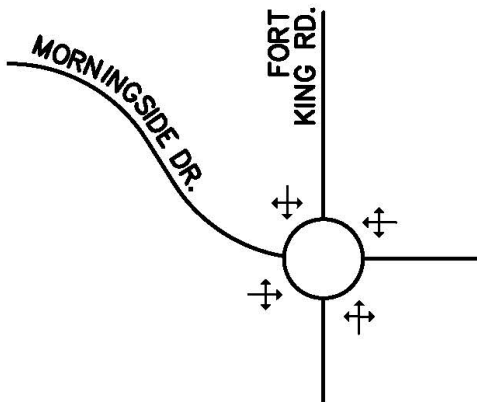


FIGURE 4-2
LANE GEOMETRY
(FORT KING RD. & MORNINGSIDE DR.)



recommended a westbound left turn lane be included to create a balance of lane geometry with the eastbound approach. Table 4-1 provides the Level of Service results. The results indicate that all movements are projected to operate at or above an acceptable Level of Service during AM and PM peak hours through design year (2045) except for the following:

- Eastbound left movement during the AM and PM peak hours
- Eastbound through and right movements during the AM peak hour
- Westbound left movement during the AM and PM peak hours

Option B - Signalized

The signalized intersection analysis was conducted utilizing SYNCHRO software and lane geometry shown in Figure 4-2. Table 4-2 provides the Level of Service results. The results indicate that the conventional signalized intersection, with the assumption that a signal is warranted, would operate at or above an acceptable Level of Service during the AM and PM peak hours through the design year (2045).

Option C – Roundabout

The Roundabout intersection analysis was conducted using the SYNCHRO Software and the lane geometry shown in Figure 4-2. Table 4-3 provides the Level of Service results. The results indicate that the roundabout intersection is projected to operate at or above an acceptable Level of Service during AM and PM peak hours through the Design Year (2045).

Morningside Drive and US 301

Option B - Signalized

The signalized intersection analysis was conducted using the SYNCHRO Software and the lane geometry shown in Figure 4-3. The existing number of lanes and signal timings were utilized in the analysis except for signal timings during the PM peak hour. Table 4-2 provides the Level of Service results. The results indicate that the signalized intersection is projected to operate at or above an acceptable Level of Service during AM and PM peak hours through the Design Year (2045).

4.2 ANALYSIS FOR SEGMENTS

Capacity analysis was conducted for the segment of Morningside Drive from SR 52 to Old Lakeland Highway using FDOT Generalized Capacity Tables.



TABLE 4-3
 INTERSECTION ANALYSIS - ROUNDABOUT (OPTION C)
 (2045 TRAFFIC)

<u>Intersection</u>	<u>Movement</u>	<u>AM Peak Hour</u>	<u>PM Peak hour</u>
Morningside Dr and Fort King Rd	EB	A	A
	WB	A	A
	NB	B	A
	SB	A	B





OPTION B - SIGNALIZED

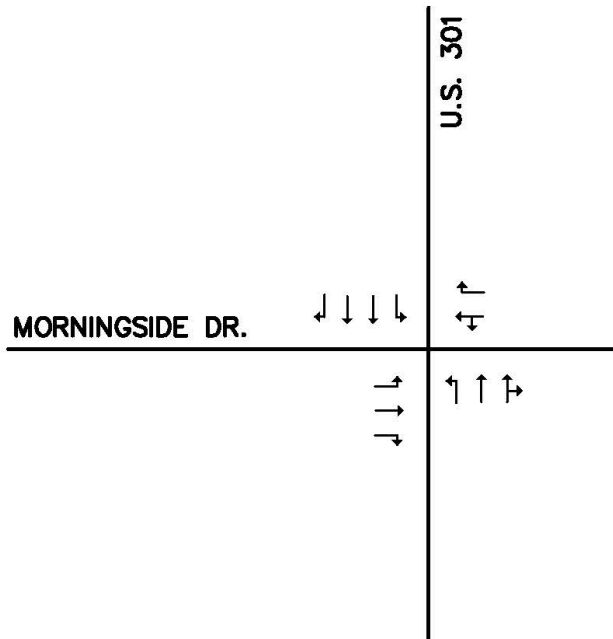


FIGURE 4-3
LANE GEOMETRY
(U.S. 301 & MORNINGSIDE DR.)



The results of the analysis are provided in Table 4-4. The results indicate that Morningside Drive is projected to operate at or above acceptable Level of Service during AM and PM peak hours through design year (2045), as a two (2) lane undivided roadway.

4.3 *STORAGE LENGTHS*

Turn lane length analysis was conducted for the studied intersections based on signalized intersection (Option B). The results are provided in Table 4-5.



TABLE 4-4

SEGMENT ANALYSIS
(2045 TRAFFIC)

<u>Road</u>	<u>From</u>	<u>To</u>	<u>No. of Lanes</u>	<u>Capacity (1)</u>	<u>AM Peak Hour</u>		<u>PM Peak Hour</u>	
					<u>Volume (3)</u>	<u>LOS</u>	<u>Volume (3)</u>	<u>LOS</u>
Morningside Dr	SR 52	Fort King Rd	2 LU (2)	1,440	472	C	416	C
Morningside Dr	Fort King Rd	US 301	2 LU (2)	1,440	214	C	286	C
Morningside Dr	US 301	Old Lakelane Hwy	2 LU (2)	1,440	178	C	435	C

(1) Based on FDOT 2020 Generalized Capacity Tables and 40 MPH or higher posted speed limit.

(2) 2 LU - 2 lane undivided.

(3) Figure 3-1 volumes.



TABLE 4-5
STORAGE LENGTH

<u>Intersection</u>	<u>Movement</u>	<u>Volume AM/PM</u>	<u>Deceleration Length (1)</u>	<u>Storage Length (2)</u>	<u>Total Length</u>	<u>Existing Length</u>
SR 52 and Morningside Dr/Adair Rd	WBL	92/120	145'	100'	245'	235'
	NBL	32/55	240'	150'	390'	350'
	SBL	67/81	240'	150'	390'	260'
Fort King Rd and Morningside Dr	EBL	100/44	145'	75'	220'	175'
	WBL	12/33	Urban: 145' Rural: 290'	50'	Urban: 195' Rural: 340'	-
	NBL	140/102	290'	125'	415'	-
	SBL	41/53	290'	75'	365'	-
US 301 and Morningside Dr	EBL	11/110	Urban: 145' Rural: 290'	100'	Urban: 245' Rural: 390'	270'
	EBR	63/40	Urban: 145' Rural: 290'	50'	Urban: 195' Rural: 340'	250'
	WBR	38/123	290'	100'	390'	205'
	NBL	59/100	290'	125'	415'	475'
	SBL	40/126	290'	125'	415'	340'
	SBR	29/87	290'	25'	315'	405'

(1) Based on following design speeds (posted plus 5 MPH) and FDOT Design Manual Exhibit 212-1:

- SR 52 - 50 MPH
- US 301 - 50 MPH
- Morningside Dr (East of US 301) - 50 MPH
- Morningside Dr (West of US 301) - Urban: 35 MPH
Rural: 50 MPH

Fort King Rd - 40 MPH

(2) Storage length signalized:

SR 52 and Morningside Dr. - Based on SimTraffic.

- WBL: 107' Use 100'
- NBL: 151' Use 150'
- SBL: 154' Use 150'

Fort King Rd and Morningside Dr - Based on SimTraffic.

- EBL: 71' Use 75'
- WBL: 48' Use 50'
- NBL: 110' Use 125'
- SBL: 62' Use 75'

US 301 and Morningside Dr. - Based on SimTraffic

- EBL: 94' Use 100'
- EBR: 51' Use 50'
- NBL: 120' Use 125'
- SBL: 124' Use 125'
- SBR: 30' Use 25'



Section 5.0

SUMMARY AND CONCLUSIONS

Level of Service and capacity analysis were conducted for the following intersections and segments:

Intersections

- Morningside/Adair Road and SR 52
- Morningside Drive and Fort King Road
- Morningside Drive and US 301

Segments

- Morningside Drive/Adair Road from SR 52 to Fort King Road
- Morningside Drive from Fort King Road to US 301
- Morningside Drive from US 301 to Old Lakeland Highway

The following is the summary of the results and conclusions:

Intersections

Morningside Drive/Adair Road and SR 52

Unsignalized (Option A)

- Operates below the Level of Service standard during the AM and PM peak hours with the existing geometry and existing peak season traffic.
- Operates below the Level of Service standard during the AM and PM peak hours with the existing geometry and 2045 design traffic.

Signalized (Option B)

- Operates at or above the Level of Service standard with the existing geometry and with 2045 design traffic with the assumption that a signal will be warranted.

Morningside Drive and Fort King Road

Unsignalized (Option A)

- Operates below the Level of Service standard during the AM peak hour with the existing geometry and existing peak season traffic.



- Operates below the Level of Service standard during the AM and PM peak hours with the existing geometry and with the 2045 design traffic.
- Operates below the Level of Service standard during the AM and PM peak hours with improved geometry and with the 2045 design traffic.

Signalized (Option B)

- Operates at or above the Level of Service standard during the AM and PM peak hours with improved geometry and with the 2045 design traffic with the assumption that a signal will be warranted.

Roundabout (Option C)

- Operates at or above Level of Service standard during the AM and PM peak hours with one lane roundabout and with the 2045 design traffic.

Morningside Drive and US 301

Signalized (Option B)

- Operates at or above the Level of Service standard during the AM and PM peak hours with existing geometry and with the existing peak season traffic.
- Operates at or above the Level of Service standard during the AM and PM peak hours with existing geometry and with the 2045 design traffic.

Segments

Morningside Drive/Adair Road from SR 52 to Fort King Road

Capacity analysis indicates that this segment should operate at an acceptable Level of Service during the AM and PM peak hours through the design year (2045) as a two (2) lane undivided roadway.

Morningside Drive from Fort King Road to US 301

Capacity analysis indicates that this segment should operate at an acceptable Level of Service during the AM and PM peak hours through the design year (2045) as a two (2) lane undivided roadway.

Morningside Drive from US 301 to Old Lakeland Highway

Capacity analysis indicates that this segment should operate at an acceptable Level of Service during the AM and PM peak hours through the design year (2045) as a two (2) lane undivided roadway.



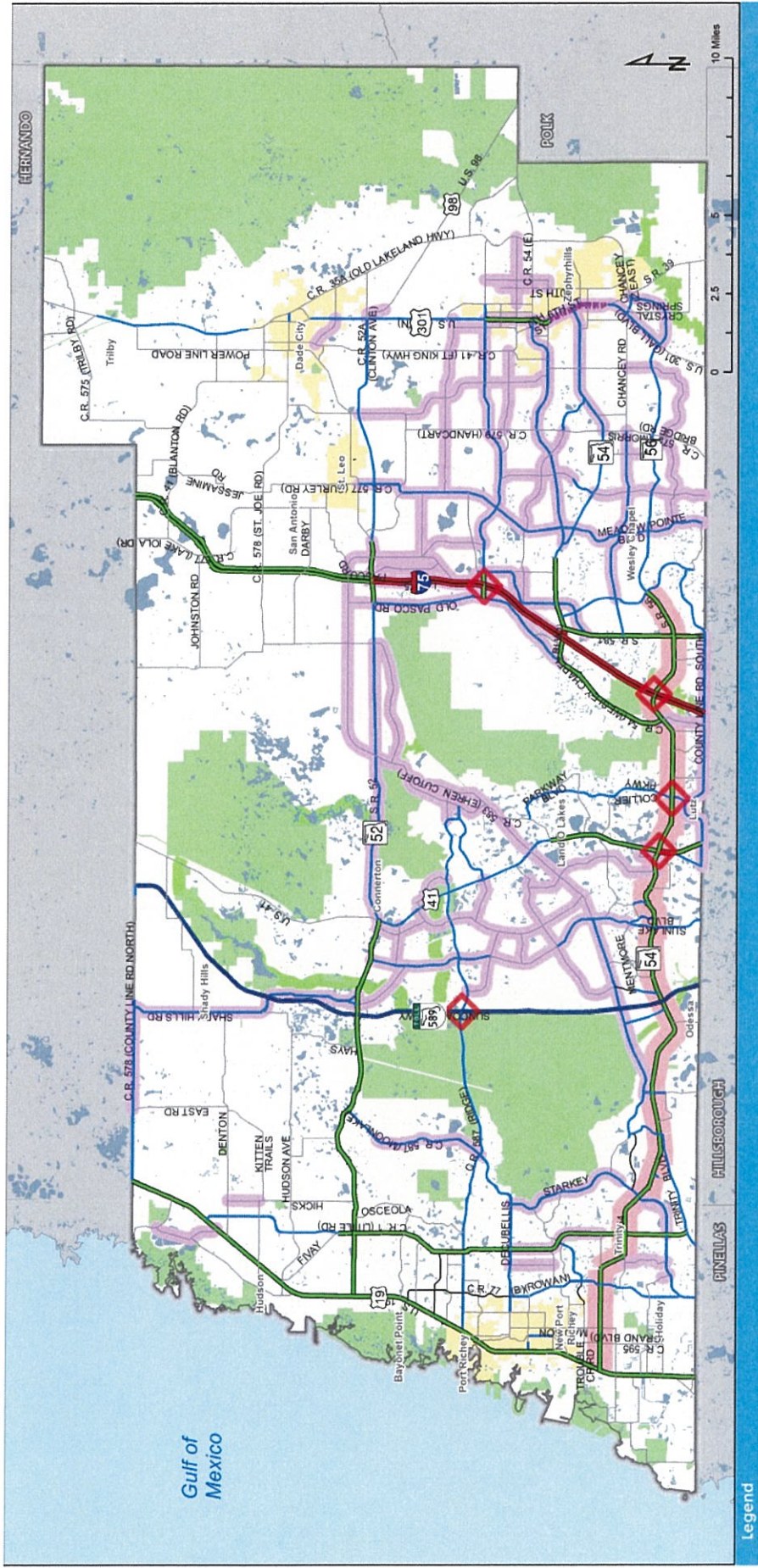
APPENDIX - A



2045 COST AFFORDABLE TRANSPORTATION PLAN



Figure 4-2. Roadway Capacity Improvements and Number of Lanes (2025-2045)



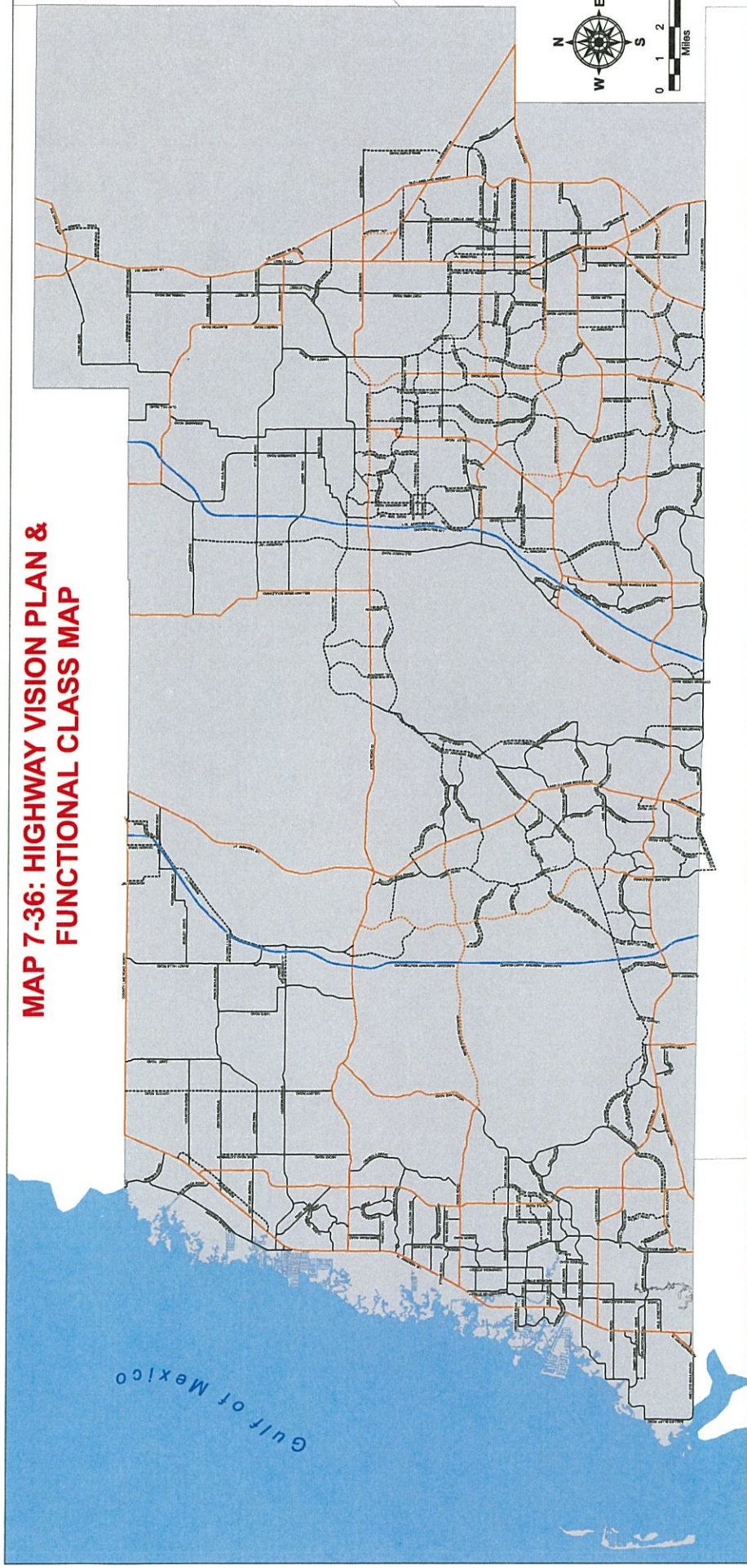
Legend

- 2 Lane One Way
 - 2 Lane Divided
 - 4 Lane Divided
 - 4 Lane Undivided
 - 6 Lane Divided
 - 6 Lane Freeway
 - 8 Lane Divided
 - 8 Lane Freeway
 - 10 Lane Freeway
 - City Limits
 - New / Improved Interchange
 - SR 54/56 Corridor Improvements
 - Critical Linkages
 - Parks and Publicly Owned Land
- \$632.8m is set aside for various studies and improvements along the SR 54/56 Corridor

HIGHWAY VISION PLAN



MAP 7-36: HIGHWAY VISION PLAN & FUNCTIONAL CLASS MAP



The data contained herein is not collected under the supervision of, and is not a survey or a plan, and does not meet the minimum technical standards of the Florida Statutes, Code 6107-6. The Pasco County Board of County Commissioners does not accept any responsibility for errors or omissions of any kind contained in the data herein. All products and derivations from the data contained herein must retain this disclaimer.

Approved by: Auribel Rheno
 Author: Jennifer Heinrich

Document Path: \\GIS\GISData\MapDocs\Map 7-36.mxd

-  EXISTING ARTERIAL
-  EXISTING COLLECTOR
-  INTERSTATE/TOLL
-  FUTURE ARTERIAL
-  FUTURE COLLECTOR

NOTE: THE ALIGNMENT OF ALL FUTURE ROADS WITHOUT AN APPROVED ROUTE STUDY ARE CONCEPTUAL FOR CONNECTIVITY AND SUBJECT TO CHANGE BASED ON EXISTING LAND DEVELOPMENT PATTERNS. THE GUIDANCE FOR CLASSIFICATION OF ARTERIAL AND COLLECTOR ROADS IS IN PASCO COUNTY COMPREHENSIVE PLAN, TABLE 7-3



Date Saved: 3/19/2019 3:07:21 PM

APPENDIX - B



48 HOUR TRAFFIC COUNTS



VOLUME

SR 52 N/O Morningside Dr

Day: Tuesday
Date: 9/22/2020

City: Dade City
Project #: FL20_120203_005

DAILY TOTALS				NB	SB	EB	WB	Total			
				5,355	5,352	0	0	10,707			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	9	8			17	12:00	78	83			161
00:15	3	1			4	12:15	80	86			166
00:30	6	2			8	12:30	80	85			165
00:45	5	23	6	17	11	12:45	95	333	84	338	179
01:00	0	5			5	13:00	59	82			141
01:15	4	4			8	13:15	83	79			162
01:30	2	2			4	13:30	78	70			148
01:45	3	9	3	14	6	13:45	98	318	55	286	153
02:00	4	6			10	14:00	96	77			173
02:15	4	4			8	14:15	128	112			240
02:30	2	1			3	14:30	94	109			203
02:45	4	14	3	14	7	14:45	103	421	93	391	196
03:00	5	5			10	15:00	102	117			219
03:15	2	12			14	15:15	101	96			197
03:30	3	4			7	15:30	85	127			212
03:45	3	13	9	30	12	15:45	92	380	98	438	190
04:00	4	11			15	16:00	97	107			204
04:15	4	16			20	16:15	134	84			218
04:30	7	14			21	16:30	110	107			217
04:45	6	21	19	60	25	16:45	102	443	102	400	204
05:00	6	35			41	17:00	127	152			279
05:15	8	41			49	17:15	113	131			244
05:30	22	50			72	17:30	116	93			209
05:45	34	70	80	206	114	17:45	112	468	129	505	241
06:00	28	99			127	18:00	81	84			165
06:15	39	83			122	18:15	72	77			149
06:30	68	70			138	18:30	77	58			135
06:45	87	222	75	327	162	18:45	59	289	59	278	118
07:00	137	107			244	19:00	74	58			132
07:15	122	133			255	19:15	54	38			92
07:30	86	92			178	19:30	69	50			119
07:45	95	440	63	395	158	19:45	53	250	58	204	111
08:00	84	64			148	20:00	65	47			112
08:15	96	81			177	20:15	92	34			126
08:30	85	75			160	20:30	50	34			84
08:45	79	344	84	304	163	20:45	32	239	26	141	58
09:00	66	59			125	21:00	31	30			61
09:15	67	64			131	21:15	24	31			55
09:30	61	76			137	21:30	24	13			37
09:45	78	272	57	256	135	21:45	17	96	14	88	31
10:00	86	70			156	22:00	25	18			43
10:15	65	75			140	22:15	17	13			30
10:30	70	78			148	22:30	11	9			20
10:45	72	293	67	290	139	22:45	15	68	14	54	29
11:00	66	77			143	23:00	7	19			26
11:15	63	57			120	23:15	11	6			17
11:30	79	72			151	23:30	9	6			15
11:45	87	295	71	277	158	23:45	7	34	8	39	15
TOTALS	2016	2190			4206	TOTALS	3339	3162			6501
SPLIT %	47.9%	52.1%			39.3%	SPLIT %	51.4%	48.6%			60.7%

DAILY TOTALS				NB	SB	EB	WB	Total			
				5,355	5,352	0	0	10,707			
AM Peak Hour	07:00	06:45		06:45	PM Peak Hour	16:15	17:00	17:00			
AM Pk Volume	440	407		839	PM Pk Volume	473	505	973			
Pk Hr Factor	0.803	0.765		0.823	Pk Hr Factor	0.882	0.831	0.872			
7 - 9 Volume	784	699	0	0	1483	4 - 6 Volume	911	905	0	0	1816
7 - 9 Peak Hour	07:00	07:00		07:00	4 - 6 Peak Hour	16:15	17:00			17:00	
7 - 9 Pk Volume	440	395	0	0	835	4 - 6 Pk Volume	473	505	0	0	973
Pk Hr Factor	0.803	0.742	0.000	0.000	0.819	Pk Hr Factor	0.882	0.831	0.000	0.000	0.872

VOLUME

SR 52 N/O Morningside Dr

Day: Wednesday
Date: 9/23/2020

City: Dade City
Project #: FL20_120203_005

DAILY TOTALS					NB	SB	EB	WB	Total
					5,480	5,447	0	0	10,927

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	11	5			16	12:00	85	69			154
00:15	3	8			11	12:15	78	83			161
00:30	9	4			13	12:30	74	84			158
00:45	5	28	6	23	11	12:45	84	321	90	326	174
01:00	1	5			6	13:00	91	92			183
01:15	4	3			7	13:15	88	94			182
01:30	4	2			6	13:30	80	67			147
01:45	4	13	6	16	10	13:45	100	359	79	332	179
02:00	4	1			5	14:00	89	101			190
02:15	4	3			7	14:15	118	106			224
02:30	5	0			5	14:30	91	92			183
02:45	2	15	0	4	2	14:45	111	409	97	396	208
03:00	4	1			5	15:00	100	117			217
03:15	2	7			9	15:15	97	104			201
03:30	2	8			10	15:30	108	105			213
03:45	3	11	8	24	11	15:45	75	380	95	421	170
04:00	3	6			9	16:00	117	78			195
04:15	5	14			19	16:15	120	102			222
04:30	6	16			22	16:30	114	112			226
04:45	7	21	16	52	23	16:45	120	471	89	381	209
05:00	7	38			45	17:00	128	161			289
05:15	10	43			53	17:15	122	122			244
05:30	15	53			68	17:30	100	109			209
05:45	18	50	87	221	105	17:45	117	467	99	491	216
06:00	32	90			122	18:00	114	103			217
06:15	42	92			134	18:15	81	94			175
06:30	71	80			151	18:30	91	73			164
06:45	77	222	70	332	147	18:45	81	367	66	336	147
07:00	116	86			202	19:00	57	50			107
07:15	132	132			264	19:15	40	59			99
07:30	80	94			174	19:30	68	53			121
07:45	100	428	64	376	164	19:45	64	229	40	202	104
08:00	94	71			165	20:00	84	47			131
08:15	97	48			145	20:15	68	35			103
08:30	78	65			143	20:30	41	32			73
08:45	84	353	75	259	159	20:45	44	237	49	163	93
09:00	56	84			140	21:00	32	30			62
09:15	82	65			147	21:15	39	32			71
09:30	62	68			130	21:30	27	22			49
09:45	71	271	79	296	150	21:45	28	126	18	102	46
10:00	72	75			147	22:00	21	15			36
10:15	67	85			152	22:15	21	20			41
10:30	73	60			133	22:30	18	12			30
10:45	66	278	71	291	137	22:45	14	74	12	59	26
11:00	70	88			158	23:00	14	9			23
11:15	69	71			140	23:15	11	8			19
11:30	88	75			163	23:30	11	12			23
11:45	79	306	75	309	154	23:45	8	44	6	35	14
TOTALS	1996	2203			4199	TOTALS	3484	3244			6728
SPLIT %	47.5%	52.5%			38.4%	SPLIT %	51.8%	48.2%			61.6%

DAILY TOTALS					NB	SB	EB	WB	Total
					5,480	5,447	0	0	10,927

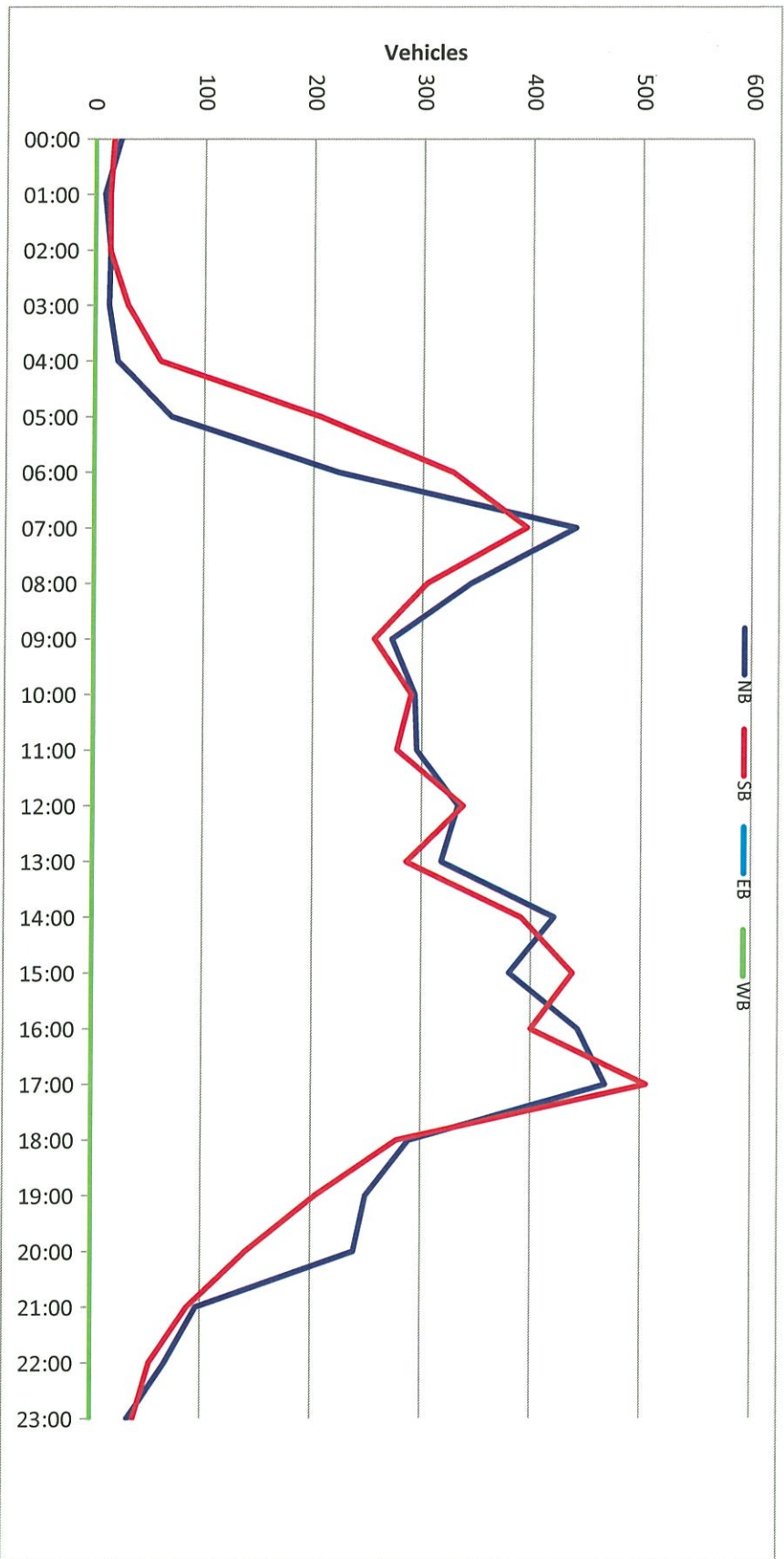
AM Peak Hour	07:00	06:45		07:00	PM Peak Hour	16:30	17:00		16:30		
AM Pk Volume	428	382		804	PM Pk Volume	484	491		968		
Pk Hr Factor	0.811	0.723		0.761	Pk Hr Factor	0.945	0.762		0.837		
7 - 9 Volume	781	635	0	0	1416	4 - 6 Volume	938	872	0	0	1810
7 - 9 Peak Hour	07:00	07:00		07:00	4 - 6 Peak Hour	16:30	17:00		16:30		
7 - 9 Pk Volume	428	376	0	0	804	4 - 6 Pk Volume	484	491	0	0	968
Pk Hr Factor	0.811	0.712	0.000	0.000	0.761	Pk Hr Factor	0.945	0.762	0.000	0.000	0.837

