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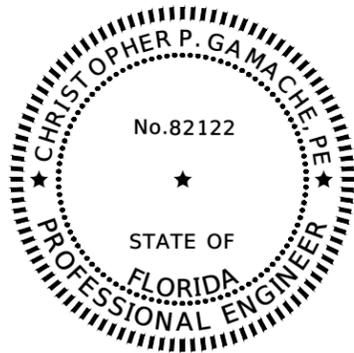
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DAVID J. ALLEN, PE
 STANTEC CONSULTING SERVICES, INC.
 3905 CRESCENT PARK DRIVE
 RIVERVIEW, FL 33578
 (813) 664-4500

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

PLAN INDEX

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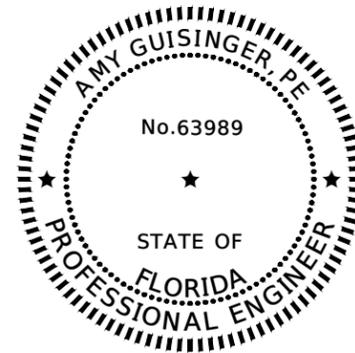
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CHRISTOPHER P. GAMACHE, PE
 STANTEC CONSULTING SERVICES, INC.
 380 PARK PLACE BLVD SUITE 300
 CLEARWATER, FL 33759
 (727) 531-3505

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PLAN INDEX

SHEET NO.	DESCRIPTION
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AMY GUISSINGER, PE
 TIERRA SOUTH FLORIDA, INC.
 6011 BENJAMIN ROAD, SUITE 106
 TAMPA, FL 33634

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PLAN INDEX

SHEET NO.	DESCRIPTION
T-2	SIGNATURE SHEET
T-11	REPORT OF CORE BORINGS

REVISIONS			
NO.	DESCRIPTION	DATE	BY
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DAVID J. ALLEN, P.E.
 P.E. LICENSE NUMBER 58540
 3905 CRESCENT PARK DRIVE
 RIVERVIEW, FL 33578
 (813) 664-4500



MANATEE COUNTY
 PUBLIC WORKS
 COUNTY PROJECT NO:
 6108261

INTERSECTION IMPROVEMENTS AT 75TH STREET WEST AND MANATEE AVENUE W. (SR 64)
SIGNATURE SHEET

SHEET NO.
 T-2

TABULATION OF QUANTITIES

PAY ITEM NO.		UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL	
			T-6														PLAN	FINAL	PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL						
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	160														160		160	
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	375														375		375	
632-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1														1		1	
632-7-6	SIGNAL CABLE, REMOVE- INTERSECTION	PI	1														1		1	
635-2-14	PULL & SPLICE BOX, F&I, 17" x 30" COVER SIZE	EA	10														10		10	
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	6														6		6	
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	EA	5														5		5	
649-21-21	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 78'	EA	1														1		1	
649-21-27	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 78'-78'	EA	1														1		1	
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE, DEEP FOUNDATION- BOLT ON ATTACHMENT	EA	2														2		2	
650-1-14	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECTION, 1 WAY	AS	15														15		15	
653-1-11	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 1 WAY	AS	6														6		6	
653-1-60	PEDESTRIAN SIGNAL, REMOVE PED SIGNAL- POLE/PEDESTAL TO REMAIN	AS	1														1		1	
660-3-11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	EA	1														1		1	
660-3-12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	EA	6														6		6	
665-1-11	PEDESTRIAN DETECTOR, FURNISH & INSTALL, STANDARD	EA	6														6		6	
684-1-1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	EA	1														1		1	
700-5-22	INTERNALLY ILLUMINATED SIGN, FURNISH & INSTALL, OVERHEAD MOUNT, 12-18 SF	EA	4														4		4	
700-5-60	INTERNALLY ILLUMINATED SIGN, REMOVE	EA	1														1		1	

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P.E. LICENSE NUMBER 58540
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RIVERVIEW, FL 33578
(813) 664-4500



INTERSECTION IMPROVEMENTS AT 75TH STREET WEST
AND MANATEE AVENUE W. (SR 64)
TABULATION OF QUANTITIES

SHEET NO.
T-3

GENERAL NOTES

1. AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING DEPARTMENTS TO INFORM THEM OF CONSTRUCTION OPERATIONS:

MANATEE COUNTY TRAFFIC OPERATIONS DIVISION:
MR. AARON BURKETT
2904 12TH STREET COURT EAST
BRADENTON, FLORIDA 34208
PHONE (941) 708-7450, EXT. 7509

MANATEE COUNTY TRAFFIC ENGINEERING DIVISION:
MR. VISHAL KAKKAD, P.E. PTOE
2101 47TH TERRACE EAST
BRADENTON, FLORIDA 34208
PHONE (941) 749-3500, EXT. 7812

CITY OF BRADENTON PUBLIC WORKS AND UTILITIES
KIM CLAYBACK, P.E.
1411 9TH STREET WEST
BRADENTON, FLORIDA 34205
PHONE (941) 708-6300, EXT. 224

FDOT TRAFFIC OPERATIONS
RENJAN JOSEPH, P.E., TSM&O ENGINEER
801 N. BROADWAY AVENUE
P.O. BOX 1249
BARTOW, FLORIDA 33830-1249
PHONE (863) 519-2746

2. 48 HOURS PRIOR TO CONTRACT START DATE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES IN WRITING GIVING THE LOCATION, START DATE AND EMERGENCY NUMBERS FOR AFTER HOURS REPAIRS:

MANATEE COUNTY SHERIFF'S OFFICE
515 11TH STREET WEST
BRADENTON, FLORIDA 34205
PH 941-747-3011

3. THIS SIGNAL IS MAINTAINED BY THE CITY OF BRADENTON. THE ATMS COMPONENTS ARE MAINTAINED BY MANATEE COUNTY. MANATEE COUNTY SIGNAL SPECIFICATIONS SHALL BE FOLLOWED OTHER THAN THE CITY OF BRADENTON'S PREFERENCES THAT ARE INCORPORATED HEREIN.

THE CONTRACTOR SHALL OBTAIN A COPY OF MANATEE COUNTY'S LATEST "TRAFFIC INFRASTRUCTURE DESIGN GUIDE" THROUGH THE COUNTY PROJECT MANAGER PRIOR TO ORDERING MATERIALS AND/OR EQUIPMENT. CONTACT THE MANATEE COUNTY TRAFFIC OPERATIONS DIVISION, MR. AARON BURKETT, 941-709-7509 FOR ADDITIONAL INFORMATION.

4. THE CONTRACTOR MUST NOTIFY THE CITY OF BRADENTON AND COUNTY TRAFFIC ENGINEERING DIVISIONS VIA THE PROJECT MANAGER AT LEAST FIVE (5) BUSINESS DAYS IN ADVANCE TO SCHEDULE THE FINAL TRAFFIC SIGNAL INSPECTION.

5. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR THE SIGNAL MAINTENANCE, TIMING AND OPERATION OF ANY AND ALL SIGNALS AND SIGNAGE FROM COMMENCEMENT TO ACCEPTANCE OF THE PROJECT (I.E.: EXISTING LOOPS CUT, SYSTEM COMMUNICATION TERMINATED, LANE OR PAVEMENT MODIFICATIONS, PEDESTRIAN MODIFICATIONS, TRAFFIC SIGNAL SCHOOL FLASHER, WARNING FLASHER, ROADWAY LIGHTING, COUNT STATIONS, AND ANY OTHER TRAFFIC RELATED DEVICE LOCATED WITHIN THE CONSTRUCTION ZONE). MANATEE COUNTY WILL ASSIST IN PROVIDING EXISTING SYSTEM TIMINGS WHEN POSSIBLE.

6. THE SIGNAL CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO TROUBLE CALLS TWENTY-FOUR HOURS A DAY, SEVEN DAYS A WEEK FOR THE DURATION OF THE PROJECT. THE PRIME CONTRACTOR SHALL PROVIDE CONTACT NUMBERS FOR THE SIGNAL CONTRACTOR TO THE TRAFFIC MANAGEMENT DIVISION AT COMMENCEMENT OF PROJECT. FURTHERMORE, WITHIN TWO HOURS OF NOTIFICATION OR DOCUMENTED ATTEMPTED NOTIFICATIONS, THE SIGNAL CONTRACTOR SHALL BE ON SITE MAKING NEEDED REPAIRS OR MODIFICATIONS. FAILURE TO MEET THE TIME REQUIREMENTS SHALL GIVE THE COUNTY, AT ITS DISCRETION, THE RIGHT TO REQUEST ASSISTANCE FROM THE MANATEE COUNTY SHERIFF'S DEPARTMENT TO CONTROL TRAFFIC FOR THE PERIOD OF TIME UNTIL THE CONTRACTOR RESPONDS AND MAKES THE NEEDED REPAIRS, THE COST FOR THE MANATEE COUNTY SHERIFF'S OFFICE SHALL BE THE RESPONSIBILITY OF THE PRIME CONTRACTOR.

7. GROUNDING: ALL GROUND ROD EQUIPMENT SHALL BE BONDED TOGETHER TO FORM AN INTEGRATED GROUNDING SYSTEM USING #6 AWG THHN COPPER WIRE. THE UPPER END OF ALL GROUND RODS SHALL BE 18 INCHES BELOW GROUND ELEVATION. MARK GROUND ROD LOCATIONS WITH PERMANENT MARKER SUCH AS AN EPOXY STICKER LOCATED ON THE NEAREST CURB AND PROVIDE AS-BUILT DRAWINGS WITH THE LOCATION OF GROUND RODS MARKED. GROUNDING CONDUCTOR MUST BE #6 OR LARGER INSULATED COPPER. EQUIPMENT SHALL NOT BE PLACED INTO OPERATIONAL SERVICE UNTIL THE ASSOCIATED GROUNDING SYSTEM HAS BEEN INSPECTED AND APPROVED BY A MEMBER OF THE MANATEE COUNTY TRAFFIC OPERATIONS STAFF. A GROUND RESISTANCE TESTER OR OTHER APPROVED MEANS SHALL BE USED TO ACQUIRE THE GROUND ROD RESISTANCE. THE ENGINEER, OR A REPRESENTATIVE OF THE ENGINEER FROM THE TRAFFIC OPERATIONS DIVISION STAFF SHALL BE PRESENT DURING THE TEST. CONNECTIVE DEVICES SHALL BE NON-CORROSIVE SPLIT BOLT, CLAMP, PRESSURE CONNECTORS, OR OTHER APPROVED MEANS TO ENSURE A POSITIVE CONNECTION.

8. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR BORING. THE CONTRACTOR SHALL FIELD MARK THE PROPOSED CONDUIT INSTALLATION ALIGNMENT FOR REVIEW AND CONCURRENCE BY THE ENGINEER PRIOR TO TRENCHING AND/OR PLACEMENT. NO PULL BOXES SHALL BE LOCATED IN DRAINAGE SWALES OR PAVED SHOULDERS.

9. AT LEAST 5 BUSINESS DAYS PRIOR TO SCHEDULING THE INITIAL TRAFFIC SIGNAL INSPECTION, DELIVER THREE HARDCOPY SETS OF AS-BUILT RECORD DRAWINGS, TWO SETS OF IMSA INSPECTION FORMS, OTR FIBER OPTIC CABLE TEST RESULTS, AND ONE COMPACT DISC OF RECORD DRAWINGS IN ADOBE ACROBAT (.PDF) AND AUTOCAD (.DWG) FORMAT TO:

MANATEE COUNTY TRAFFIC OPERATIONS DIVISION
MR. AARON BURKETT
2904 12TH ST CT EAST
BRADENTON, FL 34208

10. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW FOR ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED. THE CONTRACTOR SHALL FURNISH COPIES OF ALL DRAWINGS, SCHEDULES AND COMPLETE DESCRIPTIVE AND TECHNICAL DATA FOR ALL ITEMS TO THE PROJECT MANAGER. THE CONTRACTOR SHALL SUBMIT ALL MATERIALS TO THE ENGINEER. PRIOR TO CONSTRUCTION, FOR APPROVAL.

11. ALL CONSTRUCTION ACTIVITIES SHALL FOLLOW CURRENT MANATEE COUNTY HIGHWAY, TRAFFIC & STORMWATER STANDARDS, ALONG WITH FDOT STANDARDS AND SPECIFICATIONS.

12. THE CONTRACTOR SHALL HAVE AN IMSA CERTIFIED LEVEL II (ELECTRONICS OR ELECTRICAL TECHNICIAN) ON THE JOB SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. CERTIFICATION OF ALL TECHNICIANS SHALL BE PROVIDED TO THE COUNTY PRIOR TO BEGINNING WORK. SIGNAL INSTALLATION TECHNICIANS SHALL HAVE A MINIMUM OF IMSA LEVEL I CERTIFICATION.

13. THE CONTRACTOR SHALL PROVIDE A WARRANTY/MAINTENANCE BOND FOR THE SIGNAL INSTALLATIONS IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 611-5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING BOND REQUIREMENTS WITH THE MANATEE COUNTY PUBLIC WORKS SENIOR ADMINISTRATIVE SPECIALIST, AT (941) 708-7450, EXT. 7613.

14. WHERE MAST ARM, STRAIN POLES, OR ANY OTHER SIGNAL EQUIPMENT REQUIRING FOUNDATIONS ARE PROPOSED WITHIN 4 FEET OF ANY UNDERGROUND UTILITY, LOCATE AND PROTECT THE UTILITY. HAND DIG THE INITIAL 5 FEET FOR THE FOUNDATION.

