

Change Order Concurrence

No. 03DATE OF ISSUANCE: 01/09/2023EFFECTIVE DATE: 01/09/2023

OWNER: Indian River County
 CONTRACTOR Halley Engineering Contractors, Inc.
 Project: 66TH AVENUE ROADWAY WIDENING (49TH STREET TO 69TH STREET)
 OWNER's Project No. IRC-1505 OWNER'S Bid No. 2021018
 FM No.: 436379-1-54-01 & 436379-1-54-02

You are directed to make the following changes in the Contract Documents:

Description:

Proceed with construction of 53rd Street Signalized Intersection at 66th Avenue in accordance with Simmons & White (Engineer-of-Record) plans Signed & Sealed dated September 28, 2022 (see Exhibit A).

As a result, the following **new pay items** will be added to the Contract for means of compensation for this extra work in accordance with the Specifications & Contract Documents:

PHASE IA SIGNALIZATION - 53RD STREET

NEW PAY ITEM NO.	DESCRIPTION	UNIT	CO #03 QTY	CO #3 UNIT PRICE	CO #03 TOTAL
101-1	MOBILIZATION/DEMOBILIZATION	LS	1	\$ 65,680.00	\$ 65,680.00
102-1	MOT	LS	1	\$ 16,249.00	\$ 16,249.00
110-1-1	CLEARING AND GRUBBING	LS	1	\$ 3,450.00	\$ 3,450.00
630-2-11	CONDUIT (SIGNAL) (F & I) (UNDERGROUND)	LF	236	\$ 58.80	\$ 13,876.80
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (5 RUNS)	LF	300	\$ 58.80	\$ 17,640.00
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (1 RUN)	LF	220	\$ 58.80	\$ 12,936.00
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (6 RUNS)	LF	150	\$ 58.80	\$ 8,820.00
632-7-1	SIGNAL CABLE (F & I)	PI	1	\$ 17,325.00	\$ 17,325.00
633-2-31	FIBER OPTIC CONNECTION (INSTALL) (SPLICE)	EA	1	\$ 55.34	\$ 55.34
633-3-11	FIBER OPTIC CONNECTION HARDWARE (F & I) (SPLICE ENCLOSURE)	EA	12	\$ 1,627.50	\$ 19,530.00
633-3-15	FIBER OPTIC CONNECTION HARDWARE (F & I) (PATCH PANEL, PRETERMINATED)	EA	1	\$ 1,811.25	\$ 1,811.25
635-2-11	PULL & SPLICE BOX (F & I) (SIGNAL)	EA	22	\$ 1,680.00	\$ 36,960.00
635-2-12	PULL & SPLICE BOX (F & I) (SIGNAL) (24 x 36)	EA	1	\$ 2,630.25	\$ 2,630.25
639-1-122	ELECTRICAL POWER SOURCE (F & I) (UNDERGROUND)	AS	1	\$ 3,843.00	\$ 3,843.00
639-2-1	ELECTRICAL SERVICE WIRE (F & I)	LF	300	\$ 6.72	\$ 2,016.00

639-3-11	ELECTRICAL SERVICE DISCONNECT (F & I) (POLE)	EA	1	\$ 2,499.00	\$ 2,499.00
641-2-12	PRE-STRESSED CONCRETE POLE (F & I) (TYPE P-II SERVICE POLE)	EA	1	\$ 2,719.50	\$ 2,719.50
646-1-11	ALUMINUM SIGNAL POLES (F & I) (PEDESTAL)	EA	4	\$ 2,257.50	\$ 9,030.00
649-21-10	STEEL MAST ARM (F & I) (WS-170) (SINGLE ARM) (60')	EA	2	\$ 82,950.00	\$ 165,900.00
649-21-15	STEEL MAST ARM (F & I) (WS-170) (SINGLE ARM) (70')	EA	2	\$ 89,250.00	\$ 178,500.00
650-1-14	TRAFFIC SIGNAL (F & I) (ALUMINUM) (3-SECT) (1 WAY)	AS	8	\$ 1,722.00	\$ 13,776.00
650-1-16	TRAFFIC SIGNAL (F & I) (ALUMINUM) (4-SECT) (1 WAY)	AS	4	\$ 2,472.75	\$ 9,891.00
653-1-11	PEDESTRIAN SIGNAL (F & I) (LED COUNTDOWN) (1 WAY)	AS	4	\$ 924.00	\$ 3,696.00
660-4-11	VIDEO DETECTION SYSTEM (F & I) (CABINET)	EA	8	\$ 7,491.75	\$ 59,934.00
660-4-12	VIDEO DETECTION SYSTEM (F & I) (ABOVE GROUND EQUIPMENT)	EA	4	\$ 11,586.75	\$ 46,347.00
665-1-11	PEDESTRIAN DETECTOR (PUSH BUTTON) (F & I) (STANDARD)	EA	4	\$ 220.50	\$ 882.00
670-5-110	TRAFFIC CONTROLLER ASSEMBLY (F & I) (NEMA)	AS	1	\$ 50,610.00	\$ 50,610.00
682-1-133	CCTV CAMERA (F & I) (DOME PTZ, NON-PRESSURIZED) (IP, HIGH DEFINITION)	EA	1	\$ 9,712.50	\$ 9,712.50
684-1-1	MANAGED FIELD ETHERNET SWITCH, LAYER 2 (F & I)	EA	1	\$ 6,825.00	\$ 6,825.00
700-1-60	SINGLE POST SIGN (REMOVE)	AS	2	\$ 131.25	\$ 262.50
700-5-22	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD) (12-18 SF)	EA	4	\$ 4,410.00	\$ 17,640.00
715-5-31	LUMINAIRE AND BRACKET ARM (F & I)	EA	4	\$ 3,307.50	\$ 13,230.00
				<u>\$ 814,277.14</u>	

Reason for Change Order:

The purpose of this Change Order is to provide the means to compensate the Contractor to construct a new signalized intersection on 66th Avenue at 53rd Street. This scope of work was not included at time of original bid.

Attachments: (List documents supporting change)

- Exhibit A: Signalization Plans 53rd Street and 66th Avenue Intersection (10 Pages)
- Exhibit B: Change Order 03 Back-up Documentation (2 Pages)
 - Appendix A: Engineer's Estimate and Backup Documentation (20 pages)
 - Appendix B: Contractor's Cost Submittal (4 pages)

CHANGE IN CONTRACT PRICE:	
Description	Amount
Original Contract Price	<u>\$32,728,137.85</u>
Net Increase (Decrease) from previous Change Orders No. <u>01</u> to <u>02</u> :	<u>\$786,817.35</u>
Contract Price prior to this Change Order:	<u>\$33,514,955.20</u>
Net increase of this Change Order:	<u>\$814,277.14</u>
Contract Price with all approved Change Orders:	<u>\$34,329,232.34</u>

CHANGE IN CONTRACT TIMES	
Description	Time
Original Contract Time:	(days or dates)
Substantial Completion:	<u>720</u>
Final Completion:	<u>750</u>
Net change from previous Change Orders No. <u>01</u> to <u>02</u> :	(days)
Substantial Completion:	<u>60</u>
Final Completion:	<u>60</u>
Contract Time prior to this Change Order:	(days or dates)
Substantial Completion:	<u>780</u>
Final Completion:	<u>810</u>
Net increase this Change Order:	(days or dates)
Substantial Completion:	<u>0</u>
Final Completion:	<u>0</u>
Contract Time with all approved Change Orders:	(days or dates)
Substantial Completion:	<u>780</u>
Final Completion:	<u>810</u>

ACCEPTED:
John Morris

CONTRACTOR (Signature)

RECOMMENDED:
Kelly Cowger, P.E.

ENGINEER (Signature)

APPROVED:
Kirstin Leiendecker, P.E.

OWNER (Signature)

INDIAN RIVER COUNTY BOARD OF COUNTY COMMISSIONERS STATE OF FLORIDA

100% PLANS



66TH AVENUE ROADWAY WIDENING, PHASE 1A 49TH STREET TO 57TH STREET, SIGNALIZATION PLANS 53RD STREET AND 66TH AVENUE INTERSECTION IRC-1505

INDEX OF SHEETS

SHEET No.	DESCRIPTION
T-1	KEY SHEET
T-2	TABULATION OF QUANTITIES
T-3	GENERAL NOTES
T-4 & T-5	SIGNALIZATION PLANS
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T-7	MAST ARM ASSEMBLIES
T-8 THRU T-10	SIGNAL DETAILS
GT-1	REPORT OF CORE BORING SHEET

STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD PLANS 2022-2023 EDITION AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION JULY 2021 EDITION, AND INDIAN RIVER COUNTY TYPICALS FOR THE ANNUAL SIGNAL INSTALLATION CONTRACT, AS AMENDED BY CONTRACT DOCUMENTS.

MAINTENANCE OF TRAFFIC:
FOR INDEX #'S USE F.D.O.T. STANDARD PLANS 102-600, 601, 602, 603, 604, 613, 615, 660 & 661

APPLICABLE DESIGN STANDARDS REVISIONS:
For Design Standards Modifications click on "Design Standards" at the following web site:
<https://www.fdot.gov/design/standardplans/current>

SEC. 17, 18, 19, 20, TWP. 32S., RGE. 30E.

66TH AVENUE = 45 M.P.H. SPEED LIMIT

53RD STREET = 45 M.P.H. SPEED LIMIT

SIGNALIZATION SHOP DRAWINGS
TO BE SUBMITTED BY EMAIL TO:
TRICIA@SIMMONSANDWHITE.COM

PLANS PREPARED BY:
SIMMONS & WHITE, INC.
2581 METROCENTRE BLVD WEST, SUITE 3
WEST PALM BEACH, FL 33407

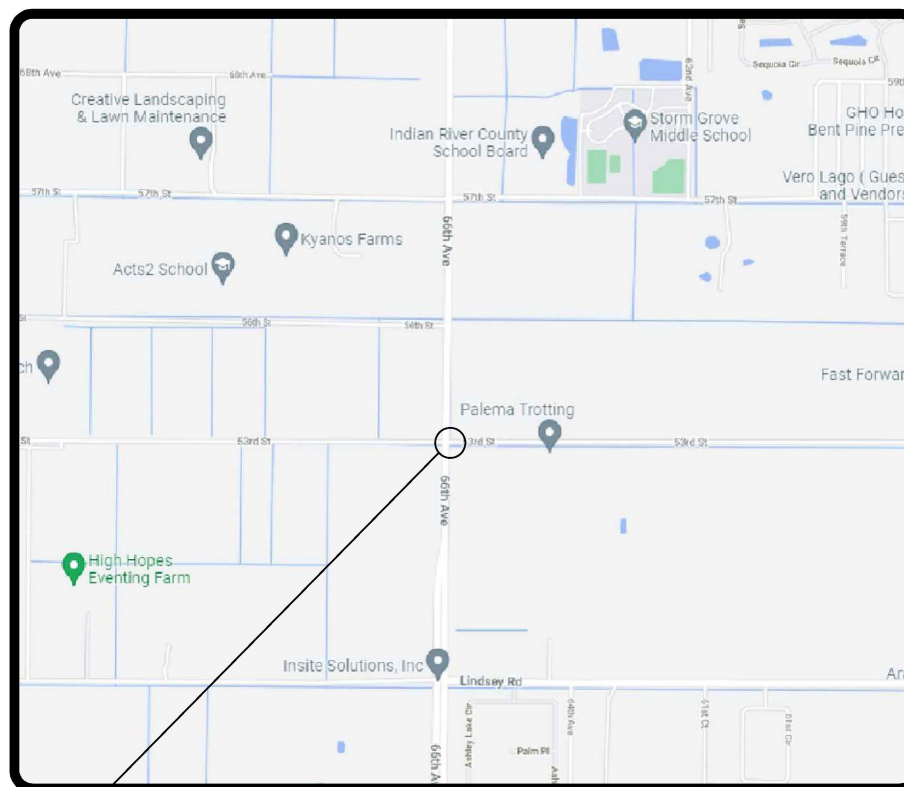
NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THE ATTACHED PLANS AND DESIGN ARE IN SUBSTANTIAL COMPLIANCE WITH THE DESIGN STANDARDS AND CRITERIA IN EFFECT ON THIS DATE FOR PALM BEACH COUNTY ENGINEERING DEPARTMENT AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION.


DATE: _____ PROFESSIONAL ENGINEER #56925

PATRICIA BARR, P.E.



LOCATION MAP
NOT TO SCALE

PROJECT LOCATION




PATRICIA MARIE BARR, P.E., STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 56925

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY PATRICIA MARIE BARR, P.E. ON 9/28/2022 USING A SHA-1 AUTHENTICATION CODE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed
by Patricia Barr
Date:
2022.09.28
15:43:22 -04'00'



SIMMONS & WHITE
ENGINEERING | PLANNING | CONSULTING | SINCE 1982
2581 Metrocentre Blvd West • Suite 3 • West Palm Beach, Florida 33407 • (561) 478-7848

DESIGN T.B.	DRAWN C.O.	CHECKED A.L.	APPROVED R.R.	DATE
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53RD STREET AND 66TH AVENUE

IRC-1505

KEY SHEET

JOB NO. 21-082	DRAWING NO. 21082T01	SHEET OF	T-1 T-10
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TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	T-4		T-5		TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
101-1	MOBILIZATION/DEMobilIZATION	LS					1		1		
102-1	MOT	LS					1		1		
110-1-1	CLEARING AND GRUBBING	LS					1		1		
630-2-11	CONDUIT (SIGNAL) (F & I) (UNDERGROUND)	LF	236				236		236		
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (1 RUN)	LF	220				220		220		
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (5 RUNS)	LF	300				300		300		
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (6 RUNS)	LF	150				150		150		
632-7-1	SIGNAL CABLE (F & I)	PI	1				1		1		
633-2-31	FIBER OPTIC CONNECTION (INSTALL) (SPLICE)	EA	1								
633-3-11	FIBER OPTIC CONNECTION HARDWARE (F & I) (SPLICE ENCLOSURE)	EA	12								
633-3-15	FIBER OPTIC CONNECTION HARDWARE (F & I) (PATCH PANEL, PRETERMINATED)	EA	1								
635-2-11	PULL & SPLICE BOX (F & I) (SIGNAL)	EA	22				22		22		
635-2-12	PULL & SPLICE BOX (F & I) (SIGNAL) (24 x 36)	EA	1				1		1		
639-1-122	ELECTRICAL POWER SOURCE (F & I) (UNDERGROUND) (PURCHASED BY CONTRACTOR)	AS	1				1		1		
639-2-1	ELECTRICAL SERVICE WIRE (F & I)	LF	300				300		300		
639-3-11	ELECTRICAL SERVICE DISCONNECT (F & I) (POLE)	EA	1				1		1		
641-2-12	PRE-STRESSED CONCRETE POLE (F & I) (TYPE P-II SERVICE POLE)	EA	1				1		1		
646-1-11	ALUMINUM SIGNAL POLES (F & I) (PEDESTAL)	EA	4				4		4		
649-21-10	STEEL MAST ARM (F & I) (WS-170) (SINGLE ARM) (60')	EA	2				2		2		
649-21-15	STEEL MAST ARM (F & I) (WS-170) (SINGLE ARM) (70')	EA	2				2		2		
650-1-14	TRAFFIC SIGNAL (F & I) (ALUMINUM) (3-SECT) (1 WAY)	AS			8		8		8		
650-1-16	TRAFFIC SIGNAL (F & I) (ALUMINUM) (4-SECT) (1 WAY)	AS			4		4		4		
653-1-11	PEDESTRIAN SIGNAL (F & I) (LED COUNTDOWN) (1 WAY)	AS			4		4		4		
660-4-11	VIDEO DETECTION SYSTEM (F & I) (CABINET)	EA	8				8		8		
660-4-12	VIDEO DETECTION SYSTEM (F & I) (ABOVE GROUND EQUIPMENT)	EA	4				4		4		
665-1-11	PEDESTRIAN DETECTOR (PUSH BUTTON) (F & I) (STANDARD)	EA	4				4		4		
670-5-110	TRAFFIC CONTROLLER ASSEMBLY (F & I) (NEMA)	AS	1				1		1		
682-1-133	CCTV CAMERA (F & I) (DOME PTZ, NON-PRESSURIZED) (IP, HIGH DEFINITION)	EA	1				1		1		
684-1-1	MANAGED FIELD ETHERNET SWITCH, LAYER 2 (F & I)	EA	1				1		1		
700-1-60	SINGLE POST SIGN (REMOVE)	AS	2				2		2		
700-5-22	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD) (12-18 SF)	EA			4		4		4		
715-5-31	LUMINAIRE AND BRACKET ARM (F & I)	EA	4				4		4		

PAY ITEM NOTES:

- 101-1 INCLUDES ALL NECESSARY EQUIPMENT INCLUDING A TWO PERSON BUCKET TRUCK FOR USE BY THE ENGINEER OR COUNTY REPRESENTATIVE DURING INSPECTION OF TRAFFIC SIGNAL.
- 102-1 INCLUDES ALL COSTS ASSOCIATED WITH FURNISHING, INSTALLING MAINTAINING AND REMOVAL OF ALL ITEMS OF MAINTENANCE OF TRAFFIC NOT PAID FOR UNDER SEPARATE ITEMS.
- 630-2-11 SHALL BE INSTALLED PER SECTION 630, OF FDOT'S STANDARD SPECIFICATIONS. ALL CONDUITS SHALL ENTER PULL BOXES AS REQUIRED IN FDOT STANDARD PLAN 635-001. ALL CONDUIT SHALL BE 2 INCH, SCHEDULE 40 PVC UNLESS SPECIFIED OTHERWISE IN THE PLANS OR SPECIFICATIONS. ALL SPARE CONDUITS SHALL ENTER THE SIGNAL CABLE PULL BOX UNLESS OTHERWISE STATED IN THE PLAN.
- 630-2-12 SHALL CONSIST OF MULTIPLE 2 INCH SCHEDULE 40 PVC SLEEVES PER BORE. SEE SPECIFIC PLAN SHEETS FOR NUMBER REQUIRED FOR THE BORE. ALL DIRECTIONAL BORING SHALL BE DONE IN CONFORMANCE WITH FDOT UTILITY ACCOMMODATIONS MANUAL REQUIREMENTS.
- 632-7-1 SHALL BE INSTALLED PER FDOT STANDARD PLAN 634-001 AS APPLICABLE. THREE SPARE CONDUCTORS PER SIGNAL CABLE ARE REQUIRED. SPARES SHALL BE GROUNDED TO THE BUS GROUNDING FACILITY IN THE CONTROLLER CABINET. MAST ARM CABLING SHALL CONSIST OF A TWENTY CONDUCTOR IMSA-19 SIGNAL CABLE FROM CONTROL CABINET TO EACH MAST ARM. EACH CONDUCTOR SHALL BE TERMINATED UPON THE 20 TERMINAL-TERMINAL BLOCK LOCATED IN THE TERMINAL COMPARTMENT OF THE MAST. A SEPARATE IMSA-19 SEVEN CONDUCTOR SHALL BE RUN FROM THE TERMINAL BLOCK TO EACH SIGNAL HEAD. PEDESTRIAN SIGNALS SHALL HAVE A SEVEN CONDUCTOR TO EACH PEDESTRIAN SIGNAL HEAD ALONG WITH A FOUR CONDUCTOR FOR THE PEDESTRIAN DETECTORS. SPAN WIRE INSTALLATIONS SHOULD CONSIST OF A SEPARATE IMSA-19 TWELVE CONDUCTOR CABLE TO EACH APPROACH. PEDESTRIAN SIGNALS SHALL HAVE AN IMSA-19 SEVEN CONDUCTOR TO EACH CORNER ALONG WITH A FOUR CONDUCTOR FOR THE PEDESTRIAN DETECTORS THESE CABLES SHOULD RUN FROM PEDESTRIAN SIGNAL TO CONTROL CABINET DIRECTLY.
- 633-3-15 TRAFFIC SIGNAL CABINET INSTALLATIONS WITH FIBER OPTIC PATCH PANELS CONTAINING TWELVE OR LESS CONNECTORS SHALL BE: DIN RAIL MOUNTED ON THE NON-HINGED SIDE OF THE CABINET. FIBER OPTIC CABLING SHALL BE INSTALLED TO ALLOW REMOVAL WITHOUT REMOVAL OF OTHER CABINET COMPONENTS SUCH AS SHELVING. THE MAXIMUM PATCH PANEL SIZE SHALL NOT EXCEED 6.3 INCHES X 5.5 INCHES X 2.0 INCHES.
- 635-2-11 SHALL BE INSTALLED IN ACCORDANCE WITH FDOT DESIGN STANDARD PLAN 635-001, AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SIZE THE PULL BOXES SUCH THAT THEY WILL ALLOW PLACEMENT OF ALL CABLES INSIDE THE PULL BOXES WHILE MAINTAINING THE REQUIRED MINIMUM BENDING RADII ON THE CABLES AND NOT EXCEEDING THE MAXIMUM BENDING RADII OF THE CABLES. PULL BOX COVERS SHALL BE FDOT APPROVED OF NON-METALLIC CONSTRUCTION WITH RECESSED COVER LOGO "TRAFFIC SIGNAL" OR "FIBER OPTIC" AS APPROPRIATE. PULL BOXES SHALL BE QUAZITE AND PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, THE PULL BOXES SHALL BE PLACED A MINIMUM OF 7 FEET FROM THE EDGE OF PAVEMENT WITH PULL BOXES AND LIDS BEING TRAFFIC BEARING. PULL BOXES SHALL NOT BE PLACED IN PEDESTRIAN RAMPS. PULL BOXES SHALL HAVE CONCRETE MOWER PADS IN ACCORDANCE WITH STANDARD DESIGN PLAN 635-001.
- 639-1-112 SHALL INCLUDE THE COST OF ALL LABOR, MATERIALS, AND PERMITS REQUIRED TO FURNISH AND INSTALL THE ASSEMBLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL AGENCIES REQUIRED FOR APPROVAL OF THE COMPLETED INSTALLATION. FDOT DESIGN STANDARD PLAN 639-001, 639-002 (AS APPLICABLE) SHALL APPLY.
- 639-2-1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING THE CONDUCTORS FOR THE POWER SERVICE.
- 639-1-122 SHALL CONSIST OF 4 VEHICLE DETECTOR ASSEMBLIES (VIDEO TYPE), TRAFFICSENSE FLIR AND WAVETRONIX SMART SENSOR ADVANCE, LATEST TECHNOLOGY, FOR DILEMMA ZONE PROTECTION ON HIGH SPEED APPROACHES. A COMPLETE VIDEO DETECTION INSTALLATION CONSISTENT WITH INDIAN RIVER COUNTY STANDARDS FOR ALL APPROACHES OF THE INTERSECTION IS REQUIRED. THE EQUIPMENT SHALL BE VIDEO DETECTION UNITS CAPABLE OF INTERFACE WITH THE TRAFFIC SIGNAL CONTROLLER UNIT AND SHALL INCLUDE THE COST OF MOUNTING ARMS TO EXTEND CAMERA TO A POSITION OVER THE ROADWAY UNLESS OTHERWISE STATED ON THE PLAN. THE CONTRACTOR IS REQUIRED TO COORDINATE WITH THE SUPPLIER AND INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION TO ENSURE RELIABLE OPERATION. CAMERA LOCATIONS MAY REQUIRE ADJUSTMENT IN THE FIELD. CONTACT INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION BEFORE ORDERING. THE CONTRACTOR SHALL COORDINATE WITH THE WAVETRONIX MANUFACTURER FOR MOUNTING LOCATIONS ON THE MAST ARMS.
- 660-4-11 DETECTOR WIRE SHALL BE TWO CONDUCTOR #12 AWG IMSA 50-2.
- 670-5-111 SHALL BE ECONOLITE TYPE 6 CABINET WITH INTERNAL PHOTO CELL STREET SIGN CONTROL. THE CONTRACTOR SHOULD COORDINATE WITH THE INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION PRIOR TO ORDERING ANY CONTROLLER RELATED EQUIPMENT.
- 715-5-31 MAST ARM LUMINAIRES SHALL BE PAINTED HIGHWAY GREEN. SHALL BE ATB2 P601 MVOLT R4 3K, 25KLUM.

ALL TRAFFIC SIGNAL EQUIPMENT MUST BE CONSISTENT WITH INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS. CONTRACTOR SHALL COORDINATE WITH THE INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION TO CONFIRM THAT EQUIPMENT STANDARDS HAVE NOT CHANGED SINCE THE TIME OF PUBLICATION OF THESE PLANS.



PATRICIA MARIE BARR, P.E., STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 56925
 THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY PATRICIA MARIE BARR, P.E. ON 9/28/2022 USING A SHA-1 AUTHENTICATION CODE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



DESIGN T.B. DRAWN C.O. CHECKED A.L. APPROVED R.R. DATE

53RD STREET AND 66TH AVENUE
 IRC-1505
 TABULATION OF QUANTITIES

JOB NO. 21-082 DRAWING NO. 21082T02 SHEET OF T-2 T-10

INDIAN RIVER COUNTY – TRAFFIC SIGNAL GENERAL NOTES

- 1.) ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD); FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (STANDARD SPECIFICATIONS) JULY 2021. FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS FY 2022-2023, ALL SUPPLEMENTS THERETO; NATIONAL ELECTRIC CODE; INDIAN RIVER COUNTY TRAFFIC SIGNAL SPECIFICATIONS; AND ANY OR ALL INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION REQUIREMENTS.
- 2.) THE AGENCY RESPONSIBLE FOR MAINTENANCE OF THE TRAFFIC SIGNAL AND RELATED COMMUNICATIONS EQUIPMENT IS INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION (IRCTED) (772) 226-1547. ALL TRAFFIC SIGNAL AND RELATED COMMUNICATIONS EQUIPMENT WHEN USING PAY ITEM SERIES: 632, 634, 635, 660, 670, 684 AND 685 FOR THIS CONTRACT SHALL BE COMPATIBLE WITH IRCTED'S CENTRAL COMPUTER NETWORK SYSTEM. PRIOR TO ANY PURCHASING OF THE ABOVE PRODUCTS, ENSURE THEY HAVE BEEN APPROVED FOR SYSTEM COMPATIBILITY BY THE MAINTAINING AGENCY.
- 3.) IRCTED SHALL BE NOTIFIED AT (772) 226-1547 AT LEAST TWO (2) FULL BUSINESS DAYS PRIOR TO ANY WORK BEING PERFORMED AT A SIGNALIZED LOCATION IN ORDER TO PROPERLY TRANSFER MAINTENANCE RESPONSIBILITIES.
- 4.) THE CONTRACTOR SHALL DELIVER ALL REMOVED TRAFFIC SIGNAL EQUIPMENT, EXCEPT CONCRETE STRAIN POLES, TO IRCTED LOCATED AT 4548 41ST STREET, VERO BEACH, FL 32967 (772) 226-3460. THE COST OF DELIVERY TO IRCTED SHALL BE INCLUDED IN THE REMOVAL OF THE RELATED SIGNAL PAY ITEM. THE CONTRACTOR SHALL CONTACT THE IRCTED SEVEN (7) FULL BUSINESS DAYS PRIOR TO THE DELIVERY OF ANY REMOVED EQUIPMENT. CONTRACTOR IS RESPONSIBLE FOR CONCRETE STRAIN POLE DISPOSAL AT THE CONTRACTOR'S EXPENSE.
- 5.) THE CONTRACTOR SHALL BE ADVISED THAT OTHER PROJECTS MAY BE UNDER CONSTRUCTION CONCURRENTLY WITH THIS PROJECT AND THAT COORDINATION EFFORTS MAY BE NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE CONSTRUCTION SCHEDULE AND FOR THE AMOUNT OF COORDINATION REQUIRED. THE COST SHALL BE INCLUDED IN THE BID.
- 6.) LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND OTHER FEATURES AFFECTING HIS/HER WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER IMMEDIATELY AND PRIOR TO ANY FURTHER RELATED WORK ACTIVITY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED.
- 7.) THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE-CALL AT 1-800-432-4770 FOR LOCATIONS OF UTILITIES WITHIN THE AREA(S) OF CONSTRUCTION FOR THIS PROJECT A MINIMUM OF THREE (3) FULL BUSINESS DAYS PRIOR TO ANY DIGGING OR EXCAVATION ACTIVITIES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CONTACT ANY UTILITY OWNER(S) THAT MAY NOT BE A "SUNSHINE" MEMBER.
- 8.) EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE LOCATION AND PROTECTION, REPAIR AND/OR REPLACEMENT OF ALL UTILITIES THAT MAY BE AFFECTED BY THE CONSTRUCTION OF THIS PROJECT. EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ANY REQUIRED UTILITY RELOCATIONS.
- 9.) THE CONTRACTOR SHALL NOTIFY ALL INVOLVED UTILITIES TWO (2) FULL BUSINESS DAYS IN ADVANCE, BEFORE SETTING TRAFFIC SIGNAL POLES OR PERFORMING ANY DIGGING OR OTHER EXCAVATION WORK, SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT. THE LOCATION OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR. KNOWN UTILITY COMPANIES INCLUDE:

COMPANY	FACILITIES	CONTACT	TELEPHONE NUMBER
SUNSHINE STATE ONE CALL			811
AT&T	TELEPHONE	LUKE FOLKERTS	(407) 496-6041
CITY GAS COMPANY OF FLORIDA	GAS	DOROTHY HAMILTON	(321) 638-3412
COMCAST	CABLE	ANTHONY SPRINGSTEEL	(772) 321-3425
FPL (INDIAN RIVER)	ELECTRIC	ROB MORRIS	(772) 223-4215
INDIAN RIVER COUNTY PUBLIC WORKS	SIGNALIZATION	JOHN ANKENY	(772) 226-1563
INDIAN RIVER COUNTY	WATER & SEWER	JOHN BOYER	(772) 226-1823
INDIAN RIVER COUNTY	WATER & SEWER	JESSE ROLAND	(772) 226-1636
- 10.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE COMPANY PROVIDING ELECTRICAL POWER TO DETERMINE IF A SERVICE PROCESSING FEE IS REQUIRED. IF REQUIRED, FEE SHALL BE REFLECTED IN THE CONTRACTOR'S BID UNIT PRICE FOR ELECTRICAL POWER SERVICE ASSEMBLY.
- 11.) THE CONTRACTOR SHALL COORDINATE AND FIELD VERIFY LOCATION(S) OF THE ELECTRIC SERVICE POINT PRIOR TO INSTALLING CONDUIT, DISCONNECT SWITCH, AND PULL BOXES.
- 12.) IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR TRENCHING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS IN ACCORDANCE WITH SECTION 2-4 OF THE FDOT SPECIFICATIONS.
- 13.) THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN ACCORDANCE WITH THE APPLICABLE GUIDELINES SET FORTH IN FDOT DESIGN STANDARD INDEXES 102-600 THROUGH 660; THE MUTCD; AND SECTION 102 OF THE STANDARD SPECIFICATIONS.
- 14.) THE CONTRACTOR SHALL MAKE ALL VIDEO DETECTORS INSTALLED AS PART OF THE PROJECT FULLY OPERATIONAL IN ACCORDANCE WITH THEIR ASSOCIATED ISOLATED INTERSECTION SIGNAL TIMING CHART PRIOR TO THE ACTIVATION OF THE SIGNAL.
- 15.) THE CONTRACTOR SHALL VERIFY ALL SIGNAL POLE ELEVATIONS AND LOCATIONS INCLUDING POSSIBLE UTILITY CONFLICTS PRIOR TO PROCUREMENT. THE CONTRACTOR SHALL VERIFY THAT ALL SIGNAL POLE ELEVATIONS WILL MEET MUTCD, FDOT AND INDIAN RIVER COUNTY REQUIREMENTS FOR LOW POINT OF CLEARANCE. ALL SIGNAL ASSEMBLIES SHALL HAVE A VERTICAL CLEARANCE OF 17.5 FEET MINIMUM AND 19 FEET MAXIMUM FROM THE BOTTOM OF THE ASSEMBLY TO THE ROAD.
- 16.) UNDER NO CIRCUMSTANCES SHALL ENERGIZED SIGNAL CABLE BE PLACED IN THE SAME CONDUIT OR PULL BOX AS VIDEO DETECTION CABLE OR COMMUNICATION.
- 17.) ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHERPROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM PROPOSED SHALL BE SUBMITTED FOR APPROVAL WITH THE OTHER EQUIPMENT SUBMITTALS REQUIRED FOR THIS PROJECT.
- 18.) THE CABINET DOOR SHALL OPEN AWAY FROM THE INTERSECTION UNLESS SPECIFIED OTHERWISE.
- 19.) TRAFFIC SIGNAL ACCEPTANCE TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS.
- 20.) THERE WILL BE A 90 DAY WARRANTY PERIOD SUBJECT TO THE REQUIREMENTS CONTAINED IN ARTICLE (SECTIONS 611-5 THROUGH 611-7.3) "CONTRACTOR'S WARRANTY PERIOD FOR SIGNAL INSTALLATIONS" AS FOUND IN FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 21.) THE CONTRACTOR SHALL PROVIDE FOUR COPIES OF MARKED-UP (AS-BUILT) CONSTRUCTION PLANS, ALSO A COPY OF SHOP DRAWING AND A COPY OF MAST ARM SPECIFICATION AND ANY/ALL APPROVED SHOP DRAWINGS AT THE TIME OF SIGNAL CONDITIONAL ACCEPTANCE INSPECTION BY THE MAINTAINING AGENCY.
- 22.) ALL SUBMITTALS AND SHOP DRAWINGS SHALL BE SUBMITTED ELECTRONICALLY TO THE ENGINEER OF RECORD FOR REVIEW IN ACCORDANCE WITH SECTION 603 OF THE STANDARD SPECIFICATIONS. ALL SUBMITTALS SHOULD BE SENT TO: TRICIA@SIMMONSANDWHITE.COM (561) 478-7848
- 23.) THE CONTRACTOR SHALL SUBMIT IN WRITING A REQUEST FOR SIGNAL INSPECTION TO THE MAINTAINING AGENCY. (ALLOW TWO (2) WEEKS FOR SIGNAL INSPECTION).

- 24.) THE CONTRACTOR SHALL PROVIDE AND MAINTAIN PORTABLE CHANGEABLE (VARIABLE) MESSAGE SIGNS (PCMS) FOR A PERIOD OF TWO WEEKS. THE PCMS WILL BE LOCATED AT AN APPROPRIATE DISTANCE IN ADVANCE OF THE APPROACHES TO THE NEW SIGNALIZED INTERSECTION AS SPECIFIED BY THE MAINTAINING AGENCY'S ENGINEER. THE PCMS WILL BE PROVIDED ONE (1) WEEK PRIOR TO THE SCHEDULED ACTIVATION TO FULL COLOR OPERATION AND SHALL REMAIN IN PLACE FOR ONE (1) WEEK FOLLOWING ACTIVATION. COST OF FURNISHING PCMS TO BE INCLUDED UNDER PAY ITEM NO. 102-1 – MAINTENANCE OF TRAFFIC.
- 25.) IN ACCORDANCE WITH FDOT STANDARDS & SPECIFICATIONS, THE CONTRACTOR SHALL PROVIDE THE ASSOCIATED TRAFFIC SIGNAL MANUFACTURER WARRANTIES FOR THE ASSOCIATED MATERIALS AND/OR EQUIPMENT PRIOR TO THE FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL.
- 26.) PRIOR TO ACTIVATION THE PCMS SIGN SHALL BE:
 - (PANEL ONE – LINE 1) "TRAFFIC"
 - (PANEL ONE – LINE 2) "SIGNAL"
 - (PANEL ONE – LINE 3) "WILL BE"
 - (PANEL TWO – LINE 1) "ACTIVE"
 - (PANEL TWO – LINE 2) "ON DAY"
 - (PANEL TWO – LINE 3) "MONTH XX"

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

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

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

- 27.) AFTER THE TURN-ON, THE PCMS SHALL BE CHANGED TO:
 - (PANEL ONE – LINE 1) "TRAFFIC"
 - (PANEL ONE – LINE 2) "SIGNAL"
 - (PANEL TWO – LINE 1) "NOW"
 - (PANEL TWO – LINE 2) "ACTIVE"
 PANEL TWO, LINE 1 AND LINE 2, SHALL FLASH THREE (3) TIMES BEFORE REVERTING BACK TO PANEL ONE.

PRIOR TO SIGNAL ACTIVATION



AFTER SIGNAL ACTIVATION



- 28.) THE ENGINEER OR CONTRACTOR SHALL SUBMIT IN WRITING A REQUEST FOR SIGNAL ACTIVATION (TURN-ON) TO THE MAINTAINING AGENCY. THE MAINTAINING AGENCY WILL SCHEDULE THE SIGNAL ACTIVATION A MINIMUM OF SEVEN (7) DAYS AFTER NOTIFICATION THAT THE SIGNAL HAS BEEN PLACED IN FLASHING MODE AND INSPECTIONS BY MAINTAINING AGENCY FORCES HAVE BEEN COMPLETED.
- 29.) THE CONTRACTOR SHALL BE PRESENT AND SHALL CONDUCT THE TURN-ON TO FULL COLOR OPERATION IN THE PRESENCE OF THE MAINTAINING AGENCY'S ENGINEER. NO ACTIVATIONS SHALL BE SCHEDULED ON MONDAYS, FRIDAYS OR WEEKENDS UNLESS OTHERWISE APPROVED BY THE MAINTAINING AGENCY'S ENGINEER. ANY PROPOSED OR NECESSARY SCHEDULE CHANGE DURING THE SEVEN (7) DAYS PRIOR TO SCHEDULED TURN-ON WILL BE AT THE DETERMINATION AND DISCRETION OF THE MAINTAINING AGENCY'S ENGINEER.
- 30.) UPON COMPLETION AND FINAL ACCEPTANCE OF THE PERMANENT TRAFFIC SIGNAL INSTALLATION BY INDIAN RIVER COUNTY, THE SIGNALS AND EQUIPMENT SHALL BE MAINTAINED BY IRCTED.

