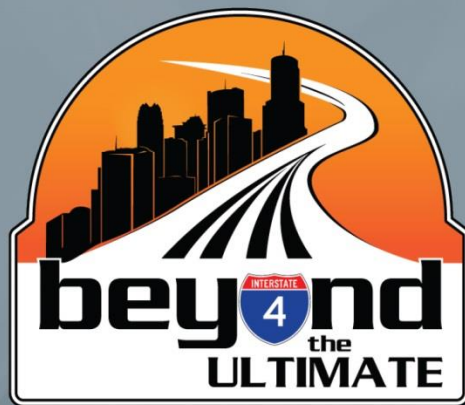




SR 400 (I-4) Project Development and Environment (PD&E) Study
FM No.: 201210-2-22-01



Utility Impact Report

Segment 5: State Road 400 (SR 400)/Interstate 4 (I-4)
from West of SR 25/US 27
to West of CR 532 (Polk/Osceola County Line)

Polk County (16320)

April, 2016

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1.0 Introduction

This report was commissioned by the Florida Department of Transportation's (FDOT) District Five Utility Office 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 201210-2-22-01. 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 from west of SR 25/US 27 to west of the Polk/Osceola County Line. This Utility Impact Report focuses on the Segment 5 from west of SR 25/US 27 to west of CR 532 in Polk County. It includes analysis on the I-4 corridor along with all major crossroads (US 27) where exits may be redesigned to accommodate the proposed improvements.

I-4's Segment 5 topography, through the study area, traverses east and west for 4.877 miles in Polk County. The study begins west of US 27/ I-4 interchange (MP 27.145) and continues east past the CR 54, Interstate-4 overpass. The study terminates at the Polk/Osceola County Line (MP 32.022 in Polk County). The majority of the I-4 corridor has an existing 450-ft right-of-way. The only deviation from the standard 450-ft right-of-way is at the US 27 exits; here the right-of-way expands to accommodate the ramps.

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, and 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 requested 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 Interstate-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. As well the project examines a possible High Speed Rail System located in the median of the road. The proposed high speed rail will run the length of the study area. Pavement widths on cross streets 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 5. 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 5, an additional 10.64 acres of right-of-way will need to be procured to accommodate expansion and additional stormwater facilities.

2.1 Right-of-Way

I-4's main corridor has a 400-ft right-of-way corridor from milepost 27.145 in Polk County to milepost 28.776, and then the west bound right of way expands to accommodate the US 27 exit ramp to I-4 westbound. The maximum right of way at milepost 29.193 is approximately 2300-ft. From milepost 29.193 east to milepost 29.612 the east bound right of way expands to accommodate the US 27 exit ramp to I-4 eastbound. The maximum right of way at this location increases to 2660-ft. At milepost 29.612 the right of way returns to the approximately 400-ft until milepost 31.518 (CR 54). The east bound right of way expands east of CR 54 to allow for a retention pond.

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 31 parcels for a total of approximately 31.74 acres.

2.2 Environmental Issues

The I-4 corridor in Segment 5 is located in Polk County. Steps to minimize the environmental impact of expanding the interstate should be taken to ensure no contamination of the ponds in the area. Out of the nineteen (19) pond sites (eleven (11) existing facilities and eight (8) new/proposed sites), fourteen (14) were given a medium risk rating and the remaining five (5) were given a low risk rating. During the field investigation, individuals or evidence of different mammals, bird, and reptile species were identified along the project corridor. The proposed project will avoid and minimize impacts to wildlife and their habitat to the greatest practicable extent. Utilities requiring relocation in this area will have to go through the proper environmental and wetland permitting processes.

3.0 Utility Impact Scope

HNTB began the investigation of I-4's 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 study area. Utility owners, confirmed by the FDOT's District Once Contact List, were sent a set of Segment 5 plans for utility markup on September 16, 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:

- BrightHouse Networks
- Central Florida Gas Company
- Comcast Communications
- Duke Energy – Distribution (Formerly Progress Energy)
- Duke Energy – Transmission (Formerly Progress Energy)
- Florida Department of Transportation
- Level 3 Communications
- Polk County Utilities Division
- Verizon -Florida

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 BrightHouse Networks

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	BrightHouse Networks	Underground CATV	From end of project on US 27 west to intersection of Heller Brother Blvd & US 27	South side of road	10+00	10+57	No
Communications	BrightHouse Networks	Underground CATV	Crossing at intersection of Heller Brothers Blvd & US 27	West side of intersection	10+00	10+51	No
Communications	BrightHouse Networks	Underground CATV	From 1070-ft east of intersection of I-4 westbound ramp to US 27 & US 27 west to intersection of Dunson Rd & US 27	South side of road	70+64	118+83	No
Communications	BrightHouse Networks	Underground CATV	Crossing at intersection of Dunson Rd & US 27	East side of intersection	116+24	117+19	No
Communications	BrightHouse Networks	Underground CATV	From 220-ft west to 580-ft east of intersection of I-4 westbound ramp to US 27 & US 27	South side of road	70+64	87+74	No
Communications	BrightHouse Networks	Aerial CATV	From intersection of Heller Brothers Blvd & US 27 west to 1070-ft east of intersection of I-4 westbound ramp to US 27 & US 27	South side of road	10+51	70+65	No
Communications	BrightHouse Networks	Aerial CATV	From intersection of Dunson Rd & US 27 west to end of US 27	South side of road	118+82	135+00	No

4.2 Central Florida Gas Company

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Natural Gas	Central Florida Gas	4" Natural Gas Main	From intersection of Frontage Rd & US 27 west on US 27 to 510-ft east of intersection of I-4 westbound ramp to US 27 & US 27	South side of road	61+32	76+39	Yes, adjust for bridge improvements
Natural Gas	Central Florida Gas	4" Natural Gas Main	Crossing of I-4 Corridor, 140-ft east of CR 54, US 27 overpass	N/A	599+17	603+32	Yes, adjust for bridge improvements

4.3 Comcast Communications

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	Comcast Communications	Aerial Coaxial and Fiber Optic Cable	Crossing of I-4 Corridor, 100-ft east of CR 54, I-4 overpass	N/A	599+94	602+36	No

4.4 Duke Energy – Distribution (Formerly Progress Energy)

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electric	Duke Energy Distribution	13 KV Aerial Electric	From end of US 27 west to 150-ft east of Ernie Caldwell Blvd, US 27 overpass	South of road	10+00	25+78	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	Crossing of US 27, 1090-ft west of intersection of Heller Brothers Blvd & US 27	N/A	20+42	20+69	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	From 800-ft west to 1600-ft west of intersection of Heller Brothers Blvd & US 27	North side of road	16+93	25+82	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	From 90-ft west of Ernie Caldwell Blvd, US 27 overpass west to end of US 27	South side of road	28+41	135+00	Yes, adjust for bridge improvements
Electric	Duke Energy Distribution	13 KV Aerial Electric	Crossing of US 27, 720-ft east of intersection of Richie Rd & US 27	N/A	88+54	90+00	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	From 230-ft to 700-ft west of intersection of I-4 westbound ramp to US 27 & US 27	South side of road	84+53	88+27	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	From 940-ft east of intersection of I-4 westbound ramp to US 27 west to end of US 27	North side of road	71+94	129+36	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	Crossing of US 27, 750-ft west of intersection of Richie Rd & US 27	N/A	101+06	103+64	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	Crossing at intersection of Dunson Rd & US 27	East side of intersection	117+22	117+62	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	From 2900-ft to 1010-ft west of US 27, I-4 Overpass	East side of road	447+92	475+55	No
Electric	Duke Energy Distribution	13 KV Aerial Electric	Crossing of I-4 Corridor, 100-ft east of CR 54, I-4 overpass	N/A	599+86	458+93	No
Electric	Duke Energy Distribution	120 V Aerial Electric	Crossing of US 27 1060-ft west of intersection Dunson Rd & US 27	N/A	492+06	494+28	No
Electric	Duke Energy Distribution	13 KV Underground Electric	Crossing at intersection of Heller Brothers Blvd & US 27	West side of intersection	10+09	10+50	No
Electric	Duke Energy Distribution	13 KV Underground Electric	From 120-ft to 930-ft west of intersection of Richie Rd & US 27	South side of road	97+21	105+00	No
Electric	Duke Energy Distribution	13 KV Underground Electric	From 1900-ft east to 2500-ft east of US 27, I-4 overpass	East side of road	487+70	500+38	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electric	Duke Energy Distribution	7.2 KV Underground Electric	Crossing at Ernie Caldwell Blvd, US 27 overpass	South side of road	25+74	28+26	No
Electric	Duke Energy Distribution	120 V Underground Electric	Crossing of US 27 at Ernie Caldwell Blvd, US 27 overpass	West side of overpass	27+70	27+74	No
Electric	Duke Energy Distribution	120 V Underground Electric	Crossing of US 27 at Ernie Caldwell Blvd, US 27 overpass	East side of overpass	26+73	26+74	No
Electric	Duke Energy Distribution	120 V Underground Electric	Crossing at Ernie Caldwell Blvd, US 27 overpass	North side of road	26+68	27+62	No
Electric	Duke Energy Distribution	120 V Underground Electric	Crossing of I-4 Corridor, at CR 54, I-4 overpass	East side of overpass, Cast into CR 54 eastbound bridge	600+00	602+53	No
Electric	Duke Energy Distribution	120 V Underground Electric	Crossing of I-4 Corridor, at CR 54, I-4 overpass	West side of overpass, Cast into CR 54 eastbound bridge	598+67	601+54	No

4.5 Duke Energy – Transmission (Formerly Progress Energy)

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Electric	Duke Energy Transmission	69 KV Aerial Electric	Crossing of I-4 Corridor, 100-ft east of CR 54, I-4 overpass	N/A	595+36	603+83	No

4.6 Level 3 Communications

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	Level 3 Communication	1.9" Underground Fiber Optic	Crossing of I-4 Corridor, at US 27, I-4 overpass	East side of overpass	59+90	75+11	Yes, adjust for bridge improvements

