



**SR 400 (I-4) Project Development and Environment (PD&E) Study**  
**FM No.: 432100-1-22-01**



# **Preliminary Engineering Report**

**Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4)  
from West of CR 532 (Osceola/Polk County Line)  
to West of SR 528 (Beachline Expressway)**

**Osceola County (92130) and Orange County (75280), Florida**

**June 2, 2017**

**HNTB Corporation**  
610 Crescent Executive Court  
Suite 400  
Lake Mary, FL 32746



# PRELIMINARY ENGINEERING REPORT

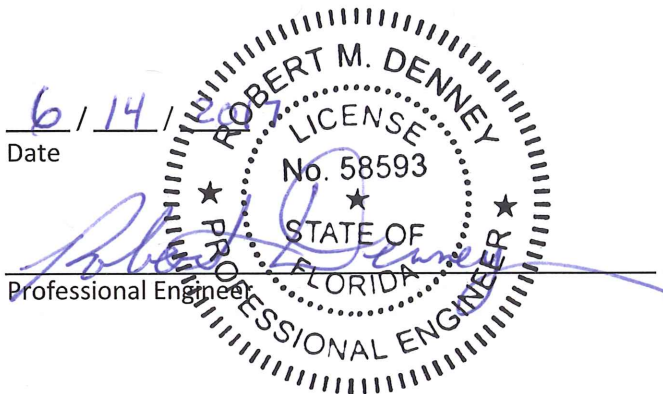
Florida Department of Transportation

ETDM Number: N/A

Financial Management Number: 432100-1-22-01

Federal-Aid Project Number: 0041-227-I

This preliminary engineering report contains detailed engineering information that fulfills the purpose and need for State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) PD&E study.





*Notes to Reviewer:*

*The typical section package for the entire SR 400 (I-4) Beyond the Ultimate corridor is submitted under separate cover.*

**TABLE OF CONTENTS**

<b>1.0</b>	<b>Summary of Project .....</b>	<b>1</b>
1.1	Commitments.....	2
1.2	Recommendations .....	4
1.3	Description of Proposed Action .....	6
1.4	Purpose and Need .....	9
<b>2.0</b>	<b>Existing Conditions.....</b>	<b>15</b>
2.1	Roadway Classification.....	15
2.2	Typical Section .....	15
2.3	Right-of-Way .....	20
2.4	Existing Property Lines and Land Use .....	20
2.5	Horizontal Alignment .....	24
2.6	Vertical Alignment.....	24
2.7	Pedestrian Accommodations and Bicycle Facilities .....	27
2.8	Design and Posted Speed.....	27
2.9	Lighting.....	28
2.10	Railroad .....	28
2.11	Existing Traffic .....	28
2.11.1	Traffic Volumes .....	28
2.11.2	Intersection Geometry and Signalization .....	34
2.11.3	Traffic Operational Analyses.....	37
2.12	Pavement Conditions .....	39
2.13	Drainage and Hydrology .....	39
2.13.1	Existing Drainage Patterns .....	39
2.13.2	Cross Culverts.....	40
2.14	Existing Bridges .....	41
2.14.1	Type of Structure .....	41
2.14.2	Current Conditions and Year of Construction.....	41
2.14.3	Horizontal and Vertical Alignments of Structures .....	45
2.14.4	Span Arrangement .....	45
2.14.5	Historical Significance .....	45
2.14.6	Channel Dimensions .....	45
2.14.7	Bridge Openings.....	45

## TABLE OF CONTENTS (Cont.)

2.14.8	Ship Impact Data .....	45
2.15	Crash Data .....	49
2.16	Utilities .....	54
2.17	Soils .....	96
2.18	Sociocultural Conditions .....	97
2.18.1	Study Area.....	98
2.18.2	Social Demographics.....	98
2.18.3	Economics .....	100
2.18.4	Community Facilities and Services.....	101
<b>3.0</b>	<b>Planning Phase/Corridor Analysis.....</b>	<b>105</b>
<b>4.0</b>	<b>Design Criteria and Standards .....</b>	<b>106</b>
<b>5.0</b>	<b>Alternatives Analysis.....</b>	<b>110</b>
5.1	No Project (No-Build) Alternative .....	110
5.2	Transportation System Management and Operations.....	111
5.3	Multi-Modal Alternatives.....	111
5.3.1	Transit .....	112
5.3.2	Bicycles and Pedestrians.....	112
5.4	Build Alternatives .....	113
5.4.1	Design Speed.....	114
5.4.2	Interchange Alternatives.....	115
5.5	Design Traffic.....	122
5.5.1	Future Traffic Volumes .....	122
5.5.2	Design Traffic Factors.....	122
5.5.3	Intersection/Interchange Traffic Volumes.....	123
5.5.4	Intersection Operational Analysis.....	129
5.6	Intersection Improvements .....	132
5.7	Environmental Impacts .....	134
5.7.1	Floodplains and Regulatory Floodways .....	134
5.7.2	Wetlands .....	134
5.7.3	Wildlife and Habitat .....	163
5.7.4	Archaeological and Historical Resources.....	177

## TABLE OF CONTENTS (Cont.)

5.7.5	Contamination .....	186
5.7.6	Noise .....	193
5.7.7	Air Quality .....	204
5.8	Section 4(f) Lands .....	205
5.9	Public Involvement Program .....	205
5.10	Value Engineering (VE) .....	208
5.11	Comparative Evaluation/Recommended Alternative .....	211
5.11.1	Evaluation Criteria .....	211
5.11.2	Evaluation Matrix .....	212
5.11.3	Recommended Alternative .....	212
<b>6.0</b>	<b>Design Details of Recommended Alternative .....</b>	<b>214</b>
6.1	Typical Section .....	215
6.2	Alignment .....	215
6.3	Design Exceptions and Variations .....	217
6.4	Drainage .....	218
6.4.1	Proposed Drainage Patterns .....	218
6.4.2	Cross Drains .....	220
6.5	Right-of-Way Requirements .....	227
6.6	Relocations .....	231
6.7	Traffic Operational Analysis .....	233
6.8	Bridge Analysis .....	236
6.9	Conceptual Signing Plan .....	237
6.10	Utilities .....	237
6.11	Lighting .....	252
6.12	Access Management .....	252
6.13	Project Cost Estimates .....	255
6.14	Production Schedule .....	255
<b>7.0</b>	<b>Supplemental Technical Reports .....</b>	<b>256</b>

## LIST OF FIGURES

Figure 1.1 – Project Location Map .....	7
Figure 1.2 – SR 400 (I -4) Segment 1 Proposed Typical Section (6+4 with rail envelope).....	8
Figure 1.3 – SR 400 (I -4) Segment 1 Proposed Special Section (Bridge Viaduct Between SR 429 and World Drive) .....	10
Figure 1.4 – SR 400 (I -4) Segment 1 Proposed Special Section (Bridge Viaduct Between SR 536 and SR 535).....	11
Figure 1.5 – SR 400 (I -4) Segment 1 Proposed Special Section (Bridge Viaduct Between SR 535 and Daryl Carter Parkway) .....	12
Figure 2.1 - Existing Typical Section (W. of CR 532, Sta. 604+50.00 to W. of SR 529, Sta. 730+00.00).....	16
Figure 2.2 - Existing Typical Section (W. of SR 529, Sta. 730+00.00 to W. of World Dr., Sta. 820+00.00) .....	16
Figure 2.3 - Existing Typical Section (W. of World Dr., Sta. 820+00.00 to W. of SR 417, Sta. 887+00.00) .....	17
Figure 2.4 - Existing Typical Section (W. of SR 417, Sta. 887+00.00 to SR 417, Sta. 944+00.00).....	17
Figure 2.5 - Existing Typical Section (SR 417, Sta. 944+00.00 to E. of US 192/SR 530, Sta. 983+00.00).....	18
Figure 2.6 - Existing Typical Section (E. of US 192/SR 530, Sta. 983+00.00 to W. of Osceola Pkwy., Sta. 1021+0.00).....	18
Figure 2.7 - Existing Typical Section (W. of Osceola Pkwy., Sta. 1021+0.00 to E. of SR 536, Sta. 1139+00.00).....	19
Figure 2.8 - Existing Typical Section (E. of SR 536, Sta. 1139+00.00 to E. of SR 535, Sta. 1199+00.00) .....	19
Figure 2.9 - Existing Typical Section (E. of SR 535, Sta. 1199+00.00 to E. of Central Florida Pkwy, Sta. 1345+48.48).....	19
Figure 2.10 - Existing City Limits .....	21
Figure 2.11 - Existing Land Use .....	22
Figure 2.12 - Future Land Use.....	23
Figure 2.13 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 1 of 5) .....	29
Figure 2.14 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 2 of 5) .....	30
Figure 2.15 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 3 of 5) .....	31
Figure 2.16 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 4 of 5) .....	32
Figure 2.17 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 5 of 5) .....	33
Figure 2.18 – Existing Bridge Locations.....	43
Figure 2.19 - Crash Distribution Along I-4 Segment 1 Corridor (Osceola County).....	50
Figure 2.20 - Crash Distribution Along I-4 Segment 1 Corridor (Orange County).....	51
Figure 2.21 - Community Facilities and Services (Sheet 1 of 2).....	102
Figure 2.22 - Community Facilities and Services (Sheet 2 of 2).....	103
Figure 5.1 – Proposed Express Lane Access Points.....	113
Figure 5.2 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 1 of 5) .....	124
Figure 5.3 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 2 of 5) .....	125
Figure 5.4 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 3 of 5) .....	126
Figure 5.5 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 4 of 5) .....	127
Figure 5.6 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 5 of 5) .....	128
Figure 5.7 – FEMA Flood Insurance Map .....	135
Figure 5.8 – Surface Water and Wetland Impacts Map (Sheet 1 of 23) .....	140
Figure 5.9 – Surface Water and Wetland Impacts Map (Sheet 2 of 23) .....	141
Figure 5.10 – Surface Water and Wetland Impacts Map (Sheet 3 of 23) .....	142
Figure 5.11 – Surface Water and Wetland Impacts Map (Sheet 4 of 23) .....	143
Figure 5.12 – Surface Water and Wetland Impacts Map (Sheet 5 of 23) .....	144
Figure 5.13 – Surface Water and Wetland Impacts Map (Sheet 6 of 23) .....	145
Figure 5.14 – Surface Water and Wetland Impacts Map (Sheet 7 of 23) .....	146
Figure 5.15 – Surface Water and Wetland Impacts Map (Sheet 8 of 23) .....	147
Figure 5.16 – Surface Water and Wetland Impacts Map (Sheet 9 of 23) .....	148
Figure 5.17 – Surface Water and Wetland Impacts Map (Sheet 10 of 23) .....	149
Figure 5.18 – Surface Water and Wetland Impacts Map (Sheet 11 of 23) .....	150

**LIST OF FIGURES (Cont.)**

Figure 5.19 – Surface Water and Wetland Impacts Map (Sheet 12 of 23) .....	151
Figure 5.20 – Surface Water and Wetland Impacts Map (Sheet 13 of 23) .....	152
Figure 5.21 – Surface Water and Wetland Impacts Map (Sheet 14 of 23) .....	153
Figure 5.22 – Surface Water and Wetland Impacts Map (Sheet 15 of 23) .....	154
Figure 5.23 – Surface Water and Wetland Impacts Map (Sheet 16 of 23) .....	155
Figure 5.24 – Surface Water and Wetland Impacts Map (Sheet 17 of 23) .....	156
Figure 5.25 – Surface Water and Wetland Impacts Map (Sheet 18 of 23) .....	157
Figure 5.26 – Surface Water and Wetland Impacts Map (Sheet 19 of 23) .....	158
Figure 5.27 – Surface Water and Wetland Impacts Map (Sheet 20 of 23) .....	159
Figure 5.28 – Surface Water and Wetland Impacts Map (Sheet 21 of 23) .....	160
Figure 5.29 – Surface Water and Wetland Impacts Map (Sheet 22 of 23) .....	161
Figure 5.30 – Surface Water and Wetland Impacts Map (Sheet 23 of 23) .....	162
Figure 5.31 – Species Location Map (Sheet 1 of 5) .....	165
Figure 5.32 – Species Location Map (Sheet 2 of 5) .....	166
Figure 5.33 – Species Location Map (Sheet 3 of 5) .....	167
Figure 5.34 – Species Location Map (Sheet 4 of 5) .....	168
Figure 5.35 – Species Location Map (Sheet 5 of 5) .....	169
Figure 5.36 – Recorded Historic Resources within I-4 Segment 1 APE (Sheet 1 of 2) .....	184
Figure 5.37 – Recorded Historic Resources within I-4 Segment 1 APE (Sheet 2 of 2) .....	185
Figure 5.38 – Potential Contamination Sites (Sheet 1 of 5) .....	188
Figure 5.39 – Potential Contamination Sites (Sheet 2 of 5) .....	189
Figure 5.40 – Potential Contamination Sites (Sheet 3 of 5) .....	190
Figure 5.41 – Potential Contamination Sites (Sheet 4 of 5) .....	191
Figure 5.42 – Potential Contamination Sites (Sheet 5 of 5) .....	192
Figure 5.43 – Noise Barrier Analysis Map (Sheet 1 of 10) .....	194
Figure 5.44 – Noise Barrier Analysis Map (Sheet 2 of 10) .....	195
Figure 5.45 – Noise Barrier Analysis Map (Sheet 3 of 10) .....	196
Figure 5.46 – Noise Barrier Analysis Map (Sheet 4 of 9) .....	197
Figure 5.47 – Noise Barrier Analysis Map (Sheet 5 of 10) .....	198
Figure 5.48 – Noise Barrier Analysis Map (Sheet 6 of 10) .....	199
Figure 5.49 – Noise Barrier Analysis Map (Sheet 7 of 10) .....	200
Figure 5.50 – Noise Barrier Analysis Map (Sheet 8 of 10) .....	201
Figure 5.51 – Noise Barrier Analysis Map (Sheet 9 of 10) .....	202
Figure 5.52 – Noise Barrier Analysis Map (Sheet 10 of 10) .....	203
Figure 6.1 – Overall Drainage Map (Sheet 1 of 6) .....	221
Figure 6.2 – Overall Drainage Map (Sheet 2 of 6) .....	222
Figure 6.3 – Overall Drainage Map (Sheet 3 of 6) .....	223
Figure 6.4 – Overall Drainage Map (Sheet 4 of 6) .....	224
Figure 6.5 – Overall Drainage Map (Sheet 5 of 6) .....	225
Figure 6.6 – Overall Drainage Map (Sheet 6 of 6) .....	226

## LIST OF TABLES

Table 1.1: Population Projections for Counties in the I-4 Corridor.....	13
Table 1.2: Employment Projections for Workforce Regions in the I-4 Corridor .....	14
Table 2.1 – Existing Typical Section Features.....	15
Table 2.2 - Existing Horizontal Alignment .....	24
Table 2.3 - Existing Vertical Alignment .....	24
Table 2.4 - Existing Lighting Summary .....	28
Table 2.5 – I-4 Mainline Freeway Operational Analysis.....	37
Table 2.6 – Intersection Operational Analysis .....	38
Table 2.7 - Pavement Conditions I-4 Segment 1.....	39
Table 2.8 – Existing Cross Drains.....	40
Table 2.9 - Existing Bridge Structures .....	42
Table 2.10 - Current Structure Condition and Year of Construction .....	44
Table 2.11 - Horizontal Clearances at Bridges .....	46
Table 2.12 - Vertical Curve Data at Bridges .....	47
Table 2.13 - Vertical Clearances at Bridges.....	48
Table 2.14 – Crash Severity Summary.....	49
Table 2.15 – Crash Event Summary .....	52
Table 2.16 - Contributing Cause Summary .....	52
Table 2.17 - High Crash Segment Summary.....	53
Table 2.18 - Utility Contact information .....	54
Table 2.19 - Major Utilities.....	57
Table 2.20 – Soil Types.....	96
Table 2.21 – Community Demographics.....	99
Table 2.22 – Community Facilities and Services .....	104
Table 4.1 - Roadway Design Criteria .....	106
Table 5.1 – Design and Posted Speed .....	114
Table 5.2 – Design Traffic Factors for I-4 Segment 1 .....	123
Table 5.3: Average Delay and Level of Service (LOS) – I-4 and CR 532 Interchange.....	129
Table 5.4: Average Delay and Level of Service (LOS) - I-4 and Osceola Parkway.....	130
Table 5.5: Average Delay and Level of Service (LOS) - I-4 and SR 535 Node Evaluation .....	131
Table 5.6: I-4 and Daryl Carter Parkway Interchange Node Evaluation.....	133
Table 5.7: I-4 and Daryl Carter Parkway Network Performance Comparison .....	133
Table 5.8 -Summary of Proposed Impacts to Jurisdictional Wetlands/Other Surface Waters.....	136
Table 5.9: Results of Phase I Archaeological Survey of Proposed Ponds for the I-4 Segment 1 APE .....	178
Table 5.10 - Historic Resources Recorded within the I-4 Segment 1 APE.....	186
Table 5.11 – Alternatives Evaluation Matrix.....	213
Table 6.1: Proposed Horizontal Alignment .....	216
Table 6.2: Design Exceptions and Variations .....	217
Table 6.3: Additional Design Elements .....	217
Table 6.4 - Summary of Recommended Pond Sites.....	219
Table 6.5 – Proposed Cross Drains.....	220
Table 6.6: Right-of-Way Acquisition for Roadway Improvements.....	227
Table 6.7: Right-of-Way Acquisition for Stormwater Facilities.....	230
Table 6.8: Potential Relocations.....	232
Table 6.9: Basic Freeway Operational Analysis Results – Build 2040 .....	234
Table 6.10: Intersection Operational Analysis Results – Build 2040.....	236



LIST OF TABLES (Cont.)

Table 6.11: Proposed Bridge Improvements .....	238
Table 6.12: Proposed Utility Impacts .....	245
Table 6.13 – Estimated Project Costs for I-4 Segment 1.....	255

LIST OF APPENDICES

Appendix A -	Concept Plans
Appendix B -	Public Involvement Documentation
Appendix C -	Conceptual Signing Plan
Appendix D -	Long Range Estimates (LRE)

## 1.0 Summary of Project

The Florida Department of Transportation (FDOT) is conducting an update/reevaluation for the Project Development and Environment (PD&E) studies for the extension of proposed express lanes for State Road 400 (SR 400)/Interstate 4 (I-4). The project limits in the original PD&E studies were:

- West of Memorial Boulevard (SR 546) to the Polk/Osceola County Line, (29.5 miles)
- CR 532 (Polk/Osceola County Line) to West of SR 528 Beachline Expressway (13.7 miles), and
- West of SR 528 Beachline Expressway to SR 472 (43 miles).

The corresponding environmental documents associated with these PD&E studies include: Environmental Assessment/Finding of No Significant Impact (EA/FONSI) for SR 400 (I-4) from West of Memorial Boulevard (SR 546) to the Polk/Osceola County Line [Financial Project Number (FPN) 201210 (December 1998)] and from CR 532 (Polk/Osceola County Line) to West of SR 528 (Beachline Expressway) [FPN 242526 and 242483 (December 1999)] and Final Environmental Impact Statement (FEIS) for I-4 from SR 528 (Beachline Expressway) to SR 472 [FPN 242486, 242592 and 242703 (2002)].

The project limits of the current SR 400 (I-4) PD&E reevaluation, herein referred to as I-4 Beyond the Ultimate (BtU) PD&E Reevaluation Study, include a total of approximately 43 miles of roadway sections east and west of the 21-mile, I-4 Ultimate project. The I-4 Ultimate project consists of reconstruction, to include new express lanes, for the section of I-4 which extends from west of SR 435 (Kirkman Road) to east of SR 434, and began construction in early 2015. The current I-4 BtU project has been divided into the following five segments:

- Segment 1: SR 400 (I-4) from West of CR 532 (Polk/Osceola County Line) to West of SR 528 Beachline Expressway - Osceola County (92130) and Orange County (75280)
- Segment 2: SR 400 (I-4) from West of SR 528 Beachline Expressway to West of SR 435 Kirkman Road - Orange County (75280)
- Segment 3: SR 400 (I-4) from 1 Mile East of SR 434 to East of SR 15-600/US 17-92 (Seminole/Volusia County Line) - Seminole County (77160)
- Segment 4: SR 400 (I-4) from East of SR 15-600/US 17-92 (Seminole/Volusia County Line) to ½ Mile East of SR 472 - Volusia County (79110)
- Segment 5: SR 400 (I-4) from West of SR 25/US 27 to West of CR 532 (Polk/Osceola County Line) Polk County (16320)

This preliminary engineering report was prepared for Segment 1 of the SR 400 (I-4) BtU PD&E Reevaluation Study and contains detailed engineering information that fulfills the purpose and need for the SR 400)/I-4 from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) PD&E study.

The purpose of this preliminary engineering report is to document design changes in support of the PD&E reevaluation of the FONSI for SR 400 (I-4) from CR 532 (Polk/Osceola County Line) to West of SR 528 (Beachline Expressway) (FPN 242526 and 242483, December 23, 1999). This reevaluation includes environmental and engineering analysis of the original design concept, which showed six general use lanes (GUL) and four special use lanes (SUL) from CR 532 to southwest of World Drive (6+4), six GUL and two High Occupancy Vehicle (HOV) lanes from southwest of World Drive to northeast of Lake Avenue (6+2) and six GUL and 4 HOV lanes from northeast of Lake Avenue to SR 528 (Beachline Expressway) (6+4), to the current proposed design which includes six GULs and four express lanes (EL) operating under a variable price toll plan (6+4). Other changes being reanalyzed include stormwater management, access plan and interchange configurations.

## 1.1 Commitments

To minimize impacts of this project on the environment, FDOT is committed to the following mitigation measures for impacts resulting from the Recommended Alternative.

1. FDOT through consultation with the U.S. Fish and Wildlife Service (USFWS) for listed species assessed the impacts to sand skinks and scrub lupine. The completed Biological Opinion (dated 8/26/16, received by FDOT 9/7/16) resulted in the following commitments for these species assessed.
  - a. FDOT proposes to offset impacts by providing compensatory mitigation at a Service-approved conservation bank at a 2:1 ratio. The compensation acres are based on surveys that determined sand skink occupancy within the Pond Site FPC 105A for the project (10.0 acres of impacts). FDOT will provide 20.0 credits to offset project impacts to occupied sand skink habitat.
  - b. During permitting the proposed project will be re-surveyed for occurrence of scrub lupine. In coordination with Bok Tower Gardens, the following will occur: collection of seeds, or translocation of plants out of the project footprint for replanting in lands acceptable to the Service (e.g., public conservation lands). Collected seeds would be provided to Bok Tower Gardens for reproduction and conservation of the species.
  - c. The construction work area for 1-4 BtU Segment 1 - Pond Site FPC 105A will be clearly delineated prior to ground disturbance to ensure that take is not exceeded within the known occupied skink areas. The Service concluded that no more than 10 ac (4.05 ha) of occupied sand skink habitat will be incidentally taken. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring re-initiation of consultation and review of the reasonable and prudent measures provided.
  - d. FDOT will be required to notify the Service 30 days before ground disturbance and construction begins that the compensatory mitigation has occurred.

2. During permitting, FDOT will ensure that mitigation proposed for wetland impacts to any wood stork suitable foraging habitat (SFH) within USFWS designated wood stork Core Foraging Area (CFA) will adhere to the requirements of the US Army Corps of Engineers (USACE) and USFWS.
3. Eastern Indigo Snake Habitat has been identified within the project. FDOT will utilize the US Fish and Wildlife Service Standard Protection Measures for the Eastern Indigo Snake, at the US Fish and Wildlife Service Link:  
[http://www.fws.gov/northflorida/IndigoSnakes/20130812\\_Eastern\\_indigo\\_snake\\_Standard\\_Protection\\_Measures.htm](http://www.fws.gov/northflorida/IndigoSnakes/20130812_Eastern_indigo_snake_Standard_Protection_Measures.htm)
4. FDOT commits to including a “wildlife friendly” design for the bridges over Reedy Creek to serve as a wildlife crossing. This will include a design that eliminates severe slopes to the extent possible, and includes the use of an “animal friendly” rip-rap to reinforce the slopes to serve as terrestrial wildlife ledges.
5. During permitting, all potential gopher tortoise habitat that could be impacted by the project will be systematically surveyed according to the current guidelines published by the Florida Fish and Wildlife Conservation Commission (FFWCC). If gopher tortoise burrows are found, all practicable design measures will be employed to avoid impacts to the burrows. For burrows which cannot be avoided, a permit will be obtained from FFWCC for relocation of gopher tortoises and commensals, and relocation will be performed at a time as close as practicable to the start of construction activities at the site of the burrows.
6. Wetland impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S. to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. 1344. Compensatory mitigation for this project will be completed through the use of mitigation banks and any other options that satisfy state and federal requirements. The *Wetland Evaluation Report - Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) (September 2016)* identified a number of approved wetland mitigation banks with credit availability to offset impacts under the South Florida Water Management District (SFWMD) and USACE jurisdiction.
7. All bridges and other structures which will require possible demolition or retrofit should be tested for asbestos containing materials, lead-based paint or any other hazardous materials prior to construction; and any parcels containing medical facilities, doctor offices, hospitals or drug stores that might be acquired should be tested for asbestos, lead-based paint, x-ray equipment, lead-lined walls, chemicals and pharmaceuticals prior to demolition. FDOT commits to conducting Level II Contamination Screenings on all Medium and High Risk Rated

sites before establishing a final determination. This will include investigating previous PD&E Studies and Design Projects covering the project area and its surroundings.

8. FDOT is committed to the construction of feasible and reasonable noise abatement measures for the Tuscana Resort Orlando, the Integra Cove Apartments and the Altis Sand Lake Apartments, as shown on the Noise Maps contingent upon the following conditions:
  - Reasonable cost analysis indicates that the economic cost of the barriers will not exceed the cost-reasonable criterion.
  - Community input regarding desires, types, heights, and locations (if applicable).
  - Consideration of preferences regarding compatibility with adjacent land uses, particularly as addressed by officials having jurisdiction over such land uses; and,
  - Consideration of safety and engineering aspects as related to the roadway user and the adjacent property owner.
9. No upstream surface water rise shall be allowed at the Reedy Creek crossing under I-4 as shown on a No-Rise Certification.
10. The new I-4 bridges over the relocated Bonnet Creek will span the entire Bonnet Creek right-of-way, which is 300-feet. The bridges can be multiple span structures, and do not have to clear span the right-of-way.
11. FDOT commits to documenting any structures that reach historic age prior to project completion as part of a supplemental Cultural Resource Assessment Survey.
12. FDOT commits to use 1.5% of the construction cost for the enhancement of the aesthetics of the new structures (hardscape) to keep the same look established by the I-4 Ultimate Project.

## 1.2 Recommendations

The FDOT recommends improvements to the fourteen (14) mile segment of I-4 which extends from west of CR 532 (Polk/Osceola County Line) to west of SR 528 (Beachline Expressway) in Osceola and Orange Counties. This recommendation was developed based on engineering and environmental analysis conducted as part of the PD&E Update/Re-evaluation studies, community input and coordination with local governments and other agencies.

The recommended improvements, as shown in the Concept Plans in Appendix A and described in detail in Chapter 6 of this report, provide for six general purpose lanes and four express lanes throughout the project limits, interchange modifications, grade-separated ramps, ramp-to-ramp auxiliary lanes, intersection modifications and/or other improvements. As a result of the Public Hearing, environmental and engineering analyses and interagency coordination, the Recommended Alternative is recommended for Location Design Concept Acceptance by the FHWA.

### Typical Section

The recommended general mainline typical section for I-4 Segment 1 will have a total of ten dedicated lanes (6 general use lanes + 4 express lanes), a 44' rail corridor in the median and a design speed of 70 miles per hour (mph) within a minimum 300-foot right-of-way. Special sections were developed along the corridor to accommodate Collector-Distributor (C-D) roads, braided ramp systems, elevated express lanes or elevated general use lanes or other roadway design features.

### Interchanges

The recommended alternative for I-4 Segment 1 provides grade separations and/or interchanges at fourteen locations:

- CR 532/Osceola-Polk Line Road (Diverging Diamond Interchange),
- Tradition Boulevard (overpass),
- SR 429/Daniel Webster Western Beltway (Systems 3-leg Directional Interchange),
- Old Lake Wilson Road (overpass),
- Reedy Creek (I-4 overpass)
- World Drive (Partial Cloverleaf Interchange),
- SR 417/Central Florida GreeneWay (Systems Partial Y Interchange),
- US 192/SR 530 (W. Irlo Bronson Memorial Highway) (Partial Cloverleaf Interchange),
- W. Osceola Parkway (Partial Cloverleaf Interchange),
- Bonnet Creek (I-4 overpass)
- SR 536 (Epcot Center/World Center Drive) (Partial Cloverleaf Interchange)
- SR 535 (Modified Diamond Interchange)
- Daryl Carter Parkway (Diverging Diamond Interchange),
- Central Florida Parkway (Diamond Interchange)

### Bridges

A total of 75 bridge structures are required for the recommended alternative for I-4 Segment 1; the majority are multiple span structures. Twenty-six existing bridges will be replaced and seven existing bridges will remain along the corridor. Forty-one new bridges are proposed to be constructed and one bridge will be widened to accommodate the new express lanes. These bridge structures include those structures that will carry either elevated express lanes or elevated general use lanes along the Segment 1 corridor.

### Drainage

Stormwater management for the recommended alternative for I-4 Segment 1 will involve collection of runoff by storm sewer systems or roadside ditches and routing to existing or proposed stormwater ponds. There are a total of 39 basins within the project limits which will require 74 existing or proposed recommended ponds to achieve water quality treatment and attenuation of project runoff. Additionally, 13 floodplain compensation ponds are proposed to compensate for floodplain impacts.

### 1.3 Description of Proposed Action

FDOT is proposing to reconstruct and widen I-4 as part of the I-4 BtU concept. This involves the build-out of I-4 to its ultimate condition through Central Florida, including segments in Polk, Osceola, Orange, Seminole and Volusia Counties. The concept design proposes the addition of two new express lanes in each direction, resulting in a total of ten dedicated lanes. The project limits for the segment analyzed in this report are within an approximate 14-mile segment of I-4 which extends from just west of CR 532 (Polk/Osceola County Line) to west of SR 528 (Beachline Expressway), from Milepost (MP) 31.607 to MP 32.022 in Polk County, MP 0.000 to MP 7.885 in Osceola County and from MP 0.000 to 5.650 in Orange County (herein referred to as I-4 Segment 1) and as shown in Figure 1.1. Although, the interstate is a designated east-west corridor, the alignment follows a southwest to northeast orientation through the limits of Segment 1. The study area in this section from west of CR 532 to west of SR 528 includes the following interchanges:

#### Osceola County

- I-4 and CR 532 (Osceola-Polk Line Road)
- I-4 and SR 429 (Daniel Webster Western Beltway)
- I-4 and World Drive
- I-4 and SR 417 (Central Florida GreeneWay)
- I-4 and US 192/SR 530 (W. Irlo Bronson Memorial Highway)
- I-4 and W. Osceola Parkway

#### Orange County

- I-4 and SR 536 (Epcot Center/World Center Drive)
- I-4 and SR 535 (S. Apopka Vineland Road)
- I-4 and Daryl Carter Parkway\*
- I-4 and Central Florida Parkway

\*Formerly Fenton Street/Wildwood Avenue (previously identified as Lake Avenue in the December 1999 FONSI). Daryl Carter Parkway is currently an existing overpass; alternative evaluations include a proposed full-access interchange.

The proposed improvements to I-4 include widening the existing six lane divided urban interstate to a ten lane divided highway. The typical section throughout Segment 1 will have three 12-foot general use travel lanes with 10-foot inside and 12-foot outside shoulders and two 12-foot express lanes with 4-foot inside and 10-foot outside shoulders in each direction. A barrier wall between the adjacent shoulders will separate the express lanes from the general use lanes. Twelve-foot auxiliary lanes will be provided in some areas in both the eastbound and westbound directions. The typical section includes a minimum 44-foot rail envelope in the median within a minimum 300-foot right-of-way (ROW). Figure 1.2 illustrates the proposed mainline typical section for I-4 Segment 1.

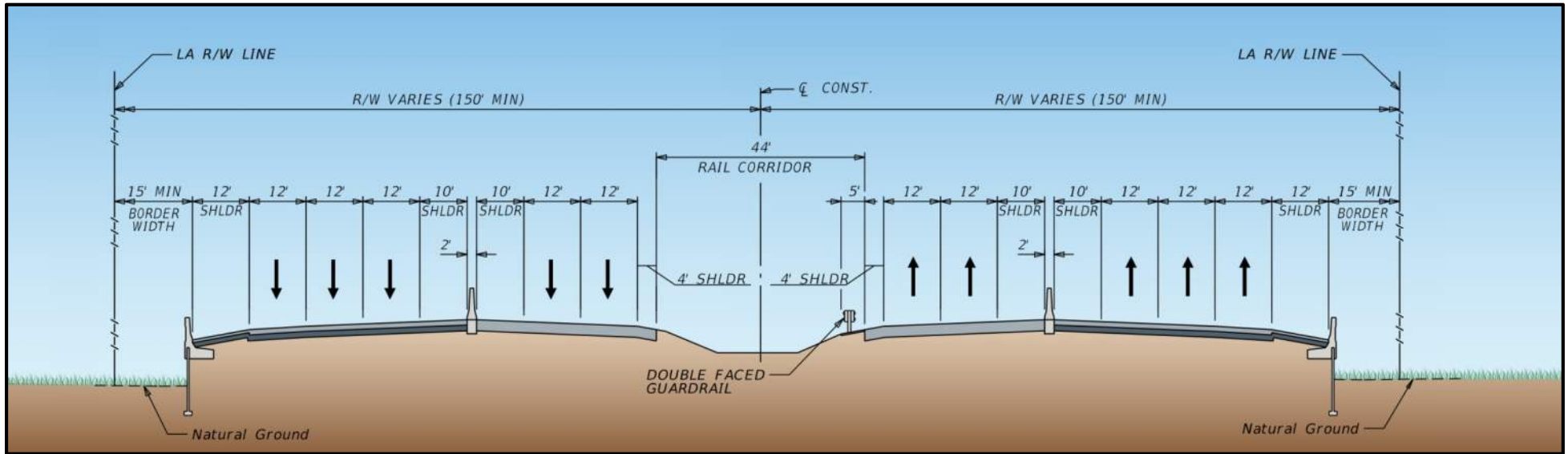
While the overall typical section remains consistent throughout Segment 1, there are some areas along the Segment 1 corridor that will have special sections. Special cross sections were developed to meet the needs of the project due to right-of-way constraints, existing utility easements or other design considerations along the corridor. These special sections may include C-D roads, braided ramp systems, elevated express lanes or elevated general use lanes. Additionally, the median width may vary in certain locations to accommodate changes in the horizontal alignment due to crossroad support structures, water crossings or other features. In the area between World Drive and SR 417,



**Preliminary Engineering Report**  
**Segment 1 - West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway)**



**Figure 1.1 – Project Location Map**



### SR 400 (I-4) TYPICAL SECTION

Design Speed - 70 MPH

Station 627 + 20.00 to Station 759 + 00.00 (Osceola County)  
 Station 828 + 00.00 to Station 1042 + 95.00 (Osceola County)  
 Station 1042 + 95.00 to Station 1121 + 50.00 (Orange County)  
 Station 1288 + 00.00 to Station 1365 + 00.00 (Orange County)

Figure 1.2 – SR 400 (I-4) Segment 1 Proposed Typical Section (6+4 with rail envelope)

the median is considerably wider than 44 feet to accommodate a future high speed rail station. The special sections along the Segment 1 corridor are identified as follows:

- I-4 Eastbound elevated express lanes between East of SR 429 and West of World Drive
- C-D system (Eastbound and Westbound) between World Drive and SR 417
- I-4 Eastbound elevated general use lanes with at grade Eastbound C-D Road between SR 536 and SR 535
- I-4 Westbound elevated general use lanes between SR 536 and East of Daryl Carter Parkway with at grade C-D Road between SR 536 and Central Florida Parkway
- I-4 Westbound elevated C-D Road between west of Central Florida Parkway and SR 528

The special sections developed for I-4 Segment 1 are illustrated in

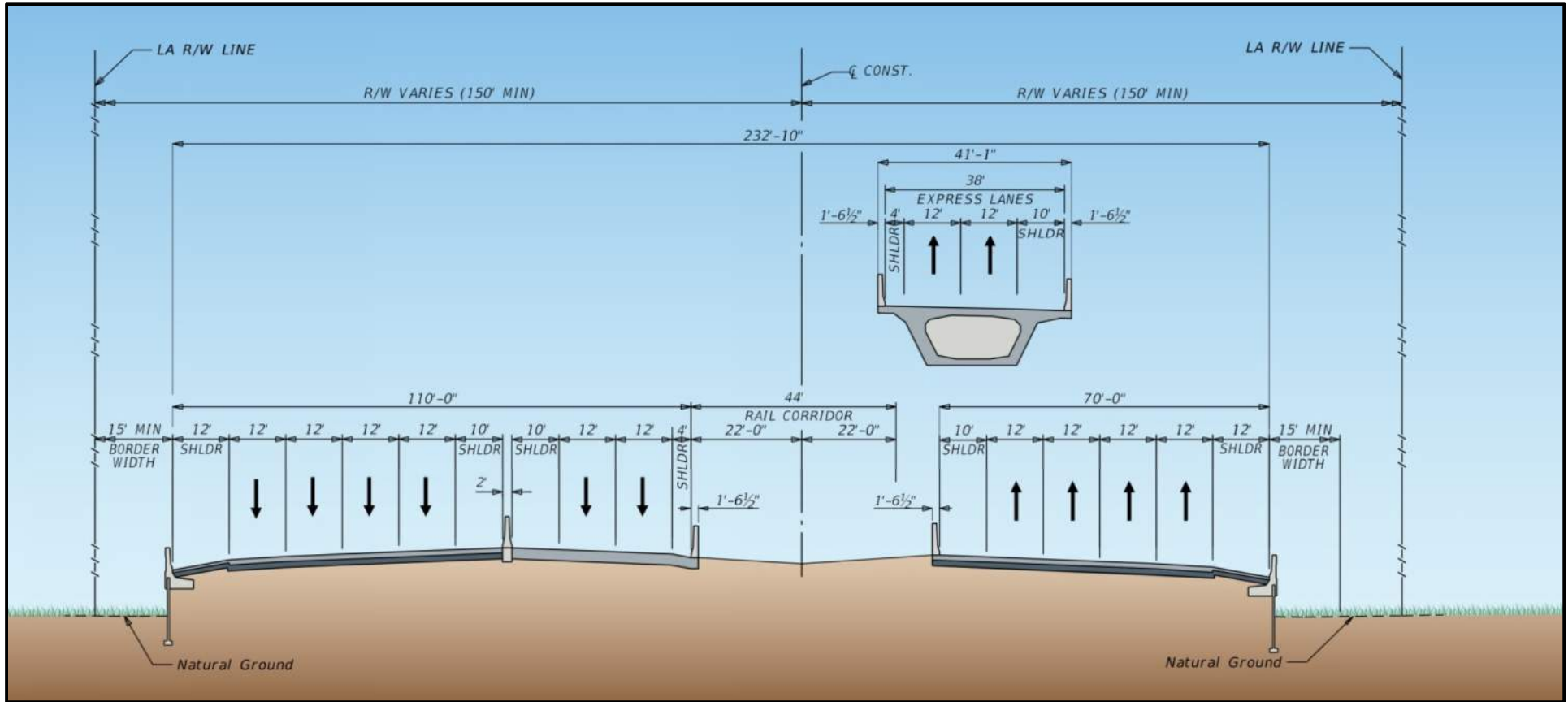
Figure 1.3 through Figure 1.5.

## 1.4 Purpose and Need

The proposed improvements to I-4 include widening the existing six lane divided urban interstate to a ten lane divided highway in order to improve traffic operations, enhance connectivity and improve mobility by providing travel choices to the motoring public. I-4 is an east-west limited access freeway which links the west and east coasts of Florida, from I-275 in Tampa to I-95 in Daytona Beach. I-4 spans across six counties in Central Florida, traversing through many cities including Lakeland, Celebration, Orlando, Altamonte Springs, Sanford and DeLand. I-4 is a critical component of Florida's Strategic Intermodal System (SIS) which links seaports, rail, airports and other intermodal facilities. This aspect of I-4's significance is evidenced through connectivity provided by major junctions with I-275, I-75, SR 429 (Daniel Webster Western Beltway), SR 417 (Southern Connector/Central Florida Greeneway/Seminole Expressway), SR 528 (Martin Andersen Beachline Expressway), SR 91 (Florida's Turnpike), SR 408 (Spessard Lindsay Holland East-West Expressway) and I-95.

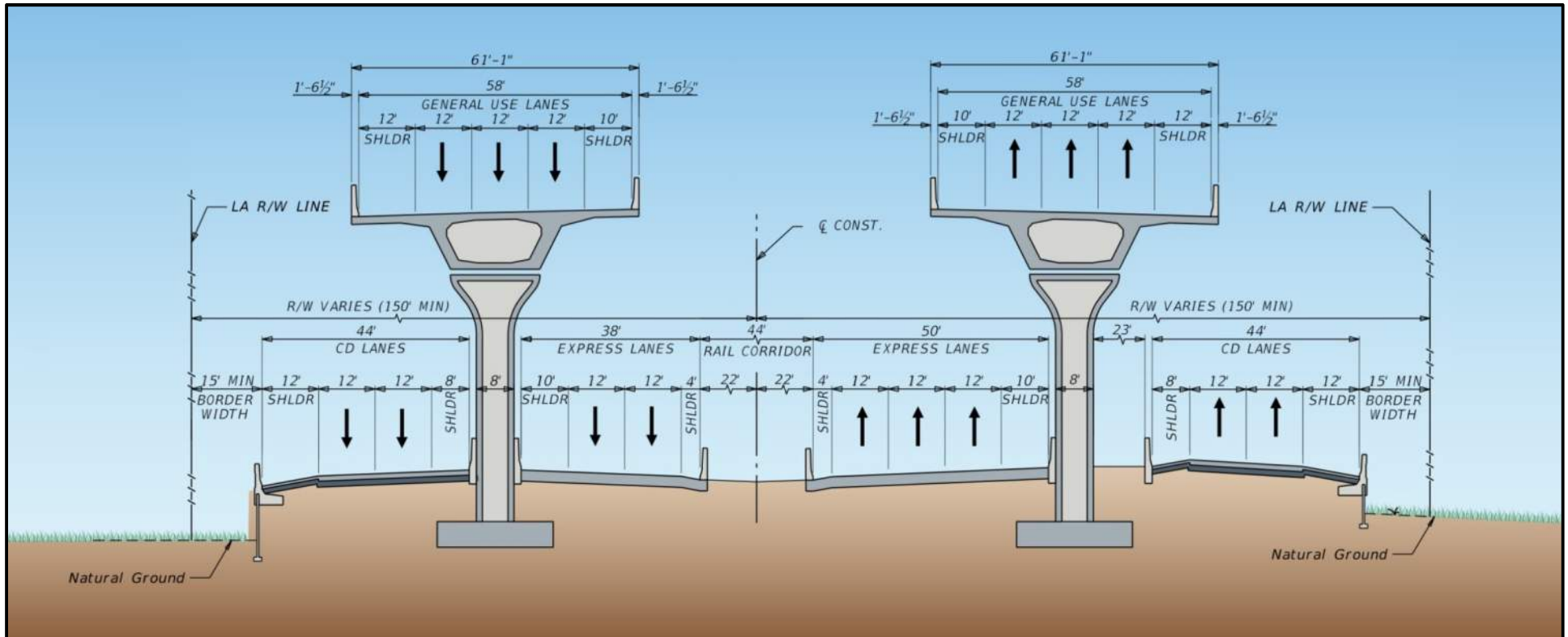
I-4 serves as the primary corridor in the movement of people and freight between major population, employment and activity centers in the Central Florida region. When the entire Interstate was fully opened in the early 1960's, it was designed to serve intrastate and interstate travel by providing a critical link between the east and west coasts of Central Florida. Although this role continues to be a crucial transportation function of I-4, the highway also serves large volumes of local and commuter traffic with shorter trip distances. Today, the highway serves as the primary link between hotel/resort complexes and tourist attractions such as Walt Disney World, Universal Studios, Sea World, the International Drive Resort Area and downtown Orlando. Since I-4 is the only north-south limited access facility that is centrally located between the predominant employment centers and the major suburbs to the north, it has become the primary commuting corridor in the Central Florida metropolitan area.





**SR 400 (I-4) SPECIAL SECTION**  
**Design Speed - 70 MPH**  
Station 759 + 00.00 to Station 828 + 00.00 (Osceola County)

Figure 1.3 – SR 400 (I-4) Segment 1 Proposed Special Section (Bridge Viaduct Between SR 429 and World Drive)

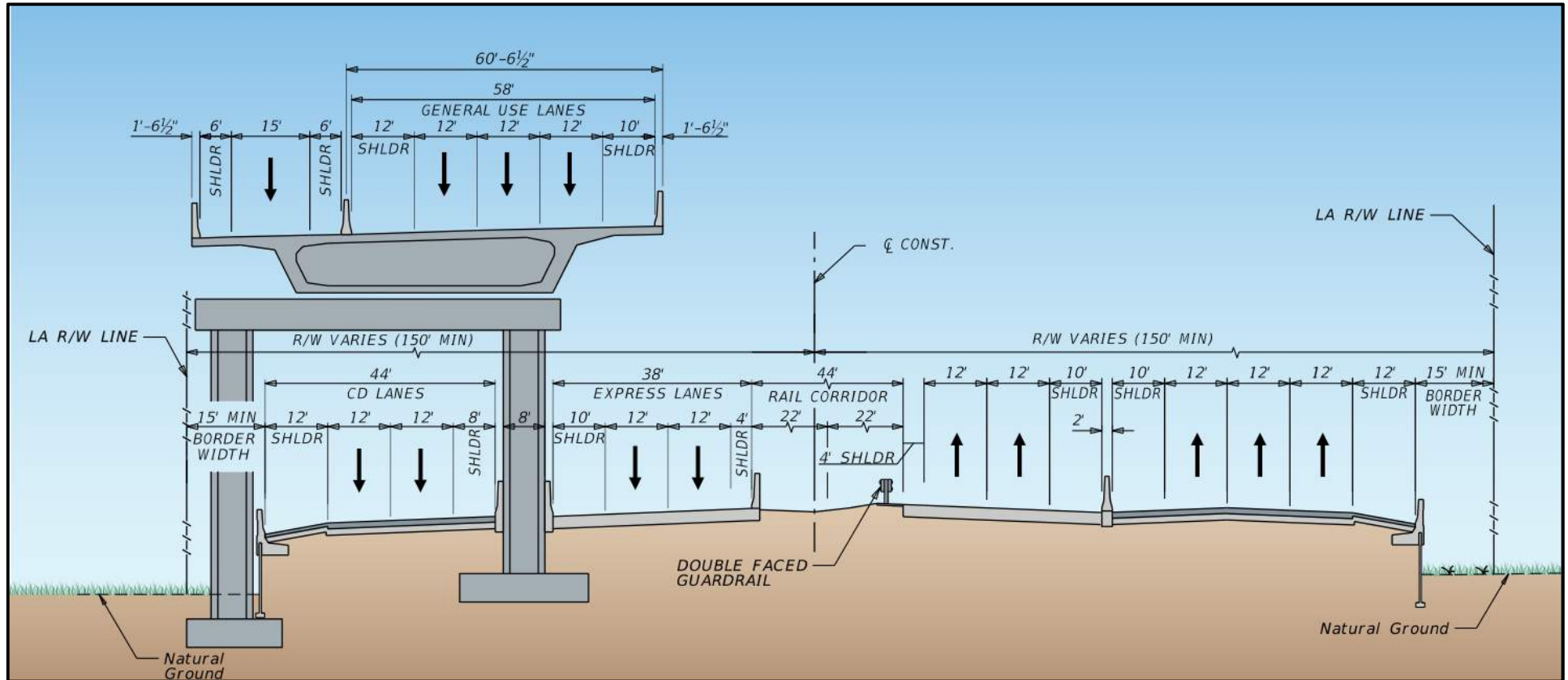


**SR 400 (I-4) SPECIAL SECTION**

**Design Speed - 70 MPH**

Station 1121 +50.00 to Station 1168 + 50.00 (Orange County)

Figure 1.4 – SR 400 (I-4) Segment 1 Proposed Special Section (Bridge Viaduct Between SR 536 and SR 535)



**SR 400 (I-4) SPECIAL SECTION**

**Design Speed - 70 MPH**

Station 1168 + 50.00 to Station 1288 + 00.00 (Orange County)

**Figure 1.5 – SR 400 (I-4) Segment 1 Proposed Special Section (Bridge Viaduct Between SR 535 and Daryl Carter Parkway)**

Growth in Central Florida over the past decades has made it difficult for the transportation system to accommodate travel demand. Traffic congestion and crash incidents have resulted in major delays on the Interstate as well as other arterials surrounding the corridor. Increased congestion levels are experienced outside of the typical morning and afternoon rush-hour periods, affecting mobility levels for more hours of the day and impacting other non-commuter/non-weekday travel. The congestion on I-4 is further evidenced by the less than desirable levels of service on the Interstate as well as the crossroads.

Projections of future population and employment in the region indicate that travel demand will continue to increase well into the future. Table 1.1 and Table 1.2, respectively, provide a summary of the population and employment growth projections for counties surrounding the I-4 corridor. The ability to accommodate the new travel patterns resulting from growth must be provided to sustain the region's economy. Without the improvements, extremely congested conditions are expected to occur for extended periods of time in both the morning and evening peak periods. Due to these congested conditions, user travel times will continue to increase, the movement of goods through the urban area will be slower, and the deliveries of goods within the urban area will be forced to other times throughout the day. The need for improvements to I-4 is illustrated by the important transportation roles I-4 serves to the Central Florida region and the State of Florida. If no improvements are made to the Interstate, a loss in mobility for the area's residents, visitors, and commuters can be expected, resulting in a severe threat to the continued viability of the economy and the quality of life.

**Table 1.1: Population Projections for Counties in the I-4 Corridor**

County	April 1, 2013	2020	2030	2040
Flagler	97,843	124,863	160,705	191,861
Hillsborough	1,276,410	1,445,344	1,666,187	1,845,013
Lake	303,317	355,935	425,221	479,928
Orange	1,202,978	1,394,814	1,641,173	1,840,695
Osceola	288,361	360,478	452,651	532,472
Polk	613,950	691,355	794,061	883,393
Seminole	431,074	465,128	508,329	541,133
Sumter	105,104	138,220	181,846	219,396
Volusia	498,978	529,447	566,999	595,077
<b>Total</b>	<b>4,818,015</b>	<b>5,505,584</b>	<b>6,397,172</b>	<b>7,128,968</b>
Source: Florida Demographic Estimating Conference, February 2014 and the University of Florida, Bureau of Economic and Business Research, Florida Population Studies, Bulletin 168, April 2014				



**Table 1.2: Employment Projections for Workforce Regions in the I-4 Corridor**

Workforce Region	Total, All Occupations		
	2014	2022	% Growth
Flagler & Volusia Counties	200,541	224,127	11.8
Hillsborough County	699,877	789,163	12.8
Polk County	228,559	252,300	10.4
Lake, Orange, Osceola, Seminole and Sumter Counties	1,224,998	1,404,357	14.6
Source: Florida Department of Economic Opportunity			

This reevaluation involves revising the original design concept showing 6 GUL + 4 SUL from CR 532 to southwest of World Drive, 6 GUL + 2 HOV lanes from southwest of World Drive to northeast of Lake Avenue and 6 GUL + 4 HOV lanes from northeast of Lake Avenue to SR 528, as recommended in the FONSI for SR 400 (I-4) from CR 532 (Polk/Osceola County Line to West of SR 528 (Beachline Expressway) (December 23, 1999), to the current proposed design of four (4) Express Lanes. The Express Lanes are tolled lanes and will extend the full length of the project. The access to/from the tolled lanes will be evaluated as part of this effort to determine if changes are needed from the previously approved concept for access to/from the SUL/HOV Lanes. The original I-4 PD&E Studies involved physical separation between the general use lanes and the SUL/HOV lanes on I-4, with demand management in the HOV lanes. The original demand management strategy was to control the use of the HOV lanes by requiring a minimum number of occupants per vehicle to maintain an acceptable level of service (Level of Service D).

This reevaluation also addresses revising the demand management tool to convert the HOV lanes to tolled express lanes. The express lanes will be separated from the general use travel lanes by two shoulders with a barrier wall between the shoulders. A variable pricing tolling plan is proposed for the express lanes. The tolls will vary by time of day and day of week to maintain acceptable levels of service in the express lanes. The tolls will be collected electronically through existing E-Pass, SunPass and other systems currently in place in the Orlando metropolitan area. The conversion to Express Lanes will maintain the same right-of-way limits as documented previously and will not change the impacts to the social, natural or physical environment. An update to the Systems Access Modification Report (SAMR) prepared in January 2013 is being completed in conjunction with this effort.

## 2.0 Existing Conditions

The existing conditions within the I-4 study corridor were evaluated by reviewing existing plans and documents, coordination with regulatory agencies and performing field investigations. The following sections provide detailed descriptions of existing roadway characteristics, traffic and bridge features, drainage, soils and other physical features and traffic and crash data within the project study area.

### 2.1 Roadway Classification

I-4 is classified by FDOT as an Urban Interstate and Strategic Intermodal System (SIS) corridor throughout the limits of Segment 1. I-4 is a designated evacuation route by the Florida Division of Emergency Management.

### 2.2 Typical Section

The existing typical section for the I-4 mainline consists of three 12-foot travel lanes in each direction. The outside and inside shoulders are 12 feet wide with 10 feet paved. A guardrail is provided on the inside shoulder of the eastbound and westbound lanes, in varying locations throughout the segment limits. The roadways are separated by a grass median which varies in width from 55 feet to 340 feet. Table 2.1 provides a summary of the existing median widths, auxiliary lanes, collector-distributor (C-D) lanes and right-of-way width along the I-4 Segment 1 corridor. Figure 2.1 through Figure 2.9 illustrate the existing I-4 typical sections.

**Table 2.1 – Existing Typical Section Features**

Station From	Station To	Median Width (feet)	Number of WB Auxiliary Lanes	Number of EB Auxiliary Lanes	Number of WB C-D Lanes	Number of EB C-D Lanes	ROW Width (feet)
604+50.00	730+00	76	0-1	0-1	0	0	300
730+00.00	820+00	64	0-1	0-1	0	0	300
820+00.00	887+00	64	0	0	4	4	300
887+00.00	944+00	Varies (64-340)	0-1	0-2	2	2	300-740
944+00.00	983+00	64	0	0	1-2	2	425
983+00.00	1021+00	55	0	0	2	1	425
1021+00.00	1139+00	64	0-1	0-2	1-2	1-2	775-1025
1139+00.00	1199+00	64	0-2	0-1	0	0	300
1199+00.00	1345+48.48	64	0	0	0	0	300

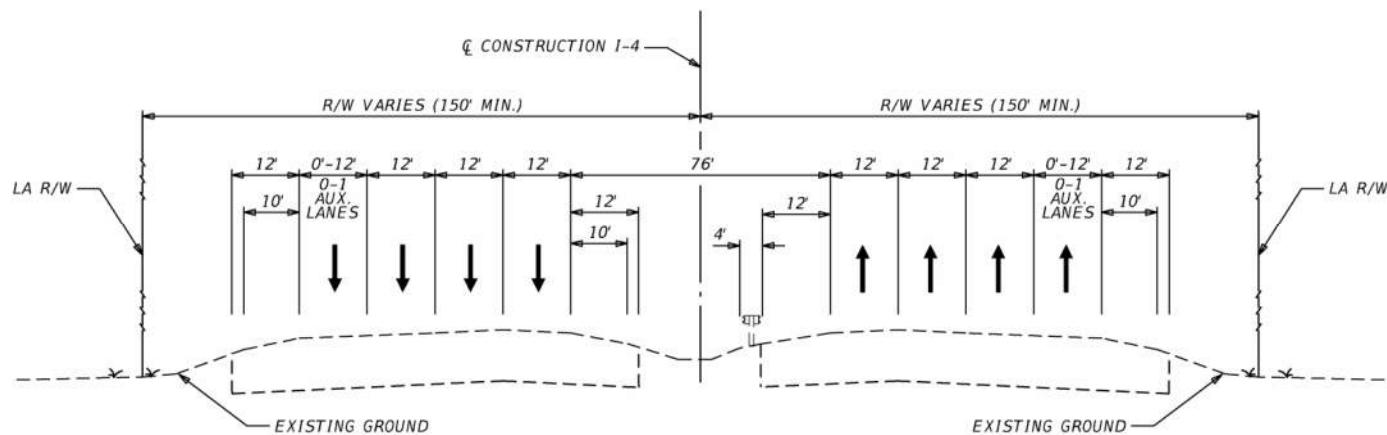


Figure 2.1 - Existing Typical Section (W. of CR 532, Sta. 604+50.00 to W. of SR 529, Sta. 730+00.00)

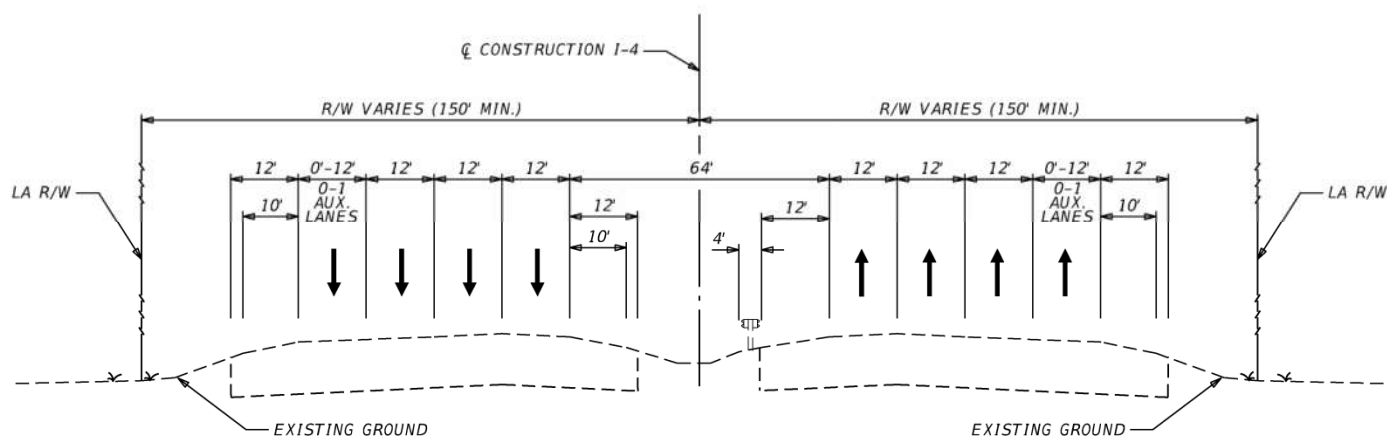


Figure 2.2 - Existing Typical Section (W. of SR 529, Sta. 730+00.00 to W. of World Dr., Sta. 820+00.00)

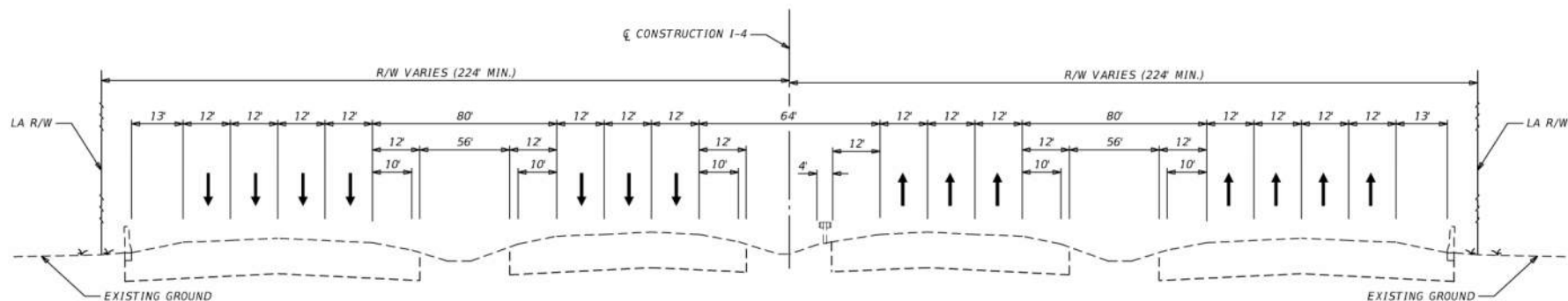


Figure 2.3 - Existing Typical Section (W. of World Dr., Sta. 820+00.00 to W. of SR 417, Sta. 887+00.00)

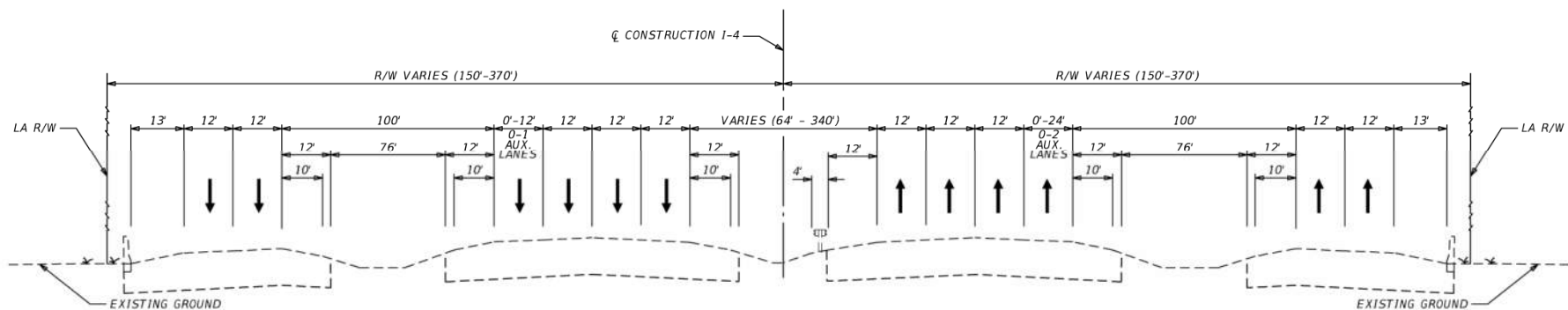


Figure 2.4 - Existing Typical Section (W. of SR 417, Sta. 887+00.00 to SR 417, Sta. 944+00.00)

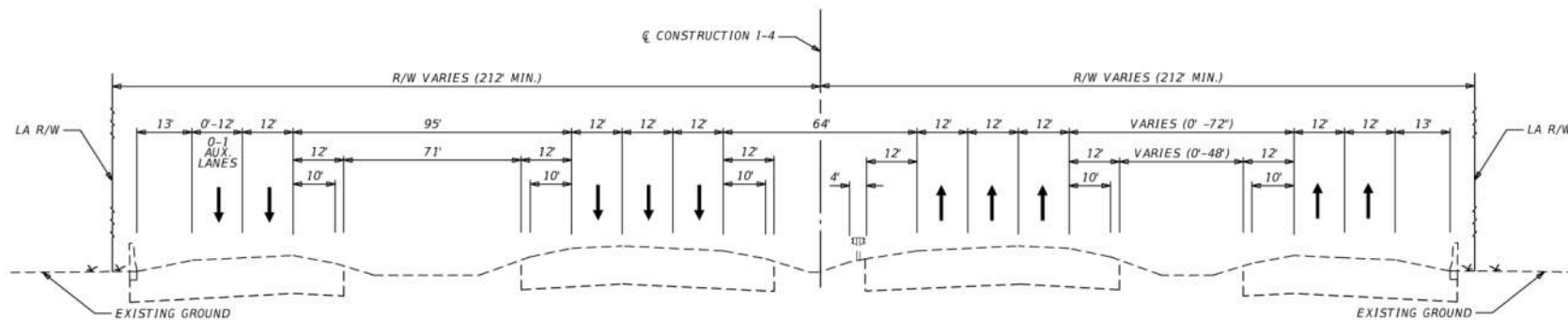


Figure 2.5 - Existing Typical Section (SR 417, Sta. 944+00.00 to E. of US 192/SR 530, Sta. 983+00.00)

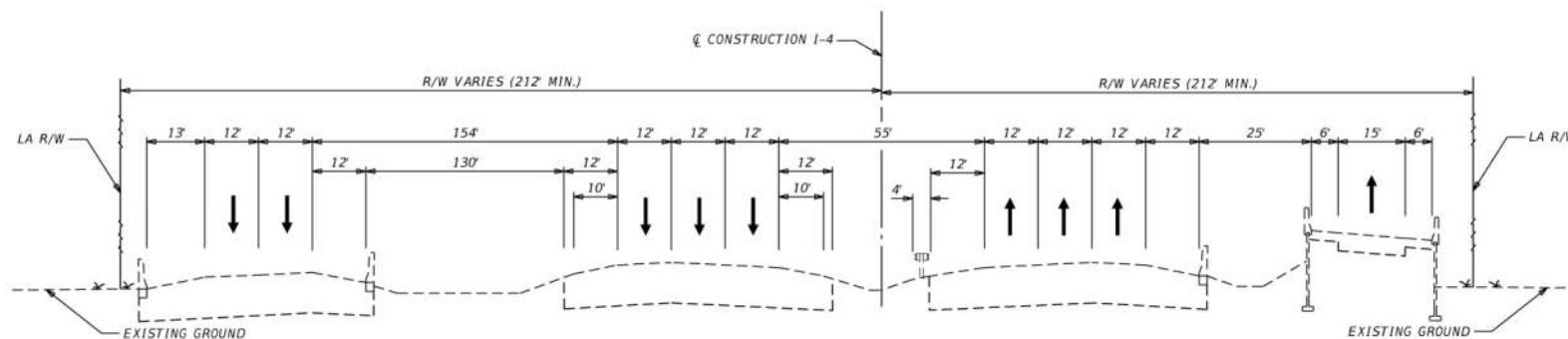


Figure 2.6 - Existing Typical Section (E. of US 192/SR 530, Sta. 983+00.00 to W. of Osceola Pkwy., Sta. 1021+00.00)

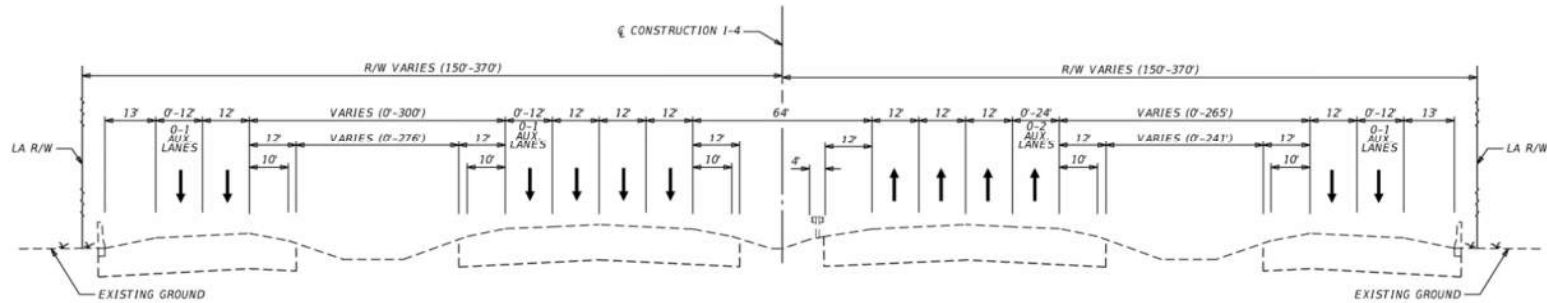


Figure 2.7 - Existing Typical Section (W. of Osceola Pkwy., Sta. 1021+0.00 to E. of SR 536, Sta. 1139+00.00)

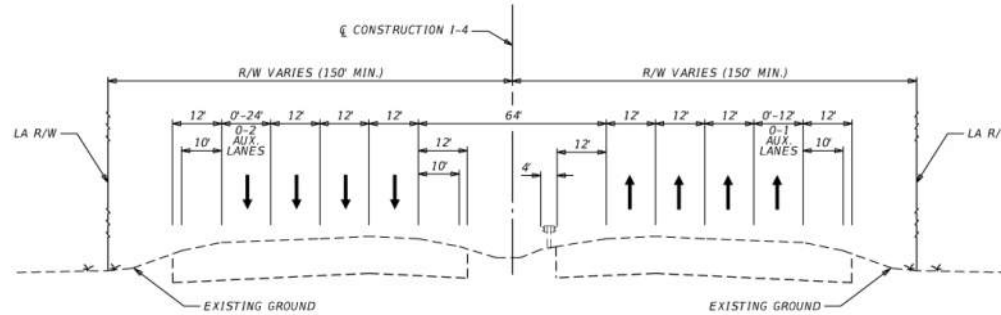


Figure 2.8 - Existing Typical Section (E. of SR 536, Sta. 1139+00.00 to E. of SR 535, Sta. 1199+00.00)

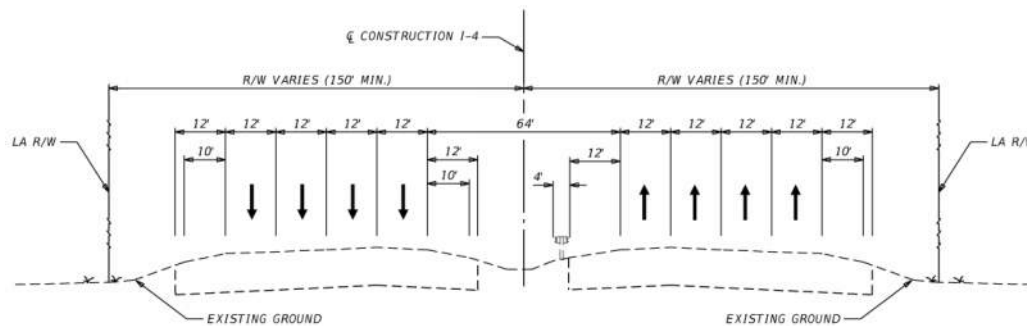


Figure 2.9 - Existing Typical Section (E. of SR 535, Sta. 1199+00.00 to E. of Central Florida Pkwy, Sta. 1345+48.48)

## 2.3 Right-of-Way

The existing right-of-way throughout Segment 1 varies, but is typically 300-feet. The existing right-of-way widens within portions of the segment with C-D roads or braided ramp systems along the corridor. The right-of-way widths were previously listed in Table 2.1 and illustrated in the typical section figures in Section 2.2. The Concept Plans for this project, included in Appendix A, also show the existing right-of-way along the corridor.

## 2.4 Existing Property Lines and Land Use

The existing property lines for parcels within the project study area were available from the Osceola and Orange County GIS databases and are shown on the Concept Plans in Appendix A. Parcels affected by the proposed improvements are identified on the Concept Plans. The proposed improvements to the 14-mile I-4 Segment 1 corridor lie within unincorporated Osceola County (approximately 8 miles) and unincorporated Orange County (approximately 6 miles). Within Orange County, a small portion of the segment is adjacent to or within the City of Lake Buena Vista, as shown in Figure 2.10.

### Existing Land Use

The existing land use map was created using information from FDOT 2012 parcel tax data records compiled by the Florida Geographic Data Library (FGDL). The existing land use along the I-4 Segment 1 corridor varies with a mixture of uses. The southern half of the corridor is characterized by large portions of agricultural and recreational land uses on either side of the interstate. Other existing land uses at the southern end of the corridor include undeveloped parcels designated for retail/office or non-residential use, non-agriculture acreage and residential land uses. The northern portion of the corridor consists largely of retail/office land uses interspersed with some vacant nonresidential parcels and agricultural use. The existing land uses along the project corridor are shown in Figure 2.11.

### Future Land Use

The future land use map was created using FGDL future land use data from the adopted comprehensive plan amendments for each municipality within the project's limits. Future land use along the I-4 Segment 1 corridor also varies greatly with a mixture of uses. The southern portion of the I-4 Segment 1 corridor through Osceola County consists of commercial, planned development and conservation land uses. The northern portion of the I-4 Segment 1 corridor which runs through Orange County is surrounded predominantly by mixed use parcels with some commercial and office use. The future land uses along the corridor are shown in Figure 2.12.



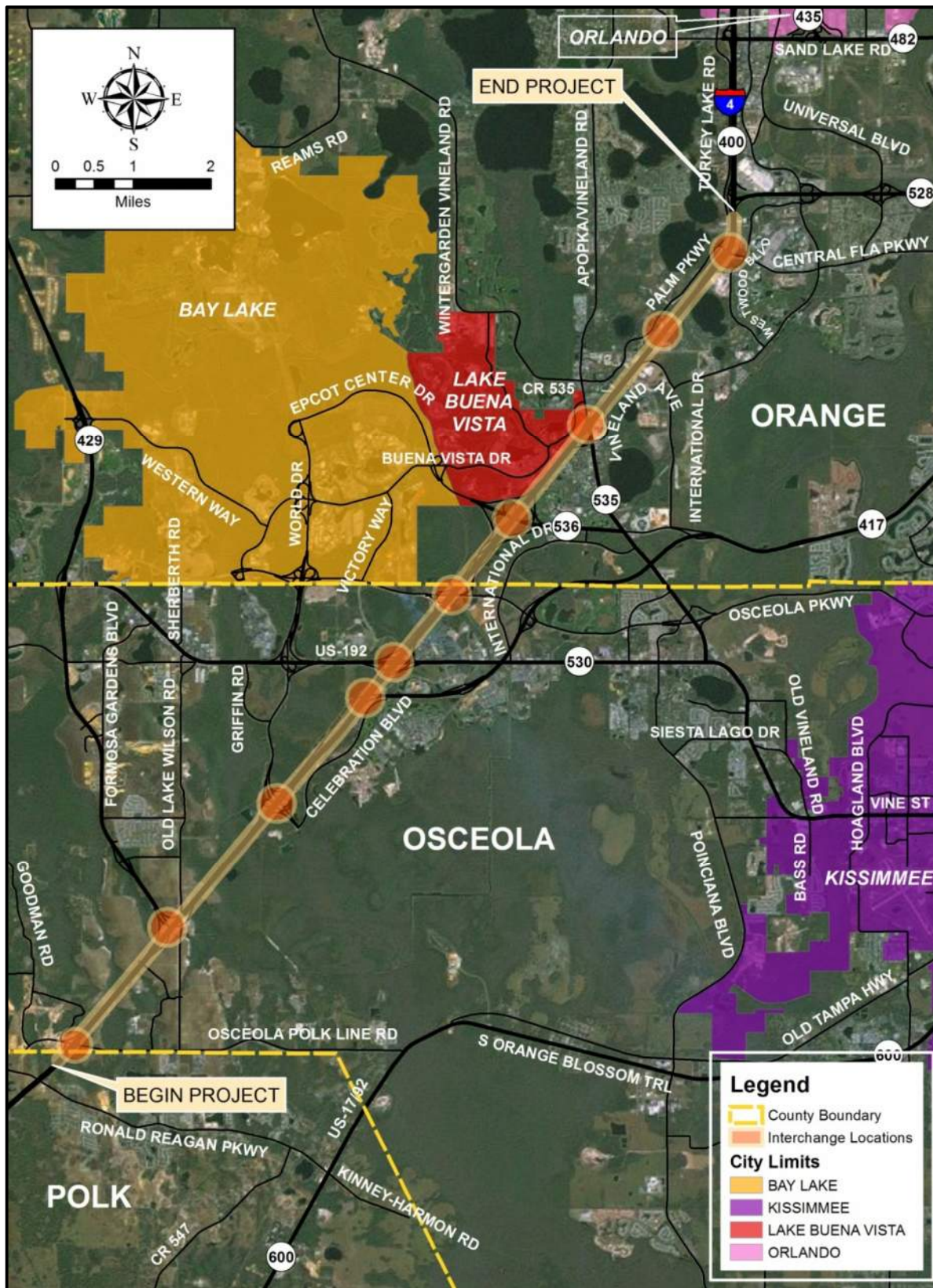


Figure 2.10 - Existing City Limits



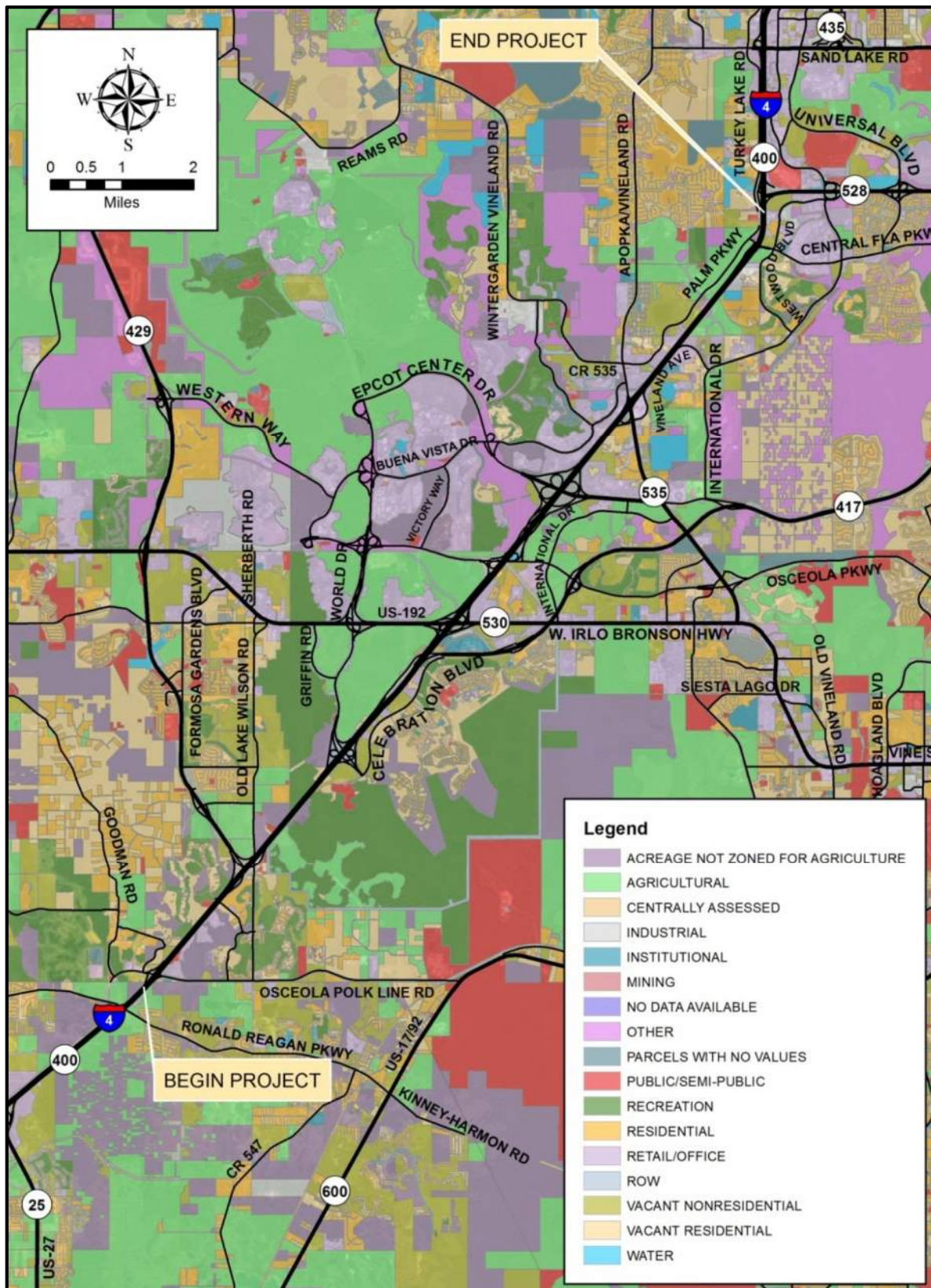


Figure 2.11 - Existing Land Use



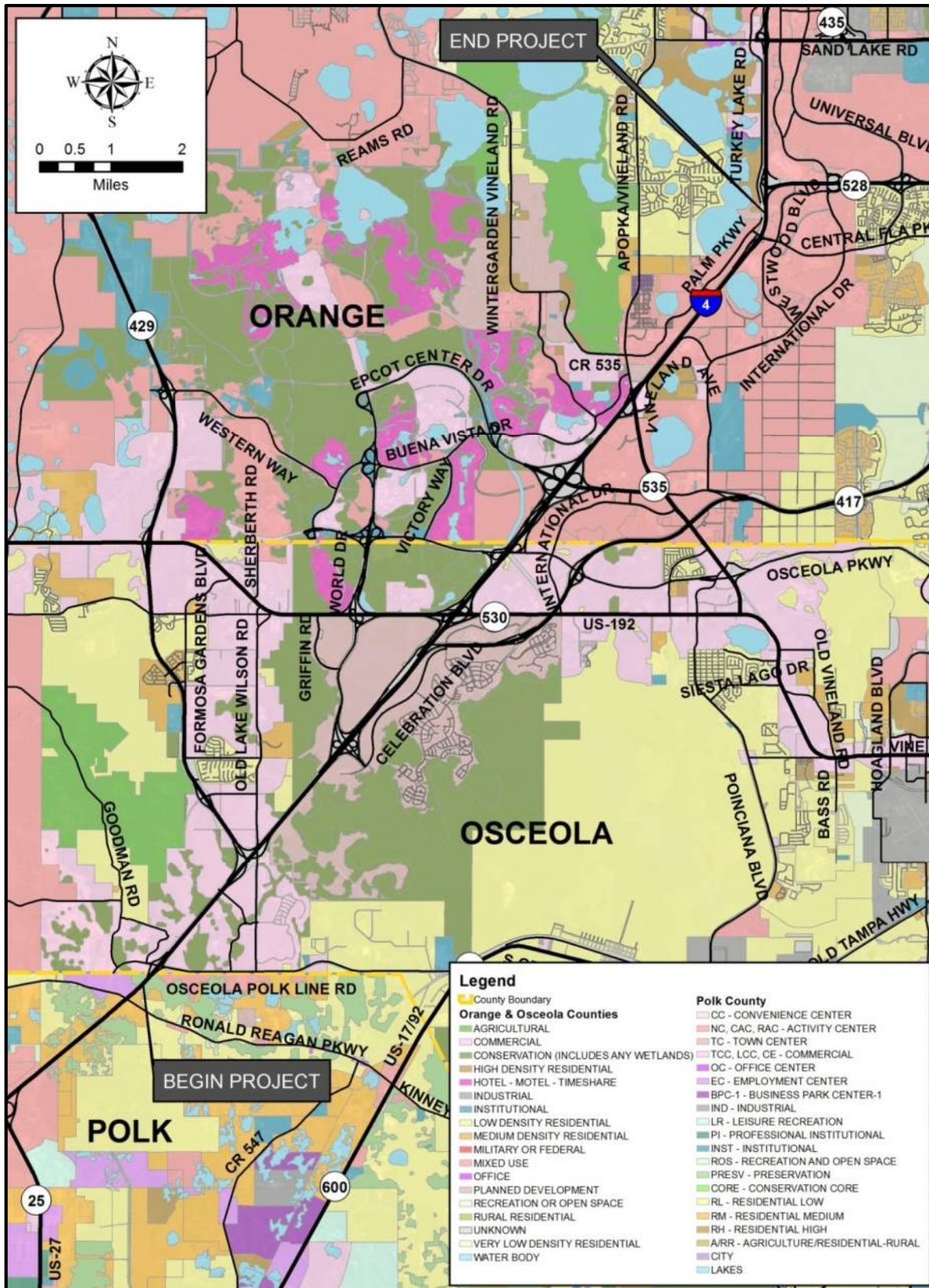


Figure 2.12 - Future Land Use

## 2.5 Horizontal Alignment

The alignment on I-4 is typical of most interstate highways, with long tangent sections connecting long, gradual curves. There are three horizontal curves within the limits of Segment 1: west of CR 54, at Osceola Parkway, and at Central Florida Parkway. Table 2.2 describes the horizontal alignment within Segment 1 and the design speed associated with each curve based on the current design criteria. The horizontal curve data was available from the *Preliminary Engineering Report for I-4 (SR 400) PD&E Study from CR 532 (Osceola-Polk Line Road) to SR 528 (Beeline Expressway)* [June 2000]. The curve to the west of CR 532 and the curve at Central Florida Parkway do not meet current design criteria for a 70-mph design speed. The superelevation rate,  $e$ , and radius for these curves are equivalent to a 55-mph design speed. The posted speed limit along Segment 1 is 65 MPH from the beginning of the segment to east of SR 536, and 60 MPH from east of SR 536 to the end of the segment limits, just west of SR 528.

**Table 2.2 - Existing Horizontal Alignment**

PI Stationing	Location	Degree of Curvature and Direction	Existing Superelevation	Equivalent Design Speed (MPH)
614+84.94	West of CR 532	0°30'00" L	0.016	55
1030+98.03	Osceola Parkway	0°04'00" L	0.02	70
1340+49.08	Central Florida Parkway	2°00'01" L	0.052	55

## 2.6 Vertical Alignment

Table 2.3 summarizes the vertical alignment of I-4 within the corridor study limits and the design speed associated with each curve based on current design criteria. The vertical curve data was available from the *Preliminary Engineering Report for I-4 (SR 400) PD&E Study from CR 532 (Osceola-Polk Line Road) to SR 528 (Beeline Expressway)* [June 2000]. Of the 63 vertical curves in Segment 1, 61 curves do not meet the current requirements for either length of curve on an interstate or 70 mph design speed based on curve constant,  $K$ . Reference location stationing is included on the Concept Plans included in Appendix A.

**Table 2.3 - Existing Vertical Alignment**

PVI Stationing	Location	At Inter-Change (Y/N)	Crest or Sag Curve	Algebraic Difference in Grade	Roadway Direction	Curve Length (ft)	Existing K-Value	Equivalent Design Speed (MPH)
620+51.27		N	Sag	0.22	EB/WB	400	1,818	70
627+14.46		N	Sag	2.78	EB/WB	450	1,62	60
642+08.03	CR 532	Y	Crest	6.00	EB/WB	1,500	250	55
649+59.75		N	Sag	2.85	WB	800	281	70

Table 2.3 - Existing Vertical Alignment

PVI Stationing	Location	At Inter-Change (Y/N)	Crest or Sag Curve	Algebraic Difference in Grade	Roadway Direction	Curve Length (ft)	Existing K-Value	Equivalent Design Speed (MPH)
666+9.82		N	Sag	1.29	WB	600	465	70
676+9.55		N	Crest	0.86	WB	1,000	1,163	70
682+59.82		N	Sag	2.37	WB	500	211	70
701+59.75		N	Sag	3.09	WB	500	162	60
719+34.82		N	Crest	5.13	WB	1,550	302	55
726+9.88		N	Sag	2.19	WB	500	228	70
735+9.82	SR 429	Y	Crest	0.93	WB	500	538	70
647+9.75		N	Sag	2.63	EB	550	209	70
666+59.75		N	Sag	0.83	EB	500	602	70
673+9.69		N	Crest	1.46	EB	500	342	60
680+59.69		N	Sag	0.58	EB	500	862	70
702+9.62		N	Sag	3.42	EB	500	146	55
714+9.62		N	Crest	4.41	EB	1,200	272	55
719+9.75		N	Sag	2.04	EB	500	245	70
736+59.75	SR 429	Y	Sag	0.08	EB	500	6,250	70
748+47.35		N	Crest	2.59	EB/WB	975	376	60
754+79.04		N	Sag	1.68	EB/WB	400	238	70
765+84.62		N	Sag	1.23	EB/WB	500	407	70
776+84.82		N	Crest	3.50	EB/WB	1,050	300	55
781+34.69		N	Sag	2.47	EB/WB	450	182	65
810+99.78		N	Sag	0.80	EB/WB	400	500	70
814+99.71		N	Crest	1.60	EB/WB	400	250	55
818+99.97		N	Sag	0.80	EB/WB	400	500	70
835+60.01	World Drive	Y	Sag	0.39	EB/WB	500	1,282	70
844+59.95	World Drive	Y	Crest	0.55	EB/WB	500	909	70
863+59.88	World Drive	Y	Sag	0.16	EB/WB	500	3,125	70
872+59.82		N	Sag	0.23	EB/WB	500	2,174	70
892+59.82		N	Crest	0.23	EB/WB	500	2,174	70
938+59.88		N	Sag	0.33	EB/WB	500	1,515	70
953+59.88		N	Crest	0.10	EB/WB	500	5,000	70
968+59.95	SR 530	Y	Crest	0.59	EB/WB	900	1,525	70
973+59.88	SR 530	Y	Sag	0.36	EB/WB	500	1,389	70
988+10.01		N	Sag	0.37	EB/WB	500	1,351	70

Table 2.3 - Existing Vertical Alignment

PVI Stationing	Location	At Inter-Change (Y/N)	Crest or Sag Curve	Algebraic Difference in Grade	Roadway Direction	Curve Length (ft)	Existing K-Value	Equivalent Design Speed (MPH)
996+60.08		N	Crest	0.43	EB/WB	500	1,163	70
1024+59.95		N	Crest	1.57	EB/WB	500	318	60
1047+60.14		N	Sag	0.22	EB/WB	500	2,273	70
1063+60.21		N	Sag	0.11	EB/WB	500	4,545	70
1079+60.28		N	Crest	0.11	EB/WB	500	4,545	70
1089+60.28	SR 536	Y	Sag	0.12	EB/WB	500	4,167	70
1112+60.14		N	Sag	0.78	EB/WB	500	641	70
1129+60.28		N	Crest	1.21	EB/WB	500	413	65
1138+60.21		N	Sag	0.30	EB/WB	500	1,667	70
1148+10.34		N	Crest	0.58	EB/WB	500	862	70
1167+10.34		N	Sag	0.29	EB/WB	400	1,379	70
1177+85.14	SR 535	Y	Sag	2.16	EB/WB	400	185	65
1191+35.41	SR 535	Y	Crest	5.44	EB/WB	1,350	248	55
1197+35.41		N	Sag	3.00	EB/WB	450	150	55
1210+10.21		N	Sag	0.98	EB/WB	400	408	70
1221+35.21		N	Crest	0.93	EB/WB	400	430	65
1244+60.34		N	Sag	0.81	EB/WB	400	494	70
1263+60.28		N	Crest	0.96	EB/WB	400	417	65
1277+60.54	Daryl Carter Parkway	Y	Crest	1.26	EB/WB	400	317	60
1294+60.34		N	Sag	1.36	EB/WB	400	294	70
1328+10.41		N	Sag	2.56	WB	400	156	55
1340+10.34	Central Florida Parkway	Y	Crest	4.37	WB	1,200	275	55
1344+10.47		N	Sag	1.85	WB	400	216	70
1328+10.41		N	Sag	2.37	EB	400	169	60
1340+10.34	Central Florida Parkway	Y	Crest	3.98	EB	1,200	302	55
1344+10.47		N	Sag	1.66	EB	400	241	70



## 2.7 Pedestrian Accommodations and Bicycle Facilities

I-4 is a limited access interstate facility that prohibits bicycle and pedestrian traffic. Existing pedestrian and bicycle facilities for each of the interchanges along Segment 1 are described in the following section.

### I-4 and CR 532 (Osceola-Polk Line Road) Interchange

There are no existing pedestrian or designated bicycle facilities at the I-4 and CR 532 interchange. However, just west of the interchange, at South Goodman Road, CR 532 (Champions Gate Boulevard) has sidewalks on both sides of the roadway. Crosswalks are provided at crossings along Champions Gate Boulevard at intersections between South Goodman Road and Ronald Reagan Parkway. East of the interchange, a sidewalk is provided on the north side of CR 532, from approximately 520 feet east of the I-4 East ramp terminal signal at CR 532 to east of South Old Lake Wilson Road.

### I-4 and SR 535 (S. Apopka Vineland Road) Interchange

The existing I-4 and SR 535 interchange has a sidewalk located on the east side of SR 535 which runs beyond the limits of the study area on SR 535. Crosswalks presently exist at ramp entry from SR 535 Northbound to I-4 Eastbound as well as at the ramp terminal from I-4 Westbound to SR 535. Crosswalks are also provided along the east side of the SR 535 and Vineland Avenue intersection to allow pedestrians to cross Vineland Avenue. There are no designated bicycle facilities at this interchange.

### I-4 and Central Florida Parkway Interchange

The existing interchange at I-4 and Central Florida Parkway has a sidewalk located on the south side of the road between Turkey Lake Road and the I-4 eastbound ramp terminal. A crosswalk exists on the south side of the Turkey Lake Road and Central Florida Parkway intersection, to allow pedestrians to cross Turkey Lake Rd. There are no designated bicycle facilities at this interchange.

There are no existing sidewalks or crosswalks, designated bicycle facilities or trail systems at the following interchange locations:

- I-4 and SR 429 (Daniel Webster Beltway) Systems Interchange
- I-4 and World Drive Interchange
- I-4 and SR 417 Systems Interchange
- I-4 and US 192/SR 530 (W. Irlo Bronson Memorial Highway) Interchange
- I-4 and W. Osceola Parkway Interchange
- I-4 and SR 536 (World Center Drive) Interchange

## 2.8 Design and Posted Speed

The design speed for I-4 is 70 miles per hour (MPH). The posted speed limit along Segment 1 is 65 MPH from the beginning of the segment to east of SR 536, and 60 MPH from east of SR 536 to the end of the segment limits, just west of SR 528.

## 2.9 Lighting

The majority of the I-4 Segment 1 mainline has existing lighting except for the area surrounding the CR 532 interchange. The existing lighting consists of conventional lighting poles along the mainline of I-4 and the interchange areas, except for an approximate 4-mile section between west of SR 417 in Osceola County and east of SR 536 in Orange County, which has high mast lighting. Table 2.4 shows the approximate limits of the existing lighting locations along the I-4 Segment 1 mainline.

**Table 2.4 - Existing Lighting Summary**

County	Existing Lighting Limits			Type
	BEGIN MP	END MP	Length	
Osceola	1.370	2.890	1.520	Conventional
Osceola	3.415	5.415	2.000	Conventional
Osceola	5.415	7.885	2.470	High Mast
Orange	0.000	1.740	1.740	High Mast
Orange	1.740	5.650	5.650	Conventional

## 2.10 Railroad

There are no at grade or grade separated rail/highway crossings within the project limits. The existing median is wide enough to support a future rail corridor throughout the limits of I-4 Segment 1.

## 2.11 Existing Traffic

Existing (2011) traffic information including volume counts, geometry, signal timing plans and other pertinent data was collected as part of the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project South Section – from West of US 27 to West of SR 435 (Kirkman Road) (March 2017)*. The data from this report was utilized to perform operational analyses of existing conditions.

### 2.11.1 Traffic Volumes

Existing traffic volume data consists of year 2011 AM and PM peak hour counts compiled from FDOT's Florida Traffic Information (FTI) database, Florida's Turnpike Enterprise, Osceola and Orange County count programs, other agencies and field data collection. The existing (year 2011) traffic counts for the I-4 Segment 1 study corridor were obtained from the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project South Section – from West of US 27 to West of SR 435 (Kirkman Road) (March 2017)* and are depicted in Figure 2.13 through Figure 2.17.

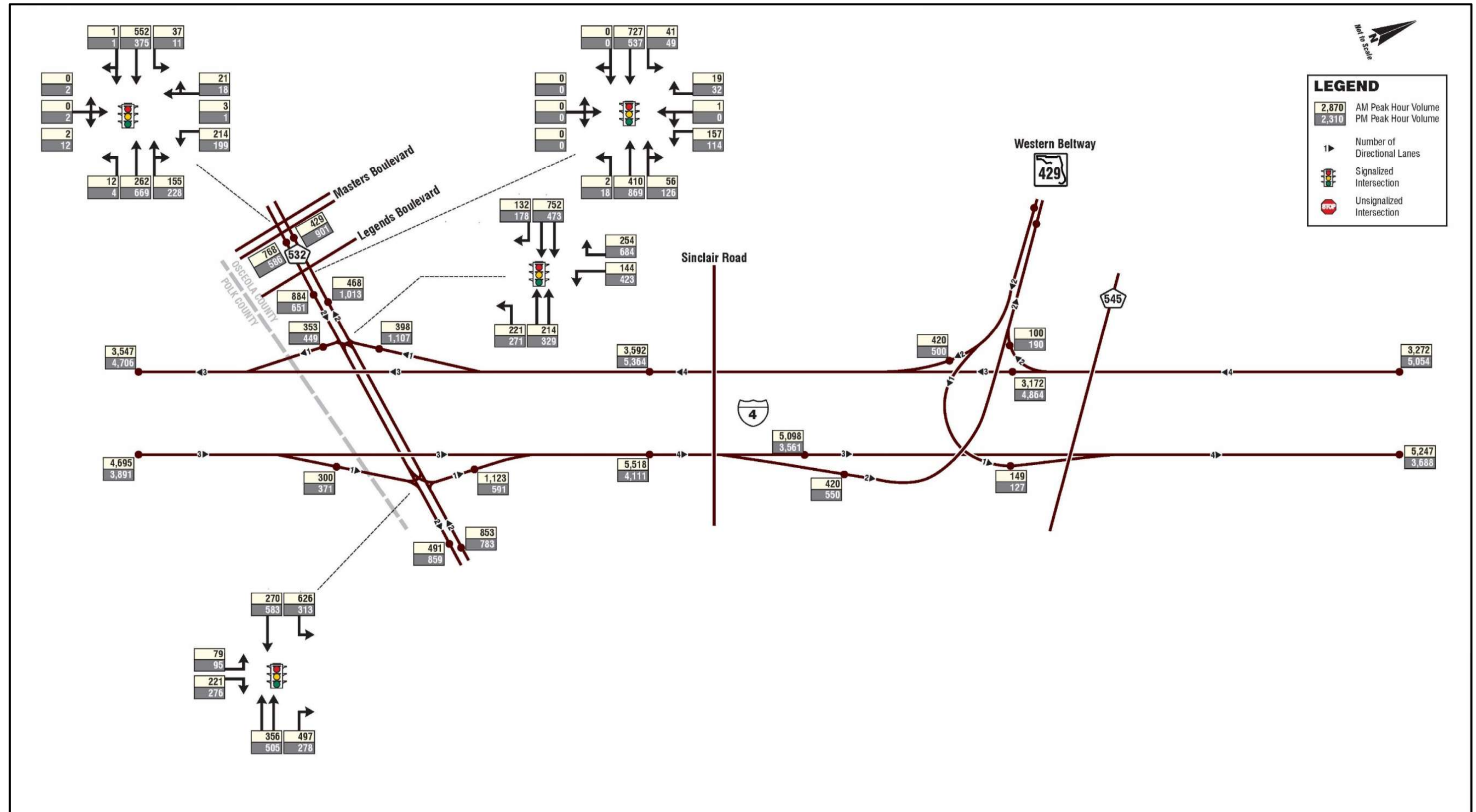


Figure 2.13 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 1 of 5)

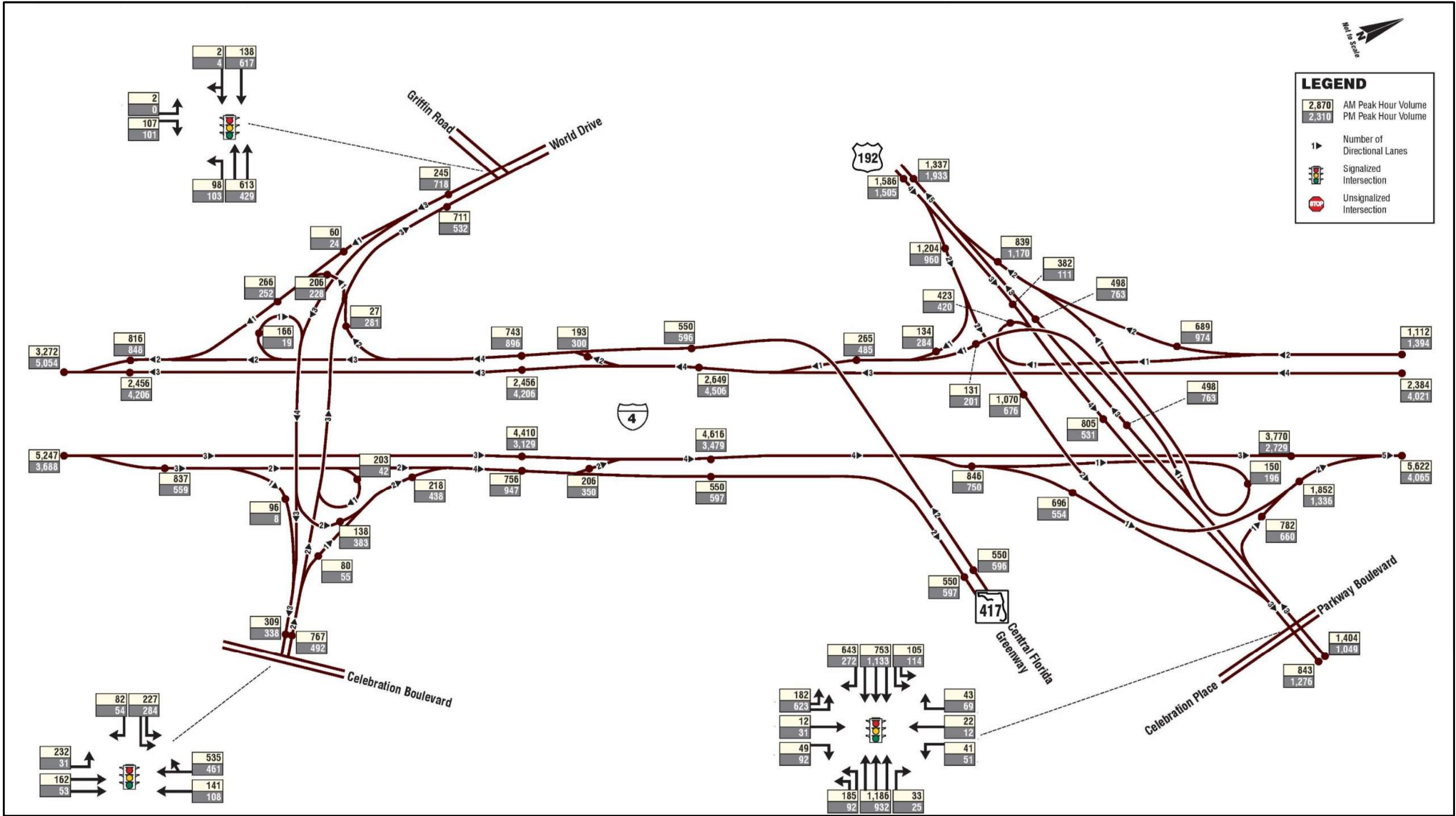


Figure 2.14 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 2 of 5)



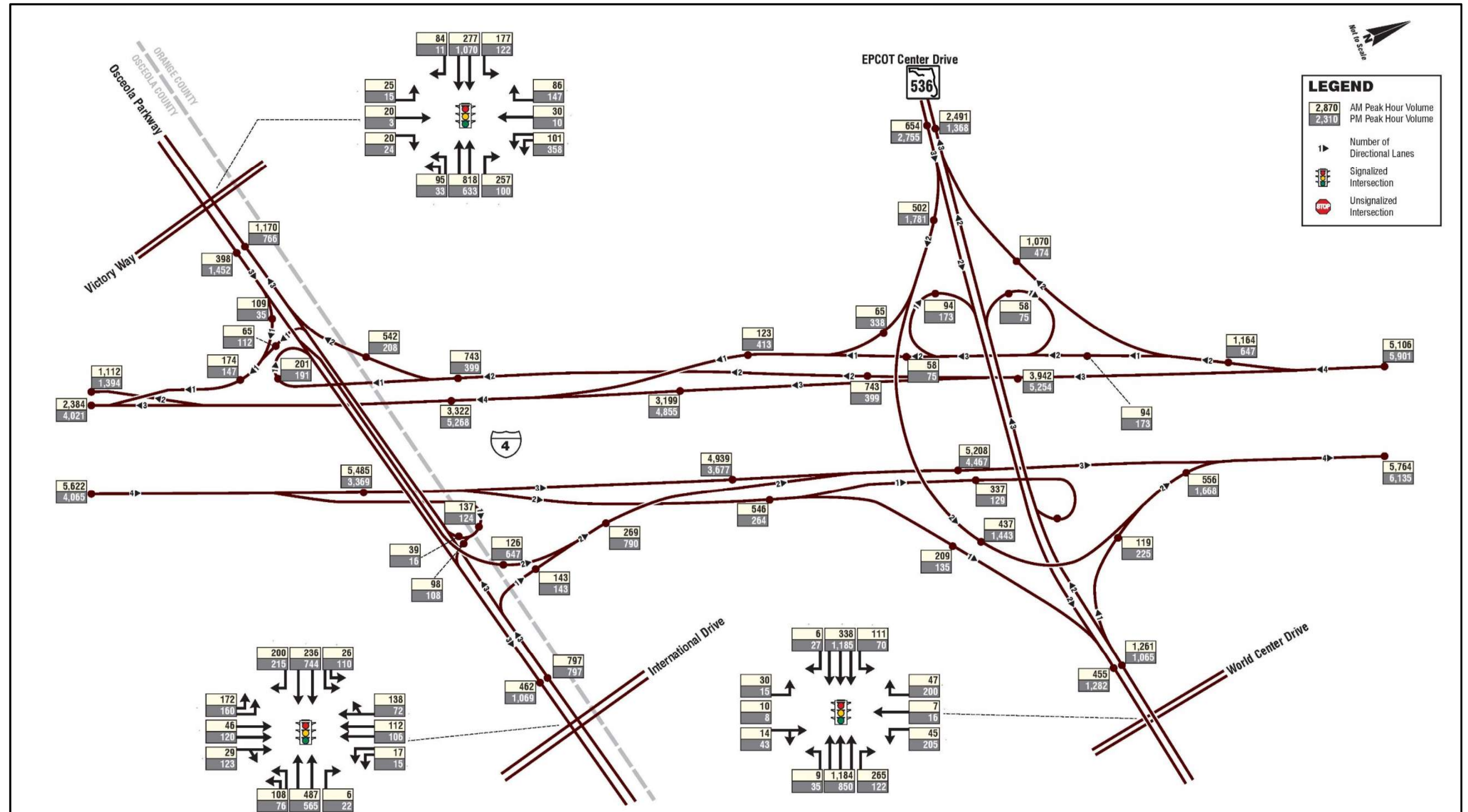


Figure 2.15 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 3 of 5)

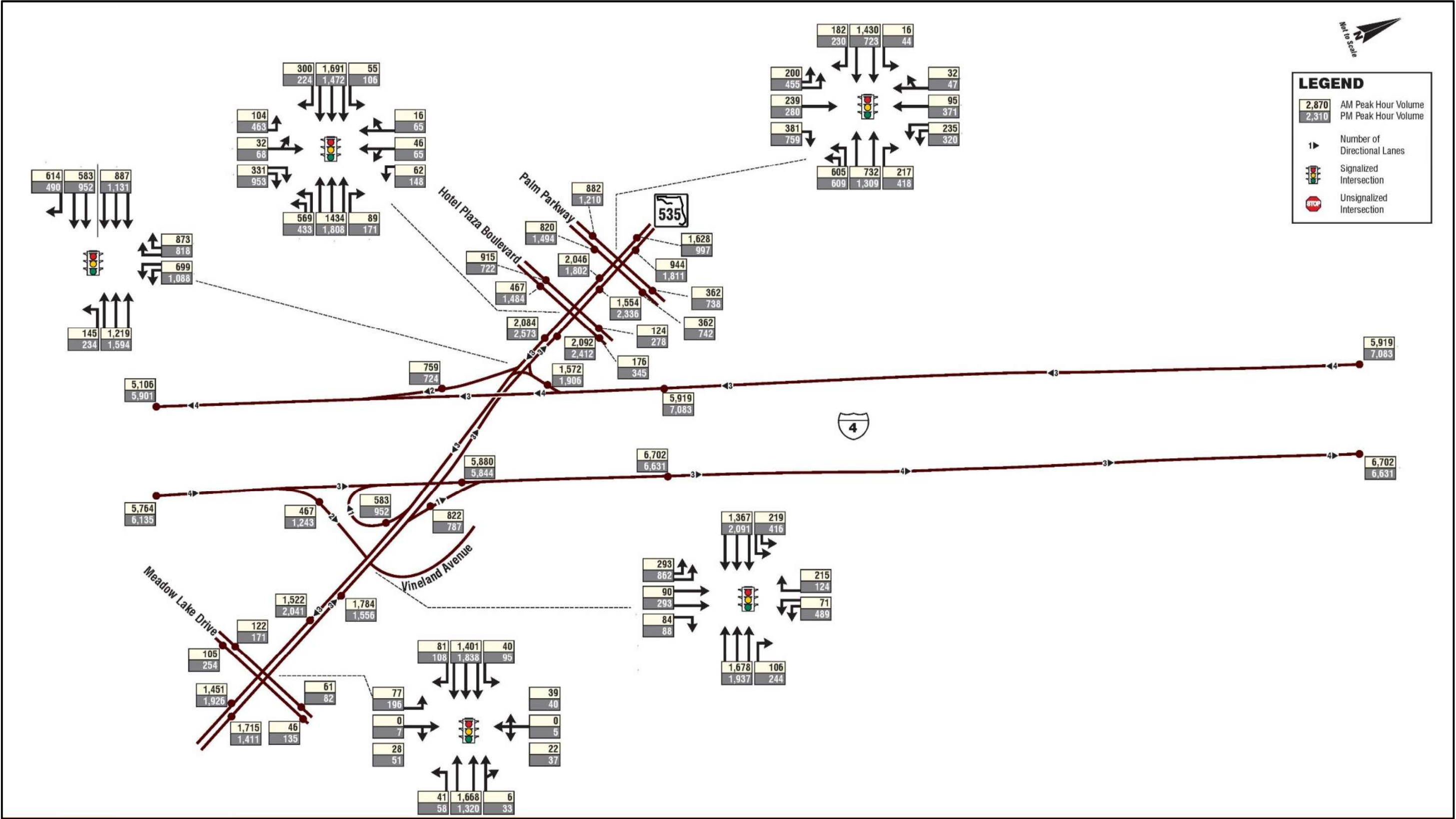


Figure 2.16 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 4 of 5)



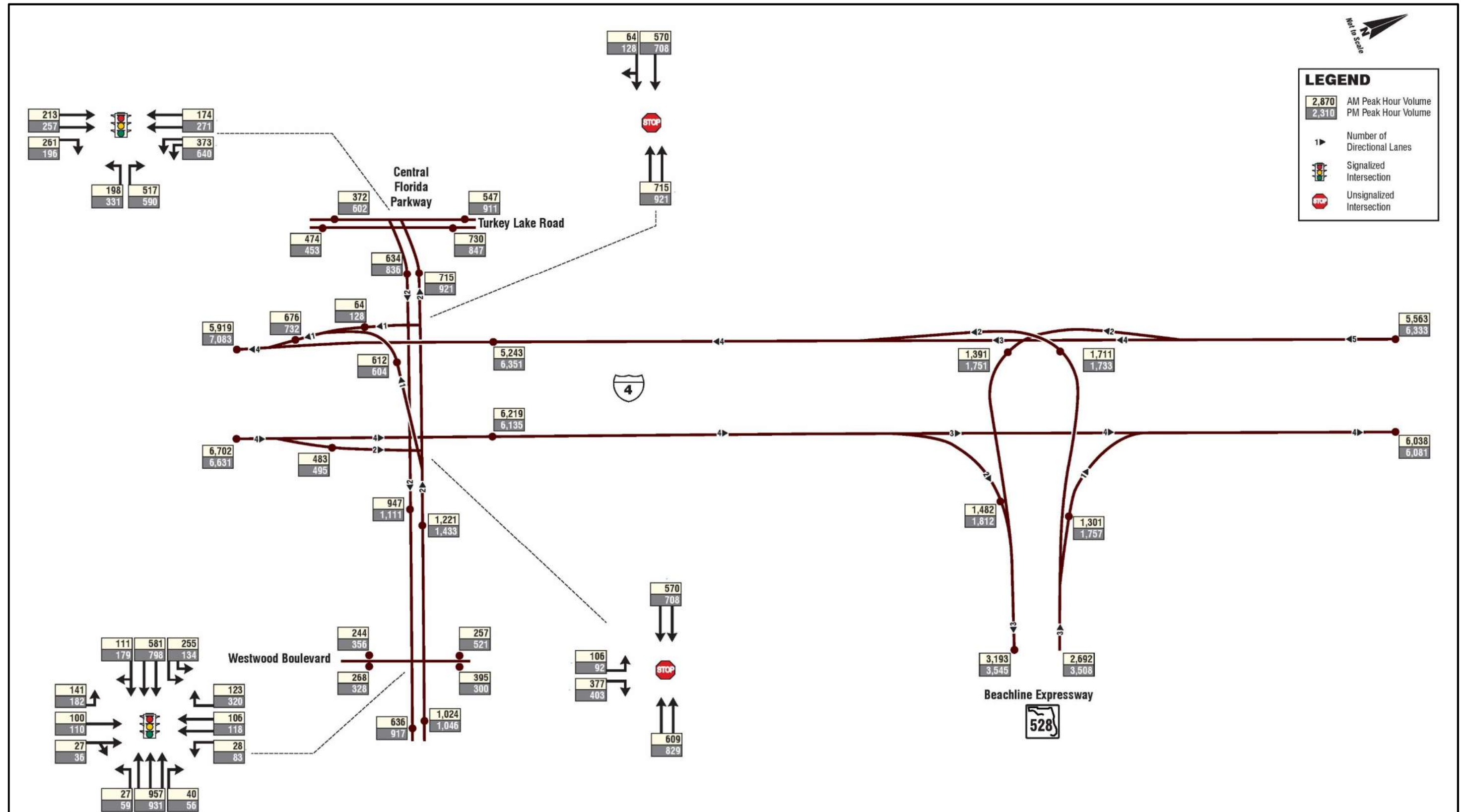


Figure 2.17 - Existing (Year 2011) Peak Hour Traffic Volumes (Sheet 5 of 5)

### 2.11.2 Intersection Geometry and Signalization

There are nine existing interchanges within the limits of I-4 Segment 1. The interchange configurations are depicted in Figure 2.13 through Figure 2.17 and described in detail in the following sections.

#### I-4 and CR 532 (Osceola-Polk Line Road) Interchange

The I-4 interchange at CR 532 (Osceola-Polk Line Road) is a compressed diamond interchange with signalized ramp terminal intersections spaced approximately 770 feet apart. All four entry/exit ramps are single-lane ramps. The right turns from CR 532 onto the interstate have exclusive right turn lanes with yield control at the on ramps. The left turn movements on and off the ramps are under signal control. The freeway exit ramps from I-4 eastbound and I-4 westbound feature free right turn lanes separated from the left turn lane by a right turn channelization island. The free right turn lane from the I-4 eastbound off-ramp continues onto CR 532 as a separate full width lane on CR 532 eastbound. The free right turn lane from the I-4 westbound off-ramp has a lane drop/merge onto CR 532 westbound with a merge distance of approximately 245 feet from the end of the right turn channelization island.

#### I-4 and SR 429 (Daniel Webster Beltway) Interchange

The I-4 and SR 429 (Daniel Webster Beltway) interchange is a 3-way ("Y") stack freeway-to-freeway interchange. The SR 429 toll road has its southern terminus at this junction with I-4. The I-4 eastbound ramp to SR 429 northbound is a single-lane left turn ramp that crosses over the I-4 mainline and the SR 429 southbound to I-4 eastbound single-lane left turn ramp. The I-4 westbound to SR 429 northbound ramp is a single-lane, free right turn ramp and the SR 429 southbound to I-4 westbound ramp is a 2-lane ramp which merges into a single lane approximately 1,650 feet before the merge onto I-4 westbound.

#### I-4 and World Drive Interchange and I-4 and SR 417 Interchange

The World Drive Interchange and the SR 417 Systems Interchange are connected by a short C-D road system. In the eastbound direction, the C-D road system begins at the I-4 east to World Drive eastbound ramp and continues 1.2 miles east where it splits off to SR 417 northbound and merges back into I-4 eastbound. In the westbound direction, SR 417 becomes the westbound C-D road approximately 0.9-mile south/west of the 417 overpass; the C-D road continues west for about 1.5 miles before merging back with I-4 westbound, west of the World Drive interchange.

The I-4 and World Drive interchange is a two quadrant, seven ramp partial cloverleaf interchange. The interstate is accessed via the C-D road system in this vicinity. There are no signals at this interchange; all movements to and from the C-D road ramp connections are right turn movements except for the World Drive eastbound to C-D road eastbound and World Drive westbound to C-D road westbound entry ramp movements. The C-D road eastbound to World Drive westbound and C-

D road westbound to World Drive eastbound exit ramps are single-lane loop ramps located in the northeast and southwest quadrants, respectively. World Drive splits at this location with two structures passing over the I-4 mainline. The World Drive westbound section over I-4 has two through lanes and a full width lane for exiting traffic from the loop ramp in the northeast quadrant for the full length of the bridge. West of the bridge, World Drive westbound is two lanes, with the inside lane becoming a left turn only lane onto C-D road westbound. The left turn lane crosses over a grass median and is stop-controlled at the intersection with eastbound World Drive before merging with the World Drive eastbound to C-D road westbound single-lane entry ramp. The World Drive eastbound section over I-4 has three through lanes and a full width lane for exiting traffic from the loop ramp in the southwest quadrant for the full length of the bridge. Just east of the mainline, eastbound World Drive's two inside through lanes spur onto the 2-lane left-turn flyover merging with the C-D road eastbound on ramp. World Drive eastbound continues as three through lanes until its terminus at Celebration Boulevard, approximately 1/2 mile east of the ramp.

#### I-4 and SR 417 Interchange

In the vicinity of the study corridor, SR 417 begins at the interchange with I-4. Access to and from SR 417 is provided via a CD road system that parallels the interstate, between World Drive and SR 417. Access to and from points south of the SR 417 junction is provided by the C-D roads directly connecting I-4 and SR 417. Access to and from points along I-4 north of SR 536 (World Center Drive) is provided by the SR 417 interchange with SR 536 (World Center Drive). Access to and from points along I-4 in between the SR 417 junction and SR 536 (World Center Drive) is provided via the Osceola Parkway interchanges with I-4 and SR 417 or via the SR 417 and Celebration Avenue and I-4 and US 192/SR 530 interchanges.

#### I-4 and US 192/SR 530 (W. Irlo Bronson Memorial Highway) Interchange

The I-4 and US 192/SR 530 (W. Irlo Bronson Memorial Highway) interchange is a partial cloverleaf interchange with exit loop ramps in the northeast and southwest quadrants. There are no signals at this interchange and all movements to and from the ramps are accessed from the right side. The ramps from US 192 eastbound to I-4 eastbound and US 192 westbound to I-4 westbound are flyover ramps which are accessed from the right lane of the respective US 192 approaches. US 192 partitions at this interchange forming two, one-way bridge sections over the I-4 mainline. The US 192 westbound section over I-4 has three through lanes and the eastbound section has three through lanes plus a full width lane for exiting traffic from the loop ramp in the southwest quadrant, for the full length of the bridges. Since the US 192 westbound flyover on ramp to I-4 westbound begins in the northeast quadrant, the loop ramp in the northeast quadrant does not merge with the US 192 westbound bridge section over I-4, instead it continues as a separate single-lane bridge section over the I-4 mainline, merging with the I-4 westbound to US 192 westbound off-ramp west of the mainline. A braided ramp system exists between the US 192 and W. Osceola Parkway interchanges, which eliminates major weaving movements within this section of freeway.

#### I-4 and W. Osceola Parkway Interchange

The I-4 and W. Osceola Parkway is a partial cloverleaf interchange with exit loop ramps in the northeast and southwest quadrants. There is one traffic signal at this interchange where the northeast quadrant single-lane loop ramp diverges into dual left lanes and a single free-flow, channelized right turn lane. Osceola Parkway splits at this interchange forming two, one-way bridge sections over the I-4 mainline. I-4 eastbound is accessed from Osceola Parkway eastbound via a single-lane left turn flyover on ramp. Similarly, I-4 westbound is accessed from Osceola Parkway westbound via a single-lane on ramp which passes under Osceola Parkway eastbound. A braided ramp system exists between the W. Osceola Parkway and the SR 536 interchange which eliminates major weaving movements within this section of freeway.

#### I-4 and SR 536 (World Center Drive) Interchange

The I-4 and SR 536 interchange is a partial cloverleaf interchange with loop ramps in the northwest, northeast and southwest quadrants. There are no signals at this interchange and all movements to and from the ramps are accessed from the right side. The northeast quadrant loop ramp is a single-lane off ramp from I-4 eastbound to SR 536 westbound. The southwest quadrant loop ramp is a single-lane off ramp from I-4 westbound to SR 536 eastbound. The northwest quadrant loop ramp is a single-lane on ramp from westbound SR 536 to westbound I-4. I-4 eastbound is accessed from SR 536 eastbound via a 2-lane left turn flyover on ramp.

#### I-4 and SR 535 (S. Apopka Vineland Road) Interchange

The I-4 and SR 535 (S. Apopka Vineland Road) interchange is a partial cloverleaf interchange with one loop ramp in the southeast quadrant. This loop ramp is a 2-lane on ramp from SR 535 southbound to I-4 eastbound. There are two signalized intersections within this interchange location. The I-4 westbound on and off ramps form a signalized intersection on the north side of the interstate. The I-4 westbound off ramp is a 2-lane ramp that splits into dual left lanes and channelized dual right turn lanes at the ramp terminal on SR 535. Both the left and right turn movements are under signal control. The ramp terminal and median on SR 535 are designed to prohibit through movements between the I-4 westbound off and on ramps. The I-4 eastbound off ramp has its ramp terminal approximately 1,100 feet east of the interstate on SR 535. The off ramp forms a signalized intersection with SR 535 and has dual left turn lanes, two through lanes and a yield-controlled, channelized right turn lane. The through movement from this ramp provides access to Vineland Avenue.

#### I-4 and Central Florida Parkway Interchange

The I-4 and Central Florida Parkway interchange is a partial diamond interchange. Access to Central Florida Parkway from the interstate is provided only in the eastbound direction of travel on I-4. Similarly, access onto I-4 from Central Florida Parkway is provided only in the westbound direction of travel on I-4. The I-4 westbound on ramp from Central Florida Parkway eastbound is a single lane on ramp. The I-4 westbound on ramp from Central Florida Parkway westbound is a single lane left

turn flyover ramp. The I-4 eastbound off ramp diverges into a single stop-controlled left turn lane at the ramp terminal and a channelized, free flow right turn lane which continues on to a full width lane on Central Florida Parkway eastbound. The closest signals on Central Florida Parkway are approximately 660 feet to the west at Palm Parkway and 1,300 feet to the east at Westwood Boulevard.

### 2.11.3 Traffic Operational Analyses

Existing conditions operational analyses were performed for the I-4 mainline using the basic freeway and weaving segment modules of the Highway Capacity Software (HCS 2010). Individual intersection performance was evaluated using the calibrated VISSIM model. The results of the operational analyses for I-4 Segment 1 are summarized in Table 2.5 and Table 2.6. Detailed outputs from the software programs are provided in an existing (2011) conditions analysis technical memorandum that is an appendix to the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project South Section – from West of US 27 to West of SR 435 (Kirkman Road) (March 2017)*.

**Table 2.5 – I-4 Mainline Freeway Operational Analysis**

I-4 Segment 1 Eastbound		Segment Type	No. Lanes	Volume		LOS	
From	To			AM	PM	AM	PM
CR 532 off-ramp	CR 532 on-ramp	Basic	3	4,395	3,520	D	C
CR 532 on-ramp	SR 429 off-ramp	Basic	3	5,518	4,111	E	C
SR 429 off-ramp	SR 429 on-ramp	Basic	3	5,098	3,561	D	C
SR 429 on-ramp	World Dr off-ramp	Basic	3	5,247	3,688	E	C
World Dr off-ramp	World Dr on-ramp	Basic	3	4,410	3,129	D	C
World Dr on-ramp	US 192 off-ramp	Basic	3	4,616	3,479	D	C
US 192 off-ramp	US 192 on-ramp	Basic	3	3,770	2,729	C	B
US 192 on-ramp	Osceola Pkwy off-ramp	Weaving	5	5,622	4,065	C	B
SR 536 off-ramp	Osceola Pkwy on-ramp	Basic	3	4,939	3,677	D	C
Osceola Pkwy on-ramp	SR 536 on-ramp	Basic	3	5,208	4,467	E	D
SR 536 on-ramp	SR 535 off-ramp	Weaving	4	5,764	6,135	E	F
SR 535 off-ramp	SR 535 SB on-ramp	Basic	3	5,297	4,892	E	D
SR 535 NB on-ramp	CFP off-ramp	Basic	4	6,702	6,631	D	D
CFP off-ramp	SR 528 off-ramp	Basic	4	6,219	6,136	D	D
I-4 Segment 1 Westbound		Segment Type	No. Lanes	Volume		LOS	
From	To			AM	PM	AM	PM
CFP on-ramp	SR 535 off-ramp	Basic	4	5,919	7,083	D	E
SR 535 off-ramp	SR 535 on-ramp	Basic	3	4,347	5,177	D	E
SR 535 on-ramp	SR 536 off-ramp	Weaving	4	5,106	5,901	C	D
SR 536 off-ramp	Osceola Pkwy off-ramp	Basic	3	3,942	5,254	C	E
Osceola Pkwy off-ramp	SR 536 on-ramp	Basic	3	3,199	4,855	C	D
SR 536 on-ramp	US 192 off-ramp	Weaving	4	3,322	5,268	B	D

Table 2.5 – I-4 Mainline Freeway Operational Analysis

I-4 Segment 1 Eastbound		Segment Type	No. Lanes	Volume		LOS	
From	To			AM	PM	AM	PM
US 192 off-ramp	Osceola Pkwy on-ramp	Basic	3	2,210	3,874	B	C
Osceola Pkwy on-ramp	US 192 on-ramp	Basic	3	2,384	4,021	B	C
US 192 on-ramp	World Dr CD Rd off-ramp	Basic	4	2,649	4,506	B	C
World Dr CD Rd off-ramp	World Dr on-ramp	Basic	3	2,456	4,206	B	D
World Dr on-ramp	SR 429 off-ramp	Basic	3	3,272	5,054	C	D
SR 429 off-ramp	SR 429 on-ramp	Basic	3	3,172	4,864	C	D
SR 429 on-ramp	CR 532 off-ramp	Basic	3	3,592	5,364	C	E
CR 532 off-ramp	CR 532 on-ramp	Basic	3	3,194	4,257	C	D
Segments operating below LOS E.							

Table 2.6 – Intersection Operational Analysis

Primary Road	Secondary Road	Existing AM		Existing PM	
		Delay (sec)	LOS	Delay (sec)	LOS
CR 532	Masters Blvd	11.70	B	10.75	B
	Legends Blvd	9.35	A	6.92	A
	WB Ramps	7.54	A	13.04	B
	EB Ramps	17.86	B	10.90	B
World Dr	Griffin Rd	2.95	A	3.41	A
	Celebration Blvd	13.38	B	8.62	A
US 192	Parkway Blvd	19.65	B	92.57	F
Osceola Pkwy	Victory Way	16.73	B	15.27	B
	EB Ramps	5.36	A	5.03	A
	WB Ramps	0.50	A	0.38	A
	International Dr	15.58	B	15.17	B
SR 536	World Center Dr	13.01	B	20.29	C
SR 535	Palm Pkwy	37.37	D	39.98	D
	Hotel Plaza Blvd	25.08	C	40.54	D
	WB Ramps	31.41	C	38.89	D
	EB On-Ramp	21.42	C	108.58	F
	Meadow Creek	10.78	B	18.04	B
Central Florida Pkwy	Palm Pkwy	22.96	C	25.93	C
	WB Ramps	0.25	A	0.65	A
	EB Ramps	1.59	A	1.40	A
	Westwood Blvd	23.41	C	34.24	C
Intersections operating below LOS E.					



## 2.12 Pavement Conditions

Pavement condition surveys for the I-4 PD&E study area are conducted annually by FDOT and are rated on a scale of zero to 10, with a rating of six or less considered critical. The pavement surface and base conditions on I-4 throughout the study area were rated as “fair” to “good” based on pavement survey ratings between 6.5 and 8.0. Table 2.7 provides the existing pavement condition ratings for 2013 and forecasted 2018 ratings for I-4 Segment 1.

**Table 2.7 - Pavement Conditions I-4 Segment 1**

Begin MP	End MP	County	Side	Crack Rating	Ride Rating	Rut Rating	Crack Rating	Ride Rating	Rut Rating
				2013	2013	2013	2018	2018	2018
0.0	5.482	Osceola	L	9.5	7.8	9.0	8.0	7.5	8.0
0.0	5.482	Osceola	R	9.5	7.8	9.0	8.0	7.5	8.0
5.482	6.856	Osceola	L	9.5	7.8	9.0	8.0	7.5	8.0
5.482	6.856	Osceola	R	9.5	7.3	8.0	8.0	7.0	7.0
6.856	7.885	Osceola	L	10.0	7.9	9.0	7.5	7.6	8.0
6.856	7.885	Osceola	R	10.0	7.6	9.0	7.5	7.3	8.0
0.0	1.0	Orange	L	9.0	7.7	9.0	8.0	7.4	8.0
0.0	1.74	Orange	R	4.5	6.8	9.0	3.0	6.5	8.0
1.0	4.232	Orange	L	9.0	7.8	9.0	7.5	7.5	8.0
1.74	4.232	Orange	R	6.5	7.4	9.0	5.0	7.1	8.0
4.232	4.414	Orange	L	-	-	-	9.5	8.0	9.0
4.232	4.585	Orange	R	-	-	-	9.5	8.0	9.0
4.414	5.791	Orange	L	9.0	7.9	9.0	7.5	7.6	8.0
4.585	6.018	Orange	R	6.5	7.2	9.0	5.0	6.9	8.0
Source: Florida Department of Transportation, <i>All System Pavement Condition Forecast</i> (2013 Ratings)									
-No data, pavement rehabilitation year									

## 2.13 Drainage and Hydrology

Existing drainage characteristics in the study area were determined by reviewing FDOT construction plans, the Straight Line Diagrams of Road Inventory, Southwest Florida Water Management District (SWFWMD), South Florida Water Management District (SFWMD) and the Reedy Creek Improvement District (RCID) drainage and permitting files, United States Geological Survey (USGS) Quadrangle Maps, Geographic Information System (GIS) maps, and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). Field reviews were also conducted along the corridor. The study area lies within the jurisdiction of SWFWMD, SFWMD and RCID.

### 2.13.1 Existing Drainage Patterns

The project is separated into thirty-nine (39) basins in the existing condition, all of which are open. Most of the basins consist of the pond sites and the full roadway right-of-way. The elevation difference between NGVD 29 and NAVD 88 varies along the project and ranges from 0.80 feet to 0.90

feet, with NGVD 29 higher in elevation than NAVD 88. The project lies within two primary basins: Reedy Creek Basin and Shingle Creek Basin. Only one (1) pond in this segment is dry while the remaining are wet detention ponds.

The stormwater runoff from the existing interchanges is treated with stormwater ponds that discharge to either the Reedy Creek or Shingle Creek Drainage Basin. Typically, as I-4 was expanded beyond its original four lanes, water quality treatment was provided for the new impervious area only. Therefore, there are portions of existing I-4 that currently receive no water quality treatment. Additional information on existing drainage patterns is presented in the *Pond Siting Report* (September 2016).

### 2.13.2 Cross Culverts

There are fifteen (15) existing structures which act as cross drains within the study area. Table 2.8 depicts the existing cross culvert data obtained from the Straight Line Diagram of Road Inventory, existing permits and original construction plans pertinent to the project study area. In the case where original construction plans were not found, cross drain invert elevations were obtained from existing permits and the original PD&E study. Some of the existing construction plans were in 1929 NGVD datum. A conversion of (-) 0.85 ft. was used to convert to the NAVD datum. During the design phase, survey and field verification will be necessary to determine the actual pipe lengths and culvert flow lines.

**Table 2.8 – Existing Cross Drains**

CD No.	Station	Description from Original Construction Plans						
		Count	Span (in)	Rise (in)	Type	Length (Ft) <sup>1</sup>	Elevation (Ft NAVD) <sup>1</sup>	
							Upstream	Downstream
CD-1	614+12.71	2	36	36	RCP	213	111.36	111.25
CD-2	664+22.84	2	48	48	RCP	256	102.58	102.48
CD-3	680+00.00	2	108	84	CBC	262	92.11	91.77
CD-4	692+20.31	1	36	36	RCP	261	90.34	88.25
CD-5	698+00.00	4	144	96	CBC	260	84.27	83.56
CD-6	732+50.00	2	84	48	CBC	310	90.72	90.50
CD-7	761+00.00	1	42	42	RCP	227	84.42	82.97
CD-8	785+16.00	2	42	42	RCP	248	74.18	73.03
CD-9	863+00.00	2	84	48	CBC	583	75.70	75.50
CD-10	914+00.00	2	84	48	CBC	250	79.50	79.25
CD-11	984+00.00	2	84	60	CBC	477	82.45	81.65
CD-12	1083+18.65	2	36	36	RCP	415	83.44	82.45
CD-13	1138+19.00	2	30	30	RCP	247	96.10	94.85
CD-14	1202+15.00	1	48	48	RCP	241	99.57	98.35
CD-15 <sup>2</sup>	1333+10.00							

Notes: RCP – Reinforced Concrete Pipe, CBC – Concrete Box Culvert <sup>1</sup>Field Verify. <sup>2</sup>Existing information not found.

Based on hydraulic calculations, cross drains CD-9 and CD-11 do not have the sufficient hydraulic capacity to convey the 100-year storm event in the existing condition. For additional information, please refer to the *Location Hydraulic Report (September 2016)* prepared for this project.

## 2.14 Existing Bridges

Within Segment 1 of the I-4 study corridor, there are nineteen existing bridge structures which cross I-4 and twelve existing mainline bridge structures which carry I-4 over local roads or waterways. The existing bridges are listed in Table 2.9 and depicted graphically in Figure 2.18. Table 2.9 summarizes the span lengths, deck widths, shoulder/lane widths and superstructure types.

### 2.14.1 Type of Structure

*Mainline Bridges* - The superstructures of the existing mainline I-4 bridges consist of a cast-in-place concrete deck carried by AASHTO prestressed precast concrete girders.

*Overpass Bridges* - The superstructures for the bridges over I-4 consist of a cast-in-place concrete deck carried by AASHTO prestressed precast concrete girders, steel plate girders, or steel box girders.

### 2.14.2 Current Conditions and Year of Construction

Table 2.10 provides a description of the existing bridges within the I-4 study corridor. This information was obtained from existing plans and the most recent bridge inspection reports. The sufficiency rating is derived from a formula that evaluates factors that are indicative of the structure's ability to remain in service. A rating of 100 percent represents an entirely sufficient bridge and a rating of zero percent represents an entirely deficient bridge.

Table 2.10 also includes data on the year of original construction and when the bridges were widened or replaced. This data was obtained from the most recent bridge inspection reports or approximated from the dates of the existing plans. The mainline facilities carrying I-4 over CR 532, Reedy Creek, Bonnet Creek and the Central Florida Parkway were originally constructed in 1960, and then later widened.

None of the mainline facilities are classified as "structurally deficient." The facilities carrying Osceola Parkway EB over I-4 and both I-4 EB and WB over Central Florida Parkway are classified as "functionally obsolete." The bridges carrying I-4 over CR 532 and the Central Florida Parkway have a structural sufficiency rating below 90. Likewise, the facility carrying Tradition Boulevard over I-4 has a structural sufficiency rating below 90. All other facilities have a structural sufficiency rating above 90.

Table 2.9 - Existing Bridge Structures

Facility	Bridge No.	No. of Spans	Bridge Length (ft)	Maximum Span Length (ft)	Deck Width (ft)	Lane/Shoulder Widths (ft)	Superstructure Type
I-4 WB over CR 532	920094	4	177.8	51.8	59.1	10' shldr, 3 lanes @ 12', 10' shldr	AASHTO Concr. Beam
I-4 EB over CR 532	920095	4	179.8	51.8	59.1	10' shldr, 3 lanes @ 12', 10' shldr	AASHTO Concr. Beam
Tradition Blvd. over I-4	925500	2	401.9	201.1	45.9	5.21' sdwlk, 2' shldr, 2 lanes @ 12', 2' shldr, 8.21' sdwlk	Steel Girder
SR-429 NB Ramp B over I-4 & SR-429 SB Ramp C	920601	5	1038.1	255.3	49.2	21' shldr, 1 lane @ 15', 10' shldr	Steel Box Girder
SR-429 SB Ramp C over I-4 & CR 545	920602	7	1167.7	233	49.2	10' shldr, 1 lane @ 15', 21' shldr	Steel Box Girder
CR 545 over I-4	924179	4	880.0	253.0	43.1	8' shldr, 2 lanes @ 12', 8' shldr	Steel Girder
I-4 WB over Reedy Creek	920098	6	228.0	38.1	78.4	10' shldr, 4 lanes @ 12', 10' shldr	AASHTO Concr. Beam
I-4 EB over Reedy Creek	920099	6	226.1	38.1	71.2	10' shldr, 4 lanes @ 12', 10' shldr	AASHTO Concr. Beam
World Dr SB over I-4 & SR 417	920176	4	406.2	137.1	70.9	10' shldr, 4 lanes @ 12', 10' shldr	AASHTO Concr. Beam
World Dr NB over I-4 & SR 417	920170	4	409.8	137.8	59.4	10' shldr, 3 lanes @ 12', 10' shldr	AASHTO Concr. Beam
SR 417 SB Ramp A over I-4	920169	4	627.7	212.9	49.5	10' shldr, 2 lanes @ 12', 12' shldr	Steel Box Girder
US 192 Ramp B over I-4	920083	4	312.0	105.0	43.0	6' shldr, 2 lanes @ 12', 10' shldr	AASHTO Concr. Beam
US 192 EB over I-4	920193	2	444.9	234.3	67.3	10' shldr, 4 lanes @ 11', 10' shldr	Steel Girder
US 192 WB over I-4	920192	2	450.2	233.6	56.1	10' shldr, 3 lanes @ 11', 10' shldr	Steel Girder
Ramp CA Flyover	920195	9	1676.6	215.9	36.7	12' shldr, 1 lane @ 15', 6'	Steel Box Girder
Ramp BD over I-4	920194	2	377.6	197.5	33.1	6' shldr, 1 lane @ 15', 12' shldr	Steel Girder
I-4 WB over Bonnet Creek	920100	4	151.9	38.1	70.2	10' shldr, 4 lanes @ 12', 10' shldr	AASHTO Concr. Beam
I-4 EB over Bonnet Creek	920101	4	151.9	38.1	70.9	10' shldr, 4 lanes @ 12', 10' shldr	AASHTO Concr. Beam
Ramp CD WB over Bonnet Creek	920181	2	151.9	76.1	43.0	10' shldr, 1 lane @ 15', 15' shldr	AASHTO Concr. Beam
Ramp C4 over Bonnet Creek	920182	2	151.9	76.1	43.0	6' shldr, 1 lane @ 15', 22' shldr	AASHTO Concr. Beam
Osceola Pkwy EB over I-4	924158	4	526.9	186.4	121.1	10' shldr, 1 lane @ 12', 22' median w/ traffic barrier, 4 lanes @ 12', 6' shldr	Steel Girder
Osceola Pkwy WB over I-4	920180	4	632.9	189.6	66.9	6' shldr, 4 lanes @ 12', 10' shldr	Steel Girder
SR 536 Ramp B over I-4	750324	5	360.0	104	42.7	6' shldr, 2 lanes @ 12', 10' shldr	AASHTO Concr. Beam
SR 536 EB over I-4	750323	4	381.6	127	50.9	6' shldr, 3 lanes @ 12', 6' shldr	AASHTO Concr. Beam
SR 536 WB over I-4	750322	4	380.9	127	51.2	6' shldr, 3 lanes @ 12', 6' shldr	AASHTO Concr. Beam
I-4 WB over SR 535	750367	2	208.0	116.1	59.4	10' shldr, 3 lanes @ 12', 10' shldr	AASHTO Concr. Beam
I-4 EB over SR 535	750368	2	208.0	116.1	83.7	10' shldr, 5 lanes @ 12' (1 not used), 10' shldr	AASHTO Concr. Beam
Daryl Carter Pkwy (Fenton St) over I-4	754115	2	420.0	210.0	126.2	6' sdwlk, 4' shldr, 4 lanes @ 12' (2 unused), 4' traffic barrier, 4 lanes @ 12' (2 unused), 4' shoulder, 6' sdwlk	Steel Girder
Central Florida Pkwy over I-4	750402	8	1247.1	186.4	29.9	6' shldr, 1 lane @ 15', 6' shldr	Steel Box Girder
I-4 WB over Central Florida Pkwy	750142	1	86.9	86.9	70.9	10' shldr, 4 lanes @ 12', 10' shldr	AASHTO Concr. Beam
I-4 EB over Central Florida Pkwy	750200	1	86.0	86.0	71.2	10' shldr, 4 lanes @ 12', 10' shldr	AASHTO Concr. Beam

Abbreviations: AASHTO - American Association of State Highway and Transportation Officials (AASHTO), shldr – shoulder, concr – concrete, sdwlk - sidewalk



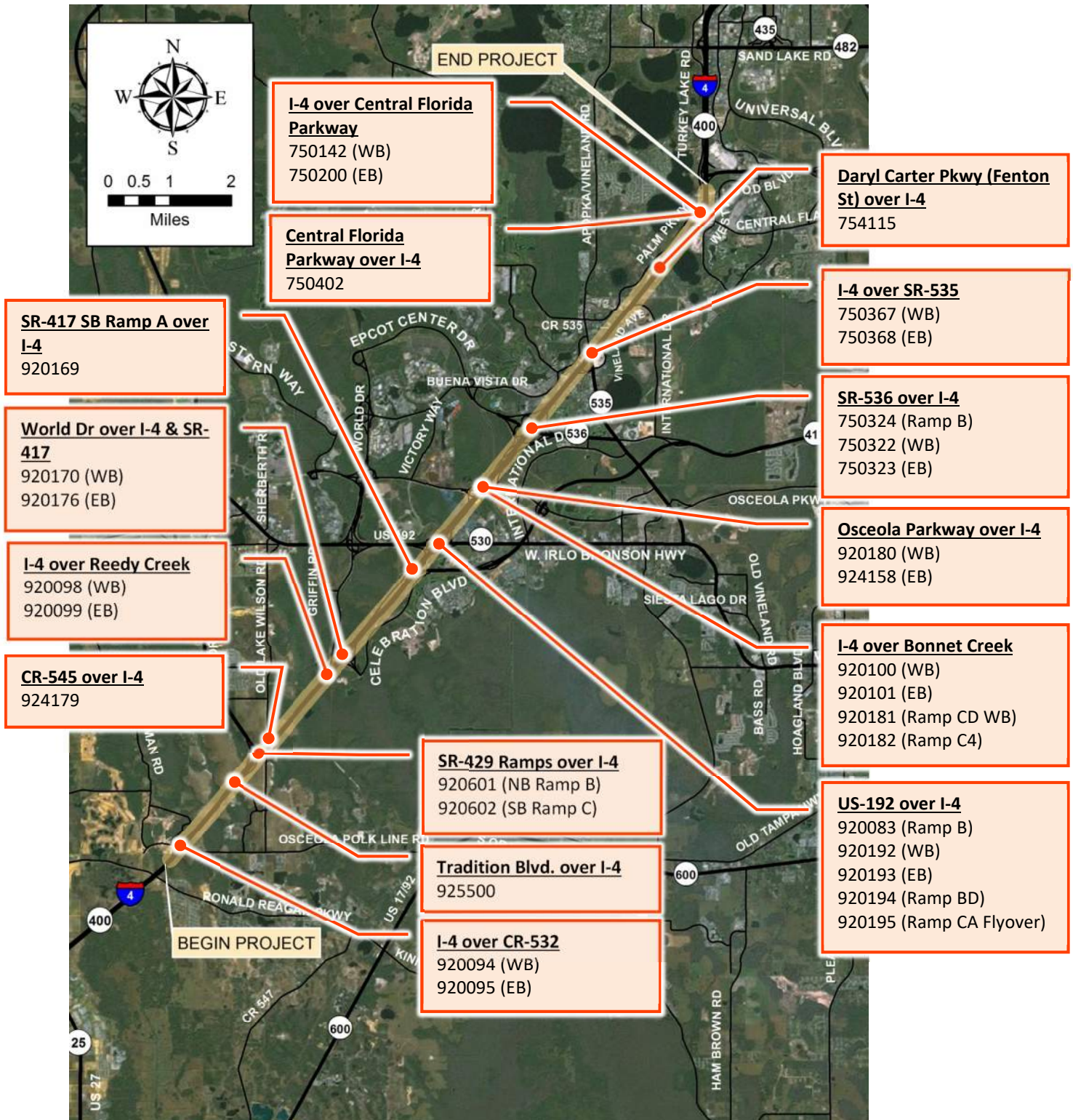


Figure 2.18 – Existing Bridge Locations

Table 2.10 - Current Structure Condition and Year of Construction

Facility	Bridge No.	Sufficiency Rating	Overall NBI Rating <sup>[1]</sup>				Year Built <sup>[2]</sup>	Year Replaced/Widened <sup>[2]</sup>
			Deck	Superstructure	Substructure	Channel		
I-4 WB over CR 532	920094	87.7	6	7	7	N/A	1960	2004
I-4 EB over CR 532	920095	89.8	7	6	7	N/A	1960	2004
Tradition Blvd. over I-4	925500	88.6	8	8	7	N/A	2005	N/A
SR-429 NB Ramp B over I-4 & SR-429 SB Ramp C	920601	92.6	8	7	7	N/A	2006	N/A
SR-429 SB Ramp C over I-4 & CR 545	920602	93.7	8	8	8	N/A	2006	N/A
CR 545 over I-4	924179	97.7	7	7	7	N/A	2005	N/A
I-4 WB over Reedy Creek	920098	93.2	6	7	7	N/A	1960	2006
I-4 EB over Reedy Creek	920099	93.2	7	7	7	N/A	1960	2006
World Dr SB over I-4 & SR 417	920176	99.5	7	7	7	N/A	1998	N/A
World Dr NB over I-4 & SR 417	920170	94.7	7	7	7	N/A	1998	N/A
SR 417 SB Ramp A over I-4	920169	94.7	8	7	7	N/A	1996	N/A
US 192 Ramp B over I-4	920083	97.7	7	7	7	N/A	1970	N/A
US 192 EB over I-4	920193	96.6	7	8	8	N/A	2006	N/A
US 192 WB over I-4	920192	96.6	8	8	8	N/A	2007	N/A
Ramp CA Flyover	920195	95.4	7	7	7	N/A	2007	N/A
Ramp BD over I-4	920194	91.3	7	7	7	N/A	2006	N/A
I-4 WB over Bonnet Creek	920100	93.2	6	7	7	N/A	1960	1979
I-4 EB over Bonnet Creek	920101	93.2	7	7	7	N/A	1960	2000
Ramp CD WB over Bonnet Creek	920181	99.1	7	7	7	N/A	2000	N/A
Ramp C4 over Bonnet Creek	920182	99.9	7	7	7	N/A	2001	N/A
Osceola Pkwy EB over I-4	924158	89.9	7	7	7	N/A	1995	N/A
Osceola Pkwy WB over I-4	920180	97.0	7	7	7	N/A	2001	N/A
SR 536 Ramp B over I-4	750324	98.6	7	7	7	N/A	1982	N/A
SR 536 EB over I-4	750323	95.5	6	7	7	N/A	1984	N/A
SR 536 WB over I-4	750322	95.5	7	7	7	N/A	1984	N/A
I-4 WB over SR 535	750367	92.1	7	7	7	N/A	1995	N/A
I-4 EB over SR 535	750368	92.1	7	7	7	N/A	1995	N/A
Daryl Carter Pkwy (Fenton St) over I-4	754115	99.0	8	8	8	N/A	2013	N/A
Central Florida Pkwy over I-4	750402	90.3	7	7	7	N/A	1990	N/A
I-4 WB over Central Florida Pkwy	750142	84.4	6	7	7	N/A	1960	1979
I-4 EB over Central Florida Pkwy	750200	84.4	7	7	7	N/A	1960	2002
<sup>[1]</sup> National Bridge Inventory (NBI) Rating: 9- Excellent; 8- Very Good; 7- Good; 6- Satisfactory; 5 – Fair								
<sup>[2]</sup> Construction and widening years obtained from Bridge Inspection Reports or Plans.								



### **2.14.3 Horizontal and Vertical Alignments of Structures**

Existing vertical clearances less than 16.5 feet are undesirable over the Interstate. The facilities carrying US 192 Ramp B and SR 536 over the mainline do not meet the minimum vertical clearance threshold while all other over the mainline provide adequate vertical clearance. Table 2.11 presents the pier locations and horizontal clearances for each of the bridges. Table 2.12 summarizes the vertical curve data at each location. Table 2.13 provides the vertical clearance information at each structure.

### **2.14.4 Span Arrangement**

The existing span arrangement (number and length of spans) of the bridges within the project limits were listed in Table 2.9.

### **2.14.5 Historical Significance**

Existing bridges in Segment 1 of the I-4 study corridor carry no historical significance. Thus, this section is not applicable to this project.

### **2.14.6 Channel Dimensions**

I-4 does not cross any navigable channels within the project limits. Thus, this section is not applicable to this project.

### **2.14.7 Bridge Openings**

Since the I-4 widening project does not involve any moveable bridges that fall within the study limits, this section is not applicable to this project.

### **2.14.8 Ship Impact Data**

I-4 does not cross any navigable channels within the project limits. Thus, this section is not applicable to this project.

Table 2.11 - Horizontal Clearances at Bridges

Facility	Bridge No.	Horizontal Clearance to Substructure
I-4 WB over CR 532	920094	N/A
I-4 EB over CR 532	920095	N/A
Tradition Blvd. over I-4	925500	25.75' to Pier 2
SR-429 NB Ramp B over I-4 & SR-429 SB Ramp C	920601	23' to Pier 3, >80' to Piers 2 and 4
SR-429 SB Ramp C over I-4 & CR 545	920602	23' to Pier 6, >80' to Piers 5 and 7
CR 545 over I-4	924179	19.5' to Pier 3, >80' to Piers 2 and 4
I-4 WB over Reedy Creek	920098	N/A
I-4 EB over Reedy Creek	920099	N/A
World Dr SB over I-4 & SR 417	920176	20.25' to Pier 3, >50' to Piers 2 and 4, No Clear on Ramps
World Dr NB over I-4 & SR 417	920170	20.25' to Pier 3, >50' to Piers 2 and 4, No Clear on Ramps
SR 417 SB Ramp A over I-4	920169	<5' to End Bent 1 and >8' to Pier 2 (WB Ramp), >50' to Pier 2, 20' to Pier 3, ~10'-20' to Pier 4
US 192 Ramp B over I-4	920083	8' to Piers 2 and 4, 20' to Pier 3, No Clear on Ramps
US 192 EB over I-4	920193	19.67' to Pier 2, 10' to Ret. Wall 1 (WB Ramp), 23.6' to Ret. Wall 2 (EB Ramp)
US 192 WB over I-4	920192	18' to Pier 2, 10' to Ret. Wall 1 (WB Ramp), 10.25' to Ret. Wall 2 (EB Ramp)
Ramp CA Flyover	920195	15.1' to Pier 9, 13.33' to Pier 8 (WB Ramp), 14' to Ret. Wall 2 (EB Ramp)
Ramp BD over I-4	920194	11.5' to Pier 2, 11.5' to Ret. Wall 6 (WB Ramp), 10.25' to Ret. Wall 5 (EB Ramp)
I-4 WB over Bonnet Creek	920100	N/A
I-4 EB over Bonnet Creek	920101	N/A
Ramp CD WB over Bonnet Creek	920181	N/A
Ramp C4 over Bonnet Creek	920182	N/A
Osceola Pkwy EB over I-4	924158	50' to Piers 2 and 4, 20' to Pier 3, No Clear on Ramps
Osceola Pkwy WB over I-4	920180	20' to Pier 3, >30' to Piers 2 and 4, 0' to Pier 4 and 20' to End Bent 5 (EB Ramp), 0' to Pier 2 and >50' to End Bent 1 (WB Ramp)
SR 536 Ramp B over I-4	750324	20' to Pier 4, ~10' to Piers 3 and 5, 26' to Pier 2 and 28' to Pier 3 (WB Ramp), No Clear on EB Ramp
SR 536 EB over I-4	750323	20' to Piers 2, 3, and 4, 26' to Slope at End Bent 1 (WB Ramp), No Clear on EB Ramp
SR 536 WB over I-4	750322	20' to Piers 2, 3, and 4, 26' to Slope at End Bent 1 (WB Ramp), No Clear on EB Ramp
I-4 WB over SR 535	750367	N/A
I-4 EB over SR 535	750368	N/A
Daryl Carter Pkwy (Fenton St) over I-4	754115	20' to Int. Bent 2, >100' to Ret. Walls 1B and 2B
Central Florida Pkwy over I-4	750402	5' to Piers 2 and 4, 15' to Pier 3
I-4 WB over Central Florida Pkwy	750142	N/A
I-4 EB over Central Florida Pkwy	750200	N/A

Table 2.12 - Vertical Curve Data at Bridges

Facility	Bridge No.	Vertical Curve Length (ft)	Vertical Curve Grade In/Grade Out
I-4 WB over CR 532	920094	1500	+3%/-3%
I-4 EB over CR 532	920095	1500	+3%/-3%
Tradition Blvd. over I-4	925500	500	+4.5%/-4.5%
SR-429 NB Ramp B over I-4 & SR-429 SB Ramp C	920601	1260	+3.22%/-5%
SR-429 SB Ramp C over I-4 & CR 545	920602	1250	+4.841%/-3.004%
CR 545 over I-4	924179	1100	+4.023%/-3.309%
I-4 WB over Reedy Creek	920098	400	+0.8%/-0.8%
I-4 EB over Reedy Creek	920099	400	+0.8%/-0.8%
World Dr SB over I-4 & SR 417	920176	400	-0.3%/-3.74%
World Dr NB over I-4 & SR 417	920170	450	+4.85%/0.4%
SR 417 SB Ramp A over I-4	920169	1200	+1.5%/-0.3531%
US 192 Ramp B over I-4	920083	600	+3%/-3%
US 192 EB over I-4	920193	980	+4.049%/-3.133%
US 192 WB over I-4	920192	1000	+3.615%/-3.726%
Ramp CA Flyover	920195	1280	+4.479%/-4%
Ramp BD over I-4	920194	900	+3.116%/-5%
I-4 WB over Bonnet Creek	920100	N/A	-0.2174%/-0.2174%
I-4 EB over Bonnet Creek	920101	N/A	-0.2174%/-0.2174%
Ramp CD WB over Bonnet Creek	920181	N/A	-0.4922%/-0.4922%
Ramp C4 over Bonnet Creek	920182	600	+0.9562%/-0.635%
Osceola Pkwy EB over I-4	924158	300	+0.4%/-1.2%
Osceola Pkwy WB over I-4	920180	850	+1.1641%/-2.8895%
SR 536 Ramp B over I-4	750324	360	+3.3182%/-1.5%
SR 536 EB over I-4	750323	1500	+2.5%/-2.5%
SR 536 WB over I-4	750322	1500	+2.5%/-2.5%
I-4 WB over SR 535	750367	1690	+2.8%/-3%
I-4 EB over SR 535	750368	1690	+2.8%/-3%
Daryl Carter Pkwy (Fenton St) over I-4	754115	400	+2%/-2%
Central Florida Pkwy over I-4	750402	900	+5.2%/-5.2%
I-4 WB over Central FL Pkwy	750142	1200	+2.3712%/-1.6125%
I-4 EB over Central FL Pkwy	750200	1200	+2.5625%/-1.8038%

Table 2.13 - Vertical Clearances at Bridges

Location	Bridge No.	Vertical Clearance (ft)
I-4 WB over CR 532	920094	16.1 to CR 532
I-4 EB over CR 532	920095	16.4 to CR 532
Tradition Blvd. over I-4	925500	22.0
SR-429 NB Ramp B over I-4 & SR-429 SB Ramp C	920601	17.1
SR-429 SB Ramp C over I-4 & CR 545	920602	17.5
CR 545 over I-4	924179	17.5
I-4 WB over Reedy Creek	920098	N/A
I-4 EB over Reedy Creek	920099	N/A
World Dr SB over I-4 & SR 417	920176	16.6
World Dr NB over I-4 & SR 417	920170	16.8
SR 417 SB Ramp A over I-4	920169	20.3
US 192 Ramp B over I-4	920083	16.1
US 192 EB over I-4	920193	18.6
US 192 WB over I-4	920192	18.0
Ramp CA Flyover	920195	17.4
Ramp BD over I-4	920194	17.4
I-4 WB over Bonnet Creek	920100	N/A
I-4 EB over Bonnet Creek	920101	N/A
Ramp CD WB over Bonnet Creek	920181	N/A
Ramp C4 over Bonnet Creek	920182	N/A
Osceola Pkwy EB over I-4	924158	16.7
Osceola Pkwy WB over I-4	920180	16.8
SR 536 Ramp B over I-4	750324	16.6
SR 536 EB over I-4	750323	16.1
SR 536 WB over I-4	750322	16.1
I-4 WB over SR 535	750367	17.2 to SR 535
I-4 EB over SR 535	750368	17.1 to SR 535
Daryl Carter Pkwy (Fenton St) over I-4	754115	18.2
Central Florida Pkwy over I-4	750402	16.4
I-4 WB over Central Florida Pkwy	750142	16.1 to Central FL Pkwy
I-4 EB over Central Florida Pkwy	750200	17.1 to Central FL Pkwy

## 2.15 Crash Data

The five-year crash data, between 2008 and 2012, was analyzed for the I-4 segment between the Polk/Osceola County Line (CR 532) and west of SR 528, from Milepost 0.000 to 7.885 in Osceola County and from Milepost 0.000 to 5.650 in Orange County. The crash data was downloaded from the FDOT Crash Analysis Reporting System (CARS) system and includes data for the I-4 mainline as well as the ramps.

The five-year crash data analysis showed that there were 1,344 crashes within this approximate 14-mile segment of I-4 in the last five years. Out of these 1,344 crashes there were eight (8) fatal crashes, 672 injury crashes and 664 property damage only crashes. Table 2.14 shows the summary of crashes by severity within the study area. Figure 2.19 and Figure 2.20 show the crash distribution by severity along the I-4 Segment 1 mainline within Osceola County and Orange County, respectively.

**Table 2.14 – Crash Severity Summary**

<b>Crash Severity</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
Fatal	4	2	0	1	1	8
Injury	134	140	137	119	142	672
Property Damage Only	116	105	176	108	159	664
Total	254	247	313	228	302	1,344

During the five-year study period, of the crashes that were classified as specific crash events, the highest were rear end collisions (456 crashes), angle collisions (164 crashes) and hitting guard rail collisions (125 crashes). The highest numbers of contributing causes were careless driving (687 crashes) and improper lane change (179 crashes).

Rear end collisions represent nearly 34% of the total crashes occurring along the I-4 Segment 1 study corridor for the five-year period analyzed. Over 55% (253 crashes) of the rear end collisions occurred during “clear” weather conditions and approximately 68% (309 crashes) occurred during daylight lighting conditions. The data indicates that the high occurrence of rear end collisions may be due to peak periods of heavy congestion along the corridor. Table 2.15 provides a summary of the types of crashes within the study area and Table 2.16 provides a summary of contributing causes.



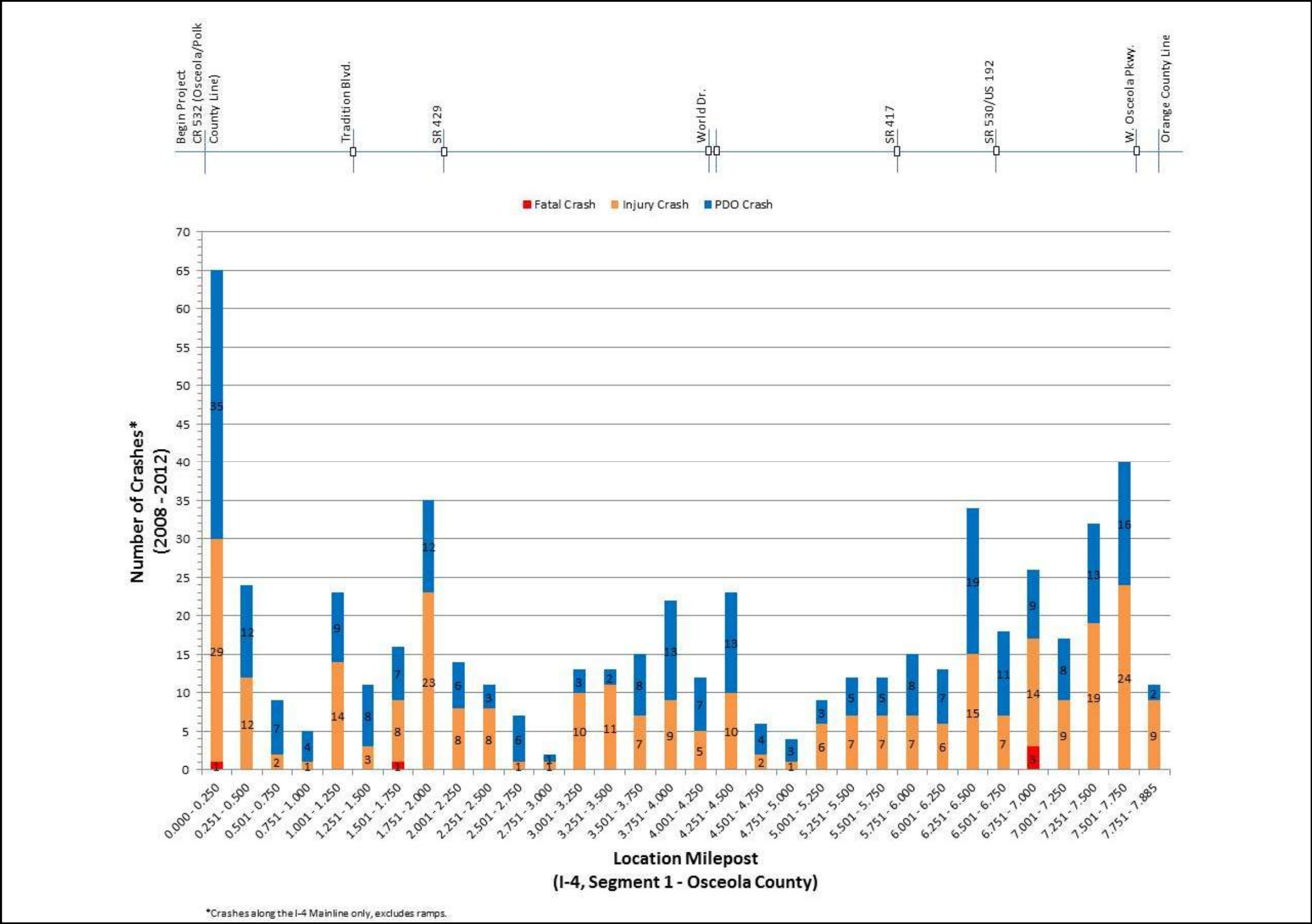


Figure 2.19 - Crash Distribution Along I-4 Segment 1 Corridor (Osceola County)

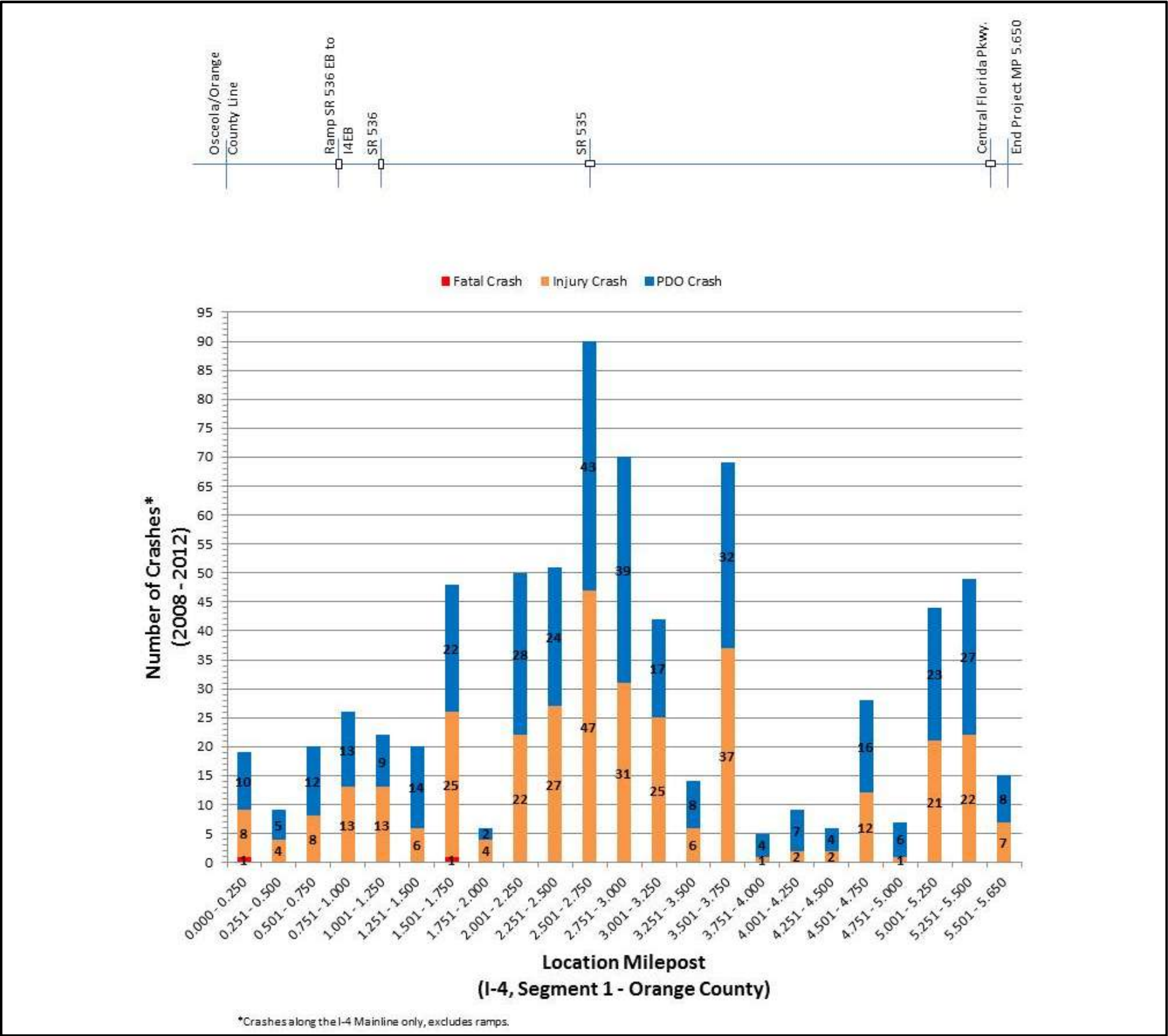


Figure 2.20 - Crash Distribution Along I-4 Segment 1 Corridor (Orange County)

Table 2.15 – Crash Event Summary

Harmful Event	2008	2009	2010	2011	2012	Total
All Other	17	12	23	34	53	139
Angle	28	48	42	26	20	164
Backed Into	1	-	-	-	-	1
Bike	1	-	-	-	-	1
Cargo Loss or Shift	5	3	5	2	1	16
Collision with Motor Vehicle on Road	4	4	16	23	33	80
Head-On	2	-	1	2	-	5
Hit Concrete Barrier Wall	5	6	3	-	2	16
Hit Const Barricd/SignBr/Pier/Abutt	-	-	3	-	-	3
Hit Fence	1	-	2	1	-	4
Hit Guardrail	19	30	44	16	16	125
Hit Sign/Sign Post	1	2	1	-	-	4
Hit Tree/Shrub	-	4	-	1	-	5
Hit Utility Pole	3	5	3	1	-	12
Left Turn	-	1	-	-	-	1
Moveable Object	1	-	6	1	2	10
Occupant Fell from Vehicle	2	-	1	-	1	4
Other Fixed Object	-	2	-	1	1	4
Overtaken	14	11	10	6	5	46
Parked Car	-	-	-	1	-	1
Ran into Ditch/Culvert	5	5	2	1	1	14
Ran Off Rd Into Water	-	-	1	-	-	1
Rear End	82	75	101	76	122	456
Separation of Units	-	-	-	-	1	1
Sideswipe	42	27	29	-	-	98
Trac/Trail Jackknifed	2	-	-	-	1	3
Unknown/Not Coded	19	12	16	-	-	47
#N/A	-	-	4	36	43	83
Total	254	247	313	228	302	1,344

Table 2.16 - Contributing Cause Summary

Contributing Cause	2008	2009	2010	2011	2012	Total
Alcohol/Drugs-Under Influence	-	-	1	-	-	1
Alcohol-Under Influence	5	1	1	-	-	7
All Other	18	11	22	26	62	139
Careless Driving	117	126	167	121	156	687
Disregarded Other Traffic Control	-	-	-	-	1	1
Disregarded Traffic Signal	-	2	1	-	-	3
Driver Distraction	1	4	3	-	-	8

Table 2.16 - Contributing Cause Summary

Contributing Cause	2008	2009	2010	2011	2012	Total
Drove Left of Center	-	1	-	-	-	1
Exceeded Safe Speed Limit	3	11	12	5	8	39
Exceeded Stated Safe Speed Limit	1	2	-	-	-	3
Failed to Maintain Equipment	7	4	7	-	-	18
Failed to Yield Right-of-way	3	1	2	8	7	21
Fleeing Police	1	-	-	-	-	1
Followed Too Closely	3	-	-	-	2	5
Improper Backing	1	-	-	-	-	1
Improper Lane Change	69	56	54	-	-	179
Improper Load	4	2	4	-	-	10
Improper Passing	1	-	3	1	-	5
Improper Turn	-	2	-	-	1	3
No Improper Driving	13	15	23	31	22	104
Obstructing Traffic	2	4	1	-	-	7
Unknown/Not Coded	5	5	8	-	-	18
#N/A	-	-	4	36	43	83
Total	254	247	313	228	302	1,344

As part of the crash data analysis, the FDOT District 5 High Crash Roadway Segments list was reviewed. Within I-4 Segment 1, the sections identified as high crash segments are shown in Table 2.17. The actual crash rates on these segments were greater than the average district wide crash rate for urban interstate facility type. The segment in Osceola County between MP 0.000 and MP 0.300 (near the Polk/Osceola County Line) appears on the list for four of the five years of data analyzed. The segment in Orange County between MP 2.100 and 2.600 (near the SR 535 interchange) appears on the list for each of the five years of data analyzed.

Table 2.17 - High Crash Segment Summary

Year	County	Begin MP	End MP	Total # Crashes	ADT	Crash Rate	Average District Wide Crash Rate (Urban Interstate)
2008	Osceola	0.000	0.300	14	101,330	1.261	0.417
	Orange	2.100	2.800	47	132,605	1.387	
	Orange	3.500	3.900	21	166,481	0.863	
	Orange	5.000	5.100	8	166,481	1.316	
2009	Osceola	0.000	0.400	18	96,475	1.277	0.477
	Orange	2.100	2.200	8	125,500	1.746	
	Orange	2.500	2.600	8	125,500	1.746	
2010	Osceola	0.000	0.400	23	106,150	1.484	0.519
	Orange	2.100	3.000	60	134,403	1.358	

Table 2.17 - High Crash Segment Summary

Year	County	Begin MP	End MP	Total # Crashes	ADT	Crash Rate	Average District Wide Crash Rate (Urban Interstate)
	Orange	3.500	3.700	14	163,974	1.169	
2011	Orange	2.000	2.800	30	119,368	0.861	0.458
2012	Osceola	0.000	0.300	15	109,129	1.255	0.497
	Orange	2.100	2.800	50	152,365	1.284	
	Orange	5.200	5.300	9	135,500	1.819	

## 2.16 Utilities

The utilities located within the right-of-way were identified through the use of existing plans and by contacting all of the utility companies identified via the Sunshine State One call system. Table 2.18 provides a list of the utility companies and contact information. Table 2.19 provides approximate locations of the major utilities that are within the project corridor. The easements by utility type and owner are shown in the Concept Plans (Appendix A).

