



# THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

## CONTRACT RR-16-4255

### ROADWAY AND BRIDGE REHABILITATION I-355 VETERANS MEMORIAL TOLLWAY

## VOLUME 4 OF 6

MILE POST 12.1 TO MILE POST 22.3  
STATION 733 + 95.55 TO STATION 1275 + 00.00

**VOLUME 1**  
GENERAL PLANS  
ALIGNMENT AND TIES  
MAINTENANCE OF TRAFFIC

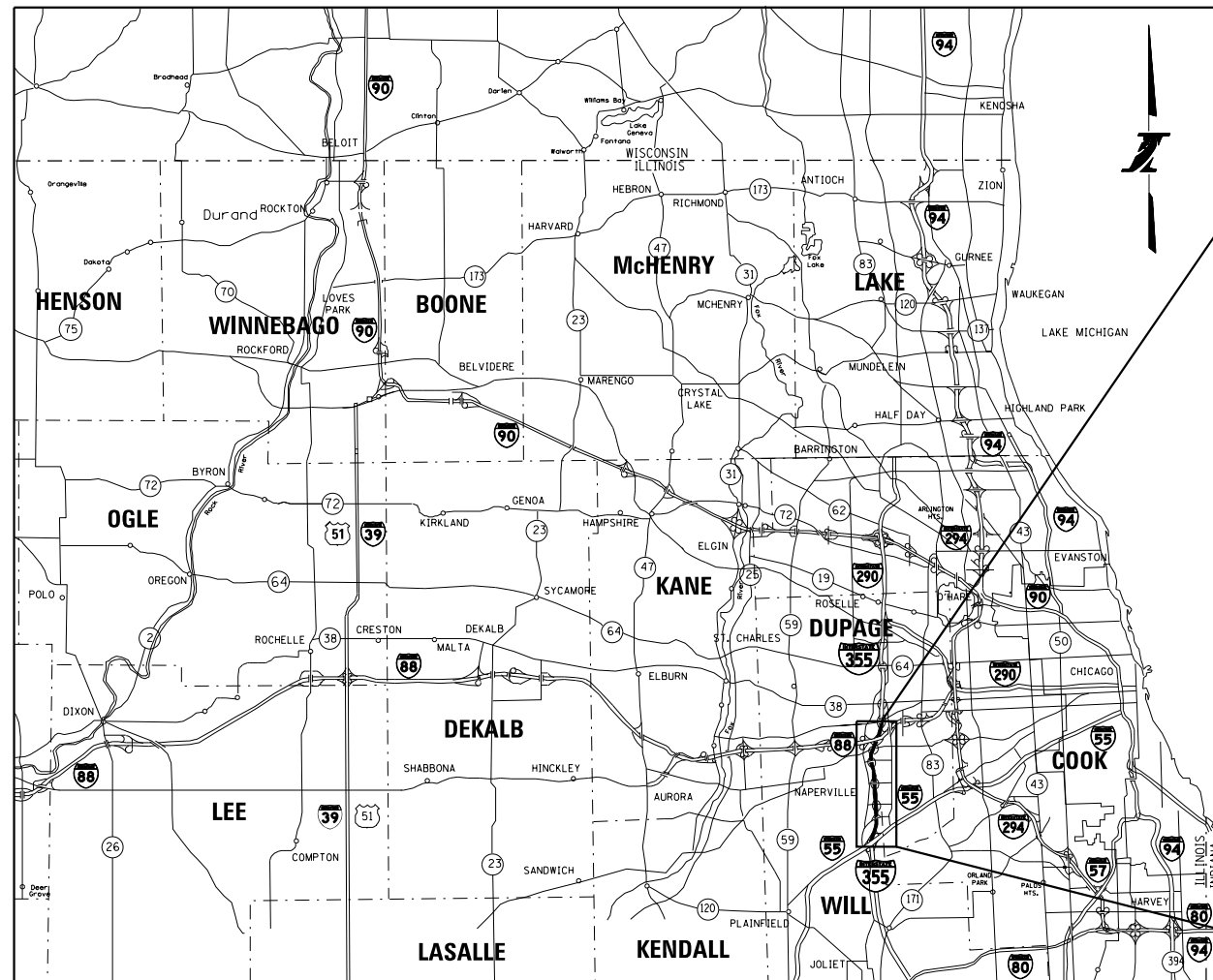
**VOLUME 2**  
MAINTENANCE OF TRAFFIC  
REMOVAL PLANS  
ROADWAY PLANS

**VOLUME 3**  
DRAINAGE PLANS  
GRADING PLANS  
EROSION CONTROL & LANDSCAPE  
PAVEMENT MARKING & SIGNING  
ITS PLANS

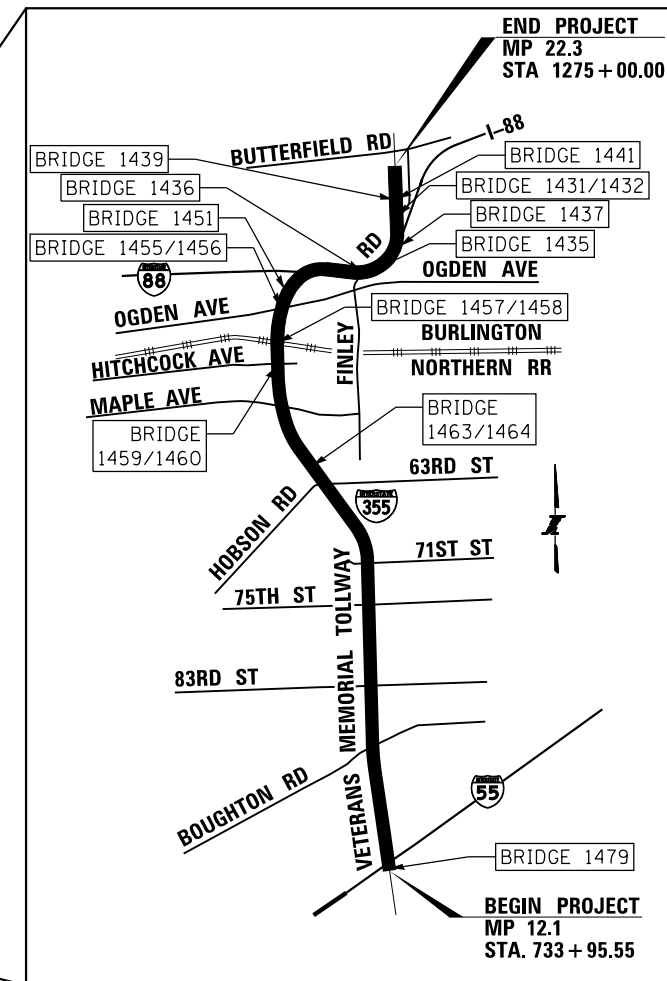
**VOLUME 4**  
LIGHTING PLANS  
BRIDGE PLANS

**VOLUME 5**  
BRIDGE PLANS

**VOLUME 6**  
BRIDGE PLANS  
NOISE WALL PLANS  
RETAINING WALL PLANS  
CROSS SECTIONS



LOCATION MAP



CONSTRUCTION AREA MAP

DESIGN SECTION ENGINEER:



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# INDEX OF DRAWINGS

DRAWINGS	SHEETS	DESCRIPTION
<b>VOLUME 1</b>		
1	COV-01	TITLE SHEET VOLUME 1
2	ENG-01	ENGINEER SEALS
3	IND-01	INDEX OF DRAWINGS AND HIGHWAY STANDARDS
4	GEN-01	GENERAL NOTES
5 TO 6	PS-01 TO PS-02	SUGGESTED PROGRESS SCHEDULE
7 TO 13	S00-01 TO S00-07	SUMMARY OF QUANTITIES
14 TO 19	SCH-01 TO SCH-06	SCHEDULE OF QUANTITIES
20 TO 39	ALI-01 TO ALI-20	ALIGNMENT, TIES, AND BENCHMARKS
40 TO 49	TYP-01 TO TYP-10	TYPICAL SECTIONS
50	MOT-01	MOT GENERAL NOTES
51	MOT-02	MOT SEQUENCE OF CONSTRUCTION
52 TO 88	MOT-03 TO MOT-39	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
89 TO 133	MOT-40 TO MOT-84	MOT STAGE 1
134 TO 167	MOT-85 TO MOT-118	MOT STAGE 1A
168 TO 212	MOT-119 TO MOT-163	MOT STAGE 2
213 TO 217	MOT-164 TO MOT-168	MOT STAGE 2A
<b>VOLUME 2</b>		
218	COV-02	TITLE SHEET VOLUME 2
219	IND-02	INDEX OF DRAWINGS AND HIGHWAY STANDARDS
220 TO 258	MOT-169 TO MOT-207	MOT STAGE 3
259 TO 293	MOT-208 TO MOT-242	MOT STAGE 3A
294 TO 310	MOT-243 TO MOT-259	MOT STAGE 3B
311 TO 327	MOT-260 TO MOT-276	MOT STAGE 3C
328 TO 336	MOT-277 TO MOT-285	MOT STAGE 3D
337 TO 374	MOT-286 TO MOT-323	MOT STAGE 4
375	MOT-324	MOT BRIDGE NO. 1447
376 TO 378	MOT-325 TO MOT-327	MOT DETOUR PLANS
379 TO 382	MOT-328 TO MOT-331	MOT DETAILS
383 TO 425	REM-01 TO REM-43	EXISTING ROADWAY AND REMOVAL PLANS
426 TO 468	RDY-01 TO RDY-43	PROPOSED ROADWAY PLANS
469 TO 476	RDT-01 TO RDT-08	ROADWAY DETAILS
<b>VOLUME 3</b>		
477	COV-03	TITLE SHEET VOLUME 3
478	IND-03	INDEX OF DRAWINGS AND HIGHWAY STANDARDS
479	UT-1	UTILITY MATRIX
480 TO 530	DE01 TO DE51	EXISTING DRAINAGE AND REMOVAL PLANS
531 TO 532	DE52 TO DE53	EXISTING DRAINAGE AND REMOVAL SCHEDULES
533 TO 576	DR01 TO DR44	DRAINAGE PLANS
577 TO 585	DR45 TO DR53	DRAINAGE SCHEDULES
586 TO 587	DR54 TO DR55	DRAINAGE DETAILS
588 TO 595	GR-01 TO GR-08	GRADING PLANS
596 TO 597	EC01 TO EC02	EROSION CONTROL AND LANDSCAPE GENERAL NOTES
598 TO 643	EC03 TO EC48	EROSION CONTROL AND LANDSCAPE PLANS
644 TO 709	PMS-01 TO PMS-66	PAVEMENT MARKING AND SIGNING PLANS
710 TO 729	ITS-01 TO ITS-20	INTELLIGENT TRANSPORTATION SYSTEM PLANS
730 TO 750	ITS-21 TO ITS-41	INTELLIGENT TRANSPORTATION SYSTEM DETAILS
<b>VOLUME 4</b>		
751	COV-04	TITLE SHEET VOLUME 4
752	IND-04	INDEX OF DRAWINGS AND HIGHWAY STANDARDS
753 TO 805	LT-1 TO LT-53	ROADWAY LIGHTING PLANS
806 TO 818	LT-54 TO LT-66	UNDERPASS LIGHTING PLAN
819	LT-67	ELECTRICAL GENERAL NOTES
820	LT-68	ELECTRICAL ABRVREVIATIONS, SYMBOLS AND FIXTURE SCHEDULE
821 TO 830	LT-69 TO LT-78	MAINLINE UNDERPASS LIGHTING
831	LT-79	LIGHTING CONTROLLER UPGRADES
832	LT-80	LIGHTING DETAILS
833 TO 835	LT-81 TO LT-83	LIGHTING PANELBOARD SCHEDULES
836 TO 842	LT-84 TO LT-90	TEMPORARY LIGHTING
843 TO 852	LT-91 TO LT-100	FOUNDATION DETAILS
853 TO 876	SA-01 TO SA-24	BRIDGE NO. 1479 (S-I RAMP D)
877 TO 880	SAA-01 TO SAA-04	BRIDGE NOS. 1477 & 1478 (I-55 RAMP)
881 TO 887	SAB-01 TO SAB-07	BRIDGE NOS. 1475 & 1476 (I-55)
888 TO 899	SAC-01 TO SAC-12	BRIDGE NO. 1473 (BOUGHTON RD.)
900 TO 907	SAD-01 TO SAD-08	BRIDGE NO. 1471 (83RD STREET)
908 TO 920	SAE-01 TO SAE-13	BRIDGE NOS. 1469 & 1470 (75TH STREET)
921 TO 930	SAF-01 TO SAF-10	BRIDGE NO. 1467 (71ST STREET)
931 TO 943	SAG-01 TO SAG-13	BRIDGE NO. 1465 (63RD STREET)
944 TO 973	SB-01 TO SB-30	BRIDGE NOS. 1463 & 1464 (JACKSON DRIVE)
974 TO 982	SBA-01 TO SBA-09	BRIDGE NOS. 1461 & 1462 (MAPLE AVENUE)
983 TO 1000	SC-01 TO SC-18	BRIDGE NOS. 1459 & 1460 (HITCHCOCK AVE.)

<b>VOLUME 5</b>	
1001	COV-05
1002	IND-05
1003 TO 1023	SD-01 TO SD-21
1024 TO 1042	SE-01 TO SE-19
1043 TO 1052	SEA-01 TO SEA-10
1053 TO 1062	SF-01 TO SF-10
1063 TO 1076	SFA-01 TO SFA-14
1077 TO 1083	SFB-01 TO SFB-07
1084 TO 1091	SFC-01 TO SFC-08
1092 TO 1104	SFD-01 TO SFD-13
1105 TO 1147	SG-01 TO SG-43
1148 TO 1189	SH-01 TO SH-42
1190 TO 1220	SI-01 TO SI-31
1221 TO 1234	SJ-01 TO SJ-14
1235 TO 1262	SK-01 TO SK-28

<b>VOLUME 6</b>	
1263	COV-06
1264	IND-06
1265 TO 1303	SL-01 TO SL-39
1304 TO 1306	SZ-01 TO SZ-03
1307 TO 1311	NWA-01 TO NWA-05
1312 TO 1321	NWB-01 TO NWB-10
1322 TO 1325	NWC-01 TO NWC-04
1326 TO 1334	NWD-01 TO NWD-09
1335 TO 1341	NWE-01 TO NWE-07
1342 TO 1348	NWF-01 TO NWF-07
1349 TO 1363	NWG-01 TO NWG-15
1364 TO 1368	NWH-01 TO NWH-05
1369 TO 1379	NWI-01 TO NWI-11
1380 TO 1386	NWJ-01 TO NWJ-07
1387 TO 1401	NWK-01 TO NWK-15
1402 TO 1405	NWL-01 TO NWL-04
1406 TO 1409	RWA-01 TO RWA-04
1410 TO 1420	RWB-01 TO RWB-11
1421 TO 1423	RWC-01 TO RWC-03
1424 TO 1426	RWD-01 TO RWD-03
1427 TO 1430	RWE-01 TO RWE-04
1431 TO 1439	RWF-01 TO RWF-09
1440 TO 1444	RWG-01 TO RWG-05
1445 TO 1450	RWH-01 TO RWH-06
1451 TO 1457	RWI-01 TO RWI-07
1458 TO 1466	RWJ-01 TO RWJ-09
1467 TO 1517	XS-01 TO XS-51

<b>TITLE SHEET VOLUME 5</b>	
INDEX OF DRAWINGS AND HIGHWAY STANDARDS	
BRIDGE NOS. 1457 & 1458 (BNSF RAILROAD)	
BRIDGE NOS. 1455 & 1456 (OGDEN AVE.)	
BRIDGE NO. 1453 (OGDEN AVE.)	
BRIDGE NO. 1451 (SB ES RAMP)	
BRIDGE NO. 1449 (WARRENVILLE ROAD.)	
BRIDGE NO. 1447 (NW RAMP)	
BRIDGE NO. 1445 (NW RAMP OVER I-88)	
BRIDGE NO. 1443 (I-88)	
BRIDGE NO. 1441 (SB SE RAMP TO I-88)	
BRIDGE NO. 1439 (SB SW RAMP TO I-88)	
BRIDGE NO. 1437 (NB EN RAMP FROM I-88)	
BRIDGE NO. 1436 (SB FINLEY RD.)	
BRIDGE NO. 1435 (NB FINLEY RD.)	

<b>TITLE SHEET VOLUME 6</b>	
INDEX OF DRAWINGS AND HIGHWAY STANDARDS	
BRIDGE NO. 1431 & 1432 (WS RAMP C & FINLEY RD.)	
SNOW CANOPY	
NOISE WALL 114551-NS14.59N, SB (R)	
NOISE WALL 114552-NS14.60N, SB (R)	
NOISE WALL 114505-NS15.10N, NB	
NOISE WALL 114507-NS15.25N, NB (R)	
NOISE WALL 114553-NS15.30N, SB (R)	
NOISE WALL 114508-NS16.10N, NB	
NOISE WALL 114554-NS16.10N, SB	
NOISE WALL 114511-NS17.55N, NB	
NOISE WALL 114557-NS17.55N, SB	
NOISE WALL 114561-NS19.14R, SB (R)	
NOISE WALL 114512-NS19.15N, NB	
NOISE WALL 114562-NS19.60N, SB	
RETAINING WALL 114002-NS14.35R, NB (R)	
RETAINING WALL 114008-NS18.40R, NB	
RETAINING WALL 114039-NS19.14R, SB (R)	
RETAINING WALL 114040-NS19.15R, SB (R)	
RETAINING WALL 114042-NS19.80R, SB	
RETAINING WALL 114043-NS20.15R, SB	
RETAINING WALL 114009-NS20.20R, NB	
RETAINING WALL 114011-NS21.30R, NB	
RETAINING WALL 114012-NS20.20R, NB	
RETAINING WALL 114045-NS20.15R, SB	
CROSS SECTIONS	

# TOLLWAY STANDARD DRAWINGS

A1-05	CONCRETE PAVEMENT REPAIR FULL DEPTH
A2-05	ASPHALT OVERLAY REPAIR
A4-04	BUTT JOINTS AND TEMPORARY ASPHALT WEDGE
A7-03	PAVEMENT JOINTS
A18-03	PRECAST PAVEMENT SLABS
B1-07	GUTTER AND CURB DETAILS
B2-06	TYPE G-2 AND G-3 GUTTER TRANSITIONS
B3-06	TYPE G-2/G-3 GUTTER TRANSITION AT TRAFFIC BARRIER TERMINAL, TYPE T6
B6-06	HEADWALL TYPE III 18"-24"-30"-36"-42"-48"-54"-60" FOR 1:3, 1:4, 1:6 AND 1:10 SLOPES
B7-03	CATCH BASIN, TYPE B
B8-05	CATCH BASINS TYPE G AND TYPE G MODIFIED, FRAMES AND GRATES
B10-09	SLOPED HEADWALLS TYPE III DETAILS
B12-06	TRENCH DRAIN DETAIL
B19-02	EROSION PROTECTION
B22-04	HEADWALL TYPE IV METAL PIPE AND PIPE-ARCH CULVERTS
B23-03	GRATING FOR HEADWALL TYPE IV PIPE & PIPE-ARCH CULVERTS
B24-05	PIPE UNDERDRAINS
B25-01	FRAME AND GRATE TYPE 20A
B26-01	FRAME AND GRATE TYPE 21A
B28-04	GUTTER TRANSITION AT TRAFFIC BARRIER TERMINAL, TYPE T1 (SPECIAL)
B29-03	GUTTER TRANSITION AT TRAFFIC BARRIER TERMINAL, TYPE T1-A (SPECIAL)
C1-09	GALVANIZED STEEL PLATE BEAM GUARDRAIL
C3-06	SINGLE FACE REINFORCED CONCRETE BARRIER
C4-07	CONCRETE SHOULDER BARRIER TRANSITION TYPE F
C5-05	CONCRETE BARRIER BASE AND CONCRETE BARRIER, DOUBLE FACE, 42" AND VARIABLE HEIGHT
C6-09	SHOULDER WIDENING FOR TRAFFIC BARRIER TERMINAL, TYPE T1 (SPECIAL) TANGENT
C7-08	TRAFFIC BARRIER TERMINAL, TYPE T2
C10-08	TRAFFIC BARRIER TERMINAL, TYPE T6B
C11-07	TRAFFIC BARRIER TERMINAL, TYPE T10
C13-04	CONCRETE MEDIAN BARRIER TRANSITION, TYPE V-F AT BRIDGE PIERS
D1-05	RIGHT OF WAY FENCE
D2-04	SYMBOLS AND PATTERNS
D4-06	ROADWAY DELINEATORS AND REFLECTORS
D5-06	PERMANENT PAVEMENT MARKINGS
D6-07	PAVEMENT MARKING AND SHOULDER RUMBLE STRIP DETAILS
D8-02	RAISED PAVEMENT LANE MARKER
E1-06	CONSTRUCTION SIGNS
E2-07	LANE CLOSURE DETAILS
E3-06	SHOULDER CLOSURE DETAILS
E4-07	MAINTENANCE OF TRAFFIC REVERSE CURVE
E5-06	TEMPORARY GORE DETAILS
E6-03	CONTRACTOR ACCESS TO WORK AREA
F4-08	OVERHEAD SIGN STRUCTURE CANTILEVER TYPE STRUCTURE DETAILS
F9-04	BREAKAWAY SIGN SUPPORT DETAILS
F10-03	MISCELLANEOUS DETAILS AND ALUMINUM SIGN PANELS
F11-04	MILEPOST MARKER
F12-02	MOUNTING DETAILS FOR RETROFITTING NEW EXIT SIGN PANELS
H1-06	SUPERSEDED - SEE SHEET NO. LT-105 THROUGH LT-113 - LIGHT STANDARD FOUNDATION
H2-05	LIGHT STANDARD DETAILS
H4-04	HEAVY-DUTY HANDHOLE AND BURIED WIRING DETAILS
H5-04	SERVICE POLE AND PEDESTAL DETAILS
H6-05	EXTERIOR CONTROL CONSOLE DETAILS
H7-02	EXTERIOR CONTROL CONSOLE FOUNDATION DETAILS
H8-02	INTERIOR CONTROL CONSOLE DETAILS
H9-01	UNDERPASS LIGHTING INSTALLATION DETAILS
K1-06	TEMPORARY EROSION AND SEDIMENT CONTROLS

# IDOT STANDARD DRAWINGS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
642001-02	SHOULDER RUMBLE STRIPS, 16 IN.
664001-02	CHAIN LINK FENCE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701206-03	LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS > 45 MPH
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-11	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
701428-01	TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY
701451-05	RAMP CLOSURE FREEWAY/EXPRESSWAY
701456-05	PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-07	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
728001-01	TELESCOPING STEEL SIGN SUPPORT

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DRAWN BY CBP DATE 3/11/2018  
 CHECKED BY RJD DATE 3/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 INDEX OF DRAWINGS  
 AND HIGHWAY STANDARDS

IND-04  
 DRAWING NO.  
 752 OF 1517



## LIGHTING LEGEND

	PROPOSED SINGLE ARM GROUND MOUNTED LIGHTING UNIT MH AND MA AS SPECIFIED, LED LUMINAIRE
	PROPOSED DUAL ARM WALL MOUNTED LIGHTING UNIT 50' MH, (2) 6' MA, LED LUMINAIRE (JS830015, JS821100, JS836006)
	EXISTING SINGLE ARM GROUND MOUNTED LIGHTING UNIT 50' MH, 15' MA, TO BE REMOVED AND RELOCATED (ORIGINAL LOCATION)
	EXISTING SINGLE ARM GROUND MOUNTED LIGHTING UNIT 50' MH, 15' MA, RELOCATED
	PROPOSED LUMINAIRE, LED, HORIZONTAL MOUNT TO REPLACE EXISTING LUMINAIRE
	PROPOSED UNDERPASS LUMINAIRE, LED TO REPLACE EXISTING LUMINAIRE
	PROPOSED LIGHTING CONTROLLER
	PROPOSED ELECTRIC SERVICE
	PROPOSED JUNCTION BOX, SIZE AS NOTED ON PLANS
	PROPOSED CANOPY LUMINAIRE, LED TO REPLACE EXISTING LUMINAIRE
	PROPOSED CABLE IN DUCT TO REPLACE EXISTING CABLE IN DUCT, SIZE AND TYPE AS NOTED ON PLANS
	PROPOSED UNDERGROUND CONDUIT CASING, SIZE AS NOTED ON PLANS
	EXISTING EMBEDDED CONDUIT
	TEMPORARY LIGHTING UNIT 70' CLASS 3 WOOD POLE, 50' MOUNTING HEIGHT, 15' MAST ARM, 400W HPS LUMINAIRE
	TEMPORARY WOOD POLE 60 FT., CLASS 4
	TEMPORARY AERIAL CABLE 4-1/C NO. 2 WITH MESSENGER WIRE (U.N.O.)
	EXISTING SINGLE ARM LIGHTING UNIT TO BE REMOVED
	EXISTING JUNCTION BOX TO BE REMOVED
	EXISTING LIGHTING CONTROLLER TO BE REMOVED
	EXISTING ELECTRIC SERVICE TO BE REMOVED
	EXISTING SIGN LUMINAIRE TO BE REMOVED
	EXISTING LIGHTING CONTROLLER TO REMAIN IN PLACE
	EXISTING UNDERPASS LUMINAIRE TO BE REMOVED
	EXISTING SINGLE ARM LIGHTING UNIT TO REMAIN
	EXISTING DUAL ARM LIGHTING UNIT TO REMAIN
	EXISTING IDOT SINGLE ARM LIGHTING UNIT TO REMAIN
	EXISTING DUPAGE COUNTY SINGLE ARM LIGHTING UNIT TO REMAIN
	EXISTING HANDHOLE TO REMAIN
	EXISTING JUNCTION BOX TO REMAIN
	EXISTING UNDERGROUND CONDUIT
	EXISTING UNDERGROUND LIGHTING CABLE IN DUCT TO REMAIN IN PLACE

## CONDUIT AND CABLE TAGS

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- ③ UNDERGROUND CONDUIT, CNC, 4" DIA. (JS810879)
- ④ CONDUIT, ATTACHED TO STRUCTURE, 2" DIAMETER PVC COATED GALVANIZED STEEL (JS811060)
- A UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- B UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- C ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- D ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- E NOT USED
- F EXISTING CABLE TO REMAIN IN USE
- G ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

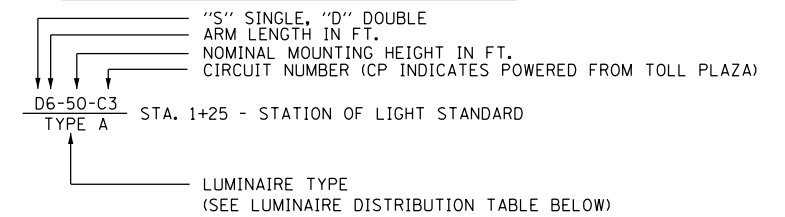
## STANDARD DRAWINGS

- H1 LIGHT STANDARD FOUNDATION
- H2 LIGHT STANDARD DETAILS
- H3 BRIDGE CONDUIT DETAILS
- H4 HEAVY DUTY HANDHOLE AND BURIED WIRING DETAILS
- H6 EXTERIOR CONTROL CONSOLE DETAILS
- H9 UNDERPASS LIGHTING INSTALLATION DETAILS
- H16 MAST ARM CABLE ASSEMBLY (SINGLE MAST ARM)
- H17 MAST ARM CABLE ASSEMBLY (TWIN MAST ARM)

## ABBREVIATIONS

AMP	AMPERE
ATS	ATTACHED TO STRUCTURE
BN	BRIDGE NUMBER
CKT	CIRCUIT
CNC	COILABLE NON METALLIC CONDUIT
GND	GROUND
HPS	HIGH PRESSURE SODIUM
IPDC	INTEGRATED POWER DISTRIBUTION AND COMMUNICATION
KW	KILOWATT
LED	LIGHT EMITTING DIODE
MA	MAST ARM
MH	MOUNTING HEIGHT
P	POLE
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
V	VOLT
W	WATT

## CALL-OUT LEGEND (HPS & LED LUMINAIRES)



## LUMINAIRE DISTRIBUTION TABLE (HPS)

LUMINAIRE TYPE	AEL	GE	HUBBELL
A	M-C-III	S-C-III	M-C-III

## LUMINAIRE DISTRIBUTION TABLE (LED)

LUMINAIRE TYPE	AEL	GE	PHILIPS
A	TYPE II	TYPE 23E1	TYPE R2M

## UNDERPASS LUMINAIRE DISTRIBUTION TABLE (LED)

LUMINAIRE TYPE	LAYOUT TYPE	PHOTOMETRIC DISTRIBUTION TYPE TILT ANGLE, DEGREES		
		CREE	KENALL	PHILIPS
A	SINGLE SIDE	TYPE 3M 0	TYPE 5N 30	TYPE 4 10
C	SINGLE SIDE	TYPE 3M 0	TYPE 5N 30	TYPE 4 10
D	OPPOSITE	TYPE 3M 0	TYPE 5N 30	TYPE 4 10
E	OPPOSITE	TYPE 3M 0	TYPE 5N 30	TYPE 4 10

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DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

REVISIONS	
NO.	DATE DESCRIPTION

CONTRACT NO. RR-16-4255

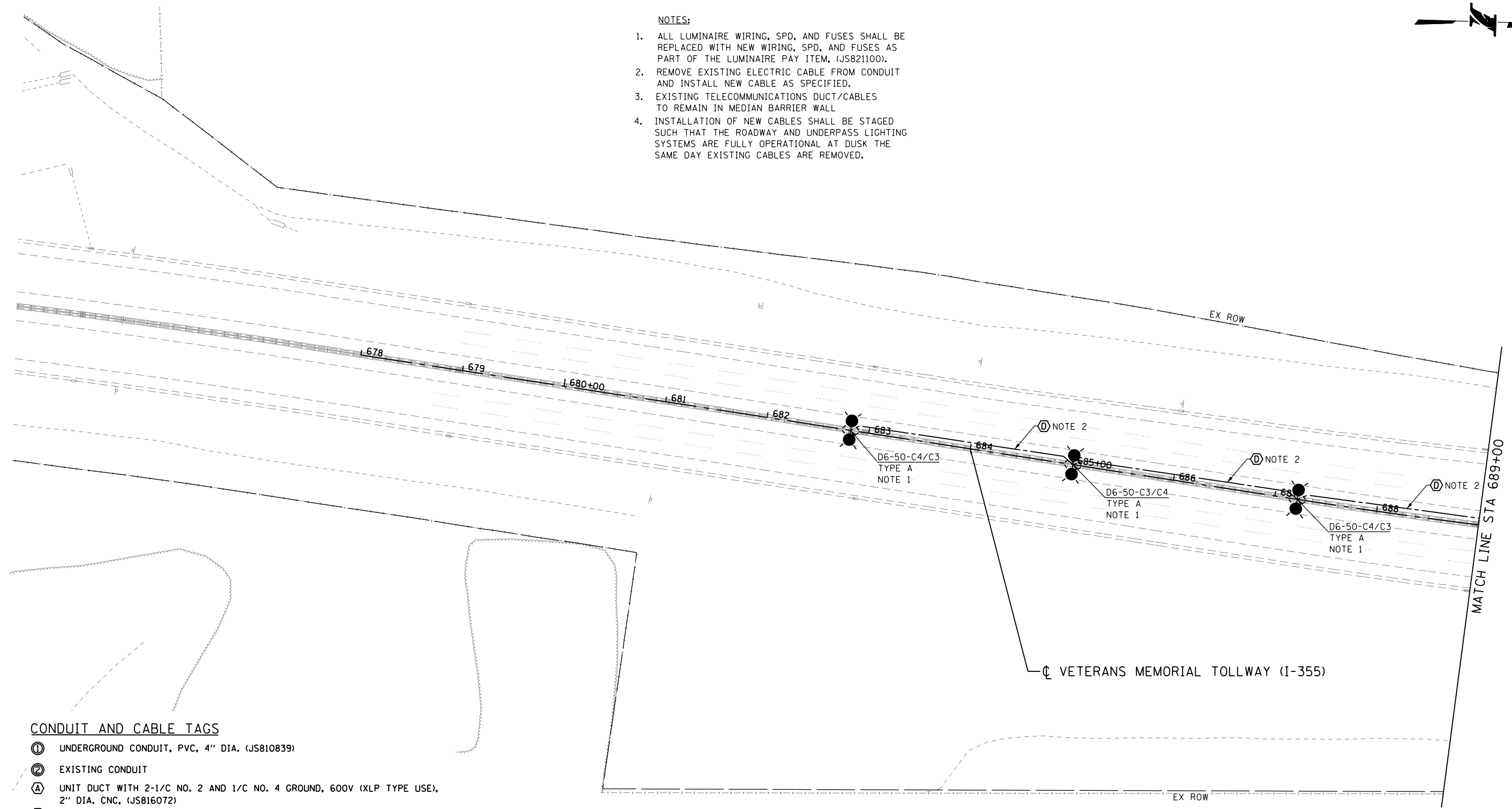
LIGHTING PLAN  
LEGEND

LT-1

DRAWING NO.  
753 OF 1517

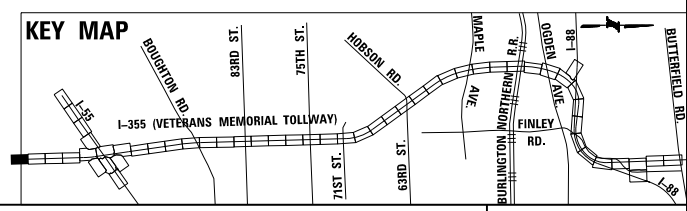


- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL
  4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.



**CONDUIT AND CABLE TAGS**

- ⓐ UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ⓑ EXISTING CONDUIT
- ⓒ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- ⓓ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- ⓔ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- ⓕ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- ⓖ NOT USED
- ⓗ EXISTING CABLE TO REMAIN IN USE
- ⓓ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

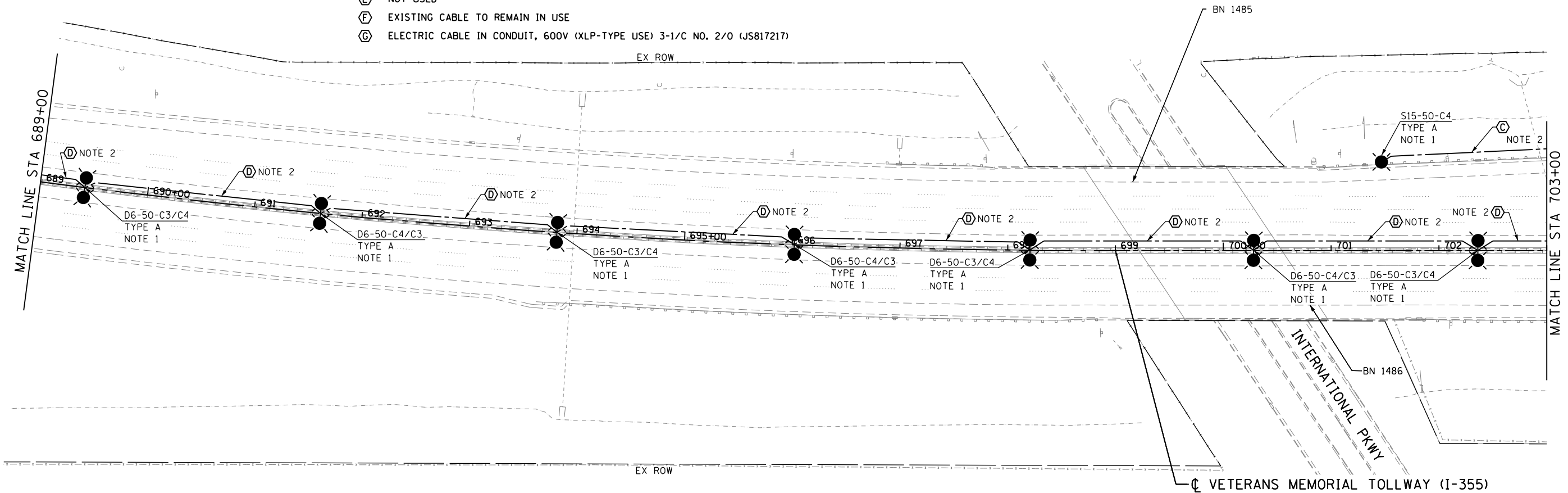
CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 689+00 - STA 703+00

LT-2  
 DRAWING NO.  
 754 OF 1517



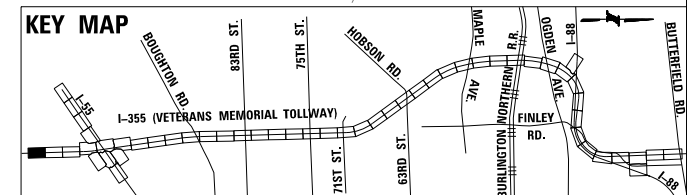
**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL
4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.



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**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

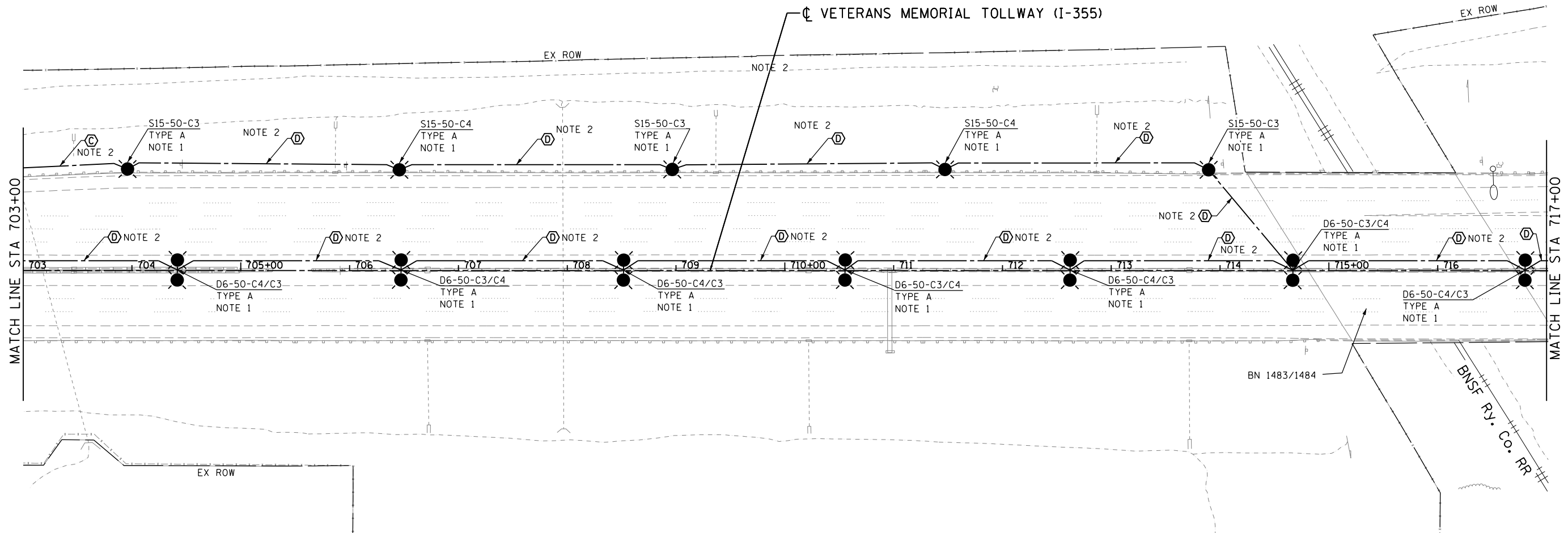
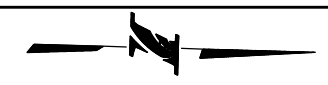
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 689+00 - STA 703+00

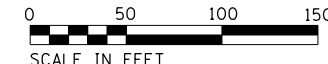
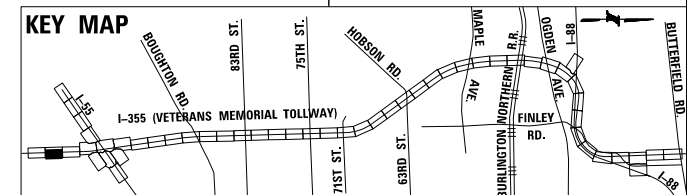
LT-3  
 DRAWING NO.  
 755 OF 1517

- NOTES:
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL
  4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.



**CONDUIT AND CABLE TAGS**

- Ⓚ UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- Ⓛ EXISTING CONDUIT
- ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- ⓔ NOT USED
- ⓕ EXISTING CABLE TO REMAIN IN USE
- ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 6035 N. NORTHWEST HIGHWAY  
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THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

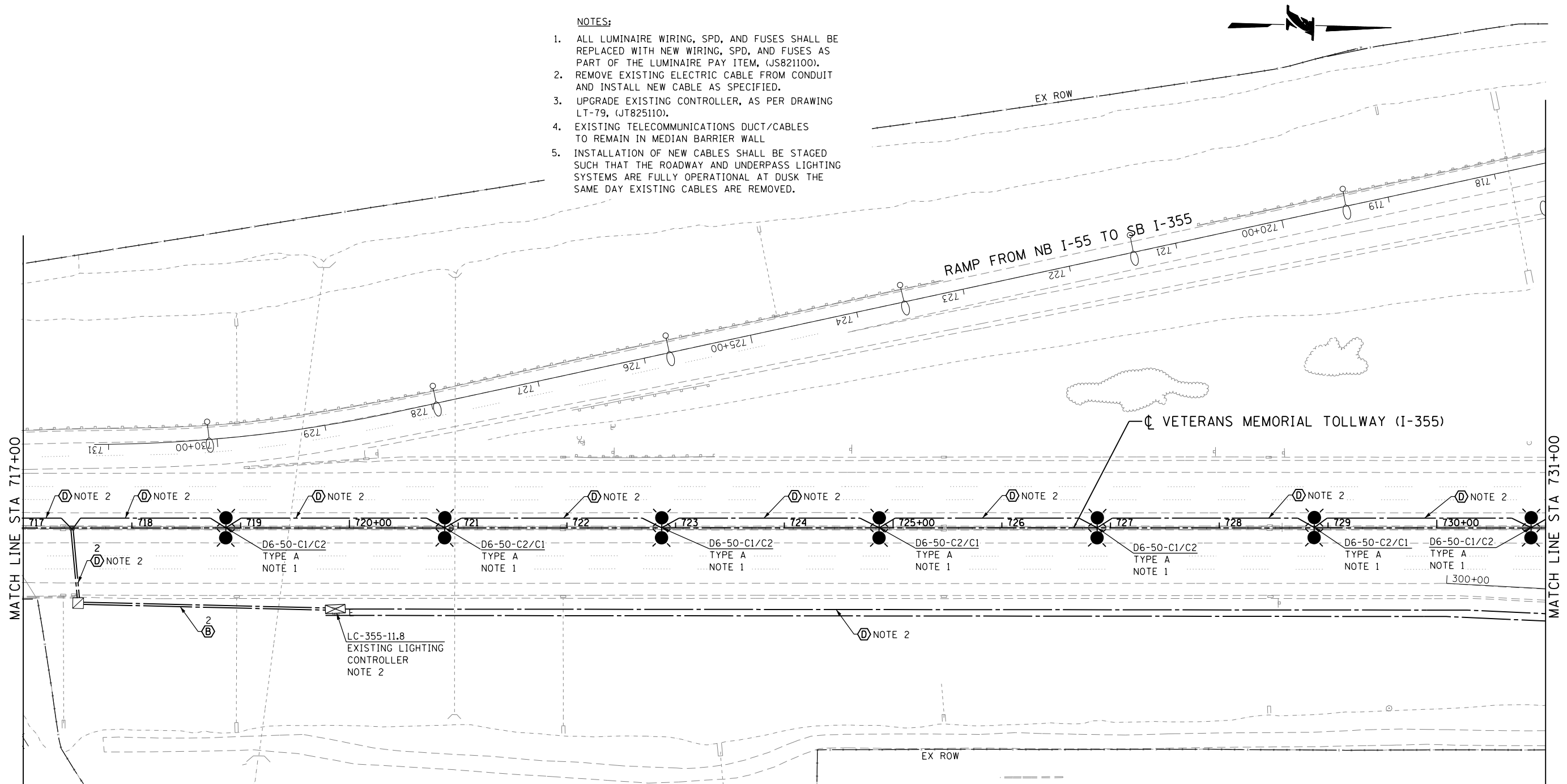
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 703+00 - STA 717+00

LT-4  
 DRAWING NO.  
 756 OF 1517

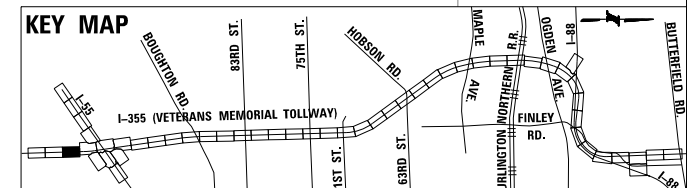
NOTES:

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM. (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
4. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL
5. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.



CONDUIT AND CABLE TAGS

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 CHECKED BY PV DATE 03/06/2018

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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

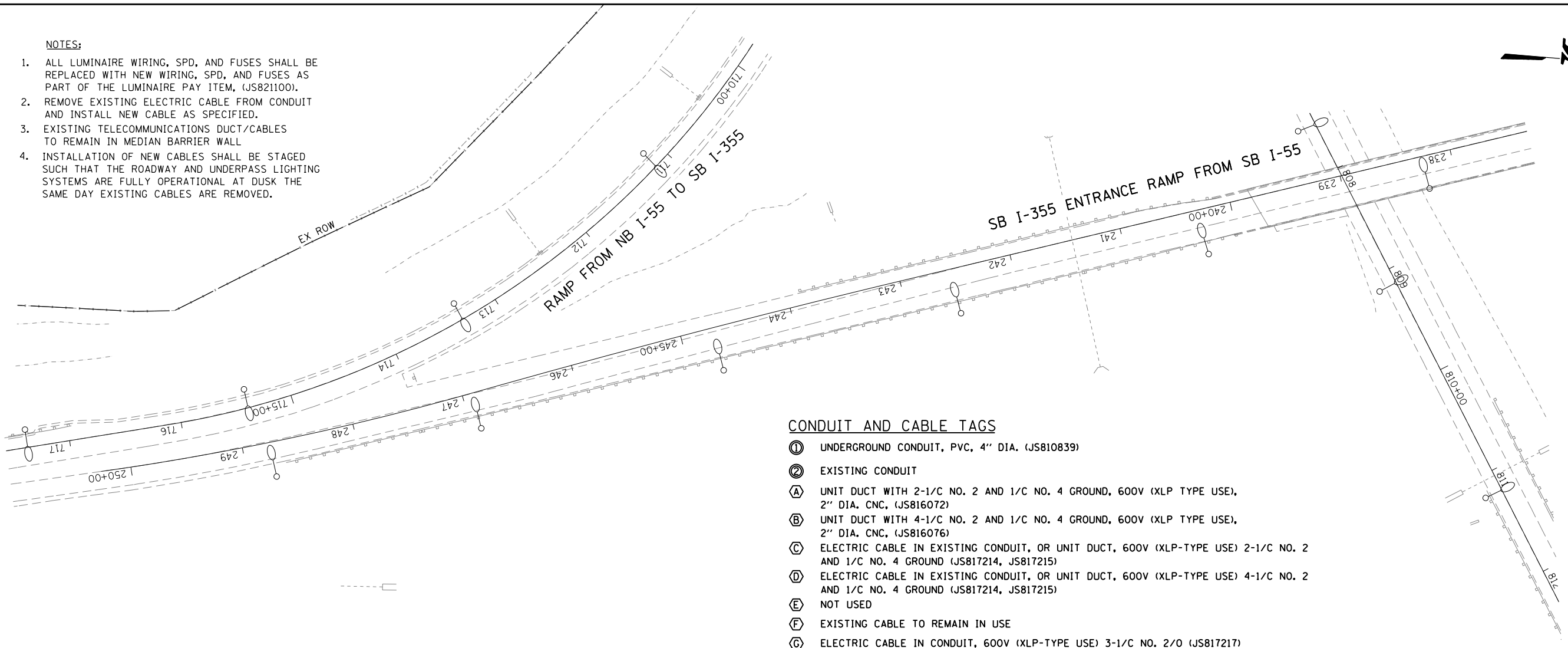
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA. 717+00 - STA. 731+00  
 LT-5  
 DRAWING NO. 757 OF 1517

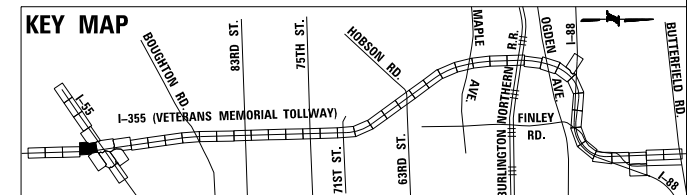
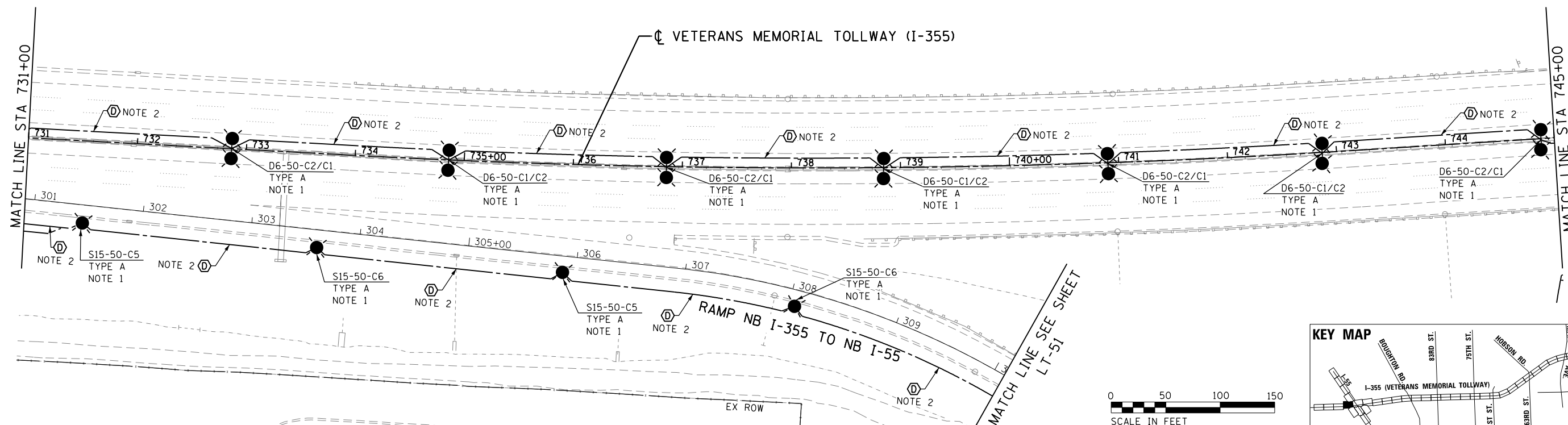
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL
4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.



**CONDUIT AND CABLE TAGS**

- Ⓐ UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- Ⓑ EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 CHECKED BY PV DATE 03/06/2018

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 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 731+00 - STA 745+00

LT-6  
 DRAWING NO.  
 758 OF 1517

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
5. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.

MATCH LINE SEE SHEET LT-48

MATCH LINE SEE SHEET LT-51

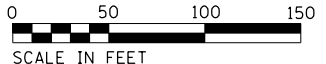
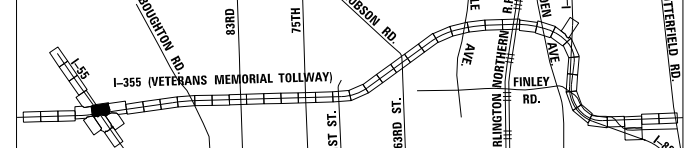
MATCH LINE SEE SHEET LT-49

MATCH LINE SEE SHEET LT-52

**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**KEY MAP**



DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910



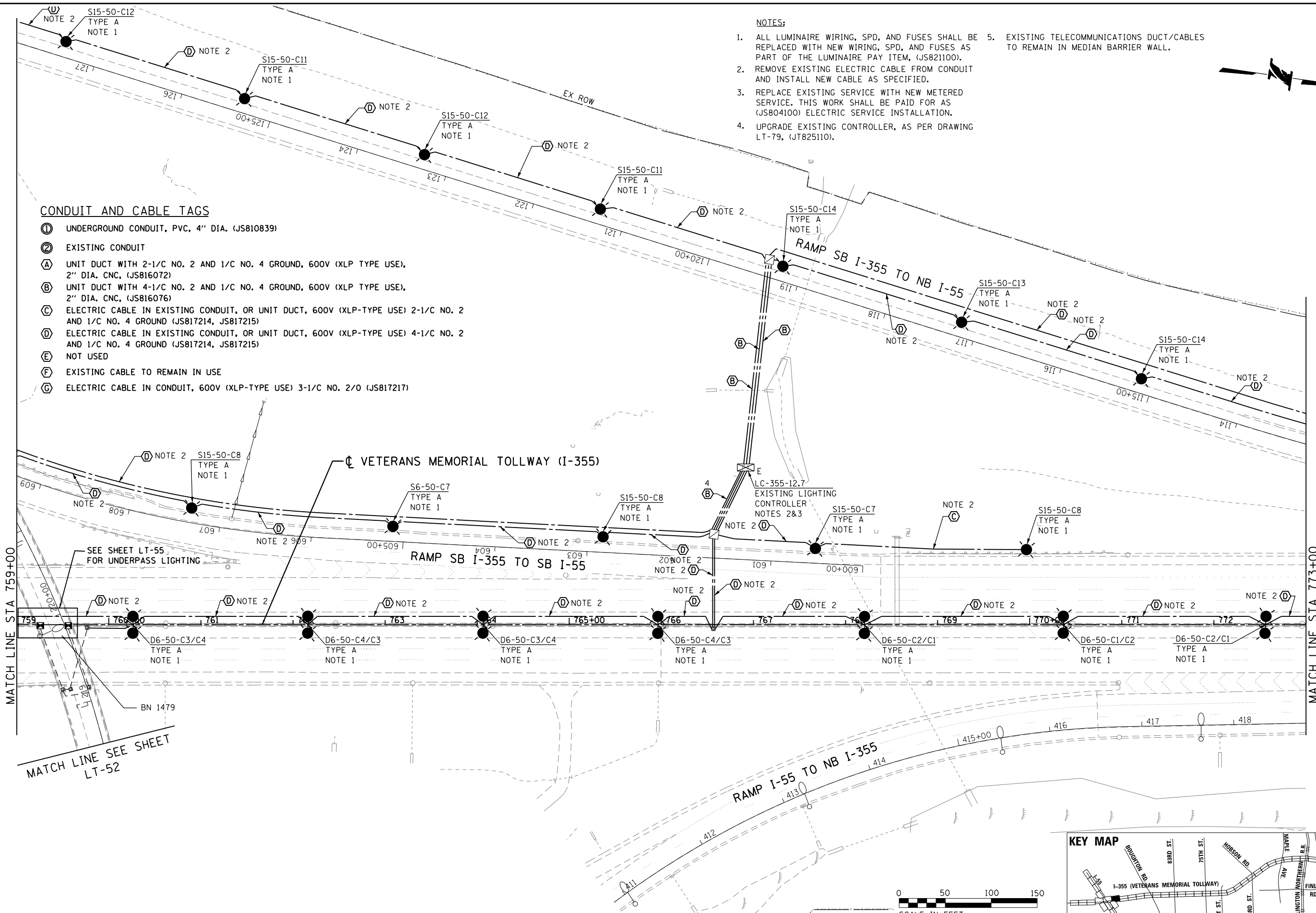
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 745+00 - STA 759+00

LT-7  
 DRAWING NO.  
 759 OF 1517





- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. REPLACE EXISTING SERVICE WITH NEW METERED SERVICE. THIS WORK SHALL BE PAID FOR AS (JS804100) ELECTRIC SERVICE INSTALLATION.
  4. UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
  5. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.

**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

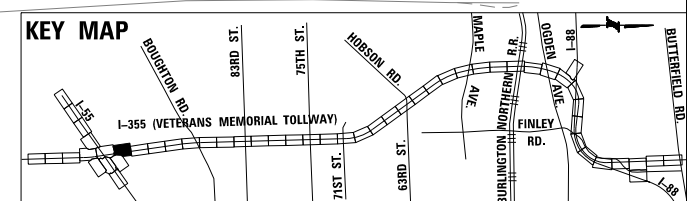
MATCH LINE STA 759+00

MATCH LINE STA 773+00

MATCH LINE SEE SHEET LT-52

BN 1479

SEE SHEET LT-55 FOR UNDERPASS LIGHTING



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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

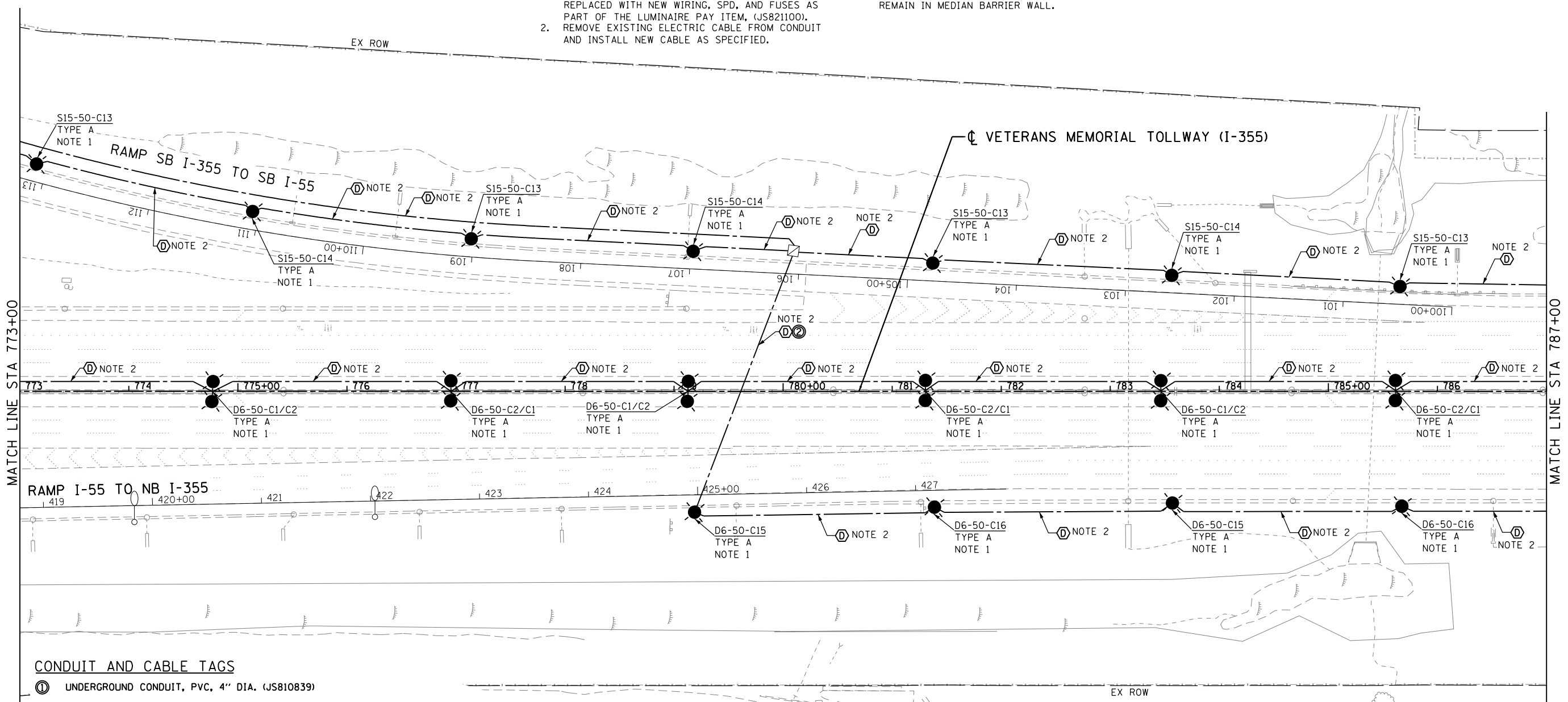
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 759+00 - STA 773+00

LT-8  
 DRAWING NO.  
 760 OF 1517



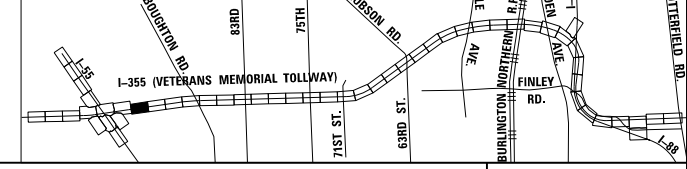
- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**CONDUIT AND CABLE TAGS**

- Ⓚ UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- Ⓛ EXISTING CONDUIT
- ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- ⓔ NOT USED
- ⓕ EXISTING CABLE TO REMAIN IN USE
- ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**KEY MAP**



DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
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THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

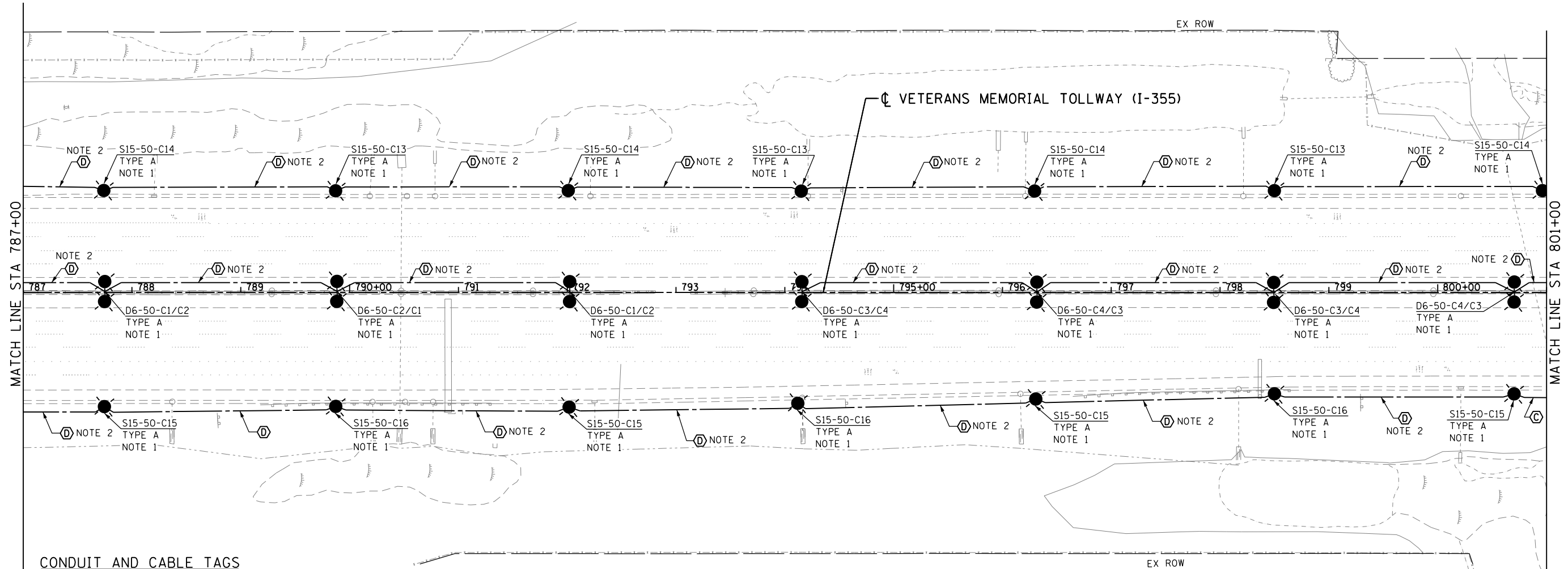
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 773+00 - STA 787+00

LT-9  
 DRAWING NO.  
 761 OF 1517

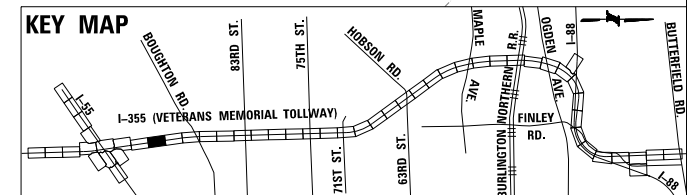
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/2 NO. 2/0 (JS817217)



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DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

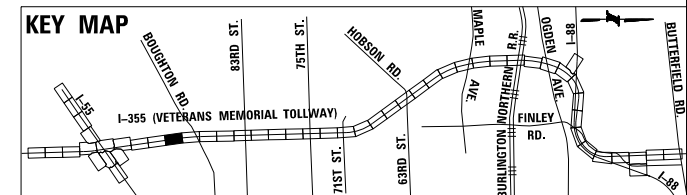
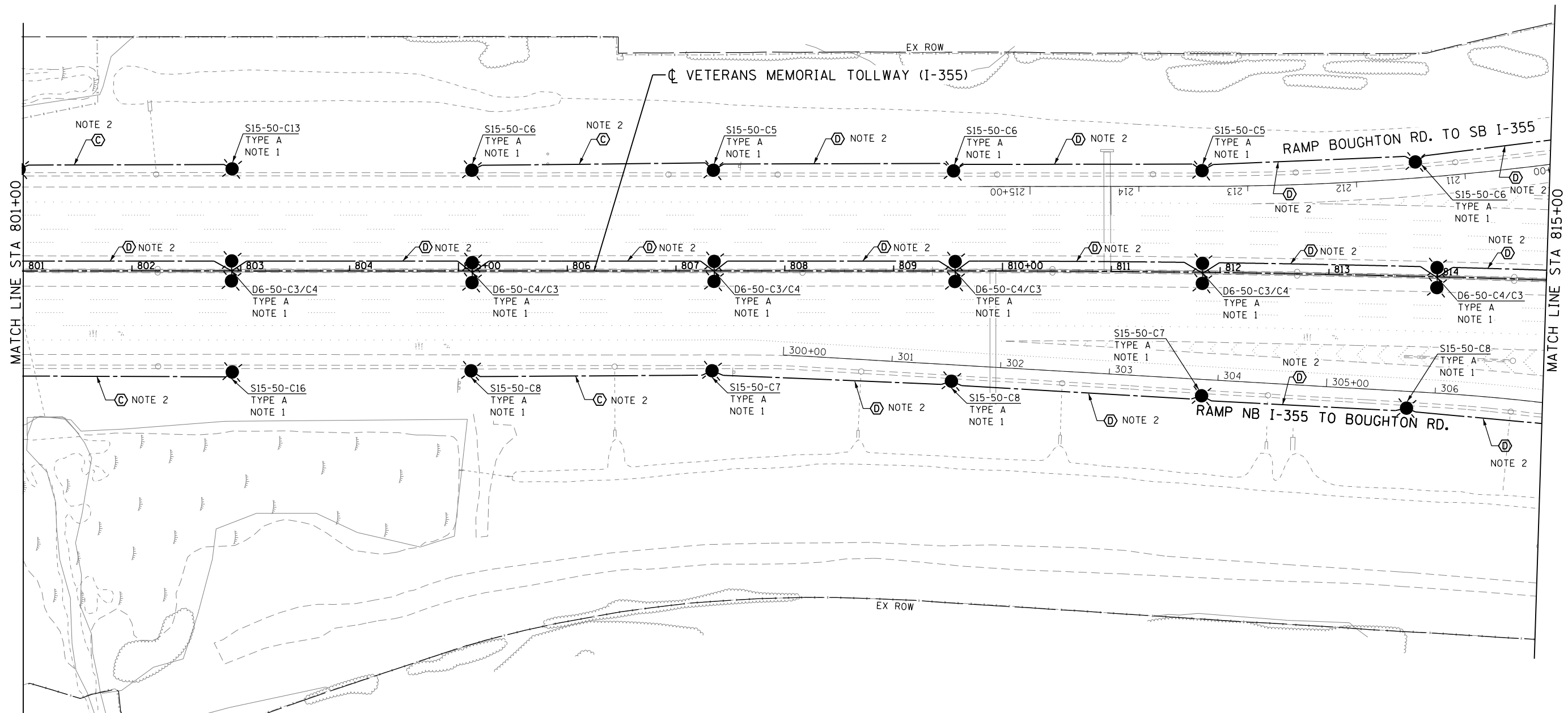
CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 787+00 - STA 801+00

LT-10  
 DRAWING NO.  
 762 OF 1517

- NOTES:**
- ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  - REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  - EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
  - EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.

**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- (A) UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- (B) UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- (C) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (D) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (E) NOT USED
- (F) EXISTING CABLE TO REMAIN IN USE
- (G) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

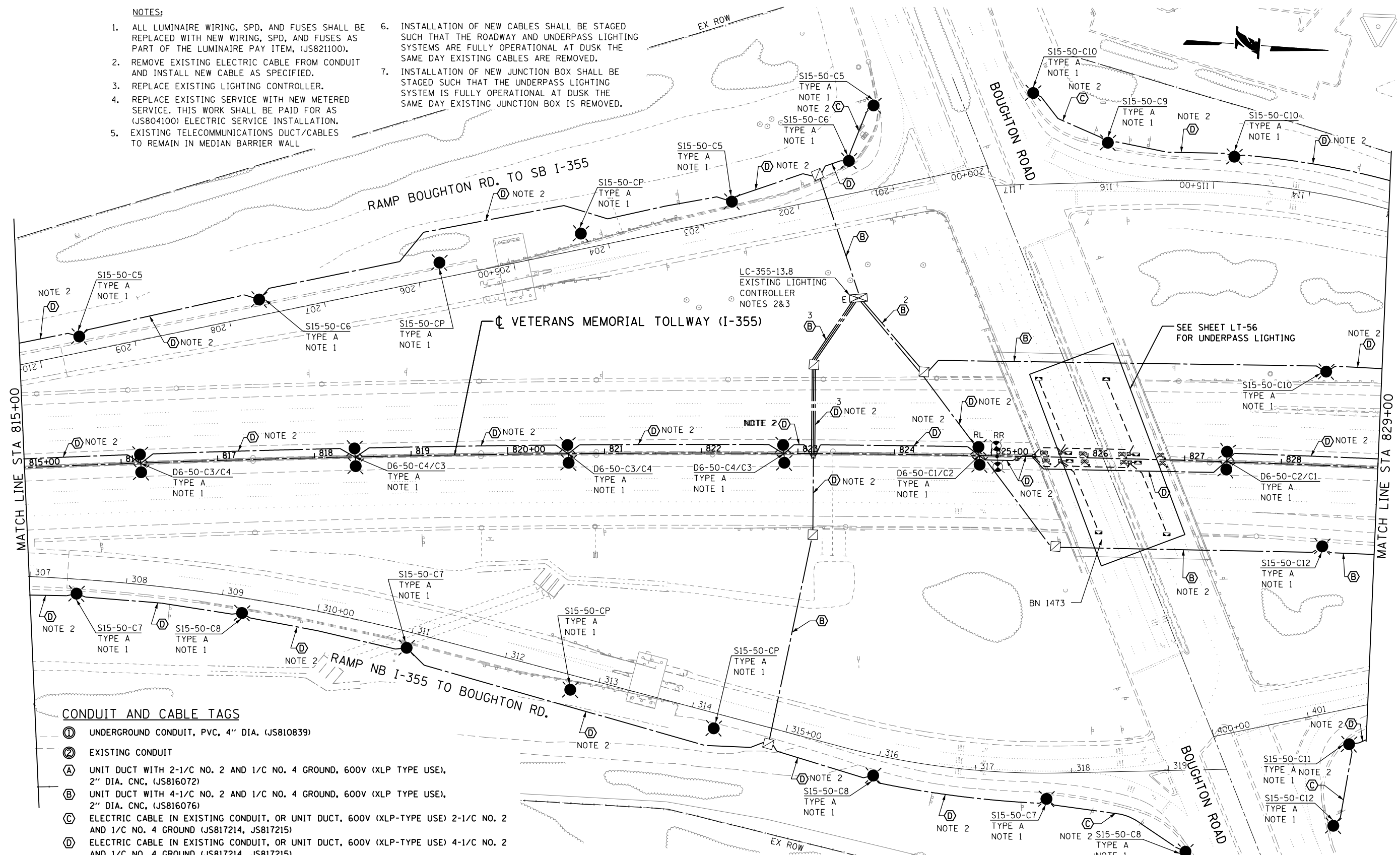
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 801+00 - STA 815+00

LT-11  
 DRAWING NO.  
 763 OF 1517

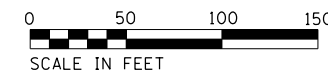
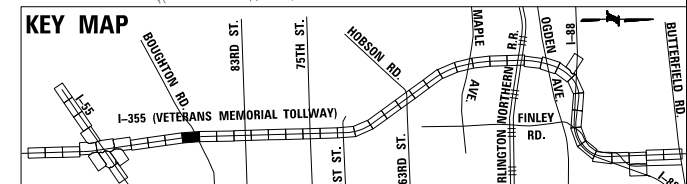
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. REPLACE EXISTING LIGHTING CONTROLLER.
4. REPLACE EXISTING SERVICE WITH NEW METERED SERVICE. THIS WORK SHALL BE PAID FOR AS (JS804100) ELECTRIC SERVICE INSTALLATION.
5. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL
6. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
7. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- (A) UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- (B) UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- (C) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (D) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (E) NOT USED
- (F) EXISTING CABLE TO REMAIN IN USE
- (G) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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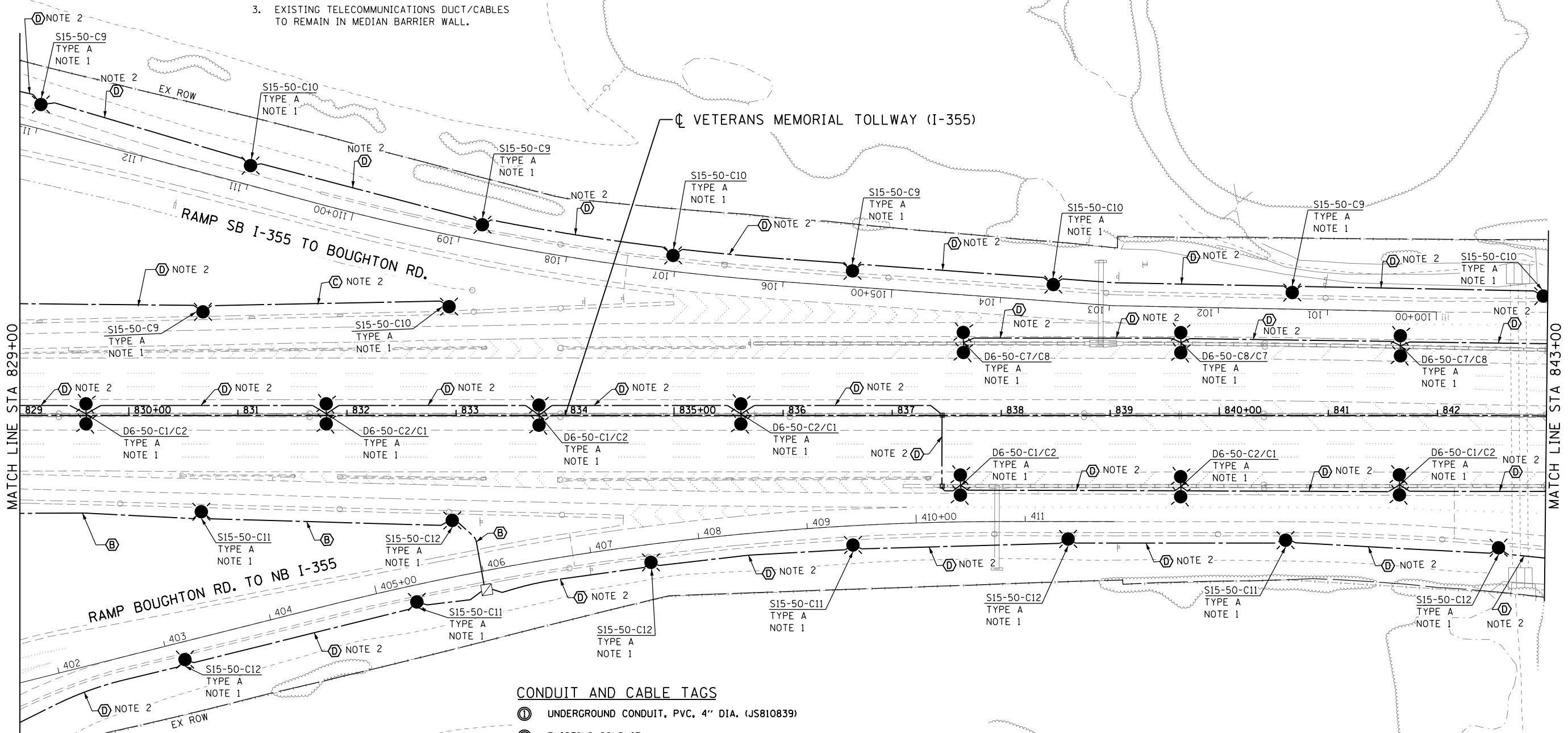
GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
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 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

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 DOWNERS GROVE,  
 ILLINOIS 60515

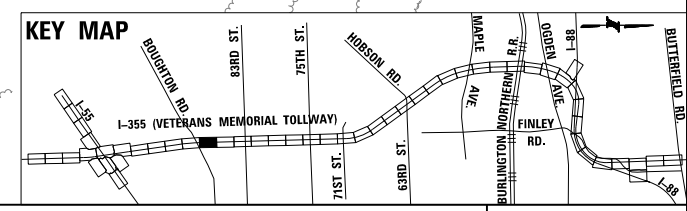
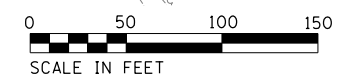
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 815+00 - STA 829+00  
 LT-12  
 DRAWING NO. 764 OF 1517

- NOTES:
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



- CONDUIT AND CABLE TAGS**
- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
  - ② EXISTING CONDUIT
  - Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
  - Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
  - Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
  - Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
  - Ⓔ NOT USED
  - Ⓕ EXISTING CABLE TO REMAIN IN USE
  - Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 CHECKED BY PV DATE 03/06/2018

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 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

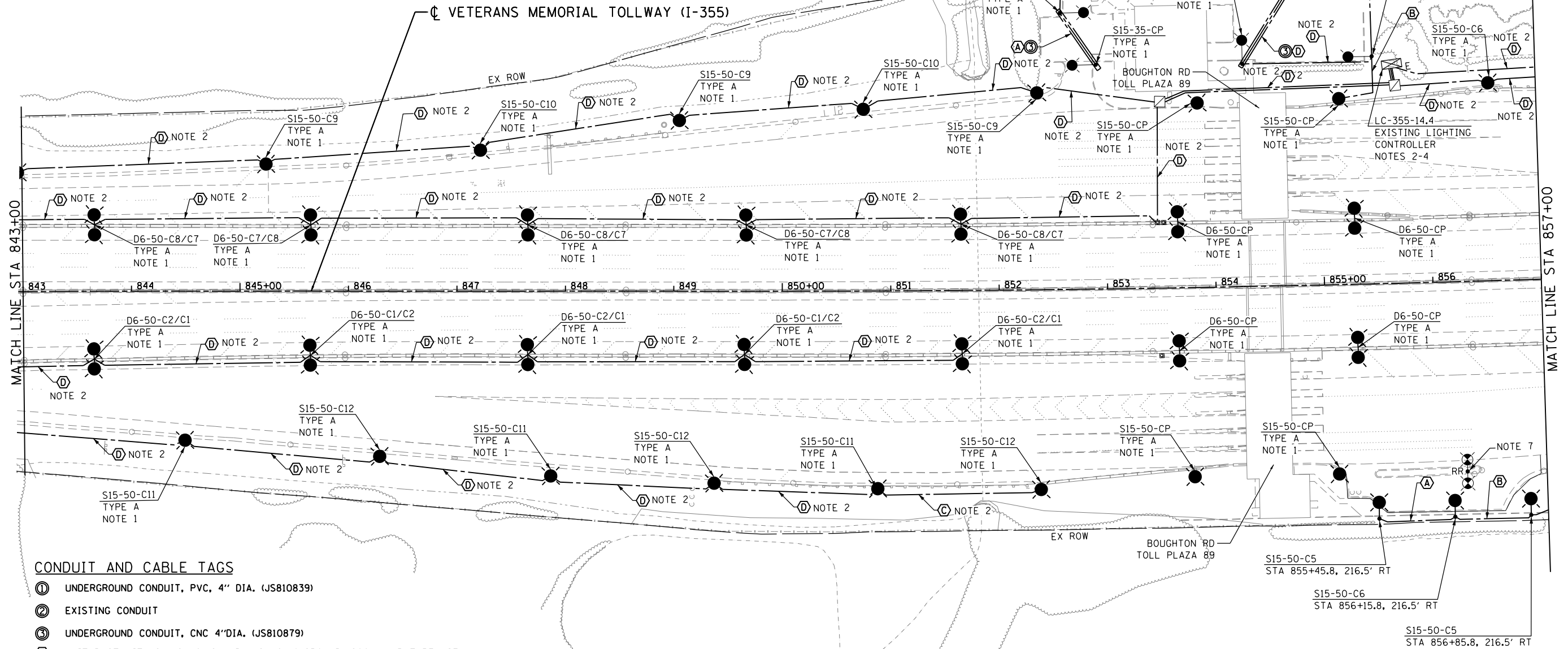
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 829+00 - STA 843+00

LT-13  
 DRAWING NO.  
 765 OF 1517

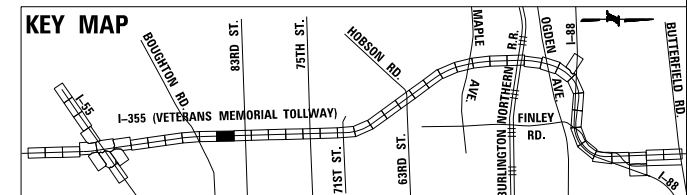
**NOTES:**

- ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
- REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
- UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
- REPAIR EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
- REPLACE EXISTING SERVICE WITH NEW METERED SERVICE. THIS WORK SHALL BE PAID FOR AS (JS804100) ELECTRIC SERVICE INSTALLATION.
- EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
- EXISTING DUAL MAST ARM LIGHTING UNIT TO BE REMOVED. DO NOT REMOVE UNTIL NEW LIGHTING AT CRASH INVESTIGATION SITE IS OPERATIONAL.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- ③ UNDERGROUND CONDUIT, CNC 4"DIA. (JS810879)
- A UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- B UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- C ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- D ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- E NOT USED
- F EXISTING CABLE TO REMAIN IN USE
- G ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

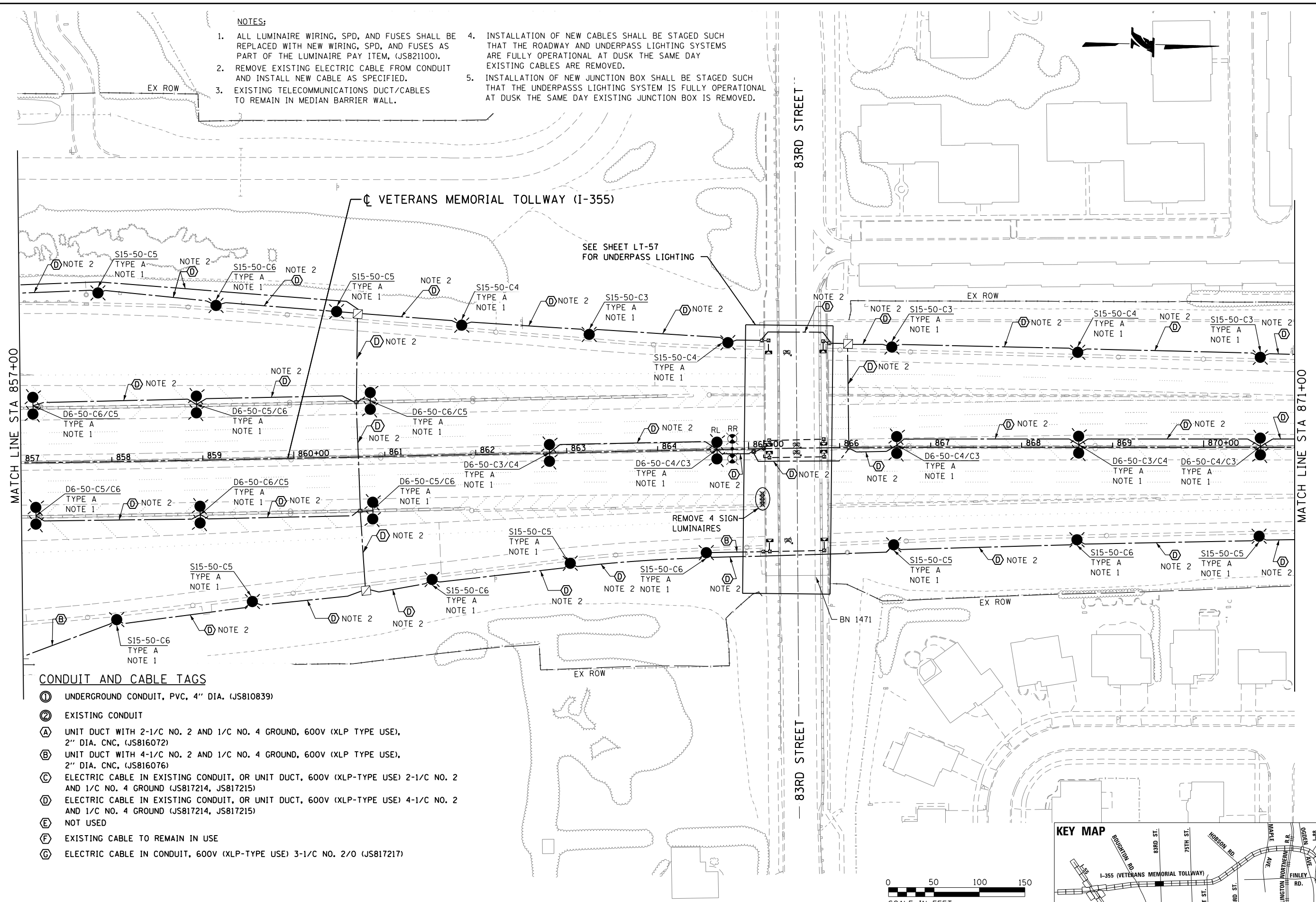
CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 843+00 - STA 857+00

LT-14  
 DRAWING NO.  
 766 OF 1517



**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM. (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
5. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/2 NO. 2/0 (JS817217)

DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018

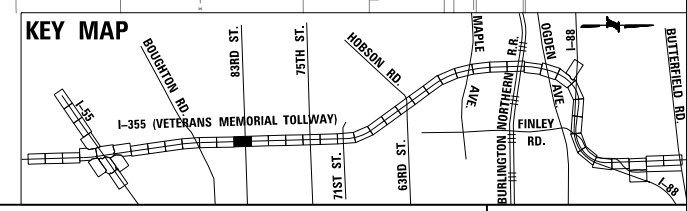


GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
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THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION



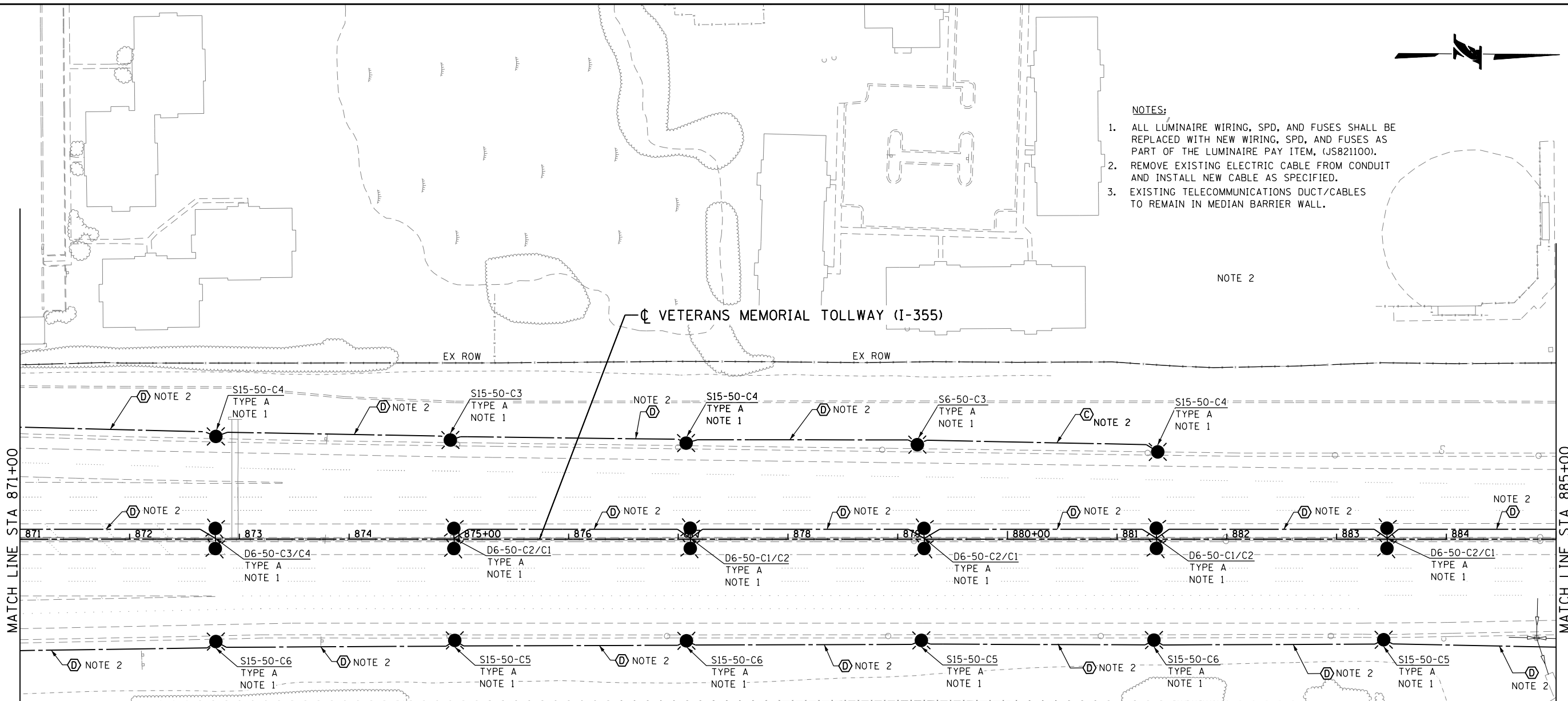
CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 857+00 - STA 871+00

LT-15  
 DRAWING NO.  
 767 OF 1517

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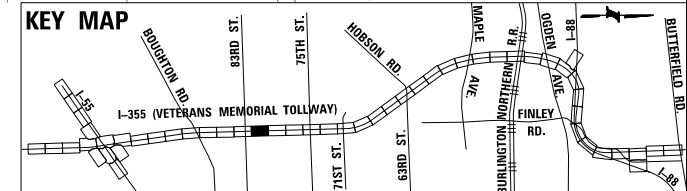


- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**CONDUIT AND CABLE TAGS**

- Ⓚ UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- Ⓛ EXISTING CONDUIT
- Ⓜ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓨ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓩ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- ⓔ NOT USED
- ⓕ EXISTING CABLE TO REMAIN IN USE
- ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

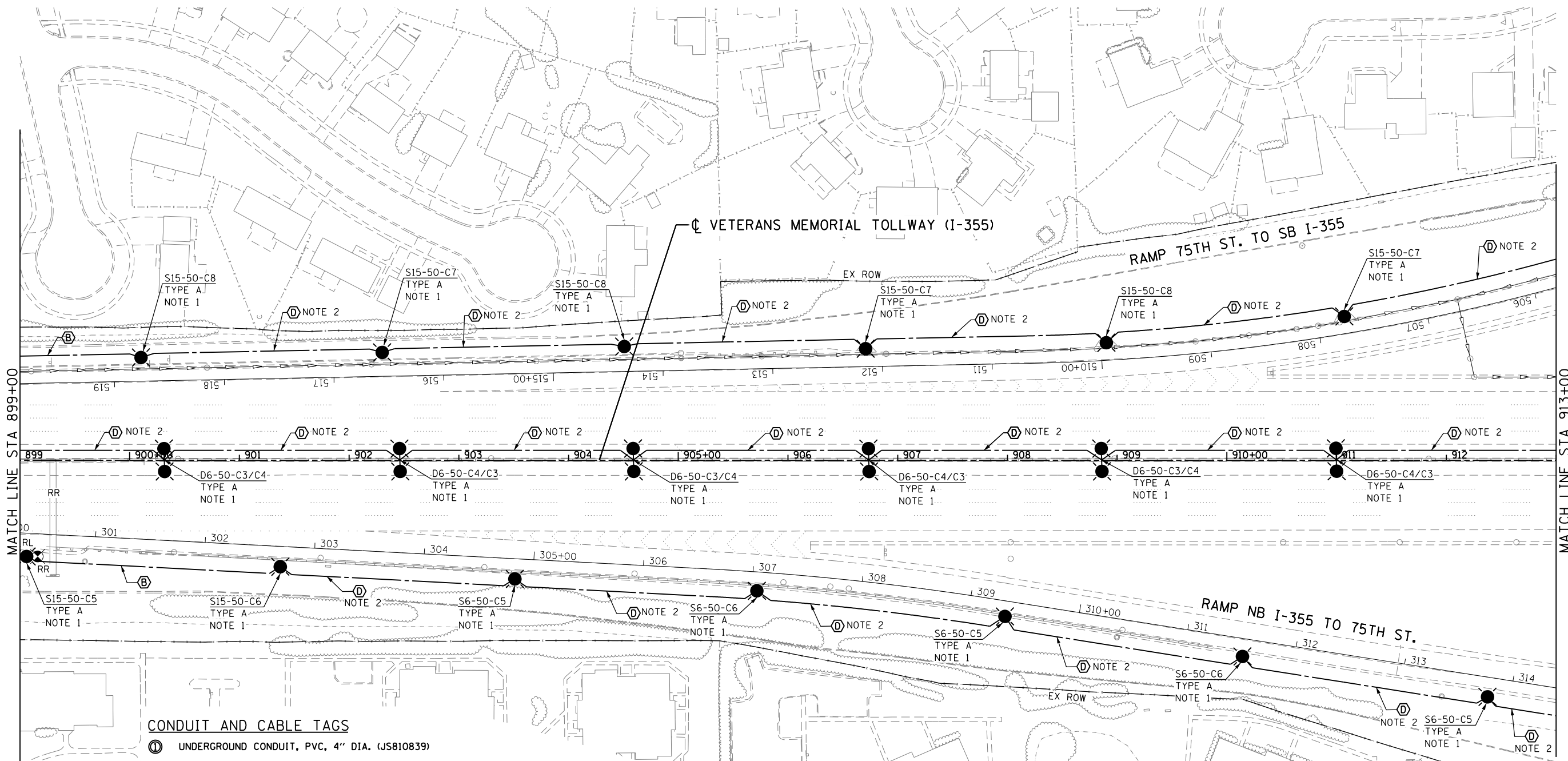
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 871+00 - STA 885+00

LT-16  
 DRAWING NO.  
 768 OF 1517





**CONDUIT AND CABLE TAGS**

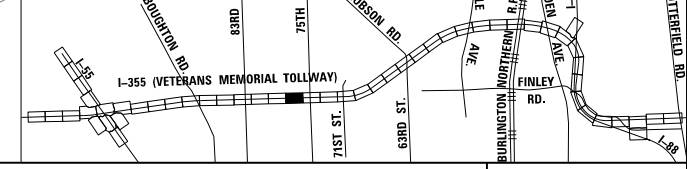
- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- (A) UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- (B) UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- (C) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (D) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (E) NOT USED
- (F) EXISTING CABLE TO REMAIN IN USE
- (G) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**KEY MAP**



DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



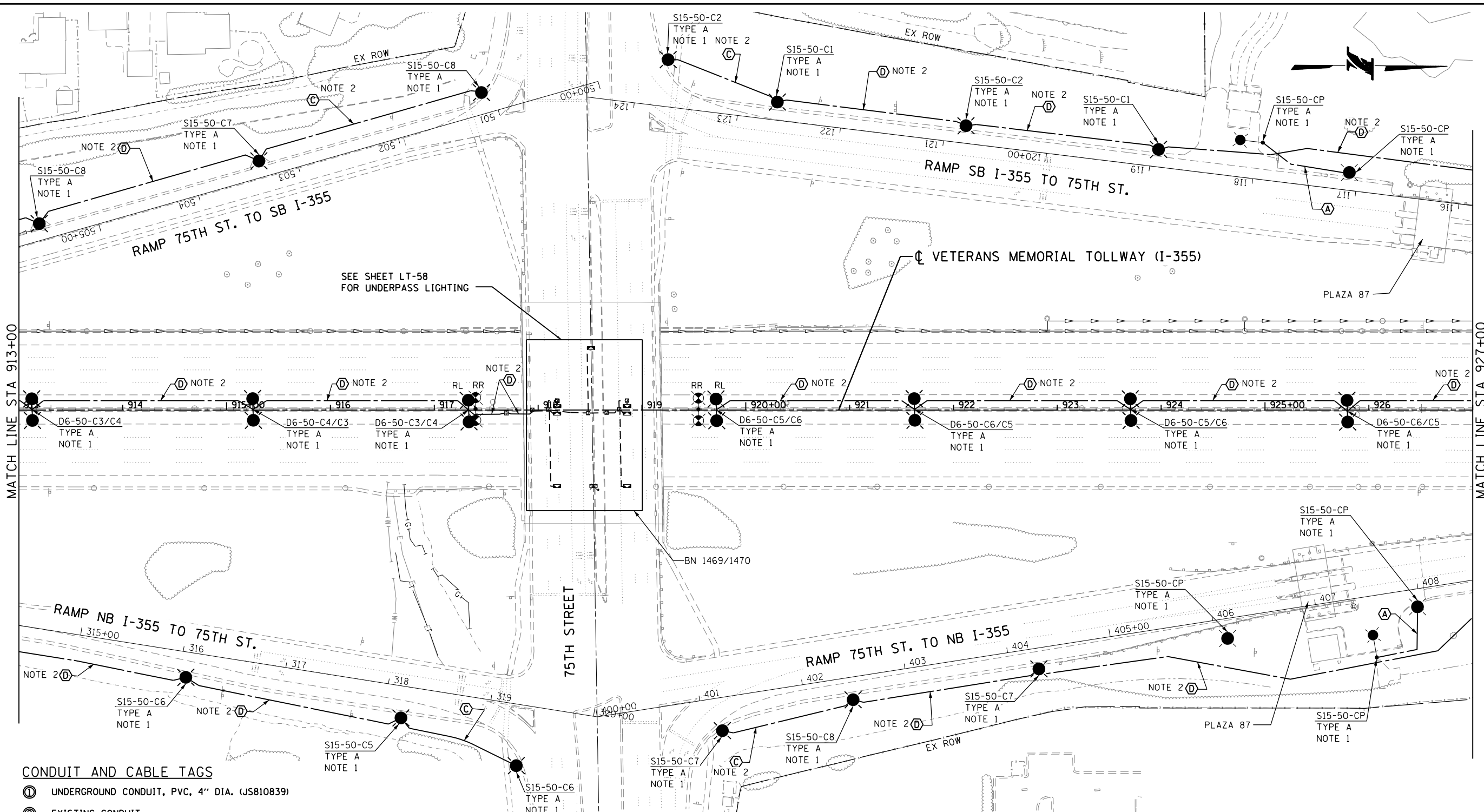
GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910



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 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 899+00 - STA 913+00  
 LT-18  
 DRAWING NO. 770 OF 1517

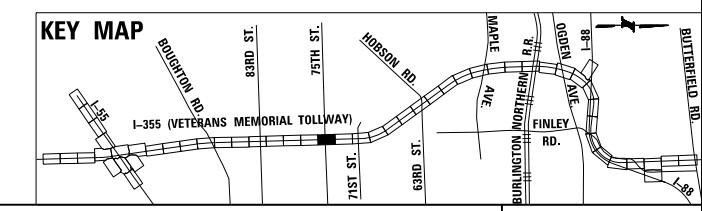


**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
5. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.



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 SUITE 306  
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**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

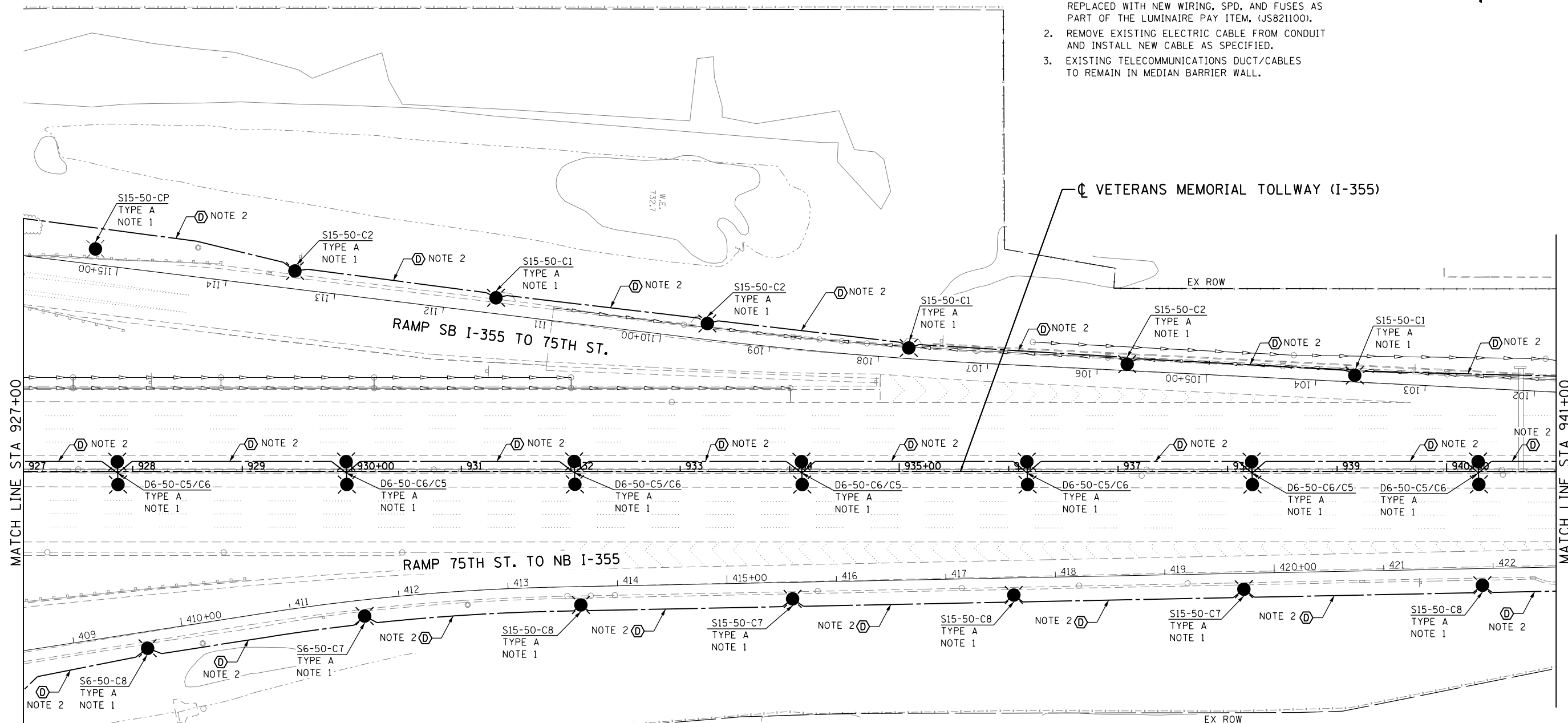
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 913+00 - STA 927+00

LT-19  
 DRAWING NO.  
 771 OF 1517

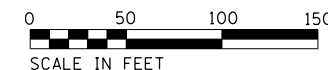
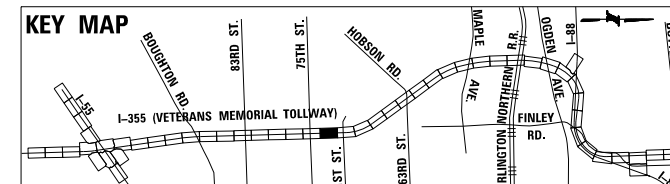
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- (A) UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- (B) UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- (C) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (D) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (E) NOT USED
- (F) EXISTING CABLE TO REMAIN IN USE
- (G) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

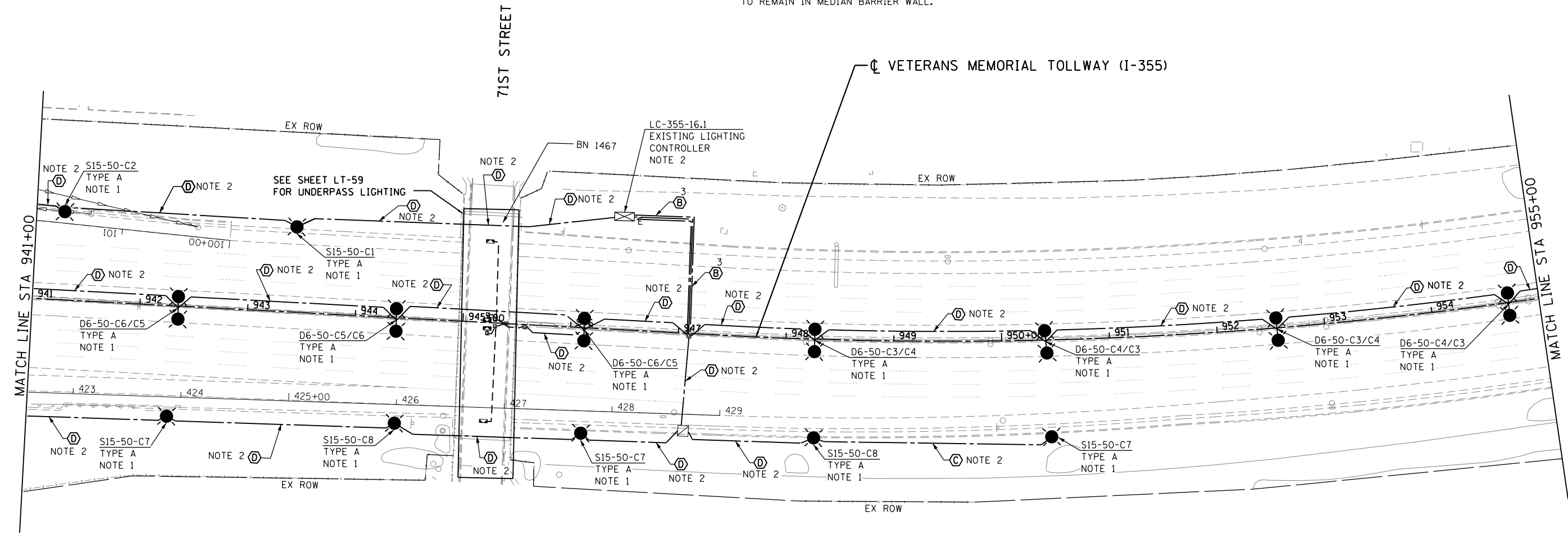
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 927+00 - STA 941+00

LT-20  
 DRAWING NO.  
 772 OF 1517

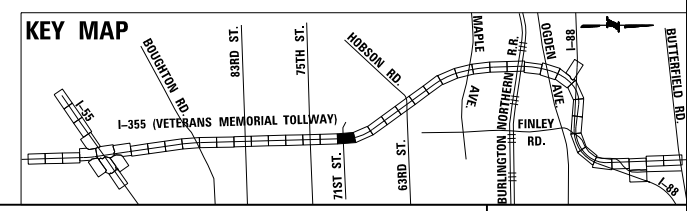


- NOTES:
- ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  - REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  - UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
  - EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
  - INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
  - INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

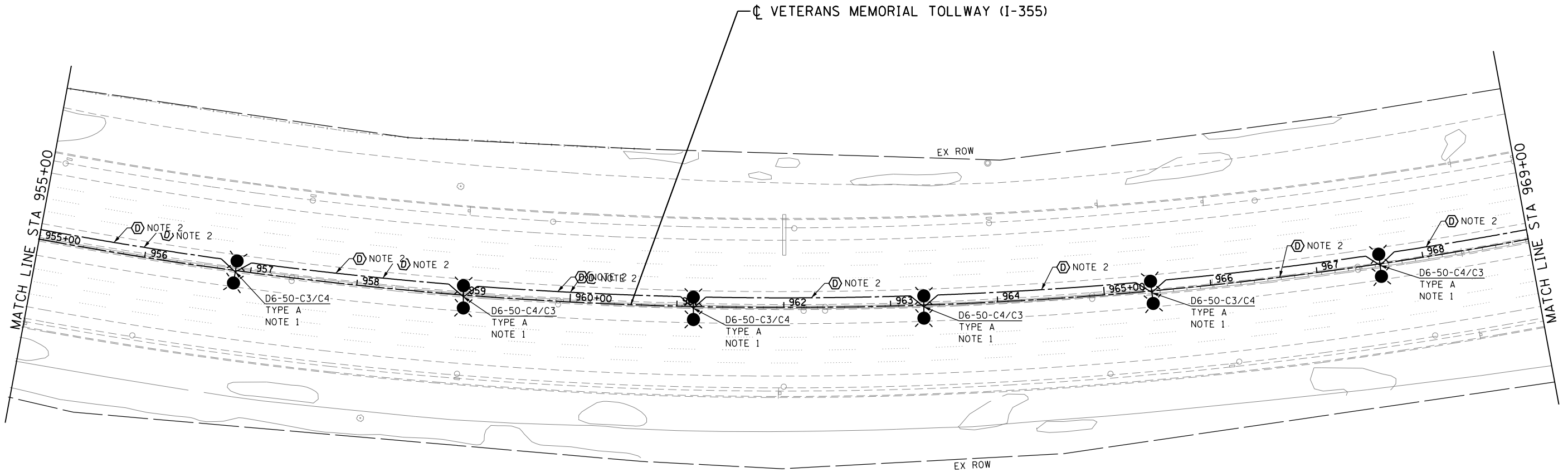






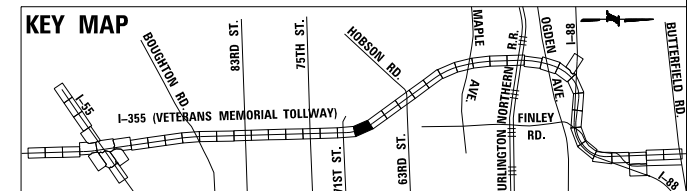
NOTES:

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM. (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



CONDUIT AND CABLE TAGS

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

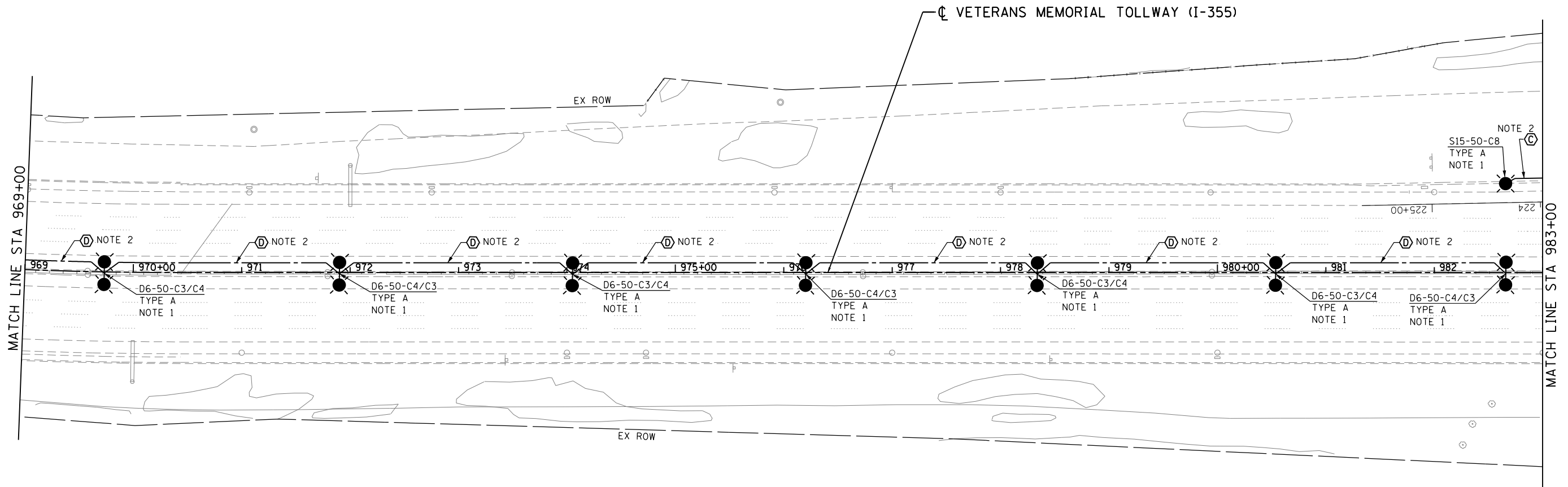
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 955+00 - STA 969+00

LT-22  
 DRAWING NO.  
 774 OF 1517

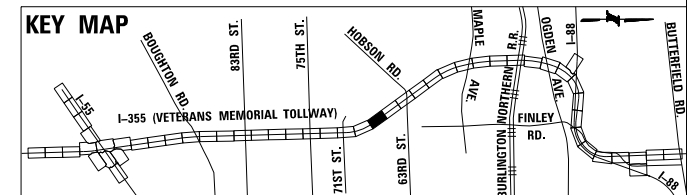
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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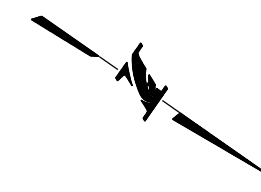
**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
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 DOWNERS GROVE,  
 ILLINOIS 60515

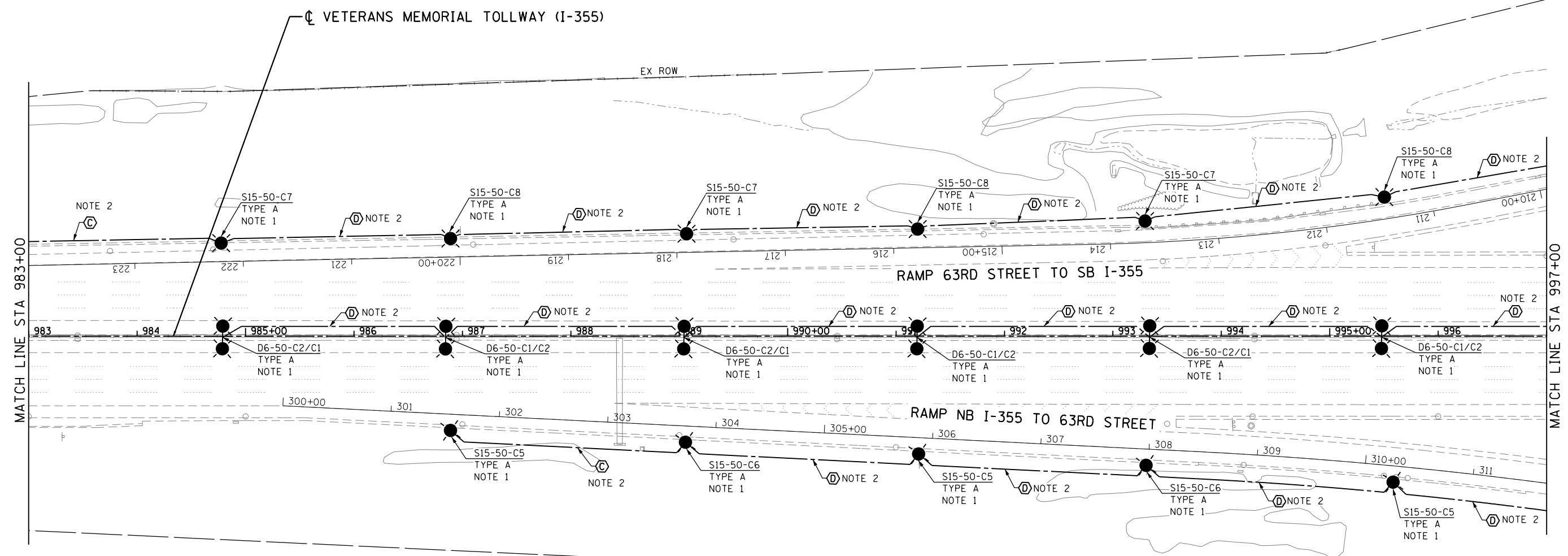
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
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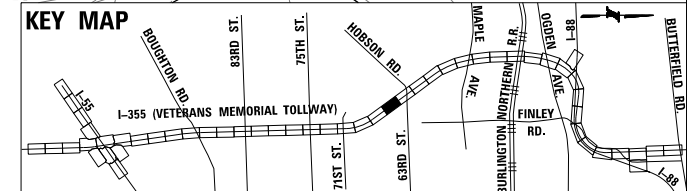
LT-23  
 DRAWING NO.  
 775 OF 1517



- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



- CONDUIT AND CABLE TAGS**
- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
  - ② EXISTING CONDUIT
  - Ⓐ UNIT DUCT WITH 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
  - Ⓑ UNIT DUCT WITH 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
  - Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
  - Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
  - Ⓔ NOT USED
  - Ⓕ EXISTING CABLE TO REMAIN IN USE
  - Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/2 NO. 2/0 (JS817217)



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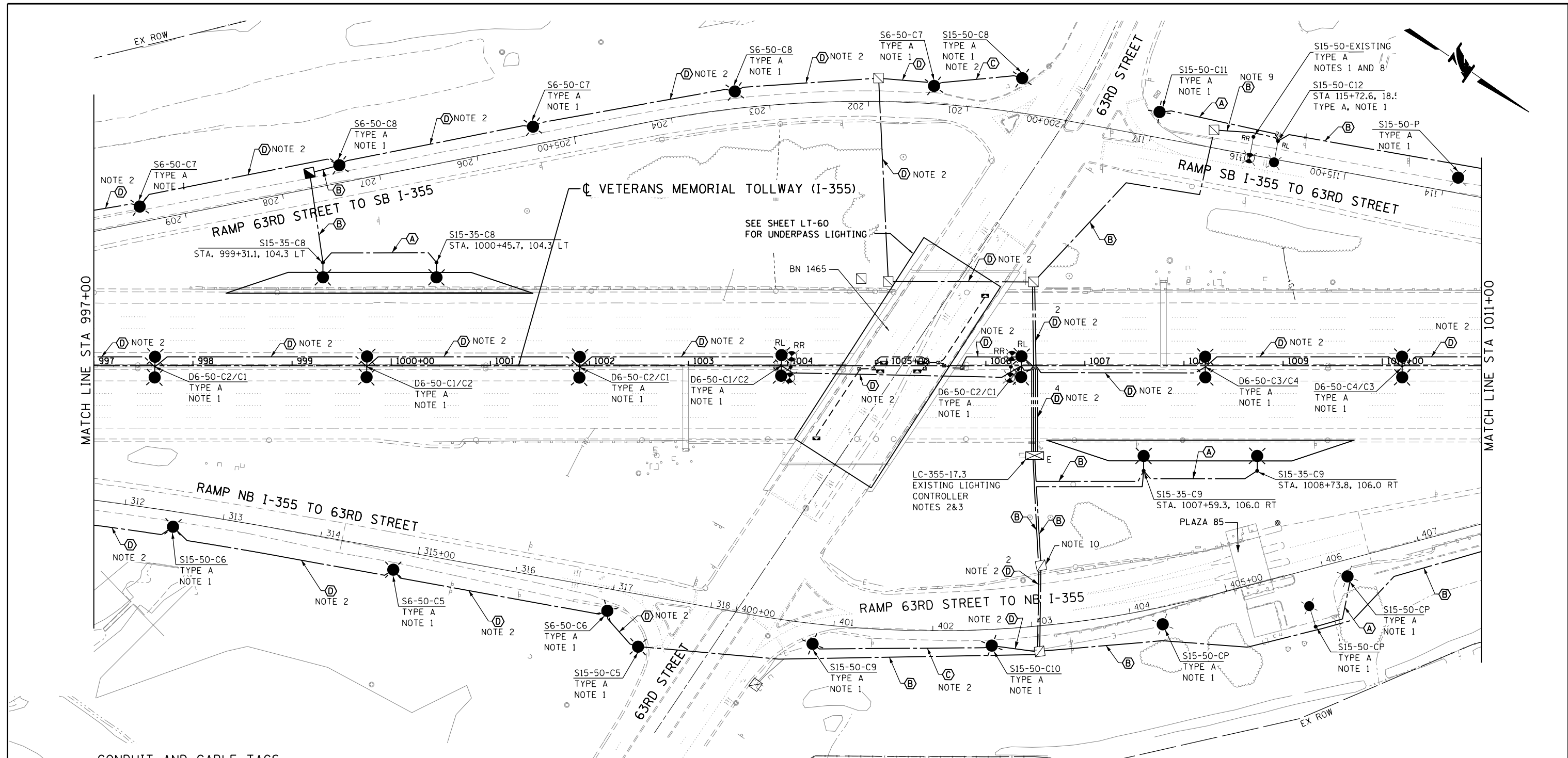
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 983+00 - STA 997+00

LT-24  
 DRAWING NO.  
 776 OF 1517

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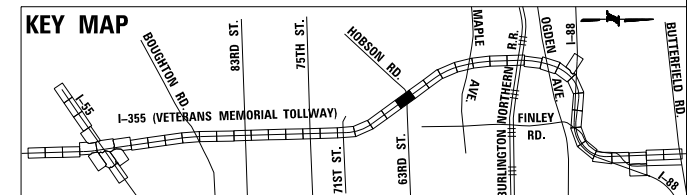
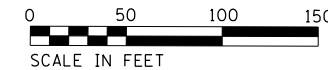


**CONDUIT AND CABLE TAGS**

- 1 UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- 2 EXISTING CONDUIT
- A UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- B UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- C ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- D ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- E NOT USED
- F EXISTING CABLE TO REMAIN IN USE
- G ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. REPLACE EXISTING LIGHTING CONTROLLER.
4. REPLACE EXISTING SERVICE WITH NEW METERED SERVICE. THIS WORK SHALL BE PAID FOR AS (JS804100) ELECTRIC SERVICE INSTALLATION.
5. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
6. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
7. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.
8. REMOVE FOUNDATION AT EXISTING LIGHT POLE LOCATION.
9. CABLE SHALL BE CONTINUOUS FROM THE CONTROLLER TO THE LIGHT POLE WITHOUT ANY CABLE SPLICES. THE UNIT DUCT BETWEEN HANDHOLE AND THIS LIGHT POLE SHALL BE INSTALLED WITHOUT ANY CABLES, SO AS TO FACILITATE INSTALLATION OF THE CABLES FROM THE CONTROLLER TO THIS LIGHT POLE.
10. WHEN REQUIRED, FOR UNIT DUCT TO ENTER THE HANDHOLE, CONTRACTOR SHALL DRILL THE EXISTING HANDHOLE. COST OF DRILLING EXISTING HANDHOLE SHALL BE INCLUDED IN THE UNIT DUCT PAY ITEM.



