

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



Utility Impact Report

Segment 3: State Road 400 (SR 400)/Interstate 4 (I-4) from One Mile East of SR 434 to East of SR 15-600/US 17-92

Seminole County (77160), Florida

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1.0 Introduction

This report was commissioned by the Florida Department of Transportation's (FDOT) District Five Utility Offices in conjunction with a FDOT roadway Project Development and Environment (PD&E) study on Interstate 4 (SR 400) in Polk, Osceola, Orange, Seminole, and Volusia Counties. FDOT requested that HNTB Corporation conduct engineering investigations to identify the status of any existing and proposed facilities that may require relocation to accommodate the proposed I-4 expansion. The report provides supplemental utility relocation cost information for evaluating the expansion of I-4 existing roadway under the FDOT Financial Project Number 4321001-1-22-01. HNTB developed and prepared this report using information gathered through the review of aerial photography from Aerial Cartographics of America (ACA) and coordination with utility owners. The I-4 project is separated into five major segments: Segment 1 covers Polk/Osceola County Line to SR 528, Segment 2 covers SR 528 to west of Kirkman Road, Segment 3 covers 1.0 mile east of SR 434 to US 17/92, Segment 4 covers from US 17/92 to 0.5 miles east of SR 472, and Segment 5 covers US 27 to the Polk/Osceola County Line. This Utility Impact Report focuses on Segment 3, SR 434 to US 17/92. It includes analysis on the I-4 corridor along with all major crossroads (Lake Mary Blvd, CR 46a, SR 417, 46 and Orange Blvd) where exits may be redesigned to accommodate the proposed improvements.

I-4's Segment 3 topography, through the study area, traverses east and west for 11.685 miles in mostly in Seminole County, entering into Volusia County at the east end. The study begins 1.0 miles east of SR 434 (MP 2.321). The study traverses east to milepost 14.135 at the Seminole/Volusia County. The milepost numbering restarts (MP 0.000) in Volusia County. The project area terminates east of the Seminole/Volusia County line in Volusia County (MP 0.129) The corridor has a 300-ft right-of-way the large portion of the project area. However, between CR 46a and SR 46 the right-of-way varies substantially from 750-ft to 1590-ft.

1.1 Study Background

HNTB's study began by overlaying existing right of way maps, from FDOT's Right-of-Way Map Department, with aerial photography gathered by ACA. A Sunshine State One Call was made to identify the utility companies present throughout the segment. Roadway plans were sent to each of the utility companies; HNTB requested they mark-up their facilities and return the markups to HNTB. The markups collected from the utility companies were input into CAD (Computer Aided Drafting) and displayed on the roadway plan sheets. The plan sheets are included in Appendix B of this report. Possible conflicts were identified and facilities that are expected to require relocation were noted in the Utility Impact Section of this report. Preliminary relocation cost information was also request from each of the utility companies and is summarized in Appendix A.

2.0 Preliminary Design and Engineering-Roadway

The Florida Department of Transportation's projected growth for the study area warrants expansion of the existing I-4 corridor from a six lane divided general use highway to a ten lane divided highway, six

general uses lanes and four managed (toll) lanes. Pavement widths on cross roads will be increased as turn lanes are added at intersections and other applicable areas. Crossroads are to be reworked to accommodate the projected growth and ease congestion at entrance and exit ramps along Segment 3. Often, additional right-of-way is required to support an expanded roadway of this type.

Based on information gathered as part of the PD&E study conducted on the I-4 expansion for Segment 3, an additional 12 acres of right-of-way will need to be procured to accommodate roadway expansion and additional stormwater facilities.

2.1 Right-of-Way

I-4's main corridor has a right-of-way of 300-ft between the western segment limit (1.0 mile east of SR 434) and CR 46a. East of CR 46a the right of way varies significantly. Between CR 46a and SR 417 the right-of-way expands to 1690-ft to accommodate a CD road in each direction and a storm water treatment pond. Segment 3 has a rest area, servicing the east bound direction of the interstate, located approximately 0.75 miles east of the E.E. Williamson overpass. The right-ofway is expanded to a maximum 1120-ft to accommodate the rest area. The right-of-way is also increased in areas where water treatment ponds are necessary to support the run off of the interstate.

The proposed improvements will require right of way for the roadway mainline improvements, storm-water management facilities and floodplain compensation sites. The total anticipated right of way impacts 41 parcels for a total of approximately 42 acres.

2.2 Environmental Issues

The western project area of I-4's main corridor is primarily urban and will not have impact to any threatened or endangered species. However there is a major possible contamination point at the east end of the project where the interstate crosses the St. Johns River. St. Johns River is habitat to multiple endangered species that must be protected. Therefore, existing habitat conditions should only be minimally altered to ensure environmental protection. Utility companies having to relocate facilities around the St. Johns River may be required to go through the environmental and wetlands permitting processes in order to install or relocate existing facilities.

3.0 Utility Impact Scope

HNTB began the investigation of the I-4 roadway utilities in June 2013. Initial objectives included identifying and verifying owners of existing utilities located in and around the area of study. Other important objectives included in the study: uncovering major utility impacts from potential construction, determine utility owners proposed facilities within the study corridor, verify utility owner's easements and obtain an estimated cost of locating conflicting utilities. ITS along the project corridor is owned by FDOT. Therefore, relocation and cost associated with FDOT owned ITS was not included in this report. Refer to the Long Range Estimate (LRE) for further information on FDOT ITS relocation costs.

The process began by submitting design locate tickets to Sunshine State One Call (SSOC) for a list of utility contact information. SSOC returned a list of utilities located within the area of study. Utility owners, confirmed by the FDOT's District Five Contact List, were sent a set of segment three plans for utility markups on June 28, 2013. After receiving markups from the utility companies, HNTB compared utility locations with the proposed roadway design and determined any utilities that posed a possible conflict.

3.1 Sunshine State One Calls

SSOC identified that the following utility companies maintain facilities in the area of study:

- AT&T Corporation
- AT&T Florida
- BrightHouse Networks
- CenturyLink
- City of Altamonte Springs
- City of Lake Mary
- City of Sanford
- Comcast Communications
- Duke Energy Distribution (Formerly Progress Energy)
- Duke Energy Transmission (Formerly Progress Energy)
- Embarq Communications
- Florida Gas Transmission
- Florida Power & Light
- Florida Public Utilities
- Level 3 Communications
- Sanlando Utilities
- Seminole County Utilities
- TECO Peoples Gas
- Transcore
- TW Telecom
- Verizon

4.0 Utility Impacts

After receiving utility markup plans from the utility companies provided by the SSOC, HNTB compared the facility locations of each company with the proposed roadway design. A summary of each company's facilities and conflicts to the I-4 expansion are provided.

4.1 AT&T Florida

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	ATT	6.5" Underground Fiber Optic	Crossing at intersection of Markham Woods Blvd & Lake Mary Blvd	East side of intersection	10+92	11+39	No
Communications	ATT	Unknown Size Underground Fiber Optic	From intersection of Markham Woods Blvd & Lake Mary Blvd east on Lake Mary Blvd for 700-ft	South side of intersection	11+08	18+00	No
Communications	ATT	Unknown Size Underground Fiber Optic	Crossing at intersection of Primera Blvd & Lake Mary Blvd	West side of intersection	88+82	88+83	No
Communications	ATT	Unknown Size Underground Fiber Optic	Crossing on SR 417, 1520-ft east of Rinehart Rd, SR 417 underpass	N/A	98+64	98+69	No
Communications	ATT	Unknown Size Underground Fiber Optic	Crossing at intersection of Monroe Rd & SR 46	West side of intersection	107+52	107+53	No
Communications	ATT	Unknown Size Underground Fiber Optic	Crossing of I-4 Corridor at Orange Blvd, I-4 underpass	Center of underpass	2564+28	2564+63	No
Communications	ATT	Unknown Size Underground Fiber Optic	From 200-ft north of intersection of Barwick Rd & US 17- 92 to 260-ft west of intersection of I-4 east bound ramp to US 17-92 & US 17-92	North/west side of road	23+77	81+44	No
Communications	ATT	Unknown Size Underground Fiber Optic	From 200-ft north of intersection of Barwick Rd & US 17- 92 to intersection of Old Deland Rd & US 17-92	East side of road	23+62	31+96	No
Communications	ATT	Unknown Size Underground Fiber Optic	Crossing US 17-92 at I-4 Main Corridor Overpass	West side of overpass	75+30	75+26	No
Communications	ATT	Unknown Size Underground Fiber Optic	From west side of US 17-92, I-4 Overpass to intersection of Monroe Rd & US 17-92	South side of road	75+26	80+95	No
Communications	ATT	Varying Size Underground Fiber Optic	Two Crossings at intersection of Rinehart Rd & CR 46a	East side of intersection	81+20	81+20	No
Communications	ATT	25 Pair Underground Fiber Optic	From intersection to 930-ft east of intersection of Primera Blvd & Lake Mary Blvd	North side of road	89+97	98+00	No
Communications	ATT	50 Pair Underground Fiber Optic	From 760-ft west of to intersection of N Sun Dr. & Lake Mary Blvd	North side of Road	98+68	105+85	No
Communications	ATT	144 Pair Underground Fiber Optic	From intersection of Rinehart Rd & CR 46A east to end of project limits on CR 46A	South side of road	81+20	130+00	No
Communications	ATT	200 Pair Underground Fiber Optic	From intersection of to 470-ft east of intersection of Rinehart Rd & CR 46A	South side of road	81+20	130+00	No
Communications	ATT	200 Pair Underground Fiber Optic	Crossing of CR 46A 470-ft east of intersection of Rinehart Rd & CR46A	N/A	84+00	84+00	No
Communications	ATT	600 Pair Underground Fiber Optic	Crossing at intersection of S Sun Dr. & Lake Mary Blvd	East side of intersection	106+73	106+76	No
Communications	ATT	600 Pair Underground Fiber Optic	From intersection of N Sun Dr. & Lake Mary Blvd east to intersection of Rinehart Rd & Lake Mary Blvd	North side of road	106+76	122+10	No
Communications	ATT	600 Pair Underground Fiber Optic	Crossing of SR 417 at Rinehart Rd underpass	East side of underpass	83+23	855+52	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	ATT	2-4" Underground PVC Duct Bank	From 1130-ft west of to Towne Center Blvd underpass of SR 417	South side of road	60+00	48+70	No
Communications	ATT	2-4" Underground PVC Duct Bank	Crossing of SR 417 at Towne Center Blvd underpass	West side of underpass	59+10	60+60	No
Communications	ATT	6-4" PVC Duct Bank	From intersection of Markham Woods & Lake Mary Blvd east to intersection of International Pkwy & Lake Mary Blvd	South side of road	11+08	55+12	No
Communications	ATT	9-4" PVC Duct Bank	Crossing of I-4 at Lake Mary Blvd overpass	South side of overpass	57+76	77+98	No
Communications	ATT	9-4" PVC Duct Bank	From intersection of I-4 east bound ramp to Lake Mary Blvd east to intersection of Lake Emma Rd & Lake Mary Blvd	South side of road	77+98	88+48	Yes, adjust to run parallel to road
Communications	ATT	12-4" PVC Duct Bank	Crossing at intersection of Lake Emma Rd & Lake Mary Blvd	West side of intersection	88+25	88+68	No
Communications	ATT	16-4" PVC Duct Bank	Crossing of I-4 2690-ft east of Lake Mary, I-4 overpass	N/A	2294+77	2294+79	No
Communications	ATT	18-4" PVC Duct Bank	Crossing at intersection of International Pkwy & Lake Mary Blvd	West side of intersection	55+11	55+12	No
Communications	ATT	Unknown Size PVC Duct Bank	From 450-ft east of intersection of Lake Emma Rd & Lake Mary Blvd east to intersection of Rinehart Rd & Lake Mary Blvd	Center of road	93+90	122+57	No
Communications	ATT	Unknown Size PVC Duct Bank	Crossing at intersection of Rinehart Rd & Lake Mary Blvd	West side of intersection	122+45	122+57	No

4.2 BrightHouse Networks

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Television	Bright House Networks	55" Underground CATV	From north side to south side of US 17-92 bridge crossing St. John's River	West side of bridge	52+08	58+83	No
Television	Bright House Networks	Unknown Size Aerial CATV	From 940-ft west of intersection of Bright Meadow Dr. & CR 46A on east bound CR 46A, east to station 141+00 on CR 46A	South side of intersection	99+90	141+00	No
Television	Bright House Networks	Unknown Size Aerial CATV	From station 10+00 on SR 46 to 500-ft east of intersection of N. Hendersen Ln & SR 46	North side of road	10+00	14+38	No
Television	Bright House Networks	Unknown Size Aerial CATV	From intersection of Terracina Dr. & SR 46 to 270-ft west of intersection of N. Oregon St & SR 46	North side of road	42+55	58+52	No
Television	Bright House Networks	Unknown Size Aerial CATV	From 450-ft west to 630-ft west of intersection of Hickman Dr. & SR 46	North side of road	78+69	80+13	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Television	Bright House Networks	Unknown Size Aerial CATV	Crossing at intersection of Sewell Rd & SR 46	West side of intersection	103+27	103+28	No
Television	Bright House Networks	Unknown Size Aerial CATV	From 250-ft east of intersection of Towne Center Blvd & SR 46 east to station 141+00 on SR 46	South side of road	87+39	141+00	No
Television	Bright House Networks	Unknown Size Aerial CATV	Crossing at intersection of Elder Rd & SR 46	East side of intersection	108+61	108+62	No
Television	Bright House Networks	Unknown Size Aerial CATV	Crossing at intersection of Monroe Rd & SR 46	West side of intersection	120+97	121+10	No
Television	Bright House Networks	Unknown Size Underground CATV	From intersection of Markham Woods Blvd & Lake Mary Blvd to intersection of International Pkwy & Lake Mary Blvd	South side of road	10+95	55+32	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing 280-ft west of intersection of International Pkwy & Lake Mary Blvd	N/A	52+97	53+02	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing of I-4 Corridor, 5450-ft south of Lake Mary Blvd, I-4 overpass	N/A	2213+77	2214+76	No
Television	Bright House Networks	Unknown Size Underground CATV	From station 10+00 on Lake Mary Blvd west on Lake Mary Blvd for 520-ft	South side of road	4+80	10+00	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing on I-4 Corridor, 4370-ft north of Lake Mary Blvd, I-4 overpass	N/A	2312+16	2312+18	No
Television	Bright House Networks	Unknown Size Underground CATV	From station 10+00 on CR 46A to intersection of St. Albans Loop & CR 46A	North side of road	10+00	24+87	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of Orange Blvd & CR 46A	East side of intersection	31+18	31+19	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of Banana Lake Rd & CR 46A	South side of intersection	30+22	31+19	No
Television	Bright House Networks	Unknown Size Underground CATV	From intersection of Orange Blvd & CR 46A to intersection of International Pkwy & CR 46A	North side of road	31+31	45+19	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of International Pkwy & CR 46A	West side of intersection	45+19	46+48	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of International Pkwy & CR 46A	North side of intersection	45+22	46+71	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of International Pkwy & CR 46A	East side of intersection	46+86	46+91	No
Television	Bright House Networks	Unknown Size Underground CATV	From intersection of International Pkwy & CR 46A to intersection of Colonial Center Pkwy & CR 46A	North side of road	46+91	57+87	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of I-4 west bound ramp to CR 46A & CR 46A	East side of intersection	59+66	59+67	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of I-4 west bound ramp to CR 46A & CR 46A to intersection of Rinehart Rd & CR 46A	South side of road	59+67	79+74	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of Rinehart & CR 46A	West side of intersection	79+74	79+91	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of Rinehart & CR 46A	South side of intersection	79+74	81+64	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of International Pkwy & Wekiva Pkwy	East side of intersection	10+98	11+43	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing on SR 417, Rinehart Rd & SR 417 underpass	East side of underpass	82+97	85+31	No
Television	Bright House Networks	Unknown Size Underground CATV	From 500-ft east of intersection of N. Henderson Ln & SR 46 to 250-ft west of intersection of Lake Forest Blvd & SR 46	North side of road	14+38	25+09	No
Television	Bright House Networks	Unknown Size Underground CATV	From 550-ft west of intersection of Lake Forest Blvd & SR 46 to intersection of Terracina Dr. & SR 46	North side of road	22+17	40+59	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of N. Oregon St & SR 46	West side of intersection	60+79	61+00	No
Television	Bright House Networks	Unknown Size Underground CATV	From intersection of Wayside Dr. & SR 46 to intersection of Upsala Rd & SR 46	South side of road	61+96	120+99	Yes, adjust for bridge improvements
Television	Bright House Networks	Unknown Size Underground CATV	From 450-ft west of intersection of Hickman Dr. & SR 46 to 150-ft east of intersection of N. Elder Rd & SR 46	North side of road	80+13	104+89	No
Television	Bright House Networks	Unknown Size Underground CATV	Crossing at intersection of Monroe Rd & SR 46	West side of intersection	120+84	120+99	No
Television	Bright House Networks	Unknown Size Underground CATV	From south side of US 17-92 bridge crossing St. John's River to intersection of Monroe Rd & US 17-92	South side of road	58+83	81+88	No

4.3 CenturyLink

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	CenturyLink	Underground Copper Cable	From 13720-ft to 11030-ft south of Lake Mary, I-4 overpass	East side of road	2132+14	2158+62	Yes, adjust to run parallel to road
Communications	CenturyLink	Underground Fiber Optic Cable	Crossing of I-4 Corridor, north side of E.E. Williamson overpass	North side of overpass	2102+09	2105+18	No
Communications	CenturyLink	Underground Fiber Optic Cable	Crossing of I-4 Corridor, north side of E.E. Williamson overpass	North side of overpass	2102+07	2105+16	No

4.4 Comcast Communications

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	Comcast Communications	Unknown Size Underground Fiber Optic	Crossing of I-4 Corridor at Orange Blvd, I-4 underpass	Center of underpass	2563+98	2564+61	No
Communications	Comcast Communications	Unknown Size Underground Fiber Optic	From 260-ft west of intersection of US 17-92 ramp to I-4 west bound & US 17-92 & Monroe Rd & US 17-92	South side of road	67+34	82+59	No

4.5 Duke Energy – Distribution (Formerly Progress Energy)

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electricity	Duke Energy Distribution	13 KV Aerial Electric	Crossing of I-4 Corridor E.E. Williamson Overpass	East side of overpass	2102+27	2105+31	No
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of I-4 Corridor 2330-ft east of E.E. Williamson Overpass	N/A	2126+73	2126+74	No
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	From 1500-ft to 5000-ft east of E.E. Williamson Overpass on I-4 Corridor	West side of road	2118+29	2157+66	Yes, adjust to run paralle to road
Electricity	Duke Energy Distribution	7.2 KV Aerial Electric	Crossing of Lake Mary Blvd, 1790-ft west of intersection of International Pkwy & Lake Mary Blvd	N/A	2260+44	2259+24	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at entrance of 7-11 on Lake Mary Blvd	North side of road	120+10	121+30	Yes, relocation of poles required
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 400-ft west to E.E. Williamson Overpass on I-4 Corridor	West side of road	2102+61	2103+67	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two Crossings of I-4 Corridor, 9340-ft west of Lake Mary, I-4 Overpass	N/A	2175+04	2175+09	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of I-4 Corridor, 5380-ft west of Lake Mary, I-4 Overpass	N/A	2214+04	2215+01	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Three Crossings of I-4 Corridor, 2680-ft east of Lake Mary, I-4 Overpass	N/A	2295+08	2295+95	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Markham Woods Blvd & Lake Mary Blvd	South side of intersection	10+00	11+09	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Markham Woods Blvd & Lake Mary Blvd east to 130-ft west of intersection of I-4 westbound ramp to Lake Mary Blvd & Lake Mary Blvd	North side of road	10+10	62+17	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Markham Woods Blvd & Lake Mary Blvd east to intersection of International Pkwy & Lake Mary Blvd	South side of road	11+09	54+09	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing of Lake Mary Blvd, 2440-ft west of intersection of International Pkwy & Lake Mary Blvd	N/A	31+21	31+27	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of International Pkwy & Lake Mary Blvd	North side of intersection	54+96	56+55	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing 180-ft east of intersection of International Pkwy & Lake Mary Blvd	N/A	57+59	57+60	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 320-ft west to intersection of Lake Emma Rd & Lake Mary Blvd	South side of road	85+98	88+58	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two crossings at intersection of Lake Emma Rd & Lake Mary Blvd.	South side of intersection	88+58	90+15	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Primera Blvd & Lake Mary Blvd	North side of intersection	88+74	89+86	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Primera Blvd & Lake Mary Blvd east to station 138+00 on Lake Mary Blvd	North side of road	89+86	138+00	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electricity	Duke Energy Distribution	13 KV Underground Electric	From 350-ft east to intersection of Lake Emma Rd & Lake Mary Blvd	South side of road	90+15	92+84	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection of Lake Emma Blvd & Lake Mary Blvd east to station 138+00 on Lake Mary Blvd	South side of road	90+15	138+00	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of N. Sun Dr. & Lake Mary Blvd	North side of intersection	105+61	106+71	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of N. Sun Dr. & Lake Mary Blvd	South side of intersection	105+72	107+04	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	From intersection to 500-ft east of intersection of N. Sun Dr. & Lake Mary Blvd	North side of road	106+71	111+67	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Rinehart Rd & Lake Mary Blvd	North side of intersection	122+10	124+11	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Rinehart Rd & Lake Mary Blvd	South side of intersection	122+39	124+11	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Multiple crossings at intersection of Rinehart Rd & Lake Mary Blvd	East side of intersection	124+11	124+73	No
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two lines from Lake Mary Overpass to 2760-ft east of Lake Mary, I-4 Overpass on I-4 Corridor	West side of road	2295+16	2266+33	Yes, adjust to run parallel to road
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	Crossing at intersection of Markham Woods Blvd & Lake Mary Blvd	West side of intersection	9+35	10+10	No
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 240-ft west to intersection of International Pkwy & Lake Mary Blvd	South side of intersection	54+09	55+31	No
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 160-ft east of intersection of International Pkwy & Lake Mary Blvd to 150-ft west of intersection of I-4 westbound ramp to Lake Mary Blvd & Lake Mary Blvd	North side of road	57+27	62+17	Yes, adjust to run parallel to road

4.6 Duke Energy – Transmission (Formerly Progress Energy)

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of I-4 Corridor, 9380-ft west of Lake Mary Blvd, I-4 Corridor Overpass	N/A	2171+56	2177+48	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of I-4 Corridor, 9400-ft west of Lake Mary Blvd, I-4 Corridor Overpass	N/A	2171+27	2177+17	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Diagonal Crossing of I-4 Corridor, from 1560-ft west of to 730-ft east of SR 46, I-4 Underpass	Diagonally across road	2469+34	2490+52	Yes, relocation of poles required
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Two Crossings of I-4 Corridor, 2420-ft west of US 17-92, I-4 underpass	N/A	2538+84	2542+64	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing at intersection of Rinehart Rd & CR 46A	East side of intersection	87+76	81+79	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of CR 46A, 190-ft east of intersection of Rinehart Rd & CR 46A	N/A	82+34	82+75	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of CR 46A, 210-ft east of intersection of Rinehart Rd & CR 46A	N/A	82+57	83+00	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of SR 417, 1350-ft west of Towne Center Blvd, SR 417 underpass	N/A	47+33	50+03	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Two Crossings of SR 417, 1180-ft west of Towne Center Blvd, SR 417 underpass	N/A	47+94	50+54	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of SR 46, 690-ft east of intersection of N. Oregon St. & SR 46	N/A	67+58	69+11	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of SR 46, 270-ft west of intersection of Hickman Dr. & SR 46	N/A	85+94	86+46	No
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Crossing of SR 46, 220-ft west of intersection of Hickman Dr. & SR 46	N/A	86+26	86+77	No

4.7 Embarq Communications

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	Embarq Communications	Unknown Size Underground Fiber Optic	Crossing on I-4 Corridor, 9320-ft south of Lake Mary Blvd, I-4 overpass	N/A	2176+00	2174+58	No
Communications	Embarq Communications	Unknown Size Underground Fiber Optic	Crossing on I-4 Corridor, 2640-ft north of Lake Mary Blvd, I-4 overpass	N/A	2294+74	2294+86	No