Table 2.18 - Utility Contact information

Utility	Contact Name	Address	Phone	E-Mail
AT&T Florida	Alan Reynolds	5100 Steyr Street Orlando, FL 32819	(407) 351-8180	AR2916@att.com
Bright House Networks	Marvin Usry	3767 All American Blvd. Orlando, FL 32810	(407) 532-8509	marvin.usry@mybighthouse.com
Central Florida Gas Company	Roger Freeze	1705 7 <sup>th</sup> St. SW Winter Haven, FL 33880	(863) 289-2487	rfreeze@fpuc.com
CenturyLink	Wade Rich	33 N. Main St. Winter Garden, FL 34787	(407) 814-5383	lindy.w.rich@centurylink.com
Comcast Communications	Cesar Rivera	4305 Vineland Rd. Suite G-2 Orlando, FL 32811	(407) 849-3611	cesar_rivera@cable.comcast.com
Duke Energy-Distribution	Sharon Dear	3300 Exchange Place NP4A Lake Mary, FL 32746	(407) 905-3321	sharon.dear@duke-energy.com



Table 2.18 - Utility Contact information

Utility	Contact Name	Address	Phone	E-Mail
Duke Energy-Transmission	Jennifer Williams	20525 Amberfield Drive, Suite 201, Land O' Lakes, FL 34638	(813) 909-1210	jewilliams@ucseng.com
Embarq Communications Inc.	Rod Judy	420 Pineview St. Altamonte Springs, FL 32701	(407) 920-8981	judy@outsourcing-inc.com
Enterprise Community Development District	Brian Smith	610 Sycamore St. Suite 140 Celebration, FL 34747	(407) 566-1935	brsmith@severntrentms.com
Florida Gas Transmission	Joseph Sanchez	2405 Lucien Way Suite 200 Maitland, FL 32751	(407) 838-7171	joseph.e.sanchez@energytransfer.com
Gulf Stream Natural Gas	Fred Deloach	1905 Intermodel Circle Suite 200 Palmetto, FL 34221	(941) 723-7108	fred.deloach@williams.com
Kinder Morgan Central Florida Pipeline Corporation	Mark Clark	2101 GATX Dr. Tampa, FL 33605	(813) 241-1124	Mark_clark@kindermorgan.com
Kissimmee Utility Authority	Ken Davis	1701 West Carroll Street Kissimmee, FL 34741	(407) 933-7777 x1210	kdavis@kua.com
Level 3 Communications	Richard Simonton	380 S. Lake Destiny Dr. Orlando, FL 32810	(407) 462-0609	richard.simonton@level3.com
Orange County Utilities	Randy Brown	9150 Curry Ford Rd. Orlando, FL 32825	(407) 254-9720	edwin.brown@ocfl.net

Table 2.18 - Utility Contact information

Utility	Contact Name	Address	Phone	E-Mail
Orlando Utilities Commission	Ric Dy-Liacco	100 W. Anderson St. Orlando, FL 32801	(407) 236-9651	rydyliacco@ouc.com
Osceola County Traffic	Rick Cole	3850 Old Canoe Creek Rd. St. Cloud, FL 34769	(407) 742-7500	rcol2@osceola.org
Polk County Utilities N.E. Region	Nelson Stiles	1011 Jim Keene Blvd SR 450 Winter Haven, FL 33880	(863) 298-4238	nelsonstiles@polk-county.net
Reedy Creek Energy Services	Gregg Harkness	5300 N. Center Dr. Lake Buena Vista, FL 32830	(407) 824-4759	gregg.harkness@disney.com
Smart City Solutions	David Cawley	3100 Bonnet Creek Rd. Lake Buena Vista, FL 32830	(407) 828-6648	dcawley@smartcity.com
TECO Peoples Gas	Bruce Stout	600 W. Robinson St. Orlando, FL 32801	(407) 420-2678	bstout@tecoenergy.com
TOHO Water Authority	Jim Jackson	951 Martin Luther King Blvd. Kissimmee, FL 34741	(407) 944-5044	jjackson@tohowater.com
Tower Cloud Inc.	John Ray	9501 International Court N. St. Petersburg, FL 33716	(813) 417-2184	jray@towercloud.com
Transcore	Eric Gordon	Milepost 263 Ocoee, FL 34761	(407) 264-3316	eric.gordin@dot.state.fl.us
Transtate	Tom Ulmer	5525 57 <sup>th</sup> Way Vero Beach, FL 32967	(561) 844-4789	tulmerjr@transtate.us
TW Telecom	Richard Simonton	380 S. Lake Destiny Dr. Orlando, FL 32810	(407) 462-0609	Richard.simonton@level3.com

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	Comcast Communications	Aerial Fiber Optic	From underpass of Central Florida Pkwy & I-4 east to end of segment 1 limits on I-4 Corridor	West side of road
Communications	Comcast Communications	Underground Fiber Optic	From intersection of Palm Pkwy & Central Florida Pkwy east to end of Central Florida Pkwy	Varies from south side of road to north side of road
Communications	Comcast Communications	Underground Coaxial	From intersection of Legends Blvd & CR 532 west for 1050-ft on CR 532	North side of road
Communications	CenturyLink	4" Conduit of Varying Amount	Crossing at intersection of Masters Blvd & CR 532	Northeast side of intersection
Communications	CenturyLink	4" Conduit of Varying Amount	From intersection of Masters Blvd & CR 532 to intersection of Legends Blvd & CR 532	North side of road
Communications	CenturyLink	4" Conduit of Varying Amount	Crossing at intersection west of intersection of Legends Blvd & CR 532	East side of intersection
Communications	CenturyLink	4" Conduit of Varying Amount	Crossing at intersection of Legends Blvd & CR 532	West side of intersection
Communications	CenturyLink	4" Conduit of Varying Amount	Crossing at intersection of S. Goodman Rd & CR 532	West side of intersection
Communications	CenturyLink	4" Conduit of Varying Amount	north side of storm water treatment pond at World Dr north bound ramp to SR 530 east bound east to SR 530 east bound ramp to I-4 east bound/west bound	South side of road
Communications	CenturyLink	4" Conduit of Varying Amount	Crossing of SR 530 2610-ft east of World Dr overpass	N/A
Communications	CenturyLink	4" Conduit of Varying Amount	Crossing of I-4 1400-ft west of SR 530 overpass	N/A

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	CenturyLink	4" Conduit of Varying Amount	From 1400-ft west of SR 530 overpass on I-4 east to 400-ft west of end of SR 530	South/east side of road
Communications	CenturyLink	4" Conduit of Varying Amount	Crossing at intersection of Celebration PI & SR 530	West side of intersection
Communications	CenturyLink	1800 Pair Copper Cable	From intersection of Hotel Plaza Blvd & SR 535 to intersection of Winter Garden Vineland Rd & SR 535	West side of road
Communications	CenturyLink	900 Pair Copper Cable	Crossing at intersection of Masters Blvd & CR 532	Northeast side of intersection
Communications	CenturyLink	900 Pair Copper Cable	From intersection of Masters Blvd & CR 532 to intersection of CR 532 ramp to I-4 west bound & CR 532	North side of road
Communications	CenturyLink	600 Pair Copper Cable	From intersection of Celebration PL & SR 530 east to 360-ft west of end of SR 530	South side of road
Communications	CenturyLink	300 Pair Copper Cable	From 800-ft south to 400-ft south of intersection of I-4 east bound ramp to SR 535 & SR 535	East side of road
Communications	CenturyLink	300 Pair Copper Cable	Crossing at intersection of S. Goodman Rd & CR 532	West side of intersection
Communications	CenturyLink	400 Pair Copper Cable	From intersection of Westwood Blvd & Central Florida Pkwy to 150-ft west of intersection of Sea Harbor Dr & Central Florida Pkwy	South side of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	CenturyLink	400 Pair Copper Cable	From 340-ft west of intersection of Arabian Nights Blvd & SR 530 east to 360-ft west of end of SR 530	North side of road
Communications	CenturyLink	200 Pair Copper Cable	From intersection of Arabian Nights Blvd & SR 530 to 340-ft west of intersection of Celebration Ave & SR 530	North side of road
Communications	CenturyLink	200 Pair Copper Cable	From intersection to 220-ft north of intersection of Vistana Centre Dr & SR 535	West side of road
Communications	CenturyLink	3 100 Pair Copper Cable	Crossing of I-4 at Old Lake Wilson Rd overpass	West side of overpass
Communications	CenturyLink	100 Pair Copper Cable	From 210-ft north to 480-ft north of intersection of Meadow Creek Dr & SR 535	East side of road
Communications	CenturyLink	100 Pair Copper Cable	From 830-ft south of 140-ft south of intersection of Vistana Centre Dr	East side of road
Communications	CenturyLink	100 Pair Copper Cable	Crossing at intersection of Arabian Nights Blvd & SR 530	West side of intersection
Communications	CenturyLink	100 Pair Copper Cable	From 540-ft west of entrance of Reunion Resort & Club east to end of CR 532	North side of road
Communications	CenturyLink	50 Pair Copper Cable	From intersection of Hotel Plaza Blvd & SR 535 to intersection of Winter Garden Vineland Rd & SR 535	West side of road
Communications	CenturyLink	50 Pair Copper Cable	West of intersection of Kemp Rd & CR 532	North side of road
Communications	CenturyLink	25 Pair Copper Cable	From 830-ft south to 140-ft south of intersection of Vistana Centre Dr & SR 535	East side of road



Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	CenturyLink	25 Pair Copper Cable	Crossing 630-ft east of entrance of Reunion Resort & Club on CR 532	N/A
Communications	CenturyLink	25 Pair Copper Cable	From intersection of Kemp Rd & CR 532 to U-turn east of intersection of Kemp Rd & CR 532	North side of road
Communications	CenturyLink	2" Copper Cable	Crossing at intersection of Kemp Rd & CR 532	East side of intersection
Communications	CenturyLink	120 Pair Fiber Optic Cable Retired	From U-turn east of intersection of Kemp Rd & CR 532 to entrance 540-ft west of Reunion Resort & Club	North side of road
Communications	CenturyLink	2 120 Pair Fiber Optic Cable	Crossing of I-4 at Old Lake Wilson Rd overpass	West side of overpass
Communications	CenturyLink	120 Pair Fiber Optic Cable	From intersection of Masters Blvd & CR 532 to intersection of Kemp Rd & CR 532	North side of road
Communications	CenturyLink	120 Pair Fiber Optic Cable	Crossing at intersection of Masters Blvd & CR 532	Northwest side of intersection
Communications	CenturyLink	120 Pair Fiber Optic Cable	Crossing at intersection of Masters Blvd & CR 532	Northeast side of intersection
Communications	CenturyLink	84 Pair Fiber Optic	From intersection of Palm Pkwy & SR 535 north to end of SR 535	East side of road
Communications	CenturyLink	24 Pair Fiber Optic Cable	Crossing at intersection of Arabian Nights Blvd & SR 530	East side of intersection
Communications	CenturyLink	24 Pair Fiber Optic Cable	Crossing 270-ft north of intersection of I-4 west bound ramp to SR 535 & SR 535	N/A

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	CenturyLink	24 Pair Fiber Optic Cable	From 270-ft north of intersection of I-4 west bound ramp to SR 535 & SR 535 north to intersection of Hotel Plaza Blvd & SR 535	West side of road
Communications	CenturyLink	24 Pair Fiber Optic Cable	From intersection of Celebration PL & SR 530 east to 360-ft west of end of SR 530	South side of road
Communications	CenturyLink	24 Pair Fiber Optic Cable	Crossing at intersection of Celebration PI & SR 530	West side of intersection
Communications	CenturyLink	6-5" Fiber Optic Cable	From intersection of Hotel Plaza Blvd & SR 535 north to end of SR 535	West side of road
Communications	CenturyLink	4-5" Fiber Optic	Crossing of SR 535, 400-ft south of intersection of I-4 east bound ramp to SR 535 & SR 535	N/A
Communications	CenturyLink	4-5" Fiber Optic	Crossing of SR 535, 220-ft north of intersection of Vistana Centre Dr & SR 535	N/A
Communications	CenturyLink	4-5" Fiber Optic	Crossing of SR 535, 275-ft north of end of SR 535	N/A
Communications	CenturyLink	4-5" Fiber Optic	Crossing of SR 535, 430-ft south of intersection of Vistana Centre Dr & SR 535	N/A
Communications	CenturyLink	2-4" Fiber Optic	Crossing of SR 535, 430-ft south of intersection of Vistana Centre Dr & SR 535	N/A
Communications	CenturyLink	2-4" Fiber Optic	Crossing of SR 535, 220-ft north of intersection of Vistana Centre Dr & SR 535	N/A
Communications	CenturyLink	2-4" Fiber Optic	Crossing of SR 535, 275-ft north of beginning of SR 535	N/A
Communications	CenturyLink	2" Fiber Optic	Crossing of I-4 at Sinclair Rd overpass	East side of overpass

**Table 2.19 - Major Utilities**

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	CenturyLink	Fiber Optic Cable of Various Sizes	From SR 535, I-4 Overpass to 2000-ft west of Daryl Carter Pkwy (Fenton St) overpass	South side of road
Communications	CenturyLink	Fiber Optic Cable of Unknown Size	Crossing of SR 535, 210-ft north of intersection of Meadow Creek Dr & SR 535	N/A
Communications	CenturyLink	10-5" PVC Pipe	From 100-ft north of end of SR 535 to 360-ft south of intersection of I-4 east bound ramp to SR 535 & SR 535	Center of road
Communications	CenturyLink	6-5" PVC Pipe	Crossing of SR 535, 400-ft south of intersection of I-4 east bound ramp to SR 535 & SR 535	N/A
Communications	CenturyLink	6-5" PVC Pipe	From 400-ft south of intersection of I-4 east bound ramp to SR 535 & SR 535 to 450-ft east of SR 535 underpass on I-4	South/east side of road
Communications	CenturyLink	6-5" PVC Pipe	Crossing of I-4 330-ft east of SR 535 underpass	N/A
Communications	CenturyLink	4-4" PVC Pipe	Crossing at intersection of International Dr & Osceola Pkwy	Center of intersection
Communications	CenturyLink	2-4" PVC Pipe	Crossing at intersection of International Dr & Osceola Pkwy	South side of intersection
Communications	CenturyLink	2-4" PVC Pipe	Crossing of SR 535, 400-ft south of intersection of I-4 east bound ramp to SR 535 & SR 535	N/A
Communications	Level 3 Communications	Aerial Fiber Optic	Crossing 1700-ft west of World Dr. on I-4	West of overpass
Communications	Level 3 Communications	Aerial Fiber Optic	Crossing at west side base of overpass on World Dr.	N/A

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	Level 3 Communications	Aerial Fiber Optic	Crossing in easement 1670-ft west of SR 530 overpass on I-4 Corridor	Easement
Communications	Level 3 Communications	Aerial Fiber Optic	From Celebration PI & SR 530 east 350-ft from Celebration PI & SR 530	Diagonally from south side of road to north side of road
Communications	Level 3 Communications	Aerial Fiber Optic	Crossing intersection of Palm Pkwy & SR 535	North side of intersection
Communications	Level 3 Communications	Aerial Fiber Optic	From intersection of Winter Garden Vineland Rd south on SR 535 for 225-ft	West side of road
Communications	Level 3 Communications	Aerial Fiber Optic	From Vineland Ave & SR 535 to SR 535 north bound ramp to I-4 East	East side of road
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	From intersection of Celebration Blvd & World Dr. to 400-ft north of beginning of World Drive westbound ramp to I-4 eastbound	East side of road
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	From end of World Dr. south 1480-ft	West side of road
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	From 1480-ft south of end of World Dr. south to 570-ft south of end of I-4 westbound ramp to World Drive.	East side of road
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	Crossing of SR 530, 1130-ft east of end of SR 530	N/A
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	From end of SR 530 east 1130-ft on SR 530	North side of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	From 350-ft east to 1130-ft east of end of SR 530	South side of road
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	Six Crossings of SR 535 250-ft north of intersection of Vistana Centre Dr. & SR 535	N/A
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	Six Crossings of SR 535, 200-ft south of intersection of I-4 eastbound ramp to SR 535 & SR 535	N/A
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	Six Lines from 360-ft south of intersection of Vineland Rd & SR 535 north to intersection of Vineland Rd & SR 535	East side of road
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	Crossing of I-4 Corridor, 1240-ft east of World Dr. Overpass	N/A
Communications	SmartCity Solutions	4" Underground Fiber Optic Cable	Six Crossings at intersection of Hotel Plaza Blvd & SR 535	North side of intersection
Communications	SmartCity Solutions	2" Underground Fiber Optic Cable	From 180-ft north of intersection of Hotel Plaza Blvd & SR 535 north to end of SR 535	East side of road
Communications	SmartCity Solutions	2" Underground Fiber Optic Cable	Crossing of I-4 Corridor at Central Florida Pkwy, I-4 Overpass	West side of overpass
Communications	SmartCity Solutions	2" Underground Fiber Optic Cable	From intersection of I-4 eastbound ramp to Central Florida Pkwy & Central Florida Pkwy east to intersection of Westwood Blvd & Central Florida Pkwy	North side of road



**Table 2.19 - Major Utilities**

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Communications	SmartCity Solutions	Proposed 4" Underground Fiber Optic Cable	From intersection of Victory Way & W. Osceola Pkwy east 2880-ft on W. Osceola Pkwy	South side of road
Communications	SmartCity Solutions	Unknown Size Fiber Optic Cable	Crossing of W. Osceola Pkwy 1700-ft east of beginning of W. Osceola Pkwy eastbound ramp to I-4 westbound	N/A
Communications	SmartCity Solutions	Unknown Size Fiber Optic Cable	Crossing of I-4 Corridor at W. Osceola Pkwy, I-4 Overpass	South of overpass
Communications	SmartCity Solutions	Unknown Size Fiber Optic Cable	From intersection of Celebration Blvd & World Dr. east to end of SR 530	South side of road
Communications	Verizon (MCI)	Unknown Size Fiber Optic Cable	Crossing of I-4 Corridor at Central Florida Pkwy, I-4 Overpass	South side of overpass
Communications	Verizon (MCI)	Unknown Size Fiber Optic Cable	From intersection of I-4 eastbound ramp to Central Florida Pkwy & Central Florida Pkwy east to end of Central Florida Pkwy	South side of road
Communications	Verizon (MCI)	Unknown Size Fiber Optic Cable	Crossing at intersection of Westwood Blvd & Central Florida Pkwy	East side of intersection
Electricity	Reedy Creek Improvement District	69 KV	From 2800-ft east of intersection of Victory Way & Osceola Pkwy to 3710-ft east of intersection of Victory Way & Osceola Pkwy	North side of road
Electricity	Reedy Creek Improvement District	69 KV	Three Crossings at Osceola Pkwy on I-4 Corridor	West side of the underpass
Electricity	Reedy Creek Improvement District	69 KV	Crossing of Osceola Pkwy at I-4 West bound ramp to Osceola Pkwy east bound	From south side of road to north side of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Masters Blvd & CR 532	South side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Masters Blvd & CR 532	West side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Masters Blvd & CR 532 to 210-ft west of intersection of Kemp Rd & CR 532	North side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection west of intersection of Legends Blvd & CR 532	West side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Legends Blvd & CR 532	West side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of S Goodman Rd & CR 532	East side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Legends Blvd & CR 532 east to intersection of CR 532 ramp to I-4 westbound & CR 532	South side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of SR 429 at Sinclair Rd, SR 429 overpass	East side of overpass
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Celebration Blvd & World Dr.	West side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Celebration Blvd & World Dr.	East side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 380-ft east of end of SR 530 east to 140-ft east of beginning of SR 530 eastbound ramp to I-4	South side of the road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of I-4 Corridor 1140-ft west of W. Osceola Pkwy, I-4 overpass	N/A

**Table 2.19 - Major Utilities**

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 1450-ft west of W. Osceola Pkwy, I-4 overpass on I-4 corridor, to end of SR 530	South side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of SR 530, 590-ft west of intersection of Parkway Blvd & SR 530	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two lines from 590-ft west to 730-ft east of intersection of Celebration Pl. & SR 530	South side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 620-ft west of intersection of Parkway Blvd & SR 530 east to intersection of Arabian Nights Blvd & SR 530	North side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of SR 530, 330-ft west of intersection of Celebration Ave & SR 530	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two crossings of I-4 Corridor 2800-ft east of W. Osceola Pkwy, I-4 parkway	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of I-4 Corridor, 1100-ft east of SR 535. I-4 underpass	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of SR 535 440-ft south of intersection of Vistana Centre Dr. & SR 535	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of SR 535 400-ft south of intersection of Vistana Centre Dr. & SR 535	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Vistana Centre Dr & SR 535	North side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing 250-ft north of intersection of Vistana Centre Dr & SR 535, on SR 535	N/A

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 420-ft south to intersection of I-4 eastbound ramp to SR 535 & SR 535	North side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of SR 535 180-ft south of intersection of I-4 eastbound ramp to SR 535 & SR 535	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two lines from 450-ft south of to intersection of Vineland Ave & SR 535	East side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of to 350-ft north of I-4 westbound ramp to SR 535 & SR 535	South side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two lines from 740-ft south of to intersection of Palm Pkwy & SR 535 on SR 535	South side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Winter Garden Vineland Rd & SR 535	West side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Winter Garden Vineland Rd & SR 535	East side of Intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing 180-ft north of intersection of Winter Garden Vineland Rd & SR 535	N/A
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 300-ft north of intersection of Winter Garden Vineland Rd & SR 535 north to end of SR 535	West side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Turkey Lake Rd & Central Florida Pkwy east to intersection of Westwood Blvd & Central Florida Pkwy	North side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing 440-ft east of intersection of Turkey Lake Rd & Central Florida Pkwy	N/A

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Westwood Blvd & Central Florida Pkwy	East side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Westwood Blvd & Central Florida Pkwy	North side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Westwood Blvd & Central Florida Pkwy	South side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Westwood Blvd & Central Florida Pkwy to end of Central Florida Pkwy	North side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Westwood Blvd east to end of SR 535	South side of road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Sea Harbor Dr & Central Florida Pkwy	North side of intersection
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Sea Harbor Dr & Central Florida Pkwy	South side of intersection
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of SR 429 600-ft east of Sinclair Rd, SR 429 overpass	N/A
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 420-ft east of intersection of Sinclair Rd & SR 429 entrance	South side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 420-ft east of intersection of Sinclair Rd & SR 429 entrance	North side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing at intersection of Celebration Blvd & World Dr.	East side of intersection
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 530-ft west to 460-ft east of World Dr. westbound, I-4 overpass on I-4 Corridor	East side of road



Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of World Drive, 520-ft east of World Drive westbound ramp to I-4 westbound ramp	N/A
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of SR 530 1130-ft east of start of SR 530	N/A
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Two crossings on SR 530 1850-ft east of start of SR 530	N/A
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 1130-ft east of to 3400-ft east of end of SR 530	South side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of SR 530, 1460-ft west of intersection of Parkway Blvd & SR 530	N/A
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 1460-ft west of intersection of Parkway Blvd & SR 530 west to 138-ft west of beginning of SR 530 westbound ramp to I-4 eastbound	North side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From beginning of SR 530 westbound ramp to I-4 eastbound to 2520-ft west of W. Osceola Pkwy, I-4 overpass	East side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of I-4 Corridor at SR 536, I-4 overpass	East side of overpass
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of I-4 Corridor 1730-ft, west of Palm Pkwy overpass	N/A
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of I-4 Corridor, 730-ft west of Palm Pkwy overpass	N/A

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 880-ft west of intersection of W. Osceola Pkwy westbound ramp to I-4 eastbound & W. Osceola Pkwy east to intersection of International Dr. & Osceola Pkwy	South side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Two crossings at intersection of International Dr & W. Osceola Pkwy	West side of intersection
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing at intersection of International Dr & W. Osceola Pkwy	South side of intersection
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing at intersection of International Dr & W. Osceola Pkwy	North side of intersection
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From intersection of International Ave & W. Osceola Pkwy east to SR 417 overpass	North side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing of I-4 Corridor at SR 536, I-4 overpass	East side of overpass
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 1600-ft west of intersection of Continental Gateway Dr & SR 536 east to end of SR 536	North side of road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing at intersection of Continental Gateway Dr & SR 536	South side of intersection
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing at intersection of World Center Dr. & SR 536	North side of intersection
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing at intersection of International Ave & SR 536	South side of intersection

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	120 V Underground Electric	Crossing of CR 532 at intersection of entrance of Reunion Resort & Club & CR 532	West side of intersection
Electricity	Duke Energy Distribution	120 V Underground Electric	Crossing at intersection of Celebration Blvd & World Dr.	East side of intersection
Electricity	Duke Energy Distribution	120 V Underground Electric	From 3330-ft west of Central Florida Pkwy underpass to Central Florida overpass on I-4 Corridor	East side of road
Electricity	Duke Energy Distribution	120 V Underground Electric	From 1400-ft east of Palm Pkwy Overpass east to Central Florida Pkwy on I-4 Corridor	West side of road
Electricity	Duke Energy Distribution	120 V Underground Electric	From 500-ft west of Central Florida Pkwy underpass to Central Florida Pkwy	West side of road, between ramps
Electricity	Duke Energy Distribution	120 V Underground Electric	Crossing at intersection of Vineland Ave & SR 535	East side of intersection
Electricity	Duke Energy Distribution	120 V Underground Electric	Three Crossings at intersection of Turkey Lake Rd. & Central Florida Pkwy	East side of intersection
Electricity	Duke Energy Distribution	120 V Underground Electric	Crossing 250-ft east of intersection of Turkey Lake Rd. & Central Florida Pkwy	N/A
Electricity	Duke Energy Distribution	120 V Underground Electric	Crossing of Central Florida Pkwy 930-ft west of intersection of Westwood Blvd & Central Florida Pkwy	N/A
Electricity	Duke Energy Distribution	120 V Underground Electric	From 110-ft west of intersection of I-4 eastbound ramp to Central Florida Pkwy & Central Florida Pkwy to intersection of Westwood Blvd & Central Florida Blvd	South side of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	120 V Underground Electric	Crossing at intersection of Westwood Blvd & Central Florida Pkwy	West side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Kemp Rd & CR 532	East side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of CR 532 at intersection of entrance of Reunion Resort & Club & CR 532	West side of intersection
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From intersection of Arabian Nights Blvd & SR 530 to end of SR 530	North side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of I-4 Corridor, 2350-ft west of Palm Pkwy overpass	Easement
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From 2320-ft west of Central Florida Pkwy east to Central Florida Pkwy	West side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From Central Florida Pkwy underpass east 1340-ft east of underpass on I-4 Corridor	West side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From end of SR 535 north to intersection of Vistana Centre Dr. & SR 535	East side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From 680-ft south of intersection of Vineland Ave & SR 535 north to 370-ft north of beginning SR 535 ramp to I-4 eastbound	East side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From intersection of to 350-ft north of I-4 westbound ramp to SR 535 & SR 535	South side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of SR 535, 600-ft south of intersection of Hotel Plaza Blvd & SR 535	N/A

**Table 2.19 - Major Utilities**

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From 770-ft south to 600-ft south of intersection of Hotel Plaza Blvd & SR 535	North side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of SR 535 720-ft south of intersection of Winter Garden Vineland Rd & SR 535	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of SR 535, 620-ft north of intersection of Winter Garden Vineland Rd & SR 535	N/A
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From 400-ft north of intersection of Winter Garden Vineland Rd & SR 535 north to end of SR 535	West side of road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of I-4 Corridor at Central Florida Pkwy, I-4 Overpass	East side of overpass
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Crossing of I-4 Corridor, 200-ft west of Old Lake Wilson Rd, I-4 Overpass	East side of overpass
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Crossing of I-4 Corridor, 3300-ft east of World Drive Westbound, I-4 Overpass	N/A
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Crossing of I-4 Corridor, 3350-ft east of World Drive Westbound, I-4 Overpass	N/A
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Crossing of I-4 Corridor, 2400-ft west of Daryl Carter Pkwy (Fenton St), I-4 Overpass	Easement
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Two Crossings of I-4 Corridor, 950-ft east of SR 417 ramp to I-4 Westbound, overpass	N/A
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Two Crossings of World Drive at end of I-4 Westbound ramp to World Drive Westbound	N/A



Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Crossing of I-4 Corridor, 1780-ft east of I-4, SR 535 underpass	N/A
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Two Crossings of SR 530, diagonally from intersection of to 380-ft east of intersection of Celebration PI & SR 530	Diagonally from south side of road to north side of road
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Two Crossings of W. Osceola Pkwy 280-ft west of intersection of SR 417 westbound ramp to W. Osceola Pkwy	West of intersection
Electricity	Duke Energy Transmission	69 KV Aerial Electric	From intersection of Meadow Creek Dr. & SR 535 south 470-ft north of intersection of Vineland Ave & SR 535	East side of road
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Crossing at intersection of Winter Garden Vineland Rd & SR 535	North side of intersection
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Two Crossings of I-4 Corridor, 1780-ft west of World Drive Westbound, I-4 Overpass	N/A
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Two Crossings of I-4 Corridor, 1000-ft east of SR 417 ramp to I-4 Westbound, overpass	N/A
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Two Crossing of World Drive at end of I-4 Westbound ramp to World Drive Westbound	N/A
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Two Crossings of SR 530, diagonally from intersection of to 310-ft east of intersection of Celebration PI & SR 530	Diagonally from south side of road to north side of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of W. Osceola Pkwy 300-ft west of intersection of SR 417 westbound ramp to W. Osceola Pkwy	N/A
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of W. Osceola Pkwy 320-ft west of intersection of SR 417 westbound ramp to W. Osceola Pkwy	N/A
Electricity	Orlando Utility Commission	230 KV Aerial Electric	Two crossings of SR 429 Ramp To I-4 EB, 730-ft before the end of ramp.	Eastbound side of I-4
Electricity	Orlando Utility Commission	230 KV Aerial Electric	Two crossings of I-4, 1690-ft west of World Drive, I-4 Overpass	N/A
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossings at ramps from SR 429 to I-4	N/A
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing at ramp from SR 417 west bound to I-4 West bound CD	East of flyover
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing on SR 417 west of Celebration Pl underpass	Varies from south of road to north of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Westbound side of I-4 from beginning of segment one limits to end of segment one limits	West side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4, 3750-ft east of Old Lake Wilson Rd, I-4 Overpass	N/A
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4, 4160-ft east of Old Lake Wilson Rd, I-4 Overpass	N/A
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Eastbound side of I-4, from 3750-ft east to 4160-ft east of Old Lake Wilson Rd, I-4 Overpass	East side of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Eastbound side of I-4, from 3380-ft west of World Drive, I-4 Overpass east to 5090-ft east of World Drive, I-4 Overpass	East side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two Crossings of I-4, 2010-ft east of SR 417 Westbound, I-4 Overpass	N/A
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two lines on westbound side of I-4 from 3631-ft west of SR 417 westbound, I-4 Overpass east to 1980-ft west of SR 417 westbound, I-4 Overpass	West side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two lines on eastbound side of I-4 from 2760-ft west of SR 417 westbound, I-4 Overpass, east to 2010-ft west of SR 417 westbound, I-4 Overpass	East side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4, SR 417 Westbound, I-4 Overpass	East side of overpass
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4, 220-ft east of SR 417 westbound, I-4 Overpass	East side of overpass
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Eastbound side of I-4, from 220-ft east of SR 417 westbound, I-4 Overpass east to 1990-ft west of Osceola Parkway, I-4 Overpass	East side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Eastbound side of I-4, from 3110-ft west of Osceola Pkwy, I-4 Overpass east to 1990-ft west of Osceola Pkwy, I-4 Overpass	East side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two crossings of I-4 Corridor, 1990-ft west of Osceola Pkwy, I-4 Overpass	N/A

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4 Corridor, 1150-ft east of Osceola Pkwy, I-4 Overpass	N/A
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4 Corridor, 590-ft east of SR 536, I-4 Overpass	N/A
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two lines on the north side of SR 536 from end of I-4, SR 536 overpass west to end of I-4 westbound ramp to SR 536 eastbound	North side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Westbound side of I-4 from SR 536, I-4 Overpass east to 590-ft east of SR 536, I-4 Overpass	West side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Eastbound side of I-4, from 590-ft east of SR 536, I-4 Overpass east to end of segment one limits on I-4 Corridor	East side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Eastbound side of I-4, from 2320-ft west of SR 535, I-4 underpass, east to 1300-ft west of SR 535, I-4 underpass	East side of road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4 Corridor at Central Florida Pkwy, I-4 Overpass	East side of overpass
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4 Corridor at Central Florida Pkwy, I-4 underpasses	west side of underpass
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Three Crossings of I-4 Corridor 3180-ft east of Central Florida Pkwy, I-4 Overpass	N/A
Jet Fuel	Kinder Morgan Pipeline	16" Steel Gas Main	Crossing 1450-ft west of World Dr. overpass on I-4, at western ramps	West side of overpass

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Jet Fuel	Kinder Morgan Pipeline	16" Steel Gas Main	Crossing at I-4 west bound ramp to World Drive, on World Dr.	N/A
Jet Fuel	Kinder Morgan Pipeline	16" Steel Gas Main	From 2025-ft west to 750-ft east of SR 417 ramp to I-4 west bound	North side of I-4 corridor
Jet Fuel	Kinder Morgan Pipeline	16" Steel Gas Main	Crossing 700-ft east of SR 417 west bound ramp to I-4 west bound	East of flyover ramp
Natural Gas	Florida Gas Transmission	18" Natural Gas Main	Crossing at ramps to I-4 on SR 429	N/A
Natural Gas	Florida Gas Transmission	18" Natural Gas Main	Crossing at Old Lake Wilson Rd	Varies from east side to west side of overpass
Natural Gas	Florida Gas Transmission	18" Natural Gas Main	From 300-ft east to 1525-ft east of Old Lake Wilson Rd, following along the SR 429 ramp to I-4 East bound	East side of road
Natural Gas	Florida Gas Transmission	18" Natural Gas Main	Crossing at World Dr west bound ramp to SR 417 east bound on World Drive	N/A
Natural Gas	Florida Gas Transmission	6.625" Natural Gas Main	Crossing at SR 535 on I-4	West side of underpass
Natural Gas	Florida Gas Transmission	6.625" Natural Gas Main	From SR 535 ramp to I-4 west bound to I-4 west bound ramp to SR 535	North side of road
Natural Gas	Kissimmee Utility Authority	20" Natural Gas Main	From southern end of Old Lake Wilson Rd to entrance of Florida Gas Transmission Company complex	East side of road
Natural Gas	TECO Peoples Gas	8" Natural Gas Main	Crossing at Old Lake Wilson Rd	West side of overpass
Natural Gas	TECO Peoples Gas	8" Natural Gas Main	Crossing 1450-ft west of World Dr. overpass on I-4, at western ramps	West of overpass



**Table 2.19 - Major Utilities**

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Natural Gas	TECO Peoples Gas	8" Natural Gas Main	Crossing 1690-ft east of World Dr. overpass on SR 530, at end of eastern ramps	N/A
Natural Gas	TECO Peoples Gas	8" Natural Gas Main	From end of SR 530 to crossing 1690-ft east of World Dr overpass on SR 530	South side of road and north side of road
Natural Gas	TECO Peoples Gas	8" Natural Gas Main	From 380 feet north of intersection of Vistana Centre Dr & SR 535 to 220-ft north of intersection of Meadow Creek Dr & SR 535	West side of road
Natural Gas	TECO Peoples Gas	8" Natural Gas Main	From 1200-ft east to 1500-ft east of I-4 west bound ramp to SR 535	North side of road
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	Crossing at easement between SR 535 & Central Florida Pkwy	Easement
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	Crossing 460-ft east of SR 535 underpass	East of underpass
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	Crossing 260-ft north of intersection of Hotel Plaza Blvd & SR 535	N/A
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	From 260-ft north of intersection of Hotel Plaza Blvd & SR 535 north to end of SR 535	East side of road
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	From 260-ft north of intersection of Hotel Plaza Blvd & SR 535 north to 450-ft south of intersection of Winter Garden Vineland Rd & SR 535	West side of road
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	Crossing at intersection of Palm Pkwy & SR 535	South side of intersection
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	Crossing 730-ft north of intersection of Palm Pkwy & SR 535, on SR 535	N/A

**Table 2.19 - Major Utilities**

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	From end of SR 535 north bound ramp to I-4 east bound east to 4919-ft on I-4 main corridor	East side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at intersection SR 429 & Sinclair Rd	East side of intersection
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at I-4 east bound ramp to SR 530 east bound, on SR 530	N/A
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	From SR 530 west bound ramp to I-4 east bound east 630-ft on SR 530	North side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	From start of SR 530 west bound ramp to I-4 east bound to end of ramp	East side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing 1460-ft east of SR 530 overpass	East of overpass
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	From end of SR 530 east to I-4 east bound/west bound ramp to SR 530 west bound	North side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at Celebration Ave & SR 530	West side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing 370-ft west from end of SR 530	N/A
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at intersection of International Dr & Osceola Pkwy	Center of intersection
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at intersection of Continental Gateway Dr & SR 536	West side of intersection
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing 380-ft south of intersection of Vistana Centre Dr & SR 535	South of intersection
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at base of I-4 east bound ramp to SR 535, north side of SR 535	West side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at Vineland Ave & SR 535	North side of the road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at Central Florida Parkway	West side of underpass

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	From intersection of Palm Pkwy & Central Florida Pkwy to intersection of Central Florida Pkwy to I-4 west bound	North side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at intersection of Palm Pkwy & Central Florida Pkwy	East side of intersection
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	From intersection of Westwood Blvd & Central Florida Pkwy to entrance of Orange County Fire Rescue Dept. Station 64	North side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	Crossing at intersection of Sea Harbor Dr & Central Florida Pkwy	West side of road
Natural Gas	TECO Peoples Gas	4" Natural Gas Main	From 1060-ft south of intersection of Central Florida Pkwy & Palm Pkwy to intersection of Central Florida Pkwy & Palm Pkwy	West side of I-4 corridor
Natural Gas	TECO Peoples Gas	2" Natural Gas Main	Crossing 250-ft east of intersection of Celebration Pl & SR 530, on SR 530	East side of road
Natural Gas	TECO Peoples Gas	2" Natural Gas Main	From 800-ft east of to intersection of Continental Gateway Dr & SR 536	South side of road
Natural Gas	TECO Peoples Gas	2" Natural Gas Main	Crossing 250-ft north of intersection of Vistana Centre Dr & SR 535, on SR 535	North of intersection
Natural Gas	TECO Peoples Gas	2" Natural Gas Main	Crossing 470-ft south of intersection of Vineland Ave & SR 535, on SR 535	N/A
Natural Gas	Sabal Trail Transmission	36" Natural Gas Main	Proposed crossing of I-4, 1960-ft east of Old Lake Wilson Rd, I-4 Overpass	Easement
Sewer/Storm water	Orange County Utilities	20" Force Main	Crossing at intersection of International Ave & SR 536	East side of intersection

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Sewer/Storm water	Orange County Utilities	20" Force Main	From intersection of International Ave & SR 536 east to end of SR 536	South side of road
Sewer/Storm water	Orange County Utilities	20" Force Main	Crossing at easement between SR 535 & Central Florida Pkwy	Easement
Sewer/Storm water	Orange County Utilities	20" Force Main	From intersection of International Ave & SR 536 East to end of SR 536	North side of road
Sewer/Storm water	Orange County Utilities	20" Force Main	Crossing at intersection of Palm Pkwy and Central Florida Pkwy	Varies, center of intersection to west of intersection
Sewer/Storm water	Orange County Utilities	16" Force Main	From intersection of Winter Garden Vineland Rd north to end of SR 535	Center of road
Sewer/Storm water	Orange County Utilities	16" Force Main	Crossing halfway between Osceola Pkwy & SR 536	Easement
Sewer/Storm water	Orange County Utilities	12" Force Main	From 200-ft east of Continental Gateway Dr & SR 536 east to end of SR 536	North side of road
Sewer/Storm water	Orange County Utilities	12" Force Main	Crossing from 450-ft north of intersection of Winter Garden Vineland Rd and SR 535	N/A
Sewer/Storm water	Orange County Utilities	10" Force Main	From 520-ft west of Westwood Blvd & Central Florida Pkwy to Sea Harbor Dr & Central Florida Pkwy	Center of road
Sewer/Storm water	Orange County Utilities	10" Force Main	Crossing at intersection of Sea Harbor Dr & Central Florida Pkwy	Center of intersection
Sewer/Storm water	Orange County Utilities	6" Force Main	From 500-ft north of intersection of Meadow Creek Dr & SR 535 north to 260-ft north of end of SR 535	Center of road
Sewer/Storm water	Orange County Utilities	6" Force Main	Crossing at Central Florida Pkwy	West side of underpass

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Sewer/Storm water	Orange County Utilities	6" Force Main	From Central Florida Pkwy west bound Ramp to I-4 west bound to 530-ft west of Westwood Blvd & Central Florida Pkwy	Varies from center of road to south side of road
Sewer/Storm water	Orange County Utilities	4" Force Main	Crossing on SR 535 260-ft north of end of SR 535	N/A
Sewer/Storm water	Orange County Utilities	4" Force Main	Crossing 500-ft north of intersection of Meadow Creek Dr & SR 535	N/A
Sewer/Storm water	Orange County Utilities	4" Force Main	Crossing 500-ft south of intersection of Palm Pkwy & SR 535	From center to east side of road
Sewer/Storm water	Orange County Utilities	4" Force Main	From 450-ft north of intersection of Winter Garden Vineland Rd north to end of SR 535	West side of road
Sewer/Storm water	Orange County Utilities	4" Force Main	From entrance of Radisson Hotel on SR 535 north to intersection of Winter Garden Vineland Rd & SR 535	Varies from center of road to east side of road
Sewer/Storm water	Orange County Utilities	21" Sanitary Main	Crossing at intersection of International Dr. & Osceola Pkwy	Center of intersection
Sewer/Storm water	Reedy Creek Improvement District	6" Force Main	Crossing 525-ft south of intersection of Hotel Plaza Blvd & SR 535	N/A
Sewer/Storm water	Reedy Creek Improvement District	6" Force Main	From SR 535 to I-4 West bound ramp north to 525-ft south of intersection of Hotel Plaza Blvd & SR 535	West side of road
Sewer/Storm water	Reedy Creek Improvement District	4" Force Main	From entrance of Radisson Hotel on SR 535 north to 225-ft north of intersection of Hotel Plaza Blvd & SR 535	Center of road
Sewer/Storm water	Reedy Creek Improvement District	12" Sanitary Main	Crossing 3000-ft west of SR 536 underpass	N/A



Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Sewer/Storm water	Reedy Creek Improvement District	60" Storm water	Six crossings 470-ft south of Holiday Plaza Blvd. on SR 535	N/A
Sewer/Storm water	Reedy Creek Improvement District	36" Storm water	Entrance to gas station located 150-ft south of intersection of Hotel Plaza Blvd & SR 535	Center of entrance
Sewer/Storm water	Reedy Creek Improvement District	18" Storm water	Crossing at intersection of Hotel Plaza Blvd & SR 535	South side of intersection
Sewer/Storm water	Reedy Creek Improvement District	18" Storm water	Crossing at intersection of Hotel Plaza Blvd & SR 535	North side of intersection
Sewer/Storm water	Reedy Creek Improvement District	15" Storm water	Crossing 290-ft north of intersection of Hotel Plaza Blvd & SR 535 on SR 535	N/A
Sewer/Storm water	Reedy Creek Improvement District	6" Storm water	Crossing at intersection of Hotel Plaza Blvd & SR 535	South side of intersection
Sewer/Storm water	Reedy Creek Improvement District	6" Storm water	Crossing at intersection of Hotel Plaza Blvd & SR 535	North side of intersection
Sewer/Storm water	Reedy Creek Improvement District	5" Storm water	Crossing at intersection of Hotel Plaza Blvd & SR 535	South side of intersection
Sewer/Storm water	Reedy Creek Improvement District	5" Storm water	Crossing at intersection of Hotel Plaza Blvd & SR 535	North side of intersection
Sewer/Storm water	Reedy Creek Improvement District	Storm water of Unknown Size	Crossing 300-ft north of intersection of Hotel Plaza Blvd & SR 535 on SR 535	N/A
Sewer/Storm water	TOHO Water Authority	24" Sanitary Main	Crossing 150-ft north of CR 532	North of underpass
Sewer/Storm water	TOHO Water Authority	24" Sanitary Main	From CR 532 Ramp to I-4 east bound west to end of CR 532	Varies from north side to center of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Sewer/Storm water	TOHO Water Authority	24" Sanitary Main	Crossing at Old Lake Wilson Rd	South of overpass
Sewer/Storm water	TOHO Water Authority	21" Sanitary Main	From intersection west of Legends Blvd & CR 532 to intersection of S. Goodman Rd & CR 532	South side of road
Sewer/Storm water	TOHO Water Authority	18" Sanitary Main	Crossing at intersection west of Legends Blvd & CR 532	West side of intersection
Sewer/Storm water	TOHO Water Authority	16" Sanitary Main	Crossing at intersection of Legends Blvd & CR 532	West side of intersection
Sewer/Storm water	TOHO Water Authority	16" Sanitary Main	From 400-ft west of Arabians Nights Blvd east to end of SR 530	South side of road
Sewer/Storm water	TOHO Water Authority	15" Sanitary Main	Crossing at intersection of Masters Blvd & CR 532	West side of intersection
Sewer/Storm water	TOHO Water Authority	15" Sanitary Main	From intersection of Masters Blvd & CR 532 to intersection west of Legends Blvd & CR 532	Varies from south side of road to center of road
Sewer/Storm water	TOHO Water Authority	12" Sanitary Main	Crossing at CR 532	North side of road
Sewer/Storm water	TOHO Water Authority	12" Sanitary Main	From intersection of Parkway Blvd & SR 530 to end of SR 530	North side of road
Sewer/Storm water	TOHO Water Authority	8" Sanitary Main	Crossing at intersection of west S. Goodman Rd & CR 532	West side of intersection
Sewer/Storm water	TOHO Water Authority	8" Sanitary Main	Crossing at intersection of S. Goodman Rd & CR 532	West side of intersection
Sewer/Storm water	TOHO Water Authority	8" Sanitary Main	Crossing at intersection of S. Goodman Rd & CR 532	West side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	From intersection of Legends Blvd & CR 532 east to end of CR 532	North side of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing I-4 Corridor at CR 532, I-4 underpass	North side of underpass
Television	BrightHouse Networks	Underground CATV of Unknown Size	From start of SR 530 east to end of SR 530	North side of road
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Parkway Blvd & SR 530	East side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Celebration Ave & SR 530	East side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Celebration Pl & SR 530 east to end of SR 530	South side of road
Television	BrightHouse Networks	Underground CATV of Unknown Size	From intersection of Gaylord Way & W. Osceola Pkwy east to intersection of International Dr. & W. Osceola Pkwy	South side of road
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of International Dr. & W. Osceola Pkwy	West side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing on SR 536 180-ft east of intersection of Continental Gateway Dr. & SR 536	N/A
Television	BrightHouse Networks	Underground CATV of Unknown Size	From intersection of Continental Gateway Dr. east to end of SR 536	South side of road

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Television	BrightHouse Networks	Underground CATV of Unknown Size	From end of SR 535 north to intersection of Meadow Creek Dr & SR 535	East side of road
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing of SR 535 250-ft north of intersection of Vistana Centre Dr	N/A
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Meadow Creek Dr. & SR 535	North side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Meadow Creek Dr. & SR 535	West side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	From 820-ft south of intersection of I-4 eastbound ramp to SR 535 & SR 535 to intersection of Hotel Plaza Blvd & SR 535	East side of road
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing of I-4 Corridor at SR 535, I-4 underpass	East side of underpass
Television	BrightHouse Networks	Underground CATV of Unknown Size	From 530-ft south of to intersection of Hotel Plaza Blvd & SR 535	West side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Palm Pkwy & SR 535	North side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Palm Pkwy & SR 535	East side of intersection

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Television	BrightHouse Networks	Underground CATV of Unknown Size	From intersection of Winter Garden Vineland Rd & SR 535 north 550-ft on SR 535	West side of road
Television	BrightHouse Networks	Underground CATV of Unknown Size	From 550-ft north of intersection of Winter Garden Vineland Rd & SR 535 north to end of project limit on SR 535	West side of road
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing of I-4 Corridor at Old Lake Wilson Rd Overpass	East side of overpass
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing of I-4 Corridor, 2600-ft east of W. Osceola Pkwy overpass	N/A
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing of I-4 Corridor, 6600-ft east of SR 535 overpass	N/A
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing of I-4 Corridor, at Central Florida Pkwy overpass	East side of overpass
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Westwood Blvd & Central Florida Pkwy	West side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing at intersection of Westwood Blvd & Central Florida Pkwy	North side of intersection
Television	BrightHouse Networks	Underground CATV of Unknown Size	From I-4 eastbound ramp to Central Florida Pkwy & Central Florida Pkwy east to end of Central Florida Pkwy	North side of road



Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Television	BrightHouse Networks	Aerial CATV of Unknown Size	From intersection of Arabian Nights Blvd & SR 530 east to end of SR 530	North side of road
Television	BrightHouse Networks	Aerial CATV of Unknown Size	From end of SR 535 north to intersection of Meadow Creek Dr & SR 535	East side of road
Television	BrightHouse Networks	Aerial CATV of Unknown Size	From 820-ft south of intersection of I-4 eastbound ramp to SR 535 & SR 535 to 370-ft north of intersection Vineland Ave & SR 535	East side of road
Television	BrightHouse Networks	Aerial CATV of Unknown Size	Crossing of SR 535 530-ft south of intersection of Hotel Plaza Blvd & SR 535	N/A
Television	BrightHouse Networks	Aerial CATV of Unknown Size	Crossing of I-4 Corridor, 6600-ft east of SR 535 overpass	N/A
Water	Orange County Utilities	24" Reclaim Main	Crossing at Lake Wilson Dr.	South side of overpass
Water	Orange County Utilities	24" Reclaim Main	Crossing at U-turn East of intersection of International Dr & Osceola Pkwy	West side of intersection
Water	Orange County Utilities	20" Reclaim Main	From SR 535 to I-4 West Bound Ramp to end of SR 535	Varies from center of road to west side of road
Water	Orange County Utilities	16" Reclaim Main	Crossing at Central Florida Pkwy	Center of road
Water	Orange County Utilities	16" Reclaim Main	Crossing at intersection of International Dr & Osceola Pkwy	West side of intersection

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Water	Orange County Utilities	12" Reclaim Main	Crossing north of Osceola Pkwy	Easement
Water	Orange County Utilities	12" Reclaim Main	Crossing at SR 535	South side of road
Water	Orange County Utilities	12" Reclaim Main	Crossing at intersection of Continental Gateway Dr & SR 536	East of intersection
Water	Orange County Utilities	12" Reclaim Main	Intersection of Continental Gateway Dr & SR 536 to end of SR 536	North side of road
Water	Orange County Utilities	12" Reclaim Main	Crossing south of intersection of Vistana Centre Dr & SR 535	N/A
Water	Orange County Utilities	12" Reclaim Main	Crossing at intersection of Vineland Ave & SR 535	South side of intersection
Water	Orange County Utilities	12" Reclaim Main	Crossing at intersection of Palm Pkwy & Central Florida Pkwy	Center of intersection
Water	Orange County Utilities	12" Reclaim Main	From I-4 East Bound Ramp to SR 535 to 100-ft south of Hotel Plaza Blvd & SR 535	Varies from center of road to west side of road
Water	Orange County Utilities	10" Reclaim Main	Intersection of Gaylord Way & Osceola Pkwy to end of Osceola Pkwy	South side of road
Water	Orange County Utilities	8" Reclaim Main	Crossing at intersection of Vistana Centre Dr & SR 535	South side of intersection
Water	Orange County Utilities	8" Reclaim Main	Crossing at International Ave & SR 536	East side of road
Water	Orange County Utilities	8" Reclaim Main	Crossing North of intersection of Meadow Creek Dr & SR 535	N/A
Water	Orange County Utilities	6" Reclaim Main	Crossing at intersection of Gaylord Way & Osceola Pkwy	West side of intersection

**Table 2.19 - Major Utilities**

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Water	Orange County Utilities	4" Reclaim Main	Crossing at intersection of Gaylord Way & Osceola Pkwy	West side of intersection
Water	Orange County Utilities	4" Reclaim Main	Crossing at intersection of Gaylord Way & Osceola Pkwy	East side of intersection
Water	Orange County Utilities	4" Reclaim Main	Crossing at intersection of International Dr & Osceola Pkwy	East side of intersection
Water	Orange County Utilities	4" Reclaim Main	Crossing east of intersection of International Dr & Osceola Pkwy	N/A
Water	Orange County Utilities	4" Reclaim Main	Crossing west of Central Florida Greenway west bound exit on Osceola Pkwy	N/A
Water	Orange County Utilities	36" Water Main	Crossing at intersection of Continental Gateway Dr & SR 536	East of intersection
Water	Orange County Utilities	30" Water Main	Crossing North of SR 535	N/A
Water	Orange County Utilities	30" Water Main	From I-4 entrance of SR 535 south bound to 500-ft north on SR 535	West side of road
Water	Orange County Utilities	24" Water Main	Crossing north of Osceola Pkwy	Easement
Water	Orange County Utilities	24" Water Main	Crossing at Central Florida Pkwy	Center of road
Water	Orange County Utilities	24" Water Main	Crossing at intersection of International Dr & Osceola Pkwy	East side of intersection
Water	Orange County Utilities	24" Water Main	Intersection of Continental Gateway Dr & SR 536 to end of SR 536	North side of road
Water	Orange County Utilities	24" Water Main	Crossing on SR 535 at entrance to Radisson Hotel	South of entrance
Water	Orange County Utilities	16" Water Main	Crossing north of Osceola Pkwy	Easement

Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Water	Orange County Utilities	16" Water Main	Crossing at U-turn east of intersection of International Dr & Osceola Pkwy	East side of intersection
Water	Orange County Utilities	16" Water Main	Intersection of Vineland Ave & SR 535 to end of SR 535	East side of road
Water	Orange County Utilities	16" Water Main	Crossing at intersection of Meadow Creek Dr & SR 535	North side of intersection
Water	Orange County Utilities	16" Water Main	Intersection of Westwood Blvd & Central Florida Pkwy to end of Central Florida Pkwy	Varies from south side of road to center of road
Water	Orange County Utilities	16" Water Main	From end of SR 535 northbound ramp to 1-4 east bound, east for 5675-ft on I-4 Corridor	East side of road
Water	Orange County Utilities	12" Water Main	Crossing at intersection of Gaylord Way & Osceola Pkwy	East side of intersection
Water	Orange County Utilities	12" Water Main	Intersection of Gaylord Way & Osceola Pkwy to end of Osceola Pkwy	North side of road
Water	Orange County Utilities	12" Water Main	Entrance to Radisson Hotel on SR 535 to intersection of Winter Garden Vineland Rd & SR 535	Varies from south side of road to center of road
Water	Orange County Utilities	12" Water Main	Crossing at intersection of Hotel Plaza Blvd & SR 535	West side of intersection
Water	Orange County Utilities	12" Water Main	Crossing at intersection of Westwood Blvd & Central Florida Pkwy	East side of intersection
Water	Orange County Utilities	12" Water Main	Crossing at intersection of Turkey Lake Rd & Central Florida Pkwy	West side of intersection
Water	Orange County Utilities	10" Water Main	Crossing at Central Florida Pkwy	North side of road

**Table 2.19 - Major Utilities**

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Water	Orange County Utilities	10" Water Main	Crossing at intersection of Continental Gateway Dr & SR 536	East of intersection
Water	Orange County Utilities	8" Water Main	Crossing at intersection of Vistana Centre Dr & SR 535	South side of intersection
Water	Orange County Utilities	6" Water Main	Intersection of Vineland Ave & SR 535	Southeast corner of intersection
Water	Orange County Utilities	6" Water Main	Crossing 300-ft north of intersection of Winter Garden Vineland Rd & SR 535 on SR 535	N/A
Water	Orange County Utilities	6" Water Main	From 1250-ft east to 1750-ft east of Central Florida Blvd & I-4 Underpass	West side of road
Water	Orange County Utilities	Water Main Unknown Size	Crossing at beginning of I-4 entrance from south bound SR 535	N/A
Water	Reedy Creek Improvement District	12" Water Main	Crossing south of SR 535	N/A
Water	TOHO Water Authority	36" Reclaim Main	Crossing at CR 532	North side of road
Water	TOHO Water Authority	36" Reclaim Main	Crossing at intersection South of Masters Blvd. & CR 532	N/A
Water	TOHO Water Authority	8" Reclaim Main	Intersection South of Masters Blvd & CR 532 to intersection of S. Goodman Rd & CR 532	Center of corridor
Water	TOHO Water Authority	8" Reclaim Main	Crossing at intersection of Masters Blvd & CR 532	Center of intersection
Water	TOHO Water Authority	8" Reclaim Main	Crossing at the intersection of Legends Blvd & CR 532	Center of intersection
Water	TOHO Water Authority	6" Reclaim Main	Crossing at intersection south of Masters Blvd. & CR 532	N/A



Table 2.19 - Major Utilities

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/Side
Water	TOHO Water Authority	4" Reclaim Main	Crossing at intersection of Masters Blvd & CR 532	South east corner of intersection
Water	TOHO Water Authority	4" Reclaim Main	Crossing at intersection south of Legends Blvd & CR 532	East side of road
Water	TOHO Water Authority	4" Reclaim Main	Crossing at S. Goodman Rd on CR 532	West side of road
Water	TOHO Water Authority	24" Water Main	Crossing at CR 532	North of underpass
Water	TOHO Water Authority	24" Water Main	Crossing at Old Lake Wilson Rd	South of overpass
Water	TOHO Water Authority	24" Water Main	CR 532 ramp to I-4 east to end of CR 532	North side of road
Water	TOHO Water Authority	20" Water Main	Intersection south of Masters Blvd & CR 532 to intersection of S. Goodman Rd & CR 532	North side of road
Water	TOHO Water Authority	20" Water Main	Crossing east of Celebration Pl on SR 530	Easement
Water	TOHO Water Authority	16" Water Main	Crossing at CR 532	Center of road
Water	TOHO Water Authority	12" Water Main	Crossing at intersection of Masters Blvd & CR 532	North side of intersection
Water	TOHO Water Authority	12" Water Main	Crossing at intersection West of Legends Blvd & CR 532	West side of intersection
Water	TOHO Water Authority	12" Water Main	Crossing at intersection of S. Goodman Rd & CR 532	East side of intersection
Water	TOHO Water Authority	12" Water Main	Intersection of Parkway Blvd & SR 530 to end of SR 530	North side of intersection
Water	TOHO Water Authority	12" Water Main	Intersection of Parkway Blvd & SR 530 to intersection of Arabian Nights Blvd	North side of intersection

## 2.17 Soils

A preliminary geotechnical review was conducted to assist in the evaluation of stormwater management systems in the project corridor study area. Soils data from the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) and United States Geological Society (USGS) Quadrangle Maps was reviewed within the limits of the proposed improvements in Polk, Osceola and Orange Counties to determine soil and groundwater conditions along the I-4 Segment 1 corridor. The predominant types of soils found in the study area and their corresponding properties are summarized in Table 2.20. Soil boring information, permeability test results and detailed soil survey information can be found in the *Report of Preliminary Geotechnical Engineering Investigation for Ponds – Segment 1 (March 2016)* completed for this project.

**Table 2.20 – Soil Types**

Soil Name	Depth (in)	Soil Description	AASHTO Soil Classification	Seasonal High Groundwater Depth (ft)	Hydrologic Group
<b>Polk County NRCS Soil Survey Review</b>					
Candler sand, 0 to 5 percent slopes	0 - 63 63 - 80	Sand, fine sand Sand, fine sand	A-3 A-2-4, A-3	> 6.0	A
Tavares fine sand, 0 to 5 percent slopes	0 - 8 8 - 80	Fine sand Sand, fine sand	A-3 A-3	3.5 - 6.0	A
<b>Osceola County NRCS Soil Survey Review</b>					
Adamsville sand	0 - 4 4 - 80	Sand Sand	A-2-4, A-3 A-2-4, A-3	2.0 - 3.5	A
Candler sand, 0 to 5 percent slopes	0 - 62 62 - 80	Sand Sand, fine sand	A-3 A-2-4, A-3	> 6.0	A
Candler sand, 5 to 12 percent slopes	0 - 59 59 - 80	Sand, fine sand Sand, fine sand	A-3 A-2-4, A-3	> 6.0	A
Hontoon Muck	0 - 70	Muck	A-8	+2.0 - 0.0	A/D
Immokalee fine sand	0 - 37 37 - 47 47 - 80	Fine sand Fine sand Fine sand	A-3 A-2-4 A-3	0.5 - 1.5	A/D
Myakka fine sand	0 - 27 27 - 37  37 - 70 70 - 82	Fine sand, sand Fine sand, sand, loamy fine sand Fine sand, sand Fine sand, sand, loamy fine sand	A-3 A-2-4, A-3  A-3 A-3, A-2-4	0.5 - 1.5	A/D
Placid fine sand, depressional	0 - 24 24 - 80	Fine sand Fine sand, sand	A-2-4, A-3 A-3, A-2-4	+2.0 - 0.0	A/D
Pompano fine sand, depressional	0 - 80	Fine sand	A-3	+2.0 - 0.0	A/D

Table 2.20 – Soil Types

Soil Name	Depth (in)	Soil Description	AASHTO Soil Classification	Seasonal High Groundwater Depth (ft)	Hydrologic Group
Riviera fine sand	0 - 2 24 - 38 38 - 61  61 - 80	Fine sand, sand Sandy clay loam, sandy loam Sandy clay loam, fine sandy loam, sandy loam Loamy sand, sand, fine sand	A-2-4, A-3 A-2-4 A-2-4, A-2-6  A-3, A-2-4	0.0 - 1.0	C/D
<b>Orange County NRCS Soil Survey Review</b>					
Basinger fine sand, depressional	0 - 7	Fine sand	A-3	+2.0 - 0	A/D
	7 - 80	Fine sand, sand	A-3, A-2-4		
Candler-Urban land complex, 0 to 5 percent slopes	0 - 4	Fine sand	A-3	> 6.0	A
	4 - 67	Fine sand, sand	A-3		
	67 - 80	Fine sand, sand	A-2-4, A-3		
Immokalee fine sand	0 - 35	Fine sand, sand	A-3	1.0 - 5.0	B/D
	35 - 67	Fine sand, sand	A-3, A-2-4		
	67 - 80	Fine sand, sand	A-3		
Pomello fine sand, 0 to 5 percent slopes	0 - 40	Fine sand, sand	A-3	3.5 - 5.0	A
	40 - 55	Fine sand, sand	A-3, A-2-4		
	55 - 80	Fine sand, sand	A-3		
St. Johns fine sand	0 - 24	Fine sand, sand	A-3	1.0 - 3.5	B/D
	24 - 44	Fine sand, sand	A-3, A-2-4		
	44 - 80	Fine sand, sand	A-3		
Sanibel muck	0 - 11	Muck	A-8	+1.0 - 0	A/D
	11 - 80	Fine sand, sand, mucky fine sand	A-3		
Seffner fine sand	0 - 80	Fine sand, sand	A-3, A-2-4	3.0 - 5.0	A/D
Smyrna fine sand	0 - 27	Fine sand, sand	A-3, A-2-4	1.0 - 3.5	A/D
	27 - 80	Fine sand, sand	A-3		
Zolfo fine sand	0 - 80	Fine sand	A-3, A-2-4	3.5 - 5.0	A

## 2.18 Sociocultural Conditions

Sociocultural Effects (SCE) Evaluation is the process of determining and evaluating the effects a transportation action may have on a community and the quality of life of the citizenry. A community is defined as a geographic, manmade or natural boundary comprised of people and places which may share similar social, cultural, economic, and political or other characteristics. This section of the report identifies community features and characteristics surrounding the project corridor, including a data inventory of existing community facilities that will be used in the subsequent SCE evaluation.

### 2.18.1 Study Area

The SCE study area was determined by evaluating project plans, land use maps, local government comprehensive plans and other relevant resources. The I-4 Segment 1 improvements are located in portions of Osceola and Orange Counties. Both counties are within the U.S. Census designated Orlando-Kissimmee-Sanford Metropolitan Statistical Area. In this metro area, the corridor lies primarily within U.S. postal zip codes 32821 and 32836 in Orlando, 32830 in Lake Buena Vista and 34747 in Kissimmee. The southern end of the Segment 1 corridor is adjacent to postal zip code 33896 in Champions Gate and the northern end is near postal zip code 32819 in Orlando.

### 2.18.2 Social Demographics

Based on the 2010 Census, Orange County is the fifth most populous County in the State of Florida. With a 2012 population estimate of 1.2 million, the County represents approximately six percent of the total State population. Orange County is second in the state for fastest growth, with a population increase of approximately 30,000 between 2010 and 2012. Over the last ten years, the County population has increased at a rate of approximately 2.3% per year from approximately 960,000 in 2002 to 1.2 million in 2012. The population projection for Orange County for the year 2040 is approximately 1.8 million, an increase of 50% over a 28-year period. The largest city in Orange County is Orlando, representing approximately 21% of the County population.

Osceola County is the 20th most populous County in the State of Florida. With a 2012 population estimate of 280,866, the County represents approximately 1.5 percent of the total State population. Osceola County's population grew by 4.5% between 2010 and 2012 with a population increase of approximately 12,000. Over the ten-year period from 2000-2010, the County population increased by 5.6% per year from approximately 172,500 in 2000 to 269,000 in 2010. The population projection for Osceola County for the year 2040 is approximately 526,000, a projected increase of 87% over a 28-year period. The only incorporated cities in Osceola County are Kissimmee and St. Cloud.

Demographic statistics specific to the area surrounding the I-4 Segment 1 corridor were obtained from the U.S. Census Bureau's American Community Survey (ACS). The U.S. Census Bureau has developed Zip Code Tabulation Areas (ZCTAs) to represent U.S. Postal Service (USPS) ZIP code service areas. Since USPS ZIP codes can cross state, county, census tract and census block boundaries, the Bureau has developed the ZCTAs to provide a correlation between postal zip codes and census bureau geographic boundaries. The 32830 ZCTA comprises the city of Bay Lake and includes all four of the Disney World theme parks and numerous supporting resort and hotel facilities. The population in the 32830 ZCTA is nearly 100% visitors and thus, the demographic data for this ZCTA is non-existent. The socioeconomic demographic data for Orange and Osceola Counties and the ZCTAs in the study area is summarized in Table 2.21.

Table 2.21 – Community Demographics

Community Characteristic	Orange County	Osceola County	ZCTA 32821	ZCTA 32836	ZCTA 34746	ZCTA 34747
Total Population	1,145,956	268,685	21,423	16,647	35,022	13,692
% White	63.6	71.0	70.8	72.8	67.8	84.5
% Black or African American	20.8	11.3	6.4	4.8	10.5	3.8
% Other	15.6	17.7	22.8	22.4	21.7	11.7
% Hispanic or Latino (Of Any Race)	26.9	45.5	19.1	16.1	43.9	20.5
% 65 Years and Over	9.7	11.0	8.8	9.3	12.5	8.3
% High School Graduate or Higher	86.9	84.2	91.8	94.3	83.1	95.3
% Bachelor's Degree or Higher	30.0	18.0	31.1	55.5	19.0	49.0
% Speak English Less Than "Very Well"	12.7	19.3	14.4	10.5	18.9	7.5
% Employed (Age 16 And Over)	62.8	59.6	68.2	66.5	59.2	67.9
% Unemployed	7.2	7.5	5.6	4.0	6.1	5.4
Commuting to Work						
% Car, Truck, Or Van -- Drove Alone	80.2	79.7	76.5	78.6	77.1	73.2
% Car, Truck, Or Van – Carpooled	9.8	11.1	8.9	7.8	13.9	12.1
% Public Transportation (Excluding Taxicab)	2.7	1.4	6.4	6.3	1.2	1.1
Mean Travel Time to Work (Minutes)	26.3	30.1	21.6	21.4	29.9	22.9
Average Household Size	2.72	2.82	2.13	3.04	2.86	2.54
Average Family Size	3.31	3.20	2.71	3.45	3.23	3.07
Median Household Income (Dollars)	49,731	46,479	45,020	90,985	50,967	69,583
Mean Household Income (Dollars)	68,054	57,206	51,384	131,274	62,270	95,097
Per Capita Income (Dollars)	25,494	20,440	23,532	43,831	22,143	37,935
Income Below the Poverty Level						
% All People	14.9	13.9	18.1	9.9	11.6	7.8
% Under 18 Years	19.8	19.6	8.9	10.9	15.3	9.8
% 65 Years and Over	10.0	10.2	4.3	0.0	10.2	8.8
Sources: U.S. Census Bureau, 2010 Census U.S. Census Bureau, 2007-2011 American Community Survey						

### 2.18.3 Economics

The average monthly employment numbers in Orange County for all industries was approximately 700,000 in 2012. The top employment industries in Orange County for 2012 were:

- Leisure & Hospitality (20.8%),
- Professional & Business Services (16.0%),
- Trade, Transportation & Utilities (16.0%) and
- Education & Health Services (10.4%).

The average annual wage for all industries was \$42,843 in Orange County. Major employers in Orange County include:

- Walt Disney World Company,
- Adventist Health Systems,
- Universal Orlando,
- Orlando Health,
- SeaWorld Entertainment,
- Lockheed Martin,
- Marriott International Inc.,
- Central Florida Investments (Westgate Resorts),
- Darden Restaurants Corporate Headquarters and
- Starwood Hotels & Resorts Worldwide Inc.

The average monthly employment in Osceola County for all industries was approximately 75,000 in 2012. The top employment industries in Osceola County for 2012 were:

- Trade, Transportation & Utilities (23.3%),
- Professional & Business Services (18.8%),
- Leisure & Hospitality (13.3%),
- Financial Activities (11.3%) and
- Education & Health Services (10.2%).

The average annual wage for all industries was \$33,799 in Osceola County. Major employers in Osceola County include:

- Wal-Mart Stores, Inc.,
- Florida Hospital – Kissimmee & Celebration,
- Osceola Regional Medical Center,
- Gaylord Palms Resort & Convention Center and
- Publix Supermarkets, Inc.



#### 2.18.4 Community Facilities and Services

Existing community resources within the I-4 Segment 1 project study area were identified as part of the sociocultural analysis. The corridor traverses through unincorporated Osceola and Orange Counties with a short segment adjacent to the City of Lake Buena Vista. The existing patterns of social activity revolve heavily around the theme park and entertainment industry along this corridor. The community facilities surrounding the I-4 Segment 1 corridor serve a large visiting population in addition to the permanent, local area residential population which includes resort-corridor employees. Thus, numerous community resources exist to serve the visitor, residential and workforce population in this region. Both Counties, and the municipalities within them, feature many medical/health services, recreational opportunities, historical points of interest and cultural events/festivals. Community resources which serve the residential population in this region are illustrated in Figure 2.21 and Figure 2.22. Table 2.22 provides a list of the locations of existing community facilities and services in the I-4 Segment 1 study area.

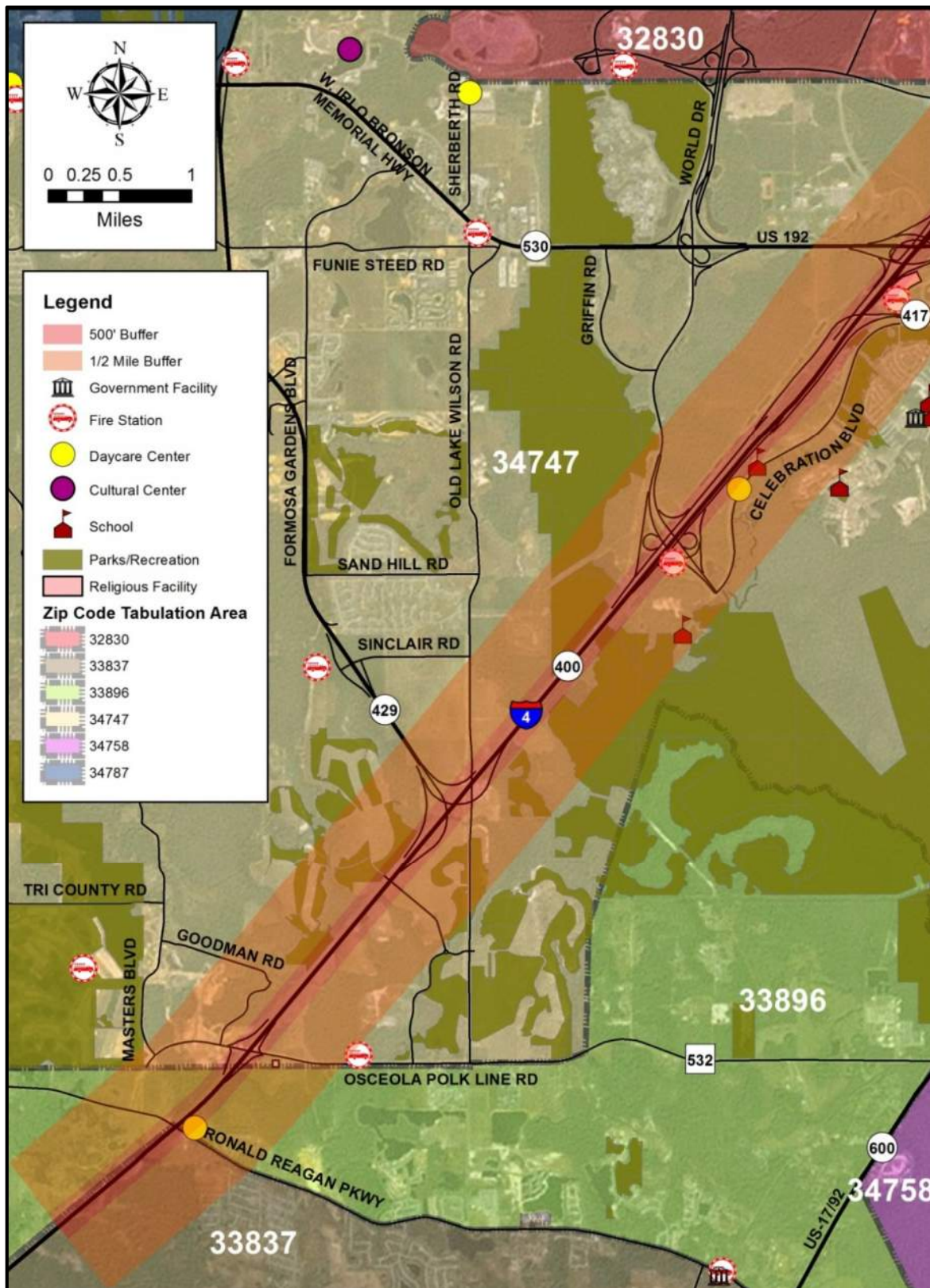


Figure 2.21 - Community Facilities and Services (Sheet 1 of 2)



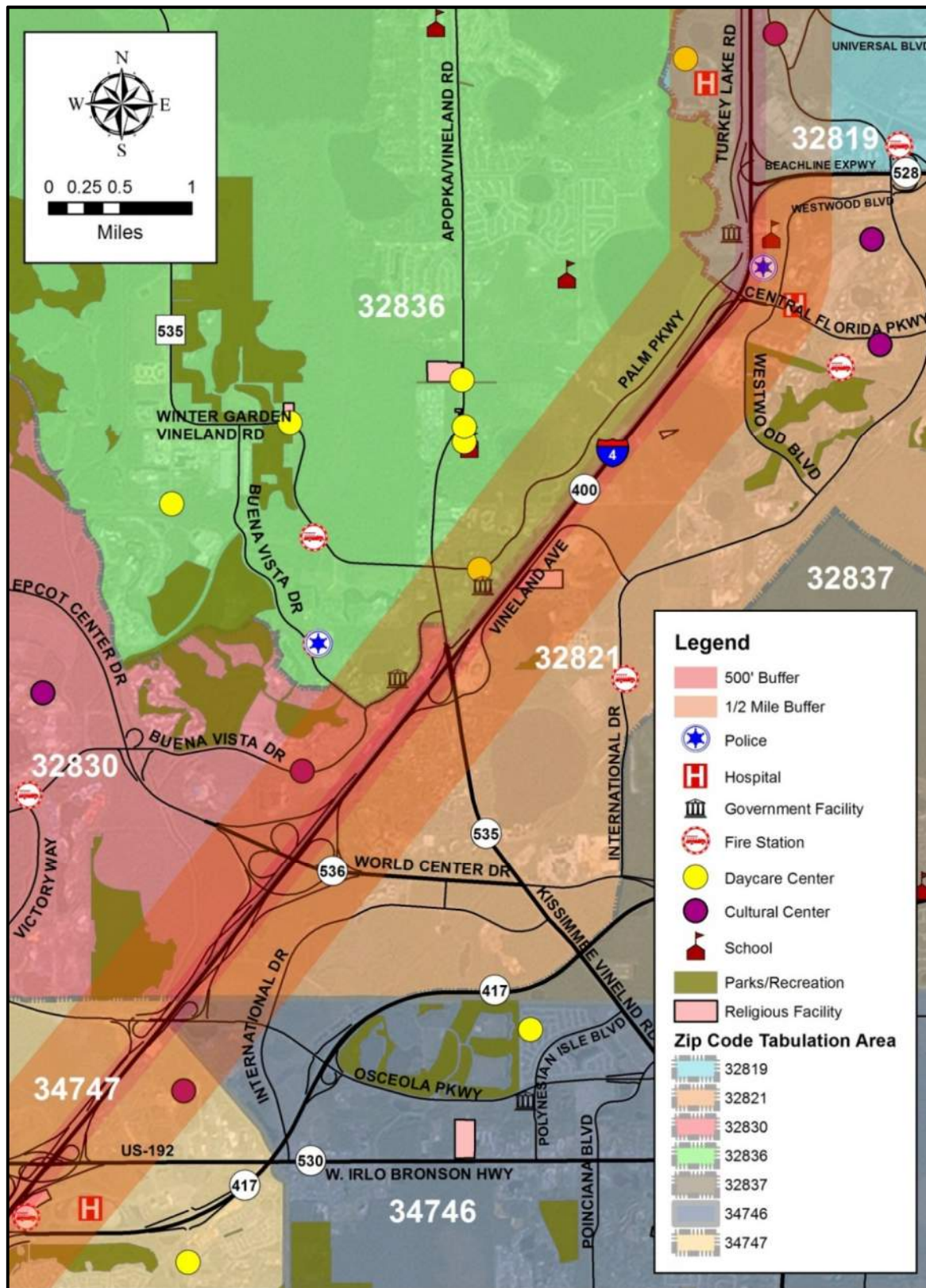


Figure 2.22 - Community Facilities and Services (Sheet 2 of 2)

Table 2.22 – Community Facilities and Services

Community Facility/Service	Address	Location	
		Within 500 feet of I-4	Within ½ mile of I-4
School/College/Daycare Facilities			
Celebration High School	1809 Celebration Blvd, Kissimmee		✓
American Institute	1420 Celebration Boulevard, Celebration	✓	
Webster University South Orlando	6750 Forum Dr, Orlando	✓	
Foreign Language Immersion Early Childhood Center	1530 Celebration Blvd, Celebration	✓	
Auntie's Christian Ministry Inc.	905 Scott Lane, Davenport	✓	
Westgate Children's Learning & Development Center	7450 Sandlake Commons Boulevard, Orlando		✓
Health/Safety Facilities			
Osceola County Fire Department Station 73 (Davenport/Reunion)	7855 Osceola Polk Line Rd, Davenport		✓
Osceola County Fire Department Station (Celebration South - (Proposed)	Kissimmee	✓	
Osceola County Fire Department and Rescue Station 72 (Celebration)	595 Celebration Pl, Celebration	✓	
Orange County Sheriff's Office Sector V	6825 Westwood Blvd, Orlando	✓	
Central Florida Behavioral Hospital	6601 Central Florida Pkwy,		✓
Florida Hospital Celebration Health	400 Celebration Pl, Celebration		✓
Dr. P. Phillips Hospital	9400 Turkey Lake Rd, Orlando		✓
Religious Facilities			
Celebration Community Church	501 Celebration Pl, Kissimmee	✓	
Celebration Seventh-day Adventist Church	404 Celebration Pl, Celebration		✓
Oak Hill Baptist Church of Loughman	8060 Osceola Polk Line Rd, Loughman		✓
Mary Queen of the Universe - Diocese of Orlando	8300 Vineland Ave, Orlando	✓	
Parks/Recreation			
Marriott's Grande Pines Golf Club Orlando	6351 International Golf Club Rd, Orlando		✓
Hawk's Landing Golf Club	8701 World Center Dr, Orlando		✓
Waldorf Astoria Golf Club	14224 Bonnet Creek Resort Ln, Orlando		✓
Celebration Golf Co LLC	701 Golfpark Dr, Kissimmee	✓	
Champions Gate Golf Resort	1400 Masters Blvd, Davenport		✓
Reunion Resort and Club	1590 Reunion Blvd, Kissimmee		✓
ESPN Wide World of Sports Complex	700 South Victory Way, Kissimmee		✓
Government Facilities			
U S Post Office - CPU Lake Buena Vista	8536 Palm Pkwy, Orlando		✓
U S Post Office - Sand Lake	10450 Turkey Lake Rd, Orlando		✓
City of Bay Lake & City of Lake Buena Vista City Halls	1900 Hotel Plaza Blvd, Orlando		✓
Other Community Facilities			
Downtown Disney (Disney Springs)	1490 East Buena Vista Drive, Lake Buena Vista		✓

### 3.0 Planning Phase/Corridor Analysis

The current I-4 BtU PD&E Study is a reevaluation of the previously approved PD&E study for I-4 from CR 532 (Osceola-Polk County Line) to West of SR 528 (FPN 242526-1-22-01 and 242483-1-22-01, FONSI December 1999). The original project followed a multi-level screening process which involved preliminary evaluations of the I-4 corridor with respect to constructability, design speeds and type of physical separation between the special use (HOV in the original design concept and express lanes in the current design concept) and general use lanes. The preliminary evaluations were reviewed with FDOT, and the corridor was analyzed with the following project goals:

- Use the existing infrastructure to the maximum extent possible
- Evaluate a barrier-separated facility
- Refine concept plans to minimize traffic disruptions during construction
- Minimize construction costs and right-of-way requirements
- Avoid and/or minimize impacts especially for wetlands, floodplains, Section 4(f) properties and Section 106 properties

Since the proposed project is a widening project, no alternative alignments were evaluated.

## 4.0 Design Criteria and Standards

The I-4 BtU PD&E Reevaluation Study incorporates project elements with various design requirements. Table 4.1 presents the roadway design criteria established for each design element. The design criteria and standards are based on design parameters in accordance with A Policy on Geometric Design of *Highway and Streets* (AASHTO 2011), *Roadway Plans Preparation Manual (PPM)*, *Volumes I and II* (FDOT, January 2015), and *Roadway and Traffic Design Standards* (FDOT, 2015).

**Table 4.1 - Roadway Design Criteria**

Design Element	Design Standard	Source(s)
Design Vehicle	WB-62FL	PPM, Pg. 1-19
Design Year	2040	FDOT Scope of Services
Design Speed Mainline I-4 / Express Lanes Diamond Ramps Loop Ramp	70 mph 50 mph 30 mph (25 mph min as per AASHTO)	FDOT PPM, Table 1.9.1 and 2011 AASHTO, Page 10-89
Median Width I-4	64 ft. without barrier 26 ft. minimum with barrier	FDOT PPM, Table 2.2.1
Maximum Degree of Curve Mainline I-4 / Express Lanes Direct Connection Ramp Loop Ramp	3°00' 8°15' 24°45'	FDOT PPM, Table 2.8.3 (e MAX – 0.10)
Length of Horizontal Curves Mainline I-4 / Express Lanes Ramps	Desirable: 30(V) <sup>1</sup> Minimum: 15(V) <sup>1</sup> Desirable: 15(V) <sup>1</sup> Minimum: 400 ft.	FDOT PPM, Table 2.8.2a
Minimum Stopping Sight Distance Mainline I-4 / Express Lanes Diamond Ramps Loop Ramp	820 ft. 425 ft. 200 ft.	FDOT PPM, Table 2.7.1
Decision Sight Distance Mainline I-4 / Express Lanes Diamond Ramps Loop Ramp	1,445 ft. 910 ft. 490 ft	2011 AASHTO, Exhibit 3-3, Page 3-7
Maximum Shoulder "Roll-Over" Maximum Lane "Roll-Over"	7% 4%	FDOT Roadway & Traffic Design Standard Index No. 510, 2011 AASHTO pg. 4-5



Table 4.1 - Roadway Design Criteria

Design Element	Design Standard	Source(s)
Superelevation Transition Tangent Curve	80% desirable, 50% minimum 20% desirable, 50% maximum	FDOT PPM, Page 2-53
Maximum Superelevation Mainline I-4 / Express Lanes	10%	
Ramps	10%	
On- and Off-Ramp Design Diamond On-Ramps Diamond Off-Ramps Loop Ramp	Taper Design with 50:1 (1200 ft) Taper Design with 3° to 5° (Parallel Design: 1,200' Accel + 300' Taper and 800' Decel + 300' Taper – District Preference)	FDOT Roadway & Traffic Design Standard Index No 525
Maximum Profile Grade Mainline I-4 Express Lanes Diamond Ramp Loop Ramp	3% 5% 7%	FDOT PPM, Table 2.6.1
Maximum Change in Grade without Vertical Curve Mainline I-4 / Express Lanes Diamond Ramp Loop Ramp	0.20% 0.60% 1.00%	FDOT PPM, Table 2.6.2
Crest Vertical Curve Mainline I-4 / Express Lanes (Open Highway) Mainline I-4 / Express Lanes (w/interchange) Diamond Ramp Loop Ramp	K=506, min. length 1,000ft. K=506, min. length 1,800 ft. K=136, min. length 300 ft. K=31, min. length 3V <sup>1</sup>	FDOT PPM, Table 2.8.5
Sag Vertical Curve Mainline I-4 / Express Lanes Diamond Ramp Loop Ramp	K=206, min. length 800 ft. K=96, min. length 200 ft. K=37, min. length 3V <sup>1</sup>	FDOT PPM, Table 2.8.6
Minimum Vertical Clearance Bridges over I-4 I-4 Bridges over Cross Roads Pedestrian Facilities over Rdwy Overhead Signs Roadway over Railroad	16'-6" <sup>2</sup> 16'-6" <sup>2</sup> 17'-6" <sup>2</sup> 17'-6" <sup>2</sup> 23'-6" <sup>3</sup>	FDOT PPM, Tables 2.10.1 and 2.10.2

Table 4.1 - Roadway Design Criteria

Design Element	Design Standard		Source(s)
Lane Widths Mainline I-4 One-Lane Ramp Two-Lane Ramp	12 ft. – Tangent 15 ft. – Tangent 24 ft. – Tangent		FDOT PPM, Tables 2.1.1, 2.1.2 and 2.1.3
Lane Drop Taper Mainline I-4 / Express Lanes	70:1 Desirable		2011 AASHTO, Page 3-143
Shoulder Width – Roadway – Inside (or Left) Mainline I-4 One-Lane Ramp Two-Lane Ramp Two-Lane Express Lane	Total 12 ft. 6 ft. 8 ft. 6 ft.	Paved 10 ft. 2 ft. 4 ft. 6 ft.	FDOT PPM, Table 2.3.1
Shoulder Width – Roadway – Outside (or Right) Mainline I-4 Mainline with Auxiliary Lane One-Lane Ramp Two-Lane Ramp Two-Lane Express Lane	Total 12 ft. 12 ft. 6 ft. 12 ft. 10 ft.	Paved 10 ft. 10 ft. 4 ft. 10 ft. 10 ft.	FDOT PPM, Table 2.3.1
Typical Roadway Cross Section Slopes Roadways: 2 Lanes in Same Direction Addition Lane in Same Direction	0.02 0.03		FDOT PPM, Figure 2.1.1 and Table 2.3.1
Shoulders: Inside Shoulder Outside Shoulder	0.05 (0.06 for 4 or more lanes) 0.06		FDOT PPM, Figure 2.1.1 and Table 2.3.1
Recoverable Terrain (min. from edge of travel way) Mainline I-4 / Express Lanes (> 55mph) Auxiliary Lane (> 55mph) One-Lane Ramp (50 mph) Two-Lane Ramp (50 mph) Loop Ramp (30 mph)	36 ft. 24 ft. 14 ft. 24 ft. 18 ft.		FDOT PPM Table 2.11.11
Shoulder Width – Bridge Structures – Inside Mainline I-4 One-Lane Ramp Two-Lane Ramp	10 ft. 6 ft. 6 ft.		FDOT PPM, Figure 2.0.1

Table 4.1 - Roadway Design Criteria

Design Element	Design Standard	Source(s)
Shoulder Width – Bridge Structures – Outside		
Mainline I-4	10 ft.	FDOT PPM, Figure 2.0.1
Auxiliary Lanes	10 ft.	
One-Lane Ramp	6 ft.	
Two-Lane Ramp	10 ft.	
Border Width <sup>4</sup>	94 ft.	FDOT PPM, Table 2.5.3
Notes: <sup>1</sup> Where V = design speed of the roadway. <sup>2</sup> Includes 6" allowance for resurfacing. <sup>3</sup> Includes Rail Resurfacing (Track Raised): 12' for conventional railroads. <sup>4</sup> Measured from outside edge of travel way to right-of-way.		

## 5.0 Alternatives Analysis

The original I-4 PD&E Study, I-4 (SR 400) from CR 532 (Polk/Osceola County Line) to West of SR 528, completed in June 2000, was performed to address access, safety and capacity improvements. This reevaluation adheres to the project development process by examining the various concepts considered for this project. The alternatives analysis will focus primarily on the interchanges and pond sites. The mainline typical section will be consistent with the approved typical section that is being implemented from SR 435 (Kirkman Road) to SR 434 ("I-4 Ultimate"), the section of I-4 that began construction in early 2015. The alternatives for the interchanges include no modifications to the existing interchange geometry (No Build), Transportation System Management and Operations (TSMO), and Study (Build) Alternatives. The following sections describe each of the proposed alternatives in greater detail and the advantages and disadvantages of each.

### 5.1 No Project (No-Build) Alternative

The No-Build Alternative assumes no changes to the transportation facilities within the project corridor beyond currently planned and programmed projects already committed within Metro Plan Orlando's *2040 Long Range Transportation Plan* and the *Transportation Improvement Program 2016-2020*. The No-Build Alternative forms the basis of the comparative analysis for each of the viable Study Alternatives.

The benefits of the No-Build Alternative are the absence of construction-related and short-term operational impacts associated with the Build Alternatives. However, long-term benefits accrued from serving future traffic demands will not be realized with this alternative. Operating conditions are anticipated to worsen with time, while further increasing delays and congestion. Specifically, the No-Build Alternative will offer no benefits to the existing or future traffic congestion anticipated on I-4. Distinct advantages and disadvantages associated with this alternative are as follows.

#### Advantages:

- No impedance to traffic flow during construction,
- No expenditure of funds for right-of-way acquisition, engineering, design or construction,
- No impact to the adjacent natural, physical and human environments and
- No disruption to existing land uses due to construction-related activities.

#### Disadvantages:

- Increase in traffic congestion and road user costs, unacceptable level of service and an increase in accidents associated with increases in travel times (due to excessive delays) and traffic volumes,
- Increase in maintenance costs due to roadway and structure deterioration,

- Increase in carbon monoxide levels and other air pollutants caused by an increase in traffic congestion,
- Increase in emergency service response time in addition to an increase in evacuation time during weather emergencies as a result of heavy congestion,
- Increase in delays to evacuation procedures throughout the state and
- Increase in safety-related accidents due to heavy congestion

The No-Build Alternative shall remain a viable alternative through the public involvement process. The final selection of an alternative will not be made until all impacts are considered and responses to the public hearing comments have been evaluated.

## 5.2 Transportation System Management and Operations

Transportation System Management and Operations (TSMO) Alternatives are defined as low capital cost transportation improvements designed to maximize the utilization and efficiency of the existing transportation system through improved system management. The various forms of TSMO activities include:

- Traffic signal improvements,
- Intersection/interchange improvements,
- Widening of parallel arterials,
- Ridesharing programs,
- Reversible flow roadway systems,
- Transit,
- ITS and
- Ramp-to-ramp auxiliary lanes.

Although the implementation of TSMO strategies would certainly aid in localized operation of the existing roadway, the projected traffic volumes for the design year 2040 require I-4 to be widened to provide the additional capacity necessary to maintain or improve the existing levels of service. Therefore, the TSMO Alternative is not considered a viable alternative and no further evaluation of the TSMO Alternative will be conducted during this study.

## 5.3 Multi-Modal Alternatives

The project study area, including arterial streets crossing I-4, is served by different modes of travel, both motorized and non-motorized. Increased connectivity for bicycle, pedestrian, and transit users is an objective of the project.

### 5.3.1 Transit

The recommended typical section for the project preserves a 44-foot corridor in the median of I-4. The 44-foot rail envelope has been preserved for the future Tampa to Orlando High Speed Rail project. In addition, the I-4 Segment 1 corridor has several existing transit opportunities available to the community. Phase one of the SunRail commuter rail line began operations on May 1, 2014. The Phase One line extends from DeBary in Volusia County through downtown Orlando and terminates at Sand Lake Road in Orange County. In the vicinity of the I-4 Segment 1 corridor, future expansion plans include extension of the SunRail commuter rail line 17.2 miles to the south, from Sand Lake Road through Kissimmee to Poinciana. The Phase 2 extension is anticipated to begin construction by 2015 and be in service by 2017. Three stations with park and ride lots and bus drop-off area are planned for Meadow Woods (South Orange Avenue and Fairway Woods Boulevard), Osceola Parkway (near Michigan Avenue) and Poinciana (Orange Blossom Trail and Poinciana Boulevard). A fourth station in downtown Kissimmee will be featured as an intermodal stop providing transit connectivity for commuters.

Bus transit options in this corridor include several LYNX bus service routes:

- Link 55 (West US 192/ Crosstown) and Link 56 (West US 192/ Magic Kingdom) along US 192,
- Link 306 (3D: Poinciana/Disney West Side Transfer Center) along Osceola Parkway,
- Links 301 (3D: Pine Hills/Animal Kingdom), 302 (3D: Rosemont/Magic Kingdom), 303 (3D: Washington Shores/Disney Hollywood Studios), 304 (3D: Rio Grande/Vistana Resort), and 305 (3D: Metrowest/All Star Resorts) along I-4 and SR 536,
- Link 300 (3D: Downtown Orlando/Hotel Plaza) along SR 535 and
- Links 50 (Downtown Orlando/Magic Kingdom), 8 (W. Oak Ridge Road/International Drive), and 38 (Downtown Orlando/SeaWorld) along Central Florida Parkway.

### 5.3.2 Bicycles and Pedestrians

There are no designated bicycle lanes currently on the cross streets within the study limits of Segment 1. Pedestrian accommodations exist along CR 532, SR 535, Fenton Street (Daryl Carter Parkway) and Central Florida Parkway. According to the Orange County Trails Master Plan and MetroPlan Orlando documents, there are no planned bike trails within Segment 1 in either Orange County or Osceola County. SR 429, World Drive, SR 417, SR 530, Osceola Parkway and SR 536 are roadway facilities without existing or proposed pedestrian accommodations. The proposed improvements for I-4 Segment 1 will maintain sidewalks along both sides of CR 532 and Daryl Carter Parkway, that will expand in width through the center of the interchanges. Sidewalks will also be provided along both sides of SR 535. A 10-foot wide sidewalk (multi-use trail) will be provided along the south side of Central Florida Parkway since bicycle lanes are not being provided on the roadway and the County has indicated a preference to have a trail in lieu of bicycle lanes. Old Lake Wilson Road will have a 10-foot sidewalk on the west side of the bridge and 6-foot sidewalk on the east side



when the bridge is replaced. The proposed improvements will not preclude any future pedestrian or bicycle facilities in the project area.

## 5.4 Build Alternatives

The build alternative for the I-4 mainline involves widening from the existing 6-lane to the proposed 10-lane section with four, tolled express lanes and a future rail corridor in the median. Access to and from the express lanes will be provided through direct access ramps at major interchanges or slip ramp connections between interchanges. Slip ramps provide access between the general use lanes and the express lanes, direct access ramps will provide access between the crossroads at the major interchanges and the express lanes and dual access ramps provide both access between GULs and ELs and major crossroads and ELs. The build alternative will provide three direct access ramps, one slip ramp and one dual access ramp along I-4 Segment 1, as shown in Figure 5.1. Detailed analysis on the development of express lanes access points and tolling concepts, is provided in the supplemental report *Concept of Operations SR 400 (I-4) from West of SR 25/US 27 to East of SR 472 (June 2016)* prepared for this project.

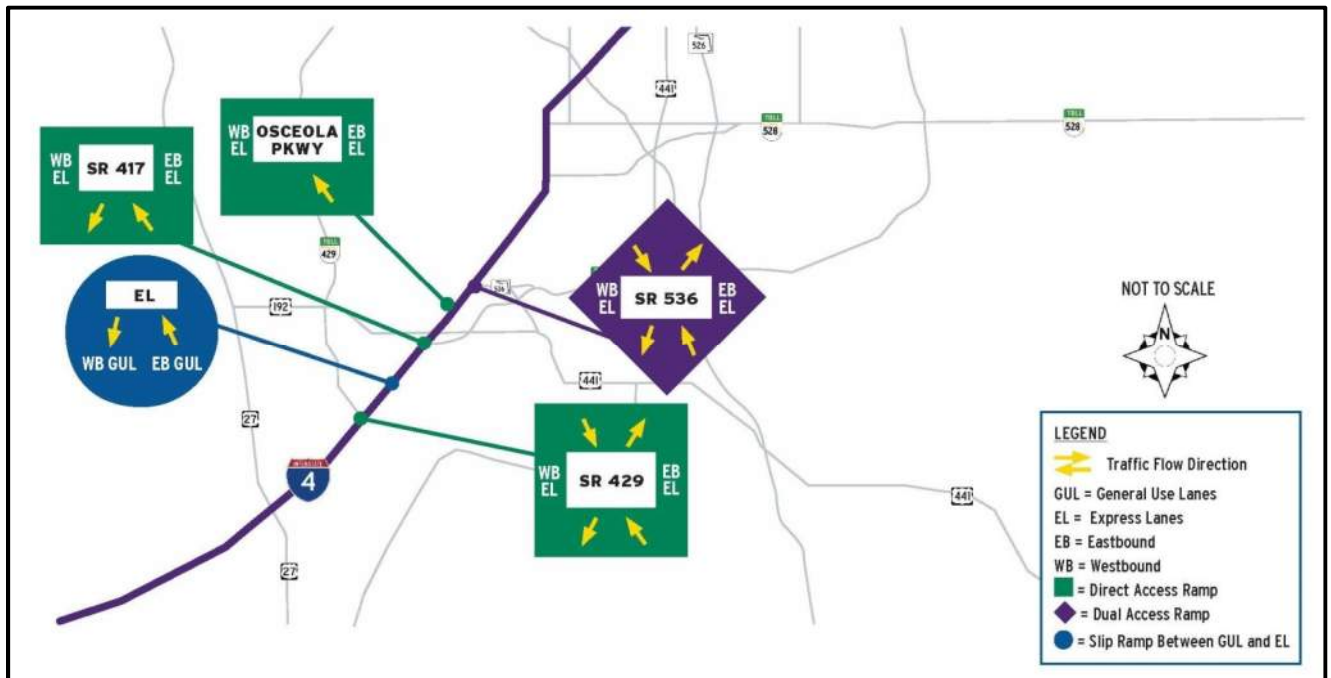


Figure 5.1 – Proposed Express Lane Access Points

As outlined previously, the project objective was to develop and evaluate viable interchange alternatives to enhance the ability of the roadways to meet anticipated traffic demands, improve safety, and serve existing and future land uses along the I-4 corridor. Alternative typical sections were evaluated for some portions of the Segment 1 corridor. These special cross sections were developed to meet the needs of the project due to right-of-way constraints, existing utility

easements or other design considerations along the corridor and may include C-D roads, braided ramp systems, elevated express lanes or elevated general use lanes. Additionally, the median width may vary in certain locations to accommodate changes in the horizontal alignment due to crossroad support structures, water crossings or other features. In the area between World Drive and SR 417, the median is considerably wider than 44 feet to accommodate a future high speed rail station. The special sections developed along the Segment 1 corridor are as follows:

- I-4 Eastbound elevated express lanes between E. of SR 429 and W. of World Drive
- C-D system (Eastbound and Westbound) between World Drive and SR 417
- I-4 Eastbound elevated general use lanes with at grade C-D Road between SR 536 and SR 535
- I-4 Westbound elevated general use lanes between SR 536 and E. of Daryl Carter Parkway with at grade C-D Road between SR 536 and Central Florida Parkway

Since the mainline typical section (three general use lanes and two express lanes in each direction) will be mostly consistent with the approved typical section that is being implemented for the I-4 Ultimate section from SR 435 (Kirkman Road) to SR 434, the alternatives analysis focused primarily on the interchanges and pond sites. Build alternatives were evaluated for the CR 532, SR 429, World Drive, SR 417, SR 530, Osceola Parkway, SR 536, SR 535, Daryl Carter Parkway and Central Florida Parkway interchanges. The proposed mainline typical and special sections were previously shown in Figure 1.2 through Figure 1.5. The complete typical section package for the I-4 BtU project has been submitted under separate cover.

#### 5.4.1 Design Speed

The design speed used for the proposed improvements for I-4 (general use lanes and express lanes) is 70 mph. The design speeds of the cross roads were available from existing bridge plans and are summarized in Table 5.1. Where the design speed was not available, the posted speed limit was used as a basis to determine the design speed.

**Table 5.1 – Design and Posted Speed**

Roadway Segment	Design Speed (MPH)	Posted Speed (MPH)
CR 532	45	-
Tradition Boulevard/ Sinclair Road	35	-
SR 429	-	65
CR 545	55	-
World Drive	40	-
SR 417	-	50
US 192/SR 530	50	-
Osceola Parkway	45	-
SR 536	60	-
SR 535	-	40

**Table 5.1 – Design and Posted Speed**

Roadway Segment	Design Speed (MPH)	Posted Speed (MPH)
Daryl Carter Parkway	40	40
Central Florida Parkway	-	45

### 5.4.2 Interchange Alternatives

The Concept Plans provided in Appendix A include detail sheets of the interchange alternatives described in the following sections.

#### CR 532 Interchange

Two interchange alternatives were evaluated for CR 532. Alternative 1, shown in Sheets 37-39 of the Concept Plans in Appendix A, would leave the overall existing horizontal geometry as it is, in a diamond configuration. The eastbound exit ramp is shorter by approximately 360 feet, but an auxiliary lane is provided along eastbound I-4, west of CR 532. The eastbound on ramp changes from a taper-type entrance to a parallel-type entrance. The westbound exit ramp connects to I-4 via an auxiliary lane before the taper. The ramp is also pushed out further northwest due to the widening of I-4. The westbound on ramp is also pushed out to the northwest due to the widening and is now a parallel type entrance onto I-4 westbound. No additional right-of-way will need to be purchased to construct this alternative.

Alternative 2, shown in Sheets 40-42 of the Concept Plans in Appendix A, proposes modifying the existing diamond interchange to a diverging diamond interchange (DDI). A DDI is designed so that each direction of the crossing roadway traffic is split and then crosses over itself. The traffic will temporarily drive on the left-hand side of the roadway and then cross back over on the other side of the interchange. In order to avoid wrong way movements through this type of interchange, the opposite directions of the roadway are intersected at an angle that is large enough to appear to the driver as if they are making a through movement and that the other side of the roadway is an intersecting street. This design changes the signal operations at the ramp terminals from three-phase to two-phase cycles, as the left turn movements from the crossroad to the on ramps are now free flow movements. The existing single lane off ramps will diverge into four lanes accommodating dual left turn lanes and dual right lanes onto CR 532. The I-4 off-ramp movements will be signalized since there are only two receiving through lanes in each direction on CR 532. Bike lanes have been provided along CR 532 through the interchange. In this alternative, the existing I-4 eastbound off ramp is shifted to the south and the widening of the ramp will require additional right-of-way.

#### SR 429 Interchange

One Interchange alternative was evaluated for SR 429 as shown in Sheets 43-47 of the Concept Plans in Appendix A. The proposed alternative would leave the overall existing horizontal geometry as it is, in a three-leg directional interchange configuration. Each of the general use lane ramps would

remain the same with new ramps being added to provide connections to the express lanes in each direction. The eastbound general use exit ramp will shift northeast of the existing condition and will be a parallel crossroad exit ramp. The existing single lane I-4 eastbound general use lane exit ramp will combine with a new eastbound express lane exit ramp to begin SR 429 northbound. The existing single lane I-4 eastbound ramp from SR 429 southbound will connect to the I-4 eastbound general use and express lanes. The new eastbound general use on ramp will connect further south from the existing condition due to the widening. The existing single lane I-4 westbound ramp to SR 429 northbound will remain connected to the I-4 westbound general use lanes. The existing off ramp will be modified to connect to I-4 further southwest of the existing condition. A new exit ramp will connect the westbound express lanes to SR 429 northbound. The existing I-4 westbound 2-lane on ramp from SR 429 southbound which converges to a single lane will become a 3-lane on ramp which will diverge, with two lanes connecting to the westbound general use lanes and one lane connecting to the express lanes. This ramp will connect to I-4 northeast of the existing condition. No additional right-of-way will need to be purchased in order to construct this alternative.

#### World Drive Interchange

One interchange alternative was evaluated for World Drive as shown in Sheets 48-52 of the Concept Plans in Appendix A. The alternative would leave the overall existing horizontal geometry as it is, in a partial cloverleaf configuration. The single lane I-4 eastbound off ramp to eastbound World Drive will continue to connect to the eastbound C-D road. The single lane I-4 eastbound loop off ramp to westbound World Drive will continue to connect to the eastbound C-D road. The C-D road and the off ramp to eastbound and westbound World Drive will be shifted further to the southeast than the existing condition due to the widening of I-4. The existing 2-lane eastbound on ramp from World Drive will continue to connect to the eastbound C-D road at approximately the same location as existing today. The existing 2-lane I-4 westbound off ramp to westbound World Drive will continue to connect to the westbound C-D road at approximately the same location as existing today. The existing single lane I-4 westbound off ramp to eastbound World Drive will continue to connect to the westbound C-D road at approximately the same location as existing today. The existing single lane westbound on ramp from World Drive will continue to connect to the westbound C-D road at approximately the same location as existing today. No additional right-of-way will need to be purchased in order to construct this alternative.

#### SR 417 Interchange

One Interchange alternative was evaluated for SR 417 as shown in Sheets 53-56 of the Concept Plans in Appendix A. The proposed alternative would leave the overall existing horizontal geometry as it is, in a partial interchange configuration. The existing 2-lane eastbound off ramp will continue to connect the eastbound C-D road to the beginning of northbound SR 417. The existing 2-lane on ramp will continue to connect the SR 417 southbound terminus to the westbound C-D road. Two new single lane ramp structures bridging over the I-4 eastbound lanes will provide direct connections

from SR 417 southbound to the I-4 westbound express lanes and from I-4 eastbound express lanes to SR 417 northbound. The existing SR 417 Southbound bridge over I-4 will be replaced due to conflicts with the existing substructure and the proposed I-4 widening. No additional right-of-way will need to be purchased in order to construct this alternative.

#### US 192/SR 530 Interchange

One Interchange alternative was evaluated for US 192/SR 530 as shown in Sheets 57-60 of the Concept Plans in Appendix A. The alternative would leave the overall existing horizontal geometry as it is, in a partial cloverleaf interchange configuration with loop ramps in the southwest and northeast quadrants. The existing 2-lane I-4 eastbound off ramp will continue to connect to eastbound SR 530 and to the loop ramp to westbound SR 530 but will diverge from I-4 further northeast of the existing condition. The existing 2-lane on ramp will continue to connect the merged ramps from eastbound SR 530 and westbound SR 530 to I-4 eastbound as a parallel entrance. The new connection point will be located further southwest of the existing condition. The existing 2-lane I-4 westbound off ramp will diverge further southwest than the existing condition on I-4 and will continue to connect to westbound SR 530 and to the loop ramp to eastbound SR 530. The existing single lane westbound on ramp will continue to connect to the merged ramps from SR 530 eastbound and the SR 530 westbound flyover ramp. This ramp will have a parallel-type entrance and will connect to I-4 further northeast of the existing condition. No additional right-of-way will need to be purchased in order to construct this alternative.

#### Osceola Parkway Interchange

Three alternatives were evaluated for Osceola Parkway. Alternative 1, shown in Sheets 61-64 of the Concept Plans in Appendix A, would leave the overall existing horizontal geometry as it is, in a partial cloverleaf interchange configuration with loop ramps in the southwest and northeast quadrants. The existing single lane east bound off ramp will diverge off of I-4 at approximately the same location as existing and will split and connect to eastbound Osceola Parkway and the existing loop ramp to westbound Osceola Parkway. The existing loop ramp from I-4 eastbound to Osceola Parkway will be modified so that the connection to eastbound Osceola Parkway is removed. It will be replaced with a new I-4 eastbound off ramp that will eliminate the traffic signal at this interchange. The existing single lane eastbound I-4 on ramp will be replaced with a 2-lane on ramp that connects to eastbound I-4 further south east of the existing connection. The existing 2-lane on ramp from I-4 westbound to eastbound and westbound Osceola Parkway will be modified to become a C-D roadway. The connection to I-4 westbound will remain a 2-lane ramp and the C-D roadway will provide access from the westbound express lanes to eastbound and westbound Osceola Parkway. The C-D road will diverge off of westbound I-4 further west of the existing connection due to the widening. The existing single lane westbound on ramp will continue to connect to the merged ramps from eastbound and westbound Osceola Parkway. Additional right-of-way will be required to build this interchange.

Alternative 2, shown in Sheets 65-69 of the Concept Plans in Appendix A, would keep the interchange the same as Alternative 1 with the addition of a single off ramp from the eastbound express lanes to eastbound Osceola Parkway. This ramp will bridge over the eastbound general use lanes, the single lane ramp to westbound Osceola Parkway and Bonnet Creek. Osceola Parkway will need to be widened by two lanes in the eastbound direction for approximately 1000 feet and then only widened one lane width from just west of Gaylord Way to International Drive. Additional right-of-way will be required to build this interchange.

Alternative 3, shown in Sheets 70-74 of the Concept Plans in Appendix A, also keeps the partial cloverleaf configuration as described in Alternative 2 and proposes the realignment of Bonnet Creek, resulting in numerous new bridge structures within this interchange. Bonnet Creek will be realigned in order to move the I-4 bridges out from underneath the Osceola Parkway bridges. The realigned Bonnet Creek will follow a north/south alignment through the interchange crossing under Osceola Parkway 500 feet east of the existing crossing location and again crossing I-4 approximately 1,300 feet north of the existing crossing location. The braided ramp system between Osceola Parkway and SR 535 will be maintained with some modifications. The existing I-4 westbound to Osceola Parkway westbound will be maintained as it is today as a 2-lane off ramp. The existing I-4 westbound to Osceola Parkway eastbound will be maintained as it is today as a 1-lane off ramp. The existing I-4 eastbound to Osceola Parkway westbound will be a 1-lane off ramp, the eastbound movement to Osceola Parkway, which is a stop condition today, will be removed and provided as a separate single lane off ramp. The I-4 eastbound express lane to Osceola Parkway eastbound will be a 1-lane off ramp as well, and will merge with the general use one lane off ramp. Improvements to the Osceola Parkway westbound to I-4 eastbound ramp have also been identified, providing a larger turning radius at this location, as shown in the Concept Plans.

#### SR 536 Interchange

One Interchange alternative was evaluated for SR 536 as shown in Sheets 75-80 of the Concept Plans in Appendix A. The proposed alternative would leave the overall existing horizontal geometry as it is, in a partial cloverleaf interchange configuration with loop ramps in the southwest, northeast, and northwest quadrants. The existing 2-lane off ramp from I-4 eastbound will diverge off further northeast than the existing condition and will continue to connect to eastbound SR 536 and the loop ramp to westbound SR 536. It will also be extended to the east of the loop ramp to provide a direct connection to the eastbound express lanes. The existing 2-lane on ramp to I-4 eastbound will merge onto I-4 further southeast than the existing condition and continue to connect to westbound SR 536 and eastbound SR 536. A new single lane ramp will be added to connect eastbound and westbound SR 536 directly to the eastbound express lanes. The existing 2-lane I-4 westbound off ramp will diverge off of I-4 further northwest than the existing condition and will continue to connect to westbound SR 536 and a C-D roadway. The 2-lane westbound I-4 off ramp will split, the left lane will continue to westbound SR536 and the right lane will go to a future propose road to Buena Vista Drive



(Downtown Disney Area). The C-D road merges with ramps from the westbound express lanes, from westbound SR 536, to eastbound SR 536, and from eastbound SR 536 before merging back with westbound I-4. This ramp will merge onto I-4 westbound further north than the existing condition. A new single lane ramp will directly connect the westbound express lanes to westbound SR 536 and the C-D roadway which will provide access to eastbound SR 536. Additional right-of-way will be required to build this interchange.

#### SR 535 Interchange

Four interchange alternatives were evaluated for SR 535. Alternative 1, shown in Sheets 81-84 of the Concept Plans in Appendix A, would leave the overall existing horizontal geometry as it is, in a partial cloverleaf interchange configuration with one loop ramp in the southeast quadrant. The existing single lane off ramp from eastbound I-4 will diverge further northeast than the existing condition and will be modified to a 2-lane off ramp. The existing 2-lane loop ramp from eastbound SR 535 to eastbound I-4 will be extended and will merge with the single lane on ramp from westbound SR 535 before connecting to I-4 eastbound as a 3-lane on ramp. This ramp will connect at approximately the same location as existing but will be pushed out due to the widening. The existing 2-lane off ramp from westbound I-4 will be modified to become a C-D roadway. This C-D road, which begins as a single lane off ramp from the westbound express lanes east of the Daryl Carter Parkway overpass merges with a 2-lane off ramp from the I-4 westbound general use lanes, west of Daryl Carter Parkway. The existing single lane on ramp from eastbound and westbound SR 535 will continue to connect to westbound I-4 general use lanes further northeast of the existing condition. Additional right-of-way will be required to build this interchange.

Alternative 2, shown in Sheets 85-88 of the Concept Plans in Appendix A, would keep the same geometry as Alternative 1 but the 3-lane west bound C-D roadway between Daryl Carter Parkway and SR 535 will be elevated and shifted in-between the westbound express and general use lanes. The C-D roadway will shift back to the west side of I-4 approximately ½ mile north of SR 535. One lane will split off of the C-D roadway on to I-4 westbound and two lanes will continue to SR 535. Additional right-of-way will be required to build this interchange.

Alternative 3, shown in Sheets 89-94 of the Concept Plans in Appendix A, would change the configuration of the interchange to a modified diamond and provide a connector roadway system between Hotel Plaza Boulevard and SR 535. A single lane off ramp from I-4 eastbound would split to two 1-lane ramps: left split will be 1-lane ramp turning right onto SR 535 southbound and right split will be a 1-lane ramp that will expand to three left turn lanes to SR 535 northbound and two through lanes to Vineland Avenue. A new 2-lane ramp from SR 535 northbound to I-4 eastbound will combine with the 3-lane on ramp from SR 535 southbound to I-4 eastbound ramp. These ramps will converge to 3 lanes onto I-4 eastbound. The existing 2-lane off ramp from I-4 westbound will remain, but SR 535 southbound traffic will exit to the right side of the ramp toward dual left turn lanes that will

bridge over northbound SR 535. SR 535 northbound traffic will stay to the left at the ramp exit to reach the at-grade dual right turn lanes. The westbound I-4 on ramp will be a combination of three single-lane ramps merging together: one ramp from SR 535 southbound, one ramp from SR 535 northbound and one ramp from Hotel Plaza Boulevard. The intersection of SR 535 and Hotel Plaza Boulevard will be modified to eliminate left turns from Crossroads Shopping Mall onto SR 535 southbound. Instead, traffic will be rerouted across SR 535 to a new intersection southwest on Hotel Plaza Boulevard. This new intersection will allow for the rerouted traffic to access SR 535 southbound, I-4 westbound, I-4 eastbound and Vineland Avenue. Also, there will be a single-lane ramp from SR 535 northbound to Hotel Plaza Boulevard. The intersection of SR 535 and Vineland Avenue will also be reconfigured. There will be two right turn lanes at grade from Vineland Avenue westbound onto SR 535 northbound. The two left turn lanes from Vineland Avenue westbound onto SR 535 southbound will bridge over SR 535 northbound. There will be two left turn lanes at grade from SR 535 southbound onto Vineland Avenue and one right turn lane from SR 535 northbound onto Vineland Avenue. Additional right-of-way will be required to build this interchange.

Alternative 4, shown in Sheets 95-107 of the Concept Plans in Appendix A, is also a modified diamond configuration, which will impact the entire Crossroads Shopping Plaza. This alternative will provide a one-way loop road connection to Hotel Plaza Boulevard and a new I-4 westbound off ramp to southbound SR 535 in the northeast quadrant. SR 535 northbound traffic will bridge over and circumnavigate the new loop road to access Hotel Plaza Boulevard, eliminating the existing north to west left turn movements. Additionally, the Hotel Plaza Boulevard eastbound dual left turn lane will be elevated over SR 535 southbound lanes and under signal control at the merge with the SR 535 northbound through lanes. A new westbound C-D road will provide a new 2-lane off ramp that will diverge into two separate ramps; the right split will be a free flow left turn bridging over SR 535 northbound lanes to provide access to SR 535 southbound and the left split will be at-grade, signalized dual right turn lanes onto SR 535 northbound.

Similar to the Hotel Plaza Boulevard grade separated intersection, the intersection at the I-4 eastbound off ramp and Vineland Avenue will also be grade separated. The I-4 eastbound off ramp will connect to SR 535 at grade, SR 535 southbound through lanes will cross over the intersection and westbound left turns from Vineland Avenue to southbound SR 535 will also cross over the SR 535 northbound travel lanes. Further south along SR 535, improvements are also proposed at the Meadow Creek Drive intersection. An additional left turn lane is proposed on the west leg to accommodate eastbound to northbound SR 535 left turn traffic. A bicycle lane is also provided along both sides of SR 535.

The Palm Parkway intersection with SR 535 lies north of the Hotel Plaza Boulevard intersection. Improvements are also required at this intersection; as a result, all left turns at the Palm Parkway and SR 535 intersection will be prohibited. Left turning traffic will now need to continue straight

through the intersection and make a U-turn or turn right onto the intersecting roadway and make a U-turn. Additionally, further north along SR 535, a new quadrant road is proposed to connect to the south leg of the SR 535 and Vinings Way Boulevard intersection. The quadrant road will run parallel to and west of SR 535, connecting Vinings Way Boulevard to Palm Parkway. The quadrant road is needed since the left turns have been prohibited at SR 535 and Palm Parkway. Additional right-of-way will be required to build this interchange.

#### Daryl Carter Parkway Interchange

Three Interchange alternatives were evaluated for Daryl Carter Parkway. Alternative 1, shown in Sheets 108-110 of the Concept Plans in Appendix A, would change Daryl Carter Parkway from an overpass with no interchange into a tight urban diamond interchange. A 2-lane off ramp would connect I-4 eastbound to Daryl Carter Parkway. A single lane on ramp would connect Daryl Carter Parkway to I-4 eastbound. A single lane off ramp from I-4 westbound would merge with a single lane ramp from the westbound express lanes and connect to Daryl Carter Parkway. A 2-lane on ramp will connect Daryl Carter Parkway to the westbound C-D road and then to I-4 westbound from a single lane on ramp. Additional right-of-way will be required to build this interchange.

Alternative 2, shown in Sheets 111-113 of the Concept Plans in Appendix A, is the same interchange configuration as Alternative 1 except for the C-D road between Daryl Carter Parkway and SR 535. The C-D road combines a 1-lane ramp from Daryl Carter Parkway, a 1-lane ramp from I-4 westbound express lanes, and a 2-lane off ramp from I-4 westbound. One of the lanes is dropped and the 3-lane C-D road is elevated and shifted between the I-4 westbound general use and express lanes and shifted back before SR 535. Additional right-of-way will be required to build this interchange.

Alternative 3, shown in Sheets 114-116 of the Concept Plans in Appendix A, proposes a Diverging Diamond Interchange (DDI). The westbound C-D road provides a 1-lane off ramp from westbound I-4 which diverges to access Daryl Carter Parkway northbound to the right and Daryl Carter Parkway southbound to the left. The I-4 westbound on ramp from Daryl Carter Parkway will connect to the I-4 elevated westbound general use lanes. A single lane off ramp from I-4 eastbound which diverges to two lanes will provide access to Daryl Carter Parkway from I-4 eastbound. The 2-lane I-4 eastbound on ramp from Daryl Carter Parkway will connect to the I-4 eastbound general use lanes; this ramp will be braided in order to eliminate weaving and conflicts with vehicles exiting to Central Florida Parkway. The I-4 westbound general use lanes will bridge over the Daryl Carter Parkway interchange. The I-4 westbound viaduct will begin just east of Daryl Carter Parkway and terminate just east of SR 536. Additional right-of-way will be required to build this interchange.

#### Central Florida Parkway Interchange

One Interchange alternative, shown in Sheets 117-119 of the Concept Plans in Appendix A, was evaluated for Central Florida Parkway. The alternative would modify the existing partial interchange into a diamond interchange with a flyover ramp. The existing single lane I-4 eastbound off ramp will

diverge off of I-4 further northeast than the existing condition and continue to connect to Central Florida Parkway. A new 2-lane on ramp will connect Central Florida Parkway to I-4 eastbound and will merge onto I-4 at the SR 528/I-4 interchange. A new 2-lane off ramp will connect I-4 westbound to Central Florida Parkway. This ramp will connect to westbound I-4 at the SR 528/I-4 interchange. The existing westbound Central Florida Parkway flyover ramp will continue to merge with the single lane ramp from eastbound Central Florida Parkway then become a braided ramp with a C-D road and continue to connect to westbound I-4 as a single lane on ramp further to the west of the existing connection. Additional right-of-way will be required to build this interchange.

## 5.5 Design Traffic

Development of project traffic for I-4 and surrounding arterials within the study limits of -4 Segment 1 was based on the procedures outlined in the *Methodology Letter of Understanding (MLOU) (October 2014 Update)* and are provided in the *I-4 SAMR Re-Evaluation – Traffic Volumes Development Report (June 2015)* prepared for this project. Both of these documents are included as part of the appendix to the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project South Section – from West of US 27 to West of SR 435 (Kirkman Road) (March 2017)* prepared for this project.

### 5.5.1 Future Traffic Volumes

Travel demand modeling using the Central Florida Regional Planning Model (CFRPM version 5.01) was utilized to forecast Directional Design Hour Volumes (DDHV) for the I-4 Segment 1 project. The future traffic forecasts were determined for 2020 (opening year), 2030 (interim year) and 2040 (design years) for two build alternatives: Original Build and Modified Build. The Original Build alternative refers to the preferred interchange alternatives identified in the original I-4 SAMR dated April 2000 and approved by FHWA in June 2000, with subsequent update in 2003. The Modified Build alternative refers to the current I-4 SAMR Reevaluation and constitutes revised improvement concepts, which account for changing conditions over time. These changes include variation in traffic characteristics, modifications to express lane access points and other traffic and design considerations which led to the current proposed build alternatives.

### 5.5.2 Design Traffic Factors

The traffic volume outputs generated by the CFRPM model represent Peak Season Weekday Average Daily Traffic (PSWADT). A Model Output Conversion Factor (MOCF) is used to convert the PSWADT to Average Annual Daily Traffic (AADT). The K factor is used to convert the 24-hour AADT estimate to an hourly volume (DHV-Design Hour Volume). The Directional Distribution factor (D) is the percentage of total, two-way design traffic traveling in the peak direction. Typically, FDOT standard “K” and “D” factors are applied to the AADT projections from the CFRPM model to produce DDHVs. Due to the unique nature of the South Section of the I-4 BtU corridor, which is distinguished by heavy

tourist traffic and includes access points to Disney World, Sea World and Universal Studios, a peak spreading methodology was developed to estimate DDHVs for I-4 Segment 1. This methodology accounts for tourist and shift work trips that are more spread out and balanced in their peaks and thus generate a longer peak period with more total traffic volume than directional traffic volume. The approved peak spreading methodology is detailed in the *Methodology Letter of Understanding (MLOU) (October 2014 Update)* as part of the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project South Section – from West of US 27 to West of SR 435 (Kirkman Road) (March 2017)* prepared for this project. Table 5.2 provides the factors used for the analysis of traffic volumes in the Segment 1 corridor.

**Table 5.2 – Design Traffic Factors for I-4 Segment 1**

Roadway	MOCF	D-Factor
I-4 (Orange County)	0.98	52.92
I-4 Disney Area (Orange County)	0.97	52.92
Arterials (Orange County)	0.98	53.66
I-4 Disney Area (Osceola County)	0.97	52.92
Arterials (Osceola County)	0.97	53.66

### 5.5.3 Intersection/Interchange Traffic Volumes

Traffic volumes for intersections and interchanges within the I-4 Segment 1 corridor were developed for both Original Build and Modified Build conditions based on the procedures outlined in the *MLOU (October 2014 Update)*. The CFRPM model was used to develop the existing, 2020 and 2030 forecasts. Year 2040 forecasts were developed by determining a growth rate from 2030 to 2035 (forecast year of the model) and using that growth rate to extrapolate volumes from 2030 to 2040. For the Original Build scenario, year 2040 peak hour volumes were adjusted based on reasonable growth rates for localized movements, current land-use patterns and future projected developments, population growth rate and, if needed, peak hour capacity of the proposed roadway configurations. Traffic volumes for the Modified Build scenario were developed based on the Original Build volumes. The redistribution of traffic between the Original Build and Modified Build was performed based on the current proposed interchange and freeway configurations. The resulting design year 2040 DDHVs for the Modified Build scenario, which is pertinent to the current reevaluation study, are shown in Figure 5.2 through Figure 5.6.



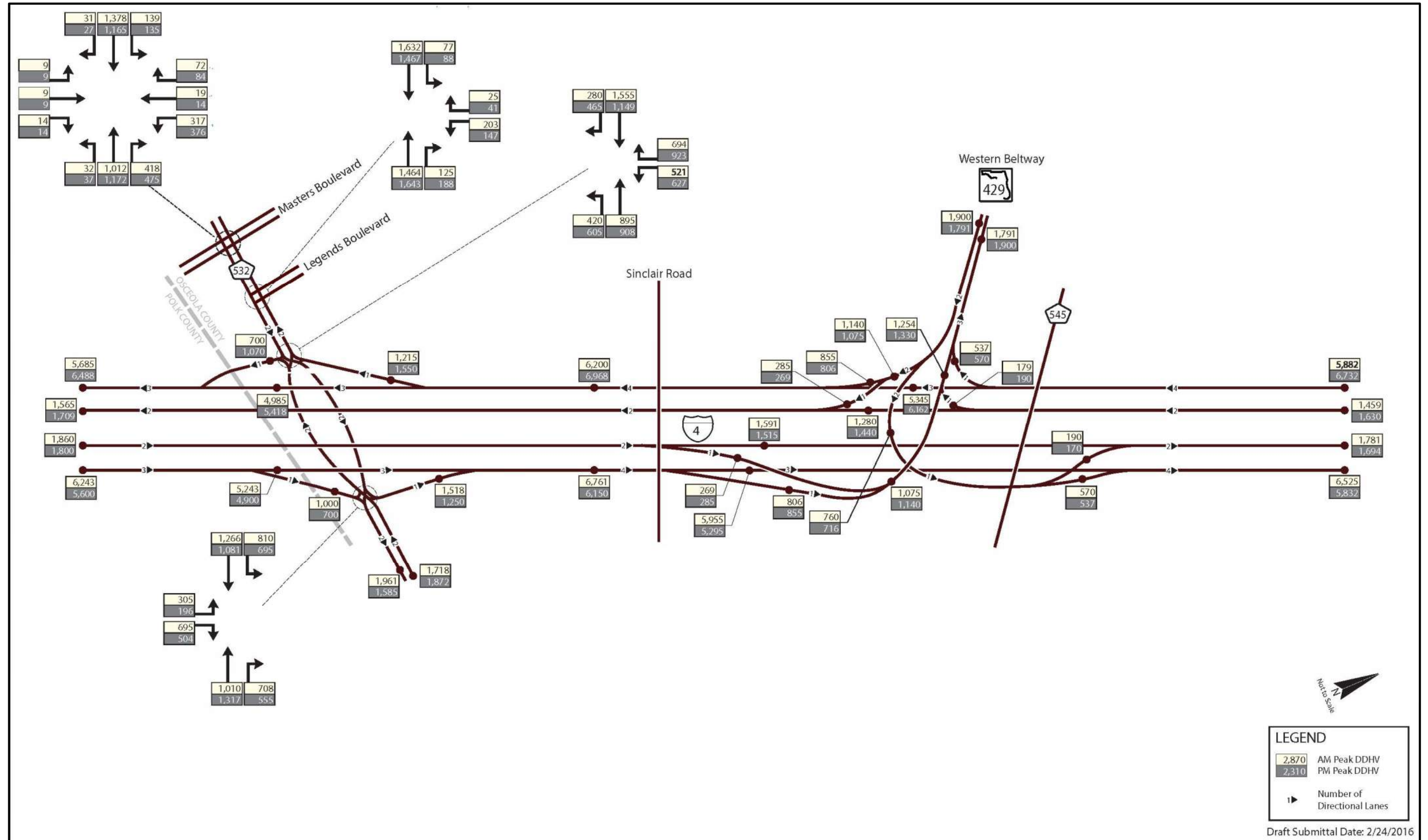


Figure 5.2 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 1 of 5)



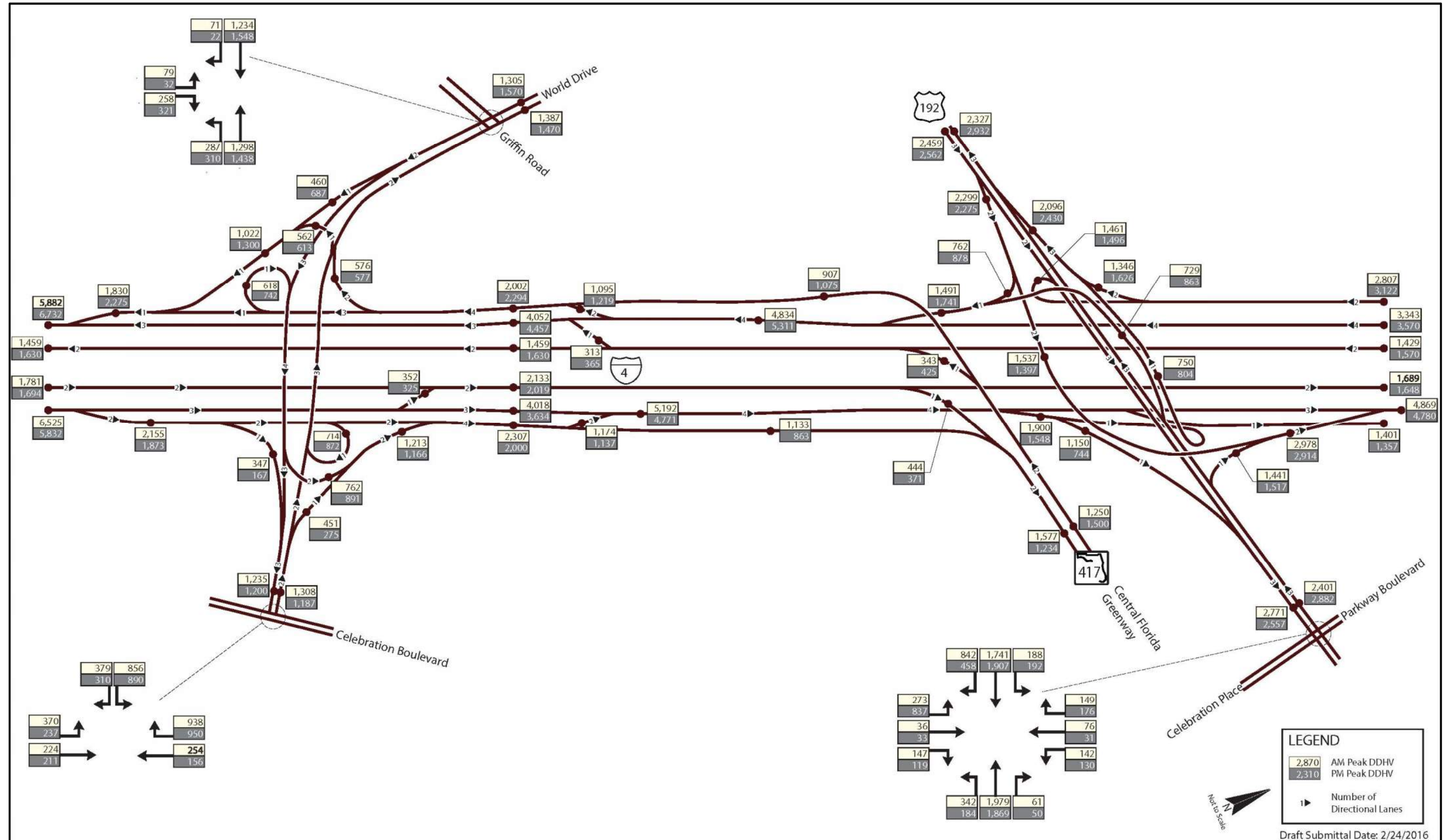


Figure 5.3 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 2 of 5)

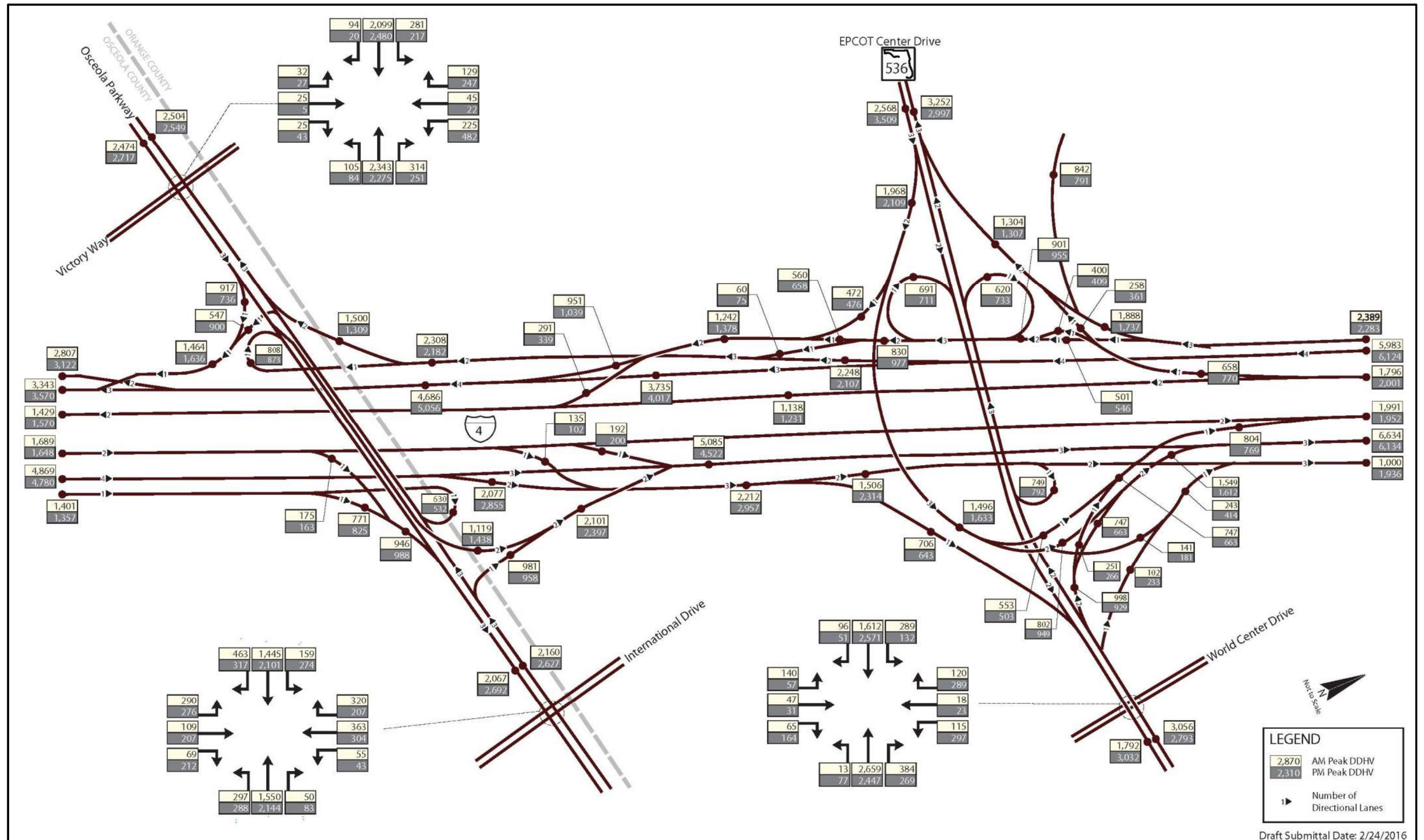


Figure 5.4 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 3 of 5)



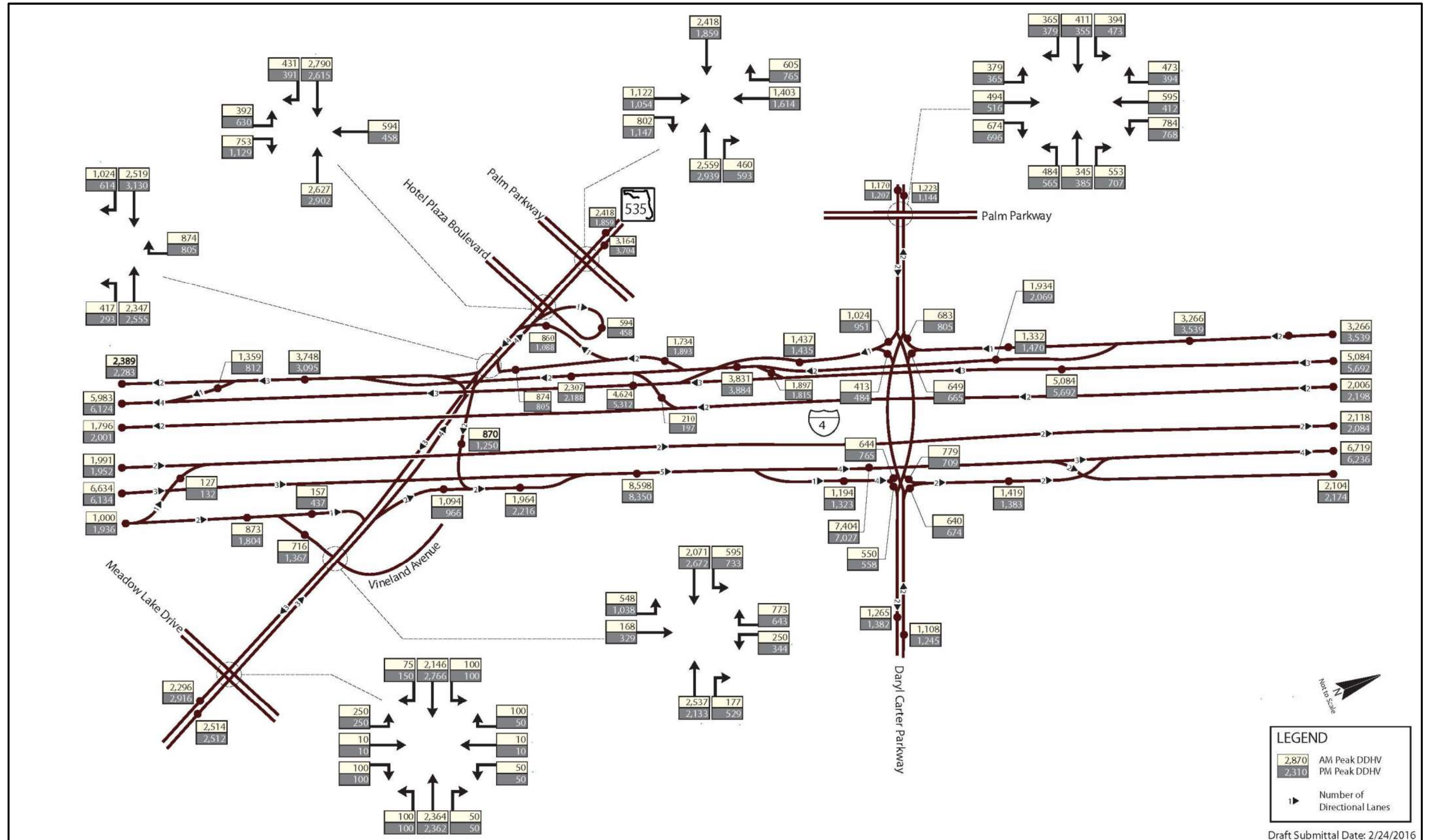


Figure 5.5 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 4 of 5)



**Figure 5.6 – Segment 1: 2040 Modified-Build Directional Design Hour Traffic Volumes (Sheet 5 of 5)**

### 5.5.4 Intersection Operational Analysis

As part of the development of interchange alternatives for I-4 Segment 1, traffic operational analyses of the intersections within or near the proposed interchange improvements were completed for No Build and Build alternatives. Some alternatives were removed from consideration due to roadway geometric design constraints or other critical evaluation criteria, and no further traffic analysis was completed. Peak hour operational analysis of intersections/ interchanges was completed using Synchro or VISSIM-version 5.4 software.

#### CR 532 (Champions Gate Boulevard) Interchange

Two alternatives were considered for the traffic operational analysis of the CR 532 interchange:

- Alternative 1 - No-Build
- Alternative 2 - Diverging Diamond Interchange (DDI)

Review of the two alternatives was conducted for the CR 532 interchange for the analysis year 2040 using VISSIM (version 5.4) microsimulation software. Alternative 1 (No-Build) intersection operational analysis indicates that the westbound left turn at the I-4 westbound ramp terminal intersection is operating deficiently with LOS F and queues extending to the adjacent ramp intersection in the PM peak hour conditions. Alternative 2 (DDI) intersections operate at LOS B or better and no queuing is expected. The results of the peak hour intersection operational analyses for the CR 532 interchange are summarized in Table 5.3. Based on the operational analysis, Alternative 2 (DDI) provides better operational performance than the No-Build Alternative.

**Table 5.3: Average Delay and Level of Service (LOS) – I-4 and CR 532 Interchange**

I-4 and CR 532 (Champions Gate Blvd.)	Alternative 1 No-Build				Alternative 2 DDI			
	AM Delay (sec/veh)	AM LOS	PM Delay (sec/veh)	PM LOS	AM Delay (sec/veh)	AM LOS	PM Delay (sec/veh)	PM LOS
I-4 WB Ramps	22.9	C	30.2	C	17.5	B	16.0	B
I-4 EB Ramps	19.6	B	20.1	B	14.3	B	10.7	B

#### SR 429 Interchange

The recommended alternative for the I-4 and SR 429 system interchange will maintain its existing form, a 3-leg directional interchange. Express lane connections will be incorporated into each of the existing ramps. No other interchange alternatives were evaluated for SR 429.

#### World Drive Interchange

The recommended alternative for the I-4 and World Drive interchange will maintain its existing form, a partial cloverleaf interchange with loop ramps in the northeast and southwest quadrants and with

on and off-ramps served by CD systems in both directions. No other interchange alternatives were evaluated for World Drive.

#### SR 417 Interchange

The recommended alternative for the I-4 and SR 417 system interchange will maintain its existing form, and express lane connections will be incorporated into each of the existing ramps. No other interchange alternatives were evaluated for SR 417.

#### US 192/SR 530 Interchange

The recommended alternative for the I-4 and US 192/SR 530 interchange will maintain its existing form, a partial cloverleaf interchange with loop ramps in the northeast and southwest quadrants. No other interchange alternatives were evaluated for US 192/SR 530.

#### Osceola Parkway Interchange

Four alternatives were considered for the traffic operational analysis of the Osceola Parkway interchange:

- No-Build
- Alternative 1 – I-4 eastbound to Osceola Parkway Eastbound Free-flow Right turn
- Alternative 2 – Alternative 1 plus direct connect from EL to free-flow ramp
- Alternative 3 – Alternative 2 with Bonnet Creek realigned

Review of all alternatives was conducted for the Osceola Parkway interchange for the analysis year 2040 using Synchro software. The geometry of intersections adjacent to the ramp was assumed to be the same for all alternatives and the analysis was performed to ensure that eastbound queues from the International Drive intersection do not back to the free-flow ramp from the Interstate. Based on the peak hour operational analysis, as shown in Table 5.4, the three proposed Build alternatives do not degrade the existing operations, and the elimination of the I-4 eastbound to Osceola Parkway eastbound left turn movement should improve mobility along Osceola Parkway for the proposed Build alternatives.

**Table 5.4: Average Delay and Level of Service (LOS) - I-4 and Osceola Parkway**

I-4 and Osceola Parkway	No-Build Alternative				Alternative 1, 2 and 3			
	AM Delay (sec/veh)	AM LOS	PM Delay (sec/veh)	PM LOS	AM Delay (sec/veh)	AM LOS	PM Delay (sec/veh)	PM LOS
I-4 EB Ramp	41.7	D	43.4	D	_*	_*	_*	_*
International Drive	60.3	E	104.5	F	60.3	E	104.5	F
Intersection operating below LOS E.								
*I-4 Eastbound to Osceola Parkway Eastbound left turn has been eliminated due to the free-flow ramp(s) provided in the proposed Alternatives.								



SR 536 Interchange

The recommended alternative for the I-4 and SR 536 interchange will maintain its existing form, a partial cloverleaf interchange. Express lane connections will be incorporated into each of the existing ramps. No other interchange alternatives were evaluated for SR 536.

SR 535 Interchange

The following alternatives were considered for the traffic operational analysis of the SR 535 interchange:

- No-Build - Maintain Existing Configuration
- Alternative 1 - Maintain Existing Configuration with modification to SR 535 to I-4 EB loop ramp
- Alternative 2 - Maintain Existing Configuration with modification to SR 535 to I-4 EB loop ramp
- Alternative 3 - Echelon intersection options for both ramp terminals and at-grade Hotel Plaza Boulevard and Palm Parkway intersection
- Alternative 4 - Echelon intersection options at both ramp terminal intersections and Hotel Plaza Boulevard and quadrant configuration for Palm Parkway intersection.

Review of all alternatives was conducted for the SR 535 interchange for the analysis year 2040 using VISSIM software. Conceptually, No-Build, Alternative 1 and Alternative 2 were the same; all maintaining existing configurations at the intersections. Therefore, analysis and results for No-Build also represent Alternatives 1 and 2. Based on the peak hour operational analysis, as shown in Table 5.5, the No-Build alternative indicates that most intersections are operating at LOS E or LOS F. The Alternative 3 Build scenario improves the operations significantly to LOS B or C at all but one of the intersections in the project study area. The Alternative 4 Build scenario shows the most improvement with all intersections operating at LOS A, B or C.

**Table 5.5: Average Delay and Level of Service (LOS) - I-4 and SR 535 Node Evaluation**

Intersection	No-Build Alternative		Alternative 3		Alternative 4	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
<b>AM Peak</b>						
SR 535 and Palm Pkwy.	215.2	F	102.6	F	26.4	C
SR 535 and Hotel Plaza Blvd.	72.3	E	13.0	B	19.7	B
SR 535 and I-4 WB Ramps	73.9	E	14.8	B	16.5	B
SR 535 and I-4 WB Ramps/ Vineland Ave.	83.7	F	27.5	C	26.9	C
SR 535 and Meadow Creek Dr.	36.4	D	24.8	C	25.5	C
Hotel Plaza Blvd. and I-4 Ramps	-	-	23.6	C	-	-
I-4 EB On Ramps	-	-	-	-	8.2	A
Cypress and Palm Pkwy.	-	-	-	-	15.3	B
SR 535 and Quadrant Road	-	-	-	-	17.3	B
U-Turn and Palm Pkwy.	-	-	-	-	11.9	B

**Table 5.5: Average Delay and Level of Service (LOS) - I-4 and SR 535 Node Evaluation**

Intersection	No-Build Alternative		Alternative 3		Alternative 4	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
<b>PM Peak</b>						
SR 535 and Palm Pkwy.	119.8	F	86.6	F	27.2	C
SR 535 and Hotel Plaza Blvd.	77.3	E	33.5	C	20.9	C
SR 535 and I-4 WB Ramps	52.0	D	20.2	C	18.3	B
SR 535 and I-4 WB Ramps/Vineland Ave.	90.6	F	27.7	C	29.0	C
SR 535 and Meadow Creek Dr.	106.9	F	25.1	C	26.5	C
Hotel Plaza Blvd. and I-4 Ramps	-	-	19.4	B	-	-
I-4 EB On Ramps	-	-	-	-	8.4	A
Cypress and Palm Pkwy.	-	-	-	-	18.8	B
SR 535 and Quadrant Road	-	-	-	-	12.8	B
U-Turn and Palm Pkwy.	-	-	-	-	12.1	B
Intersection operating below LOS E.			-Intersection not evaluated as part of the alternative.			

#### Daryl Carter Parkway Interchange

Three alternatives were evaluated for traffic operations for the Daryl Carter Parkway Interchange as follows:

- Single Point Urban Interchange – Originally approved FHWA alternative
- Alternative 1 – Tight Urban Diamond Interchange (TUDI)
- Alternative 2 – Diverging Diamond Interchange (DDI)

Review of the three alternatives was conducted for the Daryl Carter Parkway interchange for the analysis year 2040 using VISSIM. The results of the peak hour interchange node operational analyses and network-wide analyses for the Daryl Carter Parkway interchange are summarized in Table 5.6 and Table 5.7, respectively. Based on the results of the operational analysis, Alternative 2 (DDI) performs better than the SPUI and Alternative 1 (TUDI) designs.

## 5.6 Intersection Improvements

Intersection improvements based on the Concept Plans are proposed at or adjacent to the interchanges at within Segment 1. The Concept Plans for the proposed intersection concepts can be found in Appendix A.

Table 5.6: I-4 and Daryl Carter Parkway Interchange Node Evaluation

Intersection	AM Peak						PM Peak					
	SPUI		Alternative 1 (TUDI)		Alternative 2 (DDI)		SPUI		Alternative 1 (TUDI)		Alternative 2 (DDI)	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Daryl Carter Parkway (formerly Fenton St.) and Palm Pkwy.	37.5	D	30.9	C	30.6	C	32.1	C	33.5	C	30.7	C
Daryl Carter Parkway (formerly Fenton St.) and I-4 Ramp	20.8	C	40.7	D	22.1	C	24.3	C	53.0	D	22.9	C

Table 5.7: I-4 and Daryl Carter Parkway Network Performance Comparison

	I-4 & Daryl Carter Parkway - AM Peak				
Performance Parameter	SPUI	Alt. 1	Alt. 1 Improvement	Alt. 2	Alt. 2 Improvement
Total Travel Time (hr)	265	242	9%	249	6%
Total Delay Time (hr)	102	104	-2%	90	12%
Average Delay Time (sec/veh)	44	52	-18%	38	14%
Latent Delay Time (hr)	1	0	100%	0	100%
Number of Arrived Vehicles	8,131	6,978	-14%	8,147	0%
Latent Vehicles	8	0	100%	0	100%
Total Delay + Latent Delay (hr)	103	104	-1%	90	13%
	I-4 & Daryl Carter Parkway - PM Peak				
Total Delay Time (hr)	99	152	-54%	94	5%
Average Delay Time (sec/veh)	42	63	-50%	39	7%
Latent Delay Time (hr)	0	0	-	0	-
Number of Arrived Vehicles	8,333	8,324	0%	8,336	0%
Latent Vehicles	0	0	-	0	-
Total Delay + Latent Delay (hr)	99	152	-54%	94	5%

## 5.7 Environmental Impacts

### 5.7.1 Floodplains and Regulatory Floodways

The Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) for Polk, Osceola and Orange County. According to FEMA Map Numbers 12105C0125F, 12097C0040F, 12097C0035F, 12095C0585F, 12095C0395F, and 12095C0415F, portions of the roadway are located within the 100-year floodplain. Based on the FEMA floodplain lines, the roadway widening will impact the floodplain on both sides of the roadway at numerous locations within the project limits.

There are a total of ten (10) basins that impact the 100-year floodplain including Basins 100, 101, 102, 103, 105, 109, 114, 132, 138 and 142. A total of thirteen (13) existing and proposed floodplain compensation ponds provide compensation for the floodplain impacts. The FEMA Flood Insurance Rate Map for the project is shown in Figure 5.7. Detailed floodplain impacts and compensation calculations are provided in the *Pond Siting Report (September 2016)* prepared for this project.

### 5.7.2 Wetlands

The jurisdictional extent of onsite wetlands and other surface water systems within the project corridor were evaluated through the review of current and historic aerial photography of the study area and ground-truth activities. Current and historical information reviewed included infrared digitally orthorectified quadrangle (DOQ) maps, U.S. Geological Survey (USGS) topographic maps, National Wetlands Inventory (NWI) maps and soil survey maps. Jurisdictional limits were identified and limits established in general accordance with the *1987 Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1)*, the *November 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic Gulf Coastal Plain Region and the State of Florida's Delineation of the Landward Extent of Wetlands and Surface Waters (Chapter 62-340, Florida Administrative Code)*. Wetlands and surface waters observed were classified using the FDOT's Florida Land Use, Cover and Forms Classification System (FLUCFCS) and the USFWS classification system as described in their *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, et. al, 1979).



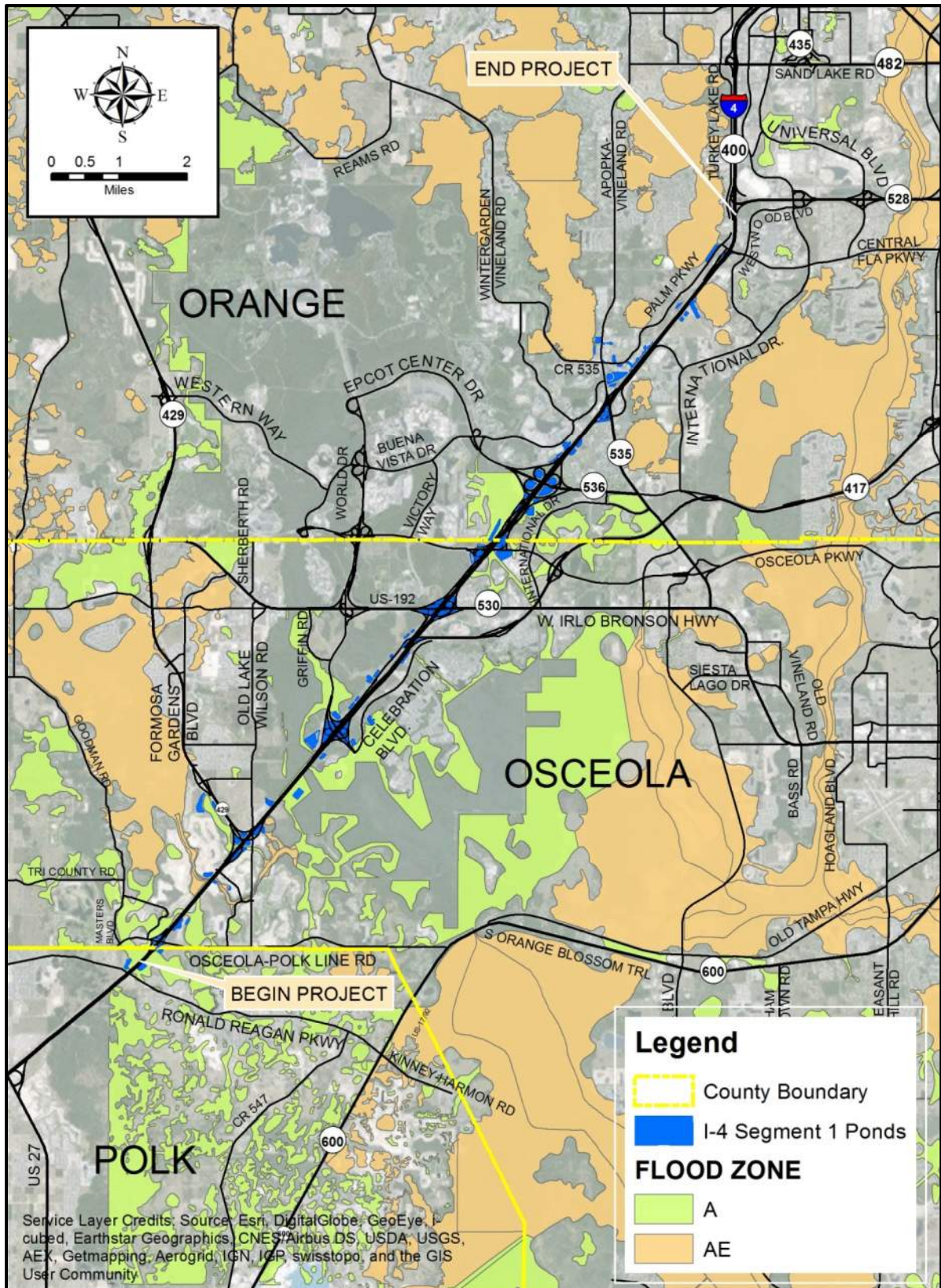


Figure 5.7 – FEMA Flood Insurance Map



For this study, jurisdictional systems were identified from west to east and were classified as either Wetland (WL-#) or Other Surface Water (SW-#) and included the direction of the travel lanes of I-4 (i.e. East (E) or West (W)) relative to the location of the system. The term other surface water generally categorizes existing stormwater ponds, lakes, creeks, ditches or swales, associated with the existing drainage conditions of I-4. Detailed analysis and descriptions of existing wetlands and other surface waters are provided in the *Wetland Evaluation Report Segment 1: State Road (SR 400)/ Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) (September 2016)* prepared for this project.

Preliminary estimates suggest that 112.94 acres of wetland and 45.99 acres of jurisdictional other surface waters communities will be impacted by the proposed improvements associated with the mainline of I-4. These estimates are based on field assessment of jurisdictional limits and preliminary plan preparation for design. Impacts to jurisdictional areas will be refined as design details are finalized. Table 5.8 provides a summary of the quality of each surface water and wetland system and the likelihood of requiring mitigation for adverse impacts. Figure 5.8 through Figure 5.30 illustrate the surface water and wetland impact areas along the project corridor. Some of the wetland communities are expansive and encompass areas along the mainline, as well as near an interchange. Further, impact acreage assumes impacts to entire wetland within the limits of the ROW and to communities within pond/ FPC sites located outside of the existing ROW; therefore, impacts are assumed to be equal for all interchange alternatives.

Impacts to surface waters and wetlands during construction will be classified as temporary or permanent, depending on the proposed level of disturbance. The type and level of mitigation for impacts will be based on the final impact acreages, the nature of disturbance (temporary or permanent) and the overall quality of the systems.

**Table 5.8 -Summary of Proposed Impacts to Jurisdictional Wetlands/Other Surface Waters**

ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed Impacts (acres)	Quality (UMAM)*	Mitigation Requirement**
<b>Wetlands</b>					
WL-A(E)	6410	0.80	0.80	Low	Y
WL-B(E)	6300	0.37	0.37	Low	Y
WL-C(E)	6300	7.87	7.87	Low	Y
WL-1(E)	6300	2.95	2.95	Moderate	Y
WL-1A(E)	6180	0.11	0.11	Low	Y
WL-2(E)	6170	0.40	0.40	Low	Y
WL-3(E)	6170	1.70	1.70	Low	Y
WL-4(E)	6170	0.00	0.00	-	N/A
WL-5(E)	6300	4.76	4.76	Moderate	Y
WL-6(E)	6170	7.83	7.83	Moderate	Y

Table 5.8 -Summary of Proposed Impacts to Jurisdictional Wetlands/Other Surface Waters

ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed Impacts (acres)	Quality (UMAM)*	Mitigation Requirement**
WL-6A(E)	6170	0.00	0.00	-	N/A
WL-6B(E)	6170	0.00	0.00	-	N/A
WL-6C(E)	6170	0.00	0.00	-	N/A
WL-7(E)	6300	0.00	0.00	-	N/A
WL-7A(E)	6300	0.21	0.21	Moderate	Y
WL-8(E)	6170	0.30	0.30	Low	Y
WL-9(E)	6170	0.31	0.31	Moderate	Y
WL-10(E)	6430	1.06	1.06	Moderate	Y
WL-10A(E)	6210	1.24	1.24	Moderate	Y
WL-11(E)	6300	9.99	9.99	Moderate	Y
WL-11A(E)	6210	0.00	0.00	-	N/A
WL-11B(E)	6210	0.00	0.00	-	N/A
WL-11C(E)	6210	0.00	0.00	-	N/A
WL-12(E)	6170	10.05	10.05	Low	Y
WL-13(E)	6410	0.00	0.00	-	N/A
WL-13A(E)	6170	3.68	3.68	Moderate	Y
WL-14(E)	6170	0.00	0.00	-	N/A
WL-A(W)	6410	0.60	0.60	Low	Y
WL-1(W)	6170	6.92	6.92	Moderate	Y
WL-2(W)	6170	1.01	1.01	Low	Y
WL-2A(W)	6170	0.19	0.19	Low	Y
WL-2B(W)	6170	0.76	0.76	Moderate	Y
WL-3(W)	6300	4.83	3.67	Moderate	Y
WL-4(W)	6300	1.02	1.02	Moderate	Y
WL-5(W)	6300	1.32	1.32	Moderate	Y
WL-6(W)	6300	0.20	0.00	-	N/A
WL-7(W)	6300	0.31	0.01	Moderate	Y
WL-8(W)	6170	0.19	0.19	Low	Y
WL-9(W)	6180	0.00	0.00	-	N/A
WL-9A(W)	6170/6210	0.30	0.30	Moderate	Y
WL-10(W)	6300	0.00	0.00	-	N/A
WL-10A(W)	6300	0.31	0.31	Low	Y
WL-10B(W)	6300	0.01	0.01	Moderate	Y
WL-10C(W)	6430	3.80	1.95	Low	Y
WL-10D(W)	6300	0.16	0.02	Moderate	Y
WL-10E(W)	6300	0.20	0.00	-	N/A
WL-10F(W)	6170	2.83	0.00	Moderate	Y

Table 5.8 -Summary of Proposed Impacts to Jurisdictional Wetlands/Other Surface Waters

ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed Impacts (acres)	Quality (UMAM)*	Mitigation Requirement**
WL-11(W)	6170	0.30	0.00	Moderate	Y
WL-12(W)	6170	0.00	0.00	Moderate	Y
WL-13(W)	6430	0.00	0.00	-	N/A
WL-14(W)	6170	1.47	0.73	Moderate	Y
WL-14A(W)	6210	8.19	2.30	Moderate	Y
WL-15(W)	6170	1.37	1.37	Low	Y
WL-16(W)	6300	1.06	1.06	Low	Y
WL-17(W)	6170	9.81	9.81	Low	Y
WL-17A(W)	6170	1.87	0.00	-	N/A
WL-17B(W)	6410	3.29	0.00	-	N/A
WL-17C(W)	6170	0.44	0.00	-	N/A
WL-17D(W)	6170	0.60	0.00	-	N/A
WL-18(W)	6300	6.37	6.37	Low	Y
WL-18A(W)	6300	11.58	11.58	Low	Y
WL-19(W)	6170	0.56	0.56	Low	Y
WL-20(W)	6170	0.95	0.95	Low	Y
WL-20A(W)	6430	0.82	0.82	Low	Y
WL-20B(W)	6170	0.20	0.20	Low	Y
WL-20C(W)	6180	0.45	0.45	Low	N
WL-21(W)	6180	0.00	0.00	-	N/A
WL-22(W)	6300	4.83	4.83	Moderate	Y
<b>Subtotal Acres</b>		<b>132.75</b>			
<b>Subtotal Impacts</b>			<b>112.94</b>		
<b>Other Surface Waters: Upland-Cut Ditches, Swales, Rivers, Creeks and Lakes</b>					
Ditches (SW): A(E), 1A(E), 1B(E), 15(E), 16(E), 20(E), 21(E), 23(E), 31(E), 32(E), 32A(E), and 36(E)	5130	7.05	7.05	Low/ Moderate	N/A
Swales (SW): 8(E), 10(E), 17(E), 18(E), 26(E), 27A(E), 33(E), 35(E) and 38(E)	5130	10.26	10.26	Low	N/A
SW-5B(E)/Reedy Creek	5130	0.27	0.27	Low/ Moderate	Y

Table 5.8 -Summary of Proposed Impacts to Jurisdictional Wetlands/Other Surface Waters

ID	FLUCFCS Code	Total Area within ROW (acres)	Proposed Impacts (acres)	Quality (UMAM)*	Mitigation Requirement**
SW-37(E)/ Lake Willis	6170/5230	1.02	1.02	Low/ Moderate	Y
SW-28(E)/ Bonnet Creek	5130	0.38	0.38	Low	Y
Ditches (SW): 3(W), 4(W), 13A(W), 20(W), 42(W), 44(W), 46(W), 48(W), 49(W), 51(W), 55(W), 57(W), 58C(W) and 59(W), 59A(W)	5130	5.65	5.65	Low	N/A
Swales (SW): 5(W), 9(W), 10(W), 13B(W), 16(W), 17(W), 18(W), 22(W), 25(W), 25B(W), 26(W), 27(W), 31(W), 31A(W), 32(W), 33(W), 34(W), 38(W), 41(W), 43(W), 47(W), 48A(W), 50(W), 52(W), 53(W), 54(W), 55A(W) and 58(W)	5130	16.60	16.60	Low	N/A
SW-8A(W)/ Cattle Pond	5340	0.00	0.00	-	N/A
SW-9B(W)/ Reedy Creek	5130	0.11	0.11	Low/ Moderate	Y
SW-40(W)/ Bonnet Creek	5130	4.65	4.65	Low/ Moderate	N
<b>Subtotal Acres</b>		<b>45.99</b>			
<b>Subtotal Impacts</b>			<b>45.99</b>		
<b>Project Total</b>		<b>178.74</b>	<b>158.93</b>		
*Low= UMAM Score between 0 and 0.49      *Moderate= UMAM Score between 0.50 and 0.79      *High= UMAM Score of 0.80 or better. **Y = Jurisdictional/Mitigation Required      **N = Jurisdictional/No Mitigation Required      **N/A= No Impacts Anticipated					



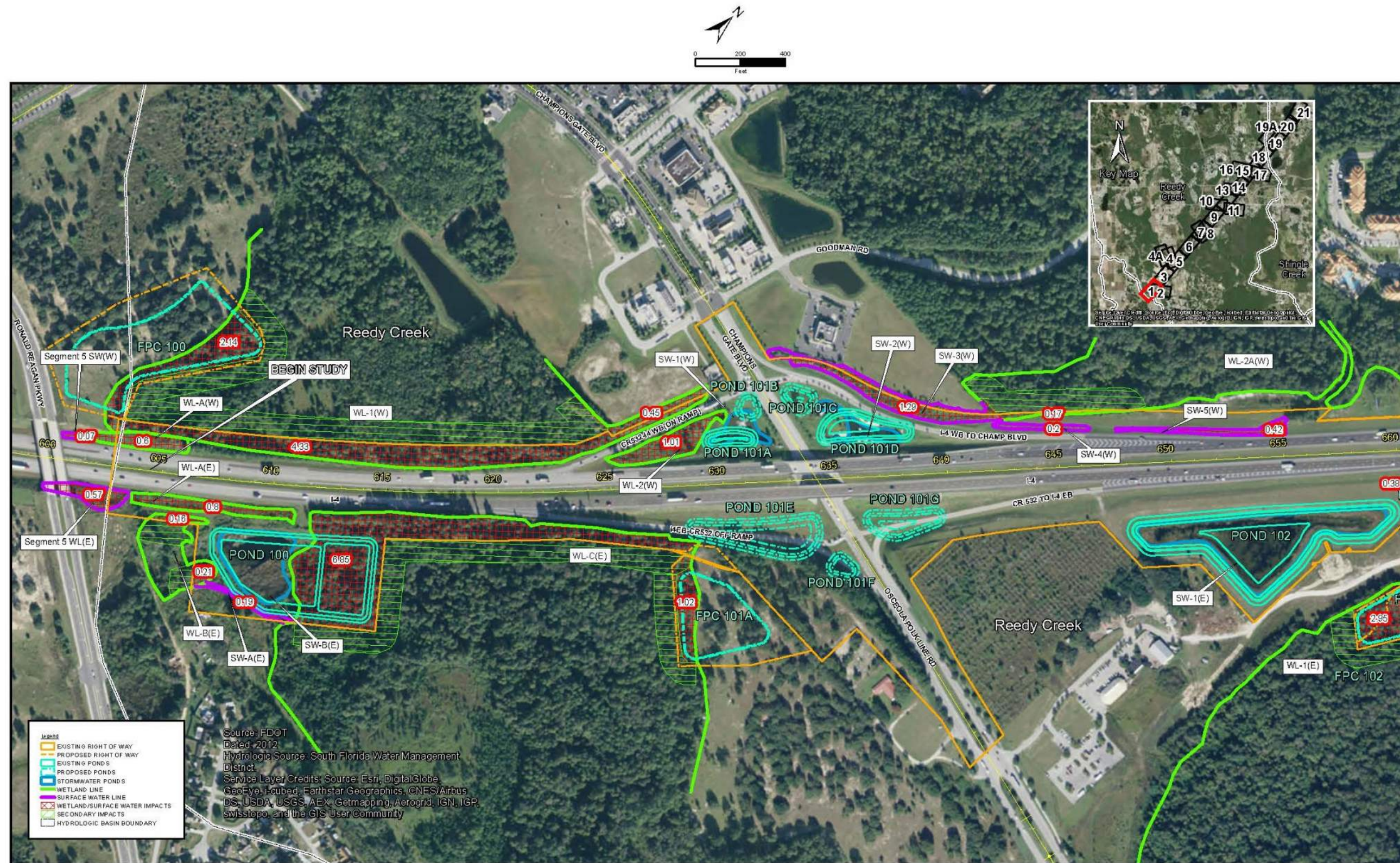


Figure 5.8 – Surface Water and Wetland Impacts Map (Sheet 1 of 23)



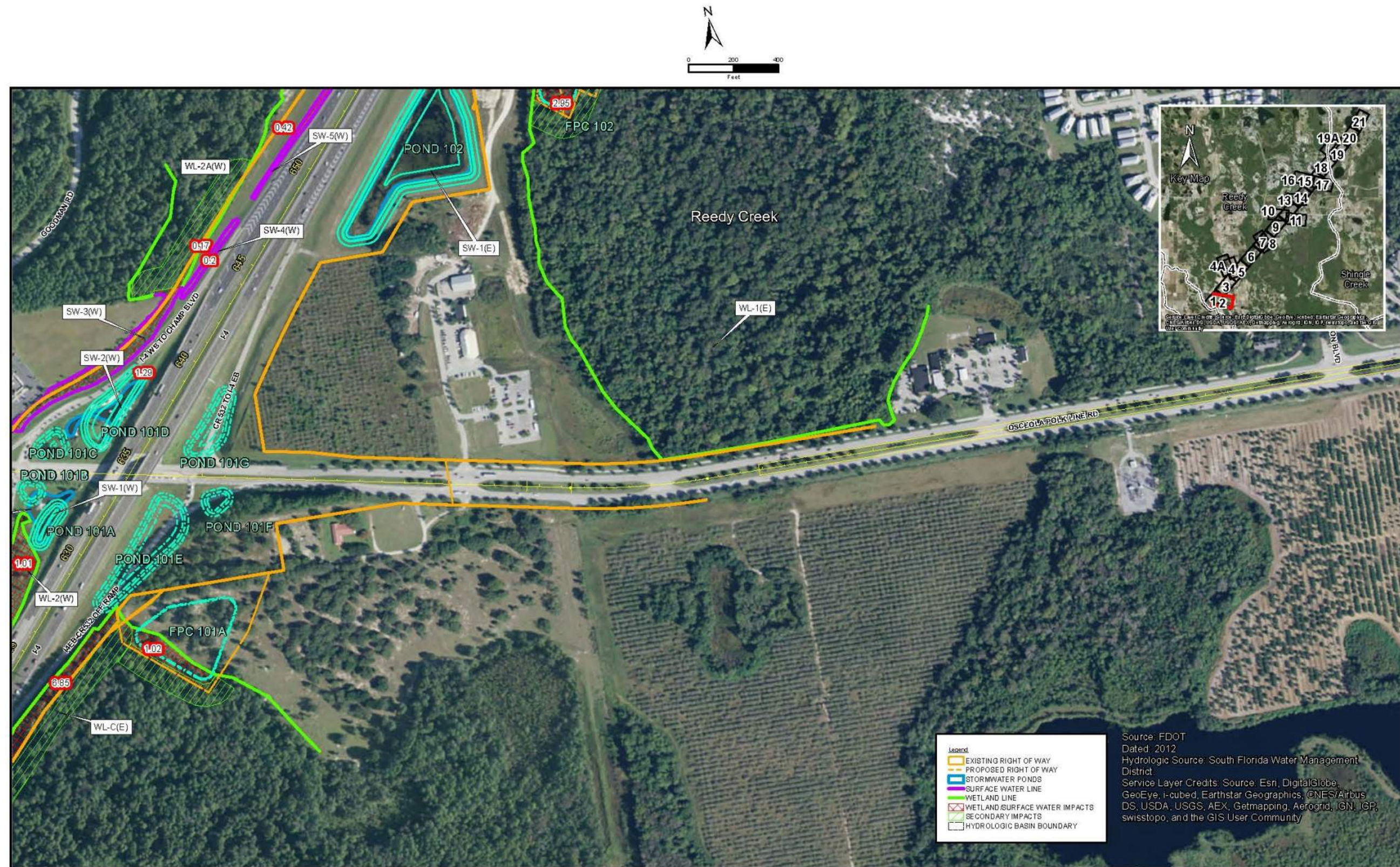


Figure 5.9 – Surface Water and Wetland Impacts Map (Sheet 2 of 23)



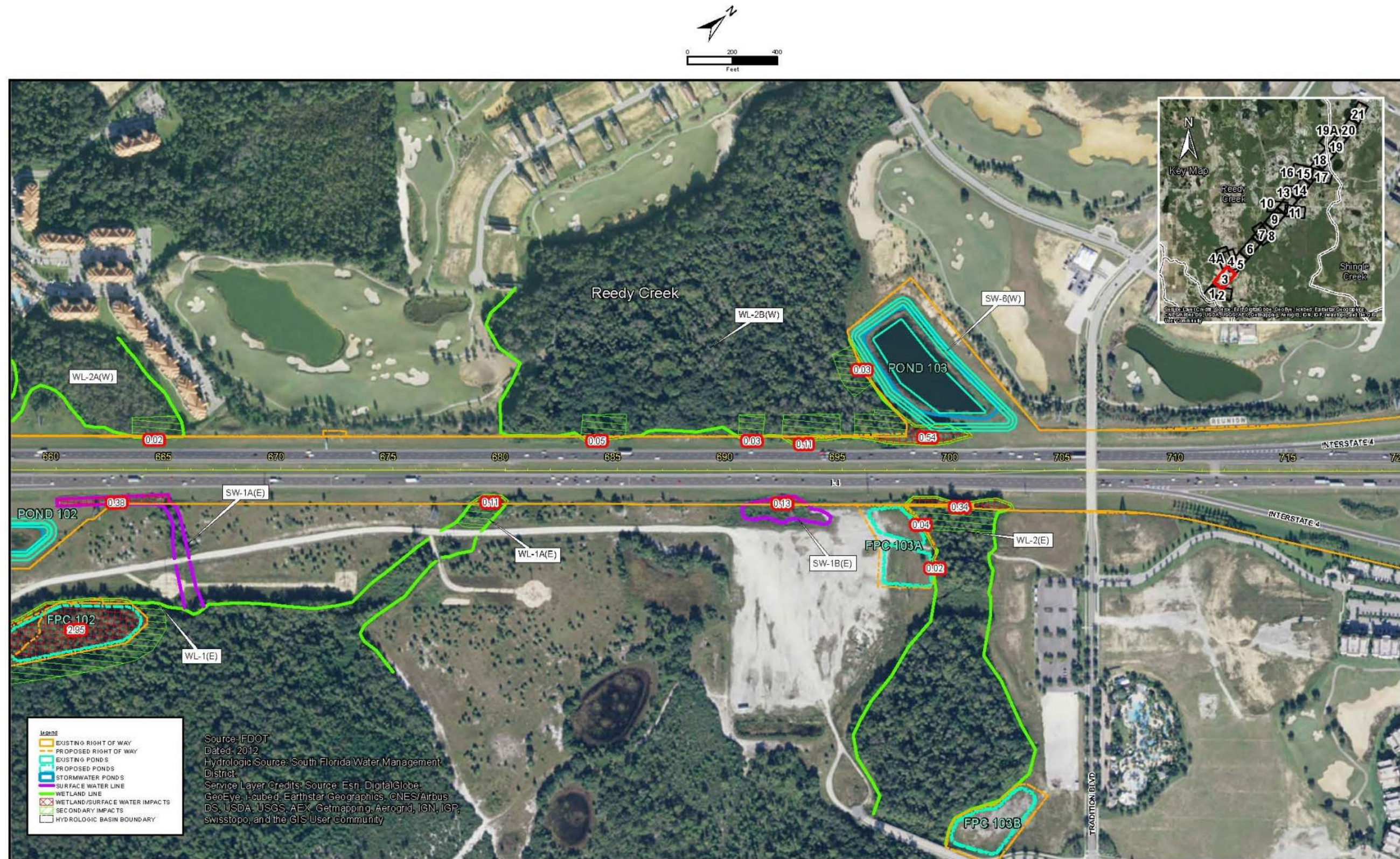


Figure 5.10 – Surface Water and Wetland Impacts Map (Sheet 3 of 23)



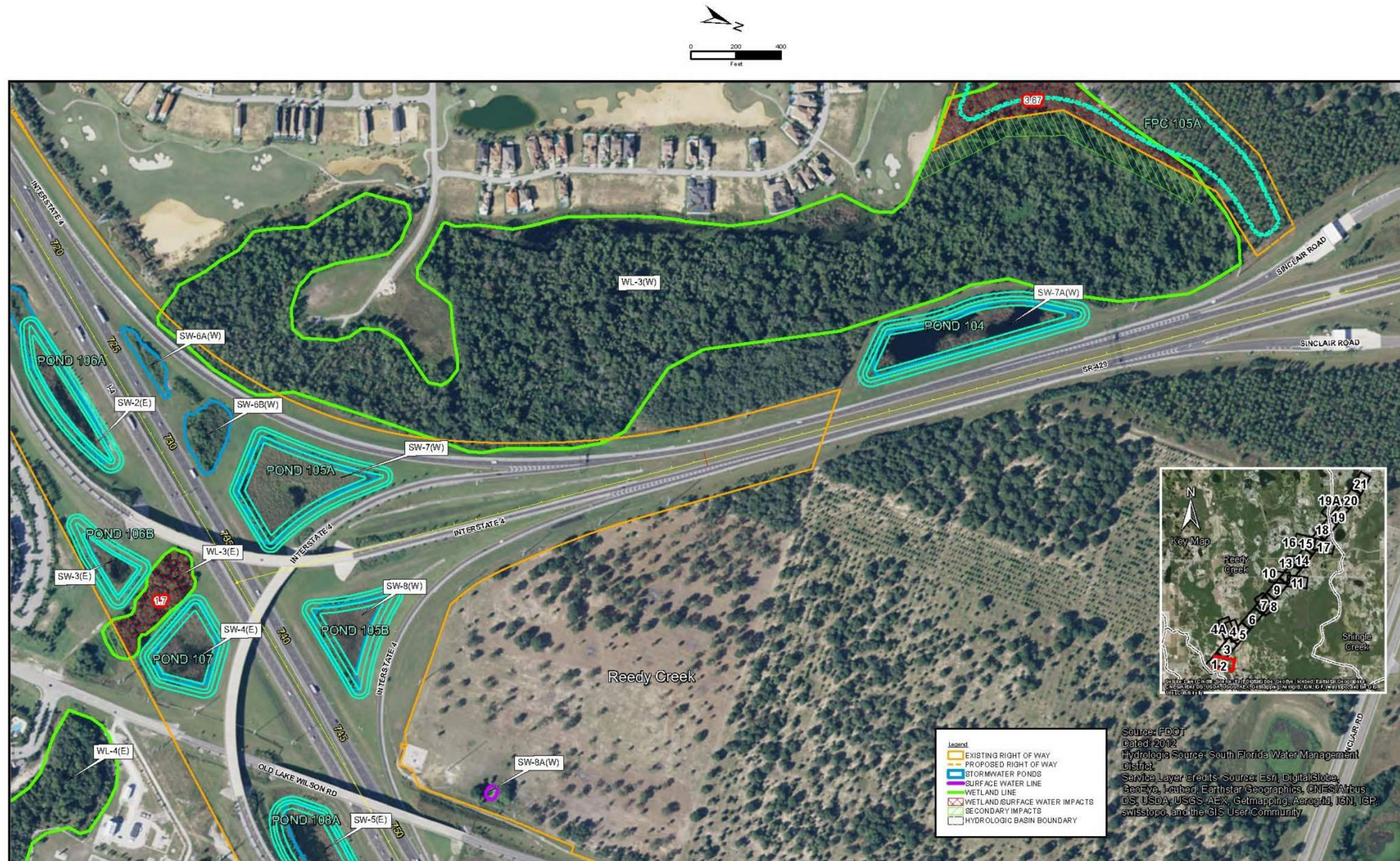


Figure 5.11 – Surface Water and Wetland Impacts Map (Sheet 4 of 23)



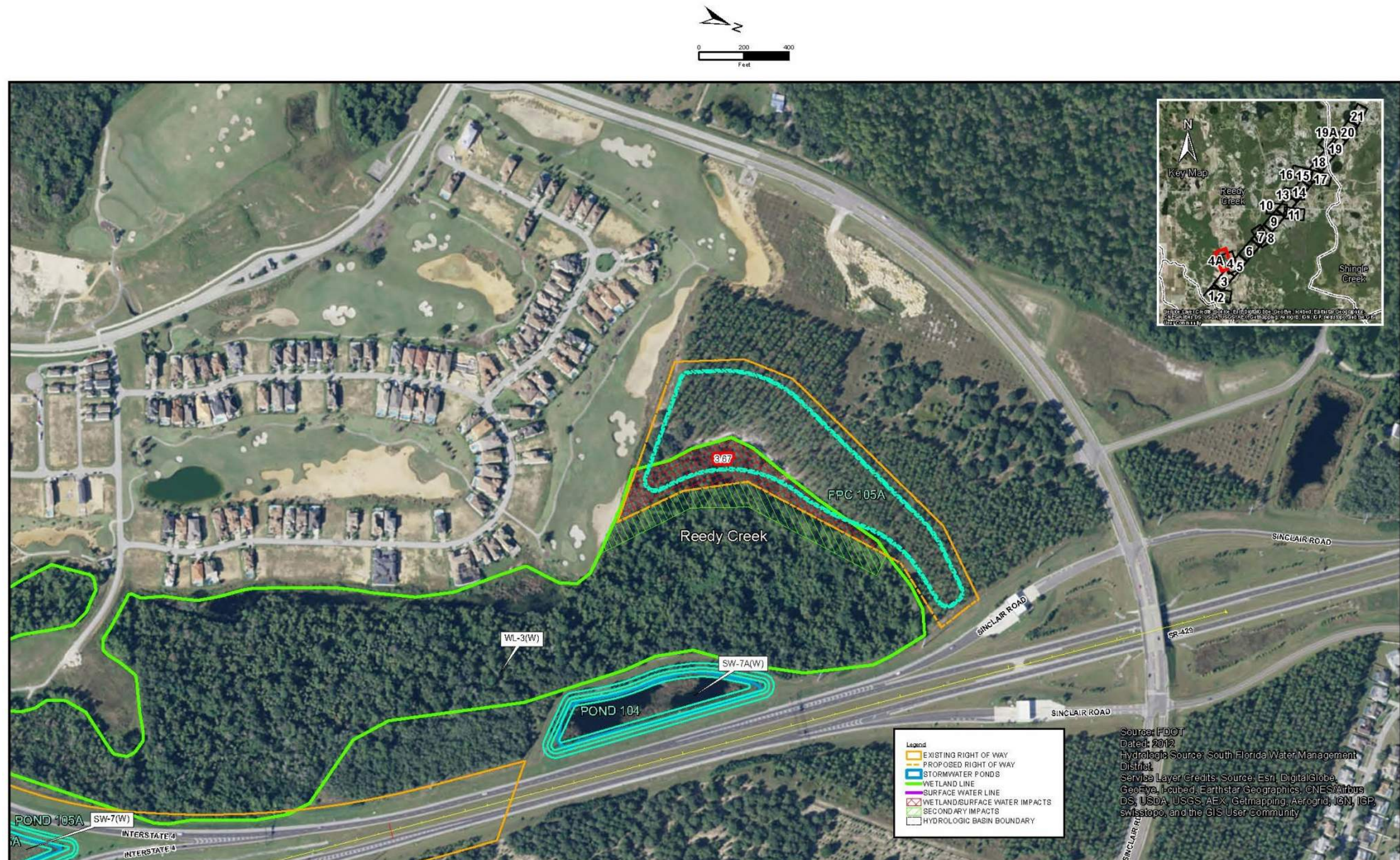


Figure 5.12 – Surface Water and Wetland Impacts Map (Sheet 5 of 23)



