

**COMPONENTS OF CONTRACT PLANS SET**

ROADWAY PLANS  
SIGNING AND PAVEMENT MARKING PLANS  
SIGNALIZATION PLANS

**STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION**

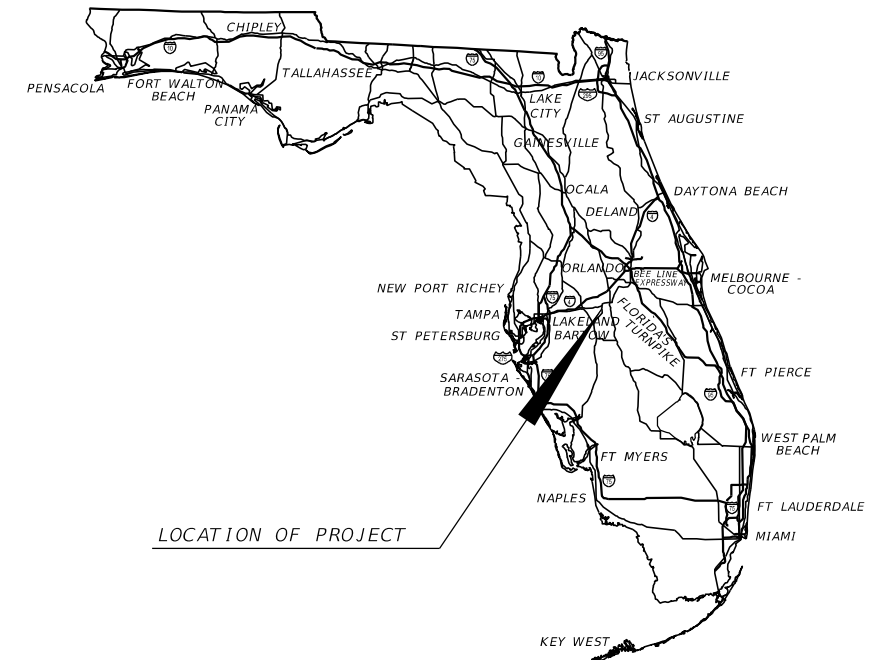
**SIGNALIZATION PLANS**

**FINANCIAL PROJECT ID 447874-1-52-01  
(FEDERAL FUNDS)**

**POLK COUNTY (16140)**

**STATE ROAD NO. SR 544 (HAVENDALE BLVD)**

**AT US 17 (8TH ST NW)**



**INDEX OF SIGNALIZATION PLANS**

SHEET NO.	SHEET DESCRIPTION
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T-13	LIGHTING PLAN

**PROJECT LOCATION URL:** <https://tinyurl.com/343r5jpf>

**PROJECT LIMITS:** BEGIN MP 3.000 - END MP 3.224

**EXCEPTIONS:** NONE

**BRIDGE LIMITS:** NONE

**RAILROAD CROSSING:** NONE

**SIGNALIZATION PLANS  
ENGINEER OF RECORD:**

OLIVER REMY RODRIGUES, P.E.; PTOE  
P.E. LICENSE NUMBER 50646  
FLORIDA TRANSPORTATION ENGINEERING, INC.  
11458 N 53RD STREET  
(813) 989-0729  
TAMPA, FLORIDA 33617  
CONTRACT NO.: CA319  
VENDOR NO.: F65-0183924

**FDOT PROJECT MANAGER:**

PHILIP MENKE, P.E.

**GOVERNING STANDARD PLANS:**

Florida Department of Transportation, FY2023-24 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: <http://www.fdot.gov/design/standardplans>

APPLICABLE IRs: IR - -

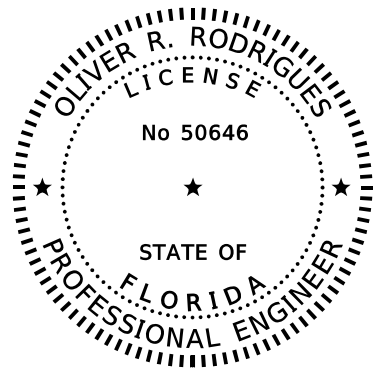
Standard Plans for Bridge Construction are included in the Structures Plans Component

**GOVERNING STANDARD SPECIFICATIONS:**

Florida Department of Transportation, FY2023-24 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

**PHASE IV  
FEBRUARY 21, 2022**

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
T1876	24	T-1



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

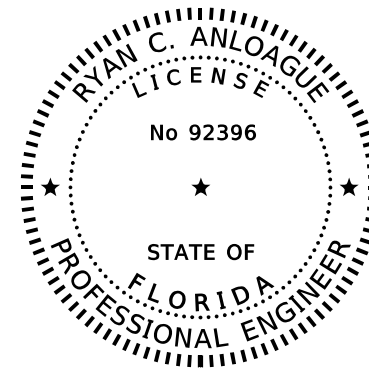
ON THE DATE ADJACENT TO THE SEAL

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FLORIDA TRANSPORTATION ENGINEERING, INC.  
11458 N 53RD STREET  
TAMPA, FLORIDA 33617  
OLIVER R. RODRIGUES, P.E., PTOE, NO. 50646

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

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
T-1	KEY SHEET
T-2	SIGNATURE SHEET
T-3	GENERAL SHEETS
T-4 - T-6	SIGNALIZATION PLAN
T-7	PEDESTRIAN SIGNAL DETAIL
T-8	MAST ARM TABULATION
T-10	GUIDE SIGN WORKSHEET
T-11	ITS PLAN



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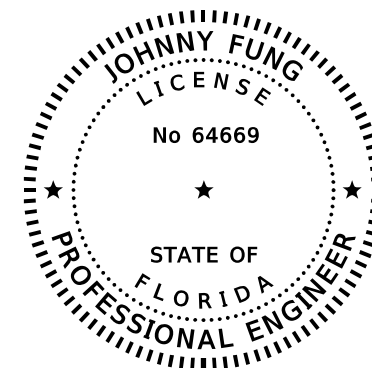
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FLORIDA TRANSPORTATION ENGINEERING, INC.  
11458 N 53RD STREET  
TAMPA, FLORIDA 33617  
RYAN C. ANLOAGUE, P.E., NO. 92396

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

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
T-2	SIGNATURE SHEET
T-12	POLE DATA AND LEGEND
T-13	LIGHTING PLAN



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

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PATEL, GREENE & ASSOCIATES, PLLC  
11458 N 53RD12570 TELECOM DRIVE  
TEMPLE TERRACE, FLORIDA 33637  
JOHNNY FUNG, P.E, NO. 64669

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

<u>SHEET NO.</u>	<u>SHEET DESCRIPTION</u>
T-9	MAST ARM ASSEMBLIES DATA TABLES

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REVISIONS				ENGINEER OF RECORD			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	OLIVER R. RODRIGUES, P.E., PTOE LICENSE NUMBER: 50646 FLORIDA TRANSPORTATION ENGINEERING, INC. 11458 NORTH 53RD STREET TAMPA, FLORIDA 33617			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
							SR 544	POLK	447874-1-52-01	T-2

**SIGNATURE SHEET**

SIGNALIZATION PAY ITEM NOTES

1. 630-2-11, 630-2-12:  
USE A MINIMUM OF 2" DIAMETER CONDUIT FOR FIBER OPTIC INTERCONNECT CABLE.
2. 632-7-1:  
COMPLETELY REWIRE INTERSECTION AT ALL SIGNAL LOCATIONS. VERIFY THE COLOR CODE OF SIGNAL CABLE WITH THE MAINTAINING AGENCY PRIOR TO WIRING INTERSECTION.
3. 635-2-11:  
PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, PULL BOXES SHALL BE PLACED A MINIMUM OF 7' FROM THE EDGE OF PAVEMENT.
4. 646-1-11, 646-1-12:  
USE LOCKING COLLARS WHEN MOUNTING ALUMINUM PEDESTRIAN POLES TO PEDESTRIAN PEDESTAL BASES. USE BREAKAWAY ALUMINUM SQUARE BASE ASSEMBLIES WITH ALUMINUM DOORS FOR PEDESTRIAN PEDESTALS.
5. 649-21-3, 649-21-6, 649-21-10, 649-21-15:  
USE TWO 2" AND ONE 1" CONDUITS STUBBED OUT THROUGH THE MAST ARM POLE FOUNDATION AND TEMPORARILY SEAL. ALL MAST ARM ASSEMBLIES SHALL HAVE A TERMINAL COMPARTMENT.
6. 650-1-14, 650-1-16, 650-1-19:  
USE LOUVERED ALUMINUM SIGNAL HEAD BACK PLATES.
7. 653-1-11, 653-1-12:  
PEDESTRIAN SIGNAL HEADS TO BE 16" INTERNATIONAL SYMBOL, LED COUNTDOWN TYPE.
8. 660-2-102, 660-2-106:  
PERMANENTLY MARK EACH LOOP PER PHASE AND PER VEHICLE MOVEMENT AT EACH SPLICE POINT AND AT THE CABINET TERMINATION POINT. FOR INCREASED SENSITIVITY, INDUCTANCE LOOPS TO HAVE A MINIMUM OF THREE TURNS OF WIRE.
9. 665-1-12:  
USE PEDESTRIAN BUTTON SIGNAL SIGN FTP-68B-06 OR R10-3e. STREET NAME SHALL BE IN ACCORDANCE WITH THE STREET NAMES SHOWN ON THE SIGNALIZATION PLAN SHEETS.
10. 670-5-111:  
CONTACT CITY OF WINTER HAVEN FOR A LIST OF ACCEPATABLE DEVICES. CONTROLLER AND EQUIPMENT TO BE COMPATIBLE WITH CITY OF WINTER HAVEN'S ADVANCE TRAFFIC MANAGEMENT SYSTEM. CONTACT CITY OF WINTER HAVEN MIKE CAMPBELL AT (863)291-5852 (MCAMPBELL@MWINTERHAVEN.COM) PRIOR TO ORDERING TO CONFIRM. ALL CONTROLLER EQUIPMENT TO BE COMPATIBLE WITH CITY OF WINTER HAVEN'S NEW (STREET WISE CLOSED LOOP) SOFTWARE SYSTEM. INCLUDE 1 ADDITIONAL SPARE CONDUIT (FOR A TOTAL OF 3 SPARES) FOR CONTROLLER CABINET IN THE CABINET BASE. CONTROLLER MMU (MALFUNCTION MANAGEMENT UNIT) TO BE COMPATIBLE WITH FOUR SECTION HEAD OPERATION/LOGIC. USE A MINIMUM OF FOUR (4) PREEMPTION PLANS FOR CONTROLLER.
11. 685-1-13:  
INCLUDE AN UNINTERRUPTIBLE POWER SUPPLY UNIT (UPS). ATTACH UPS UNIT TO THE OUTSIDE OF THE CONTROLLER CABINET. INSTALL UPS UNIT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. UPS EQUIPMENT TO BE COMPATIBLE WITH THE CITY OF WINTER HAVEN EXISTING SYSTEM.
12. 700-5-21 AND 700-5-22:  
ALL INTERNALLY ILLUMINATED STREET NAME SIGNS TO BE SINGLE SIDED AND RIGID MOUNTED TO THE MAST ARM. INSTALL PHOTOCELLS FOR STREET SIGNS IN THE ELECTRICAL SERVICE DISCONNECT.