15. THE CONTRACTOR SHALL DE-WATER THE POLE FOUNDATION EXCAVATION IF THE ELEVATION OF WATER IS HIGHER THAN THE ELEVATION OF THE FOUNDATION BASE.

16. THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED VV, VH AND VVH) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATION/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATION BETWEEN POINTS HAVE NOT BEEN VERIFIED. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR, VIA SUNSHINE STATE ONE CALL OF FLORIDA, INC. AT 1-800-432-4770, IN COORDINATION WITH UNDERGROUND AND OVERHEAD UTILITY OWNERS. THE CONTRACTOR SHALL NOTIFY UTILITY/OWNERS/AGENCIES LISTED WITHIN OR IMPACTED BY THESE PLANS, NOT LESS THAN TWO (2) FULL BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION. AT ALL LOCATIONS WHERE THE REQUIRED VERTICAL CLEARANCE TO THE POWER LINE CANNOT BE MAINTAINED, A QUALIFIED REPRESENTATIVE FROM THE POWER COMPANY SHALL BE PRESENT DURING ALL WORK UNDER POWER LINES. THE CONTRACTOR SHALL CONTACT LOCAL POWER COMPANY FOR THEIR ASSISTANCE IN PERFORMING ALL NECESSARY WORK UNDER POWER LINES, SUCH AS THE INSTALLATION OF SIGNAL CABLE, FIBERGLASS INSULATORS, AND SIGNAL POLES.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL POWER COMPANY PROVIDING ELECTRICAL POWER TO DETERMINE IF A SERVICE PROCESSING FEE IS REQUIRED. ANY FEE SHALL BE INCLUDED AS PART OF PAYMENT FOR THE ELECTRICAL POWER SERVICE ASSEMBLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS OF THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION, INSPECTION AND ENERGIZING OF THE NEW POWER SERVICE IN A TIMELY MANNER IN ORDER TO PROMOTE PROJECT COMPLETION WITHIN CONTRACT TIME.

18. THE POWER SERVICE SHALL HAVE SEPARATE PULL BOXES FOR ACCESS. THE CONTRACTOR SHALL NOT INSTALL COMMUNICATIONS AND POWER SERVICE IN THE SAME CONDUIT, PULL BOX OR MANHOLE.

19. RESPONSIBILITIES RELATED TO UTILITIES ARE NOTED IN THE ROADWAY PLANS. SEE ROADWAY PLANS FOR UTILITY CONTACT INFORMATION.

20. ELEVATION OF THE TOP OF THE MAST ARM FOUNDATION SHALL BE SIX (6) INCHES ABOVE EXISTING GRADE, UNLESS LOCATED DIRECT AT BACK OF SIDEWALK. IF LOCATED AT BACK OF SIDEWALK, THE FOUNDATION ELEVATION SHALL MATCH SIDEWALK GRADE. SEE "TOP OF FOUNDATION ELEVATION" ON MAST ARM TABULATION SHEET.

21. COORDINATE PAVEMENT MARKINGS AND SIGNAGE WORK WITH THE SCHEDULING OF SIGNAL ACTIVATION. DO NOT ACTIVATE THE SIGNAL UNTIL ALL PROPOSED STOP BARS, CROSSWALKS, RAMPS, AND PAVEMENT WORK IS COMPLETE.

22. ALL MATERIALS, EQUIPMENT, AND OTHER CONTRACTOR SUPPLIED ITEMS SHALL BE INSTALLED AND MAINTAINED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY THE ENGINEER.

23. ELECTRICAL WIRING SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE PUBLISHED BY NATIONAL FIRE PROTECTION ASSOCIATION.

24. #14 XHHW PULL WIRE SHALL BE INSTALLED IN ALL CONDUITS. AT LEAST 2 FEET OF PULL WIRE SHALL BE ACCESSIBLE AT EACH CONDUIT TERMINATION AND SECURED IN THE PULL BOX OR PLACE OF TERMINATION.

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REVISIONS				 STANTEC CONSULTING SERVICES, INC.	DAVID J. ALLEN, P.E. P.E. LICENSE NUMBER 58540 3905 CRESCENT PARK DRIVE RIVERVIEW, FL 33578 (813) 664-4500	 MANATEE COUNTY PUBLIC WORKS COUNTY PROJECT NO: 6108261	INTERSECTION IMPROVEMENTS AT 75TH STREET WEST AND MANATEE AVENUE W. (SR 64)	SHEET NO.
NO.	DESCRIPTION	DATE	BY				GENERAL NOTES (1)	T-4
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GENERAL NOTES (CONT.)

25. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TWO PORTABLE 4' X 8' VARIABLE-MESSAGE SIGNS (VMS) FOR A PERIOD OF TWO WEEKS. THE VMS WILL BE LOCATED AT AN APPROPRIATE DISTANCE IN ADVANCE OF EACH APPROACH TO THE NEW SIGNALIZED INTERSECTION AS SPECIFIED BY THE MAINTAINING AGENCY'S ENGINEER. THE VMS WILL BE PROVIDED (1) WEEK PRIOR TO THE SCHEDULED ACTIVATION IN FULL COLOR OPERATION AND SHALL REMAIN IN PLACE FOR ONE (1) WEEK FOLLOWING ACTIVATION. COST OF FURNISHING VMS TO BE INCLUDED UNDER THE ASSOCIATED PAY ITEM FOR MAINTENANCE OF TRAFFIC.

A. PRIOR TO ACTIVATION, THE VMS SIGN SHALL BE:
 (PANEL ONE - LINE 1) "TRAFFIC" (PANEL TWO - LINE 1) "ACTIVATED"
 (PANEL ONE - LINE 2) "SIGNAL" (PANEL TWO - LINE 2) "ON DAY"
 (PANEL ONE - LINE 3) "WILL BE" (PANEL TWO - LINE 3) "MONTH X"

B. SUBSTITUTION FOR THE WORD "DAY" SHALL BE AS FOLLOWS:
 SUNDAY AS "SUN" THURSDAY AS "THUR"
 MONDAY AS "MON" FRIDAY AS "FRI"
 TUESDAY AS "TUES" SATURDAY AS "SAT"
 WEDNESDAY AS "WED"

C. SUBSTITUTION FOR THE WORD "MONTH" SHALL BE AS FOLLOWS:
 JANUARY AS "JAN" JULY AS "JUL"
 FEBRUARY AS "FEB" AUGUST AS "AUG"
 MARCH AS "MAR" SEPTEMBER AS "SEP"
 APRIL AS "APR" OCTOBER AS "OCT"
 MAY AS "MAY" NOVEMBER AS "NOV"
 JUNE AS "JUN" DECEMBER AS "DEC"

D. SUBSTITUTION FOR THE WORD "XX" SHALL BE AS FOLLOWS:
 1. THE NUMERICAL DAY OF THE MONTH, FROM ONE (1) TO THIRTY-ONE (31).
 2. DATES LESS THAN TEN (10) SHALL BE PRECEDED BY A ZERO (0); EXAMPLE: "JAN 03" FOR JANUARY 3RD.

