

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

FINANCIAL PROJECT ID 437300-1-52-01

FINANCIAL PROJECT ID 437300-2-52-01

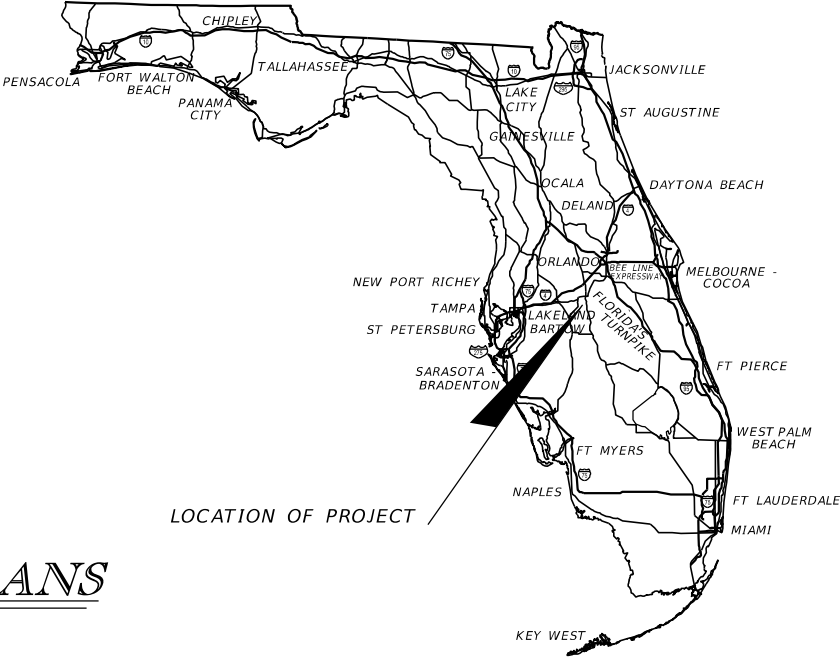
POLK COUNTY (16470)

SUNTRAX TEST FACILITY

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

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INTELLIGENT TRANSPORTATION
SYSTEMS PLANS
ENGINEER OF RECORD:

ROBERT C. MEADOR, P.E.
P.E. LICENSE NUMBER 72936
VIBE
700 CENTRAL AVENUE, SUITE 302
ST PETERSBURG, FL 33701
VENDOR NO.: 46-2667875
CONTRACT NO.: C9L54
CERTIFICATE OF AUTHORIZATION 30322

FDOT PROJECT MANAGER:

PATRICK M. MUENCH, P.E.

GEC PROJECT MANAGER:

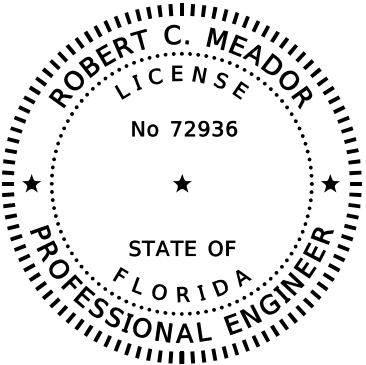
JOSH PEDERSEN, P.E.

REVISIONS:

KEY SHEET REVISIONS	
DATE	DESCRIPTION

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
E8Q39	17	IT-1

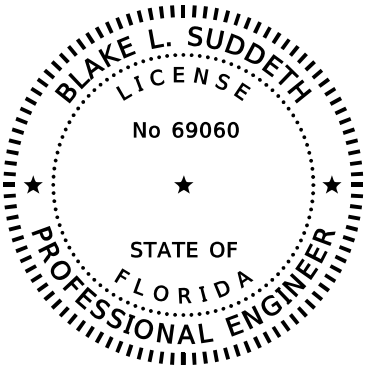
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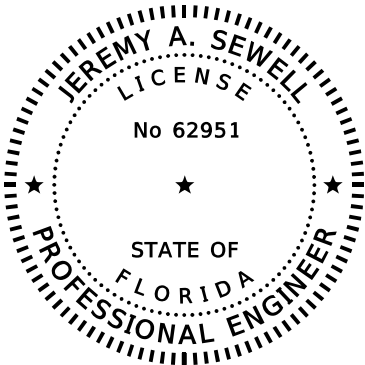
VIBE
700 CENTRAL AVENUE
SUITE 302
ST PETERSBURG, FL 33701
CERTIFICATE OF AUTHORIZATION 30322
ROBERT C. MEADOR, P.E. NO. 72936