SIGNALIZATION GENERAL NOTES

1. AT THE COMPLETION OF THE PROJECT, PROVIDE AS-BUILT PLANS IN ELECTRONIC FORM (PDF) TO:

FDOT TRAFFIC OPERATIONS  
RENJAN JOSPEPH, P.E., TSM&O ENGINEER  
801 N. BROADWAY AVE  
P.O. BOX 1249  
BARTOW, FL 33830-1249  
EMAIL: RENJAN.JOSEPH@DOT.STATE.FL.US  
PHONE: 863-519-2746

2. REFER TO THE ROADWAY PLANS FOR UTILITY CONTACT INFORMATION.
3. THE MAINTAINING AGENCY FOR SIGNALS IS CITY OF WINTER HAVEN.

LIGHTING GENERAL NOTES

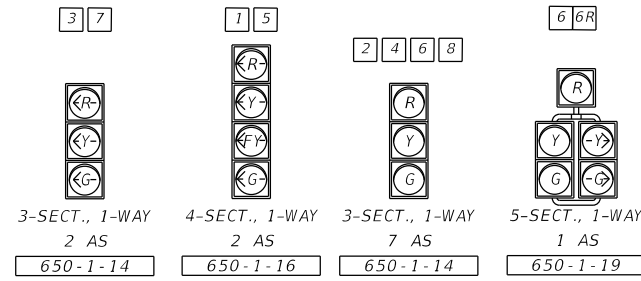
1. THE MAINTAINING AGENCY FOR LIGHTING IS CITY OF WINTER HAVEN.

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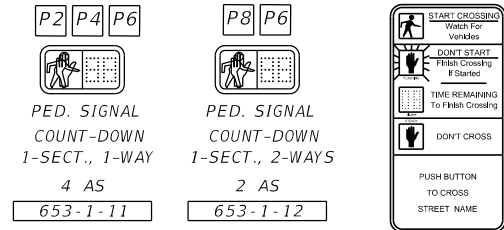
REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	OLIVER REMY RODRIGUES, P.E., PTOE LICENSE NUMBER: 50646 FLORIDA TRANSPORTATION ENGINEERING, INC. 11458 NORTH 53RD STREET TAMPA, FLORIDA 33617		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
						SR 544	POLK	447874-1-52-01	GENERAL NOTES
									T-3

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### SIGNAL HEAD DETAILS

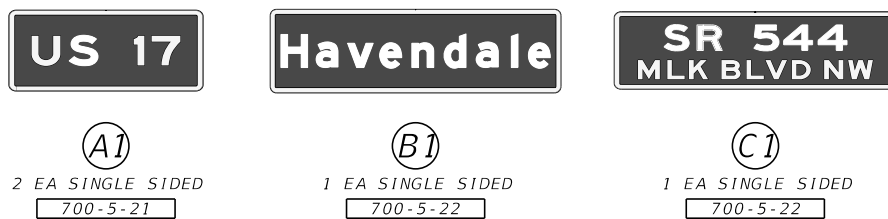


### PEDESTRIAN SIGNAL DETAILS

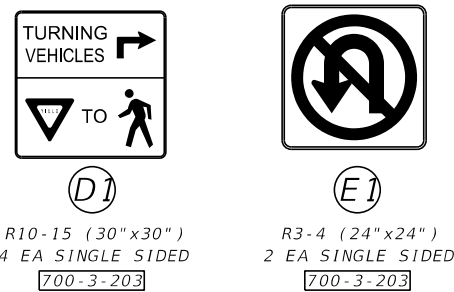


FTP-68B-06  
SIGN TO BE INSTALLED  
WITH PEDESTRIAN DETECTOR

### INTERNALLY ILLUMINATED STREET NAME SIGNS

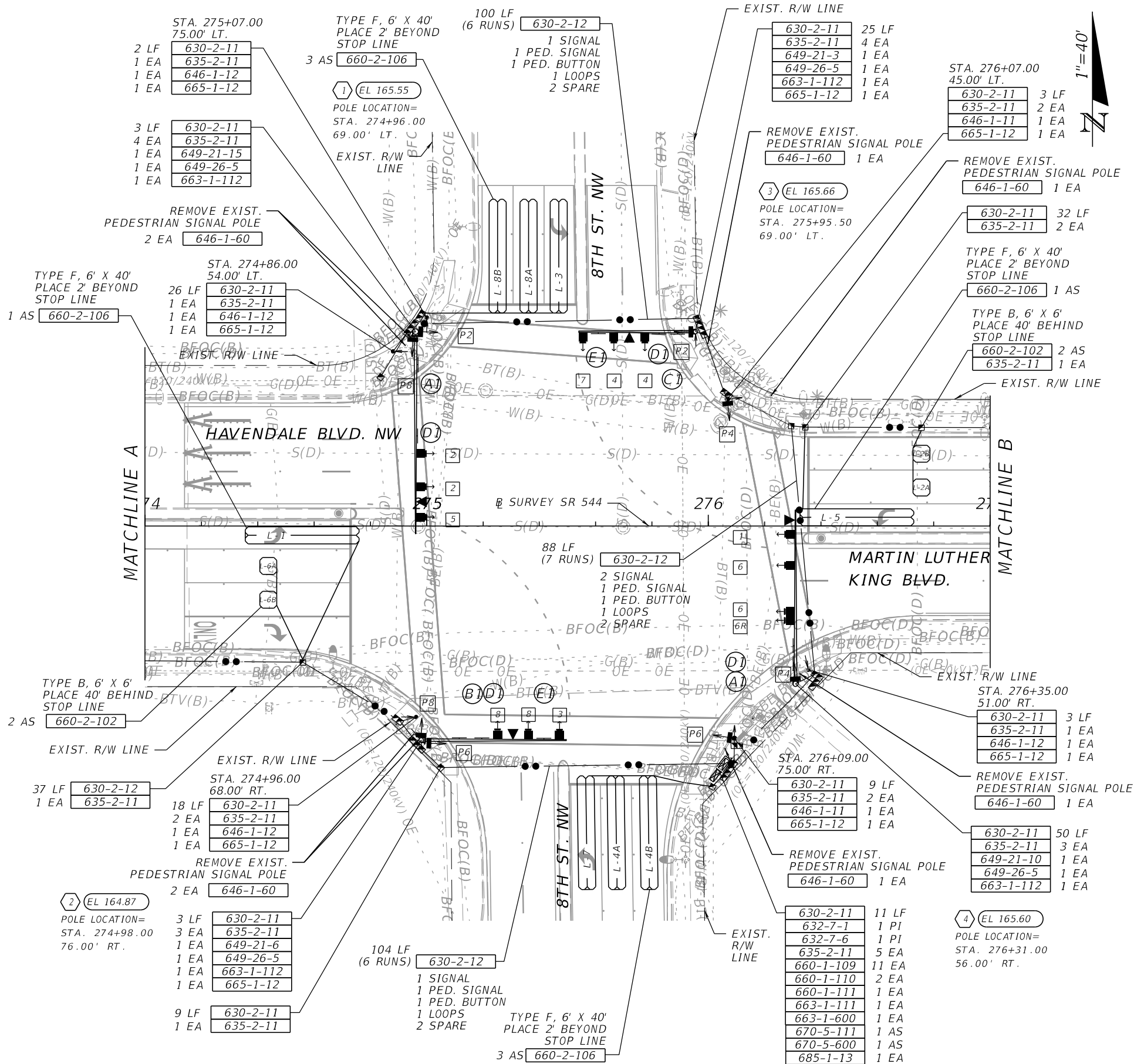


### SIGN DETAILS



### NOTES:

SEE SIGNAL NOTES, LOOP CHART, SOP AND PREEMPTION SOP ON SHEET T-6.