Project #: FL20_120203_005

City: Dade City

Location: SR 52 N/O Morningside Dr

Date: 9/22/2020

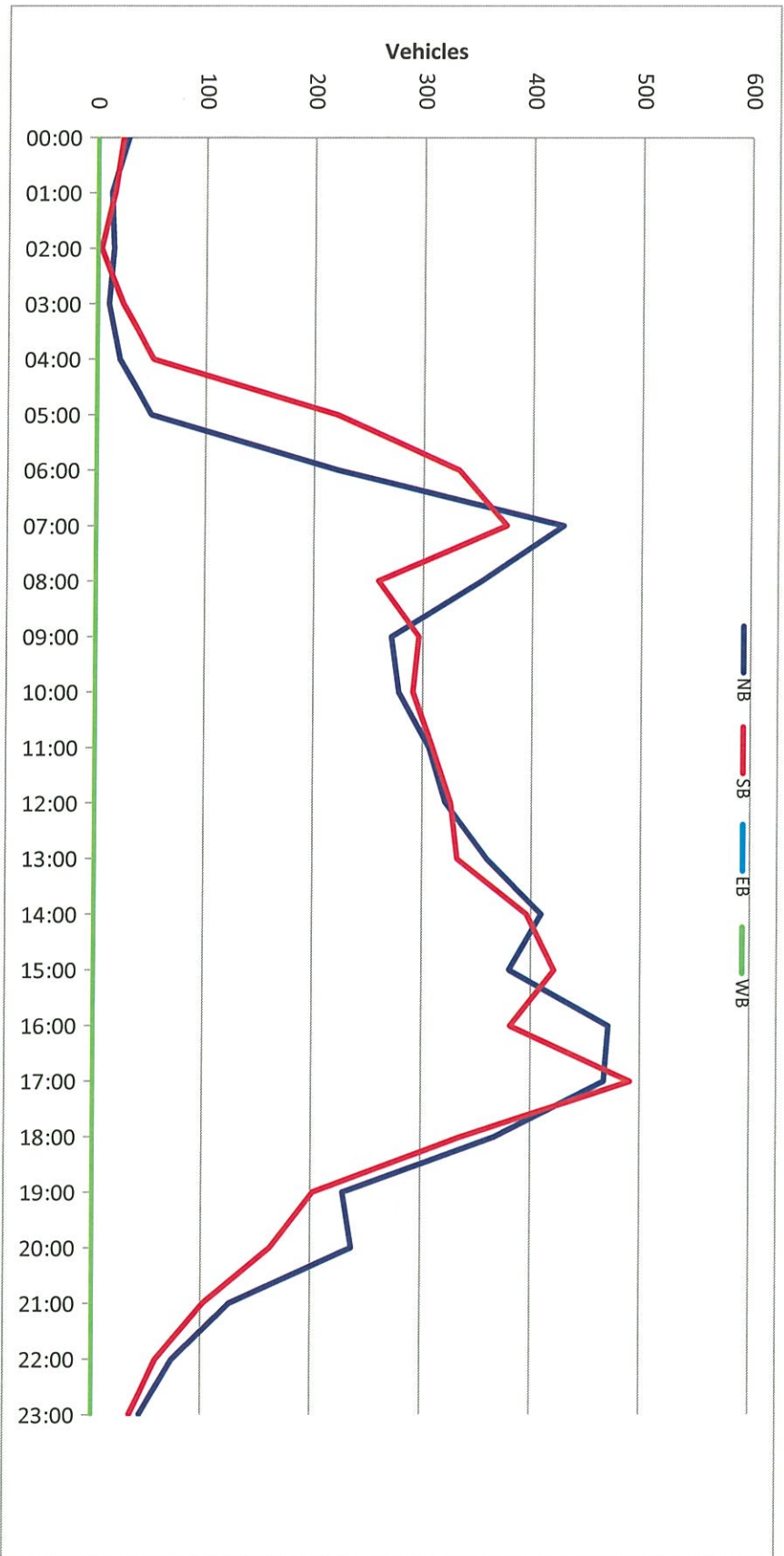


Project #: FL20_120203_005

City: Dade City

Location: SR 52 N/O Morningside Dr

Date: 9/23/2020



FDOT
SR 52 South of Morningside

County: 14
 Station: 5121
 Description: SR 52, EAST OF CR579/HAPPY HILL RD./PROSPECT RD.
 Start Date: 02/11/2020
 Start Time: 1200

Combined Time Total	Direction: E					Direction: W				
	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total
0000	13	8	16	6	43	4	2	4	5	15
58										
0100	5	8	2	4	19	4	1	3	0	8
27										
0200	3	7	2	1	13	2	2	1	4	9
22										
0300	2	4	2	8	16	8	11	5	4	28
44										
0400	5	4	9	15	33	11	8	19	26	64
97										
0500	6	12	28	27	73	32	43	77	104	256
329										
0600	22	41	77	123	263	104	114	89	110	417
680										
0700	138	98	117	134	487	117	188	147	132	584
1071										
0800	114	117	106	90	427	130	99	82	82	393
820										
0900	79	84	121	94	378	96	91	79	69	335
713										
1000	86	107	87	86	366	95	77	78	74	324
690										
1100	80	84	106	106	376	97	91	86	86	360
736										
1200	82	88	98	94	362	82	87	71	68	308
670										
1300	114	82	100	117	413	84	111	66	104	365
778										
1400	86	92	101	117	396	131	125	144	125	525
921										
1500	94	91	119	118	422	116	128	149	108	501
923										
1600	114	124	120	149	507	116	112	144	121	493
1000										
1700	112	150	116	118	496	155	159	95	104	513
1009										
1800	104	109	89	72	374	80	59	57	75	271

County: 14
 Station: 5121
 Description: SR 52, EAST OF CR579/HAPPY HILL RD./PROSPECT RD.
 Start Date: 02/12/2020
 Start Time: 1200

Combined Time Total	Direction: E					Direction: W				
	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total
0000	11	17	15	5	48	2	4	6	4	16
64										
0100	6	4	3	5	18	8	3	6	4	21
39										
0200	3	4	6	3	16	4	4	3	5	16
32										
0300	0	4	2	0	6	4	6	5	8	23
29										
0400	3	2	9	7	21	17	8	11	25	61
82										
0500	7	9	15	31	62	35	46	80	97	258
320										
0600	23	46	73	111	253	101	102	95	106	404
657										
0700	136	98	107	128	469	121	190	156	116	583
1052										
0800	114	105	86	88	393	101	106	80	71	358
751										
0900	69	81	116	104	370	97	85	71	79	332
702										
1000	70	84	91	85	330	96	59	74	78	307
637										
1100	93	102	68	64	327	90	120	80	77	367
694										
1200	92	92	108	100	392	137	99	95	100	431
823										
1300	84	102	90	95	371	94	105	79	94	372
743										
1400	97	91	108	128	424	121	100	107	117	445
869										
1500	104	107	103	107	421	128	142	119	124	513
934										
1600	120	119	107	122	468	105	135	125	105	470
938										
1700	125	130	114	117	486	136	149	105	98	488
974										
1800	89	99	80	76	344	72	73	69	53	267

VOLUME

US 301 N/O Morningside Dr

Day: Tuesday
Date: 9/22/2020

City: Dade City
Project #: FL20_120203_006

DAILY TOTALS						NB	SB	EB	WB	Total	
						12,615	11,770	0	0	24,385	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	17	23			40	12:00	225	236			461
00:15	14	17			31	12:15	249	222			471
00:30	15	8			23	12:30	270	275			545
00:45	13	59	7	55	20	12:45	277	1021	223	956	500
					114						1977
01:00	8	11			19	13:00	243	213			456
01:15	12	7			19	13:15	224	223			447
01:30	10	5			15	13:30	234	230			464
01:45	12	42	11	34	23	13:45	223	924	224	890	447
					76						1814
02:00	8	6			14	14:00	219	211			430
02:15	8	1			9	14:15	229	215			444
02:30	9	9			18	14:30	227	226			453
02:45	10	35	7	23	17	14:45	266	941	216	868	482
					58						1809
03:00	18	3			21	15:00	228	214			442
03:15	14	9			23	15:15	261	234			495
03:30	9	15			24	15:30	225	292			517
03:45	10	51	12	39	22	15:45	229	943	231	971	460
					90						1914
04:00	14	13			27	16:00	312	217			529
04:15	9	21			30	16:15	250	184			434
04:30	12	23			35	16:30	263	224			487
04:45	19	54	25	82	44	16:45	279	1104	224	849	503
					136						1953
05:00	11	27			38	17:00	302	250			552
05:15	24	39			63	17:15	315	228			543
05:30	25	56			81	17:30	256	186			442
05:45	39	99	63	185	102	17:45	232	1105	182	846	414
					284						1951
06:00	46	72			118	18:00	207	205			412
06:15	50	94			144	18:15	213	158			371
06:30	81	98			179	18:30	162	153			315
06:45	104	281	123	387	227	18:45	191	773	146	662	337
					668						1435
07:00	87	121			208	19:00	156	137			293
07:15	139	144			283	19:15	156	111			267
07:30	162	185			347	19:30	137	127			264
07:45	173	561	174	624	347	19:45	165	614	134	509	299
					1185						1123
08:00	157	159			316	20:00	141	91			232
08:15	165	149			314	20:15	111	111			222
08:30	166	189			355	20:30	101	67			168
08:45	156	644	185	682	341	20:45	100	453	51	320	151
					1326						773
09:00	145	186			331	21:00	102	68			170
09:15	163	175			338	21:15	83	61			144
09:30	188	175			363	21:30	71	41			112
09:45	194	690	195	731	389	21:45	42	298	39	209	81
					1421						507
10:00	196	172			368	22:00	58	50			108
10:15	162	196			358	22:15	46	34			80
10:30	190	198			388	22:30	40	34			74
10:45	214	762	198	764	412	22:45	36	180	22	140	58
					1526						320
11:00	185	237			422	23:00	45	17			62
11:15	220	216			436	23:15	17	19			36
11:30	226	218			444	23:30	33	17			50
11:45	237	868	210	881	447	23:45	18	113	10	63	28
					1749						176
TOTALS	4146	4487			8633	TOTALS	8469	7283			15752
SPLIT %	48.0%	52.0%			35.4%	SPLIT %	53.8%	46.2%			64.6%

DAILY TOTALS						NB	SB	EB	WB	Total
						12,615	11,770	0	0	24,385

AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	16:30	15:15			16:30
AM Pk Volume	981	943			1924	PM Pk Volume	1159	974			2085
Pk Hr Factor	0.908	0.857			0.883	Pk Hr Factor	0.920	0.834			0.944
7 - 9 Volume	1205	1306	0	0	2511	4 - 6 Volume	2209	1695	0	0	3904
7 - 9 Peak Hour	07:45	08:00			07:45	4 - 6 Peak Hour	16:30	16:30			16:30
7 - 9 Pk Volume	661	682	0	0	1332	4 - 6 Pk Volume	1159	926	0	0	2085
Pk Hr Factor	0.955	0.902	0.000	0.000	0.938	Pk Hr Factor	0.920	0.926	0.000	0.000	0.944

VOLUME

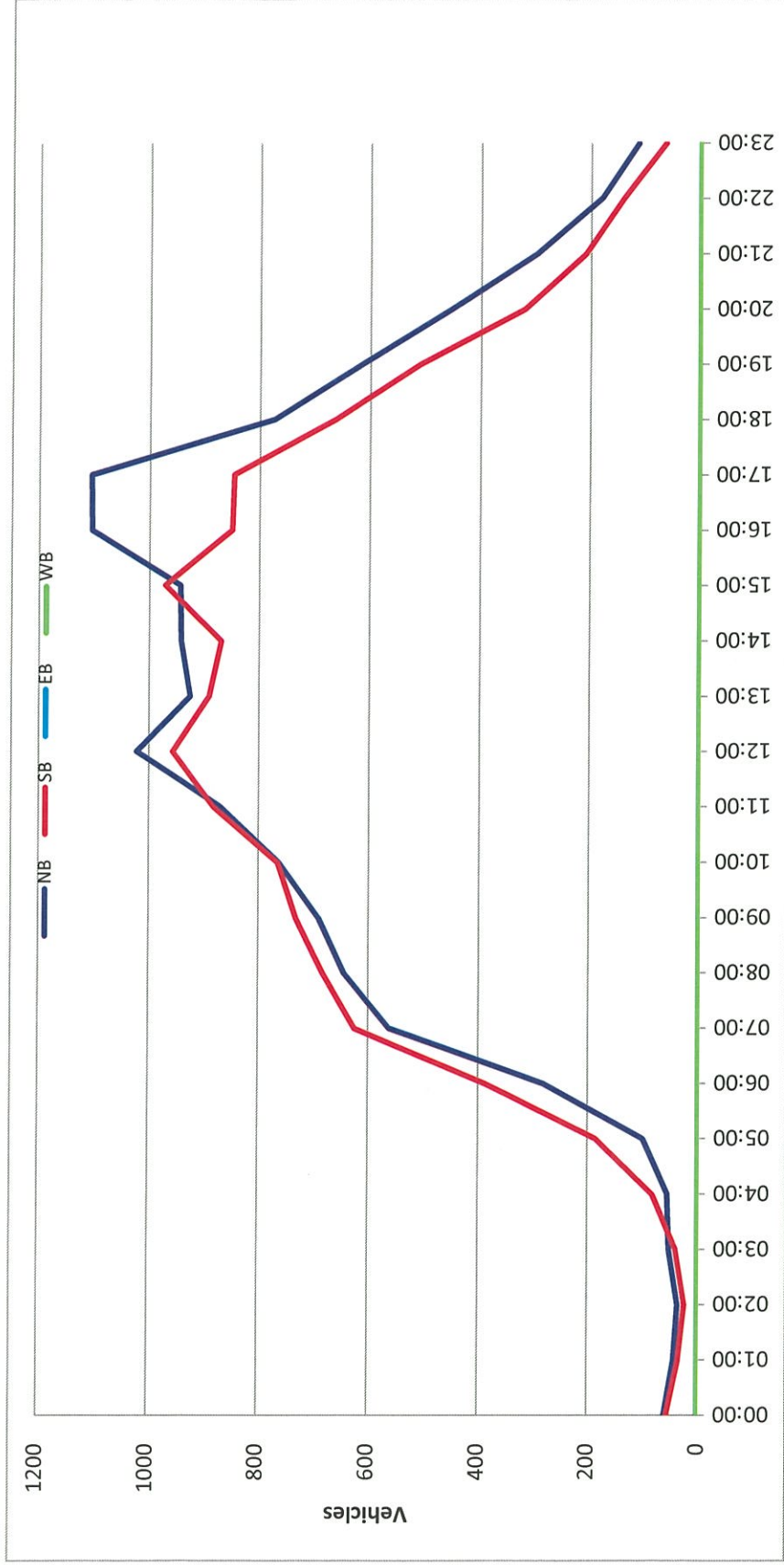
US 301 N/O Morningside Dr

Day: Wednesday
Date: 9/23/2020

City: Dade City
Project #: FL20_120203_006

DAILY TOTALS											NB	SB	EB	WB	Total
											12,642	11,871	0	0	24,513
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL				
00:00	21	11			32	12:00	247	234			481				
00:15	14	20			34	12:15	264	238			502				
00:30	17	10			27	12:30	258	238			496				
00:45	12	64	10	51	22 115	12:45	256	1025	219	929	475 1954				
01:00	11	11			22	13:00	243	235			478				
01:15	11	8			19	13:15	252	188			440				
01:30	8	8			16	13:30	218	242			460				
01:45	11	41	8	35	19 76	13:45	224	937	215	880	439 1817				
02:00	2	7			9	14:00	231	216			447				
02:15	8	0			8	14:15	204	214			418				
02:30	9	11			20	14:30	245	227			472				
02:45	3	22	5	23	8 45	14:45	257	937	222	879	479 1816				
03:00	5	6			11	15:00	240	196			436				
03:15	11	10			21	15:15	237	212			449				
03:30	1	14			15	15:30	260	250			510				
03:45	20	37	12	42	32 79	15:45	227	964	221	879	448 1843				
04:00	13	18			31	16:00	276	214			490				
04:15	21	13			34	16:15	258	246			504				
04:30	11	27			38	16:30	259	219			478				
04:45	19	64	25	83	44 147	16:45	283	1076	234	913	517 1989				
05:00	23	36			59	17:00	273	243			516				
05:15	25	27			52	17:15	283	230			513				
05:30	25	69			94	17:30	259	170			429				
05:45	44	117	49	181	93 298	17:45	258	1073	202	845	460 1918				
06:00	48	68			116	18:00	236	184			420				
06:15	63	101			164	18:15	235	148			383				
06:30	77	96			173	18:30	184	171			355				
06:45	96	284	128	393	224 677	18:45	176	831	147	650	323 1481				
07:00	109	140			249	19:00	183	134			317				
07:15	122	155			277	19:15	150	112			262				
07:30	141	176			317	19:30	157	145			302				
07:45	167	539	179	650	346 1189	19:45	155	645	116	507	271 1152				
08:00	131	163			294	20:00	148	110			258				
08:15	170	165			335	20:15	130	92			222				
08:30	165	183			348	20:30	114	73			187				
08:45	139	605	177	688	316 1293	20:45	104	496	103	378	207 874				
09:00	152	182			334	21:00	79	80			159				
09:15	160	180			340	21:15	65	43			108				
09:30	181	218			399	21:30	80	51			131				
09:45	191	684	198	778	389 1462	21:45	69	293	50	224	119 517				
10:00	199	187			386	22:00	58	40			98				
10:15	175	188			363	22:15	53	40			93				
10:30	208	208			416	22:30	44	30			74				
10:45	192	774	203	786	395 1560	22:45	33	188	21	131	54 319				
11:00	215	219			434	23:00	26	18			44				
11:15	216	198			414	23:15	26	17			43				
11:30	195	236			431	23:30	24	16			40				
11:45	224	850	222	875	446 1725	23:45	20	96	20	71	40 167				
TOTALS	4081	4585			8666	TOTALS	8561	7286			15847				
SPLIT %	47.1%	52.9%			35.4%	SPLIT %	54.0%	46.0%			64.6%				

DAILY TOTALS											NB	SB	EB	WB	Total
											12,642	11,871	0	0	24,513
AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	16:30	16:15			16:30				
AM Pk Volume	993	932			1925	PM Pk Volume	1098	942			2024				
Pk Hr Factor	0.940	0.979			0.959	Pk Hr Factor	0.970	0.957			0.979				
7 - 9 Volume	1144	1338	0	0	2482	4 - 6 Volume	2149	1758	0	0	3907				
7 - 9 Peak Hour	07:45	07:45			07:45	4 - 6 Peak Hour	16:30	16:15			16:30				
7 - 9 Pk Volume	633	690	0	0	1323	4 - 6 Pk Volume	1098	942	0	0	2024				
Pk Hr Factor	0.931	0.943	0.000	0.000	0.950	Pk Hr Factor	0.970	0.957	0.000	0.000	0.979				

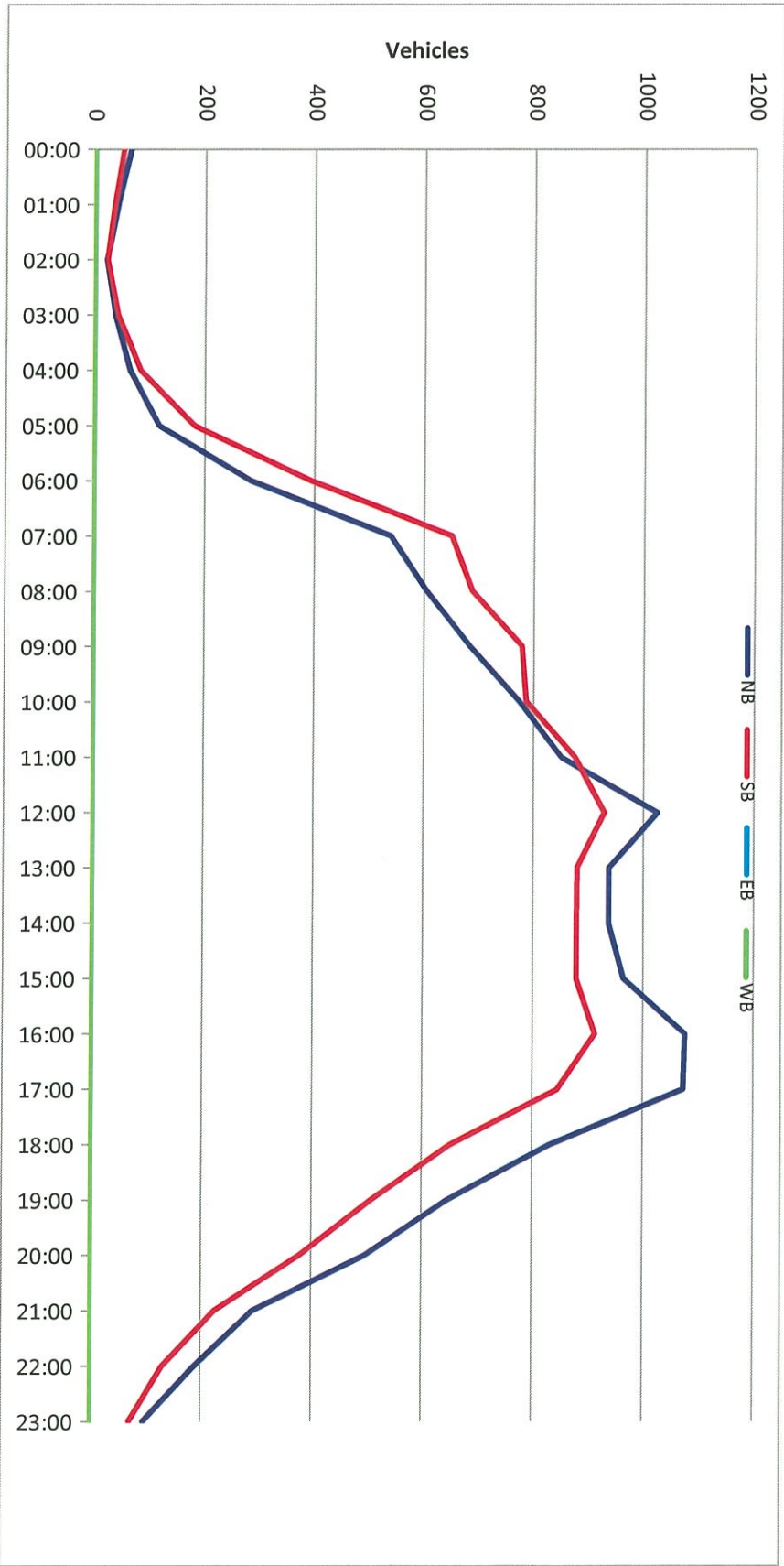


Project #: FL20_120203_006

City: Dade City

Location: US 301 N/O Morningside Dr

Date: 9/23/2020



VOLUME

Fort King Rd N/O Morningside Dr

Day: Tuesday
Date: 9/22/2020

City: Dade City
Project #: FL20_120203_002

DAILY TOTALS					NB	SB	EB	WB	Total		
					2,839	2,869	0	0	5,708		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	6	6			12	12:00	39	39			78
00:15	1	2			3	12:15	46	49			95
00:30	4	2			6	12:30	41	46			87
00:45	5	16	1	11	6	12:45	50	176	32	166	82
01:00	2	3			5	13:00	45	42			87
01:15	0	2			2	13:15	51	46			97
01:30	1	0			1	13:30	44	33			77
01:45	2	5	4	9	6	13:45	72	212	33	154	105
02:00	1	3			4	14:00	60	52			112
02:15	1	2			3	14:15	54	89			143
02:30	3	2			5	14:30	44	51			95
02:45	1	6	0	7	1	14:45	62	220	55	247	117
03:00	2	3			5	15:00	50	58			108
03:15	1	2			3	15:15	50	68			118
03:30	3	1			4	15:30	38	57			95
03:45	1	7	2	8	3	15:45	56	194	51	234	107
04:00	3	0			3	16:00	51	48			99
04:15	1	0			1	16:15	50	47			97
04:30	4	5			9	16:30	52	67			119
04:45	10	18	9	14	19	16:45	52	205	56	218	108
05:00	4	7			11	17:00	55	85			140
05:15	7	5			12	17:15	65	73			138
05:30	17	15			32	17:30	54	43			97
05:45	15	43	19	46	34	17:45	56	230	54	255	110
06:00	28	12			40	18:00	40	38			78
06:15	25	30			55	18:15	46	41			87
06:30	19	41			60	18:30	43	46			89
06:45	51	123	40	123	91	18:45	34	163	29	154	63
07:00	88	49			137	19:00	30	29			59
07:15	89	101			190	19:15	35	27			62
07:30	58	60			118	19:30	28	18			46
07:45	53	288	44	254	97	19:45	31	124	31	105	62
08:00	44	42			86	20:00	27	23			50
08:15	67	36			103	20:15	20	11			31
08:30	42	51			93	20:30	10	17			27
08:45	44	197	41	170	85	20:45	22	79	11	62	33
09:00	35	37			72	21:00	15	15			30
09:15	29	42			71	21:15	17	8			25
09:30	44	38			82	21:30	12	17			29
09:45	31	139	53	170	84	21:45	16	60	8	48	24
10:00	32	48			80	22:00	9	6			15
10:15	26	44			70	22:15	12	11			23
10:30	40	47			87	22:30	9	4			13
10:45	30	128	36	175	66	22:45	6	36	9	30	15
11:00	31	35			66	23:00	8	10			18
11:15	44	55			99	23:15	7	11			18
11:30	23	46			69	23:30	6	6			12
11:45	45	143	43	179	88	23:45	6	27	3	30	9
TOTALS	1113	1166			2279	TOTALS	1726	1703			3429
SPLIT %	48.8%	51.2%			39.9%	SPLIT %	50.3%	49.7%			60.1%

DAILY TOTALS					NB	SB	EB	WB	Total
					2,839	2,869	0	0	5,708
AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	13:30	16:30	16:30
AM Pk Volume	288	254			542	PM Pk Volume	230	281	505
Pk Hr Factor	0.809	0.629			0.713	Pk Hr Factor	0.799	0.826	0.902
7 - 9 Volume	485	424	0	0	909	4 - 6 Volume	435	473	0
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	17:00	16:30	0
7 - 9 Pk Volume	288	254	0	0	542	4 - 6 Pk Volume	230	281	0
Pk Hr Factor	0.809	0.629	0.000	0.000	0.713	Pk Hr Factor	0.885	0.826	0.000

VOLUME

Fort King Rd N/O Morningside Dr

Day: Wednesday
Date: 9/23/2020

City: Dade City
Project #: FL20_120203_002

DAILY TOTALS						NB	SB	EB	WB	Total	
						2,905	2,937	0	0	5,842	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	10	4			14	12:00	40	47			87
00:15	3	2			5	12:15	39	51			90
00:30	8	4			12	12:30	48	39			87
00:45	2	23	0	10	2	12:45	41	168	44	181	85
01:00	2	3			5	13:00	61	39			100
01:15	4	4			8	13:15	61	42			103
01:30	3	1			4	13:30	47	38			85
01:45	2	11	5	13	7	13:45	76	245	36	155	112
02:00	1	2			3	14:00	58	54			112
02:15	1	2			3	14:15	55	92			147
02:30	3	3			6	14:30	60	71			131
02:45	2	7	1	8	3	14:45	44	217	58	275	102
03:00	0	2			2	15:00	38	48			86
03:15	3	3			6	15:15	48	64			112
03:30	1	3			4	15:30	45	52			97
03:45	3	7	0	8	3	15:45	40	171	42	206	82
04:00	4	1			5	16:00	48	47			95
04:15	4	1			5	16:15	47	40			87
04:30	3	8			11	16:30	67	51			118
04:45	6	17	5	15	11	16:45	46	208	87	225	133
05:00	3	7			10	17:00	55	71			126
05:15	5	7			12	17:15	44	63			107
05:30	14	17			31	17:30	48	53			101
05:45	23	45	22	53	45	17:45	68	215	41	228	109
06:00	23	13			36	18:00	41	46			87
06:15	24	25			49	18:15	55	52			107
06:30	24	46			70	18:30	35	52			87
06:45	50	121	48	132	98	18:45	43	174	43	193	86
07:00	83	68			151	19:00	39	29			68
07:15	84	101			185	19:15	41	26			67
07:30	54	57			111	19:30	44	34			78
07:45	53	274	46	272	99	19:45	38	162	30	119	68
08:00	50	38			88	20:00	37	30			67
08:15	60	51			111	20:15	32	18			50
08:30	40	48			88	20:30	12	15			27
08:45	36	186	43	180	79	20:45	16	97	16	79	32
09:00	43	30			73	21:00	15	23			38
09:15	37	25			62	21:15	14	16			30
09:30	33	40			73	21:30	15	7			22
09:45	45	158	43	138	88	21:45	12	56	14	60	26
10:00	29	52			81	22:00	17	7			24
10:15	30	46			76	22:15	13	18			31
10:30	36	48			84	22:30	16	9			25
10:45	32	127	26	172	58	22:45	10	56	9	43	19
11:00	38	34			72	23:00	4	6			10
11:15	33	46			79	23:15	6	12			18
11:30	36	30			66	23:30	4	7			11
11:45	37	144	31	141	68	23:45	2	16	6	31	8
TOTALS	1120	1142			2262	TOTALS	1785	1795			3580
SPLIT %	49.5%	50.5%			38.7%	SPLIT %	49.9%	50.1%			61.3%

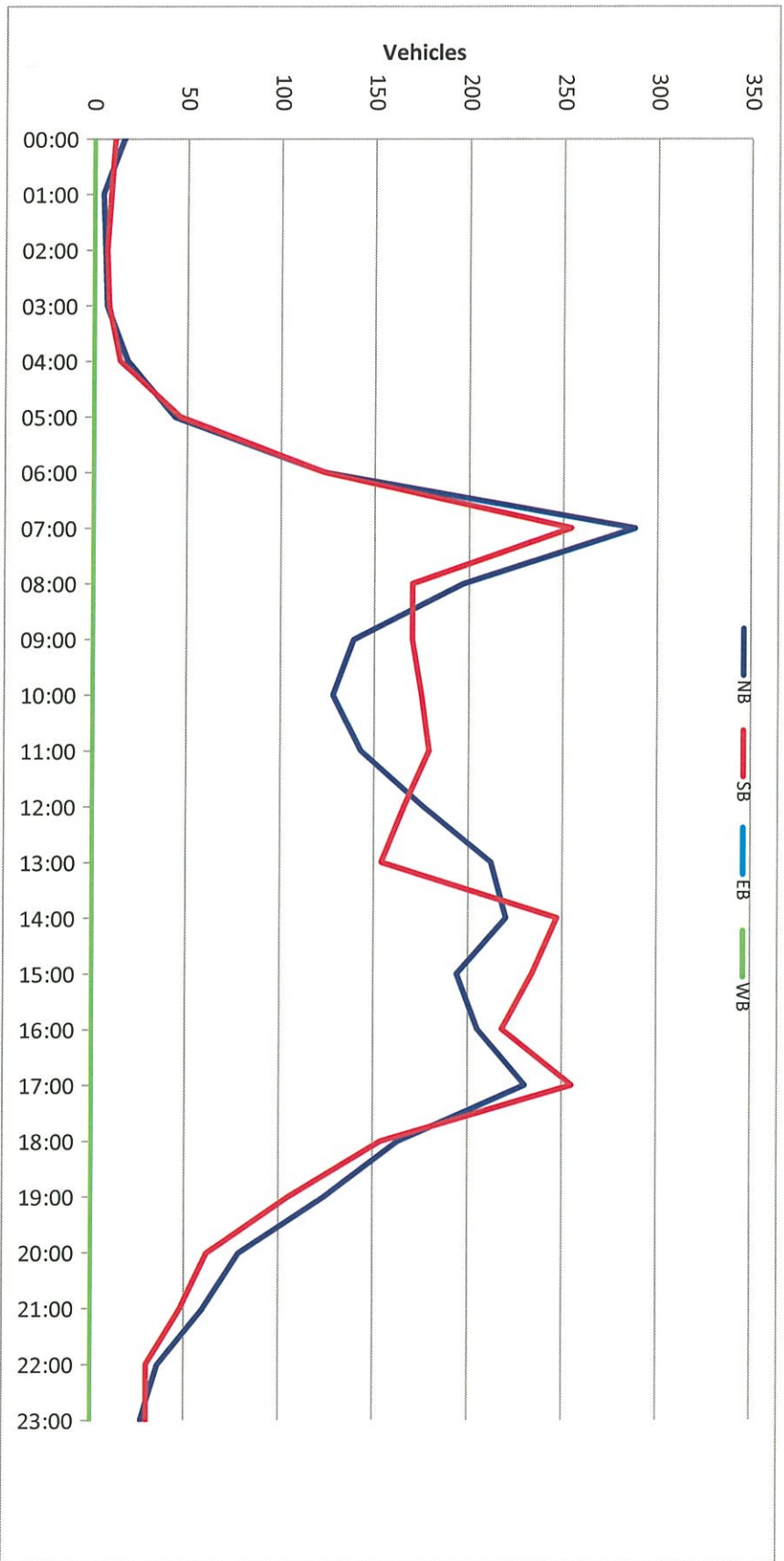
DAILY TOTALS						NB	SB	EB	WB	Total
						2,905	2,937	0	0	5,842
AM Peak Hour	07:00	06:45			07:00	PM Peak Hour	13:45	14:00		13:45
AM Pk Volume	274	274			546	PM Pk Volume	249	275		502
Pk Hr Factor	0.815	0.678			0.738	Pk Hr Factor	0.819	0.747		0.854
7 - 9 Volume	460	452	0	0	912	4 - 6 Volume	423	453	0	876
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:15	16:45		16:30
7 - 9 Pk Volume	274	272	0	0	546	4 - 6 Pk Volume	215	274	0	489
Pk Hr Factor	0.815	0.673	0.000	0.000	0.738	Pk Hr Factor	0.802	0.787	0.000	0.910