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JOSEPH, LAWRENCE & CO.
1180 HARWOOD AVENUE
SUITE 3000
ALTAMONTE SPRINGS, FL 32714
CERTIFICATE OF AUTHORIZATION 28730
BLAKE LAWRENCE SUDDETH, P.E. NO. 69060



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TIERRA, INC.
591 SUSAN B. BRITT COURT
WINTER GARDEN, FL 34787
CERTIFICATE OF AUTHORIZATION 6486
JEREMY A. SEWELL, P.E. NO. 62951

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

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INTELLIGENT TRANSPORTATION SYSTEMS PLANS

SHEET NO.	SHEET DESCRIPTION
IT-2	SIGNATURE SHEET
IT-5	GENERAL NOTES *
IT-27 THRU IT-30	POWER SERVICE DETAILS

* BLAKE LAWRENCE SUDDETH, P.E. IS RESPONSIBLE FOR PAY ITEM NOTE 715-7-11
SHOWN ON SHEET IT-5.

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

SHEET NO.	SHEET DESCRIPTION
IT-2	SIGNATURE SHEET
IT-45 THRU IT-50	REPORT OF CORE DRAWINGS

REVISIONS				ROBERT C. MEADOR, P.E. P.E. LICENSE NUMBER 72936 VIBE 700 CENTRAL AVE SUITE 302 ST PETERSBURG, FL 33701 CERTIFICATE OF AUTHORIZATION 30322	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SIGNATURE SHEET	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.				

TABULATION OF QUANTITIES																				
PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			IT-7		IT-8		IT-9		IT-10		IT-11		IT-12		IT-13					
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL
630-2-11	CONDUIT, F&I, OPEN TRENCH	LF	3241		3491		2682		2524		2254		3897		3289		21378			
630-2-14	CONDUIT, F&I, ABOVEGROUND	LF	20				20				20		20				80			
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND,12 FIBERS	LF	260		278								256		240		1034			
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND,13-48 FIBERS																			
	24 FIBERS	LF	242		232		120				120		329		329		1372			
	48 FIBERS	LF	728		739								833		833		3133			
633-1-123	FIBER OPTIC CABLE, F&I, UNDERGROUND, 72 FIBERS	LF															0			
633-1-124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 144 FIBERS	LF	3371		3205		2912		2624		2434		3401		3256		21203			
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	176		148		36				36		176		148		720			
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	EA	3		2		1				1		3		2		12			
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	EA	7		5		3				3		7		5		30			
633-3-13	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED																			

TABULATION OF QUANTITIES																				
PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			IT - 14		IT - 15		IT - 16													
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL
630-2-11	CONDUIT, F&I, OPEN TRENCH	LF	2156		2610		3264										8030		29408	
630-2-14	CONDUIT, F&I, ABOVEGROUND	LF	20		5		30										55		135	
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND,12 FIBERS	LF			255		641										896		1930	
633-1-122	FIBER OPTIC CABLE, F&I, UNDERGROUND,13-48 FIBERS																			
	24 FIBERS	LF	120				120										240		1612	
	48 FIBERS	LF															0		3133	
633-1-123	FIBER OPTIC CABLE, F&I, UNDERGROUND, 72 FIBERS	LF			137		1094										1231		1231	
633-1-124	FIBER OPTIC CABLE, F&I, UNDERGROUND, 144 FIBERS	LF	2436		4546		3268										10250		31453	
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	36		664		140										840		1560	
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	EA	1		1		2										4		16	
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	EA	3		29		14										46		76	
633-3-13	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED CONNECTOR ASSEMBLY	EA	2		55		4													