4.8 Florida Gas Tramission

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Natural Gas	Florida Gas Transmission	12.75" Natural Gas Main	Crossing of SR 46 and SR 46 ramp to I-4 west bound 180- ft east of I-4 west bound ramp to SR 46	N/A	2483+32	2490+57	No
Natural Gas	Florida Gas Transmission	3.5" Natural Gas Main	Crossing of I-4 460-ft north of the SR 46, I-4 Overpass	N/A	2499+67	2501+42	No

4.9 Florida Power & Light

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electricity	Florida Power and Light	13 KV Aerial Electric	Crossing at intersection of Rinehart Rd & CR 46A	West side of intersection	79+77	79+82	No
Electricity	Florida Power and Light	13 KV Aerial Electric	From 500-ft east to 1320-ft east of intersection of Rinehart Rd & CR 46A on west bound CR 46A	South side of road	85+83	93+46	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electricity	Florida Power and Light	13 KV Aerial Electric	From 1440-ft east of intersection of Rinehart Rd & CR 46A east bound CR 46A, east to station 139+00 on CR 46A	South side of road	93+87	139+00	No
Electricity	Florida Power and Light	13 KV Aerial Electric	Crossing at intersection of Banana Lake Rd & CR 46A	Diagonally across intersection	30+32	30+85	No
Electricity	Florida Power and Light	13 KV Aerial Electric	Crossing at intersection of International Pkwy & Wekiva Pkwy	East side of intersection	10+94	11+81	Yes, relocation of poles required
Electricity	Florida Power and Light	13 KV Aerial Electric	Crossing at intersection of Bright Meadow Dr.& CR 46A	South side of intersection	108+44	109+89	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing 85-ft west of intersection of Bright Meadow Dr. & CR 46A	West of intersection	108+43	108+44	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing 500-ft east of intersection of Bright Meadow Dr. & CR 46A	N/A	114+26	114+27	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing 770-ft west of intersection of Lake Como Dr. & CR 46A	N/A	119+44	119+48	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing 610-ft west of intersection of Lake Como Dr. & CR 46A	N/A	120+91	120+92	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing of I-4 Corridor, 2980-ft south of CR 46A, I-4 overpass	North side of pedestrian overpass	2355+88	2357+16	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing of I-4 Corridor 3030-ft south of CR 46A, I-4 overpass	South of pedestrian overpass	1244+42	2356+76	No
Electricity	Florida Power and Light	13 KV Underground Electric	From station 10+00 on CR 46A to intersection of Banana Lake Rd & CR 46A	Varies from north to center of road	10+00	30+01	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing 230-ft west of intersection of St. Albans Loop & CR 46A	West bound lane only	22+70	22+95	No
Electricity	Florida Power and Light	13 KV Underground Electric	From 230-ft west to 100-ft east of St. Albans Loop on CR 46A	Center of road	22+70	26+43	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing at intersection of St. Albans Loop & CR 46A	North east corner of intersection	25+90	26+43	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing at intersection of Banana Lake Rd & CR 46A	West side of intersection	30+03	30+04	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing at intersection of Banana Lake Rd & CR 46A	Diagonally across intersection	30+26	30+73	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing at intersection of Business Center Rd & CR 46A	East side of intersection	38+31	38+33	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing at intersection of International Pkwy & CR 46A	North side of intersection	45+06	46+86	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing at intersection of Colonial Center Pkwy & CR 46A	North side of intersection	57+68	58+78	No
Electricity	Florida Power and Light	13 KV Underground Electric	Crossing at intersection of Lake George Dr. & CR 46A	North side of intersection	37+28	38+33	No
Electricity	Florida Power and Light	230 KV Aerial Electric	Three Crossings of I-4, 5720-ft north of the SR 46, I-4 underpass	N/A	2540+00	2544+26	No
Electricity	Florida Power and Light	230 KV Aerial Electric	Two Crossings of SR 46, 590-ft east of the intersection of Rinehart Road & SR 46	N/A	100+49	100+65	No
Electricity	Florida Power and Light	115 KV Aerial Electric	Crossing of I-4 at the US 17-92, I-4 underpass	N/A	2575+35	2575+44	No
Electricity	Florida Power and Light	115 KV Aerial Electric	Crossing of US 17-92,500-ft east of the intersection of US 17-92 and I-4 WB Ramp to US 17-92	N/A	74+46	75+35	No
Electricity	Florida Power and Light	115 KV Aerial Electric	Crossing at the intersection of Orange Blvd and Monroe Road	West side of intersection	2564+07	2565+19	Yes, adjust poles to be outside of proposed roadway

4.10 Florida Public Utilities

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Natural Gas	Florida Public Utilities	6" Natural Gas Main	Crossing on I-4 Corridor, 5410-ft south of Lake Mary Blvd, I-4 overpass	N/A	2213+86	2214+85	No
Natural Gas	Florida Public Utilities	6" Natural Gas Main	From intersection of Tournament Dr. & Lake Mary Blvd to intersection of International Way & Lake Mary Blvd on Lake Mary Blvd	South side of road	31+18	54+68	No
Natural Gas	Florida Public Utilities	6" Natural Gas Main	Crossing at intersection of International Way & Lake Mary Blvd	West side of intersection	54+65	54+67	No
Natural Gas	Florida Public Utilities	6" Natural Gas Main	Crossing at intersection of Rinehart Rd & Lake Mary Blvd	West side of intersection	122+46	122+47	No
Natural Gas	Florida Public Utilities	6" Natural Gas Main	From 670-ft west of intersection of Business Center Dr. & CR 46A to intersection of International Pkwy & CR 46A	South side of road	34+03	44+43	No
Natural Gas	Florida Public Utilities	6" Natural Gas Main	Crossing at intersection of International Pkwy & CR 46A	South side of intersection	44+43	47+50	No
Natural Gas	Florida Public Utilities	4"-6" Natural Gas Main	From intersection of N. Oregon St & SR 46 to east to station 141+00 on SR 46	North side of road	61+86	141+00	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	Crossing at intersection of Markham Woods Blvd & Lake Mary Blvd	East side of intersection	10+99	11+61	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Natural Gas	Florida Public Utilities	4" Natural Gas Main	From intersection of Markham Woods Blvd & Lake Mary Blvd to intersection of Tournament Dr. & Lake Mary Blvd	North side of road	11+49	31+23	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	Crossing at intersection of Tournament Dr. & Lake Mary Blvd	West side of intersection	31+23	31+18	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	Crossing at intersection of Rinehart Rd & Lake Mary Blvd	North side of intersection	122+47	123+87	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	From intersection of Rinehart Rd & Lake Mary Blvd east to station 138+00 on Lake Mary Blvd	North side of road	123+87	138+00	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	Crossing of SR 417 at Towne Center Blvd underpass	West side underpass	59+85	60+64	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	From station 10+00 on SR 46 to intersection of Terracina Dr. & SR 46	North side of road	10+00	40+55	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	Crossing at intersection of N. Oregon St & SR 46	North side of intersection	60+60	62+78	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	Crossing at intersection of Hickman Dr. & SR 46	East side of intersection	85+51	85+74	No
Natural Gas	Florida Public Utilities	4" Natural Gas Main	Crossing 330-ft west of intersection of Central Park Dr. & SR 46	N/A	135+43	135+48	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	From 130-ft west to 300-ft east of intersection of International Way & Lake Mary Blvd	South side of road	54+26	58+78	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing at intersection of International Way & Lake Mary Blvd	South side of intersection	55+22	56+68	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing at intersection of Primera Blvd & Lake Mary Blvd	East side of intersection	89+92	89+96	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	From intersection of Primera Blvd & Lake Mary Blvd to 410-ft west of intersection of N. Sun Dr. & Lake Mary Blvd	North side of road	89+93	102+06	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing at intersection of N. Sun Dr. & Lake Mary Blvd	South side of intersection	105+68	106+77	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	From 450-ft west to 600-ft east of N. Sun Dr. & Lake Mary Blvd	South side of road	102+35	112+06	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing 150-ft west of intersection of International Pkwy & CR 46A	N/A	44+43	44+53	no
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing at intersection of Townpark Ave & CR 46A	East side of intersection	51+75	51+91	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing 260-ft west of intersection of Colonial Center Pkwy & CR 46A	N/A	55+49	55+70	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	From 190-ft west of intersection of Colonial Center Pkwy & CR 46A to intersection of Rinehart Rd & CR 46A	South side of road	55+70	79+53	Yes, adjust for bridge improvements
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing at intersection of Rinehart Rd & SR 46	East side of intersection	95+18	95+20	No
Natural Gas	Florida Public Utilities	2" Natural Gas Main	Crossing at intersection of Monroe Rd & SR 46	East side of intersection	122+83	122+86	No
Natural Gas	Florida Public Utilities	1.25" Natural Gas Main	From Towne Center Blvd, SR 417 underpass east to 500- ft east of Towne Center Blvd	North side of road	60+63	65+64	Yes, adjust to run paralle to road

4.11 FPL Fibernet

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	FPL Fibernet	Unknown Size Underground Fiber Optic	Crossing at the EE. Williamson, I-4 Overpass	North side of overpass	2102+14	2105+23	No
Communications	FPL Fibernet	Unknown Size Aerial Fiber Optic	Crossing of SR 417, 1350-ft west of Towne Center Blvd, SR 417 underpass	N/A	48+69	49+80	No

4.12 Lake Mary Utilities

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Wastewater/ Storm Water	Lake Mary Utilities	8" Sanitary Main	From station 10+00 on Lake Mary Blvd east for 650-ft	Varies from north to center of road	10+00	16+50	No
Wastewater/ Storm Water	Lake Mary Utilities	4" Sanitary Main	From intersection east of Primera Blvd & Lake Mary Blvd intersection to intersection of N. Sun Dr. & Lake Mary Blvd	North side of road	91+18	98+63	No
Water	Lake Mary Utilities	20" Water Main	Crossing at intersection of Rinehart Rd. & Lake Mary Blvd	East side of intersection	123+91	123+92	No
Water	Lake Mary Utilities	16" Water Main	From intersection of Primera Blvd & Lake Mary Blvd east to station 138+00 on Lake Mary Blvd	Varies from center to south side of road	89+66	138+00	Νο
Water	Lake Mary Utilities	12" Water Main	From 5420-ft west of to 5200-ft west of Lake Mary Blvd, I-4 corridor	East side of road	2211+10	2213+00	Yes, adjust to be paralle to proposed road
Water	Lake Mary Utilities	12" Water Main	From 5900-ft to 5500-ft south of Lake Mary Blvd, I-4 overpass	East side of road	2215+09	2220+33	No
Water	Lake Mary Utilities	12" Water Main	Crossing at intersection of Primera Blvd & Lake Mary Blvd	East center of intersection	89+63	89+66	No
Water	Lake Mary Utilities	12" Water Main	Crossing at intersection of N. Sun Dr. & Lake Mary Blvd	East side of intersection	106+74	106+75	No
Water	Lake Mary Utilities	12" Water Main	Crossing at intersection of Rinehart Rd & Lake Mary Blvd	West side of intersection	122+66	122+66	No
Water	Lake Mary Utilities	12" Water Main	From intersection of Rinehart Rd & CR 46A east to station 139+00 on CR 46A	Varies from center to south side of road	125+89	139+00	No
Water	Lake Mary Utilities	8" Water Main	Crossing on Lake Mary Blvd, 425-ft east of intersection of Primera Blvd & Lake Mary Blvd	N/A	93+58	93+65	No
Water	Lake Mary Utilities	8" Water Main	Crossing on Lake Mary Blvd, 240-ft west of intersection of N. Sun Dr. & Lake Mary Blvd	N/A	109+90	109+91	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Water	Lake Mary Utilities	8" Water Main	Crossing on Lake Mary Blvd, 240-ft east of intersection of N. Sun Dr. & Lake Mary Blvd	N/A	108+74	108+74	No
Water	Lake Mary Utilities	8" Water Main	Crossing on Lake Mary Blvd, 700-ft east of intersection of N. Sun Dr. & Lake Mary Blvd	N/A	113+17	113+22	No
Water	Lake Mary Utilities	8" Water Main	Crossing on Lake Mary Blvd, 490-ft west of intersection of Rinehart Rd. & Lake Mary Blvd	N/A	118+30	118+33	No
Water	Lake Mary Utilities	8" Water Main	Crossing at intersection of Rinehart Rd. & Lake Mary Blvd	North side of intersection	122+66	123+92	No
Water	Lake Mary Utilities	8" Water Main	Crossing on Lake Mary Blvd, 450-ft east of intersection of Rinehart Rd & Lake Mary Blvd	N/A	127+73	127+74	No
Water	Lake Mary Utilities	8" Water Main	Crossing on Lake Mary Blvd, 500-ft west to station 138+00 Lake Mary Blvd	N/A	133+06	133+07	No
Water	Lake Mary Utilities	6" Water Main	Crossing at intersection east of Primera Blvd & Lake Mary Blvd intersection	East side of intersection	89+63	89+67	No
Water	Lake Mary Utilities	Unknown Size Reclaim Main	Crossing at intersection of Primera Blvd & Lake Mary Blvd	West side of intersection	88+76	88+87	No
Water	Lake Mary Utilities	Unknown Size Reclaim Main	From intersection of Primera Blvd & Lake Mary Blvd west to station 139+00 on Lake Mary Blvd	South side of road	89+72	139+00	No
Water	Lake Mary Utilities	Unknown Size Reclaim Main	Crossing on Lake Mary Blvd, 460-ft east of intersection of Rinehart Rd & Lake Mary Blvd	N/A	127+86	127+87	No
Water	Lake Mary Utilities	Unknown Size Reclaim Main	Crossing on I-4 Corridor, 2920-ft south of CR 46A, I-4 overpass	South of pedestrian overpass	2355+00	2356+82	No
Water	Lake Mary Utilities	Unknown Size Reclaim Main	Crossing at intersection of Rinehart Rd & CR 46A	South east corner of intersection	83+10	83+28	No

4.13 Level 3 Communications

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	Level 3	12-1.25" Underground Fiber Optic	Crossing 700-ft south of intersection of Barwick Rd & US 17-92	N/A	33+31	33+49	No
Communications	Level 3	3-1.25" Underground Fiber Optic	Crossing at intersection of Primera Blvd & Lake Mary Blvd	West side of intersection	88+23	88+68	No
Communications	Level 3	3-1.25" Underground Fiber Optic	Crossing at intersection of Primera Blvd & Lake Mary Blvd	East side of intersection	89+87	8+89	No

4.14 Sanlando Utilities

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Water	Sanlando Utilities	24" Water Main	Crossing 13750-ft south of Lake Mary Blvd, I-4 Overpass	N/A	2131+03	2131+86	No

4.15 Seminole County Utilities

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of International Pkwy & Lake Mary Blvd	West side of intersection	54+85	54+91	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of International Pkwy & Lake Mary Blvd	North side of intersection	54+91	56+35	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of Markham Woods Rd & Lake Mary Blvd	North side of intersection	9+00	10+00	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	From intersection of Markham Woods Rd & Lake Mary Blvd to intersection of International Pkwy & Lake Mary Blvd	North side of road	10+00	54+88	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	From intersection of Keenwicka Dr. & CR 46A to intersection of St. Albans Loop & CR 46A	Center/north side of road	7+26	12+88	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of St. Albans Loop & CR 46A	East side of intersection	25+67	25+73	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of Orange Blvd & CR 46A	West side of intersection	30+07	30+13	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of Orange Blvd & CR 46A	South side of intersection	30+16	30+51	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of Rinehart Rd & CR 46A	East side of intersection	81+16	81+25	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of International Pkwy & Wekiva Pkwy	Diagonally across intersection	9+11	11+28	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of International Pkwy & Wekiva Pkwy	Center of intersection	9+52	10+43	No
Nastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	From Intersection of International Pkwy & Wekiva Pkwy to beginning of Wekiva Pkwy on SR 417	North side of road	11+28	25+16	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing of I-4 Corridor 2040-ft west of SR 417 underpass	N/A	2403+97	2404+19	Yes, extend across proposed I-4 Corridor
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing of SR 417 at Towne Center Blvd underpass	East side of underpass	58+97	62+14	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing of SR 46 270-ft west of intersection of Hickman Dr. & SR 46	N/A	82+06	82+08	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	From station 10+00 on SR 46 east to SR 46 west bound ramp to I-4 west bound	North side of road	10+00	68+94	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at SR 46 west bound ramp to I-4 west bound	Center of ramp	68+94	68+95	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing at intersection of N. Oregon St & SR 46	East side of intersection	62+46	62+51	No
Wastewater/ Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Two Crossings of I-4 Corridor at Orange Blvd & US 17-92 underpasses	Center/east side of underpass	2564+91	2564+96	Yes, extend across proposed I-4 Corridor
Water	Seminole County Utilities	Unknown Size Water Main	Crossing of I-4 Corridor, 4810-ft west of Lake Mary Blvd Overpass	N/A	2220+33	2220+34	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of Markham Woods Rd & Lake Mary Blvd	Center of intersection	10+90	12+01	No
Water	Seminole County Utilities	Unknown Size Water Main	From intersection of Markham Woods Rd & Lake Mary Blvd to intersection of International Pkwy & Lake Mary Blvd	North side of road	12+01	54+77	Νο
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of International Pkwy & Lake Mary Blvd	East side of intersection	56+37	56+38	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing 280-ft east of intersection of International Pkwy & Lake Mary Blvd	N/A	58+33	58+37	No
Water	Seminole County Utilities	Unknown Size Water Main	From intersection of International Pkwy & Lake Mary Blvd to intersection of I-4 East Bound Ramp to Lake Mary Blvd & Lake Mary Blvd	South side on road	58+33	63+05	No
Water	Seminole County Utilities	Unknown Size Water Main	From 280-ft east to intersection of International Pkwy & Lake Mary Blvd	North side of road	56+70	56+37	No
Water	Seminole County Utilities	Unknown Size Water Main	From intersection of Lake Emma Rd & Lake Mary Blvd to intersection of Sun Dr. & Lake Mary Blvd	South side of road	90+03	106+77	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing of I-4 Corridor at Cross Seminole Trail Overpass	West side of overpass	2355+20	2356+92	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of Keenwicka Dr. & CR 46A	West side of intersection	4+45	4+49	No
Water	Seminole County Utilities	Unknown Size Water Main	From intersection of Keenwicka Dr. & CR 46A to intersection of International Pkwy & CR 46A	South side of road	4+45	45+42	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of St. Albans Loop & CR 46A	East side of intersection	13+66	13+70	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of Orange Blvd & CR 46A	East side of intersection	73+76	73+84	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of Lake George Dr. & CR 46A	East side of intersection	38+70	38+71	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of International Pkwy & CR 46A	West side of intersection	44+85	45+51	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of International Pkwy & CR 46A	South side of intersection	45+40	46+63	No
Water	Seminole County Utilities	Unknown Size Water Main	From intersection to 320-ft east of International Pkwy & Lake Mary Blvd	South side of road	56+38	58+58	No
Water	Seminole County Utilities	Unknown Size Water Main	From station 10+00 on SR 46 east to SR 46 west bound ramp to I-4 west bound	North side of road	10+00	69+05	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of International Pkwy & SR 46	West side of intersection	40+45	40+46	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of N. Oregon St. & SR 46	East side of intersection	62+57	62+58	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing of SR 46 270-ft west of intersection of Hickman Dr. & SR 46	N/A	82+19	82+28	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at SR 46 west bound ramp to I-4 west bound	Center of ramp	2483+76	2491+20	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing at intersection of Orange Blvd & Kastner Pl.	East side of intersection	2557+41	2558+02	No
Water	Seminole County Utilities	Unknown Size Water Main	From 1200-ft west of I-4 overpass on Orange Blvd to intersection of Orange Blvd & Kastner Pl.	North side of road	2555+23	2558+02	No
Water	Seminole County Utilities	Unknown Size Water Main	Crossing 100-ft east of intersection of Orange Blvd & Kastner Pl.	Center/east side of underpass	2557+72	2558+65	No
Water	Seminole County Utilities	Unknown Size Water Main	Two Crossings of I-4 Corridor at Orange Blvd & US 17-92 underpasses	Center/east side of underpass	2564+54	2564+77	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	Crossing of I-4 Corridor, 4810-ft west of Lake Mary Blvd Overpass	N/A	2220+45	2220+50	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	Crossing at intersection of Markham Woods Rd & Lake Mary Blvd	East side of intersection	10+79	11+36	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	From 350-ft east of intersection of Markham Woods Rd & Lake Mary Blvd to intersection of International Pkwy & Lake Mary Blvd	North side of road	14+27	54+80	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	Crossing 280-ft east of intersection of International Pkwy & Lake Mary Blvd	N/A	58+45	58+47	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	From 280-ft east to intersection of International Pkwy & Lake Mary Blvd	North side of road	56+86	58+47	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	Crossing at intersection of Primera Blvd & Lake Mary Blvd	West side of intersection	88+86	88+87	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	Crossing of I-4 Corridor at Cross Seminole Trail Overpass	West side of overpass	2355+00	2356+68	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	From intersection of Keenwicka Dr. & CR 46A to intersection of International Pkwy & CR 46A	North side of road	6+51	45+38	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	Crossing at intersection of International Pkwy & CR 46A	East side of intersection	46+58	46+67	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	Crossing at intersection of Wekiva Pkwy & International Pkwy	West side of intersection	9+60	10+14	No
Water	Seminole County Utilities	Unknown Size Reclaim Water Main	Crossing at intersection of Bernini Way & SR 46	West side of intersection	34+86	34+93	No

4.16 TW Telecom

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	TW Telecom	Fiber Optic Cable	From International Pkwy to Primera Blvd on Lake Mary Blvd	North side of road	56+74	88+72	No
Communications	TW Telecom	Fiber Optic Cable	Crossing of I-4 at Lake Mary Blvd overpass	North side of overpass	70+08	74+26	No
Communications	TW Telecom	Fiber Optic Cable	Crossing at intersection of Primera Blvd & Lake Mary Blvd	West side of intersection	88+72	88+87	No
Communications	TW Telecom	Fiber Optic Cable	Crossing at intersection of Business Center Dr. & CR 46A	East side of intersection	38+37	38+40	No
Communications	TW Telecom	Fiber Optic Cable	Crossing at intersection of International Pkwy & Lake Mary Blvd	North side of intersection	55+95	57+55	No
Communications	TW Telecom	Fiber Optic Cable	Crossing at intersection of I-4 eastbound ramp to CR 46A & CR 46A	East side of intersection	72+32	73+61	Yes, adjust to run paralle to road
Communications	TW Telecom	Fiber Optic Cable	From intersection of I-4 west bound ramp to CR 46A & CR 46A to intersection of Rinehart Rd & CR 46A	South side of road	58+68	79+99	Yes, adjust to run parallel to road
Communications	TW Telecom	Fiber Optic Cable	Crossing at intersection of Rinehart Rd & CR 46A	South side of intersection	79+99	81+69	No
Communications	TW Telecom	Fiber Optic Cable	Crossing at CR 46A overpass of I-4	South side of overpass	66+90	71+45	Yes, adjust for bridge improvements