4.7 Polk County Utilities Division

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Sanitary/ Wastewater	Polk County Utilities	16" Force Main	From end of US 27 west to intersection of Home Run Blvd & US 27	South side of road	10+00	36+47	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Sanitary/ Wastewater	Polk County Utilities	30" Force Main	Crossing at intersection of Home Run Blvd & US 27	South side of intersection	36+47	37+14	No
Sanitary/ Wastewater	Polk County Utilities	8" Force Main	Crossing at intersection of Heller Brothers Blvd & US 27	West side of intersection	10+38	10+39	No
Sanitary/ Wastewater	Polk County Utilities	6" Force Main	From end of US 27 west to intersection of Heller Brothers Blvd & US 27	North side of road	10+00	10+39	No
Sanitary/ Wastewater	Polk County Utilities	6" Force Main	Crossing at intersection of Dunson Rd & US 27	East side of intersection	116+91	117+61	No
Sanitary/ Wastewater	Polk County Utilities	4" Force Main	Crossing at intersection of Adventure Ct & US 27	South side of intersection	30+88	31+50	No
Sanitary/ Wastewater	Polk County Utilities	12" Force Main	Crossing of US 27, 980-ft west of intersection of Heller Brothers Blvd & US 27	N/A	19+43	19+44	No
Sanitary/ Wastewater	Polk County Utilities	20" Force Main	Crossing of US 27, 140-ft east of intersection of Home Run Blvd & US 27	N/A	35+57	35+57	No
Sanitary/ Wastewater	Polk County Utilities	20" Force Main	Crossing of US 27, 140-ft east of intersection of Home Run Blvd & US 27	North side of road	35+57	36+61	No
Sanitary/ Wastewater	Polk County Utilities	36" Force Main	Crossing at intersection of Home Run Blvd & US 27	East side of intersection	36+92	36+93	No
Sanitary/ Wastewater	Polk County Utilities	36" Force Main	Crossing of US 27, 560-ft west of intersection of I-4 westbound ramp to US 27 & US 27	N/A	87+03	87+13	No
Sanitary/ Wastewater	Polk County Utilities	36" Force Main	From 560-ft west of intersection of I-4 westbound ramp to US 27 & US 27 west to intersection of Richie Rd & US 27	North side of road	87+12	90+00	No
Sanitary/ Wastewater	Polk County Utilities	36" Sanitary Main	From 270-ft west to 870-ft west of intersection of I-4 westbound ramp to US & US 27	South side of road	84+04	90+00	No
Sanitary/ Wastewater	Polk County Utilities	24" Force Main	From intersection of Richie Rd & US 27 west to 190-ft east of intersection of Dunson Rd & US 27	North side of road	90+00	115+82	No
Sanitary/ Wastewater	Polk County Utilities	24" Force Main	Crossing of US 27, 210-ft east of intersection of Dunson Rd & US 27	N/A	115+75	115+82	No
Sanitary/ Wastewater	Polk County Utilities	24" Force Main	From 210-ft east of intersection of Dunson Rd & US 27 west to end of US 27	South side of road	115+75	119+92	No
Sanitary/ Wastewater	Polk County Utilities	24" Force Main	Crossing of I-4 Corridor, 3110-ft west of US 27, I-4 overpass	N/A	445+57	453+63	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Sanitary/ Wastewater	Polk County Utilities	24" Force Main	Crossing of I-4 Corridor, 4430-ft east of US 27, I-4 overpass	N/A	521+37	521+53	No
Sanitary/ Wastewater	Polk County Utilities	24" Force Main	Crossing of I-4 Corridor, 180-ft west of CR 54, I-4 overpass	N/A	596+93	598+79	No
Sanitary/ Wastewater	Polk County Utilities	24 Raw Wastewater Main	Crossing at intersection of Dunson Rd & US 27	West side of intersection	117+78	119+31	No
Sanitary/ Wastewater	Polk County Utilities	18" Sanitary Main	From 570-ft east of intersection of Richie Rd & US 27 west to 600-ft east of intersection of Dunson Rd & US 27	South side of road	90+00	112+10	No
Sanitary/ Wastewater	Polk County Utilities	12" Sanitary Main	From 600-ft east of intersection of Dunson Rd & US 27 west to end of US 27	South side of road	112+10	135+00	No
Sanitary/ Wastewater	Polk County Utilities	20" Raw Wastewater Main	From intersection of Dunson Rd & US 27 west to end of US 27	North side of road	117+78	135+00	No
Water	Polk County Utilities	24" Reclaim Water Main	Crossing of US 27, 140-ft east of intersection of Home Run Blvd & US 27	N/A	35+45	35+46	No
Water	Polk County Utilities	24" Reclaim Water Main	Crossing of US 27, 590-ft west of intersection of I-4 westbound ramp to US 27 & US 27	N/A	87+18	87+20	No
Water	Polk County Utilities	24" Reclaim Water Main	From 590-ft west of intersection of I-4 westbound ramp to US 27 & US 27 west to 180-ft east of intersection of Dunson Rd & US 27	North side of road	87+20	115+63	No
Water	Polk County Utilities	24" Reclaim Water Main	Crossing of US 27 180-ft east of intersection of Dunson Rd & US 27	N/A	115+58	115+63	No
Water	Polk County Utilities	24" Reclaim Water Main	From 180-ft east of intersection of Dunson Rd & US 27 west to end of US 27	South side of road	115+58	135+00	No
Water	Polk County Utilities	24" Reclaim Water Main	Crossing of I-4 Corridor, 3110-ft west of US 27, I-4 overpass	N/A	445+72	445+82	No
Water	Polk County Utilities	24" Reclaim Water Main	Crossing of I-4 Corridor, 200-ft west of CR 54, I-4 overpass	N/A	596+93	598+79	No
Water	Polk County Utilities	16" Reclaim Water Main	From end of US 27 west to intersection of Home Run Blvd & US 27	South side of road	10+00	36+78	No
Water	Polk County Utilities	8" Reclaim Water Main	From 230-ft west of intersection of Heller Brothers Blvd & US 27	South side of road	10+45	12+06	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Water	Polk County Utilities	8" Reclaim Water Main	From 70-ft west of intersection of Adventure Ct & US 27	South side of road	31+43	31+97	No
Water	Polk County Utilities	30" Water Main	Crossing of I-4 Corridor, 160-ft west of CR 54, I-4 Overpass	N/A	597+33	599+15	No
Water	Polk County Utilities	24" Water Main	Crossing of US 27, 240-ft east of intersection of Dunson Rd & US 27	N/A	115+40	115+52	No
Water	Polk County Utilities	24" Water Main	Crossing of US 27, 140-ft west of intersection of Dunson Rd & US 27	N/A	119+32	119+41	No
Water	Polk County Utilities	24" Water Main	From 270-ft east of intersection of Dunson Rd & US 27 west to end of US 27	South side of road	115+40	199+89	No
Water	Polk County Utilities	20" Water Main	Crossing of US 27, 610-ft west of intersection of I-4 westbound ramp to US 2 & US 27	N/A	87+36	87+34	No
Water	Polk County Utilities	20" Water Main	From 610-ft west of intersection of I-4 westbound ramp to US 27 & US 27 west to 240-ft east of intersection of Dunson Rd. & US 27	North side of road	87+34	115+51	Yes, adjust to be parallel to proposed road
Water	Polk County Utilities	20" Water Main	Crossing of I-4 Corridor, 3110-ft west of US 27, I-4 overpass	N/A	445+41	453+53	No
Water	Polk County Utilities	20" Water Main	Crossing of I-4 Corridor, 4430-ft east of US 27, I-4 overpass	N/A	521+17	521+32	No
Water	Polk County Utilities	16" Water Main	Crossing of US 27, 160-ft west of intersection of Home Run Blvd & US 27	N/A	38+76	38+77	No
Water	Polk County Utilities	14" Water Main	Crossing of US 27, at intersection of Heller Brothers Blvd & US 27	West side of intersection	10+53	10+61	No
Water	Polk County Utilities	12" Water Main	From 750-ft west of intersection of Richie Rd. & US 27 west to end of US 27	South side of road	105+07	135+00	No
Water	Polk County Utilities	12" Water Main	Crossing of US 27, 140-ft east of intersection of Dunson Rd & US 27	N/A	116+64	116+77	No
Water	Polk County Utilities	8" Water Main	From intersection of Adventure Ct & US 27 west to 440-ft west of intersection of Frontage Rd & US 27	South side of road	30+94	65+33	No
Water	Polk County Utilities	8" Water Main	Crossing of US 27, 710-ft west of intersection of Home Run Blvd & US 27	N/A	44+21	44+26	No
Water	Polk County Utilities	8" Water Main	From 780-ft to 700-ft west of intersection of I-4 westbound ramp to US 27 & US 27	North side of road	86+18	88+30	Yes, adjust to be parallel to proposed road
Water	Polk County Utilities	8" Water Main	From 280-ft west of intersection of I-4 westbound ramp to US 27 & US 27 west to 230-ft east of intersection Richie Rd & US 27	South side of road	84+32	93+68	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Water	Polk County Utilities	8" Water Main	Crossing of south side of US 27, 750-ft east of intersection of Dunson Rd & US 27	N/A	487+52	490+95	No
Water	Polk County Utilities	6" Water Main	From 160-ft west of intersection of Home Run Blvd & US 27	South side of road	37+48	37+54	No
Water	Polk County Utilities	Water Main of various sizes	From end of US 27 west to 700-ft west of intersection of Posner Blvd & US 27	North side of road	10+00	44+26	No
Water	Polk County Utilities	2" Water Main	Crossing of south side of US 27, 100-ft east of end of US 27	N/A	133+98	134+08	No

4.8 Verizon – Florida

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	Verizon	Underground Fiber Optic	From end of US 27 west to intersection of Frontage Rd & US 27	North side of road	10+00	56+08	No
Communications	Verizon	Underground Fiber Optic	From end of US 27 west to intersection of Frontage Rd & US 27	South side of road	10+00	56+18	No
Communications	Verizon	Underground Fiber Optic	From 190-ft to 640-ft west of intersection of Frontage Rd & US 27 on US 27	South side of road	58+55	63+09	Yes, adjust to be parallel to proposed road
Communications	Verizon	Underground Fiber Optic	From 190-ft to 450-ft west of intersection of Frontage Rd & US 27 on US 27	North side of road	58+59	61+04	Yes, adjust to be parallel to proposed road
Communications	Verizon	Underground Fiber Optic	Crossing of US 27, 440-ft west of intersection of Frontage Rd & US 27	N/A	61+03	31+36	Yes, extend across proposed roadway
Communications	Verizon	Underground Fiber Optic	Crossing at intersection of Frontage Rd & US 27	East side of intersection	56+08	56+18	Yes, extend across proposed roadway
Communications	Verizon	Underground Fiber Optic	Crossing at intersection of Heller Brothers Blvd & US 27	West side of intersection	10+55	10+86	No
Communications	Verizon	Underground Fiber Optic	Two crossings of US 27, 1340-ft east of intersection of Frontage Rd & US 27	N/A	43+31	43+39	No
Communications	Verizon	Underground Fiber Optic	From 940-ft east of intersection of I-4 westbound ramp to US 27 west to 1190-ft east of intersection of Dunson Rd & US 27	North side of road	71+94	105+82	No
Communications	Verizon	Underground Fiber Optic	From 620-ft east to 300-ft east of intersection of I-4 westbound ramp to US 27 & US 27	North side of road	75+10	78+39	No

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required
Communications	Verizon	Underground Fiber Optic	Crossing of US 27, 550-ft west of intersection of I-4 westbound ramp to US 27 & US 27	N/A	86+81	86+86	No
Communications	Verizon	Underground Fiber Optic	From 550-ft west of intersection of I-4 westbound ramp to US 27 & US 27 west to end of US 27	South side of road	86+86	135+00	No
Communications	Verizon	Underground Fiber Optic	From 230-ft west to 1008-ft west of intersection of I-4 westbound ramp to US 27 & US 27	South side of road	84+02	91+53	No
Communications	Verizon	Underground Fiber Optic	Crossing at intersection of Richie Rd & US 27	East side of intersection	94+68	96+25	No
Communications	Verizon	Underground Fiber Optic	Crossing at intersection of Richie Rd & US 27	North side of intersection	94+83	96+25	No
Communications	Verizon	Underground Fiber Optic	Crossing of US 27, 150-ft east of intersection of Dunson Rd & US 27	N/A	94+68	94+70	No
Communications	Verizon	Underground Fiber Optic	Crossing of US 27, 150-ft east of intersection of Dunson Rd & US 27	North side of intersection	116+48	116+50	No
Communications	Verizon	Underground Fiber Optic	From 2800-ft to 1100-ft west of US 27, I-4 overpass on I-4 Corridor	East side of road	449+00	466+18	No
Communications	Verizon	Underground Fiber Optic	Crossing of I-4 Corridor, 1740-ft west of US 27, I-4 overpass	N/A	459+32	460+07	No
Communications	Verizon	Underground Fiber Optic	Two crossings of I-4 Corridor at CR 54, I-4 overpass	West side of overpass	597+92	600+51	No
Communications	Verizon	Underground Fiber Optic	Crossing of I-4 Corridor at CR 54, I-4 overpass	East side of overpass	599+64	602+04	No

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 \$3,048,080.