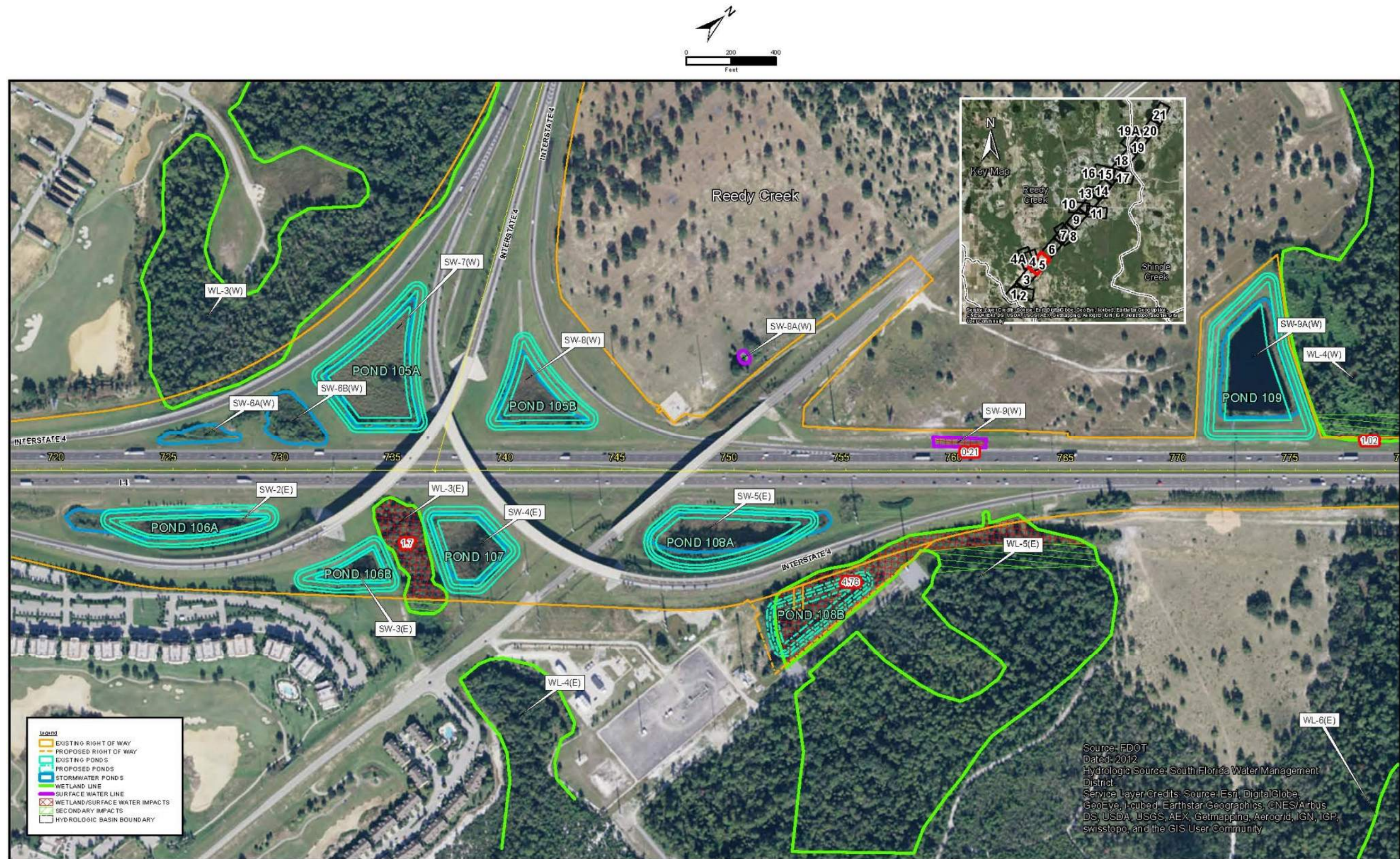


Figure 5.13 – Surface Water and Wetland Impacts Map (Sheet 6 of 23)



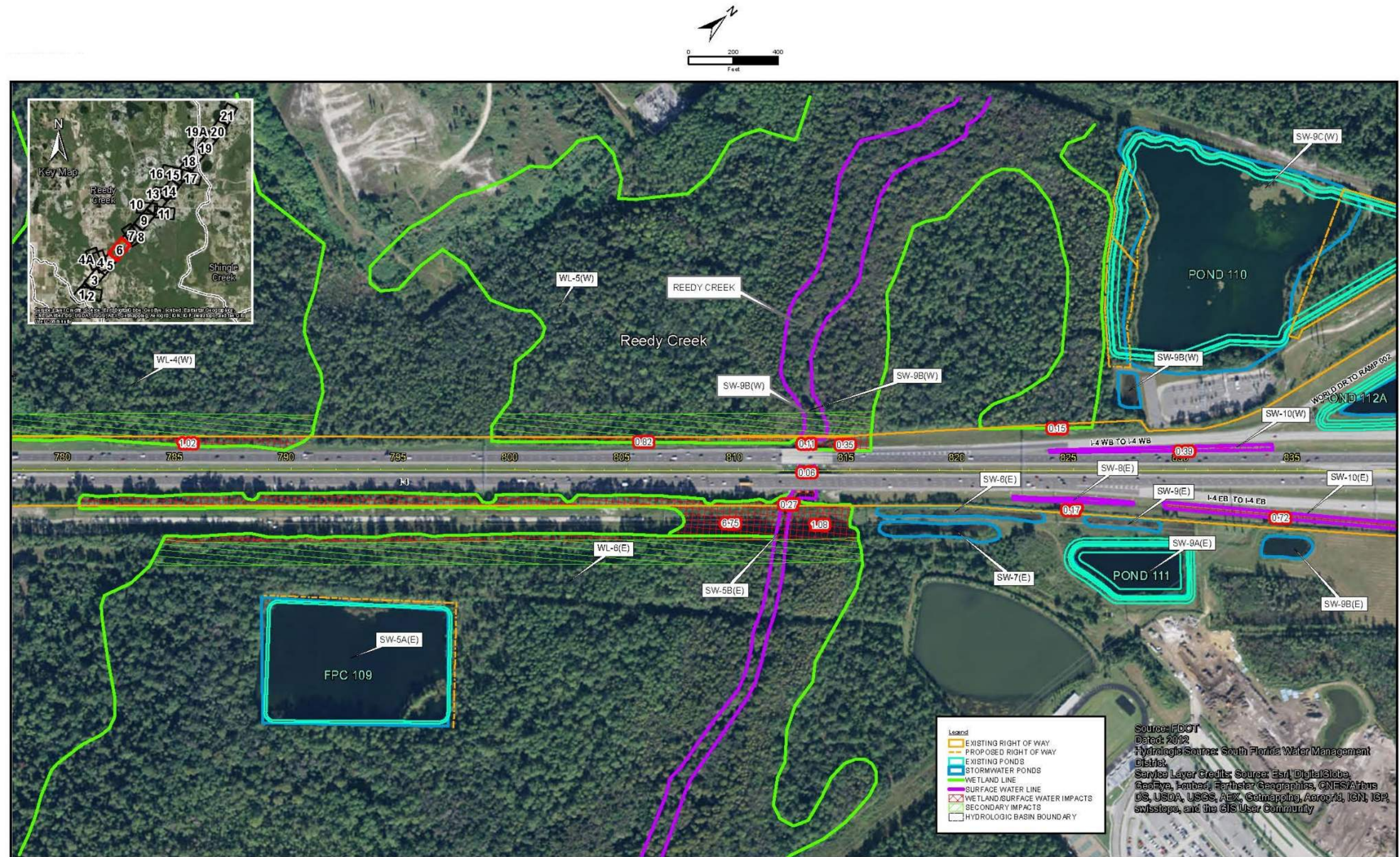


Figure 5.14 – Surface Water and Wetland Impacts Map (Sheet 7 of 23)



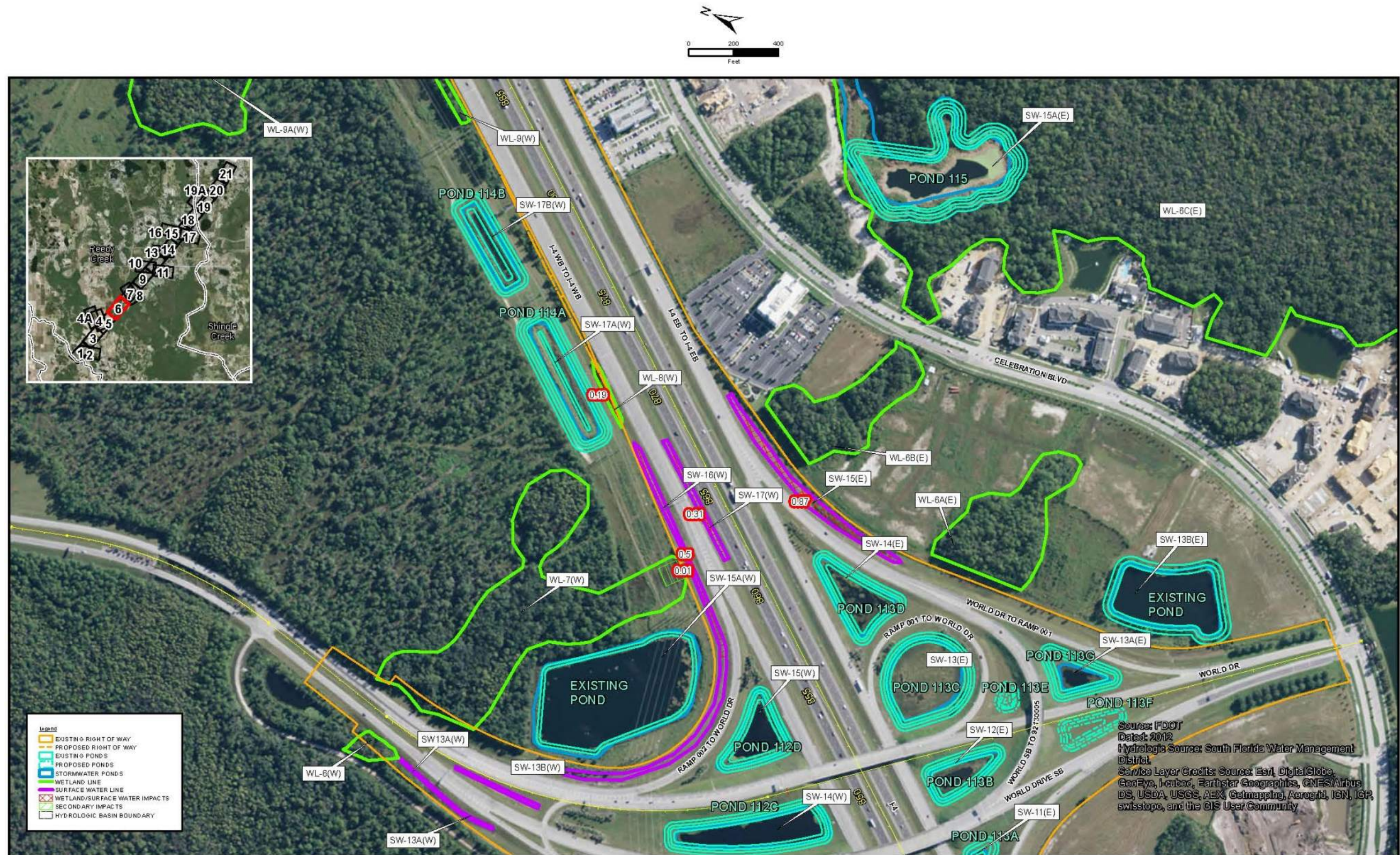


Figure 5.15 – Surface Water and Wetland Impacts Map (Sheet 8 of 23)



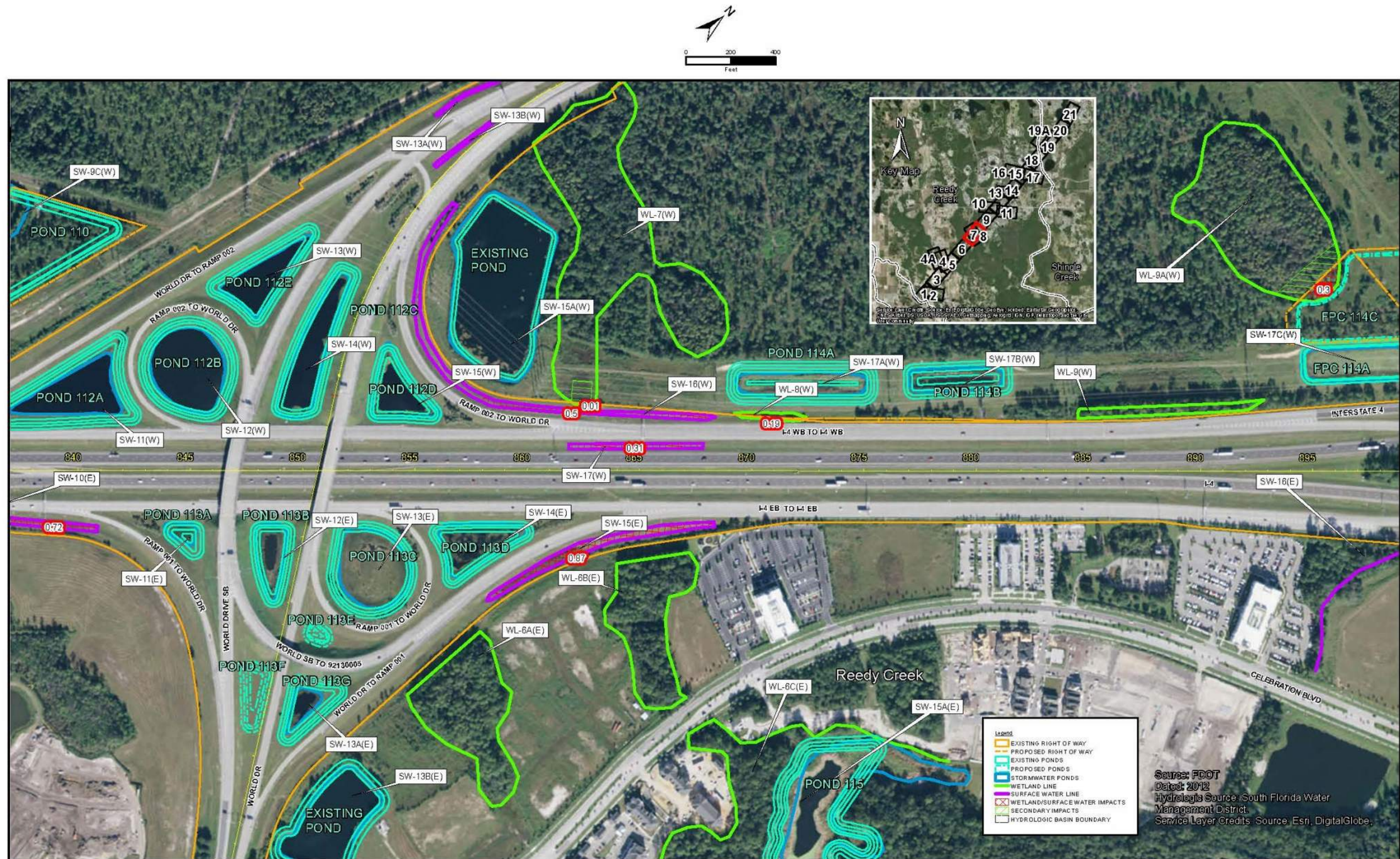


Figure 5.16 – Surface Water and Wetland Impacts Map (Sheet 9 of 23)



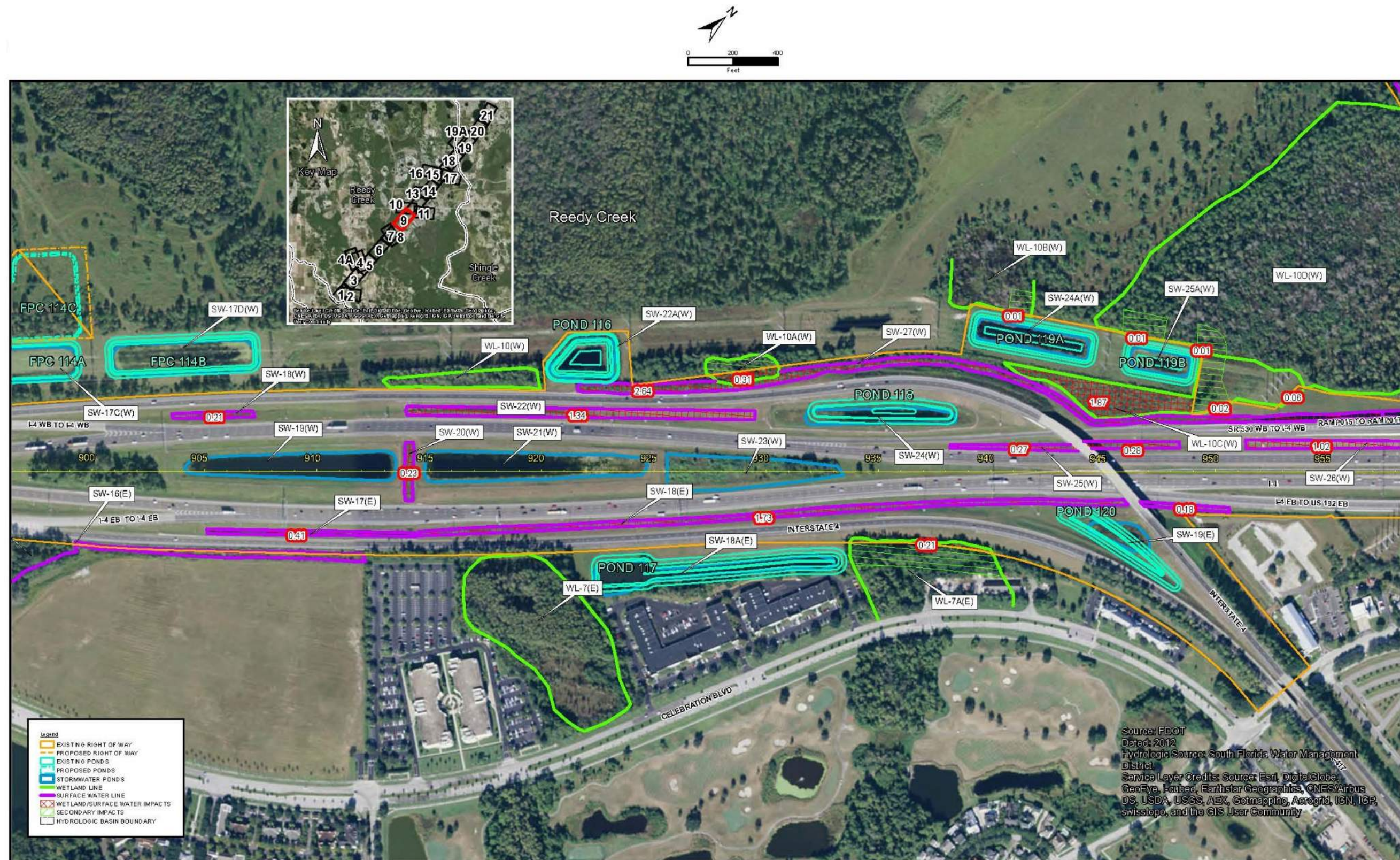
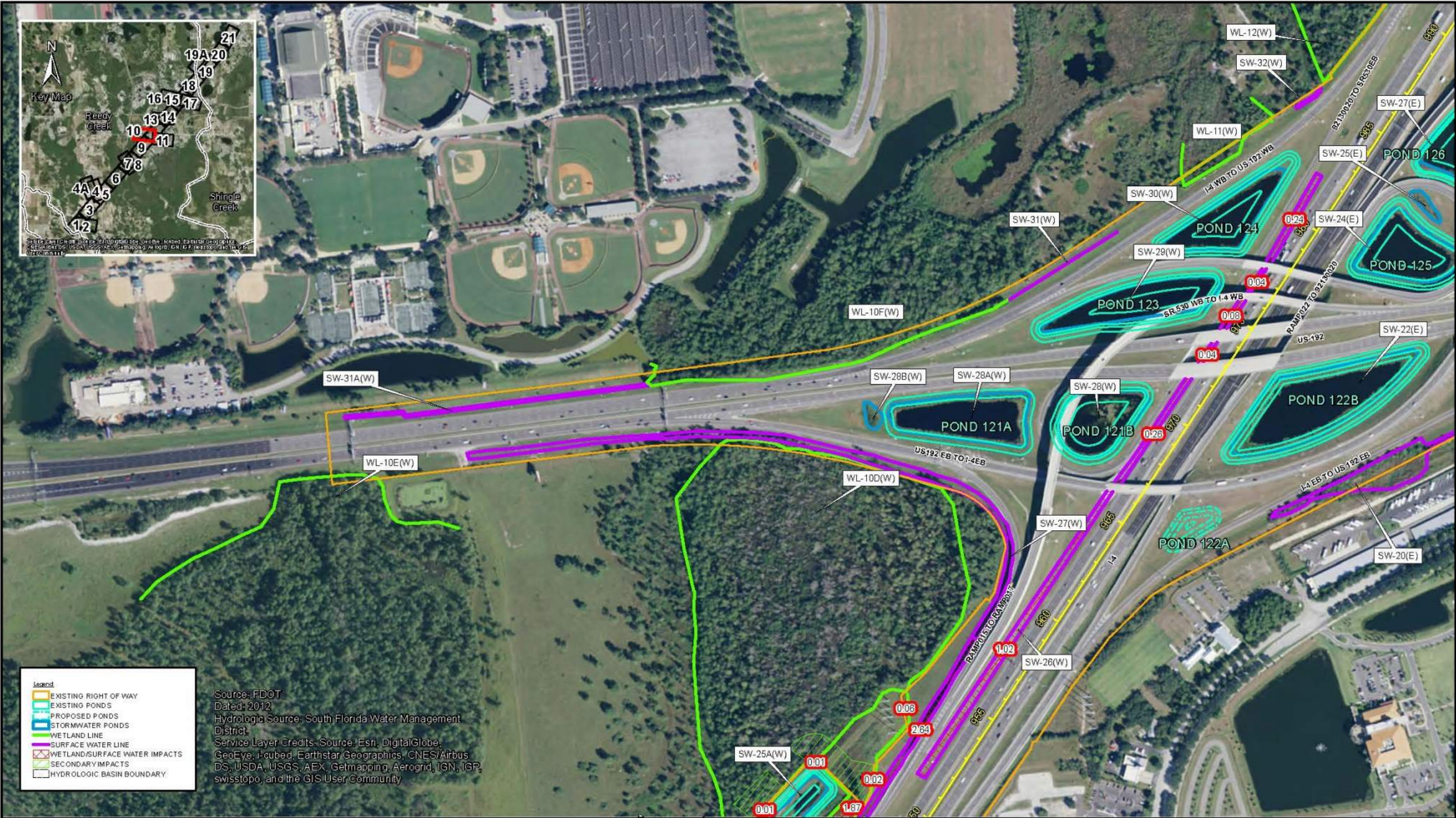


Figure 5.17 – Surface Water and Wetland Impacts Map (Sheet 10 of 23)





**Figure 5.18 – Surface Water and Wetland Impacts Map (Sheet 11 of 23)**



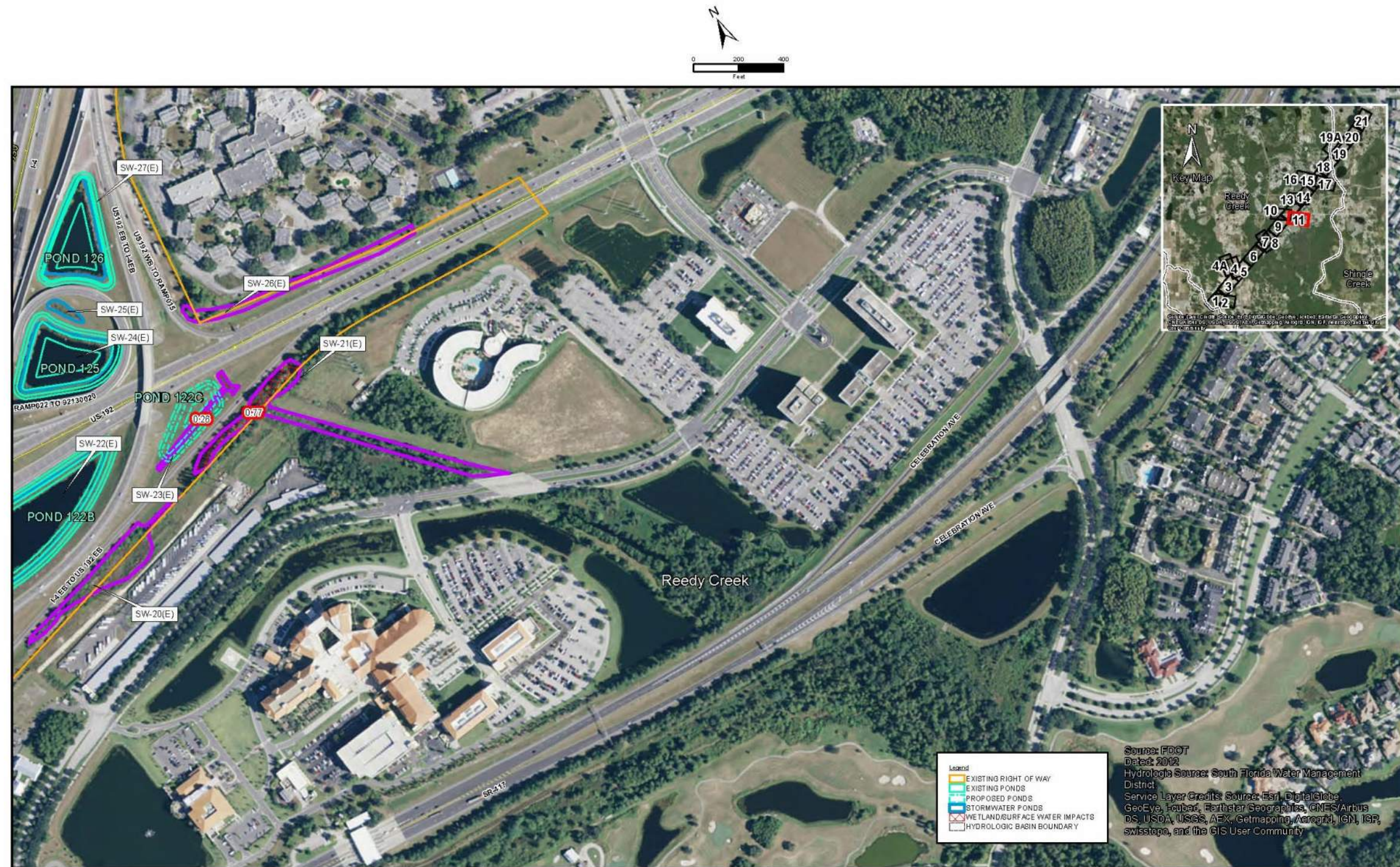
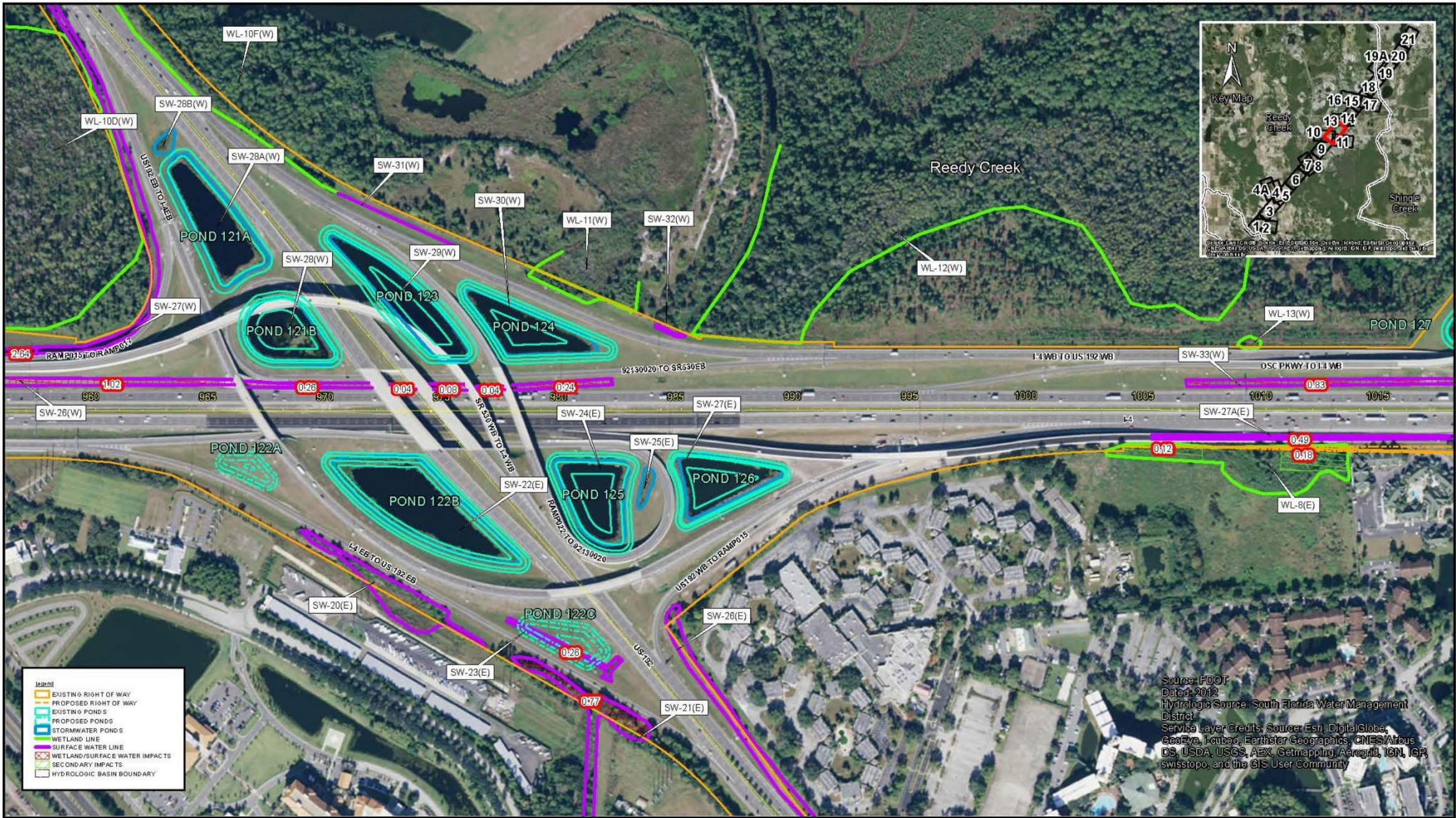


Figure 5.19 – Surface Water and Wetland Impacts Map (Sheet 12 of 23)





**Figure 5.20 – Surface Water and Wetland Impacts Map (Sheet 13 of 23)**



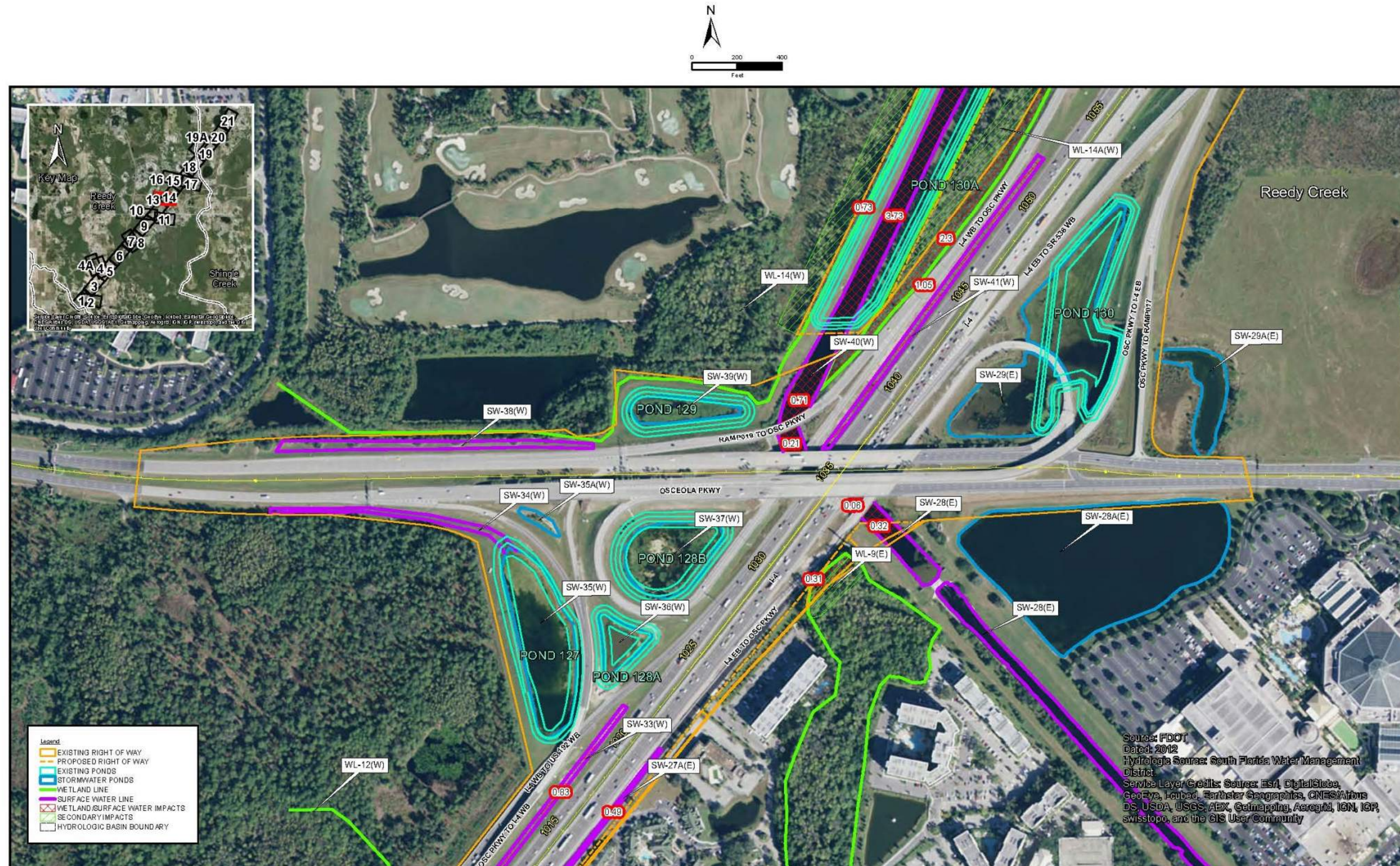


Figure 5.21 – Surface Water and Wetland Impacts Map (Sheet 14 of 23)



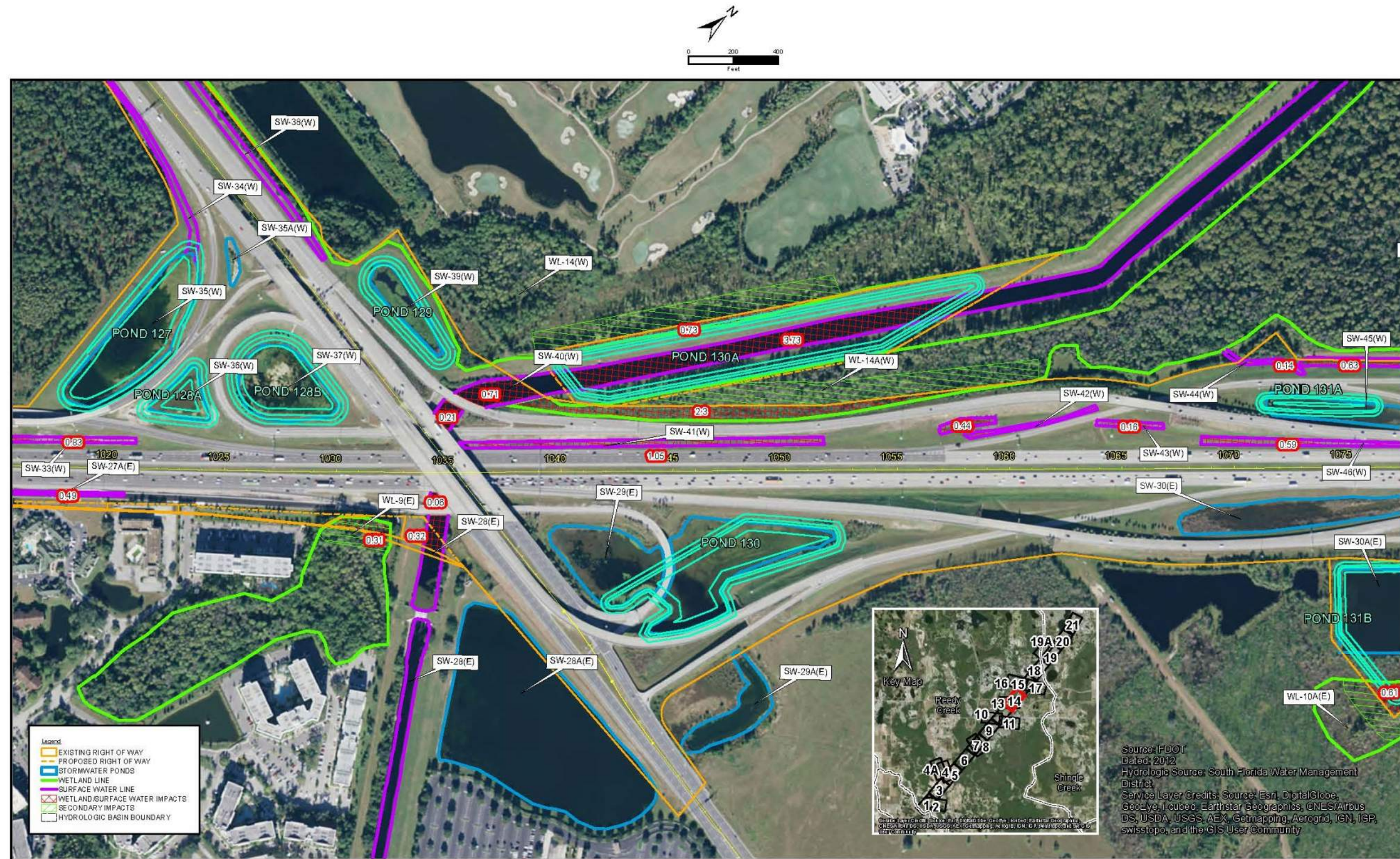


Figure 5.22 – Surface Water and Wetland Impacts Map (Sheet 15 of 23)



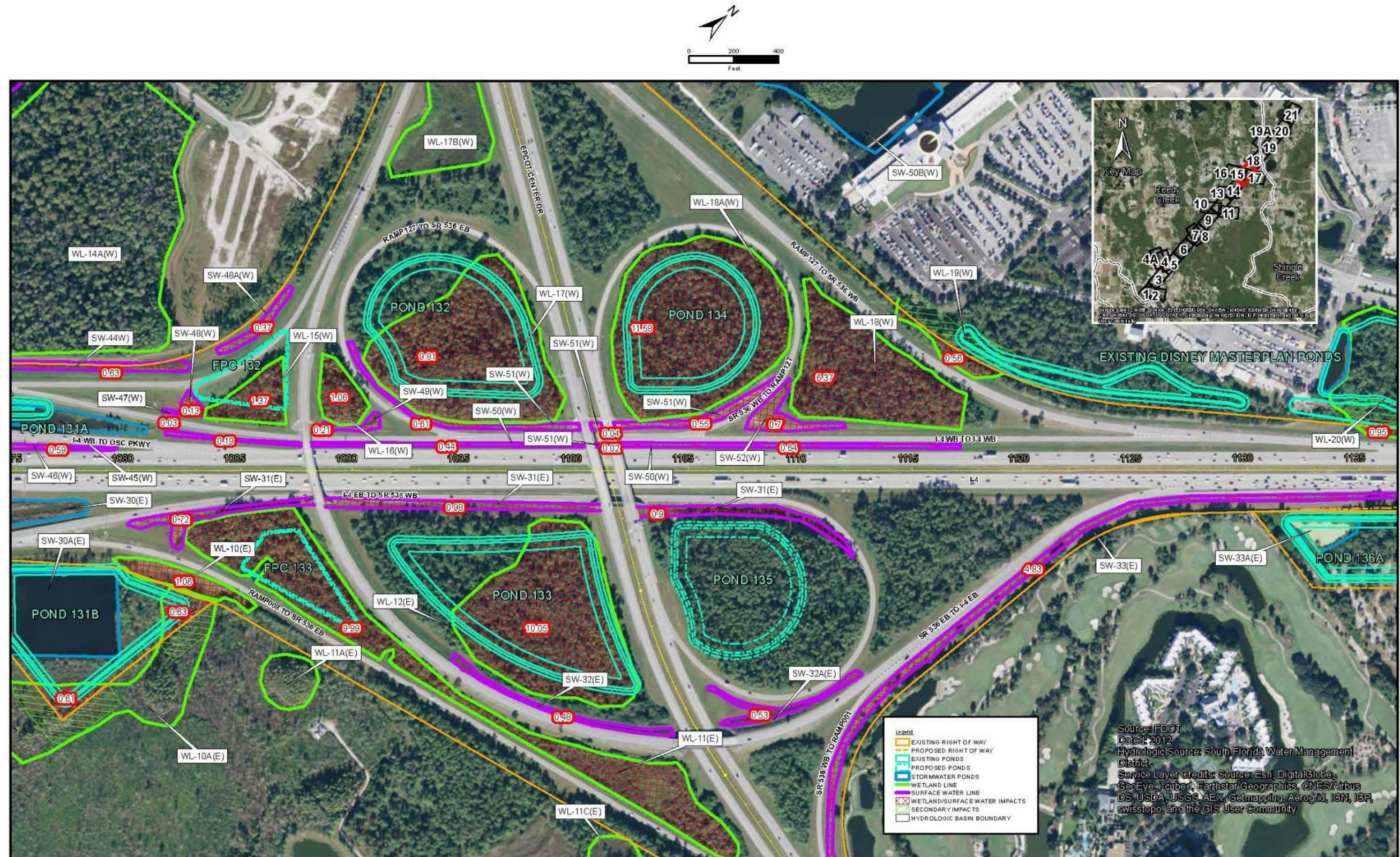
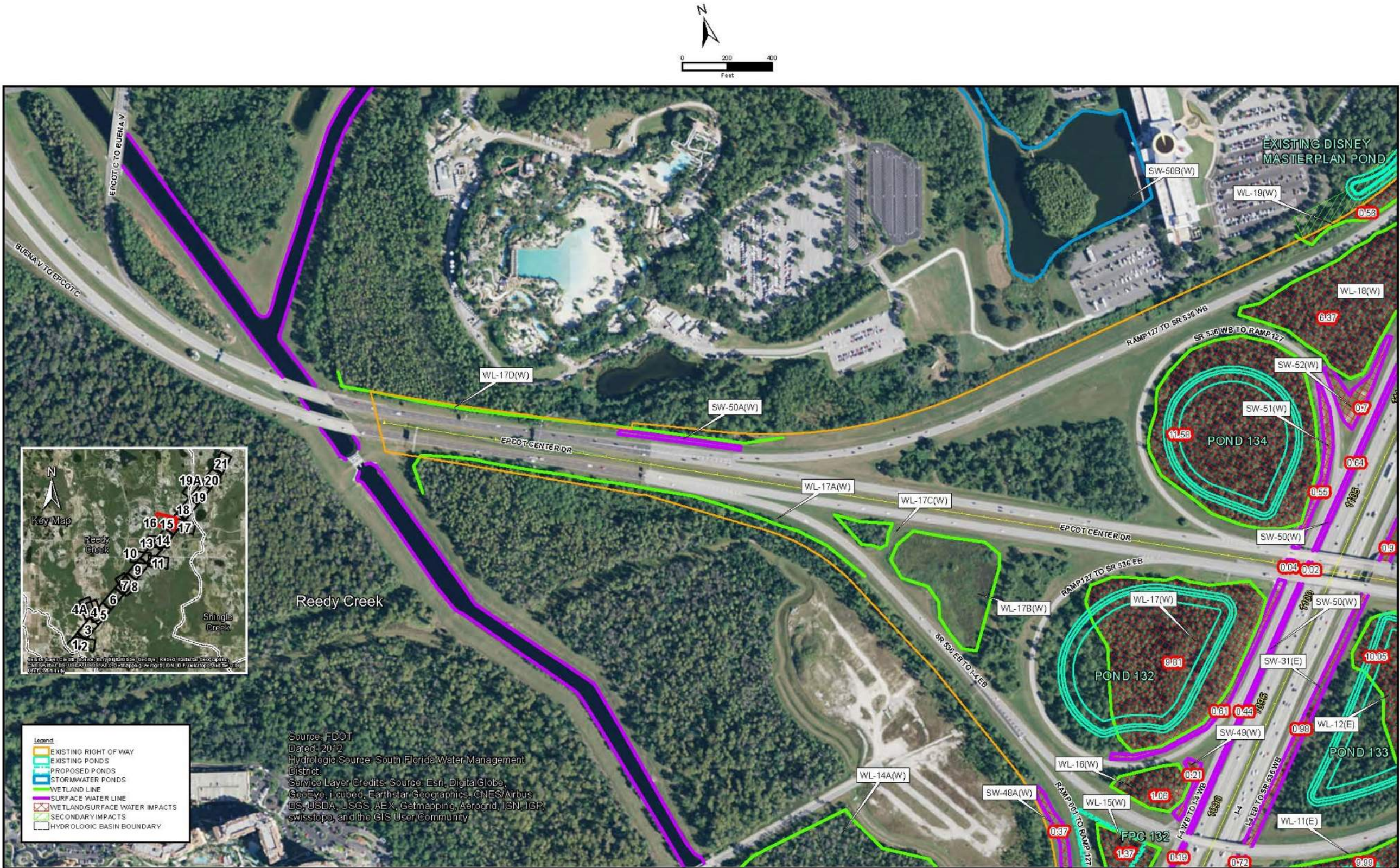


Figure 5.23 – Surface Water and Wetland Impacts Map (Sheet 16 of 23)





**Figure 5.24 – Surface Water and Wetland Impacts Map (Sheet 17 of 23)**



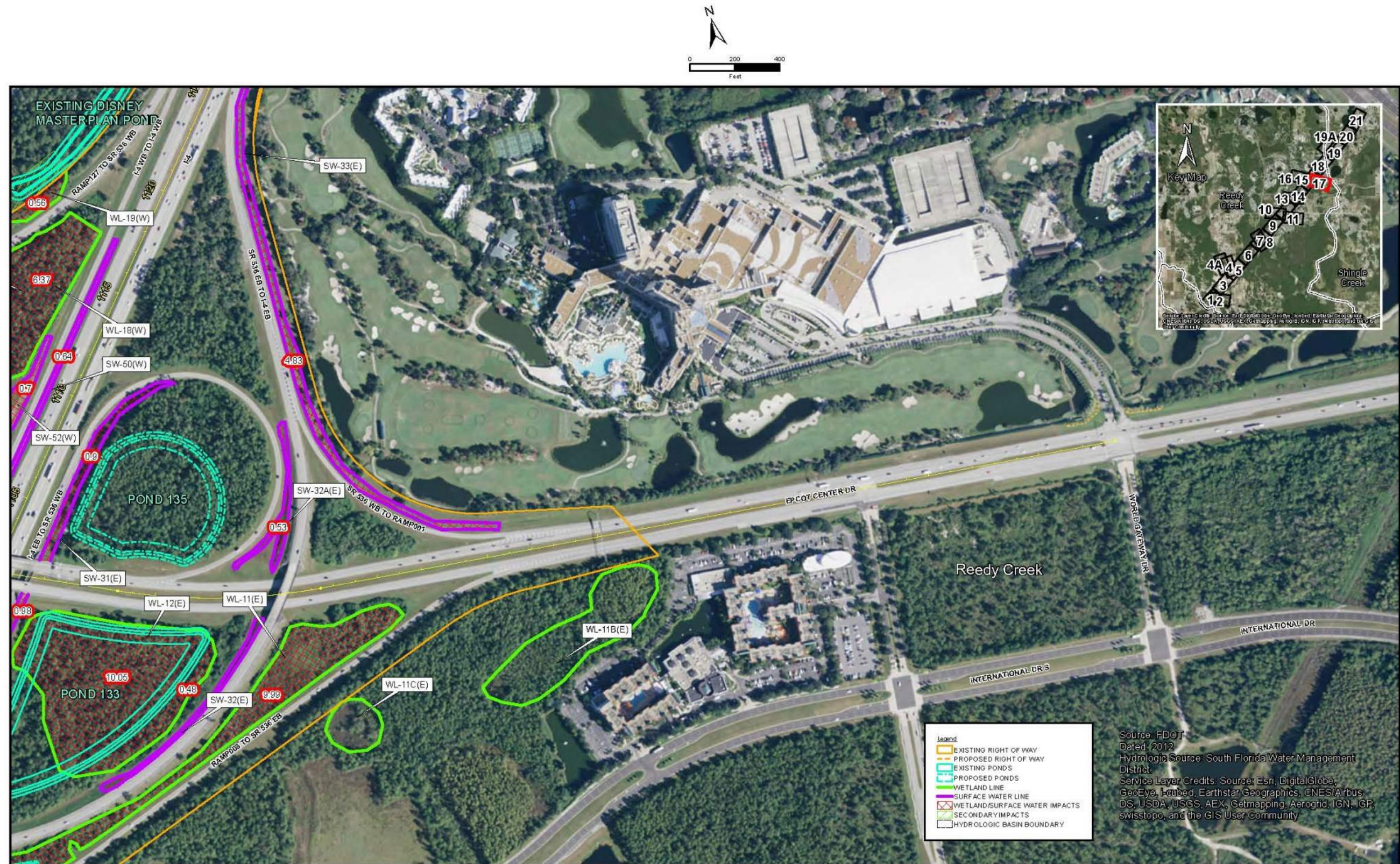


Figure 5.25 – Surface Water and Wetland Impacts Map (Sheet 18 of 23)



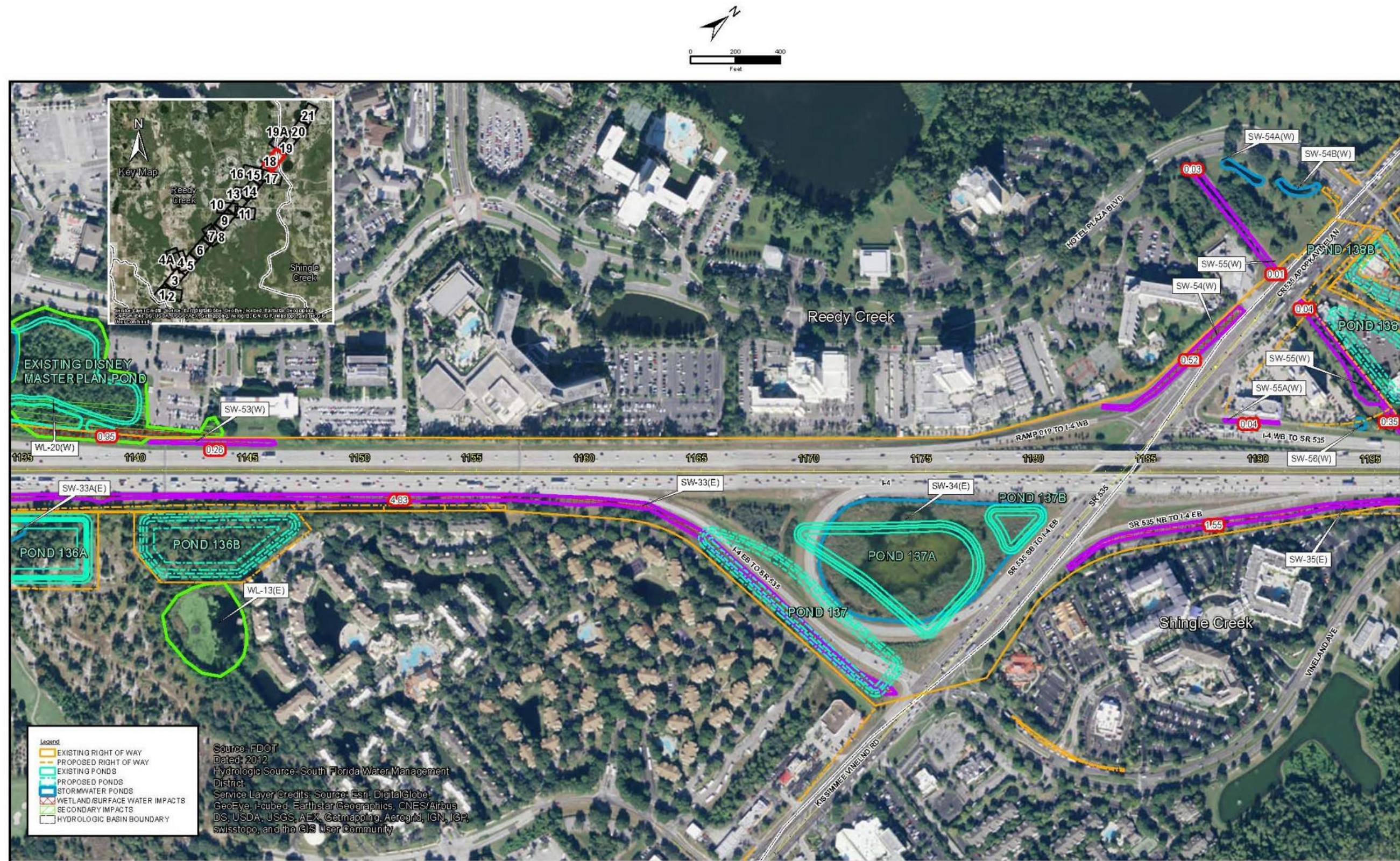


Figure 5.26 – Surface Water and Wetland Impacts Map (Sheet 19 of 23)



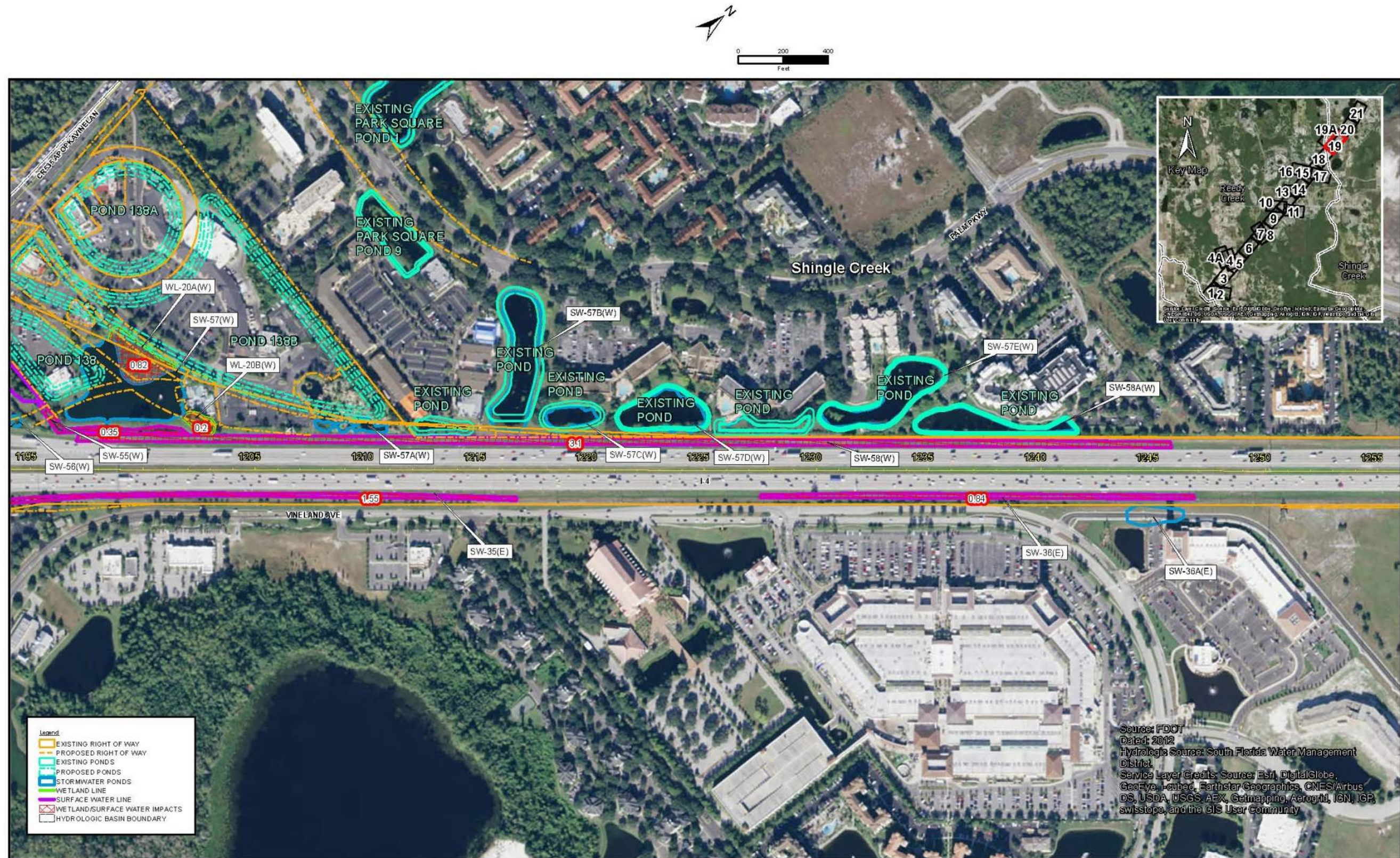
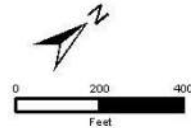


Figure 5.27 – Surface Water and Wetland Impacts Map (Sheet 20 of 23)





**Figure 5.28 – Surface Water and Wetland Impacts Map (Sheet 21 of 23)**



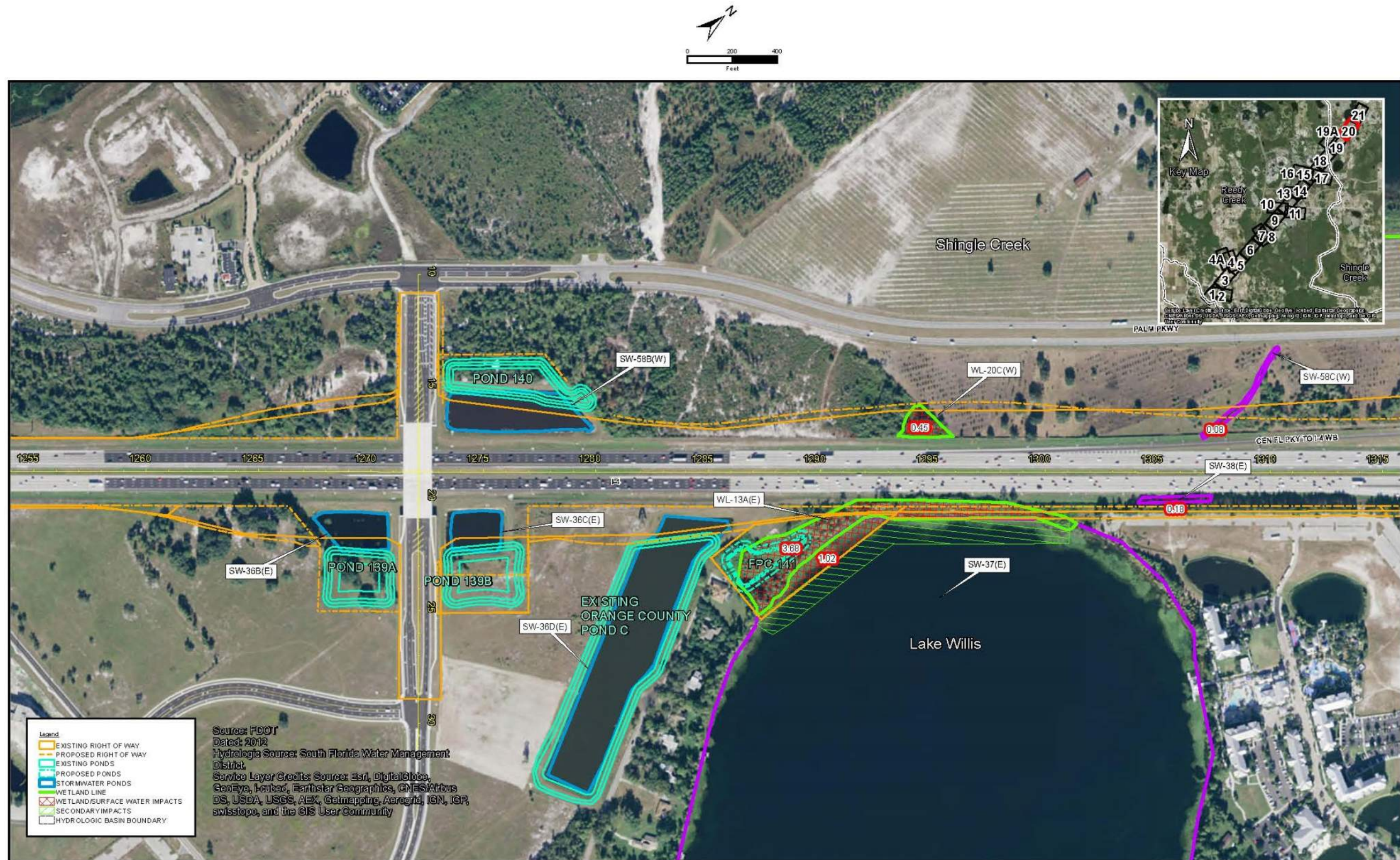


Figure 5.29 – Surface Water and Wetland Impacts Map (Sheet 22 of 23)



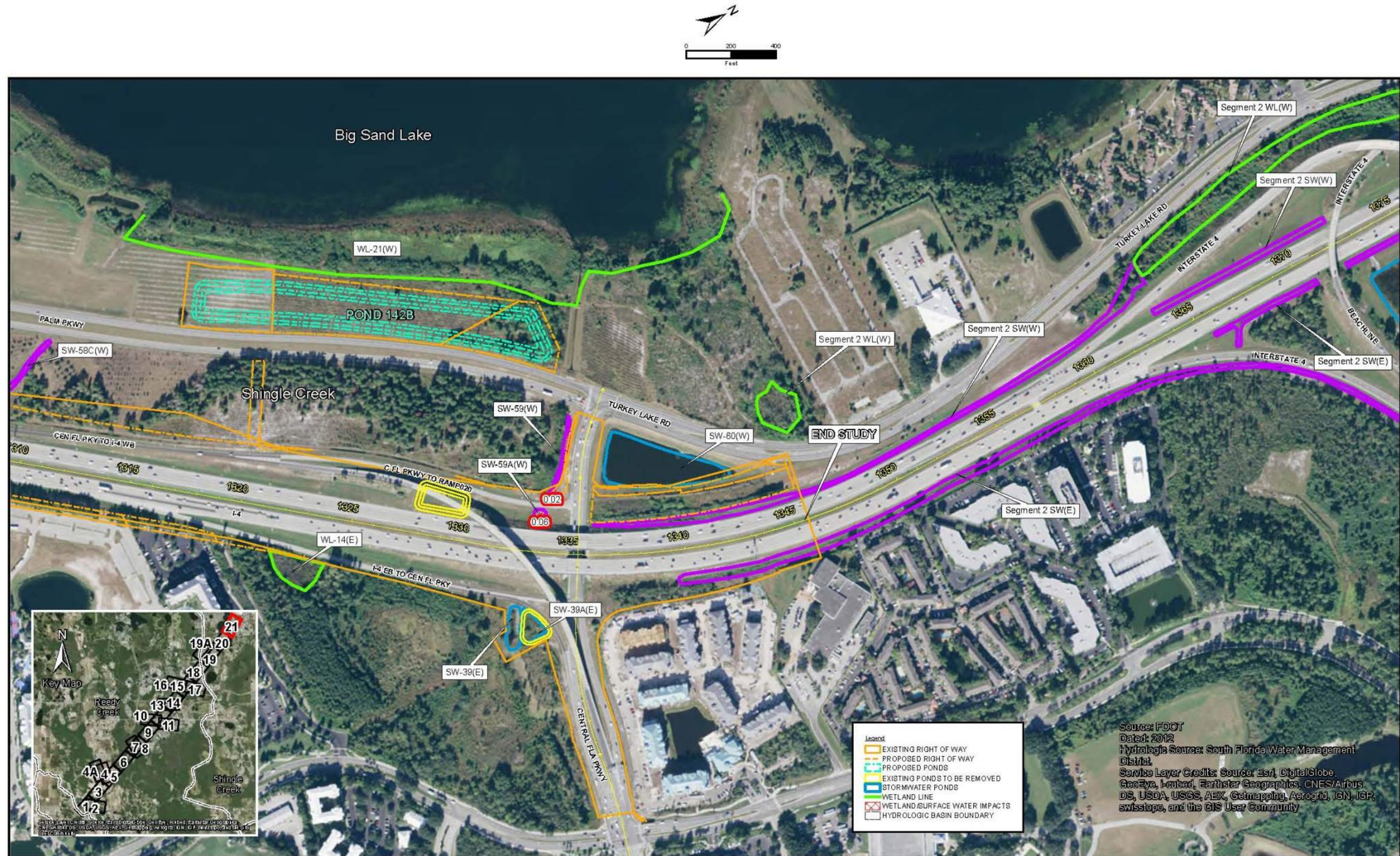


Figure 5.30 – Surface Water and Wetland Impacts Map (Sheet 23 of 23)



Mitigation requirements are based on a compilation of wetland parameters including quality, type, function and size. Impacts to wetlands and other surface waters will be avoided and minimized to the maximum extent possible while maintaining safe and sound engineering and construction practices. Primarily, avoidance and minimization efforts are related to the proposed stormwater management pond locations and the right-of-way of the I-4 corridor from west of CR 532 to west of SR 528.

A mitigation plan that adequately offsets adverse impacts will be developed and implemented prior to construction activities. Adverse wetland impacts that may result from the construction of this project will be mitigated, satisfying the requirements of Part IV Chapter 373, F.S. and 33 U.S.C.s.1344. Compensatory mitigation for this project will be completed through the use of mitigation banks and/or other mitigation options that satisfy state and federal requirements.

### 5.7.3 Wildlife and Habitat

Potential environmental impacts include identifying impacts to wildlife and natural habitat within the proposed corridor. A supplemental report, *Endangered Species Biological Assessment (September 2016)*, was prepared following guidelines presented in the PD&E Manual, Part 2, Chapter 27 (FDOT, 10/1/91) to identify wildlife species of known or potential occurrence and natural habitat types along the I-4 Segment 1 project corridor and to document potential project-related impacts. Particular attention was given to species that have been provided regulatory protection such as federal or state listed endangered, threatened, or otherwise sensitive species, as well as suitable habitat for those species.

The study area for the project corridor included all potential pond sites, the existing right-of-way of I-4, and a buffer of 500 feet beyond the boundary of the current right-of-way. The methodology used to conduct the wildlife assessment included research of existing records and review of literature published by the Florida Natural Areas Inventory (FNAI), the Florida Committee on Rare and Endangered Plants and Animals (FCREPA), the Florida Fish and Wildlife Conservation Commission (FWC), the U.S. Fish and Wildlife Service (USFWS) and other relevant scientific publications. Based on these sources, 51 species of animals and 48 species of plants have been identified as potentially occurring within the study area counties, though suitable habitat may not be available for all of the species along the project corridor. Of these species, 11 are federally listed animals, 11 are federally listed plants, 26 are state listed animals and 48 are state listed plants.

Biological surveys which followed species-specific survey guidelines as outlined by FFWCC and USFWS were conducted during daylight hours in April/May 2013, March/April/June 2014 and May/June 2015. During the field investigations, individuals or evidence of at least 50 different mammal, bird and reptile species were identified along the project corridor. Observations of species



protected under state or federal regulations were documented as shown in Figure 5.31 through Figure 5.35. The following observed species appear on protected species lists developed by the USFWS, the FFWCC, FNAI or FCREPA: American alligator, great egret, little blue heron, snowy egret, American swallow-tailed kite, white ibis, gopher tortoise, Florida sandhill crane, wood stork, sand skink, osprey and glossy ibis.

Numerous other wildlife and plant species, many of which are protected, have the potential to occur in Polk, Osceola or Orange County. Although evidence of the occurrence of those species was not observed during field inspections of the existing right-of-way or proposed pond sites, suitable habitat might exist in those areas. Details of the field surveys including species identification, soils and land use types, habitat locations and potential impacts to federal or state-listed species and other sensitive species are included in the *Endangered Species Biological Assessment (September 2016)* prepared for this project. Wildlife and plant surveys were conducted in potential impact areas such as proposed pond site areas and the existing right-of-way that contain habitat for one or more listed species. The following sections describe those species with the potential to occur within the study limits and potentially be impacted by the project.

### Federally Listed Species

Informal Consultation for federally listed species was completed with USFWS. The USFWS concurred with the proposed effects determinations described in this report. All federally listed species within I-4 Segment 1, with the exception of the sand skink and scrub lupine were granted either “No Effect” or “May Affect, but Not Likely to Adversely Affect.” Formal Consultation to address a “May Affect” determination for the sand skink and scrub lupine was completed, as documented in the Biological Opinion dated August 26, 2016 and provided in the supplemental report: *Endangered Species Biological Assessment Segment 1: from west of CR 532 (Osceola Polk Line Road) to west of SR 528 (Beachline Expressway) (September 2016)*.

#### Reptiles

**Eastern Indigo Snake** – The eastern indigo snake, listed by both the FFWCC and the USFWS as Threatened, is a habitat generalist, using a variety of habitats from mangrove swamps to xeric uplands. These snakes are cold-sensitive and require gopher tortoise burrows, other animal holes or stumps for protection during winter months. They require large tracts of natural, undisturbed habitat and prefer to forage in and around wetlands for their preferred prey – other snakes. Numerous gopher tortoise burrows were located within the project area and the potential for indigo snakes is moderate due to the limited amount of habitat available in this developed area. The closest documented eastern indigo snake sighting was in 2008 near Blue Springs State Park, which is located approximately 43 miles north of the project area.



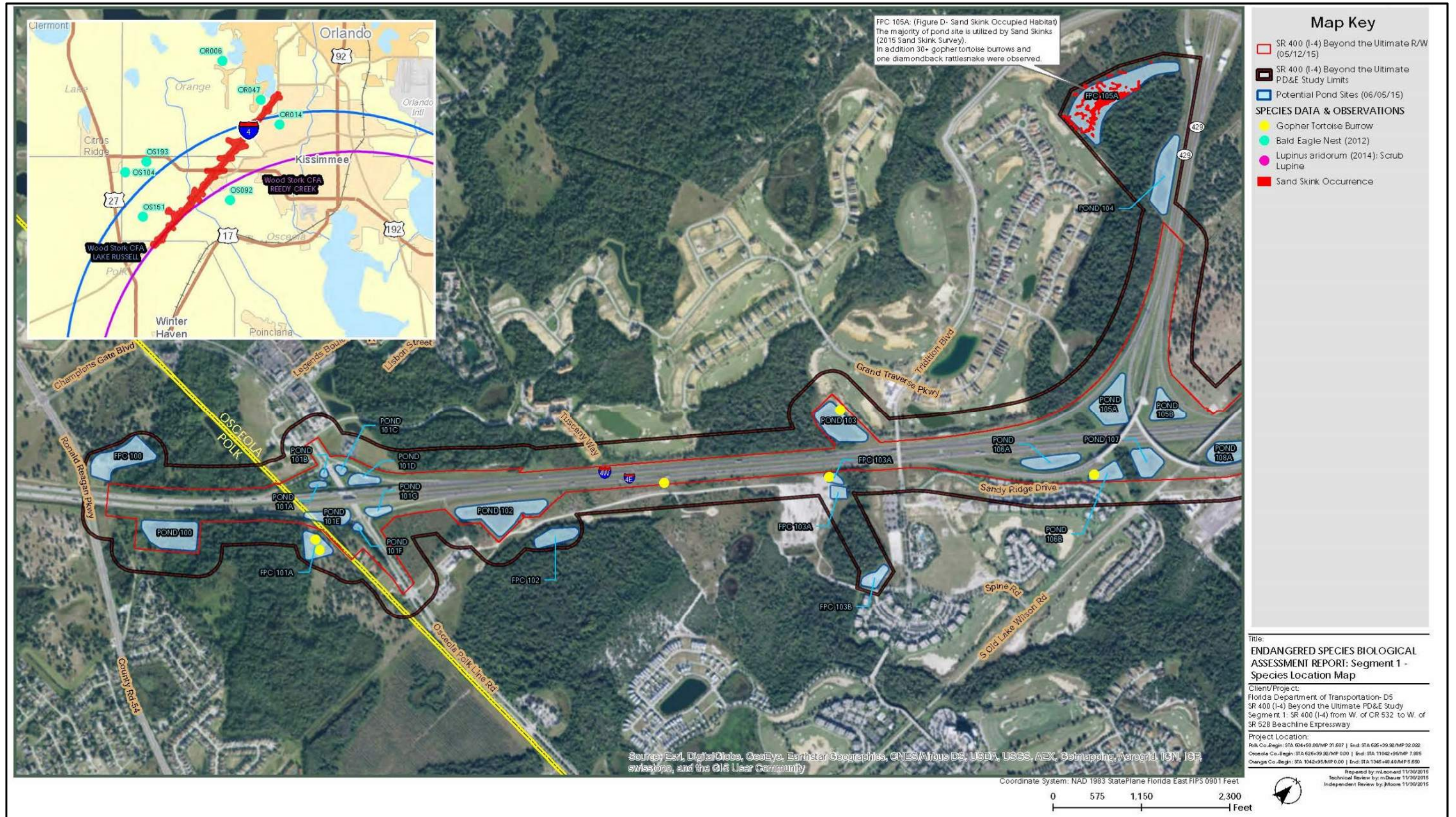


Figure 5.31 – Species Location Map (Sheet 1 of 5)



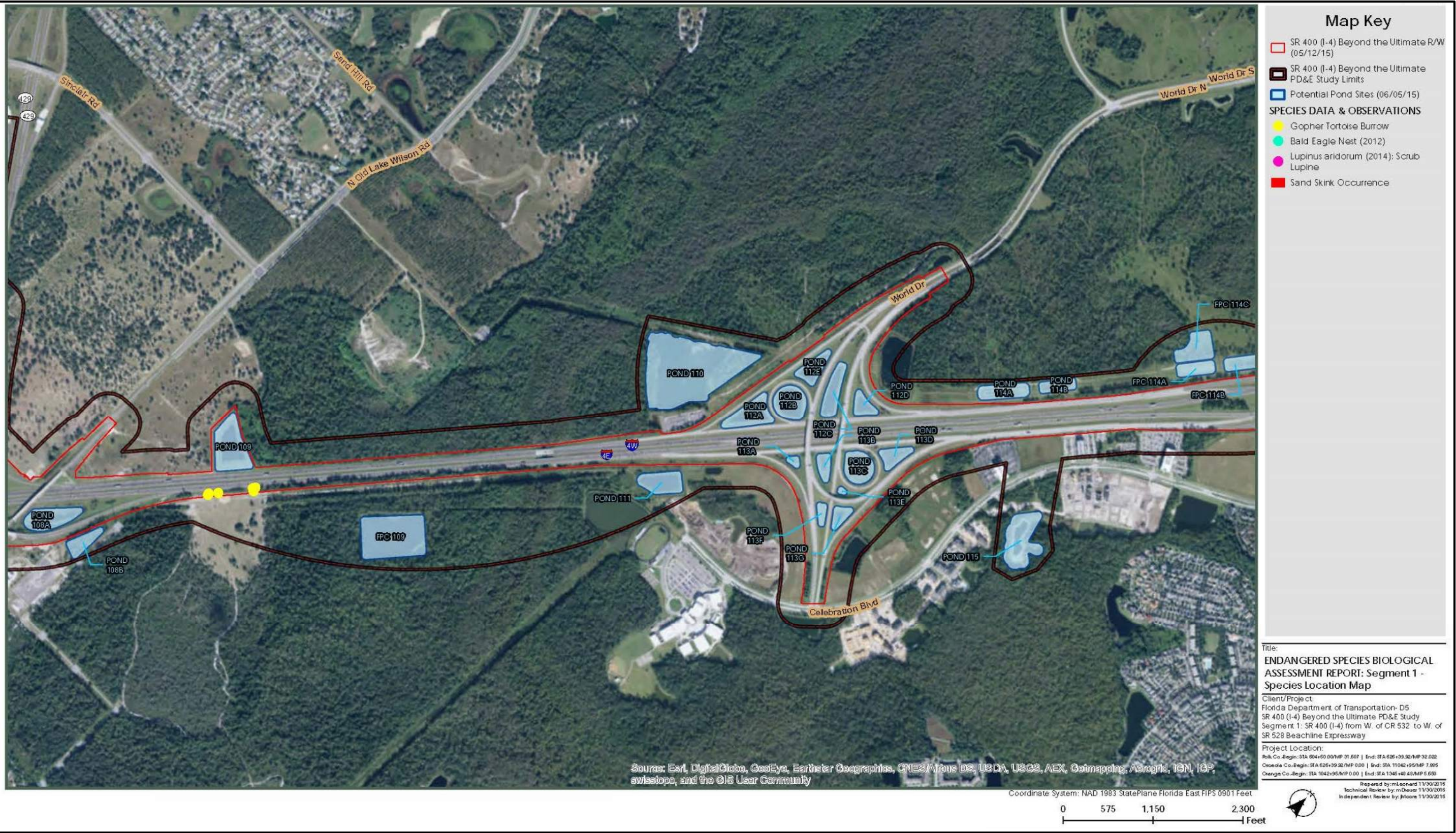


Figure 5.32 – Species Location Map (Sheet 2 of 5)



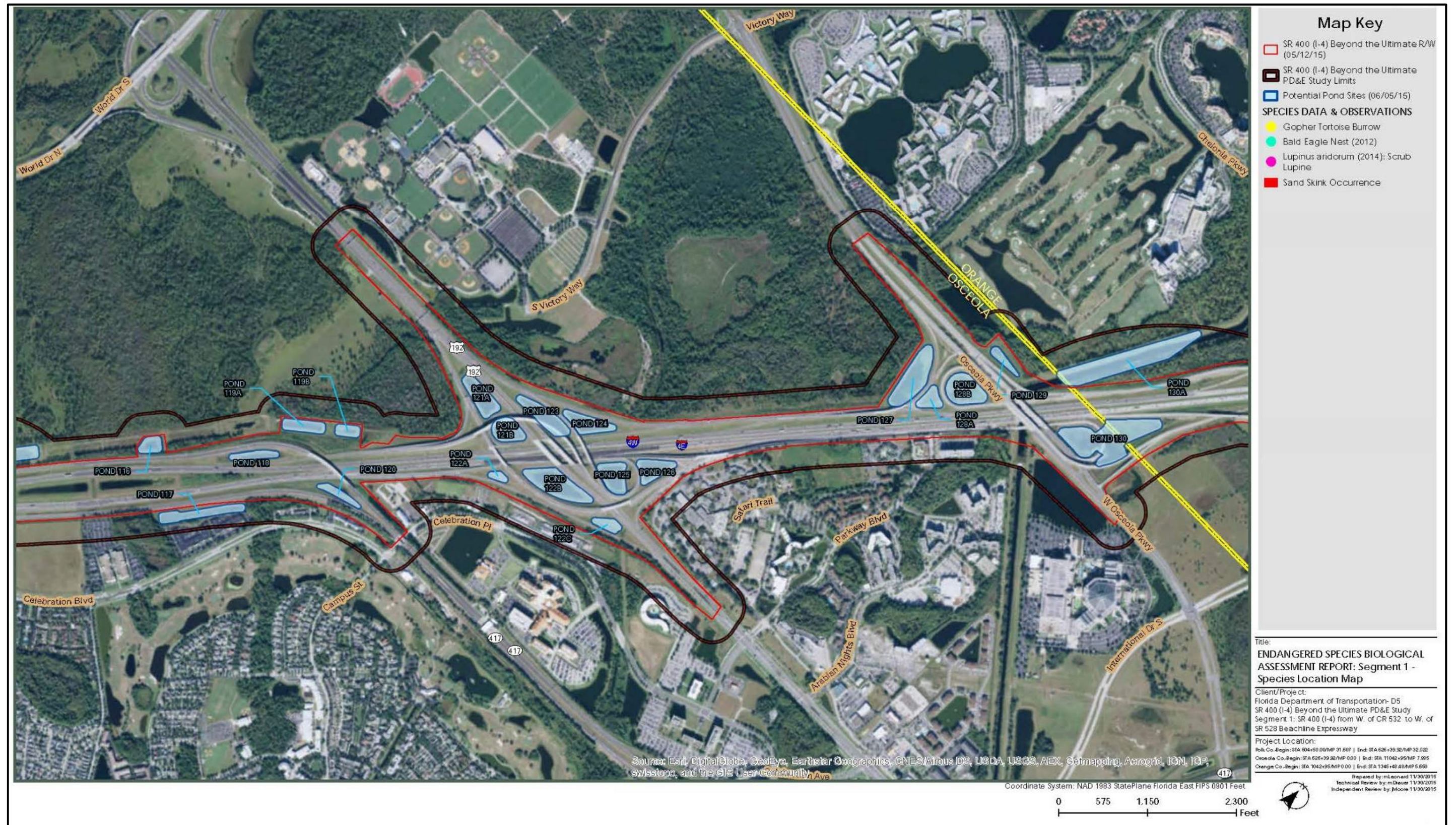


Figure 5.33 – Species Location Map (Sheet 3 of 5)





Figure 5.34 – Species Location Map (Sheet 4 of 5)



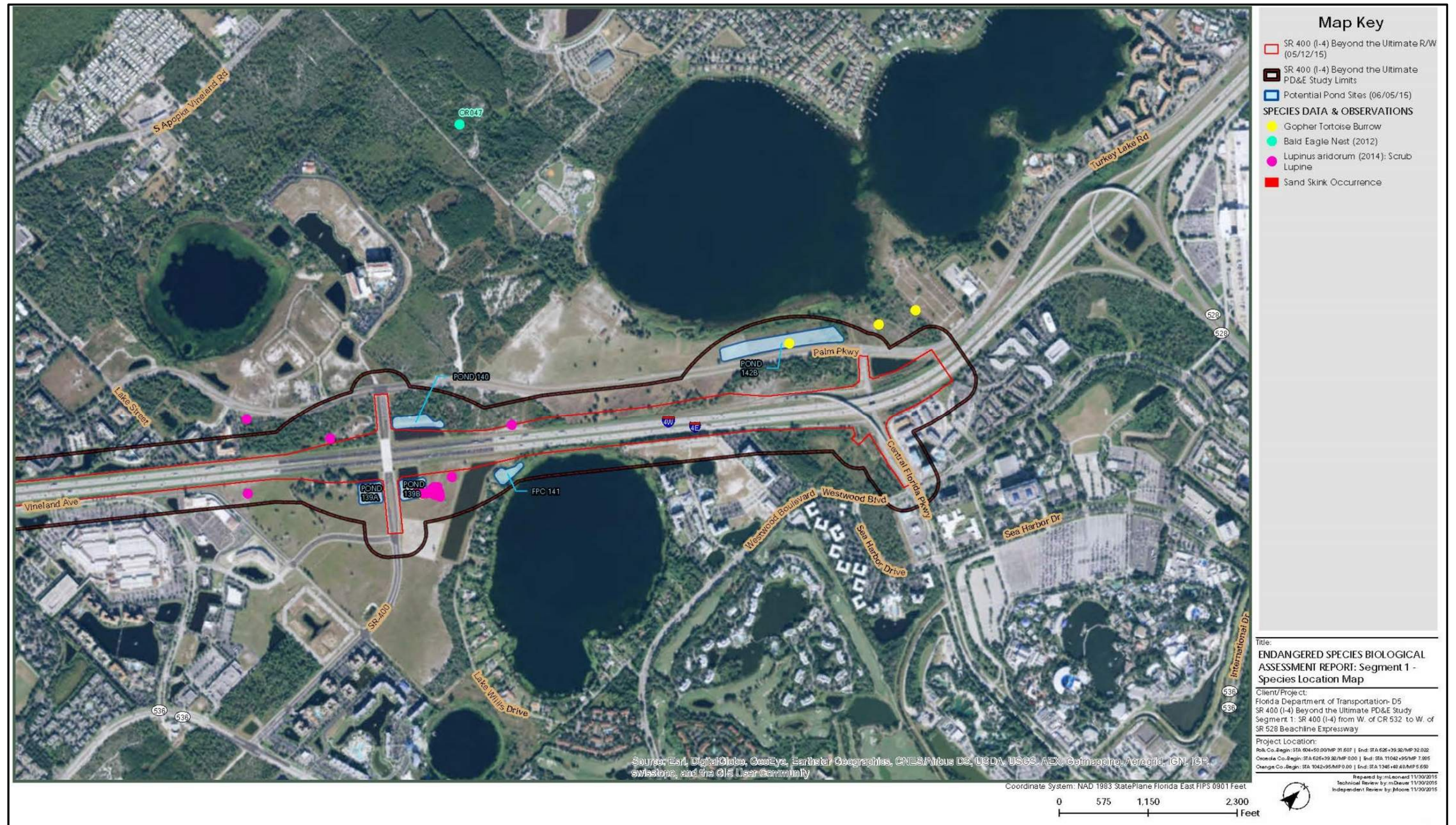


Figure 5.35 – Species Location Map (Sheet 5 of 5)



An effects determination was made by utilizing the USFWS Programmatic Key for the Eastern Indigo Snake (January 2010, updated August 2013). During the construction phase of the project, FDOT will implement the USFWS *Standard Protection Measures for the Eastern Indigo Snake*, which contain specific provisions requiring the construction contractor to develop and implement an education plan concerning avoidance of eastern indigo snakes, as well as conducting post-construction reporting.

I-4 Segment 1 may impact more than 25 acres of xeric habitat (scrub, sandhill, or scrubby flatwoods) and has more than 25 active and inactive gopher tortoise burrows. Therefore, the project would merit 'a may affect' determination under the key. Considering that the project area is primarily within an urban corridor with large areas of development offering little contiguous habitat to support the indigo snake and there are no documented sightings within the area, it should qualify for a may affect but is not likely to adversely affect determination.

**Sand Skink and Blue-tailed mole skink** – Both the sand skink and blue-tailed mole skink are listed as Threatened by the USFWS and FFWCC. The three most important factors in determining the presence of skinks are location, elevation and suitable soils. Sand skinks occur on sandy ridges of interior Central Florida, including Polk, Osceola and Orange Counties. They are found within these geographic areas typically at elevations of 82 feet above sea level and higher. They occur in excessively drained, well-drained and moderately well-drained sandy soils, with suitable soil types including: Apopka, Arrendondo, Archbold, Astatula, Candler, Daytona, Duette, Florahome, Gainesville, Hague, Kendrick, Lake, Millhopper, Orsino, Paola, Pomello, Satellite, St. Lucie, Tavares and Zuber. These soil types typically support scrub, sandhill, or xeric hammock natural communities, though these may be degraded by impacts to overgrown scrub, pine plantation, citrus grove, old field or pasture. Skinks have been documented to occur in all these degraded conditions where soil types are suitable regardless of vegetative cover. This makes habitat condition of secondary importance in determining if skinks are present. If a site has suitable soils at the appropriate elevation within the counties where skinks are known to occur, there is a likelihood of presence, and potential effects to skinks should be considered. As the project occurs within the USFWS consultation area for sand skink and blue-tailed mole skink, both a pedestrian field survey and full cover board survey were conducted to assess potential habitat for the sand skink. The cover boards were placed in all areas containing mapped skink soils as verified by a certified soil scientist. A survey occurred between April 10, 2014 and May 6, 2014. Subsequent design changes necessitated additional areas be surveyed in March and April 2015. No skinks or signs of skinks were identified during the 2014 survey. Sand skinks were observed during the survey in 2015 on one pond site (FPC 105A). The pond site contains approximately 10.0 acres of occupied skink habitat. Utilization of this pond site will impact occupied sand skink habitat; therefore, the project may affect the sand skink. Consultation with USFWS to address impacts to the sand skink was initiated for the project. The Biological Opinion issued by USFWS on August 26, 2016 provides the authorization for the impacts to sand skink habitat. FDOT

has committed to provide mitigation at a 2:1 ratio (20.0 credits) at a Service-approved skink conservation bank to offset the impacts.

#### Avian

**Florida Scrub-Jay** – The Florida scrub-jay, listed as Threatened by both the FFWCC and USFWS, is an endemic species found in Florida's scrub habitats. This gregarious jay is a habitat specialist and typically lives in scrub and scrubby flatwoods habitats. Potential suitable habitat was identified in several locations along the corridor. Preliminary assessment of the potential presence of the species utilized a scrub-jay playback tape during an informal survey. Scrub habitats were also assessed during the set up and process of conducting the sand skink survey. No scrub-jays have been observed within any proposed pond site areas or within the section of I-4 within this study, or during the PD&E study surveys conducted in December 1996 through December 1997, nor within the past 10 years according to the database maps kept by FNAI, the University of Florida or the FFWCC. The proposed widening and stormwater ponds are not expected to have any impact on scrub-jays. Therefore, this project may affect but is not likely to adversely affect this species.

**Crested caracara** – The crested caracara is listed by both the USFWS and the FFWCC as threatened. This large raptor inhabits Florida's prairies and rangelands. They forage on many kinds of insects, fish, reptiles, birds, and mammals. They feed on live captured prey, but also on roadkill. Nests are usually constructed within cabbage palms. Sensitivity to human disturbance varies in this species with many tolerating human activities, especially when human influence is already present within their home range. If a caracara nest is found to be within the project area, management practices outlined within the *Habitat Management Guidelines for Audubon's Crested Caracara in Central and Southern Florida* should be employed. The project occurs at the northernmost edge of the consultation area for this bird in Central Florida, though no birds or nests have been observed or were documented within the project corridor either during the current study or during the previous PD&E Study (December 1996 – December 1997). Previous communication with USFWS during the early stages of this PD&E Study indicated that there was no history of caracara in the project area and that no habitat remains within the project area. Though potential foraging areas occur adjacent to I-4 within the project area (active grazing pastures for cattle), the lack of documented birds (FFWCC and Wildlife Research Institute Wildlife Occurrence Systems Database 1988 – 2014) and suitable nesting habitat make the potential for these birds extremely unlikely. The project construction limits will remain within the existing Right-of-Way with the exception of pond sites. The proposed ponds located within these pastures will be expansions of existing ponds rather than new construction. Therefore, the project may affect but is not likely to adversely affect this species.

**Snail kite** – The snail kite is listed as Endangered by both the USFWS and the FFWCC. This non-migratory, medium-sized raptor utilizes large open freshwater marsh habitats and lakes with shallow water. Nests are usually located in a low tree or shrub at the water's edge. The main staple of their



diet is the apple snail, lending to their name. The project does occur within the USFWS consultation area for the snail kite though no observations have been documented within or near the project corridor. Nesting snail kites have been documented significantly east of the project in Kissimmee at both Lake Tohopekiliga and East Lake Toho. No known adequate nesting or foraging habitat is located adjacent to the project area, either within the proposed right-of-way or pond site areas. Therefore, this project will have no effect on this species.

**Red-Cockaded Woodpecker** – This species is listed as Endangered by the USFWS and by the FFWCC. The colonial red-cockaded woodpecker (RCW) is a habitat specialist, requiring stands of over-mature pine that have contracted the red-heart disease. RCWs require diseased trees for cavity building, which they use for nest and roost cavities. Preferred pine stands need to have a fairly open canopy, with a sparse subcanopy to allow easy flight. RCWs must also have ample foraging habitat consisting of younger pines surrounding the cavity trees. No suitable nesting habitat was observed in the impact area within the project limits. The project occurs near an area (three miles east) designated by USFWS as “Occurrence Area,” though the previous PD&E Study (December 1996 – December 1997) indicated no suitable habitat or any documented RCW sightings within the proposed right-of-way or pond sites. During field surveys conducted in May 2013, April 2014 and June 2015, biologists did not observe any suitable habitat within the project footprint. Therefore, this project will have no effect on the red-cockaded woodpecker.

**Wood Stork** – This species, now listed as Threatened by both the USFWS and the FFWCC, is the only true species of stork nesting in the United States. This reclassification does not change any conservation or protection measures for the wood stork under the Endangered Species Act (ESA), rather it recognizes the recovery and the positive impact that conservation efforts have had on breeding populations of storks. Feeding areas for wood storks include marshes, pools, or ditches in which fish congregate. This species typically nests in mixed woodlands comprised of such overstory species as cypress, gum and southern willow; pond apple and mangrove swamps may also be utilized for nesting. Based on the updated colony map prepared by the USFWS in June 2014, the project is located within the 15-mile Core Foraging Area (CFA – 15 miles from an active nesting colony in Central Florida) of two wood stork colonies (Lake Woodruff and Lake Russell). Wood storks were observed foraging within roadside ditches and stormwater facilities within several spots along the project corridor. Utilizing the Corps of Engineers and U.S. Fish and Wildlife Service Effect Determination Key for the Wood Stork in Central and North Peninsular Florida (2008), the project is not within 2,500 feet of an active colony site, will likely impact Suitable Foraging Habitat (SFH) of greater than 0.5 acres and is located within the CFA of two wood stork colonies. The FDOT commits to provide compensation within the Service Area of a Service-approved wetland mitigation bank(s) within the CFA, and the project is not contrary to the Service’s Habitat Management Guidelines for the Wood Stork in the Southeast Region, and is in accordance with the Clean Water Act section 404(b)(1) guidelines. There are a number of currently permitted mitigation banks that include the

project corridor within the bank service area that have credits available to offset impacts to SFH (three currently permitted banks with available federal credits that cover all or a portion of the project area). The FDOT will coordinate with the permitting agencies during the permitting phase of the project on compensatory mitigation and minimization of impacts to suitable foraging habitat. These actions should result in no net loss of foraging habitat; therefore, this project may affect but is not likely to adversely affect the wood stork.

**Southern Bald Eagle** – The southern bald eagle was delisted from both the U.S. Endangered Species Act and FFWCC imperiled list, though it is still protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The USFWS issued the National Bald Eagle Management Guidelines in May 2007 while Florida adopted a Bald Eagle Management Plan (BEMP) in April 2008, written closely to follow the federal guidelines. The BEMP provides guidelines and recommendations to help people avoid violating state and federal eagle laws. The BEMP also outlines strategies to maintain the Florida population of bald eagles at or above current levels. The BEMP goal is to, “maintain a stable or increasing population of eagles in Florida in perpetuity.” Bald eagles almost always nest in the tops of living or dead tall trees along or very near lakes and rivers; these water bodies provide fish, typically their preferred food. Bald eagles generally avoid areas with extensive human activity, so management guidelines must be considered before any construction can be initiated within 660 feet of an active southern bald eagle nest. Four bald eagles’ nests are recorded to be in the general vicinity of the project corridor (OR014, OR047, OS092 and OS151). However, none of these nests is located within 660 feet of the proposed right-of-way or any of the proposed pond sites. For that reason, the project will have no effect on the southern bald eagle.

### **Federally Listed Plant Species**

A review of agency databases and a field review of the project corridor indicate that there have been few reported occurrences of federally listed plant species within the proposed project area. Twenty (20) federally listed species have the potential to occur within Polk, Osceola and Orange County; though not all habitat types are represented within the project area. Information from the previous PD&E Study (December 1996 – December 1997) indicated that one listed plant was observed, the scrub lupine. The observation was made west of Turkey Lake Road, to the west of the SR 528 Interchange at westbound I-4. A follow up protected plant field survey covering the area of proposed right-of-way widening and pond sites was conducted in May 2013, March and April 2014, and March and April 2015 by project biologists. The scrub lupine was observed in five areas where sand skink cover board surveys were conducted in 2014. No additional federally listed plant species were identified within the proposed widening impact area or pond sites during the field investigations. Based on the proposed alignments of the right-of-way and proposed pond sites, the project is anticipated to have impacts on the scrub lupine. The footprint of Pond Site 139B and the edge of the proposed right-of-way northeast of the Daryl Carter Parkway overpass overlap an individual observation of scrub lupine.



Based upon the proposed impacts from the project, this project may affect the federally listed plant species, the scrub lupine. Consultation with USFWS was initiated to address impacts to the scrub lupine, and the resulting Biological Opinion dated August 26, 2016 provided the authorization for the project to impact this species according the following Conservation Measure: *During permitting the proposed project will be re-surveyed for occurrence of scrub lupine. In coordination with Bok Tower Gardens, the following will occur: collection of seeds, or translocation of plants out of the project footprint for replanting in lands acceptable to the Service (e.g., public conservation lands). Collected seeds would be provided to Bok Tower Gardens for reproduction and conservation of the species.*

## State Listed Species

### Mammals

**Florida Mouse** – This mouse, listed as a Species of Special Concern by the FFWCC, is one of the two mammal species that are endemic to Florida. It typically lives within gopher tortoise burrows in fire-maintained, xeric uplands. Sub-optimal habitat exists in the xeric uplands that contain gopher tortoise burrows, such as mesic flatwoods, sand pine scrub and sand pine plantations. Several gopher tortoise burrows were located within the project area, but no Florida mice were observed during field surveys. If gopher tortoise burrows are proposed to be impacted, then the relocation of gopher tortoises and their burrow commensals will be conducted prior to construction. Thus, the project is not likely to adversely affect the Florida mouse.

**Sherman's Fox Squirrel** – The Sherman's fox squirrel, listed by the FFWCC as a Species of Special Concern, is the largest of the three fox squirrel subspecies that occur in Florida. They have large ranges that can span over 80 acres. Optimum habitat for this subspecies is predominantly longleaf pine-turkey oak sandhills, although they are also reported to occur in mesic forested areas as well. Some potential habitat is present within the project area, although Sherman's fox squirrels were not observed during the site investigations for this project. The amount of potential habitat for this species impacted by the project will be minimal. Therefore, the proposed project is not likely to adversely affect the Sherman's fox squirrel

**Florida Black Bear** – The Florida black bear is a very wide-ranging species formerly listed as Threatened by the FFWCC. Preferred habitat of the black bear includes dense forest, both upland and wetland, but the bear is often encountered in other areas during its seasonal movements. The bear was removed from the list in August 2012 after the approval of the Florida Black Bear Management Plan. The plan was implemented to set a strategy in place to address challenges in bear management, to manage for a sustainable bear population state-wide and reduce human-bear conflicts. Going forward, FFWCC will continue to engage with landowners and regulating agencies to guide future land use to be compatible with the objectives of the Bear Management Plan. The plan divides the state into seven Bear Management Units (BMUs) which support the seven sub-populations of bear across the state. The unit closest to the project corridor is the Ocala/St. Johns

Unit, though nearest Primary or Secondary Bear range within this unit is located in northwestern Orange County and not near the location of the project. The Secondary Bear range within the South Central Bear Unit in southeastern Polk County is equidistant from the project, though may be a more likely source of bears to the project area. As it is unlikely that a black bear will travel through the project corridor, and no further fragmentation of bear habitat is proposed, the project is not likely to adversely affect the Florida black bear.

#### Reptiles

**Florida Pine Snake** – This snake, listed as a Species of Special Concern by the FFWCC, is another tortoise burrow commensal organism, utilizing both tortoise burrows and also the tunnels of pocket gophers for feeding and shelter. Preferred habitat of the pine snake is xeric uplands, and to a lesser extent, flatwoods and other mesic uplands. Some habitat is available within the project, especially where gopher tortoise burrows were observed. Both the pocket gophers and the pine snakes live nearly their whole lives underground and are very hard to observe directly. With the relocation of commensal organisms from gopher tortoise burrows if impacted, the project is not likely to adversely affect the Florida pine snake.

**Gopher Tortoise** – The occurrence of this species, listed as Threatened by the FFWCC (and designated as a Candidate species for listing by the USFWS), is a key factor in the determination of habitat suitability for certain other listed species because of the large number of other animals that use tortoise burrows for one or more of their life requisites. While it is common to find gopher tortoise burrows in most types of upland communities, the preferred habitats include xeric uplands and disturbed, ruderal areas. Gopher tortoise burrows and suitable habitat were observed in numerous locations along the project corridor. If impacts to these areas cannot be avoided, then relocation of the tortoises and their commensals will be necessary. During permitting, all potential gopher tortoise habitat that could be impacted by the project will be systematically surveyed according to the current guidelines published by the FFWCC. If gopher tortoise burrows are found, all practicable design measures will be employed to avoid impacts to the burrows. For burrows which cannot be avoided, a permit will be obtained from FFWCC for relocation of gopher tortoises and commensals, and relocation will be performed at a time as close as practicable to the start of construction activities at the site of the burrows. Therefore, the project is not likely to adversely affect the gopher tortoise.

**Short-tailed snake** – The short-tailed snake, listed as Threatened by the FFWCC, belongs to a monotypic genus that is endemic to Florida. Rarely seen due to its earth-burrowing tendencies, it is restricted to xeric uplands, primarily longleaf pine-turkey oak sandhills and sand pine scrub, for its habitat requirements. Herpetologist Paul Moler (FFWCC-Retired) reports short-tailed snakes occur in a wider range of ecosystems than indicated in the scant literature on the species, and may be found where prey (small snakes) and loose soils occur in North-Central Florida. Suitable habitat (remnant scrub and sandhills, areas of loose soils) was observed in several areas along the project



corridor in most areas where sand skink cover board surveys occurred. None of these snakes were observed during any field surveys. Although there is the potential impact of xeric habitat, with the commitment to relocate all potentially impacted gopher tortoise burrows, it is anticipated that this project is not likely to adversely affect the short-tailed snake.

#### Amphibians

**Gopher Frog** – The gopher frog, listed by the FFWCC as a Species of Special Concern, is a gopher tortoise burrow commensal organism, using tortoise burrows for shelter. Prime gopher frog habitat includes xeric uplands, especially longleaf pine-turkey oak associations with nearby (i.e. within one mile) seasonally flooded marshes or ponds. Field biological surveys have shown that gopher tortoise burrows were located at several locations within the project corridor, though no gopher frogs were observed. If gopher tortoise burrows are impacted, then this species could be impacted as well, though the excavation of any potentially occupied burrows and the relocation of any gopher tortoises and their burrow commensals should offset any impacts to this species. Therefore, the project is not likely to adversely affect the gopher frog.

#### Avian

**Florida Burrowing Owl** – The Florida burrowing owl is listed as a Species of Special Concern by the FFWCC. The breeding range of the Florida burrowing owl includes Polk, Osceola and Orange Counties. Preferred habitats are treeless areas on well-drained soil where herbaceous ground cover is fairly short, such as dry prairies and edges of depressional marshes during the dry season. Florida burrowing owls have also been observed along canal banks, pastures, golf courses, mowed residential lawns, and airports (Rodgers, 1996). No Florida burrowing owls or their burrows were observed during the field surveys and no direct or indirect impacts are anticipated for this species. Therefore, the project is not likely to adversely affect the Florida burrowing owl.

**Florida Sandhill Crane** – This non-migratory subspecies, listed as Threatened by the FFWCC, can often be seen foraging in improved pastures, open fields and along the roadside. During the winter months, it is distinguished from its migratory northern cousins by its smaller size and more delicate stature. Sandhill cranes nest in freshwater marshes and feed in adjacent fields and pastures. Some adequate nesting habitat is found within the freshwater marshes and vegetated shorelines of lakes located adjacent to the project corridor and foraging habitat was found within the project limits. Sandhill cranes were observed flying over the project area several times during multiple surveying events, however were not observed foraging or nesting within the project area. The proposed project is not likely to adversely affect the sandhill crane.

**Southeastern American Kestrel** – This resident subspecies of the kestrel, listed as Threatened by the FFWCC, can be distinguished from its cousin, *F. s. sparverius*, a winter migrant, by its smaller size. The Southeastern kestrel requires three components for optimal habitat: large, open fields for foraging, snags for nesting, and snags, fence lines or telephone poles as perching sites from which to

hunt. No kestrels were observed along the project corridor, nor within any pond sites or along the portion of the project to be widened. Therefore, this project is not likely to adversely affect this species.

**Least tern** – Historically, least terns nested on sandy beaches and lakeshores, but presently, they nest almost exclusively on man-made substrates such as spoil islands and gravel rooftops. This small tern, listed as Threatened by the FFWCC, is still fairly common in localized areas. However, none have been reported in the project study area. Prime nesting areas are minimal, so this species has only a low possibility of occurring along the project corridor, therefore the proposed project will have no effect on the least tern

**Wading Birds** – Wading bird rookeries were not observed and are not known to occur within or adjacent to the study area. Potential foraging habitat for limpkin, little blue heron, roseate spoonbill, white ibis, reddish egret, tri-colored heron, and snowy egret, all classified as Species of Special Concern (SSC) by the FFWCC, occurs within the limits of the study area. Both little blue heron and white ibis were observed during field surveys. No wetlands providing critical foraging or nesting habitat for these avian species will be impacted by the proposed project and indirect impacts to wading birds are not anticipated. Therefore, the proposed project is not likely to adversely affect the wading bird population in the region.

### **State Listed Plant Species**

A review of available information revealed that 48 state listed plant species have the potential to occur within the habitats located within the project area in Polk, Osceola and Orange Counties. No state listed plant species were observed during the field assessment of the project area, though during the previous PD&E Study (May 2000), nodding pinweed was observed along Turkey Lake Road. Improvements to Turkey Lake Road since this study have eliminated the habitat areas that this plant occurred in, and no evidence of the plant was observed during the field surveys in May 2013, March, April, and June 2014, or April and May 2015. Therefore, the proposed project is not likely to adversely affect state listed plant species

#### **5.7.4 Archaeological and Historical Resources**

A Cultural Resource Assessment Survey (CRAS) in support of proposed improvements to I-4 from west of CR 532 to west of SR 528 (Beachline Expressway) in Osceola and Orange Counties, Florida was conducted to comply with Section 106 of the National Historic Preservation Act (as amended) and its implementing regulation 36 CFR Part 800 (Protection of Historic Properties). All work was performed in accordance with Part 2, Chapter 12, of the Florida Department of Transportation (FDOT) PD&E Manual (revised January 1999) and the Cultural Resource Management Handbook (revised November 2004) and is consistent with the Florida Division of Historical Resources (FDHR) recommendations for such projects as stipulated in the FDHR's *Cultural Resource Management*



*Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals.* The CRAS study also complies with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code.

The CRAS serves as an addendum to the 1998 report titled *I-4 (S.R. 400) Project Development and Environmental Study from C.R. 532 (Osceola-Polk Line Road) to S.R. 528 (Beeline Expressway) in Osceola and Orange Counties, Florida* (Florida Master Site File [FMSF] Survey No. 5287, ACI 1998). The regional prehistory and history of the current project area are consistent with those described in the previous report and are not repeated. The purpose of this survey is to update the previous I-4 corridor study, which involves locating, identifying, and bounding archaeological resources within proposed pond locations and updating the inventory of historic structures and potential districts within the project Area of Potential Effect (APE). Resources identified in the APE were assessed for their potential for listing in the National Register of Historic Places (NRHP).

The APE is defined as the area within which the roadway improvements and subsequent maintenance may have physical, visual, audible or atmospheric effects on historic properties. The APE as defined for this project includes the existing right-of-way along I-4 and was extended to the back or side property lines of parcels adjacent to the corridor, limited to a distance of no more than 100 meters (330 feet) from the proposed right-of-way. The APE also includes the proposed pond footprints plus a 100-foot buffer. Archaeological survey was conducted within the proposed pond footprints, and the architectural study included the entire APE.

The archaeological field investigations consisted of pedestrian surface inspections and the excavation of 120 shovel tests within the footprint of the proposed ponds. One lithic flake was recovered in Pond 142B. The heat-treated flake (0.88 grams) appears to be a medial-distal fragment of coastal plain chert. This artifact represents the only archaeological occurrence encountered in the Segment 1 APE. No other artifacts were recovered from any of the shovel tests, and no archaeological sites or occurrences were identified. No further archaeological survey is recommended for the proposed ponds. Table 5.9 provides a summary of the results of the archaeological field investigations.

**Table 5.9: Results of Phase I Archaeological Survey of Proposed Ponds for the I-4 Segment 1**

Pond	Size (Acres)	Shovel Tests	Comment/Condition	Results
FPC 100	5.47	10	New/proposed pond	No archaeological sites or cultural material
FPC 101A	2.39	4	New/proposed pond	No archaeological sites or cultural material
FPC 102	2.36	3	New/proposed pond	No archaeological sites or cultural material

Table 5.9: Results of Phase I Archaeological Survey of Proposed Ponds for the I-4 Segment 1

Pond	Size (Acres)	Shovel Tests	Comment/Condition	Results
FPC 103A	1.47	8	New/proposed pond	One previously recorded archaeological site; no evidence identified during survey
FPC 103B	1.38	4	New/proposed pond	One previously recorded archaeological site; no evidence identified during survey
FPC 105A	11.39	18	New/proposed pond	No archaeological sites or cultural material
FPC 109	10.06	0	Existing borrow pit-no change	No archaeological sites or cultural material
FPC 114A	2.02	0	Existing pond-no change	No archaeological sites or cultural material
FPC 114B	2.79	0	Existing pond-no change	No archaeological sites or cultural material
FPC 114C	3.55	0	New/proposed pond	No archaeological sites or cultural material
FPC 132	2.00	0	New/proposed pond	No archaeological sites or cultural material
FPC 133	2.38	0	New/proposed pond	No archaeological sites or cultural material
FPC 138	1.81	0	New/proposed pond	No archaeological sites or cultural material
FPC 141	1.05	5	New/proposed pond	No archaeological sites or cultural material
Pond 100	5.62	0	Expand existing Pond	No archaeological sites or cultural material
Pond 101A	0.49	3	Reconfigure existing pond	No archaeological sites or cultural material
Pond 101B	0.25	0	New/proposed pond	No archaeological sites or cultural material
Pond 101C	0.37	1	New/proposed pond	No archaeological sites or cultural material
Pond 101D	1.17	1	Expand existing Pond	No archaeological sites or cultural material
Pond 101E	2.03	3	New/proposed pond	No archaeological sites or cultural material
Pond 101F	0.30	0	New/proposed pond	No archaeological sites or cultural material
Pond 101G	0.90	3	New/proposed pond	No archaeological sites or cultural material
Pond 102	6.50	0	Existing pond-no change	One previously recorded archaeological site; no evidence identified during survey



**Table 5.9: Results of Phase I Archaeological Survey of Proposed Ponds for the I-4 Segment 1**

<b>Pond</b>	<b>Size (Acres)</b>	<b>Shovel Tests</b>	<b>Comment/Condition</b>	<b>Results</b>
Pond 103	5.09	3	Expand/Regrade existing pond	One previously recorded archaeological site; no evidence identified during survey
Pond 104	5.16	0	Existing pond-no change	One previously recorded archaeological site; no evidence identified during survey
Pond 105A	4.84	2	Regrade existing pond	No archaeological sites or cultural material
Pond 105B	2.75	1	Reduce/Regrade existing pond	No archaeological sites or cultural material
Pond 106A	2.69	0	Reduce/Regrade existing pond	No archaeological sites or cultural material
Pond 106B	1.70	0	Expand/Regrade existing pond	No archaeological sites or cultural material
Pond 107	2.72	0	Existing pond-no change	One previously recorded archaeological site; no evidence identified during survey
Pond 108A	3.84	0	Reduce/Regrade existing pond	No archaeological sites or cultural material
Pond 108B	1.97	2	New/proposed pond	One previously recorded archaeological site; no evidence identified during survey
Pond 109	5.81	7	Expand Existing Pond	One previously recorded archaeological site; no evidence identified during survey
Pond 110	22.74	0	Expand Existing Pond	No archaeological sites or cultural material
Pond 111	3.39	0	Existing pond-no change	No archaeological sites or cultural material
Pond 112A	3.98	0	Regrade existing pond	No archaeological sites or cultural material
Pond 112B	3.67	0	Regrade existing pond	No archaeological sites or cultural material
Pond 112C	2.99	0	Regrade existing pond	No archaeological sites or cultural material
Pond 112D	1.64	0	Regrade existing pond	No archaeological sites or cultural material
Pond 112E	2.35	0	Regrade existing pond	No archaeological sites or cultural material
Pond 113A	0.51	0	Regrade existing pond	No archaeological sites or cultural material
Pond 113B	1.32	0	Regrade existing pond	No archaeological sites or cultural material

Table 5.9: Results of Phase I Archaeological Survey of Proposed Ponds for the I-4 Segment 1

Pond	Size (Acres)	Shovel Tests	Comment/Condition	Results
Pond 113C	3.17	0	Regrade existing pond	No archaeological sites or cultural material
Pond 113D	1.88	0	Regrade existing pond	No archaeological sites or cultural material
Pond 113E	0.26	0	New/proposed pond	No archaeological sites or cultural material
Pond 113F	0.81	0	New/proposed pond	No archaeological sites or cultural material
Pond 113G	1.29	0	Expand/Regrade existing pond	No archaeological sites or cultural material
Pond 114A	2.34	0	Existing pond-no change	No archaeological sites or cultural material
Pond 114B	1.80	0	Existing pond-no change	No archaeological sites or cultural material
Pond 115	5.19	0	Existing pond-no change	No archaeological sites or cultural material
Pond 116	1.23	0	Existing pond-no change	No archaeological sites or cultural material
Pond 117	2.78	0	Existing pond-no change	No archaeological sites or cultural material
Pond 118	1.51	0	Regrade existing pond	No archaeological sites or cultural material
Pond 119A	2.05	0	Regrade existing pond	No archaeological sites or cultural material
Pond 119B	1.18	0	Regrade existing pond	No archaeological sites or cultural material
Pond 120	1.38	0	Reconfigure existing pond	No archaeological sites or cultural material
Pond 121A	3.20	0	Existing pond-no change	No archaeological sites or cultural material
Pond 121B	2.52	0	Regrade existing pond	No archaeological sites or cultural material
Pond 122A	0.64	0	New/proposed pond	No archaeological sites or cultural material
Pond 122B	5.21	0	Regrade existing pond	No archaeological sites or cultural material
Pond 122C	1.19	0	New/proposed pond	No archaeological sites or cultural material
Pond 123	3.44	0	Regrade existing pond	No archaeological sites or cultural material
Pond 124	2.89	0	Regrade existing pond	No archaeological sites or cultural material



**Table 5.9: Results of Phase I Archaeological Survey of Proposed Ponds for the I-4 Segment 1**

<b>Pond</b>	<b>Size (Acres)</b>	<b>Shovel Tests</b>	<b>Comment/Condition</b>	<b>Results</b>
Pond 125	2.92	0	Regrade existing pond	No archaeological sites or cultural material
Pond 126	2.54	0	Regrade Existing Pond	No archaeological sites or cultural material
Pond 127	5.17	0	Existing pond-no change	No archaeological sites or cultural material
Pond 128A	1.56	0	Regrade existing pond	No archaeological sites or cultural material
Pond 128B	4.00	0	Existing pond-no change	No archaeological sites or cultural material
Pond 129	2.27	0	Existing pond-no change	No archaeological sites or cultural material
Pond 130	6.35	3	Reduce existing pond	No archaeological sites or cultural material
Pond 130A	10.26	1	New/proposed pond	No archaeological sites or cultural material
Pond 131A	1.22	0	Regrade existing pond	No archaeological sites or cultural material
Pond 131B	7.79	0	Expand existing pond	No archaeological sites or cultural material
Pond 132	9.01	0	Regrade existing pond	No archaeological sites or cultural material
Pond 133	11.31	0	Regrade existing pond	No archaeological sites or cultural material
Pond 134	7.22	4	Regrade existing pond	No archaeological sites or cultural material
Pond 135	6.96	0	New/proposed pond	No archaeological sites or cultural material
Pond 136A	3.88	3	Expand existing pond	No archaeological sites or cultural material
Pond 136B	3.85	2	New/proposed pond	No archaeological sites or cultural material
Pond 137	4.70	4	New/proposed pond	No archaeological sites or cultural material
Pond 137A	6.05	0	Reconfigure existing pond	No archaeological sites or cultural material
Pond 137B	0.93	0	Reconfigure existing pond	No archaeological sites or cultural material
Pond 138	2.55	1	New/proposed pond	No archaeological sites or cultural material
Pond 138A	4.68	0	New/proposed pond	No archaeological sites or cultural material

**Table 5.9: Results of Phase I Archaeological Survey of Proposed Ponds for the I-4 Segment 1**

Pond	Size (Acres)	Shovel Tests	Comment/Condition	Results
Pond 138B	14.57	1	New/proposed pond	No archaeological sites or cultural material
Pond 139A	1.79	3	Expand existing pond	No archaeological sites or cultural material
Pond 139B	2.14	4	Expand existing pond	No archaeological sites or cultural material
Pond 140	2.36	2	Expand existing pond	No archaeological sites or cultural material
Pond 142B	6.80	14	New/proposed pond	One archaeological occurrence; ineligible for NRHP
Orange County Pond	9.36	0	Reduce existing pond	No archaeological sites or cultural material
<b>Total</b>	<b>335.11</b>	<b>120</b>		

The architectural survey resulted in the identification of one historic structure, one historic cemetery, and one linear resource constructed before 1971 located within Segment 1 of the I-4 APE as shown in Figure 5.36 and Figure 5.37 and listed in Table 5.10. The Oak Hill Baptist Church Cemetery (8OS01925) was a previously recorded resource. 900 Scott Lane (8PO07762) and the Florida Midland Railroad (8OR10235) are newly recorded resources. The identified historic resources were evaluated to determine their significance and potential for listing in the NRHP. All three historic resources within the I-4 Segment 1 APE lack the architectural distinction and significant historical associations necessary to be considered for listing in the NRHP and are recommended ineligible. No potential NRHP districts were identified due to the lack of concentration of historic structures.

FSMF data indicates that three previously recorded structures (8OS00153, 8OS01926, and 8OR09607) are located within the project APE; however, the field survey confirmed that Resource 8OS00153 (Homely Cow Dip, 400 Celebration Place), 8PO01926 (1525 Kemp Road), and 8OR09607 (+/- 11001 Turkey Lake Road) have been removed or demolished. Resource 8OS00153, Homely Cow Dip, was most likely demolished during the construction of a hospital currently located at 400 Celebration Place, 8PO01926, 1525 Kemp Road, was likely demolished or removed during the construction of a nearby office building, and 8OS00153, +/- 11001 Turkey Lake Road, was likely demolished or removed during the construction of Palm Parkway in Orange County.

FMSF data also indicated that four previously recorded historic resources (8OR06192-8OR006195) were within the current I-4 Segment 1 APE; however, the architectural field survey indicated that all four resources lie to the northwest and outside of the APE. No additional documentation of these structures was warranted.



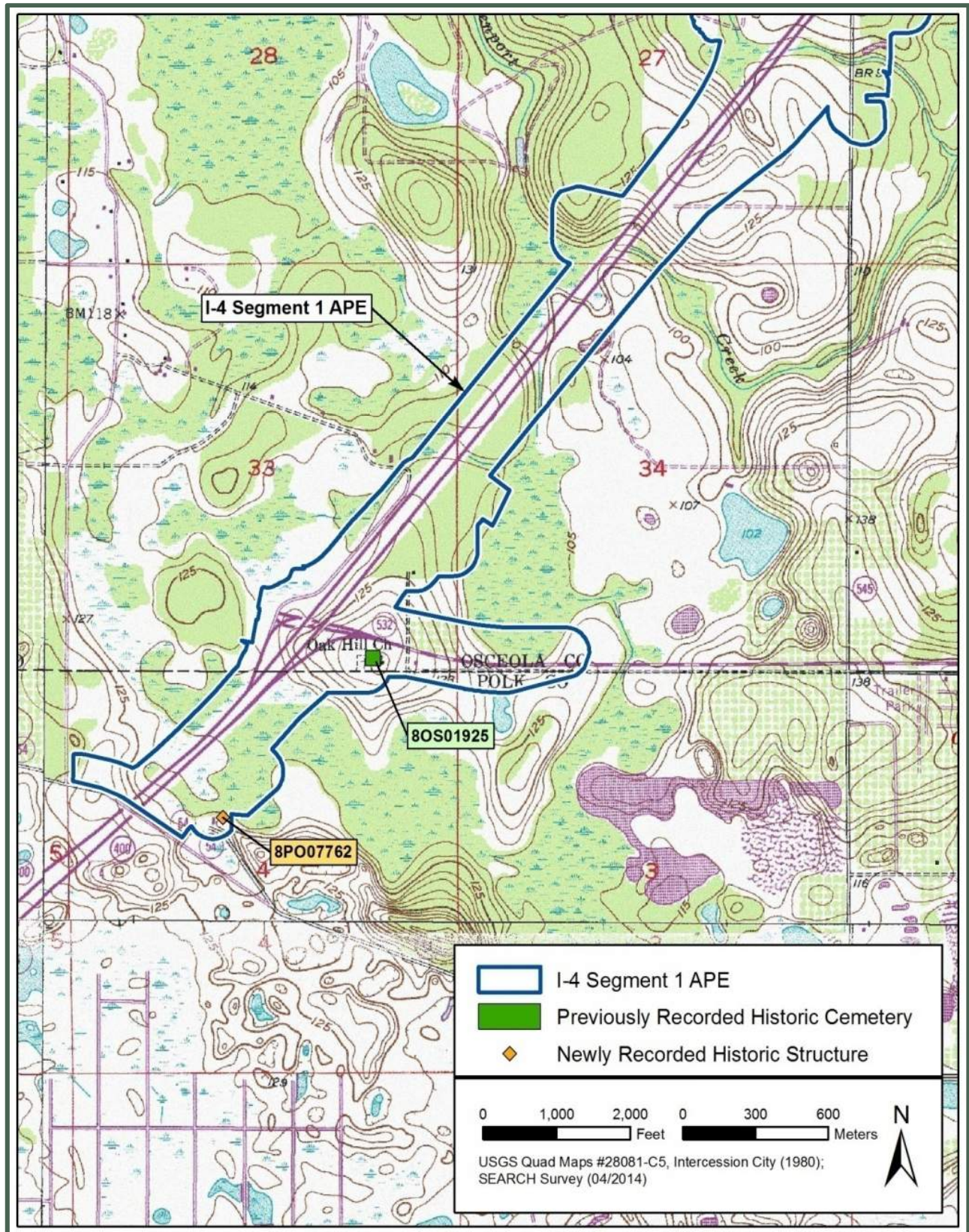


Figure 5.36 – Recorded Historic Resources within I-4 Segment 1 APE (Sheet 1 of 2)



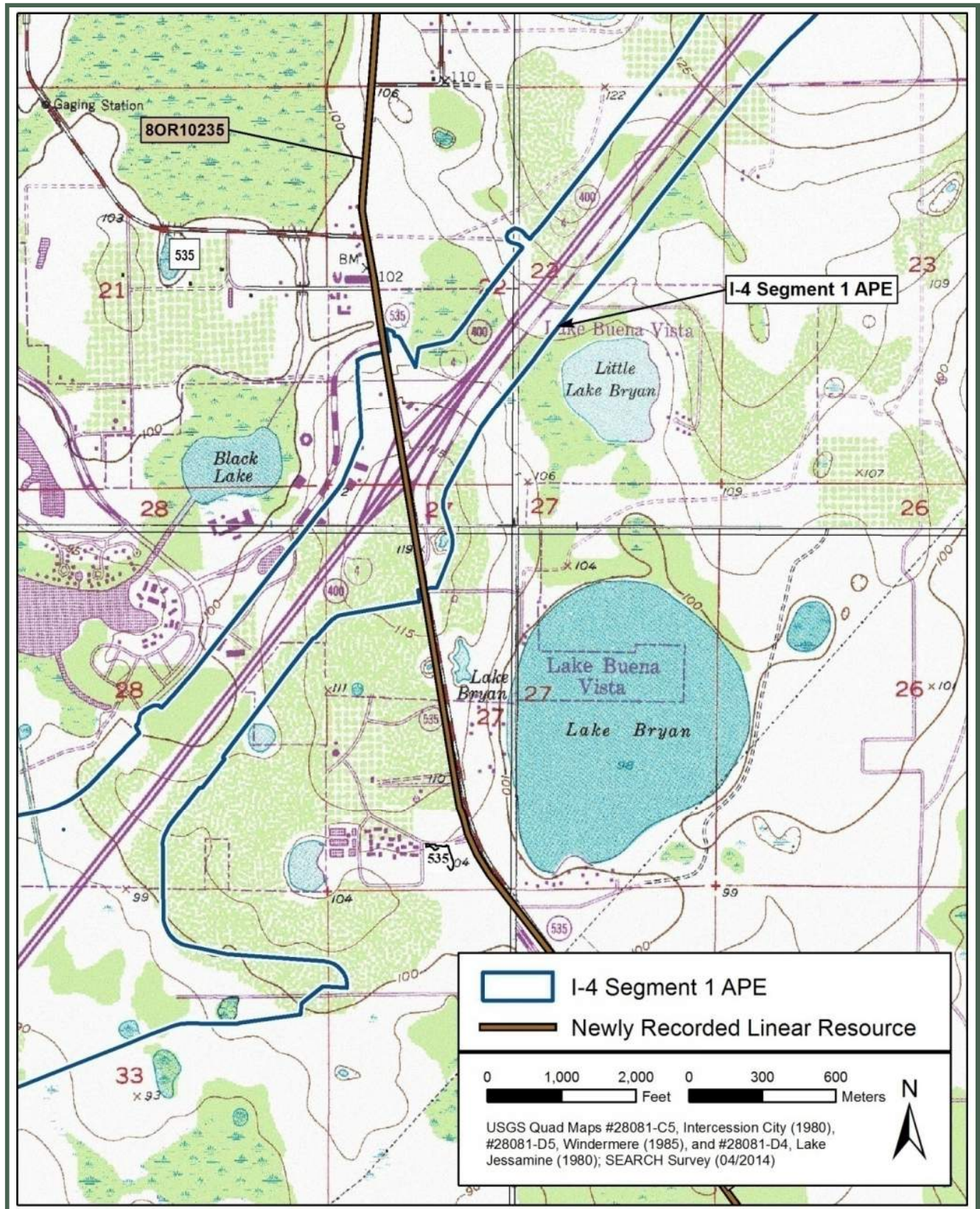


Figure 5.37 – Recorded Historic Resources within I-4 Segment 1 APE (Sheet 2 of 2)



**Table 5.10 - Historic Resources Recorded within the I-4 Segment 1 APE**

FMSF No.	Original/Update	Address	Architectural Style	Build Date	NRHP Status
8OS01925	Update	8060 Osceola-Polk Line Road	Cemetery	ca. 1902	Not eligible
8PO07762	Original	900 Scott Lane	Masonry Vernacular	ca. 1967	Not eligible
8OR10235	Original	Florida Midland Railroad	Railroad	ca. 1890	Not eligible

In addition to the aforementioned historic resources constructed prior to 1971, the Polk, Osceola and Orange Counties Property Appraiser's records were examined, which indicated that 51 structures that date from 1971 to 1974 are located within the APE. Depending on the progression of the project (i.e., how much time elapses between the current study and the eventual design/construction of the project), it may become necessary to inventory and assess these resources. The FDOT commits to documenting any structures that reach historic status prior to project completion as part of a supplemental CRAS. Detailed evaluation of the cultural resources within the study area, including survey methodology, previously recorded resources and FMSF documentation are provided in the supplementary report, *Technical Memorandum: Cultural Resource Assessment Survey of Proposed Improvements to Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) (April 2016)*, prepared for this project.

### 5.7.5 Contamination

A *Contamination Screening Evaluation Report (July 2016)* has been completed for the I-4 Segment 1 corridor and proposed pond sites. A Contamination Screening Evaluation Report (CSER) is used to determine the likelihood of petroleum or other hazardous substance impacts to the project. The CSER, completed in accordance with Chapter 22 (January 17, 2008 revision) of the PD&E Manual contains results from a physical site investigation of the project corridor, a limited investigation of properties along the corridor adjacent to the right-of-way as viewed from areas of public access, a review of Florida Department of Environmental Protection (FDEP) files, Polk, Osceola and Orange County records and available environmental databases.

As part of the CSER, a review of the Florida Department of Environmental Protection (FDEP) Oculus Database was conducted to determine locations of contaminated sites followed by visual inspection of properties adjacent to the corridor and properties within 1/2 mile of the roadway. Known contamination sites and properties with potential contamination were identified and assigned a risk rating based on the degree of concern for potential contamination problems. A total of eighty-six

(86) sites or properties within 1/2 mile of the current I-4 right-of-way and proposed pond sites were identified by searches in the FDEP contamination database or by field inspections. Of these sites, one (1) had a high risk rating, seven (7) had a medium risk rating and the remaining seventy-eight (78) sites identified received a no risk or low risk rating. It is recommended that any excavation, demolition or dewatering activities within or adjacent to any of the identified medium risk sites should require soil and groundwater testing before construction. The 86 identified sites/properties within 1/2 mile of the existing I-4 right-of-way and the proposed pond sites and their corresponding risk rating are shown on Figure 5.38 through Figure 5.42.

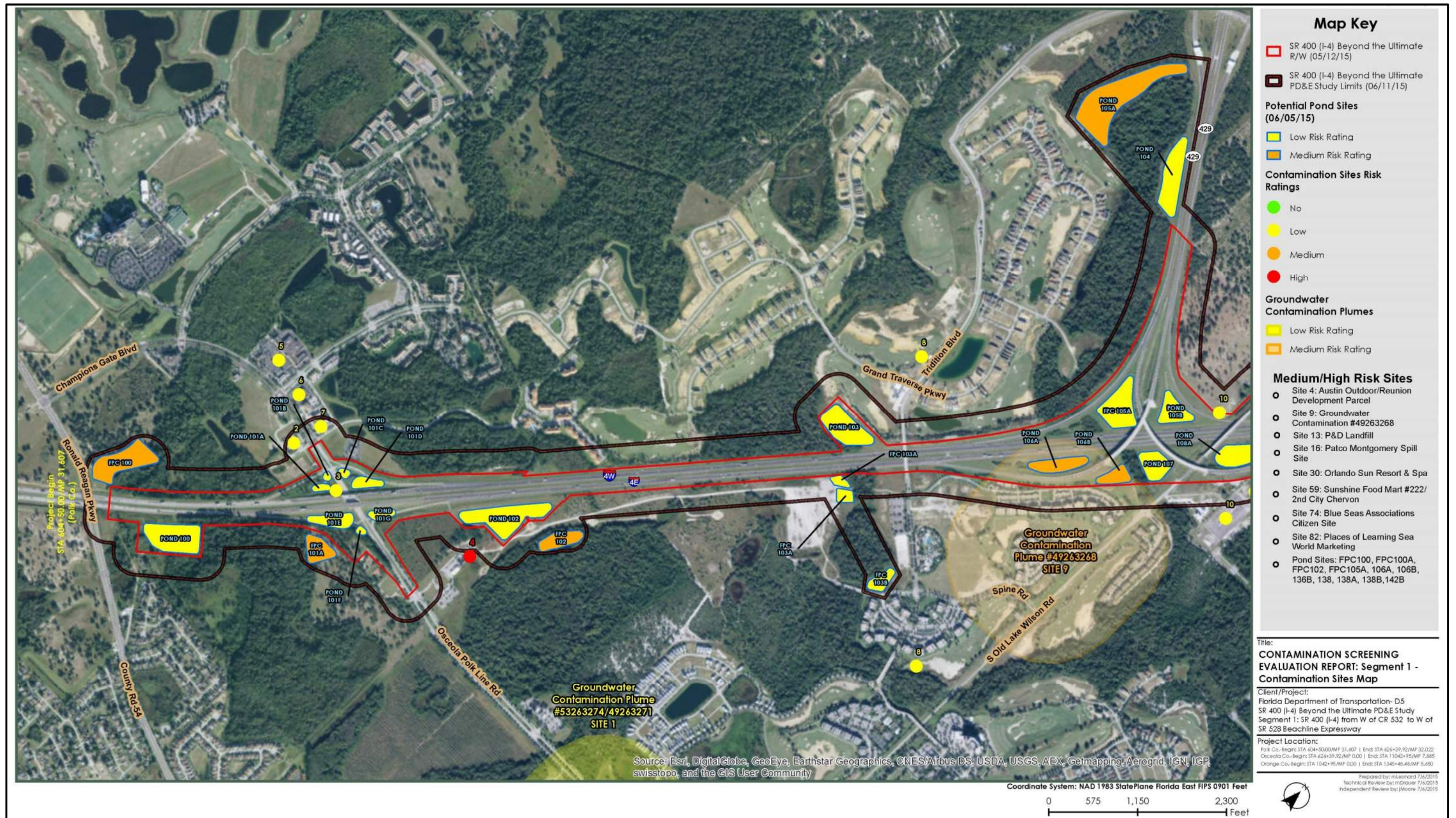
Pond sites were inspected via pedestrian transects and rated for their potential to have contamination. A total of eighty-nine (89) pond sites (87 recommended sites, 2 alternative sites) were evaluated. Of these, eleven (11) pond sites (FPC 100, FPC 101A, FPC 102, FPC 105A, 106A, 106B, 136B, 138, 138A, 138B and 142B) were given medium risk ratings and the remaining seventy-eight (78) were given a low risk rating.

Three sites were identified as groundwater contamination plumes of ethylene dibromide (EDB) and encompass a portion of one (1) listed contamination site and Pond Sites 106A and 106B. The contamination site was given a low risk rating based on its distance from the right-of-way, but both pond sites were given a medium risk rating. In addition to the contamination plumes, discarded debris such as paint cans and fire extinguishers were discovered at Pond Site 136B, which was also given a medium risk rating.

Based on historic aerials, land use in the area before the construction of I-4 consisted of natural vegetation, rural citrus groves, and some pasture land. Potential contamination impacts from these activities include additional EDB contamination from the citrus groves, pesticide/herbicide/fertilizer and potentially petroleum contamination from the citrus production or farm equipment, and arsenic contamination from potential cattle dips associated with the pastures. However, the existence, exact location and severity of these potential sources of contamination are mostly unknown.

All bridges and other structures which will require possible demolition or retrofit should be tested for asbestos containing materials, lead-based paint or any other hazardous materials prior to construction. Should any parcels containing medical facilities, doctor offices, hospitals or drug stores be acquired, they should be tested for asbestos, lead-based paint, x-ray equipment, lead-lined walls, chemicals and pharmaceuticals prior to demolition. FDOT commits to conducting Level II Contamination Screenings on all Medium and High Risk Rated sites before establishing a final determination. This will include investigating previous PD&E Studies and Design Projects covering the project area and its surroundings.





**Figure 5.38 – Potential Contamination Sites (Sheet 1 of 5)**



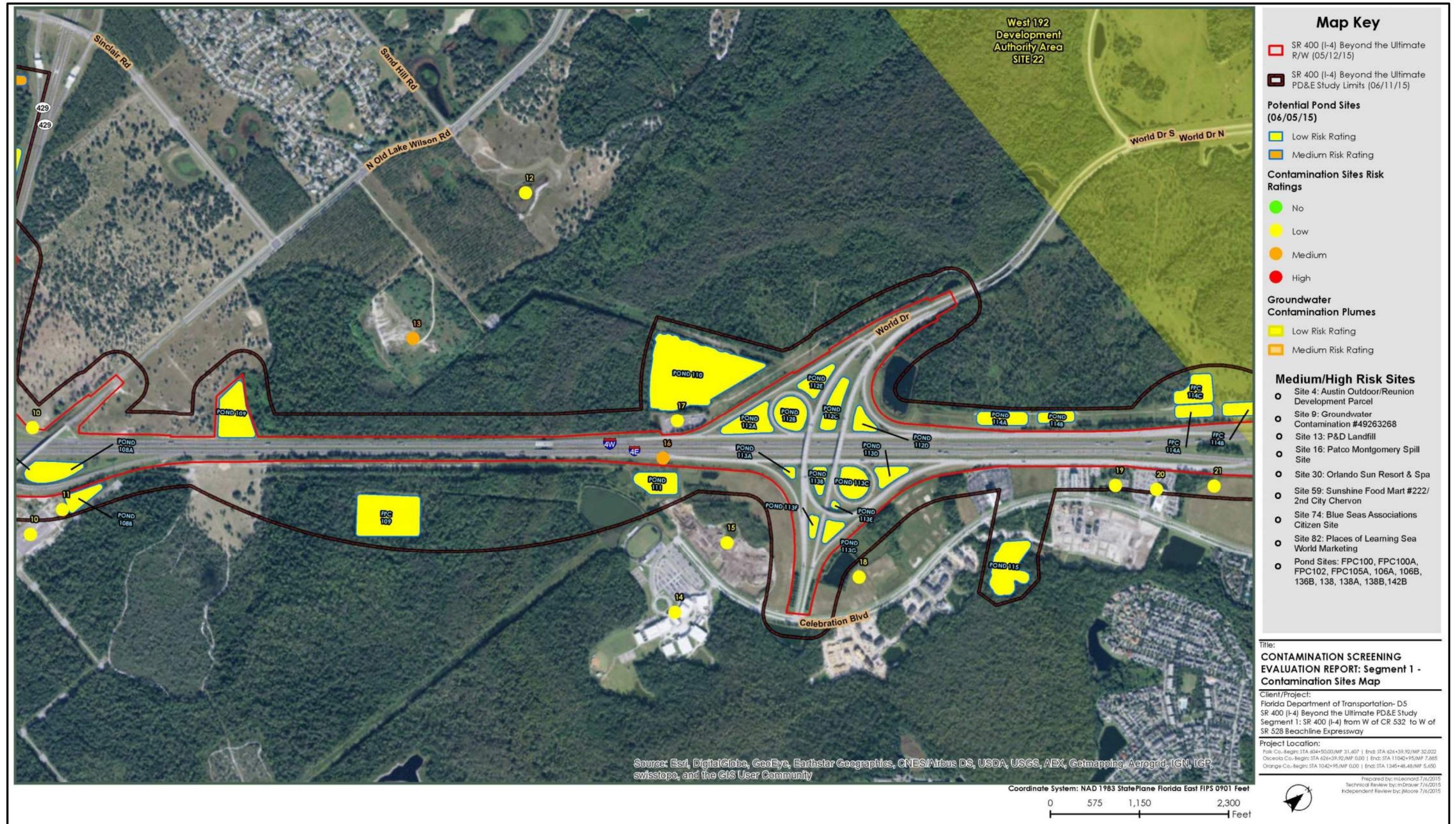
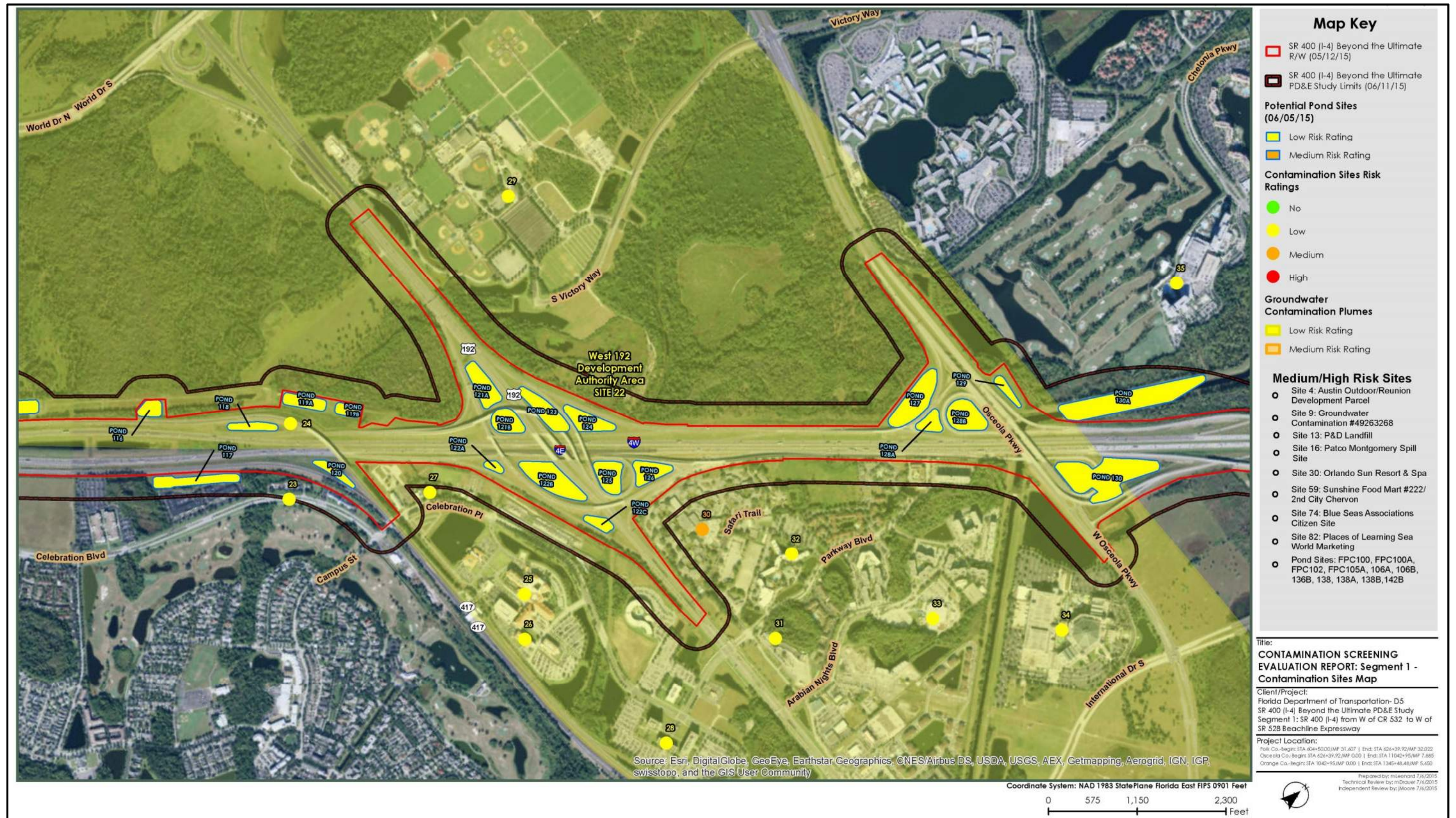


Figure 5.39 – Potential Contamination Sites (Sheet 2 of 5)







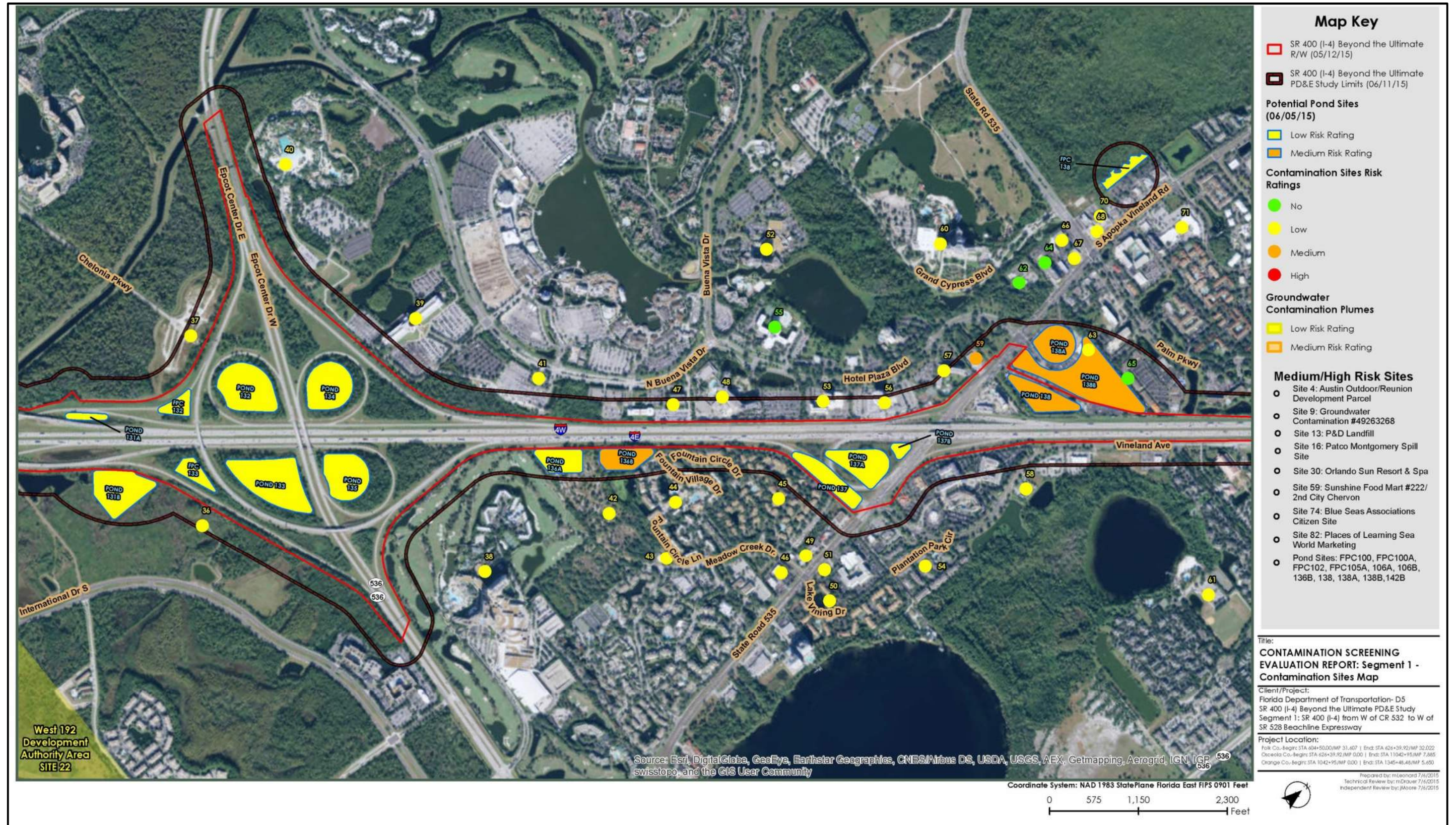


Figure 5.41 – Potential Contamination Sites (Sheet 4 of 5)



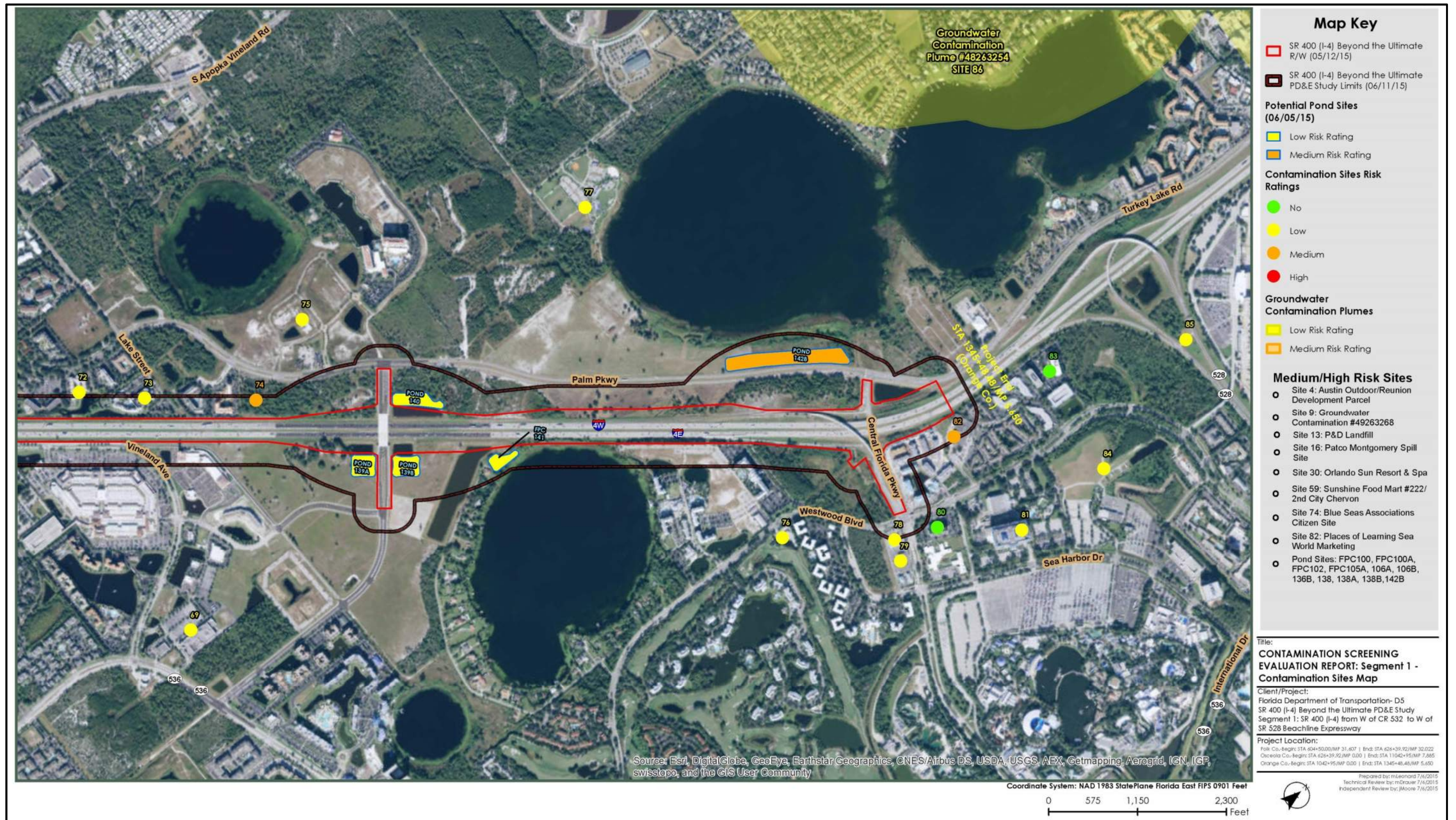


Figure 5.42 – Potential Contamination Sites (Sheet 5 of 5)



### 5.7.6 Noise

A noise study report was completed based on the procedures established in Part 2, Chapter 17, "Noise," of the FDOT PD&E Manual to determine if noise levels will be likely to increase, if noise-sensitive receivers are (or will be) within the project area and, if noise impacts will occur. If future design year noise levels at noise sensitive receptors approach, meet or exceed the Noise Abatement Criteria established by the Federal Highway Administration (FHWA) in 23 CFR 772 or increase 15 dB(A) over existing noise levels as a direct result of the transportation improvement project, noise abatement must be considered. The FHWA's Traffic Noise Modeling (TNM) Version 2.5 computer program was used to determine if noise abatement was warranted and if so, considered reasonable and feasible for any noise-sensitive sites. Feasibility deals with engineering considerations such as the ability to construct a barrier using standard construction techniques and methods to provide a reduction of at least 5 dBA to an impacted receptor site. Reasonableness factors include the achievement of the noise reduction design goal (7 dBA for at least one receptor per FDOT criteria), cost effectiveness of the noise abatement measure and consideration of the viewpoints of the benefited property owners and residents. A benefited receptor is defined as a noise sensitive site that will obtain a minimum of 5 dBA of noise reduction as a result of a specific noise abatement measure whether or not it is predicted as having a noise impact.

The I-4 Segment 1 project corridor was divided into geographic noise sensitive areas to facilitate the analysis of traffic related noise impacts. Seventeen Noise Sensitive Areas (NSA) that have the potential to be impacted by the project were identified. Based upon the analysis conducted, three noise barriers are recommended for further consideration for I-4 Segment 1. For NSA B, a 22-foot tall, 619-foot long ground mounted barrier provides the best noise abatement and meets the requirements as reasonable and feasible. For NSA P, a 22-foot tall, 489-foot long ground mounted barrier provides the best noise abatement and meets the requirements as reasonable and feasible and for NSA Q, an 18-foot tall, 1,223-foot long ground mounted barrier provides the best noise abatement and meets the requirements as reasonable and feasible. The noise sensitive areas and benefited receiver areas are shown on the noise barrier analysis maps in Figure 5.43 through Figure 5.52. Detailed analyses including noise abatement criteria, traffic data for noise modeling and barrier analysis calculations are provided in the supplemental, *Noise Study Report Segment 1: from west of CR 532 (Polk/Osceola County Line) to west of SR 528 Beachline Expressway (July 2016)*, prepared for this project.



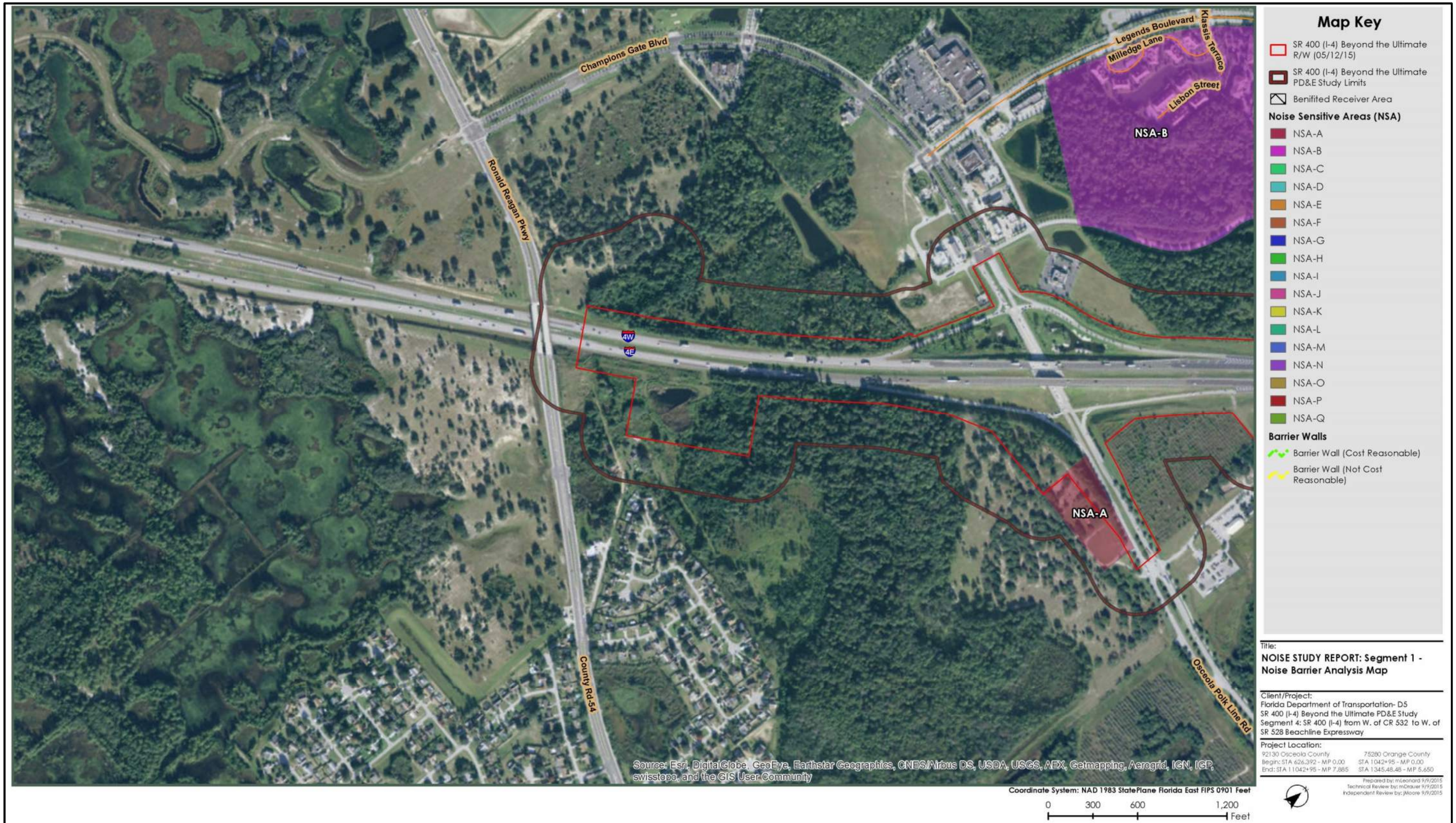


Figure 5.43 – Noise Barrier Analysis Map (Sheet 1 of 10)



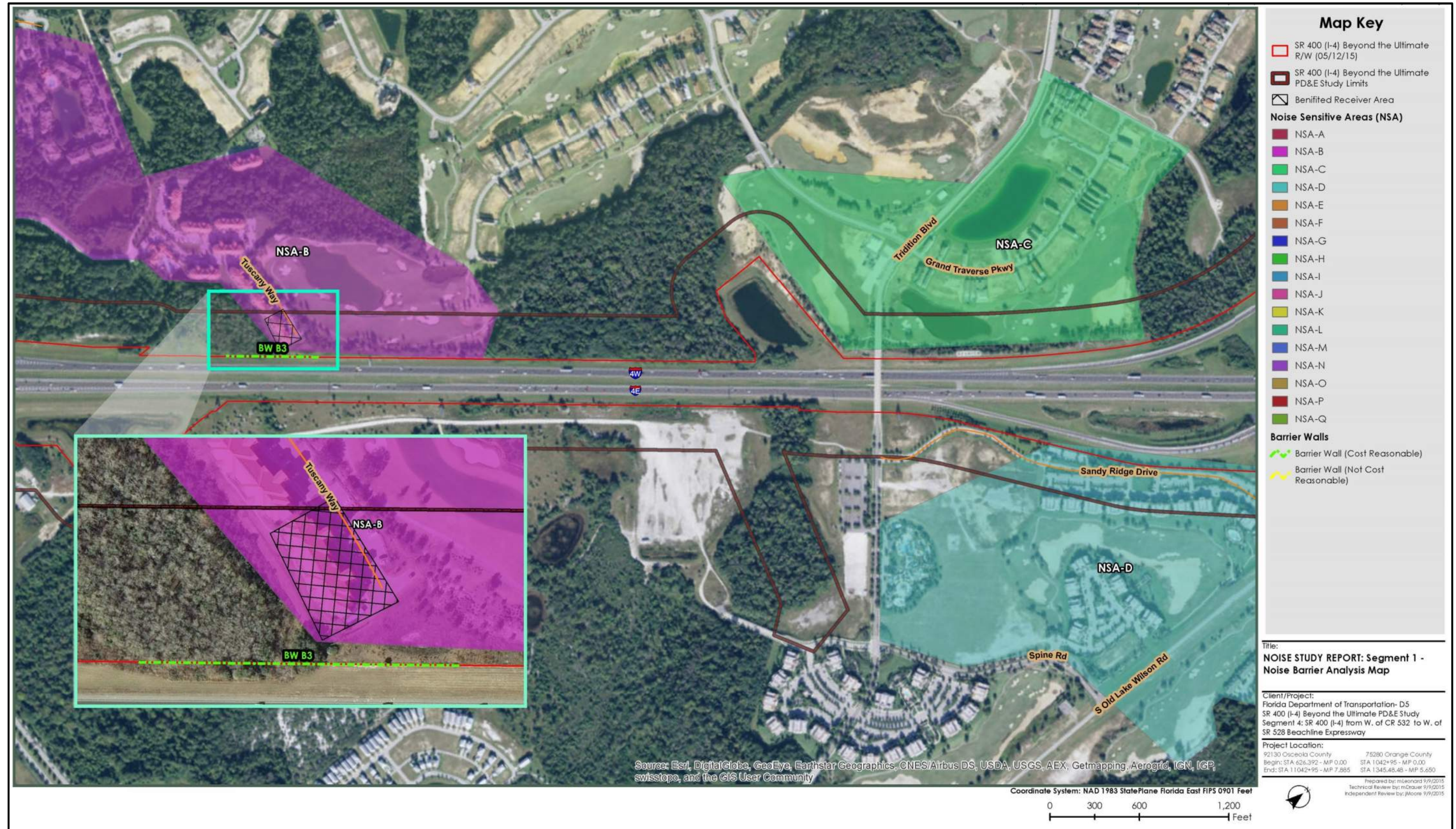


Figure 5.44 – Noise Barrier Analysis Map (Sheet 2 of 10)



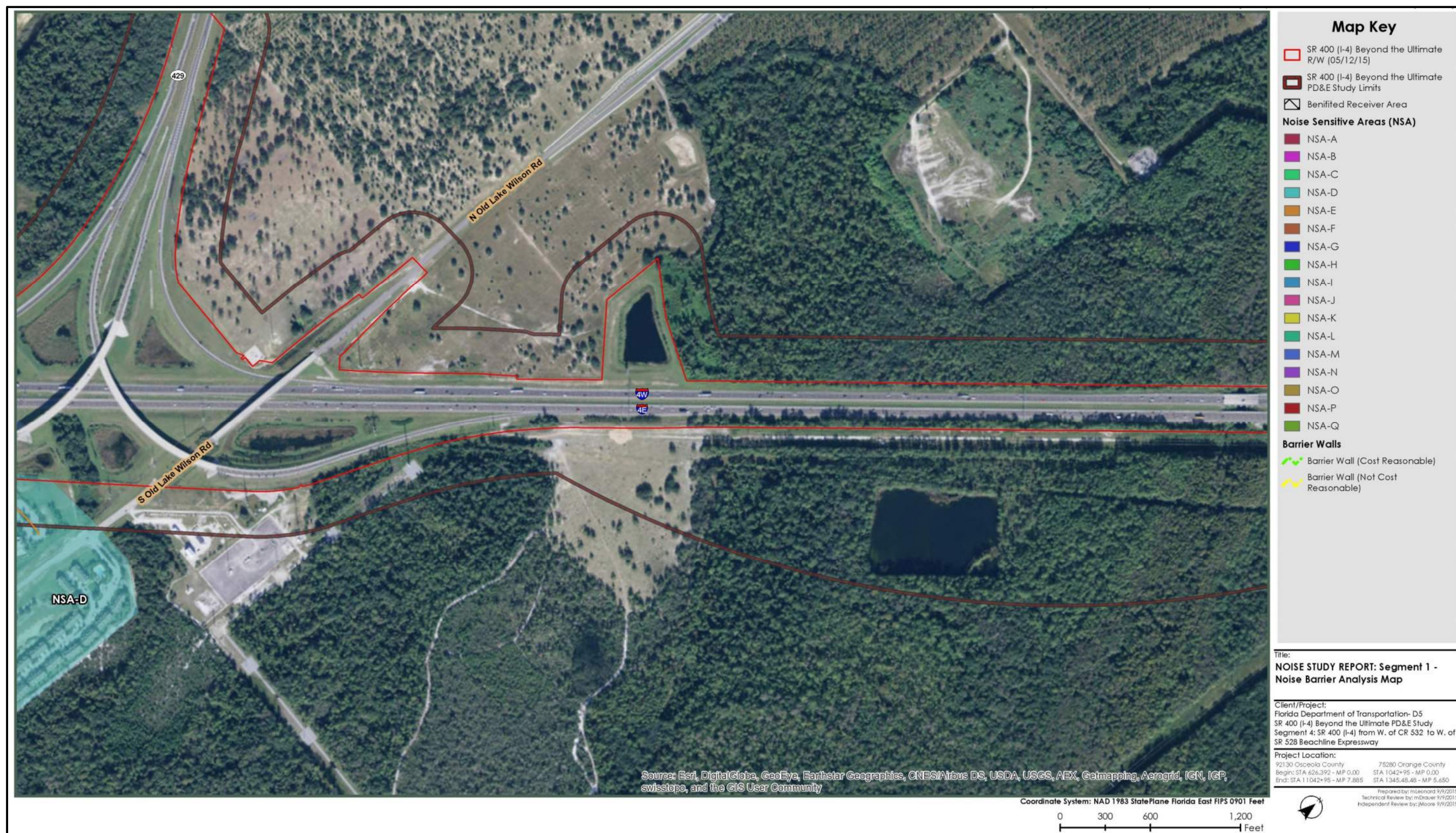


Figure 5.45 – Noise Barrier Analysis Map (Sheet 3 of 10)





Figure 5.46 – Noise Barrier Analysis Map (Sheet 4 of 9)



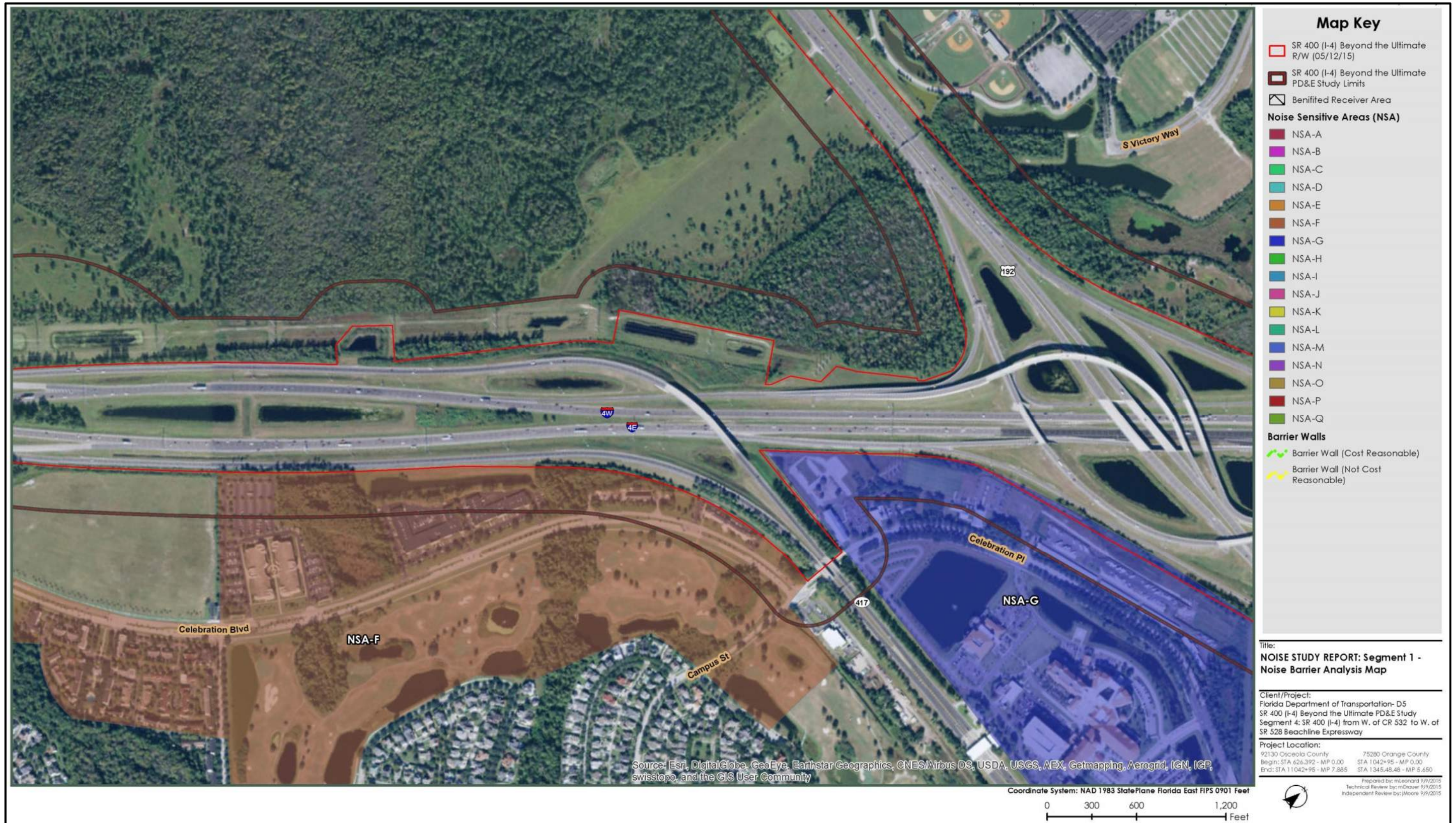


Figure 5.47 – Noise Barrier Analysis Map (Sheet 5 of 10)



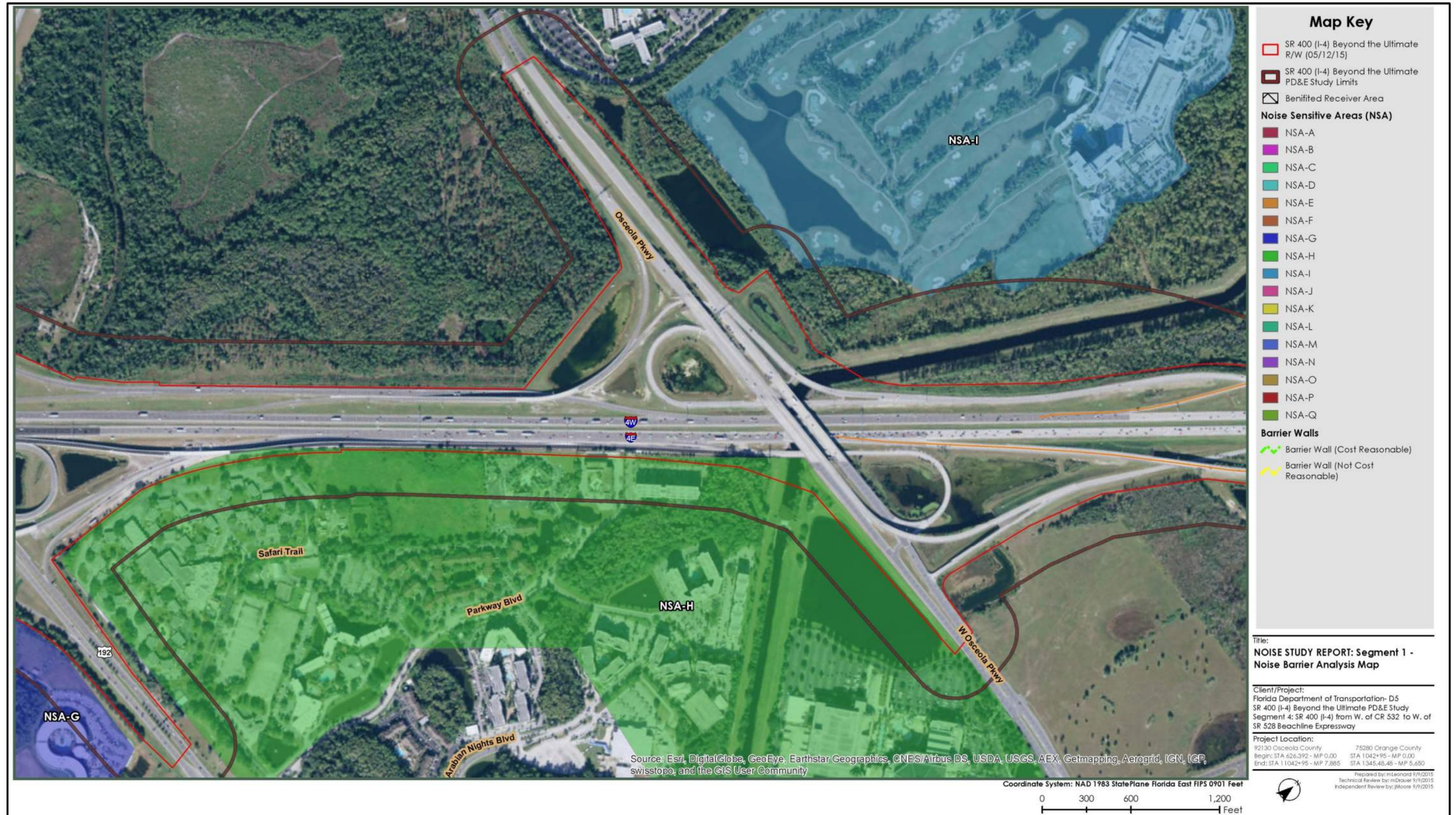


Figure 5.48 – Noise Barrier Analysis Map (Sheet 6 of 10)





Figure 5.49 – Noise Barrier Analysis Map (Sheet 7 of 10)



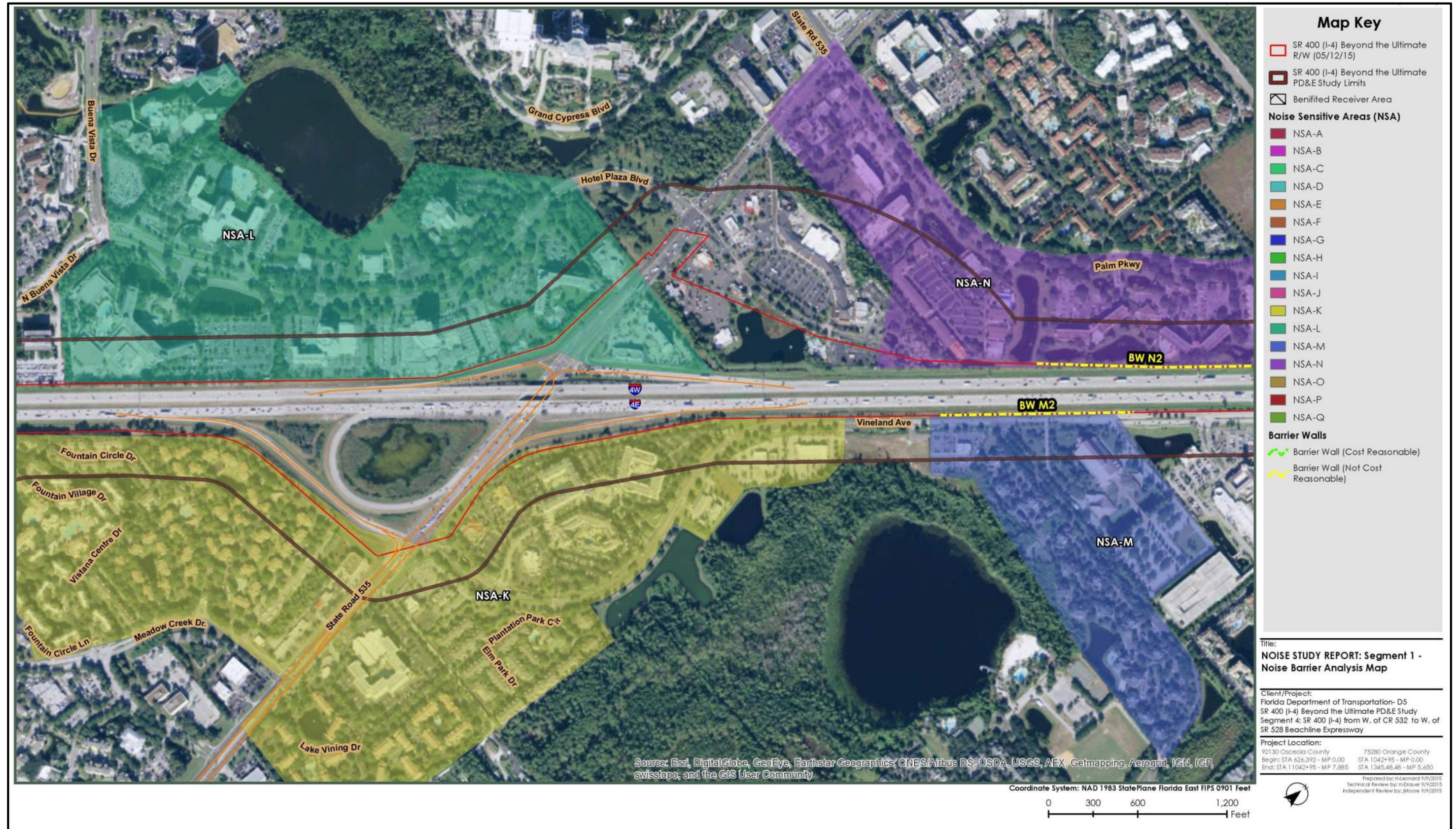


Figure 5.50 – Noise Barrier Analysis Map (Sheet 8 of 10)



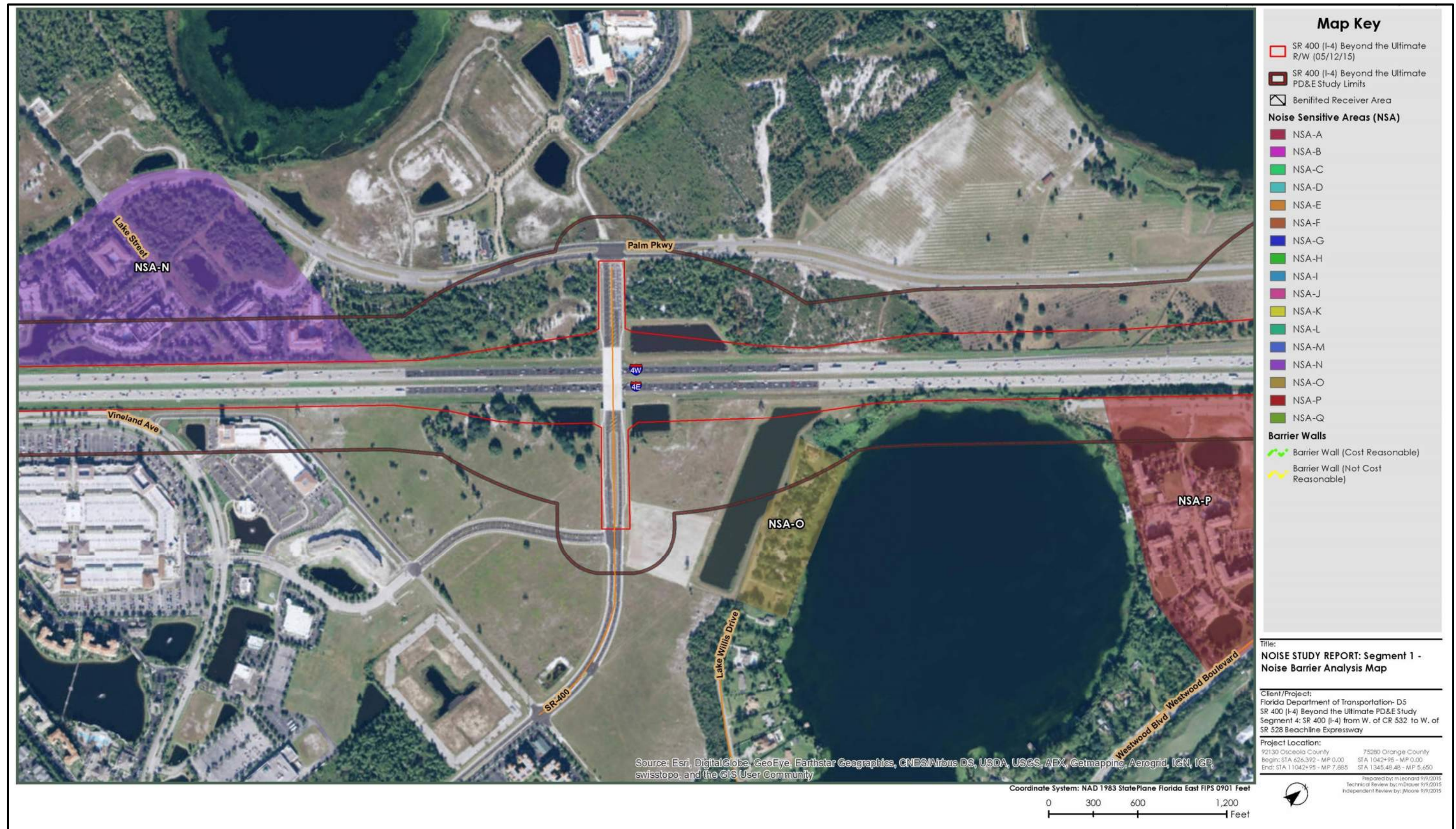


Figure 5.51 – Noise Barrier Analysis Map (Sheet 9 of 10)





Figure 5.52 – Noise Barrier Analysis Map (Sheet 10 of 10)



Construction activities for any of the proposed improvements will have temporary noise impacts for those residents and travelers within the immediate vicinity of the project. Noise and vibration impacts will be caused by heavy equipment movement and construction activities such as pile driving and vibratory compaction. Noise control measures should be implemented according to the FDOT's Standard Specifications for Road and Bridge Construction to minimize or eliminate some potential construction noise and vibration impacts. Section 335, F.S., exempts FDOT from compliance with local ordinances. FDOT policy is to follow the requirement of local ordinances to the extent that is reasonable. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist will investigate additional methods of controlling these impacts.

### 5.7.7 Air Quality

The proposed project was reviewed for air quality impacts consistent with the guidance provided by the Federal Highway Administration (FHWA). Polk, Osceola and Orange Counties are currently areas that are designated as being *attainment* for the following air pollutants: *ozone, nitrogen dioxide, particulate matter (2.5 microns in size and 10 microns in size), sulfur dioxide, carbon monoxide and lead*.

The project was subjected to a carbon monoxide (CO) screening model that makes various conservative worst-case assumptions related to site conditions, meteorology and traffic. The FDOT's screening model, CO Florida 2012 (released March 12, 2012) uses the latest United States Environmental Protection Agency (USEPA) – approved software (*MOVES 2010a and CAL3QHC2*) to produce estimates of one-hour and eight-hour CO at default air quality receptor locations. The one-hour and eight-hour estimates can be directly compared to the one-hour and eight-hour *National Ambient Air Quality Standards (NAAQS)* for CO that are 35 parts per million (ppm) and 9 parts per million (ppm), respectively.