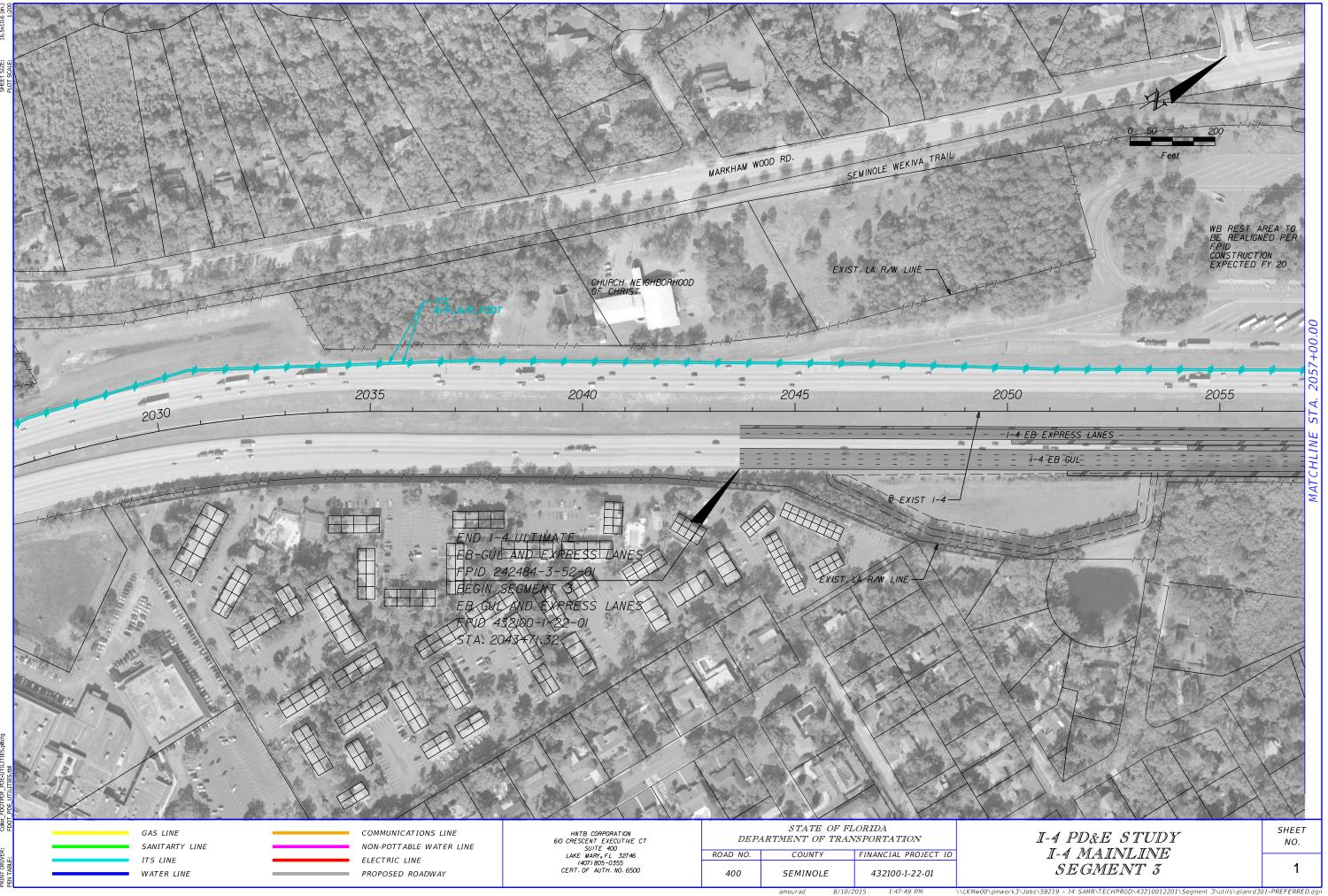
5.0 Summary

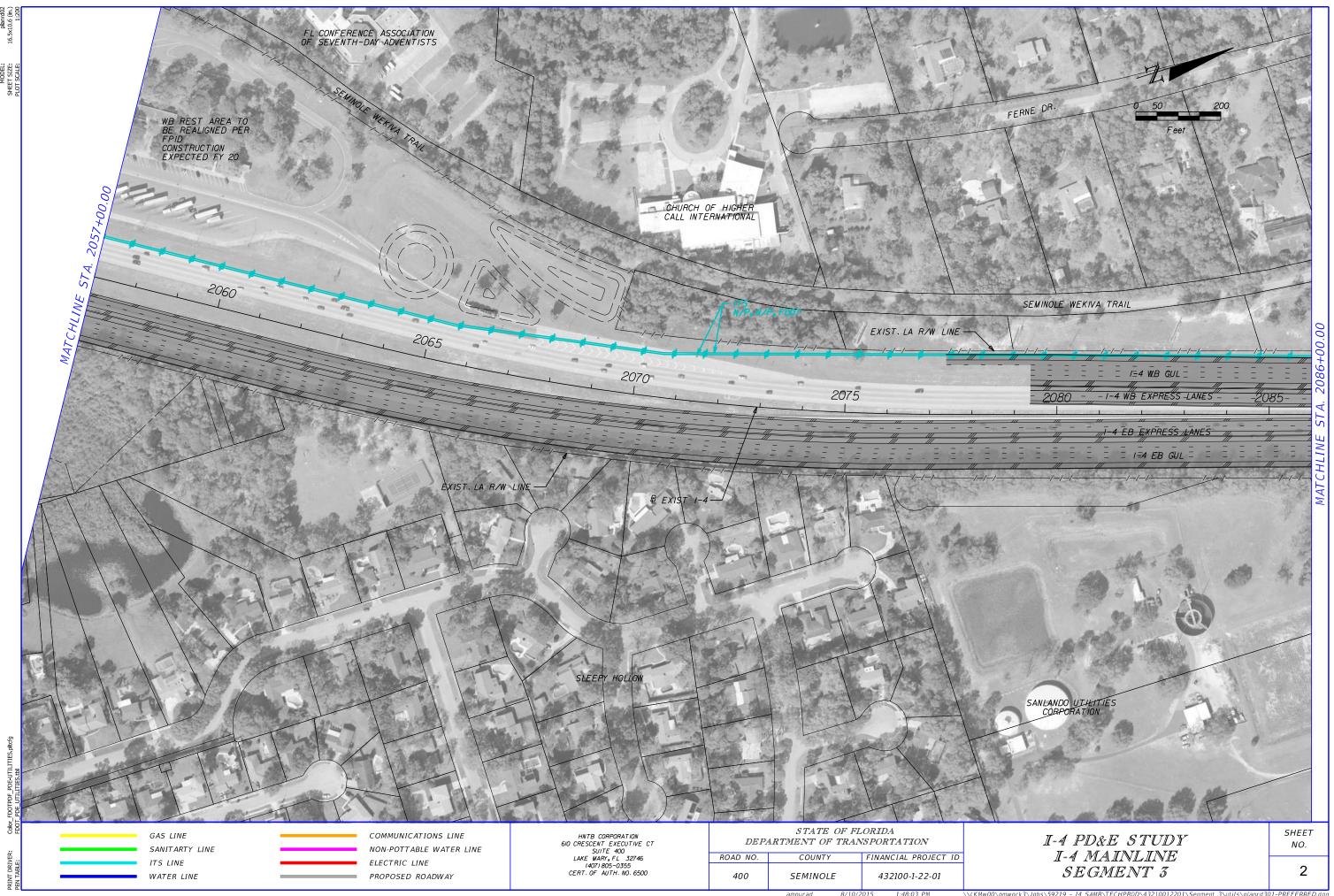
The appendix contains utility plan sheets showing utilities within the corridor of the project, as well as a detailed breakdown of the estimated cost of utilities requiring relocation. Our research has concluded utility relocation and adjustment costs will be in the range of \$1,645,500.

Appendix A	Estimate	Relocation Costs	
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Communications Communications Communications Communications Communications Electricity	ATT CenturyLink TW Telecom TW Telecom TW Telecom Duke Energy Distribution	9-4" PVC Duct Bank Underground Copper Cable Fiber Optic Cable Fiber Optic Cable Fiber Optic Cable	From intersection of I-4 east bound ramp to Lake Mary Blvd east to intersection of Lake Emma Rd & Lake Mary Blvd From 13720-ft to 11030-ft south of Lake Mary, I-4 overpass Crossing at intersection of I-4 eastbound ramp to CR 46A & CR 46A From intersection of I-4 west bound ramp to CR 46A & CR 46A to intersection of Rinehart Rd & CR 46A Crossing at CR 46A overpass of I-4	South side of road East side of road East side of intersection South side of road	77+98 2132+14 72+32	88+48 2158+62 73+61	Yes, adjust to run parallel to road Yes, adjust to run parallel to road Yes, adjust to run parallel to road	\$15,000 \$20,000 \$20,000
Communications Communications Communications	TW Telecom TW Telecom TW Telecom Duke Energy	Fiber Optic Cable	overpass Crossing at intersection of I-4 eastbound ramp to CR 46A & CR 46A From intersection of I-4 west bound ramp to CR 46A & CR 46A to intersection of Rinehart Rd & CR 46A	road East side of intersection South side of	72+32		to road Yes, adjust to run parallel	
Communications Communications	TW Telecom TW Telecom Duke Energy	Fiber Optic Cable	& CR 46A From intersection of I-4 west bound ramp to CR 46A & CR 46A to intersection of Rinehart Rd & CR 46A	intersection South side of		73+61		\$20.000
Communications	TW Telecom Duke Energy	•	CR 46A to intersection of Rinehart Rd & CR 46A					, = = , 0 0 0
	Duke Energy	Fiber Optic Cable	Crossing at CR 46A overpass of I-4		58+68	79+99	Yes, adjust to run parallel to road	\$20,000
Electricity	•.			South side of overpass	66+90	71+45	Yes, adjust for bridge improvements	\$22,500
		7.2 KV Aerial Electric	From 1500-ft to 5000-ft east of E.E. Williamson Overpass on I-4 Corridor	West side of road	2118+29	2157+66	Yes, adjust to run parallel to road	\$150,000
Electricity	Duke Energy Distribution	13 KV Underground Electric	Crossing at entrance of 7-11 on Lake Mary Blvd	North side of road	120+10	121+30	Yes, relocation of poles required	\$25,000
Electricity	Duke Energy Distribution	13 KV Underground Electric	Two lines from Lake Mary Overpass to 2760-ft east of Lake Mary, I-4 Overpass on I-4 Corridor	West side of road	2295+16	2266+33	Yes, adjust to run parallel to road	\$50,000
Electricity	Duke Energy Distribution	7.2 KV Underground Electric	From 160-ft east of intersection of International Pkwy & Lake Mary Blvd to 150-ft west of intersection of I-4 westbound ramp to Lake Mary Blvd & Lake Mary Blvd	North side of road	57+27	62+17	Yes, adjust to run parallel to road	\$15,000
Electricity	Duke Energy Transmission	230 KV Aerial Electric	Diagonal Crossing of I-4 Corridor, from 1560-ft west of to 730-ft east of SR 46, I-4 Underpass	Diagonally across road	2469+34	2490+52	Yes, relocation of poles required	\$600,000
Electricity	Florida Power and Light	13 KV Aerial Electric	Crossing at intersection of International Pkwy & Wekiva Pkwy	East side of intersection	10+94	11+81	Yes, relocation of poles required	\$50,000
Electricity	Florida Power and Light	115 KV Aerial Electric	Crossing at the intersection of Orange Blvd and Monroe Road	West side of intersection	2564+07	2565+19	Yes, adjust poles to be outside of proposed roadway	\$400,000
Natural Gas	Florida Public Utilities	2" Natural Gas Main	From 190-ft west of intersection of Colonial Center Pkwy & CR 46A to intersection of Rinehart Rd & CR 46A	South side of road	55+70	79+53	Yes, adjust for bridge improvements	\$10,000
Natural Gas	Florida Public Utilities	1.25" Natural Gas Main	From Towne Center Blvd, SR 417 underpass east to 500- ft east of Towne Center Blvd	North side of road	60+63	65+64	Yes, adjust to run parallel to road	\$10,000
Television	Bright House Networks	Unknown Size Underground CATV	From intersection of Wayside Dr. & SR 46 to intersection of Upsala Rd & SR 46	South side of road	61+96	120+99	Yes, adjust for bridge improvements	\$10,000
Wastewater/Storm Water	Seminole County Utilities	Unknown Size Sanitary Water Main	Crossing of I-4 Corridor 2040-ft west of SR 417 underpass	N/A	2403+97	2404+19	Yes, extend across proposed I-4 Corridor	\$66,000
Wastewater/ Storm Water 0	Seminole County Utilities	Unknown Size Sanitary Water Main	Two Crossings of I-4 Corridor at Orange Blvd & US 17-92 underpasses	Center/east side of underpass	2564+91	2564+96	Yes, extend across proposed I-4 Corridor	\$143,000
Water	Lake Mary Utilities	12" Water Main	From 5420-ft west of to 5200-ft west of Lake Mary Blvd, I-4 corridor	East side of road	2211+10	2213+00	Yes, adjust to be parallel to proposed road	\$19,000

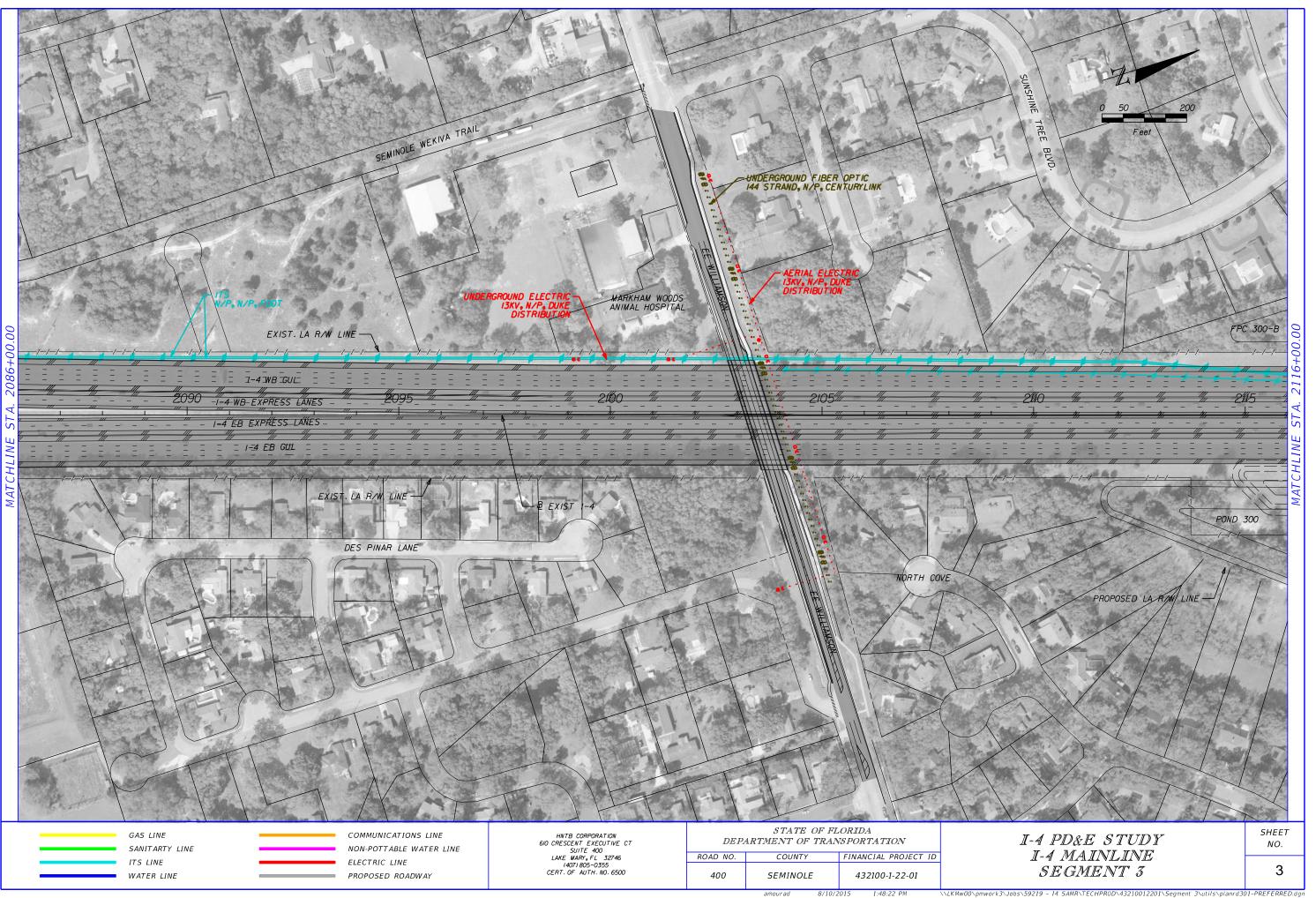
Appendix B: Existing Utility Plan Sheets

