



CONTRACT DRAWINGS
CORTEZ ROAD WEST (SR 684) AT 26TH STREET WEST
INTERSECTION IMPROVEMENTS
 FOR
MANATEE COUNTY, FLORIDA
 COUNTY PROJECT NUMBER: 6077060
 FINANCIAL PROJECT ID: 425531-1-58-01
 (FEDERAL FUNDS)
SIGNALIZATION PLANS
 SIGNAL ID NUMBER: 449

GOVERNING STANDARDS AND SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, DATED 2010 AND APPLICABLE SECTIONS, ARTICLES AND SUBARTICLES OF DIVISION I AND ALL DIVISION II & III OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2010, AS AMENDED BY CONTRACT DOCUMENTS.

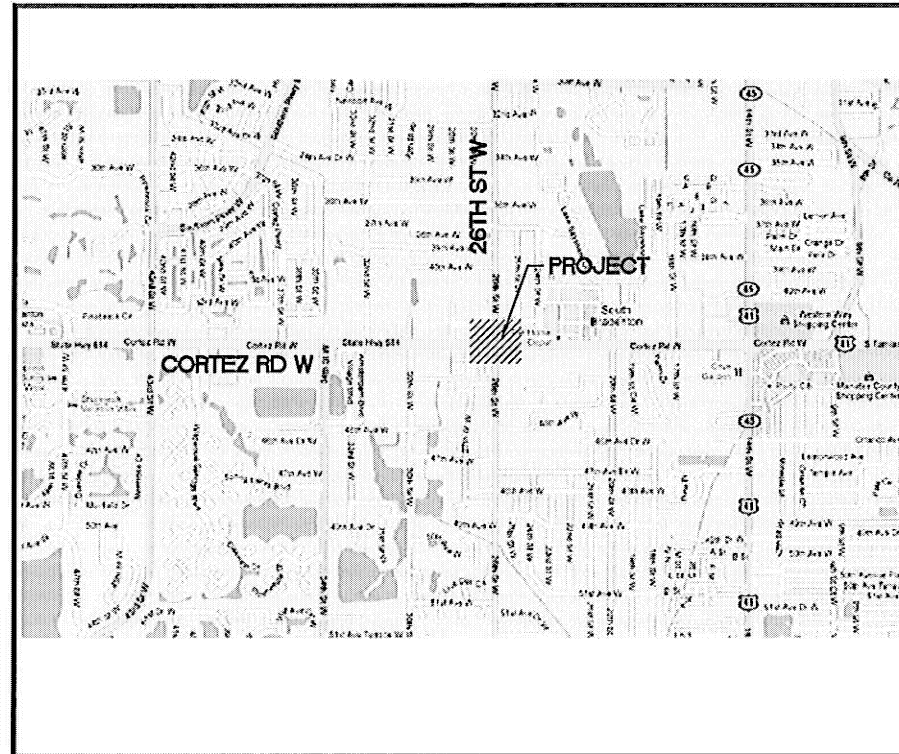
APPLICABLE DESIGN STANDARDS MODIFICATIONS: 1-1-11. FOR DESIGN STANDARDS MODIFICATIONS CLICK ON "DESIGN STANDARDS" AT THE FOLLOWING WEB SITE: [HTTP://WWW.DOT.STATE.FL.US/RDDISEGN/](http://www.dot.state.fl.us/rddesign/).

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.

SUMMARY OF REVISIONS	
DATE	DESCRIPTION



INDEX OF SIGNALIZATION PLANS

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SHOP DRAWINGS TO BE SUBMITTED TO:

UPIK Y. SUWARNO, P.E.
 CARDNO TBE
 12481 TELECOM DRIVE
 TAMPA, FLORIDA 33637
 (727) 221-0048



48 HOURS BEFORE DIGGING
 "CALL SUNSHINE"
 1-800-432-4770

JUNE 2011

PLANS PREPARED BY:

12481 Telecom Drive, Tampa, Florida 33637
 www.cardnotbe.com - 813.221.0048
 Certificate of Authorization No. 0043

ENGINEER OF RECORD
 UPIK Y. SUWARNO, PE FL. LICENSE NO. 62995
 6-17-11
 DATE

DATE: 06-17-11
 SCALE: HORIZ: N/A
 VERT: N/A
 SHEET: T-1

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																				TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			T-5		T-9		T-11		T-12		T-13																
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL					
101-1	MOBILIZATION	LS	1																			1		1			
102-1	MAINTENANCE OF TRAFFIC	LS	1																			1		1			
110-4	REMOVAL OF EXISTING CONCRETE PAVEMENT	SY					83		103		12											198		198			
285-709	OPTIONAL BASE, BASE GROUP 9	SY									12											12		12			
334-1-13	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C	TN									1.0											1.0		1.0			
337-7-31	ASPHALT CONCRETE FRICTION COURSE	TH									1.0											1.0		1.0			
520-1-10	CONCRETE CURB & GUTTER, TYPE F CURB	LF					96		84		20											200		200			
520-5-12	CONCRETE TRAFFIC SEPARATOR	LF									6											6		6			
522-2	6" CONCRETE SIDEWALK	SY					139		176													315		315			
555-1-2	DIRECTIONAL BORE (6" TO <12") (2" HDPE)	LF	350																			350		350			
630-1-11	CONDUIT (F&I) (ABOVEGROUND) (2")	LF	40																			40		40			
630-1-12	CONDUIT (F&I) (UNDERGROUND) (1.25")	LF	5																			5		5			
630-1-12	CONDUIT (F&I) (UNDERGROUND) (2")	LF	321																			321		321			
630-1-13	CONDUIT (F&I) (UNDERPAVEMENT)	LF	140																			140		140			
632-7-1	CABLE (SIGNAL) (F&I)	PI	1																			1		1			
635-1-11	PULL & JUNCTION BOXES (F&I) (PULL BOX)	EA	16																			16		16			
639-1-22	ELECTRICAL POWER SERVICE (UNDERGROUND) (PURCHASED BY CONTRACTOR FROM POWER CO)	AS	1																			1		1			
639-2-1	ELECTRICAL SERVICE WIRE (F&I)	LF	291																			291		291			
641-2-12	PRESTRESSED CONCRETE POLE (F&I) (TYPE P-11 SERVICE POLE) (12FT)	EA	1																			1		1			
649-31-299	STEEL MAST ARM ASSEMBLY (F&I)(130 MPH)(CUSTOM)	EA	4																			4		4			
650-51-311	TRAFFIC SIGNAL (F&I) (3-SECT.) (1-WAY) (LED)	AS	9																			9		9			
650-51-511	TRAFFIC SIGNAL (F&I) (5-SECT.) (1-WAY) (LED)	AS	2																			2		2			
653-191	PEDESTRIAN SIGNAL (F&I) (LED COUNTDOWN) (1 WAY)	AS	8																			8		8			
659-106	SIGNAL HEAD AUXIL. (F&I) (TUNNEL VISOR)	EA	37																			37		37			
659-107	SIGNAL HEAD AUXIL. (F&I) (ALUMINUM PEDESTAL)	EA	8																			8		8			
663-74-15	VEHICLE DETECTOR ASSEMBLIES (F&I) (VIDEO)	EA	4																			4		4			
665-13	PEDESTRIAN DETECTOR (F&I) (WITH SIGN ONLY)	EA	8																			8		8			
670-5-110	TRAFFIC CONTROLLER ASSEMBLY (F&I) (NEMA) (NO PREEMPTION)	AS	1																			1		1			
685-106	UNINTERRUPTIBLE POWER SOURCE (UPS)	EA	1																			1		1			
690-10	REMOVE SIGNAL HEAD ASSEMBLY	EA	10																			10		10			
690-20	REMOVE SIGNAL PEDESTRIAN ASSEMBLY	EA	8																			8		8			
690-31	REMOVE SIGNAL PEDESTAL	EA	2																			2		2			
690-34-1	REMOVE POLE (DEEP) (DIRECT BURIAL)	EA	4																			4		4			
690-50	REMOVE CONTROLLER ASSEMBLY	EA	2																			2		2			
690-60	REMOVE VEHICLE DETECTOR ASSEMBLY	EA	13																			13		13			
690-70	REMOVE DETECTOR PEDESTRIAN ASSEMBLY	EA	8																			8		8			
690-80	REMOVE SPAN WIRE ASSEMBLY	EA	4																			4		4			
690-90	REMOVE CONDUIT & CABLING	PI	1																			1		1			
690-100	REMOVE MISCELLANEOUS SIGNAL EQUIPMENT	PI	1																			1		1			
699-1-1	INTERNALLY ILLUMINATED SIGN (F&I)(EDGE LIT LED)	EA	4																			4		4			
700-20-11	SINGLE POST SIGN (F&I), R3-7R	AS				1																1		1			
700-48-60	SIGN PANEL (REMOVE)	EA	3																			3		3			
705-11-3	DELINEATOR, FLEXIBLE HIGH VISIBILITY (MEDIAN)	EA				2																2		2			
710-11-290	PAINT, STANDARD YELLOW, ISLAND NOSE	SF				10																10		10			
711-11-123	THERMOPLASTIC PAVEMENT MARKINGS (12" WHITE)	LF				660																660		660			
711-11-125	THERMOPLASTIC PAVEMENT MARKINGS (24" WHITE)	LF				165																165		165			
711-17	REMOVE THERMOPLASTIC PAVEMENT MARKINGS	SF				2095																2095		2095			
780-1-12	ITS POWER SERVICE WIRE	LF	975																			975		975			
783-1-121	ITS FIBER OPTIC CABLE (F&I)	LF	25																			25		25			
783-2-31	ITS FIBER OPTIC (INSTALL) (SPLICE)	EA	4																			4		4			
784-1-1	ITS FIELD ETHERNET SWITCH	EA	1																			1		1			

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY	CORTEZ ROAD WEST AND 26TH STREET WEST	 12481 Telecom Drive, Tampa, Florida 33637 www.cardnote.com - 813.221.0048 Certificate of Authorization No. 3843	 UPIK SUWARNO LICENSE No. 62995 STATE OF FLORIDA PROFESSIONAL ENGINEER	PROJECT NO: 00193-008-06 DATE: 05-12-11 SHEET NO: T-2
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GENERAL NOTES

1. AT LEAST TWO (2) FULL BUSINESS DAYS PRIOR TO BEGINNING THE TRAFFIC SIGNAL INSTALLATION, PERMITTEE TO CONTACT THE TRAFFIC SIGNAL INSPECTOR/LIAISON:

MR. CARLOS CABRERA PH: 941-359-7377
 FLORIDA DEPARTMENT OF TRANSPORTATION
 SARASOTA OPERATIONS CENTER
 1840 61ST STREET
 SARASOTA, FLORIDA 34243

2. ONE WEEK PRIOR TO THE BEGINNING OF THE TRAFFIC SIGNAL INSTALLATION, LOOP CUTTING, OR TURN ON OF A NEW SIGNAL, THE CONTRACTOR SHALL NOTIFY:

MANATEE COUNTY
 PUBLIC WORKS DEPARTMENT
 PROJECT MANAGEMENT DIVISION
 1022 26TH AVENUE EAST
 BRADENTON, FLORIDA 34208
 PHONE: 941-708-7510

MANATEE COUNTY
 PUBLIC WORKS DEPARTMENT
 TRAFFIC ENGINEERING DIVISION
 2101 47TH TERRACE EAST
 BRADENTON, FLORIDA 34203
 PHONE: 941-749-3502

3. TWO (2) FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION, CONTACT F.D.O.T. OPERATIONS CENTER, TELEPHONE 941-359-7377.

