

ELECTRICAL SYMBOL LEGEND:					GENERAL SYMBOLS LEGEND:					ABBREVIATIONS:					ABBREVIATIONS CONT:				
SYMBOL		DESCRIPTION																	
		CONDUIT UP.																	
		CONDUIT DOWN.																	
		HOMERUN TO PANEL – LETTER INDICATES PANEL, NUMBERS INDICATE CIRCUITS. ALL RACEWAYS WITHOUT FURTHER DESIGNATION INDICATE A TWO–WIRE CIRCUIT. FOUR WIRES ARE INDICATED.																	
		LONG MARKS INDICATE NEUTRAL CONDUCTOR, SHORT MARKS INDICATE PHASE CONDUCTORS. PROVIDE GREEN GROUND CONDUCTOR IN ALL CONDUITS. (TIE) INDICATES CIRCUIT IS SHARED WITH ADDITIONAL RECEPTACLES.																	
		125V, 20A NEMA 5–20R, DUPLEX RECEPTACLE. 'WP' INDICATES WEATHERPROOF WITH LOCKABLE METAL WHILE–IN–USE COVER COOPER WIUMV–1 OR EQUAL. 'GFI' INDICATES GROUND FAULT INTERRUPTER. MOUNTED BOTTOM 16” AFF UNLESS OTHERWISE NOTED.																	
		DEVICE OR EQUIPMENT AS NOTED																	
		REFERENCE NOTES																	
		OUTLET OR JUNCTION BOX, SIZE PER NEC.																	
		PANELBOARD.																	
		CONTROL PANEL.																	
		AUTOMATIC TRANSFER SWITCH.																	
		SURGE PROTECTION DEVICE.																	
		ELECTRICAL DISTRIBUTION PANEL.																	
		PULL BOX.																	
		EMERGENCY POWER SHUTOFF SWITCH.																	
		LIGHTNING PROTECTION CONDUCTOR.																	
		UNDERGROUND GROUND CONDUCTOR.																	
		CONDUIT RACEWAY EXPOSED.																	
		CONDUIT RACEWAY CONCEALED IN CEILING SPACE OR WALLS.																	
		CONDUIT RACEWAY IN CONCRETE SLAB OR UNDERGROUND.																	
		GROUND INSPECTION WELL																	
		GROUND BUSBAR																	
		GROUND ROD																	

EXTERIOR ELEVATION MARKER					NORTH ARROW				
INDICATES DIRECTION OF CUTTING PLANE									
SECTION NUMBER									
DWG. # WHERE SHOWN									
SECTION CUT MARKER									
DETAIL NUMBER					ENLARGED AREA SHOWN				
DWG. # WHERE SHOWN					DWG. # WHERE SHOWN				
DETAIL CALLOUT					DETAIL CALLOUT				
ENLARGED AREA SHOWN					ENLARGED AREA SHOWN				
DETAIL CALLOUT					DETAIL CALLOUT				
DETAIL NUMBER					SCALE: N.T.S.				
DWG. # WHERE SHOWN					SCALE OF PLAN / DETAIL				
PLAN / DETAIL CALLOUT									

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY			SHEET TITLE:			REF. DWG. NO.								
ROAD NO.			COUNTY			THEA PROJECT NO.			ELECTRICAL SYMBOL LEGEND & ABBREVIATIONS			SE-001		
SR 600			HILLSBOROUGH			O-17-00217			PROJECT NAME:			SHEET NO.		
SR 618						439023-1-52-01			SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY			10		

ELECTRICAL GENERAL NOTES:

1. FEED ALL RECEPTACLES AND DEVICES WITH (2) #12, (1) #12 GND IN 3/4" C, UON.
2. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN ALL FEEDER AND BRANCH CIRCUIT RACEWAYS.
3. ALL 120V, 20A CIRCUIT HOMERUNS OVER 50FT. SHALL BE #10 CU MINIMUM, UON.
4. ALL 120V, 20A CIRCUIT HOMERUNS OVER 150FT. SHALL BE #8 CU MINIMUM, UON.
5. ALL 240V, 20A CIRCUIT HOMERUNS OVER 150FT. SHALL BE #10 CU. MINIMUM, UON.
6. ALL 240V, 20A CIRCUIT HOMERUNS OVER 300FT. SHALL BE #8 CU MINIMUM, UON.
7. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL INSTALLER PRIOR TO ROUGH-IN.
8. PROVIDE PULL STRINGS IN ALL EMPTY CONDUIT AND RACEWAYS WITH LABELING AT EACH END.
9. THE USE OF ANY PROCESS INVOLVING ASBESTOS OR PCB, AND THE INSTALLATION OF ANY PRODUCT, INSULATION, COMPOUND OR MATERIAL CONTAINING OR INCORPORATING ASBESTOS OR PCB, IS PROHIBITED. PROVIDE A COMPLETE AND PROPERLY OPERATING ELECTRICAL SYSTEM WITHOUT THE USE OF ASBESTOS OR PCB.
10. THE ELECTRICAL CONTRACTOR SHALL CONTACT THE POWER COMPANY WITHIN 10 BUSINESS DAYS OF THE NOTICE TO PROCEED AND SCHEDULE NEW SERVICE INSTALLATION.
11. REFER TO TECHNICAL SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
12. INCLUDE THE TRANSPORT AND DISPOSAL OR RECYCLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL RULES, REGULATIONS AND GUIDELINES APPLICABLE.

A) COMPLY FULLY WITH FLORIDA STATUTE 403.7186 REGARDING MERCURY CONTAINING DEVICES AND LAMPS.

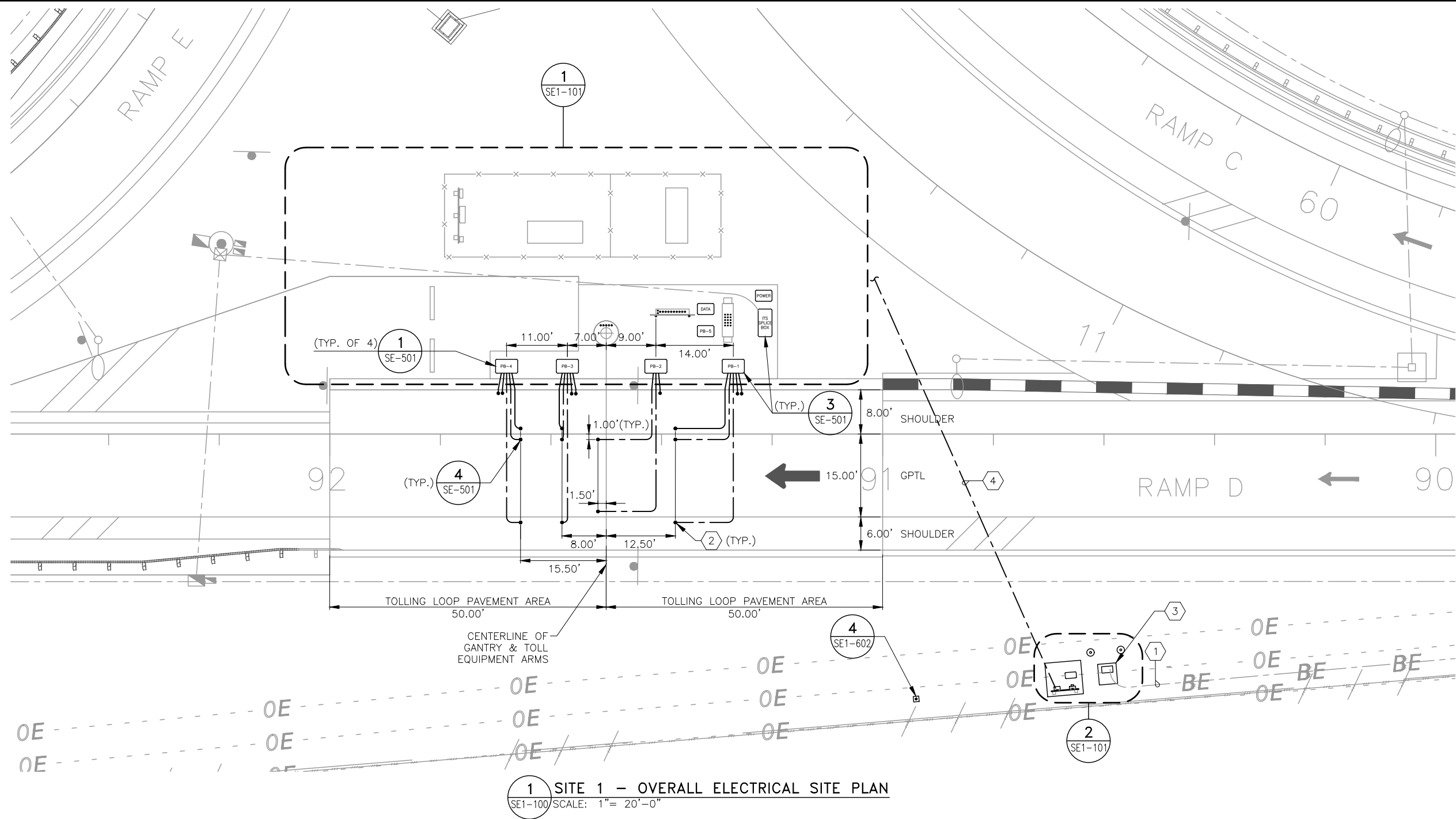
B) TRANSPORT AND DISPOSE OF LAMPS, BALLASTS AND OTHER MATERIALS IN ACCORDANCE WITH ALL DEP AND EPA GUIDELINES.