- 31.) WHEN IRCTED DETERMINES THAT THE NEED FOR A TRAFFIC SIGNAL IS CRITICAL TO THE PUBLIC WELFARE, EARLY TURN-ON OF THE SIGNAL MAY BE REQUIRED BEFORE THE COMPLETION OF THE CONTRACT. IF THIS NEED ARISES, IRCTED MAY ASSUME THE RESPONSIBILITY FOR MAINTENANCE AND LIABILITY, OR NEGOTIATE WITH THE CONTRACTOR FOR MAINTENANCE AND LIABILITY, FOR SUCH A SIGNAL. NEW SIGNALS SHALL NOT BE PLACED ON FULL COLOR OPERATION UNTIL THE DATE OF INSPECTION EXCEPT AS STATED ABOVE. NEW SIGNALS SHALL BE FLASHED NO LESS THAN A WEEK OR MORE THAN TWO WEEKS PRIOR TO THE INSPECTION. SIGNAL HEADS MUST BE BAGGED WITH BURLAP OR TURNED BACK UNTIL THIS TIME.

- A. POWER SERVICE
 - POWER SERVICES SHALL FOLLOW THE LATEST STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARD PLANS 639-001, 639-002.
 - SERVICE BREAKER BOX SHALL BE SQUARE-D MODEL #0024L70RB, OR APPROVED EQUIVALENT.
 - POWER SERVICES ARE TO BE 120/240 VAC WITH TRIPLEX SERVICE DROP WIRE WITH TWO BLACK AND ONE WHITE CABLE FROM SERVICE DISCONNECT TO POWER SERVICE CONNECTION POINT.
 - ALL ABOVE GROUND CONDUIT SHALL BE HD GALVANIZED OR ALUMINUM.
 - MAST ARM POWER SERVICES SHALL BE MOUNTED ON A STUB POLE.
 - UNDERGROUND POWER SERVICE SHALL HAVE A LOAD PULL BOX AND A SEPARATE LINE PULL BOX AT THE SERVICE POINT.
 - CONCRETE STRAIN POLE INSTALLATIONS SHOULD HAVE THE POWER SERVICE MOUNTED ON THE STRAIN POLE.

- B. TRAFFIC SIGNAL CONTROLLER
 - SHALL BE COMPATIBLE WITH ECONOLITE SYSTEM SOFTWARE.
 - SHALL HAVE INTERNAL TIME-BASED CAPABILITIES.
 - SHALL HAVE INTERNAL RAILROAD PREEMPTION WITH IMMEDIATE RETURN TO COORDINATION.

- C. TRAFFIC SIGNAL COMMUNICATIONS INTERCONNECT

NOTE: VARIANCE TO COMMUNICATION INTERCONNECT DUE TO DESIGN CRITERIA WOULD REQUIRE PRIOR APPROVAL FROM INDIAN RIVER COUNTY.

 - TWO 2" CONDUITS SHALL BE INSTALLED WITH ALL INTERCONNECT RUNS.
 - PULL BOXES CONTAINING INTERCONNECT ARE TO BE INSTALLED AT NO MORE THAN 1000 FOOT INTERVALS MARKED "TRAFFIC SIGNAL" (FDOT DESIGN STANDARD PLAN 635-001).
 - FIBER OPTIC INTERCONNECT RUNS SHALL HAVE A SLACK/SPLICE BOX AT ALL SIGNALIZED INTERSECTIONS MARKED "FIBER OPTICS". SLACK/SPLICE BOXES SHALL CONTAIN A MINIMUM OF 100 FEET OF FIBER OPTIC CABLE SLACK (FDOT DESIGN STANDARD 635-001) AND SHALL BE LOCATED AT NO MORE THAN 1/2-MILE INTERVALS.
 - FIBER OPTIC CABLE SHALL BE 96-FIBER SINGLE MODE. A #14 AWG (OR IRC-APPROVED ALTERNATIVE) TRACE WIRE SHALL BE INSTALLED WITH THE FIBER RUN.
 - THE CONNECTION FROM THE SLACK/SPLICE BOX TO THE SIGNAL CABINET (PIG TAIL) SHALL BE A 12-FIBER SINGLE MODE CABLE. FIBER IN THE CABINET SHALL BE TERMINATED IN A FIBER OPTIC TERMINAL PANEL. THE FIBER CABLE SHALL NOT BE RUN BEHIND SHELVING.
 - IN THE CABINET, DATA CONVERSION WILL BE ACCOMPLISHED WITH EXTREME NETWORKS MODEL ISW 4GBP, 2GBT, 2-SFP, PART NO. 16803, 6-100 BIT PORTS WITH 4 POE AND 2-SFP AT ONE GIG, OR IRC-APPROVED EQUIVALENT.
 - RADIO LINK SHOULD BE ECONOLITE INTUICOM RADIO ACCESS POINT OR REMOTE STATION. INCLUDES MOUNTING HARDWARE, POE INJECTOR OR APPROVED EQUIVALENT.

- D. TRAFFIC SIGNAL MAST ARM
 - MAST ARMS SHALL FOLLOW THE LATEST STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS 649-030, 649-031.
 - EACH LUMINAIRE SHALL BE PHOTO CELL CONTROLLER AND NOT POWERED THROUGH SIGNAL CABINET. WIRING SHALL BE #10 AWG OR LARGER SIZE AWG. LUMINAIRE CASING SHALL HAVE AN I.R.C. SUPPLIED STICKER ADHERED TO THE CASING.
 - MAST ARM POLES ARE TO HAVE A TERMINAL COMPARTMENT IN PLACE OF A HAND HOLE, PER STANDARD 649-031.
 - MAST ARM MOUNTING HEIGHT (MEASUREMENT UB, STANDARD PLAN 649-030) SHALL BE 19- FEET FOR HORIZONTAL AND 20- FEET FOR VERTICAL MOUNTED SIGNALS, IN THE ABSENCE OF GEOMETRIC ABNORMALITIES.
 - ALL MAST ARMS SHALL BE GALVANIZED STEEL WITH FACTORY FINISHED U.S. GOVERNMENT AMS-STD 595 #14066 (HIGHWAY GREEN) IN ACCORDANCE WITH FDOT.
 - EACH TERMINAL COMPARTMENT SHALL HAVE A 20 CIRCUIT AWG#14 TERMINAL BLOCK.
 - ALL MAST ARM POLES SHALL HAVE REMOVEABLE L.E.D. TUBE WITH R17-D ENDS HEAD LUMINAIRES, BARRING OBSTRUCTIONS OR DESIGN CRITERIA. MAST ARMS ARE TO HAVE L.E.D. INTERNALLY-ILLUMINATED SINGLE-SIDED STREET NAME SIGNS WITH LOCAL STREET NAMES AND 1" WHITE BORDER. THE SIGNS SHALL BE CONTROLLED FROM A PHOTO CELL WITHIN THE SIGNAL CABINET; THE SIGNS ARE NOT TO HAVE INDIVIDUAL PHOTO CELL. THE STREET NAME SIGNS ARE TO BE MOUNTED WITH FIXED BRACKETS ON THE ARM BETWEEN THE POLE AND THE FIRST TRAFFIC SIGNAL.

- E. TRAFFIC SIGNAL POLES & SPAN WIRE
 - POLES SHALL FOLLOW THE LATEST STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARD PLAN 641-010.
 - STRAIN POLES SHALL HAVE L.E.D., COBRA HEAD STYLE LUMINAIRES, BARRING OBSTRUCTIONS OR DESIGN CRITERIA. EACH LUMINAIRE SHALL BE PHOTO CELL CONTROLLER AND NOT POWERED THROUGH SIGNAL CABINET.
 - ALL ABOVE GROUND CONDUIT SHALL BE HD GALVANIZED.
 - BOTH UPPER AND LOWER SPAN SHALL BE NO LESS THAN 3/8 INCH CABLE WIRE.
 - THE SIGNAL CABLE SHALL BE ATTACHED TO THE MESSENGER WIRE BY LASHING RODS.

- F. TRAFFIC SIGNAL HEADS
 - TRAFFIC SIGNALS MOUNTED ON SPAN CABLE ARE TO BE LIGHTWEIGHT McCAIN SIGNAL, (RED SECTION TO BE ALUMINUM AND ALL OTHER SECTIONS TO BE POLY PLASTIC), 12 INCH INDICATIONS.
 - TRAFFIC SIGNALS MOUNTED ON MAST SUPPORTS ARE TO BE ALL ALUMINUM McCAIN SIGNAL 12-INCH INDICATIONS. THE MOUNTING SHALL BE HORIZONTAL USING PELCO ASTRO BRAC OR IRC-APPROVED EQUIVALENT. SPAN MOUNT SIGNALS ARE TO BE MOUNTED VERTICAL. ALL VEHICLE SIGNAL HEADS ARE TO HAVE RETRO-REFLECTIVE BACK PLATES.
 - TRAFFIC SIGNALS ARE TO BE SUPPLIED WITH ALL L.E.D. INDICATIONS, INCLUDING ALL ARROWS AND YELLOWS.
 - TRAFFIC SIGNALS ARE TO BE SUPPLIED WITH TUNNEL VISORS.
 - TRAFFIC SIGNALS AND ASSOCIATED ACCESSORIES, INCLUDING BUT NOT LIMITED TO BACKPLATES SHALL BE McCAIN.
 - PEDESTRIAN SIGNALS ARE TO BE COUNT DOWN PEDESTRIAN SIGNALS WITH INTERNATIONAL-STYLE HAND/MAN (SYMBOLS) WITH FULL (NOT OUTLINE) L.E.D. INDICATIONS. EACH CORNER WILL BE FED WITH ONE SEVEN CONDUCTOR CABLE FOR PEDESTRIAN SIGNAL HEAD AND ONE FOUR CONDUCTOR CABLE FOR PEDESTRIAN DETECTOR. THESE CABLES WILL RUN FROM PEDESTRIAN SIGNAL AND DETECTOR DIRECTLY TO CONTROLLER BOX. (NO SPLICES.) PEDESTRIAN DETECTOR SIGNALS ARE TO BE R10-31.

- G. VIDEO DETECTORS
 - VIDEO DETECTION SYSTEM SHALL BE TRAFISENSE2 632 FLIR OR IRC-APPROVED EQUIVALENT.
- H. VIDEO SURVEILLANCE
 - VIDEO CAMERAS SHALL BE AXIS Q6075-E PTZ DOME NETWORK CAMERA WITH SURGE PROTECTOR AND AXIS TB144 60 W INDUSTRIAL MIDSPAN POE POWER SUPPLY, LATEST TECHNOLOGY OR IRC-APPROVED EQUIVALENT.

- I. BATTERY BACK-UP
 - BATTERY BACKUP SYSTEM IS TO BE USED ON ALL INSTALLATIONS UNLESS OTHERWISE STATED.
 - BATTERY BACKUP SHALL BE MYERS UPS SYSTEM MP2000E-TB WITH STANDING CABINET, EXTERNAL GENERATOR PLUG, ETHERNET CARD.

PATRICIA MARIE BARR, P.E., STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 56925

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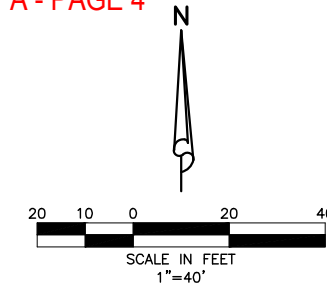
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T.B.	C.O.	A.L.	R.R.	

53RD STREET AND 66TH AVENUE

IRC-1505

GENERAL NOTES

JOB NO.	DRAWING NO.	SHEET	OF
21-082	21082T03	T-3	T-10



PEDESTRIAN SIGNAL POLE

25 LF	630-2-11
1 EA	635-2-11
1 EA	646-1-11
1 EA	665-1-11

PROPOSED CONCRETE MONUMENT W/ ELECTRICAL DISCONNECT. CONSTRUCT PULL BOX FOR POWER SERVICES.

1 EA	635-2-11
1 EA	639-3-11
1 EA	641-2-12

ECONOLITE CONTROLLER W/ TYPE 6 CABINET (4 RUNS @ 6')

24 LF	630-2-11
1 PI	632-7-1
12 EA	633-2-31
1 EA	633-3-11
1 EA	633-3-15
3 EA	635-2-11
1 EA	635-2-12
1 AS	639-1-122
300 LF	639-2-1
8 EA	660-4-11
1 AS	670-5-110
1 EA	684-1-1

PEDESTRIAN SIGNAL POLE

25 LF	630-2-11
1 EA	635-2-11
1 EA	646-1-11
1 EA	665-1-11

POLE LOCATION = (A) STA. 312+78.00/96.00' LT. ELEV. = 24.90

(4 RUNS @ 7')

28 LF	630-2-11
3 EA	635-2-11
1 EA	649-21-10
1 EA	660-4-12
1 EA	715-5-31

EXISTING TOP OF BANK FURNISH & INSTALL IRC TRAFFIC 5-2" PVC CONDUITS 630-2-12 (5 RUNS) 160 LF

POLE LOCATION STA. 313+00.68/62.06' RT. ELEV. = 25.00 (SEE NOTE 2)

28 LF	630-2-11	(4 RUNS @ 7')
3 EA	635-2-11	
1 EA	649-21-10	
1 EA	660-4-12	
1 EA	715-5-31	

PEDESTRIAN SIGNAL POLE

10 LF	630-2-11
1 EA	635-2-11
1 EA	646-1-11
1 EA	665-1-11

LEGEND

- (C) SIGN
- (A) MAST ARM
- (V2) VIDEO DETECTOR
- (3) SIGNAL HEAD
- (P2) PEDESTRIAN HEAD
- OD-2 DETECTION ZONE

REMOVAL ITEMS

2 AS	700-1-60
------	----------

DESIGN NOTES:
INDIAN RIVER COUNTY WANTS A SHORTER 10' LUMINAIRE ARM ON MAST ARM A SHOULD THERE BE CONFLICTS WITH THE FPL OVERHEAD ELECTRIC ONCE FPL IS INSTALLED.

CONSTRUCT PULL BOX & IRC TRAFFIC 1-2" P.V.C. CONDUIT FOR POWER SERVICES

115 LF	630-2-12
1 EA	635-2-11

EXISTING TOP OF BANK
EXISTING R/W LINE

PEDESTRIAN SIGNAL POLE

40 LF	630-2-11
1 EA	635-2-11
1 EA	646-1-11
1 EA	665-1-11

FURNISH & INSTALL IRC TRAFFIC 6-2" PVC CONDUITS

(6 RUNS) 150 LF

630-2-12

FURNISH & INSTALL IRC TRAFFIC 5-2" PVC CONDUITS (5 RUNS) 140 LF

630-2-12

FPL POWER SOURCE LOCATION IS ±120' SOUTH OF INTERSECTION. CONSTRUCT PULL BOX & IRC TRAFFIC 1-2" P.V.C. CONDUIT FOR POWER SERVICES.

105 LF	630-2-12
1 EA	635-2-11

POLE LOCATION = (D) STA. 311+42.01/68.99' LT. ELEV. = 25.20 (SEE NOTE 3)

(4 RUNS @ 7')

28 LF	630-2-11
3 EA	635-2-11
1 EA	649-21-15
1 EA	660-4-12
1 EA	715-5-31

POLE LOCATION STA. 311+70.20/61.35' RT. ELEV. = 25.00 (SEE NOTES 2 & 3)

28 LF	630-2-11	(4 RUNS @ 7')
3 EA	635-2-11	
1 EA	649-21-15	
1 EA	660-4-12	
1 EA	715-5-31	

PROPOSED CONCRETE BARRIER
PROPOSED GUARDRAIL

CCTV CAMERA 682-1-133 1 EA

EXISTING TOP OF BANK
EXISTING R/W LINE

NOTES:

- ALL STATIONS/OFFSETS ARE MEASURED W.R.T. THE BASELINE OF 66TH AVENUE.
- IF MAST ARMS B OR C ARE PLACED BEFORE THE ULTIMATE ROADWAY CONDITION, GUARDRAIL PROTECTION IS REQUIRED.
- MAST ARMS C & D SHALL BE PLACED ONLY AFTER THE PROPOSED SURFACE WATER FILL IN IS PLACED PER THE ROADWAY PLANS BY ARCADIS (SEE NOTE 4).
- REFER TO ROADWAY AND SIGNING & MARKING PLANS BY ARCADIS U.S., INC. FOR IRC PROJECT NUMBER 1505.

PATRICIA MARIE BARR, P.E., STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 56925

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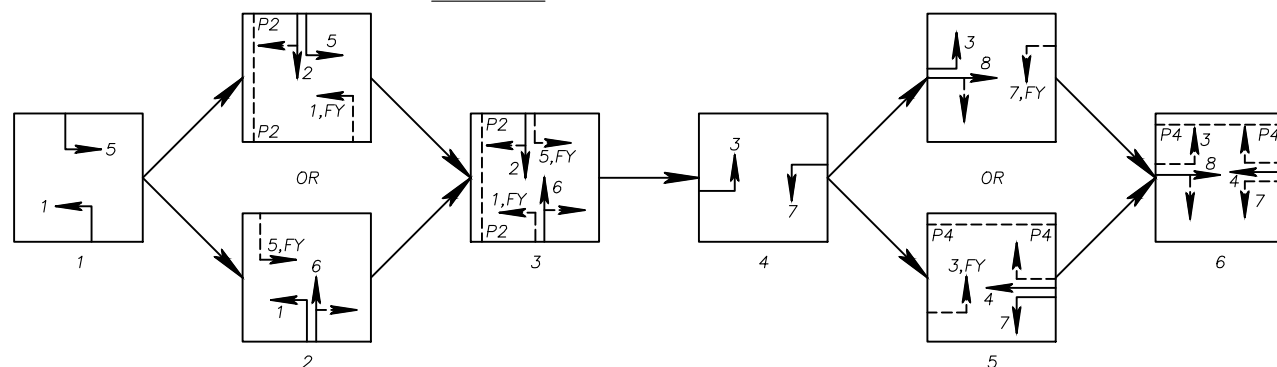
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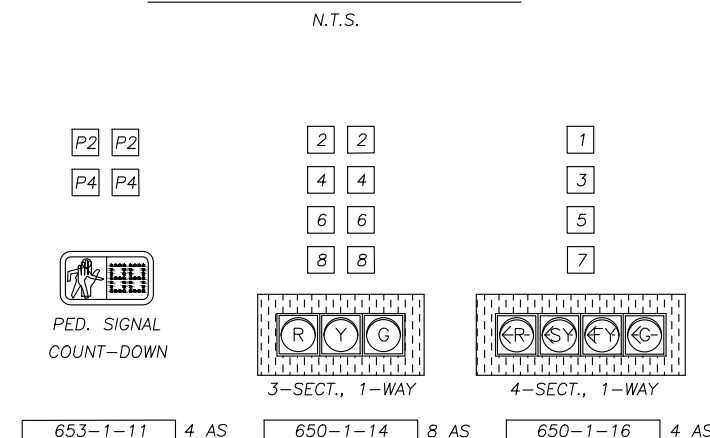
53RD STREET AND 66TH AVENUE
IRC-1505
SIGNALIZATION PLAN