E. AFTER THE TURN-ON, THE VMS SHALL BE CHANGED TO
 (PANEL ONE - LINE 1) "TRAFFIC" (PANEL TWO - LINE 1) "NOW"
 (PANEL ONE - LINE 2) "SIGNAL" (PANEL TWO - LINE 2) "ACTIVE"

PANEL TWO, LINE 1 AND LINE 2, SHALL FLASH THREE (3) TIMES BEFORE REVERTING TO PANEL ONE.

PAY ITEM NOTES

630-2-12:
 THE CONTRACTOR SHALL PROVIDE BORE LOGS FOR ALL CONDUIT INSTALLED USING DIRECTIONAL BORE METHOD.

632-7-1:
 CONTACT MANATEE COUNTY FOR COLOR CODE VERIFICATION.

THIS PAY ITEM INCLUDES CONDUCTORS TO POWER THE OVERHEAD ILLUMINATED STREET NAME SIGNS.

635-2-14:
 PULL BOXES SHALL BE TRAFFIC BEARING, ALL POLYMER CONSTRUCTION (NOT CONCRETE). 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. ALL PULL BOXES AND SPLICE BOXES SHALL HAVE TRAFFIC BEARING LIDS WITH A MINIMUM LOAD RATING OF 20,000 LB.

STANDARD PULL BOX DIMENSIONS SHALL BE 17"X30"X12" AND THE LID SHALL BE STAMPED "MANATEE COUNTY TRAFFIC SIGNAL" ON THE COVER.

REMOVE ALL UNUSED PULL BOXES. PAYMENT FOR REMOVAL IS COVERED UNDER ROADWAY CLEARING AND GRUBBING.

649-26-5:
 THE EXISTING MAST ARM SUPPORTS LICENSE PLATE READER TECHNOLOGY. CONTACT THE MANATEE COUNTY SHERIFF'S OFFICE SEVEN BUSINESS DAYS IN ADVANCE OF MAST ARM REMOVAL TO COORDINATE THE REMOVAL OF THE LICENSE PLATE READER AND SOLAR PANEL.

CAPTAIN RICK GERKEN
 MANATEE COUNTY SHERIFF'S OFFICE
 941-747-3011 X 2041
 Richard.gerken@manateesheriff.com

650-1-14:
 USE ALUMINUM LOUVERED BACKPATES ON ALL SIGNAL HEADS. ALL BACKPLATES SHALL INCLUDE A 2" YELLOW REFLECTORIZED (TYPE III REFLECTIVITY) OUTER EDGE BORDER.

653-1-11:
 USE LOCKING COLLARS FOR MOUNTING PEDESTRIAN SIGNAL HEADS TO PEDESTALS.

660-3-11, 660-3-12:
 THE CONTRACTOR SHALL COORDINATE WITH THE VENDOR AND PROVIDE DETECTION OVERLAY PLANS TO THE COUNTY FOR REVIEW PRIOR TO FINALIZING INSTALLATION IN THE FIELD.

CONSULT WITH THE MANUFACTURER AND USE RECOMMENDED MATERIALS AND INSTALLATION METHODS. USE EQUIPMENT COMPATIBLE WITH MANATEE COUNTY'S EXISTING ATMS SYSTEM.

USE WAVETRONIX SMARTSENSOR MATRIX UNITS FOR STOP BAR DETECTION. USE WAVETRONIX SMARTSENSOR ADVANCE EXTENDED RANGE UNITS FOR ADVANCE DETECTION.

INSTALL ALL MICROWAVE DETECTION CABLING IN CONTINUOUS LENGTHS FROM THE CONTROL CABINET TO POINT OF DEVICE TERMINATION.

ATTACH DETECTION DEVICES TO THE PROPOSED MAST ARMS USING MANUFACTURER'S RECOMMENDED HARDWARE AND POSITIONING AS REQUIRED FOR OPTIMAL OPERATION.

MODIFY THE EXISTING CABINET UNDER THESE PAY ITEMS TO ENABLE ALL MICROWAVE DETECTION.

684-1-1:
 PROVIDE A RUGGEDCOM SWITCH MODEL RSG920P (6GK6092-0PS23-0BA0-Z A05+B05+C02+D02).

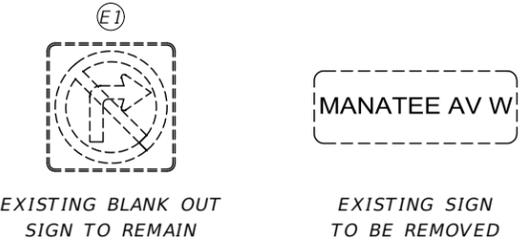
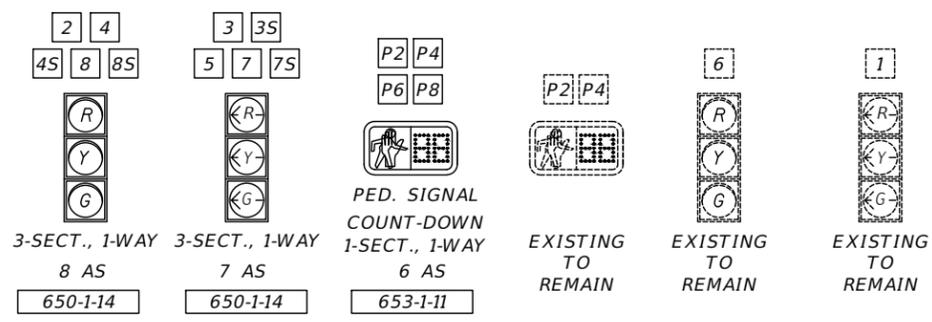
THIS ITEM SHALL INCLUDE A PLANET 2-CHANNEL OPTICAL FIBER BYPASS SWITCH MODEL IFB-244-SLC WITH A SEPARATE 48V POWER ADAPTOR AND TWO SINGLE MODE DUPLEX 3-FOOT LC-LC FIBER PATCH CABLES.

CONTROLLER MODIFICATION:
 MODIFY THE CONTROLLER CABINET AS NEEDED TO ENABLE FULL COMMUNICATION AND OPERATION AS SHOWN. THE COST TO MODIFY THE CONTROLLER CABINET IS COVERED UNDER OTHER PAY ITEMS. NO SEPARATE PAY ITEM IS PROVIDED.

