

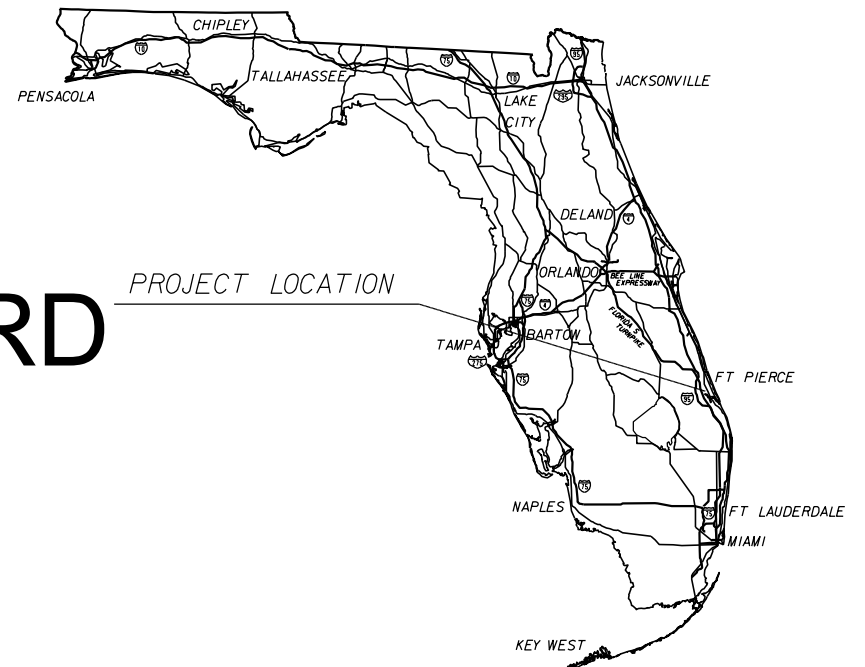
CITY OF PORT ST. LUCIE, FLORIDA  
PUBLIC WORKS DEPARTMENT

CONSTRUCTION PLANS  
FOR

**SW BAYSHORE BOULEVARD**

AT SW BAYSHORE BOULEVARD AND SW LAKEHURST DRIVE

**SIGNALIZATION PLANS**



INDEX OF SIGNALIZATION PLANS

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SHEET 1-2\* SPECIFIC PURPOSE SURVEY

SHEET 1\* TOPOGRAPHIC SURVEY

\* THIS SHEET IS INCLUDED IN THE INDEX OF SIGNALIZATION PLANS ONLY TO INDICATE THAT IT IS PART OF THE SIGNALIZATION PLANS. THIS SHEET IS CONTAINED IN A SEPARATE DIGITALLY SIGNED AND SEALED DOCUMENT

GOVERNING STANDARDS AND SPECIFICATIONS:  
FLORIDA DEPARTMENT OF TRANSPORTATION,  
STANDARD PLANS DATED FY 2022-23,  
AND STANDARD SPECIFICATIONS FOR ROAD AND  
BRIDGE CONSTRUCTION DATED JULY 2022,  
AS AMENDED BY CONTRACT DOCUMENTS.

PLANS PREPARED BY:



2041 Vista Parkway, Suite 101  
West Palm Beach, FL 33411  
Phone: (561) 253-9550 Fax: (561) 253-9551

NOTE: THE SCALE OF THESE PLANS MAY  
HAVE CHANGED DUE TO REPRODUCTION.

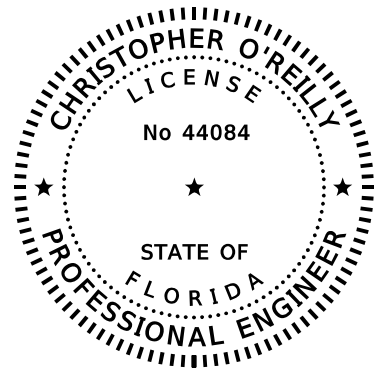
SIGNALIZATION PLANS  
ENGINEER OF RECORD: CHRISTOPHER N. O'REILLY, P.E.

P.E. NO.: 44084

FISCAL YEAR	SHEET NO.
23	T-1

CITY OF PORT ST. LUCIE PROJECT MANAGER: PAUL JOHNSON

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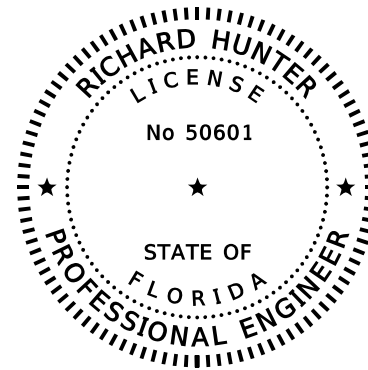
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Christopher N. O'Reilly, P.E., No. 44084

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

SIGNALIZATION PLANS

SHEET NO.                      SHEET DESCRIPTION

T-1	KEY SHEET
T-2	SIGNATURE SHEET
T-3	TABULATION OF QUANTITIES
T-4, T-5	GENERAL NOTES
T-6	SIGNALIZATION PLAN
T-7	SIGNING AND PAVEMENT MARKING PLAN
T-8	GUIDE SIGN WORKSHEET
T-9	MAST ARM TABULATION



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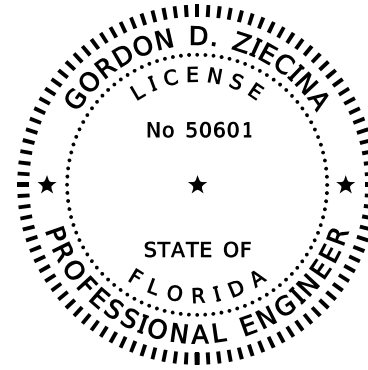
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SIGNALIZATION PLANS

SHEET NO.                      SHEET DESCRIPTION

T-2	SIGNATURE SHEET
T-11	STANDARD MAST ARM ASSEMBLIES DATA TABLE



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SIGNALIZATION PLANS

SHEET NO.                      SHEET DESCRIPTION

T-2	SIGNATURE SHEET
T-10	SPLICING DIAGRAM

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



CITY OF PORT ST. LUCIE  
121 S.W. PORT ST. LUCIE BLVD.  
PORT ST. LUCIE, FL 34984

ROAD	COUNTY
SW BAYSHORE BLVD	ST. LUCIE

**SIGNATURE SHEET**

SHEET NO.