JOB NO.	DRAWING NO.	SHEET OF
21-082	21082T04	T-4 T-10

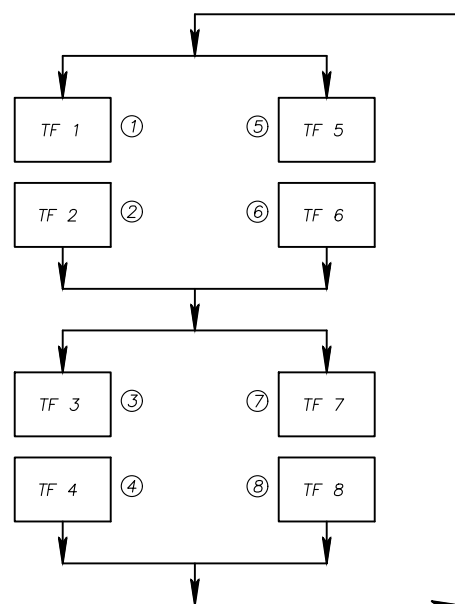
SOP 10



DETAIL OF SIGNAL HEADS



RING DIAGRAM



VIDEO DETECTOR CHART

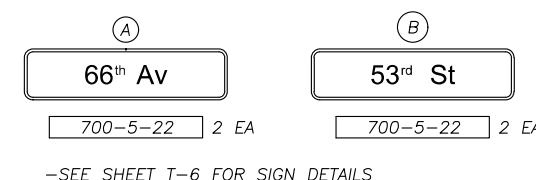
DETECTOR NO.	MOVEMENTS
V-1	2, 5
V-2	4, 4R, 7
V-3	1, 6
V-4	3, 8

SIGNAL TIMING

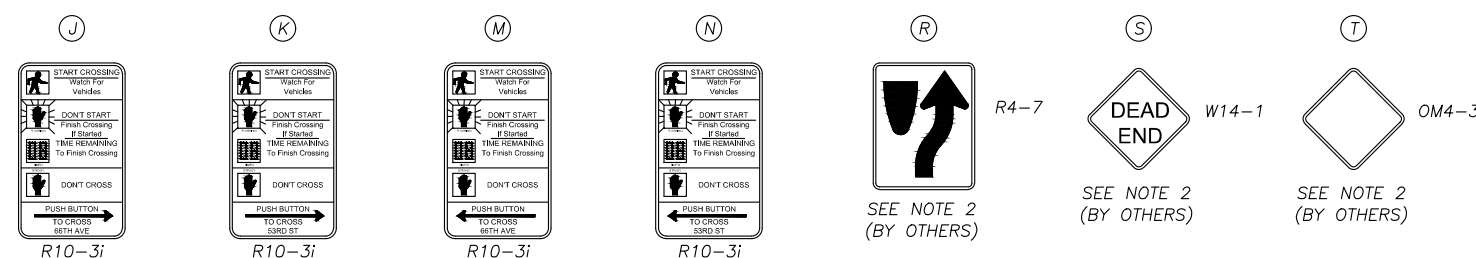
CONTROLLER PHASING	1	2	3	4	5	6	7	8
TIMING FUNCTION NUMBER	1	2	3	4	5	6	7	8
FACE NUMBER (SEE SOP)	1	2	3	4	5	6	7	8
DIRECTION	NBLT	SB	EBLT	WB	SBLT	NB	WBLT	EB
INITIAL GREEN (MINIMUM)	5	20	5	6	5	20	5	6
PASSAGE	3	4	3	4	3	4	3	4
MAXIMUM GREEN I	18	45	20	25	20	45	20	25
MAXIMUM GREEN II								
YELLOW CLEARANCE	3.7	5.5	3.7	4.8	3.7	5.5	3.7	4.8
ALL-RED CLEARANCE	2.9	2	2.4	2	3	2	2.4	2
PEDESTRIAN WALK		7		7				
PEDESTRIAN CLEARANCE		15		24				
MINIMUM RECALL		X				X		
MAXIMUM RECALL								
PEDESTRIAN RECALL								
NON LOCKING	X		X	X	X		X	X
CNA 1		X				X		
FLASH OPERATION	RED	YELLOW	RED	RED	RED	YELLOW	RED	RED

TIMING PLAN FROM INDIAN RIVER COUNTY, MAY 25, 2022.

DETAIL OF STREET NAME SIGNS



DETAIL OF SIGNS

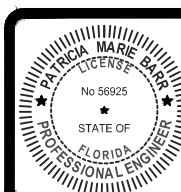


NOTES:

- COST OF R10-3i SIGNS SHALL BE INCLUDED UNDER PAY ITEM 665-1-11.
- FOR SIGNS R, S, & T, REFER TO SIGNING & PAVEMENT MARKING PLANS BY ARCADIS U.S., INC. FOR IRC PROJECT NUMBER 1505.

NOTES:

- CONTROLLER OPERATIONS:
 - THE CONTROLLER SHALL OPERATE AS SIGNAL OPERATING PLAN 10.
 - MAJOR STREET IS 66TH AVENUE AND MINOR STREET IS 53RD STREET.
 - FLASHING OPERATION TO BE YELLOW FOR MAJOR STREET MOVEMENTS 2 & 6 AND RED FOR ALL OTHER MOVEMENTS.
- CONTRACTOR SHALL VERIFY IF OTHER UTILITIES (NOT SHOWN IN PLANS) EXISTING WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE CONFLICTS, THE CONTRACTOR SHALL INFORM THE ENGINEER AND NOTIFY THE OWNER OF CONFLICTS AND ADJUSTMENTS AS REQUIRED.
- CONTROLLER SHALL BE PLACED SUCH THAT THE TECHNICIAN CAN EASILY SEE THE INTERSECTION WITH THE CABINET DOOR OPEN.
- ACTUAL SIGNAL TIMINGS AND COORDINATION PLANS ARE TO BE DETERMINED BY THE INDIAN RIVER COUNTY ENGINEER'S REPRESENTATIVE.
- THE SPEED LIMIT ON 66TH AVENUE AND ON 53RD STREET IS 45 MPH.



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53RD STREET AND 66TH AVENUE
 IRC-1505
 SIGNALIZATION PLAN

JOB NO.	DRAWING NO.	SHEET OF
21-082	21082T05	T-5 T-10


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.)	
A	A60/S-P4/S/L-DS/25/5	A60/S					0	P4/S/L		19	DS/25/5
B	A60/S-P4/S/L-DS/25/5	A60/S					45	P4/S/L		19	DS/25/5
C	A70/S-P5/S/L-DS/25/5	A70/S	35.5				45	P5/S/L		19	DS/25/5
D	A70/S-P5/S/L-DS/25/5	A70/S	35.5				45	P5/S/L		19	DS/25/5

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. 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.
4. Work with Indexes 649-030 and 649-031.

GEOTECHNICAL NOTES:


1. Drilling slurry may be required during excavation. Additionally, the limestone layers may render difficulties in shaft excavation.
2. The contractor shall anticipate difficult drilled shaft installation due to the presence of very loose sand, or compacted fill, or any combination of these layers. The presence of difficult soil conditions may occur at varying depths below the ground. The contractor shall anticipate potential cave-in of the sandy soils, and difficult/impossible conditions to retain bentonite/polymer slurry inside the drilled holes.



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53RD STREET AND 66TH AVENUE	
IRC-1505	
MAST ARM ASSEMBLIES	
JOB NO. 21-082	DRAWING NO. 21082T07
SHEET T-7	OF T-10

INDIAN RIVER COUNTY – TRAFFIC SIGNAL GENERAL NOTES
REV 6-1.7 9-1-21

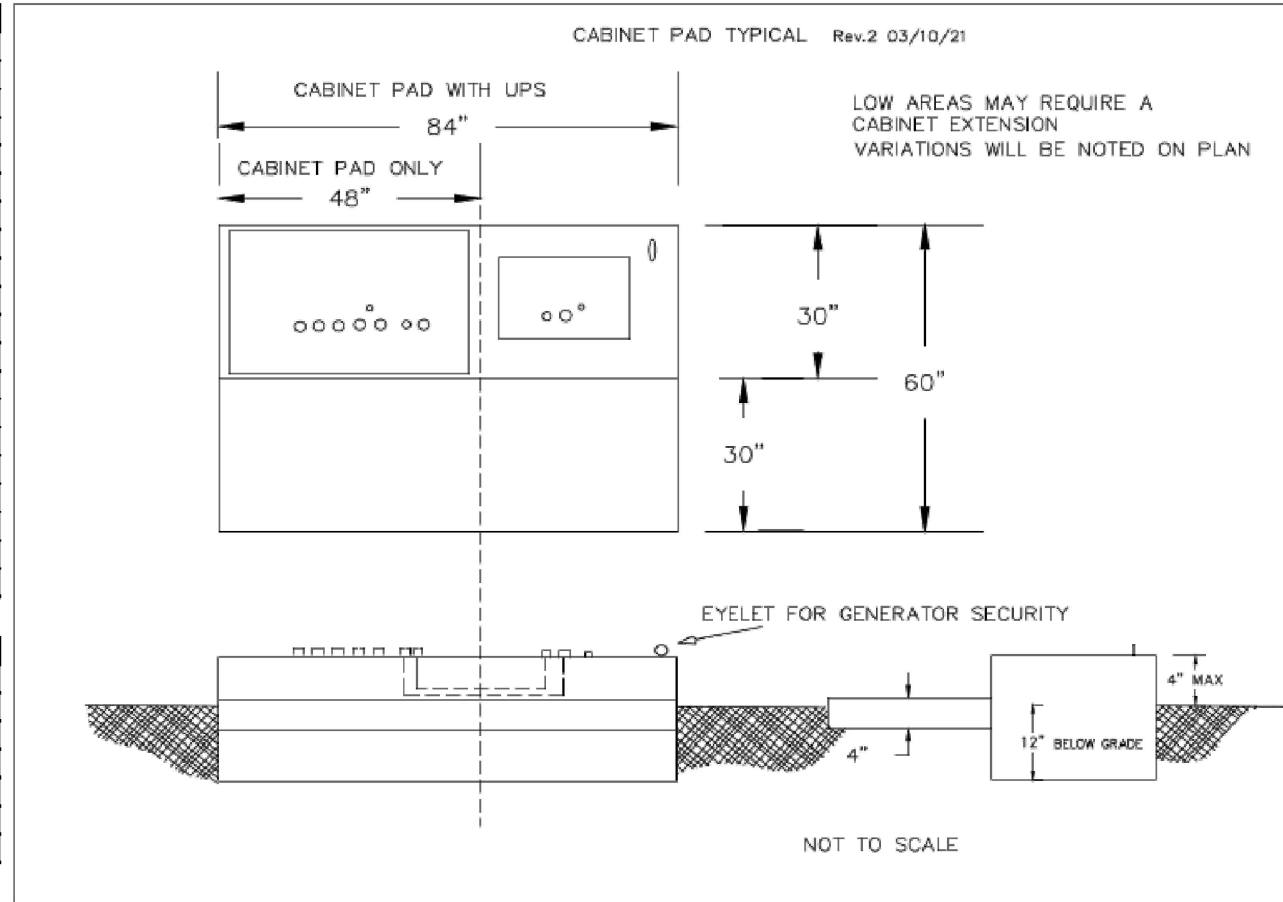
INDIAN RIVER COUNTY TYPICAL WIRING & CABINET PAD

Signal Wiring 20 Conductor				
Number	Color	Location	Phase	Comments
1	Green	Main Street	02, 06	
2	Orange	Main Street	02, 06	
3	Red	Main Street	02, 06	
4	Green/Black	Side Street	04, 08	
5	Orange/Black	Side Street	04, 08	
6	Red/Black	Side Street	04, 08	
7	Blue	Left Turn	01, 03, 05, 07	Green
8	White/Black	Left Turn	01, 03, 05, 07	Amber
9	Black/White	Left Turn	01, 03, 05, 07	Red
10	Blue/Black	Right Turn	02, 04, 06, 07	Amber
11	Black	Right Turn	02, 04, 06, 07	Green
12	White	Neutral		
13	Green/White	Spare		
14	Orange/Red	Spare		
15	Red/White	Spare		
16	Blue/White	Spare		
17	White/Red	Spare		
18	Black/Red	Spare		
19	Blue/Red	Spare		
20	Red/Green	Spare		

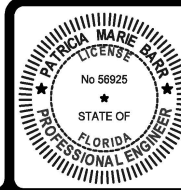
Pedestrian Head Wiring 7 Conductor				
Number	Color	Location	Phase	Comments
1	Green	Main Street	02, 06	Green
2	Orange	Side Street	04, 08	Green
3	Red	Main Street	02, 06	Red
4	Blue	Side Street	04, 08	Red
5	White/Black	Spare		
6	Black	Spare		
7	White	Neutral		

Pedestrian Button Wiring 4 Conductor				
Number	Color	Location	Phase	Comments
1	Green	Main Street	02, 06	Return
2	Red	Main Street	02, 06	
3	White	Side Street	04, 08	Return
4	Black	Side Street	04, 08	

Tape Color	
Direction	Color
North	Green
South	Red
East	Yellow
West	Blue



F:\Traffic Division\Traffic Signal Coordination\Design Info\Specifications\IRC TRAFFIC ENGINEERING TYPICAL GENERAL NOTES FOR SIGNALIZATION IMPROVEMENTS 090121.dwg
UPDATED: January 5, 2022



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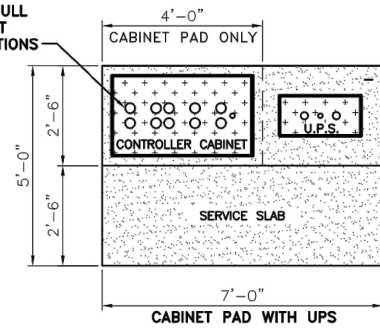
53RD STREET AND 66TH AVENUE
IRC-1505
SIGNAL DETAILS

JOB NO. 21-082	DRAWING NO. 21082T08	SHEET OF T-8 T-10
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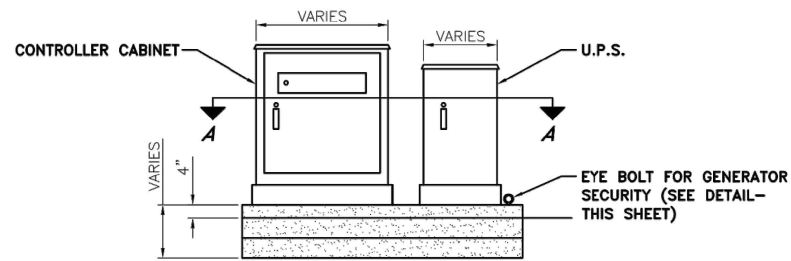
NOTES:

1. THIS DETAIL SHEET SUPPLEMENTS FDOT STANDARD PLANS INDEX 676-010.
2. LOW AREAS MAY REQUIRE A CABINET EXTENSION. VARIATIONS WILL BE NOTED ON THE SIGNAL PLAN.
3. CABINET PAD DIMENSIONS ASSUME A 26"x44" CONTROLLER CABINET AND A 16"x23" U.P.S. CONFIRM EQUIPMENT AND CABINET PAD SIZE.

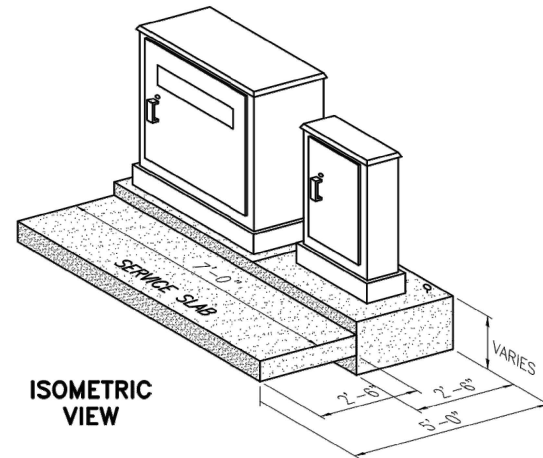
SEE STANDARD TYPICAL PULL BOX AND CONDUIT LAYOUT PLAN FOR CONDUIT LOCATIONS



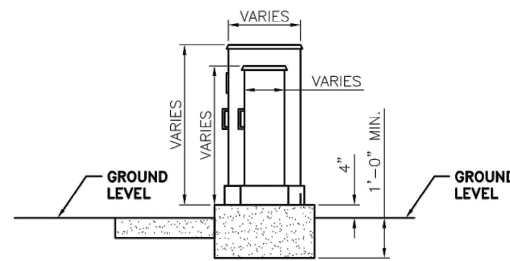
SECTION A-A & TOP VIEW OF PAD



FRONT VIEW



ISOMETRIC VIEW

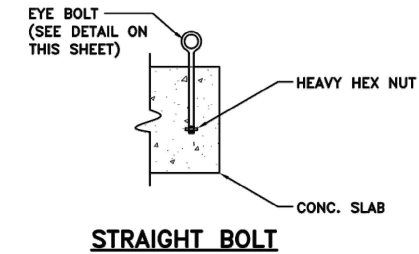


RIGHT-SIDE VIEW

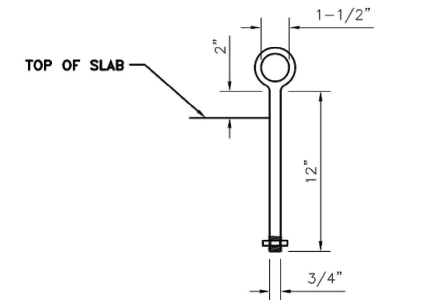
**GROUND MOUNT CONTROLLER CABINET
NOT TO SCALE**

NOTES:

1. EYE BOLTS SHALL HAVE A 1-1/2" INSIDE DIAMETER AND 3/4" SHANK DIAMETER AND MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 634-2.3 HARDWARE AND FITTINGS.