4. WHEN CONSTRUCTION IS COMPLETE, PROVIDE A SET OF "AS-BUILT" PLANS TO:

MANATEE COUNTY
 PUBLIC WORKS DEPARTMENT
 PROJECT MANAGEMENT DIVISION
 1022 26TH AVENUE EAST
 BRADENTON, FL 34208-1000

5. MAINTAINING AGENCY:

MANATEE COUNTY
 TRAFFIC OPERATIONS DIVISION
 2404 12TH STREET COURT EAST
 BRADENTON, FLORIDA 34208

6. TRAFFIC SIGNAL ACCEPTANCE INSPECTIONS SHALL BE COORDINATED WITH F.D.O.T. TRAFFIC SIGNAL INSPECTOR/LIAISON A MINIMUM OF TWO FULL BUSINESS DAYS NOTICE.

RESULTS OF FIELD TESTS SHALL BE MADE AVAILABLE TO THE PROJECT ENGINEER IN WRITTEN FORM. A QUALIFIED CONTRACTOR'S REPRESENTATIVE SHALL BE PRESENT AT THE CONDITIONAL ACCEPTANCE INSPECTION OF THE CONTROLLER ASSEMBLY. THE QUALIFICATIONS OF THE REPRESENTATIVE SHALL INCLUDE:

- A) COMPLETE FAMILIARITY WITH ALL SYSTEM ELEMENTS INCLUDING CONTROLLERS, COORDINATING UNITS, SYSTEM CLOCKS AND SYSTEM COMMUNICATIONS ELEMENTS. THE REPRESENTATIVE SHALL BE QUALIFIED TO INPUT AND RECALL ALL CONTROLLER AND SYSTEM TIMING FUNCTIONS.

7. WHEN CONSTRUCTION DEVIATES FROM APPROVED PERMIT PLANS INCLUDING POSSIBLE EASEMENTS, PERMITTEE TO FURNISH THE DEPARTMENT OF TRANSPORTATION ONE SET OF "AS BUILT" PLANS FOR FDOT RECORDS;

DEPARTMENT OF TRANSPORTATION
 P.O. BOX 1249
 (STREET ADDRESS: 801 N. BROADWAY AVE)
 BARTON, FLORIDA 33831
 ATTENTION: TRAFFIC OPERATIONS - SIGNAL DESIGN

8. THIS SIGNAL TO FLASH FOR A MINIMUM OF TWO (2) FULL BUSINESS DAYS BEFORE BEING PLACED INTO FULL OPERATION. FLASHING OPERATION SHALL START ON A MONDAY, TUESDAY OR WEDNESDAY. HOWEVER, THE FLASHING OPERATION SHALL NOT START ON THE DAY PRECEDING A HOLIDAY.

9. SIGNAL TO BE PLACED IN FULL OPERATION ON A MONDAY, TUESDAY, OR WEDNESDAY, BUT SHALL NOT BE PLACED IN FULL OPERATION ON THE DAY PRECEDING A HOLIDAY.

10. ALL TRAFFIC SIGNAL POLES SHALL BE LOCATED IN ACCORDANCE WITH PLANS PREPARATION MANUAL (LATEST EDITION), SECTION 2.11 AND TABLE 2.11.4 (CLEAR ZONE WIDTHS) IN THE EVENT R/W OR IRRESOLVABLE UTILITY CONFLICTS PROHIBIT POLE PLACEMENT ACCORDING TO SECTION 2.11.4, CONTRACTOR SHALL CONTACT TRAFFIC OPERATIONS ENGINEER AND/OR DISTRICT DESIGN ENGINEER FOR DIRECTION IN THE EVENT THAT R/W OR UTILITY CONFLICTS PROHIBIT POLE PLACEMENT.

11. THE CONTRACTOR IS TO COORDINATE WITH THE POWER COMPANY PERFORMING ALL NECESSARY WORK UNDER THEIR POWER LINES, SUCH AS THE INSTALLATION OF SPAN WIRE, SIGNAL CABLE, FIBERGLASS INSULATORS AND SIGNAL POLES. CONTRACTOR SHALL NOTIFY THE POWER COMPANY AT LEAST THREE (3) FULL BUSINESS DAYS PRIOR TO INSTALLATION OF THIS EQUIPMENT.

12. THE CONTRACTOR IS RESPONSIBLE TO CONTACT MANATEE COUNTY AT 941-749-3502, FOR THE ASSIGNMENT OF THE PHYSICAL ADDRESS ONCE THE SERVICE DROP LOCATION HAS BEEN ESTABLISHED.

13. EXTREME CARE TO BE TAKEN TO INSURE THAT ALL SIGNAL EQUIPMENT IS INSTALLED AS SHOWN IN PLANS WITHIN EXISTING RIGHT-OF-WAY.

14. MAINTAINING AGENCY TO COORDINATE UTILITY RELOCATION IF NECESSARY.

15. FOR REMOVED SIGNAL EQUIPMENT CLAIMED BY MAINTAINING AGENCY CONTACT:

MANATEE COUNTY
 TRAFFIC OPERATIONS DIVISION
 2404 12TH STREET COURT EAST
 BRADENTON, FLORIDA 34208

16. WORK ZONE TRAFFIC CONTROL

- A. THE CRITERIA AS OUTLINED IN THE "MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNALS AND DEVICES", SHALL BE ADHERED TO FOR SIGNAL WORK. MAINTAIN TRAFFIC BY USE OF TRAFFIC CONTROL INDEXES IN THE F.D.O.T. ROADWAY TRAFFIC DESIGN STANDARDS BOOKLET DATED JANUARY 2010. NO LANE CLOSURES WILL BE ALLOWED BETWEEN 6:00 A.M. AND 9:00 A.M. AND BETWEEN 4:00 P.M. AND 7:00 P.M.

- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SAFE AND EFFICIENT OPERATION DURING SIGNAL INSTALLATION.

17. THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL UTILITIES.

18. EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.

19. THE CONTRACTOR TO NOTIFY UTILITY OWNERS OF ANY EXCAVATION OR DEMOLITION ACTIVITY THROUGH SUNSHINE ONE CALL OF FLORIDA INC. (1-800-432-4770) AND SHALL ALSO NOTIFY THOSE UTILITY OWNERS/ AGENCIES LISTED WITHIN OR IMPACTED BY THESE PLANS, NOT LESS THAN TWO (2) FULL BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE.

20. THE CONTRACTOR SHALL HAND DIG THE FIRST 48 INCHES (4 FEET) OF THE HOLE FOR THE POLE FOUNDATION OR CONDUIT RUN WHERE UTILITIES ARE IN CLOSE PROXIMITY.

21. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR BORING.

22. THE TYPE OF EQUIPMENT USED IN THE INSTALLATION OF MAST ARMS/ FOUNDATIONS, OVERHEAD CANTILEVER SIGNS/ FOUNDATIONS, AND THE MOVEMENT/INSTALLATION OF STRAIN POLES SHALL MEET THE FOLLOWING REQUIREMENTS: 1) OVERHEAD LINES SHALL STAY IN PLACE BOTH VERTICALLY AND HORIZONTALLY AND; 2) CONTRACTOR SHALL MEET ALL LATEST APPLICABLE OSHA REQUIREMENTS ANY COST ASSOCIATED WITH THE TYPE OF EQUIPMENT REQUIRED FOR THIS INSTALLATION SHALL BE INCLUDED IN THE RELATED PAY ITEMS.

23. THE CONTRACTOR SHALL COORDINATE WITH MANATEE COUNTY TRAFFIC ENGINEERING DIVISION ABOUT THE ON GOING MANATEE ATMS PROJECT THAT INCLUDES THIS INTERSECTION PRIOR TO START OF CONSTRUCTION AND ORDERING OF MATERIAL.

24. THE CONTRACTOR SHALL FIELD VERIFY ALL CRITICAL ELEVATIONS PRIOR TO ORDERING MAST ARMS.

25. DETECTION MUST BE MAINTAINED FOR PEDESTRIANS AND THE SIDE STREETS FOR THE LIFE OF THE PROJECT.

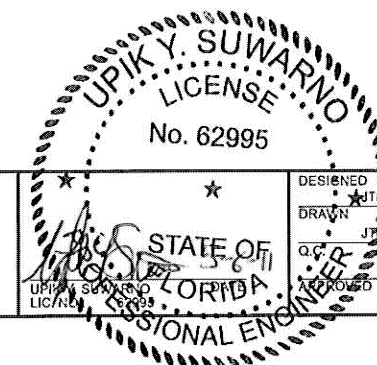
26. WHEN A CONTRACTOR IS WORKING ON A SIGNAL IN AN INTERSECTION (INSTALLING CONDUIT IN THE STREET, REMOVING EXISTING SIGNAL EQUIPMENT, INSTALLING SIGNAL EQUIPMENT, LOOPS, HOMERUNS OR TURNING ON OF NEW SIGNAL) WHERE A LANE IS CLOSED, THE ENGINEER MAY REQUIRE AN OFF DUTY LAW ENFORCEMENT OFFICER TO DIRECT TRAFFIC. THE HOURLY RATE OF PAY FOR AN OFF DUTY LAW ENFORCEMENT OFFICER CAN BE OBTAINED FROM THE LOCAL LAW ENFORCEMENT OFFICE. THE COST OF THE OFFICER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

27. CONTRACTOR IS ADVISED THAT THE F.D.E.P. DATABASE INDICATES THAT SOIL IN THE PROJECT AREA FOR THE SIGNAL FOUNDATIONS MAY BE CONTAMINATED WITH PETROLEUM PRODUCTS. THE EXTENT OF POTENTIAL IMPACTS WITHIN THE PROJECT AREA HAS NOT BEEN FULLY DELINEATED HORIZONTALLY OR VERTICALLY FOR SOIL, GROUNDWATER, OR SURFACE WATER AS OF THE DATE OF THESE PLANS. CONTRACTOR IS ADVISED THAT ALL EXCAVATED SOILS ON THE SOUTHEAST CORNER AND NORTHWEST CORNER MUST BE REMOVED FROM THE SITE AND TRANSPORTED TO A STATE APPROVED CONTAMINATED SOLID DISPOSAL FACILITY. THIS APPLIED TO CLEARING, GRUBBING, EXCAVATION, STAGING, HANDLING, AND/OR DISPOSAL REQUIREMENTS OF ON-SITE SOILS. EXCAVATION OR DEWATERING LIMITATIONS AND SAFETY PRECAUTIONS MAY BE NECESSARY.

