



## ADDENDUM NO. 2

Issue Date: June 1, 2020

Project Name: Indian River Boulevard and 8<sup>th</sup> Street Signalization

Bid Number: 2020037

Bid Opening Date: June 11, 2020

This addendum is being released to provide meeting minutes.

The information and documents contained in this addendum are hereby incorporated in the invitation to bid. **This addendum must be acknowledged where indicated on the bid form, or the bid will be declared non-responsive.**



# *Board of County Commissioners*

*1801 27th Street  
Vero Beach, Florida 32960-3365  
Telephone: (772) 567-8000  
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## **MANDATORY PRE-BID MEETING MINUTES**

**MAY 28, 2020, 2:00 P.M.**

**INDIAN RIVER COUNTY ADMINISTRATION BUILDING**

Conference Call/ Zoom Meeting

**INDIAN RIVER BOULEVARD AND 8<sup>TH</sup> STREET SIGNALIZATION**

**PROJECT No. IRC-1909**

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Project Name: INDIAN RIVER BOULEVARD AND 8<sup>TH</sup> STREET SIGNALIZATION  
Project Number: IRC-1909  
Bid Number: 2020037

### **INTRODUCTIONS / SIGN IN SHEET**

**This meeting was recorded as part of the project records.**

This was a Pre-bid meeting; attendance at this conference by all bidders was **MANDATORY**. Bidders were required to sign in before 2:00 P.M. to receive credit for attending.

### **PROJECT DESCRIPTION:**

The proposed improvements to the intersection of Indian River Boulevard and 8th Street consist of the signalization of the intersection by installing mast arm assemblies with traffic signals, milling and resurfacing, installation of pedestrian crosswalks, sidewalk ramps and landings, associated signage and pavement markings, and sodding.

### **CONTRACT DETAILS**

Bid opening: Thursday, June 11, 2020 at 2:00 PM  
Contract time: 240 days to substantial completion  
270 days to final completion  
Liquidated Damages: \$1,656.00 per day

### **CONTACTS BIDDING PROCESS**

All communications concerning this bid shall be directed to Indian River County Purchasing Division at [purchasing@ircgov.com](mailto:purchasing@ircgov.com).

### **PROJECT CONSULTANTS:**

Mike Foreman, PE  
Kimley-Horn and Associates, Inc.

**UTILITIES**

AT&T  
 Comcast Cable Communications, Inc.  
 Florida City Gas  
 Florida Power and Light, Co.  
 Indian River County Department of Utilities Services  
 Indian River County Telecommunications  
 Indian River County Traffic Operations

**OTHER ISSUES**

- Bidders to review plan documents and provide comments to Indian River Purchasing Department as soon as possible. No further comments or questions will be addressed from end of business, June 1, 2020.
- Governing Standards and Specification for this project will be FDOT FY 2018-19, Standard Specifications for Road and Bridge Construction dated January 2019.
- Indian River County Traffic Signal Specifications.
- Notice to Proceed is expected end of July 2020.
- IRC work hours are Monday to Friday from 7:00 AM to 5:00 PM
- Maintenance of Traffic:
  - Contractor shall submit a Maintenance of Traffic Plan to the Indian River County, Engineering Division for approval at Pre-Construction meeting.
  - The Maintenance of Traffic Plan shall meet the FDOT Index Numbers (102 – Series) and shall be signed and sealed by a Florida Professional Engineer.
  - Traffic shall be maintained at all times.
  - Temporary Lane Closures require notice to the IRC traffic department 72 hours in advance and can be conducted between 9 AM and 4 PM.
  - Access for businesses and residences shall be maintained at all times.
  - Access for School buses, sanitation & US Postal Service must be maintained.
- All testing on this project will follow FDOT specifications, this will include subgrade, asphalt, concrete and the drilled shaft testing installation. Contractor will be required to provide FDOT CQTP testing for drilled shafts.
- All drilled shaft locations will require a 5 ft hand excavation for utility clearance which shall be performed in advance of the drilled shaft mobilization.
- A Drilled Shaft Installation Plan needs to be submitted for approval.
- All areas disturbed by the Contractor will need to be restored to original conditions or better.
- Contractor shall submit material and storage staging area for approval.
- Contractor shall submit a “Hurricane Preparedness” plan prior to Notice to Proceed.