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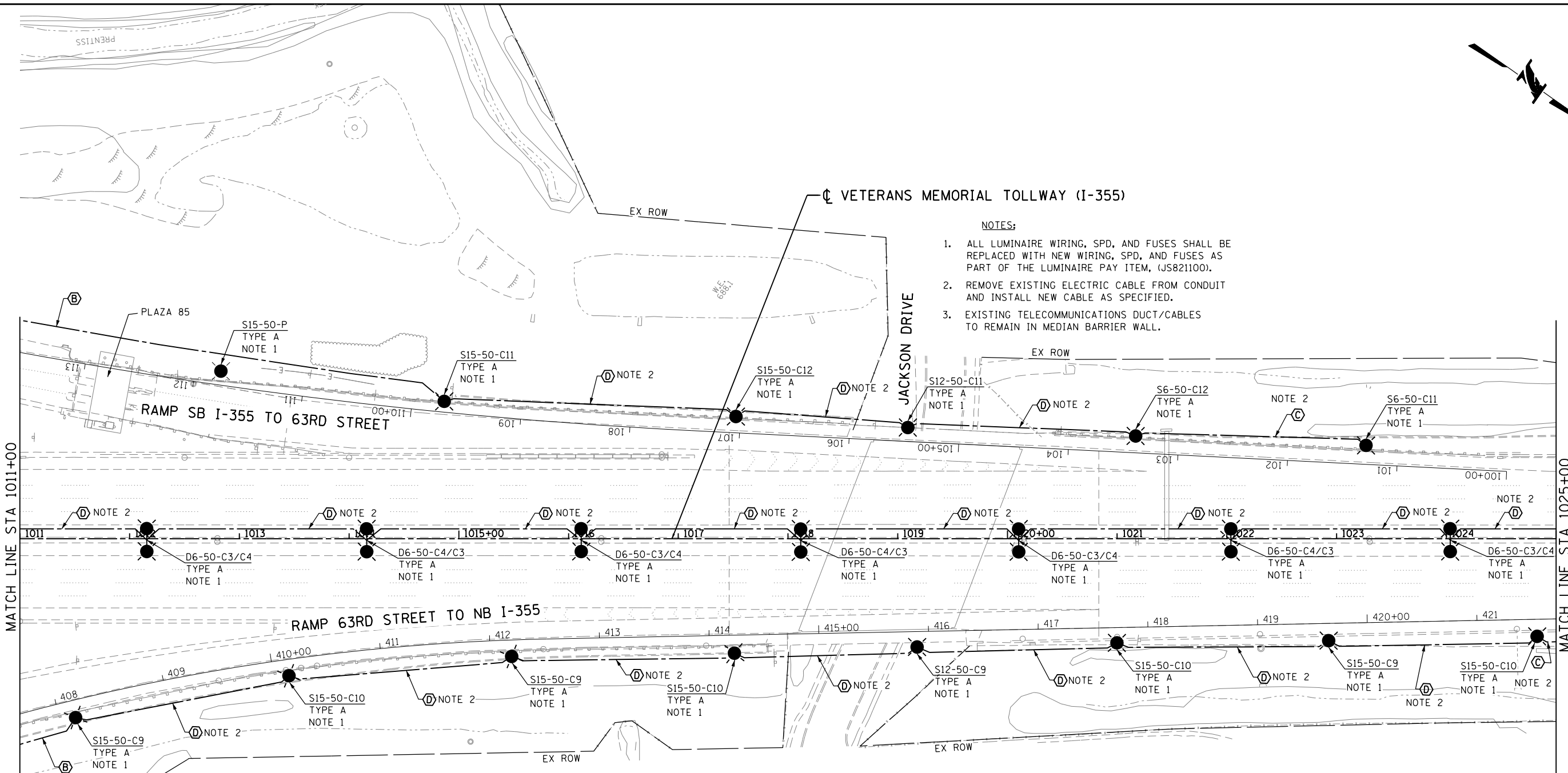
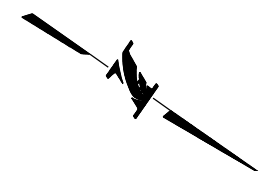
**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 997+00 - STA 1011+00

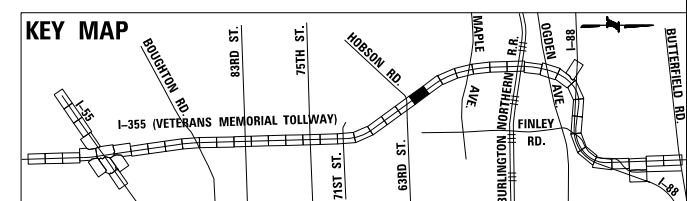
LT-25  
 DRAWING NO.  
 777 OF 1517



- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.

**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- (A) UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- (B) UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- (C) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (D) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (E) NOT USED
- (F) EXISTING CABLE TO REMAIN IN USE
- (G) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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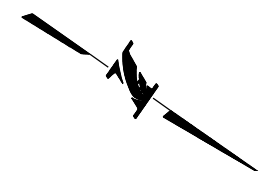
**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
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 DOWNERS GROVE,  
 ILLINOIS 60515

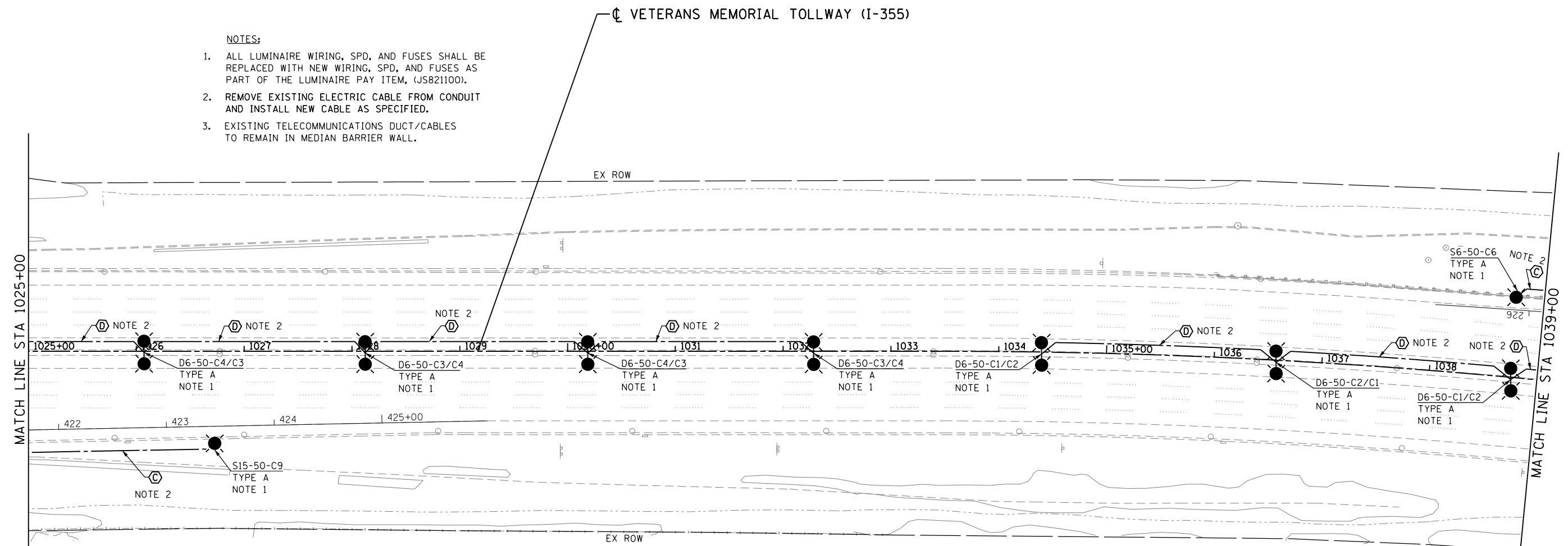
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1011+00 - STA 1025+00

LT-26  
 DRAWING NO.  
 778 OF 1517

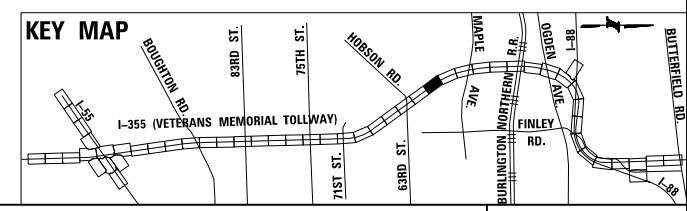
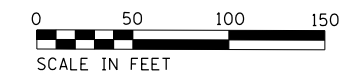


- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

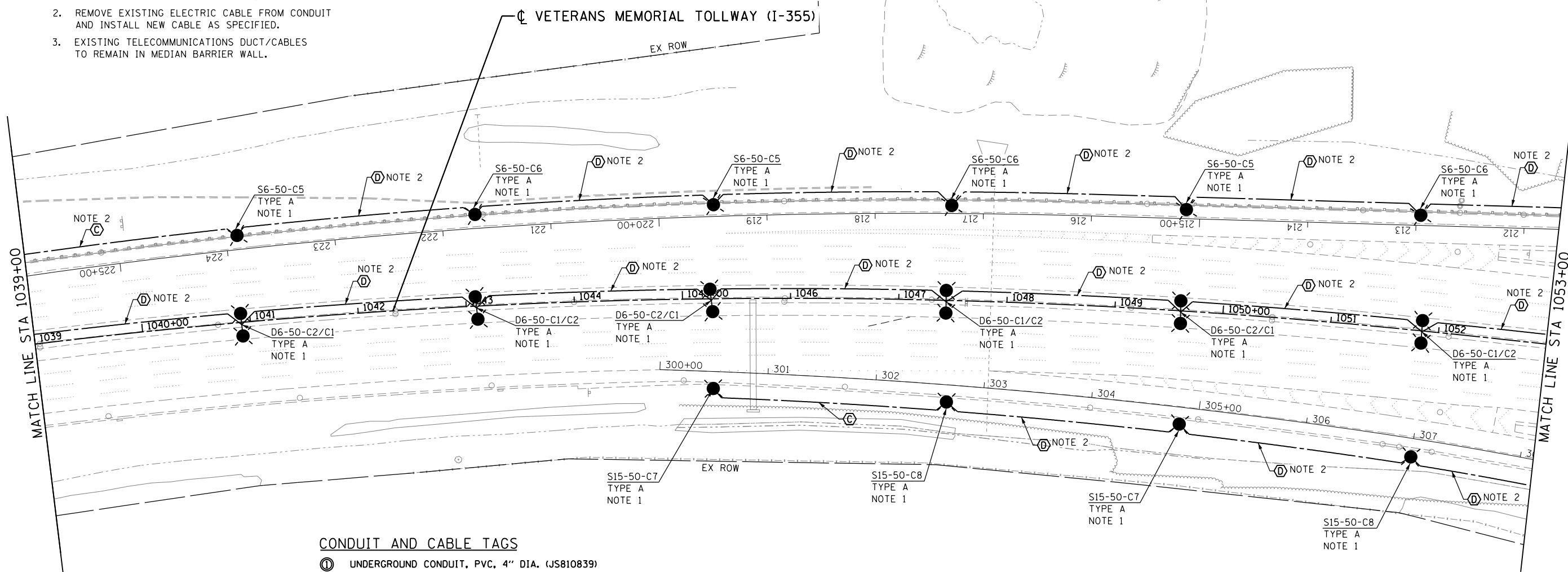
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1025+00 - STA 1039+00

LT-27  
 DRAWING NO.  
 779 OF 1517

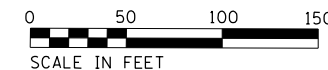
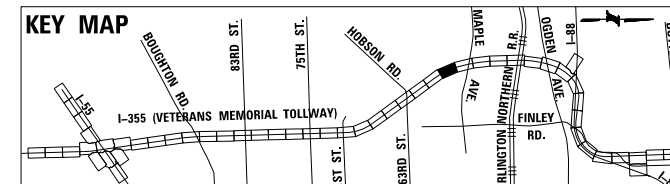
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- A UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- B UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- C ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- D ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- E NOT USED
- F EXISTING CABLE TO REMAIN IN USE
- G ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910



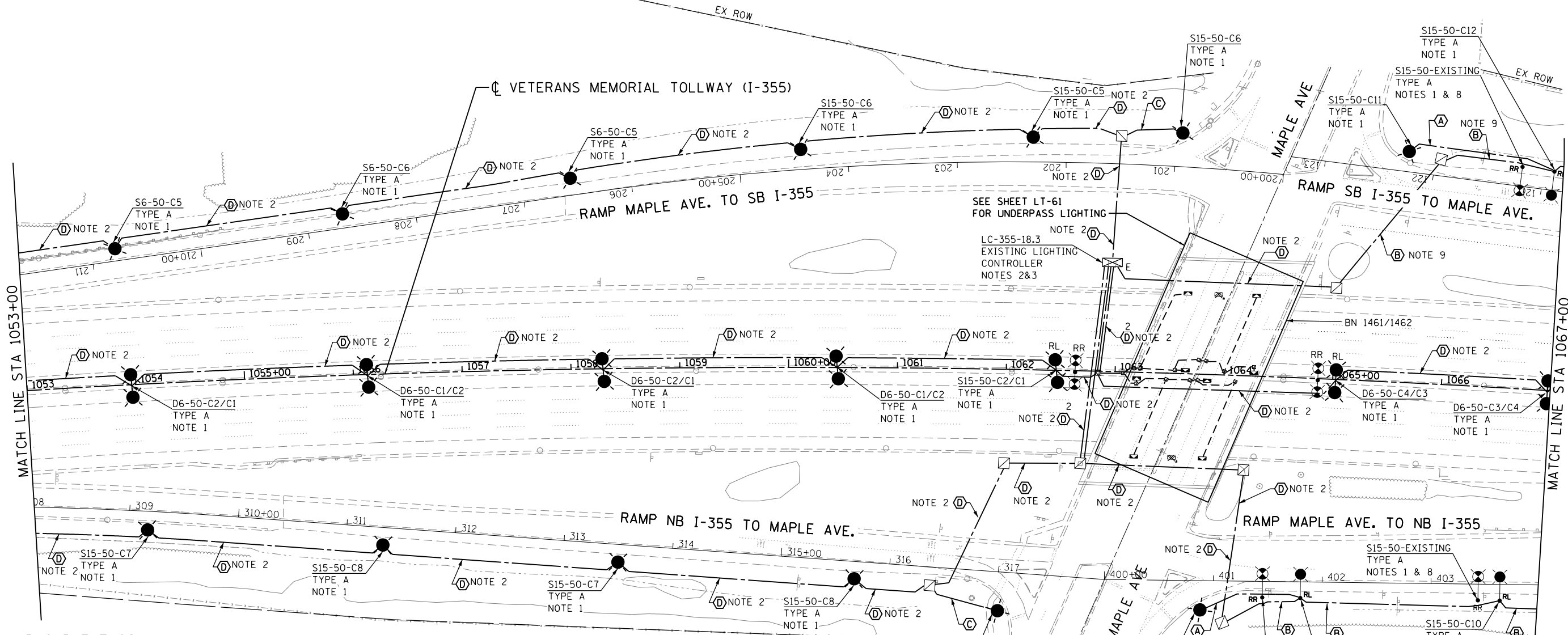
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1039+00 - STA 1053+00

LT-28  
 DRAWING NO.  
 780 OF 1517



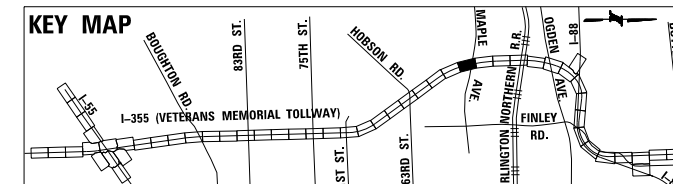


**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. REPLACE EXISTING LIGHTING CONTROLLER.
4. REPLACE EXISTING SERVICE WITH NEW METERED SERVICE. THIS WORK SHALL BE PAID FOR AS (JS804100) ELECTRIC SERVICE INSTALLATION.
5. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
6. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
7. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.
8. REMOVE FOUNDATION AT EXISTING LIGHT POLE LOCATION/
9. CABLE SHALL BE CONTINUOUS FROM THE CONTROLLER TO THE LIGHT POLE WITHOUT ANY CABLE SPLICES. THE UNIT DUCT BETWEEN HANDHOLE AND THIS LIGHT POLE SHALL BE INSTALLED WITHOUT ANY CABLES, SO AS TO FACILITATE INSTALLATION OF THE CABLES FROM THE CONTROLLER TO THIS LIGHT POLE.



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GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



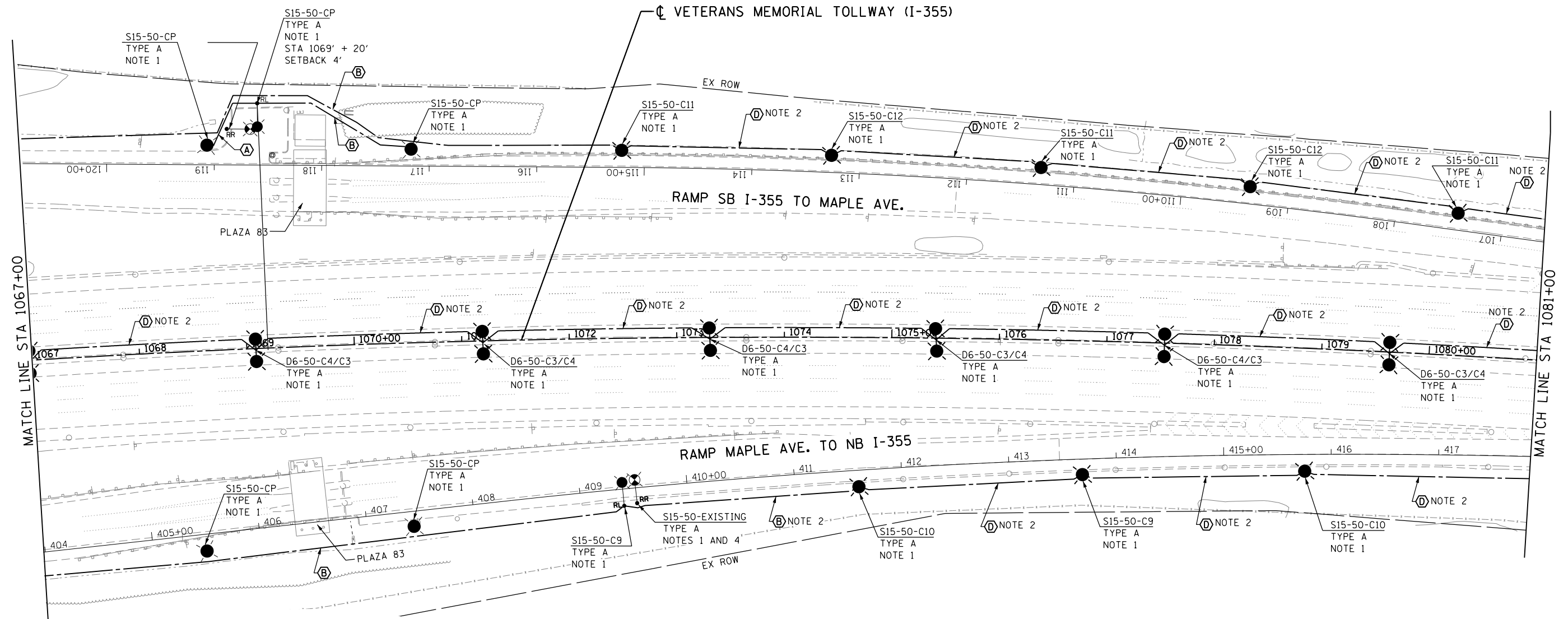
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DATE DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1055+00 - STA 1067+00

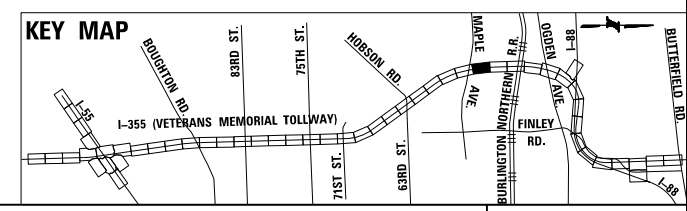
LT-29  
 DRAWING NO.  
 781 OF 1517

- NOTES:
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
  4. REMOVE FOUNDATION AT EXISTING LIGHT POLE LOCATION.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- (A) UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- (B) UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- (C) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (D) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- (E) NOT USED
- (F) EXISTING CABLE TO REMAIN IN USE
- (G) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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**GO** GANDHI AND ASSOCIATES, INC.  
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 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

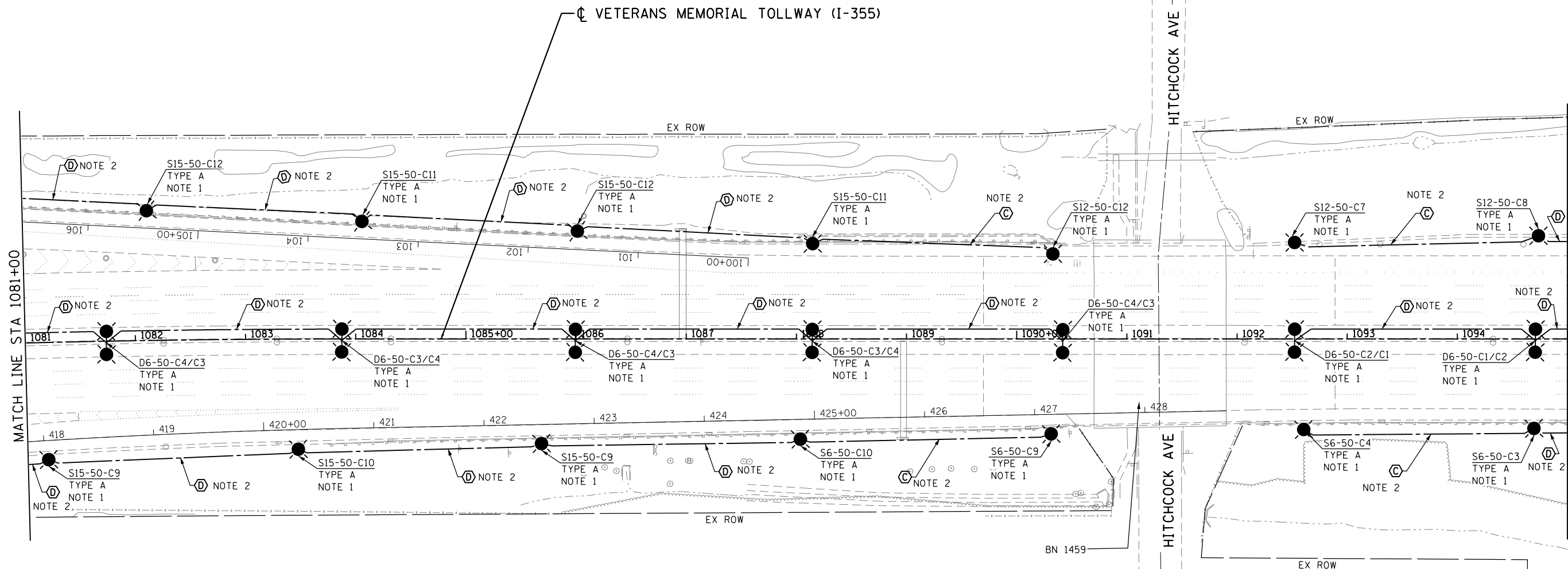
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1067+00 - STA 1081+00

LT-30  
 DRAWING NO.  
 782 OF 1517

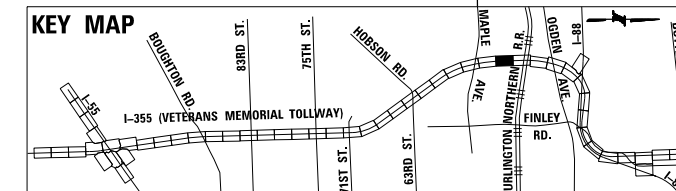
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

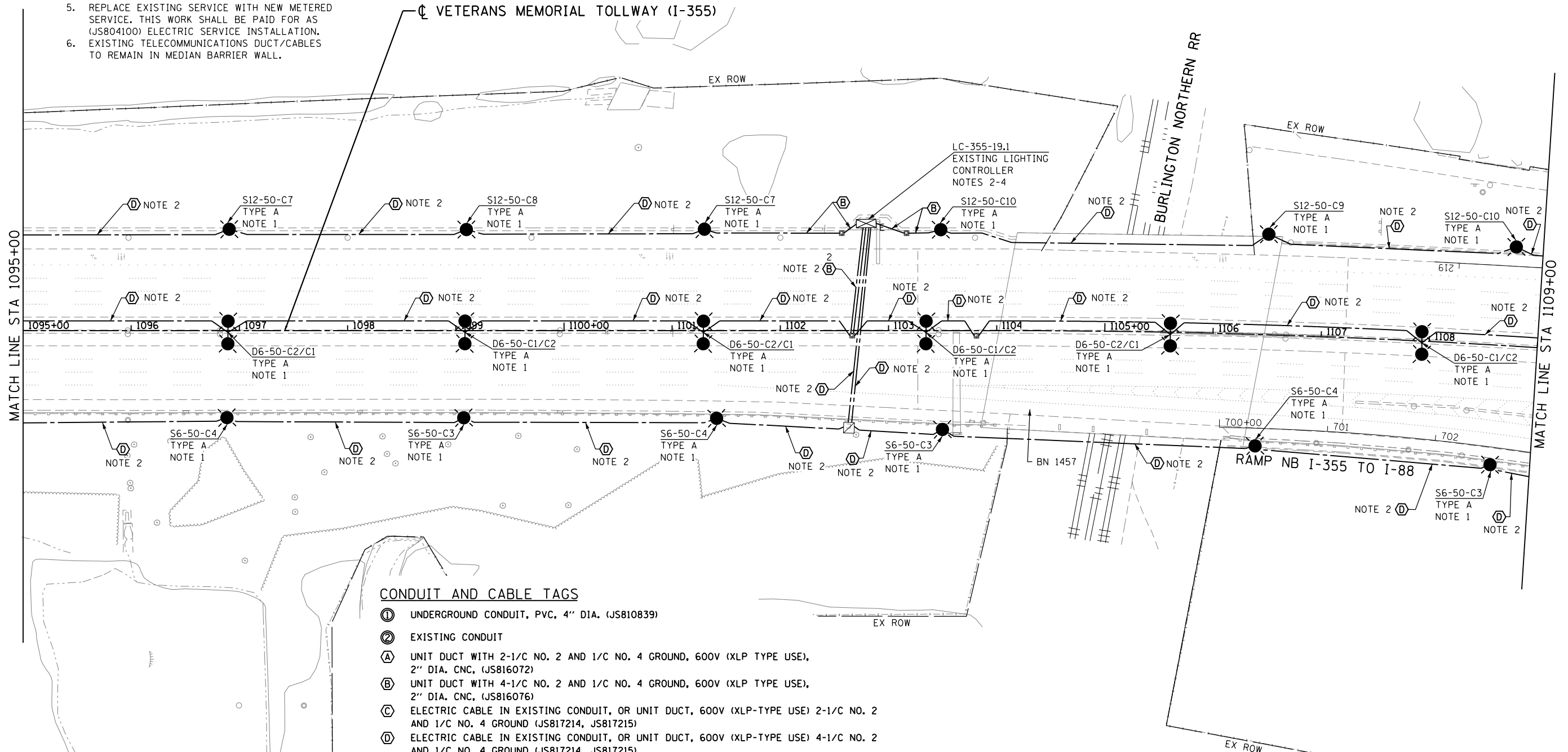
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1081+00 - STA 1095+00

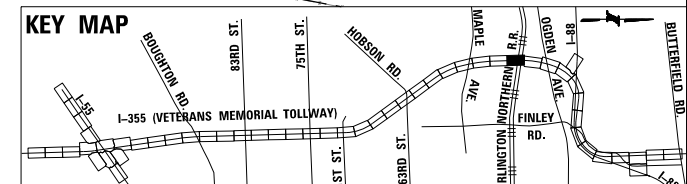
LT-31  
 DRAWING NO.  
 783 OF 1517

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
4. REPAIR EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
5. REPLACE EXISTING SERVICE WITH NEW METERED SERVICE. THIS WORK SHALL BE PAID FOR AS (JS804100) ELECTRIC SERVICE INSTALLATION.
6. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



- Ⓧ UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- Ⓨ EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

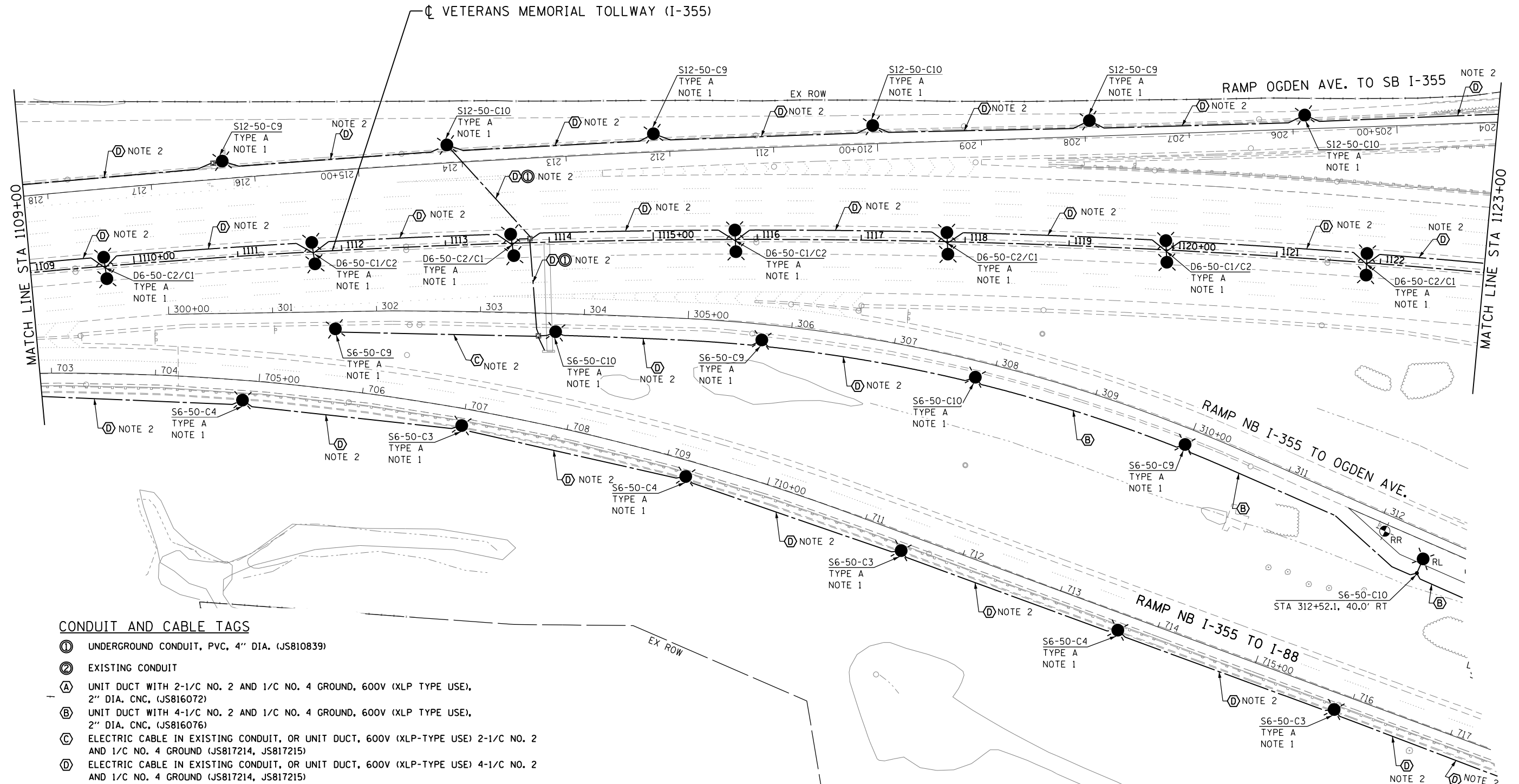
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1095+00 - STA 1109+00

LT-32  
 DRAWING NO.  
 784 OF 1517

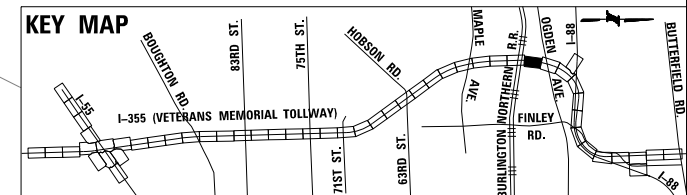
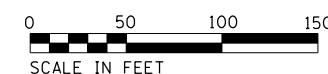
NOTES:

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



CONDUIT AND CABLE TAGS

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- A UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- B UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- C ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- D ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- E NOT USED
- F EXISTING CABLE TO REMAIN IN USE
- G ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

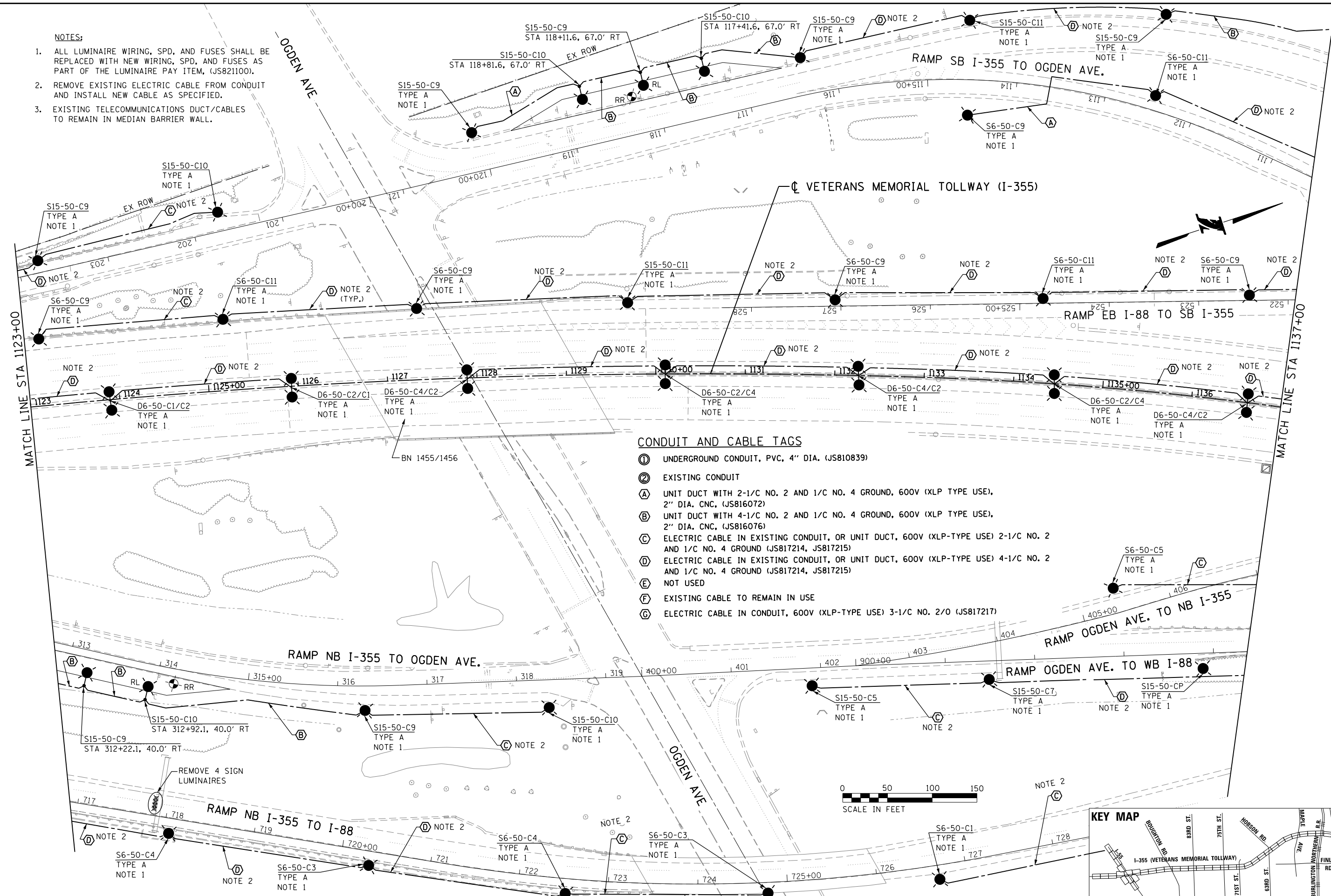
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1109+00 - STA 1123+00  
 LT-33  
 DRAWING NO. 785 OF 1517

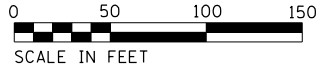
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.

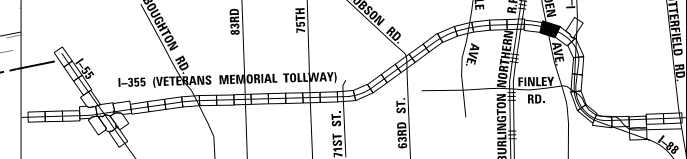


**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/2 NO. 2/0 (JS817217)



**KEY MAP**



DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

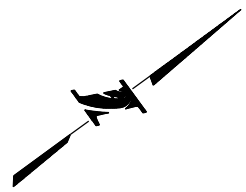
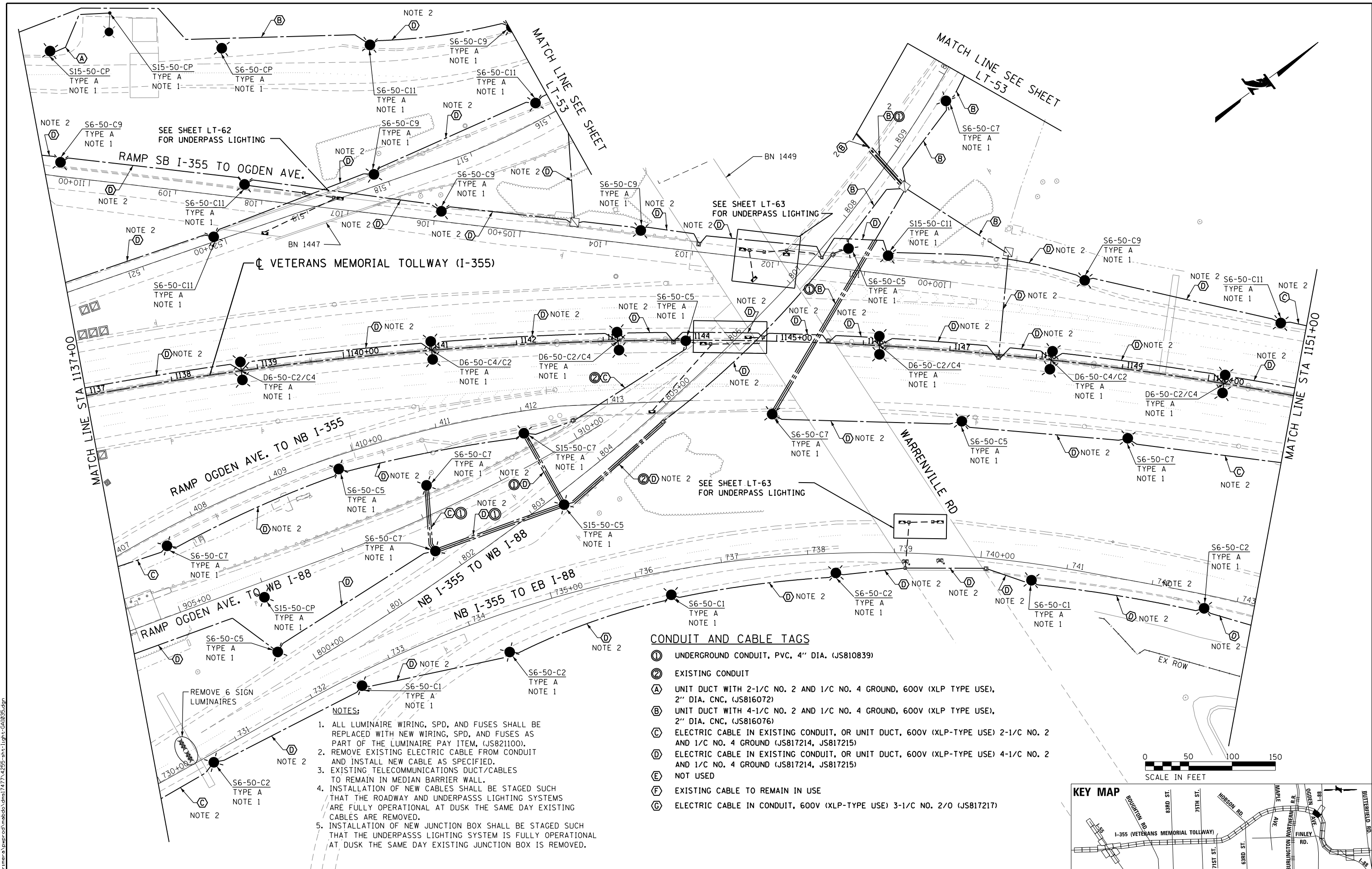


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
LIGHTING PLAN  
STA 1123+00 - STA 1137+00

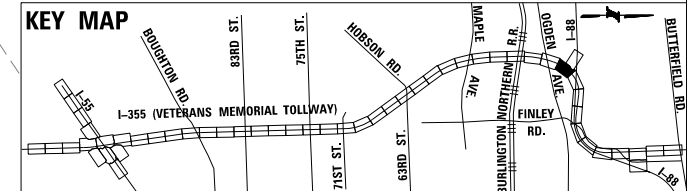
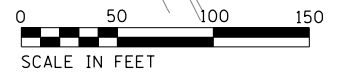
LT-34  
DRAWING NO.  
786 OF 1517



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/2 NO. 2/0 (JS817217)

- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
  4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
  5. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.



DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

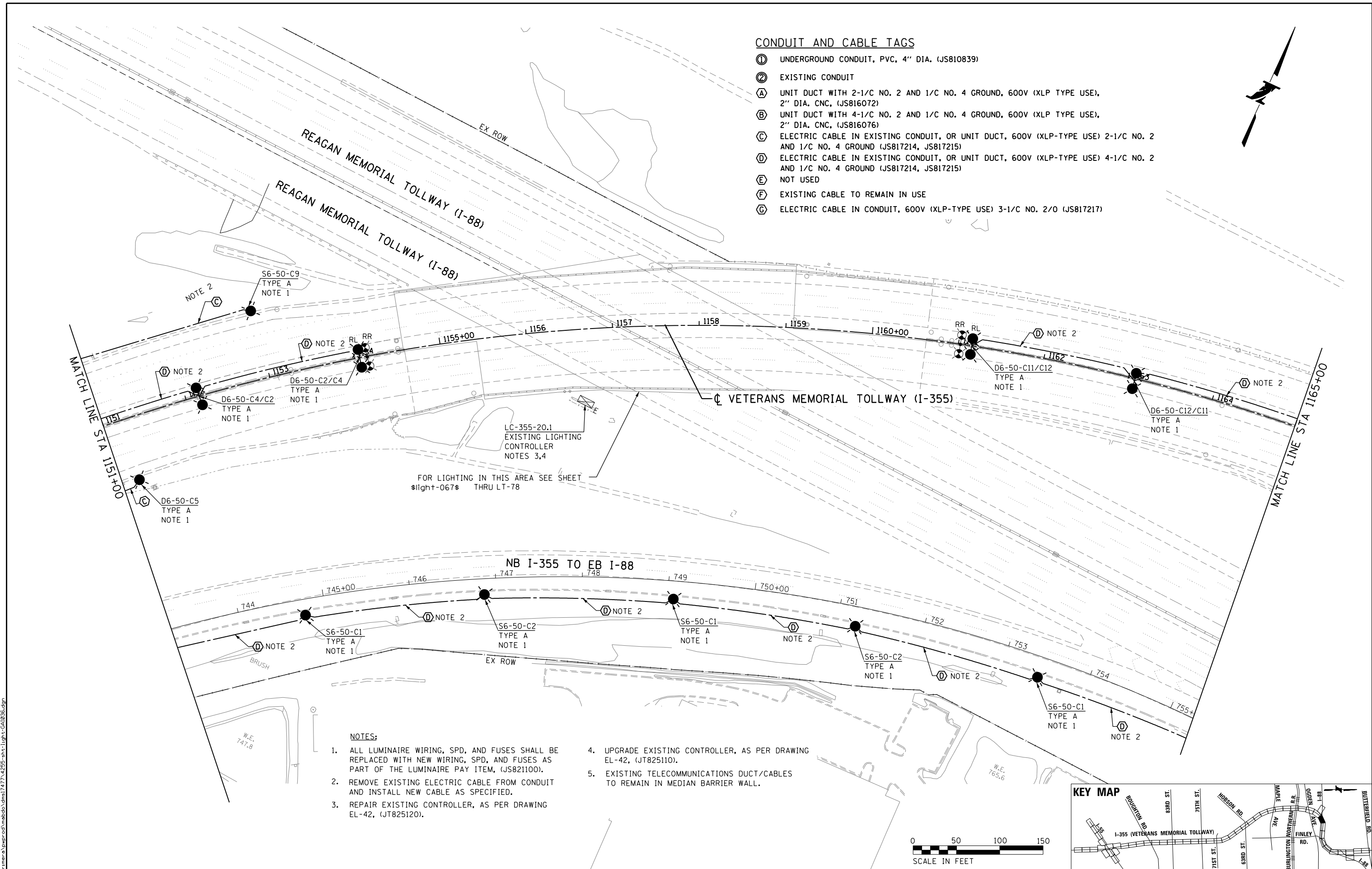
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1137+00 - STA 1151+00  
 LT-35  
 DRAWING NO. 787 OF 1517



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

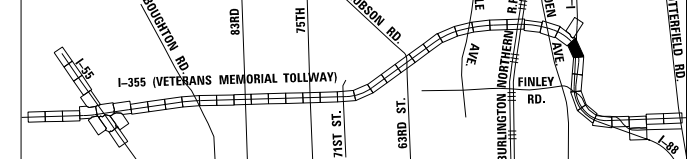


FOR LIGHTING IN THIS AREA SEE SHEET  
Light-067\$ THRU LT-78

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. REPAIR EXISTING CONTROLLER, AS PER DRAWING EL-42, (JT825120).
4. UPGRADE EXISTING CONTROLLER, AS PER DRAWING EL-42, (JT825110).
5. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.

**KEY MAP**



DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
LIGHTING PLAN  
STA 1137+00 - STA 1151+00  
LT-36  
DRAWING NO. 788 OF 1517



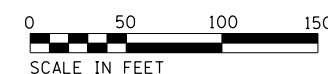
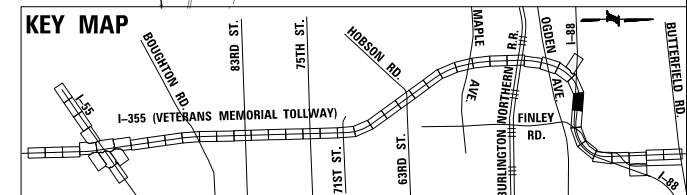
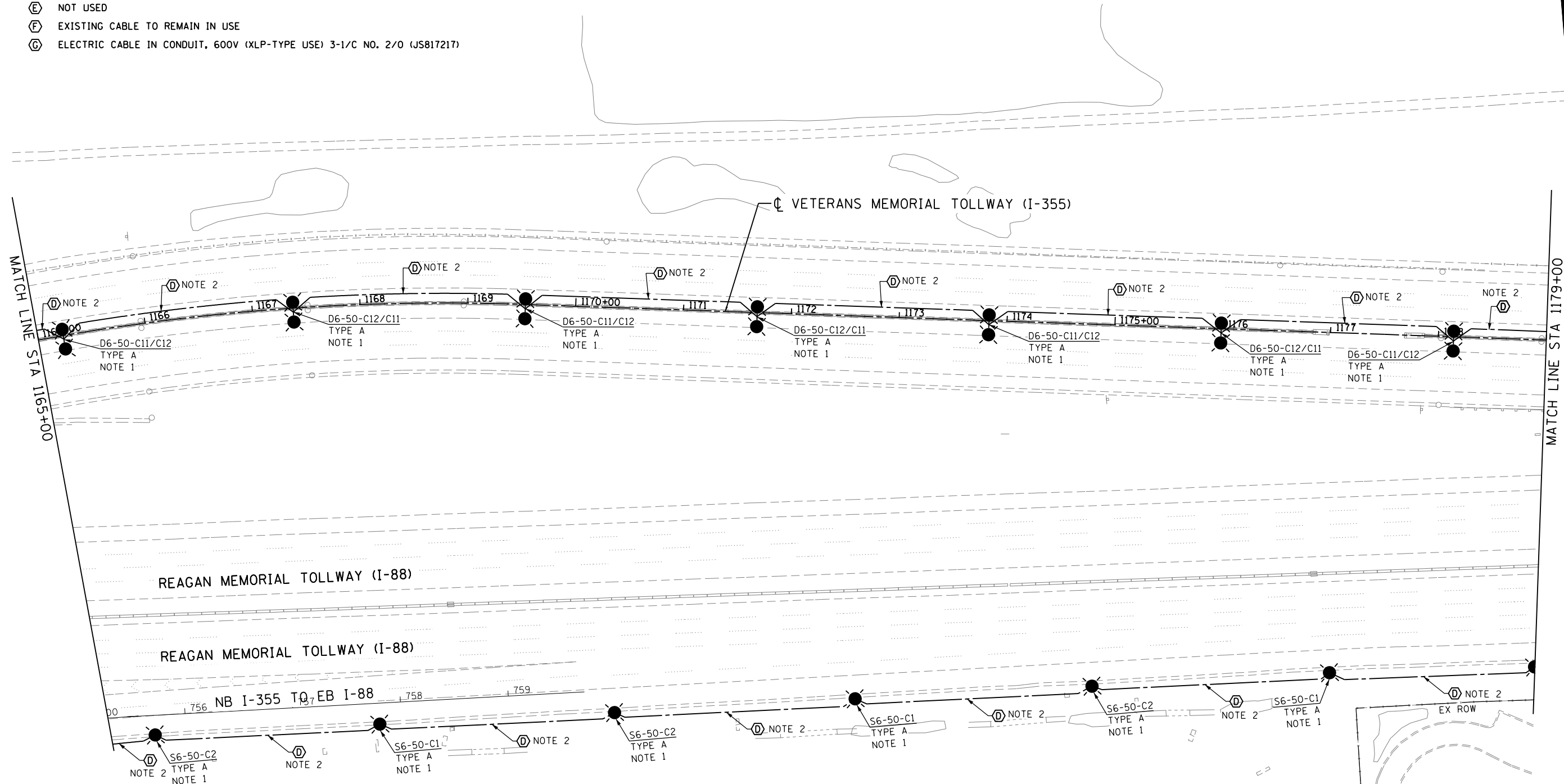
**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.

W.E. 767.2



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 ENGINEERS AND PLANNERS  
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 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1151+00 - STA 1179+00

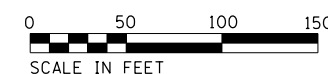
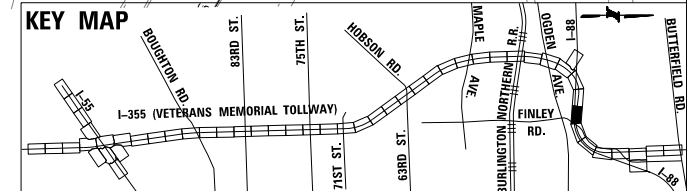
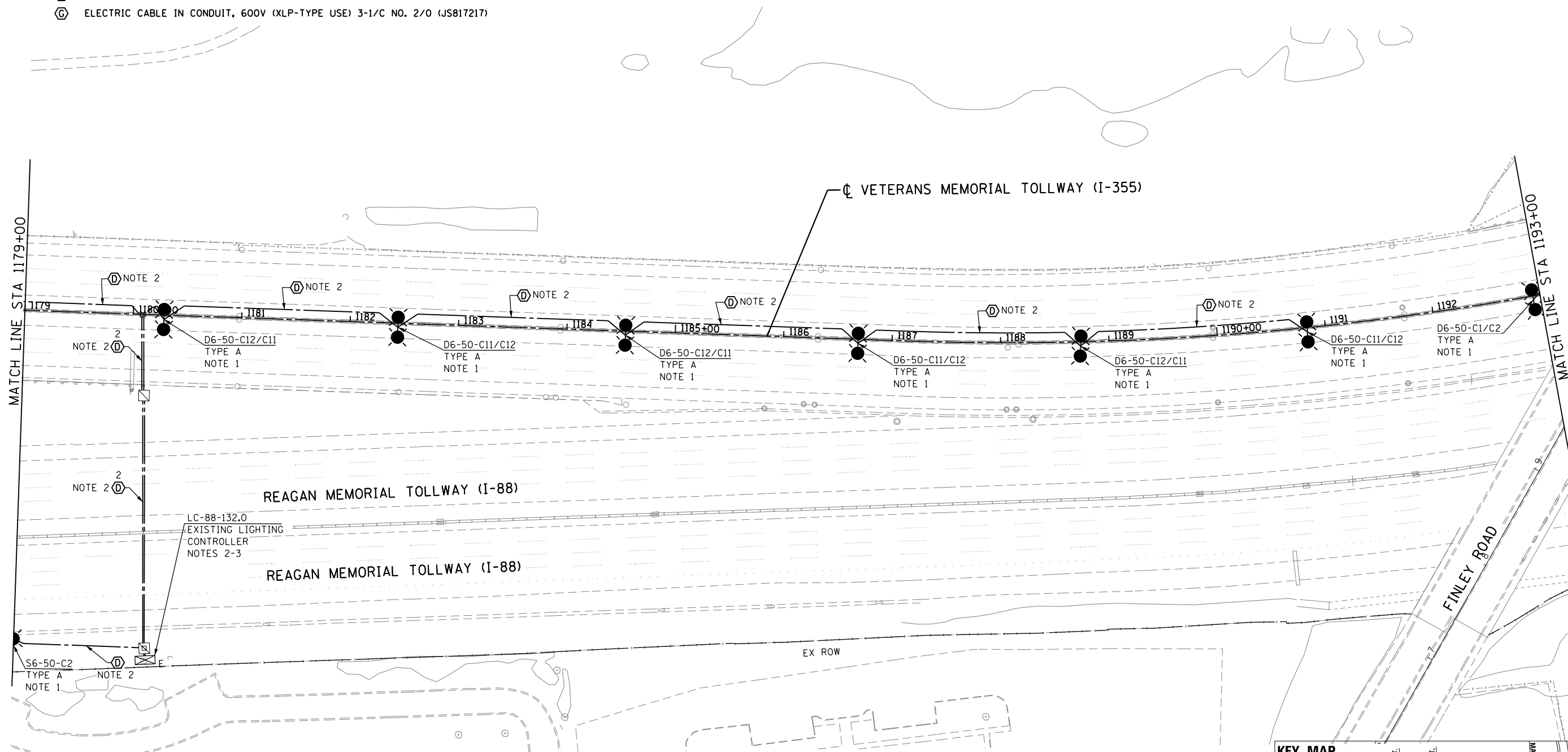
LT-37  
 DRAWING NO.  
 789 OF 1517

**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. REPLACE EXISTING SERVICE WITH NEW METERED SERVICE. THIS WORK SHALL BE PAID FOR AS JS804100 ELECTRIC SERVICE INSTALLATION.
4. UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
5. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



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 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

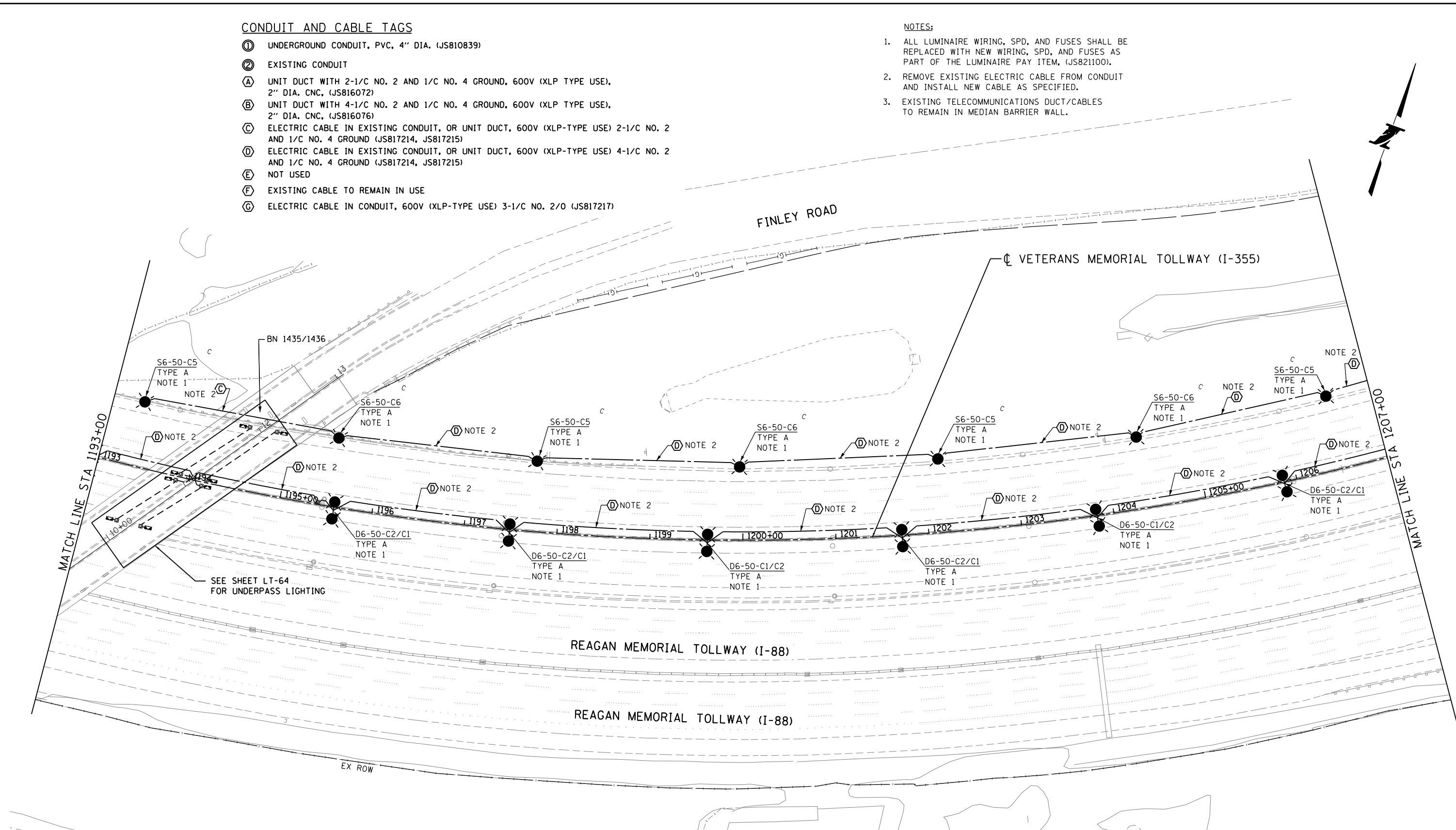
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 LIGHTING PLAN  
 STA 1151+00 - STA 1179+00  
 LT-38  
 DRAWING NO. 790 OF 1517

**CONDUIT AND CABLE TAGS**

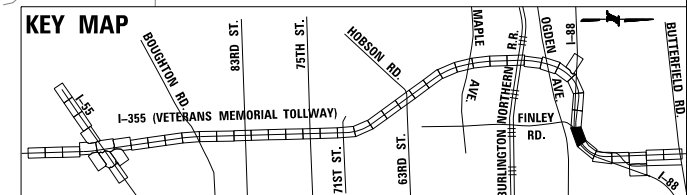
- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/4 NO. 2 AND 1/4 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/4 NO. 2 AND 1/4 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/4 NO. 2 AND 1/4 NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/4 NO. 2 AND 1/4 NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/4 NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



SEE SHEET LT-64 FOR UNDERPASS LIGHTING



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REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1193+00 - STA 1207+00  
 LT-39  
 DRAWING NO. 791 OF 1517

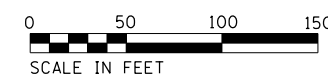
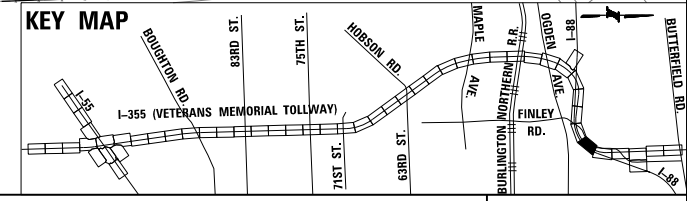
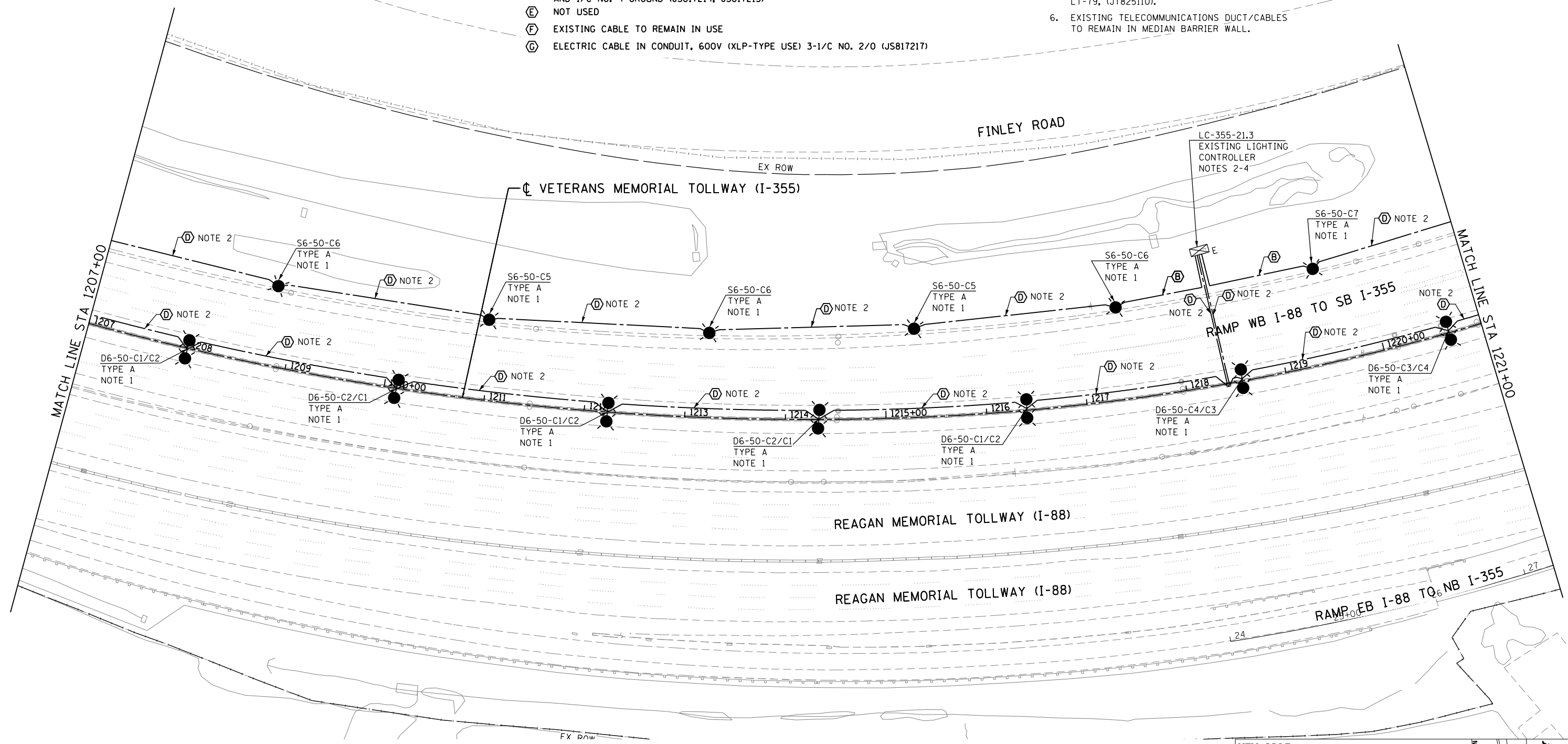
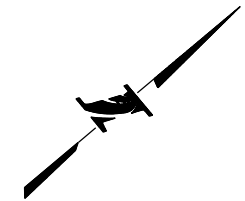
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**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. REPAIR EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825120).
4. REPLACE EXISTING SERVICE WITH NEW METERD SERVICE. THIS WORK SHALL BE PAID FOR AS JS804100 ELECTRIC SERVICE INSTALLATION.
5. UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
6. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



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 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

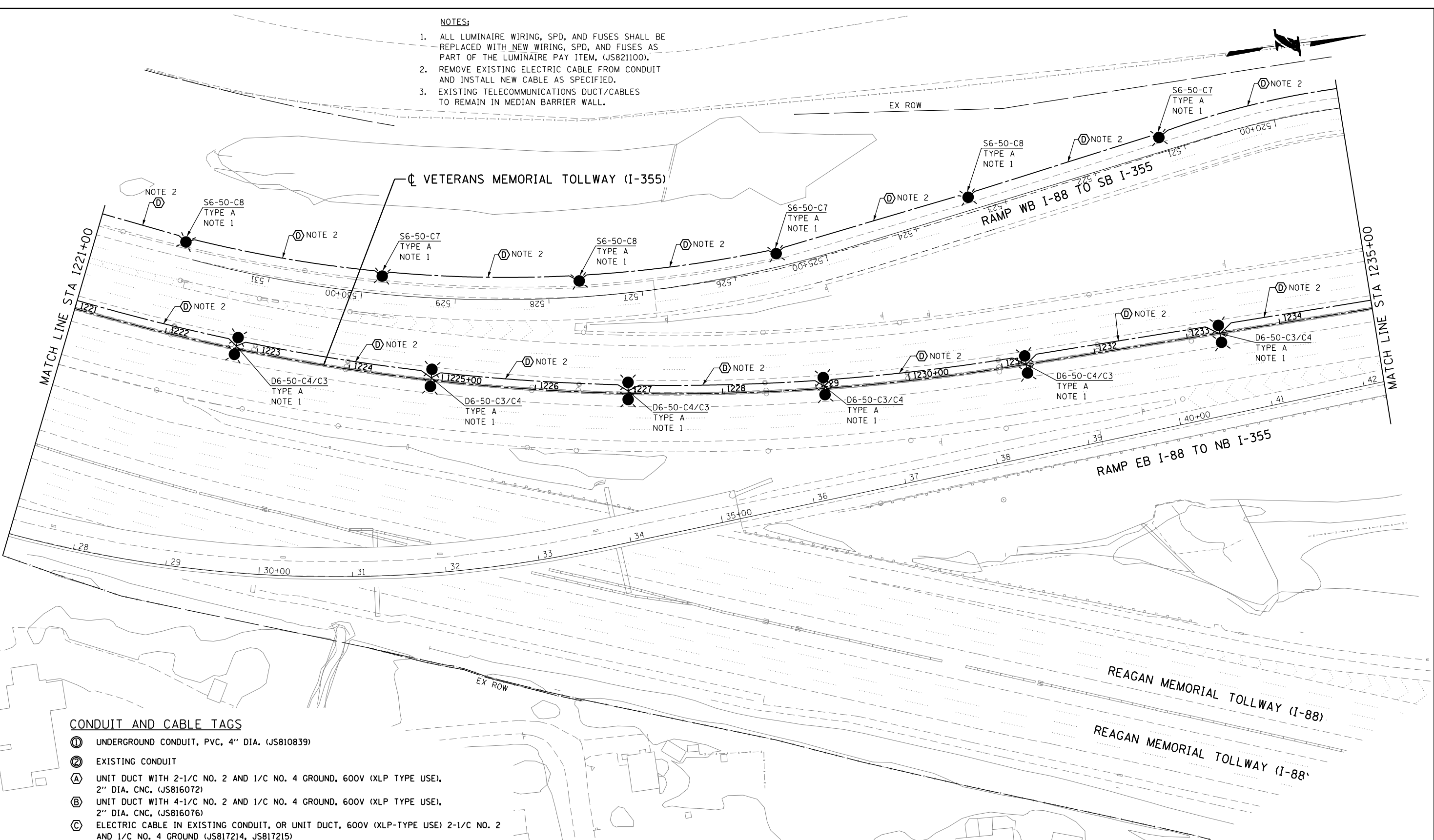
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1207+00 - STA 1221+00  
 LT-40  
 DRAWING NO. 792 OF 1517

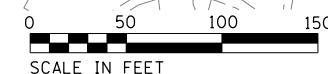
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.

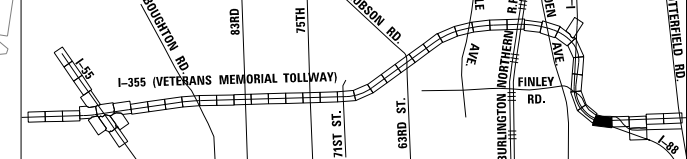


**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



**KEY MAP**



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 CHECKED BY PV DATE 03/06/2018



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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
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 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

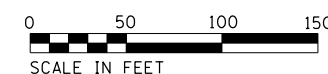
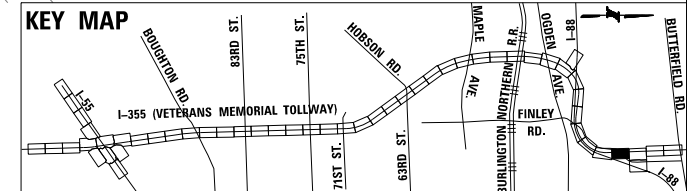
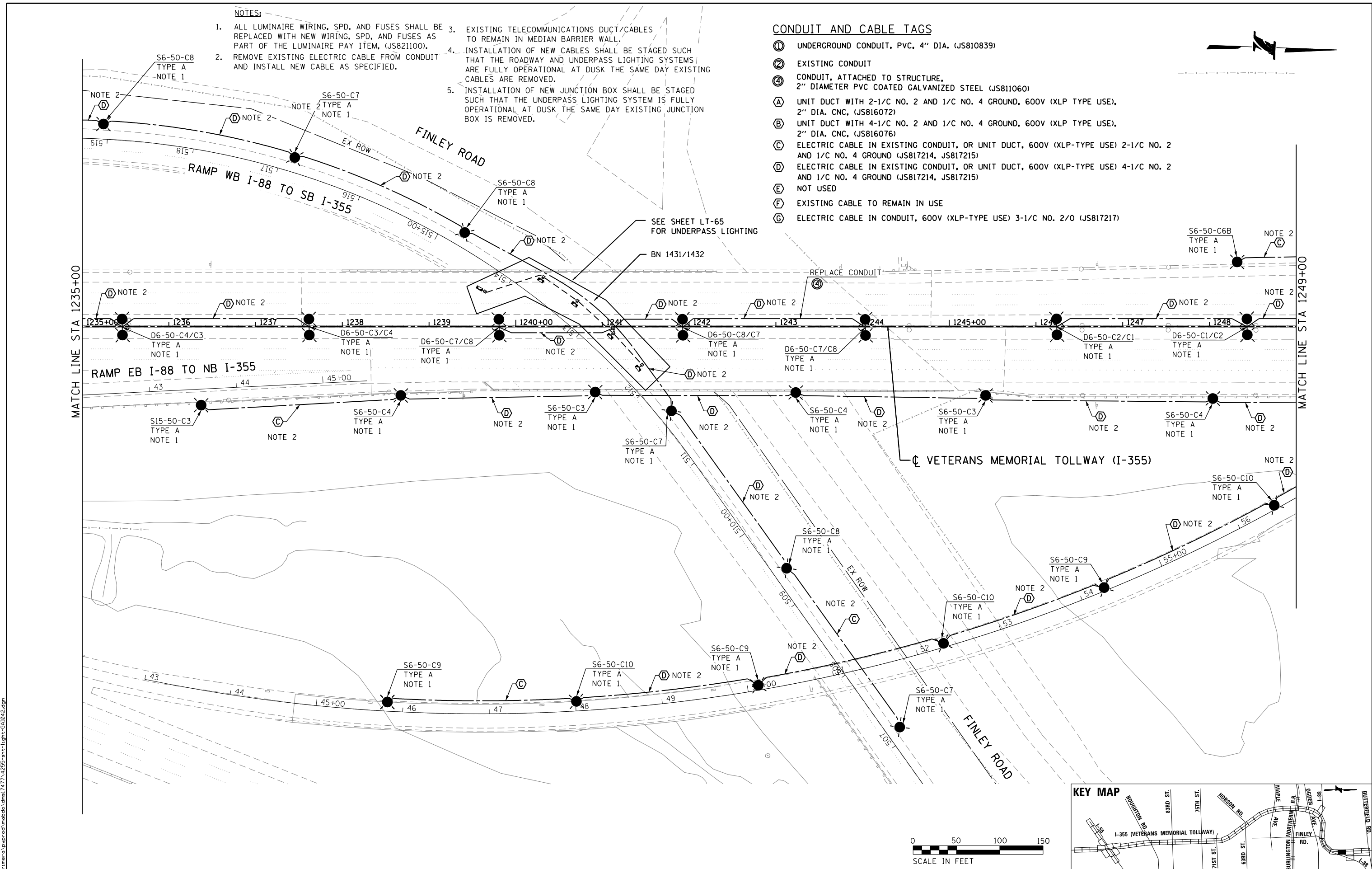
CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1221+00 - STA 1235+00  
 LT-41  
 DRAWING NO. 793 OF 1517

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
4. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
5. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.

**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- ④ CONDUIT, ATTACHED TO STRUCTURE, 2" DIAMETER PVC COATED GALVANIZED STEEL (JS811060)
- (A) UNIT DUCT WITH 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- (B) UNIT DUCT WITH 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- (C) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- (D) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- (E) NOT USED
- (F) EXISTING CABLE TO REMAIN IN USE
- (G) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/2 NO. 2/0 (JS817217)



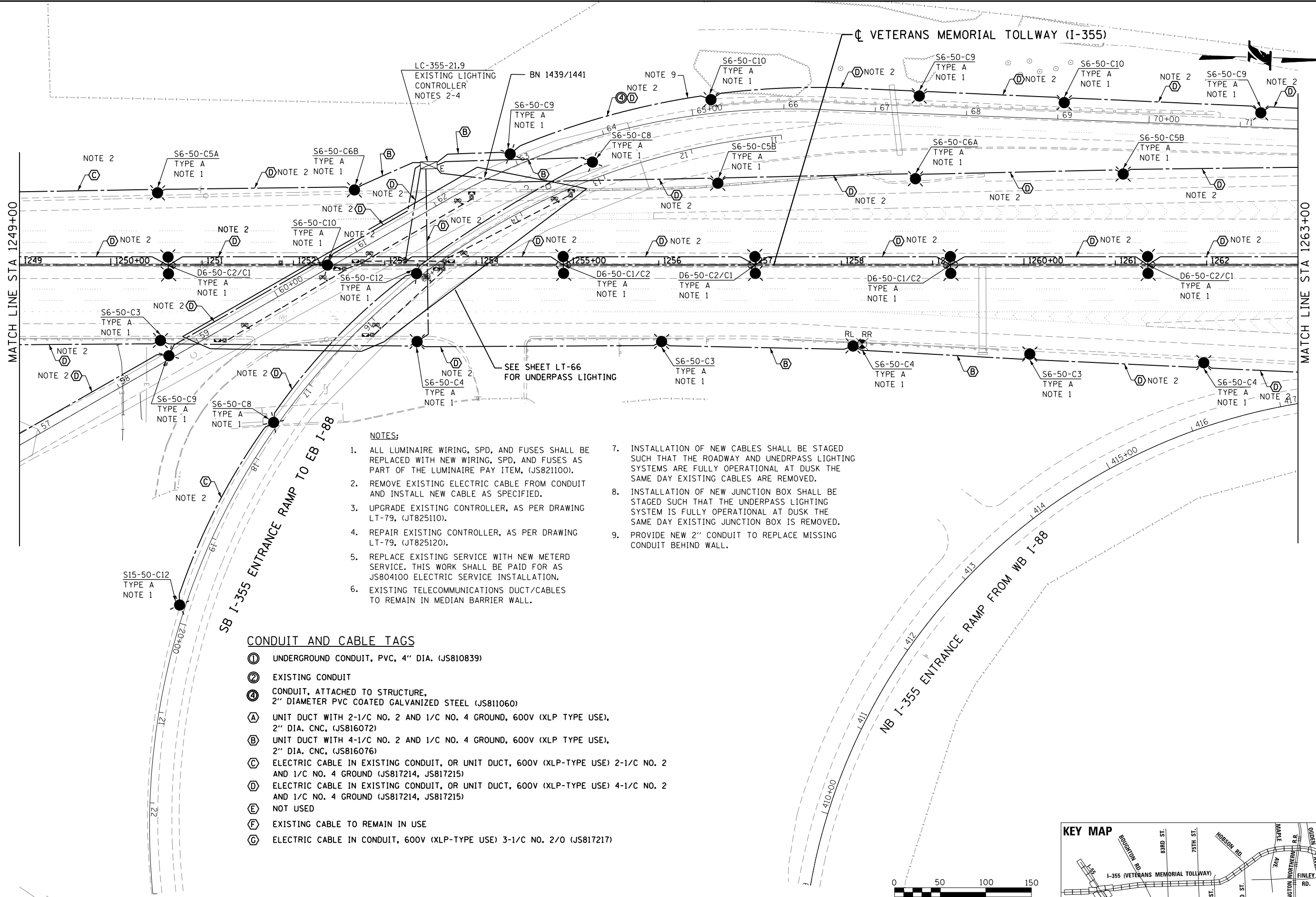
DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018

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 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
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 DOWNERS GROVE,  
 ILLINOIS 60515

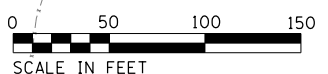
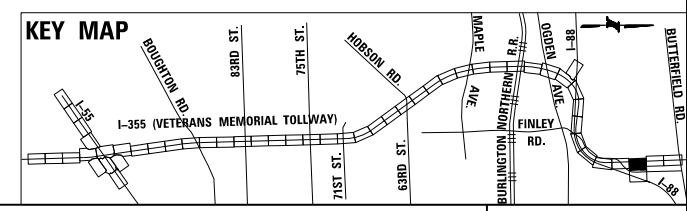
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1235+00 - STA 1249+00  
 LT-42  
 DRAWING NO. 794 OF 1517



- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
  3. UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
  4. REPAIR EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825120).
  5. REPLACE EXISTING SERVICE WITH NEW METERED SERVICE. THIS WORK SHALL BE PAID FOR AS JS804100 ELECTRIC SERVICE INSTALLATION.
  6. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.
  7. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
  8. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT THE UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.
  9. PROVIDE NEW 2" CONDUIT TO REPLACE MISSING CONDUIT BEHIND WALL.

- CONDUIT AND CABLE TAGS**
- (1) UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
  - (2) EXISTING CONDUIT
  - (3) CONDUIT, ATTACHED TO STRUCTURE, 2" DIAMETER PVC COATED GALVANIZED STEEL (JS811060)
  - (A) UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
  - (B) UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
  - (C) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
  - (D) ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
  - (E) NOT USED
  - (F) EXISTING CABLE TO REMAIN IN USE
  - (G) ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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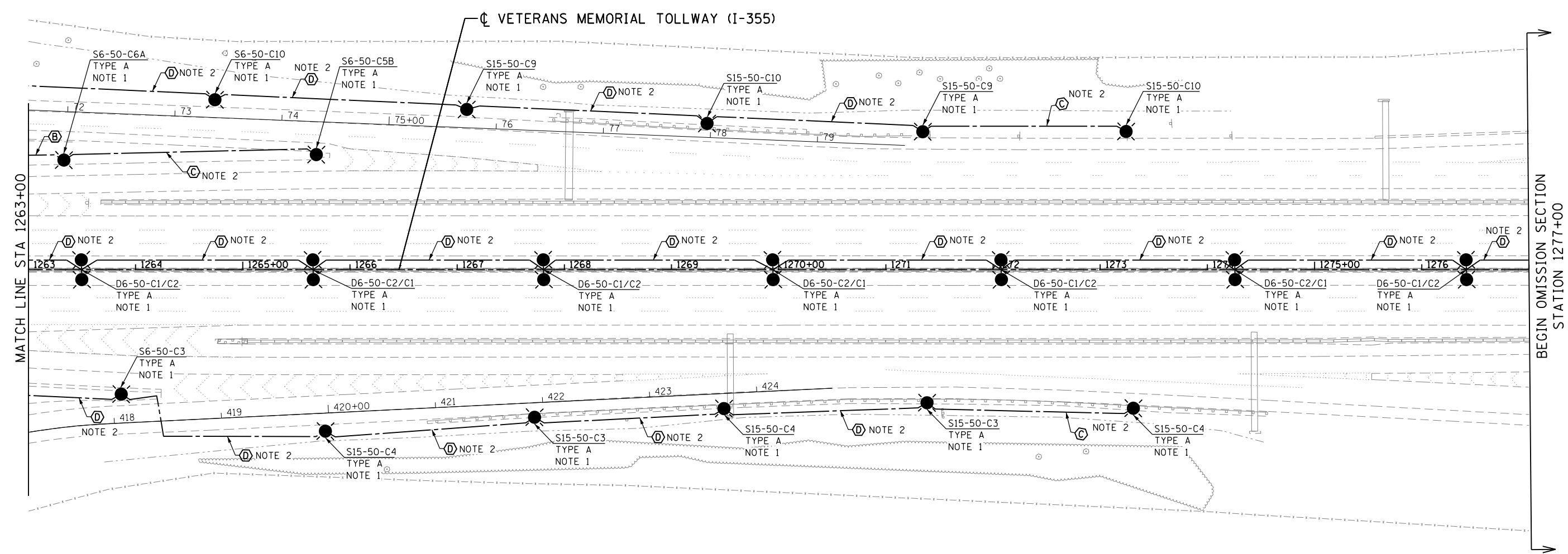
**GO** GANDHI AND ASSOCIATES, INC.  
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 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

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 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1235+00 - STA 1263+00

LT-43  
 DRAWING NO.  
 795 OF 1517

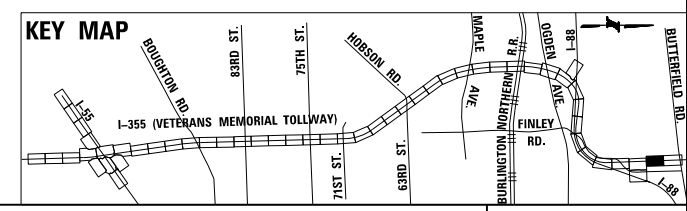


**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.
3. EXISTING TELECOMMUNICATIONS DUCT/CABLES TO REMAIN IN MEDIAN BARRIER WALL.



DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



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 ENGINEERS AND PLANNERS  
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 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



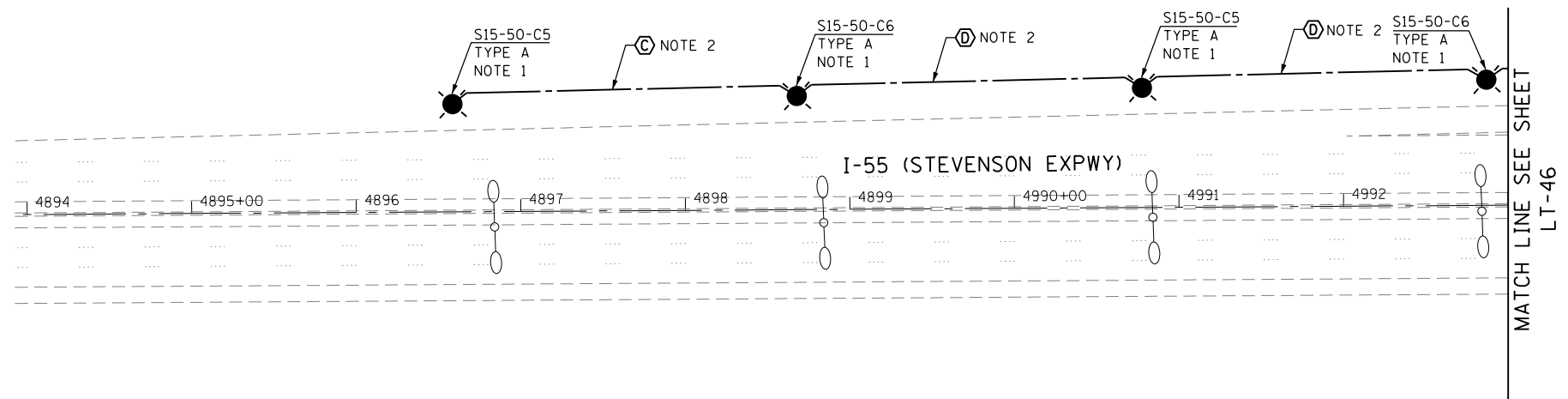
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 STA 1263+00 - STA 1277+00

LT-44  
 DRAWING NO.  
 796 OF 1517

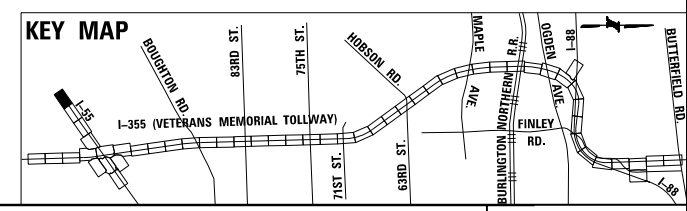




**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- A UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- B UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- C ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- D ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- E NOT USED
- F EXISTING CABLE TO REMAIN IN USE
- G ELECTRIC CABLE IN CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.



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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 I-355/I-55 RAMPS

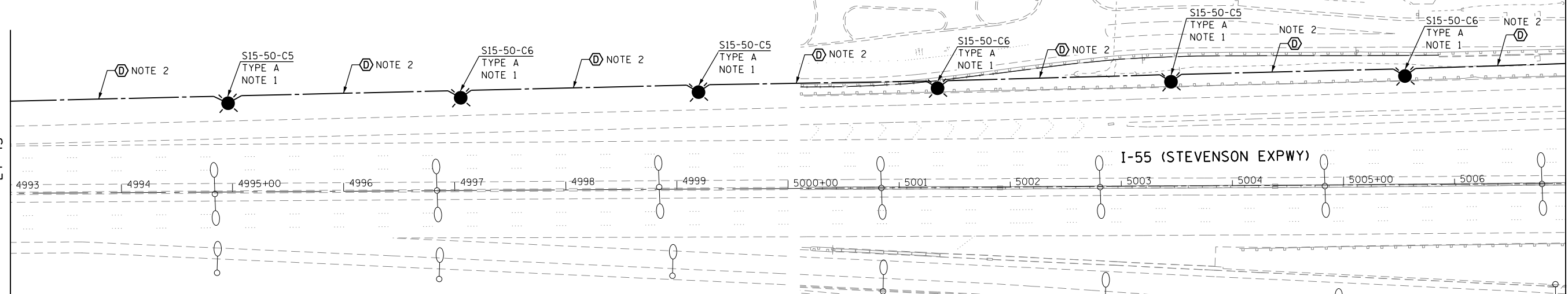
LT-45  
 DRAWING NO.  
 797 OF 1517



- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.

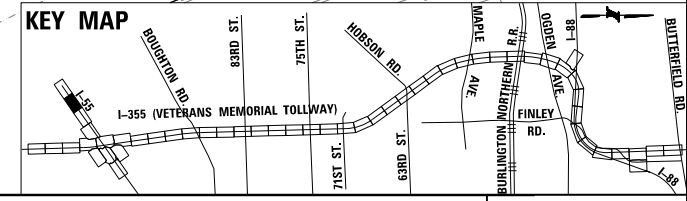
MATCH LINE SEE SHEET  
LT-45

MATCH LINE SEE SHEET  
LT-47



**CONDUIT AND CABLE TAGS**

- Ⓐ UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- Ⓑ EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 DOWNERS GROVE,  
 ILLINOIS 60515

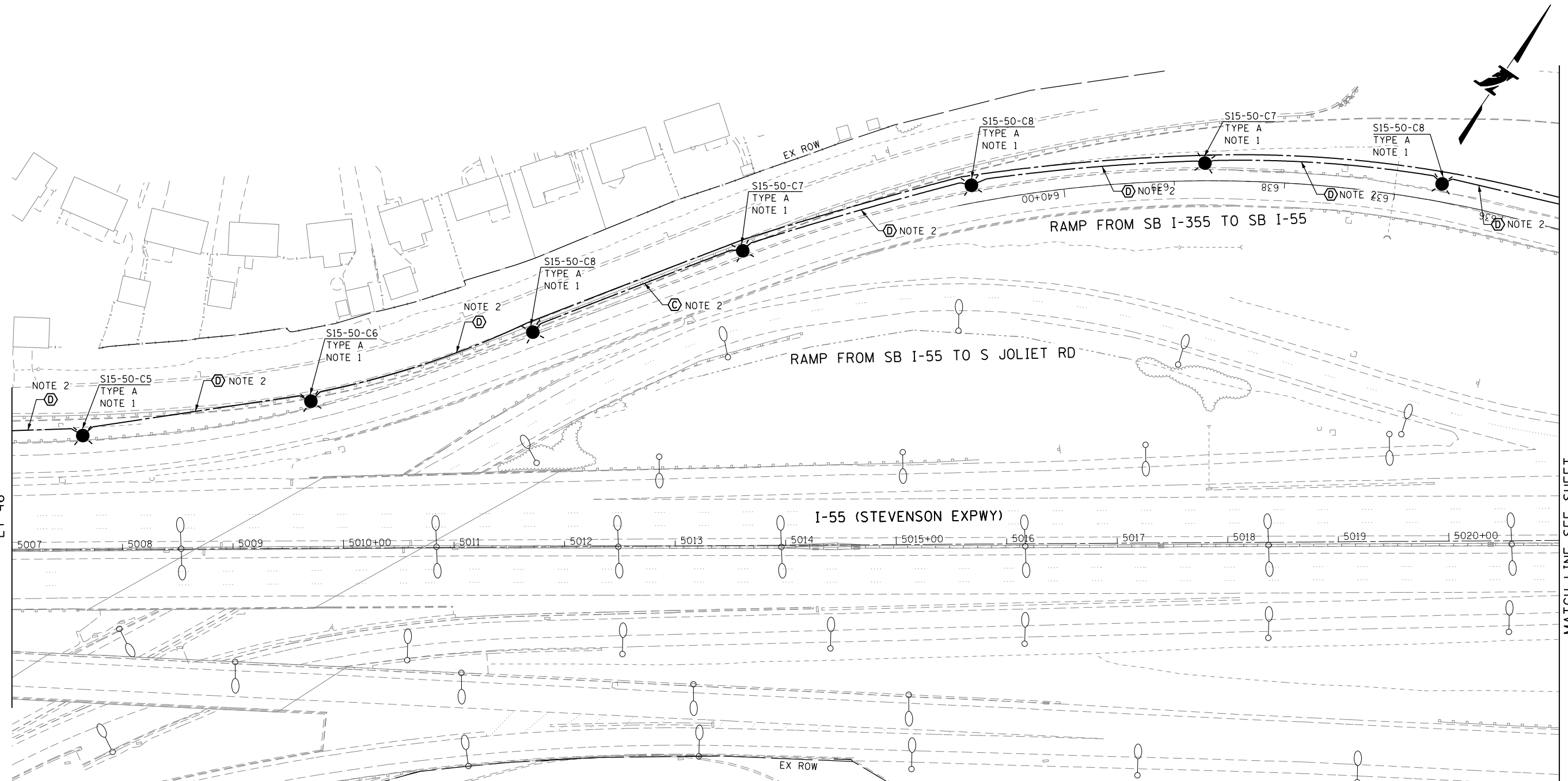
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 I-355/I-55 RAMPS

LT-46  
 DRAWING NO.  
 798 OF 1517

MATCH LINE SEE SHEET  
LT-46

MATCH LINE SEE SHEET  
LT-48

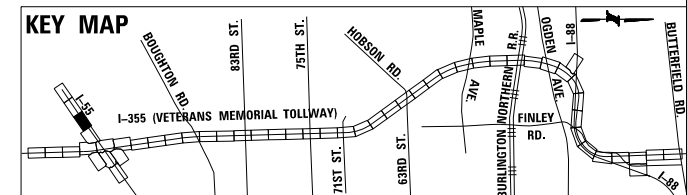


**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.



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 DOWNERS GROVE,  
 ILLINOIS 60515

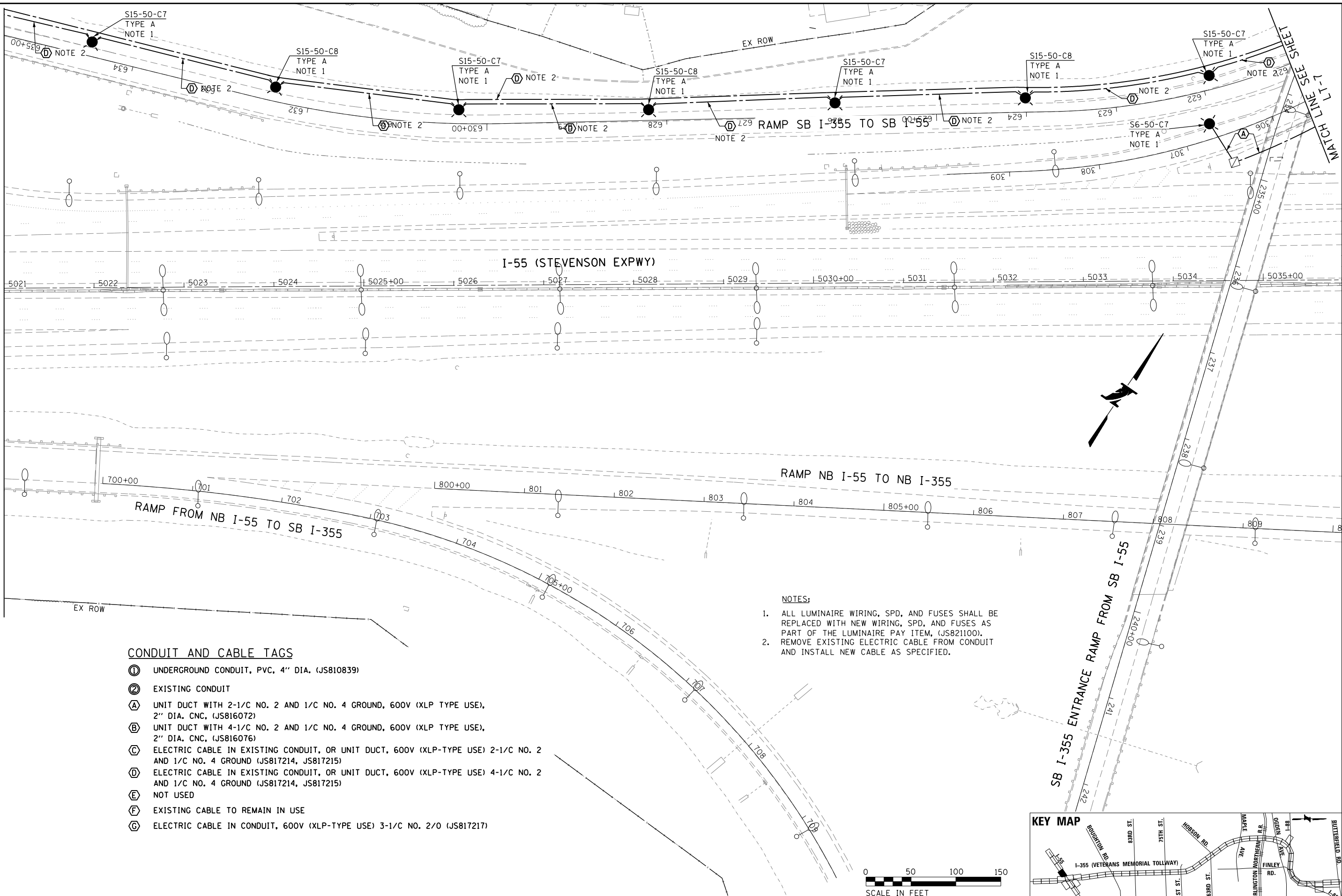
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 I-355/I-55 RAMPS

LT-47  
 DRAWING NO.  
 799 OF 1517

MATCH LINE SEE SHEET  
LT-47

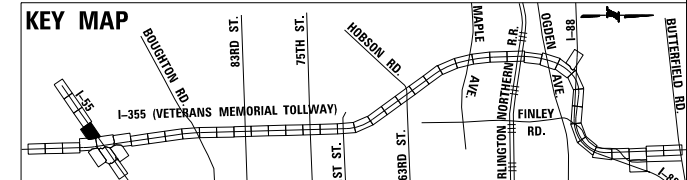
SHEET  
1-1  
MATCH LINE SEE SHEET  
LT-48



**CONDUIT AND CABLE TAGS**

- Ⓐ UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- Ⓑ EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)

- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.



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**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
2700 OGDEN AVENUE  
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ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

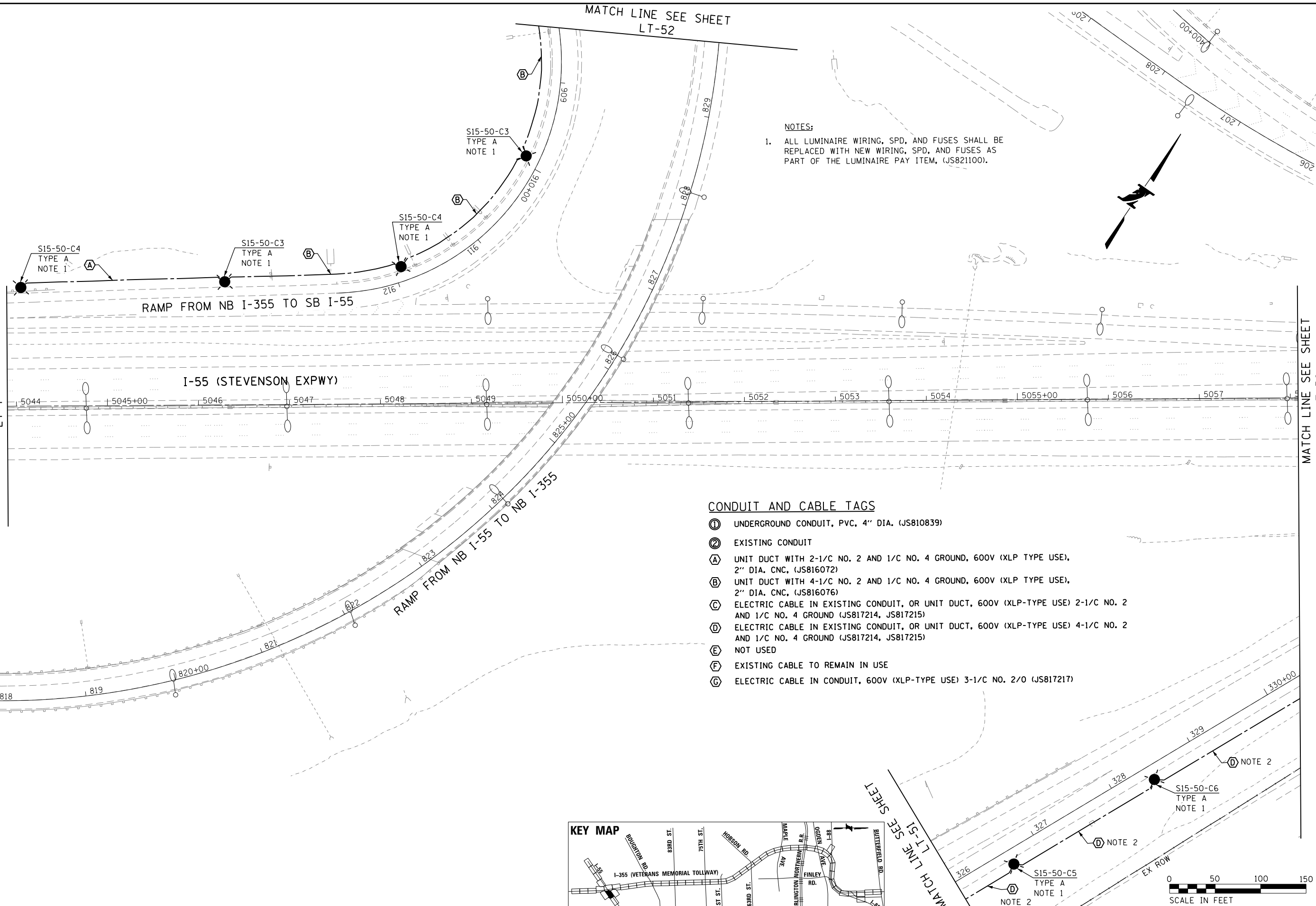
CONTRACT NO. RR-16-4255  
LIGHTING PLAN  
I-355/I-55 RAMPS  
DRAWING NO.  
800 OF 1517

MATCH LINE SEE SHEET LT-52

**NOTES:**  
 1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).

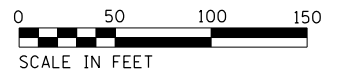
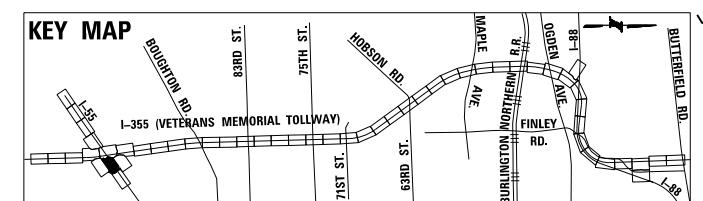
MATCH LINE SEE SHEET LT-7

MATCH LINE SEE SHEET LT-50



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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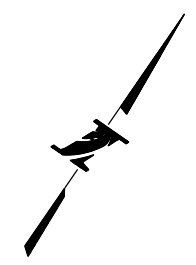
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 I-355/I-55 RAMPS

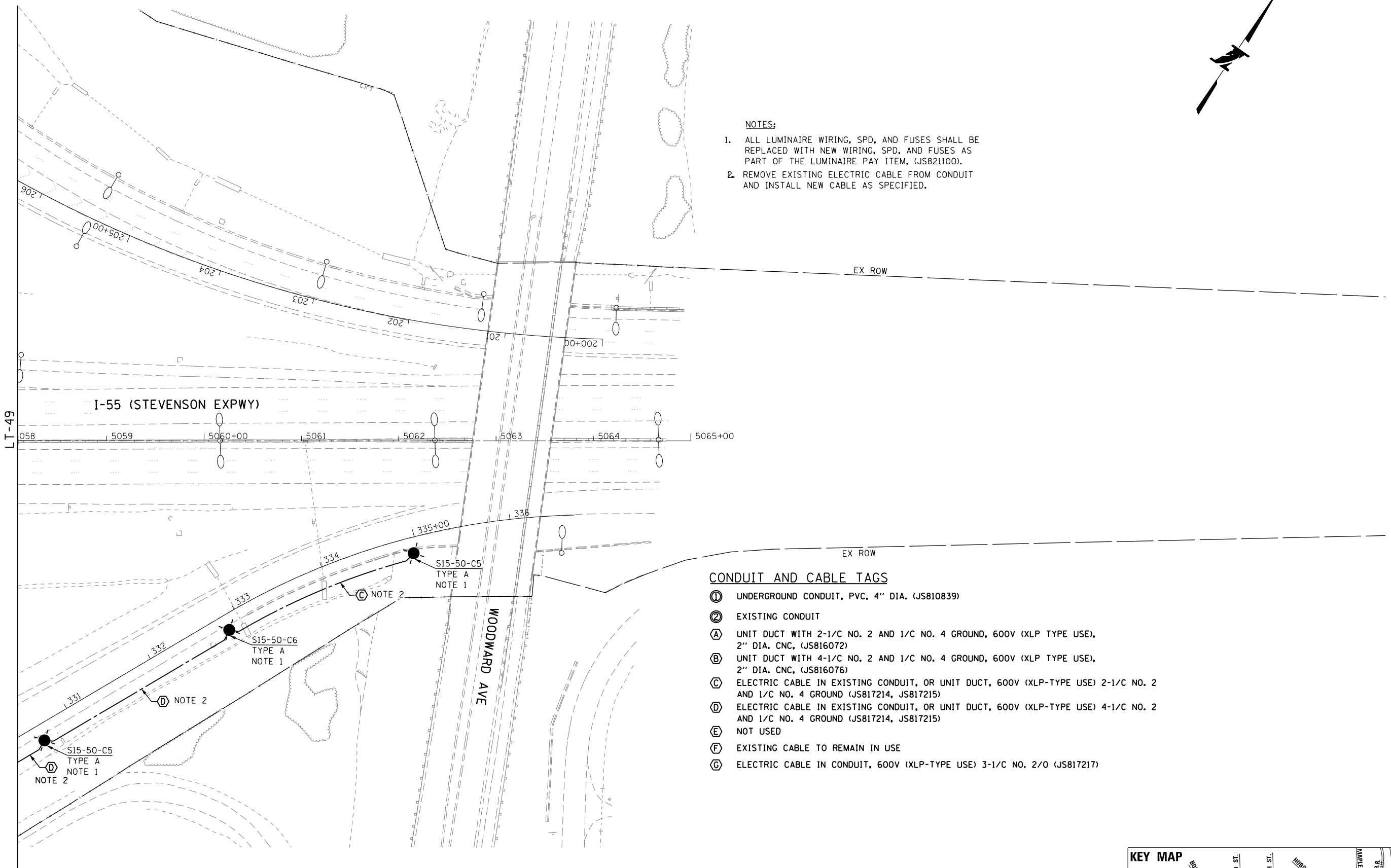
LT-49  
 DRAWING NO.  
 801 OF 1517

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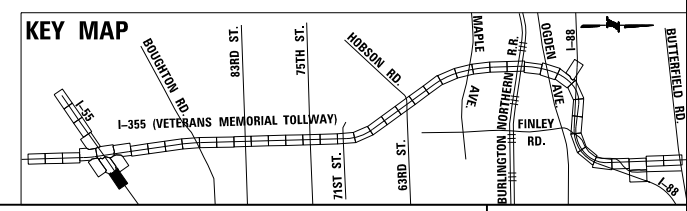
- NOTES:**
1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
  2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.

MATCH LINE SEE SHEET LT-49



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 I-355/I-55 RAMPS

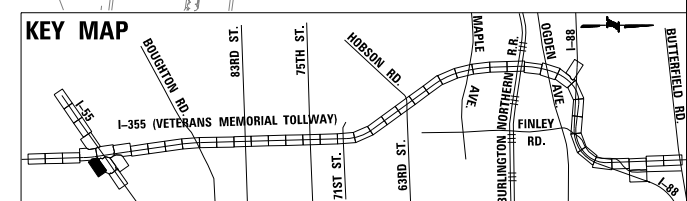
LT-50  
 DRAWING NO.  
 802 OF 1517

**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. REMOVE EXISTING ELECTRIC CABLE FROM CONDUIT AND INSTALL NEW CABLE AS SPECIFIED.

**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC, (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



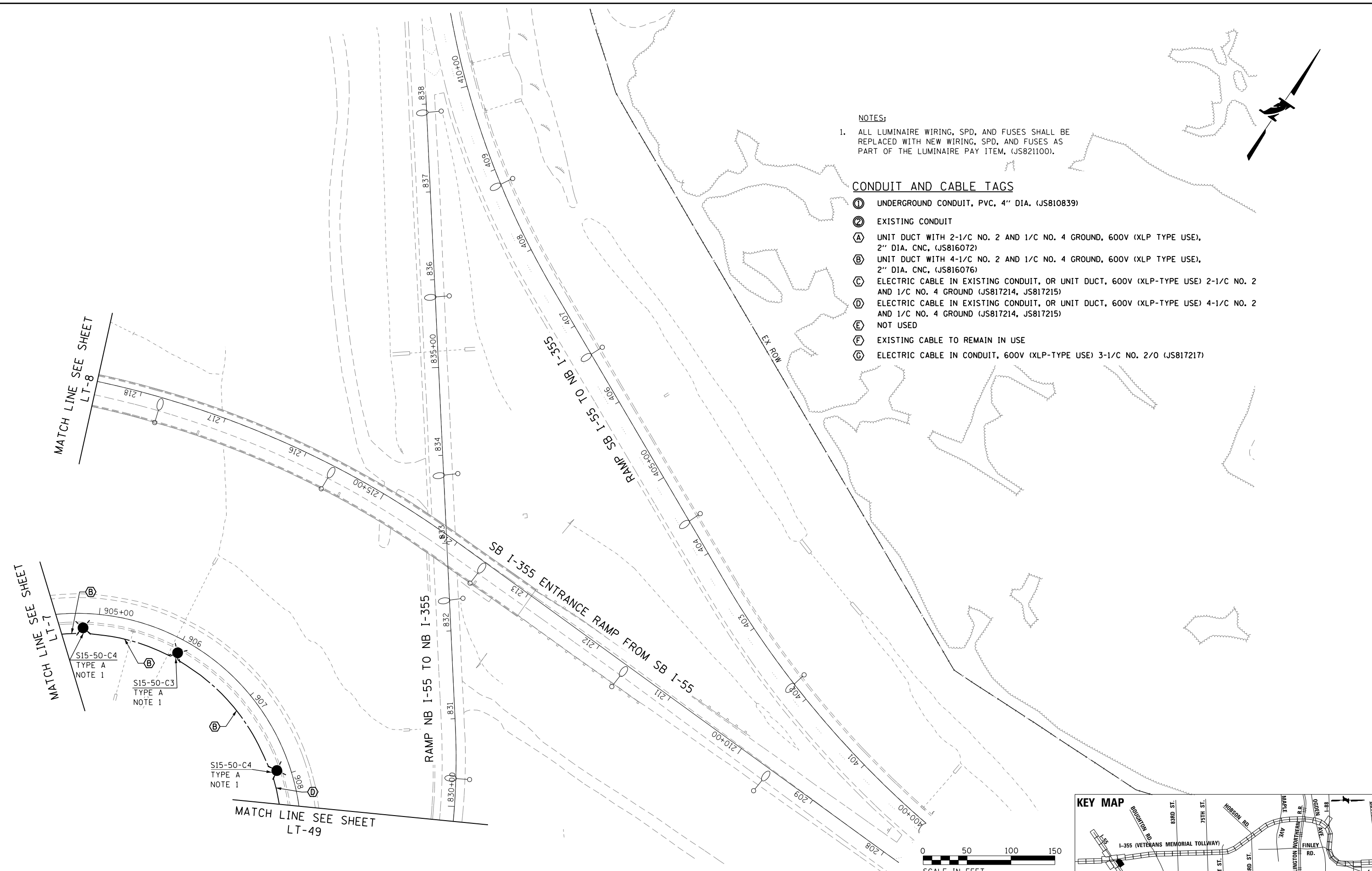
DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018

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 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 I-355/I-55 RAMPS  
 LT-51  
 DRAWING NO.  
 803 OF 1517

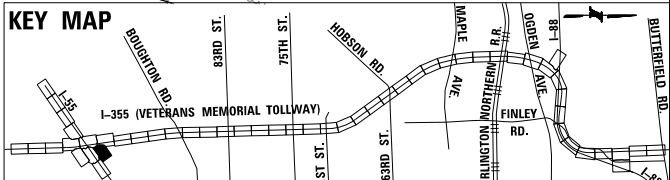


**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).

**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/C NO. 2 AND 1/C NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2/0 (JS817217)



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 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

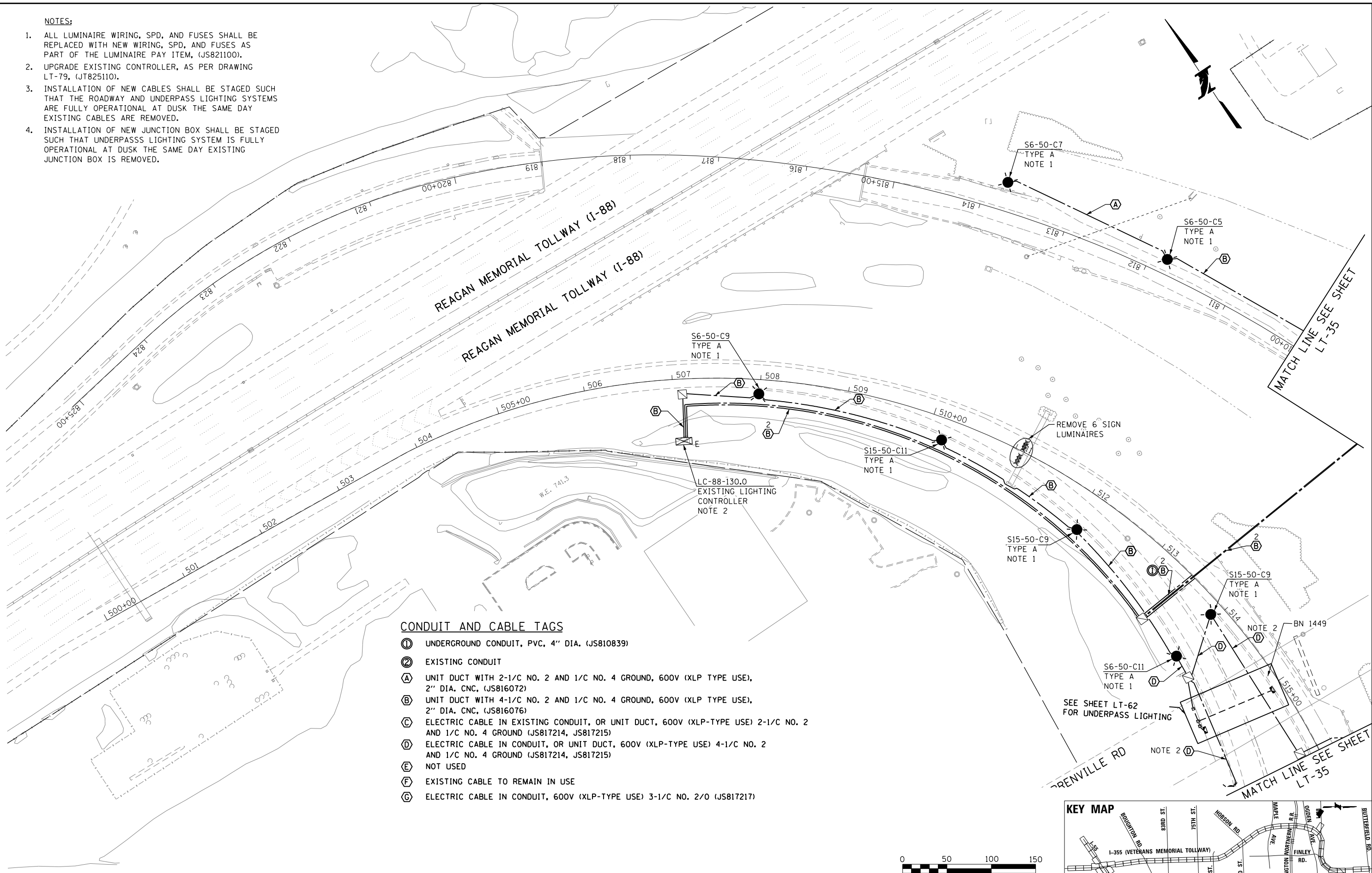
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 LIGHTING PLAN  
 I-355/I-55 RAMPS

LT-52  
 DRAWING NO.  
 804 OF 1517



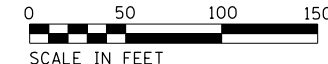
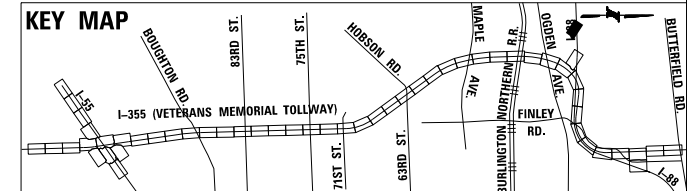
**NOTES:**

1. ALL LUMINAIRE WIRING, SPD, AND FUSES SHALL BE REPLACED WITH NEW WIRING, SPD, AND FUSES AS PART OF THE LUMINAIRE PAY ITEM, (JS821100).
2. UPGRADE EXISTING CONTROLLER, AS PER DRAWING LT-79, (JT825110).
3. INSTALLATION OF NEW CABLES SHALL BE STAGED SUCH THAT THE ROADWAY AND UNDERPASS LIGHTING SYSTEMS ARE FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING CABLES ARE REMOVED.
4. INSTALLATION OF NEW JUNCTION BOX SHALL BE STAGED SUCH THAT UNDERPASS LIGHTING SYSTEM IS FULLY OPERATIONAL AT DUSK THE SAME DAY EXISTING JUNCTION BOX IS REMOVED.