28. OVERHEAD FACILITIES TO REMAIN ENERGIZED AND IN PLACE. TABLE "A" "MINIMUM CLEARANCE DISTANCES" SPECIFIED IN SUBPART CC OF OSHA RULE 1926 (AS THEY PERTAIN TO CRANE/ DERRICK OPERATIONS, AND/OR THOSE MINIMUM DISTANCES SPECIFIED IN 29 CFR 1910.333(CX3X1XA) AND (111XA) FOR WORK IN PROXIMITY TO POWER LINES NOT COVERED BY THIS SUBPART CC, ARE TO BE MAINTAINED.

MANATEE COUNTY

CORTEZ ROAD AND
 26TH STREET WEST



GENERAL NOTES

PROJECT NO: 00193-008-05
 DATE: 05-06-11
 SHEET NO: T-3

PAY ITEM FOOTNOTES :

1. 555-1-2: COST FOR PULL WIRE IS INCLUDED UNDER THIS PAY ITEM. USE A MINIMUM OF 3" DIAMETER CONDUIT FOR FIBER OPTIC INTERCONNECT CABLE. USE A MINIMUM 2" DIAMETER PVC CONDUIT FOR ALL SIGNAL, PEDESTRIAN, AND DETECTION FUNCTIONS.
2. 630-1-11: INCLUDES COST OF WEATHERHEAD.
3. 630-1-11, 630-1-12, 630-1-13: USE A MINIMUM OF 3" DIAMETER CONDUIT FOR FIBER OPTIC INTERCONNECT CABLE. USE A MINIMUM 2" DIAMETER PVC CONDUIT FOR ALL SIGNAL, PEDESTRIAN, AND DETECTION FUNCTIONS.
4. 632-7-1: VERIFY THE COLOR CODE OF SIGNAL CABLE WITH THE MAINTAINING AGENCY PRIOR TO WIRING INTERSECTION. USE A MINIMUM OF 7 CONDUCTOR SIGNAL CABLE FOR SIGNAL HEADS AND PEDESTRIAN HEADS.
5. 635-1-11: ALL PULL BOXES AND LIDS SHALL BE OF TRAFFIC BEARING, POLYMER CONCRETE CONSTRUCTION. 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 FEET FROM THE EDGE OF THE PAVEMENT. THE TOP OF THE LID SHALL READ "TRAFFIC SIGNAL" IN STAMPED RAISED LETTERS. USE POLYMER CONCRETE PULL BOX WITH A POLYMER CONCRETE, COVER MARKED "TRAFFIC SIGNAL" FOR FIBER COMMUNICATION AND/OR INTERCONNECT CABLE. USE 24" X 36" PULL BOXES PLACED A MINIMUM OF 800' APART. APPROPRIATELY SIZE EACH PULL BOX SO THE FIBER COMMUNICATION AND/OR INTERCONNECT CABLE DOES NOT EXCEED MANUFACTURER'S RECOMMENDED BENDING RADIUS.
6. 639-1-22: AN ADDITIONAL BREAKER SHALL BE ADDED FOR THE POWER TO THE CCTV. THE BREAKERS SHALL BE CLEARLY MARKED. THE ELECTRICAL SERVICE DISCONNECT IS 100 AMP, COMPRISING OF A SIX (6) CIRCUIT DISCONNECT BOX WITH THREE CIRCUIT BREAKERS - ONE 50 AMP/120 VOLT FOR CONTROLLER/INTERNALLY ILLUMINATED STREET NAME SIGN, ONE 15 AMP/120 VOLT FOR FUTURE USE, ONE 50 AMP/120 VOLT FOR THE CCTV. USE RIGID GALVANIZED STEEL ABOVE GROUND CONDUIT FOR ELECTRICAL POWER SERVICE.
7. 639-2-1: PAYMENT SHALL BE BASED ON THE LINEAR FOOT OF A SINGLE CONDUCTOR.
8. 649-31-202 & 649-31-205: USE THREE 2" AND ONE 3/4" CONDUITS STUBBED OUT THROUGH THE MAST ARM POLE FOUNDATION AND TEMPORARILY SEAL.
9. 650-51-311 & 650-51-511: USE SIGNAL HEAD SUPPORTING TUBE THAT IS CAPABLE OF ADJUSTING VERTICALLY A MINIMUM OF 1.5 FEET. DO NOT USE PLASTIC GARBAGE BAGS AS A COVERING FOR CONCEALNG SIGNAL HEADS. INCLUDES THE COST OF BACK PLATES. USE LOUVERED ALUMINUM SIGNAL HEAD BACK PLATES WITH A 2 INCH YELLOW REFLECTORIZED (TYPE III REFLECTIVITY) OUTER EDGE BORDER.
10. 653-191: PEDESTRIAN SIGNAL HEADS TO BE 16" INTERNATIONAL SYMBOL, FDOT APPROVED LED COUNTDOWN TYPE.
11. 659-107: USE BREAKAWAY ALUMINUM SQUARE BASE ASSEMBLIES WITH ALUMINUM DOORS FOR PEDESTRIAN PEDESTALS. INSIDE DIAMETER OF PEDESTALS SHALL BE FOUR INCHES (4"). USE LOCKING COLLARS WHEN MOUNTING PEDESTRIAN SIGNAL HEADS TO PEDESTRIAN PEDESTALS. USE LOCKING COLLARS WHEN MOUNTING ALUMINUM PEDESTRIAN POLES TO PEDESTRIAN PEDESTAL BASES.
12. 663-74-15: SEE PLAN SHEET FOR THE NUMBER OF VIDEO CAMERAS INCLUDED IN THE VIDEO DETECTION ASSEMBLY. USE A 72" LONG GUSSET TUBE FOR VIDEO DETECTION CAMERA ATTACHMENT BRACKET. VIDEO DETECTION TO BE COMPATIBLE WITH MAINTAINING AGENCY'S EXISTING VIDEO DETECTION SYSTEM.

13. 665-13: USE PEDESTRIAN BUTTON SIGNAL SIGN FTP-68B-06. STREET NAME SHALL BE IN ACCORDANCE WITH THE STREET NAMES SHOWN ON THE SIGNALIZATION PLAN SHEETS.
14. 670-5-110: TOP OF CONTROLLER CABINET BASE TO BE SAME ELEVATION AS CROWN OF ROADWAY OR GREATER. USE A TS2 TYPE I CONTROLLER WITH A TYPE V CABINET. ALL CONTROLLER EQUIPMENT TO BE COMPATIBLE WITH MANATEE COUNTY'S EXISTING ATMS SYSTEM (NAZTEC'S ATMS.NOW). CONTACT MAINTAINING AGENCY PRIOR TO ORDERING CONTROLLER ASSEMBLY TO CONFIRM EQUIPMENT COMPATIBILITY. THE CONTRACTOR SHALL COORDINATE WITH MANATEE COUNTY TO PICK UP AND INSTALL THE GENERATOR CABINET ON THE NEW FOUNDATION. ALL COSTS OF LABOR, CONCRETE AND OTHER MATERIALS FOR THE CONTROLLER ASSEMBLY AND EGC BASES, TECHNICIAN PADS, STEPS AS REQUIRED, AND INSTALLATION OF THE GENERATOR CABINET ARE INCLUDED IN THIS ITEM. THE CONTROLLER AND EGC BASE SHALL BE AT LEAST 2' HIGH OR THE SAME ELEVATION AS THE CROWN OF THE ROADWAY, WHICHEVER IS GREATER. THE MAXIMUM DISTANCE FROM THE TECHNICIAN PAD OR STEP TO THE FOUNDATION TOP IS 4". THE CABINET DOORS SHALL OPEN TOWARDS OR PARALLEL TO THE RIGHT-OF-WAY LINE AND AWAY FROM TRAFFIC.
15. 685-106: INCLUDE AN UNINTERRUPTED POWER SUPPLY UNIT (UPS) WITH AN 8 HOUR RUN TIME AT 450 WATTS. ATTACH UPS UNIT TO THE OUTSIDE OF THE CONTROLLER CABINET. INSTALL UPS UNIT IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
16. 699-1-1: USE LED INTERNALLY ILLUMINATED STREET NAME SIGNS. PHOTO ELECTRIC CELL IS TO BE MOUNTED INSIDE THE CONTROLLER CABINET. THIS ITEM SHALL INCLUDE A PLEXIGLASS WINDOW KIT (LIGHT ACCESS) FOR THE INSTALLATION OF A PHOTOELECTRIC CELL INSIDE THE CONTROLLER CABINET. ALL INTERNALLY ILLUMINATED STREET NAMES SIGNS TO BE MOUNTED RIGIDLY ON MAST ARM.

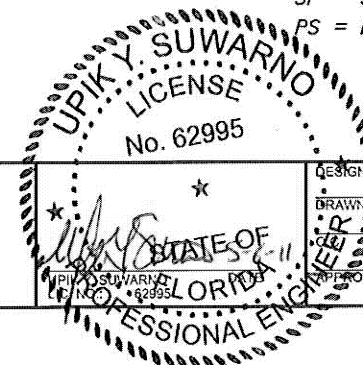
CONDUIT LEGEND

- LV = SIGNAL LOW VOLTAGE CONDUIT (INCLUDES VID CABLE)
- HV = SIGNAL HIGH VOLTAGE CONDUIT
- SP = SPARE CONDUIT
- PS = POWER SERVICE

NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

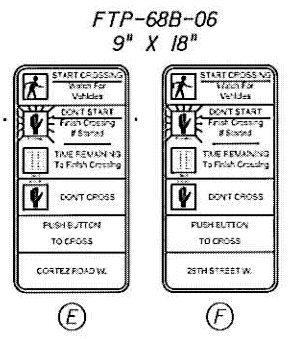
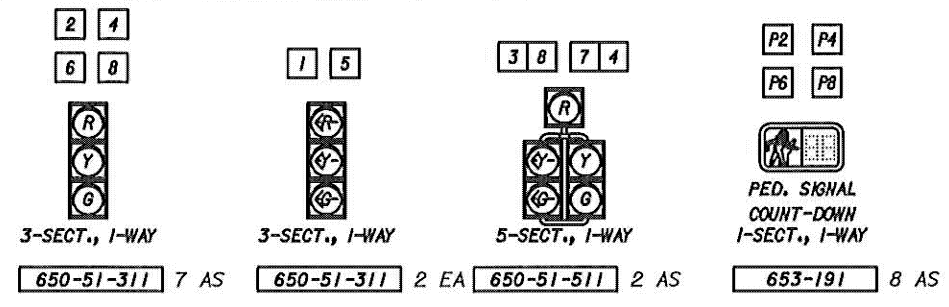
CORTEZ ROAD AND 26TH STREET WEST



DESIGNED JTP
DRAWN JTP
CHECKED JTP
APPROVED JTP

PAY ITEM NOTES

PROJECT NO:
00193-008-06
DATE:
05-06-11
SHEET NO:
T-4



* SIGNAL BACKPLATES SHALL BE PROVIDED WITH YELLOW RETRO-REFLECTIVE BORDER MATERIAL

CONTROLLER NOTES:

1. MAJOR STREET IS CORTEZ RD. WEST (MOVEMENTS 1, 2, 5 & 6). MINOR STREET IS 26TH ST. WEST (MOVEMENTS 3, 4, 7 & 8).
2. THE CONTROLLER CABINET SHALL BE WIRED FOR SOP 10.
3. FLASHING OPERATION IS YELLOW FOR MOVEMENTS 2 & 6 AND RED FOR ALL OTHER MOVEMENTS.
4. CONCURRENT/ ACTUATED PEDESTRIAN TIMING FOR MOVEMENTS P2, P4, P6 & P8.
5. EACH PHASE/ MOVEMENT SHALL BE WIRED FROM THE SIGNAL DISPLAY TO THE CONTROLLER AS A SEPARATE PHASE/ MOVEMENT. THIS INCLUDES LEFT TURN MOVEMENTS. EACH LEFT TURN MOVEMENT SHALL HAVE CONDUCTORS AVAILABLE FOR PROTECTED AND PERMISSIVE OPERATION.
6. THE SIGNAL SHALL BE INCORPORATED INTO THE MANATEE COUNTY ATMS SYSTEM.