Project #: FL20_120203_002

City: Dade City

Location: Fort King Rd N/O Morningside Dr

Date: 9/22/2020

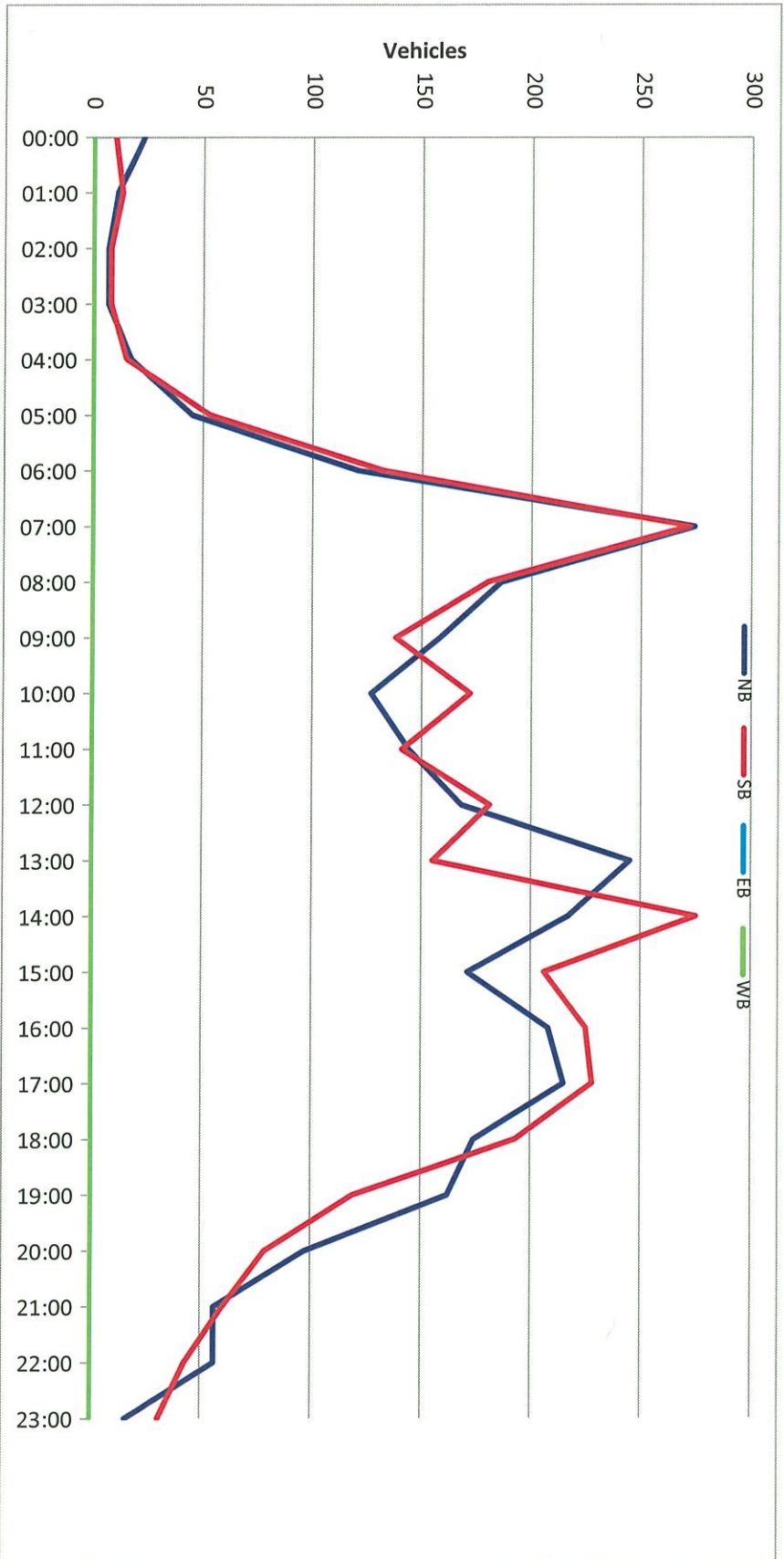


Project #: FL20_120203_002

City: Dade City

Location: Fort King Rd N/O Morningside Dr

Date: 9/23/2020



VOLUME

Fort King Rd S/O Morningside Dr

Day: Tuesday
Date: 9/22/2020

City: Dade City
Project #: FL20_120203_003

DAILY TOTALS						NB	SB	EB	WB	Total	
						3,258	3,500	0	0	6,758	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	5	7			12	12:00	40	52			92
00:15	3	3			6	12:15	52	53			105
00:30	1	2			3	12:30	40	55			95
00:45	4	13	2	14	6	12:45	58	190	44	204	102
01:00	1	6			7	13:00	49	47			96
01:15	2	3			5	13:15	58	49			107
01:30	1	1			2	13:30	57	48			105
01:45	2	6	2	12	4	13:45	56	220	39	183	95
02:00	0	4			4	14:00	71	50			121
02:15	1	3			4	14:15	69	89			158
02:30	3	1			4	14:30	61	78			139
02:45	3	7	2	10	5	14:45	56	257	52	269	108
03:00	0	4			4	15:00	56	75			131
03:15	3	1			4	15:15	60	79			139
03:30	1	0			1	15:30	44	91			135
03:45	3	7	3	8	6	15:45	62	222	63	308	125
04:00	3	1			4	16:00	51	60			111
04:15	2	1			3	16:15	56	57			113
04:30	6	6			12	16:30	62	92			154
04:45	4	15	5	13	9	16:45	67	236	78	287	145
05:00	3	10			13	17:00	67	95			162
05:15	11	6			17	17:15	82	75			157
05:30	17	15			32	17:30	71	62			133
05:45	17	48	27	58	44	17:45	61	281	73	305	134
06:00	30	15			45	18:00	56	52			108
06:15	30	27			57	18:15	71	53			124
06:30	32	37			69	18:30	60	51			111
06:45	64	156	37	116	101	18:45	43	230	50	206	93
07:00	116	58			174	19:00	31	45			76
07:15	98	113			211	19:15	37	37			74
07:30	56	74			130	19:30	38	34			72
07:45	59	329	54	299	113	19:45	30	136	35	151	65
08:00	45	48			93	20:00	27	37			64
08:15	66	42			108	20:15	19	31			50
08:30	46	65			111	20:30	17	21			38
08:45	48	205	51	206	99	20:45	19	82	19	108	38
09:00	46	43			89	21:00	13	19			32
09:15	38	55			93	21:15	23	16			39
09:30	42	46			88	21:30	13	16			29
09:45	29	155	56	200	85	21:45	14	63	8	59	22
10:00	56	55			111	22:00	8	6			14
10:15	28	42			70	22:15	14	17			31
10:30	44	54			98	22:30	11	10			21
10:45	31	159	45	196	76	22:45	7	40	11	44	18
11:00	37	48			85	23:00	4	14			18
11:15	47	57			104	23:15	10	13			23
11:30	37	49			86	23:30	4	5			9
11:45	55	176	54	208	109	23:45	7	25	4	36	11
TOTALS	1276	1340			2616	TOTALS	1982	2160			4142
SPLIT %	48.8%	51.2%			38.7%	SPLIT %	47.9%	52.1%			61.3%

DAILY TOTALS						NB	SB	EB	WB	Total
						3,258	3,500	0	0	6,758
AM Peak Hour	06:45	07:00			07:00	PM Peak Hour	16:45	16:30		16:30
AM Pk Volume	334	299			628	PM Pk Volume	287	340		618
Pk Hr Factor	0.720	0.662			0.744	Pk Hr Factor	0.875	0.895		0.954
7 - 9 Volume	534	505	0	0	1039	4 - 6 Volume	517	592	0	1109
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:45	16:30		16:30
7 - 9 Pk Volume	329	299	0	0	628	4 - 6 Pk Volume	287	340	0	618
Pk Hr Factor	0.709	0.662	0.000	0.000	0.744	Pk Hr Factor	0.875	0.895	0.000	0.954

VOLUME

Fort King Rd S/O Morningside Dr

Day: Wednesday
Date: 9/23/2020

City: Dade City
Project #: FL20_120203_003

DAILY TOTALS						NB	SB	EB	WB	Total	
						3,278	3,514	0	0	6,792	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	8	9			17	12:00	40	55			95
00:15	2	4			6	12:15	50	67			117
00:30	6	5			11	12:30	54	53			107
00:45	2	18	1	19	3	12:45	54	198	47	222	420
01:00	6	3			9	13:00	56	48			104
01:15	2	5			7	13:15	66	58			124
01:30	1	1			2	13:30	59	52			111
01:45	2	11	3	12	5	13:45	55	236	43	201	437
02:00	2	2			4	14:00	63	48			111
02:15	3	3			6	14:15	72	91			163
02:30	1	3			4	14:30	72	91			163
02:45	0	6	0	8	0	14:45	51	258	60	290	548
03:00	0	2			2	15:00	37	66			103
03:15	3	3			6	15:15	48	72			120
03:30	1	1			2	15:30	47	64			111
03:45	3	7	2	8	5	15:45	48	180	50	252	432
04:00	5	4			9	16:00	59	59			118
04:15	4	4			8	16:15	58	56			114
04:30	3	9			12	16:30	78	68			146
04:45	3	15	6	23	9	16:45	59	254	91	274	528
05:00	5	8			13	17:00	53	90			143
05:15	11	10			21	17:15	55	77			132
05:30	16	19			35	17:30	75	66			141
05:45	24	56	24	61	48	17:45	67	250	51	284	534
06:00	29	11			40	18:00	57	62			119
06:15	26	22			48	18:15	66	68			134
06:30	42	40			82	18:30	54	58			112
06:45	58	155	45	118	103	18:45	45	222	47	235	457
07:00	93	68			161	19:00	37	34			71
07:15	95	97			192	19:15	38	30			68
07:30	57	69			126	19:30	38	49			87
07:45	61	306	62	296	123	19:45	48	161	39	152	313
08:00	66	43			109	20:00	32	48			80
08:15	61	61			122	20:15	24	33			57
08:30	48	49			97	20:30	14	24			38
08:45	40	215	56	209	96	20:45	25	95	22	127	222
09:00	45	46			91	21:00	17	32			49
09:15	44	34			78	21:15	18	19			37
09:30	38	54			92	21:30	18	11			29
09:45	54	181	48	182	102	21:45	12	65	16	78	143
10:00	34	54			88	22:00	19	9			28
10:15	35	57			92	22:15	15	20			35
10:30	26	58			84	22:30	12	9			21
10:45	39	134	35	204	74	22:45	13	59	14	52	111
11:00	42	42			84	23:00	10	11			21
11:15	47	42			89	23:15	7	14			21
11:30	42	39			81	23:30	7	11			18
11:45	34	165	42	165	76	23:45	7	31	6	42	73
TOTALS	1269	1305			2574	TOTALS	2009	2209			4218
SPLIT %	49.3%	50.7%			37.9%	SPLIT %	47.6%	52.4%			62.1%

DAILY TOTALS						NB	SB	EB	WB	Total
						3,278	3,514	0	0	6,792

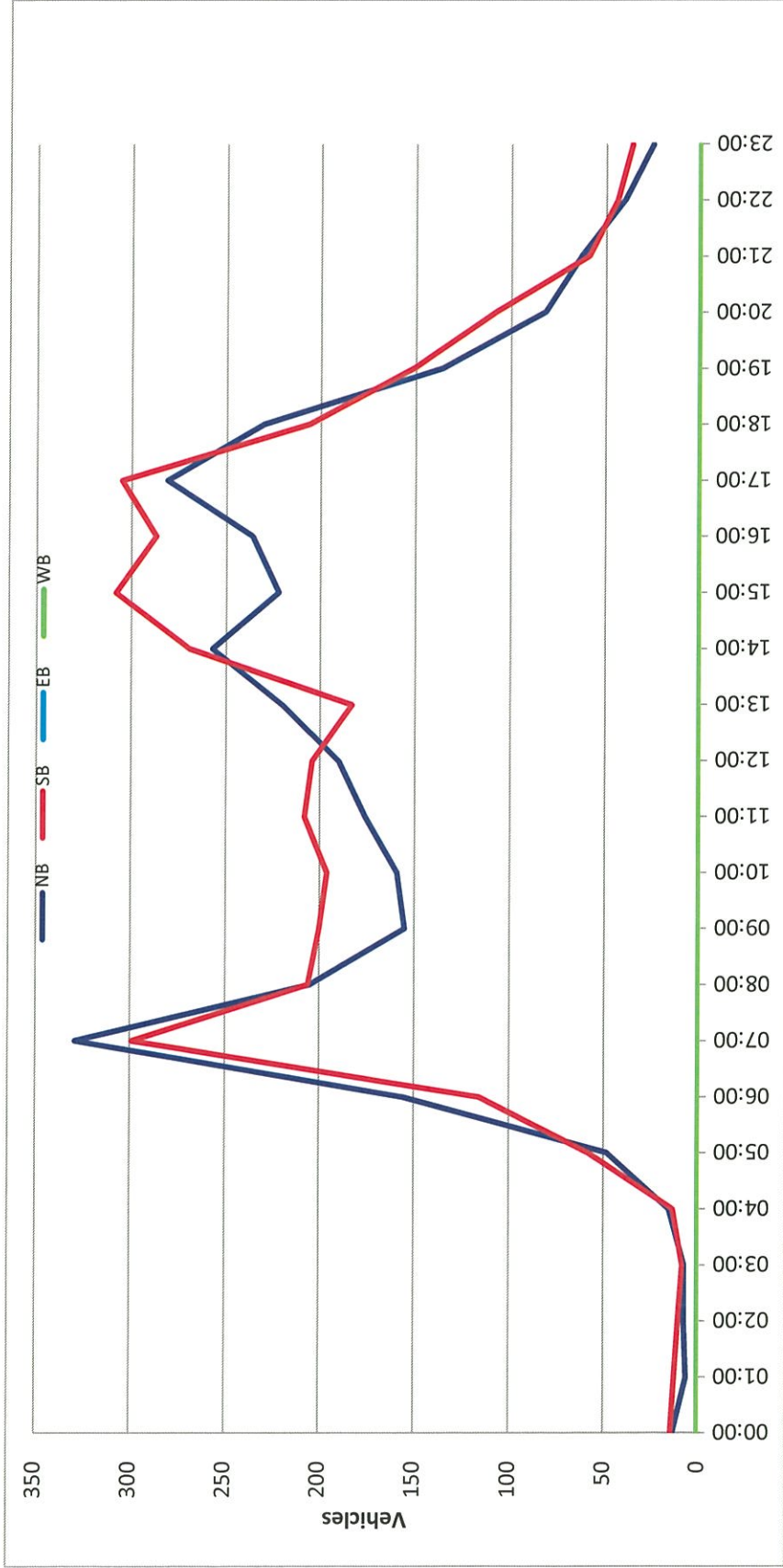
AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	17:30	16:30		16:30
AM Pk Volume	306	296			602	PM Pk Volume	265	326		571
Pk Hr Factor	0.805	0.763			0.784	Pk Hr Factor	0.883	0.896		0.952
7 - 9 Volume	521	505	0	0	1026	4 - 6 Volume	504	558	0	0
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:00	16:30		16:30
7 - 9 Pk Volume	306	296	0	0	602	4 - 6 Pk Volume	254	326	0	0
Pk Hr Factor	0.805	0.763	0.000	0.000	0.784	Pk Hr Factor	0.814	0.896	0.000	0.000

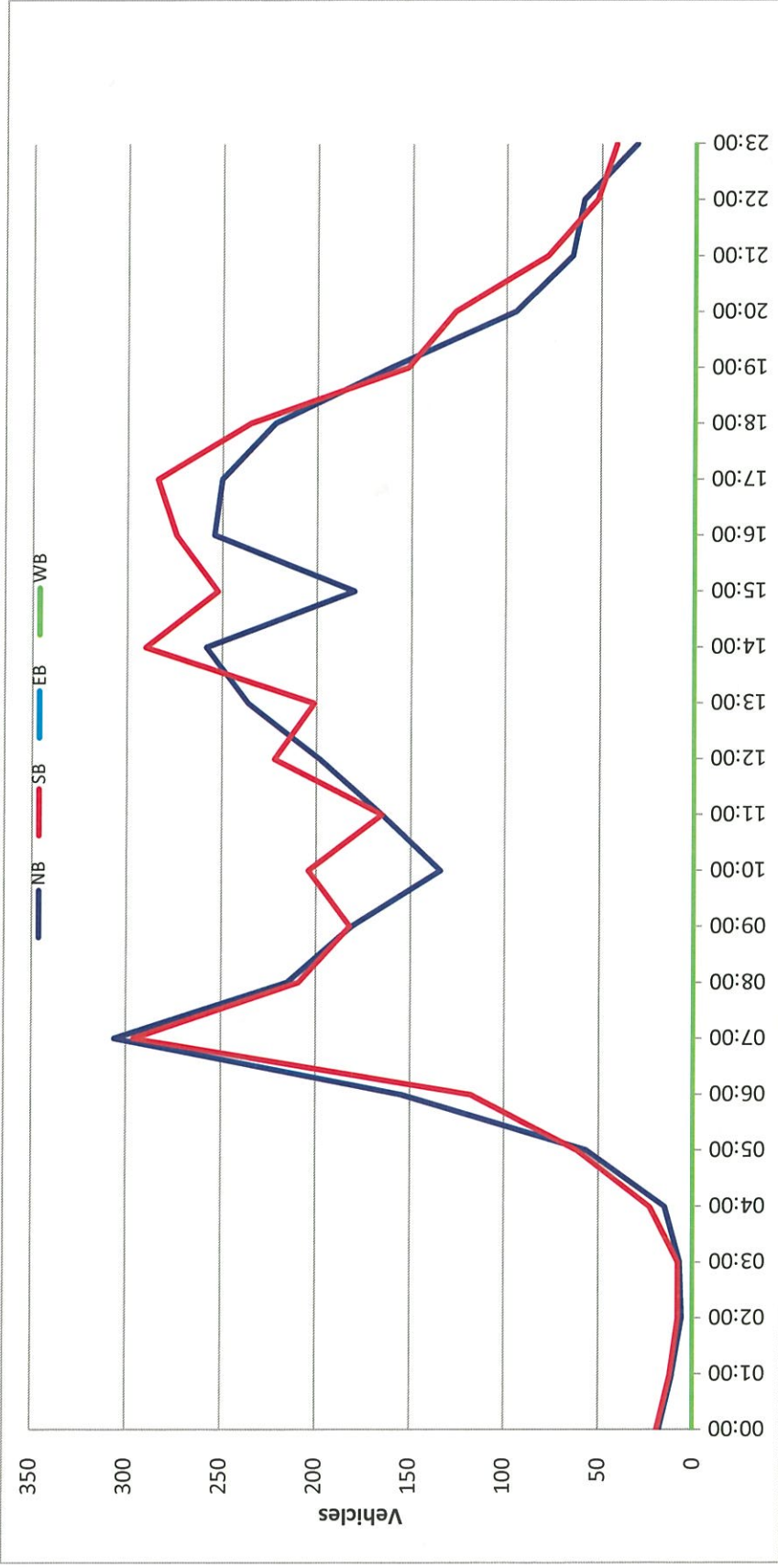
Project #: FL20_120203_003

City: Dade City

Location: Fort King Rd S/O Morningside Dr

Date: 9/22/2020





VOLUME

Morningside Dr E/O SR 52

Day: Tuesday
Date: 9/22/2020

City: Dade City
Project #: FL20_120203_001

DAILY TOTALS						NB	SB	EB	WB	Total	
						0	0	1,425	1,323	2,748	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			6	6	12	12:00			18	16	34
00:15			0	2	2	12:15			24	21	45
00:30			0	0	0	12:30			21	14	35
00:45			1	7	8	12:45			30	93	123
01:00			3	0	3	13:00			22	23	45
01:15			2	1	3	13:15			19	31	50
01:30			1	0	1	13:30			19	27	46
01:45			0	6	6	13:45			16	76	92
02:00			0	0	0	14:00			21	36	57
02:15			1	1	2	14:15			44	54	98
02:30			0	0	0	14:30			41	25	66
02:45			0	1	1	14:45			19	125	144
03:00			1	0	1	15:00			19	23	42
03:15			1	1	2	15:15			24	24	48
03:30			2	0	2	15:30			28	19	47
03:45			1	5	6	15:45			16	87	103
04:00			2	0	2	16:00			19	23	42
04:15			1	0	1	16:15			20	20	40
04:30			2	3	5	16:30			40	29	69
04:45			5	10	15	16:45			22	101	123
05:00			2	2	4	17:00			29	29	58
05:15			6	7	13	17:15			16	28	44
05:30			9	3	12	17:30			25	27	52
05:45			14	31	45	17:45			38	108	146
06:00			9	11	20	18:00			16	20	36
06:15			14	16	30	18:15			25	31	56
06:30			27	19	46	18:30			24	24	48
06:45			22	72	94	18:45			22	87	109
07:00			36	51	87	19:00			24	16	40
07:15			53	47	100	19:15			10	17	27
07:30			20	35	55	19:30			18	17	35
07:45			39	148	187	19:45			11	63	74
08:00			15	6	21	20:00			16	10	26
08:15			26	10	36	20:15			21	6	27
08:30			22	13	35	20:30			8	10	18
08:45			15	78	93	20:45			12	57	69
09:00			15	11	26	21:00			8	8	16
09:15			19	13	32	21:15			7	9	16
09:30			26	9	35	21:30			4	6	10
09:45			34	94	128	21:45			3	22	25
10:00			13	19	32	22:00			8	1	9
10:15			11	17	28	22:15			5	4	9
10:30			15	16	31	22:30			5	3	8
10:45			19	58	77	22:45			2	20	22
11:00			19	14	33	23:00			5	1	6
11:15			16	14	30	23:15			4	2	6
11:30			10	22	32	23:30			0	3	3
11:45			22	67	89	23:45			0	9	9
TOTALS			577	486	1063	TOTALS			848	837	1685
SPLIT %			54.3%	45.7%	38.7%	SPLIT %			50.3%	49.7%	61.3%

DAILY TOTALS						NB	SB	EB	WB	Total	
						0	0	1,425	1,323	2,748	
AM Peak Hour			07:00	07:00	07:00	PM Peak Hour			14:00	13:30	13:45
AM Pk Volume			148	154	302	PM Pk Volume			125	141	266
Pk Hr Factor			0.698	0.755	0.755	Pk Hr Factor			0.710	0.653	0.666
7 - 9 Volume	0	0	226	199	425	4 - 6 Volume	0	0	209	212	421
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			16:15	16:30	16:30
7 - 9 Pk Volume	0	0	148	154	302	4 - 6 Pk Volume	0	0	111	114	225
Pk Hr Factor	0.000	0.000	0.698	0.755	0.755	Pk Hr Factor	0.000	0.000	0.694	0.983	0.801

VOLUME

Morningside Dr E/O SR 52

Day: Wednesday
Date: 9/23/2020

City: Dade City
Project #: FL20_120203_001

DAILY TOTALS						NB	SB	EB	WB	Total				
						0	0	1,410	1,306	2,716				
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			4	2	6	12:00			19	13	32			
00:15			2	0	2	12:15			20	20	40			
00:30			2	1	3	12:30			21	14	35			
00:45			1	9	0	12:45			16	76	16	63	32	139
01:00			0	3	3	13:00			24	17	41			
01:15			3	0	3	13:15			23	22	45			
01:30			1	0	1	13:30			16	28	44			
01:45			0	4	1	13:45			18	81	18	85	36	166
02:00			0	0	0	14:00			23	39	62			
02:15			1	1	2	14:15			41	48	89			
02:30			0	0	0	14:30			34	31	65			
02:45			0	1	0	14:45			15	113	24	142	39	255
03:00			1	1	2	15:00			21	21	42			
03:15			0	0	0	15:15			17	16	33			
03:30			1	1	2	15:30			21	22	43			
03:45			4	6	1	15:45			18	77	17	76	35	153
04:00			2	0	2	16:00			18	28	46			
04:15			4	1	5	16:15			19	25	44			
04:30			3	2	5	16:30			26	30	56			
04:45			6	15	1	16:45			23	86	25	108	48	194
05:00			2	3	5	17:00			38	19	57			
05:15			5	3	8	17:15			19	29	48			
05:30			9	4	13	17:30			27	36	63			
05:45			18	34	10	17:45			22	106	30	114	52	220
06:00			10	15	25	18:00			26	25	51			
06:15			22	15	37	18:15			28	26	54			
06:30			28	22	50	18:30			27	27	54			
06:45			23	83	19	18:45			19	100	18	96	37	196
07:00			30	38	68	19:00			11	14	25			
07:15			42	57	99	19:15			13	13	26			
07:30			28	25	53	19:30			20	15	35			
07:45			28	128	15	19:45			14	58	16	58	30	116
08:00			19	18	37	20:00			22	8	30			
08:15			29	11	40	20:15			21	6	27			
08:30			23	18	41	20:30			11	7	18			
08:45			20	91	16	20:45			8	62	11	32	19	94
09:00			18	11	29	21:00			8	7	15			
09:15			12	10	22	21:15			10	6	16			
09:30			35	17	52	21:30			3	2	5			
09:45			28	93	16	21:45			6	27	4	19	10	46
10:00			19	12	31	22:00			4	3	7			
10:15			20	16	36	22:15			9	8	17			
10:30			13	16	29	22:30			3	5	8			
10:45			12	64	14	22:45			5	21	4	20	9	41
11:00			17	14	31	23:00			7	2	9			
11:15			13	24	37	23:15			2	5	7			
11:30			14	13	27	23:30			2	4	6			
11:45			17	61	10	23:45			3	14	5	16	8	30
TOTALS			589	477	1066	TOTALS			821	829	1650			
SPLIT %			55.3%	44.7%	39.2%	SPLIT %			49.8%	50.2%	60.8%			

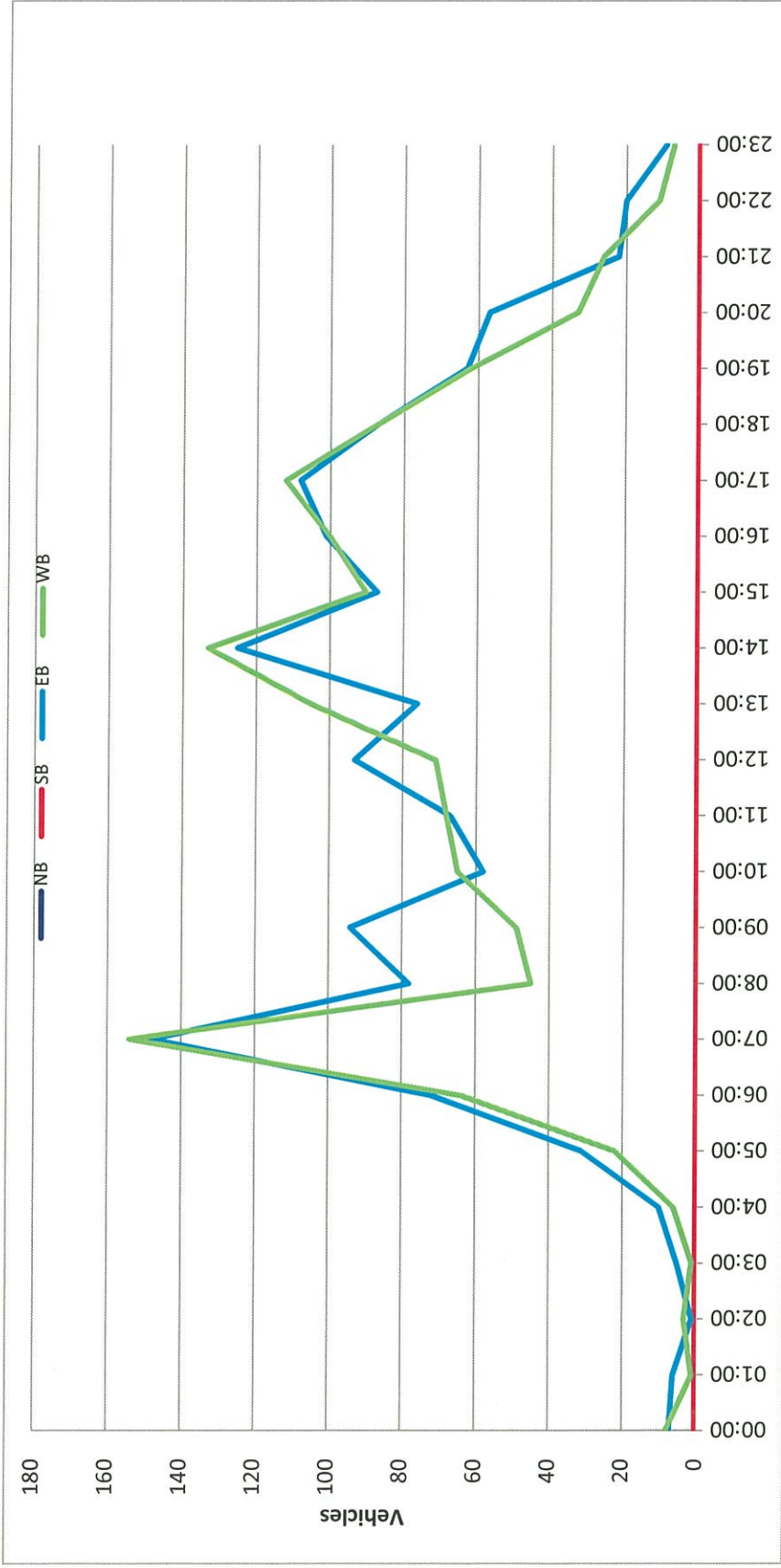
DAILY TOTALS						NB	SB	EB	WB	Total	
						0	0	1,410	1,306	2,716	
AM Peak Hour			07:00	06:45	07:00	PM Peak Hour			13:45	14:00	14:00
AM Pk Volume			128	139	263	PM Pk Volume			116	142	255
Pk Hr Factor			0.762	0.610	0.664	Pk Hr Factor			0.707	0.740	0.716
7 - 9 Volume	0	0	219	198	417	4 - 6 Volume	0	0	192	222	414
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			16:45	17:00	17:00
7 - 9 Pk Volume	0	0	128	135	263	4 - 6 Pk Volume	0	0	107	114	220
Pk Hr Factor	0.000	0.000	0.762	0.592	0.664	Pk Hr Factor	0.000	0.000	0.704	0.792	0.873