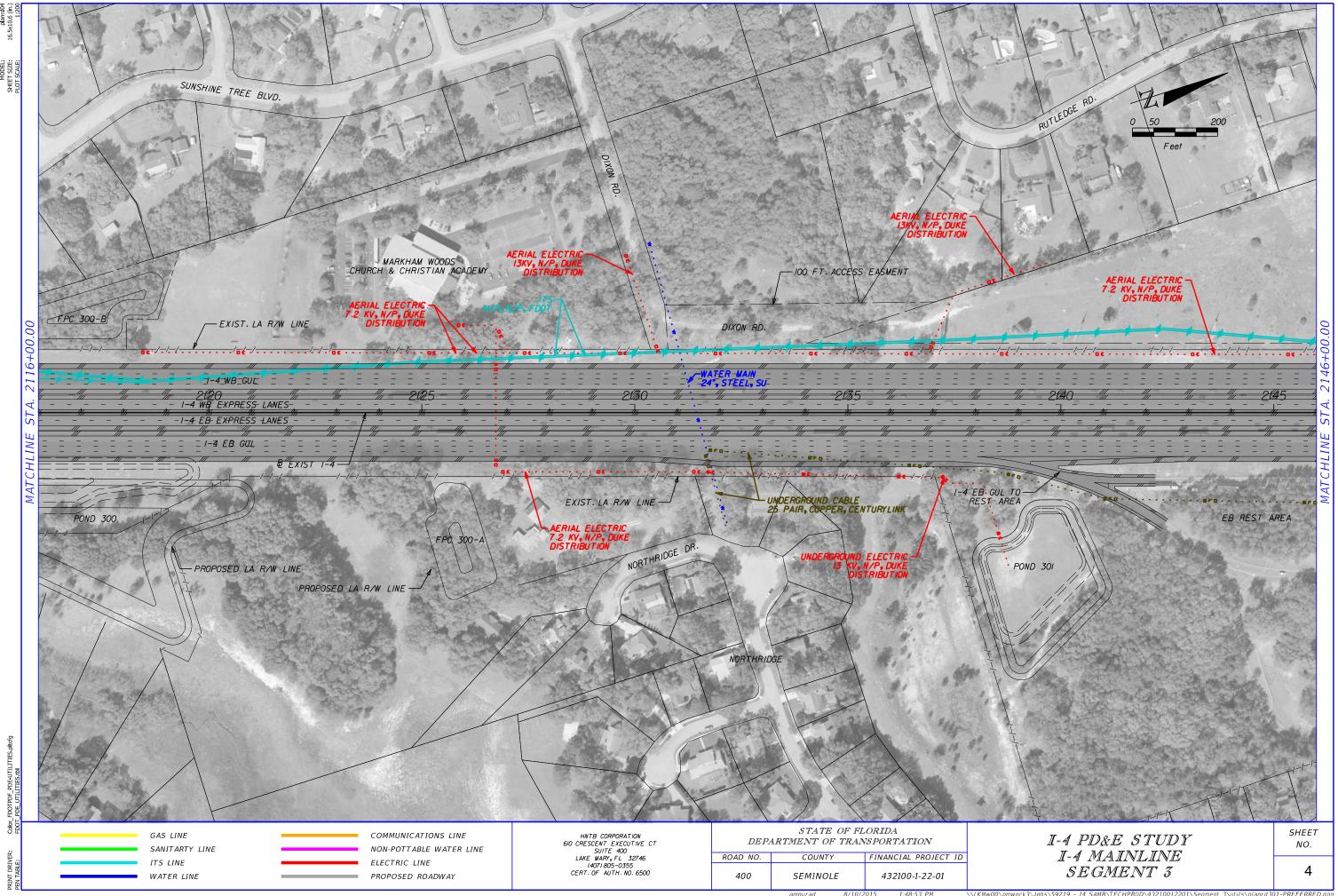


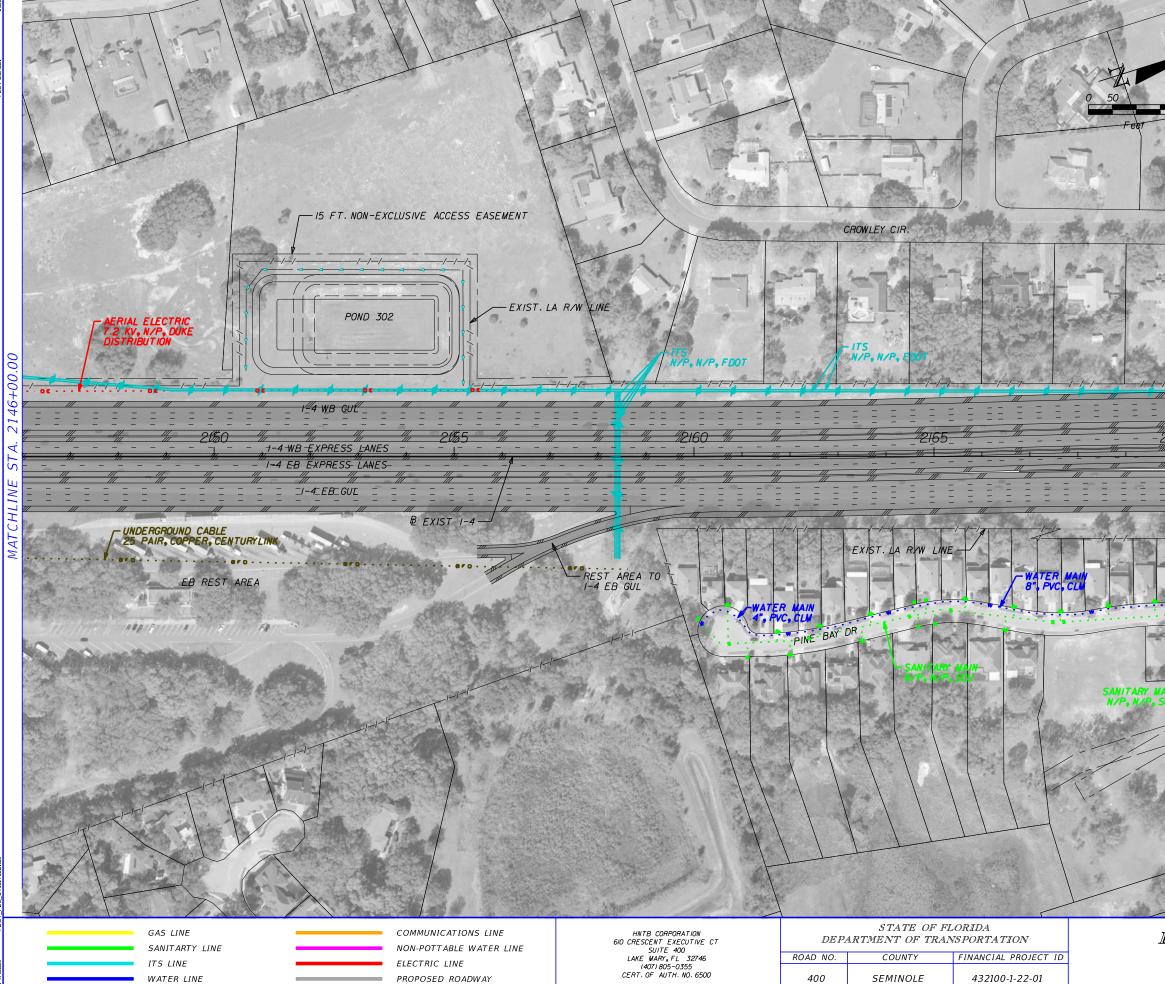


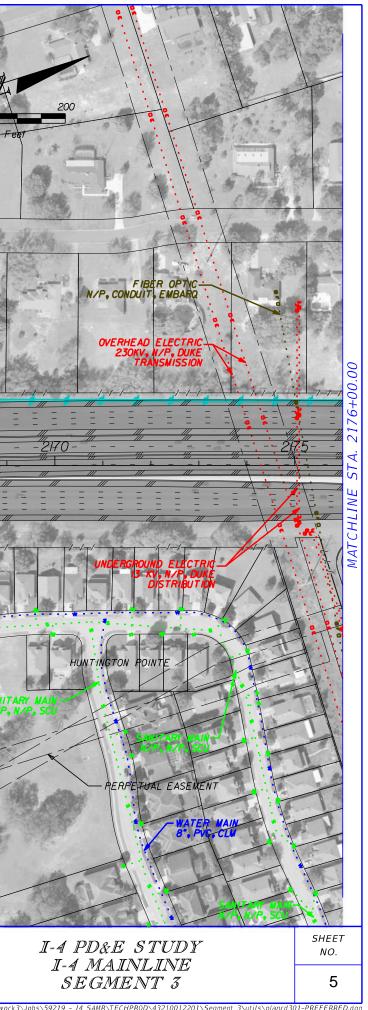
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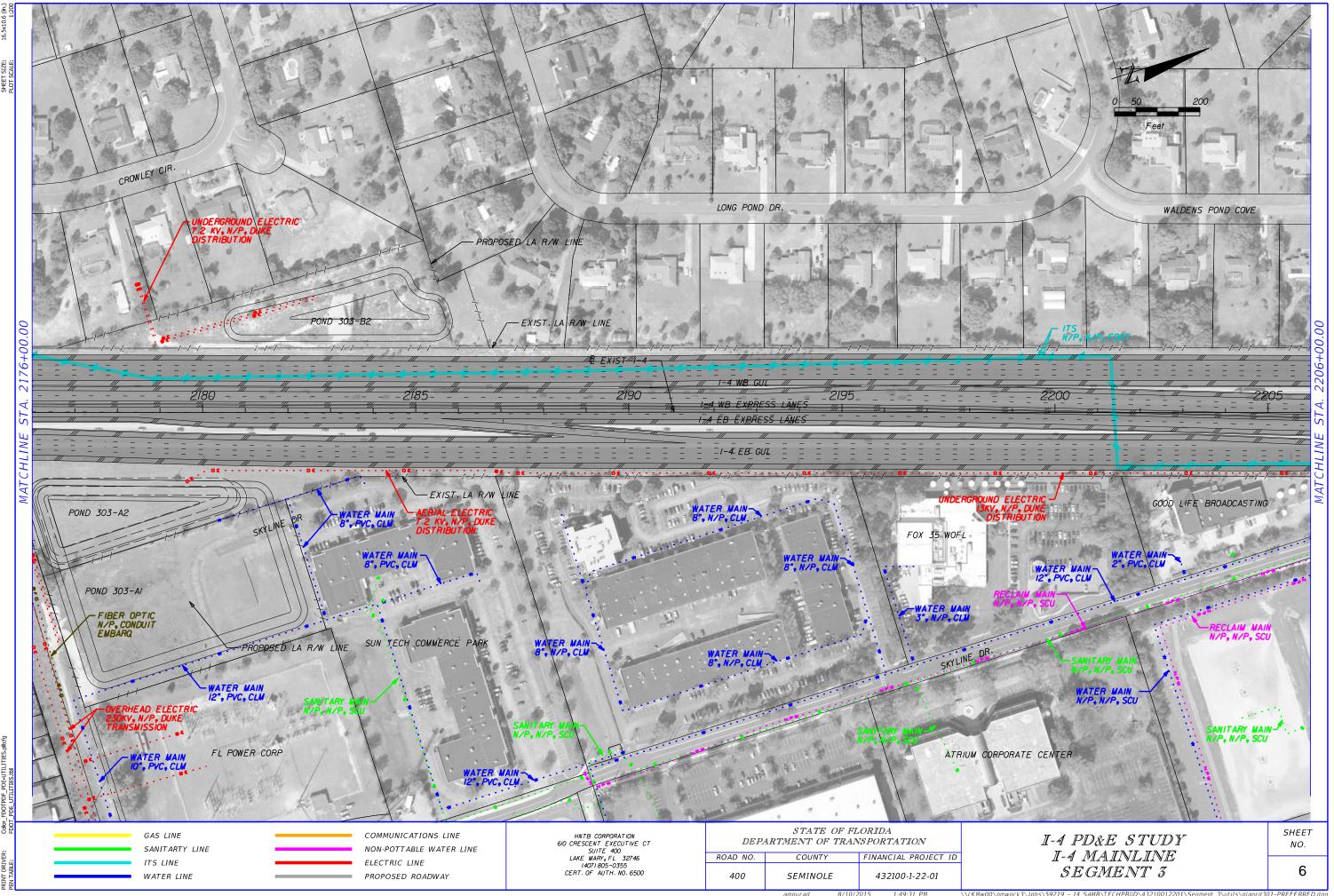




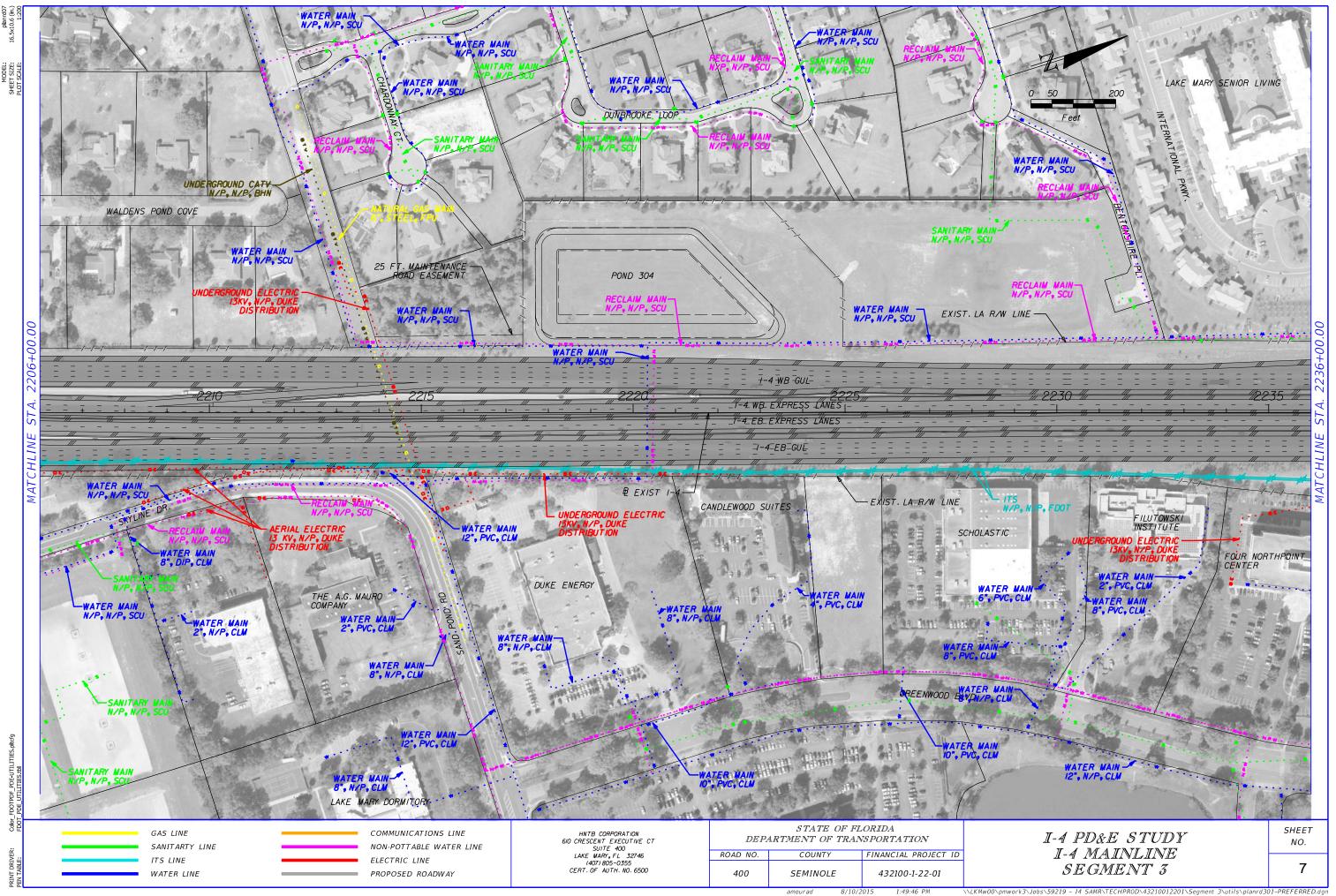


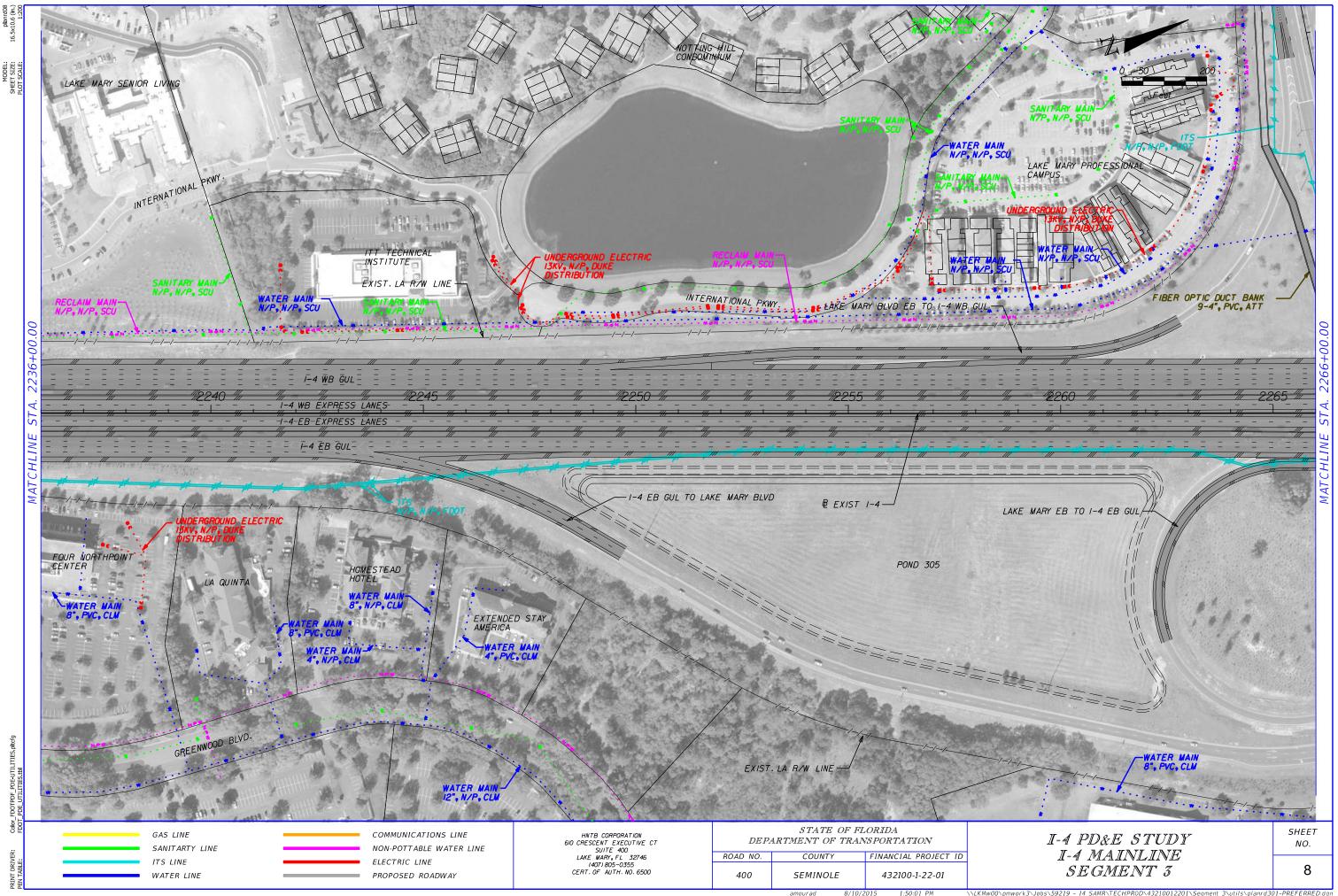
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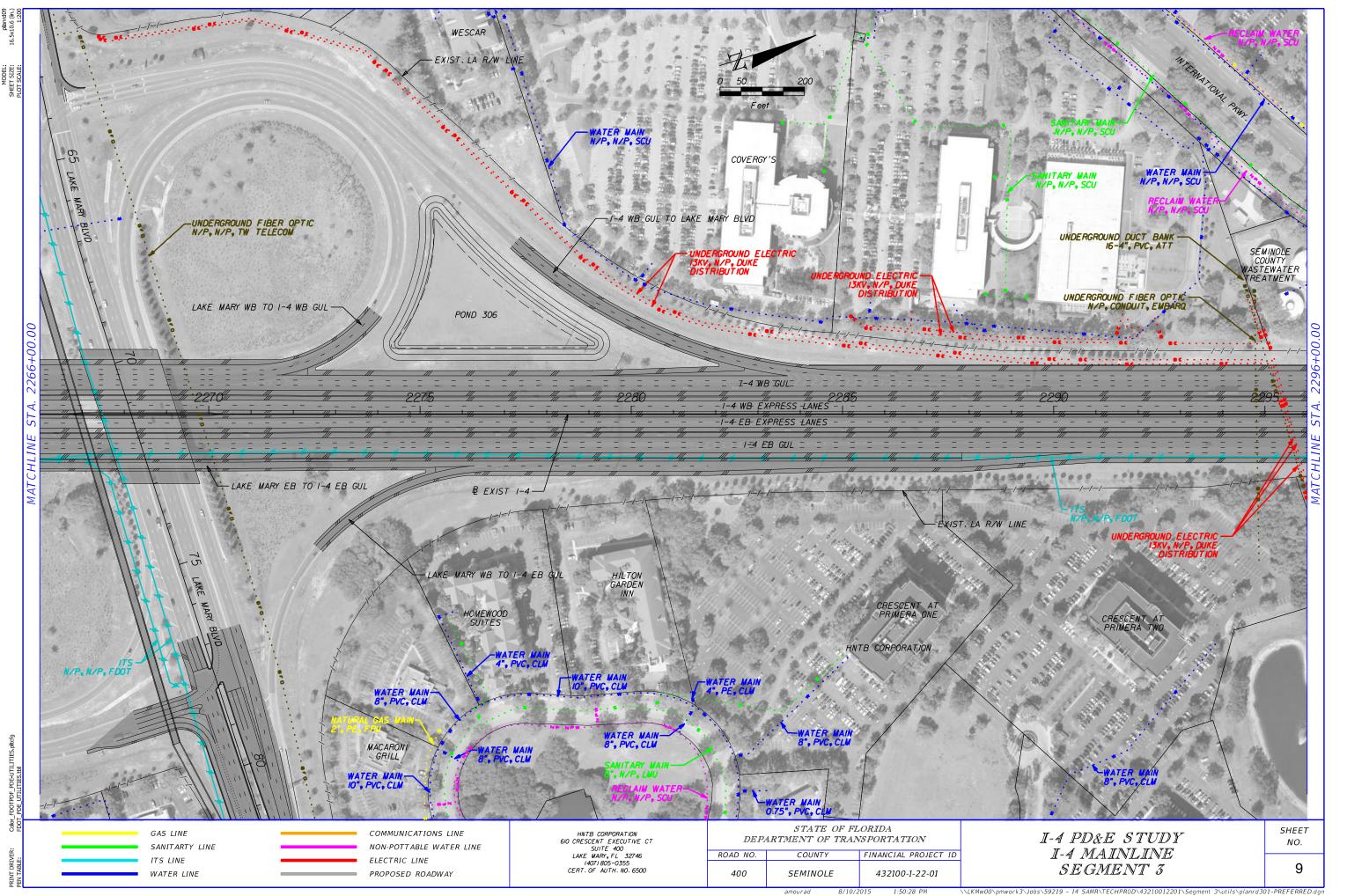
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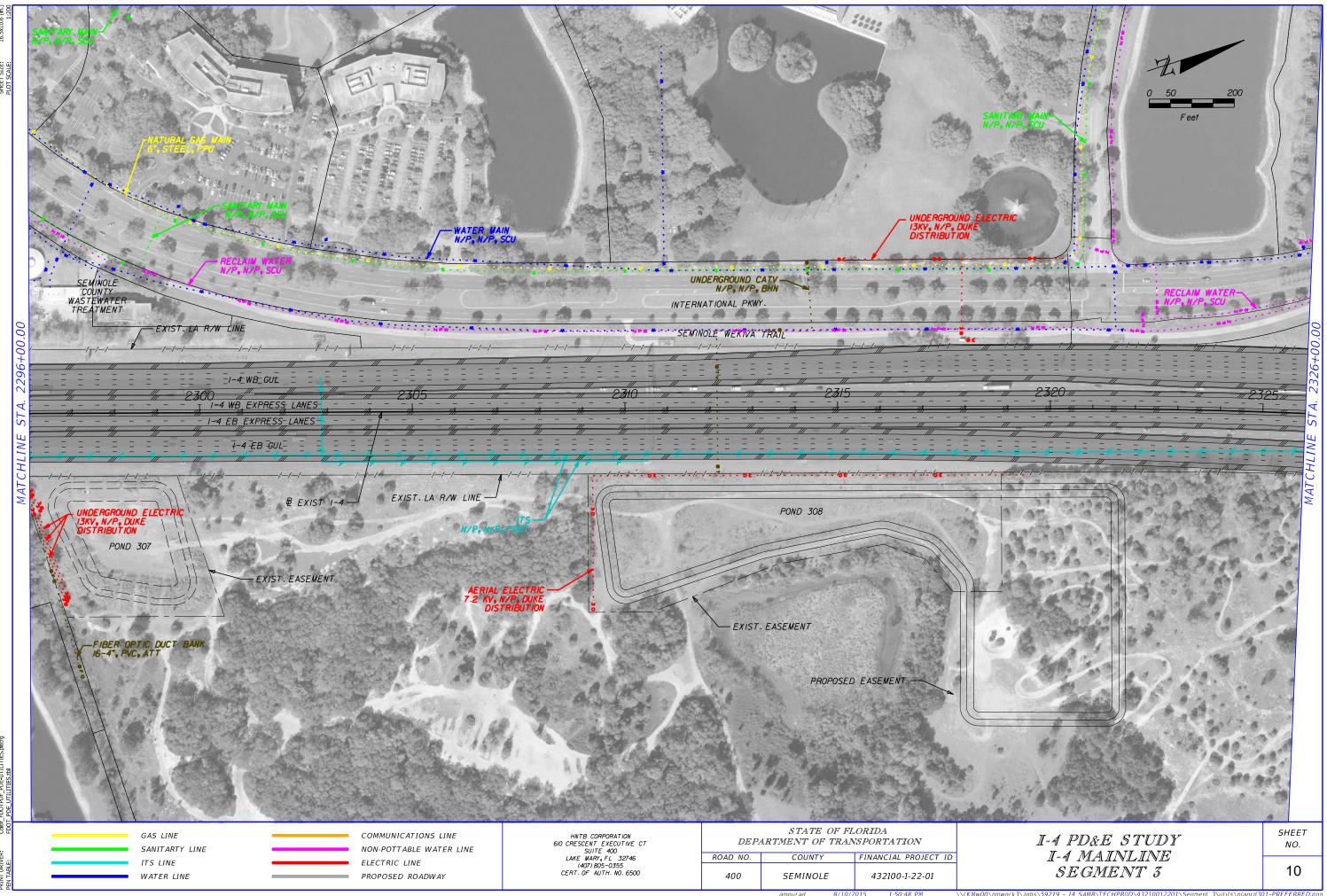


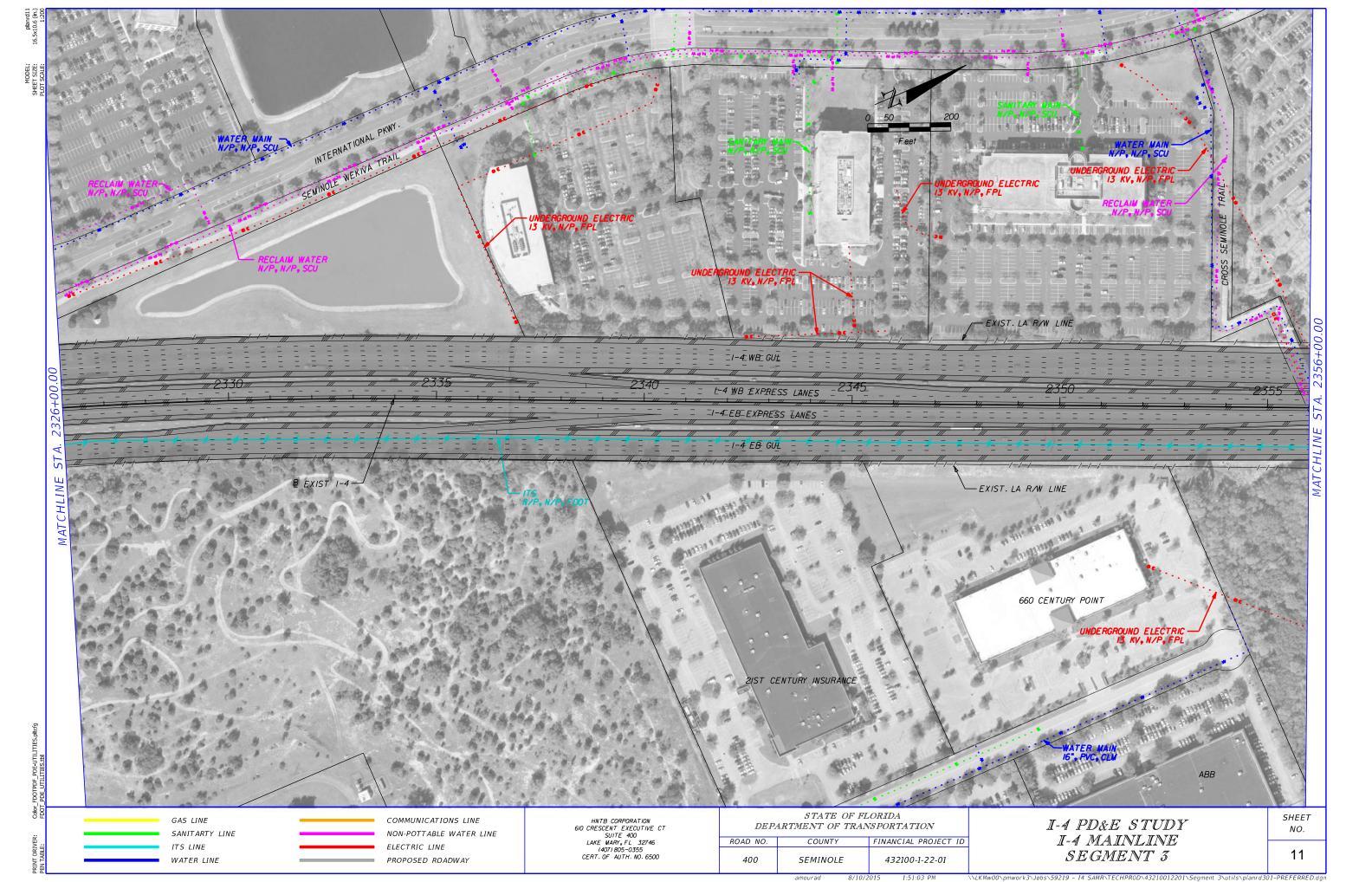
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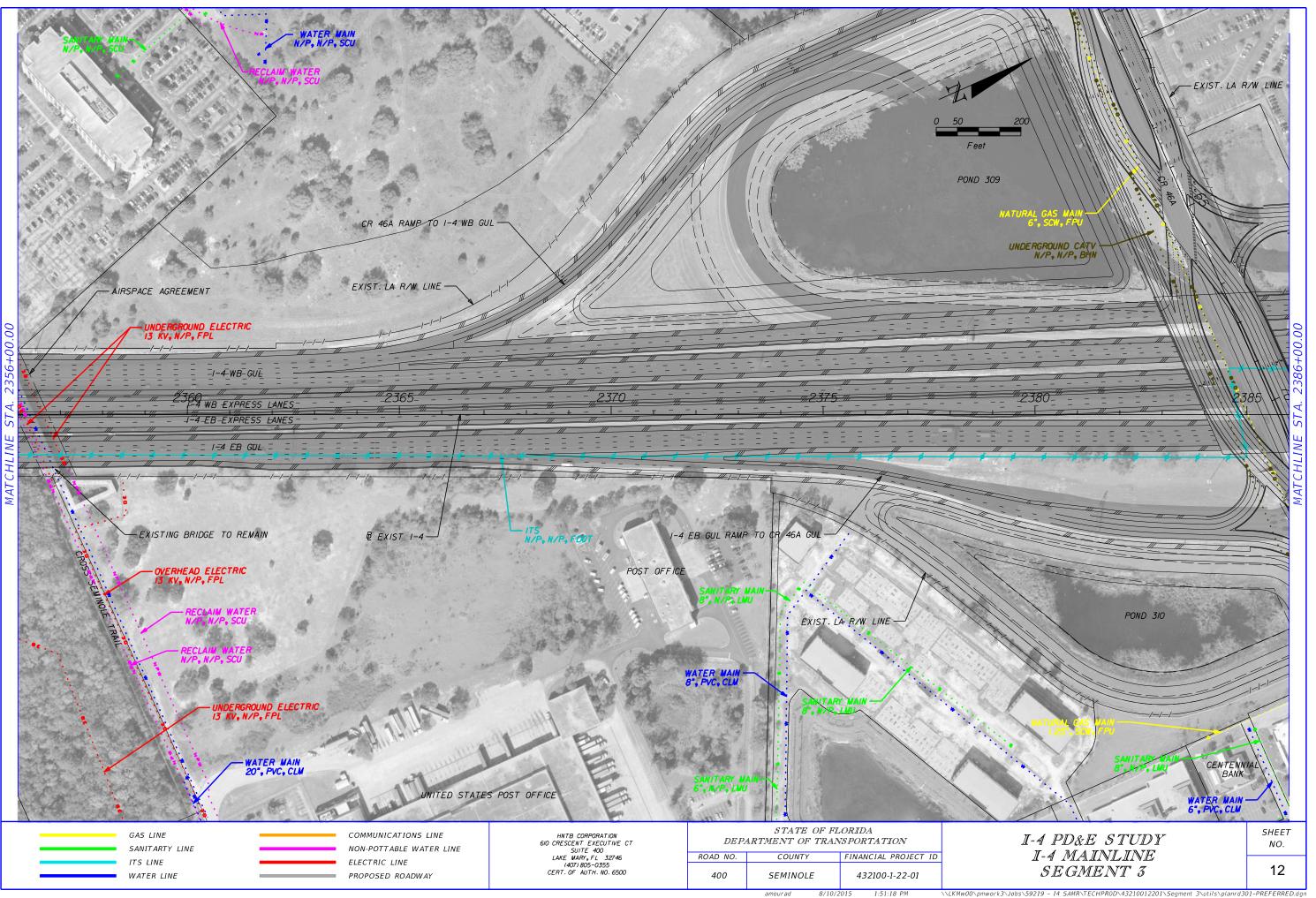