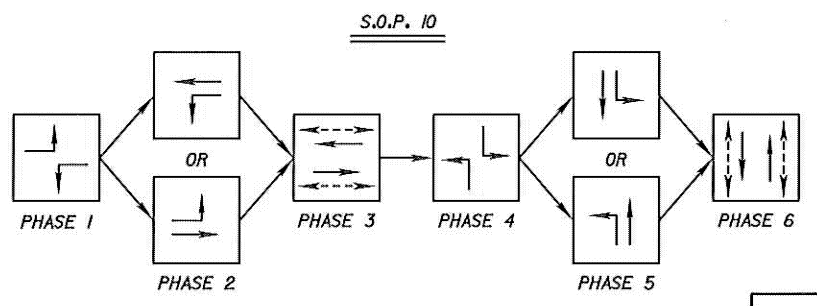
SIGNAL HEAD LEGEND:



REMOVAL NOTE:
REMOVE ENTIRE EXISTING SIGNAL SYSTEM

REMOVAL ITEMS:

690-10	10 EA
690-20	8 EA
690-31	2 EA
690-34-1	4 EA
690-50	2 EA
690-60	13 EA
690-70	8 EA
690-80	4 EA
690-90	1 PI
690-100	1 PI
700-48-60	3 EA



CONTROLLER TIMINGS

TIMING FUNCTION	1	2	3	4	5	6	7	8
MOVEMENT NUMBER	1	2	3	4	5	6	7	8
MINIMUM GREEN	7.0	20	7.0	7.0	7.0	20	7.0	7.0
EXTENSION	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MAXIMUM GREEN 1	12	30	12	18	12	30	12	18
MAXIMUM GREEN 2	60	50	25	45	50	50	25	50
YELLOW CLEARANCE	4.5	4.5	4.0	4.0	4.5	4.5	4.0	4.0
ALL RED	4.5	2.3	4.7	3.0	4.5	2.3	4.6	3.0
PEDESTRIAN WALK		7		7		7		7
PED. CLEARANCE		24		35		24		35
RECALL		MIN				MIN		

TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

VIDEO DETECTOR ZONES

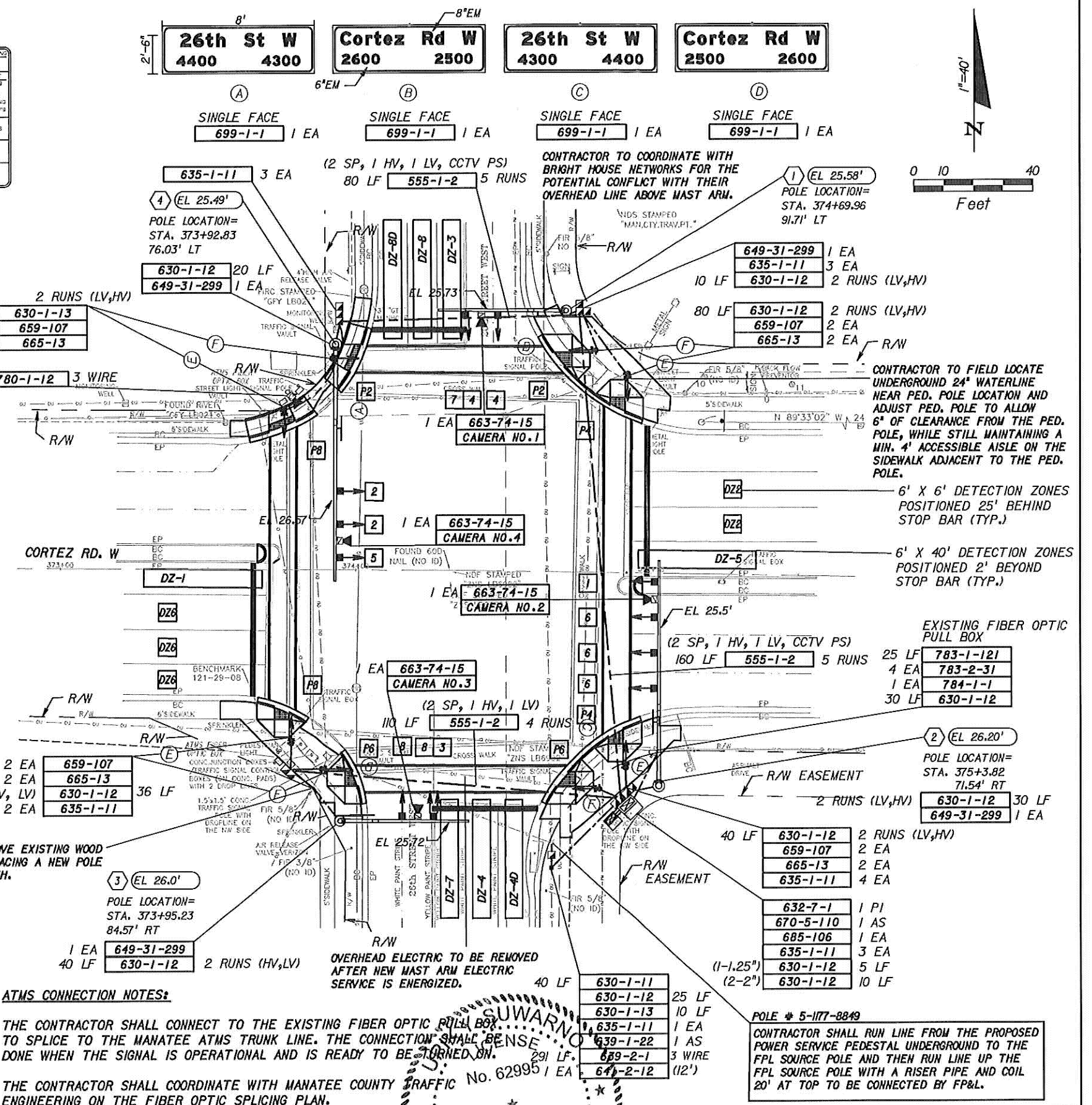
ZONE LOCATION NO.	VIDEO CAMERA NO.	NO. OF DETECTION ZONES	DELAY TIME (SEC)
DZ-1	2	1	0
DZ-2	4	2	0
DZ-3	3	1	0
DZ-4	1	1	0
DZ-4D	1	1	5
DZ-5	4	1	0
DZ-6	2	3	0
DZ-7	1	1	0
DZ-8	3	1	0
DZ-8D	3	1	5

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

FPL TO REMOVE EXISTING WOOD POLE AND PLACING A NEW POLE 20'-30' SOUTH.

ATMS CONNECTION NOTES:

1. THE CONTRACTOR SHALL CONNECT TO THE EXISTING FIBER OPTIC PULL BOX TO SPLICE TO THE MANATEE ATMS TRUNK LINE. THE CONNECTION SHALL BE DONE WHEN THE SIGNAL IS OPERATIONAL AND IS READY TO BE TURNED ON.
2. THE CONTRACTOR SHALL COORDINATE WITH MANATEE COUNTY TRAFFIC ENGINEERING ON THE FIBER OPTIC SPLICING PLAN.



MANATEE COUNTY	CORTEZ ROAD AND 26TH STREET WEST	 12481 Telecom Drive, Tampa, Florida 33637 www.cardnote.com - 813.221.0048 Certificate of Authorization No. 3843	DESIGNED	UYS	SIGNALIZATION PLAN	PROJECT NO:	00193-008-06
			DRAWN	UYS		DATE:	05-12-11
UNDERLYING SURVEY PROVIDED BY MANATEE COUNTY NO. DESCRIPTION BY DATE			APPROVED		SHEET NO:	T-5	

SPECIAL MAST ARM ASSEMBLIES DATA TABLE																								
NUMBER OF LOCATIONS	STRUCTURE NUMBER	FIRST ARM				FIRST ARM EXTENSION				SECOND ARM				SECOND ARM EXTENSION				POLE						
		FA(ft)	FB(in)	FC(in)	FD(in)	FE(ft)	FF(in)	FG(in)	FH(in)	SA(ft)	SB(in)	SC(in)	SD(in)	SE(ft)	SF(in)	SG(in)	SH(in)	UA(ft)	UB(ft)	UC(in)	UD(in)	UE(in)	UF(deg)	UG(ft)
1	ID.NO.1(D3-S2 MODIFIED)	36.3	8.92	14.0	0.1793	11.7	13.36	15	0.313	0	0	0	0	0	0	0	0	22.5	21	14.85	18	0.375	0	0
1	ID.NO.2(D7-S6 MODIFIED)	36	8.96	14.0	0.1793	40	13.4	19	0.375	0	0	0	0	0	0	0	0	21.5	20	22	25	0.375	0	0
1	ID.NO.3(D3-S2 MODIFIED)	36.3	8.92	14.0	0.1793	11.7	13.36	15	0.313	0	0	0	0	0	0	0	0	22.5	21	14.85	18	0.375	0	0
1	ID.NO.4(D7-S6 MODIFIED)	40	8.44	14.0	0.1793	40	13.4	19	0.375	0	0	0	0	0	0	0	0	22.5	21	22	25	0.375	0	0

SPECIAL MAST ARM ASSEMBLIES DATA TABLE (CONT.)																											
STRUCTURE NUMBER	FIRST ARM CONNECTION (in) First Arm Camber Angle = 2 Degrees													SECOND ARM CONNECTION (in) Second Arm Camber Angle = 2 Degrees													
	#Bolts	HT	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	#Bolts	HT	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	
ID.NO.1(D3-S2 MODIFIED)	6	20	25	2.5	0.75	0.313	0.438	15.5	1.0	0.375	2	8	0.438	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ID.NO.2(D7-S6 MODIFIED)	6	30	36	3.0	0.75	0.313	0.5	16.6	1.5	0.563	2.25	12.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ID.NO.3(D3-S2 MODIFIED)	6	20	25	2.5	0.75	0.313	0.438	15.5	1.0	0.375	2	8	0.438	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ID.NO.4(D7-S6 MODIFIED)	6	30	36	3.0	0.75	0.313	0.5	16.6	1.5	0.563	2.25	12.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0