The roadway intersection forecast to have the highest total approach traffic volume (for both the Build and No-Build scenarios) is the intersection of Palm Parkway and SR 535. However, this intersection is located several intersections away from I-4 and was not used for this analysis. The intersection of Hotel Plaza Boulevard and SR 535 is forecast to have slightly lower total approach traffic volume (for both the No-Build and Build scenarios) than the intersection of Palm Parkway and SR 535. It was selected as the intersection to analyze based on its proximity to I-4 and CO reception sites. The No-Build and Build scenarios for the opening year (2020) and the design year (2040) were evaluated (for design hour volumes).

Estimates of CO were predicted for the default receptors which are located 10 feet to 150 feet from the edge of the roadway. Based on the results from the screening model, the highest project-related CO one-hour and eight-hour levels are not predicted to meet or exceed the one-hour or eight-hour

*National Ambient Air Quality Standards (NAAQS)* for this pollutant with either the Build or No-Build alternatives. As such, the project “passes” the screening model.

The project is located in an area which is designated attainment for all of the *National Ambient Air Quality Standards* under the criteria provided in the *Clean Air Act*. Therefore, the *Clean Air Act* conformity requirements do not apply to the project. Detailed data and analysis are provided in the supplemental report, *Air Quality Analysis Technical Memorandum Segment 1: SR 400 (I-4) from West of CR 532 (Polk/Osceola County Line) to West of SR 528 Beachline Expressway (July 2016)*.

## 5.8 Section 4(f) Lands

In accordance with Section 4(f) of the Department of Transportation (DOT) Act of 1966 [Title 49, USC, Section 1653(f)] amended and codified in Title 49, USC, Section 303, the project was evaluated for potential Section 4(f) resources. Section 4(f) resources consist of publicly owned parks, recreation areas, wildlife refuges and public and private historic and archaeological sites.

The corridor was reviewed and one Section 4(f) property adjacent to the project was identified, Dr. P. Phillips Community Park. While the park is publicly owned (Orange County), no property will be acquired and no change in access, visual impacts, noise, or other impacts are anticipated to occur.

## 5.9 Public Involvement Program

A comprehensive Public Involvement Program (PIP) was initiated as part of this PD&E Study. This program is in compliance with Part 1, Chapter 11 of the FDOT PD&E Manual which details various federal, state and local regulations including Section 339.155, Florida Statutes; Council of Environmental Quality (CEQ) Regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA) and 23 Code of Federal Regulations (CFR) 771.

The public involvement program for I-4 Segment 1 included the publication of newsletters, meetings with government agencies, community outreach meetings, an Alternatives Public Workshop and a formal Public Hearing. A project website, [www.i4express.com](http://www.i4express.com), was also developed to disseminate updated information about the project and allow the public to communicate with the project team and/or provide comments.

### Alternatives Public Workshop

The Alternatives Public Workshop was held on Thursday, June 17, 2014, from 5:30 p.m. to 7:30 p.m. at the Radisson Resort, Orlando-Celebration located at 2900 Parkway Boulevard, Kissimmee, FL 34747. An invitational letter was mailed to property owners located within at least 300 feet on either side of the current project corridor, public officials, organizations and individuals interested in the project. An advertisement was placed in the Orlando Sentinel (full circulation) and a press release was distributed by FDOT to local media outlets. The Alternatives Public Workshop was held in an



open house format with project display boards and an automated presentation which gave an overview of the proposed project, including a summary of the engineering and environmental considerations in development of the proposed alternatives. Thirty-eight (38) citizens and nine (9) project team members signed in at the public meeting. Project team attendees included the FDOT Project Manager, staff from FDOT Right-of-way and Environmental Management Offices, and the project consultants. Public comment forms were made available to attendees; however, no written comments were received during or after the meeting. Verbal comments/questions received during the public meeting consisted of general project and schedule questions. No opposition against the project was received during the meeting.

Several additional meetings were held to discuss the proposed project improvements and PD&E study, as follows.

- Florida's Turnpike Enterprise (FTE) Coordination Meeting (May 2, 2014) – Discussion on proposed improvement concepts for SR 417 & SR 429 interchanges
- Orange County Partnering Meeting (August 12, 2014)
- Orange County Coordination Meeting #1/Management Presentation (February 9, 2015) – Presented recommended alternatives to Orange County management for Segments 1 and 2
- Meeting with property owners and representatives – Discussion on Crossroads Shopping Plaza (February 17, 2015).
- Orange County Meeting to discuss Daryl Carter Parkway Interchange Improvements (February 25, 2015)
- Reedy Creek Improvement District (March 24, 2015) – Discussed SR 535, Bonnet Creek, Slip Ramp location point, Utilities between SR 429 and World Drive.
- Osceola County Coordination Meeting (April 7, 2015)
- Orange County Coordination Meeting #2 (April 29, 2015)
- Meeting with Congressman Mica and the CFHLA to introduce the I-4 BtU Improvements (06/15/15)
- Reedy Creek Energy Services (June 23, 2015)

## Public Hearing

A formal Public Hearing was conducted on October 25, 2016 to seek input on the Recommended Alternative. The hearing provided an overview of the Recommended Alternative and impacts, the study schedule, and summary of the remaining steps in the study process. The hearing was held at the Celebration Town Hall located at 851 Celebration Avenue, Kissimmee, FL 34747. The draft environmental and engineering reports were available for public review from October 4, 2016 through November 4, 2016 on the project website ([www.i4express.com](http://www.i4express.com)) and at the Osceola County Public Library, West Branch located at 305 Campus Street, Kissimmee, FL 34747.

A half-hour open house preceded the formal portion of the hearing. The public was given the opportunity to ask questions and provide comments to the FDOT representatives in a one-on-one setting. A court reporter was present to receive oral comments from the public, and written comments were also accepted. The Recommended Alternative for the overall I-4 corridor and each interchange was displayed on aerial photography of the study area. A matrix with potential environmental impacts and cost estimates was presented. An audiovisual presentation describing the engineering and environmental components of the Recommended Alternative was given. After the presentation, the public was given an opportunity to offer oral comments to the hearing moderator.

Per Chapter 11 of the PD&E Manual, all property owners within at least 300 feet of either side of the centerline of the Recommended Alternative were notified of the hearing by newsletter. Thirty (30) citizens and fifteen (15) project team members signed in at the public hearing. Project team attendees included the FDOT PD&E and Design Project Managers and staff from FDOT Public Information, Right-of-way and Environmental Management Offices. Three public comment forms (from two different citizens) were received at the hearing and two public comments were provided during the oral comment period of the hearing. No additional comments were received during the 10-day comment period following the hearing. The public comments from the hearing are summarized as follows:

#### Written Comments

- Extend the project limits to US 27; this will help the commercial traffic.
- Request for electronic copies of the slide presentation given at the hearing.
- Questions regarding the impact of the project on their property, how to get a sound barrier approved and the project timeline.

#### Oral Comments

- Has FDOT considered the impact on loss of jobs and revenue to the state with respect to Crossroads?
- FDOT shows the need for 5.5 acres of a 38-acre parcel. Does FDOT have a timetable when they will publicly commit that they aren't going to take more land than the 5.5 acres shown?

### **Post Public Hearing Coordination**

Oral and written comments from the public were either directly addressed by project team members during the public hearing or through follow-up letter/email responses provided by the FDOT Project Manager. The public involvement documentation for I-4 Segment 1, including official public hearing transcripts and public input comments with responses, are provided in Appendix B of this report.



## 5.10 Value Engineering (VE)

Value Engineering (VE) for the proposed improvements was conducted after the alternatives public workshop meeting in 2014. The VE study was held July 7-11, 2014; the VE team consisted of representatives from the FDOT D5 office in the Traffic Operations, Roadway Design, Right-of-way, Construction, Structures, Geotechnical, Maintenance, Project Management and Drainage departments. The VE team reviewed the preliminary concept plans and made recommendations based on overall value added to the project. The VE team made 21 recommendations that would result in cost savings or added value to the project. The detailed recommendations are provided in the *Value Engineering for Transportation Improvements, Interstate 4 from East of County Road 532 to Central Florida Parkway, Value Engineering Study Draft Report (July 2014)*. The VE recommendations and corresponding dispositions from November 2014 are summarized as follows.

1. Elevate the westbound C-D road between Fenton Street (Daryl Carter Parkway) and SR 535 to the inside to avoid right-of-way impacts at Crossroads and the adjacent commercial development on Palm Parkway. *(Accepted. However, elevating the mainline is the recommended concept at this time. Elevating the mainline (3-lanes) minimizes right-of-way impacts even more).*
2. Between Central Florida Parkway and Fenton Street (Daryl Carter Parkway) eliminate the outer braided ramps and combine them at grade. *(Not Accepted. Based on the traffic model, the braided ramps are required for operational purposes. The westbound (WB) Central Florida Parkway (CFP) ramp will be the beginning of the WB CD system. The I-4 WB off ramp to the CD system will braid in. This will allow vehicles entering the CD system from CFP to have access to Fenton and SR 536).*
3. Before the Central Florida Parkway move the express lane exist east and add a slip ramp to the general use lanes. This exit provides access to Fenton Street and the C-D system for SR 535. *(Not Accepted. This would require vehicles exiting the express lane to cross from one side of I-4 to the other in about 1500 feet. The access plan has since been revised as well, and that slip ramp has been removed all together).*
4. Eliminate the braided ramp and replace it with a ramp from the direct connect to the general use lanes in the SR 429 interchange. *(Accepted. Braided ramp from this area has been eliminated and moved west into the interchange where there is more right-of-way to work with).*
5. Eliminate Pond 108B and make Pond 107 larger to reduce the right-of-way and wetland impacts. *(Accepted. Pond 108B has been eliminated. Basin divides have been realigned to drain some of the runoff from Basin 108 to Basin 105. The additional runoff does not affect the pond footprint for Basin 105. Existing Pond 107 cannot be expanded to the north because of two existing piers located in the middle of the potential expansion. To expand the existing pond, the piers would have to be exposed below grade. The piers would also be surrounded*

- by water because the pond is a wet detention pond). Although this VE recommendation was previously accepted, subsequent design considerations led to modifications which included Pond 108B as part of the recommended alternative. Basins 105 and 108 are within the SR 429 interchange. Recommended Pond 105C had to be eliminated due to a residential development (Reunion West) planned on the pond site. Due to the elimination of Pond 105C, Pond 108B has been included as part of the stormwater management for the SR 429 interchange.
6. Reduce the general use lane inside shoulders to 10 ft. and look at reducing the maintenance buffer to reduce the impacts to parcel 35. *(Accepted. Inside GUL shoulder can go to 10-feet (12 feet required), and inside EL shoulder can go to 4-feet (6 feet required). This is consistent with all the other I-4 BtU segments).* A design variation will be required for this recommendation.
  7. Move the eastbound entrance slip ramp east to the bifurcated area to eliminate the right-of-way impact to Quest Diagnostics parking lot. *(Accepted).*
  8. Realign the eastbound general use and express lanes to the south and reuse the existing travel lanes (enlarges the bifurcated area). *(Accepted).*
  9. Construct Alternative 2 interchange to provide the direct connect to the Osceola Parkway. *(Accepted).*
  10. Keep the existing general use lane connection and add a direct connect from the express lanes to the Osceola Parkway. *(Accepted. A direct connection will be added from EB I-4 express lane to EB Osceola Parkway. Based on traffic and operations, the EB GUL ramp provides a benefit to future operations of the interchange, and is therefore recommended in lieu of maintaining the existing ramp which has a stop condition at Osceola Parkway).*
  11. No improvements at the Osceola Parkway. *(Not Accepted. Based on traffic and operations, the EB ramp provides a benefit to future operations of the interchange. A direct connection is also needed from the express lanes to EB Osceola Parkway to provide express to toll connectivity).*
  12. Keep the existing alignment for the westbound exit ramp to SR 536 northbound and extend the express lane exit ramp bridge and put the C-D ramp under the extended bridge closer to the mainline. *(Accepted).*
  13. Keep the existing braided bridges south of SR 536. *(Accepted).*
  14. Relocate the westbound off-ramp (C-D lanes) through Crossroads to connect to Hotel Plaza Boulevard. *(Accepted. Since the westbound off-ramp now connects to a C-D system, there is no longer a concern that the ramp traffic will back up onto the GULs. The vehicles wanting to travel WB on Hotel Plaza Boulevard can use a ramp that cuts through Crossroads, and vehicles wanting to travel SB on SR 535 can also use a ramp which cuts through Crossroads).*
  15. Reduce the separation between the eastbound on ramp and the mainline to eliminate the right-of-way at SR 535. *(Accepted).*



16. Widen existing bridges to accommodate both express and general use lanes at SR 535. *(Not Accepted. Based on the recommended geometry at SR 535, the bridges will require replacing).*
17. Construct a ramp on structure that comes through the south end of Crossroads and remains on structure until crossing SR 535 and landing on Hotel Plaza Boulevard, just north of the Double Tree Hotel. SR 535 traffic remains on the existing westbound off ramp. *(Not Accepted. Connecting the westbound off ramp directly to Hotel Plaza Boulevard would create additional congestion on Hotel Plaza Boulevard, and require an additional signal on Hotel Plaza Boulevard).*
18. Construct a ramp on structure that comes through the south end of Crossroads and remains on structure until crossing SR 535 and landing on Hotel Plaza Boulevard just north of the Double Tree Hotel. Right turns onto northbound SR 535 traffic will be at grade. Northbound SR 535 wanting to turn left onto Hotel Plaza Boulevard will start on structure north of I-4 and flyover to merge with the ramp ending at the Double Tree Hotel. *(Not Accepted. Connecting the westbound off ramp directly to Hotel Plaza Boulevard would create additional congestion on Hotel Plaza Boulevard, and require an additional signal on Hotel Plaza Boulevard).*
19. Widen the Fenton Street (Daryl Carter Parkway) Bridge and construct a SPDI to eliminate right-of-way impacts. *(Not Accepted. An operational analysis was performed at Fenton Street, and it was determined that a SPDI, DDI and TUDI all operate the same. A SPDI would require the bridge to be replaced and is therefore the most expensive alternative, with no additional operational benefit. A CD system is required in this area as well, so there will be right-of-way impacts already. It has been decided that a Tight Urban Diamond will be implemented at this location).*
20. Recommendation 35: Change the westbound on ramp at Central Florida Parkway to directly connect with the general use lanes. Not Accepted. The westbound on ramp will need to connect to the CD system in this area. The exit for the CD system would be too close to the ramp if westbound CFP were to tie directly to the GUL.
21. Recommendation 37: At Fenton Street only provide direct connect on and off ramps. Not accepted. The traffic was reviewed for this area and Fenton was modeled as a direct connection. The traffic operations model shows that this interchange would be under-utilized by making it a direct connect only, and that it would not offer any relief to SR 535 and the overall system.

The VE study recommendations and dispositions are an integral part of the engineering design process. As the project proceeds through various phases of preliminary design, the design concepts are modified to reflect all aspects of engineering and environmental analyses. As such, some of the dispositions previously stated may have been modified during design and development of the concept plans.

## 5.11 Comparative Evaluation/Recommended Alternative

The proposed improvements follow the existing alignment of I-4 and the typical section for the I-4 BtU corridor will be consistent with the I-4 Ultimate mainline typical section (three general use lanes and two express lanes in each direction). Thus, the alternatives analysis focused on the interchange design.

### 5.11.1 Evaluation Criteria

Each of the viable alternatives was evaluated based on several criteria, including: right-of-way impacts, natural and physical environment, social impacts, traffic operations, engineering design considerations and estimated project construction costs. The recommended alternatives were based on the results of the engineering and environmental analysis and input from the public involvement program. The following provides a description of the evaluation criteria.

#### Community Impacts/Relocations

Community impacts anticipated from the proposed improvements may include adverse effects on neighborhoods and community cohesion. Potential relocations of residences and businesses that will be directly impacted are identified and quantified.

#### Environmental Impacts

Environmental impacts include identifying and quantifying, through literature research, field surveys and investigations, the archeological, historical and contamination sites impacted, as well as endangered species impacts. A cultural resources survey was conducted to identify historic sites in the study corridor and archaeological resources within proposed pond locations. The architectural study further assesses historic sites for their potential for listing in the NRHP. The contamination screening evaluation was completed to identify the number, location and risk potential of known or potential hazardous waste sites along the corridor. The endangered species biological assessment was completed to document the potential occurrence of natural habitats and wildlife within the proposed project corridor and recommend actions to avoid and/or minimize impacts to the greatest practicable extent.

Additional environmental impacts include identifying noise sensitive areas, air quality, wetlands and floodplain impacts along the project corridor. The noise study report evaluates future design traffic to determine if noise-sensitive receivers are within the project area, if noise levels are likely to increase and if noise impacts are anticipated to occur. Noise abatement measures are evaluated based on the analysis. Air pollutant quantities are estimated and compared to nationally-established air quality standards to determine impacts from traffic for the project design year. Encroachment into existing wetlands or floodplains may result from the proposed improvements. The wetlands evaluation report identifies existing wetlands and surface water communities based on the USFWS Classification and functionality. Impacts due to the proposed construction and improvements are



addressed by the use of mitigation banks and/or other mitigation options that satisfy state and federal requirements. Impacts to the 100-year floodplain from the proposed improvements will be mitigated by floodplain compensation ponds.

#### Project Costs

Project costs include construction and right-of-way costs. Construction cost estimates include roadway, structures, retaining walls, utility relocation, drainage improvements, maintenance of traffic and engineering design cost. Construction engineering and inspection is assumed to be 12% of total construction cost. Additionally, the project costs include right-of-way costs (to be provided by FDOT) for additional right-of-way necessary for each alternative to accommodate roadway and interchange improvements and stormwater management. Right-of-way costs also include residential and business relocations.

#### Public Involvement

A comprehensive public involvement program (PIP), as described in Section 5.9 of this report, including a series of meetings, workshops and other outreach activities was initiated as part of the I-4 BtU PD&E Reevaluation Study. As part of the PIP, an Alternatives Public Workshop was held on January 30, 2014 to present project information, to property owners, public officials, organizations and individuals interested in the project. The workshop was intended to provide details on the proposed design concepts and receive input from the public.

### **5.11.2 Evaluation Matrix**

A summary of the estimated impacts resulting from the comparative evaluation of the build alternatives considered is provided in Table 5.11. The table illustrates impacts from the proposed improvements to the I-4 mainline for the build alternative and comparatively shows any additional impacts from the various interchange alternative options.

### **5.11.3 Recommended Alternative**

The FDOT District 5 has selected the recommended alternative based on analyses of potential environmental impacts, projected traffic operations, right-of-way acquisitions, estimated project costs, value engineering study and other engineering considerations. The following alternatives were selected as the recommended alternative to be presented at the Public Hearing:

- I-4 Mainline Build Alternative (Roadway reconstruction to include six general use lanes and four express lanes)
- I-4 Mainline Build Alternative with Elevated General Use Lanes between Daryl Carter Parkway and SR 536
- I-4 Mainline Build Alternative with Elevated Express Lanes between SR 429 and World Drive
- CR 532 Alternative 2 (DDI)
- SR 429 Build Alternative (Base 3-leg directional interchange with direct connect ramps)

Table 5.11 – Alternatives Evaluation Matrix

Summary of Impacts <sup>1</sup>	No-Build	I-4 Mainline	CR 532		SR 429 (Base 3-leg directional with direct connect ramps)*	World Drive (Base Parclo modified)*	SR 417 (Base Partial Y modified)*	US 192/ SR 530 (Base Parclo modified)*	Osceola Parkway			SR 536 (Base Parclo modified)*	SR 535				Daryl Carter Parkway			Central Florida Parkway (Diamond w/Flyover ramp from CFP WB to I-4 WB C-D Road)*
			Alt. 1 (Base Diamond modified)	Alt. 2 (DDI)*					Alt. 1 (Base Parclo w/I-4 EB to Osc. Pkwy EB off ramp)	Alt. 2 Base Parclo w/I-4 EB to Osc. Pkwy EB off ramps for GUL & EL)	Alt. 3 (Parclo w/Bonnet Creek realigned)*		Alt. 1 (Base Parclo w/ modified ramps)	Alt. 2 (Base Parclo w/I-4 WB elevated C-D Road)	Alt. 3 (Modified Diamond w/Hotel Plaza Blvd. Connector Roads)	Alt. 4 (Modified Diamond)*	Alt. 1 (TUDI)	Alt. 2 (TUDI w/I-4 WB elevated C-D Road)	Alt. 3 (DDI)*	
Roadway ROW Area (Acres)	0	2.64	0	0.31	0	0	0	0	0.83	2.56	8.35 <sup>2</sup>	0	5.64	3.57	7.73	20.42	29.88	26.45	20.56	3.32
Pond or Floodplain Compensation ROW Area (Acres) <sup>3</sup>	0	Pond: 13.76	N/A	FPC: 4.56	Pond: 0.10	7.4	0	0	N/A	N/A	12.82	9.11	N/A	N/A	N/A	Pond: 29.64	N/A	N/A	4.69	10.03
	0	FPC: 33.44			FPC: 16.10											FPC: 2.87				
Floodplain Impacts (Ac-Ft.)	0	43.15	N/A	2.3	29.42	0	0	0	N/A	N/A	0	8.89	N/A	N/A	N/A	2.75	N/A	N/A	0	0
Wetland Impacts (Acres) <sup>4</sup>	0	112.94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impacted Noise Sensitive Sites	0	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Section 4(f) Properties Impacted	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Historic Sites <sup>5,6</sup>	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Contamination <sup>7</sup> Sites	0	48 Low, 3 Med. 1 High	4 Low	4 Low	2 Low	4 Low	3 Low	5 Low 1 Med.	0	0	0	5 Low	4 Low 1 Med.	4 Low 1 Med.	4 Low 1 Med.	4 Low 1 Med.	1 Low 1 Med.	1 Low 1 Med.	1 Low 1 Med.	2 Low 1 Med.
	0	13 Low 4 Med.	7 Low 1 Med.	7 Low 1 Med.	6 Low 3 Med.	14 Low	9 Low	9 Low	6 Low	6 Low	6 Low	8 Low	4 Low 3 Med.	4 Low 3 Med.	4 Low 3 Med.	4 Low 3 Med.	3 Low	3 Low	3 Low	1 Med.
Potential to Improve Traffic Operations	Low	High	Low	High	High	High	High	High	High	High	High	High	Low	Low	Medium	High	Medium	Medium	High	High
Area of Bridges (SF)	0	2,718,141	0	0	179,632	52,846	76,538	87,831	92,342	126,828	451,075	181,529	0	292,033	49,027	75,256	37,775	37,775	20,405	76,142
Pedestrian Accommodations	Some Areas <sup>8</sup>	No	Yes	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bicycle Accommodations	No <sup>9</sup>	No	No	Yes	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No	Yes	Yes <sup>10</sup>
Parcels Impacted	0	47	0	3	2	3	0	0	6	6	9	1	11	10	16	64	14	11	12	8
Relocations	0	0	0	0	0	0	0	0	0	0	0	0	5	0	2	12	0	0	0	0
Constructability	N/A	Medium	High	High	Medium	High	Medium	High	Medium	Medium	Medium	Medium	High	Low	Low	Medium	Medium	High	High	Medium
Construction Cost <sup>11</sup>	0	\$1.1B	\$853K	\$5M	\$64M	\$28M	\$26M	\$33M	\$34M	\$48M	\$142M	\$82M	\$12M	\$103M	\$39M	\$63M	\$19M	\$20M	\$15M	\$30M

Notes: This document is a working draft; data provided is a work in progress and may be updated or replaced.   **\*Recommended Alternative**  
Abbreviations: DDI - Diverging Diamond Interchange, Parclo – Partial Cloverleaf Interchange, TUDI- Tight Urban Diamond Interchange, C-D – Collector-Distributor, APE – Area of Potential Effect, NRHP - National Register of Historic Places.  
<sup>1</sup>This table illustrates impacts from the proposed improvements to I-4 for the build alternative and comparatively shows any additional impacts from the various interchange alternative options.  
<sup>2</sup>Includes ROW area for realignment of Bonnet Creek.   <sup>3</sup> Area to be acquired Based on the recommended pond sites as determined in the Pond Siting Report (September 2016). <sup>4</sup>Impact acreage assumes impacts to entire wetland within the limits of the ROW and to communities within pond/FPC sites located outside of the existing ROW, therefore impacts are assumed to be equal for all interchange alternatives.   <sup>5</sup>Constructed before 1971 within APE; APE – Area of Potential Effect includes 330’ from proposed ROW and pond footprints plus 100’ buffer.   <sup>6</sup>None of the historic resources are NRHP eligible.   <sup>7</sup>Potential contamination sites within the roadway right-of-way; pond sites may be outside of the right-of-way. <sup>8</sup>Pedestrian accommodations are currently present along CR 532, SR 535, Daryl Carter Parkway and Central Florida Parkway.   <sup>9</sup>No designated bicycle lanes on the cross streets within the study limits.   <sup>10</sup>Multi-use trail/path.   <sup>11</sup>Construction costs are preliminary, based on the Engineer’s estimate provided in Appendix D.



- World Drive Build Alternative (Base partial cloverleaf interchange with modifications)
- SR 417 Build Alternative (Base Partial Y interchange with modifications)
- US 192/SR 530 (Base partial cloverleaf interchange with modifications)
- Osceola Parkway Alternative 3 (Partial cloverleaf interchange with realignment of Bonnet Creek)
- SR 536 (Base partial cloverleaf interchange with modifications)
- SR 535 Alternative 4 (Modified Diamond interchange)
- Daryl Carter Parkway Alternative 3 (DDI)
- Central Florida Parkway (Diamond interchange w/Flyover ramp from CFP WB to I-4 WB C-D Road)

As shown in Table 5.11, although some of the recommended alternatives involve increased right-of-way acquisition and larger construction costs, other factors were considered when determining the recommended alternatives.

The CR 532 Alternative 2 improvements require additional right-of-way and have higher construction costs than CR 532 Alternative 1, but Alternative 2 was chosen as the recommended alternative due to the higher potential to improve traffic operations.

Osceola Parkway Alternative 3 has greater right-of-way impacts and higher costs than Alternatives 1 and 2; however, it was chosen as the recommended alternative based on agency coordination with the FDOT which indicated that the realignment of Bonnet Creek is preferred for future maintenance purposes. The recommended alternative moves the Bonnet Creek crossing to the east so that the I-4 bridge over Bonnet Creek is not directly underneath the Osceola Parkway bridge.

The SR 535 Alternative 4 improvements require more right-of-way than Alternatives 1, 2 and 3 and have higher construction costs than SR 535 Alternatives 1 and 3. However, Alternative 4 was chosen as the recommended alternative due to the higher potential to improve traffic operations through the interchange and along the SR 535 corridor.

## 6.0 Design Details of Recommended Alternative

The Concept Plans for this project, included in Appendix A, are provided for all of the alternatives discussed in Section 1.0 of this report. The following section describes general design criteria and probable impacts applicable to all alternatives. As the project proceeds, a preferred/recommended alternative will be chosen based on the results from the engineering and environmental analysis and the public involvement program process. This section will be further refined to include additional data and analysis specific to the preferred alternative.

## 6.1 Typical Section

The proposed typical section for Segment 1 includes six general use lanes and four express lanes (6+4 Alternative) and was previously shown in Figure 1.2. Auxiliary lanes are also proposed along portions of the corridor and vary from one to three lanes. The proposed typical section provides a design speed of 70 mph, 12-foot express and general use lanes, 4-foot inside and 10-foot outside shoulders for express lanes, 10-foot inside and 12-foot outside shoulders for general use lanes and a 2-foot wide barrier wall between the general use and express lanes.

While the overall typical section remains consistent throughout Segment 1, there are some areas along the Segment 1 corridor that will have special sections. Special cross sections were developed to meet the needs of the project due to right-of-way constraints, existing utility easements or other design considerations along the corridor. These special sections may include C-D roads, braided ramp systems, elevated express lanes or elevated general use lanes. Additionally, the median width may vary in certain locations to accommodate changes in the horizontal alignment due to crossroad support structures, water crossings or other features. In the area between World Drive and SR 417, the median is considerably wider than 44 feet to accommodate a future high speed rail station. The special sections along the Segment 1 corridor, previously shown in Figure 1.2 through Figure 1.5, are identified as follows:

- I-4 Eastbound elevated express lanes between East of SR 429 and West of World Drive
- C-D system (Eastbound and Westbound) between World Drive and SR 417
- I-4 Eastbound elevated general use lanes with at grade Eastbound C-D Road between SR 536 and SR 535
- I-4 Westbound elevated general use lanes between SR 536 and East of Daryl Carter Parkway with at grade C-D Road between SR 536 and Central Florida Parkway
- I-4 Westbound elevated C-D Road between west of Central Florida Parkway and SR 528

A typical section package for the entire I-4 BtU corridor including all five segments, has been submitted to FDOT under separate cover.

## 6.2 Alignment

Horizontal Alignment: There are three horizontal curves within Segment 1. The horizontal curves located east of CR 54 and at Central Florida Parkway will need to be adjusted to meet the current design speed standards for degree of curvature and superelevation. The preliminary Concept Plans and baseline data submitted with this report illustrate in detail the proposed horizontal alignment and can be found in Appendix A. Table 6.1 provides the proposed horizontal curve data for I-4 Segment 1; all of the curves provide a design speed of 70 MPH.



Table 6.1: Proposed Horizontal Alignment

Curve Direction	Back Tangent From PC	PC Station	PT Station	Degree of Curvature	Radius (ft)	Proposed Super-elevation (ft/ft)
					Curve Length (ft)	
Curve 1 (Left)	N 50° 28' 36.58" E	604+47.30	625+11.56	0° 30' 01.44"	11,450	0.020
					2,064.26	
Curve 2 (Left)	N 40° 07' 25.27" E	1024+19.59	1037+76.39	0° 06' 20.42"	54,220	Normal Crown
					1,356.80	
Curve 3 (Left)	N 38° 31' 39.03" E	1331+04.39	1350+17.97	2° 00' 37.36"	2,850	0.070
					1,913.58	

**Vertical Alignment:** The proposed improvements require significant vertical alignment modifications to meet established criteria for the vertical alignment as outlined in Section 4.0 of this report. A listing of the known vertical curves and their design speeds can be found in Section 2.6.

Sections of I-4 will be elevated in order to minimize right-of-way impacts. The I-4 eastbound express lanes will be elevated over the eastbound general use lanes between SR 429 and World Drive in order to avoid right-of-way impacts and utility impacts to Kinder Morgan, TECO Gas, Florida Gas Transmission and Orlando Utilities Commission transmission. A cost comparison was performed comparing I-4 at grade with the aforementioned utility impacts, and elevating the express lanes. It was determined that it was more cost effective to elevate the express lanes over the general use lanes and eliminate the need for additional right-of-way, and avoid all impacts to Kinder Morgan, TECO Gas, Florida Gas Transmission and Orlando Utilities Commission transmission line.

The I-4 eastbound general use lanes will be elevated between SR 536 and SR 535. In order to minimize right-of-way impacts to the Marriott Hotel and the Vista Way Apartments, the eastbound general use lanes will be elevated over the express lanes and the C-D road in this area.

The I-4 westbound general use lanes will be elevated between Daryl Carter Parkway and SR 536. In order to minimize right-of-way impacts to the Homewood Suites, Residence Inn, Embassy Suites, Clarion Inn, Royal Plaza, Holiday Inn Lake Buena Vista, Hilton Orlando Lake Buena Vista and Walt Disney World Casting, the westbound general use lanes will be elevated over the express lanes and the C-D road in this area.

### 6.3 Design Exceptions and Variations

From time to time, it may be necessary to deviate from the standard criteria used in the design process. If deemed necessary, two specific deviations may occur: (1) Design Exception or (2) Design Variation. A Design Exception is required when the design criteria applied falls below the minimums established by AASHTO. A Design Variation is required when design criteria applied falls below FDOT established criteria and the deviation is not covered by the Design Exception. Table 6.2 summarizes the 13 design elements and specifies whether AASHTO or FDOT design criteria are satisfied, or if a design exception/variation is required for the specific design element for the proposed improvements.

**Table 6.2: Design Exceptions and Variations**

Design Element	Design Exception < AASHTO	Design Variation < FDOT and > AASHTO
1. Design Speed	Satisfied	Satisfied
2. Lane Width	Satisfied	Satisfied
3. Shoulder Width	Satisfied	Required
4. Bridge Width	Satisfied	Satisfied
5. Structural Capacity	Satisfied	Satisfied
6. Vertical Clearance	Satisfied	Satisfied
7. Grade	Satisfied	Satisfied
8. Cross Slope	Satisfied	Satisfied
9. Superelevation	Satisfied	Satisfied
10. Horizontal Alignment	Satisfied	Satisfied
11. Vertical Alignment	Satisfied	Satisfied
12. Stopping Sight Distance	Satisfied	Satisfied
13. Horizontal Clearance	Satisfied	Satisfied

The proposed improvements will require new construction; therefore, as indicated in Table 6.2, no design exceptions are anticipated. A design variation is anticipated for the median (inside) shoulder widths in the express lanes and the median (inside) shoulder widths of the general use lanes. The proposed median (inside) shoulder width is four feet for the express lanes and 10 feet for the general use lanes. These shoulder widths are consistent with the minimum required by AASHTO and will not require a design exception, however they fall below the minimum width specified in the FDOT PPM, therefore a design variation is required. Table 6.3 lists additional design elements that are not addressed by AASHTO but require a design variation by FDOT if the standards are not met.

**Table 6.3: Additional Design Elements**

Design Element	Design Variation
Border Width	Required
Median Width	Satisfied
Length of Horizontal Curve	Satisfied
Length of Vertical Curve	Satisfied



A border width of 94 feet for freeways and interchange ramps is required by FDOT. In order to minimize impacts to adjacent properties and reduce right-of-way acquisition costs, a 15-foot border width has been used throughout the project limits. When necessary, standard concrete barrier wall will be placed at the edges of the outside shoulders. This will provide protection for motorists from objects that do not meet clear zone requirements and maintain the appropriate border width. The barrier wall will also be placed on top of any necessary retaining walls to provide protection from any drop offs.

## 6.4 Drainage

This project will make many improvements to the water quality along the roadway corridor. The stormwater runoff from the new impervious area will be treated in existing and proposed stormwater facilities. The stormwater runoff will be collected by storm sewer systems and roadside ditches. The water quality treatment and attenuation will be achieved through the expansion and construction of offsite ponds, some of which will require acquisition of additional right-of-way.

The stormwater will be routed to existing and proposed stormwater ponds. There are a total of 39 basins within the project limits. In areas with poor soils and high water table, only wet detention ponds were considered. The ponds were sized based on the assumption that most of the offsite runoff would be drained through separate systems. For a majority of the ponds, the location of where the proposed basins begin and end is the same as the existing condition. The location of the outfall in the proposed condition is the same as the existing. None of the basins discharge to an OFW. The following is a summary of the findings documented in the *Pond Siting Report (September 2016)*. These documents contain more detailed information regarding the drainage along the project corridor.

### 6.4.1 Proposed Drainage Patterns

There are 36 basins within the project that discharge to either Davenport Creek, a tributary of Davenport Creek, adjacent wetlands or Bonnet Creek, which ultimately discharge to the Reedy Creek Drainage Basin. The basin limits start at west of CR 532 (Osceola/Polk County Line) and end just east of the SR 535 Interchange. A combination of 70 existing and proposed pond sites will provide water quality treatment and peak discharge attenuation from the beginning of the project to east of the SR 535 Interchange. All of the basins are open and treatment will be provided in wet detention ponds. This section of I-4 includes interchanges with CR 532, SR 429, World Drive, SR 417, SR 530, Osceola Parkway, SR 536 and SR 535. Most of the existing interchange ponds will be used and regraded as necessary, supplemented by additional ponds requiring the acquisition of right-of-way.

The remaining three basins within the project discharge to Black Lake, adjacent ditches or Big Sand Lake, which ultimately discharge to the Shingle Creek Drainage Basin. A combination of four existing

and proposed pond sites will provide water quality treatment and peak discharge attenuation from east of the SR 535 Interchange to west of the SR 528 Interchange. This section of I-4 includes the interchange with Daryl Carter Parkway and Central Florida Parkway. There is one dry retention pond, with the remaining three ponds being wet detention ponds. Generally, the proposed pond sites are the existing ponds, the Daryl Carter Parkway overpass ponds and the remnant area between I-4 and Turkey Lake Road. The *Pond Siting Report (September 2016)* prepared for this project discussed the alternatives evaluated and identified the recommended pond sites; Table 6.4 lists the recommended pond alternatives.

**Table 6.4 - Summary of Recommended Pond Sites**

<b>Basin Designation</b>	<b>Recommended Alternative</b>
100	Pond 100
101	Pond 101A-101G
102	Pond 102
103	Pond 103
104	Pond 104
105	Pond 105A & 105B
106	Pond 106A & 106B
107	Pond 107
108	Pond 108A & 108B
109	Pond 109
110	Pond 110
111	Pond 111
112	Pond 112A-112E
113	Pond 113A-113G
114	Pond 114A & 114B
115	Pond 115
116	Pond 116
117	Pond 117
118	Pond 118
119	Pond 119A & 119B
120	Pond 120
121	Pond 121A & 121B
122	Pond 122A-122C
123	Pond 123
124	Pond 124
125	Pond 125
126	Pond 126
127	Pond 127
128	Pond 128A & 128B
129	Pond 129
130	Pond 130 & 130A
131	Pond 131A & 131B



Table 6.4 - Summary of Recommended Pond Sites

Basin Designation	Recommended Alternative
132	Pond 132-135
136	Pond 136B
137	Pond 137, 137A & 137B
138	Pond 138, 138A & 138B
139	Pond 139A & 139B
140	Pond 140
142	Pond 142B

There will be floodplain impacts from the proposed improvements. Right-of-way requirements, floodplain and wetland impact acreages and floodplain compensation ponds are discussed in detail in the *Pond Siting Report (September 2016)* prepared for this project. The overall drainage maps for the project are shown in Figure 6.1 through Figure 6.6.

#### 6.4.2 Cross Drains

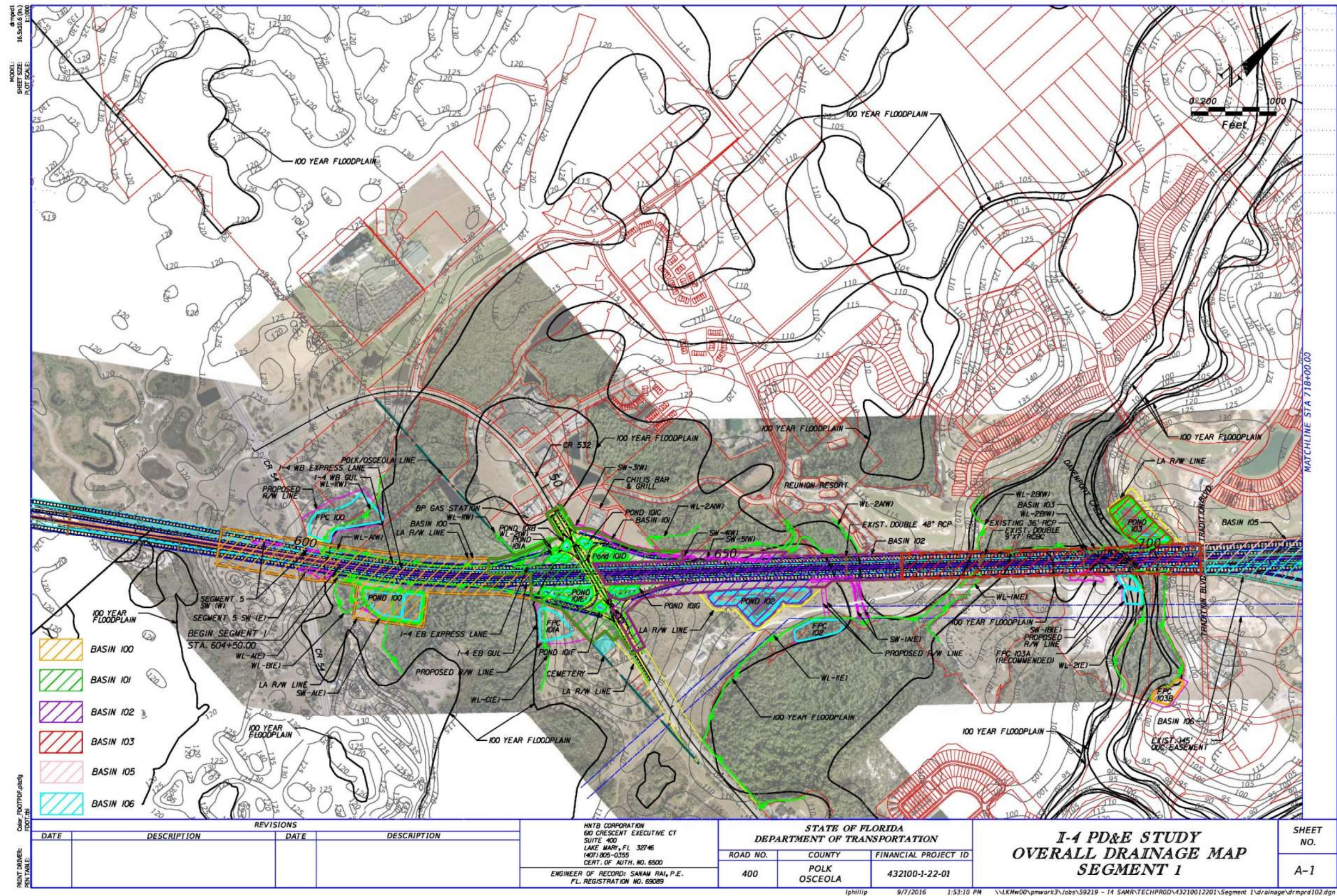
Due to the proposed roadway widening, all of the cross drains will require total replacement. Through hydraulic analysis, it was determined that four (4) cross drains need to be upsized: CD-7, CD-8, CD-12 and CD-13. The remaining cross drains will require a change in slope to function adequately. All cross drains were analyzed using HY8 (Version 7.3) software. Table 6.5 depicts the results of the hydraulic analysis. Additional information is presented in the *Location Hydraulic Report (September 2016)* prepared for this study.

Table 6.5 – Proposed Cross Drains

CD No.	Station	Description from Original Construction Plans						
		Count	Span (in)	Rise (in)	Type	Length (Ft)	Invert Elevation (Ft NAVD)	
							Upstream	Downstream
CD-1	614+12.71	2	36	36	RCP	328	111.80	110.80
CD-2	664+22.84	2	48	48	RCP	300	102.58	102.18
CD-3	680+00.00	2	108	84	CBC	353	92.11	91.77
CD-4	692+20.31	1	36	36	RCP	300	90.34	88.25
CD-5	698+00.00	4	144	96	CBC	392	84.27	83.16
CD-6	732+50.00	2	84	48	CBC	460	90.72	90.10
CD-7	761+00.00	1	48	48	RCP	404	84.42	82.97
CD-8	785+16.00	2	48	48	RCP	308	74.18	73.03
CD-9	863+00.00	2	84	48	CBC	583	75.70	75.20
CD-10	914+00.00	2	84	48	CBC	558	79.50	78.70
CD-11	984+00.00	2	84	60	CBC	581	82.00	80.90
CD-12	1083+18.65	2	42	42	RCP	612	83.44	82.45
CD-13	1138+19.00	2	36	36	RCP	356	96.10	94.85
CD-14	1202+15.00	1	48	48	RCP	372	99.57	98.20
CD-15*	1333+10.00							

Abbreviations: RCP – Reinforced Concrete Pipe, CBC – Concrete Box Culvert \*Existing information not found.





**Figure 6.1 – Overall Drainage Map (Sheet 1 of 6)**



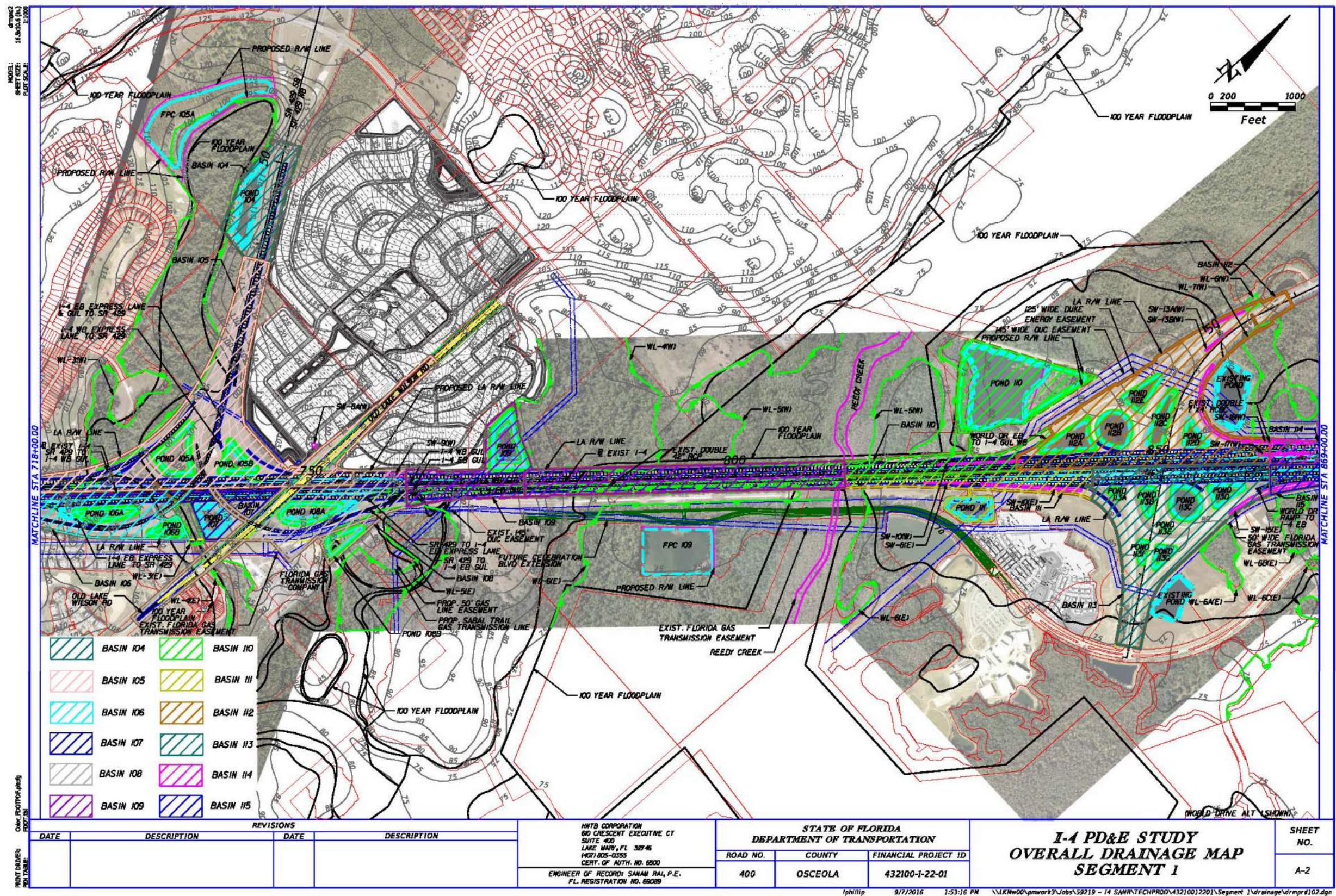


Figure 6.2 – Overall Drainage Map (Sheet 2 of 6)



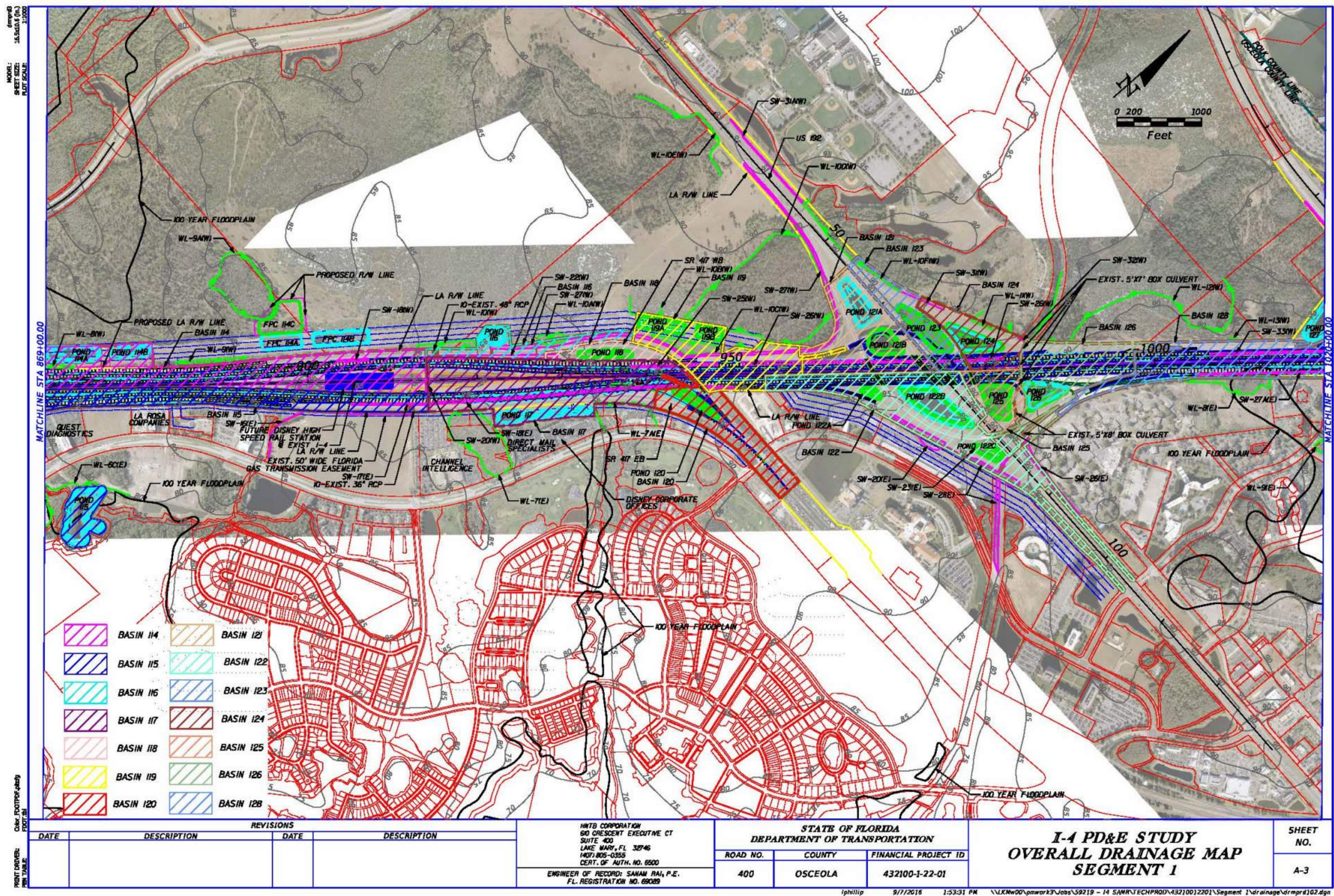


Figure 6.3 – Overall Drainage Map (Sheet 3 of 6)



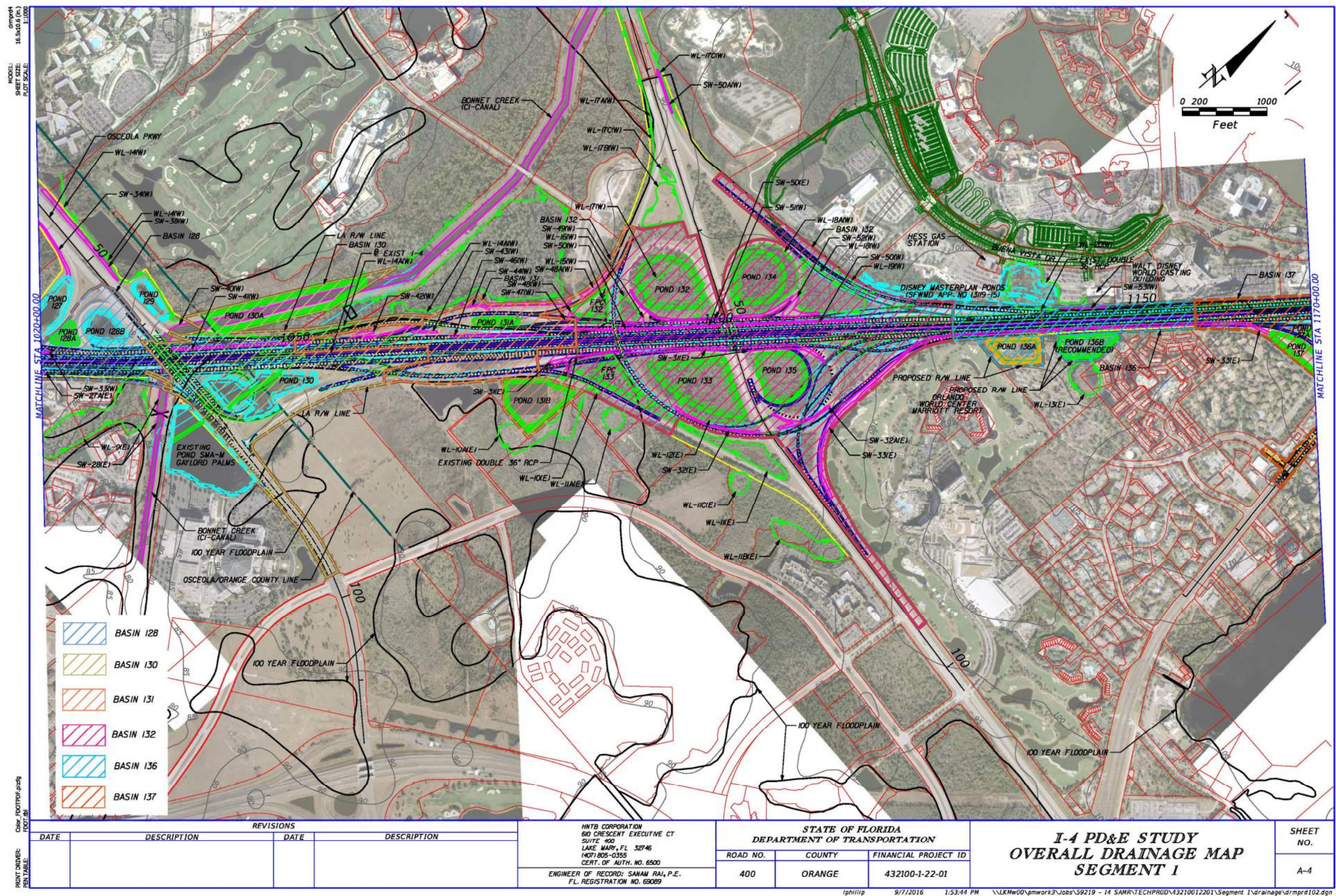
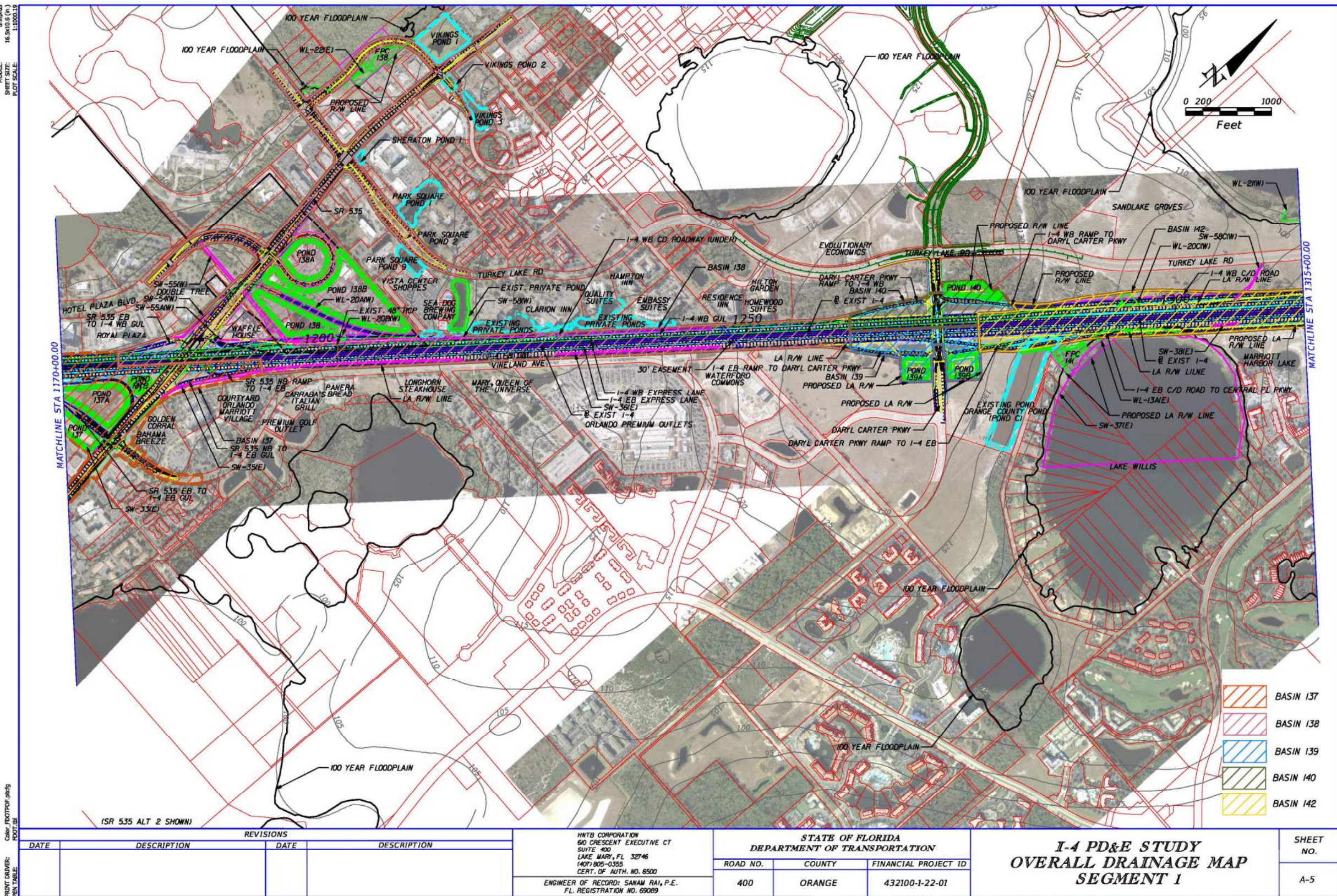


Figure 6.4 – Overall Drainage Map (Sheet 4 of 6)





**Figure 6.5 – Overall Drainage Map (Sheet 5 of 6)**



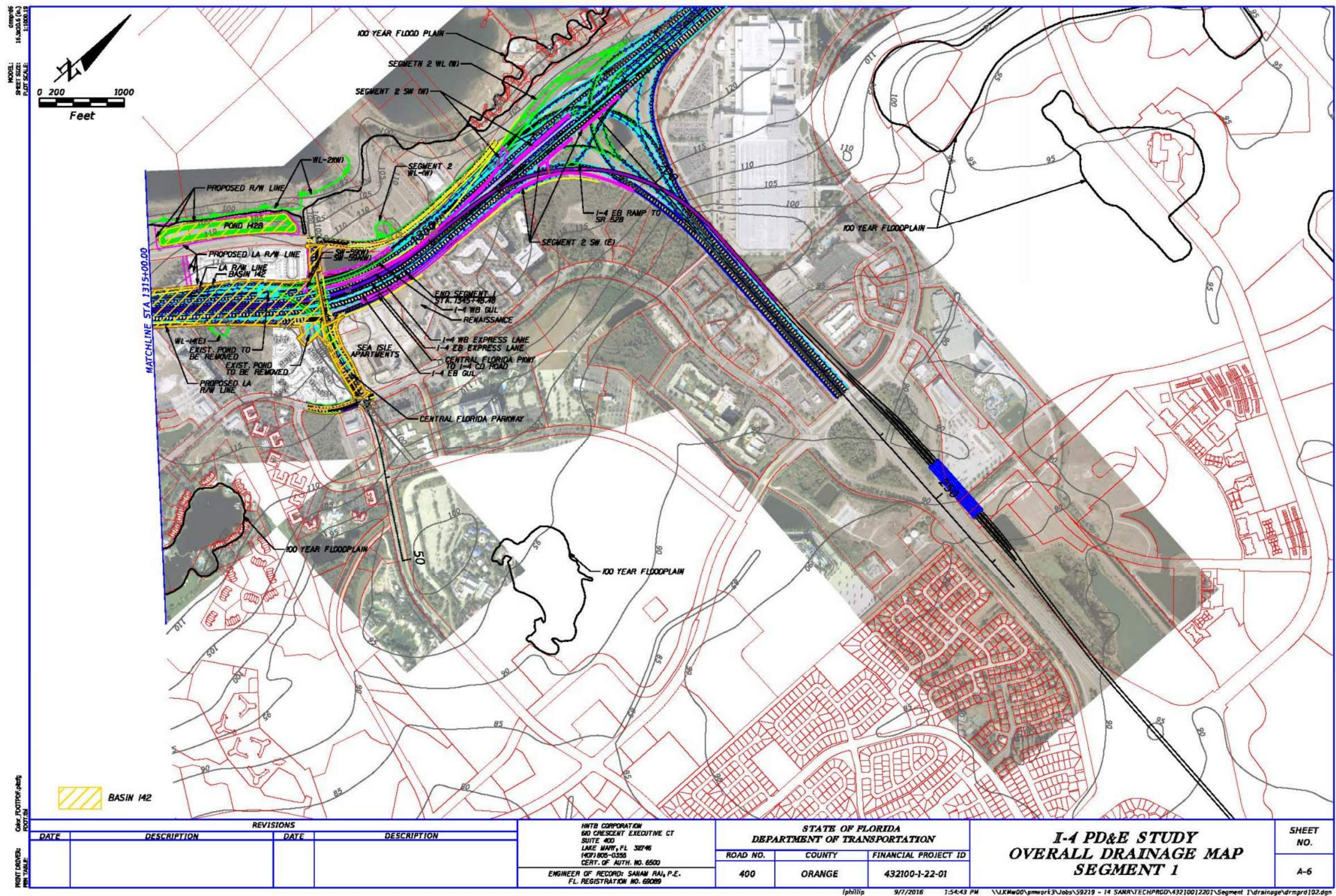


Figure 6.6 – Overall Drainage Map (Sheet 6 of 6)



## 6.5 Right-of-Way Requirements

The proposed improvements to I-4 Segment 1 will follow the existing alignment and will require acquisition of right-of-way for the roadway mainline and interchange improvements, stormwater management facilities and floodplain compensation sites. The total anticipated right-of-way impacts for the recommended alternative involve full or partial acquisition of 125 parcels for a total of approximately 188 acres (53 acres roadway and 135 acres stormwater); some parcels may be impacted by both roadway and stormwater acquisitions. The parcels impacted and the corresponding right-of-way required for the proposed roadway improvements associated with the recommended alternative including the realignment of Bonnet Creek, are summarized in Table 6.6 and shown on the Concept Plans included in Appendix A.

**Table 6.6: Right-of-Way Acquisition for Roadway Improvements**

Parcel ID Number	County	Location	Total Area Acquired (Acres)
32-24-28-0825-00-004	Orange	Osceola Parkway/ Bonnet Creek	3.859
28-24-11-0000-00-022	Orange	Central Florida Parkway	0.607
28-24-11-7793-01-000	Orange	Central Florida Parkway	0.242
Turkey Lake Road	Orange	Central Florida Parkway	2.221
28-24-12-9249-00-011	Orange	Central Florida Parkway	0.011
28-24-14-5844-01-132	Orange	Daryl Carter Parkway	0.005
28-24-14-5844-01-130	Orange	Daryl Carter Parkway	0.382
28-24-14-0000-00-012	Orange	Daryl Carter Parkway	3.078
28-24-14-0000-00-006	Orange	Daryl Carter Parkway	3.714
28-24-11-0000-00-024	Orange	Daryl Carter Parkway	6.340
28-24-14-0000-00-009	Orange	Daryl Carter Parkway	2.478
28-24-11-0000-00-015	Orange	Daryl Carter Parkway	0.393
11-24-28-3829-00-011	Orange	Daryl Carter Parkway	0.154
14-24-28-0000-00-020	Orange	Daryl Carter Parkway	1.646
28-24-28-0000-00-051	Orange	I-4 Mainline	0.002
28-24-28-0000-00-002	Orange	I-4 Mainline	0.745
28-24-27-8930-01-008	Orange	I-4 Mainline	0.248
28-24-27-8931-02-003	Orange	I-4 Mainline	0.166
28-24-28-0000-00-010	Orange	I-4 Mainline	0.004
28-24-28-0000-00-015	Orange	I-4 Mainline	0.013
27-24-28-8931-02-004	Orange	I-4 Mainline	0.105
28-24-27-0000-00-035	Orange	I-4 Mainline	0.039
28-24-22-0307-00-001	Orange	I-4 Mainline	0.018
28-24-22-0000-00-017	Orange	I-4 Mainline	0.115
28-24-15-5120-00-011	Orange	I-4 Mainline	0.021



Table 6.6: Right-of-Way Acquisition for Roadway Improvements

Parcel ID Number	County	Location	Total Area Acquired (Acres)
28-24-15-5120-00-012	Orange	I-4 Mainline	0.024
28-24-14-5844-01-131	Orange	I-4 Mainline	0.004
28-24-14-5120-00-010	Orange	I-4 Mainline	0.008
28-24-33-5134-01-000	Orange	I-4 Mainline	0.046
28-24-22-0000-00-034	Orange	I-4 Mainline	0.053
28-24-22-5844-01-092	Orange	SR 535	0.551
28-24-22-0000-00-039	Orange	SR 535	0.868
28-24-22-0000-00-039	Orange	SR 535	0.251
28-24-22-0000-00-033	Orange	SR 535	6.972
28-24-22-0000-00-031	Orange	SR 535	0.256
28-24-22-0000-00-032	Orange	SR 535	0.693
28-24-22-8915-00-030	Orange	SR 535	0.375
28-24-22-8915-00-050	Orange	SR 535	0.252
27-20-22-0000-00-052	Orange	SR 535	0.023
28-24-22-5130-00-020	Orange	SR 535	0.106
28-24-22-0000-00-029	Orange	SR 535	0.008
28-24-22-5844-01-091	Orange	SR 535	0.176
28-24-22-0000-00-035	Orange	SR 535	0.043
28-24-22-5112-00-041	Orange	SR 535	0.124
28-24-22-0000-00-023	Orange	SR 535	0.088
28-24-22-0000-00-024	Orange	SR 535	0.047
28-24-22-8915-00-011	Orange	SR 535	0.024
28-24-22-8915-00-010	Orange	SR 535	0.030
28-24-22-0000-00-021	Orange	SR 535	0.172
28-24-22-0000-00-045	Orange	SR 535	0.036
28-24-22-5112-00-030	Orange	SR 535	0.235
28-24-22-0000-00-042	Orange	SR 535	0.081
28-24-22-0000-00-004	Orange	SR 535	0.002
28-24-27-0000-00-047	Orange	SR 535	0.156
28-24-27-0000-00-049	Orange	SR 535	0.042
28-24-27-0000-00-045	Orange	SR 535	0.022
28-24-22-5130-00-040	Orange	SR 535	0.122
22-24-28-0000-00-020	Orange	SR 535	0.358
22-24-28-8915-00-020	Orange	SR 535	0.295
22-24-28-8915-00-001	Orange	SR 535	0.028
22-24-28-8915-00-100	Orange	SR 535	0.732
22-24-28-8915-00-021	Orange	SR 535	0.298
22-24-28-8915-00-030	Orange	SR 535	0.182

Table 6.6: Right-of-Way Acquisition for Roadway Improvements

Parcel ID Number	County	Location	Total Area Acquired (Acres)
22-24-28-8915-00-090	Orange	SR 535	0.006
21-24-28-0000-00-020	Orange	SR 535	1.331
21-24-28-5844-00-320	Orange	SR 535	2.430
21-24-28-5844-00-010	Orange	SR 535	0.335
Orange County	Orange	SR 535	0.004
Orange County	Orange	SR 535	0.048
22-24-28-8895-00-002	Orange	SR 535	0.902
15-24-28-0000-00-007	Orange	SR 535	0.061
22-24-28-0881-00-040	Orange	SR 535	0.031
22-24-28-0881-00-030	Orange	SR 535	0.033
22-24-28-0881-00-001	Orange	SR 535	0.059
22-24-28-0881-00-020	Orange	SR 535	0.013
22-24-28-0881-00-010	Orange	SR 535	0.009
22-24-28-5112-01-080	Orange	SR 535	0.001
22-24-28-8895-00-001	Orange	SR 535	0.729
22-24-28-8895-00-010	Orange	SR 535	0.214
22-24-28-8895-00-032	Orange	SR 535	0.123
28-24-22-0000-00-019	Orange	SR 535	0.010
28-24-22-0000-00-041	Orange	SR 535	0.055
28-24-28-0000-00-043	Orange	SR 535	0.006
04-25-28-5531-0001-00A0	Osceola	Osceola Parkway/ Bonnet Creek	1.926
35-25-27-4895-PRCL-01C0	Osceola	I-4 Mainline	0.052
34-25-27-4012-0001-0010	Osceola	I-4 Mainline	0.047
34-25-27-4012-0001-0020	Osceola	I-4 Mainline	0.011
27-25-27-2985-TRAC-FD30	Osceola	I-4 Mainline	0.006
27-25-27-2985-TRAC-FD30	Osceola	I-4 Mainline	0.006
27-25-27-2985-TRAC-FD20	Osceola	I-4 Mainline	0.025
33-25-27-0000-0150-0000	Osceola	I-4 Mainline	0.023
33-25-27-3160-000A-0017	Osceola	I-4 Mainline	0.031
35-25-27-4892-TRAC-0G50	Osceola	I-4 Mainline	0.129
34-25-27-4012-0003-0016	Osceola	I-4 Mainline	0.245
35-25-27-4881-TRAC-0G40	Osceola	I-4 Mainline	0.138
13-25-27-0000-0035-0000	Osceola	I-4 Mainline	0.054
34-25-27-4012-0003-0014	Osceola	I-4 Mainline	0.002
13-25-27-0000-0036-0000	Osceola	I-4 Mainline	0.135
13-25-27-0000-0034-0000	Osceola	I-4 Mainline	0.139
Goodman Road	Osceola	I-4 Mainline	0.002



Table 6.6: Right-of-Way Acquisition for Roadway Improvements

Parcel ID Number	County	Location	Total Area Acquired (Acres)
33-25-27-3160-000A-0010	Osceola	I-4 Mainline	0.000
Sinclair Road	Osceola	I-4 Mainline	0.007
05-25-28-0000-0010-0000	Osceola	Osceola Parkway	0.194
05-25-28-4652-0001-COMM	Osceola	Osceola Parkway	0.262
05-25-28-4668-0001-COMM	Osceola	Osceola Parkway	0.390
05-25-28-5388-0001-0010	Osceola	Osceola Parkway	0.721
05-25-28-4667-0001-0040	Osceola	Osceola Parkway	0.510
Bonnet Creek	Osceola	Osceola Parkway	0.485
272604000000011010	Polk	CR 532	0.294
272604000000013010	POLK	CR 532	0.015
Total Right-of-way Required:			52.645

The right-of-way impacts due to stormwater management facilities, including floodplain compensation sites were determined in the *Pond Siting Report (September 2016)*. The parcels impacted and the corresponding right-of-way required for the proposed stormwater management facilities associated with the recommended alternative are summarized in Table 6.7 and shown on the Concept Plans included in Appendix A.

Table 6.7: Right-of-Way Acquisition for Stormwater Facilities

Pond	County	Location	Parcel ID Number	Pond Area Including Access (Acres)
108B	Osceola	Station 751+00 to Station 756+00	34-25-27-4012-0002-0013	0.10
110	Osceola	Station 825+00 to Station 843+00	23-25-27-0000-0051-0000	0.98
			23-25-27-0000-0061-0000	1.37
			14-25-27-0000-0041-0000	5.05
130A	Orange	Station 1040+00 to Station 1059+00	32-24-28-0000-00-002	12.82
131B	Orange	Station 1074+00 to Station 1082+00	33-24-28-0000-00-007	9.11
136B	Orange	Station 1140+00 to Station 1147+00	28-24-28-0000-00-002	4.66
138, 138A & 138B	Orange	Station 1193+00 to Station 1211+00	28-24-22-0000-00-029	0.39
			28-24-22-0000-00-027	0.41
			28-24-22-0000-00-031	0.43
			28-24-22-0000-00-035	0.66
			28-24-22-0000-00-032	1.79

**Table 6.7: Right-of-Way Acquisition for Stormwater Facilities**

Pond	County	Location	Parcel ID Number	Pond Area Including Access (Acres)
			28-24-22-0000-00-034	0.15
			28-24-22-0000-00-028	0.42
			28-24-22-0000-00-030	0.66
			28-24-22-0000-00-033	24.73
139A	Orange	Station 1267+00 to Station 1271+00	14-24-28-0000-00-020	1.57
139B	Orange	Station 1273+00 to Station 1277+00	28-24-14-0000-00-006	1.61
140	Orange	Station 1273+00 to Station 1280+00	14-24-28-0000-00-018	1.51
			11-24-28-0000-00-027	2.53
142B	Orange	Station 1317+00 to Station 1333+00	11-24-28-0000-00-004	2.01
			11-24-28-0000-00-003	5.06
			11-24-28-0000-00-024	0.42
Subtotal Right-of-way Required for Ponds:				78.44
<b>Floodplain Compensation Ponds</b>				
100	Polk	Station 600+00 to 609+00	27-26-04-0000-0003-3010	5.64
			27-26-04-0000-0003-3020	2.5
101A	Polk	Station 628+00 to 631+00	27-26-04-000000-011010	4.56
102	Osceola	Station 658+00 to Station 663+00	35-25-27-4895-PRCL-01C0	0.83
			34-25-27-4012-0001-0010	2.34
103A	Osceola	Station 696+00 to Station 699+00	35-25-27-4895-PRCL-01C0	2.06
105A	Osceola	Station 41+00 to Station 59+00 (SR429)	22-25-27-3160-000C-0010	16.10
109	Osceola	Station 789+00 to Station 797+00	23-25-27-0000-0012-0000	11.16
114C	Osceola	Station 895+00 to Station 900+00	13-25-27-0000-0035-0000	3.37
			12-25-27-0000-0010-0000	1.37
138	Orange	NW Corner of SR 535/Palm Parkway Intersection	21-24-28-5844-00-320	2.84
			21-24-28-5844-00-010	0.03
141	Orange	Station 1285+00 to Station 1289+00	14-24-28-0000-00-006	4.17
Subtotal Right-of-way Required for FPC:				56.97
Total Right-of-way Required for Stormwater Management:				135.41

## 6.6 Relocations

Right-of-way acquisition for the proposed improvements associated with I-4 Segment 1 involves partial or complete purchase of parcels within the project study area which may result in displacement of residential and non-residential land uses. In order to minimize the unavoidable effects of right-of-way acquisition and displacement of people, FDOT will carry out a Right-of-way



and Relocation Program in accordance with state statutes and federal regulations. This includes advance notification to property owners of impending acquisitions, fair market value payment for property rights and financial assistance to relocated individuals or businesses.

The recommended alternatives for the I-4 Segment 1 project may result in right-of-way impacts to 125 parcels totaling approximately 188 acres. Of these, 73 parcels (63 in Orange County and 10 in Osceola County) are improved with existing developments. The existing developments consist of apartments, condominium/timeshare properties, hotels, golf courses and restaurants. Other impacted parcels are either vacant, agriculture use, existing ponds/surface waters or municipal/utility facilities. The majority of right-of-way impacts to parcels are related to stormwater management (approximately 135 acres) and the remaining impacts are related to roadway improvements (approximately 53 acres). Eighteen parcels in the project study area are impacted by both roadway and stormwater management acquisitions. Of the 125 unique parcel IDs, the recommended alternative for I-4 Segment 1 is anticipated to impact eleven parcels that are developed/occupied may require full or partial (nine full, two partial) acquisitions, involving potential relocation of existing commercial properties. No residential relocations are anticipated within I-4 Segment 1. The impacted commercial parcels are located within/near the existing Crossroads Shopping Plaza in the northeast quadrant of the I-4 and SR 535 interchange and are identified in Table 6.8.

To minimize the unavoidable effects of right-of-way acquisition and displacement of people, FDOT will carry out a relocation assistance program in accordance with The Uniform Relocation assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended, for Federal and Federally Assisted Programs (23 CFR and 49 CFR, Part 24, Sections 334.048, 339.09 and 421.55, Florida Statutes Rule 14-66, Florida Administrative Code). The recommended alternative for I-4 Segment 1 is not anticipated to result in any residential displacements, however a review of real estate listings using internet search engines shows there is an ample number of sites available for potential displacees to relocate to within the project study area. Additional information pertaining to the potentially displaced properties, including resources available to facilitate relocation and socio-economic impacts to the surrounding neighborhoods are identified in the *Conceptual Stage Relocation Plan (September 2016)* prepared for this project.

**Table 6.8: Potential Relocations**

Parcel ID	Location	Parcel Size (Acres)	Proposed ROW Acquisition (Acres)
28-24-22-0000-00-033	12501 SR 535, Orlando, FL 32836	31.699	31.699
28-24-22-0000-00-031	12551 SR 535, Orlando, FL 32836	0.682	0.682
28-24-22-0000-00-032	12545 SR 535, Orlando, FL 32836	2.487	2.487

Table 6.8: Potential Relocations

Parcel ID	Location	Parcel Size (Acres)	Proposed ROW Acquisition (Acres)
28-24-22-0000-00-030	12557 SR 535, Orlando, FL 32836	0.661	0.661
28-24-22-0000-00-034	12555 SR 535, Orlando, FL 32836	0.200	0.200
28-24-22-0000-00-029	12559 SR 535, Orlando, FL 32836	0.397	0.397
28-24-22-0000-00-027	12549 SR 535, Orlando, FL 32836	0.411	0.411
28-24-22-0000-00-035	12547 SR 535, Orlando, FL 32836	0.700	0.700
28-24-22-0000-00-028	12553 SR 535, Orlando, FL 32836	0.416	0.416
<b>Total:</b>		<b>37.652</b>	<b>37.652</b>

## 6.7 Traffic Operational Analysis

Traffic operational analyses of the Recommended Build Alternative (referred to as Modified Build in the current I-4 SAMR Reevaluation) were completed. The operational analyses included Highway Capacity Analysis using Highway Capacity Software (HCS) 2010 for freeway, weave and ramp operations along the Interstate and Synchro software for arterial intersection operations. Additionally, micro simulation analyses were performed using VISSIM software to analyze the I-4 general and special use lanes and the study area intersections for Build 2040. Detailed analyses, including model runs and computer outputs are provided in a future conditions analysis technical memorandum that is an appendix to the *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation: I-4 Beyond the Ultimate Project South Section – from West of US 27 to West of SR 435 (Kirkman Road) (March 2017)* prepared for this project; the following sections provide a summary of the traffic operations analyses for the recommended alternative.

### Basic Freeway Operations

The results of the HCM operational analyses of the basic freeway segments, as shown in Table 6.9, indicated that the majority of basic freeway segments (general purpose lanes) within I-4 Segment 1 would operate at LOS D or better during both peak hours for the projected 2040 peak traffic volumes. Four of the 18 basic freeway segments within I-4 Segment 1 Eastbound and three of the 20 basic freeway segments within I-4 Segment 1 westbound would operate at LOS E or worse during the AM and/or PM peak hour for the projected 2040 traffic volumes. The express lanes are projected to operate at LOS B or better during both the AM and PM peak hours.

### Intersection Operations

The results of the operational analyses, as shown in Table 6.10, indicated that the majority of study intersections within the project area are projected to operate at LOS D or better during the AM and PM peak hours for the projected 2040 traffic volumes. Five of the 23 intersections would operate at LOS E during the AM and/or PM peak hour.



Table 6.9: Basic Freeway Operational Analysis Results – Build 2040

Roadway/Segment		AM Peak Hour			PM Peak Hour		
		Avg Speed	Density	LOS	Avg Speed	Density	LOS
		(mph)	(pc/mi/ln)		(mph)	(pc/mi/ln)	
I-4 Basic Freeway Eastbound							
On Ramp from US 27	CR 532 Off Ramp	57.3	39.2	E	62.7	31.8	D
CR 532 Off Ramp	On Ramp from CR 532	66.3	28.4	D	68.9	25.3	C
On Ramp from CR 532	SR 429 Off Ramp	67.5	27.0	D	70.4	23.3	C
SR 429 Off Ramp	On Ramp from SR 429	60.6	35.4	E	66.3	28.4	D
On Ramp from SR 429	World Dr-SR 417 Off Ramp	66.4	26.5	D	68.5	22.7	C
World Dr-SR 417 Off Ramp	On Ramp from EL at World Dr	68.4	23.0	C	69.5	20.3	C
On Ramp from EL at World Dr	On Ramp from World Dr	69.3	20.9	C	69.9	18.5	C
On Ramp from World Dr	US 192 Off Ramp	69.5	20.1	C	69.9	18.2	C
US 192 Off Ramp	Osceola Pkwy Off Ramp	70.0	16.9	B	70.0	16.4	B
Osceola Pkwy Off Ramp	On Ramp from US 192	70.0	10.6	A	70.0	10.3	A
On Ramp from US 192	SR 536 - SR 535 Off Ramp	69.4	20.6	C	69.6	19.9	C
SR 536 - SR 535 Off Ramp	On Ramp from Osceola Pkwy	70.0	15.6	B	70.0	10.6	A
On Ramp from Osceola Pkwy	On Ramp from EL at SR 536	70.0	16.4	B	70.0	14.3	B
On Ramp from EL at SR 536	On Ramp from SR 536	62.8	31.7	D	66.5	26.3	D
On Ramp from SR 536	On Ramp from SR 535	47.5	54.6	F	54.0	44.0	E
On Ramp from SR 535	Daryl Carter Pkwy Off Ramp	62.3	32.4	D	63.7	30.5	D
Daryl Carter Pkwy Off Ramp	Central Florida Pkwy Off Ramp	59.1	36.8	E	61.8	33.0	D
Central Florida Pkwy Off Ramp	On Ramp from Daryl Carter Pkwy	61.2	33.9	D	64.7	29.1	D
I-4 Basic Freeway Westbound							
SR 528 Off Ramp	Daryl Carter Pkwy - SR 535 Off Ramp	68.7	22.2	C	66.0	27.1	D
Daryl Carter Pkwy - SR 535 Off Ramp	Central Florida Pkwy Off Ramp	70.0	15.1	B	69.8	18.9	C
Central Florida Pkwy Off Ramp	On Ramp from SR 528	70.0	8.0	A	70.0	11.4	B
On Ramp from SR 528	On Ramp from Central Florida Pkwy	70.0	15.8	B	69.7	19.7	C
On Ramp from Central Florida Pkwy	SR 536 Off Ramp	62.8	31.6	D	58.3	37.8	E
SR 536 Off Ramp	Daryl Carter Pkwy Off Ramp	70.0	17.8	B	68.9	21.8	C
Daryl Carter Pkwy Off Ramp	On Ramp from SR 535	65.7	27.5	D	61.5	33.4	D
On Ramp from SR 535	Osceola Pkwy Off Ramp	66.4	26.4	D	66.1	26.9	D
Osceola Pkwy Off Ramp	On Ramp from SR 536	69.2	21.1	C	68.5	22.7	C
On Ramp from SR 536	US 192 Off Ramp	69.6	19.7	C	69.2	21.2	C
US 192 Off Ramp	On Ramp from Osceola Pkwy	70.0	10.5	A	70.0	10.7	A
On Ramp from Osceola Pkwy	On Ramp from US 192	70.0	14.0	B	70.0	14.8	B
On Ramp from US 192	World Dr Off Ramp	69.9	18.7	C	69.4	20.4	C
World Dr Off Ramp	Off Ramp to EL north of World Dr	69.8	19.3	C	69.2	21.0	C
Off Ramp to EL north of World Dr	On Ramp from SR 417-World Dr	69.2	21.0	C	68.3	23.2	C
On Ramp from SR 417-World Dr	SR 429 Off Ramp	68.3	23.2	C	65.9	27.3	D
SR 429 Off Ramp	On Ramp from SR 429	64.0	30.1	D	58.5	37.5	E
On Ramp from SR 429	CR 532 Off Ramp	70.0	23.9	C	66.8	27.9	D

Table 6.9: Basic Freeway Operational Analysis Results – Build 2040

Roadway/Segment		AM Peak Hour			PM Peak Hour		
		Avg Speed	Density	LOS	Avg Speed	Density	LOS
		(mph)	(pc/mi/ln)		(mph)	(pc/mi/ln)	
CR 532 Off Ramp	On Ramp from CR 532	68.0	26.4	D	65.4	29.5	D
On Ramp from CR 532	US 27 Off Ramp	62.9	32.5	D	56.0	41.3	E
I-4 EL Eastbound							
On Ramp from US 27	SR 429 Off Ramp	75.0	13.1	B	75.0	12.6	B
SR 429 Off Ramp	On Ramp from SR 429	75.0	11.2	B	75.0	10.6	A
On Ramp from SR 429	On Ramp from I-4 at World Dr	75.0	12.5	B	75.0	11.9	B
On Ramp from I-4 at World Dr	SR 417 Off Ramp	74.8	15.0	B	75.0	14.2	B
SR 417 Off Ramp	Osceola Pkwy Off Ramp	70.0	12.7	B	70.0	12.4	B
Osceola Pkwy Off Ramp	SR 535 - SR 536 Off Ramp	70.0	11.4	B	70.0	11.2	B
SR 535 - SR 536 Off Ramp	Off Ramp to I-4 at Osceola Pkwy	70.0	10.4	A	70.0	10.4	A
Off Ramp to I-4 at Osceola Pkwy	On Ramp from SR 536	75.0	8.3	A	75.0	8.3	A
On Ramp from SR 536	On Ramp from CD south of SR 535	75.0	14.0	B	75.0	13.7	B
On Ramp from CD south of SR 535	SR 528 Off Ramp	74.9	14.9	B	74.9	14.9	B
I-4 EL Westbound							
On Ramp from SR 528	SR 536 Off Ramp to CD	75.0	14.1	B	74.7	15.5	B
SR 536 Off Ramp to CD	SR 536 Off Ramp	75.0	12.6	B	75.0	14.0	B
SR 536 Off Ramp	On Ramp from SR 536	75.0	8.0	A	75.0	8.6	A
On Ramp from SR 536	On Ramp from SR 417	75.0	10.0	A	75.0	11.0	B
On Ramp from SR 417	Off Ramp from I-4 north of World Dr	75.0	12.4	B	75.0	14.0	B
Off Ramp from I-4 north of World Dr	SR 429 Off Ramp	75.0	10.2	A	75.0	11.4	B
SR 429 Off Ramp	On Ramp from SR 429	75.0	9.0	A	75.0	10.1	A
On Ramp from SR 429	US 27 Off Ramp	75.0	11.0	A	75.0	12.0	B
		Segments operating at LOS E or worse.					



Table 6.10: Intersection Operational Analysis Results – Build 2040

Primary Road	Secondary Road	2040 AM Peak Hour		2040 PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
CR 532	Masters Blvd	33.7	C	54.7	D
	WB Ramps	36.4	D	24.0	C
	EB Ramps	40.1	D	31.7	C
	Legends Blvd	14.0	B	13.5	B
World Dr	Griffin Rd	25.0	C	33.9	C
	Celebration Blvd	28.9	C	19.8	B
US 192	Parkway Blvd	31.9	C	58.5	E
Osceola Pkwy	Victory Way	80.3	F	85.5	F
	International Dr	66.7	E	75.9	E
SR 536	World Center Dr	47.5	D	57.5	E
SR 535	Palm Pkwy	44.8	D	48.5	D
	Hotel Plaza Blvd	36.3	D	40.6	D
	WB Off Ramp	38.1	D	38.2	D
	WB On Ramp	19.7	B	19.7	B
	EB Ramps	69.4	E	93.5	F
	Meadow Creek	46.9	D	40.8	D
Daryl Carter Pkwy	I-4 WB Ramps	20.8	C	25.8	C
	I-4 EB Ramps	20.0	C	22.0	C
	Palm Pkwy	48.3	D	46.6	D
Central Florida Pkwy	Palm Pkwy	29.4	C	34.7	C
	WB Ramps	17.0	B	30.2	C
	EB Ramps	30.2	C	34.2	C
	Westwood Blvd	48.2	D	54.6	D
Intersections operating at LOS E or worse.					

## 6.8 Bridge Analysis

An analysis of the existing bridge conditions and proposed improvements for each bridge structure was conducted as part of this PD&E study. There are thirty-one existing bridge structures along the I-4 Segment 1 mainline, one existing bridge structure along World Drive and two existing bridge structures along Osceola Parkway. As part of this study, each bridge was evaluated to determine if widening or replacement of the bridges is required or if the bridge may remain in place. Where practical, widening or retrofitting the existing structure is recommended. However, due to the proposed roadway geometrics and alignment, there are several structures which will require replacement. Based on the bridge analysis, 41 new bridge structures are recommended. New bridge

structures of note are an approximately 7000-foot elevated roadway carrying I-4 Eastbound Express Lanes, 11,000-foot elevated Eastbound GUL section, 16,500-foot elevated westbound GUL section and new bridge structures along I-4 and Osceola Parkway at Bonnet Creek due to the proposed creek realignment. The existing I-4 bridges over Bonnet Creek will be replaced, and the creek will be relocated so that it is no longer underneath the Osceola Parkway Bridges. The new I-4 bridges over the relocated Bonnet Creek will span the entire Reedy Creek right-of-way, which is 300 feet. The bridges can be multiple span structures, and do not have to clear span the entire 300 feet. The proposed bridge improvements for I-4 Segment 1 are summarized in Table 6.11. Vertical clearance requirements are based on minimum vertical clearance to the rail of a future high speed rail corridor. Coordination should occur in the design phase to ensure adequate clearance between highway sign panels and bridge deck structures along portions of the corridor where special typical sections with multi-level structures are proposed.

## 6.9 Conceptual Signing Plan

A conceptual signing plan for the recommended alternatives was developed for the I-4 BtU improvements. A critical aspect in development of the signing concepts is distinguishing between the general use and special use (express) lanes. This is achieved by employing the designated sign panel colors to distinguish between the two lane facility types. The conceptual signing plan includes static and dynamic message signs (DMS) which show entry/exit access points between the general use and express lanes, as well as vehicle eligibility restrictions and toll pricing amounts. The conceptual signing plan for I-4 Segment 1 is provided in Appendix C.

## 6.10 Utilities

Numerous utility companies have utilities located within the project corridor, as previously identified in Section 2.16 of this report. Utility impacts were carefully evaluated when considering the proposed roadway improvements and stormwater pond locations. The location of overhead utilities, existing power poles and access issues were also evaluated to minimize impacts. However, smaller gas lines and other buried utilities may involve relocation.

Most utility companies have the capability to adjust their services without causing major inconveniences to the customers. As a result, mitigation measures, to the maximum extent feasible, will include the following:

- Maintaining utility connections in temporary locations;
- Minimizing the time without service;
- Installing alternative or new service before disconnecting the existing service; and
- Allowing service disruption only during periods of non-usage or minimum usage.



Table 6.11: Proposed Bridge Improvements

Facility	Bridge No.	Project FPID	Proposed Improvement	Proposed Bridge Length (ft.)	Proposed Bridge Width (ft.)	Proposed Minimum Vertical Clearance (ft.)	Depth of Structure (ft.) <sup>[1]</sup>	Super-structure Type	No. Spans	Max Span Length (ft.)	Comments
I-4 WB over CR 532	920094	431456-1	Replace	178.3	106	16.6	4	Prestressed Concrete Beams	4	51.5	Existing substructure conflicts with proposed CR 532 alignment. Skewed Supports.
I-4 EB over CR 532	920095	431456-1	Replace	178.3	106	16.6	4	Prestressed Concrete Beams	4	51.5	Existing substructure conflicts with proposed CR 532 alignment. Skewed Supports.
Tradition Blvd. over I-4	925500	431456-1	Remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
I-4 EB EL Ramp Over I-4 EB GUL to NB SR 429	New Bridge	431456-1	New Bridge	514.1	31	16.5	9	Steel I-Girder	3	245.0	Straddle pier and integral-cap pier likely. Curved Geometry.
SR-429 SB Ramp Over I-4 WB GUL to WB EL	New Bridge	431456-1	New Bridge	582.4	31	16.5	9	Steel I-Girder	3	254.0	Two straddle piers likely. Curved Geometry.
Ramp "B" Over I-4 & Ramp "C"	920601	431456-1	Remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Curved Geometry and Skewed Supports.
Ramp "C" Over CR 545 & I-4	920602	431456-1	Remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Curved Geometry and Skewed Supports.
I-4 WB EL Ramp Over I-4 WB GUL to NB SR 429	New Bridge	431456-1	New Bridge	721.3	31	16.5	8	Steel I-Girder	3	191.0	Curved Geometry and Skewed Supports.
CR 545 (Old Lake Wilson Rd) over I-4	924179	431456-1	Replace	880.0	126	23.5	9.5	Steel I-Girder	4	282.0	Existing substructure conflicts with proposed Ultimate I-4 section.
SR 429 SB Ramp to I-4 EB EL	New Bridge	431456-1	New Bridge	400.0	31	16.5	8	Steel I-Girder	3	191.0	Curved Geometry and Skewed Supports.
I-4 EB Express Elevated	New Bridge	431456-1	New Bridge	6900.0	48	16.5	12	Concrete Box Girder	46	150.0	

Table 6.11: Proposed Bridge Improvements

Facility	Bridge No.	Project FPID	Proposed Improvement	Proposed Bridge Length (ft.)	Proposed Bridge Width (ft.)	Proposed Minimum Vertical Clearance (ft.)	Depth of Structure (ft.) <sup>[1]</sup>	Super-structure Type	No. Spans	Max Span Length (ft.)	Comments
I-4 WB over Reedy Creek	920098	431456-1	Replace	227.0	141	4.8	5	Prestressed Concrete Beams	2	113.5	Recommend replacement due to original construction in 1960 and retrofitted in 2006 with scour countermeasures.
I-4 EB over Reedy Creek	920099	431456-1	Replace	227.0	76	4.8	5	Prestressed Concrete Beams	2	113.5	Recommend replacement due to original construction in 1960 and retrofitted in 2006 with scour countermeasures.
World Dr SB over I-4	920176	431456-1	Replace	404.2	71.1	23.5	6	Prestressed Concrete Beams	4	135.8	Existing substructure conflicts with proposed Ultimate I-4 section. Curved Geometry.
World Dr NB over I-4	920170	431456-1	Replace	407.9	59.1	23.5	6	Prestressed Concrete Beams	4	137.8	Existing substructure conflicts with proposed Ultimate I-4 section.
World Drive Ramp C2 Over NB World Drive	750555 (formerly 920171)	431456-1	Remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Curved Geometry and Skewed Supports.
I-4 EB EL Ramp to SR 417 NB	New Bridge	431456-1	New Bridge	570.4	31	16.5	8	Steel I-Girder	3	231.0	Curved Geometry.
SR 417 SB Ramp to I-4 WB EL	New Bridge	431456-1	New Bridge	812.0	31	23.5	9	Steel I-Girder	4	260.0	Curved Geometry and Skewed Supports.
SR 417 SB Ramp A over I-4	920169	431456-1	Replace	612.0	49	23.5	7	Steel I-Girder	4	201.3	Existing substructure conflicts with proposed Ultimate I-4 section. Curved Geometry and Skewed Supports.
SR 417 NB Over Celebration Place	920154	431456-1	Widen	154.0	24	16.5	5	Prestressed Concrete Beams	1	154.0	12-ft. Interior Widening
US 192 EB Ramp over I-4	920083	431456-1	Replace	364.4	43	23.5	7	Steel I-Girder	2	195.0	Existing substructure conflicts with proposed Ultimate I-4 section. Curved Geometry and Skewed Supports.



Table 6.11: Proposed Bridge Improvements

Facility	Bridge No.	Project FPID	Proposed Improvement	Proposed Bridge Length (ft.)	Proposed Bridge Width (ft.)	Proposed Minimum Vertical Clearance (ft.)	Depth of Structure (ft.) <sup>[1]</sup>	Super-structure Type	No. Spans	Max Span Length (ft.)	Comments
US 192 EB over I-4	920193	431456-1	Replace	462.2	66.6	23.5	8	Steel I-Girder	2	238.0	Existing substructure conflicts with proposed Ultimate I-4 section. Skewed Supports.
US 192 WB over I-4	920192	431456-1	Replace	467.9	59	23.5	8	Steel I-Girder	2	233.0	Existing substructure conflicts with proposed Ultimate I-4 section. Skewed Supports.
Ramp CA Flyover	920195	431456-1	Remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Curved Geometry and Skewed Supports.
I-4 EB ramp to WB US 192	920194	431456-1	Replace	382.6	36	23.5	7	Steel I-Girder	2	196.0	Existing substructure conflicts with proposed Ultimate I-4 section. Skewed Supports.
Osceola Pkwy EB over I-4	924158	431456-1	Replace	535.4	101.7	16.5	8	Steel I-Girder	3	268.0	Existing substructure conflicts with proposed Ultimate I-4 section. Skewed Supports.
Osceola Pkwy WB over I-4	920180	431456-1	Replace	637.1	67.1	16.5	8	Steel I-Girder	3	263.0	Existing substructure conflicts with proposed Ultimate I-4 section. Skewed Supports.
Osceola Pkwy EB over Bonnet Creek	New Bridge	431456-1	New Bridge	300.0	140	10	6	Prestressed Concrete Beams	3	125.0	Curved Geometry and Skewed Supports.
Osceola Pkwy WB over Bonnet Creek	New Bridge	431456-1	New Bridge	300.0	67	10	6	Prestressed Concrete Beams	3	125.0	
I-4 EB EL Off Ramp Over GUL and ramp	New Bridge	431456-1	New Bridge	550.0	30	16.5	8	Steel I-Girder	3	230.0	Curved Geometry.
Osceola Parkway EB on ramp over Pond 130	920184	431456-1	Replace	900.0	40	16.5	8	Steel I-Girder	6	230.0	Revise horizontal alignment for continuity with proposed improvements Curved Geometry and Skewed Supports.
I-4 EB CD Ramp over Bonnet Creek to Osceola Parkway WB	920185	431456-1	Replace	330.0	40	10	6	Prestressed Concrete Beams	3	125.0	Revise horizontal alignment for continuity with proposed improvements Curved Geometry and Skewed Supports.

Table 6.11: Proposed Bridge Improvements

Facility	Bridge No.	Project FPID	Proposed Improvement	Proposed Bridge Length (ft.)	Proposed Bridge Width (ft.)	Proposed Minimum Vertical Clearance (ft.)	Depth of Structure (ft.) <sup>[1]</sup>	Super-structure Type	No. Spans	Max Span Length (ft.)	Comments
I-4 WB over Bonnet Creek	New Bridge	242484-8	New Bridge	600.0	160	10	6	Prestressed Concrete Beams	4	150.0	Skewed Supports.
I-4 EB over Bonnet Creek	New Bridge	242484-8	New Bridge	600.0	160	10	6	Prestressed Concrete Beams	4	150.0	Skewed Supports.
Ramp CD WB over Bonnet Creek	New Bridge	242484-8	New Bridge	725.0	47	10	6	Prestressed Concrete Beams	6	135.0	Curved Geometry and Skewed Supports.
EL ramp over EB I-4 GUL and Ramp	New Bridge	242484-8	New Bridge	746.0	31	16.5	6	Steel I-Girder	5	172.0	Curved Geometry and Skewed Supports.
I-4 EB off ramp over I-4 EB on ramp	Remain	242484-8	Remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
I-4 WB GUL Over SR 536 Ramp to I-4 WB GUL	New Bridge	242484-8	New Bridge	270.3	64	16.5	6	Prestressed Concrete Beams	2	135.2	Skewed Supports.
I-4 WB CD Over SR 536 Ramp to I-4 WB GUL	750556	242484-8	Replace	220.0	51.1	16.5	6	Prestressed Concrete Beams	2	110.0	
SR 536 EB Ramp over I-4	750324	242484-8	Replace	504.0	56	23.5	8	Prestressed Concrete Beams	5	169.5	Existing substructure conflicts with proposed Ultimate I-4 section. Curved Geometry.
SR 536 EB over I-4	750323	242484-8	Replace	454.0	54	23.5	7	Prestressed Concrete Beams	5	150.0	Existing substructure conflicts with proposed Ultimate I-4 section. Skewed Supports.
SR 536 WB over I-4	750322	242484-8	Replace	454.0	54	23.5	7	Prestressed Concrete Beams	5	150.0	Existing substructure conflicts with proposed Ultimate I-4 section. Skewed Supports.
SR 536 Ramp A Over SR 536	New Bridge	242484-8	New Bridge	161.4	31	16.5	4	Prestressed Concrete Beams	2	80.7	Curved Geometry.



Table 6.11: Proposed Bridge Improvements

Facility	Bridge No.	Project FPID	Proposed Improvement	Proposed Bridge Length (ft.)	Proposed Bridge Width (ft.)	Proposed Minimum Vertical Clearance (ft.)	Depth of Structure (ft.) <sup>[1]</sup>	Super-structure Type	No. Spans	Max Span Length (ft.)	Comments
SR 536 Ramp B Over SR 536	750325	242484-8	Replace	202.4	51.7	16.5	5	Prestressed Concrete Beams	2	101.2	Modify plan geometry. Curved Geometry and Skewed Supports.
SR 536 Ramp B1 over SR 536	New Bridge	242484-8	New Bridge	109.4	31	16.5	5	Prestressed Concrete Beams	1	109.4	Curved Geometry and Skewed Supports.
SR 536 Ramp B2 Over SR 536	New Bridge	242484-8	New Bridge	138.1	32	16.5	5	Prestressed Concrete Beams	1	138.1	Curved Geometry and Skewed Supports.
SR 536 Ramp A Over loop ramp	New Bridge	242484-8	New Bridge	577.0	31	16.5	5	Prestressed Concrete Beams	6	100.0	Curved Geometry.
SR 536 Ramp G Over I-4 EB CD	New Bridge	242484-8	New Bridge	202.3	48	16.5	7	Steel I-Girder	1	202.3	Curved Geometry.
SR 536 Ramp H Over I-4 EB CD	New Bridge	242484-8	New Bridge	200.2	44	16.5	7	Steel I-Girder	1	202.3	Curved Geometry.
I-4 WB CD Over I-4 WB GUL Ramp to SR 536 WB	New Bridge	242484-8	New Bridge	329.7	31	16.5	8	Steel I-Girder	2	164.9	Curved Geometry.
I-4 EB GUL Elevated	New Bridge	242484-8	New Bridge	5930.0	85	16.5	12	Concrete Box Girder	73	150.0	
I-4 WB GUL Elevated	New Bridge	242484-8	New Bridge	16530.0	85	16.5	12	Concrete Box Girder	110	150.0	
I-4 WB CD Road Ramp to I-4 WB GUL	New Bridge	242484-8	New Bridge	778.6	31	16.5	9	Concrete Box Girder	4	194.7	Curved Geometry and Skewed Supports.
Pedestrian Bridge	New Bridge		New Bridge					Pre-Fab. Steel			

Table 6.11: Proposed Bridge Improvements

Facility	Bridge No.	Project FPID	Proposed Improvement	Proposed Bridge Length (ft.)	Proposed Bridge Width (ft.)	Proposed Minimum Vertical Clearance (ft.)	Depth of Structure (ft.) <sup>[1]</sup>	Super-structure Type	No. Spans	Max Span Length (ft.)	Comments
I-4 EB over SR 535	750368	242484-8	Replace	270.2	106	16.5	6	Prestressed Concrete Beams	2	135.1	Replacement bridge will carry I-4 EB EL over SR 535. Skewed Supports.
I-4 WB over SR 535	750367	242484-8	Replace	432.5	44	16.5	6	Prestressed Concrete Beams	4	130.2	Replacement bridge will carry I-4 WB EL over SR 535 and I-4 EB Ramp to SR 535 NB. Skewed Supports.
I-4 EB GUL and EL over ramp to I-4 EB	New Bridge	242484-8	New Bridge	99.0	108	16.5	6	Prestressed Concrete Beams	1	120.0	Skewed Supports.
I-4 WB C/D Road Over SR 535	New Bridge	242484-8	New Bridge	342.0	64	16.5	6	Prestressed Concrete Beams	1	120.0	New bridge will carry I-4 WB C/D road over SR 535 Skewed Supports.
I-4 WB flyover over NB SR 535	New Bridge	242484-8	New Bridge	337.0	56	16.5	5	Prestressed Concrete Beams	4	105.0	Curved Geometry and Skewed Supports.
SR 535 SB Over Vineland Avenue	New Bridge	242484-8	New Bridge	156.2	79.5	16.5	6	Steel I-Girder	1	156.2	
Vineland Avenue Ramp Over SR 535 NB	New Bridge	242484-8	New Bridge	184.5	46.0	16.5	6	Steel I-Girder	1	184.5	Curved Geometry.
SR 535 NB Over Hotel Plaza Blvd.	New Bridge	242484-8	New Bridge	126.0	90.7	16.5	6	Steel I-Girder	1	126.0	
Hotel Plaza Blvd. Ramp Over SR 535 SB	New Bridge	242484-8	New Bridge	176.5	45.0	16.5	6	Steel I-Girder	1	176.5	Curved Geometry and Skewed Supports.
Elevated CD Ramp to I-4 WB GUL	New Bridge	242484-8	New Bridge	7650.0	32.0	16.5	7	Concrete Box Girder	52	150.0	3rd Level Structure. Shared substructure components with adjacent Elevated GUL Structure.
Elevated CD Off-Ramp	New Bridge	242484-8	New Bridge	1500.0	48.0	16.5	7	Concrete Box Girder	10	150.0	



Table 6.11: Proposed Bridge Improvements

Facility	Bridge No.	Project FPID	Proposed Improvement	Proposed Bridge Length (ft.)	Proposed Bridge Width (ft.)	Proposed Minimum Vertical Clearance (ft.)	Depth of Structure (ft.) <sup>[1]</sup>	Super-structure Type	No. Spans	Max Span Length (ft.)	Comments
I-4 WB Ramp to SR 535 SB Over I-4 WB Ramp to SR 535 NB	New Bridge	242484-8	New Bridge	190.0	32.0	16.5	5	Prestressed Concrete Beams	3	75.0	
Daryl Carter Pkwy over I-4	754115	242484-8	Remain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
I-4 EB on ramp from Daryl Carter Pkwy	New Bridge	242484-8	New Bridge	425.1	48	16.5	7	Steel I-Girder	2	212.6	Curved Geometry and Skewed Supports.
Central FL Pkwy Ramp Over I-4 WB GUL Ramp to WB CD Road	New Bridge	242484-8	New Bridge	832.6	48	16.5	8	Steel I-Girder	6	200.0	Skewed Supports.
flyover - Central FL Pkwy over I-4	750402	242484-8	Replace	1205.9	30.0	23.5	8	Steel Box Girders	8	209.9	Existing substructure conflicts with proposed Ultimate I-4 section. Curved Geometry and Skewed Supports.
I-4 EB over Central FL Pkwy	750200	242484-8	Replace	113.3	76	16.5	5.5	Prestressed Concrete Beams	1	113.3	Correct horizontal geometry.
I-4 EB EL Over Central FL Pkwy	New Bridge	242484-8	New Bridge	113.2	48.0	16.5	5.5	Prestressed Concrete Beams	1	113.2	
I-4 WB EL Over Central FL Pkwy	New Bridge	242484-8	New Bridge	112.4	60.0	16.5	5.5	Prestressed Concrete Beams	1	112.4	
I-4 WB over Central FL Pkwy	750142	242484-8	Replace	110.7	87.5	16.5	5.5	Prestressed Concrete Beams	1	110.7	Correct horizontal geometry.
Elevated CD Ramp over Central FL Pkwy	New Bridge	242484-8	New Bridge	1550.0	48.0	16.5	7	Concrete Box Girder	11	150.0	

Notes:

1. Depth of structure is taken as total structure depth at straddle, integral, or C-Piers.

A *Utility Impact Report (April 2016)* has been prepared and submitted under separate cover. Table 6.12 provides a summary of potential utility impacts associated with the proposed improvements in the I-4 Segment 1 corridor for the recommended alternative. Exact locations of existing utilities will be determined in the final design of the proposed improvements. Coordination with the known utility companies during the final design phase will assist in minimizing relocation adjustments and disruptions of service to the public.

Table 6.12: Proposed Utility Impacts					
Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side	Relocation Required
Communications	Comcast Communications	Aerial Fiber Optic	From underpass of Central Florida Pkwy & I-4 east to end of segment 1 limits on I-4 Corridor	West side of road	Yes, adjust to be parallel to proposed road
Communications	Comcast Communications	Underground Fiber Optic	From intersection of Palm Pkwy & Central Florida Pkwy east to end of Central Florida Pkwy	Varies from south side of road to north side of road	Yes, adjust to be parallel to proposed road
Communications	CenturyLink	84 Pair Fiber Optic	From intersection of Palm Pkwy & SR 535 north to end of SR 535	East side of road	Yes, adjust to be parallel to proposed road
Communications	CenturyLink	24 Pair Fiber Optic Cable	Crossing 270-ft north of intersection of I-4 west bound ramp to SR 535 & SR 535	N/A	Yes, extend across proposed road
Communications	CenturyLink	10-5" PVC Pipe	From 100-ft north of end of SR 535 to 360-ft south of intersection of I-4 east bound ramp to SR 535 & SR 535	Center of road	Yes, adjust to be parallel to proposed road
Communications	Level 3 Communications	Aerial Fiber Optic	Crossing intersection of Palm Pkwy & SR 535	North side of intersection	Yes, adjust due to widened intersection



Table 6.12: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side	Relocation Required
Communications	SmartCity Solutions	2" Underground Fiber Optic Cable	From 180-ft north of intersection of Hotel Plaza Blvd & SR 535 north to end of SR 535	East side of road	Yes, adjust parallel to road
Communications	SmartCity Solutions	2" Underground Fiber Optic Cable	Crossing of I-4 Corridor at Central Florida Pkwy, I-4 Overpass	West side of overpass	Yes, adjust across proposed I-4 Corridor
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two lines from 740-ft south of to intersection of Palm Pkwy & SR 535 on SR 535	South side of road	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing 180-ft north of intersection of Winter Garden Vineland Rd & SR 535	N/A	Yes, extend across proposed road
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 300-ft north of intersection of Winter Garden Vineland Rd & SR 535 north to end of SR 535	West side of road	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Turkey Lake Rd & Central Florida Pkwy east to intersection of Westwood Blvd & Central Florida Pkwy	North side of road	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing 440-ft east of intersection of Turkey Lake Rd & Central Florida Pkwy	N/A	Yes, extend across proposed road

Table 6.12: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side	Relocation Required
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 530-ft west to 460-ft east of World Dr. westbound, I-4 overpass on I-4 Corridor	East side of road	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	120 V Underground Electric	From 3330-ft west of Central Florida Pkwy underpass to Central Florida overpass on I-4 Corridor	East side of road	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	120 V Underground Electric	From 1400-ft east of Palm Pkwy Overpass east to Central Florida Pkwy on I-4 Corridor	West side of road	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	120 V Underground Electric	From 500-ft west of Central Florida Pkwy underpass to Central Florida Pkwy	West side of road, between ramps	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	120 V Underground Electric	Crossing at intersection of Vineland Ave & SR 535	East side of intersection	Yes, extend across proposed road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of I-4 Corridor, 2350-ft west of Palm Pkwy overpass	Easement	Yes, raise to accommodate second level
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From Central Florida Pkwy underpass east 1340-ft east of underpass on I-4 Corridor	West side of road	Yes, adjust to be parallel to proposed road
Electricity	Duke Energy Distribution	13 KV Aerial Electric	From 770-ft south to 600-ft south of intersection of Hotel Plaza Blvd & SR 535	North side of road	Yes, adjust to be parallel to proposed road



Table 6.12: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side	Relocation Required
Electricity	Duke Energy Transmission	69 KV Aerial Electric	Crossing at intersection of Winter Garden Vineland Rd & SR 535	North side of intersection	Yes, extend across proposed road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Westbound side of I-4 from beginning of segment one limits to end of segment one limits	West side of road	Yes, adjust to be parallel to proposed road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Eastbound side of I-4, from 3750-ft east to 4160-ft east of Old Lake Wilson Rd, I-4 Overpass	East side of road	Yes, adjust to be parallel to proposed road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two Crossings of I-4, 2010-ft east of SR 417 Westbound, I-4 Overpass	N/A	Yes, extend across proposed I-4 Corridor
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two lines on westbound side of I-4 from 3631-ft west of SR 417 westbound, I-4 Overpass east to 1980-ft west of SR 417 westbound, I-4 Overpass	West side of road	Yes, adjust to be parallel to proposed road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two lines on eastbound side of I-4 from 2760-ft west of SR 417 westbound, I-4 Overpass, east to 2010-ft west of SR 417 westbound, I-4 Overpass	East side of road	Yes, adjust to be parallel to proposed road

Table 6.12: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side	Relocation Required
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4, 220-ft east of SR 417 westbound, I-4 Overpass	East side of overpass	Yes, extend across proposed I-4 Corridor
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Eastbound side of I-4, from 220-ft east of SR 417 westbound, I-4 Overpass east to 1990-ft west of Osceola Parkway, I-4 Overpass	East side of road	Yes, adjust to be parallel to proposed road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two crossings of I-4 Corridor, 1990-ft west of Osceola Pkwy, I-4 Overpass	N/A	Yes, extend across proposed I-4 Corridor
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4 Corridor, 1150-ft east of Osceola Pkwy, I-4 Overpass	N/A	Yes, extend across proposed I-4 Corridor
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Crossing of I-4 Corridor, 590-ft east of SR 536, I-4 Overpass	N/A	Yes, extend across proposed I-4 Corridor
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Two lines on the north side of SR 536 from end of I-4, SR 536 overpass west to end of I-4 westbound ramp to SR 536 eastbound	North side of road	Yes, adjust to be parallel to proposed road
Intelligent Transportation Systems	Florida Department of Transportation	ITS Cable	Westbound side of I-4 from SR 536, I-4 Overpass east to 590-ft east of SR 536, I-4 Overpass	West side of road	Yes, adjust to be parallel to proposed road
Natural Gas	TECO Peoples Gas	8" Natural Gas Main	From 1200-ft east to 1500-ft east of I-4 west bound ramp to SR 535	North side of road	Yes, adjust to be parallel to proposed road



Table 6.12: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side	Relocation Required
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	Crossing 260-ft north of intersection of Hotel Plaza Blvd & SR 535	N/A	Yes, extend across proposed road
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	From 260-ft north of intersection of Hotel Plaza Blvd & SR 535 north to end of SR 535	East side of road	Yes, adjust to be parallel to proposed road
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	Crossing at intersection of Palm Pkwy & SR 535	South side of intersection	Yes, adjust for intersection improvements
Natural Gas	TECO Peoples Gas	6" Natural Gas Main	From end of SR 535 north bound ramp to I-4 east bound east to 4919-ft on I-4 main corridor	East side of road	Yes, adjust to be parallel to proposed road
Sewer/Storm water	Orange County Utilities	6" Force Main	From Central Florida Pkwy west bound Ramp to I-4 west bound to 530-ft west of Westwood Blvd & Central Florida Pkwy	Varies from center of road to south side of road	Yes, adjust to be parallel to proposed road
Sewer/Storm water	Orange County Utilities	4" Force Main	Crossing 500-ft south of intersection of Palm Pkwy & SR 535	From center to east side of road	Yes, extend across proposed road
Sewer/Storm water	Orange County Utilities	4" Force Main	From entrance of Radisson Hotel on SR 535 north to intersection of Winter Garden Vineland Rd & SR 535	Varies from center of road to east side of road	Yes, adjust to be parallel to proposed road

Table 6.12: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side	Relocation Required
Television	BrightHouse Networks	Underground CATV of Unknown Size	From 820-ft south of intersection of I-4 eastbound ramp to SR 535 & SR 535 to intersection of Hotel Plaza Blvd & SR 535	East side of road	Yes, adjust to be parallel to proposed road
Television	BrightHouse Networks	Underground CATV of Unknown Size	Crossing of I-4 Corridor, at Central Florida Pkwy overpass	East side of overpass	Yes, adjust to be parallel to proposed road
Television	BrightHouse Networks	Aerial CATV of Unknown Size	From 820-ft south of intersection of I-4 eastbound ramp to SR 535 & SR 535 to 370-ft north of intersection Vineland Ave & SR 535	East side of road	Yes, adjust to be parallel to proposed road
Water	Orange County Utilities	20" Reclaim Main	From SR 535 to I-4 West Bound Ramp to end of SR 535	Varies from center of road to west side of road	Yes, adjust to be parallel to proposed road
Water	Orange County Utilities	12" Reclaim Main	From I-4 East Bound Ramp to SR 535 to 100-ft south of Hotel Plaza Blvd & SR 535	Varies from center of road to west side of road	Yes, adjust to be parallel to proposed road
Water	Orange County Utilities	24" Water Main	Crossing at Central Florida Pkwy	Center of road	Yes, adjust for bridge improvements
Water	Orange County Utilities	24" Water Main	Crossing on SR 535 at entrance to Radisson Hotel	South of entrance	Yes, adjust to be parallel to proposed road
Water	Orange County Utilities	16" Water Main	Intersection of Vineland Ave & SR 535 to end of SR 535	East side of road	Yes, adjust to be parallel to proposed road



Table 6.12: Proposed Utility Impacts

Type of Utility	Utility Owner	Type of Facility	Limits	Offset/ Side	Relocation Required
Water	Orange County Utilities	12" Water Main	Entrance to Radisson Hotel on SR 535 to intersection of Winter Garden Vineland Rd & SR 535	Varies from south side of road to center of road	Yes, adjust to be parallel to proposed road
Water	Orange County Utilities	12" Water Main	Crossing at intersection of Turkey Lake Rd & Central Florida Pkwy	West side of intersection	Yes, adjust for intersection improvements
Water	Orange County Utilities	10" Water Main	Crossing at Central Florida Pkwy	North side of road	Yes, adjust to be parallel to proposed road
Water	Orange County Utilities	6" Water Main	Intersection of Vineland Ave & SR 535	Southeast corner of intersection	Yes, adjust for intersection improvements
Water	TOHO Water Authority	36" Reclaim Main	Crossing at CR 532	North side of road	Yes, adjust to be parallel to proposed road
Water	TOHO Water Authority	24" Water Main	CR 532 ramp to I-4 east to end of CR 532	North side of road	Yes, adjust to be parallel to proposed road

## 6.11 Lighting

Based on the lighting warrant criteria specified in AASHTO's Roadway Lighting Design Guide (October 2005) and as determined in the *SR 400 (I-4) Lighting Justification – West Section (US 27 to Kirkman Road) Memorandum (December 12, 2013)*, continuous freeway lighting is recommended along all of Segment 1.

## 6.12 Access Management

Access management is the practice of controlling vehicular access to a roadway in order to increase roadway efficiency and improve travel safety by reducing the number of traffic conflicts encountered by roadway users. The State Highway System Access Management Act (F.S. 335.18) mandates the implementation of access management standards based on the Access Management Classification

System developed in Administrative Rule 14-97. Property access impacts were evaluated to determine whether access can be maintained in interchange areas via the local roadway network. Meetings were conducted with some property owners regarding property access.

I-4 has been identified as Access Management Class 1 under this system. Access Class 1 consists of limited access facilities (roadways which do not provide direct property connections). The proposed improvements will not modify the existing interchange spacing; however, they will include a new full access interchange at Daryl Carter Parkway (previously known as Lake Avenue in the original PD&E study). The preferred build alternative as identified in the *Preliminary Engineering Report I-4 (S.R. 40) PD&E Study from C.R. 532 (Osceola-Polk County Line) To S.R. 528 (BeeLine Expressway)* [FPN 242526 and 242483, June 2000], provided a full access interchange at I-4 and Lake Avenue with direct connect ramps to and from the HOV lanes.

CR 532 (Osceola Polk Line Road) is a County Road which is classified as an Access Class 5 minor arterial. There are numerous businesses located on the west side of the interchange in the area known as Champions Gate. To the east of the interchange, there are a few businesses and a residential community. The study area along CR 532 starts at South Goodman Road and continues east to Kemp Road. The recommended alternative maintains two through lanes in each direction. Access to businesses will not be affected.

SR 429 and SR 417 are limited access facilities that are operated by the Florida Turnpike Enterprise within the limits of Segment 1.

World Drive is a County Road which is classified as an Access Class 3 minor arterial roadway between I-4 and US 192/SR 530. Directly west of the interchange there are no driveways, businesses or residences. To the east of the interchange, World Drive forms a major intersection with Celebration Boulevard. The recommended alternative maintains the same number of lanes and access that is provided today.

US 192/SR 530 is currently categorized as a Class 1 roadway between World Drive and I-4 and as Class 5 roadway west of World Drive and east of I-4. The proposed improvements in Segment 1 do not affect the access management of US 192/SR 530.

Osceola Parkway is a County Road which is classified as an Access Class 2 principal arterial. Directly west of the interchange there are no driveways, businesses or residences with direct access to Osceola Parkway. To the east of the interchange lies the entrance to Gaylord Palms. The study area along Osceola Parkway starts at Victory Way and continues east to International Drive. There are some modifications to the existing interchange ramps, as well as the addition of new ramps, however, the recommended alternative maintains the same access that is provided today.



SR 536 is categorized as a Class 3 roadway from west of I-4 to SR 535. The proposed improvements in Segment 1 do not affect the access management of SR 536.

SR 535 is categorized as a Class 3 roadway from I-4 to SR 530. The proposed improvements in Segment 1 will modify access to some parcels along SR 535 north and south of the interchange. Between I-4 and Hotel Plaza Boulevard, the two driveway access points immediately north of the interchange (east and west side of SR 535) will be maintained but shifted slightly from their current locations. The second driveway north of I-4 on the east side of SR 535 will be removed along with the acquisition of the Crossroads Shopping Plaza. SR 535 northbound traffic will bridge over Hotel Plaza Boulevard, eliminating the existing north to west left turn movements at the intersection. The east leg of Hotel Plaza Boulevard, which is currently the main access for the Crossroads Shopping Plaza will be converted to a new one-way loop road which will go under SR 535 to provide access to Hotel Plaza Boulevard westbound. Additionally, the Hotel Plaza Boulevard eastbound through movement will be eliminated, since there will be no plaza to access on the east side of SR 535. Between Hotel Plaza Boulevard and north to Palm Parkway, all of the accesses along SR 535 will be maintained, except for the first driveway on the east side which connects to the Crossroads Shopping Plaza; that access will no longer be required as this is the location of the proposed pond 138A. North of Palm Parkway to Vinings Way Boulevard, all accesses to parcels along SR 535 will be maintained. However, all left turns will be prohibited at the Palm Parkway intersection and SR 535 intersection. Left turning traffic will continue straight through the intersection and make a U-turn, or turn right onto the intersecting roadway and make a U-turn. Additionally, a new quadrant road is proposed to connect to the south leg of the SR 535 and Vinings Way Boulevard intersection. The quadrant road will run parallel to and west of SR 535, connecting Vinings Way Boulevard to Palm Parkway. South of the interchange, access to and from Vineland Avenue will be maintained, but SR 535 southbound through lanes will bridge over the intersection, and westbound left turns from Vineland Avenue to southbound SR 535 will bridge over the SR 535 northbound travel lanes. Between Vineland Avenue south to Meadow Creek Drive, all access drives to parcels along SR 535 will be maintained except for the right-in only driveway on the west side of SR 535, just south of Vineland Way. This driveway is located within the transition section of the southbound SR 535 bridge section from Vineland Avenue which elevates the southbound travel lanes through this section of roadway, thus the need to eliminate the existing access. A full access driveway is located approximately 300 feet south of this location which is already being utilized by the existing parcel for exiting.

Daryl Carter Parkway is a County Road classified as a minor arterial. Directly west of the interchange there is an intersection with Palm Parkway/Turkey Lake Road; however, there are no driveways, businesses or residences between the intersection and I-4. To the east of the interchange, Regency Village Drive intersects Daryl Carter Parkway, providing access to the Orlando Premium Outlets (Vineland Avenue) to the south. The study area along Daryl Carter Parkway starts at Palm Parkway and continues east to Regency Village Drive. The interchange will be reconfigured to a Diverging

Diamond Interchange, with full access to I-4 eastbound and westbound. Access to businesses in the vicinity of the Orlando Premium Outlets will not be affected.

Central Florida Parkway is a County Road classified as a minor arterial. Directly west of the interchange there are no driveways, businesses or residences with direct access. To the east of the interchange, is a major intersection with Westwood Boulevard and further east, is the access to the Sea World theme park. The study area along Central Florida Parkway starts at Turkey Lake Road/Palm Parkway and continues east to Westwood Boulevard. Interchange ramps will be added to allow access to eastbound I-4 and from westbound I-4. Access along the section of Central Florida Parkway will remain as it is today.

### 6.13 Project Cost Estimates

The estimated cost of construction including Maintenance of Traffic (MOT) and contingency is \$1.55 Billion. Estimated Engineering Design and Construction Engineering and Inspection (CEI) costs are both expected to be an additional 5% each of the total construction cost. The complete Long Range Estimates (LRE) for Segment 1 is included in Appendix D. The total estimated cost for Segment 1 is \$1.7 Billion; Table 6.13 shows the breakdown of estimated project costs for I-4 Segment 1.

Table 6.13 – Estimated Project Costs for I-4 Segment 1	
Item	Cost
LRE	\$ 1,112,820,644
MOT (10%)	\$ 111,282,065
Mobilization (10%)	\$ 122,410,271
Project Unknowns (15%)	\$ 201,976,947
Project Non-Bid Subtotal	\$ 150,000
Design (5%)	\$ 77,431,996
CEI (5%)	\$ 77,431,996
<b>Total</b>	<b>\$ 1,703,503,919</b>

### 6.14 Production Schedule

The PD&E re-evaluation for Segment 1 is scheduled to be completed in Summer of 2017. The preliminary design began in September 2015. The segment is projected to be procured as a design-build-finance contract and is currently not funded.



## 7.0 Supplemental Technical Reports

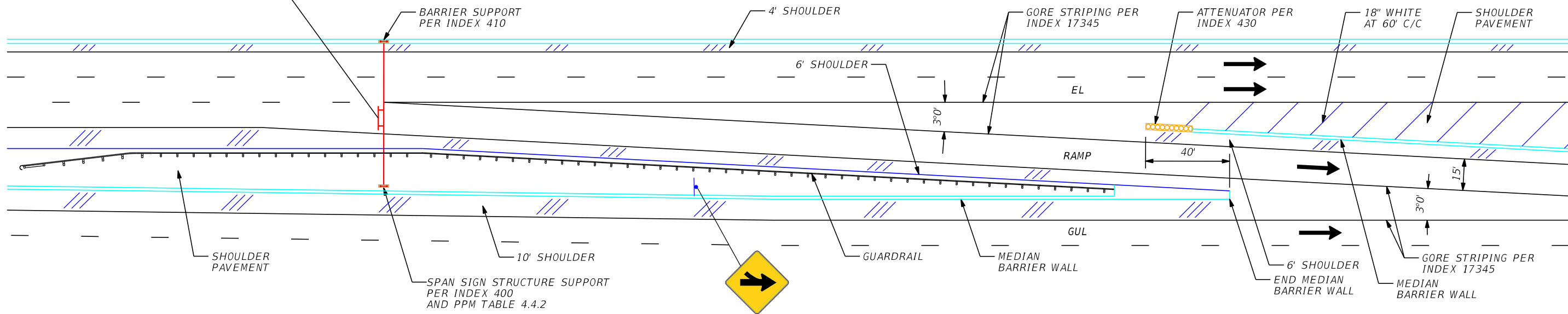
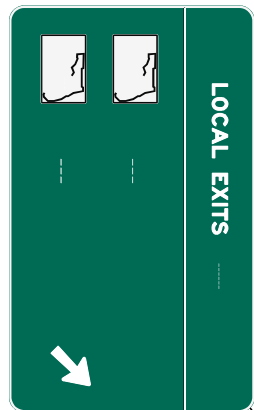
A series of supporting documents including Technical Reports and Memorandums were prepared as part of the PD&E study for this project. Information from these reports was used to evaluate and develop the alternatives and design recommendations in this PER. These documents are listed here for reference.

1. *Air Quality Analysis Technical Memorandum - Segment 1: SR 400 (I-4) from West of CR 532 (Polk/Osceola County Line) to West of SR 528 Beachline Expressway* [July 2016]
2. *Concept of Operations - SR 400 (I-4) from West of SR 25/US 27 to East of SR 472* [June 2016]
3. *Conceptual Stage Relocation Plan - Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway)* [September 2016]
4. *Contamination Screening Evaluation Report - Segment 1: from west of CR 532 (Polk/Osceola County Line) to west of SR 528 Beachline Expressway* [July 2016]
5. *Endangered Species Biological Assessment - Segment 1: from west of CR 532 (Osceola Polk Line Road) to west of SR 528 (Beachline Expressway)* [September 2016]
6. *I-4 Beyond the Ultimate Systems Access Modification Report (SAMR) Re-Evaluation I-4 Beyond the Ultimate Project: South Section – from West of US 27 to West of SR 435 (Kirkman Road)* [March 2017]
7. *Level 2 Contamination Impact Assessment Report: - SR 400 (I-4) Project Development and Environment (PD&E) Study Segment 1 Ponds 136B, 141A, 141B, and 142B* [March 2015]
8. *Location Hydraulic Report - Segment 1: State Road 400 (SR 400)/Interstate 4(I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528, Beachline Expressway* [September 2016]
9. *Noise Study Report - Segment 1: from west of CR 532 (Polk/Osceola County Line) to west of SR 528 Beachline Expressway* [July 2016]
10. *Orange County Sand Skink Memo* [September 2014]
11. *Osceola County Sand Skink Memo Report* [September 2014]
12. *Pavement Type Selection Report - Segment 1: West of CR 532(Osceola/Polk County Line) to West of SR 528 (Beachline Expressway)* [July 2014]

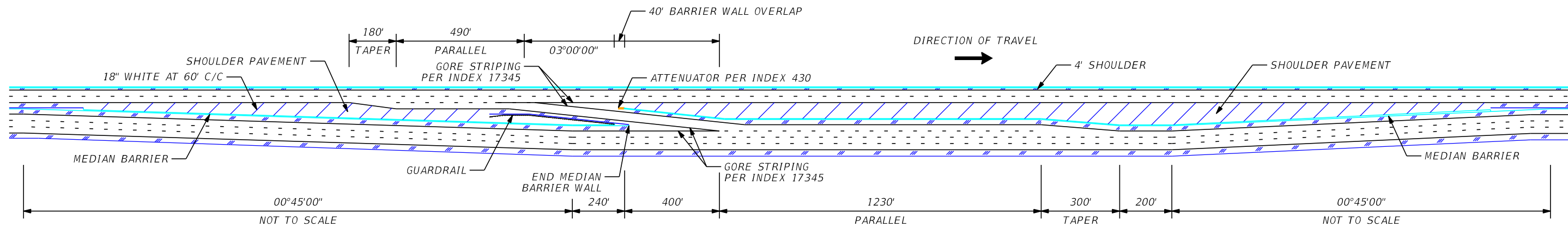
13. *Pond Siting Report - Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) [September 2016]*
14. *Report of Preliminary Geotechnical Engineering Investigation for Ponds - Segment 1 Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) [March 2016]*
15. *Technical Memorandum: Cultural Resource Assessment Survey of Proposed Improvements to Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) [April 2016]*
16. *Technical Memorandum: SR 400 (I-4) Lighting Justification – West Section (US 27 to Kirkman Road), FPID: 432100-1-22-01 [December 2013]*
17. *Utility Impact Report - Segment 1: West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) [April 2016]*
18. *Wetland Evaluation Report (WER) Segment 1: State Road 400 (SR 400)/Interstate 4 (I-4) from West of CR 532 (Osceola/Polk County Line) to West of SR 528 (Beachline Expressway) [September 2016]*



## Appendix A - **Concept Plans**



SLIP RAMP DETAIL EGRESS FROM EXPRESS LANES



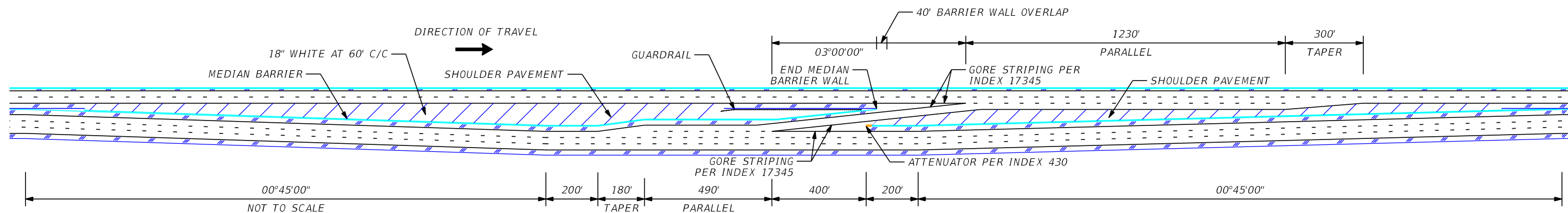
SLIP RAMP DETAIL EGRESS FROM EXPRESS LANES

	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SEGMENT 1	SHEET NO.
		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
		400	ORANGE/OSCEOLA	432100-1-22-01		1

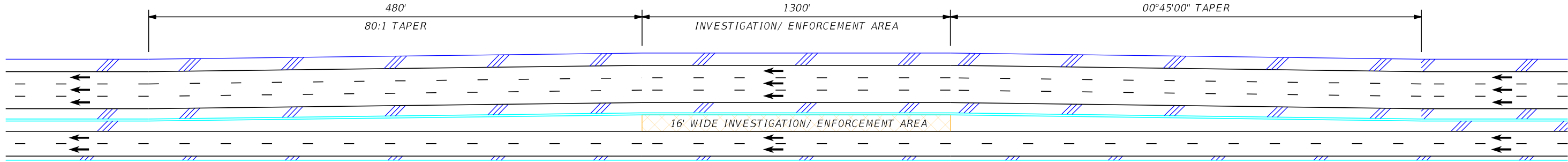




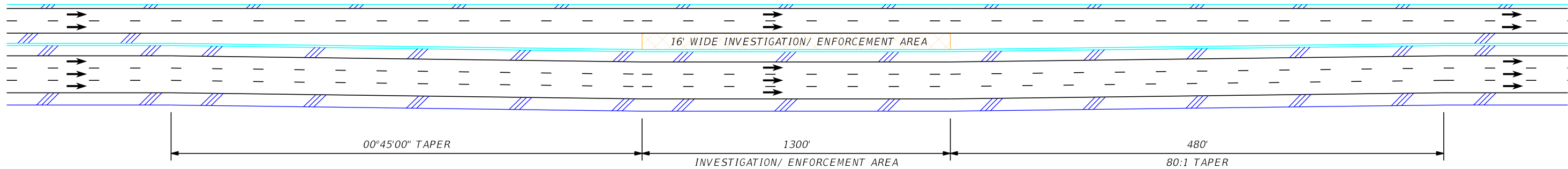
SLIP RAMP DETAIL INGRESS TO EXPRESS LANES



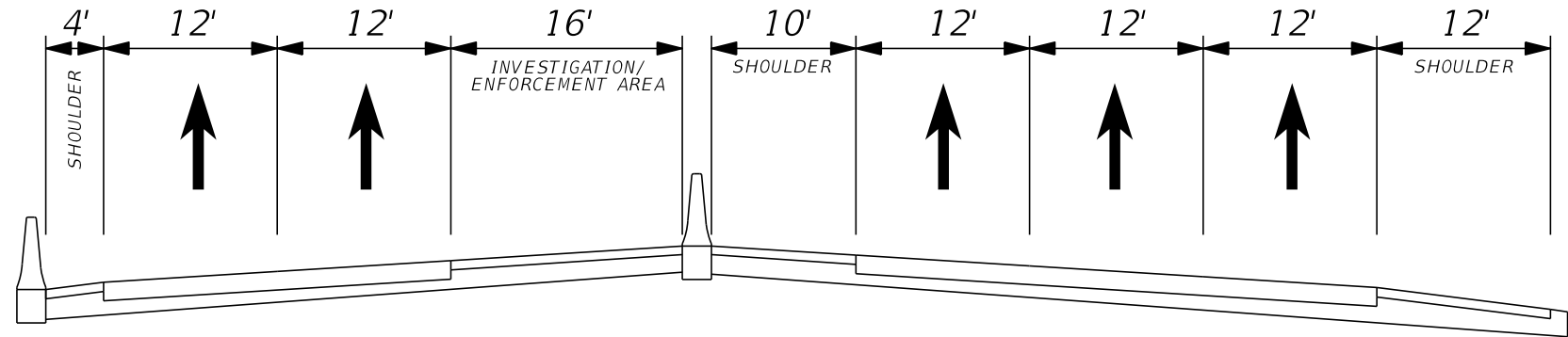
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SEGMENT 1	SHEET NO.  2
	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	400	ORANGE/OSCEOLA	432100-1-22-01		



WESTBOUND INVESTIGATION/ ENFORCEMENT AREA DETAILS



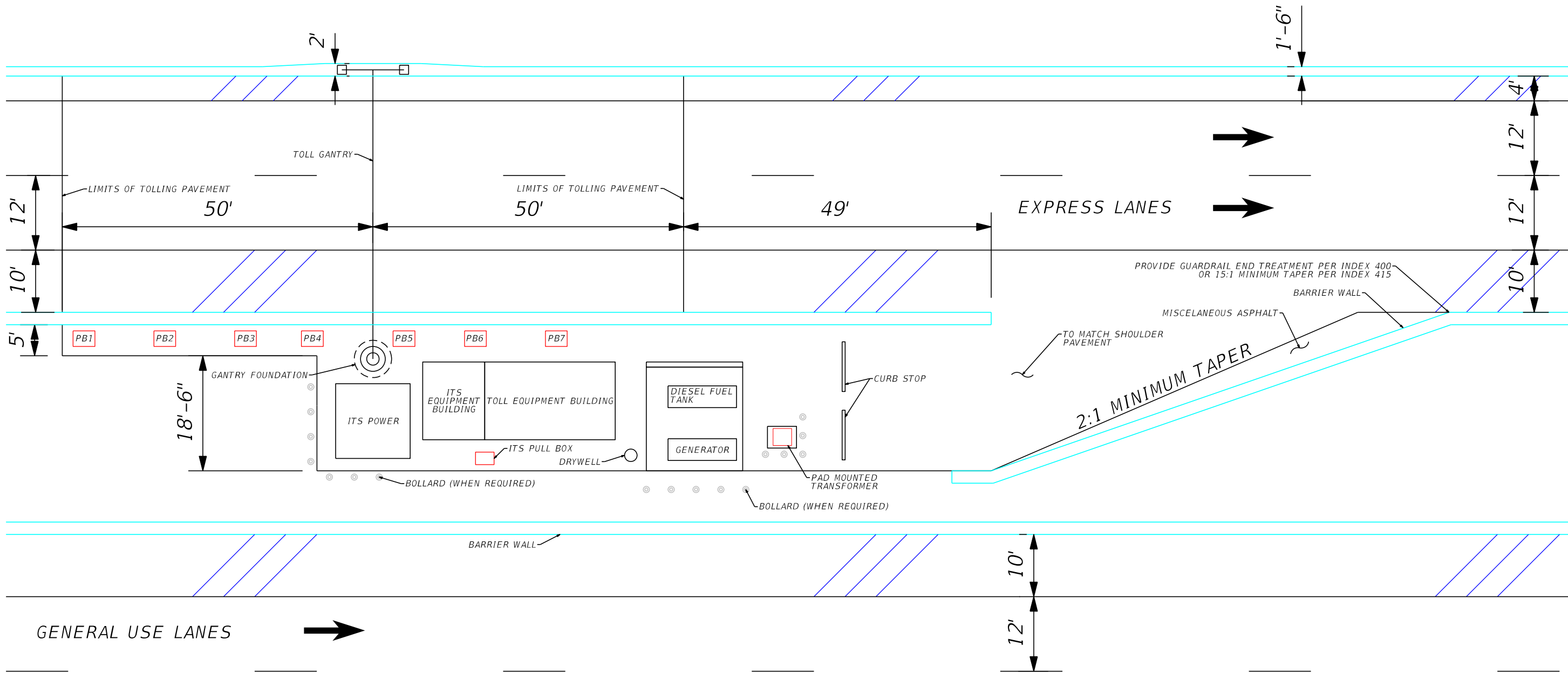
EASTBOUND INVESTIGATION/ ENFORCEMENT AREA DETAILS



INVESTIGATION/ ENFORCEMENT AREA TYPICAL SECTION

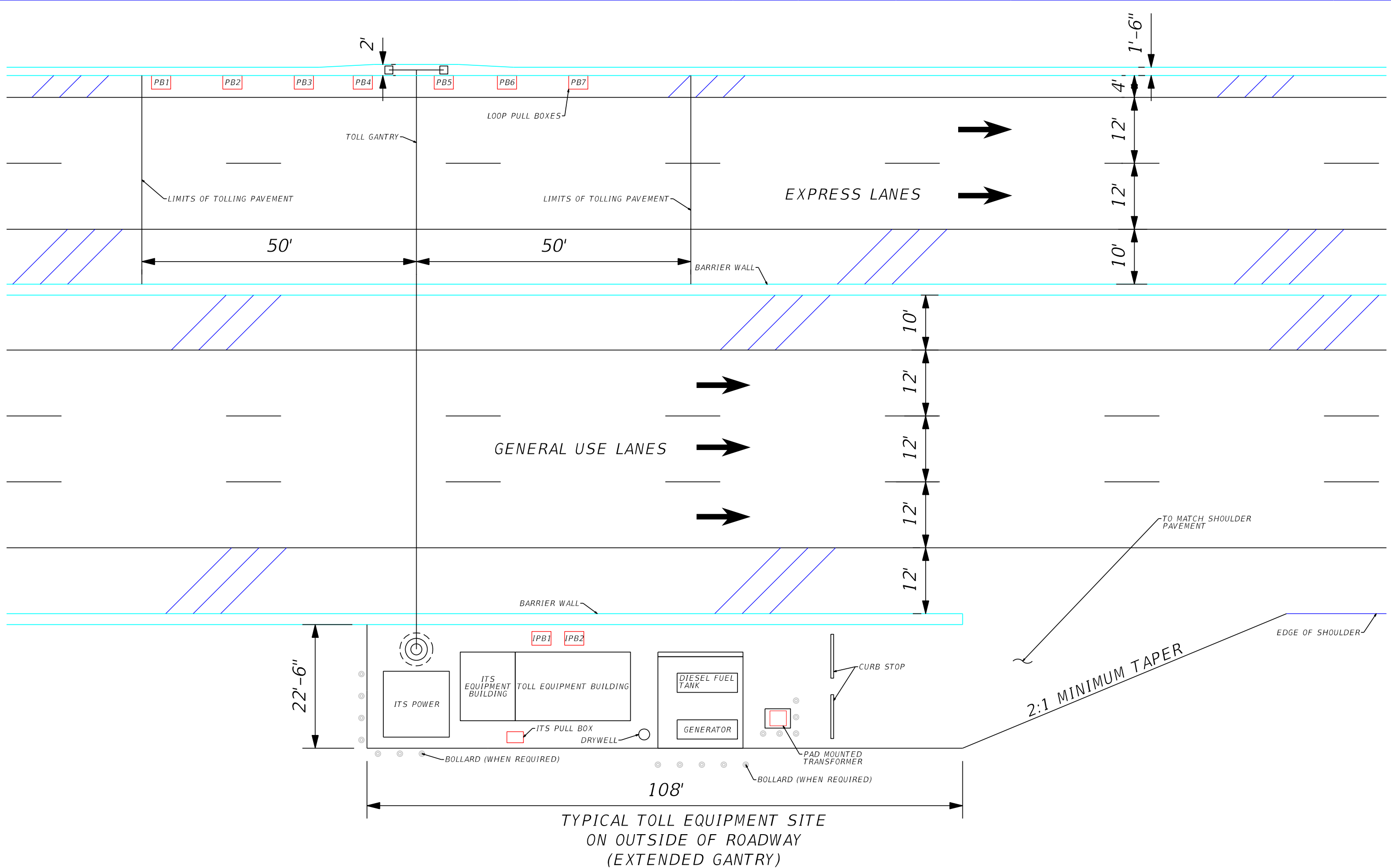
	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div>		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		<div>I-4 PD&amp;E STUDY SEGMENT 1</div>	SHEET NO.
			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
			400	ORANGE/OSCEOLA	432100-1-22-01	3





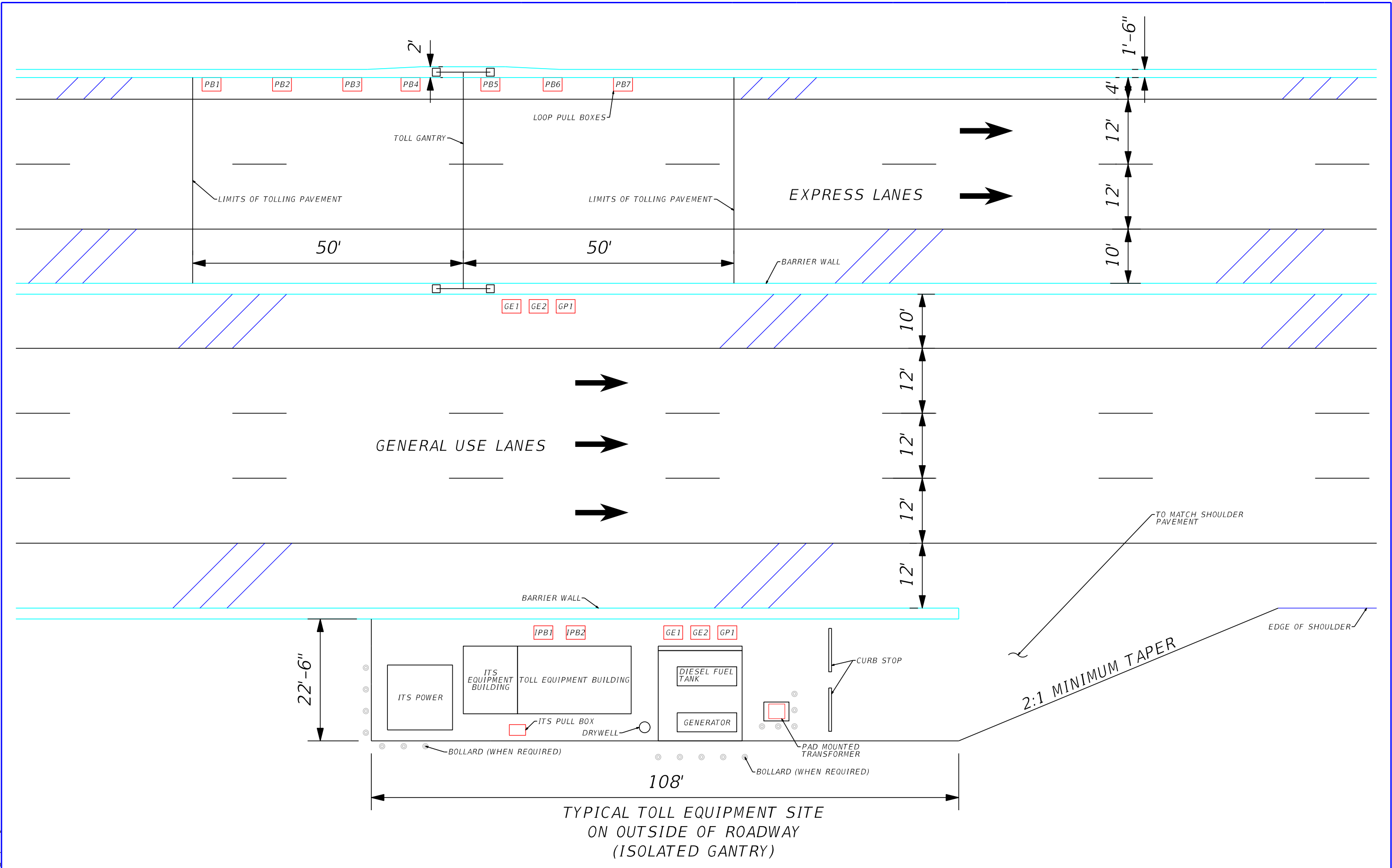
TYPICAL TOLL EQUIPMENT SITE  
BETWEEN ROADWAYS

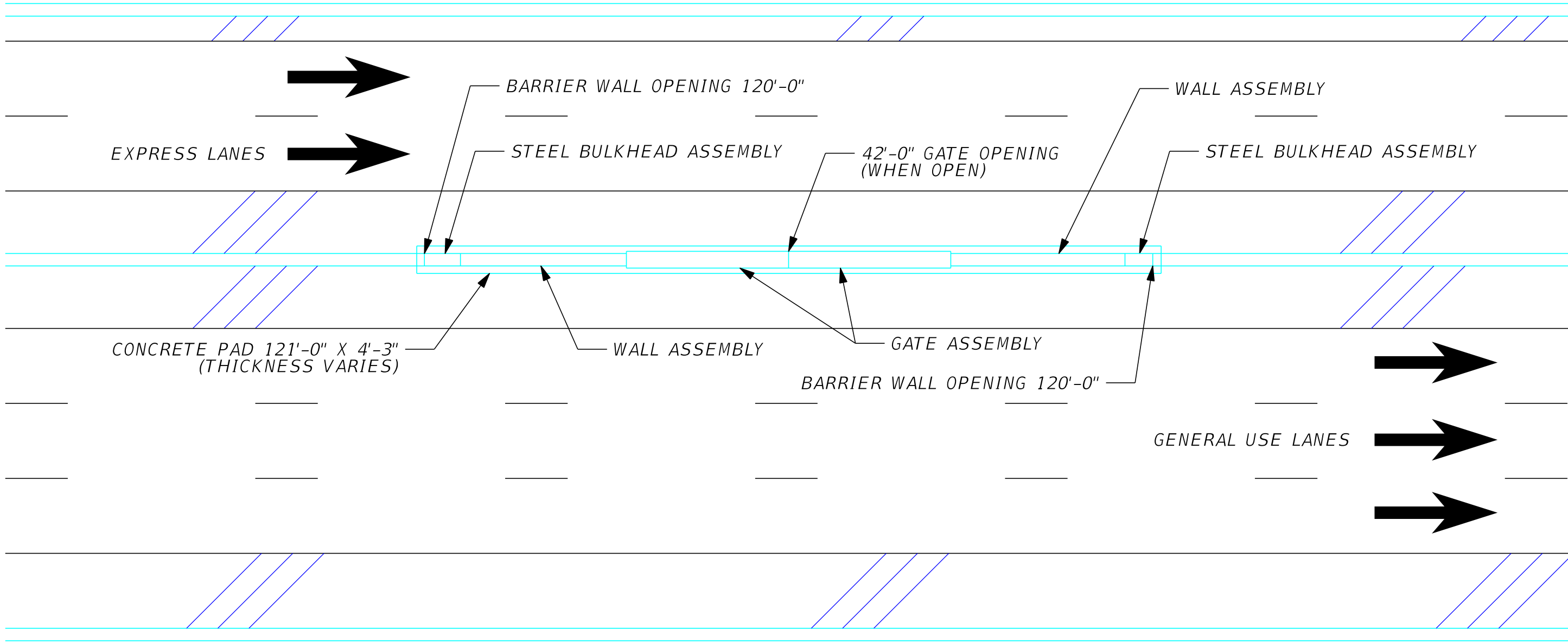
	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SEGMENT 1	SHEET NO.
		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
		400	ORANGE/OSCEOLA	432100-1-22-01		4



HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<i>I-4 PD&amp;E STUDY          SEGMENT 1</i>	SHEET NO.  5
	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	400	ORANGE/OSCEOLA	432100-1-22-01		



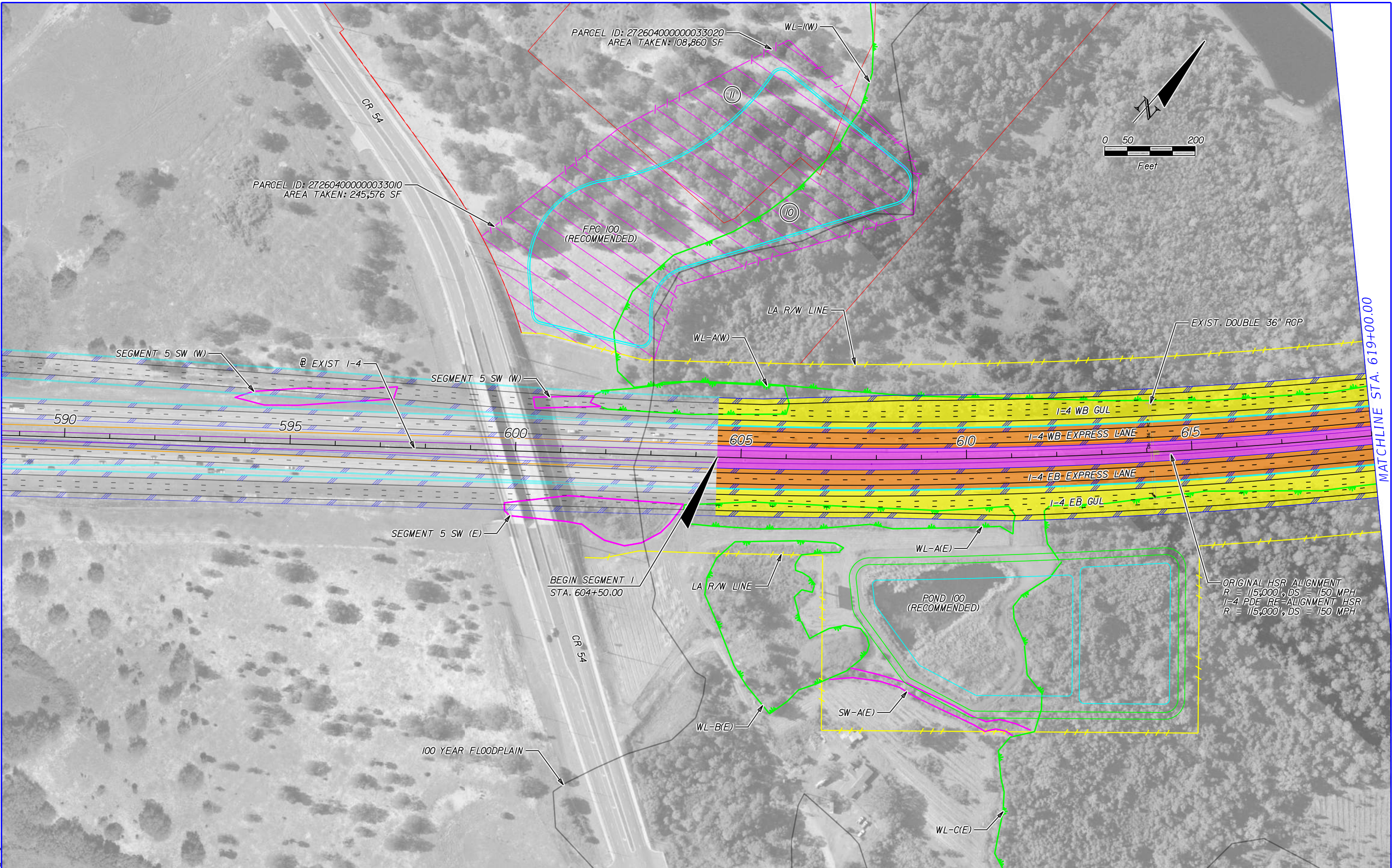




TYPICAL EMERGENCY ACCESS GATE DETAILS

	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SEGMENT 1	SHEET NO.
		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			400	ORANGE/OSCEOLA	432100-1-22-01	



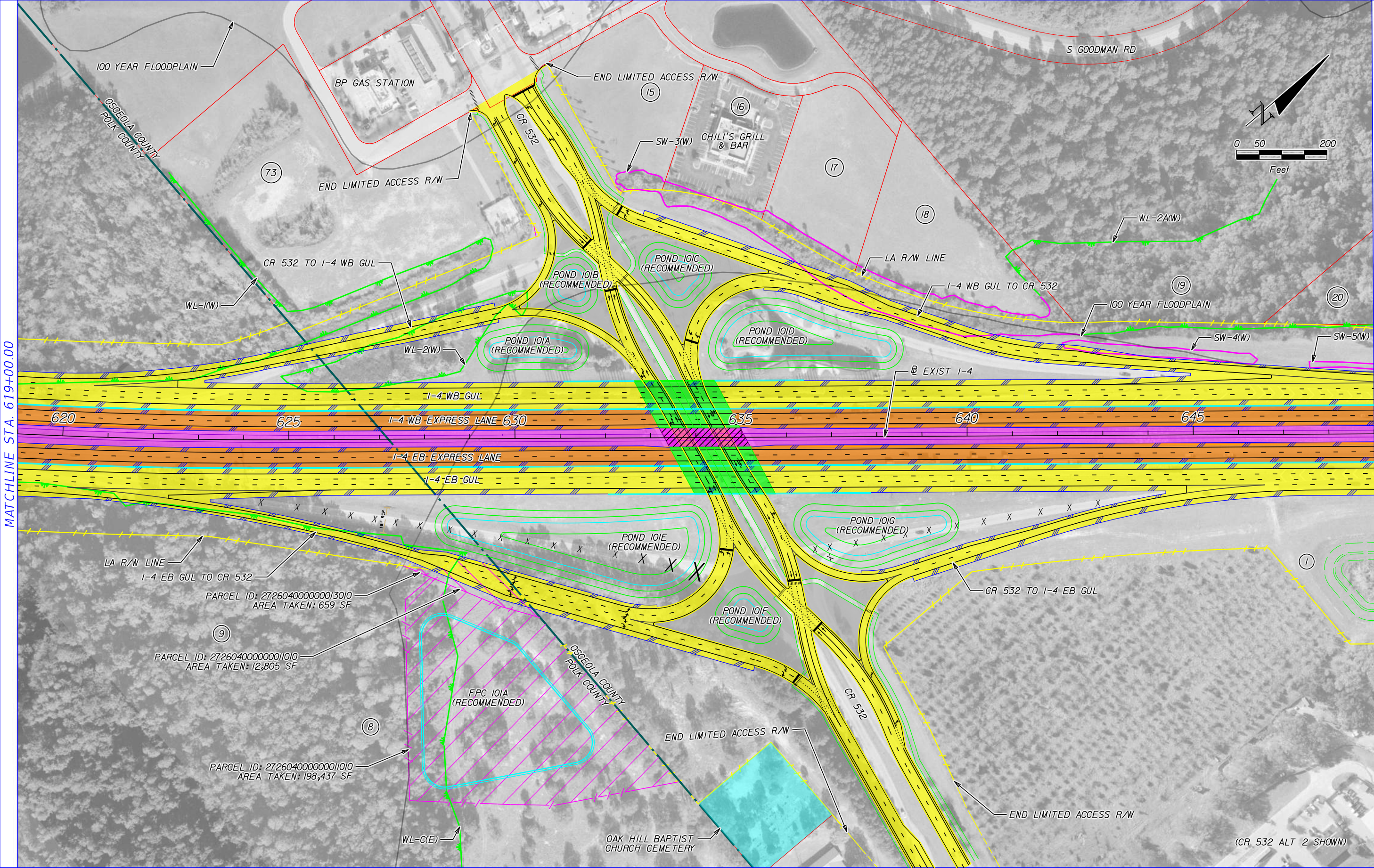


MATCHLINE STA. 619+00.00

<div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION	<div>I-4 PD&amp;E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1</div>	SHEET NO.  8
			ROAD NO.	COUNTY	FINANCIAL PROJECT ID
			400	POLK	432100-1-22-01

mbacal 11/1/2016 11:51:47 AM \\LK\Mw00\pwork3\Jobs\59219 - 14\_SAMR\TECHPROD\43210012201\Segment 1\roadway\planrd101-PREFERRED.dgn





MATCHLINE STA. 619+00.00

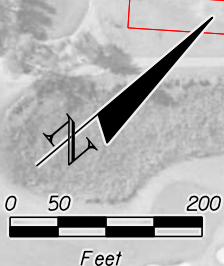
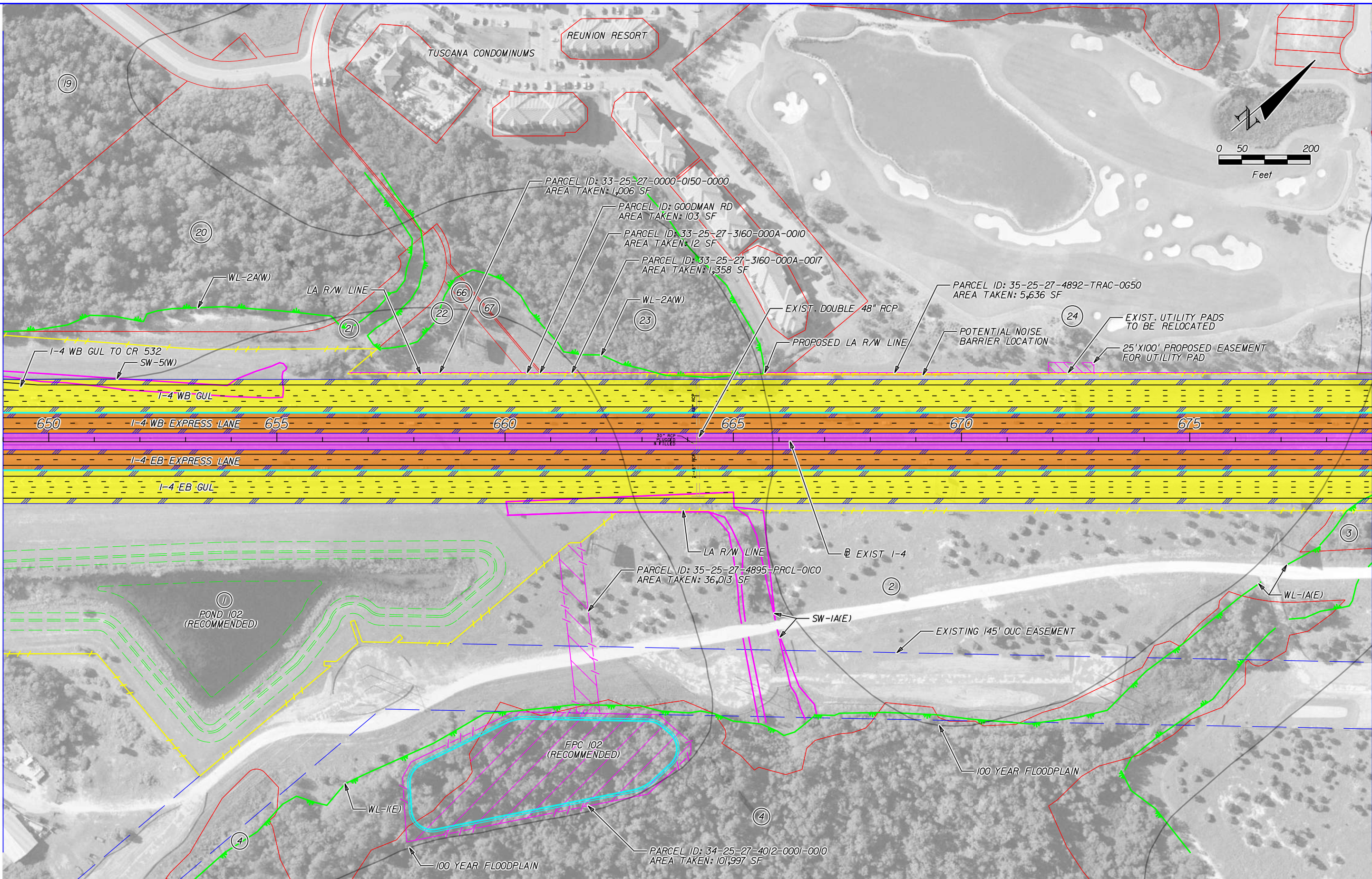
MATCHLINE STA. 649+00.00

		<p>EXISTING LA R/W</p> <p>PROPOSED LA R/W</p> <p>EXISTING R/W</p> <p>PROPOSED FDOT R/W</p> <p>PARCEL LINES</p> <p>FUTURE EXISTING CONDITION</p>		<p>GENERAL USE LANES</p> <p>EXPRESS LANES</p> <p>EXISTING BRIDGE</p> <p>PROPOSED BRIDGE</p> <p>BARRIER WALL</p> <p>HSR CORRIDOR</p>	<p>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</p> <p>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</p>	<table><tr><th colspan="3">STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</th></tr><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>POLK OSCEOLA</td><td>432100-1-22-01</td></tr></table>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	POLK OSCEOLA	432100-1-22-01	<p><i>I-4 PD&amp;E STUDY</i></p> <p><i>I-4 MAINLINE</i></p> <p><i>(RECOMMENDED ALTERNATIVE)</i></p> <p><i>SEGMENT 1</i></p>	<p>SHEET NO.</p> <p>9</p>
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION																	
ROAD NO.	COUNTY	FINANCIAL PROJECT ID															
400	POLK OSCEOLA	432100-1-22-01															



MATCHLINE STA. 649+00.00

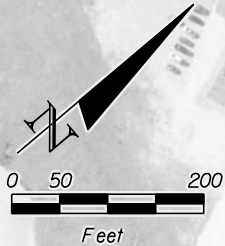
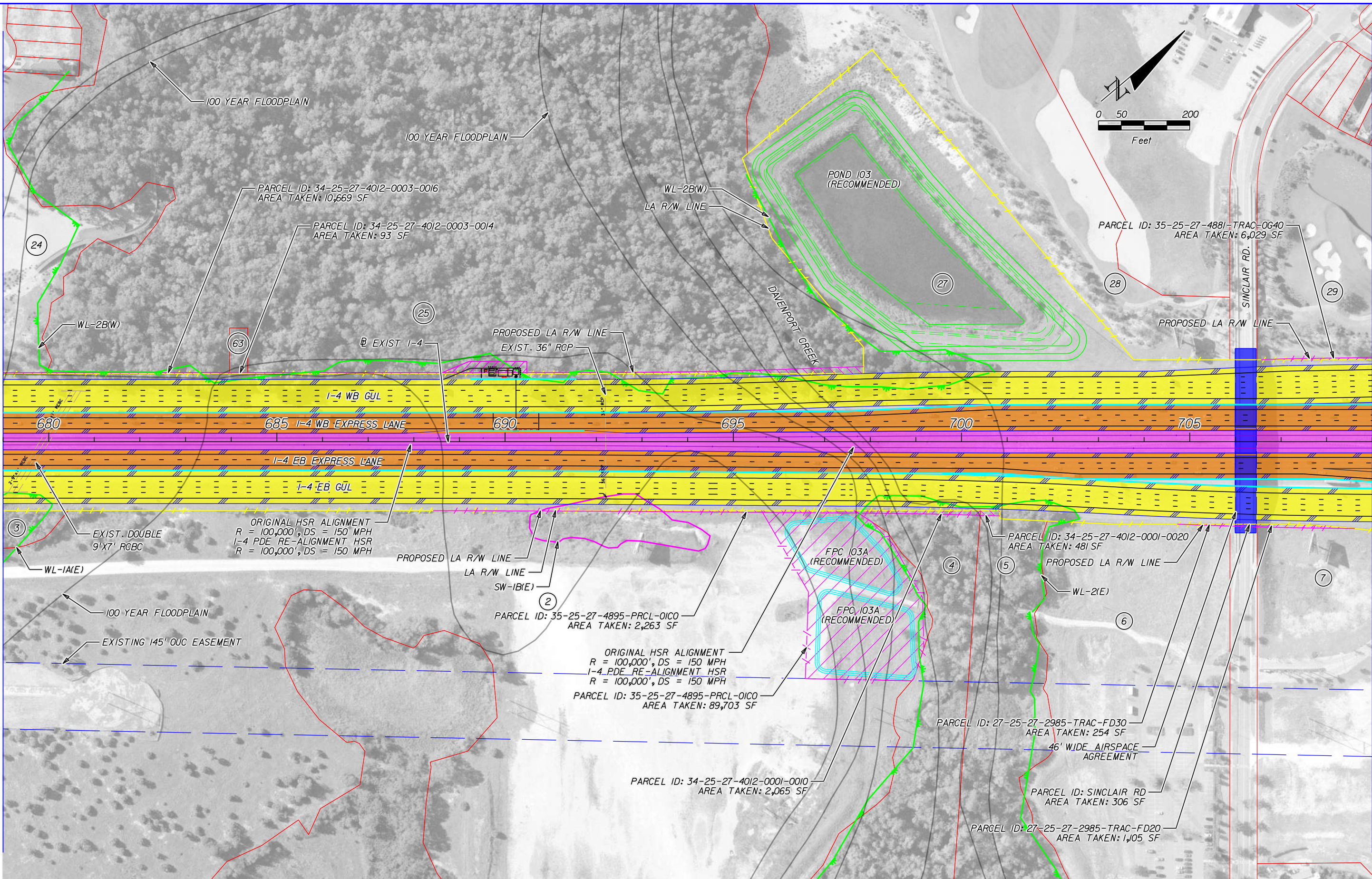
MATCHLINE STA. 679+00.00



<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div><div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div></div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1	SHEET NO.  10
			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			400	OSCEOLA	432100-1-22-01		



MATCHLINE STA. 679+00.00



MATCHLINE STA. 709+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

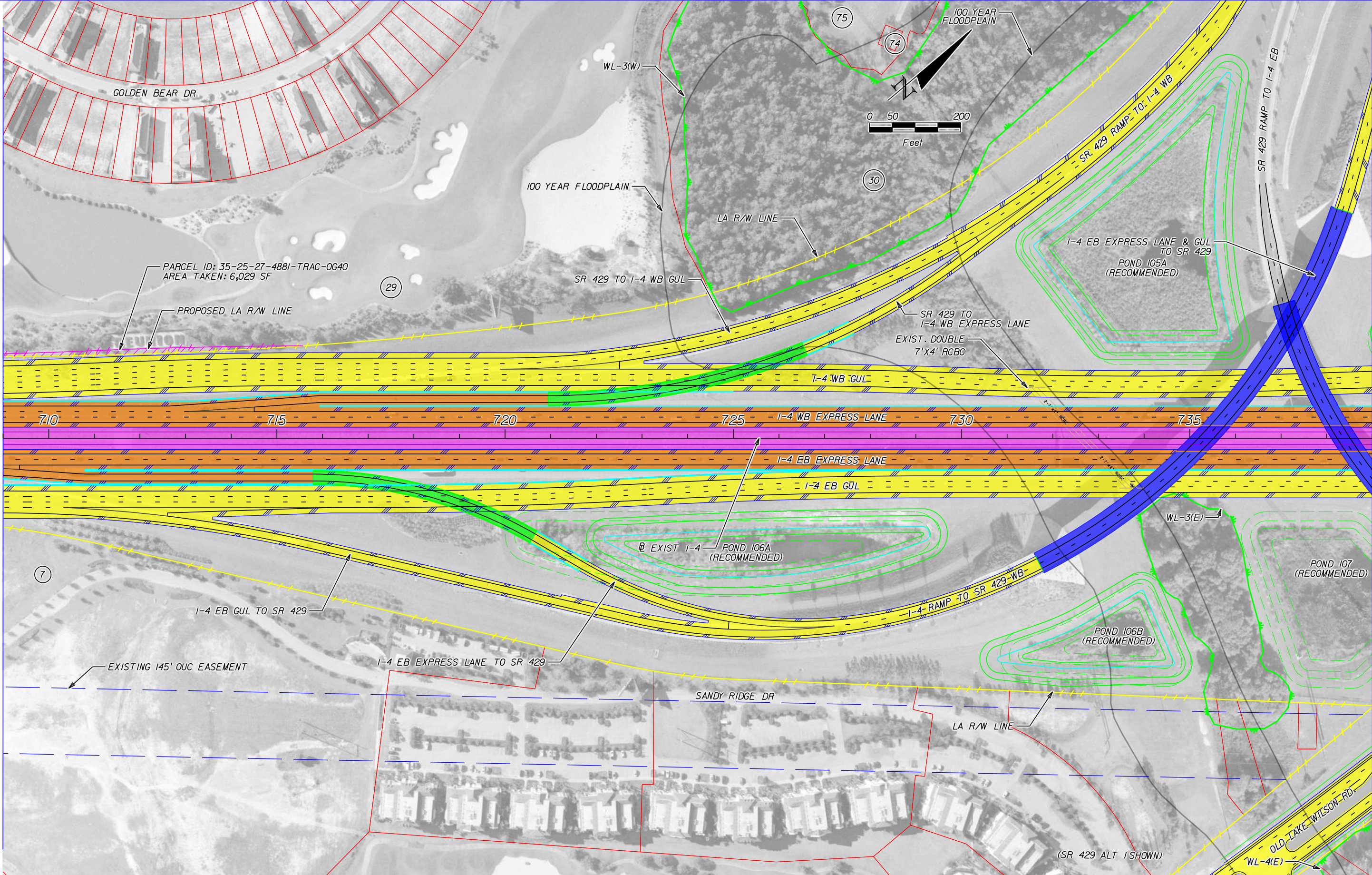
<b>I-4 PD&amp;E STUDY</b> <b>I-4 MAINLINE</b> <b>(RECOMMENDED ALTERNATIVE)</b> <b>SEGMENT 1</b>
----------------------------------------------------------------------------------------------------------

SHEET NO.
11



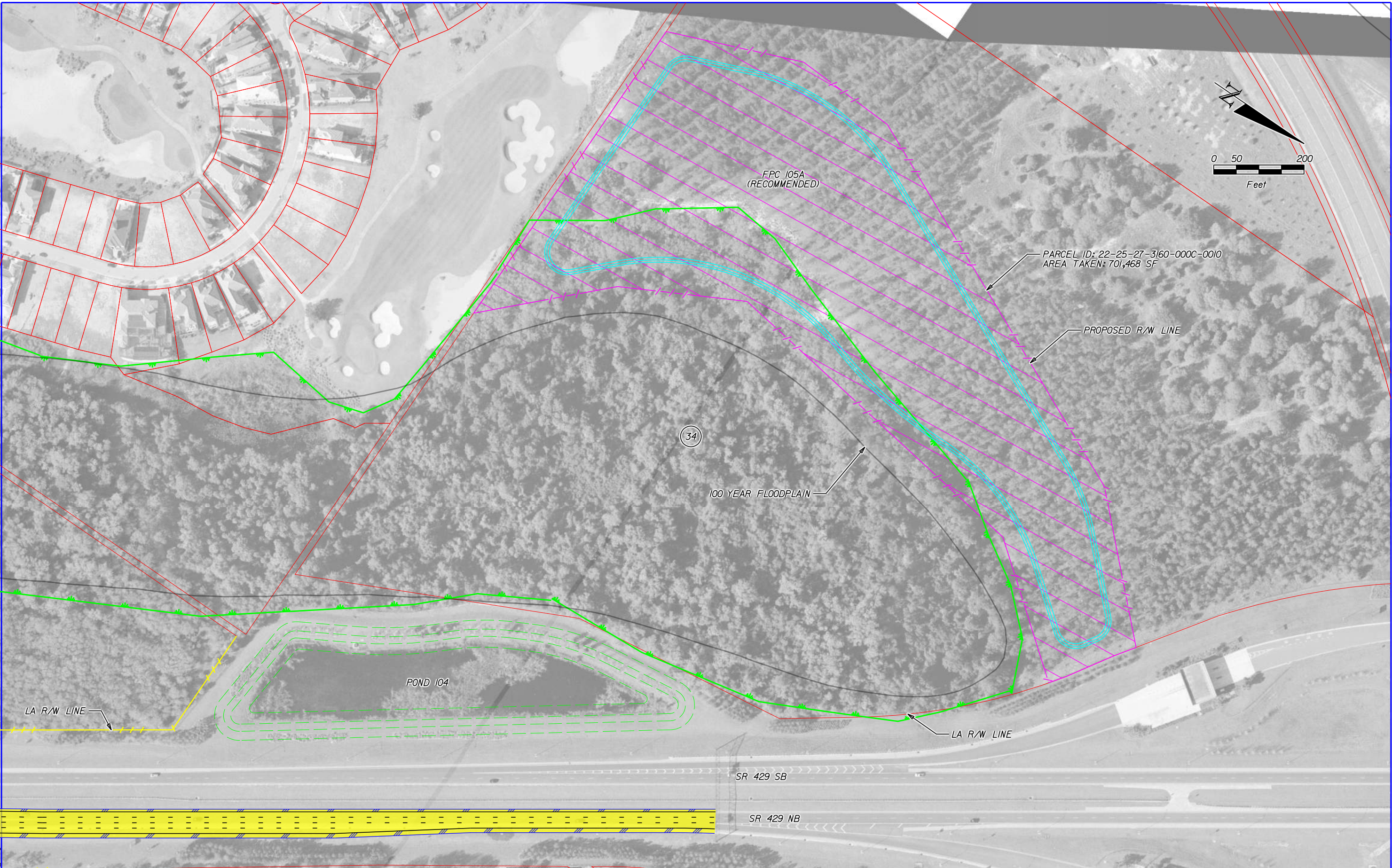
MATCHLINE STA. 709+00.00

MATCHLINE STA. 739+00.00



<div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<div>I-4 PD&amp;E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1</div>	SHEET NO.  12
			ROAD NO.  400	COUNTY  OSCEOLA	FINANCIAL PROJECT ID  432100-1-22-01		