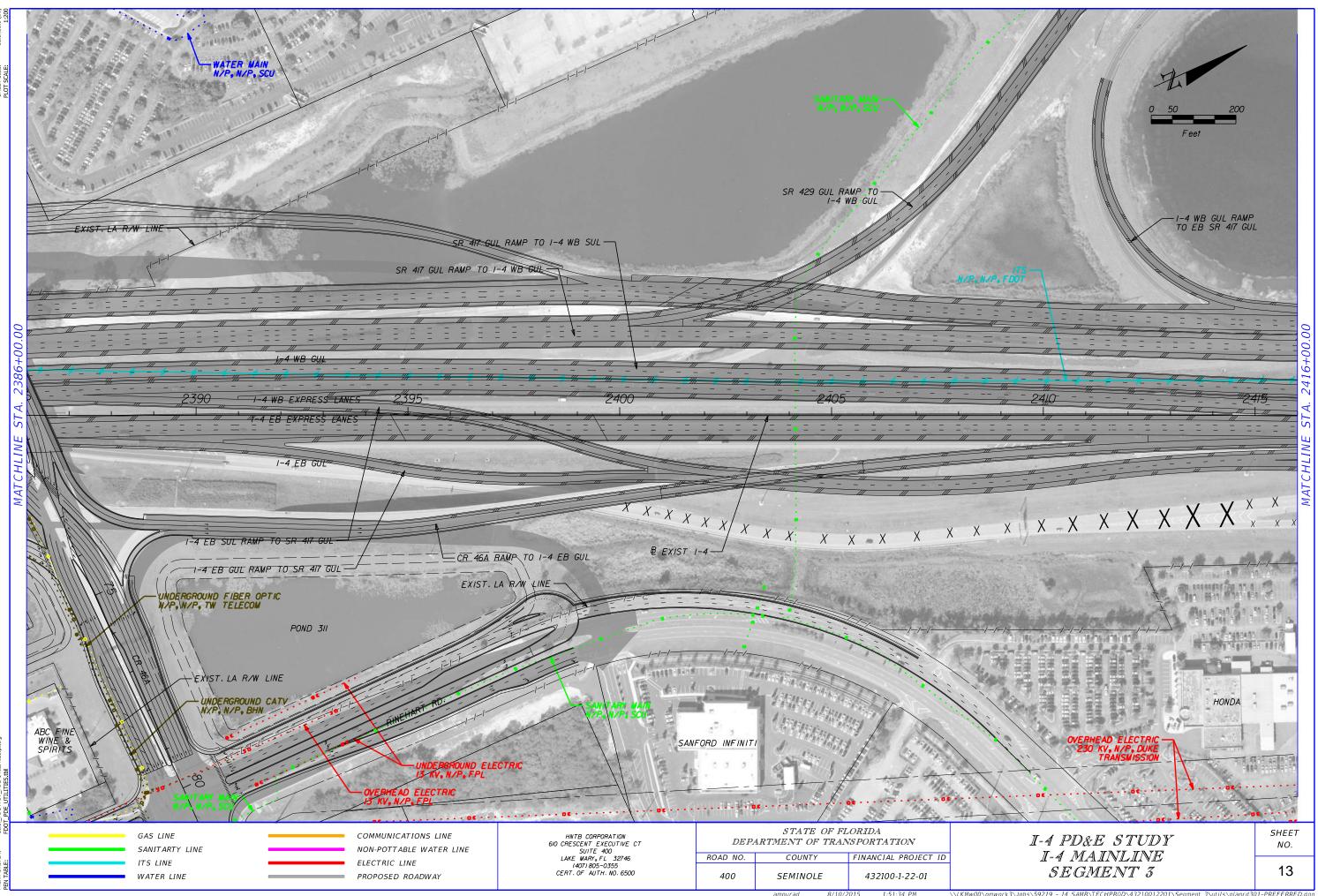




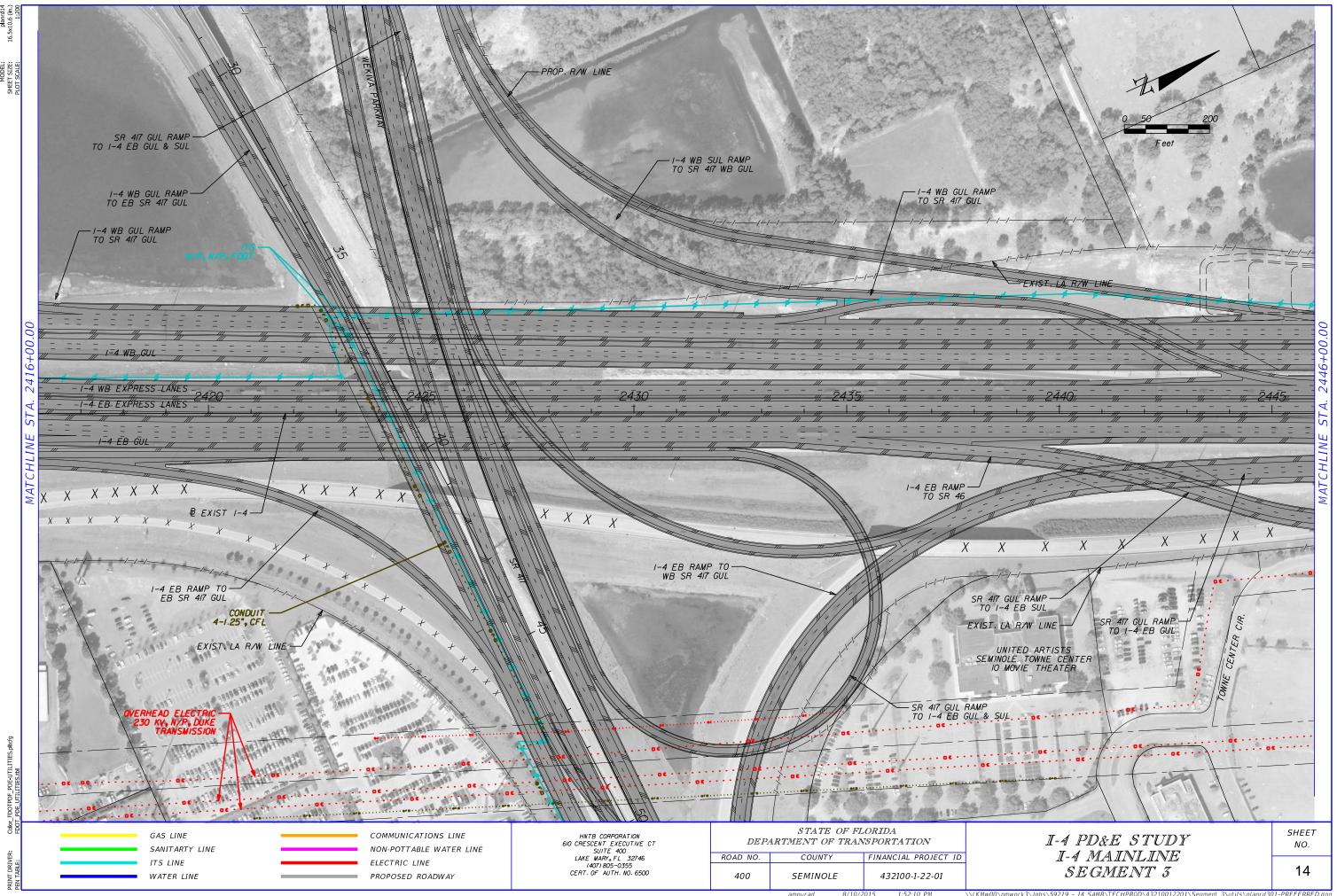


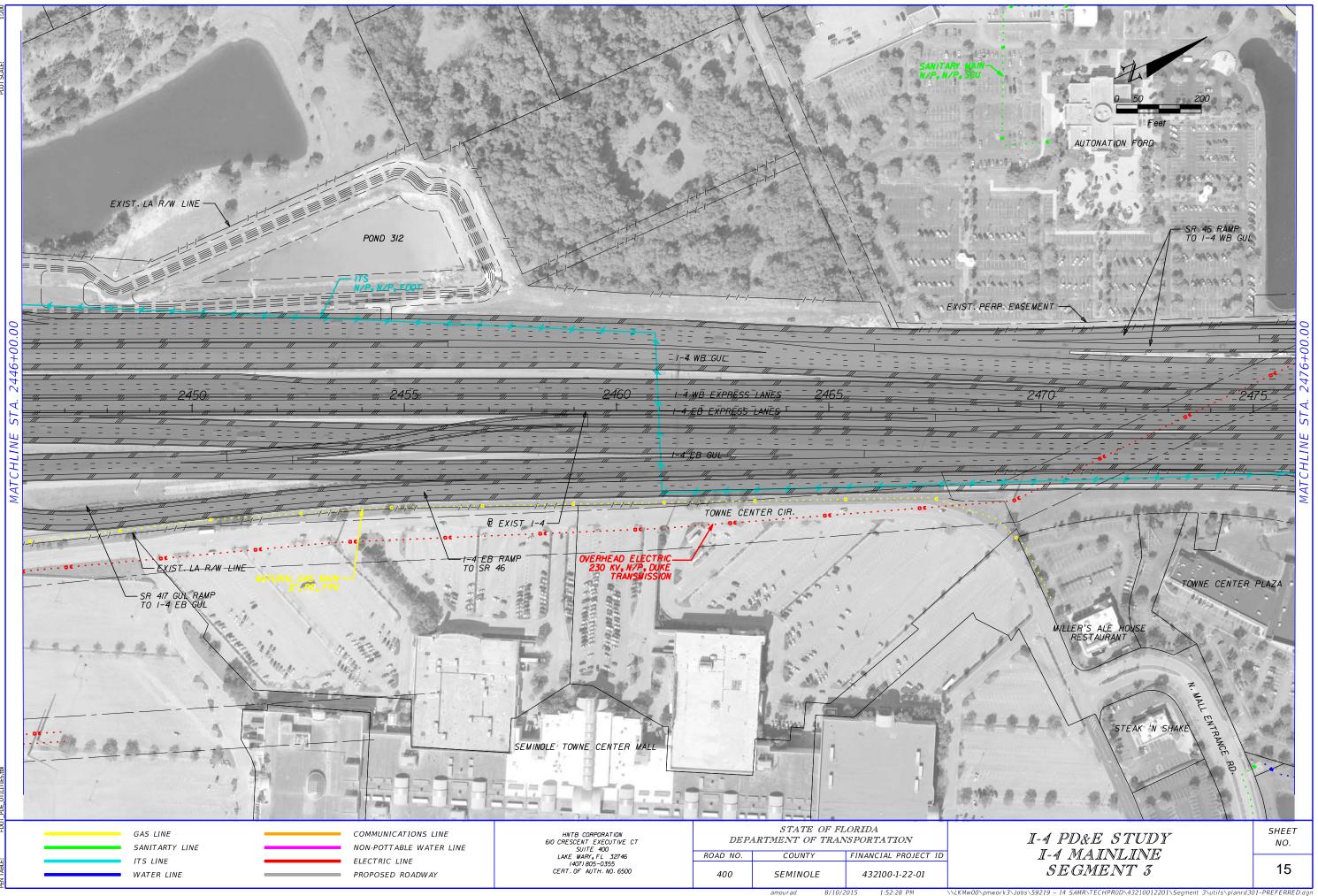




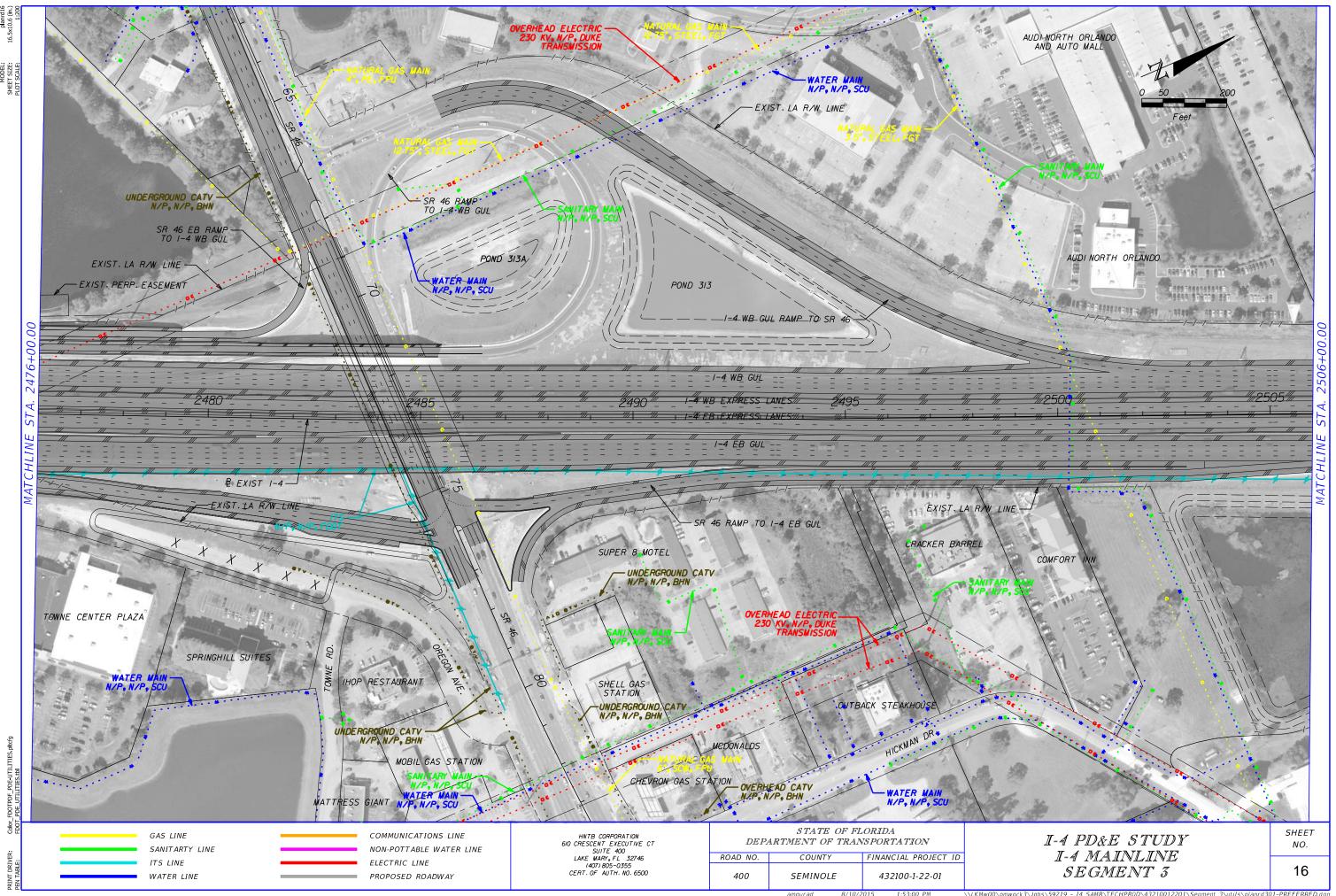


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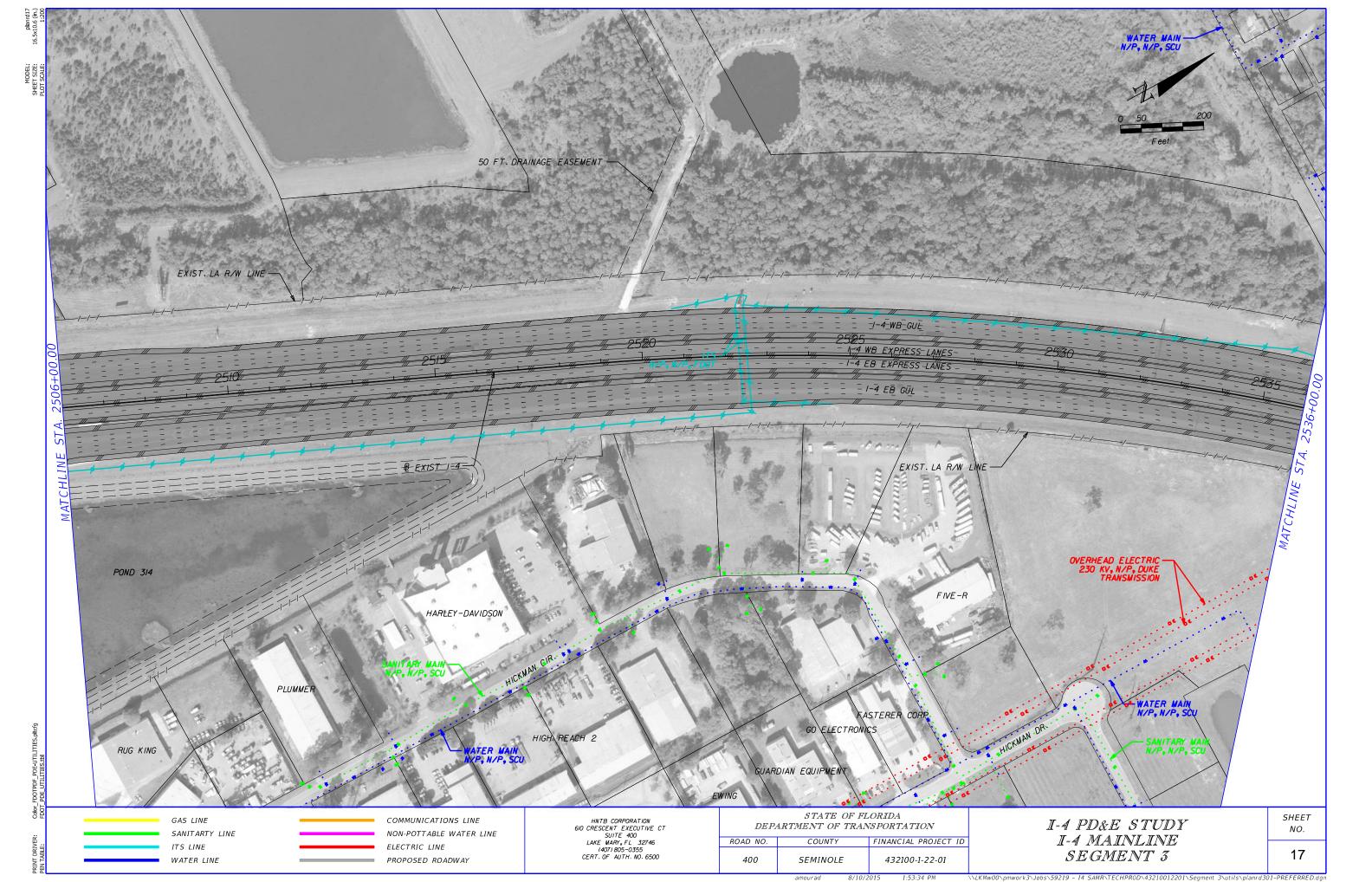


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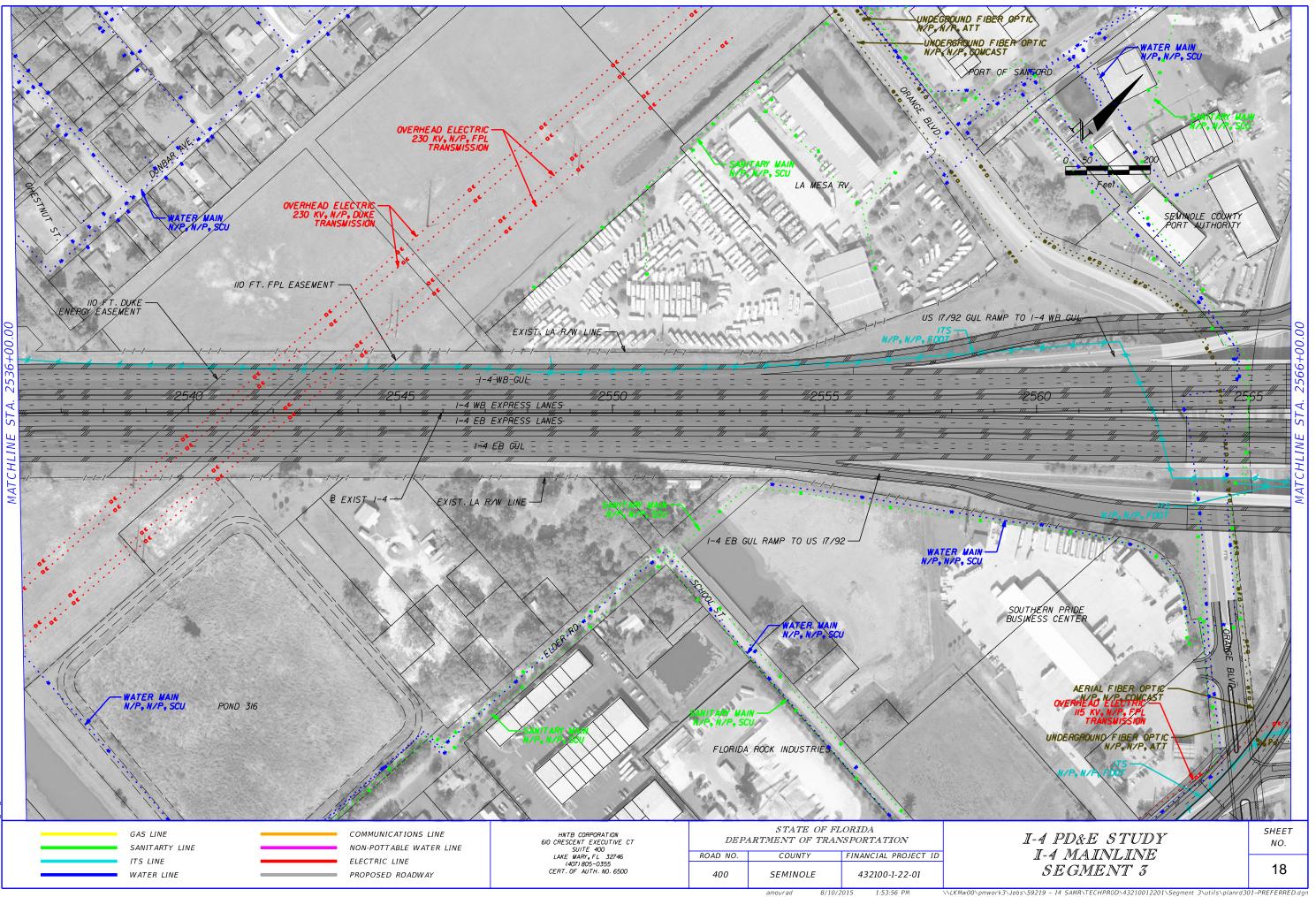