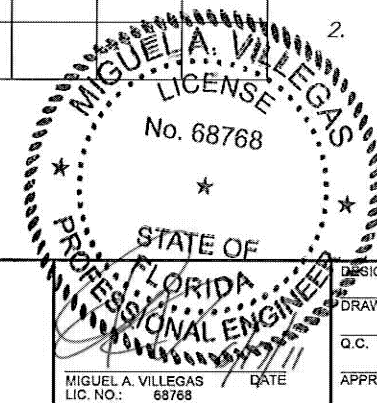
SPECIAL MAST ARM ASSEMBLIES DATA TABLE (CONT.)																							
STRUCTURE NUMBER	POLE BASE CONNECTION (in)							SHAFT AND REINF.					LUMINAIRE AND LUMINAIRE CONNECTION										
	#Bolts	BA	BB	BC	BD	BE	BF	DA(ft)	DB(ft)	RA	RB	LA(ft)	LB(ft)	LC(in)	LD(in)	LE	LF(ft)	LG(in)	LH(in)	LJ(in)	LK(in)	LL(deg)	
ID.NO.1(D3-S2 MODIFIED)	6	32	1.75	1.75	0.375	0.313	36	12	4.5	11	16	0	0	0	0	0	0	0	0	0	0	0	
ID.NO.2(D7-S6 MODIFIED)	6	41	2	2	0.375	0.313	40	15	5.0	11	18	0	0	0	0	0	0	0	0	0	0	0	
ID.NO.3(D3-S2 MODIFIED)	6	32	1.75	1.75	0.375	0.313	36	12	4.5	11	16	0	0	0	0	0	0	0	0	0	0	0	
ID.NO.4(D7-S6 MODIFIED)	6	41	2	2	0.375	0.313	40	15	5.0	11	18	0	0	0	0	0	0	0	0	0	0	0	

NOTES:

1. Work with Index 17745.
2. Design Wind Speed = 130 mph
3. Contractor shall coordinate anchor bolt requirements with fabricator.
4. Contractor shall identify Structures Numbers and submit detailed shop drawings.

FOUNDATION NOTES:

1. Design based on Borings taken and sealed by Martin E. Millburg, P.E. with Professional Service Industries, Inc.
2. Assumptions and Values used in design:
Soil Type = Sand
Soil Layer Thickness = 15 ft.
Soil Friction Angle = 29 deg.
Soil Weight = 42.6 pcf
Design Water Table is at ground line.



NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

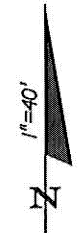
CORTEZ ROAD WEST AND
26TH STREET WEST



DESIGNED	MAV
DRAWN	JJH
O.C.	FXH
APPROVED	MAV

TABLE OF VARIABLES
FOR SPECIAL MAST ARM
ASSEMBLIES

PROJECT NO:	00193-008-06
DATE:	06-17-11
SHEET NO:	T-8

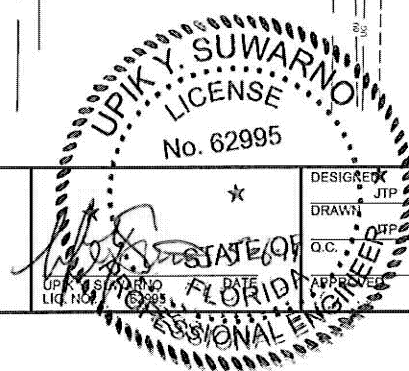
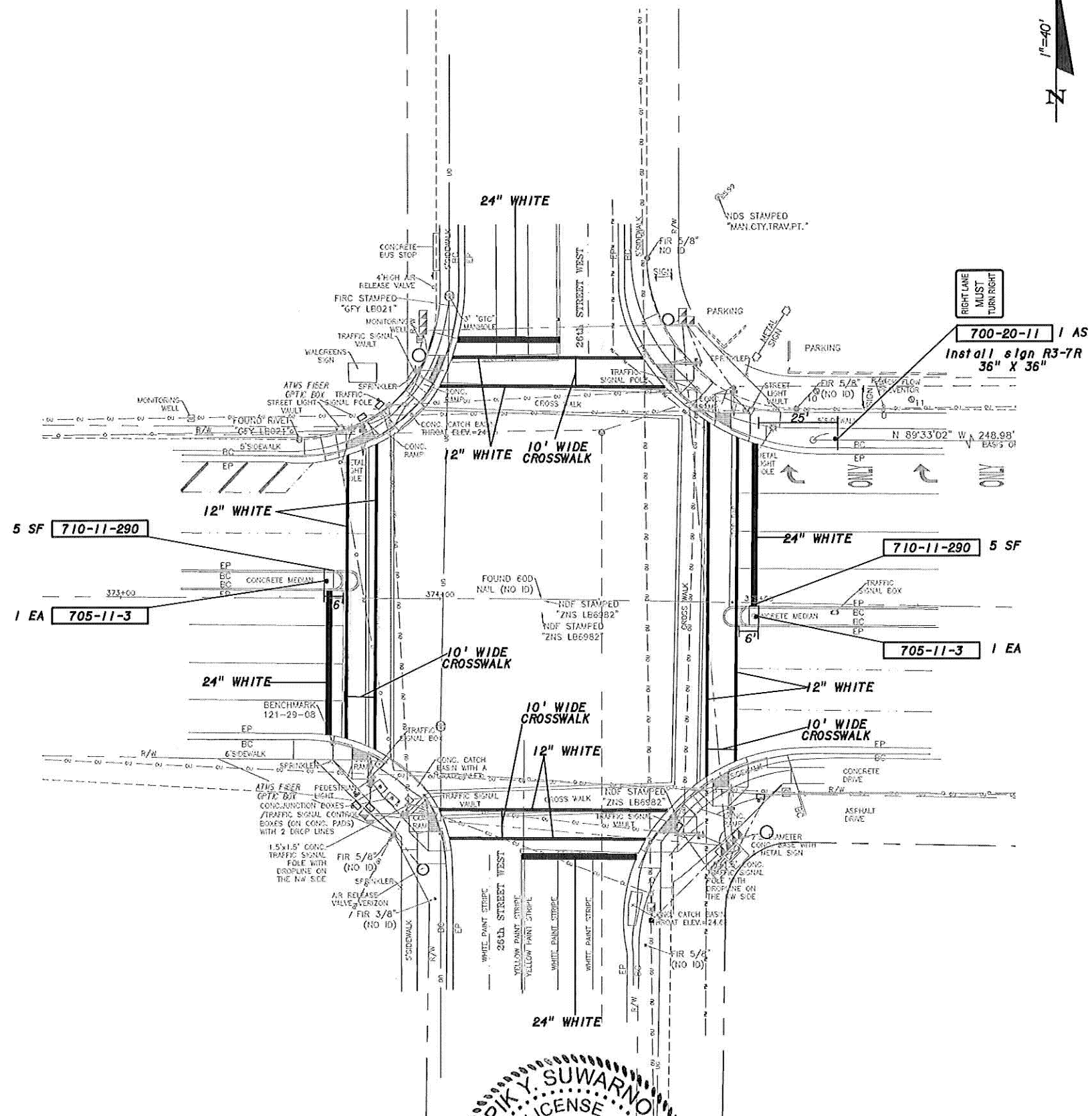


NOTES:

1. THE CONTRACTOR SHALL REMOVE ALL THE EXISTING MARKINGS BEING REPLACED. THE REMOVAL OF ALL RETRO-REFLECTIVE PAVEMENT MARKERS ASSOCIATED WITH ALL PAVEMENT MARKINGS BEING REMOVED SHALL BE INCLUDED UNDER THE REMOVAL PAY ITEM.