**PROJECT REQUIREMENTS:**

- Subcontractors – per Contract Documents requirements “Section 00458 – List of Subcontractors” must be completed.
- Summary of required Contractor form submittals checklist (Section 00300 – Bid Package Content)
- Invoicing shall be submitted on monthly basis and must include release of liens and Surety’s Consent.

- The County will be using e-builder for project management.

### **DISCUSSION**

- For the purpose of clarification, the County's intention was to hold this meeting via the cloud platform, Zoom. While that was accomplished for those using their computers as a means for attending and also for those using their phones as a means for attending, there was a technical difficulty that occurred for the entire meeting. It was uncertain to the participants as to whether the phone users could be heard by the computer users and vice versa. After the agenda was read, for both sets of attendees, there were minimal questions asked and the answers are provided below. As a result, the meeting recording that was taken, of the computer-cased meeting, is being provided in addition to these meeting minutes. Any further questions can still be asked of the Indian River County Purchasing Division until the deadline as stated above.
- The length of contract time is due to the anticipated delay in delivery of the mast arms after they are ordered. It is expected this could take five months. The Contractor should place the order for them as soon as possible after being awarded the project.
- Revised plans sheets 5 and 11 reflect changes that now correspond to The Indian River County Traffic Engineering Special Conditions (Appendix C in the contract).
- Any work performed outside of Indian River County work hours as stated above will need to be approved by the County and may be subject to additional inspection charges.
- There are water lines at the southwest corner of the intersection that will be located close to the mast arm foundation. Care should be taken while performing underground work in this area. There will be some minor grading work in the northwest corner of the intersection.
- The testing lab will be Andersen Andre Consulting Engineers, Inc.

### **ATTACHMENTS**

Meeting recording

Sign in sheet

Revised plan sheets 5 and 11

INDIAN RIVER COUNTY TYPICAL WIRING & CABINET PAD

**MANDATORY Pre-Bid Meeting for Bid 2020037 – INDIAN RIVER BOULEVARD & 8TH STREET SIGNALIZATION IMPROVEMENTS – May 28, 2020 at 2:00 p.m. Via Zoom**

<b>Name</b>	<b>Company</b>	<b>Phone</b>
Doug Burch	Traffic Control Devices	
Ed Shea	Ferreira Construction	
Tim Rose	Timothy Rose Contracting	
Ana Gonzalez	Sunshine Land Design	
Marty Gray	American Lighting and Signalization	
Brian Smiddy/Sean	Carr Construction	
Mike Forman	Kimley-Horn	
Kirstin Leiendecker	Indian River County Engineering	
Kevin Hansen	Indian River County Engineering	
James Ennis	Indian River County Public Works	
Jennifer Hyde	Indian River County Purchasing	

PAY ITEM FOOT NOTES

PAY ITEM NO. 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.

PAY ITEM NO.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.

PAY ITEM NO. 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 DESIGN INDEX 17700. 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 OTHER WISE STATED IN THE PLAN.

PAY ITEM NO. 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.

PAY ITEM NO. 632-7-1

SHALL BE INSTALLED PER FDOT STANDARD INDEX 17727 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 CORNER 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.

PAY ITEM NO. 635-2-11

SHALL BE INSTALLED IN ACCORDANCE WITH FDOT DESIGN STANDARD INDEX 17700, 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 INDEX 17700.

PAY ITEM NO. 639-1-112, 639-1-122

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 INDEX 17504, 17736 (AS APPLICABLE) SHALL APPLY.

PAY ITEM NO. 639-2-1

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING THE CONDUCTORS FOR THE POWER SERVICE.

PAY ITEM NO. 641-2-80

COST TO INCLUDE, BUT NOT LIMITED TO, ALL MATERIAL, EQUIPMENT AND MANPOWER TO BACKFILL EXISTING POLE FOUNDATION WITH FDOT EXCAVATABLE FLOWABLE FILL AFTER POLE REMOVAL.