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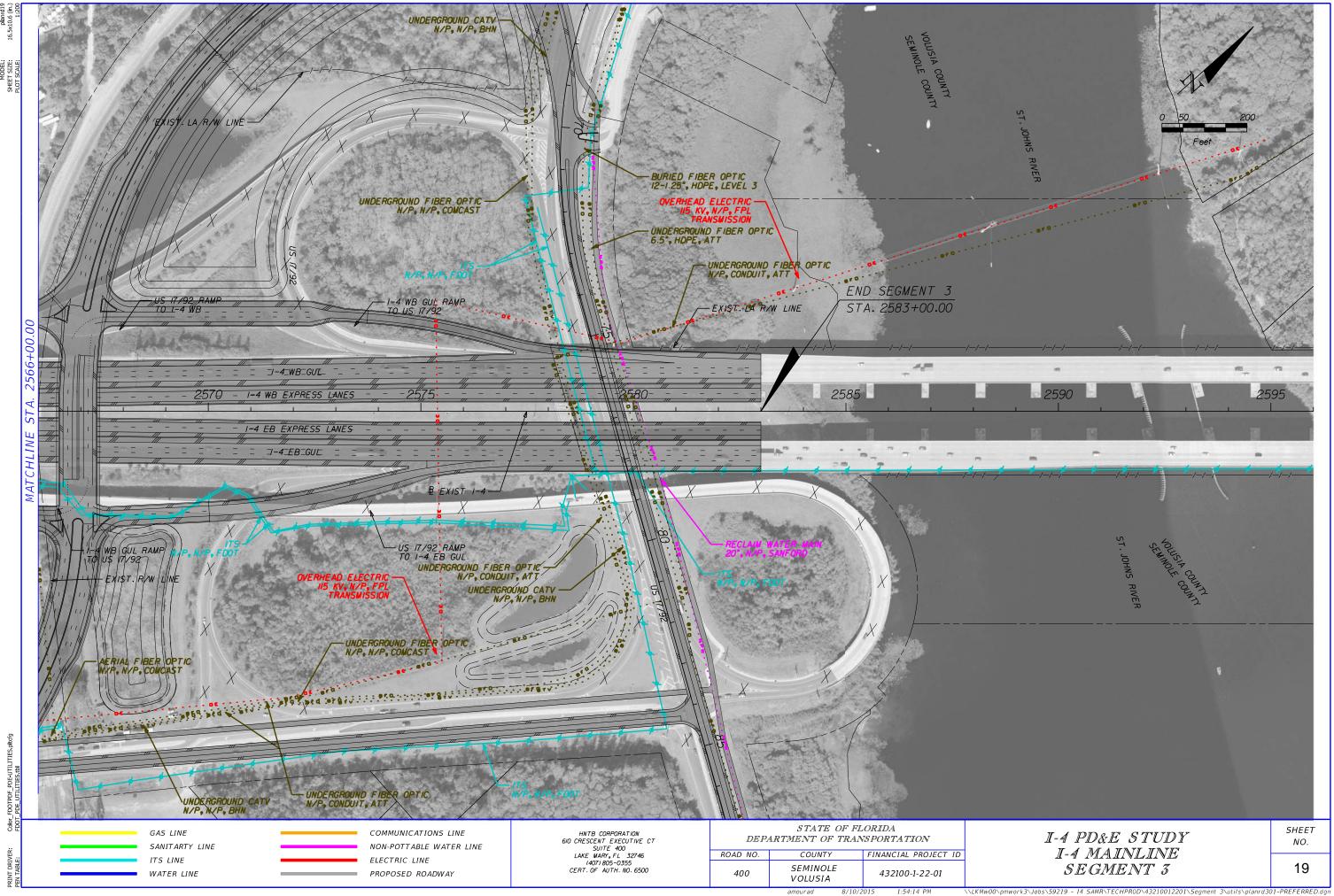
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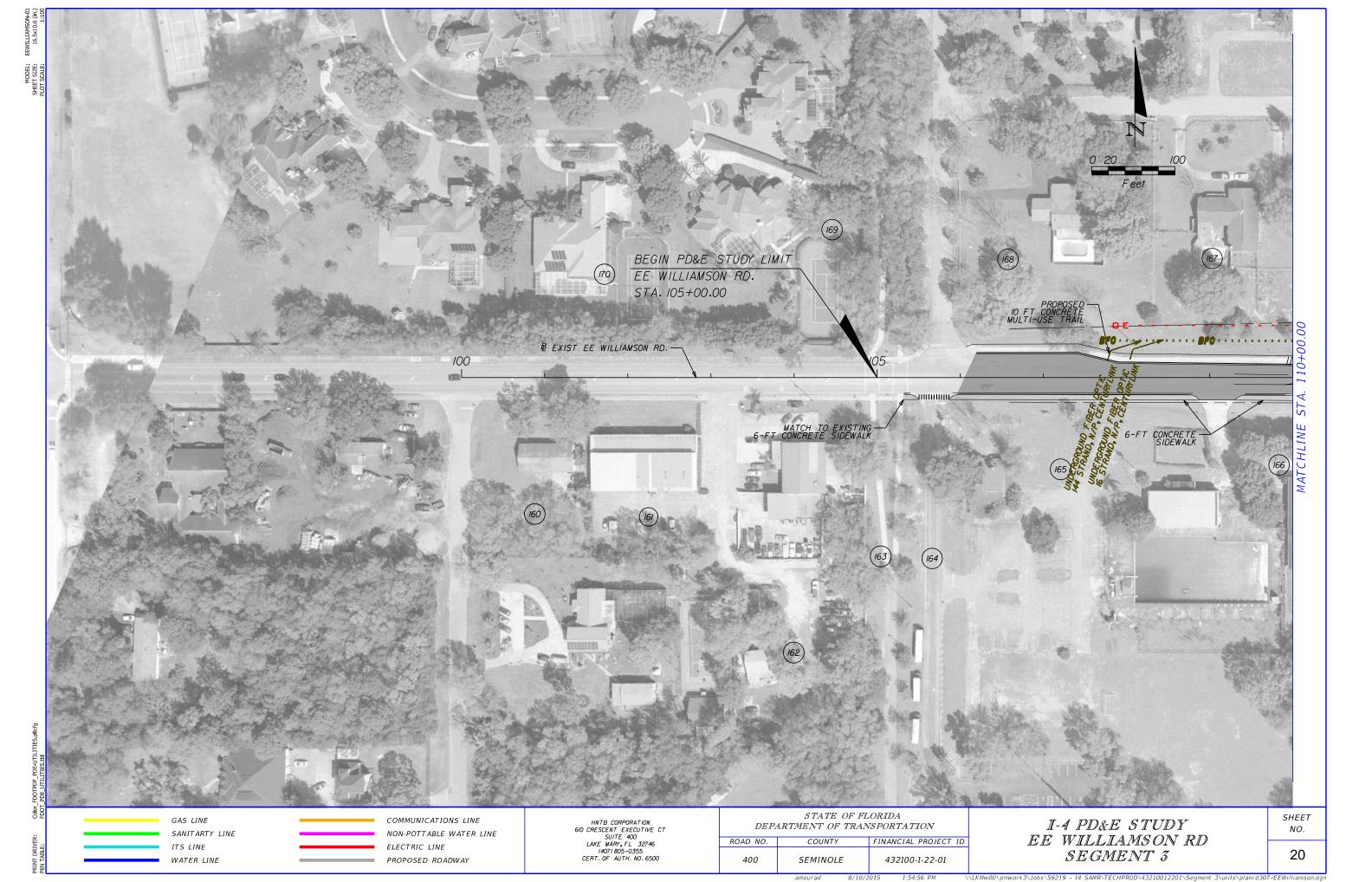


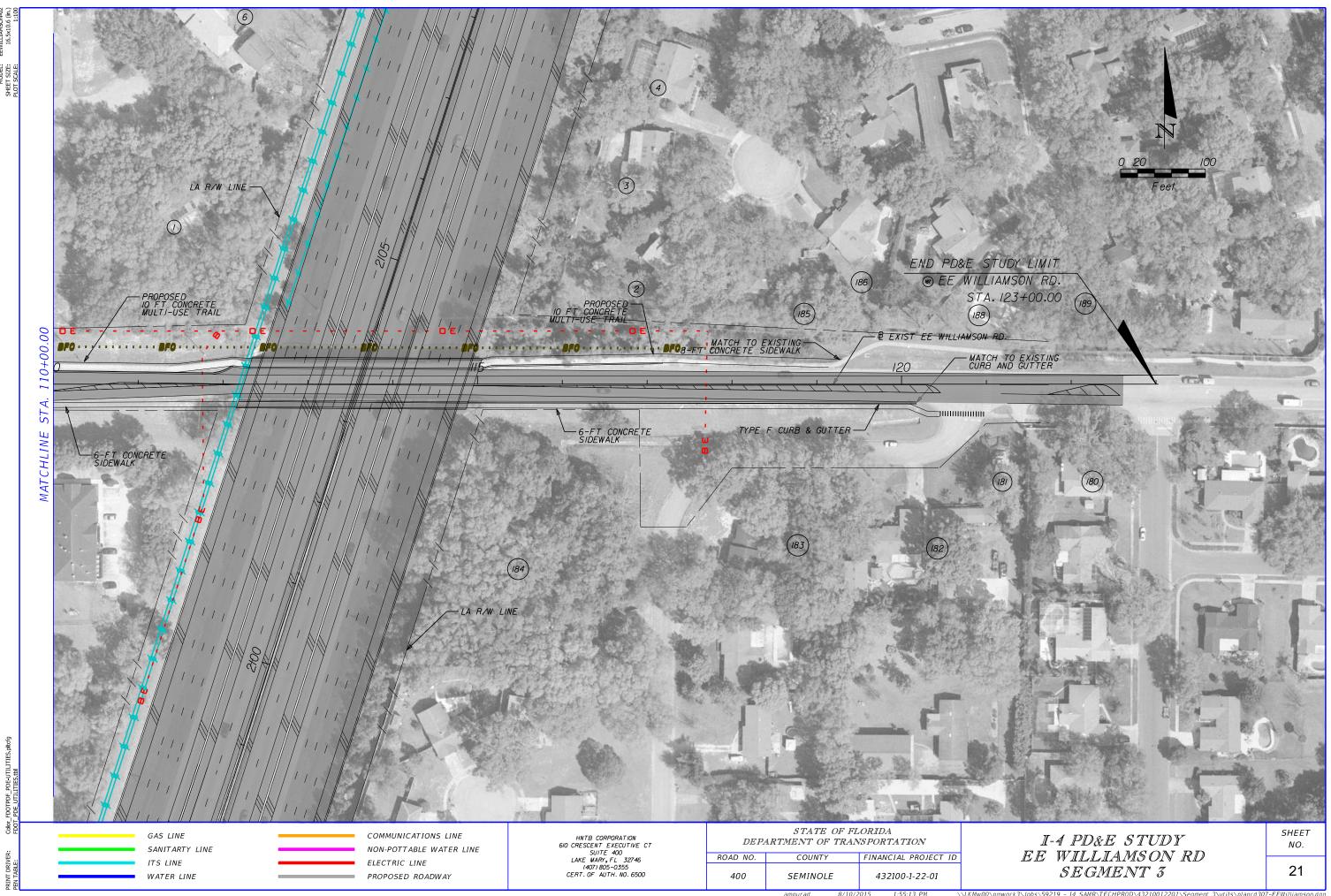


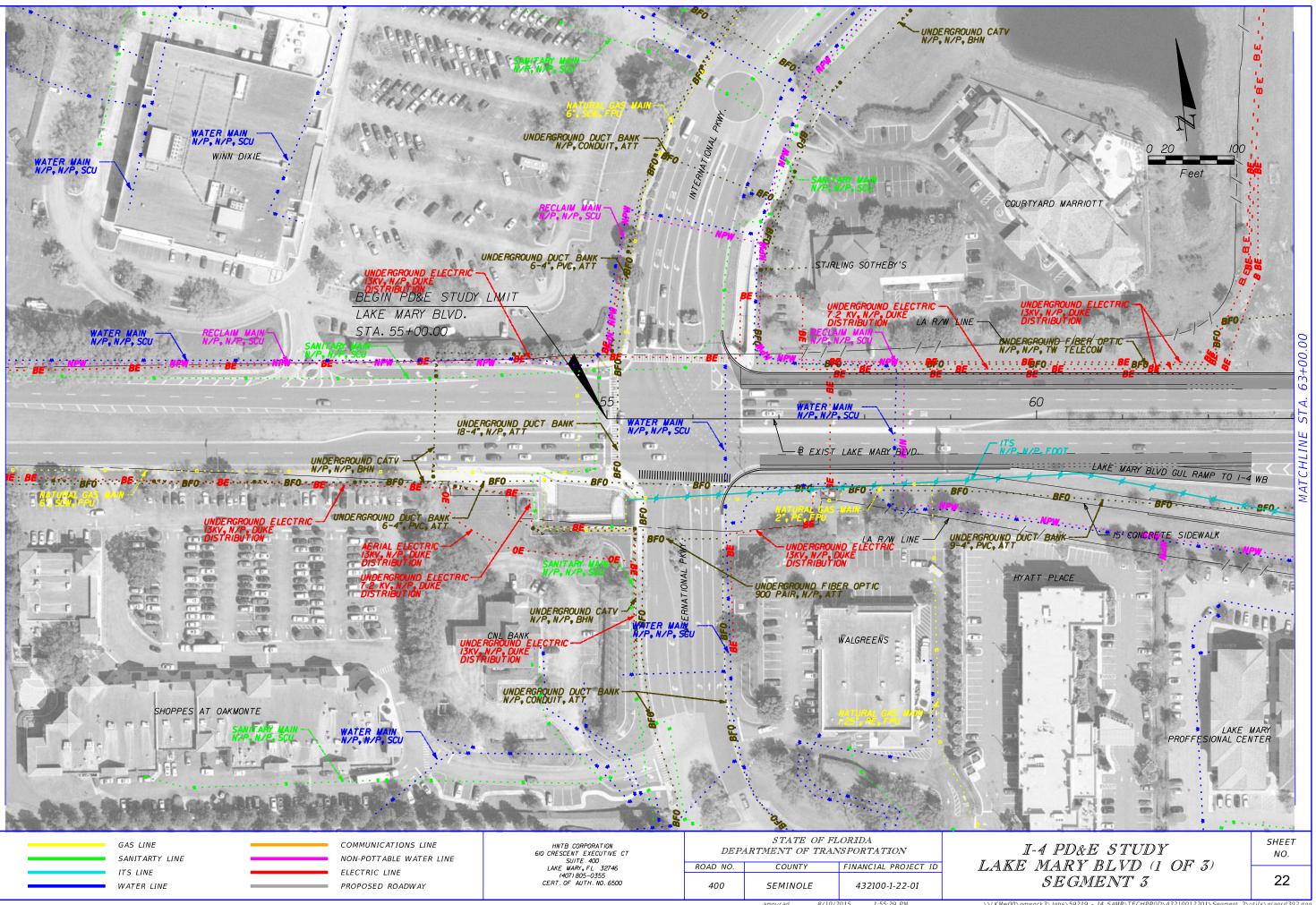


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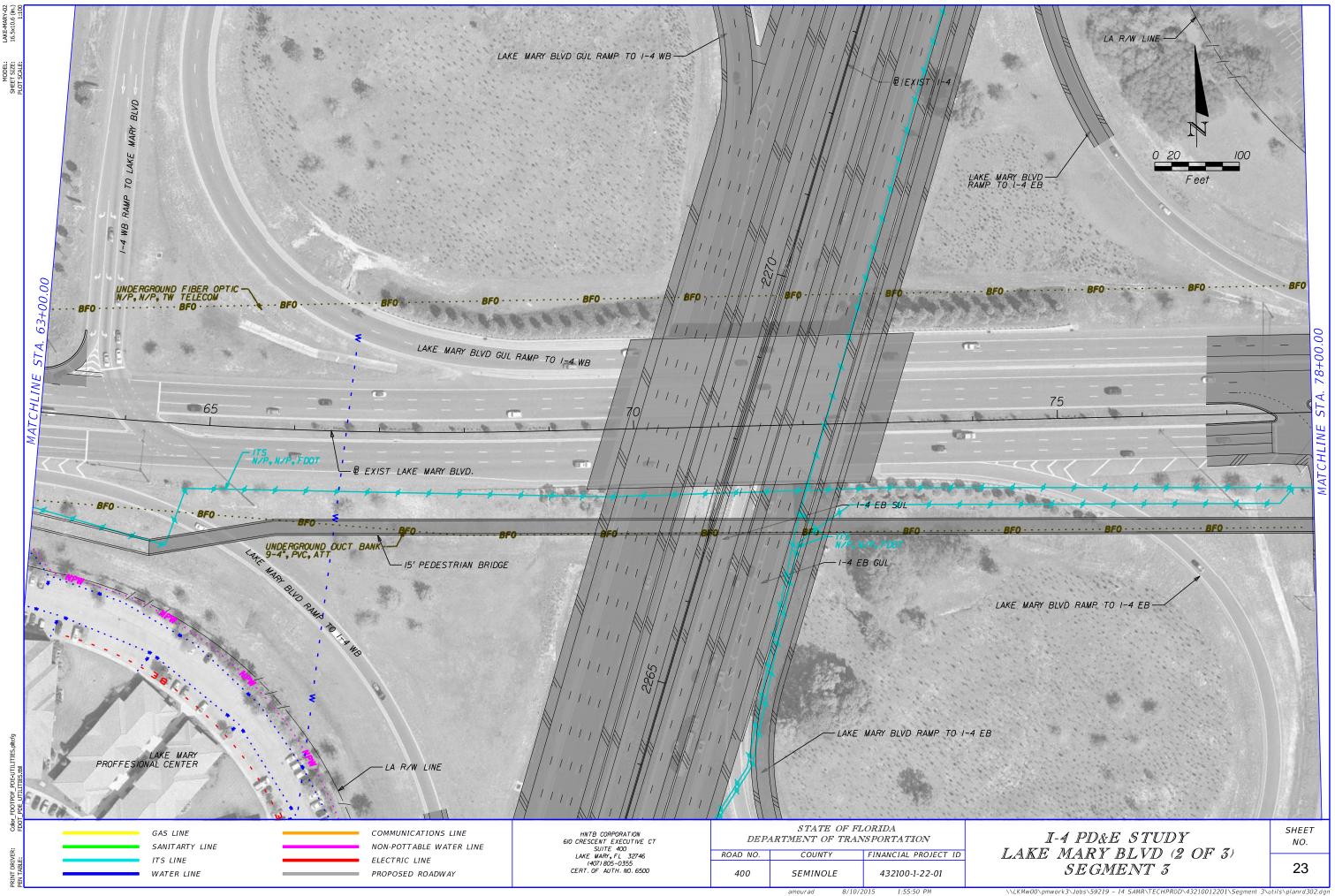