Project #: FL20_120203_001

City: Dade City

Location: Morningside Dr E/O SR 52

Date: 9/22/2020

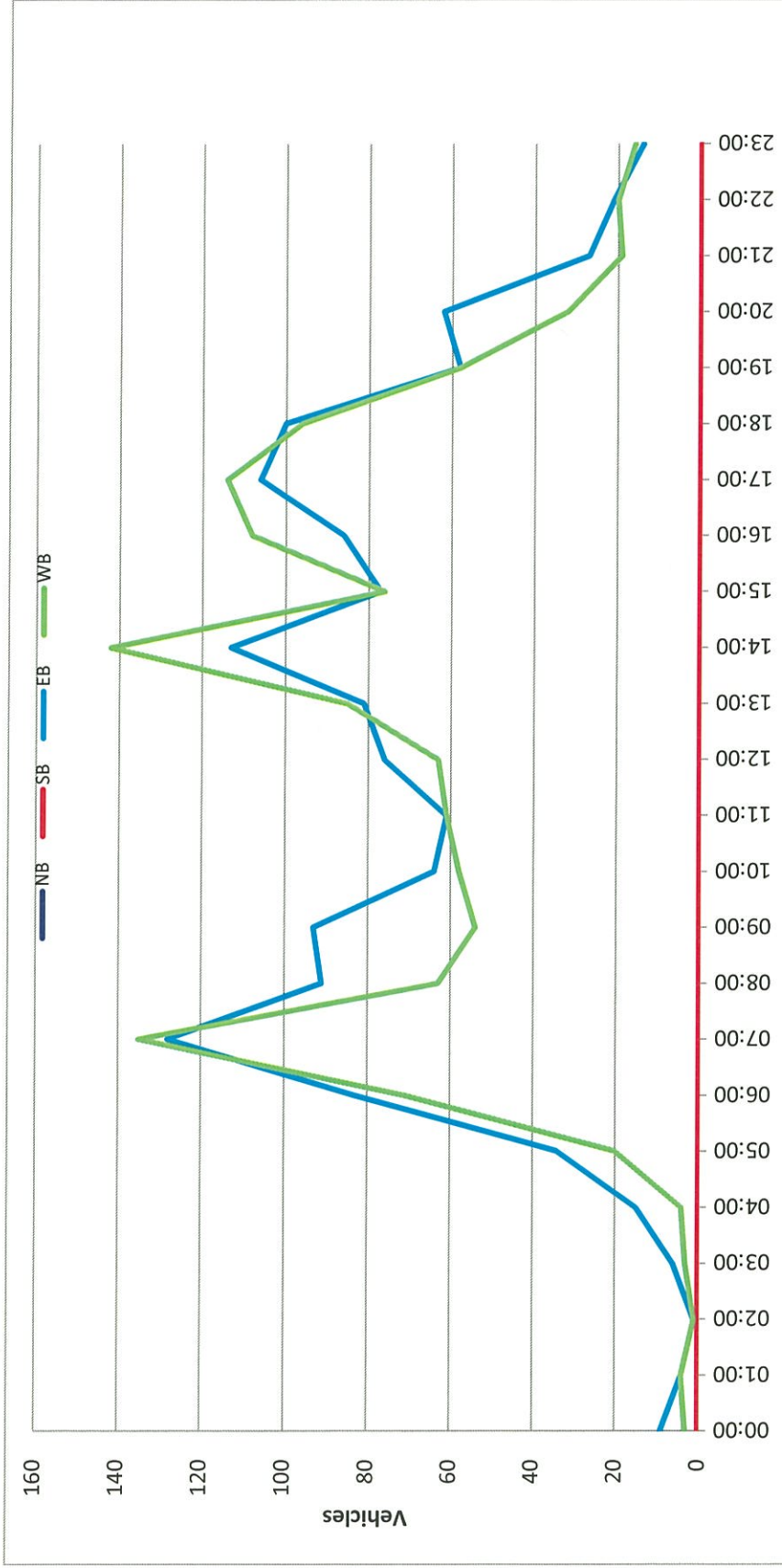


Project #: FL20_120203_001

City: Dade City

Location: Morningside Dr E/O SR 52

Date: 9/23/2020



VOLUME

Morningside Dr E/O US 301

Day: Tuesday
Date: 9/22/2020

City: Dade City
Project #: FL20_120203_004

DAILY TOTALS					NB	SB	EB	WB	Total					
					0	0	1,296	1,641	2,937					
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			2	1	3	12:00			28	35	63			
00:15			2	1	3	12:15			35	45	80			
00:30			0	3	3	12:30			30	27	57			
00:45			1	5	1	6	2	11	25	118	43	150	68	268
01:00			1	2	3	13:00			23	39	62			
01:15			2	0	2	13:15			31	38	69			
01:30			1	0	1	13:30			24	32	56			
01:45			2	6	4	6	12	29	107	32	141	61	248	
02:00			0	2	2	14:00			30	34	64			
02:15			0	0	0	14:15			24	29	53			
02:30			0	0	0	14:30			28	29	57			
02:45			0	0	2	2	0	22	104	37	129	59	233	
03:00			0	0	0	15:00			22	30	52			
03:15			1	0	1	15:15			26	29	55			
03:30			0	1	1	15:30			31	27	58			
03:45			1	2	0	1	3	30	109	37	123	67	232	
04:00			1	0	1	16:00			23	29	52			
04:15			0	0	0	16:15			26	39	65			
04:30			0	0	0	16:30			28	36	64			
04:45			3	4	2	2	5	6	27	104	37	141	64	245
05:00			1	0	1	17:00			34	36	70			
05:15			1	3	4	17:15			29	31	60			
05:30			4	5	9	17:30			28	32	60			
05:45			4	10	4	12	8	22	31	122	26	125	57	247
06:00			2	6	8	18:00			24	31	55			
06:15			4	6	10	18:15			26	19	45			
06:30			3	4	7	18:30			20	27	47			
06:45			5	14	12	28	7	42	22	92	23	100	45	192
07:00			5	8	13	19:00			13	32	45			
07:15			10	17	27	19:15			12	18	30			
07:30			7	6	13	19:30			20	27	47			
07:45			12	34	15	46	27	80	23	68	18	95	41	163
08:00			8	12	20	20:00			10	22	32			
08:15			10	15	25	20:15			19	15	34			
08:30			17	21	38	20:30			13	20	33			
08:45			16	51	18	66	34	117	7	49	13	70	20	119
09:00			18	14	32	21:00			8	12	20			
09:15			13	23	36	21:15			9	9	18			
09:30			13	22	35	21:30			7	12	19			
09:45			14	58	31	90	45	148	1	25	5	38	6	63
10:00			19	35	54	22:00			1	6	7			
10:15			22	26	48	22:15			3	6	9			
10:30			22	27	49	22:30			3	3	6			
10:45			21	84	27	115	48	199	0	7	4	19	4	26
11:00			25	32	57	23:00			5	3	8			
11:15			34	24	58	23:15			2	0	2			
11:30			34	39	73	23:30			3	1	4			
11:45			19	112	35	130	54	242	1	11	2	6	3	17
TOTALS			380	504	884	TOTALS			916	1137	2053			
SPLIT %			43.0%	57.0%	30.1%	SPLIT %			44.6%	55.4%	69.9%			

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	1,296	1,641	2,937		
AM Peak Hour			11:30	11:30	11:30	PM Peak Hour			17:00	12:15	12:00
AM Pk Volume			116	154	270	PM Pk Volume			122	154	268
Pk Hr Factor			0.829	0.856	0.844	Pk Hr Factor			0.897	0.856	0.838
7 - 9 Volume	0	0	85	112	197	4 - 6 Volume	0	0	226	266	492
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			17:00	16:15	16:15
7 - 9 Pk Volume	0	0	51	66	117	4 - 6 Pk Volume	0	0	122	148	263
Pk Hr Factor	0.000	0.000	0.750	0.786	0.770	Pk Hr Factor	0.000	0.000	0.897	0.949	0.939

VOLUME

Morningside Dr E/O US 301

Day: Wednesday
Date: 9/23/2020

City: Dade City
Project #: FL20_120203_004

DAILY TOTALS						NB	SB	EB	WB	Total	
						0	0	1,304	1,597	2,901	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	1	1	12:00			35	36	71
00:15			3	2	5	12:15			19	33	52
00:30			2	1	3	12:30			24	39	63
00:45			1	6	7	12:45			29	107	136
01:00			0	3	3	13:00			31	35	66
01:15			1	3	4	13:15			29	37	66
01:30			0	2	2	13:30			21	28	49
01:45			1	2	3	13:45			23	104	127
02:00			0	2	2	14:00			22	31	53
02:15			0	0	0	14:15			28	35	63
02:30			0	0	0	14:30			26	31	57
02:45			0	1	1	14:45			36	112	148
03:00			1	1	2	15:00			22	26	48
03:15			0	0	0	15:15			31	30	61
03:30			0	1	1	15:30			39	35	74
03:45			5	6	11	15:45			19	111	130
04:00			0	0	0	16:00			18	40	58
04:15			0	1	1	16:15			34	38	72
04:30			0	0	0	16:30			32	28	60
04:45			2	2	4	16:45			28	112	140
05:00			0	0	0	17:00			30	32	62
05:15			1	2	3	17:15			32	35	67
05:30			2	2	4	17:30			22	24	46
05:45			1	4	5	17:45			36	120	156
06:00			5	3	8	18:00			24	37	61
06:15			1	5	6	18:15			25	37	62
06:30			2	5	7	18:30			27	25	52
06:45			5	13	18	18:45			17	93	110
07:00			4	12	16	19:00			21	29	50
07:15			13	18	31	19:15			16	21	37
07:30			9	8	17	19:30			19	27	46
07:45			8	34	42	19:45			12	68	80
08:00			9	8	17	20:00			15	13	28
08:15			8	17	25	20:15			11	15	26
08:30			10	12	22	20:30			11	13	24
08:45			6	33	39	20:45			12	49	61
09:00			16	17	33	21:00			11	10	21
09:15			19	19	38	21:15			8	6	14
09:30			20	20	40	21:30			6	12	18
09:45			27	82	109	21:45			4	29	33
10:00			15	29	44	22:00			1	4	5
10:15			15	27	42	22:15			3	5	8
10:30			25	16	41	22:30			3	2	5
10:45			32	87	119	22:45			3	10	13
11:00			30	21	51	23:00			2	4	6
11:15			30	30	60	23:15			1	4	5
11:30			24	35	59	23:30			2	1	3
11:45			27	111	138	23:45			4	9	13
TOTALS			380	470	850	TOTALS			924	1127	2051
SPLIT %			44.7%	55.3%	29.3%	SPLIT %			45.1%	54.9%	70.7%

DAILY TOTALS						NB	SB	EB	WB	Total
						0	0	1,304	1,597	2,901

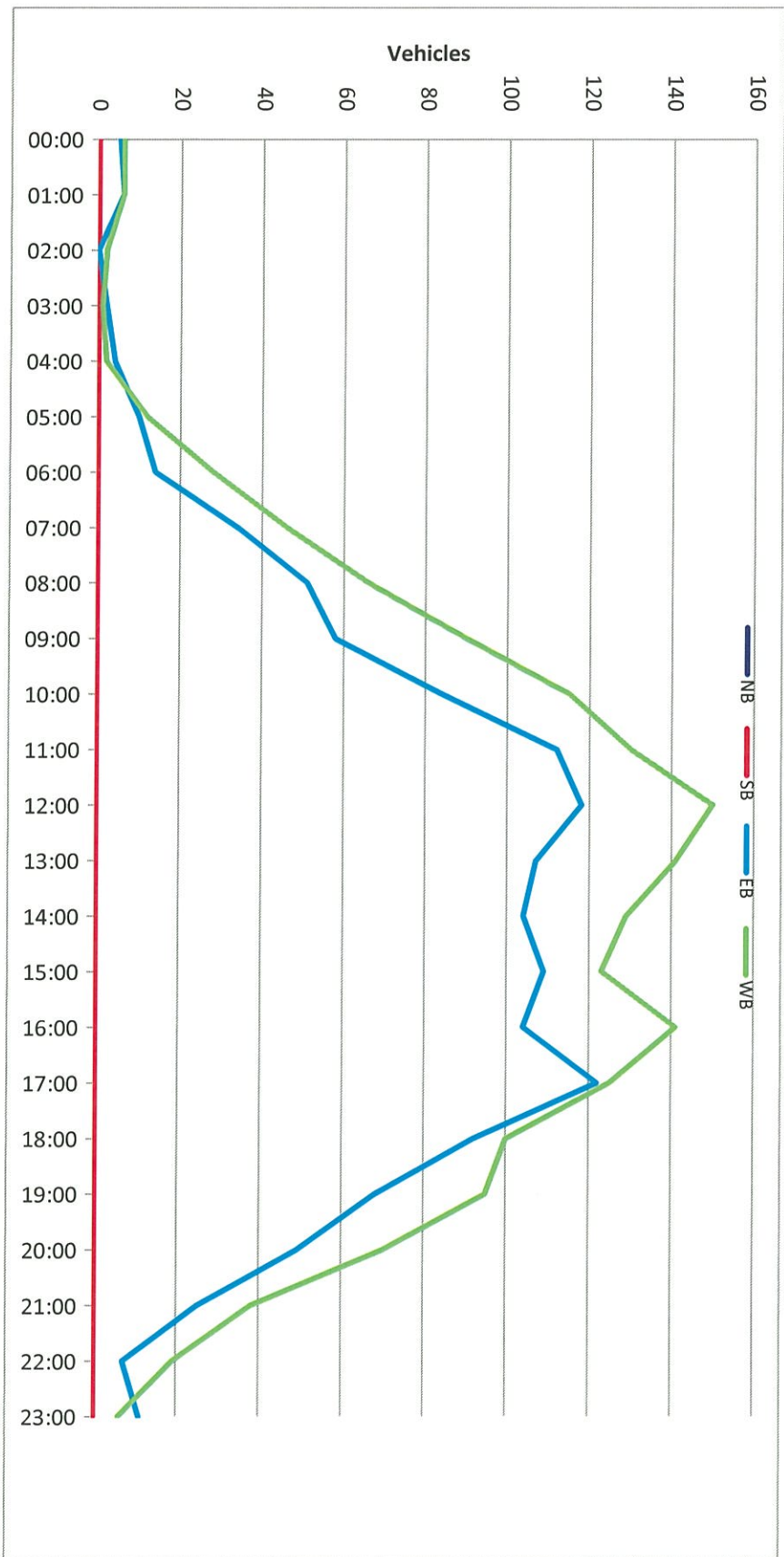
AM Peak Hour			10:30	11:45	11:15	PM Peak Hour			14:45	12:30	16:15
AM Pk Volume			117	138	247	PM Pk Volume			128	148	263
Pk Hr Factor			0.914	0.885	0.870	Pk Hr Factor			0.821	0.949	0.913
7 - 9 Volume	0	0	67	108	175	4 - 6 Volume	0	0	232	275	507
7 - 9 Peak Hour			07:15	08:00	07:15	4 - 6 Peak Hour			16:15	16:00	16:15
7 - 9 Pk Volume	0	0	39	55	88	4 - 6 Pk Volume	0	0	124	147	263
Pk Hr Factor	0.000	0.000	0.750	0.764	0.710	Pk Hr Factor	0.000	0.000	0.912	0.896	0.913

Project #: FL20_120203_004

City: Dade City

Location: Morningside Dr E/O US 301

Date: 9/22/2020

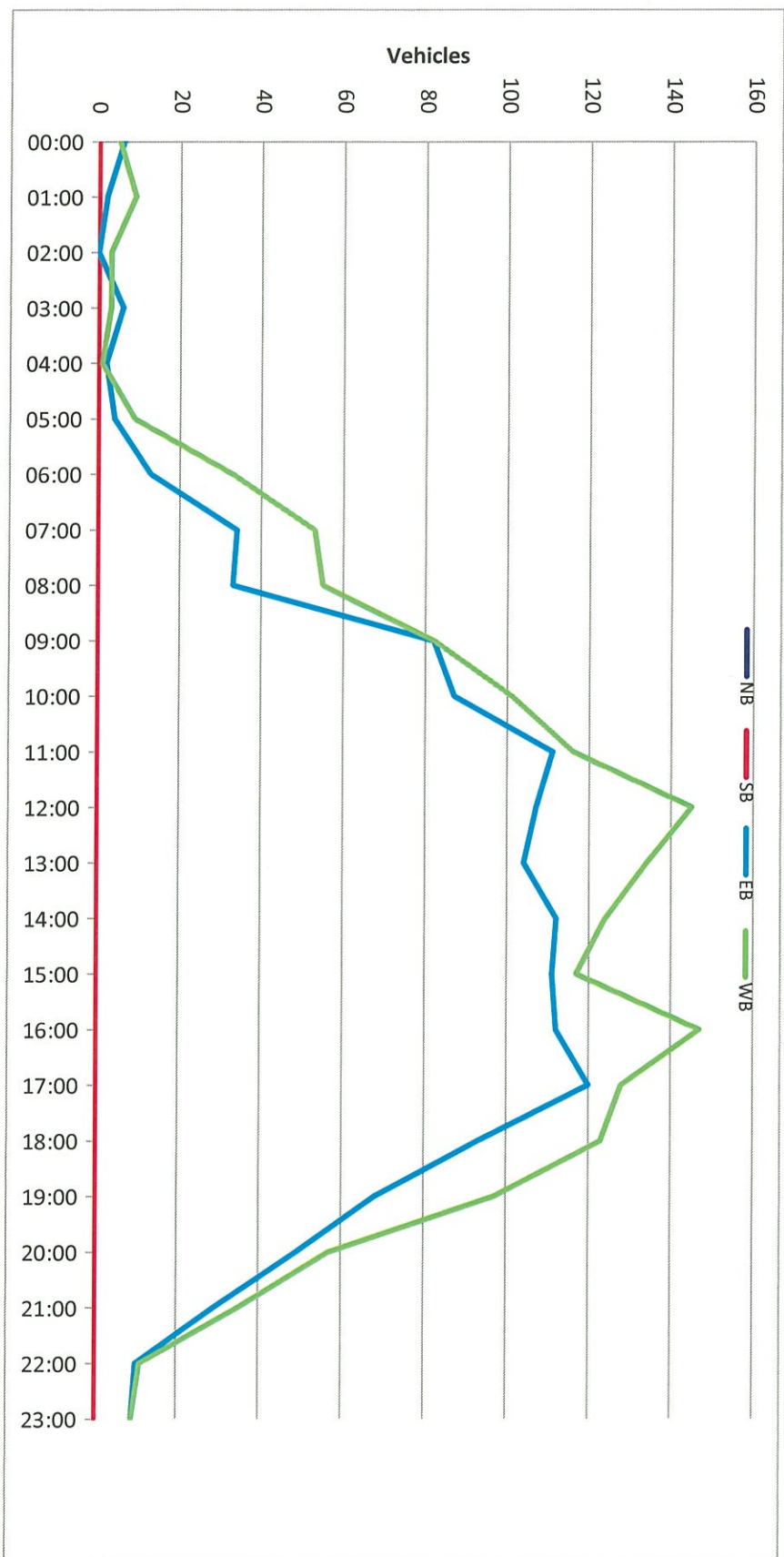


Project #: FL20_120203_004

City: Dade City

Location: Morningside Dr E/O US 301

Date: 9/23/2020



INTERSECTION TRAFFIC COUNTS





National Data & Surveying Services

Site Code: 20-120220-001

Date: 10/01/2020

Weather: Sunny

City: Dade City

County: Pasco

Count Times: 07:00 - 09:00

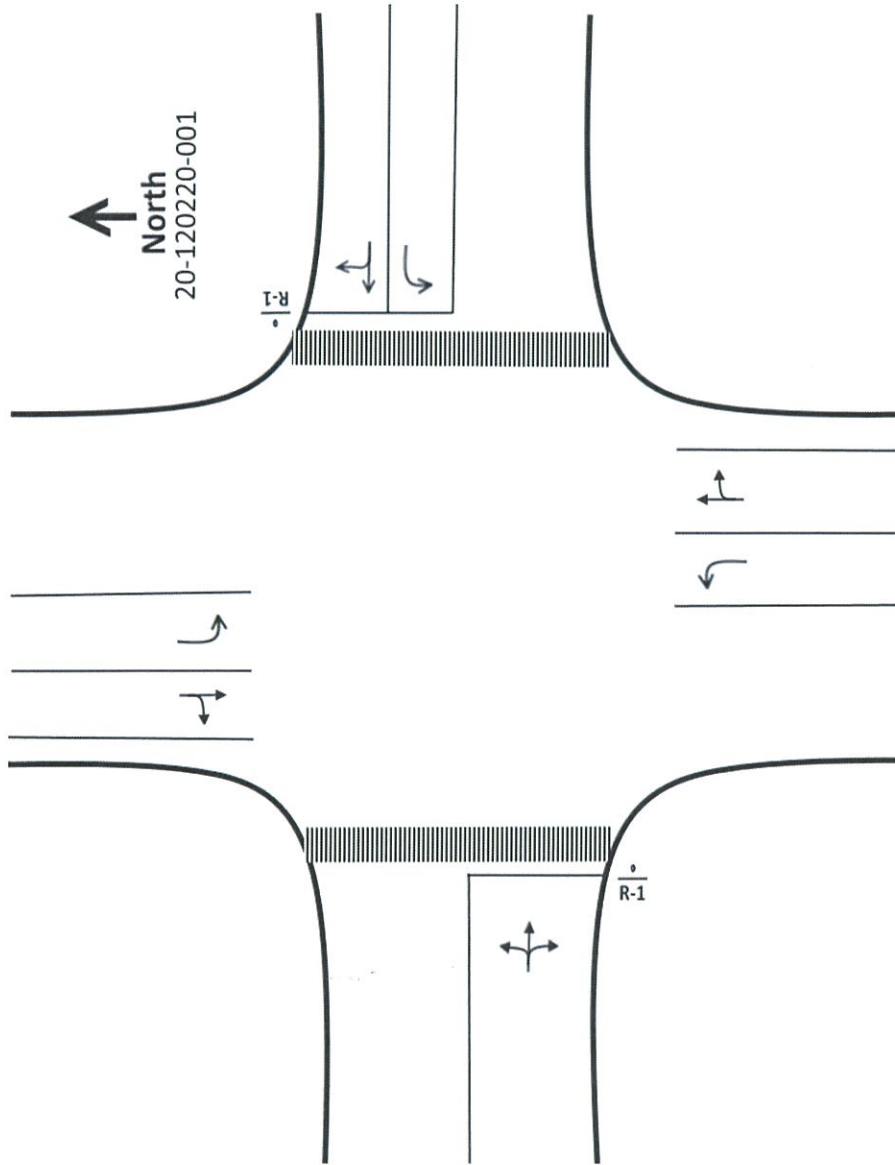
16:00 - 18:00

Control: 2-Way Stop(EB/WB)



N/S Street: SR 52

Speed: 35 MPH



E/W Street: Adair Rd/Morningside Dr

Speed: 30 MPH

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 52 & Adair Rd/Morningside Dr
 City: Dade City
 Control: 2-Way Stop (EB/WB)

Project ID: 20-120220-001
 Date: 10/1/2020

Cars

NS/EW Streets:	SR 52						Adair Rd/Morningside Dr						Adair Rd/Morningside Dr					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
7:00 AM	0	0	0	0	6	87	1	0	13	9	9	0	10	3	29	0	0	268
7:15 AM	6	69	16	0	16	113	8	0	5	8	14	0	20	2	35	0	0	312
7:30 AM	8	74	5	0	12	71	2	0	3	5	5	0	18	3	7	0	0	213
7:45 AM	3	81	8	0	9	72	4	0	8	9	12	0	8	1	5	0	0	220
8:00 AM	1	80	11	0	6	62	3	0	5	3	4	0	4	1	1	0	0	181
8:15 AM	1	64	7	0	4	60	5	0	8	6	7	0	3	5	4	0	0	174
8:30 AM	4	68	6	0	3	51	5	0	10	3	5	0	7	4	5	0	0	171
8:45 AM	4	64	3	0	4	43	2	0	6	3	3	0	3	4	1	0	0	140
TOTAL VOLUMES :	31	578	75	0	60	559	30	0	58	46	59	0	73	23	87	0	0	1679
APPROACH %'s :	4.53%	84.50%	10.96%	0.00%	9.24%	86.13%	4.62%	0.00%	35.58%	28.22%	36.20%	0.00%	39.89%	12.57%	47.54%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																	
PEAK HR VOL :	21	302	48	0	43	343	15	0	29	31	40	0	56	9	76	0	0	1013
PEAK HR FACTOR :	0.66	0.932	0.632	0.000	0.672	0.759	0.469	0.000	0.558	0.861	0.714	0.000	0.700	0.750	0.543	0.000	0.000	0.812
	0.918																	

NS/EW Streets:	SR 52						Adair Rd/Morningside Dr						Adair Rd/Morningside Dr					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	325
4:15 PM	6	132	20	0	13	100	7	0	5	3	9	0	15	5	10	0	0	317
4:30 PM	7	122	16	0	5	103	6	0	6	2	8	0	24	8	10	0	0	318
4:45 PM	5	115	17	0	9	105	11	0	7	5	12	0	15	9	8	0	0	312
5:00 PM	11	125	21	0	8	95	5	0	8	7	18	0	16	9	9	0	0	397
5:15 PM	8	122	14	0	15	144	12	0	4	5	19	0	18	8	15	0	0	343
5:30 PM	6	131	15	0	11	112	10	0	6	8	9	0	23	7	13	0	0	316
5:45 PM	10	132	19	0	9	89	14	0	8	6	10	0	15	10	3	0	0	333
TOTAL VOLUMES :	60	991	140	0	86	838	77	0	48	46	95	0	148	58	74	0	0	2661
APPROACH %'s :	5.04%	83.21%	11.75%	0.00%	8.59%	83.72%	7.69%	0.00%	25.40%	24.34%	50.26%	0.00%	52.86%	20.71%	26.43%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																	
PEAK HR VOL :	35	510	69	0	51	435	48	0	22	29	48	0	78	27	37	0	0	1389
PEAK HR FACTOR :	0.80	0.966	0.821	0.000	0.797	0.755	0.857	0.000	0.688	0.725	0.632	0.000	0.848	0.675	0.617	0.000	0.000	0.875
	0.953																	

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 52 & Adair Rd/Morningside Dr
City: Dade City
Control: 2-Way Stop (EB/WB)
Project ID: 20-120220-001
Date: 10/1/2020

HT

NS/EW Streets	SR 52						Adair Rd/Morningside Dr						Adair Rd/Morningside Dr					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:15 AM	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
7:30 AM	0	4	0	0	0	2	1	0	0	0	0	0	3	0	0	0	0	9
7:45 AM	0	1	1	0	0	4	0	0	0	1	0	0	1	0	1	0	0	9
8:00 AM	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	5	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	9
8:30 AM	0	9	3	0	1	4	0	0	0	0	0	0	2	0	1	0	0	20
8:45 AM	0	7	0	0	0	3	0	0	0	0	0	0	1	0	1	0	0	12
	0	2	1	0	1	7	0	0	0	0	0	0	0	0	1	0	0	12
TOTAL VOLUMES :	0	32	8	0	3	26	1	0	0	1	0	0	7	0	6	0	0	84
APPROACH %'s :	0.00%	80.00%	20.00%	0.00%	10.00%	86.67%	3.33%	0.00%	0.00%	100.00%	0.00%	0.00%	53.85%	0.00%	46.15%	0.00%		
PEAK HR :	0	9	4	0	1	10	1	0	0	1	0	0	4	0	1	0	0	31
PEAK HR VOL :	0.000	0.563	0.333	0.000	0.250	0.625	0.250	0.000	0.000	0.250	0.000	0.000	0.333	0.000	0.250	0.000	0.000	0.775
PEAK HR FACTOR :						0.600				0.250					0.417			

NS/EW Streets	SR 52						Adair Rd/Morningside Dr						Adair Rd/Morningside Dr					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
4:15 PM	1	3	2	0	0	6	0	0	0	0	0	0	1	0	0	0	0	14
4:30 PM	0	4	1	0	2	2	0	0	0	0	3	0	1	0	1	0	0	16
4:45 PM	0	5	6	0	3	2	0	0	0	0	0	0	0	0	0	0	0	16
5:00 PM	0	1	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	4	5	0	1	1	0	0	0	0	0	0	0	0	1	0	0	12
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	5
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
TOTAL VOLUMES :	2	19	16	0	7	14	0	0	0	1	5	0	2	0	3	0	0	69
APPROACH %'s :	5.41%	51.35%	43.24%	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	16.67%	83.33%	0.00%	40.00%	0.00%	60.00%	0.00%		
PEAK HR :	1	6	5	0	2	2	0	0	0	1	2	0	0	0	2	0	0	21
PEAK HR VOL :	0.25	0.375	0.250	0.000	0.500	0.500	0.000	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.438
PEAK HR FACTOR :						0.500				0.250	0.750				0.500			

Intersection Turning Movement Count

Location: SR 52 & Adair Rd/Morningside Dr
City: Dade City

Project ID: 20-120220-001
Date: 10/1/2020

Pedestrians (Crosswalks)

NS/EW Streets:	SR 52		SR 52		Adair Rd/Morningside Dr		Adair Rd/Morningside Dr		TOTAL
	NORTH LEG	WB	SOUTH LEG	WB	EAST LEG	SB	WEST LEG	SB	
AM	EB	0	EB	0	NB	1	NB	0	1
7:00 AM	WB	0	WB	0	SB	0	SB	0	0
7:15 AM		0		0		1		0	1
7:30 AM		0		0		2		0	2
7:45 AM		0		0		0		0	0
8:00 AM		0		0		0		1	1
8:15 AM		0		0		0		0	0
8:30 AM		0		0		0		0	0
8:45 AM		0		0		0		0	0
TOTAL VOLUMES :	EB	0	EB	0	NB	4	NB	1	5
APPROACH %'s :	WB	0	WB	0	SB	0	SB	0	0.00%
PEAK HR :						100.00%		100.00%	0.00%
PEAK HR VOL :		0		0		4		0	4
PEAK HR FACTOR :		0		0		0.500		0	0.500