T-2

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS				TOTAL THIS SHEET		GRAND TOTAL	
			T-6		T-7		PLAN	FINAL	PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL				
101-1	MOBILIZATION	LS					1		1	
110-4-10	REMOVAL OF EXISTING CONCRETE	SY			138		138		138	
520-1-10	CONCRETE CURB & GUTTER, TYPE F	SY			298		298		298	
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY			113		113		113	
527-2	DETECTABLE WARNINGS	SF			180		180		180	
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	251				251		251	
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	239				239		239	
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1				1		1	
633-1-121	FIBER OPTIC CABLE, F&I, UNDERGROUND, 2-12 FIBERS	LF	306				306		306	
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA	24				24		24	
633-3-11	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	EA	2				2		2	
633-3-12	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	EA	2				2		2	
633-3-13	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED CONNECTOR ASSEMBLY	EA	12				12		12	
633-3-16	FIBER OPTIC CONNECTION HARDWARE, F&I, PATCH PANEL- FIELD TERMINATED	EA	1				1		1	
633-6	FIBER OPTIC CABLE LOCATOR	DA	60				60		60	
633-8-1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	LF	50				50		50	
635-2-11	PULL & SPLICE BOX, F&I, 17" x 30" x 12" COVER SIZE	EA	25				25		25	
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	EA	3				3		3	
639-1-122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	AS	1				1		1	
639-2-1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	LF	10				10		10	
641-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE	EA	1				1		1	
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	8				8		8	
649-21-1	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 30'	EA	1				1		1	
649-21-3	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'	EA	1				1		1	
649-21-10	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 60'	EA	2				2		2	
650-1-24	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE W/ALUM TOP, 3 SECTION, 1 WAY	AS	8				8		8	
650-1-26	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE W/ALUM TOP, 4 SECTION, 1 WAY	AS	2				2		2	
653-1-11	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 1 WAY	AS	8				8		8	
660-4-11	VEHICLE DETECTION SYSTEM- VIDEO, FURNISH & INSTALL CABINET EQUIPMENT	EA	1				1		1	
660-4-12	VEHICLE DETECTION SYSTEM- VIDEO, FURNISH & INSTALL ABOVE GROUND EQUIPMENT	EA	4				4		4	
665-1-11	PEDESTRIAN DETECTOR, FURNISH & INSTALL, STANDARD	EA	8				8		8	
670-5-110	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA	AS	1				1		1	
682-1-113	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	EA	1				1		1	
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	EA	1				1		1	
684-5-1	MEDIA CONVERTER, FURNISH & INSTALL	EA	1				1		1	
685-1-13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	EA	1				1		1	
700-1-11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS			2		2		2	
700-1-60	SINGLE POST SIGN, REMOVE	AS			2		2		2	
700-3-201	SIGN PANEL, FURNISH & INSTALL OVERHEAD MOUNT, UP TO 12 SF	EA	2				2		2	
700-5-22	INTERNALLY ILLUMINATED SIGN, FURNISH & INSTALL OVERHEAD MOUNT, 12 TO 18 SF	EA	4				4		4	
706-3	RAISED PAVEMENT MARKER, TYPE B	EA			51		51		51	
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND ROUNDABOUT	LF			526		526		526	
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF			513		513		513	
711-11-170	THERMOPLASTIC, STANDARD, WHITE, ARROWS	EA			6		6		6	
711-15-101	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES WHITE, SOLID, 6"	GM			0.408		0.408		0.408	
711-15-131	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SKIP, 6", 10-30 SKIP OR 3-9 LANE DROP	GM			0.152		0.152		0.152	
711-15-201	THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, YELLOW, SOLID, 6"	GM			0.293		0.293		0.293	
711-17-1	THERMOPLASTIC, REMOVE EXISTING THERMOPLASTIC PAVEMENT MARKINGS- SURFACE TO REMAIN	SF			1561		1561		1561	

PAY ITEM FOOT NOTES:

- 649-21-1: INCLUDES THE COST FOR ALL MAST ARMS TO BE 12 SIDED
- 649-21-3: INCLUDES THE COST FOR ALL MAST ARMS TO BE 12 SIDED
- 649-21-10: INCLUDES THE COST FOR ALL MAST ARMS TO BE 12 SIDED



<p style="text-align: center;">REVISIONS</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>						DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION							 <p>American Consulting Engineers of Florida, LLC 2041 Vista Parkway, Suite 101 West Palm Beach, Florida 33411 Phone: (561) 253-9550 Fax: (561) 253-9551 Christopher N. O'Reilly, P.E., No. 44084</p>		 <p>CITY OF PORT ST. LUCIE 121 S.W. PORT ST. LUCIE BLVD. PORT ST. LUCIE, FL 34984</p>		<p><b>TABULATION OF QUANTITIES</b></p>		<p>SHEET NO. <b>T-3</b></p>
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION																			
<p>ROAD: SW BAYSHORE BLVD</p>		<p>COUNTY: ST. LUCIE</p>																						