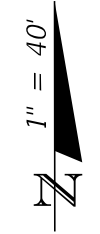
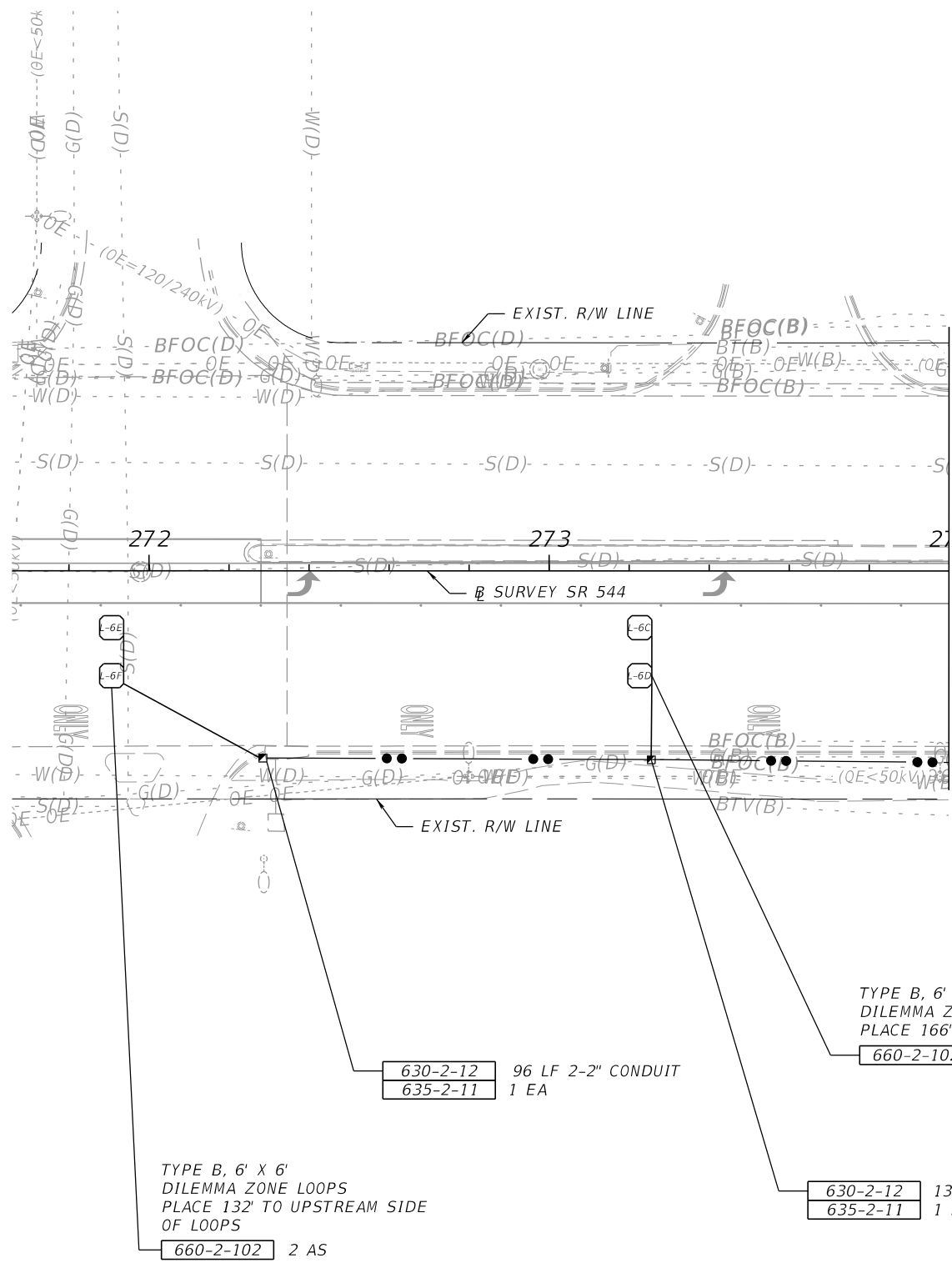


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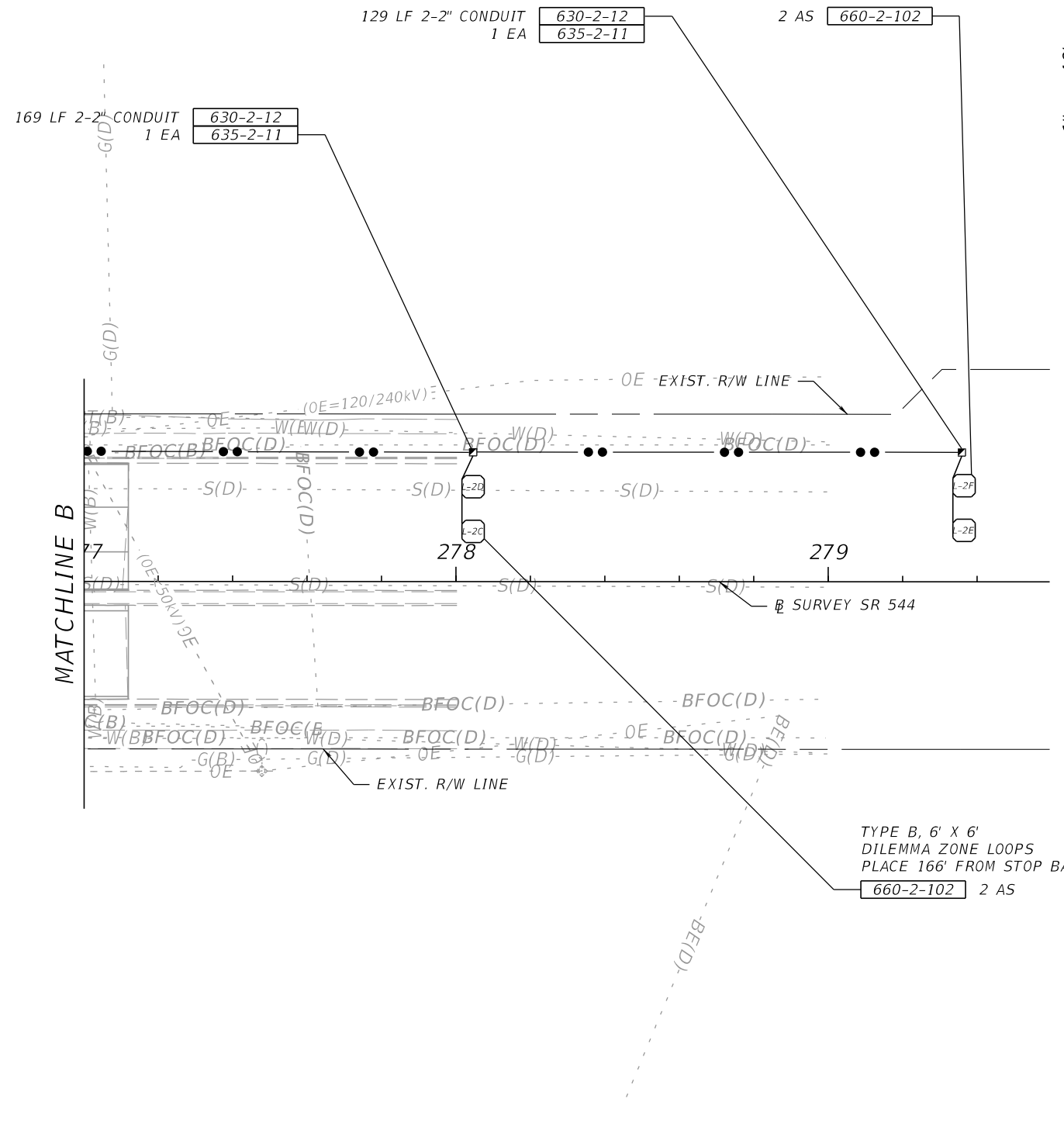
REVISIONS		ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
			OLIVER REMY RODRIGUES, P.E., PTOE LICENSE NUMBER: 50646 FLORIDA TRANSPORTATION ENGINEERING, INC. 11458 NORTH 53RD STREET TAMPA, FLORIDA 33617	SR 544	POLK	447874-1-52-01	T-4

