APPENDIX K

FINANCIAL PROJECT ID 424401-1-52-01 SUMTER COUNTY WILDWOOD (5-5496) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS





LOCATION OF PROJECT

TOWER SITE ADDRESS:

WER SITE ADDRESS:

WILDWOOD

688 E. SR-44 WILDWOOD, FL 34785

LATITUDE: 28-52-26.0 N (NAD 83) LONGITUDE: 82-05-30.7 W

WILDWOOD TOWER SITE

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

FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DO CUMENTS.

INDEX OF PLANS

KEY SHEET

SHEET DESCRIPTION

WILDWOOD REMOVAL AND INSTALLATION NOTES

WILDWOOD COMMUNICATIONS BUILDING DETAIL

WILDWOOD TOWER LOADING DIAGRAM

SHEET NO.

K-2

K-3

FDOT PROJECT MANAGER: RANDY PIERCE

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX. (850)-410-5501

STATE OF FLORIDA					
DEPARTMENT OF TRANSPORTATION					
SITENAME	COUNTY	FINAN CIAL PROJECT ID			
WILDIWOOD	CLIMATED	424401 1 52 01			

WILDWOOD KEY SHEET SHEET NO.

https://arkins-mv.sharepoint.com/personal/sean_kane_arkinsolobal_com/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER AND BEACON TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.

THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.

2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE DB-230 ANTENNAS LABELED "I" AND "K" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET K-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

WILDWOOD INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED DUAL DAYTIME/NIGHT-TIME TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD. TOWER LIGHTS TO BE INSTALLED ARE LABELED "A" AND "I" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET K-4.

THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.

THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET K-3.

- THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.
- 3. THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL AIRPAX MODEL: LML1-1RLS4R-29954-10
- 4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

<u>IP ADDRESS:</u> 172.16.8.14 <u>SUBNET MASK:</u> 255.255.254.0 <u>DEFAULT GATEWAY:</u> 172.16.8.19

5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED
READ COMMUNITY: PUBLIC
WRITE COMMUNITY: PUBLIC
SYSTEM NAME: WILDWOOD TECHNOSTROBE
SYSTEM DESCRIPTION: WILDWOOD TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: WILDWOOD
TRAP STATE: WILDWOOD
TRAPS PRIMARY DESTINATION: 172.16.2.21
TRAPS SECONDARY DESTINATION: 172.16.16.21

WILDWOOD

- 6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.
- 7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.
- 8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

CONTRACT PLANS RECORD							
DATE REV. DESCRIPTION			DATE	REV.	DESCRIPTION		



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX.(850)-410-5501

STATE OF FLORIDA							
DEPARTMENT OF TRANSPORTATION							
SITENAME	COUNTY	FINAN CIAL PROJECT ID					

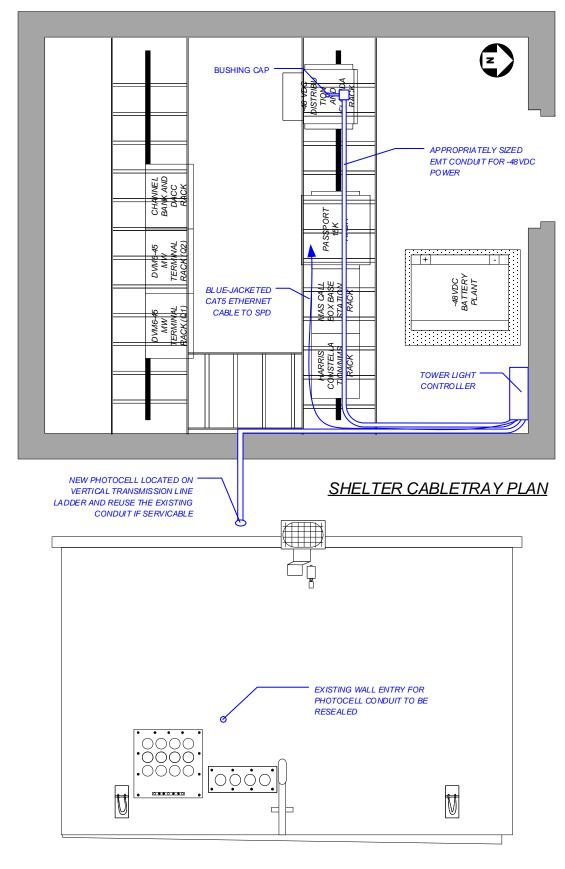
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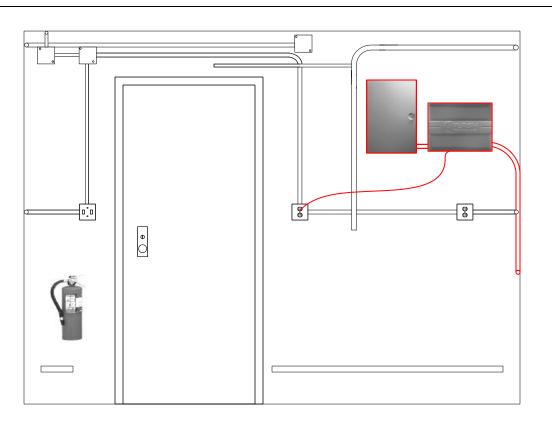
REMOVAL AND INSTALLATION NOTES SHEET NO.

K-2

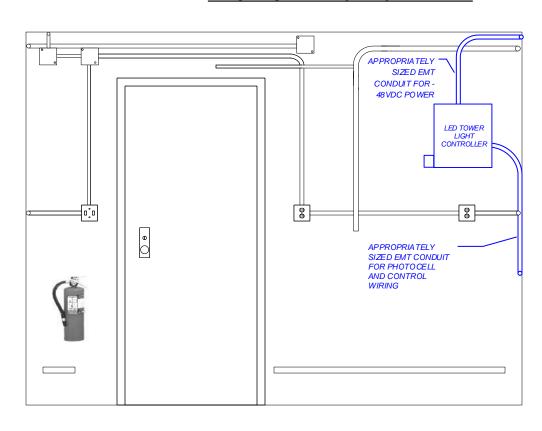
WILDWOOD







EXISTING INTERIOR NORTH WALL



PROPOSED INTERIOR NORTH WALL

WILDWOOD

<u>NOTES</u>

- 1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
- 2. THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
- 3. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD WITH ASSOCIATED PHOTOCELL, SURGE PROTECTION, GROUNDING, AND CONDUIT.
- 4. THE VENDOR SHALL FURNISH AND INSTALL ONE (1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD SHALL BE MOUNTED ON THE DIN RAIL IN THE PASSPORT RACK.
- 5. THE VENDOR SHALL INSTALL CUSTOM LENGTH BLUE-JACKETED CAT 5 CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE PASSPORT RACK AND FROM THE SPD TO THE BPS 2000, PORT #21.
 - THE VENDOR SHALL ROUTE THE NEW BLUE-JACKETED CAT 5 ETHERNET CABLE ALONG THE OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING ETHERNET CABLES TO THE CHANNEL BANK RACK. THE VENDOR SHALL INDEPENDENTLY SECURE THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN. INTERVALS, MAXIMUM.
- 6. THE VENDOR SHALL MECHANICALLY GROUND THE TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND SHORT AS POSSIBLE.

THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.