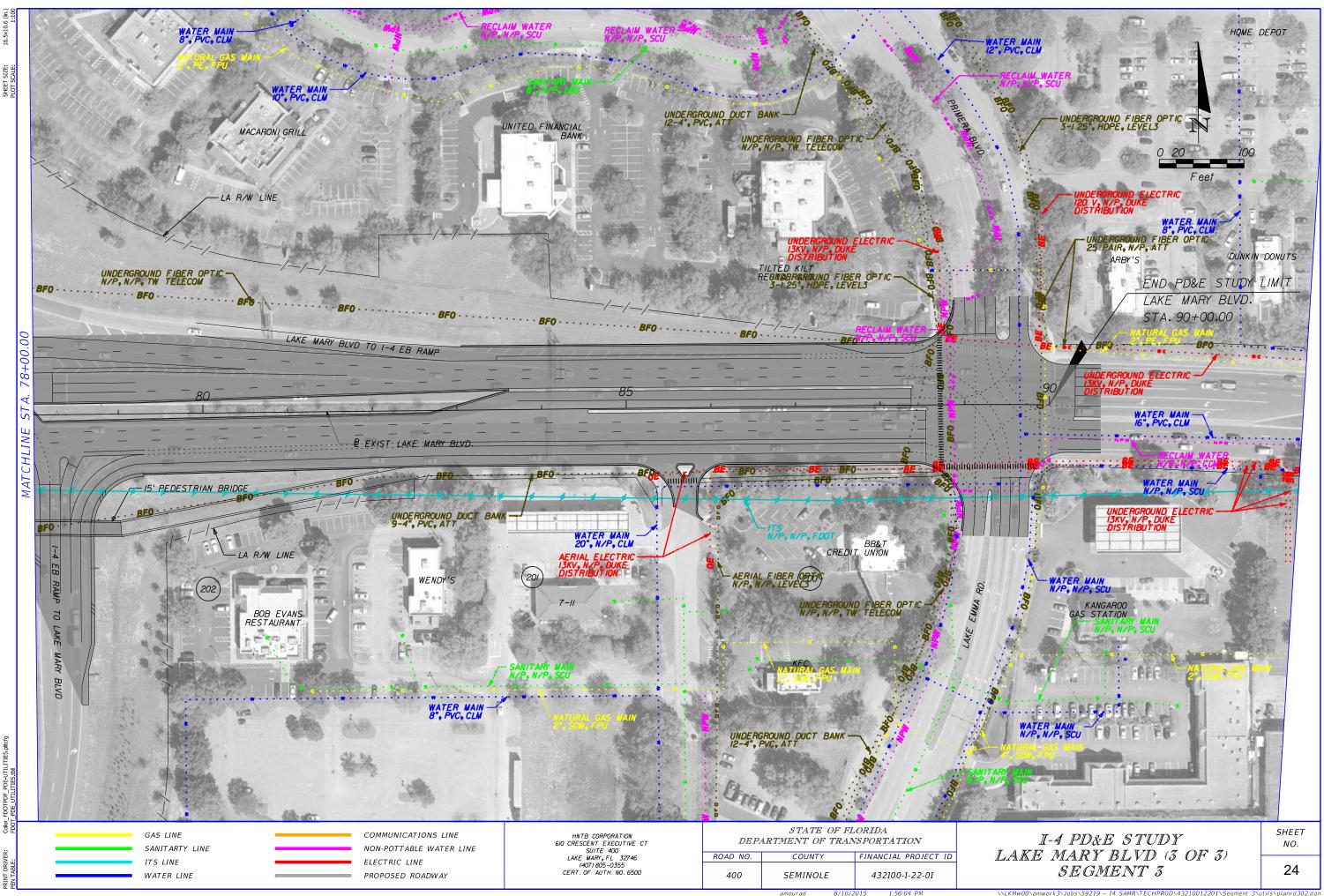


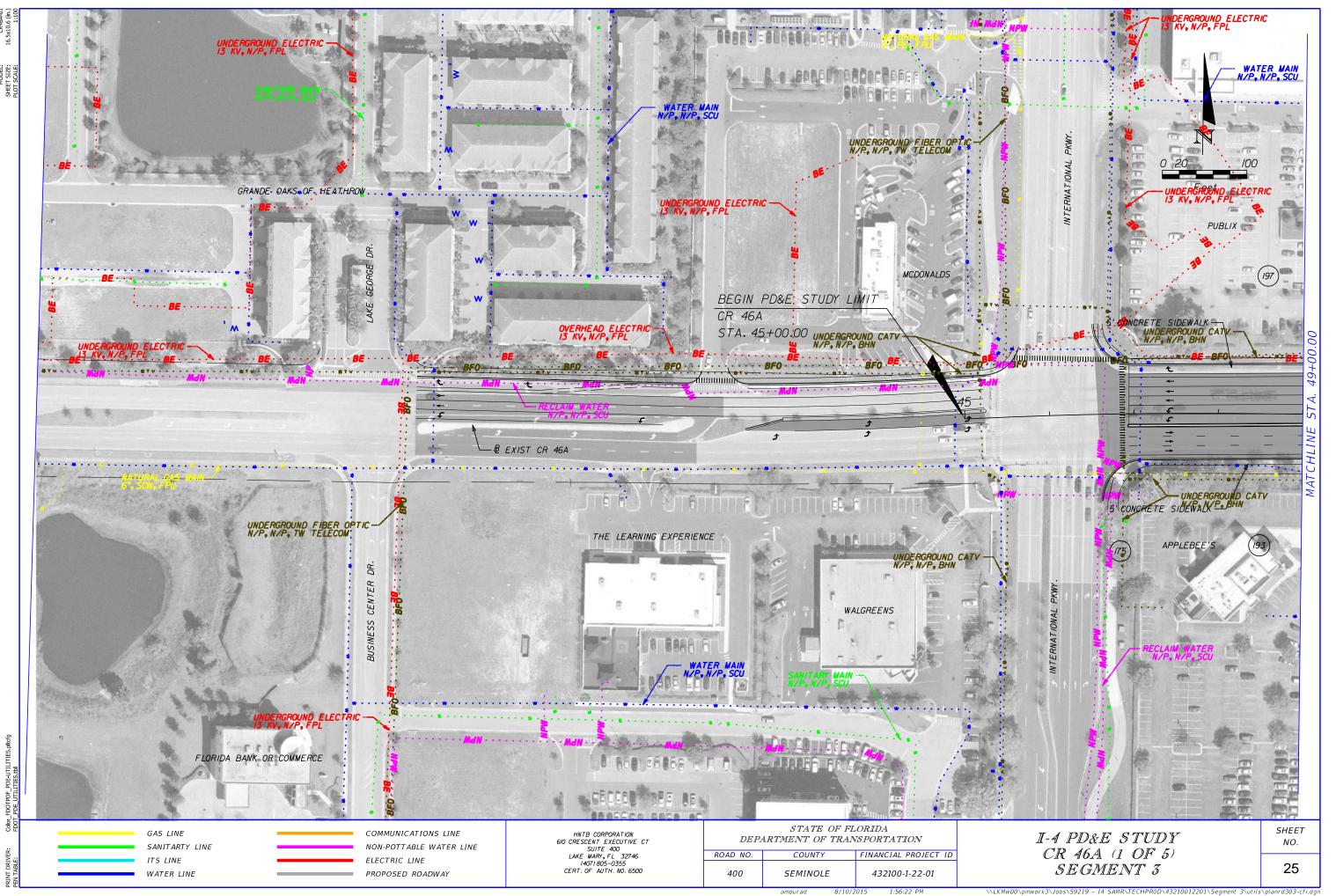


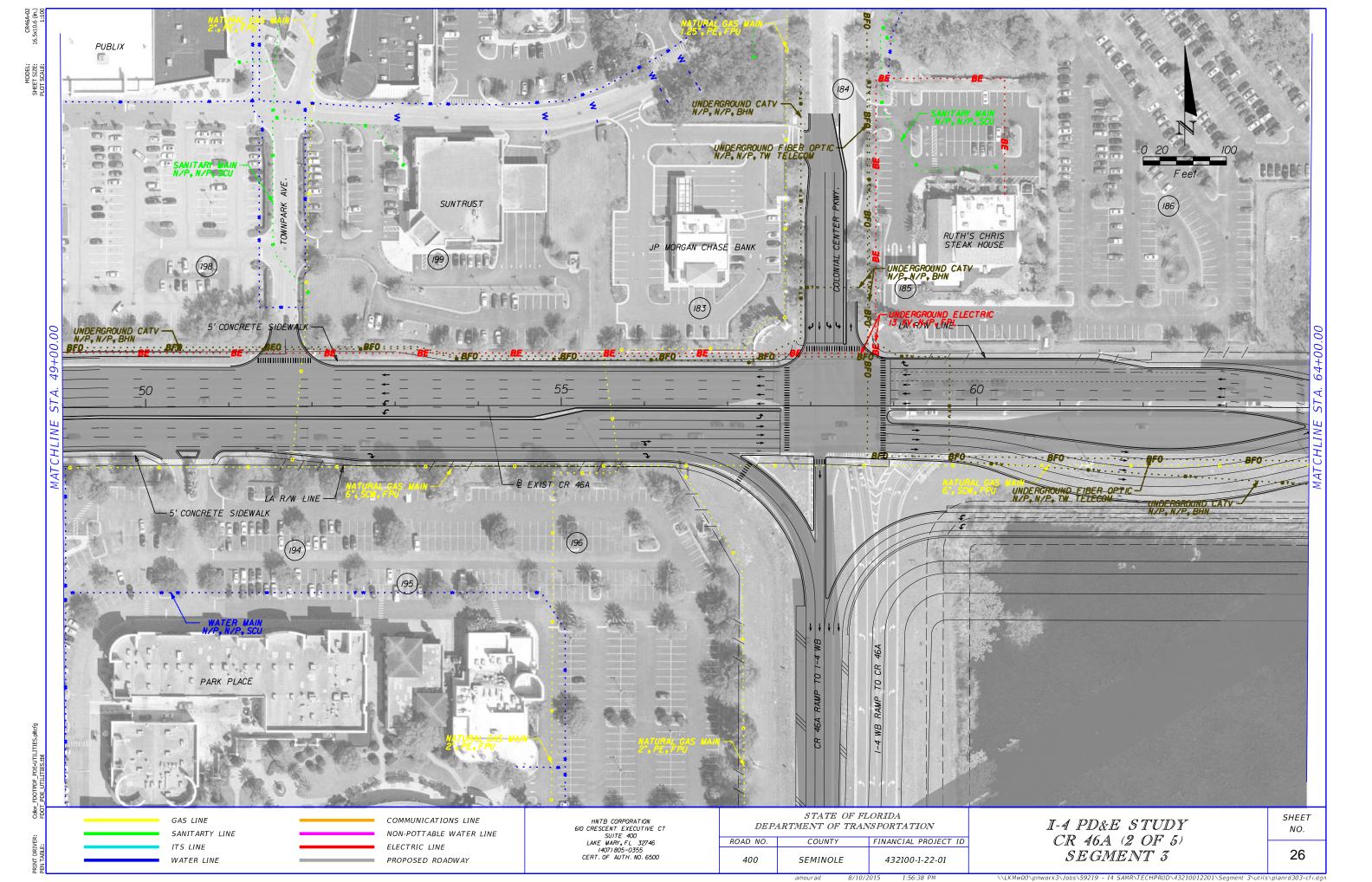


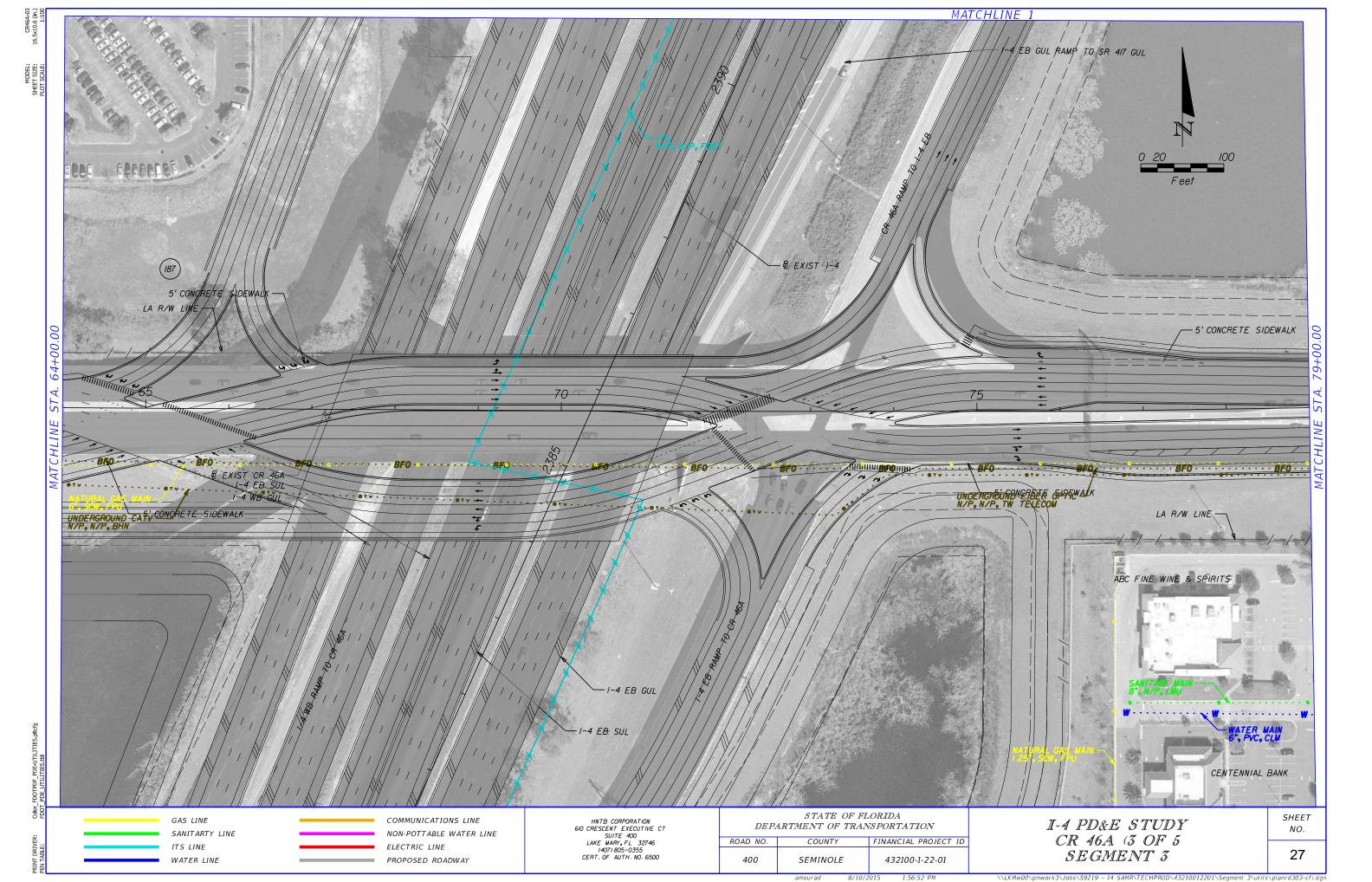
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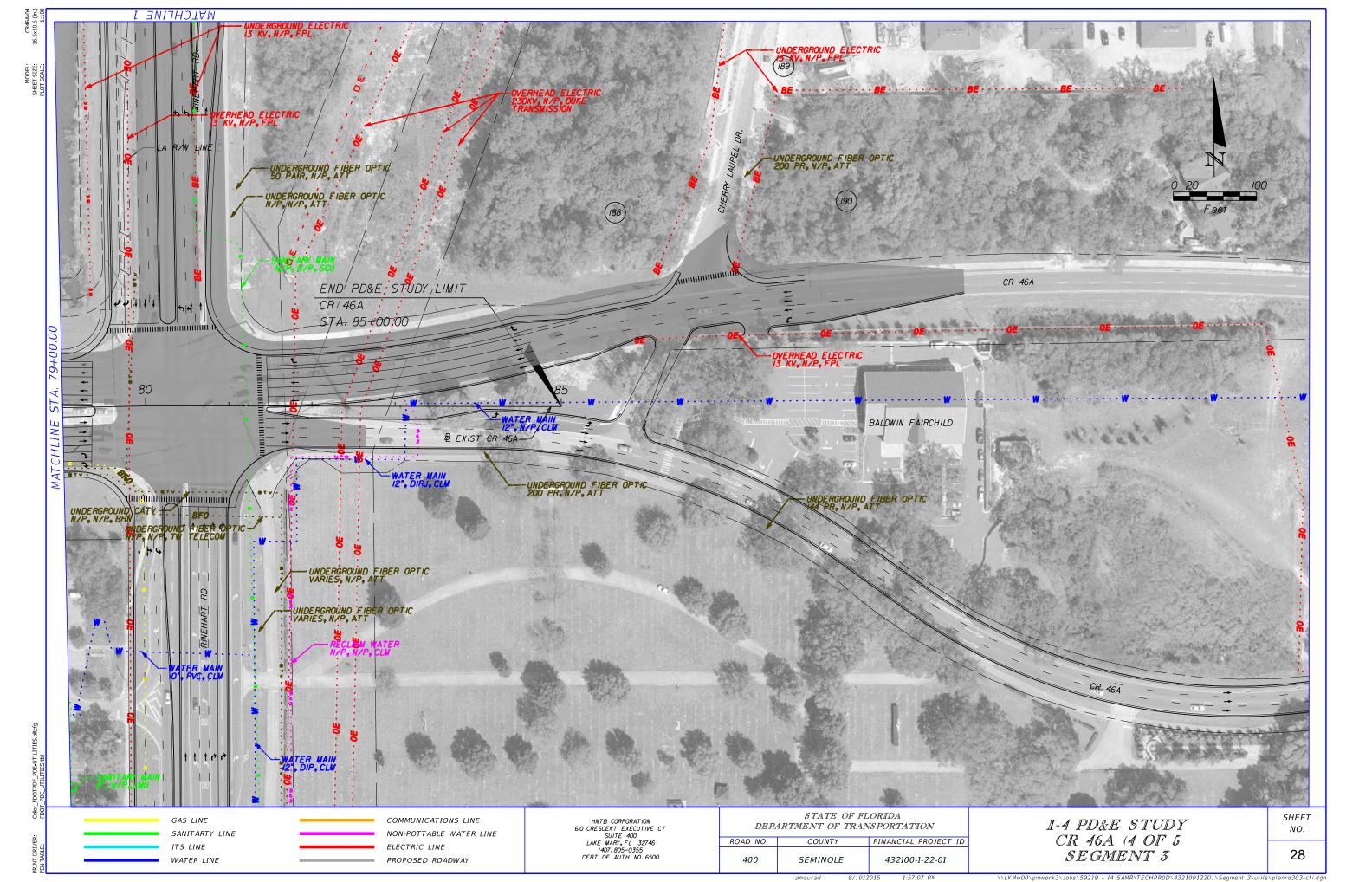