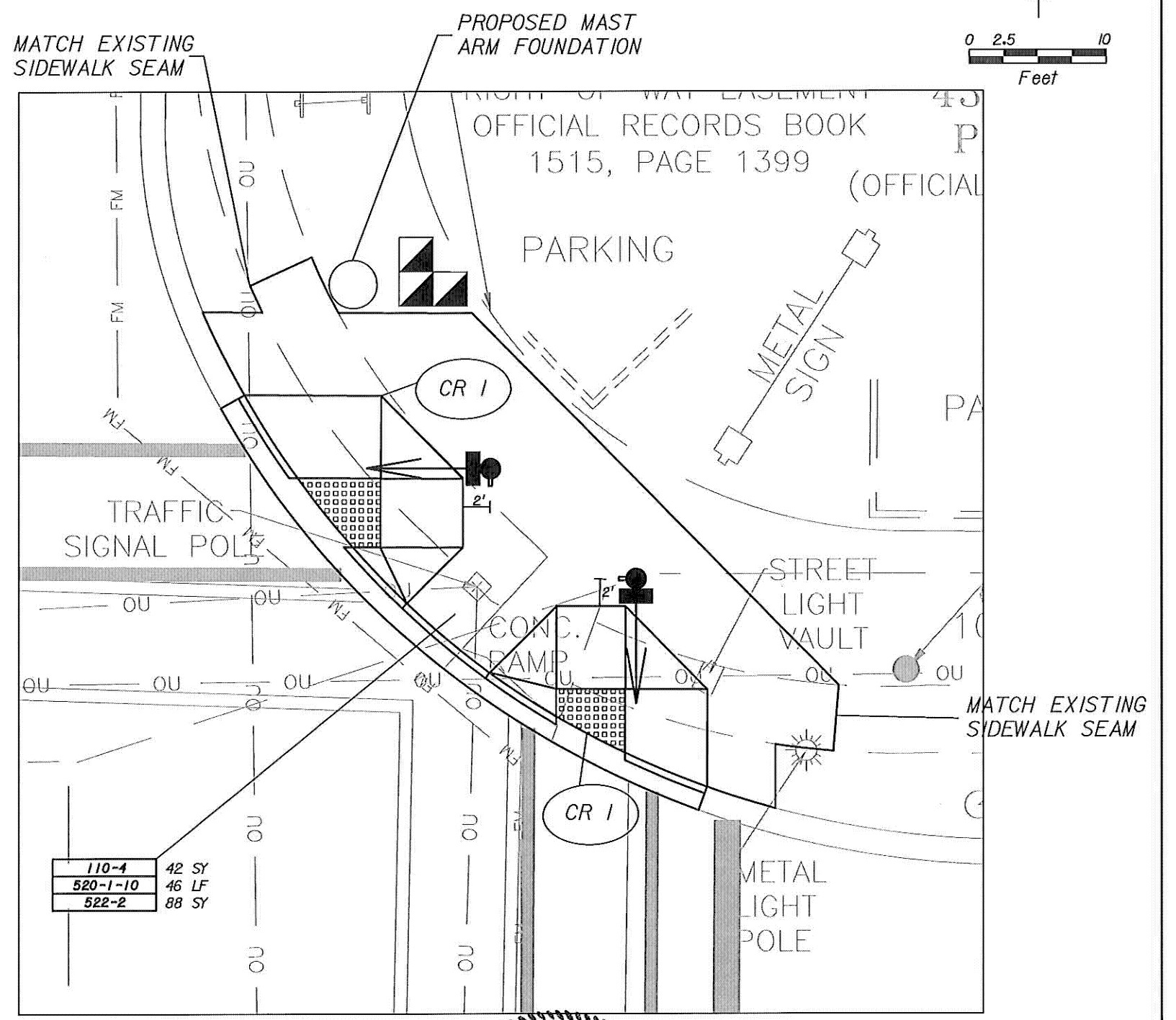
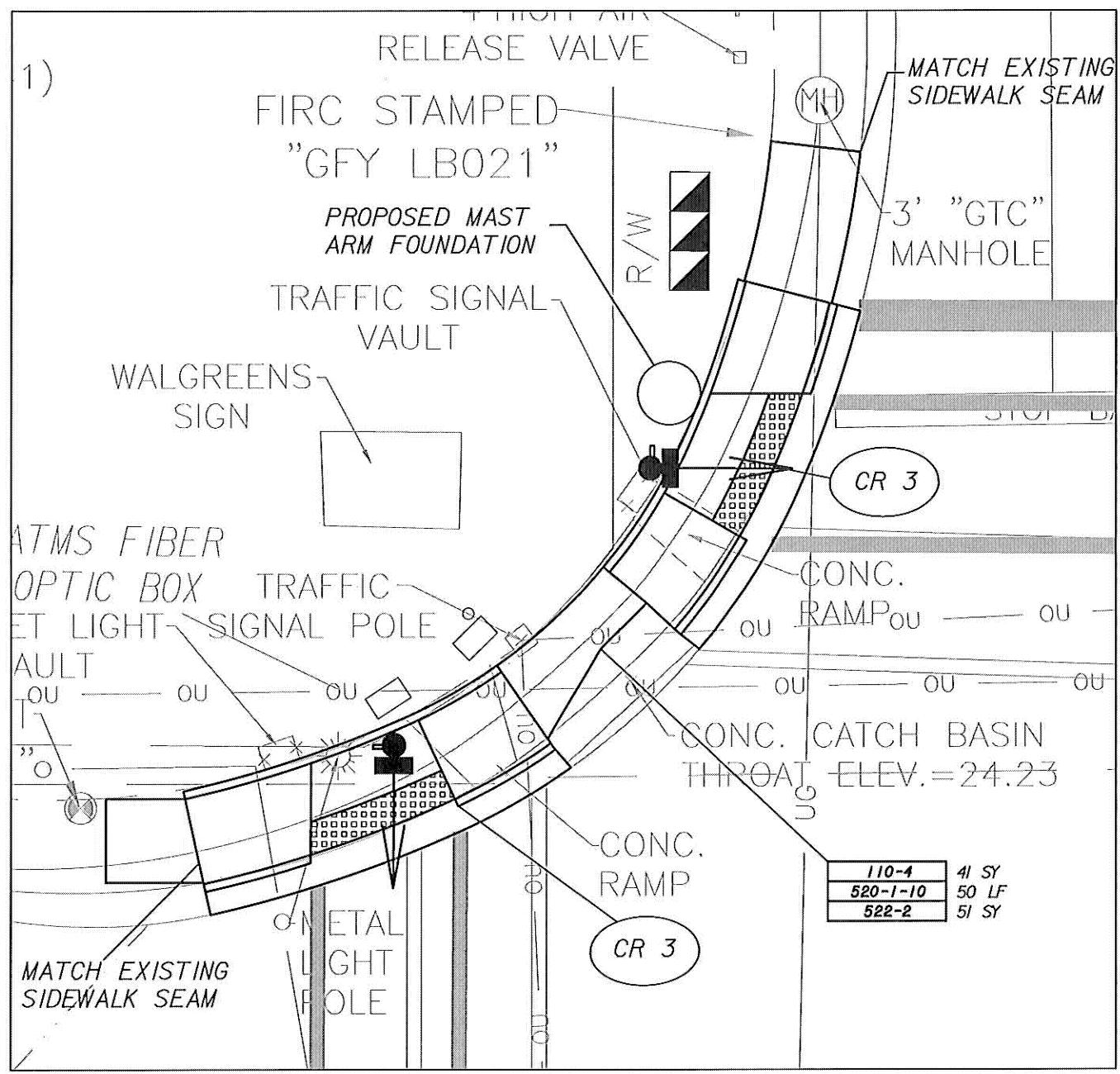
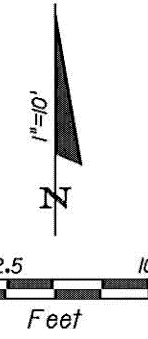
2. NEW STOP BARS ARE TO BE PLACED 4 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE.

711-11-123	660 LF
711-11-125	165 LF
711-17	2,095 SF



NO.	DESCRIPTION	BY	DATE

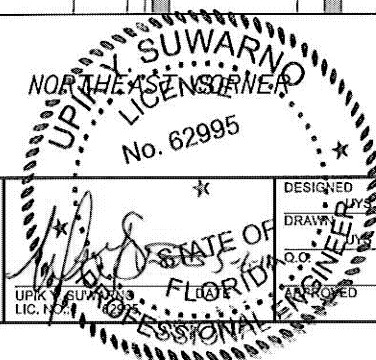
<p>MANATEE COUNTY</p>	<p>CORTEZ ROAD AND 26TH STREET WEST</p>	 <p>12481 Telecom Drive, Tampa, Florida 33637 www.cardno.com • 813.221.0048 Certificate of Authorization No. 3843</p>	<p>SIGNING AND PAVEMENT MARKING PLAN</p>	<p>PROJECT NO: 00193-008-06</p> <p>DATE: 05-06-2011</p> <p>SHEET NO: T-9</p>
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110-4	41 SY
520-1-10	50 LF
522-2	51 SY

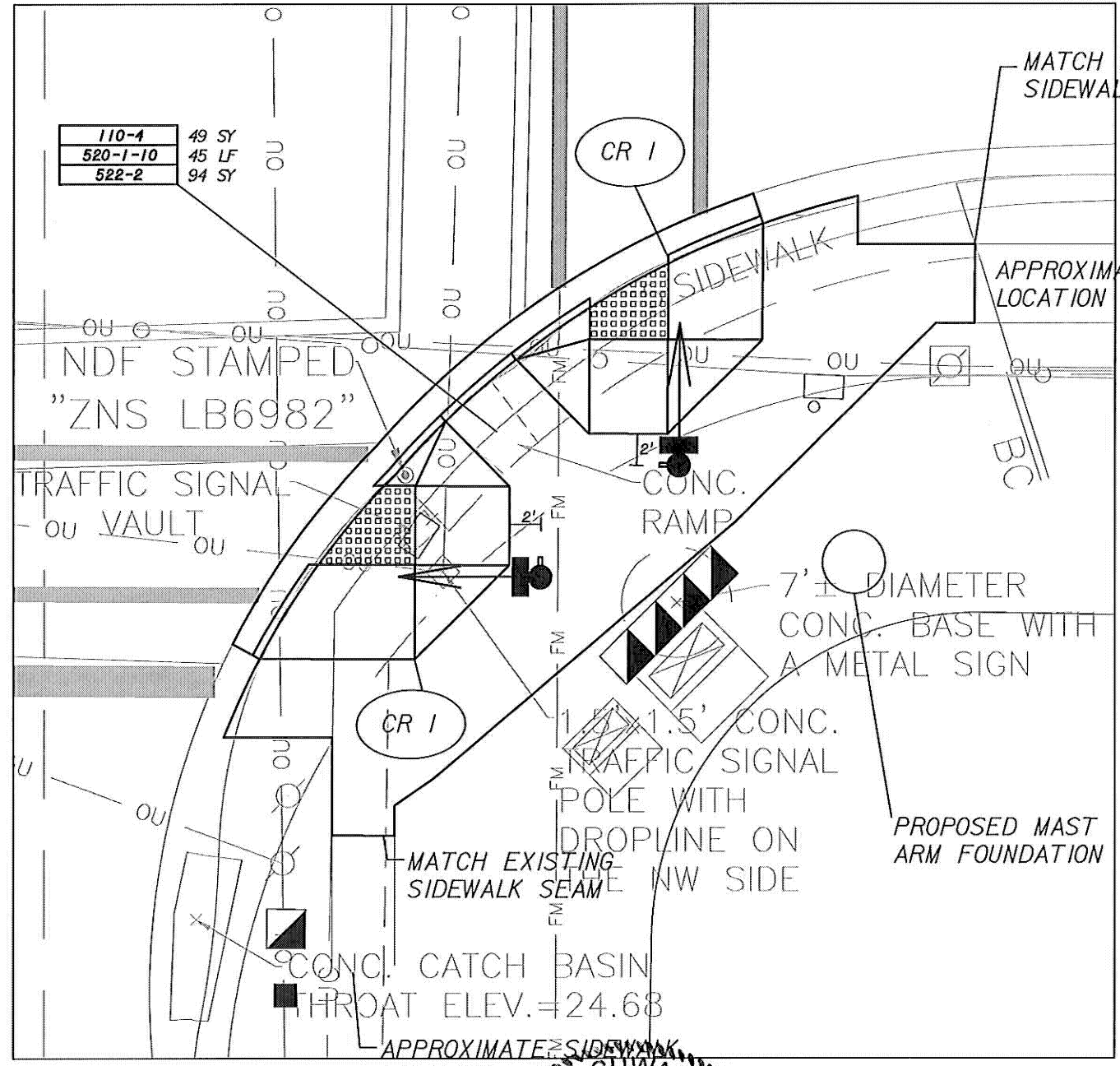
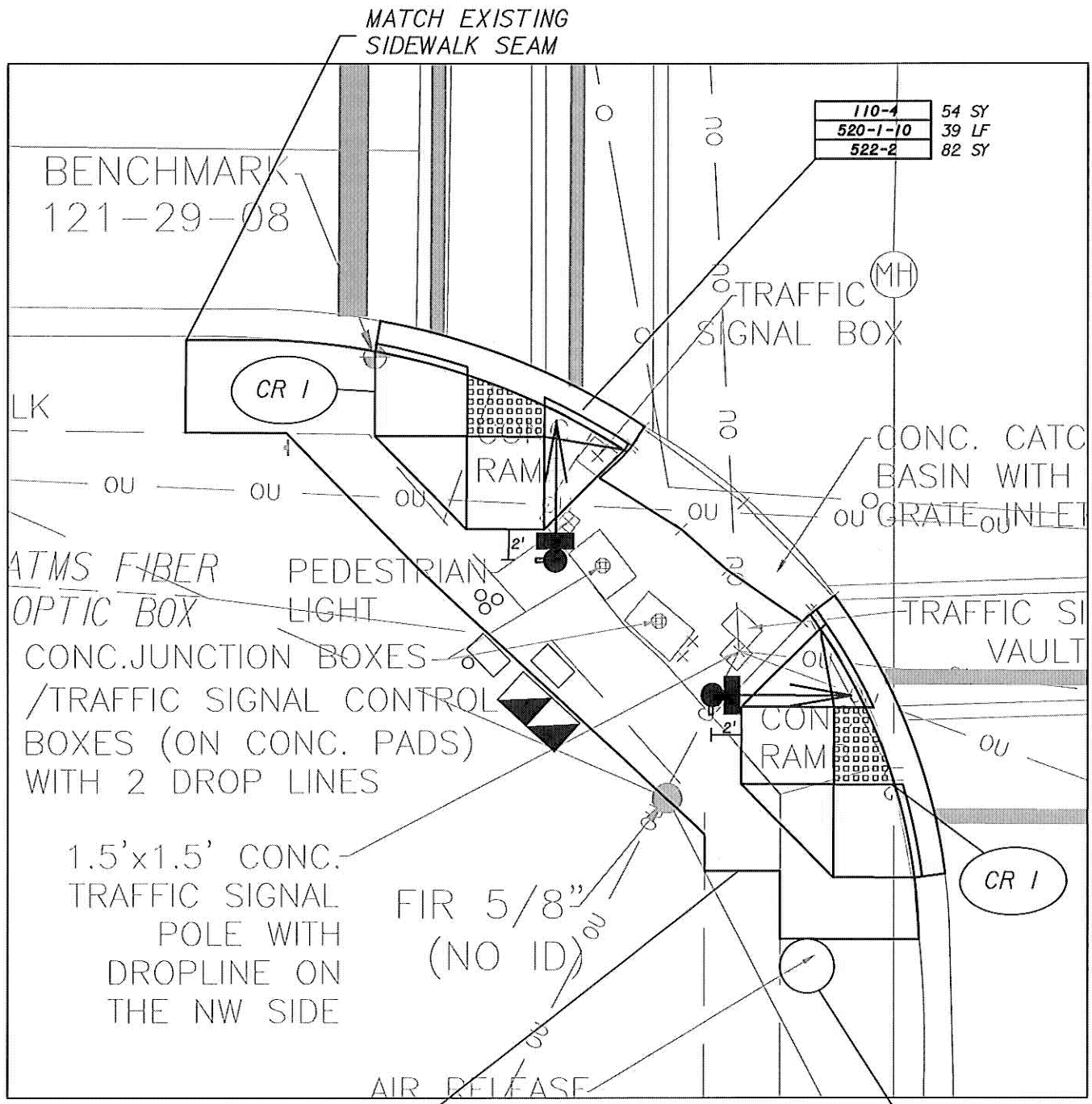
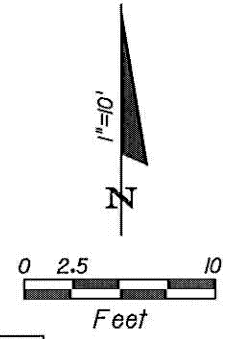
110-4	42 SY
520-1-10	46 LF
522-2	88 SY