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

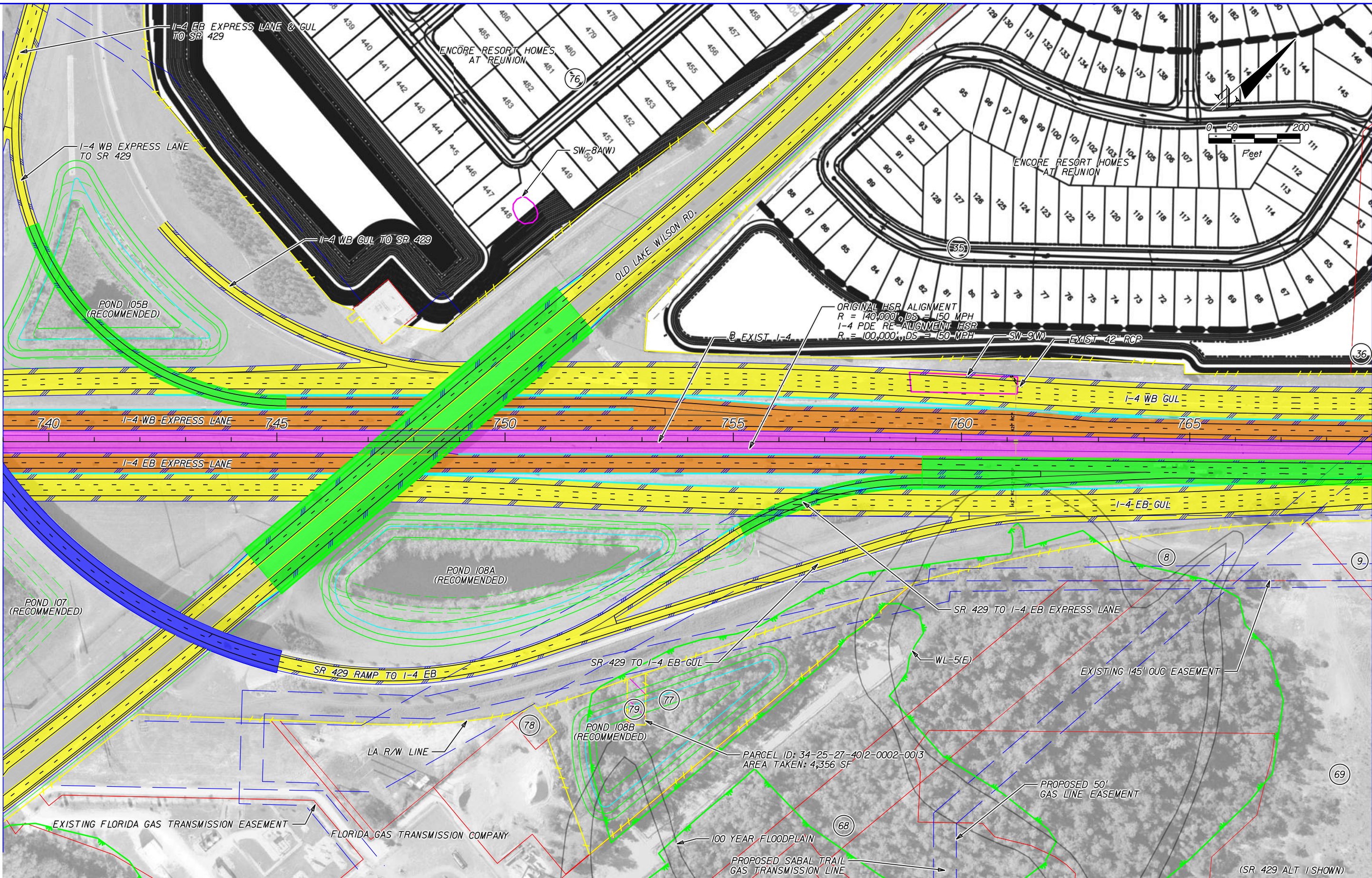
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

<b>I-4 PD&amp;E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1</b>	SHEET NO.
	<b>13</b>



MATCHLINE STA. 739+00.00

MATCHLINE STA. 769+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

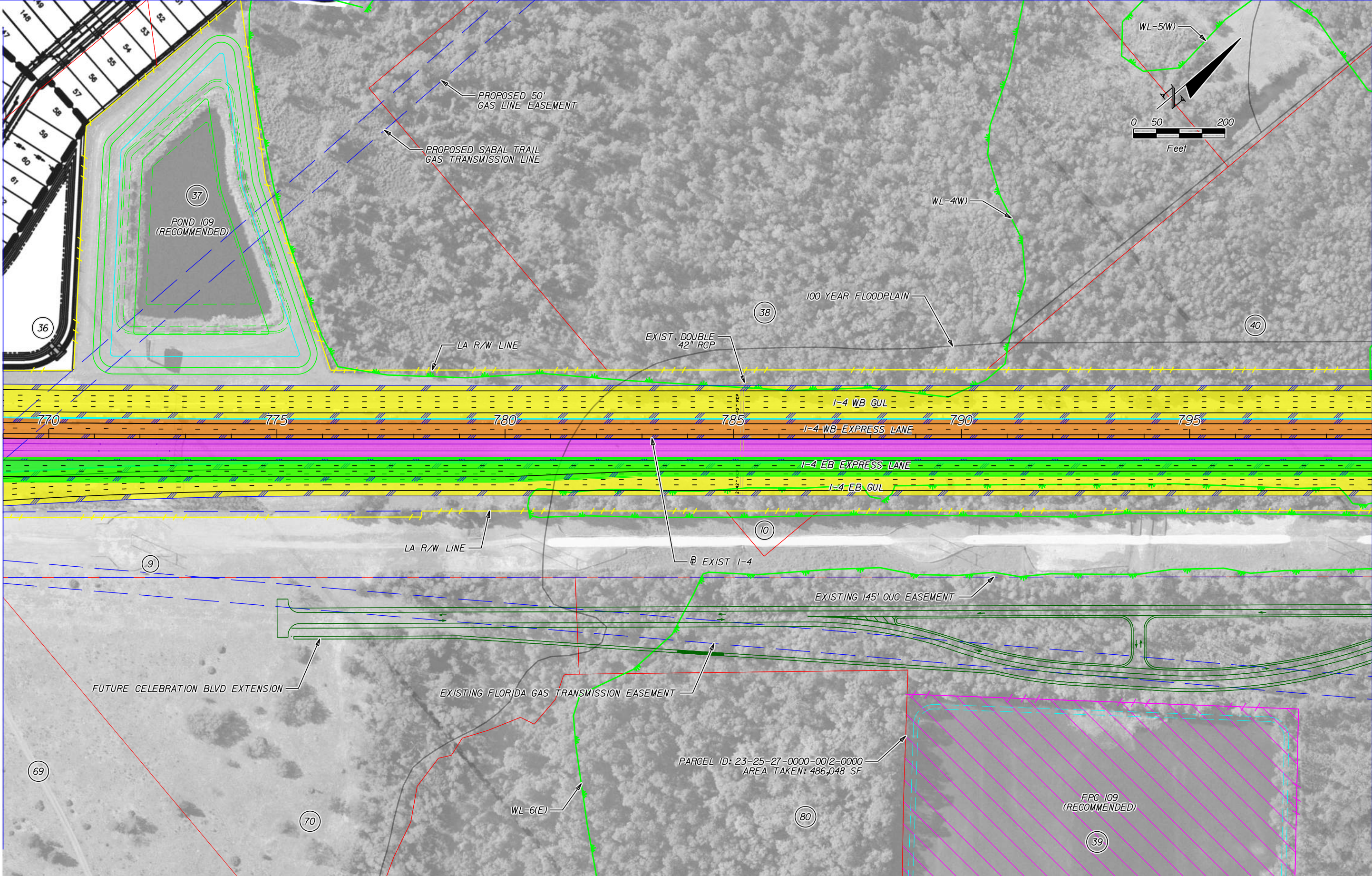
**I-4 PD&E STUDY  
I-4 MAINLINE  
(RECOMMENDED ALTERNATIVE)  
SEGMENT 1**

SHEET NO.
14



MATCHLINE STA. 769+00.00

MATCHLINE STA. 799+00.00

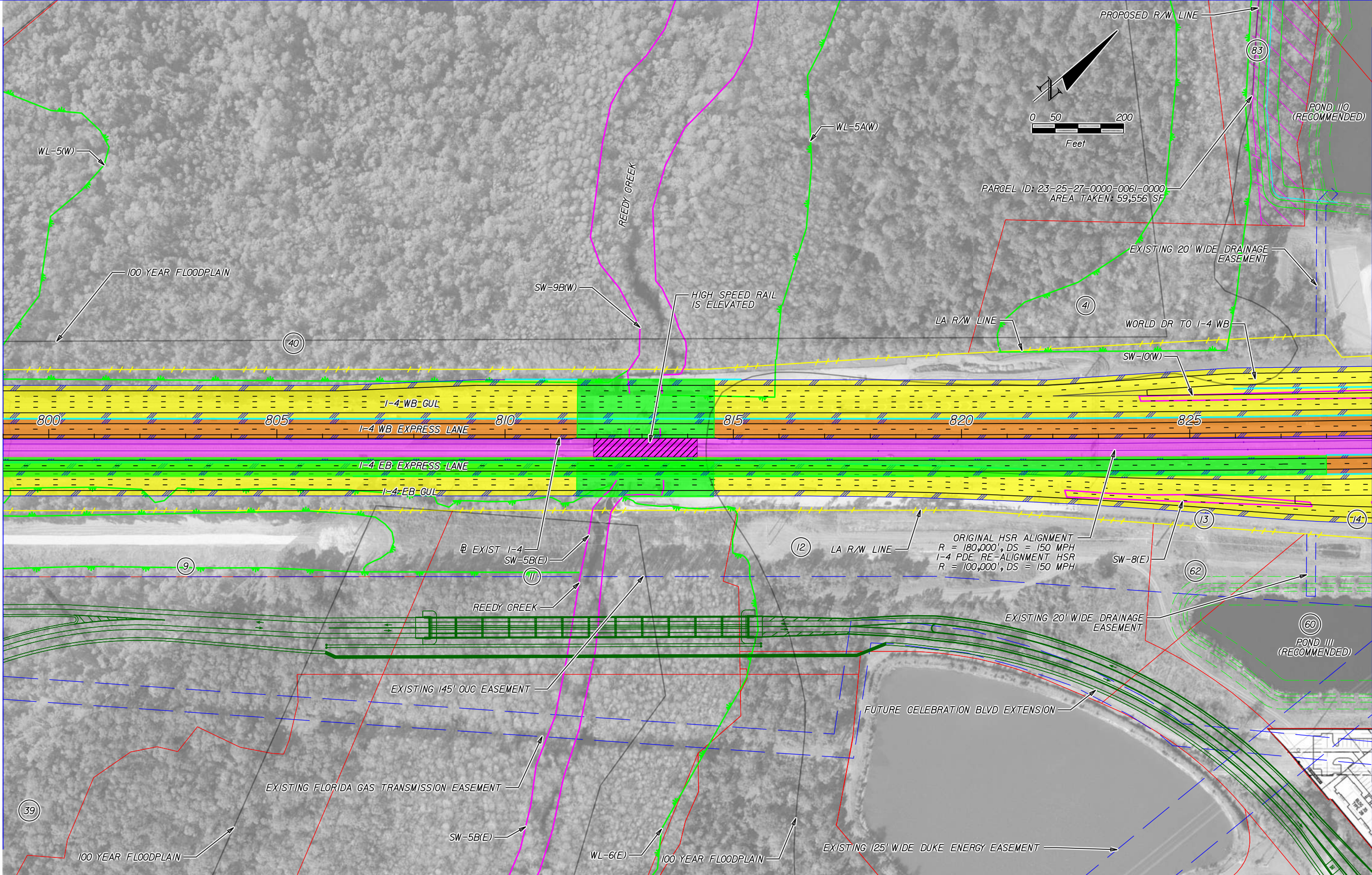


<div><div><div></div><div></div><div></div><div></div><div></div></div><div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div></div>	<div><div><div></div><div></div><div></div><div></div><div></div></div><div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div></div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	<div>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</div> <table><tr><td>ROAD NO.</td><td>COUNTY</td><td>FINANCIAL PROJECT ID</td></tr><tr><td>400</td><td>OSCEOLA</td><td>432100-1-22-01</td></tr></table>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	OSCEOLA	432100-1-22-01	<div>I-4 PD&amp;E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1</div>	<div>SHEET NO. 15</div>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID									
400	OSCEOLA	432100-1-22-01									



MATCHLINE STA. 799+00.00

MATCHLINE STA. 829+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

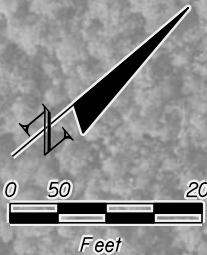
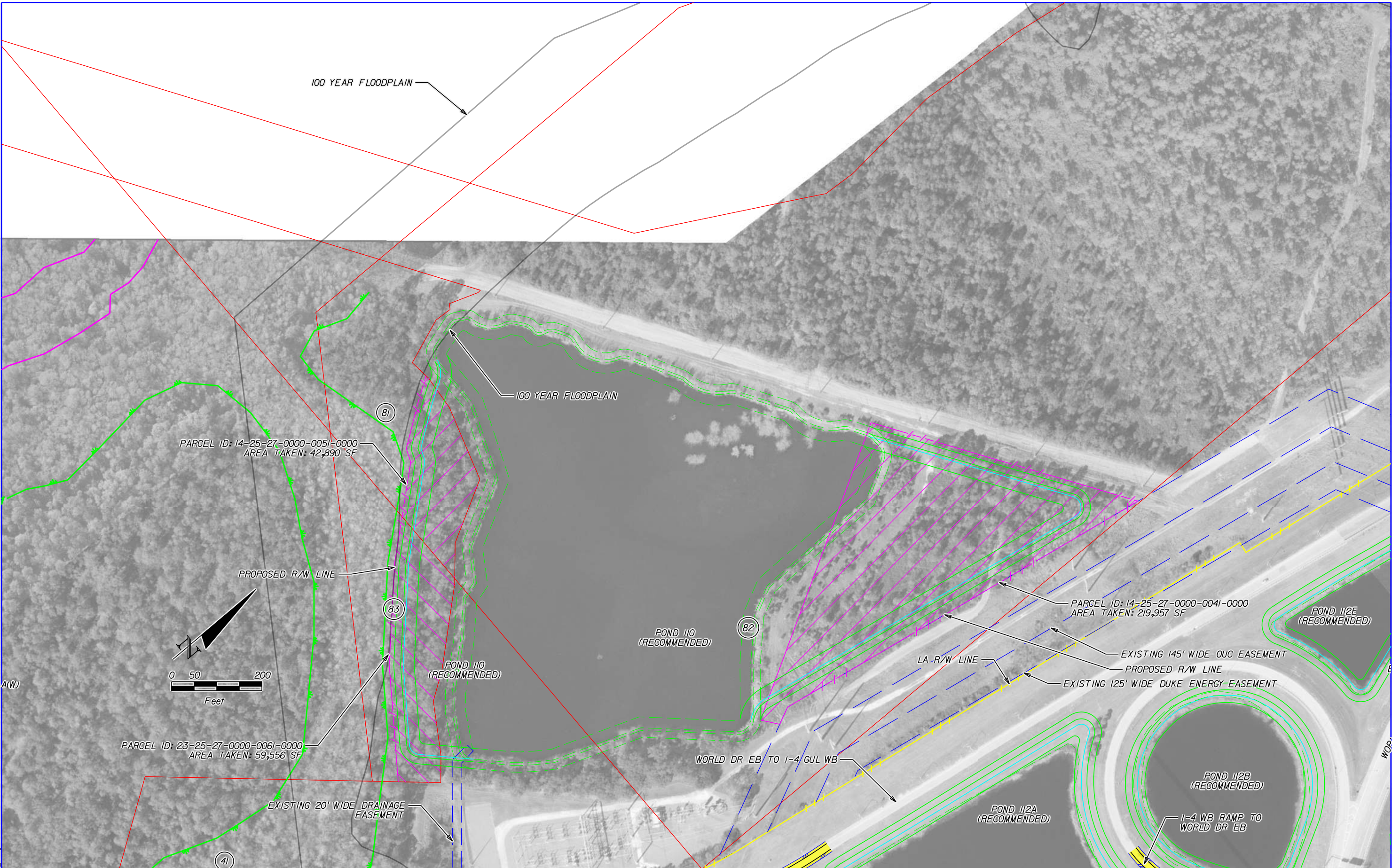
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY</b> <b>I-4 MAINLINE</b> <b>(RECOMMENDED ALTERNATIVE)</b> <b>SEGMENT 1</b>
----------------------------------------------------------------------------------------------------------

SHEET NO.
<b>16</b>





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION













HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

<b>I-4 PD&amp;E STUDY</b> <b>I-4 MAINLINE</b> <b>(RECOMMENDED ALTERNATIVE)</b> <b>SEGMENT 1</b>
<b>SHEET NO.</b>  <b>17</b>





	EXISTING LA R/W		GENERAL USE LANES	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1	SHEET NO.
	PROPOSED LA R/W		EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		18
	PROPOSED FDOT R/W		EXISTING BRIDGE		400	OSCEOLA	432100-1-22-01		
	EXISTING R/W		PROPOSED BRIDGE						
	PARCEL LINES		RAIL CORRIDOR						
	BARRIER WALL		FUTURE EXISTING CONDITION						

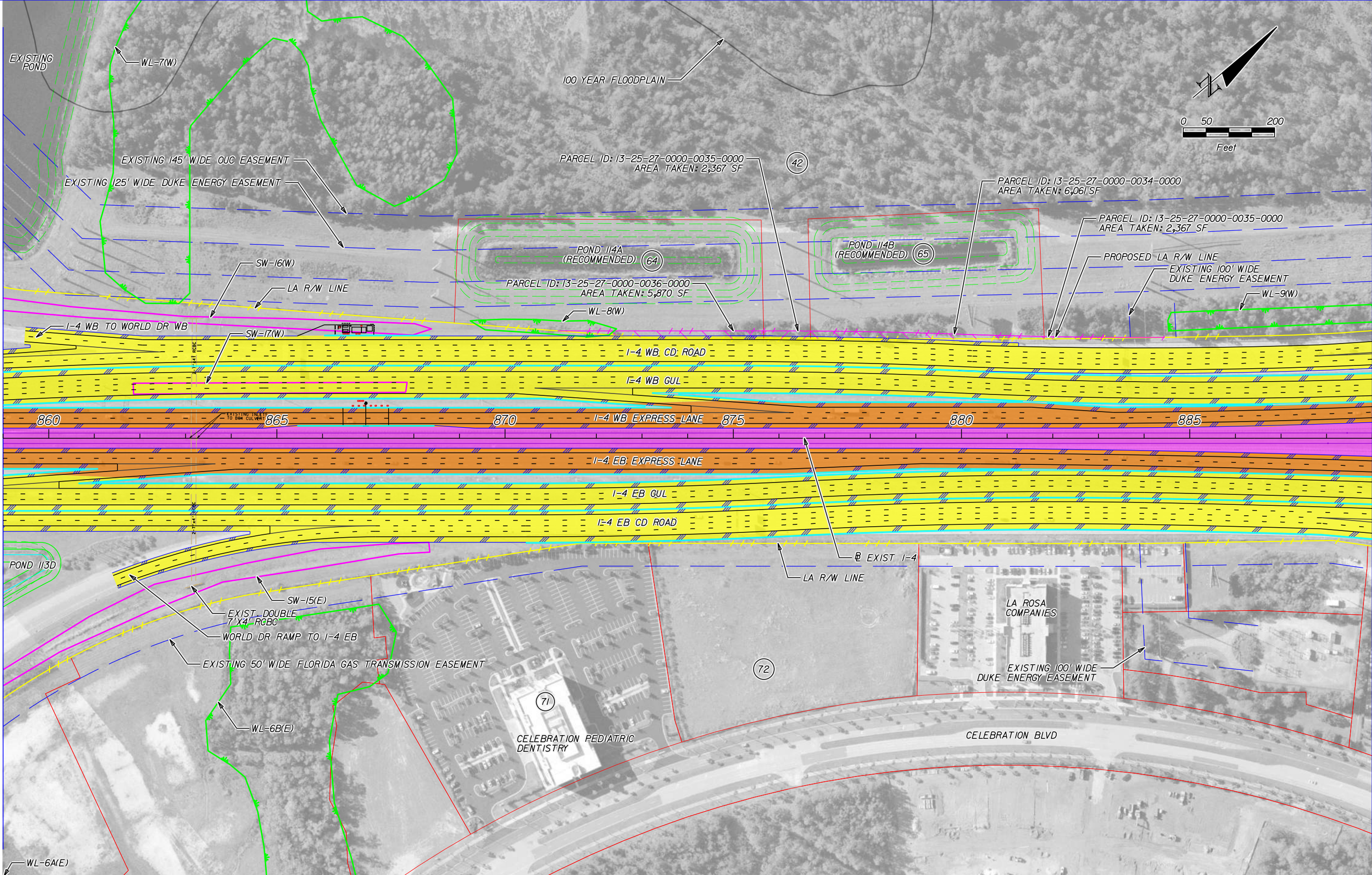


planrd10  
MODEL:  
SHEET SIZE:  
PLOT SCALE:

PRINT DRIVER:  
PEN TABLE:

MATCHLINE STA. 859+00.00

MATCHLINE STA. 889+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

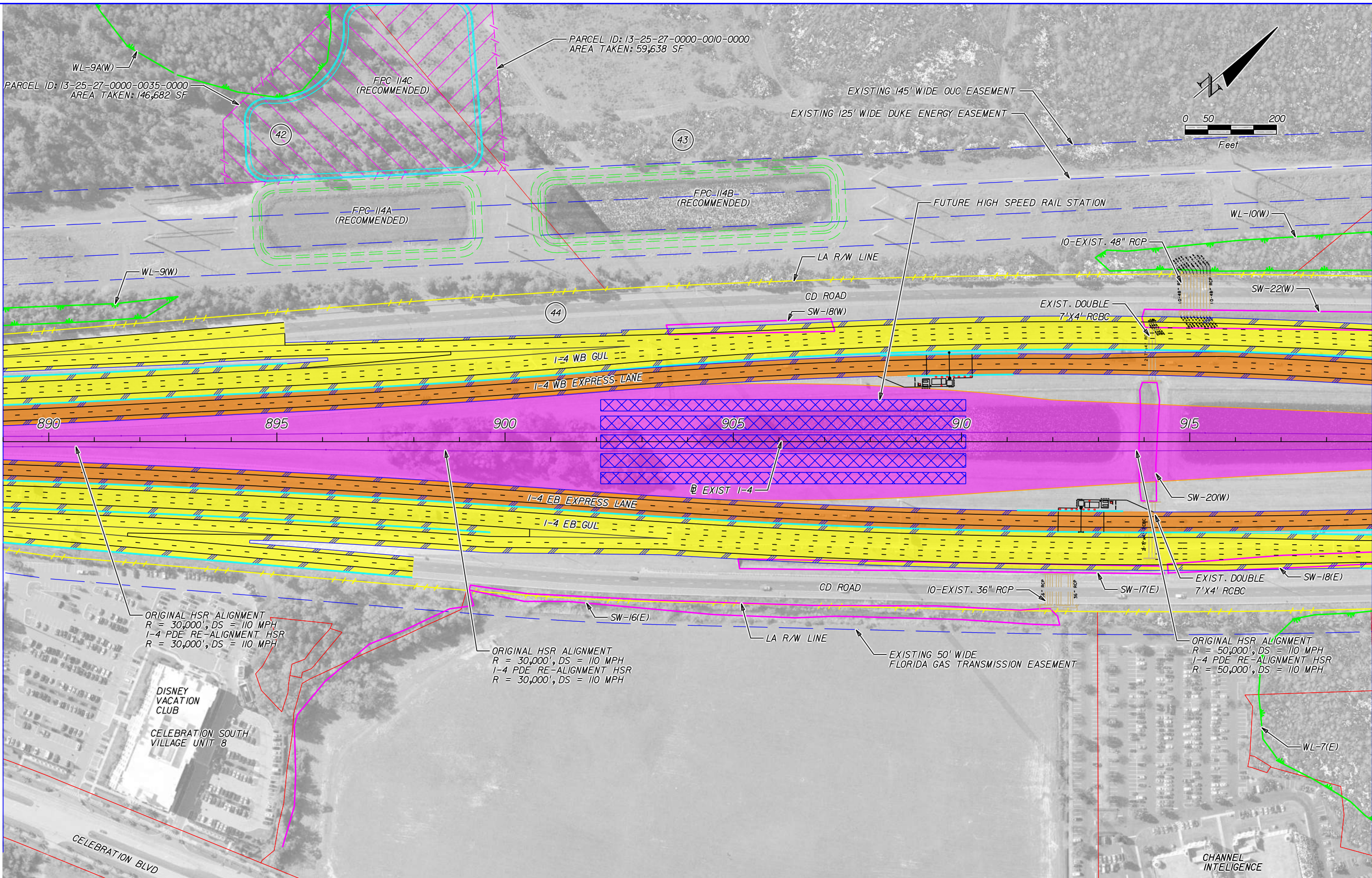
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

**I-4 PD&E STUDY  
I-4 MAINLINE  
(RECOMMENDED ALTERNATIVE)  
SEGMENT 1**

SHEET  
NO.  
**19**



MATCHLINE STA. 889+00.00



MATCHLINE STA. 919+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

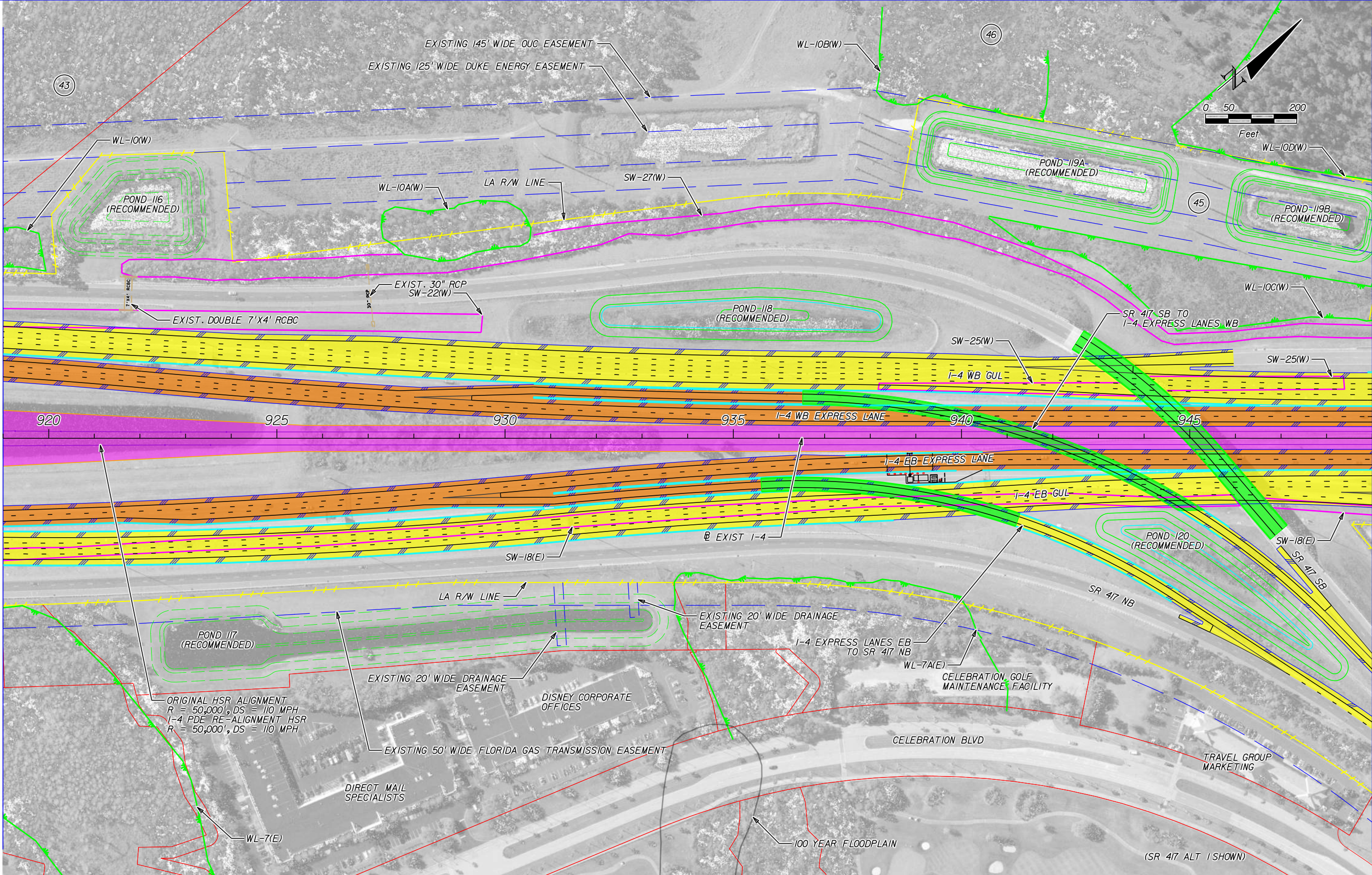
<b>I-4 PD&amp;E STUDY</b> <b>I-4 MAINLINE</b> <b>(RECOMMENDED ALTERNATIVE)</b> <b>SEGMENT 1</b>
----------------------------------------------------------------------------------------------------------

SHEET NO.
<b>20</b>



MATCHLINE STA. 919+00.00

MATCHLINE STA. 949+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

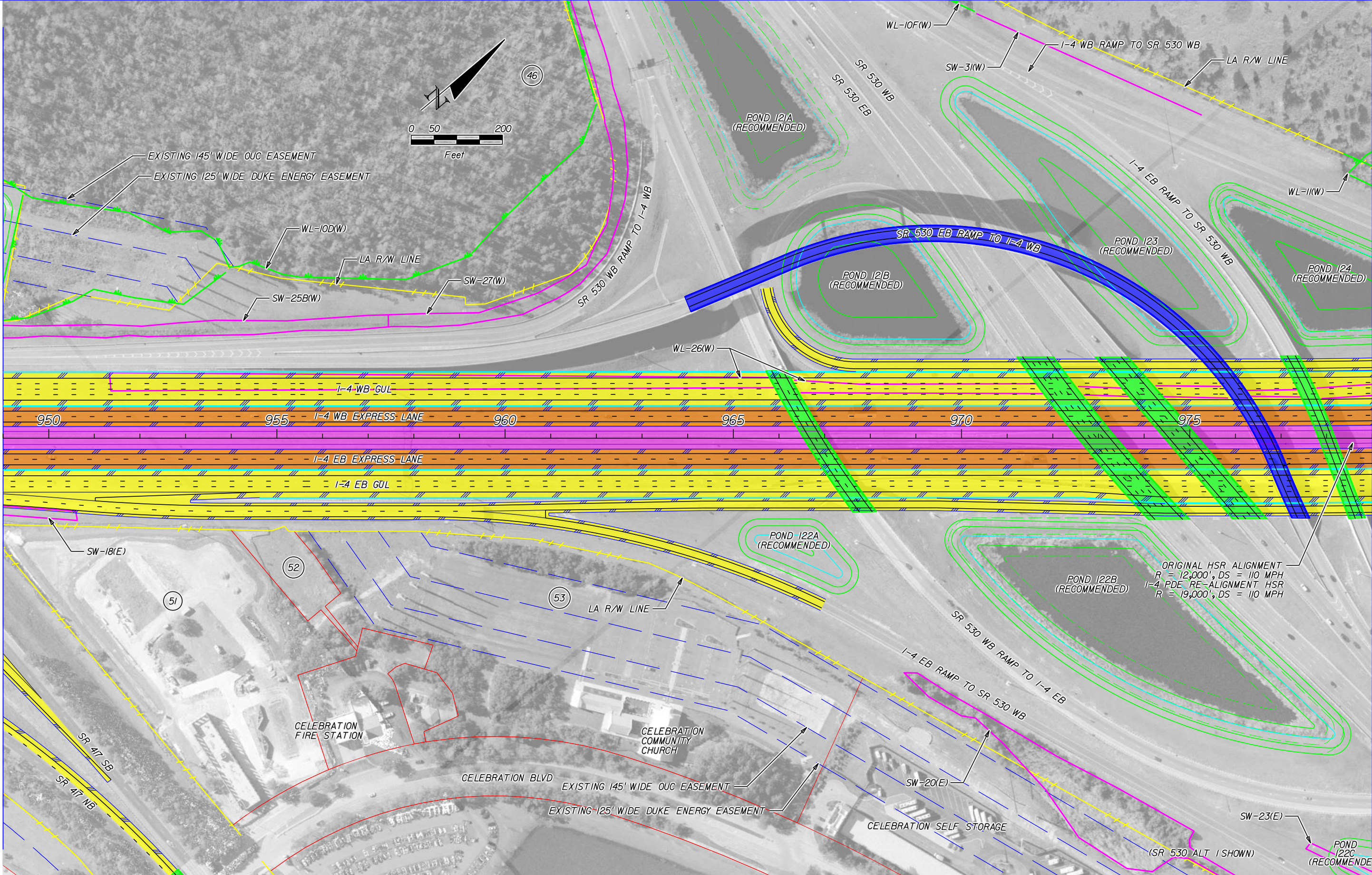
<b>I-4 PD&amp;E STUDY</b> <b>I-4 MAINLINE</b> <b>(RECOMMENDED ALTERNATIVE)</b> <b>SEGMENT 1</b>
----------------------------------------------------------------------------------------------------------

SHEET NO.
21



MATCHLINE STA. 949+00.00

MATCHLINE STA. 979+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

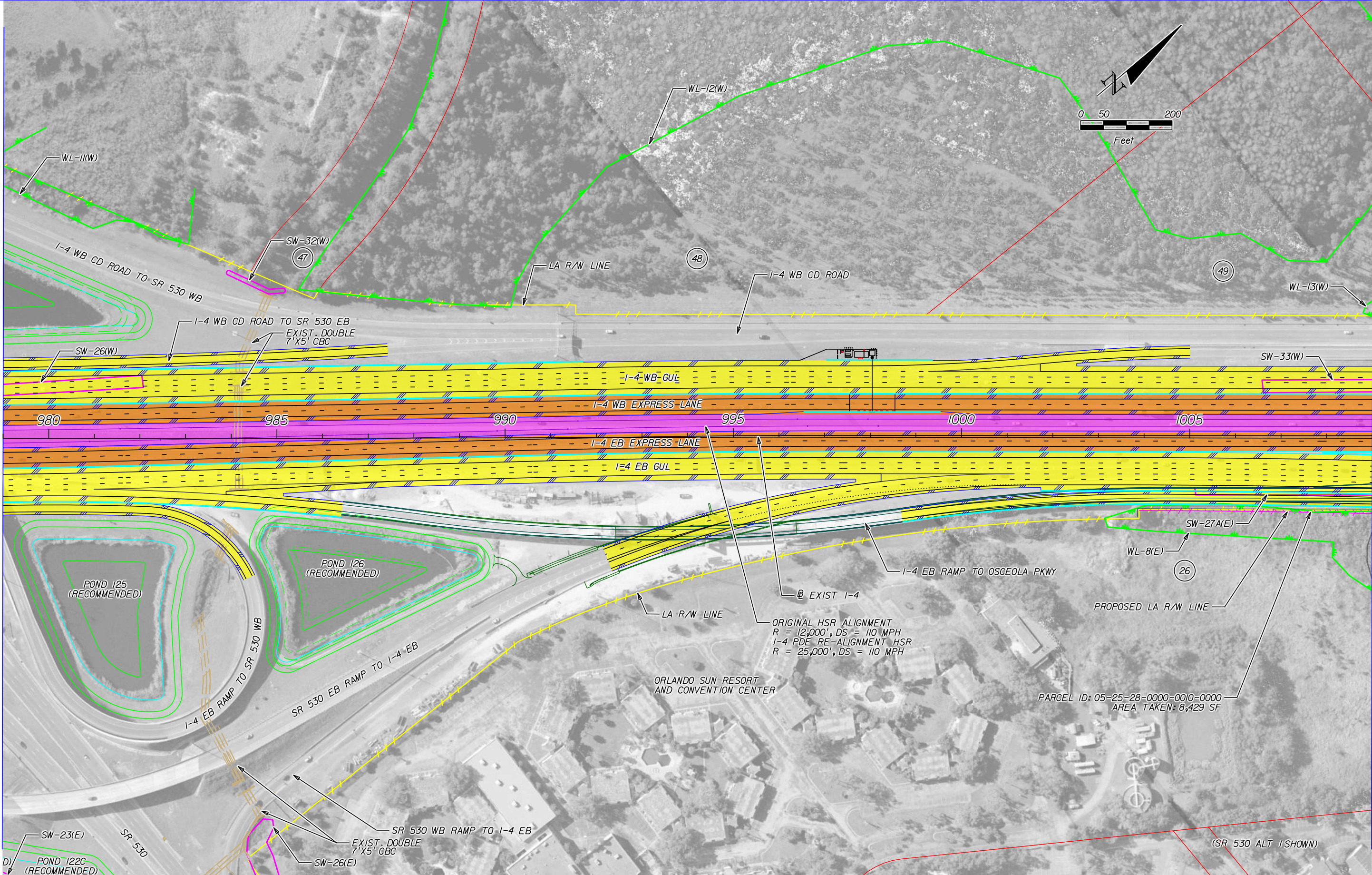
**I-4 PD&E STUDY**  
**I-4 MAINLINE**  
**(RECOMMENDED ALTERNATIVE)**  
**SEGMENT 1**

SHEET NO.
22



MATCHLINE STA. 979+00.00

MATCHLINE STA. 1009+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

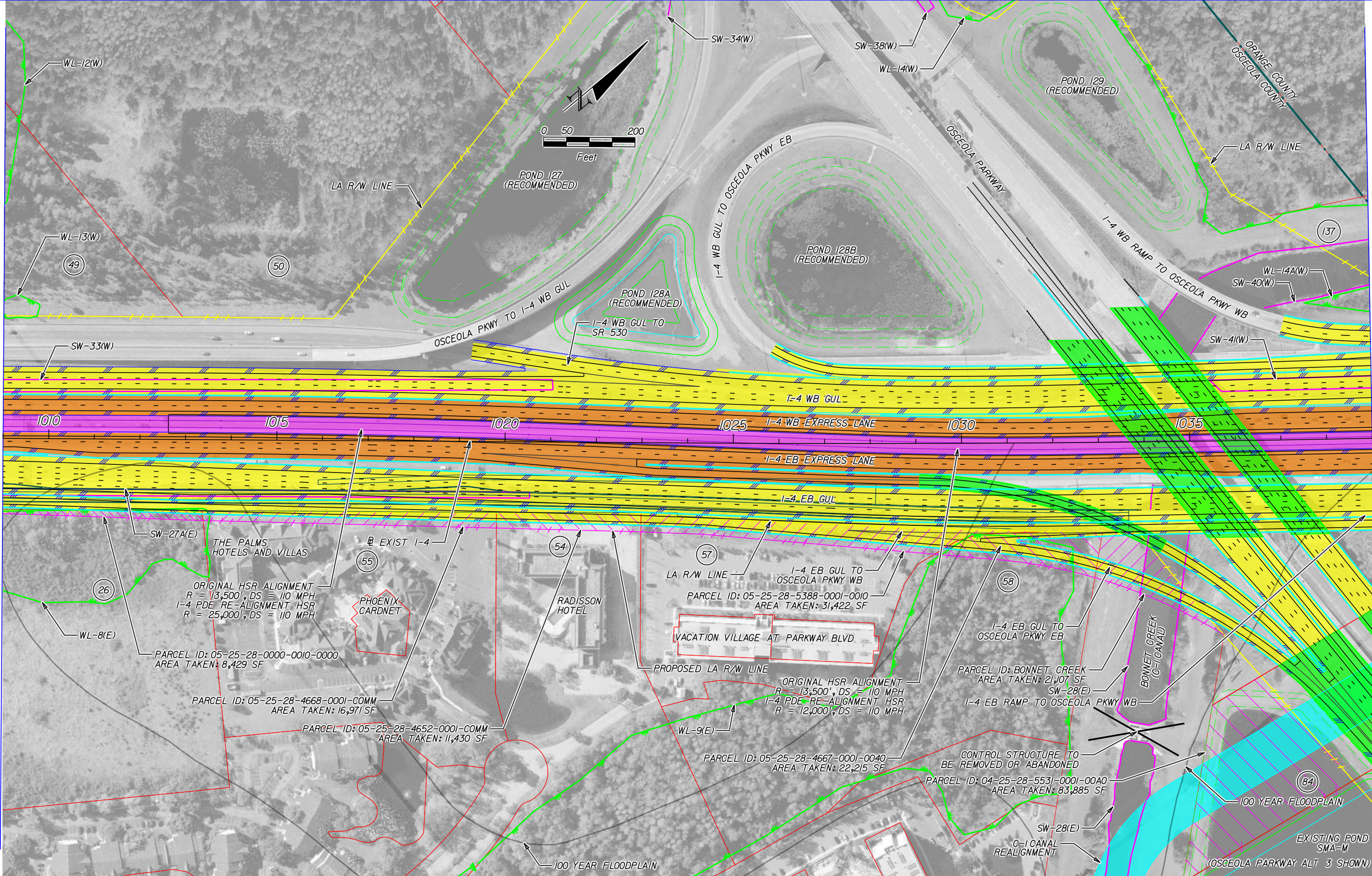
**I-4 PD&E STUDY**  
**I-4 MAINLINE**  
**(RECOMMENDED ALTERNATIVE)**  
**SEGMENT 1**

SHEET  
NO.  
**23**



MATCHLINE STA. 1009+00.00

MATCHLINE STA. 1039+00.00



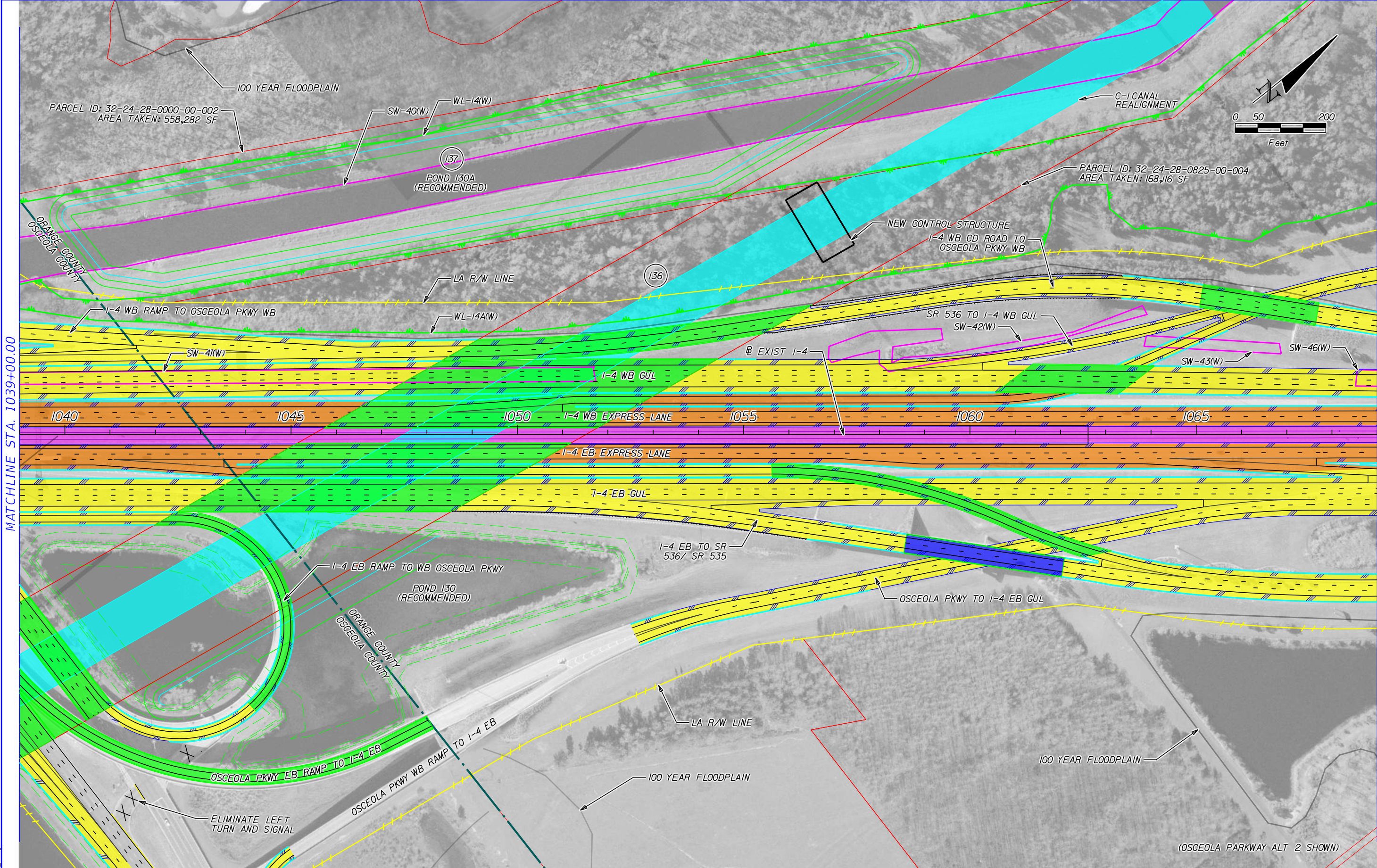
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500  ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
	ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	400	OSCEOLA	432100-1-22-01

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

I-4 PD&E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1	SHEET NO.
	24
	A-24



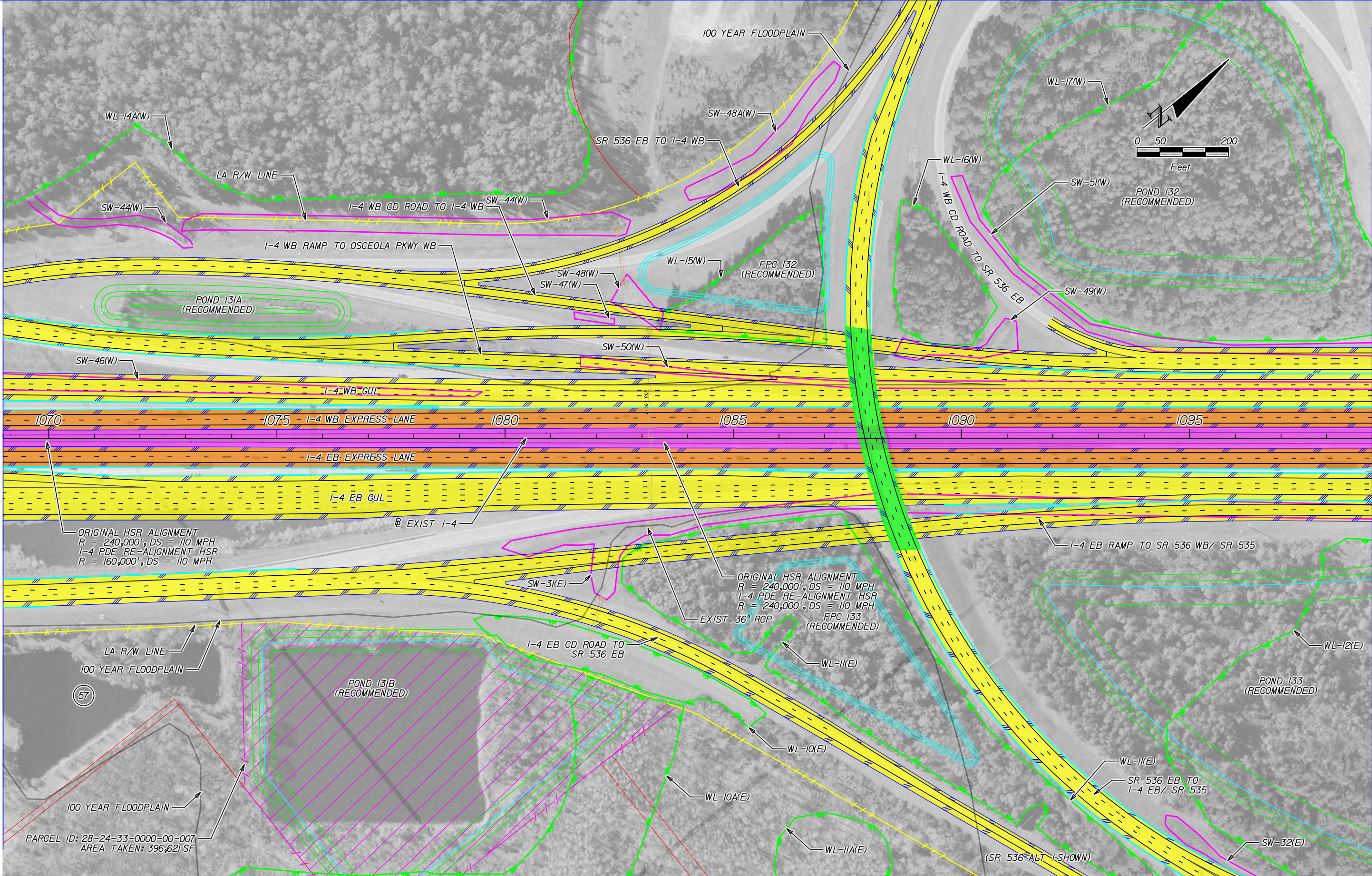


<div><div><div><div></div><div>EXISTING LA R/W</div></div><div><div></div><div>PROPOSED LA R/W</div></div><div><div></div><div>PROPOSED FDOT R/W</div></div><div><div></div><div>EXISTING R/W</div></div><div><div></div><div>PARCEL LINES</div></div><div><div></div><div>BARRIER WALL</div></div></div><div><div><div></div><div>GENERAL USE LANES</div></div><div><div></div><div>EXPRESS LANES</div></div><div><div></div><div>EXISTING BRIDGE</div></div><div><div></div><div>PROPOSED BRIDGE</div></div><div><div></div><div>RAIL CORRIDOR</div></div><div><div></div><div>FUTURE EXISTING CONDITION</div></div></div></div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500  ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	<div>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</div> <table><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>OSCEOLA ORANGE</td><td>432100-1-22-01</td></tr></table>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	OSCEOLA ORANGE	432100-1-22-01	<div>I-4 PD&amp;E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1</div>	<div>SHEET NO.  25</div>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID								
400	OSCEOLA ORANGE	432100-1-22-01								



MATCHLINE STA. 1069+00.00

MATCHLINE STA. 1099+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

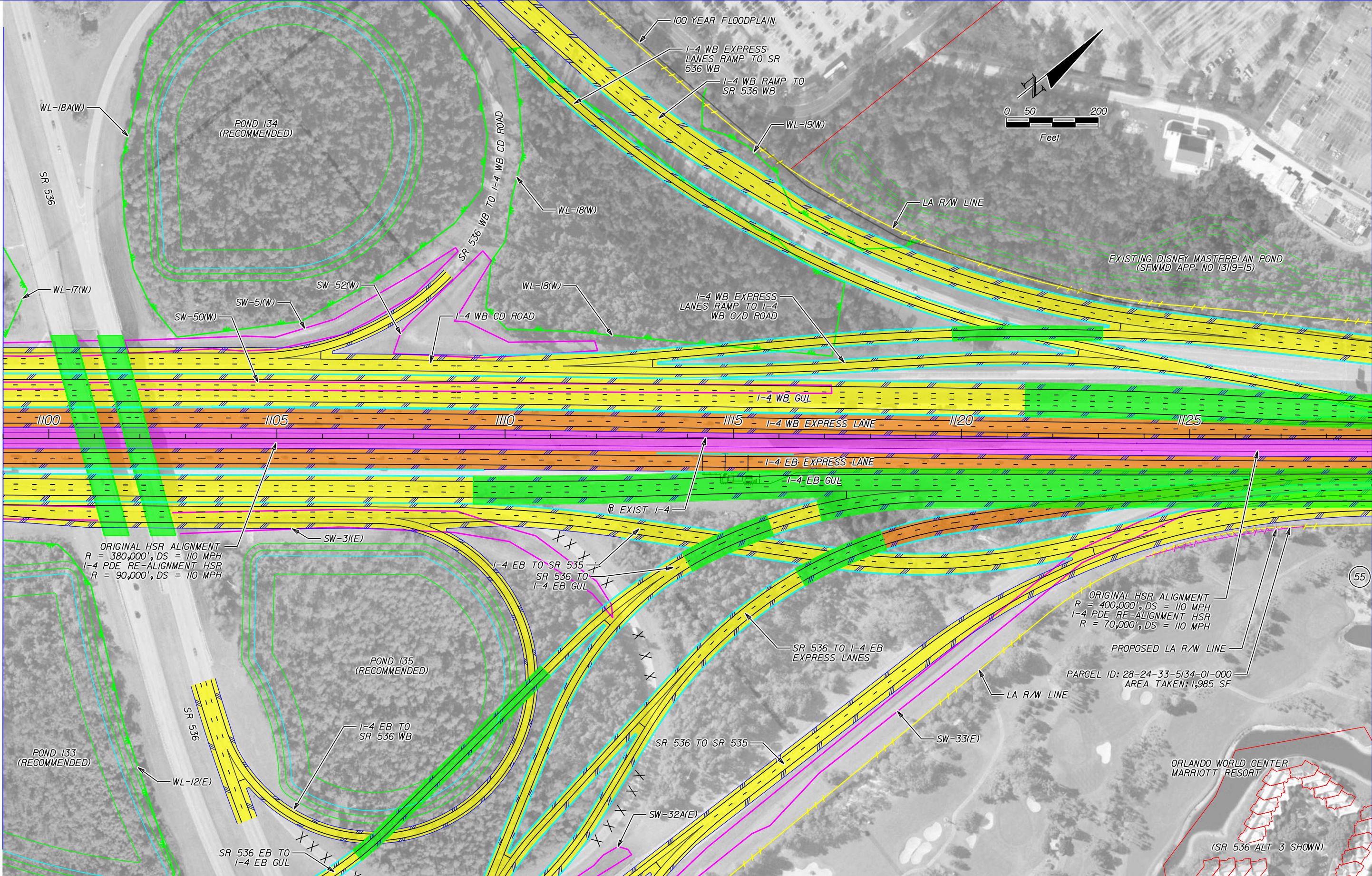
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY**  
**I-4 MAINLINE**  
**(RECOMMENDED ALTERNATIVE)**  
**SEGMENT 1**

SHEET NO.
26



MATCHLINE STA. 1099+00.00



MATCHLINE STA. 1129+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

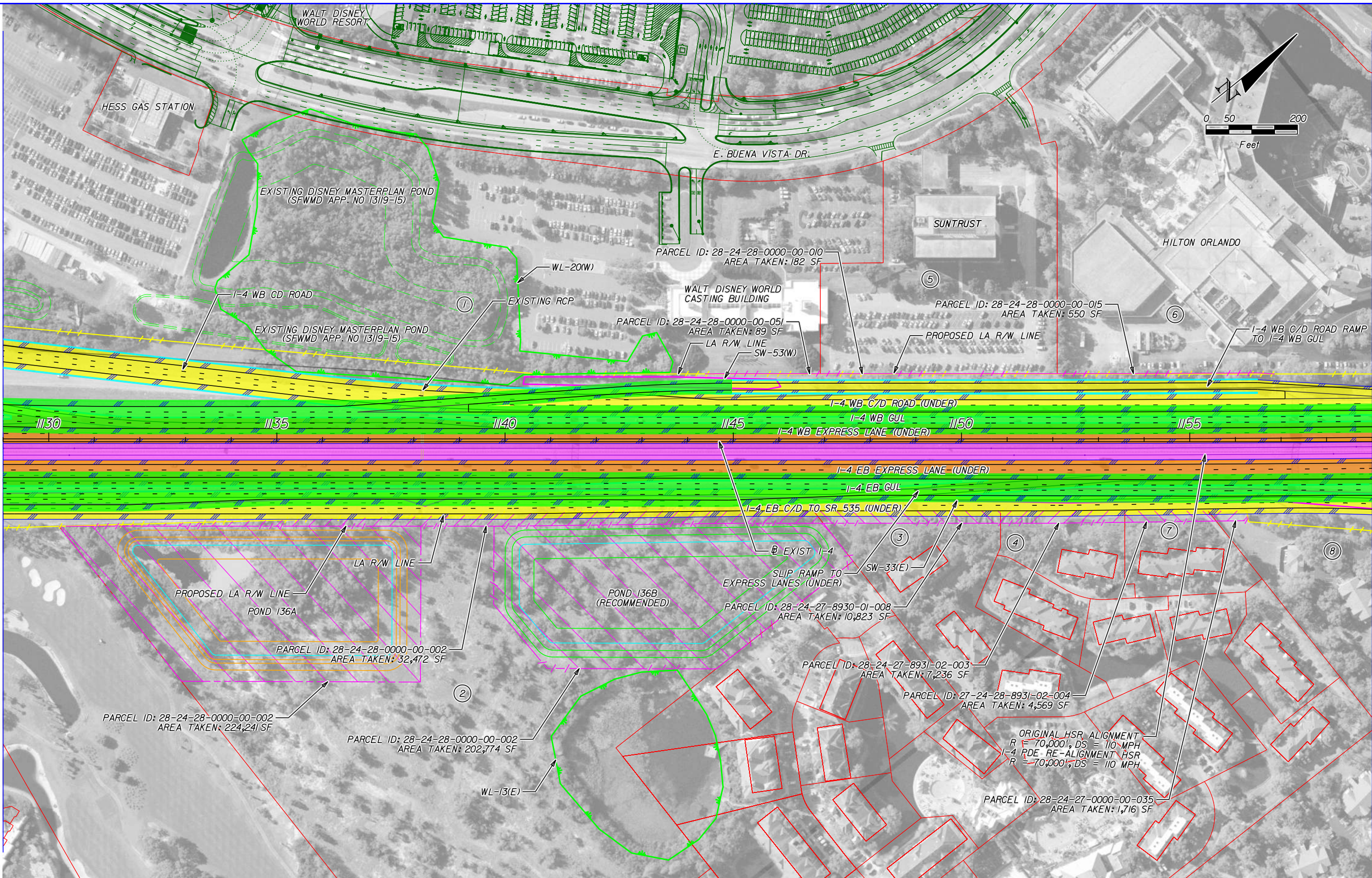
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
I-4 MAINLINE  
(RECOMMENDED ALTERNATIVE)  
SEGMENT 1**

SHEET NO.
27



MATCHLINE STA. 1129+00.00



MATCHLINE STA. 1159+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

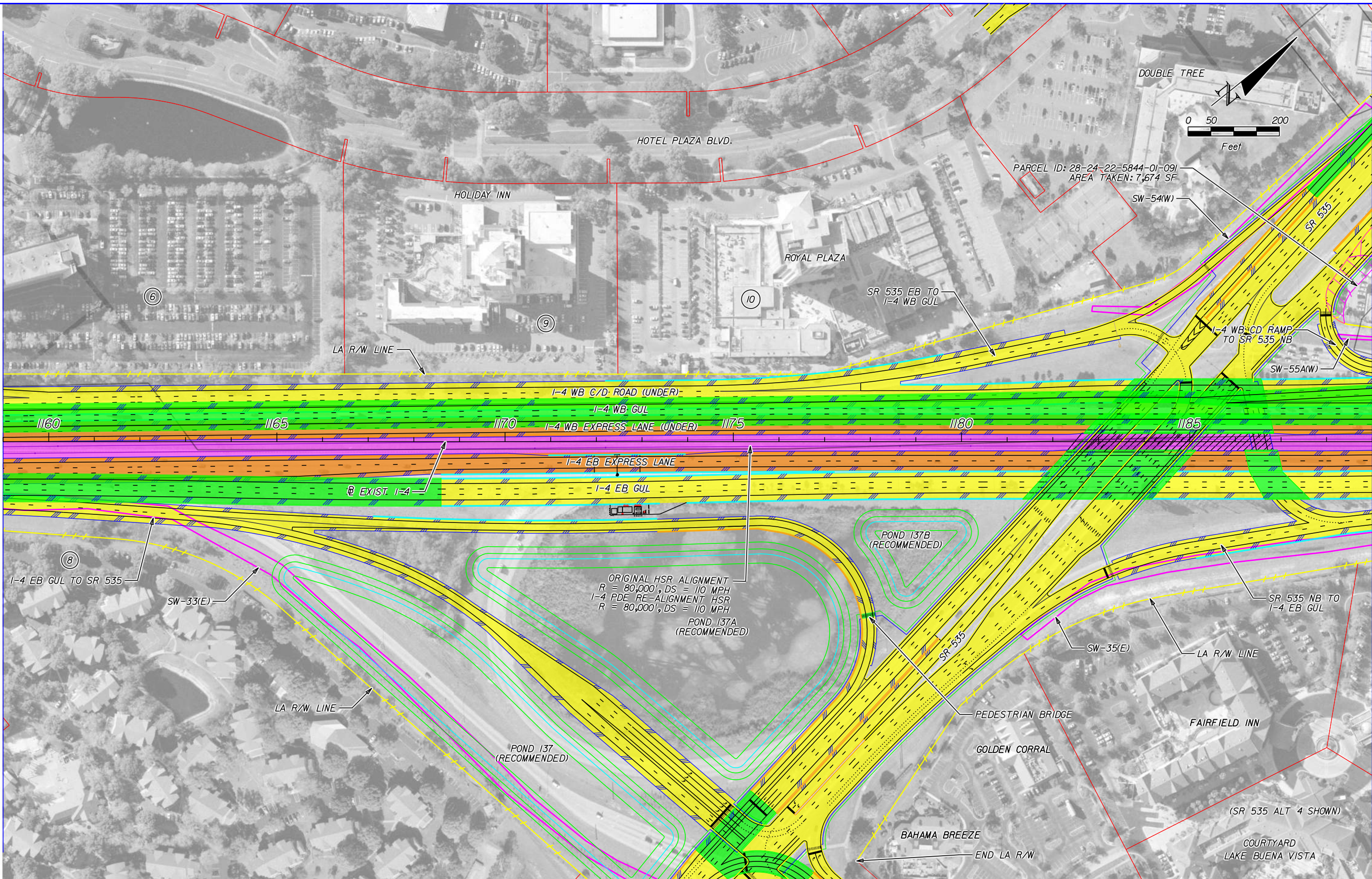
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
I-4 MAINLINE  
(RECOMMENDED ALTERNATIVE)  
SEGMENT 1**

SHEET NO.
28



MATCHLINE STA. 1159+00.00



MATCHLINE STA. 1189+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

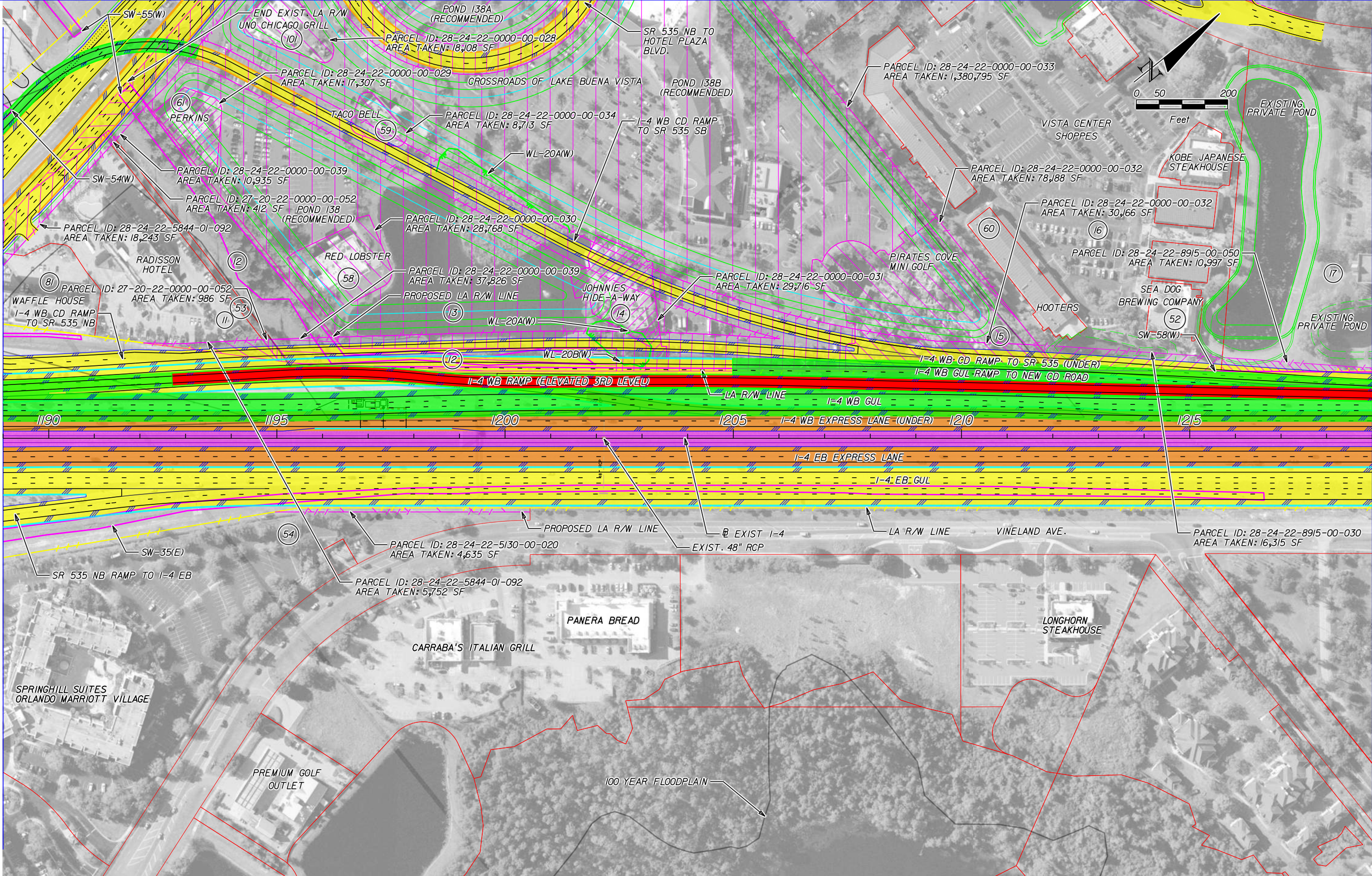
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1
--------------------------------------------------------------------------

SHEET NO.
29



MATCHLINE STA. 1189+00.00



MATCHLINE STA. 1219+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

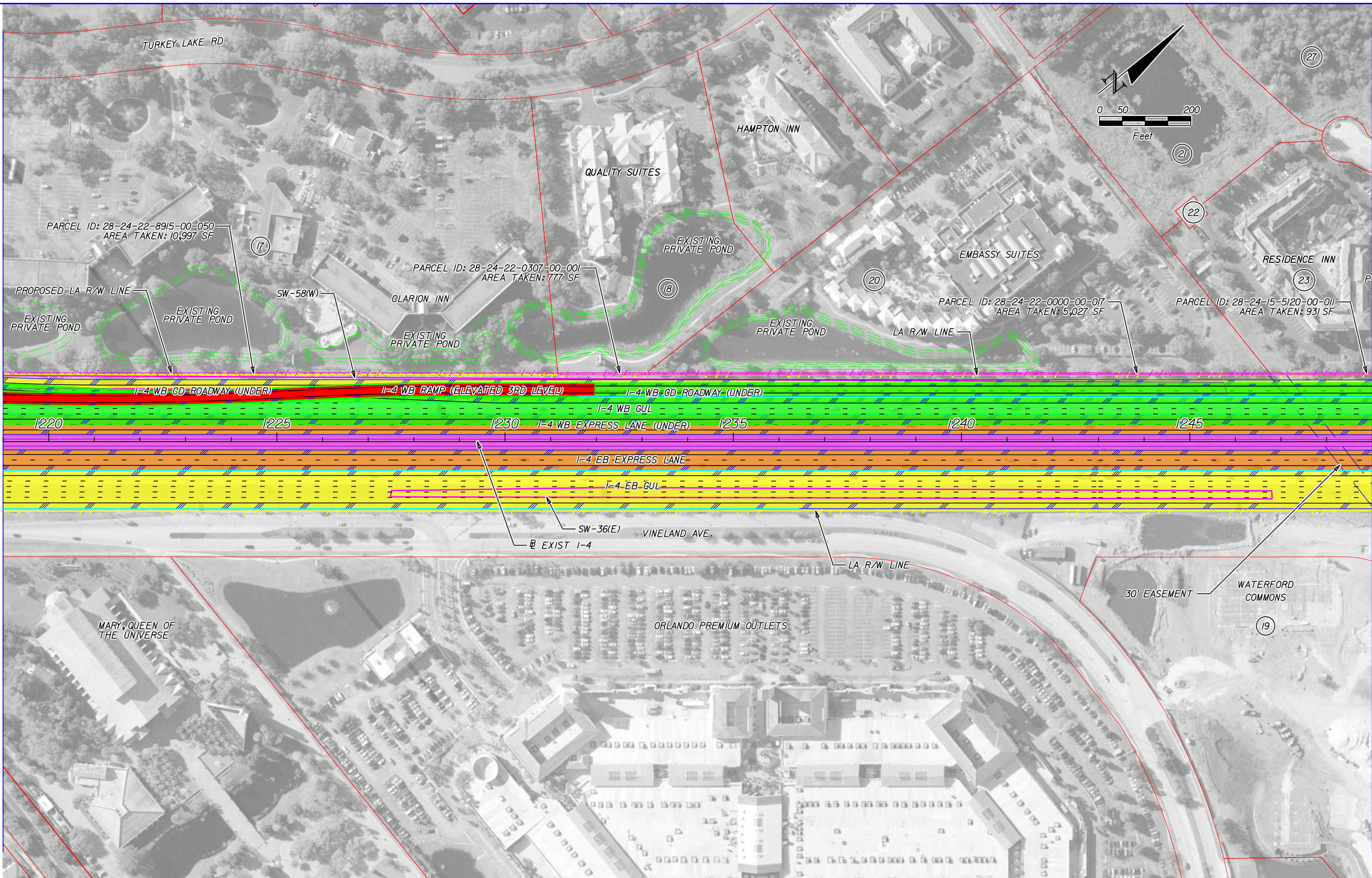
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1
--------------------------------------------------------------------------













SHEET NO.
30



MATCHLINE STA. 1219+00.00



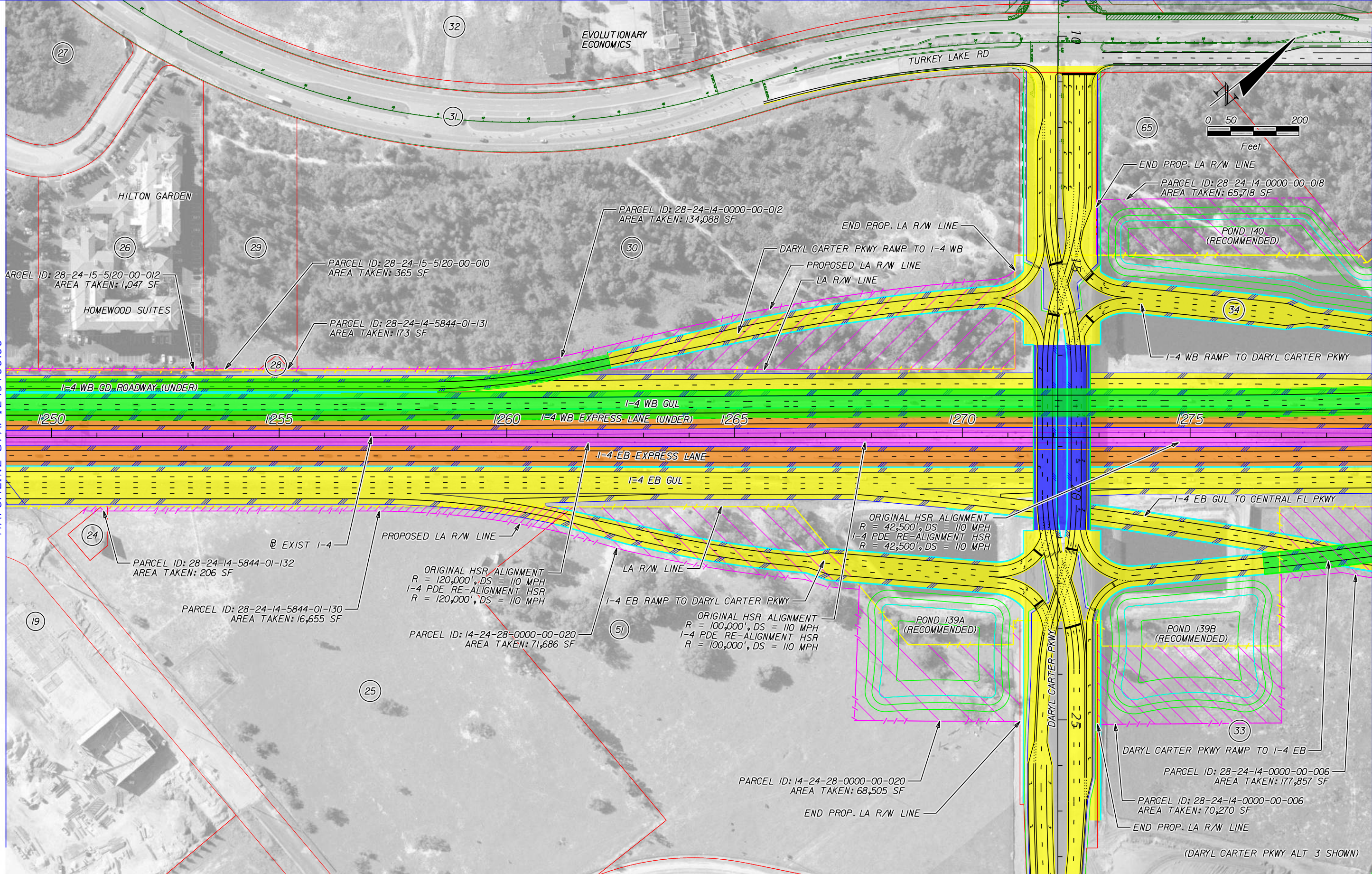
MATCHLINE STA. 1249+00.00

	EXISTING LA R/W		GENERAL USE LANES	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1	SHEET NO.
	PROPOSED LA R/W		EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		31
	PROPOSED FDOT R/W		EXISTING BRIDGE		400	ORANGE	432100-1-22-01		
	EXISTING R/W		PROPOSED BRIDGE						
	PARCEL LINES		RAIL CORRIDOR						
	BARRIER WALL		FUTURE EXISTING CONDITION						



MATCHLINE STA. 1249+00.00

MATCHLINE STA. 1279+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

<b>I-4 PD&amp;E STUDY</b> <b>I-4 MAINLINE</b> <b>(RECOMMENDED ALTERNATIVE)</b> <b>SEGMENT 1</b>
----------------------------------------------------------------------------------------------------------

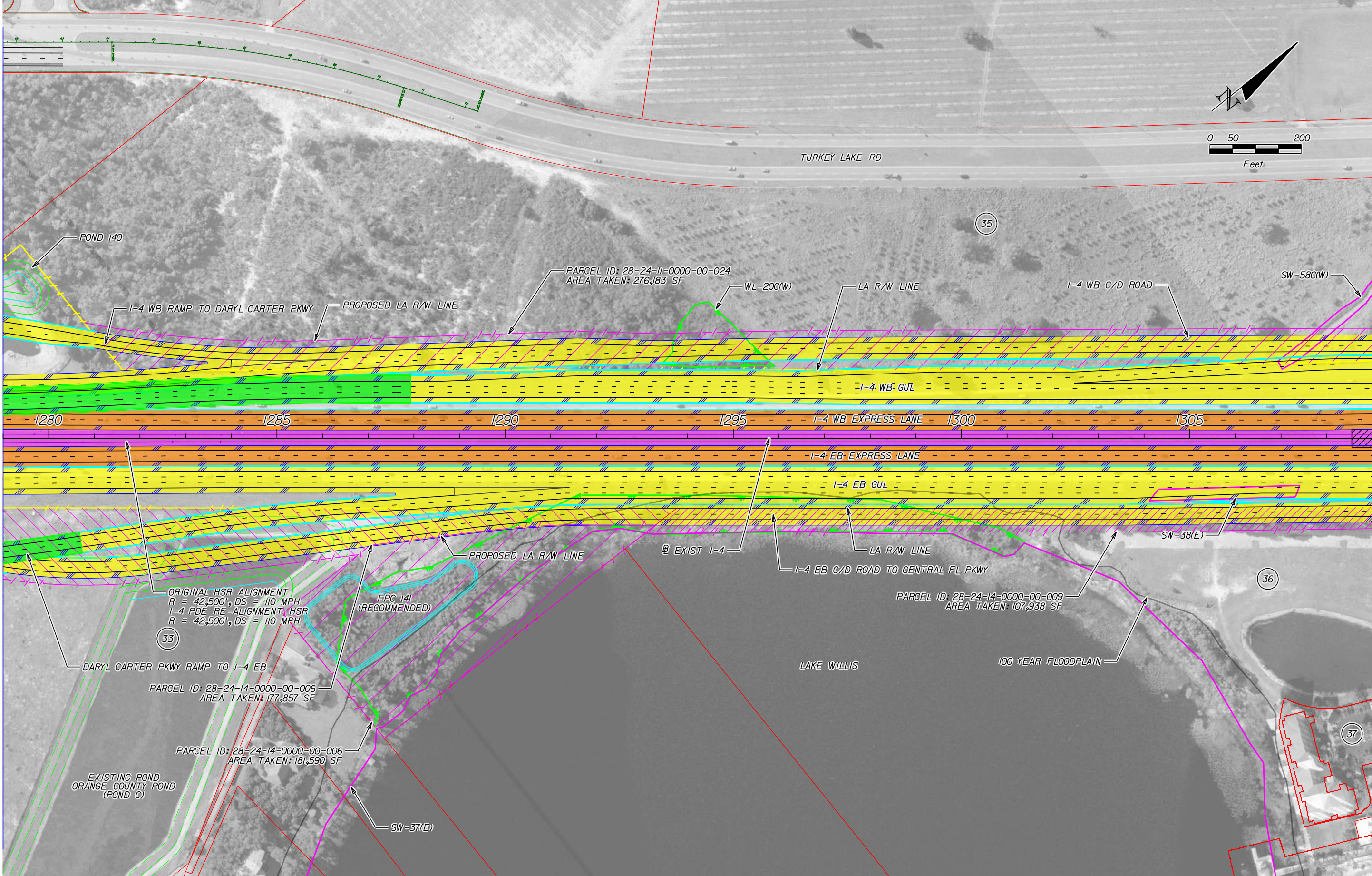
SHEET NO.
32



planrd24  
MODEL:  
SHEET SIZE:  
PLOT SCALE:

PRINT DRIVER:  
PEN TABLE:  
Color\_FDOTPDF.dwg  
FDOT\_text.dwg

MATCHLINE STA. 1279+00.00



MATCHLINE STA. 1309+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

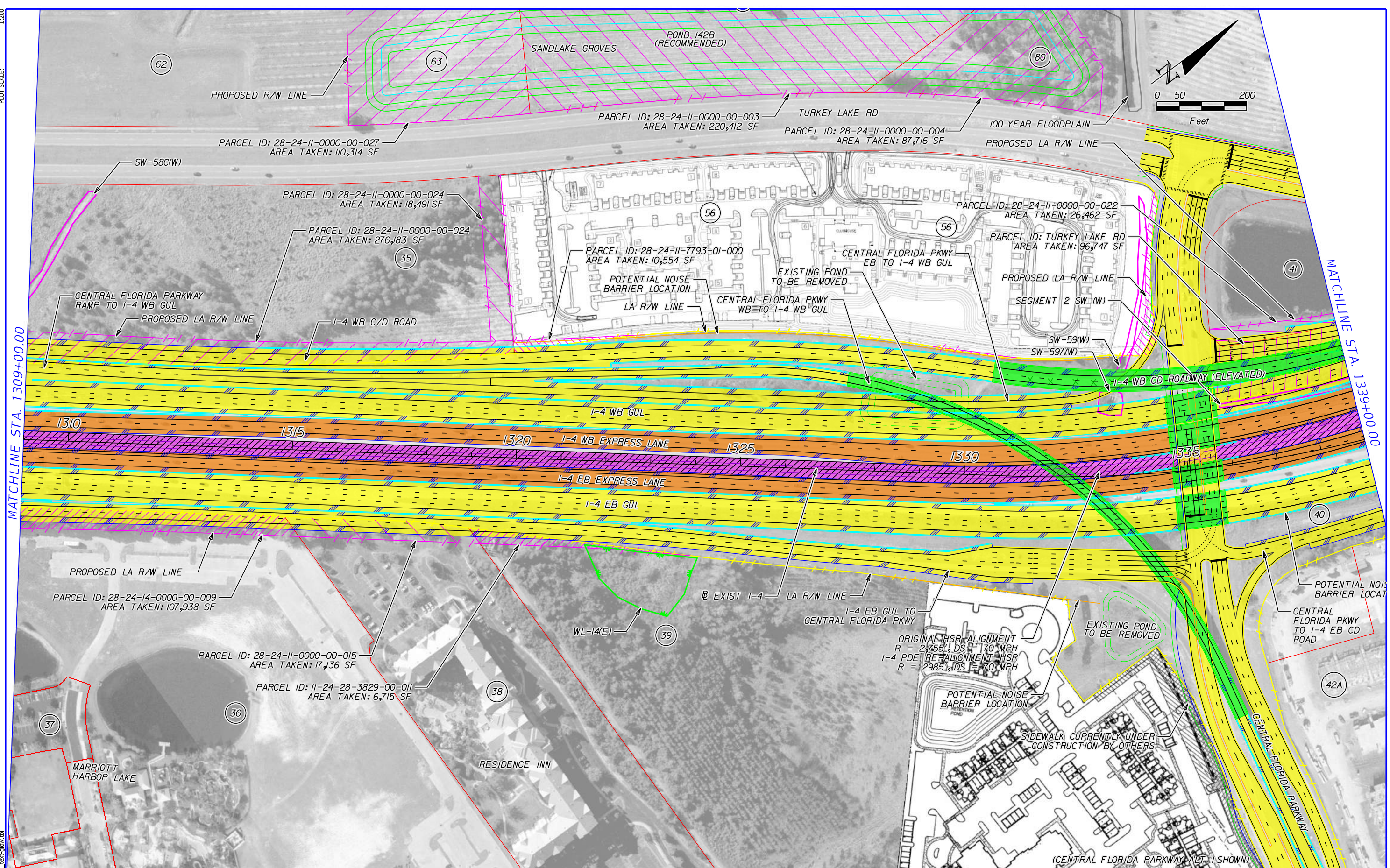
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
I-4 MAINLINE  
(RECOMMENDED ALTERNATIVE)  
SEGMENT 1**

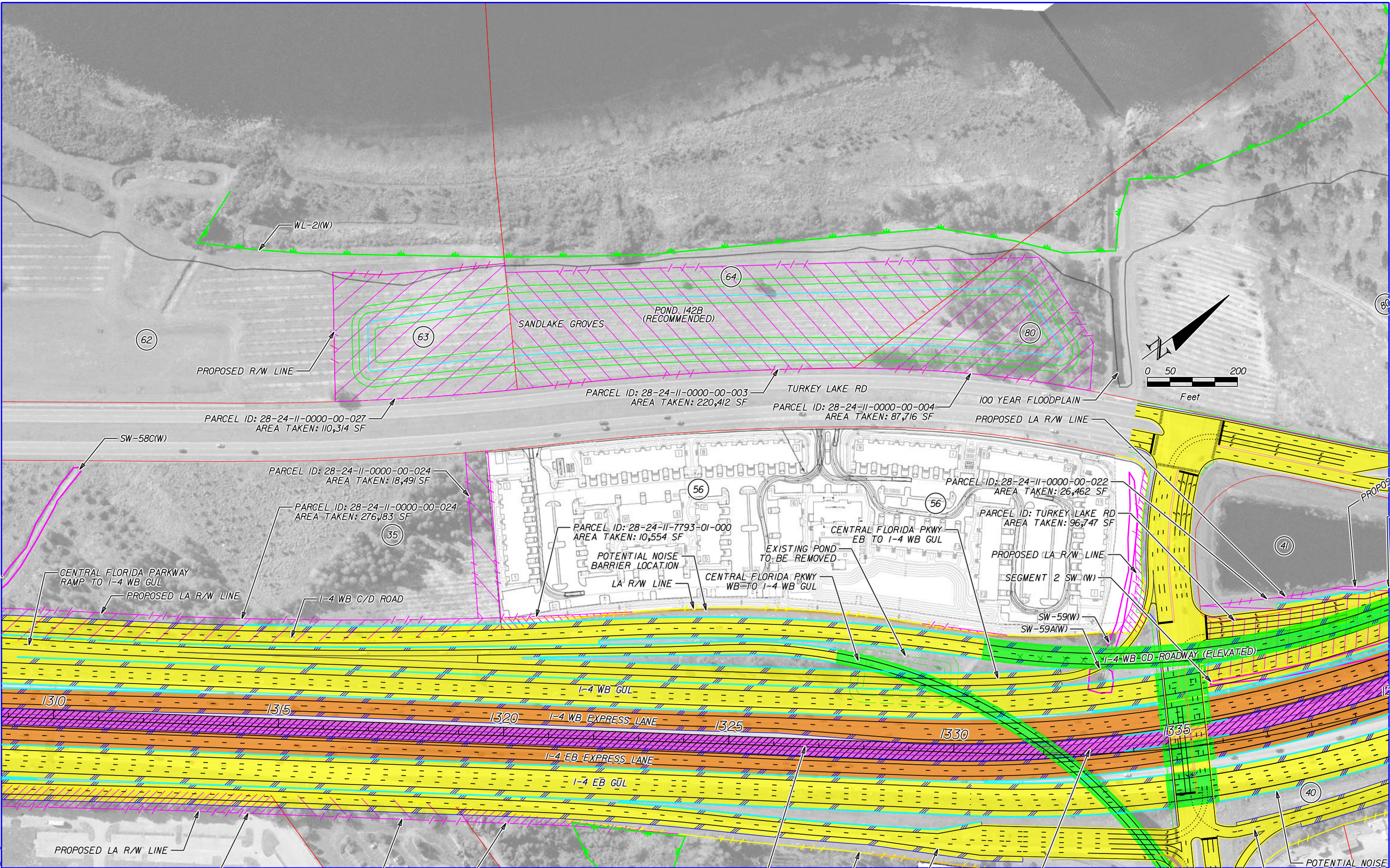
SHEET NO.
<b>33</b>





<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	EXISTING LA R/W	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	GENERAL USE LANES	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<div>I-4 PD&amp;E STUDY I-4 MAINLINE (RECOMMENDED ALTERNATIVE) SEGMENT 1</div>	SHEET NO.
	PROPOSED LA R/W	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		34
	PROPOSED FDOT R/W	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	EXISTING BRIDGE		400	ORANGE	432100-1-22-01		
	EXISTING R/W	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	PROPOSED BRIDGE						
	PARCEL LINES	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	RAIL CORRIDOR	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593					
BARRIER WALL	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	FUTURE EXISTING CONDITION							





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

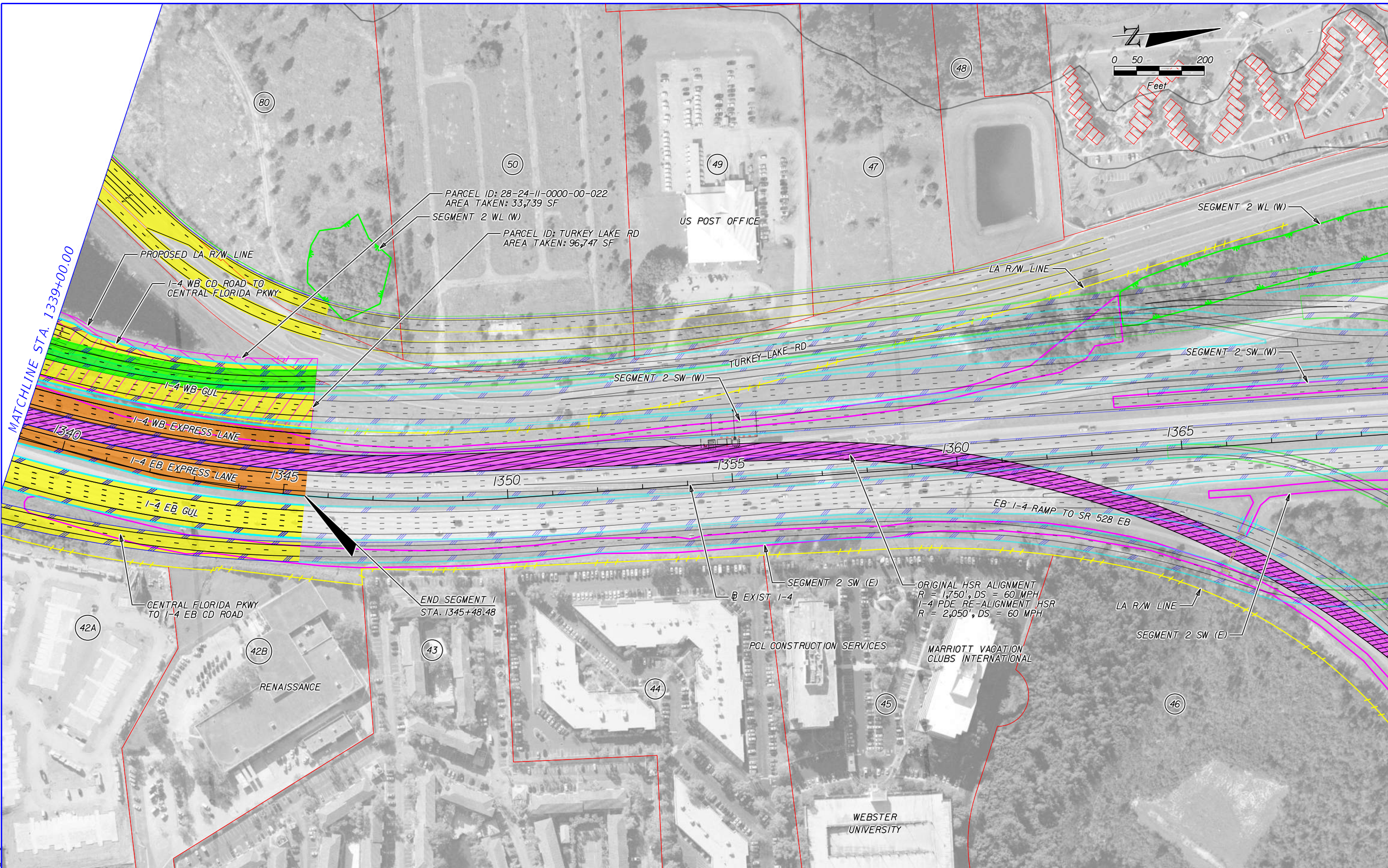
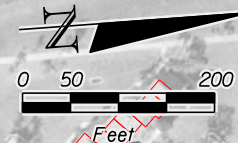
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
I-4 MAINLINE  
(RECOMMENDED ALTERNATIVE)  
SEGMENT 1**

SHEET NO.
<b>35</b>





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

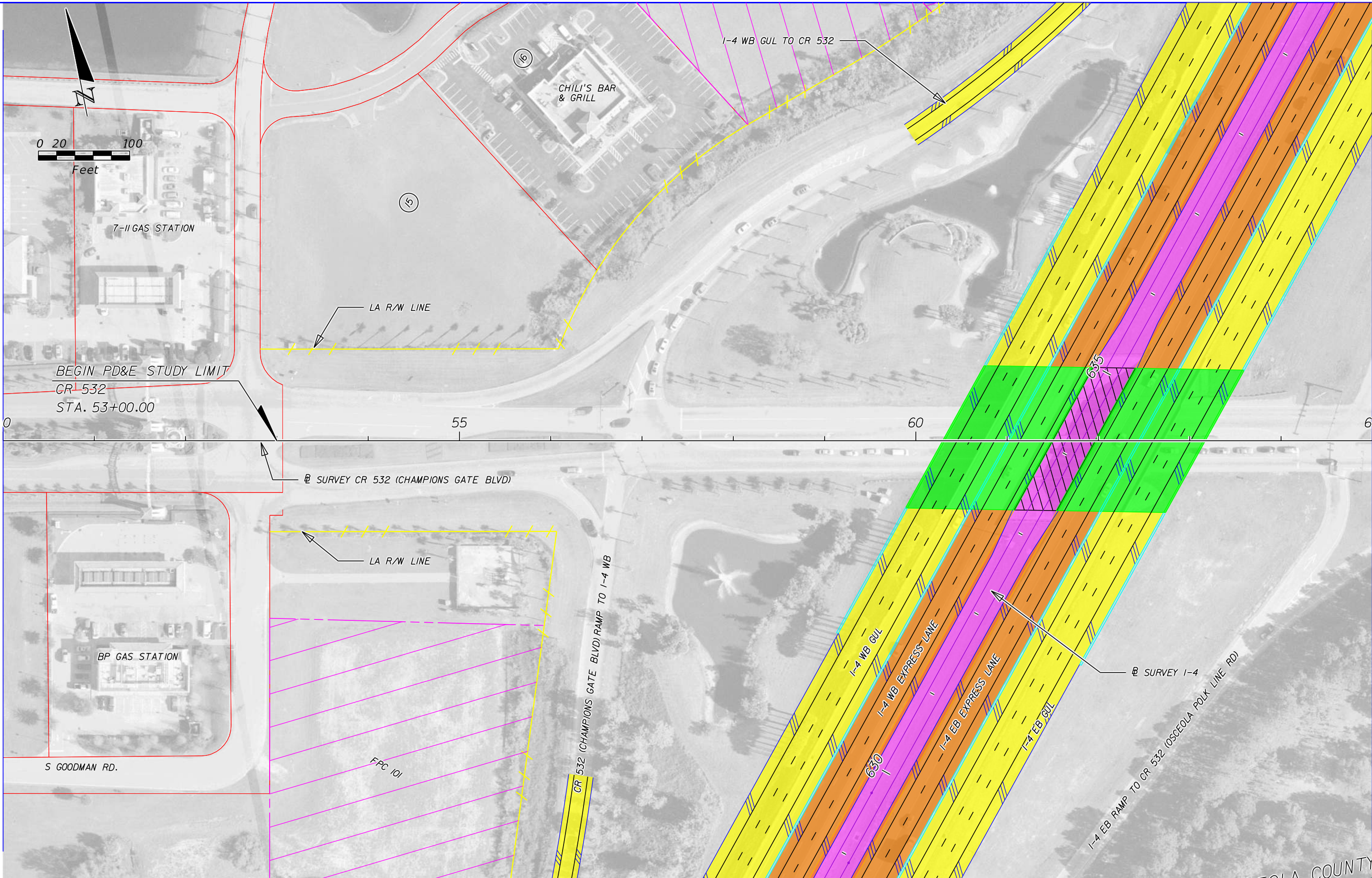
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
I-4 MAINLINE  
(RECOMMENDED ALTERNATIVE)  
SEGMENT 1**

SHEET NO.
<b>36</b>





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

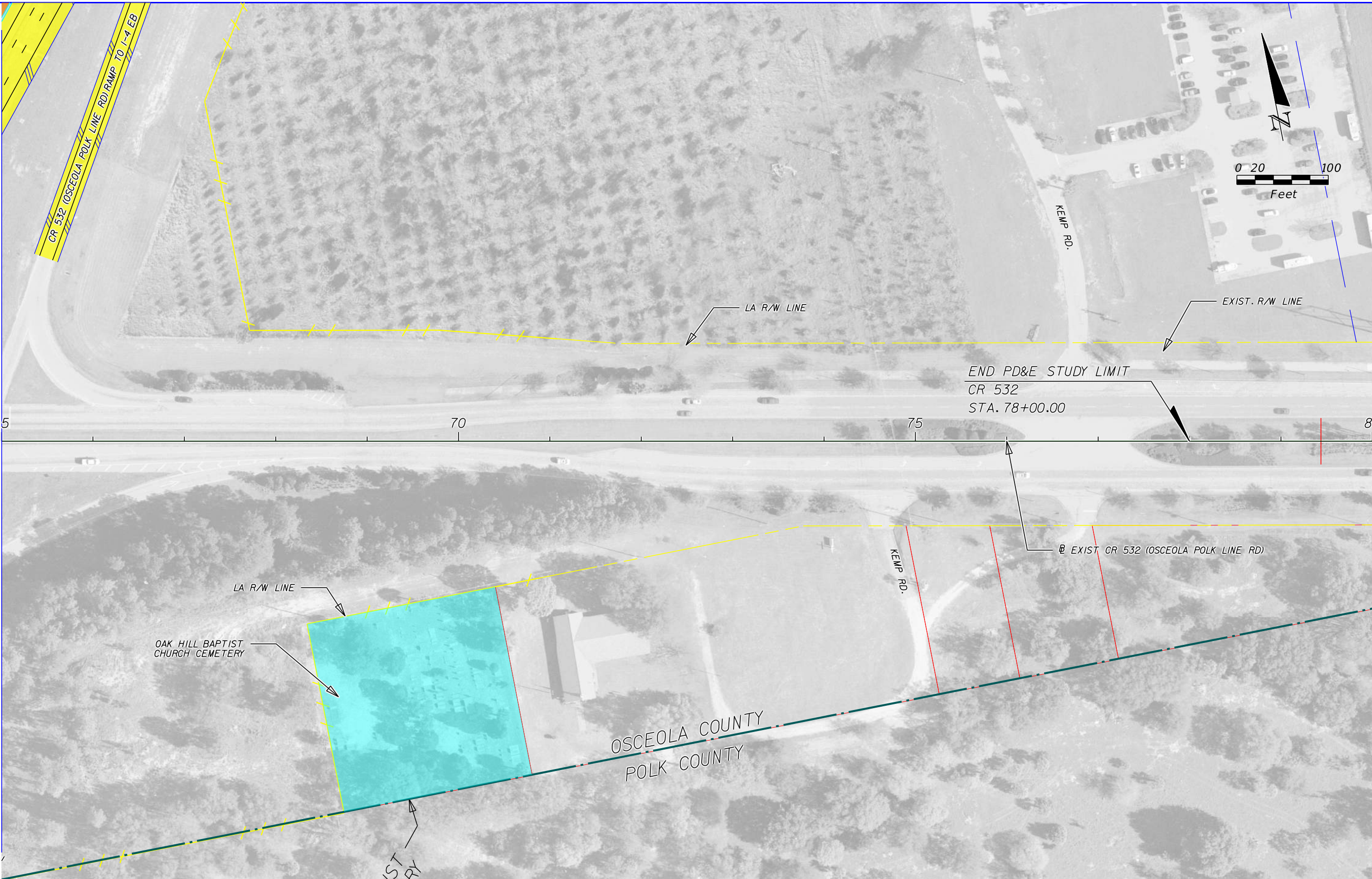
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

I-4 PD&E STUDY CR 532 ALT 1 (1 OF 2) SEGMENT 1	
SHEET NO. 37	

A-37
------



MATCHLINE STA. 65+00.00



PRINT DRIVER:  
PEN TABLE:  
Color\_FDOTPDF.plt  
FDOT\_text.plt

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

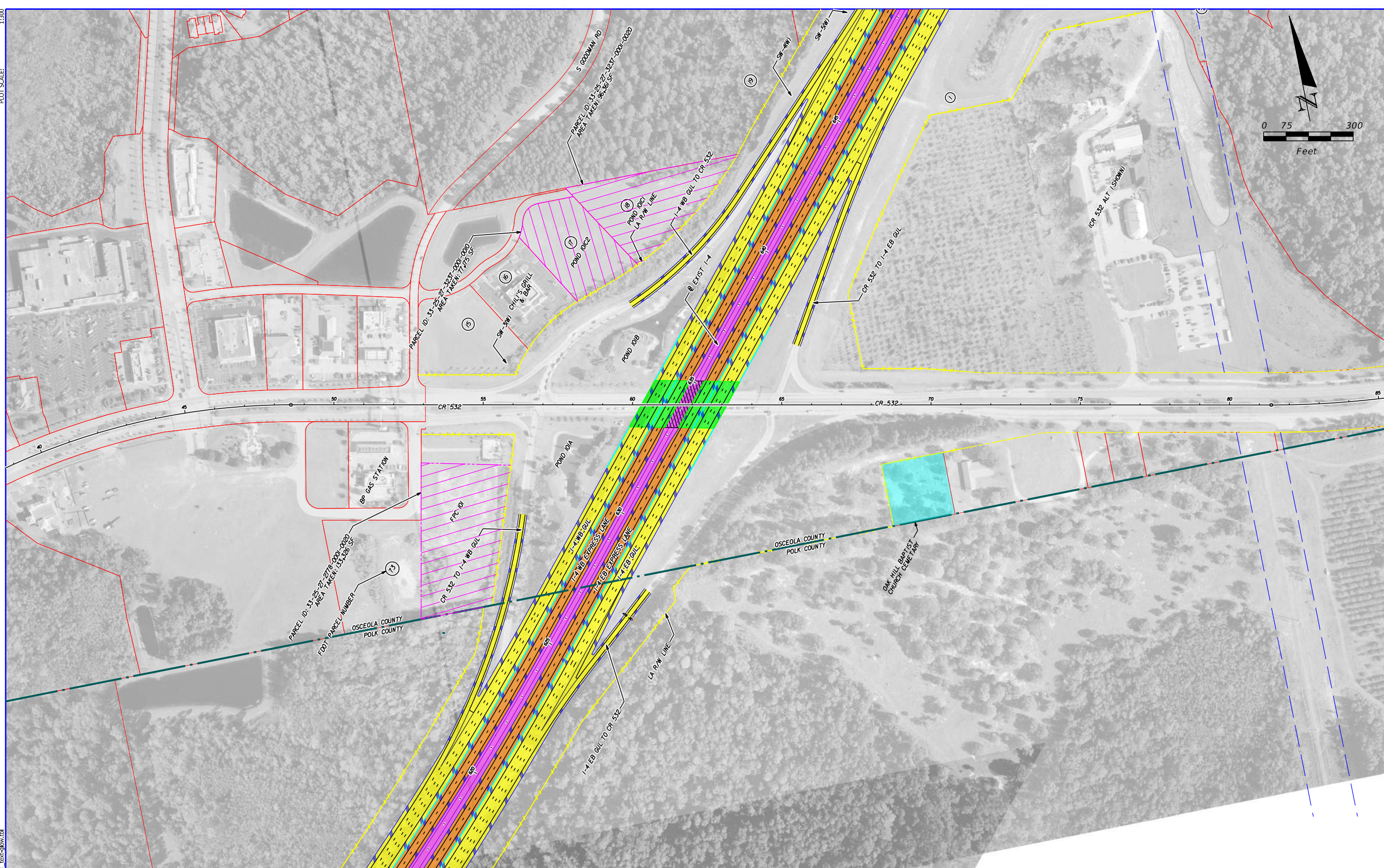
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593








STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

I-4 PD&E STUDY CR 532 ALT 1 (2 OF 2) SEGMENT 1	
SHEET NO. 38	

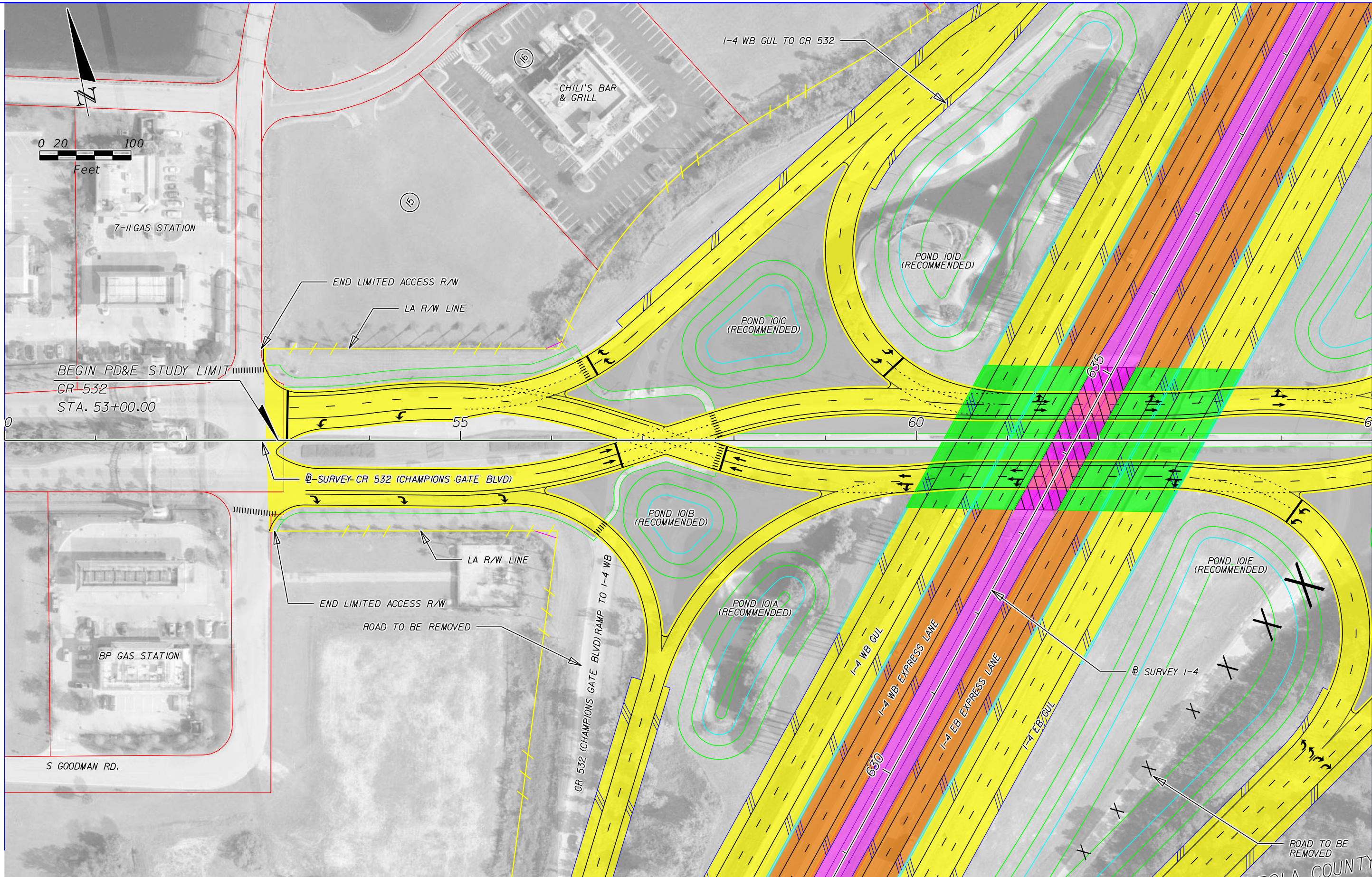
A-38





PROJECT TABLE:  	EXISTING LA R/W		GENERAL USE LANES	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<div>I-4 PD&amp;E STUDY CR 532 ALTERNATIVE 1 SEGMENT 1</div>	SHEET NO.
	PROPOSED LA R/W		EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PROPOSED FDOT R/W		EXISTING BRIDGE		400	OSCEOLA	432100-1-22-01		39
	EXISTING R/W		PROPOSED BRIDGE						
	PARCEL LINES		RAIL CORRIDOR						
BARRIER WALL		FUTURE EXISTING CONDITION							





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

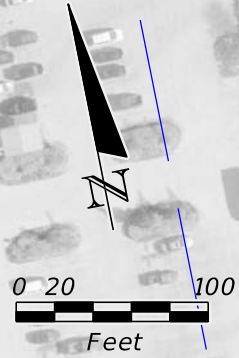
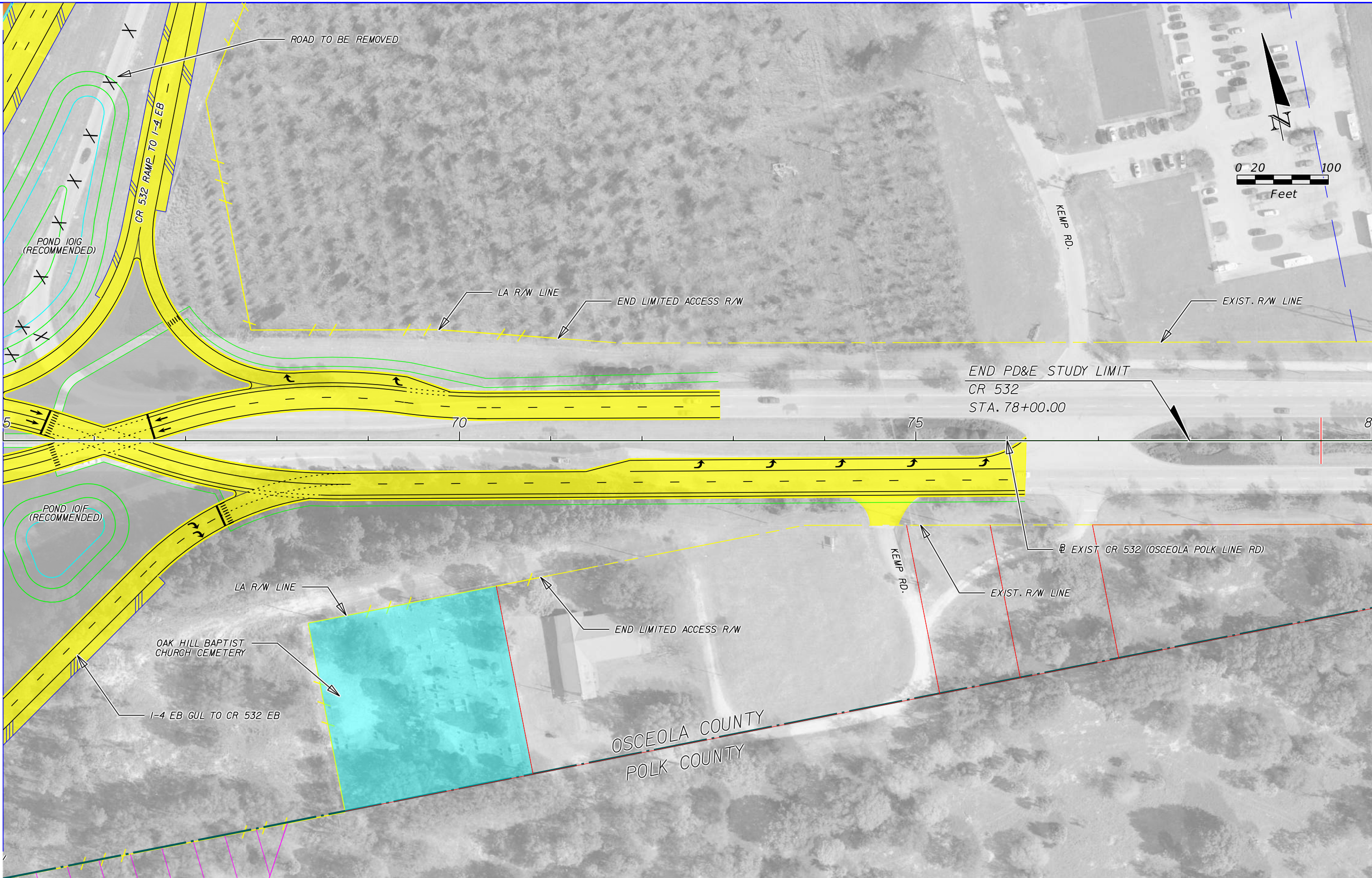
<b>I-4 PD&amp;E STUDY</b> <b>CR 532</b> <b>RECOMMENDED ALT 2 (1 OF 2)</b> <b>SEGMENT 1</b>
-----------------------------------------------------------------------------------------------------

SHEET NO.
40

MATCHLINE STA. 65+00.00



MATCHLINE STA. 65+00.00



PRINT DRIVER:  
PEN TABLE:  
Color\_FDOTPDF.plt  
FDOT\_text.dwt

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

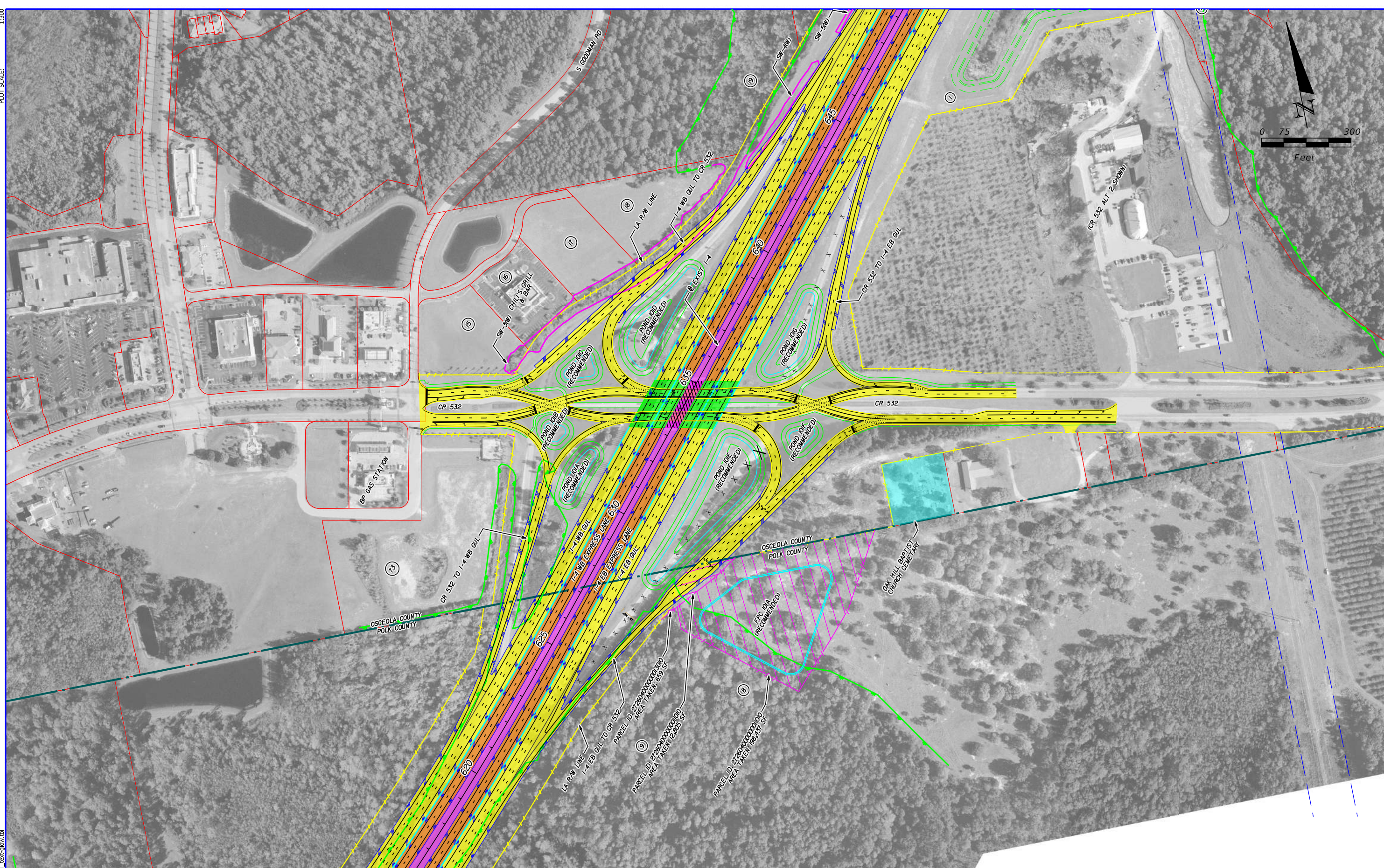
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593






STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

I-4 PD&E STUDY CR 532 RECOMMENDED ALT 2 (2 OF 2) SEGMENT 1
---------------------------------------------------------------------

SHEET NO.
41





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

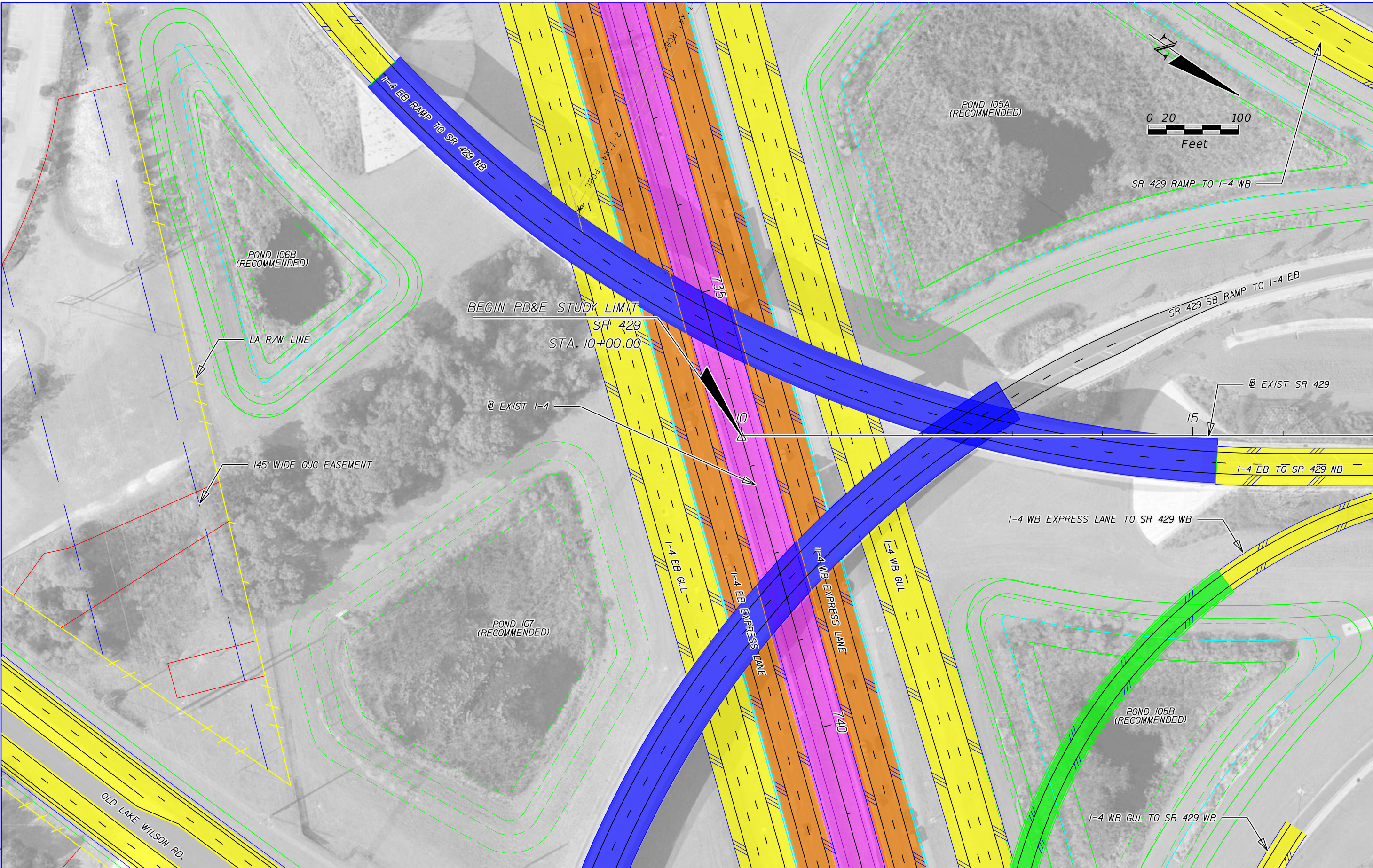
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

*I-4 PD&E STUDY  
CR 532 RECOMMENDED ALT 2  
SEGMENT 1*

42





MATCHLINE STA. 17+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

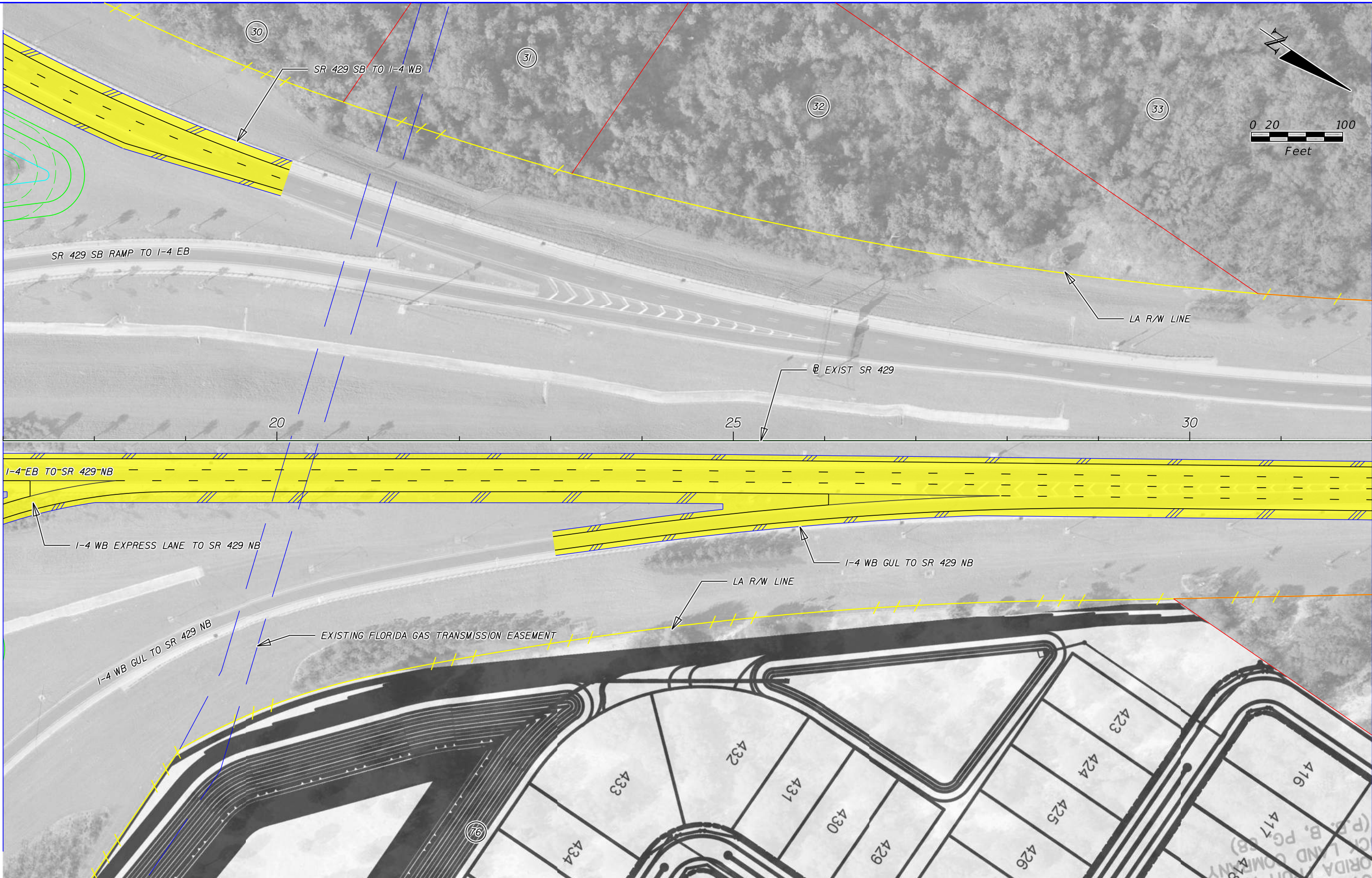
<b>I-4 PD&amp;E STUDY SR 429 (1 OF 4) RECOMMENDED SEGMENT 1</b>
<b>43</b>

SHEET NO.
<b>43</b>



MATCHLINE STA. 17+00.00

MATCHLINE STA. 32+00.00

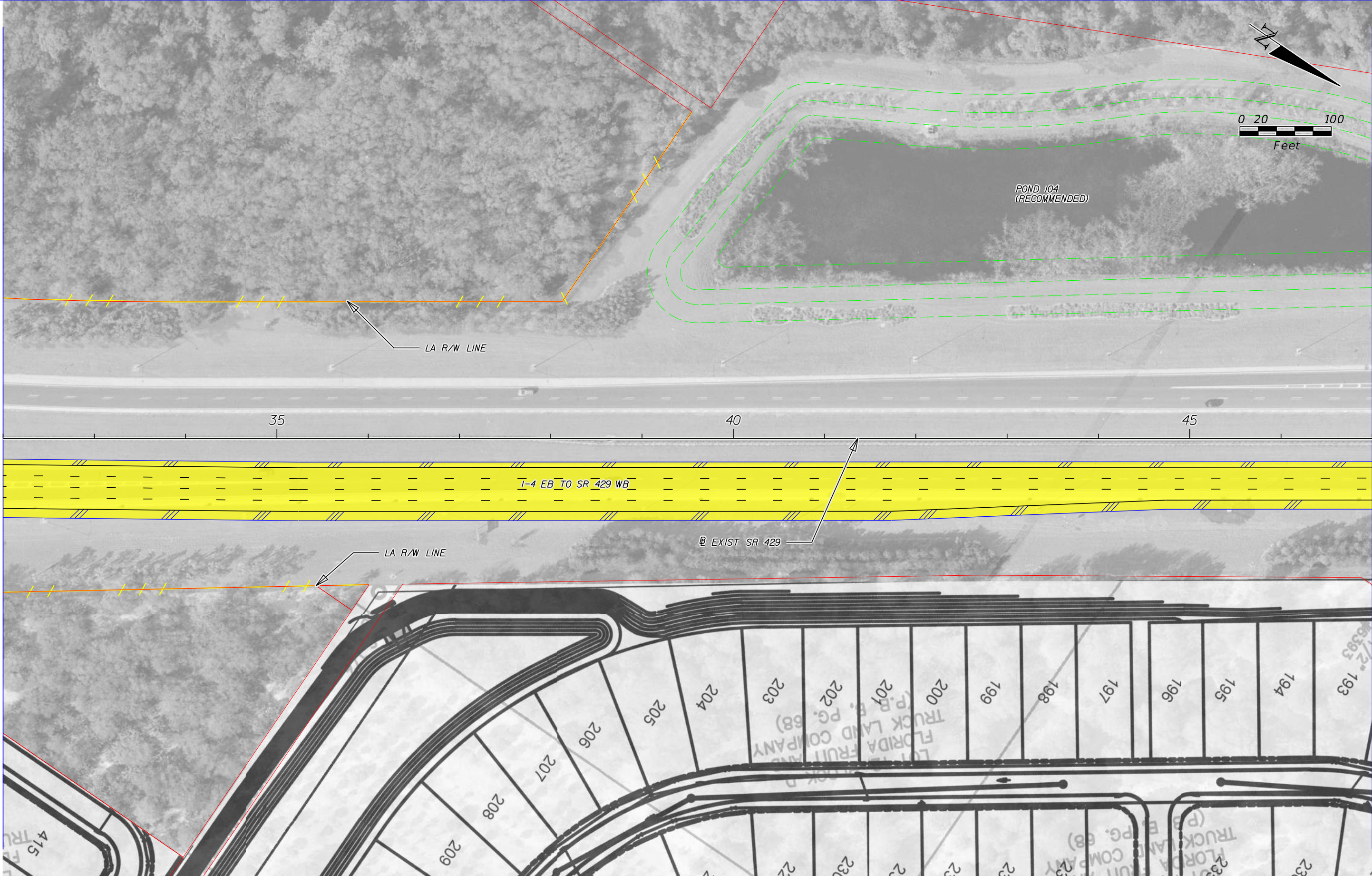


<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	<div>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</div> <table><tr><td>ROAD NO.</td><td>COUNTY</td><td>FINANCIAL PROJECT ID</td></tr><tr><td>400</td><td>OSCEOLA</td><td>432100-1-22-01</td></tr></table>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	OSCEOLA	432100-1-22-01	<div>I-4 PD&amp;E STUDY SR 429 (2 OF 4) RECOMMENDED SEGMENT 1</div>	<div>SHEET NO.  44</div>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID									
400	OSCEOLA	432100-1-22-01									



MATCHLINE STA. 32+00.00

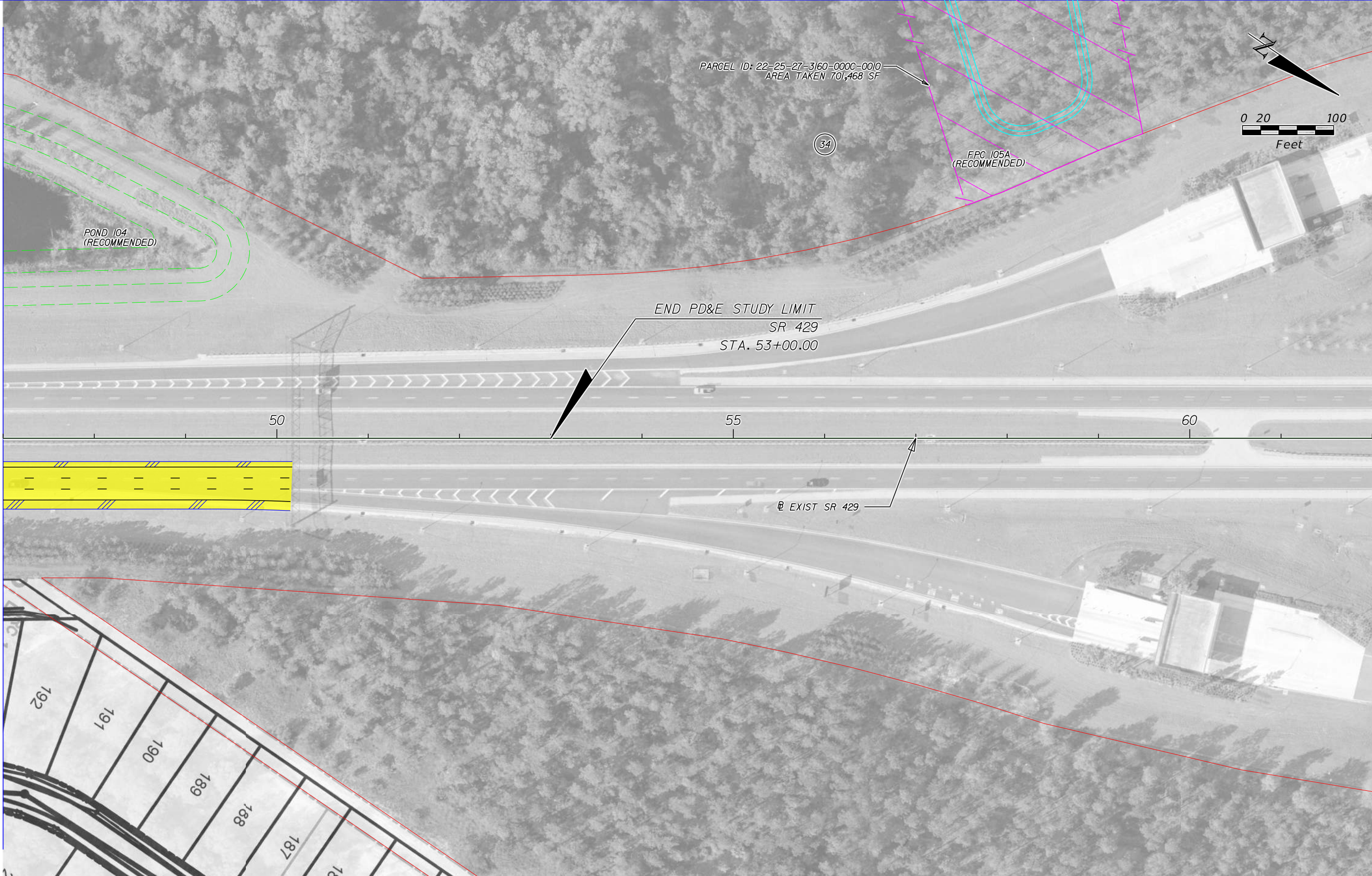
MATCHLINE STA. 47+00.00



<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SR 429 (3 OF 4) RECOMMENDED SEGMENT 1	SHEET NO.  45
	PROPOSED LA R/W	EXPRESS LANES	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593			ROAD NO.      COUNTY      FINANCIAL PROJECT ID  400      OSCEOLA      432100-1-22-01				
	PROPOSED FDOT R/W	EXISTING BRIDGE								
	EXISTING R/W	PROPOSED BRIDGE								
PARCEL LINES	RAIL CORRIDOR									
BARRIER WALL	FUTURE EXISTING CONDITION									



MATCHLINE STA. 47+00.00



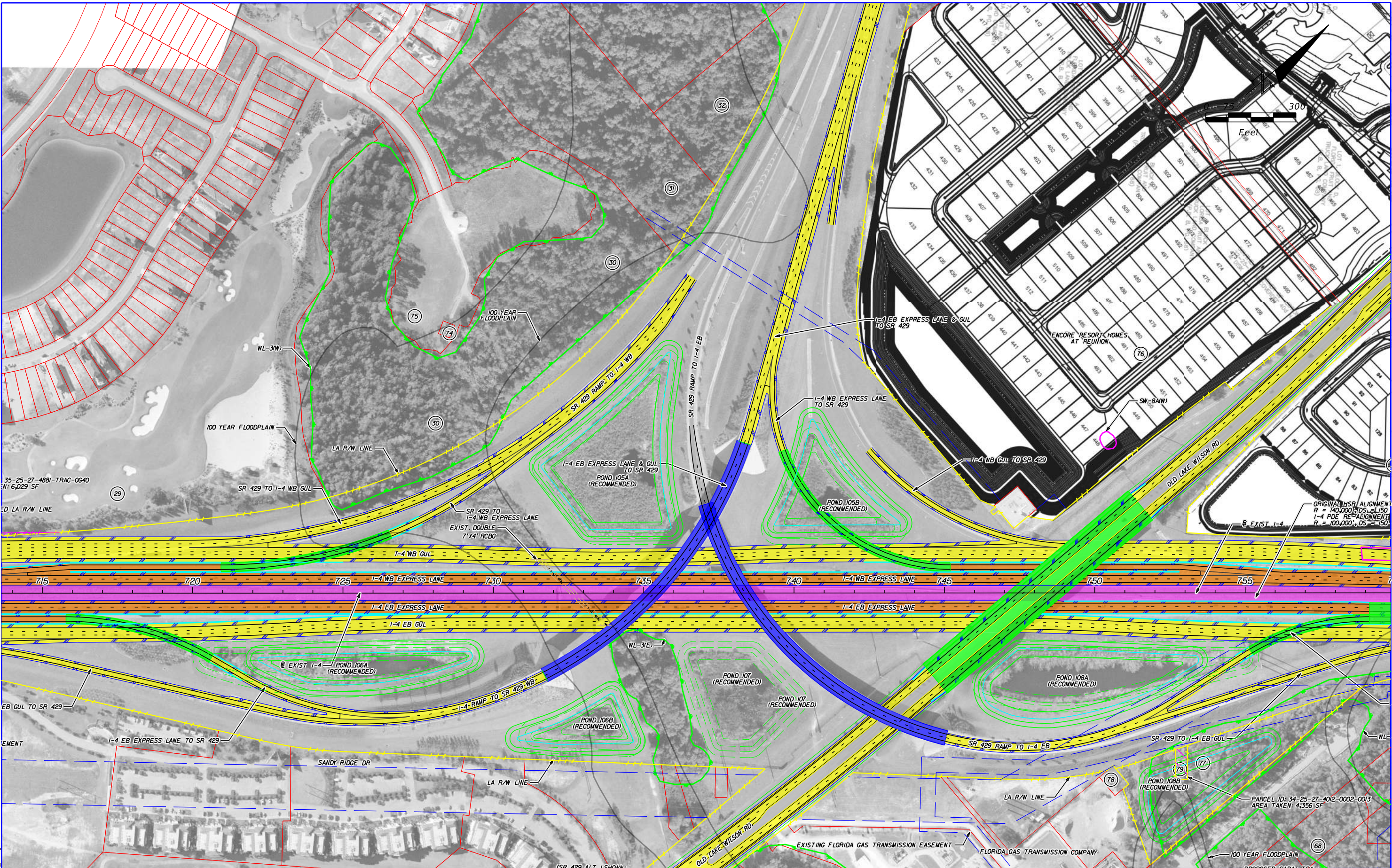
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION













HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

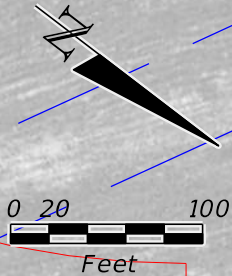
<b>I-4 PD&amp;E STUDY SR 429 (4 OF 4) RECOMMENDED SEGMENT 1</b>	SHEET NO.
	<b>46</b>





	EXISTING LA R/W		GENERAL USE LANES	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SR 429 RECOMMENDED SEGMENT 1	SHEET NO.
	PROPOSED LA R/W		EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PROPOSED FDOT R/W		EXISTING BRIDGE		400	OSCEOLA	432100-1-22-01		47
	EXISTING R/W		PROPOSED BRIDGE						
	PARCEL LINES		RAIL CORRIDOR						
	BARRIER WALL		FUTURE EXISTING CONDITION						





BEGIN PD&E STUDY LIMIT  
WORLD DRIVE  
STA. 10+00.00

10

15

20

FLORIDA GAS TRANSMISSION EASEMENT

LA R/W LINE

WORLD DRIVE EB

WORLD DRIVE WB

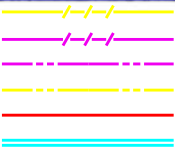
EXIST WORLD DR

WORLD DRIVE WB TO I-4 EB

POND 113F  
(RECOMMENDED)

POND 113G  
(RECOMMENDED)

MATCHLINE STA. 22+00.00



EXISTING LA R/W  
PROPOSED LA R/W  
PROPOSED FDOT R/W  
EXISTING R/W  
PARCEL LINES  
BARRIER WALL



GENERAL USE LANES  
EXPRESS LANES  
EXISTING BRIDGE  
PROPOSED BRIDGE  
RAIL CORRIDOR  
FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

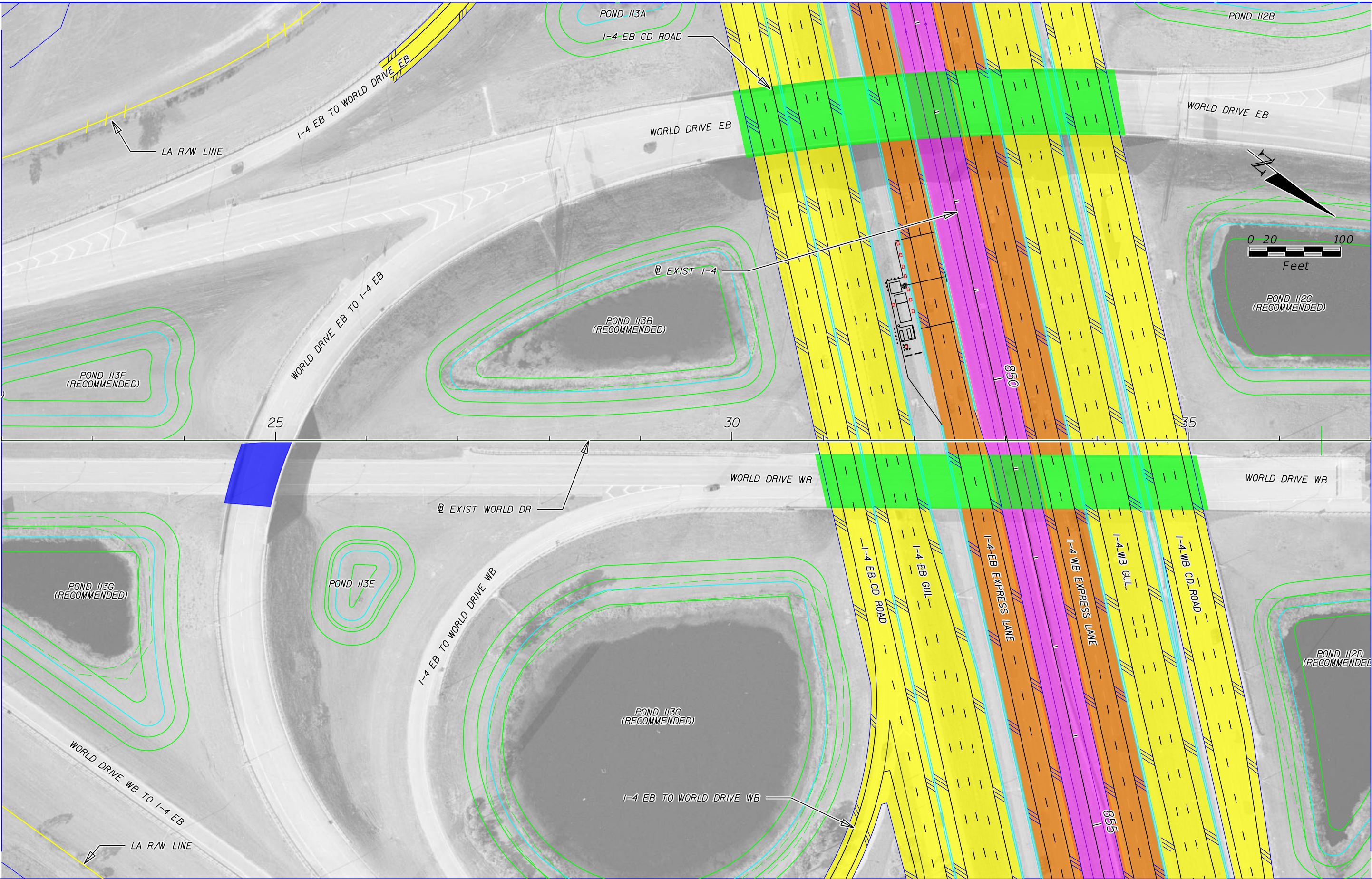
I-4 PD&E STUDY  
WORLD DRIVE (1 OF 4)  
RECOMMENDED  
SEGMENT 1

SHEET  
NO.  
48



MATCHLINE STA. 22+00.00

MATCHLINE STA. 37+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

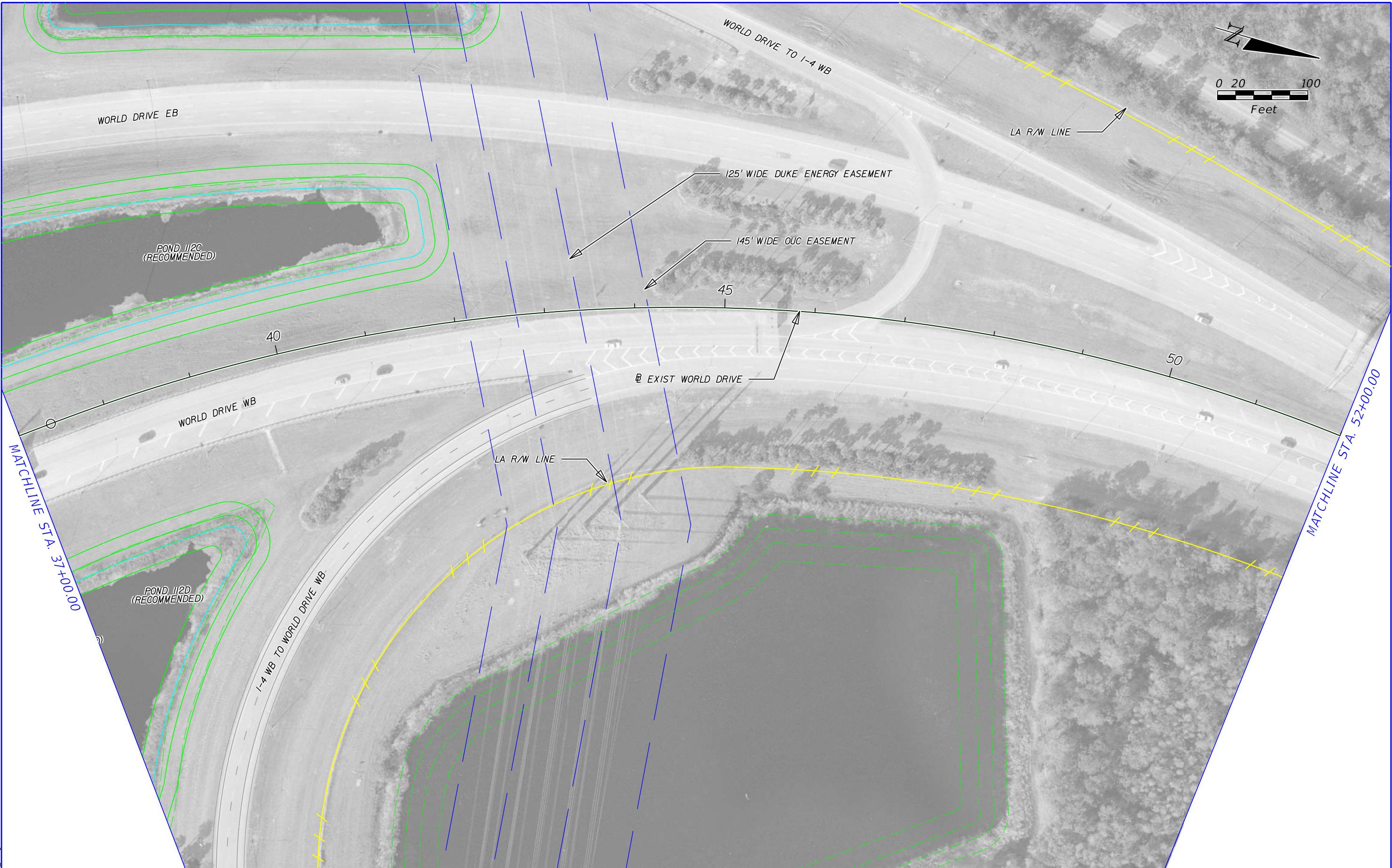
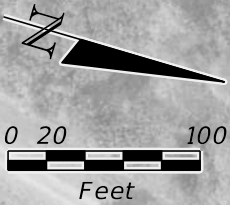
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY WORLD DRIVE (2 OF 4) RECOMMENDED SEGMENT 1</b>
SHEET NO.
<b>49</b>

A-49
------





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

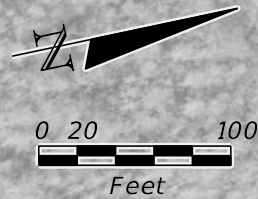
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY WORLD DRIVE (3 OF 4) RECOMMENDED SEGMENT 1</b>	SHEET NO.
	<b>50</b>

A-50
------





MATCHLINE STA. 52+00.00



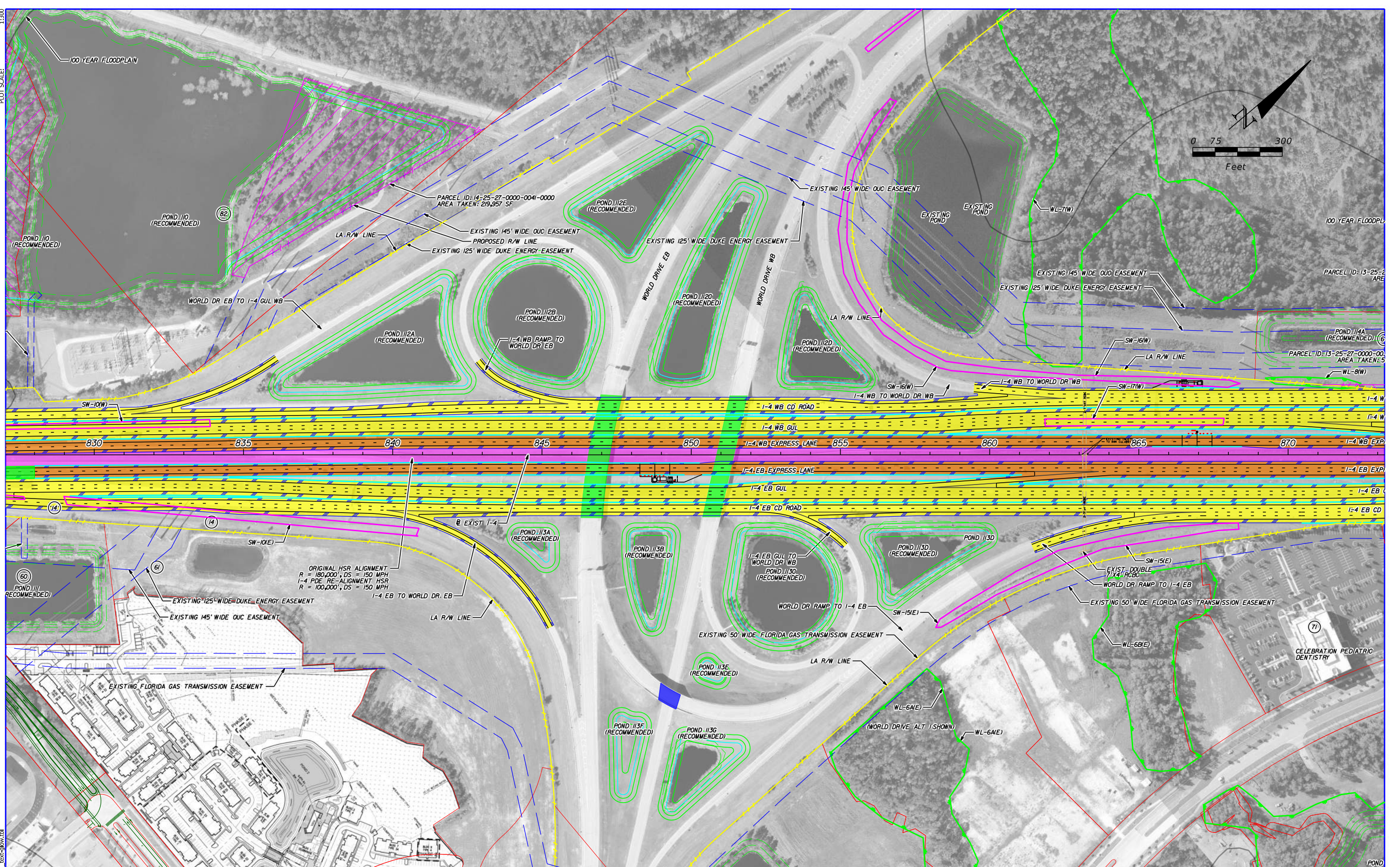
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

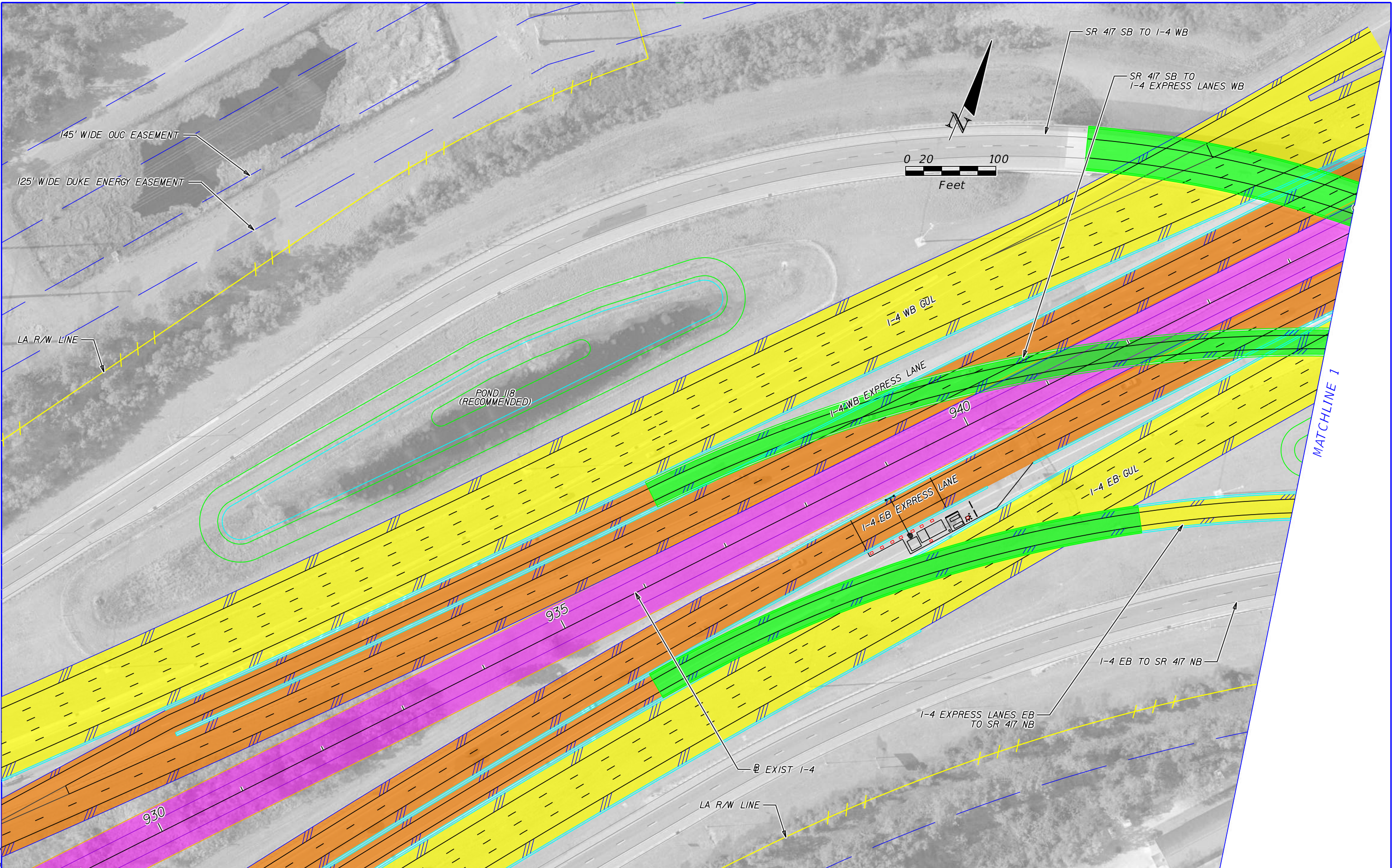
<b>I-4 PD&amp;E STUDY WORLD DRIVE (4 OF 4) RECOMMENDED SEGMENT 1</b>	SHEET NO.
	<b>51</b>





PD&E OPEN TABLE:		EXISTING LA R/W		GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY WORLD DRIVE RECOMMENDED SEGMENT 1	SHEET NO.
		PROPOSED LA R/W		EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		52
		PROPOSED FDOT R/W		EXISTING BRIDGE	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	400	OSCEOLA	432100-1-22-01		
		EXISTING R/W		PROPOSED BRIDGE						
		PARCEL LINES		RAIL CORRIDOR						
	BARRIER WALL		FUTURE EXISTING CONDITION							





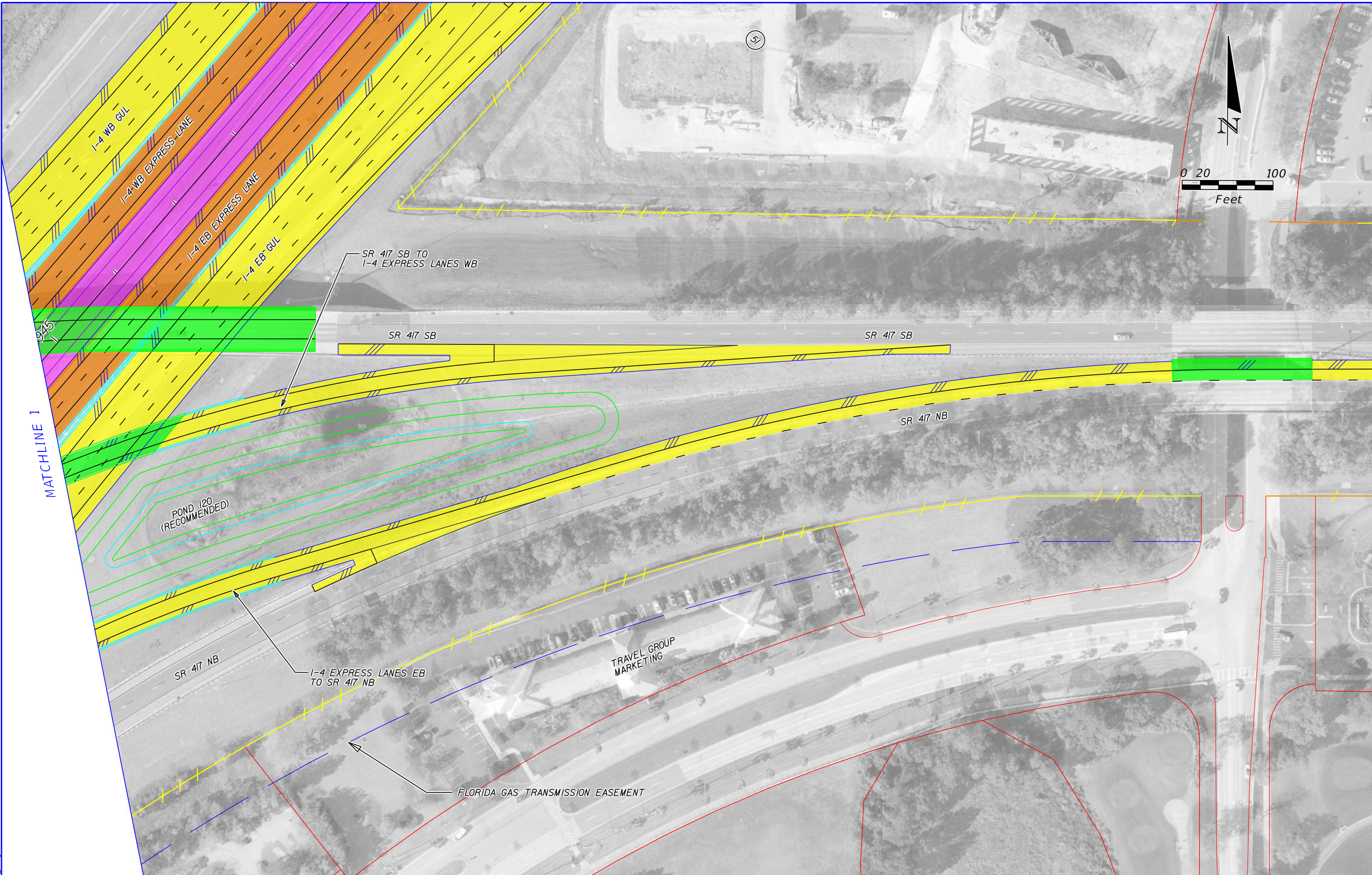
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY SR 417 (1 OF 3) RECOMMENDED SEGMENT 1</b>	SHEET NO.
	<b>53</b>





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY SR 417 (2 OF 3) RECOMMENDED SEGMENT 1</b>	SHEET NO.
	<b>54</b>



MATCHLINE 2



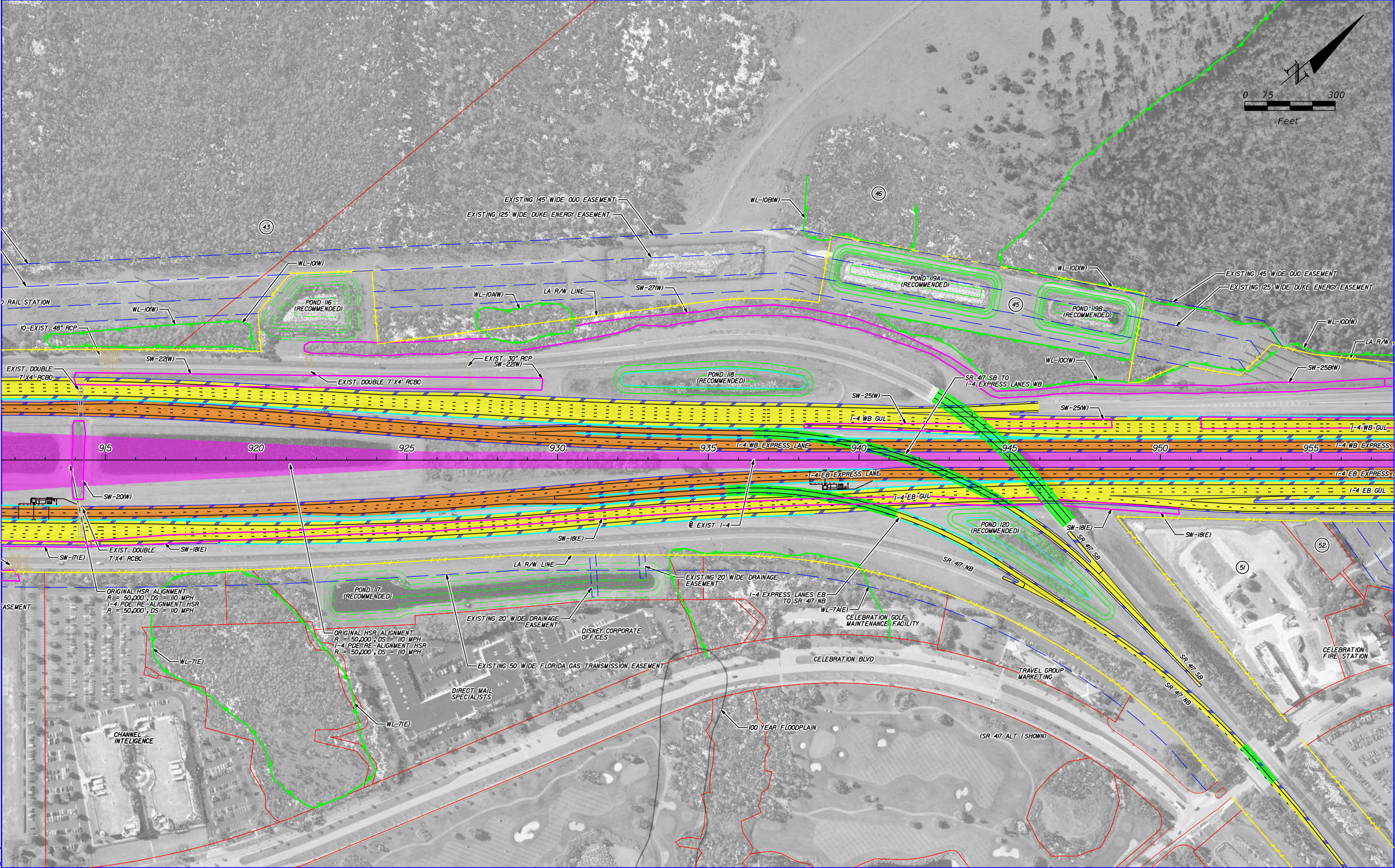
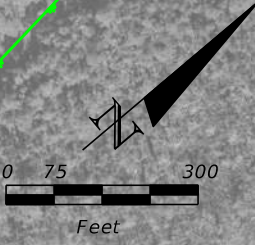
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY SR 417 (3 OF 3) RECOMMENDED SEGMENT 1</b>	SHEET NO.
	<b>55</b>





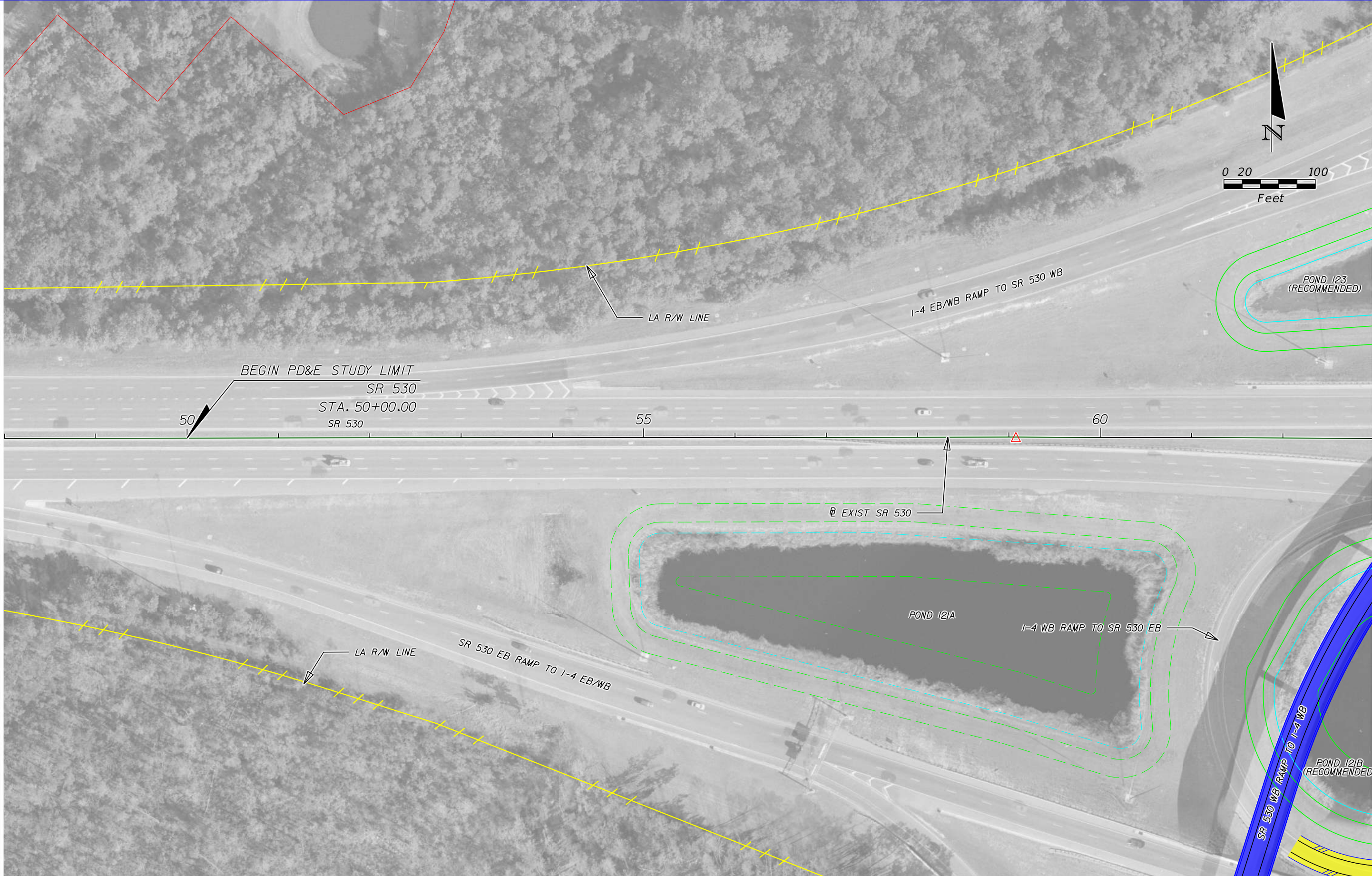
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

I-4 PD&E STUDY SR 417 RECOMMENDED SEGMENT 1	
SHEET NO.  56	





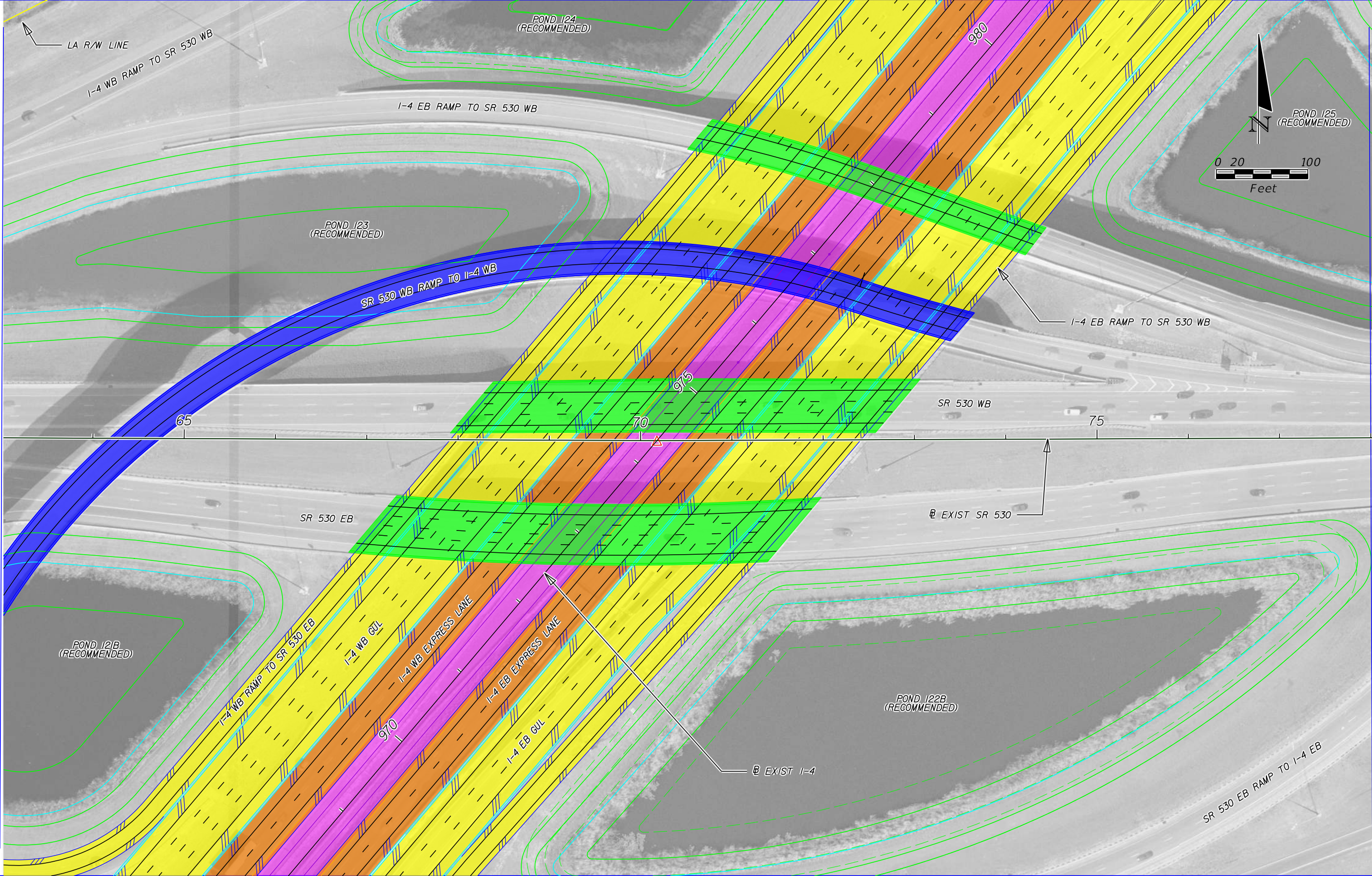
MATCHLINE STA. 63+00.00

	EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL		GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	<table><tr><th colspan="3">STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</th></tr><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>OSCEOLA</td><td>432100-1-22-01</td></tr></table>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	OSCEOLA	432100-1-22-01	<div>I-4 PD&amp;E STUDY US 192/ SR 530 (1 OF 3) RECOMMENDED SEGMENT 1</div>	<div>SHEET NO. 57</div>
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION																
ROAD NO.	COUNTY	FINANCIAL PROJECT ID														
400	OSCEOLA	432100-1-22-01														



MATCHLINE STA. 63+00.00

MATCHLINE STA. 78+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

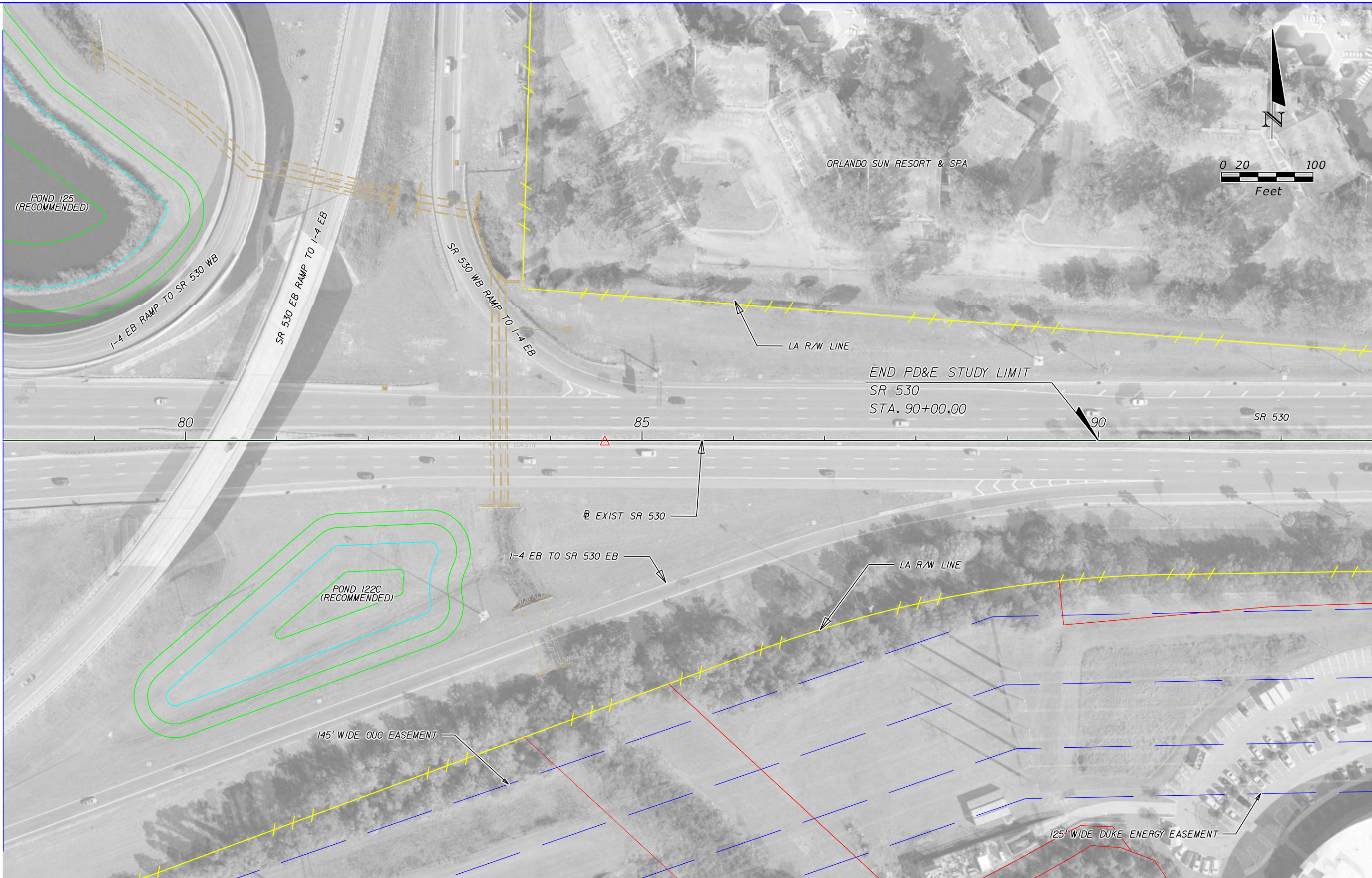
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

**I-4 PD&E STUDY**  
**US 192/ SR 530 (2 OF 3)**  
**RECOMMENDED**  
**SEGMENT 1**

SHEET NO.  
**58**

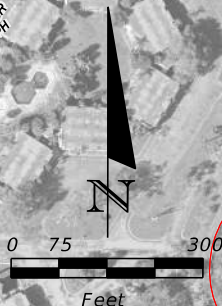
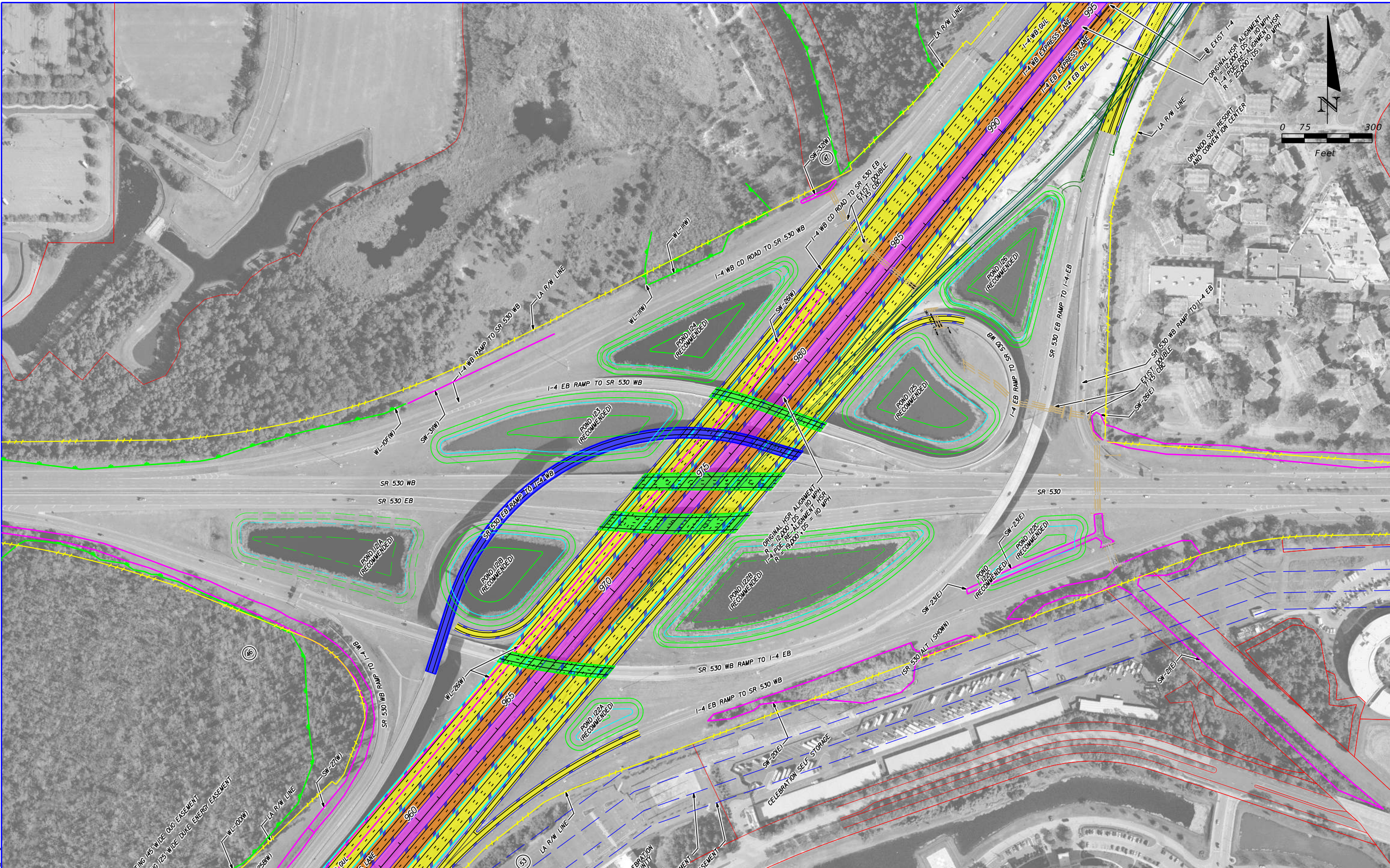


MATCHLINE STA. 78+00.00



<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY US 192/ SR 530 (3 OF 3) RECOMMENDED SEGMENT 1	SHEET NO.  59
				ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
		ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593		400	OSCEOLA	432100-1-22-01		





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

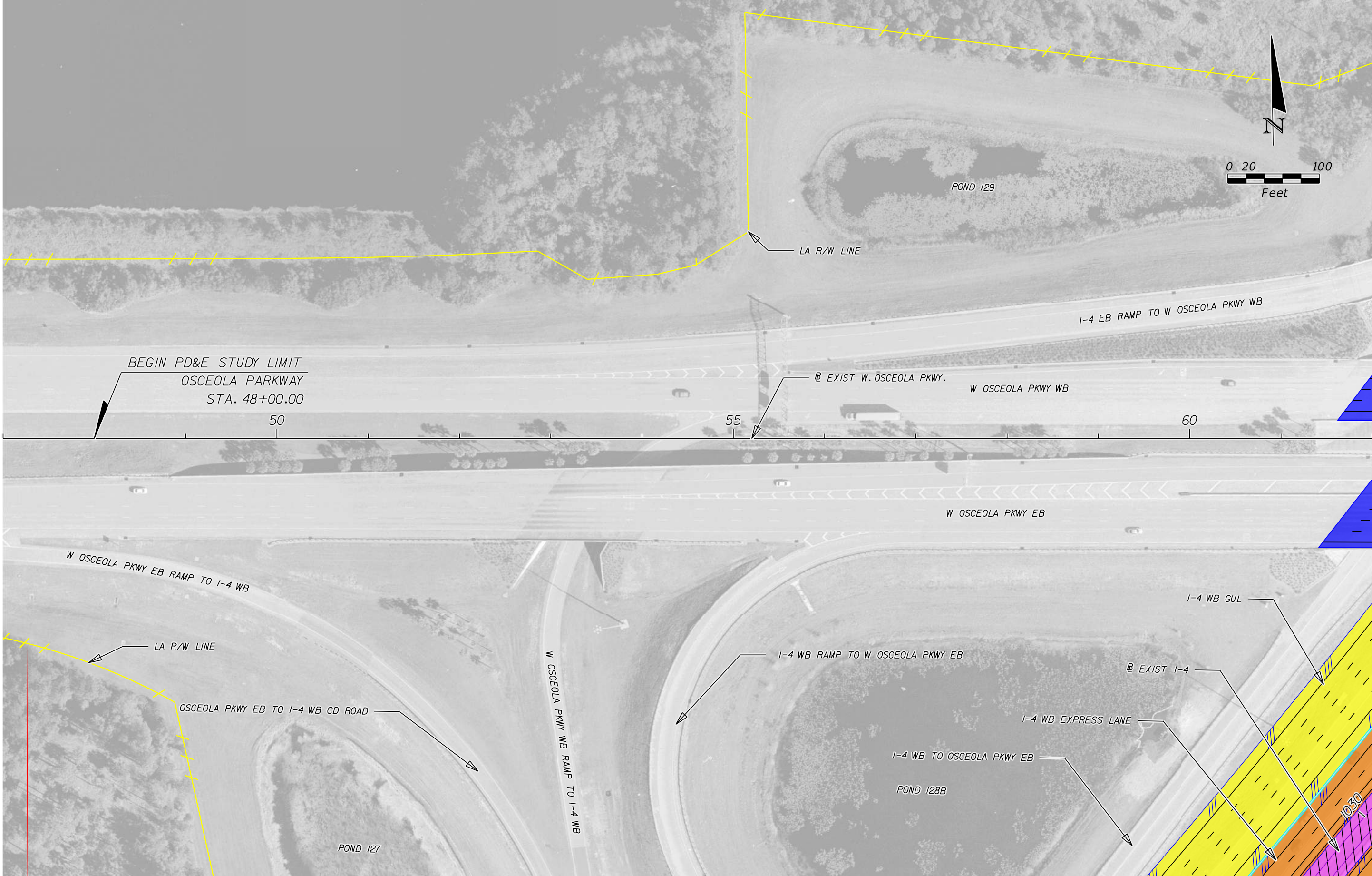
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

**I-4 PD&E STUDY  
US 192/ SR 530  
RECOMMENDED  
SEGMENT 1**

SHEET  
NO.  
**60**

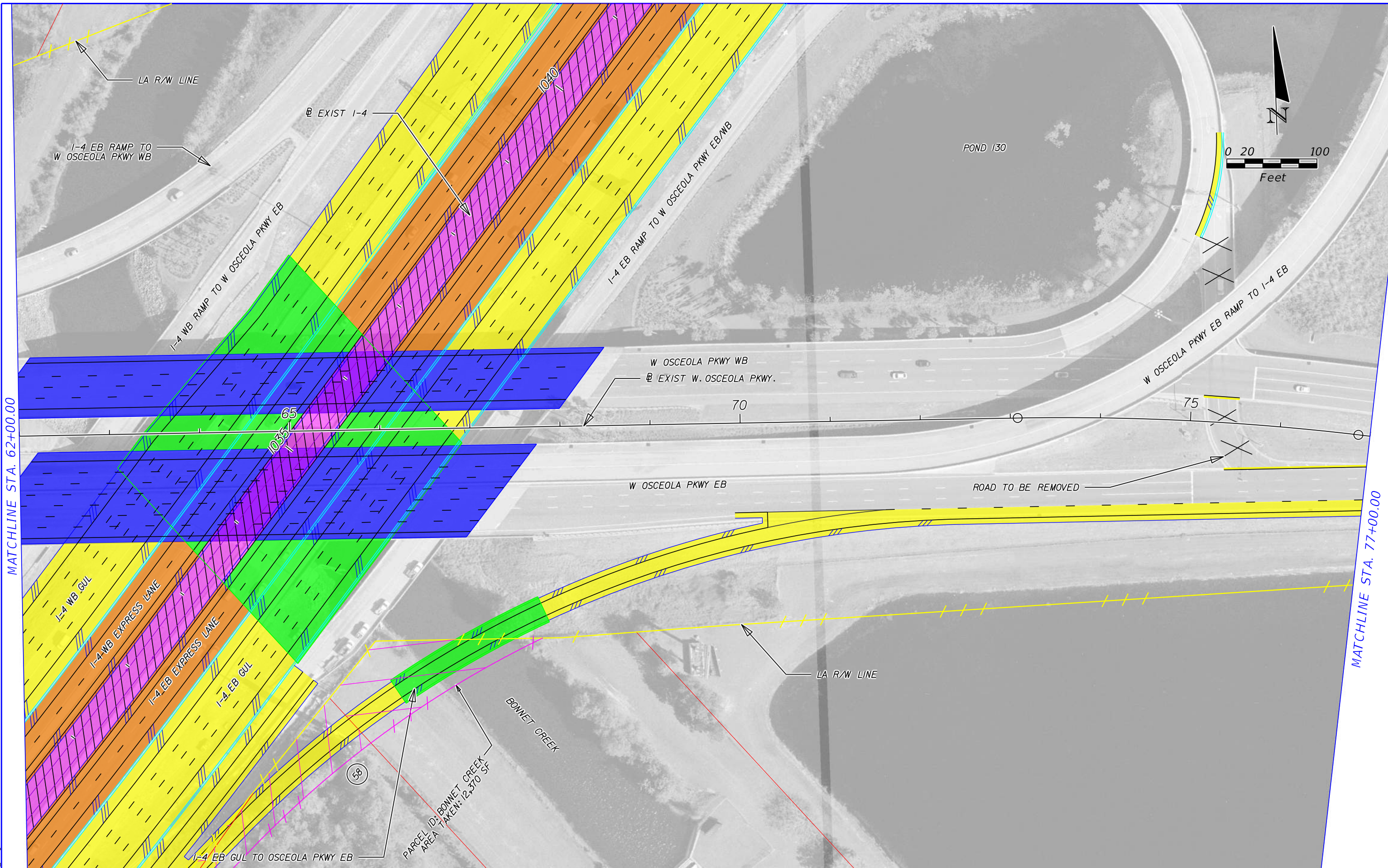




MATCHLINE STA. 62+00.00

<div><div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div><div><div>EXISTING LA R/W</div><div>PROPOSED LA R/W</div><div>PROPOSED FDOT R/W</div><div>EXISTING R/W</div><div>PARCEL LINES</div><div>BARRIER WALL</div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div>GENERAL USE LANES</div><div>EXPRESS LANES</div><div>EXISTING BRIDGE</div><div>PROPOSED BRIDGE</div><div>RAIL CORRIDOR</div><div>FUTURE EXISTING CONDITION</div></div></div>		<div><div>HNTB CORPORATION</div><div>610 CRESCENT EXECUTIVE CT</div><div>SUITE 400</div><div>LAKE MARY, FL 32746</div><div>(407) 805-0355</div><div>CERT. OF AUTH. NO. 6500</div></div> <div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.</div><div>FL. REGISTRATION NO. 58593</div></div>		<div><div>STATE OF FLORIDA</div><div>DEPARTMENT OF TRANSPORTATION</div></div> <table><tr><td>ROAD NO.</td><td>COUNTY</td><td>FINANCIAL PROJECT ID</td></tr><tr><td>400</td><td>OSCEOLA</td><td>432100-1-22-01</td></tr></table>			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	OSCEOLA	432100-1-22-01	<div><div>I-4 PD&amp;E STUDY</div><div>OSCEOLA PARKWAY</div><div>ALTERNATIVE 1 (1 OF 3)</div><div>SEGMENT 1</div></div>		<div><div>SHEET</div><div>NO.</div><div>61</div></div>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID													
400	OSCEOLA	432100-1-22-01													





MATCHLINE STA. 62+00.00

MATCHLINE STA. 77+00.00

PRINT DRIVER:  
PEN TABLE:  
Color\_FOOTPRINT.ctb  
FDOT\_text.plt

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

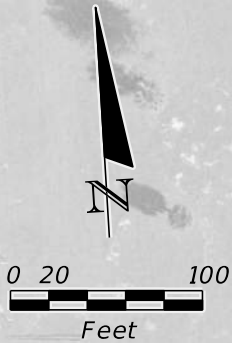
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY OSCEOLA PARKWAY ALTERNATIVE 1 (2 OF 3) SEGMENT 1</b>
----------------------------------------------------------------------------------------

SHEET NO.
<b>62</b>



MATCHLINE STA. 77+00.00



PRINT DRIVER:  
PEN TABLE:  
Color\_FDOTPDF.ctb  
FDOT\_text.dwg

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

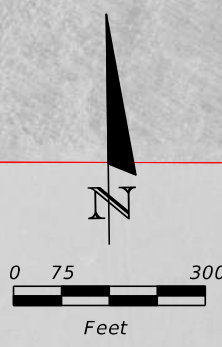
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593













STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY OSCEOLA PARKWAY ALTERNATIVE 1 (3 OF 3) SEGMENT 1</b>	SHEET NO.
	<b>63</b>

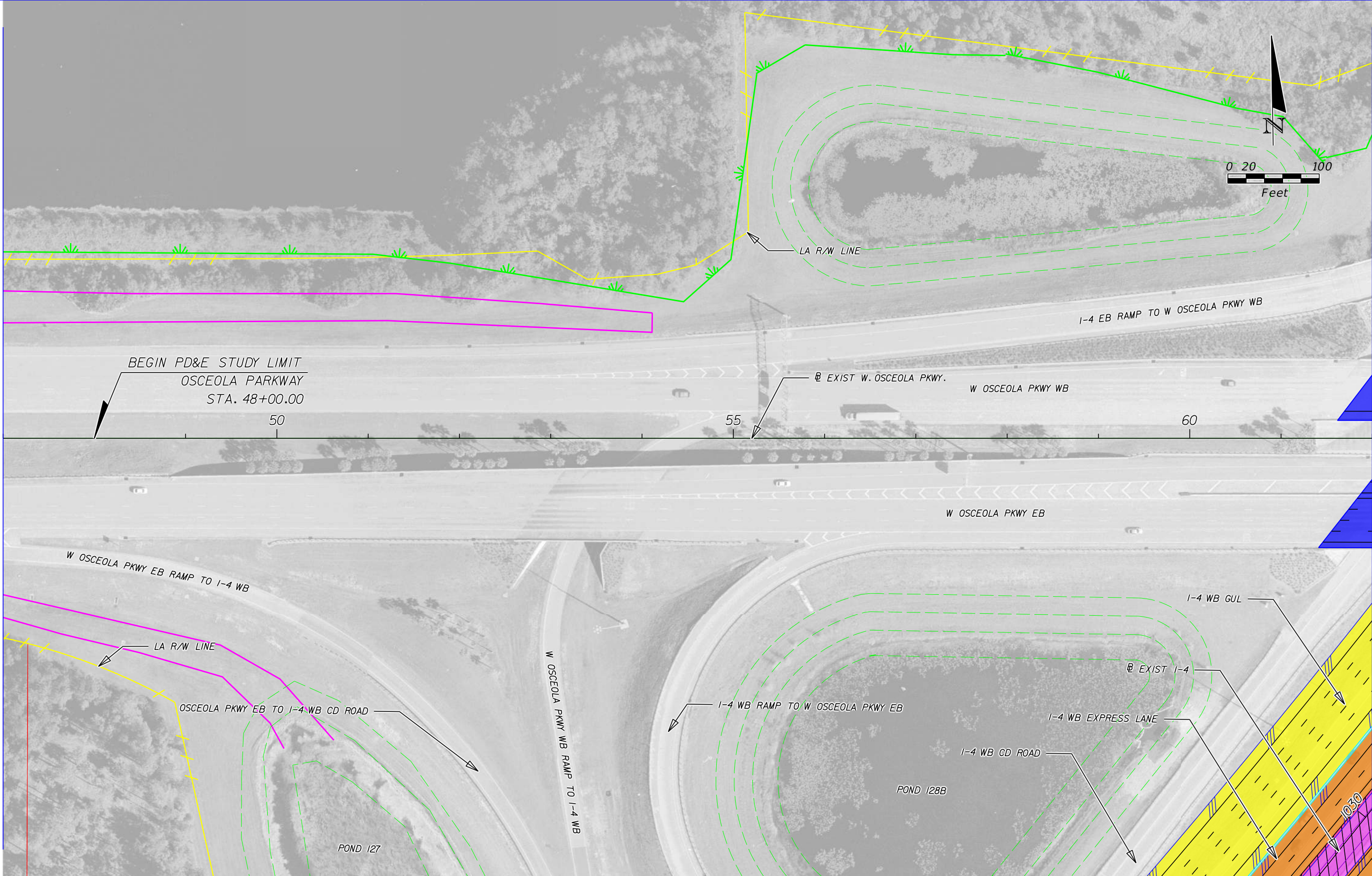
A-63
------





<div>FDOT</div> <div>OPEN TABLE:</div>		EXISTING LA R/W		GENERAL USE LANES	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<div>I-4 PD&amp;E STUDY</div> <div>OSCEOLA PKWY ALTERNATIVE 1</div> <div>SEGMENT 1</div>	SHEET NO.	
		PROPOSED LA R/W		EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID			
		PROPOSED FDOT R/W		EXISTING BRIDGE		EXISTING BRIDGE	400	ORANGE OSCEOLA		432100-1-22-01	64
		EXISTING R/W		PROPOSED BRIDGE		PROPOSED BRIDGE					
		PARCEL LINES		RAIL CORRIDOR							
		BARRIER WALL		FUTURE EXISTING CONDITION							





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

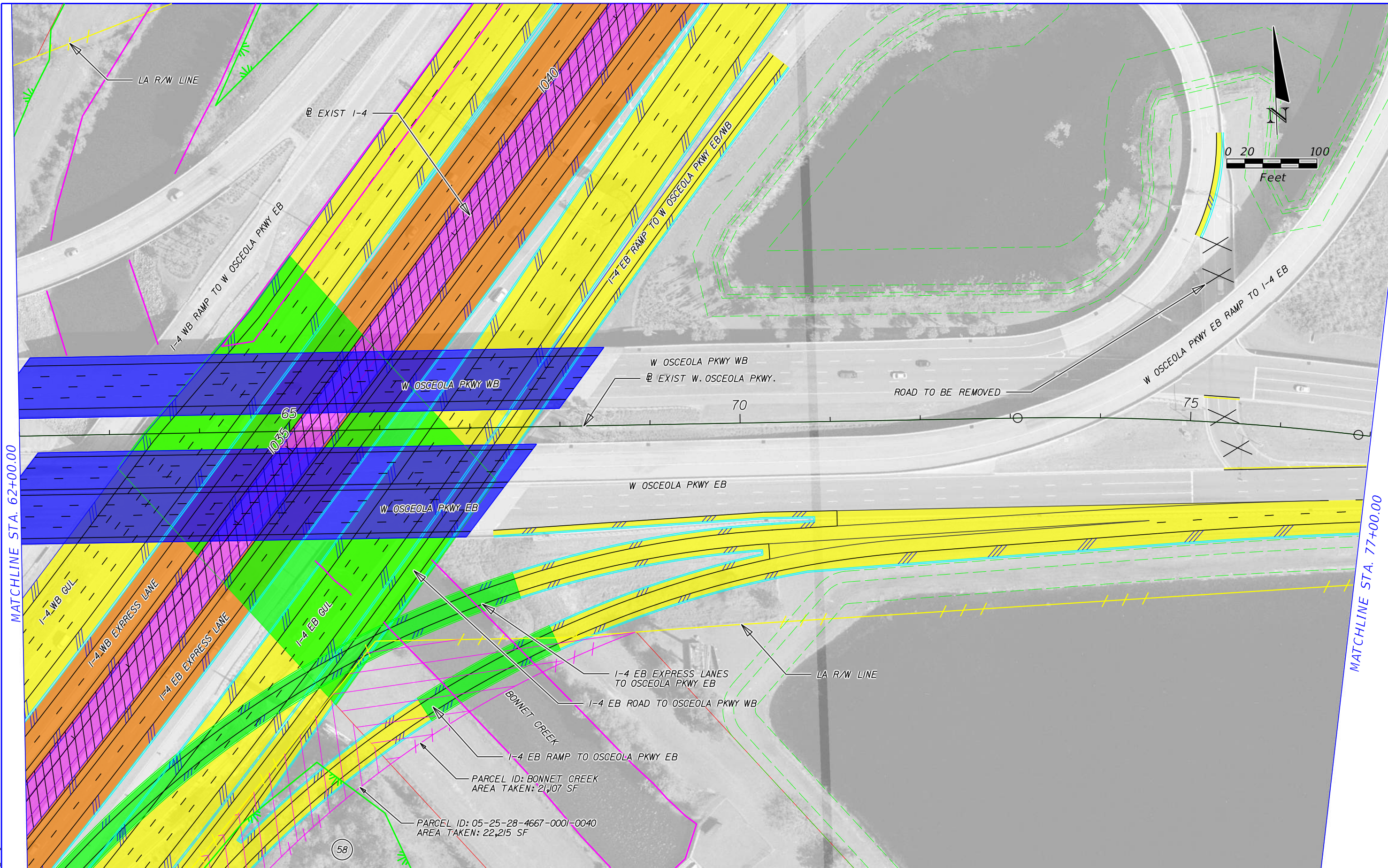
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY OSCEOLA PARKWAY ALTERNATIVE 2 (1 OF 4) SEGMENT 1</b>	SHEET NO. <b>65</b>
----------------------------------------------------------------------------------------	---------------------------

MATCHLINE STA. 62+00.00





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

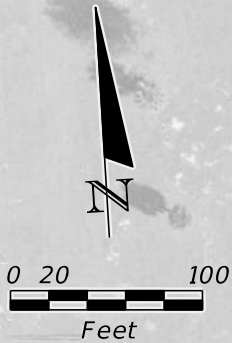
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

**I-4 PD&E STUDY  
OSCEOLA PARKWAY  
ALTERNATIVE 2 (2 OF 4)  
SEGMENT 1**

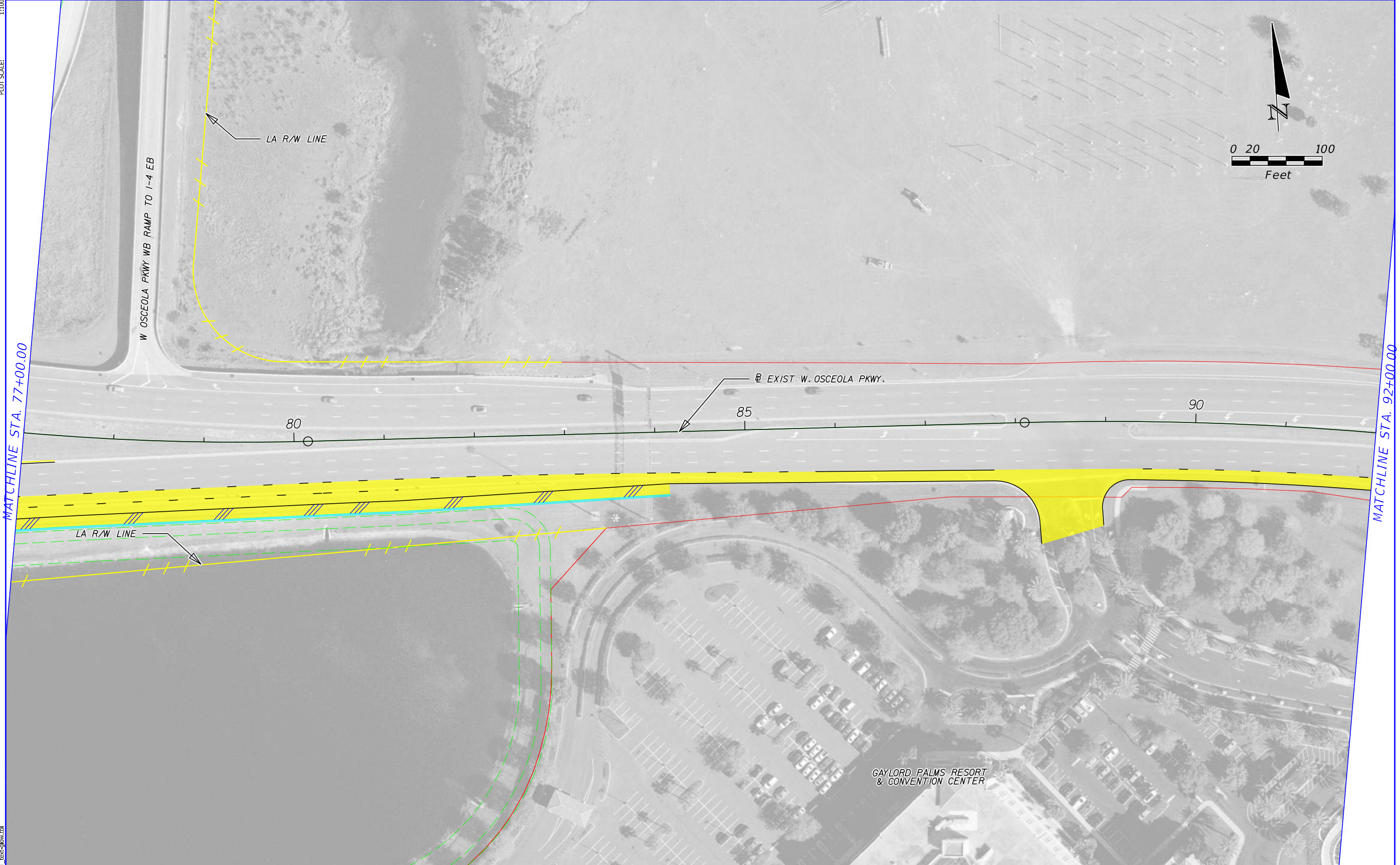
SHEET NO.
<b>66</b>





MATCHLINE STA. 77+00.00

MATCHLINE STA. 92+00.00



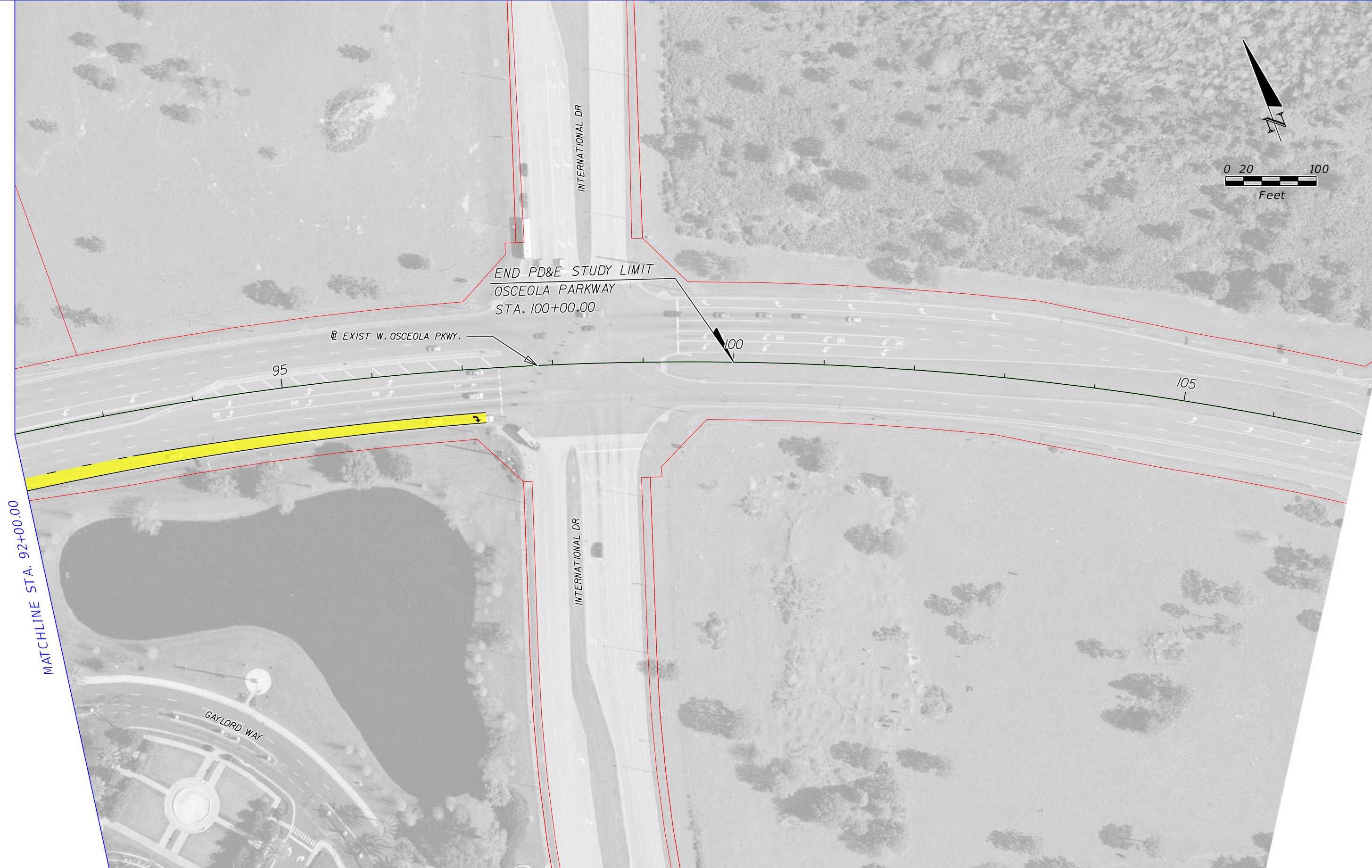
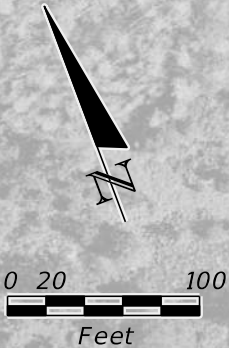
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

I-4 PD&E STUDY OSCEOLA PARKWAY ALTERNATIVE 2 (3 OF 4) SEGMENT 1
SHEET NO. 67





MATCHLINE STA. 92+00.00

END PD&E STUDY LIMIT  
OSCEOLA PARKWAY  
STA. 100+00.00

EXIST W. OSCEOLA PKWY.