CONTRACT PLANS RECORD						
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 32399-0450 PH.(850)-410-5600 FAX.(850)-410-5501

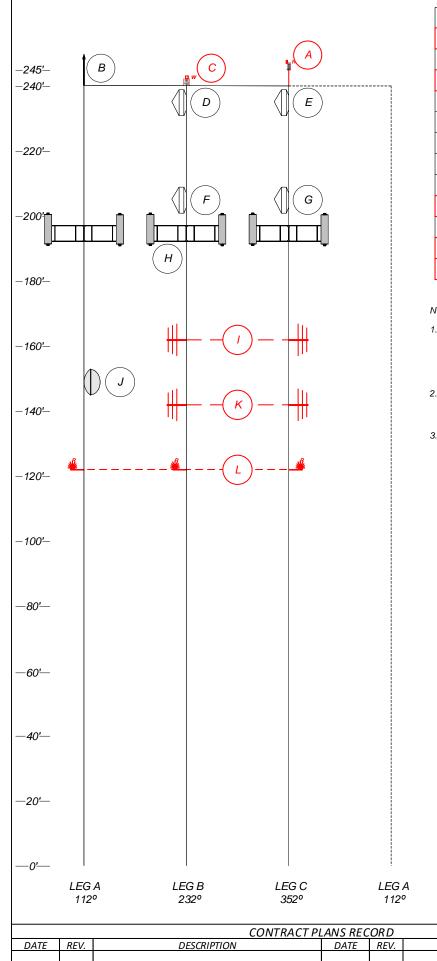
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION SITENAME COUNTY FINANCIAL PROJECT ID

SUMTER

WILD WOOD COMM BLDG PLANS SHEET NO.

K-3

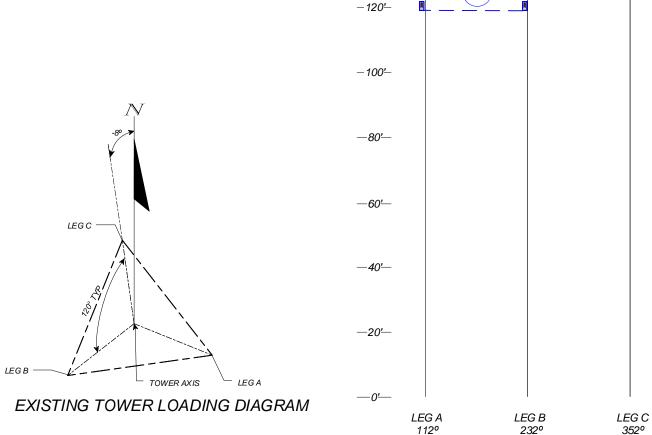
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ID	MODEL	LEG/ FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
Α	RED BEACON	С	245' BASE	-	-	1
В	AIR TERMINAL	Α	240' BASE	-	-	-
С	WHITE STROBE	В	240' BASE	-	-	1
D	PA8-65	В	235' (C.L.)	WE-65	-	-
Ε	PA 8-65	С	235' (C.L.)	WE-65	-	-
F	PA8-65	В	205' (C. L.)	WE-65		-
G	PA8-65	С	205' (C. L.)	WE-65	-	-
Н	(6) EMS RR33-20- XXDPL4 METROPCS (F.L)	A, B,C	196' (C. L.)	1-5/8"	-	-
1	DB-230-2	B-C	162' (C. L.)	1/2"	-	2
J	PA R8-65	Α	149' (C.L.)	EW-63	-	-
K	DB-230-2	B-C	142' (C.L.)	1/2"	-	2
L	SIDE MARKERS	A, B,C	122' BASE	-	-	1

NOTES:

- 1. REMOVE AND PROPERLY DISPOSE OF THE TOWER OBSTRUCTION LIGHTING SYSTEM, CONDUIT, AND ASSOCIATED MOUNTING HARDWARE PER THESE PLANS. THE STROBE SHALL BE PRESERVED AND DELIVERED TO THE MAINTENANCE CONTRACTOR IN ACCORDANCE WITH SHEET K-2 REMOVAL NOTE 1.
- 2. VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE ANTENNAS, ASSOCIATED COAXIAL TRANSMISSION LINES, MOUNTING HARDWARE, AND SPDS.
- 3. RESTORE SITE COMPOUND PER THESE PLANS.



	ID	MODEL	FACE	HGT.	TX LINE	AZIM.	NOTES
ŗ	Α	TECHNOSTROBE DUAL LED FLASH HEAD	С	245' BASE	CONDUIT	-	1
	В	AIR TERMINAL	Α	240' BASE	-	-	-
	С	PA 8-65	В	235' (C.L.)	WE-65	-	-
	D	PA 8-65	С	235' (C.L.)	WE-65	-	-
	Ε	PA 8-65	В	205' (C.L.)	WE-65	-	-
	F	PA 8-65	С	205' (C.L.)	WE-65	-	-
	G	(6) EMS RR33-20-XXDPL4 METROPCS (F.L)	A, B,C	196' (C.L.)	1-5/8"	-	-
	Н	PA R8-65	Α	149' (C.L.)	EW-63	-	-
	Ī	(2) LED SIDE MARKERS	A, B	122' BA SE	SAME CONDUIT	-	1

NOTES:

1. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 TOWER LIGHTING SYSTEM IN ACCORDANCE WITH SHEET A-3.

PROPOSED TOWER LOADING DIAGRAM

	CONTRACT PLANS RECORD						
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION		



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX. (850)-410-5501

В

-245'

-240<u>'</u>-

-220'-

-2001

-180'-

-160'-

-140<u>'</u>

STATE OF FLORIDA							
DEPARTMENT OF TRANSPORTATION							
SITENAME	COUNTY	FINAN CIAL PROJECT II					

SUMTER

WILDWOOD

LEGA

424401-1-52-01

WILDWOOD Tower Loading Diagram

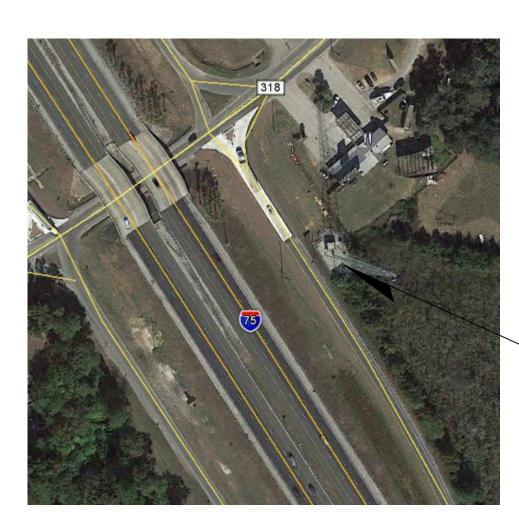
SHEET NO.

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APPENDIX L

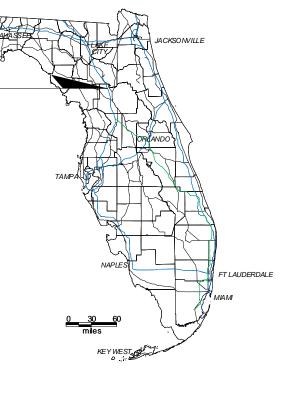
FINANCIAL PROJECT ID 424401-1-52-01 MARION COUNTY CR 318 (5-5490) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS





LO CATION OF PROJEC



TOWER SITE ADDRESS:

CR 318

7426 W. HIGHWAY 318 ORANGE LAKE, FL 32686

LATITUDE: 29-24-23.5 N (NAD 83) LONGITUDE: 82-14-47.6 W

CR 318 TOWER SITE

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

FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DOCUMENTS.