NORTHWEST CORNER



				MANATEE COUNTY		CORTEZ ROAD AND 26TH STREET WEST		 12481 Telecom Drive, Tampa, Florida 33637 www.cardnotbe.com - 813.221.0048 Certificate of Authorization No. 3843		DESIGNED BY: UPIK SUWARNO DRAWN BY: [Signature] CHECKED BY: [Signature] APPROVED BY: [Signature]		RAMP DETAILS (1)		PROJECT NO: 00193-008-06
												DATE: 05-06-11		
												SHEET NO: T-11		

NOTE: EXISTING CONCRETE JUNCTION BOXES ARE TO REMAIN, CONTRACTOR IS TO BUILD SIDEWALK AROUND EXISTING PULL BOXES/SPLICE BOXES AND DURING INSTALLATION OR RECONSTRUCTION OF SIDEWALK AND RAMPS, MAKE SURE EXISTING PULL BOXES/SPLICE BOXES ARE FLUSH WITH TOP OF NEW SIDEWALK.

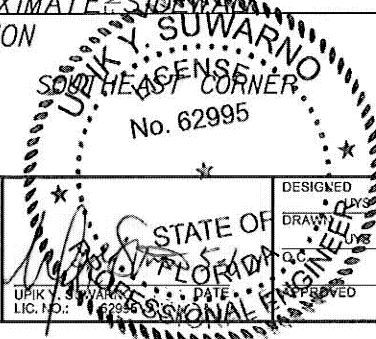


MATCH EXISTING SIDEWALK SEAM

SOUTHWEST CORNER

PROPOSED MAST ARM FOUNDATION

APPROXIMATE SIDEWALK LOCATION



NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

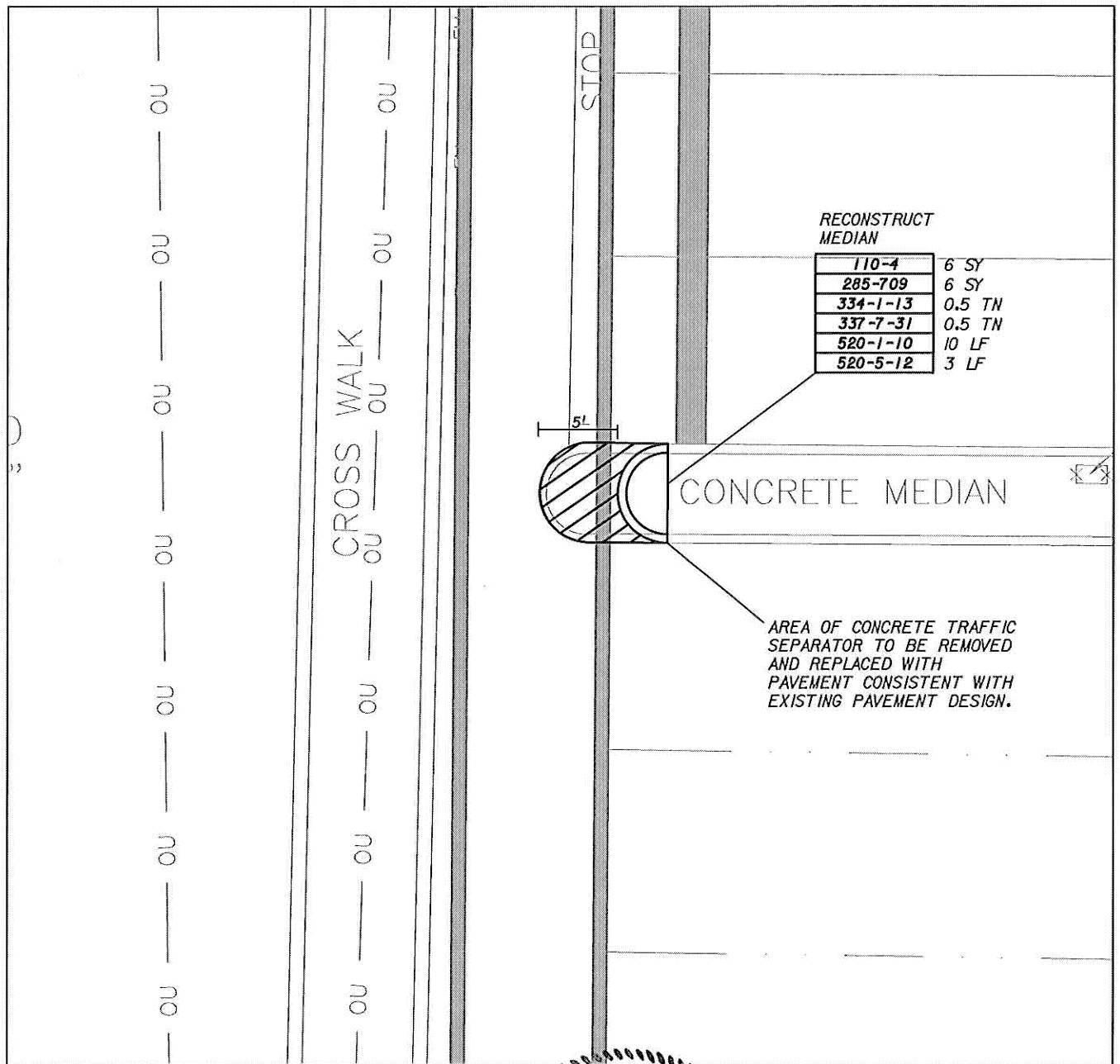
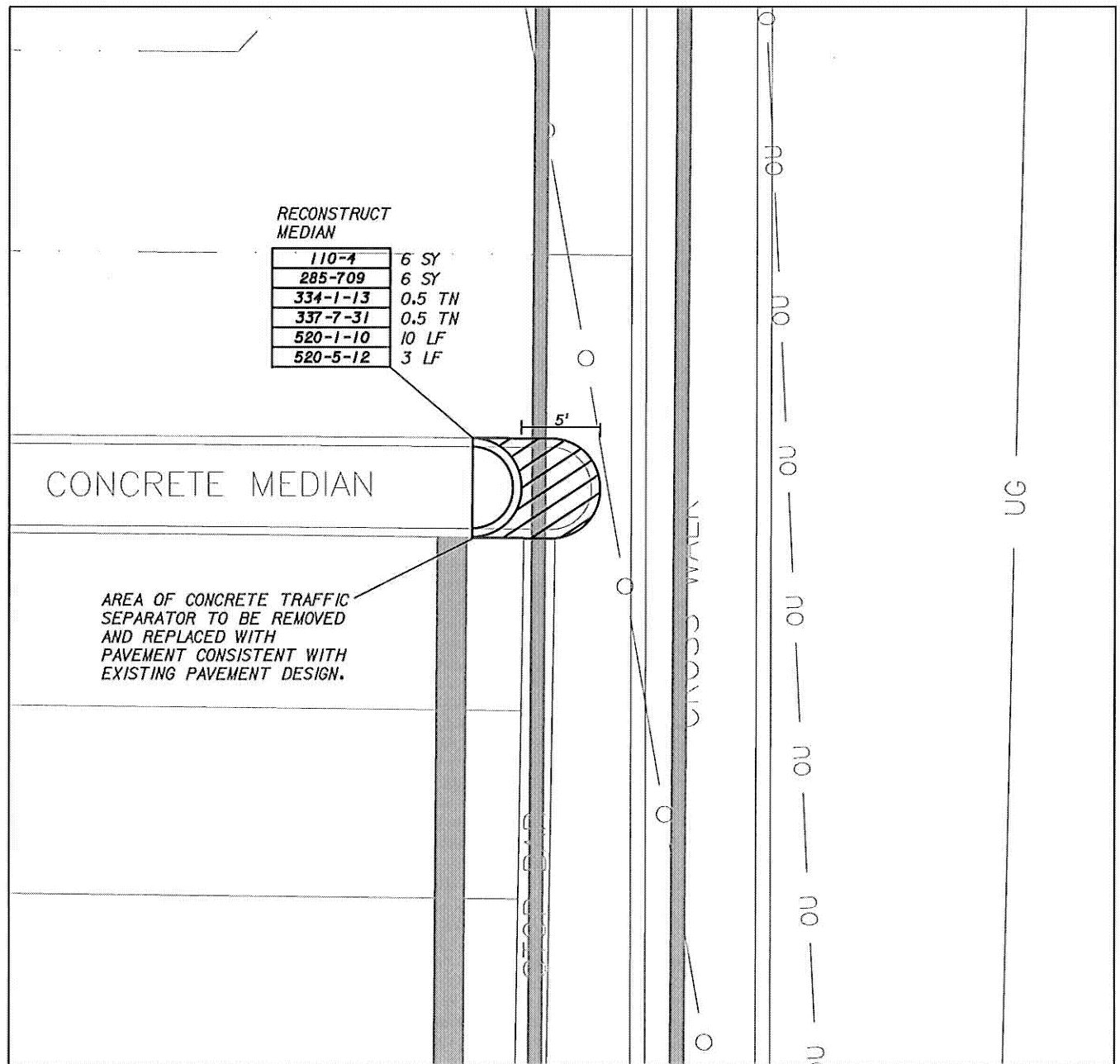
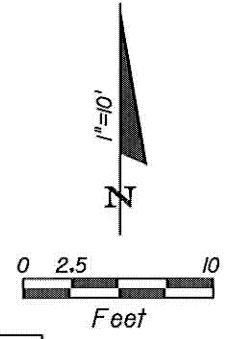
CORTEZ ROAD AND 26TH STREET WEST