INTERNATIONAL DR

INTERNATIONAL DR

GAYLORD WAY

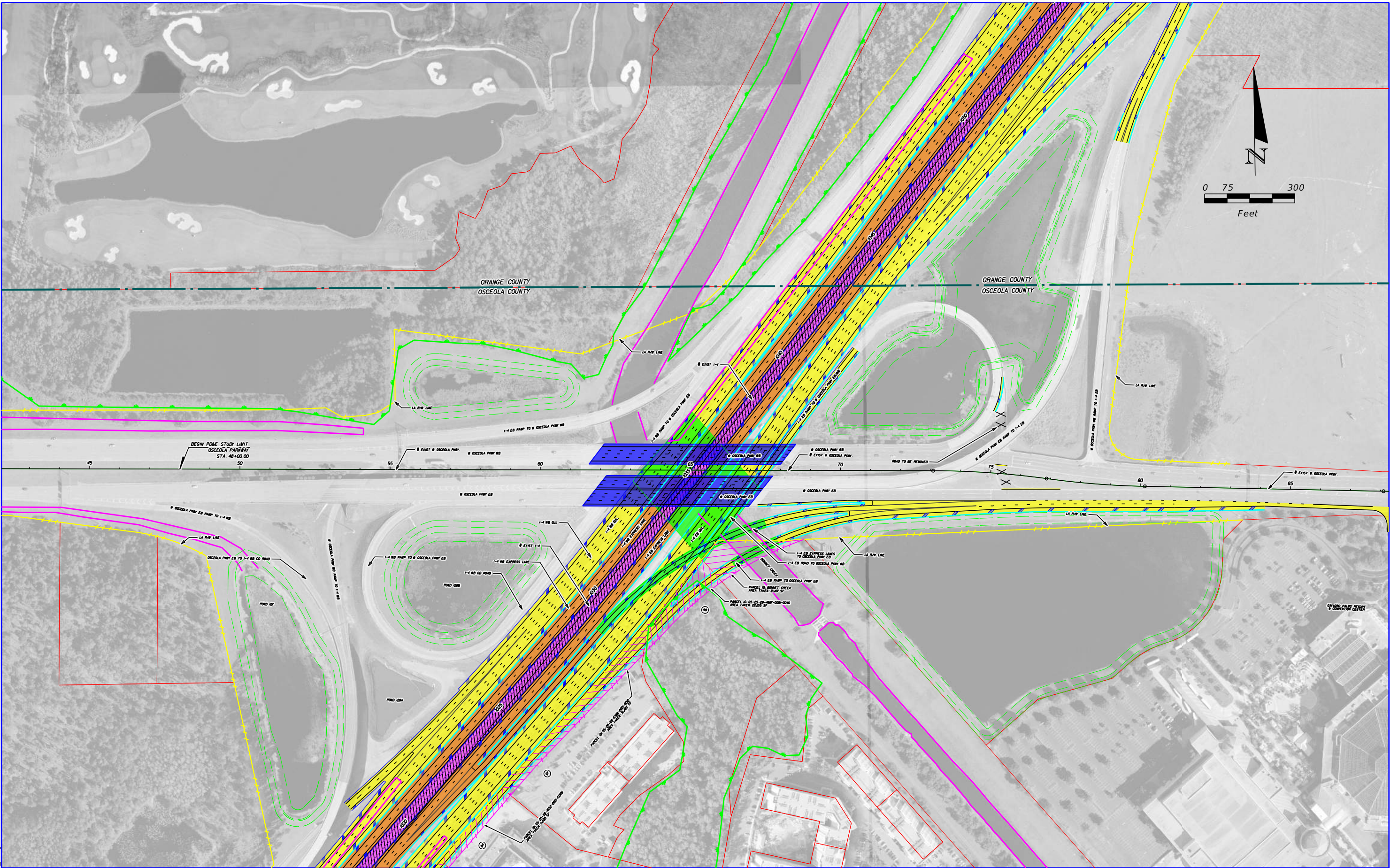
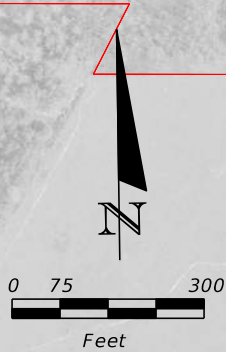
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

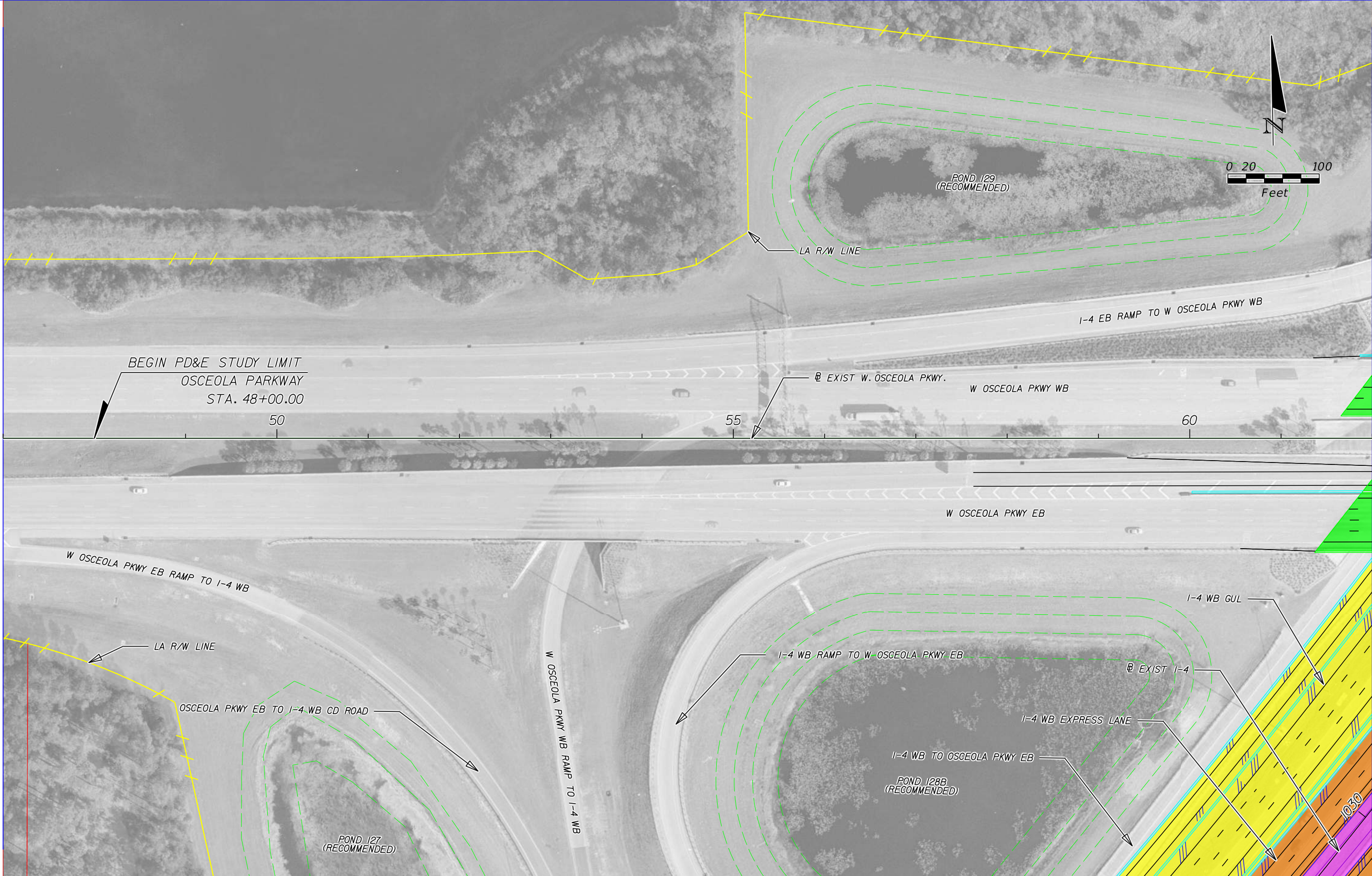
<b>I-4 PD&amp;E STUDY OSCEOLA PARKWAY ALTERNATIVE 2 (4 OF 4) SEGMENT 1</b>	SHEET NO.
	<b>68</b>





<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div><div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div></div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY OSCEOLA PKWY ALTERNATIVE 2 SEGMENT 1	SHEET NO.  69
			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			400	ORANGE OSCEOLA	432100-1-22-01		

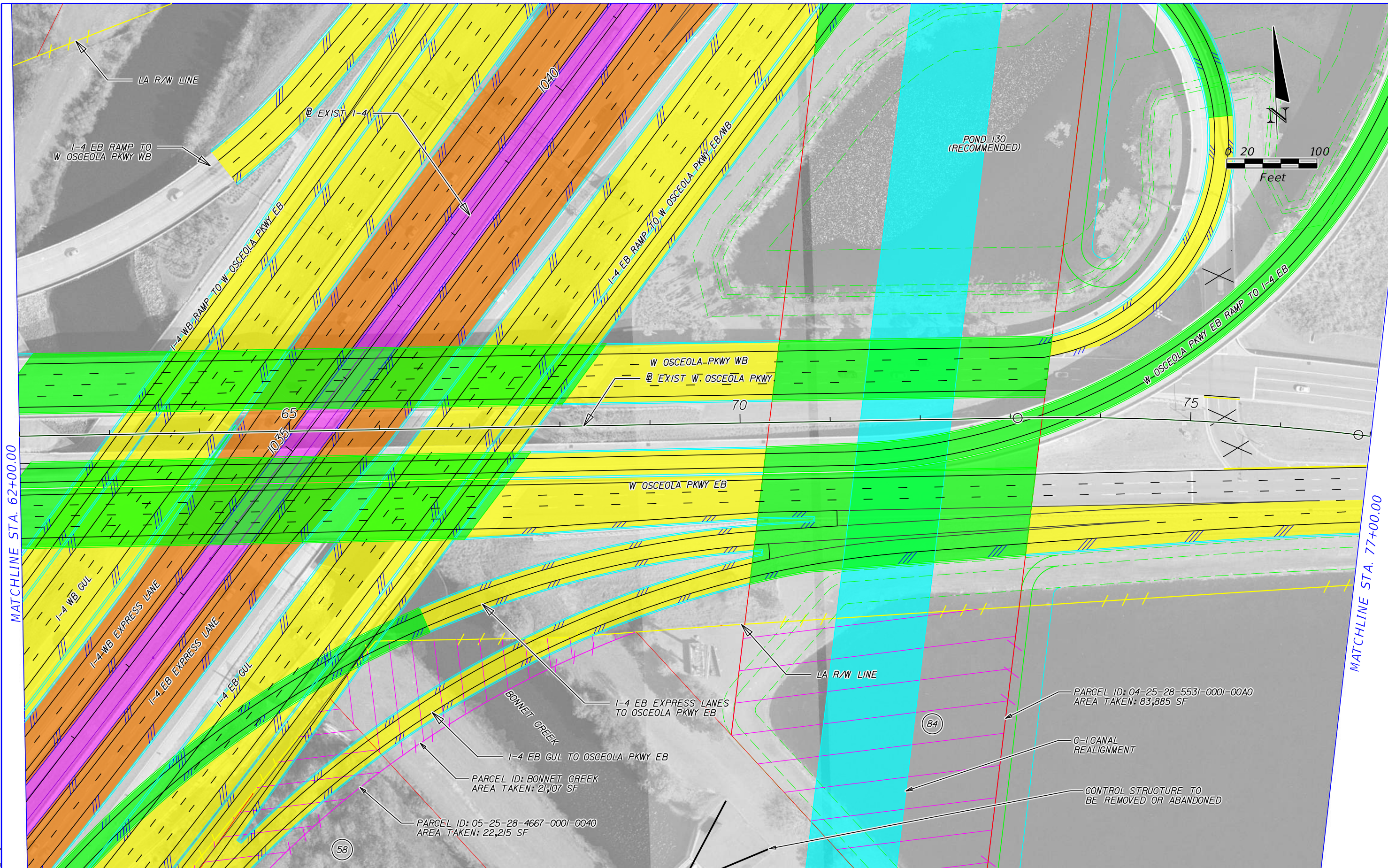




MATCHLINE STA. 62+00.00

	EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL	GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500  ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY OSCEOLA PARKWAY RECOMMENDED ALT 3 (1 OF 4) SEGMENT 1	SHEET NO.
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	OSCEOLA	432100-1-22-01	70		





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

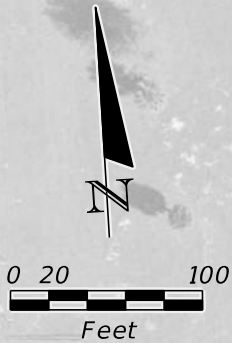
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

<b>I-4 PD&amp;E STUDY OSCEOLA PARKWAY RECOMMENDED ALT 3 (2 OF 4) SEGMENT 1</b>
--------------------------------------------------------------------------------------------

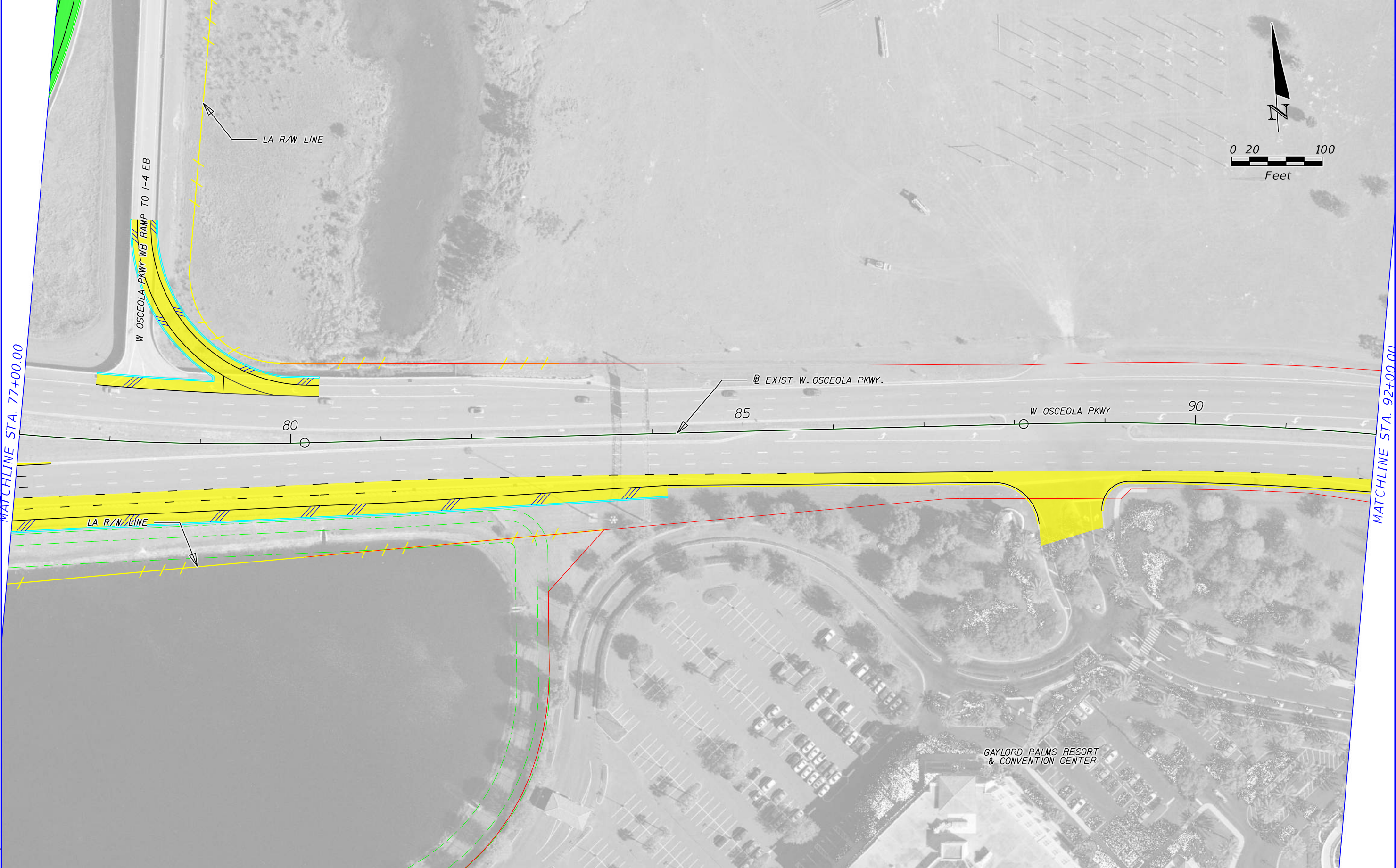
SHEET NO.
71





MATCHLINE STA. 77+00.00

MATCHLINE STA. 92+00.00



PRINT DRIVER:  
PEN TABLE:

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

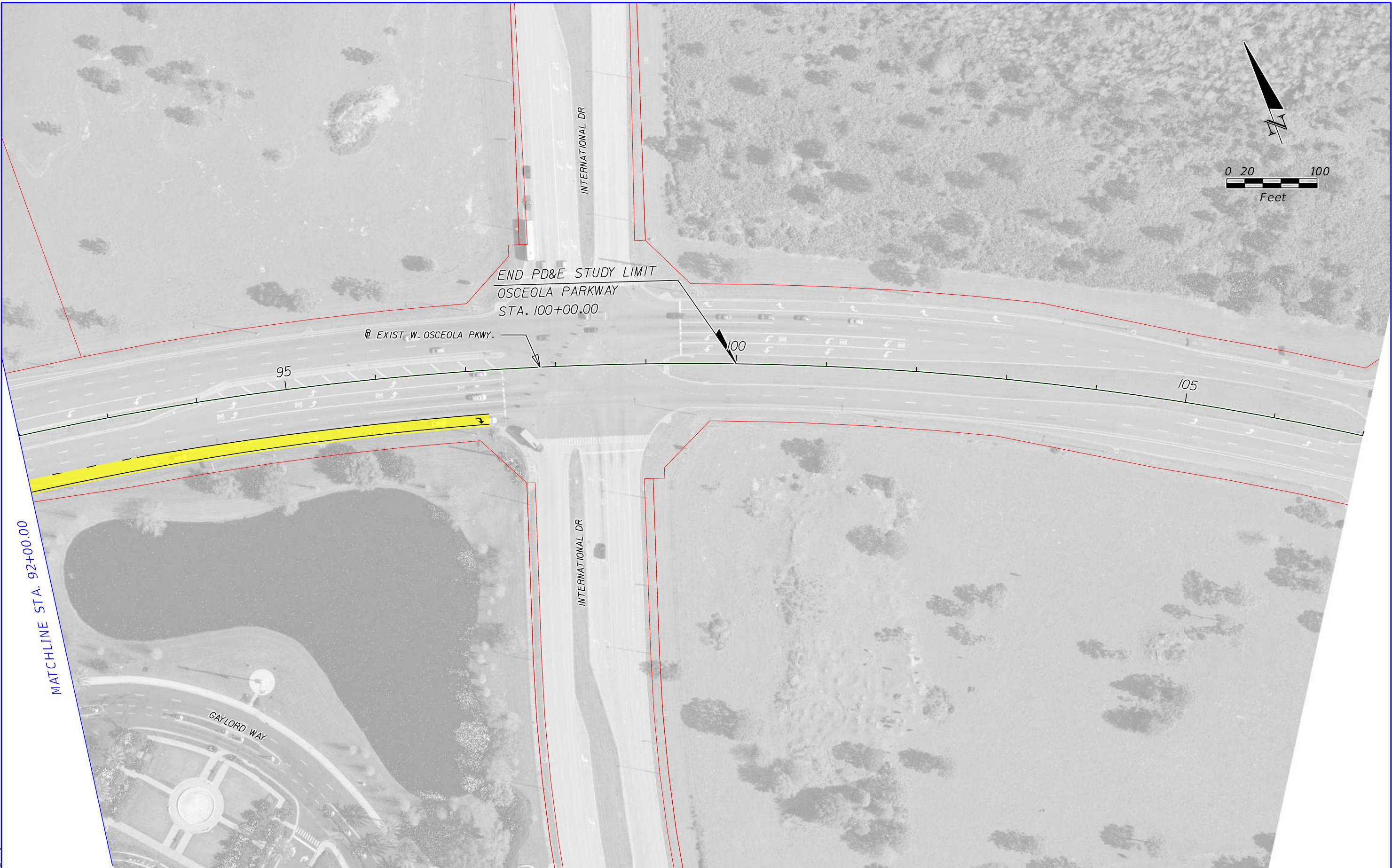
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	OSCEOLA	432100-1-22-01

I-4 PD&E STUDY OSCEOLA PARKWAY RECOMMENDED ALT 3 (3 OF 4) SEGMENT 1
------------------------------------------------------------------------------

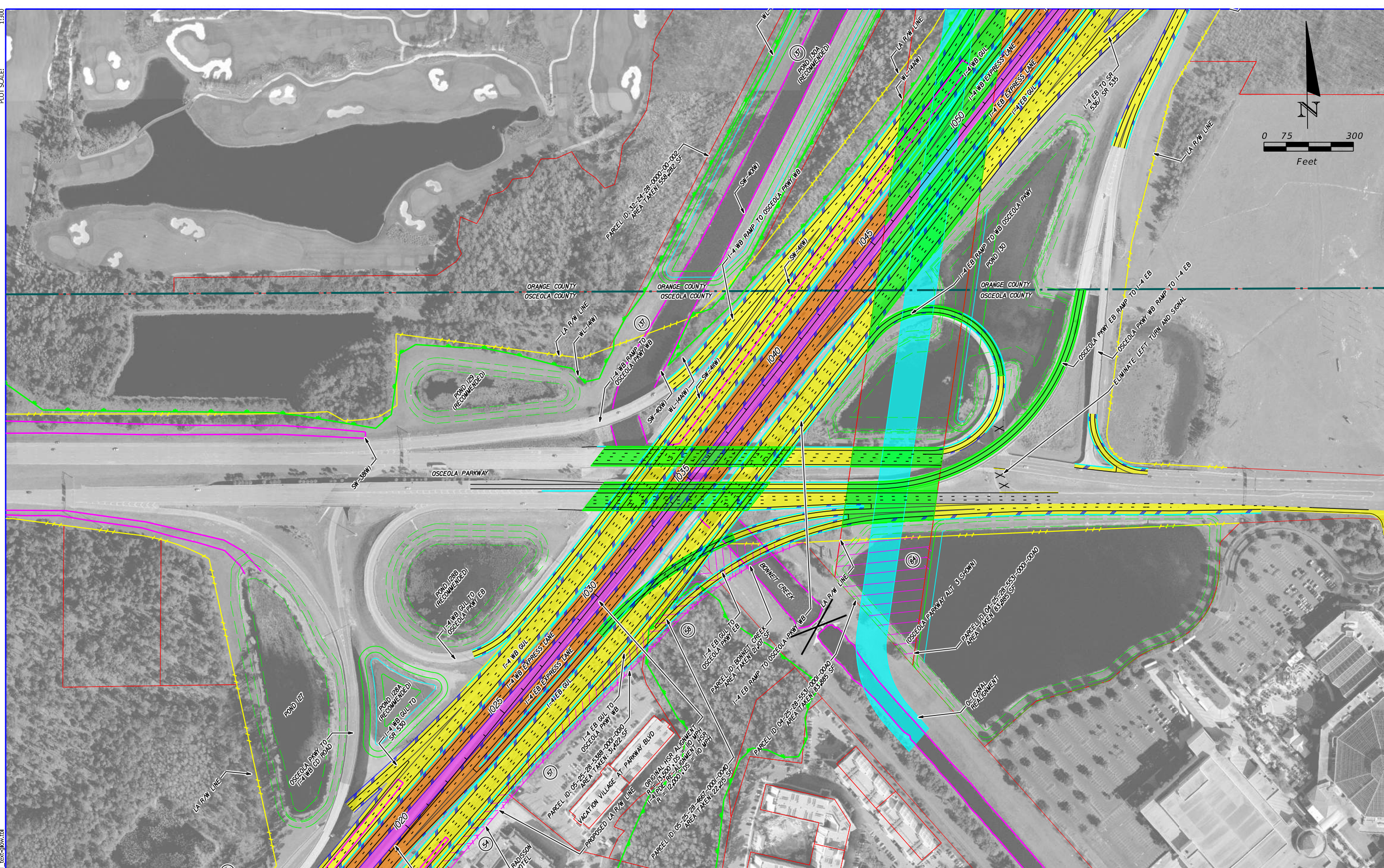
SHEET NO.
72






		<p>EXISTING LA R/W</p> <p>PROPOSED LA R/W</p> <p>PROPOSED FDOT R/W</p> <p>EXISTING R/W</p> <p>PARCEL LINES</p> <p>BARRIER WALL</p>		<p>GENERAL USE LANES</p> <p>EXPRESS LANES</p> <p>EXISTING BRIDGE</p> <p>PROPOSED BRIDGE</p> <p>RAIL CORRIDOR</p> <p>FUTURE EXISTING CONDITION</p>		<p>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</p> <p>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</p>		<p>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</p> <table><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>OSCEOLA</td><td>432100-1-22-01</td></tr></table>			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	OSCEOLA	432100-1-22-01	<p>I-4 PD&amp;E STUDY OSCEOLA PARKWAY RECOMMENDED ALT 3 (4 OF 4) SEGMENT 1</p>		<p>SHEET NO.</p> <p>73</p>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID																	
400	OSCEOLA	432100-1-22-01																	





PROJECT TABLE:  	EXISTING LA R/W	GENERAL USE LANES	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY OSCEOLA PKWY ALT 3 (RECOMMENDED ALTERNATIVE) SEGMENT 1	SHEET NO.  74
	PROPOSED LA R/W	EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
	PROPOSED FDOT R/W	EXISTING BRIDGE	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	400	ORANGE OSCEOLA	432100-1-22-01		
	EXISTING R/W	PROPOSED BRIDGE						
	PARCEL LINES	RAIL CORRIDOR						
BARRIER WALL	FUTURE EXISTING CONDITION							





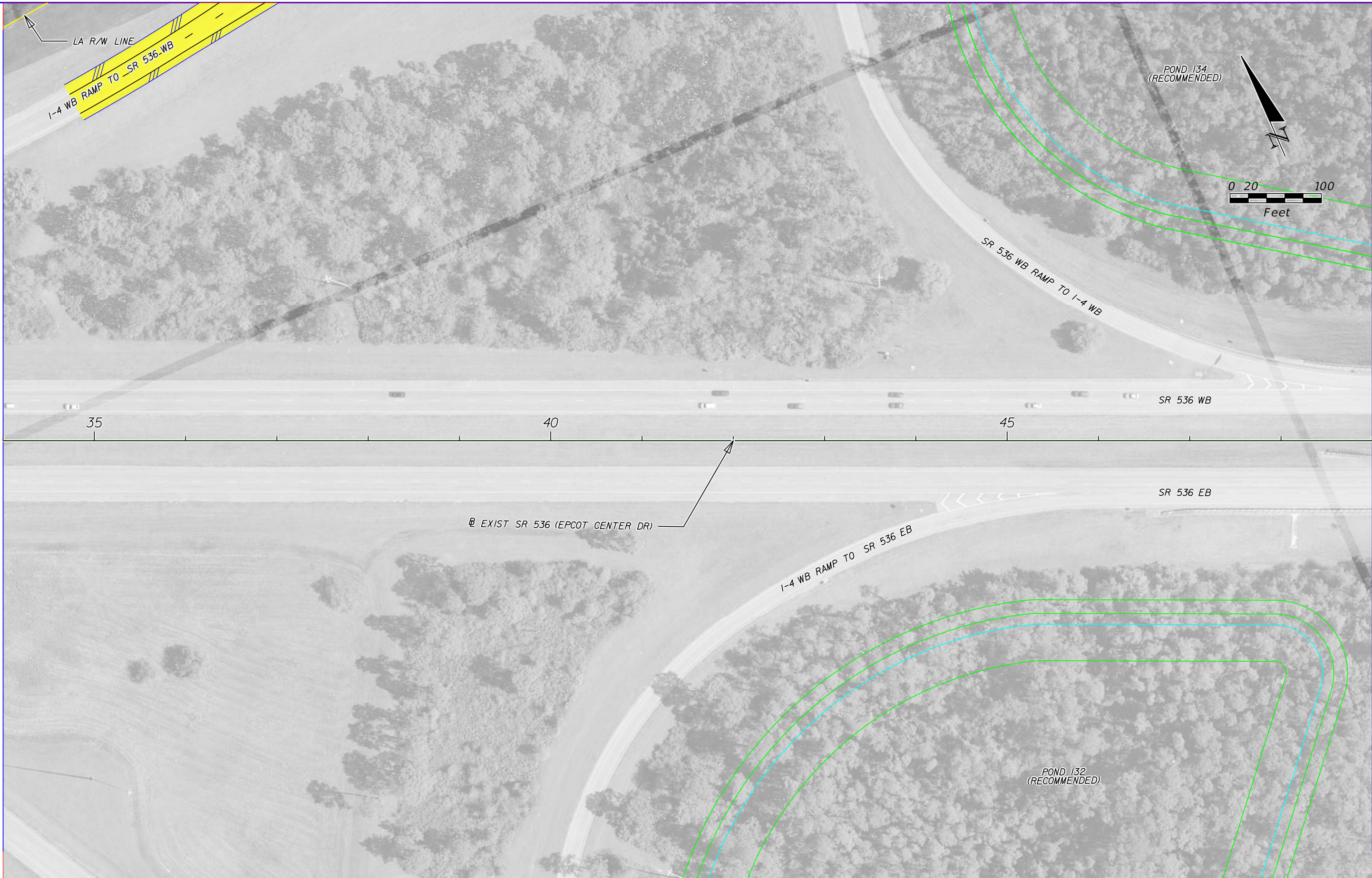
MATCHLINE STA. 34+00.00

<div><div></div><div>EXISTING LA R/W</div></div> <div><div></div><div>PROPOSED LA R/W</div></div> <div><div></div><div>PROPOSED FDOT R/W</div></div> <div><div></div><div>EXISTING R/W</div></div> <div><div></div><div>PARCEL LINES</div></div> <div><div></div><div>BARRIER WALL</div></div>	<div><div></div><div>GENERAL USE LANES</div></div> <div><div></div><div>EXPRESS LANES</div></div> <div><div></div><div>EXISTING BRIDGE</div></div> <div><div></div><div>PROPOSED BRIDGE</div></div> <div><div></div><div>RAIL CORRIDOR</div></div> <div><div></div><div>FUTURE EXISTING CONDITION</div></div>	<div><div>HNTB CORPORATION</div><div>610 CRESCENT EXECUTIVE CT</div><div>SUITE 400</div><div>LAKE MARY, FL 32746</div><div>(407) 805-0355</div><div>CERT. OF AUTH. NO. 6500</div></div> <div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.</div><div>FL. REGISTRATION NO. 58593</div></div>	<div><div>STATE OF FLORIDA</div><div>DEPARTMENT OF TRANSPORTATION</div></div> <div><div>ROAD NO.</div><div>COUNTY</div><div>FINANCIAL PROJECT ID</div></div> <div><div>400</div><div>ORANGE</div><div>432100-1-22-01</div></div>			<div><div>I-4 PD&amp;E STUDY</div><div>SR 536 (1 OF 5)</div><div>RECOMMENDED</div><div>SEGMENT 1</div></div>	<div><div>SHEET</div><div>NO.</div></div> <div><div>75</div></div>



SR-536-03  
MODEL:  
SHEET SIZE:  
PLOT SCALE:

MATCHLINE STA. 34+00.00



MATCHLINE STA. 49+00.00

PRINT DRIVER:  
PEN TABLE:

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

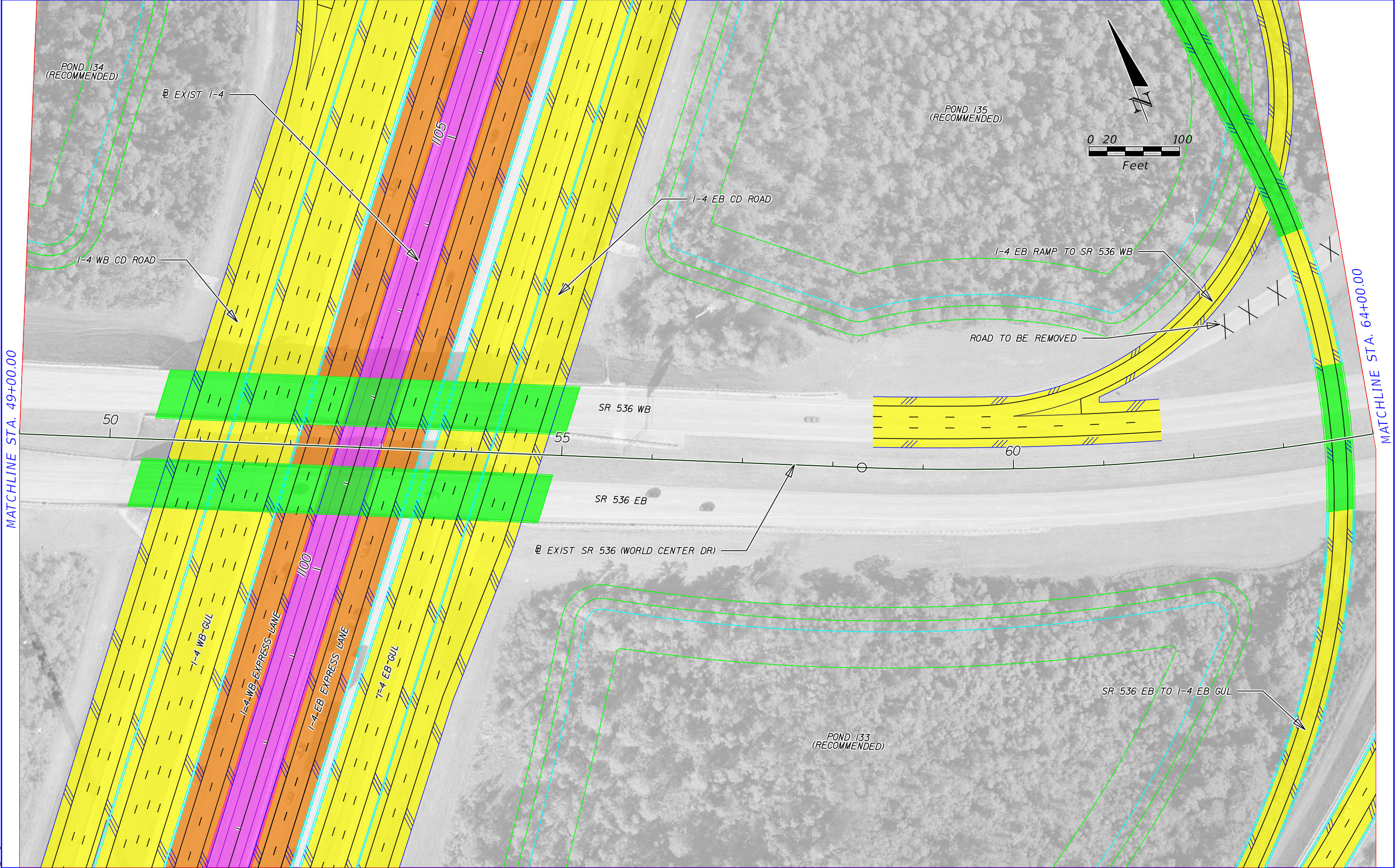
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

<b>I-4 PD&amp;E STUDY SR 536 (2 OF 5) RECOMMENDED SEGMENT 1</b>	SHEET NO.
	<b>76</b>

A-76
------





<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SR 536 (3 OF 5) RECOMMENDED SEGMENT 1	SHEET NO.  77
			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			400	ORANGE	432100-1-22-01		

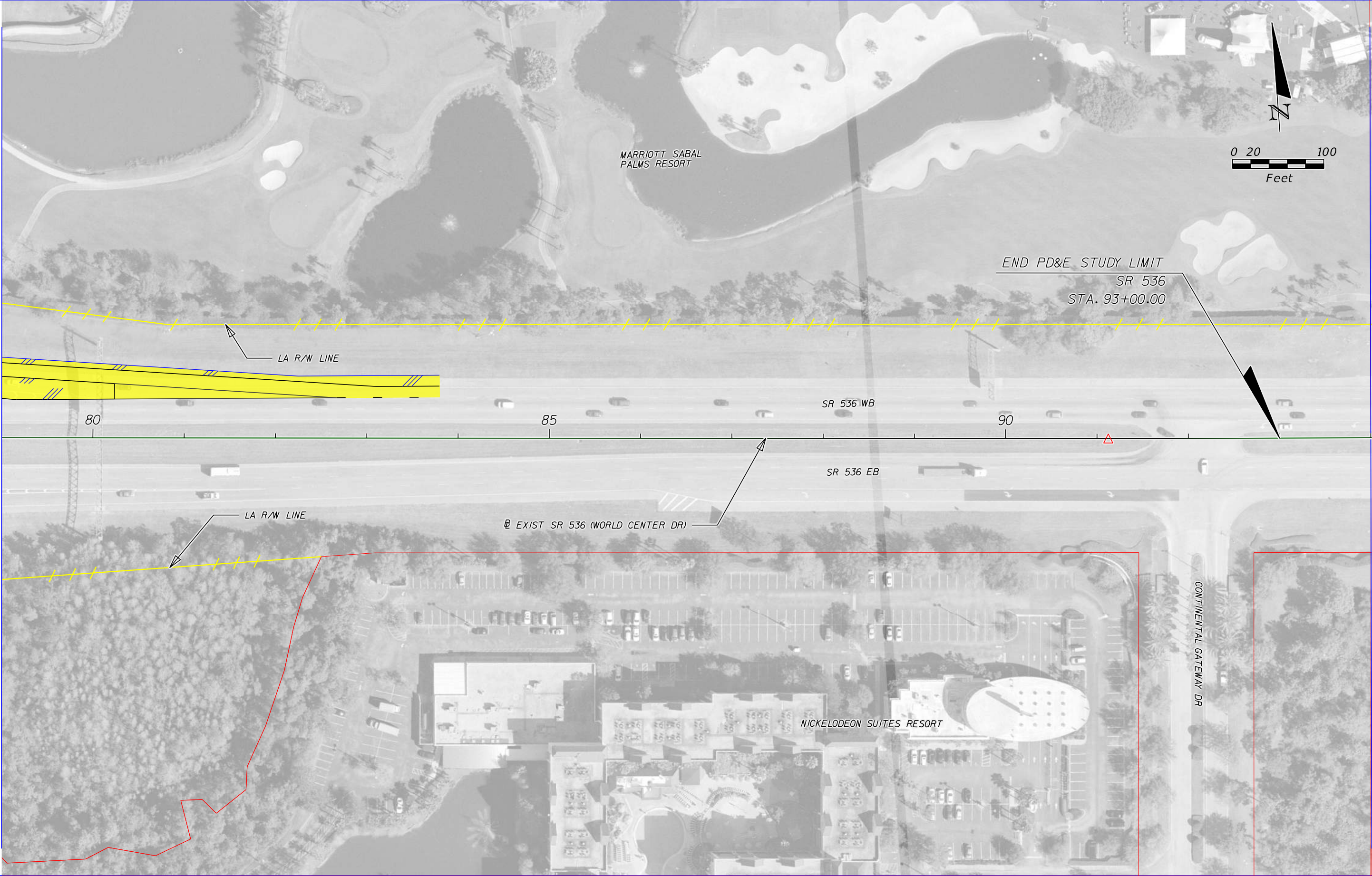




		<p>EXISTING LA R/W</p> <p>PROPOSED LA R/W</p> <p>PROPOSED FDOT R/W</p> <p>EXISTING R/W</p> <p>PARCEL LINES</p> <p>BARRIER WALL</p>		<p>GENERAL USE LANES</p> <p>EXPRESS LANES</p> <p>EXISTING BRIDGE</p> <p>PROPOSED BRIDGE</p> <p>RAIL CORRIDOR</p> <p>FUTURE EXISTING CONDITION</p>		<p>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</p> <p>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</p>		<p>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</p> <table><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>ORANGE</td><td>432100-1-22-01</td></tr></table>			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	ORANGE	432100-1-22-01	<p>I-4 PD&amp;E STUDY SR 536 (4 OF 5) RECOMMENDED SEGMENT 1</p>		<p>SHEET NO.</p> <p>78</p>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID																	
400	ORANGE	432100-1-22-01																	



MATCHLINE STA. 79+00.00



MATCHLINE STA. 94+00.00

PRINT DRIVER:  
PEN TABLE:  
Cdr\_FDOTPDF.plt  
FDOT\_text.dwt

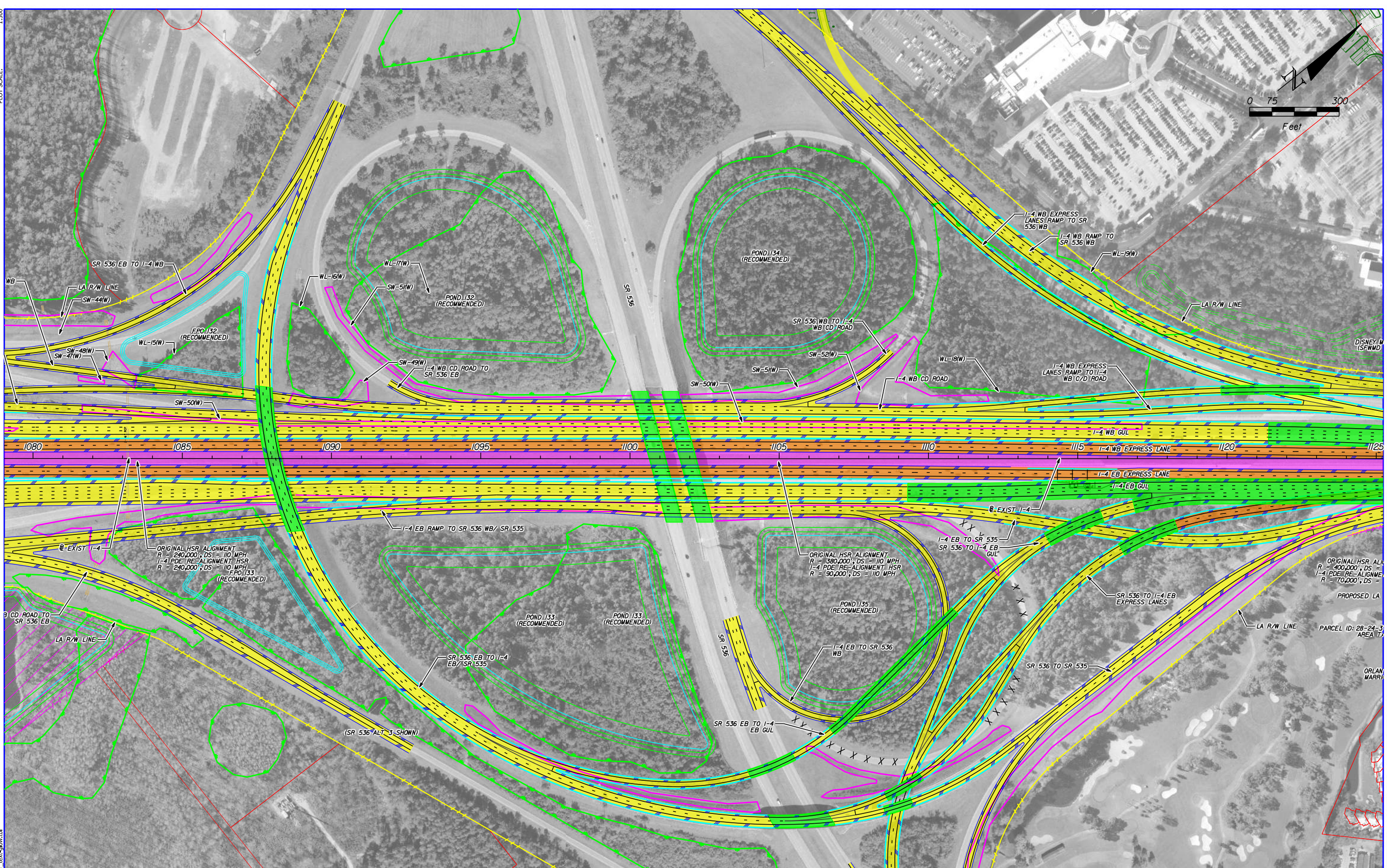
	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

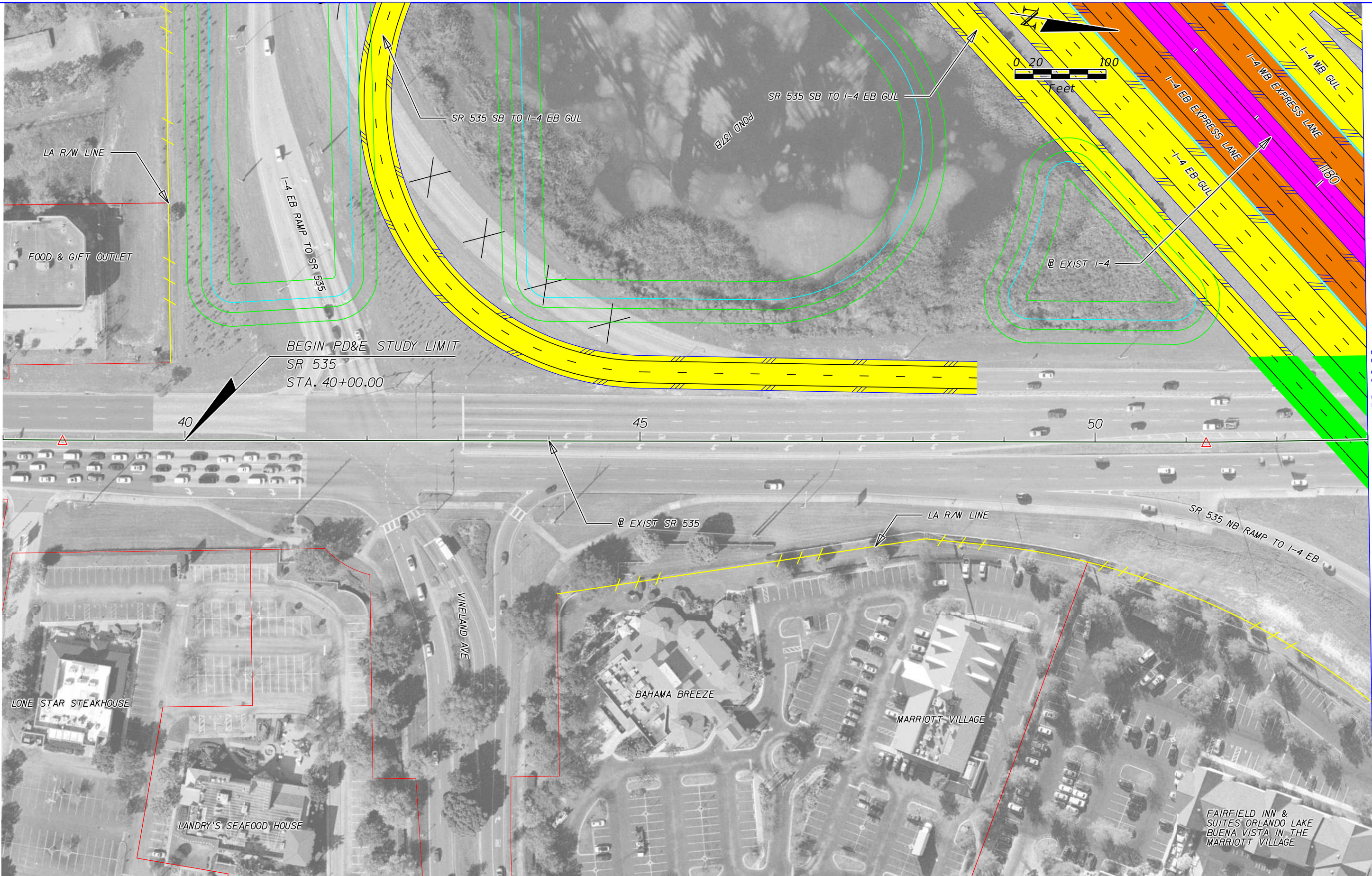
<b>I-4 PD&amp;E STUDY SR 536 (5 OF 5) RECOMMENDED SEGMENT 1</b>	SHEET NO.
	<b>79</b>





<div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div>&lt;/</div></div></div>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------





MATCHLINE STA. 53+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

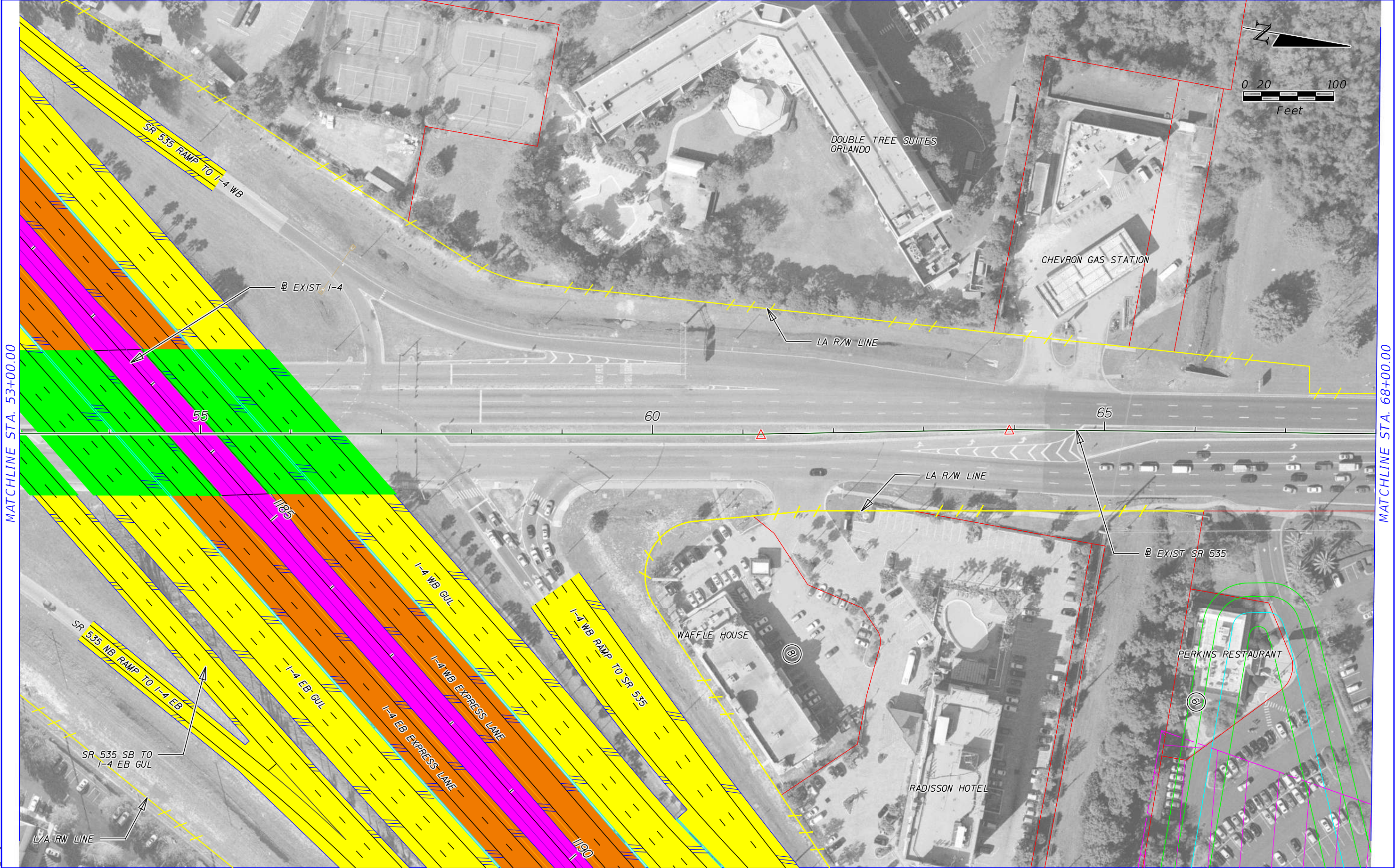
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY**  
**SR 535 ALTERNATIVE 1 (1 OF 3)**  
**SEGMENT 1**

SHEET NO.
<b>81</b>





MATCHLINE STA. 53+00.00

MATCHLINE STA. 68+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

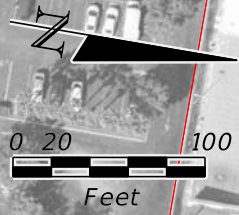
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY**  
**SR 535 ALTERNATIVE 1 (2 OF 3)**  
**SEGMENT 1**

SHEET NO.
82



MATCHLINE STA. 68+00.00



MATCHLINE STA. 83+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

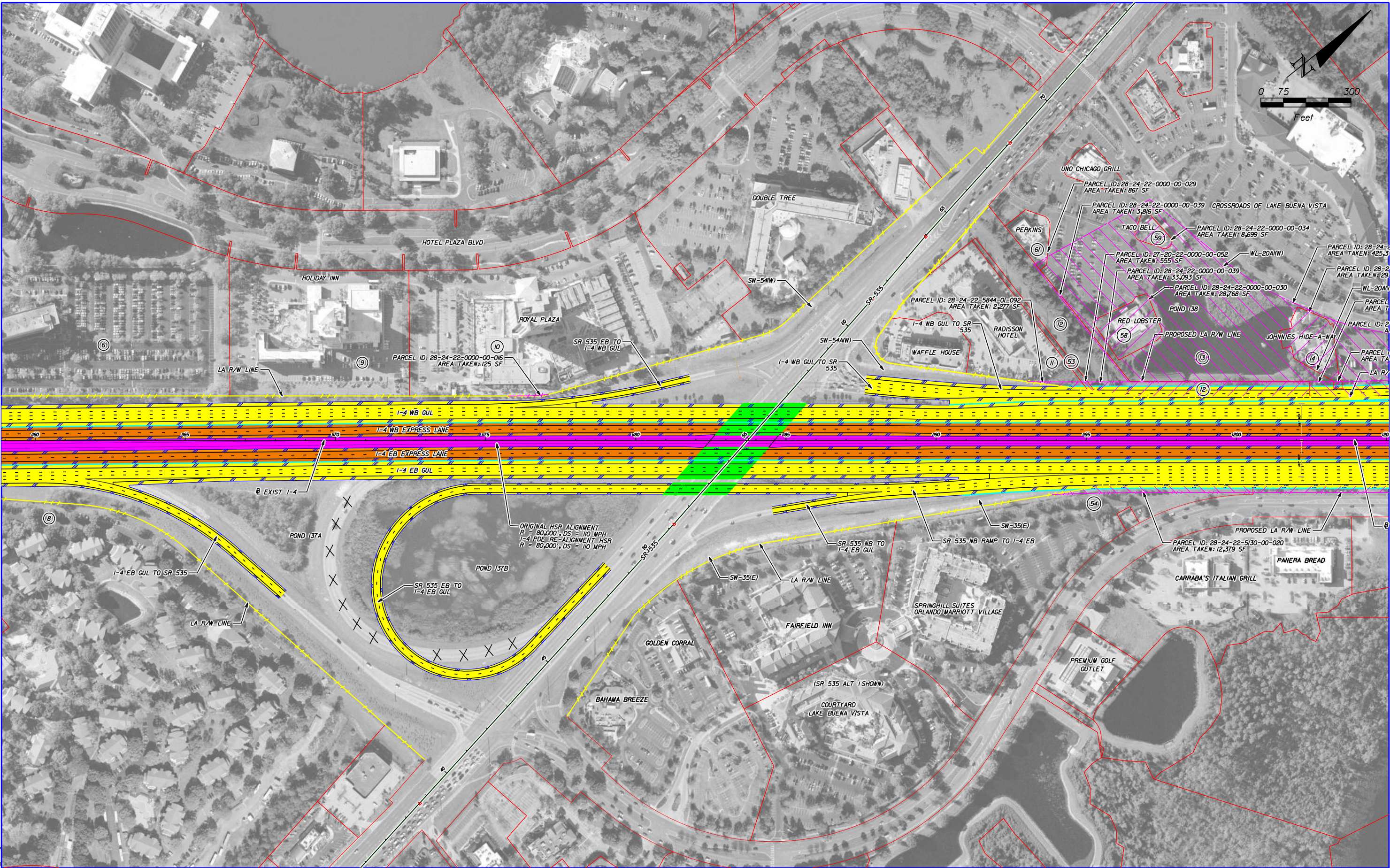
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY**  
**SR 535 ALTERNATIVE 1 (3 OF 3)**  
**SEGMENT 1**

SHEET  
NO.  
**83**





EXISTING LA R/W  
PROPOSED LA R/W  
PROPOSED FDOT R/W  
EXISTING R/W  
PARCEL LINES  
BARRIER WALL

GENERAL USE LANES  
EXPRESS LANES  
EXISTING BRIDGE  
PROPOSED BRIDGE  
RAIL CORRIDOR  
FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY  
SR 535 ALTERNATIVE 1  
SEGMENT 1

SHEET  
NO.  
84





MATCHLINE STA. 53+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

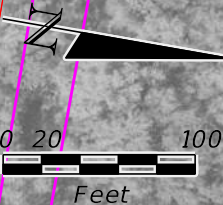
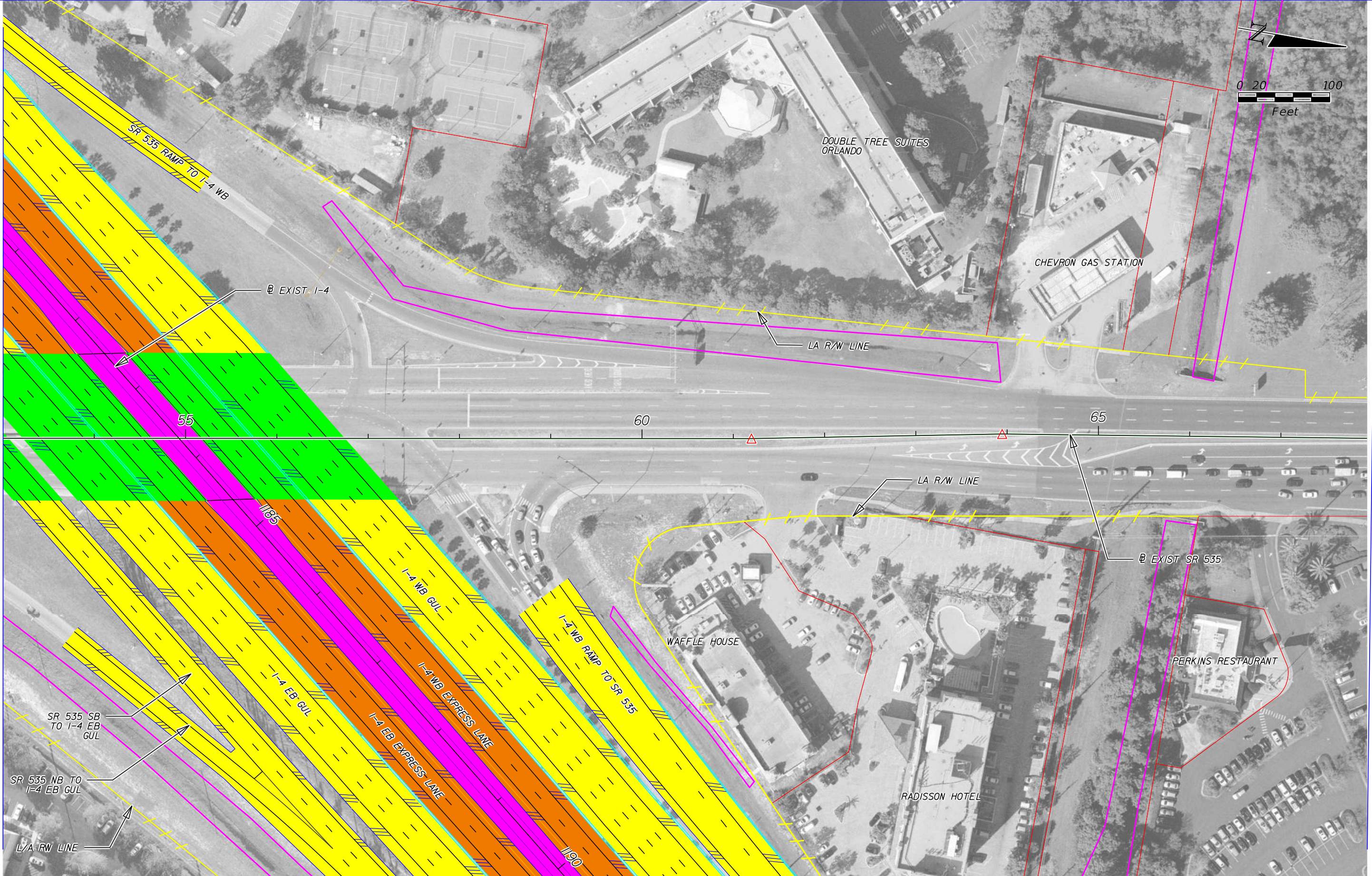
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

<i>I-4 PD&amp;E STUDY</i> <i>SR 535</i> <i>ALTERNATIVE 2 (1 OF 3)</i> <i>SEGMENT 1</i>	SHEET NO.
85	
A-85	



MATCHLINE STA. 53+00.00

MATCHLINE STA. 68+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
SR 535  
ALTERNATIVE 2 (2 OF 3)  
SEGMENT 1**

SHEET NO.
<b>86</b>



MATCHLINE STA. 68+00.00



PRINT DRIVER:  
PEN TABLE:  
Color\_FOOTPRINT.dwg  
Foot\_Text.dwg

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

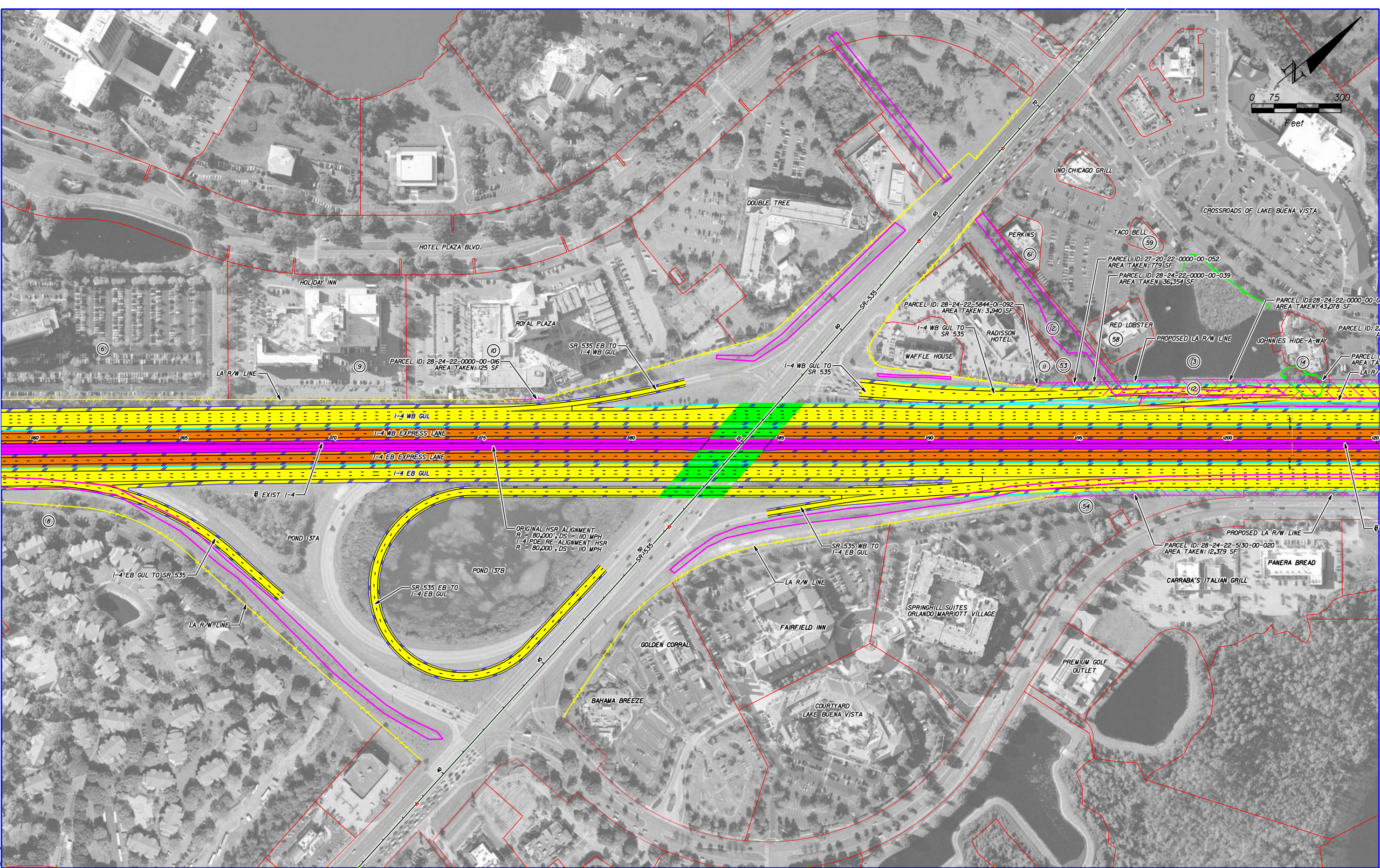
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY SR 535 ALTERNATIVE 2 (3 OF 3) SEGMENT 1	SHEET NO.
	87
	A-87



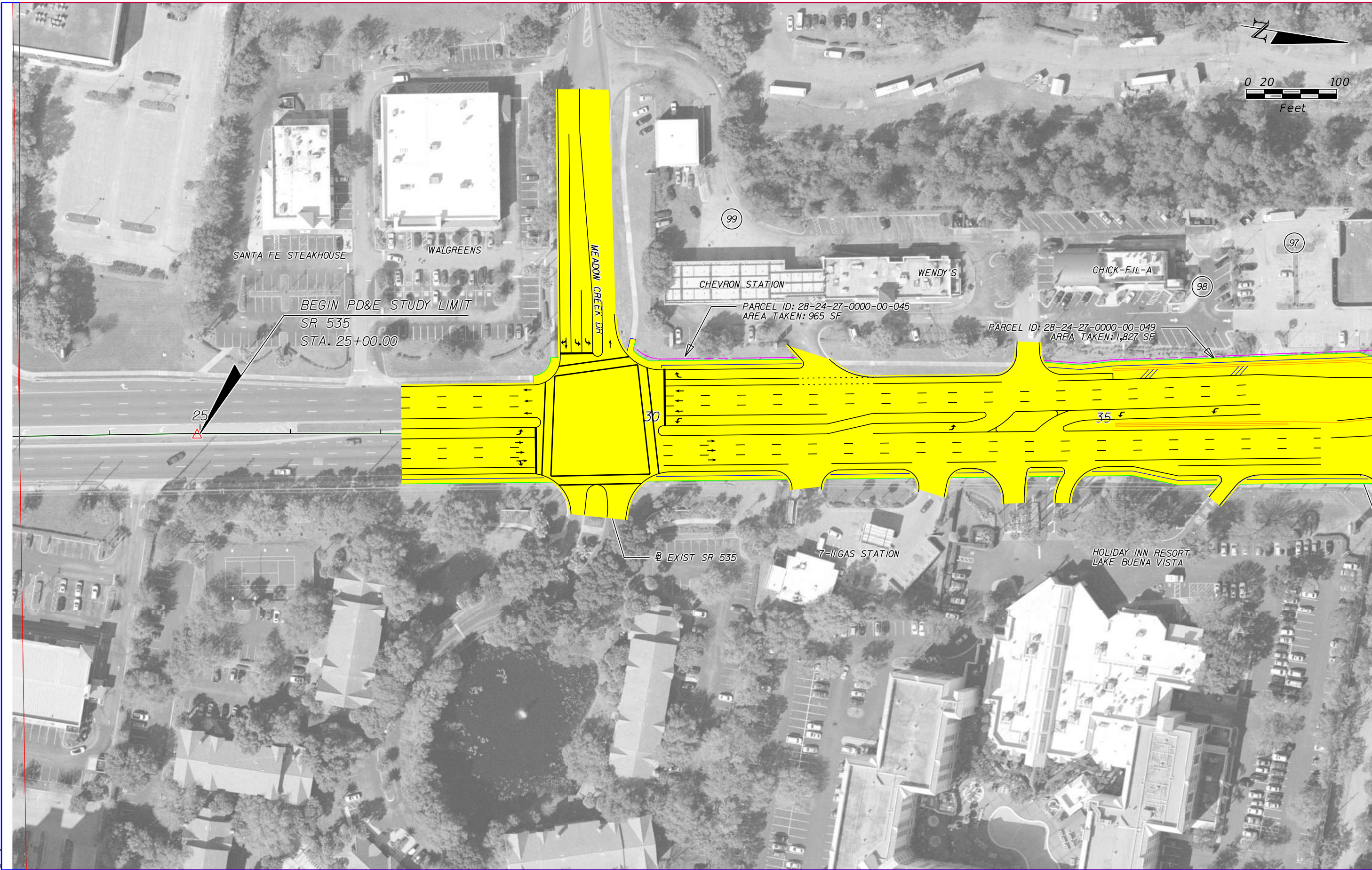
300 Scale  
MODEL: 16.5x10.6 (in.)  
SHEET SIZE: 1:300  
PRINT DRIVER: Color\_FDOTPDF.dwg  
PEN TABLE: FDOT\_text.dwt



<div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500  ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SR 535 ALTERNATIVE 2 SEGMENT 1	SHEET NO.  88
			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			400	ORANGE	432100-1-22-01		

mbacal 11/1/2016 12:06:58 PM \\LKMw00\pmwork\3\Jobs\59219 - 14\SAHR\TECHPROD\43210012201\Segment 1\roadway\pland108 - WITH CD.dgn





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

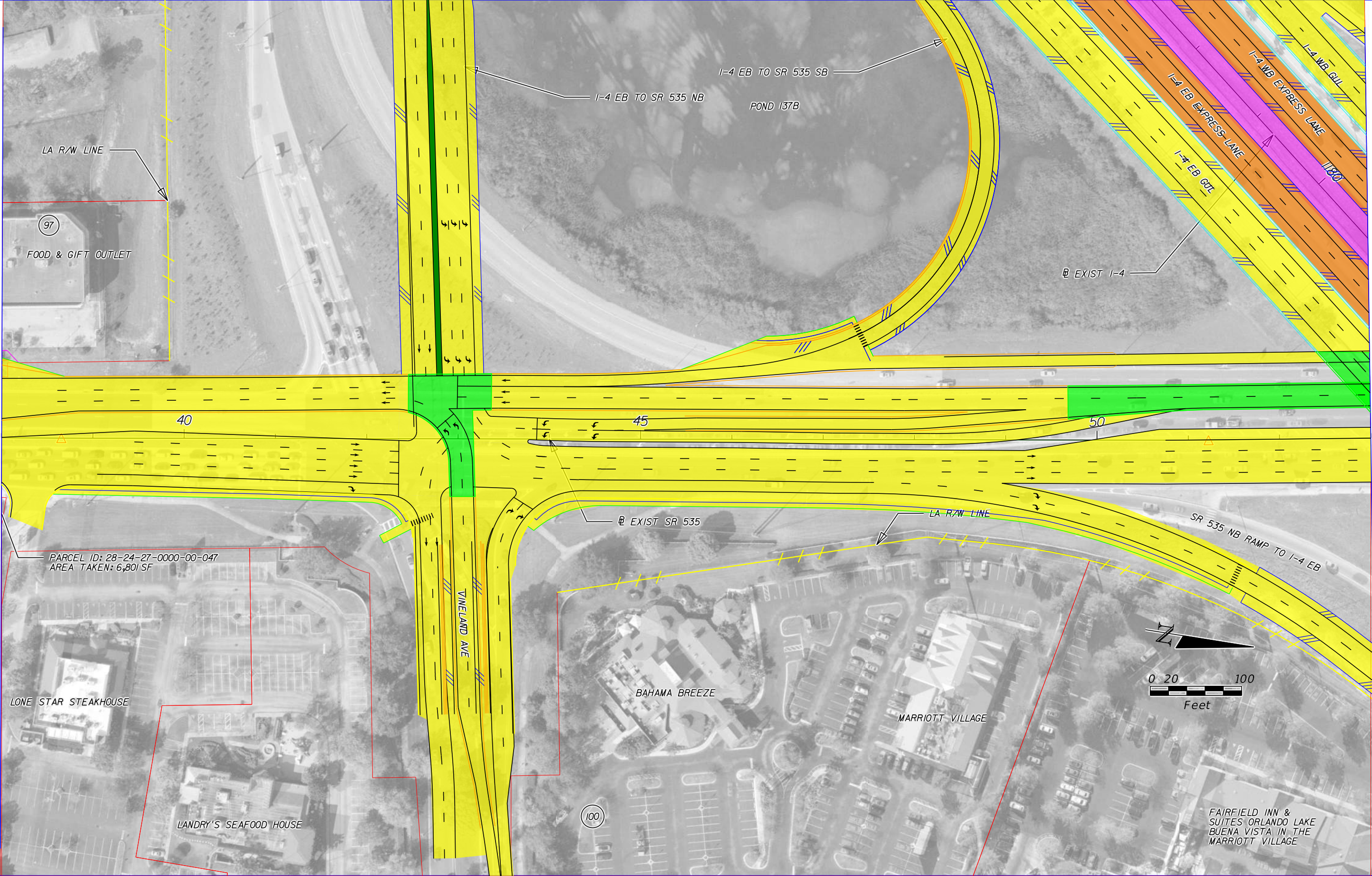
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

*I-4 PD&E STUDY*  
*SR 535*  
*ALTERNATIVE 3 (1 OF 5)*  
*SEGMENT 1*



MATCHLINE STA. 38+00.00

MATCHLINE STA. 53+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

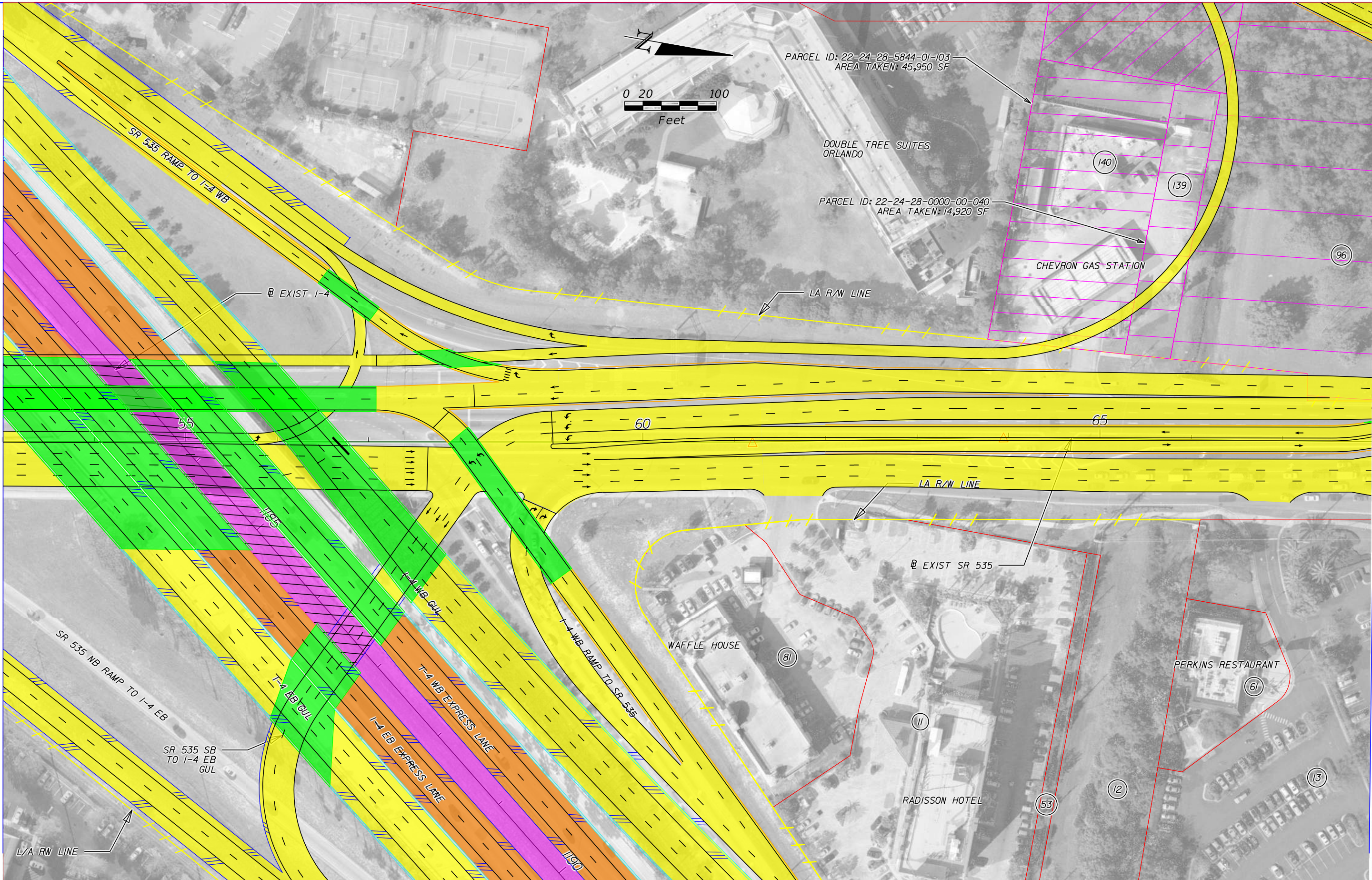
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

<b>I-4 PD&amp;E STUDY</b> <b>SR 535</b> <b>ALTERNATIVE 3 (2 OF 5)</b> <b>SEGMENT 1</b>
-------------------------------------------------------------------------------------------------

SHEET NO.
<b>90</b>



MATCHLINE STA. 53+00.00



MATCHLINE STA. 68+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

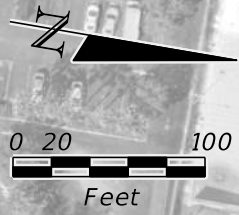
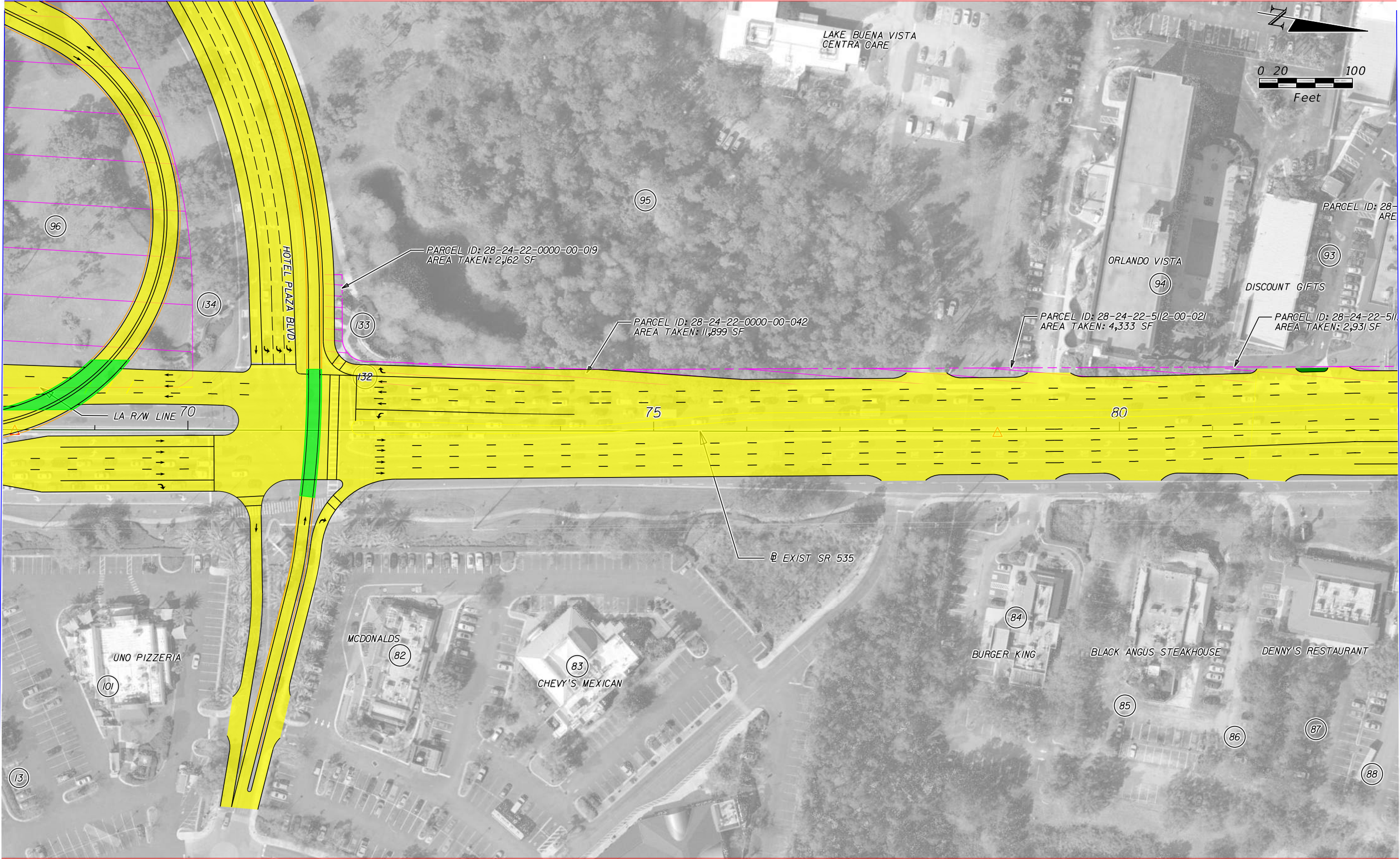
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY SR 535 ALTERNATIVE 3 (3 OF 5) SEGMENT 1	
SHEET NO. 91	

A-91
------



MATCHLINE STA. 68+00.00



MATCHLINE STA. 83+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

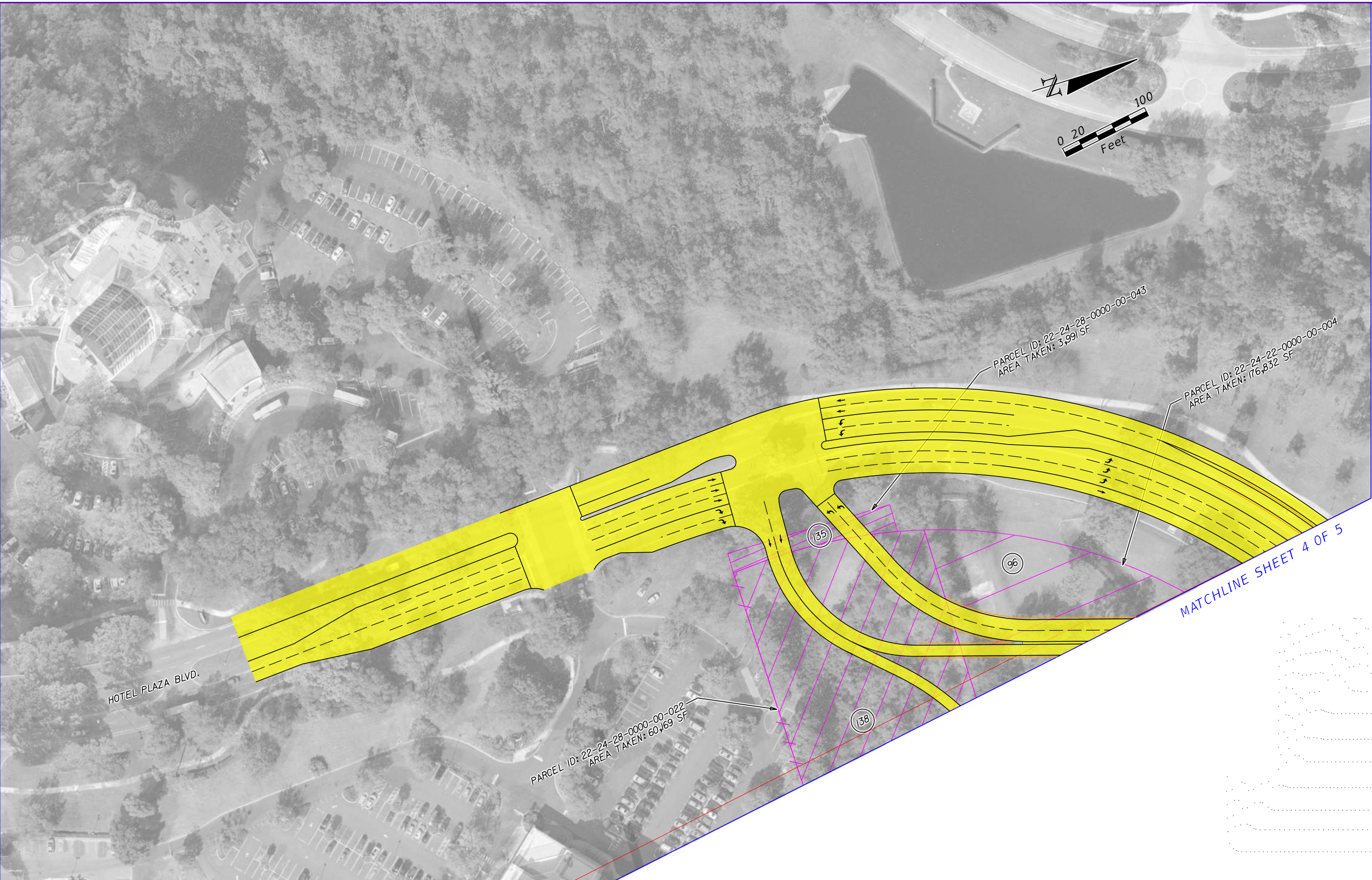
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY**  
**SR 535**  
**ALTERNATIVE 3 (4 OF 5)**  
**SEGMENT 1**

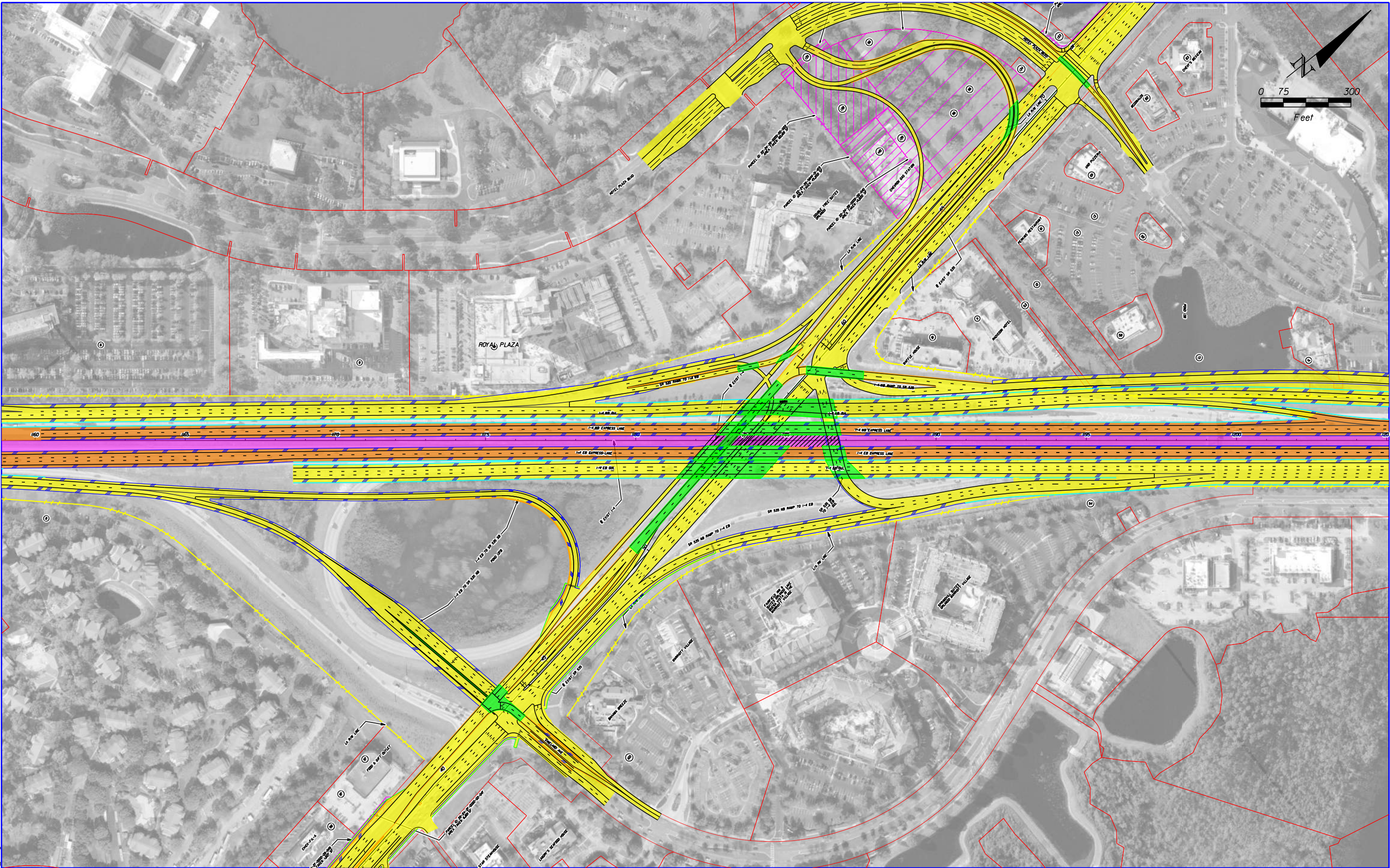
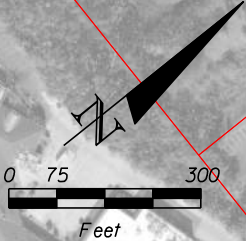
SHEET NO.
92





<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SR 535 ALTERNATIVE 3 (5 OF 5) SEGMENT 1	SHEET NO.  93
					ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	400	ORANGE	432100-1-22-01		A-93





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION






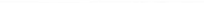






HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY SR 535 ALTERNATIVE 3 SEGMENT 1	
SHEET NO.  94	



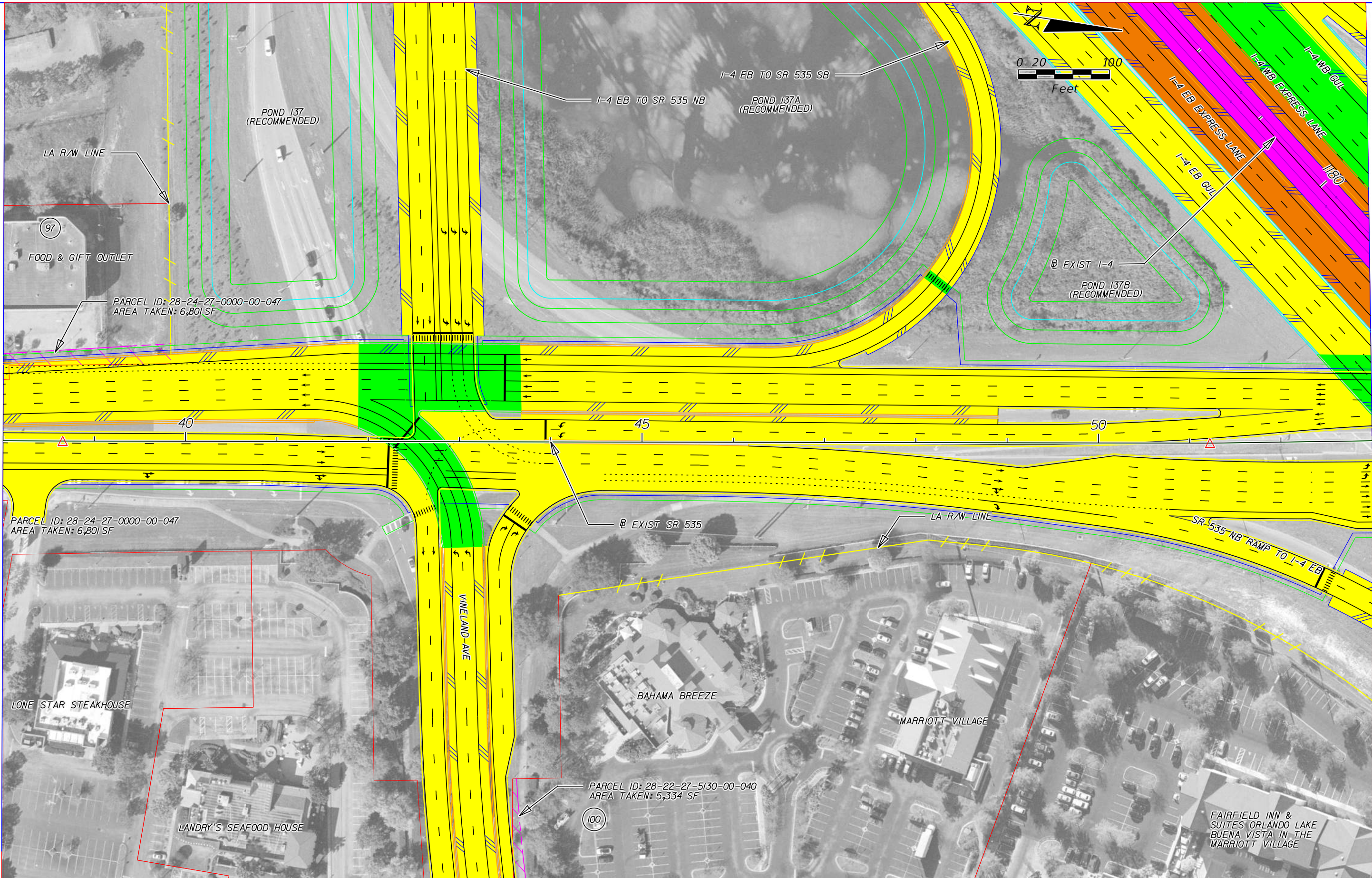


	EXISTING LA R/W		GENERAL USE LANES	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<div>I-4 PD&amp;E STUDY SR 535 RECOMMENDED ALT 4 (1 OF 11) SEGMENT 1</div>	SHEET NO.
	PROPOSED LA R/W		EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		95
	PROPOSED FDOT R/W		EXISTING BRIDGE	400	ORANGE	432100-1-22-01			
	EXISTING R/W		PROPOSED BRIDGE						
	PARCEL LINES		RAIL CORRIDOR						
	BARRIER WALL		FUTURE EXISTING CONDITION						



MATCHLINE STA. 38+00.00

MATCHLINE STA. 53+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

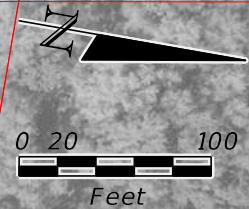
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
SR 535  
RECOMMENDED ALT 4 (2 OF 11)  
SEGMENT 1**

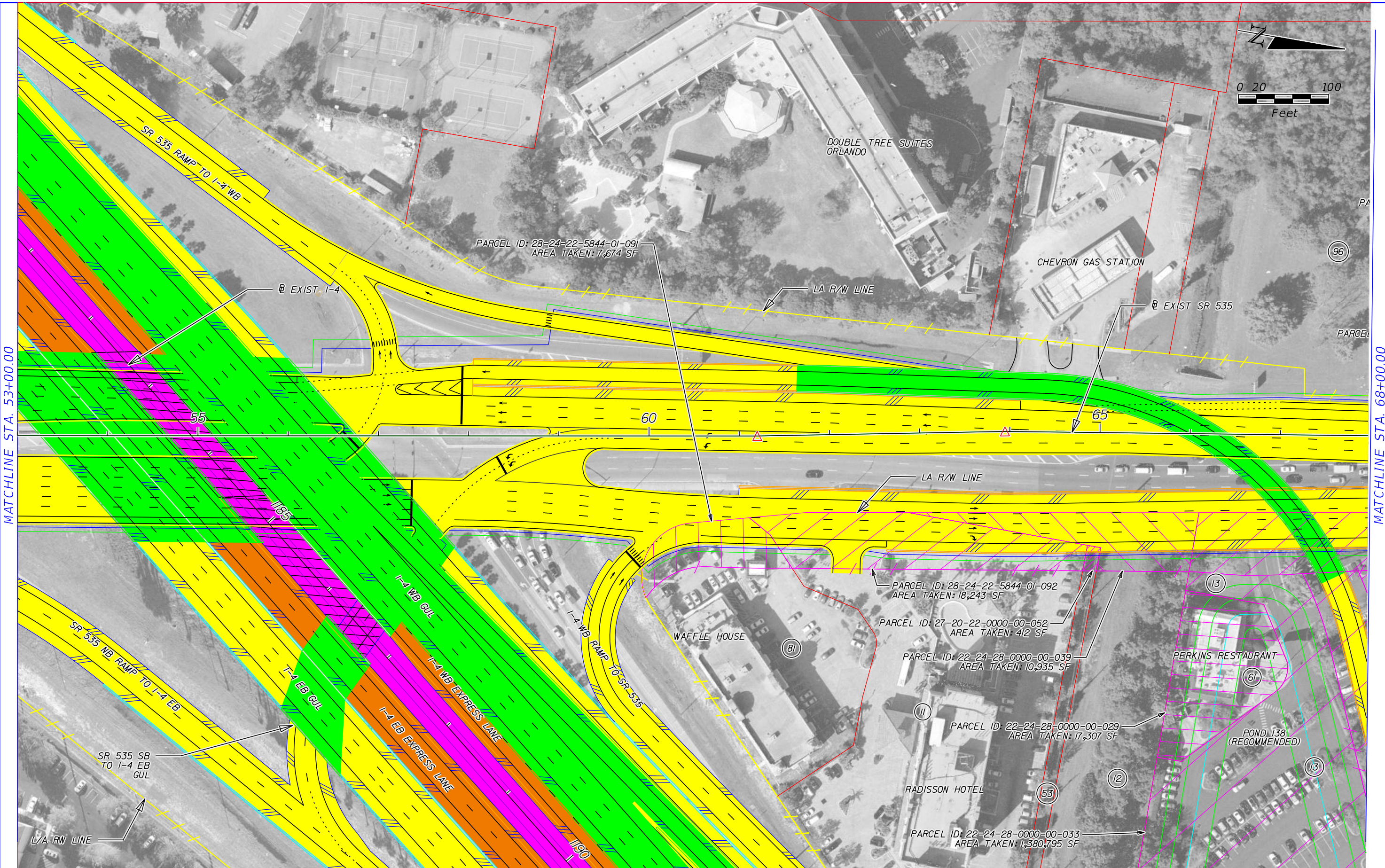
SHEET NO.
<b>96</b>





MATCHLINE STA. 53+00.00

MATCHLINE STA. 68+00.00



PRINT DRIVER:  
PEN TABLE:  
Color\_FOOTPRINT.dwg  
FDOT\_text.dwg

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

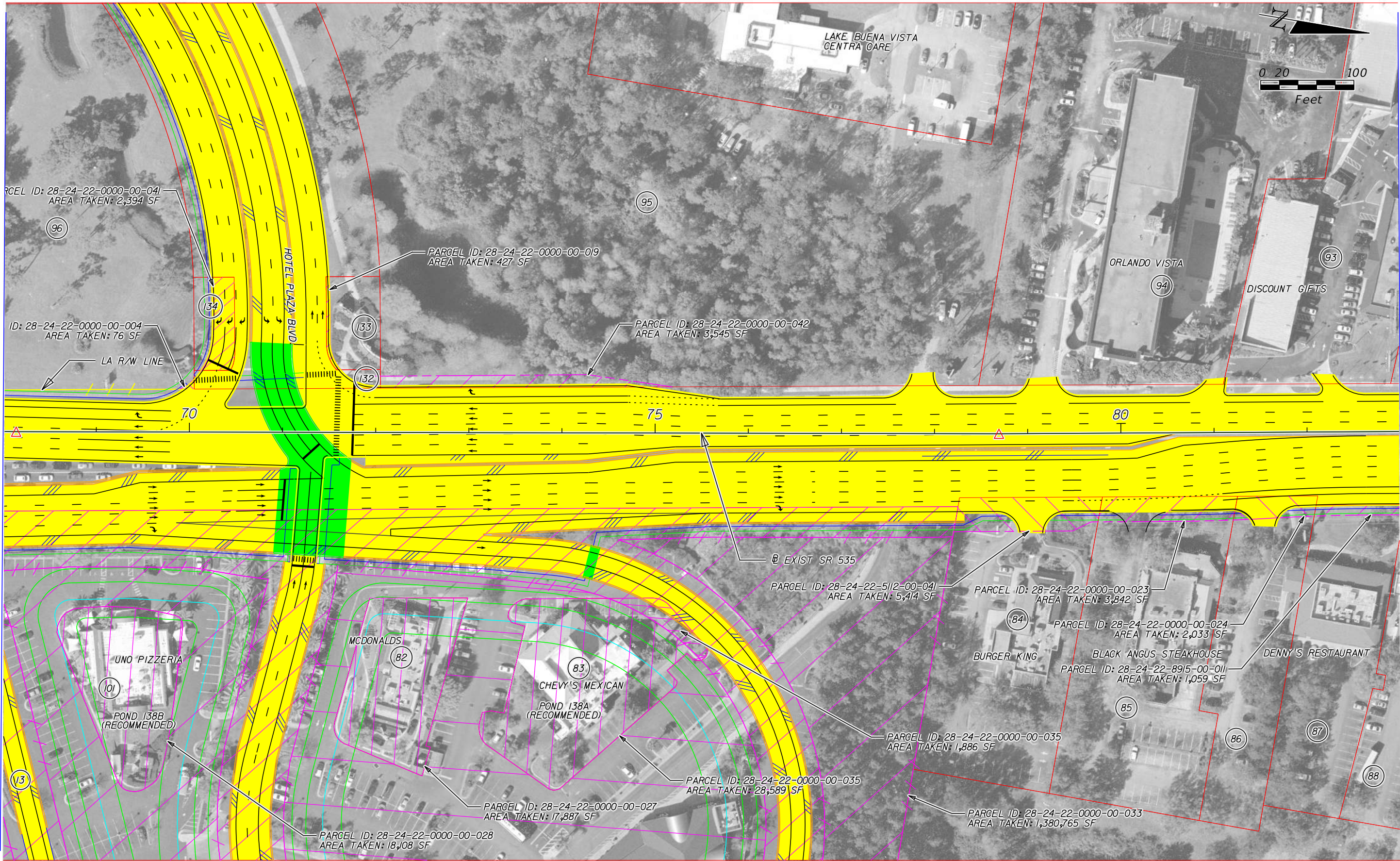
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY SR 535 RECOMMENDED ALT 4 (3 OF 11) SEGMENT 1
----------------------------------------------------------------------

SHEET NO.
97



MATCHLINE STA. 68+00.00



MATCHLINE STA. 83+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

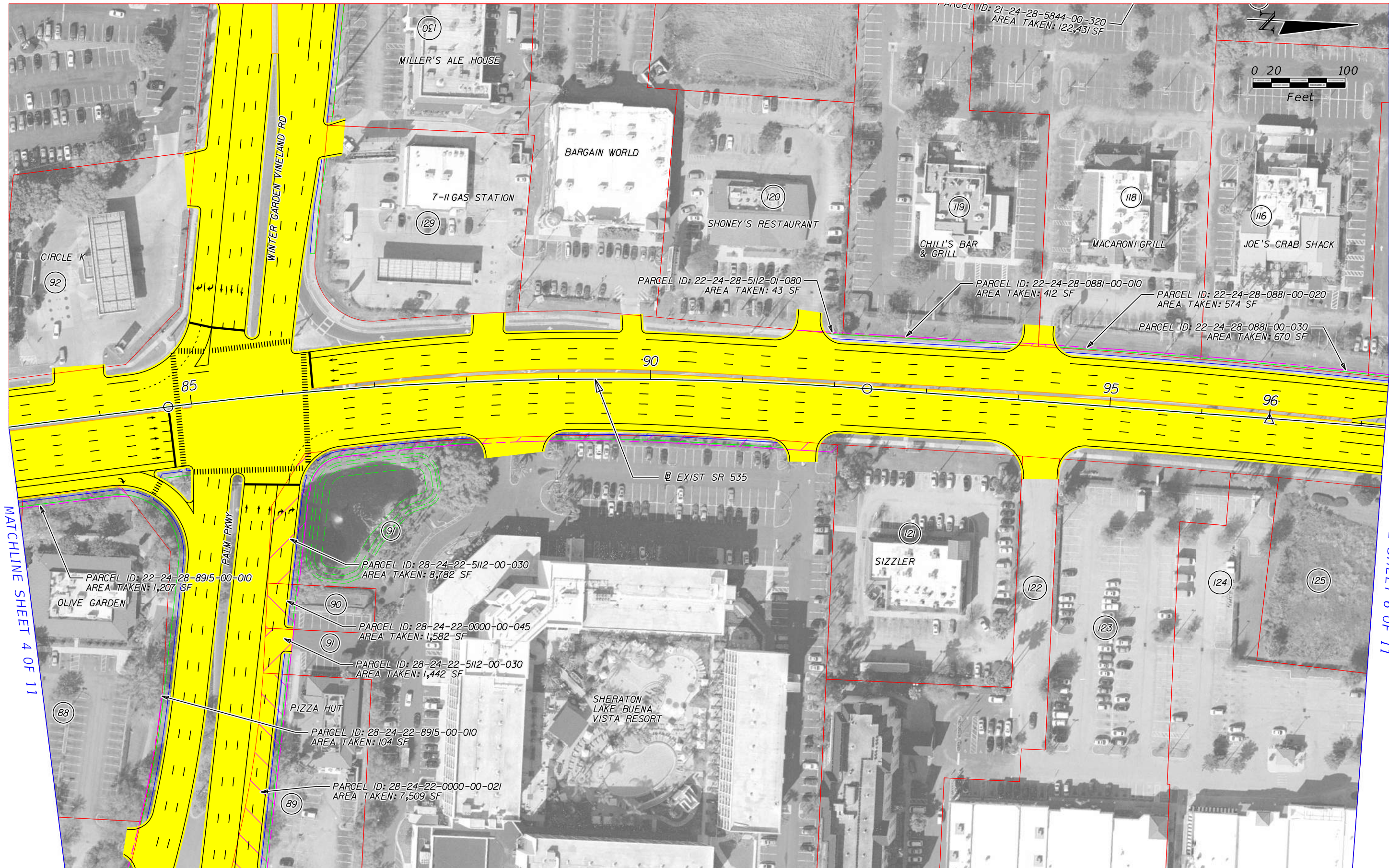
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
SR 535  
RECOMMENDED ALT 4 (4 OF 11)  
SEGMENT 1**

SHEET  
NO.  
**98**





MATCHLINE SHEET 4 OF 11

MATCHLINE SHEET 6 OF 11

	EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL		GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION
--	---------------------------------------------------------------------------------------------------------	--	------------------------------------------------------------------------------------------------------------------------

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

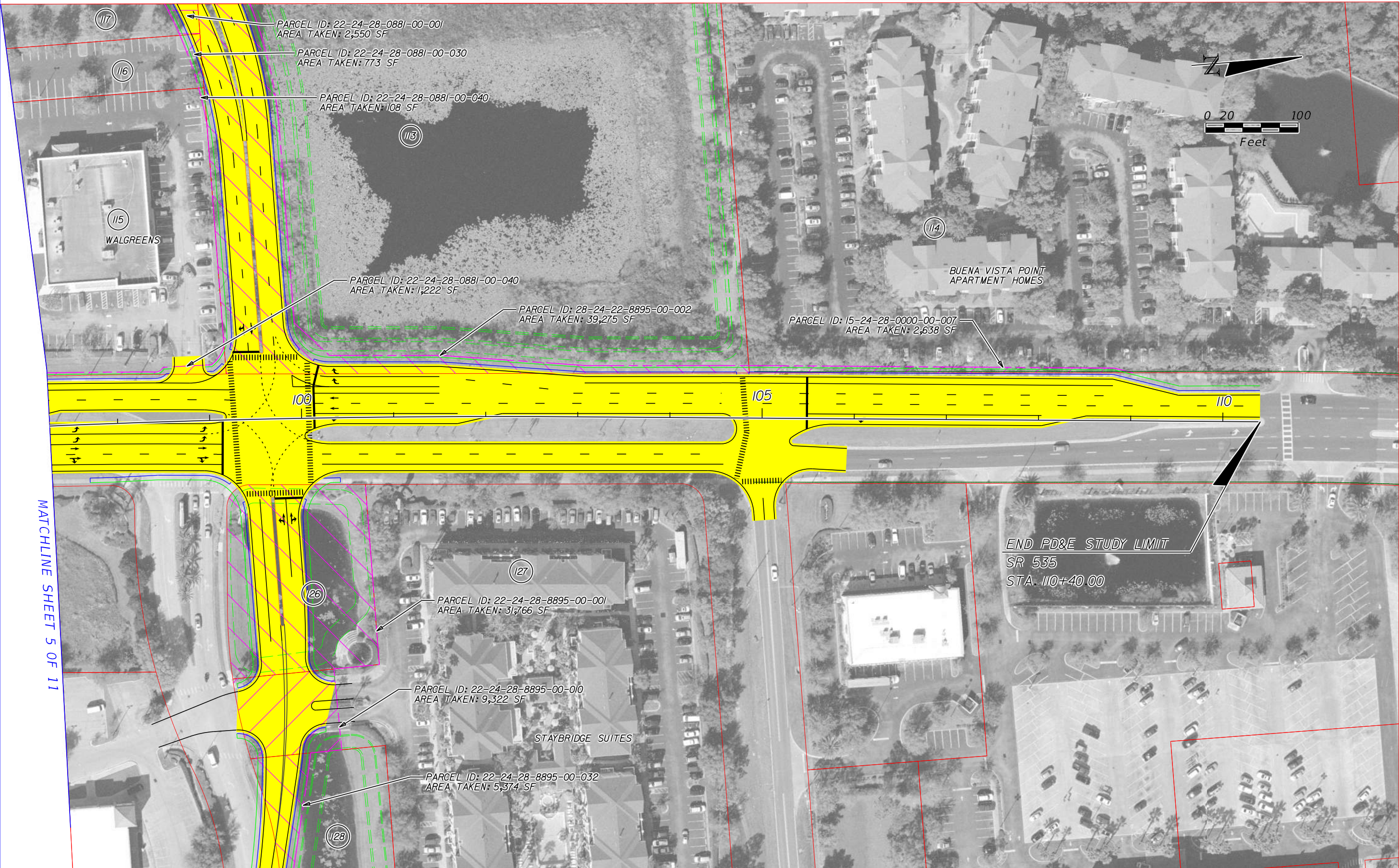
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY SR 535 RECOMMENDED ALT 4 (5 OF 11) SEGMENT 1
----------------------------------------------------------------------

SHEET NO. 99
-----------------



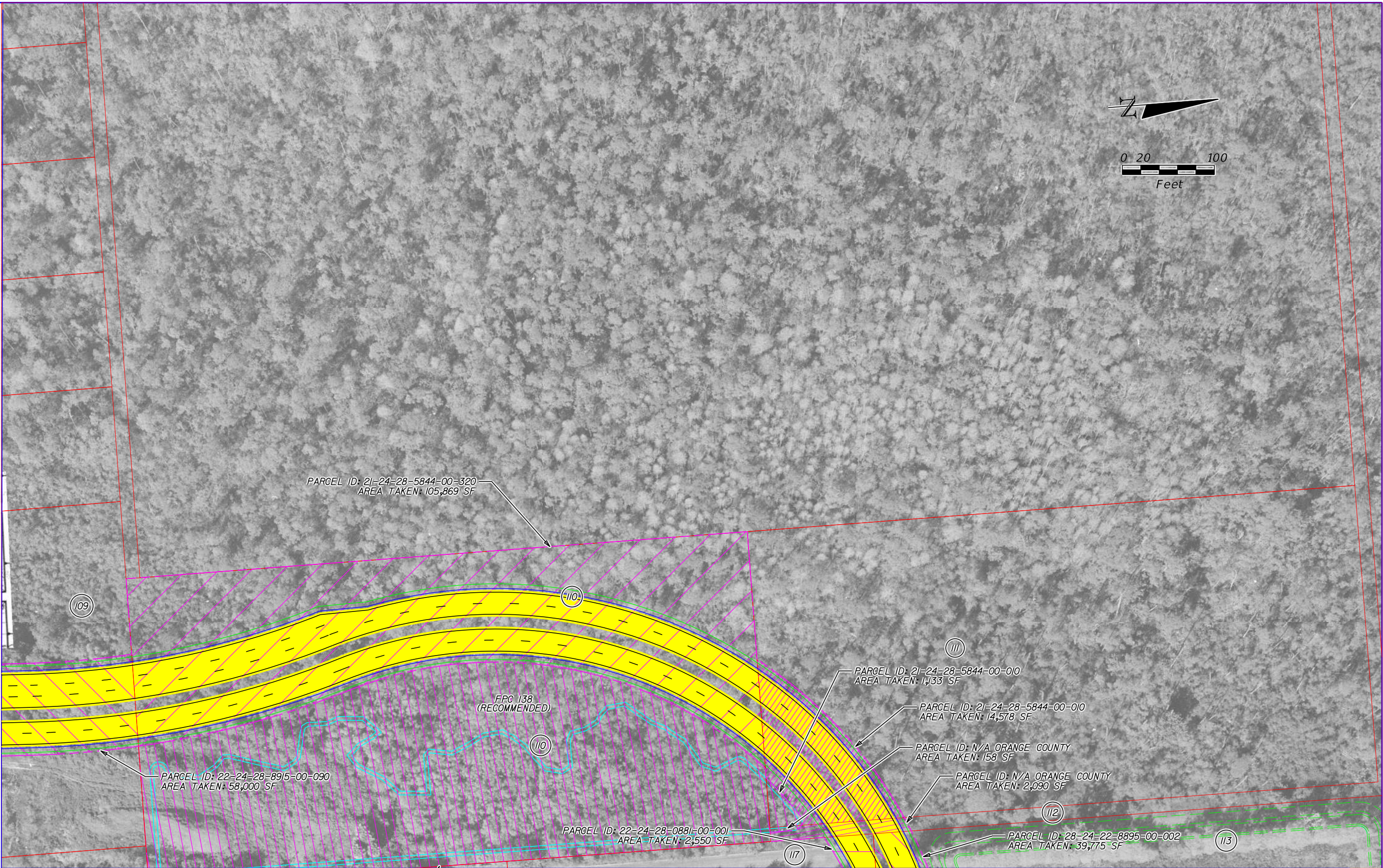
MATCHLINE SHEET 5 OF 11



<div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div>	<div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY SR 535 RECOMMENDED ALT 4 (6 OF 11) SEGMENT 1	SHEET NO.  100
			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			400	ORANGE	432100-1-22-01		



MATCHLINE SHEET 8 OF 11



PRINT DRIVER:  
PEN TABLE:

Color\_FDOTPDF.dwg  
FDOT\_text.dwg

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

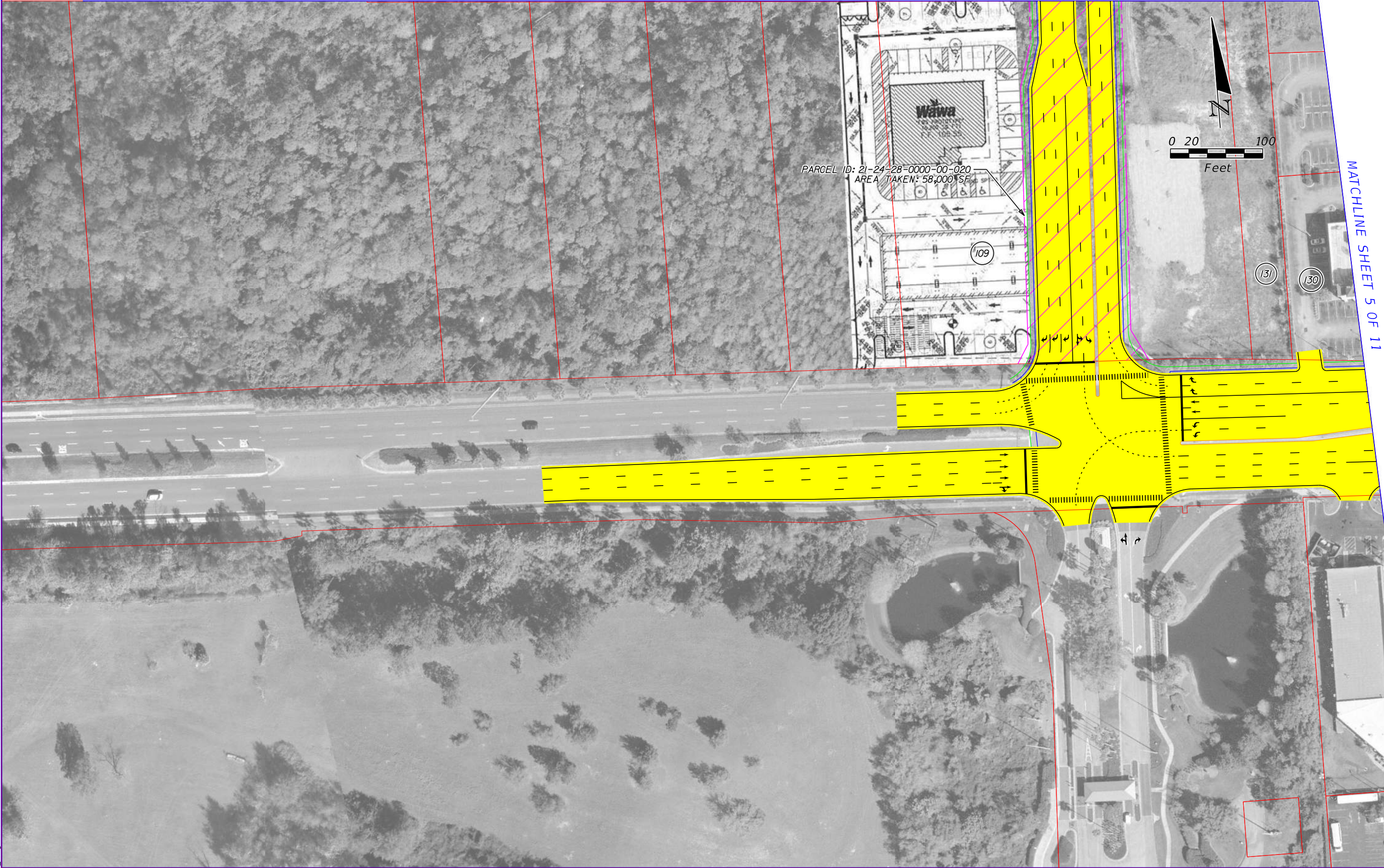
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY SR 535 RECOMMENDED ALT 4 (7 OF 11) SEGMENT 1
SHEET NO. 101

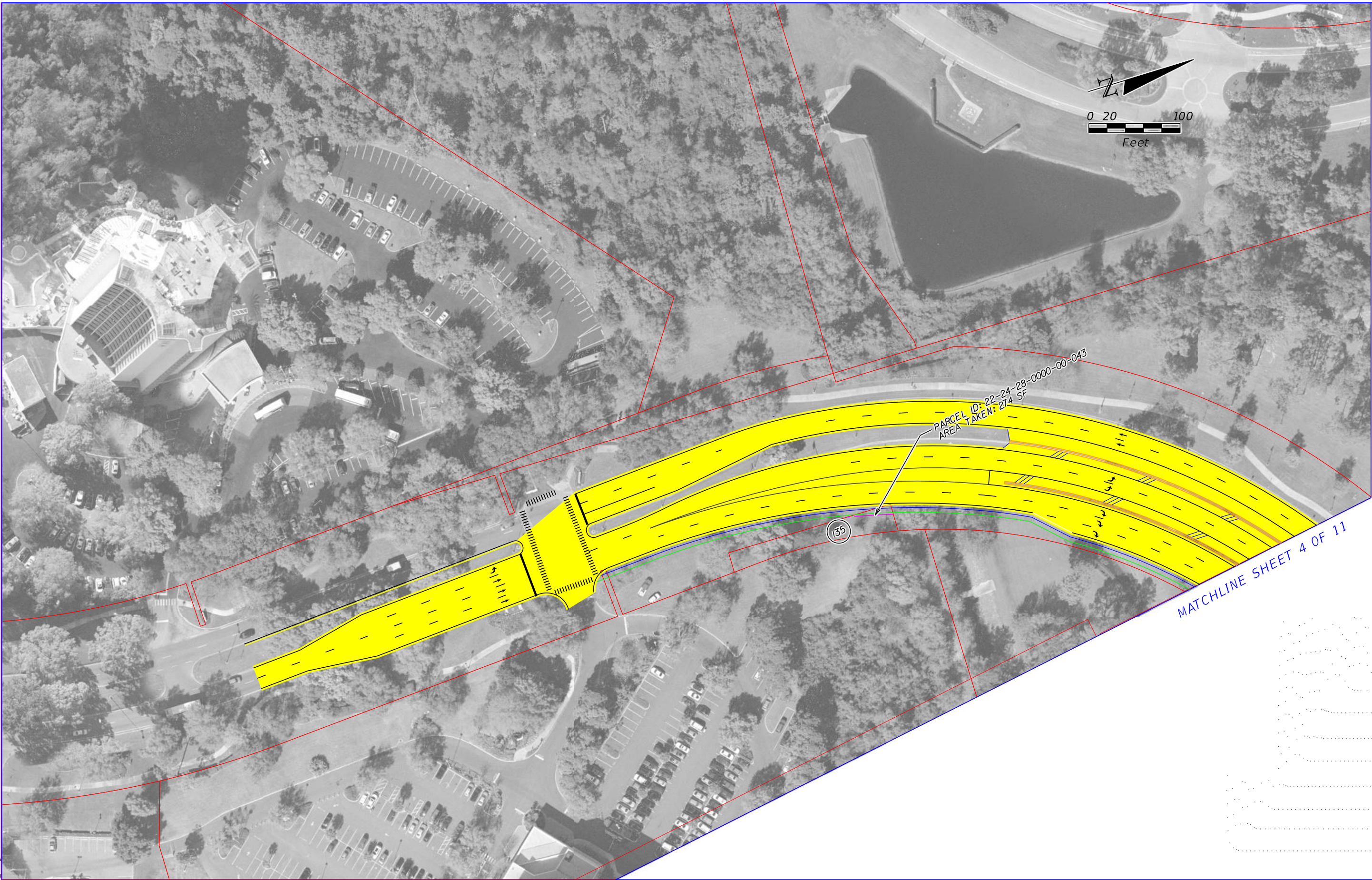
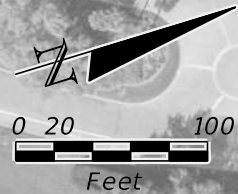
MATCHLINE SHEET 6 OF 11





		<p>EXISTING LA R/W</p> <p>PROPOSED LA R/W</p> <p>PROPOSED FDOT R/W</p> <p>EXISTING R/W</p> <p>PARCEL LINES</p> <p>BARRIER WALL</p>		<p>GENERAL USE LANES</p> <p>EXPRESS LANES</p> <p>EXISTING BRIDGE</p> <p>PROPOSED BRIDGE</p> <p>RAIL CORRIDOR</p> <p>FUTURE EXISTING CONDITION</p>		<p>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</p> <p>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</p>			<p>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</p> <table><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>ORANGE</td><td>432100-1-22-01</td></tr></table>			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	ORANGE	432100-1-22-01	<p>I-4 PD&amp;E STUDY SR 535 RECOMMENDED ALT 4 (8 OF 11) SEGMENT 1</p>		<p>SHEET NO.</p> <p>102</p>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID																		
400	ORANGE	432100-1-22-01																		





MATCHLINE SHEET 4 OF 11

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

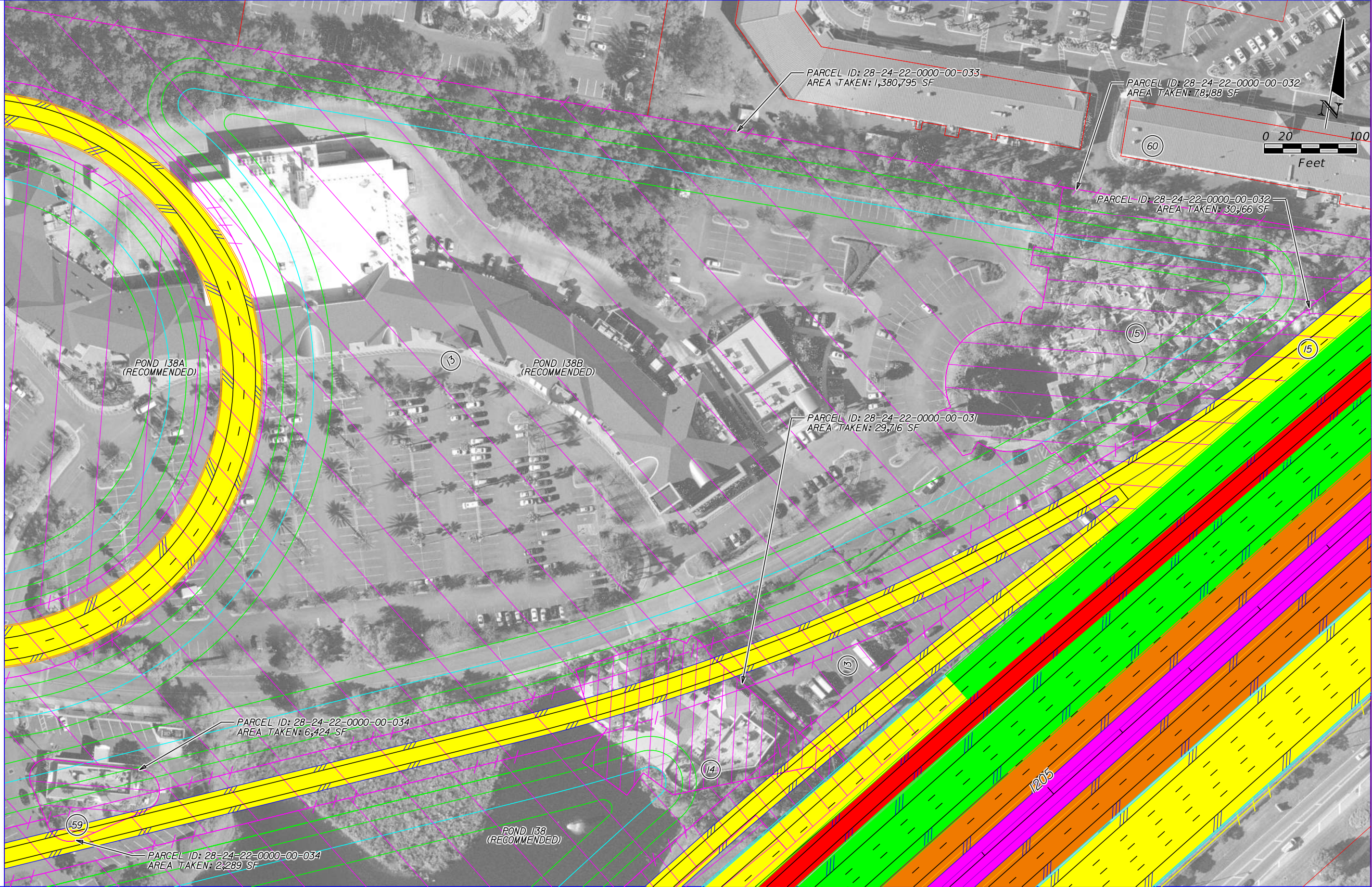
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY  
SR 535  
RECOMMENDED ALT 4 (9 OF 11)  
SEGMENT 1

SHEET NO.
103



MATCHLINE SHEET 4 OF 11



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
SR 535  
RECOMMENDED ALT 4 (10 OF 11)  
SEGMENT 1**

SHEET NO.
104



MATCHLINE SHEET 5 OF 11

COURTYARD BY  
MARRIOTT



PARCEL ID: 22-24-28-0000-00-020  
AREA TAKEN: 15,603 SF

FORTUNE COURT  
GIFT SHOP

102

PARCEL ID: 22-24-28-8915-00-100  
AREA TAKEN: 31,878 SF

105

PARCEL ID: 22-24-28-8915-00-001  
AREA TAKEN: 11,200 SF

104

PARCEL ID: 22-24-28-8915-00-020  
AREA TAKEN: 12,830 SF

103

VENTURELLA  
RESORT AND SPA

PARCEL ID: 22-24-28-8915-00-021  
AREA TAKEN: 12,979 SF

106

HOLIDAY INN  
EXPRESS

PARCEL ID: 28-24-22-8915-00-090  
AREA TAKEN: 268 SF

108

PARCEL ID: 22-24-28-8915-00-030  
AREA TAKEN: 7,921 SF

SHOPPES AT  
VISTA CENTRE

107

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

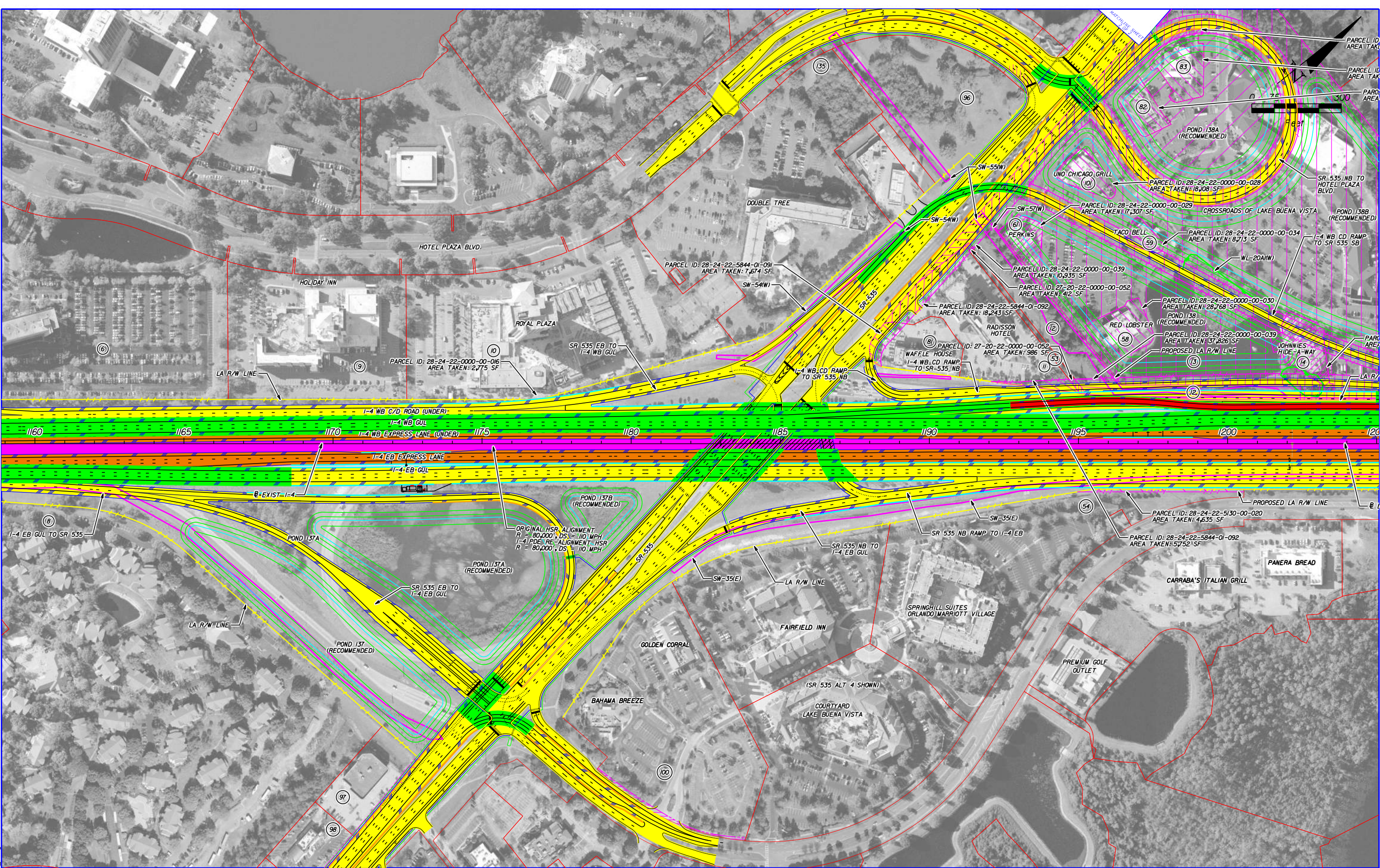
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY  
SR 535  
RECOMMENDED ALT 4 (11 OF 11)  
SEGMENT 1

SHEET NO.
105

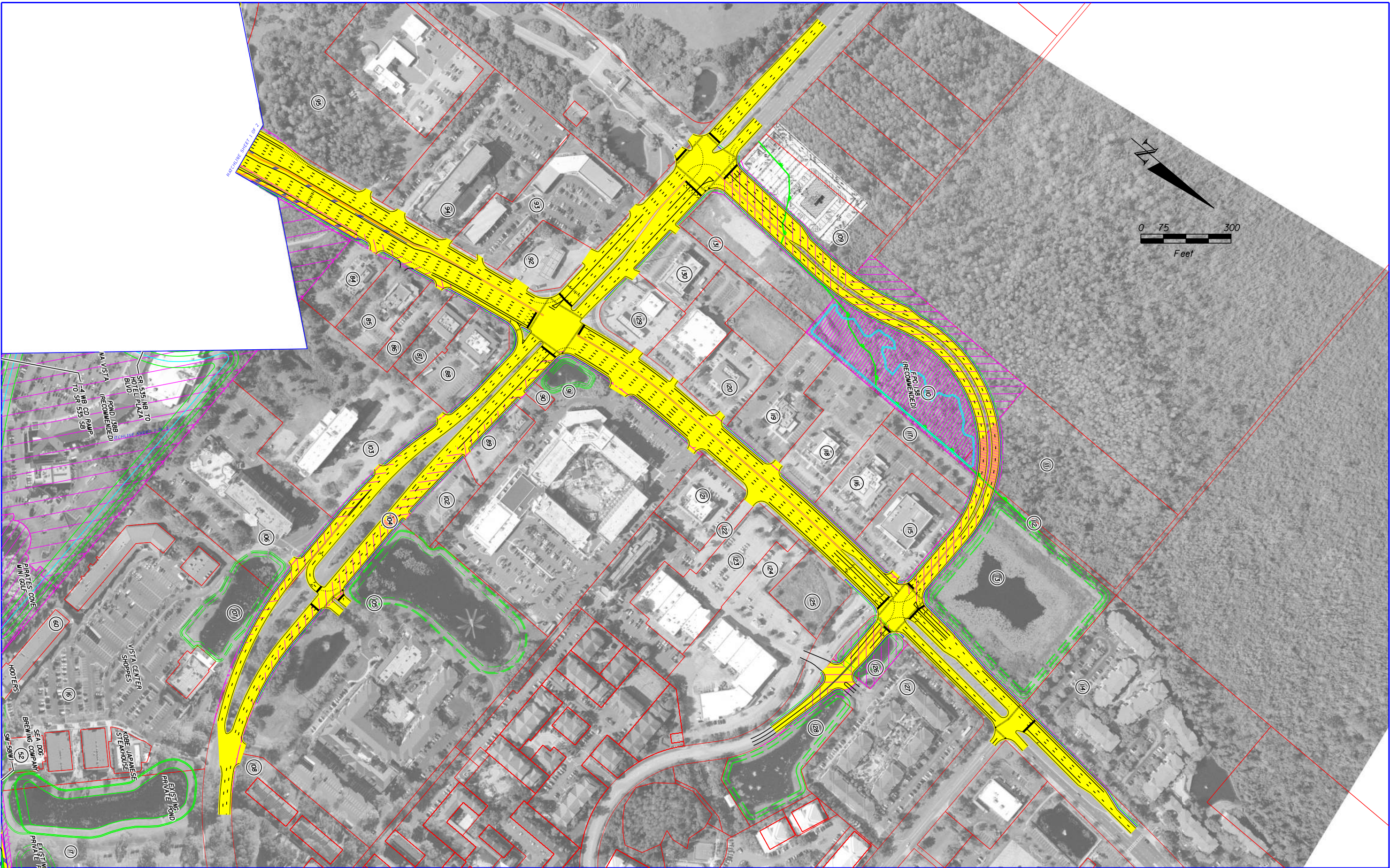




<div><div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div><div><div>EXISTING LA R/W</div><div>PROPOSED LA R/W</div><div>PROPOSED FDOT R/W</div><div>EXISTING R/W</div><div>PARCEL LINES</div><div>BARRIER WALL</div></div></div>	<div><div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div><div><div>GENERAL USE LANES</div><div>EXPRESS LANES</div><div>EXISTING BRIDGE</div><div>PROPOSED BRIDGE</div><div>RAIL CORRIDOR</div><div>FUTURE EXISTING CONDITION</div></div></div>	<div><div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div></div>	<div><div>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</div><table><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>ORANGE</td><td>432100-1-22-01</td></tr></table></div>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	ORANGE	432100-1-22-01	<div><div>I-4 PD&amp;E STUDY SR 535 ALT 4 (1 OF 2) (RECOMMENDED ALTERNATIVE) SEGMENT 1</div></div>	<div><div>SHEET NO.</div><div>106</div></div>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID									
400	ORANGE	432100-1-22-01									

mbacal 11/1/2016 12:10:36 RMLKmw00\pmwork3\Jobs\59219 - 14 SAMR\TECHPROD\43210012201\Segment 1\roadway\planrd108 - alt\_4\_PREFERRED.dgn





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

<b>I-4 PD&amp;E STUDY SR 535 ALT 4 (2 OF 2) (RECOMMENDED ALTERNATIVE) SEGMENT 1</b>
-------------------------------------------------------------------------------------------------

SHEET NO.
107





<div><div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div><div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div></div>	<div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div><div><div></div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div>	<div><div><div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div></div></div>	<div><div>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</div><table><tr><td>ROAD NO.</td><td>COUNTY</td><td>FINANCIAL PROJECT ID</td></tr><tr><td>400</td><td>ORANGE</td><td>432100-1-22-01</td></tr></table></div>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	ORANGE	432100-1-22-01	<div><div>I-4 PD&amp;E STUDY DARYL CARTER PKWY ALT 1 (1 OF 2) SEGMENT 1</div></div>	<div><div>SHEET NO.</div><div>108</div></div>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID									
400	ORANGE	432100-1-22-01									



MATCHLINE STA. 20+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

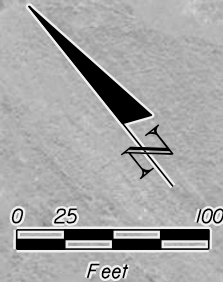
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY**  
**DARYL CARTER PKWY**  
**ALT 1 (2 OF 2)**  
**SEGMENT 1**

SHEET  
NO.  
**109**

A-109



33

25

30

DARYL CARTER PKWY RAMP TO I-4 EB

DARYL CARTER PKWY

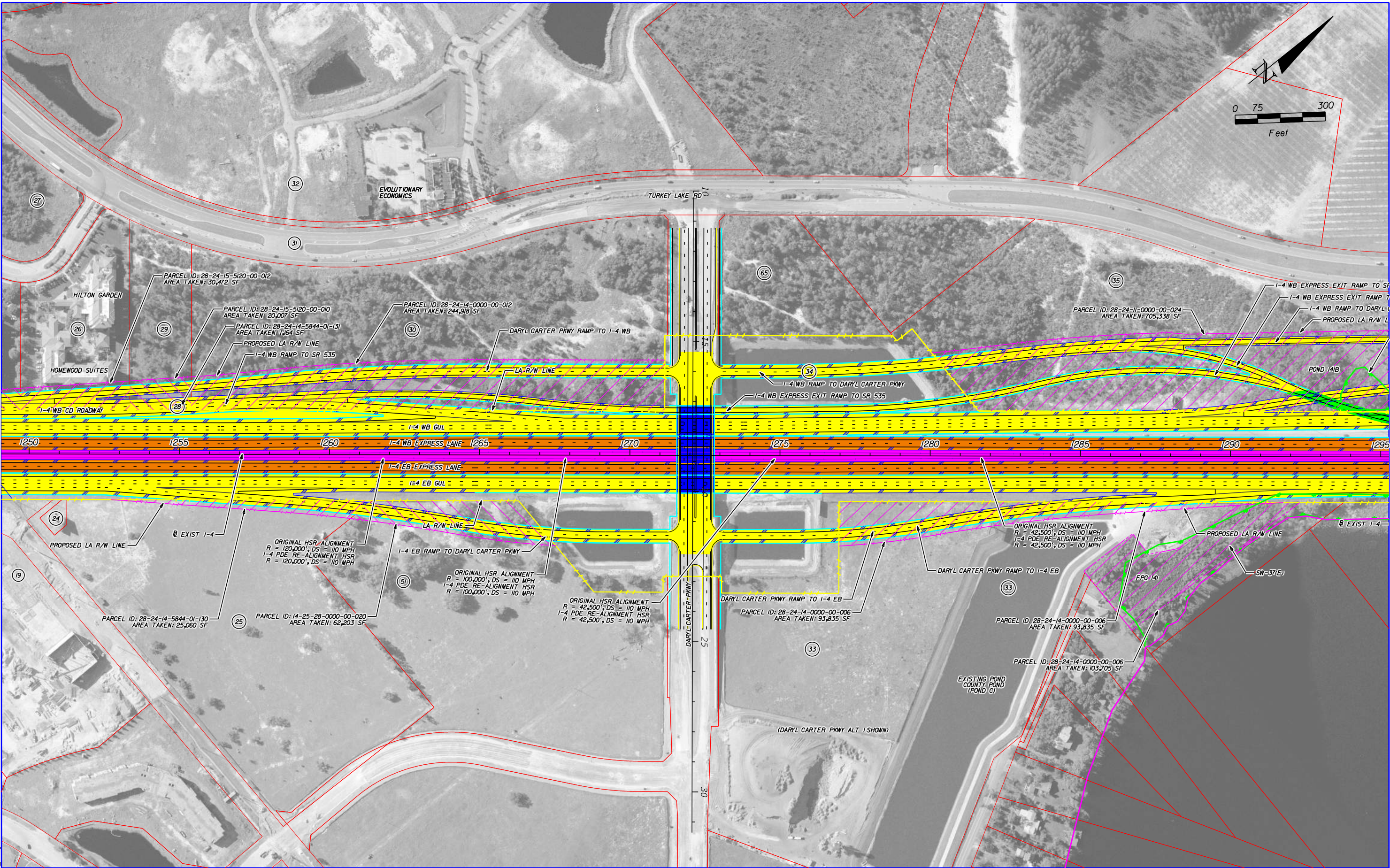
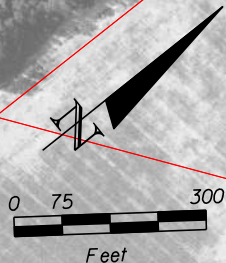
LA R/W LINE

I-4 EB RAMP TO DARYL CARTER PKWY

END PD&E STUDY LIMIT  
DARYL CARTER PKWY  
STA. 30+00.00



300 SCALE  
MODEL:  
SHEET SIZE:  
PLOT SCALE:



PRINT DRIVER:  
PEN TABLE:  
Color FOOTPRINT.dwg  
FDOT\_text.dwg

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

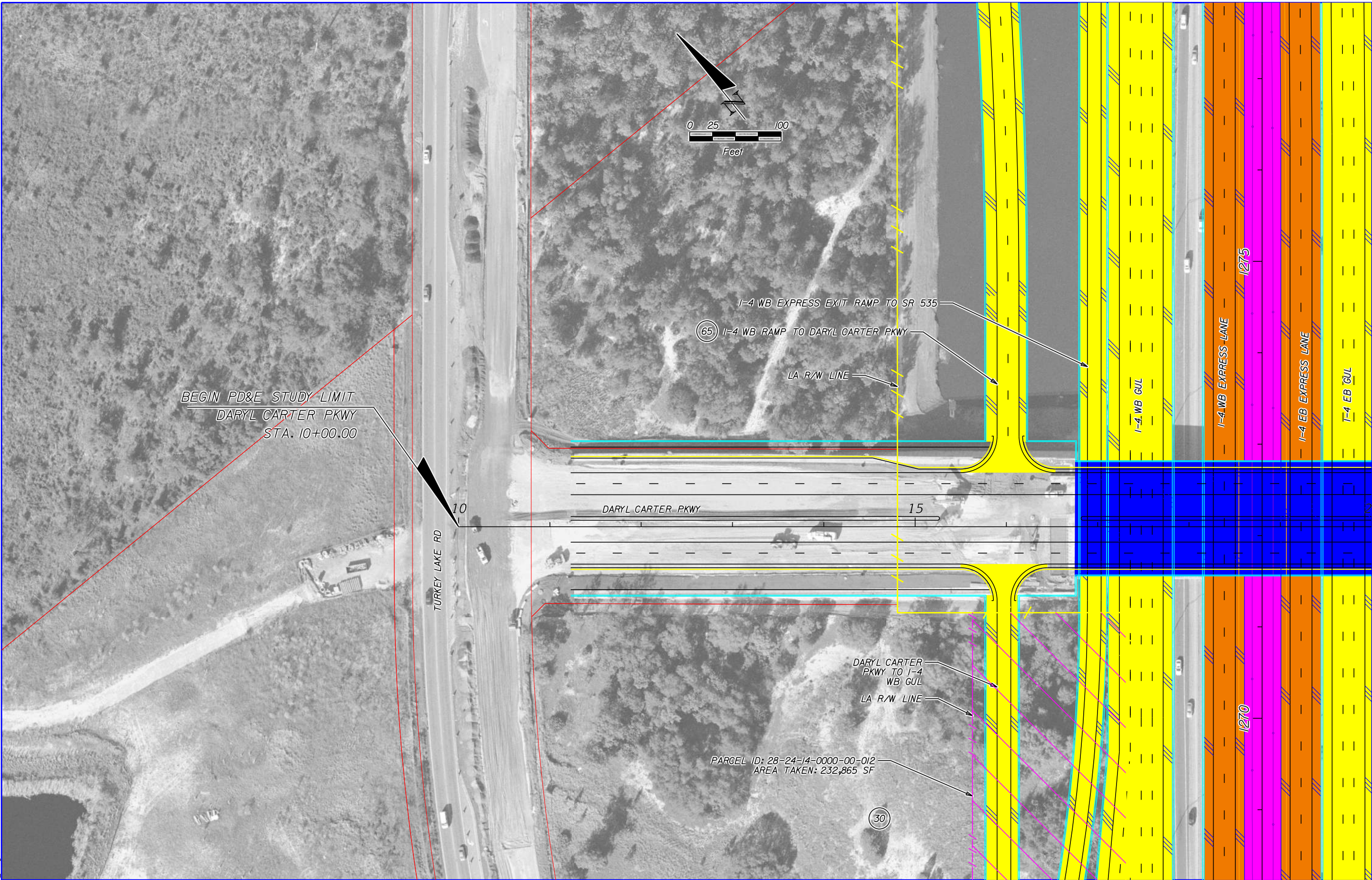
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
DARYL CARTER PKWY  
ALTERNATIVE 1  
SEGMENT 1**

SHEET NO.
<b>110</b>





<div><div><div></div><div></div><div></div><div></div><div></div></div><div>EXISTING LA R/W PROPOSED LA R/W PROPOSED FDOT R/W EXISTING R/W PARCEL LINES BARRIER WALL</div></div>	<div><div><div></div><div></div><div></div><div></div><div></div></div><div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE RAIL CORRIDOR FUTURE EXISTING CONDITION</div></div>	<div><div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div></div>	<div>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</div> <table><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>ORANGE</td><td>432100-1-22-01</td></tr></table>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	ORANGE	432100-1-22-01	<div>I-4 PD&amp;E STUDY DARYL CARTER PKWY ALTERNATIVE 2 (1 OF 2) SEGMENT 1</div>	<div>SHEET NO. 111</div>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID									
400	ORANGE	432100-1-22-01									

MATCHLINE STA. 20+00.00



MATCHLINE STA. 20+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

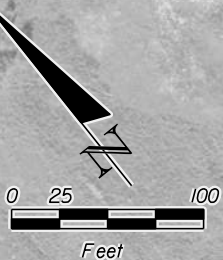
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

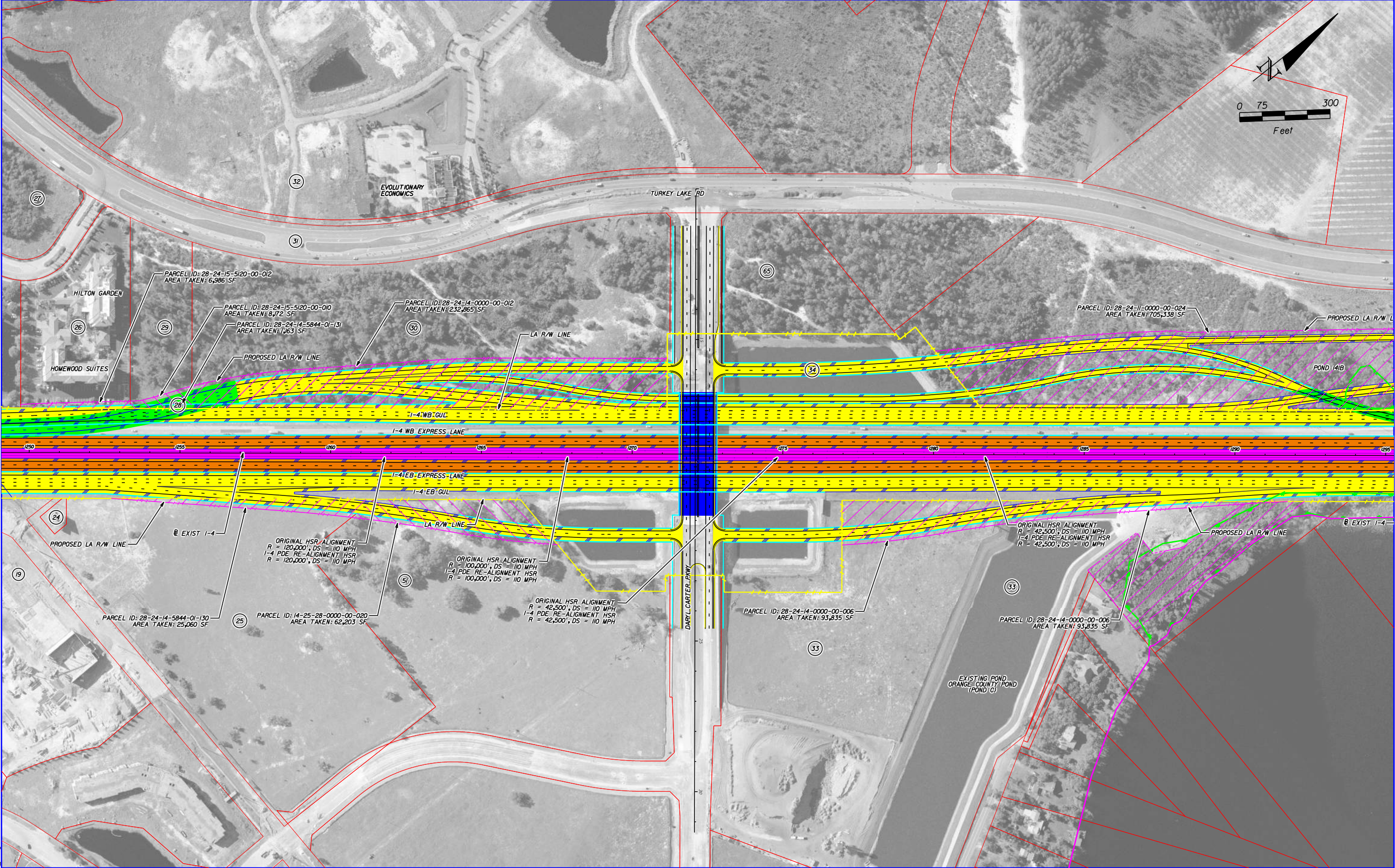
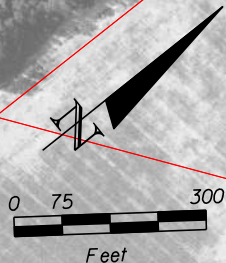
**I-4 PD&E STUDY**  
**DARYL CARTER PKWY**  
**ALTERNATIVE 2 (2 OF 2)**  
**SEGMENT 1**

SHEET  
NO.  
**112**



END PD&E STUDY LIMIT  
DARYL CARTER PKWY  
STA. 30+00.00





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

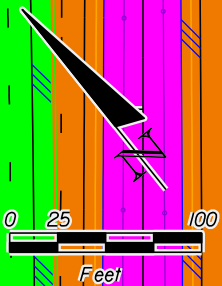
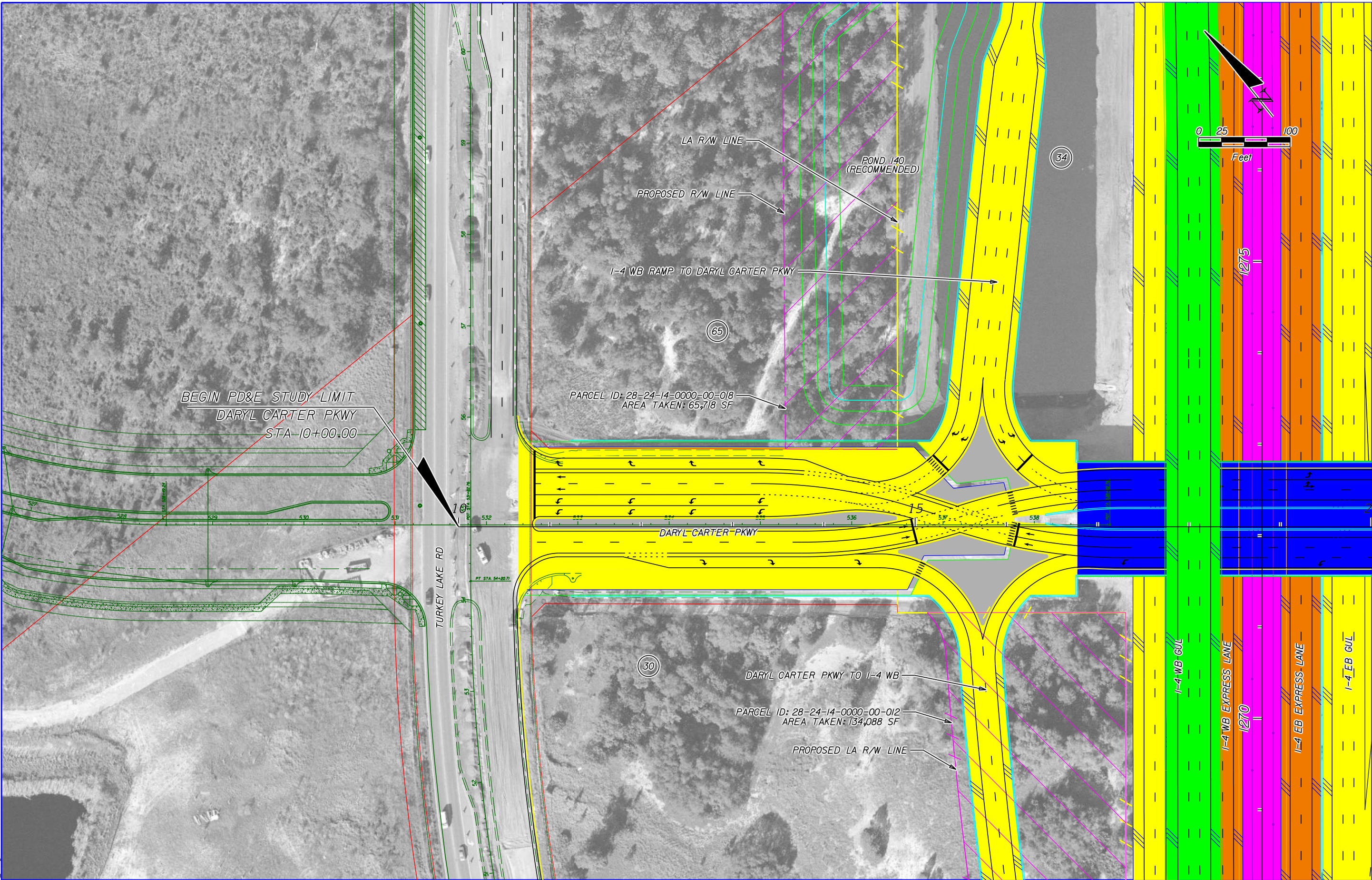
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
DARYL CARTER PKWY  
ALTERNATIVE 2  
SEGMENT 1**

SHEET NO.
113





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
DARYL CARTER PKWY  
(RECOMMENDED) ALT. 3 (1 OF 2)  
SEGMENT 1**

SHEET NO.
114



MATCHLINE STA. 20+00.00

PARCEL ID: 28-24-14-0000-00-006  
AREA TAKEN: 161,789 SF

POND 139B  
(RECOMMENDED)

DARYL CARTER PKWY RAMP TO I-4 EB

PARCEL ID: 28-24-14-0000-00-006  
AREA TAKEN: 70,270 SF

END PD&E STUDY LIMIT  
DARYL CARTER PKWY  
STA. 30+00.00

POND 139A  
(RECOMMENDED)

I-4 EB RAMP TO DARYL CARTER PKWY

LA R/W LINE

PARCEL ID: 14-24-28-0000-00-020  
AREA TAKEN: 68,505 SF

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

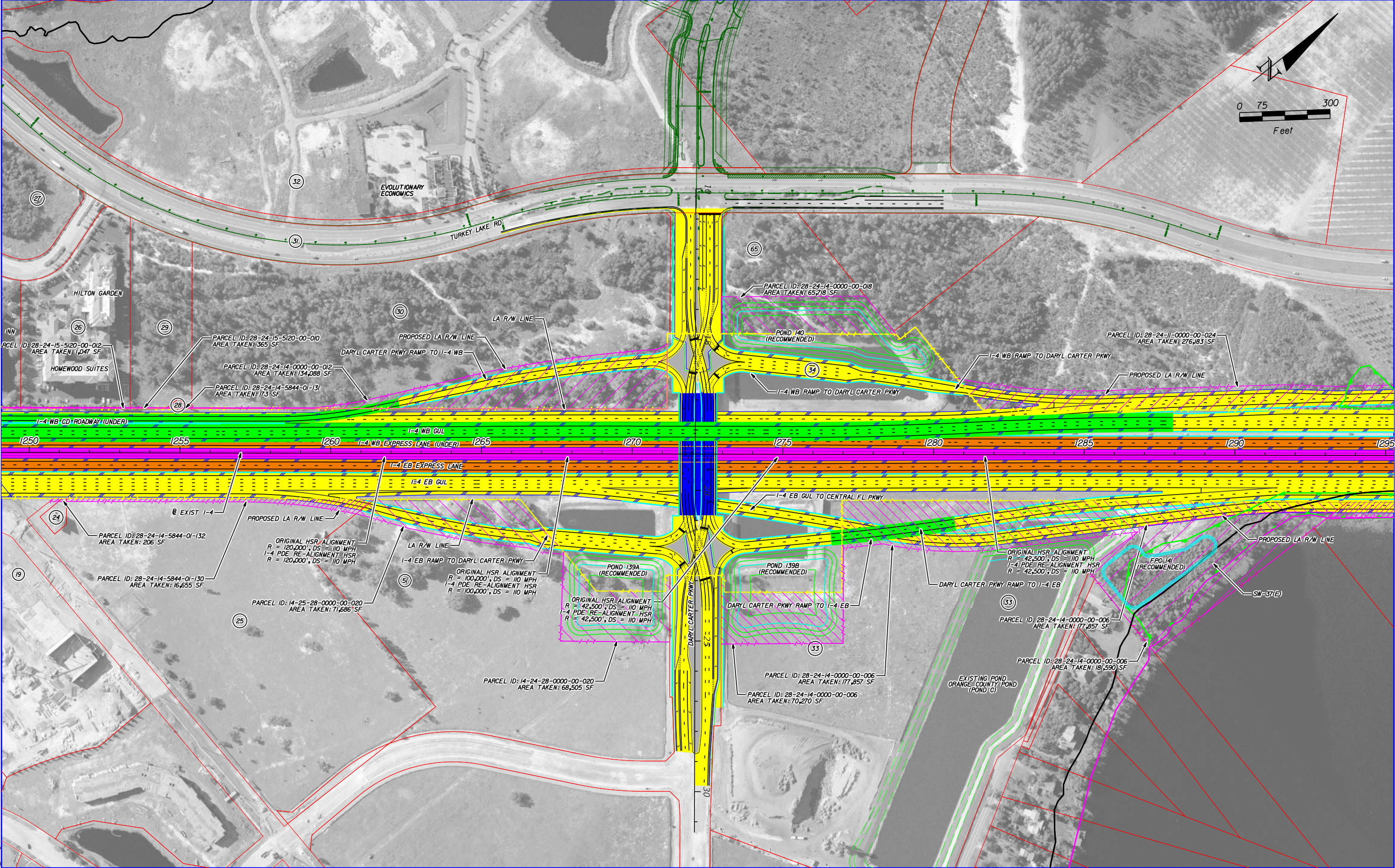
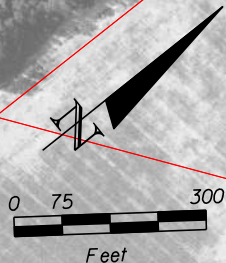
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY DARYL CARTER PKWY (RECOMMENDED) ALT. 3 (2 OF 2) SEGMENT 1
SHEET NO. 115



MODEL: 16.5x10.5 (ft.)  
SHEET SIZE: 1:300  
PLOT SCALE:



PRINT DRIVER: Color\_FOOTPRINT.dwg  
PEN TABLE: FDOT\_text.dwt

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500

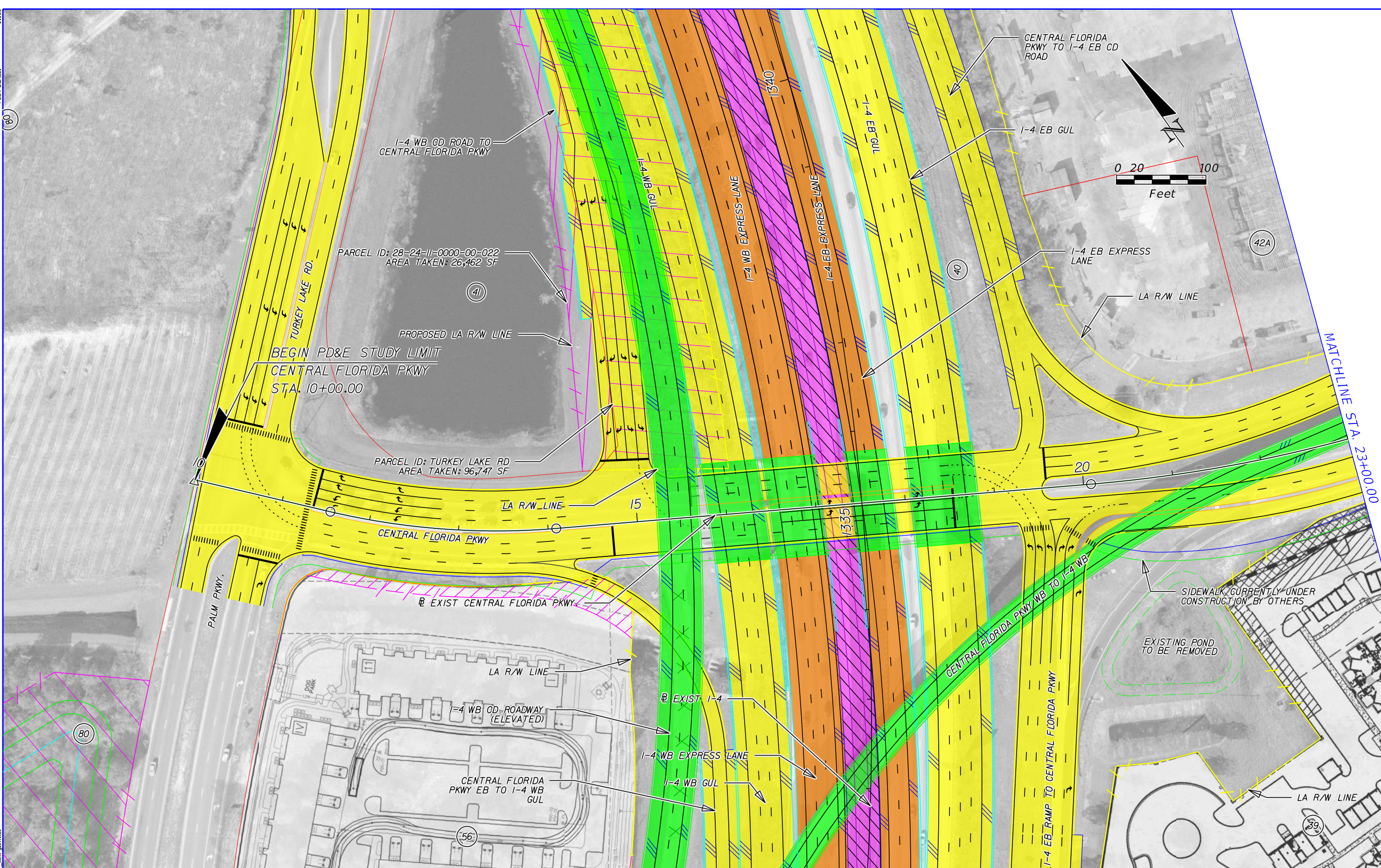
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593













STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY  
DARYL CARTER PKWY ALT 3  
(RECOMMENDED)  
SEGMENT 1**

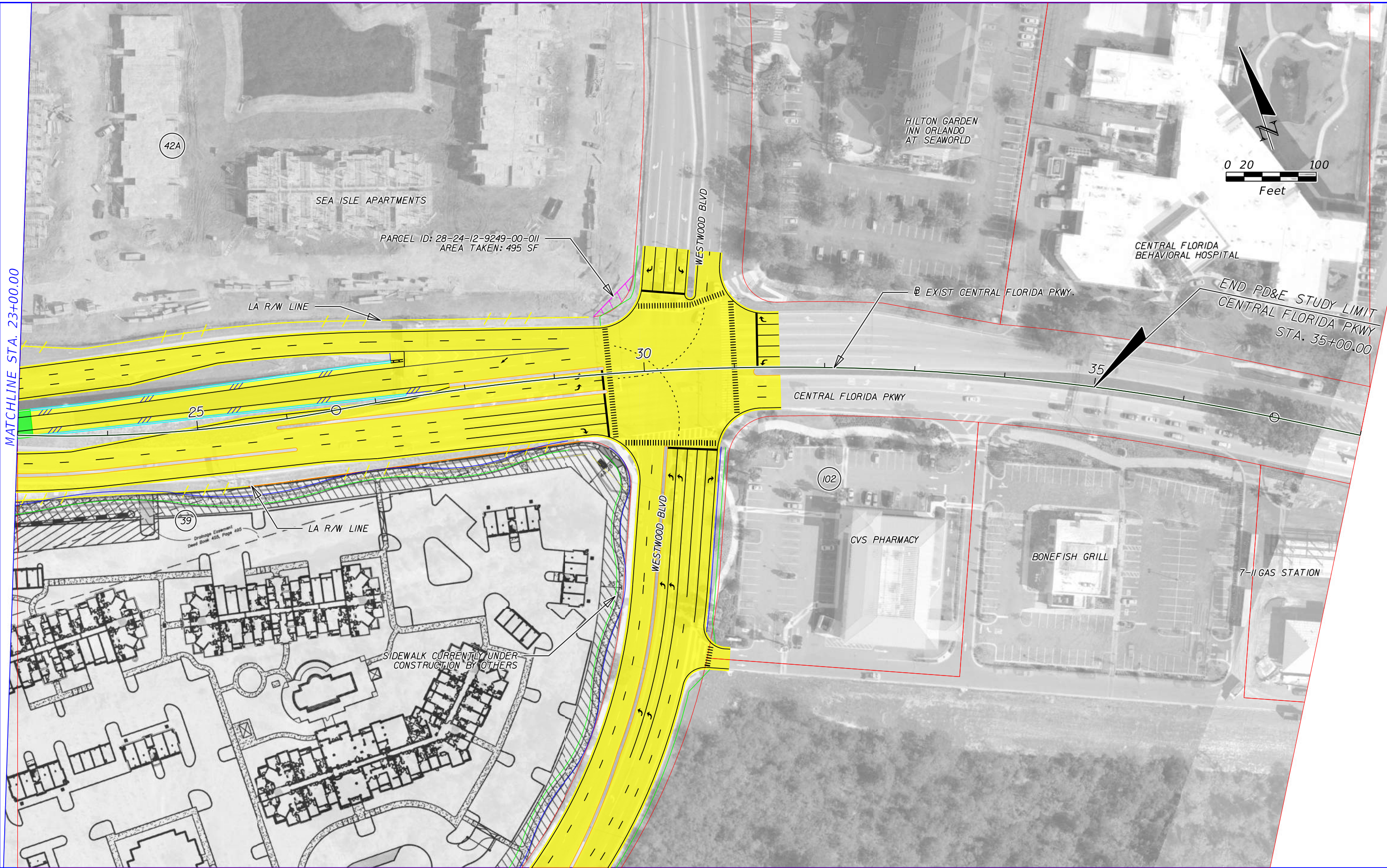
SHEET NO.
<b>116</b>





	EXISTING LA R/W		GENERAL USE LANES	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<div>I-4 PD&amp;E STUDY CENTRAL FLORIDA PKWY (1 OF 2) RECOMMENDED SEGMENT 1</div>	SHEET NO.
	PROPOSED LA R/W		EXPRESS LANES		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		117
	PROPOSED FDOT R/W		EXISTING BRIDGE						
	EXISTING R/W		PROPOSED BRIDGE						
	PARCEL LINES		RAIL CORRIDOR	400	ORANGE	432100-1-22-01			
	BARRIER WALL		FUTURE EXISTING CONDITION						





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

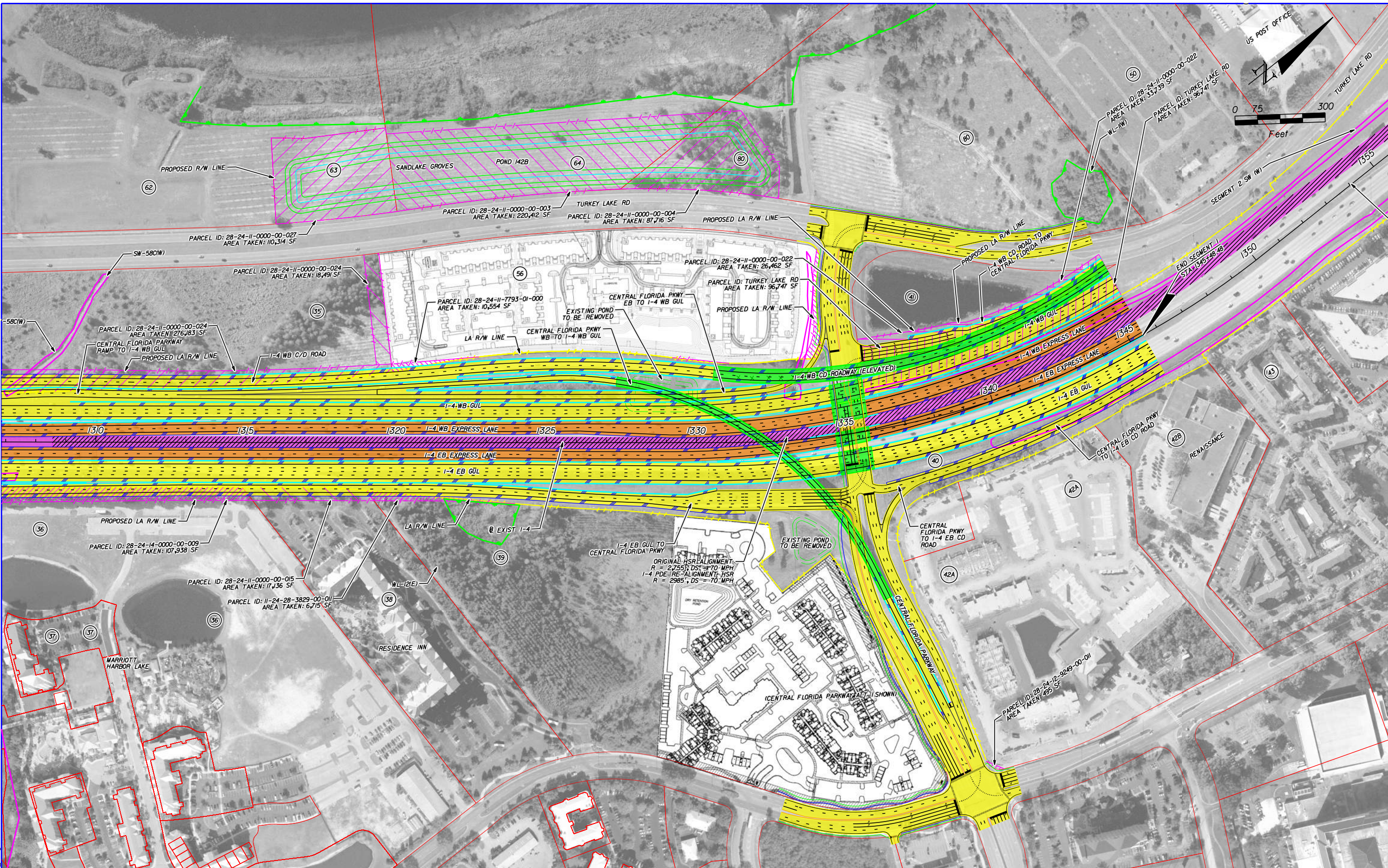
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

I-4 PD&E STUDY CENTRAL FLORIDA PKWY (2 OF 2) RECOMMENDED SEGMENT 1
-----------------------------------------------------------------------------

SHEET NO.
118





	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	PROPOSED FDOT R/W		EXISTING BRIDGE
	EXISTING R/W		PROPOSED BRIDGE
	PARCEL LINES		RAIL CORRIDOR
	BARRIER WALL		FUTURE EXISTING CONDITION

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	ORANGE	432100-1-22-01

**I-4 PD&E STUDY**  
**CENTRAL FLORIDA PKWY**  
**RECOMMENDED**  
**SEGMENT 1**

SHEET NO.  
**119**



THIS PAGE LEFT BLANK INTENTIONALLY.