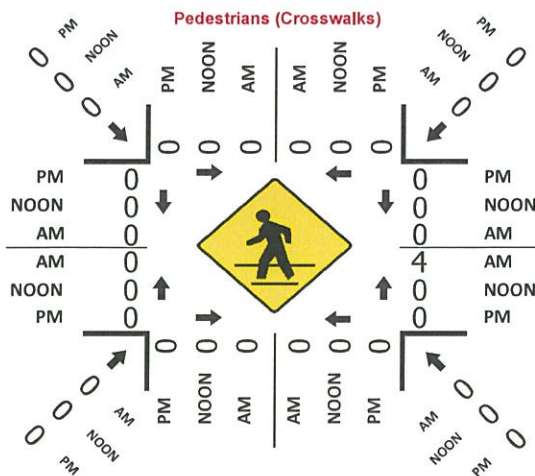
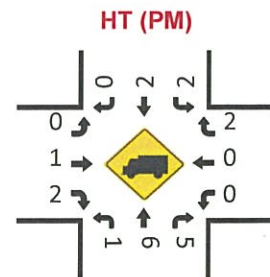
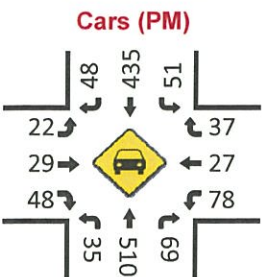
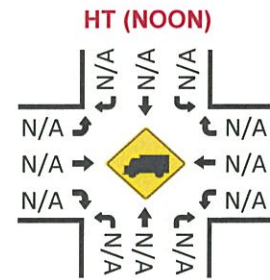
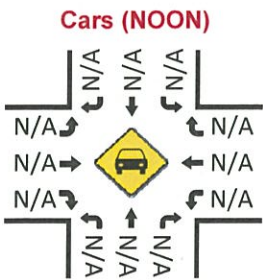
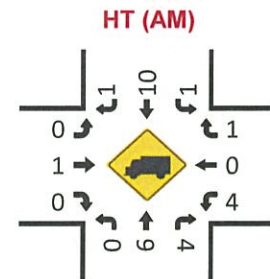
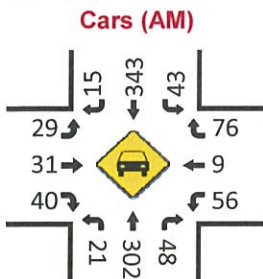
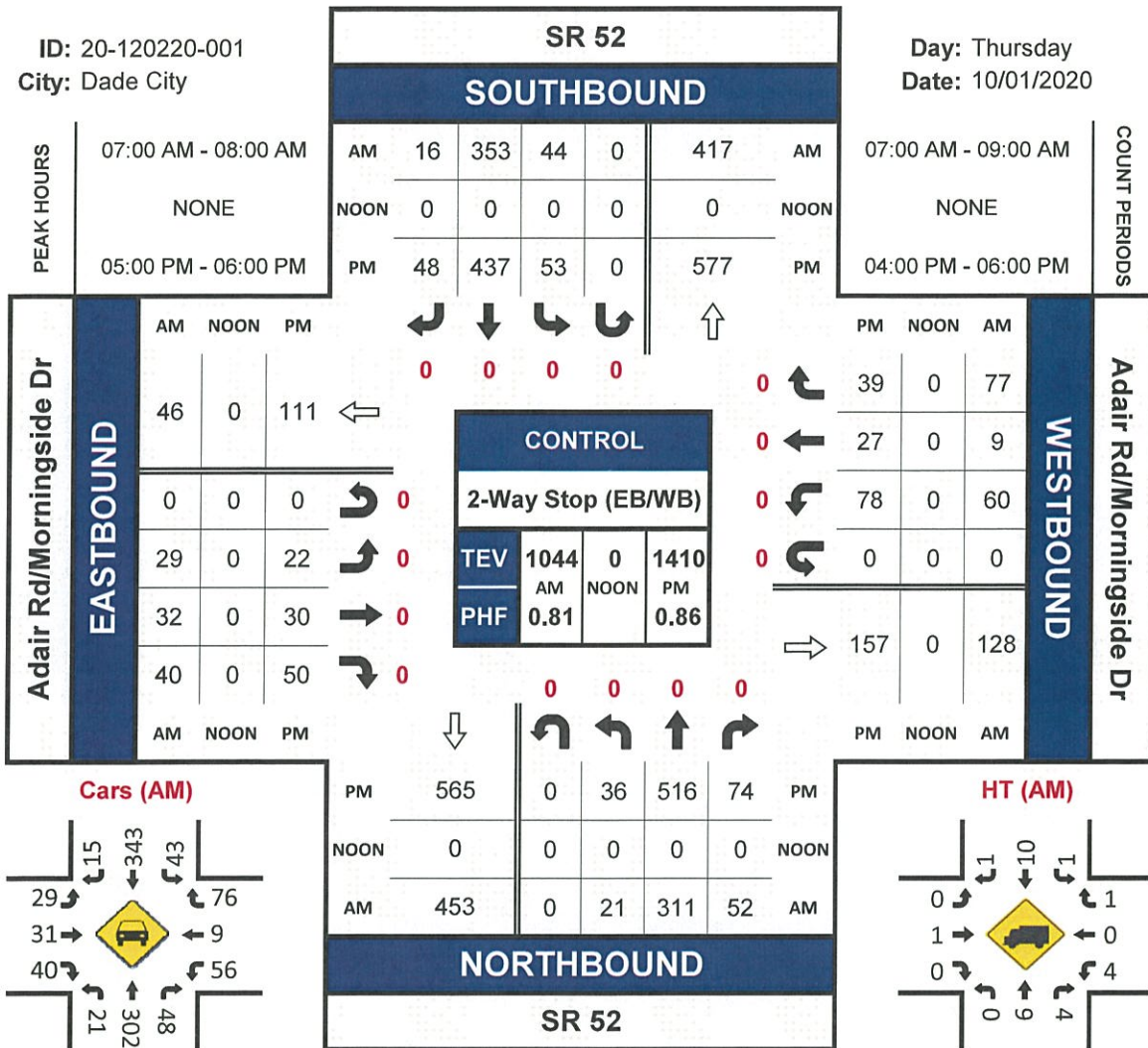
NS/EW Streets:	SR 52		SR 52		Adair Rd/Morningside Dr		Adair Rd/Morningside Dr		TOTAL
	NORTH LEG	WB	SOUTH LEG	WB	EAST LEG	SB	WEST LEG	SB	
PM	EB	0	EB	0	NB	0	NB	0	0
4:00 PM	WB	0	WB	0	SB	0	SB	0	0
4:15 PM		0		0		0		0	0
4:30 PM		0		0		0		0	0
4:45 PM		0		0		0		0	0
5:00 PM		0		0		0		0	0
5:15 PM		0		0		0		0	0
5:30 PM		0		0		0		0	0
5:45 PM		0		0		0		0	0
TOTAL VOLUMES :	EB	0	EB	0	NB	0	NB	0	0
APPROACH %'s :	WB	0	WB	0	SB	0	SB	0	0
PEAK HR :						0		0	0
PEAK HR VOL :		0		0		0		0	0
PEAK HR FACTOR :		0		0		0		0	0

SR 52 & Adair Rd/Morningside Dr

Peak Hour Turning Movement Count

ID: 20-120220-001
City: Dade City

Day: Thursday
Date: 10/01/2020



National Data & Surveying Services

Intersection Turning Movement Count

Location: Fort King Rd & Morningside Dr
 City: Dade City
 Control: 2-Way Stop (EB/WB)

Project ID: 20-120220-002
 Date: 10/1/2020

HT

NS/EW Streets:	Fort King Rd				Fort King Rd				Morningside Dr				Morningside Dr				TOTAL
	NORTHBOUND		SOUTHBOUND		NORTHBOUND		SOUTHBOUND		EASTBOUND		WESTBOUND		EASTBOUND		WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	
7:15 AM	0	1	0	0	0	4	1	0	1	0	1	0	0	0	0	0	
7:30 AM	1	0	0	0	0	1	0	0	6	0	5	0	0	0	0	0	
7:45 AM	0	2	0	0	0	0	0	0	3	0	1	0	0	0	0	0	
8:00 AM	0	2	0	0	0	3	0	0	1	0	0	0	0	0	0	0	
8:15 AM	2	5	1	0	0	0	1	0	3	0	0	0	0	0	0	0	
8:30 AM	1	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	
TOTAL VOLUMES :	4	18	1	0	0	12	3	0	16	0	10	0	0	0	0	0	
APPROACH %'s :	17.39%	78.26%	4.35%	0.00%	0.00%	80.00%	20.00%	0.00%	61.54%	0.00%	38.46%	0.00%	0.00%	0.00%	0.00%	0.00%	
PEAK HR :	8	0	0	0	8	2	2	0	11	0	9	0	0	0	0	0	
PEAK HR VOL :	0.250	0.400	0.000	0.000	0.500	0.500	0.500	0.000	0.458	0.000	0.450	0.000	0.000	0.000	0.000	0.000	
	0.450				0.500				0.455								

NS/EW Streets:	Fort King Rd				Fort King Rd				Morningside Dr				Morningside Dr				TOTAL
	NORTHBOUND		SOUTHBOUND		NORTHBOUND		SOUTHBOUND		EASTBOUND		WESTBOUND		EASTBOUND		WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	2	1	0	0	2	1	1	0	0	0	1	0	0	0	1	0	
4:30 PM	1	3	0	0	0	1	1	0	0	0	1	0	0	0	0	0	
4:45 PM	0	2	0	0	0	0	0	0	4	0	0	0	0	0	0	0	
5:00 PM	3	2	0	0	0	5	2	0	1	0	1	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	
5:30 PM	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	
5:45 PM	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES :	8	13	0	0	2	9	3	0	7	0	4	0	1	0	1	0	
APPROACH %'s :	38.10%	61.90%	0.00%	0.00%	14.29%	64.29%	21.43%	0.00%	63.64%	0.00%	36.36%	0.00%	50.00%	0.00%	50.00%	0.00%	
PEAK HR :	4	7	0	0	6	6	2	0	6	0	1	0	1	0	0	0	
PEAK HR VOL :	0.33	0.583	0.000	0.000	0.300	0.300	0.250	0.000	0.375	0.000	0.250	0.000	0.250	0.000	0.000	0.000	
	0.550				0.286				0.438				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fort King Rd & Morningside Dr
 City: Dade City

Project ID: 20-120220-002

Date: 10/1/2020

Pedestrians (Crosswalks)

NS/EW Streets:	Fort King Rd		Fort King Rd		Morningside Dr		Morningside Dr		TOTAL
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
AM	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	07:00 AM - 08:00 AM								
PEAK HR VOL :	0	0	0	0	0	0	0	0	TOTAL
PEAK HR FACTOR :	0								

NS/EW Streets:	Fort King Rd		Fort King Rd		Morningside Dr		Morningside Dr		TOTAL
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
PM	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	04:30 PM - 05:30 PM								
PEAK HR VOL :	0	0	0	0	0	0	0	0	TOTAL
PEAK HR FACTOR :	0								

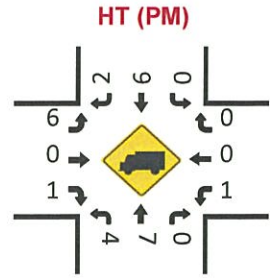
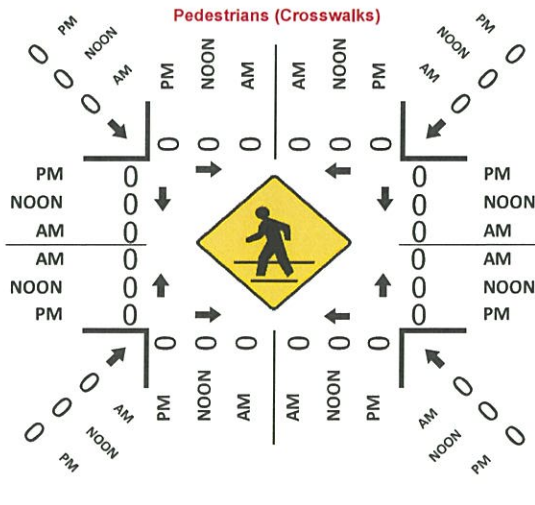
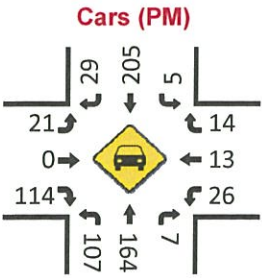
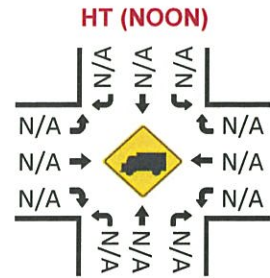
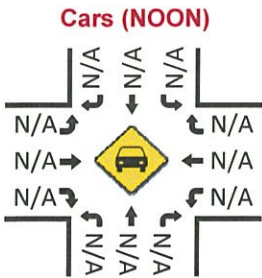
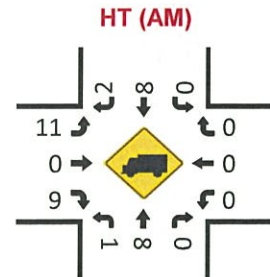
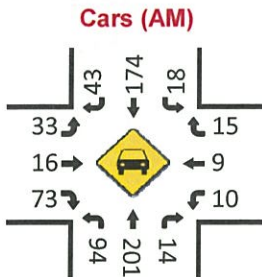
Fort King Rd & Morningside Dr

Peak Hour Turning Movement Count

ID: 20-120220-002
City: Dade City

Day: Thursday
Date: 10/01/2020

PEAK HOURS		Fort King Rd								COUNT PERIODS																																									
		SOUTHBOUND																																																	
PEAK HOURS	07:00 AM - 08:00 AM	AM	45	182	18	0	268	AM	07:00 AM - 09:00 AM	COUNT PERIODS																																									
	NONE	NOON	0	0	0	0	0	NOON	NONE																																										
	04:30 PM - 05:30 PM	PM	31	211	5	0	212	PM	04:00 PM - 06:00 PM																																										
Morningside Dr	EASTBOUND	AM	NOON	PM					PM	NOON	AM	Morningside Dr	WESTBOUND																																						
		149	0	155	0	14	0	15																																											
		0	0	0	0	13	0	9																																											
		44	0	27	0	27	0	10																																											
		16	0	0	0	0	0	0																																											
AM	NOON	PM					PM	NOON	AM																																										
82	0	115					12	0	48																																										
<table border="1"> <thead> <tr> <th colspan="4">CONTROL</th> </tr> <tr> <th colspan="4">2-Way Stop (EB/WB)</th> </tr> <tr> <th>TEV</th> <th>739</th> <th>0</th> <th>732</th> </tr> <tr> <th>PHF</th> <th>0.68</th> <th></th> <th>0.87</th> </tr> </thead> <tbody> <tr> <td>AM</td> <td>NOON</td> <td>PM</td> <td></td> </tr> </tbody> </table>												CONTROL				2-Way Stop (EB/WB)				TEV	739	0	732	PHF	0.68		0.87	AM	NOON	PM																					
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2-Way Stop (EB/WB)																																																			
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PHF	0.68		0.87																																																
AM	NOON	PM																																																	
<table border="1"> <thead> <tr> <th colspan="8">NORTHBOUND</th> </tr> <tr> <th colspan="8">Fort King Rd</th> </tr> </thead> <tbody> <tr> <td>PM</td> <td>353</td> <td>0</td> <td>111</td> <td>171</td> <td>7</td> <td>PM</td> <td></td> </tr> <tr> <td>NOON</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>NOON</td> <td></td> </tr> <tr> <td>AM</td> <td>274</td> <td>0</td> <td>95</td> <td>209</td> <td>14</td> <td>AM</td> <td></td> </tr> </tbody> </table>												NORTHBOUND								Fort King Rd								PM	353	0	111	171	7	PM		NOON	0	0	0	0	0	NOON		AM	274	0	95	209	14	AM	
NORTHBOUND																																																			
Fort King Rd																																																			
PM	353	0	111	171	7	PM																																													
NOON	0	0	0	0	0	NOON																																													
AM	274	0	95	209	14	AM																																													





National Data & Surveying Services

Site Code: 20-120220-003

Date: 10/01/2020

Weather: Sunny

City: Dade City

County: Pasco

Count Times: 07:00 - 09:00

16:00 - 18:00

Control: Signalized

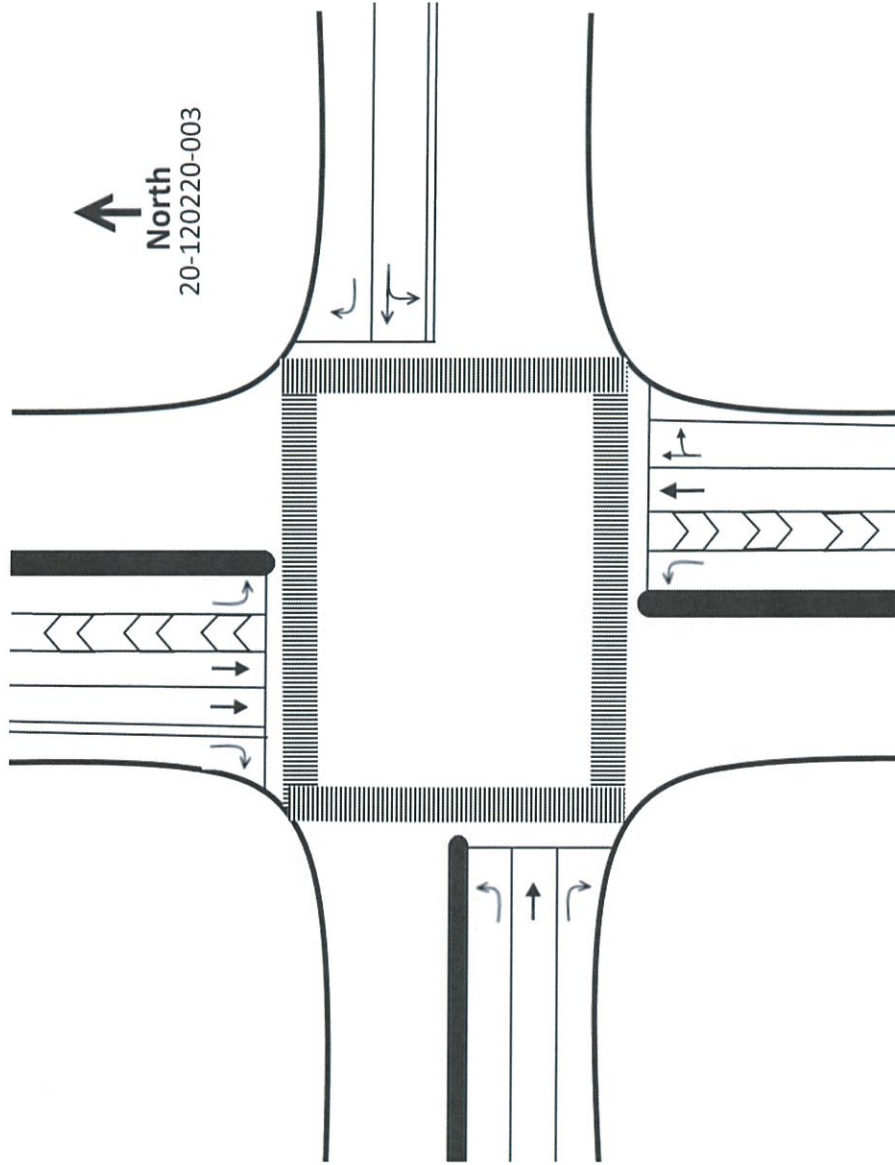
SIGNAL TIMING

PHASES	1	2	3
SL/ST	00:22	00:31	00:36
NT/ST	01:21	01:23	01:22
ET/WT	00:26	00:22	00:37



N/S Street: US 301

Speed: 50 MPH



E/W Street: Morningside Dr

Speed: 45 MPH

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 301 & Morningside Dr
 City: Dade City
 Control: Signalized

Project ID: 20-120220-003
 Date: 10/1/2020

Total

NS/EW Streets:	US 301						Morningside Dr										
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	1	91	4	0	6	96	2	0	3	1	0	0	4	0	4	0	212
7:15 AM	4	137	4	0	7	138	3	0	2	2	1	0	6	1	15	0	320
7:30 AM	2	152	5	3	5	172	6	0	1	0	1	0	5	0	10	0	362
7:45 AM	1	181	6	1	9	165	4	0	2	1	0	0	7	1	5	0	383
8:00 AM	2	148	5	2	4	142	3	0	1	0	1	0	5	2	9	0	324
8:15 AM	7	169	2	2	8	159	6	0	3	0	3	0	10	1	8	0	378
8:30 AM	12	141	5	2	13	135	7	1	4	1	2	0	8	0	13	0	344
8:45 AM	7	162	4	4	15	159	8	0	9	3	4	0	13	2	9	0	399
TOTAL VOLUMES:	36	1181	35	14	67	1166	39	1	25	8	12	0	58	7	73	0	2722
APPROACH %'s:	2.84%	93.29%	2.76%	1.11%	5.26%	91.59%	3.06%	0.08%	55.56%	17.78%	26.67%	0.00%	42.03%	5.07%	52.90%	0.00%	
PEAK HR:	12	650	18	8	26	638	19	0	7	1	5	0	27	4	32	0	1447
PEAK HR VOL:	0.429	0.898	0.750	0.667	0.722	0.927	0.792	0.000	0.583	0.250	0.417	0.000	0.675	0.500	0.800	0.000	0.945
				0.910			0.933			0.542			0.829				

NS/EW Streets:	US 301						Morningside Dr										
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	15	201	11	3	18	214	23	0	21	4	8	0	23	7	15	0	563
4:15 PM	18	270	15	2	17	198	22	0	19	3	11	0	23	2	19	0	619
4:30 PM	9	256	10	2	31	172	14	0	19	3	6	0	18	3	21	0	564
4:45 PM	6	230	12	2	17	220	20	0	19	2	5	0	17	3	24	0	577
5:00 PM	10	281	10	3	18	217	16	0	15	2	5	0	25	4	17	0	623
5:15 PM	8	222	7	0	26	187	22	0	20	4	8	0	20	8	20	0	552
5:30 PM	13	222	12	1	16	174	18	0	11	4	1	0	12	3	25	0	512
5:45 PM	10	198	9	1	18	137	11	0	21	0	10	0	24	4	23	0	466
TOTAL VOLUMES:	89	1880	86	14	161	1519	146	0	145	22	54	0	162	34	164	0	4476
APPROACH %'s:	4.30%	90.87%	4.16%	0.68%	8.82%	83.19%	8.00%	0.00%	65.61%	9.95%	24.43%	0.00%	45.00%	9.44%	45.56%	0.00%	
PEAK HR:	43	1037	47	9	83	807	72	0	72	10	27	0	83	12	81	0	2383
PEAK HR VOL:	0.597	0.923	0.783	0.750	0.669	0.917	0.818	0.000	0.947	0.833	0.614	0.000	0.830	0.750	0.844	0.000	0.956
				0.931			0.936			0.826			0.957				

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 301 & Morningside Dr
 City: Dade City
 Control: Signalized

Project ID: 20-120220-003
 Date: 10/1/2020

Cars

NS/EW Streets:	US 301										Morningside Dr						TOTAL					
	NORTHBOUND					SOUTHBOUND					EASTBOUND			WESTBOUND								
AM	NL	NT	NR	NU	0	SL	ST	SR	SU	0	EL	ET	ER	EU	0	WL	WT	WR	WU	0	TOTAL	
7:00 AM	1	90	4	0	0	6	92	2	0	0	1	4	0	0	0	4	0	4	0	0	0	204
7:15 AM	4	131	2	0	0	7	136	3	0	0	2	2	1	0	0	6	1	15	0	0	310	
7:30 AM	2	144	2	3	0	5	164	6	0	0	1	0	0	0	0	5	0	10	0	0	342	
7:45 AM	1	174	5	1	0	9	157	4	0	0	2	1	0	0	0	6	1	4	0	0	365	
8:00 AM	2	144	5	2	0	4	134	3	0	0	1	0	1	0	0	5	2	9	0	0	312	
8:15 AM	7	164	2	2	0	8	152	6	0	0	3	0	3	0	0	8	1	8	0	0	364	
8:30 AM	11	137	4	2	0	12	133	7	1	0	4	1	2	0	0	8	0	13	0	0	335	
8:45 AM	7	155	4	4	0	14	153	8	0	0	9	3	4	0	0	10	1	9	0	0	381	
TOTAL VOLUMES :	NL	NT	NR	NU	0	SL	ST	SR	SU	0	EL	ET	ER	EU	0	WL	WT	WR	WU	0	TOTAL	
APPROACH %'s :	35	1139	28	14	65	1121	39	1	23	7	11	0	0	0	0	52	6	72	0	0	2613	
	2.88%	93.67%	2.30%	1.15%	5.30%	91.44%	3.18%	0.08%	56.10%	17.07%	26.83%	0.00%	0.00%	0.00%	40.00%	4.62%	55.38%	0.00%	0.00%			
PEAK HR VOL :	12	626	14	8	26	607	19	0	7	1	4	0	0	0	0	24	4	31	0	0	1383	
PEAK HR FACTOR :	0.43	0.899	0.700	0.667	0.722	0.925	0.792	0.000	0.583	0.250	0.333	0.000	0.000	0.000	0.000	0.750	0.500	0.775	0.000	0.000	0.947	
		0.912				0.931				0.500						0.868						

NS/EW Streets:	US 301										Morningside Dr						TOTAL				
	NORTHBOUND					SOUTHBOUND					EASTBOUND			WESTBOUND							
PM	NL	NT	NR	NU	0	SL	ST	SR	SU	0	EL	ET	ER	EU	0	WL	WT	WR	WU	0	TOTAL
4:00 PM	15	196	11	3	0	18	203	23	0	0	21	4	8	0	0	23	7	15	0	0	547
4:15 PM	18	261	15	2	0	17	194	22	0	0	19	3	10	0	0	23	2	19	0	0	605
4:30 PM	9	253	9	2	0	31	169	14	0	0	19	3	6	0	0	17	3	21	0	0	556
4:45 PM	6	226	12	2	0	17	214	20	0	0	18	2	5	0	0	17	3	24	0	0	566
5:00 PM	10	277	10	3	0	18	215	16	0	0	15	2	5	0	0	25	4	17	0	0	617
5:15 PM	8	218	7	0	0	26	181	22	0	0	20	4	8	0	0	20	8	20	0	0	542
5:30 PM	13	218	12	1	0	16	172	17	0	0	11	4	1	0	0	12	3	25	0	0	505
5:45 PM	10	195	9	1	0	18	133	10	0	0	21	0	10	0	0	23	4	23	0	0	457
TOTAL VOLUMES :	NL	NT	NR	NU	0	SL	ST	SR	SU	0	EL	ET	ER	EU	0	WL	WT	WR	WU	0	TOTAL
APPROACH %'s :	89	1844	85	14	161	1481	144	0	144	22	53	0	0	0	0	160	34	164	0	0	4395
	4.38%	90.75%	4.18%	0.69%	9.01%	82.92%	8.06%	0.00%	65.75%	10.05%	24.20%	0.00%	0.00%	0.00%	44.69%	9.50%	45.81%	0.00%	0.00%		
PEAK HR VOL :	43	1017	46	9	83	792	72	0	71	10	26	0	0	0	0	82	12	81	0	0	2344
PEAK HR FACTOR :	0.60	0.918	0.767	0.750	0.669	0.921	0.818	0.000	0.934	0.833	0.650	0.000	0.000	0.000	0.000	0.820	0.750	0.844	0.000	0.000	0.950
		0.929				0.943				0.836						0.951					

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 301 & Morningside Dr
 City: Dade City
 Control: Signalized

Project ID: 20-120220-003
 Date: 10/1/2020

HT

NS/EW Streets:	US 301						Morningside Dr						Morningside Dr					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
7:00 AM	0	1	0	0	0	4	0	0	2	1	0	0	0	0	0	0	0	8
7:15 AM	0	6	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	10
7:30 AM	0	8	3	0	0	8	0	0	0	0	1	0	0	0	0	0	0	20
7:45 AM	0	7	1	0	0	8	0	0	0	0	0	0	1	0	1	0	0	18
8:00 AM	0	4	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	12
8:15 AM	0	5	0	0	0	7	0	0	0	0	0	0	2	0	0	0	0	14
8:30 AM	1	4	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	9
8:45 AM	0	7	0	0	1	6	0	0	0	0	0	0	3	1	0	0	0	18
TOTAL VOLUMES :	1	42	7	0	2	45	0	0	2	1	1	0	6	1	1	0	0	109
APPROACH %'s :	2.00%	84.00%	14.00%	0.00%	4.26%	95.74%	0.00%	0.00%	50.00%	25.00%	25.00%	0.00%	75.00%	12.50%	12.50%	0.00%	0.00%	
PEAK HR :	0	24	4	0	0	31	0	0	0	0	1	0	3	0	1	0	0	64
PEAK HR VOL :	0.000	0.750	0.333	0.000	0.000	0.969	0.000	0.000	0.000	0.000	0.250	0.000	0.375	0.000	0.250	0.000	0.500	0.800
PEAK HR FACTOR :						0.969				0.250								

NS/EW Streets:	US 301						Morningside Dr						Morningside Dr					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
4:00 PM	0	5	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	16
4:15 PM	0	9	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	14
4:30 PM	0	3	1	0	0	3	0	0	0	0	0	0	1	0	0	0	0	8
4:45 PM	0	4	0	0	0	6	0	0	1	0	0	0	0	0	0	0	0	11
5:00 PM	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6
5:15 PM	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	10
5:30 PM	0	4	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	7
5:45 PM	0	3	0	0	0	4	1	0	0	0	0	0	1	0	0	0	0	9
TOTAL VOLUMES :	0	36	1	0	0	38	2	0	1	0	1	0	2	0	0	0	0	81
APPROACH %'s :	0.00%	97.30%	2.70%	0.00%	0.00%	95.00%	5.00%	0.00%	50.00%	0.00%	50.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	
PEAK HR :	0	20	1	0	0	15	0	0	1	0	1	0	1	0	0	0	0	39
PEAK HR VOL :	0.00	0.556	0.250	0.000	0.000	0.625	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.696	
PEAK HR FACTOR :						0.625			0.250		0.250							

National Data & Surveying Services

Location: **Intersection Turning Movement Count** City: Dade City Date: 10/1/2020

Pedestrians (Crosswalks)

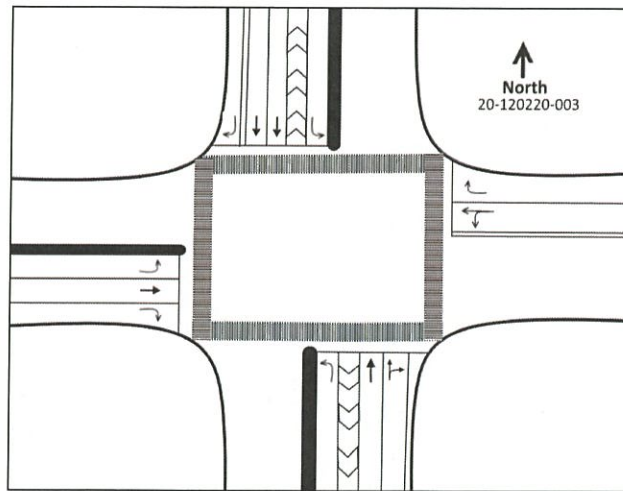
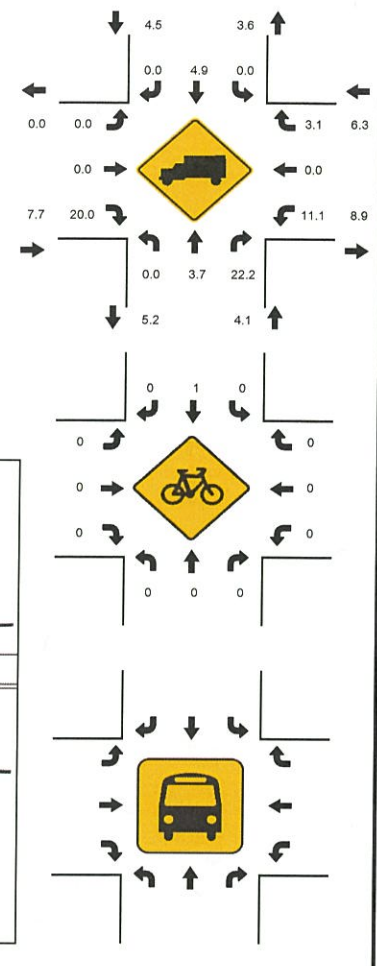
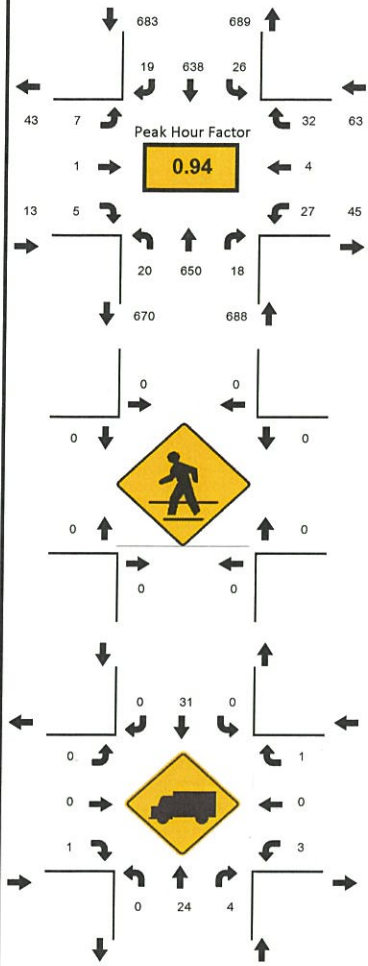
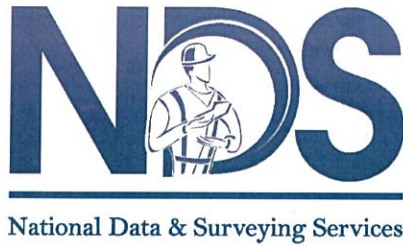
NS/EW Streets:	US 301		US 301		Morningside Dr		Morningside Dr			
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG			
	EB	WB	EB	WB	NB	SB	NB	SB		
7:00 AM	0	0	0	1	0	0	1	0	TOTAL	2
7:15 AM	0	0	0	0	0	0	0	0	TOTAL	0
7:30 AM	0	0	0	0	0	0	0	0	TOTAL	0
7:45 AM	0	0	0	0	0	0	0	0	TOTAL	0
8:00 AM	0	0	0	0	0	0	0	0	TOTAL	0
8:15 AM	0	0	0	0	0	0	0	0	TOTAL	0
8:30 AM	0	0	0	0	0	0	0	0	TOTAL	0
8:45 AM	0	0	0	0	0	0	0	0	TOTAL	0
TOTAL VOLUMES :	0	0	0	1	0	0	1	0	TOTAL	2
APPROACH %'s :	0.00%		100.00%		0.00%		100.00%		0.00%	
PEAK HR :	0		0		0		0		0	
PEAK HR VOL :	0		0		0		0		0	
PEAK HR FACTOR :	0		0		0		0		0	