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SIGNAL OPERATION AND GENERAL ITEM NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF PORT ST. LUCIE PUBLIC WORKS DEPT. NO LATER THAN TWO (2) FULL BUSINESS DAYS IN ADVANCE OF ANY WORK TO BE CARRIED OUT AT ANY SIGNAL. 772-344-4360
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A #8 KEY FROM THE TRAFFIC OPERATIONS COMPOUND AT 821 DWYER AVE TO ACCESS ANY OPERATIONAL TRAFFIC CABINET.
3. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND ALL EXISTING UTILITIES, INCLUDING OVERHEAD POWER LINES.
4. FOR PROGRAMED FLASH OPERATION, THE MAJOR STREET IS TO FLASH YELLOW AND THE MINOR STREET IS TO FLASH RED
5. THE CONTROLLER ASSEMBLY SHALL BE A NAZTEC TS2 TYPE 1 CABINET WITH A #8 KEY. THE TOP OF THE CONTROLLER CABINET FOUNDATION SHALL BE 12" ABOVE THE SIDEWALK ELEVATION TO PREVENT FLOODING. IN THE EVENT THERE IS NO SIDEWALK, THE TOP OF THE CONTROLLER CABINET FOUNDATION SHALL BE 12" ABOVE THE EDGE OF PAVEMENT.
6. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING ITS UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.
7. LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO EXCAVATION.
8. CONTACT SUNSHINE ONE CALL OF FLORIDA AT 811 OR SUNSHINE811.COM AT LEAST TWO (2) FULL BUSINESS DAYS BEFORE DIGGING.
9. A DISCONNECT SWITCH IS TO BE MOUNTED ON A SEPARATE CONCRETE POLE ON CONTROLLER CABINET CORNER.
10. CONTROLLER BASE SHALL HAVE TWO (2) CONDUITS FOR COMMUNICATION CABLE IN ADDITION TO THE TWO (2) SPARES THAT ARE REQUIRED. THEY SHALL BE TERMINATED INTO THE COMMUNICATION PULL BOX.
11. THE CONTRACTOR SHALL COORDINATE WITH FLORIDA POWER AND LIGHT TO DETERMINE ELECTRICAL SERVICE FEED LOCATION.
12. THE CONTROLLER CABINET SHALL BE ORIENTED WITH THE DOOR OPENING AWAY FROM THE ROADWAY, SO THAT THE TECHNICIAN CAN VIEW THE ENTIRE INTERSECTION WHILE WORKING IN THE CABINET.
13. A CONCRETE TECHNICIAN PAD SHALL BE CONSTRUCTED ADJACENT TO THE CONTROLLER CABINET AT SIDEWALK ELEVATION WITH A 6" EYEBOLT PROTRUDING FROM THE CONCRETE AT THE HINGE SIDE OF THE CABINET TO SECURE A GENERATOR. IN THE ABSENCE OF SIDEWALK, THE CONCRETE TECHNICIAN PAD SHALL BE AT EDGE OF PAVEMENT ELEVATION.
14. TOP OF MAST ARM FOUNDATIONS WITHIN THE SIDEWALKS SHALL MATCH FINISH CONTOUR AND ELEVATION OF SIDEWALKS WITHOUT JOINTS. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER BOLT PROJECTION ABOVE FINISHED SIDEWALK GRADE.
15. THE CONTROLLER SHALL OPERATE AN APPROVED FLORIDA D.O.T. SIGNAL OPERATING PLAN.
16. SIGNAL TIMINGS DISPLAYED FOR LOCAL OPERATION ARE SUGGESTED TIMINGS BASED ON THE MPO AREA VOLUME COUNTS ACTUAL TIMING AND COORDINATION PLANS ARE TO BE DETERMINED BY THE CITY OF PORT ST. LUCIE PROFESSIONAL ENGINEER'S REPRESENTATIVE.
17. FINAL LOCATION OF MAST ARMS TO BE FIELD DETERMINED AND APPROVED BY THE CITY AND ENGINEER OF RECORD.
18. OPTICAL VEHICLE DETECTORS SHALL BE ITERIS EDGE II, WITH ITERIS EDGE CONNECT AND ITERIS TS2-IM MODULE, AND SHALL BE CAPABLE OF MULTI ZONE DETECTION. DETECTORS SHALL BE ITERIS RZ4-WDR AND SHALL BE MOUNTED ABOVE THE MAST ARM USING ASTRO BRACKET HARDWARE AT A HEIGHT CAPABLE OF THE REQUIRED DETECTION AND AS RECOMMENDED BY THE SYSTEM MANUFACTURER. THE DETECTION SYSTEM SHALL BE EQUIPPED WITH AN LCD MONITOR FOR CONFIGURATION OF THE DETECTOR LOOPS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE CITY OF PORT ST. LUCIE FOR APPROVAL AND MUST COMPLY WITH THE CITY'S VIDEO SYSTEM. ALL VIDEO POWER CABLES, PROCESSORS, AND EQUIPMENT SHALL BE PROVIDED FOR A COMPLETE AND OPERATIONAL VIDEO DETECTION SYSTEM. MANUFACTURERS SHALL BE PRESENT AT TURN ON FOR PROGRAMMING AND SETUP.
19. ALL ILLUMINATED STREET NAME SIGNS SHALL BE RIGIDLY MOUNTED AND WIRED TO A SINGLE PHOTO CELL LOCATED IN THE CONTROLLER CABINET. LETTERING SIZE AND FHWA FONT TYPE SHALL MEET CURRENT MUTCD AND FDOT STANDARDS.
20. ALL SIGNALS SHALL BE EQUIPPED WITH AN UNINTERRUPTABLE POWER SUPPLY (UPS). AN ALPHA NOVUS FXM 2000 IN A NOVUS FORTEX FX 200 CABINET MOUNTED ON A CONCRETE PAD ALONGSIDE THE CONTROLLER FOUNDATION AND HAVE A NETWORK INTERFACE CARD INSTALLED AND CONFIGURED.