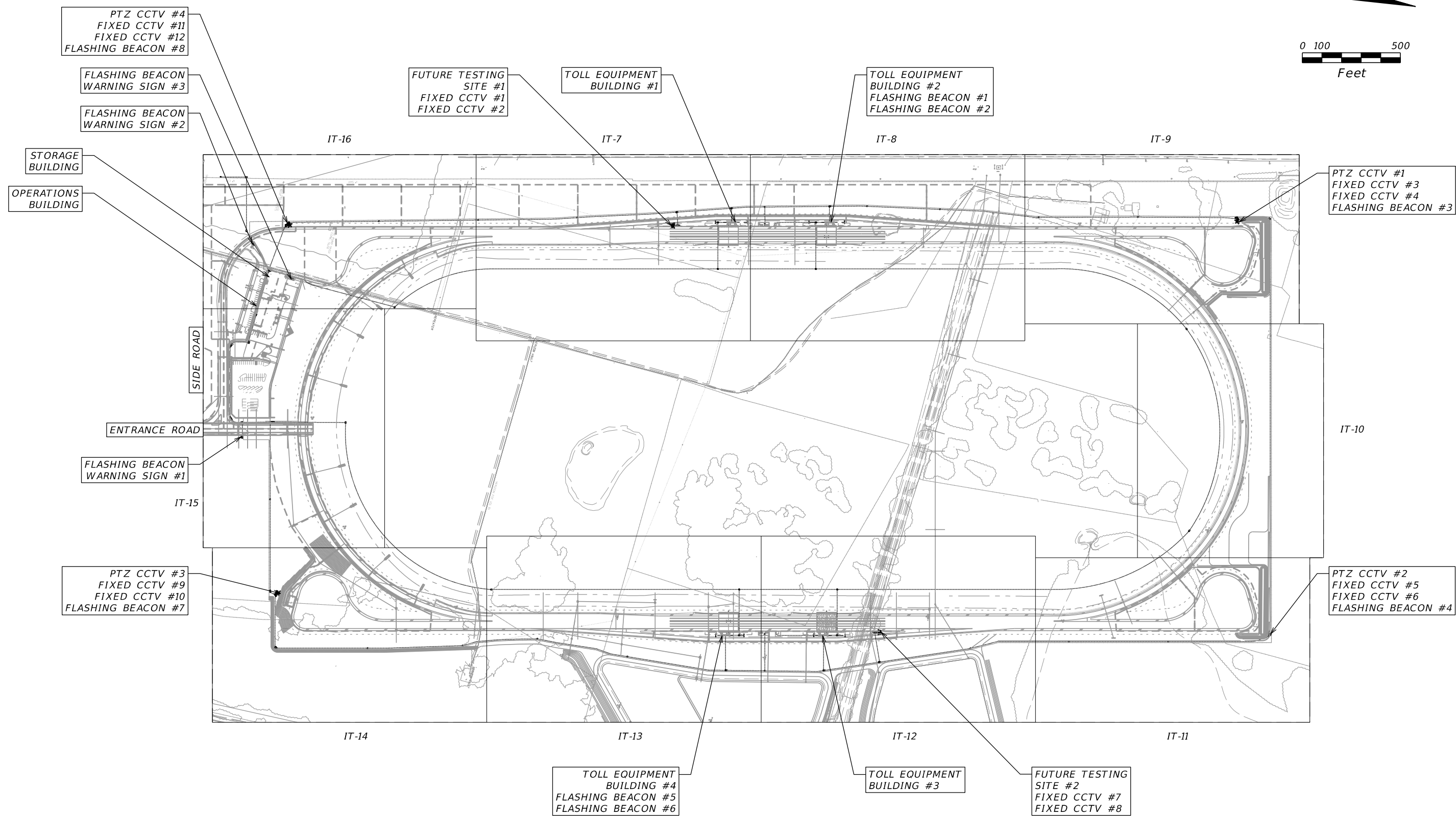
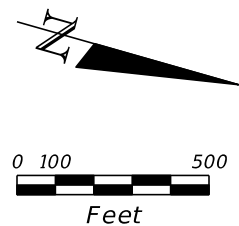
GENERAL NOTES:

1. THESE PLANS REFLECT CONDITIONS KNOWN DURING PLAN DEVELOPMENT. IN THE EVENT THE ACTUAL PHYSICAL CONDITIONS PREVENT THE APPLICATION OF THE PROGRESSION OF ANY WORK SPECIFIED IN THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND PRIOR TO ANY FURTHER WORK ACTIVITY.
2. PLACE INTELLIGENT TRANSPORTATION SYSTEM DEVICES IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE PLANS, FDOT DESIGN STANDARDS, FDOT STANDARD SPECIFICATIONS, FDOT PLANS PREPARATION MANUAL (PPM), FHWA STANDARD HIGHWAY SIGNS, TURNPIKE PLANS PREPARATION AND PRACTICES HANDBOOK (TPPPH), AND FDOT TRAFFIC ENGINEERING MANUAL.
3. FLORIDA STATUTES 556 REQUIRES CONTRACTORS TO CALL SUNSHINE ONE CALL OF FLORIDA, INC. AT 1-800-432-4770, NOT LESS THAN 2 NOR MORE THAN 5 BUSINESS DAYS BEFORE BEGINNING ANY EXCAVATION OR DEMOLITION. NOT ALL UTILITY AGENCIES / OWNERS ARE MEMBERS OF SUNSHINE STATE ONE CALL OF FLORIDA, INC.
4. PULLING INSTRUCTIONS FOR POWER CONDUCTORS: CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET AND MEET MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY N.E.C. FOR CABLE USED.
5. ALL PULL BOXES SHALL MEET TIER 22 LOAD RATING REQUIREMENTS.
6. ALL STUB OUT CONDUIT SHALL BE CAPPED OUTSIDE PULL / SPLICE BOXES WITH A WATERPROOF CAP.
7. THE PLANS SHOW THE GENERAL ROUTE AND LOCATION OF CONDUIT AND EQUIPMENT RELATIVE TO MAJOR PHYSICAL FEATURES. CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS TO THE PLACEMENT OF CONDUIT, PULL BOXES, AND SPLICE VAULTS AS APPROVED BY THE ENGINEER TO ENSURE THEY ARE NOT LOCATED WITHIN DITCHES OR LOW AREAS THAT WILL COLLECT WATER.
8. WHEN RUNNING CABLE INSIDE THE CCTV CAMERA POLES ENSURE THAT WATER DOES NOT ENTER THE CABINET BY RUNNING DOWN THE CABLE THROUGH THE USE OF DRIP LOOPS AND WATER TIGHT GROMMETS.
9. ALL UPS's SHALL INCLUDE AN SNMP MODULE WITH REMOTE RESET CAPABILITY.
10. COORDINATE WITH RYAN BROWN TURNPIKE ITS MAINTENANCE (954) 934-1614 AND GARY KAISER TURNPIKE TOLLS (407) 264-3328 PRIOR TO ALL FIBER SPLICING.
11. WHEN CONNECTING TO THE POLK PARKWAY FIBER OPTIC TRUNKLINE WITH THE FIBER OPTIC SERVING THE TEST FACILITY, AT NO TIME WILL ANY PORTION OF THE EXISTING FTE INTELLIGENT TRANSPORTATION SYSTEM (ITS) BE OFFLINE. THE FTE ITS SHALL BE MAINTAINED AND FUNCTIONAL FOR THE DURATION OF THE PROJECT.
12. CONTRACTOR SHALL SHOW BORE LOGS FOR ALL BORE LOCATIONS ON THE RESPECTIVE PLAN SHEETS OF AS-BUILT DRAWINGS.
13. THE CONTRACTOR SHALL ENSURE PROPER TESTING OF ALL ITS INSTALLED EQUIPMENT AND FIBER OPTIC CABLES. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE BUILDING CONTRACTORS AND TOLL EQUIPMENT CONTRACTORS AS TESTING SHALL NOT OCCUR UNTIL ALL DEVICES, TOLLING COMMUNICATIONS CABINETS, AND FIBER OPTIC CABLE CONNECTIONS HAVE BEEN INSTALLED BY ALL PARTIES.