C) PROVIDE WRITTEN CERTIFICATION THAT ALL MATERIALS WERE RECYCLED OR DISPOSED OF PROPERLY PER THE GUIDELINES NOTED ABOVE.
13. LOCATE EXISTING UTILITIES AND PROTECT THEM FROM DAMAGE. THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES, AS SHOWN ON THESE PLANS, ARE APPROXIMATE AND BASED ON THE INFORMATION FURNISHED TO THE ENGINEER BY THE UTILITY OWNER(S) AND ARE SHOWN AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST. BEFORE EXCAVATING, NOTIFY THE SERVING UTILITY COMPANY(S) AND REQUEST THEM TO LOCATE AND STAKE THEIR UNDERGROUND FACILITIES. UTILITIES ARE TO BE ADJUSTED BY OTHERS AS DIRECTED BY THE ENGINEER.
14. PHASE WORK AS REQUIRED BY MOT PLANS.
15. UNDERGROUND CONDUIT SHALL BE PVC SCH. 80, UON. UNDERGROUND CONDUIT SHALL TRANSITION TO RGS CONDUIT WITH PVC TO RGS CONDUIT FITTINGS. CONDUIT SHALL BE RGS ABOVE GRADE THROUGH AND INCLUDING THE FIRST 90 DEGREE FITTING UNDERGROUND UON. APPLY (2-COATS) BITUMASTIC COATING TO DIRECT BURIED PORTION OF RGS CONDUIT, UP TO AND INCLUDING 6" ABOVE FINAL GRADE. REFER TO TSP FOR FURTHER INFORMATION.

16. TOLL EQUIPMENT AND ALL WIRING/CABLING FOR TOLL EQUIPMENT WILL BE FURNISHED AND INSTALLED BY T.E.C., UON.
17. UNDERGROUND CONDUITS SHALL BE INSTALLED A MINIMUM OF 36" BELOW GRADE.
18. EXPOSED EXTERIOR CONDUIT SHALL BE RGS THROUGH AND INCLUDING THE FIRST 90° BEND INSTALLED UNDERGROUND. TRANSITIONS BETWEEN RGS AND PVC CONDUIT SHALL BE MADE UNDERGROUND WITH A RGS TO PVC CONDUIT FITTING.
19. EQUIPMENT SPECIFIED WITH CATALOG NUMBERS OR PART NUMBERS SHALL NOT BE SUBSTITUTED UNLESS "OR EQUAL" IS INDICATED.
20. CONDUIT RESERVED FOR TOLLING LOOPS SHALL BE SCH. 80 PVC.
21. PLASTIC END CAPS SHALL BE INSTALLED ON ENDS OF UNISTRUT.
22. ALL LIQUID-TIGHT, FLEXIBLE CONDUIT SHALL BE METALLIC.
23. ADJUST THE LOCATIONS OF THE SPD'S SUCH THAT THE MAXIMUM SPD BRAIDED/TWISTED LEADS LENGTH DO NOT EXCEED 24 INCHES AND HAVE NO SHARP TURNS.
24. AC OR DC ELECTRICAL CIRCUITS OR WIRING THAT OPERATES AT 25 VOLTS OR GREATER SHALL NOT BE INSTALLED AND/OR LOCATED WITHIN 5 FEET OF ANY TRAFFIC DETECTION LOOP OR LOOP PULL BOX.
25. ROADWAY LIGHT POLES, CONDUITS AND CONDUCTORS SHALL NOT BE LOCATED WITHIN 5 FEET OF THE TOLLING LOOP PAVEMENT, TOLL SITE INFRASTRUCTURE, AND SIDEWALK SURROUNDING THE TOLLING EQUIPMENT CONTROL CABINET.
26. CONDUIT BENDS SHALL NOT EXCEED 270° BETWEEN PULL POINTS.

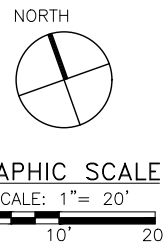
		REVISIONS			AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY		SHEET TITLE:		REF. DWG. NO.
DATE	DESCRIPTION		DATE	DESCRIPTION		ROAD NO.	COUNTY	ELECTRICAL GENERAL NOTES		SE-002
						SR 600 SR 618	HILLSBOROUGH	THEA PROJECT NO. FDOT FINANCIAL PROJECT ID	PROJECT NAME:  SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY	SHEET NO.
								O-17-00217 439023-1-52-01		11

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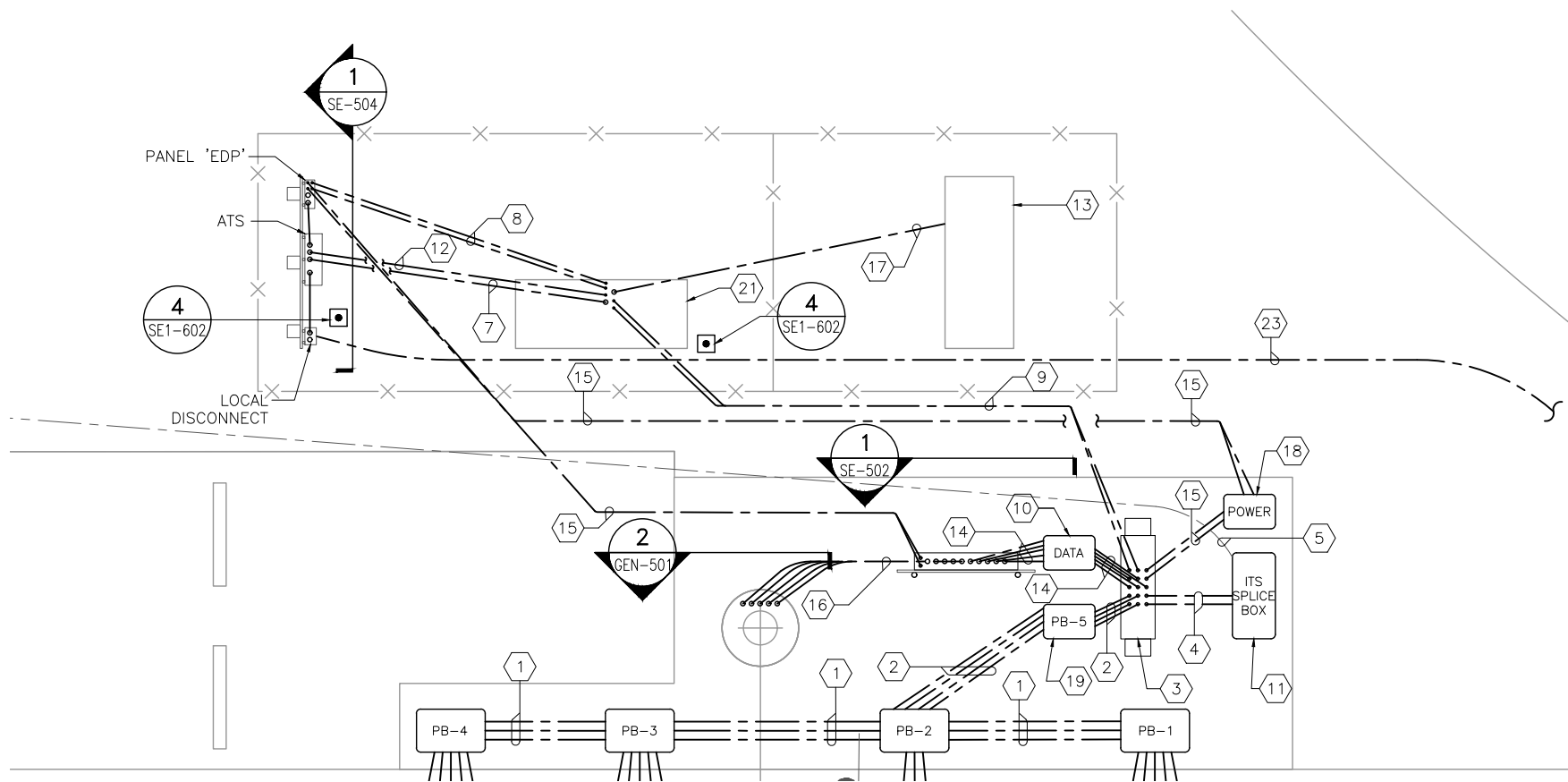
REFERENCE NOTES:

- 1 BURIED PRIMARY CONDUIT AND CONDUCTORS BY POWER COMPANY. REFER TO UTILITY ADJUSTMENT SHEETS FOR CONTINUATION. THE ELECTRICAL CONTRACTOR SHALL CONTACT THE UTILITY COMPANY WITHIN TWO WEEKS OF NTP TO ENSURE ELECTRICAL SERVICE IS AVAILABLE WHEN CONSTRUCTION OF THE TOLL SITE IS COMPLETE. CONTACT MR. STEVE SZYMAKOWSKI AT TECO, (813) 625-3899. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE POWER COMPANY TO BRING POWER TO THE TRANSFORMER (PRIMARY). COORDINATE INSTALLATION WITH CIVIL, ROADWAY CONSTRUCTION AND POWER UTILITY COMPANY AS REQUIRED.
- 2 EXACT LOCATIONS OF ALL ROADWAY TOLLING LOOP LANE CONDUIT STUB-UPS MUST BE COORDINATED WITH T.E.C. TRANSORE PRIOR TO ROUGH-IN. TOLLING LOOP LAYOUT (PROVIDED BY T.E.C. TRANSORE) IS NOT SHOWN FOR CLARITY.
- 3 PROPOSED LOCATION FOR UTILITY TRANSFORMER. FINAL TRANSFORMER LOCATION SHALL BE COORDINATED WITH UTILITY REPRESENTATIVE PRIOR TO CONDUIT ROUGH-IN, CONCRETE SLAB OR BOLLARD INSTALLATION. ELECTRICAL INSTALLATION AT TRANSFORMER LOCATION MUST BE INSPECTED AND APPROVED BY TECO.
- 4 UNDERGROUND FEEDER ROUTING, REFER TO DRAWING SE1-601. THE CONTRACTOR SHALL ROUTE FEEDER CONDUIT AROUND, BUT NOT UNDER, LARGE PIECES OF EQUIPMENT OR TOLLING LOOP PAVEMENT AREA. COORDINATE CONDUIT ROUTING WITH ALL UTILITIES, ROADWAY CONSTRUCTION AND ADJACENT CONSTRUCTION ACTIVITY AS REQUIRED. THE ELECTRICAL CONTRACTOR SHALL PAY FOR ALL COST ASSOCIATED WITH THE INSTALLATION OF THE ELECTRICAL SERVICE INCLUDING THE SERVICE DISCONNECTING MEANS, GROUNDING, METER SOCKET AND OTHER WORK AS SPECIFIED.



RAMP D

		REVISIONS			AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY			SHEET TITLE:		REF. DWG. NO.
DATE	DESCRIPTION		DATE	DESCRIPTION		ROAD NO.	COUNTY	THEA PROJECT NO. FDOT FINANCIAL PROJECT ID	SITE 1 - OVERALL ELECTRICAL SITE PLAN		SE1-100
									PROJECT NAME:		SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY
						SR 600 SR 618	HILLSBOROUGH	O-17-00217 439023-1-52-01			12



1 SITE 1 – ENLARGED ELECTRICAL SITE PLAN  
SE1-101 SCALE: 1"= 10'-0"

REFERENCE NOTES:

- 1 (3) 2" CONDUITS (TOLLING LOOPS).

2 (4) 2" CONDUITS (TOLLING LOOPS).

3 TOLLING EQUIPMENT CONTROL CABINET, PROVIDED BY OTHERS. ALL CONDUIT STUB-UPS INTO THE CONTROL CABINET SLAB SHALL EXTEND 1" ABOVE SLAB, TERMINATED WITH A GROUNDING BUSHING. COORDINATE TOLLING EQUIPMENT CONTROL CABINET SIZE WITH THEA AND OBTAIN FINAL APPROVAL FROM THEA ON FINAL CABINET SIZE.

4 (2) 2" CONDUITS (FIBER OPTIC CABLE FOR NETWORK CONNECTIONS).

5 (2) 2" CONDUITS (FIBER OPTIC CABLE FOR NETWORK CONNECTIONS) TO BE INSTALLED BY ITS CONTRACTOR. REFER TO SITE AND ITS PLANS FOR CONTINUATION.

6 PROVIDE 13" X 24" X 18" DEEP POLYMER CONCRETE PULLBOX WITH COVER STAMPED "THEA ELECTRIC POWER". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED. REFER TO DRAWING SE1-601.

7 POWER CIRCUITING FROM GENERATOR CIRCUIT BREAKER TO ATS. REFER TO DRAWING SE1-601.

8 (2) 1" CONDUITS FOR JACKET WATER HEATER AND BATTERY CHARGER CIRCUITING. REFER TO DRAWING SE1-601.

9 (2) 1" CONDUITS FROM GENERATOR CONTROL PANEL TO TOLLING COMMUNICATIONS CABINET.

10 PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "THEA DATA". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.

11 PROVIDE 30" X 60" X 36" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "THEA ITS FIBER SPLICE BOX". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.
- 12 2 #14 (GENERATOR RUN), 4 #14 (SPARE), 1 #14 GROUND IN 1" CONDUIT.

13 LIQUEFIED PROPANE GAS FUEL TANK. REFER TO TSP.

14 (5) 3" CONDUITS (DATA).

15 (2) 2" CONDUITS (POWER). REFER TO DRAWING SE1-601.

16 (1) 3" POWER CONDUIT, (2) 3" DATA CONDUITS, (1) 3" (E6) CONDUIT, (1) 3" SPARE CONDUIT.

17 2" CONDUIT ROUTED WITH FUEL PIPING. COORDINATE EXACT ROUTING WITH FUEL PIPING CONTRACTOR PRIOR TO ROUGH-IN.

18 PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "THEA POWER". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.

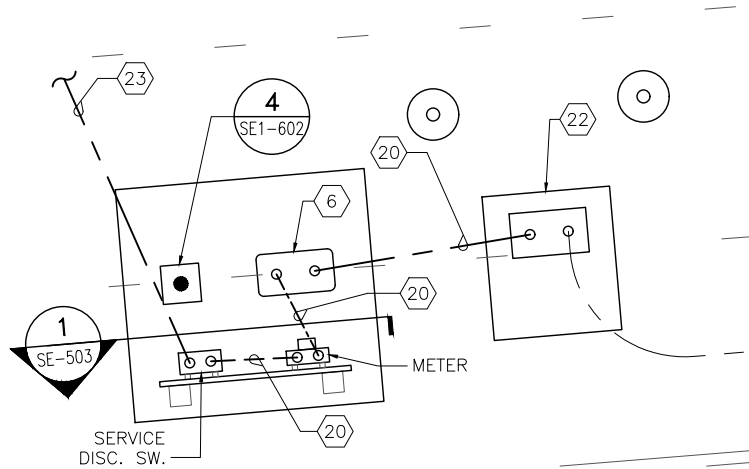
19 PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX, OPEN BOTTOM WITH GASKET AND COVER STAMPED "THEA TOLLING LOOPS". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT, AND ANSI TIER 15 RATED.

20 SECONDARY POWER SERVICE CONDUCTORS. REFER TO DRAWING SE1-601.

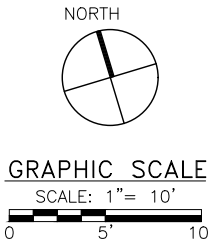
21 LIQUEFIED PROPANE GAS GENERATOR. REFER TO DRAWING SE1-601.