21. FIBER OPTIC ETHERNET SWITCH SHALL BE CISCO INDUSTRIAL ETHERNET 4000 SERIES 20 PORTS MANAGED- (PART # IE-4000-8GT8GP4G-E)/CISCO AC-DC POWER MODULE FOR POE SOLUTION (PART # PWR-IE170W-PC-AC) AND SHALL BE FULLY CONFIGURED FOR OPERATION, INCLUDING ASSIGNED IP ADDRESS DETERMINED BY THE CITY OF PORT ST. LUCIE TRAFFIC DIVISION. CONTRACTOR SHALL CONTACT TRAFFIC DIVISION TO DETERMINE WHICH SWITCH WILL BE APPROPRIATE FOR INSTALL.
22. TRAFFIC MONITORING CAMERA SHALL BE BOSCH AUTODOME IP STARLIGHT 7000 HD PAN TILT ZOOM, SHALL HAVE SURGE & LIGHTING PROTECTION, AND SHALL BE MOUNTED WITH MAST-O-BRACKET AND NEOPRENE WRAP. THE CITY OF PORT ST. LUCIE TRAFFIC DIVISION SHALL DETERMINE THE MOUNTING LOCATION.
23. ALL PATCH CABLES, SPLITTERS AND MISC. MATERIALS REQUIRED FOR THE INSTALLATION OF TRAFFIC MONITORING EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. INSTALLED PATCH CABLE SHALL MATCH EXISTING PATCH CABLE DIMENSIONS AND TYPE. ANY DEVIATIONS SHALL BE APPROVED BY TRAFFIC DIVISION.
24. SIGNAL CONDUCTOR SHALL PASS THROUGH HOLE IN PELCO/ASTRO MOUNTING BRACKET, INTO SIGNAL MOUNTING PIPE AND INTO SIGNAL, SO CABLE IS NOT EXPOSED TO THE ELEMENTS.
25. ALL SIGNAL HEADS SHALL HAVE BACK PLATES INSTALLED USING ALL NECESSARY HARDWARE ACCORDING TO LATEST FDOT STANDARDS.
26. CONTRACTOR SHALL NOT USE WIRE NUTS ANYWHERE WITHIN THE CONTROLLER CABINET, STREET LIGHT CIRCUIT OR SIGNAL CIRCUIT. APPROVED CONNECTIONS ARE TERMINAL STRIPS, WATER TIGHT BUTT SPLICES (RUBBER TAPE ELECTRICAL TAPE, SCOTCH COTE) AND SPLIT BOLTS.
27. ALL SIGNAL UPRIGHT HAND HOLES SHALL HAVE TERMINAL STRIPS INSTALLED FOR THE TERMINATION OF SIGNAL CONDUCTOR FROM THE CONTROLLER CABINET TO THE SIGNAL HEADS/PEDESTRIAN SIGNALS.
28. ALL GROUND WIRING WITHIN PULL BOXES REQUIRING TERMINATION TO GROUND ROD SHALL BE ATTACHED USING CAD WELD IGNITORS.
29. SIGNAL CONDUCTOR WITHIN CONTROLLER CABINET SHALL COMPLETELY ENCIRCLE INSIDE OF CABINET BEFORE TERMINATION TO ALLOW SLACK FOR KNOCK DOWNS.
30. ALL SPARE SIGNAL CONDUCTOR WITHIN CONTROLLER CABINET SHALL BE TERMINATED DIRECTLY TO GROUND/NEUTRAL BARS.
31. ALL SIGNAL CONDUCTOR WITHIN THE UPRIGHT HAND HOLE AND CONTROLLER CABINET SHALL BE PROPERLY LABELED USING FLAG TIE WRAPS.
32. ALL DETECTION CAMERA PELCO BRACKETS SHALL BE DRILLED AND TAPPED FOR 1/4-20 SET SCREW AFTER INSTALLATION TO PREVENT CAMERA FROM LAYING OVER IN HIGH WINDS.
33. WEEP HOLES SHALL BE DRILLED IN ALL TRAFFIC SIGNAL HEADS AND PEDESTRIAN SIGNALS.
34. ANTI SEIZE SHALL BE USED ON ALL MOUNTING HARDWARE FOR SIGNAL/CAMERA BRACKETS.
35. THE FOLLOWING SHALL BE USED FOR FIBER OPTIC INTERCONNECT:
  - PULL BOX (FIBER OPTIC)- TIER 15 (MIN.)
    - BOX: QUAZITE-PG1730BB18- 17"X30"X18" DEEP, COVER: QUAZITE-PG1730CA00
    - BOX: SYNERTECH-S1730B18FA- 17"X30"X18" DEEP, COVER: SYNERTECH-S1730HB0A
  - SPLICE BOX (FIBER OPTIC)- TIER 15 (MIN.)
    - BOX: QUAZITE-PG3048BB- 30"X48"X36" DEEP COVER: QUAZITE-PG3048HC00
    - BOX: OLDCASTLE-3048-36- 30"X48"36" DEEP COVER- OLDCASTLE-UNI-HALF 3048
  - SPLICE CLOSURES (FIBER OPTIC): TYCO FOSC-450-C6-6-NT-0-C6V
    - ENCLOSURE SPLICE TRAY: FOSC-ACC-C-TRAY-24
    - BASKET: FOSC-ACC-C-BASKET
  - FIBER OPTIC CABLE
    - CORNING/SEICOR-096EU4-T4701D20- 96 FIBER ALTOS GEL-FREE CABLE NON-ARMORED SMFE 1.4/0.4/0.3 DB/KM 12F/TUBE PRINT IN FT.
    - CORNING/SIECOR-012EU4-T4701D20- 12 FIBER ALTOS GEL-GREE CABLE NON-ARMORED SMFE 1.4/0.4/0.3 DB/KM 12F/TUBE PRINT IN FT.

REVISIONS							 CITY OF PORT ST. LUCIE 121 S.W. PORT ST. LUCIE BLVD. PORT ST. LUCIE, FL 34984	ROAD		SHEET NO.  <b>GENERAL NOTES</b>
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD	COUNTY	
									T-4	

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36. THE FOLLOWING FIBER OPTIC AND CABINET DEVICE PAY ITEMS SHALL BE INCORPORATED INTO THE SIGNALIZATION PLANS FOR EACH INTERSECTION:

CCTV ITEMS

- VIDEO DATA SERIAL CONVERTER (F&I) 1 EA
- COPPER DATA PATCH CABLES 5 (F&I) 1 EA
- CAMERA ASSEMBLY, BOSCH AUTODOME IP STARLIGHT 7000 HD, SMOKED LENS W/ COMPOSITE CABLE & GASKET (F&I) 1 EA
- CCTV MOUNT, MASTOBRAC & NEOPRENE WRAP (F&I) 1 EA
- VIDEO COAX PATCH CABLES W/ SPLITTER (F&I) 1 EA
- CCTV MAINTENANCE UNIT (SURGE ARRESTOR PANEL FOR POWER, DATA, VIDEO W/ INTERFACE) (F&I) 1 EA
- MULTI-VOLTAGE POWER SUPPLY MODULE (F&I) 1 EA