**CONDUIT AND CABLE TAGS**

- ① UNDERGROUND CONDUIT, PVC, 4" DIA. (JS810839)
- ② EXISTING CONDUIT
- Ⓐ UNIT DUCT WITH 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816072)
- Ⓑ UNIT DUCT WITH 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND, 600V (XLP TYPE USE), 2" DIA. CNC. (JS816076)
- Ⓒ ELECTRIC CABLE IN EXISTING CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 2-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓓ ELECTRIC CABLE IN CONDUIT, OR UNIT DUCT, 600V (XLP-TYPE USE) 4-1/2 NO. 2 AND 1/2 NO. 4 GROUND (JS817214, JS817215)
- Ⓔ NOT USED
- Ⓕ EXISTING CABLE TO REMAIN IN USE
- Ⓖ ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/2 NO. 2/0 (JS817217)



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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
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THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 LIGHTING PLAN  
 I-355/I-55 RAMPS

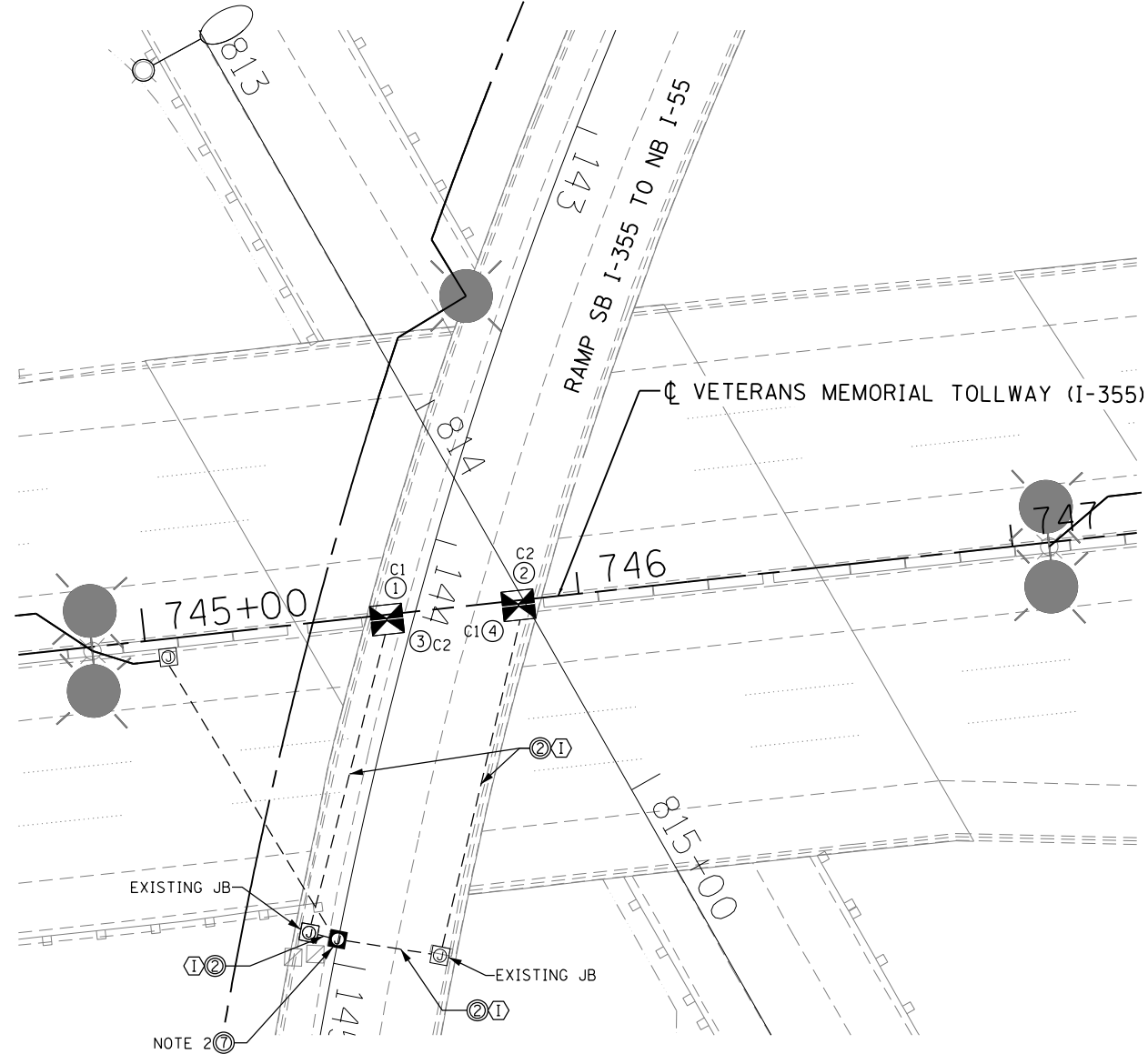
LT-53  
 DRAWING NO.  
 805 OF 1517

**CONDUIT AND CABLE TAGS**

- ② EXISTING CONDUIT
- ③ CONDUIT ATTACHED TO STRUCTURE. 1" DIA. PVC COATED GALVANIZED STEEL (JS811032)
- ⑤ JUNCTION BOX. STAINLESS STEEL. ATTACHED TO STRUCTURE. 6" X 6" X 4" (JS813022)
- ⑥ JUNCTION BOX. STAINLESS STEEL. ATTACHED TO STRUCTURE. 12" X 10" X 6" (JS813053)
- ⑦ JUNCTION BOX. STAINLESS STEEL. ATTACHED TO STRUCTURE. 18" X 18" X 8" (JS813083)
- ⑧ ELECTRIC CABLE IN CONDUIT. 600V (XLP-TYPE USE) 2-1/C NO. 10 AND 1/C NO. 10 GROUND (JS817211)
- ⑨ ELECTRIC CABLE IN CONDUIT. 600V (XLP-TYPE USE) 4-1/C NO. 10 AND 1/C NO. 10 GROUND (JS817211)

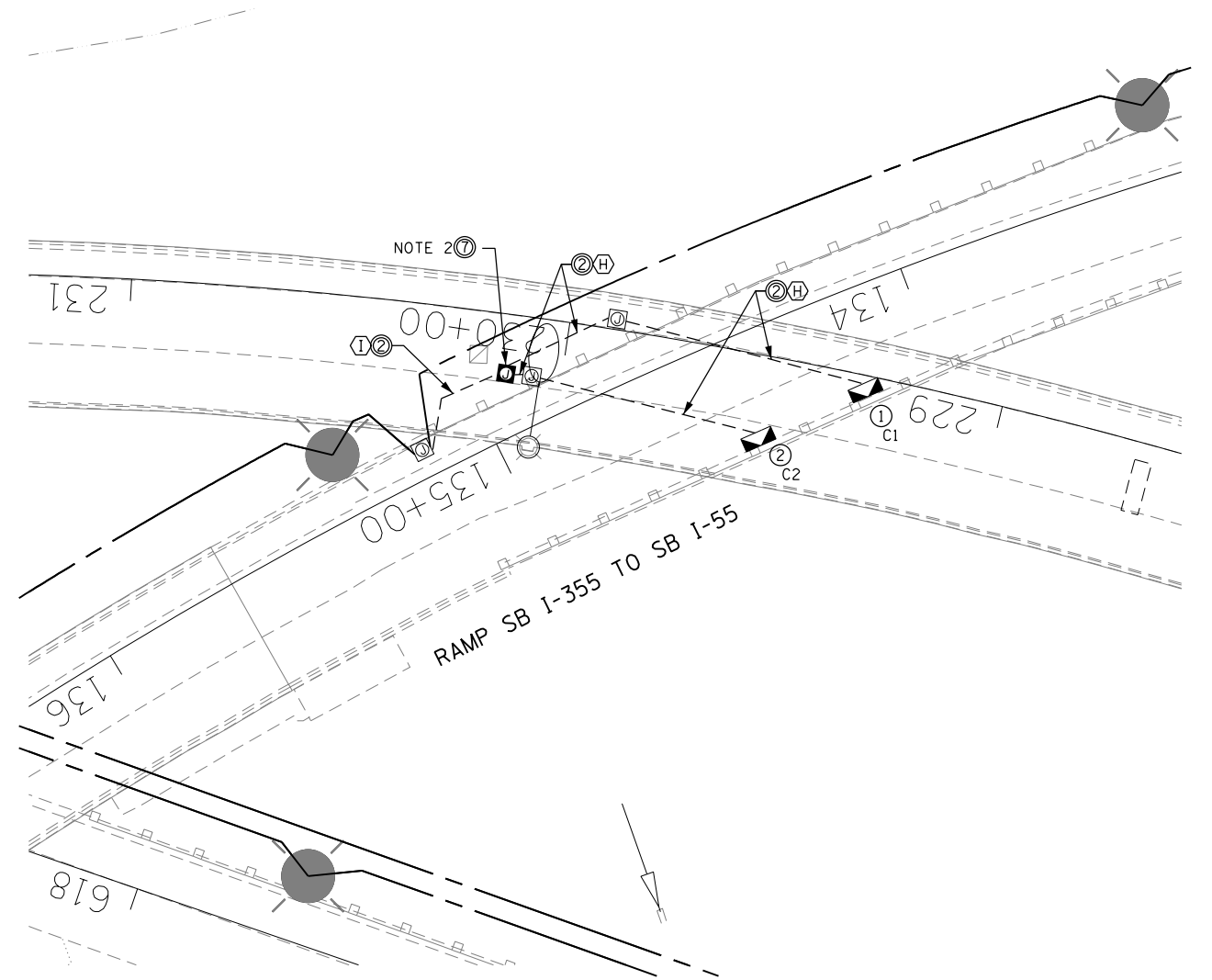
**NOTES:**

1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS, PER DETAIL SHEET EL-68 (JS813083).



**RAMP SB I-355  
TO NB I-55  
BRIDGE# 1479**

#	STATION	WALL M.	MOUNTING HEIGHT
1	745+56	W. MED.	16'
2	745+86	W. MED.	16'
3	745+56	E. MED.	16'
4	745+86	E. MED.	16'



**RAMP SB I-355  
TO SB I-55  
BRIDGE# 1479**

#	STATION	WALL M.	MOUNTING HEIGHT
1	134+18	SUSPENDED	16'
2	134+45	SUSPENDED	16'



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DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

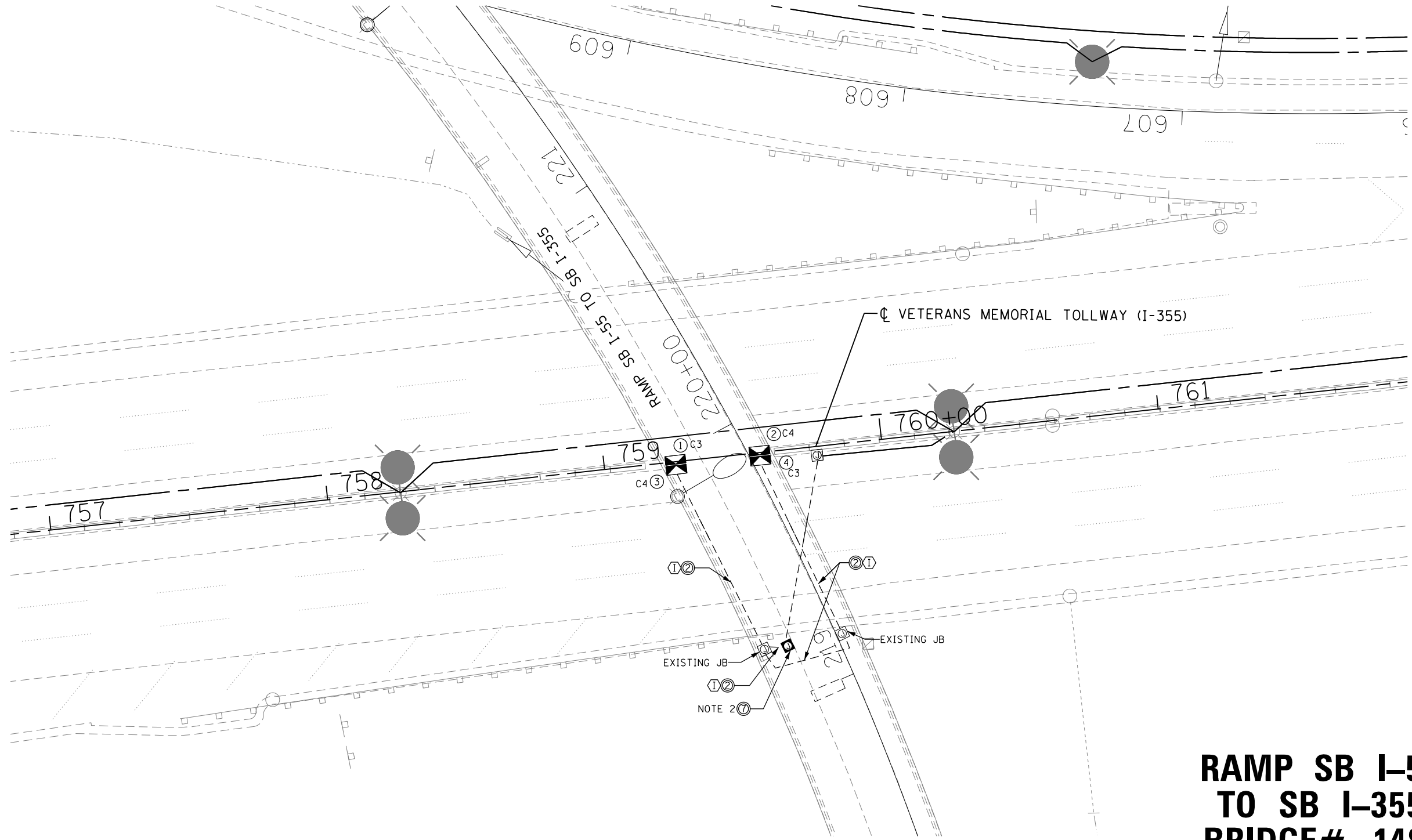
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NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255  
UNDERPASS LIGHTING PLAN  
I-355 FLY OVER

LT-54  
DRAWING NO.  
806 OF 1517

**NOTES:**

1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
3. SEE E-54 CONDUIT AND CABLE TAGS



## RAMP SB I-55 TO SB I-355 BRIDGE# 1481

#	STATION	WALL M.	MOUNTING HEIGHT
1	759+26	W. MED.	16'
2	759+56	E. MED.	16'
3	759+26	W. MED.	16'
4	759+56	E. MED.	16'



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 CHECKED BY PV    DATE 03/06/2018

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 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

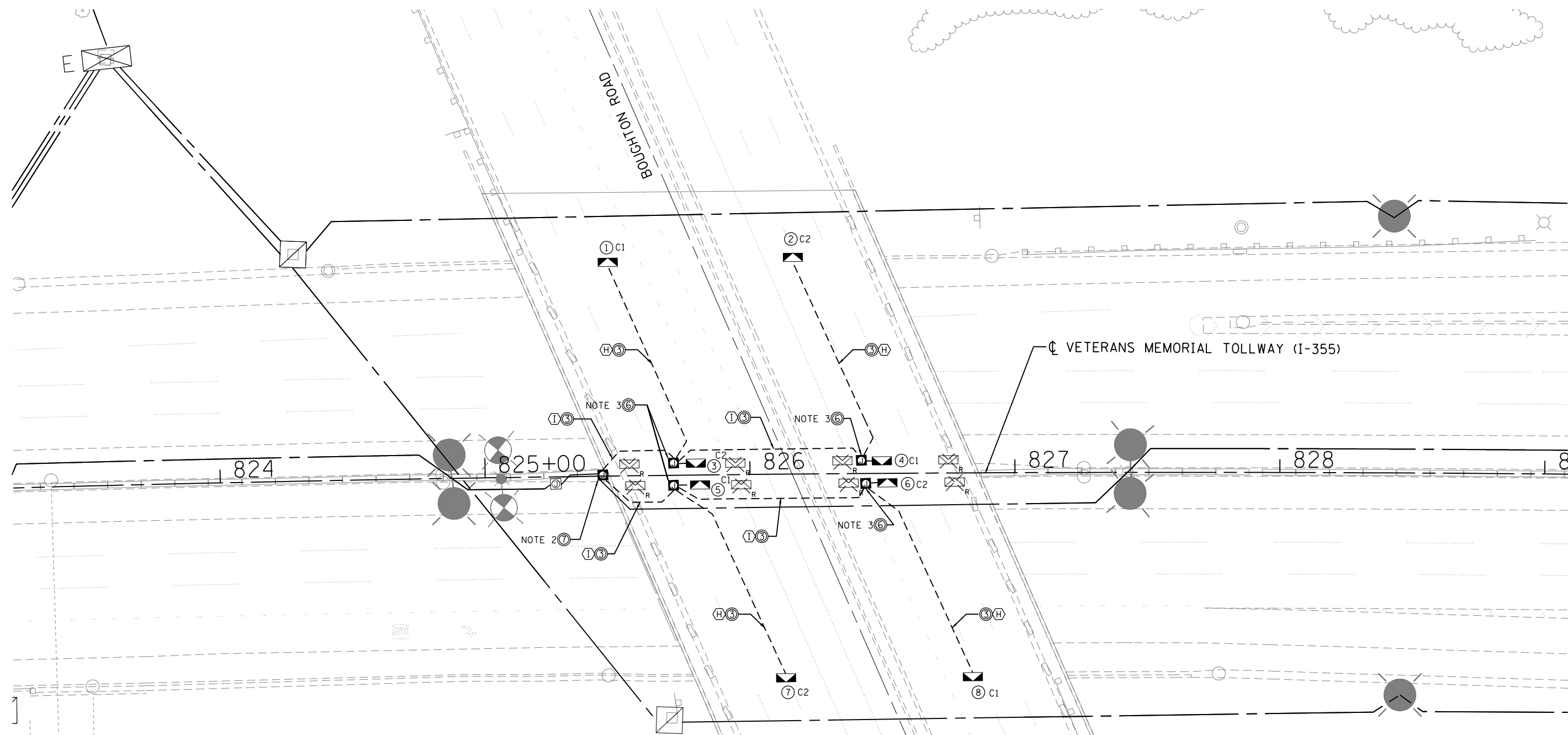
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
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 DOWNERS GROVE,  
 ILLINOIS 60515

NO.		REVISIONS	
NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 I-355 FLY OVER

LT-55  
 DRAWING NO.  
 807 OF 1517

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- NOTES:**
1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
  2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
  3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
  4. SEE EL-54 FOR CONDUIT AND CABLE TAGS.

## BOUGHTON ROAD BRIDGE# 1473

#	STATION	WALL M.	MOUNTING HEIGHT
1	825+48	W. ABUT.	16'
2	826+18	W. ABUT.	16'
3	825+80	W. MED.	16'
4	826+50	W. MED.	16'
5	825+81	E. MED.	16'
6	826+52	E. MED.	16'
7	826+13	E. ABUT.	16'
8	826+83	E. ABUT.	16'



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 CHECKED BY PV DATE 03/06/2018

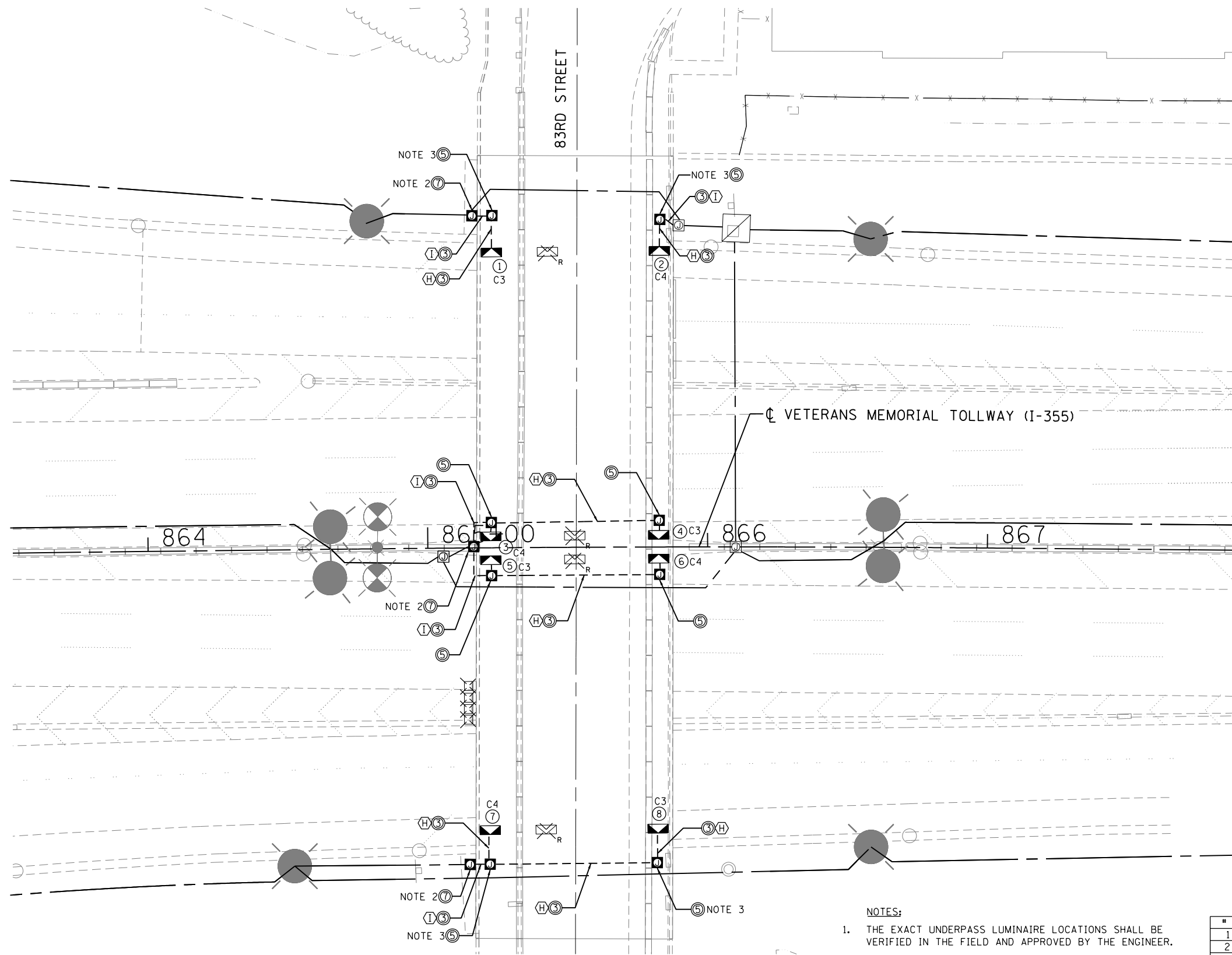
**GO** GANDHI AND ASSOCIATES, INC.  
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 DOWNERS GROVE,  
 ILLINOIS 60515

NO.		REVISIONS	
NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 BOUGHTON RD

LT-56  
 DRAWING NO.  
 808 OF 1517



# 83RD STREET BRIDGE# 1471

- NOTES:**
1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
  2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS, PER DETAIL SHEET EL-68 (JS813083).
  3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
  4. SEE EL-56 FOR CONDUIT AND CABLE TAGS.

#	STATION	WALL M.	MOUNTING HEIGHT
1	865+24	W. ABUT.	16'
2	865+84	W. ABUT.	16'
3	865+23	W. MED.	16'
4	865+83	W. MED.	16'
5	865+23	E. MED.	16'
6	865+83	E. MED.	16'
7	865+21	E. ABUT.	16'
8	865+81	E. ABUT.	16'



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 SUITE 306  
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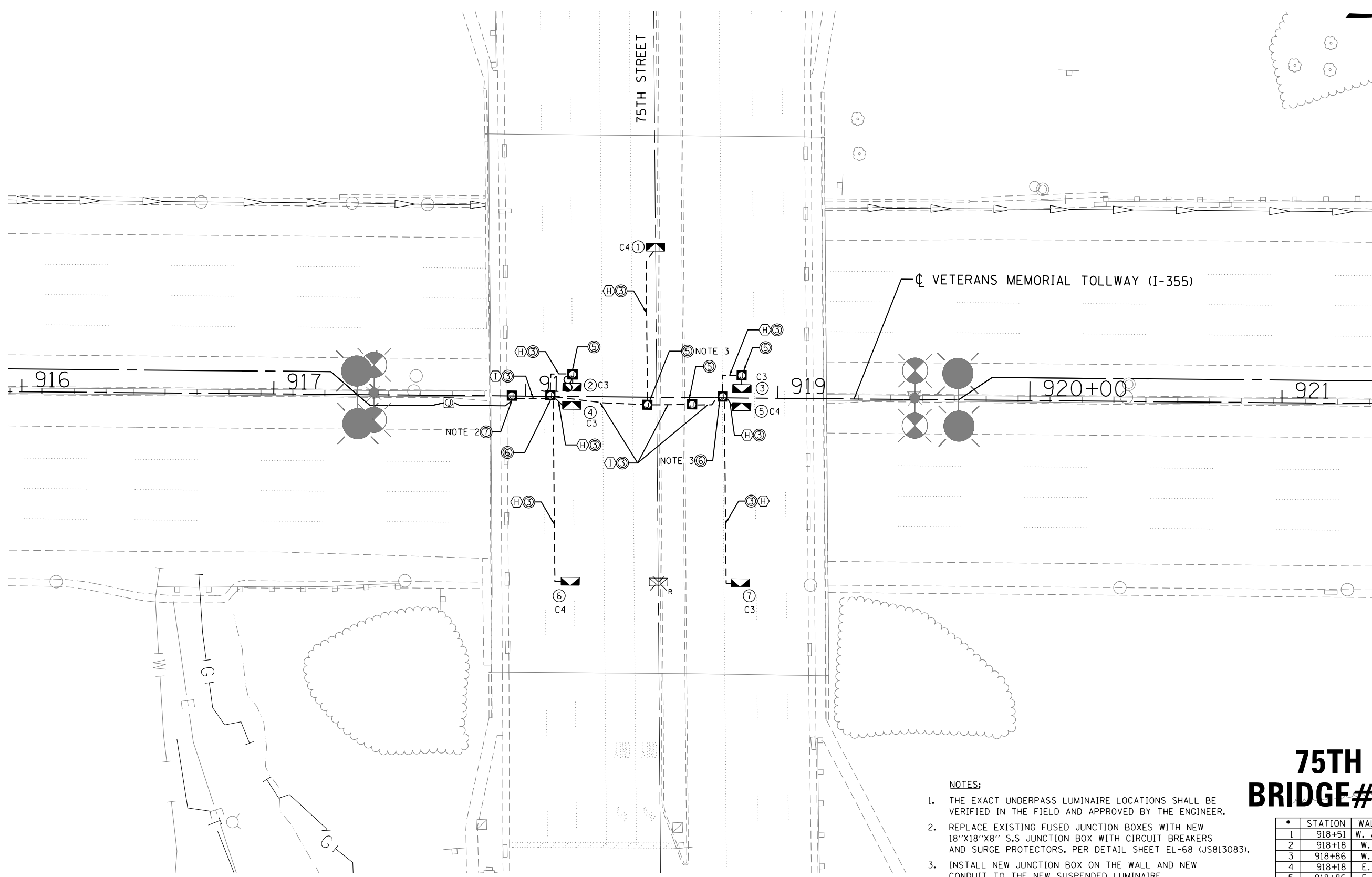
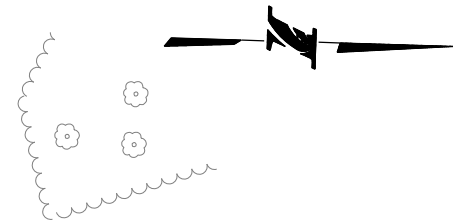
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.	DATE	REVISIONS	
		DESCRIPTION	

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 83RD ST

LT-57  
 DRAWING NO.  
 809 OF 1517

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**NOTES:**

1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
4. SEE EL-54 FOR CONDUIT AND CABLE TAGS.

## 75TH STREET BRIDGE# 1469/1470

#	STATION	WALL M.	MOUNTING HEIGHT
1	918+51	W. ABUT.	16'
2	918+18	W. MED.	16'
3	918+86	W. MED.	16'
4	918+18	E. MED.	16'
5	918+86	E. MED.	16'
6	918+18	E. ABUT.	16'
7	918+86	E. ABUT.	16'



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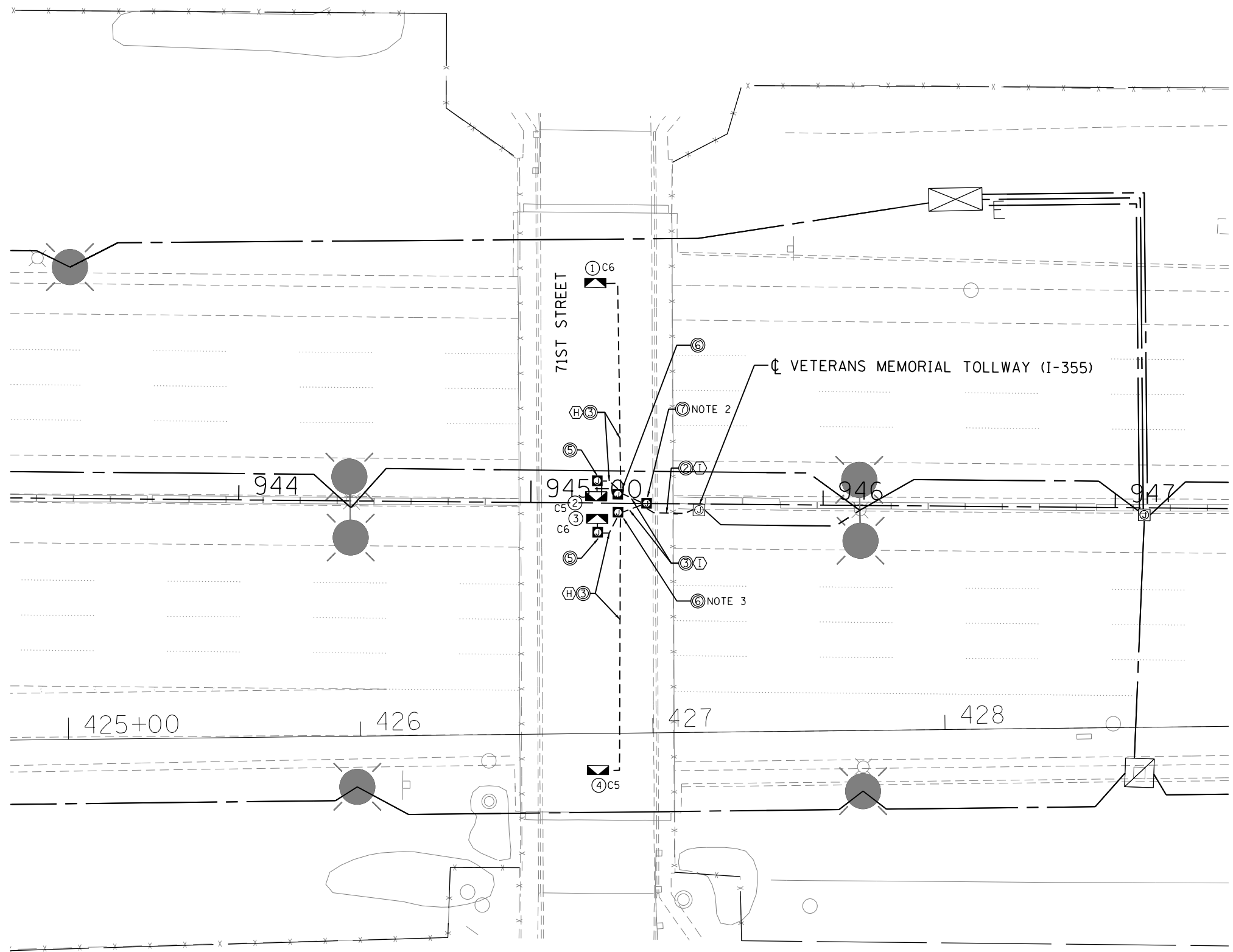
**GA** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.		DATE	REVISIONS DESCRIPTION

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 75TH ST

LT-58  
 DRAWING NO.  
 810 OF 1517



- NOTES:**
1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
  2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS, PER DETAIL SHEET EL-68 (JS813083).
  3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
  4. SEE EL-54 FOR CONDUIT AND CABLE TAGS.

## 71ST STREET BRIDGE# 1467

#	STATION	WALL M.	MOUNTING HEIGHT
1	945+21	W. ABUT.	16'
2	945+22	W. MED.	16'
3	945+23	W. MED.	16'
4	945+24	E. ABUT.	16'



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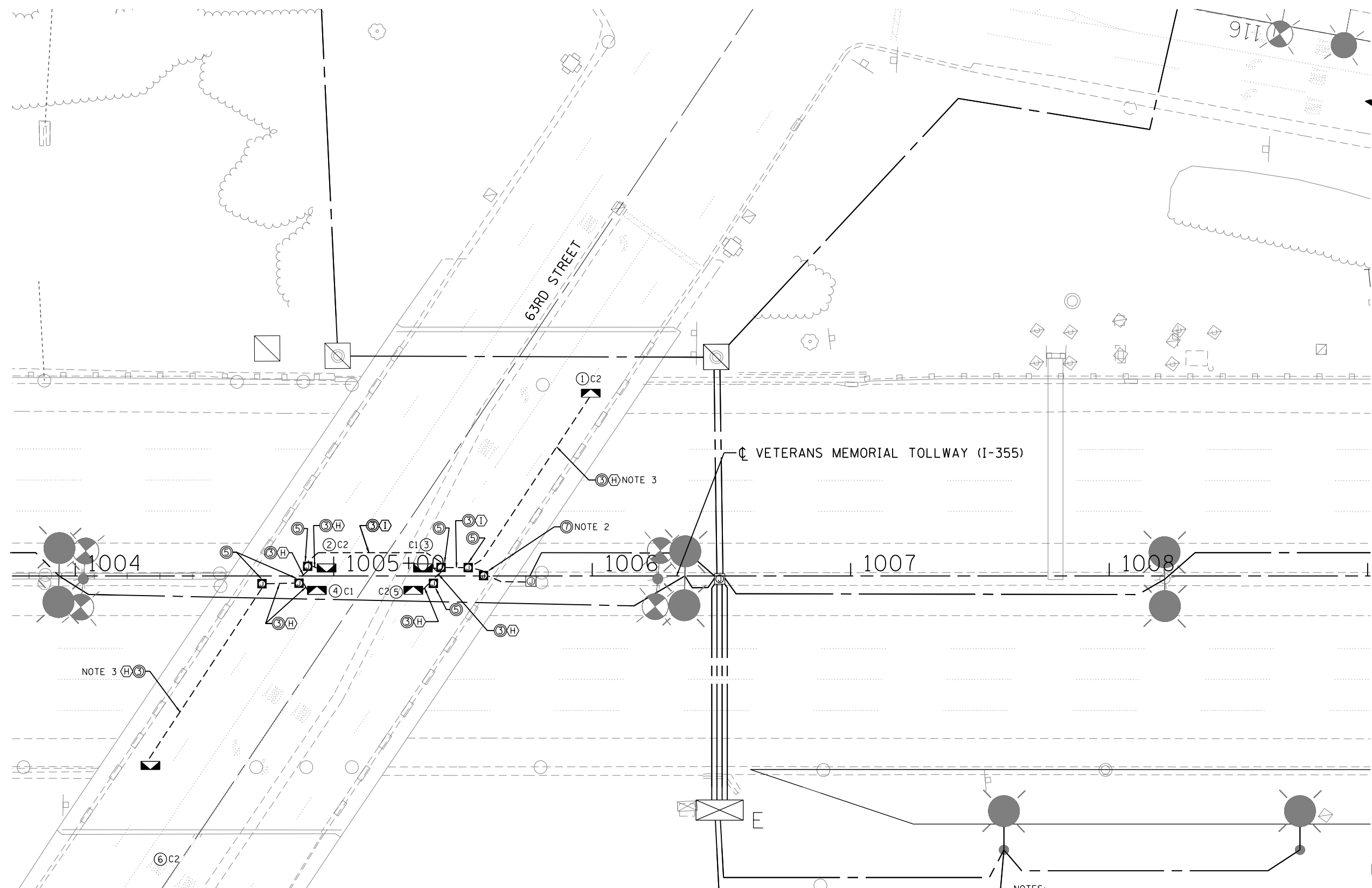
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 71ST ST

LT-59  
 DRAWING NO.  
 811 OF 1517

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# 63RD STREET BRIDGE# 1465

- NOTES:**
1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
  2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
  3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
  4. SEE EL-54 FOR CONDUIT AND CABLE TAGS.

#	STATION	WALL M.	MOUNTING HEIGHT
1	1005+99	W. ABUT.	16'
2	1004+97	W. MED.	16'
3	1005+34	W. MED.	16'
4	1004+94	E. MED.	16'
5	1005+31	E. MED.	16'
6	1004+29	E. ABUT.	16'



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 SUITE 306  
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**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

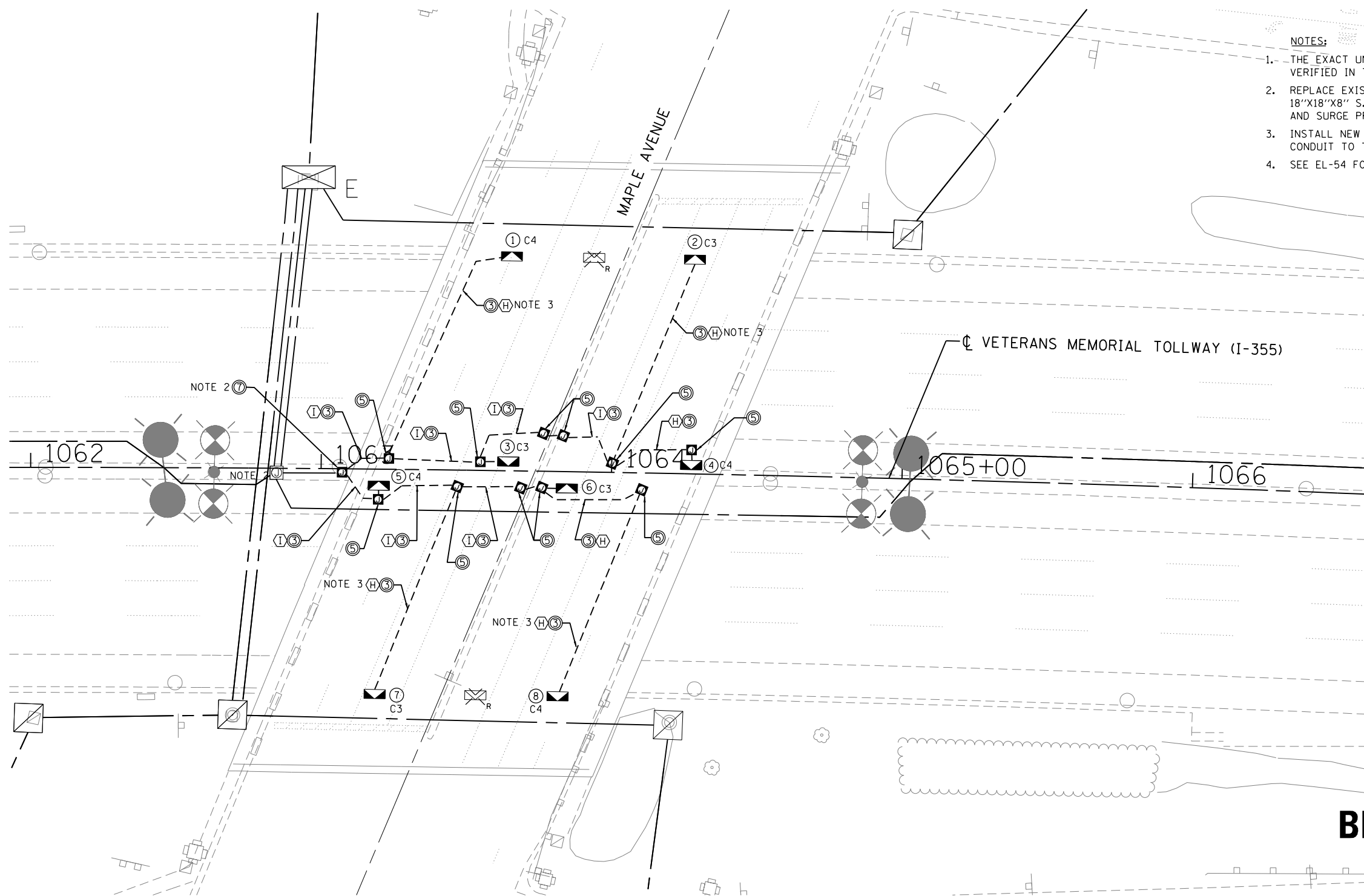
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NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 63RD ST

LT-60  
 DRAWING NO.  
 812 OF 1517

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- NOTES:**
1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
  2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
  3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
  4. SEE EL-54 FOR CONDUIT AND CABLE TAGS.

## MAPLE AVENUE BRIDGE# 1461/462

#	STATION	WALL M.	MOUNTING HEIGHT
1	1063+65	W. ABUT.	16'
2	1064+27	W. ABUT.	16'
3	1063+64	W. MED.	16'
4	1064+27	W. MED.	16'
5	1063+20	E. MED.	16'
6	1063+83	E. MED.	16'
7	1063+19	E. ABUT.	16'
8	1063+82	E. ABUT.	16'



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 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
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**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.		REVISIONS	
NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 MAPLE AVE

LT-61  
 DRAWING NO.  
 813 OF 1517

# RAMP I-88 EB TO I-355 SB BRIDGE# 1447

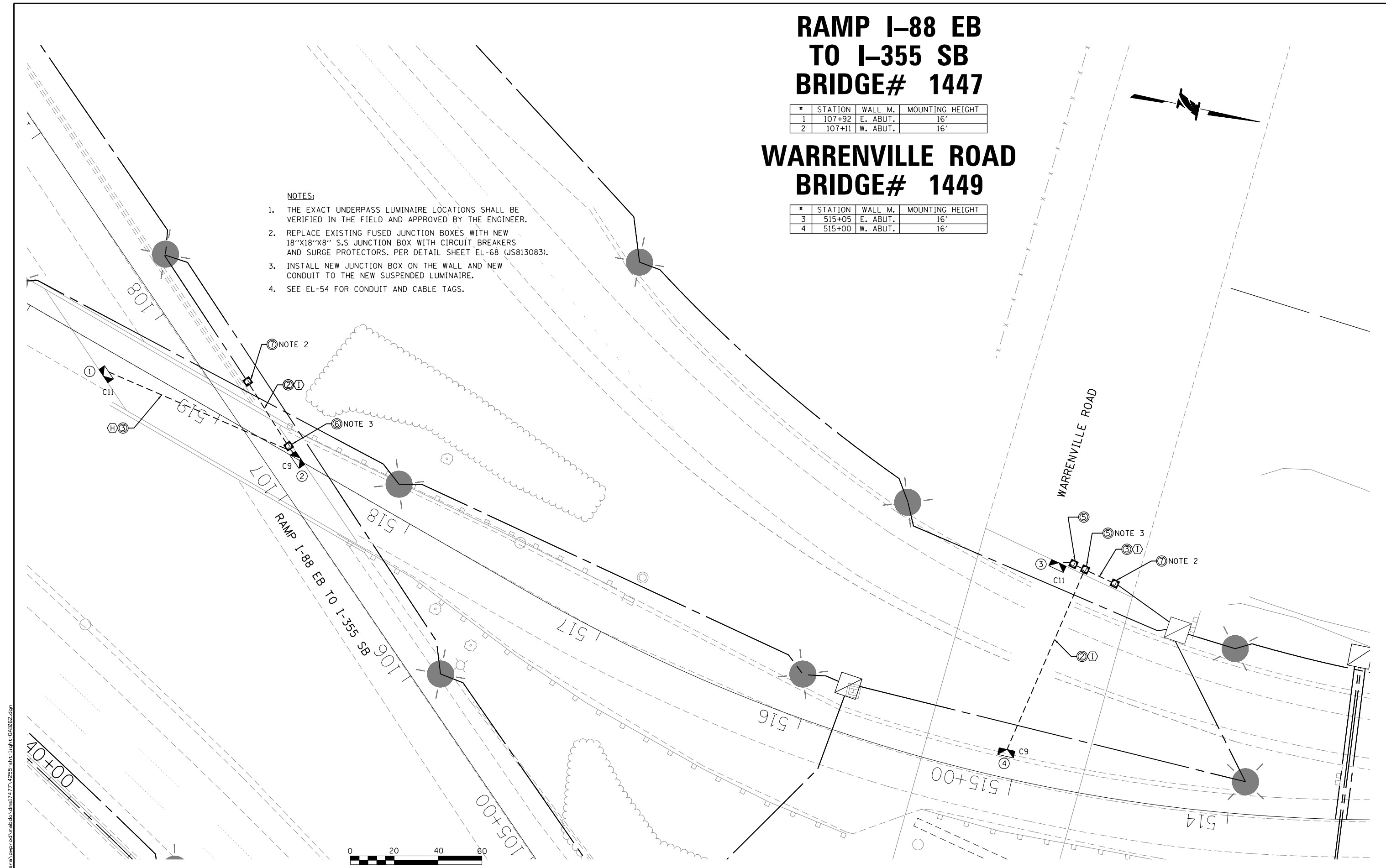
#	STATION	WALL M.	MOUNTING HEIGHT
1	107+92	E. ABUT.	16'
2	107+11	W. ABUT.	16'

# WARRENVILLE ROAD BRIDGE# 1449

#	STATION	WALL M.	MOUNTING HEIGHT
3	515+05	E. ABUT.	16'
4	515+00	W. ABUT.	16'

**NOTES:**

1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
4. SEE EL-54 FOR CONDUIT AND CABLE TAGS.



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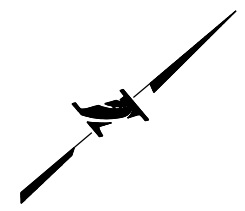
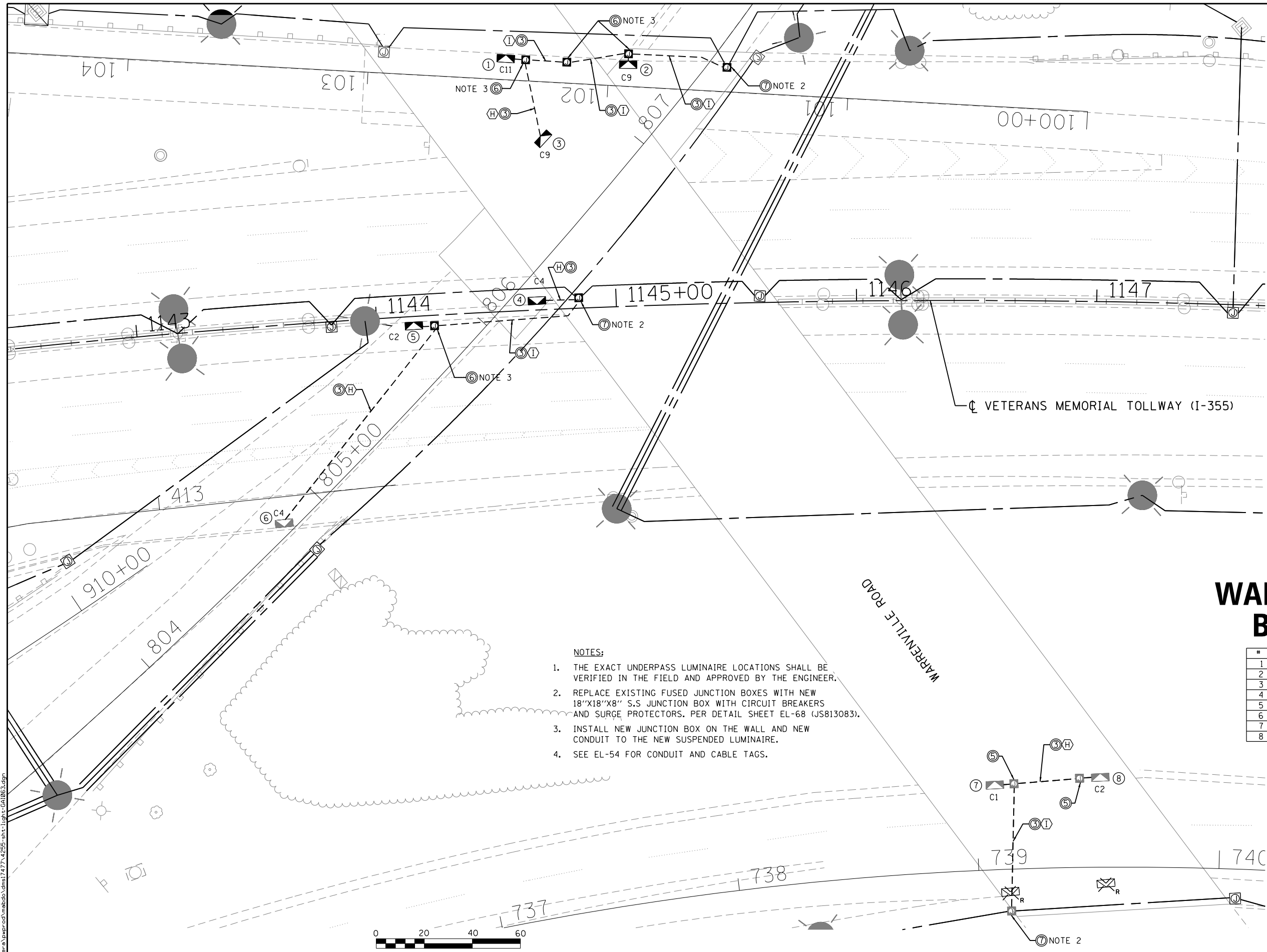
**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
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**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
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 DOWNERS GROVE,  
 ILLINOIS 60515

NO.	DATE	REVISIONS	
		DESCRIPTION	

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 WARRENVILLE RD

LT-62  
 DRAWING NO.  
 814 OF 1517



- NOTES:**
1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
  2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
  3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
  4. SEE EL-54 FOR CONDUIT AND CABLE TAGS.

## WARRENVILLE ROAD BRIDGE# 1449

#	STATION	WALL M.	MOUNTING HEIGHT
1	102+43	W. ABUT.	16'
2	101+92	W. ABUT.	16'
3	806+74	W. ABUT.	16'
4	1144+67	E. MED.	16'
5	1144+15	W. MED.	16'
6	413+51	E. ABUT.	16'
7	739+08	W. ABUT.	16'
8	739+52	W. ABUT.	16'



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 ILLINOIS 60515

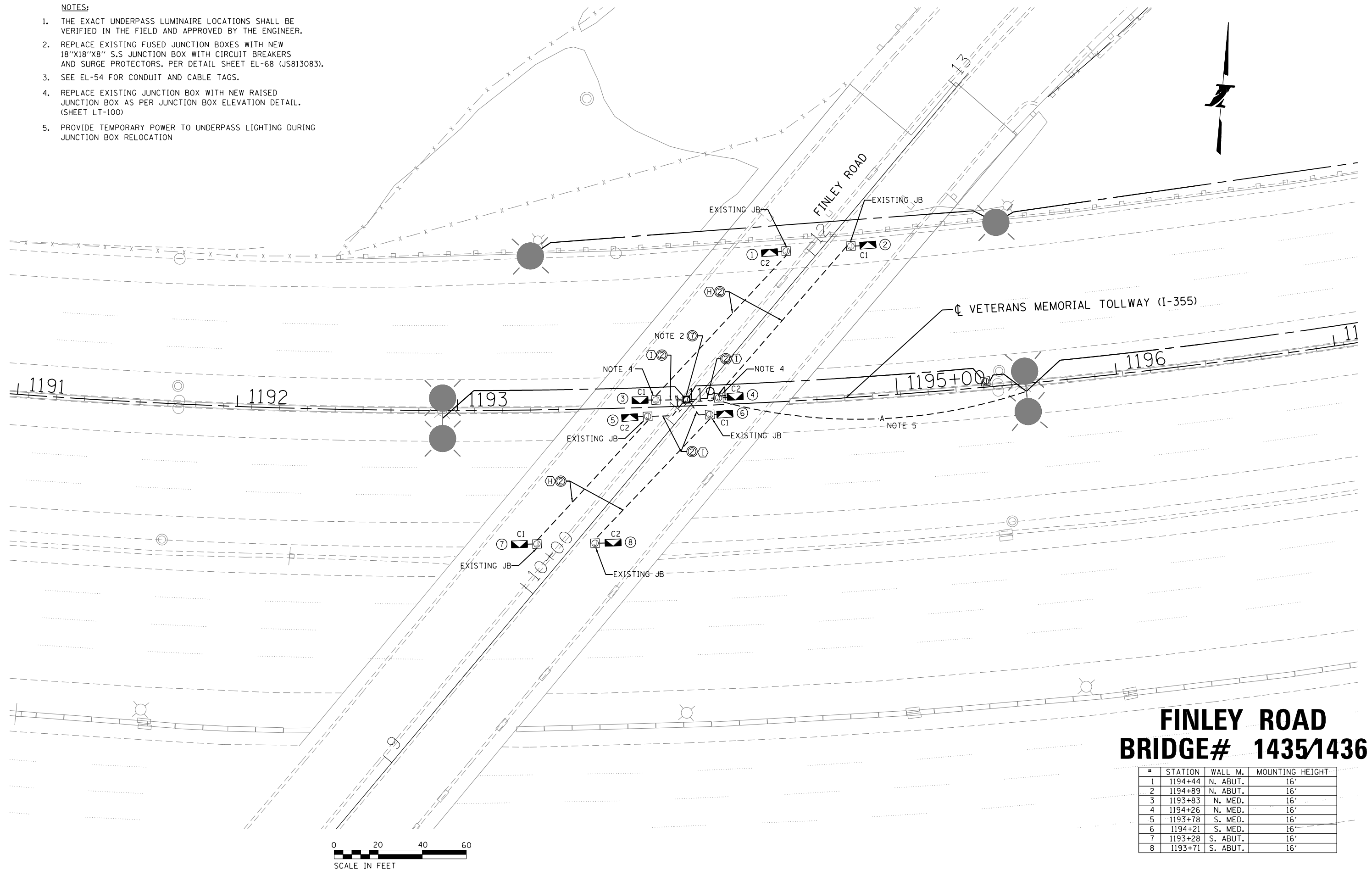
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NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 WARRENVILLE RD

LT-63  
 DRAWING NO.  
 815 OF 1517

**NOTES:**

1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS, PER DETAIL SHEET EL-68 (JS813083).
3. SEE EL-54 FOR CONDUIT AND CABLE TAGS.
4. REPLACE EXISTING JUNCTION BOX WITH NEW RAISED JUNCTION BOX AS PER JUNCTION BOX ELEVATION DETAIL. (SHEET LT-100)
5. PROVIDE TEMPORARY POWER TO UNDERPASS LIGHTING DURING JUNCTION BOX RELOCATION



## FINLEY ROAD BRIDGE# 1435/1436

NO.	STATION	WALL M.	MOUNTING HEIGHT
1	1194+44	N. ABUT.	16'
2	1194+89	N. ABUT.	16'
3	1193+83	N. MED.	16'
4	1194+26	N. MED.	16'
5	1193+78	S. MED.	16'
6	1194+21	S. MED.	16'
7	1193+28	S. ABUT.	16'
8	1193+71	S. ABUT.	16'



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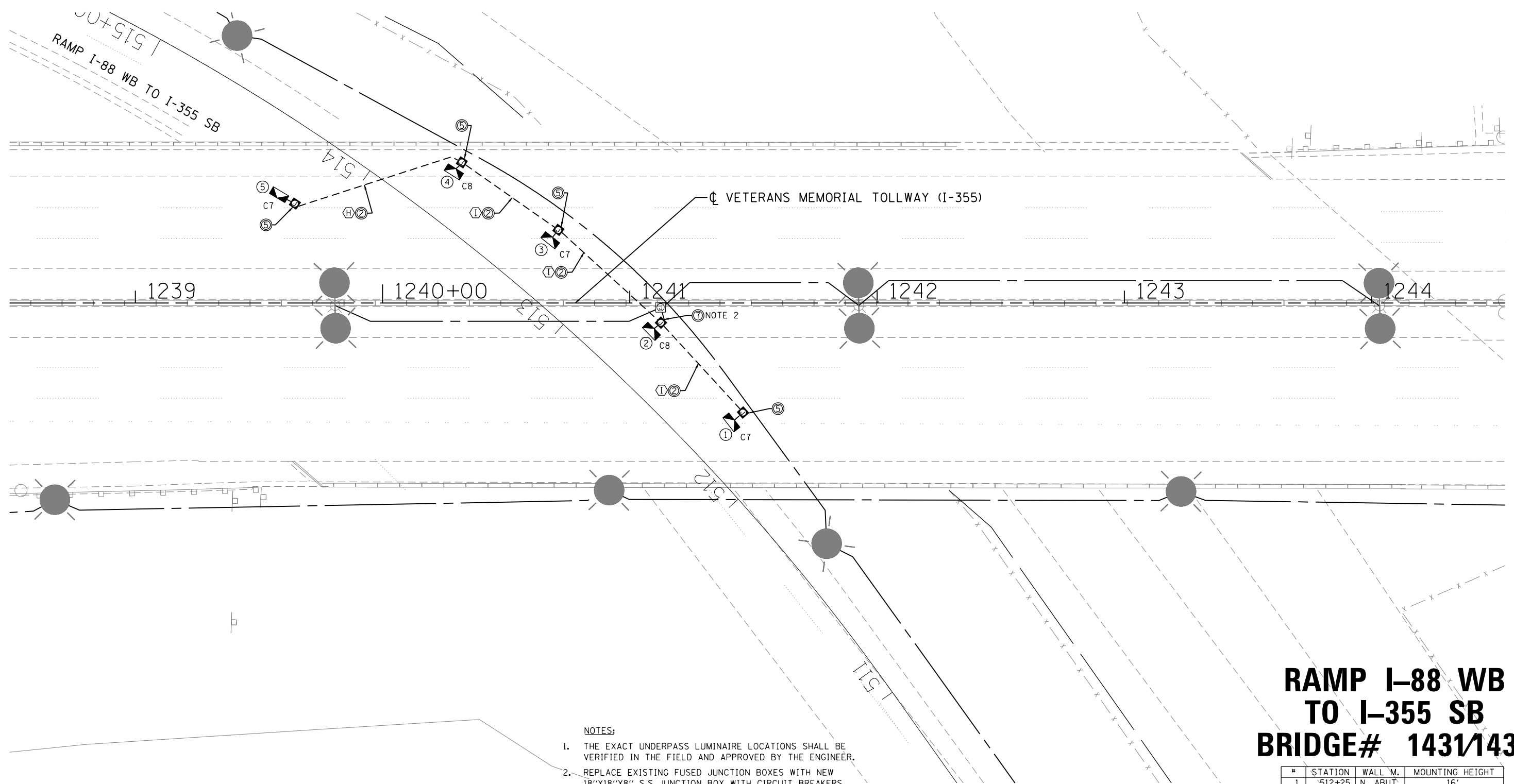
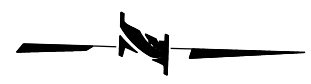
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.	DATE	REVISIONS	
		DESCRIPTION	

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 FINLEY RD

LT-64  
 DRAWING NO.  
 816 OF 1517

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- NOTES:**
1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
  2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
  3. INSTALL NEW JUNCTION BOX ON THE WALL AND NEW CONDUIT TO THE NEW SUSPENDED LUMINAIRE.
  4. SEE EL-54 FOR CONDUIT AND CABLE TAGS.

## RAMP I-88 WB TO I-355 SB BRIDGE# 1431/432

#	STATION	WALL 'M.	MOUNTING HEIGHT
1	512+25	N. ABUT.	16'
2	512+71	N. ABUT.	16'
3	513+27	N. ABUT.	16'
4	513+72	N. ABUT.	16'
5	514+24	S. ABUT.	16'



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 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.		DATE	REVISIONS DESCRIPTION

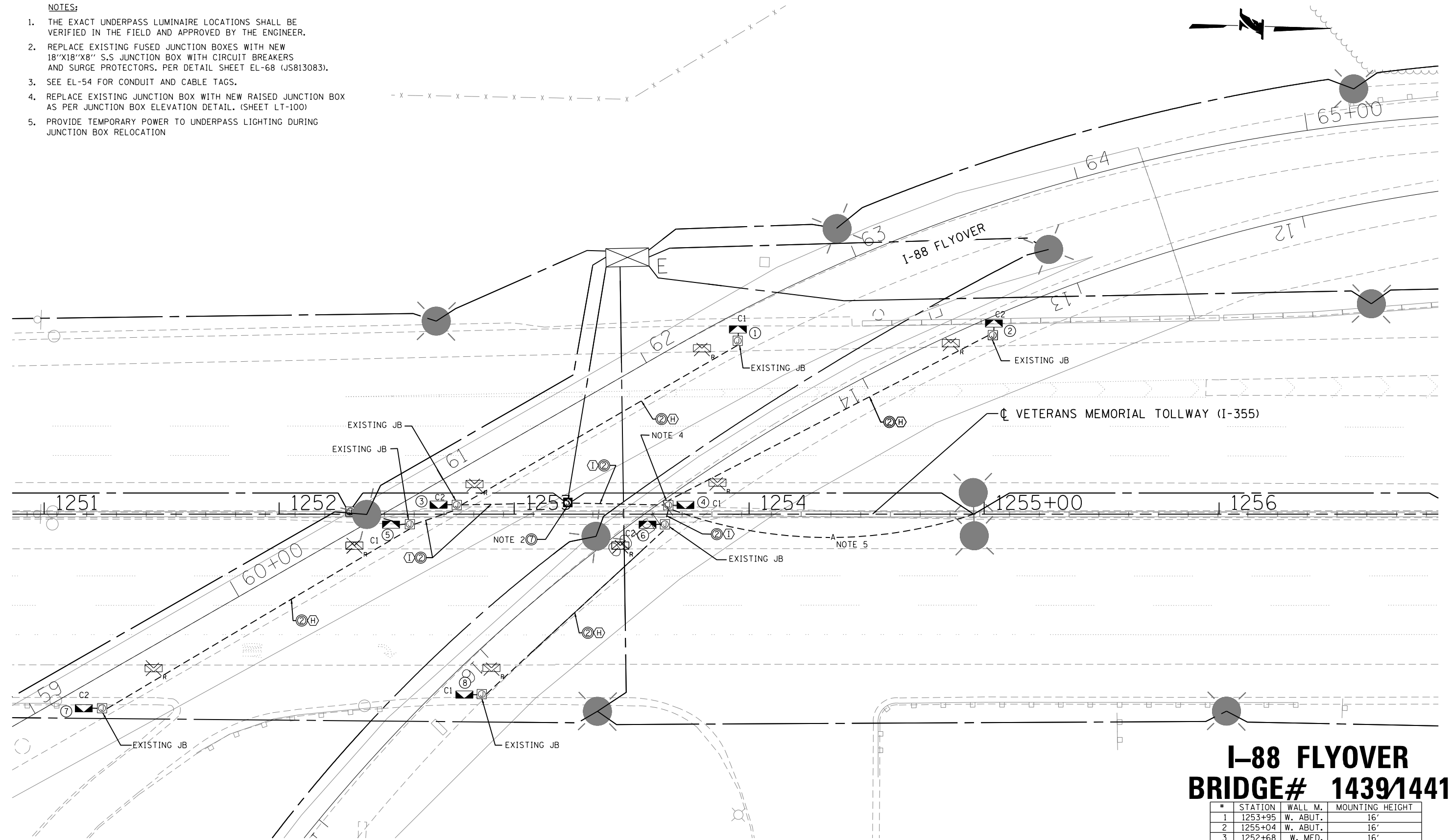
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 UNDERPASS LIGHTING PLAN  
 RAMP I-88 WB TO I-355 SB

LT-65  
 DRAWING NO.  
 817 OF 1517

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**NOTES:**

1. THE EXACT UNDERPASS LUMINAIRE LOCATIONS SHALL BE VERIFIED IN THE FIELD AND APPROVED BY THE ENGINEER.
2. REPLACE EXISTING FUSED JUNCTION BOXES WITH NEW 18"X18"X8" S.S JUNCTION BOX WITH CIRCUIT BREAKERS AND SURGE PROTECTORS. PER DETAIL SHEET EL-68 (JS813083).
3. SEE EL-54 FOR CONDUIT AND CABLE TAGS.
4. REPLACE EXISTING JUNCTION BOX WITH NEW RAISED JUNCTION BOX AS PER JUNCTION BOX ELEVATION DETAIL. (SHEET LT-100)
5. PROVIDE TEMPORARY POWER TO UNDERPASS LIGHTING DURING JUNCTION BOX RELOCATION



## I-88 FLYOVER BRIDGE# 1439/1441

#	STATION	WALL M.	MOUNTING HEIGHT
1	1253+95	W. ABUT.	16'
2	1255+04	W. ABUT.	16'
3	1252+68	W. MED.	16'
4	1253+73	W. MED.	16'
5	1252+48	E. MED.	16'
6	1253+58	E. MED.	16'
7	1251+17	E. ABUT.	16'
8	1252+79	E. ABUT.	16'



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**GANDHI AND ASSOCIATES, INC.**  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910



**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.	DATE	REVISIONS	
		DESCRIPTION	

CONTRACT NO. RR-16-4255  
 UNDERPASS LIGHTING PLAN  
 I-88 FLYOVERS

LT-66  
 DRAWING NO.  
 818 OF 1517

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**ELECTRIC GENERAL NOTES**

1. ALL VEHICLES INCLUDING PASSENGER CARS, WHETHER OWNED BY THE CONTRACTOR OR ANYONE REPRESENTING HIM, SHALL BE EQUIPPED WITH A YELLOW FLASHING LIGHT MOUNTED EITHER ON TOP OR IN THE REAR WINDOW OF THE VEHICLE AND VISIBLE FOR AT LEAST 500 FEET TO THE REAR OF THE VEHICLE IN ADDITION, A SIGN MUST BE DISPLAYED ON EACH SIDE OF THE VEHICLE AND WITH LETTERS AT LEAST 3 INCHES IN HEIGHT AND WITH A SUITABLE FONT, SHOWING THE COMPANY NAME AND ADDRESS. MAGNETIC OR TEMPORARY SIGNS ARE ACCEPTABLE.
2. THE CONTRACTOR SHALL NOTIFY THE AGENCIES AND UTILITIES AT LEAST 10 DAYS PRIOR TO ANY CONSTRUCTION IN THE AREA AND SHALL COMPLY WITH ALL RESTRICTIONS FOR EQUIPMENT MOVEMENTS AND CLEARANCES IN REGARDS TO THEIR FACILITIES.
3. MAINTAINING DRAINAGE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN DRAINAGE FLOWS AT ALL TIMES DURING THE PERFORMANCE OF THE WORK. METHODS USED BY THE CONTRACTOR SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
4. FLUORESCENT VESTS AND HARD HATS, ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR FLUORESCENT ORANGE, FLUORESCENT YELLOW/GREEN OR A COMBINATION OF FLUORESCENT ORANGE AND FLUORESCENT YELLOW/GREEN VESTS AND HARD HATS AT ALL TIMES WHILE ON THE CONSTRUCTION SITE.
5. THE STANDARD DRAWINGS LISTED IN THE PLANS INDEX ARE INTENDED TO BE THE LATEST REVISIONS AND SHALL TAKE PRECEDENCE OVER EARLIER REVISIONS THAT MAY BE REFERRED TO ELSEWHERE IN THE PLANS OR SPECIAL PROVISIONS.
6. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS,
7. THE CONTRACTOR WILL NOT BE ALLOWED TO SETUP AN OFFICE OR YARD ON THE TOLLWAY PROPERTY WITHOUT WRITTEN APPROVAL FROM THE CHIEF ENGINEER OF THE TOLLWAY.
8. NIGHT OPERATIONS: WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE UTMOST PRECAUTION IN PREVENTING ADVERSE VISIBILITY TO MOTORING PUBLIC. AS WELL AS THE ADJOINING RESIDENTIAL AREAS.
9. WHERE SECTION, SUB-SECTION MONUMENTS OR BENCH MARKS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY NAILS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
10. DURING CROSSROAD CONSTRUCTION OPERATIONS: THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ADJACENT TRAFFIC LANES OPEN TO TRAFFIC FROM DEBRIS BEING BLOWN OR OTHERWISE REMOVED FROM THE CONSTRUCTION AREAS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR KEEPING DEBRIS OFF THE ADJACENT TRAVELED LANE SURFACE. STREET SWEEPING, AS SPECIFIED BY THE ENGINEER, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
11. POLLUTION CONTROL: THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION. HE WILL NOT BE ALLOWED TO BUILD FIRES ON THE SITE.
12. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS CONSTRICTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORK DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
13. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWER OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
14. ALL FRAMES AND GRATES, SIGNS, FENCES AND DELINEATORS DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT THEIR EXPENSE.
15. THE CONTRACTORS OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO THE WORK AREA AND/OR CONSTRUCTION LIMITS. ANY ADDITIONAL STAGING AREAS ADJACENT TO THE PROJECT ARE SUBJECT TO PRIOR APPROVAL BY THE APPROPRIATE AGENCY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THE ABOVE REQUIREMENTS.
16. ALL EXISTING REINFORCEMENT MUST BE IDENTIFIED PRIOR TO INSTALLATION OF ELECTRICAL CONDUITS. DRILLING THROUGH EXISTING REINFORCEMENT IS NOT ALLOWED.
17. STEEL MAST ARM ASSEMBLY SHALL BE ADDED TO EACH POLE.
18. MAST ARMS SHALL BE INSPECTED DURING LED REPLACEMENT. A QUANTITY OF 12 MAST ARM REPLACEMENTS HAS BEEN INCLUDED FOR USE AT THE ENGINEER'S DISCRETION.
19. DAMAGED MAST ARMS SHALL BE REPLACED. INCLUDE ALLOWANCE FOR 5% OF MONOTUBE ARMS TO BE REPLACED WITH 6-FOOT TRUSS ARMS.
20. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE TOLLWAY ELECTRICIAN AT LEAST 10 DAYS IN ADVANCE OF ANY CONSTRUCTION NEAR TOLLWAY OWNED ELECTRICAL COMUNICATIONS OR TRAFFIC CONTROL CABLES. TOLLWAY ELECTRICIANS WILL LOCATE ANY POSSIBLE INTERFERING CABLES, ANY BURIED CABLE AT OR NEAR A PROPOSED CONSTRUCTION LOCATION SHALL FIRST BE EXPOSED BY THE CONTRACTOR BY HAND DIGGING. ONCE EXPOSED AND IF THE ENGINEER DETERMINES THERE IS A CONFLICT, THE TOLLWAY ELECTRICIANS SHALL RELOCATE THE CABLES. IF THE CONTRACTOR CUTS OR DAMAGES ANY CABLES, EITHER THROUGH CARELESSNESS OR FAILURE TO FOLLOW THE ABOVE PROCEDURE, HE SHALL THEN BE HELD RESPONSIBLE FOR REPAIRING OF ALL DAMAGES AT HIS EXPENSE, TO THE SATISFACTION OF THE TOLLWAY. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. TOLLWAY ELECTRICAL AND COMMUNICATION LOCATES SHALL BE REQUESTED BY THE CONTRACTOR.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AND/OR THE OWNER. THIS WORK SHALL BE AT THE CONTRACTORS EXPENSE.
22. COOPERATION WITH UTILITIES. THE CONTRACTOR SHALL IN ACCORDANCE WITH SPECIAL PROVISION 106, COORDINATE ALL WORK INVOLVING EXISTING OR PROPOSED UTILITIES. THE FOLLOWING AGENCIES AND REPRESENTATIVES HAVE BEEN CONTACTED IN REFERENCE TO THIS CONTRACT AND PERTINENT UTILITY INFORMATION HAS BEEN INCORPORATED INTO THESE PLANS. ADDITIONAL INQUIRES AND COMMUNICATIONS MAY BE DIRECTED TO:

THE COMMONWEALTH EDISON CO.  
1040 N. JAMES AVENUE  
BOLINGBROOK IL 60439  
ATTN: MR. MITO GANTCHEV  
(815) 409-0648 CELL  
(630) 985-4042 OFFICE

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY.  
2700 OGDEN AVENUE  
DOWNERS GROVE IL 60515  
ATTN: MR. DANA HAVRANEK  
(630) 241-6800 X3941  
(630) 241-6105 FAX

G4S TECHNOLOGIES (ADESTA)  
1428 SHERMAN ROAD  
ROMEDEVILLE IL 60446  
ATTN: MR. CHRIS ROBERTS  
(815) 405-1358 CELL  
(630) 739-6346 FAX

**TUNNEL-SPECIFIC NOTES:**

1. CONTRACTOR SHALL VERIFY CONDITION OF EXISTING CONDUIT, CABLE, AND JUNCTION BOXES. THOSE WHICH ARE DEFICIENT SHALL BE REPLACED.
2. MOUNTING OF LUMINAIRES SHALL BE PERFORMED BY CONTRACTOR. IT SHOULD NOT BE ASSUMED THAT NEW LUMINAIRES CAN USE EXISTING MOUNTING.
3. REFLECTIVE TILES SHALL BE RESTORED TO PROPER CONDITION AS SPECIFIED IN "RESTORE EXISTING TILES". THIS INCLUDES ANY DAMAGED DURING CONSTRUCTION.
4. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY LUMINAIRES, CABLE, CONDUIT, OR TILES DAMAGED DURING CONSTRUCTION.

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6035 N. NORTHWEST HIGHWAY  
SUITE 306  
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




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ILLINOIS 60515



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. **RR-16-4255**  
ELECTRICAL GENERAL NOTES

LT-67  
DRAWING NO.  
**819 OF 1517**

ABBREVIATIONS	
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
C	CONDUIT
GND	GROUND
GFI	GROUND FAULT INTERRUPTER
JB	JUNCTION BOX
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUG ONLY
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
WP	WEATHERPROOF

SYMBOL LIST	
F1 	DAYLIGHT LUMINAIRE SEE LIGHTING FIXTURE SCHEDULE
F2 	NIGHT LUMINAIRE SEE LIGHTING FIXTURE SCHEDULE
J1 	EXISTING 18"x12"x6" STAINLESS STEEL JUNCTION BOX
J2 	EXISTING 12"x10"x6" STAINLESS STEEL JUNCTION BOX
A6 	DESIGNATION OF CIRCUIT SERVING LUMINAIRE LETTER INDICATES PANEL NAME, NUMBER - RESPECTIVE CIRCUIT BREAKER

LIGHTING FIXTURE SCHEDULE					
SYMBOL	DESCRIPTION	VOLTAGE	LAMPS	MFR. AND CAT. NO.	REMARKS
F1 	16-GAUGE TYPE 304 STAINLESS STEEL ONE-PIECE SEAM WELDED HOUSING, ELECTRICAL COMPARTMENT SEPARATED FROM OPTICAL CHAMBER AND ACCESSIBLE THRU HINGED DOOR WITH STAINLESS STEEL LATCHES, SEALED WITH ONE-PIECE SILICONE GASGET, 0.250" CLEAR TEMPERED GLASS LENS SEALED TO DOOR FRAME WITH ONE-PIECE SILICONE GASKET. TWO EXTERNAL MOUNTING BRACKET FLANGES WITH FOUR (2" ON BOTH SIDES) 0.375" DIAMETER HOLES. 4000K COLOR TEMPERATURE, 70 CRI.	480 V	300 WATT LED	KENALL LTSI-A2-C-SM-4-8 300L-40K7-DCC-480-304-1KF	OR APPROVED EQUAL •
F2 	16-GAUGE TYPE 304 STAINLESS STEEL ONE-PIECE HOUSING, OPTICAL COMPARTMENT SEALED FROM ELECTRICAL COMPARTMENT. DETACHABLE HOUSING ATTACHED TO BASE/ WIRING BOX WITH STAINLESS STEEL LOCKING SLIDE PIN HINGES AND SECURED WITH STAINLESS STEEL LATCHES. MOUNTING BASE SEALED TO HOUSING WITH ONE-PIECE SILICONE GASKET. 0.250" CLEAR TEMPERED GLASS LENS SEALED TO DOOR FRAME WITH ONE-PIECE SILICONE GASKET. TWO EXTERNAL MOUNTING BRACKET FLANGES WITH TWO EXTERNAL MOUNTING BRACKET FLANGES WITH FOUR (2" ON BOTH SIDES) 0.312" DIAMETER HOLES. 4000K COLOR TEMPERATURE, 70 CRI.	480 V	100 WATT LED	KENALL LTSIU-A2-W-SM-2-8- 100L49K-DCC-480-304-1KF	OR APPROVED EQUAL •

- CONTRACTOR SHALL ORDER F1 & F2 LUMINAIRES FROM MANUFACTURER WITH CLEAR INDICATION OF PLACEMENT OF LED DRIVER AND ASSOCIATED FIXTURE'S CONTROL COMPONENTS AT THE CENTER OF ELECTRICAL COMPARTMENT OF LUMINAIRE.

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6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

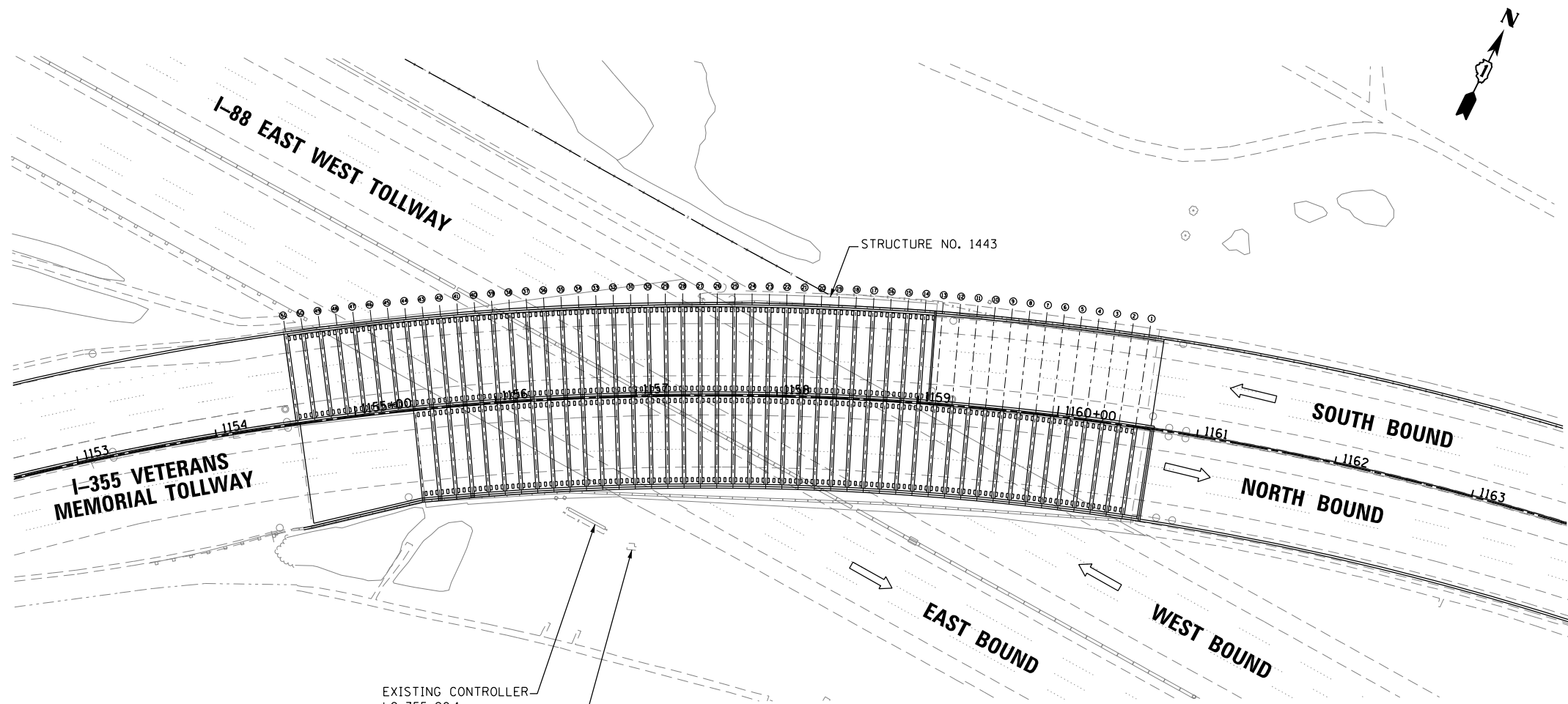


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NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255	LT-68
ELECTRICAL ABBREVIATIONS, SYMBOL LIST AND FIXTURE SCHEDULE	DRAWING NO. 820 OF 1517





**NOTE:**  
1. REFER TO SHEET E-45 FOR EXACT LOCATION OF CONTROLLER.

**MAINLINE UNDERPASS SITE PLAN**



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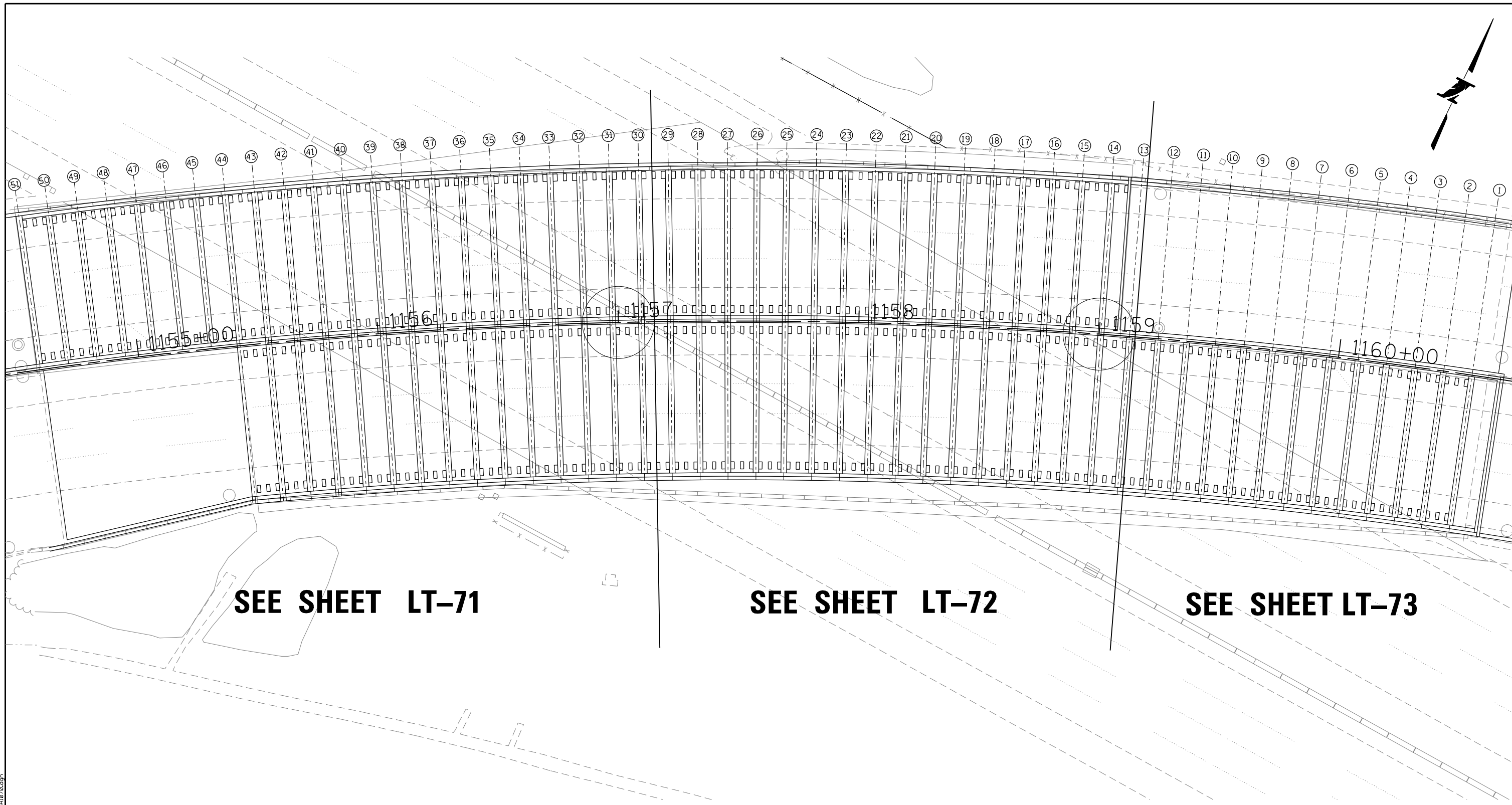
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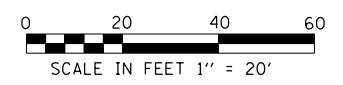
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MAINLINE SITE PLAN  
DRAWING NO. 821 OF 1517



**SEE SHEET LT-71**

**SEE SHEET LT-72**

**SEE SHEET LT-73**



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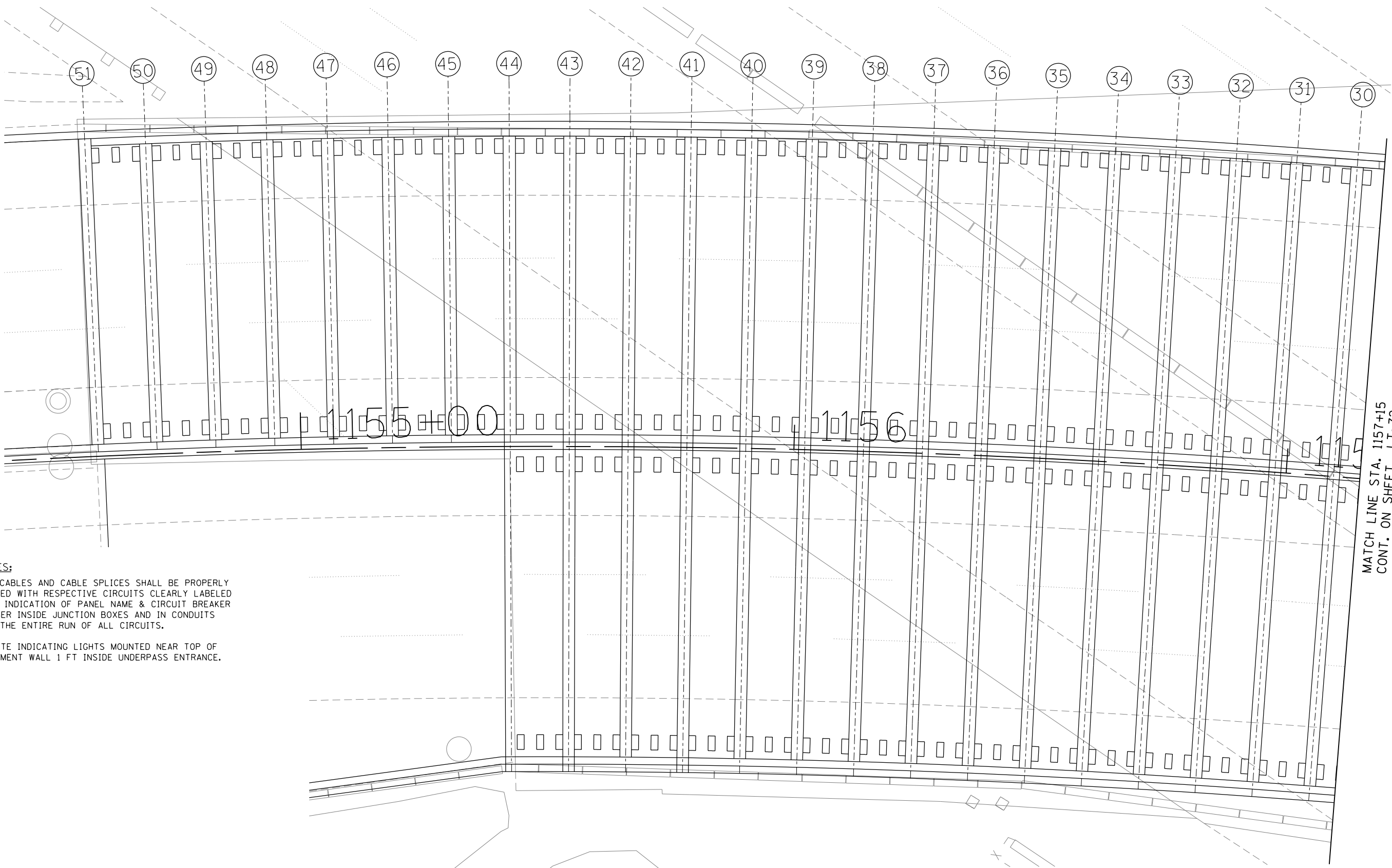
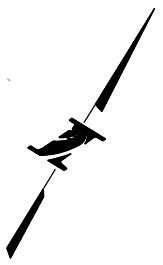
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CONTRACT NO. RR-16-4255  
 MAINLINE UNDERPASS  
 KEY PLAN

LT-70  
 DRAWING NO.  
 822 OF 1517



MATCH LINE STA. 1157+15  
CONT. ON SHEET LT-72

**NOTES:**

1. ALL CABLES AND CABLE SPLICES SHALL BE PROPERLY MARKED WITH RESPECTIVE CIRCUITS CLEARLY LABELED WITH INDICATION OF PANEL NAME & CIRCUIT BREAKER NUMBER INSIDE JUNCTION BOXES AND IN CONDUITS FOR THE ENTIRE RUN OF ALL CIRCUITS.
2. REMOTE INDICATING LIGHTS MOUNTED NEAR TOP OF ABUTMENT WALL 1 FT INSIDE UNDERPASS ENTRANCE.



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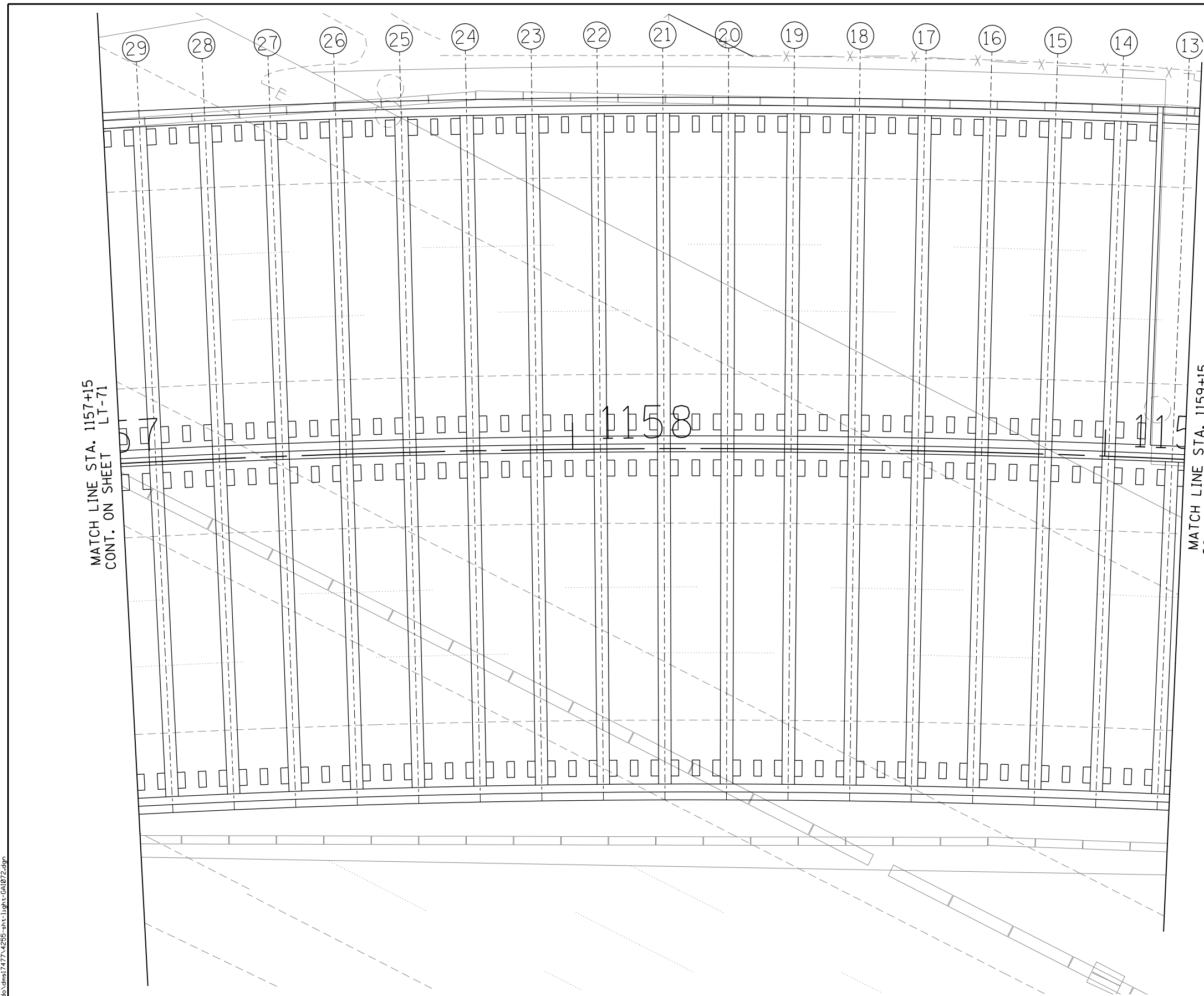
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NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255  
 MAINLINE UNDERPASS  
 PROPOSED LIGHTING PLAN

LT-71  
 DRAWING NO.  
 823 OF 1517



MATCH LINE STA. 1157+15  
CONT. ON SHEET LT-71

MATCH LINE STA. 1159+15  
CONT. ON SHEET LT-73

**NOTES:**

1. ALL CABLES AND CABLE SPLICES SHALL BE PROPERLY MARKED WITH RESPECTIVE CIRCUITS CLEARLY LABELED WITH INDICATION OF PANEL NAME & CIRCUIT BREAKER NUMBER INSIDE JUNCTION BOXES AND IN CONDUITS FOR THE ENTIRE RUN OF ALL CIRCUITS.
2. REMOTE INDICATING LIGHTS MOUNTED NEAR TOP OF ABUTMENT WALL 1 FT INSIDE UNDERPASS ENTRANCE.



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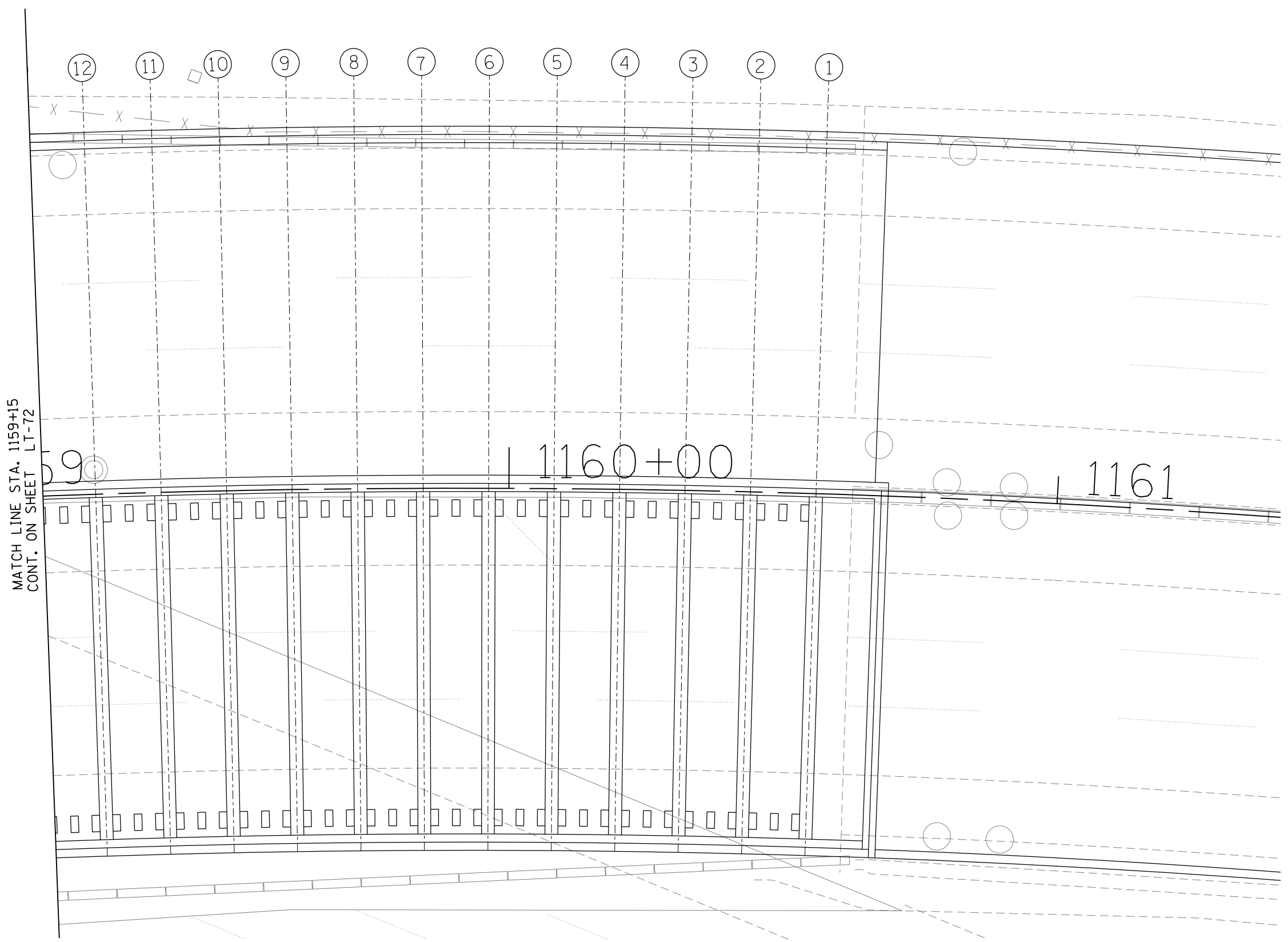
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NO.		REVISIONS	
NO.	DATE	DESCRIPTION	DESCRIPTION

CONTRACT NO. RR-16-4255  
MAINLINE UNDERPASS  
PROPOSED LIGHTING PLAN

LT-72  
DRAWING NO.  
824 OF 1517



MATCH LINE STA. 1159+15  
CONT. ON SHEET LT-72

**NOTES:**

1. ALL CABLES AND CABLE SPLICES SHALL BE PROPERLY MARKED WITH RESPECTIVE CIRCUITS CLEARLY LABELED WITH INDICATION OF PANEL NAME & CIRCUIT BREAKER NUMBER INSIDE JUNCTION BOXES AND IN CONDUITS FOR THE ENTIRE RUN OF ALL CIRCUITS.
2. REMOTE INDICATING LIGHTS MOUNTED NEAR TOP OF ABUTMENT WALL 1 FT INSIDE UNDERPASS ENTRANCE. REFER TO SHEET E78-E79 FOR DETAILS.



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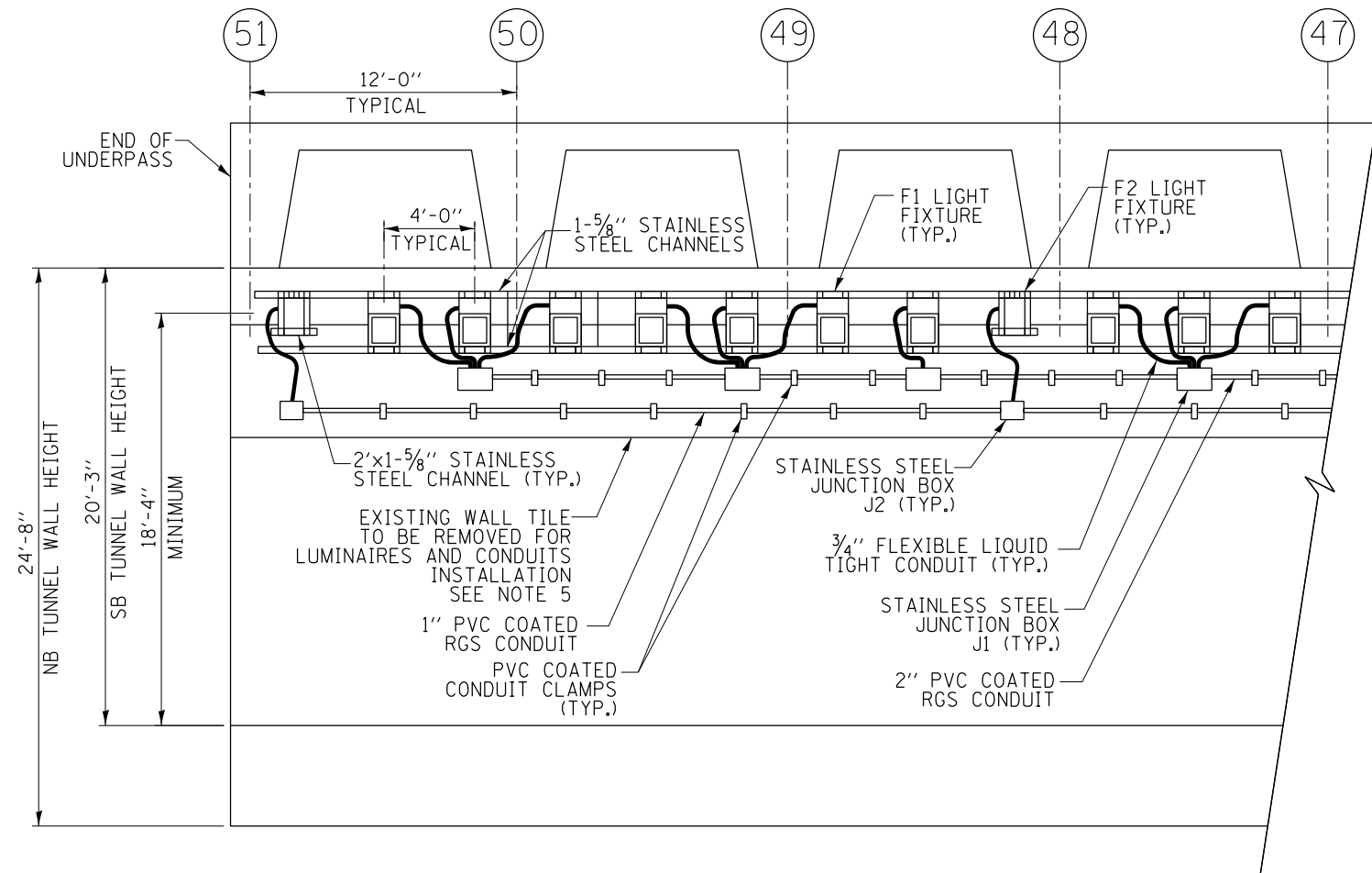


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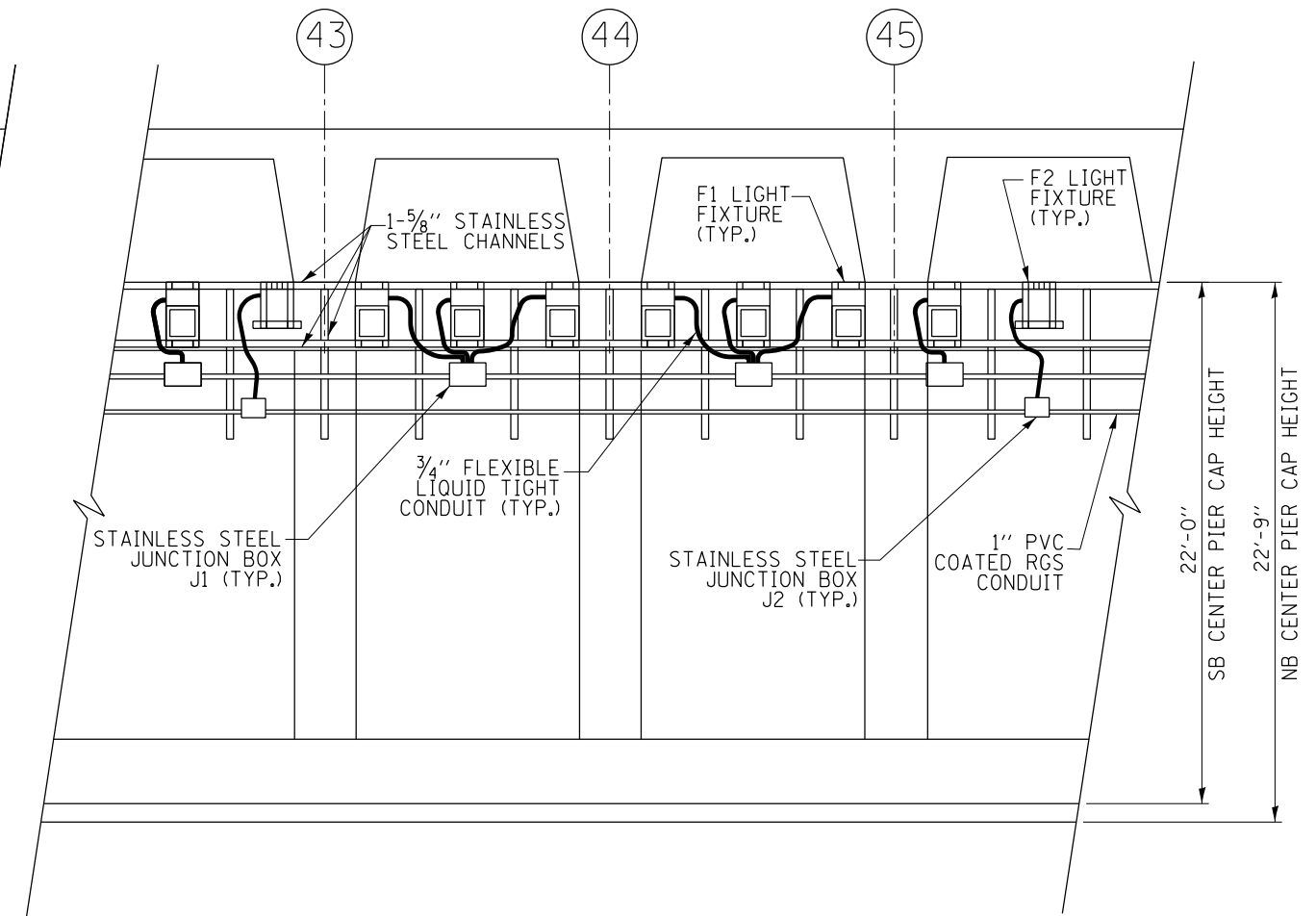
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NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255  
 MAINLINE UNDERPASS  
 PROPOSED LIGHTING PLAN

LT-73  
 DRAWING NO.  
 825 OF 1517



PARTIAL TYPICAL WALL ELEVATION  
SCALE: 1/4"1'-0"



PARTIAL TYPICAL PIER ELEVATION  
SCALE: 1/4"1'-0"

NOTES:

1. ALL LUMINAIRES ON LIGHTING PANELS "A" & "B" SHALL BE TYPE F1.
2. ALL LUMINAIRES ON PANEL "C" SHALL BE TYPE F2.
3. THE CONDUITS SHOWN WILL REQUIRE BENDING TO ACCOMMODATE THE ACTUAL CURVED SURFACE OF THE UNDERPASS WALLS.
4. ALL SPACERS, INSERTS AND OTHER SUPPORTS FOR CONDUITS SHALL BE INSTALLED PERPENDICULARLY TO THE WALL SURFACE ALONG RADIUS OF THE ARC.
5. CONTRACTOR SHALL REMOVE ENOUGH COMPLETE ROWS OF TILE, GROUT AND ADHESIVE TO ALLOW FOR THE INSTALLATION OF LUMINAIRES, CONDUITS AND JUNCTION BOXES. CONTRACTOR SHALL CLEAN AND PATCH CONCRETE WALL BEHIND THE REMOVED TILES.

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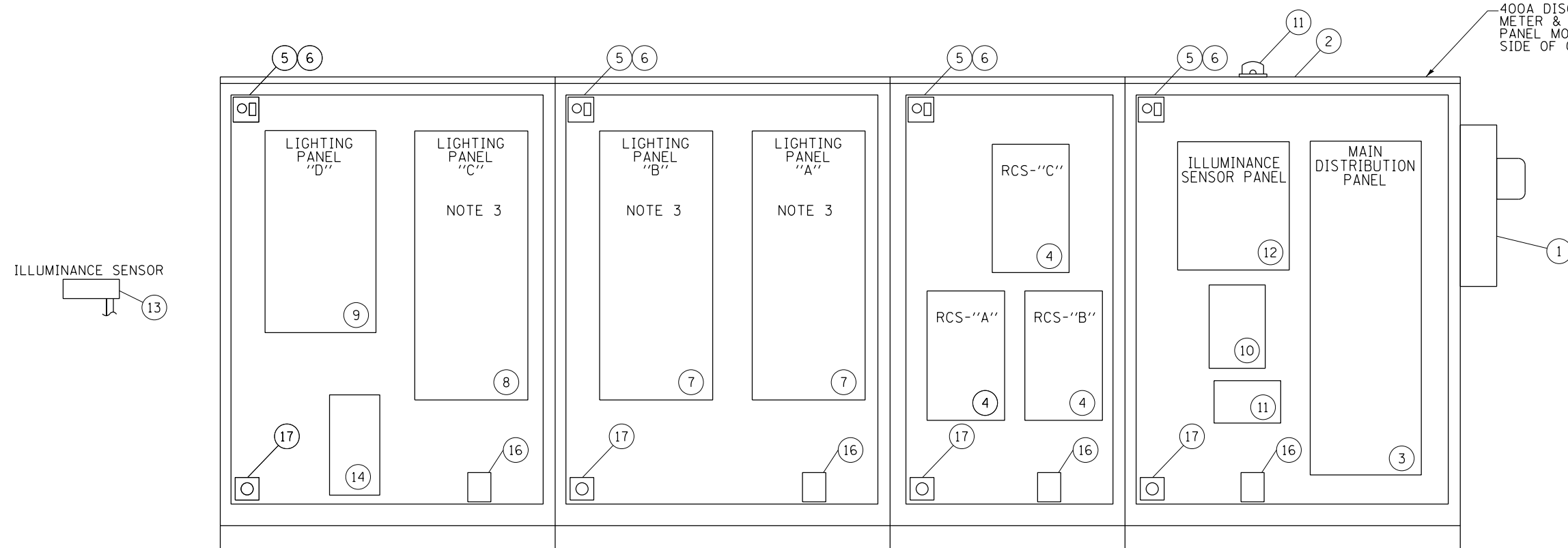
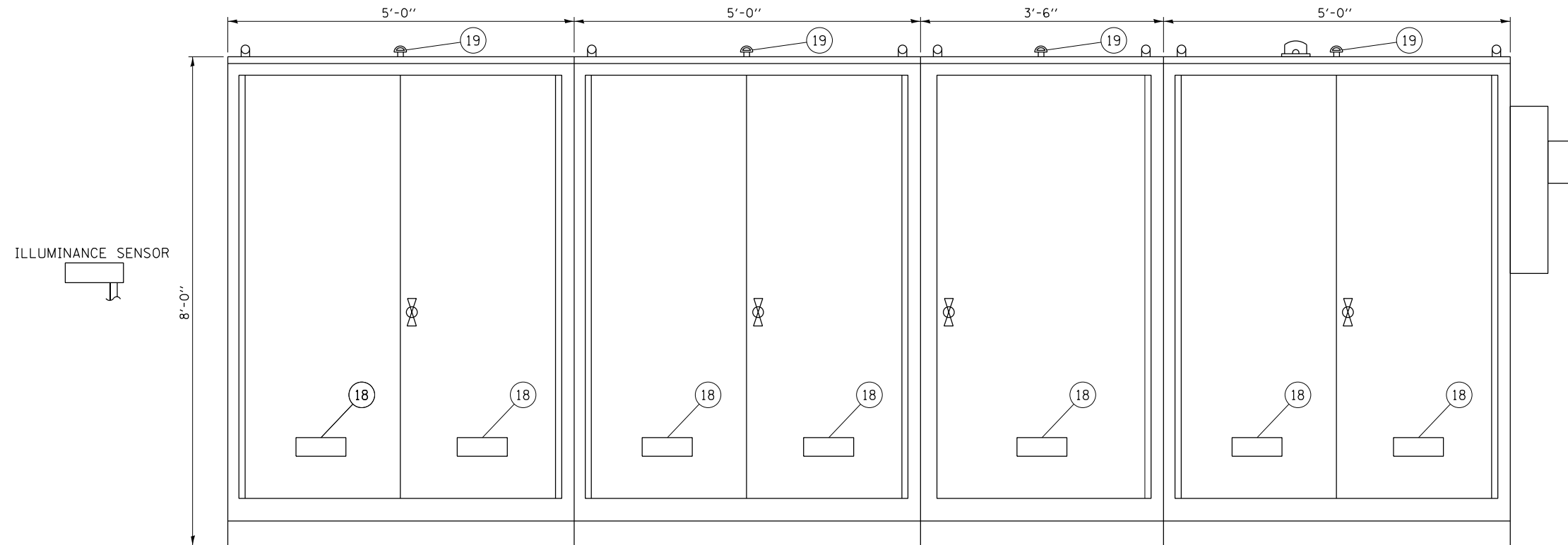


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

NO.		DATE	REVISIONS DESCRIPTION

CONTRACT NO. RR-16-4255  
MAINLINE UNDERPASS  
PARTIAL ELEVATIONS

LT-74  
DRAWING NO.  
826 OF 1517



400A DISCONNECT BETWEEN METER & MAIN DISTRIBUTION PANEL MOUNTED TO BACK SIDE OF CABINET

**NOTE:**  
 1. DRAWINGS IS NOT TO SCALE.  
 2. VERIFY CONDITION OF SURGE SUPPRESSORS. REPLACE IF NECESSARY

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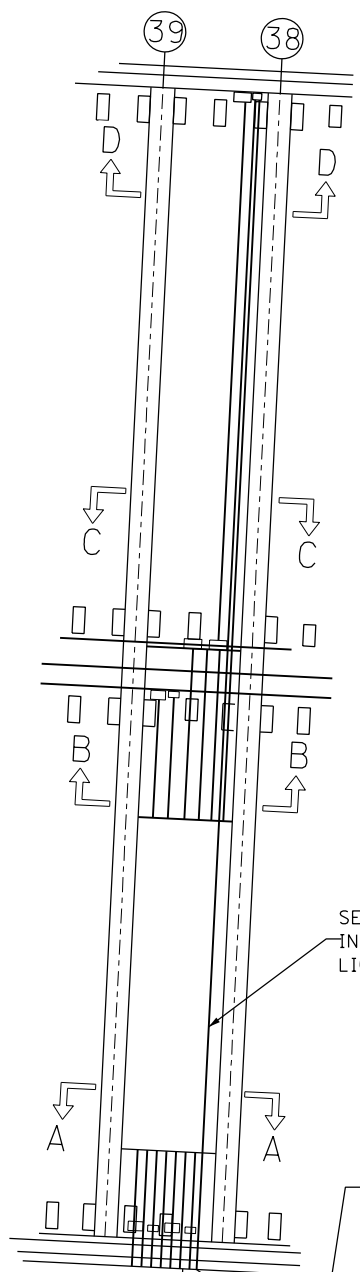
**GA** GANDHI AND ASSOCIATES, INC.  
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 SUITE 306  
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**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
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REVISIONS		
NO.	DATE	DESCRIPTION

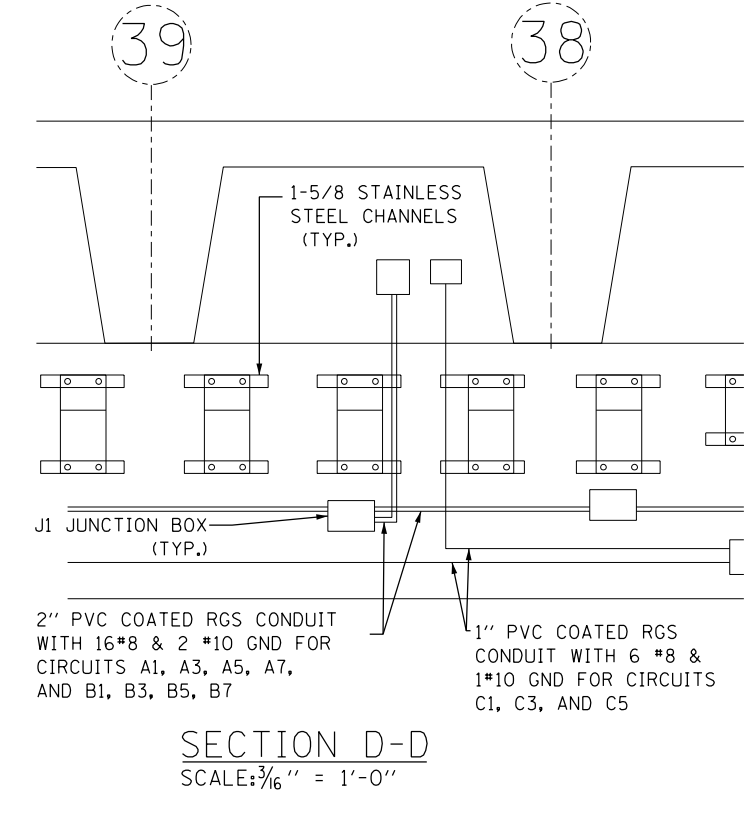
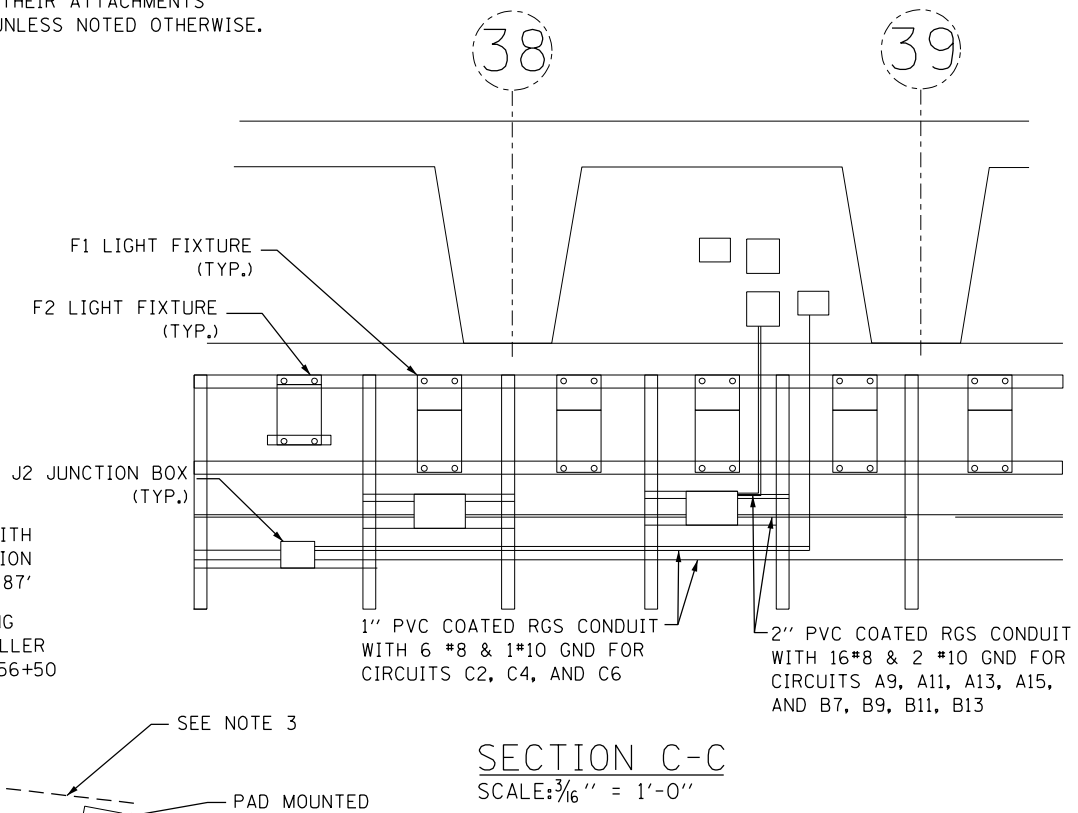
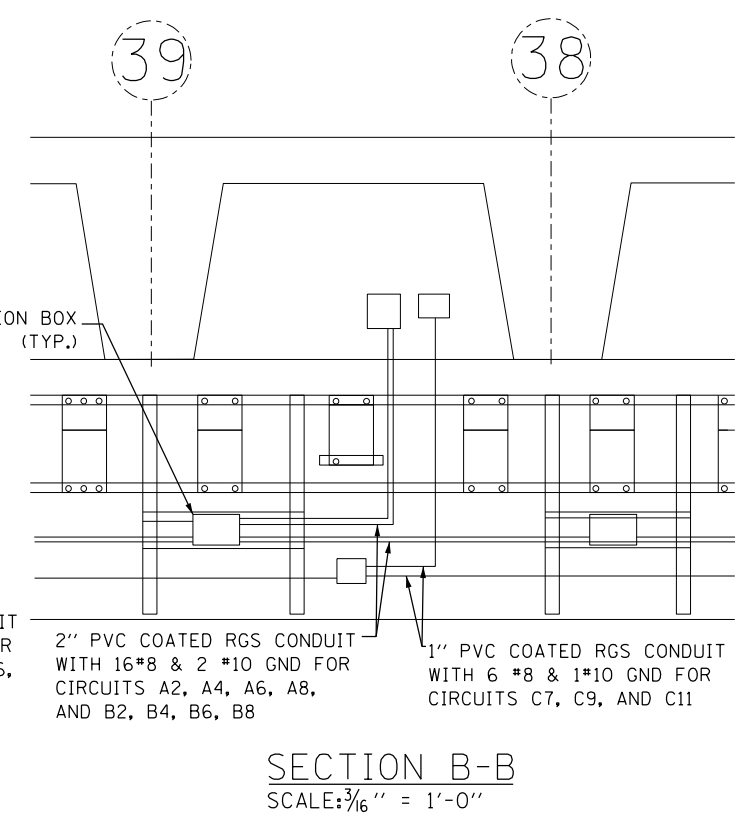
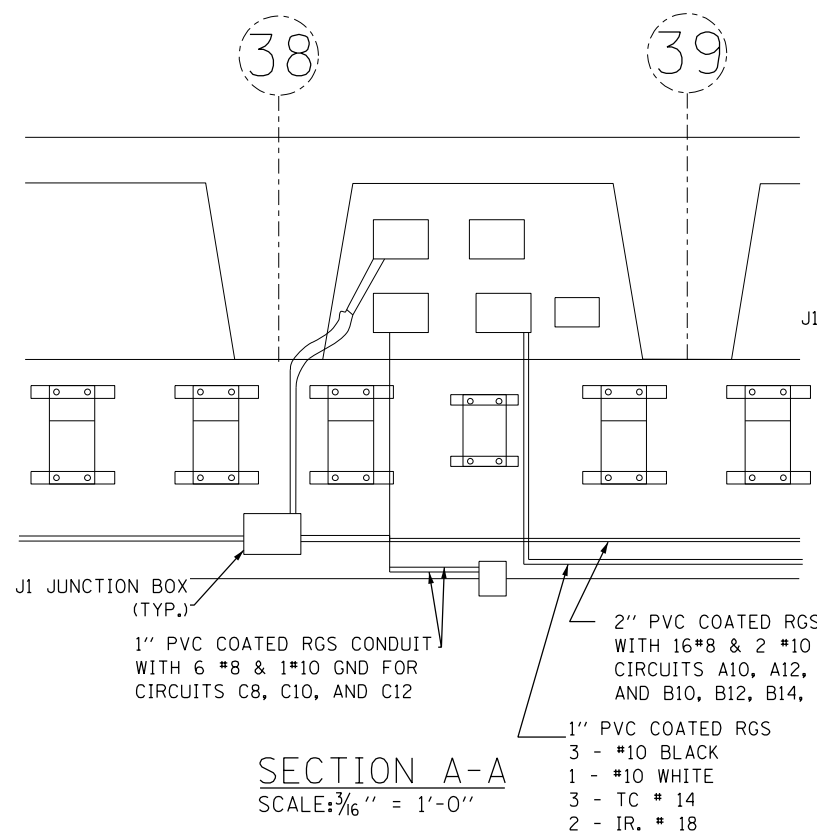
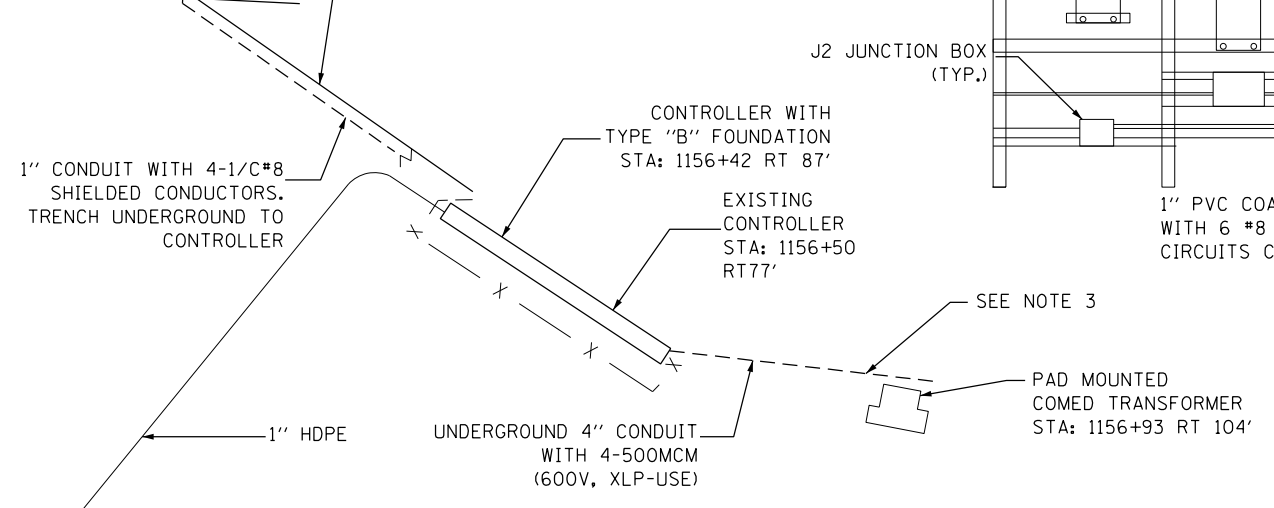
CONTRACT NO. RR-16-4255  
 MAINLINE UNDERPASS LIGHTING  
 CONTROLLER CONSOLE #15

LT-75  
 DRAWING NO.  
 827 OF 1517



**NOTES:**

1. ALL BRANCH WIRES SHALL BE 600V, WITH XLP-USE INSULATION (U.N.O)
2. WIRING AND CONDUIT ARE EXISTING. CONTRACTOR IS TO VERIFY CONDITION.
3. CONTRACTOR SHALL LOCATE EXACT ROUTING OF EXISTING SECONDARY LINE CONDUIT AND PRESERVE ITS INTEGRITY DURING DIGGING AND TRENCHING FOR NEW SECONDARY LINE.
4. ALL EXISTING REINFORCEMENT MUST BE IDENTIFIED PRIOR TO INSTALLATION OF ELECTRICAL CONDUITS, DRILLING THROUGH EXISTING REINFORCEMENT IS NOT ALLOWED.
5. ALL SPACES IN DRILLED CORES SHALL BE SEALED WITH PLIABLE WATERPROOF SEALING COMPOUND.
6. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40 TYPE (U.N.O). ALL EXPOSED CONDUITS ABOVE GROUND SHALL BE PVC COATED RGS TYPE (U.N.O)
7. ALL UNISTRUT CHANNELS AND THEIR ATTACHMENTS SHALL BE STAINLESS STEEL, UNLESS NOTED OTHERWISE.