## SIGNALIZATION PLAN

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MATCHLINE A



MATCHLINE B

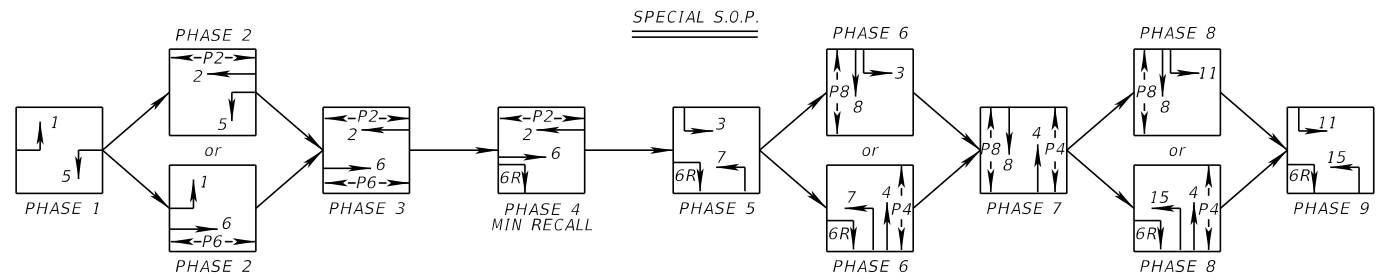
**NOTES**  
SEE SIGNAL NOTES, LOOP CHART, SOP AND PREEMPTION SOP ON SHEET T-6

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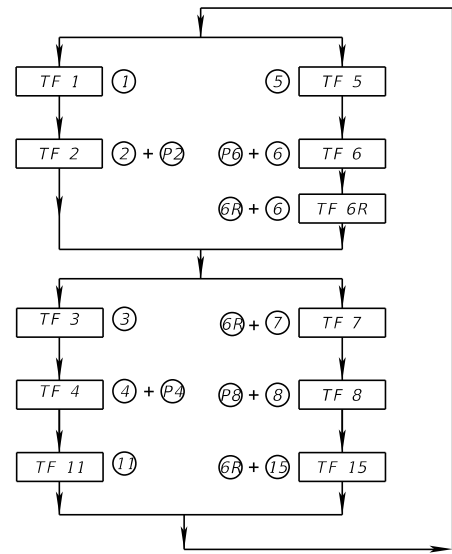
REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	OLIVER REMY RODRIGUES, P.E., PTOE LICENSE NUMBER: 50646 FLORIDA TRANSPORTATION ENGINEERING, INC. 11458 NORTH 53RD STREET TAMPA, FLORIDA 33617		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
						SR 544	POLK	447874-1-52-01	T-5

**SIGNALIZATION PLAN**

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SPECIAL S.O.P.



DETECTORS FOR LOOPS			
LOOP	NO. OF NEW DETS.	CONNECT TO MOVEMENT	DELAY TIME (SEC)
L-1	1	1	
L-2A	1	2	
L-2B			
L-2C	1	2	
L-2D			
L-2E	1	2	
L-2F			
L-3	1	3 & 11	
L-4A	2	4	8
L-4B			
L-5	1	5	
L-6A	1	6	
L-6B			
L-6C	1	6	
L-6D			
L-6E	1	6	
L-6F			
L-7	1	7 & 15	
L-8A	2	8	
L-8B			8

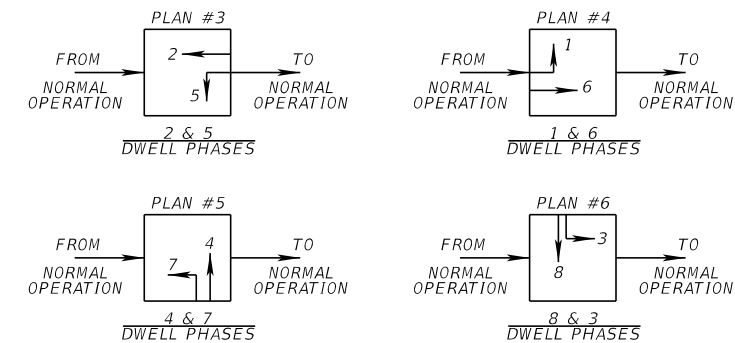
DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

**SIGNAL NOTES:**

- CONTROLLER OPERATIONS:  
- MAJOR STREET: SR 544  
- MINOR STREET: US 17
- FLASHING OPERATIONS:  
- YELLOW : 2 & 6  
- RED: ALL OTHER MOVEMENTS
- POSTED SPEED LIMITS ARE AS FOLLOWS:  
- SR 544 = 45 MPH  
- US 17 = 35 MPH
- RUN SPECIAL SOP PER TOD PLAN. SOP 10 TO RUN DURING OTHER PERIODS PER TOD PLAN.
- MOVEMENT 6R TO BE PROGRAMMED AS OVERLAP A TO COME UP WITH MOVEMENTS 6, 7, AND 15. RED AND YELLOW CLEARANCE TIMES WILL MATCH THAT OF PARENT PHASE.
- P6 SHALL BE A CONFLICT PHASE OF OLA. OLA SHALL NOT DISPLAY GREEN WHILE P6 IS ACTIVE.
- PROGRAM PHASE RESTRICTIONS TO OMIT MOVEMENT 1 AND REDIRECT CALLS FROM MOVEMENT 1 TO MOVEMENT 6, WHEN MOVEMENT 2 IS GREEN AND TO OMIT MOVEMENT 5 AND REDIRECT CALLS FROM MOVEMENT 5 TO MOVEMENT 2, WHEN MOVEMENT 6 IS GREEN.
- PROGRAM A START-UP DELAY OF 2 SECONDS FOR THE FLASHING YELLOW ARROW ON MOVEMENTS 1 AND 5 (RELATIVE TO THE OPPOSING THROUGH MOVEMENTS).
- REQUEST UPDATED SIGNAL TIMINGS FROM FDOT TSM&O ENGINEER-ARTERIALS (863-519-2216) WHEN ALL LANES, STRIPPING, SIGNALS AND PEDESTRIAN FACILITIES ARE IN FINAL CONFIGURATION AND THE SIGNAL IS OPERATING AS DESIGNED. PROVIDE FDOT WITH ALL "AS-BUILT" INFORMATION NECESSARY TO DEVELOP THE BASIC SIGNAL TIMING PARAMETERS AND ALLOW THREE WEEKS FOLLOWING THE REQUEST FOR FDOT TO DEVELOP THE UPDATED TIMINGS. PROGRAM THE CONTROLLER PER THE TIMING PROVIDED BY FDOT.

CONTROLLER TIMINGS (SECONDS)											
MOVEMENT NUMBER	1	2	3	4	5	6	7	8	11	15	NOTES
DIRECTION	EBL	WB	SBL	NB	WBL	EB	NBL	SB	SBL	NBL	
TURN TYPE	PROT/PERM		PROT		PROT/PERM		PROT		PROT	PROT	OLA=6+7+15
MIN GREEN	5	8	5	10	5	8	5	10	5	5	
EXT.	3	5	3	5	3	5	3	5	3	3	
YELLOW	4.8	4.8	4.0	4.0	4.8	4.8	4.0	4.0	4.0	4.0	
ALL RED	3.3	3.3	3.5	2.0	3.1	3.3	3.7	2.0	3.5	3.7	
MAX I	17	57	28	49	14	60	27	44	28	27	
MAX II											
MAX LIMIT											
ADJUST BY											
WALK		7		7		7		7			
FLASHING DON'T WALK		23		24		29		36			
DETECTOR MEMORY			NL				NL		NL	NL	
DET. CROSS SWITCH	YES				YES						
DUAL ENTRY		ON				ON					
RECALL		MIN				MIN					

PRE-EMPTION TIMINGS						
PRE-EMPTION TIMING PLAN	1	2	3 (WB)	4 (EB)	5 (NB)	6 (SB)
PRIORITY			6	6	6	6
DELAY BEFORE PREEMPTION (SEC)			0	0	0	0
MINIMUM GREEN BEFORE PRE-EMPTION (SEC)			*	*	*	*
LOCK CALL			OFF	OFF	OFF	OFF
MAXIMUM PRESENCE (SEC)			60	60	60	60
YELLOW CLEARANCE (SEC)			**	**	**	**
RED CLEARANCE (SEC)			**	**	**	**
DWELL PHASE (SEC)			2 & 5	1 & 6	7 & 4	8 & 3
MINIMUM DWELL (SEC)			15	15	7	7
YELLOW CLEARANCE (SEC)**			**	**	**	**
RED CLEARANCE (SEC)**			**	**	**	**
EXIT PHASES			2 & 6	2 & 6	2 & 6	2 & 6



**PRE-EMPTION NOTES:**

- \*ENTRY INTO PRE-EMPTION SHALL NOT VIOLATE MINIMUM GREEN OR PEDESTRIAN CLEARANCE INTERVALS
- \*\*YELLOW AND ALL RED INTERVALS DURING PREEMPTION SHALL BE THE SAME VALUES USED DURING NORMALS CONTROLLER OPERATIONS.

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REVISIONS		ENGINEER OF RECORD	
DATE	DESCRIPTION	DATE	DESCRIPTION
			OLIVER REMY RODRIGUES, P.E., PTOE LICENSE NUMBER: 50646 FLORIDA TRANSPORTATION ENGINEERING, INC. 11458 NORTH 53RD STREET TAMPA, FLORIDA 33617