ELECTRONICS

- CISCO INDUSTRIAL 4000 8GT8GP4G-E FO ETHERNET SWITCH 1000BASEF, 2OPT-20CU POE (F&I) 1 EA

FIBER OPTIC CABLE OSP

- 101-1 MOBILIZATION AND DOCUMENTATION LS
- TW TRACER WIRE W/ RADIO DETECTION SYSTEM BALANCING FOR CITYWIDE LOCATE SYSTEM (F&I) LF
- FO CABLE 96F, SM, LT, UG (F&I) LF
- DM ROW DELINEATOR MARKER POST ORANGE 6' (F&I) 1 EA
- FO CABLE 12F, SM, DROP CABLE (F&I) LF
- FO CONNECTION (INSTALL) SPLICE 1 EA
- FO CONNECTION (INSTALL) TERMINATION 1 EA
- FO SPLICE-TERM. CABINET, 12F, WALL/RACK (F&I) 1 EA
- FO JUMPER, DUPLEX ST-ST, SM, 10' (F&I) 1 EA
- FO JUMPER, DUPLEX SC-ST, SM, 10' (F&I) 1 EA
- FO JUMPER, DUPLEX LC-ST, SM, 10' (F&I) 1 EA
- FO SPLICE CLOSURE 12F, AERIAL/UG (F&I) 1 EA
- FO SPLICE CLOSURE 96F, AERIAL/UG (F&I) 1 EA
- FO PULLBOX (F&I) 1 EA
- FO SPLICEBOX (F&I) 1 EA

37. THE CITY SHALL BE SUPPLIED WITH ONE (1) HONDA EU 3000I PORTABLE INVERTOR GENERATOR (OR EQUIVALENT) UPON COMPLETION OF THE TRAFFIC SIGNAL. IT SHALL BE EQUIPPED WITH ELECTRONIC START AND WHEELS.

ALL UTILITY OWNERS, AGENCY AND CONTACTS FOR OTHER REQUIRED ACTIONS WITHIN THE PROJECT LIMITS SHALL BE LISTED WITH CONTACT PERSON AND PHONE NUMBER AS FOLLOWS:

CONTACT PERSON	UTILITY	PHONE NUMBER
LUKE FOLKERTS	AT&T DISTRIBUTION	561-683-2729
HOLLY COOMBS	CITY GAS COMPANY OF FLORIDA	321-638-3419
PAUL JOHNSON	CITY OF PORT ST. LUCIE - TRAFFIC	772-871-5182
JOHN EASON	CITY OF PORT ST. LUCIE	772-871-5063
TONY SPRINGSTEEL	COMCAST	772-321-3425
ROB MORRIS	FLORIDA POWER & LIGHT- ST. LUCIE	772-223-4215

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



**American**  
Consulting Engineers of Florida, LLC  
2041 Vista Parkway, Suite 101  
West Palm Beach, Florida 33411  
Phone: (561) 253-9550 Fax: (561) 253-9551  
Christopher N. O'Reilly, P.E., No. 44084



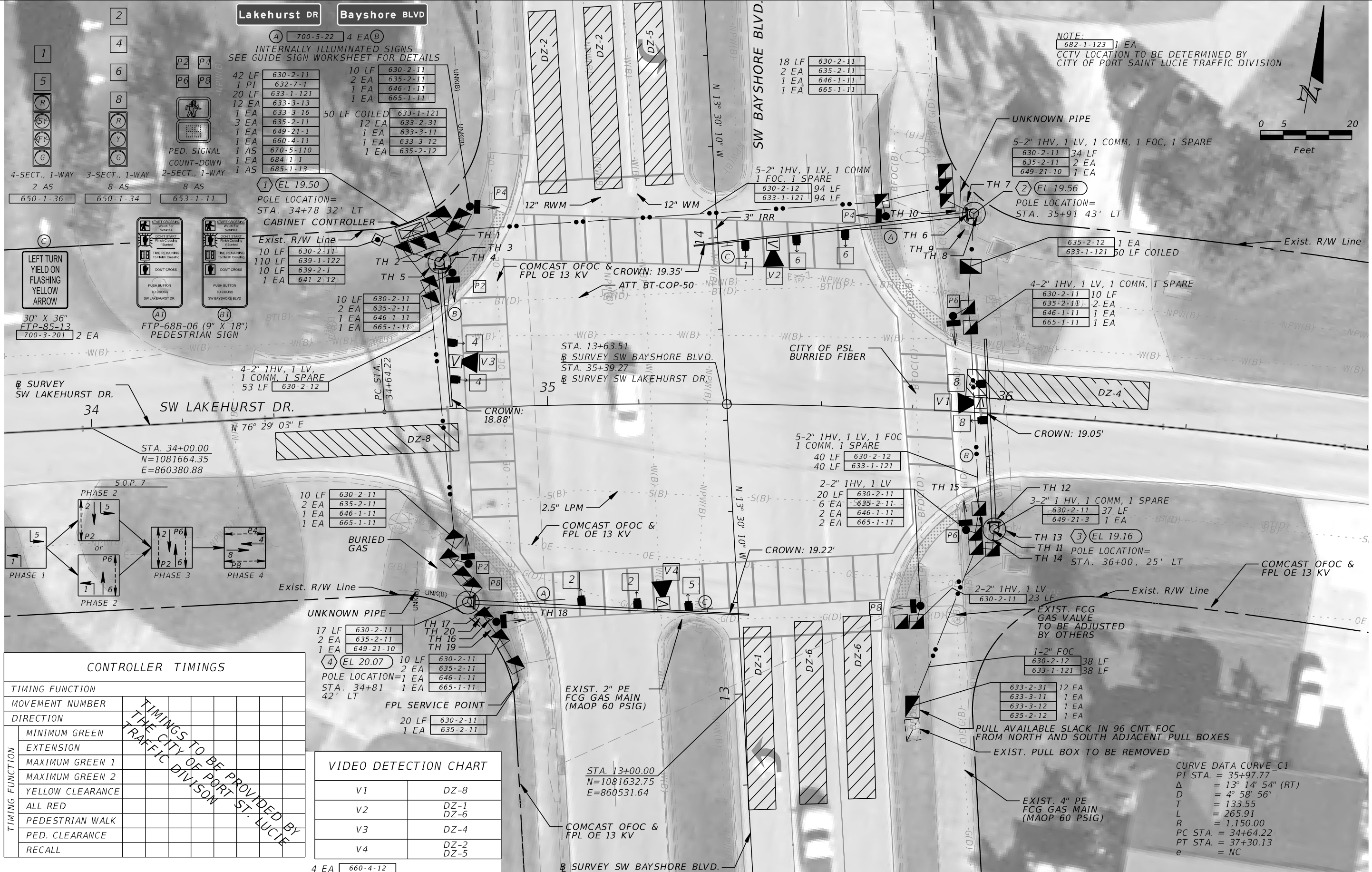
CITY OF PORT ST. LUCIE  
121 S.W. PORT ST. LUCIE BLVD.  
PORT ST. LUCIE, FL 34984