**DETAIL OF STRAIGHT EYE BOLT FOR GENERATOR SECURITY
NOT TO SCALE**



**DETAIL OF STRAIGHT EYE BOLT
NOT TO SCALE**

No.	Revision	Date	By	INDIAN RIVER COUNTY		DESIGNED BY:	ENGINEER OF RECORD:	CABINET FOUNDATION		SHEET 1 OF 2
				1801 27th STREET VERO BEACH, FL 32960 (772) 567-8000		<i>E. FERGUSON, P.E.</i>	<i>E. FERGUSON, P.E.</i> FL REG. #62036	TRAFFIC STANDARD DETAILS		
				Department of Public Works Engineering Division		DRAWN BY: <i>K. P. HANSEN</i>	DATE: 12/1/2021			



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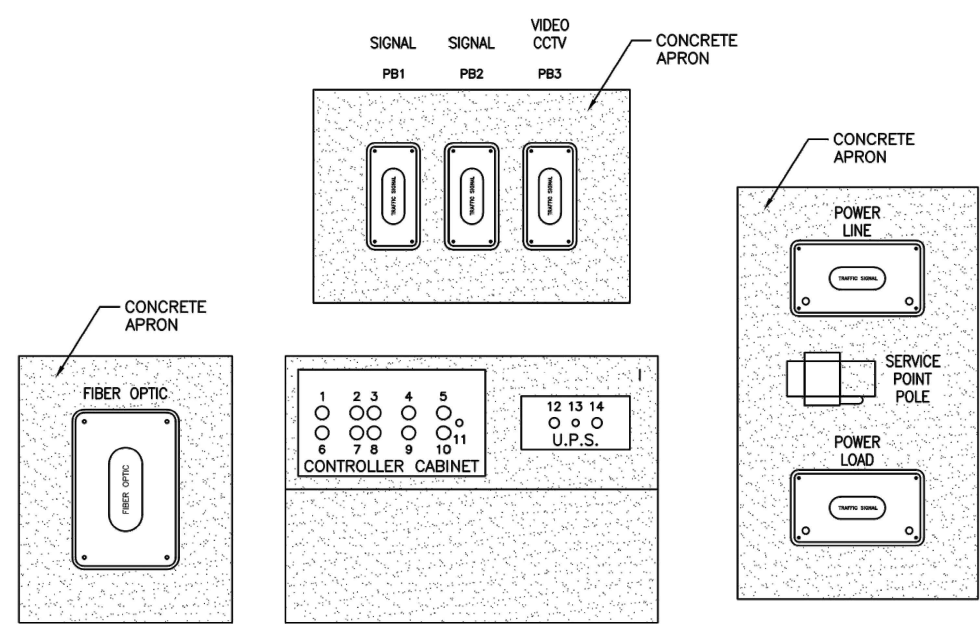
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53RD STREET AND 66TH AVENUE

IRC-1505

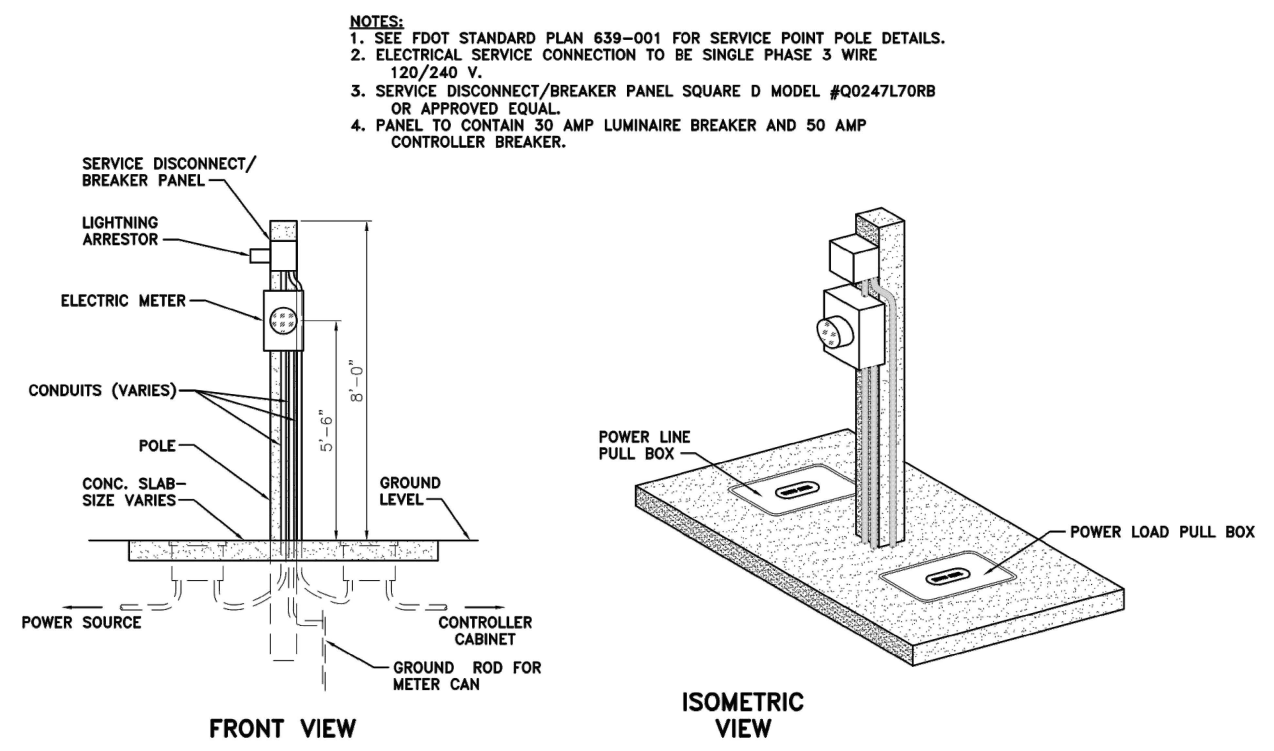
SIGNAL DETAILS

JOB NO. 21-082	DRAWING NO. 21082T09	SHEET OF T-9 T-10
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GROUND MOUNTED CONTROLLER CABINET PAD
TOP VIEW

TYPICAL PULL BOX AND CONTROLLER CABINET CONDUIT LAYOUT
NOT TO SCALE



FRONT VIEW

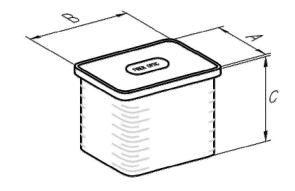
ISOMETRIC VIEW

ELECTRICAL SERVICE POINT
NOT TO SCALE

NOTES:
1. PULL BOX LOCATIONS SHOWN ARE TO DENOTE THE TYPE AND QUANTITY. SEE SIGNAL PLAN FOR PULL BOX LOCATIONS.

CONTROLLER CABINET PAD CONDUIT ROUTING			
CONDUIT	FROM	TO	NOTES
1	CONTROLLER CABINET	FIBER OPTIC PULL BOX	
2	CONTROLLER CABINET	PB1	
3	CONTROLLER CABINET	PB2	
4	CONTROLLER CABINET	PB3	
5	CONTROLLER CABINET	CONDUIT #12	POWER
6	CONTROLLER CABINET	FIBER OPTIC PULL BOX	
7	CONTROLLER CABINET	PB1	SPARE
8	CONTROLLER CABINET	PB2	SPARE
9	CONTROLLER CABINET	PB3	SPARE
10	CONTROLLER CABINET	POWER LOAD PULL BOX	SPARE
11	----	----	1/2" GROUND ROD
12	UPS	CONDUIT #5	POWER
13	----	----	1/2" GROUND ROD
14	UPS	POWER LOAD PULLBOX	

PULL BOX SIZES			
	A	B	C
FIBER OPTIC	24"	36"	24"
PB1	17"	30"	12"
PB2	17"	30"	12"
PB3	17"	30"	12"
POWER LINE	17"	30"	12"
POWER LOAD	17"	30"	12"



PULL BOX SCHEMATIC
NOT TO SCALE

No.	Revision	Date	By	INDIAN RIVER COUNTY 1801 27th STREET VERO BEACH, FL 32960 (772) 567-8000		DESIGNED BY: E. FERGUSON, P.E. DRAWN BY: K. P. HANSEN APPROVED BY: E. FERGUSON, P.E.	ENGINEER OF RECORD: E. FERGUSON, P.E. FL REG. #62036 DATE: 12/1/2021	POWER SERVICE & CONTROLLER CABINET CONDUIT - TRAFFIC STANDARD DETAILS	SHEET 2 OF 2
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PATRICIA MARIE BARR, P.E., STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 56925

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53RD STREET AND 66TH AVENUE
IRC-1505
SIGNAL DETAILS

JOB NO. 21-082	DRAWING NO. 21082T10	SHEET OF T-10T-10
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CHANGE ORDER BACK-UP DOCUMENTATION

FIN No.: 436379-1-54-01 & 436379-1-54-02

Contract No: IRC-1505

Change Order No.: 03

Amount \$ 814,277.14 and 0 Days

Title of Issue

Construction of 53rd Street Signalized Intersection at 66th Avenue in accordance with Simmons & White (Engineer-of-Record) plans Signed & Sealed dated September 28, 2022.

I. Entitlement Analysis

The purpose of this Change Order is to provide means to compensate the Contractor to construct a new signalized intersection on 66th Avenue at 53rd Street. This scope of work was not included at time of original bid.

II. Time Analysis

The Contractor is not pursuing a time extension to complete this additional work.

III. Engineer's Estimate

a. Basis of Estimate

The Engineer's Estimate was based on current State-Wide-Average (SWA) multiplied by the Engineer-of-Records' plan quantities for this new scope of work. Considering the increase in unit cost is appropriate as the decision to proceed with this extra work occurred at this time and the Contractor was unable to proceed with procurement of the necessary components earlier. To this we added Mobilization & Maintenance of Traffic (MOT) as a percentage based on original contract. This resulted in an Engineer's Estimate totaling \$827,689.97.

b. Estimate

The Engineer's Estimate to add a signalized intersection at 53rd Street resulted in the net increase to Contract in the amount of \$827,689.97. This price includes all mark-ups and no bonding.

Refer to Appendix "A" for a breakdown of the Engineer's Estimate and backup documentation.

c. Contractor's Quote

The Contractor's quote submitted a Change Order in the amount of Eight Hundred Fourteen Thousand Two Hundred Seventy-Seven and Fourteen Cents (\$814,277.14).

Refer to Appendix "B" for a breakdown of the Contractor's cost proposal.

d. Final Disposition

After comparing the Engineer's Estimate of \$827,689.97 to the Contractor's price of \$814,277.14 the Contractor's proposal is less than the Engineer's Estimate by \$13,412.83. After review of the Contractor's proposal the County has agreed to the Contractors price of \$814,277.14 has been accepted.

IV. CRS Coding

503 Change resulting from engineering decision (use specific reason in lieu of this when possible)

- a. Avoidability Code: 0 - Unavoidable: No Remedial Action Required
- b. Cost Recovery Code: N - No Action Recommended
- c. Claim/Extend Limits Code: N – Neither

V. Premium Cost Analysis

There will be no premium costs involved with the change from three (3) proposed travel lanes to five (5) proposed travel lanes on the 53rd Street Bridge. None of the costs are the result of rework, delay, or inefficiency, therefore none of the costs associated with this issue are considered premium.

Agree Disagree

Pursue Cost Recovery? Yes No

VI. Statement of Claim Settlement Costs

None

VIII. Statutory Reason:

This contract modification is being done in compliance with Florida Statute 337.11 (9), to make the project functionally operational in accordance with the intent of the original contract.

VII. Federal Aid Participation

Time: Zero (0) Days

Cost: Increase of Eight Hundred Fourteen Thousand Two Hundred Seventy-Seven and Fourteen Cents (\$814,277.14).

Participating Non-Participating

Kelly Cowger, P.E. – Sr. Project Engineer

Attachments

- Appendix A: Engineer’s Estimate and Backup Documentation (20 pages)
- Appendix B: Contractor’s Cost Submittal (4 pages)

PAY ITEM NO.	DESCRIPTION	UNIT	QTY	Contract Unit Price	SWA Unit Price	ENGR ESTIMATE	HALLEY REQUESTED		DIFFERENCE
101-1	MOBILIZATION/DEMOBILIZATION	LS	1		\$ 86,849.55	\$ 86,849.55	\$ 65,680.00	\$ 65,680.00	\$ (21,169.55)
102-1	MOT	LS	1		\$ 17,094.20	\$ 17,094.20	\$ 16,249.00	\$ 16,249.00	\$ (845.20)
110-1-1	CLEARING AND GRUBBING	LS	1		\$ -	\$ -	\$ 3,450.00	\$ 3,450.00	\$ 3,450.00
SUBCONTRACTED WORK									
630-2-11	CONDUIT (SIGNAL) (F & I) (UNDERGROUND)	LF	236	\$ 16.00	\$ 17.43	\$ 4,113.48	\$ 58.80	\$ 13,876.80	\$ 9,763.32
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (5 RUNS)	LF	300	\$ 25.00	\$ 33.55	\$ 10,065.00	\$ 58.80	\$ 17,640.00	\$ 7,575.00
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (1 RUN)	LF	220	\$ 25.00	\$ 33.55	\$ 7,381.00	\$ 58.80	\$ 12,936.00	\$ 5,555.00
630-2-12	2" CONDUIT-SIGNALS (F & I) (UNDER PAVEMENT) (DIRECTIONAL BORE) (6 RUNS)	LF	150	\$ 25.00	\$ 33.55	\$ 5,032.50	\$ 58.80	\$ 8,820.00	\$ 3,787.50
632-7-1	SIGNAL CABLE (F & I)	PI	1	\$ 5,600.00	\$ 9,111.16	\$ 9,111.16	\$ 17,325.00	\$ 17,325.00	\$ 8,213.84
633-2-31	FIBER OPTIC CONNECTION (INSTALL) (SPLICE)	EA	1		\$ 59.07	\$ 59.07	\$ 55.34	\$ 55.34	\$ (3.73)
633-3-11	FIBER OPTIC CONNECTION HARDWARE (F & I) (SPLICE ENCLOSURE)	EA	12		\$ 1,139.74	\$ 13,676.88	\$ 1,627.50	\$ 19,530.00	\$ 5,853.12
633-3-15	FIBER OPTIC CONNECTION HARDWARE (F & I) (PATCH PANEL, PRETERMINATED)	EA	1		\$ 2,688.02	\$ 2,688.02	\$ 1,811.25	\$ 1,811.25	\$ (876.77)
635-2-11	PULL & SPLICE BOX (F & I) (SIGNAL)	EA	22	\$ 450.00	\$ 1,156.81	\$ 25,449.82	\$ 1,680.00	\$ 36,960.00	\$ 11,510.18
635-2-12	PULL & SPLICE BOX (F & I) (SIGNAL) (24 x 36)	EA	1		\$ 2,499.61	\$ 2,499.61	\$ 2,630.25	\$ 2,630.25	\$ 130.64
639-1-122	ELECTRICAL POWER SOURCE (F & I) (UNDERGROUND)	AS	1		\$ 4,311.75	\$ 4,311.75	\$ 3,843.00	\$ 3,843.00	\$ (468.75)
639-2-1	ELECTRICAL SERVICE WIRE (F & I)	LF	300		\$ 17.07	\$ 5,121.00	\$ 6.72	\$ 2,016.00	\$ (3,105.00)
639-3-11	ELECTRICAL SERVICE DISCONNECT (F & I) (POLE)	EA	1	\$ 525.00	\$ 1,808.63	\$ 1,808.63	\$ 2,499.00	\$ 2,499.00	\$ 690.37
641-2-12	PRE-STRESSED CONCRETE POLE (F & I) (TYPE P-II SERVICE POLE)	EA	1	\$ 650.00	\$ 2,119.46	\$ 2,119.46	\$ 2,719.50	\$ 2,719.50	\$ 600.04
646-1-11	ALUMINUM SIGNAL POLES (F & I) (PEDESTAL)	EA	4	\$ 850.00	\$ 2,304.71	\$ 9,218.84	\$ 2,257.50	\$ 9,030.00	\$ (188.84)
649-21-10	STEEL MAST ARM (F & I) (WS-170) (SINGLE ARM) (60')	EA	2		\$ 83,661.63	\$ 167,323.26	\$ 82,950.00	\$ 165,900.00	\$ (1,423.26)
649-21-15	STEEL MAST ARM (F & I) (WS-170) (SINGLE ARM) (70')	EA	2		\$ 93,040.22	\$ 186,080.44	\$ 89,250.00	\$ 178,500.00	\$ (7,580.44)
650-1-14	TRAFFIC SIGNAL (F & I) (ALUMINUM) (3-SECT) (1 WAY)	AS	8	\$ 850.00	\$ 1,679.48	\$ 13,435.84	\$ 1,722.00	\$ 13,776.00	\$ 340.16
650-1-16	TRAFFIC SIGNAL (F & I) (ALUMINUM) (4-SECT) (1 WAY)	AS	4	\$ 1,000.00	\$ 1,722.24	\$ 6,888.96	\$ 2,472.75	\$ 9,891.00	\$ 3,002.04
653-1-11	PEDESTRIAN SIGNAL (F & I) (LED COUNTDOWN) (1 WAY)	AS	4	\$ 430.00	\$ 905.82	\$ 3,623.28	\$ 924.00	\$ 3,696.00	\$ 72.72
660-4-11	VIDEO DETECTION SYSTEM (F & I) (CABINET)	EA	8	\$ 7,200.00	\$ 12,831.69	\$ 102,653.52	\$ 7,491.75	\$ 59,934.00	\$ (42,719.52)
660-4-12	VIDEO DETECTION SYSTEM (F & I) (ABOVE GROUND EQUIPMENT)	EA	4	\$ 3,250.00	\$ 6,028.89	\$ 24,115.56	\$ 11,586.75	\$ 46,347.00	\$ 22,231.44
665-1-11	PEDESTRIAN DETECTOR (PUSH BUTTON) (F & I) (STANDARD)	EA	4	\$ 135.00	\$ 330.80	\$ 1,323.20	\$ 220.50	\$ 882.00	\$ (441.20)
670-5-110	TRAFFIC CONTROLLER ASSEMBLY (F & I) (NEMA)	AS	1		\$ 38,554.92	\$ 38,554.92	\$ 50,610.00	\$ 50,610.00	\$ 12,055.08
682-1-133	CCTV CAMERA (F & I) (DOME PTZ, NON-PRESSURIZED) (IP, HIGH DEFINITION)	EA	1	\$ 4,100.00	\$ 7,429.94	\$ 7,429.94	\$ 9,712.50	\$ 9,712.50	\$ 2,282.56
684-1-1	MANAGED FIELD ETHERNET SWITCH, LAYER 2 (F & I)	EA	1	\$ 1,400.00	\$ 4,959.99	\$ 4,959.99	\$ 6,825.00	\$ 6,825.00	\$ 1,865.01
700-1-60	SINGLE POST SIGN (REMOVE)	AS	2		\$ 53.03	\$ 106.06	\$ 131.25	\$ 262.50	\$ 156.44
700-5-22	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD) (12-18 SF)	EA	4		\$ 4,967.73	\$ 19,870.92	\$ 4,410.00	\$ 17,640.00	\$ (2,230.92)
715-5-31	LUMINAIRE AND BRACKET ARM (F & I)	EA	4		\$ 2,565.00	\$ 10,260.00	\$ 3,307.50	\$ 13,230.00	\$ 2,970.00
TOTAL SUBCONTRACTED WORK						\$ 689,282.11			
5% SUBCONTRACTOR MARKUP						\$ 34,464.11			
						\$ 827,689.97	\$ 814,277.14		

ENGR ESTIMATE based on percentage of Original Contract Amount minus Mob & MOT vs. Value of Original Work; Mobilization is \$3.20M/\$25.40M = 12.60%. Therefore, 12.60% of \$689,282.11 = \$86,849.55.

ENGR ESTIMATE based on percentage of Original Contract Amount minus Mob & MOT vs. Value of Original Work; MOT is \$630k/\$25.40M = 2.48%. Therefore, 2.48% of \$689,282.11 = \$17,094.20.