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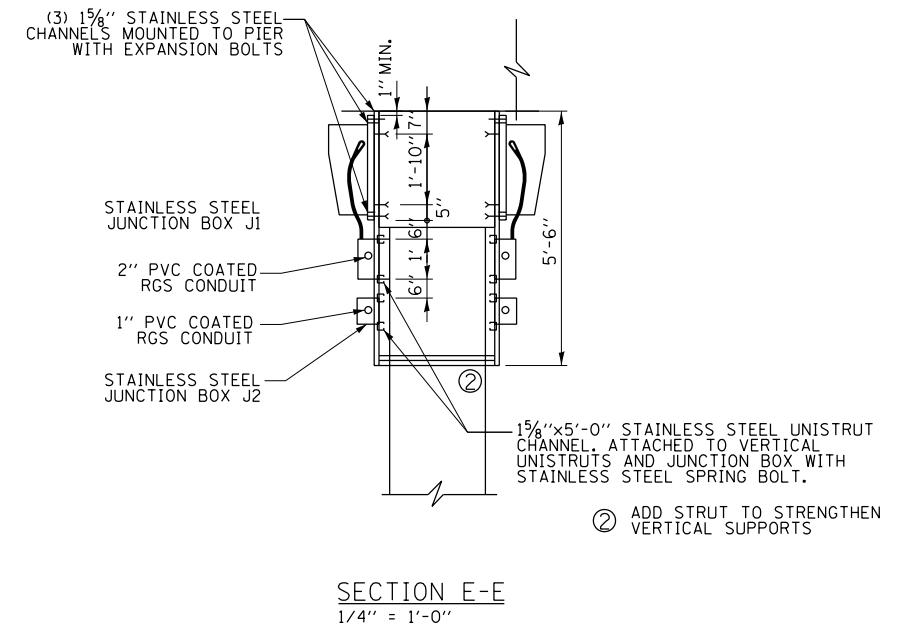
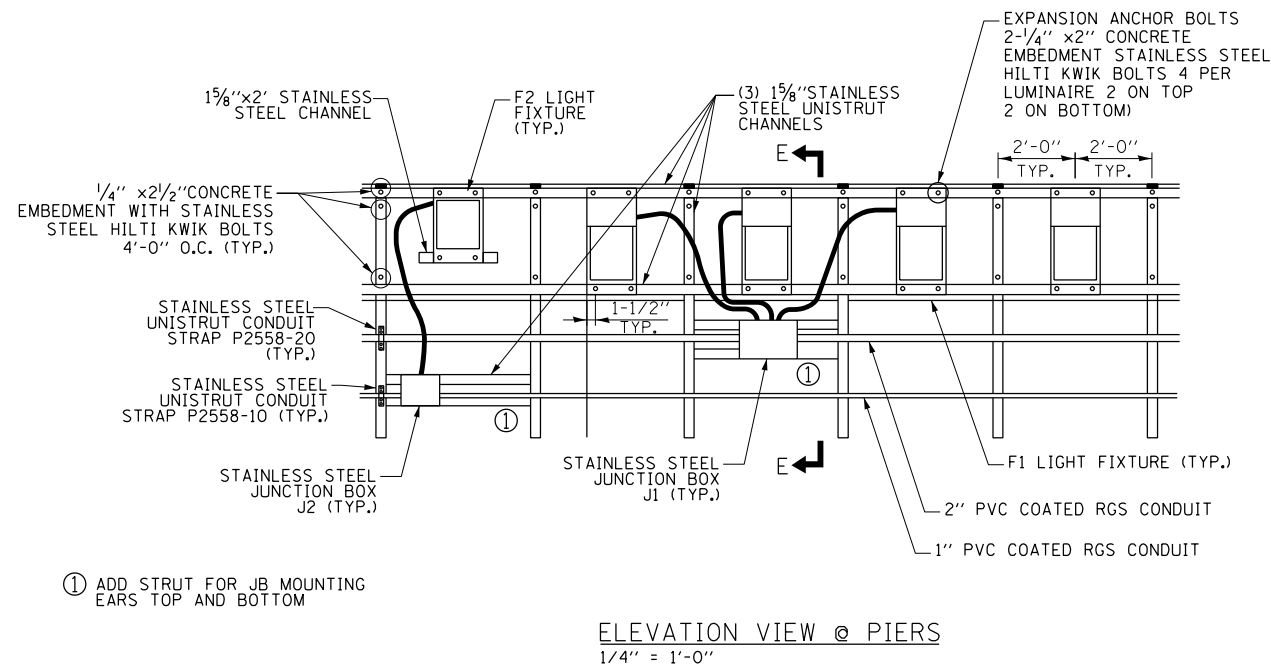
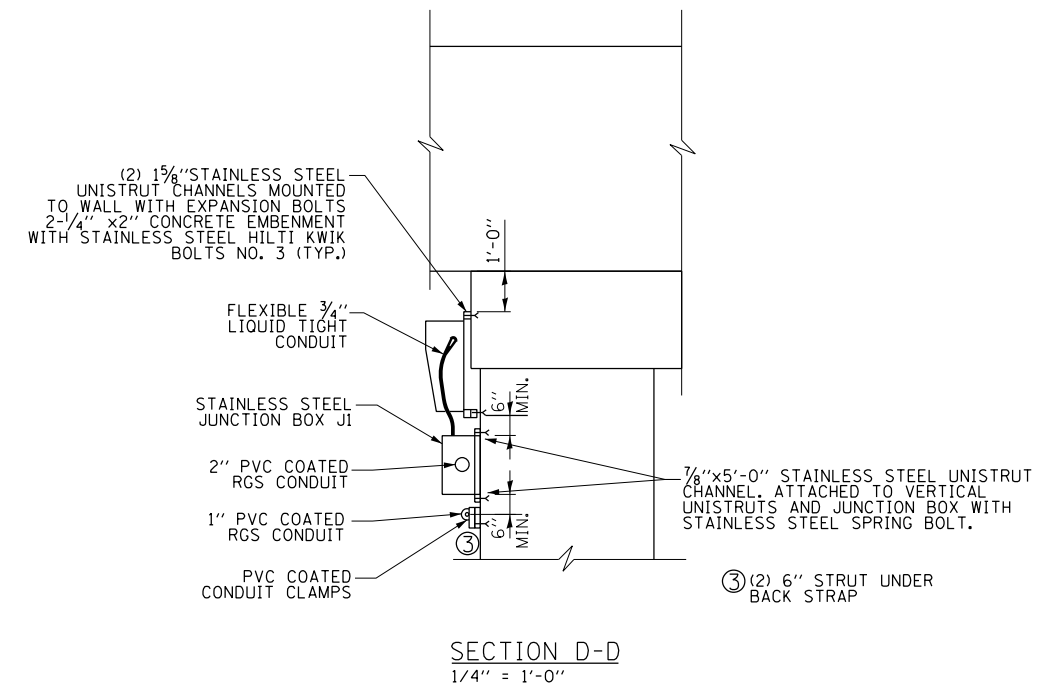
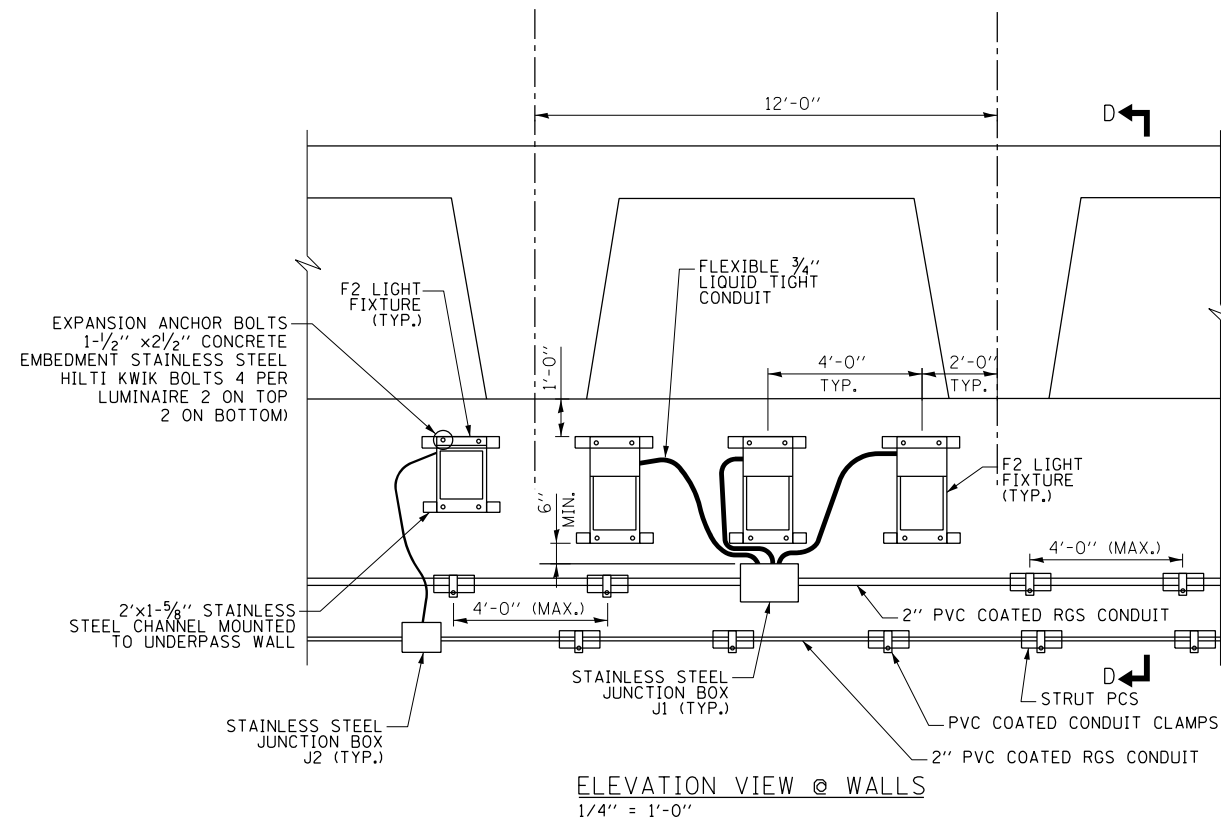
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REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 MAINLINE UNDERPASS LIGHTING DETAILS

LT-76  
 DRAWING NO. 828 OF 1517





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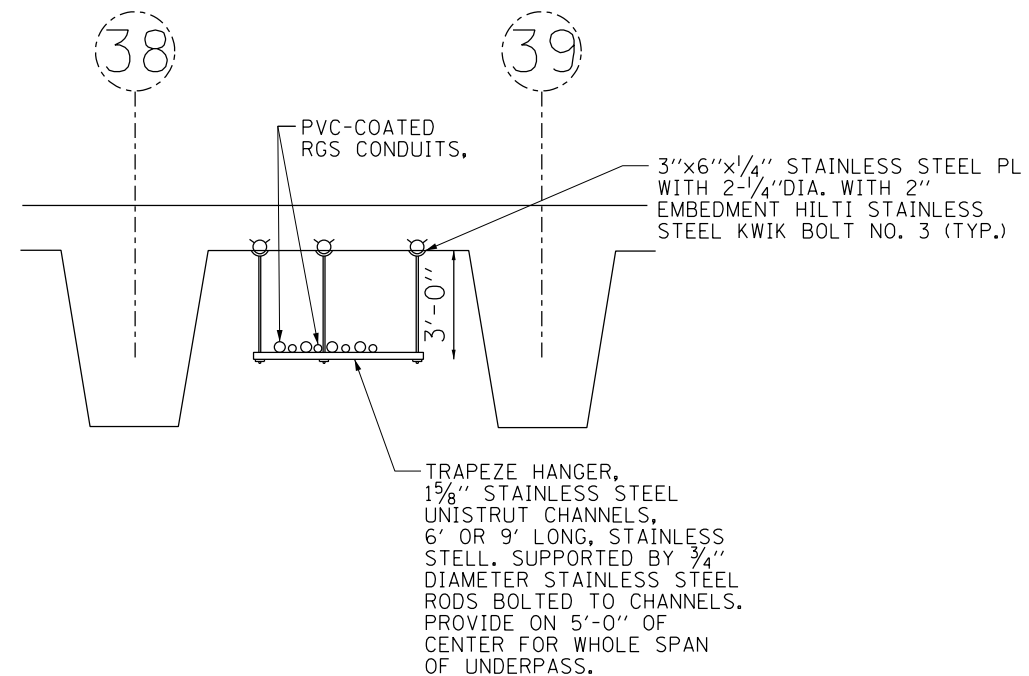
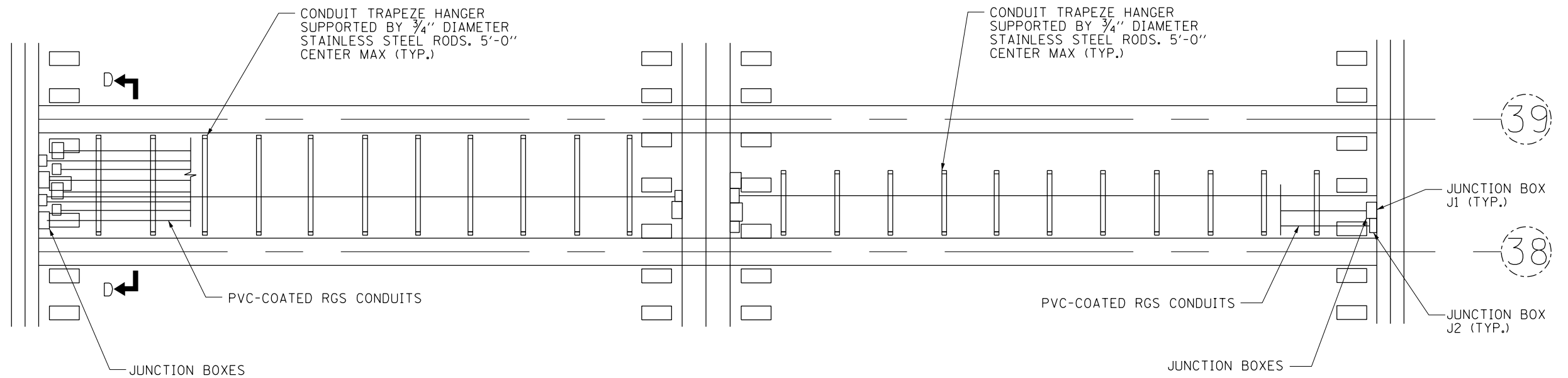
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NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255  
TUNNEL LIGHTING  
PROPOSED UNDERPASS ATTACHMENT

LT-77  
DRAWING NO.  
829 OF 1517



SECTION D-D  
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2700 OGDEN AVENUE  
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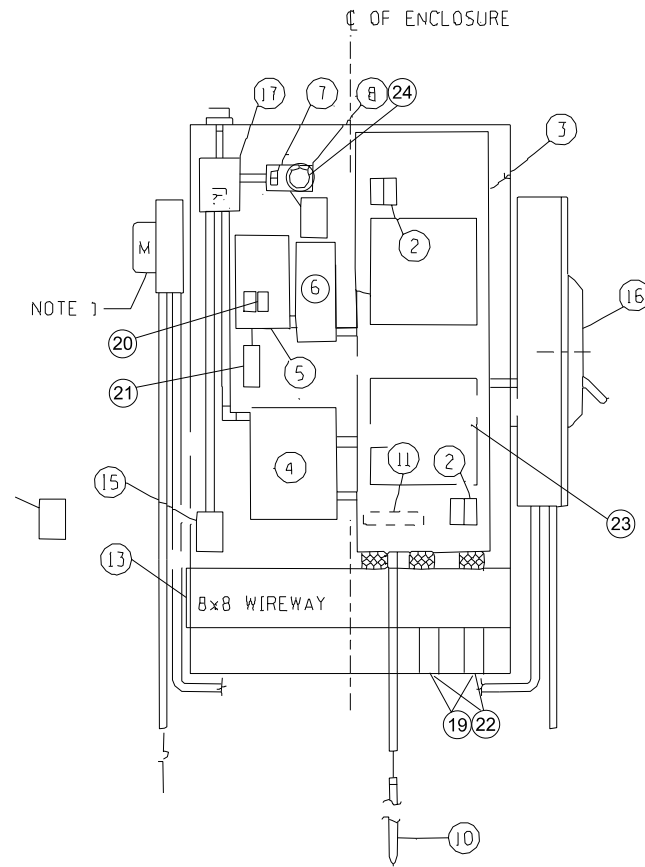
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MAINLINE UNDERPASS  
WIRING DETAILS

LT-78

DRAWING NO.  
830 OF 1517

## BILL OF MATERIAL (REFERENCE ONLY)



INTERIOR EQUIPMENT LAYOUT

### ITEM DESCRIPTION

- |   |  |  |
|---|--|--|
| <p>① METER HOUSING</p> <p>② SECONDARY SURGE ARRESTER, 2-POLE, 600 V.</p> <p>③ MAIN PANELBOARD IN NEMA 1 ENCLOSURE, 480/240 V, 1 PHASE 3 WIRE. 2 SECTION, 200 A 2-POLE MAIN CIRCUIT BREAKER 65,000 A SYMMETRICAL INTERRUPTING CPACITY WITH CIRCUIT BREAKERS PER SCHEDULE ON PLANS, DOOR HINGES ON RIGHT SIDE.</p> <p>④ LIGHTING CONTACTOR, 480 V 200A 2-POLE, 120-VOLT CONTROL WITH RELAY FOR 2-WIRE CONTROL. 1 NORMALLY OPEN, AND ONE NORMALLY CLOSED AUXILIARY CONTACTS, CONTROL LINE FUSE IN NEMA 1 ENCLOSURE.</p> <p>⑤ SECONDARY BREAKER, 15 AMP TRIP, 120-V SINGLE POLE, 65,000 AMP SYMMETRICAL INTERRUPTING CAPACITY, IN A NEMA 1 SURFACE MOUNTED ENCLOSURE.</p> <p>⑥ STEP-DOWN TRANSFORMER, 1500 VA 480-V PRIMARY 120-VOLT. SECONDARY. SINGLE PHASE 60 HERTZ, DRY TYPE, NEMA 3R ENCLOSURE.</p> <p>⑦ SINGLE POLE, 15 AMP SWITCH IN A NEMA 1 ENCLOSURE WITH ITEM 8, RATED AT 120-277 VAC.</p> <p>⑧ LAMP HOLDER 660 W 600 V MOUNTED ON NEMA 1 ENCLOSURE WITH ITEM 7, WITH LAMP.</p> <p>⑨ HAND-OFF-AUTO SELECTOR SWITCH WITH LEGEND PLATE, MOUNTED IN THE COVER OF ITEM 17.</p> <p>⑩ 5/8" X 10' GROUND ROD, IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, DRIVEN EXTERNAL TO THE FOUNDATION</p> | <p>⑪ GROUND BUS, MOUNTED IN PANELBOARD ENCLOSURE</p> <p>⑫ PHOTO-ELECTRIC CONTROL SWITCH WITH RECEPTACLE.</p> <p>⑬ NEMA TYPE 3R STAINLESS STEEL ENCLOSURE, WITH DRIP SHIELD AND STAINLESS STEEL HARDWARE. ENCLOSURE SHALL CONFORM TO JIC STANDARDS WITH CELLULAR NEOPRENE GASKETED DOORS, ALL SEAMS CONTINUOUSLY WELDED. 10 GAGE STAINLESS STEEL BODY. REMOVABLE STEEL PAINTED WHITE PANEL INSIDE THE BACK AND FACTORY-INSTALLED DRIP. SHIELD, CONTINUOUSLY HINGED DOORS, MEETING IN CENTER OVERLAPPED AND GASKETED, NO CENTERPOST, OILTIGHT KEY LOCKING PANEL, 3-POINT LATCH (FURNISH 6 KEYS). EACH END OF ENCLOSURE SHALL HAVE A VENTILATOR INTERNAL CONDUIT, SHALL HAVE LOCKNUTS, INSULATOR BUSHING AND CONDULET FITTINGS. INTERNAL WIRING SHALL BE XLP NEC TYPE RHH/RHW-2. PROVIDE WIRING DIAGRAM IN PRINT POCKET INSIDE CABINET DOOR.</p> <p>⑭ INTERNAL CONTROL WIRING SHALL BE #12 AWG, STRANDED XLP INSULATED NEC TYPE, RHH/RHW-2, 600 V WITH SUITABLE COLOR CODING TO BE APPROVED BY THE ENGINEER BEFORE CONSTRUCTION.</p> <p>⑮ 200 WATT 120V CABINET HEATER WITH INTEGRAL THERMOSTAT.</p> <p>⑯ SERVICE SAFETY SWITCH, 200 AMP 600 VOLT NONFUSED NEMA 4X STAINLESS STEEL ENCLOSURE.</p> <p>⑰ NEMA TYPE 1 8" X 6" X 4" JUNCTION BOX &amp; COVER WITHOUT KNOCKOUTS, ITEM 9 IS MOUNTED IN THE COVER.</p> <p>⑱ INTERNAL CONDUITS SHALL BE 3/4" MINIMUM.</p> <p>⑲ PVC-COATED GALVANIZED STEEL CONDUIT TO HANDHOLE ENCLOSURE.</p> |  |
|---|--|--|

### NEW ITEMS

- ④ REPLACE EXISTING LIGHTING CONTACTOR AND RELAY BOARD WITH NEW LIGHTING CONTACTOR ELECTRICALLY HELD, 200A., 2P., 600V. WITH 240V COIL.
- ⑮ PROVIDE NEW 15-A BREAKER FOR RECEPTACLE.
- ⑰ PROVIDE NEW GFCI RECEPTACLE IN NEMA 1 ENCLOSURE.
- ⑲ SEAL ALL CONDUITS EXITING THE CONTROLLER.
- ⑳ TRACE ALL CIRCUITS. PROVIDE LEGIBLE CIRCUIT DIRECTORY ON PANEL DOOR.
- ㉑ PROVIDE NEW LED BULB IN PLACE OF EXISTING.
- ㉒ INSTALL CONTROLLER LABEL ON THE OUTSIDE BACK WALL OPPOSITE OF THE DOORS.

### SUMMARY OF LIGHTING CONTROLLER WORK

CONTROLLER APPROXIMATE STATION	LANDMARK/CROSSROAD	NEW CONTROLLER DECAL LABEL	REPAIR WORK		UPGRADE CONTROLLER (JT825110)
			NA	NONE	
719+87	I-55	LC-355-11.8	NA	NONE	YES
766+75	I-55	LC-355-12.7	NA	NONE	YES
823+62	BOUGHTON RD	LC-355-13.8	LOCATION 1	CONTROLLER TO BE REPLACED	NA
855+66	BOUGHTON RD PLAZA	LC-355-14.4	LOCATION 2	REPAINT, REPAIR PANELBOARD LATCH, PROVIDE JUNCTION BOX COVER, PROVIDE NEW BRANCH BREAKER FOR PARKING LOT LIGHTS	YES
898+73	75TH ST	LC-355-14.9	NA	NONE	YES
946+44	71ST ST	LC-355-16.1	NA	NONE	YES
1006+49	63RD ST	LC-355-17.3	NA	CONTROLLER TO BE REPLACED	NA
1062+95	MAPLE AVE	LC-355-18.3	NA	CONTROLLER TO BE REPLACED	NA
1102+79	BNSF RR	LC-355-19.1	LOCATION 3	REPAINT	YES
1156+58	MAINLINE TUNNEL	LC-355-20.1	LOCATION 4	SURGE PROTECTORS AT EACH PANEL	NO
1217+97	FINLEY RD	LC-355-21.3	LOCATION 5	REPAINT	YES
1253+48	SE RAMP	LC-355-21.9	NA	CONTROLLER TO BE REPLACED	NA
507+09	OGDEN AVE	LC-88-130.0	NA	NONE	YES
1180+80	RAMP EN	LC-88-132.0	NA	NONE	YES

### LIGHTING CONTROLLER UPGRADES (JT825120)

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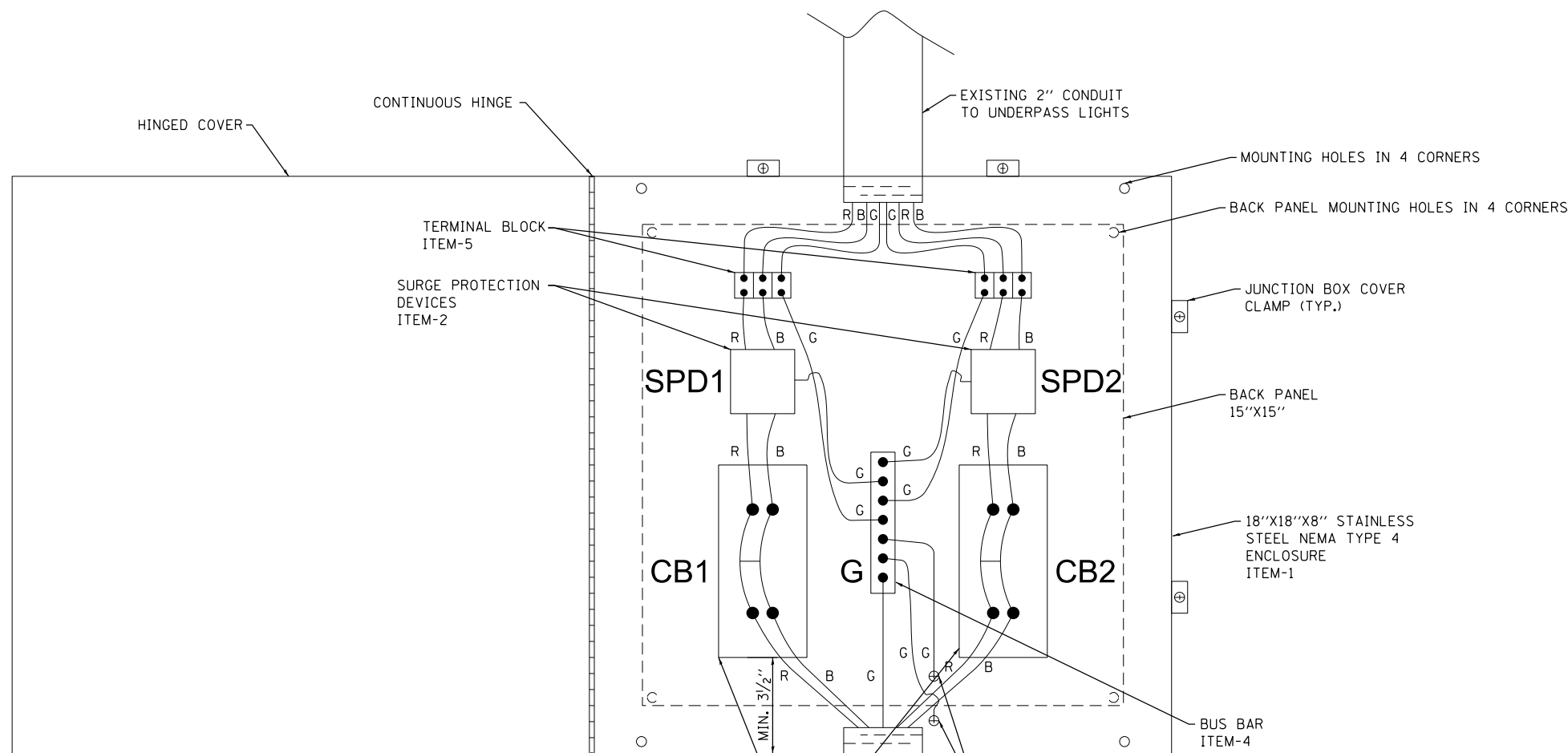
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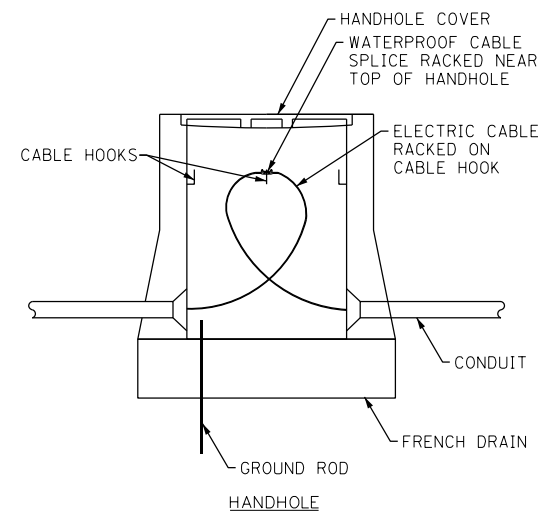
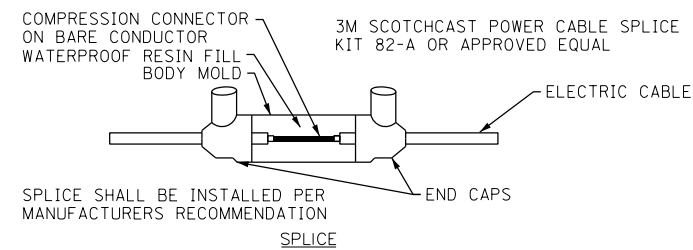
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NO.	DATE DESCRIPTION

CONTRACT NO. RR-16-4255	LT-79
LIGHTING CONTROLLER UPGRADES	DRAWING NO. 831 OF 1517

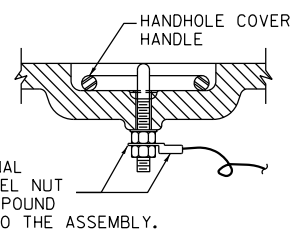
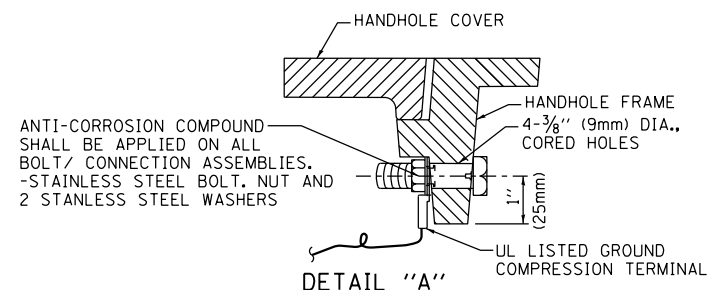


BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
1	1	NEMA 4 STAINLESS STEEL HINGED CLAMP COVER ENCLOSURE WITH BACKPANEL
2	2	SURGE PROTECTIVE DEVICE, 480-V, 2-PHASE, EMERSON EDCO SHAS-480 OR EQUAL.
3	2	CIRCUIT BREAKER, 2-POLE, 600-V, 30-A TRIP, EATON TYPE HFD OR EQUAL.
4	1	COPPER GROUND BUS, TERMINALS AS REQUIRED.
5	2	3 POINT TERMINAL BLOCKS, 600V, 30A RATED.

- NOTES**
- INSTALLATION SHALL MEET REQUIREMENTS OF ILLINOIS TOLLWAY, NATIONAL ELECTRICAL CODE, UNDERWRITERS LABORATORIES, AND ALL STATE AND LOCAL REQUIREMENTS.
  - EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURERS INSTRUCTIONS.
  - PROVIDE MINIMUM 6" SLACK IN WIRES.
  - MOUNTING HARDWARE, SUCH AS SCREWS, BRACKETS AND DIN RAILS, IS INCIDENTAL TO THIS ITEM.
  - ALL ITEMS SHOWN SHALL BE INCIDENTAL TO THE PAY ITEM NUMBER JS813083 JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18"X18"X8".
  - WIRING SHALL BE #10 AWG EXCEPT AS NOTED.

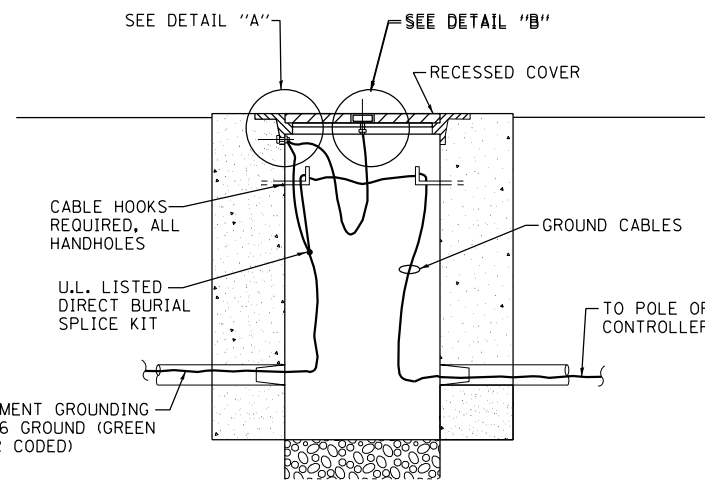


**MAIN UNDERPASS JUNCTION BOX DETAIL**  
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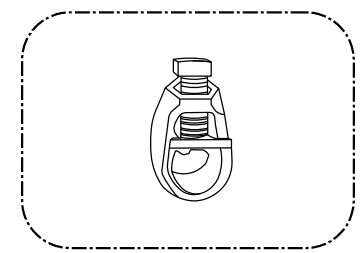
UL LISTED GROUND COMPRESSION TERMINAL WITH STAINLESS STEEL NUT ANTI-CORROSION COMPOUND SHALL BE APPLIED TO THE ASSEMBLY.

**DETAIL "B"**

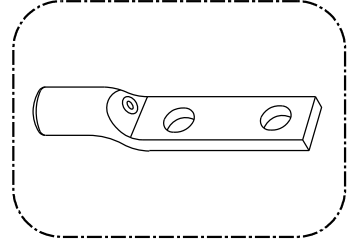


(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL) ANTI-CORROSION COMPOUND SHALL BE APPLIED TO EACH ASSEMBLY.

**HANDHOLE COVER & FRAME-GROUNDING DETAIL**  
(NOT TO SCALE)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)



HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER. UL APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
  - 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  - 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  - 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

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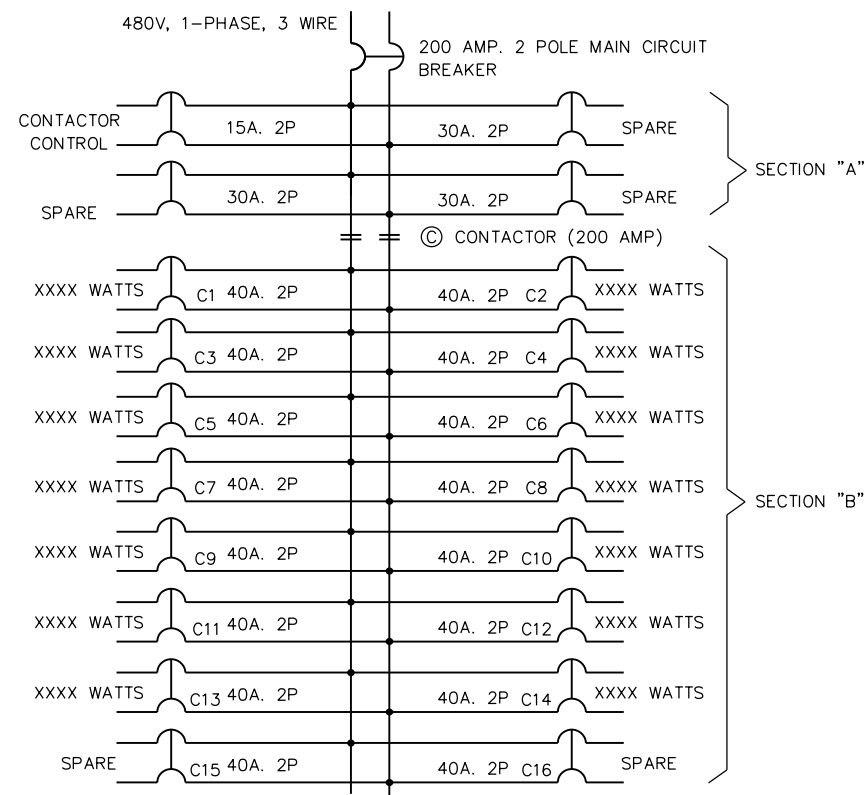
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NO.	DATE	DESCRIPTION

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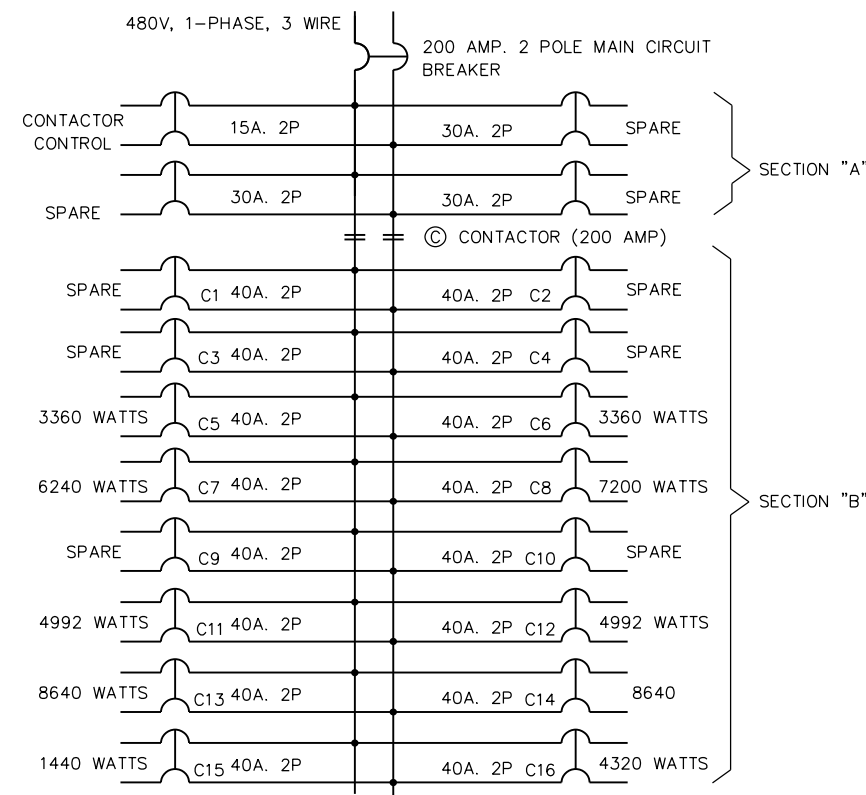
LIGHTING DETAILS

LT-80

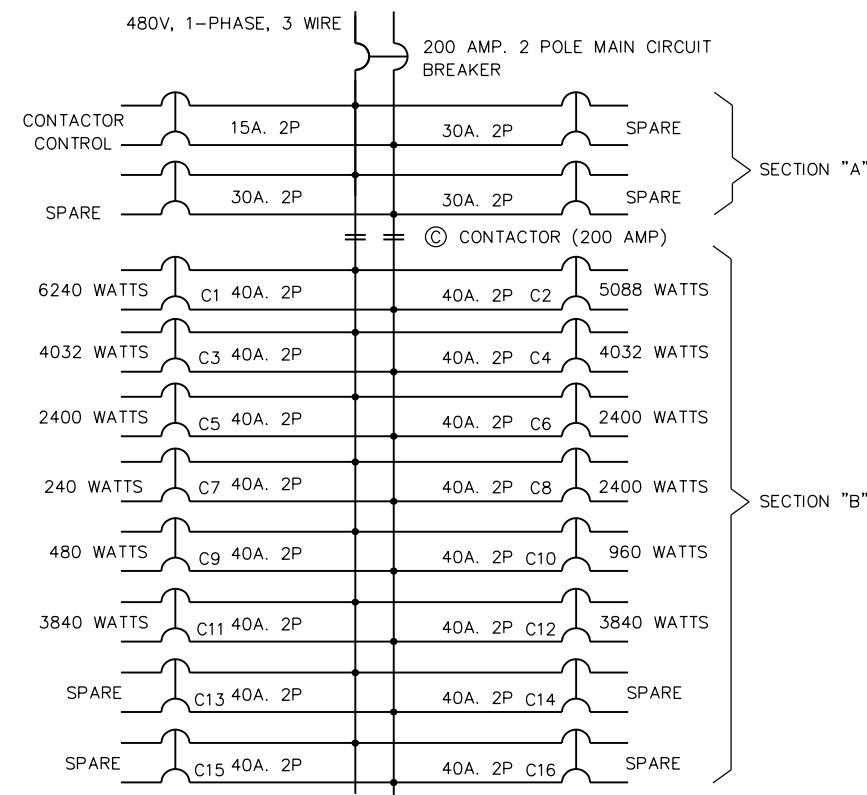
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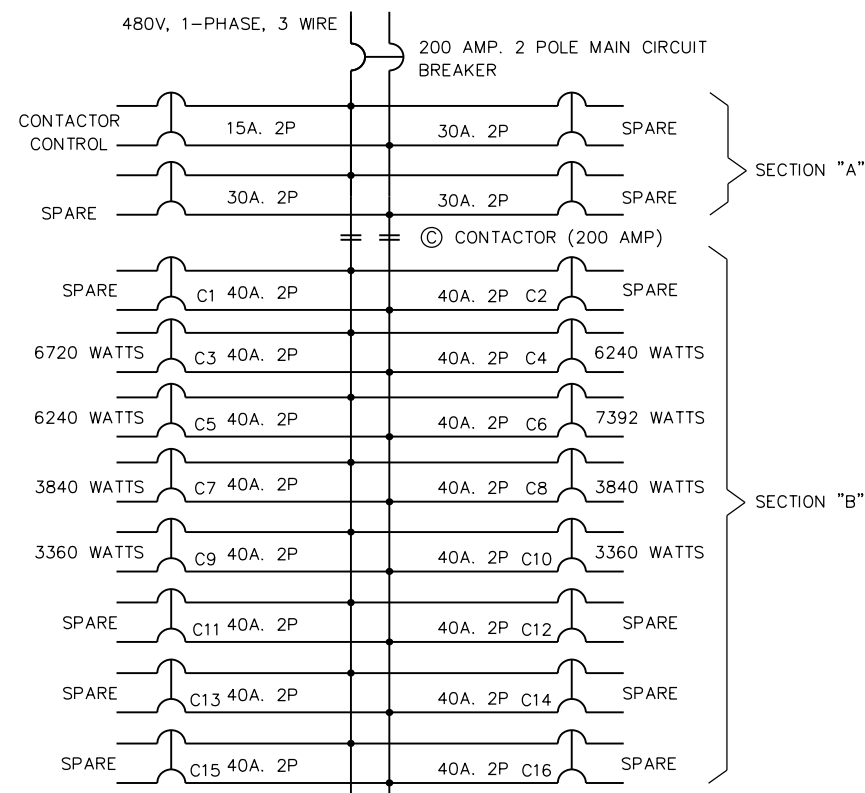
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**STATION 719+87**  
**LC-355-11.8**



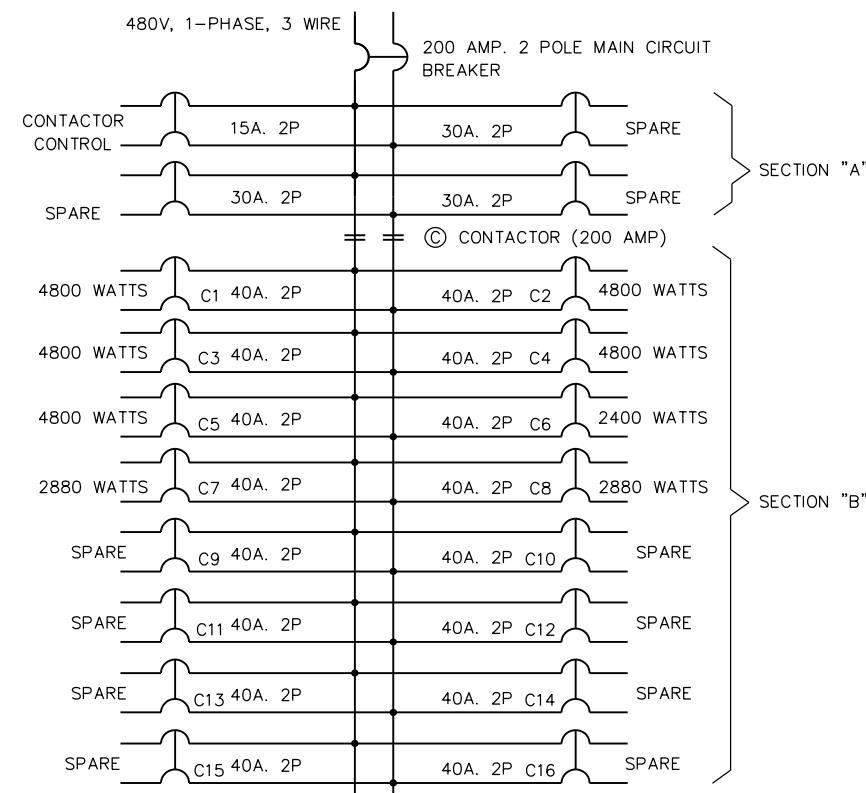
**LIGHTING CONTROLLER**  
**STATION 766+75**  
**LC-355-12.7** TOTAL 53184 WATTS



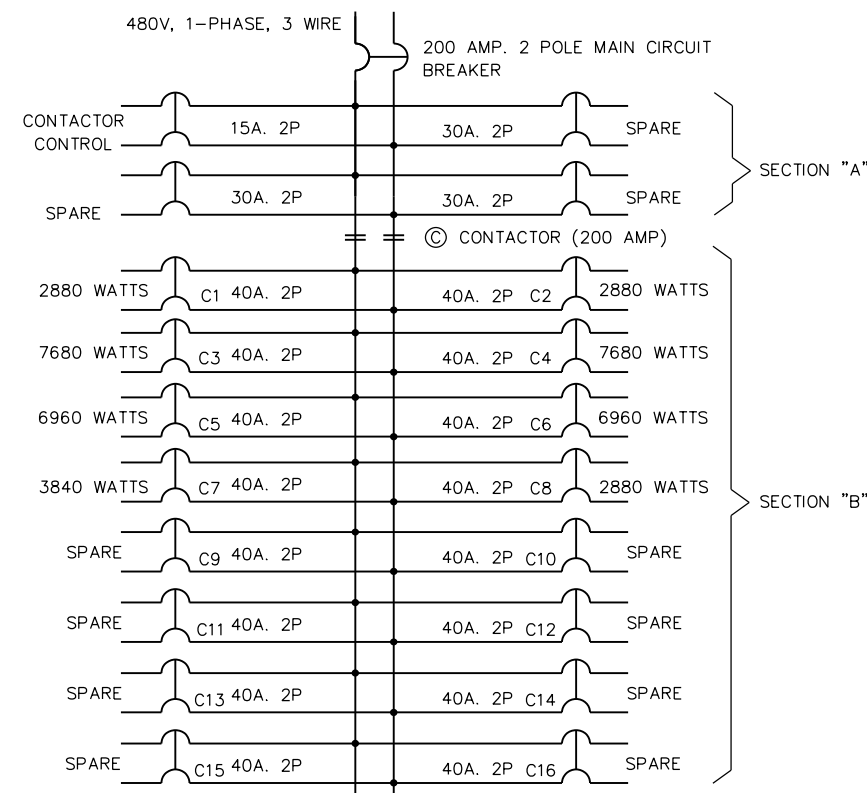
**LIGHTING CONTROLLER**  
**STATION 823+62**  
**LC-355-13.8** TOTAL 38592 WATTS



**LIGHTING CONTROLLER**  
**STATION 855+66**  
**LC-355-14.4** TOTAL 41472 WATTS



**LIGHTING CONTROLLER**  
**STATION 898+73**  
**LC-355-14.9** TOTAL 29760 WATTS



**LIGHTING CONTROLLER**  
**STATION 946+44**  
**LC-355-16.1** TOTAL 41760 WATTS

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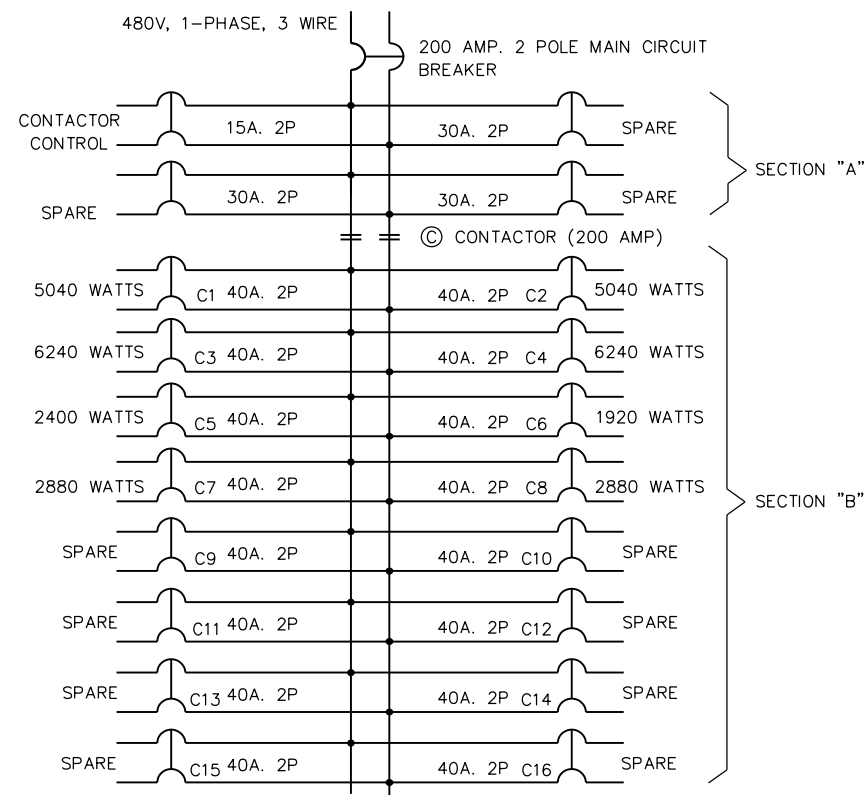
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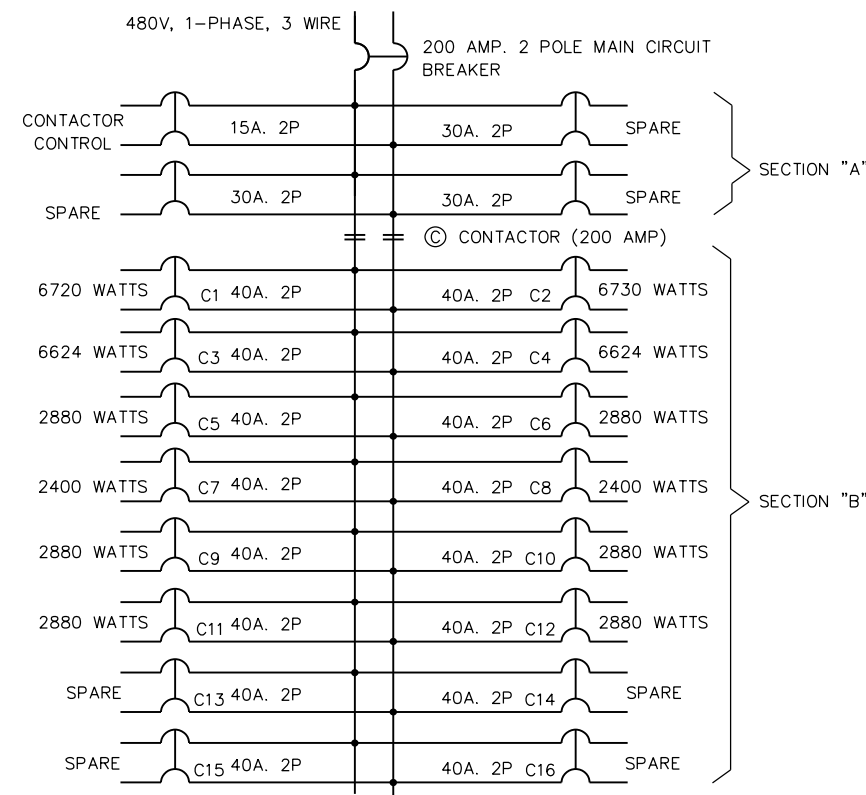
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CONTRACT NO. RR-16-4255  
 LIGHTING PANELBOARD SCHEDULES

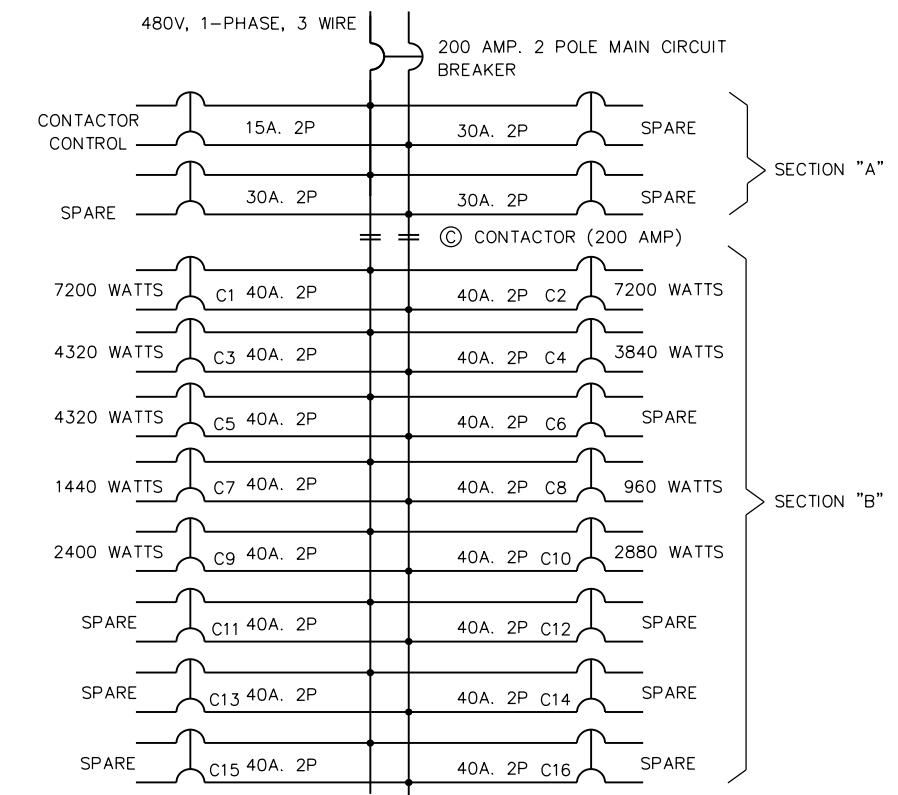
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 DRAWING NO. 833 OF 1517



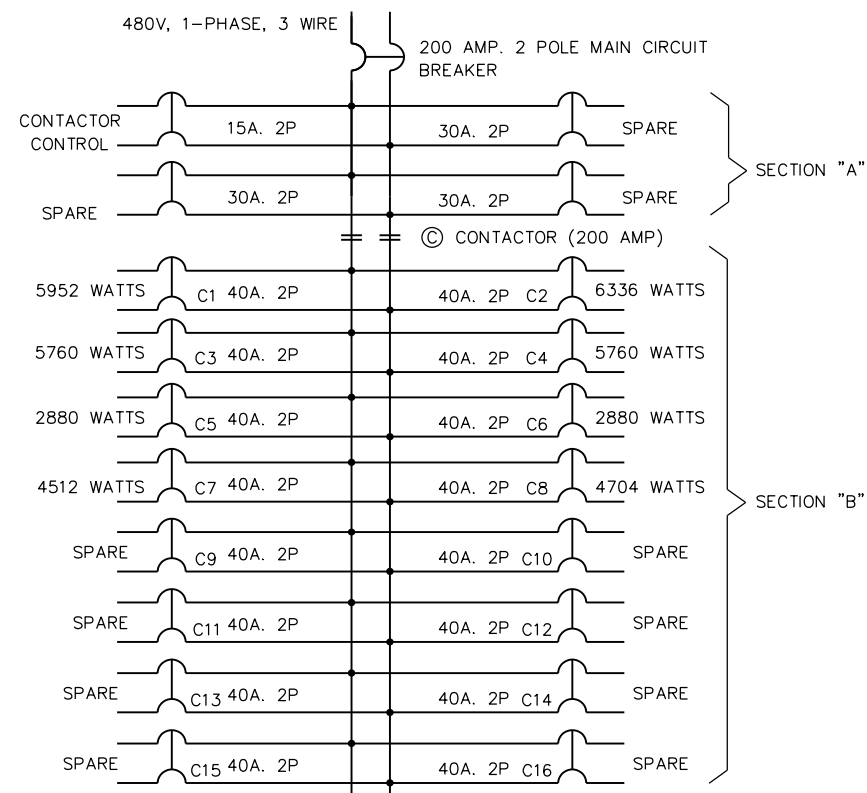
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**STATION 1006+49**  
**LC-355-17.3** TOTAL 42240 WATTS



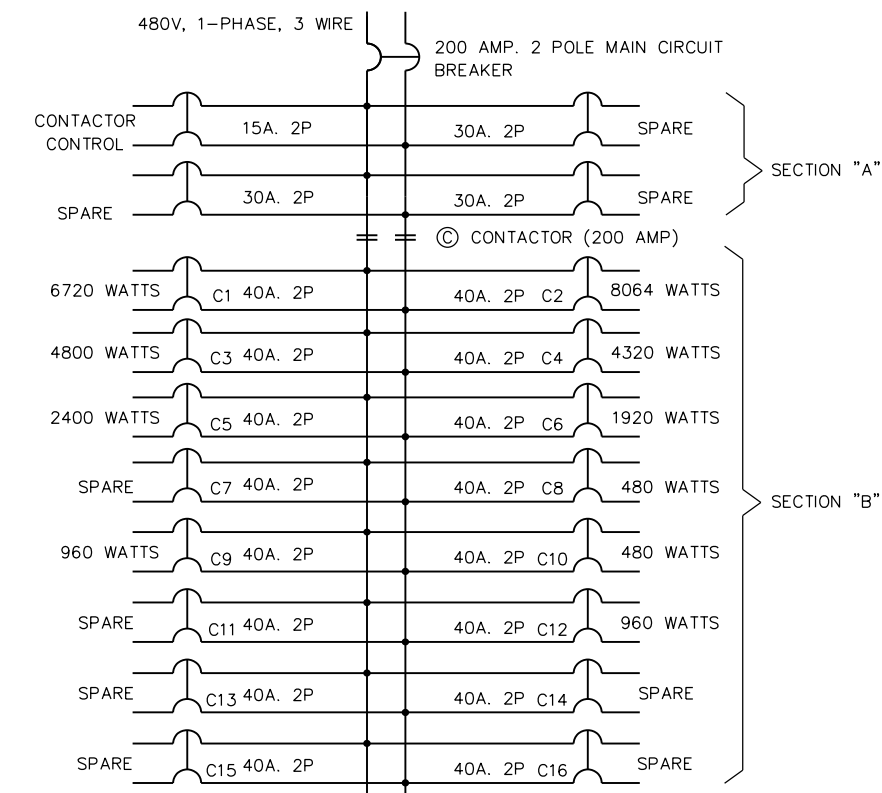
**LIGHTING CONTROLLER**  
**STATION 1062+95**  
**LC-355-18.3** TOTAL 48288 WATTS



**LIGHTING CONTROLLER**  
**STATION 1102+79**  
**LC-355-19.1** TOTAL 34560 WATTS



**LIGHTING CONTROLLER**  
**STATION 1217+97**  
**LC-355-21.3** TOTAL 38784 WATTS



**LIGHTING CONTROLLER**  
**STATION 1253+48**  
**LC-355-21.9** TOTAL 30624 WATTS

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DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.		DATE	REVISIONS DESCRIPTION

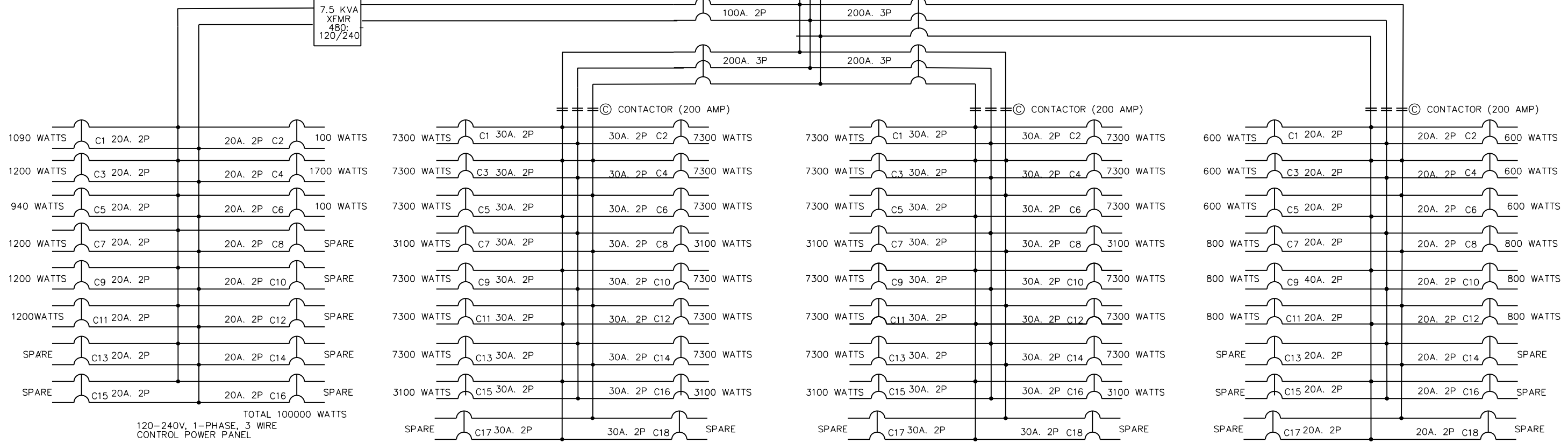
CONTRACT NO. RR-16-4255  
 LIGHTING PANELBOARD SCHEDULES

LT-82  
 DRAWING NO. 834 OF 1517

480V, 3-PHASE, 4 WIRE

400 AMP. 3 POLE MAIN CIRCUIT BREAKER

7.5 KVA XFMR 480:120/240



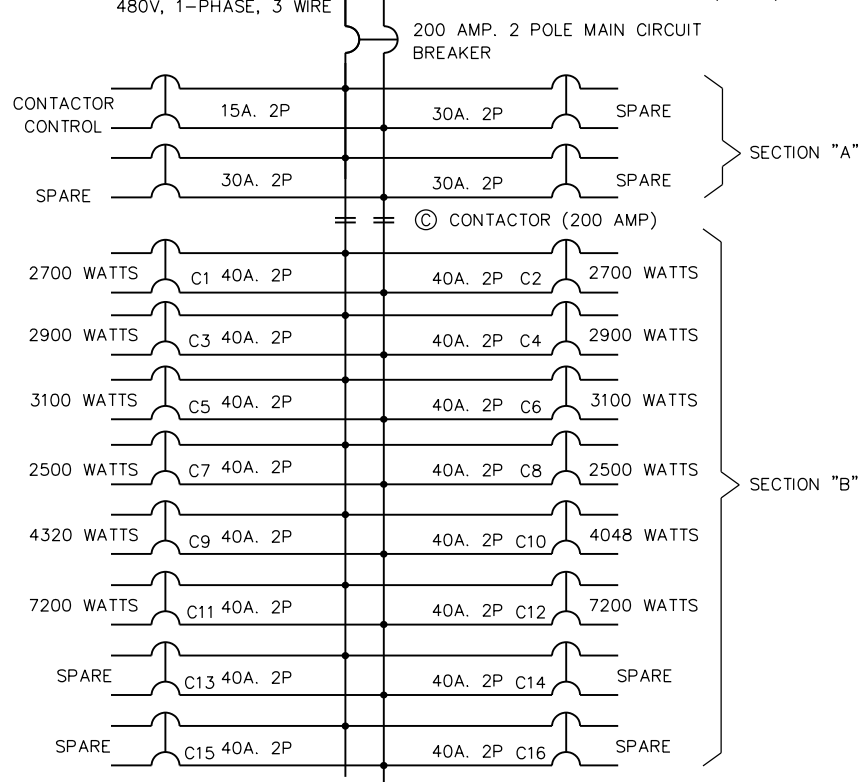
120-240V, 1-PHASE, 3 WIRE CONTROL POWER PANEL

PANEL A (DAY 1)

LIGHTING CONTROLLER STATION 1180+80 LC-88-132.0

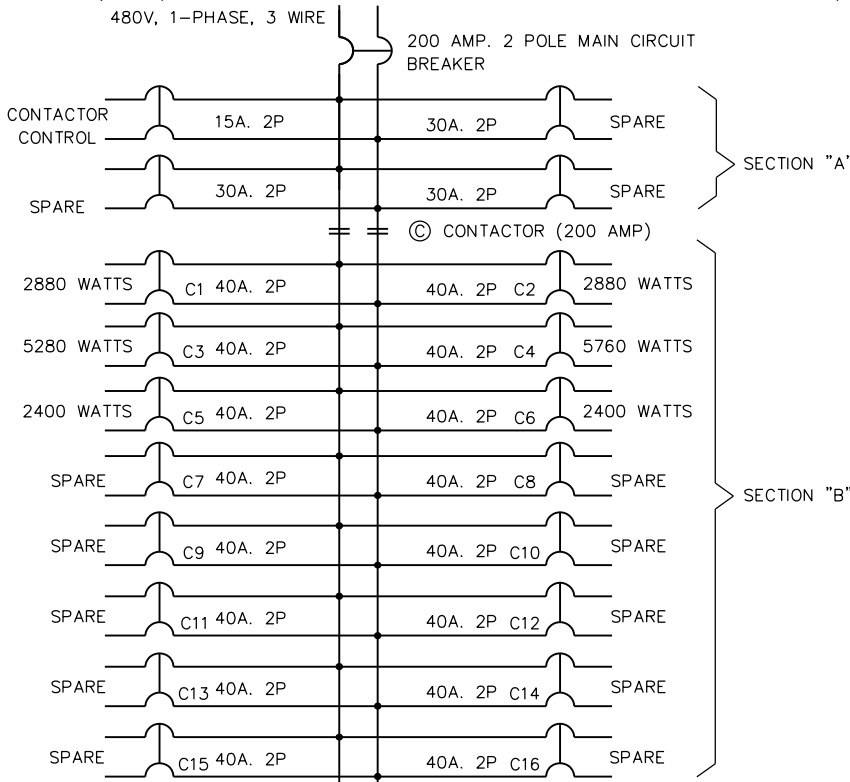
PANEL B (DAY 2)

PANEL C (NIGHT)



LIGHTING CONTROLLER STATION 507+09 LC-88-130.0

TOTAL 45168 WATTS



LIGHTING CONTROLLER STATION 1180+80 LC-88-132.0

TOTAL 21600 WATTS

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 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

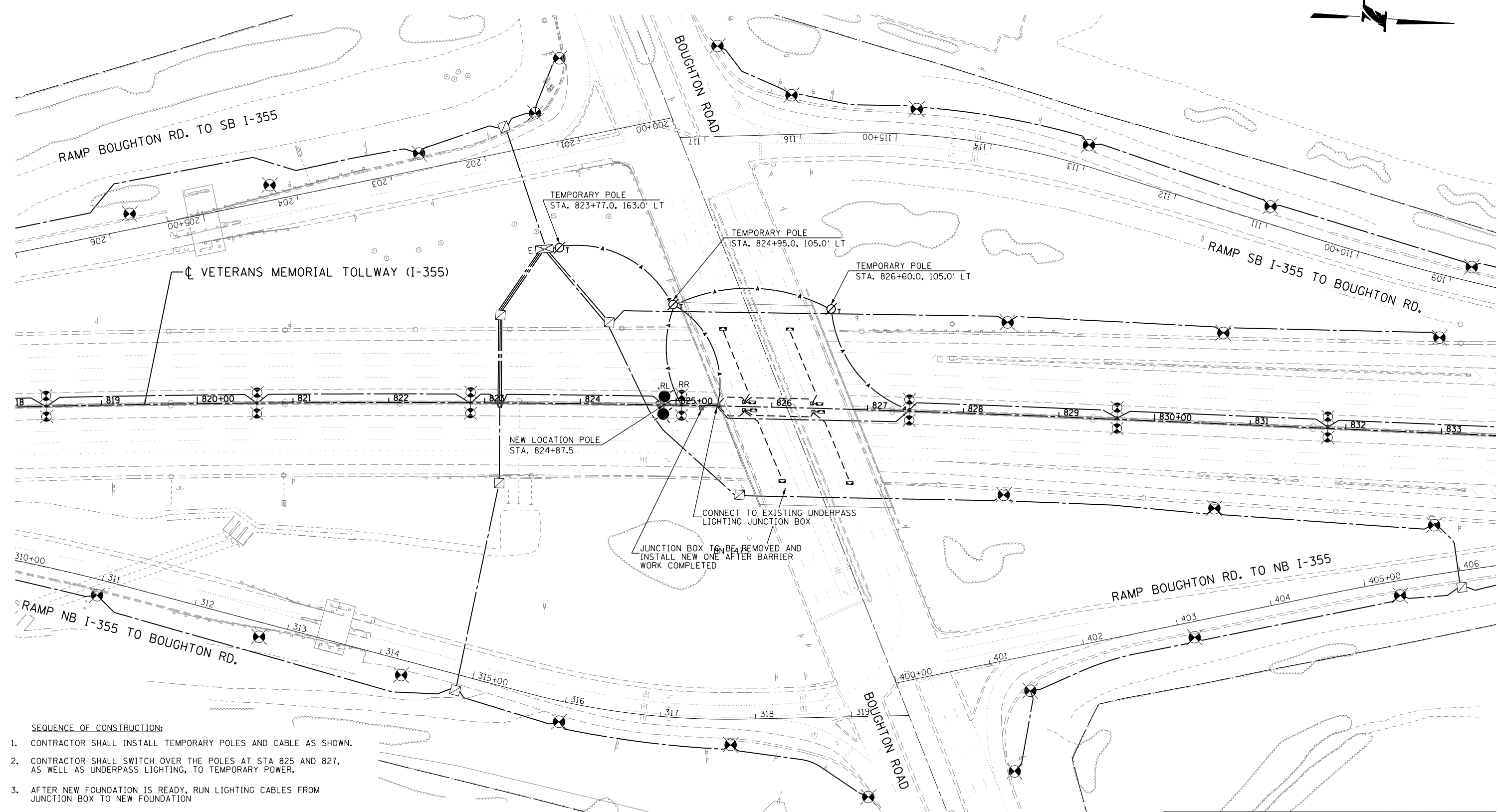


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.		REVISIONS	
NO.	DATE	DESCRIPTION	DESCRIPTION

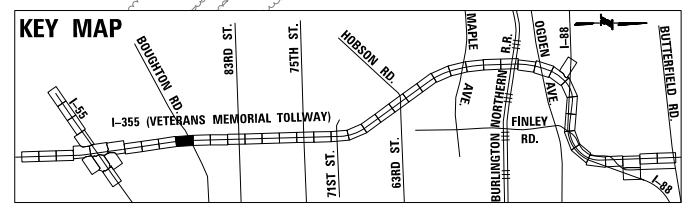
CONTRACT NO. RR-16-4255  
 LIGHTING PANELBOARD SCHEDULES

LT-83  
 DRAWING NO. 835 OF 1517



**SEQUENCE OF CONSTRUCTION:**

1. CONTRACTOR SHALL INSTALL TEMPORARY POLES AND CABLE AS SHOWN.
2. CONTRACTOR SHALL SWITCH OVER THE POLES AT STA 825 AND 827, AS WELL AS UNDERPASS LIGHTING, TO TEMPORARY POWER.
3. AFTER NEW FOUNDATION IS READY, RUN LIGHTING CABLES FROM JUNCTION BOX TO NEW FOUNDATION
4. REMOVE POLE AT STA. 825 TO NEW FOUNDATION AND CONNECT POLE. THIS NEED TO BE DONE IN ONE DAY.
5. AFTER NEW BARRIER SECTION IS COMPLETE, RUN NEW CABLES IN CONDUIT (IMBEDDED IN BARRIER) TO JUNCTION BOX AT UNDERPASS AND TO EXISTING POLE AT STA 827.
6. AFTER LIGHTING IS CONNECTED AND ENERGIZED, REMOVE TEMPORARY WIRING AND POLES.



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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

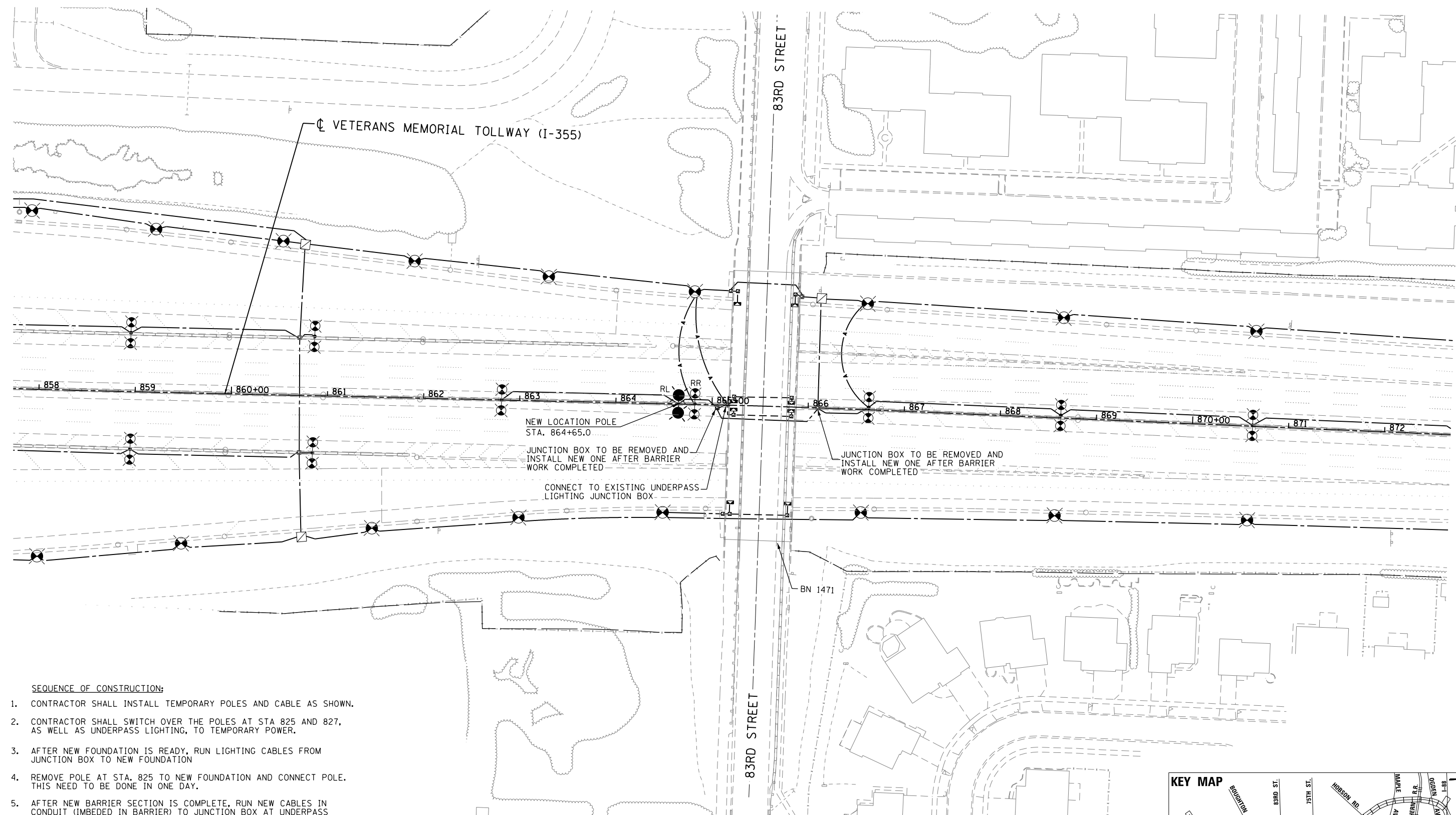
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		DESCRIPTION	

CONTRACT NO. RR-16-4255  
 TEMPORARY LIGHTING AND RELOCATION PLAN  
 STA 818+00 - STA 833+00

LT-84  
 DRAWING NO.  
 836 OF 1517

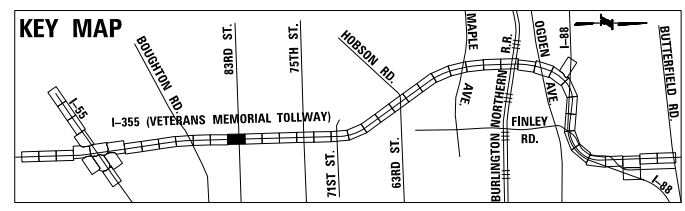
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**SEQUENCE OF CONSTRUCTION:**

1. CONTRACTOR SHALL INSTALL TEMPORARY POLES AND CABLE AS SHOWN.
2. CONTRACTOR SHALL SWITCH OVER THE POLES AT STA 825 AND 827, AS WELL AS UNDERPASS LIGHTING, TO TEMPORARY POWER.
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6. AFTER LIGHTING IS CONNECTED AND ENERGIZED, REMOVE TEMPORARY WIRING AND POLES.



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 ENGINEERS AND PLANNERS  
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 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910



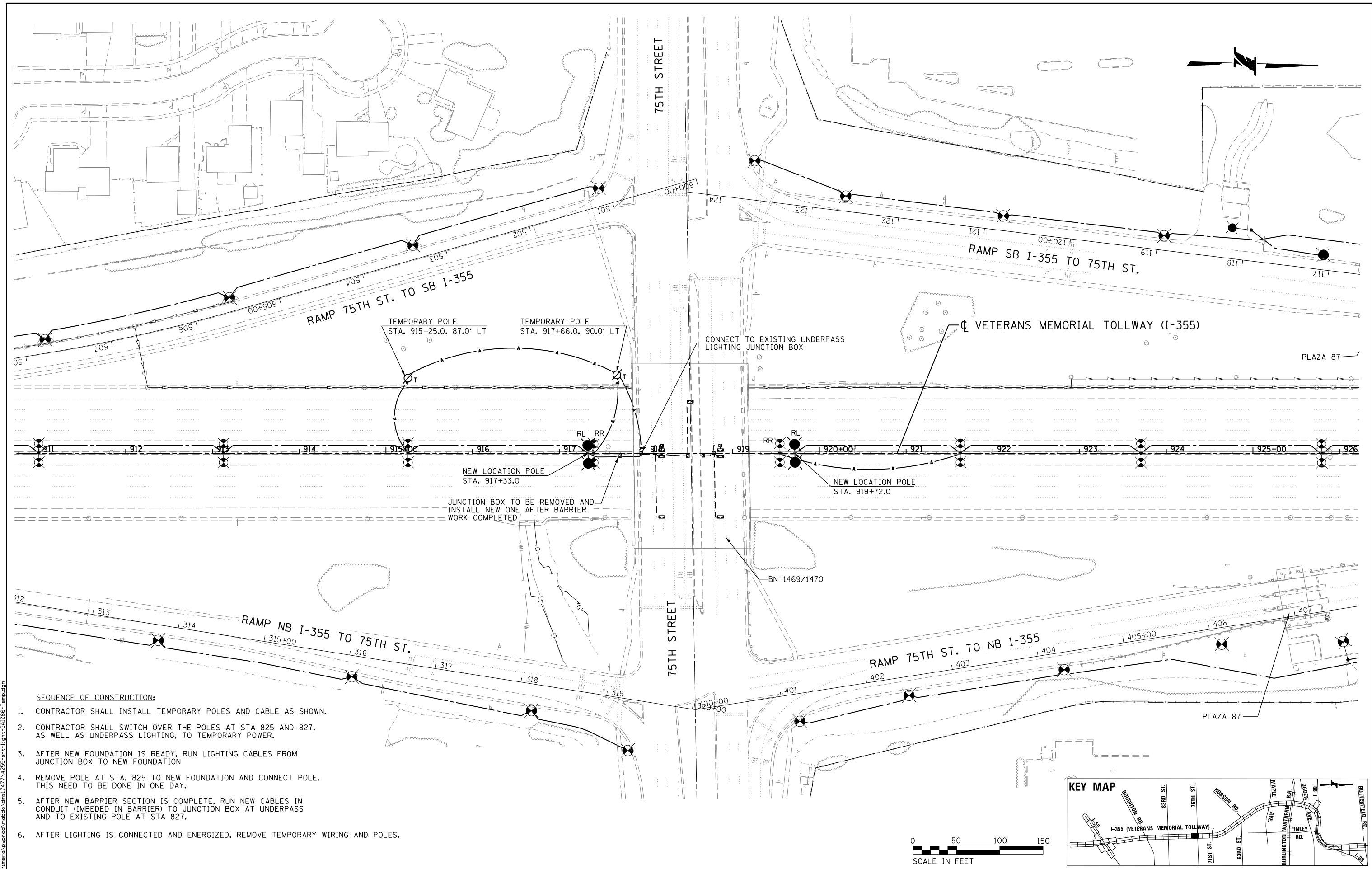
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.	DATE	REVISIONS	
		DESCRIPTION	

CONTRACT NO. RR-16-4255  
 TEMPORARY LIGHTING AND RELOCATION PLAN  
 STA 858+00 - STA 872+00

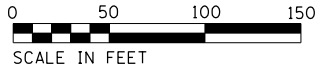
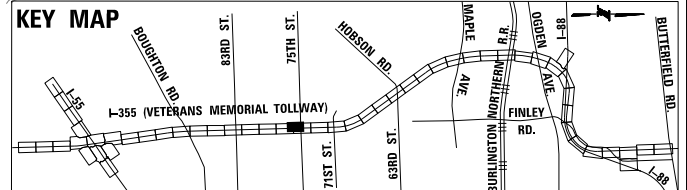
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 DRAWING NO.  
 837 OF 1517

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**SEQUENCE OF CONSTRUCTION:**

1. CONTRACTOR SHALL INSTALL TEMPORARY POLES AND CABLE AS SHOWN.
2. CONTRACTOR SHALL SWITCH OVER THE POLES AT STA 825 AND 827, AS WELL AS UNDERPASS LIGHTING, TO TEMPORARY POWER.
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6. AFTER LIGHTING IS CONNECTED AND ENERGIZED, REMOVE TEMPORARY WIRING AND POLES.



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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

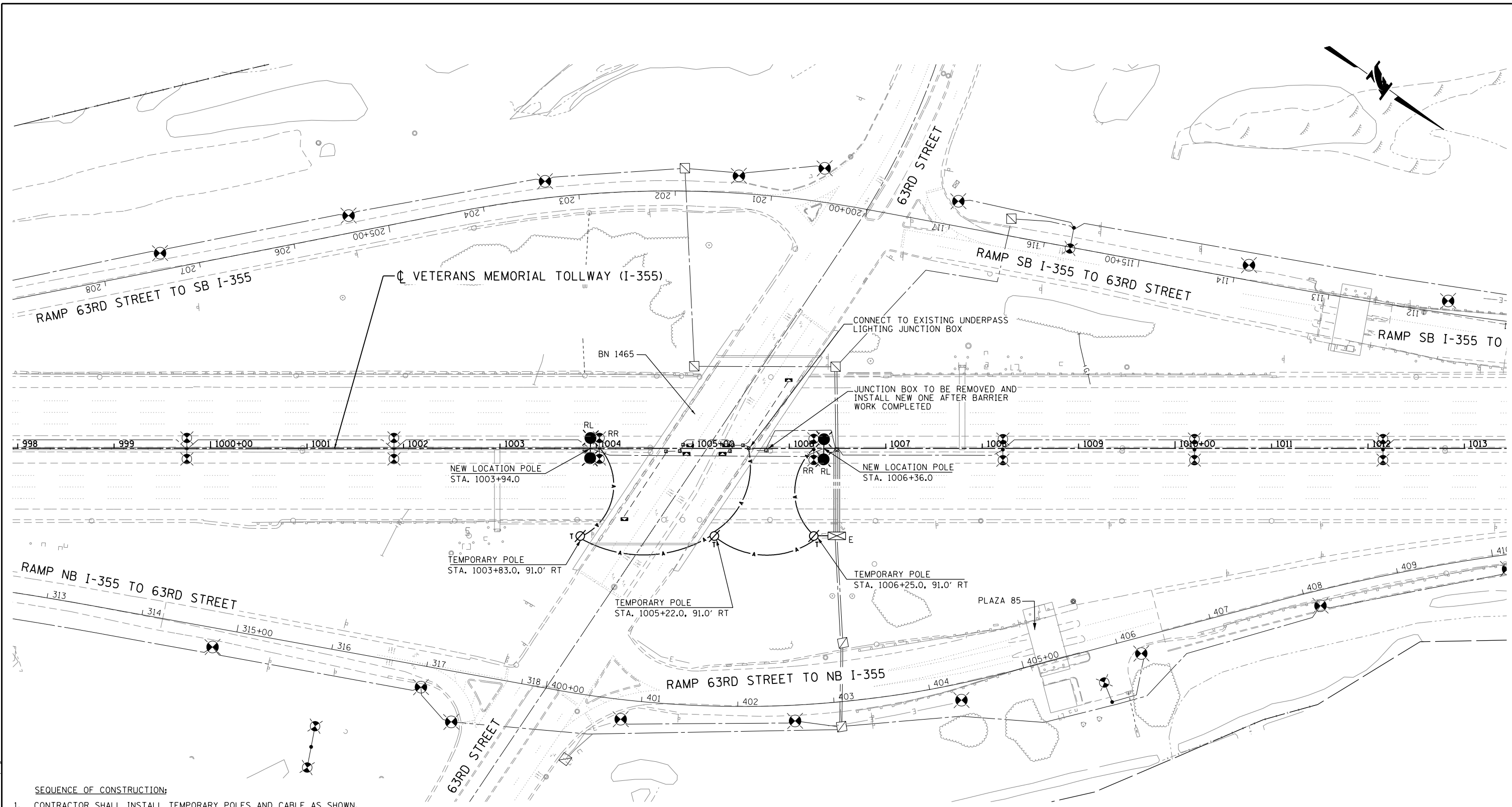


REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 TEMPORARY LIGHTING AND RELOCATION PLAN  
 STA 911+00 - STA 926+00

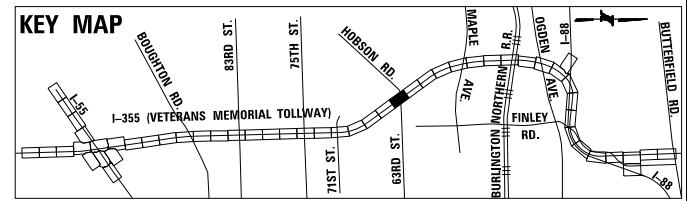
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 DRAWING NO.  
 838 OF 1517

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**SEQUENCE OF CONSTRUCTION:**

1. CONTRACTOR SHALL INSTALL TEMPORARY POLES AND CABLE AS SHOWN.
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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

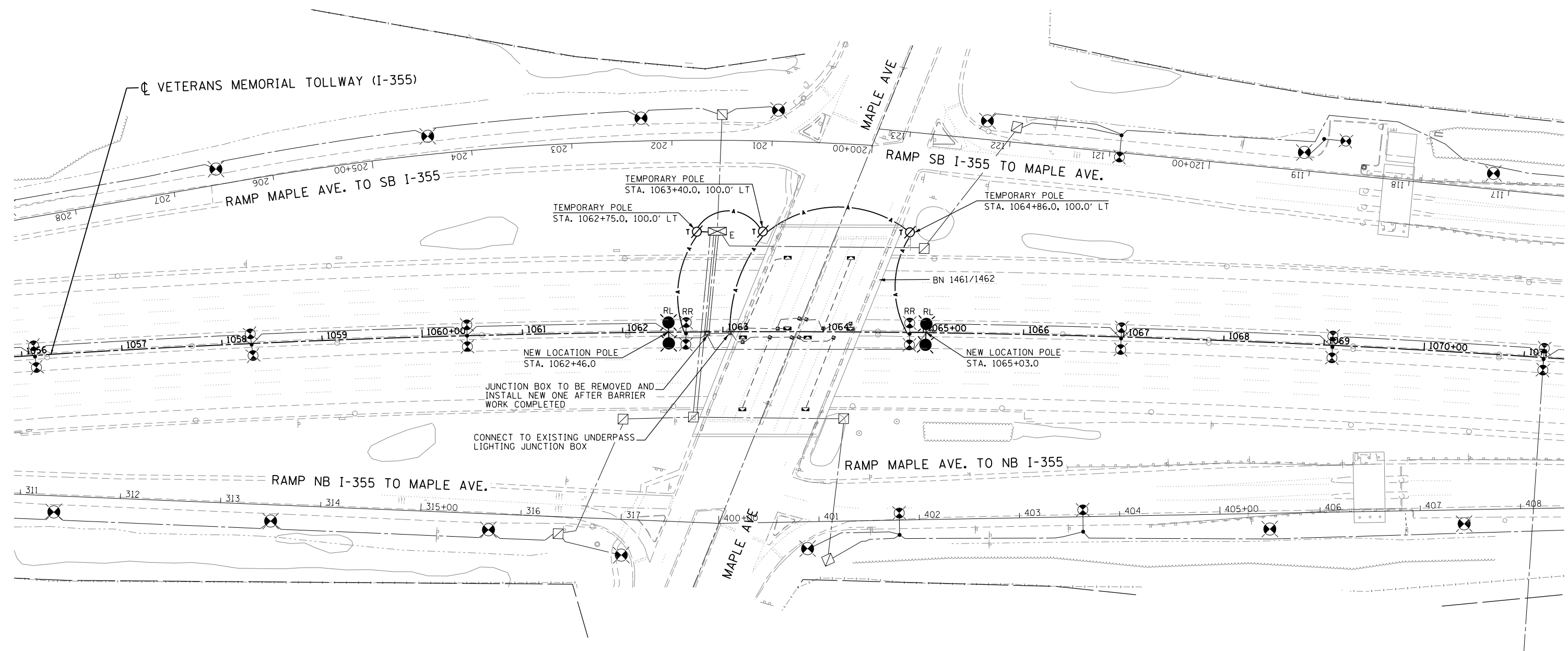
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 TEMPORARY LIGHTING AND RELOCATION PLAN  
 STA 998+00 - STA 1013+00

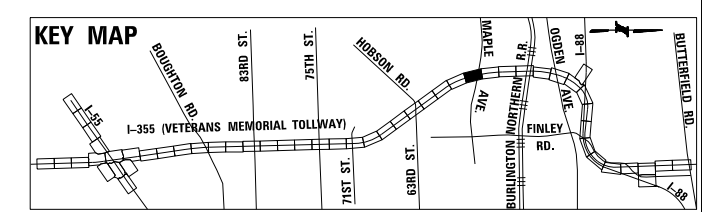
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 DRAWING NO.  
 839 OF 1517

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**SEQUENCE OF CONSTRUCTION:**

1. CONTRACTOR SHALL INSTALL TEMPORARY POLES AND CABLE AS SHOWN.
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 6035 N. NORTHWEST HIGHWAY  
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 CHICAGO, ILLINOIS 60631 TEL.(773)774-5910

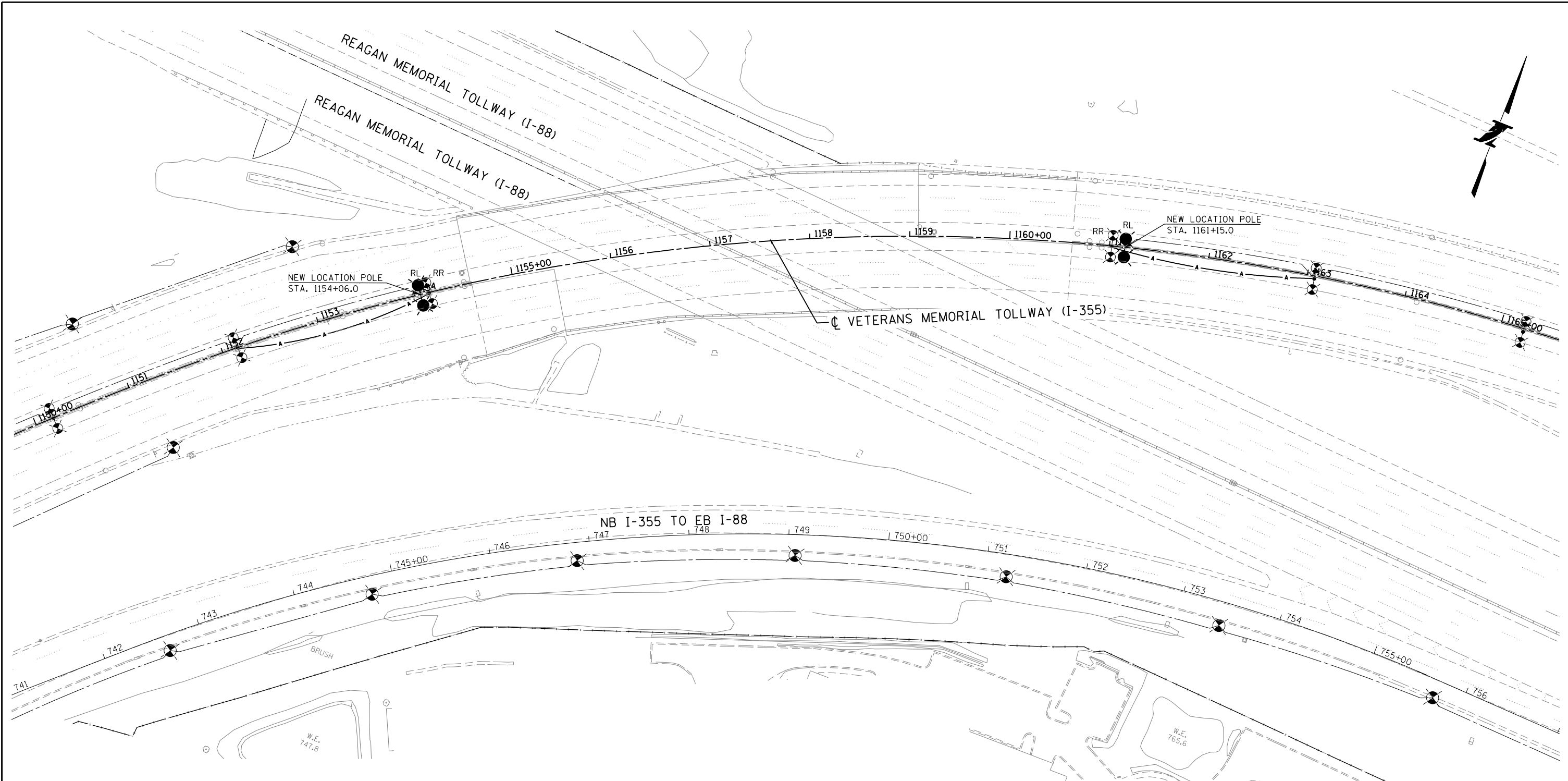
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 TEMPORARY LIGHTING AND RELOCATION PLAN  
 STA 1056+00 - STA 1071+00

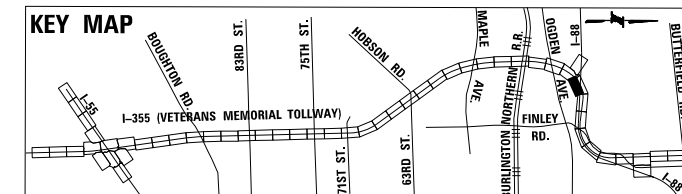
LT-88  
 DRAWING NO.  
 840 OF 1517

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**SEQUENCE OF CONSTRUCTION:**

1. CONTRACTOR SHALL INSTALL TEMPORARY POLES AND CABLE AS SHOWN.
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 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

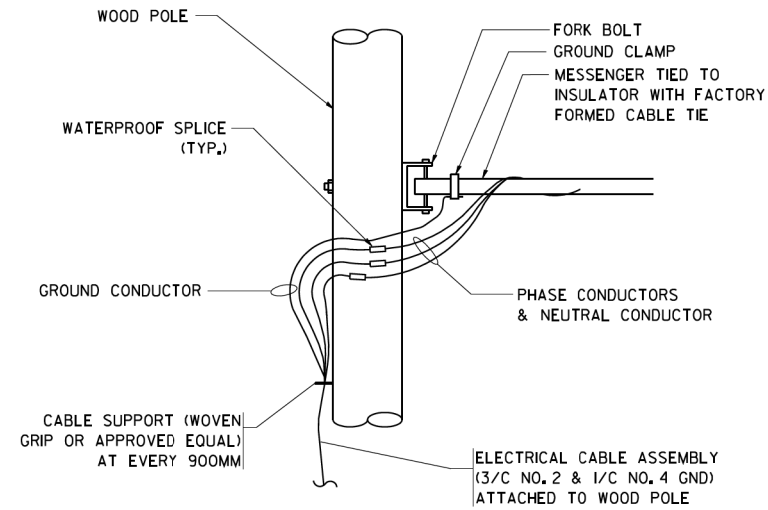


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
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 ILLINOIS 60515

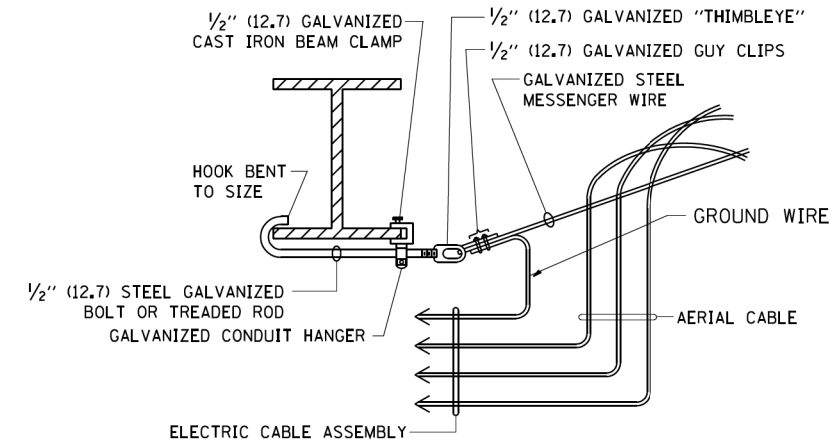
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NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 TEMPORARY LIGHTING AND RELOCATION PLAN  
 STA 1150+00 - STA 1165+00

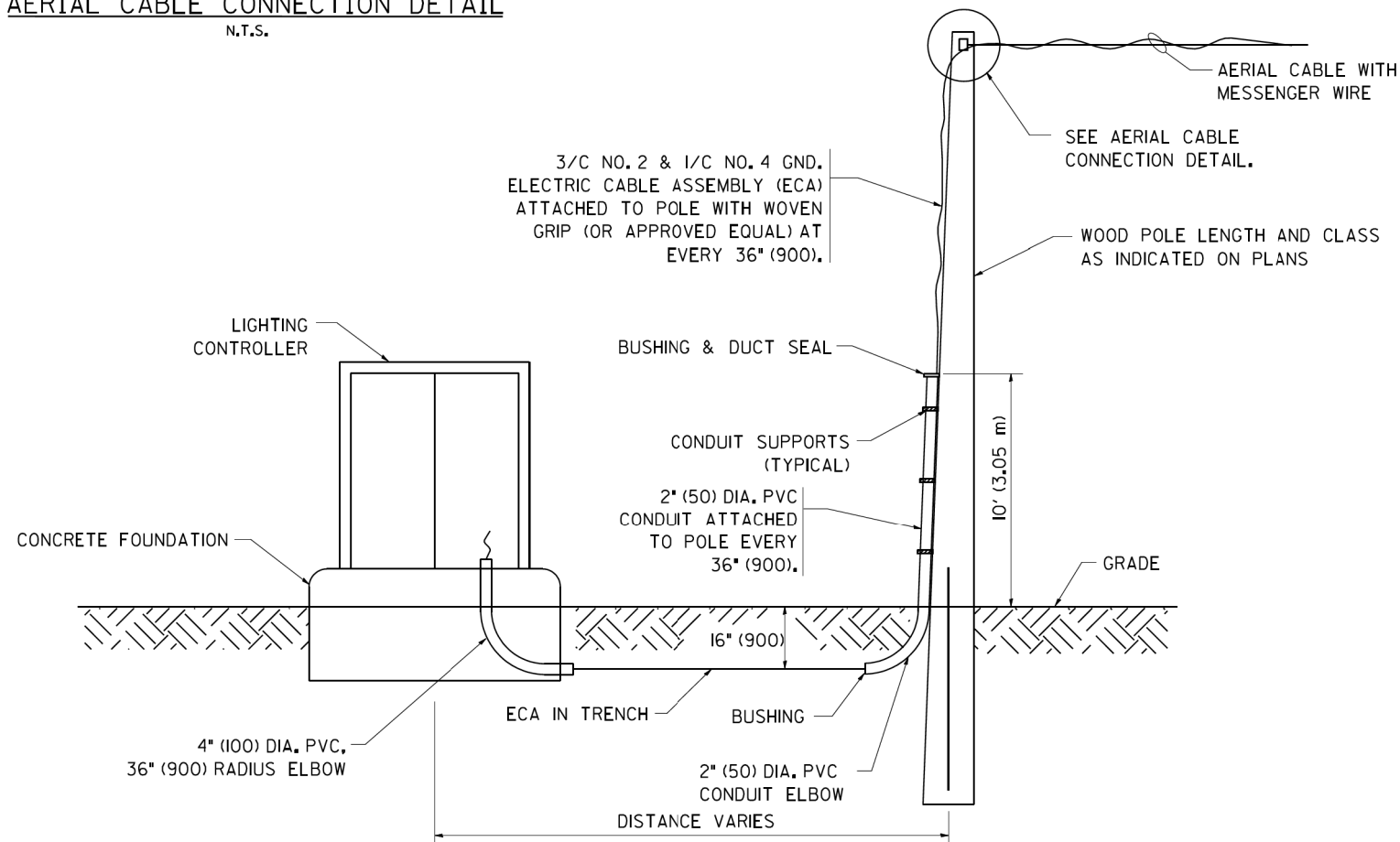
LT-89  
 DRAWING NO.  
 841 OF 1517



**AERIAL CABLE CONNECTION DETAIL**  
N.T.S.



**AERIAL CABLE ATTACHED TO STRUCTURE**  
NOT TO SCALE



**WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL**  
N.T.S.

**NOTES:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

FILE NAME = W:\diststd\22x34\be801.dgn	USER NAME = gaglianabt	DESIGNED - DRAWN -	REVISED - 08-08-03 REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY AERIAL CABLE INSTALLATION</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 50.000 "/ IN.	CHECKED -	REVISIED -	REVISIED -		SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	<b>BE-801</b>		CONTRACT NO.
PLOT DATE = 1/4/2008	DATE -	REVISIED -	REVISIED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018



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ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

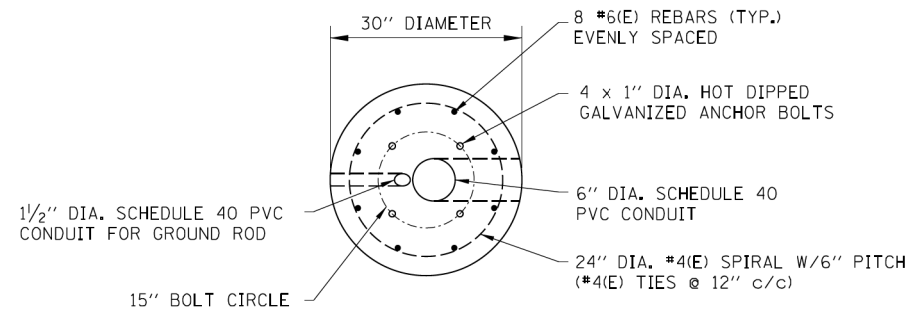


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

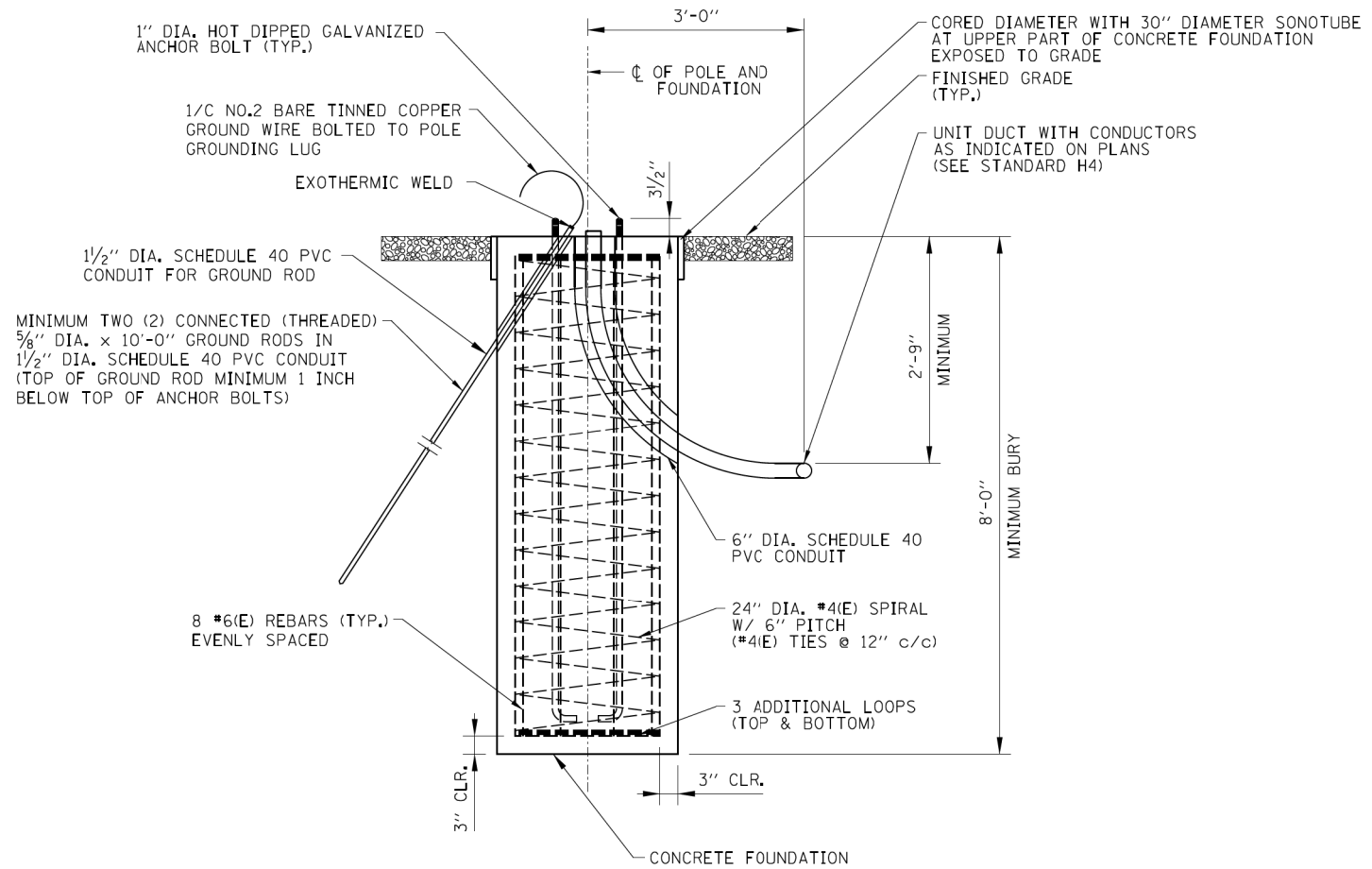
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NO.	DATE	

CONTRACT NO. RR-16-4255  
TEMPORARY LIGHTING AND RELOCATION  
DETAILS

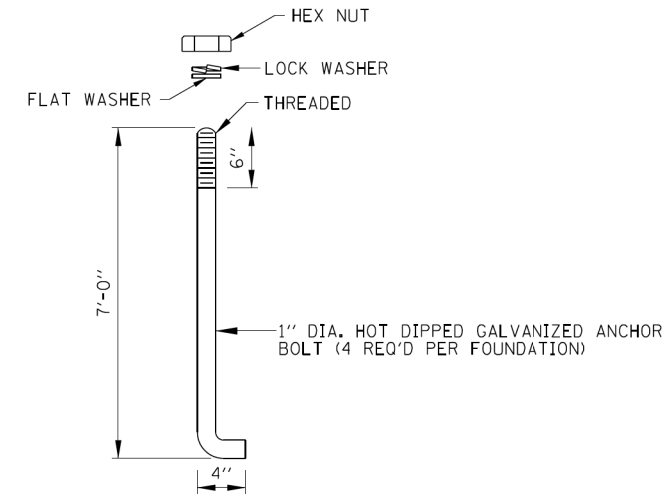
LT-90  
DRAWING NO.  
842 OF 1517



PLAN



ELEVATION



ANCHOR BOLT DETAIL

NOTES:

1. AT LOCATIONS NOT SHIELDED BY GUARDRAIL, THE LIGHT POLE FOUNDATION SHALL BE FLUSH WITH SURROUNDING GRADED ON ALL SIDES. THE SURROUNDING AREA SHALL BE A LEVEL GRADED AREA CONSTRUCTED OF AGGREGATE SHOULDERS WITH FILTER FABRIC, TYPE B, 4".
2. PROVIDE SEEDING, POTASUIM FERTILIZER NUTRIENT, AND EROSION CONTROL BLANKET AS REQUIRED.
3. THE TOP OF FOUNDATION SHALL BE AT THE SAME ELEVATION AS THE ADJACENT TOP OF GUTTER OR WHEN ADJACENT TO AGGREGATE SHOULDER, AT THE SAME ELEVATION AS THE OUTSIDE EDGE OF THE AGGREGATE SHOULDER SLOPED A MAXIMUM 6% AWAY FROM THE PAVED SHOULDER.
4. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).
5. ALL GROUND MOUNTED LIGHT POLES SHALL BE PROVIDED WITH AN ACCEPTED FHWA BREAKAWAY BASE OR DEVICE PER THE ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS SECTION 1070.
6. FOR DETAILS OF FUSE HOLDER, POLE BASE WIRING AND JOINT ASSEMBLY SEE STANDARD H2.
7. ALL REINFORCEMENT BARS SHALL BE EPOXY COATED.
8. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND THE NATIONAL ELECTRICAL SAFETY CODE.

LIGHT STANDARD FOUNDATION DETAILS - CONCRETE  
(GROUND MOUNTED UNITS)

APPROVED *Paul Kovacs* CHIEF ENGINEER DATE 2-7-2012

SHEET 1 OF 9



LIGHT STANDARD FOUNDATION

STANDARD H1-05

DATE	REVISIONS
2-07-2012	MODIFIED FOUNDATION DETAILS, REVISED NOTES
11-01-2012	ADDED CONTROLLER NUMBER
3-31-2014	REVISED HELIX FOUNDATION, NEW DETAIL "A", AND GRADED AREA
3-11-2015	MOVED MEDIAN BARRIER MOUNTED FOUNDATION DETAILS.
3-31-2016	ADDED HELIX FOUNDATION DEPTH INFORMATION.

DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018



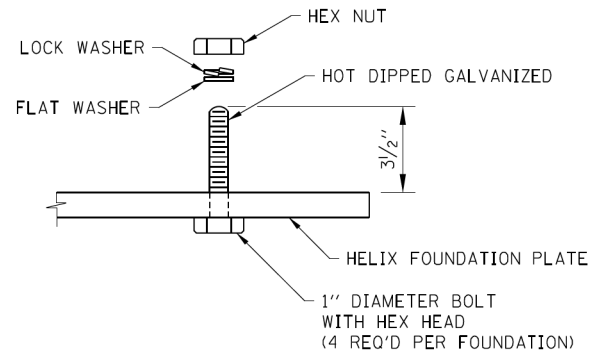
GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
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CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

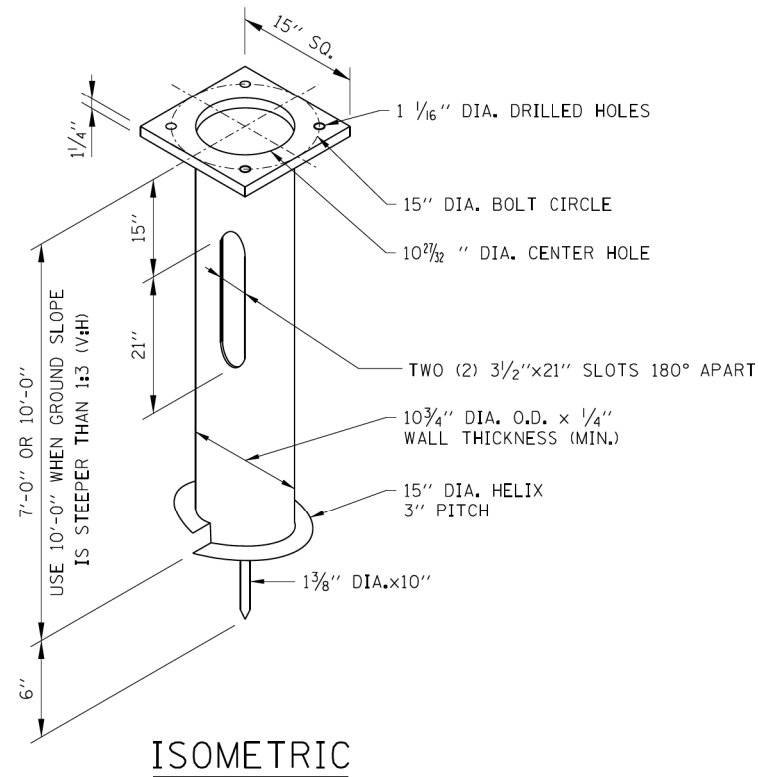
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
FOUNDATION DETAILS

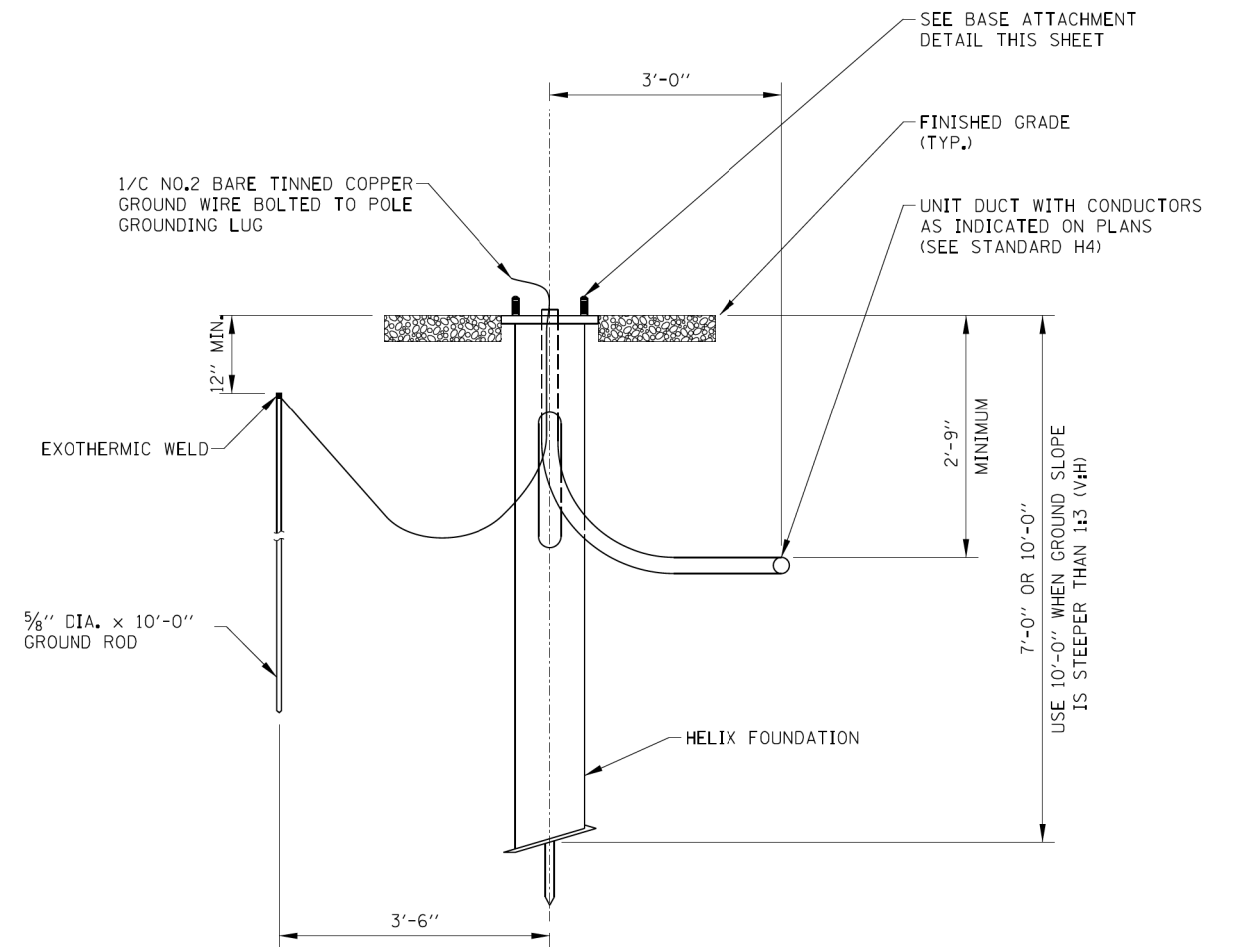
LT-91  
DRAWING NO. 843 OF 1517



**BASE ATTACHMENT DETAIL**



**ISOMETRIC**



**ELEVATION**

SHEET 2 OF 9



LIGHT STANDARD FOUNDATION

STANDARD H1-05

**LIGHT STANDARD FOUNDATION DETAILS - HELIX  
(GROUND MOUNTED UNITS)**

NOTES:  
SEE SHEET 1 OF THIS SERIES FOR NOTES.