CONDUIT LEGEND	
HV	= HIGH VOLTAGE CONDUIT
LV	= LOW VOLTAGE CONDUIT
MV	= MVDS CONDUIT
SP	= SPARE CONDUIT

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NOTES:

- POSTED SPEED LIMIT FOR 75TH STREET WEST IS 40 MPH. POSTED SPEED LIMIT FOR MANATEE AVENUE WEST IS 45 MPH.
- REQUEST UPDATED SIGNAL TIMINGS FROM FDOT TSM&O ENGINEER - ARTERIALS (863-519-2216) WHEN ALL LANES, STRIPING, SIGNALS AND PEDESTRIAN FACILITIES ARE IN THEIR 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 (3) WEEKS FOLLOWING THE REQUEST FOR FDOT TO DEVELOP THE UPDATED TIMINGS. PROGRAM THE CONTROLLER PER THE TIMINGS PROVIDED BY FDOT.

CONTROLLER OPERATION

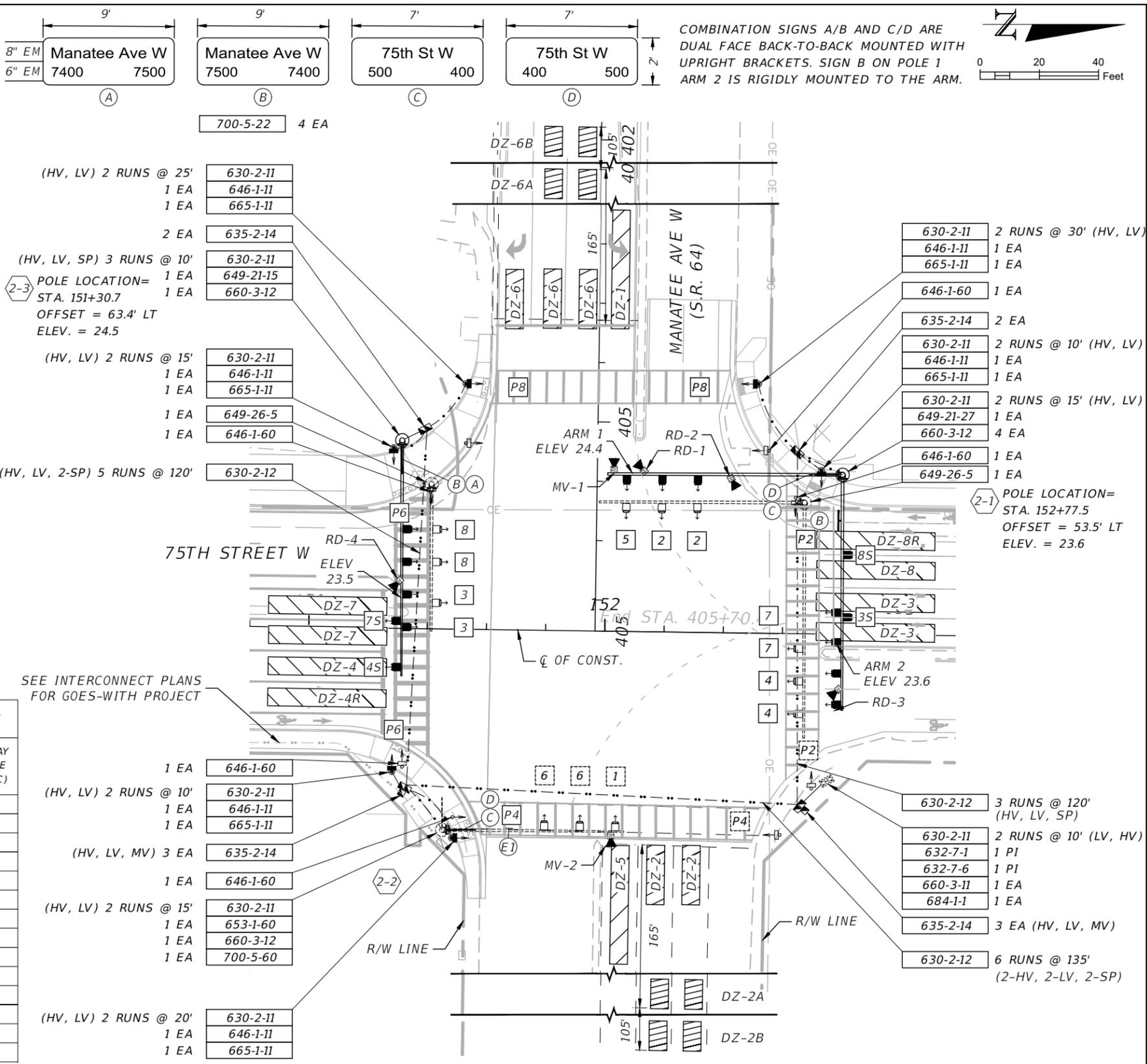
- MAJOR STREET IS MANATEE AVENUE WEST, MINOR STREET IS 75TH STREET WEST.
- FLASHING OPERATION SHALL BE YELLOW FOR MOVEMENTS 1, 2, 5, AND 6, AND RED FOR MOVEMENTS 3, 4, 7, AND 8.
- EXISTING CONTROLLER OPERATION SOP 10 TO REMAIN.

CONTROLLER TIMINGS								
MOVEMENT #	1	2	3	4	5	6	7	8
DIRECTION	EBLT	WB	SBLT	NB	WBLT	EB	NBLT	SB
TURN TYPE	PROT		PROT		PROT		PROT	
MIN GREEN	5	10	5	7	5	10	5	7
EXTENSION	3.0	5.0	3.0	3.0	3.0	5.0	3.0	3.0
YELLOW	4.8	4.8	4.5	4.5	4.8	4.8	4.5	4.5
ALL RED	3.5	2.0	3.2	2.0	2.9	2.0	2.0	2.0
MAX 1	30	55	40	40	40	45	30	40
MAX 2	30	75	45	50	40	65	40	50
MAX LIMIT								
ADJUST BY								
WALK		10		10		10		10
FLASHING DON'T WALK		28		28		26		24
DETECTOR MEMORY				ON				ON
DET. CROSS SWITCH								
DUAL ENTRY		ON		ON		ON		ON
RECALL		MAX				MAX		

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

DETECTION ZONE ASSIGNMENTS			
RADAR DETECTOR NO.	DETECTION ZONE(S)	CONNECT TO MOVEMENT	DELAY TIME (SEC)
RD-1	DZ-1	1	
RD-1	DZ-6	6	
RD-2	DZ-3	3	
RD-2	DZ-8	8	
RD-2	DZ-8R	8	8
RD-3	DZ-5	5	
RD-3	DZ-2	2	
RD-4	DZ-7	7	
RD-4	DZ-4	4	
RD-4	DZ-4R	4	8
MV-1	DZ-6A	6	
MV-1	DZ-6B	6	
MV-2	DZ-2A	2	
MV-2	DZ-2B	2	