22 PROPOSED LOCATION FOR UTILITY TRANSFORMER.

23 POWER FEEDER CONDUCTORS. REFER TO DRAWING SE1-601.



2 SITE 1 – SERVICE POINT DETAILS  
SE1-101 SCALE: 1"= 5'-0"



RAMP D

		REVISIONS		AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY		SHEET TITLE:  SITE 1 - ENLARGED ELECTRICAL SITE PLAN	REF. DWG. NO.  SE1-101
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY		
					SR 600 SR 618	HILLSBOROUGH	THEA PROJECT NO. FDOT FINANCIAL PROJECT ID  O-17-00217 439023-1-52-01	SHEET NO.  13

PROJECT NAME:  
SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE  
WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY

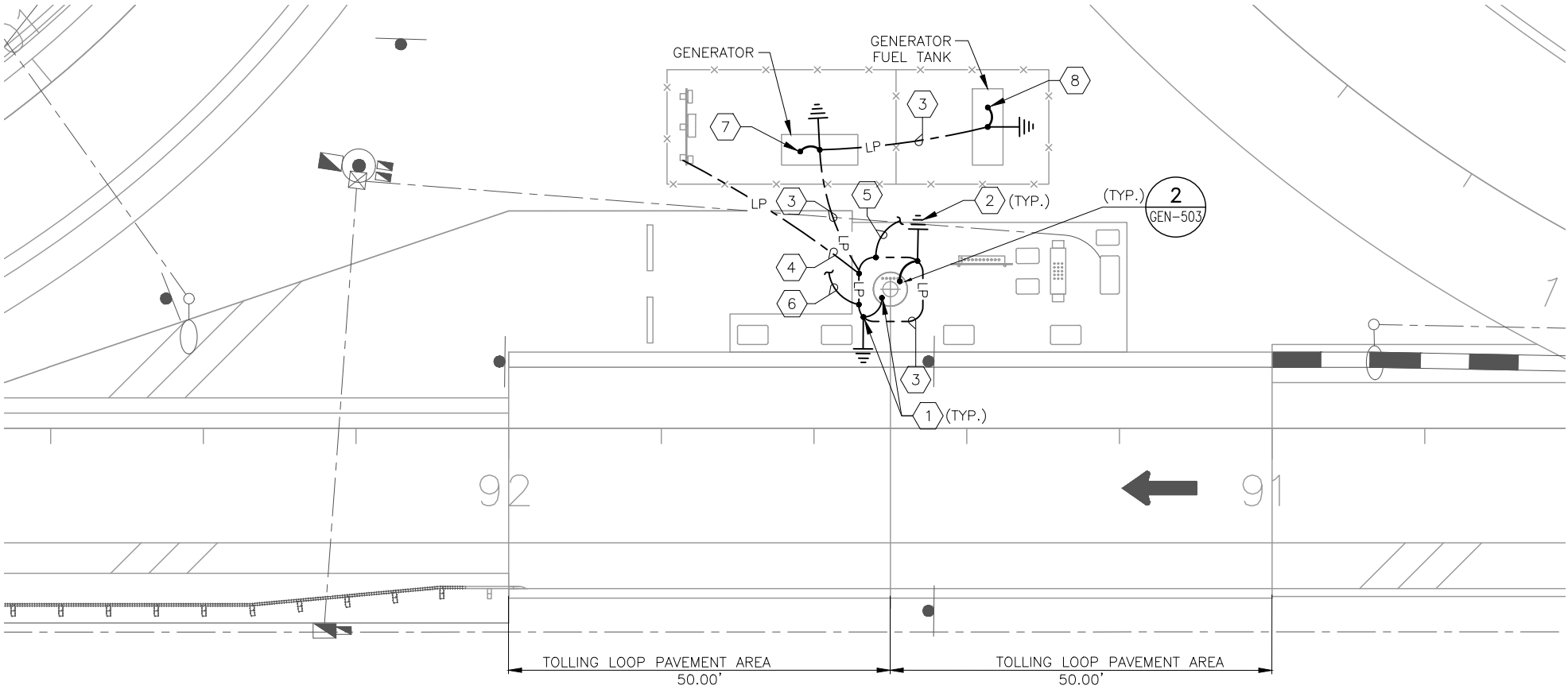
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GENERAL NOTES:

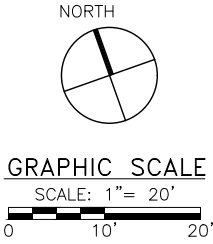
1. THIS SHEET DEPICTS THE LIGHTNING PROTECTION SYSTEM FOR THE GANTRY. ALL WORK SHALL MEET NFPA 780.
2. SEE TSP SECTION 26 41 13.

REFERENCE NOTES:

- 1 STRANDED COPPER LIGHTNING PROTECTION CONDUCTOR. BONDED TO GANTRY COLUMN AND TO GROUND RING ELECTRODE. REFER TO DRAWING GEN-503.
- 2 20' LONG X 5/8" DIAMETER COPPER-CLAD STEEL GROUND ROD.
- 3 BARE STRANDED COPPER CONDUCTOR, 36" BELOW FINISHED GRADE. DO NOT ROUTE CONDUCTOR UNDER TOLLING LOOP PAVEMENT.
- 4 BOND POWER DISTRIBUTION SUPPORT STRUCTURE TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE1-602.
- 5 BOND ALL METAL WIRE TROUGHS TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE1-602.
- 6 BOND ALL METAL FENCE POSTS TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE1-602.
- 7 BOND GENERATOR ENCLOSURE TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE1-602.
- 8 BOND GENERATOR FUEL TANK TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE1-602.

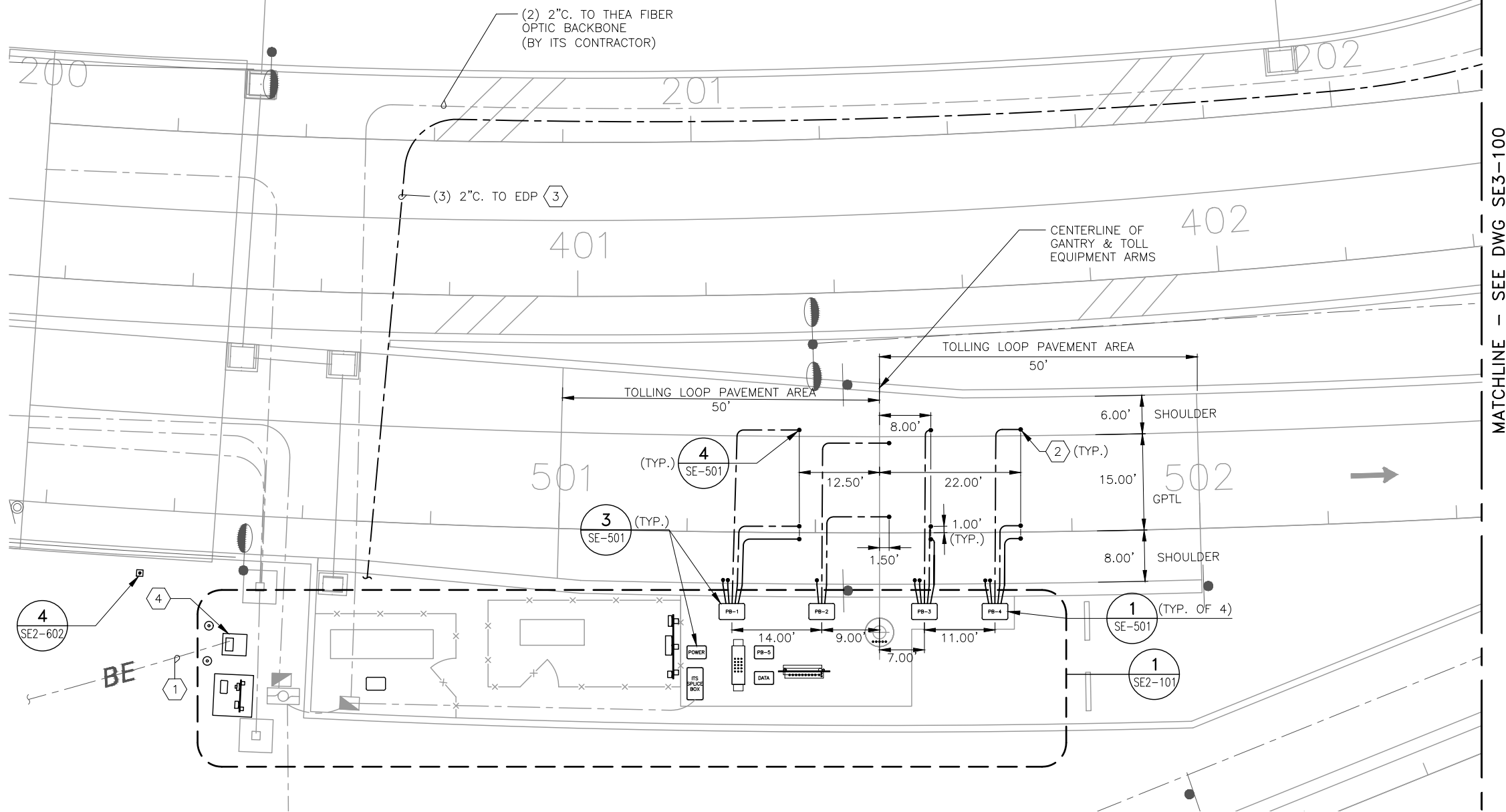


1 SITE 1 – LIGHTNING PROTECTION SITE PLAN  
SE1-102 SCALE: 1"= 20'-0"



RAMP D

		REVISIONS			AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY		SHEET TITLE:		REF. DWG. NO.	
DATE	DESCRIPTION		DATE	DESCRIPTION		ROAD NO.	COUNTY	THEA PROJECT NO. FDOT FINANCIAL PROJECT ID	SITE 1 - LIGHTNING PROTECTION SITE PLAN		SE1-102
						SR 600 SR 618	HILLSBOROUGH	O-17-00217 439023-1-52-01	PROJECT NAME: SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY		SHEET NO. 14