INDEX OF PLANS

KEY SHEET

SHEET DESCRIPTION

CR 318 REMOVAL AND INSTALLATION NOTES

CR 318 TOWER LOADING DIAGRAM

CR 318 FDOT COMMUNICATIONS BUILDING DETAIL

SHEET NO.

L-1 L-2

L-3

L-4

FDOT PROJECT MANAGER: RANDY PIERCE

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX. (850)-410-5501 STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

SITENAME COUNTY FINANCIAL PROJECT ID

CR 318 MARION 424401-1-52-01

CR 318 KEY SHEET SHEET NO.

L-1

https://afkins-my.sharepoint.com/personal/sean_kane_afkinsglobal_com/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vs

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER AND BEACON TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.

THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.

2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE DB-230 ANTENNAS LABELED "H" AND "I" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET L-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

CR 318 INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED DUAL DAYTIME/NIGHT-TIME TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD. TOWER LIGHTS TO BE INSTALLED ARE LABELED "A" AND "G" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET L-4.

THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.

THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET L-3.

- 2. THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.
- THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL AIRPAX MODEL: LML1-1RLS4R-29954-10
- 4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

IP ADDRESS: 172.16.94.14 <u>SUBNET MASK:</u> 255.255.254.0 <u>DEFAULT GATEWAY:</u> 172.16.94.19

5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED
READ COMMUNITY: PUBLIC
WRITE COMMUNITY: PUBLIC
SYSTEM NAME: CR 318 TECHNOSTROBE
SYSTEM DESCRIPTION: CR 318 TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: CR 318
TRAP STATE: CR 318
TRAPS PRIMARY DESTINATION: 172.16.221
TRAPS SECONDARY DESTINATION: 172.16.16.21

- 6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.
- 7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.
- 8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

	CONTRACT PLANS RECORD						
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION		



FLORIDA DEPARTMENT OF TRANSPORTATION
605 SUWANNEE ST. MS 90
TALLAHASSEE, FL 32399-0450
PH. (850)-410-5600
FAX. (850)-410-5501

STATE OF FLORIDA							
DEPARTMENT OF TRANSPORTATION							
SITENAME	COUNTY	FINAN CIAL PROJECT I					

MARION

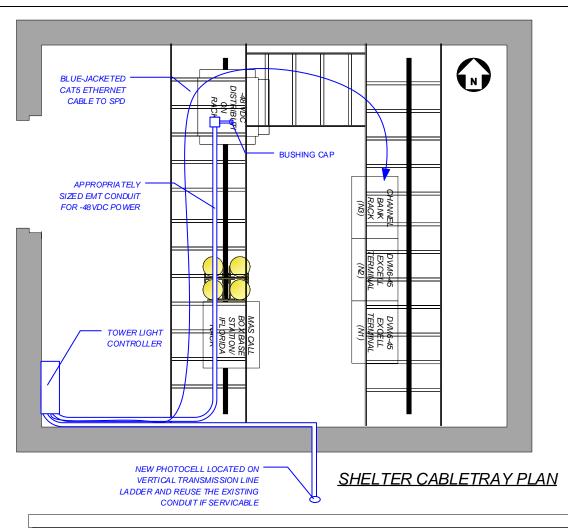
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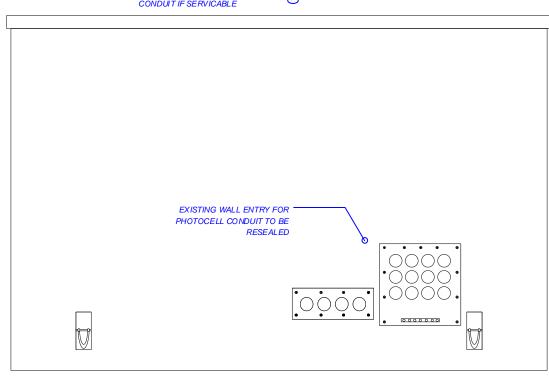
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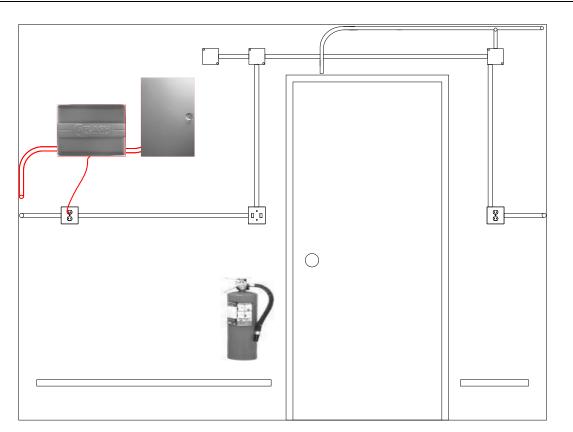
CR 318 REMOVAL AND INSTALLATION NOTES

SHEET NO.

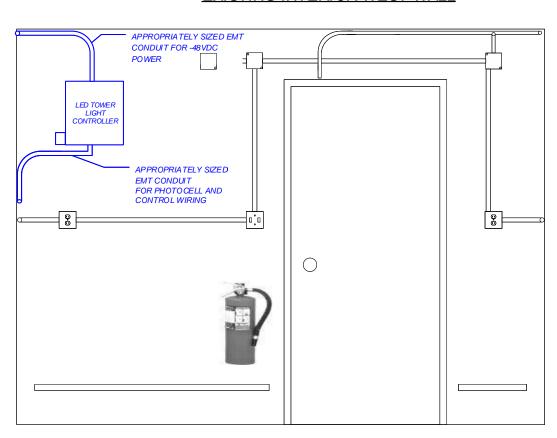




EXTERIOR SOUTH WALL



EXISTING INTERIOR WEST WALL



PROPOSED INTERIOR WEST WALL

CR 318

<u>NOTES</u>

- 1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
- 2. THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
- 3. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD WITH ASSOCIATED PHOTOCELL, SURGE PROTECTION, GROUNDING, AND CONDUIT.
- 4. THE VENDOR SHALL FURNISH AND INSTALL ONE (1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD SHALL BE MOUNTED ON THE DIN RAIL IN THE CHANNEL BANK RACK.
- 5. THE VENDOR SHALL INSTALL CUSTOM LENGTH BLUE-JACKETED CAT 5 CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE CHANNEL BANK RACK, AND FROM THE SPD TO THE BPS 2000, PORT #22.

THE VENDOR SHALL ROUTE THE NEW BLUE-JACKETED CAT 5 ETHERNET CABLE ALONG THE OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING ETHERNET CABLES TO THE CHANNEL BANK RACK. THE VENDOR SHALL INDEPENDENTLY SECURE THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN. INTERVALS, MAXIMUM.

6. THE VENDOR SHALL MECHANICALLY GROUND THE TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND SHORT AS POSSIBLE.

THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.