NS/EW Streets:	US 301		US 301		Morningside Dr		Morningside Dr			
	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG			
	EB	WB	EB	WB	NB	SB	NB	SB		
4:00 PM	0	0	0	1	0	0	0	0	TOTAL	1
4:15 PM	1	0	0	0	0	0	0	0	TOTAL	1
4:30 PM	0	0	0	0	0	0	0	2	TOTAL	2
4:45 PM	0	0	0	0	0	0	0	0	TOTAL	0
5:00 PM	0	0	0	0	0	0	0	0	TOTAL	0
5:15 PM	0	0	0	0	0	0	0	0	TOTAL	0
5:30 PM	0	0	0	0	0	0	0	0	TOTAL	0
5:45 PM	0	0	1	0	0	0	0	0	TOTAL	1
TOTAL VOLUMES :	1	0	1	1	0	0	0	2	TOTAL	5
APPROACH %'s :	100.00%		50.00%		0.00%		100.00%		0.00%	
PEAK HR :	0		0		0		0		0	
PEAK HR VOL :	0		0		0		0		0	
PEAK HR FACTOR :	0.250		0.250		0.250		0.250		0.375	

LOCATION: US 301 & Morningside Dr
 CITY/STATE: Dade City, FL

PROJECT ID: 20-120220-003
 DATE: 10/01/2020

Peak-Hour: 07:30 AM - 08:30 AM
 Peak 15-Minute: 07:45 AM - 08:00 AM

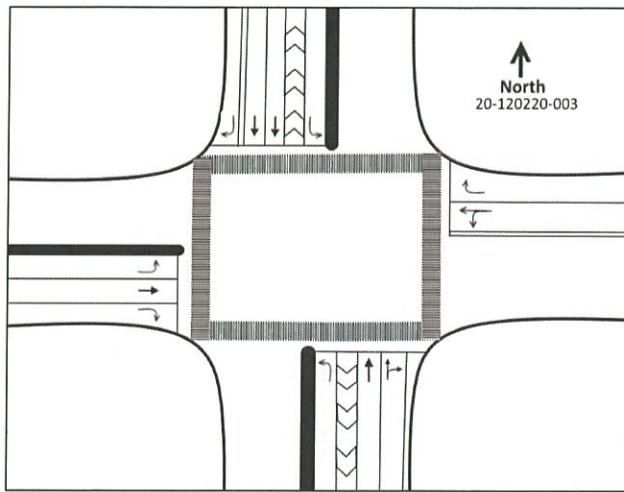
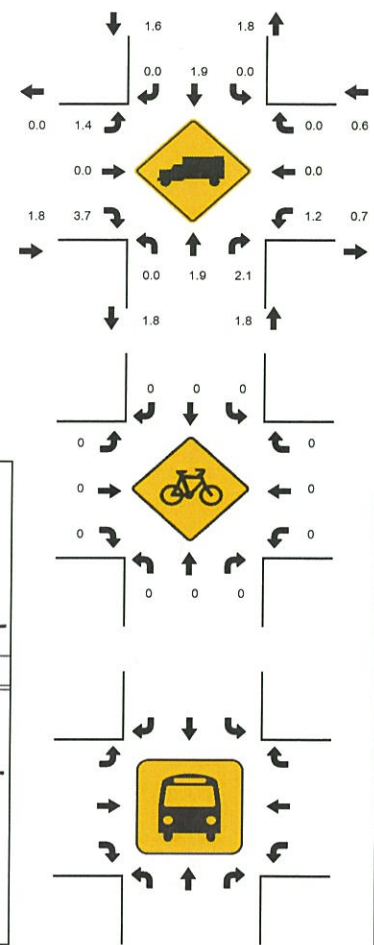
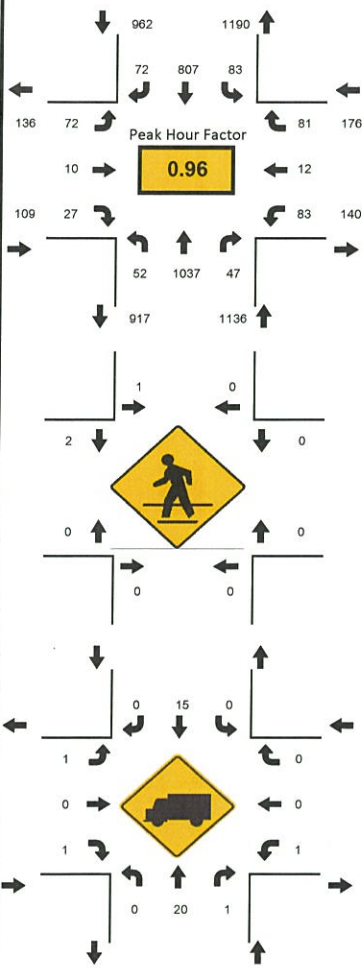
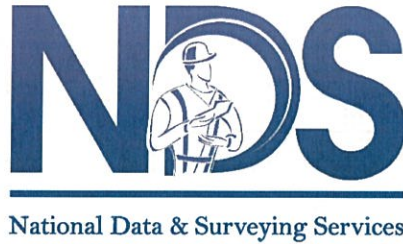


15-Min Count Period Beginning At	US 301 Northbound					US 301 Southbound					Morningside Dr Eastbound					Morningside Dr Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	1	91	4	0		6	96	2	0		3	1	0	0		4	0	4	0		212	1277
07:15 AM	4	137	4	0		7	138	3	0		2	2	1	0		6	1	15	0		320	1389
07:30 AM	2	152	5	3		5	172	6	0		1	0	1	0		5	0	10	0		362	1447
07:45 AM	1	181	6	1		9	165	4	0		2	1	0	0		7	1	5	0		383	1429
08:00 AM	2	148	5	2		4	142	3	0		1	0	1	0		5	2	9	0		324	1445
08:15 AM	7	169	2	2		8	159	6	0		3	0	3	0		10	1	8	0		378	1121
08:30 AM	12	141	5	2		13	135	7	1		4	1	2	0		8	0	13	0		344	743
08:45 AM	7	162	4	4		15	159	8	0		9	3	4	0		13	2	9	0		399	399
Peak 15-Min Flowrates	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Total	
All Vehicles	28	724	24	12		36	688	24	0		12	4	12	0		40	8	40	0		1652	
Heavy Trucks	0	32	12			0	32	0			0	0	4			8	0	4			92	
Pedestrians	0	0	0			0	0	0			0	0	0			0	0	0			0	
Bicycles	0	0	0			0	4	0			0	0	0			0	0	0			4	
Railroad Stopped Buses																						

LOCATION: US 301 & Morningside Dr
 CITY/STATE: Dade City, FL

PROJECT ID: 20-120220-003
 DATE: 10/01/2020

Peak-Hour: 04:15 PM - 05:15 PM
 Peak 15-Minute: 05:00 PM - 05:15 PM



15-Min Count Period Beginning At	US 301 Northbound					US 301 Southbound					Morningside Dr Eastbound					Morningside Dr Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	15	201	11	3		18	214	23	0		21	4	8	0		23	7	15	0		563	2323
04:15 PM	18	270	15	2		17	198	22	0		19	3	11	0		23	2	19	0		619	2383
04:30 PM	9	256	10	2		31	172	14	0		19	3	6	0		18	3	21	0		564	2316
04:45 PM	6	230	12	2		17	220	20	0		19	2	5	0		17	3	24	0		577	2264
05:00 PM	10	281	10	3		18	217	16	0		15	2	5	0		25	4	17	0		623	2153
05:15 PM	8	222	7	0		26	187	22	0		20	4	8	0		20	8	20	0		552	1530
05:30 PM	13	222	12	1		16	174	18	0		11	4	1	0		12	3	25	0		512	978
05:45 PM	10	198	9	1		18	137	11	0		21	0	10	0		24	4	23	0		466	466
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	72	1124	60	12		124	880	88	0		76	12	44	0		100	16	96	0		2704	
Heavy Trucks	0	36	4			0	24	0			4	0	4			4	0	0			76	
Pedestrians	0						4					8				0					12	
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0	
Railroad																						
Stopped Buses																						

APPENDIX - C



D FACTOR



Morning Side (East of SR 52)
 (48 Hour Machine Counts)

		Day 1		Day 2		AVG		D Factor	
		EB	WB	EB	WB	EB	WB	EB	WB
AM	7:00-8:00	148	154	128	135	138	145	0.49	0.51
PM	5:00-6:00	108	112	106	114	107	113	0.49	0.51
							Avg	0.49	0.51

Morning Side (East of US 301)
 (48 Hour Machine Counts)

	Day 1		Day 2		AVG		D Factor	
	EB	WB	EB	WB	EB	WB	EB	WB
AM 7:30-8:30	37	48	39	49	38	49	0.44	0.56
PM 4:15-5:15	115	148	124	139	120	144	0.45	0.55
						Avg	0.45	0.55

T-FACTOR



Truck Percentage-T Factor

(Morningside Drive from SR 52 to Fort King Road)

Intersection	AM			PM		
	Total Approach Existing	Total Approach Existing	Total Approach Existing	Total Approach Existing	Total Approach Existing	Total Approach Existing
	Traffic (1)	Traffic (1)	%Trucks	Traffic (1)	Traffic (1)	%Trucks
Morningside Dr And SR 52/Adair Rd	146	5	3%	144	2	1%
Morningside Dr And Fort King Road	142	20	14%	142	7	5%
		Avg	9%		Avg	3%
					Avg AM and PM	6%

(1) Based on Existing Turning movement counts-Westbound Approach Volumes at Morningside Dr and SR52 intersection
And Eastbound Approach Volumes at Moningside Dr and Fort King Road Intersection

SEASONAL FACTORS



2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1400 PASCO COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2019 - 01/05/2019	0.98	1.03
2	01/06/2019 - 01/12/2019	1.00	1.05
3	01/13/2019 - 01/19/2019	1.03	1.08
4	01/20/2019 - 01/26/2019	1.01	1.06
5	01/27/2019 - 02/02/2019	1.00	1.05
* 6	02/03/2019 - 02/09/2019	0.98	1.03
* 7	02/10/2019 - 02/16/2019	0.97	1.02
* 8	02/17/2019 - 02/23/2019	0.96	1.01
* 9	02/24/2019 - 03/02/2019	0.95	1.00
*10	03/03/2019 - 03/09/2019	0.94	0.99
*11	03/10/2019 - 03/16/2019	0.93	0.98
*12	03/17/2019 - 03/23/2019	0.93	0.98
*13	03/24/2019 - 03/30/2019	0.94	0.99
*14	03/31/2019 - 04/06/2019	0.94	0.99
*15	04/07/2019 - 04/13/2019	0.95	1.00
*16	04/14/2019 - 04/20/2019	0.96	1.01
*17	04/21/2019 - 04/27/2019	0.97	1.02
*18	04/28/2019 - 05/04/2019	0.98	1.03
19	05/05/2019 - 05/11/2019	0.99	1.04
20	05/12/2019 - 05/18/2019	1.01	1.06
21	05/19/2019 - 05/25/2019	1.01	1.06
22	05/26/2019 - 06/01/2019	1.02	1.07
23	06/02/2019 - 06/08/2019	1.02	1.07
24	06/09/2019 - 06/15/2019	1.03	1.08
25	06/16/2019 - 06/22/2019	1.03	1.08
26	06/23/2019 - 06/29/2019	1.04	1.09
27	06/30/2019 - 07/06/2019	1.04	1.09
28	07/07/2019 - 07/13/2019	1.04	1.09
29	07/14/2019 - 07/20/2019	1.05	1.11
30	07/21/2019 - 07/27/2019	1.05	1.11
31	07/28/2019 - 08/03/2019	1.05	1.11
32	08/04/2019 - 08/10/2019	1.06	1.12
33	08/11/2019 - 08/17/2019	1.06	1.12
34	08/18/2019 - 08/24/2019	1.06	1.12
35	08/25/2019 - 08/31/2019	1.07	1.13
36	09/01/2019 - 09/07/2019	1.07	1.13
37	09/08/2019 - 09/14/2019	1.08	1.14
38	09/15/2019 - 09/21/2019	1.08	1.14
39	09/22/2019 - 09/28/2019	1.06	1.12
40	09/29/2019 - 10/05/2019	1.05	1.11
41	10/06/2019 - 10/12/2019	1.03	1.08
42	10/13/2019 - 10/19/2019	1.01	1.06
43	10/20/2019 - 10/26/2019	1.00	1.05
44	10/27/2019 - 11/02/2019	1.00	1.05
45	11/03/2019 - 11/09/2019	0.99	1.04
46	11/10/2019 - 11/16/2019	0.99	1.04
47	11/17/2019 - 11/23/2019	0.98	1.03
48	11/24/2019 - 11/30/2019	0.98	1.03
49	12/01/2019 - 12/07/2019	0.98	1.03
50	12/08/2019 - 12/14/2019	0.98	1.03
51	12/15/2019 - 12/21/2019	0.98	1.03
52	12/22/2019 - 12/28/2019	1.00	1.05
53	12/29/2019 - 12/31/2019	1.03	1.08

FDOT 48 hour counts

*Other 48 hour counts
Turning movement counts*

* PEAK SEASON

14-FEB-2020 15:39:31

830UPD

7_1400_PKSEASON.TXT

AXLE FACTORS



2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 14 - PASCO

WEEK	DATES	I75, HILLS CO - SUMT	US 301	1401	1402	1403	1404
1	01/01/2019 - 01/05/2019	0.90			0.96	0.92	1404
2	01/06/2019 - 01/12/2019	0.90			0.96	0.92	0.98
3	01/13/2019 - 01/19/2019	0.89			0.96	0.92	0.98
4	01/20/2019 - 01/26/2019	0.89			0.96	0.92	0.98
5	01/27/2019 - 02/02/2019	0.89			0.96	0.92	0.98
6	02/03/2019 - 02/09/2019	0.89			0.96	0.92	0.98
7	02/10/2019 - 02/16/2019	0.89			0.96	0.92	0.98
8	02/17/2019 - 02/23/2019	0.89			0.96	0.92	0.98
9	02/24/2019 - 03/02/2019	0.89			0.96	0.92	0.98
10	03/03/2019 - 03/09/2019	0.89			0.96	0.92	0.98
11	03/10/2019 - 03/16/2019	0.89			0.96	0.92	0.98
12	03/17/2019 - 03/23/2019	0.89			0.96	0.92	0.98
13	03/24/2019 - 03/30/2019	0.89			0.96	0.92	0.98
14	03/31/2019 - 04/06/2019	0.89			0.96	0.92	0.98
15	04/07/2019 - 04/13/2019	0.89			0.96	0.92	0.98
16	04/14/2019 - 04/20/2019	0.89			0.96	0.92	0.98
17	04/21/2019 - 04/27/2019	0.89			0.96	0.92	0.98
18	04/28/2019 - 05/04/2019	0.89			0.96	0.92	0.98
19	05/05/2019 - 05/11/2019	0.89			0.96	0.92	0.98
20	05/12/2019 - 05/18/2019	0.89			0.96	0.92	0.98
21	05/19/2019 - 05/25/2019	0.89			0.96	0.92	0.98
22	05/26/2019 - 06/01/2019	0.89			0.96	0.92	0.98
23	06/02/2019 - 06/08/2019	0.89			0.96	0.92	0.98
24	06/09/2019 - 06/15/2019	0.89			0.96	0.92	0.98
25	06/16/2019 - 06/22/2019	0.89			0.96	0.92	0.98
26	06/23/2019 - 06/29/2019	0.89			0.96	0.92	0.98
27	06/30/2019 - 07/06/2019	0.89			0.96	0.92	0.98
28	07/07/2019 - 07/13/2019	0.89			0.96	0.92	0.98
29	07/14/2019 - 07/20/2019	0.89			0.96	0.92	0.98
30	07/21/2019 - 07/27/2019	0.89			0.96	0.92	0.98
31	07/28/2019 - 08/03/2019	0.89			0.96	0.92	0.98
32	08/04/2019 - 08/10/2019	0.88			0.96	0.92	0.98
33	08/11/2019 - 08/17/2019	0.88			0.96	0.92	0.98
34	08/18/2019 - 08/24/2019	0.88			0.96	0.92	0.98
35	08/25/2019 - 08/31/2019	0.88			0.96	0.92	0.98
36	09/01/2019 - 09/07/2019	0.88			0.96	0.92	0.98
37	09/08/2019 - 09/14/2019	0.88			0.96	0.92	0.98
38	09/15/2019 - 09/21/2019	0.88			0.96	0.92	0.98
39	09/22/2019 - 09/28/2019	0.88			0.96	0.92	0.98
40	09/29/2019 - 10/05/2019	0.88			0.96	0.92	0.98
41	10/06/2019 - 10/12/2019	0.88			0.96	0.92	0.98
42	10/13/2019 - 10/19/2019	0.88			0.96	0.92	0.98
43	10/20/2019 - 10/26/2019	0.88			0.96	0.92	0.98
44	10/27/2019 - 11/02/2019	0.89			0.96	0.92	0.98
45	11/03/2019 - 11/09/2019	0.89			0.96	0.92	0.98
46	11/10/2019 - 11/16/2019	0.89			0.96	0.92	0.98
47	11/17/2019 - 11/23/2019	0.89			0.96	0.92	0.98
48	11/24/2019 - 11/30/2019	0.89			0.96	0.92	0.98
49	12/01/2019 - 12/07/2019	0.90			0.96	0.92	0.98
50	12/08/2019 - 12/14/2019	0.90			0.96	0.92	0.98
51	12/15/2019 - 12/21/2019	0.90			0.96	0.92	0.98
52	12/22/2019 - 12/28/2019	0.90			0.96	0.92	0.98
53	12/29/2019 - 12/31/2019	0.89			0.96	0.92	0.98

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 14 - PASCO

WEEK	DATES	ALT19, PINE	1405	SR597, HILLS	1406	SR41, HILLS	1407	US19, PINE	1408
			- US 19	CO/L -		- SR 52		- SR 52	
1	01/01/2019	- 01/05/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
2	01/06/2019	- 01/12/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
3	01/13/2019	- 01/19/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
4	01/20/2019	- 01/26/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
5	01/27/2019	- 02/02/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
6	02/03/2019	- 02/09/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
7	02/10/2019	- 02/16/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
8	02/17/2019	- 02/23/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
9	02/24/2019	- 03/02/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
10	03/03/2019	- 03/09/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
11	03/10/2019	- 03/16/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
12	03/17/2019	- 03/23/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
13	03/24/2019	- 03/30/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
14	03/31/2019	- 04/06/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
15	04/07/2019	- 04/13/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
16	04/14/2019	- 04/20/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
17	04/21/2019	- 04/27/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
18	04/28/2019	- 05/04/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
19	05/05/2019	- 05/11/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
20	05/12/2019	- 05/18/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
21	05/19/2019	- 05/25/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
22	05/26/2019	- 06/01/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
23	06/02/2019	- 06/08/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
24	06/09/2019	- 06/15/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
25	06/16/2019	- 06/22/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
26	06/23/2019	- 06/29/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
27	06/30/2019	- 07/06/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
28	07/07/2019	- 07/13/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
29	07/14/2019	- 07/20/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
30	07/21/2019	- 07/27/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
31	07/28/2019	- 08/03/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
32	08/04/2019	- 08/10/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
33	08/11/2019	- 08/17/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
34	08/18/2019	- 08/24/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
35	08/25/2019	- 08/31/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
36	09/01/2019	- 09/07/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
37	09/08/2019	- 09/14/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
38	09/15/2019	- 09/21/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
39	09/22/2019	- 09/28/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
40	09/29/2019	- 10/05/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
41	10/06/2019	- 10/12/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
42	10/13/2019	- 10/19/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
43	10/20/2019	- 10/26/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99
44	10/27/2019	- 11/02/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
45	11/03/2019	- 11/09/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
46	11/10/2019	- 11/16/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
47	11/17/2019	- 11/23/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
48	11/24/2019	- 11/30/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
49	12/01/2019	- 12/07/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
50	12/08/2019	- 12/14/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
51	12/15/2019	- 12/21/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
52	12/22/2019	- 12/28/2019	0.99	0.90	0.90	0.97	0.99	0.99	0.99
53	12/29/2019	- 12/31/2019	0.99	0.89	0.89	0.97	0.99	0.99	0.99

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 14 - PASCO

WEEK	DATES	US98, POLK - US 301	SR54, US41 - PASCO R	SR54, PASCO RD-CR581	SR54, CR581 - US301
1	01/01/2019 - 01/05/2019	0.90	0.97	0.99	0.99
2	01/06/2019 - 01/12/2019	0.90	0.97	0.99	0.99
3	01/13/2019 - 01/19/2019	0.89	0.97	0.99	0.99
4	01/20/2019 - 01/26/2019	0.89	0.97	0.99	0.99
5	01/27/2019 - 02/02/2019	0.89	0.97	0.99	0.99
6	02/03/2019 - 02/09/2019	0.89	0.97	0.99	0.99
7	02/10/2019 - 02/16/2019	0.89	0.97	0.99	0.99
8	02/17/2019 - 02/23/2019	0.89	0.97	0.99	0.99
9	02/24/2019 - 03/02/2019	0.90	0.97	0.99	0.99
10	03/03/2019 - 03/09/2019	0.90	0.97	0.99	0.99
11	03/10/2019 - 03/16/2019	0.90	0.97	0.99	0.99
12	03/17/2019 - 03/23/2019	0.90	0.97	0.99	0.99
13	03/24/2019 - 03/30/2019	0.89	0.97	0.99	0.99
14	03/31/2019 - 04/06/2019	0.89	0.97	0.99	0.99
15	04/07/2019 - 04/13/2019	0.89	0.97	0.99	0.99
16	04/14/2019 - 04/20/2019	0.89	0.97	0.99	0.99
17	04/21/2019 - 04/27/2019	0.89	0.97	0.99	0.99
18	04/28/2019 - 05/04/2019	0.89	0.97	0.99	0.99
19	05/05/2019 - 05/11/2019	0.89	0.97	0.99	0.99
20	05/12/2019 - 05/18/2019	0.89	0.97	0.99	0.99
21	05/19/2019 - 05/25/2019	0.89	0.97	0.99	0.99
22	05/26/2019 - 06/01/2019	0.89	0.97	0.99	0.99
23	06/02/2019 - 06/08/2019	0.89	0.97	0.99	0.99
24	06/09/2019 - 06/15/2019	0.89	0.97	0.99	0.99
25	06/16/2019 - 06/22/2019	0.89	0.97	0.99	0.99
26	06/23/2019 - 06/29/2019	0.89	0.97	0.99	0.99
27	06/30/2019 - 07/06/2019	0.89	0.97	0.99	0.99
28	07/07/2019 - 07/13/2019	0.89	0.97	0.99	0.99
29	07/14/2019 - 07/20/2019	0.89	0.97	0.99	0.99
30	07/21/2019 - 07/27/2019	0.89	0.97	0.99	0.99
31	07/28/2019 - 08/03/2019	0.89	0.97	0.99	0.99
32	08/04/2019 - 08/10/2019	0.89	0.97	0.99	0.99
33	08/11/2019 - 08/17/2019	0.89	0.97	0.99	0.99
34	08/18/2019 - 08/24/2019	0.89	0.97	0.99	0.99
35	08/25/2019 - 08/31/2019	0.89	0.97	0.99	0.99
36	09/01/2019 - 09/07/2019	0.89	0.97	0.99	0.99
37	09/08/2019 - 09/14/2019	0.89	0.97	0.99	0.99
38	09/15/2019 - 09/21/2019	0.89	0.97	0.99	0.99
39	09/22/2019 - 09/28/2019	0.89	0.97	0.99	0.99
40	09/29/2019 - 10/05/2019	0.89	0.97	0.99	0.99
41	10/06/2019 - 10/12/2019	0.89	0.97	0.99	0.99
42	10/13/2019 - 10/19/2019	0.89	0.97	0.99	0.99
43	10/20/2019 - 10/26/2019	0.89	0.97	0.99	0.99
44	10/27/2019 - 11/02/2019	0.90	0.97	0.99	0.99
45	11/03/2019 - 11/09/2019	0.90	0.97	0.99	0.99
46	11/10/2019 - 11/16/2019	0.90	0.97	0.99	0.99
47	11/17/2019 - 11/23/2019	0.90	0.97	0.99	0.99
48	11/24/2019 - 11/30/2019	0.90	0.97	0.99	0.99
49	12/01/2019 - 12/07/2019	0.90	0.97	0.99	0.99
50	12/08/2019 - 12/14/2019	0.90	0.97	0.99	0.99
51	12/15/2019 - 12/21/2019	0.90	0.97	0.99	0.99
52	12/22/2019 - 12/28/2019	0.90	0.97	0.99	0.99
53	12/29/2019 - 12/31/2019	0.89	0.97	0.99	0.99

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 14 - PASCO

WEEK	DATES	SR52, US19 - CR587	SR52, CR587 - CR581	SR52, CR581 - CR577	SR52, CR577 - SR533
1	01/01/2019 - 01/05/2019	0.98	0.90	0.90	1416
2	01/06/2019 - 01/12/2019	0.98	0.90	0.90	0.98
3	01/13/2019 - 01/19/2019	0.98	0.89	0.89	0.98
4	01/20/2019 - 01/26/2019	0.98	0.89	0.89	0.98
5	01/27/2019 - 02/02/2019	0.98	0.89	0.89	0.98
6	02/03/2019 - 02/09/2019	0.98	0.89	0.89	0.98
7	02/10/2019 - 02/16/2019	0.98	0.89	0.89	0.98
8	02/17/2019 - 02/23/2019	0.98	0.89	0.89	0.98
9	02/24/2019 - 03/02/2019	0.98	0.90	0.90	0.98
10	03/03/2019 - 03/09/2019	0.98	0.90	0.90	0.98
11	03/10/2019 - 03/16/2019	0.98	0.90	0.90	0.98
12	03/17/2019 - 03/23/2019	0.98	0.90	0.90	0.98
13	03/24/2019 - 03/30/2019	0.98	0.90	0.90	0.98
14	03/31/2019 - 04/06/2019	0.98	0.89	0.89	0.98
15	04/07/2019 - 04/13/2019	0.98	0.89	0.89	0.98
16	04/14/2019 - 04/20/2019	0.98	0.89	0.89	0.98
17	04/21/2019 - 04/27/2019	0.98	0.89	0.89	0.98
18	04/28/2019 - 05/04/2019	0.98	0.89	0.89	0.98
19	05/05/2019 - 05/11/2019	0.98	0.89	0.89	0.98
20	05/12/2019 - 05/18/2019	0.98	0.89	0.89	0.98
21	05/19/2019 - 05/25/2019	0.98	0.89	0.89	0.98
22	05/26/2019 - 06/01/2019	0.98	0.89	0.89	0.98
23	06/02/2019 - 06/08/2019	0.98	0.89	0.89	0.98
24	06/09/2019 - 06/15/2019	0.98	0.89	0.89	0.98
25	06/16/2019 - 06/22/2019	0.98	0.89	0.89	0.98
26	06/23/2019 - 06/29/2019	0.98	0.89	0.89	0.98
27	06/30/2019 - 07/06/2019	0.98	0.89	0.89	0.98
28	07/07/2019 - 07/13/2019	0.98	0.89	0.89	0.98
29	07/14/2019 - 07/20/2019	0.98	0.89	0.89	0.98
30	07/21/2019 - 07/27/2019	0.98	0.89	0.89	0.98
31	07/28/2019 - 08/03/2019	0.98	0.89	0.89	0.98
32	08/04/2019 - 08/10/2019	0.98	0.89	0.89	0.98
33	08/11/2019 - 08/17/2019	0.98	0.89	0.89	0.98
34	08/18/2019 - 08/24/2019	0.98	0.89	0.89	0.98
35	08/25/2019 - 08/31/2019	0.98	0.89	0.89	0.98
36	09/01/2019 - 09/07/2019	0.98	0.89	0.89	0.98
37	09/08/2019 - 09/14/2019	0.98	0.89	0.89	0.98
38	09/15/2019 - 09/21/2019	0.98	0.89	0.89	0.98
39	09/22/2019 - 09/28/2019	0.98	0.89	0.89	0.98
40	09/29/2019 - 10/05/2019	0.98	0.89	0.89	0.98
41	10/06/2019 - 10/12/2019	0.98	0.89	0.89	0.98
42	10/13/2019 - 10/19/2019	0.98	0.89	0.89	0.98
43	10/20/2019 - 10/26/2019	0.98	0.89	0.89	0.98
44	10/27/2019 - 11/02/2019	0.98	0.90	0.90	0.98
45	11/03/2019 - 11/09/2019	0.98	0.90	0.90	0.98
46	11/10/2019 - 11/16/2019	0.98	0.90	0.90	0.98
47	11/17/2019 - 11/23/2019	0.98	0.90	0.90	0.98
48	11/24/2019 - 11/30/2019	0.98	0.90	0.90	0.98
49	12/01/2019 - 12/07/2019	0.98	0.90	0.90	0.98
50	12/08/2019 - 12/14/2019	0.98	0.90	0.90	0.98
51	12/15/2019 - 12/21/2019	0.98	0.90	0.90	0.98
52	12/22/2019 - 12/28/2019	0.98	0.90	0.90	0.98
53	12/29/2019 - 12/31/2019	0.98	0.89	0.89	0.98