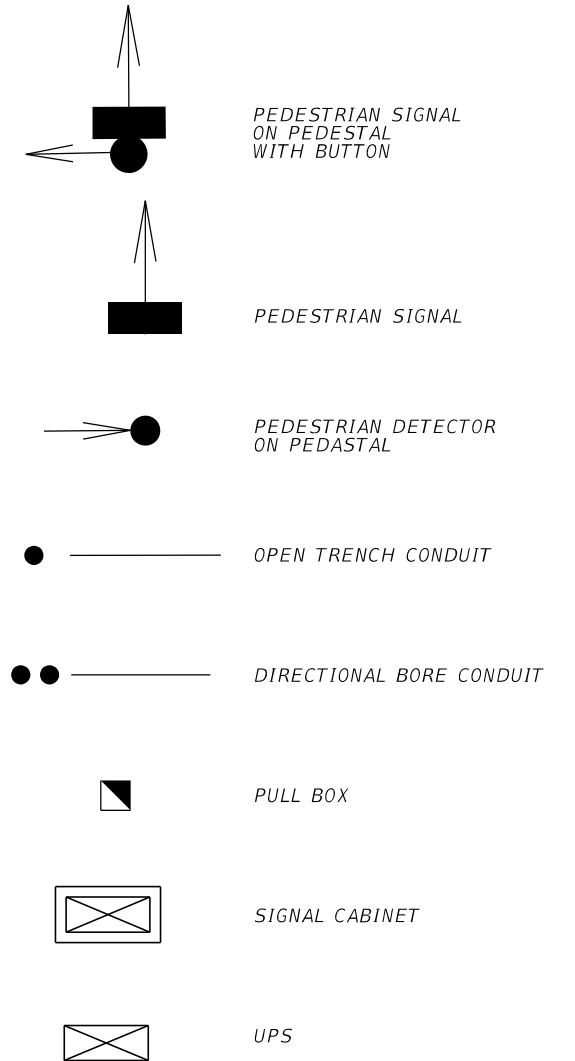
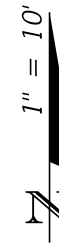
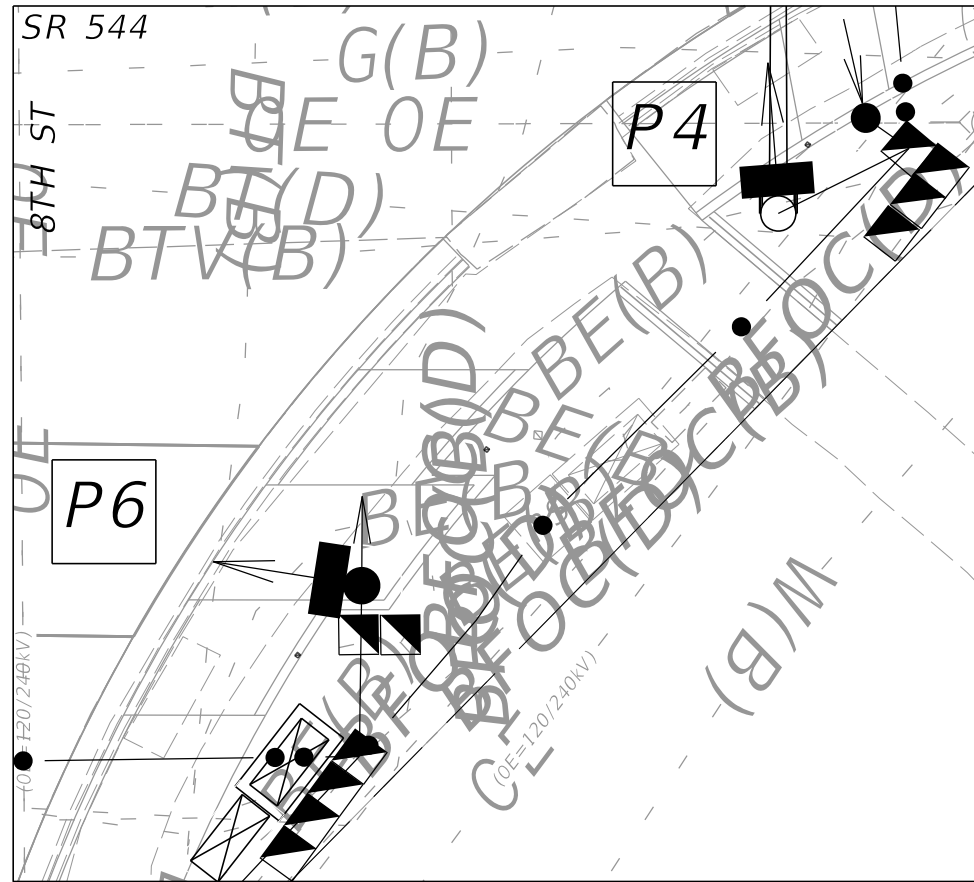
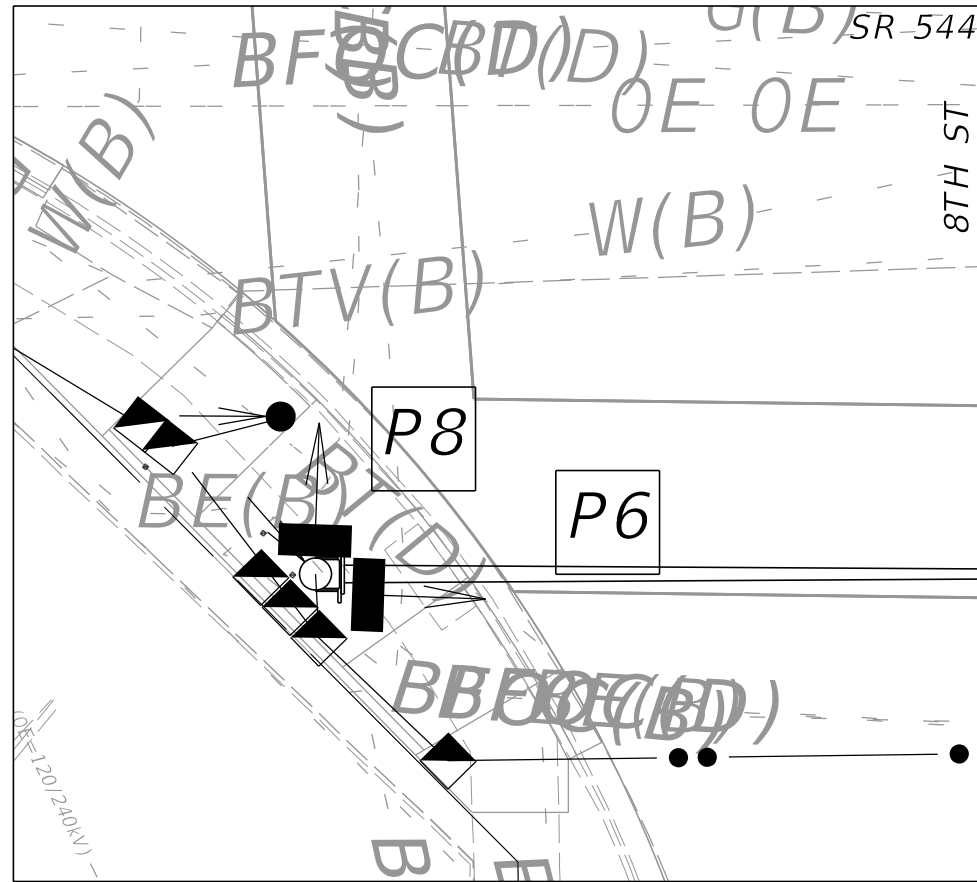
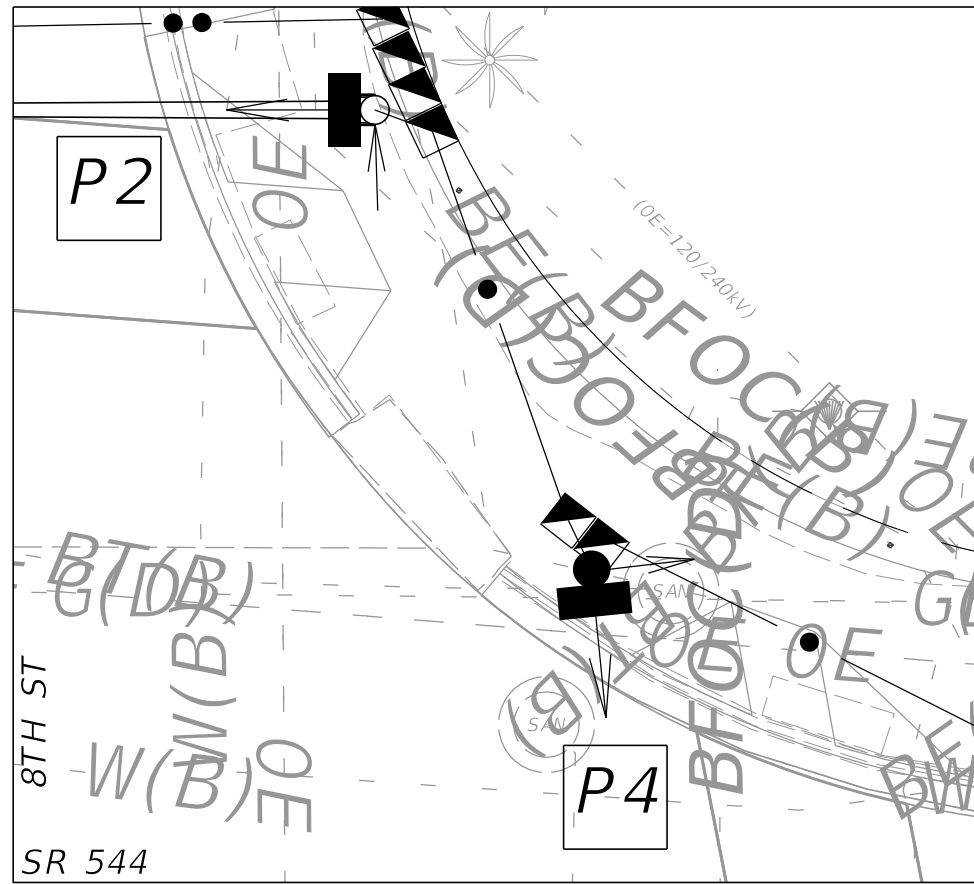
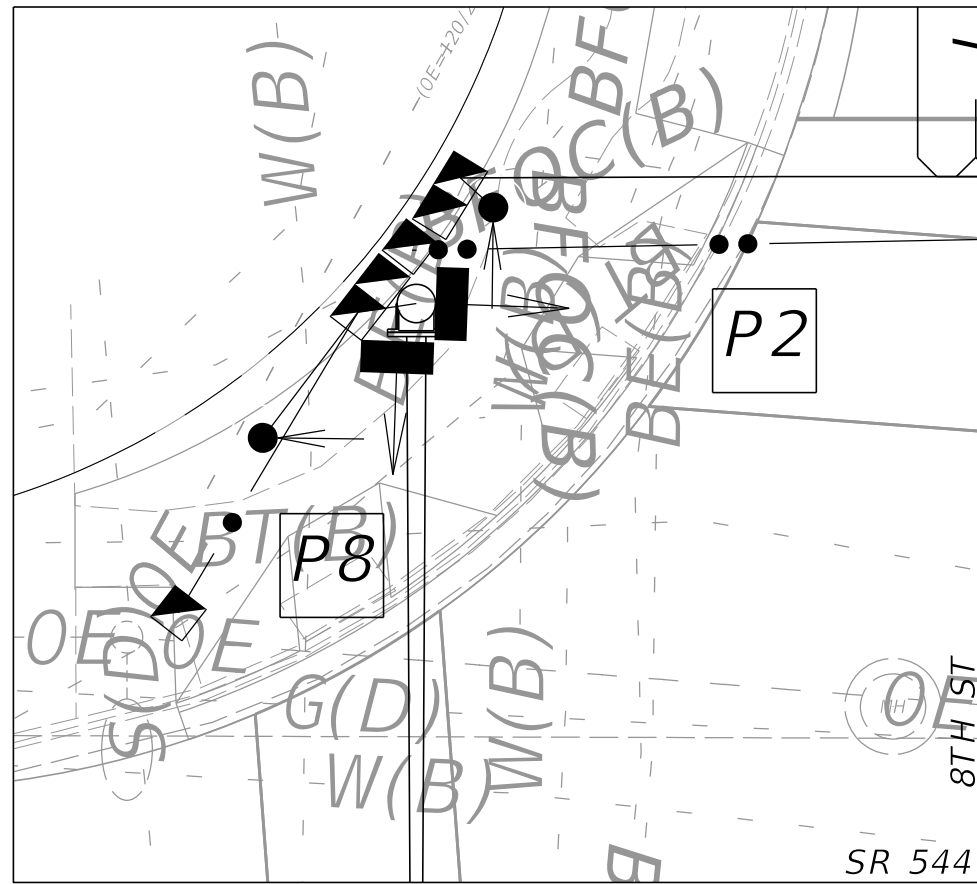
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 544	POLK	447874-1-52-01