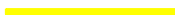






Appendix A: Estimate Relocation Costs

Type of Utility	Owner of Utility	Type of Facility	Limits	Offset/Side	Begin Sta.	End Sta.	Relocation Required	Relocation Cost
Communications	Level 3 Communication	1.9" Underground Fiber Optic	Crossing of I-4 Corridor, at US 27, I-4 overpass	East side of overpass	59+90	75+11	Yes, adjust for bridge improvements	\$39,800
Communications	Verizon	Underground Fiber Optic	From 190-ft to 640-ft west of intersection of Frontage Rd & US 27 on US 27	South side of road	58+55	63+09	Yes, adjust to be parallel to proposed road	\$325,820
Communications	Verizon	Underground Fiber Optic	From 190-ft to 450-ft west of intersection of Frontage Rd & US 27 on US 27	North side of road	58+59	61+04	Yes, adjust to be parallel to proposed road	\$325,820
Communications	Verizon	Underground Fiber Optic	Crossing of US 27, 440-ft west of intersection of Frontage Rd & US 27	N/A	61+03	31+36	Yes, extend across proposed roadway	\$325,820
Communications	Verizon	Underground Fiber Optic	Crossing at intersection of Frontage Rd & US 27	East side of intersection	56+08	56+18	Yes, extend across proposed roadway	\$325,820
Electric	Duke Energy Distribution	13 KV Aerial Electric	From 90-ft west of Ernie Caldwell Blvd, US 27 overpass west to end of US 27	South side of road	28+41	135+00	Yes, adjust for bridge improvements	\$25,000
Natural Gas	Central Florida Gas	4" Natural Gas Main	From intersection of Frontage Rd & US 27 west on US 27 to 510-ft east of intersection of I-4 westbound ramp to US 27 & US 27	South side of road	61+32	76+39	Yes, adjust for bridge improvements	\$50,000
Natural Gas	Central Florida Gas	4" Natural Gas Main	Crossing of I-4 Corridor, 140-ft east of CR 54, US 27 overpass	N/A	599+17	603+32	Yes, adjust for bridge improvements	\$30,000
Water	Polk County Utilities	20" Water Main	From 610-ft west of intersection of I-4 westbound ramp to US 27 & US 27 west to 240-ft east of intersection of Dunson Rd. & US 27	North side of road	87+34	115+51	Yes, adjust to be parallel to proposed road	\$960,000
Water	Polk County Utilities	8" Water Main	From 780-ft to 700-ft west of intersection of I-4 westbound ramp to US 27 & US 27	North side of road	86+18	88+30	Yes, adjust to be parallel to proposed road	\$640,000
Estimated Total Cost								\$3,048,080

Appendix B: Existing Utility Plan Sheets



MATCHLINE STA. 379+00.00

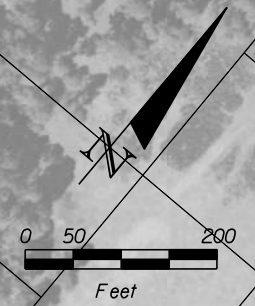
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	SANITARY LINE		NON-POTTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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	POLK	201210-2-22-01

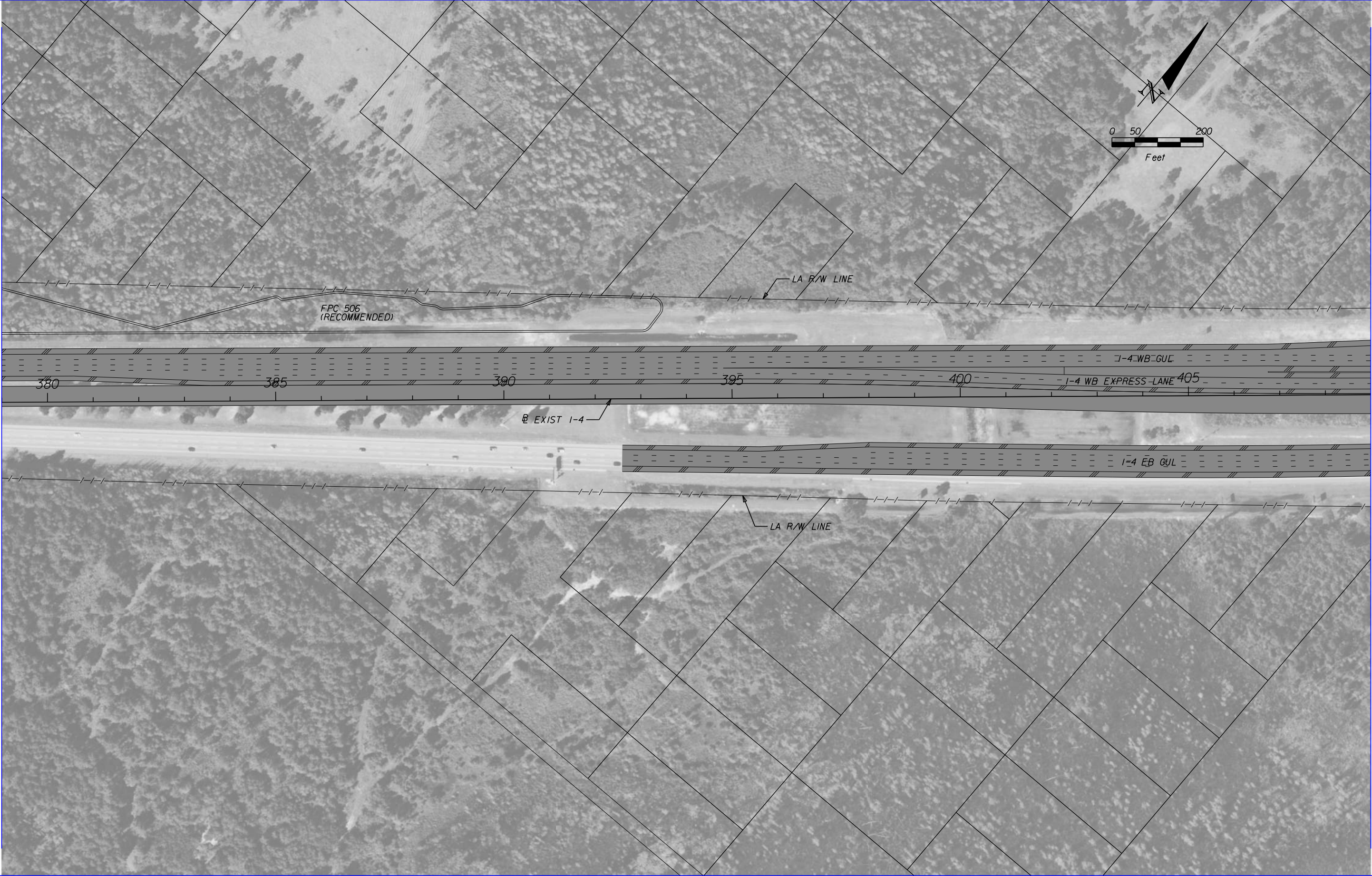
**I-4 PD&E STUDY
MAINLINE
SEGMENT 5**

SHEET NO.
1



MATCHLINE STA. 379+00.00

MATCHLINE STA. 409+00.00



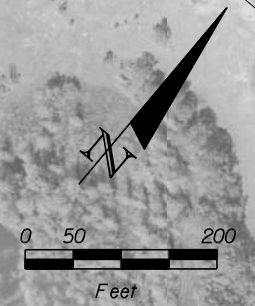
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	SANITARY LINE		NON-POTTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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**I-4 PD&E STUDY
MAINLINE
SEGMENT 5**

SHEET NO.
2



POND 506
 (RECOMMENDED)

POND 500
 (RECOMMENDED)