APPROVED: *Paul Kovacs* CHIEF ENGINEER DATE 2-7-2012

DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
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THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

NO.	DATE	REVISIONS	
		DESCRIPTION	

CONTRACT NO. RR-16-4255

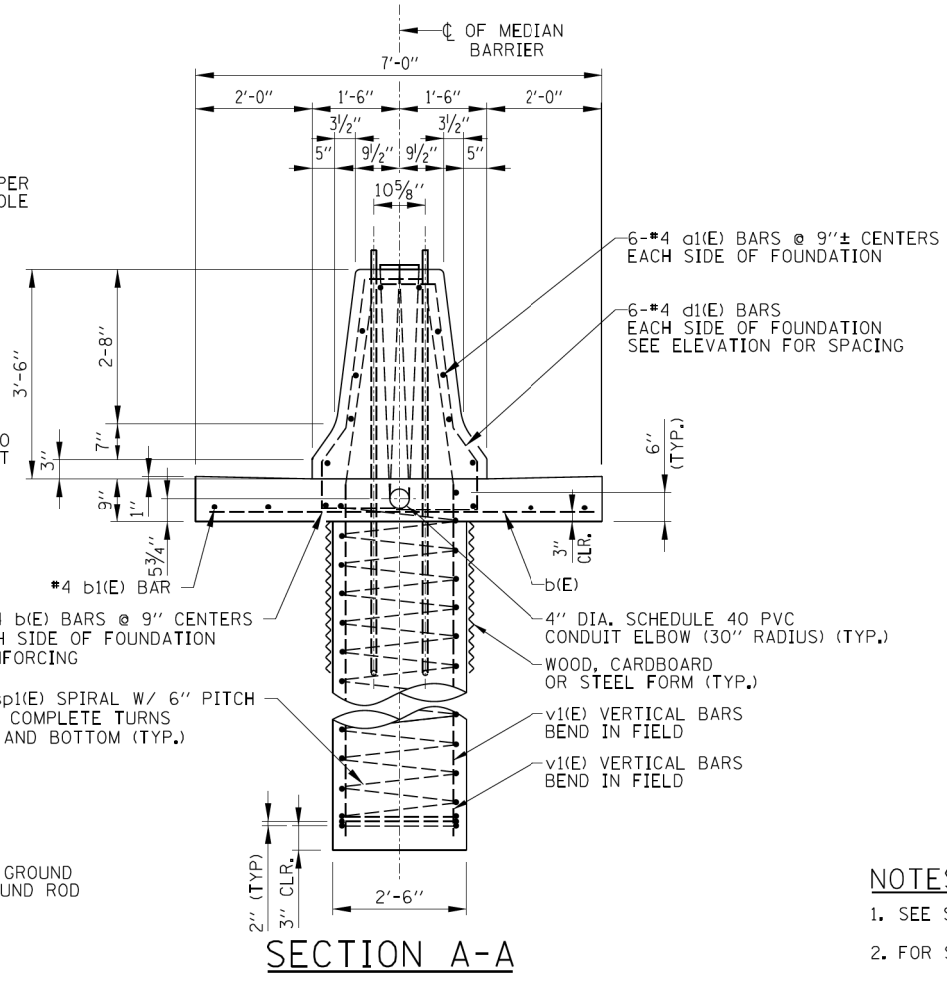
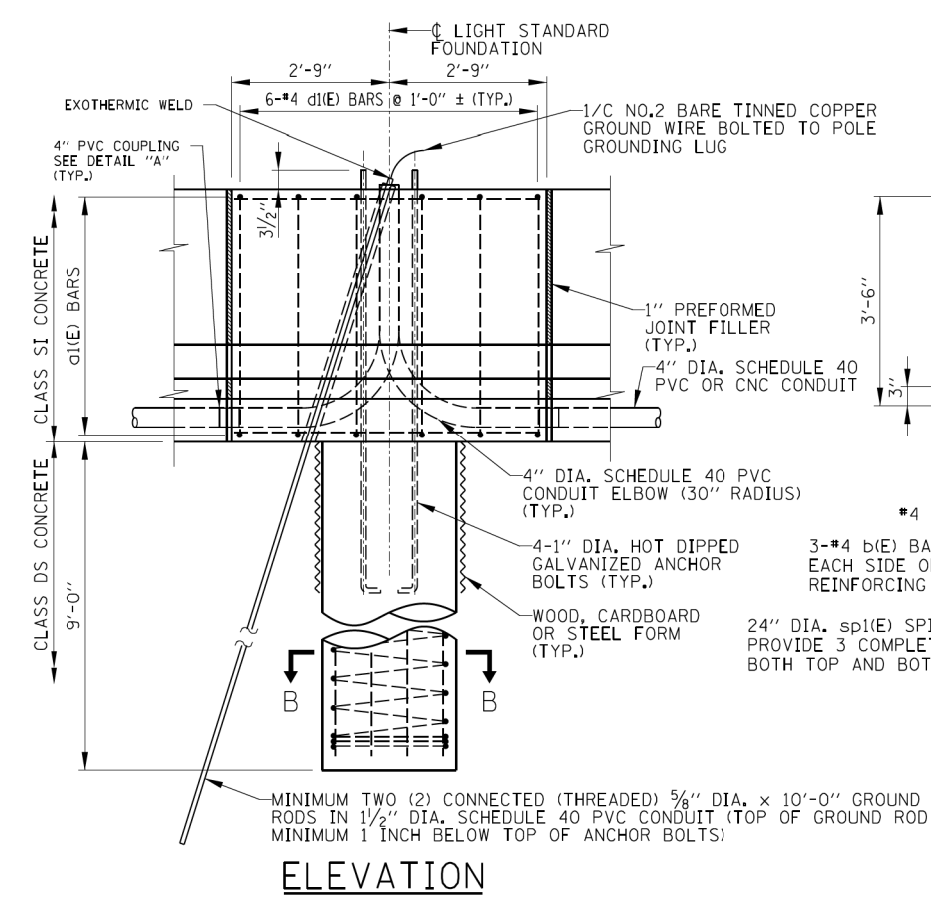
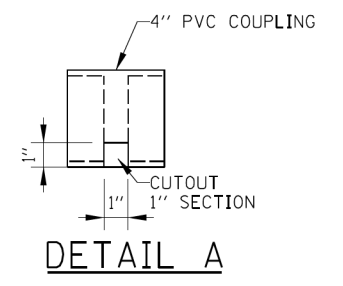
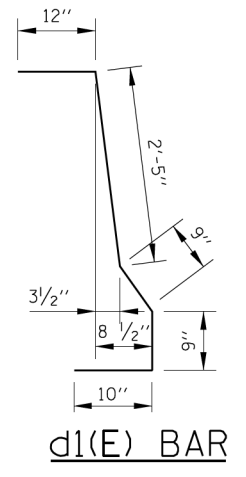
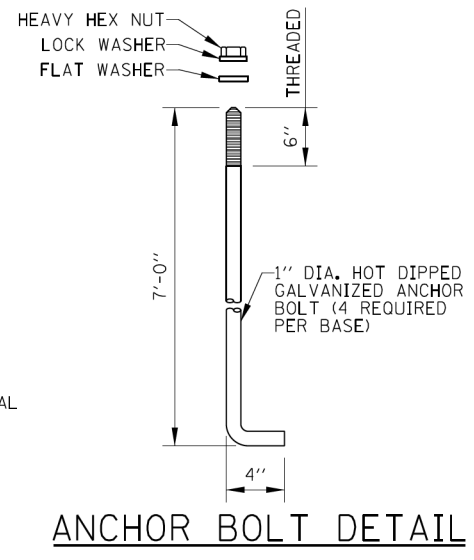
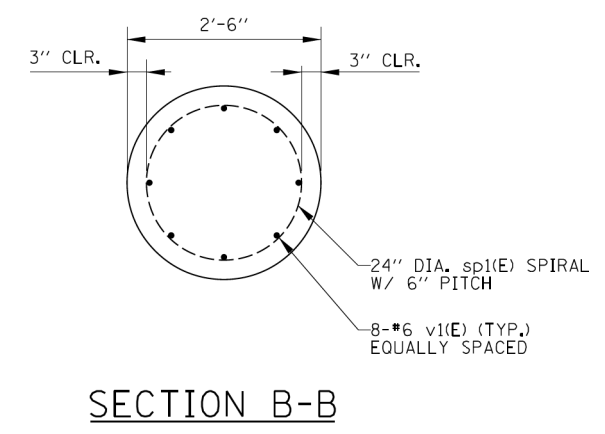
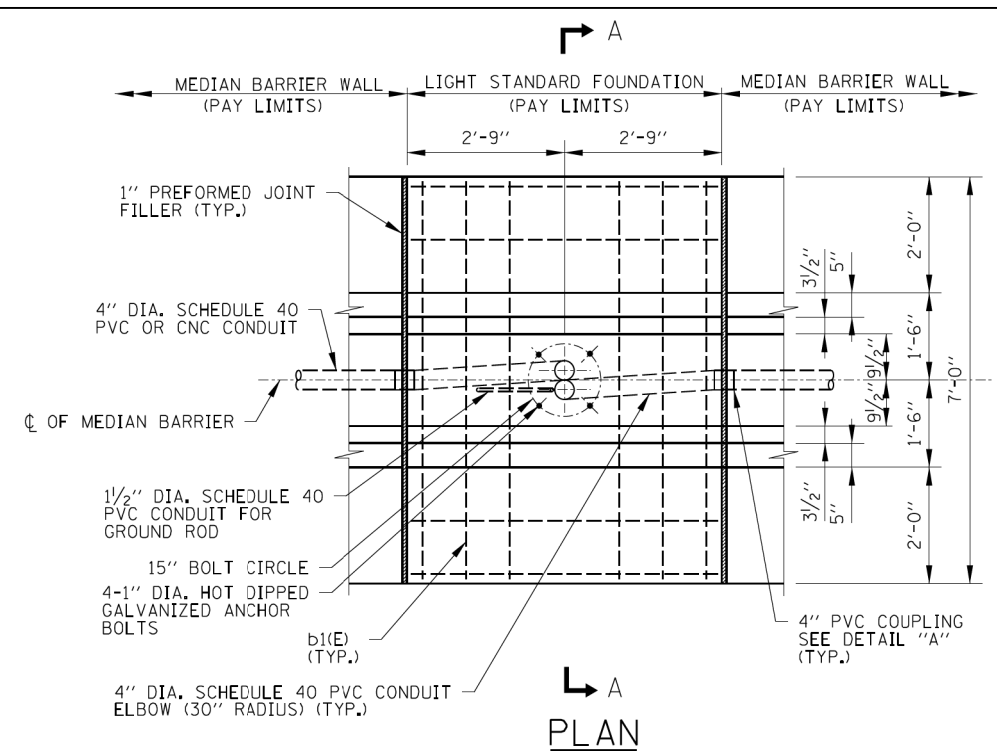
FOUNDATION DETAILS

LT-92

DRAWING NO.  
844 OF 1517

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REINFORCEMENT BARS SCHEDULE					
BAR	NO.	SIZE	LENGTH	WT. LB.	SHAPE
d1(E)	12	#4	5'-0"	40	
b1(E)	6	#4	6'-6"	26	
b1(E)	4	#4	5'-2"	14	
d1(E)	12	#4	5'-9"	46	
sp1(E)	1	#4	*	*	
v1(E)	8	#6	11'-9"	142	

\* SEE SECTION A-A

- NOTES:**
- SEE SHEET 1 OF THIS SERIES FOR NOTES.
  - FOR SLIP FORM, SEE SHEET 6 OF THIS SERIES.

SHEET 3 OF 9



LIGHT STANDARD FOUNDATION

STANDARD H1-05

*Paul Kovacs*  
APPROVED CHIEF ENGINEER DATE 2-7-2012

LIGHT STANDARD FOUNDATION DETAILS - MEDIAN BARRIER  
(TYPE 1 CENTERED CAISSON, 42" BARRIER)

DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018

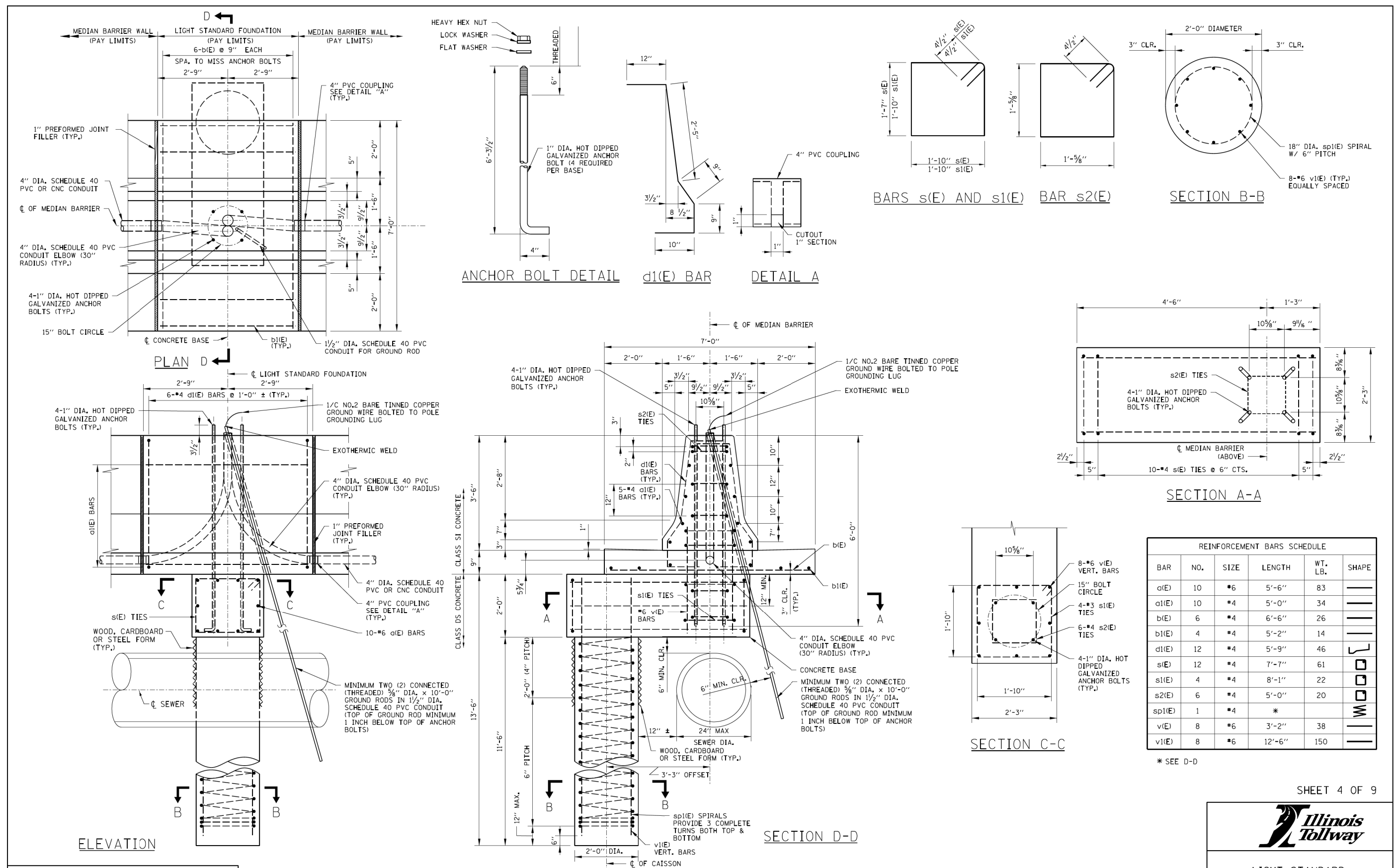
**GO** GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

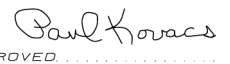
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
FOUNDATION DETAILS

LT-93  
DRAWING NO. 845 OF 1517



  
 APPROVED CHIEF ENGINEER DATE 2-7-2012

**LIGHT STANDARD FOUNDATION DETAILS - MEDIAN BARRIER**  
 (TYPE 2 OFFSET CAISSON, 42" BARRIER)

- NOTES:**
- SEE SHEET 1 OF THIS SERIES FOR NOTES.
  - FOR SLIP FORM, SEE SHEET 6 OF THIS SERIES

REINFORCEMENT BARS SCHEDULE					
BAR	NO.	SIZE	LENGTH	WT. LB.	SHAPE
d1(E)	10	#6	5'-6"	83	
s1(E)	10	#4	5'-0"	34	
b1(E)	6	#4	6'-6"	26	
b1(E)	4	#4	5'-2"	14	
d1(E)	12	#4	5'-9"	46	
s1(E)	12	#4	7'-7"	61	
s2(E)	6	#4	5'-0"	20	
sp1(E)	1	#4	*		
v1(E)	8	#6	3'-2"	38	
v2(E)	8	#6	12'-6"	150	

\* SEE D-D



LIGHT STANDARD FOUNDATION

STANDARD H1-05

DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



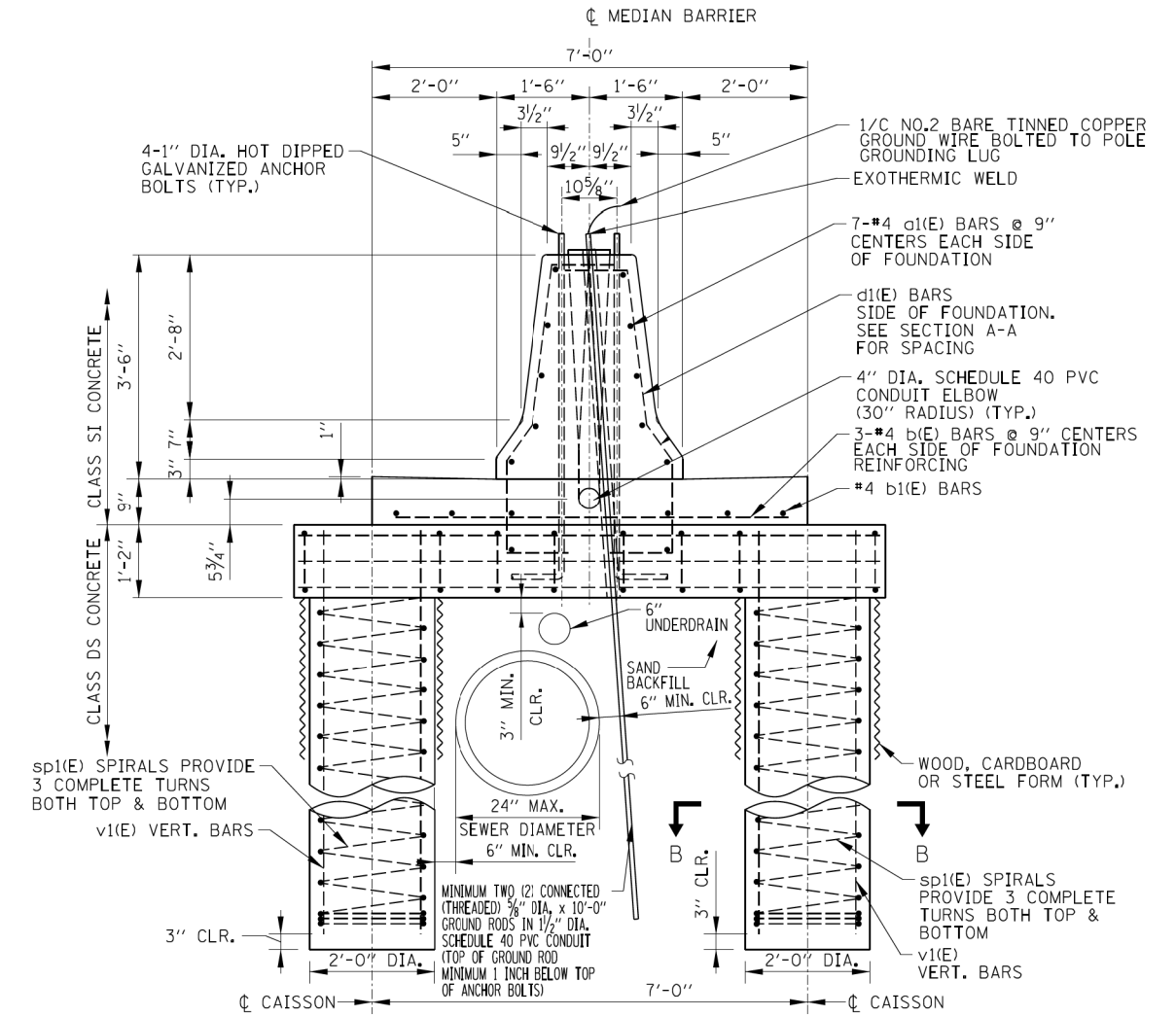
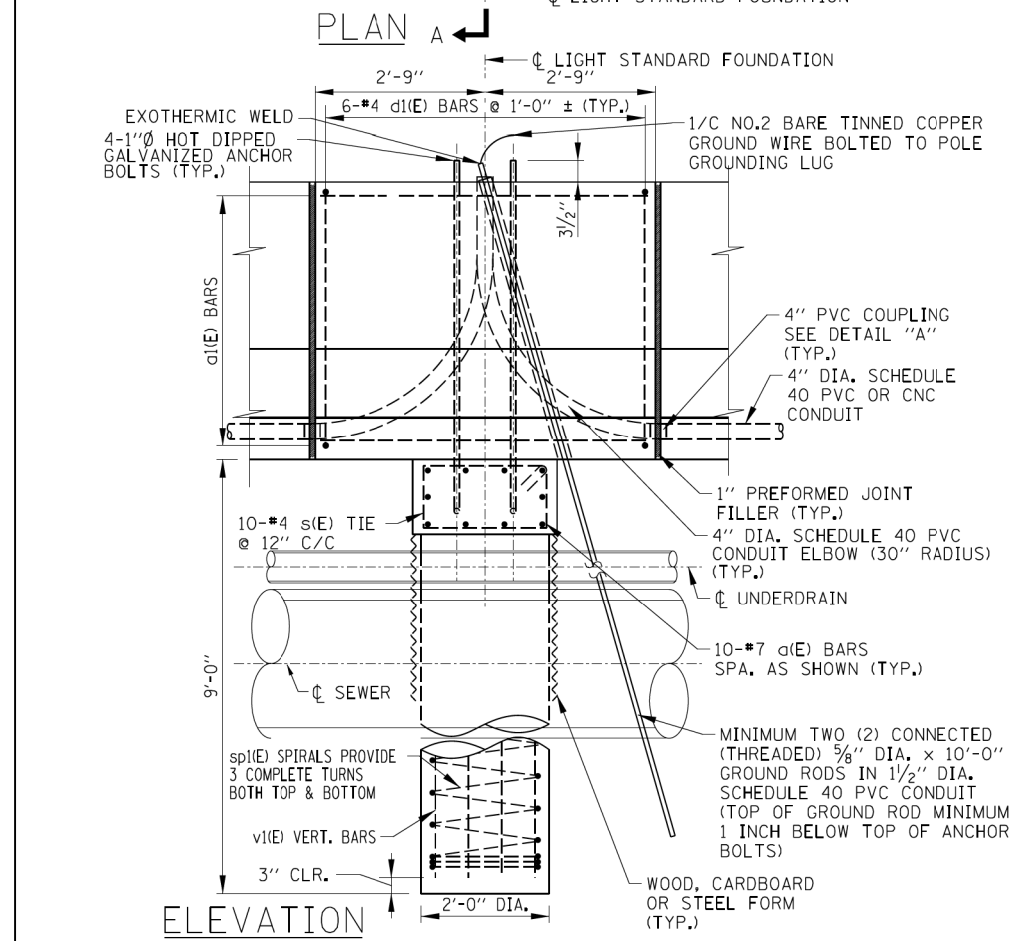
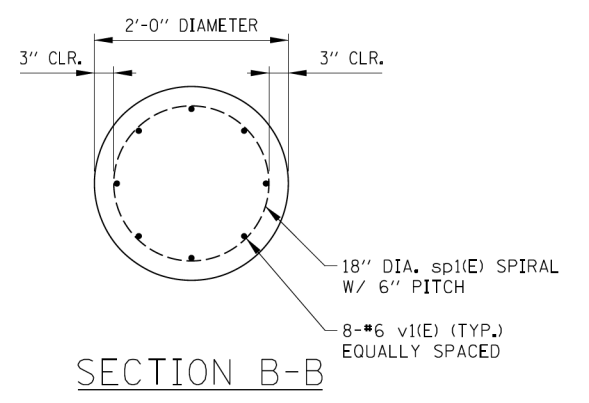
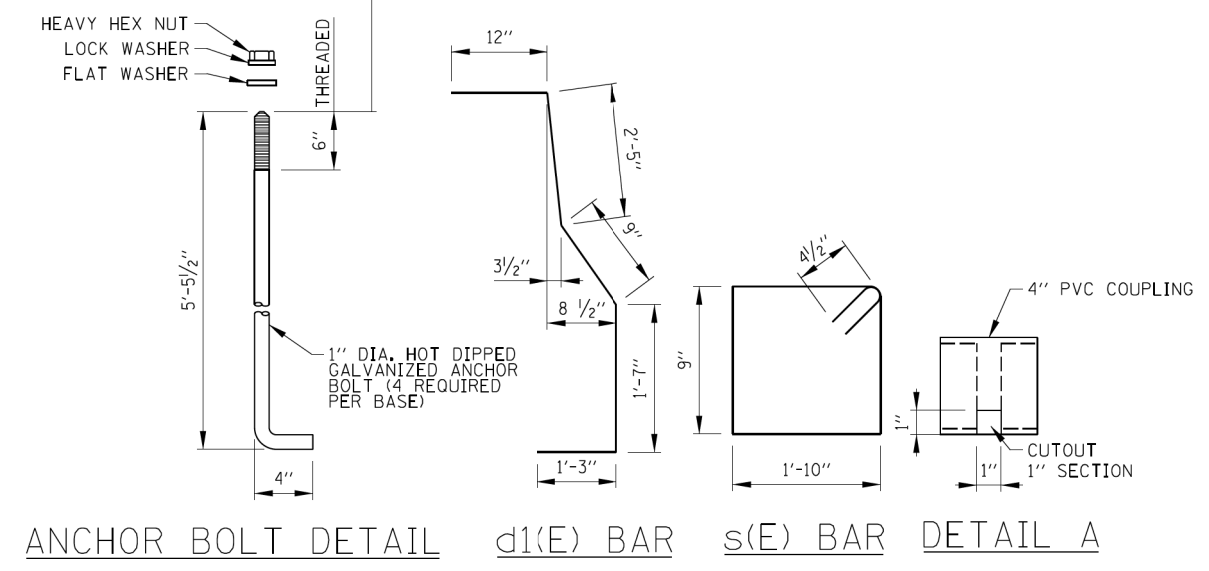
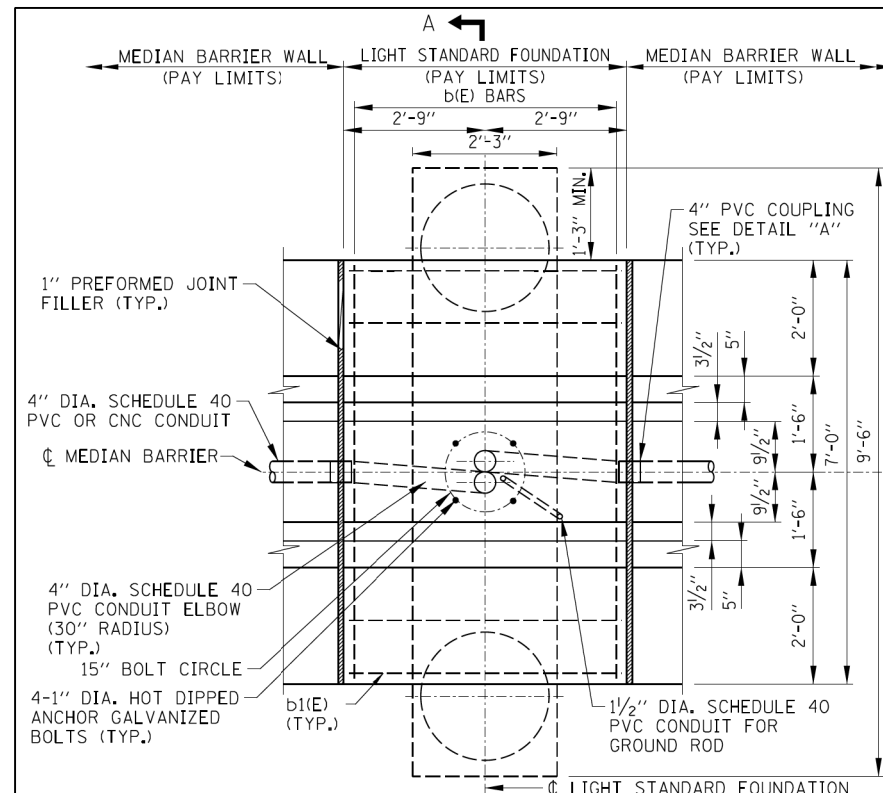
**GANDHI AND ASSOCIATES, INC.**  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 FOUNDATION DETAILS

LT-94  
 DRAWING NO.  
 846 OF 1517



REINFORCEMENT BARS SCHEDULE					
BAR	NO.	SIZE	LENGTH	WT. LB.	SHAPE
a1(E)	10	#7	9'-0"	184	—
a1(E)	14	#4	5'-0"	47	—
b1(E)	6	#4	6'-6"	26	—
b1(E)	4	#4	5'-2"	14	—
d1(E)	12	#4	6'-7"	53	—
s(E)	10	#4	5'-11"	40	—
sp1(E)	2	#4	*		—
v1(E)	16	#6	9'-9"	235	—

\* SEE ELEVATION

- NOTES:
- SEE SHEET 1 OF THIS SERIES FOR NOTES.
  - FOR SLIP FORM, SEE SHEET 6 OF THIS SERIES.

Paul Kovacs  
 APPROVED CHIEF ENGINEER DATE 2-7-2012

LIGHT STANDARD FOUNDATION DETAILS - MEDIAN BARRIER (TYPE 3 STRADDLED CAISSON, 42" BARRIER)

SECTION A-A



LIGHT STANDARD FOUNDATION

STANDARD HI-05

DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



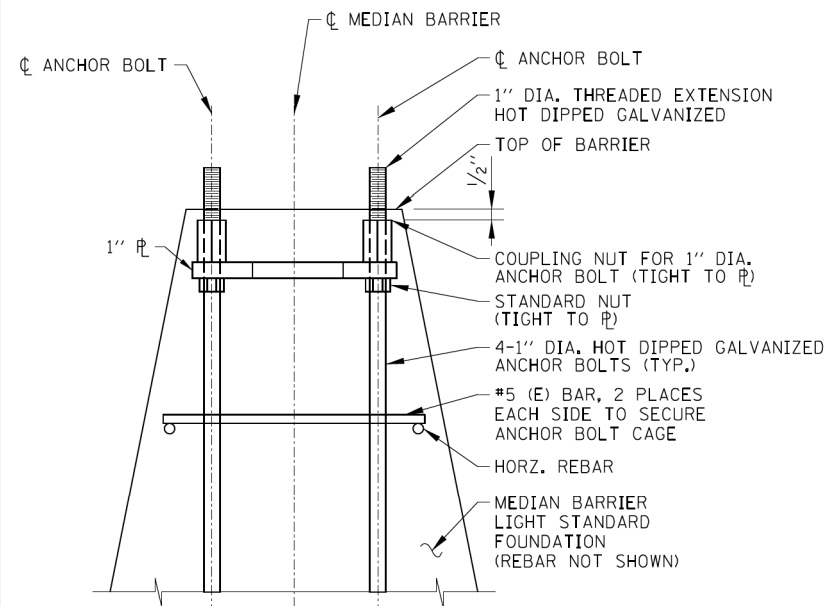
GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

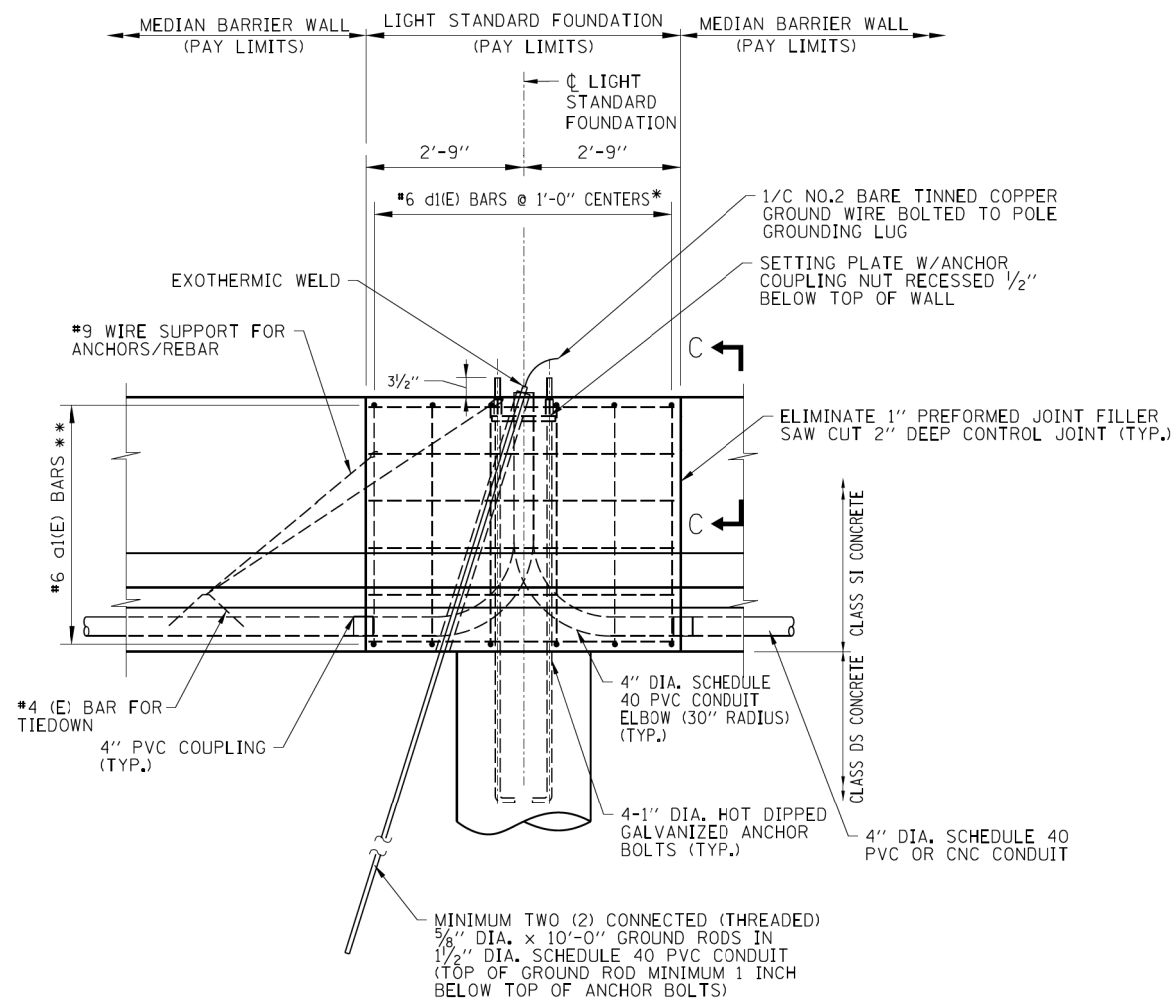
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 FOUNDATION DETAILS

LT-95  
 DRAWING NO. 847 OF 1517

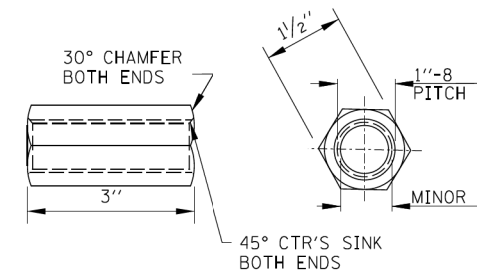


SECTION C-C

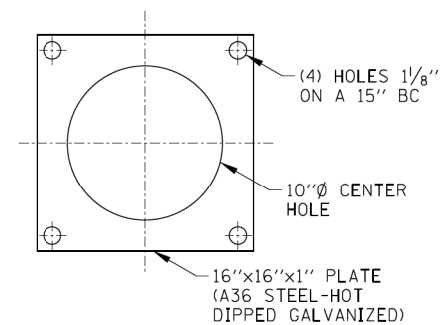


ELEVATION

\* #6 d1(E) BAR REPLACES #4 d1(E) BAR  
 \*\* #6 d1(E) BAR REPLACES #4 d1(E) BAR



COUPLING NUT



SETTING PLATE

**LIGHT STANDARD FOUNDATION DETAILS - MEDIAN BARRIER  
 (MODIFICATIONS FOR SLIPFORM POUR, 42" BARRIER)**

*Paul Kovacs*  
 APPROVED ..... CHIEF ENGINEER ..... DATE 2-7-2012

**NOTES:**

- SEE SHEET 1 OF THIS SERIES FOR NOTES.
- PLUG TOP OF COUPLER WITH PLASTIC PLUG OR COVER WHILE PLACING CONCRETE.

SHEET 6 OF 9



LIGHT STANDARD FOUNDATION

STANDARD HI-05

DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



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THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

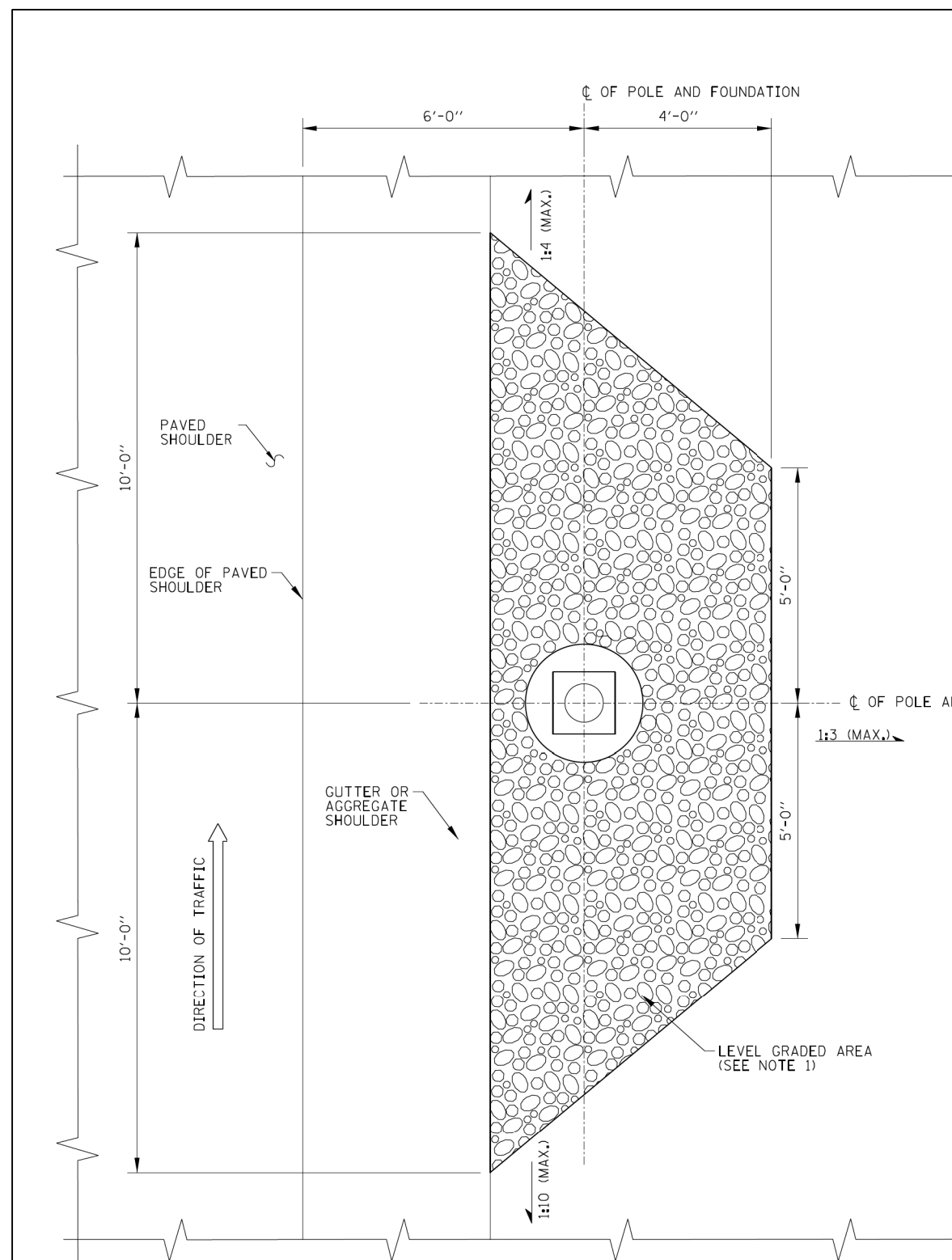
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NO.	DESCRIPTION

CONTRACT NO. RR-16-4255

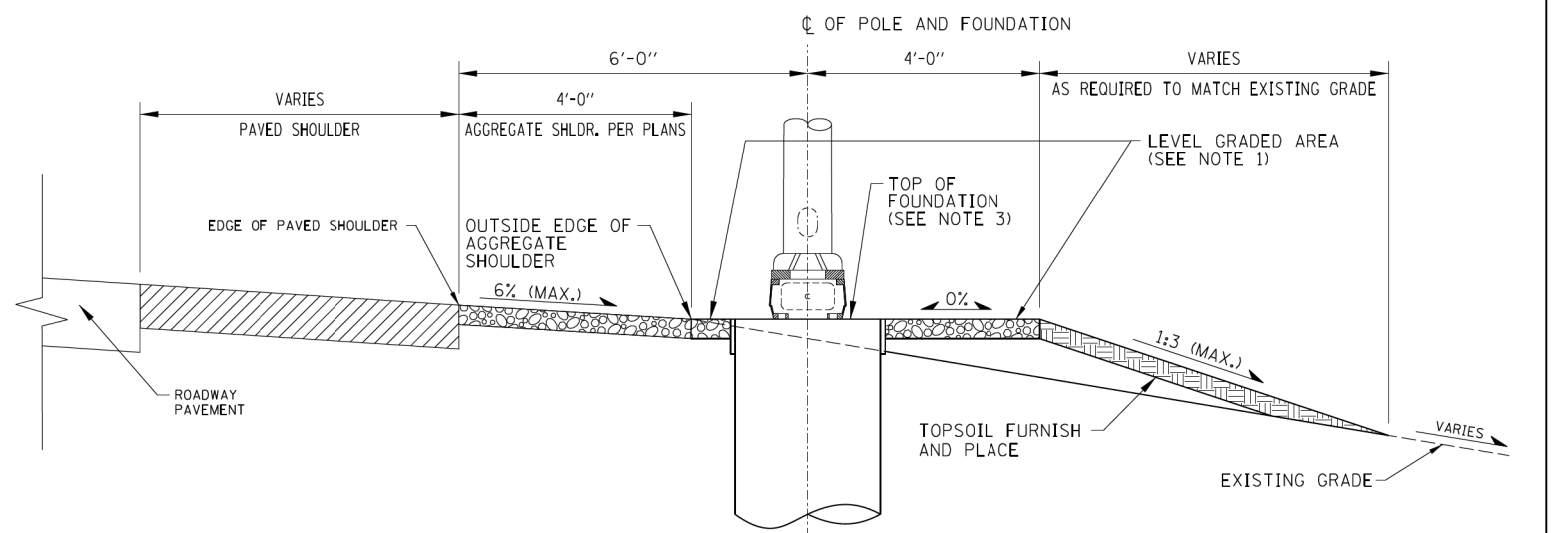
FOUNDATION DETAILS

LT-96

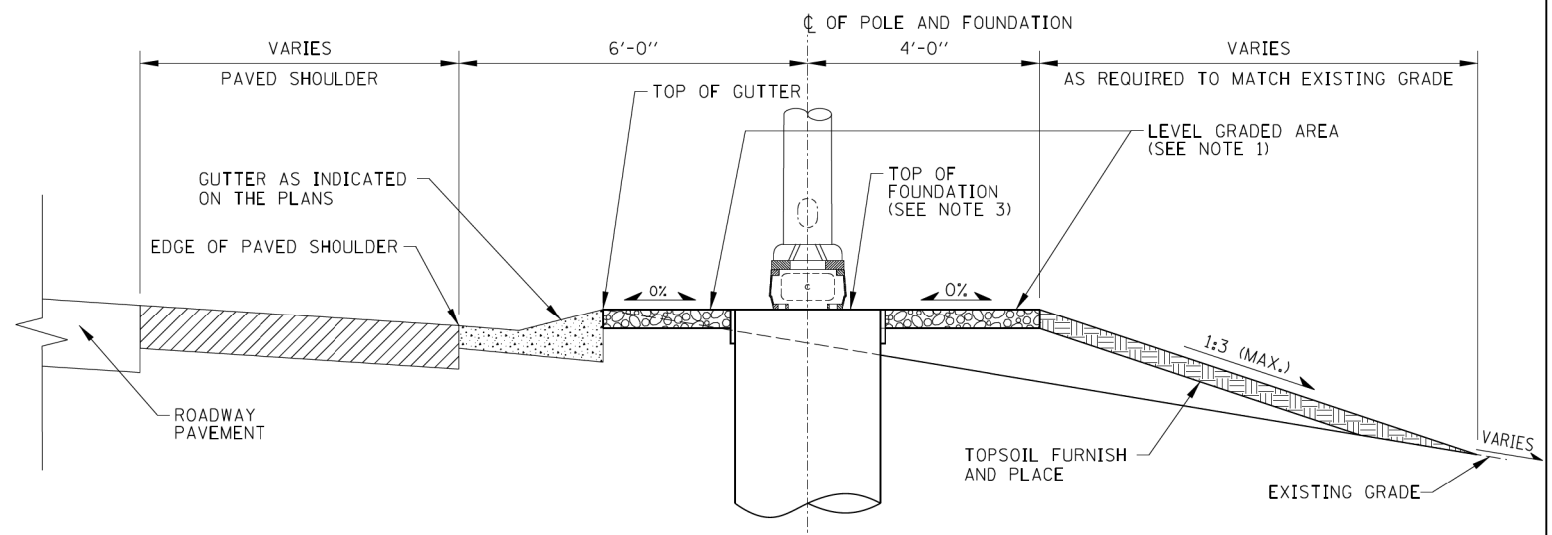
DRAWING NO.  
848 OF 1517



PLAN



LIGHT STANDARD FOUNDATION  
ADJACENT TO AGGREGATE SHOULDER



LIGHT STANDARD FOUNDATION  
ADJACENT TO GUTTER

LIGHT STANDARD FOUNDATION DETAILS - GRADING W/ FORESLOPE  
(GROUND MOUNTED UNITS)

APPROVED *Paul Kovacs* CHIEF ENGINEER DATE 2-7-2012

NOTE:  
SEE SHEET 1 OF THIS SERIES FOR NOTES.

SHEET 7 OF 9



LIGHT STANDARD  
FOUNDATION

STANDARD HI-05

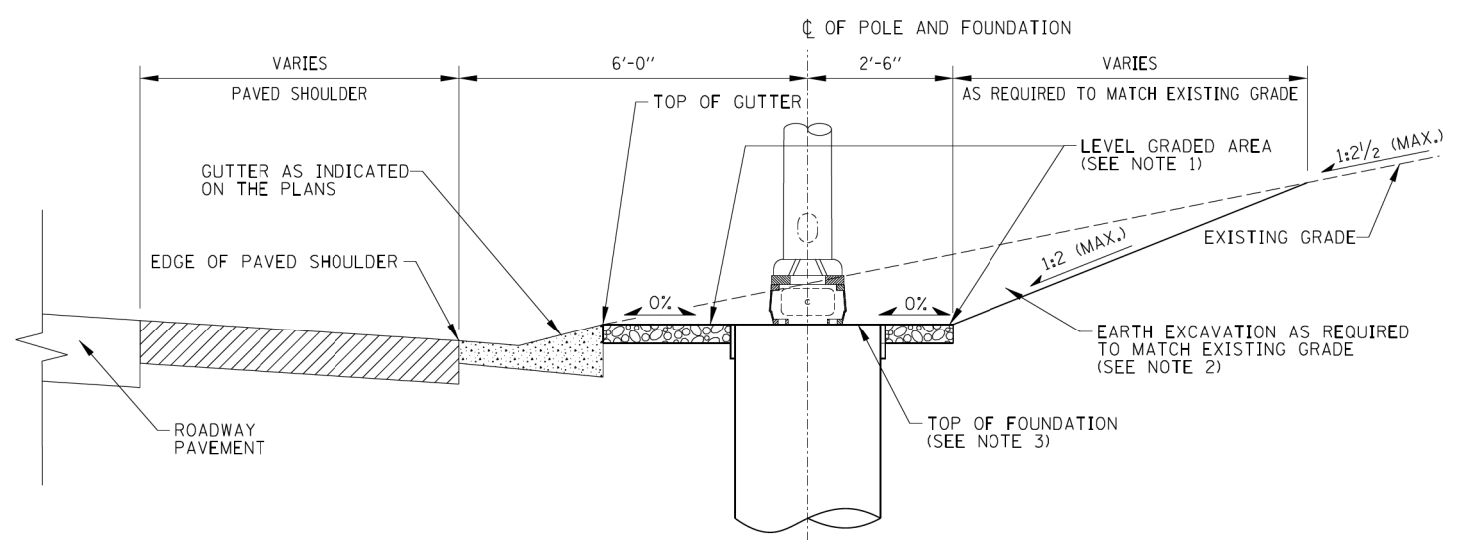
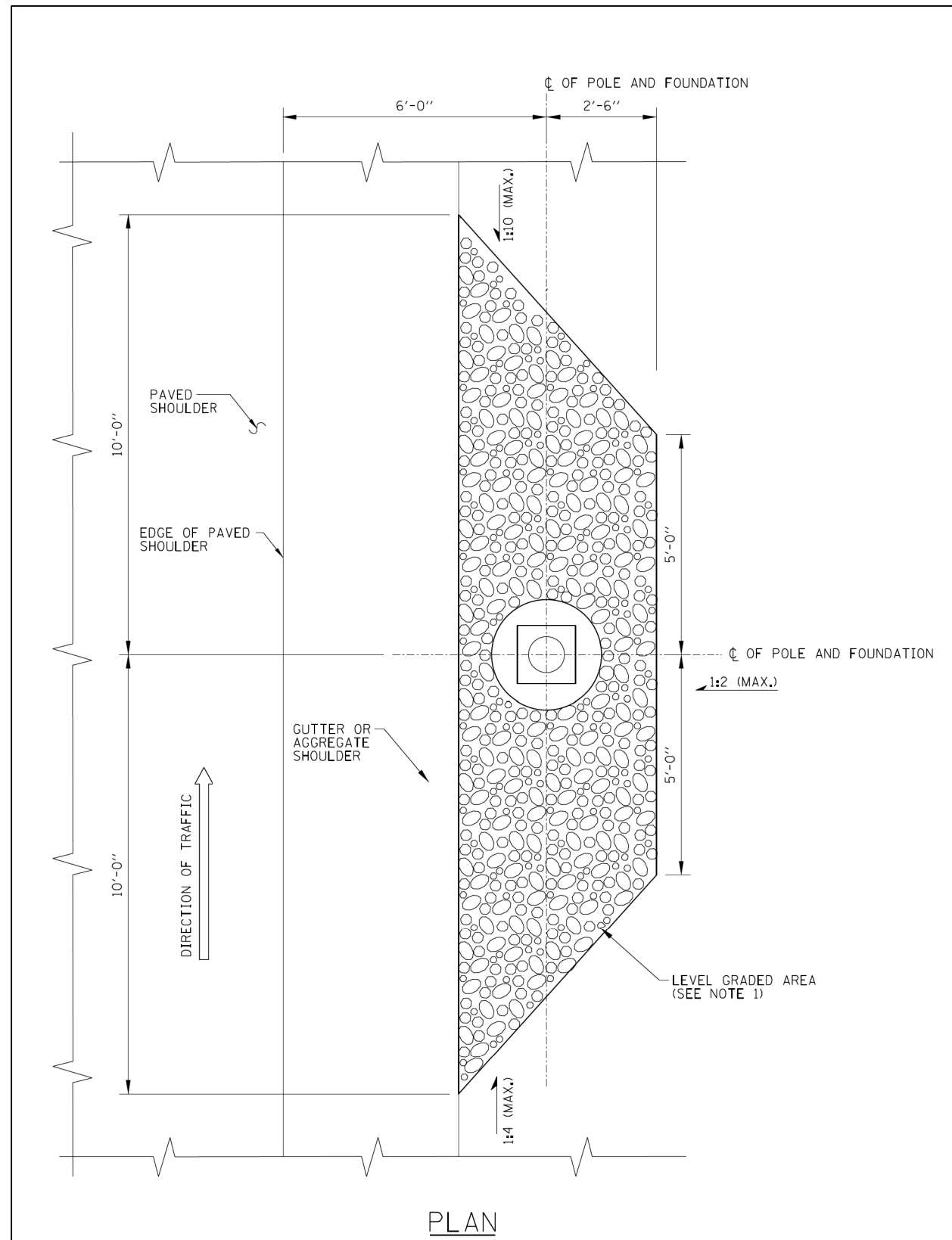
DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
FOUNDATION DETAILS  
LT-97  
DRAWING NO. 849 OF 1517



**LIGHT STANDARD FOUNDATION  
ADJACENT TO GUTTER**

**LIGHT STANDARD FOUNDATION DETAILS - GRADING W/ BACKSLOPE  
(GROUND MOUNTED UNITS)**

*Paul Kovacs*  
APPROVED ..... CHIEF ENGINEER ..... DATE 2-7-2012

NOTE:  
SEE SHEET 1 OF THIS SERIES FOR NOTES.

SHEET 8 OF 9

LIGHT STANDARD FOUNDATION

STANDARD HI-05

DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

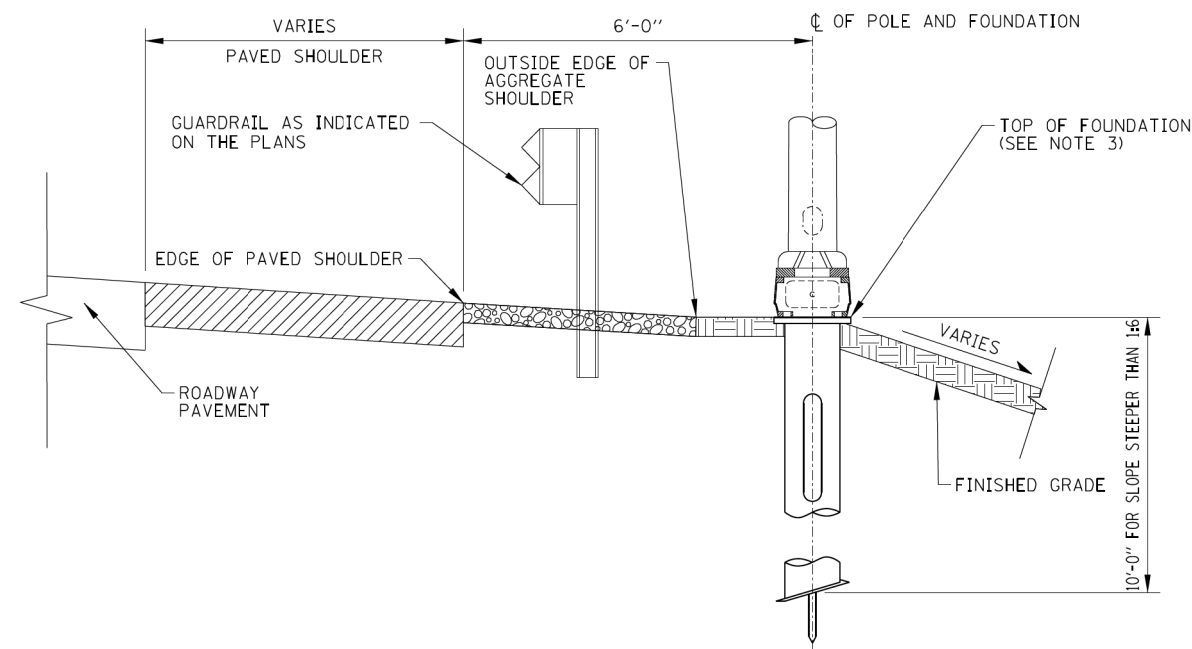
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

REVISIONS	
NO.	DATE

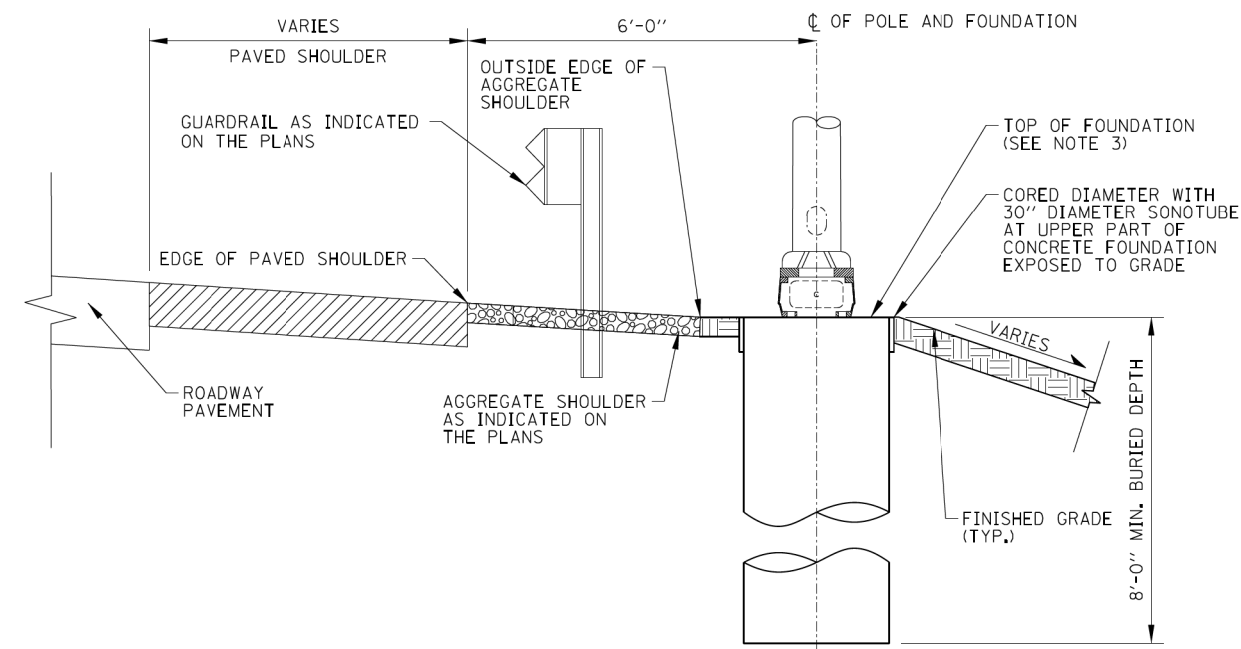
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FOUNDATION DETAILS

LT-98  
DRAWING NO.  
850 OF 1517

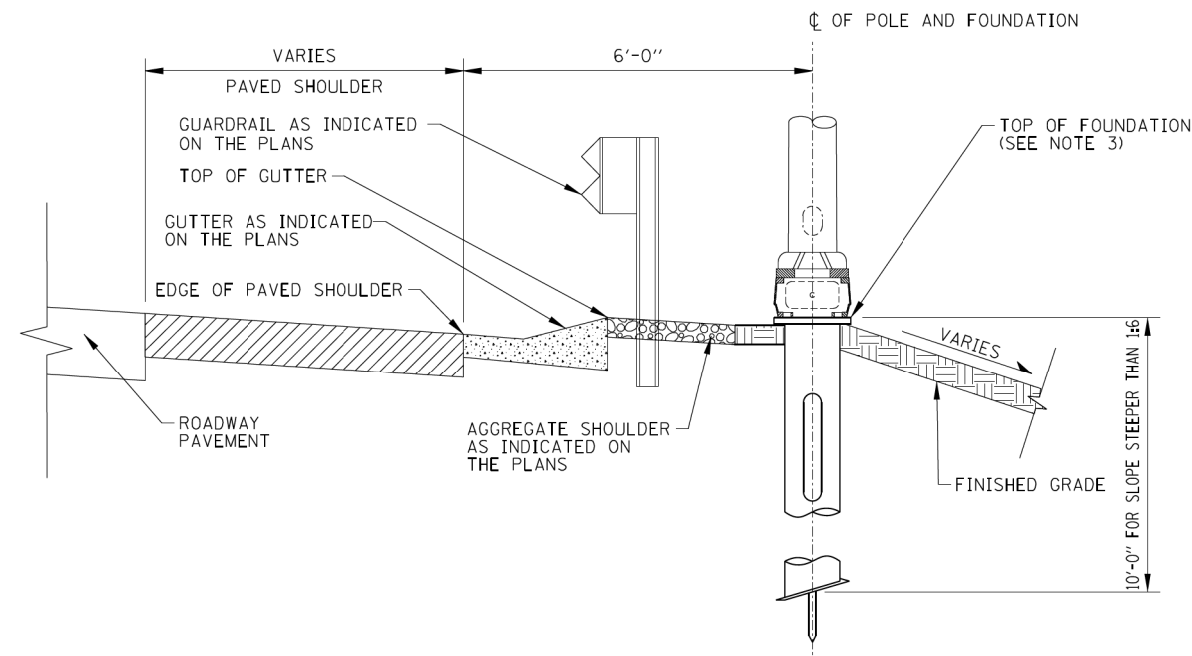
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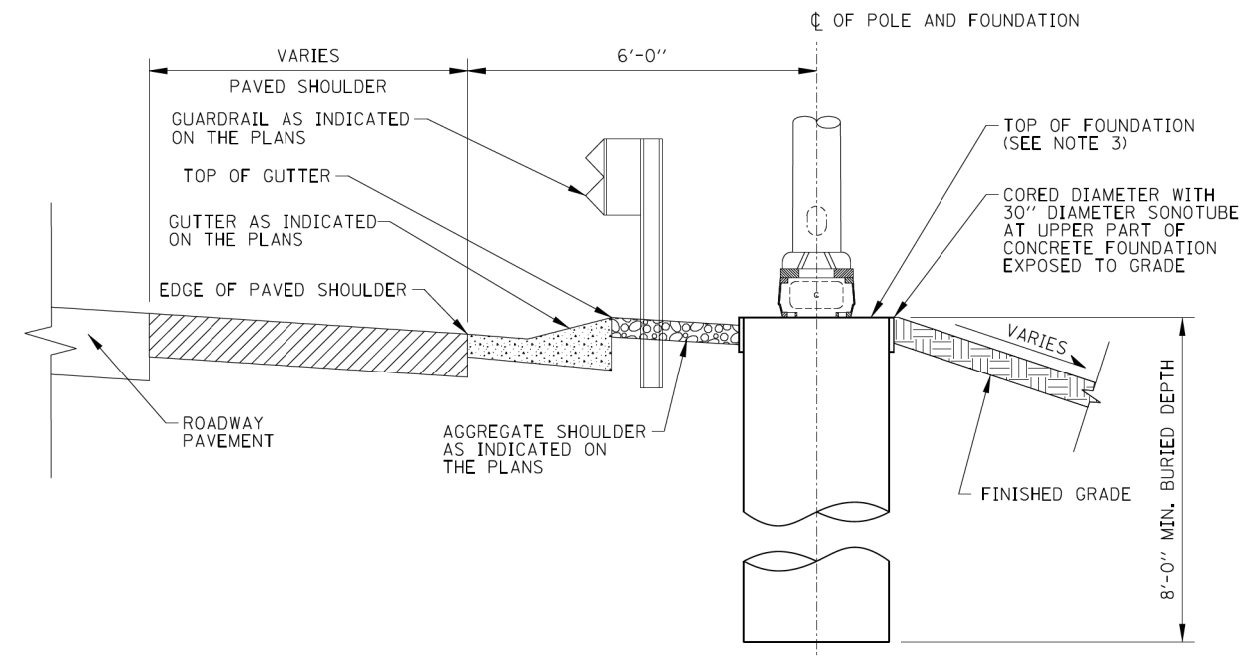
LIGHT STANDARD FOUNDATION - HELIX  
ADJACENT TO AGGREGATE SHOULDER



LIGHT STANDARD FOUNDATION - CONCRETE  
ADJACENT TO AGGREGATE SHOULDER



LIGHT STANDARD FOUNDATION - HELIX  
ADJACENT TO GUTTER



LIGHT STANDARD FOUNDATION - CONCRETE  
ADJACENT TO GUTTER

LIGHT STANDARD FOUNDATION DETAILS - ADJACENT TO GUARDRAIL  
(GROUND MOUNTED UNITS)

*Paul Kovacs*  
APPROVED ..... CHIEF ENGINEER ..... DATE 2-7-2012

NOTE:  
SEE SHEET 1 OF THIS SERIES FOR NOTES.

SHEET 9 OF 9

LIGHT STANDARD FOUNDATION

STANDARD HI-05

DRAWN BY MA, AV DATE 03/06/2018  
CHECKED BY PV DATE 03/06/2018

**GO** GANDHI AND ASSOCIATES, INC.  
ENGINEERS AND PLANNERS  
6035 N. NORTHWEST HIGHWAY  
SUITE 306  
CHICAGO, ILLINOIS 60631 TEL. (773) 774-5910

**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

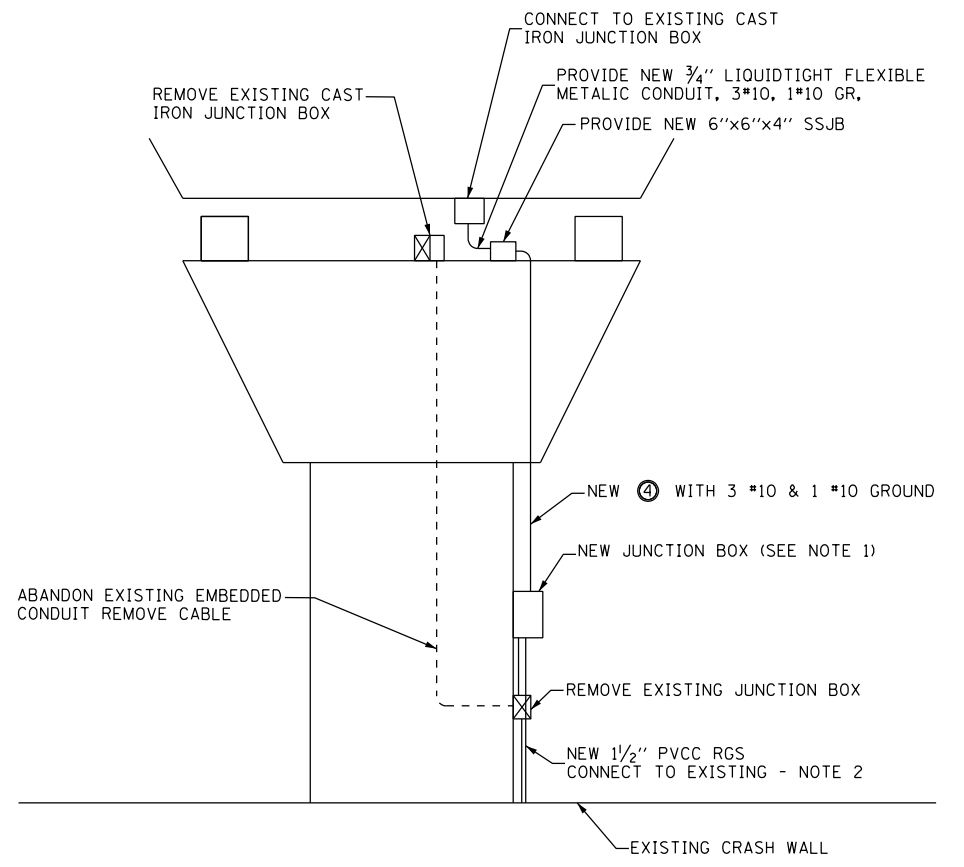
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CONTRACT NO. RR-16-4255  
FOUNDATION DETAILS

LT-99  
DRAWING NO.  
851 OF 1517

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- NOTE:**
1. JUNCTION BOX SHALL BE 12"x10"x6" STAINLESS STEEL.
  2. CONDUIT CONNECTION MUST BE CONCRETE-TIGHT.

**JUNCTION BOX CRASH WALL RELOCATION DETAIL**

DRAWN BY MA, AV DATE 03/06/2018  
 CHECKED BY PV DATE 03/06/2018



GANDHI AND ASSOCIATES, INC.  
 ENGINEERS AND PLANNERS  
 6035 N. NORTHWEST HIGHWAY  
 SUITE 306  
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THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

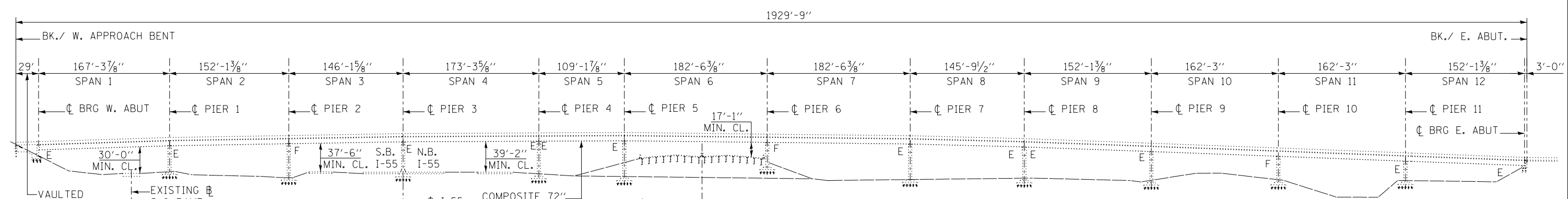
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 JUNCTION BOX CRASH WALL  
 RELOCATION DETAIL

LT-100  
 DRAWING NO.  
 852 OF 1517



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**EXISTING STRUCTURE:**  
 BRIDGE NUMBER 1479 WAS ORIGINALLY CONSTRUCTED IN 1996 UNDER ISTHA CONTRACT CIP-93-700A AS A 12 SPAN CONTINUOUS CURVED STEEL PLATE GIRDER SUPERSTRUCTURE. THE LENGTH OF 1,887'-7 3/8" MEASURED BACK TO BACK OF ABUTMENTS, AND WIDTH OF 37'-2" OUT TO OUT OF 7 1/2" CONCRETE DECK ON CONVENTIONAL CAST-IN-PLACE REINFORCED CONCRETE VAULTED TYPE ABUTMENTS, SAND FILLED, ON PILES AND CURTAIN WALLS. 11 SINGLE CONVENTIONAL GRADE SEPARATION HAMMER HEAD PIERS CAST-IN-PLACE REINFORCED CONCRETE WITH FOOTINGS ON PILES.

**ELEVATION**  
 ALONG  $\bar{E}$  STRUCTURE

**PROPOSED SCOPE OF WORK**

1. REMOVE LOOSE AND DAMAGED PORTION OF THE CONCRETE PARAPET AND RECONSTRUCT IN-KIND.
2. REPAIR SPALLED AREAS OF THE DECK SLAB.
3. REMOVE DEBRIS AND CLEAN BRIDGE DECK EXPANSION JOINT STRIP SEAL AND MODULAR EXPANSION JOINT.
4. REMOVE AND REPLACE PREFORMED JOINT SEAL BETWEEN TRANSITION SLAB AND ROADWAY PAVEMENT. CLEAN AND RESEAL JOINT BETWEEN MAIN APPROACH AND TRANSITION SLAB. CLEAN DEBRIS AT THE EXPANSION JOINT OVER THE ABUTMENTS, PIERS 4 & 8.
5. CLEAN AND APPLY BRIDGE DECK CONCRETE CRACK SEALER (SPECIAL) TO DECK AND APPROACH SLAB AND VAULTED ROOF SLAB OF THE WEST VAULTED ABUTMENT.
6. APPLY CONCRETE SEALANT TO TOP AND TRAFFIC FACE OF THE PARAPETS, BRIDGE SEATS, BACKWALLS AND BREASTWALLS, AND THE TRAFFIC FACE OF PIERS 1, 2 & 3, BRIDGE SEAT OF PIERS 4 & 8.
7. REPAIR DELAMINATED AND SPALLED CONCRETE IN ABUTMENTS, PIERS, SLOPEWALLS, AND PARAPETS.
8. CLEAN AND SEAL CRACKS WIDER THAN 1/16" AND ALL LEACHING CRACKS IN ABUTMENTS AND PIERS. SEAL SLOPEWALL CRACKS WIDER THAN 1/2"
9. REMOVE AND REINSTALL EXPANSION SLIDING PLATE IN PARAPET OVER PIER 8 BEFORE AND AFTER PARAPET REPAIR RESPECTIVELY.
10. REPAIR APPROACH AND TRANSITION SLABS.

BENCHMARK: TBM #28  
 RR SPIKE 1ST P.P. E. OF  
 C.U. WATER TOWER  
 ELEV. = 752.104

BENCHMARK: TBM #29  
 CHIS. "C", E. SIDE TOP  
 OF SLOPE BOX JUST N.W.  
 OF C.U. WATER TOWER.  
 ELEV. = 755.009

**LOADING HS20-44 &  
 ALTERNATE MILITARY**

ALLOWABLE FUTURE WEARING SURFACE = 25 PSF  
 (TAKEN FROM THE 2005 EXISTING PLANS)

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION AND ALL SUBSEQUENT INTERIMS.

2003 AASHTO GUIDE SPECIFICATIONS FOR HORIZONTALLY CURVED STEEL GIRDER HIGHWAY BRIDGES.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL ADOPTED MARCH 2017

ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL, 2012

ILLINOIS DEPARTMENT OF TRANSPORTATION ALL BRIDGE DESIGN MEMORANDUMS

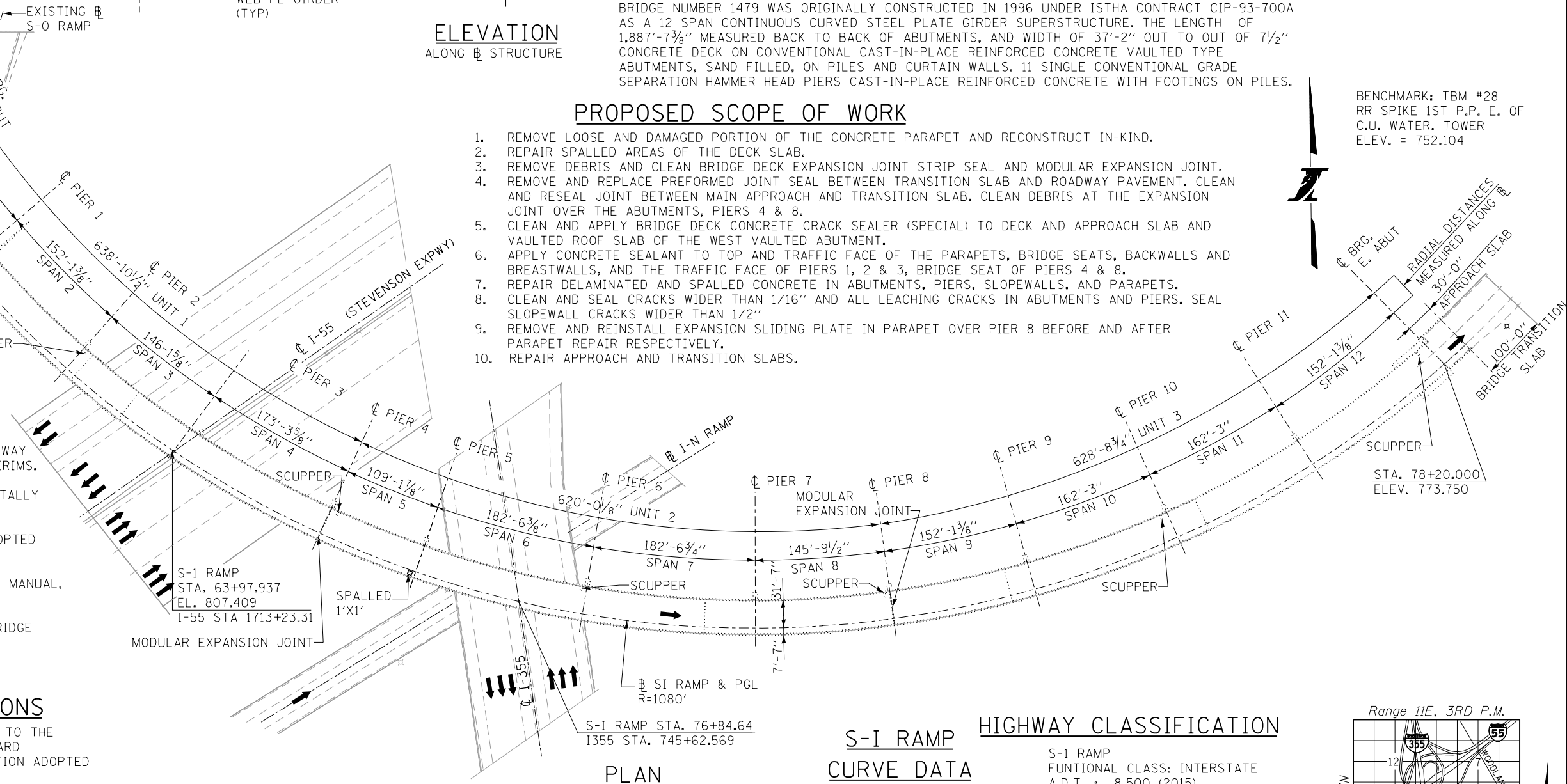
**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS (GBSP's)

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2018.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.



**PLAN**  
 (EXISTING CONDITION)

**S-I RAMP  
 CURVE DATA**

$\Delta$  = 162°36'41"  
 D = 5°18'19"  
 R = 1080'  
 T = 7062.51'  
 L = 3065.15'  
 E = 6064.61'  
 S.E. = 0.0737'  
 P.C. STA. 51+63.94  
 P.T. STA. 82+29.09  
 P.I. STA. 122+26.44

**DESIGN STRESSES**  
 FIELD UNITS

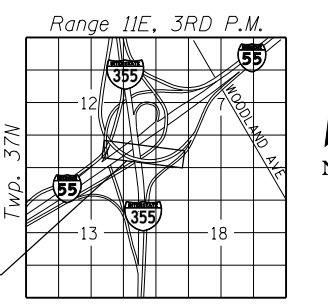
$f'_c$  = 3,500 PSI (CLASS SI - SUBSTRUCTURES REPAIRS)  
 $f'_c$  = 4,000 PSI (CLASS AX HIGH EARLY STRENGTH (BRIDGE DECK, BRIDGE APPROACH AND TRANSITION SLAB PATCH REPAIRS))  
 $f'_c$  = 4,000 PSI (CLASS BS PARAPETS AND BARRIERS REPAIRS)  
 $f_y$  = 60,000 PSI (REINFORCEMENT)

**HIGHWAY CLASSIFICATION**

S-1 RAMP  
 FUNCTIONAL CLASS: INTERSTATE  
 A.D.T. : 8,500 (2015)  
 A.D.T.T.: UNKNOWN  
 D.H.V.: UNKNOWN  
 DESIGN SPEED: 50 MPH  
 POSTED SPEED: 45 MPH

**ROUTE UNDER**

I-55  
 FUNCTIONAL CLASS: INTERSTATE  
 A.D.T. : 103,200 (2015)  
 A.D.T.T.: 14,450 (2015)



**LOCATION SKETCH**

DRAWN BY **MPS** DATE **3/11/2018**  
 CHECKED BY **JPM/MMH/PAB** DATE **3/11/2018**



REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 GENERAL PLAN AND ELEVATION

SA-01 OF SA-24  
 SHT NO. SA-01  
 DRAWING NO. 853 OF 1517

**INDEX OF SHEETS**

- SA-01 GENERAL PLAN AND ELEVATION
- SA-02 GENERAL NOTES INDEX OF SHEETS & TOTAL BILL OF MATERIAL
- SA-03 CONSTRUCTION STAGING
- SA-04 SLOPEWALL REPAIR DETAILS
- SA-05 EAST & WEST ABUTMENT REPAIR
- SA-06 WINGWALL REPAIR DETAILS
- SA-07 PIER 1 REPAIR DETAILS
- SA-08 PIER 2 REPAIR DETAILS
- SA-09 PIER 3 REPAIR DETAILS
- SA-10 PIER 4 REPAIR DETAILS
- SA-11 PIER 5 REPAIR DETAILS
- SA-12 PIER 6 REPAIR DETAILS
- SA-13 PIER 7 REPAIR DETAILS
- SA-14 PIER 8 REPAIR DETAILS
- SA-15 PIER 9 REPAIR DETAILS
- SA-16 PIER 10 REPAIR DETAILS
- SA-17 PIER 11 REPAIR DETAILS
- SA-18 DECK PLAN - SPAN 1 THRU 4
- SA-19 DECK PLAN - SPAN 5 THRU 8
- SA-20 DECK PLAN - SPAN 9 THRU 12
- SA-21 DECK CROSS SECTION
- SA-22 BRIDGE NORTH PARAPET REPAIR DETAILS
- SA-23 EAST & WEST APPROACH REPAIR PLANS
- SA-24 EXPANSION JOINT DETAILS

**LIST OF ABBREVIATIONS**

- B.F. BACK FACE
- BK/ BACK OF
- B/ BOTTOM OF
- B BASELINE
- BRG BEARING
- BOT. BOTTOM
- C.I.P. CAST-IN-PLACE
- CL. CENTERLINE
- CL. CLEARANCE
- CU. FT. CUBIC FEET
- EA EACH
- ELEV. ELEVATION
- EXIST. EXISTING
- EXP. EXPANSION
- E.F. EACH FACE
- F.F. FRONT FACE
- HP H-PILE
- I.F. INSIDE FACE
- L.F. LINEAR FOOT
- MAX. MAXIMUM
- MIN. MINIMUM
- N.B. NORTHBOUND
- N. ABUT. NORTH ABUTMENT
- O.F. OUTSIDE FACE
- P.G.L. PROFILE GRADE LINE
- P.J.F. PREFORMED JOINT FILLER
- P.J.S. PREFORMED JOINT SEALER
- PROP. PROPOSED
- S. ABUT. SOUTH ABUTMENT
- S.B. SOUTHBOUND
- S.P. SPECIAL PROVISION
- STA. STATION
- SHLDR SHOULDER
- SF SQUARE FOOT
- SO. FT. SQUARE FOOT
- SO. YD. SQUARE YARD
- SY SQUARE YARD
- T/ TOP OF
- TYP. TYPICAL
- WF W-FLANGE

**GENERAL NOTES**

**CAST-IN-PLACE CONCRETE:**

1. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

**REINFORCING BARS:**

1. REINFORCEMENT BARS, INCLUDING EPOXY- COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.
2. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
3. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION.
4. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
5. COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

**CONSTRUCTION:**

1. A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTION OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.
2. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
3. THE CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.
4. NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
5. THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.
6. NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 811.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS" AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CABLE.
9. EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE CLEANED, STRAIGHTENED (WITHOUT HEATING), CUT AND/OR BENT TO FIT AND EPOXY PAINTED IF GOUGED. COST OF WHICH SHALL BE INCLUDED WITH CONCRETE REMOVAL.

**TOTAL BILL OF MATERIAL**

S.P.	PAY ITEM NO.	ITEM	UNIT	SUPER	SUB	PLAN QUANTITY	RECORDED QUANTITY
	50102400	CONCRETE REMOVAL	CU. YD.	0.2	-	0.2	
	50157300	PROTECTIVE SHIELD	SQ. YD.	156	-	156	
	50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	0.2	-	0.2	
*	J1506010	CLEANING AND SEALING JOINTS	FOOT	78	-	78	
**	JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	9	170	179	
*	JT503012	ACCELERATED DECK SLAB REPAIR (PARTIAL)	SQ. YD.	5	-	5	
*	JT503013	ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ. YD.	1	-	1	
*	JT503033	ACCELERATED APPROACH SLAB REPAIR (FULL DEPTH, TYPE II)	SQ. YD.	2	-	2	
*	JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ. FT.	5	43	48	
*	JT503041	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ. FT.	3	-	3	
*	JT524010	APPLY CONCRETE SEALANT	SQ. FT.	-	10,111	10,111	
	JT524015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	84,453	-	84,453	
*	JT525230	BONDED PREFORMED JOINT SEAL REPLACEMENT, 3 IN.	FOOT	44	-	44	
	X0323491	SLOPE WALL CRACK SEALING	FOOT	-	48	48	
	Z0065700	SLOPE WALL REPAIR	SQ. YD.	-	1	1	

\* INDICATES SPECIAL PROVISION  
 \*\* INDICATES ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATION

**CONSTRUCTION (CONT.):**

10. THE PROTECTIVE SHIELD SYSTEM SHALL EXTENDED A MINIMUM OF 10' BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5' BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIR AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER.
11. CONCRETE SEALANT SHALL BE APPLIED TO THE TOP AND TRAFFIC FACE OF THE BRIDGE DECK BARRIERS AND PARAPET, INCLUDING PARAPET ON BRIDGE WINGWALLS. SEALANT SHALL BE APPLIED TO ABUTMENTS BACKWALL & BEARING SEATS. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
12. WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THAT DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
13. AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

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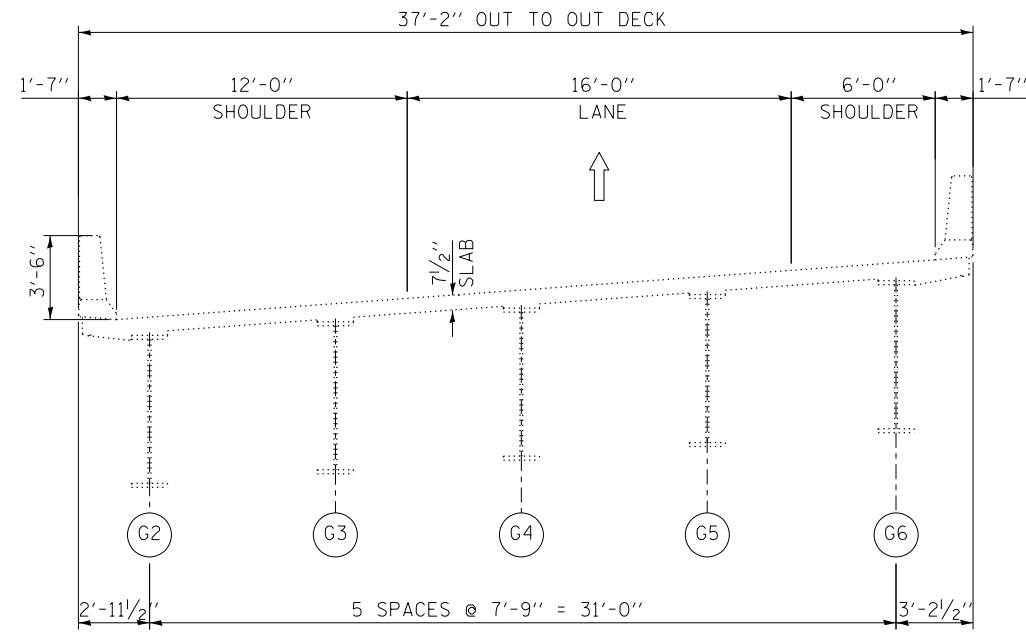
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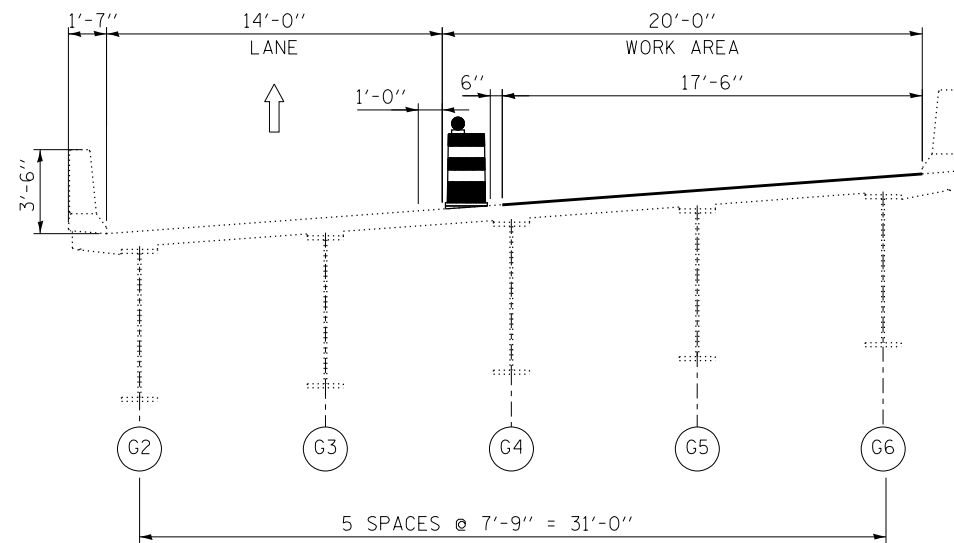
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**B.N. 1479 SI RAMP D I-55 - S.N. 099-0337**  
 GENERAL NOTES INDEX OF SHEETS & TOTAL BILL OF MATERIAL

SA-02 OF SA-24  
 SHT NO. SA-02  
 DRAWING NO. 854 OF 1517

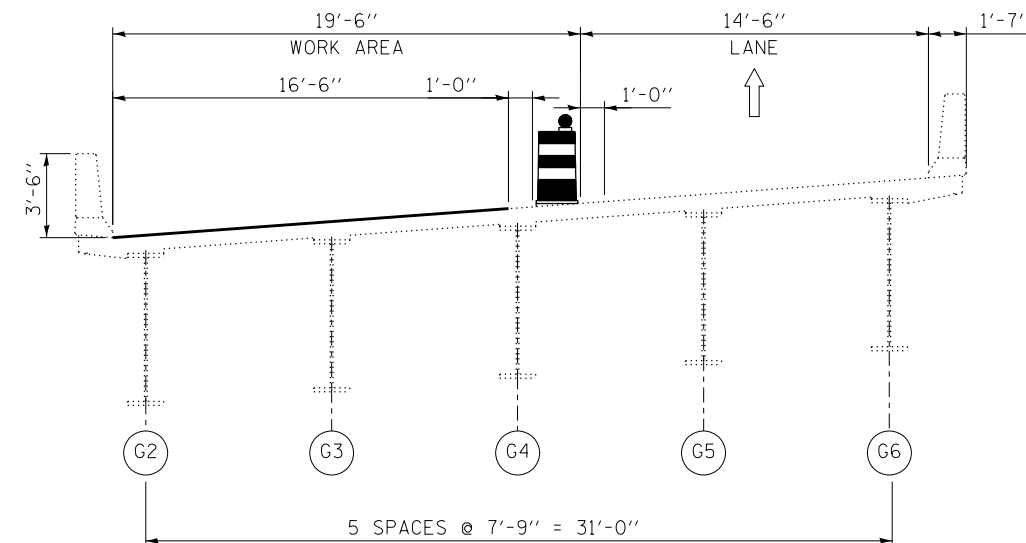


**EXISTING CONDITIONS**  
(LOOKING EAST)

NOTE:  
SEE MOT-03 FOR MORE DETAILS.



**STAGE A CONSTRUCTION**



**STAGE B CONSTRUCTION**

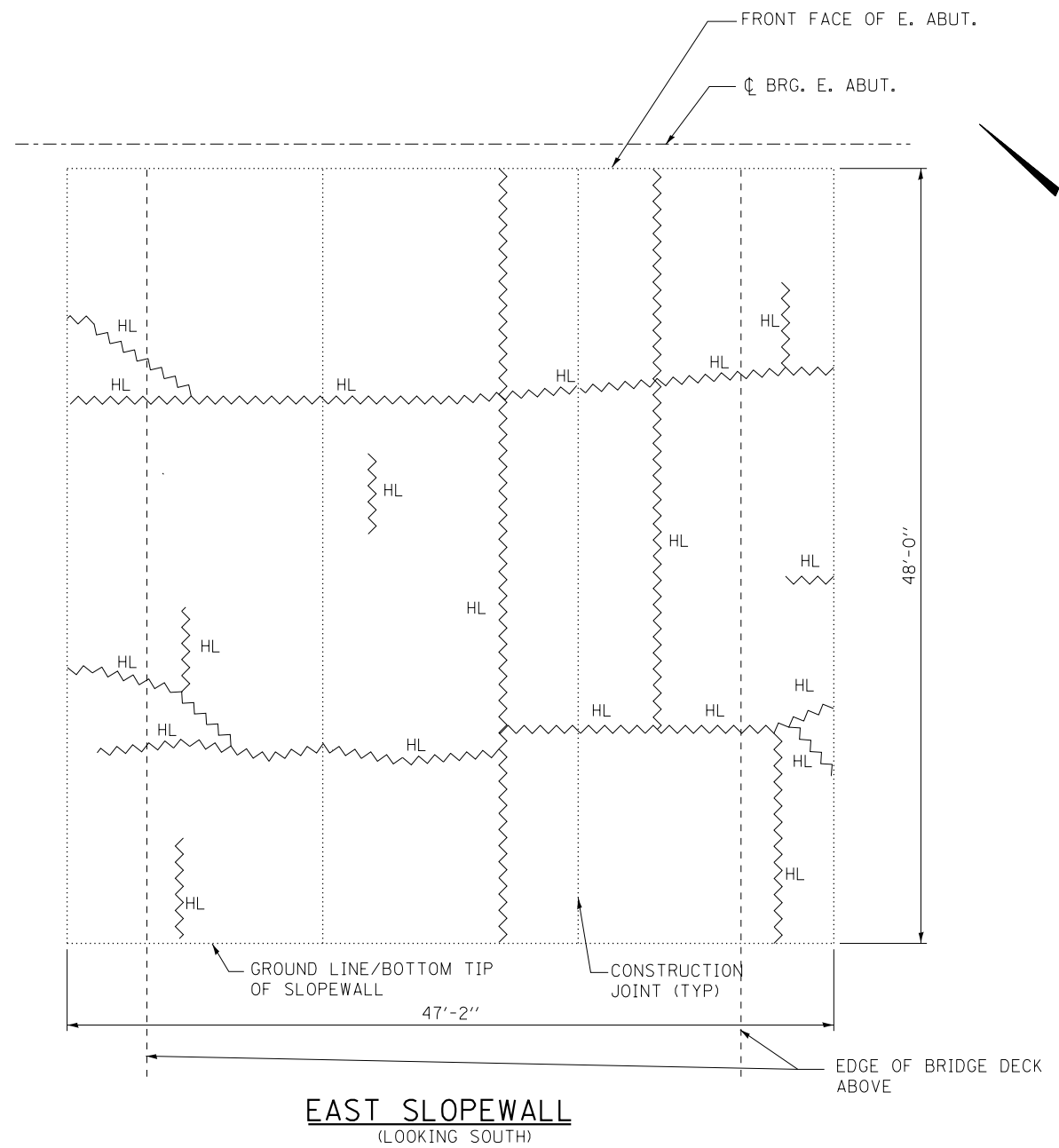
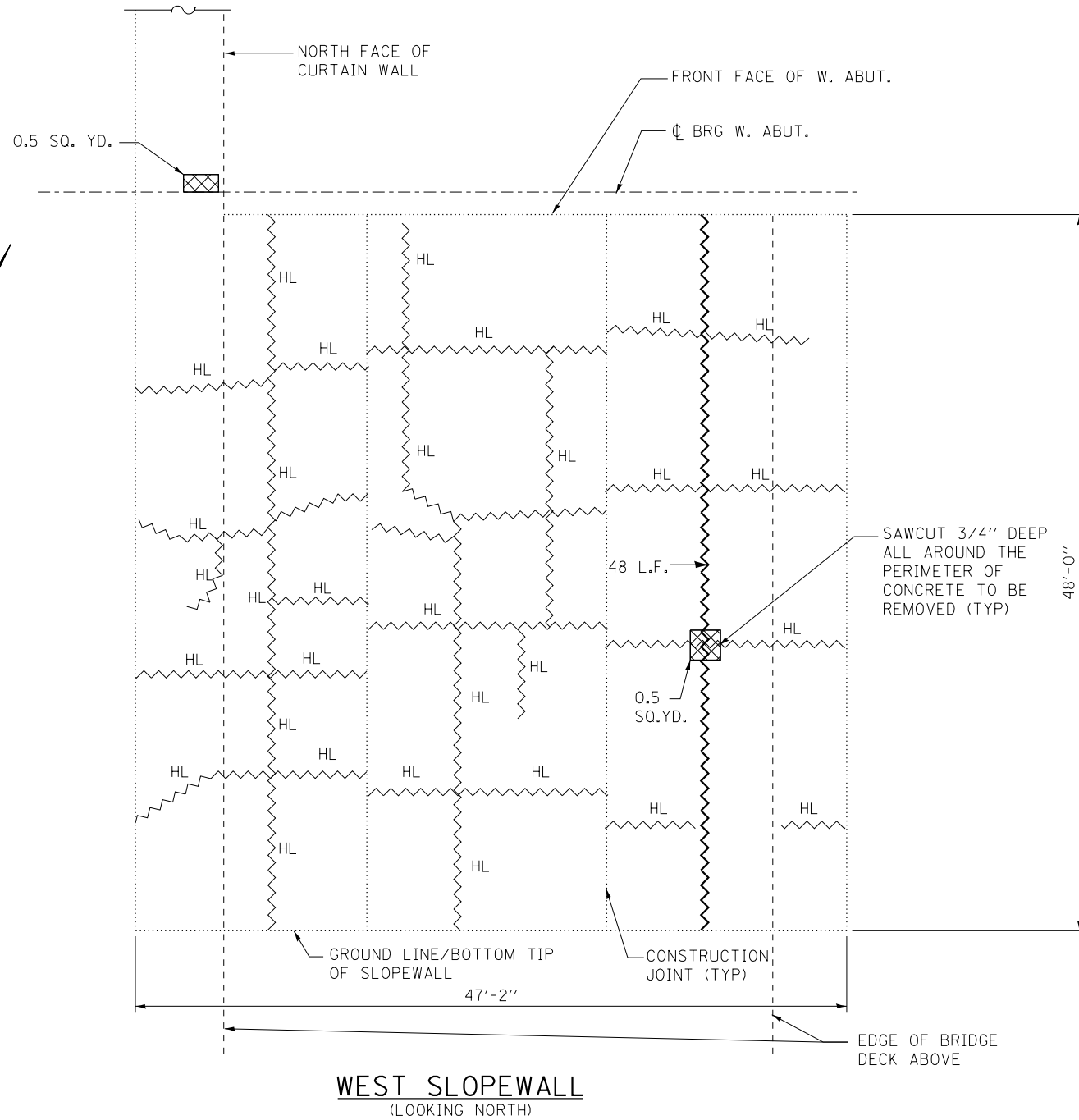
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CONTRACT NO. RR-16-4255  
B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
CONSTRUCTION STAGING

SA-03 OF SA-24  
SHT NO. SA-03  
DRAWING NO.  
855 OF 1517



**LEGEND:**

SLOPEWALL REPAIR

SLOPEWALL CRACK SEALING  
(CRACKS WIDER THAN 1/2")

HAIRLINE CRACKS  
(FOR INFORMATION ONLY)

**NOTE:**

EXISTING SLOPEWALL REINFORCEMENT IS TO REMAIN AND REUSE. EXTRA CARE SHALL BE USED WHEN REMOVING CONCRETE IN ORDER NOT TO DAMAGE EXISTING REINFORCEMENT

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	QUANTITY
X0323491	SLOPE WALL CRACK SEALING	FOOT	48
Z0065700	SLOPE WALL REPAIR	SQ. YD.	1

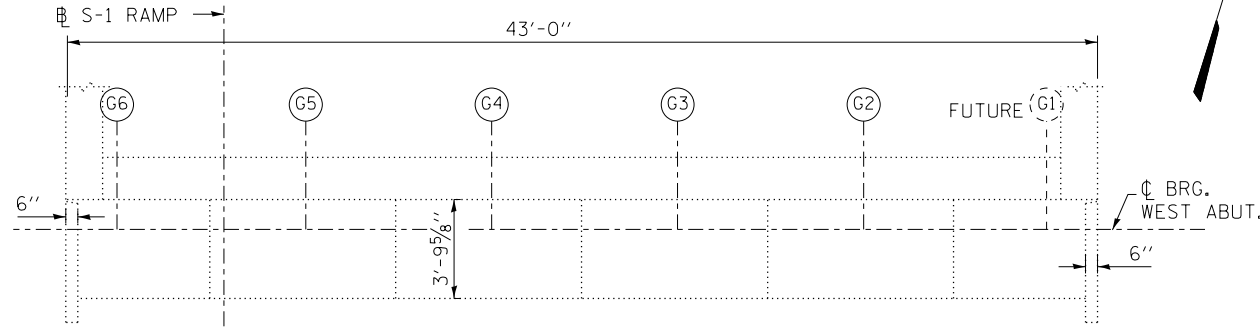
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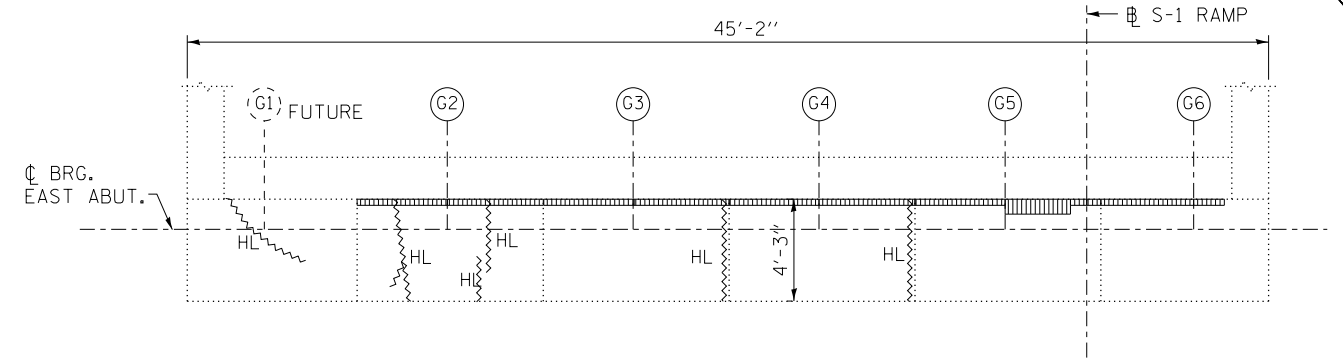
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 SLOPEWALL REPAIR DETAILS

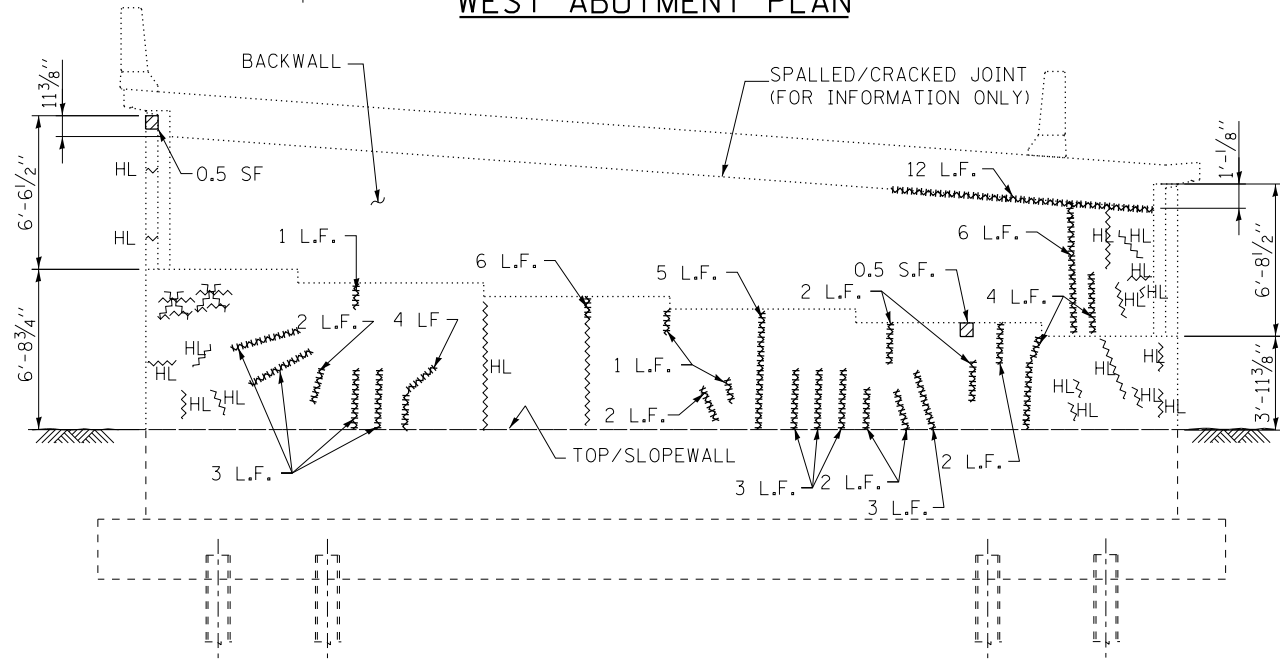
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 DRAWING NO.  
 856 OF 1517



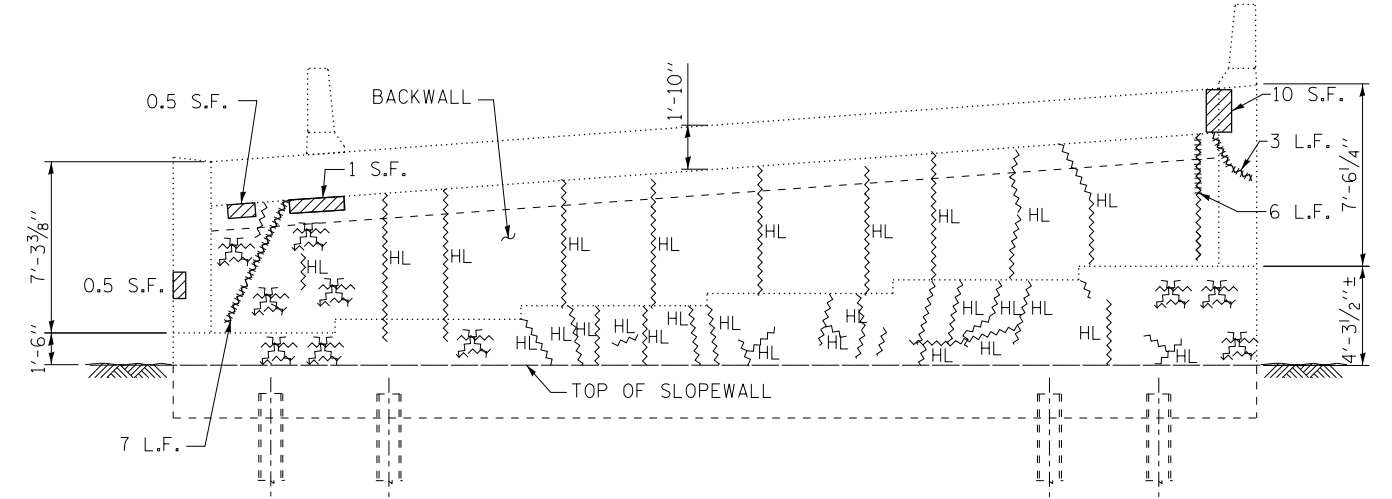
WEST ABUTMENT PLAN



EAST ABUTMENT PLAN



WEST ABUTMENT ELEVATION



EAST ABUTMENT ELEVATION

**LEGEND:**

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)
- SCALING CONCRETE (FOR INFORMATION ONLY)
- L.F. LOW PRESSURE EPOXY INJECTION
- LEAKING OR LEACHING CRACK & CONSTRUCTION JOINT LOW PRESSURE EPOXY INJECTION
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. DIMENSIONS WERE TAKEN FROM 2005 AS-BUILT PLANS.
2. APPLY CONCRETE SEALANT TO THE SURFACES OF THE ABUTMENT BACKWALLS, SEATS AND BREASTWALLS FIRST 2 FT. BELOW THE ABUTMENT SEAT.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	98
JT524010	APPLY CONCRETE SEALANT	SQ. YD.	1,019
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ. FT.	13

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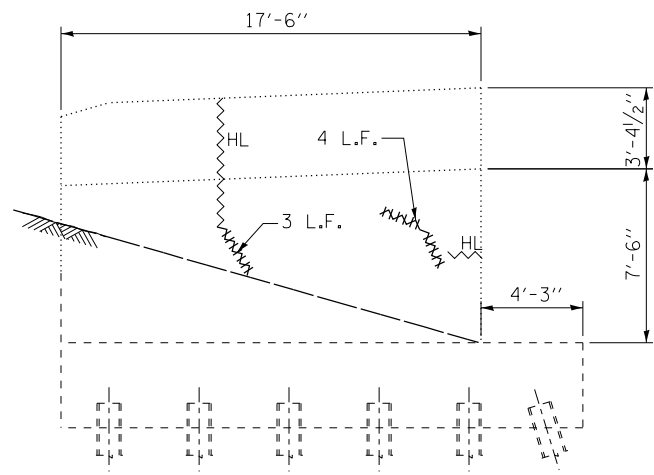
**Primera**  
 100 S. Wacker Drive, Suite 700 • Chicago, IL 60606 • P 312/606-0910 • F 312/606-0415

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 DOWNERS GROVE,  
 ILLINOIS 60515

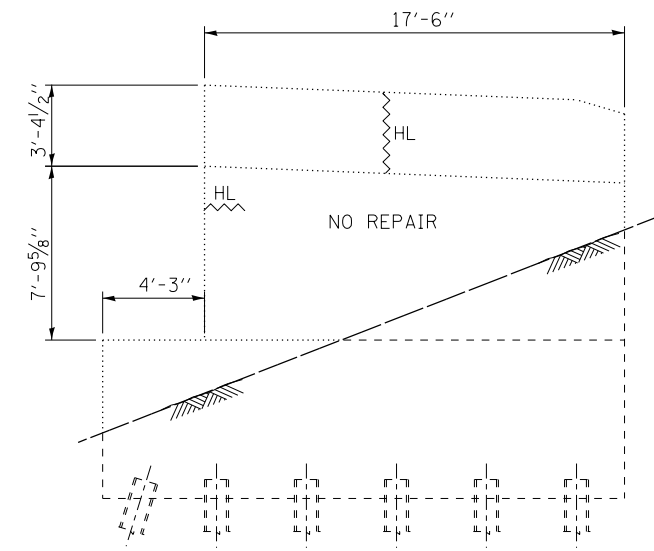
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NO.	DATE	DESCRIPTION

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 EAST & WEST ABUTMENT REPAIR

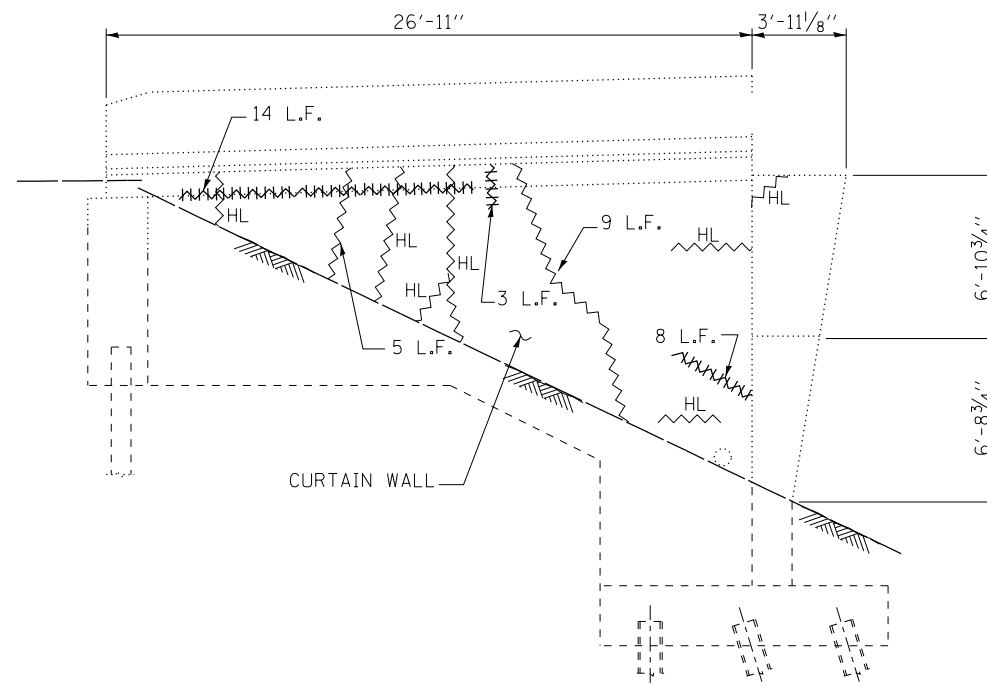
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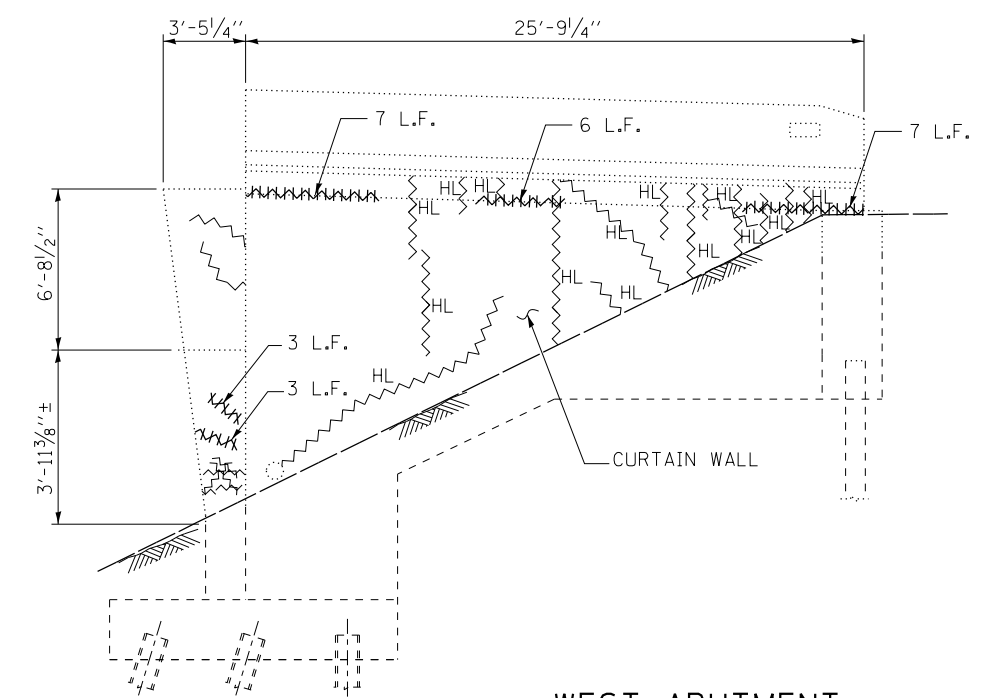
**EAST ABUTMENT  
NORTH WINGWALL ELEVATION**  
(LOOKING SOUTH)



**EAST ABUTMENT  
SOUTH WINGWALL ELEVATION**  
(LOOKING NORTH)



**WEST ABUTMENT  
WEST CURTAIN WALL ELEVATION**  
(LOOKING NORTH)



**WEST ABUTMENT  
EAST CURTAIN WALL ELEVATION**  
(LOOKING SOUTH)

**LEGEND:**

- HAIRLINE CRACK  
(FOR INFORMATION ONLY)
- LOW PRESSURE EPOXY INJECTION
- LEAKING CRACK,  
LOW PRESSURE EPOXY INJECTION

**NOTE:**

1. DIMENSIONS WERE TAKEN FROM THE 2005 AS-BUILT PLANS.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	72

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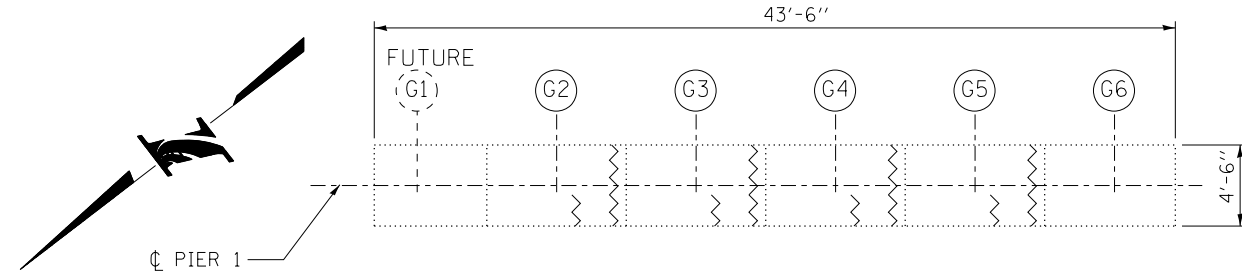