ROAD	COUNTY
SW BAYSHORE BLVD	ST. LUCIE

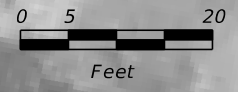
**GENERAL NOTES**

SHEET NO.

T-5

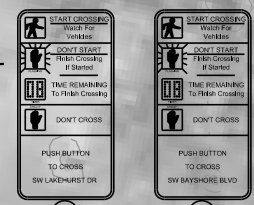


NOTE:  
682-1-123 1 EA  
CCTV LOCATION TO BE DETERMINED BY  
CITY OF PORT SAINT LUCIE TRAFFIC DIVISION



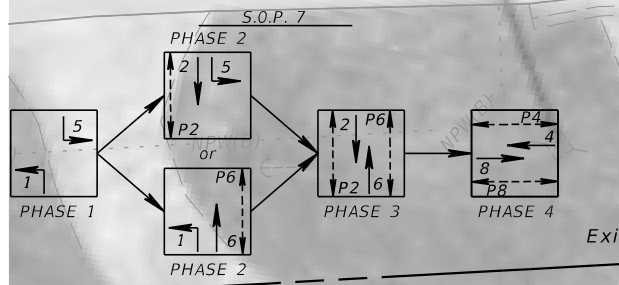
4-SECT., 1-WAY 2 AS  
3-SECT., 1-WAY 8 AS  
2-SECT., 1-WAY 8 AS

INTERNALLY ILLUMINATED SIGNS  
SEE GUIDE SIGN WORKSHEET FOR DETAILS



30" X 36"  
FTP-85-13  
700-3-201 2 EA

FTP-68B-06 (9' X 18')  
PEDESTRIAN SIGN



**CONTROLLER TIMINGS**

TIMING FUNCTION	MINIMUM GREEN	EXTENSION	MAXIMUM GREEN 1	MAXIMUM GREEN 2	YELLOW CLEARANCE	ALL RED	PEDESTRIAN WALK	PED. CLEARANCE	RECALL
MOVEMENT NUMBER									
DIRECTION									

TIMINGS TO BE PROVIDED BY THE CITY OF PORT ST. LUCIE TRAFFIC DIVISION

**VIDEO DETECTION CHART**

V1	DZ-8
V2	DZ-1 DZ-6
V3	DZ-4
V4	DZ-2 DZ-5

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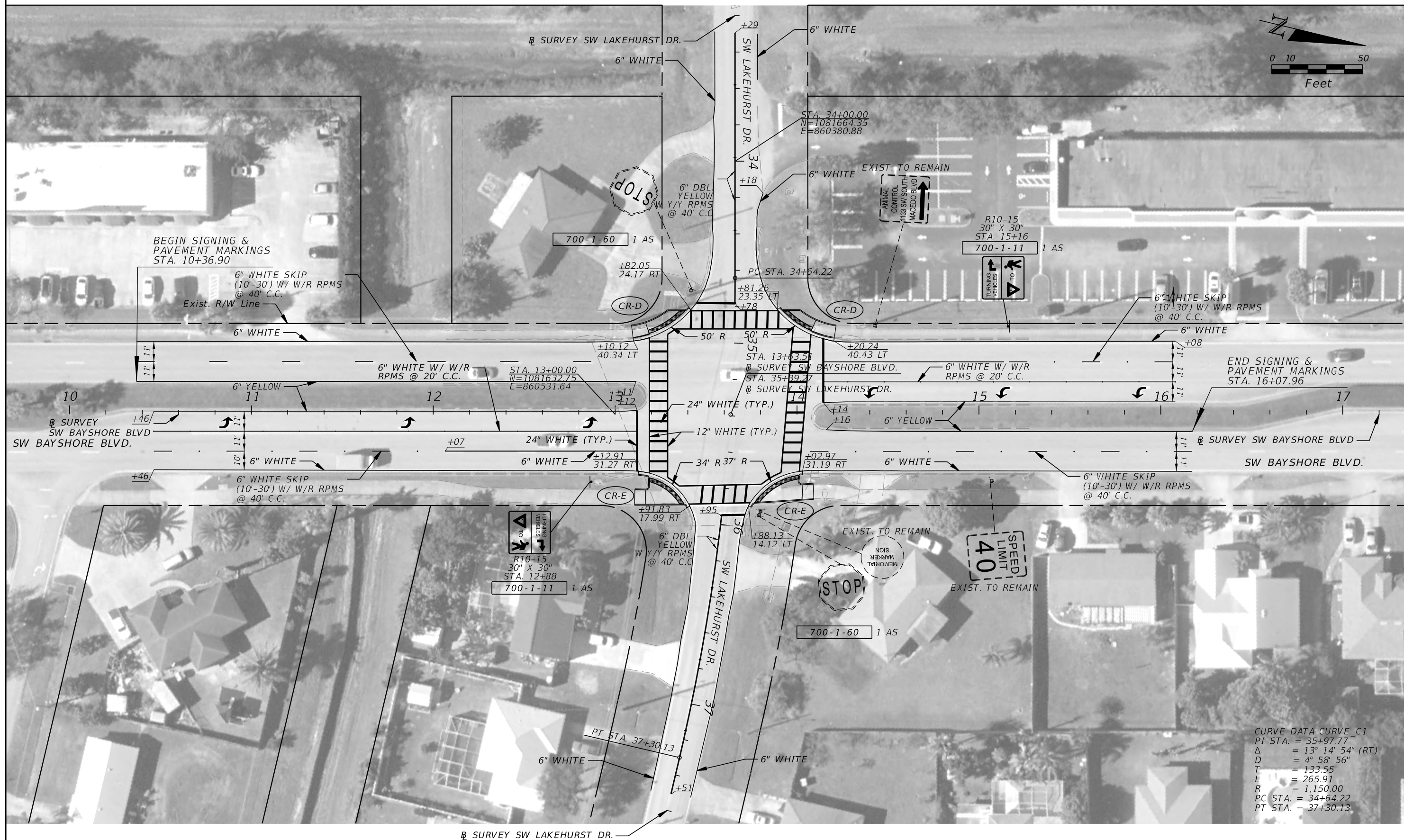
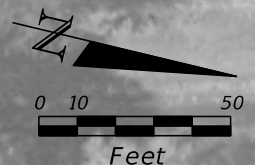
ROAD	COUNTY
SW BAYSHORE BLVD	ST. LUCIE