LA R/W LINE

LA R/W LINE

EXIST I-4

I-4 WB GUL

I-4 WB EXPRESS LANE

I-4 EB EXPRESS LANE

I-4 EB GUL

410

415

420

425

430

435

MATCHLINE STA. 409+00.00

MATCHLINE STA. 439+00.00

	GAS LINE		COMMUNICATIONS LINE
	SANITARY LINE		NON-POTTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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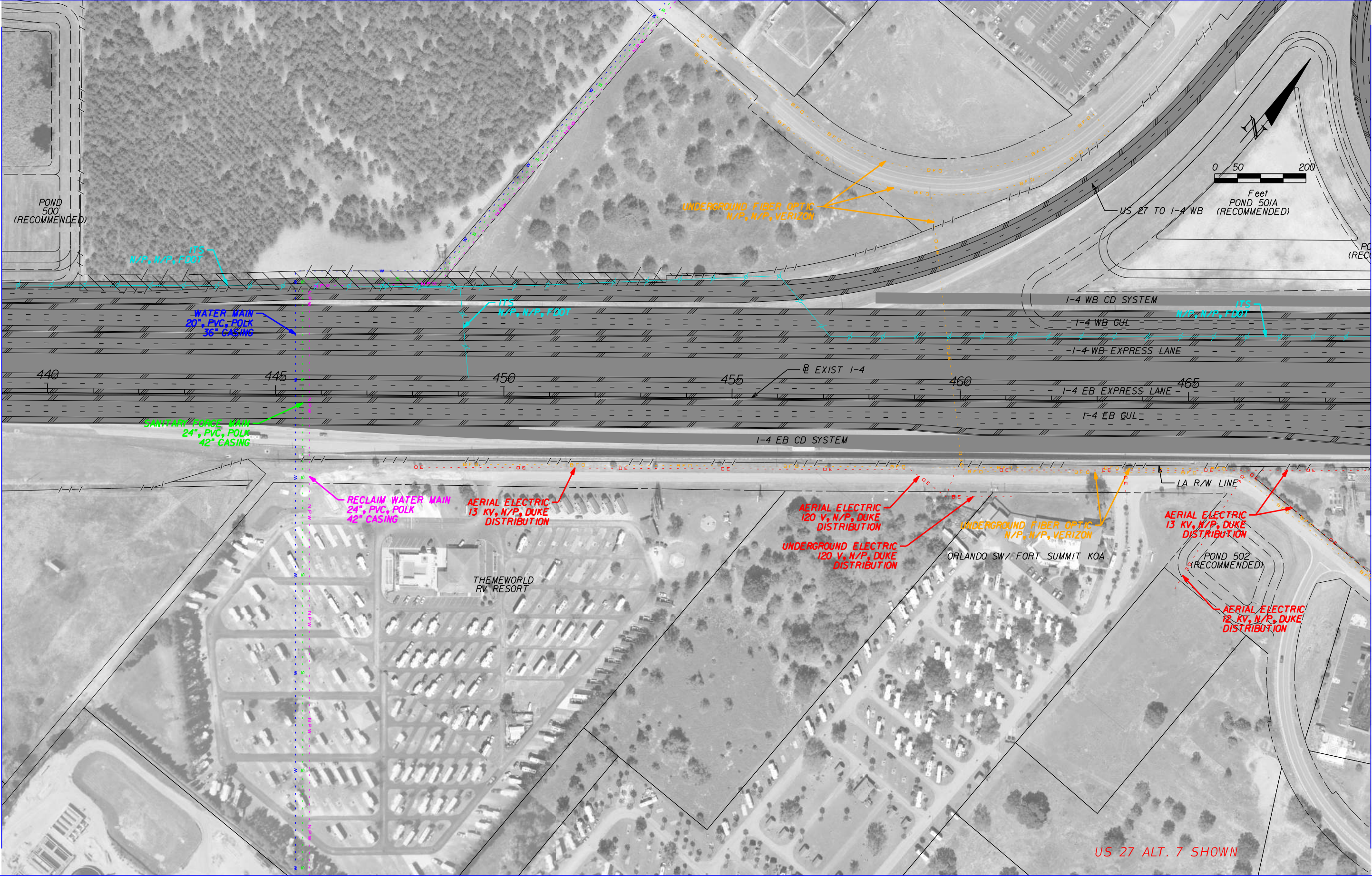
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 MAINLINE
 SEGMENT 5**

SHEET NO.
3

MATCHLINE STA. 439+00.00

MATCHLINE STA. 469+00.00



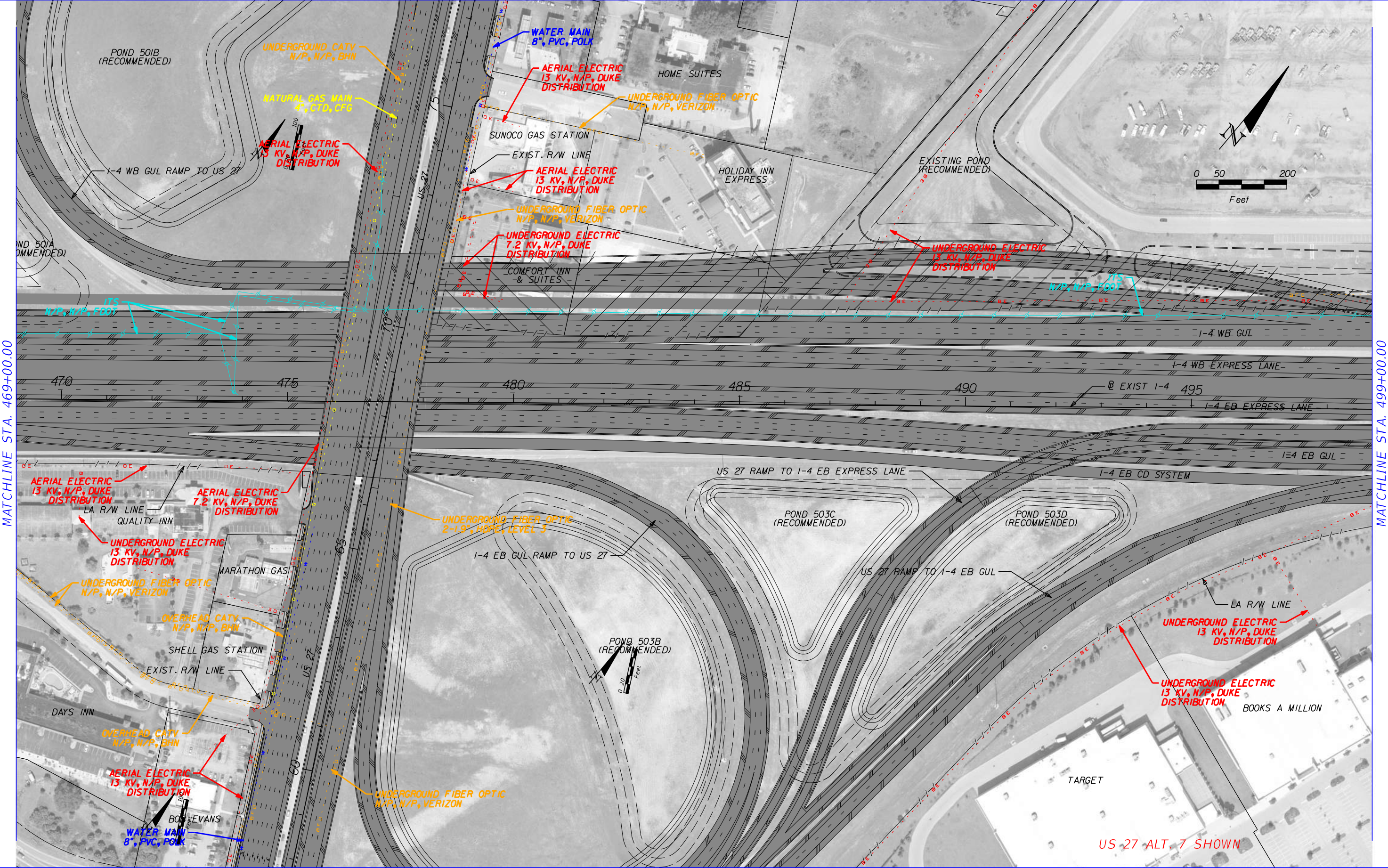
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	WATER LINE		PROPOSED ROADWAY

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**I-4 PD&E STUDY
 MAINLINE
 SEGMENT 5**

SHEET NO.
4



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MATCHLINE STA. 499+00.00

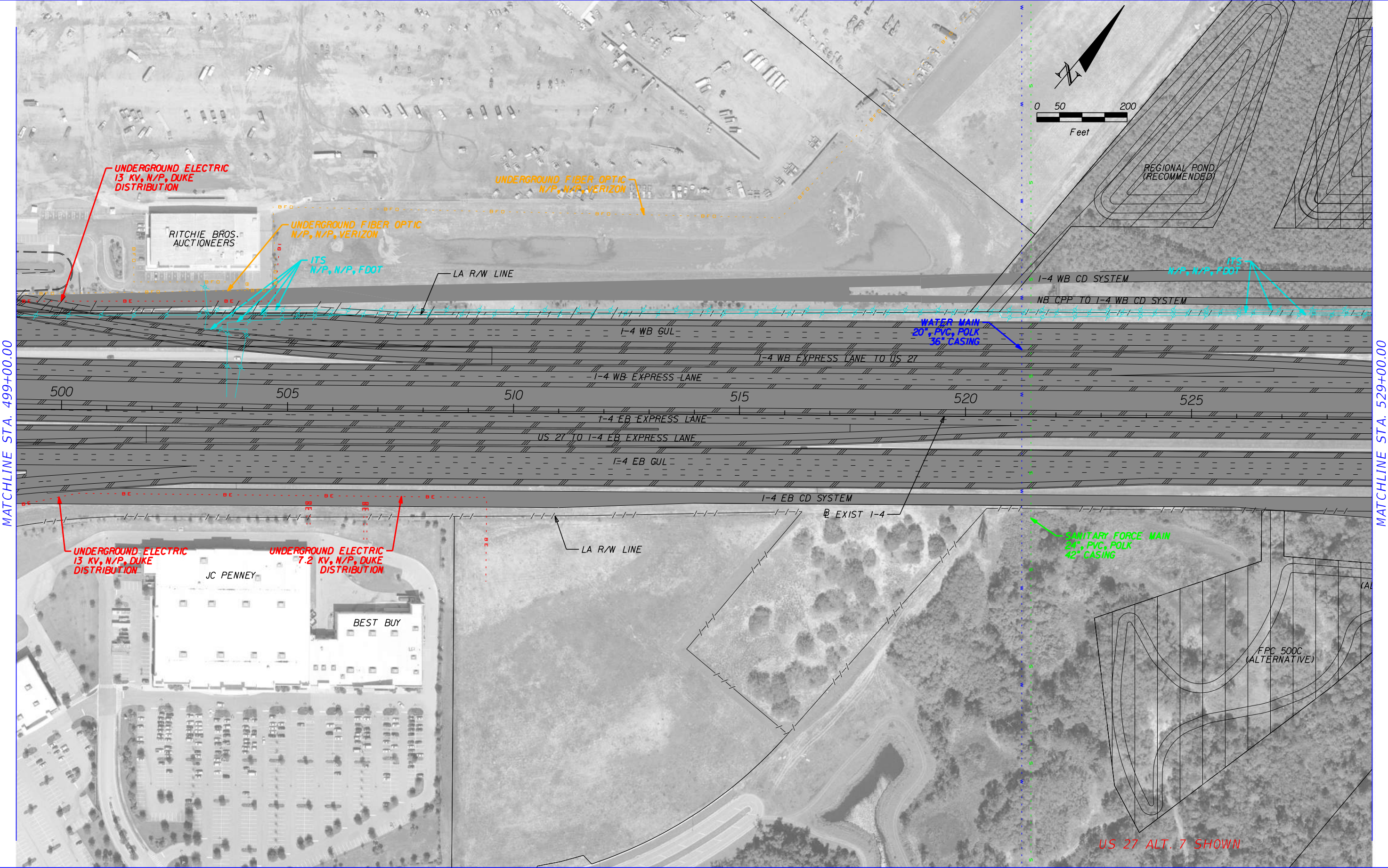
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	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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**I-4 PD&E STUDY
MAINLINE
SEGMENT 5**