LEGEND

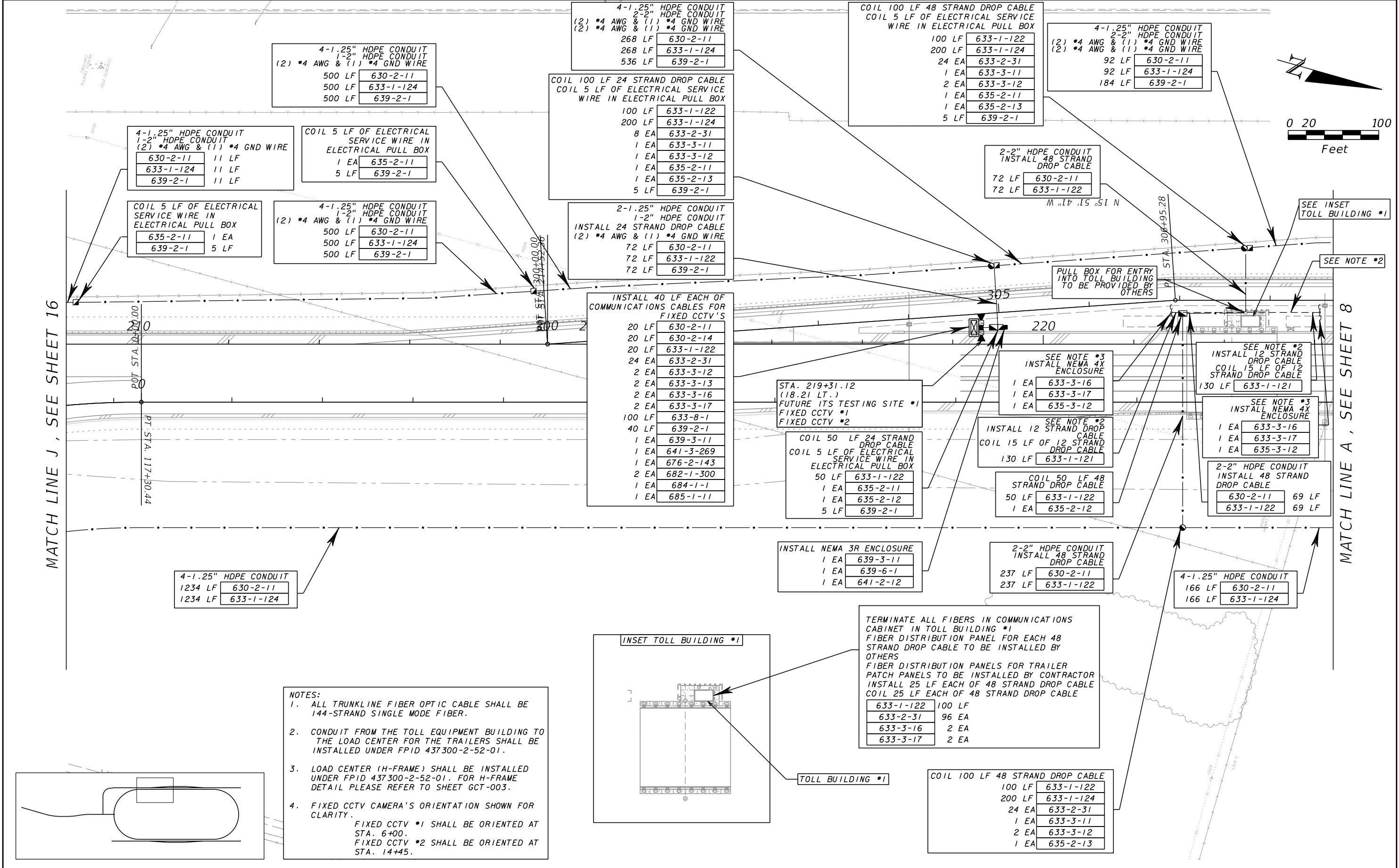
- PROPOSED CONDUIT (OPEN TRENCH)
- PROPOSED GROUND MOUNTED ITS CABINET
- PROPOSED CCTV CAMERA
- PROPOSED FIXED CCTV CAMERA
- PROPOSED SPLICE VAULT
- EXISTING SPLICE VAULT
- PROPOSED FIBER OPTIC PULL BOX
- EXISTING FIBER OPTIC PULL BOX
- PROPOSED ELECTRICAL PULL BOX
- PROPOSED CONCRETE POLE
- PROPOSED FLASHING BEACON
- PROPOSED FLASHING BEACON WARNING SIGN