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ILLINOIS 60515

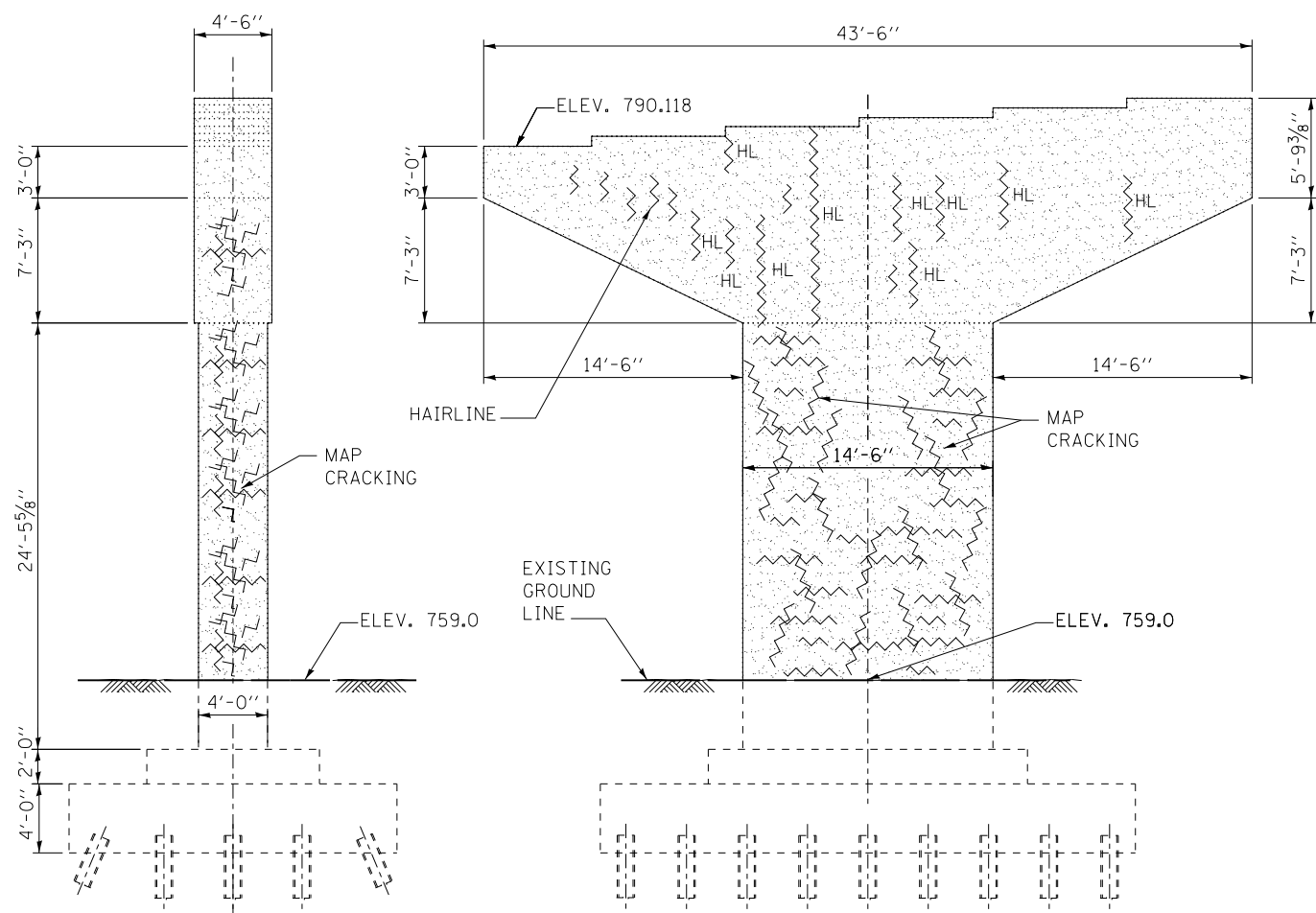
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WINGWALL REPAIR DETAILS

SA-06 OF SA-24  
SHT NO. SA-06  
DRAWING NO.  
858 OF 1517

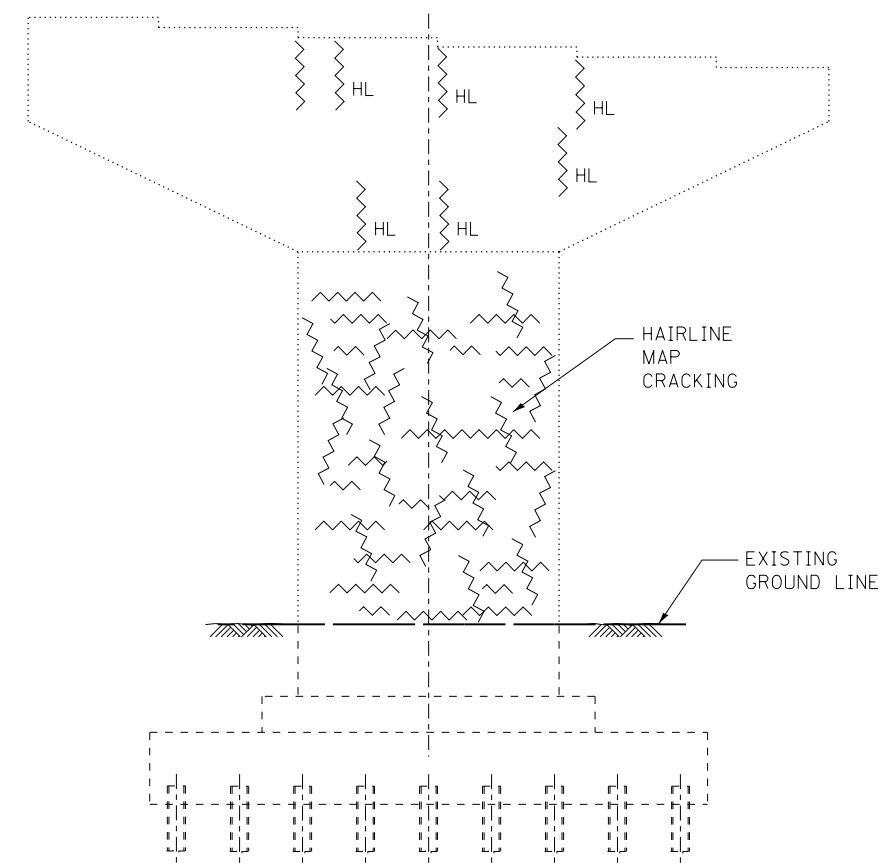


PLAN

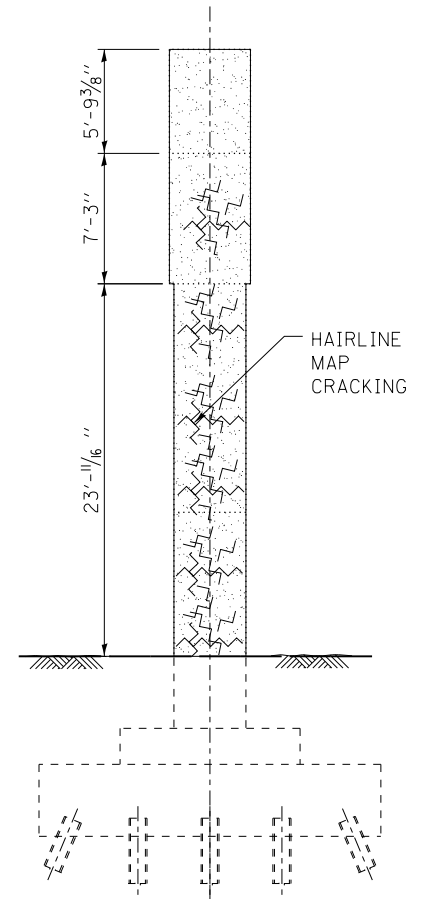


NORTH END VIEW

WEST ELEVATION  
(LOOKING SOUTH)  
TRAFFIC FACE



EAST ELEVATION  
(LOOKING NORTH)



SOUTH END VIEW

LEGEND:

- APPLY CONCRETE SEALANT
- HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

NOTES:

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

BILL OF MATERIAL

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	1,053

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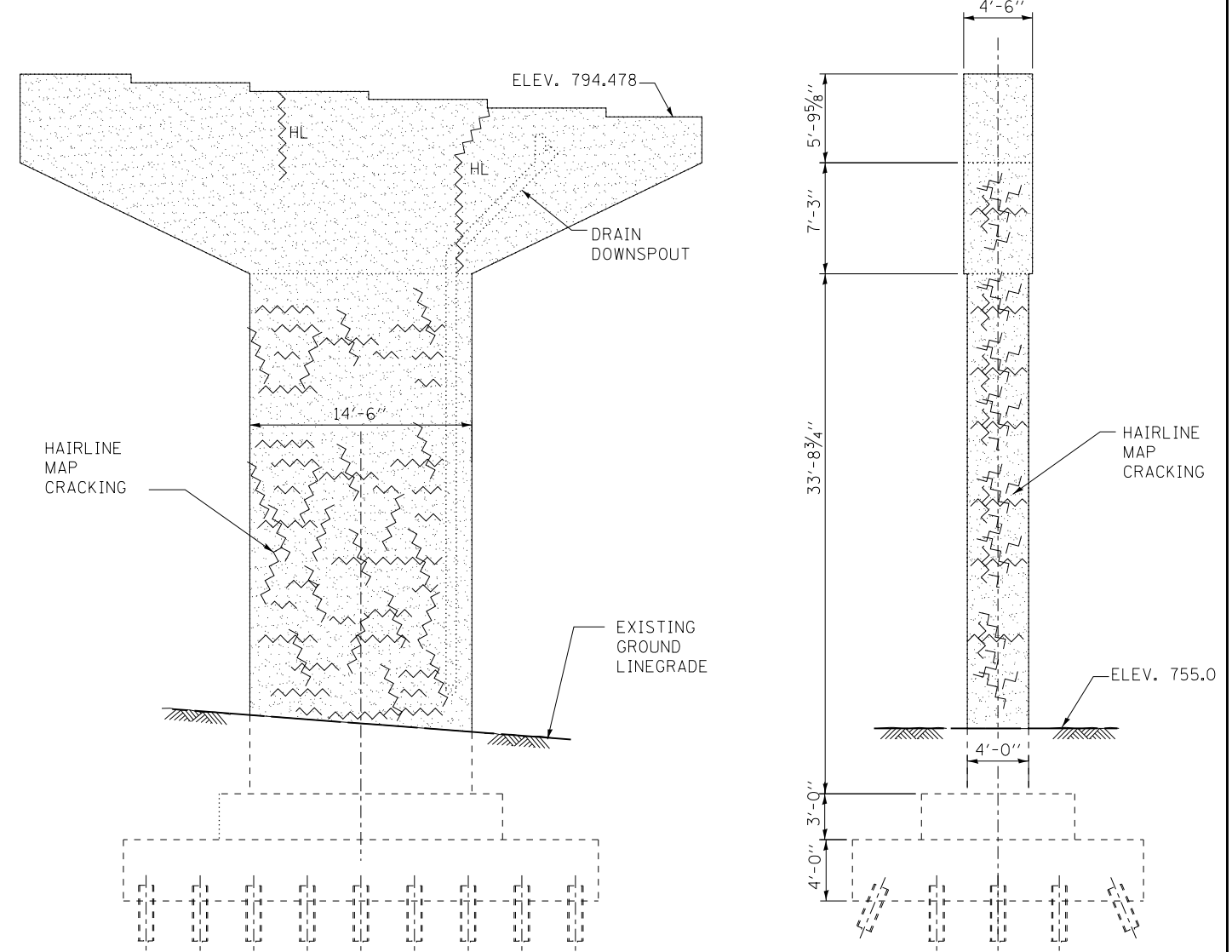
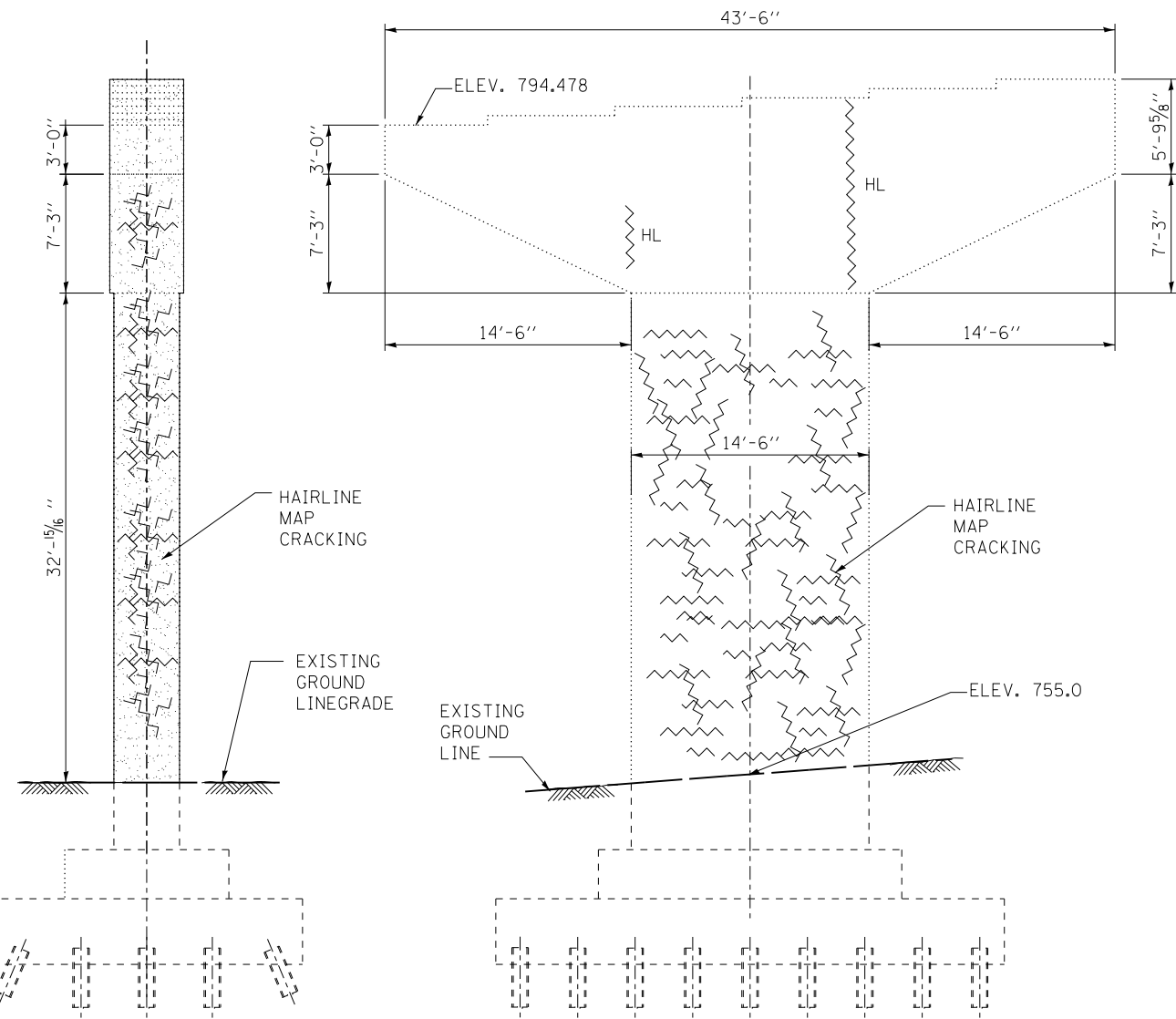
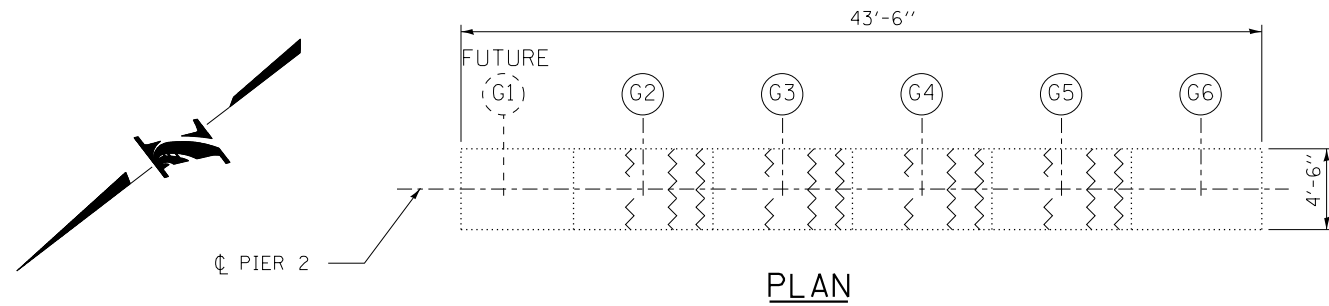


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 PIER 1 REPAIR DETAILS

SA-07 OF SA-24  
 SHT NO. SA-07  
 DRAWING NO. 859 OF 1517



**NORTH END VIEW**

**LEGEND:**

- APPLY CONCRETE SEALANT
- HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	1,260

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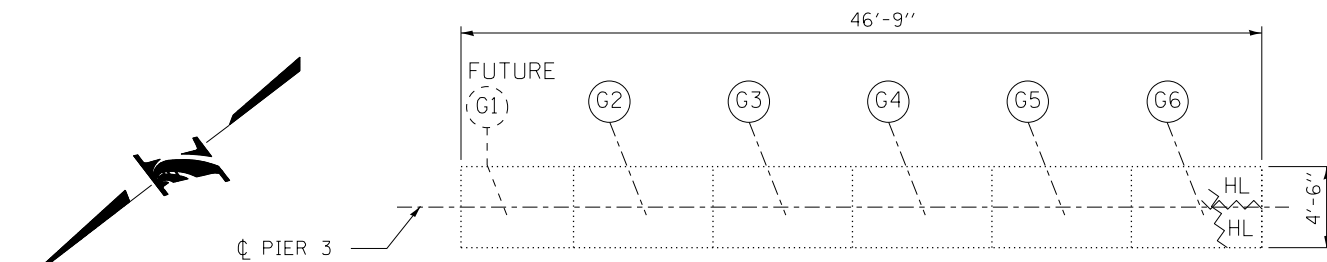
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 ILLINOIS 60515

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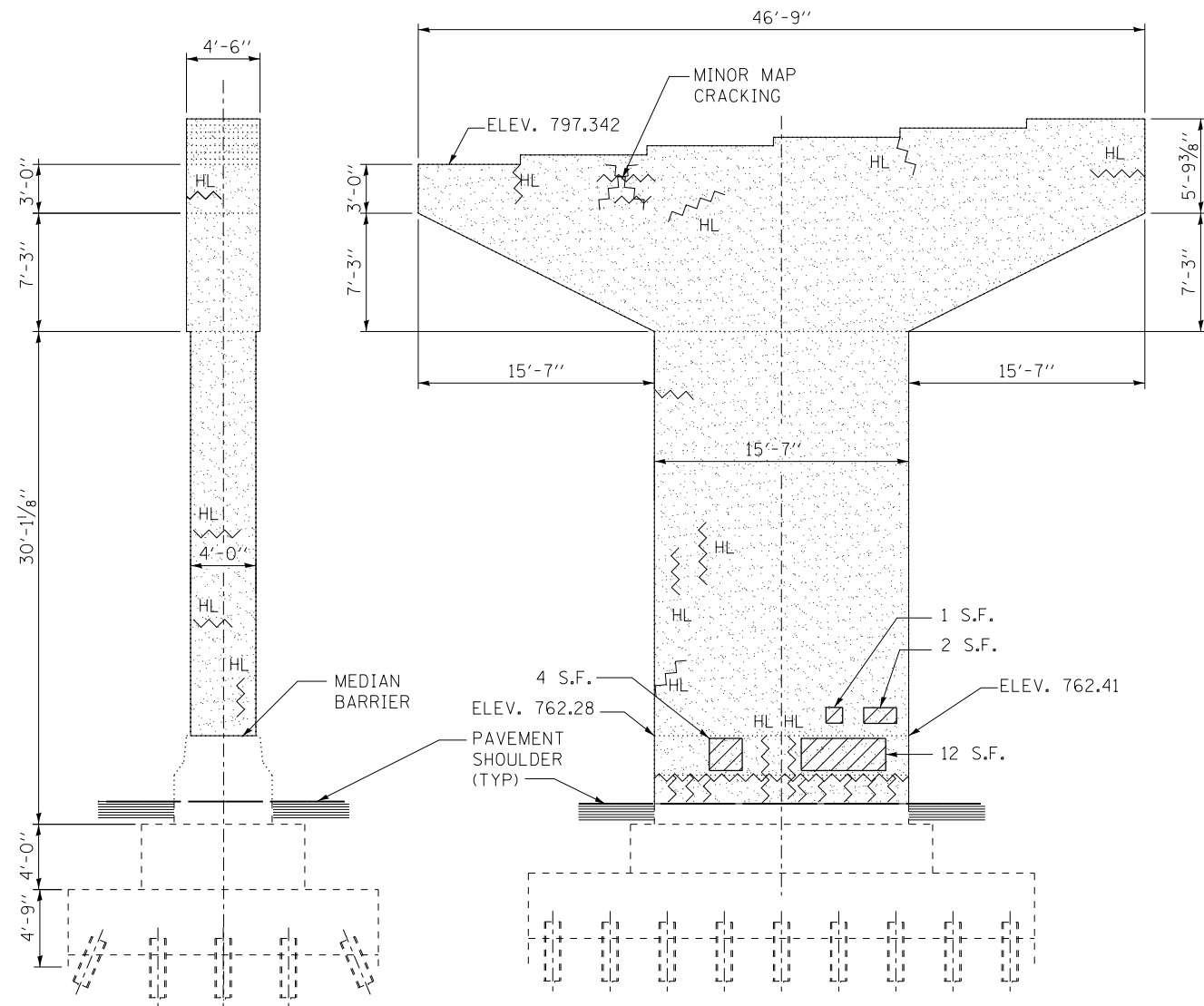
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SA-08 OF SA-24  
 SHT NO. SA-08  
 DRAWING NO.  
**860 OF 1517**



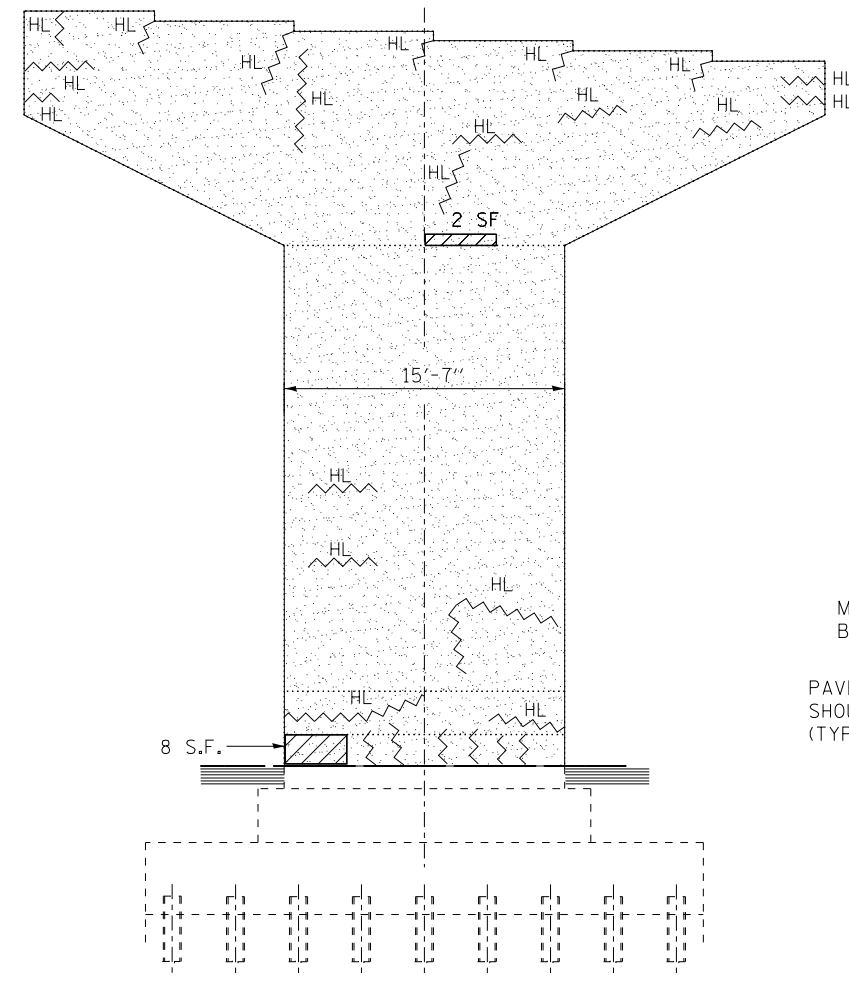


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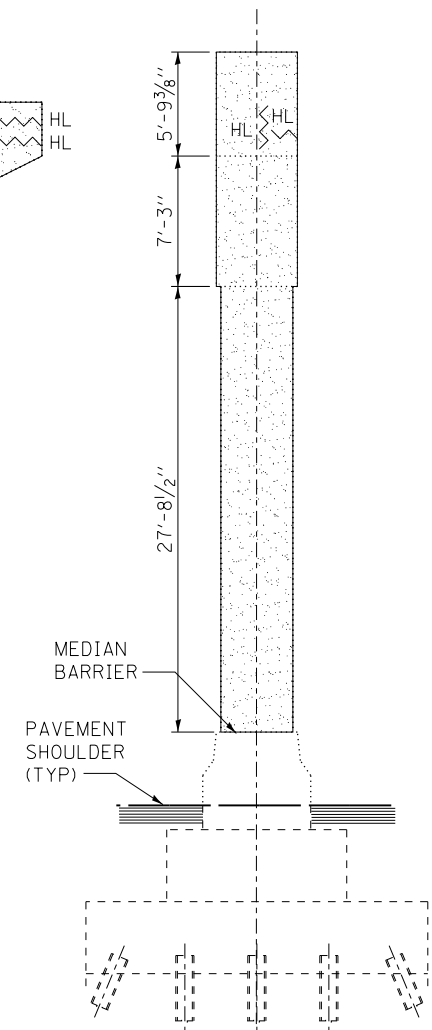


**NORTH END VIEW**

**WEST ELEVATION  
(LOOKING SOUTH)**







**EAST ELEVATION  
(LOOKING NORTH)**



**SOUTH END VIEW**

**LEGEND:**

-  STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)
-  APPLY CONCRETE SEALANT
-  HAIRLINE CRACK (FOR INFORMATION ONLY)
-  MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	2,109
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ. FT.	29

SA-09 OF SA-24

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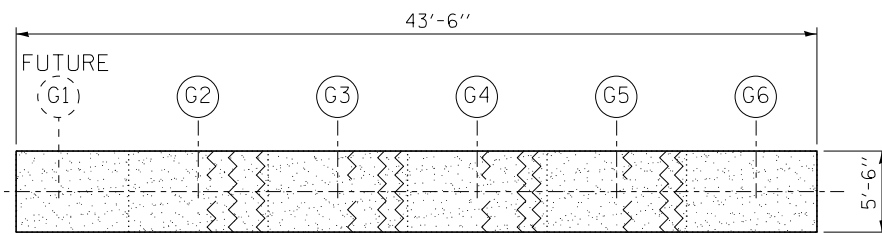
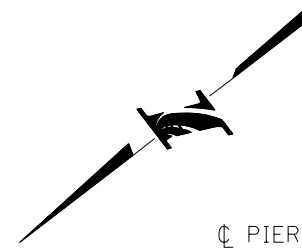


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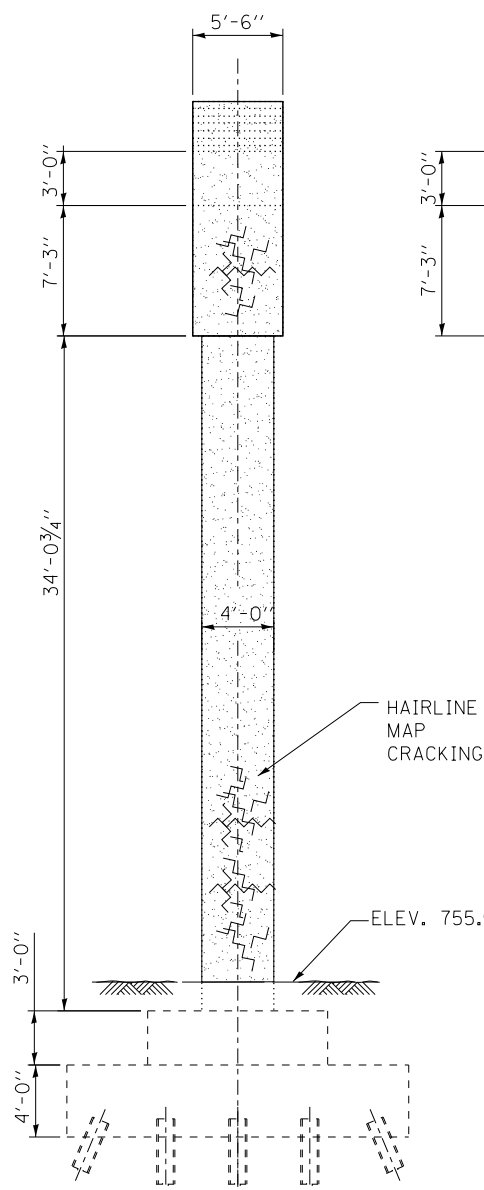
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CONTRACT NO. **RR-16-4255**  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
**PIER 3 REPAIR DETAILS**

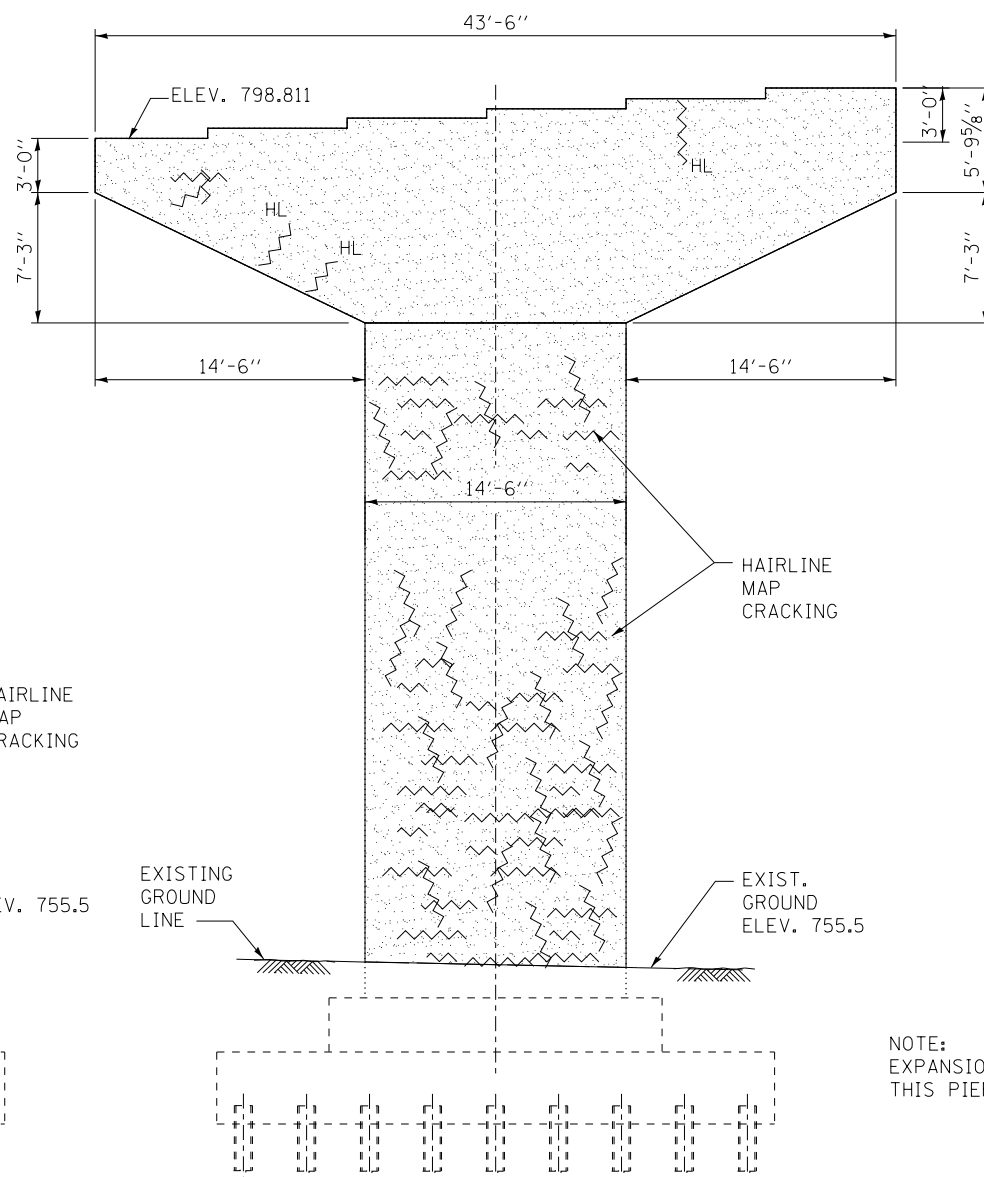
SHT NO. **SA-09**  
 DRAWING NO. **861** OF **1517**



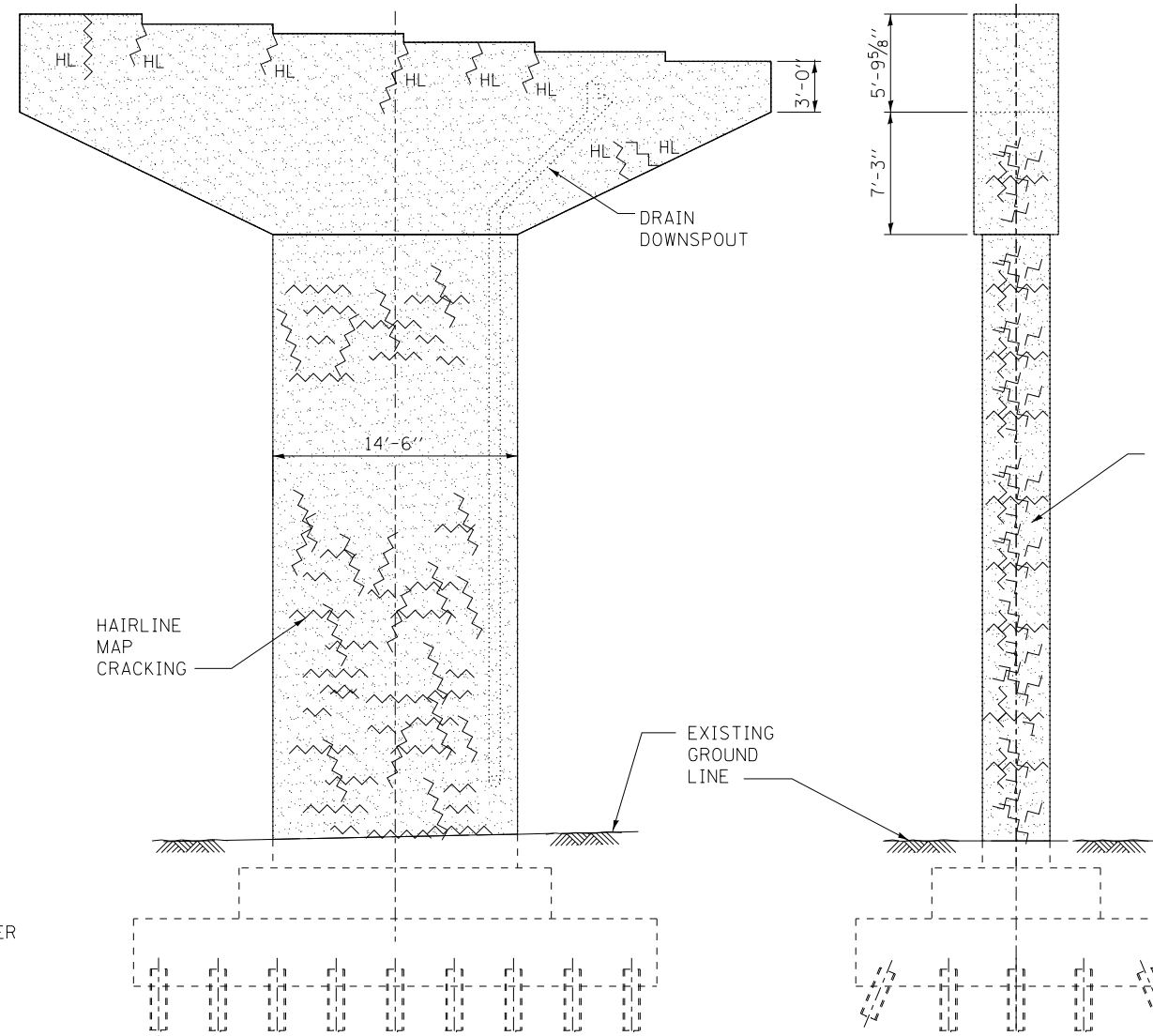
PLAN



NORTH END VIEW



WEST ELEVATION  
(LOOKING SOUTH)






EAST ELEVATION  
(LOOKING NORTH)

SOUTH END VIEW

NOTE:  
EXPANSION JOINT OVER  
THIS PIER

LEGEND:

-  APPLY CONCRETE SEALANT
-  HAIRLINE CRACK (FOR INFORMATION ONLY)
-  MAP CRACKING (FOR INFORMATION ONLY)

NOTES:

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

BILL OF MATERIAL

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	2,379

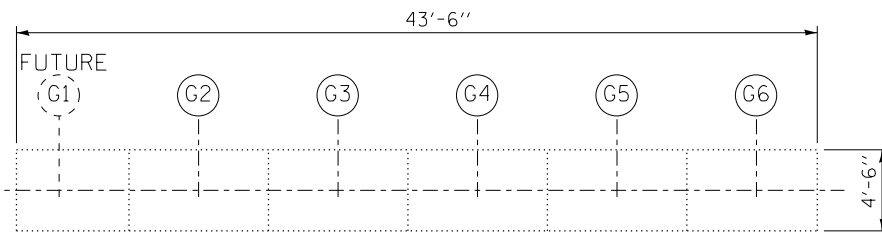
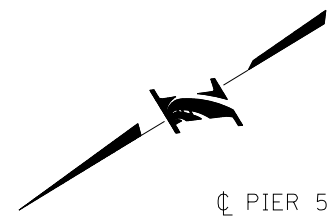
DRAWN BY MPS DATE 3/11/2018  
CHECKED BY JPM/MMH/PAB DATE 3/11/2018



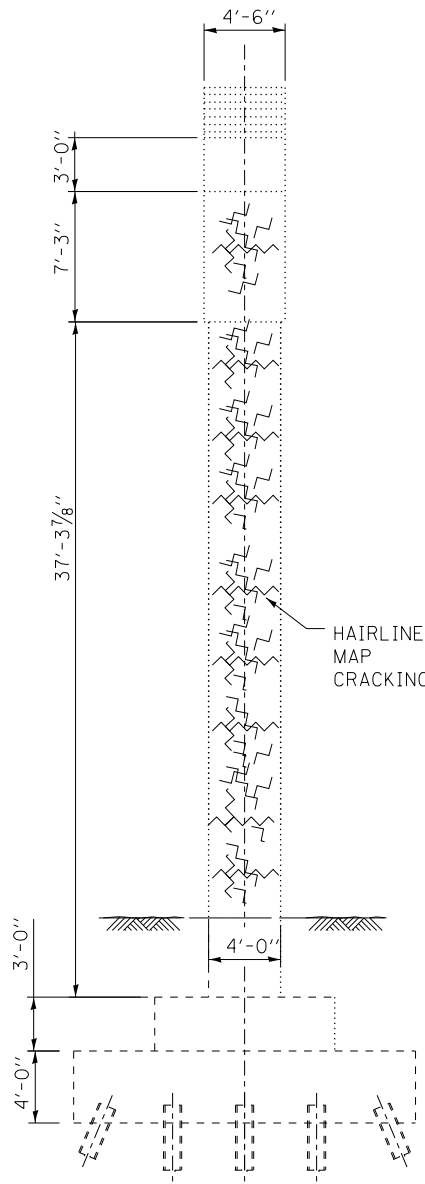
REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
PIER 4 REPAIR DETAILS

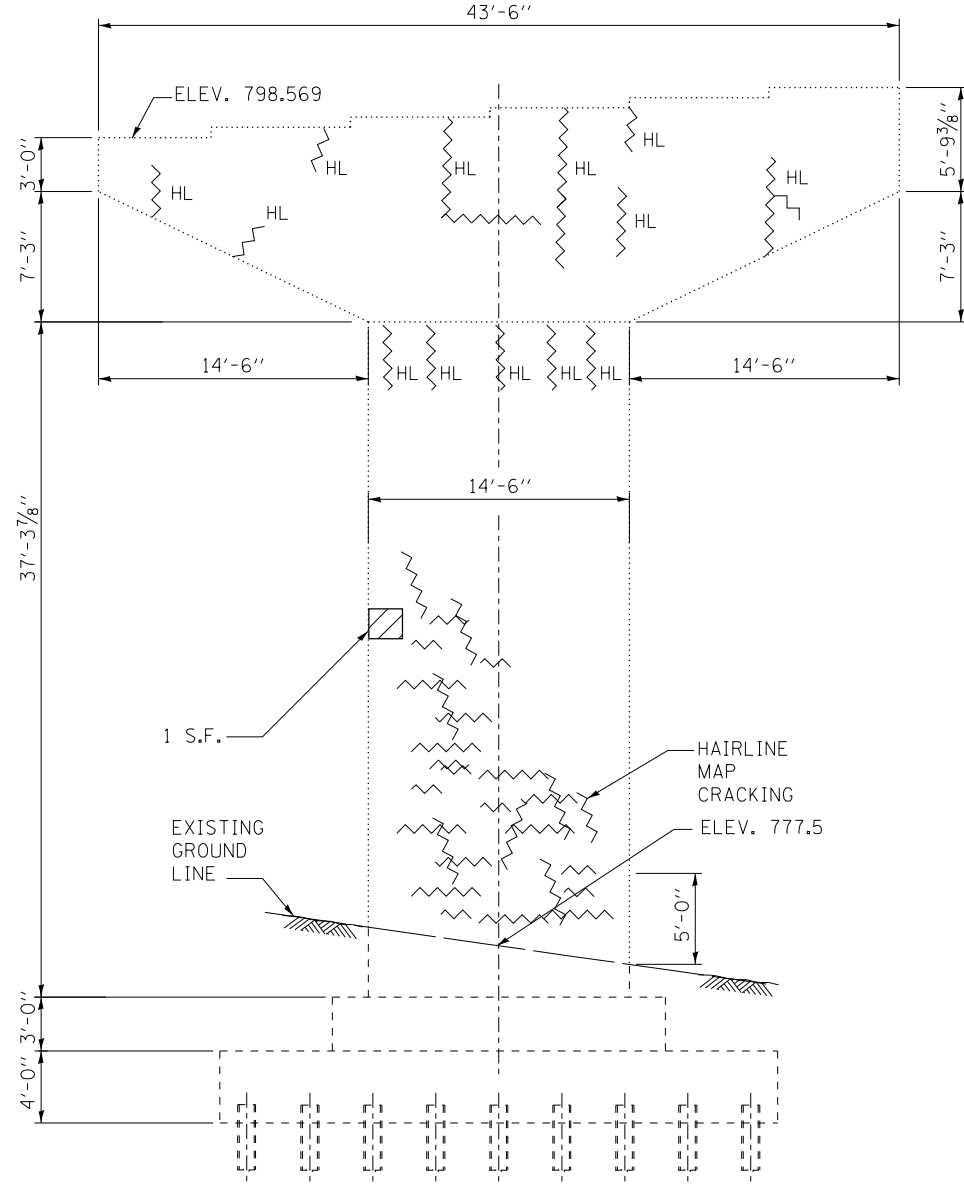
SA-10 OF SA-24  
SHT NO. SA-10  
DRAWING NO. 862 OF 1517



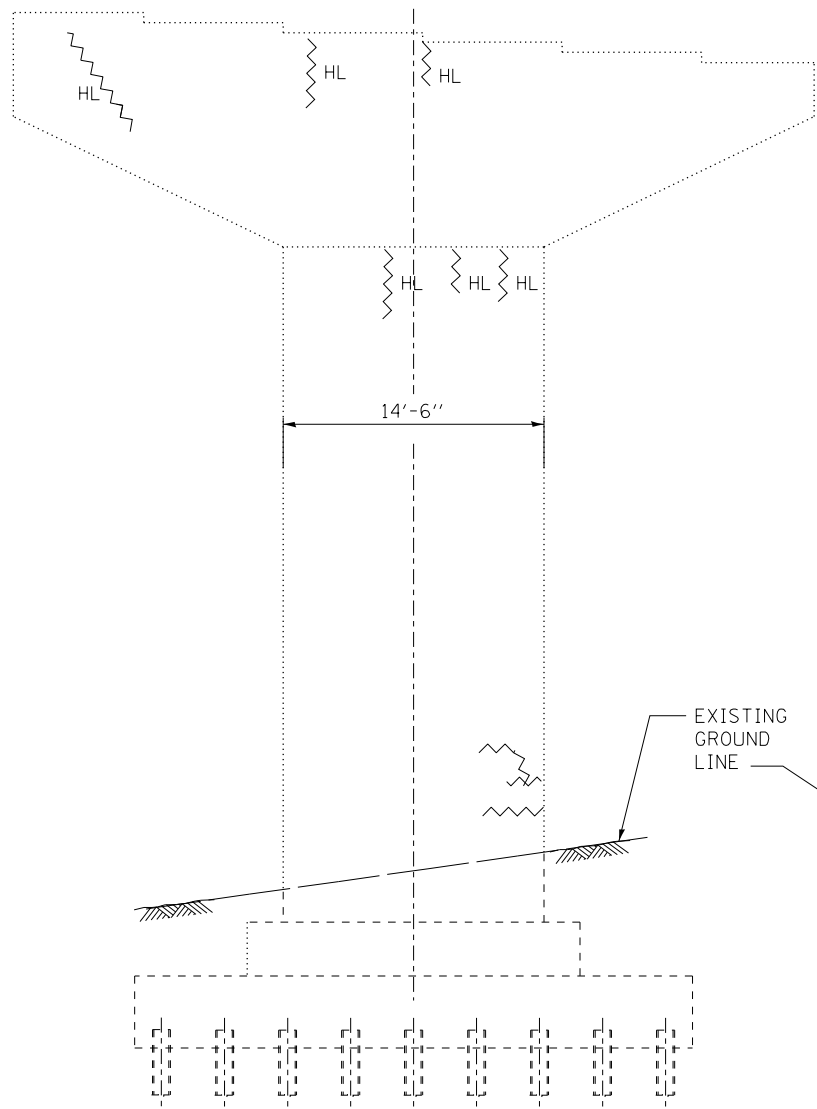
**PLAN**



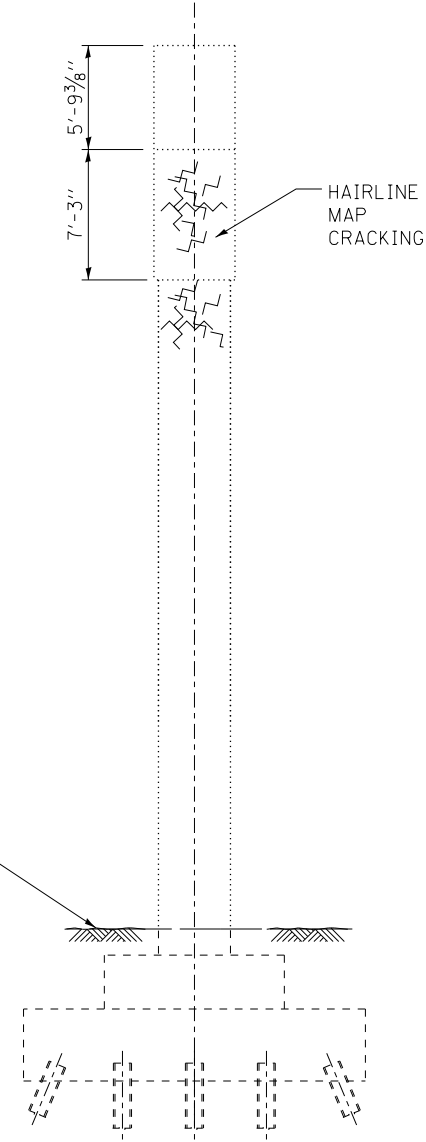
**NORTH END VIEW**



**WEST ELEVATION  
(LOOKING SOUTH)**



**EAST ELEVATION  
(LOOKING NORTH)**



**SOUTH END VIEW**

**LEGEND:**

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)
- HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ. FT.	1

DRAWN BY **MPS** DATE **3/11/2018**  
 CHECKED BY **JPM/MMH/PAB** DATE **3/11/2018**

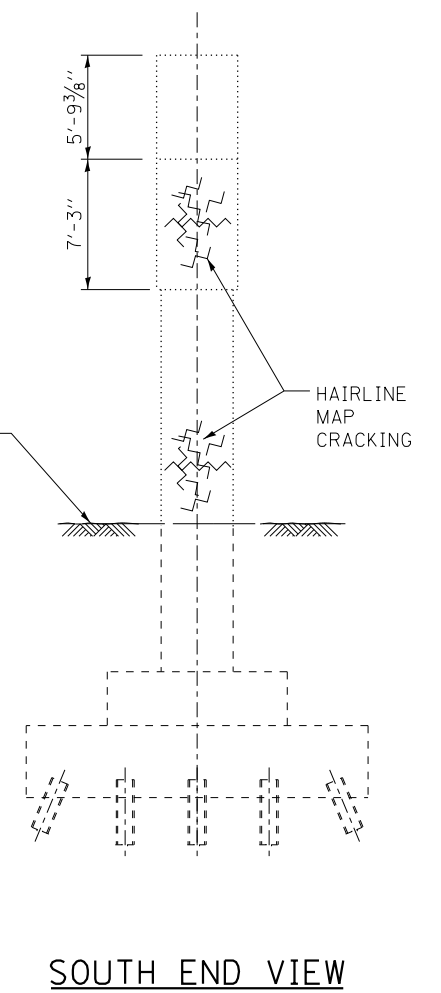
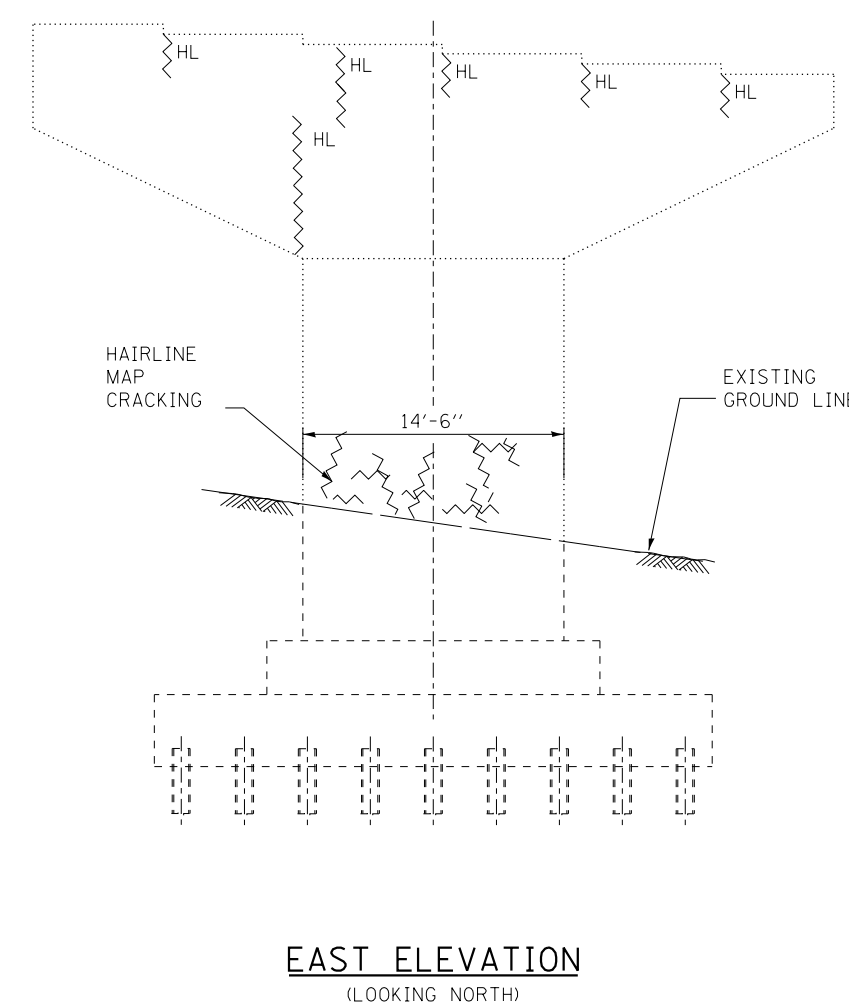
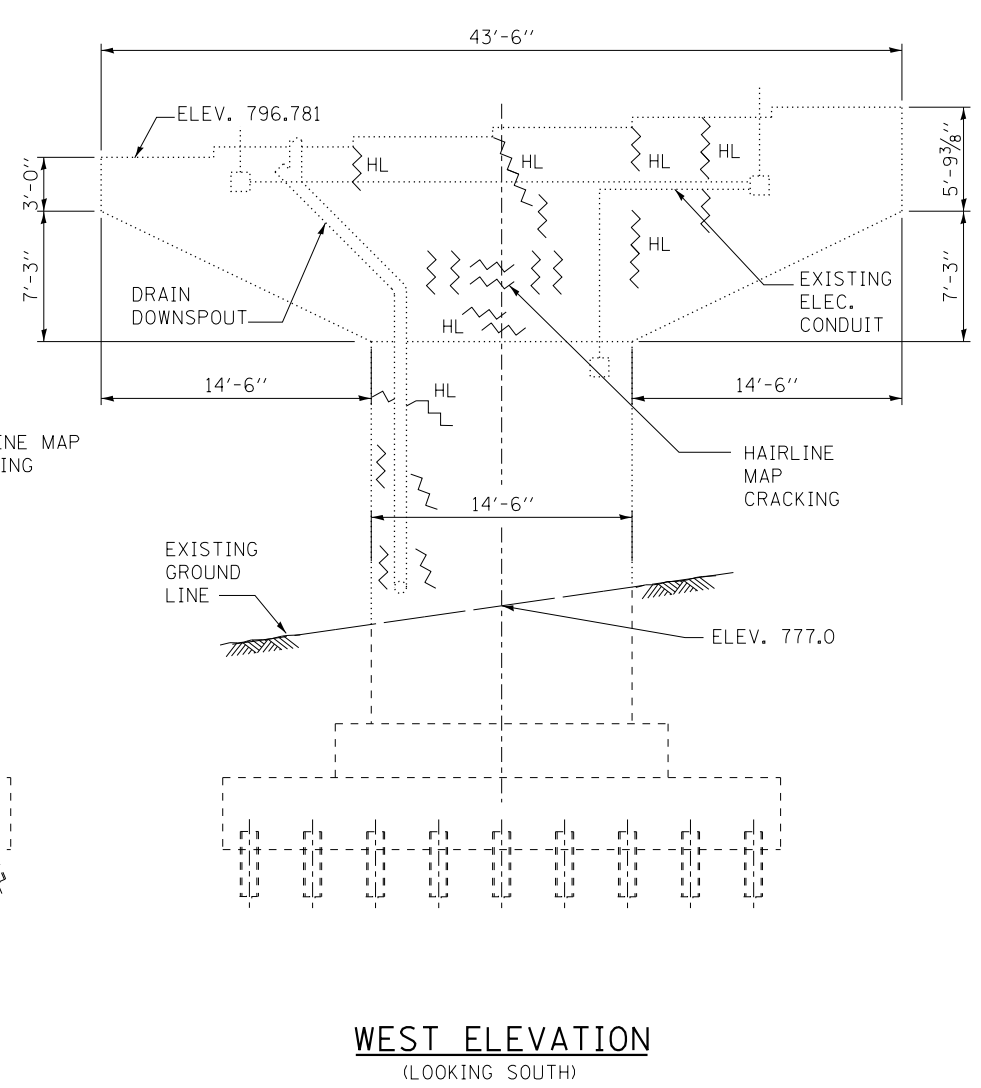
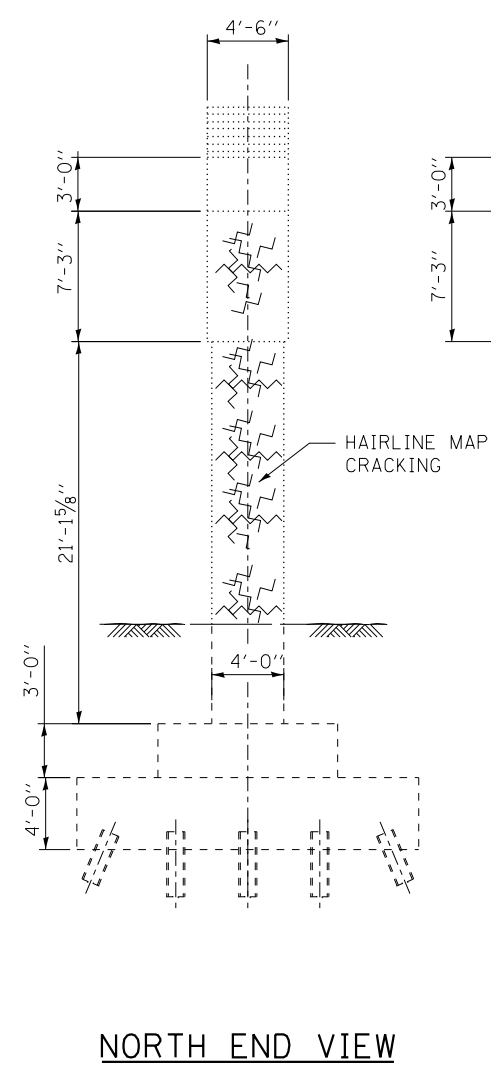
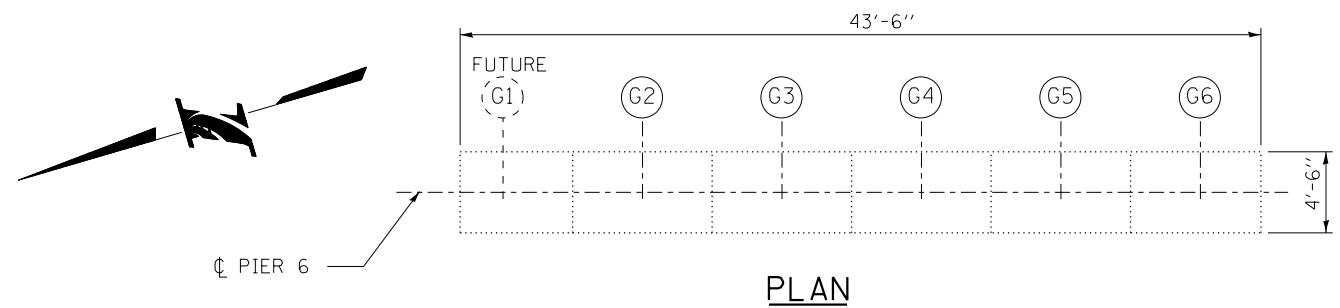


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. **RR-16-4255**  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
**PIER 5 REPAIR DETAILS**

SA-11 OF SA-24  
 SHT NO. SA-11  
 DRAWING NO.  
 863 OF 1517



**LEGEND:**

- HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

DRAWN BY MPS DATE 3/11/2018  
 CHECKED BY JPM/MMH/PAB DATE 3/11/2018

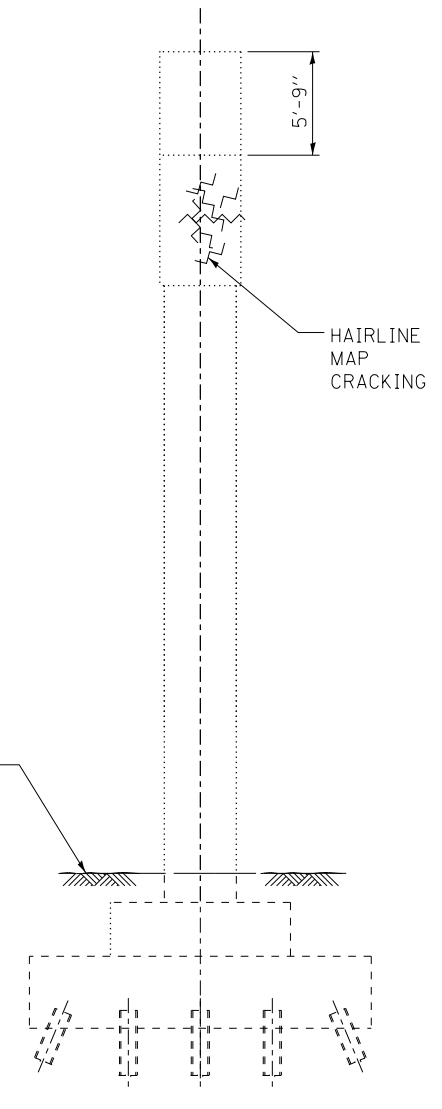
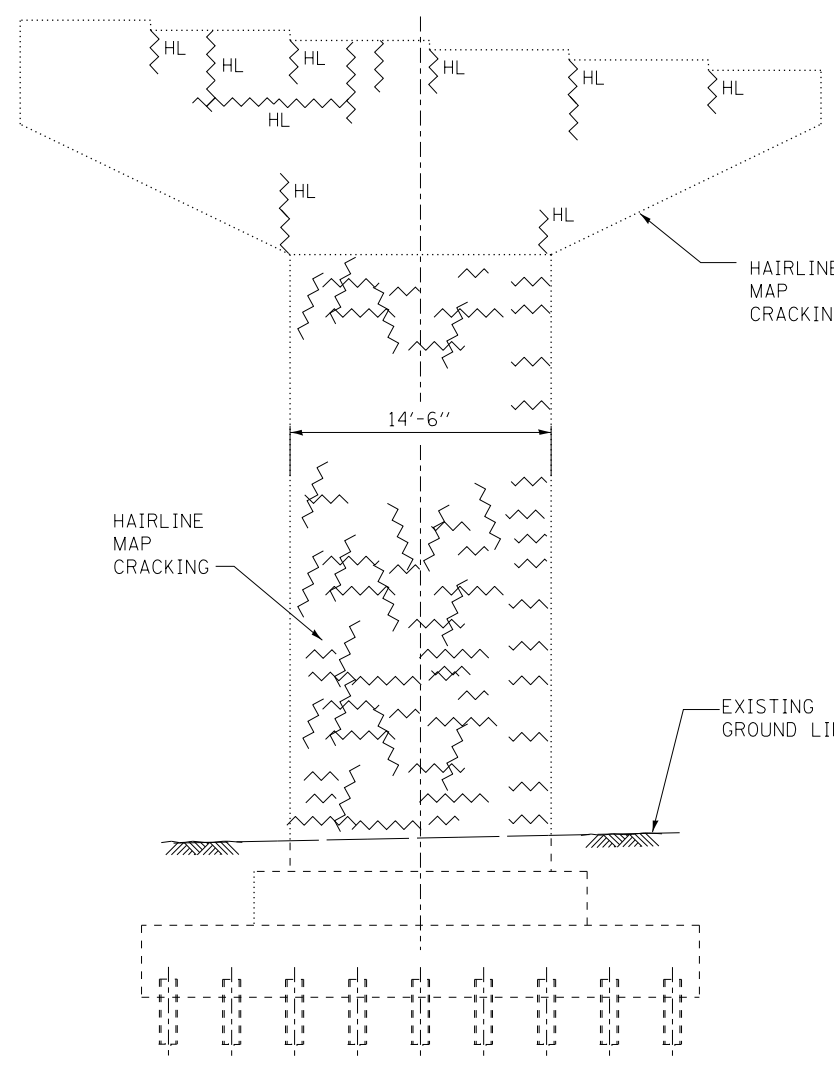
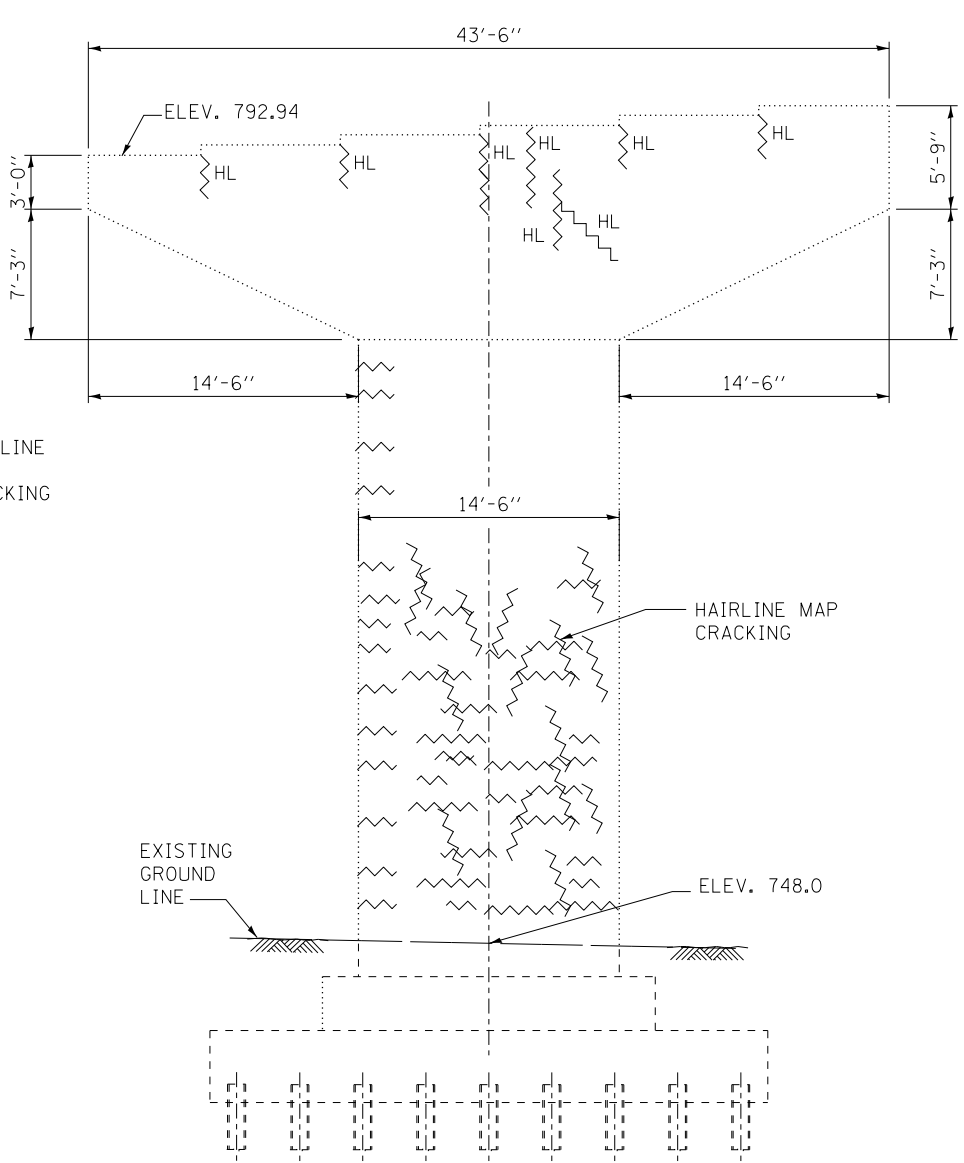
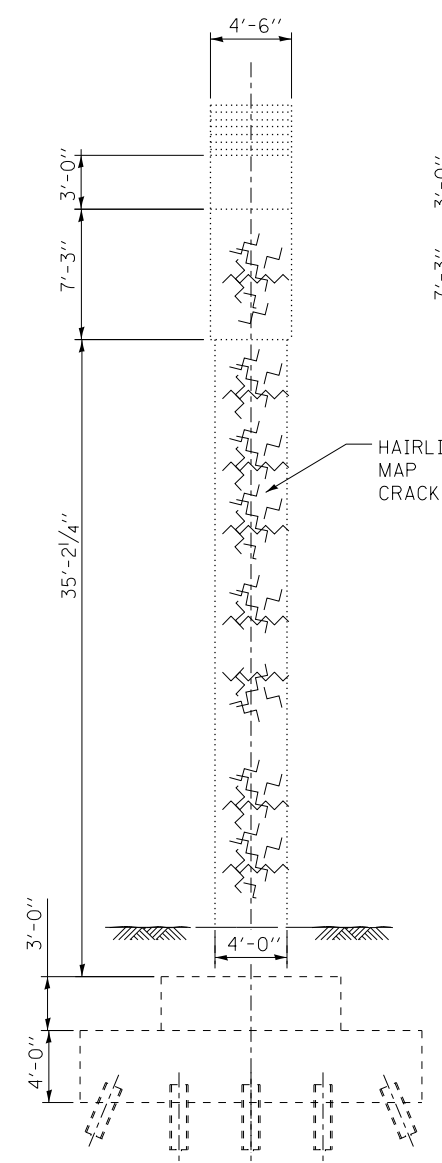
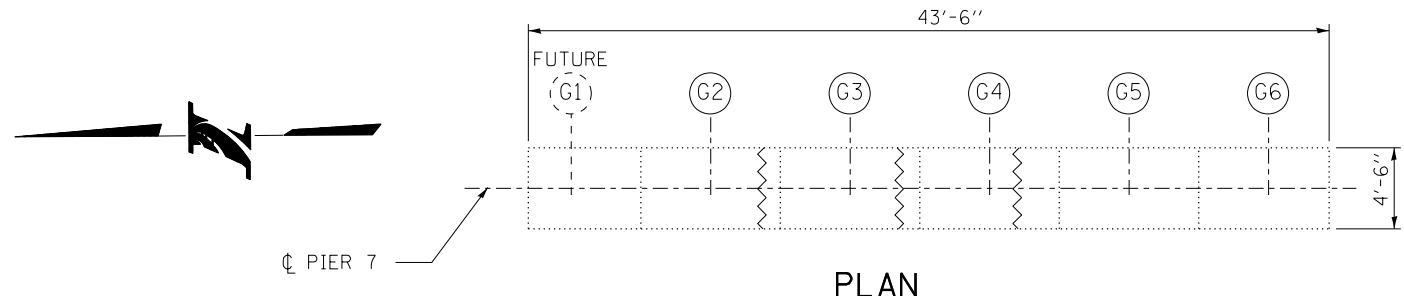


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 PIER 6 REPAIR DETAILS

SA-12 OF SA-24  
 SHT NO. SA-12  
 DRAWING NO.  
 864 OF 1517



**LEGEND:**

- HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

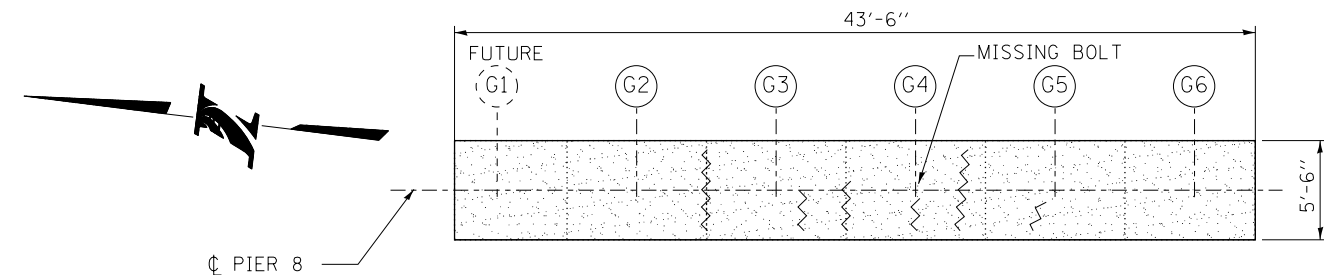
DRAWN BY **MPS** DATE **3/11/2018**  
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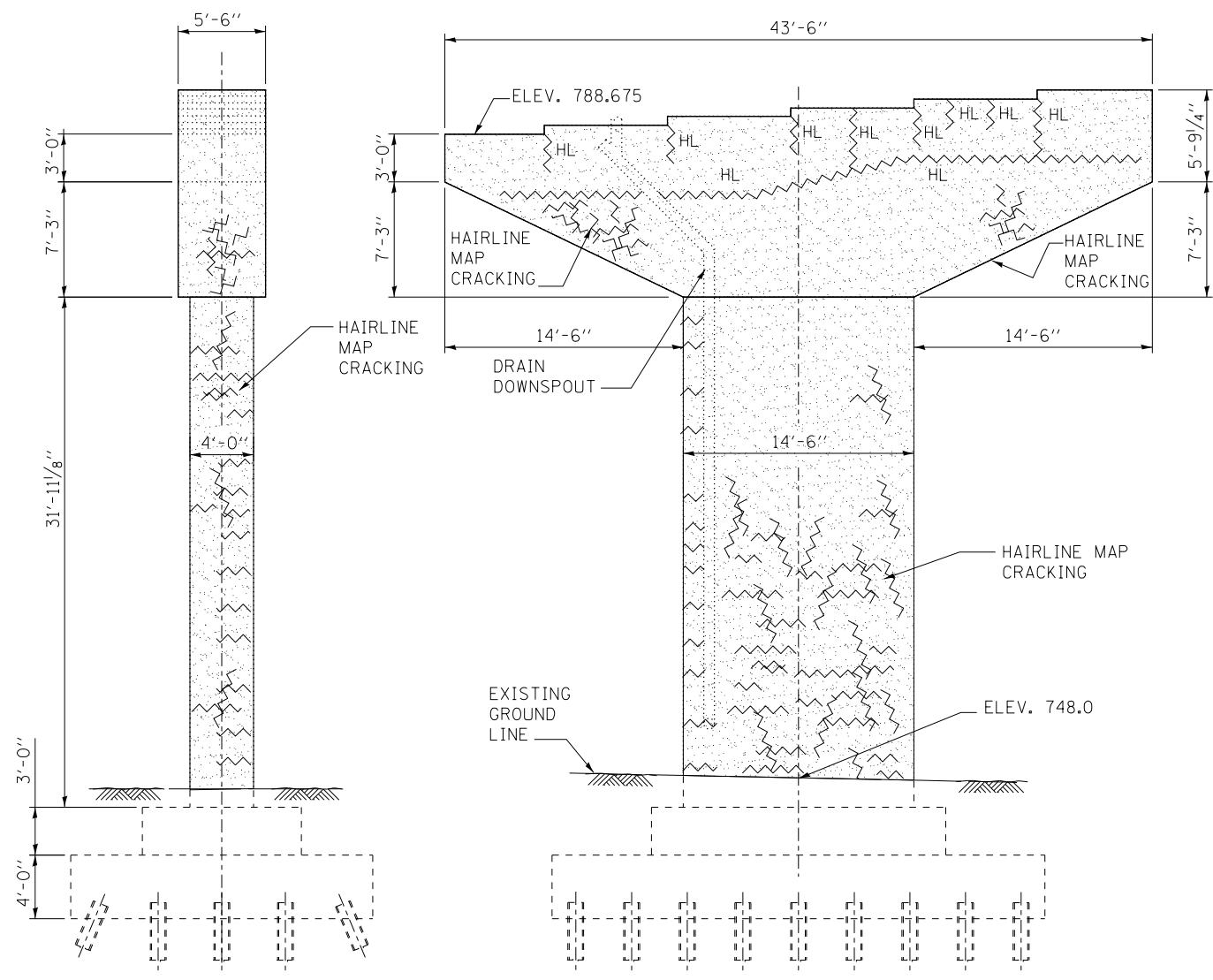
REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. **RR-16-4255**  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
**PIER 7 REPAIR DETAILS**

Projects\2016\20161616\_Veterans Memorial Tollway\Drawings\Current Drawings Files\4255\Structural\Sheet\4255-sht-1479-PIER-REL13.dgn

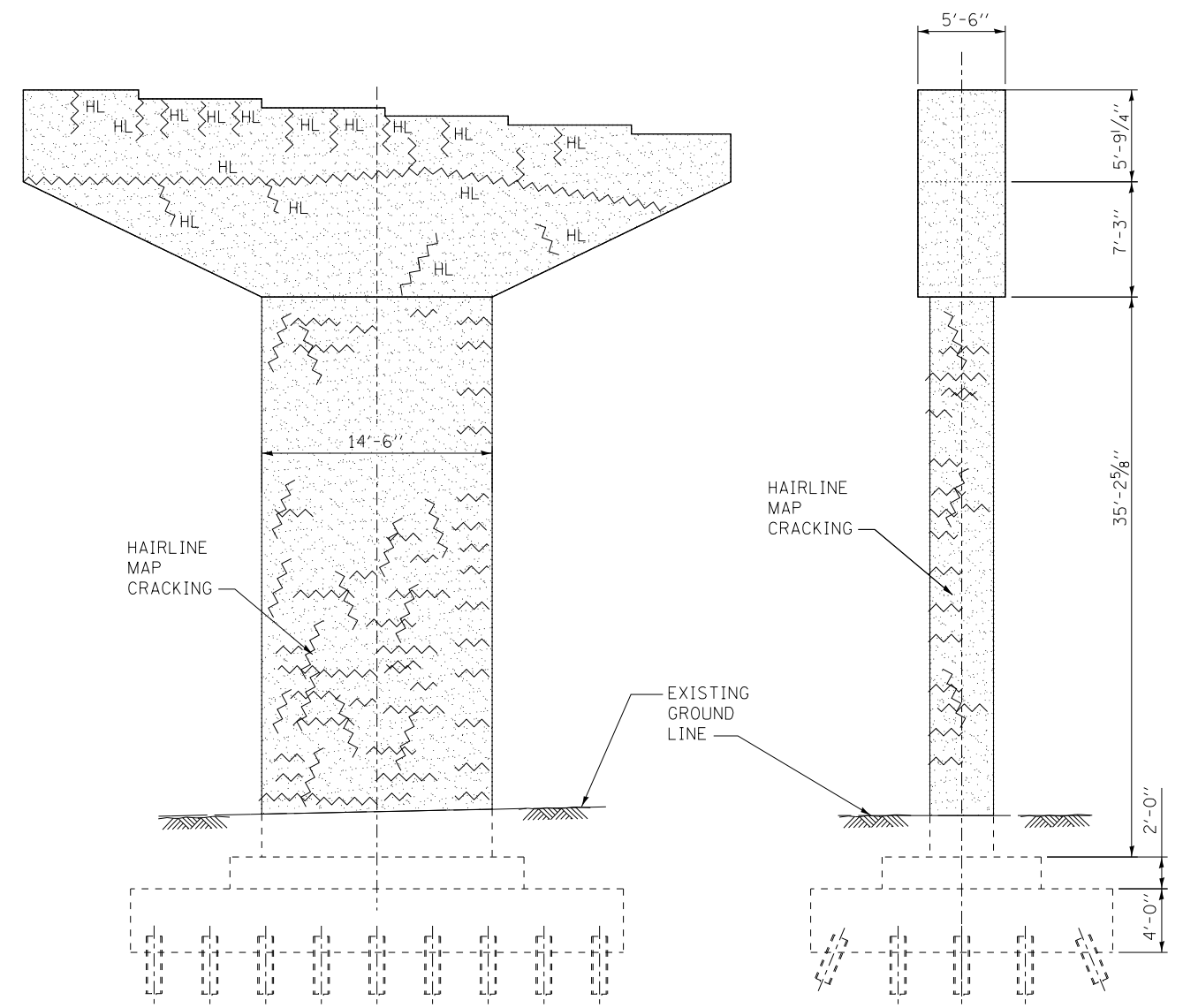


PLAN



NORTH END VIEW

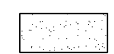
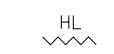
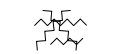
WEST ELEVATION  
(LOOKING EAST)



EAST ELEVATION  
(LOOKING WEST)

SOUTH END VIEW

LEGEND:

-  APPLY CONCRETE SEALANT
-  HAIRLINE CRACK (FOR INFORMATION ONLY)
-  MAP CRACKING (FOR INFORMATION ONLY)

NOTES:

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

BILL OF MATERIAL

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	2,291

DRAWN BY MPS DATE 3/11/2018  
 CHECKED BY JPM/MMH/PAB DATE 3/11/2018

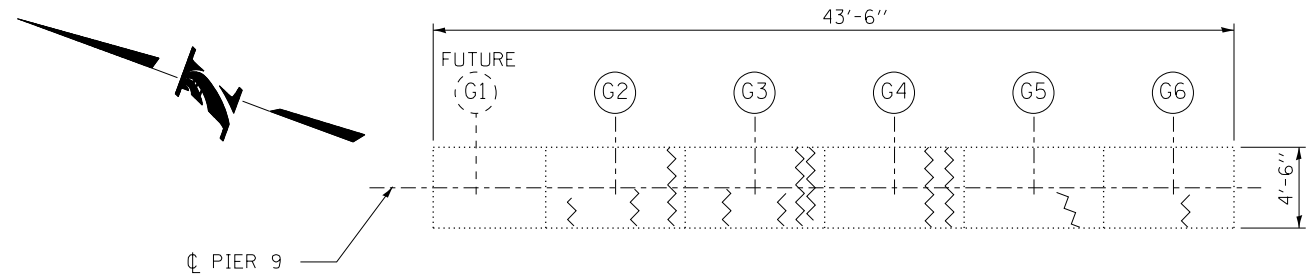


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

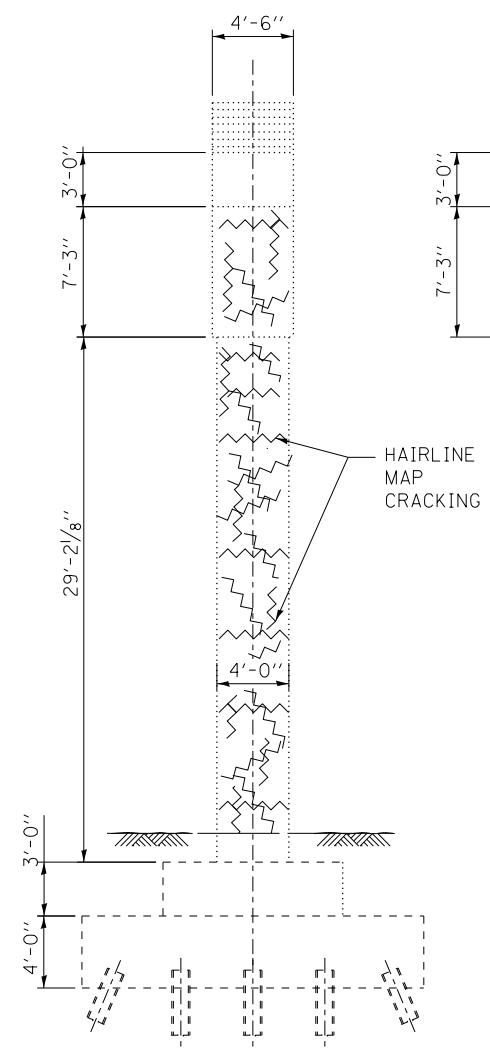
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 PIER 8 REPAIR DETAILS

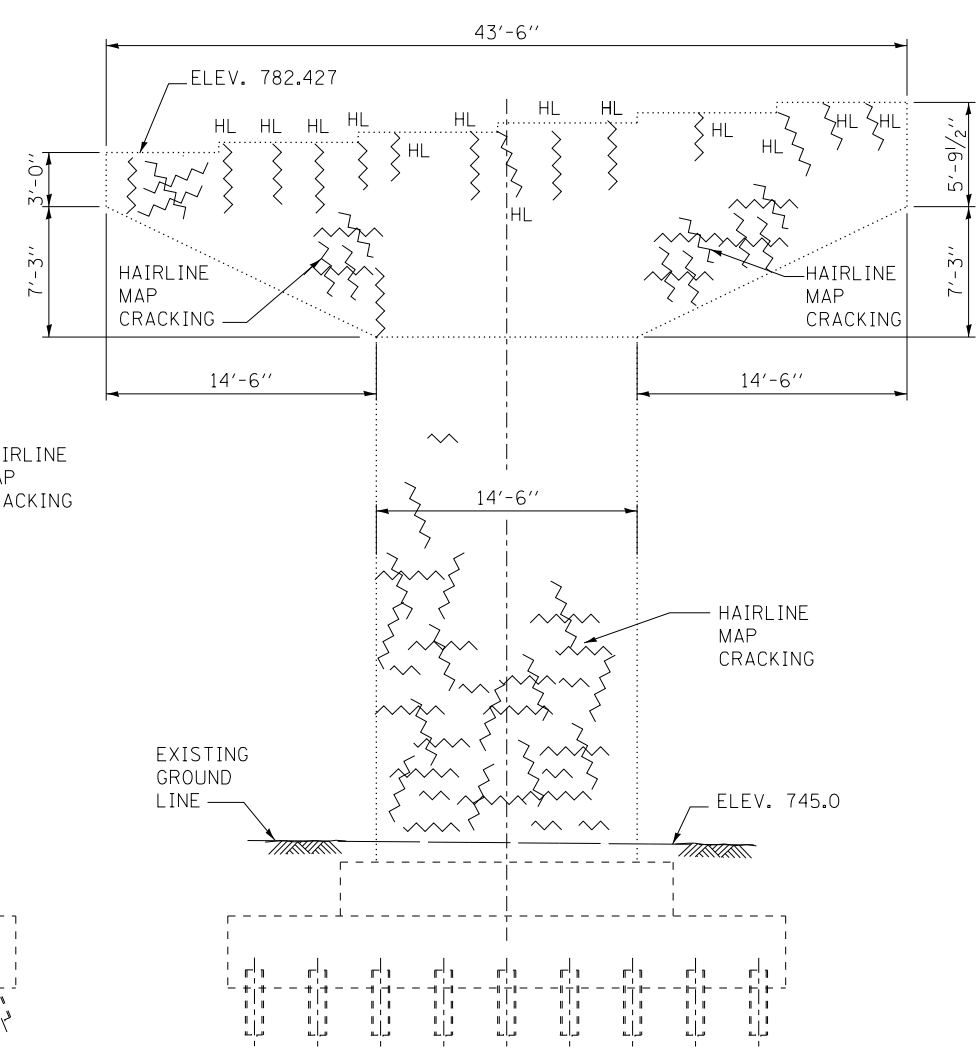
SA-14 OF SA-24  
 SHT NO. SA-14  
 DRAWING NO. 866 OF 1517



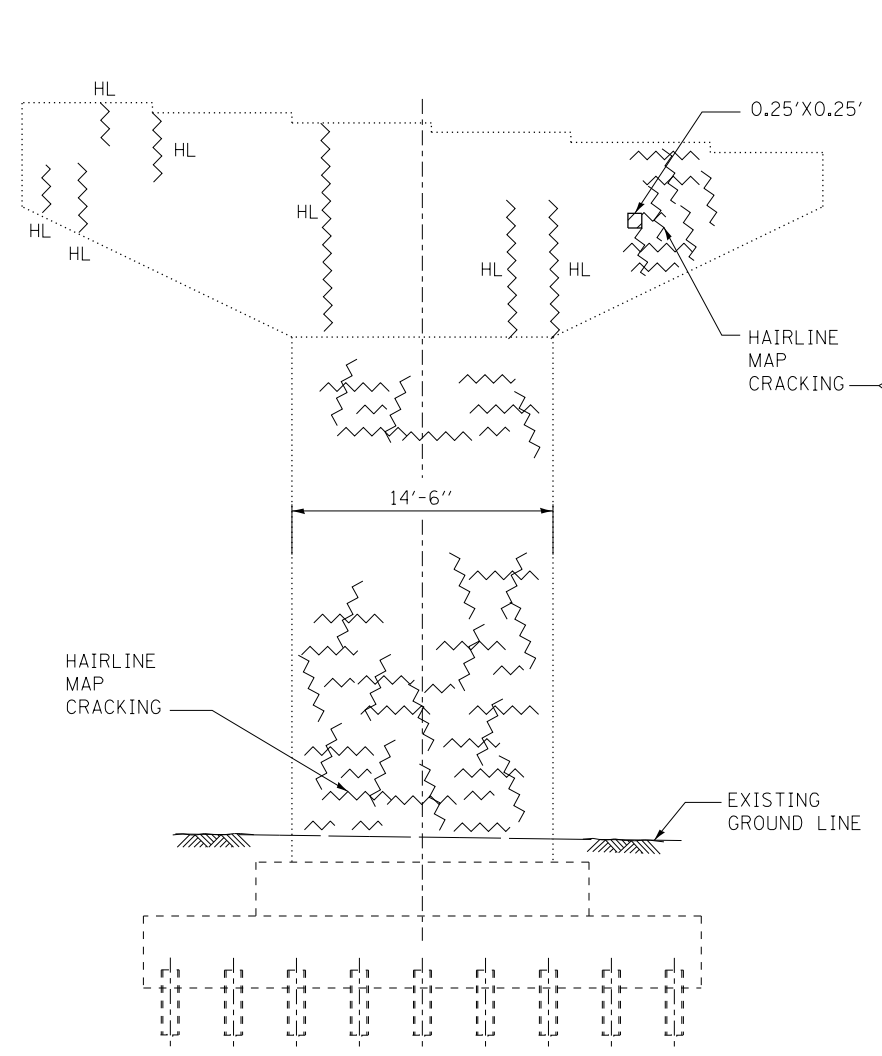
**PLAN**



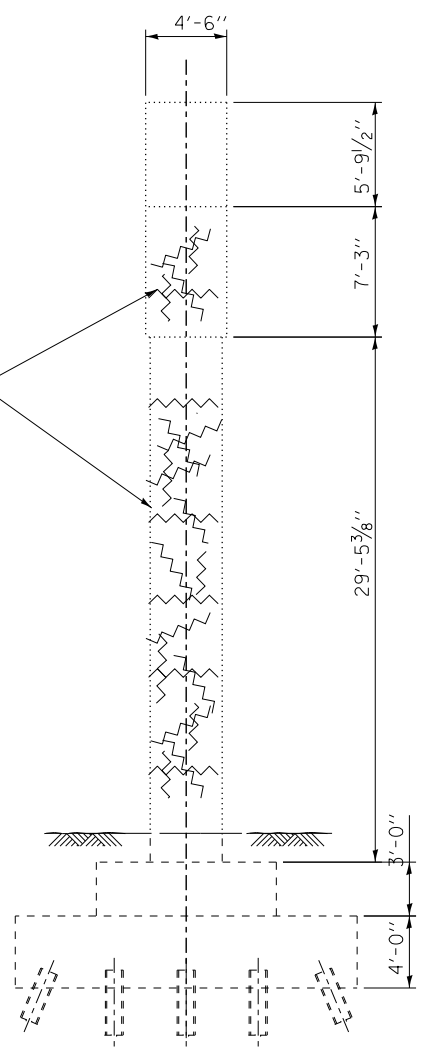
**NORTH END VIEW**



**WEST ELEVATION  
(LOOKING EAST)**



**EAST ELEVATION  
(LOOKING WEST)**



**SOUTH END VIEW**

**LEGEND:**

- HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

DRAWN BY **MPS** DATE **3/11/2018**  
 CHECKED BY **JPM/MMH/PAB** DATE **3/11/2018**



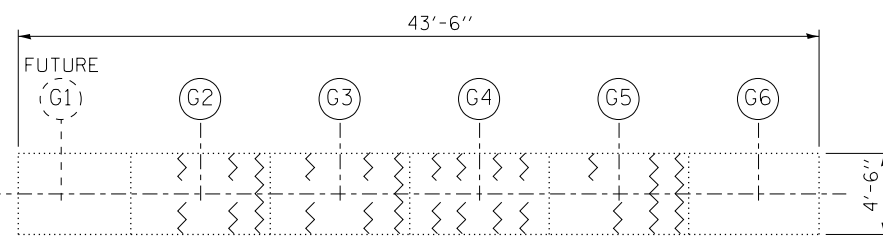
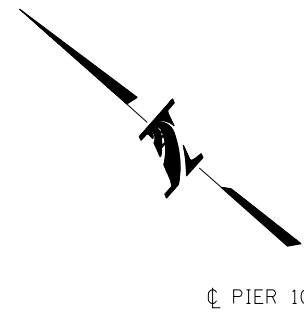
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

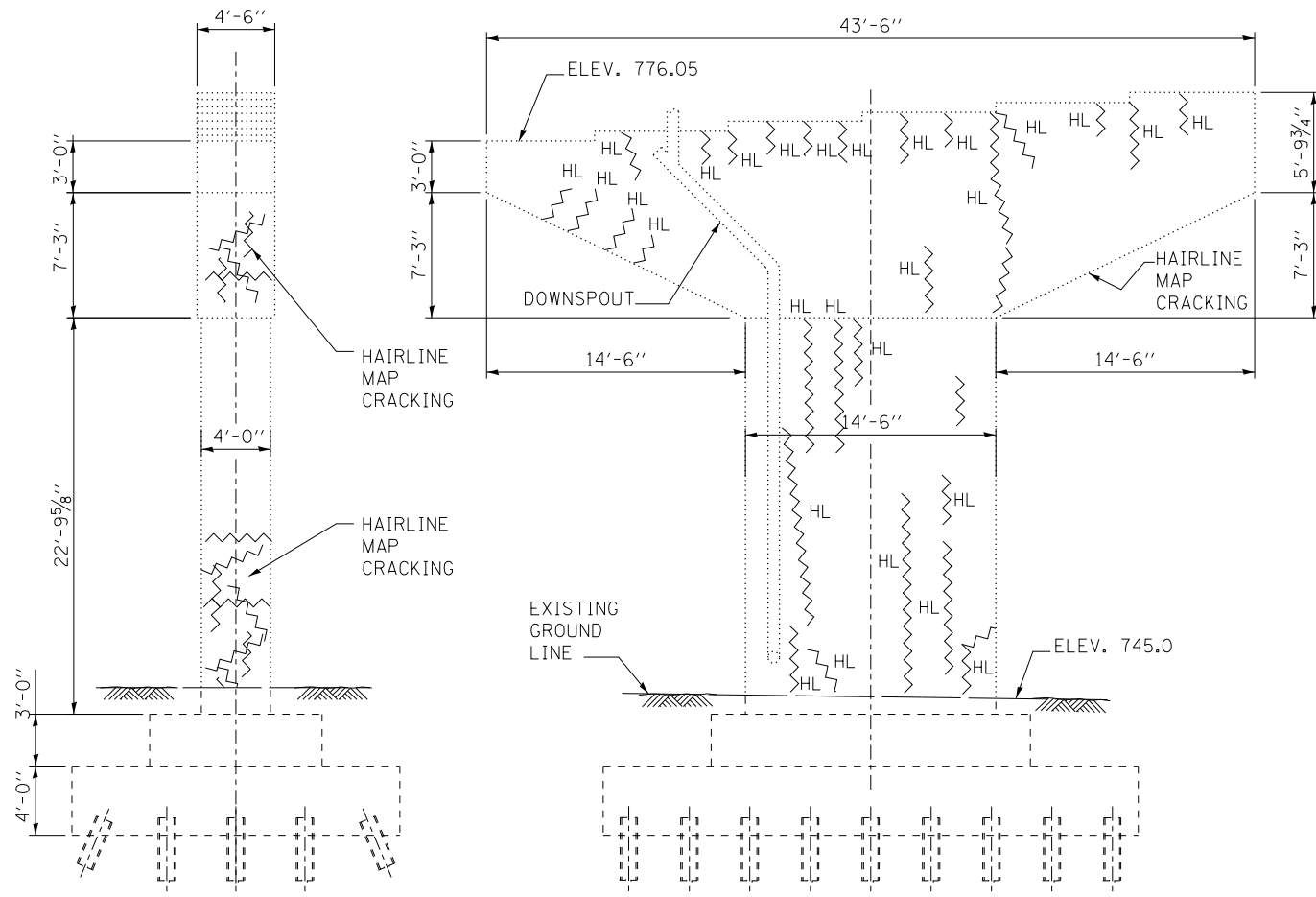
CONTRACT NO. **RR-16-4255**  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
**PIER 9 REPAIR DETAILS**

SA-15 OF SA-24  
 SHT NO. SA-15  
 DRAWING NO.  
**867 OF 1517**

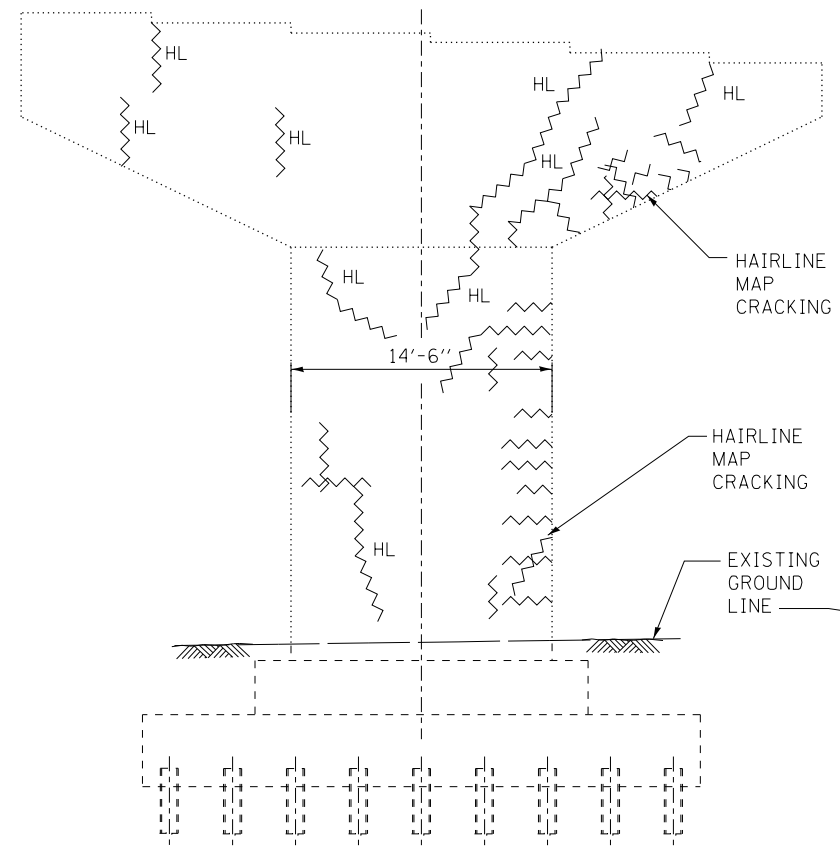
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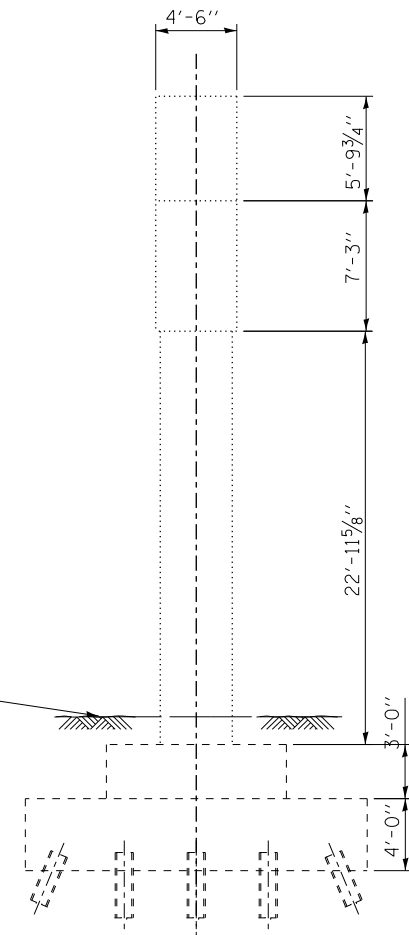
**PLAN**



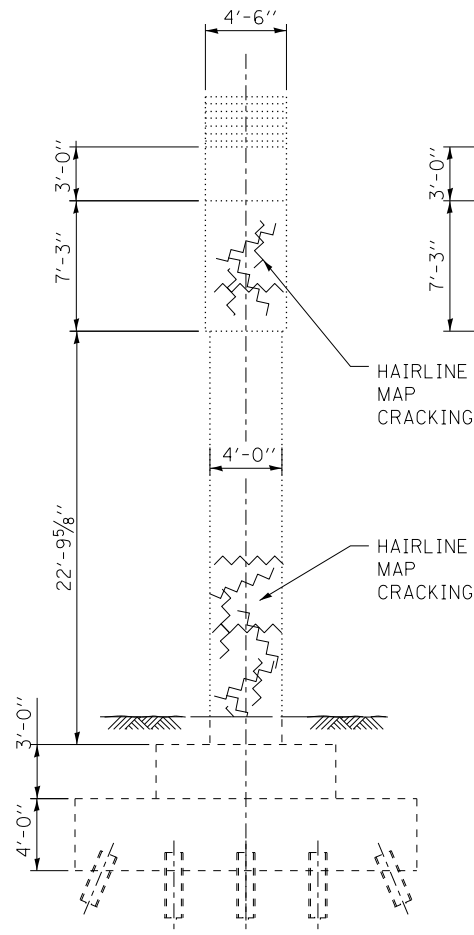
**WEST ELEVATION**  
(LOOKING EAST)



**EAST ELEVATION**  
(LOOKING WEST)



**SOUTH END VIEW**



**NORTH END VIEW**

**LEGEND:**

- HL HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

DRAWN BY **MPS** DATE **3/11/2018**  
 CHECKED BY **JPM/MMH/PAB** DATE **3/11/2018**

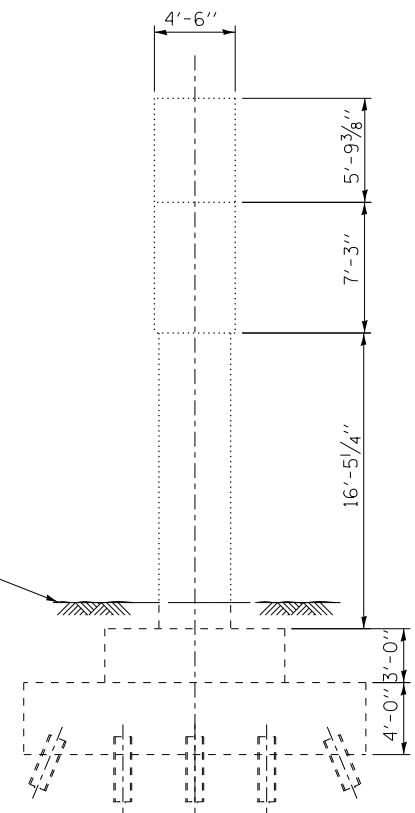
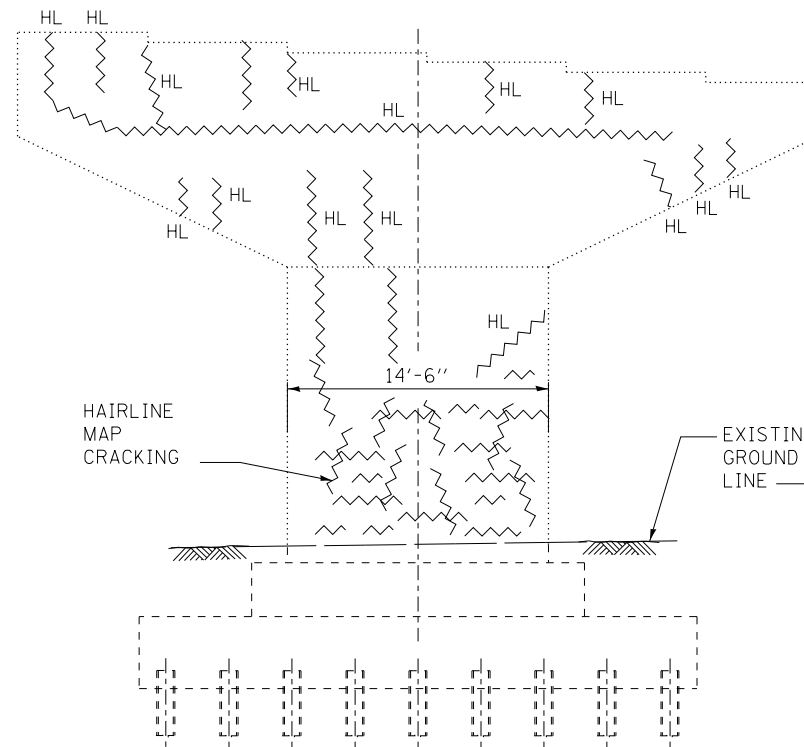
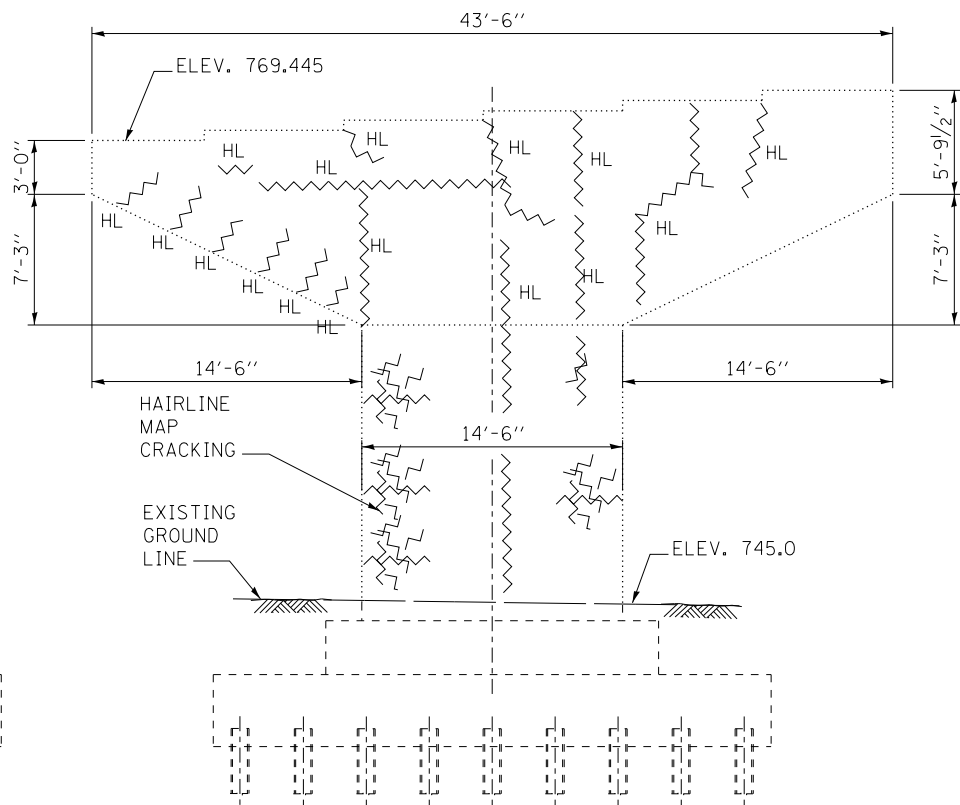
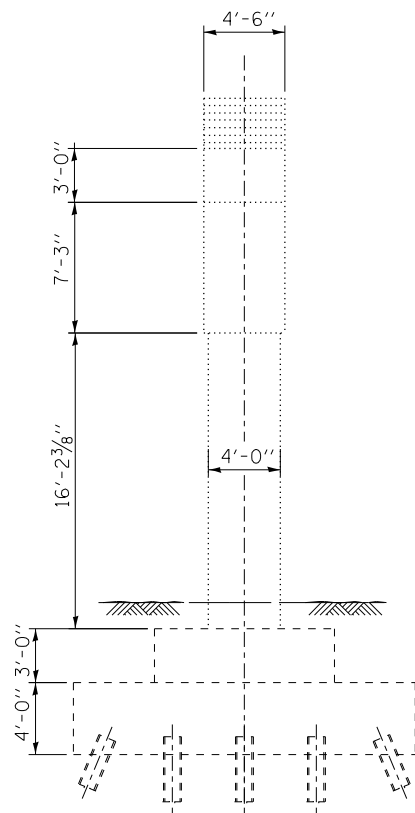
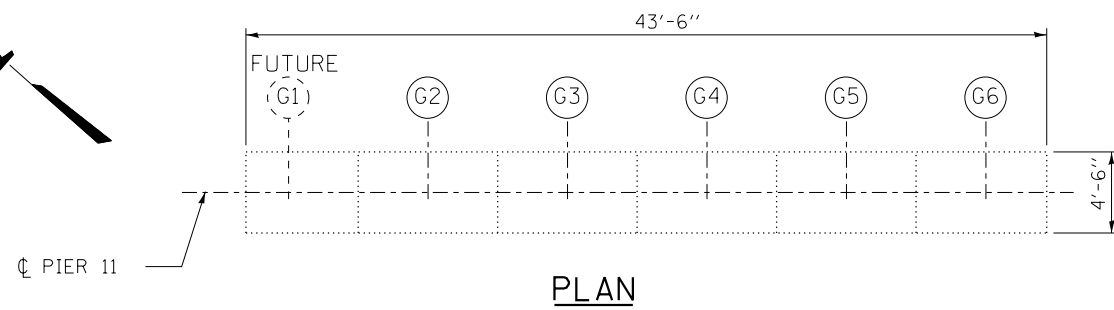
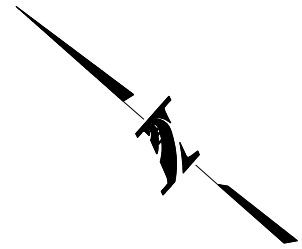


REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. **RR-16-4255**  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
**PIER 10 REPAIR DETAILS**

SA-16 OF SA-24  
 SHT NO. SA-16  
 DRAWING NO. 868 OF 1517





**LEGEND:**

- HAIRLINE CRACK (FOR INFORMATION ONLY)
- MAP CRACKING (FOR INFORMATION ONLY)

**NOTES:**

1. ALL ELEVATION AND DIMENSIONS ARE TAKEN FROM THE 2005 AS-BUILT PLANS.
2. MAP CRACKING ARE HAIRLINE CRACKS AND NOT INTENDED TO BE SEALED.

DRAWN BY **MPS** DATE **3/11/2018**  
 CHECKED BY **JPM/MMH/PAB** DATE **3/11/2018**

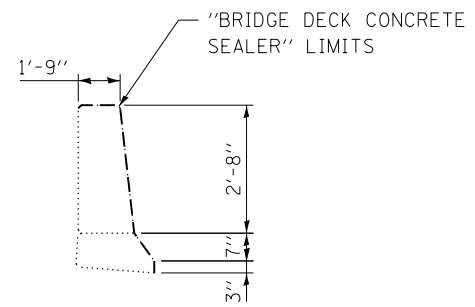
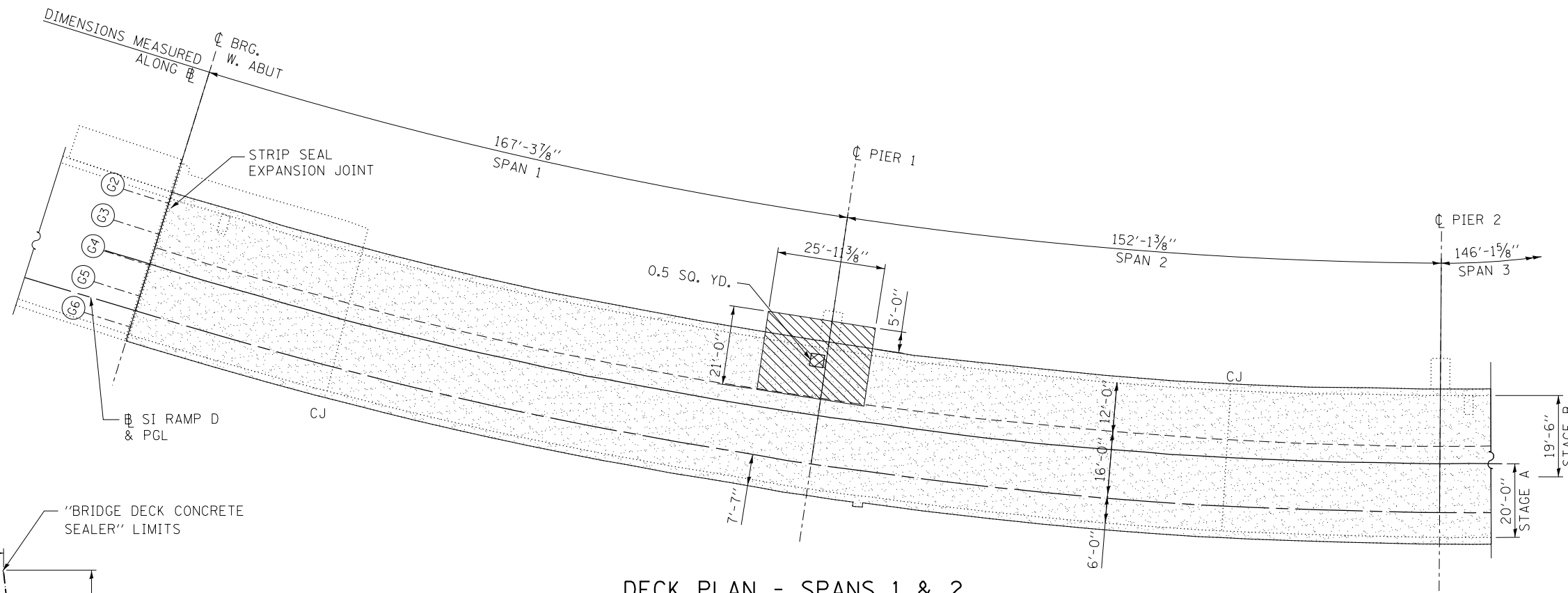


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DATE

CONTRACT NO. **RR-16-4255**  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 PIER 11 REPAIR DETAILS

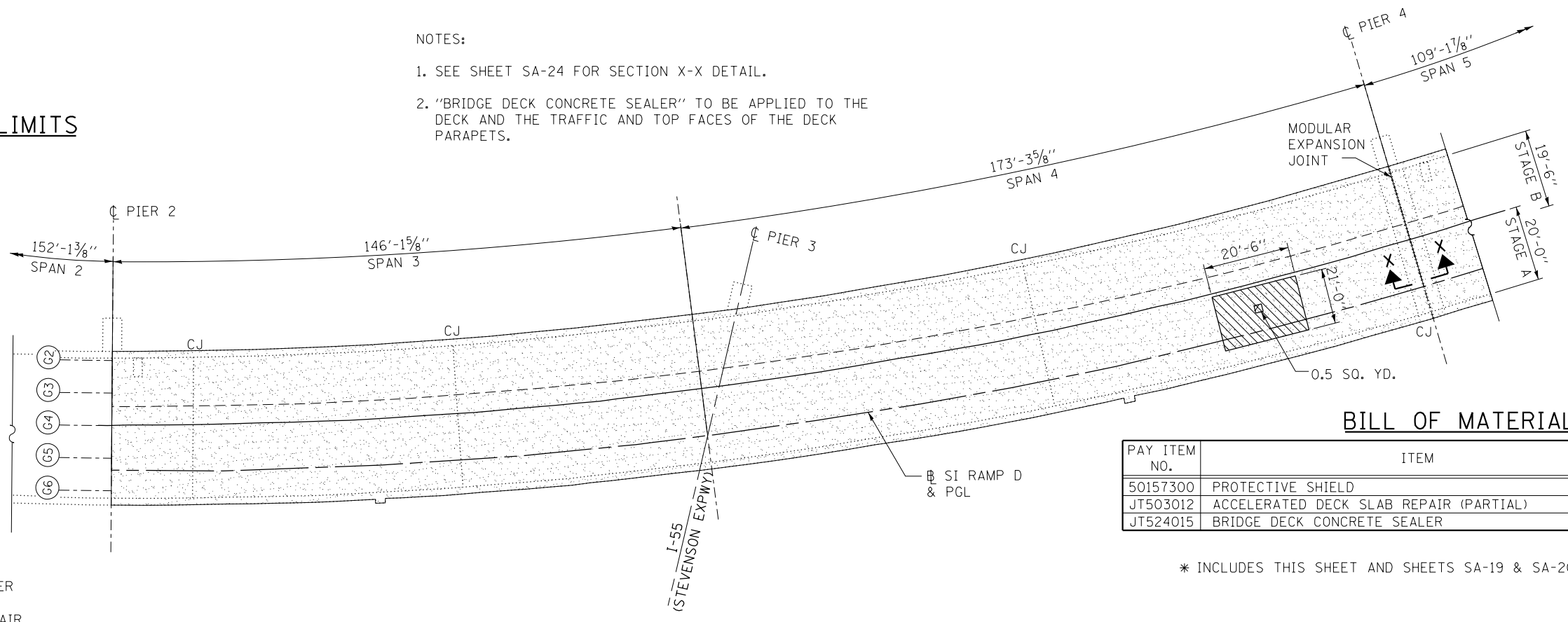
SA-17 OF SA-24  
 SHT NO. SA-17  
 DRAWING NO.  
 869 OF 1517



DECK PLAN - SPANS 1 & 2

- NOTES:
- SEE SHEET SA-24 FOR SECTION X-X DETAIL.
  - "BRIDGE DECK CONCRETE SEALER" TO BE APPLIED TO THE DECK AND THE TRAFFIC AND TOP FACES OF THE DECK PARAPETS.

CONCRETE SEALANT LIMITS



DECK PLAN - SPANS 3 & 4

- LEGEND:
- PROTECTIVE SHIELD
  - BRIDGE DECK CONCRETE SEALER
  - ACCELERATED DECK SLAB REPAIR (PARTIAL)
  - CJ CONSTRUCTION JOINT

BILL OF MATERIAL \*

PAY ITEM NO.	ITEM	UNIT	QUANTITY
50157300	PROTECTIVE SHIELD	SQ. YD.	156
JT503012	ACCELERATED DECK SLAB REPAIR (PARTIAL)	SQ. YD.	5
JT524015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	81,020

\* INCLUDES THIS SHEET AND SHEETS SA-19 & SA-20.