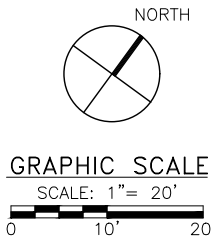


MATCHLINE - SEE DWG SE3-100

1 SITE 2 - OVERALL ELECTRICAL SITE PLAN  
SE2-100 SCALE: 1" = 20'-0"

REFERENCE NOTES:

- 1 BURIED PRIMARY CONDUIT AND CONDUCTORS BY POWER COMPANY. REFER TO UTILITY ADJUSTMENT SHEETS FOR CONTINUATION. THE ELECTRICAL CONTRACTOR SHALL CONTACT THE UTILITY COMPANY WITHIN TWO WEEKS OF NTP TO ENSURE ELECTRICAL SERVICE IS AVAILABLE WHEN CONSTRUCTION OF THE TOLL SITE IS COMPLETE. CONTACT MR. STEVE SZYMAKOWSKI AT TECO, (813) 625-3899. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE POWER COMPANY TO BRING POWER TO THE TRANSFORMER (PRIMARY). COORDINATE INSTALLATION WITH CIVIL, ROADWAY CONSTRUCTION AND POWER UTILITY COMPANY AS REQUIRED.
- 2 EXACT LOCATIONS OF ALL ROADWAY TOLLING LOOP LANE CONDUIT STUB-UPS MUST BE COORDINATED WITH T.E.C. TRANSORE PRIOR TO ROUGH-IN. TOLLING LOOP LAYOUT (PROVIDED BY T.E.C. TRANSORE) NOT SHOWN FOR CLARITY.
- 3 CAREFULLY COORDINATE INSTALLATION WITH ROADWAY CONSTRUCTION. REFER TO SE2-601 FOR POWER CONDUIT AND CONDUCTOR DETAILS.
- 4 PROPOSED LOCATION FOR UTILITY TRANSFORMER. FINAL TRANSFORMER LOCATION SHALL BE COORDINATED WITH UTILITY REPRESENTATIVE PRIOR TO CONDUIT ROUGH-IN, CONCRETE SLAB OR BOLLARD INSTALLATION. ELECTRICAL INSTALLATION AT TRANSFORMER LOCATION MUST BE INSPECTED AND APPROVED BY TECO.



		REVISIONS						SHEET TITLE:		REF. DWG. NO.	
DATE	DESCRIPTION		DATE	DESCRIPTION				SITE 2 - OVERALL ELECTRICAL SITE PLAN		SE2-100	
								PROJECT NAME:		SHEET NO.	
								SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY		15	

AECOM Technical Services, Inc.  
7650 West Courtney  
Campbell Causeway  
Tampa, FL 33607-1462  
C.A. No. 8115  
Pete Pastore, P.E. No. 77103

TAMPA HILLSBOROUGH  
EXPRESSWAY AUTHORITY

ROAD NO.

SR 600  
SR 618

COUNTY

HILLSBOROUGH

THEA PROJECT NO.

0-17-00217

FDOT FINANCIAL PROJECT ID

439023-1-52-01

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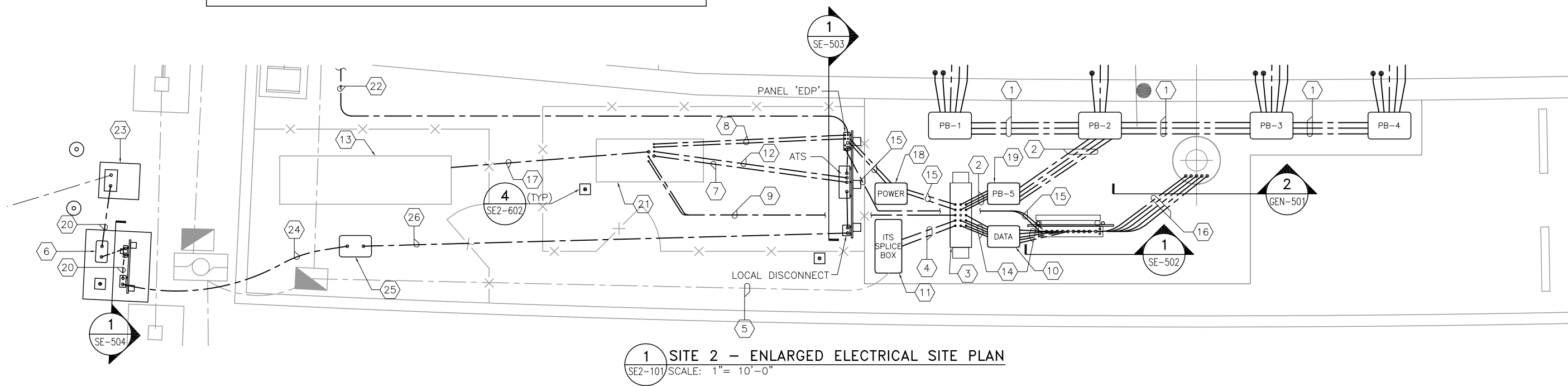
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THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

RELEASED FOR CONSTRUCTION

**NOTE:** THE LOCATION OF THE GENERATOR PAD AND LP GAS FUEL TANK PAD (AS SHOWN ON THESE ELECTRICAL PLANS) PROVIDE ADEQUATE MAINTENANCE AND REQUIRED CODE CLEARANCES. PLEASE USE THE ELECTRICAL PLAN LOCATIONS AS A GUIDE. CONCRETE PAD DIMENSIONS ARE APPROXIMATE, AND EXACT EQUIPMENT DIMENSIONS ARE DEPENDENT ON MANUFACTURER PROVIDED. COORDINATE WITH CONTRACTOR AS REQUIRED.

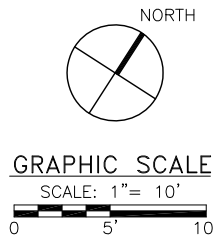


**REFERENCE NOTES:**

- (1) (3) 2" CONDUITS (TOLLING LOOPS).
- (2) (4) 2" CONDUITS (TOLLING LOOPS).
- (3) TOLLING EQUIPMENT CONTROL CABINET, PROVIDED BY OTHERS. ALL CONDUIT STUB-UPS INTO THE CONTROL CABINET SLAB SHALL EXTEND 1" ABOVE SLAB, TERMINATED WITH A GROUNDING BUSHING. COORDINATE TOLLING EQUIPMENT CONTROL CABINET SIZE WITH THEA AND OBTAIN FINAL APPROVAL FROM THEA ON FINAL CABINET SIZE.
- (4) (2) 2" CONDUITS (FIBER OPTIC CABLE FOR NETWORK CONNECTIONS).
- (5) (2) 2" CONDUITS (FIBER OPTIC CABLE FOR NETWORK CONNECTIONS) TO BE INSTALLED BY ITS CONTRACTOR. REFER TO SITE AND ITS PLANS FOR CONTINUATION.
- (6) PROVIDE 13" X 24" X 18" DEEP POLYMER CONCRETE PULLBOX WITH COVER STAMPED "ELECTRIC POWER". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED. REFER TO DRAWING SE2-601.
- (7) POWER CIRCUITING FROM GENERATOR CIRCUIT BREAKER TO ATS. REFER TO DRAWING SE2-601.
- (8) (2) 1" CONDUITS FOR JACKET WATER HEATER AND BATTERY CHARGER CIRCUITING. REFER TO DRAWING SE2-601.
- (9) (2) 1" CONDUITS FROM GENERATOR CONTROL PANEL TO TOLLING COMMUNICATIONS CABINET.
- (10) PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "THEA DATA". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.
- (11) PROVIDE 30" X 60" X 36" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "THEA ITS FIBER SPLICE BOX". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.