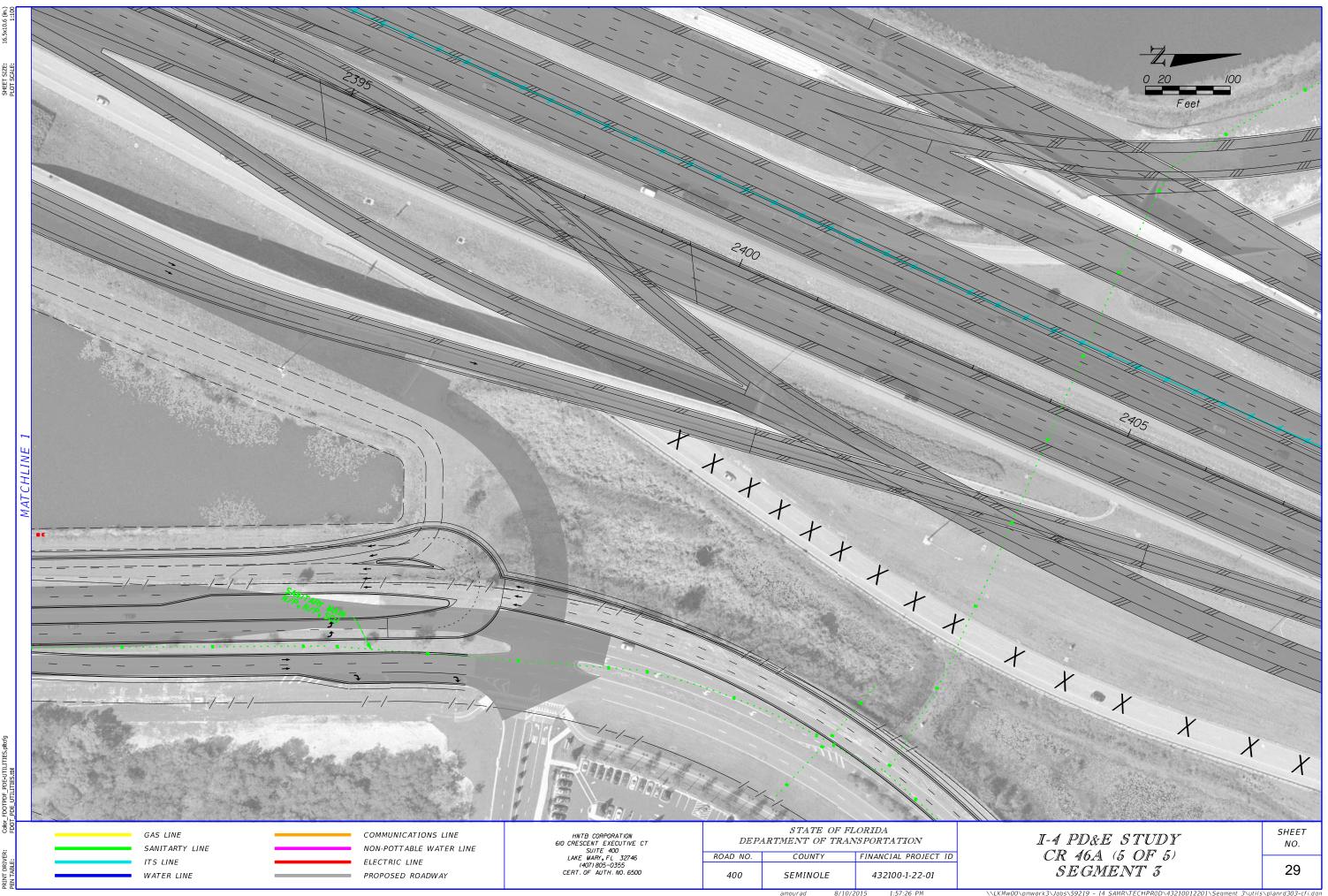


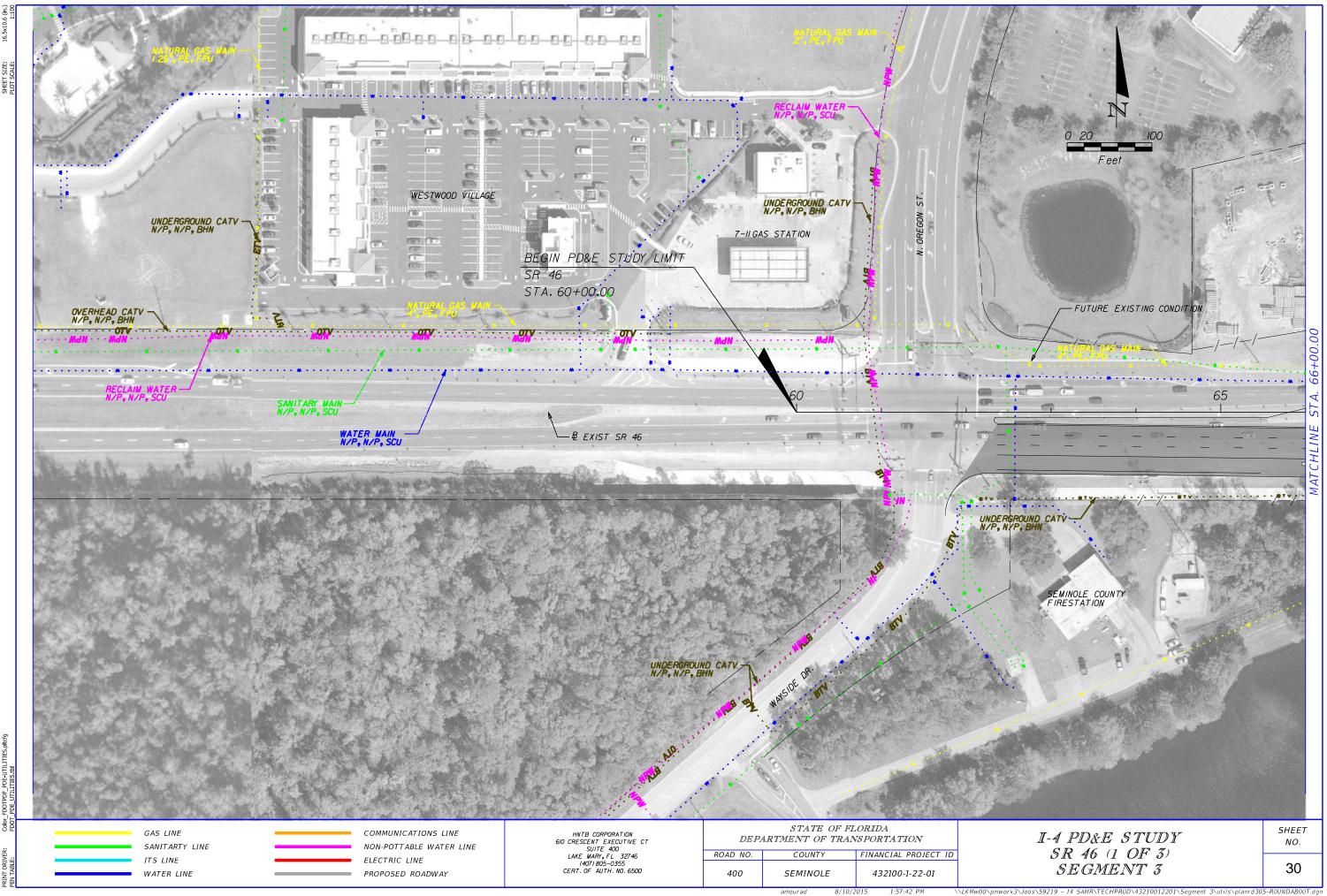




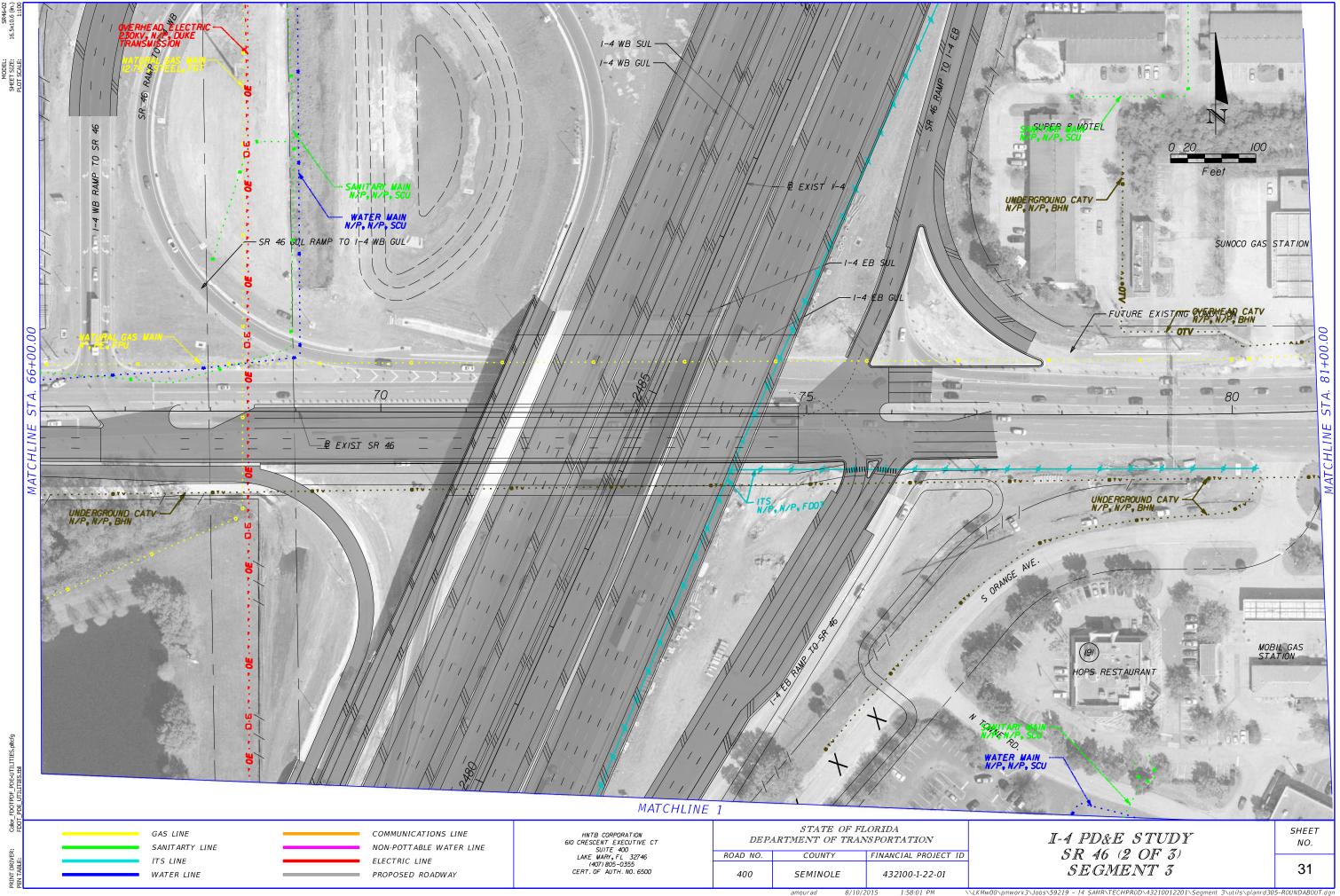




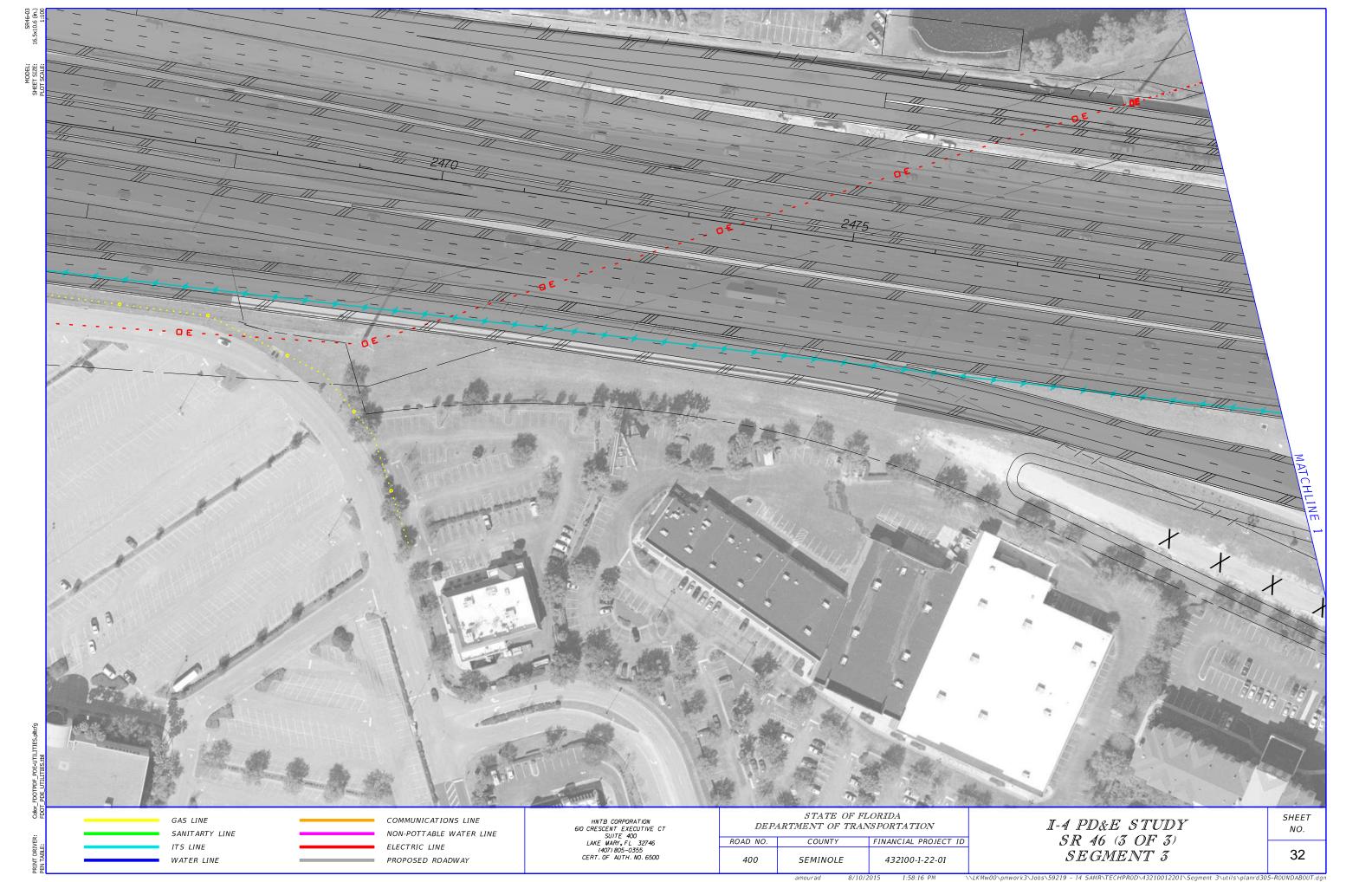


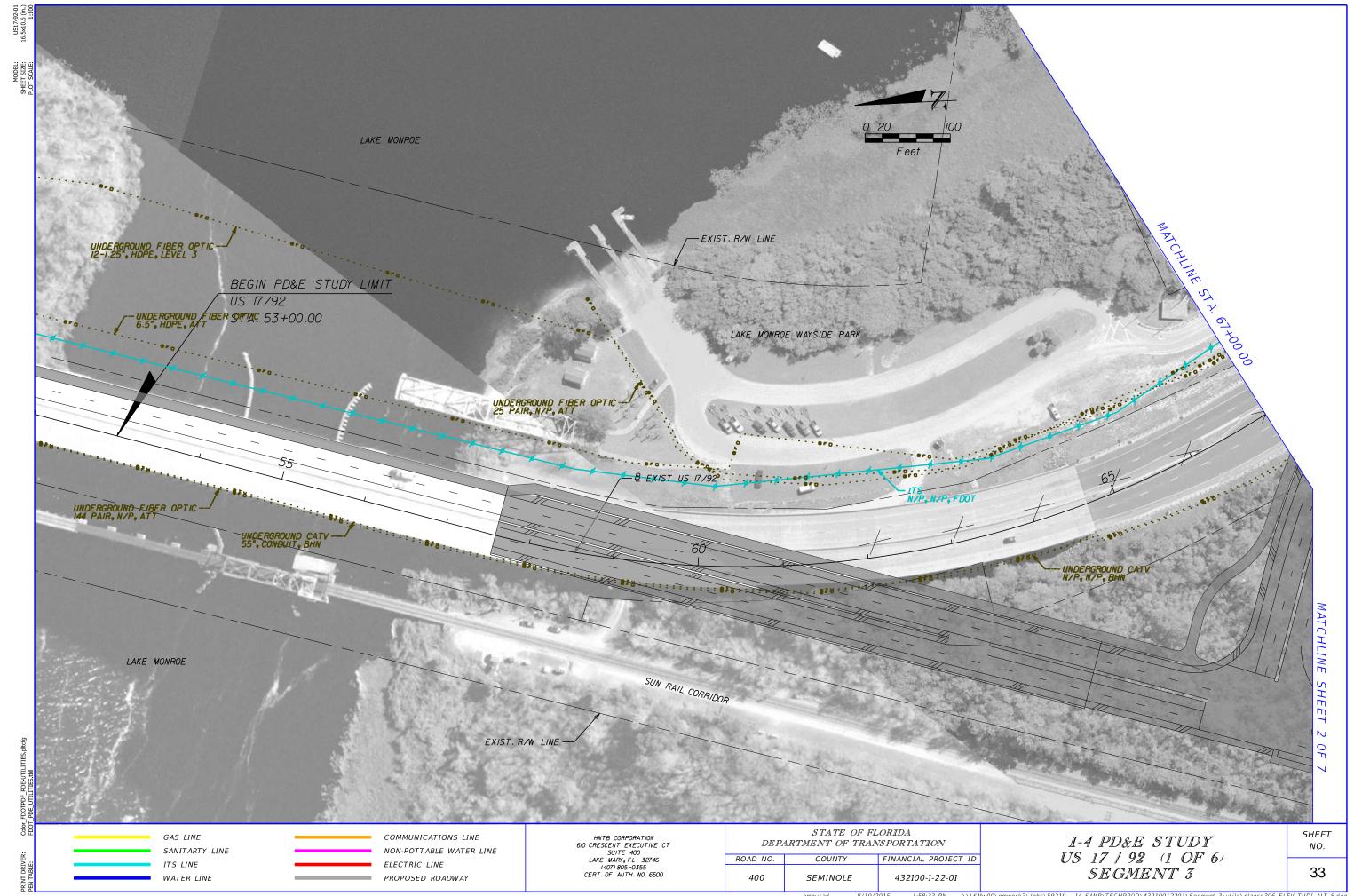


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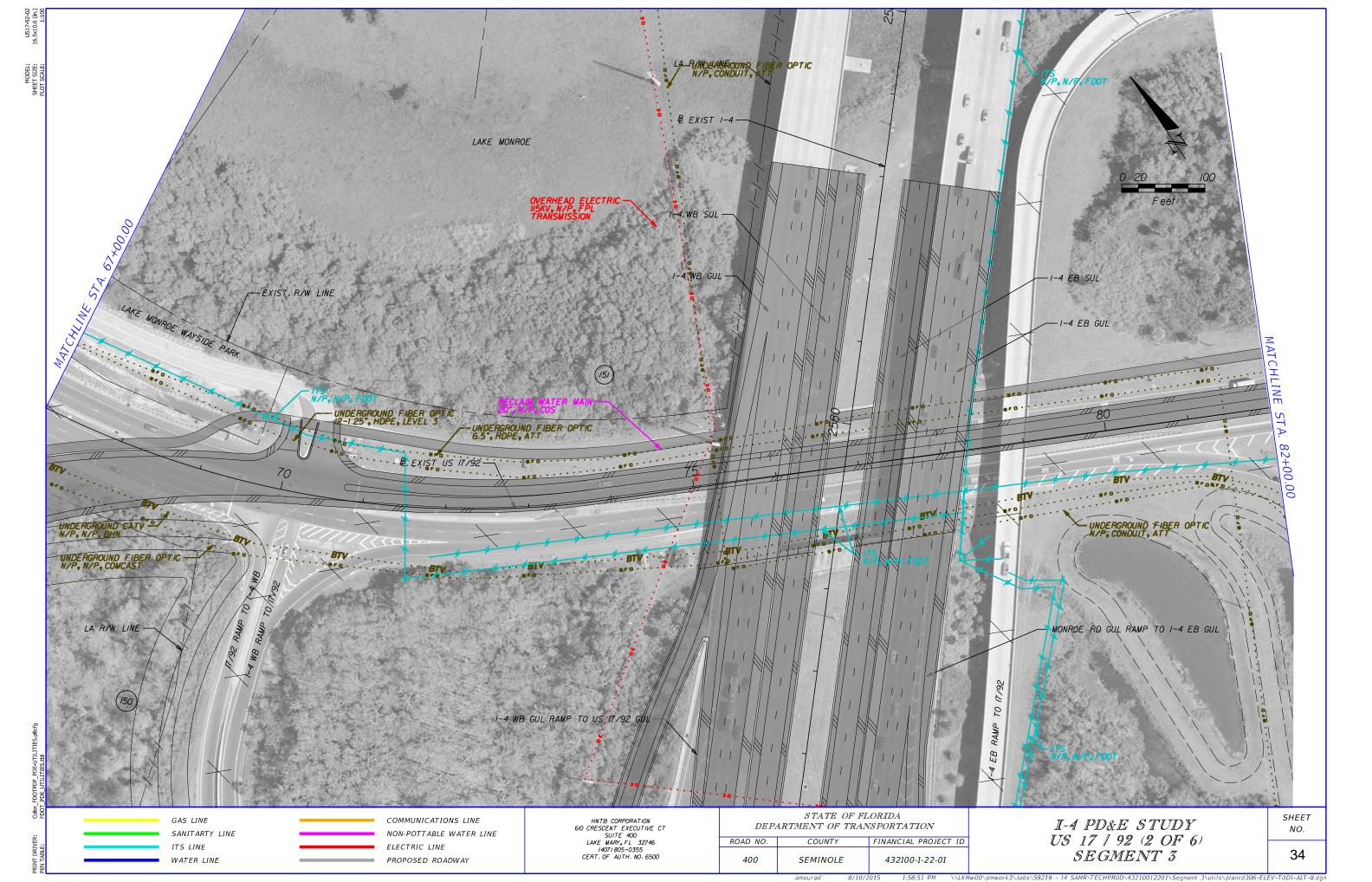


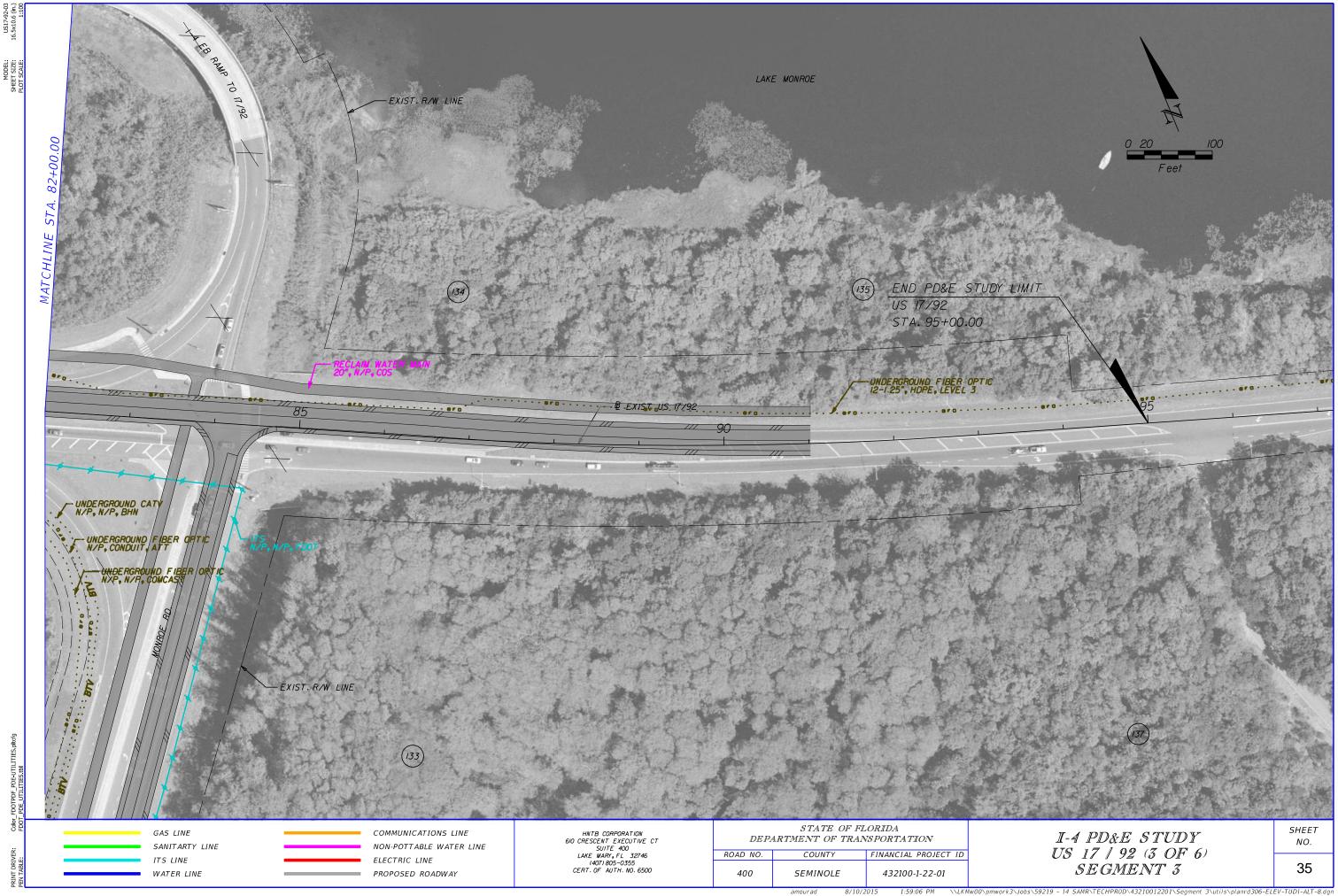
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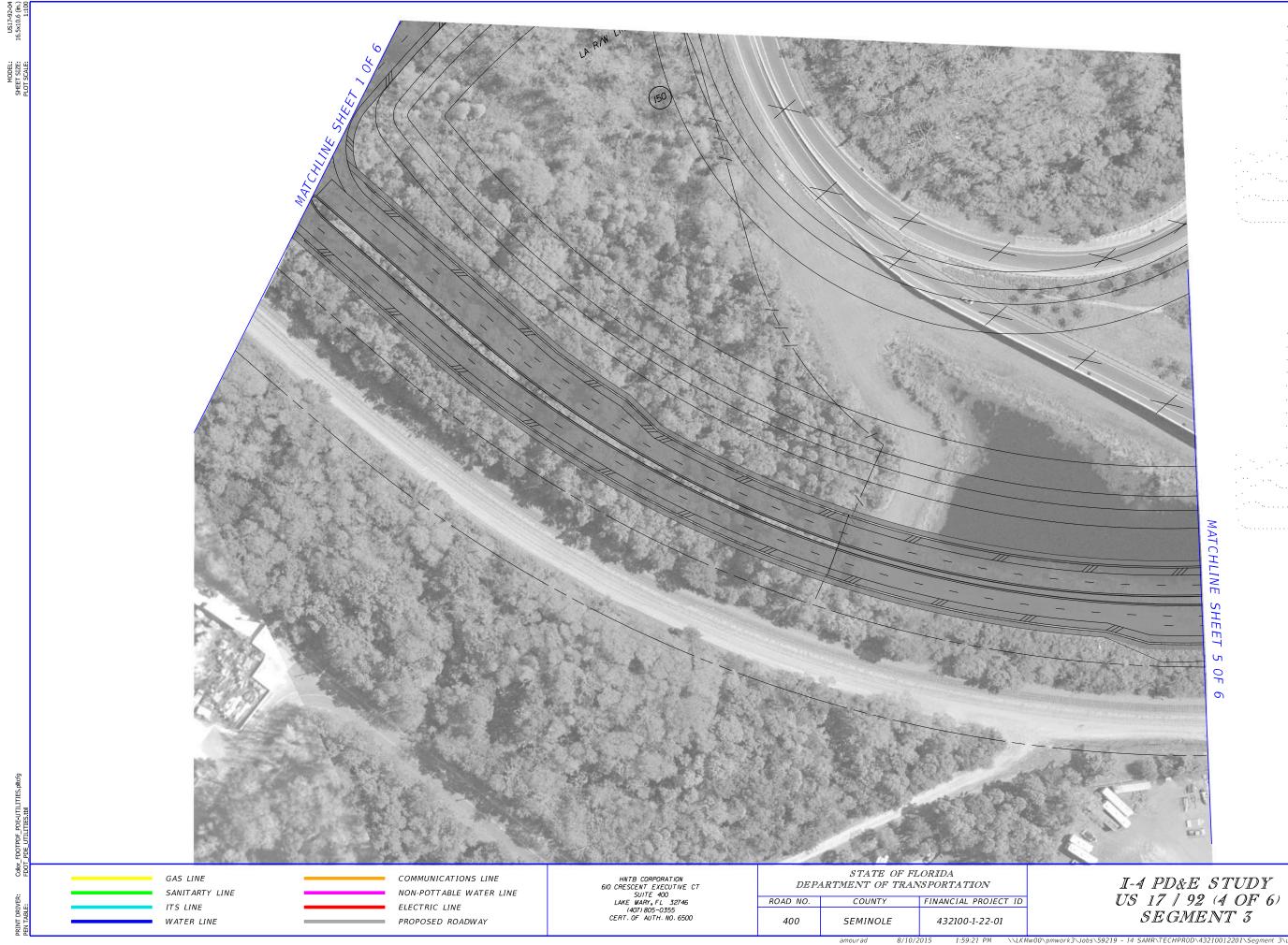




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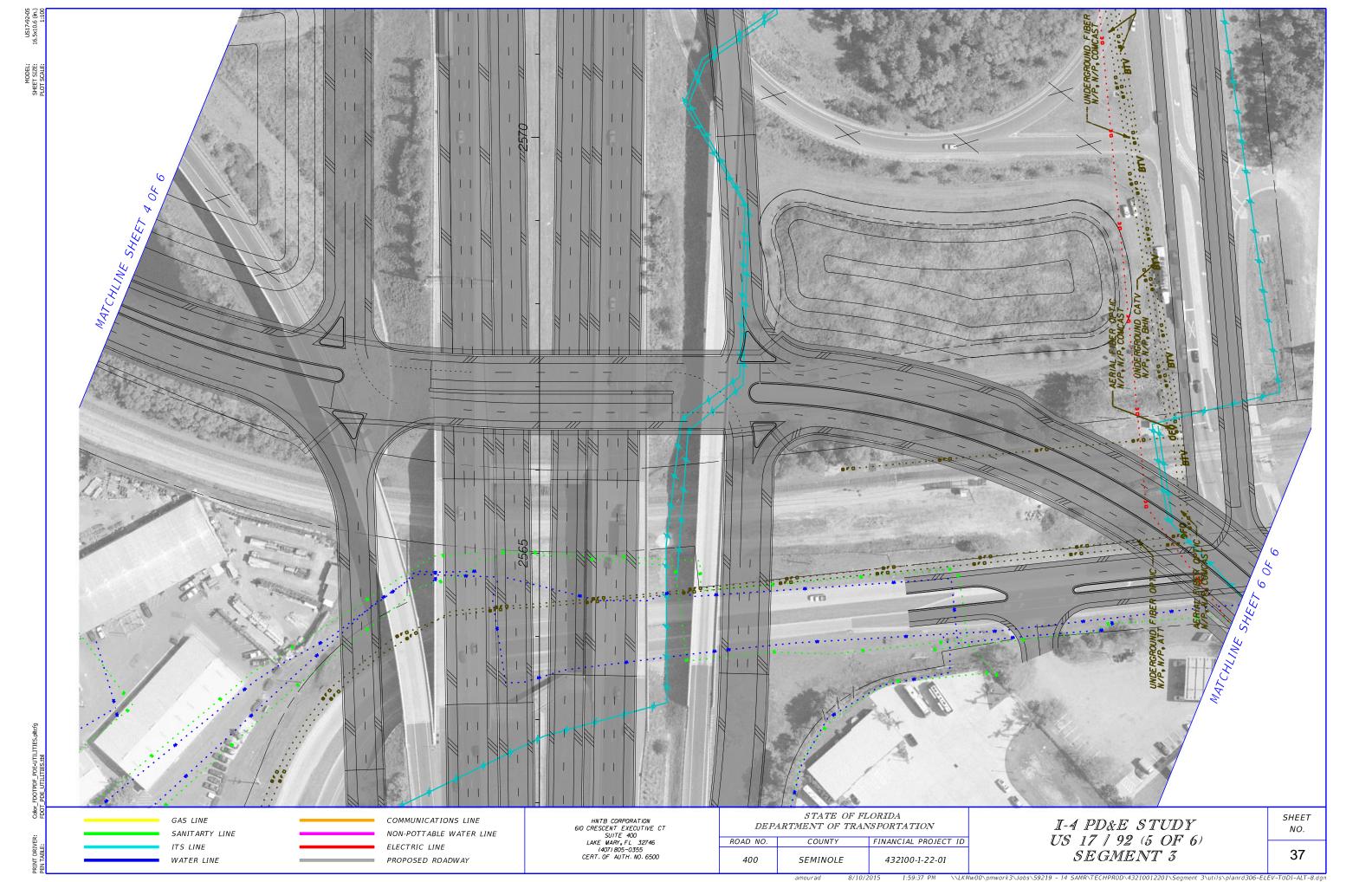






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