ENGR ESTIMATE = \$0 as inclusive of Original Contract

DIFFERENCE \$ (13,412.83)

Kelly Cowger, P.E.
Senior Project Engineer



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Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0590 70 5	2	\$185,000.00	\$370,000.00	2.000	LS	N	IRRIGATION SYSTEM- MODIFY EXISTING SYSTEM
0591 1200		\$33.51	\$33,544.96	1,001.000	LF	N	IRRIGATION SLEEVE, 2" DIAMETER
0591 1400		\$46.01	\$17,576.00	382.000	LF	N	IRRIGATION SLEEVE, 4" DIAMETER
0591 1600		\$33.00	\$6,567.00	199.000	LF	N	IRRIGATION SLEEVE, 6" DIAMETER
0611 1 1		\$1,847.10	\$2,659.53	88.062	MI	N	ITSFM SUBSURFACE DOCUMENTATION- PROJECT LENGTH
0611 2 1		\$4,026.73	\$6,908.70	34.000	EA	N	ITSFM LOCATION DOCUMENTATION- INTERSECTION
0611 2 2		\$1,297.19	\$7,337.81	129.000	EA	N	ITSFM LOCATION DOCUMENTATION- ITS SITE
0611 2 3		\$3,800.00	\$3,800.00	1.000	EA	N	ITSFM LOCATION DOCUMENTATION- COMMUNICATIONS BUILDING
0630 2 11	7	\$17.43	\$1,886.32	324,250.000	LF	N	CONDUIT, FURNISH & INSTALL, OPEN TRENCH
0630 2 12	8	\$33.55	\$8,405.18	248,218.000	LF	N	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE
0630 2 14	2	\$35.15	\$7,191.67	5,325.000	LF	N	CONDUIT, FURNISH & INSTALL, ABOVEGROUND
0630 2 15		\$50.76	\$3,329.25	4,400.000	LF	N	CONDUIT, FURNISH & INSTALL, BRIDGE MOUNT
0630 2 16		\$19.09	\$1,937.95	106,945.000	LF	N	CONDUIT, FURNISH & INSTALL, EMBEDDED CONCRETE BARRIERS AND TRAFFIC RAILINGS
0630 2 65		\$8.90	\$9,498.80	2,190.000	LF	N	CONDUIT, REMOVE, BRIDGE MOUNT
0630 3 1		\$264.28	\$43,605.68	165.000	EA	N	REPLACE ROUTE MARKER FOR EXISTING CONDUIT
0632 7 1	5	\$9,111.16	\$1,767,565.07	194.000	PI	N	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL
0632 7 2	1	\$11.17	\$111,274.75	9,960.000	LF	N	SIGNAL CABLE- REPAIR/REPLACE/OTHER, FURNISH & INSTALL
0632 7 4		\$975.71	\$1,951.42	2.000	PI	N	SIGNAL CABLE, ADJUST
0632 7 6	3	\$1,348.48	\$142,939.40	106.000	PI	N	SIGNAL CABLE, REMOVE- INTERSECTION



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0632 7 7	4	\$2.74	\$3,283.80	1,200.000	LF	N	SIGNAL CABLE, REMOVE- OUTSIDE OF INTERSECTION
0633 1111	1	\$4.70	\$1,095.10	233.000	LF	N	FIBER OPTIC CABLE, F&I, OVERHEAD,2-12 FIBERS
0633 1121	24	\$3.86	\$131,167.82	34,015.000	LF	N	FIBER OPTIC CABLE, F&I, UNDERGROUND,2-12 FIBERS
0633 1122	7	\$3.68	\$192,143.59	52,227.000	LF	N	FIBER OPTIC CABLE, F&I, UNDERGROUND,13-48 FIBERS
0633 1123	8	\$3.70	\$186,225.78	50,387.000	LF	N	FIBER OPTIC CABLE, F&I, UNDERGROUND,49-96 FIBERS
0633 1124	7	\$6.12	\$979,997.15	160,116.000	LF	N	FIBER OPTIC CABLE, F&I, UNDERGROUND, 97 - 144 FIBERS
0633 1410	1	\$4.70	\$1,142.10	243.000	LF	N	FIBER OPTIC CABLE, RELOCATE, OVERHEAD
0633 1420	10	\$7.31	\$72,176.46	9,870.000	LF	N	FIBER OPTIC CABLE, RELOCATE, UNDERGROUND
0633 1610	1	\$2.70	\$351.00	130.000	LF	N	FIBER OPTIC CABLE, REMOVE, OVERHEAD
0633 1620	8	\$1.13	\$83,667.13	74,103.000	LF	N	FIBER OPTIC CABLE, REMOVE, UNDERGROUND
0633 2 31	28	\$59.07	\$344,396.16	5,830.000	EA	N	FIBER OPTIC CONNECTION, INSTALL, SPLICE
0633 2 32	18	\$88.52	\$91,177.34	1,030.000	EA	N	FIBER OPTIC CONNECTION, INSTALL, TERMINATION
0633 3 11	20	\$1,139.74	\$193,755.02	170.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE
0633 3 12	21	\$68.86	\$29,955.57	435.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY
0633 3 13	12	\$84.62	\$82,503.71	975.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED CONNECTOR ASSEMBLY
0633 3 14	3	\$148.26	\$9,933.67	67.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, F&I, BUFFER TUBE FAN OUT KIT
0633 3 15	9	\$2,688.02	\$34,944.25	13.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL
0633 3 16	4	\$2,090.75	\$361,700.31	173.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, F&I, PATCH PANEL- FIELD TERMINATED



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0633 3 17	11	\$153.69	\$25,051.28	163.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, F&I, CONNECTOR PANEL
0633 3 41	1	\$559.48	\$559.48	1.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, RELOCATE SPLICE ENCLOSURE
0633	3	\$1,298.75	\$3,896.25	3.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, RELOCATE PATCH PANEL- FIELD TERMINATED
0633	7	\$598.94	\$13,775.55	23.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, ADJUST/MODIFY SPLICE ENCLOSURE
0633	3	\$53.46	\$320.77	6.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, ADJUST/MODIFY SPLICE TRAY
0633	1	\$578.00	\$578.00	1.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, ADJUST/MODIFY PATCH PANEL, PRETERMINATED
0633	4	\$391.58	\$1,957.92	5.000	EA	N	FIBER OPTIC CONNECTION HARDWARE, ADJUST/MODIFY PATCH PANEL
0633	1	\$1.30	\$409.50	315.000	LF	N	SIGNALS COMMUNICATION CABLE- TWISTED PAIR CABLE, REMOVE
0633	42	\$305.47	\$4,673,337.09	15,299.000	DA	N	FIBER OPTIC CABLE LOCATOR
0633	13	\$6.48	\$38,705.40	5,976.000	LF	N	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL
0633	1	\$6.00	\$1,560.00	260.000	LF	N	MULTI-CONDUCTOR COMMUNICATION CABLE, RELOCATE
0633	1	\$0.50	\$523.00	1,046.000	LF	N	MULTI-CONDUCTOR COMMUNICATION CABLE, REMOVE
0634 411	1	\$5,950.00	\$5,950.00	1.000	PI	N	SPAN WIRE ASSEMBLY, F&I, TWO POINT, DIAGONAL
0634 4113	6	\$8,009.26	\$64,074.10	8.000	PI	N	SPAN WIRE ASSEMBLY, F&I, TWO POINT, BOX OR DROP BOX
0634 4600	3	\$758.74	\$2,276.21	3.000	PI	N	SPAN WIRE ASSEMBLY, REMOVE- POLES REMAIN
0634 5 1	2	\$51.82	\$3,109.40	60.000	LF	N	FIBERGLASS INSULATOR, FURNISH & INSTALL
0635 2 11	84	\$1,156.81	\$5,919,405.67	5,117.000	EA	N	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE
0635 2 12	42	\$2,499.61	\$1,204,812.87	482.000	EA	N	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE



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Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0635 3 11	4	\$831.31	\$13,301.00	16.000	EA	N	JUNCTION BOX, FURNISH & INSTALL, AERIAL
0635 3 12	12	\$705.51	\$101,593.82	144.000	EA	N	JUNCTION BOX, FURNISH & INSTALL, MOUNTED
0635 3 13	14	\$777.68	\$801,788.66	1,031.000	EA	N	JUNCTION BOX, FURNISH & INSTALL, EMBEDDED
0635 3 40	1	\$987.00	\$987.00	1.000	EA	N	JUNCTION BOX, RELOCATE
0639 1111	1	\$2,915.40	\$2,915.40	1.000	AS	N	ELECTRICAL POWER SERVICE, F&I, OVERHEAD, METER FURNISHED BY POWER COMPANY
0639 1112	20	\$5,407.03	\$151,396.95	28.000	AS	N	ELECTRICAL POWER SERVICE, F&I, OVERHEAD METER PURCHASED BY CONTRACTOR FROM POWER COMPANY
0639 1113	3	\$3,295.46	\$13,181.82	4.000	AS	N	ELECTRICAL POWER SERVICE, F&I, OVERHEAD METER NOT REQUIRED
0639 1121	9	\$3,568.42	\$60,663.06	17.000	AS	N	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER FURNISHED BY POWER COMPANY
0639 1122	93	\$4,311.75	\$1,008,950.43	234.000	AS	N	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR
0639 1123	16	\$3,572.75	\$92,891.41	26.000	AS	N	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER NOT REQUIRED
0639 1410	1	\$1,086.66	\$1,086.66	1.000	AS	N	ELECTRICAL POWER SERVICE, REL OVERHEAD
0639 1420	3	\$7,364.04	\$29,456.14	4.000	AS	N	ELECTRICAL POWER SERVICE, RELOCATE, UNDERGROUND
0639 1610	13	\$904.84	\$19,906.56	22.000	AS	N	ELECTRICAL POWER SERVICE, REMOVE OVERHEAD
0639 1620	24	\$739.46	\$28,099.66	38.000	AS	N	ELECTRICAL POWER SERVICE, REMOVE UNDERGROUND
0639 2 1	127	\$14.84	\$4,465,212.30	300,877.000	LF	N	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL
0639 2 4	2	\$5.65	\$1,411.60	250.000	LF	N	ELECTRICAL SERVICE WIRE, RELOCATE



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0639 1420	2	\$9,456.49	\$28,369.48	3.000	AS	N	ELECTRICAL POWER SERVICE, RELOCATE, UNDERGROUND
0639 1610	3	\$918.75	\$7,350.00	8.000	AS	N	ELECTRICAL POWER SERVICE, REMOVE OVERHEAD
0639 1620	6	\$687.16	\$6,871.61	10.000	AS	N	ELECTRICAL POWER SERVICE, REMOVE UNDERGROUND
0639 2 1	55	\$17.07	\$1,757,574.46	102,972.000	LF	N	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL
0639 2 4	2	\$5.65	\$1,411.60	250.000	LF	N	ELECTRICAL SERVICE WIRE, RELOCATE
0639 2 6	7	\$.82	\$15,832.35	19,380.000	LF	N	ELECTRICAL SERVICE WIRE, REMOVE
0639 3 11	29	\$1,808.63	\$280,338.26	155.000	EA	N	ELECTRICAL SERVICE DISCONNECT, F&I, POLE MOUNT
0639 3 12	4	\$1,589.54	\$9,537.21	6.000	EA	N	ELECTRICAL SERVICE DISCONNECT, F&I, CABINET
0639 3 60	4	\$554.48	\$9,426.11	17.000	EA	N	ELECTRICAL SERVICE DISCONNECT, REMOVE- POLE OR CABINET TO REMAIN
0639 5 2	1	\$203,400.00	\$203,400.00	1.000	EA	N	EMERGENCY GENERATOR-PERMANENT 26-50 KW
0639 5 31	1	\$150,000.00	\$150,000.00	1.000	EA	N	EMERGENCY GENERATOR-PERMANENT 51-75 KW
0639 5 50	1	\$4,500.00	\$4,500.00	1.000	EA	N	EMERGENCY GENERATOR-PERMANENT, REMOVE
0639 6 1	13	\$3,052.86	\$23,387.79	83.000	EA	N	ELECTRICAL POWER SERVICE- TRANSFORMER FURNISH & INSTALL
0639 7114	1	\$1.40	\$4,544.40	3,246.000	LF	N	ELECTRICAL POWER SERVICE, TOLL FACILITY CONDUCTORS AND CABLES, NO. 10 AND SMALLER, PROJECT 442764-1-52-01
0639 7115	1	\$2.15	\$1,083.60	504.000	LF	N	ELECTRICAL POWER SERVICE, TOLL FACILITY CONDUCTORS AND CABLES, NO. 8 TO NO. 6, PROJECT 442764-1-52-01
0639 7116	1	\$4.00	\$1,200.00	300.000	LF	N	ELECTRICAL POWER SERVICE, TOLL FACILITY CONDUCTORS AND CABLES, NO. 4 TO NO. 2, PROJECT 442764-1-52-01
0639 7118	1	\$9.50	\$20,900.00	2,200.000	LF	N	ELECTRICAL POWER SERVICE, TOLL FACILITY CONDUCTORS AND



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0639 7118							CABLES, NO. 1/0 TO NO. 3/0, PROJECT 442764-1-52-01
0639 7119	1	\$20,515.00	\$41,030.00	2.000	EA	N	ELECTRICAL POWER SERVICE, RTC TOLL SITE PANELBOARDS AND POWER DISTRIBUTION FRAME, PROJECT 442764-1-52-01
0639 7120	1	\$12,760.00	\$12,760.00	1.000	EA	N	ELECTRICAL POWER SERVICE, TOLL SITE ELECTRIC METERING AND UTILITY SERVICE ENTRANCE, PROJECT 442764-1-52-01
0639 7121	1	\$22.00	\$158,400.00	7,200.000	LF	N	ELECTRICAL POWER SERVICE, TOLL FACILITY CONDUCTORS AND CABLES, 350 KCMIL TO 400 KCMIL, PROJECT 442764-1-52-01
0639 8100	4	\$11,840.92	\$59,204.62	5.000	LS	N	ELECTRICAL POWER SERVICE- CONTRIBUTION IN AID OF CONSTRUCTION (CIAC), DUKE (DO NOT BID)
0639 8110	1	\$5,000.00	\$5,000.00	1.000	LS	N	ELECTRICAL POWER SERVICE- CONTRIBUTION IN AID OF CONSTRUCTION (CIAC), SECO (DO NOT BID)
0639 8130	9	\$13,703.78	\$191,852.90	14.000	LS	N	ELECTRICAL POWER SERVICE- CONTRIBUTION IN AID OF CONSTRUCTION (CIAC), FPL (DO NOT BID)
0639 8141	1	\$30,000.00	\$30,000.00	1.000	LS	N	ELECTRICAL POWER SERVICE- CONTRIBUTION IN AID OF CONSTRUCTION (CIAC), COH (DO NOT BID)
0639 8142	1	\$58,000.00	\$58,000.00	1.000	LS	N	ELECTRICAL POWER SERVICE- CONTRIBUTION IN AID OF CONSTRUCTION (CIAC), WREC (DO NOT BID)
0641 2 11	11	\$2,225.38	\$100,142.16	45.000	EA	N	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II PEDESTAL
0641 2 12	50	\$2,119.46	\$349,711.22	165.000	EA	N	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II SERVICE POLE
0641 2 13	2	\$6,961.89	\$83,542.72	12.000	EA	N	PRESTRESSED CONCRETE POLE, F&I, TYPE P-III
0641 2 15	1	\$13,460.00	\$13,460.00	1.000	EA	N	PRESTRESSED CONCRETE POLE, F&I, TYPE P-V



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0641 3269							DEVICE, 69'
0641 3800	2	\$10,404.27	\$41,617.09	4.000	EA	N	CONCRETE CCTV POLE, COMPLETE POLE REMOVAL
0643600	1	\$2,500.00	\$5,000.00	2.000	EA	N	STRAIN POLE, WOOD, REMOVE
0646 1 11	58	\$2,304.71	\$1,539,548.43	668.000	EA	N	ALUMINUM SIGNALS POLE, PEDESTAL
0646 1 12	16	\$1,928.74	\$225,662.82	117.000	EA	N	ALUMINUM SIGNALS POLE, FURNISH & INSTALL PEDESTRIAN DETECTOR POST
0646 1 40	5	\$1,167.33	\$19,844.60	17.000	EA	N	ALUMINUM SIGNALS POLE, RELOCATE
0646 1 60	34	\$389.26	\$91,477.08	235.000	EA	N	ALUMINUM SIGNALS POLE, REMOVE
0646 2115	2	\$2,977.78	\$26,800.00	9.000	EA	N	ALUMINUM POLE- INDEX 695-001, FURNISH & INSTALL, 15'
0649 1 11	1	\$11,200.00	\$112,000.00	10.000	EA	N	STEEL STRAIN POLE, F&I, TYPE PS- IV
0649 1 13	1	\$62,000.00	\$186,000.00	3.000	EA	N	STEEL STRAIN POLE, F&I, TYPE PS- VI
0649 1 14	1	\$65,573.83	\$262,295.32	4.000	EA	N	STEEL STRAIN POLE, F&I, TYPE PS- VII
0649 1 16	1	\$67,501.34	\$270,005.36	4.000	EA	N	STEEL STRAIN POLE, F&I, TYPE PS- IX
0649 1 63	1	\$3,800.00	\$15,200.00	4.000	EA	N	STEEL STRAIN POLE, REMOVE, SHALLOW FOUNDATION REMOVAL, BOLT ON ATTACHMENT
0649 1 65	2	\$8,292.97	\$58,050.80	7.000	EA	N	STEEL STRAIN POLE, REMOVE, DEEP FOUNDATION REMOVAL, BOLT ON ATTACHMENT
0649 2155	2	\$50,750.00	\$406,000.00	8.000	EA	N	STEEL CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 55'
0649 2170	1	\$95,000.00	\$380,000.00	4.000	EA	N	STEEL CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 70'
0649 2603	1	\$4,500.00	\$9,000.00	2.000	EA	N	STEEL CCTV POLE, REMOVE POLE- SHALLOW FOUNDATION REMOVAL, BOLT ON ATTACHMENT



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0649 2605	1	\$10,000.00	\$10,000.00	1.000	EA	N	STEEL CCTV POLE, REMOVE POLE- COMPLETE/DEEP FOUNDATION REMOVAL, BOLT ON ATTACHMENT
0649 2606	10	\$5,921.63.98	\$921,663.62	16.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 30'
0649 2607	1	\$109,000.00	\$109,000.00	1.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 30'-30'
0649 2608	11	\$71,151.46.75	\$1,286,761.50	18.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 40'
0649 2609	3	\$84,554.28.82	\$420,164.08	5.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 40'-40'
0649 2610	18	\$73,451.77.51	\$2,568,212.73	35.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 50'
0649 2611	1	\$66,511.47	\$66,511.47	1.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 50'-40'
0649 2612	1	\$91,130.00	\$91,130.00	1.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 50'-50'
0649 2613	18	\$83,151.63	\$2,677,172.21	32.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 60'
0649 2614	1	\$77,800.00	\$77,800.00	1.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 60'-30'
0649 2615	1	\$115,000.00	\$115,000.00	1.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 60'-50'
0649 2616	1	\$90,660.00	\$90,660.00	1.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 60'-60'
0649 2617	21	\$93,721.608.74	\$3,721,608.74	40.000	EA	N	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 70'



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0650 1 13	1	\$953.30	\$1,906.60	2.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 2 SECTION, 1-2 WAYS
0650 1 14	48	\$1,679.48	\$1,559.84	926.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECTION, 1 WAY
0650 1 15	1	\$2,133.00	\$2,133.00	1.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECTION, 2-4 WAYS
0650 1 16	20	\$1,722.24	\$1,722.24	102.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 4 SECTION, 1 WAY
0650 1 18	7	\$1,818.89	\$21,827.73	12.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 5 SECTION STRAIGHT, 1 WAY
0650 1 19	11	\$2,152.42	\$94,706.49	44.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 5 SECTION CLUSTER, 1 WAY
0650 1 24	1	\$1,540.00	\$6,160.00	4.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE W/ALUM TOP, 3 SECTION, 1 WAY
0650 1 34	4	\$1,293.25	\$80,162.53	62.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY
0650 1 35	1	\$1,842.99	\$1,842.99	1.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 2-4 WAYS
0650 1 36	2	\$1,323.96	\$5,295.82	4.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 4 SECTION, 1 WAY
0650 1 38	1	\$2,019.79	\$8,079.16	4.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION, 1 WAY