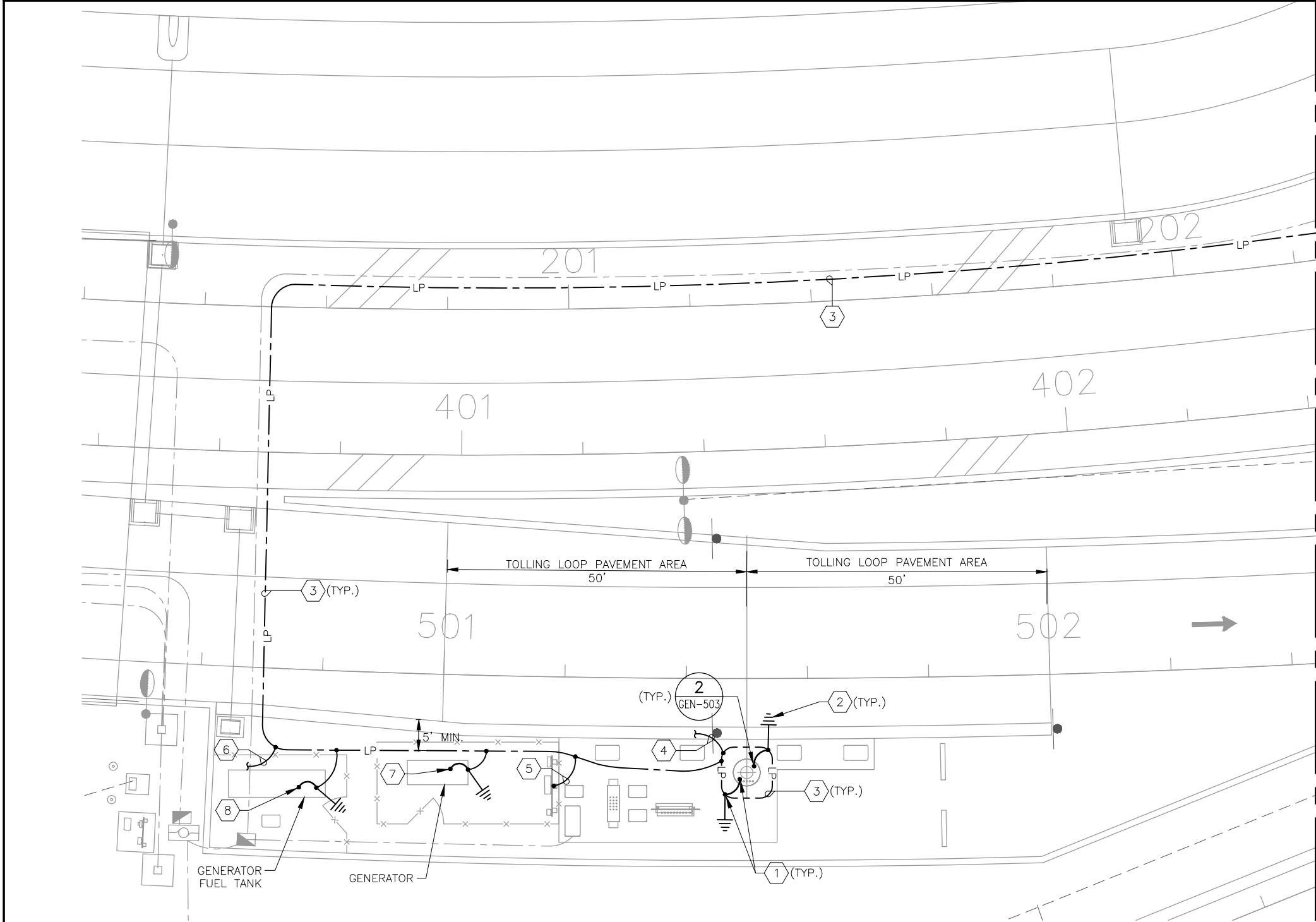
- (12) 2 #14 (GENERATOR RUN), 4 #14 (SPARE), 1 #14 GROUND IN 1" CONDUIT.
- (13) LIQUEFIED PROPANE GAS FUEL TANK. REFER TO TSP.
- (14) (5) 3" CONDUITS (DATA).
- (15) (2) 2" CONDUITS (POWER). REFER TO DRAWING SE2-601.
- (16) (1) 3" POWER CONDUIT, (2) 3" DATA CONDUITS, (1) 3" (E6) CONDUIT, (1) 3" SPARE CONDUIT.
- (17) 2" CONDUIT ROUTED WITH FUEL PIPING. COORDINATE EXACT ROUTING WITH FUEL PIPING CONTRACTOR PRIOR TO ROUGH-IN.
- (18) PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "THEA POWER". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.
- (19) PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX, OPEN BOTTOM WITH GASKET AND COVER STAMPED "THEA TOLLING LOOPS". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT, AND ANSI TIER 15 RATED.
- (20) SECONDARY POWER SERVICE CONDUCTORS. REFER TO DRAWING SE2-601.
- (21) LIQUEFIED PROPANE GAS GENERATOR. REFER TO DRAWING SE2-601.
- (22) (3) 2" CONDUITS ROUTED FROM PANEL 'EDP' (SITE #2) TO POWER PULLBOX (SITE #3). ROUTE ADJACENT TO ITS CONDUIT AND LP SYSTEM CONDUCTOR. CAREFULLY COORDINATE INSTALLATION WITH ROADWAY CONSTRUCTION. REFER TO DRAWING SE2-601.
- (23) PROPOSED LOCATION FOR UTILITY TRANSFORMER.

- (24) UNDERGROUND FEEDER ROUTING, REFER TO DRAWING SE2-601. THE CONTRACTOR SHALL ROUTE FEEDER CONDUIT VERTICALLY WITHIN MSE WALL. ROUTE CONDUIT AROUND, BUT NOT UNDER, LARGE PIECES OF EQUIPMENT OR TOLLING LOOP PAVEMENT AREA. COORDINATE CONDUIT ROUTING WITH ALL UTILITIES, ROADWAY CONSTRUCTION AND ADJACENT CONSTRUCTION AS REQUIRED. THE ELECTRICAL CONTRACTOR SHALL PAY FOR ALL COSTS ASSOCIATED WITH THE ELECTRICAL SERVICE INCLUDING THE SERVICE DISCONNECTING MEANS, GROUNDING, METER SOCKET AND OTHER WORK AS SPECIFIED.
- (25) PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "THEA POWER". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED. PROVIDE VERTICAL STRAIN RELIEF DEVICE FOR CONDUCTORS, KELLEMS GRIP OR APPROVED EQUAL.
- (26) POWER FEEDER CONDUCTORS. REFER TO DRAWING SE2-601.



**SELMON NB RAMP**

		REVISONS		AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY			SHEET TITLE:		REF. DWG. NO.	
DATE	DESCRIPTION		DATE		DESCRIPTION	ROAD NO.	COUNTY	THEA PROJECT NO. FDOT FINANCIAL PROJECT ID	SITE 2 - ENLARGED ELECTRICAL SITE PLAN		SE2-101
						SR 600 SR 618	HILLSBOROUGH	O-17-00217 439023-1-52-01	PROJECT NAME: SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY		SHEET NO. 16



MATCHLINE - SEE DWG SE3-102

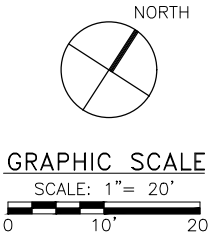
GENERAL NOTES:

1. THIS SHEET DEPICTS THE LIGHTNING PROTECTION SYSTEM FOR THE GANTRY. ALL WORK SHALL MEET NFPA 780.
2. SEE TSP SECTION 26 41 13.

REFERENCE NOTES:

- 1 STRANDED COPPER LIGHTNING PROTECTION CONDUCTOR. BONDED TO GANTRY COLUMN AND TO GROUND RING ELECTRODE. REFER TO DRAWING GEN-503.
- 2 40' LONG X 5/8" DIAMETER COPPER-CLAD STEEL GROUND ROD.
- 3 BARE STRANDED COPPER CONDUCTOR, 3/6" BELOW FINISHED GRADE. DO NOT ROUTE CONDUCTOR UNDER TOLLING LOOP PAVEMENT. CAREFULLY COORDINATE INSTALLATION WITH ROADWAY CONSTRUCTION.
- 4 BOND ALL METAL WIRE TROUGHS TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE2-602.
- 5 BOND POWER DISTRIBUTION SUPPORT STRUCTURE TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE2-602.
- 6 BOND ALL METAL FENCE POSTS TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE2-602.
- 7 BOND GENERATOR ENCLOSURE TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE2-602.
- 8 BOND GENERATOR FUEL TANK TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE2-602.