REVISIONS			BLAKE L. SUDDETH, P.E. P.E. LICENSE NUMBER 69060 JOSEPH, LAWRENCE & CO. 1180 HARWOOD AVENUE SUITE 3000 ALTAMONTE SPRINGS, FL 32714 CERTIFICATE OF AUTHORIZATION 28730	ROBERT C. MEADOR, P.E. P.E. LICENSE NUMBER 72936 VIBE 700 CENTRAL AVE SUITE 302 ST PETERSBURG, FL 33701 CERTIFICATE OF AUTHORIZATION 30322	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
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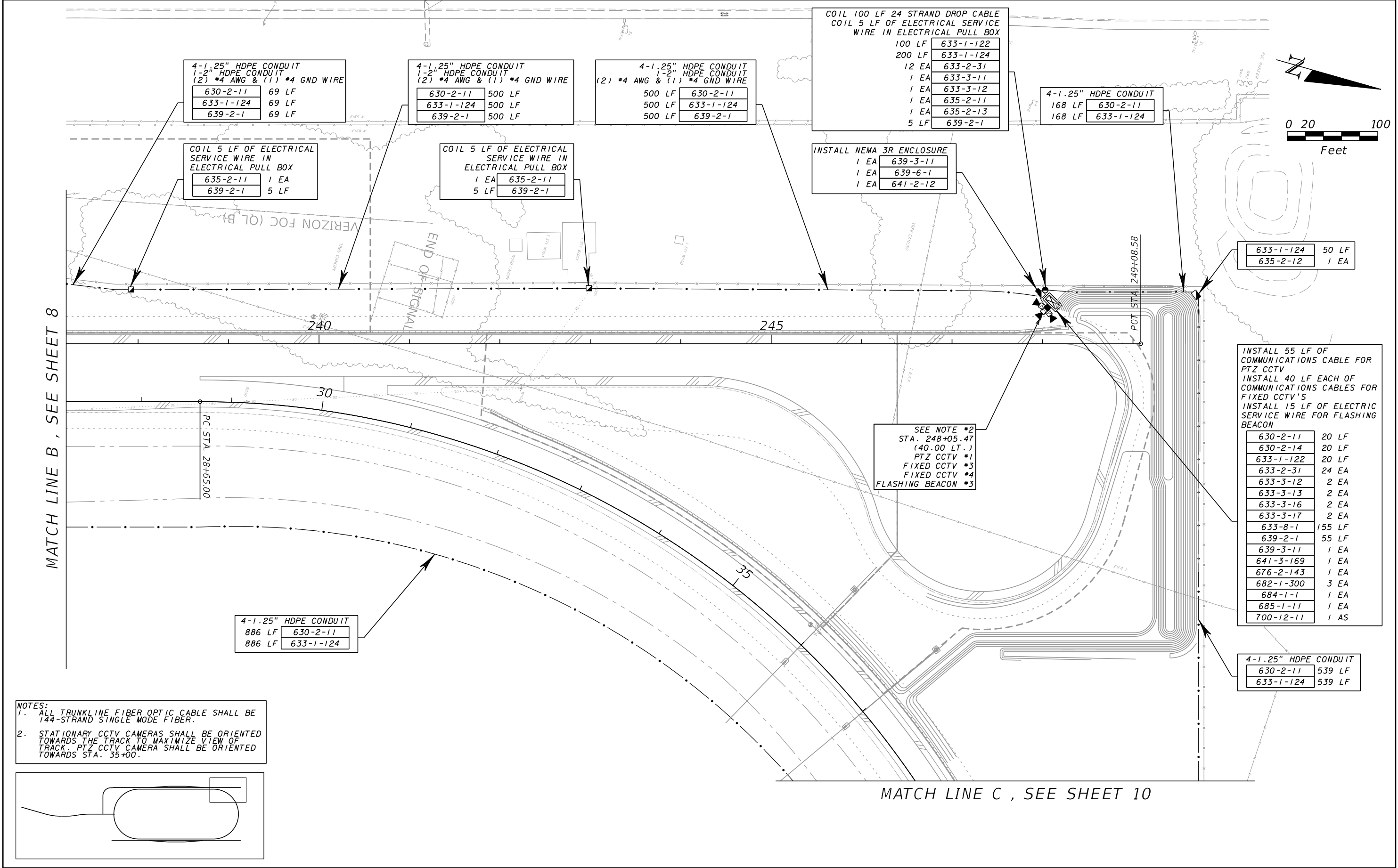