CONTRACT PLANS RECORD					
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DEPARTMENT OF TRANSPORTATION

SITENAME COUNTY FINANCIAL PROJECT ID

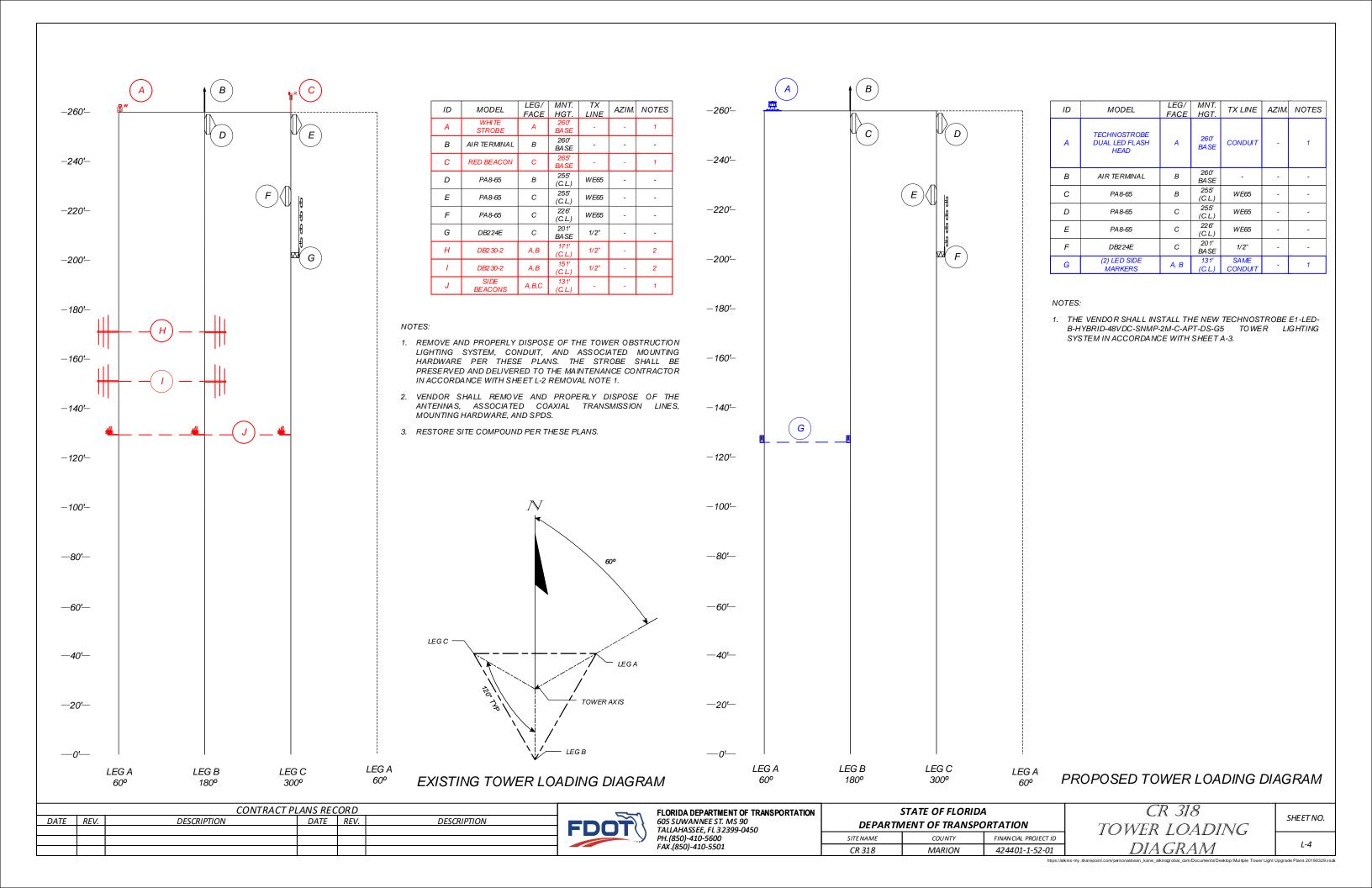
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CR 318 COMM BLDG PLANS SHEET NO.

L-3

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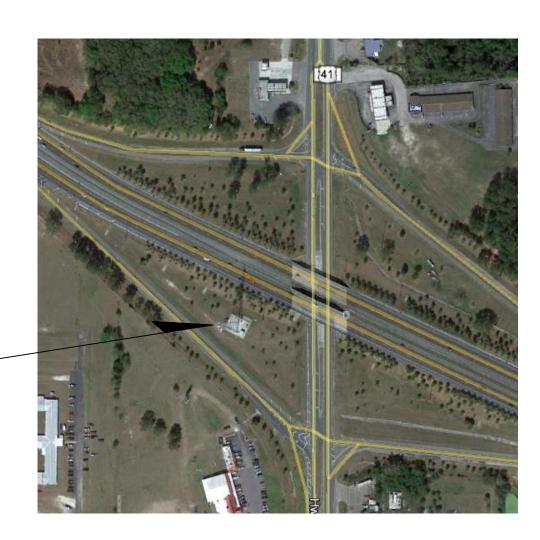
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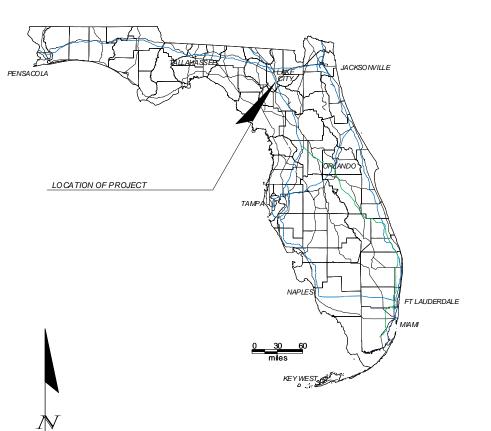


APPENDIX M

FINANCIAL PROJECT ID 424401-1-52-01 COLUMBIA COUNTY US 41 (2-2516) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS





TOWER SITE ADDRESS:

JS 41

13934 S. US HIGHWAY 441 LAKE CITY, FL 32024

LATITUDE: 29-59-58.5 N (NAD 83) LONGITUDE: 82-35-53.7 W

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

FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT

INDEX OF PLANS

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M-1 KEY SHEET

M-2 US 41 REMOVAL AND INSTALLATION NOTES
 M-3 US 41 FDOT COMMUNICATIONS BUILDING DETAIL

M-4 US 41 TOWER LOADING DIAGRAM

US 41 TOWER SITE

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DO CUMENTS.

FDOT PROJECT MANAGER: RANDY PIERCE

	CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX. (850)-410-5501

STATE OF FLORIDA					
DEPARTMENT OF TRANSPORTATION					
SITENAME	COUNTY	FINAN CIAL PROJECT ID			
US 41	COLUMBIA	424401-1-52-01			

US 41 KEY SHEET SHEET NO.

https://alkins-my.sharepoint.com/personal/sean_kane_alkinsglobal_com/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vsdx

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER AND BEACON TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.

THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.

2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE ANTENNAS LABELED "H," "J," "K," "M,", AND "N" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET M-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

US 41 INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED DUAL DAYTIME/NIGHT-TIME TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD. TOWER LIGHTS TO BE INSTALLED ARE LABELED "B" AND "H" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET M-4.

THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.

THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET M-3.