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 14 - PASCO

WEEK	DATES	1417	1418	1419	1420
1	01/01/2019 - 01/05/2019	SR533, US301 - US301	US41, HILLS - CR 583	SR575, US301 - HERN	SR54, US19 - GUNN HW
2	01/06/2019 - 01/12/2019	0.94	0.93	0.90	0.99
3	01/13/2019 - 01/19/2019	0.94	0.93	0.90	0.99
4	01/20/2019 - 01/26/2019	0.94	0.93	0.89	0.99
5	01/27/2019 - 02/02/2019	0.94	0.93	0.89	0.99
6	02/03/2019 - 02/09/2019	0.94	0.93	0.89	0.99
7	02/10/2019 - 02/16/2019	0.94	0.93	0.89	0.99
8	02/17/2019 - 02/23/2019	0.94	0.93	0.89	0.99
9	02/24/2019 - 03/02/2019	0.94	0.93	0.90	0.99
10	03/03/2019 - 03/09/2019	0.94	0.93	0.90	0.99
11	03/10/2019 - 03/16/2019	0.94	0.93	0.90	0.99
12	03/17/2019 - 03/23/2019	0.94	0.93	0.90	0.99
13	03/24/2019 - 03/30/2019	0.94	0.93	0.90	0.99
14	03/31/2019 - 04/06/2019	0.94	0.93	0.89	0.99
15	04/07/2019 - 04/13/2019	0.94	0.93	0.89	0.99
16	04/14/2019 - 04/20/2019	0.94	0.93	0.89	0.99
17	04/21/2019 - 04/27/2019	0.94	0.93	0.89	0.99
18	04/28/2019 - 05/04/2019	0.94	0.93	0.89	0.99
19	05/05/2019 - 05/11/2019	0.94	0.93	0.89	0.99
20	05/12/2019 - 05/18/2019	0.94	0.93	0.89	0.99
21	05/19/2019 - 05/25/2019	0.94	0.93	0.89	0.99
22	05/26/2019 - 06/01/2019	0.94	0.93	0.89	0.99
23	06/02/2019 - 06/08/2019	0.94	0.93	0.89	0.99
24	06/09/2019 - 06/15/2019	0.94	0.93	0.89	0.99
25	06/16/2019 - 06/22/2019	0.94	0.93	0.89	0.99
26	06/23/2019 - 06/29/2019	0.94	0.93	0.89	0.99
27	06/30/2019 - 07/06/2019	0.94	0.93	0.89	0.99
28	07/07/2019 - 07/13/2019	0.94	0.93	0.89	0.99
29	07/14/2019 - 07/20/2019	0.94	0.93	0.89	0.99
30	07/21/2019 - 07/27/2019	0.94	0.93	0.89	0.99
31	07/28/2019 - 08/03/2019	0.94	0.93	0.89	0.99
32	08/04/2019 - 08/10/2019	0.94	0.93	0.89	0.99
33	08/11/2019 - 08/17/2019	0.94	0.93	0.89	0.99
34	08/18/2019 - 08/24/2019	0.94	0.93	0.89	0.99
35	08/25/2019 - 08/31/2019	0.94	0.93	0.89	0.99
36	09/01/2019 - 09/07/2019	0.94	0.93	0.89	0.99
37	09/08/2019 - 09/14/2019	0.94	0.93	0.89	0.99
38	09/15/2019 - 09/21/2019	0.94	0.93	0.89	0.99
39	09/22/2019 - 09/28/2019	0.94	0.93	0.89	0.99
40	09/29/2019 - 10/05/2019	0.94	0.93	0.89	0.99
41	10/06/2019 - 10/12/2019	0.94	0.93	0.89	0.99
42	10/13/2019 - 10/19/2019	0.94	0.93	0.89	0.99
43	10/20/2019 - 10/26/2019	0.94	0.93	0.89	0.99
44	10/27/2019 - 11/02/2019	0.94	0.93	0.90	0.99
45	11/03/2019 - 11/09/2019	0.94	0.93	0.90	0.99
46	11/10/2019 - 11/16/2019	0.94	0.93	0.90	0.99
47	11/17/2019 - 11/23/2019	0.94	0.93	0.90	0.99
48	11/24/2019 - 11/30/2019	0.94	0.93	0.90	0.99
49	12/01/2019 - 12/07/2019	0.94	0.93	0.90	0.99
50	12/08/2019 - 12/14/2019	0.94	0.93	0.90	0.99
51	12/15/2019 - 12/21/2019	0.94	0.93	0.90	0.99
52	12/22/2019 - 12/28/2019	0.94	0.93	0.90	0.99
53	12/29/2019 - 12/31/2019	0.94	0.93	0.89	0.99

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 14 - PASCO

WEEK	DATES	SR54, PLAYER - US 41	1421	US41, CR583 - HERN	1422	SR 700, US 301-PASCO	1423	SR 39, HILLS-US 301	1424
1	01/01/2019 - 01/05/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
2	01/06/2019 - 01/12/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
3	01/13/2019 - 01/19/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
4	01/20/2019 - 01/26/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
5	01/27/2019 - 02/02/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
6	02/03/2019 - 02/09/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
7	02/10/2019 - 02/16/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
8	02/17/2019 - 02/23/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
9	02/24/2019 - 03/02/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
10	03/03/2019 - 03/09/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
11	03/10/2019 - 03/16/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
12	03/17/2019 - 03/23/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
13	03/24/2019 - 03/30/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
14	03/31/2019 - 04/06/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
15	04/07/2019 - 04/13/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
16	04/14/2019 - 04/20/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
17	04/21/2019 - 04/27/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
18	04/28/2019 - 05/04/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
19	05/05/2019 - 05/11/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
20	05/12/2019 - 05/18/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
21	05/19/2019 - 05/25/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
22	05/26/2019 - 06/01/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
23	06/02/2019 - 06/08/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
24	06/09/2019 - 06/15/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
25	06/16/2019 - 06/22/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
26	06/23/2019 - 06/29/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
27	06/30/2019 - 07/06/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
28	07/07/2019 - 07/13/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
29	07/14/2019 - 07/20/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
30	07/21/2019 - 07/27/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
31	07/28/2019 - 08/03/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
32	08/04/2019 - 08/10/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
33	08/11/2019 - 08/17/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
34	08/18/2019 - 08/24/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
35	08/25/2019 - 08/31/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
36	09/01/2019 - 09/07/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
37	09/08/2019 - 09/14/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
38	09/15/2019 - 09/21/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
39	09/22/2019 - 09/28/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
40	09/29/2019 - 10/05/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
41	10/06/2019 - 10/12/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
42	10/13/2019 - 10/19/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
43	10/20/2019 - 10/26/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89
44	10/27/2019 - 11/02/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
45	11/03/2019 - 11/09/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
46	11/10/2019 - 11/16/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
47	11/17/2019 - 11/23/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
48	11/24/2019 - 11/30/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
49	12/01/2019 - 12/07/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
50	12/08/2019 - 12/14/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
51	12/15/2019 - 12/21/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
52	12/22/2019 - 12/28/2019		0.98	0.90	0.90	0.90	0.90	0.89	0.89
53	12/29/2019 - 12/31/2019		0.98	0.89	0.89	0.89	0.89	0.89	0.89

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 14 - PASCO

WEEK	DATES	1425 PASCO EASTERN HPMS 1	1426 PASCO EASTERN HPMS 2	1427 PASCO CENTRAL HPMS	1428 PASCO WESTERN HPMS 1
1	01/01/2019 - 01/05/2019	0.90	0.90	0.90	0.90
2	01/06/2019 - 01/12/2019	0.90	0.89	0.90	0.90
3	01/13/2019 - 01/19/2019	0.89	0.89	0.89	0.89
4	01/20/2019 - 01/26/2019	0.89	0.89	0.89	0.89
5	01/27/2019 - 02/02/2019	0.89	0.89	0.89	0.89
6	02/03/2019 - 02/09/2019	0.89	0.89	0.89	0.89
7	02/10/2019 - 02/16/2019	0.89	0.89	0.89	0.89
8	02/17/2019 - 02/23/2019	0.89	0.89	0.89	0.89
9	02/24/2019 - 03/02/2019	0.90	0.90	0.90	0.90
10	03/03/2019 - 03/09/2019	0.90	0.90	0.90	0.90
11	03/10/2019 - 03/16/2019	0.90	0.90	0.90	0.90
12	03/17/2019 - 03/23/2019	0.90	0.90	0.90	0.90
13	03/24/2019 - 03/30/2019	0.90	0.89	0.89	0.89
14	03/31/2019 - 04/06/2019	0.89	0.89	0.89	0.89
15	04/07/2019 - 04/13/2019	0.89	0.89	0.89	0.89
16	04/14/2019 - 04/20/2019	0.89	0.89	0.89	0.89
17	04/21/2019 - 04/27/2019	0.89	0.89	0.89	0.89
18	04/28/2019 - 05/04/2019	0.89	0.89	0.89	0.89
19	05/05/2019 - 05/11/2019	0.89	0.89	0.89	0.89
20	05/12/2019 - 05/18/2019	0.89	0.89	0.89	0.89
21	05/19/2019 - 05/25/2019	0.89	0.89	0.89	0.89
22	05/26/2019 - 06/01/2019	0.89	0.89	0.89	0.89
23	06/02/2019 - 06/08/2019	0.89	0.89	0.89	0.89
24	06/09/2019 - 06/15/2019	0.89	0.89	0.89	0.89
25	06/16/2019 - 06/22/2019	0.89	0.89	0.89	0.89
26	06/23/2019 - 06/29/2019	0.89	0.89	0.89	0.89
27	06/30/2019 - 07/06/2019	0.89	0.89	0.89	0.89
28	07/07/2019 - 07/13/2019	0.89	0.89	0.89	0.89
29	07/14/2019 - 07/20/2019	0.89	0.89	0.89	0.89
30	07/21/2019 - 07/27/2019	0.89	0.89	0.89	0.89
31	07/28/2019 - 08/03/2019	0.89	0.89	0.89	0.89
32	08/04/2019 - 08/10/2019	0.89	0.89	0.89	0.89
33	08/11/2019 - 08/17/2019	0.89	0.89	0.89	0.89
34	08/18/2019 - 08/24/2019	0.89	0.89	0.89	0.89
35	08/25/2019 - 08/31/2019	0.89	0.89	0.89	0.89
36	09/01/2019 - 09/07/2019	0.89	0.89	0.89	0.89
37	09/08/2019 - 09/14/2019	0.89	0.89	0.89	0.89
38	09/15/2019 - 09/21/2019	0.89	0.89	0.89	0.89
39	09/22/2019 - 09/28/2019	0.89	0.89	0.89	0.89
40	09/29/2019 - 10/05/2019	0.89	0.89	0.89	0.89
41	10/06/2019 - 10/12/2019	0.89	0.89	0.89	0.89
42	10/13/2019 - 10/19/2019	0.89	0.89	0.89	0.89
43	10/20/2019 - 10/26/2019	0.89	0.89	0.89	0.89
44	10/27/2019 - 11/02/2019	0.90	0.90	0.90	0.90
45	11/03/2019 - 11/09/2019	0.90	0.90	0.90	0.90
46	11/10/2019 - 11/16/2019	0.90	0.90	0.90	0.90
47	11/17/2019 - 11/23/2019	0.90	0.90	0.90	0.90
48	11/24/2019 - 11/30/2019	0.90	0.90	0.90	0.90
49	12/01/2019 - 12/07/2019	0.90	0.90	0.90	0.90
50	12/08/2019 - 12/14/2019	0.90	0.90	0.90	0.90
51	12/15/2019 - 12/21/2019	0.90	0.90	0.90	0.90
52	12/22/2019 - 12/28/2019	0.90	0.90	0.89	0.90
53	12/29/2019 - 12/31/2019	0.89	0.89	0.89	0.89

2019 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 14 - PASCO

WEEK	DATES	PASCO WESTERN HPMS 2	PASCO COUNTY WIDE	SR 56	1431
1	01/01/2019 - 01/05/2019	0.90	0.98		0.90
2	01/06/2019 - 01/12/2019	0.90	0.98		0.90
3	01/13/2019 - 01/19/2019	0.89	0.98		0.89
4	01/20/2019 - 01/26/2019	0.89	0.98		0.89
5	01/27/2019 - 02/02/2019	0.89	0.98		0.89
6	02/03/2019 - 02/09/2019	0.89	0.98		0.89
7	02/10/2019 - 02/16/2019	0.89	0.98		0.89
8	02/17/2019 - 02/23/2019	0.89	0.98		0.90
9	02/24/2019 - 03/02/2019	0.90	0.98		0.92
10	03/03/2019 - 03/09/2019	0.90	0.98		0.93
11	03/10/2019 - 03/16/2019	0.90	0.98		0.94
12	03/17/2019 - 03/23/2019	0.90	0.98		0.93
13	03/24/2019 - 03/30/2019	0.90	0.98		0.92
14	03/31/2019 - 04/06/2019	0.89	0.98		0.91
15	04/07/2019 - 04/13/2019	0.89	0.98		0.90
16	04/14/2019 - 04/20/2019	0.89	0.98		0.89
17	04/21/2019 - 04/27/2019	0.89	0.98		0.89
18	04/28/2019 - 05/04/2019	0.89	0.98		0.89
19	05/05/2019 - 05/11/2019	0.89	0.98		0.89
20	05/12/2019 - 05/18/2019	0.89	0.98		0.89
21	05/19/2019 - 05/25/2019	0.89	0.98		0.89
22	05/26/2019 - 06/01/2019	0.89	0.98		0.89
23	06/02/2019 - 06/08/2019	0.89	0.98		0.89
24	06/09/2019 - 06/15/2019	0.89	0.98		0.89
25	06/16/2019 - 06/22/2019	0.89	0.98		0.89
26	06/23/2019 - 06/29/2019	0.89	0.98		0.89
27	06/30/2019 - 07/06/2019	0.89	0.98		0.89
28	07/07/2019 - 07/13/2019	0.89	0.98		0.89
29	07/14/2019 - 07/20/2019	0.89	0.98		0.89
30	07/21/2019 - 07/27/2019	0.89	0.98		0.89
31	07/28/2019 - 08/03/2019	0.89	0.98		0.89
32	08/04/2019 - 08/10/2019	0.89	0.98		0.89
33	08/11/2019 - 08/17/2019	0.89	0.98		0.89
34	08/18/2019 - 08/24/2019	0.89	0.98		0.89
35	08/25/2019 - 08/31/2019	0.89	0.98		0.89
36	09/01/2019 - 09/07/2019	0.89	0.98		0.89
37	09/08/2019 - 09/14/2019	0.89	0.98		0.89
38	09/15/2019 - 09/21/2019	0.89	0.98		0.89
39	09/22/2019 - 09/28/2019	0.89	0.98		0.89
40	09/29/2019 - 10/05/2019	0.89	0.98		0.89
41	10/06/2019 - 10/12/2019	0.89	0.98		0.89
42	10/13/2019 - 10/19/2019	0.89	0.98		0.89
43	10/20/2019 - 10/26/2019	0.89	0.98		0.89
44	10/27/2019 - 11/02/2019	0.90	0.98		0.90
45	11/03/2019 - 11/09/2019	0.90	0.98		0.90
46	11/10/2019 - 11/16/2019	0.90	0.98		0.90
47	11/17/2019 - 11/23/2019	0.90	0.98		0.90
48	11/24/2019 - 11/30/2019	0.90	0.98		0.90
49	12/01/2019 - 12/07/2019	0.90	0.98		0.90
50	12/08/2019 - 12/14/2019	0.90	0.98		0.90
51	12/15/2019 - 12/21/2019	0.90	0.98		0.90
52	12/22/2019 - 12/28/2019	0.90	0.98		0.90
53	12/29/2019 - 12/31/2019	0.89	0.98		0.89

APPENDIX - D

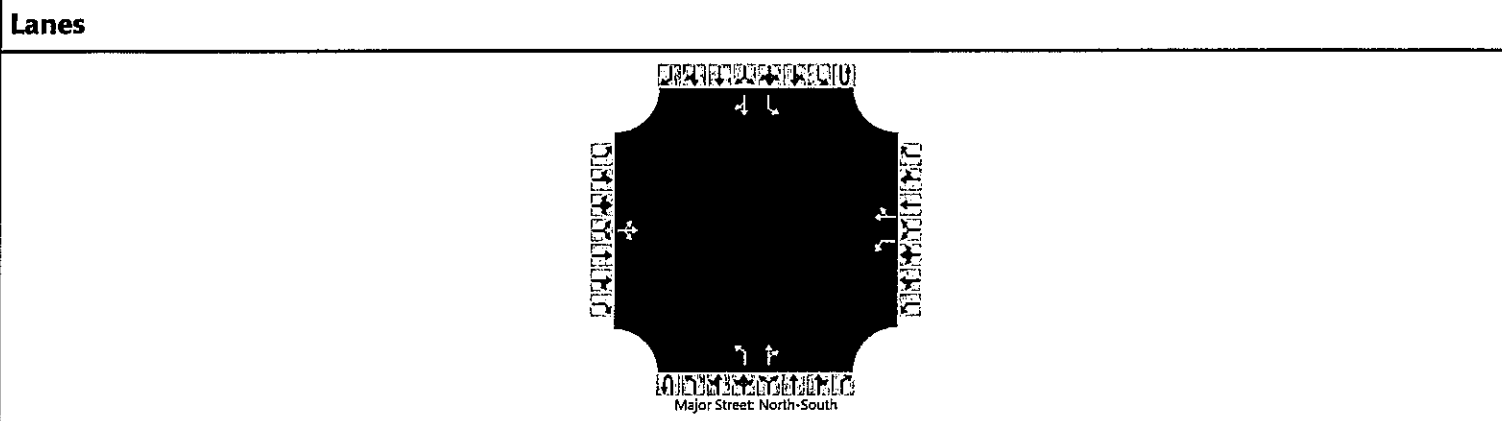


INTERSECTION ANALYSIS
(EXISTING)



HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst		Intersection					
Agency/Co.		Jurisdiction					
Date Performed	11/5/2020	East/West Street	Morningside Drive/Adair				
Analysis Year	2020	North/South Street	SR 52				
Time Analyzed	AM Peak	Peak Hour Factor	0.81				
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25				
Project Description	Existing Peak Season						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	1	1	0	0	1	1	0
Configuration			LTR			L		TR		L		TR		L		TR
Volume (veh/h)		32	36	44		67	10	85		23	345	58		49	392	18
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

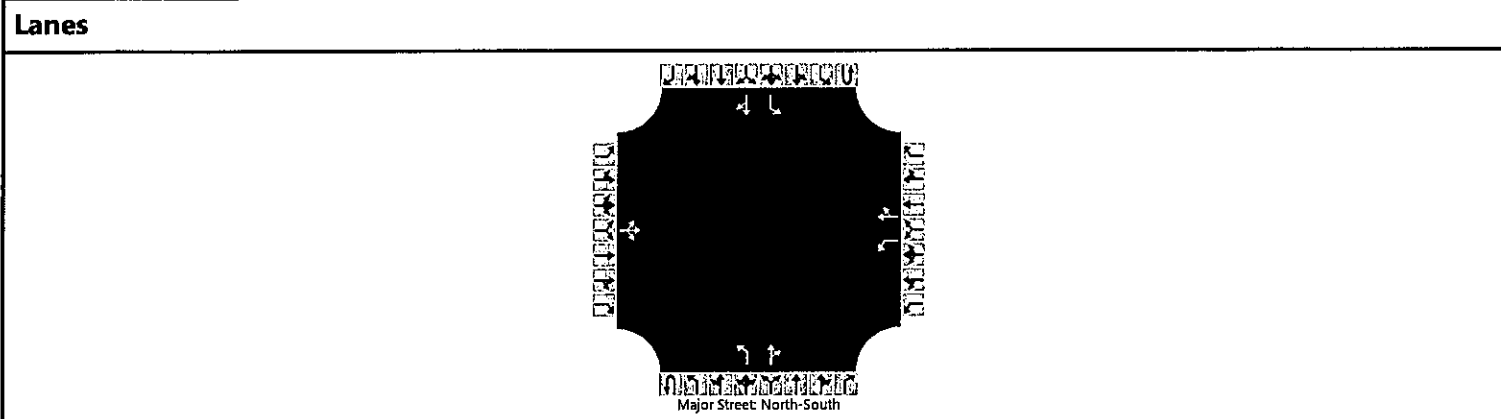
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			138			83		117		28				60		
Capacity, c (veh/h)			204			113		482		1053				1061		
v/c Ratio			0.68			0.73		0.24		0.03				0.06		
95% Queue Length, Q ₉₅ (veh)			4.2			4.0		0.9		0.1				0.2		
Control Delay (s/veh)			53.4			95.0		14.9		8.5				8.6		
Level of Service (LOS)			F			F		B		A				A		
Approach Delay (s/veh)	53.4				48.0				0.5				0.9			
Approach LOS	F				E											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst		Intersection					
Agency/Co.		Jurisdiction					
Date Performed	11/5/2020	East/West Street		Morningside Drive/Adair			
Analysis Year	2020	North/South Street		SR 52			
Time Analyzed	PM Peak	Peak Hour Factor		0.86			
Intersection Orientation	North-South	Analysis Time Period (hrs)		0.25			
Project Description	Existing Peak Season						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement									1U	1	2	3	4U	4	5	6
Priority		10	11	12		7	8	9								
Number of Lanes		0	1	0		1	1	0	0	1	1	0	0	1	1	0
Configuration			LTR			L		TR		L		TR		L		TR
Volume (veh/h)		24	33	56		87	30	43		40	573	82		59	485	53
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

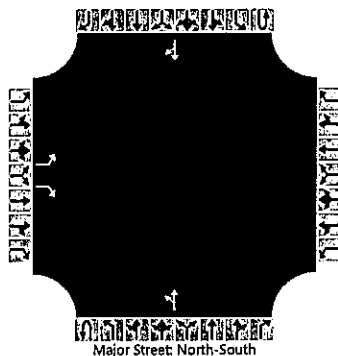
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			131			101		85		47				69		
Capacity, c (veh/h)			121			47		177		951				846		
v/c Ratio			1.09			2.17		0.48		0.05				0.08		
95% Queue Length, Q ₉₅ (veh)			7.7			10.5		2.3		0.2				0.3		
Control Delay (s/veh)			177.8			726.3		42.7		9.0				9.6		
Level of Service (LOS)			F			F		E		A				A		
Approach Delay (s/veh)	177.8				414.4				0.5				1.0			
Approach LOS	F				F				A				A			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst		Intersection					
Agency/Co.		Jurisdiction					
Date Performed	11/5/2020	East/West Street		Morningside Drive			
Analysis Year	2020	North/South Street		Fort King Road			
Time Analyzed	AM Peak	Peak Hour Factor		0.68			
Intersection Orientation	North-South	Analysis Time Period (hrs)		0.25			
Project Description	Existing Peak Season						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0		0	1	0		0	1	0
Configuration		L		R						LT						TR
Volume (veh/h)		67		91						105	248				213	60
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

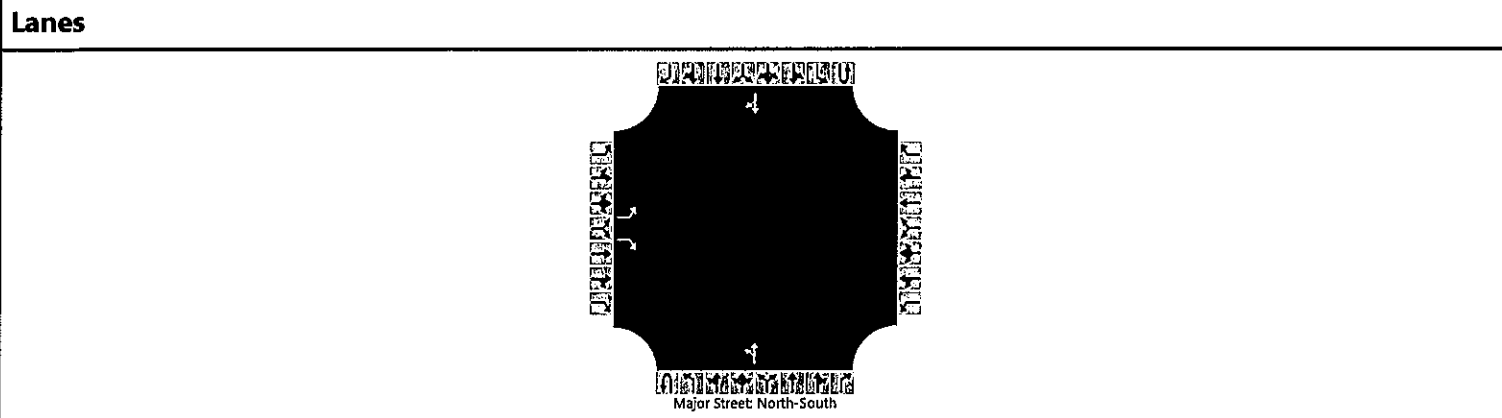
Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		99		134						154						
Capacity, c (veh/h)		214		685						1152						
v/c Ratio		0.46		0.20						0.13						
95% Queue Length, Q ₉₅ (veh)		2.2		0.7						0.5						
Control Delay (s/veh)		35.4		11.5						8.6						
Level of Service (LOS)		E		B						A						
Approach Delay (s/veh)	21.7								3.6							
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst		Intersection					
Agency/Co.		Jurisdiction					
Date Performed	11/5/2020	East/West Street	Morningside Drive				
Analysis Year	2020	North/South Street	Fort King Road				
Time Analyzed	PM Peak	Peak Hour Factor	0.87				
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25				
Project Description	Existing Peak Season						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0	
Configuration		L		R						LT						TR	
Volume (veh/h)		30		128						123	198					264	48
Percent Heavy Vehicles (%)		3		3						3							
Proportion Time Blocked																	
Percent Grade (%)	0																
Right Turn Channelized	No																
Median Type Storage	Undivided																

Critical and Follow-up Headways
























Base Critical Headway (sec)		7.1		6.2						4.1							
Critical Headway (sec)		6.43		6.23						4.13							
Base Follow-Up Headway (sec)		3.5		3.3						2.2							
Follow-Up Headway (sec)		3.53		3.33						2.23							

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34		147						141							
Capacity, c (veh/h)		288		708						1195							
v/c Ratio		0.12		0.21						0.12							
95% Queue Length, Q ₉₅ (veh)		0.4		0.8						0.4							
Control Delay (s/veh)		19.2		11.4						8.4							
Level of Service (LOS)		C		B						A							
Approach Delay (s/veh)	12.9								3.9								
Approach LOS	B																

Lanes, Volumes, Timings
4: Morningside Drive & US 301

02/01/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	6	30	4	36	22	722	20	29	708	21
Future Volume (vph)	8	1	6	30	4	36	22	722	20	29	708	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		200	0		155	425		0	290		355
Storage Lanes	1		1	0		1	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.996				0.850
Flt Protected	0.950				0.957		0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	0	1783	1583	1770	3525	0	1770	3539	1583
Flt Permitted	0.733				0.749		0.348			0.326		
Satd. Flow (perm)	1365	1863	1583	0	1395	1583	648	3525	0	607	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			158			158		3				104
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		822			1313			868			935	
Travel Time (s)		18.7			29.8			11.8			12.8	
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)	9	1	7	33	4	39	24	785	22	32	770	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	1	7	0	37	39	24	807	0	32	770	23
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			12			12	
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		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	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	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	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	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6

Lanes, Volumes, Timings

4: Morningside Drive & US 301

02/01/2021

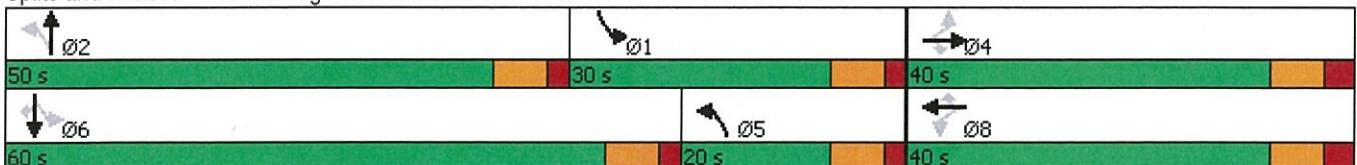


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	25.6	25.6	25.6	25.6	25.6	25.6	11.8	24.8		11.8	24.8	24.8
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	20.0	50.0		30.0	60.0	60.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	41.7%		25.0%	50.0%	50.0%
Maximum Green (s)	32.4	32.4	32.4	32.4	32.4	32.4	13.2	43.2		23.2	53.2	53.2
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8		4.8	4.8	4.8
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.6	7.6	7.6		7.6	7.6	6.8	6.8		6.8	6.8	6.8
Lead/Lag							Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max		None	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0		11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0		0	0	0
Act Effct Green (s)	7.7	7.7	7.7		7.7	7.7	60.6	57.6		66.0	61.3	61.3
Actuated g/C Ratio	0.09	0.09	0.09		0.09	0.09	0.72	0.69		0.79	0.73	0.73
v/c Ratio	0.07	0.01	0.02		0.29	0.14	0.04	0.33		0.05	0.30	0.02
Control Delay	36.9	36.0	0.2		42.4	1.0	4.3	9.8		3.5	6.6	0.0
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	36.9	36.0	0.2		42.4	1.0	4.3	9.8		3.5	6.6	0.0
LOS	D	D	A		D	A	A	A		A	A	A
Approach Delay		21.7			21.1			9.6			6.3	
Approach LOS		C			C			A			A	

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	83.8
Natural Cycle:	65
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.33
Intersection Signal Delay:	8.7
Intersection Capacity Utilization:	47.3%
Analysis Period (min):	15
Intersection LOS:	A
ICU Level of Service:	A

Splits and Phases: 4: Morningside Drive & US 301



Lanes, Volumes, Timings
4: Morningside Drive & US 301

02/01/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	11	30	91	13	90	58	1151	52	92	896	80
Future Volume (vph)	80	11	30	91	13	90	58	1151	52	92	896	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		200	0		155	425		0	290		355
Storage Lanes	1		1	0		1	1		0	1		1
Taper Length (ft)	25			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.993				0.850
Flt Protected	0.950				0.958		0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	0	1785	1583	1770	3514	0	1770	3539	1583
Flt Permitted	0.684				0.744		0.239			0.123		
Satd. Flow (perm)	1274	1863	1583	0	1386	1583	445	3514	0	229	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			158			158		4				104
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		822			1313			868			935	
Travel Time (s)		18.7			29.8			11.8			12.8	
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)	87	12	33	99	14	98	63	1251	57	100	974	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	12	33	0	113	98	63	1308	0	100	974	87
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			12			12	
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		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	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	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	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	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6

Lanes, Volumes, Timings
4: Morningside Drive & US 301

02/01/2021

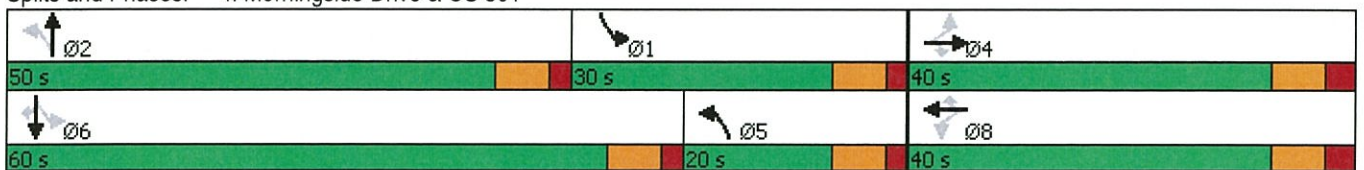


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4	8	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	25.6	25.6	25.6	25.6	25.6	25.6	11.8	24.8		11.8	24.8	24.8
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	20.0	50.0		30.0	60.0	60.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	16.7%	41.7%		25.0%	50.0%	50.0%
Maximum Green (s)	32.4	32.4	32.4	32.4	32.4	32.4	13.2	43.2		23.2	53.2	53.2
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8		4.8	4.8	4.8
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.6	7.6	7.6		7.6	7.6	6.8	6.8		6.8	6.8	6.8
Lead/Lag							Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max		None	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0		11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0		0	0	0
Act Effct Green (s)	12.7	12.7	12.7		12.7	12.7	52.2	46.1		64.3	53.7	53.7
Actuated g/C Ratio	0.14	0.14	0.14		0.14	0.14	0.57	0.51		0.71	0.59	0.59
v/c Ratio	0.49	0.05	0.09		0.59	0.27	0.18	0.73		0.25	0.47	0.09
Control Delay	46.7	34.5	0.5		50.0	3.0	8.7	23.6		13.3	12.8	1.9
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	46.7	34.5	0.5		50.0	3.0	8.7	23.6		13.3	12.8	1.9
LOS	D	C	A		D	A	A	C		B	B	A
Approach Delay		34.1			28.2			23.0			12.0	
Approach LOS		C			C			C			B	