REVISIONS				ROBERT C. MEADOR, P.E. P.E. LICENSE NUMBER 72936 VIBE 700 CENTRAL AVE SUITE 302 ST. PETERSBURG, FL 33701 CERTIFICATE OF AUTHORIZATION 30322	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PROJECT LAYOUT	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					N/A	POLK	437300-1-52-01		IT-6

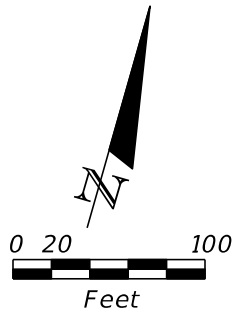
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REVISIONS				ROBERT C. MEADOR, P.E. P.E. LICENSE NUMBER 72936 VIBE 700 CENTRAL AVE SUITE 302 ST PETERSBURG, FL 33701 CERTIFICATE OF AUTHORIZATION 3
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REVISIONS				ROBERT C. MEADOR, P.E. P.E. LICENSE NUMBER 72936 VIBE 700 CENTRAL AVE SUITE 302 ST. PETERSBURG, FL 33701 CERTIFICATE OF AUTHORIZATION 30322	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SHEET	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					N/A	POLK	437300-1-52-01		
									IT-9



MATCH LINE C , SEE SHEET 9

MATCH LINE D , SEE SHEET 11

4-1.25" HDPE CONDUIT
1193 LF 630-2-11
1193 LF 633-1-124

4-1.25" HDPE CONDUIT
1088 LF 630-2-11
1088 LF 633-1-124

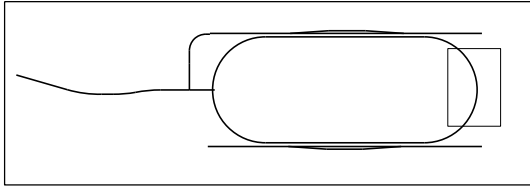
633-1-124 50 LF
635-2-12 1 EA

4-1.25" HDPE CONDUIT
630-2-11 33 LF
633-1-124 33 LF

50 LF 633-1-124
1 EA 635-2-12

4-1.25" HDPE CONDUIT
210 LF 630-2-11
210 LF 633-1-124

NOTE:
1. ALL TRUNKLINE FIBER OPTIC CABLE SHALL BE 144-STRAND SINGLE MODE FIBER.



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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					N/A	POLK	437300-1-52-01		IT-10

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INSTALL 55 LF OF COMMUNICATIONS CABLE FOR PTZ CCTV
INSTALL 40 LF EACH OF COMMUNICATIONS CABLES FOR FIXED CCTV'S
INSTALL 15 LF OF ELECTRIC SERVICE WIRE FOR FLASHING BEACON

20 LF	630-2-11
20 LF	630-2-14
20 LF	633-1-122
24 EA	633-2-31
2 EA	633-3-12
2 EA	633-3-13
2 EA	633-3-16
2 EA	633-3-17
155 LF	633-8-1
55 LF	639-2-1
1 EA	639-3-11
1 EA	641-3-169
1 EA	676-2-143
3 EA	682-1-300
1 EA	684-1-1
1 EA	685-1-11
1 AS	700-12-11

INSTALL NEMA 3R ENCLOSURE		
639-3-11	1 EA	
639-6-1	1 EA	
641-2-12	1 EA	

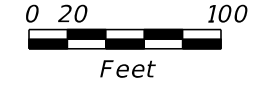
4-1.25" HDPE CONDUIT 1-2" HDPE CONDUIT (2) #6 AWG & (1) #6 GND WIRE		
630-2-11	500 LF	
633-1-124	500 LF	
639-2-1	500 LF	