- 2. THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.
- 3. THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL AIRPAX MODEL: LML1-1RLS4R-29954-10
- 4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

IP ADDRESS: 172.16.90.14 SUBNET MASK: 255.255.254.0 DEFAULT GATEWAY: 172.16.90.19

5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED

READ COMMUNITY: PUBLIC

WRITE COMMUNITY: PUBLIC

SYSTEM NAME: US 41 TECHNOSTROBE

SYSTEM DESCRIPTION: US 41 TECHNOSTROBE TOWER LIGHTS

SYSTEM LOCATION: US 41

TRAP STATE: US 41

TRAPS PRIMARY DESTINATION: 172.16.2.21

TRAPS SECONDARY DESTINATION: 172.16.16.21

- 6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.
- 7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.
- 8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

	CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90
TALLAHASSEE, FL 3 2399-0450
PH. (850)-410-5600
FAX.(850)-410-5501

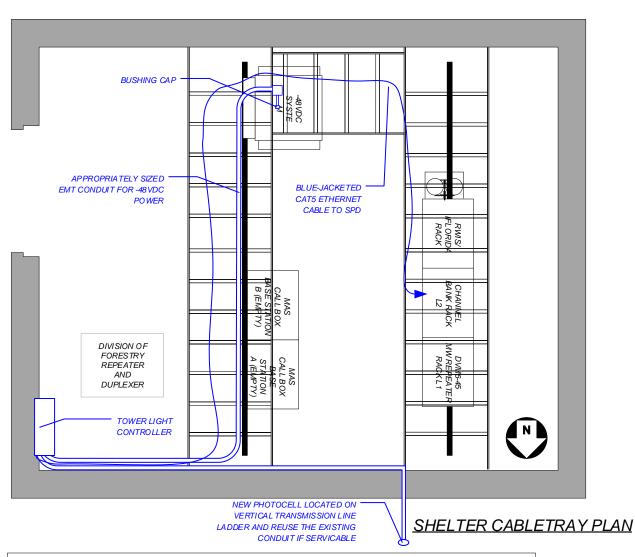
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION						

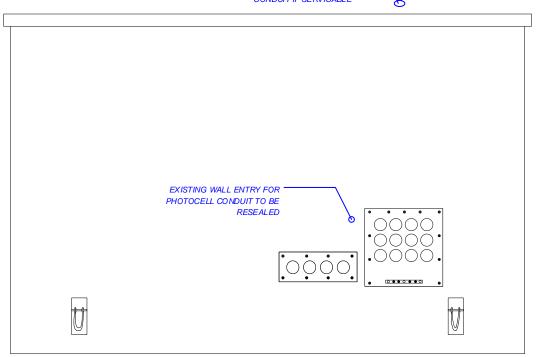
COLUMBIA

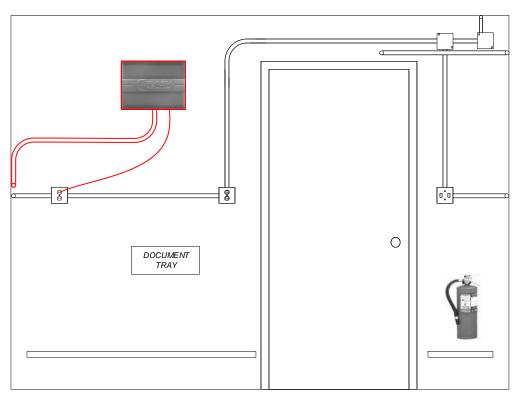
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US 41 REMOVAL AND INSTALLATION NOTES SHEET NO.

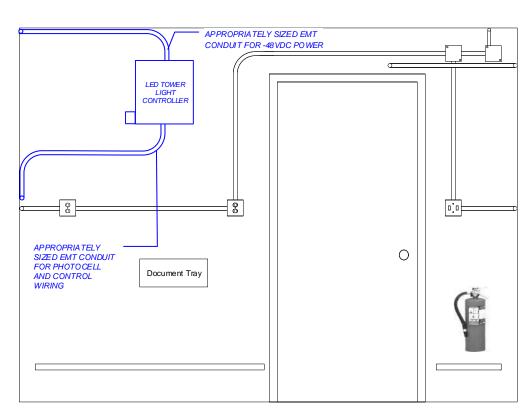
M-2







EXISTING INTERIOR EAST WALL



PROPOSED INTERIOR EAST WALL

US 41

<u>NOTES</u>

- 1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
- 2. THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
- 3. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD WITH ASSOCIATED PHOTOCELL, SURGE PROTECTION, GROUNDING, AND CONDUIT.
- 4. THE VENDOR SHALL FURNISH AND INSTALL ONE (1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD SHALL BE MOUNTED ON THE DIN RAIL IN THE CHANNEL BANK RACK.
- 5. THE VENDOR SHALL INSTALL CUSTOM LENGTH BLUE-JACKETED CAT 5 CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE CHANNEL BANK RACK, AND FROM THE SPD TO THE BPS 2000, PORT #22.

THE VENDOR SHALL ROUTE THE NEW BLUE-JACKETED CAT 5 ETHERNET CABLE ALONG THE OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING ETHERNET CABLES TO THE CHANNEL BANK RACK. THE VENDOR SHALL INDEPENDENTLY SECURE THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN. INTERVALS, MAXIMUM.

6. THE VENDOR SHALL MECHANICALLY GROUND THE TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND SHORT AS POSSIBLE.

THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.



EXTERIOR NORTH WALL

CONTRACT PLANS RECORD						
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX. (850)-410-5501 STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