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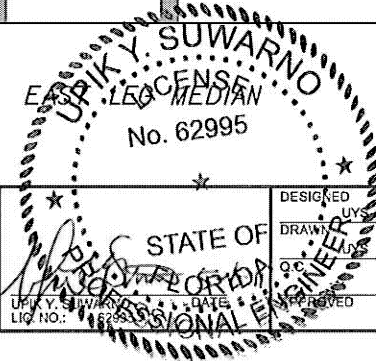
RAMP DETAILS (2)

PROJECT NO:	00193-008-06
DATE:	05-06-11
SHEET NO:	T-12

NOTE: FOR ADDITIONAL INFORMATION OF EXISTING ROADWAY PAVEMENT DESIGN, CONTRACTOR SHALL OBTAIN THE AS-BUILTS FOR FP ID 406755-1-52-01.



WEST LEG MEDIAN



NO.	DESCRIPTION	BY	DATE

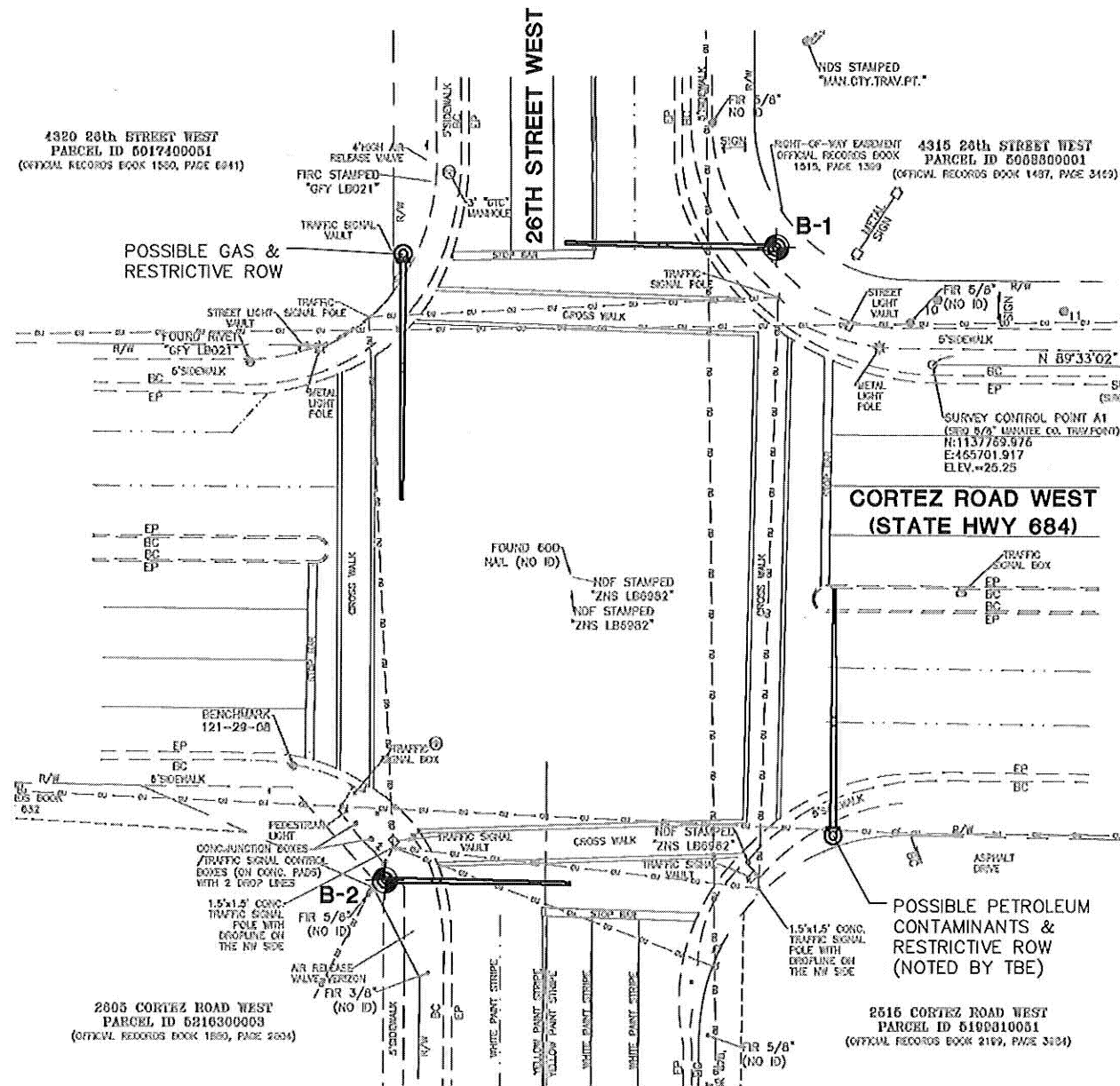
MANATEE COUNTY

CORTEZ ROAD AND 26TH STREET WEST

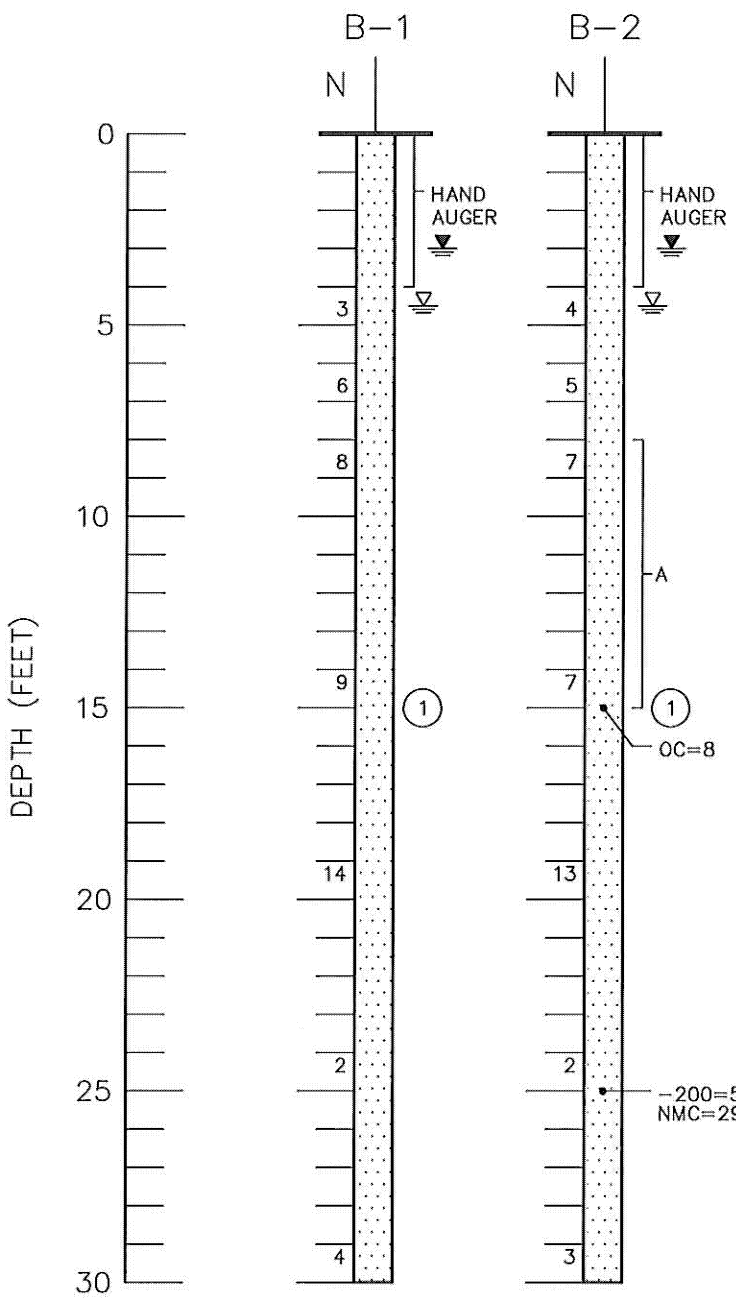
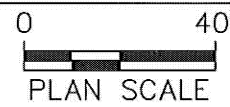
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MEDIAN RECONSTRUCTION DETAILS

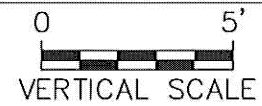
PROJECT NO: 00193-008-06
 DATE: 05-06-11
 SHEET NO: T-13



BORING LOCATION PLAN



SOIL PROFILES



LEGEND

- ① [Symbol] Light to dark gray, greenish gray, brown fine SAND to slightly silty fine SAND (SP/SP-SM)
- [Symbol] Unified Soil Classification System (ASTM D 2487) group symbol as determined by visual review
- [Symbol] Groundwater level, September 2010
- [Symbol] Seasonal high groundwater level
- N SPT N-value in blows/foot
- 200 Fines passing No. 200 sieve (%)
- NMC Natural Moisture Content (%)
- oc Organic Content (%)
- A Trace roots, organics
- [Symbol] Approximate SPT boring location

NOTE: Site plan provided by Cardno TBE

SOIL PARAMETERS

Boring No.	Approximate Depth (ft)	Soil Description	Soil Type	Average SPT-N	Unit Weight (pcf)		Cohesion (psf)	Friction Angle (degree)	Coefficient of Lateral Pressure		
					Total	Submerge			Ka	Kp	Ko
B-1	0-30	SP/SP-SM	Cohesionless	7	105	42.6	-	29	0.34	2.93	0.46
B-2	0-30	SP/SP-SM	Cohesionless	6	105	42.6	-	29	0.34	2.91	0.46

DRAWN	DJG
CHECKED	JH
APPROVED	MEM
SCALE	NOTED

GEOTECHNICAL SERVICES
PROPOSED MAST ARM SIGNAL POLES
 CORTEZ ROAD WEST & 26TH STREET WEST
 MANATEE COUNTY, FLORIDA



DATE	SEPT 10	PROJ. NO.	0775771	SHEET	T-14
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P:\775-Geo\0775771 Cardno TBE Cortez & 26th Mast Arms\cod\0775771a1