**SIGNALIZATION PLAN**

SHEET NO. T-6

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CURVE DATA CURVE\_C1  
 PI STA. = 35+97.77  
 $\Delta$  = 13° 14' 54" (RT)  
 D = 4° 58' 56"  
 T = 133.55  
 L = 265.91  
 R = 1,150.00  
 PC STA. = 34+64.22  
 PT STA. = 37+30.13

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 PORT ST. LUCIE, FL 34984

ROAD	COUNTY
SW BAYSHORE BLVD	ST. LUCIE

**SIGNING AND PAVEMENT MARKING PLAN**

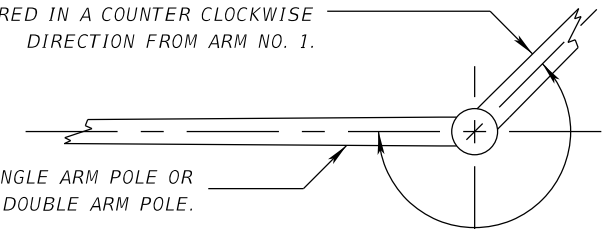
SHEET NO. T-7

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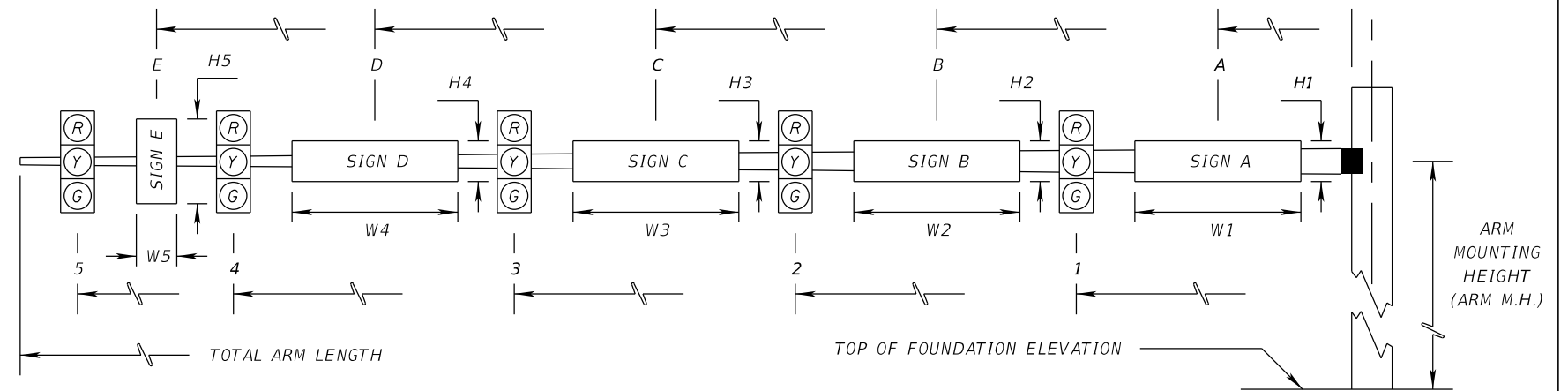




ARM NO. 2 - DOUBLE ARM POLE ORIENTATION  
TO BE MEASURED IN A COUNTER CLOCKWISE  
DIRECTION FROM ARM NO. 1.



ARM NO. 1 - SINGLE ARM POLE OR  
LONGEST ARM FOR DOUBLE ARM POLE.



\* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

ID NO.	SHEET NO.	LOCATION BY STA.	GROUND ELEVATION AT FOUNDATION	TOP OF FOUNDATION ELEVATION	RDWY ARM NO.	CROWN ELEV.	SIGNAL DATA										TOTAL ARM LENGTH	ARM M.H.	SIGN DATA									PAINT COLOR								
							SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	DISTANCE FROM POLE										DISTANCE FROM POLE/HEIGHT & WIDTH OF SIGN																
										1	*	2	*	3	*	4			*	V	A	H1	W1	B	H2	W2	C		H3	W3						
1	T-6	34+78	19.00	19.50	1	18.88	V	Y	N	16.5	3	24.5	3								8	2.0	8.0													GALVANIZED
2	T-6	35+91	19.06	19.56	1	19.35	V	Y	N	27	3	37.5	3	49	4						19	2.0	7.5	53	3.0	2.5									GALVANIZED	
3	T-6	36+00	18.66	19.16	1	19.05	V	Y	N	22.5	3	30.5	3								14.5	2.0	8.0												GALVANIZED	
4	T-6	34+81	19.57	20.07	1	19.22	V	Y	N	23.5	3	36	3	47	4						15.5	2.0	7.5	51	3.0	2.5									GALVANIZED	