PAY ITEM NO. 660-4-11 AND 660-4-12

SHALL CONSIST OF 4 VEHICLE DETECTOR ASSEMBLIES (VIDEO TYPE), ECONOLITE VIDEO DETECTION, LATEST TECHNOLOGY. 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 OTHER WISE 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.

PAY ITEM NO. 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.

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.

PAY ITEM NO. 684-6-11

WIRELESS COMMUNICATION DEVICE SHALL BE AN ECONOLITE INTUICOM RADIO ACCESS POINT OR REMOTE STATION. INCLUDE MOUNTING HARDWARE, PoE INJECTOR. COST TO INCLUDE, BUT NOT LIMITED TO, ALL MATERIALS, EQUIPMENT AND MANPOWER NEED TO FURNISH WIRELESS ETHERNET RADIO LINK AND WILL DELIVER TO INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION. COST TO INCLUDE COORDINATION WITH INDIAN RIVER COUNTY TRAFFIC ENGINEERING DIVISION FOR DELIVERY OF ASSEMBLY. INDIAN RIVER COUNTY TO INSTALL AND PROGRAM RADIO LINKS.



REVISIONS						 <small>MICHAEL C. FORMAN, P.E.                      P.E. LICENSE NUMBER 85367                      445 24th STREET, SUITE 200                      VERO BEACH, FL 32960                      (772) 794-4100                      CERTIFICATE OF AUTHORIZATION: 00000696</small>	INDIAN RIVER COUNTY BOARD OF COUNTY COMMISSIONERS INDIAN RIVER BOULEVARD & 8TH STREET SIGNALIZATION IMPROVEMENTS		PAY ITEM FOOT NOTES	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		5			
6-2020	Z.A.	△ PAY ITEM NOTE REVISION								
6-2020	Z.A.	△ PAY ITEM ADDED								

INDIAN RIVER COUNTY - TRAFFIC SIGNAL SPECIFICATIONS



A. POWER SERVICE

1. POWER SERVICES SHALL FOLLOW THE LATEST STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARD INDEX NO. 17504, 17736
2. SERVICE BREAKER BOX SHALL BE SQUARE-D MODEL #Q024L70RB, OR APPROVED EQUIVALENT.
3. POWER SERVICES ARE TO BE 120/240 VAC WITH TRIPLEX SERVICE DROP WIRE WITH TWO BLACK AND ONE WHITE CABLE FROM SERVICE DISCONNECT TO PAOWER SERVICE CONNECTION POINT.
4. ALL ABOVE GROUND CONDUIT SHALL BE HD GAVINIZED OR ALUMINUM.
5. MAST ARM POWER SERVICES SHALL BE MOUNTED ON A STUB POLE.
6. UNDERGROUND POWER SERVICE SHOULD HAVE AN FPL PULL BOX FOR THE LINE SIDE NEAR SERVICE DISCONNECT.
7. CONCRETE STRAIN POLE INSTALLATIONS SHALL HAVE THE POWER SERVICE MOUNTED ON THE STRAIN POLE.

B. TRAFFIC SIGNAL CONTROLLER

1. SHALL BE COMPATIBLE WITH ECONOLITE SYSTEM SOFTWARE.
2. SHALL HAVE INTERNAL TIME-BASED CAPABILITIES
3. 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.

1. TWO 2" CONDUITS SHALL BE INSTALLED WITH ALL INTERCONNECT RUNS.
2. PULL BOXES CONTAINING INTERCONNECT ARE TO BE INSTALLED AT NO MORE THAN 1000 FOOT INTERVALS MARKED "TRAFFIC SIGNAL"(FDOT DESIGN STANDARD INDEX 17700).
3. 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.
4. 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.
5. 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 SHELIVING.
6. IN THE CABINET, DATA CONVERSION WILL BE ACCOMPLISHED WITH RUGGEDCOM GIGABIT ETHERNET SWITCH OR IRC-APPROVED EQUIVALENT.