**SIGNALIZATION PLAN**

SHEET NO.  
T-6

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD  
 OLIVER REMY RODRIGUES, P.E., PT0E  
 LICENSE NUMBER: 50646  
 FLORIDA TRANSPORTATION ENGINEERING, INC.  
 11458 NORTH 53RD STREET  
 TAMPA, FLORIDA 33617

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
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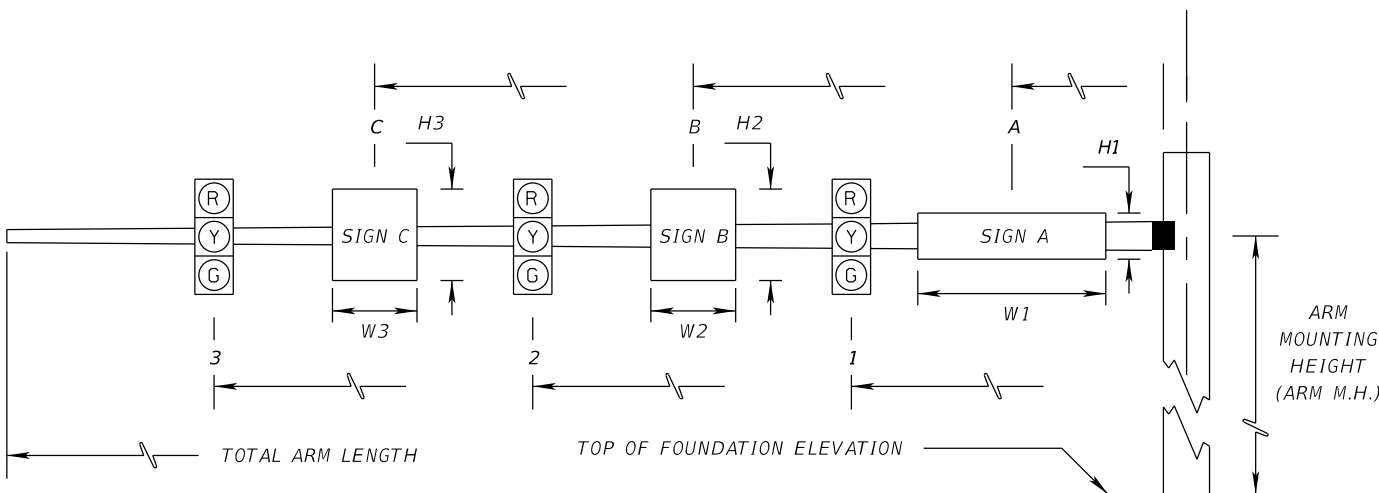
**PEDESTRIAN SIGNAL DETAIL**

SHEET NO.  
T-7

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SPECIAL INSTRUCTIONS

ID NO.	PED. BUTTON	PED. SIGNALS	HANDHOLE LOCATION



\* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

PROPOSED MAST ARM ASSEMBLY

ID NO.	SHEET NO.	LOCATION BY STA.	TOP OF FOUND. ELEVATION	RDWY ARM NO.	CROWN ELEV.	LUMI-NAIRE Y/N	TERM. COMP. Y/N	SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	SIGNAL DATA												TOTAL ARM LENGTH	ARM M.H.	ANGLE BETWEEN DUAL ARMS 90/270	SIGN DATA												PAINT COLOR									
											DISTANCE FROM POLE															DISTANCE FROM POLE / HEIGHT AND WIDTH OF SIGN																					
											1	*	2	*	3	*	4	*	5	*	A	H1				W1	B	H2	W2	C	H3	W3	D	H4	W4												
1	T-4	274+96.00	165.55'	1	165.75'	N	N	V	Y	Y	41.6	3	53.3	3	64.1	4	70	21.0	-----	10.0	2.0	4.0	35.3	2.5	2.5																						
2	T-4	274+98.00	164.87'	1	165.88'	N	N	V	Y	Y	25.6	3	36.5	3	47.6	3	50	21.5	-----	12.0	2.0	7.0	20.0	2.5	2.5	42.0	2.0	2.0																			
3	T-4	275+95.50	165.66'	1	165.90'	N	N	V	Y	Y	16.6	3	27.6	3	38.6	3	40	20.5	-----	5.0	2.0	6.0	11.5	2.5	2.5	33.1	2.0	2.0																			
4	T-4	276+31.00	165.60'	1	165.91'	N	N	V	Y	Y	22.4	5	40.4	3	51.4	4	60	21.0	-----	5.5	2.0	4.0	11.9	2.5	2.5																						

\* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

FUTURE MAST ARM ASSEMBLY WITH SPLIT PHASE

ID NO.	SHEET NO.	LOCATION BY STA.	TOP OF FOUND. ELEVATION	RDWY ARM NO.	CROWN ELEV.	LUMI-NAIRE Y/N	TERM. COMP. Y/N	SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	SIGNAL DATA												TOTAL ARM LENGTH	ARM M.H.	ANGLE BETWEEN DUAL ARMS 90/270	SIGN DATA												PAINT COLOR											
											DISTANCE FROM POLE															DISTANCE FROM POLE / HEIGHT AND WIDTH OF SIGN																							
											1	*	2	*	3	*	4	*	5	*	A	H1				W1	B	H2	W2	C	H3	W3	D	H4	W4														
1	T-4	274+96.00	165.55'	1	165.75'	N	N	V	Y	Y	41.6	3	53.3	3	64.1	4	70	21.0	-----	10.0	2.0	4.0	35.3	2.5	2.5																								
2	T-4	274+98.00	164.87'	1	165.88'	N	N	V	Y	Y	25.6	3	36.5	5	47.6	3	50	21.5	-----	12.0	2.0	7.0	20.0	2.5	2.5	42.0	2.0	2.0																					
3	T-4	275+95.50	165.66'	1	165.90'	N	N	V	Y	Y	16.6	3	27.6	5	38.6	3	40	20.5	-----	5.0	2.0	6.0	11.5	2.5	2.5	33.1	2.0	2.0																					
4	T-4	276+31.00	165.60'	1	165.91'	N	N	V	Y	Y	22.4	5	40.4	3	51.4	4	60	21.0	-----	5.5	2.0	4.0	11.9	2.5	2.5																								

REVISIONS				ENGINEER OF RECORD			STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			<h2>MAST ARM TABULATION</h2>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	OLIVER REMY RODRIGUES, P.E., PT0E LICENSE NUMBER: 50646 FLORIDA TRANSPORTATION ENGINEERING, INC. 11458 NORTH 53RD STREET TAMPA, FLORIDA 33617			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		T-8
								SR 544	POLK		447874-1-52-01