DRAWN BY MPS DATE 3/11/2018  
 CHECKED BY JPM/MMH/PAB DATE 3/11/2018

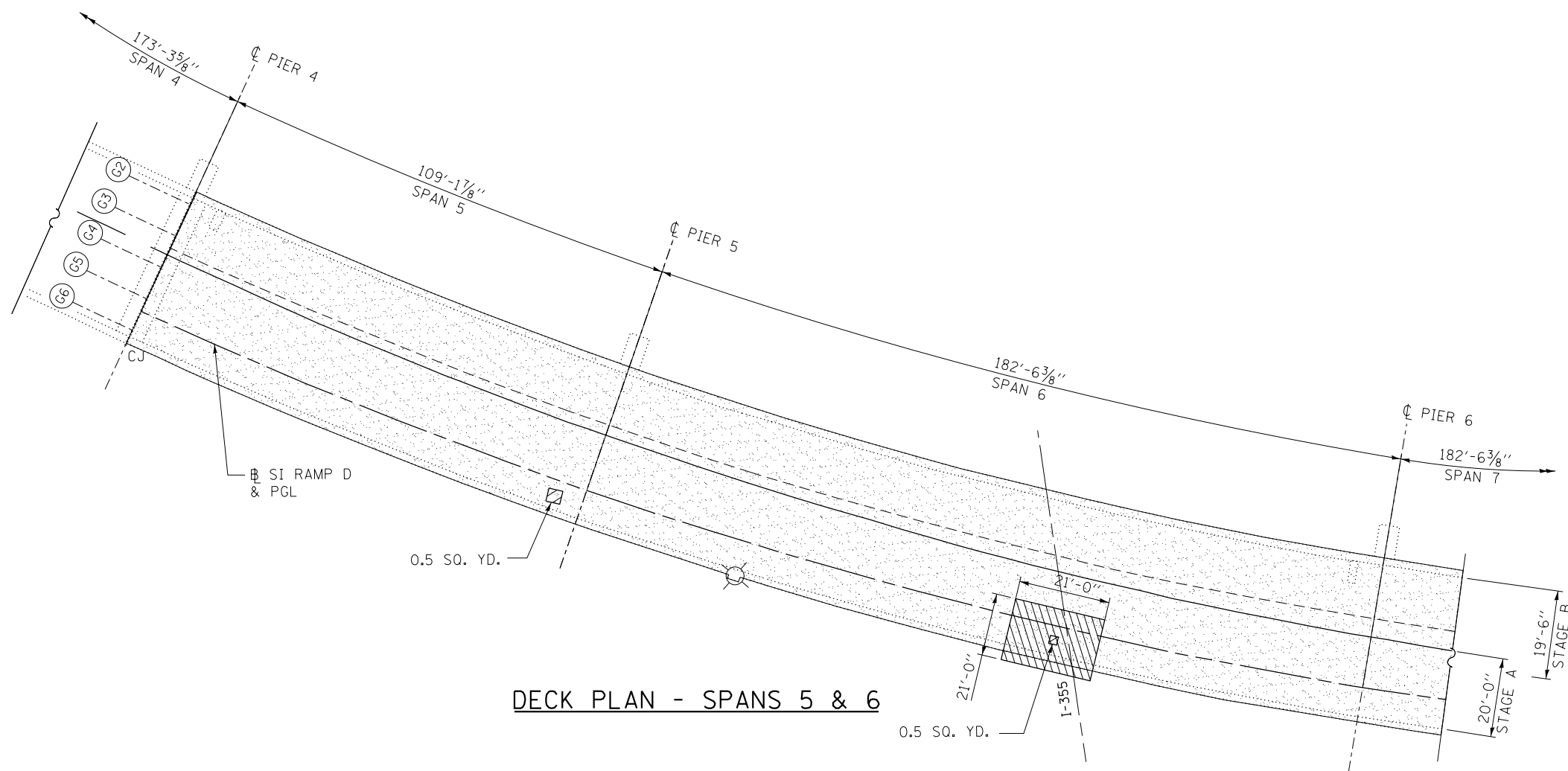


REVISIONS	
NO.	DATE

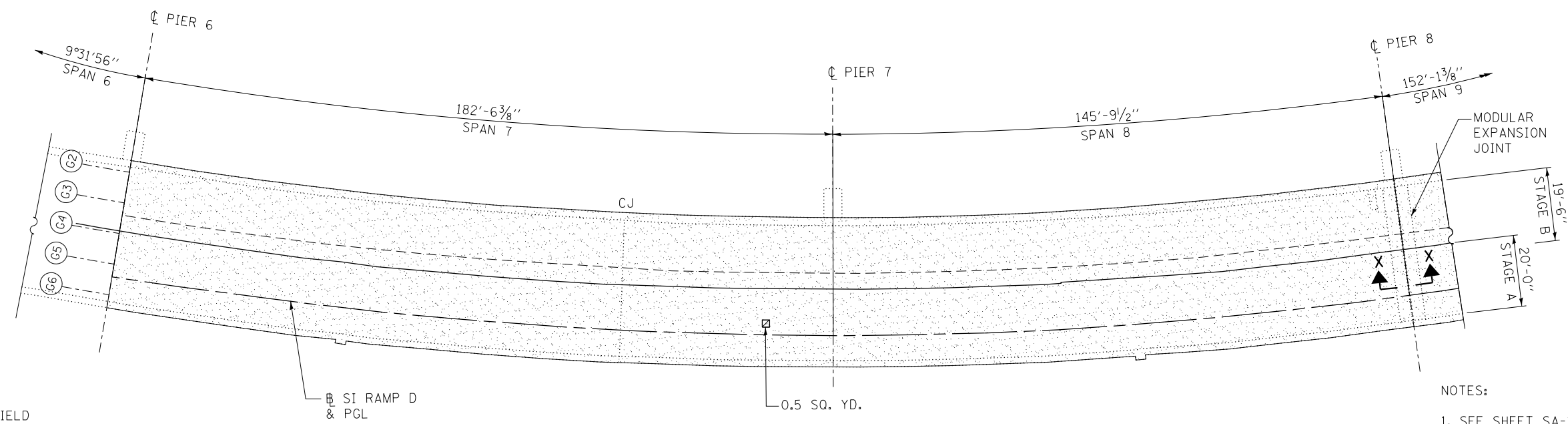
CONTRACT NO. RR-16-4255  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 DECK PLAN - SPAN 1 THRU 4

SA-18 OF SA-24  
 SHT NO. SA-18  
 DRAWING NO.  
 870 OF 1517

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DECK PLAN - SPANS 5 & 6



DECK PLAN - SPANS 7 & 8

**LEGEND:**

- PROTECTIVE SHIELD
- BRIDGE DECK CONCRETE SEALER
- ACCELERATED DECK SLAB REPAIR (PARTIAL)
- CJ CONSTRUCTION JOINT

**NOTES:**

1. SEE SHEET SA-18 FOR BILL OF MATERIAL.
2. SEE SHEET SA-24 FOR SECTION X-X DETAIL.



DRAWN BY **MPS** DATE **3/11/2018**  
 CHECKED BY **JPM/MMH/PAB** DATE **3/11/2018**



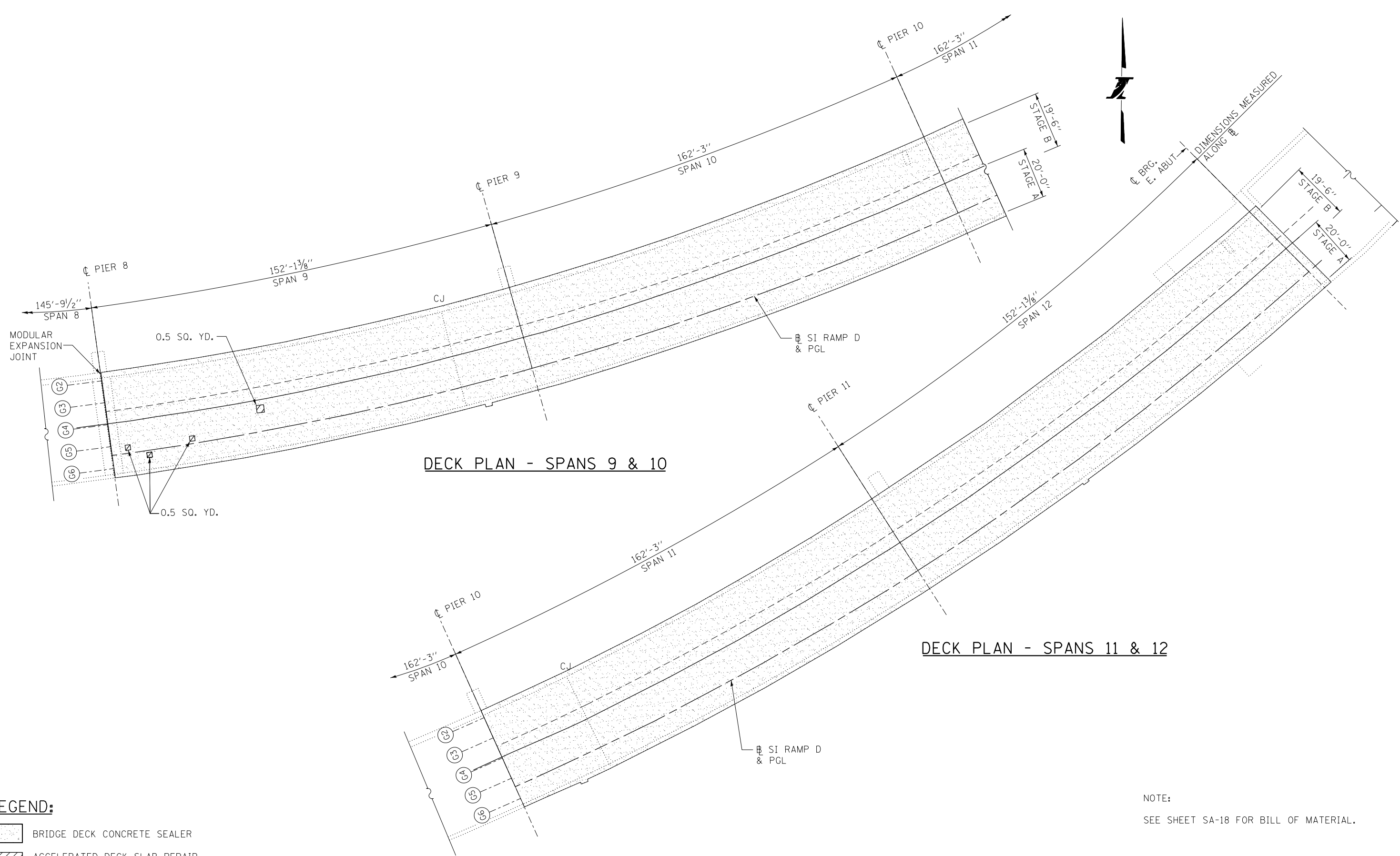
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 DECK PLAN - SPAN 5 THRU 8

SA-19 OF SA-24  
 SHT NO. SA-19  
 DRAWING NO.  
 871 OF 1517

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**DECK PLAN - SPANS 9 & 10**

**DECK PLAN - SPANS 11 & 12**

**LEGEND:**

- BRIDGE DECK CONCRETE SEALER
- ACCELERATED DECK SLAB REPAIR (PARTIAL)
- CJ CONSTRUCTION JOINT

NOTE:  
SEE SHEET SA-18 FOR BILL OF MATERIAL.

SA-20 OF SA-24

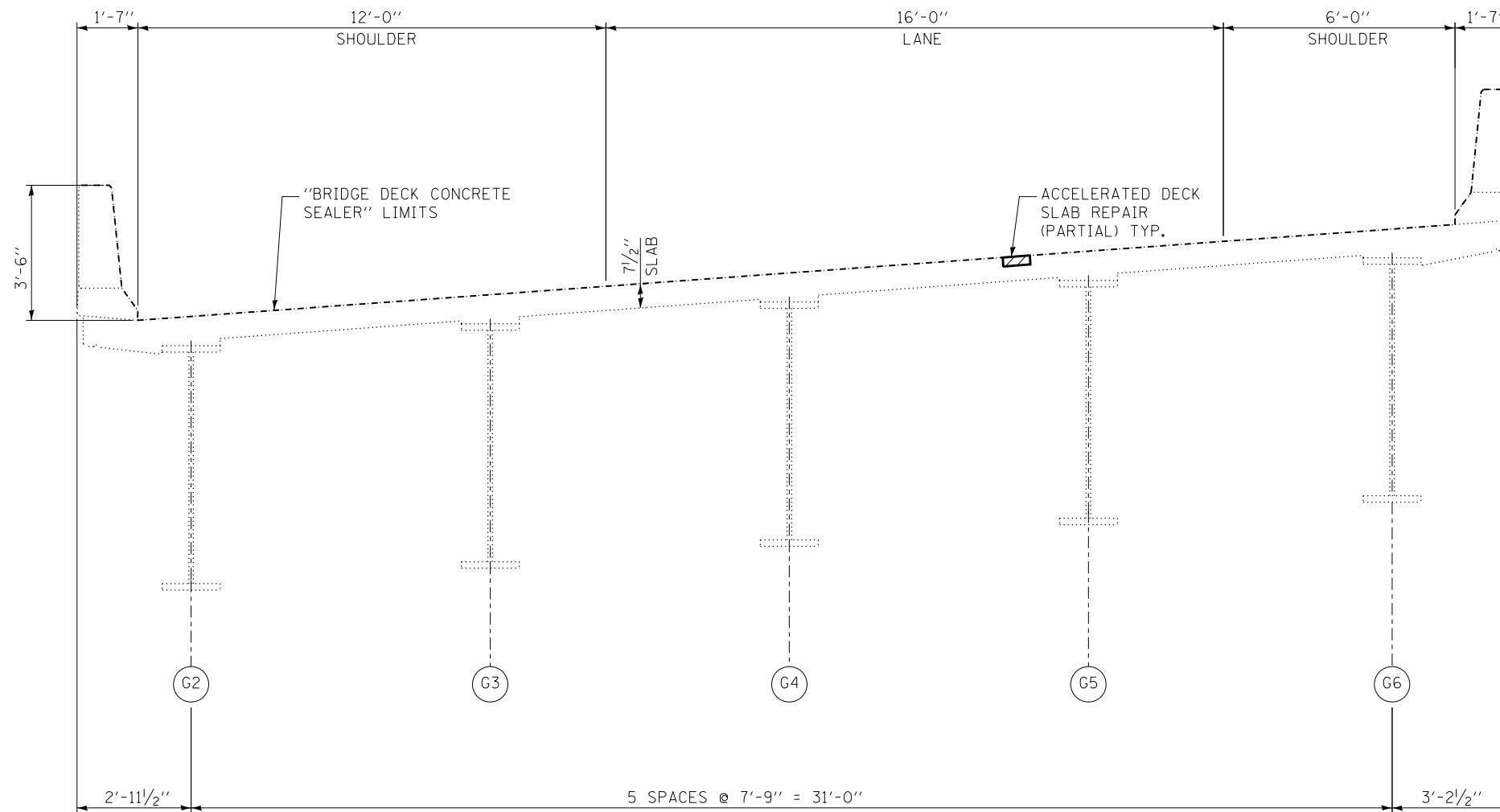
DRAWN BY **MPS** DATE **3/11/2018**  
 CHECKED BY **JPM/MMH/PAB** DATE **3/11/2018**



REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 DECK PLAN - SPAN 9 THRU 12

SHT NO. SA-20  
 DRAWING NO. 872 OF 1517



CROSS SECTION - LIMITS OF WORK  
(LOOKING EAST)

NOTE:  
FOR CONSTRUCTION STAGING SEE SHEET SA-03

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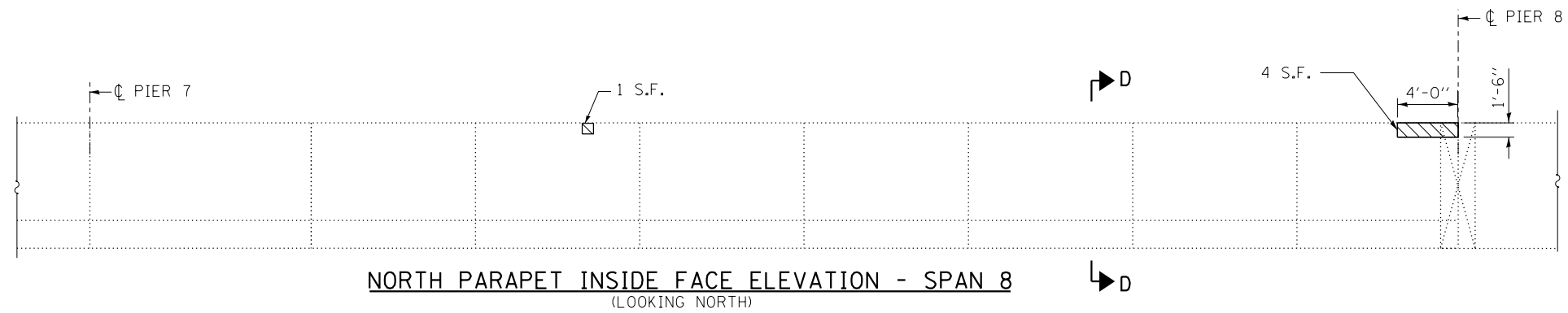
DRAWN BY MPS DATE 3/11/2018  
 CHECKED BY JPM/MMH/PAB DATE 3/11/2018



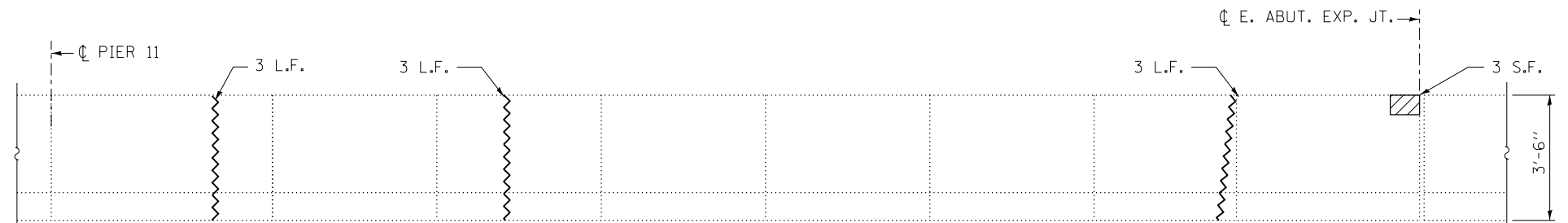
REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 DECK CROSS SECTION

SA-21 OF SA-24  
 SHT NO. SA-21  
 DRAWING NO.  
 873 OF 1517



NORTH PARAPET INSIDE FACE ELEVATION - SPAN 8  
(LOOKING NORTH)



NORTH PARAPET INSIDE FACE ELEVATION - SPAN 12  
(LOOKING NORTH)

**LEGEND:**

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)
- STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 IN.)
- LF LOW PRESSURE EPOXY INJECTION

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	9
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ. FT.	5
JT503041	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 IN.)	SQ. FT.	3

DRAWN BY **MPS** DATE **3/11/2018**  
 CHECKED BY **JPM/MMH/PAB** DATE **3/11/2018**



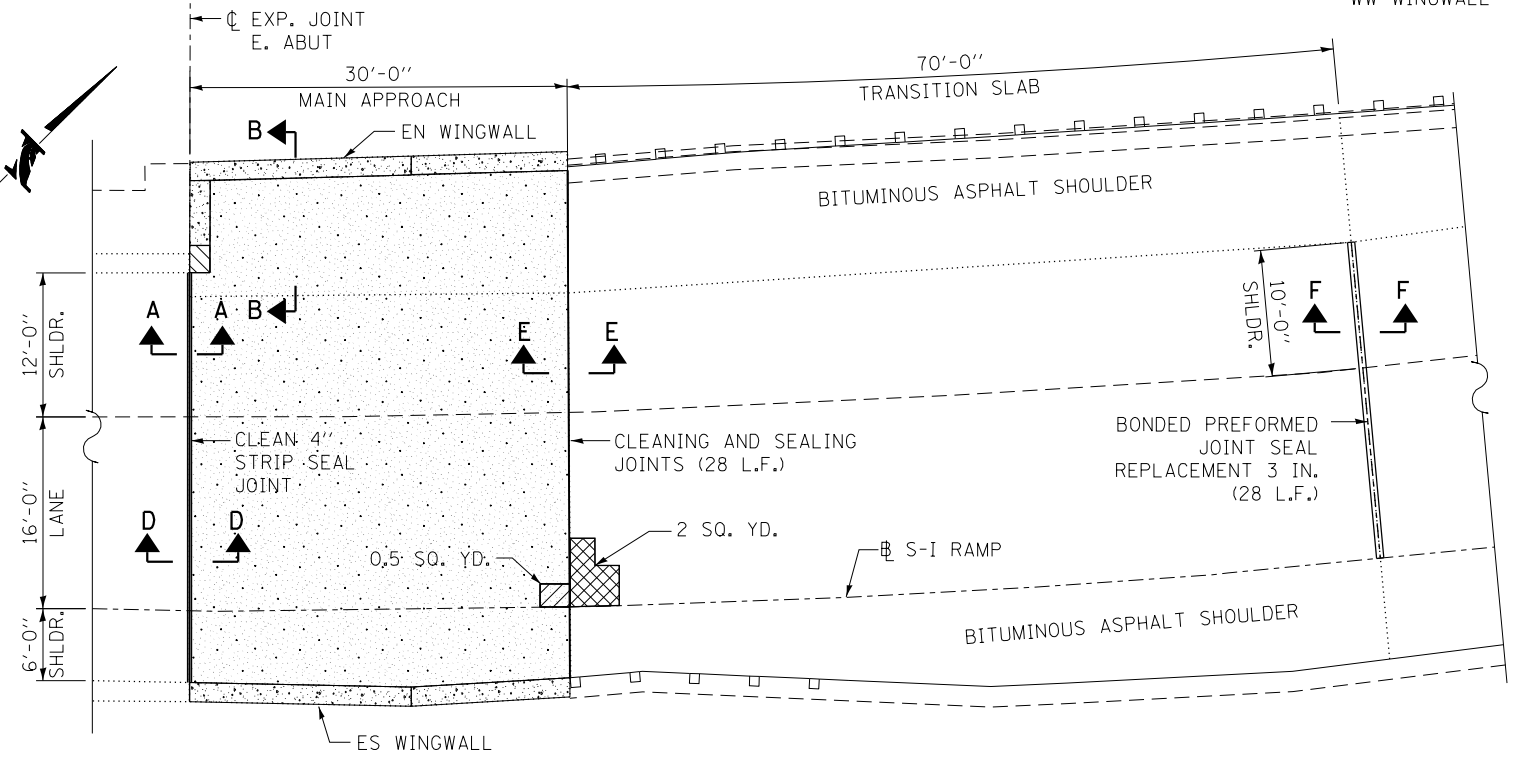
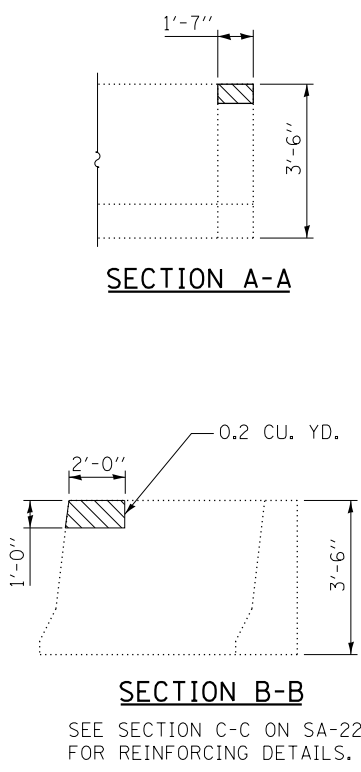
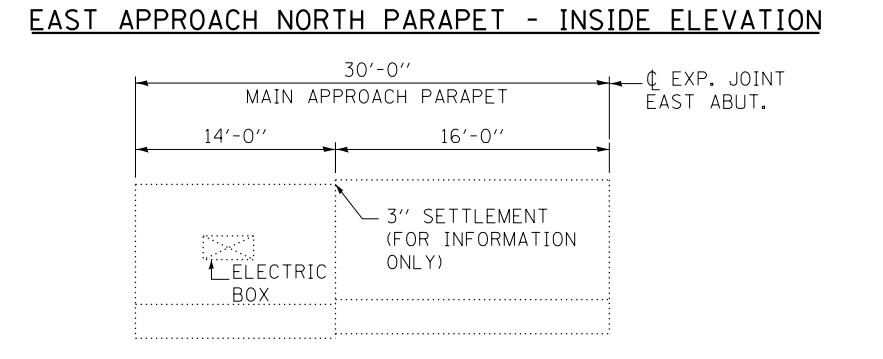
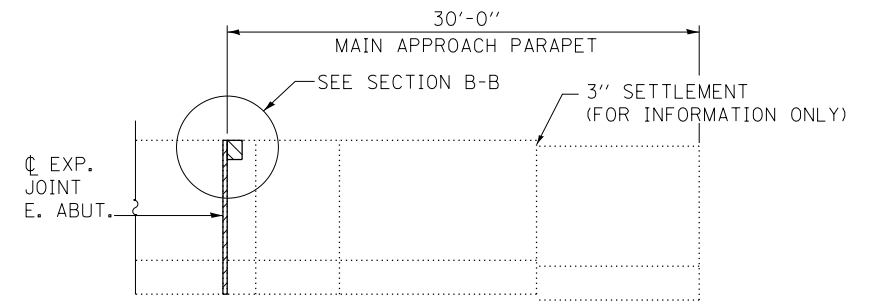
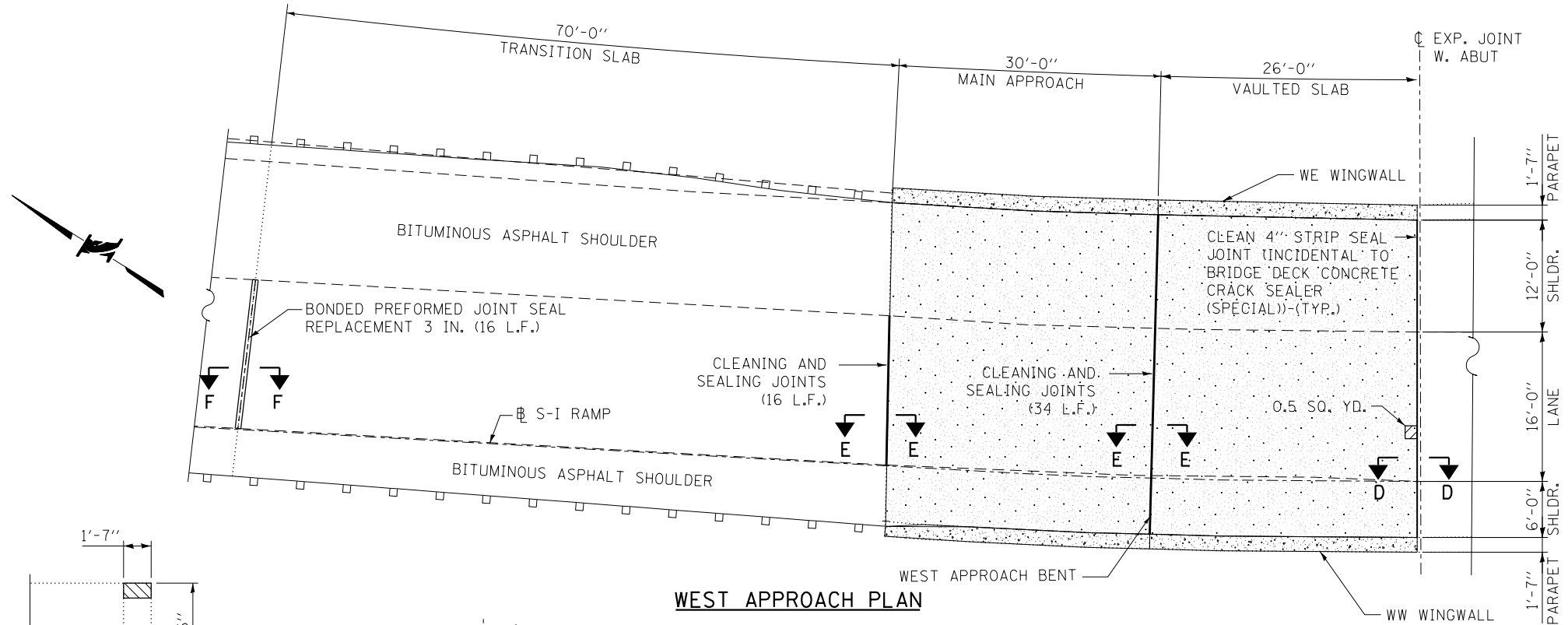
REVISIONS	
NO.	DATE

CONTRACT NO. **RR-16-4255**  
**B.N. 1479 SI RAMP D I-55 - S.N. 099-0337**  
**BRIDGE NORTH PARAPET REPAIR DETAILS**

SA-22 OF SA-24  
 SHT NO. SA-22  
 DRAWING NO. 874 OF 1517

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Projects\2016\20161616 - Veterans Memorial Tollway\Drawings\Current Drawings Files\4255\Structural\Sheet\4255-ah-1479-approach-REL23.dgn  
 100 S. Wacker Drive, Suite 700 - Chicago, IL 60606 - P 312/606-0910 - F 312/606-0415



- NOTE:
- CONSTRUCTION STAGING SHOULD FOLLOW BRIDGE DECK WORK STAGING.
  - WORK THIS SHEET WITH SA-24.
  - "BRIDGE DECK CONCRETE CRACK SEALER (SPECIAL)" APPLIED TO APPROACH, TRANSITION, AND VAULTED SLAB.
  - "APPLY CONCRETE SEALANT" APPLIED TO THE TOP AND TRAFFIC FACE OF THE APPROACH AND TRANSITION PARAPETS.

- LEGEND:**
- CONCRETE REMOVAL, CONCRETE SUPERSTRUCTURE
  - ACCELERATED APPROACH SLAB REPAIR (PARTIAL)
  - ACCELERATED APPROACH SLAB REPAIR (FULL DEPTH, TYPE II)
  - BRIDGE DECK CONCRETE SEALER

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	QUANTITY
50102400	CONCRETE REMOVAL	CU. YD.	0.2
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	0.2
J1506010	CLEANING AND SEALING JOINTS	FOOT	78
JT503013	ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ. YD.	1
JT503033	ACCELERATED APPROACH SLAB REPAIR (FULL DEPTH, TYPE II)	SQ. YD.	2
JT524010	BRIDGE DECK CONCRETE SEALER	SQ. FT.	3,433
JT525230	BONDED PREFORMED JOINT SEAL REPLACEMENT, 3 IN.	FOOT	44

DRAWN BY MPS DATE 3/11/2018  
 CHECKED BY JPM/MMH/PAB DATE 3/11/2018

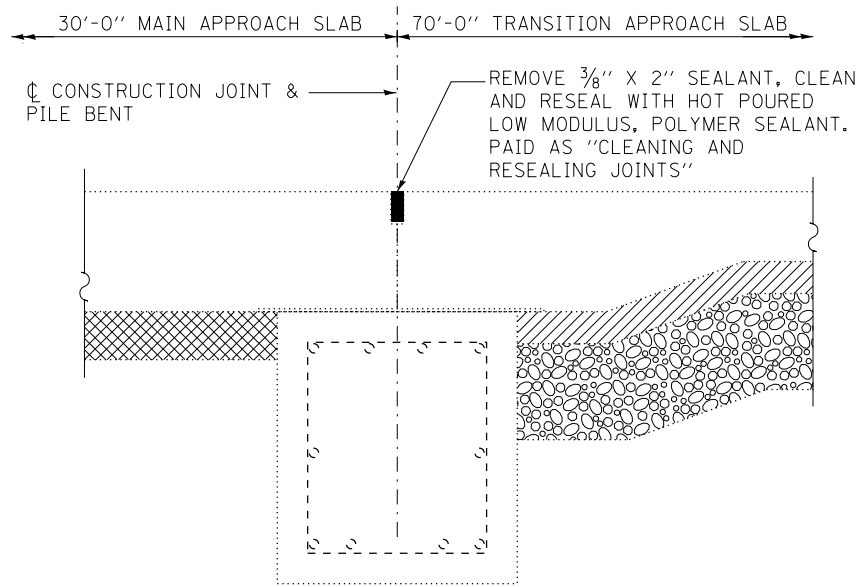


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

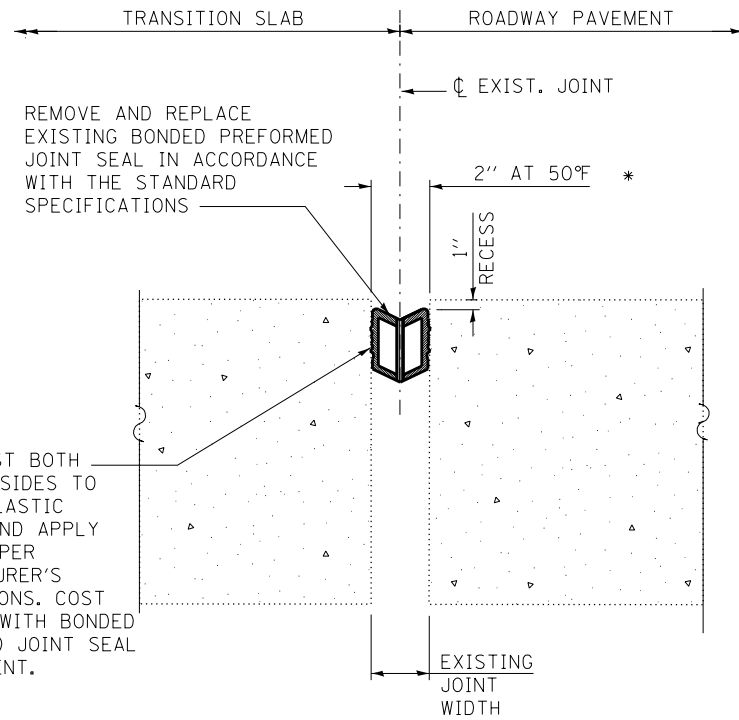
REVISIONS	
NO.	DATE DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1479 SI RAMP D I-55 - S.N. 099-0337  
 EAST & WEST APPROACH REPAIR PLANS

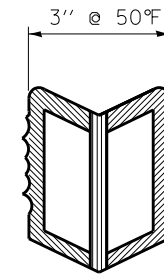
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 SHT NO. SA-23  
 DRAWING NO. 875 OF 1517



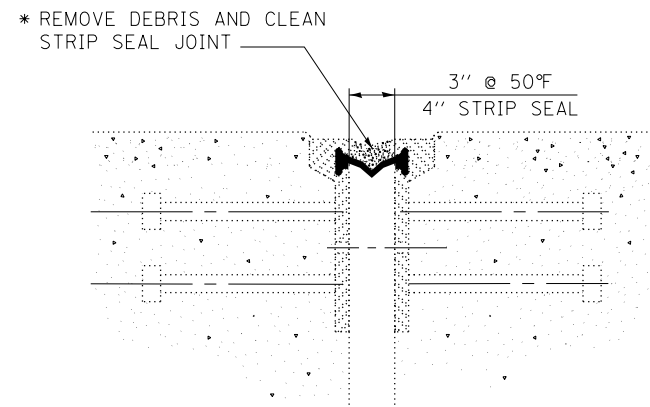
**SECTION E-E**



**SECTION F-F**



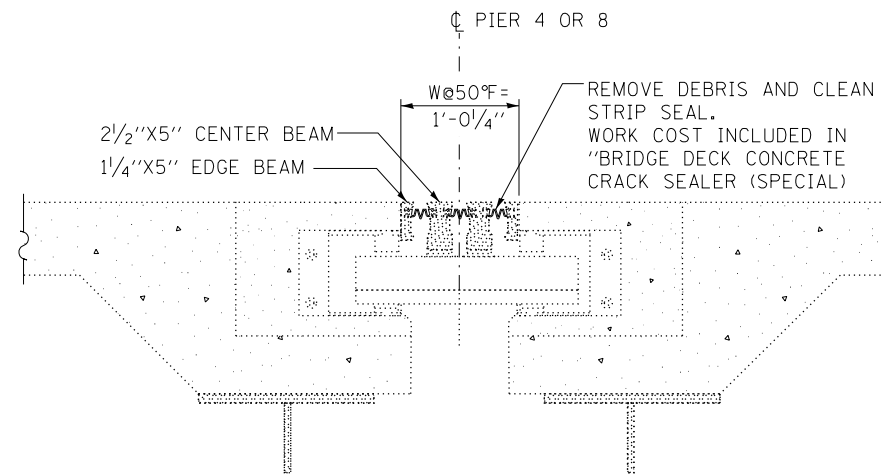
**BONDED PREFORMED JOINT SEAL**



**SECTION D-D**

EXPANSION JOINT AT EAST AND WEST ABUTMENTS

\* COST INCLUDED IN "BRIDGE DECK CONCRETE CRACK SEALER (SPECIAL)"



**SECTION X-X**

NOTE:

COST OF REMOVING EXISTING AND INSTALLING NEW JOINT MATERIAL INCLUDED IN PAY ITEM "BONDED PREFORMED JOINT SEAL REPLACEMENT."

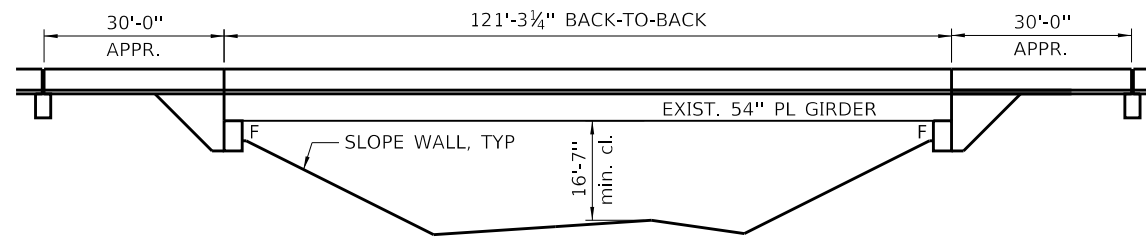
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REVISIONS	
NO.	DESCRIPTION

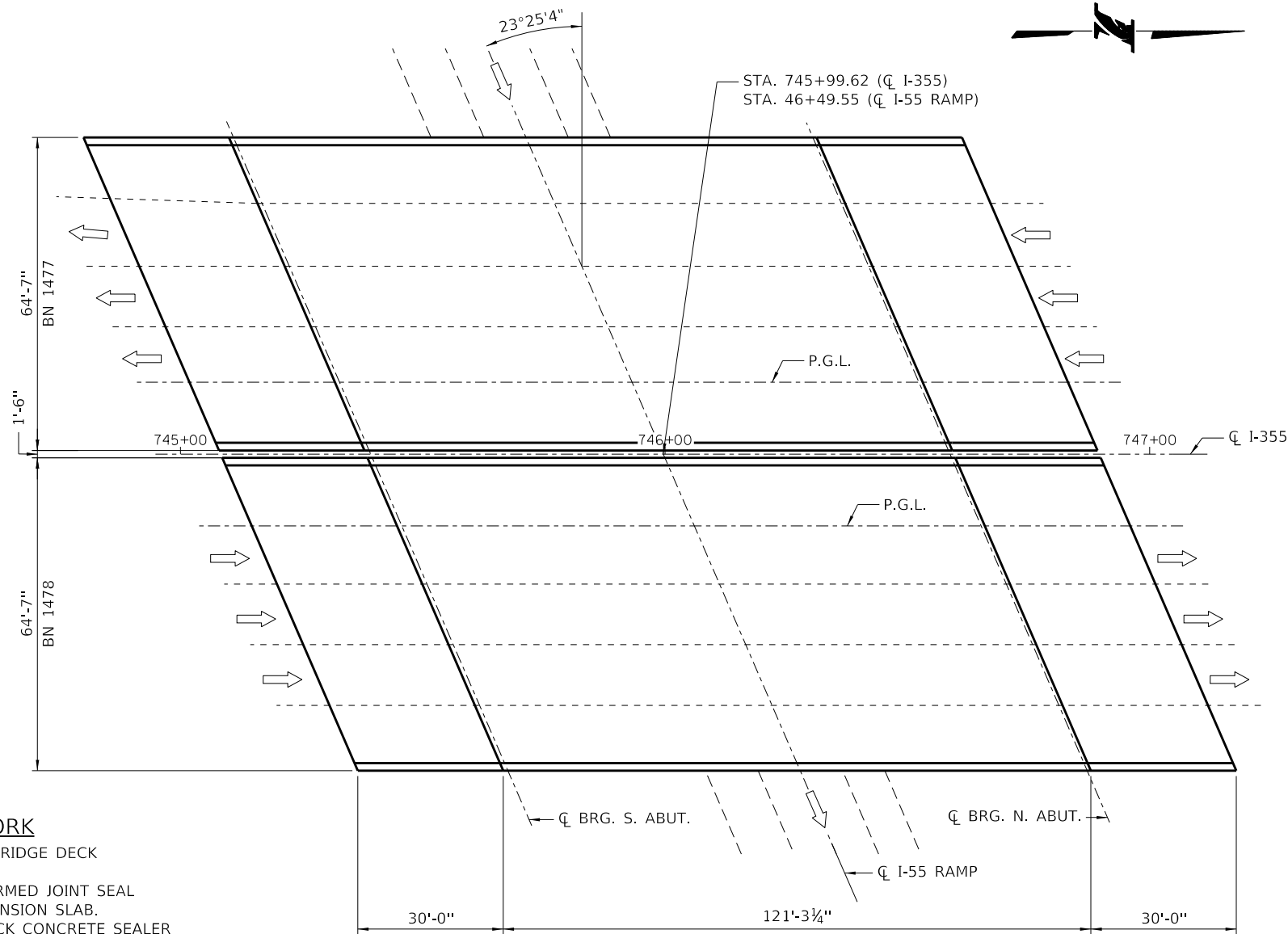


EXISTING STRUCTURE, BN 1477, BUILT AS PART OF CONTRACT CIP-93-700A IN 1996. EXISTING STRUCTURE, BN 1478, BUILT AS PART OF CONTRACT I-05-7711 IN 2005. LENGTH IS 121'-3 1/4" BACK TO BACK OF ABUTMENTS WITH SINGLE SPAN. 54" STEEL PLATE GIRDERS WITH INTEGRAL ABUTMENTS.

BENCH MARK: CHISELED "□" ON EAST SIDE OF SLOPE BOX. JUST NW OF CITIZENS UTILITY WATER TOWER. ELEV: 755.009



ELEVATION



PLAN

**PROPOSED SCOPE OF WORK**

1. REMOVE DEBRIS AND CLEAN BRIDGE DECK EXPANSION JOINT.
2. REMOVE AND REPLACE PREFORMED JOINT SEAL BETWEEN APPROACH AND TRANSION SLAB.
3. CLEAN AND APPLY BRIDGE DECK CONCRETE SEALER TO DECK, APPROACH SLABS, AND TO TOP AND TRAFFIC FACE OF PARAPETS.

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED MARCH 2017.

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS, (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL SERVICES MANUAL ADOPTED JUNE 30, 2017.

**LOADING HS20-44 & ALTERNATE MILITARY**

(FROM 2005 PLANS)

ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE

**DESIGN STRESSES**

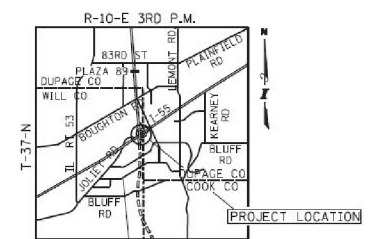
**FIELD UNITS**

- f'c = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)
- f'c = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)
- f'c = 4,000 PSI (CLASS AX BRIDGE DECK & APPROACH SLAB REPAIRS)
- fy = 60,000 PSI (REINFORCEMENT)

**HIGHWAY CLASSIFICATION**

I-355 (ON ROUTE)  
 FUNCTIONAL CLASS: INTERSTATE  
 ADT: 76,400 (2015), 87,567 (2032)  
 ADTT: 9,932 (2015), 11,384 (2032)  
 DESIGN SPEED: 70 MPH

I-55 RAMP (UNDER)  
 FUNCTIONAL CLASS: INTERSTATE  
 ADT: 22,400 (2015)  
 ADTT: 2,240 (2015)



LOCATION SKETCH

SAA-01 OF SAA-04

DRAWN BY JMM DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255	SHT NO. SAA-01
BRIDGE NO. 1477 & 1478 (S.N. 099-3011)	DRAWING NO. 877 OF 1517
GENERAL PLAN AND ELEVATION	

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**GENERAL NOTES**

**CONSTRUCTION**

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION TOLERANCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
2. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
3. NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
4. THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COSTS WILL BE AT THE CONTRACTOR'S EXPENSE.
5. NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINES BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E. 1-800-892-0123.
7. WHENEVER THE MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF THE EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
8. CONCRETE SEALANT SHALL BE APPLIED TO THE TOP AND TRAFFIC FACE OF ALL REPAIRED AREAS OF THE BRIDGE DECK REPAIRS AND PARAPET, INCLUDING PARAPET ON BRIDGE WINGWALS. EXISTING SURFACES SHALL BE POWERED WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
9. AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
10. ALL DIMENSIONS TAKEN FROM THE FOLLOWING EXISTING PLANS:  
BN 1477/1478: TOLLWAY CONTRACT NO. I-05-7711 (2005)

**ABBREVIATIONS**

- ABUT. - ABUTMENT
- APPROX. - APPROXIMATE
- BPJS - BONDED PREFORMED JOINT SEAL
- BRG. - BEARING
- CL. - CLEAR
- DIM. - DIMENSION
- E. - EAST
- ELEV. - ELEVATION
- EXIST. - EXISTING
- MAX. - MAXIMUM
- MIN. - MINIMUM
- N. - NORTH
- N.B. - NORTHBOUND
- NO. - NUMBER
- P.G.L. - PROFILE GRADE LINE
- S. - SOUTH
- S.B. - SOUTHBOUND
- SHLDR. - SHOULDER
- STA. - STATION
- TYP. - TYPICAL
- W. - WEST

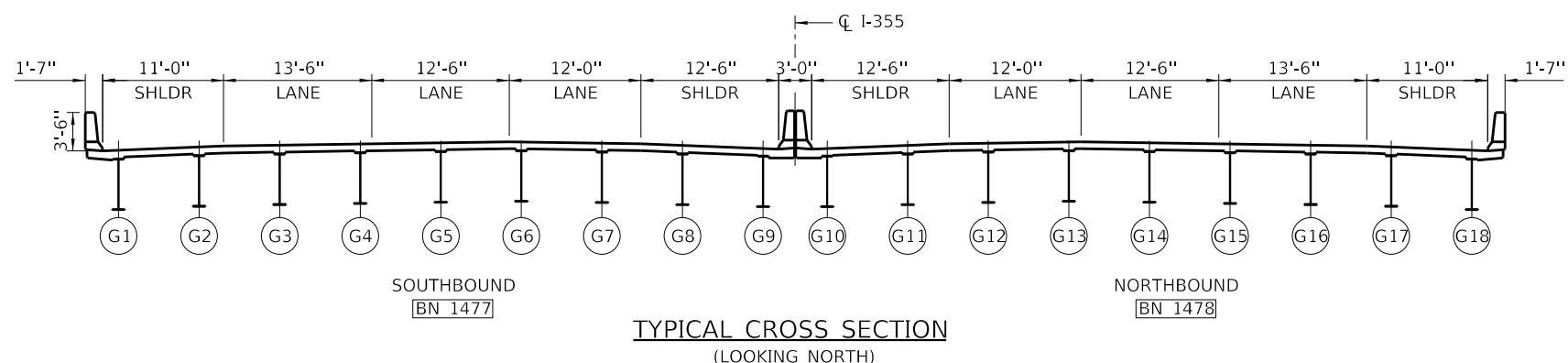
**LIST OF SHEETS**

- SY-01 GENERAL PLAN AND ELEVATION
- SY-02 GENERAL DATA, SOQ, CROSS SECTION, AND LIST OF SHEETS
- SY-03 CONSTRUCTION STAGING
- SY-04 DECK REPAIR DETAILS

**TOTAL BILL OF MATERIALS  
(BN 1477 AND BN 1478)**

CODE	ITEM	UNIT	SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL	RECORDED QUANTITIES
* JT524010	BRIDGE DECK CONCRETE SEALER	SQ FT	-	41,165	41,165	
GBSP JT525235	BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	-	282	282	

- \* TOLLWAY SPECIAL PROVISION ITEM
- \*\* IDOT SPECIAL PROVISION ITEM
- GBSP IDOT GUIDE BRIDGE SPECIAL PROVISION



SAA-02 OF SAA-04

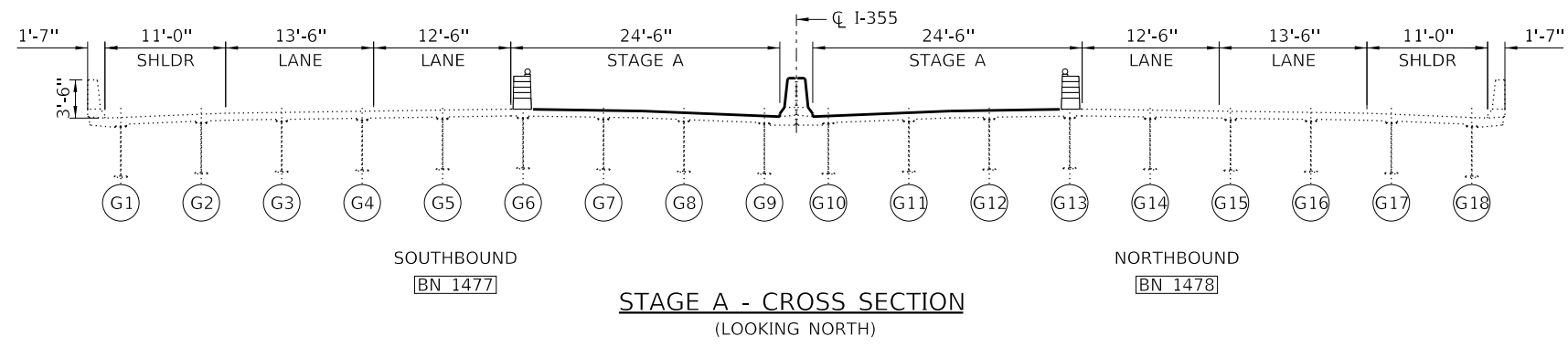
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CHECKED BY PRD DATE 03/11/2018



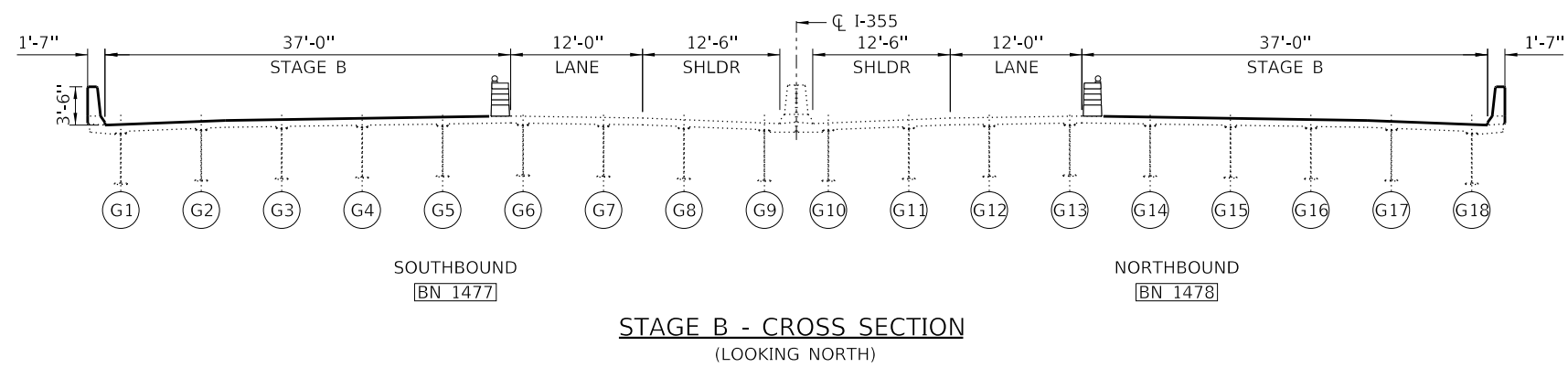
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1477 & 1478 (S.N. 099-3011)  
GENERAL DATA  
SHT NO. SAA-02  
DRAWING NO. 878 OF 1517

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**STAGE A - CROSS SECTION**  
(LOOKING NORTH)



**STAGE B - CROSS SECTION**  
(LOOKING NORTH)

**NOTE:**

SEE IDOT STANDARD MOT DRAWINGS, UNLESS OTHERWISE NOTED ON MOT PLANS.

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DRAWN BY **JMM**    DATE **03/11/2018**  
 CHECKED BY **PRD**    DATE **03/11/2018**

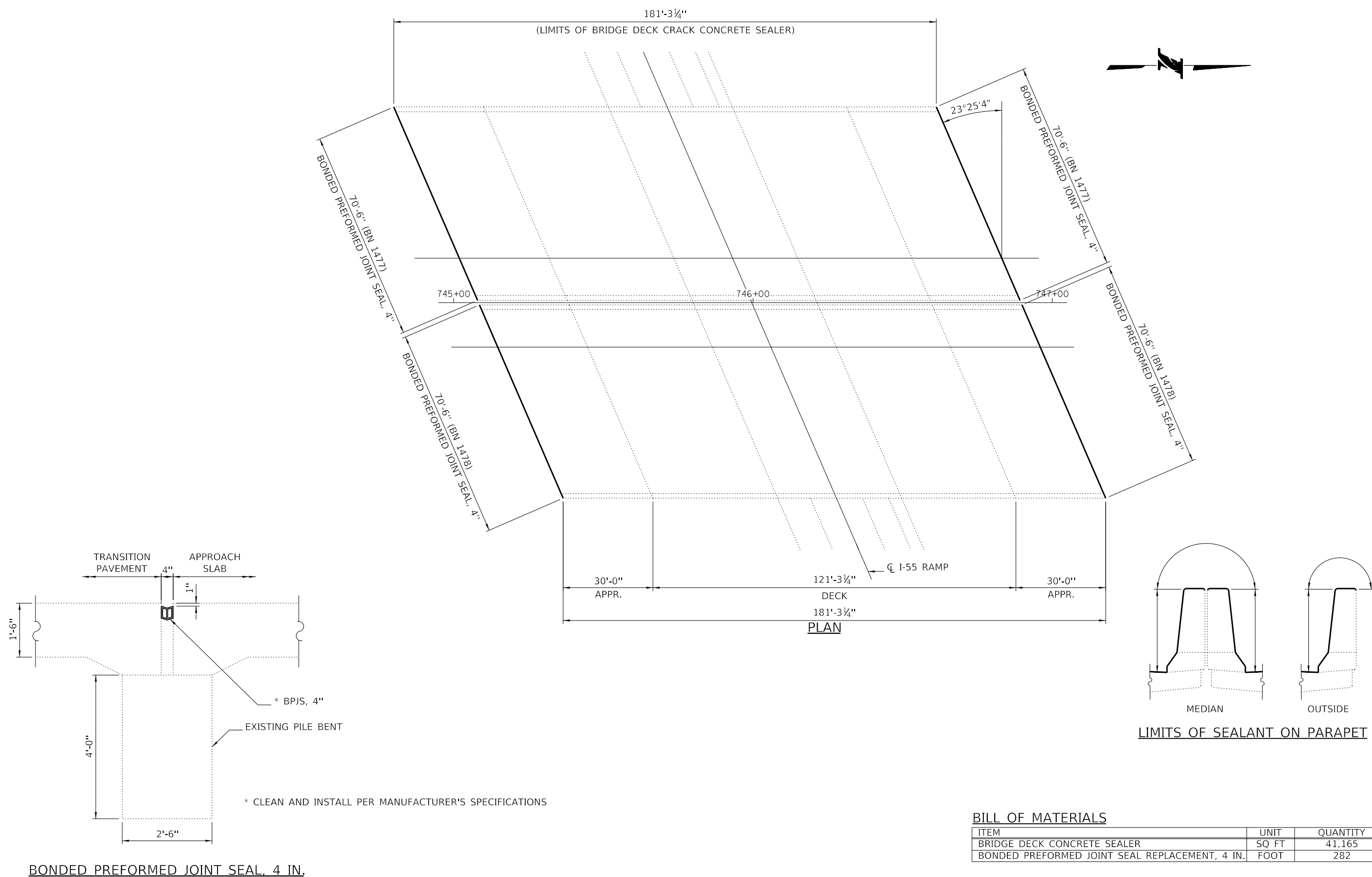


NO.		REVISIONS	
NO.	DATE	DESCRIPTION	

CONTRACT NO. **RR-16-4255**  
 BRIDGE NO. **1477 & 1478 (S.N. 099-3011)**  
 CONSTRUCTION STAGING

SHT NO. **SAA-03**  
 DRAWING NO. **879** OF **1517**

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BONDED PREFORMED JOINT SEAL, 4 IN.

LIMITS OF SEALANT ON PARAPET

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
BRIDGE DECK CONCRETE SEALER	SQ FT	41,165
BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	282

DRAWN BY JMM DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018



**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1477 & 1478 (S.N. 099-3011)  
 DECK REPAIR DETAILS

SHT NO. SAA-04  
 DRAWING NO. 880 OF 1517

EXISTING STRUCTURE, BN 1475, BUILT AS PART OF CONTRACT CIP-611 IN 1987, AND REPAIRED IN 2005 AS PART OF CONTRACT I-05-7711. EXISTING STRUCTURE, BN 1476, BUILT AS PART OF CONTRACT I-05-7711 IN 2005. LENGTH IS 413'-9" BACK TO BACK OF APPROACH BENTS WITH TWO SPANS, 184'-9" AND 172'-0". 74" STEEL PLATE GIRDERS.

BENCH MARK: CHISELED "□" ON EAST SIDE TOP OF SLOPE BOX. STA. 739+69 (I-355) 295' RT. ELEV: 755.01

N.E. CORNER ELECT. VAULT, STA. 760+92.3 (I-355) 120.6' RT. ELEV: 764.82

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED MARCH 2017.

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS, (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL SERVICES MANUAL ADOPTED JUNE 30, 2017.

**LOADING HS20-44 & ALTERNATE MILITARY**

(FROM 2008 RECORD PLANS)

ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE

**DESIGN STRESSES**

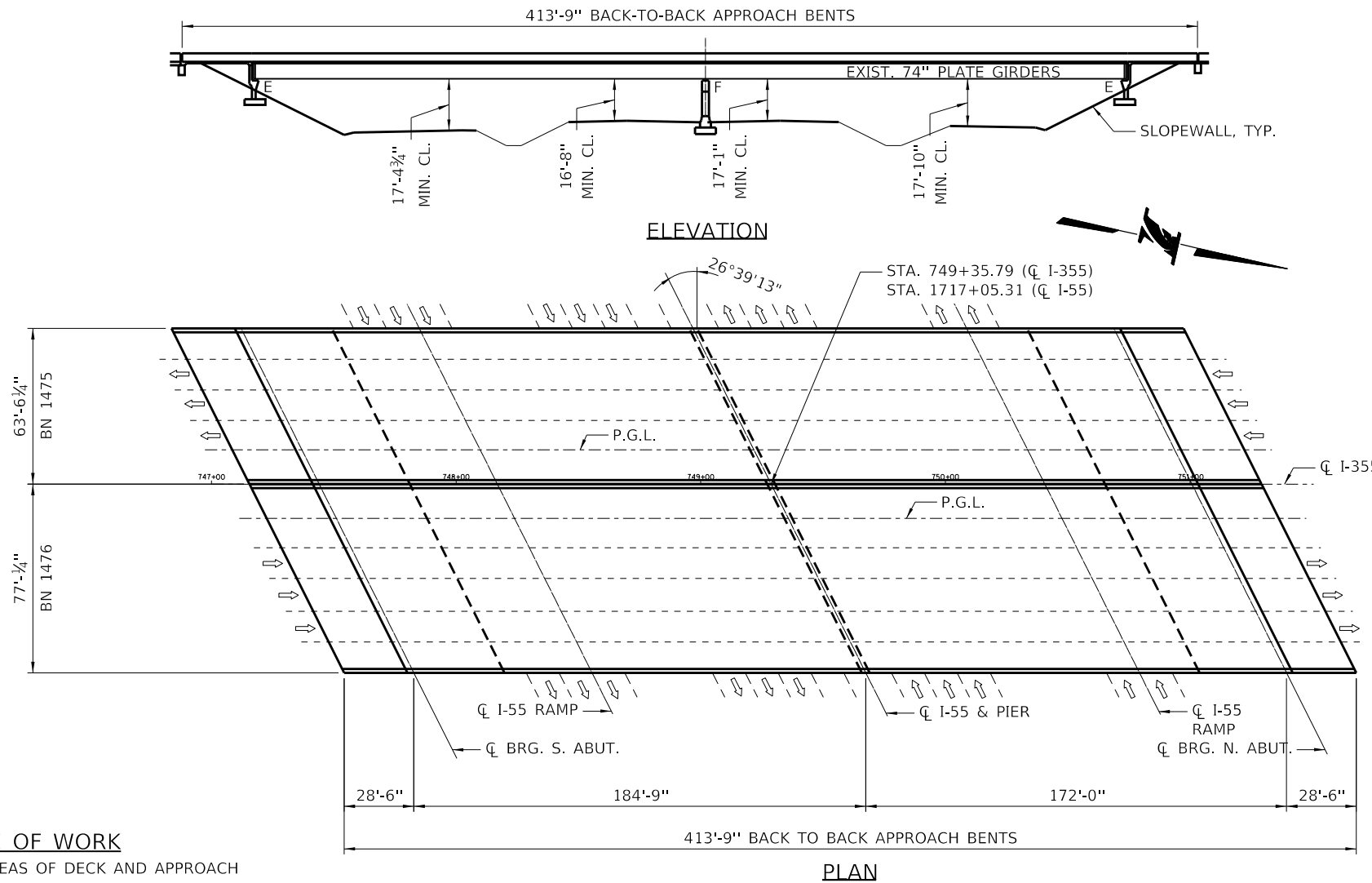
**FIELD UNITS**

- f<sub>c</sub> = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)
- f<sub>c</sub> = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)
- f<sub>c</sub> = 4,000 PSI (CLASS AX BRIDGE DECK & APPROACH SLAB REPAIRS)
- f<sub>y</sub> = 60,000 PSI (REINFORCEMENT)

**HIGHWAY CLASSIFICATION**

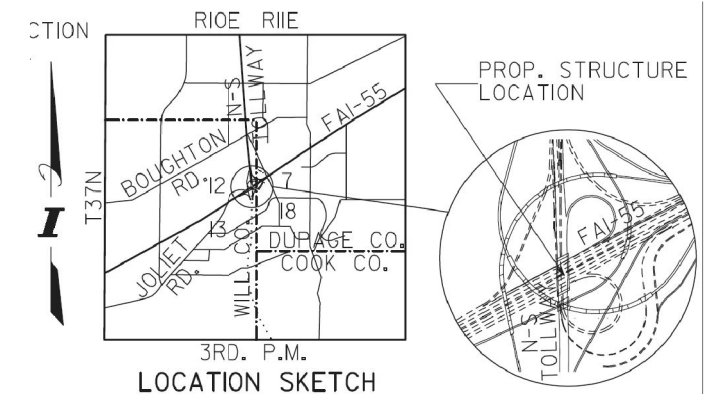
I-355 (ON ROUTE)  
 FUNCTIONAL CLASS: INTERSTATE  
 ADT: 76,400 (2015), 87,567 (2032)  
 ADTT: 9,932 (2015), 11,384 (2032)  
 DESIGN SPEED: 70 MPH

I-55 (UNDER)  
 FUNCTIONAL CLASS: INTERSTATE  
 ADT: 99,700 (2016)  
 ADTT: 13,958 (2016)



**PROPOSED SCOPE OF WORK**

1. REPAIR SPALLED AREAS OF DECK AND APPROACH SLABS.
2. REMOVE DEBRIS AND CLEAN BRIDGE DECK EXPANSION JOINT.
3. REMOVE AND REPLACE PREFORMED JOINT SEAL BETWEEN BRIDGE DECK AND APPROACH SLAB.
4. CLEAN AND APPLY BRIDGE DECK CONCRETE SEALER TO DECK, APPROACH SLABS, AND TOP AND TRAFFIC FACES OF PARAPETS.
6. APPLY CONCRETE SEALANT TO ABUTMENTS, BRIDGE SEATS, BACKWALLS, AND PIERS.
7. REPAIR SPALLED AND DELAMINATED CONCRETE IN ABUTMENTS, PIERS, WINGWALLS, AND SLOPE WALLS.
8. CLEAN AND SEAL CRACKS WIDER THAN 1/16" AND ALL LEACHING CRACKS IN ABUTMENTS AND PIERS.



SAB-01 OF SAB-07

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DRAWN BY JMM DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018



**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BN 1475 (SN 099-0336) & 1476 (SN 099-9944)  
 GENERAL PLAN AND ELEVATION

SHT NO. SAB-01  
 DRAWING NO. 881 OF 1517

**GENERAL NOTES**

**CONSTRUCTION**

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION TOLERANCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
2. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
3. NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
4. THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COSTS WILL BE AT THE CONTRACTOR'S EXPENSE.
5. NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINES BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E. 1-800-892-0123.
7. WHENEVER THE MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF THE EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
8. THE PROTECTIVE SHIELD SYSTEM SHALL EXTEND A MINIMUM OF 10 FEET BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5 FEET BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIRS AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER.
9. CONCRETE SEALANT SHALL BE APPLIED TO THE TOP AND TRAFFIC FACE OF ALL REPAIRED AREAS OF THE BRIDGE DECK REPAIRS AND PARAPET, INCLUDING PARAPET ON BRIDGE WINGWALLS. SEALANT SHALL ALSO BE APPLIED TO THE REPAIRED AREAS OF THE VISIBLE FACES OF THE PIER COLUMNS, CRASHWALLS AND CAPS, PIERS AND ABUTMENTS, BACKWALLS, AND BEARING SEATS. EXISTING SURFACES SHALL BE POWERED WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
10. AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
11. ALL DIMENSIONS ARE TAKEN FROM THE FOLLOWING EXISTING PLANS:  
 BN 1475: TOLLWAY CONTRACT NO. CIP-611 (1987)  
 BN 1476: TOLLWAY CONTRACT NO. I-05-7711 (2005)

**ABBREVIATIONS**

- ABUT. - ABUTMENT
- APPROX. - APPROXIMATE
- BPJS - BONDED PREFORMED JOINT SEAL
- BRG. - BEARING
- CL. - CLEAR
- DIM. - DIMENSION
- E. - EAST
- ELEV. - ELEVATION
- EXIST. - EXISTING
- MAX. - MAXIMUM
- MIN. - MINIMUM
- N. - NORTH
- N.B. - NORTHBOUND
- NO. - NUMBER
- P.G.L. - PROFILE GRADE LINE
- S. - SOUTH
- S.B. - SOUTHBOUND
- SHLDR. - SHOULDER
- STA. - STATION
- TYP. - TYPICAL
- W. - WEST

**LIST OF SHEETS**

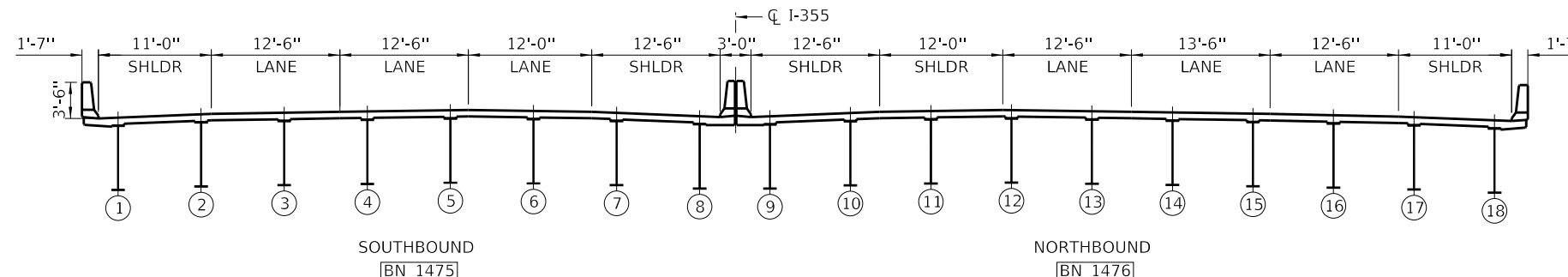
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- SAB-02 GENERAL DATA, SOQ, CROSS SECTION, AND LIST OF SHEETS
- SAB-03 CONSTRUCTION STAGING
- SAB-04 NORTH ABUTMENT REPAIR DETAILS
- SAB-05 SOUTH ABUTMENT REPAIR DETAILS
- SAB-06 PIER REPAIR DETAILS
- SAB-07 DECK REPAIR DETAILS

**TOTAL BILL OF MATERIALS**

(BN 1475 AND BN 1476)

CODE	ITEM	UNIT	SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL	RECORDED QUANTITIES
50157300	PROTECTIVE SHIELD	SQ YD	-	355	355	
* JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	43	-	43	
* JT503012	ACCELERATED DECK SLAB REPAIR (PARTIAL)	SQ YD	-	3	3	
* JT503013	ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ YD	-	1	1	
* JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	42	-	42	
* JT524010	APPLY CONCRETE SEALANT	SQ FT	8,661	-	8,661	
* JT524015	BRIDGE DECK CONCRETE SEALER	SQ FT	-	70,890	70,890	
GBSP JT525235	BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	-	628	628	
** X0323818	CLEANING AND PAINTING EXPOSED REBAR	SQ FT	-	2	2	

- \* TOLLWAY SPECIAL PROVISION ITEM
- \*\* IDOT SPECIAL PROVISION ITEM
- GBSP IDOT GUIDE BRIDGE SPECIAL PROVISION



**TYPICAL CROSS SECTION**  
(LOOKING NORTH)

SAB-02 OF SAB-07

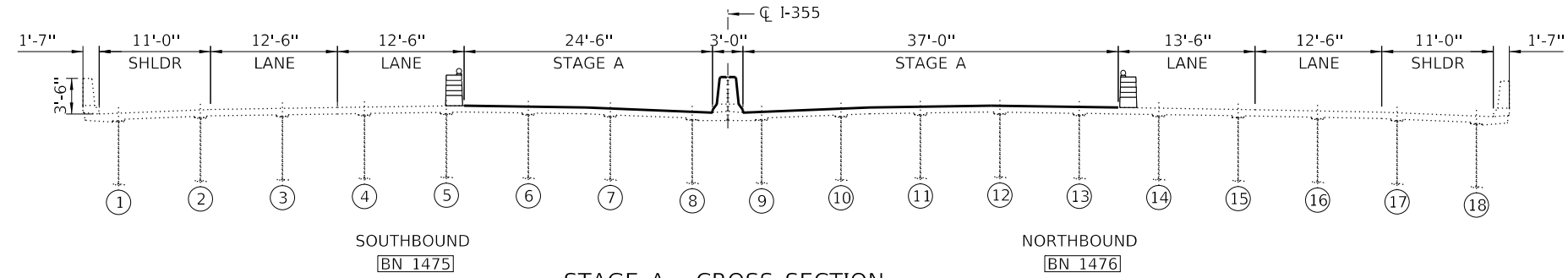
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 CHECKED BY PRD DATE 03/11/2018



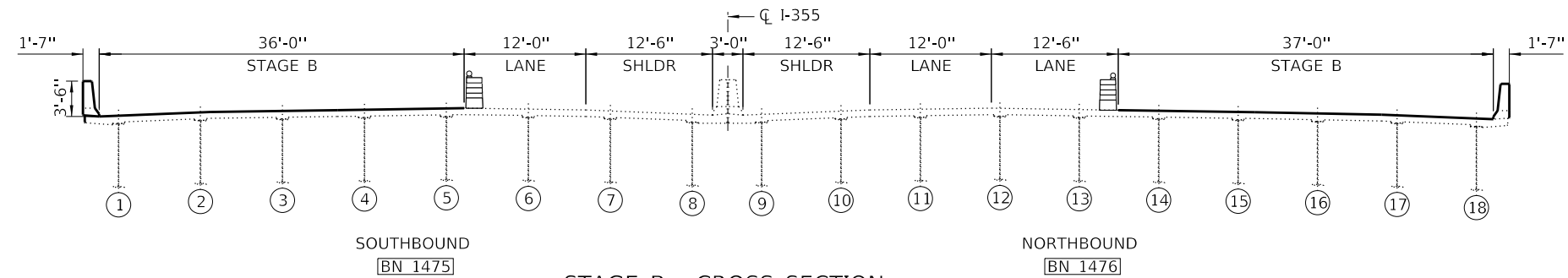
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NO.	DESCRIPTION

CONTRACT NO. RR-16-4255	SHT NO. SAB-02
BN 1475 (SN 099-0336) & 1476 (SN 099-9944)	DRAWING NO. 882 OF 1517
GENERAL DATA	

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**STAGE A - CROSS SECTION**  
(LOOKING NORTH)



**STAGE B - CROSS SECTION**  
(LOOKING NORTH)

**NOTE:**

SEE IDOT STANDARD MOT DRAWINGS, UNLESS OTHERWISE NOTED ON MOT PLANS.

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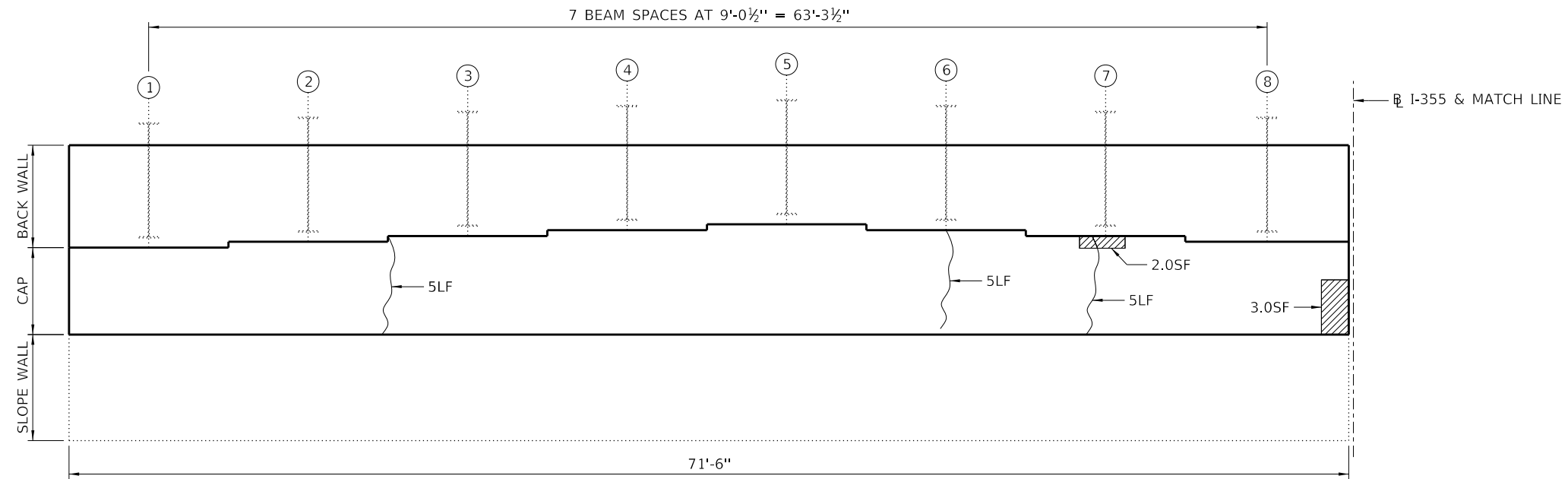


REVISIONS		DESCRIPTION
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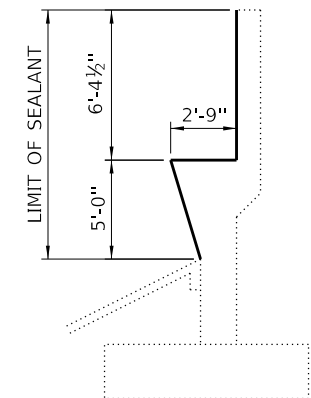
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BN 1475 (SN 099-0336) & 1476 (SN 099-9944)  
CONSTRUCTION STAGING

SHT NO. SAB-03  
DRAWING NO. 883 OF 1517

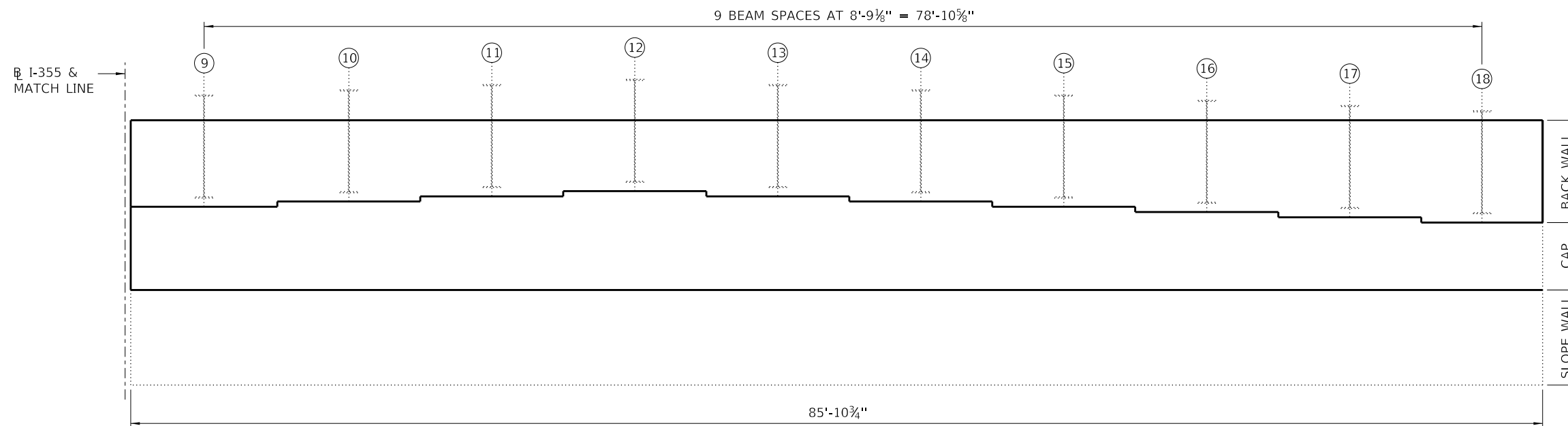
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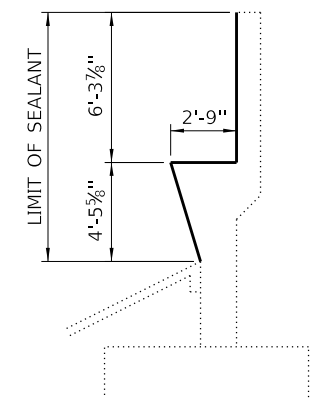
**NORTH ABUTMENT ELEVATION (BN 1475)**  
(LOOKING NORTH)



**SECTION THRU ABUTMENT (BN 1475)**  
(SHOWING LIMITS OF CONCRETE SEALANT)



**SOUTH ABUTMENT ELEVATION (BN 1476)**  
(LOOKING NORTH)



**SECTION THRU ABUTMENT (BN 1476)**  
(SHOWING LIMITS OF CONCRETE SEALANT)

**LEGEND**

- STRUCTURAL REPAIR OF CONCRETE (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF ABUTMENTS SHALL BE SEALED WITH CONCRETE SEALANT.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	15
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	5
APPLY CONCRETE SEALANT	SQ FT	2,176

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CHECKED BY PRD DATE 03/11/2018



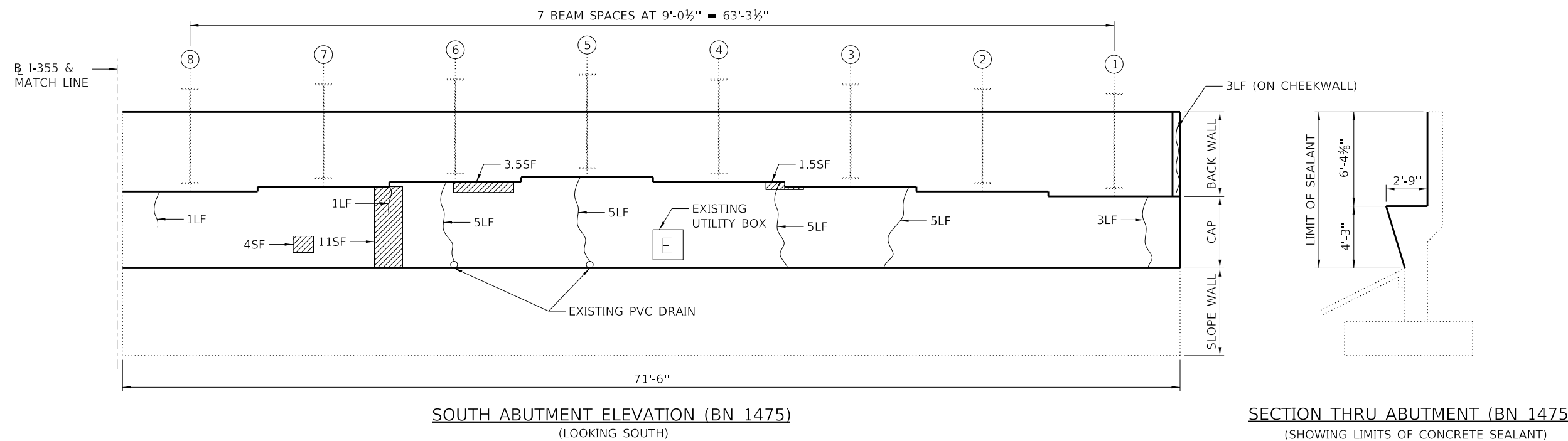
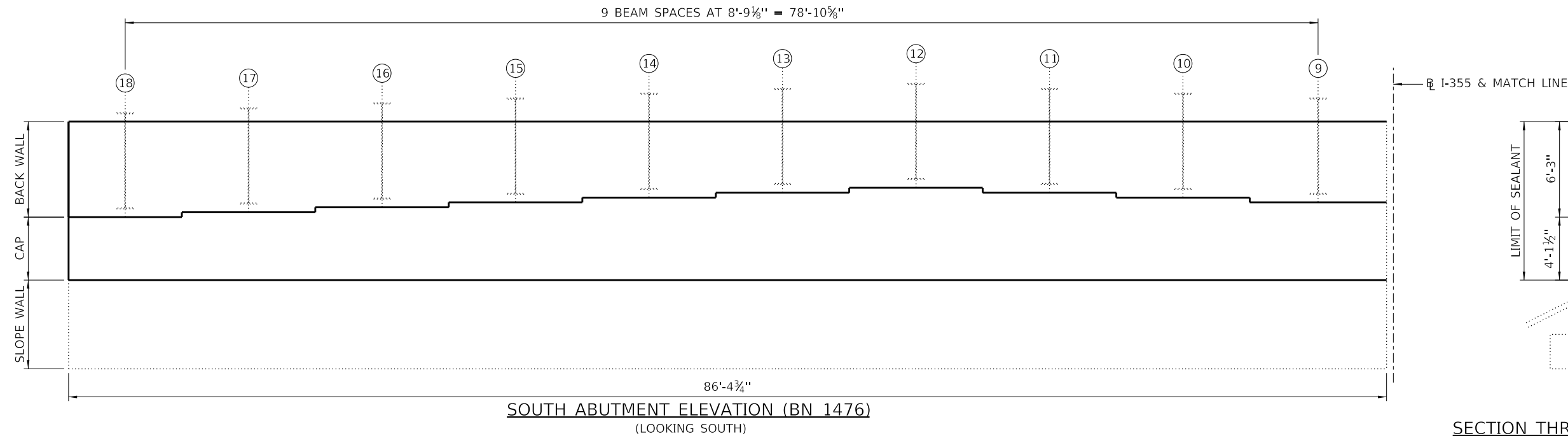
REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
BN 1475 (SN 099-0336) & 1476 (SN 099-9944)  
NORTH ABUTMENT REPAIR DETAILS

SHT NO. SAB-04  
DRAWING NO. 884 OF 1517

SAB-04 OF SAB-07





**LEGEND**

- STRUCTURAL REPAIR OF CONCRETE (<5")
- CRACKS TO BE EPOXY INJECTED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF ABUTMENTS SHALL BE SEALED WITH CONCRETE SEALANT.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	28
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	20
APPLY CONCRETE SEALANT	FOOT	2,095

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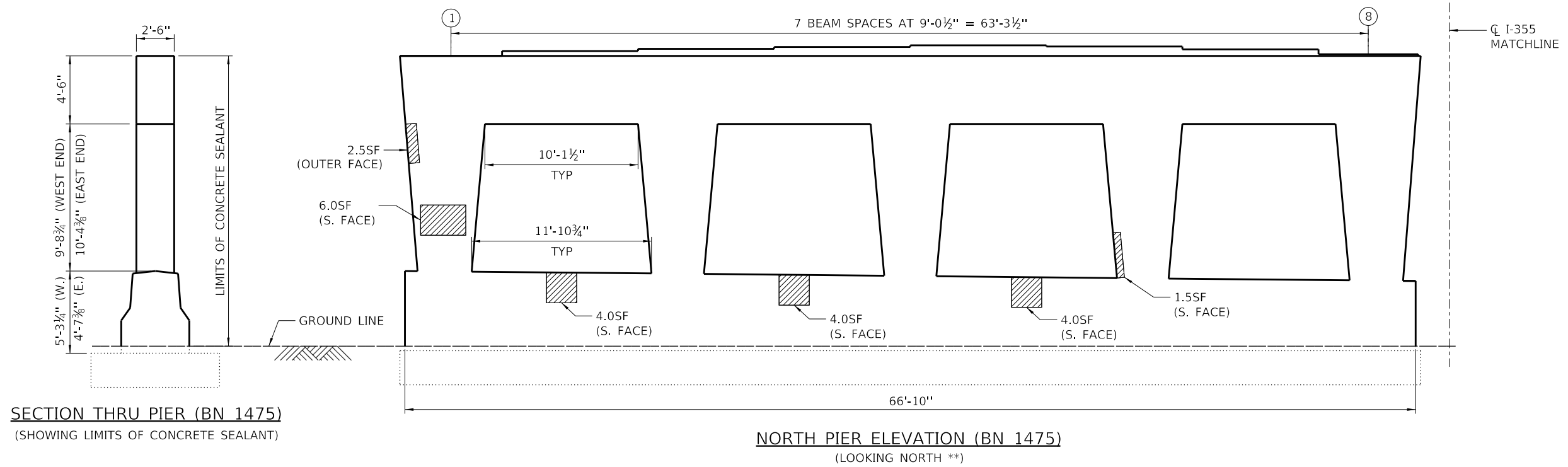


REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
BN 1475 (SN 099-0336) & 1476 (SN 099-9944)  
SOUTH ABUTMENT REPAIR DETAILS

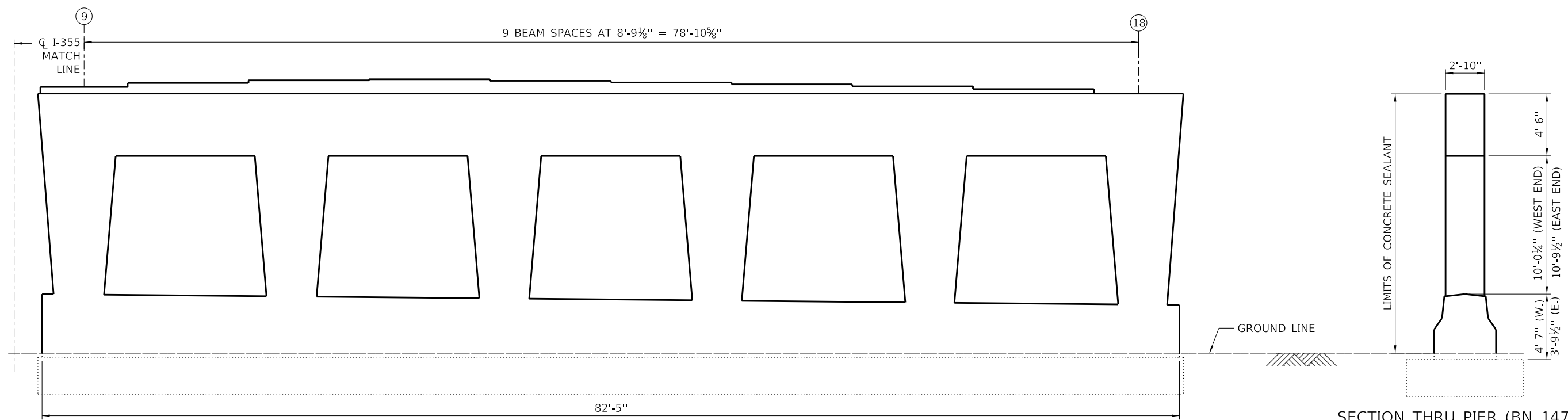
SHT NO. SAB-05  
DRAWING NO. 885 OF 1517

SAB-05 OF SAB-07



SECTION THRU PIER (BN 1475)  
(SHOWING LIMITS OF CONCRETE SEALANT)

NORTH PIER ELEVATION (BN 1475)  
(LOOKING NORTH \*\*)



SOUTH PIER ELEVATION (BN 1476)  
(LOOKING NORTH \*)

SECTION THRU PIER (BN 1476)  
(SHOWING LIMITS OF CONCRETE SEALANT)

**LEGEND**

STRUCTURAL REPAIR OF CONCRETE (<5")

\* PIER LOOKING SOUTH IS SIMILAR

**REPAIR NOTES**

1. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
2. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
3. ALL EXPOSED FACES OF PIER SHALL BE SEALED WITH CONCRETE SEALANT.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	22
APPLY CONCRETE SEALANT	SQ FT	4,390

SAB-06 OF SAB-07

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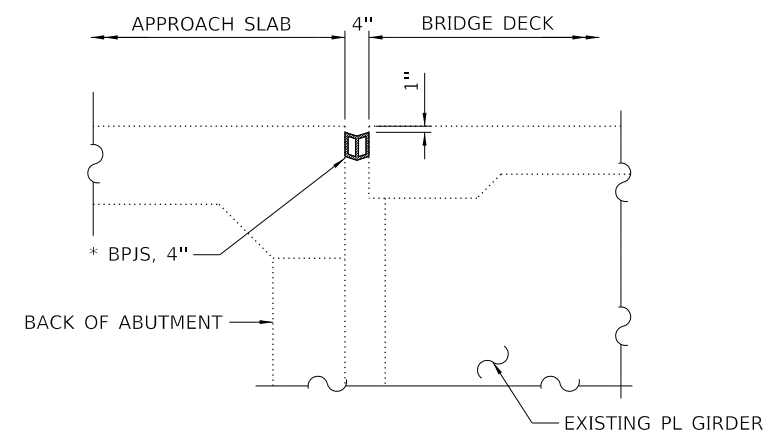
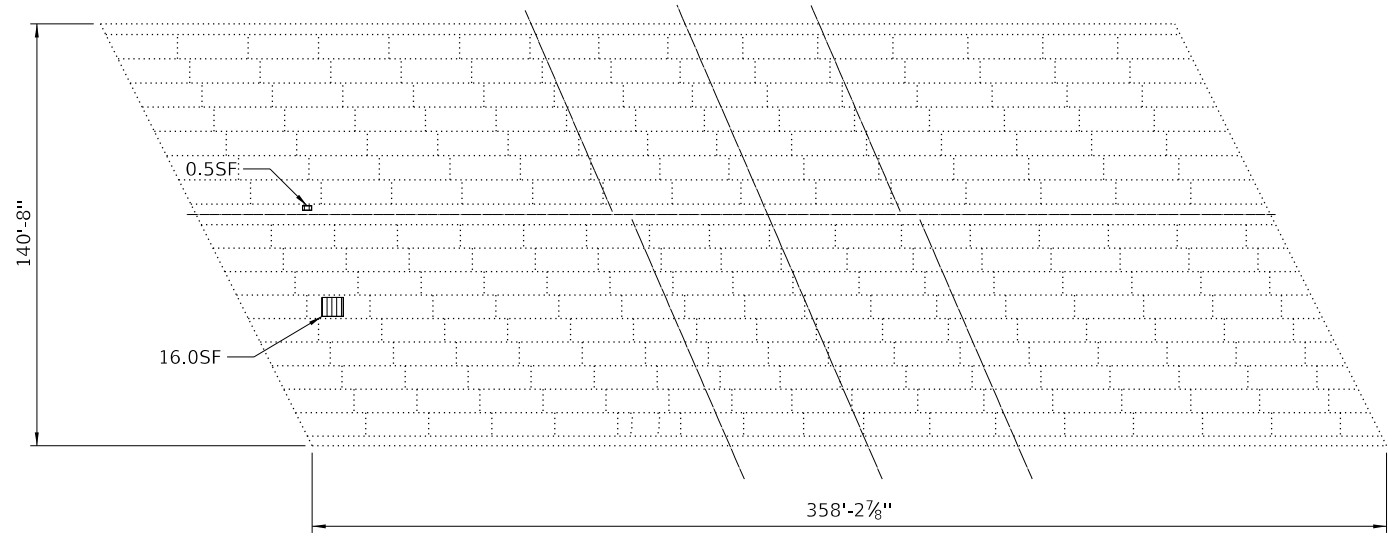
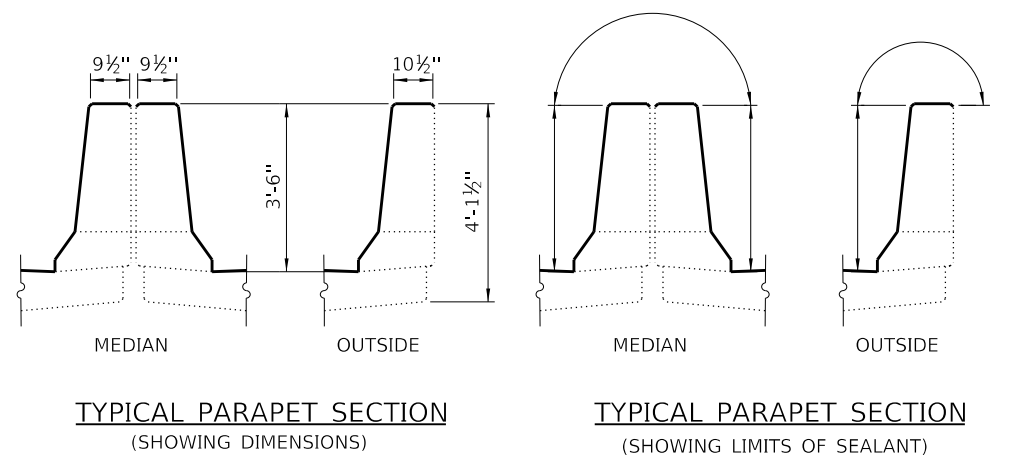
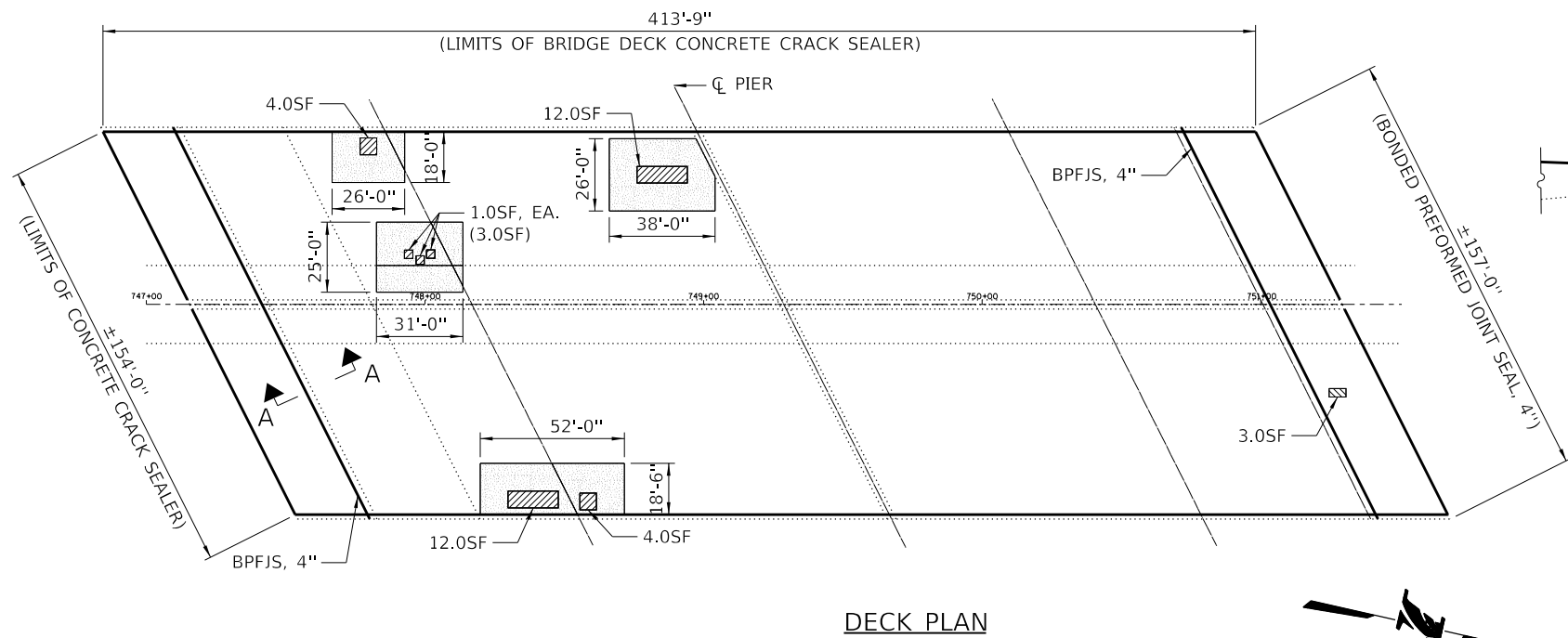
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REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
BN 1475 (SN 099-0336) & 1476 (SN 099-9944)  
PIER REPAIR DETAILS

SHT NO. SAB-06  
DRAWING NO. 886 OF 1517



\* CLEAN AND INSTALL PER MANUFACTURER'S SPECIFICATIONS

**LEGEND**

- ACCELERATED DECK SLAB REPAIR (PARTIAL)
- ACCELERATED APPROACH SLAB REPAIR (PARTIAL)
- CLEANING AND PAINTING EXPOSED REBAR
- PROTECTIVE SHIELD

**REPAIR NOTES**

1. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
2. ALL EXPOSED FACES OF PARAPETS, DECK, AND APPROACH SLABS SHALL BE SEALED WITH BRIDGE DECK CONCRETE SEALER.
3. SEE IDOT STANDARD MOT DRAWINGS UNLESS OTHERWISE NOTED IN MOT SHEETS FOR I-55 BELOW.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
PROTECTIVE SHIELD	SQ YD	355
ACCELERATED DECK SLAB REPAIR (PARTIAL)	SQ YD	3
ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ YD	1
BRIDGE DECK CONCRETE SEALER	SQ FT	70,890
BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	628
CLEANING AND PAINTING EXPOSED REBAR	SQ FT	2

SAB-07 OF SAB-07

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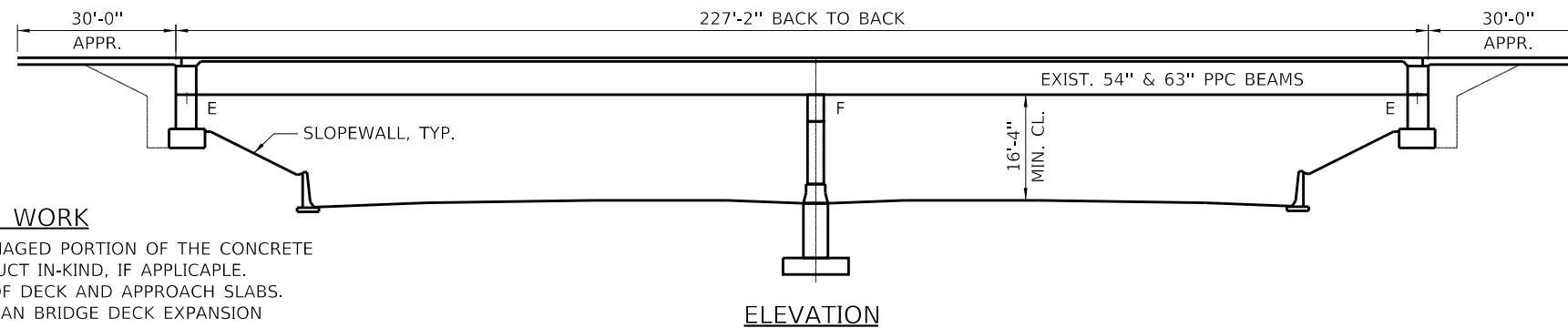
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 BN 1475 (SN 099-0336) & 1476 (SN 099-9944)  
 DECK REPAIR DETAILS

SHT NO. SAB-07  
 DRAWING NO. 887 OF 1517

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EXISTING STRUCTURE, BN 1473, BUILT AS PART OF CONTRACT CIP-611 IN 1990, AND WIDENED IN 1997 AS PART OF CONTRACT CIP-93-700P. LENGTH IS 227'-2" BACK TO BACK OF ABUTMENTS WITH TWO SPANS, 115'-0" AND 110'-0". 54" AND 63" PPC BEAMS WITH SEMI-INTEGRAL ABUTMENTS.

BENCH MARK: GPS MONUMENT, IRON ROD SET IN CONCRETE LOCATED IN N.W. QUADRANT OF I-355/BOUGHTON RD INTERSECTION, 9'-0" NORTH OF NORTHERLY BACK OF CURB AND 49'-6" WEST OF THE WEST END OF THE NORTHERLY BRIDGE WALL. ELEV. 760.345



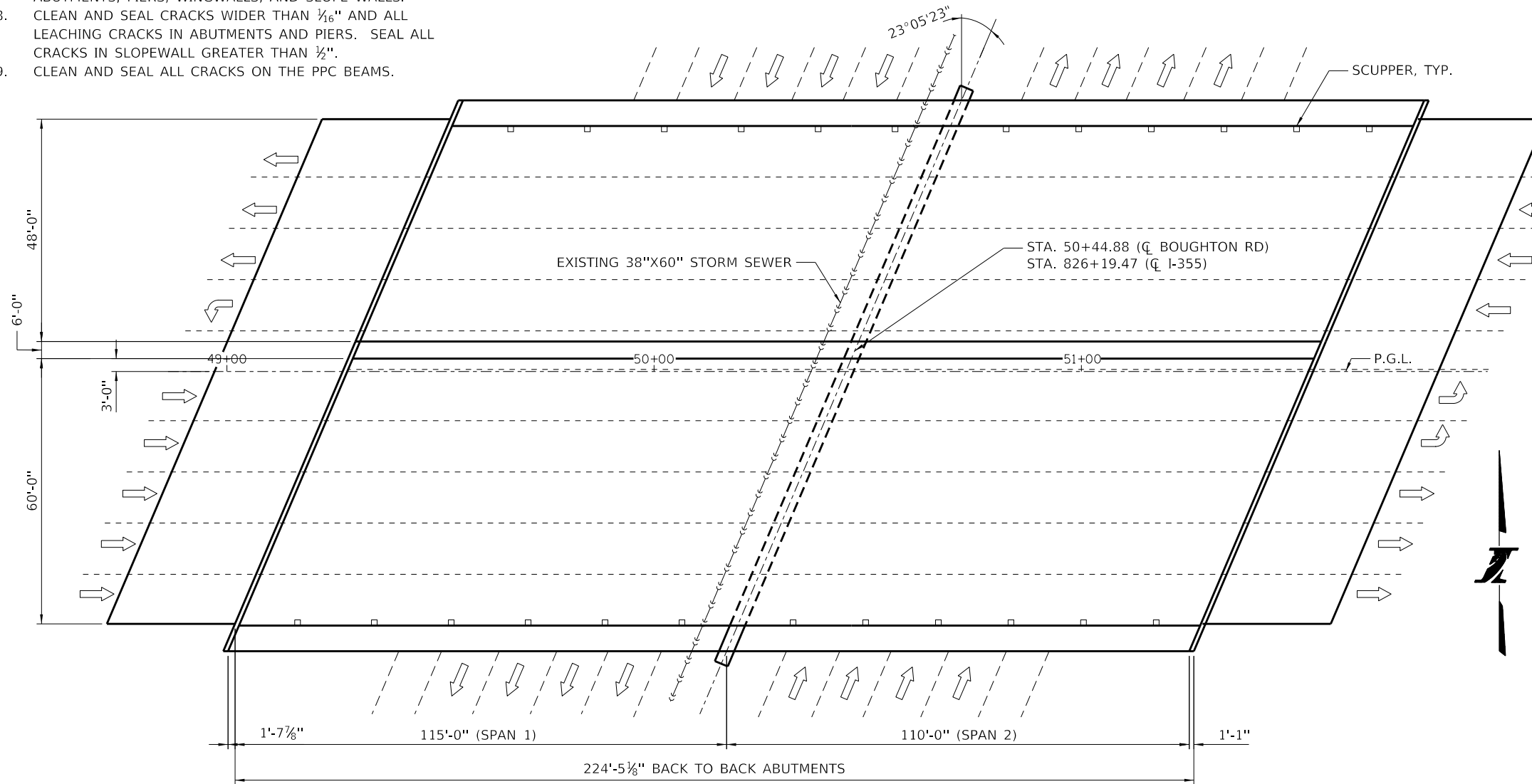
ELEVATION

**PROPOSED SCOPE OF WORK**

1. REMOVE LOOSE AND DAMAGED PORTION OF THE CONCRETE PARAPET AND RECONSTRUCT IN-KIND, IF APPLICABLE.
2. REPAIR SPALLED AREAS OF DECK AND APPROACH SLABS.
3. REMOVE DEBRIS AND CLEAN BRIDGE DECK EXPANSION JOINTS.
4. REMOVE AND REPLACE PRESSURE RELIEF JOINT BETWEEN APPROACH SLAB AND PAVEMENT.
5. CLEAN AND APPLY BRIDGE DECK CONCRETE SEALER TO DECK, APPROACH SLABS, AND TOP AND TRAFFIC FACE OF PARAPETS.
6. APPLY CONCRETE SEALANT TO ABUTMENTS, BRIDGE SEATS, BACKWALLS, AND PIERS.
7. REPAIR SPALLED AND DELAMINATED CONCRETE IN ABUTMENTS, PIERS, WINGWALLS, AND SLOPE WALLS.
8. CLEAN AND SEAL CRACKS WIDER THAN 1/8" AND ALL LEACHING CRACKS IN ABUTMENTS AND PIERS. SEAL ALL CRACKS IN SLOPEWALL GREATER THAN 1/2".
9. CLEAN AND SEAL ALL CRACKS ON THE PPC BEAMS.

**PROPOSED SCOPE OF WORK (CONT.)**

10. REPAIR SPALLED AND DELAMINATED CONCRETE WITH POLYMER CONCRETE CEMENT MORTAR WITH FIBER WRAP ON PPC BEAMS. FIBER WRAP ONLY TO BE APPLIED OVER SHOULDERS AND LANES OF TRAFFIC.
11. MODIFY EXISTING CRASHWALLS AT PIER TO MEET CURRENT TOLLWAY STANDARDS.



PLAN

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED MARCH 2017.

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS, (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL SERVICES MANUAL ADOPTED JUNE 30, 2017.

**LOADING HS20-44**

(FROM 1997 PLANS)

ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE

**DESIGN STRESSES**

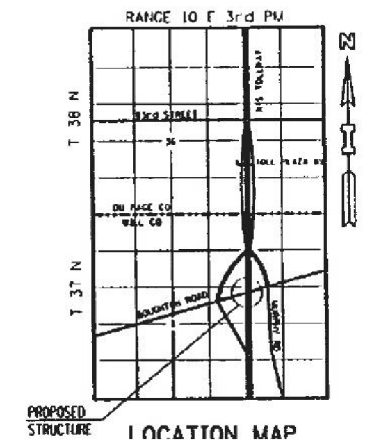
**FIELD UNITS**

- f'c = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)
- f'c = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)
- f'c = 4,000 PSI (CLASS AX BRIDGE DECK & APPROACH SLAB REPAIRS)
- f'y = 60,000 PSI (REINFORCEMENT)

**HIGHWAY CLASSIFICATION**

BOUGHTON ROAD (ON ROUTE)  
FUNCTIONAL CLASS: URBAN  
ADT: 32,700 (2015)  
ADTT: 327 (2015)

I-355 (UNDER)  
FUNCTIONAL CLASS: INTERSTATE  
ADT: 116,500 (2015)  
ADTT: 10,485 (2015)



PROPOSED STRUCTURE LOCATION MAP

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DRAWN BY JMM DATE 03/11/2018  
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REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1473 (S.N. 099-9943)  
GENERAL PLAN AND ELEVATION

SAC-01 OF SAC-12

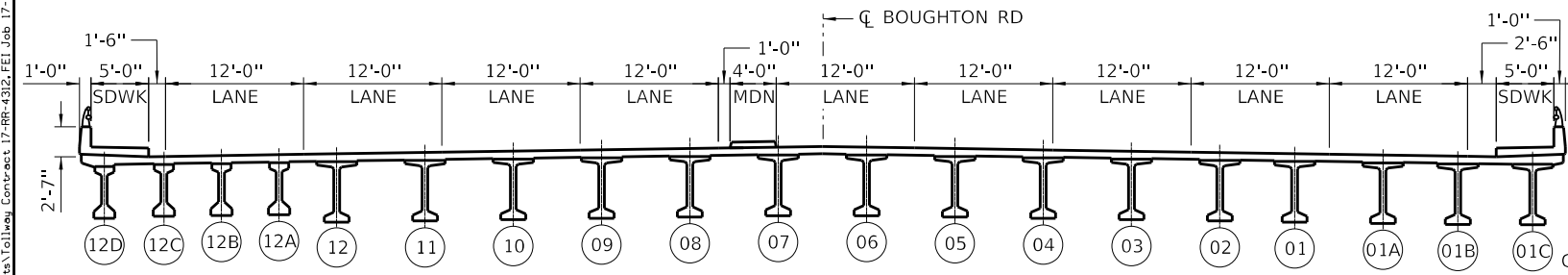
SHT NO. SAC-01  
DRAWING NO. 888 OF 1517

**GENERAL NOTES**

**CONSTRUCTION**

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION TOLERANCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
2. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
3. NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
4. THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COSTS WILL BE AT THE CONTRACTOR'S EXPENSE.
5. NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINES BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E. 1-800-892-0123.
7. EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH THAT FOR, "CONCRETE REMOVAL".
8. WHENEVER THE MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF THE EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
9. THE PROTECTIVE SHIELD SYSTEM SHALL EXTEND A MINIMUM OF 10 FEET BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5 FEET BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIRS AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER.
10. CONCRETE SEALANT SHALL BE APPLIED TO THE TOP AND TRAFFIC FACE OF ALL REPAIRED AREAS OF THE BRIDGE DECK REPAIRS AND PARAPET, INCLUDING PARAPET ON BRIDGE WINGWALLS. SEALANT SHALL ALSO BE APPLIED TO THE REPAIRED AREAS OF THE VISIBLE FACES OF THE PIER COLUMNS, CRASHWALLS AND CAPS, PIERS AND ABUTMENTS, BACKWALLS, AND BEARING SEATS. EXISTING SURFACES SHALL BE POWERED WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
11. A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURAL ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.
12. AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS. AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
13. ALL DIMENSIONS ARE TAKEN FROM THE FOLLOWING EXISTING PLANS:  
TOLLWAY CONTRACT NO. CIP-93-700P (1997).

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**TYPICAL CROSS SECTION**  
(LOOKING EAST)

**GENERAL NOTES (CONT.)**

**CAST-IN-PLACE CONCRETE**

1. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF 1 FOOT BELOW FINISHED GROUND LEVEL.
- REINFORCING BARS**
1. REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM 706), GRADE 60, DEFORMED BARS.
  2. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY-COATED.
  3. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION.
  4. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
  5. COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

**ABBREVIATIONS**

- ABUT. - ABUTMENT
- APPROX. - APPROXIMATE
- BRG. - BEARING
- CL. - CLEAR
- DIM. - DIMENSION
- E. - EAST
- ELEV. - ELEVATION
- EXIST. - EXISTING
- MAX. - MAXIMUM
- MED. - MEDIAN
- MIN. - MINIMUM
- N. - NORTH
- N.B. - NORTHBOUND
- NO. - NUMBER
- P.G.L. - PROFILE GRADE LINE
- S. - SOUTH
- SDWK - SIDEWALK
- S.B. - SOUTHBOUND
- SHLDR. - SHOULDER
- STA. - STATION
- TYP. - TYPICAL
- W. - WEST

**LIST OF SHEETS**

SAC-01	GENERAL PLAN AND ELEVATION
SAC-02	GENERAL DATA, SOQ, CROSS SECTION, AND LIST OF SHEETS
SAC-03	CONSTRUCTION STAGING
SAC-04	EAST ABUTMENT REPAIR DETAILS
SAC-05	WEST ABUTMENT REPAIR DETAILS
SAC-06	WINGWALL REPAIR DETAILS
SAC-07	SLOPEWALL REPAIR DETAILS
SAC-08	PIER REPAIR DETAILS
SAC-09	BEAM REPAIR DETAILS I
SAC-10	BEAM REPAIR DETAILS II
SAC-11	DECK REPAIR DETAILS
SAC-12	CRASHWALL MODIFICATIONS

**TOTAL BILL OF MATERIALS**

(BN 1473)

CODE	ITEM	UNIT	SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL	RECORDED QUANTITIES
50102400	CONCRETE REMOVAL	CU YD	93.4	-	93.4	
50157300	PROTECTIVE SHIELD	SQ YD	-	198	198	
50200100	STRUCTURE EXCAVATION	CU YD	134.9	-	134.9	
50300225	CONCRETE STRUCTURES	CU YD	68.8	-	68.8	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	8,110	-	8,110	
* JI505040	REPAIR BRIDGE DRAINAGE SYSTEM	EACH	-	1	1	
* JI606050	CONCRETE GUTTER (SPECIAL)	FOOT	280	-	280	
* JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	182	112	294	
* JS121300	HIGH PRESSURE EPOXY INJECTION	FOOT	-	111	111	
* JT503012	ACCELERATED DECK SLAB REPAIR (PARTIAL)	SQ YD	-	5	5	
* JT503013	ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ YD	-	1	1	
* JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	47	96	143	
* JT503045	CONCRETE PRESSURE RELIEF JOINT REPAIR - TYPE I	FOOT	-	257	257	
* JT503100	FIBER WRAP REPAIR	SQ FT	-	75	75	
* JT524010	APPLY CONCRETE SEALANT	SQ FT	7,958	-	7,958	
* JT524015	BRIDGE DECK CONCRETE SEALER	SQ FT	-	30,774	30,774	
* JT599105	SLOPEWALL GAP FILLER REMOVAL AND REPLACEMENT	FOOT	-	336	336	
* JT602830	CLEAN DRAINAGE SYSTEM	EACH	-	1	1	
* X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	-	16	16	
** X0323818	CLEANING AND PAINTING EXPOSED REBAR	SQ FT	-	29	29	
** X0323491	SLOPEWALL CRACK SEALING	FOOT	220	-	220	
** Z0065700	SLOPEWALL REPAIR	SQ YD	7	-	7	

\* TOLLWAY SPECIAL PROVISION ITEM  
\*\* IDOT SPECIAL PROVISION ITM  
GBSP IDOT GUIDE BRIDGE SPECIAL PROVISION

SAC-02 OF SAC-12

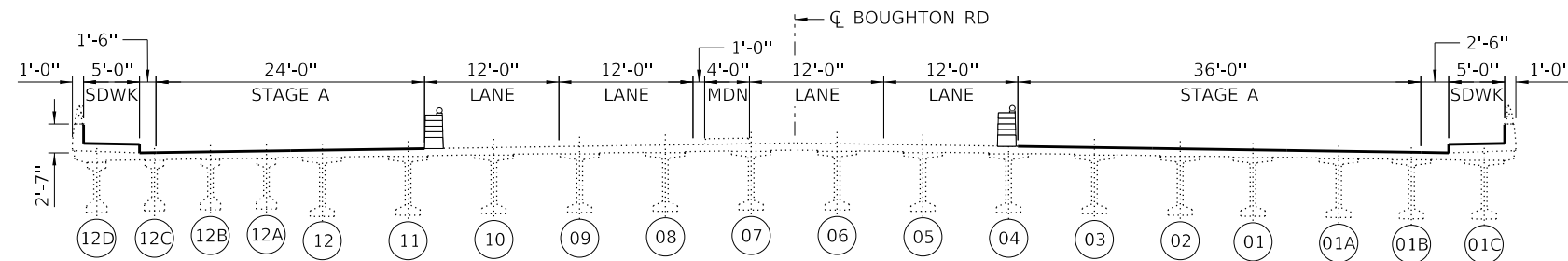
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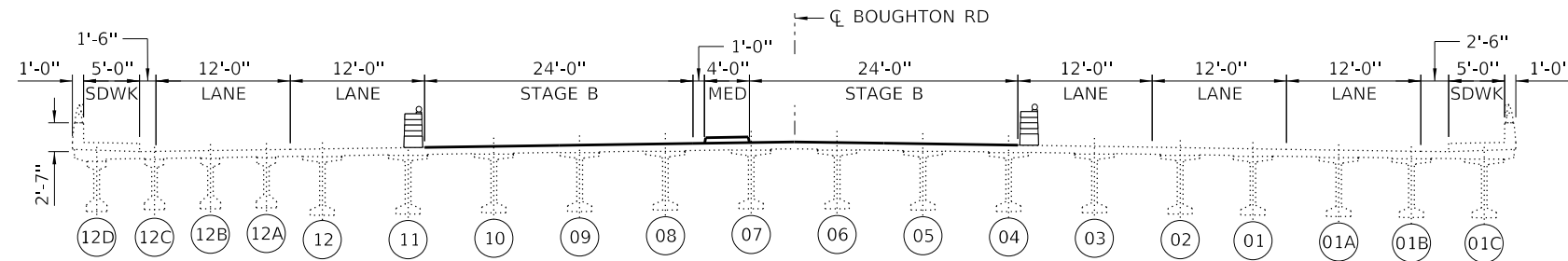
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CONTRACT NO. RR-16-4255  
BRIDGE NO. 1473 (S.N. 099-9943)  
GENERAL DATA

SHT NO. SAC-02  
DRAWING NO. 889 OF 1517



STAGE A CROSS SECTION  
(LOOKING EAST)



STAGE B CROSS SECTION  
(LOOKING EAST)

**NOTE:**

SEE IDOT STANDARD MOT DRAWINGS, UNLESS OTHERWISE NOTED ON MOT PLANS.