SHEET NO.
5



MATCHLINE STA. 499+00.00

MATCHLINE STA. 529+00.00

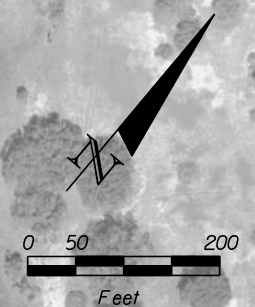
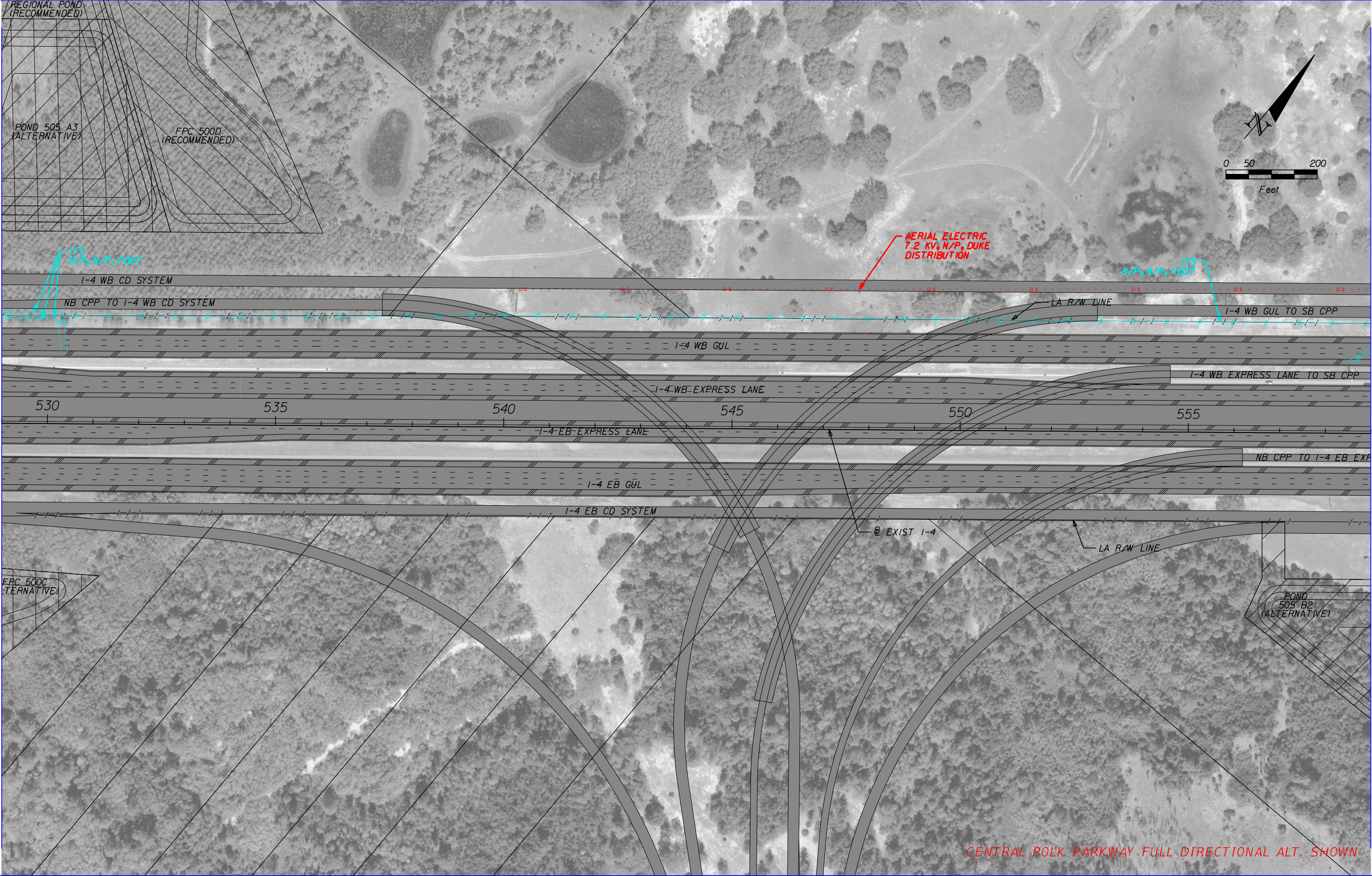
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	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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**I-4 PD&E STUDY
 MAINLINE
 SEGMENT 5**

SHEET NO.
6



MATCHLINE STA. 529+00.00

MATCHLINE STA. 559+00.00

CENTRAL POLK PARKWAY FULL DIRECTIONAL ALT. SHOWN

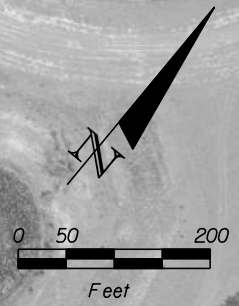
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400	POLK	201210-2-22-01

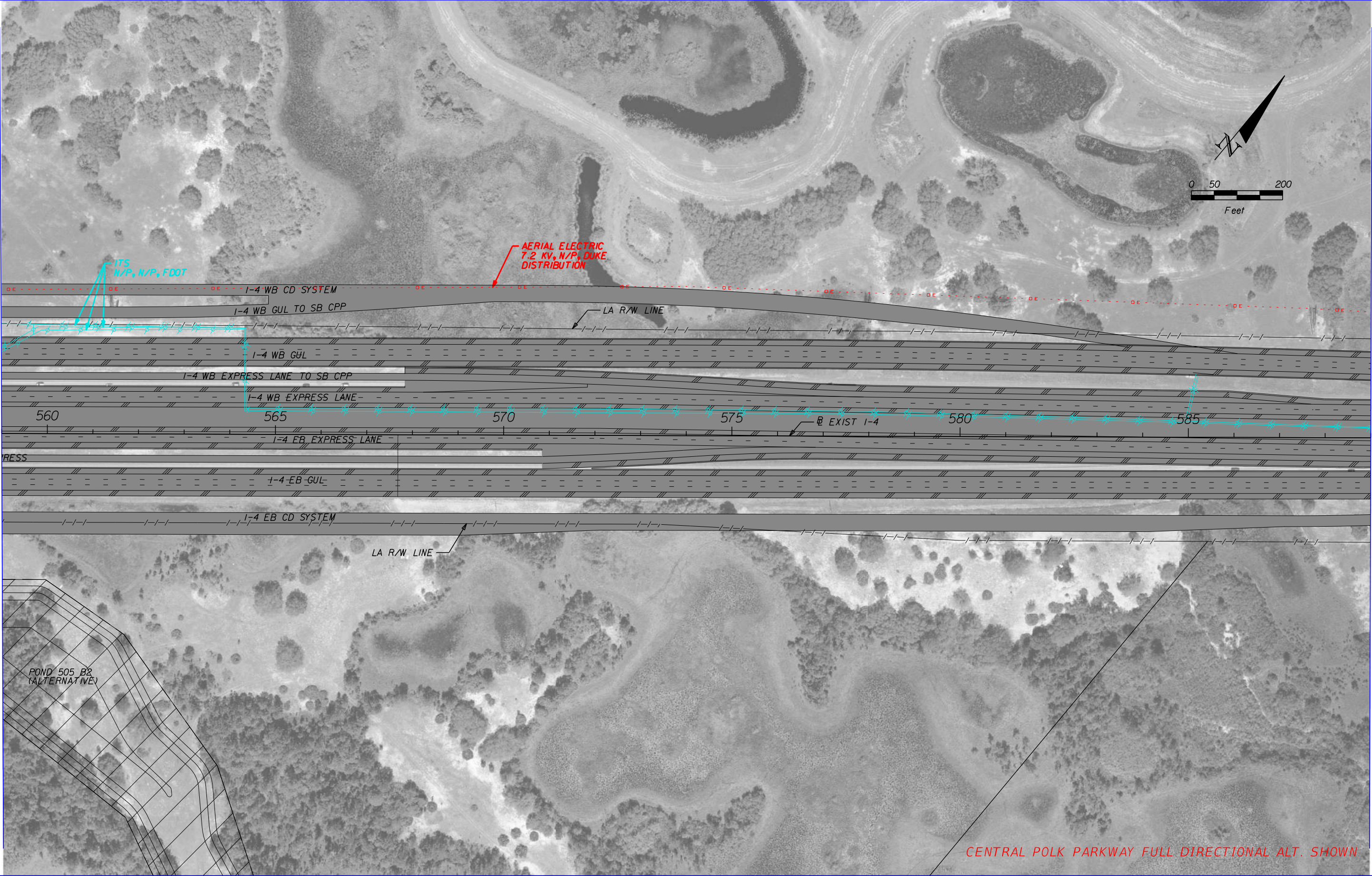
**I-4 PD&E STUDY
MAINLINE
SEGMENT 5**

SHEET NO.
7



MATCHLINE STA. 559+00.00

MATCHLINE STA. 589+00.00



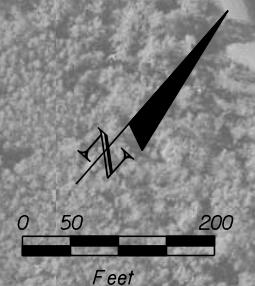
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	WATER LINE		PROPOSED ROADWAY

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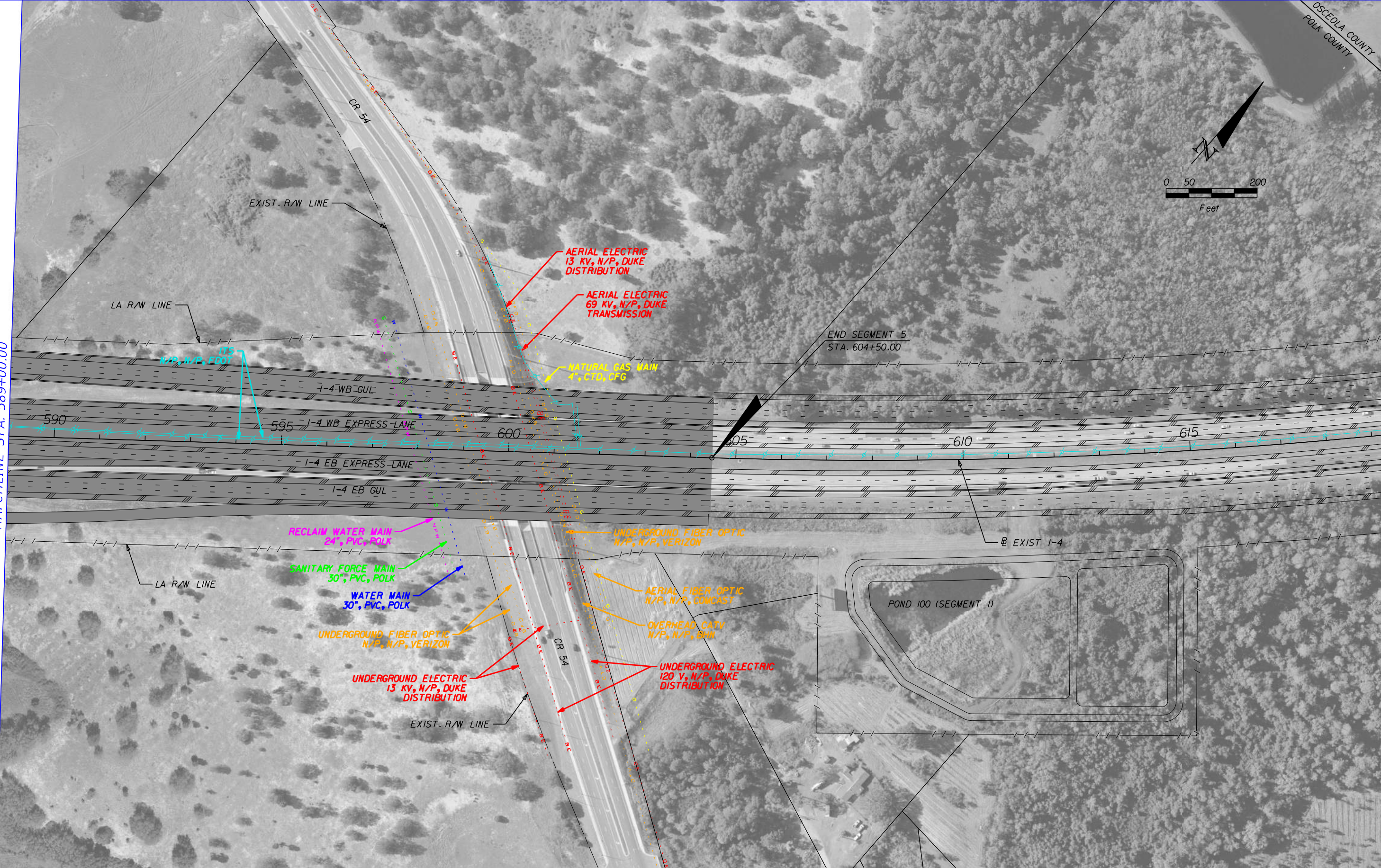
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 MAINLINE
 SEGMENT 5**