## Appendix B - **Public Involvement Documentation**





## *Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

719 S. Woodland Boulevard  
DeLand, FL 32720-6834

**JIM BOXOLD**  
SECRETARY

September 30, 2016

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E)  
Reevaluation Study  
From West of County Road (CR) 532 to West of the Beachline Expressway/State Road  
(SR) 528  
Osceola and Orange Counties  
Financial Project ID Number: 432100-1-22-01  
Design Project ID Number: 431561-1-32-01 (Osceola County)  
Design Project ID Number: 242484-8-32-01 (Orange County)  
Federal Aid Project Number: 0041-227-I

Dear Stakeholder,

On behalf of the Florida Department of Transportation (FDOT), I invite you to attend a public hearing for the "I-4 Beyond the Ultimate" PD&E Study. This study focuses on the concept of adding express lanes on Interstate 4 (I-4), from west of US 27 to west of Kirkman Road/State Road (SR) 435 to the west, and from east of SR 434 to east of SR 472 to the east; a distance of approximately 40 miles. At this meeting we will present the recommended design alternative for adding express lanes on the segment of I-4 from **west of CR 532 to west of the Beachline Expressway/SR 528** in Osceola and Orange Counties. This hearing is being conducted to give interested persons an opportunity to express their views concerning the location, conceptual design, and social, economic, and environmental effects of the proposed improvements.

The hearing will be Tuesday, October 25, 2016, from 5:30 p.m. to 7:30 p.m. at the Celebration Town Hall, located at 851 Celebration Avenue, Celebration, FL 34747. It will begin as an open house at 5:30 p.m. with a formal presentation at 6:00 p.m., followed by a public comment period.

Persons wishing to submit written statements, in place of or in addition to oral statements, may do so at the hearing or by sending them to Beata Stys-Palasz, P.E. at 719 South Woodland Boulevard, DeLand, Florida 32720, by phone 386-943-5418, or by email to [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us). All statements postmarked no later than November 4, 2016 will become a part of the public hearing record.

The draft environmental and engineering reports developed by the Department will be available for public review from October 4, 2016 through November 4, 2016 at the following locations:

1. The Osceola Public Library, West Branch, located at 305 Campus Street, Kissimmee, FL 34747
2. The study website - [www.i4express.com](http://www.i4express.com)



Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator by phone at 386-943-5367, or via email at [jennifer.smith2@dot.state.fl.us](mailto:jennifer.smith2@dot.state.fl.us).

Persons with disabilities who require special accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact Beata Stys-Palasz, P.E., by phone at 386-943-5418, or via email at [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us) at least seven (7) days prior to the hearing. If you are hearing or speech impaired, please contact us by using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice).

For information pertaining to this project, please contact Beata Stys-Palasz, P.E., FDOT Project Manager, by phone at 386-943-5418, or via email at [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us).

Sincerely,

A handwritten signature in blue ink that reads "Beata Stys-Palasz". The signature is written in a cursive style and is contained within a rectangular box.

Beata Stys-Palasz, P.E.  
FDOT Project Manager





## *Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

719 S. Woodland Boulevard  
DeLand, FL 32720-6834

**JIM BOXOLD**  
SECRETARY

September 30, 2016

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E)  
Reevaluation Study  
From West of County Road (CR) 532 to West of the Beachline Expressway/State Road (SR) 528  
Osceola and Orange Counties  
Financial Project ID Number: 432100-1-22-01  
Design Project ID Number: 431561-1-32-01 (Osceola County)  
Design Project ID Number: 242484-8-32-01 (Orange County)  
Federal Aid Project Number: 0041-227-I

Dear Government Partner,

On behalf of the Florida Department of Transportation (FDOT), I invite you to attend a public hearing for the "I-4 Beyond the Ultimate" PD&E Study. This study focuses on the concept of adding express lanes on Interstate 4 (I-4), from west of US 27 to west of Kirkman Road/State Road (SR) 435 to the west, and from east of SR 434 to east of SR 472 to the east; a distance of approximately 40 miles. At this meeting we will present the recommended design alternative for adding express lanes on the segment of I-4 from **west of CR 532 to west of the Beachline Expressway/SR 528** in Osceola and Orange Counties. This hearing is being conducted to give interested persons an opportunity to express their views concerning the location, conceptual design, and social, economic, and environmental effects of the proposed improvements.

The hearing will be Tuesday, October 25, 2016, from 5:30 p.m. to 7:30 p.m. at the Celebration Town Hall, located at 851 Celebration Avenue, Celebration, FL 34747. It will begin as an open house at 5:30 p.m. with a formal presentation at 6:00 p.m., followed by a public comment period.

Persons wishing to submit written statements, in place of or in addition to oral statements, may do so at the hearing or by sending them to Beata Stys-Palasz, P.E. at 719 South Woodland Boulevard, DeLand, Florida 32720, by phone 386-943-5418, or by email to [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us). All statements postmarked no later than November 4, 2016 will become a part of the public hearing record.

The draft environmental and engineering reports developed by the Department will be available for public review from October 4, 2016 through November 4, 2016 at the following locations:

1. The Osceola Public Library, West Branch, located at 305 Campus Street, Kissimmee, FL 34747
2. The study website - [www.i4express.com](http://www.i4express.com)



Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator by phone at 386-943-5367, or via email at [jennifer.smith2@dot.state.fl.us](mailto:jennifer.smith2@dot.state.fl.us).

Persons with disabilities who require special accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact Beata Stys-Palasz, P.E., by phone at 386-943-5418, or via email at [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us) at least seven (7) days prior to the hearing. If you are hearing or speech impaired, please contact us by using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice).

For information pertaining to this project, please contact Beata Stys-Palasz, P.E., FDOT Project Manager, by phone at 386-943-5418, or via email at [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us).

Sincerely,

Amy Sirmans, P.E.  
Project Development Manager





## *Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

719 S. Woodland Boulevard  
DeLand, FL 32720-6834

**JIM BOXOLD**  
SECRETARY

September 30, 2016

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study  
From West of County Road (CR) 532 to West of the Beachline Expressway/State Road (SR) 528  
Osceola and Orange Counties  
Financial Project ID Number: 432100-1-22-01  
Design Project ID Number: 431561-1-32-01 (Osceola County)  
Design Project ID Number: 242484-8-32-01 (Orange County)  
Federal Aid Project Number: 0041-227-I

Dear Elected Leader,

On behalf of the Florida Department of Transportation (FDOT), I invite you to attend a public hearing for the "I-4 Beyond the Ultimate" PD&E Study. This study focuses on the concept of adding express lanes on Interstate 4 (I-4), from west of US 27 to west of Kirkman Road/State Road (SR) 435 to the west, and from east of SR 434 to east of SR 472 to the east; a distance of approximately 40 miles. At this meeting we will present the recommended design alternative for adding express lanes on the segment of I-4 from **west of CR 532 to west of the Beachline Expressway/SR 528** in Osceola and Orange Counties. This hearing is being conducted to give interested persons an opportunity to express their views concerning the location, conceptual design, and social, economic, and environmental effects of the proposed improvements.

The hearing will be Tuesday, October 25, 2016, from 5:30 p.m. to 7:30 p.m. at the Celebration Town Hall, located at 851 Celebration Avenue, Celebration, FL 34747. It will begin as an open house at 5:30 p.m. with a formal presentation at 6:00 p.m., followed by a public comment period.

Persons wishing to submit written statements, in place of or in addition to oral statements, may do so at the hearing or by sending them to Beata Stys-Palasz, P.E. at 719 South Woodland Boulevard, DeLand, Florida 32720, by phone 386-943-5418, or by email to [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us). All statements postmarked no later than November 4, 2016 will become a part of the public hearing record.

The draft environmental and engineering reports developed by the Department will be available for public review from October 4, 2016 through November 4, 2016 at the following locations:

1. The Osceola Public Library, West Branch, located at 305 Campus Street, Kissimmee, FL 34747
2. The study website - [www.i4express.com](http://www.i4express.com)



Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator by phone at 386-943-5367, or via email at [jennifer.smith2@dot.state.fl.us](mailto:jennifer.smith2@dot.state.fl.us).

Persons with disabilities who require special accommodations under the Americans with Disabilities Act or persons who require translation services (free of charge) should contact Beata Stys-Palasz, P.E., by phone at 386-943-5418, or via email at [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us) at least seven (7) days prior to the hearing. If you are hearing or speech impaired, please contact us by using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice).

For information pertaining to this project, please contact Beata Stys-Palasz, P.E., FDOT Project Manager, by phone at 386-943-5418, or via email at [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us).

Sincerely,

Noranne Downs, P.E.  
FDOT District Five Secretary





# "BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM WEST OF CR 532 TO WEST OF THE BEACHLINE EXPRESSWAY/SR 528

Tuesday, October 25, 2016

Open House - 5:30 p.m. Formal Presentation - 6:00 p.m.

FPID: 432100-1-22-01



## Name (PLEASE PRINT)

## Mailing Address (PLEASE PRINT)

## E-mail or Phone Number

Bryan Weeks	431 Hammerstone Ave. Haines City, FL 33844	wbw917@gmail.com
Terre Zeigler	<del>3100</del> 16622 Lazy Breeze Loop, Clermont, FL 34714	sillenave@msn.com
Gladys Sanchez	3100 Parkway Blvd Ste. A Kissimmee, FL 34747	gilasan50@aol.com
Steve Nappinger	315 E. Robinson St, Orlando FL 32801	stevenappinger@ecocom.com
Steve Weiser	12650 International Dr Orlando FL 32821	mgr.06027@store.walgreens.com
Iris Timm	411 Campus St, Celebration, FL 34747	irtimm@gmail.com
Curt Busse	1230 Wright Cir Celebration FL 34747	curt@curtbusse.com
Major Mark Thompson	2601 E Zola Brownson Hwy Kissimmee, FL 34744	mtho22@secular.org
Fred Bailey	12545 SR 535, Orlando, FL <del>32836</del>	fubinfi@aol.com
DENIS PERSAUD	8200 <sup>Palm</sup> Parkway Orlando FL 32836	dpersaud@qualitysuitebvi.com
TREVOR DAVIES	1211 Stonecutter Drive, Unit 310, Celebration	daviestg@aol.com
Mare Reichert	8390 ChampionsGate Blvd Suite 104. 33896	mreichert@championsgate.com
Jon Martin	12402 Bohannon Blvd 32824	5407 898-1511
DONALD REGAN	5824 BEE RIDGE ROAD, PMB #240, SARASOTA, FL 34241	DONALD REGAN JR@MSN.COM
Jay Small	225 E Robinson St. Orlando. FL 32801	jsmall@mateosharbert.com
LESLIE EVANS	225 E Robinson St. Ste 600 Orlando 32801	LEvans@mateosharbert.com
BRIAN SMITH	200 South Orange Ave Suite 2200 ORL FL 32801	bsmith@bakerlaw.com
Chris Zeigler	16622 Lazy Breeze Loop, Clermont FL 34714	chris-zeigler@yahoo.com
NORM MORALES	3100 Parkway Blvd, Kissimmee, FL	NMORALES@GMAIL.COM
Richard D LePere Jr.	P.O. Box 101 Lake Buena Vista FL 32830	rlepere@rcid.org
	Reedy Creek Fire Dept	





# "BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

FROM WEST OF CR 532 TO WEST OF THE BEACHLINE EXPRESSWAY/SR 528

Tuesday, October 25, 2016

Open House - 5:30 p.m. Formal Presentation - 6:00 p.m.

FPID: 432100-1-22-01



Name (PLEASE PRINT)

Mailing Address (PLEASE PRINT)

E-mail or Phone Number

JOEDEL ZABALLERO

Cindy Brown

Glinda Schwiegerath

Jordan Rockefeller

Nancy Bryant

BRENDAN LYNE

John Classe

Penelope Shuman

Thomas Ping

Raymer Maguire

1 LOUWHOUSE SQ, SUITE 3100, KISSIMMEE, FL 34741

300 W. Plant Street, Winter Garden, FL 34787

8300 Vineland Ave, Orlando 32821

1581 BERWICK DRIVE, DAVENPORT, FL 33896

8200 Palmparkway, Orlando, FL

215 N. E. 2nd DR. ORLANDO, FL 32801

P.O. Box 10170, Lake Buena Vista FL 32830

1600 Parker Ave. Winterth

OCTRD

605 E. Robinson Street Orlando FL 32801

joezel.zaballero@osceola.org

Cindy.Brown@mail.house.gov

margqueenoperations@gmail.com

JordanRockefeller@yahoo.com

Nbryant@carterhospitalitygroupllc.com

Brendan.Lyne@lawless-law.com

Jclasse@rcid.org

p11ment@shumati.com

Thomas.Ping@ocfl.net





# "BEYOND I-4 ULTIMATE" PD&E REEVALUATION STUDY

## FROM WEST OF CR 532 TO WEST OF THE BEACHLINE EXPRESSWAY/SR 528

Tuesday, October 25, 2016

Open House - 5:30 p.m. Formal Presentation - 6:00 p.m.



### PROJECT TEAM MEMBERS

FPID: 432100-1-22-01

Name (PLEASE PRINT)	Mailing Address (PLEASE PRINT)	E-mail or Phone Number
Beata Stys-Palasz <i>MS</i>	FDOT, 719 S. Woodland Blvd, DeLand, FL	Beata.stys-palasz@dot.state.fl.us
Heather Johnstone <i>HJA</i>	FDOT, 719 S. Woodland Blvd, DeLand, FL	Heather.johnstone@dot.state.fl.us
Catalina Chacon	FDOT, 719 S. Woodland Blvd, DeLand, FL	Catalina.chacon@dot.state.fl.us
Luis Diaz <i>LD</i>	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	ldiaz@hntb.com
Robert Denney	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	rdenney@hntb.com
Colleen Jarrell <i>CJ</i>	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	cjarrell@hntb.com
Deepika Fields	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	dkfields@hntb.com
Camila Amaya <i>CA</i>	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	smoss@hntb.com
Sanam Rai <i>SR</i>	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	srai@hntb.com
Mark Bacal <i>MB</i>	HNTB, 610 Crescent Executive Ct, Suite 400, Lake Mary	mbacal@hntb.com
John Moore <i>JM</i>	Stantec, 615 Crescent Executive Ct, 248, Lake Mary	John.moore@stantec.com
Mike Drauer	Stantec, 615 Crescent Executive Ct, 248, Lake Mary	Mike.drauer@stantec.com
Michael Dollery	FDOT, 719 S. Woodland Blvd, DeLand, FL	Michael.dollery@dot.state.fl.us
Steve Olson	FDOT, 719 S. Woodland Blvd, DeLand, FL	Steve.olson@dot.state.fl.us
Brian Stanger	FDOT, 719 S. Woodland Blvd, DeLand, FL	Brian.Stanger@dot.state.fl.us
Amy Sirmans <i>AS</i>	FDOT, 719 S. Woodland Blvd, DeLand, FL	Amy.sirmans@dot.state.fl.us
Mary McGehee	FDOT, 719 S. Woodland Blvd, DeLand, FL	Mary.mcgehee@dot.state.fl.us
Jack Crahan	FPC Group, 101 N. Woodland Blvd, DeLand, FL	Jack@fpc-group.com
Jennifer Smith	FDOT, 719 S. Woodland Blvd, DeLand, FL	Jennifer.smith2@dot.state.fl.us





**FPID: 432100-1-22-01**

E-mail or Phone Number

Frank.odea@dot.state.fl.us

Jessica.keane@dot.state.fl.us

Jennifer.Horton@dot.state.fl.us

Loreen.Bobo@dot.state.fl.us

Jennifer.vreeland@dot.state.fl.us

JUDEE.Boland@dot.state.fl.us

DENNIS, KYLE@

lauren.clifton@dot.state.fl.us

Ashley.smith@dot.state.fl.us



1 I-4 BEYOND THE ULTIMATE  
2 PD&E REEVALUATION STUDY  
3 SEGMENT 1: FROM WEST OF CR 532 TO WEST OF SR 528  
4 FDOT PROJECT NUMBER: 432100-1-22-01

5 \_\_\_\_\_/

6 PUBLIC HEARING

7 DATE: OCTOBER 25, 2016

8 REPORTER: KAYLYN REINHOLD

9 PLACE: CELEBRATION TOWN HALL

10 851 CELEBRATION AVENUE

11 CELEBRATION FLORIDA, 34747

12

13

14

15

16

17

18

19

20

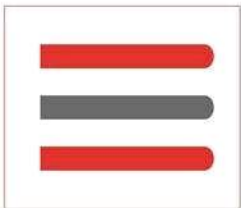
21

22

23

24

25





<p style="text-align: right;">2</p> <p>1                   <b>APPEARANCES</b></p> <p>2 BEATA STYS-PALASZ, P.E.</p> <p>3 FLORIDA DEPARTMENT OF TRANSPORTATION</p> <p>4</p> <p>5 COLLEEN JARRELL</p> <p>6 HNTB CORPORATION</p> <p>7</p> <p>8 BRENDAN LYNCH, ESQUIRE</p> <p>9 LOWNDES LAW FIRM</p> <p>10</p> <p>11 RAYMER MAGUIRE, ESQUIRE</p> <p>12 MAGUIRE LASSMAN, P.A.</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">4</p> <p>1                   <b>PROCEEDINGS</b></p> <p>2           <b>MS. STYS-PALASZ:</b> Good Evening. The Florida</p> <p>3 Department of Transportation would like to welcome</p> <p>4 you to the public hearing for the Interstate 4</p> <p>5 Beyond the Ultimate Project Development and</p> <p>6 Environment Study. My name is Beata Stys-Palasz. I</p> <p>7 am the project manager for the Florida Department of</p> <p>8 Transportation. This public hearing is relative to</p> <p>9 Financial Management Project Number 432100-1-22-01</p> <p>10 and Federal Aid Project Number 0041-227-I. The</p> <p>11 proposed improvement involves widening Interstate 4</p> <p>12 to ten lanes, with three general use lanes and two</p> <p>13 express lanes in each direction, from West of County</p> <p>14 Road 532 to West of State Road 528, Beachline</p> <p>15 Expressway. This hearing is being held to provide</p> <p>16 you with the opportunity to comment on this project.</p> <p>17 Here with me tonight is Luis Diaz, the consultant</p> <p>18 project manager from the back, also Pedro Johnston,</p> <p>19 who is the design project manager for this section,</p> <p>20 and of course, other representatives from the FDOT</p> <p>21 and consultant project team. At this time, we would</p> <p>22 like to recognize any federal, state, county, or</p> <p>23 city officials who might be present tonight. Are</p> <p>24 there any officials who would like to be recognized?</p> <p>25 We will begin the presentation right now, starting</p>
<p style="text-align: right;">3</p> <p>1                   <b>STIPULATION</b></p> <p>2       THE PUBLIC HEARING HELD AT CELEBRATION</p> <p>3 TOWN HALL,</p> <p>4 851 CELEBRATION AVENUE, CELEBRATION FLORIDA,</p> <p>5 34747 ON</p> <p>6 TUESDAY THE 25TH DAY OF OCTOBER, 2016 AT</p> <p>7 APPROXIMATELY</p> <p>8 <b>6:01 P.M., WAS TAKEN PURSUANT TO THE FLORIDA</b></p> <p>9 <b>RULES OF</b></p> <p>10 <b>CIVIL PROCEDURE.</b></p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">5</p> <p>1       with a short safety -- pedestrian safety and</p> <p>2 bicycle safety educational movie.</p> <p>3       (VIDEO)</p> <p>4 <b>RECORDING:</b> The State of Florida Department of</p> <p>5 Transportation, also known as FDOT, would to welcome you</p> <p>6 to the Public Hearing for the Interstate 4 Beyond the</p> <p>7 Ultimate Project Development and Environment Study. This</p> <p>8 public hearing is being held relative to FDOT Financial</p> <p>9 Project ID Number 432100-1-22-01 and Federal Aid Project</p> <p>10 Number 0041-227-I. This public hearing was advertised</p> <p>11 consistent with federal and state requirements and is</p> <p>12 being conducted consistent with the Americans with</p> <p>13 Disabilities Act of 1990. Advertisements for this</p> <p>14 public hearing included letters to elected and agency</p> <p>15 officials, letters to property owners, newspaper ads,</p> <p>16 notifying local media, and advertising in the Florida</p> <p>17 Administrative Register. The Florida Department of</p> <p>18 Transportation is required to comply with various</p> <p>19 nondiscrimination laws and regulations, including Title</p> <p>20 VI of the Civil Rights Act of 1964. This hearing is</p> <p>21 being held to give all interested persons the right to</p> <p>22 understand the project and comment on their concerns to</p> <p>23 the department. Public participation at this hearing is</p> <p>24 solicited without regard to race, color, national</p> <p>25 origin, age, sex, religion, disability, or family</p>



**MILESTONE | REPORTING COMPANY**

TOMORROW'S TECHNOLOGY TODAY

407.423.9900

[www.MILESTONEREPORTING.com](http://www.MILESTONEREPORTING.com)

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-12



<p style="text-align: right;">6</p> <p>1 status. Persons wishing to express their concerns about  2 Title VI may do so by contacting the individuals listed  3 on this slide, which is also provided in the project  4 newsletter and on a board displayed at this hearing. The  5 proposed improvement involves adding express lanes on I-  6 4, from US 27 to Kirkman Road to the west and from State  7 Road 434 to State Road 472 to the east. The purpose of  8 this public hearing is to share information with the  9 general public about the alternatives under  10 consideration, the proposed improvements, and their  11 potential environmental impacts. This public hearing  12 also serves as an official forum providing an  13 opportunity to the public to express their opinions and  14 concerns regarding the location, conceptual design; and  15 potential social, economic, and environmental effects of  16 the proposed improvement on the community. There is a  17 court reporter present at this hearing and tonight's  18 proceedings are being recorded. An official transcript  19 of the hearing will be produced. Following this  20 presentation, the floor will be open for public  21 comments. All written material received at this public  22 hearing and at the Florida Department of Transportation  23 office, postmarked no later than November 4, 2016 or  24 through the project website, will become a part of the  25 public record for this hearing. The Project Development</p>	<p style="text-align: right;">8</p> <p>1 is approximately fourteen miles in length and is located  2 in Osceola and Orange County. An environmental  3 assessment was prepared and submitted to the Federal  4 Highway Administration, or FHWA, and received a Finding  5 of No Significant Impact in December 1999. The current  6 reevaluation is being completed to document any changes  7 in design and design criteria, and impacts to social,  8 cultural, physical, and the natural environment. The  9 MetroPlan Orlando Metropolitan Planning Organization  10 works with the Florida Department of Transportation and  11 local governments to fund and implement projects  12 identified through various plans developed by the MPO.  13 It should be noted that the I-4 Beyond the Ultimate,  14 Segment 1, was ranked number two on the MetroPlan  15 Orlando priority list, adopted September 14, 2016. This  16 project segment is identified on the MetroPlan Orlando  17 2040 Long Range Transportation Plan. The project is  18 consistent with the State Transportation Improvement  19 Program and the Transportation Element of the Orange  20 County and Osceola County Comprehensive Plans. The  21 purpose of this study is to accommodate future traffic  22 needs based on anticipated population and employment  23 growth and enhance safety and mobility along the study  24 corridor. The original PD&amp;E study included special use  25 or high occupancy vehicle or HOV lanes in the median.</p>
<p style="text-align: right;">7</p> <p>1 and Environment Study or PD&amp;E is the second step of the  2 project development process that the Florida Department  3 of Transportation follows to evaluate social, cultural,  4 economic, and environmental impacts associated with a  5 planned transportation improvement project. The PD&amp;E  6 process was established by the FDOT as the state's  7 procedure for complying with the National Environmental  8 Policy Act, or NEPA, of 1969 and Florida statutes. NEPA  9 is a United States environmental law that requires  10 federal agencies to assess the environmental effects of  11 their proposed actions prior to making decisions. This  12 phase involves the preparation of all preliminary  13 engineering and environmental documentation required for  14 study approval and subsequent funding. During a PD&amp;E  15 Study, several alternatives are developed to meet the  16 purpose and need for the project. These alternatives  17 are developed with input from the public, local  18 government, and environmental agencies throughout the  19 study process. Keeping the public involved and informed  20 throughout the study is paramount to the success of a  21 PD&amp;E study. This study is a reevaluation of a PD&amp;E  22 study that was previously done 14 to 17 years ago. The  23 original study covered the same project limits as the  24 current study: the segment of Interstate 4 between  25 County Road 532 and State Road 528. The study corridor</p>	<p style="text-align: right;">9</p> <p>1 This reevaluation includes six general use lanes, three  2 in each direction, and four express lanes, two in each  3 direction. The widening of I-4 proposed to meet the  4 design year 2040 projected traffic volumes. The goal of  5 the project is to maintain acceptable levels of service  6 along the corridor for the design year 2040. Levels of  7 service are measured on an "A" through "F" grading scale  8 with "A" being the best and "F" failing. Drivers will  9 experience levels of services "E" and "F" under the  10 "original build" condition in the design year 2040 along  11 some portions of the corridor. Levels of service can be  12 improved to "D" or better with the express lanes  13 widening improvements of the recommended "build"  14 alternative. Typical sections are detailed cross  15 section depictions of a roadway's principal elements  16 that are standard between certain segment limits and  17 show typical conditions only. The existing typical  18 section for the I-4 mainline consists of three 12-foot  19 travel lanes in each direction. The outside and inside  20 shoulders are 12 feet wide with ten feet paved. A  21 guardrail is provided on the inside shoulder of the  22 eastbound and westbound lanes, in varying locations  23 throughout the segment. The roadways are separated by a  24 grass median which varies in width from 55 feet to 340  25 feet. The existing right-of-way widens within portions</p>



**MILESTONE | REPORTING COMPANY**

TOMORROW'S TECHNOLOGY TODAY

**CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602**

**407.423.9900**

**www.MILESTONEREPORTING.com**

**Toll Free 855-MYDEPOS**

B-13



<p style="text-align: right;">10</p> <p>1 of the segment with collector-distributor or C-D roads  2 or braided ramp systems along the corridor. The  3 following is a summary of coordination, meetings, and  4 presentations held with local agencies and stakeholders  5 to discuss the study which includes Orange County,  6 Osceola County, MetroPlan Orlando, Florida's Turnpike  7 Enterprise, Reedy Creek Improvement District, and many  8 other stakeholders. A project website,  9 www.i4express.com, was developed to allow the public to  10 communicate with the study team and provide comments. An  11 Alternatives Public Meeting was held on June 17, 2014.  12 47 members of the public attended this meeting. No  13 written comments were received. Public input from these  14 meetings has factored into the study decision making  15 process. Today's hearing will provide the public with  16 another opportunity to comment on the proposed  17 improvements under consideration. A "no-build" and  18 "build" alternative are being considered as part of this  19 PD&amp;E study. The "no-build" alternative maintains the  20 existing facility as-is. No improvements are made and  21 there is no congestion relief along the corridor. The  22 "no-build" alternative is also evaluated as a  23 baseline for comparison with the "build" alternative.  24 We will now discuss the recommended "build" alternative  25 which proposes to widen Interstate 4 to ten lanes with</p>	<p style="text-align: right;">12</p> <p>1 crossings, or other features. The proposed horizontal  2 alignment of I-4 Segment 1 closely follows the existing  3 I-4 alignment. Right-of-way will be required for the  4 roadway mainline and interchange improvements, storm  5 water management facilities, and floodplain compensation  6 sites. The total anticipated right-of-way impacts  7 involve full or partial acquisition of 125 parcels for  8 the total of approximately 188 acres. The recommended  9 alternative for the County Road 532 Interchange proposes  10 a Diverging Diamond Interchange, also known as DDI. A  11 DDI is designed so that each direction of traffic is  12 split and crosses over itself. The traffic will  13 temporarily drive on the opposite side of the roadway  14 and cross back over on the other side of the  15 interchange. In order to avoid wrong way movements  16 through this type of interchange, the opposite  17 directions of the roadway are intersected at an angle  18 that is large enough to appear to the driver as if they  19 are making a through movement and that the other side of  20 the roadway is an intersecting street. The existing  21 single lane off ramps will diverge into four lanes,  22 accommodating dual left turn lanes and dual right lanes  23 onto County Road 532. The recommended alternative for  24 State Road 429 proposes leaving the overall existing  25 horizontal geometry as it is, in a three-leg directional</p>
<p style="text-align: right;">11</p> <p>1 five lanes in each direction: three general use lanes  2 and two express lanes. An evaluation matrix comparing  3 the "no-build" alternative with the recommended roadway  4 "build" alternative is on display here tonight. In  5 general, the proposed typical section consists of two  6 12-foot wide express lanes with four-foot inside and  7 ten-foot outside shoulders and three 12-foot wide  8 general use lanes with ten-foot inside and 12-foot  9 outside shoulders, in each direction. A two-foot wide  10 barrier wall separates the general use from the express  11 lanes. The minimum right-of-way width required to  12 accommodate this typical section is 300 feet. A 44-foot  13 rail corridor is preserved within the median throughout  14 the corridor. While the overall typical section remains  15 consistent throughout Segment 1, there are some areas  16 along the Segment 1 corridor that will have "special  17 sections." "Special" cross sections were developed to  18 meet the needs of the project due to right-of-way  19 constraints, existing utility easements, or other design  20 considerations along the corridor. These special  21 sections many include C-D roads, braided ramp systems,  22 elevated express lanes, or elevated general use lanes.  23 Additionally, the median width may vary in certain  24 locations to accommodate changes in the horizontal  25 alignment due to crossroad support structures, water</p>	<p style="text-align: right;">13</p> <p>1 interchange configuration. Each of the general use lane  2 ramps would remain the same, with new ramps being added  3 to provide connections to the express lanes in each  4 direction. No additional right-of-way will need to be  5 purchased in order to construct this alternative. The  6 recommended alternative for the World Drive Interchange  7 proposes leaving the overall existing horizontal  8 geometry as it is, in a partial cloverleaf  9 configuration. The existing I-4 eastbound and westbound  10 on and off ramps will continue to connect to the  11 eastbound and westbound C-D roads, respectively. Ramp  12 connections between the general use lane and express  13 lanes will be provided east of World Drive. No  14 additional right-of-way will need to be purchased in  15 order to construct this alternative. The recommended  16 alternative for the State Road 417 Interchange proposes  17 leaving the overall existing horizontal geometry as it  18 is, in a partial interchange junction configuration.  19 Direct connections from State Road 417 to the express  20 lanes will be provided. The existing State Road 417  21 Southbound bridge over I-4 will be replaced due to  22 conflicts with the existing substructure and the  23 proposed I-4 widening. No additional right-of-way will  24 need to be purchased in order to construct this  25 alternative. The recommended alternative for the US</p>



**MILESTONE | REPORTING COMPANY**

TOMORROW'S TECHNOLOGY TODAY

407.423.9900

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-14



<p style="text-align: right;">14</p> <p>1 192/State Road 530 Interchange proposes leaving the  2 overall existing horizontal geometry as it is, in a  3 partial cloverleaf interchange configuration. All of  4 the existing ramp connections will be maintained, with  5 some minor modifications. No additional right-of-way  6 will need to be purchased in order to construct this  7 alternative. The recommended alternative for the  8 Osceola Parkway Interchange proposes leaving the  9 interchange a partial cloverleaf configuration with the  10 braided ramp system between Osceola Parkway and State  11 Road 535. Bonnet Creek will be realigned in order to  12 move the I-4 bridges out from underneath the Osceola  13 Parkway bridges. This will result in numerous new  14 bridge structures. The I-4 eastbound to Osceola Parkway  15 eastbound movement will be modified to be a free flow  16 ramp, removing the existing stop condition. A ramp will  17 also be provided from the I-4 eastbound express lane to  18 Osceola Parkway eastbound. Additional right-of-way will  19 need to be purchased in order to construct this  20 alternative. The recommended alternative for the State  21 Road 536 Interchange proposes leaving the overall  22 existing horizontal geometry as it, in a partial  23 cloverleaf interchange configuration. Existing ramp  24 configurations will remain, with some minor  25 modifications. New ramps will be added from the I-4</p>	<p style="text-align: right;">16</p> <p>1 enhanced to accommodate storm water runoff from the  2 proposed roadway improvements. The storm water  3 management systems, proposed by this study, have been  4 designed to meet the current requirements of the  5 Southwest Florida Water Management District, South  6 Florida Water Management District, the Reedy Creek  7 Improvement District, and the Florida Department of  8 Transportation. Storm water treatment will be provided  9 in wet detention ponds and dry retention ponds, located  10 on or off-site. The treatment facilities and locations  11 are on exhibit here this evening, as well as in the  12 documents on display. In accordance with current FDOT  13 standards for road and bridge construction, all best  14 management practices for erosion control and water  15 quality considerations will be adhered to during the  16 construction phase of the project. Pond siting  17 evaluation criteria were developed to screen the various  18 potential pond sites. Each of the criteria are  19 evaluated for impacts which are then used for comparison  20 in order to identify overall suitability and select  21 recommended ponds. Design criteria as set forth by the  22 Southwest Florida Water Management District, South  23 Florida Water Management District, the Reedy Creek  24 Improvement District, and FDOT was used to determine  25 pond siting. The recommended pond sites for this study</p>
<p style="text-align: right;">15</p> <p>1 express lanes to State Road 536 eastbound and westbound.  2 Additional right-of-way will need to be purchased in  3 order to construct this alternative. The recommended  4 alternative for the State Road 535 Interchange proposes  5 a modified diamond interchange configuration. This  6 alternative includes grade separation with a loop ramp  7 at Hotel Plaza Boulevard, grade separation at Vineland  8 Avenue, and additional improvements at the Palm Parkway  9 and Meadow Creek Drive intersections. Additional right-  10 of-way will need to be purchased in order to construct  11 this alternative. The recommended alternative for the  12 Daryl Carter Parkway Interchange proposes a Diverging  13 Diamond Interchange, DDI. New ramps will be added to  14 this interchange via a C-D system in the westbound  15 direction and braided ramps in the eastbound direction.  16 Additional right-of-way will need to be purchased in  17 order to construct this alternative. The recommended  18 alternative for the Central Florida Parkway Interchange  19 proposes modifying the existing partial interchange into  20 a diamond interchange with a flyover ramp. This will  21 include the addition of an I-4 eastbound on ramp from  22 Central Florida Parkway and an off ramp from I-4  23 westbound to Central Florida Parkway. Additional right-  24 of-way will need to be purchased in order to construct  25 this alternative. The existing drainage systems will be</p>	<p style="text-align: right;">17</p> <p>1 are labeled and illustrated on the design concept boards  2 on display. To comply with various executive orders and  3 other federal and state requirements, engineering and  4 environmental information was reviewed and evaluated to  5 determine if there were any substantial impacts to  6 social and economic, cultural, physical, and natural  7 resources that may result from construction of the  8 proposed improvements. The project improvements will  9 have positive socioeconomic impacts on the study area as  10 it improves mobility and relieves congestion. An  11 archaeological survey was performed within the existing  12 and proposed right-of-way. The results indicate that  13 there is one artifact, not surrounded by an additional  14 cultural material, within the study limits. The  15 isolated artifact represents an archaeological  16 occurrence, and as such, is not eligible for listing on  17 the National Register of Historic Places. The  18 architectural survey resulted in the identification of  19 one historic structure, one historic cemetery, and one  20 historic linear resource constructed before 1971 located  21 within Segment 1 of the I-4 APE. All three resources  22 lack the architectural distinction and significant  23 historical associations necessary to be considered for  24 listing in the National Register of Historic Places and  25 are recommended ineligible. No adverse effects to</p>



**MILESTONE | REPORTING COMPANY**

TOMORROW'S TECHNOLOGY TODAY

407.423.9900

[www.MILESTONEREPORTING.com](http://www.MILESTONEREPORTING.com)

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-15



<p style="text-align: right;">18</p> <p>1 cultural resources are anticipated. The project was  2 evaluated in accordance with Executive Order 11990  3 entitled "Protection of Wetlands." There are  4 approximately 112.94 acres of direct wetland impacts and  5 45.99 acres of jurisdictional other surface water  6 impacts associated with the recommended alternative.  7 This project was evaluated for impacts to wildlife and  8 habitat resources, including protected species, in  9 accordance with Title 50 Code of Federal Regulations  10 Part 402 of the Endangered Species Act of 1973, as  11 amended. The proposed I-4 Segment 1 project has either  12 a "No effect," "Not Likely to Adversely Affect," or "May  13 Affect but not Likely to Adversely Affect" determination  14 for all federally or state listed species that may be  15 impacted by the project, with the exception of the Sand  16 Skink and Scrub Lupine. A biological opinion with  17 conservation measures to address the impacts to these  18 species was issued, and is available here with the  19 documents on display. To avoid and/or minimize impacts  20 to wildlife, FDOT will continue to coordinate with the  21 U.S. Fish and Wildlife Service and the Florida Fish and  22 Wildlife Conservation Commission. FDOT will also  23 conduct monitoring and assessment for specific species  24 during the permitting phase. The proposed storm water  25 facilities will be designed to meet the current</p>	<p style="text-align: right;">20</p> <p>1 evaluated to determine if impacts would occur as a  2 result of the proposed improvements. 86 potential  3 contamination sites have been identified. One of the  4 site is rated as a high risk, seven are medium risk, and  5 78 are rated no risk or low risk of potential  6 contamination. Additionally, of the 89 potential pond  7 sites, none were rated as high risk, 11 were rated as  8 medium risk, and 78 were rated as low risk. An Air  9 Quality Analysis was performed on the project. The  10 analysis was conducted using the established FDOT Air  11 Quality Screening Model. Air quality impacts are not  12 expected to occur as a result of this project. Right-  13 of-way acquisition is anticipated for the recommended  14 alternative for roadway and drainage improvements.  15 Approximately 53 acres of additional right-of-way is  16 anticipated for roadway improvements and approximately  17 135 acres of additional right-of-way is anticipated for  18 off-site ponds. In addition, there is a potential for  19 12 relocations involving commercial properties. These  20 anticipated relocations are displayed on the aerials  21 available at tonight's hearing. No residential  22 relocations are anticipated. All right-of-way  23 acquisition will be conducted in accordance with the  24 Federal Uniform Relocation Assistance and Real Property  25 Acquisition Act of 1970 and FDOT Real Estate Acquisition</p>
<p style="text-align: right;">19</p> <p>1 requirements of the Southwest Florida Water Management  2 District, the South Florida Water Management District,  3 and the Reedy Creek Improvement District. Storm water  4 treatment will be provided by wet detention and dry  5 retention ponds, located on or off-site. The pond  6 locations are on exhibit here this evening, as well as  7 in the documents on display. In accordance with  8 Executive Order 11988 entitled "Floodplain Management,"  9 a floodplain analysis was performed. Floodplain impacts  10 are anticipated. There are a total of ten basins that  11 impact the 100-year floodplain for approximately 90  12 acre-feet of floodplain impacts. 13 existing and  13 proposed floodplain compensation ponds provide  14 compensation for the floodplain impacts. Traffic noise  15 impacts were evaluated in accordance with the Code of  16 Federal Regulation, Part 772. Based on the results of a  17 noise barrier evaluation, three noise barriers are  18 recommended for further consideration on this segment of  19 the project along the west side of I-4, near the Tuscan  20 Resort Orlando and the Integra Cove Apartments, and  21 along the east side of I-4 near the Altis Sand Lake  22 Apartments. The recommended barriers provide the best  23 noise abatement and meet the requirements as reasonable  24 and cost feasible. Potentially contaminated sites in  25 the vicinity of the project corridor were identified and</p>	<p style="text-align: right;">21</p> <p>1 Process. Right-of-way requirements for the project are  2 on display here tonight. One of the unavoidable  3 consequences on a project such as this is the necessary  4 relocation of families or businesses. On this project,  5 we anticipate the relocation of three families and one  6 business. All right-of-way acquisition will be  7 conducted in accordance with the Federal Uniform  8 Relocation Assistance and Real Property Acquisition  9 Policies Act of 1970, commonly known as the Uniform Act.  10 If you are required to make any type of move as a result  11 of a Department of Transportation project, you can  12 expect to be treated in a fair and helpful manner and in  13 compliance with the Uniform Relocation Assistance Act.  14 If a move is required, you will be contacted by an  15 appraiser who will inspect your property. We encourage  16 you to be present during your inspection and provide  17 information about the value of your property. You may  18 also be eligible for relocation advisory services and  19 payment benefits. If you are being moved and you are  20 unsatisfied with the department's determination of your  21 eligibility for payment of the amount of that payment,  22 you may appeal that determination. You will be promptly  23 furnished necessary forms and notified of the procedures  24 to be followed in making that appeal. A special word of  25 caution -- if you move before you receive notification</p>



**MILESTONE | REPORTING COMPANY**

TOMORROW'S TECHNOLOGY TODAY

407.423.9900

[www.MILESTONEREPORTING.com](http://www.MILESTONEREPORTING.com)

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-16



<p style="text-align: right;">22</p> <p>1 of the relocation benefits that you might be entitled  2 to, your benefits may be jeopardized. The relocation  3 specialists who are supervising this program are here  4 tonight. They will be happy to answer your questions  5 and will also furnish you with copies of relocation  6 assistance brochures. The estimated total cost for the  7 recommended alternative will be approximately \$2.2  8 billion. This includes \$1.6 billion for construction  9 and utility relocations, \$428 million for right-of-way  10 acquisition for roadway and pond improvements, and \$17  11 million for permitting, and \$126 million for  12 construction engineering and inspection. Over the next  13 two months, FDOT will continue to finalize the analysis  14 and will seek to approve the documents and improvements  15 presented here at tonight's public hearing. Following  16 approval, FDOT will continue with the design, right-of-  17 way acquisition, and construction phases. This project  18 is currently not funded for construction. The study is  19 anticipated to be completed in November 2016. The  20 design is fully-funded for this segment of I-4. Draft  21 documents for this public hearing were available for  22 review starting October 4, 2016 and will remain on  23 display until November 4, 2016 at the Osceola Public  24 Library, West Branch and also on the study website,  25 www.i4express.com. These documents are also on display</p>	<p style="text-align: right;">24</p> <p>1 does anyone else?  2 <b>MS. STYS-PALASZ:</b> We have an error in the  3 script and I would like to correct. We do not have  4 residential relocation. We have five relocation  5 involving only commercial properties. Thank you.  6 <b>MS. JARRELL:</b> Okay. So I have two comments.  7 We'll start with Brendan Lynch.  8 <b>MR. LYNCH:</b> It's always good to have an  9 audience. My statements are just twofold. My name  10 is Brendan Lynch. I'm at the Lowndes Law Firm, and  11 we have been working with DOT for some of this  12 project, discussing with them two questions for DOT  13 that we want to make sure are on the record. One is  14 whether FDOT has considered the impact on loss of  15 jobs, particularly in the Crossroads area where the  16 restaurants are being closed. That's one. The  17 second is whether FDOT has considered the loss of  18 revenue to the state and localities through sale of  19 revenue tax, property tax revenue, et cetera, again,  20 due to the loss of those properties, particularly at  21 Crossroads.  22 <b>MS. JARRELL:</b> Thank you. And then Mr. Maguire?  23 <b>MR. MAGUIRE:</b> My name is Raymer Maguire and I  24 represent this 38-acre parcel here, and it looks  25 like you-all are taking about five-and-a-half acres.</p>
<p style="text-align: right;">23</p> <p>1 here tonight. No final decisions will be made until  2 after we review your comments. You may provide your  3 comments in several ways. You may provide an oral  4 statement to the court reporter present here tonight.  5 Complete a speaker card and make an oral statement at  6 the microphone during the public comment period.  7 Complete a comment form and drop it in the comment box  8 provided here at the hearing or mail your comments to  9 the FDOT project manager at the address shown on the  10 comment form. You may e-mail your comments to the FDOT  11 at the address shown on the comment form or visit the  12 project website and submit comments electronically.  13 There is a dedicated page on the website for comments.  14 All written material received at this public hearing and  15 at the Florida Department of Transportation office,  16 postmarked no later than ten days following the date of  17 this public hearing or through the project website, will  18 become a part of the public record for this hearing.  19 This concludes our presentation. Thank you.  20 <b>MS. JARRELL:</b> We will now take a brief break.  21 If anybody wants to make a public statement, please  22 ask for a comment or a speaker card, and we'll fill  23 those out and can come -- in the order that I  24 receive them back, you can come up and give your  25 public statement for the record. Does anybody --</p>	<p style="text-align: right;">25</p> <p>1 And we've got individuals that want to go ahead and  2 start building on this 38 acres. Is the DOT got a  3 time table when they publicly will commit that they  4 are not going to take more land than this five-and-  5 a-half acres represented by the crosshatching?  6 <b>MS. STYS-PALASZ:</b> We will finalize our right-  7 of-way maps in -- when the right-of-way maps will be  8 ready?  9 <b>MS. JARRELL:</b> End of the next year.  10 <b>MS. STYS-PALASZ:</b> End of the next year -- that  11 will be the time frame we can make a commitment.  12 <b>MR. MAGUIRE:</b> 2017, right?  13 <b>MS. STYS-PALASZ:</b> Yes, sir.  14 <b>MS. JARRELL:</b> Is that? Okay. Thank you. No  15 other public statements? Okay. Seeing none, we  16 will close the public hearing portion. And then we  17 can go back to the display areas. If anyone has any  18 questions, there are plenty of team members to  19 address those. We've got comment forms. If you  20 please leave those, everybody who provides a comment  21 will receive a response from the department. Thank  22 you.  23 (PUBLIC HEARING CONCLUDED AT 6:40 P.M.)  24  25</p>



**MILESTONE | REPORTING COMPANY**

TOMORROW'S TECHNOLOGY TODAY

407.423.9900

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-17



26

1 C E R T I F I C A T E

2

3 STATE OF FLORIDA)

4 COUNTY OF ORANGE)

5

6 I, KAYLYN REINHOLD , Court Reporter and Notary

7 Public for the State of Florida at Large, do hereby

8 certify that I was authorized to and did report the

9 foregoing proceeding, and that said transcript is a true  
10 record of the testimony given by the witness.

11

12 I FURTHER CERTIFY that I am not of counsel for,

13 related to, or employed by any of the parties or

14 attorneys involved herein, nor am I financially

15 interested in said action.

16

17 Submitted on: November 4, 2016

18

19

20

21 KAYLYN REINHOLD

22 Court Reporter, Notary Public

23

24

25



407.423.9900

**MILESTONE | REPORTING COMPANY**

TOMORROW'S TECHNOLOGY TODAY

[www.MILESTONEREPORTING.com](http://www.MILESTONEREPORTING.com)

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-18



<hr/> \$ <hr/> <b>\$1.6</b> 22:8 <b>\$126</b> 22:11 <b>\$17</b> 22:10 <b>\$2.2</b> 22:7 <b>\$428</b> 22:9 <hr/> 0 <hr/> <b>0041-227-I</b> 4:10 5:10 <hr/> 1 <hr/> <b>1</b> 1:3 8:14 11:15,16 12:2 17:21 18:11 <b>100-year</b> 19:11 <b>11</b> 20:7 <b>112.94</b> 18:4 <b>11988</b> 19:8 <b>11990</b> 18:2 <b>12</b> 9:20 20:19 <b>125</b> 12:7 <b>12-foot</b> 9:18 11:6,7,8 <b>13</b> 19:12 <b>135</b> 20:17 <b>14</b> 7:22 8:15 <b>17</b> 7:22 10:11 <b>188</b> 12:8 <b>192/State</b> 14:1 <b>1964</b> 5:20 <b>1969</b> 7:8 <b>1970</b> 20:25 21:9	<b>1971</b> 17:20 <b>1973</b> 18:10 <b>1990</b> 5:13 <b>1999</b> 8:5 <hr/> 2 <hr/> <b>2014</b> 10:11 <b>2016</b> 1:7 3:4 6:23 8:15 22:19,22,23 26:17 <b>2017</b> 25:12 <b>2040</b> 8:17 9:4,6,10 <b>25</b> 1:7 <b>25TH</b> 3:4 <b>27</b> 6:6 <hr/> 3 <hr/> <b>300</b> 11:12 <b>340</b> 9:24 <b>34747</b> 1:11 3:3 <b>38</b> 25:2 <b>38-acre</b> 24:24 <hr/> 4 <hr/> <b>4</b> 4:4,11 5:6 6:6,23 7:24 10:25 22:22,23 26:17 <b>402</b> 18:10 <b>417</b> 13:16,19,20 <b>429</b> 12:24 <b>432100-1-22-01</b>	1:4 4:9 5:9 <b>434</b> 6:7 <b>44-foot</b> 11:12 <b>45.99</b> 18:5 <b>47</b> 10:12 <b>472</b> 6:7 <hr/> 5 <hr/> <b>50</b> 18:9 <b>528</b> 1:3 4:14 7:25 <b>53</b> 20:15 <b>530</b> 14:1 <b>532</b> 1:3 4:14 7:25 12:9,23 <b>535</b> 14:11 15:4 <b>536</b> 14:21 15:1 <b>55</b> 9:24 <hr/> 6 <hr/> <b>6:01</b> 3:5 <b>6:40</b> 25:23 <hr/> 7 <hr/> <b>772</b> 19:16 <b>78</b> 20:5,8 <hr/> 8 <hr/> <b>851</b> 1:10 3:3 <b>86</b> 20:2 <b>89</b> 20:6 <hr/> 9 <hr/> <b>90</b> 19:11	<hr/> A <hr/> <b>abatement</b> 19:23 <b>acceptable</b> 9:5 <b>accommodate</b> 8:21 11:12,24 16:1 <b>accommodating</b> 12:22 <b>accordance</b> 16:12 18:2,9 19:7,15 20:23 21:7 <b>acquisition</b> 12:7 20:13,23,25 21:6,8 22:10,17 <b>acre-feet</b> 19:12 <b>acres</b> 12:8 18:4,5 20:15,17 24:25 25:2,5 <b>Act</b> 5:13,20 7:8 18:10 20:25 21:9,13 <b>action</b> 26:15 <b>actions</b> 7:11 <b>added</b> 13:2 14:25 15:13 <b>adding</b> 6:5 <b>addition</b> 15:21 20:18 <b>additional</b> 13:4,14,23 14:5,18 15:2,8,9,16,23
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-19



17:13 20:15,17 <b>Additionally</b> 11:23 20:6 <b>address</b> 18:17 23:9,11 25:19 <b>adhered</b> 16:15 <b>Administration</b> 8:4 <b>Administrative</b> 5:17 <b>adopted</b> 8:15 <b>ads</b> 5:15 <b>adverse</b> 17:25 <b>Adversely</b> 18:12,13 <b>advertised</b> 5:10 <b>Advertisements</b> 5:13 <b>advertising</b> 5:16 <b>advisory</b> 21:18 <b>aerials</b> 20:20 <b>Affect</b> 18:12,13 <b>age</b> 5:25 <b>agencies</b> 7:10,18 10:4 <b>agency</b> 5:14 <b>ago</b> 7:22 <b>a-half</b> 25:5 <b>ahead</b> 25:1 <b>Aid</b> 4:10 5:9 <b>Air</b> 20:8,10,11 <b>alignment</b> 11:25	12:2,3 <b>allow</b> 10:9 <b>alternative</b> 9:14 10:18,19,22,23 ,24 11:3,4 12:9,23 13:5,6,15,16,2 5 14:7,20 15:3,4,6,11,17 ,18,25 18:6 20:14 22:7 <b>alternatives</b> 6:9 7:15,16 10:11 <b>Altis</b> 19:21 <b>am</b> 4:7 26:12,14 <b>amended</b> 18:11 <b>Americans</b> 5:12 <b>amount</b> 21:21 <b>analysis</b> 19:9 20:9,10 22:13 <b>and/or</b> 18:19 <b>angle</b> 12:17 <b>answer</b> 22:4 <b>anticipate</b> 21:5 <b>anticipated</b> 8:22 12:6 18:1 19:10 20:13,16,17,20 ,22 22:19 <b>anybody</b> 23:21,25 <b>anyone</b> 24:1 25:17	<b>Apartments</b> 19:20,22 <b>APE</b> 17:21 <b>appeal</b> 21:22,24 <b>appear</b> 12:18 <b>APPEARANCES</b> 2:1 <b>appraiser</b> 21:15 <b>approval</b> 7:14 22:16 <b>approve</b> 22:14 <b>approximately</b> 3:4 8:1 12:8 18:4 19:11 20:15,16 22:7 <b>archaeological</b> 17:11,15 <b>architectural</b> 17:18,22 <b>area</b> 17:9 24:15 <b>areas</b> 11:15 25:17 <b>artifact</b> 17:13,15 <b>as-is</b> 10:20 <b>assess</b> 7:10 <b>assessment</b> 8:3 18:23 <b>assistance</b> 20:24 21:8,13 22:6 <b>associated</b> 7:4 18:6 <b>associations</b> 17:23	<b>attended</b> 10:12 <b>attorneys</b> 26:14 <b>audience</b> 24:9 <b>authorized</b> 26:8 <b>available</b> 18:18 20:21 22:21 <b>Avenue</b> 1:10 3:3 15:8 <b>avoid</b> 12:15 18:19 <hr/> B <hr/> <b>barrier</b> 11:10 19:17 <b>barriers</b> 19:17,22 <b>based</b> 8:22 19:16 <b>baseline</b> 10:23 <b>basins</b> 19:10 <b>Beachline</b> 4:14 <b>Beata</b> 2:2 4:6 <b>become</b> 6:24 23:18 <b>begin</b> 4:25 <b>benefits</b> 21:19 22:1,2 <b>best</b> 9:8 16:13 19:22 <b>better</b> 9:12 <b>Beyond</b> 1:1 4:5 5:6 8:13 <b>bicycle</b> 5:2 <b>billion</b> 22:8
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-20



<b>biological</b> 18:16	1:9,10,11 3:2,3	<b>Commission</b> 18:22	<b>conduct</b> 18:23
<b>board</b> 6:4	<b>cemetery</b> 17:19	<b>commit</b> 25:3	<b>conducted</b> 5:12 20:10,23 21:7
<b>boards</b> 17:1	<b>Central</b> 15:18,22,23	<b>commitment</b> 25:11	<b>configuration</b> 13:1,9,18 14:3,9,23 15:5
<b>Bonnet</b> 14:11	<b>certain</b> 9:16 11:23	<b>commonly</b> 21:9	<b>configurations</b> 14:24
<b>Boulevard</b> 15:7	<b>certify</b> 26:8,12	<b>communicate</b> 10:10	<b>conflicts</b> 13:22
<b>box</b> 23:7	<b>cetera</b> 24:19	<b>community</b> 6:16	<b>congestion</b> 10:21 17:10
<b>braided</b> 10:2 11:21 14:10 15:15	<b>changes</b> 8:6 11:24	<b>comparing</b> 11:2	<b>connect</b> 13:10
<b>Branch</b> 22:24	<b>city</b> 4:23	<b>comparison</b> 10:23 16:19	<b>connections</b> 13:3,12,19 14:4
<b>break</b> 23:20	<b>Civil</b> 3:6 5:20	<b>compensation</b> 12:5 19:13,14	<b>consequences</b> 21:3
<b>Brendan</b> 2:8 24:7,10	<b>close</b> 25:16	<b>Complete</b> 23:5,7	<b>conservation</b> 18:17,22
<b>bridge</b> 13:21 14:14 16:13	<b>closed</b> 24:16	<b>completed</b> 8:6 22:19	<b>consideration</b> 6:10 10:17 19:18
<b>bridges</b> 14:12,13	<b>closely</b> 12:2	<b>compliance</b> 21:13	<b>considerations</b> 11:20 16:15
<b>brief</b> 23:20	<b>cloverleaf</b> 13:8 14:3,9,23	<b>comply</b> 5:18 17:2	<b>considered</b> 10:18 17:23 24:14,17
<b>brochures</b> 22:6	<b>Code</b> 18:9 19:15	<b>complying</b> 7:7	<b>consistent</b> 5:11,12 8:18 11:15
<b>build</b> 9:10,13 10:18,23,24 11:3,4	<b>collector- distributor</b> 10:1	<b>Comprehensive</b> 8:20	<b>consists</b> 9:18 11:5
<b>building</b> 25:2	<b>COLLEEN</b> 2:5	<b>concept</b> 17:1	<b>constraints</b> 11:19
<b>business</b> 21:6	<b>color</b> 5:24	<b>conceptual</b> 6:14	<b>construct</b> 13:5,15,24
<b>businesses</b> 21:4	<b>comment</b> 4:16 5:22 10:16 23:6,7,10,11,2 2 25:19,20	<b>concerns</b> 5:22 6:1,14	
<hr/> <b>C</b> <hr/>	<b>comments</b> 6:21 10:10,13 23:2,3,8,10,12 ,13 24:6	<b>CONCLUDED</b> 25:23	
<b>card</b> 23:5,22	<b>commercial</b> 20:19 24:5	<b>concludes</b> 23:19	
<b>Carter</b> 15:12		<b>condition</b> 9:10 14:16	
<b>caution</b> 21:25		<b>conditions</b> 9:17	
<b>C-D</b> 10:1 11:21 13:11 15:14			
<b>CELEBRATION</b>			



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-21



14:6,19 15:3,10,17,24 <b>constructed</b> 17:20 <b>construction</b> 16:13,16 17:7 22:8,12,17,18 <b>consultant</b> 4:17,21 <b>contacted</b> 21:14 <b>contacting</b> 6:2 <b>contaminated</b> 19:24 <b>contamination</b> 20:3,6 <b>continue</b> 13:10 18:20 22:13,16 <b>control</b> 16:14 <b>coordinate</b> 18:20 <b>coordination</b> 10:3 <b>copies</b> 22:5 <b>CORPORATION</b> 2:6 <b>correct</b> 24:3 <b>corridor</b> 7:25 8:24 9:6,11 10:2,21 11:13,14,16,20 19:25 <b>cost</b> 19:24 22:6 <b>counsel</b> 26:12 <b>county</b> 4:13,22 7:25 8:2,20 10:5,6 12:9,23	26:4 <b>course</b> 4:20 <b>court</b> 6:17 23:4 26:6,22 <b>Cove</b> 19:20 <b>covered</b> 7:23 <b>CR</b> 1:3 <b>Creek</b> 10:7 14:11 15:9 16:6,23 19:3 <b>criteria</b> 8:7 16:17,18,21 <b>cross</b> 9:14 11:17 12:14 <b>crosses</b> 12:12 <b>crosshatching</b> 25:5 <b>crossings</b> 12:1 <b>crossroad</b> 11:25 <b>Crossroads</b> 24:15,21 <b>cultural</b> 7:3 8:8 17:6,14 18:1 <b>current</b> 7:24 8:5 16:4,12 18:25 <b>currently</b> 22:18 <hr/> D <hr/> <b>Daryl</b> 15:12 <b>date</b> 1:7 23:16 <b>DAY</b> 3:4 <b>days</b> 23:16	<b>DDI</b> 12:10,11 15:13 <b>December</b> 8:5 <b>decision</b> 10:14 <b>decisions</b> 7:11 23:1 <b>dedicated</b> 23:13 <b>department</b> 2:3 4:3,7 5:4,17,23 6:22 7:2 8:10 16:7 21:11 23:15 25:21 <b>department's</b> 21:20 <b>depictions</b> 9:15 <b>design</b> 4:19 6:14 8:7 9:4,6,10 11:19 16:21 17:1 22:16,20 <b>designed</b> 12:11 16:4 18:25 <b>detailed</b> 9:14 <b>detention</b> 16:9 19:4 <b>determination</b> 18:13 21:20,22 <b>determine</b> 16:24 17:5 20:1 <b>developed</b> 7:15,17 8:12 10:9 11:17 16:17 <b>development</b> 4:5 5:7 6:25 7:2	<b>diamond</b> 12:10 15:5,13,20 <b>Diaz</b> 4:17 <b>direct</b> 13:19 18:4 <b>direction</b> 4:13 9:2,3,19 11:1,9 12:11 13:4 15:15 <b>directional</b> 12:25 <b>directions</b> 12:17 <b>Disabilities</b> 5:13 <b>disability</b> 5:25 <b>discuss</b> 10:5,24 <b>discussing</b> 24:12 <b>display</b> 11:4 16:12 17:2 18:19 19:7 21:2 22:23,25 25:17 <b>displayed</b> 6:4 20:20 <b>distinction</b> 17:22 <b>District</b> 10:7 16:5,6,7,22,23 ,24 19:2,3 <b>diverge</b> 12:21 <b>Diverging</b> 12:10 15:12 <b>document</b> 8:6
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-22



<b>documentation</b> 7:13 <b>documents</b> 16:12 18:19 19:7 22:14,21,25 <b>done</b> 7:22 <b>DOT</b> 24:11,12 25:2 <b>Draft</b> 22:20 <b>drainage</b> 15:25 20:14 <b>drive</b> 12:13 13:6,13 15:9 <b>driver</b> 12:18 <b>Drivers</b> 9:8 <b>drop</b> 23:7 <b>dry</b> 16:9 19:4 <b>dual</b> 12:22 <b>due</b> 11:18,25 13:21 24:20 <b>during</b> 7:14 16:15 18:24 21:16 23:6 <hr/> <b>E</b> <hr/> <b>easements</b> 11:19 <b>east</b> 6:7 13:13 19:21 <b>eastbound</b> 9:22 13:9,11 14:14,15,17,18 15:1,15,21 <b>economic</b> 6:15 7:4 17:6 <b>educational</b> 5:2	<b>effect</b> 18:12 <b>effects</b> 6:15 7:10 17:25 <b>either</b> 18:11 <b>elected</b> 5:14 <b>electronically</b> 23:12 <b>Element</b> 8:19 <b>elements</b> 9:15 <b>elevated</b> 11:22 <b>eligibility</b> 21:21 <b>eligible</b> 17:16 21:18 <b>else</b> 24:1 <b>e-mail</b> 23:10 <b>employed</b> 26:13 <b>employment</b> 8:22 <b>encourage</b> 21:15 <b>Endangered</b> 18:10 <b>engineering</b> 7:13 17:3 22:12 <b>enhance</b> 8:23 <b>enhanced</b> 16:1 <b>Enterprise</b> 10:7 <b>entitled</b> 18:3 19:8 22:1 <b>environment</b> 4:6 5:7 7:1 8:8 <b>environmental</b> 6:11,15 7:4,7,9,10,13,	18 8:2 17:4 <b>erosion</b> 16:14 <b>error</b> 24:2 <b>ESQUIRE</b> 2:8,11 <b>established</b> 7:6 20:10 <b>Estate</b> 20:25 <b>estimated</b> 22:6 <b>et</b> 24:19 <b>evaluate</b> 7:3 <b>evaluated</b> 10:22 16:19 17:4 18:2,7 19:15 20:1 <b>evaluation</b> 11:2 16:17 19:17 <b>evening</b> 4:2 16:11 19:6 <b>everybody</b> 25:20 <b>exception</b> 18:15 <b>executive</b> 17:2 18:2 19:8 <b>exhibit</b> 16:11 19:6 <b>existing</b> 9:17,25 10:20 11:19 12:2,20,24 13:7,9,17,20,2 2 14:2,4,16,22,2 3 15:19,25 17:11 19:12 <b>expect</b> 21:12 <b>expected</b> 20:12	<b>experience</b> 9:9 <b>express</b> 4:13 6:1,5,13 9:2,12 11:2,6,10,22 13:3,12,19 14:17 15:1 <b>Expressway</b> 4:15 <hr/> <b>F</b> <hr/> <b>facilities</b> 12:5 16:10 18:25 <b>facility</b> 10:20 <b>factored</b> 10:14 <b>failing</b> 9:8 <b>fair</b> 21:12 <b>families</b> 21:4,5 <b>family</b> 5:25 <b>FDOT</b> 1:4 4:20 5:5,8 7:6 16:12,24 18:20,22 20:10,25 22:13,16 23:9,10 24:14,17 <b>feasible</b> 19:24 <b>features</b> 12:1 <b>federal</b> 4:10,22 5:9,11 7:10 8:3 17:3 18:9 19:16 20:24 21:7 <b>federally</b> 18:14 <b>feet</b> 9:20,24,25 11:12
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

 CORPORATE ORLANDO, FL 32801  
 JACKSONVILLE, FL 32256  
 TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-23



<b>FHWA</b> 8:4 <b>fill</b> 23:22 <b>final</b> 23:1 <b>finalize</b> 22:13 25:6 <b>Financial</b> 4:9 5:8 <b>financially</b> 26:14 <b>Finding</b> 8:4 <b>Firm</b> 2:9 24:10 <b>Fish</b> 18:21 <b>five</b> 11:1 24:4 <b>five-and</b> 25:4 <b>five-and-a-half</b> 24:25 <b>floodplain</b> 12:5 19:8,9,11,12,1 3,14 <b>floor</b> 6:20 <b>Florida</b> 1:11 2:3 3:3,5 4:2,7 5:4,16,17 6:22 7:2,8 8:10 15:18,22,23 16:5,6,7,22,23 18:21 19:1,2 23:15 26:3,7 <b>Florida's</b> 10:6 <b>flow</b> 14:15 <b>flyover</b> 15:20 <b>foregoing</b> 26:9 <b>form</b> 23:7,10,11	<b>forms</b> 21:23 25:19 <b>forth</b> 16:21 <b>forum</b> 6:12 <b>four-foot</b> 11:6 <b>fourteen</b> 8:1 <b>frame</b> 25:11 <b>free</b> 14:15 <b>full</b> 12:7 <b>fully-funded</b> 22:20 <b>fund</b> 8:11 <b>funded</b> 22:18 <b>funding</b> 7:14 <b>furnish</b> 22:5 <b>furnished</b> 21:23 <b>future</b> 8:21 <hr/> <b>G</b> <b>general</b> 4:12 6:9 9:1 11:1,5,8,10,22 13:1,12 <b>geometry</b> 12:25 13:8,17 14:2,22 <b>given</b> 26:10 <b>goal</b> 9:4 <b>government</b> 7:18 <b>governments</b> 8:11 <b>grade</b> 15:6,7 <b>grading</b> 9:7	<b>grass</b> 9:24 <b>growth</b> 8:23 <b>guardrail</b> 9:21 <hr/> <b>H</b> <b>habitat</b> 18:8 <b>HALL</b> 1:9 3:2 <b>happy</b> 22:4 <b>hearing</b> 1:6 3:2 4:4,8,15 5:6,8,10,14,20 ,23 6:4,8,11,17,19 ,22,25 10:15 20:21 22:15,21 23:8,14,17,18 25:16,23 <b>held</b> 3:2 4:15 5:8,21 10:4,11 <b>helpful</b> 21:12 <b>hereby</b> 26:7 <b>herein</b> 26:14 <b>high</b> 8:25 20:4,7 <b>Highway</b> 8:4 <b>historic</b> 17:17,19,20,24 <b>historical</b> 17:23 <b>HNTB</b> 2:6 <b>horizontal</b> 11:24 12:1,25 13:7,17 14:2,22 <b>Hotel</b> 15:7	<b>HOV</b> 8:25 <hr/> <b>I</b> <hr/> <b>I-4</b> 1:1 8:13 9:3,18 12:2,3 13:9,21,23 14:12,14,17,25 15:21,22 17:21 18:11 19:19,21 22:20 <b>ID</b> 5:9 <b>identification</b> 17:18 <b>identified</b> 8:12,16 19:25 20:3 <b>identify</b> 16:20 <b>illustrated</b> 17:1 <b>I'm</b> 24:10 <b>impact</b> 8:5 19:11 24:14 <b>impacted</b> 18:15 <b>impacts</b> 6:11 7:4 8:7 12:6 16:19 17:5,9 18:4,6,7,17,19 19:9,12,14,15 20:1,11 <b>implement</b> 8:11 <b>improved</b> 9:12 <b>improvement</b> 4:11 6:5,16 7:5 8:18 10:7 16:7,24 19:3 <b>improvements</b> 6:10 9:13
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-24



10:17,20 12:4 15:8 16:2 17:8 20:2,14,16 22:10,14 <b>improves</b> 17:10 <b>include</b> 11:21 15:21 <b>included</b> 5:14 8:24 <b>includes</b> 9:1 10:5 15:6 22:8 <b>including</b> 5:19 18:8 <b>indicate</b> 17:12 <b>individuals</b> 6:2 25:1 <b>ineligible</b> 17:25 <b>information</b> 6:8 17:4 21:17 <b>informed</b> 7:19 <b>input</b> 7:17 10:13 <b>inside</b> 9:19,21 11:6,8 <b>inspect</b> 21:15 <b>inspection</b> 21:16 22:12 <b>Integra</b> 19:20 <b>interchange</b> 12:4,9,10,15,1 6 13:1,6,16,18 14:1,3,8,9,21, 23 15:4,5,12,13,1	4,18,19,20 <b>interested</b> 5:21 26:15 <b>intersected</b> 12:17 <b>intersecting</b> 12:20 <b>intersections</b> 15:9 <b>Interstate</b> 4:4,11 5:6 7:24 10:25 <b>involve</b> 12:7 <b>involved</b> 7:19 26:14 <b>involves</b> 4:11 6:5 7:12 <b>involving</b> 20:19 24:5 <b>isolated</b> 17:15 <b>issued</b> 18:18 <b>It's</b> 24:8 <hr/> J <hr/> <b>JARRELL</b> 2:5 23:20 24:6,22 25:9,14 <b>jeopardized</b> 22:2 <b>jobs</b> 24:15 <b>Johnston</b> 4:18 <b>junction</b> 13:18 <b>June</b> 10:11 <b>jurisdictional</b> 18:5	<hr/> K <hr/> <b>KAYLYN</b> 1:8 26:6,21 <b>Kirkman</b> 6:6 <b>known</b> 5:5 12:10 21:9 <hr/> L <hr/> <b>labeled</b> 17:1 <b>lack</b> 17:22 <b>Lake</b> 19:21 <b>land</b> 25:4 <b>lane</b> 12:21 13:1,12 14:17 <b>lanes</b> 4:12,13 6:5 8:25 9:1,2,12,19,22 10:25 11:1,2,6,8,11, 22 12:21,22 13:3,13,20 15:1 <b>large</b> 12:18 26:7 <b>LASSMAN</b> 2:12 <b>later</b> 6:23 23:16 <b>law</b> 2:9 7:9 24:10 <b>laws</b> 5:19 <b>leave</b> 25:20 <b>leaving</b> 12:24 13:7,17 14:1,8,21 <b>length</b> 8:1	<b>letters</b> 5:14,15 <b>levels</b> 9:5,6,9,11 <b>Library</b> 22:24 <b>Likely</b> 18:12,13 <b>limits</b> 7:23 9:16 17:14 <b>linear</b> 17:20 <b>list</b> 8:15 <b>listed</b> 6:2 18:14 <b>listing</b> 17:16,24 <b>local</b> 5:16 7:17 8:11 10:4 <b>localities</b> 24:18 <b>located</b> 8:1 16:9 17:20 19:5 <b>location</b> 6:14 <b>locations</b> 9:22 11:24 16:10 19:6 <b>Long</b> 8:17 <b>loop</b> 15:6 <b>loss</b> 24:14,17,20 <b>low</b> 20:5,8 <b>Lowndes</b> 2:9 24:10 <b>Luis</b> 4:17 <b>Lupine</b> 18:16 <b>Lynch</b> 2:8
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-25



<p>24:7,8,10</p> <hr/> <p>M</p> <hr/> <p><b>Maguire</b> 2:11,12 24:22,23 25:12</p> <p><b>mail</b> 23:8</p> <p><b>mainline</b> 9:18 12:4</p> <p><b>maintain</b> 9:5</p> <p><b>maintained</b> 14:4</p> <p><b>maintains</b> 10:19</p> <p><b>management</b> 4:9 12:5 16:3,5,6,14,22 ,23 19:1,2,8</p> <p><b>manager</b> 4:7,18,19 23:9</p> <p><b>manner</b> 21:12</p> <p><b>maps</b> 25:7</p> <p><b>material</b> 6:21 17:14 23:14</p> <p><b>matrix</b> 11:2</p> <p><b>may</b> 6:2 11:23 17:7 18:12,14 21:17,22 22:2 23:2,3,10</p> <p><b>Meadow</b> 15:9</p> <p><b>measured</b> 9:7</p> <p><b>measures</b> 18:17</p> <p><b>media</b> 5:16</p> <p><b>median</b> 8:25 9:24 11:13,23</p> <p><b>medium</b> 20:4,8</p> <p><b>meet</b> 7:15 9:3 11:18 16:4</p>	<p>18:25 19:23</p> <p><b>meeting</b> 10:11,12</p> <p><b>meetings</b> 10:3,14</p> <p><b>members</b> 10:12 25:18</p> <p><b>MetroPlan</b> 8:9,14,16 10:6</p> <p><b>Metropolitan</b> 8:9</p> <p><b>microphone</b> 23:6</p> <p><b>miles</b> 8:1</p> <p><b>million</b> 22:9,11</p> <p><b>minimize</b> 18:19</p> <p><b>minimum</b> 11:11</p> <p><b>minor</b> 14:5,24</p> <p><b>mobility</b> 8:23 17:10</p> <p><b>Model</b> 20:11</p> <p><b>modifications</b> 14:5,25</p> <p><b>modified</b> 14:15 15:5</p> <p><b>modifying</b> 15:19</p> <p><b>monitoring</b> 18:23</p> <p><b>months</b> 22:13</p> <p><b>move</b> 14:12 21:10,14,25</p> <p><b>moved</b> 21:19</p> <p><b>movement</b> 12:19 14:15</p>	<p><b>movements</b> 12:15</p> <p><b>movie</b> 5:2</p> <p><b>MPO</b> 8:12</p> <hr/> <p>N</p> <hr/> <p><b>national</b> 5:24 7:7 17:17,24</p> <p><b>natural</b> 8:8 17:6</p> <p><b>necessary</b> 17:23 21:3,23</p> <p><b>NEPA</b> 7:8</p> <p><b>newsletter</b> 6:4</p> <p><b>newspaper</b> 5:15</p> <p><b>no-build</b> 10:17,19,22</p> <p><b>noise</b> 19:14,17,23</p> <p><b>nondiscriminati on</b> 5:19</p> <p><b>none</b> 20:7 25:15</p> <p><b>nor</b> 26:14</p> <p><b>Notary</b> 26:6,22</p> <p><b>noted</b> 8:13</p> <p><b>notification</b> 21:25</p> <p><b>notified</b> 21:23</p> <p><b>notifying</b> 5:16</p> <p><b>November</b> 6:23 22:19,23 26:17</p> <p><b>numerous</b> 14:13</p> <hr/> <p>O</p> <hr/> <p><b>occupancy</b> 8:25</p>	<p><b>occur</b> 20:1,12</p> <p><b>occurrence</b> 17:16</p> <p><b>October</b> 1:7 3:4 22:22</p> <p><b>office</b> 6:23 23:15</p> <p><b>official</b> 6:12,18</p> <p><b>officials</b> 4:23,24 5:15</p> <p><b>off-site</b> 16:10 19:5 20:18</p> <p><b>of-way</b> 11:11 15:10,24 20:13 25:7</p> <p><b>Okay</b> 24:6 25:14,15</p> <p><b>onto</b> 12:23</p> <p><b>open</b> 6:20</p> <p><b>opinion</b> 18:16</p> <p><b>opinions</b> 6:13</p> <p><b>opportunity</b> 4:16 6:13 10:16</p> <p><b>opposite</b> 12:13,16</p> <p><b>oral</b> 23:3,5</p> <p><b>Orange</b> 8:2,19 10:5 26:4</p> <p><b>order</b> 12:15 13:5,15,24 14:6,11,19 15:3,10,17,24 16:20 18:2</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-26



19:8 23:23 <b>orders</b> 17:2 <b>Organization</b> 8:9 <b>origin</b> 5:25 <b>original</b> 7:23 8:24 9:10 <b>Orlando</b> 8:9,15,16 10:6 19:20 <b>Osceola</b> 8:2,20 10:6 14:8,10,12,14, 18 22:23 <b>outside</b> 9:19 11:7,9 <b>overall</b> 11:14 12:24 13:7,17 14:2,21 16:20 <b>owners</b> 5:15 <hr/> P <hr/> <b>P.A</b> 2:12 <b>P.E</b> 2:2 <b>P.M</b> 3:5 25:23 <b>page</b> 23:13 <b>Palm</b> 15:8 <b>paramount</b> 7:20 <b>parcel</b> 24:24 <b>parcels</b> 12:7 <b>Parkway</b> 14:8,10,13,14, 18 15:8,12,18,22, 23	<b>partial</b> 12:7 13:8,18 14:3,9,22 15:19 <b>participation</b> 5:23 <b>particularly</b> 24:15,20 <b>parties</b> 26:13 <b>paved</b> 9:20 <b>payment</b> 21:19,21 <b>PD&amp;E</b> 1:2 7:1,5,14,21 8:24 10:19 <b>pedestrian</b> 5:1 <b>Pedro</b> 4:18 <b>performed</b> 17:11 19:9 20:9 <b>period</b> 23:6 <b>permitting</b> 18:24 22:11 <b>persons</b> 5:21 6:1 <b>phase</b> 7:12 16:16 18:24 <b>phases</b> 22:17 <b>physical</b> 8:8 17:6 <b>Places</b> 17:17,24 <b>Plan</b> 8:17 <b>planned</b> 7:5 <b>Planning</b> 8:9 <b>plans</b> 8:12,20	<b>Plaza</b> 15:7 <b>please</b> 23:21 25:20 <b>plenty</b> 25:18 <b>Policies</b> 21:9 <b>Policy</b> 7:8 <b>pond</b> 16:16,18,25 19:5 20:6 22:10 <b>ponds</b> 16:9,21 19:5,13 20:18 <b>population</b> 8:22 <b>portion</b> 25:16 <b>portions</b> 9:11,25 <b>positive</b> 17:9 <b>postmarked</b> 6:23 23:16 <b>potential</b> 6:11,15 16:18 20:2,5,6,18 <b>Potentially</b> 19:24 <b>practices</b> 16:14 <b>preliminary</b> 7:12 <b>preparation</b> 7:12 <b>prepared</b> 8:3 <b>present</b> 4:23 6:17 21:16 23:4 <b>presentation</b> 4:25 6:20	23:19 <b>presentations</b> 10:4 <b>presented</b> 22:15 <b>preserved</b> 11:13 <b>previously</b> 7:22 <b>principal</b> 9:15 <b>prior</b> 7:11 <b>priority</b> 8:15 <b>procedure</b> 3:6 7:7 <b>procedures</b> 21:23 <b>proceeding</b> 26:9 <b>proceedings</b> 4:1 6:18 <b>process</b> 7:2,6,19 10:15 21:1 <b>produced</b> 6:19 <b>program</b> 8:19 22:3 <b>project</b> 1:4 4:5,7,9,10,16, 18,19,21 5:7,9,22 6:3,24,25 7:2,5,16,23 8:16,17 9:5 10:8 11:18 16:16 17:8 18:1,7,11,15 19:19,25 20:9,12 21:1,3,4,11 22:17
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-27



23:9,12,17 24:12 <b>projected</b> 9:4 <b>projects</b> 8:11 <b>promptly</b> 21:22 <b>properties</b> 20:19 24:5,20 <b>property</b> 5:15 20:24 21:8,15,17 24:19 <b>proposed</b> 4:11 6:5,10,16 7:11 9:3 10:16 11:5 12:1 13:23 16:2,3 17:8,12 18:11,24 19:13 20:2 <b>proposes</b> 10:25 12:9,24 13:7,16 14:1,8,21 15:4,12,19 <b>protected</b> 18:8 <b>Protection</b> 18:3 <b>provide</b> 4:15 10:10,15 13:3 19:13,22 21:16 23:2,3 <b>provided</b> 6:3 9:21 13:13,20 14:17 16:8 19:4 23:8 <b>provides</b> 25:20 <b>providing</b> 6:12 <b>pubic</b> 22:21	<b>public</b> 1:6 3:2 4:4,8 5:6,8,10,14,23 6:8,9,11,13,20 ,21,25 7:17,19 10:9,11,12,13, 15 22:15,23 23:6,14,17,18, 21,25 25:15,16,23 26:7,22 <b>publicly</b> 25:3 <b>purchased</b> 13:5,14,24 14:6,19 15:2,10,16,24 <b>purpose</b> 6:7 7:16 8:21 <b>PURSUANT</b> 3:5 <hr/> Q <hr/> <b>quality</b> 16:15 20:9,11 <b>questions</b> 22:4 24:12 25:18 <hr/> R <hr/> <b>race</b> 5:24 <b>rail</b> 11:13 <b>ramp</b> 10:2 11:21 13:11 14:4,10,16,23 15:6,20,21,22 <b>ramps</b> 12:21 13:2,10 14:25 15:13,15 <b>Range</b> 8:17	<b>ranked</b> 8:14 <b>rated</b> 20:4,5,7,8 <b>Raymer</b> 2:11 24:23 <b>ready</b> 25:8 <b>Real</b> 20:24,25 21:8 <b>realigned</b> 14:11 <b>reasonable</b> 19:23 <b>receive</b> 21:25 23:24 25:21 <b>received</b> 6:21 8:4 10:13 23:14 <b>recognize</b> 4:22 <b>recognized</b> 4:24 <b>recommended</b> 9:13 10:24 11:3 12:8,23 13:6,15,25 14:7,20 15:3,11,17 16:21,25 17:25 18:6 19:18,22 20:13 22:7 <b>record</b> 6:25 23:18,25 24:13 26:10 <b>recorded</b> 6:18 <b>RECORDING</b> 5:4 <b>Reedy</b> 10:7 16:6,23 19:3 <b>reevaluation</b> 1:2 7:21 8:6	9:1 <b>regard</b> 5:24 <b>regarding</b> 6:14 <b>Register</b> 5:17 17:17,24 <b>Regulation</b> 19:16 <b>regulations</b> 5:19 18:9 <b>REINHOLD</b> 1:8 26:6,21 <b>related</b> 26:13 <b>relative</b> 4:8 5:8 <b>relief</b> 10:21 <b>relieves</b> 17:10 <b>religion</b> 5:25 <b>relocation</b> 20:24 21:4,5,8,13,18 22:1,2,5 24:4 <b>relocations</b> 20:19,20,22 22:9 <b>remain</b> 13:2 14:24 22:22 <b>remains</b> 11:14 <b>removing</b> 14:16 <b>replaced</b> 13:21 <b>report</b> 26:8 <b>reporter</b> 1:8 6:17 23:4 26:6,22 <b>represent</b> 24:24
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-28



<b>representatives</b> 4:20	23:2	19:21	23:3
<b>represented</b> 25:5	<b>reviewed</b> 17:4	<b>scale</b> 9:7	<b>sex</b> 5:25
<b>represents</b> 17:15	<b>right-of</b> 22:16	<b>screen</b> 16:17	<b>share</b> 6:8
<b>required</b> 5:18 7:13 11:11 12:3 21:10,14	<b>right-of-way</b> 9:25 11:18 12:3,6 13:4,14,23 14:5,18 15:2,16 17:12 20:15,17,22 21:1,6 22:9 25:7	<b>Screening</b> 20:11	<b>short</b> 5:1
<b>requirements</b> 5:11 16:4 17:3 19:1,23 21:1	<b>Rights</b> 5:20	<b>script</b> 24:3	<b>shoulder</b> 9:21
<b>requires</b> 7:9	<b>risk</b> 20:4,5,7,8	<b>Scrub</b> 18:16	<b>shoulders</b> 9:20 11:7,9
<b>residential</b> 20:21 24:4	<b>road</b> 4:14 6:6,7 7:25 12:9,23,24 13:16,19,20 14:1,11,21 15:1,4 16:13	<b>second</b> 7:1 24:17	<b>shown</b> 23:9,11
<b>Resort</b> 19:20	<b>roads</b> 10:1 11:21 13:11	<b>section</b> 4:19 9:15,18 11:5,12,14	<b>significant</b> 8:5 17:22
<b>resource</b> 17:20	<b>roadway</b> 11:3 12:4,13,17,20 16:2 20:14,16 22:10	<b>sections</b> 9:14 11:17,21	<b>single</b> 12:21
<b>resources</b> 17:7,21 18:1,8	<b>roadways</b> 9:23	<b>Seeing</b> 25:15	<b>sir</b> 25:13
<b>respectively</b> 13:11	<b>roadway's</b> 9:15	<b>seek</b> 22:14	<b>site</b> 20:4
<b>response</b> 25:21	<b>RULES</b> 3:5	<b>segment</b> 1:3 7:24 8:14,16 9:16,23 10:1 11:15,16 12:2 17:21 18:11 19:18 22:20	<b>sites</b> 12:6 16:18,25 19:24 20:3,7
<b>restaurants</b> 24:16	<b>runoff</b> 16:1	<b>select</b> 16:20	<b>siting</b> 16:16,25
<b>result</b> 14:13 17:7 20:2,12 21:10	<b>S</b>	<b>separated</b> 9:23	<b>six</b> 9:1
<b>resulted</b> 17:18	<b>safety</b> 5:1,2 8:23	<b>separates</b> 11:10	<b>Skink</b> 18:16
<b>results</b> 17:12 19:16	<b>sale</b> 24:18	<b>separation</b> 15:6,7	<b>slide</b> 6:3
<b>retention</b> 16:9 19:5	<b>Sand</b> 18:15	<b>September</b> 8:15	<b>social</b> 6:15 7:3 8:7 17:6
<b>revenue</b> 24:18,19		<b>serves</b> 6:12	<b>socioeconomic</b> 17:9
<b>review</b> 22:22		<b>service</b> 9:5,7,11 18:21	<b>solicited</b> 5:24
		<b>services</b> 9:9 21:18	<b>South</b> 16:5,22 19:2
		<b>seven</b> 20:4	<b>Southbound</b> 13:21
		<b>several</b> 7:15	<b>Southwest</b> 16:5,22 19:1
			<b>speaker</b> 23:5,22
			<b>special</b> 8:24



MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

407.423.9900

www.MILESTONEREPORTING.com

Toll Free 855-MYDEPOS

B-29



11:16,17,20 21:24 <b>specialists</b> 22:3 <b>species</b> 18:8,10,14,18, 23 <b>specific</b> 18:23 <b>split</b> 12:12 <b>SR</b> 1:3 <b>stakeholders</b> 10:4,8 <b>standard</b> 9:16 <b>standards</b> 16:13 <b>start</b> 24:7 25:2 <b>starting</b> 4:25 22:22 <b>state</b> 4:14,22 5:4,11 6:6,7 7:25 8:18 12:24 13:16,19,20 14:10,20 15:1,4 17:3 18:14 24:18 26:3,7 <b>statement</b> 23:4,5,21,25 <b>statements</b> 24:9 25:15 <b>state's</b> 7:6 <b>States</b> 7:9 <b>status</b> 6:1 <b>statutes</b> 7:8 <b>step</b> 7:1	<b>STIPULATION</b> 3:1 <b>stop</b> 14:16 <b>storm</b> 12:4 16:1,2,8 18:24 19:3 <b>street</b> 12:20 <b>structure</b> 17:19 <b>structures</b> 11:25 14:14 <b>Stys-Palasz</b> 2:2 4:2,6 24:2 25:6,10,13 <b>submit</b> 23:12 <b>submitted</b> 8:3 26:17 <b>subsequent</b> 7:14 <b>substantial</b> 17:5 <b>substructure</b> 13:22 <b>success</b> 7:20 <b>suitability</b> 16:20 <b>summary</b> 10:3 <b>supervising</b> 22:3 <b>support</b> 11:25 <b>sure</b> 24:13 <b>surface</b> 18:5 <b>surrounded</b> 17:13 <b>survey</b> 17:11,18 <b>system</b> 14:10 15:14	<b>systems</b> 10:2 11:21 15:25 16:3 <hr/> T <hr/> <b>table</b> 25:3 <b>taking</b> 24:25 <b>tax</b> 24:19 <b>team</b> 4:21 10:10 25:18 <b>temporarily</b> 12:13 <b>ten</b> 4:12 9:20 10:25 19:10 23:16 <b>ten-foot</b> 11:7,8 <b>testimony</b> 26:10 <b>Thank</b> 23:19 24:5,22 25:14,21 <b>That's</b> 24:16 <b>three-leg</b> 12:25 <b>throughout</b> 7:18,20 9:23 11:13,15 <b>Title</b> 5:19 6:2 18:9 <b>Today's</b> 10:15 <b>tonight</b> 4:17,23 11:4 21:2 22:4 23:1,4 <b>tonight's</b> 6:17 20:21 22:15 <b>total</b> 12:6,8 19:10 22:6	<b>TOWN</b> 1:9 3:2 <b>traffic</b> 8:21 9:4 12:11,12 19:14 <b>transcript</b> 6:18 26:9 <b>transportation</b> 2:3 4:3,8 5:5,18 6:22 7:3,5 8:10,17,18,19 16:8 21:11 23:15 <b>travel</b> 9:19 <b>treated</b> 21:12 <b>treatment</b> 16:8,10 19:4 <b>true</b> 26:9 <b>TUESDAY</b> 3:4 <b>turn</b> 12:22 <b>Turnpike</b> 10:6 <b>Tuscan</b> 19:19 <b>twofold</b> 24:9 <b>two-foot</b> 11:9 <b>type</b> 12:16 21:10 <b>typical</b> 9:14,17 11:5,12,14 <hr/> U <hr/> <b>U.S</b> 18:21 <b>Ultimate</b> 1:1 4:5 5:7 8:13 <b>unavoidable</b> 21:2
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-30



<p><b>underneath</b> 14:12</p> <p><b>understand</b> 5:22</p> <p><b>Uniform</b> 20:24 21:7,9,13</p> <p><b>United</b> 7:9</p> <p><b>unsatisfied</b> 21:20</p> <p><b>utility</b> 11:19 22:9</p> <hr/> <p>V</p> <hr/> <p><b>value</b> 21:17</p> <p><b>varies</b> 9:24</p> <p><b>various</b> 5:18 8:12 16:17 17:2</p> <p><b>vary</b> 11:23</p> <p><b>varying</b> 9:22</p> <p><b>vehicle</b> 8:25</p> <p><b>VI</b> 5:20 6:2</p> <p><b>via</b> 15:14</p> <p><b>vicinity</b> 19:25</p> <p><b>VIDEO</b> 5:3</p> <p><b>Vineland</b> 15:7</p> <p><b>visit</b> 23:11</p> <p><b>volumes</b> 9:4</p> <hr/> <p>W</p> <hr/> <p><b>wall</b> 11:10</p> <p><b>water</b> 11:25 12:5 16:1,2,5,6,8,1 4,22,23 18:5,24</p>	<p>19:1,2,3</p> <p><b>ways</b> 23:3</p> <p><b>website</b> 6:24 10:8 22:24 23:12,13,17</p> <p><b>welcome</b> 4:3 5:5</p> <p><b>we'll</b> 23:22 24:7</p> <p><b>west</b> 1:3 4:13,14 6:6 19:19 22:24</p> <p><b>westbound</b> 9:22 13:9,11 15:1,14,23</p> <p><b>wet</b> 16:9 19:4</p> <p><b>wetland</b> 18:4</p> <p><b>Wetlands</b> 18:3</p> <p><b>we've</b> 25:1,19</p> <p><b>whether</b> 24:14,17</p> <p><b>wide</b> 9:20 11:6,7,9</p> <p><b>widen</b> 10:25</p> <p><b>widening</b> 4:11 9:3,13 13:23</p> <p><b>widens</b> 9:25</p> <p><b>width</b> 9:24 11:11,23</p> <p><b>wildlife</b> 18:7,20,21,22</p> <p><b>wishing</b> 6:1</p> <p><b>witness</b> 26:10</p> <p><b>working</b> 24:11</p> <p><b>works</b> 8:10</p>	<p><b>World</b> 13:6,13</p> <p><b>written</b> 6:21 10:13 23:14</p> <p><b>wrong</b> 12:15</p> <p><b>www.i4express.c</b> <b>om</b> 10:9 22:25</p> <hr/> <p>Y</p> <hr/> <p><b>you-all</b> 24:25</p>	
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--



407.423.9900

MILESTONE | REPORTING COMPANY

TOMORROW'S TECHNOLOGY TODAY

www.MILESTONEREPORTING.com

CORPORATE ORLANDO, FL 32801  
JACKSONVILLE, FL 32256  
TAMPA, FL 33602

Toll Free 855-MYDEPOS

B-31





### SPEAKER REQUEST CARD

To be completed prior to making a recorded statement

**PUBLIC HEARING – OCTOBER 25, 2016**

**I-4 BEYOND THE ULTIMATE PD&E STUDY  
FROM WEST OF CR 532 TO WEST OF SR 528**

FPID NO.: 432100-1-22-01



**PLEASE PRINT**

Name:

BRENDAN LYNCH

Address:

215 N BOZA DR.

ORLANDO FL 32801

City

State

Zip

Affiliation:

LOWMEYER LAW FIRM

Note: In order to allow all persons the opportunity to speak, please limit your comments to 3 minutes. Public Participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. All verbal or written comments provided become part of the study's project file. This information may be provided to other individuals who make a public records request.



### SPEAKER REQUEST CARD

To be completed prior to making a recorded statement

**PUBLIC HEARING – OCTOBER 25, 2016**

**I-4 BEYOND THE ULTIMATE PD&E STUDY  
FROM WEST OF CR 532 TO WEST OF SR 528**

FPID NO.: 432100-1-22-01



**PLEASE PRINT**

Name:

Raymer Moquinie

Address:

1605 E. Robinson St. Suite 148

Orlando FL 32801

City

State

Zip

Affiliation:

Moquinie Rossman, P.A.

Note: In order to allow all persons the opportunity to speak, please limit your comments to 3 minutes. Public Participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. All verbal or written comments provided become part of the study's project file. This information may be provided to other individuals who make a public records request.





## *Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

719 S. Woodland Boulevard  
DeLand, FL 32720-6834

**JIM BOXOLD**  
SECRETARY

January 30, 2017

Mr. Brendan Lynch  
Lowndes Law Firm  
215 N. Eola Drive  
Orlando, FL 32801

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study  
From West of County Road (CR) 532 to West of the Beachline Expressway/State Road (SR) 528  
Osceola and Orange Counties  
Financial Project ID Number: 432100-1-22-01  
Design Project ID Number: 431561-1-32-01 (Osceola County)  
Design Project ID Number: 242484-8-32-01 (Orange County)  
Federal Aid Project Number: 0041-227-I

Dear Mr. Lynch:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for the verbal comments you made during the public hearing. You asked two questions; 1) Has FDOT considered the impact on loss of jobs, particularly in the Crossroads area where restaurants are being closed and 2) Has FDOT considered the loss of revenue to the state and localities through sale of revenue tax and property tax revenue due to the loss of those properties in Crossroads?

FDOT has coordinated with property owners (specifically Crossroads) and local agencies (Orange County and MetroPlan Orlando) throughout the PD&E study process. Through this coordination, several improvement alternatives were developed and considered and the resultant recommended alternative for the SR 535 interchange was selected based on the need to relieve existing traffic congestion in the area and better accommodate future development and traffic growth. While the recommended alternative does impact the Crossroads, the FDOT mission is to provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment. The impact of the I-4 corridor traffic estimated to add 46 hours to each travelers' drive per year and is impacting the overall economy of the Central Florida area. Orlando is the 27<sup>th</sup> most congested city in America with a cost per peak auto commuter estimated at \$1,044. The total estimate cost of congestion in Orlando is \$1,207 million per year. Without the improvements to the I-4 corridor, the future economic growth of the area is impacted.

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us).

Sincerely,

Beata Stys-Palasz, P.E.  
FDOT Project Manager





## *Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

719 S. Woodland Boulevard  
DeLand, FL 32720-6834

**JIM BOXOLD**  
SECRETARY

January 30, 2017

Mr. Raymer Maguire  
Maguire Lassman, P.A.  
605 E. Robinson Street, Suite 140  
Orlando, FL 32801

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study  
From West of County Road (CR) 532 to West of the Beachline Expressway/State Road (SR) 528  
Osceola and Orange Counties  
Financial Project ID Number: 432100-1-22-01  
Design Project ID Number: 431561-1-32-01 (Osceola County)  
Design Project ID Number: 242484-8-32-01 (Orange County)  
Federal Aid Project Number: 0041-227-I

Dear Mr. Maguire:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for the verbal comments you made during the public hearing. You stated you represented a parcel owner along the study corridor and asked when the right-of-way maps would be finalized. As indicated at the hearing, the right-of-way mapping for this segment of the I-4 PD&E study should be at a more definitive point by the end of 2017.

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us).

Sincerely,

A handwritten signature in blue ink that reads "Beata Stys-Palasz". The signature is written in a cursive, flowing style.

Beata Stys-Palasz, P.E.  
FDOT Project Manager





"BEYOND I-4 ULTIMATE" PD&E  
REEVALUATION STUDY  
FROM WEST OF CR 532 TO WEST OF SR 528

FPID: 432100-1-22-01



Please provide your comments below. If more space is needed, please use an additional sheet of paper. You may place your comments in the "Comment Box" provided at the meeting, or send to the address below. Comments are also acceptable through the project website. Written comments, exhibits and/or statements must be postmarked or e-mailed no later than **November 4, 2016**.

This project should be extended  
to US HWY 27. This will help the of  
commercial traffic

PLEASE RETURN COMMENTS TO:

Beata Styś-Pałasz, P.E., Project Manager  
Florida Department of Transportation – District Five



Florida Department of Transportation  
719 S. Woodland Boulevard  
DeLand, Florida 32720



(386) 943-5418  
Toll Free: 1-800-780-7102



[Beata.Stys-Palasz@dot.state.fl.us](mailto:Beata.Stys-Palasz@dot.state.fl.us)



[www.i4express.com](http://www.i4express.com)

Name

Marcel Reichert

Address

8398 Championsgate Blvd  
CG, FL 33896

Phone Number

407-397-2500

Email

mreichert@championsgate.com





## *Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

719 S. Woodland Boulevard  
DeLand, FL 32720-6834

**JIM BOXOLD**  
SECRETARY

January 30, 2017

Mr. Marc Reicher  
8390 ChampionsGate Boulevard  
ChampionsGate, FL 33896

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study  
From West of County Road (CR) 532 to West of the Beachline Expressway/State Road (SR) 528  
Osceola and Orange Counties  
Financial Project ID Number: 432100-1-22-01  
Design Project ID Number: 431561-1-32-01 (Osceola County)  
Design Project ID Number: 242484-8-32-01 (Orange County)  
Federal Aid Project Number: 0041-227-I

Dear Mr. Reicher:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for your comments you submitted at the public hearing. You suggested the project should be extended to US 27. You'll be please to know that the PD&E study limits do extend to US 27. The section of I-4 from US 27 to CR 532 is considered Segment 5 of the PD&E study and details on this section can be found on the PD&E study website <http://www.i4express.com>. Information regarding the design phases for all of the I-4 segments (and related schedules) can also be found on our website [http://www.i4express.com/design\\_contracts.shtm](http://www.i4express.com/design_contracts.shtm).

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us).

Sincerely,

A handwritten signature in blue ink that reads "Beata Stys-Palasz". The signature is written in a cursive, flowing style.

Beata Stys-Palasz, P.E.  
FDOT Project Manager





**"BEYOND I-4 ULTIMATE" PD&E  
REEVALUATION STUDY  
FROM WEST OF CR 532 TO WEST OF SR 528**

FPID: 432100-1-22-01



Please provide your comments below. If more space is needed, please use an additional sheet of paper. You may place your comments in the "Comment Box" provided at the meeting, or send to the address below. Comments are also acceptable through the project website. Written comments, exhibits and/or statements must be postmarked or e-mailed no later than **November 4, 2016**.

I'd like <sup>electronic</sup> copies to all power points  
presented this evening 10/25/16.

**PLEASE RETURN COMMENTS TO:**

Beata Styś-Pałasz, P.E., Project Manager  
Florida Department of Transportation – District Five



Florida Department of Transportation  
719 S. Woodland Boulevard  
DeLand, Florida 32720



(386) 943-5418  
Toll Free: 1-800-780-7102



[Beata.Stys-Palasz@dot.state.fl.us](mailto:Beata.Stys-Palasz@dot.state.fl.us)



[www.i4express.com](http://www.i4express.com)

Name

Terre Zeigler

Address

Phone Number

217-649-7375

Email

sillenave@msn.com





"BEYOND I-4 ULTIMATE" PD&E  
REEVALUATION STUDY  
FROM WEST OF CR 532 TO WEST OF SR 528

FPID: 432100-1-22-01



Please provide your comments below. If more space is needed, please use an additional sheet of paper. You may place your comments in the "Comment Box" provided at the meeting, or send to the address below. Comments are also acceptable through the project website. Written comments, exhibits and/or statements must be postmarked or e-mailed no later than **November 4, 2016**.

I'd like <sup>electronic</sup> copies to all power points  
presented this evening 10/25/16.

PLEASE RETURN COMMENTS TO:

Beata Styś-Pałasz, P.E., Project Manager  
Florida Department of Transportation – District Five



Florida Department of Transportation  
719 S. Woodland Boulevard  
DeLand, Florida 32720



(386) 943-5418  
Toll Free: 1-800-780-7102



[Beata.Stys-Palasz@dot.state.fl.us](mailto:Beata.Stys-Palasz@dot.state.fl.us)



[www.i4express.com](http://www.i4express.com)

Name

Terre Zeigler

Address

Phone Number

217-649-7375

Email

sillenave@msn.com



**Colleen Jarrell**

---

**From:** Colleen Jarrell  
**Sent:** Tuesday, December 13, 2016 3:30 PM  
**To:** 'sillenave@msn.com'  
**Cc:** Luis Diaz; P. E. Beata Stys-Palasz (beata.stys-palasz@dot.state.fl.us)  
**Subject:** I-4 Beyond the Ultimate PD&E Study, Segment 2

Ms. Zeigler,

Good afternoon. Thank you for the comment form you filled out at the public hearing. You requested a copy of the powerpoint presentation from that evening. It was mentioned that all materials were available on the project website but I wanted to follow up to make sure you were able to locate and access the files.

All project files for Segment 2 can be found here:

[http://www.i4express.com/project\\_documents\\_segment\\_2.shtm](http://www.i4express.com/project_documents_segment_2.shtm)

The specific powerpoint presentation (no audio) can be found here:

[http://www.i4express.com/Seg2Docs/I-4\\_BtU\\_Segment\\_2\\_Presentation.pdf](http://www.i4express.com/Seg2Docs/I-4_BtU_Segment_2_Presentation.pdf)

The video file (including audio) can be found here:

[http://www.i4express.com/Seg2Docs/I-4\\_BtU\\_Segment\\_2\\_Presentation.mp4](http://www.i4express.com/Seg2Docs/I-4_BtU_Segment_2_Presentation.mp4)

Please let me know if you are not able to access these files or have any additional questions.

Thank you,  
Colleen

**Colleen T. Jarrell, P.E.**

Assistant Department Manager

[cjarrell@hntb.com](mailto:cjarrell@hntb.com)

Tel (407) 547-3028 Cell (407) 474-8991 Fax (407) 805-0227

**HNTB CORPORATION**

610 Crescent Executive Court Suite 400, Lake Mary, FL 32746 | [www.hntb.com](http://www.hntb.com)

 **100+ YEARS OF INFRASTRUCTURE SOLUTIONS**





"BEYOND I-4 ULTIMATE" PD&E  
REEVALUATION STUDY  
FROM WEST OF CR 532 TO WEST OF SR 528

FPID: 432100-1-22-01



Please provide your comments below. If more space is needed, please use an additional sheet of paper. You may place your comments in the "Comment Box" provided at the meeting, or send to the address below. Comments are also acceptable through the project website. Written comments, exhibits and/or statements must be postmarked or e-mailed no later than **November 4, 2016**.

Palms Villas - Bldg #7  
3100 Parkway Blvd, Kissimmee, FL 34747

What impact will there be to our property?  
We are within the right of way for the expansion.

How do we get a sound barrier wall?  
When is the projected start date?

PLEASE RETURN COMMENTS TO:

Beata Styś-Pałasz, P.E., Project Manager  
Florida Department of Transportation - District Five



Florida Department of Transportation  
719 S. Woodland Boulevard  
DeLand, Florida 32720



(386) 943-5418  
Toll Free: 1-800-780-7102



[Beata.Stys-Palasz@dot.state.fl.us](mailto:Beata.Stys-Palasz@dot.state.fl.us)



[www.i4express.com](http://www.i4express.com)

Name

Terre Zeigler

Address

16622 Lazy Breeze Loop  
Clermont, FL 34741

Phone Number

217-649-7375

Email

[sillenave@msn.com](mailto:sillenave@msn.com)





## *Florida Department of Transportation*

**RICK SCOTT**  
GOVERNOR

719 S. Woodland Boulevard  
DeLand, FL 32720-6834

**JIM BOXOLD**  
SECRETARY

January 30, 2017

Ms. Terre Zeigler  
16622 Lazy Breeze Loop  
Clermont, FL 34741

Subject: "I-4 Beyond the Ultimate" Project Development and Environment (PD&E) Reevaluation Study  
From West of County Road (CR) 532 to West of the Beachline Expressway/State Road (SR) 528  
Osceola and Orange Counties  
Financial Project ID Number: 432100-1-22-01  
Design Project ID Number: 431561-1-32-01 (Osceola County)  
Design Project ID Number: 242484-8-32-01 (Orange County)  
Federal Aid Project Number: 0041-227-I

Dear Ms. Zeigler:

On behalf of the Florida Department of Transportation (FDOT), District Five, we would like to thank you for your involvement in the "I-4 Beyond the Ultimate" PD&E Study. The FDOT values your input and considers interaction with the public to be an essential component of transportation improvements.

We are writing you to thank you for your comments you submitted at the public hearing. You had several questions related to your property located at Palm Villas (3100 Parkway Boulevard, Kissimmee, FL). You asked about the potential impacts to your property, how to get a sound barrier and the projected project start date. You also requested copies of the presentations from the public hearing.

I am aware that Colleen Jarrell with HNTB sent you an email with links to the presentations that were given at the public hearing. The Noise Study Report indicated there are no sites predicted to be impacted by this project, therefore a sound barrier is not proposed. With regards to the proximity of the improvements to the Palm Villas building, the current recommended concept plans from the PD&E phase indicate the roadway improvements will partially impact Building 7 of Palm Villas. The true extent of this impact is unknown at this time and will be better determined during the design phase of the improvements when more detailed survey and calculations are performed. Public meetings will be conducted during the design phase that will afford you the opportunity to review and comment on the design plans. Information regarding the design project and schedule can be found on our website [http://www.i4express.com/design\\_contracts.shtm](http://www.i4express.com/design_contracts.shtm).

Again, we sincerely appreciate your participation and input into this project. If you have additional questions or comments, please do not hesitate to contact me at 386-943-5418 or [beata.stys-palasz@dot.state.fl.us](mailto:beata.stys-palasz@dot.state.fl.us).

Sincerely,

A handwritten signature in blue ink that reads "Beata Stys-Palasz". The signature is written in a cursive, flowing style.

Beata Stys-Palasz, P.E.  
FDOT Project Manager



THIS PAGE LEFT BLANK INTENTIONALLY.



## Appendix C - **Conceptual Signing Plan**



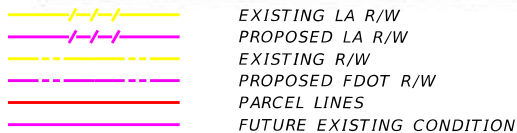
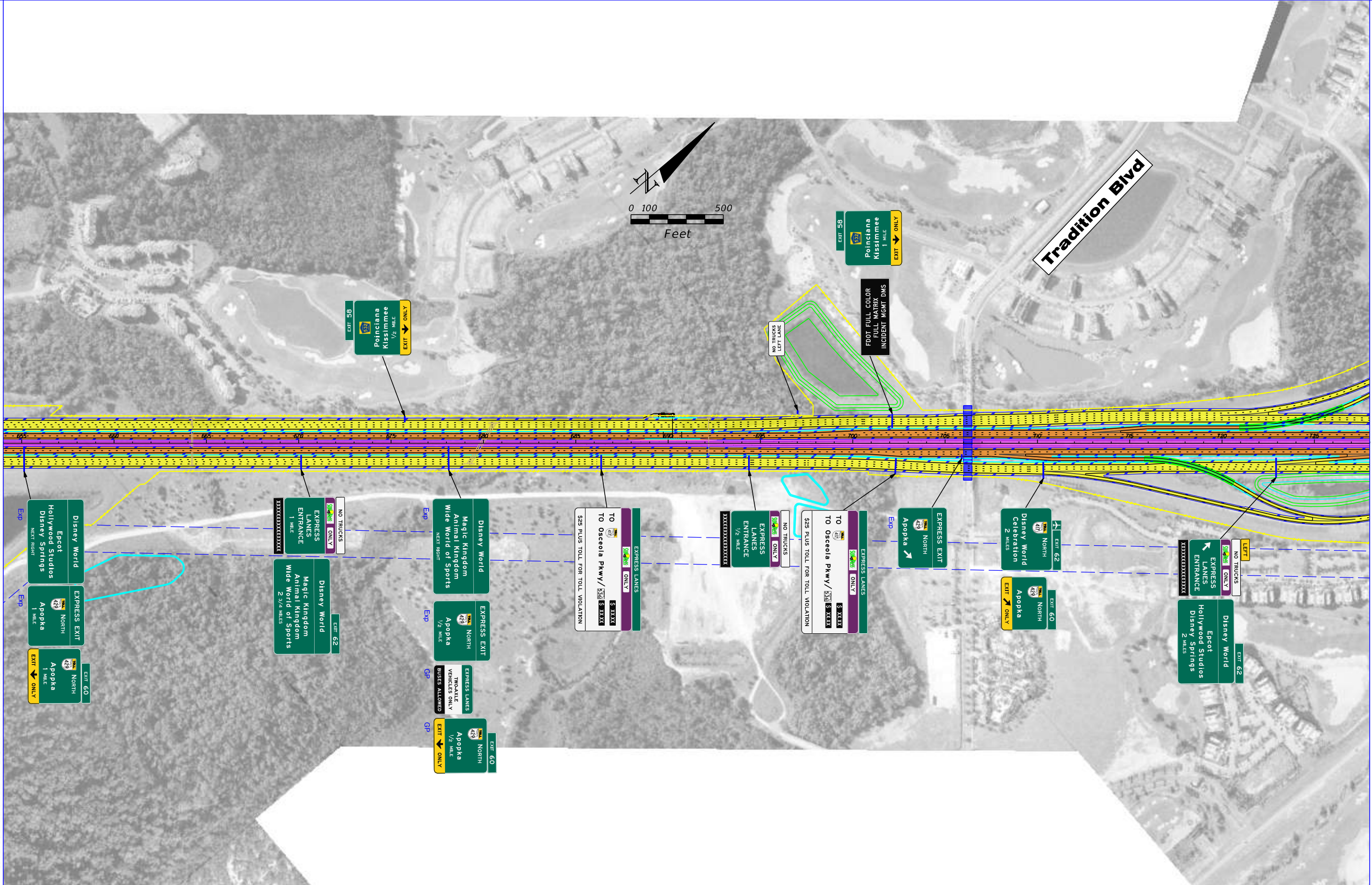
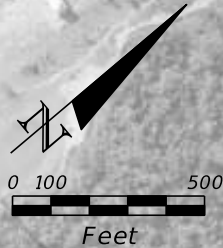


*I-4 PD&E STUDY  
CONCEPTUAL SIGNING PLAN  
SEGMENT 1*



MATCHLINE STA. 654+00.00

MATCHLINE STA. 728+00.00



HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY  
CONCEPTUAL SIGNING PLAN  
SEGMENT 1

SHEET  
NO.

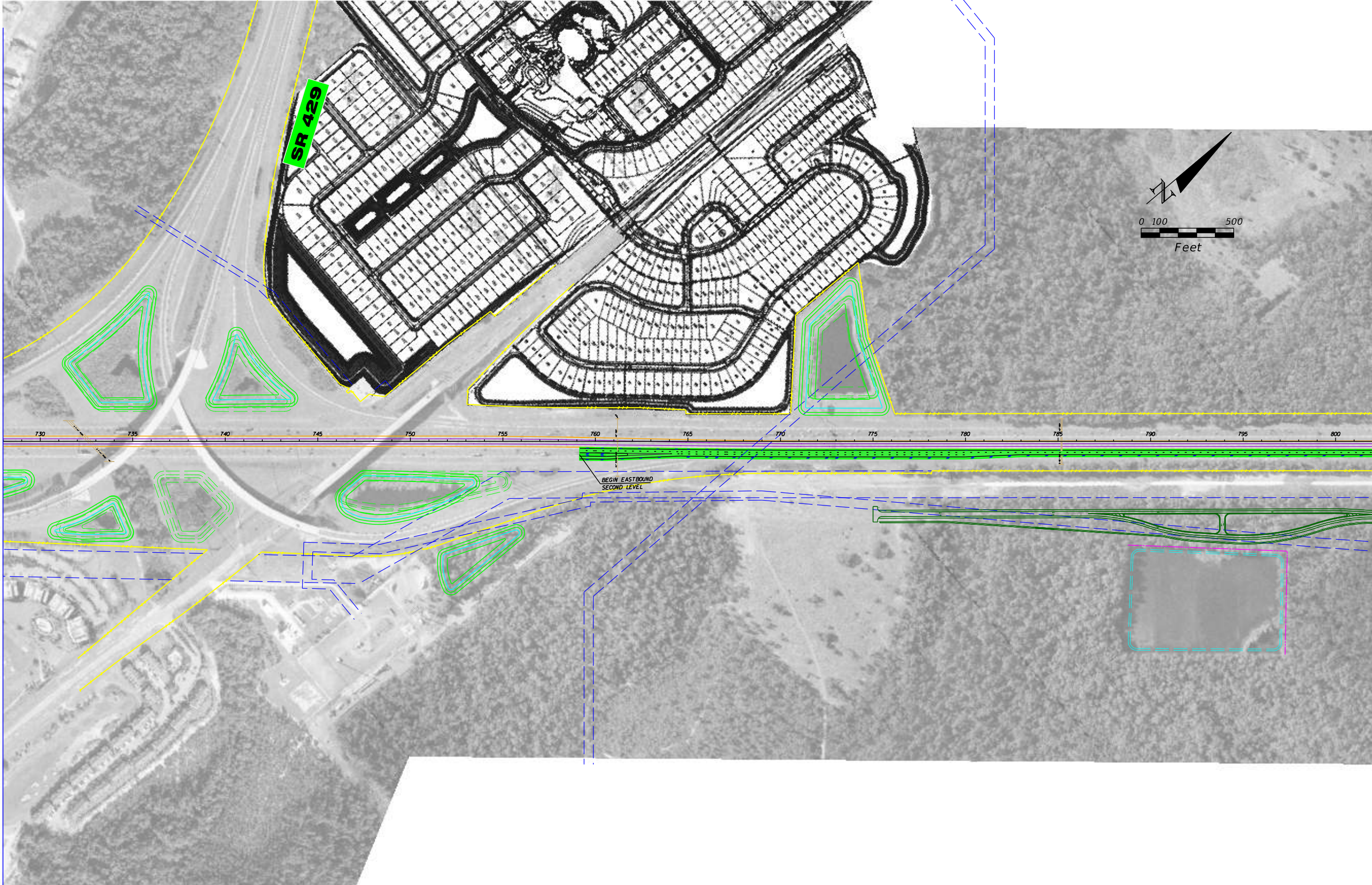




C-3



MATCHLINE STA. 728+00.00



MATCHLINE STA. 802+00.00

	EXISTING LA R/W
	PROPOSED LA R/W
	EXISTING R/W
	PROPOSED FDOT R/W
	PARCEL LINES
	FUTURE EXISTING CONDITION

	GENERAL USE LANES
	EXPRESS LANES
	EXISTING BRIDGE
	PROPOSED BRIDGE
	BARRIER WALL
	PARCEL NUMBERS

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

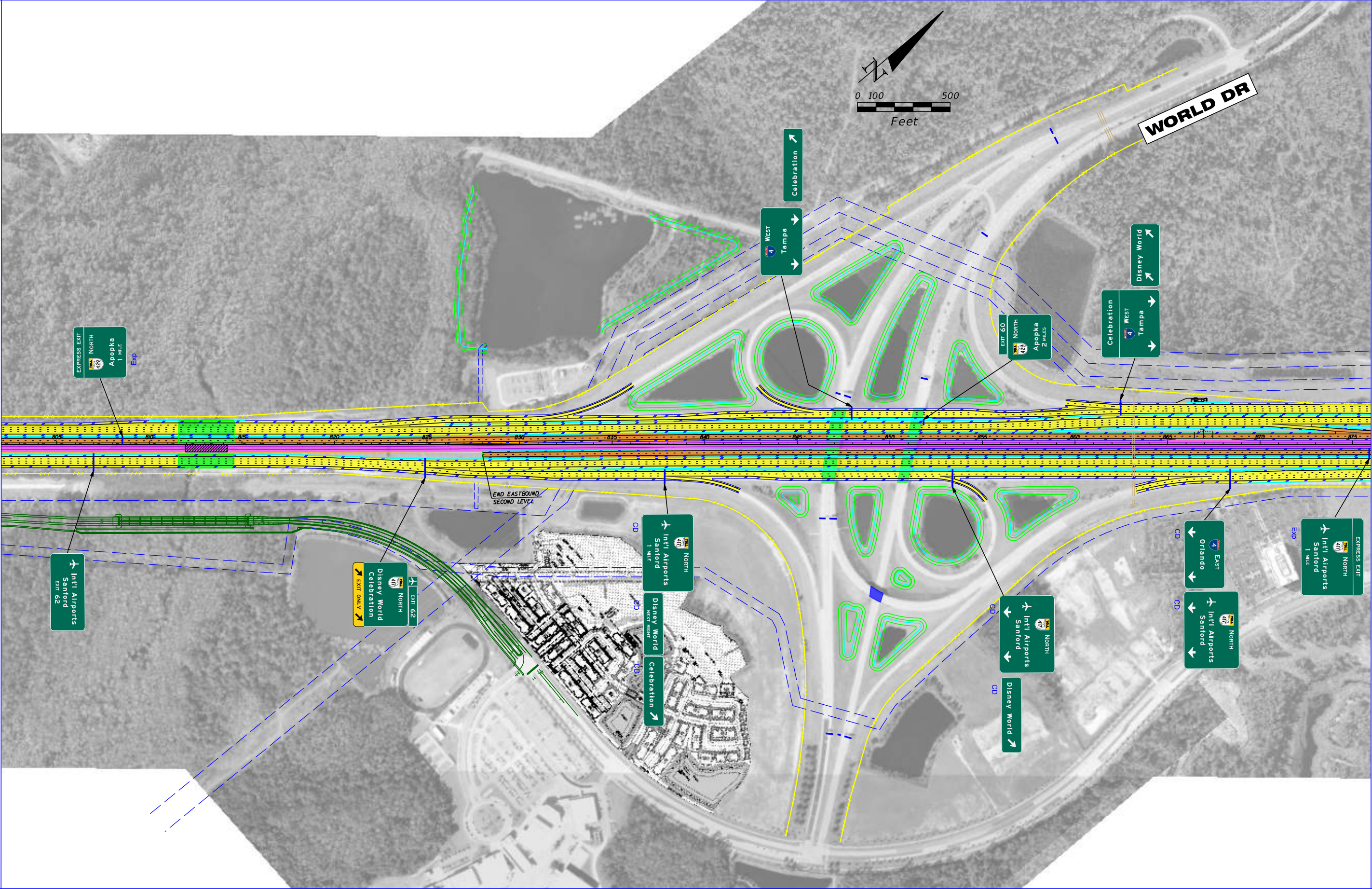
I-4 PD&E STUDY  
CONCEPTUAL SIGNING PLAN  
SEGMENT 1

SHEET  
NO.



MATCHLINE STA. 802+00.00

MATCHLINE STA. 875+00.00



<div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W EXISTING R/W PROPOSED FDOT R/W PARCEL LINES FUTURE EXISTING CONDITION</div>	<div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE BARRIER WALL PARCEL NUMBERS</div>	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1	SHEET NO.
		ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	ROAD NO.	COUNTY	FINANCIAL PROJECT ID			
			400	SEMINOLE	432100-1-22-01			



MATCHLINE STA. 802+00.00

MATCHLINE STA. 875+00.00



WORLD DR

END EASTBOUND  
SECOND LEVEL

- |  |                           |  |                   |
|--|---------------------------|--|-------------------|
|  | EXISTING LA R/W           |  | GENERAL USE LANES |
|  | PROPOSED LA R/W           |  | EXPRESS LANES     |
|  | EXISTING R/W              |  | EXISTING BRIDGE   |
|  | PROPOSED FDOT R/W         |  | PROPOSED BRIDGE   |
|  | PARCEL LINES              |  | BARRIER WALL      |
|  | FUTURE EXISTING CONDITION |  | PARCEL NUMBERS    |



HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

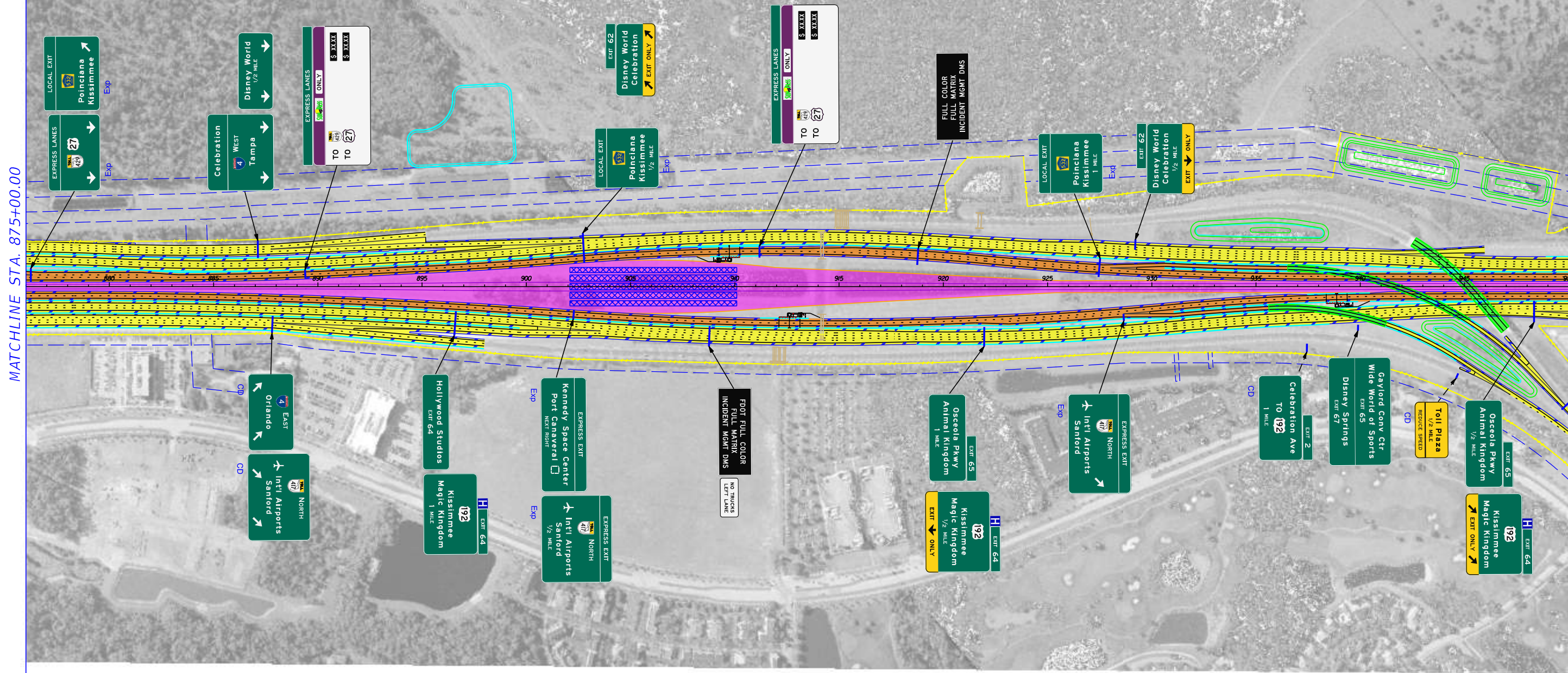
STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

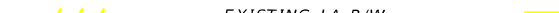

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY  
CONCEPTUAL SIGNING PLAN  
SEGMENT 1

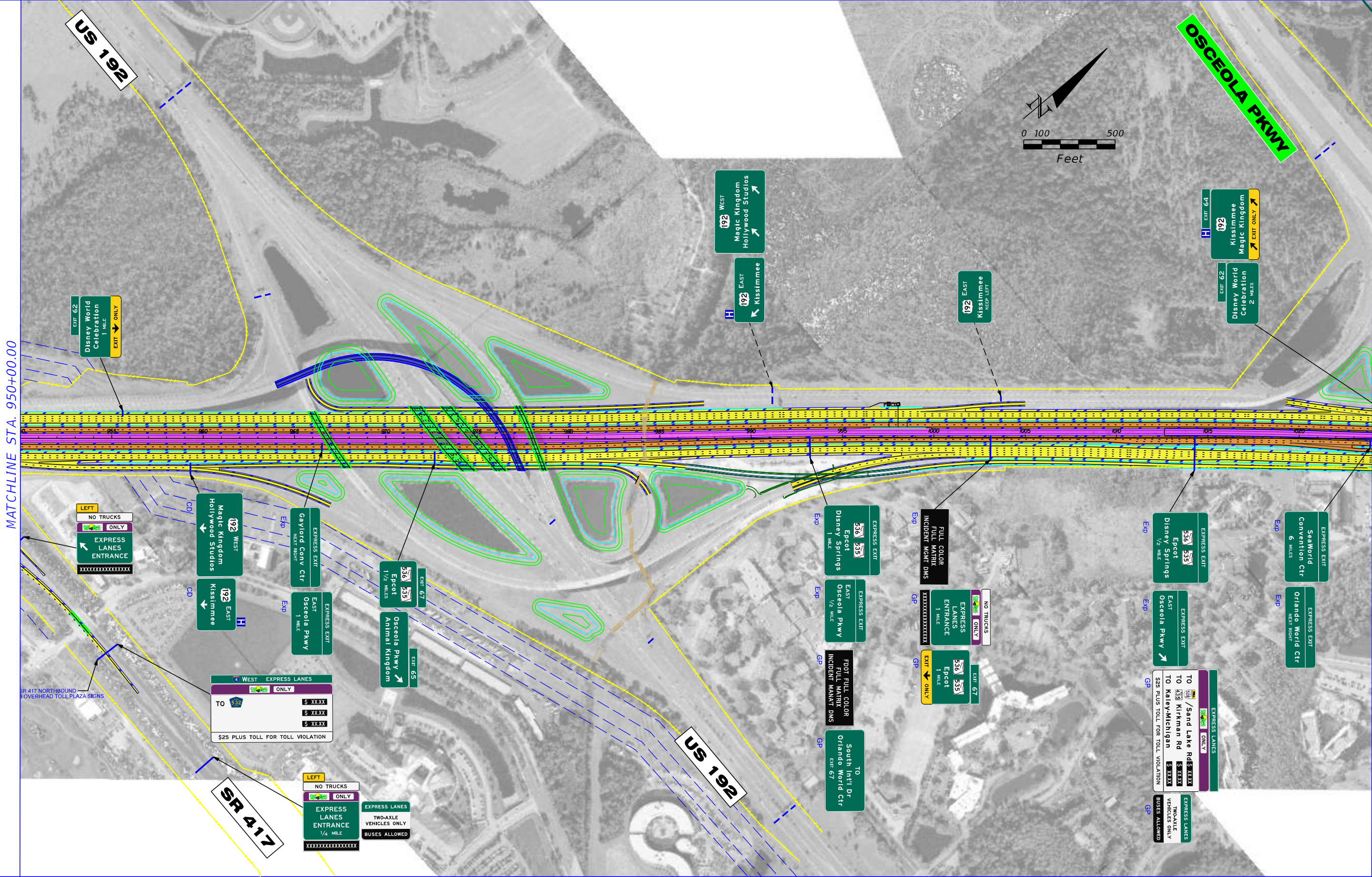
SHEET  
NO.





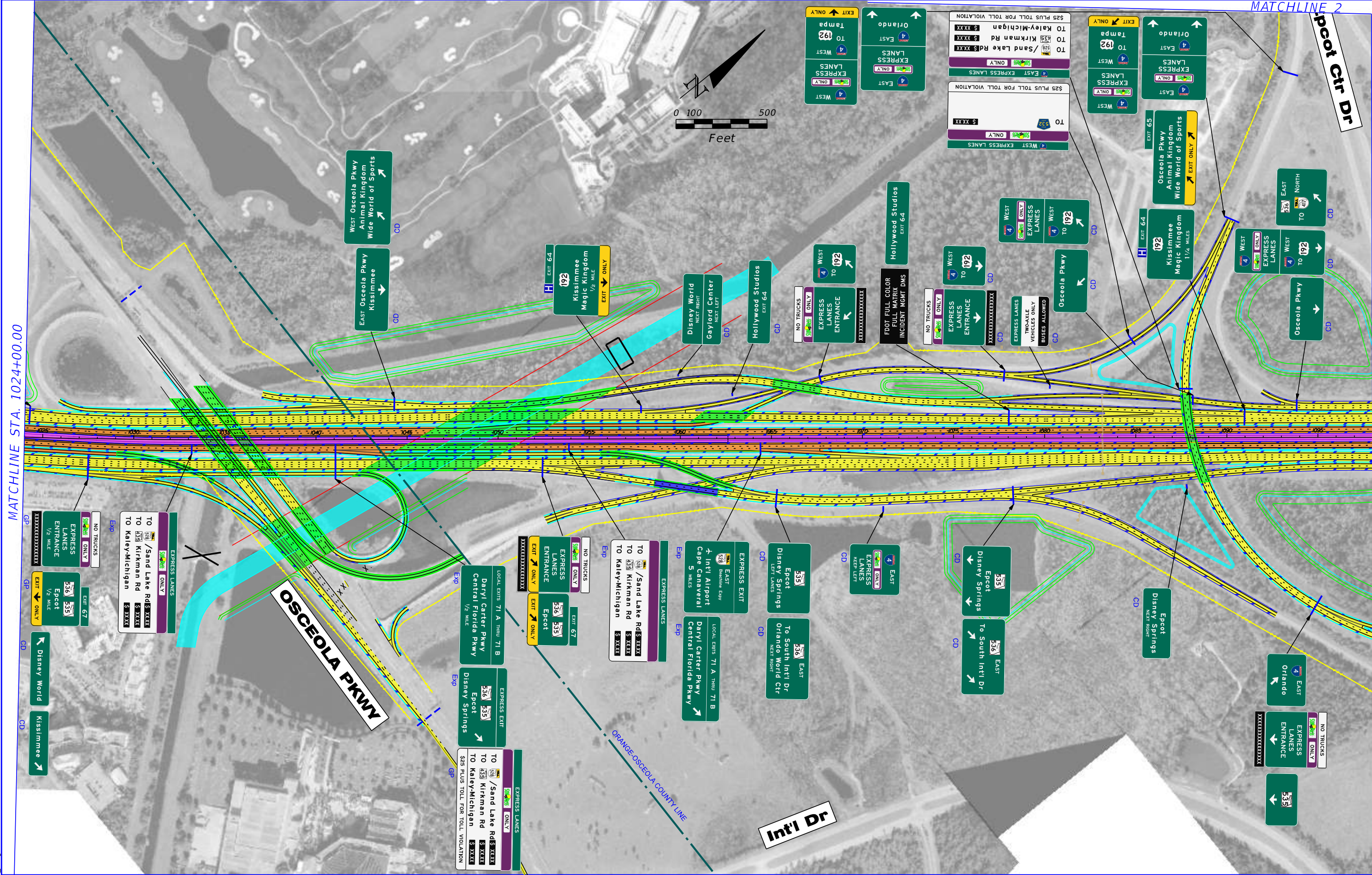
 EXISTING LA R/W PROPOSED LA R/W EXISTING R/W PROPOSED FDOT R/W PARCEL LINES FUTURE EXISTING CONDITION	 GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE BARRIER WALL PARCEL NUMBERS	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	<div>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</div> <table><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>SEMINOLE</td><td>432100-1-22-01</td></tr></table>			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	SEMINOLE	432100-1-22-01	<div>I-4 PD&amp;E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1</div>	SHEET NO.
ROAD NO.	COUNTY	FINANCIAL PROJECT ID											
400	SEMINOLE	432100-1-22-01											





<div><div></div><div></div><div></div><div></div><div></div></div> <div>EXISTING LA R/W PROPOSED LA R/W EXISTING R/W PROPOSED FDOT R/W PARCEL LINES FUTURE EXISTING CONDITION</div>	<div><div></div><div></div><div></div><div></div><div></div></div> <div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE BARRIER WALL PARCEL NUMBERS</div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500  ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1	SHEET NO.  C-8
			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
			400	SEMINOLE	432100-1-22-01		





MATCHLINE STA. 1024+00.00

MATCHLINE STA. 1098+00.00

	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	EXISTING R/W		EXISTING BRIDGE
	PROPOSED FDOT R/W		PROPOSED BRIDGE
	PARCEL LINES		BARRIER WALL
	FUTURE EXISTING CONDITION		PARCEL NUMBERS

HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY  
CONCEPTUAL SIGNING PLAN  
SEGMENT 1

SHEET  
NO.



MATCHLINE STA. 1098+00.00

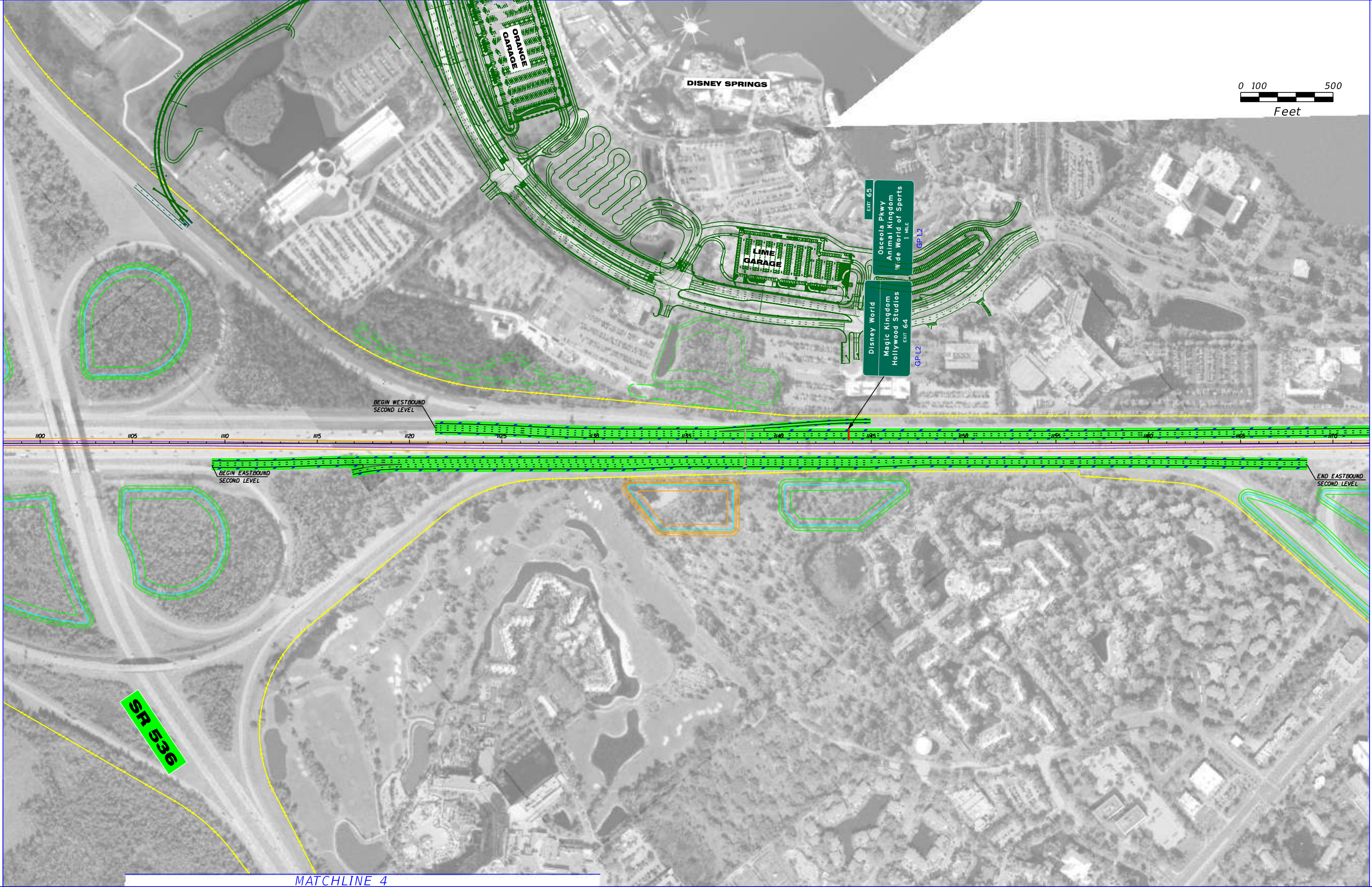
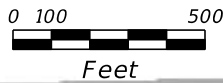
MATCHLINE 4



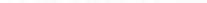









MATCHLINE STA. 1172+00.00



MATCHLINE STA. 1098+00.00

MATCHLINE STA. 1172+00.00



<div><div> EXISTING LA R/W</div><div> PROPOSED LA R/W</div><div> EXISTING R/W</div><div> PROPOSED FDOT R/W</div><div> PARCEL LINES</div><div> FUTURE EXISTING CONDITION</div></div> <div><div> GENERAL USE LANES</div><div> EXPRESS LANES</div><div> EXISTING BRIDGE</div><div> PROPOSED BRIDGE</div><div> BARRIER WALL</div><div> PARCEL NUMBERS</div></div>		<div><div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div></div>	<div><div>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION</div><table><tr><th>ROAD NO.</th><th>COUNTY</th><th>FINANCIAL PROJECT ID</th></tr><tr><td>400</td><td>SEMINOLE</td><td>432100-1-22-01</td></tr></table></div>	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	400	SEMINOLE	432100-1-22-01	<div><div>I-4 PD&amp;E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1</div></div>	<div>SHEET NO.</div>
ROAD NO.	COUNTY	FINANCIAL PROJECT ID									
400	SEMINOLE	432100-1-22-01									





MATCHLINE STA. 1276+00.00

<div><div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div><div>EXISTING LA R/W PROPOSED LA R/W EXISTING R/W PROPOSED FDOT R/W PARCEL LINES FUTURE EXISTING CONDITION</div></div>	<div><div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div><div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE BARRIER WALL PARCEL NUMBERS</div></div>
<div><div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div><div>EXISTING LA R/W PROPOSED LA R/W EXISTING R/W PROPOSED FDOT R/W PARCEL LINES FUTURE EXISTING CONDITION</div></div>	<div><div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div><div><div></div><div></div></div></div><div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE BARRIER WALL PARCEL NUMBERS</div></div>

HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID			
400	SEMINOLE	432100-1-22-01			

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593	400	SEMINOLE	432100-1-22-01
--------------------------------------------------------------------------	-----	----------	----------------

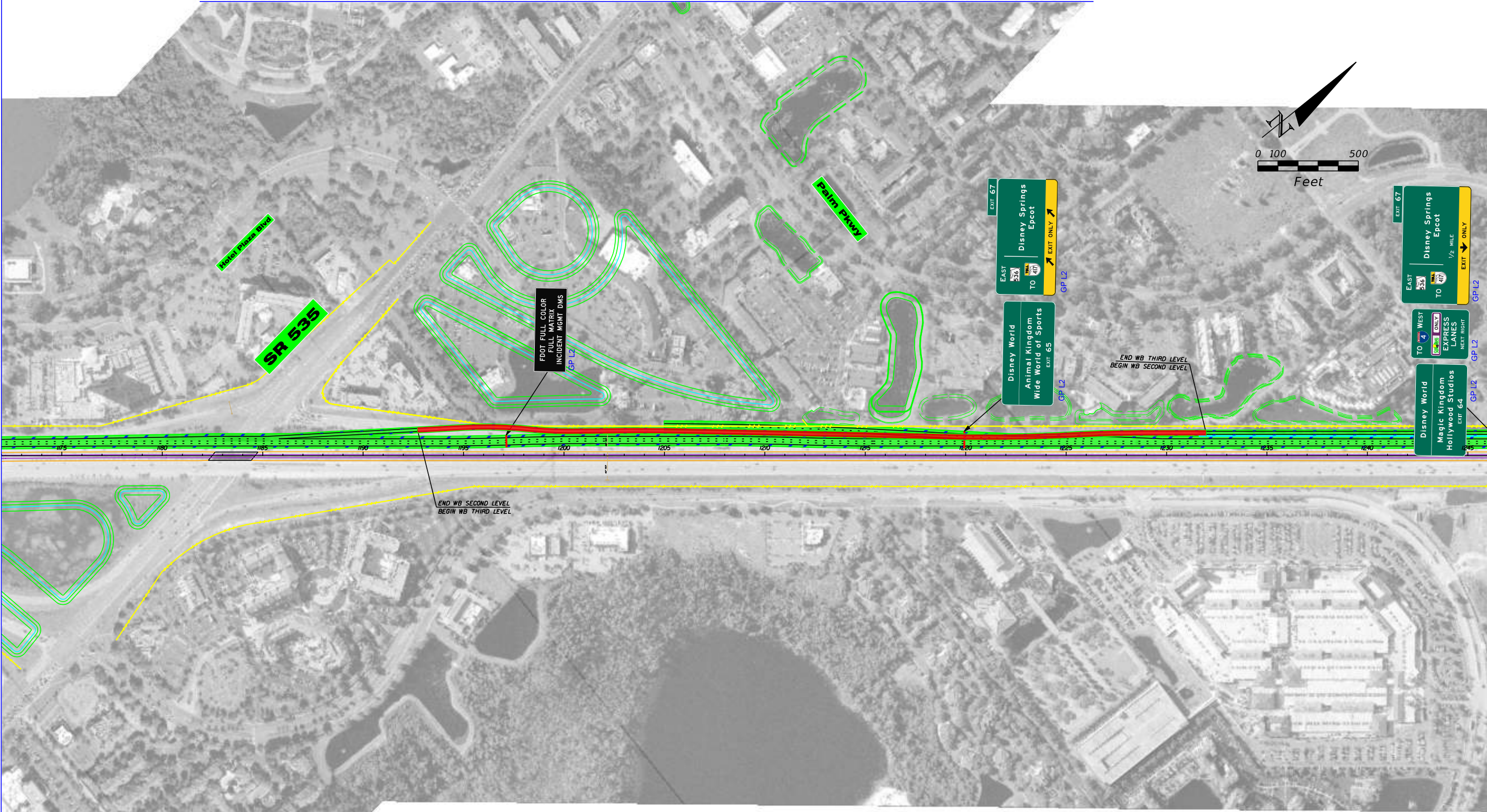
I-4 PD&E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1				SHEET NO.
--------------------------------------------------------	--	--	--	-----------



MATCHLINE STA. 1172+00.00

MATCHLINE 3

MATCHLINE STA. 1276+00.00



	EXISTING LA R/W
	PROPOSED LA R/W
	EXISTING R/W
	PROPOSED FDOT R/W
	PARCEL LINES
	FUTURE EXISTING CONDITION

	GENERAL USE LANES
	EXPRESS LANES
	EXISTING BRIDGE
	PROPOSED BRIDGE
	BARRIER WALL
	PARCEL NUMBERS

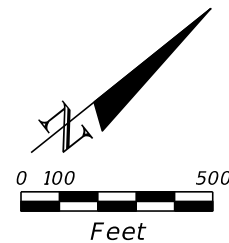
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY  
CONCEPTUAL SIGNING PLAN  
SEGMENT 1

SHEET  
NO.






 EXISTING LA R/W  
 PROPOSED LA R/W  
 EXISTING R/W  
 PROPOSED FDOT R/W  
 PARCEL LINES  
 FUTURE EXISTING CONDITION

GENERAL USE LANES  
 EXPRESS LANES  
 EXISTING BRIDGE  
 PROPOSED BRIDGE  
 BARRIER WALL  
 PARCEL NUMBERS

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

*I-4 PD&E STUDY  
CONCEPTUAL SIGNING PLAN  
SEGMENT 1*

*SHEET*  
*NO.*



C-15



MATCHLINE STA. 1320+00.00



	EXISTING LA R/W
	PROPOSED LA R/W
	EXISTING R/W
	PROPOSED FDOT R/W
	PARCEL LINES
	FUTURE EXISTING CONDITION

	GENERAL USE LANES
	EXPRESS LANES
	EXISTING BRIDGE
	PROPOSED BRIDGE
	BARRIER WALL
	PARCEL NUMBERS

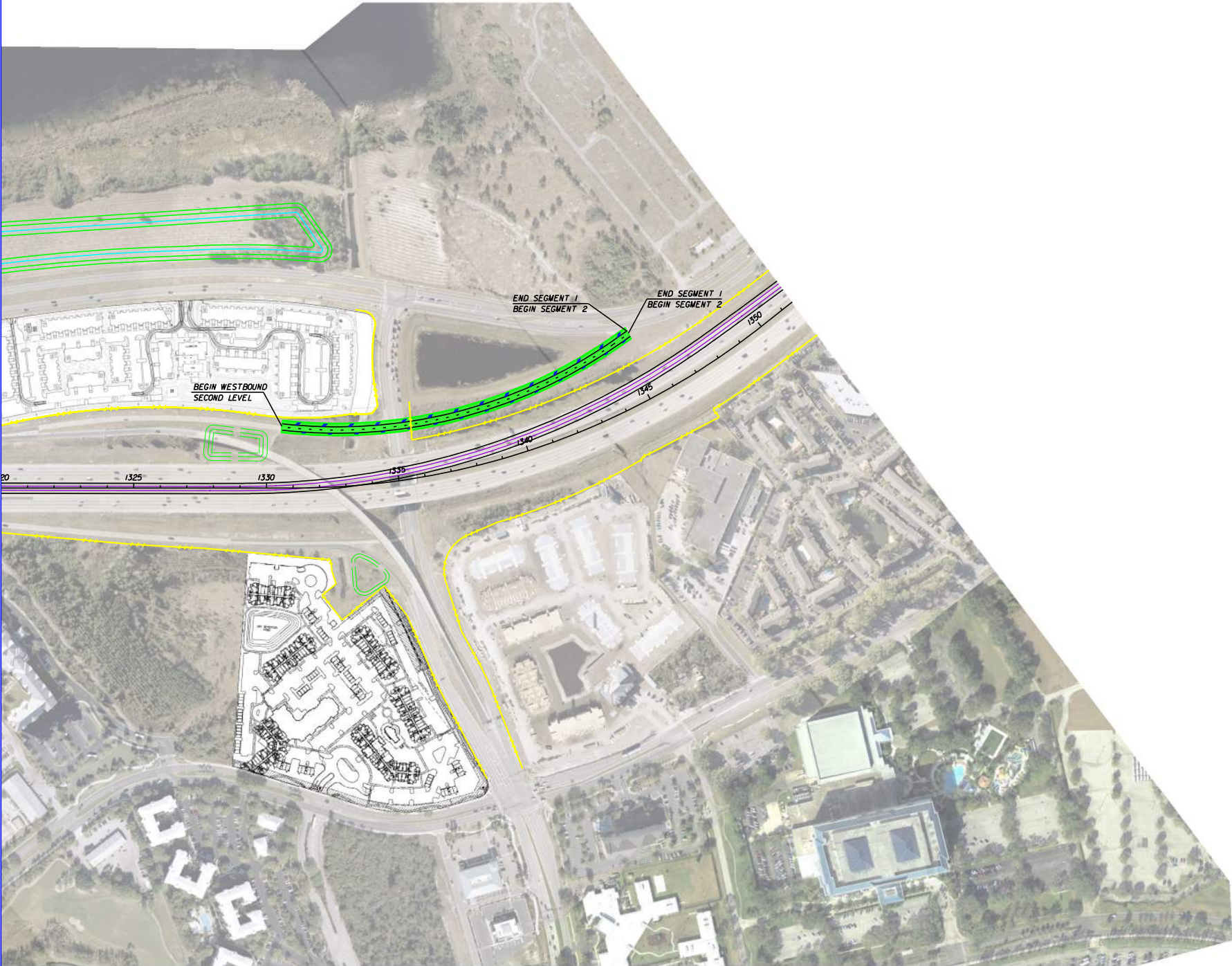
HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500  
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

I-4 PD&E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1	
SHEET NO.	



MATCHLINE STA. 1320+00.00



	EXISTING LA R/W		GENERAL USE LANES
	PROPOSED LA R/W		EXPRESS LANES
	EXISTING R/W		EXISTING BRIDGE
	PROPOSED FDOT R/W		PROPOSED BRIDGE
	PARCEL LINES		BARRIER WALL
	FUTURE EXISTING CONDITION		PARCEL NUMBERS

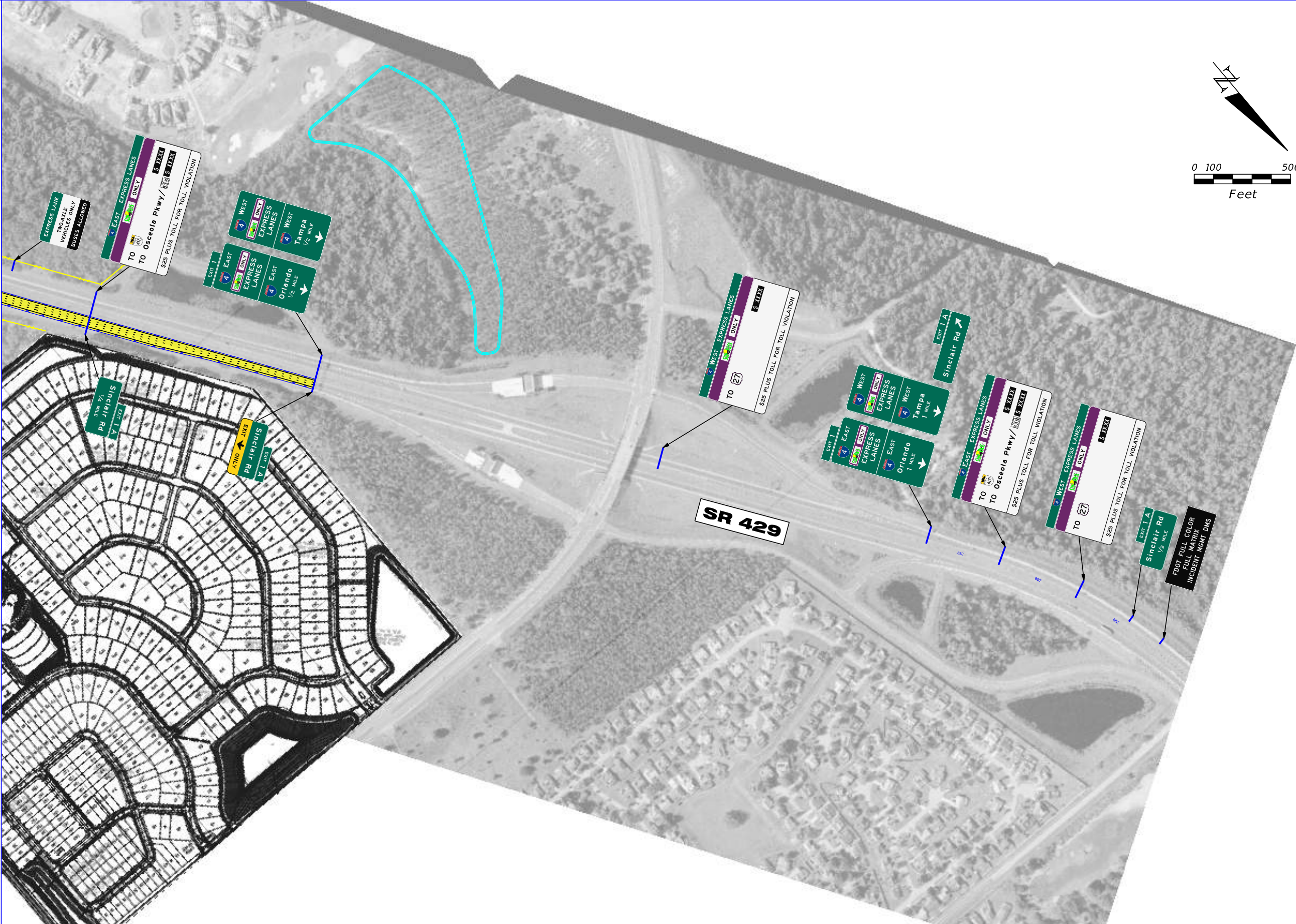
HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500
ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	SEMINOLE	432100-1-22-01

<b>I-4 PD&amp;E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1</b>	SHEET NO.



MATCHLINE 1



<div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>EXISTING LA R/W PROPOSED LA R/W EXISTING R/W PROPOSED FDOT R/W PARCEL LINES FUTURE EXISTING CONDITION</div></div> <div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE BARRIER WALL PARCEL NUMBERS</div></div>	<div><div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div><div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div></div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1	SHEET NO.
		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
		400	SEMINOLE	432100-1-22-01	C-18	



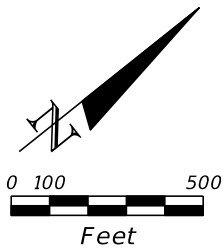


HNTB CORPORATION  
610 CRESCENT EXECUTIVE CT  
SUITE 400  
LAKE MARY, FL 32746  
(407) 805-0355  
CERT. OF AUTH. NO. 6500

ENGINEER OF RECORD: ROBERT M. DENNEY, P.E.  
FL. REGISTRATION NO. 58593

*I-4 PD&E STUDY  
CONCEPTUAL SIGNING PLAN  
SEGMENT 1*

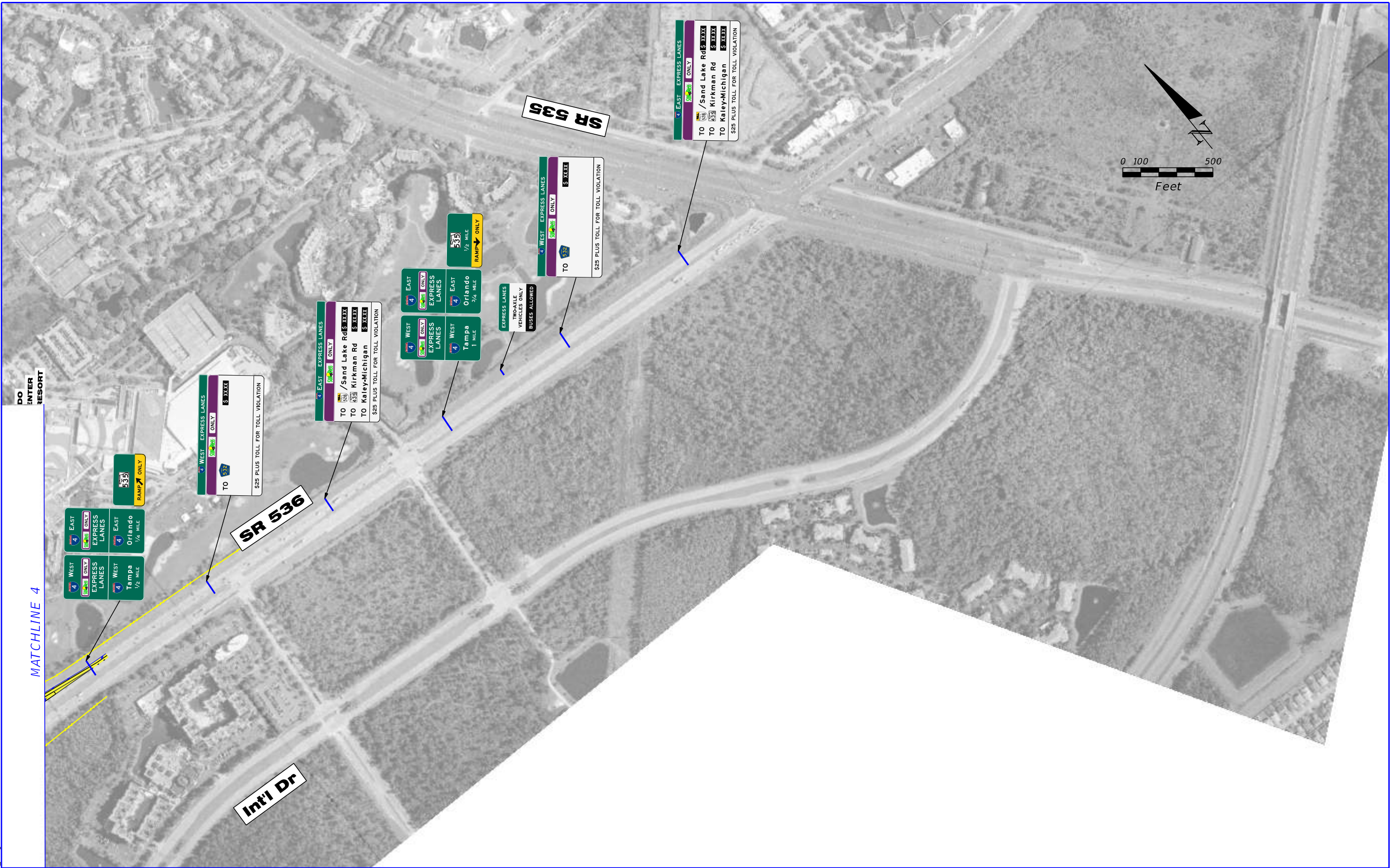




MATCHLINE 3

<div><div><div></div><div></div><div></div><div></div><div></div></div><div>EXISTING LA R/W PROPOSED LA R/W EXISTING R/W PROPOSED FDOT R/W PARCEL LINES FUTURE EXISTING CONDITION</div></div> <div><div><div></div><div></div><div></div><div></div><div></div></div><div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE BARRIER WALL PARCEL NUMBERS</div></div>	<div>HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500</div> <div>ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593</div>	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			I-4 PD&E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1	SHEET NO.
		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
		400	SEMINOLE	432100-1-22-01		





<div><div><div></div><div></div><div></div><div></div><div></div></div><div>EXISTING LA R/W PROPOSED LA R/W EXISTING R/W PROPOSED FDOT R/W PARCEL LINES FUTURE EXISTING CONDITION</div></div> <div><div><div></div><div></div><div></div><div></div><div></div></div><div>GENERAL USE LANES EXPRESS LANES EXISTING BRIDGE PROPOSED BRIDGE BARRIER WALL PARCEL NUMBERS</div></div>	HNTB CORPORATION 610 CRESCENT EXECUTIVE CT SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT. OF AUTH. NO. 6500		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		I-4 PD&E STUDY CONCEPTUAL SIGNING PLAN SEGMENT 1	SHEET NO.
	ENGINEER OF RECORD: ROBERT M. DENNEY, P.E. FL. REGISTRATION NO. 58593		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
			400	SEMINOLE	432100-1-22-01	



THIS PAGE LEFT BLANK INTENTIONALLY.