COIL 5 LF OF ELECTRICAL SERVICE WIRE IN ELECTRICAL PULL BOX		
1 EA	635-2-11	
5 LF	639-2-1	

COIL 5 LF OF ELECTRICAL SERVICE WIRE IN ELECTRICAL PULL BOX		
1 EA	635-2-11	
5 LF	639-2-1	

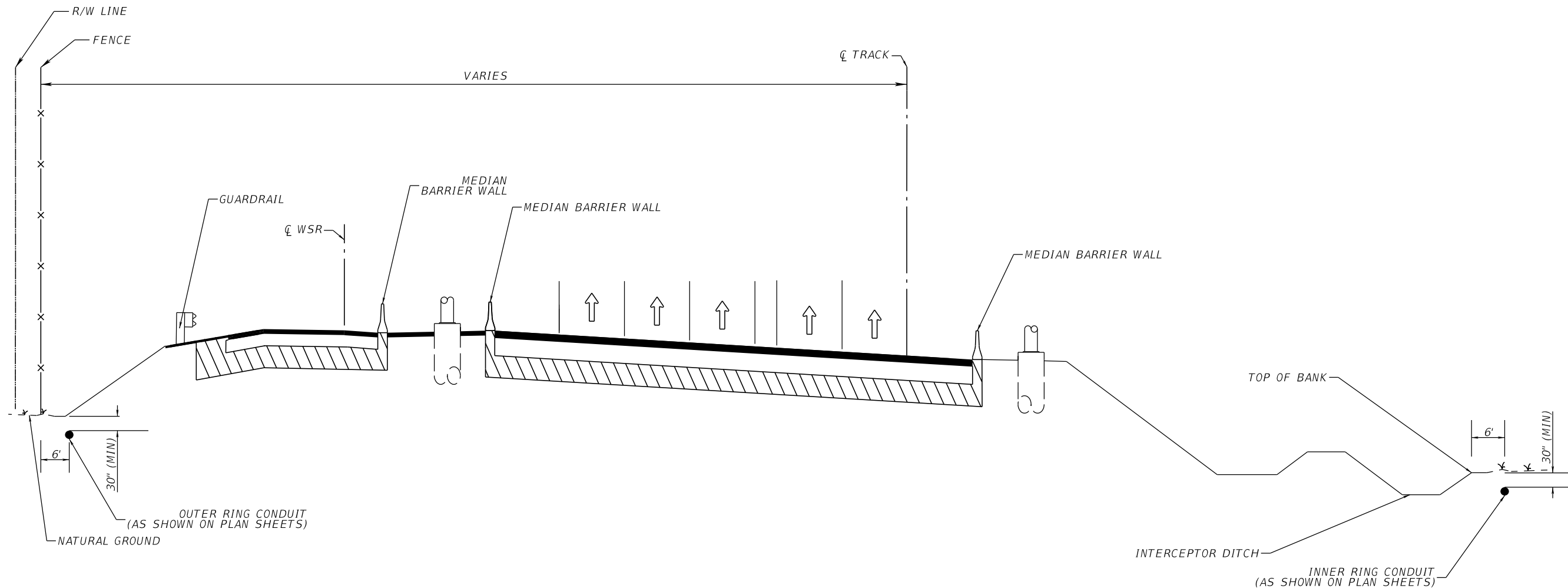
4-1.25" HDPE CONDUIT 1-2" HDPE CONDUIT (2) #6 AWG & (1) #6 GND WIRE		
630-2-11	500 LF	
633-1-124	500 LF	
639-2-1	500 LF	

4-1.25" HDPE CONDUIT 1-2" HDPE CONDUIT (2) #6 AWG & (1) #6 GND WIRE		
168 LF	630-2-11	
168 LF	633-1-124	
168 LF	639-2-1	



SEE NOTE#2
STA. 449+96.00
(29.27 RT.)
PTZ CCTV #2
FIXED CCTV #5
FIXED CCTV #6
FLASHING BEACON #4

4-1.25" HDPE CONDUIT		
406 LF	630-2-11	
406 LF	633-1-124	



TYPICAL CONDUIT PLACEMENT
N.T.S.

NOTE:
1. INNER RING CONDUIT SHALL BE PLACED IN A RELATIVELY STRAIGHT RUNNING LINE. HOWEVER, AT NO POINT SHALL THE CONDUIT BE PLACED CLOSER THAN 6 FEET OF TOP OF BANK OF THE INTERCEPTOR DITCH AS SHOWN ON THIS SHEET.

REVISIONS				ROBERT C. MEADOR, P.E. P.E. LICENSE NUMBER 72936 VIBE 700 CENTRAL AVE SUITE 302 ST. PETERSBURG, FL 33701 CERTIFICATE OF AUTHORIZATION 30322	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CONDUIT DETAIL	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					N/A	POLK	437300-1-52-01		IT-20

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