SHEET NO.
8



MATCHLINE STA. 589+00.00



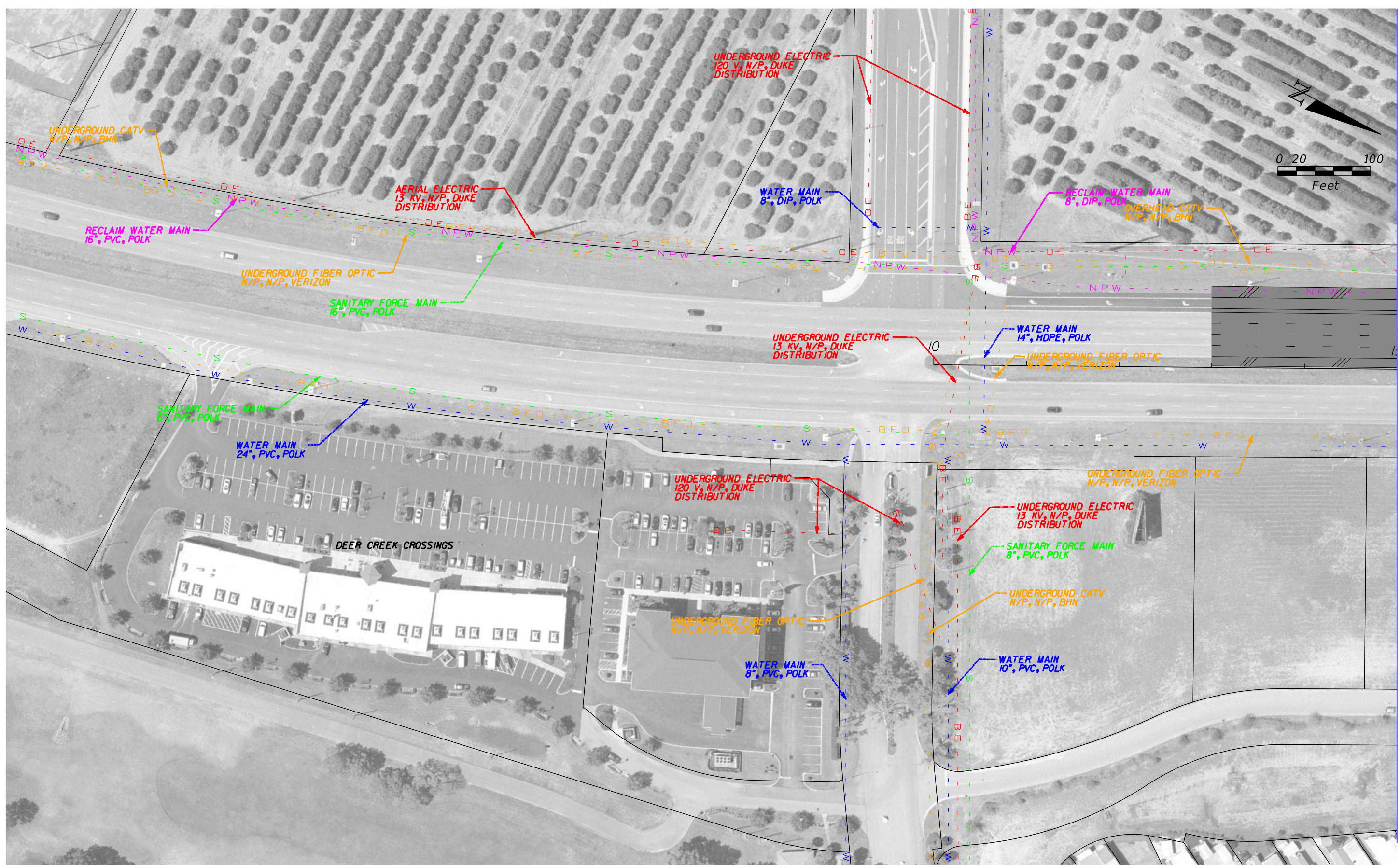
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	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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**I-4 PD&E STUDY
MAINLINE
SEGMENT 5**

SHEET NO.
9



MATCHLINE STA. 15+00.00

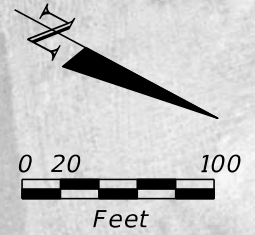
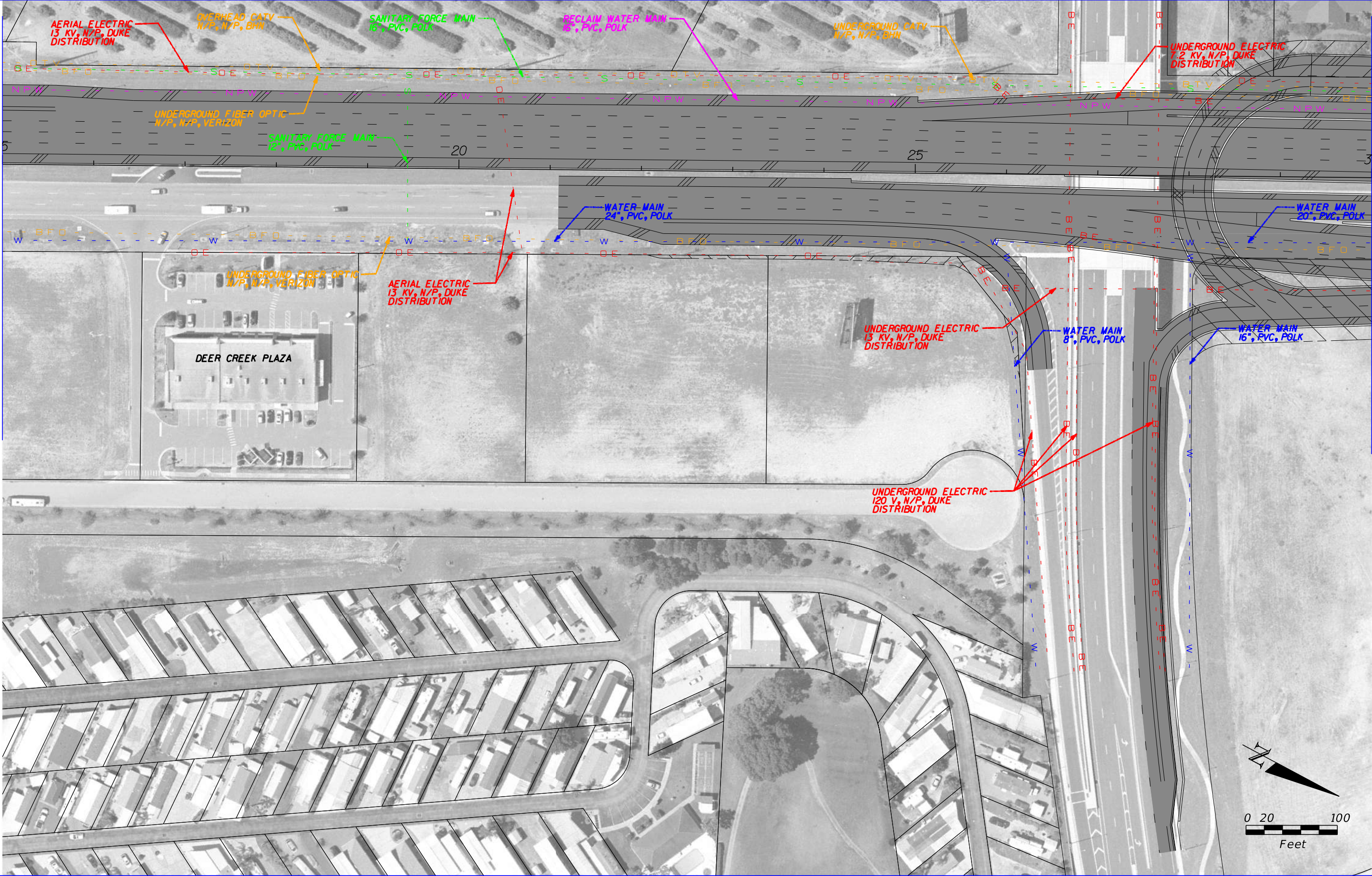
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	SANITARY LINE		NON-POTTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 US 27 ALT 7 (1 OF 9)
 (RECOMMENDED)
 SEGMENT 5**