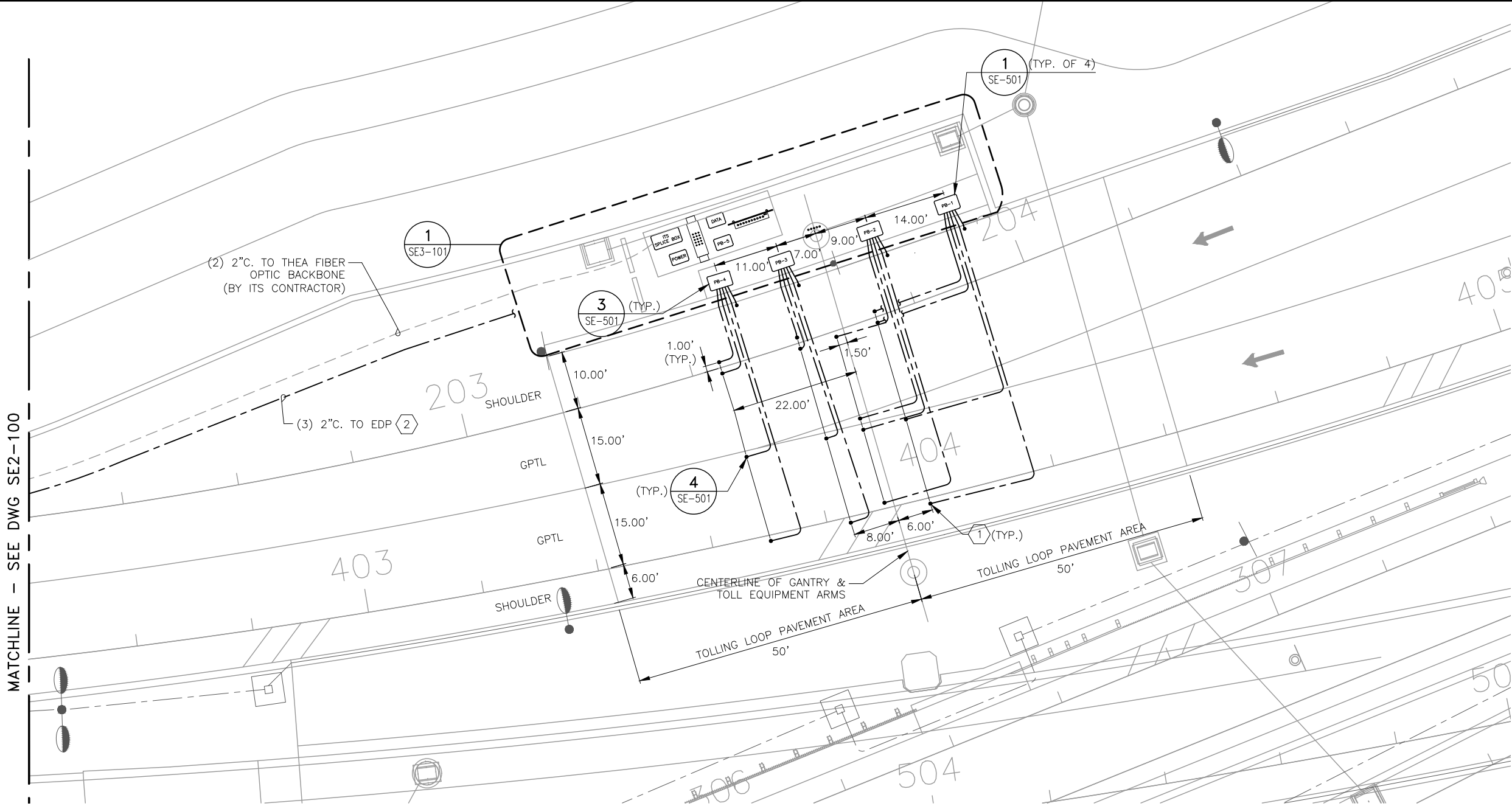
1 SITE 2 - LIGHTNING PROTECTION SITE PLAN  
SE2-102 SCALE: 1"= 20'-0"



SELMON NB RAMP

		REVISIONS			AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY		SHEET TITLE:		REF. DWG. NO.
DATE	DESCRIPTION		DATE	DESCRIPTION		ROAD NO.	COUNTY	THEA PROJECT NO. FDOT FINANCIAL PROJECT ID	SITE 2 - LIGHTNING PROTECTION SITE PLAN	SE2-102
						SR 600 SR 618	HILLSBOROUGH	O-17-00217 439023-1-52-01	PROJECT NAME: SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY	SHEET NO. 17

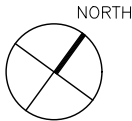




1 SITES 3 - OVERALL ELECTRICAL SITE PLAN  
SE3-100 SCALE: 1"= 20'-0"

REFERENCE NOTES:

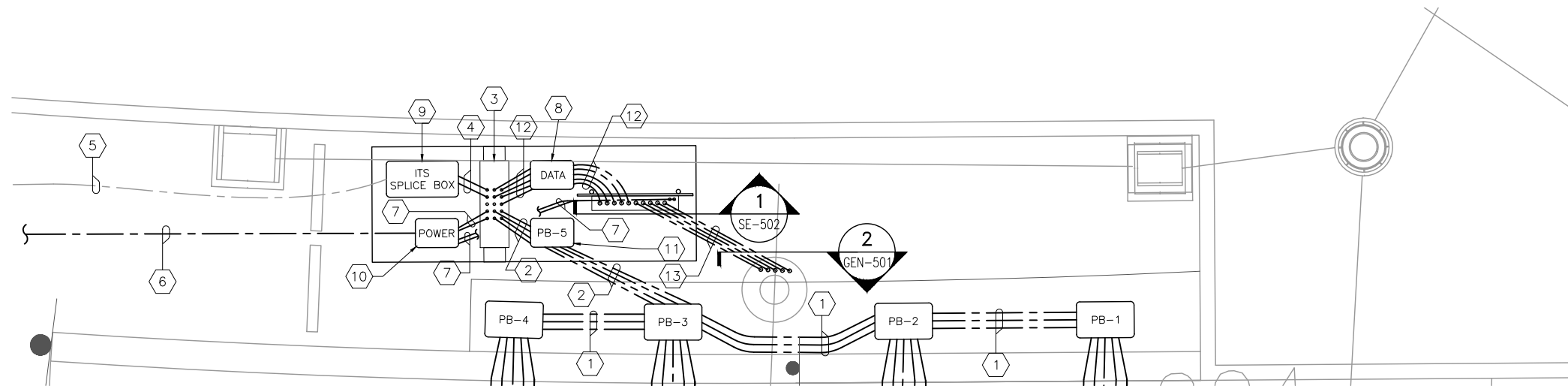
- 1 EXACT LOCATIONS OF ALL ROADWAY TOLLING LOOP LANE CONDUIT STUB-UPS MUST BE COORDINATED WITH T.E.C. TRANSCORE PRIOR TO ROUGH-IN. TOLLING LOOP LAYOUT (PROVIDED BY T.E.C. TRANSCORE) NOT SHOWN FOR CLARITY.
- 2 CAREFULLY COORDINATE INSTALLATION WITH ROADWAY CONSTRUCTION.