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



SEE INTERCONNECT PLANS FOR GOES-WITH PROJECT

REVISIONS			
NO.	DESCRIPTION	DATE	BY



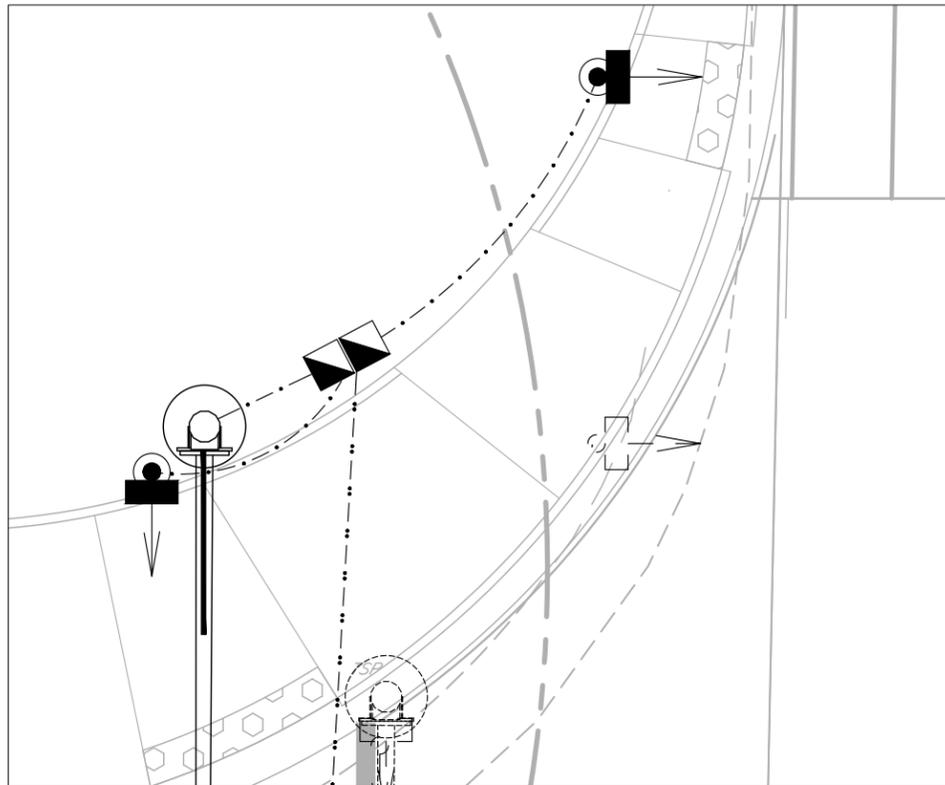
DAVID J. ALLEN, P.E.
P.E. LICENSE NUMBER 58540
3905 CRESCENT PARK DRIVE
RIVERVIEW, FL 33578
(813) 664-4500



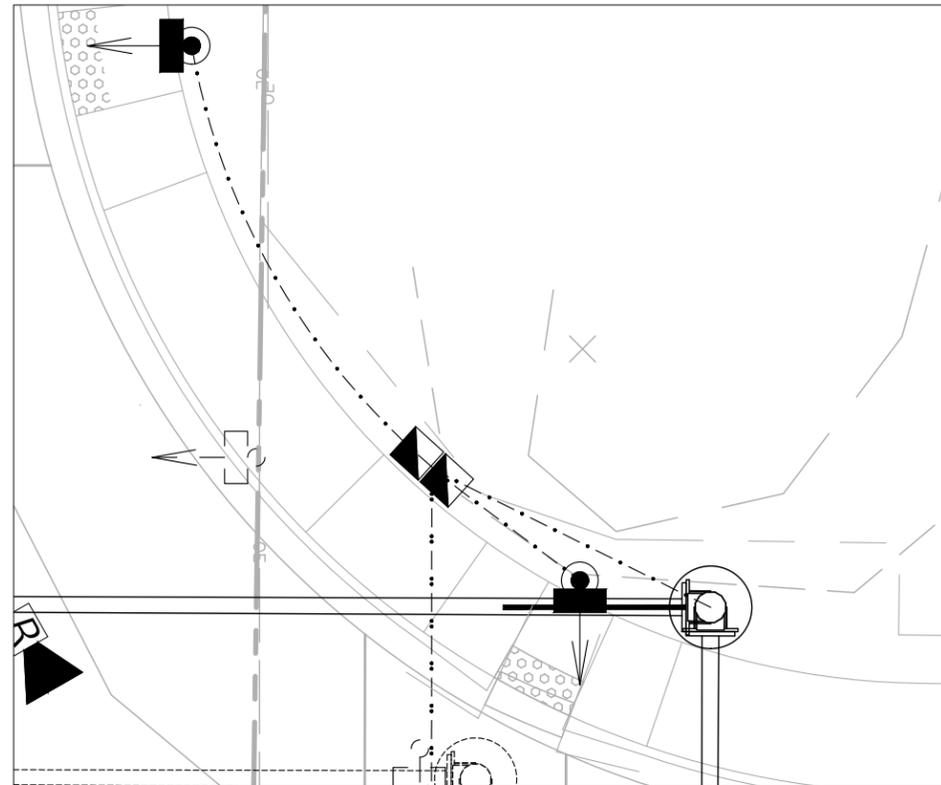
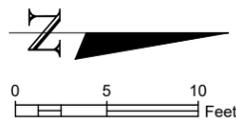
INTERSECTION IMPROVEMENTS AT 75TH STREET WEST AND MANATEE AVENUE W. (SR 64)
SIGNALIZATION PLAN (1)

SHEET NO.
T-6

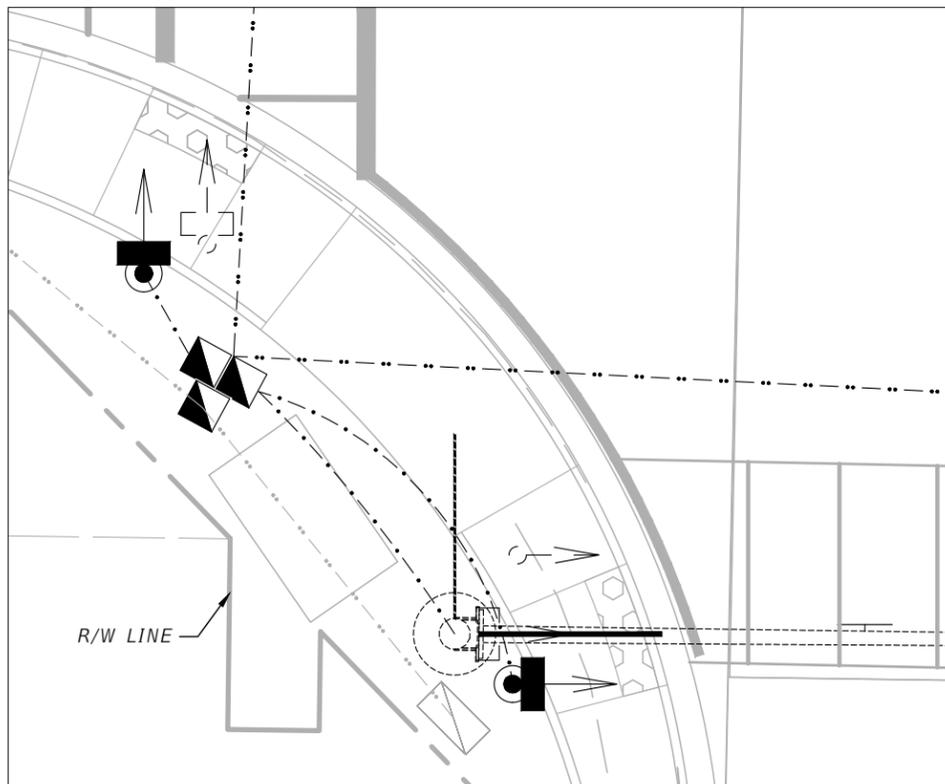
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75TH STREET W