SHEET NO.
10



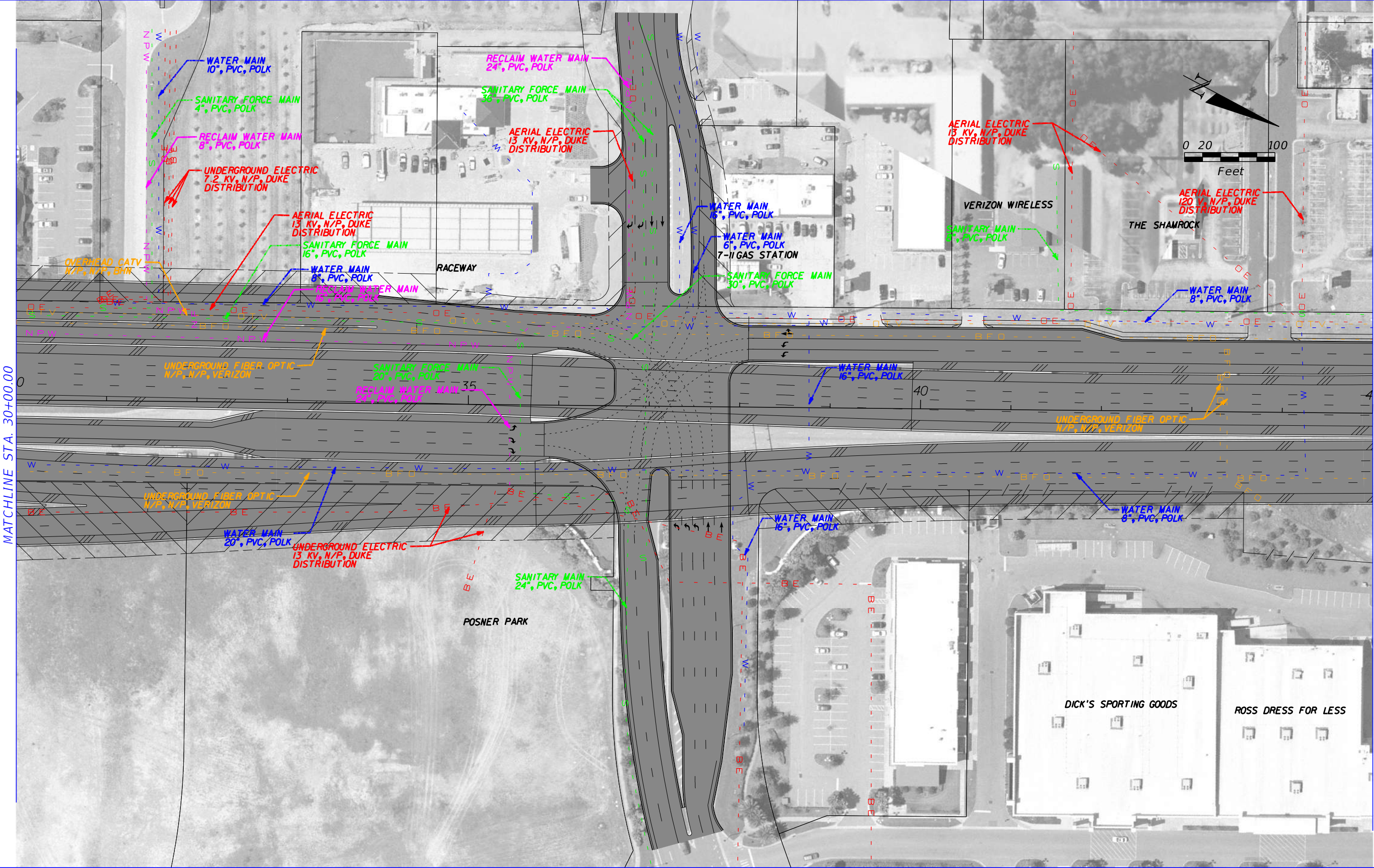
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	WATER LINE		PROPOSED ROADWAY

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400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 US 27 ALT 7 (2 OF 9)
 (RECOMMENDED)
 SEGMENT 5**

SHEET NO.
11



MATCHLINE STA. 30+00.00

MATCHLINE STA. 45+00.00

	GAS LINE		COMMUNICATIONS LINE
	SANITARY LINE		NON-POTTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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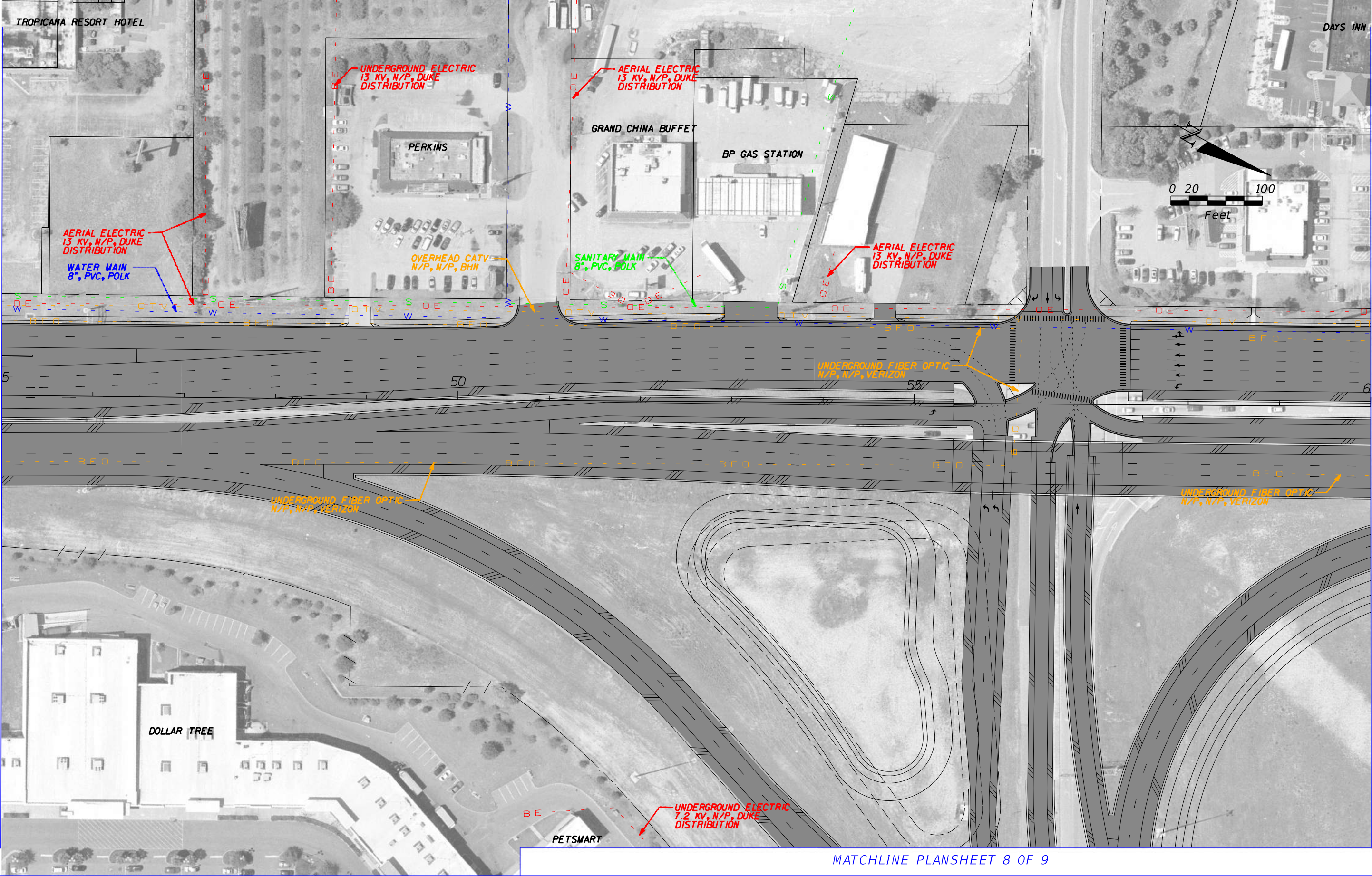
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 US 27 ALT 7 (3 OF 9)
 (RECOMMENDED)
 SEGMENT 5**

SHEET NO.
12

MATCHLINE STA. 45+00.00

MATCHLINE STA. 60+00.00



MATCHLINE PLANSHEET 8 OF 9

	GAS LINE		COMMUNICATIONS LINE
	SANITARY LINE		NON-POTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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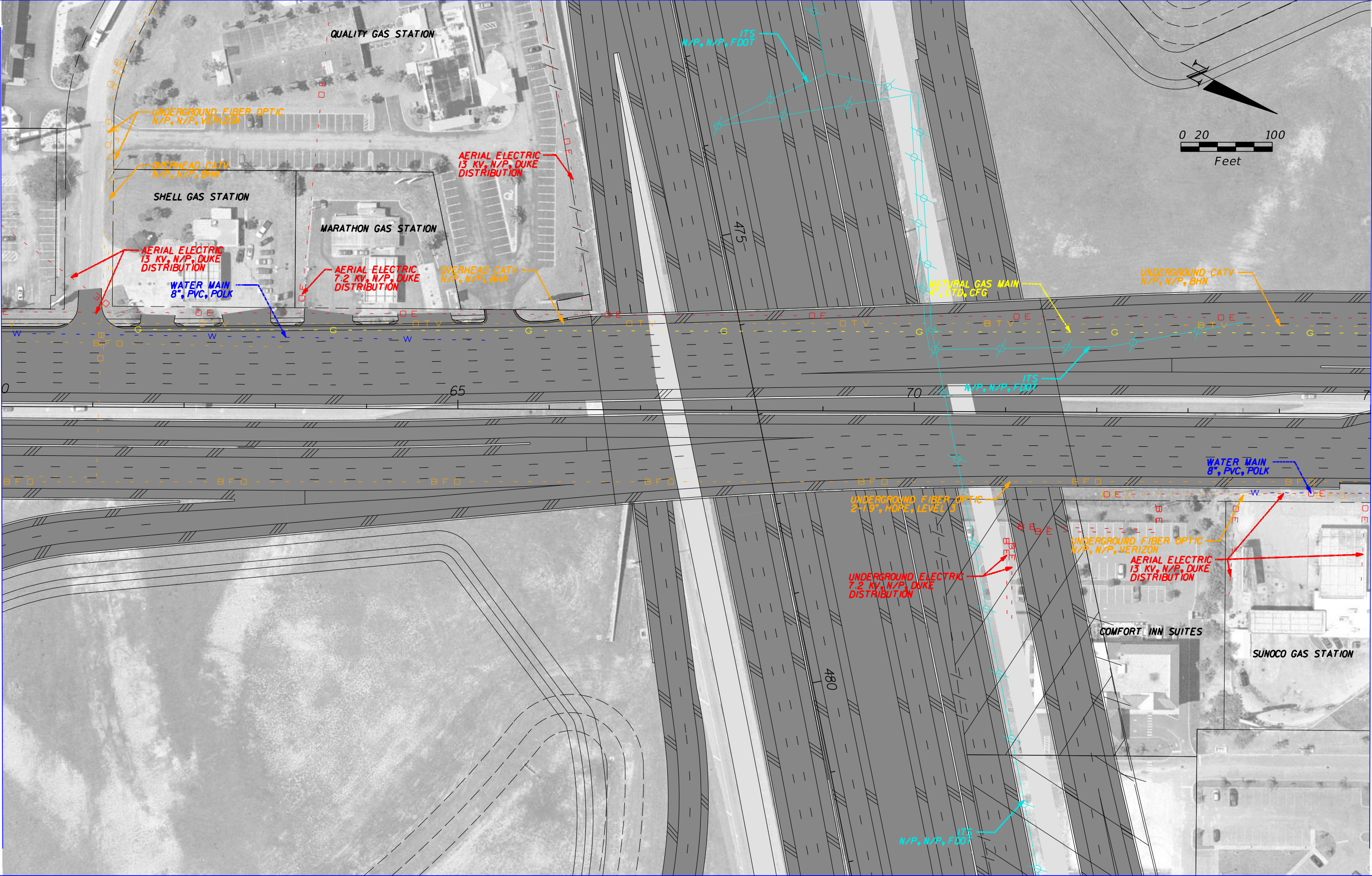
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 US 27 ALT 7 (4 OF 9)
 (RECOMMENDED)
 SEGMENT 5**