GRAPHIC SCALE  
SCALE: 1"= 20'  
0 10' 20'

SELMON SB RAMP/RAMP F

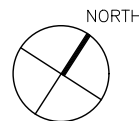
REVISIONS										
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	THEA PROJECT NO.	FDOT FINANCIAL PROJECT ID	SHEET TITLE:	REF. DWG. NO.
				AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	SR 600 SR 618	HILLSBOROUGH	0-17-00217 439023-1-52-01		SITE 3 - OVERALL ELECTRICAL SITE PLAN	SE3-100
									SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY	SHEET NO. 18



1 SITE 3 – ENLARGED ELECTRICAL SITE PLAN  
SE3-101 SCALE: 1"= 10'-0"

**REFERENCE NOTES:**

- 1 (3) 2" CONDUITS (TOLLING LOOPS).
- 2 (4) 2" CONDUITS (TOLLING LOOPS).
- 3 TOLLING EQUIPMENT CONTROL CABINET, PROVIDED BY OTHERS. ALL CONDUIT STUB-UPS INTO THE CONTROL CABINET SLAB SHALL EXTEND 1" ABOVE SLAB, TERMINATED WITH A GROUNDING BUSHING. COORDINATE TOLLING EQUIPMENT CONTROL CABINET SIZE WITH THEA AND OBTAIN FINAL APPROVAL FROM THEA ON FINAL CABINET SIZE.
- 4 (2) 2" CONDUITS (FIBER OPTIC CABLE FOR NETWORK CONNECTIONS).
- 5 (2) 2" CONDUITS (FIBER OPTIC CABLE FOR NETWORK CONNECTIONS) TO BE INSTALLED BY ITS CONTRACTOR. REFER TO SITE AND ITS PLANS FOR CONTINUATION.
- 6 (3) 2" CONDUITS (POWER) ROUTED FROM SITE #2, PANEL 'EDP'. ROUTE CONDUITS ADJACENT TO ITS CONDUIT AND LIGHTNING PROTECTION SYSTEM CONDUCTOR. REFER TO DRAWING SE2-601.
- 7 (2) 2" CONDUITS (POWER). REFER TO DRAWING SE2-601.
- 8 PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "DATA". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.
- 9 PROVIDE 30" X 60" X 36" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "ITS FIBER SPLICE BOX". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.
- 10 PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX WITH COVER STAMPED "POWER". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT AND ANSI TIER 15 RATED.
- 11 PROVIDE 24" X 36" X 24" POLYMER CONCRETE PULLBOX, OPEN BOTTOM WITH GASKET AND COVER STAMPED "TOLLING LOOPS". PULLBOX AND COVER SHALL BE MINIMUM UL LISTED, ANSI/SCTE 77 LOAD COMPLIANT, AND ANSI TIER 15 RATED.
- 12 (5) 3" CONDUITS (DATA).
- 13 (1) 3" POWER CONDUIT, (2) 3" DATA CONDUITS, (1) 3" E6 CONDUIT, (1) 3" SPARE CONDUIT.



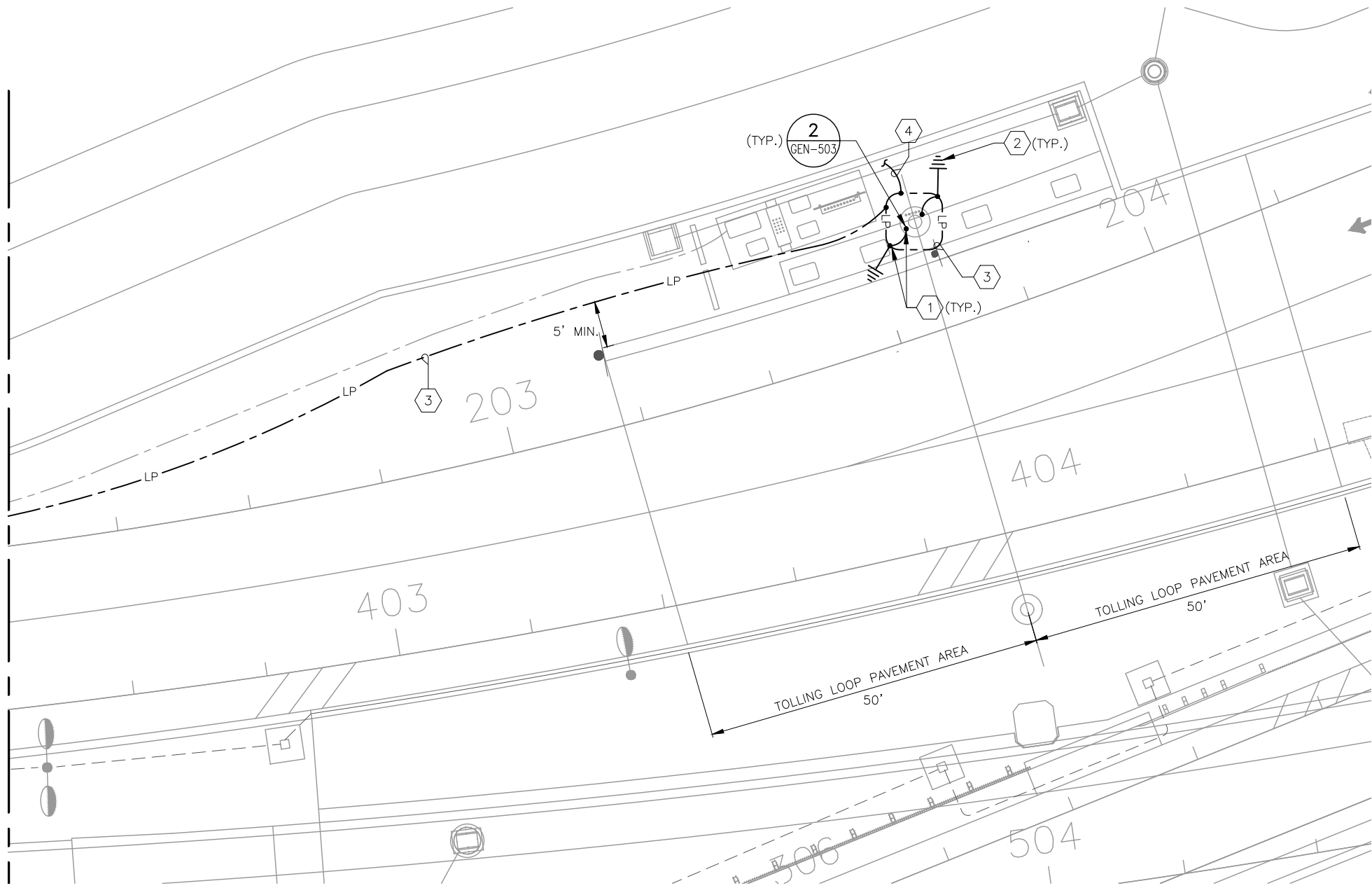
**GRAPHIC SCALE**  
SCALE: 1"= 10'  
0 5' 10'

**SELMON SB RAMP/RAMP F**

		REVISIONS		AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY		SHEET TITLE:		REF. DWG. NO.
DATE	DESCRIPTION		DATE		ROAD NO.	COUNTY	THEA PROJECT NO. FDOT FINANCIAL PROJECT ID	SITE 3 - ENLARGED ELECTRICAL SITE PLAN	SE3-101
					SR 600 SR 618	HILLSBOROUGH	O-17-00217 439023-1-52-01	SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY	SHEET NO. 19

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MATCHLINE - SEE DWG SE2-102



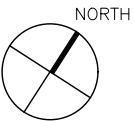
1 SITE 3 - LIGHTNING PROTECTION SITE PLAN  
SE3-102 SCALE: 1"= 20'-0"

**GENERAL NOTES:**

1. THIS SHEET DEPICTS THE LIGHTNING PROTECTION SYSTEM FOR THE GANTRY. ALL WORK SHALL MEET NFPA 780.
2. SEE TSP SECTION 26 41 13.

**REFERENCE NOTES:**

- 1 STRANDED COPPER LIGHTNING PROTECTION CONDUCTOR. BONDED TO GANTRY COLUMN AND TO GROUND RING ELECTRODE. REFER TO DRAWING GEN-503.
- 2 40' LONG X 5/8" DIAMETER COPPER-CLAD STEEL GROUND ROD.
- 3 BARE STRANDED COPPER CONDUCTOR, 36" BELOW FINISHED GRADE. DO NOT ROUTE CONDUCTOR UNDER TOLLING LOOP PAVEMENT. CAREFULLY COORDINATE INSTALLATION WITH ROADWAY CONSTRUCTION.
- 4 BOND ALL METAL WIRE TROUGHS TO THE LIGHTNING PROTECTION GROUND RING ELECTRODE. REFER TO DRAWING GEN-503 AND SE2-602.



GRAPHIC SCALE  
SCALE: 1"= 20'  
0 10' 20'

**SELMON SB RAMP/RAMP F**

		REVISIONS			AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 C.A. No. 8115 Pete Pastore, P.E. No. 77103	TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY		SHEET TITLE:		REF. DWG. NO.
DATE	DESCRIPTION		DATE	DESCRIPTION		ROAD NO.	COUNTY	THEA PROJECT NO. FDOT FINANCIAL PROJECT ID	PROJECT NAME:	SE3-102
						SR 600 SR 618	HILLSBOROUGH	0-17-00217 439023-1-52-01	SELMON WEST EXTENSION FROM THE GANDY BRIDGE TO THE WESTERN TERMINUS OF THE LEE ROY SELMON EXPRESSWAY	SHEET NO. 20