## Appendix D - Long Range Estimates (LRE)



Date: 8/12/2016 9:46:41 AM

## FDOT Long Range Estimating System - Production

### R3: Project Details by Sequence Report

Project: 242484-8-52-01

Letting Date: 01/2099

**Description:** (242484-8)SR 400 (I-4) from East of SR 522 Osceola Parkway (Osceola/Orange County Line) to West of SR 528 Beachline Expressway - Orange County

District: 05 County: 75 ORANGE

Market Area: 08 Units: English

Contract Class: 1 Lump Sum Project: N

Design/Build: N Project Length: 5.730 MI

Project Manager: BSP

**Version 17 Project Grand Total****\$928,985,020.06**

**Description:** I-4 (SR 400) FROM OSCEOLA / ORANGE COUNTY LINE (Sta. 1042+94.30, MP 0) TO W OF SR 528 BEELINE (Sta. 1345+48.50, MP 5.65. HNTB August 2016 Update: Express Lanes with Asphalt Pavement

**Sequence:** 1 NDR - New Construction, Divided, Rural**Net Length:** 5.730 MI  
30,254 LF

**Description:** Construct 3 GUL in each direction for a total of 30254' from Station 1042+24.30 to station 1345+48.50.

**Special Conditions:** Includes ITS and drainage basins for entire project.

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	200.00 / 200.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	5.730
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	277.82 AC	\$10,000.00	\$2,778,200.00
120-6	EMBANKMENT	206,469.47 CY	\$8.00	\$1,651,755.76

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	3,182,659.00 CY	\$8.00	\$25,461,272.00

**Earthwork Component Total** **\$29,891,227.76**

**ROADWAY COMPONENT**



**User Input Data**

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	660
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	403,384.96 SY	\$3.25	\$1,311,001.12
285-712	OPTIONAL BASE,BASE GROUP 12	246,468.21 SY	\$23.00	\$5,668,768.83
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	79,870.22 TN	\$97.88	\$7,817,697.13
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	9,681.24 TN	\$142.31	\$1,377,737.26

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-1	CONC TRAF RAIL BAR, JCT SLAB,32"F SHAPE	60,508.00 LF	\$240.44	\$14,548,543.52
	<b>Comment:</b> along both sides of I-4			

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	3,868.00 EA	\$3.74	\$14,466.32
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	22.92 NM	\$908.42	\$20,820.99
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	22.92 GM	\$383.54	\$8,790.74
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	22.92 NM	\$3,138.35	\$71,930.98
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	22.92 GM	\$1,027.15	\$23,542.28

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	51.00 TN	\$235.00	\$11,985.00



536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,500.00 LF	\$15.96	\$23,940.00
536-85-22	GUARDRAIL END ANCHORAGE ASSEMBLY- FLARED	3.00 EA	\$2,257.65	\$6,772.95
544-75-1	CRASH CUSHION	20.00 EA	\$15,521.81	\$310,436.20
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	60,508.00 LF	\$12.11	\$732,751.88
<b>Roadway Component Total</b>				<b>\$31,949,185.20</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	82,895.61 SY	\$17.00	\$1,409,225.37
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	13,311.70 TN	\$100.00	\$1,331,170.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	11.46 PM	\$1,428.02	\$16,365.11

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	78,660.07 LF	\$1.15	\$90,459.08
104-11	FLOATING TURBIDITY BARRIER	1,432.48 LF	\$9.63	\$13,794.78
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	1,432.48 LF	\$4.69	\$6,718.33
104-15	SOIL TRACKING PREVENTION DEVICE	6.00 EA	\$2,215.78	\$13,294.68
104-18	INLET PROTECTION SYSTEM	35.00 EA	\$94.06	\$3,292.10
107-1	LITTER REMOVAL	138.89 AC	\$35.00	\$4,861.15
107-2	MOWING	138.89 AC	\$50.00	\$6,944.50

**Shoulder Component Total****\$2,896,125.10****MEDIAN COMPONENT****User Input Data**

Description	Value
Total Median Width	24.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O



Rumble Strips No. of Sides

2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	82,895.61 SY	\$17.00	\$1,409,225.37
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	13,311.70 TN	\$100.00	\$1,331,170.00
521-1-1	MEDIAN BARRIER WALL CONC, PRECAST	57,508.00 LF	\$111.97	\$6,439,170.76
<b>Median Component Total</b>				<b>\$9,179,566.13</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	392.00 LF	\$111.27	\$43,617.84
570-1-1	PERFORMANCE TURF	4,033.85 SY	\$0.76	\$3,065.73

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	200.00 EA	\$5,750.00	\$1,150,000.00
<b>Comment:</b> TOTAL DIST./ 300'X 2 SIDES				
430-982-138	MITERED END SECT, OPTIONAL RD, 36" CD	2.00 EA	\$2,463.56	\$4,927.12
430-982-140	MITERED END SECT, OPTIONAL RD, 42" CD	2.00 EA	\$3,060.45	\$6,120.90
430-982-141	MITERED END SECT, OPTIONAL RD, 48" CD	2.00 EA	\$3,424.94	\$6,849.88

**EX-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	24" RCP SD	5.00 MI	\$300,000.00	\$1,500,000.00
<b>Comment:</b> TRUNK LINE. \$300000 PER MILE.				

**Retention Basin 1**

Description	Value
Size	1.5 AC
Multiplier	1
Depth	12.00
Description	188A

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.50 AC	\$10,000.00	\$15,000.00
120-1	REGULAR EXCAVATION	29,040.00 CY	\$4.50	\$130,680.00
400-2-2	CONC CLASS II, ENDWALLS	18.00 CY	\$1,301.59	\$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00 EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00 LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,025.00 LF	\$12.11	\$12,412.75



550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00 EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	7,260.00 SY	\$0.76	\$5,517.60

**Retention Basin 2**

<b>Description</b>	<b>Value</b>
Size	2 AC
Multiplier	4
Depth	12.00
Description	188B

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	8.00 AC	\$10,000.00	\$80,000.00
120-1	REGULAR EXCAVATION	154,880.00 CY	\$4.50	\$696,960.00
400-2-2	CONC CLASS II, ENDWALLS	72.00 CY	\$1,301.59	\$93,714.48
425-1-541	INLETS, DT BOT, TYPE D, <10'	4.00 EA	\$3,512.69	\$14,050.76
425-2-71	MANHOLES, J-7, <10'	4.00 EA	\$6,250.00	\$25,000.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	224.00 LF	\$133.10	\$29,814.40
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00 LF	\$216.88	\$173,504.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	4,720.00 LF	\$12.11	\$57,159.20
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	4.00 EA	\$2,128.82	\$8,515.28
570-1-1	PERFORMANCE TURF	38,720.00 SY	\$0.76	\$29,427.20

**Retention Basin 3**

<b>Description</b>	<b>Value</b>
Size	10 AC
Multiplier	1
Depth	12.00
Description	189

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00 AC	\$10,000.00	\$100,000.00
120-1	REGULAR EXCAVATION	193,600.00 CY	\$4.50	\$871,200.00
400-2-2	CONC CLASS II, ENDWALLS	36.00 CY	\$1,301.59	\$46,857.24
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00 EA	\$3,512.69	\$7,025.38
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$6,250.00	\$12,500.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	104.00 LF	\$133.10	\$13,842.40
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00 LF	\$216.88	\$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00 LF	\$12.11	\$33,665.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00 EA	\$2,128.82	\$6,386.46
570-1-1	PERFORMANCE TURF	48,400.00 SY	\$0.76	\$36,784.00

**Retention Basin 4**

<b>Description</b>	<b>Value</b>
Size	2 AC
Multiplier	1



Depth 3.00  
Description FPC 189

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.00	AC	\$10,000.00	\$20,000.00
120-1	REGULAR EXCAVATION	9,680.00	CY	\$4.50	\$43,560.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	\$1,301.59	\$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00	EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,180.00	LF	\$12.11	\$14,289.80
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	1.00	EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	9,680.00	SY	\$0.76	\$7,356.80

**Retention Basin 5**

Description	Value
Size	2.5 AC
Multiplier	1
Depth	12.00
Description	FPC 190

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50	AC	\$10,000.00	\$25,000.00
120-1	REGULAR EXCAVATION	48,400.00	CY	\$4.50	\$217,800.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	\$1,301.59	\$23,428.62
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	\$5,040.98	\$5,040.98
425-2-71	MANHOLES, J-7, <10'	1.00	EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00	LF	\$12.11	\$16,166.85
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	1.00	EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	12,100.00	SY	\$0.76	\$9,196.00

**Retention Basin 6**

Description	Value
Size	10 AC
Multiplier	1
Depth	12.00
Description	190

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.00	AC	\$10,000.00	\$100,000.00
120-1	REGULAR EXCAVATION	193,600.00	CY	\$4.50	\$871,200.00
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	\$1,301.59	\$46,857.24
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	\$3,512.69	\$7,025.38



425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$6,250.00	\$12,500.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	104.00 LF	\$133.10	\$13,842.40
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00 LF	\$216.88	\$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,780.00 LF	\$12.11	\$33,665.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00 EA	\$2,128.82	\$6,386.46
570-1-1	PERFORMANCE TURF	48,400.00 SY	\$0.76	\$36,784.00

**Retention Basin 7**

<b>Description</b>	<b>Value</b>
Size	2.5 AC
Multiplier	3
Depth	12.00
Description	191

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	7.50 AC	\$10,000.00	\$75,000.00
120-1	REGULAR EXCAVATION	145,200.00 CY	\$4.50	\$653,400.00
400-2-2	CONC CLASS II, ENDWALLS	54.00 CY	\$1,301.59	\$70,285.86
425-1-361	INLETS, CURB, TYPE P-6, <10'	3.00 EA	\$5,040.98	\$15,122.94
425-2-71	MANHOLES, J-7, <10'	3.00 EA	\$6,250.00	\$18,750.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	168.00 LF	\$133.10	\$22,360.80
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00 LF	\$216.88	\$130,128.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	4,005.00 LF	\$12.11	\$48,500.55
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00 EA	\$2,128.82	\$6,386.46
570-1-1	PERFORMANCE TURF	36,300.00 SY	\$0.76	\$27,588.00

**Retention Basin 8**

<b>Description</b>	<b>Value</b>
Size	2 AC
Multiplier	3
Depth	12.00
Description	192

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	6.00 AC	\$10,000.00	\$60,000.00
120-1	REGULAR EXCAVATION	116,160.00 CY	\$4.50	\$522,720.00
400-2-2	CONC CLASS II, ENDWALLS	54.00 CY	\$1,301.59	\$70,285.86
425-1-541	INLETS, DT BOT, TYPE D, <10'	3.00 EA	\$3,512.69	\$10,538.07
425-2-71	MANHOLES, J-7, <10'	3.00 EA	\$6,250.00	\$18,750.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	168.00 LF	\$133.10	\$22,360.80
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00 LF	\$216.88	\$130,128.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	3,540.00 LF	\$12.11	\$42,869.40
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	3.00 EA	\$2,128.82	\$6,386.46



570-1-1	PERFORMANCE TURF	29,040.00 SY	\$0.76	\$22,070.40
---------	------------------	--------------	--------	-------------

**Retention Basin 9**

<b>Description</b>	<b>Value</b>
Size	2 AC
Multiplier	4
Depth	12.00
Description	193A1

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	8.00 AC	\$10,000.00	\$80,000.00
120-1	REGULAR EXCAVATION	154,880.00 CY	\$4.50	\$696,960.00
400-2-2	CONC CLASS II, ENDWALLS	72.00 CY	\$1,301.59	\$93,714.48
425-1-541	INLETS, DT BOT, TYPE D, <10'	4.00 EA	\$3,512.69	\$14,050.76
425-2-71	MANHOLES, J-7, <10'	4.00 EA	\$6,250.00	\$25,000.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	224.00 LF	\$133.10	\$29,814.40
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	800.00 LF	\$216.88	\$173,504.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	4,720.00 LF	\$12.11	\$57,159.20
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	4.00 EA	\$2,128.82	\$8,515.28
570-1-1	PERFORMANCE TURF	38,720.00 SY	\$0.76	\$29,427.20

**Retention Basin 10**

<b>Description</b>	<b>Value</b>
Size	2 AC
Multiplier	2
Depth	12.00
Description	193A2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.00 AC	\$10,000.00	\$40,000.00
120-1	REGULAR EXCAVATION	77,440.00 CY	\$4.50	\$348,480.00
400-2-2	CONC CLASS II, ENDWALLS	36.00 CY	\$1,301.59	\$46,857.24
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00 EA	\$3,512.69	\$7,025.38
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$6,250.00	\$12,500.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00 LF	\$133.10	\$14,907.20
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00 LF	\$216.88	\$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,360.00 LF	\$12.11	\$28,579.60
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	2.00 EA	\$2,128.82	\$4,257.64
570-1-1	PERFORMANCE TURF	19,360.00 SY	\$0.76	\$14,713.60

**Retention Basin 11**

<b>Description</b>	<b>Value</b>
Size	2 AC
Multiplier	2
Depth	12.00
Description	194A



**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.00	AC	\$10,000.00	\$40,000.00
120-1	REGULAR EXCAVATION	77,440.00	CY	\$4.50	\$348,480.00
400-2-2	CONC CLASS II, ENDWALLS	36.00	CY	\$1,301.59	\$46,857.24
425-1-541	INLETS, DT BOT, TYPE D, <10'	2.00	EA	\$3,512.69	\$7,025.38
425-2-71	MANHOLES, J-7, <10'	2.00	EA	\$6,250.00	\$12,500.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	112.00	LF	\$133.10	\$14,907.20
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00	LF	\$216.88	\$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	2,360.00	LF	\$12.11	\$28,579.60
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	2.00	EA	\$2,128.82	\$4,257.64
570-1-1	PERFORMANCE TURF	19,360.00	SY	\$0.76	\$14,713.60

**Retention Basin 12**

Description	Value
Size	2 AC
Multiplier	3
Depth	12.00
Description	194B

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	6.00	AC	\$10,000.00	\$60,000.00
120-1	REGULAR EXCAVATION	116,160.00	CY	\$4.50	\$522,720.00
400-2-2	CONC CLASS II, ENDWALLS	54.00	CY	\$1,301.59	\$70,285.86
425-1-541	INLETS, DT BOT, TYPE D, <10'	3.00	EA	\$3,512.69	\$10,538.07
425-2-71	MANHOLES, J-7, <10'	3.00	EA	\$6,250.00	\$18,750.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	168.00	LF	\$133.10	\$22,360.80
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	600.00	LF	\$216.88	\$130,128.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	3,540.00	LF	\$12.11	\$42,869.40
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	3.00	EA	\$2,128.82	\$6,386.46
570-1-1	PERFORMANCE TURF	29,040.00	SY	\$0.76	\$22,070.40

**Retention Basin 13**

Description	Value
Size	5 AC
Multiplier	3
Depth	12.00
Description	195

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	15.00	AC	\$10,000.00	\$150,000.00
120-1	REGULAR EXCAVATION	290,400.00	CY	\$4.50	\$1,306,800.00
400-2-2	CONC CLASS II, ENDWALLS	90.00	CY	\$1,301.59	\$117,143.10
425-1-541	INLETS, DT BOT, TYPE D, <10'	3.00	EA	\$3,512.69	\$10,538.07
425-2-71	MANHOLES, J-7, <10'	6.00	EA	\$6,250.00	\$37,500.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	168.00	LF	\$133.10	\$22,360.80



430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	1,200.00 LF	\$216.88	\$260,256.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	5,580.00 LF	\$12.11	\$67,573.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	6.00 EA	\$2,128.82	\$12,772.92
570-1-1	PERFORMANCE TURF	72,600.00 SY	\$0.76	\$55,176.00

**Retention Basin 14**

<b>Description</b>	<b>Value</b>
Size	2 AC
Multiplier	1
Depth	12.00
Description	196

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.00 AC	\$10,000.00	\$20,000.00
120-1	REGULAR EXCAVATION	38,720.00 CY	\$4.50	\$174,240.00
400-2-2	CONC CLASS II, ENDWALLS	18.00 CY	\$1,301.59	\$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00 EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00 LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,180.00 LF	\$12.11	\$14,289.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00 EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	9,680.00 SY	\$0.76	\$7,356.80

**Retention Basin 15**

<b>Description</b>	<b>Value</b>
Size	2 AC
Multiplier	1
Depth	12.00
Description	197A

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.00 AC	\$10,000.00	\$20,000.00
120-1	REGULAR EXCAVATION	38,720.00 CY	\$4.50	\$174,240.00
400-2-2	CONC CLASS II, ENDWALLS	18.00 CY	\$1,301.59	\$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00 EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00 LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,180.00 LF	\$12.11	\$14,289.80
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00 EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	9,680.00 SY	\$0.76	\$7,356.80

**Retention Basin 16**



Description	Value
Size	2 AC
Multiplier	1
Depth	12.00
Description	197B

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.00	AC	\$10,000.00	\$20,000.00
120-1	REGULAR EXCAVATION	38,720.00	CY	\$4.50	\$174,240.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	\$1,301.59	\$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00	EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,180.00	LF	\$12.11	\$14,289.80
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	1.00	EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	9,680.00	SY	\$0.76	\$7,356.80

**Retention Basin 17**

Description	Value
Size	1.5 AC
Multiplier	1
Depth	3.00
Description	FPC 198

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.50	AC	\$10,000.00	\$15,000.00
120-1	REGULAR EXCAVATION	7,260.00	CY	\$4.50	\$32,670.00
400-2-2	CONC CLASS II, ENDWALLS	18.00	CY	\$1,301.59	\$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00	EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00	EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00	LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00	LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,025.00	LF	\$12.11	\$12,412.75
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	1.00	EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	7,260.00	SY	\$0.76	\$5,517.60

**Retention Basin 18**

Description	Value
Size	1.5 AC
Multiplier	1
Depth	12.00
Description	198B

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.50	AC	\$10,000.00	\$15,000.00



120-1	REGULAR EXCAVATION	29,040.00 CY	\$4.50	\$130,680.00
400-2-2	CONC CLASS II, ENDWALLS	18.00 CY	\$1,301.59	\$23,428.62
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	1.00 EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00 LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,025.00 LF	\$12.11	\$12,412.75
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	1.00 EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	7,260.00 SY	\$0.76	\$5,517.60

**Retention Basin 19**

<b>Description</b>	<b>Value</b>
Size	5 AC
Multiplier	1
Depth	12.00
Description	198

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00 AC	\$10,000.00	\$50,000.00
120-1	REGULAR EXCAVATION	96,800.00 CY	\$4.50	\$435,600.00
400-2-2	CONC CLASS II, ENDWALLS	30.00 CY	\$1,301.59	\$39,047.70
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$6,250.00	\$12,500.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00 LF	\$216.88	\$86,752.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00 LF	\$12.11	\$22,524.60
550-60-234	FENCE GATE, TYP B, SLIDE/CANT, 18.1-20' OPEN	2.00 EA	\$2,128.82	\$4,257.64
570-1-1	PERFORMANCE TURF	24,200.00 SY	\$0.76	\$18,392.00

**Retention Basin 20**

<b>Description</b>	<b>Value</b>
Size	5 AC
Multiplier	1
Depth	12.00
Description	199A1

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.00 AC	\$10,000.00	\$50,000.00
120-1	REGULAR EXCAVATION	96,800.00 CY	\$4.50	\$435,600.00
400-2-2	CONC CLASS II, ENDWALLS	30.00 CY	\$1,301.59	\$39,047.70
425-1-541	INLETS, DT BOT, TYPE D, <10'	1.00 EA	\$3,512.69	\$3,512.69
425-2-71	MANHOLES, J-7, <10'	2.00 EA	\$6,250.00	\$12,500.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	400.00 LF	\$216.88	\$86,752.00



550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,860.00 LF	\$12.11	\$22,524.60
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	2.00 EA	\$2,128.82	\$4,257.64
570-1-1	PERFORMANCE TURF	24,200.00 SY	\$0.76	\$18,392.00

**Retention Basin 21**

<b>Description</b>	<b>Value</b>
Size	2.5 AC
Multiplier	1
Depth	12.00
Description	199A2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.50 AC	\$10,000.00	\$25,000.00
120-1	REGULAR EXCAVATION	48,400.00 CY	\$4.50	\$217,800.00
400-2-2	CONC CLASS II, ENDWALLS	18.00 CY	\$1,301.59	\$23,428.62
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00 EA	\$5,040.98	\$5,040.98
425-2-71	MANHOLES, J-7, <10'	1.00 EA	\$6,250.00	\$6,250.00
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	56.00 LF	\$133.10	\$7,453.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	200.00 LF	\$216.88	\$43,376.00
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	1,335.00 LF	\$12.11	\$16,166.85
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	1.00 EA	\$2,128.82	\$2,128.82
570-1-1	PERFORMANCE TURF	12,100.00 SY	\$0.76	\$9,196.00
<b>Drainage Component Total</b>				<b>\$17,489,403.03</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	12.00 AS	\$321.52	\$3,858.24
700-1-12	SINGLE POST SIGN, F&I GM, 12- 20 SF	138.00 AS	\$1,053.87	\$145,434.06
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	12.00 AS	\$4,188.78	\$50,265.36
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	35.00 AS	\$5,697.97	\$199,428.95
<b>Signing Component Total</b>				<b>\$398,986.61</b>

**INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT****Description of Work****EX-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
ITS	ITS FOR ENTIRE PROJECT	5.73 MI	\$108,600.00	\$622,278.00
<b>Intelligent Traffic System (ITS) Component Total</b>				<b>\$622,278.00</b>



**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				150	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	30,000.00	LF	\$6.43	\$192,900.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	150.00	EA	\$535.14	\$80,271.00
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	90,000.00	LF	\$2.15	\$193,500.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	150.00	EA	\$4,688.07	\$703,210.50
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	150.00	EA	\$553.54	\$83,031.00
Subcomponent Total					\$1,252,912.50

**High Mast Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				4	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,000.00	LF	\$6.43	\$12,860.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	\$535.14	\$4,281.12
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	2,000.00	LF	\$1.45	\$2,900.00
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,000.00	LF	\$2.15	\$12,900.00
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	1.00	EA	\$10,120.46	\$10,120.46
715-19-113	HIGH MAST LIGHT POLE,F&I,WS-150,120'	4.00	EA	\$63,817.65	\$255,270.60
715-500-2	POLE CABLE DISTRIBUTION SYS, HIGH MAST	4.00	EA	\$388.88	\$1,555.52
Subcomponent Total					\$299,887.70
Lighting Component Total					\$1,552,800.20

**LANDSCAPING COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Cost %	1.50
Component Detail	N
<b>Landscaping Component Total</b>	<b>\$8,230,793.08</b>

**BRIDGES COMPONENT****Bridge 536OPR**

<b>Description</b>	<b>Value</b>
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	20.00
Width (LF)	20.00
Type	Medium Level



Cost Factor	0.00
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$0.00
<b>Final Cost per SF</b>	<b>\$0.00</b>
<b>Basic Bridge Cost</b>	<b>\$0.00</b>
Description	SR 536 OVERPASS RAMP - NO LONGER IN CONCEPT

**Bridge 536OPR Total** \$0.00

**Bridge 536EB**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	20.00
Width (LF)	20.00
Type	Medium Level
Cost Factor	0.00
Structure No.	
Removal of Existing Structures area	21,528.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$0.00
<b>Final Cost per SF</b>	<b>\$0.00</b>
<b>Basic Bridge Cost</b>	<b>\$0.00</b>
Description	SR 536 EB OVERPASS - NO LONGER HERE

**Bridge 536EB Total** \$0.00

**Bridge 536WB**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	414.00
Width (LF)	52.00
Type	Medium Level
Cost Factor	0.00
Structure No.	
Removal of Existing Structures area	21,528.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$0.00
<b>Final Cost per SF</b>	<b>\$0.00</b>
<b>Basic Bridge Cost</b>	<b>\$0.00</b>
Description	SR 536 WB OVERPASS - NO LONGER HERE

**Bridge 536WB Total** \$0.00

**Bridge 535OP**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	230.00
Width (LF)	305.00
Type	Medium Level
Cost Factor	1.25



Structure No.	
Removal of Existing Structures area	32,682.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$173.72</b>
<b>Basic Bridge Cost</b>	<b>\$11,837,812.50</b>
Description	SR 535 OVERPASS

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	32,682.00 SF	\$25.00	\$817,050.00
400-2-10	CONC CLASS II, APPROACH SLABS	677.78 CY	\$350.00	\$237,223.00
415-1-9	REINF STEEL- APPROACH SLABS	118,611.50 LB	\$0.94	\$111,494.81
<b>Bridge 535OP Total</b>				<b>\$13,003,580.31</b>

**Bridge CFPR**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,220.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	36,600.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$169.69</b>
<b>Basic Bridge Cost</b>	<b>\$6,176,250.00</b>
Description	CENTRAL FL PKWY RAMP

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	36,600.00 SF	\$25.00	\$915,000.00
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22
<b>Bridge CFPR Total</b>				<b>\$7,125,551.72</b>

**Bridge CPFO**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	114.00
Width (LF)	264.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	16,263.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75



<b>Final Cost per SF</b>	<b>\$178.78</b>
<b>Basic Bridge Cost</b>	<b>\$5,078,700.00</b>

Description	CENTRAL FL PKWY OVERPASS
-------------	--------------------------

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	16,263.00	SF	\$25.00	\$406,575.00
400-2-10	CONC CLASS II, APPROACH SLABS	586.67	CY	\$350.00	\$205,334.50
415-1-9	REINF STEEL- APPROACH SLABS	102,667.25	LB	\$0.94	\$96,507.22

<b>Bridge CPFO Total</b>	<b>\$5,787,116.72</b>
--------------------------	-----------------------

**Bridge B-38**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	271.00
Width (LF)	60.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$172.97</b>
<b>Basic Bridge Cost</b>	<b>\$2,743,875.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	133.33	CY	\$350.00	\$46,665.50
415-1-9	REINF STEEL- APPROACH SLABS	23,332.75	LB	\$0.94	\$21,932.78

<b>Bridge B-38 Total</b>	<b>\$2,812,473.29</b>
--------------------------	-----------------------

**Bridge B-51**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	5,930.00
Width (LF)	85.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$168.94</b>
<b>Basic Bridge Cost</b>	<b>\$85,058,437.50</b>
Description	

I-4 EB GUL ELEVATED
---------------------

**Bridge Pay Items**



Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	188.89 CY	\$350.00	\$66,111.50
415-1-9	REINF STEEL- APPROACH SLABS	33,055.75 LB	\$0.94	\$31,072.40
<b>Bridge B-51 Total</b>				<b>\$85,155,621.41</b>

**Bridge B-52**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	16,530.00
Width (LF)	85.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$168.82</b>
<b>Basic Bridge Cost</b>	<b>\$237,102,187.50</b>
Description	I-4 WB GUL ELEVATED

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	188.89 CY	\$350.00	\$66,111.50
415-1-9	REINF STEEL- APPROACH SLABS	33,055.75 LB	\$0.94	\$31,072.40
<b>Bridge B-52 Total</b>				<b>\$237,199,371.41</b>

**Bridge B-53**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	667.00
Width (LF)	27.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.46</b>
<b>Basic Bridge Cost</b>	<b>\$3,039,018.75</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	60.00 CY	\$350.00	\$21,000.00
415-1-9	REINF STEEL- APPROACH SLABS	10,500.00 LB	\$0.94	\$9,870.00
<b>Bridge B-53 Total</b>				<b>\$3,069,888.75</b>



**Bridge B-54**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	287.00
Width (LF)	100.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$172.73</b>
<b>Basic Bridge Cost</b>	<b>\$4,843,125.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	222.22	CY	\$350.00	\$77,777.00
415-1-9	REINF STEEL- APPROACH SLABS	38,888.50	LB	\$0.94	\$36,555.19

**Bridge B-54 Total** **\$4,957,457.19**

**Bridge B-55**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	392.00
Width (LF)	40.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$171.67</b>
<b>Basic Bridge Cost</b>	<b>\$2,646,000.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	88.89	CY	\$350.00	\$31,111.50
415-1-9	REINF STEEL- APPROACH SLABS	15,555.75	LB	\$0.94	\$14,622.40

**Bridge B-55 Total** **\$2,691,733.91**

**Bridge B-67**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	91.00
Width (LF)	85.00
Type	Medium Level
Cost Factor	1.25



Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$181.31</b>
<b>Basic Bridge Cost</b>	<b>\$1,305,281.25</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	188.89 CY	\$350.00	\$66,111.50
415-1-9	REINF STEEL- APPROACH SLABS	33,055.75 LB	\$0.94	\$31,072.40
<b>Bridge B-67 Total</b>				<b>\$1,402,465.16</b>

**Bridge B-68**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	83.00
Width (LF)	57.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$182.53</b>
<b>Basic Bridge Cost</b>	<b>\$798,356.25</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	126.67 CY	\$350.00	\$44,334.50
415-1-9	REINF STEEL- APPROACH SLABS	22,167.25 LB	\$0.94	\$20,837.22
<b>Bridge B-68 Total</b>				<b>\$863,527.97</b>

**Bridge B-69**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	137.00
Width (LF)	44.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$177.10</b>
<b>Basic Bridge Cost</b>	<b>\$1,017,225.00</b>
Description	



**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	97.78 CY	\$350.00	\$34,223.00
415-1-9	REINF STEEL- APPROACH SLABS	17,111.50 LB	\$0.94	\$16,084.81
<b>Bridge B-69 Total</b>				<b>\$1,067,532.81</b>

**Bridge B-70**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	126.00
Width (LF)	72.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$177.82</b>
<b>Basic Bridge Cost</b>	<b>\$1,530,900.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	160.00 CY	\$350.00	\$56,000.00
415-1-9	REINF STEEL- APPROACH SLABS	28,000.00 LB	\$0.94	\$26,320.00
<b>Bridge B-70 Total</b>				<b>\$1,613,220.00</b>

**Bridge ELCD1**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,550.00
Width (LF)	48.00
Type	High Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$169.49</b>
<b>Basic Bridge Cost</b>	<b>\$12,555,000.00</b>
Description	NEW ELEVATED CD FROM SEGMENT 2

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	106.67 CY	\$350.00	\$37,334.50
415-1-9	REINF STEEL- APPROACH SLABS	18,667.25 LB	\$0.94	\$17,547.22
<b>Bridge ELCD1 Total</b>				<b>\$12,609,881.72</b>



**Bridge ELCD2**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	7,650.00
Width (LF)	32.00
Type	High Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$168.90</b>
<b>Basic Bridge Cost</b>	<b>\$41,310,000.00</b>
Description	NEW 3RD LEVEL ELEVATED CD FROM DARRYL CARTER RAMP

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	71.11 CY	\$350.00	\$24,888.50
415-1-9	REINF STEEL- APPROACH SLABS	12,444.25 LB	\$0.94	\$11,697.60
<b>Bridge ELCD2 Total</b>				<b>\$41,346,586.10</b>

**Bridge ELEVOF**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,500.00
Width (LF)	48.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$169.51</b>
<b>Basic Bridge Cost</b>	<b>\$12,150,000.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	106.67 CY	\$350.00	\$37,334.50
415-1-9	REINF STEEL- APPROACH SLABS	18,667.25 LB	\$0.94	\$17,547.22
<b>Bridge ELEVOF Total</b>				<b>\$12,204,881.72</b>
<b>Bridges Component Total</b>				<b>\$432,910,890.19</b>

**RETAINING WALLS COMPONENT****X-Items**



Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-1	CONC TRAF RAIL BAR, JCT SLAB,32"F SHAPE	60,508.00 LF	\$240.44	\$14,548,543.52

**Retaining Wall 1**

Description	Value
Length	60,508.00
Begin height	3.00
End Height	3.00
Multiplier	1

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	181,524.00 SF	\$29.09	\$5,280,533.16

**Retaining Walls Component Total** \$19,829,076.68

**ARCHITECTURAL COMPONENT****EX-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
1	TOLL GANTRY, 40'	4.00 EA	\$500,000.00	\$2,000,000.00
<b>Comment:</b> TWO 40' SPAN TOLL GANTRYs				

**Architectural Component Total** \$2,000,000.00

**Sequence 1 Total** \$556,950,331.98

**Sequence:** 2 NDR - New Construction, Divided, Rural

**Net Length:** 5.730 MI  
30,254 LF

**Description:** Construct 2 Express lanes in each direction for a total of 30254' from Station 1042+24.30 to station 1345+48.50.

**Special Conditions:** August 2016 Update: Express Lanes with Asphalt Pavement

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	5.730
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	1 to 1 / 1 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %



**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	239,144.22 CY	\$8.00	\$1,913,153.76
<b>Earthwork Component Total</b>				<b>\$1,913,153.76</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	660
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	295,815.64 SY	\$3.25	\$961,400.83
285-712	OPTIONAL BASE,BASE GROUP 12	165,791.22 SY	\$23.00	\$3,813,198.06
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	53,246.81 TN	\$97.88	\$5,211,797.76
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	6,454.16 TN	\$142.31	\$918,491.51

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	2,321.00 EA	\$3.74	\$8,680.54
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	45.84 NM	\$908.42	\$41,641.97
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	22.92 GM	\$383.54	\$8,790.74

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
----------	-------------	---------------	------------	-----------------



339-1	MISCELLANEOUS ASPHALT PAVEMENT	1,011.17 TN	\$235.00	\$237,624.95
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	30,255.00 LF	\$23.60	\$714,018.00
536-8	GUARDRAIL- BRIDGE ANCHORAGE ASSEM, F&I	8.00 EA	\$2,292.42	\$18,339.36
<b>Roadway Component Total</b>				<b>\$11,933,983.72</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	69,449.44	SY	\$17.00	\$1,180,640.48
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	11,093.09	TN	\$100.00	\$1,109,309.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	11.46	PM	\$1,428.02	\$16,365.11

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	78,660.07	LF	\$1.15	\$90,459.08
104-11	FLOATING TURBIDITY BARRIER	1,432.48	LF	\$9.63	\$13,794.78
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	1,432.48	LF	\$4.69	\$6,718.33
104-15	SOIL TRACKING PREVENTION DEVICE	6.00	EA	\$2,215.78	\$13,294.68
104-18	INLET PROTECTION SYSTEM	35.00	EA	\$94.06	\$3,292.10
107-1	LITTER REMOVAL	138.89	AC	\$35.00	\$4,861.15
107-2	MOWING	138.89	AC	\$50.00	\$6,944.50
<b>Shoulder Component Total</b>					<b>\$2,445,679.21</b>

**MEDIAN COMPONENT****User Input Data**

Description	Value
Total Median Width	64.00
Performance Turf Width	44.00
Total Median Shoulder Width L/R	10.00 / 10.00
Paved Median Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O



Rumble Strips No. of Sides

2

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	42,557.11	SY	\$17.00	\$723,470.87
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	6,655.85	TN	\$100.00	\$665,585.00
570-1-1	PERFORMANCE TURF	147,907.82	SY	\$0.76	\$112,409.94
<b>Median Component Total</b>					<b>\$1,501,465.81</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	4,033.85	SY	\$0.76	\$3,065.73

**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD	60,508.00	LF	\$25.36	\$1,534,482.88
	<b>Comment:</b> TOTAL DIST.				
446-71-1	EDGEDRAIN OUTLET PIPE, 4"	1,211.00	LF	\$28.30	\$34,271.30
	<b>Comment:</b> (TOTAL DIST./300' INTERVAL)X 6' PIPE LENGTH X 2 SIDES				
<b>Drainage Component Total</b>					<b>\$1,571,819.91</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	12.00	AS	\$321.52	\$3,858.24
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	138.00	AS	\$1,053.87	\$145,434.06
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	12.00	AS	\$4,188.78	\$50,265.36
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	35.00	AS	\$5,697.97	\$199,428.95
<b>Signing Component Total</b>					<b>\$398,986.61</b>

**LIGHTING COMPONENT****High Mast Lighting Subcomponent****Description**

Multiplier (Number of Poles)

**Value**

4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,000.00	LF	\$6.43	\$12,860.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	\$535.14	\$4,281.12



715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	2,000.00 LF	\$1.45	\$2,900.00
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,000.00 LF	\$2.15	\$12,900.00
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	1.00 EA	\$10,120.46	\$10,120.46
715-19-113	HIGH MAST LIGHT POLE,F&I,WS-150,120'	4.00 EA	\$63,817.65	\$255,270.60
715-500-2	POLE CABLE DISTRIBUTION SYS, HIGH MAST	4.00 EA	\$388.88	\$1,555.52
<b>Subcomponent Total</b>				\$299,887.70
<b>Lighting Component Total</b>				\$299,887.70

### LANDSCAPING COMPONENT

#### User Input Data

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** \$300,974.65

**Sequence 2 Total** \$20,365,951.37

**Sequence:** 3 NDR - New Construction, Divided, Rural **Net Length:** 7.167 MI  
37,844 LF

**Description:** Mainline auxiliary lanes only

**Special Conditions:** This is pavement for 12' wide aux. lanes at on / off & Express ramp connections and ramps.

### EARTHWORK COMPONENT

#### User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	7.170
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	1 to 1 / 1 to 1
Median Slope L/R	1 to 1 / 1 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

#### Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	34,997.25 CY	\$8.00	\$279,978.00
<b>Earthwork Component Total</b>				\$279,978.00



**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	6.00 / 6.00
Structural Spread Rate	660
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	50,458.50 SY	\$3.25	\$163,990.12
285-712	OPTIONAL BASE,BASE GROUP 12	56,008.93 SY	\$23.00	\$1,288,205.39
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	16,651.30 TN	\$97.88	\$1,629,829.24
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	2,018.34 TN	\$142.31	\$287,229.97

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	7.17 NM	\$908.42	\$6,513.37
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	7.17 NM	\$3,138.35	\$22,501.97

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-1-1	MEDIAN BARRIER WALL CONC, PRECAST	10,653.00 LF	\$111.97	\$1,192,816.41
<b>Roadway Component Total</b>				<b>\$4,591,086.48</b>

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
-------------	-------



Cost % 1.50  
Component Detail N

**Landscaping Component Total**

\$73,065.97

**Sequence 3 Total**

\$4,944,130.45

**Sequence:** 4 NDR - New Construction, Divided, Rural**Net Length:** 1.562 MI  
8,248 LF**Description:** Express auxiliary lanes only**Special Conditions:** August 2016 Update: Express Lanes with Asphalt Pavement**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.560
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	1 to 1 / 1 to 1
Median Slope L/R	1 to 1 / 1 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	7,614.46 CY	\$8.00	\$60,915.68
<b>Earthwork Component Total</b>				<b>\$60,915.68</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	6.00 / 6.00
Structural Spread Rate	660
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,997.18 SY	\$3.25	\$35,740.84
285-712	OPTIONAL BASE,BASE GROUP 12	12,206.87 SY	\$23.00	\$280,758.01
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	3,629.07 TN	\$97.88	\$355,213.37
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	439.89 TN	\$142.31	\$62,600.75



**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	1
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.12	NM	\$908.42	\$2,834.27

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Roadway Component Total**

\$737,147.24

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total**

\$11,970.94

**Sequence 4 Total**

\$810,033.86

**Sequence:** 5 NDR - New Construction, Divided, Rural**Net Length:** 5.067 MI  
26,753 LF**Description:** One-lane ramps - SR 536**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	5.070
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1



Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	61.42 AC	\$10,000.00	\$614,200.00
120-6	EMBANKMENT	109,160.48 CY	\$8.00	\$873,283.84

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	70,400.00 CY	\$8.00	\$563,200.00
	<b>Comment:</b> Embankment for ramping up or down from bridge.			

**Earthwork Component Total** \$2,050,683.84

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	660
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	115,930.67 SY	\$3.25	\$376,774.68
285-712	OPTIONAL BASE,BASE GROUP 12	48,512.53 SY	\$23.00	\$1,115,788.19
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	14,714.28 TN	\$97.88	\$1,440,233.73
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	1,783.55 TN	\$142.31	\$253,817.00

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	10.13 NM	\$908.42	\$9,202.29
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	10.13 NM	\$3,138.35	\$31,791.49

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00



Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	26,753.00	LF	\$186.18	\$4,980,873.54
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	10,000.00	LF	\$12.11	\$121,100.00
<b>Roadway Component Total</b>					<b>\$8,329,580.92</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-712	OPTIONAL BASE,BASE GROUP 12	37,632.88	SY	\$23.00	\$865,556.24
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	5,885.71	TN	\$97.88	\$576,093.29
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	10.13	PM	\$1,428.02	\$14,465.84

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	69,558.40	LF	\$1.15	\$79,992.16
104-11	FLOATING TURBIDITY BARRIER	1,266.73	LF	\$9.63	\$12,198.61
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	1,266.73	LF	\$4.69	\$5,940.96
104-15	SOIL TRACKING PREVENTION DEVICE	6.00	EA	\$2,215.78	\$13,294.68
104-18	INLET PROTECTION SYSTEM	31.00	EA	\$94.06	\$2,915.86
107-1	LITTER REMOVAL	122.82	AC	\$35.00	\$4,298.70
107-2	MOWING	122.82	AC	\$50.00	\$6,141.00
<b>Shoulder Component Total</b>					<b>\$1,580,897.34</b>

**MEDIAN COMPONENT****User Input Data**

Description	Value
Total Median Width	12.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	6.00 / 6.00
Paved Median Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	330



Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	37,632.88	SY	\$17.00	\$639,758.96
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	5,885.71	TN	\$100.00	\$588,571.00
521-1-1	MEDIAN BARRIER WALL CONC, PRECAST	3,520.00	LF	\$111.97	\$394,134.40
<b>Median Component Total</b>					<b>\$1,622,464.36</b>

**DRAINAGE COMPONENT****X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	90.00	EA	\$5,750.00	\$517,500.00
<b>Comment: TOTAL DIST/300'</b>					
<b>Drainage Component Total</b>					<b>\$517,500.00</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	11.00	AS	\$321.52	\$3,536.72
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	122.00	AS	\$1,053.87	\$128,572.14
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	11.00	AS	\$4,188.78	\$46,076.58
700-2-15	MULTI- POST SIGN, F&I GM, 51- 100 SF	31.00	AS	\$5,697.97	\$176,637.07
<b>Signing Component Total</b>					<b>\$354,822.51</b>

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** **\$247,820.08**

**RETAINING WALLS COMPONENT****Retaining Wall 1**

Description	Value
Length	400.00
Begin height	10.00
End Height	10.00
Multiplier	1



**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,000.00	SF	\$29.09	\$116,360.00

**Retaining Wall 2**

Description	Value
Length	400.00
Begin height	10.00
End Height	10.00
Multiplier	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,000.00	SF	\$29.09	\$116,360.00

**Retaining Wall 3**

Description	Value
Length	1,300.00
Begin height	10.00
End Height	10.00
Multiplier	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	13,000.00	SF	\$29.09	\$378,170.00

**Retaining Wall 4**

Description	Value
Length	1,300.00
Begin height	10.00
End Height	10.00
Multiplier	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	13,000.00	SF	\$29.09	\$378,170.00

**Retaining Wall 5**

Description	Value
Length	1,600.00
Begin height	10.00
End Height	10.00
Multiplier	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	16,000.00	SF	\$29.09	\$465,440.00

**Retaining Wall 6**

Description	Value
Length	1,600.00



Begin height	10.00
End Height	10.00
Multiplier	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	16,000.00	SF	\$29.09	\$465,440.00

**Retaining Wall 7**

Description	Value
Length	500.00
Begin height	10.00
End Height	10.00
Multiplier	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	5,000.00	SF	\$29.09	\$145,450.00

<b>Retaining Walls Component Total</b>	<b>\$2,065,390.00</b>
----------------------------------------	-----------------------

<b>Sequence 5 Total</b>	<b>\$16,769,159.05</b>
-------------------------	------------------------

Sequence: 6 NDR - New Construction, Divided, Rural

<b>Net Length:</b>	3.892 MI
	20,550 LF

Description: Two-lane ramps - SR 536

Special  
Conditions: All two lane ramps at SR 536

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	3.900
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	47.18	AC	\$10,000.00	\$471,800.00
120-6	EMBANKMENT	102,174.45	CY	\$8.00	\$817,395.60



**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	182,866.00	CY	\$8.00	\$1,462,928.00
<b>Earthwork Component Total</b>					<b>\$2,752,123.60</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	660
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	136,998.40	SY	\$3.25	\$445,244.80
285-712	OPTIONAL BASE,BASE GROUP 12	57,813.32	SY	\$23.00	\$1,329,706.36
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	18,083.79	TN	\$97.88	\$1,770,041.37

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	525.00	EA	\$3.74	\$1,963.50
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	7.78	NM	\$908.42	\$7,067.51
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	7.78	NM	\$3,138.35	\$24,416.36

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	2,606.00	LF	\$186.18	\$485,185.08
550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	5,860.00	LF	\$12.11	\$70,964.60

**Roadway Component Total****\$4,134,589.58**



**SHOULDER COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	8.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
285-708	OPTIONAL BASE,BASE GROUP 08	47,173.12	SY	\$17.00	\$801,943.04
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	7,534.91	TN	\$100.00	\$753,491.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	7.78	PM	\$1,428.02	\$11,110.00

**Erosion Control****Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
104-10-3	SEDIMENT BARRIER	53,429.38	LF	\$1.15	\$61,443.79
104-11	FLOATING TURBIDITY BARRIER	973.00	LF	\$9.63	\$9,369.99
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	973.00	LF	\$4.69	\$4,563.37
104-15	SOIL TRACKING PREVENTION DEVICE	4.00	EA	\$2,215.78	\$8,863.12
104-18	INLET PROTECTION SYSTEM	24.00	EA	\$94.06	\$2,257.44
107-1	LITTER REMOVAL	94.34	AC	\$35.00	\$3,301.90
107-2	MOWING	94.34	AC	\$50.00	\$4,717.00

**Shoulder Component Total**

\$1,661,060.65

**MEDIAN COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Total Median Width	16.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	8.00 / 8.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
285-708	OPTIONAL BASE,BASE GROUP 08	38,039.89	SY	\$17.00	\$646,678.13
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	6,027.93	TN	\$100.00	\$602,793.00

**Median Component Total**

\$1,249,471.13



**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND, 24"SD	3,120.00	LF	\$72.48	\$226,137.60
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	1,344.00	LF	\$75.40	\$101,337.60
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	1,160.00	LF	\$111.27	\$129,073.20

**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	69.00	EA	\$5,750.00	\$396,750.00
<b>Comment:</b> TOTAL DIST/300' INTERVAL					

**Drainage Component Total**

\$853,298.40

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	8.00	AS	\$321.52	\$2,572.16
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	94.00	AS	\$1,053.87	\$99,063.78
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	8.00	AS	\$4,188.78	\$33,510.24
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	24.00	AS	\$5,697.97	\$136,751.28

**Signing Component Total**

\$271,897.46

**LIGHTING COMPONENT****High Mast Lighting Subcomponent****Description**

Multiplier (Number of Poles)

**Value**

4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,000.00	LF	\$6.43	\$12,860.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	\$535.14	\$4,281.12
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL, NO.8-6	2,000.00	LF	\$1.45	\$2,900.00
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,000.00	LF	\$2.15	\$12,900.00
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	1.00	EA	\$10,120.46	\$10,120.46
715-19-113	HIGH MAST LIGHT POLE, F&I, WS-150, 120'	4.00	EA	\$63,817.65	\$255,270.60
715-500-2	POLE CABLE DISTRIBUTION SYS, HIGH MAST	4.00	EA	\$388.88	\$1,555.52
<b>Subcomponent Total</b>					\$299,887.70

**Lighting Component Total**

\$299,887.70



**LANDSCAPING COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Cost %	1.50
Component Detail	N

<b>Landscaping Component Total</b>	<b>\$620,882.85</b>
------------------------------------	---------------------

**BRIDGES COMPONENT****Bridge 36**

<b>Description</b>	<b>Value</b>
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	672.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.45</b>
<b>Basic Bridge Cost</b>	<b>\$3,402,000.00</b>
Description	

**Bridge Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22

<b>Bridge 36 Total</b>	<b>\$3,436,301.72</b>
------------------------	-----------------------

**Bridge 39**

<b>Description</b>	<b>Value</b>
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	415.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$171.51</b>
<b>Basic Bridge Cost</b>	<b>\$2,100,937.50</b>
Description	

**Bridge Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22

<b>Bridge 39 Total</b>	<b>\$2,135,239.22</b>
------------------------	-----------------------



**Bridge 40**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	867.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.07</b>
<b>Basic Bridge Cost</b>	<b>\$4,389,187.50</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22
<b>Bridge 40 Total</b>					<b>\$4,423,489.22</b>

**Bridge 41**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	768.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.24</b>
<b>Basic Bridge Cost</b>	<b>\$3,888,000.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22
<b>Bridge 41 Total</b>					<b>\$3,922,301.72</b>

**Bridge 42**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	768.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	



Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.24</b>
<b>Basic Bridge Cost</b>	<b>\$3,888,000.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22
<b>Bridge 42 Total</b>					<b>\$3,922,301.72</b>

**Bridge 43**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	145.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$176.64</b>
<b>Basic Bridge Cost</b>	<b>\$734,062.50</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22
<b>Bridge 43 Total</b>					<b>\$768,364.22</b>

**Bridge 44**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	282.00
Width (LF)	30.00
Type	Low Level, Widen
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$145.00
Factored Cost per SF	\$181.25
<b>Final Cost per SF</b>	<b>\$185.30</b>
<b>Basic Bridge Cost</b>	<b>\$1,533,375.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
----------	-------------	----------	------	------------	-----------------



400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22
<b>Bridge 44 Total</b>				<b>\$1,567,676.72</b>

**Bridge 45**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	90.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$181.45</b>
<b>Basic Bridge Cost</b>	<b>\$455,625.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22
<b>Bridge 45 Total</b>				<b>\$489,926.72</b>

**Bridge 46**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	127.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$177.75</b>
<b>Basic Bridge Cost</b>	<b>\$642,937.50</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22
<b>Bridge 46 Total</b>				<b>\$677,239.22</b>

**Bridge 47**

Description	Value
Estimate Type	SF Estimate



Primary Estimate	YES
Length (LF)	520.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.95</b>
<b>Basic Bridge Cost</b>	<b>\$2,632,500.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22
<b>Bridge 47 Total</b>				<b>\$2,666,801.72</b>

**Bridge 48**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	291.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$172.68</b>
<b>Basic Bridge Cost</b>	<b>\$1,473,187.50</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22
<b>Bridge 48 Total</b>				<b>\$1,507,489.22</b>

**Bridge 49**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	267.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$173.03</b>



**Basic Bridge Cost****\$1,351,687.50**

Description

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22

**Bridge 49 Total****\$1,385,989.22****Bridge 50****Description****Value**

Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	297.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$172.60</b>
<b>Basic Bridge Cost</b>	<b>\$1,503,562.50</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22

**Bridge 50 Total****\$1,537,864.22****Bridges Component Total****\$28,440,984.86****RETAINING WALLS COMPONENT****Retaining Wall 1****Description****Value**

Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	8

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	56,000.00 SF	\$29.09	\$1,629,040.00

**Retaining Wall 2****Description****Value**

Length	52.00
Begin height	16.50



End Height 16.50  
Multiplier 4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,432.00	SF	\$29.09	\$99,836.88

**Retaining Walls Component Total** \$1,728,876.88

**Sequence 6 Total** \$42,013,073.11

**Sequence:** 7 NUR - New Construction, Undivided, Rural **Net Length:** 3.338 MI  
17,624 LF  
**Description:** One-lane ramps - SR 535 TO CENTRAL FL PKWY

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	3.340
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 5 to 1
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 0.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	40.46	AC	\$10,000.00	\$404,600.00
120-6	EMBANKMENT	68,555.21	CY	\$8.00	\$548,441.68

**Earthwork Component Total** \$953,041.68

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	52,872.34	SY	\$3.25	\$171,835.10
285-712	OPTIONAL BASE, BASE GROUP 12	30,665.95	SY	\$23.00	\$705,316.85
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	7,269.95	TN	\$97.88	\$711,582.71



337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	1,174.94 TN	\$142.31	\$167,205.71
----------	---------------------------------------	-------------	----------	--------------

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	6.68 NM	\$908.42	\$6,068.25
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	6.68 NM	\$3,138.35	\$20,964.18

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	17,600.00 LF	\$186.18	\$3,276,768.00

<b>Roadway Component Total</b>	<b>\$5,059,740.81</b>
--------------------------------	-----------------------

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	24,791.25 SY	\$17.00	\$421,451.25
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	2,584.87 TN	\$100.00	\$258,487.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	45,822.69 LF	\$1.15	\$52,696.09



104-11	FLOATING TURBIDITY BARRIER	834.48 LF	\$9.63	\$8,036.04
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	834.48 LF	\$4.69	\$3,913.71
104-15	SOIL TRACKING PREVENTION DEVICE	4.00 EA	\$2,215.78	\$8,863.12
107-1	LITTER REMOVAL	40.46 AC	\$35.00	\$1,416.10
107-2	MOWING	40.46 AC	\$50.00	\$2,023.00

**Shoulder Component Total**

\$756,886.31

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	2,672.00 LF	\$72.48	\$193,666.56
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	560.00 LF	\$111.27	\$62,311.20

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	59.00 EA	\$5,750.00	\$339,250.00
<b>Comment:</b> TOTAL DIST/300' INTERVAL				

**Drainage Component Total**

\$595,227.76

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	7.00 AS	\$321.52	\$2,250.64
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	67.00 AS	\$1,053.87	\$70,609.29
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	7.00 AS	\$4,188.78	\$29,321.46

**Signing Component Total**

\$102,181.39

**SIGNALIZATIONS COMPONENT****Signalization 1****Description**

Type

Multiplier

Description

**Value**

6 Lane Mast Arm

5

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	3,500.00 LF	\$6.43	\$22,505.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	1,500.00 LF	\$17.13	\$25,695.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	5.00 PI	\$4,446.59	\$22,232.95
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	110.00 EA	\$535.14	\$58,865.40
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	5.00 AS	\$1,774.62	\$8,873.10



639-2-1	ELECTRICAL SERVICE WIRE, F&I	300.00 LF	\$3.30	\$990.00
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	5.00 EA	\$959.88	\$4,799.40
649-1-10	STEEL STRAIN POLE, F&I, PEDESTAL	5.00 EA	\$1,011.11	\$5,055.55
649-31-105	M/ARM,F&I, WS-150,SINGLE ARM,W/O LUM-78	20.00 EA	\$39,714.16	\$794,283.20
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	100.00 AS	\$931.67	\$93,167.00
653-191	PEDESTRIAN SIGNAL, F&I, LED-COUNT DWN, 1	40.00 AS	\$522.37	\$20,894.80
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	100.00 EA	\$179.15	\$17,915.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	100.00 AS	\$851.32	\$85,132.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	40.00 EA	\$196.31	\$7,852.40
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	5.00 AS	\$23,075.08	\$115,375.40
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	20.00 EA	\$209.21	\$4,184.20
<b>Signalizations Component Total</b>				<b>\$1,287,820.40</b>

#### LANDSCAPING COMPONENT

##### User Input Data

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** **\$161,108.83**

#### BRIDGES COMPONENT

##### Bridge 535RMP

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	192.00
Width (LF)	27.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$174.70</b>
<b>Basic Bridge Cost</b>	<b>\$874,800.00</b>
Description	BRIDGE OVER 535 RAMP

##### Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	60.00	CY	\$350.00	\$21,000.00
415-1-9	REINF STEEL- APPROACH SLABS	10,500.00	LB	\$0.94	\$9,870.00
<b>Bridge 535RMP Total</b>					<b>\$905,670.00</b>



**Bridge PED1**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	30.00
Width (LF)	12.00
Type	Pedestrian Overpass
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$295.00
Factored Cost per SF	\$368.75
<b>Final Cost per SF</b>	<b>\$368.75</b>
<b>Basic Bridge Cost</b>	<b>\$132,750.00</b>
Description	PED BRIDGE 1

**Bridge PED1 Total** \$132,750.00

**Bridge PED2**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	30.00
Width (LF)	12.00
Type	Pedestrian Overpass
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$295.00
Factored Cost per SF	\$368.75
<b>Final Cost per SF</b>	<b>\$368.75</b>
<b>Basic Bridge Cost</b>	<b>\$132,750.00</b>
Description	PED BRIDGE 2

**Bridge PED2 Total** \$132,750.00

**Bridges Component Total** \$1,171,170.00

**RETAINING WALLS COMPONENT****Retaining Wall 1**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	28,000.00	SF	\$29.09	\$814,520.00

**Retaining Walls Component Total** \$814,520.00



---

**Sequence 7 Total** \$10,901,697.18

---

**Sequence:** 8 NUR - New Construction, Undivided, Rural

**Net Length:** 3.452 MI  
18,225 LF

**Description:** Two-lane ramps - SR 535 TO CENTRAL FL PKWY

---

### EARTHWORK COMPONENT

#### User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	3.450
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

#### Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	41.84	AC	\$10,000.00	\$418,400.00

#### X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	16,000.00	CY	\$8.00	\$128,000.00

**Earthwork Component Total** \$546,400.00

---

### ROADWAY COMPONENT

#### User Input Data

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	495
Friction Course Spread Rate	80

#### Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	85,049.89	SY	\$3.25	\$276,412.14
285-712	OPTIONAL BASE,BASE GROUP 12	49,936.43	SY	\$23.00	\$1,148,537.89
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	12,028.48	TN	\$97.88	\$1,177,347.62
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	1,944.00	TN	\$142.31	\$276,650.64

#### Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1



Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	466.00	EA	\$3.74	\$1,742.84
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	6.90	NM	\$908.42	\$6,268.10
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	3.45	GM	\$383.54	\$1,323.21
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	6.90	NM	\$3,138.35	\$21,654.62
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	3.45	GM	\$1,027.15	\$3,543.67
<b>Roadway Component Total</b>					<b>\$2,913,480.73</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 8.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	25,636.47	SY	\$17.00	\$435,819.99
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	2,673.00	TN	\$100.00	\$267,300.00
570-1-2	PERFORMANCE TURF, SOD	8,099.99	SY	\$2.25	\$18,224.98

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	47,384.94	LF	\$1.15	\$54,492.68
104-11	FLOATING TURBIDITY BARRIER	862.92	LF	\$9.63	\$8,309.92
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	862.92	LF	\$4.69	\$4,047.09
104-15	SOIL TRACKING PREVENTION DEVICE	4.00	EA	\$2,215.78	\$8,863.12
107-1	LITTER REMOVAL	41.83	AC	\$35.00	\$1,464.05
107-2	MOWING	41.83	AC	\$50.00	\$2,091.50
<b>Shoulder Component Total</b>					<b>\$800,613.33</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
----------	-------------	----------	------	------------	-----------------



430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	2,768.00 LF	\$72.48	\$200,624.64
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	584.00 LF	\$111.27	\$64,981.68
570-1-1	PERFORMANCE TURF	2,430.00 SY	\$0.76	\$1,846.80

**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	61.00	EA	\$5,750.00	\$350,750.00
<b>Comment:</b> TOTAL DIST/300' INTERVAL					

**Drainage Component Total**

\$618,203.12

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	7.00	AS	\$321.52	\$2,250.64
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	70.00	AS	\$1,053.87	\$73,770.90
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	7.00	AS	\$4,188.78	\$29,321.46

**Signing Component Total**

\$105,343.00

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total**

\$112,162.78

**RETAINING WALLS COMPONENT****Retaining Wall 1**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	12

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	84,000.00	SF	\$29.09	\$2,443,560.00

**Retaining Wall 2**

Description	Value
Length	52.00
Begin height	16.50
End Height	16.50
Multiplier	2



**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	1,716.00	SF	\$29.09	\$49,918.44
<b>Retaining Walls Component Total</b>					<b>\$2,493,478.44</b>

---

**Sequence 8 Total** **\$7,589,681.40**

---

**Sequence:** 9 NUR - New Construction, Undivided, Rural **Net Length:** 0.947 MI  
5,000 LF

**Description:** Fenton St. signalization

---

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	15.00 / 15.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	16,667.20	SY	\$3.25	\$54,168.40
285-712	OPTIONAL BASE,BASE GROUP 12	17,033.88	SY	\$23.00	\$391,779.24
334-1-23	SUPERPAVE ASPH CONC, TRAF C, PG76-22,PMA	4,125.13	TN	\$115.00	\$474,389.95
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	666.69	TN	\$142.31	\$94,876.65

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	128.00	EA	\$3.74	\$478.72
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.89	NM	\$908.42	\$1,716.91
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.89	NM	\$3,138.35	\$5,931.48
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	0.95	GM	\$1,027.15	\$975.79
<b>Roadway Component Total</b>					<b>\$1,024,317.14</b>

---

**SHOULDER COMPONENT**



**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	13,000.42	LF	\$1.15	\$14,950.48
104-11	FLOATING TURBIDITY BARRIER	236.75	LF	\$9.63	\$2,279.90
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	236.75	LF	\$4.69	\$1,110.36
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	11.48	AC	\$35.00	\$401.80
107-2	MOWING	11.48	AC	\$50.00	\$574.00
<b>Shoulder Component Total</b>					<b>\$21,532.32</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	17.05	CY	\$1,301.59	\$22,192.11
430-174-124	PIPE CULV, OPT MATL, ROUND, 24"SD	760.00	LF	\$72.48	\$55,084.80
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	160.00	LF	\$111.27	\$17,803.20
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	38.00	EA	\$1,198.82	\$45,555.16
570-1-1	PERFORMANCE TURF	666.69	SY	\$0.76	\$506.68
<b>Drainage Component Total</b>					<b>\$141,141.95</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	\$321.52	\$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	19.00	AS	\$1,053.87	\$20,023.53
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	\$4,188.78	\$8,377.56
<b>Signing Component Total</b>					<b>\$29,044.13</b>

**SIGNALIZATIONS COMPONENT****Signalization 1**

Description	Value
-------------	-------



Type  
Multiplier  
Description

2 Lane Mast Arm  
1

EB on/off ramp intersection.

### Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	\$6.43	\$5,144.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	\$17.13	\$3,426.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$4,446.59	\$4,446.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	\$535.14	\$6,421.68
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,774.62	\$1,774.62
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	\$3.30	\$198.00
649-31-111	M/ARM,F&I, WS-150,DBL ARM,W/O LU 36-46	4.00	EA	\$34,125.08	\$136,500.32
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	8.00	AS	\$931.67	\$7,453.36
653-191	PEDESTRIAN SIGNAL, F&I, LED-COUNT DWN, 1	8.00	AS	\$522.37	\$4,178.96
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	8.00	EA	\$179.15	\$1,433.20
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	8.00	AS	\$851.32	\$6,810.56
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	\$196.31	\$1,570.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$23,075.08	\$23,075.08
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	\$209.21	\$836.84

### Signalization 2

#### Description

#### Value

Type  
Multiplier  
Description

2 Lane Mast Arm  
1

WB on/off ramp intersection.

### Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	\$6.43	\$5,144.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	\$17.13	\$3,426.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$4,446.59	\$4,446.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	\$535.14	\$6,421.68
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,774.62	\$1,774.62
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	\$3.30	\$198.00
649-31-111	M/ARM,F&I, WS-150,DBL ARM,W/O LU 36-46	4.00	EA	\$34,125.08	\$136,500.32
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	8.00	AS	\$931.67	\$7,453.36
653-191	PEDESTRIAN SIGNAL, F&I, LED-COUNT DWN, 1	8.00	AS	\$522.37	\$4,178.96
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	8.00	EA	\$179.15	\$1,433.20
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	8.00	AS	\$851.32	\$6,810.56
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	\$196.31	\$1,570.48



670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$23,075.08	\$23,075.08
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	\$209.21	\$836.84
<b>Signalizations Component Total</b>				<b>\$406,539.38</b>

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** **\$72,238.15**

**BRIDGES COMPONENT****Bridge B-64**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	624.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.58</b>
<b>Basic Bridge Cost</b>	<b>\$3,159,000.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22

**Bridge B-64 Total** **\$3,193,301.72**

**Bridges Component Total** **\$3,193,301.72**

**Sequence 9 Total** **\$4,888,114.79**

**Sequence:** 10 NUR - New Construction, Undivided, Rural

**Net Length:** 0.350 MI  
1,850 LF

**Description:** Central FL Pkwy roadway improvements

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00



Alignment Number	1
Distance	0.350
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.24	AC	\$10,000.00	\$42,400.00
<b>Earthwork Component Total</b>					<b>\$42,400.00</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	17,678.85	SY	\$3.25	\$57,456.26
285-712	OPTIONAL BASE,BASE GROUP 12	14,936.57	SY	\$23.00	\$343,541.11
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	3,663.22	TN	\$97.88	\$358,555.97
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	592.04	TN	\$142.31	\$84,253.21

**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-11	CONCRETE CURB & GUTTER, VAR HT TYPE F	3,700.00	LF	\$23.18	\$85,766.00

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	5

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	331.00	EA	\$3.74	\$1,237.94
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.70	NM	\$908.42	\$635.89
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.75	GM	\$383.54	\$671.20



711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.70 NM	\$3,138.35	\$2,196.85
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	1.75 GM	\$1,027.15	\$1,797.51
<b>Roadway Component Total</b>				<b>\$936,111.94</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	7.00 / 7.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	2,191.35 SY	\$17.00	\$37,252.95
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	226.12 TN	\$100.00	\$22,612.00
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	10.85 TN	\$142.31	\$1,544.06
570-1-1	PERFORMANCE TURF	822.27 SY	\$0.76	\$624.93

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	1,850.00 SY	\$50.29	\$93,036.50

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,810.29 LF	\$1.15	\$5,531.83
104-11	FLOATING TURBIDITY BARRIER	87.60 LF	\$9.63	\$843.59
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	87.60 LF	\$4.69	\$410.84
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	4.25 AC	\$35.00	\$148.75
107-2	MOWING	4.25 AC	\$50.00	\$212.50

**Shoulder Component Total****\$164,433.73****DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	6.31 CY	\$1,301.59	\$8,213.03
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	288.00 LF	\$72.48	\$20,874.24
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	64.00 LF	\$111.27	\$7,121.28
MITERED END SECT, OPTIONAL				



430-984-129	RD, 24" SD	15.00 EA	\$1,198.82	\$17,982.30
570-1-1	PERFORMANCE TURF	246.68 SY	\$0.76	\$187.48
<b>Drainage Component Total</b>				<b>\$54,378.33</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$321.52	\$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00	AS	\$1,053.87	\$8,430.96
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,188.78	\$4,188.78
<b>Signing Component Total</b>				<b>\$12,941.26</b>	

**SIGNALIZATIONS COMPONENT****Signalization 1****Description**

Type

Multiplier

Description

**Value**

6 Lane Mast Arm

4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F&I, OPEN TRENCH	2,800.00	LF	\$6.43	\$18,004.00
630-2-12	CONDUIT, F&I, DIRECTIONAL BORE	1,200.00	LF	\$17.13	\$20,556.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	4.00	PI	\$4,446.59	\$17,786.36
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	88.00	EA	\$535.14	\$47,092.32
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	4.00	AS	\$1,774.62	\$7,098.48
639-2-1	ELECTRICAL SERVICE WIRE, F&I	240.00	LF	\$3.30	\$792.00
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	4.00	EA	\$959.88	\$3,839.52
649-1-10	STEEL STRAIN POLE, F&I, PEDESTAL	4.00	EA	\$1,011.11	\$4,044.44
649-31-105	M/ARM,F&I, WS-150,SINGLE ARM,W/O LUM-78	16.00	EA	\$39,714.16	\$635,426.56
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	80.00	AS	\$931.67	\$74,533.60
653-191	PEDESTRIAN SIGNAL, F&I, LED-COUNT DWN, 1	32.00	AS	\$522.37	\$16,715.84
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	80.00	EA	\$179.15	\$14,332.00
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	80.00	AS	\$851.32	\$68,105.60
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	32.00	EA	\$196.31	\$6,281.92
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	4.00	AS	\$23,075.08	\$92,300.32
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	16.00	EA	\$209.21	\$3,347.36
<b>Signalizations Component Total</b>				<b>\$1,030,256.32</b>	



**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** \$33,607.82

**Sequence 10 Total** \$2,274,129.40

Date: 8/12/2016 9:46:45 AM

## FDOT Long Range Estimating System - Production

### R3: Project Details by Sequence Report

**Project:** 242484-8-52-01

**Letting Date:** 01/2099

**Description:** (242484-8)SR 400 (I-4) from East of SR 522 Osceola Parkway (Osceola/Orange County Line) to West of SR 528 Beachline Expressway - Orange County

**District:** 05      **County:** 75 ORANGE

**Market Area:** 08      **Units:** English

**Contract Class:** 1      **Lump Sum Project:** N

**Design/Build:** N      **Project Length:** 5.730 MI

**Project Manager:** BSP

**Version 17 Project Grand Total**

**\$928,985,020.06**

**Description:** I-4 (SR 400) FROM OSCEOLA / ORANGE COUNTY LINE (Sta. 1042+94.30, MP 0) TO W OF SR 528 BEELINE (Sta. 1345+48.50, MP 5.65. HNTB August 2016 Update: Express Lanes with Asphalt Pavement

**Project Sequences Subtotal** **\$667,506,302.59**

102-1	Maintenance of Traffic	10.00 %	\$66,750,630.26
101-1	Mobilization	10.00 %	\$73,425,693.29

**Project Sequences Total** **\$807,682,626.14**

Project Unknowns	15.00 %	\$121,152,393.92
Design/Build	0.00 %	\$0.00

**Non-Bid Components:**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$150,000.00	\$150,000.00

**Project Non-Bid Subtotal** **\$150,000.00**

**Version 17 Project Grand Total** **\$928,985,020.06**



Date: 8/12/2016 9:22:38 AM

## FDOT Long Range Estimating System - Production

### R3: Project Details by Sequence Report

Project: 431456-1-52-01

Letting Date: 01/2099

**Description:** (431456-1)SR 400 (I-4) FROM WEST OF CR 532 (POLK/OSCEOLA COUNTY LINE) TO ORANGE COUNTY LINE.

District: 05 County: 92 OSCEOLA

Market Area: 08 Units: English

Contract Class: 1 Lump Sum Project: N

Design/Build: N Project Length: 8.304 MI

Project Manager: BSP

**Version 14 Project Grand Total****\$619,804,906.48**

**Description:** SR 400 (I-4) from West of CR 532 (Polk/Osceola County Line) to Orange County Line - HNTB  
August 2016 Update: Express Lanes with Asphalt Pavement

**Sequence:** 1 NDR - New Construction, Divided, Rural

**Net Length:** 8.304 MI  
43,847 LF

**Description:** Construct 3 GUL in each direction for a total of 43847' from Station 604+47.32 to station 1042+94.3.

**Special Conditions:** Includes ITS for full project and 100,000 SF of temporary sheeting. All drainage basins included in this sequence.

#### EARTHWORK COMPONENT

**User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	200.00 / 200.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	8.300
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	402.62 AC	\$10,000.00	\$4,026,200.00
120-6	EMBANKMENT	299,074.45 CY	\$8.00	\$2,392,595.60

**Earthwork Component Total****\$6,418,795.60**

#### ROADWAY COMPONENT

**User Input Data**

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	660
Friction Course Spread Rate	80



**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	584,629.76 SY	\$3.25	\$1,900,046.72
285-712	OPTIONAL BASE,BASE GROUP 12	357,208.78 SY	\$20.00	\$7,144,175.60
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	115,756.69 TN	\$97.88	\$11,330,264.82
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	14,031.11 TN	\$142.31	\$1,996,767.26

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
455-133-2	SHEET PILING STEEL, TEMPORARY-CRITICAL	100,000.00 SF	\$16.13	\$1,613,000.00
521-8-1	CONC TRAF RAIL BAR, JCT SLAB,32"F SHAPE	98,900.00 LF	\$240.44	\$23,779,516.00

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	5,605.00 EA	\$3.74	\$20,962.70
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	33.22 NM	\$908.42	\$30,177.71
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	33.22 GM	\$383.54	\$12,741.20
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	33.22 NM	\$3,138.35	\$104,255.99
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	33.22 GM	\$1,027.15	\$34,121.92

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	34.00 TN	\$232.34	\$7,899.56
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,000.00 LF	\$17.18	\$17,180.00
536-85-22	GUARDRAIL END ANCHORAGE ASSEMBLY- FLARED	2.00 EA	\$3,211.21	\$6,422.42
544-75-1	CRASH CUSHION	22.00 EA	\$15,521.81	\$341,479.82



550-10-220	FENCING, TYPE B, 5.1-6.0', STANDARD	87,700.00 LF	\$10.00	\$877,000.00
------------	----------------------------------------	--------------	---------	--------------

**Roadway Component Total**

\$49,216,011.72

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	120,141.42 SY	\$16.00	\$1,922,262.72
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	19,292.78 TN	\$100.00	\$1,929,278.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	16.61 PM	\$1,428.02	\$23,719.41

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	114,002.80 LF	\$1.15	\$131,103.22
104-11	FLOATING TURBIDITY BARRIER	2,076.10 LF	\$9.63	\$19,992.84
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	2,076.10 LF	\$4.69	\$9,736.91
104-15	SOIL TRACKING PREVENTION DEVICE	9.00 EA	\$2,215.78	\$19,942.02
104-18	INLET PROTECTION SYSTEM	50.00 EA	\$94.06	\$4,703.00
107-1	LITTER REMOVAL	201.30 AC	\$35.00	\$7,045.50
107-2	MOWING	201.30 AC	\$50.00	\$10,065.00

**Shoulder Component Total**

\$4,077,848.62

**MEDIAN COMPONENT****User Input Data**

Description	Value
Total Median Width	24.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
	OPTIONAL BASE,BASE GROUP			



285-708	08	120,141.42 SY	\$16.00	\$1,922,262.72
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	19,292.78 TN	\$100.00	\$1,929,278.00
521-1-1	MEDIAN BARRIER WALL CONC, PRECAST	129,541.00 LF	\$111.97	\$14,504,705.77
<b>Median Component Total</b>				<b>\$18,356,246.49</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	632.00 LF	\$111.27	\$70,322.64

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-1	CONC CLASS II, CULVERTS <b>Comment:</b> CD#3: 9'X7'X353' CD#5: 12'X8'X392' CD#6: 7'X4'X460' CD#9: 7'X4'X583' CD#10: 7'X4'X516' CD#11: 7'X5'X581' End walls: 653 cy	1,156.00 CY	\$965.27	\$1,115,852.12
400-2-2	CONC CLASS II, ENDWALLS	653.00 CY	\$1,301.59	\$849,938.27
415-1-1	REINF STEEL- ROADWAY	40,855.00 LB	\$1.06	\$43,306.30
425-1-901	INLETS, SPECIAL, <10' <b>Comment:</b> TOTAL DIST./300'	300.00 EA	\$10,802.53	\$3,240,759.00
430-174-148	PIPE CULV, OPT MATL, ROUND,48"SD	1,096.00 LF	\$150.88	\$165,364.48
430-982-138	MITERED END SECT, OPTIONAL RD, 36" CD	4.00 EA	\$2,463.56	\$9,854.24
430-982-141	MITERED END SECT, OPTIONAL RD, 48" CD	6.00 EA	\$3,424.94	\$20,549.64

**EX-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	24" RCP SD <b>Comment:</b> TRUNK LINE. \$300000 PER MILE.	8.00 MI	\$300,000.00	\$2,400,000.00

**Retention Basin 1**

Description	Value
Size	15 AC
Multiplier	9
Depth	12.00
Description	All ponds

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	135.00 AC	\$10,000.00	\$1,350,000.00
120-1	REGULAR EXCAVATION	2,613,600.00 CY	\$4.50	\$11,761,200.00
400-2-2	CONC CLASS II, ENDWALLS	432.00 CY	\$1,301.59	\$562,286.88
425-1-541	INLETS, DT BOT, TYPE D, <10'	18.00 EA	\$3,512.69	\$63,228.42
425-2-71	MANHOLES, J-7, <10'	27.00 EA	\$5,745.70	\$155,133.90
430-175-142	PIPE CULV, OPT MATL, ROUND, 42"S/CD	936.00 LF	\$133.10	\$124,581.60
430-175-160	PIPE CULV, OPT MATL, ROUND, 60"S/CD	5,400.00 LF	\$216.88	\$1,171,152.00
550-10-220	FENCING, TYPE B, 5.1-6.0',	32,400.00 LF	\$10.00	\$324,000.00



	STANDARD			
550-60-234	FENCE GATE,TYP B,SLIDE/CANT,18.1-20'OPEN	36.00 EA	\$2,128.82	\$76,637.52
570-1-1	PERFORMANCE TURF	653,400.00 SY	\$0.76	\$496,584.00
<b>Drainage Component Total</b>				<b>\$24,000,751.01</b>

**SIGNING COMPONENT**

<b>Pay Items</b>				
<b>Pay item</b>	<b>Description</b>	<b>Quantity Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	17.00 AS	\$321.52	\$5,465.84
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	200.00 AS	\$1,053.87	\$210,774.00
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	17.00 AS	\$4,188.78	\$71,209.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	50.00 AS	\$5,697.97	\$284,898.50
<b>Signing Component Total</b>				<b>\$572,347.60</b>

**INTELLIGENT TRAFFIC SYSTEM (ITS) COMPONENT****Description of Work****EX-Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
ITS	ITS FOR ENTIRE PROJECT	8.30 MI	\$108,600.00	\$901,380.00
<b>Intelligent Traffic System (ITS) Component Total</b>				<b>\$901,380.00</b>

**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				210	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	42,000.00	LF	\$6.43	\$270,060.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	210.00	EA	\$535.14	\$112,379.40
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	126,000.00	LF	\$2.15	\$270,900.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	210.00	EA	\$4,688.07	\$984,494.70
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	210.00	EA	\$553.54	\$116,243.40
Subcomponent Total					\$1,754,077.50

**High Mast Lighting Subcomponent**

Description				Value
Multiplier (Number of Poles)				40
Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	20,000.00 LF	\$6.43	\$128,600.00
	PULL & SPLICE BOX, F&I, 13" x			



635-2-11	24"	80.00 EA	\$535.14	\$42,811.20
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	20,000.00 LF	\$1.45	\$29,000.00
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	60,000.00 LF	\$2.15	\$129,000.00
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	1.00 EA	\$10,120.46	\$10,120.46
715-19-113	HIGH MAST LIGHT POLE,F&I,WS-150,120'	40.00 EA	\$63,817.65	\$2,552,706.00
715-500-2	POLE CABLE DISTRIBUTION SYS, HIGH MAST	40.00 EA	\$388.88	\$15,555.20
<b>Subcomponent Total</b>				\$2,907,792.86
<b>Lighting Component Total</b>				\$4,661,870.36

### LANDSCAPING COMPONENT

#### User Input Data

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** \$3,697,431.48

### BRIDGES COMPONENT

#### Bridge 532

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	180.00
Width (LF)	212.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	23,000.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$150.00
<b>Final Cost per SF</b>	<b>\$156.35</b>
<b>Basic Bridge Cost</b>	<b>\$5,724,000.00</b>
Description	I-4 BRIDGE OVER CR 532.

#### Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	23,000.00	SF	\$20.00	\$460,000.00
400-2-10	CONC CLASS II, APPROACH SLABS	471.11	CY	\$350.00	\$164,888.50
415-1-9	REINF STEEL- APPROACH SLABS	82,444.25	LB	\$0.94	\$77,497.60
<b>Bridge 532 Total</b>					\$6,426,386.10

#### Bridge RCREEK

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES



Length (LF)	217.00
Width (LF)	300.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	37,312.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$174.02</b>
<b>Basic Bridge Cost</b>	<b>\$10,985,625.00</b>
Description	I-4 OVER REEDY CREEK.

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	37,312.00 SF	\$20.00	\$746,240.00
400-2-10	CONC CLASS II, APPROACH SLABS	666.67 CY	\$350.00	\$233,334.50
415-1-9	REINF STEEL- APPROACH SLABS	116,667.25 LB	\$0.94	\$109,667.22

**Bridge RCREEK Total** \$12,074,866.72

**Bridge BCREEK**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	600.00
Width (LF)	300.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	28,640.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.66</b>
<b>Basic Bridge Cost</b>	<b>\$30,375,000.00</b>
Description	I-4 BRIDGE OVER BONNET CREEK.

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	28,640.00 SF	\$20.00	\$572,800.00
400-2-10	CONC CLASS II, APPROACH SLABS	666.67 CY	\$350.00	\$233,334.50
415-1-9	REINF STEEL- APPROACH SLABS	116,667.25 LB	\$0.94	\$109,667.22

**Bridge BCREEK Total** \$31,290,801.72

**Bridge ELEV**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	6,900.00
Width (LF)	48.00
Type	Low Level
Cost Factor	1.25



Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$168.92</b>
<b>Basic Bridge Cost</b>	<b>\$55,890,000.00</b>

Description I-4 EB EXPRESS ELEVATED

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	106.67 CY	\$350.00	\$37,334.50
415-1-9	REINF STEEL- APPROACH SLABS	18,667.25 LB	\$0.94	\$17,547.22
<b>Bridge ELEV Total</b>				\$55,944,881.72
<b>Bridges Component Total</b>				\$105,736,936.26

**RETAINING WALLS COMPONENT****X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-8-1	CONC TRAF RAIL BAR, JCT SLAB,32"F SHAPE	87,694.00 LF	\$240.44	\$21,085,145.36

**Retaining Wall 1**

Description	Value
Length	87,700.00
Begin height	3.00
End Height	3.00
Multiplier	1

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	263,100.00 SF	\$29.09	\$7,653,579.00

**Retaining Wall 2**

Description	Value
Length	800.00
Begin height	16.50
End Height	1.00
Multiplier	4

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	28,000.00 SF	\$29.09	\$814,520.00
<b>Retaining Walls Component Total</b>				\$29,553,244.36

**ARCHITECTURAL COMPONENT****EX-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
----------	-------------	---------------	------------	-----------------



1	TOLL GANTRY, 40	6.00 EA	\$500,000.00	\$3,000,000.00
	<b>Comment:</b> FOUR 40' SPAN TOLL GANTRY'S			

<b>Architectural Component Total</b>	<b>\$3,000,000.00</b>
--------------------------------------	-----------------------

---

<b>Sequence 1 Total</b>	<b>\$250,192,863.50</b>
-------------------------	-------------------------

---

<b>Sequence:</b> 2 NDR - New Construction, Divided, Rural	<b>Net Length:</b>	8.304 MI 43,847 LF
<b>Description:</b> Construct 2 Express lanes in each direction from east of CR 532 to Orange line		
<b>Special Conditions:</b> August 2016 Update: Express Lanes with Asphalt Pavement		

---

### EARTHWORK COMPONENT

#### User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	8.300
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	1 to 1 / 1 to 1
Median Slope L/R	1 to 1 / 1 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

#### Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	322,706.95 CY	\$8.00	\$2,581,655.60
<b>Earthwork Component Total</b>				<b>\$2,581,655.60</b>

---

### ROADWAY COMPONENT

#### User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	660
Friction Course Spread Rate	80

#### Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	448,216.15 SY	\$3.25	\$1,456,702.49
285-712	OPTIONAL BASE,BASE GROUP 12	240,282.83 SY	\$20.00	\$4,805,656.60
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA ASPH CONC FC,INC BIT,FC-	77,171.13 TN	\$97.88	\$7,553,510.20



337-7-22      5,PG76-22,PMA      9,354.08 TN      \$142.31      \$1,331,179.12

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	3,363.00 EA	\$3.74	\$12,577.62
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	66.44 NM	\$908.42	\$60,355.42
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	33.22 GM	\$383.54	\$12,741.20
<b>Roadway Component Total</b>				<b>\$15,232,722.65</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	100,653.76 SY	\$16.00	\$1,610,460.16
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	16,077.32 TN	\$100.00	\$1,607,732.00
546-72-51	RUMBLE STRIPS, GROUND-IN, 16" MIN. WIDTH	16.61 PM	\$1,428.02	\$23,719.41

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	114,002.80 LF	\$1.15	\$131,103.22
104-11	FLOATING TURBIDITY BARRIER	2,076.10 LF	\$9.63	\$19,992.84
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	2,076.10 LF	\$4.69	\$9,736.91
104-15	SOIL TRACKING PREVENTION DEVICE	9.00 EA	\$2,215.78	\$19,942.02
104-18	INLET PROTECTION SYSTEM	50.00 EA	\$94.06	\$4,703.00
107-1	LITTER REMOVAL	201.30 AC	\$35.00	\$7,045.50
107-2	MOWING	201.30 AC	\$50.00	\$10,065.00

**Shoulder Component Total**

\$3,444,500.06

**MEDIAN COMPONENT****User Input Data**

Description	Value
Total Median Width	56.00
Performance Turf Width	36.00
Total Median Shoulder Width L/R	12.00 / 12.00
Paved Median Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	2

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	100,653.76 SY	\$16.00	\$1,610,460.16
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	16,077.32 TN	\$100.00	\$1,607,732.00
570-1-2	PERFORMANCE TURF, SOD	175,388.93 SY	\$2.25	\$394,625.09

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
536-1-3	GUARDRAIL- ROADWAY, DOUBLE FACE	43,800.00 LF	\$23.60	\$1,033,680.00

**Median Component Total**

\$4,646,497.25

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	6,648.00 LF	\$65.00	\$432,120.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	2,856.00 LF	\$75.40	\$215,342.40

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD <b>Comment:</b> EDGEDRAIN ALONG EB AND WB EXPRESS LANES.	82,400.00 LF	\$25.36	\$2,089,664.00
446-71-1	EDGEDRAIN OUTLET PIPE, 4" <b>Comment:</b> (TOT. DIST. / 300' INTERVAL) X 6' LONG PIPE X 2(EB&WB)	1,760.00 LF	\$28.30	\$49,808.00

**Drainage Component Total**

\$2,786,934.40

**SIGNING COMPONENT**



**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	17.00	AS	\$321.52	\$5,465.84
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	200.00	AS	\$1,053.87	\$210,774.00
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	17.00	AS	\$4,188.78	\$71,209.26
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	50.00	AS	\$5,697.97	\$284,898.50
<b>Signing Component Total</b>					<b>\$572,347.60</b>

**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				206	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	41,200.00	LF	\$6.43	\$264,916.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	206.00	EA	\$535.14	\$110,238.84
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	123,600.00	LF	\$2.15	\$265,740.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	206.00	EA	\$4,688.07	\$965,742.42
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	206.00	EA	\$553.54	\$114,029.24
Subcomponent Total					\$1,720,666.50
Lighting Component Total					\$1,720,666.50

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** **\$464,779.86**

**Sequence 2 Total** **\$31,450,103.92**

**Sequence:** 3 NDR - New Construction, Divided, Rural **Net Length:** 10.682 MI  
56,400 LF

**Description:** Mainline Auxiliary lanes only

**Special Conditions:** Alternative For Beata on 7-25-16: Express Lanes with Asphalt Pavement

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	10.700
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 0.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	36,868.87 CY	\$8.00	\$294,950.96
<b>Earthwork Component Total</b>				<b>\$294,950.96</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	6.00 / 6.00
Structural Spread Rate	660
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	75,199.87 SY	\$3.25	\$244,399.58
285-712	OPTIONAL BASE,BASE GROUP 12	83,471.86 SY	\$20.00	\$1,669,437.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	24,815.96 TN	\$97.88	\$2,428,986.16
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	3,007.99 TN	\$142.31	\$428,067.06

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	0
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Roadway Component Total** **\$4,770,890.00**

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00



Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	146,639.75	LF	\$1.15	\$168,635.71
104-11	FLOATING TURBIDITY BARRIER	2,670.45	LF	\$9.63	\$25,716.43
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	2,670.45	LF	\$4.69	\$12,524.41
104-15	SOIL TRACKING PREVENTION DEVICE	11.00	EA	\$2,215.78	\$24,373.58
104-18	INLET PROTECTION SYSTEM	65.00	EA	\$94.06	\$6,113.90
107-1	LITTER REMOVAL	258.93	AC	\$35.00	\$9,062.55
107-2	MOWING	258.93	AC	\$50.00	\$12,946.50
<b>Shoulder Component Total</b>					<b>\$259,373.08</b>

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** **\$79,878.21**

**Sequence 3 Total** **\$5,405,092.25**

**Sequence:** 4 NUR - New Construction, Undivided, Rural **Net Length:** 0.726 MI  
3,835 LF  
**Description:** One-lane ramps - CR-532 interchange

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.730
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	8.80	AC	\$10,000.00	\$88,000.00

120-6	EMBANKMENT	12,459.70 CY	\$8.00	\$99,677.60
<b>Earthwork Component Total</b>				<b>\$187,677.60</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,652.40	SY	\$3.25	\$34,620.30
285-712	OPTIONAL BASE,BASE GROUP 12	6,672.66	SY	\$20.00	\$133,453.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,581.88	TN	\$97.88	\$154,834.41
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	255.66	TN	\$142.31	\$36,382.97

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.45	NM	\$908.42	\$1,317.21
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.45	NM	\$3,138.35	\$4,550.61

**Roadway Component Total** **\$365,158.70**

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	4.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	2.00 / 4.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	2,837.80	SY	\$16.00	\$45,404.80
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	281.22	TN	\$100.00	\$28,122.00



570-1-2	PERFORMANCE TURF, SOD	1,704.38 SY	\$2.25	\$3,834.86
---------	-----------------------	-------------	--------	------------

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	9,970.65 LF	\$1.15	\$11,466.25
104-11	FLOATING TURBIDITY BARRIER	181.58 LF	\$9.63	\$1,748.62
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	181.58 LF	\$4.69	\$851.61
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	8.80 AC	\$35.00	\$308.00
107-2	MOWING	8.80 AC	\$50.00	\$440.00
<b>Shoulder Component Total</b>				<b>\$94,391.92</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	584.00 LF	\$65.00	\$37,960.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	128.00 LF	\$111.27	\$14,242.56
570-1-1	PERFORMANCE TURF	511.32 SY	\$0.76	\$388.60
<b>Drainage Component Total</b>				<b>\$52,591.16</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00 AS	\$321.52	\$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	15.00 AS	\$1,053.87	\$15,808.05
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00 AS	\$4,188.78	\$8,377.56
<b>Signing Component Total</b>				<b>\$24,828.65</b>

**SIGNALIZATIONS COMPONENT****Signalization 1****Description**

Type

Multiplier

Description

**Value**

4 Lane Mast Arm

1

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00 LF	\$6.43	\$4,822.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00 LF	\$17.13	\$4,282.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$4,446.59	\$4,446.59

635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00 EA	\$535.14	\$8,562.24
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$1,774.62	\$1,774.62
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$3.30	\$198.00
649-31-103	M/ARM,F&I, WS-150,SING ARM,W/O LUM-60	4.00 EA	\$34,227.85	\$136,911.40
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	12.00 AS	\$931.67	\$11,180.04
653-191	PEDESTRIAN SIGNAL, F&I, LED- COUNT DWN, 1	8.00 AS	\$600.78	\$4,806.24
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00 EA	\$179.15	\$2,149.80
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00 AS	\$851.32	\$10,215.84
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	\$196.31	\$1,570.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$23,075.08	\$23,075.08
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	\$209.21	\$836.84

**Signalization 2****Description**

Type

Multiplier

Description

**Value**

4 Lane Mast Arm

1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00	LF	\$6.43	\$4,822.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00	LF	\$17.13	\$4,282.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$4,446.59	\$4,446.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	16.00	EA	\$535.14	\$8,562.24
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,774.62	\$1,774.62
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	\$3.30	\$198.00
649-31-103	M/ARM,F&I, WS-150,SING ARM,W/O LUM-60	4.00	EA	\$34,227.85	\$136,911.40
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	12.00	AS	\$931.67	\$11,180.04
653-191	PEDESTRIAN SIGNAL, F&I, LED- COUNT DWN, 1	8.00	AS	\$600.78	\$4,806.24
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00	EA	\$179.15	\$2,149.80
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00	AS	\$851.32	\$10,215.84
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	\$196.31	\$1,570.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$23,075.08	\$23,075.08
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	\$209.21	\$836.84

**Signalization 3****Description**

Type

Multiplier

Description

**Value**

2 Lane Mast Arm

1

**Pay Items**



Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	\$6.43	\$5,144.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	\$17.13	\$3,426.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$4,446.59	\$4,446.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	\$535.14	\$6,421.68
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,774.62	\$1,774.62
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	\$3.30	\$198.00
649-31-111	M/ARM,F&I, WS-150,DBL ARM,W/O LU 36-46	4.00	EA	\$34,125.08	\$136,500.32
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	8.00	AS	\$931.67	\$7,453.36
653-191	PEDESTRIAN SIGNAL, F&I, LED-COUNT DWN, 1	8.00	AS	\$600.78	\$4,806.24
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	8.00	EA	\$179.15	\$1,433.20
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	8.00	AS	\$851.32	\$6,810.56
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	\$196.31	\$1,570.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$23,075.08	\$23,075.08
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	\$209.21	\$836.84

**Signalization 4****Description**

Type

Multiplier

Description

**Value**

2 Lane Mast Arm

1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	800.00	LF	\$6.43	\$5,144.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	\$17.13	\$3,426.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$4,446.59	\$4,446.59
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	\$535.14	\$6,421.68
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	\$1,774.62	\$1,774.62
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	\$3.30	\$198.00
649-31-111	M/ARM,F&I, WS-150,DBL ARM,W/O LU 36-46	4.00	EA	\$34,125.08	\$136,500.32
650-1-311	TRAFFIC SIGNAL,F&I,3 SECT,1 WAY,ALUMINUM	8.00	AS	\$931.67	\$7,453.36
653-191	PEDESTRIAN SIGNAL, F&I, LED-COUNT DWN, 1	8.00	AS	\$600.78	\$4,806.24
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	8.00	EA	\$179.15	\$1,433.20
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	8.00	AS	\$851.32	\$6,810.56
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	\$196.31	\$1,570.48
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	\$23,075.08	\$23,075.08
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	\$209.21	\$836.84

**Signalizations Component Total****\$837,458.28**

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** \$23,431.59

**Sequence 4 Total** \$1,585,537.90

**Sequence:** 7 NUR - New Construction, Undivided, Rural **Net Length:** 2.892 MI  
15,271 LF

**Description:** One-lane ramps - SR-429 interchange

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	2.900
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	35.05	AC	\$10,000.00	\$350,500.00
120-6	EMBANKMENT	49,610.88	CY	\$8.00	\$396,887.04
<b>Earthwork Component Total</b>					<b>\$747,387.04</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	45,812.45	SY	\$3.25	\$148,890.46
285-712	OPTIONAL BASE,BASE GROUP 12	26,571.22	SY	\$20.00	\$531,424.40
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA ASPH CONC FC,INC BIT,FC-	6,299.21	TN	\$97.88	\$616,566.67



337-7-22      5,PG76-22,PMA      1,018.05 TN      \$142.31      \$144,878.70

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	5.78 NM	\$908.42	\$5,250.67
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	5.78 NM	\$3,138.35	\$18,139.66
<b>Roadway Component Total</b>				<b>\$1,465,150.56</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	21,480.95 SY	\$16.00	\$343,695.20
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	2,239.72 TN	\$100.00	\$223,972.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	39,704.12 LF	\$1.15	\$45,659.74
104-11	FLOATING TURBIDITY BARRIER	723.05 LF	\$9.63	\$6,962.97
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	723.05 LF	\$4.69	\$3,391.10
104-15	SOIL TRACKING PREVENTION DEVICE	3.00 EA	\$2,215.78	\$6,647.34
107-1	LITTER REMOVAL	35.05 AC	\$35.00	\$1,226.75
107-2	MOWING	35.05 AC	\$50.00	\$1,752.50
<b>Shoulder Component Total</b>				<b>\$633,307.60</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
----------	-------------	---------------	------------	-----------------

430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	15,312.00 LF	\$65.00	\$995,280.00
570-1-1	PERFORMANCE TURF	2,036.11 SY	\$0.76	\$1,547.44

**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	51.00	EA	\$10,802.53	\$550,929.03
<b>Comment:</b> TOTAL DIST./300' INTERVAL					

**Drainage Component Total** \$1,547,756.47

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	6.00	AS	\$321.52	\$1,929.12
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	58.00	AS	\$1,053.87	\$61,124.46
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	6.00	AS	\$4,188.78	\$25,132.68
<b>Signing Component Total</b>					\$88,186.26

**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				10	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,000.00	LF	\$6.43	\$12,860.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	10.00	EA	\$535.14	\$5,351.40
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,000.00	LF	\$2.15	\$12,900.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	10.00	EA	\$4,688.07	\$46,880.70
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	10.00	EA	\$553.54	\$5,535.40
Subcomponent Total					\$83,527.50
Lighting Component Total					\$83,527.50

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** \$637,462.86

**BRIDGES COMPONENT****Bridge EBOFF1**



Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	514.00
Width (LF)	31.00
Type	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$202.50
<b>Final Cost per SF</b>	<b>\$204.72</b>
<b>Basic Bridge Cost</b>	<b>\$3,226,635.00</b>
Description	EB EXPRESS OFFRAMP

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	68.89 CY	\$350.00	\$24,111.50
415-1-9	REINF STEEL- APPROACH SLABS	12,055.75 LB	\$0.94	\$11,332.40
<b>Bridge EBOFF1 Total</b>				<b>\$3,262,078.91</b>

**Bridge EBON1**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	551.00
Width (LF)	31.00
Type	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$202.50
<b>Final Cost per SF</b>	<b>\$204.58</b>
<b>Basic Bridge Cost</b>	<b>\$3,458,902.50</b>
Description	EB EXPRESS ONRAMP SR 429

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	68.89 CY	\$350.00	\$24,111.50
415-1-9	REINF STEEL- APPROACH SLABS	12,055.75 LB	\$0.94	\$11,332.40
<b>Bridge EBON1 Total</b>				<b>\$3,494,346.41</b>

**Bridge EBOFF2**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	663.00
Width (LF)	31.00
Type	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00

Factored Cost per SF	\$202.50
<b>Final Cost per SF</b>	<b>\$204.22</b>
<b>Basic Bridge Cost</b>	<b>\$4,161,982.50</b>
Description	EB EXPRESS OFFRAMP SR429

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	68.89	CY	\$350.00	\$24,111.50
415-1-9	REINF STEEL- APPROACH SLABS	12,055.75	LB	\$0.94	\$11,332.40
<b>Bridge EBOFF2 Total</b>					<b>\$4,197,426.41</b>

**Bridge EBON2**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	360.00
Width (LF)	31.00
Type	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$202.50
<b>Final Cost per SF</b>	<b>\$205.68</b>
<b>Basic Bridge Cost</b>	<b>\$2,259,900.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	68.89	CY	\$350.00	\$24,111.50
415-1-9	REINF STEEL- APPROACH SLABS	12,055.75	LB	\$0.94	\$11,332.40
<b>Bridge EBON2 Total</b>					<b>\$2,295,343.91</b>

**Bridge WILSON**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	880.00
Width (LF)	126.00
Type	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$202.50
<b>Final Cost per SF</b>	<b>\$203.80</b>
<b>Basic Bridge Cost</b>	<b>\$22,453,200.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	280.00	CY	\$350.00	\$98,000.00



415-1-9	REINF STEEL- APPROACH SLABS	49,000.00 LB	\$0.94	\$46,060.00
<b>Bridge WILSON Total</b>				\$22,597,260.00
<b>Bridges Component Total</b>				\$35,846,455.64

**RETAINING WALLS COMPONENT****X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	1,700.00 SF	\$29.09	\$49,453.00
<b>Comment:</b> AT BRIDGES				

**Retaining Wall 1**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	10

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	70,000.00 SF	\$29.09	\$2,036,300.00
<b>Retaining Walls Component Total</b>				\$2,085,753.00

**Sequence 7 Total** \$43,134,986.93

**Sequence:** 8 NUR - New Construction, Undivided, Rural **Net Length:** 0.443 MI  
2,340 LF

**Description:** Two-lane ramps - SR-429 interchange

**Special Conditions:** Assumes 1000' of ramp reconstruction at each tie-in

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.440
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.37 AC	\$10,000.00	\$53,700.00

120-6	EMBANKMENT	9,054.46 CY	\$8.00	\$72,435.68
<b>Earthwork Component Total</b>				<b>\$126,135.68</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	11,440.47	SY	\$3.25	\$37,181.53
285-712	OPTIONAL BASE,BASE GROUP 12	6,411.86	SY	\$20.00	\$128,237.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,544.46	TN	\$97.88	\$151,171.74
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	249.61	TN	\$142.31	\$35,522.00

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	60.00	EA	\$3.74	\$224.40
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.89	NM	\$908.42	\$808.49
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.44	GM	\$383.54	\$168.76
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.89	NM	\$3,138.35	\$2,793.13
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	0.44	GM	\$1,027.15	\$451.95
<b>Roadway Component Total</b>					<b>\$356,559.20</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	8.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0



**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	5,371.82 SY	\$16.00	\$85,949.12
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	572.02 TN	\$100.00	\$57,202.00
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	13.73 TN	\$142.31	\$1,953.92

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	6,084.25 LF	\$1.15	\$6,996.89
104-11	FLOATING TURBIDITY BARRIER	110.80 LF	\$9.63	\$1,067.00
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	110.80 LF	\$4.69	\$519.65
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	5.37 AC	\$35.00	\$187.95
107-2	MOWING	5.37 AC	\$50.00	\$268.50

**Shoulder Component Total**

\$156,360.81

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	2,344.00 LF	\$65.00	\$152,360.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	80.00 LF	\$111.27	\$8,901.60
570-1-1	PERFORMANCE TURF	312.01 SY	\$0.76	\$237.13

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	8.00 EA	\$10,802.53	\$86,420.24

**Comment:** TOTAL DIST./300' INTERVAL**Drainage Component Total**

\$247,918.97

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$321.52	\$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	9.00 AS	\$1,053.87	\$9,484.83
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,188.78	\$4,188.78

**Signing Component Total**

\$13,995.13

**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				2	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	400.00	LF	\$6.43	\$2,572.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	2.00	EA	\$535.14	\$1,070.28
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,200.00	LF	\$2.15	\$2,580.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	2.00	EA	\$4,688.07	\$9,376.14
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	2.00	EA	\$553.54	\$1,107.08
Subcomponent Total					\$16,705.50
Lighting Component Total					\$16,705.50

### LANDSCAPING COMPONENT

#### User Input Data

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** \$13,765.13

**Sequence 8 Total** \$931,440.42

**Sequence:** 9 NUR - New Construction, Undivided, Rural **Net Length:** 0.777 MI  
4,100 LF

**Description:** One-lane ramps - EB weave ramp at Reedy Ck

**Special Conditions:** New weave ramps

### EARTHWORK COMPONENT

#### User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.485
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	130.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Alignment Number	2
Distance	0.194
Top of Structural Course For Begin Section	130.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	2 to 1 / 2 to 1



Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Alignment Number	3
Distance	0.098
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	9.41 AC	\$10,000.00	\$94,100.00
120-6	EMBANKMENT	96,734.92 CY	\$8.00	\$773,879.36
<b>Earthwork Component Total</b>				<b>\$867,979.36</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	12,299.76 SY	\$3.25	\$39,974.22
285-701	OPTIONAL BASE,BASE GROUP 01	7,133.86 SY	\$11.87	\$84,678.92
350-4-13	REINFORCED CEMENT CONC PVMT,12"	6,833.20 SY	\$85.00	\$580,822.00

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.55 NM	\$3,138.35	\$4,864.44

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00

Noise Barrier Wall End Height

0.00

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	4,600.00 LF	\$186.18	\$856,428.00
<b>Roadway Component Total</b>				<b>\$1,566,767.58</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	5,767.22 SY	\$16.00	\$92,275.52
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	601.32 TN	\$100.00	\$60,132.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	10,659.79 LF	\$1.15	\$12,258.76
104-11	FLOATING TURBIDITY BARRIER	194.12 LF	\$9.63	\$1,869.38
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	194.12 LF	\$4.69	\$910.42
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	9.41 AC	\$35.00	\$329.35
107-2	MOWING	9.41 AC	\$50.00	\$470.50
<b>Shoulder Component Total</b>				<b>\$170,461.71</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	624.00 LF	\$65.00	\$40,560.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	136.00 LF	\$111.27	\$15,132.72
570-1-1	PERFORMANCE TURF	546.66 SY	\$0.76	\$415.46

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
446-1-1	EDGEDRAIN DRAINCRETE, STANDARD	4,100.00 LF	\$25.36	\$103,976.00
<b>Comment:</b> TOTAL DIST.				



446-71-1	EDGEDRAIN OUTLET PIPE, 4"	14.00 LF	\$28.30	\$396.20
<b>Comment:</b> TOTAL DIST./300' INTERVAL				
<b>Drainage Component Total</b>				\$160,480.38

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-20-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	2.00 AS	\$241.18	\$482.36
700-20-12	SINGLE POST SIGN, F&I, 12-20 SF	16.00 AS	\$640.62	\$10,249.92
700-21-11	MULTI- POST SIGN, F&I, 50 OR <	2.00 AS	\$2,749.17	\$5,498.34

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-22-154	OHD TRUSS SPAN SGN,F&I,T>200,S>700	1.00 AS	\$278,281.34	\$278,281.34
700-23-144	OHD TRUSS CANT SGN,F&I,T>50,S>300	1.00 AS	\$70,000.67	\$70,000.67

**Signing Component Total** \$364,512.63

**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value
Multiplier (Number of Poles)				9
Pay Items				
Pay item	Description	Quantity	Unit Price	Extended Amount
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	5,400.00	LF \$2.15	\$11,610.00
715-2-11	LIGHTING-CONDUIT, F&I, UNDERGROUND	1,800.00	LF \$3.03	\$5,454.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	9.00	EA \$4,688.07	\$42,192.63
715-14-11	LIGHTING - PULL BOX,F&I,ROADSIDE-MOULDED	9.00	EA \$330.70	\$2,976.30
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	9.00	EA \$553.54	\$4,981.86
Subcomponent Total				\$67,214.79
Lighting Component Total				\$67,214.79

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N
<b>Landscaping Component Total</b>	<b>\$106,256.07</b>

**BRIDGES COMPONENT****Bridge HOV**

Description	Value
-------------	-------

Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	600.00
Width (LF)	30.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.66</b>
<b>Basic Bridge Cost</b>	<b>\$3,037,500.00</b>
Description	HOV WEAVE LANE OVER EB I-4

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22
<b>Bridge HOV Total</b>				\$3,071,801.72
<b>Bridges Component Total</b>				\$3,071,801.72

**RETAINING WALLS COMPONENT****Retaining Wall 1**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	4

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	28,000.00 SF	\$29.09	\$814,520.00
<b>Retaining Walls Component Total</b>				\$814,520.00

**Sequence 9 Total** \$7,189,994.24

**Sequence:** 10 NUR - New Construction, Undivided, Rural **Net Length:** 0.568 MI  
3,000 LF  
**Description:** One-lane ramps - World Dr. interchange

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.568



Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	6.88 AC	\$10,000.00	\$68,800.00
120-6	EMBANKMENT	9,716.89 CY	\$8.00	\$77,735.12
<b>Earthwork Component Total</b>				<b>\$146,535.12</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	9,000.29 SY	\$3.25	\$29,250.94
285-712	OPTIONAL BASE,BASE GROUP 12	5,220.17 SY	\$20.00	\$104,403.40
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,237.54 TN	\$97.88	\$121,130.42
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	200.01 TN	\$142.31	\$28,463.42

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.14 NM	\$908.42	\$1,035.60
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.14 NM	\$3,138.35	\$3,577.72
<b>Roadway Component Total</b>				<b>\$287,861.50</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00

Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	4,220.14 SY	\$16.00	\$67,522.24
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	440.01 TN	\$100.00	\$44,001.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	7,800.25 LF	\$1.15	\$8,970.29
104-11	FLOATING TURBIDITY BARRIER	142.05 LF	\$9.63	\$1,367.94
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	142.05 LF	\$4.69	\$666.21
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	6.89 AC	\$35.00	\$241.15
107-2	MOWING	6.89 AC	\$50.00	\$344.50
<b>Shoulder Component Total</b>				<b>\$125,329.11</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	456.00 LF	\$65.00	\$29,640.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	96.00 LF	\$111.27	\$10,681.92
570-1-1	PERFORMANCE TURF	400.01 SY	\$0.76	\$304.01
<b>Drainage Component Total</b>				<b>\$40,625.93</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-20-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	2.00 AS	\$241.18	\$482.36
700-20-12	SINGLE POST SIGN, F&I, 12-20 SF	12.00 AS	\$640.62	\$7,687.44
700-21-11	MULTI- POST SIGN, F&I, 50 OR <	2.00 AS	\$2,749.17	\$5,498.34

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-22-154	OHD TRUSS SPAN SGN,F&I,T>200,S>700	2.00 AS	\$278,281.34	\$556,562.68
700-23-144	OHD TRUSS CANT SGN,F&I,T>50,S>300	2.00 AS	\$70,000.67	\$140,001.34
700-83	OVHD SIGN, BRIDGE MOUNTED	2.00 AS	\$2,277.98	\$4,555.96

**Signing Component Total****\$714,788.12**



**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				15	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	9,000.00	LF	\$2.15	\$19,350.00
715-2-11	LIGHTING-CONDUIT, F&I, UNDERGROUND	3,000.00	LF	\$3.03	\$9,090.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	15.00	EA	\$4,688.07	\$70,321.05
715-14-11	LIGHTING - PULL BOX,F&I,ROADSIDE-MOULDED	15.00	EA	\$330.70	\$4,960.50
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	15.00	EA	\$553.54	\$8,303.10
Subcomponent Total					\$112,024.65
Lighting Component Total					\$112,024.65

**LANDSCAPING COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Cost %	1.50
Component Detail	N
<b>Landscaping Component Total</b>	<b>\$192,776.89</b>

**BRIDGES COMPONENT****Bridge WD 1**

<b>Description</b>	<b>Value</b>
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	419.00
Width (LF)	73.00
Type	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$202.50
<b>Final Cost per SF</b>	<b>\$205.23</b>
<b>Basic Bridge Cost</b>	<b>\$6,193,867.50</b>
Description	

**Bridge Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
400-2-10	CONC CLASS II, APPROACH SLABS	162.22	CY	\$350.00	\$56,777.00
415-1-9	REINF STEEL- APPROACH SLABS	28,388.50	LB	\$0.94	\$26,685.19
<b>Bridge WD 1 Total</b>					<b>\$6,277,329.69</b>

**Bridge WD 2**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	418.00
Width (LF)	60.00
Type	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$202.50
<b>Final Cost per SF</b>	<b>\$205.24</b>
<b>Basic Bridge Cost</b>	<b>\$5,078,700.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	133.33	CY	\$350.00	\$46,665.50
415-1-9	REINF STEEL- APPROACH SLABS	23,332.75	LB	\$0.94	\$21,932.78
<b>Bridge WD 2 Total</b>					<b>\$5,147,298.29</b>
<b>Bridges Component Total</b>					<b>\$11,424,627.98</b>

---

**Sequence 10 Total** **\$13,044,569.30**

---

**Sequence:** 11 NUR - New Construction, Undivided, Rural **Net Length:** 1.733 MI  
9,150 LF

**Description:** Two-lane ramps - World Dr. interchange

**Special Conditions:** Assumes 1000' of ramp reconstruction at each tie-in

---

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.700
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	21.01	AC	\$10,000.00	\$210,100.00
120-6	EMBANKMENT	35,445.23	CY	\$8.00	\$283,561.84



**Earthwork Component Total**

\$493,661.84

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	42,701.12	SY	\$3.25	\$138,778.64
285-712	OPTIONAL BASE,BASE GROUP 12	25,071.66	SY	\$20.00	\$501,433.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	6,039.16	TN	\$97.88	\$591,112.98
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	976.03	TN	\$142.31	\$138,898.83

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	234.00	EA	\$3.74	\$875.16
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.47	NM	\$908.42	\$3,152.22
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.73	GM	\$383.54	\$663.52
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	3.47	NM	\$3,138.35	\$10,890.07
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	1.73	GM	\$1,027.15	\$1,776.97

**Roadway Component Total**

\$1,387,581.59

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Paved Outside Shoulder Width L/R	4.00 / 8.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	12,871.34	SY	\$16.00	\$205,941.44
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,342.04	TN	\$100.00	\$134,204.00
570-1-2	PERFORMANCE TURF, SOD	6,100.16	SY	\$2.25	\$13,725.36

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	23,790.62	LF	\$1.15	\$27,359.21
104-11	FLOATING TURBIDITY BARRIER	433.25	LF	\$9.63	\$4,172.20
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	433.25	LF	\$4.69	\$2,031.94
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$2,215.78	\$4,431.56
107-1	LITTER REMOVAL	21.00	AC	\$35.00	\$735.00
107-2	MOWING	21.00	AC	\$50.00	\$1,050.00
<b>Shoulder Component Total</b>					<b>\$393,650.71</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-2	CONC CLASS II, ENDWALLS	31.19	CY	\$1,301.59	\$40,596.59
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	1,392.00	LF	\$65.00	\$90,480.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	296.00	LF	\$111.27	\$32,935.92
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	70.00	EA	\$1,198.82	\$83,917.40
570-1-1	PERFORMANCE TURF	1,220.03	SY	\$0.76	\$927.22
<b>Drainage Component Total</b>					<b>\$248,857.13</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	\$321.52	\$1,286.08
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	35.00	AS	\$1,053.87	\$36,885.45
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	4.00	AS	\$4,188.78	\$16,755.12
<b>Signing Component Total</b>					<b>\$54,926.65</b>

**LIGHTING COMPONENT****Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

**Value**

5

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
	LIGHTING CONDUCTORS, F&I,				



715-1-13	INSUL, NO.4-2	3,000.00 LF	\$2.15	\$6,450.00
715-2-11	LIGHTING-CONDUIT, F&I, UNDERGROUND	1,000.00 LF	\$3.03	\$3,030.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	5.00 EA	\$4,688.07	\$23,440.35
715-14-11	LIGHTING - PULL BOX,F&I,ROADSIDE-MOULDED	5.00 EA	\$330.70	\$1,653.50
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00 EA	\$553.54	\$2,767.70
<b>Subcomponent Total</b>				\$37,341.55
<b>Lighting Component Total</b>				\$37,341.55

### LANDSCAPING COMPONENT

#### User Input Data

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** \$39,240.29

**Sequence 11 Total** \$2,655,259.76

**Sequence:** 12 NUR - New Construction, Undivided, Rural **Net Length:** 0.616 MI  
3,250 LF

**Description:** Three-lane ramps - World Dr. interchange

**Special Conditions:** Assumes 1000' of ramp reconstruction at each tie-in

### EARTHWORK COMPONENT

#### User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.620
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

#### Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	7.47	AC	\$10,000.00	\$74,700.00
120-6	EMBANKMENT	14,847.59	CY	\$8.00	\$118,780.72

**Earthwork Component Total** \$193,480.72

### ROADWAY COMPONENT

**User Input Data**

Description	Value
Number of Lanes	3
Roadway Pavement Width L/R	18.00 / 18.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	21,665.60	SY	\$3.25	\$70,413.20
285-712	OPTIONAL BASE,BASE GROUP 12	13,237.68	SY	\$20.00	\$264,753.60
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	3,217.34	TN	\$97.88	\$314,913.24
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	519.97	TN	\$142.31	\$73,996.93

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	332.00	EA	\$3.74	\$1,241.68
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.23	NM	\$908.42	\$1,117.36
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.23	NM	\$3,138.35	\$3,860.17
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	1.23	GM	\$1,027.15	\$1,263.39

**Roadway Component Total**

\$731,559.57

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	7,460.19	SY	\$16.00	\$119,363.04
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	794.41	TN	\$100.00	\$79,441.00
570-1-2	PERFORMANCE TURF, SOD	1,444.37	SY	\$2.25	\$3,249.83



**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	8,449.58	LF	\$1.15	\$9,717.02
104-11	FLOATING TURBIDITY BARRIER	153.88	LF	\$9.63	\$1,481.86
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	153.88	LF	\$4.69	\$721.70
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	7.46	AC	\$35.00	\$261.10
107-2	MOWING	7.46	AC	\$50.00	\$373.00
<b>Shoulder Component Total</b>					<b>\$216,824.33</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	496.00	LF	\$65.00	\$32,240.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	104.00	LF	\$111.27	\$11,572.08
570-1-1	PERFORMANCE TURF	433.31	SY	\$0.76	\$329.32
<b>Drainage Component Total</b>					<b>\$44,141.40</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	\$321.52	\$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	13.00	AS	\$1,053.87	\$13,700.31
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	\$4,188.78	\$8,377.56
<b>Signing Component Total</b>					<b>\$22,720.91</b>

**LIGHTING COMPONENT****Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

**Value**

5

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	\$2.15	\$6,450.00
715-2-11	LIGHTING-CONDUIT, F&I, UNDERGROUND	1,000.00	LF	\$3.03	\$3,030.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	5.00	EA	\$4,688.07	\$23,440.35
715-14-11	LIGHTING - PULL BOX,F&I,ROADSIDE-MOULDED	5.00	EA	\$330.70	\$1,653.50
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	\$553.54	\$2,767.70
<b>Subcomponent Total</b>					<b>\$37,341.55</b>

**Lighting Component Total****\$37,341.55****LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total****\$18,691.03****Sequence 12 Total****\$1,264,759.51****Sequence:** 13 NUR - New Construction, Undivided, Rural**Net Length:** 0.890 MI  
4,700 LF**Description:** One-lane ramps - US-192 interchange**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	0.890
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	10.79	AC	\$10,000.00	\$107,900.00
120-6	EMBANKMENT	15,225.41	CY	\$8.00	\$121,803.28

**Earthwork Component Total****\$229,703.28****ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	14,100.77	SY	\$3.25	\$45,827.50
285-712	OPTIONAL BASE,BASE GROUP 12	8,178.45	SY	\$20.00	\$163,569.00
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,938.86	TN	\$97.88	\$189,775.62



337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	313.35 TN	\$142.31	\$44,592.84
----------	---------------------------------------	-----------	----------	-------------

**Pavement Marking Subcomponent**

<b>Description</b>	<b>Value</b>
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.78 NM	\$908.42	\$1,616.99
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.78 NM	\$3,138.35	\$5,586.26
<b>Roadway Component Total</b>				<b>\$450,968.21</b>

**SHOULDER COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	6,611.69 SY	\$16.00	\$105,787.04
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	689.37 TN	\$100.00	\$68,937.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	12,220.67 LF	\$1.15	\$14,053.77
104-11	FLOATING TURBIDITY BARRIER	222.55 LF	\$9.63	\$2,143.16
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	222.55 LF	\$4.69	\$1,043.76
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	10.79 AC	\$35.00	\$377.65
107-2	MOWING	10.79 AC	\$50.00	\$539.50
<b>Shoulder Component Total</b>				<b>\$195,097.66</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	720.00	LF	\$65.00	\$46,800.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	152.00	LF	\$111.27	\$16,913.04
570-1-1	PERFORMANCE TURF	626.70	SY	\$0.76	\$476.29
<b>Drainage Component Total</b>					<b>\$64,189.33</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	\$321.52	\$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	18.00	AS	\$1,053.87	\$18,969.66
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	\$4,188.78	\$8,377.56
<b>Signing Component Total</b>					<b>\$27,990.26</b>

**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				24	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	4,800.00	LF	\$6.43	\$30,864.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00	EA	\$535.14	\$12,843.36
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	14,400.00	LF	\$2.15	\$30,960.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	24.00	EA	\$4,688.07	\$112,513.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	24.00	EA	\$553.54	\$13,284.96
Subcomponent Total					\$200,466.00
Lighting Component Total					\$200,466.00

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N
Landscaping Component Total	\$84,571.85

**BRIDGES COMPONENT****Bridge WB192R**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES



Length (LF)	386.00
Width (LF)	42.00
Type	Medium Level
Cost Factor	1.50
Structure No.	
Removal of Existing Structures area	16,212.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$202.50
<b>Final Cost per SF</b>	<b>\$205.46</b>
<b>Basic Bridge Cost</b>	<b>\$3,282,930.00</b>
Description	EB I-4 TO WB US 192

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	16,212.00	SF	\$20.00	\$324,240.00
400-2-10	CONC CLASS II, APPROACH SLABS	93.33	CY	\$350.00	\$32,665.50
415-1-9	REINF STEEL- APPROACH SLABS	16,332.75	LB	\$0.94	\$15,352.78
<b>Bridge WB192R Total</b>					\$3,655,188.29
<b>Bridges Component Total</b>					\$3,655,188.29

**RETAINING WALLS COMPONENT****Retaining Wall 1**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	28,000.00	SF	\$29.09	\$814,520.00
<b>Retaining Walls Component Total</b>					\$814,520.00

**Sequence 13 Total** \$5,722,694.88

**Sequence:** 14 NUR - New Construction, Undivided, Rural **Net Length:** 0.417 MI  
2,200 LF

**Description:** Two-lane ramps - US-192 interchange

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number 3

Distance	0.420
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.05	AC	\$10,000.00	\$50,500.00
120-6	EMBANKMENT	8,642.89	CY	\$8.00	\$69,143.12
<b>Earthwork Component Total</b>					<b>\$119,643.12</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,756.42	SY	\$3.25	\$34,958.36
285-712	OPTIONAL BASE,BASE GROUP 12	6,028.48	SY	\$20.00	\$120,569.60
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	1,452.12	TN	\$97.88	\$142,133.51
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	234.69	TN	\$142.31	\$33,398.73

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	56.00	EA	\$3.74	\$209.44
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.83	NM	\$908.42	\$753.99
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.42	GM	\$383.54	\$161.09
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.83	NM	\$3,138.35	\$2,604.83
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	0.42	GM	\$1,027.15	\$431.40

**Roadway Component Total****\$335,220.96**



**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	8.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	5,050.63	SY	\$16.00	\$80,810.08
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	537.82	TN	\$100.00	\$53,782.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,720.46	LF	\$1.15	\$6,578.53
104-11	FLOATING TURBIDITY BARRIER	104.18	LF	\$9.63	\$1,003.25
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	104.18	LF	\$4.69	\$488.60
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	5.05	AC	\$35.00	\$176.75
107-2	MOWING	5.05	AC	\$50.00	\$252.50

**Shoulder Component Total**

\$145,307.49

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	336.00	LF	\$65.00	\$21,840.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	72.00	LF	\$111.27	\$8,011.44
570-1-1	PERFORMANCE TURF	293.36	SY	\$0.76	\$222.95

**Drainage Component Total**

\$30,074.39

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$321.52	\$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	9.00	AS	\$1,053.87	\$9,484.83
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,188.78	\$4,188.78

**Signing Component Total**

\$13,995.13

**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description					Value
Multiplier (Number of Poles)					35
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	7,000.00	LF	\$6.43	\$45,010.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	35.00	EA	\$535.14	\$18,729.90
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	21,000.00	LF	\$2.15	\$45,150.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	35.00	EA	\$4,688.07	\$164,082.45
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	35.00	EA	\$553.54	\$19,373.90
Subcomponent Total					\$292,346.25
Lighting Component Total					\$292,346.25

**LANDSCAPING COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Cost %	1.50
Component Detail	N
<b>Landscaping Component Total</b>	<b>\$78,868.43</b>

**BRIDGES COMPONENT****Bridge EB192R**

<b>Description</b>	<b>Value</b>
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	370.00
Width (LF)	48.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	17,800.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$171.84</b>
<b>Basic Bridge Cost</b>	<b>\$2,997,000.00</b>
Description	EB US 192 TO EB I-4

**Bridge Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	17,800.00	SF	\$20.00	\$356,000.00
400-2-10	CONC CLASS II, APPROACH SLABS	106.67	CY	\$350.00	\$37,334.50
415-1-9	REINF STEEL- APPROACH SLABS	18,667.25	LB	\$0.94	\$17,547.22
<b>Bridge EB192R Total</b>					<b>\$3,407,881.72</b>



**Bridges Component Total**

\$3,407,881.72

**RETAINING WALLS COMPONENT****X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	3,400.00	SF	\$29.09	\$98,906.00
<b>Comment:</b> ENDS OF BRIDGE					

**Retaining Wall 1**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	28,000.00	SF	\$29.09	\$814,520.00

**Retaining Walls Component Total**

\$913,426.00

**Sequence 14 Total**

\$5,336,763.49

**Sequence:** 16 NUR - New Construction, Undivided, Rural**Net Length:** 0.385 MI  
2,035 LF**Description:** One-lane ramps - Osceola Pkwy. interchange**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.390
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.67	AC	\$10,000.00	\$46,700.00
120-6	EMBANKMENT	6,671.81	CY	\$8.00	\$53,374.48

**Earthwork Component Total**

\$100,074.48

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,104.74	SY	\$3.25	\$19,840.40
285-712	OPTIONAL BASE,BASE GROUP 12	3,540.75	SY	\$20.00	\$70,815.00
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	839.40	TN	\$97.88	\$82,160.47
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	135.66	TN	\$142.31	\$19,305.77

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.77	NM	\$908.42	\$699.48
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.77	NM	\$3,138.35	\$2,416.53

**Peripherals Subcomponent**

Description	Value
Off Road Bike Path(s)	0
Off Road Bike Path Width L/R	0.00 / 0.00
Bike Path Structural Spread Rate	0
Noise Barrier Wall Length	0.00
Noise Barrier Wall Begin Height	0.00
Noise Barrier Wall End Height	0.00

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
521-72-3	SHLDR CONC BARRIER WALL, RIGID-SHLDR	1,000.00	LF	\$186.18	\$186,180.00

**Roadway Component Total**

\$381,417.66

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00



Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	2,862.44	SY	\$16.00	\$45,799.04
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	298.45	TN	\$100.00	\$29,845.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,290.77	LF	\$1.15	\$6,084.39
104-11	FLOATING TURBIDITY BARRIER	96.35	LF	\$9.63	\$927.85
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	96.35	LF	\$4.69	\$451.88
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	4.67	AC	\$35.00	\$163.45
107-2	MOWING	4.67	AC	\$50.00	\$233.50

**Shoulder Component Total**

\$85,720.89

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	2,112.00	LF	\$65.00	\$137,280.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	64.00	LF	\$111.27	\$7,121.28
570-1-1	PERFORMANCE TURF	271.32	SY	\$0.76	\$206.20

**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	7.00	EA	\$10,802.53	\$75,617.71
<b>Comment:</b> TOTAL DIST./300' INTERVAL					

**Drainage Component Total**

\$220,225.19

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$321.52	\$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00	AS	\$1,053.87	\$8,430.96
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,188.78	\$4,188.78

**Signing Component Total**

\$12,941.26

**LIGHTING COMPONENT****Rural Lighting Subcomponent**

Description				Value	
Multiplier (Number of Poles)				21	
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	4,200.00	LF	\$6.43	\$27,006.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	21.00	EA	\$535.14	\$11,237.94
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	12,600.00	LF	\$2.15	\$27,090.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	21.00	EA	\$4,688.07	\$98,449.47
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	21.00	EA	\$553.54	\$11,624.34
Subcomponent Total					\$175,407.75
Lighting Component Total					\$175,407.75

**LANDSCAPING COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Cost %	1.50
Component Detail	N

**Landscaping Component Total** **\$583,104.69**

**BRIDGES COMPONENT****Bridge B26**

<b>Description</b>	<b>Value</b>
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,687.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.00
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$135.00
<b>Final Cost per SF</b>	<b>\$135.68</b>
<b>Basic Bridge Cost</b>	<b>\$6,832,350.00</b>
Description	

**Bridge Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22
<b>Bridge B26 Total</b>					<b>\$6,866,651.72</b>

**Bridge B27**

<b>Description</b>	<b>Value</b>
Estimate Type	SF Estimate



Primary Estimate	YES
Length (LF)	1,019.00
Width (LF)	40.00
Type	Low Level
Cost Factor	1.00
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$135.00
<b>Final Cost per SF</b>	<b>\$136.12</b>
<b>Basic Bridge Cost</b>	<b>\$5,502,600.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	88.89 CY	\$350.00	\$31,111.50
415-1-9	REINF STEEL- APPROACH SLABS	15,555.75 LB	\$0.94	\$14,622.40
<b>Bridge B27 Total</b>				<b>\$5,548,333.91</b>

**Bridge B28**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,134.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$169.76</b>
<b>Basic Bridge Cost</b>	<b>\$5,740,875.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22
<b>Bridge B28 Total</b>				<b>\$5,775,176.72</b>

**Bridge B29**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	648.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.51</b>

**Basic Bridge Cost****\$3,280,500.00**

Description

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22

**Bridge B29 Total****\$3,314,801.72****Bridge B30****Description****Value**

Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	503.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$171.02</b>
<b>Basic Bridge Cost</b>	<b>\$2,546,437.50</b>

Description

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22

**Bridge B30 Total****\$2,580,739.22****Bridge B31****Description****Value**

Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,100.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$169.79</b>
<b>Basic Bridge Cost</b>	<b>\$5,568,750.00</b>

Description

**Bridge Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67 CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25 LB	\$0.94	\$10,967.22



**Bridge B31 Total**

\$5,603,051.72

**Bridge B32**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	544.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$170.85</b>
<b>Basic Bridge Cost</b>	<b>\$2,754,000.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22

**Bridge B32 Total**

\$2,788,301.72

**Bridge B35**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	1,064.00
Width (LF)	30.00
Type	Low Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$169.82</b>
<b>Basic Bridge Cost</b>	<b>\$5,386,500.00</b>
Description	

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	66.67	CY	\$350.00	\$23,334.50
415-1-9	REINF STEEL- APPROACH SLABS	11,667.25	LB	\$0.94	\$10,967.22

**Bridge B35 Total**

\$5,420,801.72

**Bridges Component Total**

\$37,897,858.45

**Sequence 16 Total**

\$39,456,750.37

**Sequence:** 17 NUR - New Construction, Undivided, Rural**Net Length:**0.167 MI  
880 LF

**Description:** Two-lane ramps - Osceola Pkwy. interchange**EARTHWORK COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.170
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
110-1-1	CLEARING & GRUBBING	2.02	AC	\$10,000.00	\$20,200.00
120-6	EMBANKMENT	3,498.31	CY	\$8.00	\$27,986.48
<b>Earthwork Component Total</b>					<b>\$48,186.48</b>

**ROADWAY COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Number of Lanes	2
Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
160-4	TYPE B STABILIZATION	4,303.08	SY	\$3.25	\$13,985.01
285-712	OPTIONAL BASE,BASE GROUP 12	2,411.68	SY	\$20.00	\$48,233.60
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	580.92	TN	\$97.88	\$56,860.45
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	93.89	TN	\$142.31	\$13,361.49

**Pavement Marking Subcomponent**

<b>Description</b>	<b>Value</b>
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	1

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	23.00	EA	\$3.74	\$86.02
	PAINTED PAVT				



710-11-111	MARK,STD,WHITE,SOLID,6"	0.33 NM	\$908.42	\$299.78
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP,6"	0.17 GM	\$383.54	\$65.20
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.33 NM	\$3,138.35	\$1,035.66
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	0.17 GM	\$1,027.15	\$174.62

**Roadway Component Total**

\$134,101.83

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	8.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	2,020.49 SY	\$16.00	\$32,327.84
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	215.15 TN	\$100.00	\$21,515.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,288.46 LF	\$1.15	\$2,631.73
104-11	FLOATING TURBIDITY BARRIER	41.68 LF	\$9.63	\$401.38
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	41.68 LF	\$4.69	\$195.48
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	2.02 AC	\$35.00	\$70.70
107-2	MOWING	2.02 AC	\$50.00	\$101.00

**Shoulder Component Total**

\$59,458.91

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	904.00 LF	\$65.00	\$58,760.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	32.00 LF	\$111.27	\$3,560.64
570-1-1	PERFORMANCE TURF	117.36 SY	\$0.76	\$89.19

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	2.00 EA	\$10,802.53	\$21,605.06

**Drainage Component Total****\$84,014.89****SIGNING COMPONENT****Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$321.52	\$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	\$1,053.87	\$4,215.48
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,188.78	\$4,188.78
<b>Signing Component Total</b>					<b>\$8,725.78</b>

**LIGHTING COMPONENT****Rural Lighting Subcomponent****Description****Value**

Multiplier (Number of Poles)

3

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
630-2-11	CONDUIT, F&I, OPEN TRENCH	600.00	LF	\$6.43	\$3,858.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	\$535.14	\$1,605.42
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	1,800.00	LF	\$2.15	\$3,870.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	3.00	EA	\$4,688.07	\$14,064.21
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	3.00	EA	\$553.54	\$1,660.62
<b>Subcomponent Total</b>					<b>\$25,058.25</b>
<b>Lighting Component Total</b>					<b>\$25,058.25</b>

**LANDSCAPING COMPONENT****User Input Data****Description****Value**

Cost %

1.50

Component Detail

N

**Landscaping Component Total****\$5,393.19****Sequence 17 Total****\$364,939.33****Sequence:** 18 NUR - New Construction, Undivided, Rural**Net Length:**0.379 MI  
2,000 LF**Description:** US 192 EB AND WB BRIDGES OVER I-4**EARTHWORK COMPONENT****User Input Data****Description****Value**

Standard Clearing and Grubbing Limits L/R

0.00 / 0.00

Incidental Clearing and Grubbing Area

0.00



Alignment Number	1
Distance	0.373
Top of Structural Course For Begin Section	130.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	120,023.51 CY	\$8.00	\$960,188.08
<b>Earthwork Component Total</b>				<b>\$960,188.08</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	7
Roadway Pavement Width L/R	48.00 / 36.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	6

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	409.00 EA	\$3.74	\$1,529.66
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.52 NM	\$3,138.35	\$4,770.29
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	2.27 GM	\$1,027.15	\$2,331.63
<b>Roadway Component Total</b>				<b>\$8,631.58</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Erosion Control****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	5,200.17 LF	\$1.15	\$5,980.20
104-11	FLOATING TURBIDITY BARRIER	94.70 LF	\$9.63	\$911.96
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	94.70 LF	\$4.69	\$444.14
104-15	SOIL TRACKING PREVENTION DEVICE	1.00 EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	4.59 AC	\$35.00	\$160.65
107-2	MOWING	4.59 AC	\$50.00	\$229.50
<b>Shoulder Component Total</b>				<b>\$9,942.23</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	2,008.00 LF	\$65.00	\$130,520.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	64.00 LF	\$111.27	\$7,121.28

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-891	INLETS, BARRIER WALL, <10'	14.00 EA	\$4,505.46	\$63,076.44
<b>Comment: TOTAL DIST./300' X 2 BRIDGES</b>				
<b>Drainage Component Total</b>				<b>\$200,717.72</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00 AS	\$321.52	\$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	8.00 AS	\$1,053.87	\$8,430.96
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,188.78	\$4,188.78
<b>Signing Component Total</b>				<b>\$12,941.26</b>

**LIGHTING COMPONENT****Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

**Value**

20

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	4,000.00 LF	\$6.43	\$25,720.00



635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	20.00 EA	\$535.14	\$10,702.80
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	12,000.00 LF	\$2.15	\$25,800.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	20.00 EA	\$4,688.07	\$93,761.40
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	20.00 EA	\$553.54	\$11,070.80
<b>Subcomponent Total</b>				\$167,055.00

**Lighting Component Total** \$167,055.00

### LANDSCAPING COMPONENT

#### User Input Data

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** \$197,435.30

### BRIDGES COMPONENT

#### Bridge EB192

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	470.00
Width (LF)	68.00
Type	Medium Level
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	31,960.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$171.18</b>
<b>Basic Bridge Cost</b>	<b>\$5,393,250.00</b>
Description	EB US 192 OVER I-4

#### Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	31,960.00	SF	\$20.00	\$639,200.00
400-2-10	CONC CLASS II, APPROACH SLABS	151.11	CY	\$350.00	\$52,888.50
415-1-9	REINF STEEL- APPROACH SLABS	26,444.25	LB	\$0.94	\$24,857.60
<b>Bridge EB192 Total</b>					<b>\$6,110,196.10</b>

#### Bridge WB192

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	470.00
Width (LF)	59.00
Type	Medium Level
Cost Factor	1.25

Structure No.	
Removal of Existing Structures area	27,730.00
Default Cost per SF	\$135.00
Factored Cost per SF	\$168.75
<b>Final Cost per SF</b>	<b>\$171.18</b>
<b>Basic Bridge Cost</b>	<b>\$4,679,437.50</b>
Description	WB US 192 OVER I-4

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	27,730.00	SF	\$20.00	\$554,600.00
400-2-10	CONC CLASS II, APPROACH SLABS	131.11	CY	\$350.00	\$45,888.50
415-1-9	REINF STEEL- APPROACH SLABS	22,944.25	LB	\$0.94	\$21,567.60
<b>Bridge WB192 Total</b>					\$5,301,493.60
<b>Bridges Component Total</b>					\$11,411,689.70

**RETAINING WALLS COMPONENT****Retaining Wall 1**

Description	Value
Length	560.00
Begin height	16.50
End Height	16.50
Multiplier	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	9,240.00	SF	\$29.09	\$268,791.60

**Retaining Wall 2**

Description	Value
Length	255.00
Begin height	16.50
End Height	16.50
Multiplier	1

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	4,207.50	SF	\$29.09	\$122,396.18
<b>Retaining Walls Component Total</b>					\$391,187.78

---

<b>Sequence 18 Total</b>	<b>\$13,359,788.65</b>
--------------------------	------------------------

---



**Sequence:** 19 NDR - New Construction, Divided, Rural**Net Length:** 1.667 MI  
8,800 LF**Description:** Express Lane Auxiliary lanes only**Special Conditions:** August 2016 Update: Express Lanes with Asphalt Pavement**EARTHWORK COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.700
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	0 to 1 / 0 to 1
Median Slope L/R	0 to 1 / 0 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	0.00 % / 0.00 %
Roadway Cross Slope L/R	0.00 % / 0.00 %

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
120-6	EMBANKMENT	5,857.67 CY	\$8.00	\$46,861.36
<b>Earthwork Component Total</b>				<b>\$46,861.36</b>

**ROADWAY COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Number of Lanes	1
Roadway Pavement Width L/R	6.00 / 6.00
Structural Spread Rate	660
Friction Course Spread Rate	80

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
160-4	TYPE B STABILIZATION	11,733.57 SY	\$3.25	\$38,134.10
285-712	OPTIONAL BASE,BASE GROUP 12	13,024.26 SY	\$20.00	\$260,485.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	3,872.08 TN	\$97.88	\$378,999.19
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	469.34 TN	\$142.31	\$66,791.78

**Pavement Marking Subcomponent**

<b>Description</b>	<b>Value</b>
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	0
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	0

**Roadway Component Total****\$744,410.27****SHOULDER COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	330
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Erosion Control****Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
104-10-3	SEDIMENT BARRIER	22,880.46	LF	\$1.15	\$26,312.53
104-11	FLOATING TURBIDITY BARRIER	416.68	LF	\$9.63	\$4,012.63
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	416.68	LF	\$4.69	\$1,954.23
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	\$2,215.78	\$4,431.56
104-18	INLET PROTECTION SYSTEM	11.00	EA	\$94.06	\$1,034.66
107-1	LITTER REMOVAL	40.40	AC	\$35.00	\$1,414.00
107-2	MOWING	40.40	AC	\$50.00	\$2,020.00
<b>Shoulder Component Total</b>					<b>\$41,179.61</b>

**SIGNING COMPONENT****Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	\$321.52	\$1,286.08
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	41.00	AS	\$1,053.87	\$43,208.67
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	4.00	AS	\$4,188.78	\$16,755.12
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	11.00	AS	\$5,697.97	\$62,677.67
<b>Signing Component Total</b>					<b>\$123,927.54</b>

**LANDSCAPING COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Cost %	1.50
Component Detail	N

**Landscaping Component Total****\$14,345.68**



**Sequence 19 Total**

\$970,724.46

**Sequence:** 20 NUR - New Construction, Undivided, Rural**Net Length:** 0.672 MI  
3,550 LF**Description:** SR-429 Roadway**EARTHWORK COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Standard Clearing and Grubbing Limits L/R	100.00 / 100.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.670
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
110-1-1	CLEARING & GRUBBING	16.29	AC	\$10,000.00	\$162,900.00
120-6	EMBANKMENT	19,319.23	CY	\$8.00	\$154,553.84
<b>Earthwork Component Total</b>					<b>\$317,453.84</b>

**ROADWAY COMPONENT****User Input Data**

<b>Description</b>	<b>Value</b>
Number of Lanes	7
Roadway Pavement Width L/R	24.00 / 48.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

<b>Pay item</b>	<b>Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Extended Amount</b>
160-4	TYPE B STABILIZATION	37,863.94	SY	\$3.25	\$123,057.80
285-712	OPTIONAL BASE,BASE GROUP 12	28,658.27	SY	\$20.00	\$573,165.40
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	7,028.49	TN	\$97.88	\$687,948.60
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	1,135.92	TN	\$142.31	\$161,652.78

**Pavement Marking Subcomponent**

<b>Description</b>	<b>Value</b>
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	6

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	726.00	EA	\$3.74	\$2,715.24
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.34	NM	\$908.42	\$1,217.28
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	4.03	GM	\$383.54	\$1,545.67
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.34	NM	\$3,138.35	\$4,205.39
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	4.03	GM	\$1,027.15	\$4,139.41
<b>Roadway Component Total</b>					<b>\$1,559,647.58</b>

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	8,148.63	SY	\$16.00	\$130,378.08
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	867.72	TN	\$100.00	\$86,772.00
337-7-22	ASPH CONC FC,INC BIT,FC-5,PG76-22,PMA	20.83	TN	\$142.31	\$2,964.32
570-1-2	PERFORMANCE TURF, SOD	1,577.66	SY	\$2.25	\$3,549.74

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	9,229.33	LF	\$1.15	\$10,613.73
104-11	FLOATING TURBIDITY BARRIER	168.08	LF	\$9.63	\$1,618.61
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	168.08	LF	\$4.69	\$788.30
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	8.15	AC	\$35.00	\$285.25
107-2	MOWING	8.15	AC	\$50.00	\$407.50
<b>Shoulder Component Total</b>					<b>\$239,593.31</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	544.00	LF	\$65.00	\$35,360.00
	PIPE CULV, OPT MATL, ROUND,				



430-175-136	36"S/CD	112.00 LF	\$111.27	\$12,462.24
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	2.00 EA	\$1,198.82	\$2,397.64
570-1-1	PERFORMANCE TURF	473.30 SY	\$0.76	\$359.71
<b>Drainage Component Total</b>				<b>\$50,579.59</b>

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	\$321.52	\$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	14.00	AS	\$1,053.87	\$14,754.18
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	\$4,188.78	\$8,377.56
<b>Signing Component Total</b>				<b>\$23,774.78</b>	

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** **\$32,865.74**

**Sequence 20 Total** **\$2,223,914.84**

**Sequence:** 21 NUR - New Construction, Undivided, Rural **Net Length:** 0.796 MI  
4,200 LF

**Description:** Four-lane ramps - World Dr. interchange

**Special Conditions:** Assumes 1000' of ramp reconstruction at each tie-in

**EARTHWORK COMPONENT****User Input Data**

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.800
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
----------	-------------	----------	------	------------	-----------------

110-1-1	CLEARING & GRUBBING	9.65 AC	\$10,000.00	\$96,500.00
120-6	EMBANKMENT	20,472.32 CY	\$8.00	\$163,778.56
<b>Earthwork Component Total</b>				<b>\$260,278.56</b>

**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	33,601.92	SY	\$3.25	\$109,206.24
285-712	OPTIONAL BASE,BASE GROUP 12	22,709.30	SY	\$20.00	\$454,186.00
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	5,544.32	TN	\$97.88	\$542,678.04
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	896.05	TN	\$142.31	\$127,516.88

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	3

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	537.00	EA	\$3.74	\$2,008.38
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.59	NM	\$908.42	\$1,444.39
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	1.59	NM	\$3,138.35	\$4,989.98
711-11-131	THERMOPLASTIC, STD, WHITE, SKIP, 6"	2.39	GM	\$1,027.15	\$2,454.89

**Roadway Component Total** **\$1,244,484.80**

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	12.00 / 12.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0



**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	11,508.66	SY	\$16.00	\$184,138.56
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	1,232.07	TN	\$100.00	\$123,207.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	10,920.62	LF	\$1.15	\$12,558.71
104-11	FLOATING TURBIDITY BARRIER	198.88	LF	\$9.63	\$1,915.21
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	198.88	LF	\$4.69	\$932.75
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	9.64	AC	\$35.00	\$337.40
107-2	MOWING	9.64	AC	\$50.00	\$482.00

**Shoulder Component Total**

\$325,787.41

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	4,224.00	LF	\$65.00	\$274,560.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	136.00	LF	\$111.27	\$15,132.72
570-1-1	PERFORMANCE TURF	560.03	SY	\$0.76	\$425.62

**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	15.00	EA	\$10,802.53	\$162,037.95
<b>Comment:</b> TOTAL DIST./300' INTERVAL					

**Drainage Component Total**

\$452,156.29

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00	AS	\$321.52	\$643.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	16.00	AS	\$1,053.87	\$16,861.92
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	\$4,188.78	\$8,377.56

**Signing Component Total**

\$25,882.52

**LIGHTING COMPONENT****Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

**Value**

5

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,000.00	LF	\$6.43	\$6,430.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	\$535.14	\$2,675.70
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,000.00	LF	\$2.15	\$6,450.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	5.00	EA	\$4,688.07	\$23,440.35
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	5.00	EA	\$553.54	\$2,767.70
<b>Subcomponent Total</b>					<b>\$41,763.75</b>
<b>Lighting Component Total</b>					<b>\$41,763.75</b>

### LANDSCAPING COMPONENT

#### User Input Data

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total** **\$35,255.30**

**Sequence 21 Total** **\$2,385,608.63**

**Sequence:** 22 NUR - New Construction, Undivided, Rural **Net Length:** 1.167 MI  
6,160 LF  
**Description:** One-lane ramps - SR 417 interchange

### EARTHWORK COMPONENT

#### User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00

Alignment Number	1
Distance	1.170
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

#### Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	14.15	AC	\$10,000.00	\$141,500.00
120-6	EMBANKMENT	20,015.42	CY	\$8.00	\$160,123.36

#### X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	38,400.00	CY	\$8.00	\$307,200.00

**Earthwork Component Total** **\$608,823.36**



**ROADWAY COMPONENT****User Input Data**

Description	Value
Number of Lanes	1
Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	18,480.53	SY	\$3.25	\$60,061.72
285-712	OPTIONAL BASE,BASE GROUP 12	10,718.71	SY	\$20.00	\$214,374.20
334-1-25	SUPERPAVE ASPH CONC, TRAF E, PG76-22,PMA	2,541.07	TN	\$97.88	\$248,719.93
337-7-22	ASPH CONC FC,INC BIT,FC- 5,PG76-22,PMA	410.68	TN	\$142.31	\$58,443.87

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.33	NM	\$908.42	\$2,116.62
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	2.33	NM	\$3,138.35	\$7,312.36

**Roadway Component Total**

\$591,028.70

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-708	OPTIONAL BASE,BASE GROUP 08	8,665.31	SY	\$16.00	\$138,644.96
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	903.49	TN	\$100.00	\$90,349.00

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
----------	-------------	----------	------	------------	-----------------

104-10-3	SEDIMENT BARRIER	16,016.46 LF	\$1.15	\$18,418.93
104-11	FLOATING TURBIDITY BARRIER	291.68 LF	\$9.63	\$2,808.88
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	291.68 LF	\$4.69	\$1,367.98
104-15	SOIL TRACKING PREVENTION DEVICE	2.00 EA	\$2,215.78	\$4,431.56
107-1	LITTER REMOVAL	14.14 AC	\$35.00	\$494.90
107-2	MOWING	14.14 AC	\$50.00	\$707.00
<b>Shoulder Component Total</b>				<b>\$257,223.21</b>

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	6,200.00 LF	\$65.00	\$403,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	200.00 LF	\$111.27	\$22,254.00

**X-Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	21.00 EA	\$10,802.53	\$226,853.13
<b>Comment: TOTAL DIST./300'</b>				

**Drainage Component Total** **\$652,107.13**

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00 AS	\$321.52	\$964.56
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	24.00 AS	\$1,053.87	\$25,292.88
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	3.00 AS	\$4,188.78	\$12,566.34

**Signing Component Total** **\$38,823.78**

**LIGHTING COMPONENT****Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

**Value**

24

**Pay Items**

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F&I, OPEN TRENCH	4,800.00 LF	\$6.43	\$30,864.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00 EA	\$535.14	\$12,843.36
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	14,400.00 LF	\$2.15	\$30,960.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	24.00 EA	\$4,688.07	\$112,513.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	24.00 EA	\$553.54	\$13,284.96
<b>Subcomponent Total</b>				<b>\$200,466.00</b>



**Lighting Component Total**

\$200,466.00

**LANDSCAPING COMPONENT****User Input Data**

Description	Value
Cost %	1.50
Component Detail	N

**Landscaping Component Total**

\$171,037.46

**BRIDGES COMPONENT****Bridge NB417**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	600.00
Width (LF)	31.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$150.00
<b>Final Cost per SF</b>	<b>\$151.91</b>
<b>Basic Bridge Cost</b>	<b>\$2,790,000.00</b>

Description EB I-4 EXPRESS TO NB SR 417

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	68.89	CY	\$350.00	\$24,111.50
415-1-9	REINF STEEL- APPROACH SLABS	12,055.75	LB	\$0.94	\$11,332.40

**Bridge NB417 Total**

\$2,825,443.91

**Bridge SB417**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	850.00
Width (LF)	31.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$150.00
<b>Final Cost per SF</b>	<b>\$151.35</b>
<b>Basic Bridge Cost</b>	<b>\$3,952,500.00</b>

Description SB SR 417 TO WB I-4 EXPRESS

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
	CONC CLASS II, APPROACH				

400-2-10	SLABS	68.89 CY	\$350.00	\$24,111.50
415-1-9	REINF STEEL- APPROACH SLABS	12,055.75 LB	\$0.94	\$11,332.40
<b>Bridge SB417 Total</b>				<b>\$3,987,943.91</b>

**Bridge 20**

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	154.00
Width (LF)	24.00
Type	Overpass Bridge
Cost Factor	1.25
Structure No.	
Removal of Existing Structures area	0.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$150.00
<b>Final Cost per SF</b>	<b>\$157.42</b>
<b>Basic Bridge Cost</b>	<b>\$554,400.00</b>
Description	INTERIOR WIDENING

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
400-2-10	CONC CLASS II, APPROACH SLABS	53.33	CY	\$350.00	\$18,665.50
415-1-9	REINF STEEL- APPROACH SLABS	9,332.75	LB	\$0.94	\$8,772.78
<b>Bridge 20 Total</b>					<b>\$581,838.29</b>
<b>Bridges Component Total</b>					<b>\$7,395,226.11</b>

**RETAINING WALLS COMPONENT****Retaining Wall 1**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	28,000.00	SF	\$29.09	\$814,520.00

**Retaining Wall 2**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX	28,000.00	SF	\$29.09	\$814,520.00



## BARRIER

## Retaining Wall 3

Description	Value
Length	31.00
Begin height	16.50
End Height	16.50
Multiplier	2

## Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	1,023.00	SF	\$29.09	\$29,759.07

**Retaining Walls Component Total** \$1,658,799.08

**Sequence 22 Total** \$11,573,534.83

**Sequence:** 23 NUR - New Construction, Undivided, Rural

**Net Length:** 0.117 MI  
620 LF

**Description:** Two-lane Bridge - SR 417 interchange

## EARTHWORK COMPONENT

## User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	50.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	1.170
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

## Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.42	AC	\$10,000.00	\$14,200.00
120-6	EMBANKMENT	20,015.42	CY	\$8.00	\$160,123.36

## X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-6	EMBANKMENT	38,400.00	CY	\$8.00	\$307,200.00

**Earthwork Component Total** \$481,523.36

## ROADWAY COMPONENT

## User Input Data

Description	Value
Number of Lanes	1

Roadway Pavement Width L/R	7.50 / 7.50
Structural Spread Rate	495
Friction Course Spread Rate	80

**Pavement Marking Subcomponent**

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Concrete
Solid Stripe No. of Paint Applications	0
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	0
Skip Stripe No. of Stripes	0

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
711-11-111	THERMOPLASTIC, STD, WHITE, SOLID, 6"	0.23	NM	\$3,138.35	\$721.82

**Roadway Component Total**

\$721.82

**SHOULDER COMPONENT****User Input Data**

Description	Value
Total Outside Shoulder Width L/R	6.00 / 6.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips No. of Sides	0

**Erosion Control****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,611.67	LF	\$1.15	\$1,853.42
104-11	FLOATING TURBIDITY BARRIER	29.35	LF	\$9.63	\$282.64
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	29.35	LF	\$4.69	\$137.65
104-15	SOIL TRACKING PREVENTION DEVICE	1.00	EA	\$2,215.78	\$2,215.78
107-1	LITTER REMOVAL	1.42	AC	\$35.00	\$49.70
107-2	MOWING	1.42	AC	\$50.00	\$71.00

**Shoulder Component Total**

\$4,610.19

**DRAINAGE COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND, 24"SD	640.00	LF	\$65.00	\$41,600.00

**X-Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-901	INLETS, SPECIAL, <10'	3.00	EA	\$10,802.53	\$32,407.59



**Comment:** TOTAL DIST./300'**Drainage Component Total**

\$74,007.59

**SIGNING COMPONENT****Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	1.00	AS	\$321.52	\$321.52
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	3.00	AS	\$1,053.87	\$3,161.61
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00	AS	\$4,188.78	\$4,188.78
<b>Signing Component Total</b>					<b>\$7,671.91</b>

**LIGHTING COMPONENT****Rural Lighting Subcomponent****Description**

Multiplier (Number of Poles)

**Value**

24

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F&I, OPEN TRENCH	4,800.00	LF	\$6.43	\$30,864.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00	EA	\$535.14	\$12,843.36
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	14,400.00	LF	\$2.15	\$30,960.00
715-4-122	LIGHT POLE COMP, F&I, WS130, 45'	24.00	EA	\$4,688.07	\$112,513.68
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	24.00	EA	\$553.54	\$13,284.96
<b>Subcomponent Total</b>					<b>\$200,466.00</b>
<b>Lighting Component Total</b>					<b>\$200,466.00</b>

**LANDSCAPING COMPONENT****User Input Data****Description**

Cost %

**Value**

1.50

Component Detail

N

**Landscaping Component Total**

\$104,409.08

**BRIDGES COMPONENT****Bridge SB417****Description**

Estimate Type

**Value**

SF Estimate

Primary Estimate

YES

Length (LF)

620.00

Width (LF)

50.00

Type

Overpass Bridge

Cost Factor

1.25

Structure No.

Removal of Existing Structures area	31,000.00
Default Cost per SF	\$120.00
Factored Cost per SF	\$150.00
<b>Final Cost per SF</b>	<b>\$151.84</b>
<b>Basic Bridge Cost</b>	<b>\$4,650,000.00</b>
Description	SB SR 417 TO WB I-4 GUL

**Bridge Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	31,000.00	SF	\$20.00	\$620,000.00
400-2-10	CONC CLASS II, APPROACH SLABS	111.11	CY	\$350.00	\$38,888.50
415-1-9	REINF STEEL - APPROACH SLABS	19,444.25	LB	\$0.94	\$18,277.60
<b>Bridge SB417 Total</b>					\$5,327,166.10
<b>Bridges Component Total</b>					\$5,327,166.10

**RETAINING WALLS COMPONENT****Retaining Wall 1**

Description	Value
Length	800.00
Begin height	1.00
End Height	16.50
Multiplier	4

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	28,000.00	SF	\$29.09	\$814,520.00

**Retaining Wall 2**

Description	Value
Length	52.00
Begin height	16.50
End Height	16.50
Multiplier	2

**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	1,716.00	SF	\$29.09	\$49,918.44

**Retaining Walls Component Total** \$864,438.44

**Sequence 23 Total** \$7,065,014.49

Date: 8/12/2016 9:22:45 AM

## FDOT Long Range Estimating System - Production

### R3: Project Details by Sequence Report



**Project:** 431456-1-52-01**Letting Date:** 01/2099**Description:** (431456-1)SR 400 (I-4) FROM WEST OF CR 532 (POLK/OSCEOLA COUNTY LINE) TO ORANGE COUNTY LINE.**District:** 05      **County:** 92 OSCEOLA**Market Area:** 08      **Units:** English**Contract Class:** 1      **Lump Sum Project:** N**Design/Build:** N      **Project Length:** 8.304 MI**Project Manager:** BSP**Version 14 Project Grand Total****\$619,804,906.48****Description:** SR 400 (I-4) from West of CR 532 (Polk/Osceola County Line) to Orange County Line - HNTB  
August 2016 Update: Express Lanes with Asphalt Pavement**Project Sequences Subtotal****\$445,314,341.70**

102-1	Maintenance of Traffic	10.00 %	\$44,531,434.17
101-1	Mobilization	10.00 %	\$48,984,577.59

**Project Sequences Total****\$538,830,353.46**

Project Unknowns	15.00 %	\$80,824,553.02
Design/Build	0.00 %	\$0.00

**Non-Bid Components:**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$150,000.00	\$150,000.00

**Project Non-Bid Subtotal****\$150,000.00****Version 14 Project Grand Total****\$619,804,906.48**

## Engineer's Estimate



# Engineer's Estimate

## I-4 Segment 1

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	1,362	\$ 10,519,816	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	118,495	\$ 2,791,742	Area of existing bridges
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	1,305,708	\$ 3,786,554	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	627,346	\$ 8,588,370	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	678,362	\$ 9,510,637	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	69,008	\$ 6,023,026	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	111,930	\$ 9,761,393	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	74,620	\$ 6,688,922	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	27,982	\$ 3,279,542	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
350 1 3	Plain Cement Conc Pavt, 8"	SY	\$ 55.00	378,092	\$ 20,795,048	Express Lanes
521 1	Barrier Wall	LF	\$ 113	261,823	\$ 29,585,999	Concrete, Double face
0538 1	Guardrail Reset	LF	\$ 11	34,990	\$ 399,236	Guardrail Relocation
	Thermoplastic, White, Striping	NM	\$ 3,178	196	\$ 624,392	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	4	\$ 73,311	At gores
	Fencing	LF	\$ 10.00	148,197	\$ 1,481,970	LA R/W fence
	Embankment	CY	\$ 5.94	1,984,070	\$ 11,785,378	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	444,591	\$ 15,116,090	Roadway raised 3' x length of section x 2 sides
	Bridges	SF	\$ 160.00	2,838,141	\$ 454,102,539	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 594,913,963	
	Compensable Utility Relocation	LS			\$ 29,745,698	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 59,491,396	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 59,491,396	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 29,745,698	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 29,745,698	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 118,982,793	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 29,745,698	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 5,949,140	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 957,811,481	
	Contingency	LS			\$ 143,671,722	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 1,101,483,203</b>	

# Engineer's Estimate

## CR 532 Alternate 1 - Base

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	4	\$ 32,734	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	9,096	\$ 26,378	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	\$ 13.69	4,091	\$ 56,001	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	5,005	\$ 70,173	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	450	\$ 39,274	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	826	\$ 72,023	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	551	\$ 49,353	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	206	\$ 24,198	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	-	\$ -	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	1	\$ 3,922	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	-	\$ -	At gores
	Fencing	LF	\$ 10.00	3,258	\$ 32,580	LA R/W fence
	Embankment	CY	\$ 5.94	9,096	\$ 54,030	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	-	\$ -	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	-	\$ -	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 460,666	
	Compensable Utility Relocation	LS			\$ 23,033	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 46,067	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 46,067	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 23,033	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 23,033	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 92,133	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 23,033	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 4,607	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 741,672	
	Contingency	LS			\$ 111,251	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 852,923</b>	



# Engineer's Estimate

## CR 532 Alternate 2 - DDI

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	25	\$ 196,433	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	42,128	\$ 122,170	Total Area of section (Roadway & Shldr)
285 706	Base optional (base group 6) ML	SY	\$ 13.69	9,060	\$ 124,036	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	33,067	\$ 463,604	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	997	\$ 86,986	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	5,456	\$ 475,827	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	3,637	\$ 326,057	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	1,364	\$ 159,864	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
337 7 22	Barrier Wall	LF	\$ 113	-	\$ -	Concrete, Double face
520 1 10	Curb and Gutter	LF	\$ 17.78	11,963	\$ 212,702	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	12	\$ 37,022	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	-	\$ -	At gores
	Fencing	LF	\$ 10.00	23,187	\$ 231,870	LA R/W fence
	Embankment	CY	\$ 5.94	42,128	\$ 250,238	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	-	\$ -	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	-	\$ -	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 2,686,811	
	Compensable Utility Relocation	LS			\$ 134,341	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 268,681	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 268,681	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 134,341	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 134,341	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 537,362	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 134,341	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 26,868	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 4,325,765	
	Contingency	LS			\$ 648,865	Assume 15% of Construction Subtotal
	Grand Total				\$ 4,974,630	

# Engineer's Estimate

## SR 429 Alternate 1 - BASE

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	100	\$ 772,165	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	168,165	\$ 487,679	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	22,954	\$ 314,246	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	72,605	\$ 1,017,928	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	2,525	\$ 220,381	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	11,980	\$ 1,044,767	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	7,987	\$ 715,919	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	2,995	\$ 351,011	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	897	\$ 101,361	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	8	\$ 26,004	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	2	\$ 36,655	At gores
	Fencing	LF	\$ 10.00	15,785	\$ 157,850	LA R/W fence
	Embankment	CY	\$ 5.94	95,560	\$ 567,626	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	6,279	\$ 213,486	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	179,632	\$ 28,741,088	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 34,768,167	
	Compensable Utility Relocation	LS			\$ 1,738,408	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 3,476,817	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 3,476,817	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 1,738,408	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 1,738,408	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 6,953,633	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 1,738,408	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 347,682	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 55,976,748	
	Contingency	LS			\$ 8,396,512	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 64,373,260</b>	



# Engineer's Estimate

## WORLD DRIVE Alternate 1 - Base

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	57	\$ 440,994	Total Disturbed Area
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	196,166	\$ 568,880	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	43,403	\$ 594,190	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	76,381	\$ 1,070,865	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	4,774	\$ 416,706	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	12,603	\$ 1,099,099	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	8,402	\$ 753,149	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	3,151	\$ 369,265	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	287	\$ 32,431	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	15	\$ 47,219	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	3	\$ 54,983	At gores
	Fencing	LF	\$ 10.00	24,053	\$ 240,530	LA R/W fence
	Embankment	CY	\$ 5.94	196,166	\$ 1,165,224	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	2,009	\$ 68,306	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	52,846	\$ 8,455,282	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 15,377,123	
	Compensable Utility Relocation	LS			\$ 768,856	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 1,537,712	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 1,537,712	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 768,856	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 768,856	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 3,075,425	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 768,856	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 153,771	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 24,757,168	
	Contingency	LS			\$ 3,713,575	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 28,470,743</b>	

# Engineer's Estimate

## SR 417 Alternate 1 - BASE

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	7	\$ 51,126	Total Disturbed Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	12,217	\$ 35,430	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	5,387	\$ 73,754	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	6,830	\$ 95,753	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	593	\$ 51,724	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	1,127	\$ 98,278	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	751	\$ 67,344	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	282	\$ 33,019	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	2,590	\$ 292,670	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	0	\$ 597	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	2	\$ 36,655	At gores
	Fencing	LF	\$ 10.00	5,946	\$ 59,460	LA R/W fence
	Embankment	CY	\$ 5.94	12,217	\$ 72,570	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	18,130	\$ 616,420	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	76,538	\$ 12,246,144	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 13,830,945	
	Compensable Utility Relocation	LS			\$ 691,547	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 1,383,094	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 1,383,094	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 691,547	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 691,547	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 2,766,189	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 691,547	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 138,309	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 22,267,821	
	Contingency	LS			\$ 3,340,173	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 25,607,994</b>	



# Engineer's Estimate

## US 192/ SR 530 Alternate 1 - BASE

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	12	\$ 92,763	Total Disturbed Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	34,332	\$ 808,862	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	27,115	\$ 78,634	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	10,666	\$ 146,022	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	16,449	\$ 230,615	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	1,173	\$ 102,405	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	2,714	\$ 236,695	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	1,809	\$ 162,194	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	679	\$ 79,523	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	4,281	\$ 483,753	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	1	\$ 1,606	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	1	\$ 18,328	At gores
	Fencing	LF	\$ 10.00	9,304	\$ 93,040	Pond Perimeters
	Embankment	CY	\$ 5.94	27,115	\$ 161,065	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	29,967	\$ 1,018,878	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160.00	87,831	\$ 14,053,027	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 17,767,411	
	Compensable Utility Relocation	LS			\$ 888,371	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 1,776,741	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 1,776,741	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 888,371	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 888,371	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 3,553,482	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 888,371	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 177,674	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 28,605,531	
	Contingency	LS			\$ 4,290,830	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 32,896,361</b>	

# Engineer's Estimate

## Osceola Parkway Alternate 1 - Base

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	22	\$ 171,063	Total Disturbed Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	46,741	\$ 135,548	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	17,607	\$ 241,038	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	29,134	\$ 408,456	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	1,937	\$ 169,040	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	4,807	\$ 419,225	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	3,205	\$ 287,271	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	1,202	\$ 140,847	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	4,919	\$ 555,847	Concrete, Double face
520 1 10	Curb and Gutter	LF	\$ 17.78	236	\$ 4,196	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	1	\$ 4,367	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	3	\$ 54,983	At gores
	Fencing	LF	\$ 10.00	18,136	\$ 181,360	Pond Perimeters
	Embankment	CY	\$ 5.94	46,741	\$ 277,640	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	9,807	\$ 333,438	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160.00	92,342	\$ 14,774,720	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 18,159,038	
	Compensable Utility Relocation	LS			\$ 907,952	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 1,815,904	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 1,815,904	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 907,952	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 907,952	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 3,631,808	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 907,952	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 181,590	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 29,236,051	
	Contingency	LS			\$ 4,385,408	Assume 15% of Construction Subtotal
	Grand Total				\$ 33,621,459	



# Engineer's Estimate

## Osceola Parkway Alternate 2 - Slip Ramp from Express Lanes

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	17	\$ 135,096	Total Disturbed Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	54,636	\$ 158,443	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	18,190	\$ 249,020	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	36,446	\$ 510,968	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	2,001	\$ 174,637	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	6,014	\$ 524,440	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	4,009	\$ 359,369	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	1,503	\$ 176,197	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	8,326	\$ 940,838	Concrete, Double face
520 1 10	Curb and Gutter	LF	\$ 17.78	236	\$ 4,196	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	2	\$ 5,574	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	4	\$ 73,311	At gores
	Fencing	LF	\$ 10.00	9,006	\$ 90,060	Pond Perimeters
	Embankment	CY	\$ 5.94	54,636	\$ 324,535	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	58,282	\$ 1,981,588	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160.00	126,828	\$ 20,292,480	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 26,000,752	
	Compensable Utility Relocation	LS			\$ 1,300,038	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 2,600,075	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 2,600,075	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 1,300,038	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 1,300,038	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 5,200,150	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 1,300,038	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 260,008	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 41,861,210	
	Contingency	LS			\$ 6,279,182	Assume 15% of Construction Subtotal
	Grand Total				\$ 48,140,392	

# Engineer's Estimate

## Osceola Parkway Alternate 3 - PARCLO WITH BONNET CREEK REALIGNMENT

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	21	\$ 162,372	Total Disturbed Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	9,704	\$ 228,626	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	20,271	\$ 58,786	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	4,943	\$ 67,667	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	15,328	\$ 214,902	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	544	\$ 47,455	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	2,529	\$ 220,568	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	1,686	\$ 151,142	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	632	\$ 74,104	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	13,032	\$ 1,472,616	Concrete, Double face
520 1 10	Curb and Gutter	LF	\$ 17.78	236	\$ 4,196	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	3	\$ 8,800	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	4	\$ 73,311	At gores
	Fencing	LF	\$ 10.00	24,443	\$ 244,430	Pond Perimeters
	Embankment	CY	\$ 5.94	20,271	\$ 120,410	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	37,000	\$ 1,258,000	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160.00	451,075	\$ 72,171,934	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 76,579,318	
	Compensable Utility Relocation	LS			\$ 3,828,966	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 7,657,932	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 7,657,932	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 3,828,966	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 3,828,966	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 15,315,864	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 3,828,966	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 765,793	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 123,292,702	
	Contingency	LS			\$ 18,493,905	Assume 15% of Construction Subtotal
	Grand Total				\$ 141,786,608	



# Engineer's Estimate

## SR 536 Alternate 1 - Base PARCLO with Modifications

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	69	\$ 536,369	Total Disturbed Area - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	15,153	\$ 357,005	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	164,018	\$ 475,651	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	61,173	\$ 837,461	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	102,844	\$ 1,441,878	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	6,729	\$ 587,312	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	16,969	\$ 1,479,894	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	11,313	\$ 1,014,086	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	4,242	\$ 497,201	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	38,015	\$ 4,295,695	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	8	\$ 26,356	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	2	\$ 36,655	At gores
	Fencing	LF	\$ 10.00	51,627	\$ 516,270	Pond Perimeters
	Embankment	CY	\$ 5.94	164,018	\$ 974,264	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	57,387	\$ 1,951,158	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160.00	181,529	\$ 29,044,647	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 44,071,903	
	Compensable Utility Relocation	LS			\$ 2,203,595	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 4,407,190	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 4,407,190	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 2,203,595	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 2,203,595	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 8,814,381	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 2,203,595	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 440,719	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 70,955,764	
	Contingency	LS			\$ 10,643,365	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 81,599,128</b>	

# Engineer's Estimate

## SR 535 Alternate 1 - Base

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	26.01	\$ 200,873	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	82,714	\$ 239,871	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	32,162	\$ 440,302	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	50,552	\$ 708,736	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	3,538	\$ 308,784	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	8,341	\$ 727,422	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	5,561	\$ 498,461	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	2,085	\$ 244,393	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	6,045	\$ 683,085	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	4	\$ 11,763	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	3	\$ 54,983	At gores
	Fencing	LF	\$ 10.00	12,948	\$ 129,480	LA R/W fence
	Embankment	CY	\$ 5.94	82,714	\$ 491,322	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	43,876	\$ 1,491,784	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	-	\$ -	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 6,231,259	
	Compensable Utility Relocation	LS			\$ 311,563	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 623,126	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 623,126	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 311,563	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 311,563	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 1,246,252	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 311,563	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 62,313	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 10,032,328	
	Contingency	LS			\$ 1,504,849	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 11,537,177</b>	



# Engineer's Estimate

## SR 535 Alternate 2 - Elevated C/D

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	36.24	\$ 279,879	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	53,445	\$ 154,991	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	20,438	\$ 279,790	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	33,007	\$ 462,764	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	2,248	\$ 196,217	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	5,446	\$ 474,966	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	3,631	\$ 325,467	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	1,362	\$ 159,574	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	29,948	\$ 3,384,124	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	4	\$ 11,827	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	3	\$ 54,983	At gores
	Fencing	LF	\$ 10.00	36,581	\$ 365,810	LA R/W fence
	Embankment	CY	\$ 5.94	53,445	\$ 317,463	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	65,170	\$ 2,215,780	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	292,033	\$ 46,725,280	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 55,408,915	
	Compensable Utility Relocation	LS			\$ 2,770,446	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 5,540,891	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 5,540,891	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 2,770,446	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 2,770,446	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 11,081,783	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 2,770,446	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 554,089	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 89,208,353	
	Contingency	LS			\$ 13,381,253	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 102,589,606</b>	

# Engineer's Estimate

## SR 535 Alternate 3 - Modified Diamond with Hotel Plaza Blvd Connector

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	84.60	\$ 653,453	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	122,899	\$ 356,408	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	20,629	\$ 282,408	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	102,271	\$ 1,433,835	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	2,269	\$ 198,053	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	16,875	\$ 1,471,639	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	11,250	\$ 1,008,430	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	4,219	\$ 494,428	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	25,948	\$ 2,932,124	Concrete, Double face
	Thermoplastic, White, Striping	NM	\$ 3,178	7	\$ 23,517	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	3	\$ 54,983	At gores
	Fencing	LF	\$ 10.00	85,973	\$ 859,730	LA R/W fence
	Embankment	CY	\$ 5.94	122,899	\$ 730,023	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	83,000	\$ 2,822,000	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	49,027	\$ 7,844,320	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 21,165,350	
	Compensable Utility Relocation	LS			\$ 1,058,267	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 2,116,535	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 2,116,535	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 1,058,267	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 1,058,267	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 4,233,070	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 1,058,267	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 211,653	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 34,076,213	
	Contingency	LS			\$ 5,111,432	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 39,187,645</b>	



# Engineer's Estimate

## SR 535 Alternate 4 - Modified Diamond

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	116.38	\$ 898,865	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	196,593	\$ 570,120	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	28,936	\$ 396,132	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	167,657	\$ 2,350,556	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	3,183	\$ 277,808	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	27,663	\$ 2,412,530	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	18,442	\$ 1,653,168	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	6,916	\$ 810,539	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	25,948	\$ 2,932,124	Concrete, Double face
520 1 10	Curb and Gutter	LF	\$ 17.78	48,763	\$ 867,006	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	18	\$ 56,567	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	3	\$ 54,983	At gores
	Fencing	LF	\$ 10.00	110,000	\$ 1,100,000	LA R/W fence
	Embankment	CY	\$ 5.94	196,593	\$ 1,167,764	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	75,256	\$ 2,558,704	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	98,493	\$ 15,758,816	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 33,865,683	
	Compensable Utility Relocation	LS			\$ 1,693,284	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 3,386,568	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 3,386,568	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 1,693,284	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 1,693,284	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 6,773,137	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 1,693,284	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 338,657	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 54,523,749	
	Contingency	LS			\$ 8,178,562	Assume 15% of Construction Subtotal
	Grand Total				\$ 62,702,311	

# Engineer's Estimate

## Daryl Carter Alternate 1 - TUDI

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	6.30	\$ 48,635	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	30,477	\$ 88,382	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	14,040	\$ 192,205	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	16,437	\$ 230,445	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	1,544	\$ 134,793	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	2,712	\$ 236,521	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	1,808	\$ 162,074	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	678	\$ 79,464	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	8,959	\$ 1,012,367	Concrete, Double face
520 1 10	Curb and Gutter	LF	\$ 17.78	503	\$ 8,943	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	1	\$ 3,486	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	2	\$ 36,655	At gores
	Fencing	LF	\$ 10.00	-	\$ -	LA R/W fence
	Embankment	CY	\$ 5.94	45,960	\$ 273,002	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	52,800	\$ 1,795,200	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	37,775	\$ 6,044,000	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 10,346,174	
	Compensable Utility Relocation	LS			\$ 517,309	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 1,034,617	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 1,034,617	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 517,309	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 517,309	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 2,069,235	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 517,309	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 103,462	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 16,657,341	
	Contingency	LS			\$ 2,498,601	Assume 15% of Construction Subtotal
	Grand Total				\$ 19,155,942	



# Engineer's Estimate

## Daryl Carter Alternate 2 - Elevated C/D

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	18.70	\$ 144,435	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	33,128	\$ 96,071	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	14,262	\$ 195,250	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	18,866	\$ 264,495	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	1,569	\$ 136,929	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	3,113	\$ 271,469	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	2,075	\$ 186,022	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	778	\$ 91,206	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	6,592	\$ 744,896	Concrete, Double face
520 1 10	Curb and Gutter	LF	\$ 17.78	392	\$ 6,970	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	1	\$ 2,763	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	2	\$ 36,655	At gores
	Fencing	LF	\$ 10.00	17,214	\$ 172,140	LA R/W fence
	Embankment	CY	\$ 5.94	33,128	\$ 196,779	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	59,010	\$ 2,006,340	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	37,775	\$ 6,044,000	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 10,596,418	
	Compensable Utility Relocation	LS			\$ 529,821	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 1,059,642	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 1,059,642	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 529,821	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 529,821	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 2,119,284	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 529,821	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 105,964	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 17,060,233	
	Contingency	LS			\$ 2,559,035	Assume 15% of Construction Subtotal
	Grand Total				\$ 19,619,268	

# Engineer's Estimate

## Daryl Carter Alternate 3 - DDI

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	7.34	\$ 56,654	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	-	\$ -	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	35,502	\$ 102,955	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	11,892	\$ 162,797	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	23,610	\$ 331,011	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	1,308	\$ 114,170	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	3,896	\$ 339,738	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	2,597	\$ 232,803	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	974	\$ 114,142	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	8,959	\$ 1,012,367	Concrete, Double face
520 1 10	Curb and Gutter	LF	\$ 17.78	3,791	\$ 67,404	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	1	\$ 3,378	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	2	\$ 36,655	At gores
	Fencing	LF	\$ 10.00	-	\$ -	LA R/W fence
	Embankment	CY	\$ 5.94	50,832	\$ 301,942	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	52,800	\$ 1,795,200	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	20,405	\$ 3,264,768	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 7,935,984	
	Compensable Utility Relocation	LS			\$ 396,799	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 793,598	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 793,598	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 396,799	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 396,799	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 1,587,197	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 396,799	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 79,360	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 12,776,934	
	Contingency	LS			\$ 1,916,540	Assume 15% of Construction Subtotal
	Grand Total				\$ 14,693,474	



# Engineer's Estimate

## Central Florida Parkway Alternate 1 - Base

Item	Description	Unit	Unit Cost	Quantity	Total Cost	Remarks
0110 1 1	Clearing & Grubbing	AC	\$ 7,724	18.68	\$ 144,266	Total Area of mainline section - R/W to R/W
0110 3	Removal of Existing Structure	SF	\$ 24	21,922	\$ 516,482	Area of existing bridge
160 4	Stabilization Type B LBR 40	SY	\$ 2.90	50,902	\$ 147,616	Total Area of mainline section
285 706	Base optional (base group 6) ML	SY	\$ 13.69	16,378	\$ 224,216	Total Shldr area
285 712	Base optional (base group 12) ML	SY	\$ 14.02	34,524	\$ 484,026	Total Roadway area
334 1 12	Superpave asphaltic concrete (Traff B)	TN	\$ 87.28	1,802	\$ 157,243	Used 110 lb /sy*inch lift (2" thk) - Shoulder
334 1 14	Superpave asphaltic concrete (Traff D)	TN	\$ 87.21	5,696	\$ 496,788	Used 110 lb /sy*inch lift (3" thk) - Roadway
334 1 24	Superpave asphaltic concrete (Traff D-PG 76-22)	TN	\$ 89.64	3,798	\$ 340,420	Used 110 lb /sy*inch lift (2" thk) - Roadway
337 7 22	Asphaltic Conc friction course (FC-5) (PG 76-22)	TN	\$ 117.20	1,424	\$ 166,906	Used 110 lb /sy*inch lift (0.75" thk) - Roadway
521 1	Barrier Wall	LF	\$ 113	1,647	\$ 186,111	Concrete, Double face
520 5 11	Traffic Separator	LF	\$ 34.69	370	\$ 12,835	Type I, 4' Wide
520 1 10	Curb and Gutter	LF	\$ 17.78	11,717	\$ 208,328	Type F
	Thermoplastic, White, Striping	NM	\$ 3,178	2	\$ 5,392	EOP and lane lines
	Vehicle Impact Attenuator	EA	\$ 18,327.63	-	\$ -	At gores
	Fencing	LF	\$ 10.00	11,850	\$ 118,500	LA R/W fence
	Embankment	CY	\$ 5.94	45,221	\$ 268,613	Assume 3' over entire roadway area
	MSE wall	SF	\$ 34.00	11,529	\$ 391,986	Length of Barrier Wall X 7' Average Height
	Bridges	SF	\$ 160	76,142	\$ 12,182,688	Concrete
	Wetland Mitigation	AC	\$ 108,000.00	0	\$ -	Assumed 25' from edge of shoulder
	Subtotal Cost	LS			\$ 16,052,418	
	Compensable Utility Relocation	LS			\$ 802,621	Assume 5% of Construction Subtotal Cost
	Mobilization	LS			\$ 1,605,242	Assume 10% of Construction Subtotal Cost
	Maintenance of Traffic (MOT)	LS			\$ 1,605,242	Assume 10% of Construction Subtotal Cost
	Lighting	LS			\$ 802,621	Assume 5% of Construction Subtotal Cost
	Signage	LS			\$ 802,621	Assume 5% of Construction Subtotal Cost
	Drainage	LS			\$ 3,210,484	Assume 20% of Construction Subtotal Cost
	ITS	LS			\$ 802,621	Assume 5% of Construction Subtotal Cost
	Erosion Control	LS			\$ 160,524	Assume 1% of Construction Subtotal Cost
	Construction Subtotal	LS			\$ 25,844,394	
	Contingency	LS			\$ 3,876,659	Assume 15% of Construction Subtotal
	<b>Grand Total</b>				<b>\$ 29,721,053</b>	

THIS PAGE LEFT BLANK INTENTIONALLY.