SITENAME COUNTY FINANCIAL PROJECT ID

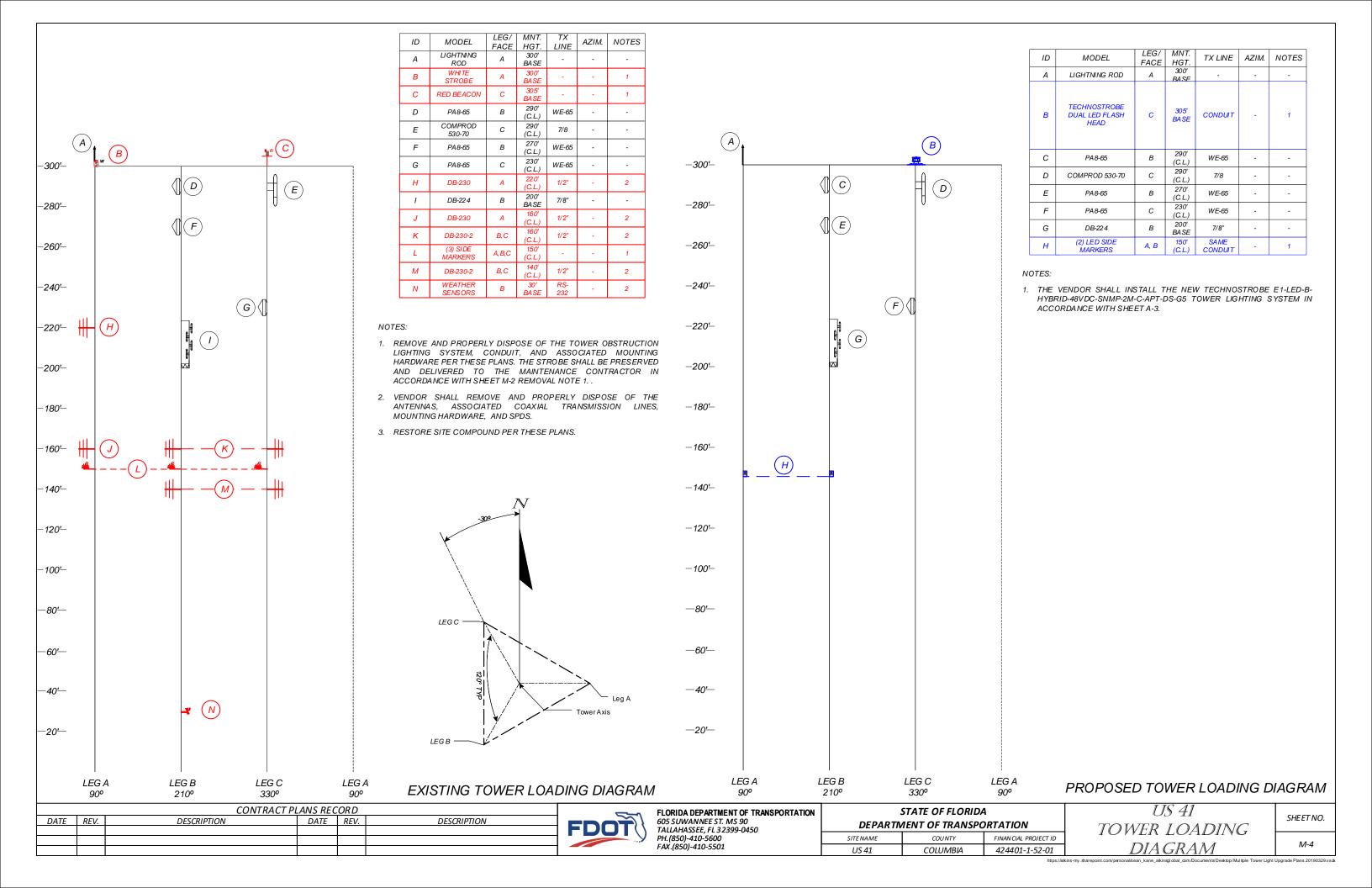
COLUMBIA

US 41 COMM BLDG PLANS SHEET NO.

M-3

424401-1-52-01 IVI-3

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APPENDIX N

FINANCIAL PROJECT ID 424401-1-52-01 PASCO COUNTY JESSAMINE (7-7337) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS





LO CATION OF PROJECT

NAPLES FT LAUDERDALE

MIAM

MEYWEST

NAPLES

MIAM

MIA

TOWER SITE ADDRESS:

JESSAMINE

32319 BLANTON RD. JESSAMINE, FL 33523

LATITUDE: 28-25-13.0 N (NAD 83) LONG ITUDE: 82-17-15.7 W

JESSAMINE TOWER SITE

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

FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DOCUMENTS.

INDEX OF PLANS

KEY SHEET

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SHEET DESCRIPTION

JESSAMINE REMOVAL AND INSTALLATION NOTES

JESSAMINE TOWER LOADING DIAGRAM

JESSAMINE FDOT COMMUNICATIONS BUILDING DETAIL

FDOT PROJECT MANAGER: RANDY PIERCE

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION				
SITENAME	COUNTY	FINAN CIAL PROJECT ID		
IESSAM INE	PASCO	424401-1-52-01		

JESSAMINE KEY SHEET SHEET NO.

N-1

https://arkins-my.sharepoint.com/personal/sean_kane_arkinsglobal_com/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vs.

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER AND BEACON TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.

THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.

2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE DB-230 ANTENNAS LABELED "H" THROUGH "J" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET N-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

TEMPLE TERRACE INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED DUAL DAYTIME/NIGHT-TIME TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD. TOWER LIGHTS TO BE INSTALLED ARE LABELED "A" AND "G" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET N-4.

THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.

THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET N-3.

- 2. THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.
- 3. THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL AIRPAX MODEL: LML1-1RLS4R-29954-10
- 4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

IP ADDRESS: 172.16.100.14 SUBNET MASK: 255.255.254.0 DEFAULT GATE WAY: 172.16.100.19

5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED
READ COMMUNITY: PUBLIC
WRITE COMMUNITY: PUBLIC
SYSTEM NAME: JESSAMINE TECHNOSTROBE
SYSTEM DESCRIPTION: JESSAMINE TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: JESSAMINE
TRAP STATE: JESSAMINE
TRAPS PRIMARY DESTINATION: 172.16.221
TRAPS SECONDARY DESTINATION: 172.16.16.21

- 6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.
- 7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.
- 8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

	CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX.(850)-410-5501

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

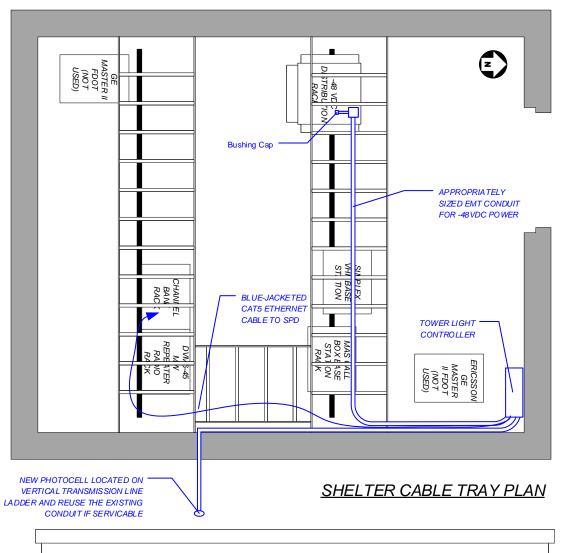
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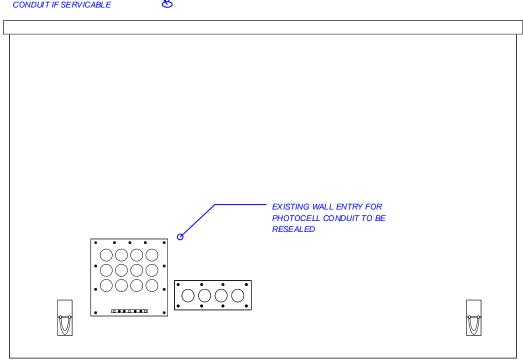
JESSAMINE PASCO 424401-1-52-01

JESSAMINE REMOVAL AND INSTALLATION NOTES

SHEET NO.

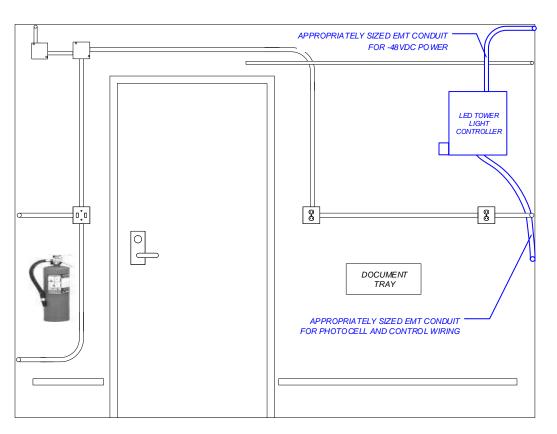
N-2





DOCUMENT TRAY

EXISTING INTERIOR NORTH WALL



PROPOSED INTERIOR NORTH WALL

JESSAMINE

NOTES

- 1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
- 2. THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
- 3. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD WITH ASSOCIATED PHOTOCELL, SURGE PROTECTION, GROUNDING, AND CONDUIT.
- 4. THE VENDOR SHALL FURNISH AND INSTALL ONE (1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD SHALL BE MOUNTED ON THE DIN RAIL IN THE CHANNEL BANK RACK.
- 5. THE VENDOR SHALL INSTALL CUSTOM LENGTH BLUE-JACKETED CAT 5 CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE CHANNEL BANK RACK, AND FROM THE SPD TO THE BPS 2000, PORT #22.