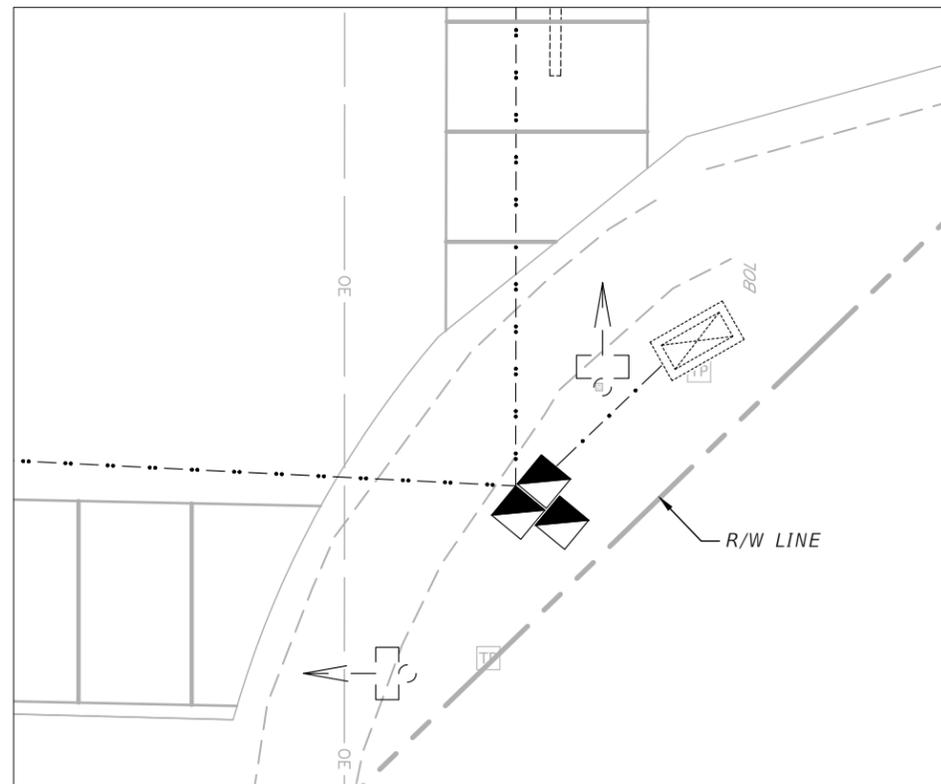


75TH STREET W



R/W LINE

MANATEE AVE W
(SR 64)



R/W LINE

OE

OE

REVISIONS			
NO.	DESCRIPTION	DATE	BY
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RIVERVIEW, FL 33578
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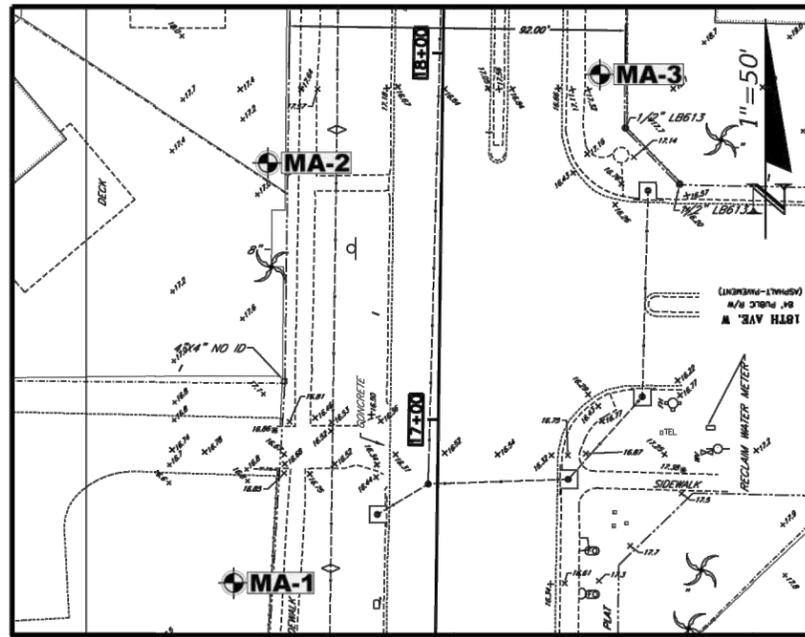
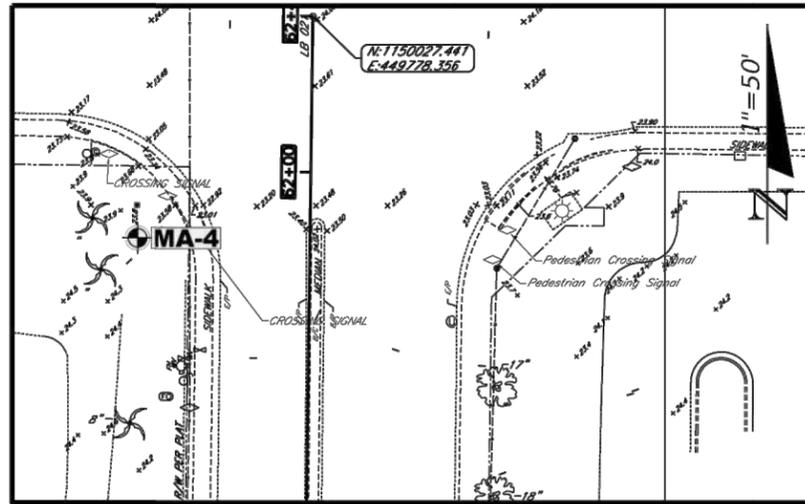
MANATEE COUNTY
PUBLIC WORKS
COUNTY PROJECT NO:
6108261

INTERSECTION IMPROVEMENTS AT 75TH STREET WEST
AND MANATEE AVENUE W. (SR 64)

SIGNALIZATION PLAN (2)

SHEET
NO.