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	91
Natural Cycle:	75
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.73
Intersection Signal Delay:	19.4
Intersection Capacity Utilization:	68.6%
Analysis Period (min):	15
Intersection LOS:	B
ICU Level of Service:	C

Splits and Phases: 4: Morningside Drive & US 301



APPENDIX - E



FDOT GENERALIZED CAPACITY TABLES



TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's Urbanized Areas¹

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Core Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	1,510	1,600	**	4	4,050	5,640	6,800	7,420	
4	Divided	*	3,420	3,580	**	6	5,960	8,310	10,220	11,150	
6	Divided	*	5,250	5,390	**	8	7,840	10,960	13,620	14,850	
8	Divided	*	7,090	7,210	**	10	9,800	13,510	17,040	18,580	
						12	11,600	16,350	20,930	23,200	
Class II (35 mph or slower posted speed limit)						Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	660	1,330	1,410	4	4,130	5,640	7,070	7,690	
4	Divided	*	1,310	2,920	3,040	6	6,200	8,450	10,510	11,530	
6	Divided	*	2,090	4,500	4,590	8	8,270	11,270	13,960	15,380	
8	Divided	*	2,880	6,060	6,130	10	10,350	14,110	17,310	19,220	
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						Freeway Adjustments					
Non-State Signalized Roadways - 10%						Auxiliary Lanes Present in Both Directions + 1,800 Ramp Metering + 5%					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E
2	Divided	Yes	No	+5%		2	Undivided	1,050	1,620	2,180	2,930
2	Undivided	No	No	-20%		4	Divided	3,270	4,730	5,960	6,780
Multi	Undivided	Yes	No	-5%		6	Divided	4,910	7,090	8,950	10,180
Multi	Undivided	No	No	-25%		Uninterrupted Flow Highway Adjustments					
-	-	-	Yes	+5%		Lanes	Median	Exclusive left lanes	Adjustment factors		
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6						2	Divided	Yes	+5%		
BICYCLE MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						Multi	Undivided	Yes	-5%		
Paved Shoulder/Bicycle Lane Coverage						Multi	Undivided	No	-25%		
		B	C	D	E	PEDESTRIAN MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
	0-49%	*	260	680	1,770	Sidewalk Coverage	B	C	D	E	
	50-84%	190	600	1,770	>1,770	0-49%	*	*	250	850	
	85-100%	830	1,700	>1,770	**	50-84%	*	150	780	1,420	
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)						85-100%	340	960	1,560	>1,770	
		B	C	D	E	BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)					
	0-84%	> 5	≥ 4	≥ 3	≥ 2	Sidewalk Coverage	B	C	D	E	
	85-100%	> 4	≥ 3	≥ 2	≥ 1	0-84%	*	*	250	850	
						50-84%	*	150	780	1,420	
						85-100%	340	960	1,560	>1,770	

¹ Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

² Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
<https://www.fdot.gov/planning/systems/>

TABLE 4
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's
Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities				Interrupted Flow Facilities					
	Freeways	Core Freeways	Highways		State Arterials				Class I	
					Class I	Class II		Bicycle	Pedestrian	
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	urban	urban								
Number of through lanes (both dir.)	4-10	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	65	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	70	55	55	50	55	35	35	50	50
Auxiliary Lanes (n,y)	n	n								
Median (d, twlt, n, nr, r)				d	n	r	n	r	r	r
Terrain (l,r)	1	1	1	1	1	1	1	1	1	1
% no passing zone			80							
Exclusive left turn lane impact (n, y)			[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)					n	n	n	n	n	n
Facility length (mi)	3	3	5	5	2	2	1.9	1.8	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.090	0.085	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	0.95	0.95	0.95	0.95	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Speed Adjustment Factor (SAF)	0.975	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968	0.968		0.968						
% left turns					12	12	12	12	12	12
% right turns					12	12	12	12	12	12
CONTROL CHARACTERISTICS										
Number of signals					4	4	10	10	4	6
Arrival type (1-6)					3	3	4	4	4	4
Signal type (a, c, p)					c	c	c	c	c	c
Cycle length (C)					120	150	120	120	120	120
Effective green ratio (g/C)					0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)									n, 50%, y	n
Outside lane width (n, t, w)									t	t
Pavement condition (d, t, u)									t	
On-street parking (n, y)										
Sidewalk (n, y)										n, 50%, y
Sidewalk/roadway separation(a, t, w)										t
Sidewalk protective barrier (n, y)										n
LEVEL OF SERVICE THRESHOLDS										
Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus		
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.		
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6		
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4		
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3		
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2		

% ffs = Percent free flow speed ats = Average travel speed

APPENDIX - F



2045 MODEL ADJUSTMENTS



ADOPTED LRTP

Morningside Route Study Socioeconomic Data

Zone	Dwelling Units	Population	Industrial Employees	Commercial Employees	Service Employees	Total Employees	K-12 Students	College Students
2172	787	2052	117	24	39	180	0	0
2176	105	247	10	18	2	30	0	0
2177	635	1176	28	4	166	198	0	0
2178	134	271	8	2	117	127	0	0
2263	21	41	4	0	482	486	0	8342
2265	355	826	16	107	190	313	0	0
2356	686	1742	15	191	70	276	1365	0
2357	411	941	8	127	7	142	0	0
2358	505	1024	20	10	27	57	0	0
2359	612	1371	134	263	197	594	0	0
2361	755	1757	31	62	11	104	0	0
2362	871	2600	24	183	345	552	442	0
2363	845	1773	41	319	664	1024	0	0
2388	576	1484	152	36	61	249	0	0
2389	126	269	19	3	6	28	0	0
2390	276	810	16	5	100	121	0	1566
2391	315	887	165	18	76	259	0	0
2392	547	1325	1101	152	863	2116	0	0
2393	394	1232	31	30	49	110	0	0
2394	5	10	113	0	117	230	0	0
2395	909	2153	133	0	67	200	0	0
2396	870	2367	4	7	118	129	0	0
2397	483	796	49	169	593	811	487	0
2398	13	18	15	111	1052	1178	0	0
2399	194	469	18	11	124	153	142	0
2400	909	1972	24	36	509	569	0	0
2401	204	461	8	12	215	235	0	0
2402	617	1256	33	93	756	882	1594	0
2403	196	447	37	59	601	697	0	0
2404	623	1525	73	4	225	302	3033	197
2405	271	549	87	243	712	1042	0	0
2406	390	961	26	6	167	199	0	0
2407	307	573	53	318	130	501	0	0
2408	616	772	73	670	389	1132	0	0
2409	297	715	19	0	6	25	0	0
2410	10	23	15	0	0	15	0	0
2411	31	50	21	0	9	30	0	0
2412	976	1498	31	2	34	67	0	0
2413	11	37	108	0	0	108	0	0
2414	27	69	107	10	12	129	0	0
2416	684	1523	38	12	290	340	1339	0
2417	1512	3255	91	16	61	168	0	0

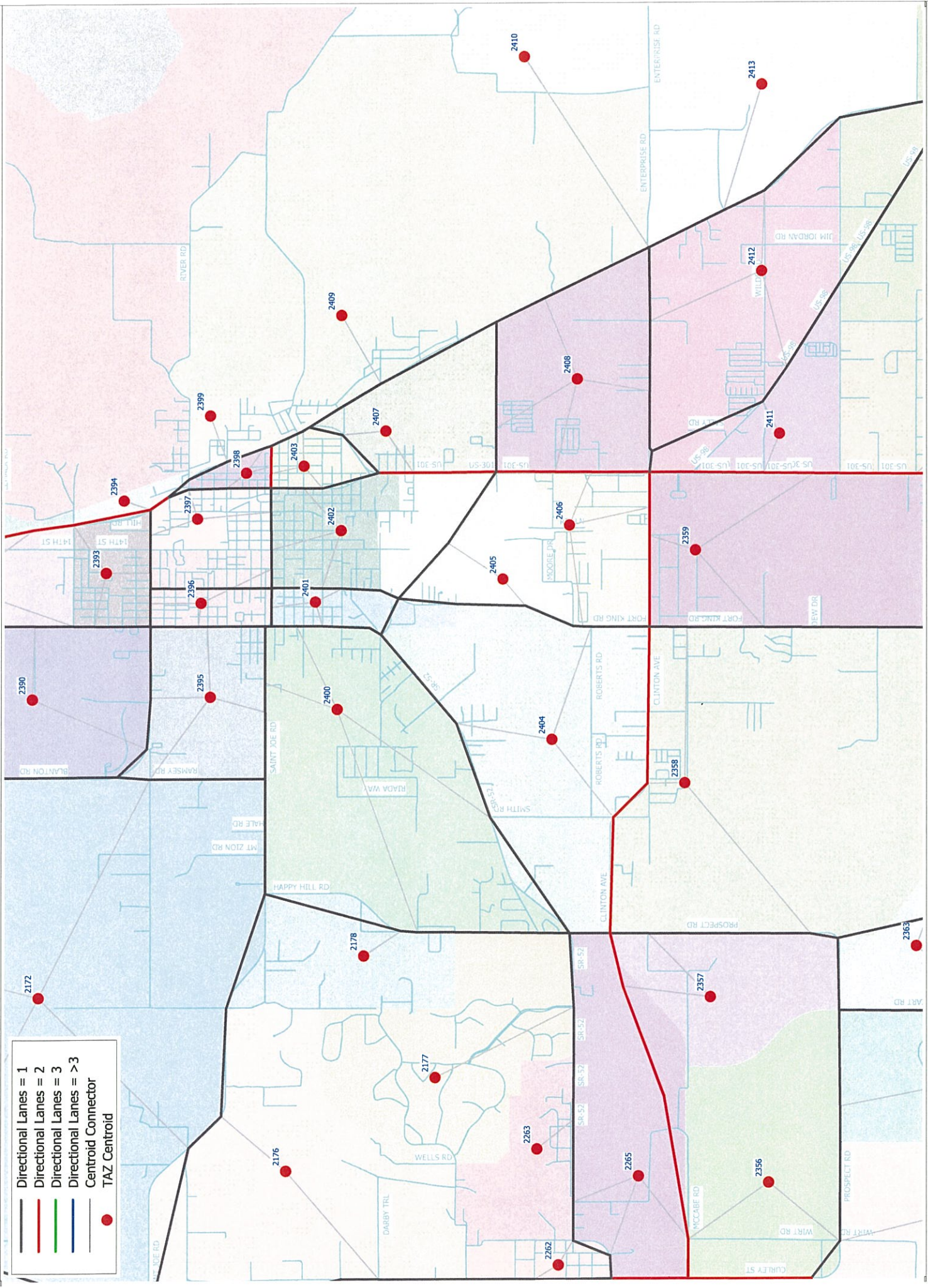
PROPOSED CHANGES

Morningside Route Study 2045 Socioeconomic Data

Zone	Dwelling Units	Population	Industrial Employees	Commercial Employees	Service Employees	Total Employees	K-12 Students	College Students
2172	787	2052	117	24	39	180	0	0
2176	105	247	10	18	2	30	0	0
2177	635	1176	28	4	166	198	0	0
2178	134	271	8	2	117	127	0	0
2263	21	41	4	0	482	486	0	8342
2265	355	826	16	107	190	313	0	0
2356	686	1742	15	191	70	276	1365	0
2357	411	941	8	127	7	142	0	0
2358	505	1024	20	10	27	57	0	0
2359	612	1371	134	263	197	594	0	0
2361	755	1757	31	62	11	104	0	0
2362	871	2600	24	183	345	552	442	0
2363	845	1773	41	319	664	1024	0	0
2388	576	1484	152	36	61	249	0	0
2389	126	269	19	3	6	28	0	0
2390	276	810	16	5	100	121	0	1566
2391	315	887	165	18	76	259	0	0
2392	547	1325	1101	152	863	2116	0	0
2393	394	1232	31	30	49	110	0	0
2394	5	10	113	0	117	230	0	0
2395	909	2153	133	0	67	200	0	0
2396	870	2367	4	7	118	129	0	0
2397	483	796	49	169	593	811	487	0
2398	13	18	15	111	1052	1178	0	0
2399	194	469	18	11	124	153	142	0
2400	909	1972	24	36	509	569	0	0
2401	204	461	8	12	215	235	0	0
2402	617	1256	33	93	756	882	1594	0
2403	196	447	37	59	601	697	0	0
2404	623	1525	73	4	225	302	3033	197
2405	201	468	0	0	0	0	0	0
2406	390	961	26	6	167	199	0	0
2407	307	573	53	318	130	501	0	0
2408	616	772	73	670	389	1132	0	0
2409	297	715	19	0	6	25	0	0
2410	10	23	15	0	0	15	0	0
2411	31	50	21	0	9	30	0	0
2412	976	1498	31	2	34	67	0	0
2413	11	37	108	0	0	108	0	0
2414	27	69	107	10	12	129	0	0
2416	684	1523	38	12	290	340	1339	0
2417	1512	3255	91	16	61	168	0	0
2500	250	581	87	243	712	1042	0	0

ADOPTED MODEL

TBRPM v9.0 2045 CF NETWORK - WITH CENTROID NUMBERS



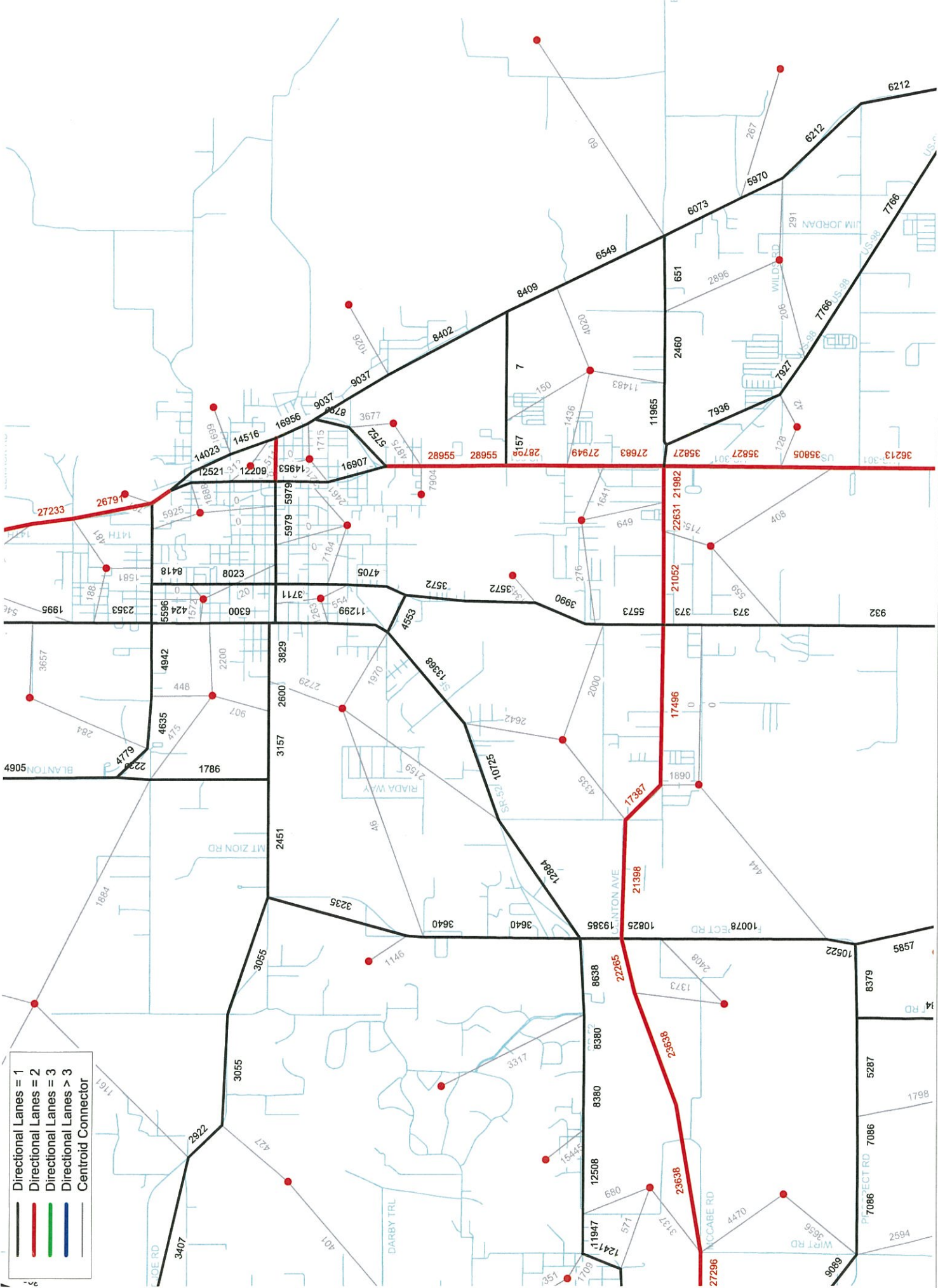
2045 MODEL VOLUMES
(WITH MORNINGSIDE EXTENSION)



2045 MODEL VOLUMES
(WITHOUT MORNINGSIDE EXTENSION)



TBRPMv9 2045 CF Model - 2045 PSWT Volumes - No-Build



- Directional Lanes = 1
- Directional Lanes = 2
- Directional Lanes = 3
- Directional Lanes > 3
- Centroid Connector

2015 MODEL VOLUMES



MODEL CORRECTION FACTOR



2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1400 PASCO COUNTYWIDE

MOCF: 0.95
 PSCF

WEEK	DATES	SF	
1	01/01/2019 - 01/05/2019	0.98	1.03
2	01/06/2019 - 01/12/2019	1.00	1.05
3	01/13/2019 - 01/19/2019	1.03	1.08
4	01/20/2019 - 01/26/2019	1.01	1.06
5	01/27/2019 - 02/02/2019	1.00	1.05
* 6	02/03/2019 - 02/09/2019	0.98	1.03
* 7	02/10/2019 - 02/16/2019	0.97	1.02
* 8	02/17/2019 - 02/23/2019	0.96	1.01
* 9	02/24/2019 - 03/02/2019	0.95	1.00
*10	03/03/2019 - 03/09/2019	0.94	0.99
*11	03/10/2019 - 03/16/2019	0.93	0.98
*12	03/17/2019 - 03/23/2019	0.93	0.98
*13	03/24/2019 - 03/30/2019	0.94	0.99
*14	03/31/2019 - 04/06/2019	0.94	0.99
*15	04/07/2019 - 04/13/2019	0.95	1.00
*16	04/14/2019 - 04/20/2019	0.96	1.01
*17	04/21/2019 - 04/27/2019	0.97	1.02
*18	04/28/2019 - 05/04/2019	0.98	1.03
19	05/05/2019 - 05/11/2019	0.99	1.04
20	05/12/2019 - 05/18/2019	1.01	1.06
21	05/19/2019 - 05/25/2019	1.01	1.06
22	05/26/2019 - 06/01/2019	1.02	1.07
23	06/02/2019 - 06/08/2019	1.02	1.07
24	06/09/2019 - 06/15/2019	1.03	1.08
25	06/16/2019 - 06/22/2019	1.03	1.08
26	06/23/2019 - 06/29/2019	1.04	1.09
27	06/30/2019 - 07/06/2019	1.04	1.09
28	07/07/2019 - 07/13/2019	1.04	1.09
29	07/14/2019 - 07/20/2019	1.05	1.11
30	07/21/2019 - 07/27/2019	1.05	1.11
31	07/28/2019 - 08/03/2019	1.05	1.11
32	08/04/2019 - 08/10/2019	1.06	1.12
33	08/11/2019 - 08/17/2019	1.06	1.12
34	08/18/2019 - 08/24/2019	1.06	1.12
35	08/25/2019 - 08/31/2019	1.07	1.13
36	09/01/2019 - 09/07/2019	1.07	1.13
37	09/08/2019 - 09/14/2019	1.08	1.14
38	09/15/2019 - 09/21/2019	1.08	1.14
39	09/22/2019 - 09/28/2019	1.06	1.12
40	09/29/2019 - 10/05/2019	1.05	1.11
41	10/06/2019 - 10/12/2019	1.03	1.08
42	10/13/2019 - 10/19/2019	1.01	1.06
43	10/20/2019 - 10/26/2019	1.00	1.05
44	10/27/2019 - 11/02/2019	1.00	1.05
45	11/03/2019 - 11/09/2019	0.99	1.04
46	11/10/2019 - 11/16/2019	0.99	1.04
47	11/17/2019 - 11/23/2019	0.98	1.03
48	11/24/2019 - 11/30/2019	0.98	1.03
49	12/01/2019 - 12/07/2019	0.98	1.03
50	12/08/2019 - 12/14/2019	0.98	1.03
51	12/15/2019 - 12/21/2019	0.98	1.03
52	12/22/2019 - 12/28/2019	1.00	1.05
53	12/29/2019 - 12/31/2019	1.03	1.08

* PEAK SEASON

14-FEB-2020 15:39:31

830UPD

7_1400_PKSEASON.TXT

APPENDIX - G



INTERSECTION ANALYSIS

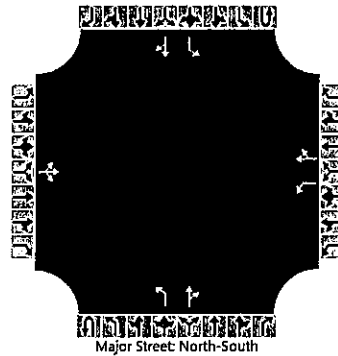
(2045)



HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst		Intersection					
Agency/Co.		Jurisdiction					
Date Performed	11/5/2020	East/West Street	Morningside Drive/Adair				
Analysis Year	2020	North/South Street	SR 52				
Time Analyzed	AM Peak- Option A	Peak Hour Factor	0.92				
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25				
Project Description	2045 Traffic						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		1	1	0	0	1	1	0	0	1	1	0
Configuration			LTR			L		TR		L		TR		L		TR
Volume (veh/h)		44	49	60		92	13	116		32	473	80		67	537	24
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

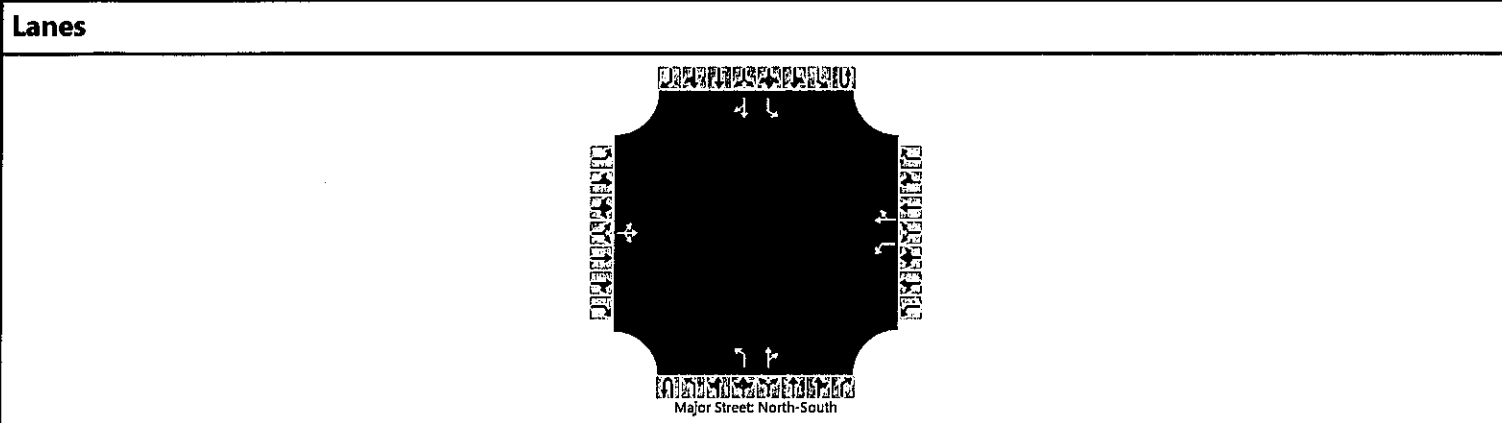
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			166			100		140		35				73		
Capacity, c (veh/h)			134			59		401		964				971		
v/c Ratio			1.25			1.69		0.35		0.04				0.07		
95% Queue Length, Q ₉₅ (veh)			10.2			9.2		1.5		0.1				0.2		
Control Delay (s/veh)			221.9			484.4		18.7		8.9				9.0		
Level of Service (LOS)			F			F		C		A				A		
Approach Delay (s/veh)	221.9				212.6				0.5				1.0			
Approach LOS	F				F											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst				Intersection			
Agency/Co.				Jurisdiction			
Date Performed	11/5/2020			East/West Street	Morningside Drive/Adair		
Analysis Year	2020			North/South Street	SR 52		
Time Analyzed	PM Peak-Option A			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	2045 Traffic						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement									1U	1	2	3	4U	4	5	6
Priority		10	11	12		7	8	9								
Number of Lanes		0	1	0		1	1	0	0	1	1	0	0	1	1	0
Configuration			LTR			L		TR		L		TR		L		TR
Volume (veh/h)		33	45	77		120	41	59		55	786	112		81	665	73
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways




















Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			168			130		109		60				88		
Capacity, c (veh/h)			20					96		817				703		
v/c Ratio			8.48					1.14		0.07				0.13		
95% Queue Length, Q ₉₅ (veh)			21.5					7.3		0.2				0.4		
Control Delay (s/veh)			3745.2					215.4		9.8				10.9		
Level of Service (LOS)			F					F		A				B		
Approach Delay (s/veh)	3745.2								0.6				1.1			
Approach LOS	F															

Lanes, Volumes, Timings
3: SR 52/Morningside Dr & Adair Rd

01/26/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	49	60	92	13	116	32	473	80	67	537	24
Future Volume (vph)	44	49	60	92	13	116	32	473	80	67	537	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	185		0	185		0	212		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			50			50			50		
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		0.947			0.865			0.978			0.994	
Flt Protected		0.986		0.950			0.950			0.950		
Satd. Flow (prot)	0	1739	0	1770	1611	0	1770	1822	0	1770	1852	0
Flt Permitted		0.858		0.596			0.379			0.384		
Satd. Flow (perm)	0	1514	0	1110	1611	0	706	1822	0	715	1852	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47			126			21			5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		866			1084			642			581	
Travel Time (s)		19.7			24.6			14.6			13.2	
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)	48	53	65	100	14	126	35	514	87	73	584	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	166	0	100	140	0	35	601	0	73	610	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			12			12	
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		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		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		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		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		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		

Lanes, Volumes, Timings
 3: SR 52/Morningside Dr & Adair Rd

01/26/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	25.0	25.0		25.0	25.0		45.0	45.0		45.0	45.0	
Total Split (%)	35.7%	35.7%		35.7%	35.7%		64.3%	64.3%		64.3%	64.3%	
Maximum Green (s)	20.5	20.5		20.5	20.5		40.5	40.5		40.5	40.5	
Yellow Time (s)	3.5	3.5		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		1.0	1.0	
Lost Time Adjust (s)		0.0		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	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		10.5		10.5	10.5		43.4	43.4		43.4	43.4	
Actuated g/C Ratio		0.17		0.17	0.17		0.69	0.69		0.69	0.69	
v/c Ratio		0.57		0.54	0.38		0.07	0.48		0.15	0.48	
Control Delay		24.0		33.8	8.8		4.7	6.5		5.2	6.7	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		24.0		33.8	8.8		4.7	6.5		5.2	6.7	
LOS		C		C	A		A	A		A	A	
Approach Delay		24.0			19.2			6.4			6.5	
Approach LOS		C			B			A			A	

Intersection Summary

Area Type:	Other
Cycle Length:	70
Actuated Cycle Length:	62.9
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.57
Intersection Signal Delay:	9.9
Intersection Capacity Utilization:	65.4%
Analysis Period (min):	15
Intersection LOS:	A
ICU Level of Service:	C

Splits and Phases: 3: SR 52/Morningside Dr & Adair Rd



Queuing and Blocking Report
 AM Peak Hour -2045 Traffic

01/26/2021

Intersection: 3: SR 52/Morningside Dr & Adair Rd





















Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	127	88	77	67	173	60	171
Average Queue (ft)	69	54	48	26	101	33	105
95th Queue (ft)	124	91	85	77	177	66	178
Link Distance (ft)	832		1050		608		547
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		185		185		212	
Storage Blk Time (%)					0		0
Queuing Penalty (veh)					0		0

Network Summary

Network wide Queuing Penalty: 0

Lanes, Volumes, Timings
 3: SR 52/Morningside Dr & Adair Rd

01/26/2021

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	33	45	77	120	41	59	55	786	112	81	665	73	
Future Volume (vph)	33	45	77	120	41	59	55	786	112	81	665	73	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0		0	185		0	185		0	212		0	
Storage Lanes	0		0	1		0	1		0	1		0	
Taper Length (ft)	25			50			50			50			
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		0.933			0.912			0.981			0.985		
Flt Protected		0.989		0.950			0.950			0.950			
Satd. Flow (prot)	0	1719	0	1770	1699	0	1770	1827	0	1770	1835	0	
Flt Permitted		0.912		0.577			0.262			0.167			
Satd. Flow (perm)	0	1585	0	1075	1699	0	488	1827	0	311	1835	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		68			64			19			15		
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		866			1084			642			581		
Travel Time (s)		19.7			24.6			14.6			13.2		
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)	36	49	84	130	45	64	60	854	122	88	723	79	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	169	0	130	109	0	60	976	0	88	802	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			12			12		
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		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru		
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex		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		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		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		0.0	0.0		
Detector 2 Position(ft)		94			94			94			94		
Detector 2 Size(ft)		6			6			6			6		
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel													
Detector 2 Extend (s)		0.0			0.0			0.0			0.0		
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA		
Protected Phases		4			8			2			6		
Permitted Phases	4			8			2			6			

Lanes, Volumes, Timings

3: SR 52/Morningside Dr & Adair Rd

01/26/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		47.5	47.5		47.5	47.5	
Total Split (%)	32.1%	32.1%		32.1%	32.1%		67.9%	67.9%		67.9%	67.9%	
Maximum Green (s)	18.0	18.0		18.0	18.0		43.0	43.0		43.0	43.0	
Yellow Time (s)	3.5	3.5		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		1.0	1.0	
Lost Time Adjust (s)		0.0		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	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)		12.5		12.5	12.5		45.9	45.9		45.9	45.9	
Actuated g/C Ratio		0.19		0.19	0.19		0.68	0.68		0.68	0.68	
v/c Ratio		0.48		0.65	0.30		0.18	0.78		0.42	0.64	
Control Delay		18.6		40.0	12.7		6.8	14.8		14.0	9.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		18.6		40.0	12.7		6.8	14.8		14.0	9.9	
LOS		B		D	B		A	B		B	A	
Approach Delay		18.6			27.6			14.3			10.3	
Approach LOS		B			C			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	70
Actuated Cycle Length:	67.5
Natural Cycle:	70
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.78
Intersection Signal Delay:	14.5
Intersection LOS:	B
Intersection Capacity Utilization:	83.2%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 3: SR 52/Morningside Dr & Adair Rd

 47.5 s	 22.5 s
 47.5 s	 22.5 s

Queuing and Blocking Report
PM Peak Hour -2045 Traffic

01/26/2021

Intersection: 3: SR 52/Morningside Dr & Adair Rd

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	TR	L	TR	L	TR
Maximum Queue (ft)	124	102	87	152	411	133	259
Average Queue (ft)	77	66	49	52	233	75	154
95th Queue (ft)	132	107	89	151	443	154	267
Link Distance (ft)	832		1050		608		547
Upstream Blk Time (%)					0		
Queuing Penalty (veh)					0		
Storage Bay Dist (ft)		185		185		212	
Storage Blk Time (%)					11	1	2
Queuing Penalty (veh)					6	9	2

Network Summary

Network wide Queuing Penalty: 16