SHEET NO.
13

MATCHLINE STA. 60+00.00

MATCHLINE STA. 75+00.00



	GAS LINE		COMMUNICATIONS LINE
	SANITARY LINE		NON-POTTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

HNTB CORPORATION
 610 CRESCENT EXECUTIVE CT
 SUITE 400
 LAKE MARY, FL 32746
 (407) 805-0355
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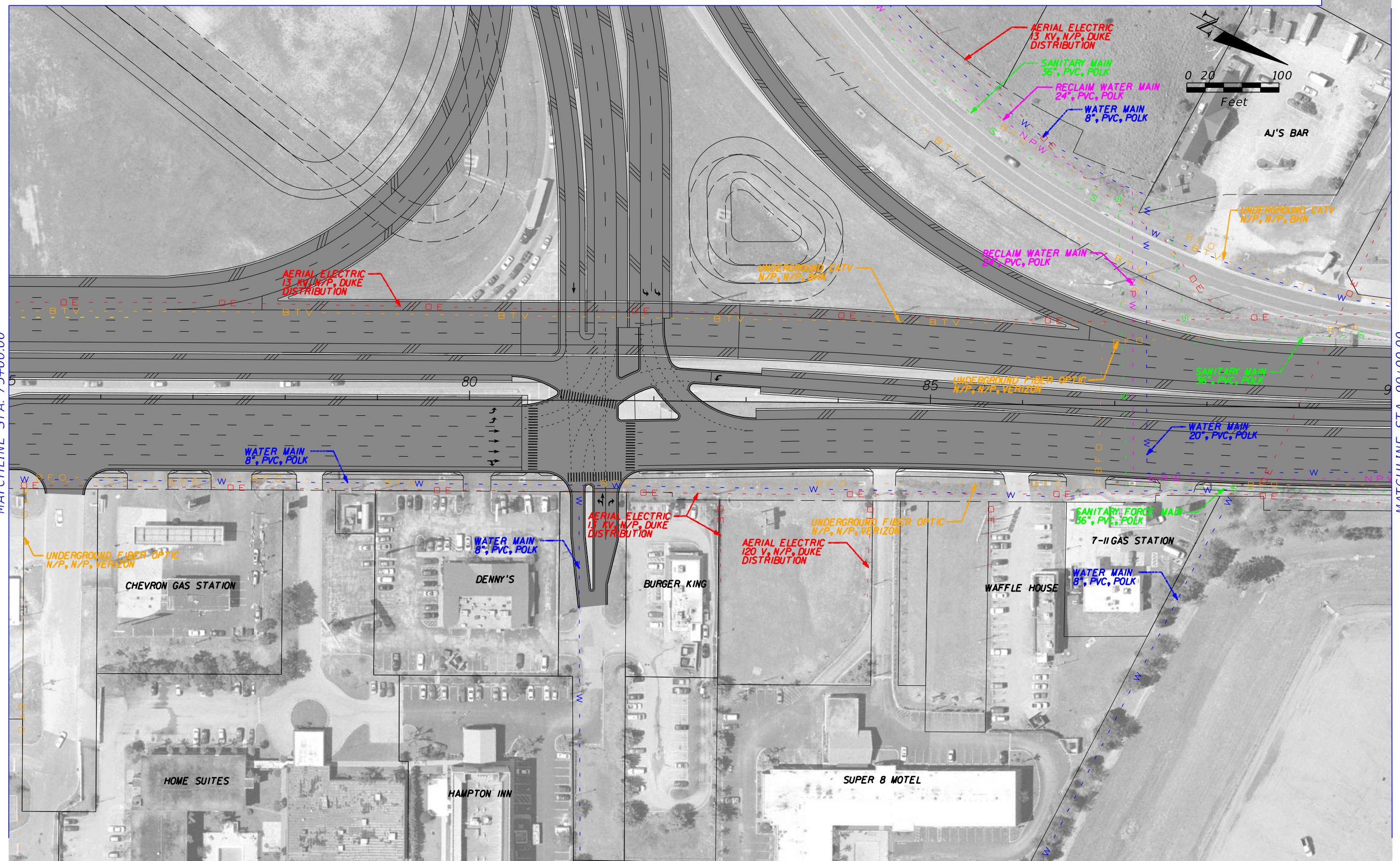
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 US 27 ALT 7 (5 OF 9)
 (RECOMMENDED)
 SEGMENT 5**

SHEET NO.
14

MATCHLINE STA. 75+00.00

MATCHLINE STA. 90+00.00



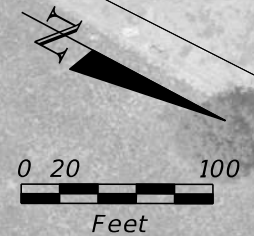
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	WATER LINE		PROPOSED ROADWAY

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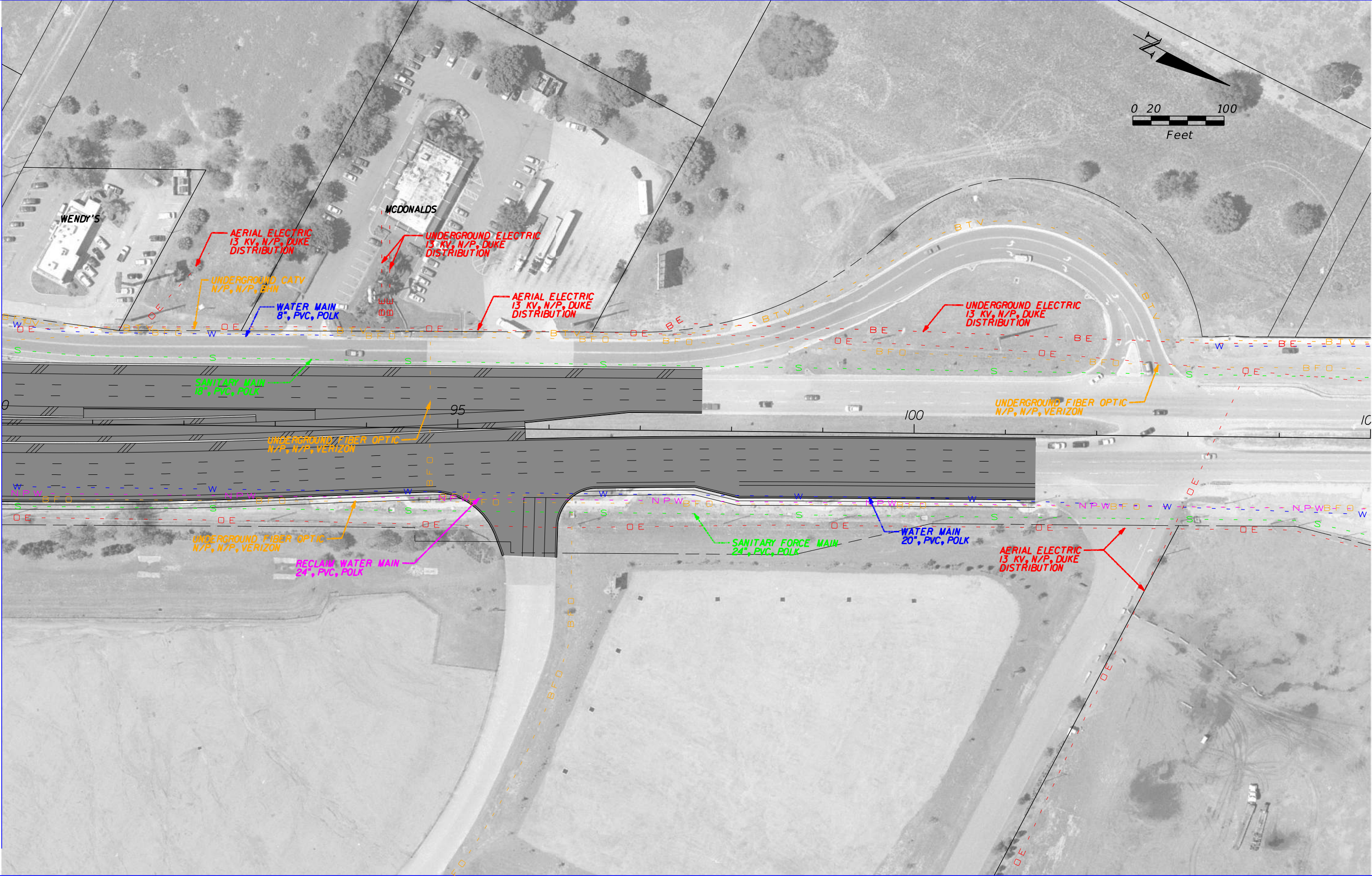
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
400	POLK	201210-2-22-01

I-4 PD&E STUDY
 US 27 ALT 7 (6 OF 9)
 (RECOMMENDED)
 SEGMENT 5

SHEET NO.
 15



MATCHLINE STA. 90+00.00



	GAS LINE		COMMUNICATIONS LINE
	SANITARY LINE		NON-POTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

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400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 US 27 ALT 7 (7 OF 9)
 (RECOMMENDED)
 SEGMENT 5**

SHEET NO.
16

US27-08
 MODEL: 16.5x10.6 (R)
 SHEET SIZE: 11:10
 PLOT SCALE:



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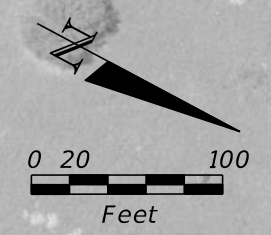
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400	POLK	201210-2-22-01

**I-4 PD&E STUDY
 US 27 ALT 7 (8 OF 9)
 (RECOMMENDED)
 SEGMENT 5**

SHEET NO.
17



MATCHLINE PLANSHEET 6 OF 9

	GAS LINE		COMMUNICATIONS LINE
	SANITARY LINE		NON-POTTABLE WATER LINE
	ITS LINE		ELECTRIC LINE
	WATER LINE		PROPOSED ROADWAY

HNTB CORPORATION
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**I-4 PD&E STUDY
 US 27 ALT 7 (9 OF 9)
 (RECOMMENDED)
 SEGMENT 5**

SHEET NO.
18