D. TRAFFIC SIGNAL MAST ARM

1. MAST ARMS SHALL FOLLOW THE LATEST STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS INDEX NO. 17743, 17745.
2. ALL MAST ARM 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. WIRING SHALL BE #10 AWG OR LARGER SIZE AWG.
3. MAST ARM POLES ARE TO HAVE A TERMINAL COMPARTMENT IN PLACE OF A HAND HOLE, PER FDOT INDEX NO. 649-031.
4. MAST ARM MOUNTING HEIGHT (MEASUREMENT UB INDEX NO. 17743) SHALL BE 19- FEET FOR HORIZONTAL AND 20- FEET FOR VERTICAL MOUNTED SIGNALS, IN THE ABSENCES OF GEOMETRIC ABNORMALTIES.
5. ALL MAST ARMS SHALL BE GALVANIZED STEEL WITH FACTORY FINISHED U.S. GOVERNMENT FEDERAL STANDARD 595C #14066 (HIGHWAY GREEN) IN ACCORDANCE WITH FDOT.
6. EACH TERMINAL COMPARTMENT SHALL HAVE A 20 CIRCUIT AWG#14 TERMINAL BLOCK.
7. 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 WITH IN THE SIGNAL CABINET THE SIGNS ARE NOT TO HAVE INDIVIUALL 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

1. POLES SHALL FOLLOW THE LATEST STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARD INDEX NO. 17725.
2. 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.
3. ALL ABOVE GROUND CONDUIT SHALL BE HD GAVINIZED.
4. BOTH UPPER AND LOWER SPAN SHALL BE NO LESS THAN 3/8 INCH CABLE WIRE.
5. THE SIGNAL CABLE SHALL BE ATTACHED TO THE MESSENGER WIRE BY LASHING RODS.

F. TRAFFIC SIGNAL HEADS

1. 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.
2. TRAFFIC SIGNALS MOUNTED ON MAST SUPPORTS ARE TO BE ALL AUMIMUM 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-RELLECTIVE BACK PLATES.
3. TRAFFIC SIGNALS ARE TO BE SUPPLIED WITH ALL L.E.D. INDICATIONS, INCLUDING ALL ARROWS AND YELLOWS.
4. TRAFFIC SIGNALS ARE TO BE SUPPLIED WITH TUNNEL VISORS.
5. TRAFFIC SIGNALS AND ASSOCIATED ACCESSORIES, INCLUDING BUT NOT LIMITED TO BACKPLATES SHALL BE MCCAIN.
6. PEDESTRIAN SIGNALS ARE TO BE COUNT DOWN PEDESTRIAL 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)

G. VIDEO DETECTORS

1. VIDEO DETECTION SYSTEM SHALL BE ECONOLITE LATEST TECHNOLOGY OR IRC-APPROVED EQUIVALENT.

H. VIDEO SURVEILLANCE

1. VIDEO CAMERAS SHALL BE AXIS Q6055-E PTZ DOME NETWORK CAMERA, LATEST TECHNOLOGY OR IRC-APPROVED EQUIVALENT.

I. BATTERY BACK-UP

1. BATTERY BACKUP SYSTEM IS TO BE USED ON ALL INSTALLATIONS UNLESS OTHERWISE STATED.
2. BATTERY BACKUP SHALL BE MYERS UPS SYSTEM MP2000E-TB WITH STANDING CABINET.

REVISIONS							INDIAN RIVER COUNTY BOARD OF COUNTY COMMISSIONERS INDIAN RIVER BOULEVARD & 8TH STREET SIGNALIZATION IMPROVEMENTS	INDIAN RIVER COUNTY TRAFFIC SIGNAL SPECIFICATIONS	SHEET NO.  11
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				
6-2020	Z.A.	NOTE REVISION				MICHAEL C. FORMAN, P.E. P.E. LICENSE NUMBER 85367 445 24th STREET, SUITE 200 VERO BEACH, FL 32960 (772) 794-4100 CERTIFICATE OF AUTHORIZATION: 00000696			

# INDIAN RIVER COUNTY TYPICAL WIRING & CABINET PAD

Signal Wiring 20 Pair				
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 pair				
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 pair				
Number	Color	Location	Phase	Comments
1	Green	Main Street	02, 06	
2	Red	Main Street	02, 06	
3	White	Side Street	04, 08	
4	Black	Side Street	04, 08	

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