STANDARD MAST ARM ASSEMBLIES DATA TABLE											Table Date 11-01-16	
STRUCTURE ID NUMBERS	POLE NUMBER	DESIGNATION	FIRST ARM		SECOND ARM		UF (deg)	LL (deg)	POLE			DRILLED SHAFT ID
			ARM ID	FAA (ft.)	ARM ID	SAA (ft.)			POLE ID	UAA (ft.)	UB (ft.)	
	1	A70/S-P5/S	A70/S	N/A	N/A	N/A	N/A	N/A	P5/S	24.0	21.0	DS/20/5.0
	2	A50/S-P3/S	A50/S	N/A	N/A	N/A	N/A	N/A	P3/S	24.5	21.5	DS/16/5.0
	3	A40/S-P2/S	A40/S	N/A	N/A	N/A	N/A	N/A	P2/S	23.5	20.5	DS/16/4.5
	4	A60/S-P4/S	A60/S	N/A	N/A	N/A	N/A	N/A	P4/S	24.0	21.0	DS/16/5.0

NOTES [NOTES DATE 11-01-16]:

- IF AN ENTRY APPEARS IN COLUMN FAA, A SHORTER ARM IS REQUIRED. THIS IS OBTAINED BY REMOVING LENGTH FROM THE ARM TIP AND THE ARM LENGTH SHORTENED FROM FA TO FAA. SAA SIMILAR.
- IF AN ENTRY APPEARS IN COLUMN UAA, A SHORTER POLE IS REQUIRED. THIS IS OBTAINED BY REMOVING LENGTH FROM THE POLE TIP AND THE POLE HEIGHT SHORTENED FROM UA TO UAA.
- WORK THIS SHEET WITH THE SIGNAL DESIGNER'S "MAST ARM TABULATION". SEE "MAST ARM TABULATION" FOR SPECIAL INSTRUCTIONS THAT INCLUDE NON-STANDARD HANDHOLE LOCATION, PAINT COLOR, TERMINAL COMPARTMENT REQUIREMENT, AND PEDESTRIAN FEATURES.
- WORK WITH INDEX 649-030 AND 649-031.

FOUNDATION DATA TABLE					
STRUCTURE ID NUMBERS	POLE NUMBER	SOIL TYPE	EFFECTIVE SOIL WEIGHT (PCF)	SOIL FRICTION ANGLE (DEGREES)	AVERAGE SPT N-VALUE
	1	SAND	42.6	29	8
	2	SAND	42.6	29	8
	3	SAND	42.6	29	8
	4	SAND	42.6	29	8

NOTES:

- FOUNDATION DESIGN BASED ON A DATA PROVIDED BY THE FDOT DISTRICT 1/7 MATERIALS OFFICE.
- FOR SOIL ASSUMPTIONS AND VALUES USED IN DESIGN, SEE FOUNDATION DATA TABLE. WATER TABLE IS ASSUMED TO BE AT THE SOIL SURFACE.

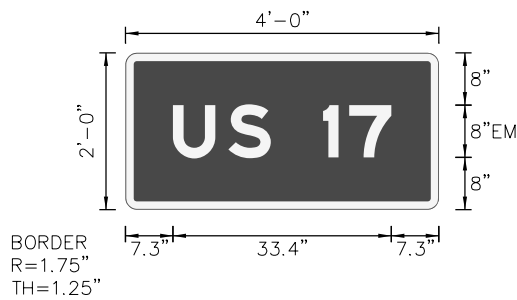
2/17/2023 10:08:32 AM USER: jlli.lukas T:\FDOT\Projects\447874\1520\structures\MiscStrMastArm01.dgn

REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			MAST ARM ASSEMBLIES DATA TABLES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOHNNY FUNG, P.E. LICENSE NUMBER: 64669 PATEL, GREENE & ASSOCIATES, LLC 12570 TELECOM DRIVE TEMPLE TERRACE, FL 33637		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		T-9
						SR 544	POLK	447874-1-52-01		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Drawn By : JML 02-23 Designed By: VLT 02-23  
Checked By: MSL 02-23

SIGN NAME		A1	QTY	2	SIGN NUMBER	STATION(S)
PANEL		BORDER				274+96
WIDTH	4'-0"	WIDTH	1.25'			276+34
HEIGHT	2'-0"	RADII	1.75'			
LEGEND	White	COLOR	White			
COLOR	Green					
SYMBOL(S)	ANGLE	X	Y	WID	HT	
SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE	AVERAGE LENGTH		



NO. OF LIGHT FIXTURES	FIXTURE SPACING	PHOTOMETRIC CURVE	WATT	VOLTAGE

COPY		U	S	1	7	L													
SPACE	7.3	0	8.5	15	23	27	33.4												
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			

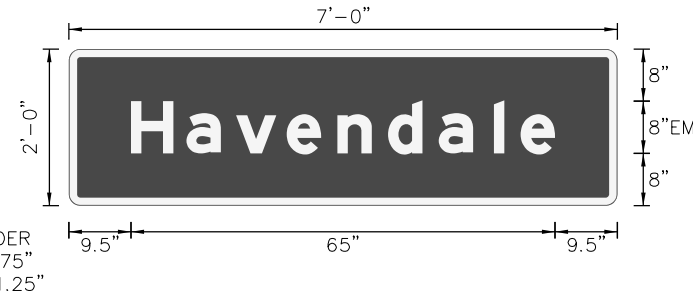
SIGN NAME		C1	QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER				275+95
WIDTH	6'-0"	WIDTH	1.25'			
HEIGHT	2'-0"	RADII	1.75'			
LEGEND	White	COLOR	White			
COLOR	Green					
SYMBOL(S)	ANGLE	X	Y	WID	HT	
SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE	AVERAGE LENGTH		



NO. OF LIGHT FIXTURES	FIXTURE SPACING	PHOTOMETRIC CURVE	WATT	VOLTAGE

COPY	S	R	5	4	4	L													
SPACE	12.6	21.1	27.6	35.6	43.2	52	46.8												
COPY	M	L	K	B	L	V	D	N	W	L									
SPACE	6	13.5	19	23.9	27.3	33.7	38.5	45.3	50.2	53.6	59.6	60							
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			

SIGN NAME		B1	QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER				274+98
WIDTH	7'-0"	WIDTH	1.25'			
HEIGHT	2'-0"	RADII	1.75'			
LEGEND	White	COLOR	White			
COLOR	Green					
SYMBOL(S)	ANGLE	X	Y	WID	HT	
SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE	AVERAGE LENGTH		



NO. OF LIGHT FIXTURES	FIXTURE SPACING	PHOTOMETRIC CURVE	WATT	VOLTAGE

COPY		H	a	v	e	n	d	a	i	e	L								
SPACE	9.5	8.5	7.6	7.8	7.8	7.8	7.8	8.5	4.1	5.3	9.5	65							
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			

SIGN NAME			QTY		SIGN NUMBER	STATION(S)
PANEL		BORDER				
WIDTH		WIDTH				
HEIGHT		RADII				
LEGEND		COLOR				
COLOR						
SYMBOL(S)	ANGLE	X	Y	WID	HT	
SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE	AVERAGE LENGTH		

NO. OF LIGHT FIXTURES	FIXTURE SPACING	PHOTOMETRIC CURVE	WATT	VOLTAGE

COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			
COPY																			
SPACE																			

2/20/2023 2:31:59 PM Carly S:\Projects\DOT\_44787415201\Signalization\G5WK5G01.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD  
 OLIVER REMY RODRIGUES, P.E., PTOE  
 LICENSE NUMBER: 50646  
 FLORIDA TRANSPORTATION ENGINEERING, INC.  
 11458 NORTH 53RD STREET  
 TAMPA, FLORIDA 33617

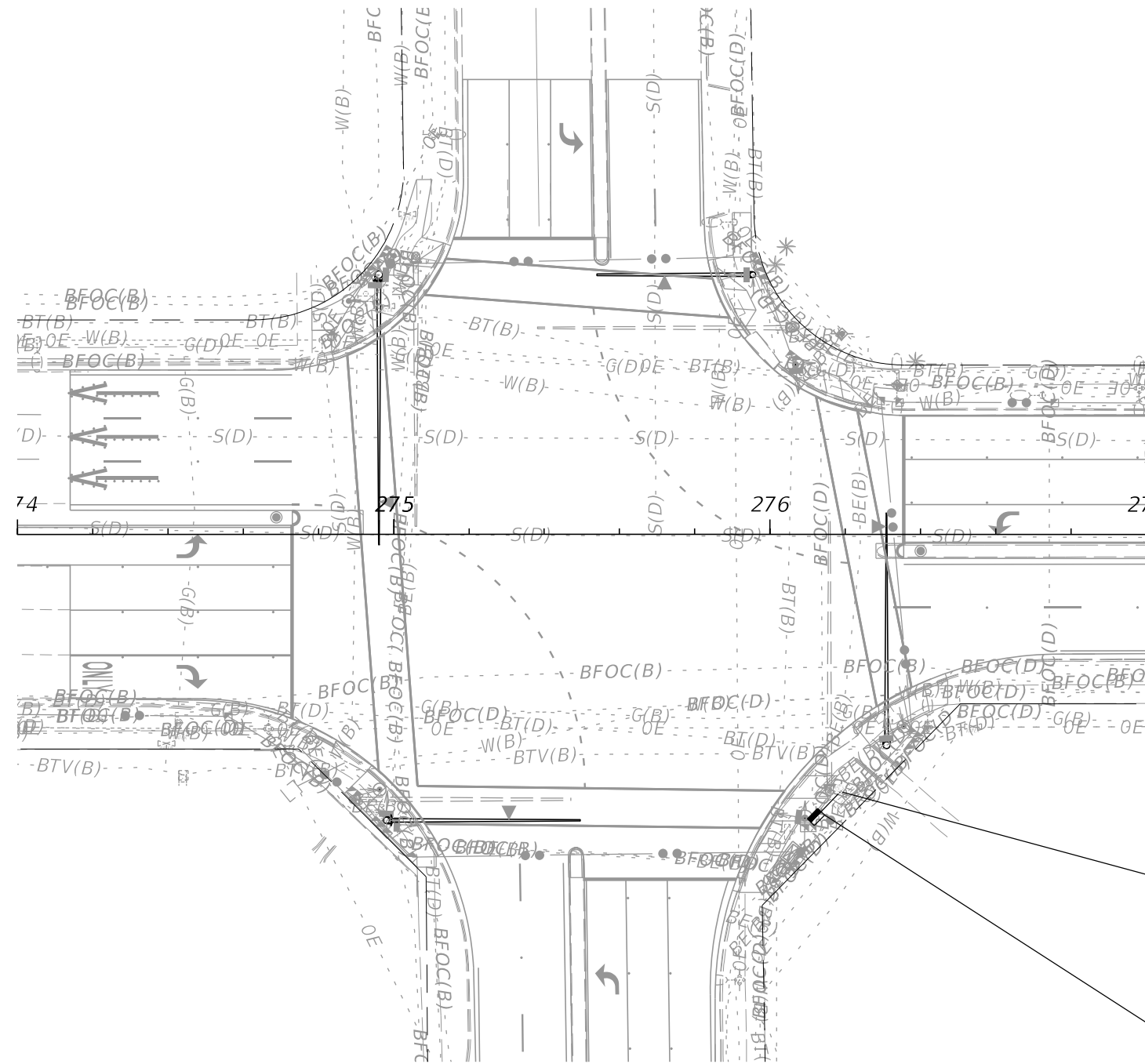
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 544	POLK	447874-1-52-01