THE VENDOR SHALL ROUTE THE NEW BLUE-JACKETED CAT 5 ETHERNET CABLE ALONG THE OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING ETHERNET CABLES TO THE CHANNEL BANK RACK. THE VENDOR SHALL INDEPENDENTLY SECURE THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN. INTERVALS, MAXIMUM.

6. THE VENDOR SHALL MECHANICALLY GROUND THE TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND SHORT AS POSSIBLE.

THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.



EXTERIOR EAST WALL

	CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX.(850)-410-5501

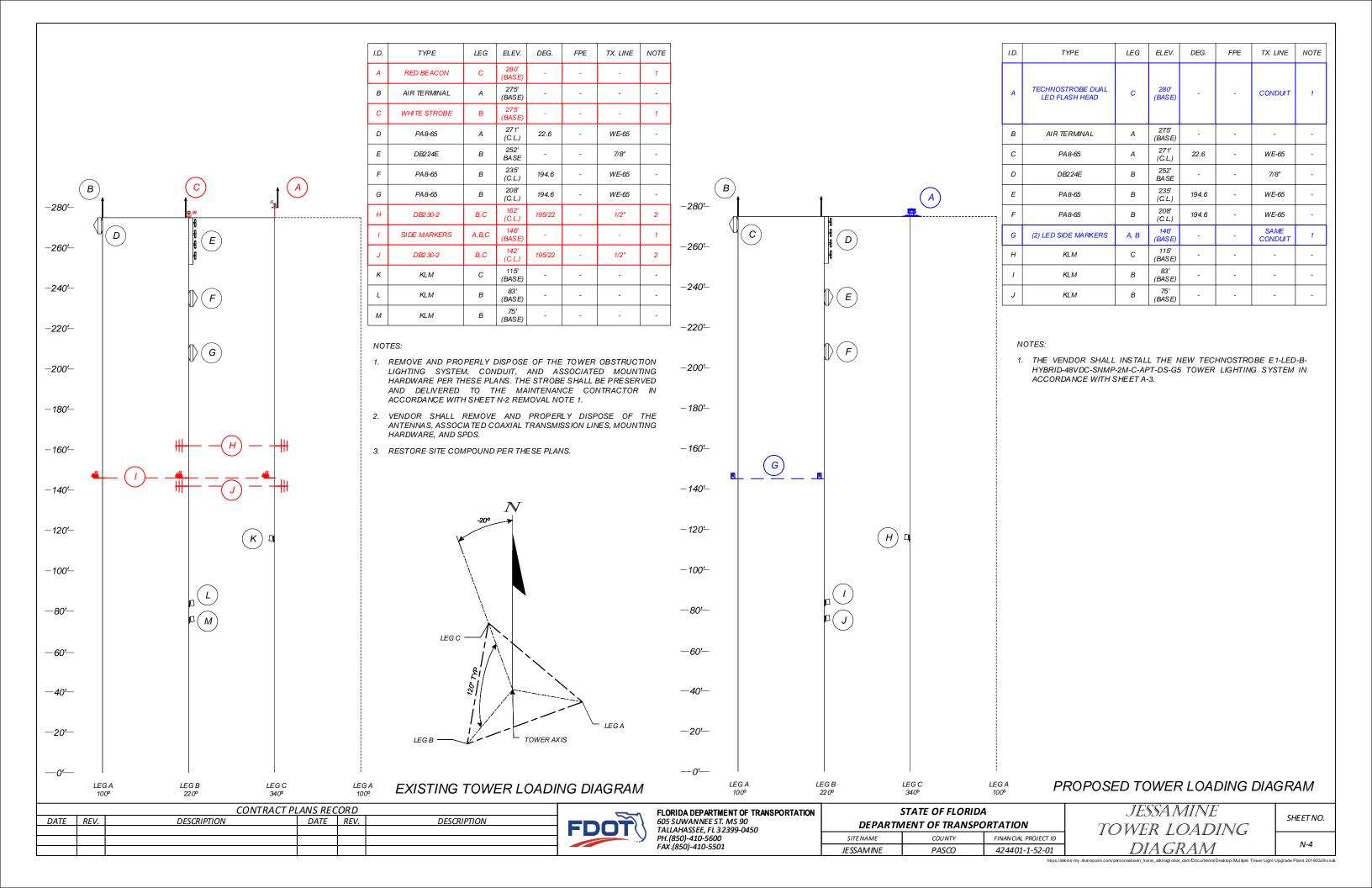
STATE OF FLORIDA					
DEPARTMENT OF TRANSPORTATION					
SITENAME	COUNTY	FINAN CIAL PROJECT ID			

PASCO

JESSAMINE COMM BLDG PLANS SHEET NO.

N-3

424401-1-52-01 N-3
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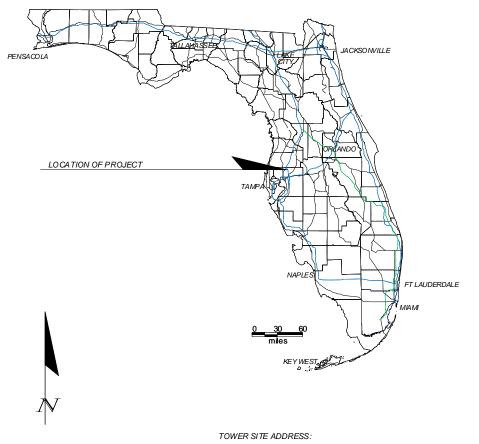


APPENDIX O

FINANCIAL PROJECT ID 424401-1-52-01 HILLSBOROUGH COUNTY TEMPLE TERRACE (7-7339) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS





TEMPLE TERRACE

17304 BRUCE B. DOWNS BLVD. TAMPA, FL 33647

LATITUDE: 28-07-22.6 N (NAD 83) LONGITUDE: 82-22-31.1 W

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

FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT

TEMPLE TERRACE TOWER SITE

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DO CUMENTS.

INDEX OF PLANS

KEY SHEET

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SHEET DESCRIPTION

TEMPLE TERRACE REMOVAL AND INSTALLATION NOTES

TEMPLE TERRACE COMMUNICATIONS BUILDING DETAIL

TEMPLE TERRACE TOWER LOADING DIAGRAM

FDOT PROJECT MANAGER: RANDY PIERCE

	CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	
				_		



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 3 2399-0450 PH. (850)-410-5600 FAX. (850)-410-5501

STATE OF FLORIDA					
DEPARTMENT OF TRANSPORTATION					
SITENAME	COUNTY	FINAN CIAL PROJECT ID			
TEMPLE TERRACE	HILLSBOROUGH	424401-1-52-01			

TEMPLE TERRACE KEY SHEET SHEET NO.

https://afkins-mv.sharepoint.com/personal/sean_kane_afkinsglobal_com/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329 ysok

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER AND BEACON TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.

THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.

2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE DB-230 ANTENNAS LABELED "I" THROUGH "L" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET 0-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

TEMPLE TERRACE INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED DUAL DAYTIME/NIGHT-TIME TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD. TOWER LIGHTS TO BE INSTALLED ARE LABELED "A" AND "I" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET O-4.

THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.

THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET 0-3.

- 2. THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.
- 3. THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL AIRPAX MODEL: LML1-1RLS4R-29954-10
- 4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

IP ADDRESS: 172.16.102.14 SUBNET MASK: 255.255.254.0 DEFAULT GATEWAY: 172.16.102.19

5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED
READ COMMUNITY: PUBLIC
WRITE COMMUNITY: PUBLIC
SYSTEM NAME: TEMPLE TERRACE TECHNOSTROBE
SYSTEM DESCRIPTION: TEMPLE TERRACE TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: TEMPLE TERRACE
TRAP STATE: TEMPLE TERRACE
TRAPS PRIMARY DESTINATION: 172.16.221
TRAPS SECONDARY DESTINATION: 172.16.1621

- 6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.
- 7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.
- 8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSE, FL 32399-0450 PH. (850)-410-5600 FAX. (850)-410-5501

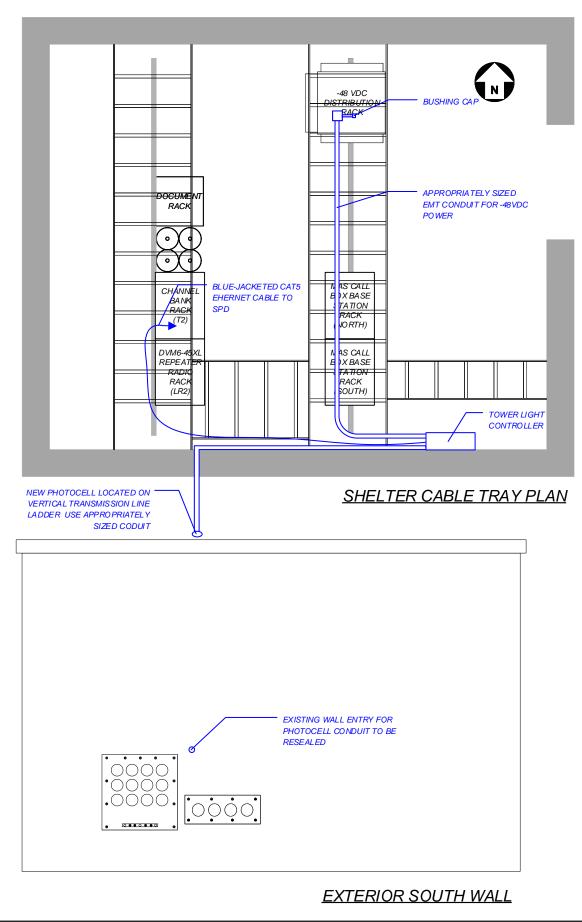
STATE OF FLORIDA					
DEPARTMENT OF TRANSPORTATION					

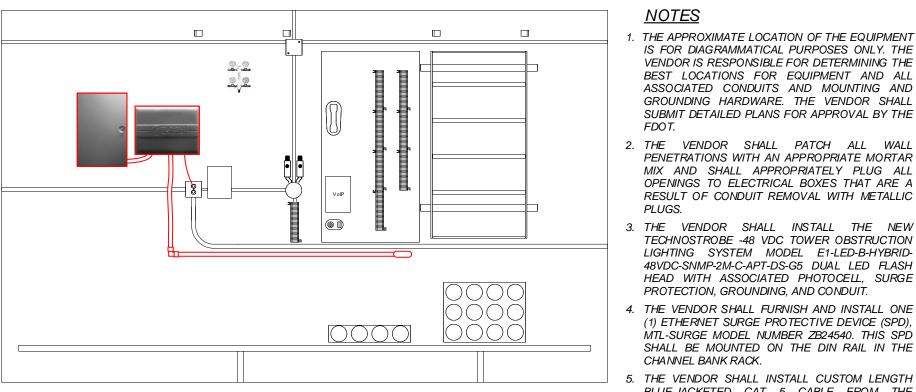
SITE NAME COUNTY FINAN CIAL PROJECT ID
TEMPLE TERRACE HILLSBOROUGH 424401-1-52-01

TEMPLE TERRACE REMOVAL AND INSTALLATION NOTES

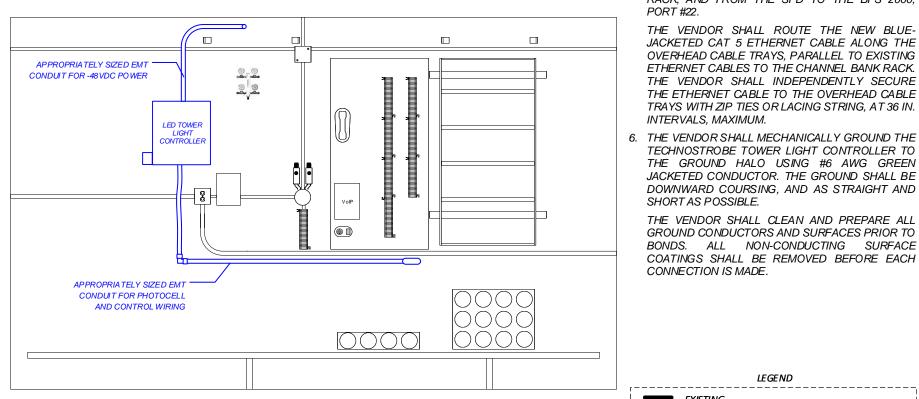
SHEET NO.

0-2





EXISTING INTERIOR SOUTH WALL



PROPOSED INTERIOR SOUTH WALL

TEMPLE TERRACE

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE. FL 3 2399-0450 PH.(850)-410-5600 FAX.(850)-410-5501

STATE OF FLORIDA **DEPARTMENT OF TRANSPORTATION** FINAN CIAL PROJECT ID COUNTY

HILLSBOROUGH

TEMPLE TERRACE

NOTES

PLUGS.

1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL

ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE

PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL

OPENINGS TO ELECTRICAL BOXES THAT ARE A

RESULT OF CONDUIT REMOVAL WITH METALLIC

TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH

HEAD WITH ASSOCIATED PHOTOCELL, SURGE

4. THE VENDOR SHALL FURNISH AND INSTALL ONE

(1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD

SHALL BE MOUNTED ON THE DIN RAIL IN THE

BLUE-JACKETED CAT 5 CABLE FROM THE

TECHNOSTROBE ETHERNET PORT TO THE NEWLY

INSTALLED ETHERNET SPD IN THE CHANNEL BANK RACK, AND FROM THE SPD TO THE BPS 2000,

THE VENDOR SHALL ROUTE THE NEW BLUE-

JACKETED CAT 5 ETHERNET CABLE ALONG THE

OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING

ETHERNET CABLES TO THE CHANNEL BANK RACK.

THE VENDOR SHALL INDEPENDENTLY SECURE

THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN.

TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND

THE VENDOR SHALL CLEAN AND PREPARE ALL

GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH

LEGEND

VENDOR FURNISHED AND INSTALLED

PROTECTION, GROUNDING, AND CONDUIT.

CHANNEL BANK RACK.

INTERVALS, MAXIMUM.

SHORT AS POSSIBLE.

CONNECTION IS MADE.

EXISTING

PORT #22.

SHEET NO.

0-3

COMM BLDG PLANS

TO BE REMOVED BY VENDOR

424401-1-52-01