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Contract Type: CC
 Displaying: VALID ITEMS WITH HITS
 From: 0102 1 To: 9999999

Item	No. of Confs	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0650 1 38							SECTION STRAIGHT, 1 WAY
0650 1 39	1	\$1,535.83	\$4,607.49	3.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION CLUSTER, 1 WAY
0650 1 43	1	\$4,500.00	\$36,000.00	8.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL PROGRAMMABLE, 2 SECTION, 1-2 WAYS
0650 1 44	1	\$10,000.00	\$20,000.00	2.000	AS	N	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL PROGRAMMABLE, 3 SECTION, 1 WAY
0650 1 60	18	\$185.25	\$53,351.14	288.000	AS	N	VEHICULAR TRAFFIC SIGNAL, REMOVE- POLES TO REMAIN
0650 1 70	8	\$944.43	\$28,332.96	30.000	AS	N	VEHICULAR TRAFFIC SIGNAL, RELOCATE- INCLUDES REMOVAL AND REINSTALLATION
0650 2102	3	\$394.78	\$9,080.00	23.000	EA	N	VEHICULAR SIGNAL AUXILIARIES, REPAIR/REPLACE/RETROFIT- FURNISH & INSTALL, BACKPLATE- BLACK WITH REFLECT BORDER
0650 2109	18	\$584.24	\$418,319.33	716.000	EA	N	VEHICULAR SIGNAL AUXILIARIES, REPAIR/REPLACE/RETROFIT- FURNISH & INSTALL, BACKPLATE- FLEXIBLE REQUIRED
0653 1 11	56	\$901.82	\$605,088.00	668.000	AS	N	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 1 WAY
0653 1 12	24	\$1,615.40	\$164,770.34	102.000	AS	N	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 2 WAYS
0653 1 40	2	\$620.00	\$2,480.00	4.000	AS	N	PEDESTRIAN SIGNAL, RELOCATE
0653 1 60	20	\$184.44	\$40,391.62	219.000	AS	N	PEDESTRIAN SIGNAL, REMOVE PED SIGNAL- POLE/PEDESTAL TO REMAIN
0654 1 10	2	\$50,142.78	\$1,082,570.00	18.000	AS	N	MIDBLOCK CROSSWALK: IN ROADWAY LIGHT ASSEMBLY, FURNISH & INSTALL- AC POWERED, COMPLETE CROSSING



Florida Department of Transportation
 Item Average Unit Cost
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 Statewide

Contract Type: CC
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Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0660 3 41	1	\$3,382.49	\$6,764.98	2.000	EA	N	VEHICLE DETECTION SYSTEM- MICROWAVE, RELOCATE CABINET EQUIPMENT
0660 3 42	2	\$2,584.00	\$18,087.97	7.000	EA	N	VEHICLE DETECTION SYSTEM - MICROWAVE, RELOCATE, ABOVE GROUND EQUIPMENT
0660 3 51	1	\$1,282.40	\$1,282.40	1.000	EA	N	VEHICLE DETECTION SYSTEM- MICROWAVE, ADJUST & MODIFY, CABINET EQUIPMENT
0660 3 52	3	\$1,903.46	\$9,517.32	5.000	EA	N	VEHICLE DETECTION SYSTEM - MICROWAVE, ADJUST & MODIFY, ABOVE GROUND EQUIPMENT
0660 3 60	1	\$531.09	\$531.09	1.000	EA	N	VEHICLE DETECTION SYSTEM - MICROWAVE, REMOVE, COMPLETE SYSTEM
0660 4 11	54	\$12,831.69	\$2,989,783.26	233.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, FURNISH & INSTALL CABINET EQUIPMENT
0660 4 12	58	\$5,663.43	\$2,826,053.16	499.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, FURNISH & INSTALL ABOVE GROUND EQUIPMENT
0660 4 41	4	\$1,617.53	\$8,087.66	5.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, RELOCATE CABINET EQUIPMENT
0660 4 42	7	\$1,192.26	\$20,268.35	17.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, RELOCATE ABOVE GROUND EQUIPMENT
0660 4 51	6	\$3,622.86	\$61,588.69	17.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, ADJUST/MODIFY CABINET EQUIPMENT
0660 4 52	3	\$1,864.23	\$11,185.40	6.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, ADJUST/MODIFY ABOVE GROUND EQUIPMENT



Florida Department of Transportation
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Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0660 2102	18	\$1,045.50	\$396,242.74	379.000	AS	N	LOOP ASSEMBLY, F&I, TYPE B
0660 2106	31	\$1,552.58	\$659,845.76	425.000	AS	N	LOOP ASSEMBLY, F&I, TYPE F
0660 3 11	12	\$4,257.83	\$250,884.40	59.000	EA	N	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT
0660 3 12	12	\$12,333.17	\$1,319,493.06	107.000	EA	N	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT
0660 3 41	1	\$3,389.97	\$6,764.98	2.000	EA	N	VEHICLE DETECTION SYSTEM- MICROWAVE, RELOCATE CABINET EQUIPMENT
0660 4 11	21	\$12,414.41	\$1,465,152.23	118.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, FURNISH & INSTALL CABINET EQUIPMENT
0660 4 12	22	\$6,028.89	\$1,254,009.77	208.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, FURNISH & INSTALL ABOVE GROUND EQUIPMENT
0660 4 41	1	\$600.00	\$600.00	1.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, RELOCATE CABINET EQUIPMENT
0660 4 42	4	\$1,363.75	\$10,910.00	8.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, RELOCATE ABOVE GROUND EQUIPMENT
0660 4 51	3	\$2,221.97	\$8,887.89	4.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, ADJUST/MODIFY CABINET EQUIPMENT
0660 4 52	1	\$1,298.00	\$2,596.00	2.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, ADJUST/MODIFY ABOVE GROUND EQUIPMENT
0660 4 60	5	\$773.94	\$10,835.12	14.000	EA	N	VEHICLE DETECTION SYSTEM- VIDEO, REMOVE
0660 5 62	1	\$140.16	\$840.96	6.000	EA	N	VEHICLE DETECTION SYSTEM- WIRELESS MAGNETOMETER, REMOVE



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Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0663 1400	5	\$2,628.12	\$34,165.61	13.000	EA	N	SIGNAL PRIORITY & PREEMPTION SYSTEM, RELOCATE
0665 1 11	47	\$330.80	\$242,804.78	734.000	EA	N	PEDESTRIAN DETECTOR, FURNISH & INSTALL, STANDARD
0665 1 12	15	\$1,585.38	\$351,954.08	222.000	EA	N	PEDESTRIAN DETECTOR, FURNISH & INSTALL, ACCESSIBLE
0665 1 40	1	\$302.50	\$1,512.50	5.000	EA	N	PEDESTRIAN DETECTOR, RELOCATE
0665 1 50	3	\$475.16	\$4,276.45	9.000	EA	N	PEDESTRIAN DETECTOR, ADJUST/MODIFY ON EXISTING POLE
0665 1 60	22	\$69.30	\$19,541.28	282.000	EA	N	PEDESTRIAN DETECTOR, REMOVE- POLE/PEDESTAL TO REMAIN
0670 4 1	1	\$6,000.00	\$6,000.00	1.000	AS	N	INTERSECTION CONTROL BEACON CONTROLLER ASSIMBLY, FURNISH & INSTALL
0670 5110	20	\$38,554.92	\$925,317.98	20.000	AS	N	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA
0670 5111	17	\$43,341.47	\$1,516,951.47	17.000	AS	N	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 1 PREEMPTION
0670 5112	4	\$42,699.43	\$213,497.14	4.000	AS	N	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 2 PREEMPTION
0670 5140	5	\$40,233.68	\$885,141.00	5.000	AS	N	TRAFFIC CONTROLLER ASSEMBLY, FURNISH & INSTALL MODEL 2070
0670 5141	3	\$40,937.50	\$163,750.00	3.000	AS	N	TRAFFIC CONTROLLER ASSEMBLY, FURNISH & INSTALL, MODEL 2070, 1 PREEMPTION
0670 5500	2	\$5,044.50	\$10,089.00	2.000	AS	N	TRAFFIC CONTROLLER ASSEMBLY, RELOCATE CONTROLLER WITH CABINET
0670 5600	29	\$974.13	\$45,783.97	29.000	AS	N	TRAFFIC CONTROLLER ASSEMBLY, REMOVE CONTROLLER WITH CABINET
0671 2 11	1	\$5,130.00	\$5,130.00	1.000	EA	N	TRAFFIC CONTROLLER WITHOUT CABINET, F&I IN EXISTING CABINET, NEMA
0671 2 40	4	\$3,345.37	\$53,525.91	16.000	EA	N	TRAFFIC CONTROLLER, MODIFY
0671 2 60	2	\$457.00	\$914.00	2.000	EA	N	TRAFFIC CONTROLLER, REMOVE- CABINET TO REMAN



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Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0676 3 10							10"W X 13"H X 11" D
0678 1104	1	\$134.55	\$134.55	1.000	EA	N	CONTROLLER ACCESSORIES, REPLACE EXISTING- FURNISH AND INSTALL, LOAD SWITCH
0680 1122	1	\$32,360.00	\$64,360.00	2.000	EA	N	SYSTEM CONTROL EQUIPMENT, FURNISH & INSTALL, ADAPTIVE SIGNAL CONTROL SYSTEM- 170, CABINET EQUIPMENT
0680 1123	1	\$75,000.00	\$30,000.00	4.000	EA	N	SYSTEM CONTROL EQUIPMENT, FURNISH & INSTALL, ADAPTIVE SIGNAL CONTROL SYSTEM- 170, ABOVE GROUND EQUIPMENT
0682 1112	2	\$11,950.00	\$79,300.00	7.000	EA	N	ITS CCTV CAMERA, F&I, DOME ENCLOSURE - PRESSURIZED, IP, STANDARD DEFINITION
0682 1113	4	\$9,214.26	\$340,932.12	37.000	EA	N	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION
0682 1133	6	\$7,429.28	\$312,057.67	42.000	EA	N	ITS CCTV CAMERA, F&I, DOME ENCLOSURE - NON-PRESSURIZED, IP, HIGH DEFINITION
0682 1300	1	\$3,657.50	\$14,630.00	4.000	EA	N	ITS CCTV CAMERA, INSTALL
0682 1400	3	\$3,453.33	\$13,815.00	4.000	EA	N	ITS CCTV CAMERA, RELOCATE
0682 1500	1	\$1,988.49	\$1,988.49	1.000	EA	N	ITS CCTV CAMERA, ADJUST/MODIFY
0682 1600	6	\$554.15	\$6,651.94	12.000	EA	N	ITS CCTV CAMERA, REMOVE & DISPOSAL
0684 1 1	7	\$4,959.84	\$634,878.68	128.000	EA	N	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL
0684 1 4	1	\$765.00	\$1,530.00	2.000	EA	N	MANAGED FIELD ETHERNET SWITCH, RELOCATE
0684 1 5	1	\$908.49	\$908.49	1.000	EA	N	MANAGED FIELD ETHERNET SWITCH, ADJUST / MODIFY
0684 1 6	1	\$461.26	\$461.26	1.000	EA	N	MANAGED FIELD ETHERNET SWITCH, REMOVE- CABINET TO REMAIN



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Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0695 8 11							INSTALL
0700 1 11	99	\$502.76	\$1,972,345.62	3,923.000	AS	N	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF
0700 1 12	67	\$1,607.87	\$1,710,768.80	1,064.000	AS	N	SINGLE POST SIGN, F&I GROUND MOUNT, 12-20 SF
0700 1 13	40	\$2,307.94	\$360,039.21	156.000	AS	N	SINGLE POST SIGN, F&I GROUND MOUNT, 21-30 SF
0700 1 14	10	\$2,686.31	\$85,962.02	32.000	AS	N	SINGLE POST SIGN, F&I GROUND MOUNT, 31+ SF
0700 1 21	2	\$2,201.92	\$11,009.60	5.000	AS	N	SINGLE POST SIGN, F&I BARRIER MOUNT INDEX 11871/700-013 UP TO 12 SF
0700 1 22	4	\$2,826.93	\$118,731.20	42.000	AS	N	SINGLE POST SIGN, F&I BARRIER MOUNT INDEX 11871/700-013, 12-20 SF
0700 1 31	4	\$3,135.45	\$53,302.64	17.000	AS	N	SINGLE POST SIGN, F&I BRIDGE MOUNT INDEX 11870/700-012, UP TO 12 SF
0700 1 32	2	\$3,303.33	\$9,910.00	3.000	AS	N	SINGLE POST SIGN, F&I BRIDGE MOUNT INDEX 11870/700-012, 12-20 SF
0700 1 40	1	\$220.00	\$220.00	1.000	AS	N	SINGLE POST SIGN, INSTALL
0700 1 50	63	\$387.24	\$178,517.91	461.000	AS	N	SINGLE POST SIGN, RELOCATE
0700 1 60	91	\$53.03	\$131,833.33	2,486.000	AS	N	SINGLE POST SIGN, REMOVE
0700 1 74	4	\$3,738.13	\$48,595.69	13.000	AS	N	SINGLE POST SIGN, F&I CUSTOM, 31+ SF
0700 2 11	1	\$5,191.36	\$15,574.08	3.000	AS	N	MULTI- POST SIGN, F&I GROUND MOUNT, UP TO 12 SF
0700 2 12	5	\$5,084.79	\$55,932.68	11.000	AS	N	MULTI- POST SIGN, F&I GROUND MOUNT, 12-20 SF
0700 2 13	9	\$5,423.90	\$92,206.35	17.000	AS	N	MULTI- POST SIGN, F&I GROUND MOUNT, 21-30 SF
0700 2 14	19	\$7,063.96	\$339,070.00	48.000	AS	N	MULTI- POST SIGN, F&I GROUND MOUNT, 31-50 SF
0700 2 15	16	\$10,021.31	\$410,873.54	41.000	AS	N	MULTI- POST SIGN, F&I GROUND MOUNT, 51-100 SF



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0700 4113	6	\$145,343.60	\$2,180,154.00	15.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, FURNISH & INSTALL, CANTILEVER, 31-40 FT
0700 4114	5	\$146,430.51	\$5,125,068.00	35.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, FURNISH & INSTALL, CANTILEVER, 41-50 FT
0700 4115	1	\$245,000.00	\$245,000.00	1.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, FURNISH & INSTALL, SPAN, 51-100 FT
0700 4116	2	\$242,416.40	\$1,212,082.00	5.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, FURNISH & INSTALL, SPAN, 101-150 FT
0700 4117	1	\$80,000.00	\$160,000.00	2.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, RELOCATE, CANTILEVER, 41-50 FT
0700 4611	1	\$6,500.00	\$19,500.00	3.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, SHALLOW FOUNDATION REMOVAL, CANTILEVER
0700 4612	3	\$17,083.05	\$102,498.51	6.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, DEEP FOUNDATION REMOVAL, CANTILEVER
0700 4621	1	\$20,000.00	\$80,000.00	4.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, DEEP FOUNDATION REMOVAL, SPAN
0700 4641	2	\$4,677.67	\$14,033.00	3.000	EA	N	OVERHEAD STATIC SIGN STRUCTURE, REMOVE BRIDGE MOUNT
0700 5211	5	\$3,954.96	\$51,414.46	13.000	EA	N	INTERNALLY ILLUMINATED SIGN, FURNISH & INSTALL OVERHEAD MOUNT, UP TO 12 SF
0700 5212	41	\$4,967.73	\$1,266,772.07	255.000	EA	N	INTERNALLY ILLUMINATED SIGN, FURNISH & INSTALL, OVERHEAD MOUNT, 12-18 SF



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Item	No. of Conts	Weighted Average	Total Amount	Total Quantity	Unit Meas	Obs?	Description
0715 5 21	2	\$3,921.03	\$66,657.45	17.000	EA	N	LUMINAIRE & BRACKET ARM, REPLACE LUMINAIRE AND ARM ON EXISTING POLE
0715 5 31	7	\$2,565.00	\$79,515.04	31.000	EA	N	LUMINAIRE & BRACKET ARM- ALUMINUM, FURNISH & INSTALL NEW LUMINAIRE AND ARM ON NEW/EXISTING POLE
0715 5 32	7	\$4,028.10	\$64,449.67	16.000	EA	N	LUMINAIRE & BRACKET ARM- GALV STEEL, FURNISH & INSTALL NEW LUMINAIRE AND ARM ON NEW/EXISTING POLE
0715 5 51	2	\$529.76	\$2,119.04	4.000	EA	N	LUMINAIRE & BRACKET ARM, REMOVE LUMINAIRE AND ARM; POLE REMAINS
0715 7 11	17	\$19,076.81	\$553,227.61	29.000	EA	N	LOAD CENTER, F&I, SECONDARY VOLTAGE
0715 7 21	2	\$6,618.45	\$26,473.80	4.000	EA	N	LOAD CENTER, REWORK, SECONDARY VOLTAGE
0715 7 31	1	\$7,000.00	\$7,000.00	1.000	EA	N	LOAD CENTER, RELOCATE, SECONDARY VOLTAGE
0715 7 41	4	\$1,087.60	\$5,438.00	5.000	EA	N	LOAD CENTER, REMOVE, SECONDARY VOLTAGE
0715 10 2	1	\$4,455.00	\$62,370.00	14.000	EA	N	LIGHT POLE FOUNDATION, F&I- MAINTENANCE USE ONLY
0715 11 33	1	\$4,485.00	\$26,910.00	6.000	EA	N	LUMINAIRE WITH BRACKET, FURNISH & INSTALL
0715 11125	8	\$2,066.89	\$241,826.39	117.000	EA	N	LUMINAIRE, F&I, UNDER DECK, WALL MOUNT
0715 11211	16	\$1,352.27	\$818,124.89	605.000	EA	N	LUMINAIRE, F&I- REPLACE EXISTING LUMINAIRE ON EXISTING POLE/ARM, ROADWAY, COBRA HEAD
0715 11212	2	\$3,420.16	\$218,890.00	64.000	EA	N	LUMINAIRE, F&I- REPLACE EXISTING LUMINAIRE ON EXISTING POLE/ARM, ROADWAY HIGH MAST
0715 11213	6	\$1,443.31	\$327,631.72	27.000	EA	N	LUMINAIRE, F&I- REPLACE EXISTING LUMINAIRE ON EXISTING POLE/ARM, ROADWAY, POLE TOP

ITEMIZED BID SCHEDULE - Revision 1

PROJECT NAME: 66TH AVENUE (NORTH OF 49TH STREET TO 69TH STREET)

PROJECT NO. IRC-1505 BID NO. 2021018 FM NOS. 436379-1-54-01 & 436379-1-54-02

BIDDER'S NAME:

Item No.	Description	Unit	Unit Price	Quantity	Amount
PHASE 1A - ROADWAY, 49TH STREET TO 57TH STREET					
0101 1	MOBILIZATION	LS	\$ 1,400,000.00	1	\$ 1,400,000.00
0102 1	MAINTENANCE OF TRAFFIC	LS	\$ 230,000.00	1	\$ 230,000.00
IRC 1	FIELD OFFICE	LS	\$ 3,000.00	1	\$ 3,000.00
0104 2	PREVENTION, CONTROL & ABATEMENT OF EROSION AND WATER POLLUTION	LS	\$ 120,000.00	1	\$ 120,000.00
0110 1 1	CLEARING & GRUBBING	LS	\$ 300,000.00	1	\$ 300,000.00
0110 7 1	MAILBOX F & I	EA	\$ 100.00	3	\$ 300.00
0120 1	REGULAR EXCAVATION	CY	\$ 3.50	5,801	\$ 20,303.50
0120 4	SUBSOIL EXCAVATION	CY	\$ 22.00	1,000	\$ 22,000.00
0120 5	CHANNEL EXCAVATION (LAKE EXCAVATION)	CY	\$ 3.50	35,755	\$ 125,142.50
0120 6	EMBANKMENT, COMPACTED IN PLACE	CY	\$ 7.50	89,721	\$ 672,907.50
0121 70	FLOWABLE FILL	CY	\$ 170.00	100	\$ 17,000.00
0160 4	TYPE B STABILIZATION	SY	\$ 2.70	82,243	\$ 222,056.10
285709	OPTIONAL BASE, BASE GROUP 09	SY	\$ 13.00	64,018	\$ 832,234.00
0286 1	TURNOUT CONSTRUCTION	SY	\$ 26.00	619	\$ 16,094.00
0286 2	TURNOUT CONSTRUCTION-ASPHALT	TN	\$ 150.00	135	\$ 20,250.00
0334 1 13	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, SP-12.5	TN	\$ 91.00	6,162	\$ 560,742.00
0337 7 82	ASPHALTIC CONCRETE FRICTION COURSE, TRAFFIC C, FC-9.5, PG 76-22	TN	\$ 125.00	4,401	\$ 550,125.00
0339 1	MISCELLANEOUS ASPHALT PAVEMENT	TN	\$ 250.00	56	\$ 14,000.00
0350 3 1	PLAIN CEMENT CONCRETE PAVEMENT, 6"	SY	\$ 48.00	743	\$ 35,664.00
0400 1 2	CONCRETE CLASS I, ENDWALLS	CY	\$ 1,360.00	17.5	\$ 23,800.00
0425 1 351	INLETS, CURB, TYPE P-5, <10'	EA	\$ 5,187.00	8	\$ 41,496.00
0425 1 361	INLETS, CURB, TYPE P-6, <10'	EA	\$ 5,500.00	13	\$ 71,500.00
0425 1 451	INLETS, CURB, TYPE J-5, <10'	EA	\$ 8,170.00	3	\$ 24,510.00
0425 1 461	INLETS, CURB, TYPE J-6, <10'	EA	\$ 8,778.00	4	\$ 35,112.00
0425 1 521	INLETS, DITCH BOTTOM, TYPE C, <10'	EA	\$ 3,455.00	8	\$ 27,640.00
0425 2 41	MANHOLES, P-7, <10'	EA	\$ 4,760.00	3	\$ 14,280.00

ITEMIZED BID SCHEDULE - Revision 1

PROJECT NAME: 66TH AVENUE (NORTH OF 49TH STREET TO 69TH STREET)
PROJECT NO. IRC-1505 BID NO. 2021018 FM NOS. 436379-1-54-01 & 436379-1-54-02

BIDDER'S NAME:

Item No.	Description	Unit	Unit Price	Quantity	Amount
PHASE 1B - ROADWAY, 57TH STREET TO 69TH STREET					
101-1	MOBILIZATION/ DEMOBILIZATION	LS	\$ 1,800,000.00	1	\$ 1,800,000.00
102-1	MAINTENANCE OF TRAFFIC	LS	\$ 400,000.00	1	\$ 400,000.00
104-2	PREVENTION, CONTROL & ABATEMENT OF EROSION AND WATER POLLUTION	LS	\$ 145,000.00	1	\$ 145,000.00
110-1-1	CLEARING & GRUBBING	AC	\$ 4,418.00	86.0	\$ 379,948.00
110-7-1	MAILBOX F & I	EA	\$ 100.00	40	\$ 4,000.00
120-1	REGULAR EXCAVATION	CY	\$ 3.50	81,595	\$ 285,582.50
120-4	SUBSOIL EXCAVATION	CY	\$ 22.00	3,198	\$ 70,356.00
120-5	CHANNEL EXCAVATION	CY	\$ 3.50	890	\$ 3,115.00
120-6	EMBANKMENT	CY	\$ 7.50	128,124	\$ 960,930.00
160-4	TYPE "B" STABILIZATION	SY	\$ 2.70	123,552	\$ 333,590.40
285-709	OPTIONAL BASE (BASE GROUP 9)	SY	\$ 13.00	108,050	\$ 1,404,650.00
286-1	TURNOUT CONSTRUCTION	SY	\$ 26.00	2,320	\$ 60,320.00
327-70-01	MILLING EXISTING ASPHALT PAVEMENT (1" AVG. DEPTH)	SY	\$ 15.00	118	\$ 1,770.00
334-1-13	SUPERPAVE ASPHALT CONCRETE (SP-12.5) (TRAFFIC C) (2")	TN	\$ 91.00	11,959	\$ 1,088,269.00
337-7-82	ASPHALTIC CONCRETE FRICTION COURSE (FC-9.5) (TRAFFIC C) (1")	TN	\$ 125.00	5,980	\$ 747,500.00
339-1	MISCELLANEOUS ASPHALT PAVEMENT	TN	\$ 250.00	34	\$ 8,500.00
400-1-2	CLASS I CONCRETE (ENDWALL)	CY	\$ 1,100.00	13.4	\$ 14,740.00
400-2-2	CLASS II CONCRETE (ENDWALL)	CY	\$ 1,735.00	125.6	\$ 217,916.00
400-4-1	REINFORCED CONCRETE BOX CULVERT (12'X10')	LF	\$ 2,360.00	72	\$ 169,920.00
415-1-1	REINFORCING STEEL (ROADWAY)	LB	\$ 1.00	6,510	\$ 6,510.00
425-1-351	INLETS (CURB) (TYPE P-5) (<10')	EA	\$ 4,880.00	32	\$ 156,160.00
425-1-361	INLETS (CURB) (TYPE P-6) (<10')	EA	\$ 4,900.00	20	\$ 98,000.00
425-1-451	INLETS (CURB) (TYPE J-5) (<10')	EA	\$ 8,170.00	6	\$ 49,020.00
425-1-452	INLETS (CURB)(TYPE J-5) (>10')	EA	\$ 11,750.00	4	\$ 47,000.00
425-1-452A	INLETS (CURB)(TYPE J-5) (>10') (CONTROL STRUCTURE W/ INTERNAL WEIR)	EA	\$ 21,500.00	1	\$ 21,500.00
425-1-461	INLETS (CURB) (TYPE J-6) (<10')	EA	\$ 8,200.00	11	\$ 90,200.00
425-1-462	INLETS (CURB) (TYPE J-6) (>10')	EA	\$ 11,550.00	1	\$ 11,550.00
425-1-521	INLETS (DT BOT) (TYPE C) (<10')	EA	\$ 3,200.00	18	\$ 57,600.00
425-1-521A	INLETS (DT BOT)(TYPE C) (<10') (CONTROL STRUCTURE W/ EXTERNAL SKIMMER)	EA	\$ 6,100.00	3	\$ 18,300.00
425-1-531	INLETS (DT BOT) (TYPE C MOD.) (<10') (BACK OF SWK INLET)	EA	\$ 3,250.00	2	\$ 6,500.00
425-1-541	INLETS (DT BOT) (TYPE D) (<10')	EA	\$ 3,950.00	2	\$ 7,900.00

HALLEY ENGINEERING CONTRACTORS, INC.					
To: Indian River County IRC 1505 66th Ave				Contact: Rick Shepherd Phone: 772-521-5632	
Project Name: 53RD ST SIGNALIZATION					
Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
101-1	MOBILIZATION	1.00	LS	\$65,680.00	\$65,680.00
102-1	MAINTENANCE OF TRAFFIC	1.00	LS	\$16,249.00	\$16,249.00
110-1-1	CLEARING & GRUBBING	1.00	LS	\$3,450.00	\$3,450.00
630-2-11	CONDUIT (SIGNAL) (F & I) UNDERGROUND	236.00	LF	\$58.80	\$13,876.80
630-2-12	2" CONDUIT -SIGNALS (F&I) UNDERPAVEMENT 1 RUN	220.00	LF	\$58.80	\$12,936.00
630-2-12	2" CONDUIT -SIGNALS (F&I) UNDERPAVEMENT 5 RUNS	300.00	INT	\$58.80	\$17,640.00
630-2-12	2" CONDUIT -SIGNALS (F&I) UNDERPAVEMENT 6 RUNS	150.00	EACH	\$58.80	\$8,820.00
632-7-1	SIGNAL CABLE (F&I)	1.00	EACH	\$17,325.00	\$17,325.00
633-2-31	FIBER OPTIC CONNECTION (INSTALL) (SPLICE)	1.00	AMBY	\$55.34	\$55.34
633-3-11	FIBER OPTIC CONNECTION HARDWARE (F & I) SPLICE ENCLOSURE	12.00	LF	\$1,627.50	\$19,530.00
633-3-15	FIBER OPTIC CONNECTION HARDWARE (F & I) (PATCH PANEL	1.00	EACH	\$1,811.25	\$1,811.25
635-2-11	PULL & SPLICE BOX (F & I) (SIGNAL) (13 X 24)	22.00	EACH	\$1,680.00	\$36,960.00
635-2-12	PULL & SPLICE BOX (F & I) (SIGNAL) (24 X 36)	1.00	EACH	\$2,630.25	\$2,630.25
639-1-122	ELECTRICAL POWER SOURCE (F & I) M UNDERGROUND (M PURCHASE BY	1.00	AS	\$3,843.00	\$3,843.00
639-2-1	ELECTRICAL SERVICE WIRE (F & I)	300.00	LF	\$6.72	\$2,016.00
639-3-11	ELECTRICAL SERVICE DISCONNECT (F & I) POLE	1.00	EA	\$2,499.00	\$2,499.00
639-2-12	PER-STRESSED CONCRETE POLE (F & I) TYPE P- II SERVICE POLE	1.00	EA	\$2,719.50	\$2,719.50
646-1-11	ALUMINIUM SIGNAL POLE (F & I) PEDESTAL	4.00	EA	\$2,257.50	\$9,030.00
649-21-10	MAST ARM (F & I) (WS -170) (SINGLE ARM) (60')	2.00	EA	\$82,950.00	\$165,900.00
649-21-15	MAST ARM (F & I) (WS -170) (SINGLE ARM) (70')	2.00	EA	\$89,250.00	\$178,500.00
650-1-14	TRAFFIC SIGNAL (F & I) ALUMINIUM (3-SECTION) (1-WAY)	8.00	AS	\$1,722.00	\$13,776.00
650-1-16	TRAFFIC SIGNAL (F & I) ALUMINIUM (4-SECTION) (1-WAY)	4.00	AS	\$2,472.75	\$9,891.00
653-1-11	PEDESTRIAN SIGNAL (F & I) LED COUNTDOWN (1-WAY)	4.00	AS	\$924.00	\$3,696.00
660-4-11	VIDEO DETECTION SYSTEM (F& I) CABINET	8.00	EA	\$7,491.75	\$59,934.00
660-4-12	VIDEO DETECTION SYSTEM (F & I)	4.00	EA	\$11,586.75	\$46,347.00
665-1-11	PEDESTRIAN DETECTOR (PUSH BUTTON) F& I STANDARD	4.00	EA	\$220.50	\$882.00
670-5-110	TRAFFIC CONTROL ASSEMBLY (F & I) NEMA	1.00	AS	\$50,610.00	\$50,610.00
682-2-133	CCTV CAMERA (F & I) (DOME PTZ, NON-PRESSURIZED) (IP, HIGH DEFINITION)	1.00	EA	\$9,712.50	\$9,712.50
684-1-1	MANAGED FIELD ETHERNET SWITCH LAYER 2 (F & I)	1.00	EA	\$6,825.00	\$6,825.00
700-1-60	SINGLE POST SIGN (REMOVE)	2.00	AS	\$131.25	\$262.50
700-5-22	INTERNALLY ILLUMINATED SIGN (F & I) OVERHEAD (12-18 SF)	4.00	EA	\$4,410.00	\$17,640.00
715-5-31	LUMINAIRE AND BRACKET ARM (F& I)	4.00	EA	\$3,307.50	\$13,230.00
TOTAL BID PRICE					\$814,277.14
Notes:					
<ul style="list-style-type: none"> • Our proposal is valid for 30 days following the date of bid submission. Exceptions may be granted upon written request. * Local power company impact fees & permit fees are not included. • Preparation of shop drawings and submittals generally take 30-45 days following the issuance of a notice to proceed under usual circumstances. • A reasonable material procurement is anticipated thereafter (22-28 weeks) • Proposal does NOT include any cost associated with de-energizing electrical lines for installation of drill shaft foundations and Mastarms, if needed. 					
ACCEPTED:					
The above prices, specifications and conditions are satisfactory and are hereby accepted.					
Buyer:					
Signature: _____				Date of	
Acceptance: _____				_____	

Quote No: 22-1055 change order 4

Project: IRC 66 AVE

Location: 66 AVE & 53

County:

INDIAN RIVER

COMPANY A ALLEN

ADDRESS

PHONE

EMAIL

NAT TRAFFIC CONTROL SYSTEMS
9250 BELEVEDERE RD

WEST PALM BEACH
FLORIDA 33411
561 313 2812
Email:aallen@ntcs.co



PROPOSAL

Contract Item	Description	UM	Qty.	Unit Price	Total Amount
101-1	MOBILIZATION / DEMOBILIZATION	LS	1	35,000.00	35,000.00
102-1	MOT	LS	1		
110-1-1		LS	1		
630-2-11	CONDUIT (SIGNAL) (F & I) UNDERGROUND	LF	236	56.00	13,216.00
630-2-12	2" CONDUIT -SIGNALS (F&I) UNDERPAVEMENT 1 RUN	LF	220	56.00	12,320.00
630-2-12	2" CONDUIT -SIGNALS (F&I) UNDERPAVEMENT 5 RUNS	LF	300	56.00	16,800.00
630-2-12	2" CONDUIT -SIGNALS (F&I) UNDERPAVEMENT 6 RUNS	LF	150	56.00	8,400.00
632-7-1	SIGNAL CABLE (F&I)	PI	1	16,500.00	16,500.00
633-2-31	FIBER OPYIC CONNECTION (INSTALL) (SPLICE)	EA	1	52.70	52.70
633-3-11	FIBER OPTIC CONNECTION HARDWARE (F & I) SPLICE ENCLOSURE	EA	12	1,550.00	18,600.00
633-3-15	FIBER OPTIC CONNECTION HARDWARE (F & I) (PATCH PANEL PRETERMINATED)	EA	1	1,725.00	1,725.00
635-2-11	PULL & SPLICE BOX (F & I) (SIGNAL) (13 X 24)	EA	22	1,600.00	35,200.00
635-2-12	PULL & SPLICE BOX (F & I) (SIGNAL) (24 X 36)	EA	1	2,505.00	2,505.00

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Contract Item	Description	UM	Qty.	Unit Price	Total Amount
639-1-122	ELECTRICAL POWER SOURCE (F & I)M UNDERGROUND (M PURCHASE BY CONTRACTOR)	AS	1	3,660.00	3,660.00
639-2-1	ELECTRICAL SERVICE WIRE (F & I)	LF	300	6.40	1,920.00
639-3-11	ELECTRICAL SERVICE DISCONNECT (F & I) POLE	EA	1	2,380.00	2,380.00
639-2-12	PER-STRESSED CONCRETE POLE (F & I) TYPE P- II SERVICE POLE	EA	1	2,590.00	2,590.00
646-1-11	ALUMINUM SIGNAL POLE (F& I) PEDESTAL	EA	4	2,150.00	8,600.00
649-21-10	MAST ARM (F & I) (WS -170) (SINGLE ARM) (60')	EA	2	79,000.00	158,000.00
649-21-15	MAST ARM (F & I) (WS -170) (SINGLE ARM) (70')	EA	2	85,000.00	170,000.00
650-1-14	TRAFFIC SIGNAL (F & I) ALUMINIUM (3-SECTION) (1-WAY)	AS	8	1,640.00	13,120.00
650-1-16	TRAFFIC SIGNAL (F & I) ALUMINIUM (4-SECTION) (1-WAY)	AS	4	2,355.00	9,420.00
653-1-11	PEDDESTRIAN SIGNAL (F & I) LED COUNTDOWN (1-WAY)	AS	4	880.00	3,520.00
660-4-11	VIDEO DETECTION SYSTEM (F& I) CABINET	EA	8	7,135.00	57,080.00
660-4-12	VIDEO DETECTION SYSTEM (F & I)	EA	4	11,035.00	44,140.00
665-1-11	PEDESTRIAN DETECTOR (PUSH BUTTON) F& I STANDARD	EA	4	210.00	840.00
670-5-110	TRAFFIC CONTROL ASSEMBLY (F & I) NEMA	AS	1	48,200.00	48,200.00
682-2-133	CCTV CAMERA (F & I) (DOME PTZ, NON-PRESSURIZED) (IP, HIGH DEFINITION)	EA	1	9,250.00	9,250.00
684-1-1	MANAGED FIELD ENTHERNET SWITCH LAYER 2 (F & I)	EA	1	6,500.00	6,500.00
700-1-60	SINGLE POST SIGN (REMOVE)	AS	2	125.00	250.00
700-5-22	INTERNALLY ILLUMINATED SIGN (F & I) OVERHEAD (12-18 SF)	EA	4	4,200.00	16,800.00
715-5-31	LUMINAIRE AND BRACKET ARM (F& I)	EA	4	3,150.00	12,600.00

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PROPOSAL

Contract Item	Description	UM	Qty.	Unit Price	Total Amount
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GRAND TOTAL 729,188.70

COMMENTS:

- THIS PROPOSAL MUST BE A PART OF THE CONTRACT DOCUMENTS. ALL COMMENTS BELOW SUPERCEDES ANY LANGUAGE INCLUDED IN THE CONTRACT DOCUMENTS THAT CONTRADICTS THESE COMMENTS
- 1.) MAINTENANCE OF TRAFFIC IS TO BE PROVIDED BY PRIME CONTRACTOR
 - 2.) ALL OFF DUTY LAW ENFORCEMENT OFFICERS, IF REQUIRED, TO BE PROVIDED BY PRIME
 - 3.) ALL MOT DEVICES TO BE PROVIDED BY PRIME CONTRACTOR
 - 4.) IMPACT FEES, PERMIT FEES, BONDING, PERMITTING AND SURVEYING NOT INCLUDED.
 - 5.) ALL SURVYING WITH OFF SETS TO BE DONE BY PRIME
 - 6.) COST FOR CONCRETE APRONS AROUND PULL BOXES IS NOT INCLUDED
 - 7.)
 - 8.)
 - 9.)
 - 10.) PLEASE CALL ANTHONNEEL ALLEN @ 5613132812 WITH ANY QUESTIONS.