**GUIDE SIGN WORKSHEET**

SHEET NO.  
T-10

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

SR 544/HAVENDALE BLVD/ MLK BLVD NW



PROPOSED 12CT SM FO CABLE.  
CONNECT PROPOSED ITS PUL BOX  
TO PROPOSED SIGNAL CABINET.

630-2-11	12 LF
633-1-121	30 LF
633-1-620	30 LF
633-2-31	1 EA
633-3-12	1 EA
633-3-13	1 EA
633-3-16	1 EA
633-6	1 DA
635-2-12	1 EA

2/20/2023 2:32:01 PM Carry S:\Projects\FDOT\44787415201\Signalization\PL\CS601.dgn

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD  
 OLIVER REMY RODRIGUES, P.E., PTOE  
 LICENSE NUMBER: 50646  
 FLORIDA TRANSPORTATION ENGINEERING, INC.  
 11458 NORTH 53RD STREET  
 TAMPA, FLORIDA 33617

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 544	POLK	447874-1-52-01

ITS PLAN

SHEET NO.  
T-11

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

POLE DATA

POLE NO.	CIRCUIT	STATION	DIST. OR ARM	LUMENS	LUMINAIRE WATTAGE	MOUNTING HEIGHT	POLE SETBACK	PAY ITEM
1	EXIST.	274+66.70	8'	15,607	133W	30'	51.60' RT.	715-11-211
2	EXIST.	275+14.79	8'	15,607	133W	30'	147.21' RT.	715-11-211
3	EXIST.	275+91.95	8'	15,607	133W	30'	118.40' RT.	715-11-211
4	EXIST.	276+41.90	12'	15,607	133W	30'	51.27' RT.	715-11-211

SIGNALIZED INTERSECTION LIGHTING RETROFIT CRITERIA

AVERAGE INITIAL INTENSITY (H.F.C.) 1.5 STD.; 1.0 MIN. (H.F.C.)  
 UNIFORMITY RATIO - AVG./MIN. 4:1 OR LESS  
 MAX./MIN. 10:1 OR LESS

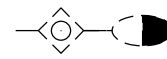
AVERAGE INITIAL INTENSITY IN CROSSWALK FOR APPROACH MOVEMENT (V.F.C.) 1.5 STD.; 1.0 MIN. (V.F.C.)

WIND SPEED 140 MPH

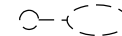
LEGEND

SYMBOL

DESCRIPTION



EXISTING LUMINAIRE TO BE RETROFITTED WITH 133W LED LUMINAIRE, DESIGNED FOR 15,607 LUMENS, AND TYPE III ROADWAY DISTRIBUTION. ANALYZED USING ATB2\_40BLEDE10\_MVOLT\_R3\_3K.IES.



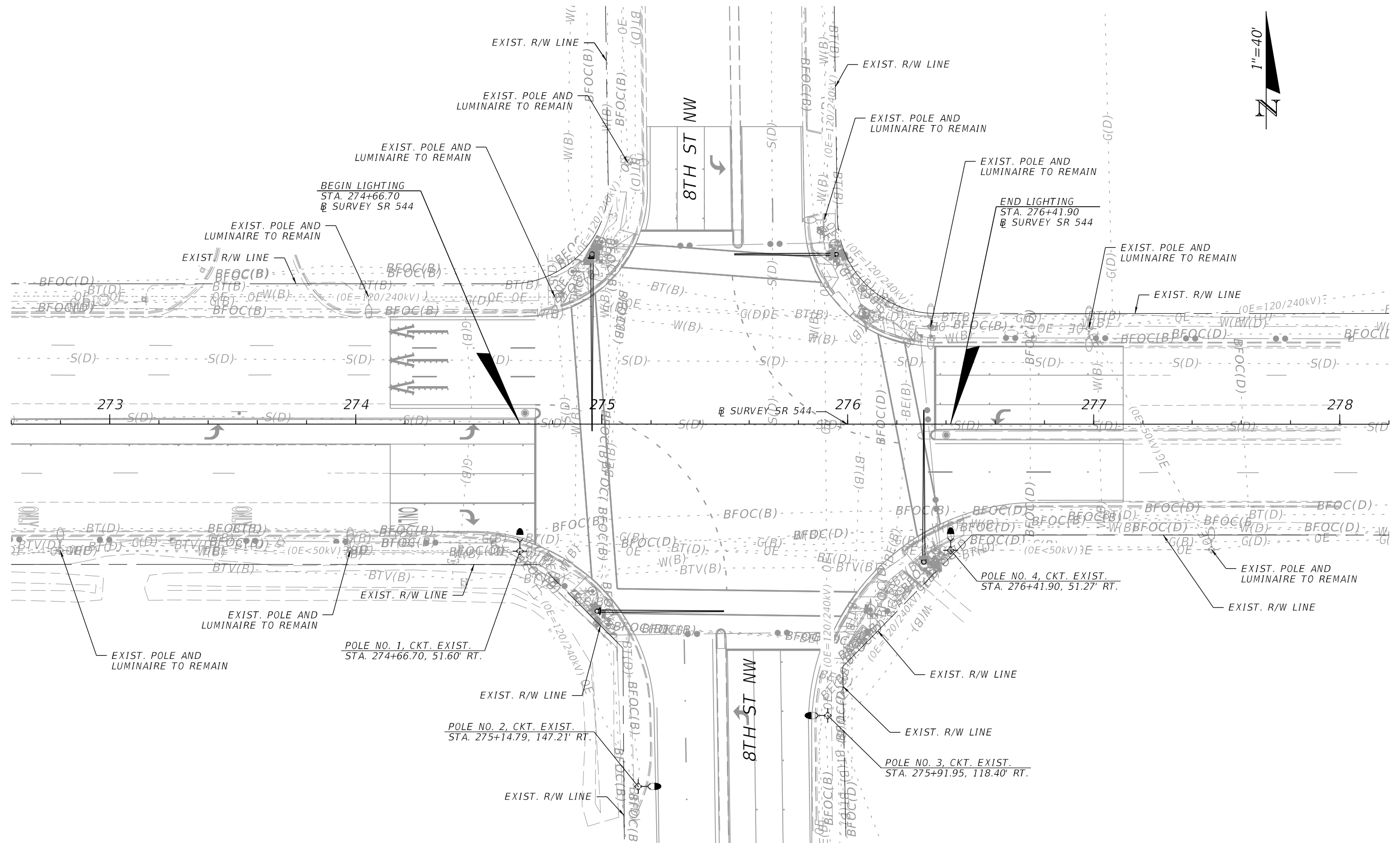
EXISTING POLE AND LUMINAIRE TO REMAIN

2/20/2023 2:32:02 PM Carry S:\Projects\DOT\_447874\15201\Lighting\PLD\LT01.dgn

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REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			POLE DATA AND LEGEND	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	RYAN C. ANLOAGUE, P.E. LICENSE NUMBER: 92396 FLORIDA TRANSPORTATION ENGINEERING, INC. 11458 NORTH 53RD STREET TAMPA, FLORIDA 33617		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
						SR 544	POLK	447874-1-52-01		T-12

SR 544 / HAVENDALE BLVD / MLK BLVD NW



2/20/2023 2:32:06 PM Carry S:\Projects\DOT\_44787415201\Lighting\PLANLT01.dgn

REVISIONS		REVISIONS	
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD  
 RYAN C. ANLOAGUE, P.E.  
 LICENSE NUMBER: 92396  
 FLORIDA TRANSPORTATION ENGINEERING, INC.  
 11458 NORTH 53RD STREET  
 TAMPA, FLORIDA 33617

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 544	POLK	447874-1-52-01

**LIGHTING PLAN**

SHEET NO.  
T-13

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