T-7



BORING LOCATION PLAN

Approximate Location of SPT Boring

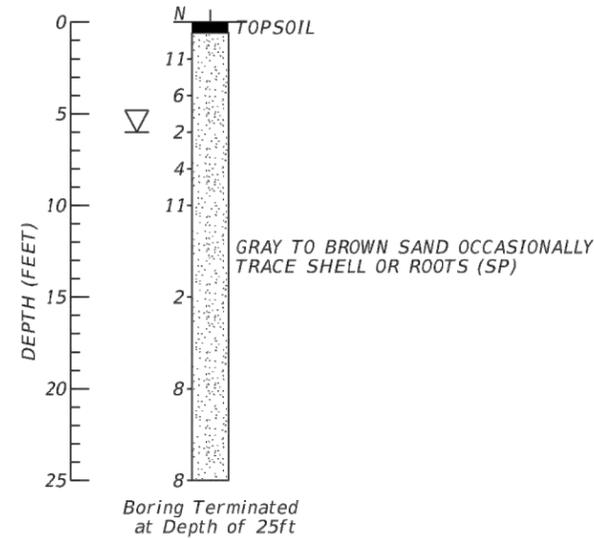
LEGEND

- ▽ ENCOUNTERED GROUNDWATER TABLE
- GNE GROUNDWATER NOT ENCOUNTERED IN UPPER 10 FEET
- || CASING
- Asphalt / Topsoil
- Sand
- Gravelly Sand

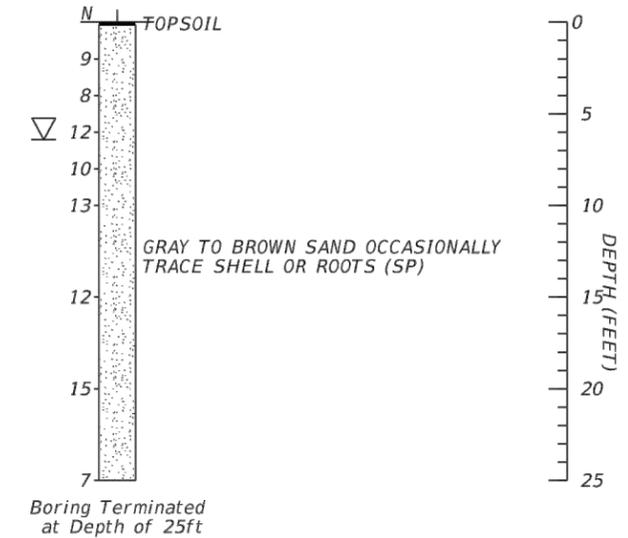
NOTES

1. BORING LOCATIONS WERE MARKED IN THE FIELD USING A HANDHELD GPSMAP GARMIN 78s. ACTUAL LOCATIONS AND THEIR COORDINATES ARE APPROXIMATE.
2. DEPTH SHOWN ARE IN FEET FROM EXISTING GROUND SURFACE
3. SPT N-VALUES SHOWN ABOVE WERE OBTAINED USING AUTOMATIC HAMMERS. GENERALLY DESIGN CORRELATIONS AND PROGRAMS USE SAFETY HAMMERS N-VALUES. HENCE, THE ABOVE N-VALUES NEED TO BE MULTIPLIED BY 1.24 TO OBTAIN EQUIVALENT SAFETY HAMMER N-VALUES FOR DESIGN PURPOSE.

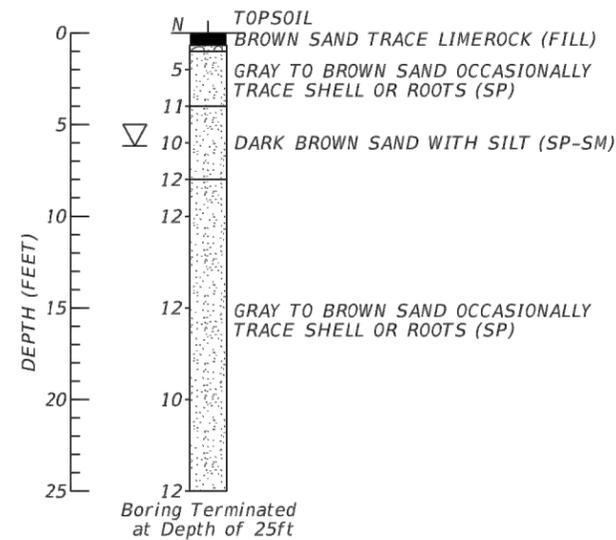
Bore # MA-01
 Date 5/27/2023
 Driller Y. OVIEDO
 Hammer AUTO
 Rig CME-55
 Latitude 27.483424
 Longitude -82.63689



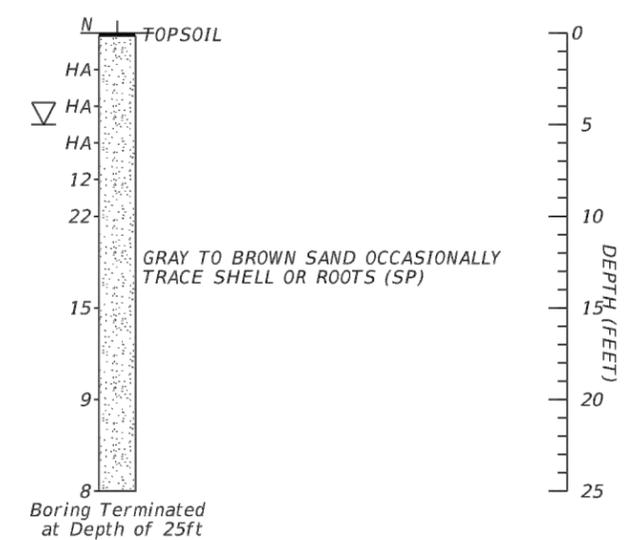
Bore # MA-02
 Date 5/27/2023
 Driller Y. OVIEDO
 Hammer AUTO
 Rig CME-55
 Latitude 27.483749
 Longitude -82.636879



Bore # MA-03
 Date 5/27/2023
 Driller Y. OVIEDO
 Hammer AUTO
 Rig CME-55
 Latitude 27.483813
 Longitude -82.63661



Bore # MA-04
 Date 5/27/2023
 Driller Y. OVIEDO
 Hammer AUTO
 Rig CME-55
 Latitude 27.495901
 Longitude -82.636822



REVISIONS			
NO.	DESCRIPTION	DATE	BY

AMY GUISSINGER, P.E.
 P.E. LICENSE NUMBER 63989
 TIERRA SOUTH FLORIDA, INC.
 6011 BENJAMIN RD, SUITE 106
 TAMPA, FL 33634



MANATEE COUNTY
 PUBLIC WORKS
 COUNTY PROJECT NO:
 6108260

76TH STREET WEST FROM
 20TH AVENUE W. TO MANATEE AVENUE W. (SR 64)
MAST ARMS
REPORT OF CORE BORINGS

SHEET NO.
 T-11

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