REVISIONS

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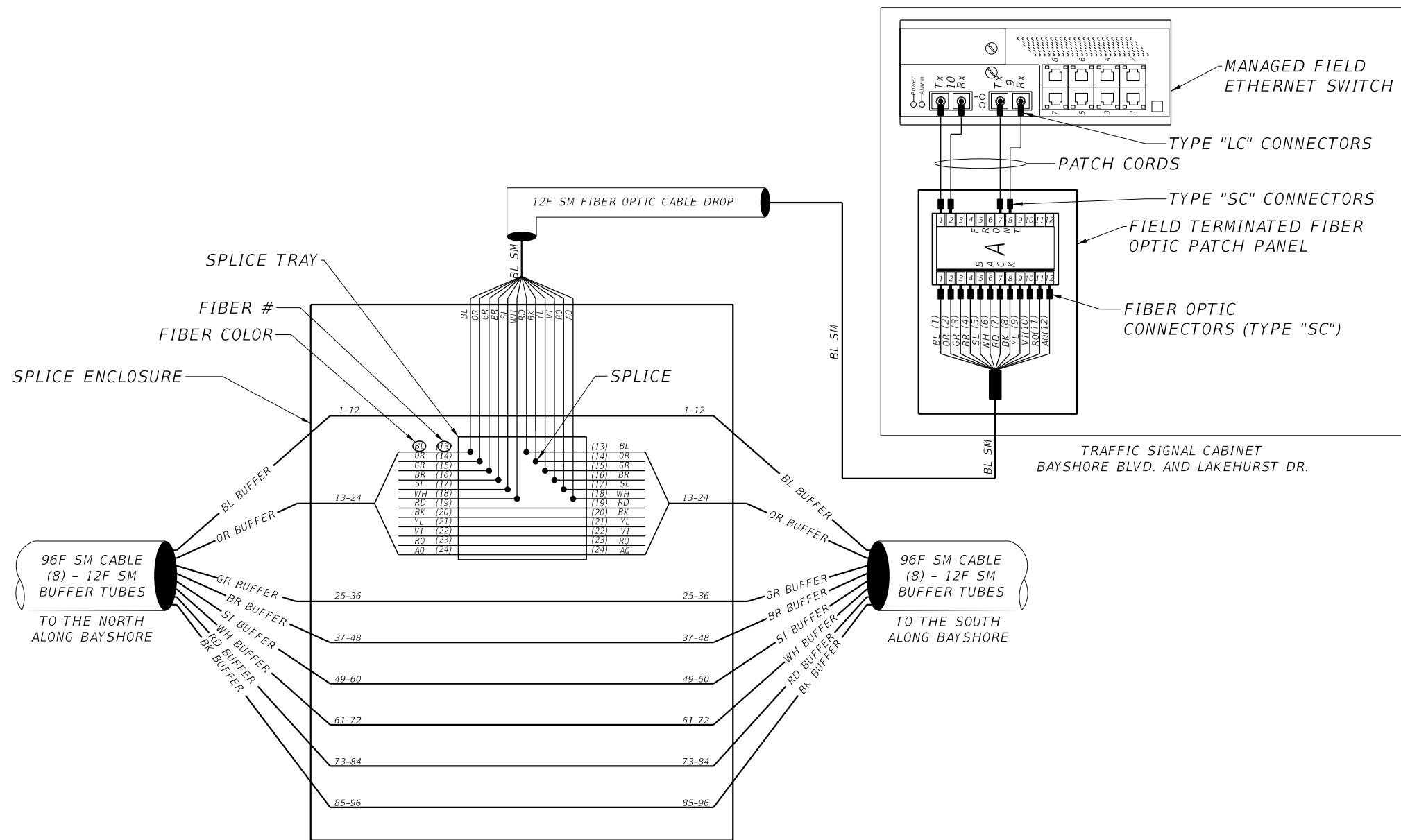
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121 S.W. PORT ST. LUCIE BLVD.  
PORT ST. LUCIE, FL 34984

ROAD	COUNTY
SW BAYSHORE BLVD	ST. LUCIE

**STANDARD MAST ARM  
TABULATION**

SHEET NO.  
T-9

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 2818 Cypress Ridge Blvd, Suite 200  
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 Phone: (813) 435-2600 Fax: (813) 435-2601  
 Gordon D. Ziecina, P.E. No. 33770

**CITY OF PORT ST. LUCIE**  
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ROAD	COUNTY
SW BAYSHORE BLVD	ST. LUCIE

**SPLICING DIAGRAM**



SHEET NO.  
T-10

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STANDARD MAST ARM ASSEMBLIES DATA TABLE											Table Date 11-01-16
STRUCTURE ID NUMBERS	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.)	
T-4-1	A30/S-P1/S	A30/S						P1/S	23	20	DS/12/4
T-4-2	A60/S-P4/S	A60/S						P4/S	23	20	DS/14/5
T-4-3	A40/S-P2/S	A40/S						P2/S	23	20	DS/12/4.5
T-4-4	A60/S-P4/S	A60/S						P4/S	23	20	DS/14/5

NOTES [Notes Date 11-01-16]:

1. 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.
2. 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.
3. Arm mounting height UB must be between 18-22 feet.
4. Pole types P2 and larger require a minimum 4.5 foot diameter drilled shaft. Pole types P5 and larger require a minimum 5.0 foot diameter drilled shaft.
5. 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.
6. Work with Index 649-030 and 649-031.

REVISIONS						 <b>American</b> Consulting Engineers of Florida, LLC 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Richard A. Hunter, P.E., No. 50601	 CITY OF PORT ST. LUCIE 121 S.W. PORT ST. LUCIE BLVD. PORT ST. LUCIE, FL 34984	STANDARD MAST ARM ASSEMBLIES DATA TABLE		SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD	COUNTY	T-II
						SW BAYSHORE BLVD	ST. LUCIE			