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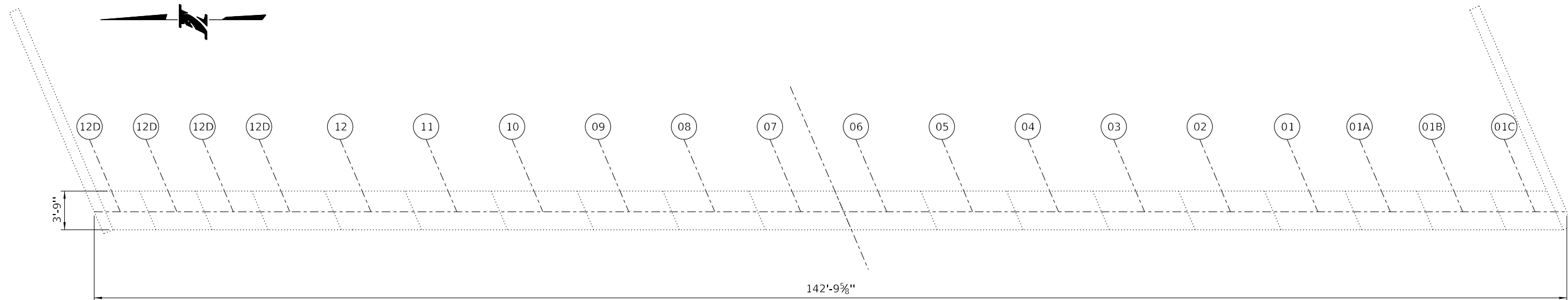
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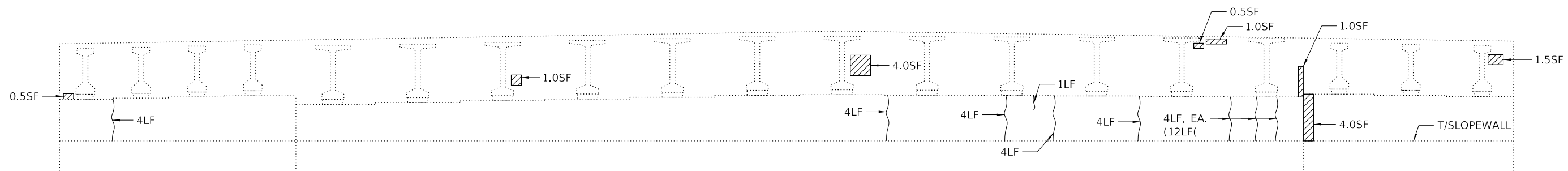
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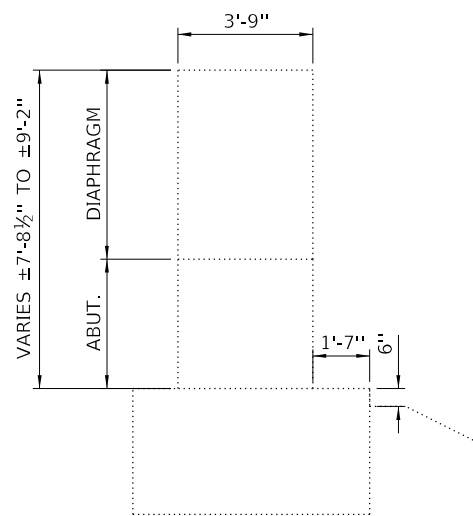
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 DRAWING NO. 890 OF 1517



EAST ABUTMENT PLAN



EAST ABUTMENT ELEVATION  
(LOOKING EAST)



TYPICAL CROSS SECTION

**LEGEND**

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	33
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	14

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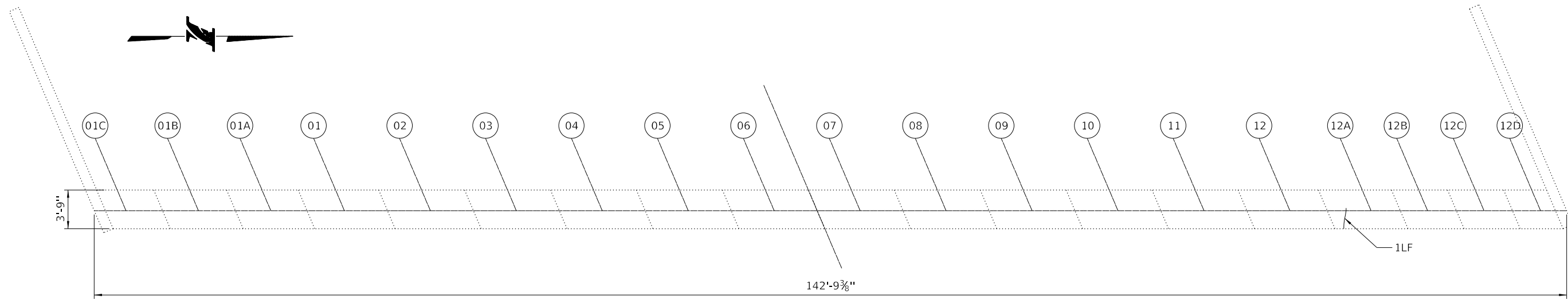


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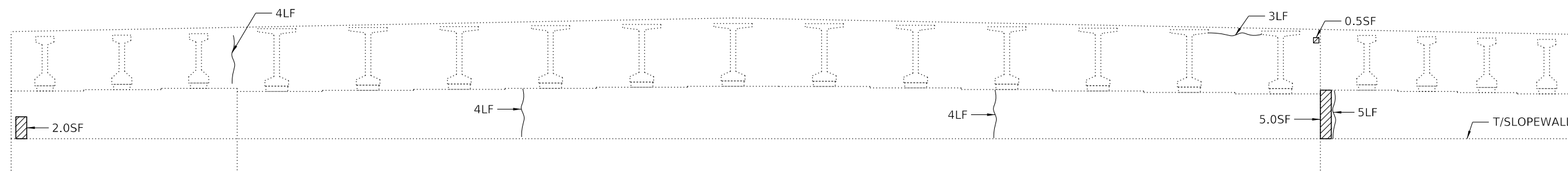
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 EAST ABUTMENT REPAIR DETAILS

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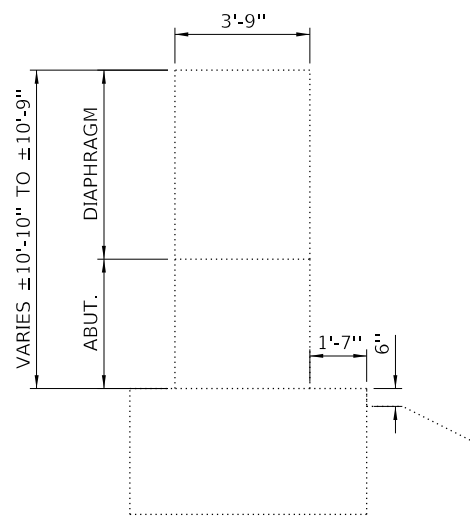
SAC-04 OF SAC-12



WEST ABUTMENT PLAN



WEST ABUTMENT ELEVATION  
(LOOKING WEST)



TYPICAL CROSS SECTION

**LEGEND**

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	21
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	8

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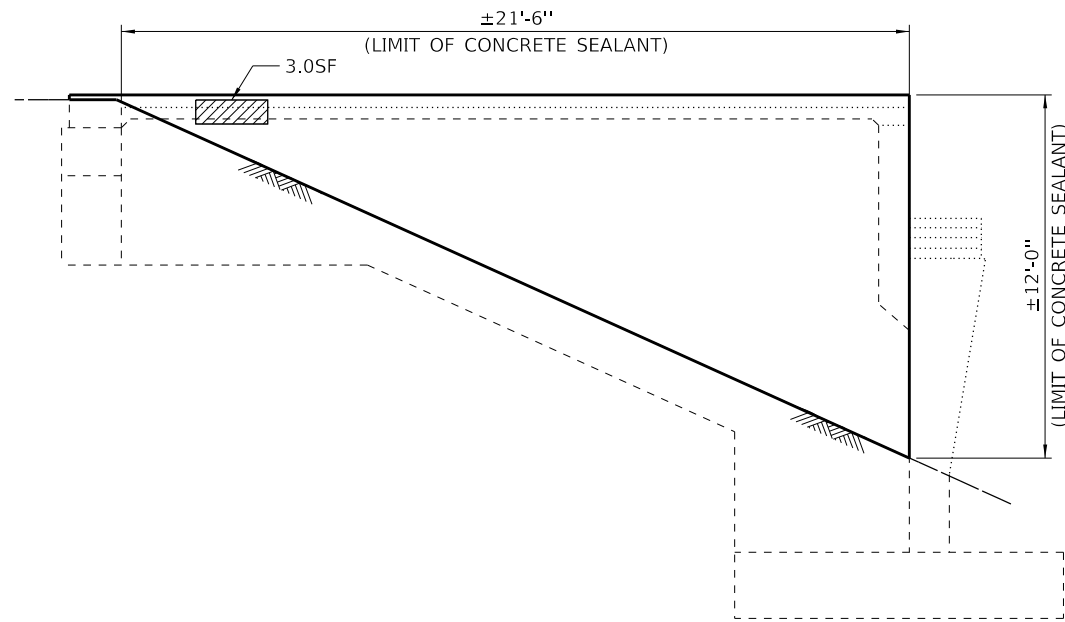
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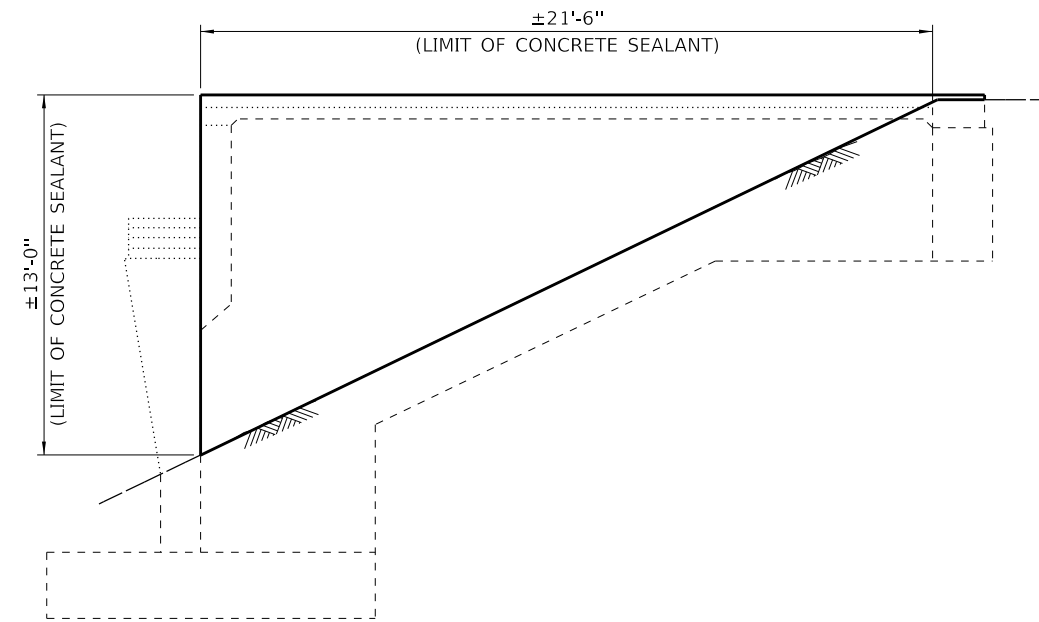
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SHT NO. SAC-05  
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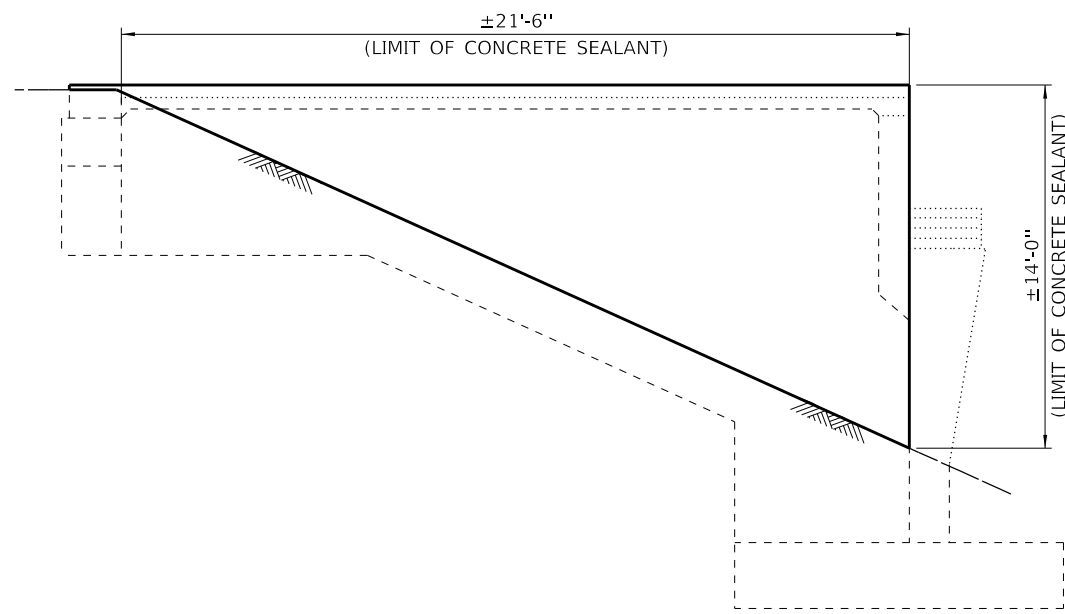




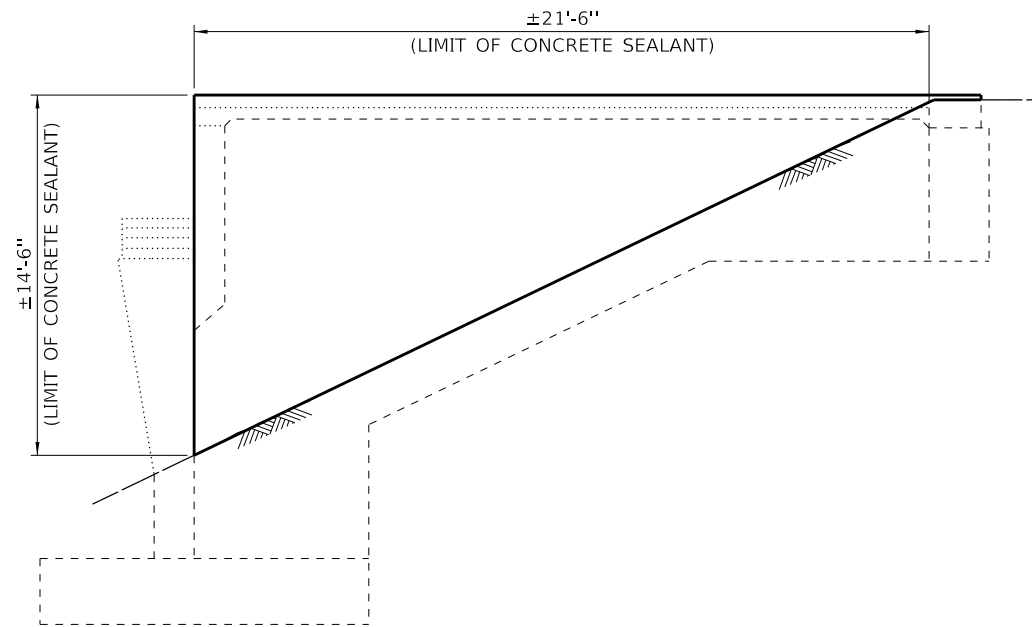
NORTHEAST ELEVATION



SOUTHEAST ELEVATION



SOUTHWEST ELEVATION



SOUTHWEST ELEVATION

LEGEND

 CONCRETE REPAIR (<5")

REPAIR NOTES

- HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF WINGWALLS SHALL BE SEALED WITH CONCRETE SEALANT.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	3
APPLY CONCRETE SEALANT	SQ FT	576

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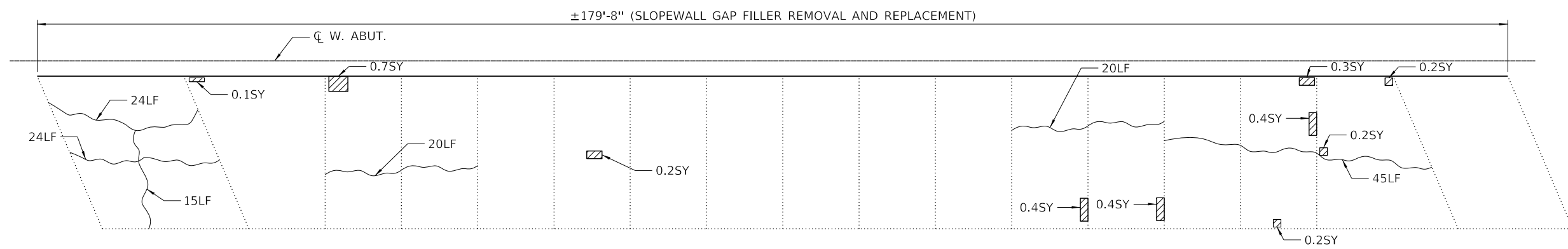


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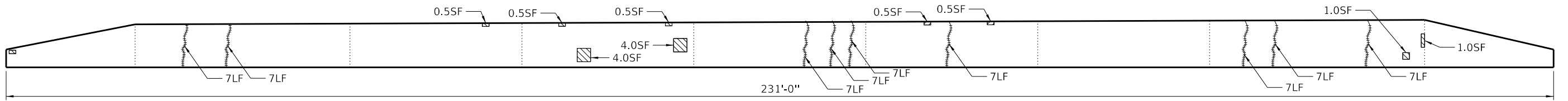
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 WINGWALL REPAIR DETAILS

SAC-06 OF SAC-12

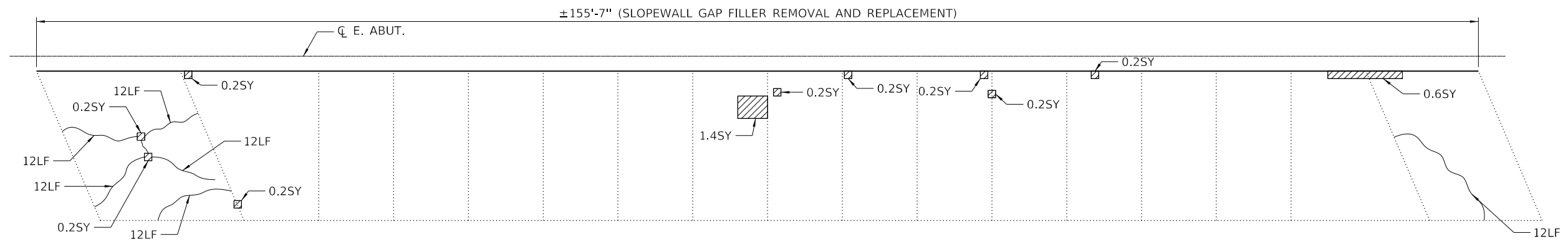
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 DRAWING NO.  
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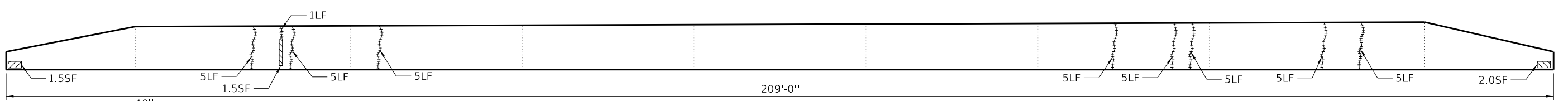
WEST SLOPEWALL ELEVATION



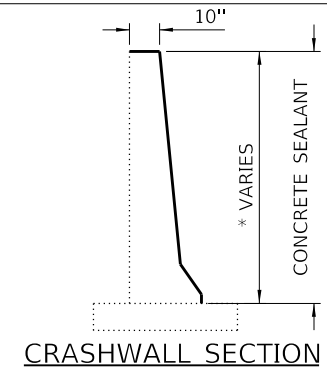
WEST CRASHWALL ELEVATION



EAST SLOPEWALL ELEVATION



EAST CRASHWALL ELEVATION



\* 6'-5" TO 7'-1" (WEST CRASHWALL)  
4'-4" (EAST CRASHWALL)  
2'-8" (AT ENDS)

**LEGEND**

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED
- SLOPEWALL REPAIR
- SLOPEWALL CRACK SEALING

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF CRASHWALLS SHALL BE SEALED WITH CONCRETE SEALANT.
4. CRACKS (>1#2") ON SLOPEWALL SHALL BE SEALED.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	104
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	18
APPLY CONCRETE SEALANT	SQ FT	2,834
SLOPEWALL GAP FILLER REMOVAL AND REPLACEMENT	FOOT	336
SLOPEWALL CRACK SEALING	FOOT	220
SLOPEWALL REPAIR	SQ YD	7

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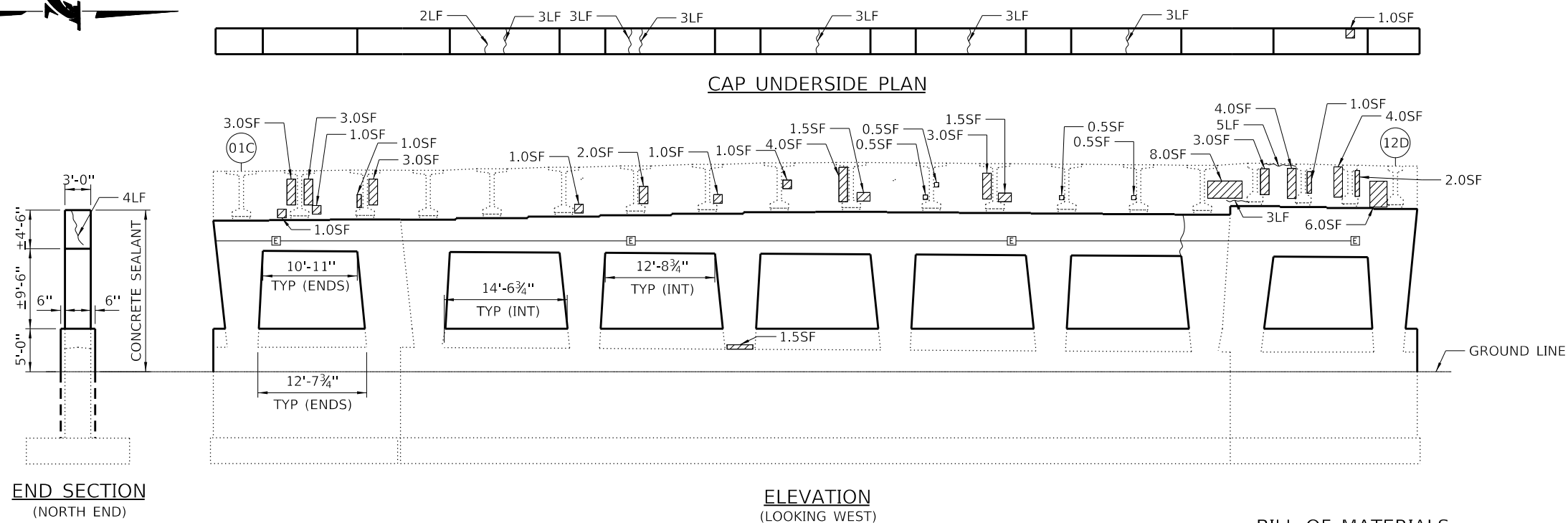
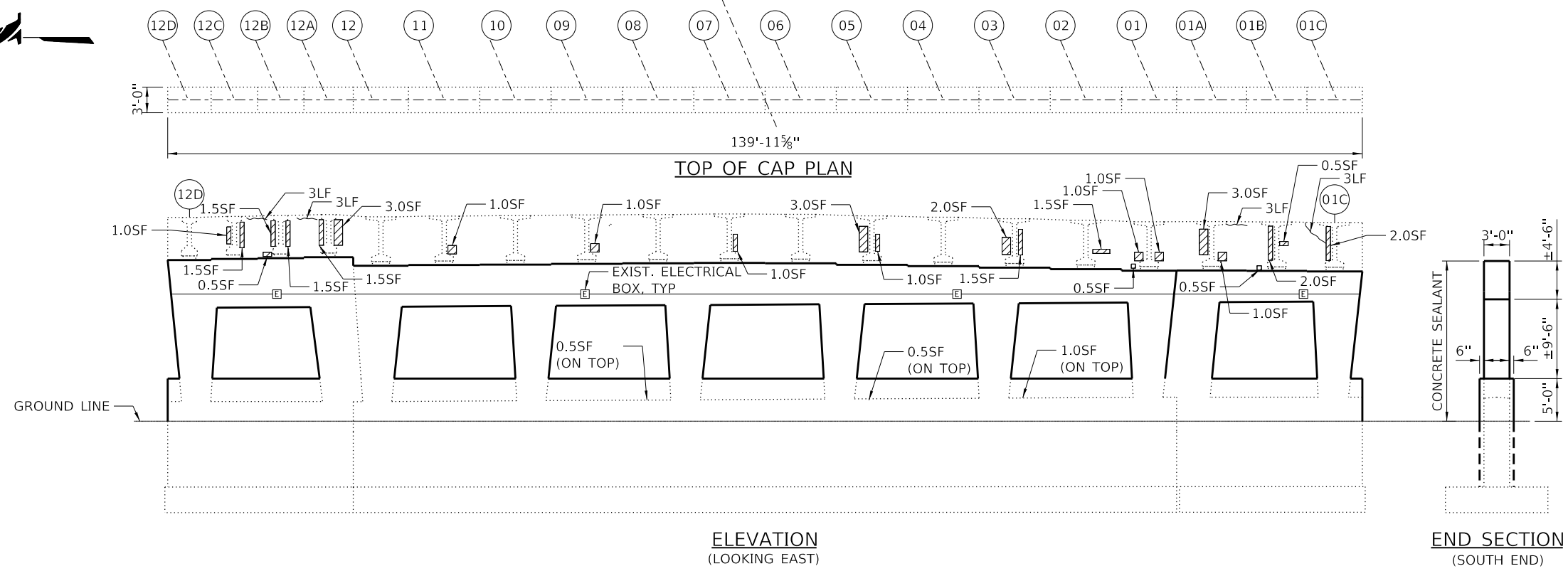
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ILLINOIS 60515

REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1473 (S.N. 099-9943)  
SLOPEWALL REPAIR DETAILS

SAC-07 OF SAC-12

SHT NO. SAC-07  
DRAWING NO.  
894 OF 1517



**REPAIR NOTES**

- HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF PIER SHALL BE SEALED WITH CONCRETE SEALANT.
- REPAIRS ON THE DIAPHRAGM ARE INCLUDED WITH SUPERSTRUCTURE.
- FOR CRASHWALL UPGRADES, SEE SHEET SAC-12 OF SAC-12.
- ALL STRUCTURAL REPAIR OF CONCRETE LOCATED WITHIN CRASHWALL MODIFICATION AREA SHALL BE CHIPPED AWAY PRIOR TO CRASHWALL MODIFICATION.

**ELEVATION (LOOKING WEST)**

**LEGEND**

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	48
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	97
APPLY CONCRETE SEALANT	SQ FT	4,548

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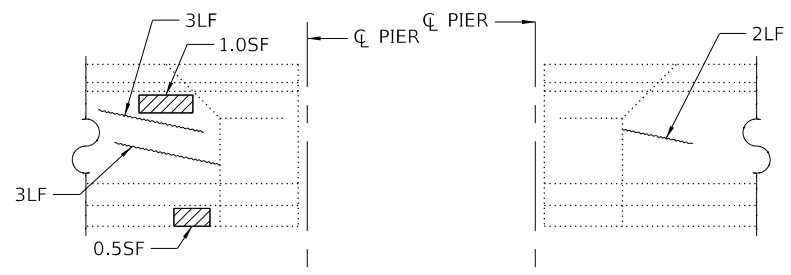
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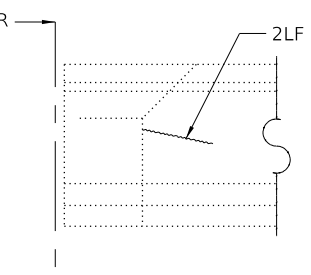
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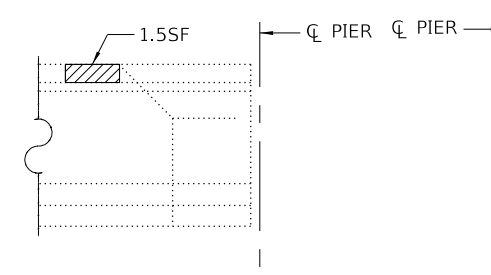
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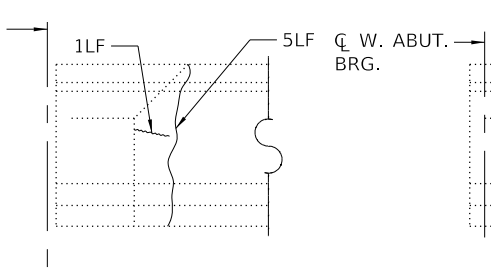
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(LOOKING NORTH)



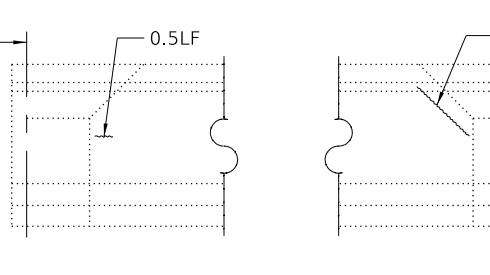
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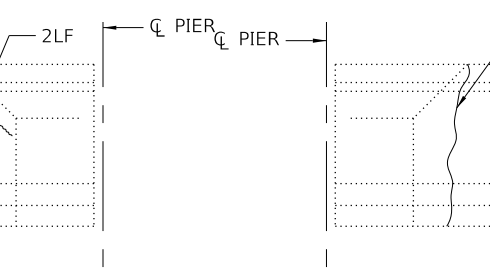
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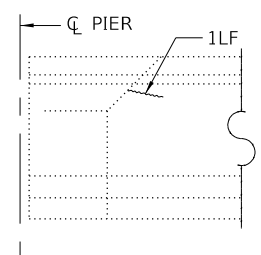
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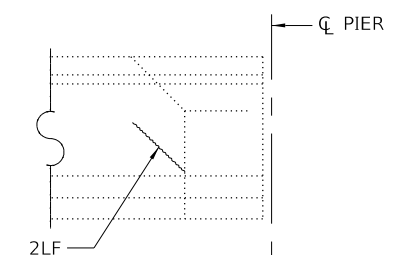
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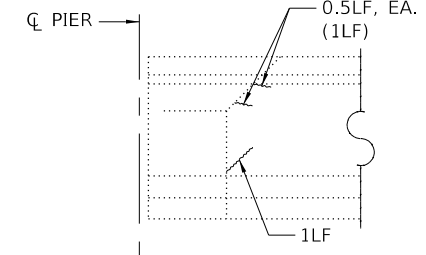
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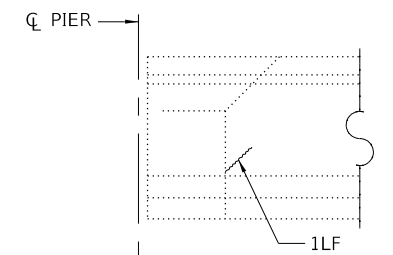
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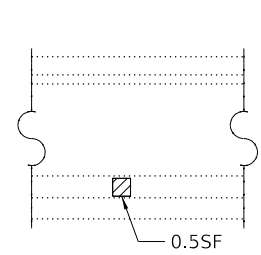
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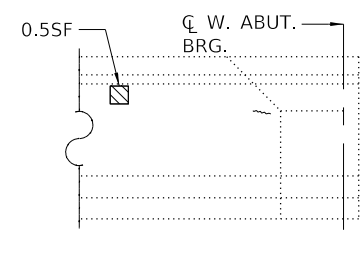
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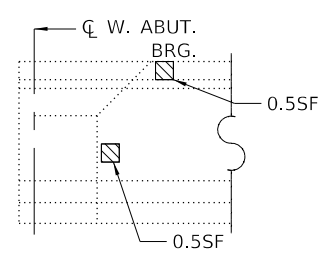
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(LOOKING SOUTH)



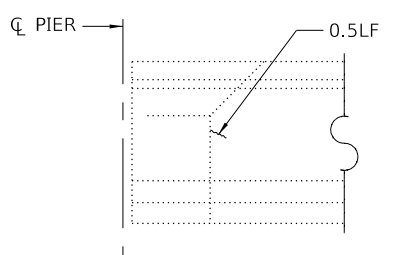
**BEAM 09 SPAN 01**  
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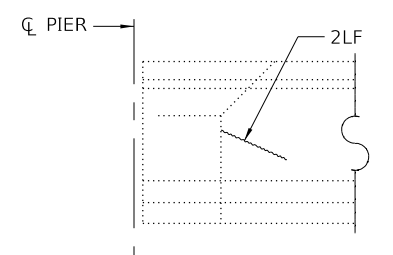
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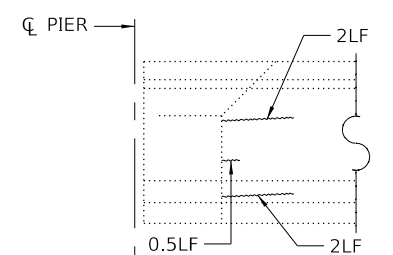
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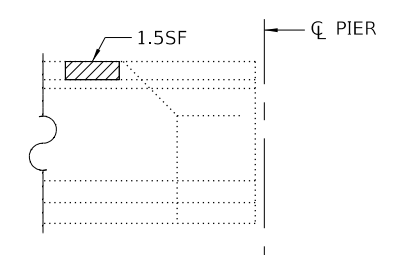
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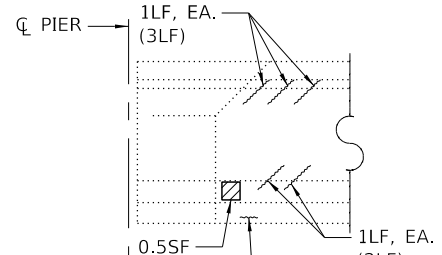
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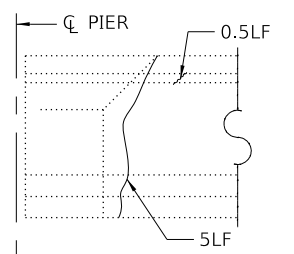
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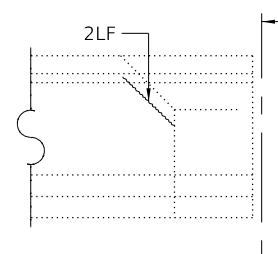
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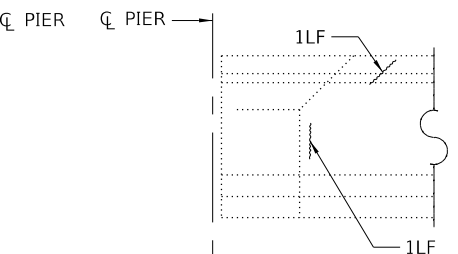
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(LOOKING NORTH)



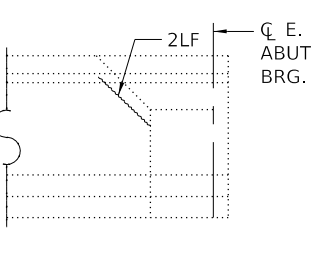
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(LOOKING NORTH)



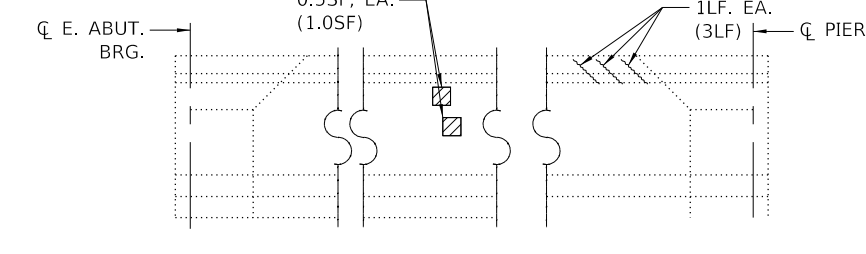
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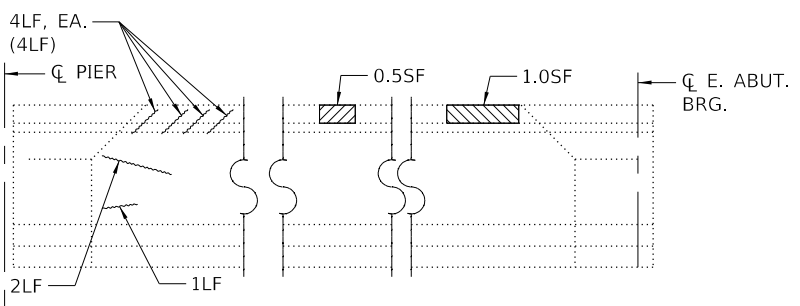
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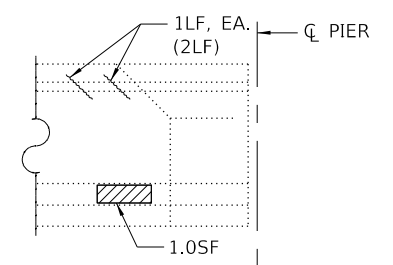
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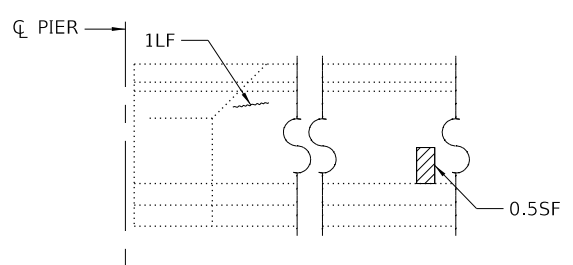
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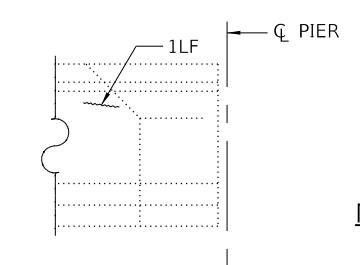
**BEAM 01 SPAN 02**  
(LOOKING NORTH)



**BEAM 02 SPAN 02**  
(LOOKING SOUTH)



**BEAM 02 SPAN 02**  
(LOOKING NORTH)



**BEAM 03 SPAN 02**  
(LOOKING SOUTH)

- LEGEND**
- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
  - SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED
  - SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR ONLY (NO FIBER WRAP)

- NOTES:**
1. FIBER WRAP ONLY TO BE APPLIED TO REPAIR AREAS OVER SHOULDERS AND LANES OF TRAFFIC.
  2. FOR REPAIR DETAILS AND BILL OF MATERIALS, SEE SHEET SAC-10 OF SAC-12.

**SAC-09 OF SAC-12**

DRAWN BY **JMM** DATE **03/11/2018**  
 CHECKED BY **PRD** DATE **03/11/2018**



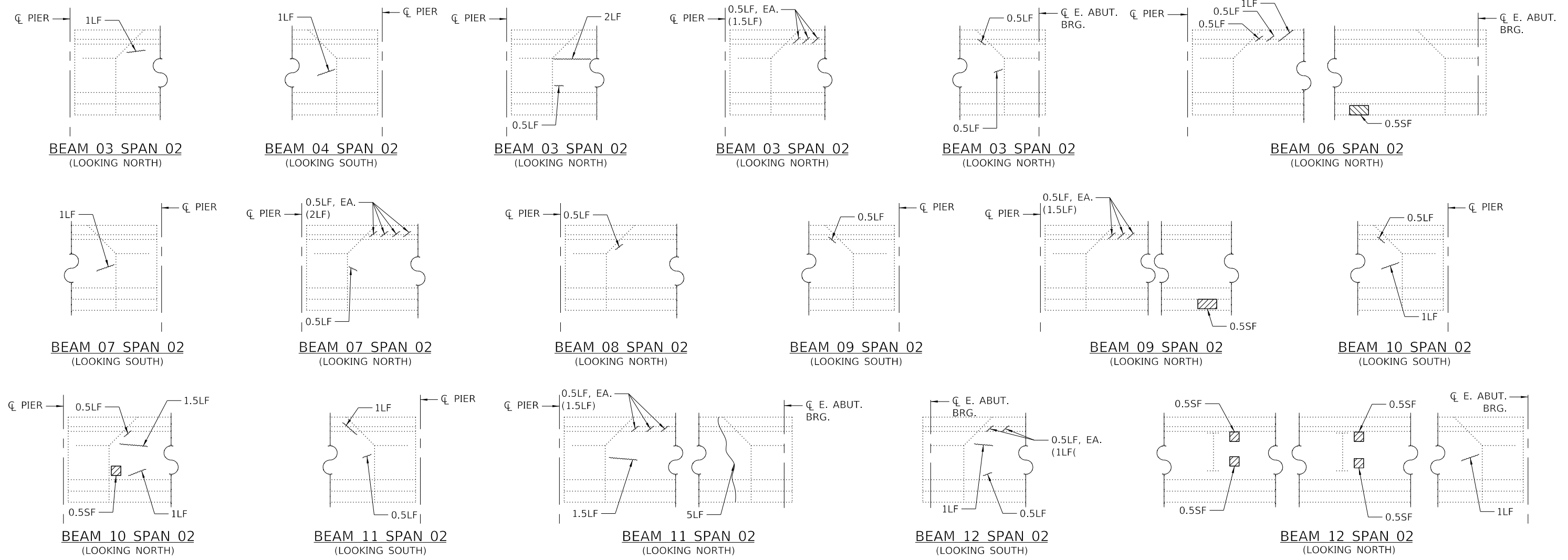
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. **RR-16-4255**  
 BRIDGE NO. **1473 (S.N. 099-9943)**  
 BEAM REPAIR DETAILS I

SHT NO. **SAC-09**  
 DRAWING NO. **896** OF **1517**

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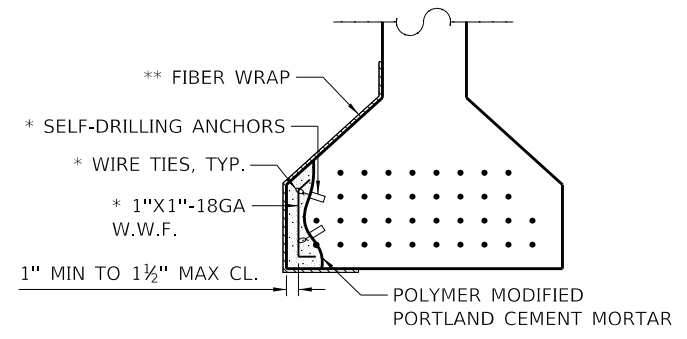


**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR ONLY (NO FIBER WRAP)

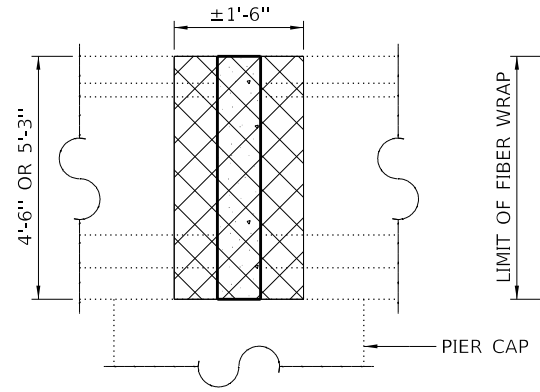
**REPAIR NOTES**

1. HAIRLINE CRACKS (<math>< \frac{1}{16}</math>") SHALL BE HIGH PRESSURED EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. FOR DIAPHRAGM OVER PIER, REMOVE CONCRETE AS SHOWN IN DIAPHRAGM OVER PIER REPAIR DETAIL. REPAIR DIAPHRAGM SAME AS SHOWN IN BEAM REPAIR DETAIL.
4. ONLY FIBER WRAP SPALLS OVER SHOULDERS AND TRAFFIC LANES.

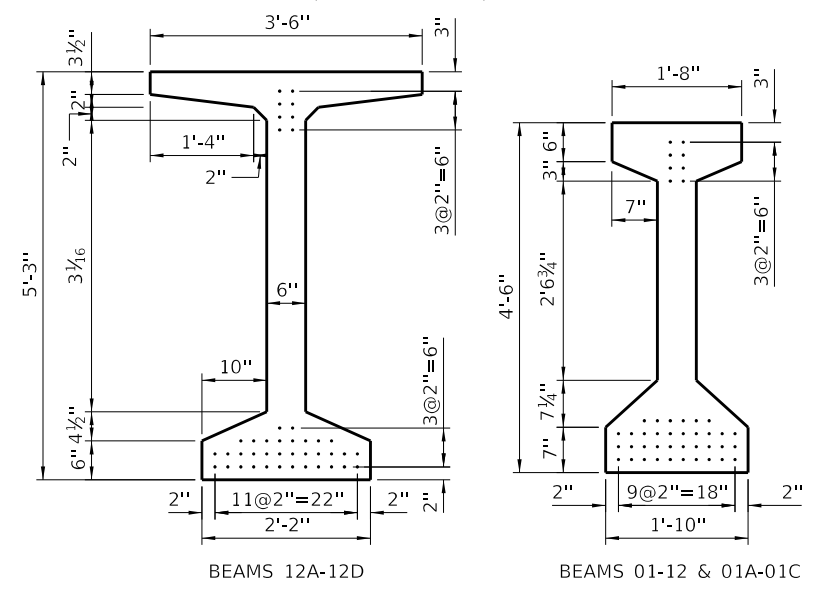


**BEAM REPAIR DETAIL**

- \* INCLUDED IN THE COST OF POLYMER MODIFIED PORTLAND CEMENT MORTAR
- \*\* FIBER WRAP SHALL EXTEND AT LEAST 6" BEYOND ALL SIDES OF POLYMER MODIFIED PORTLAND CEMENT MORTAR REPAIR.



**DIAPHRAGM OVER PIER REPAIR**



**TYPICAL BEAM SECTION (AT BEAM ENDS)**

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
HIGH PRESSURE EPOXY INJECTION	FOOT	111
FIBER WRAP REPAIR	SQ FT	75
POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	16

SAC-10 OF SAC-12

DRAWN BY JMM DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018

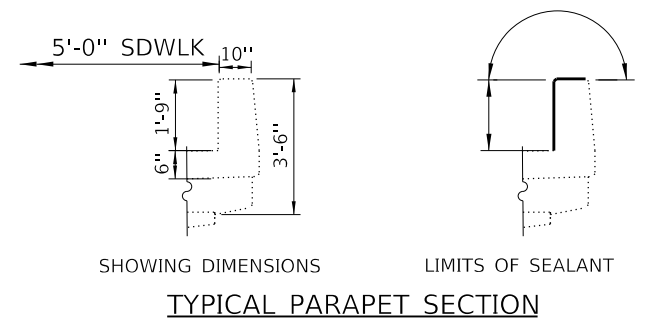
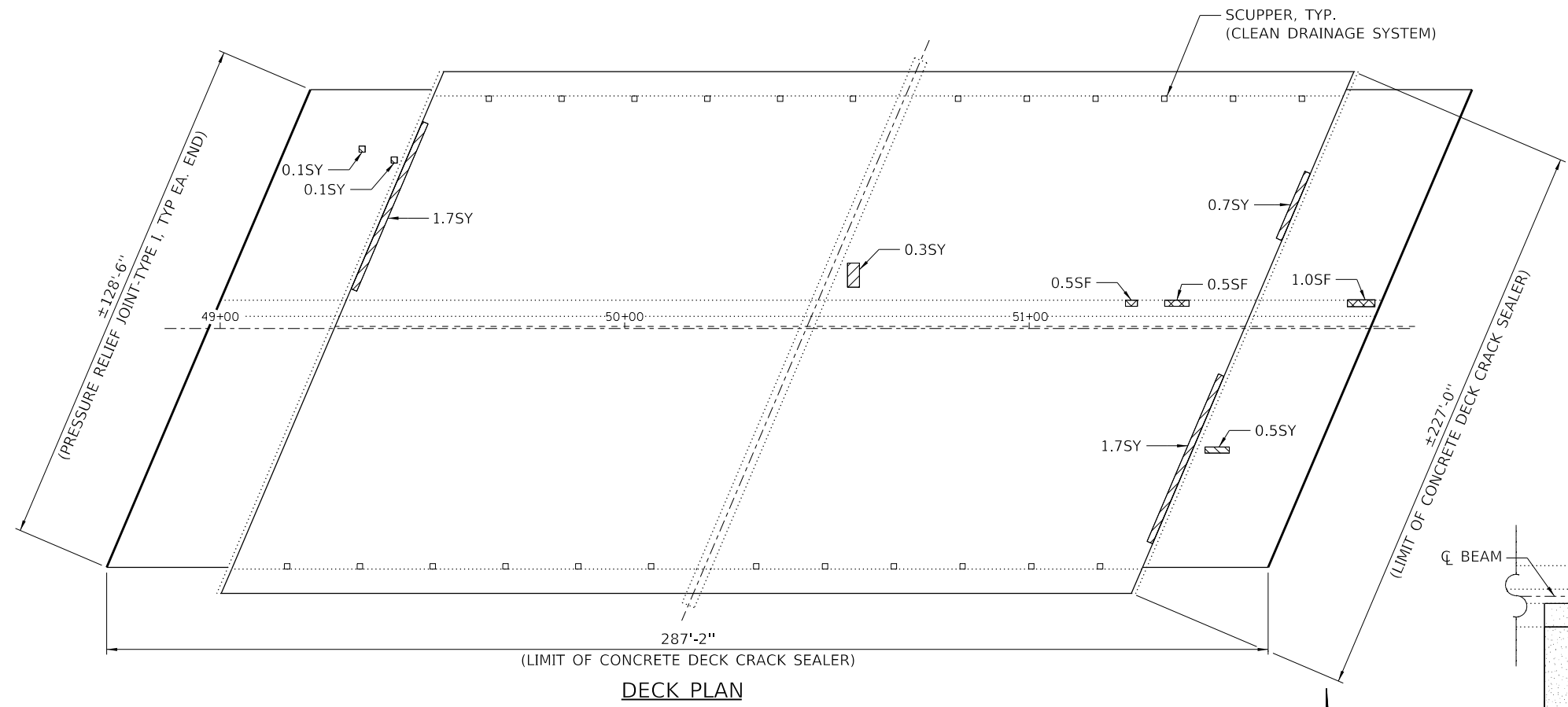


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1473 (S.N. 099-9943)  
 BEAM REPAIR DETAILS II

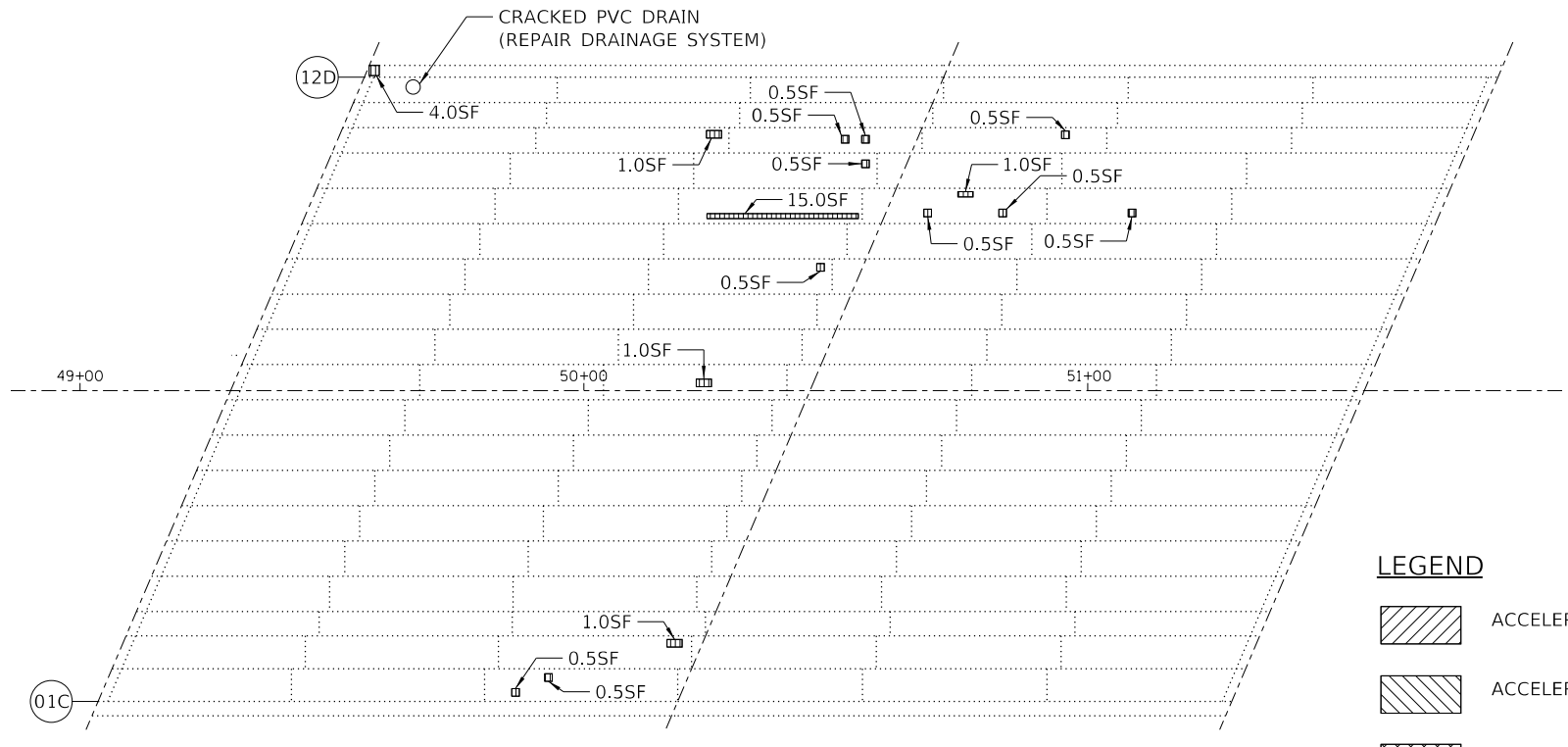
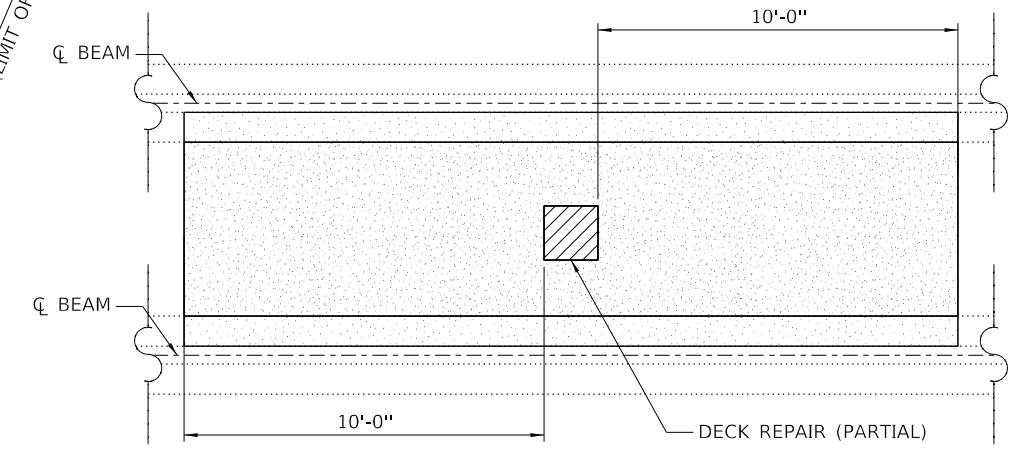
SHT NO. SAC-10  
 DRAWING NO. 897 OF 1517



**TYPICAL PARAPET CRACK SCHEDULE**  
(LOW PRESSURE EPOXY INJECTION)

LOCATION	LENGTH	NO. CRACKS	QUANTITY
INSIDE N. PARAPET	3'-0"	8	24
OUTSIDE N. PARAPET	3'-0"	8	24
INSIDE S. PARAPET	4'-0"	6	24
OUTSIDE S. PARAPET	5'-0"	4	20

NOTE:  
PARAPET MOUNTED SIGN ON OUTSIDE FACE OF NORTH PARAPET



**LEGEND**

- ACCELERATED DECK SLAB REPAIR (PARTIAL)
- ACCELERATED APPROACH SLAB REPAIR (PARTIAL)
- CONCRETE REPAIR (<5")
- PROTECTIVE SHIELD
- CLEAN AND PAINT EXPOSED REBAR

**REPAIR NOTES**

- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF DECK, SIDEWALKS, APPROACH SLABS, INSIDE FACE AND TOPS OF PARAPETS SHALL BE SEALED WITH BRIDGE DECK CONCRETE SEALER.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
PROTECTIVE SHIELD	SQ YD	198
REPAIR BRIDGE DRAINAGE SYSTEM	EACH	1
LOW PRESSURE EPOXY INJECTION	FOOT	92
ACCELERATED DECK SLAB REPAIR (PARTIAL)	SQ YD	5
ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ YD	1
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR THAN 5 IN)	SQ FT	2
CONCRETE PRESSURE RELIEF JOINT REPAIR-TYPE I	FOOT	257
BRIDGE DECK CONCRETE SEALER	SQ FT	30,774
CLEAN DRAINAGE SYSTEM	EACH	1
CLEANING AND PAINTING EXPOSED REBAR	SQ FT	29

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DRAWN BY JMM DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018



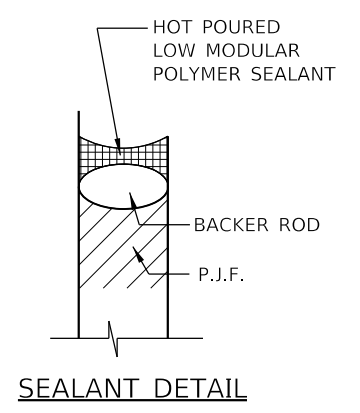
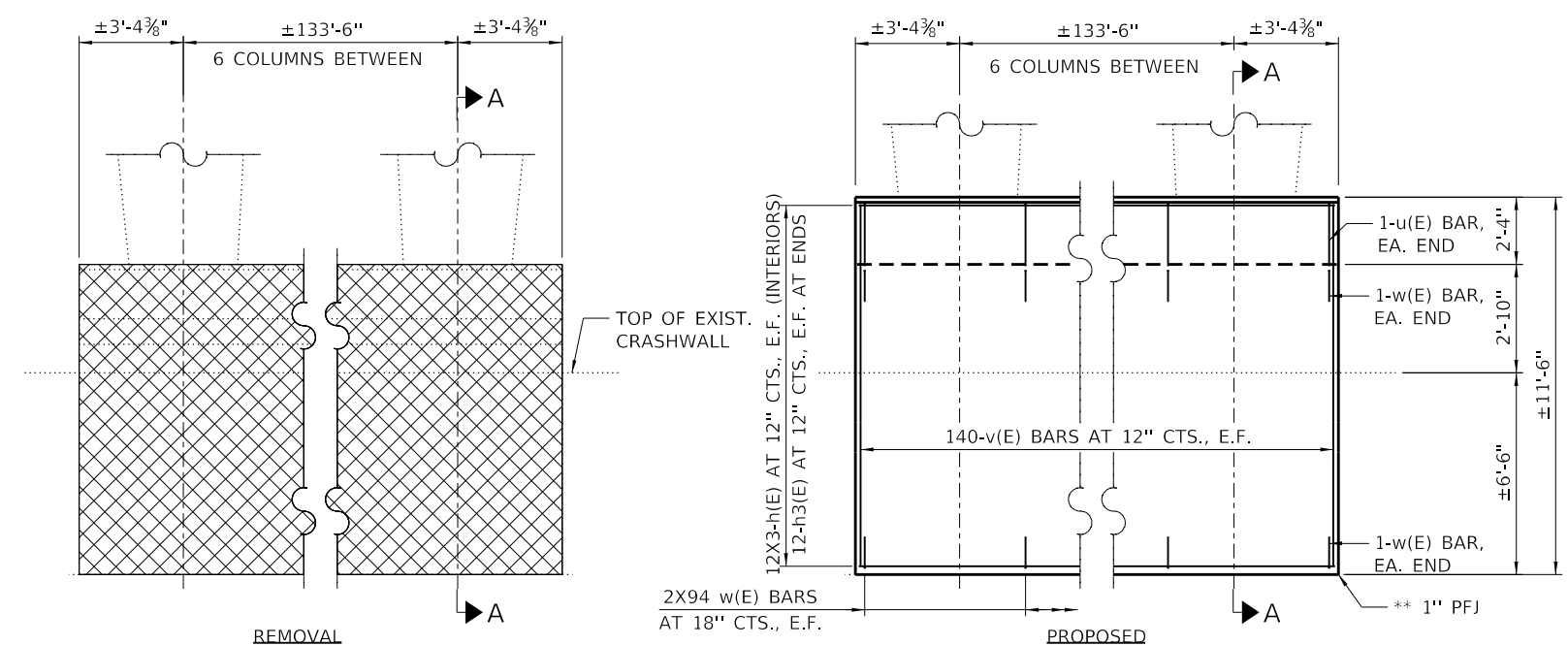
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1473 (S.N. 099-9943)  
DECK REPAIR DETAILS

SAC-11 OF SAC-12

SHT NO. SAC-11  
DRAWING NO. 898 OF 1517

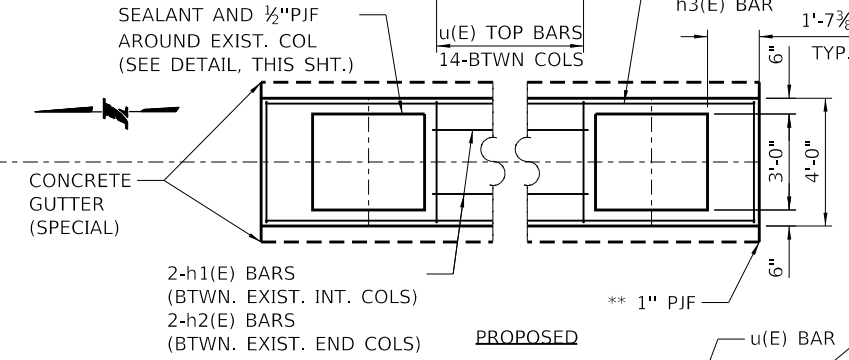
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 Contract 17-RR-4312.FEI Job 17-1163\4255\Working\CADD\_Sheets\SAC-BN\173-SAC12-CrashWall.dgn



**NOTES:**

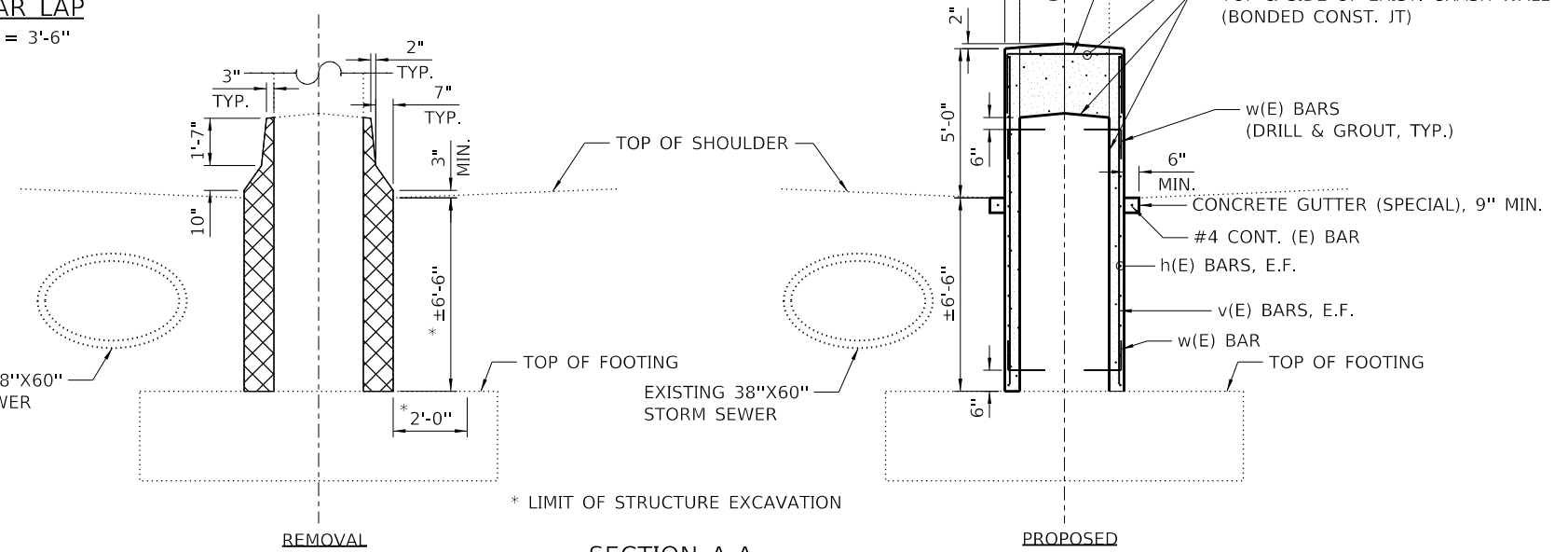
- REMOVE EXISTING CONCRETE CRASHWALL BACK TO FACE OF COLUMNS PRIOR TO PLACING CONCRETE AROUND EXISTING CRASHWALL AND COLUMNS. SURFACES TO RECEIVE NEW CONCRETE SHALL BE BLAST CLEANED. COST OF CLEANING SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL.
- CONCRETE MEDIAN BARRIER TRANSITION TAPER LENGTHS, PAY LIMITS AND MEASUREMENT, AND BASIS OF PAYMENT ALL IN ACCORDANCE WITH THE ILLINOIS TOLLWAY STANDARD DRAWING C13, C14 AND THE SPECIAL PROVISIONS.
- THE CLEAR COVER FOR REINFORCEMENT BARS TO THE SURFACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN.
- REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
- EXPOSED CONCRETE EDGES SHALL HAVE 3#4"x45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.
- CONCRETE SEALANT SHALL BE APPLIED TO THE EXPOSED SURFACES OF ALL NEW AND/OR MODIFIED PIER CRASH WALLS. BILL OF MATERIAL FOR "APPLY CONCRETE SEALANT" ON PIER REPAIR SHEET, SAC-08 OF SAC-12.
- E.F. DENOTES EACH FACE
- CONTRACTOR TO MAINTAIN STORM SEWER AND PROVIDE SOIL RETENTION AS REQUIRED, COST TO BE INCLUDED WITH "STRUCTURE EXCAVATION."
- BARS NOTED THUS, 3X2-#5 INDICATED 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

**ELEVATION**



\*\* 1" P.F. TO BE INCLUDED IN THE COST OF "CONCRETE STRUCTURES"

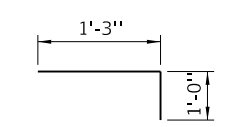
**PLAN**



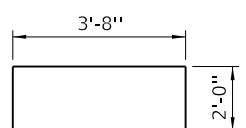
**MIN. BAR LAP**  
#5 BAR = 3'-6"

**SECTION A-A**

**LEGEND**



BAR w(E)



BAR u(E)

**BILL OF MATERIALS**

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	72	#5	30'-2"	—
h1(E)	10	#5	13'-8"	—
h2(E)	4	#5	12'-6"	—
h3(E)	48	#5	21'-5"	—
u(E)	100	#5	5'-9"	┌
v(E)	280	#5	11'-8"	—
w(E)	372	#4	2'-3"	┌
CONCRETE REMOVAL			CU YD	93.4
STRUCTURE EXCAVATION			CU YD	134.9
CONCRETE STRUCTURES			CU YD	68.8
REINFORCEMENT BARS, EPOXY COATED			POUND	8,110
CONCRETE GUTTER (SPECIAL)			FOOT	280

SAC-12 OF SAC-12

DRAWN BY JMM DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1473 (S.N. 099-9943)  
 CRASH WALL MODIFICATIONS  
 SHT NO. SAC-12  
 DRAWING NO. 899 OF 1517

EXISTING STRUCTURE, BN 1471, BUILT AS PART OF CONTRACT CIP-612 IN 1990, REPLACED IN 1997 AS PART OF CONTRACT CIP-93-700P, AND WIDENED TO ADD A SIDEWALK IN 2001 AS PART OF CONTRACT CIP-93-700W. BRIDGE REPAIR DONE BY VILLAGE OF WOODRIDGE, SPRING 2015, PARAPET REPLACEMENT, NORTH SIDEWALK. LENGTH IS 327'-0" BACK TO BACK OF APPROACH BENTS WITH TWO SPANS, 139'-0" AND 139'-0". 72" PPC BEAMS WITH INTEGRAL ABUTMENTS.

BENCH MARK: CHISEDED SQUARE CUT IN S.E. CORNER OF EXISTING S.E. WINGWALL ELEV. 781.230

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED MARCH 2017.

1997 AASHTO GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS, (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL SERVICES MANUAL ADOPTED JUNE 30, 2017.

**LOADING HS20-44**

(FROM 2002 RECORD PLANS)

ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE

75 PSF PEDESTRIAN LOADING

**DESIGN STRESSES**

FIELD UNITS

f<sub>c</sub> = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)

f<sub>c</sub> = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)

f<sub>c</sub> = 4,000 PSI (CLASS AX BRIDGE DECK & APPROACH SLAB REPAIRS)

f<sub>y</sub> = 60,000 PSI (REINFORCEMENT)

**HIGHWAY CLASSIFICATION**

83RD STREET (ON ROUTE)

FUNCTIONAL CLASS: URBAN

ADT: 10,700 (2016)

ADTT: 428 (2016)

I-355 (UNDER)

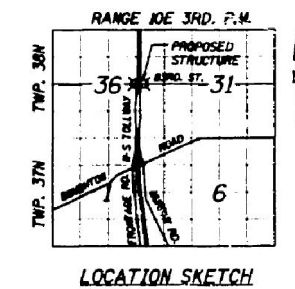
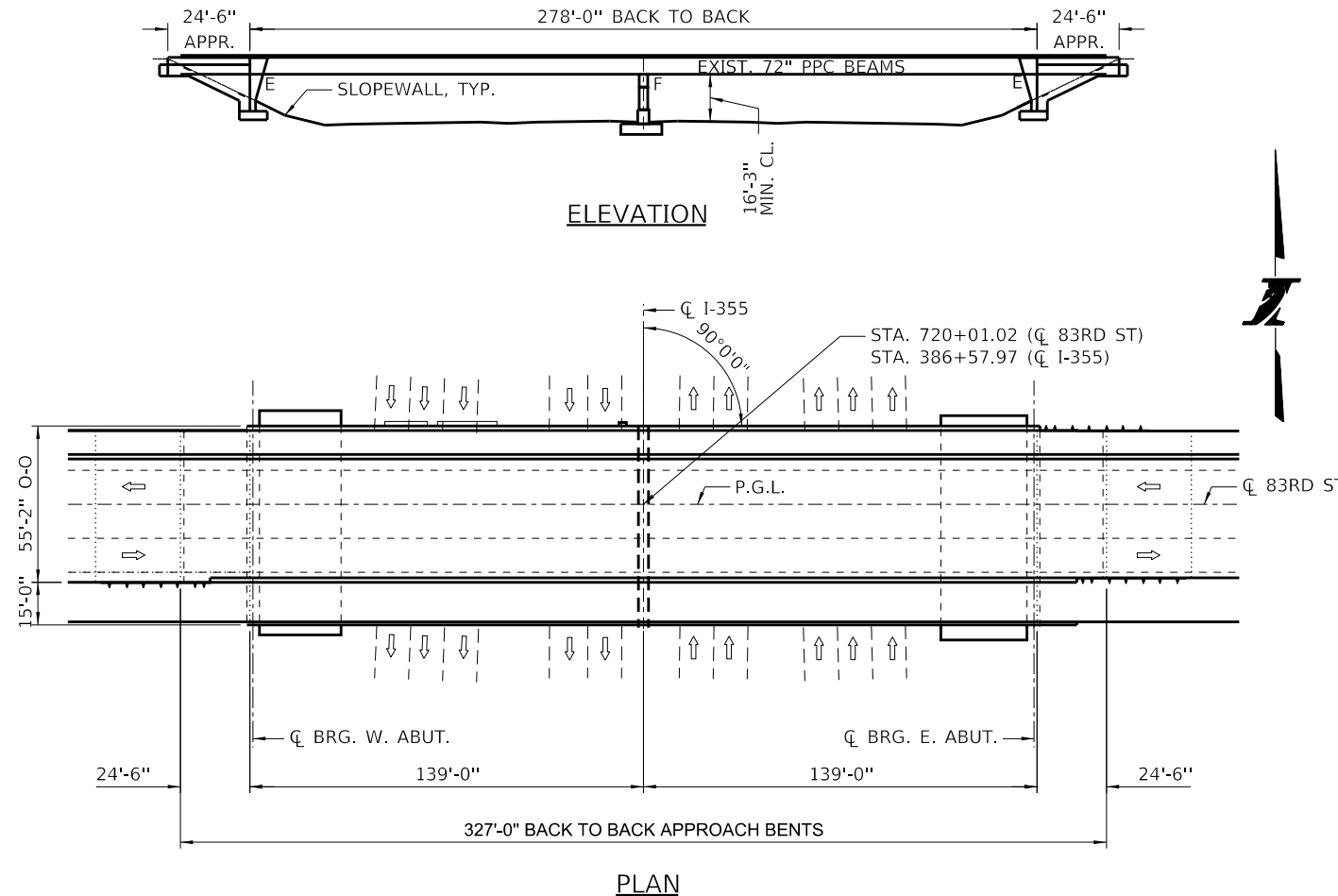
FUNCTIONAL CLASS: INTERSTATE

ADT: 123,900 (2015)

ADTT: 11,151 (2015)

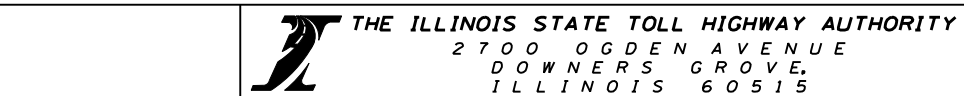
**PROPOSED SCOPE OF WORK**

1. RECONSTRUCT MEDIAN CRASHWALL AT BASE OF PIER.
2. HIGH PRESSURE EPOXY INJECT HAIRLINE CRACKS ON BEAMS.
3. APPLY CONCRETE SEALANT TO ABUTMENTS, BRIDGE SEATS, BACKWALLS, AND PIER.
4. REPAIR SPALLED AND DELAMINATED CONCRETE IN ABUTMENTS, PIERS, WINGWALLS, AND SLOPE WALLS.
5. CLEAN AND SEAL CRACKS WIDER THAN 1/16" AND ALL LEACHING CRACKS IN ABUTMENTS AND PIERS. SEAL ALL CRACKS IN SLOPEWALL GREATER THAN 1/2".
6. REPAIR SPALLED AND DELAMINATED CONCRETE WITH POLYMER CONCRETE CEMENT MORTAR WITH FIBER WRAP ON PPC BEAMS. FIBER WRAP TO ONLY BE APPLIED ON AREAS OVER SHOULDERS AND LANES OF TRAFFIC.
7. MODIFY EXISTING CRASHWALLS AT PIER TO MEET CURRENT TOLLWAY STANDARDS.



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DRAWN BY RAL DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018



NO.		DATE	REVISIONS DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1471 (S.N. 022-9986)  
 GENERAL PLAN AND ELEVATION

SHT NO. SAD-01  
 DRAWING NO. 900 OF 1517

SAD-01 OF SAD-08



**GENERAL NOTES**

**CONSTRUCTION**

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION TOLERANCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
2. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
3. NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
4. THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COSTS WILL BE AT THE CONTRACTOR'S EXPENSE.
5. NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINES BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E. 1-800-892-0123.
7. EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH THAT FOR, "CONCRETE REMOVAL".
8. WHENEVER THE MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF THE EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
9. CONCRETE SEALANT SHALL BE APPLIED TO THE REPAIRED AREAS OF THE VISIBLE FACES OF THE PIER COLUMNS, CRASHWALLS AND CAPS, PIERS AND ABUTMENTS, BACKWALLS, AND BEARING SEATS. EXISTING SURFACES SHALL BE POWERED WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
10. AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
11. ALL DIMENSIONS ARE TAKEN FROM THE FOLLOWING EXISTING PLANS:  
TOLLWAY CONTRACT NO. CIP-93-700P (1997).  
TOLLWAY CONTRACT NO. CIP-93-700W (2001).
12. THE TOP OF THE DECK IS MAINTAINED BY THE VILLAGE OF WOODBRIDGE.

**GENERAL NOTES (CONT.)**

**CAST-IN-PLACE CONCRETE**

1. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF 1 FOOT BELOW FINISHED GROUND LEVEL.

**REINFORCING BARS**

1. REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM 706), GRADE 60, DEFORMED BARS.
2. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY-COATED.
3. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION.
4. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
5. COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

**ABBREVIATIONS**

- ABUT. - ABUTMENT
- APPROX. - APPROXIMATE
- BPJS - BONDED PREFORMED JOINT SEAL
- BRG. - BEARING
- CL. - CLEAR
- DIM. - DIMENSION
- E. - EAST
- ELEV. - ELEVATION
- EXIST. - EXISTING
- MAX. - MAXIMUM
- MIN. - MINIMUM
- N. - NORTH
- N.B. - NORTHBOUND
- NO. - NUMBER
- P.G.L. - PROFILE GRADE LINE
- S. - SOUTH
- S.B. - SOUTHBOUND
- SDWK. - SIDEWALK
- SHLDR. - SHOULDER
- STA. - STATION
- TYP. - TYPICAL
- W. - WEST

**LIST OF SHEETS**

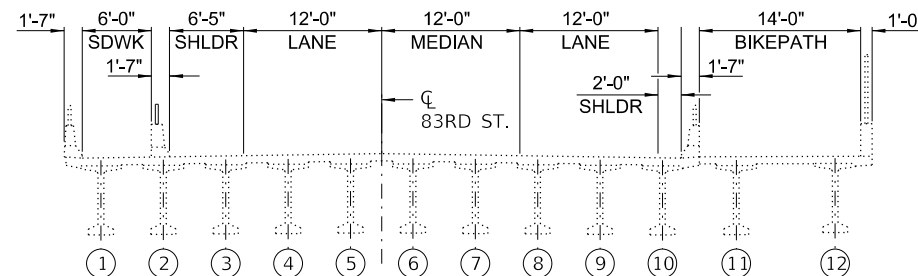
SAD-01	GENERAL PLAN AND ELEVATION
SAD-02	GENERAL DATA
SAD-03	ABUTMENT REPAIR DETAILS
SAD-04	WINGWALL REPAIR DETAILS
SAD-05	SLOPEWALL REPAIR DETAILS
SAD-06	PIER REPAIR DETAILS
SAD-07	BEAM REPAIR DETAILS
SAD-08	CRASH WALL MODIFICATIONS

**TOTAL BILL OF MATERIALS**

(BN 1471)

	ITEM	UNIT	SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL	RECORD QUANTITIES
	50102400 CONCRETE REMOVAL	CU YD	13.0	-	13.0	
	50200100 STRUCTURE EXCAVATION	CU YD	12.5	-	12.5	
	50300225 CONCRETE STRUCTURES	CU YD	22.5	-	22.5	
	50800205 REINFORCEMENT BARS, EPOXY COATED	POUND	2,720	-	2,720	
*	J1606050 CONCRETE GUTTER (SPECIAL)	FOOT	140	-	140	
*	JS121200 LOW PRESSURE EPOXY INJECTION	FOOT	46	-	46	
*	JS121300 HIGH PRESSURE EPOXY INJECTION	FOOT	-	68	68	
*	JT503100 FIBER WRAP REPAIR	SQ FT	-	28	28	
GBSP	JT524010 APPLY CONCRETE SEALANT	SQ FT	3,436.0	-	3,436.0	
**	X0322194 POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	-	1	1	
**	X0323419 SLOPEWALL CRACK SEALING	FOOT	140	-	140	
**	Z0065700 SLOPEWALL REPAIR	SQ YD	7.5	-	7.5	

- \* TOLLWAY SPECIAL PROVISION ITEM
- \*\* IDOT SPECIAL PROVISION ITEM
- GBSP IDOT GUIDE BRIDGE SPECIAL PROVISION



**TYPICAL CROSS SECTION**  
(LOOKING EAST)

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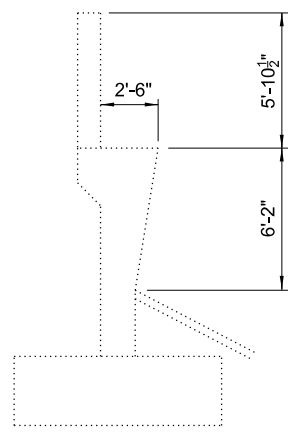
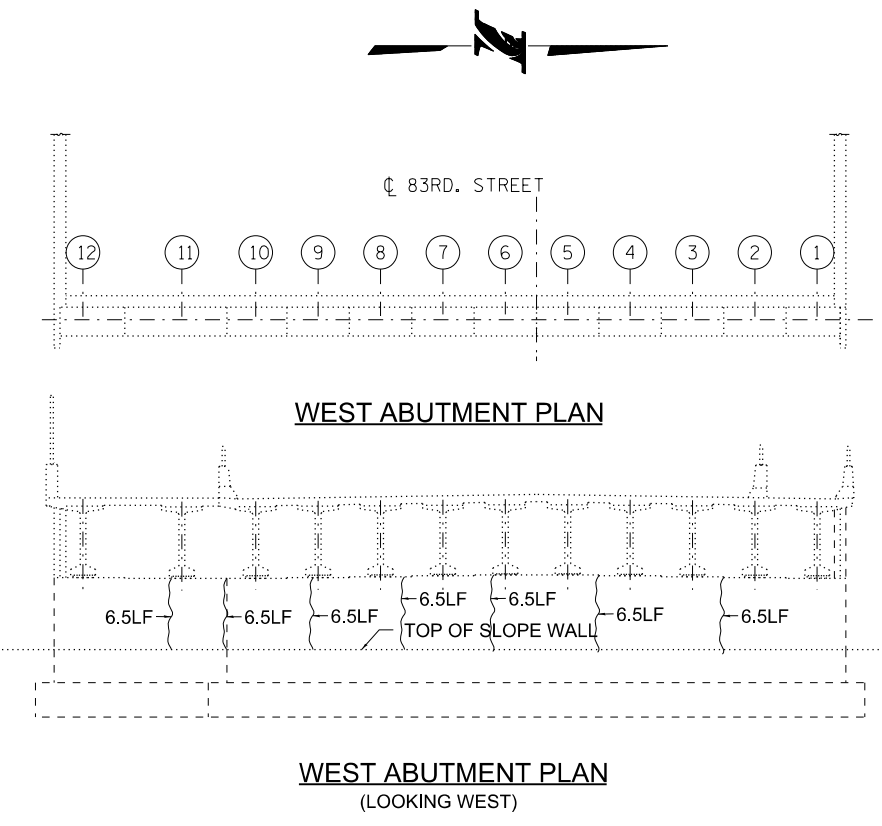
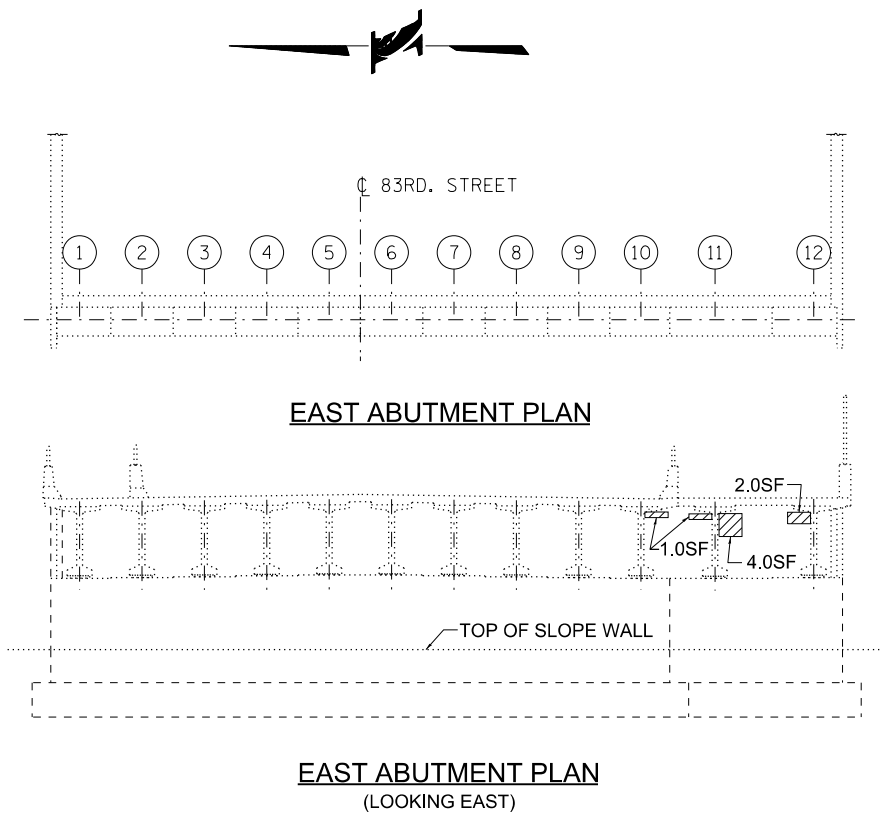
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CHECKED BY PRD DATE 03/11/2018



REVISIONS	
NO.	DATE DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1471 (S.N. 022-9986)  
GENERAL DATA

SAD-02 OF SAD-08  
SHT NO. SAD-02  
DRAWING NO. 901 OF 1517



**SECTION THRU ABUTMENT**  
(SHOWING LIMITS OF CONCRETE SEALANT)

**LEGEND**

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF ABUTMENTS SHALL BE SEALED WITH CONCRETE SEALANT.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	46
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	8.0
APPLY CONCRETE SEALANT	SQ FT	302.0

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CHECKED BY PRD DATE 03/11/2018

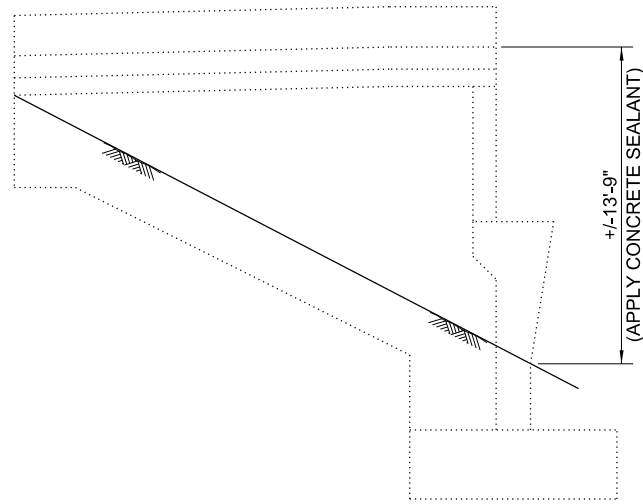


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NO.	DATE	

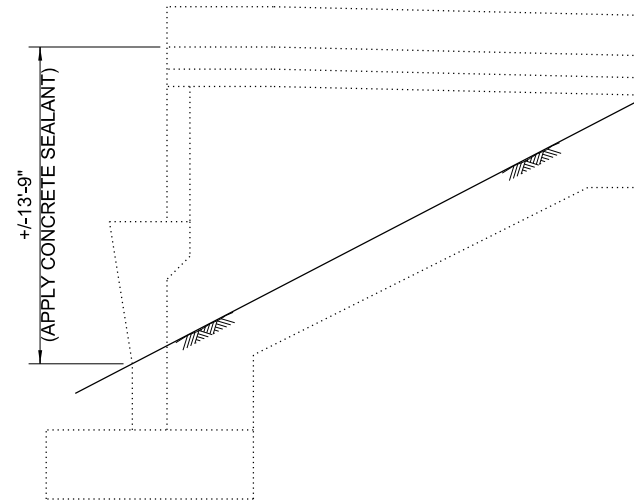
CONTRACT NO. RR-16-4255  
BRIDGE NO. 1471 (S.N. 022-9986)  
ABUTMENT REPAIR DETAILS

SHT NO. SAD-03  
DRAWING NO. 902 OF 1517

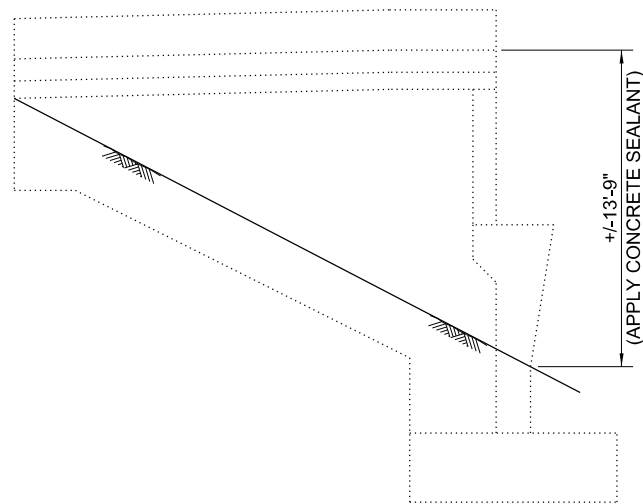
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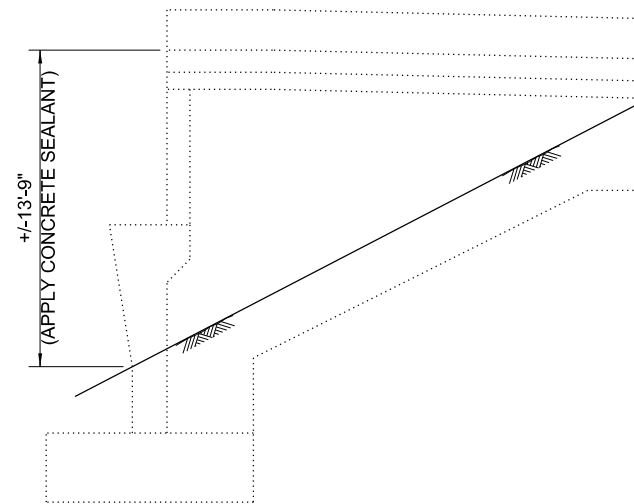
NORTH EAST ELEVATION



NORTH WEST ELEVATION



SOUTH WEST ELEVATION



SOUTH EAST ELEVATION

REPAIR NOTES

1. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
2. ALL EXPOSED FACES OF CLOSURE WALLS SHALL BE SEALED WITH CONCRETE SEALANT.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
APPLY CONCRETE SEALANT	SQ FT	812

SAD-04 OF SAD-08

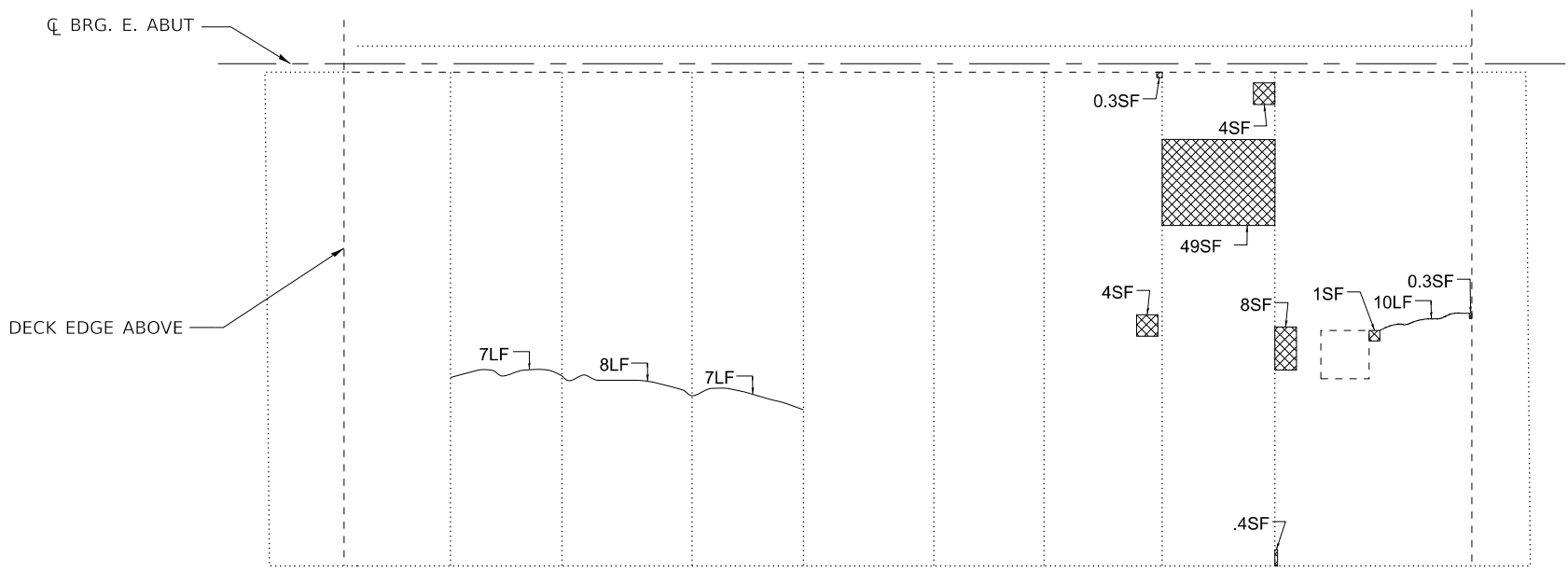
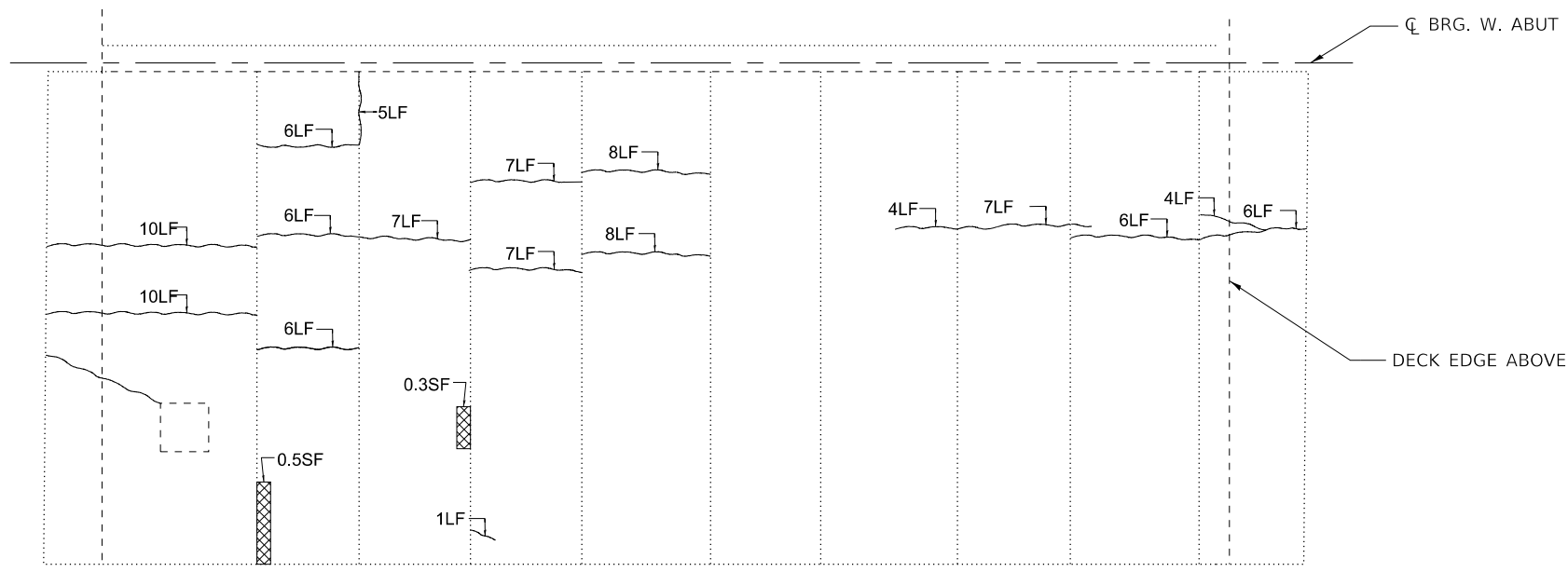
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 CHECKED BY PRD DATE 03/11/2018



REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1471 (S.N. 022-9986)  
 WINGWALL REPAIR DETAILS

SHT NO. SAD-04  
 DRAWING NO.  
 903 OF 1517



**LEGEND**

- CRACKS TO BE SLOPE WALL CRACK SEALING
- SLOPEWALL REPAIR

**REPAIR NOTES**

1. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
2. CRACKS (> 1/2") IN SLOPEWALLS SHALL BE SEALED.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
SLOPE WALL CRACK SEALING	FOOT	140
SLOPEWALL REPAIR	SQ YD	7.5

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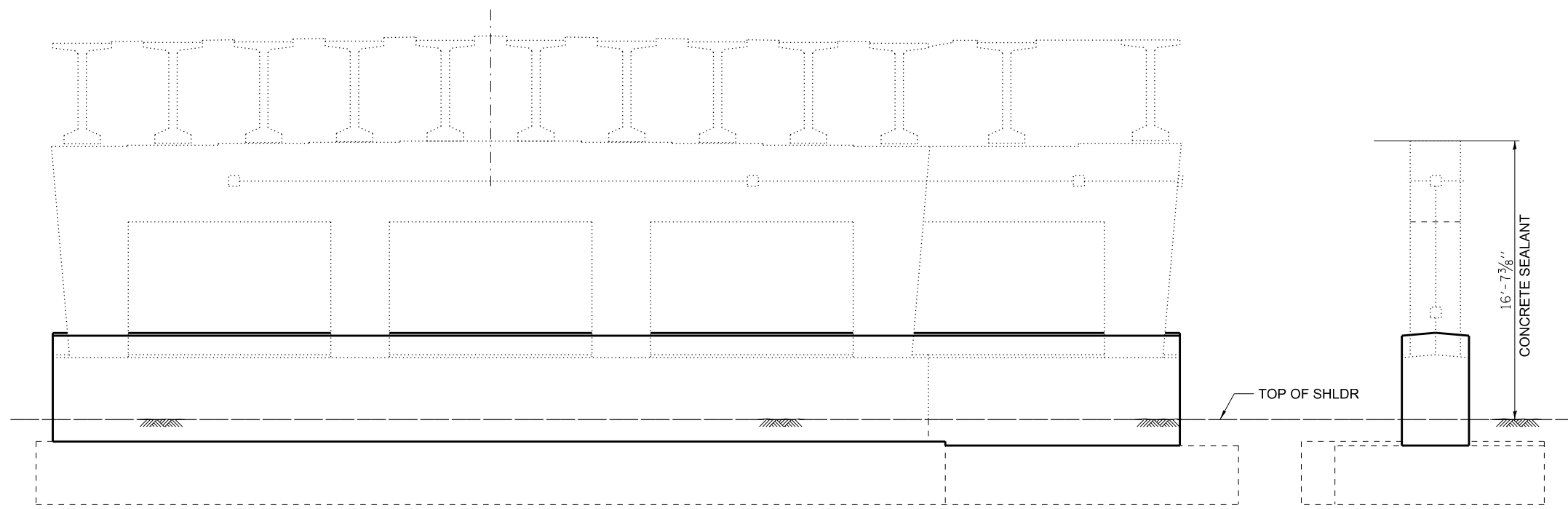


REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1471 (S.N. 022-9986)  
 SLOPEWALL REPAIR DETAILS

SHT NO. SAD-05  
 DRAWING NO. 904 OF 1517

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**ELEVATION**  
(LOOKING EAST)

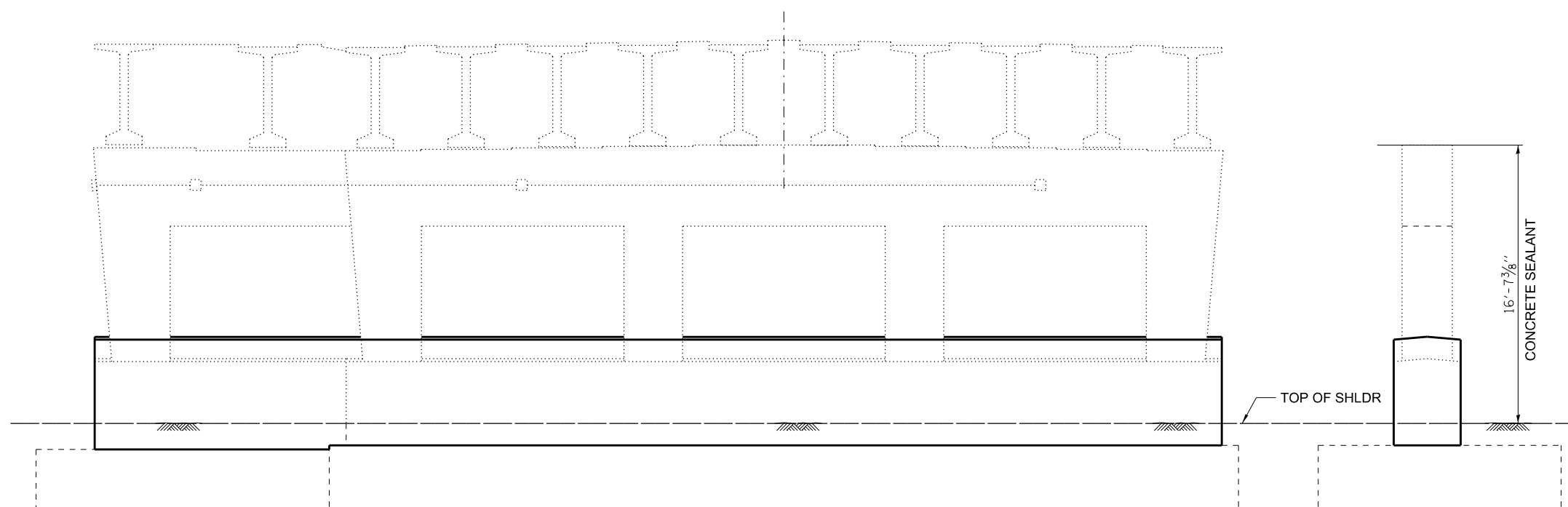
**END VIEW**  
(LOOKING NORTH)

**LEGEND**

{ CRACKS TO BE LOW PRESSURE EPOXY INJECTED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF PIER SHALL BE SEALED WITH CONCRETE SEALANT.
4. REPAIRS ON THE DIAPHRAGMS ARE INCLUDED WITH SUPERSTRUCTURE.
5. FOR CRASH WALL UPGRADES, SEE SHEET SAD-07 OF SAD-07.



**ELEVATION**  
(LOOKING WEST)

**END VIEW**  
(LOOKING SOUTH)

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
APPLY CONCRETE SEALANT	SQ FT	2322.0

DRAWN BY RAL DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018

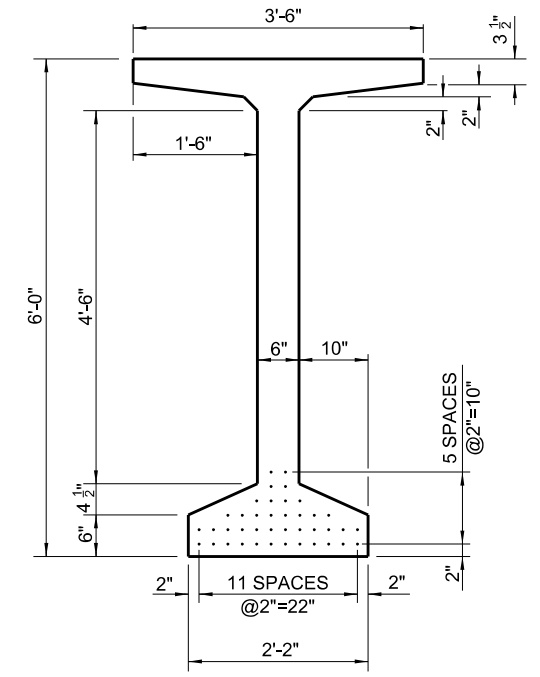
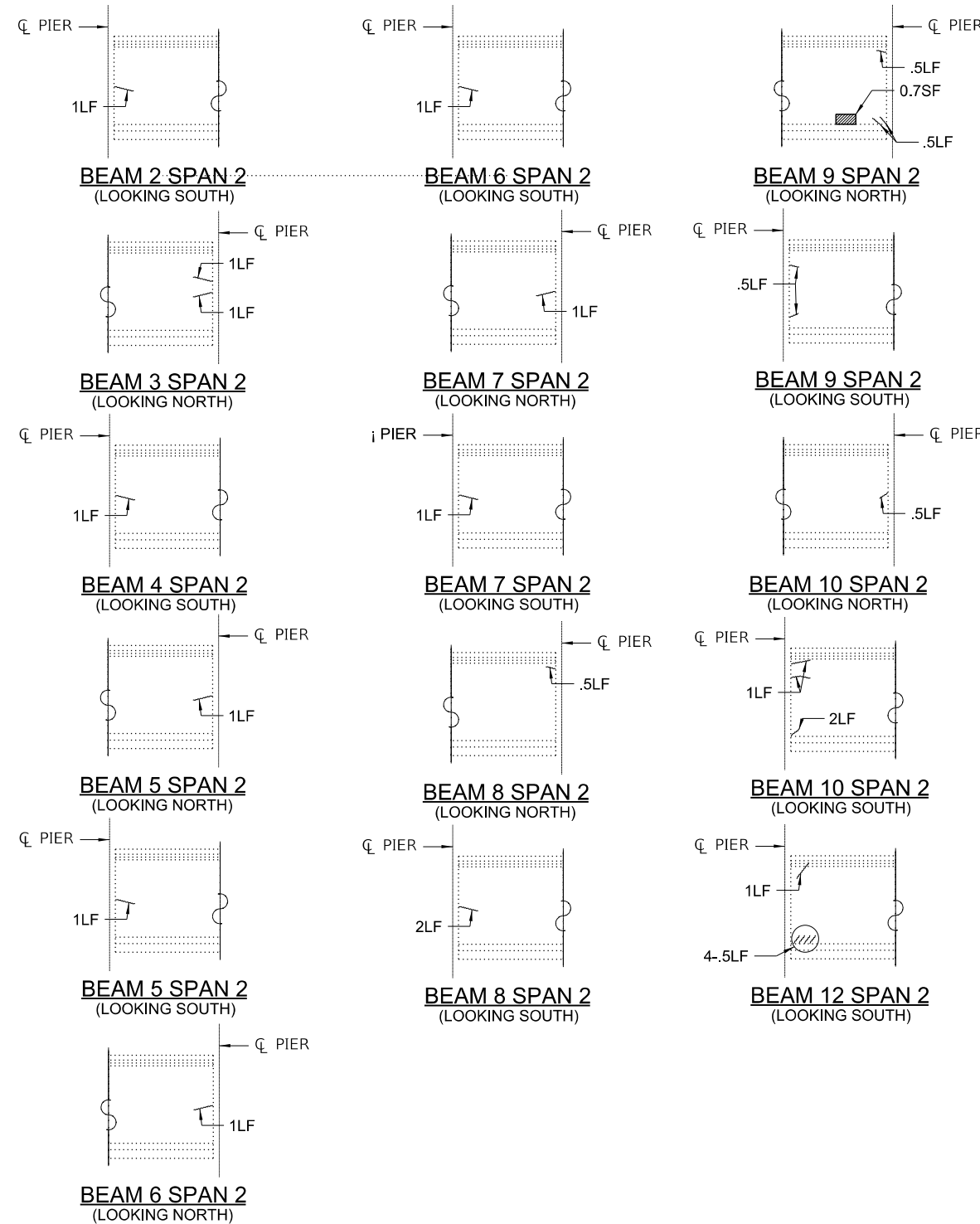
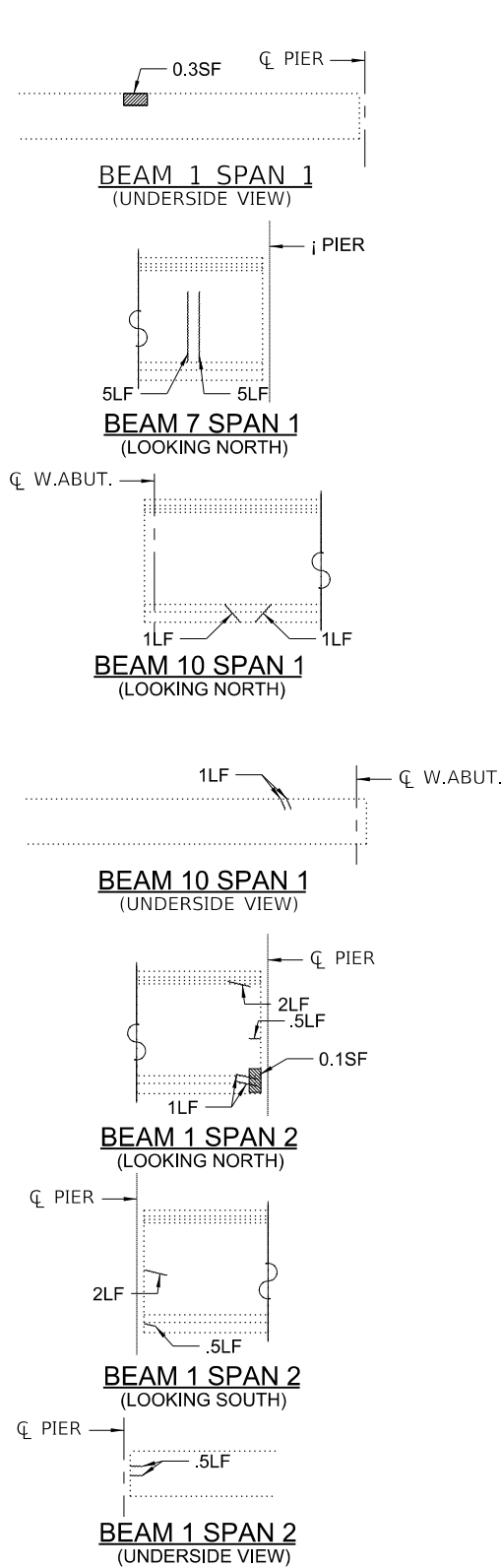


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.	DATE	REVISIONS	
		DESCRIPTION	

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1471 (S.N. 022-9986)  
 PIER REPAIR DETAILS

SAD-06 OF SAD-08  
 SHT NO. SAD-06  
 DRAWING NO.  
 905 OF 1517



TYPICAL BEAM SECTION  
(AT BEAM ENDS)

**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<math>< \frac{1}{16}</math>") SHALL BE HIGH PRESSURED EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
HIGH PRESSURE EPOXY INJECTION	FOOT	68
FIBER WRAP REPAIR	SQ FT	28
POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	1

SAD-07 OF SAD-8

DRAWN BY RAL DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018



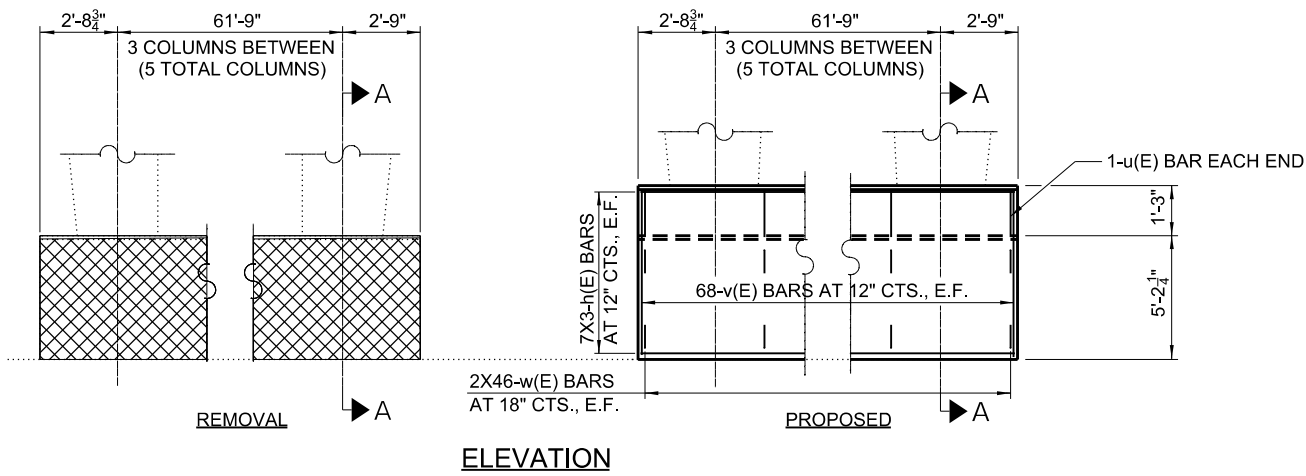
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1471 (S.N. 022-9986)  
 BEAM REPAIR DETAILS

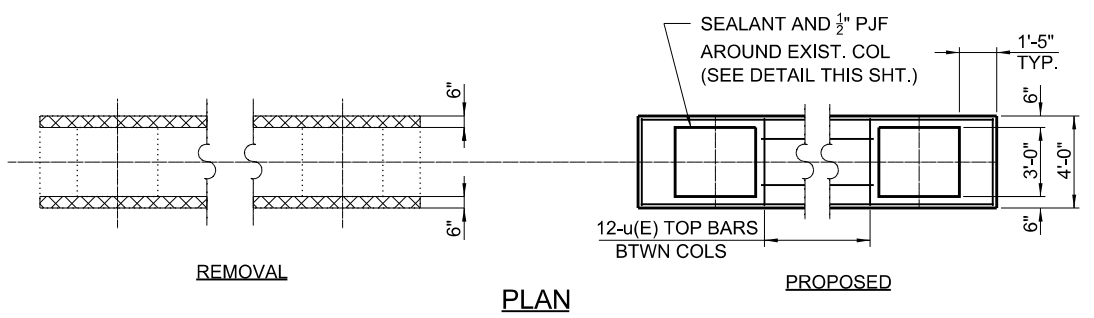
SHT NO. SAD-07  
 DRAWING NO.  
 906 OF 1517

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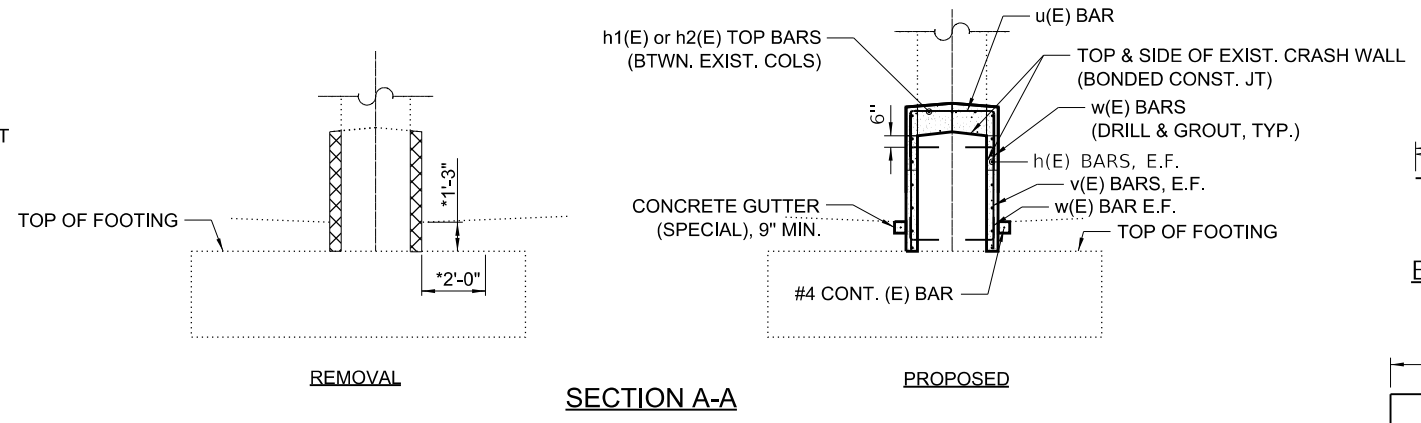
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**ELEVATION**



**PLAN**

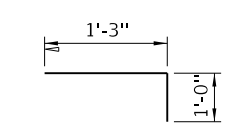


**SECTION A-A**

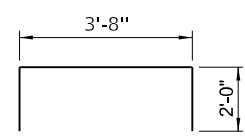


**LEGEND**

Concrete Removal



**BAR w(E)**



**BAR u(E)**

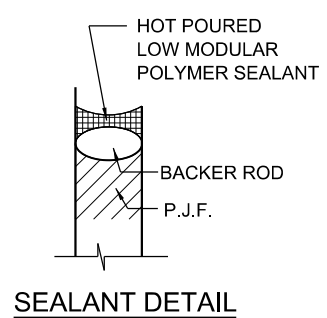
**NOTES:**

1. REMOVE EXISTING CONCRETE CRASHWALL BACK TO FACE OF COLUMNS PRIOR TO PLACING CONCRETE AROUND EXISTING CRASHWALL AND COLUMNS. SURFACES TO RECEIVE NEW CONCRETE SHALL BE BLAST CLEANED. COST OF CLEANING SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL.
2. CONCRETE MEDIAN BARRIER TRANSITION TAPER LENGTHS, PAY LIMITS AND MEASUREMENT, AND BASIS OF PAYMENT ALL IN ACCORDANCE WITH THE ILLINOIS TOLLWAY STANDARD DRAWING C13, C14 AND THE SPECIAL PROVISIONS.
3. THE CLEAR COVER FOR REINFORCEMENT BARS TO THE SURFACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. EXPOSED CONCRETE EDGES SHALL HAVE 3#4"x45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.
6. CONCRETE SEALANT SHALL BE APPLIED TO THE EXPOSED SURFACES OF ALL NEW AND/OR MODIFIED PIER CRASH WALLS. BILL OF MATERIALS FOR "APPLY CONCRETE SEALANT" LOCATED ON SHEETS SAD-06 OF SAD-08.
7. E.F. DENOTES EACH FACE
8. CONTRACTOR TO MAINTAIN STORM SEWER AND PROVIDE SOIL RETENTION AS REQUIRED, COST TO BE INCLUDED WITH "STRUCTURE EXCAVATION."
9. BARS NOTED THUS, 7X3-#5 INDICATED 7 LINES OF BARS WITH 3 LENGTHS OF BARS PER LINE.
10. WORK THIS SHEET WITH SAD-06.

**BILL OF MATERIALS**

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	42	#5	24'-9"	—
h1(E)	6	#5	11'-10"	—
h2(E)	4	#5	11'-0"	—
u(E)	50	#5	7'-8"	┌
v(E)	136	#5	5'-11"	—
w(E)	184	#4	2'-3"	┌
CONCRETE REMOVAL			CU YD	13.0
STRUCTURE EXCAVATION			CU YD	12.5
CONCRETE STRUCTURES			CU YD	22.5
REINFORCEMENT BARS, EPOXY COATED			POUND	2,720
CONCRETE GUTTER (SPECIAL)			FOOT	140

**MIN. BAR LAP**  
#5 BAR = 3'-6"



**SEALANT DETAIL**

SAD-08 OF SAD-08

DRAWN BY RAL DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1471 (S.N. 022-9986)  
CRASH WALL MODIFICATIONS

SHT NO. SAD-08  
DRAWING NO. 907 OF 1517

EXISTING STRUCTURES, BN 1469 AND BN 1470, BUILT AS PART OF CONTRACT CIP-612 IN 1990, REPAIRED IN 2010 AS PART OF CONTRACT RR-08-5475, AND CURRENTLY (2018) UNDERGOING DECK AND JOINT REPAIRS AS PART OF SECTION 17-JTREP-00-BR. LENGTH IS 211'-6" CL TO CL OF ABUTMENTS WITH TWO SPANS, 102'-6" AND 109'-0". 60" PPC BEAMS WITH INTEGRAL ABUTMENTS.

BENCH MARK: N/A

**PROPOSED SCOPE OF WORK**

1. REPAIR SPALLED AND DELAMINATED CONCRETE IN ABUTMENTS, PIERS, WINGWALLS, AND SLOPE WALLS.
2. CLEAN AND SEAL CRACKS WIDER THAN 1/16" AND ALL LEACHING CRACKS IN ABUTMENTS AND PIERS. SEAL ALL CRACKS IN SLOPEWALL GREATER THAN 1/2".
3. CLEAN AND SEAL ALL CRACKS ON PPC BEAMS.

**PROPOSED SCOPE OF WORK (CONT.)**

4. REPAIR SPALLED AND DELAMINATED CONCRETE WITH POLYMER CONCRETE CEMENT MORTAR WITH FIBER WRAP ON PPC BEAMS.
5. APPLY CONCRETE SEALANT TO ABUTMENTS, BRIDGE SEATS, BACKWALLS AND PIERS.
6. MODIFY EXISTING CRASHWALL AT PIER TO MEET CURRENT TOLLWAY STANDARDS.

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED MARCH 2017.

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS, (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL SERVICES MANUAL ADOPTED JUNE 30, 2017.

**LOADING HS20-44**

(FROM 1990 PLANS)

ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE

**DESIGN STRESSES**

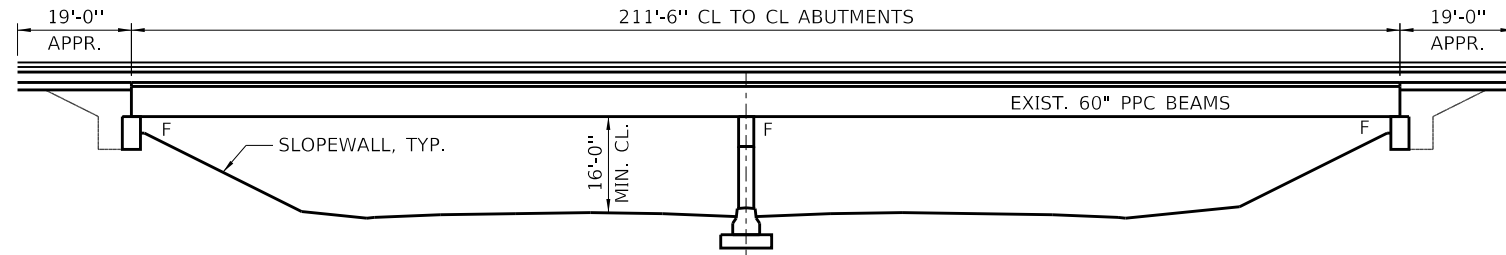
**FIELD UNITS**

- f'c = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)
- f'c = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)
- f'c = 4,000 PSI (CLASS AX BRIDGE DECK & APPROACH SLAB REPAIRS)
- fy = 60,000 PSI (REINFORCEMENT)

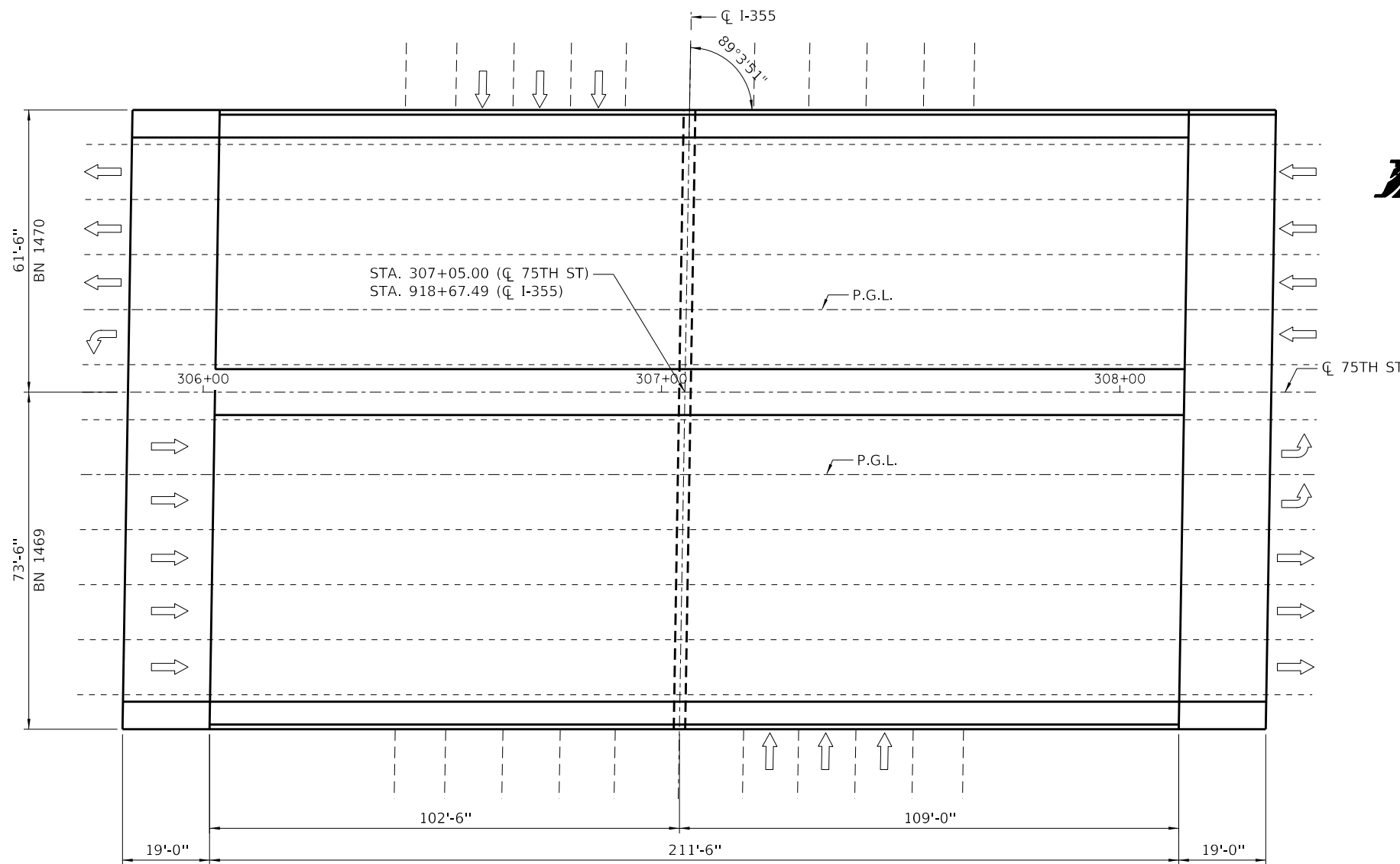
**HIGHWAY CLASSIFICATION**

75TH STREET (ON ROUTE)  
FUNCTIONAL CLASS: URBAN  
ADT: 32,700 (2016)  
ADTT: 1,926 (2016)

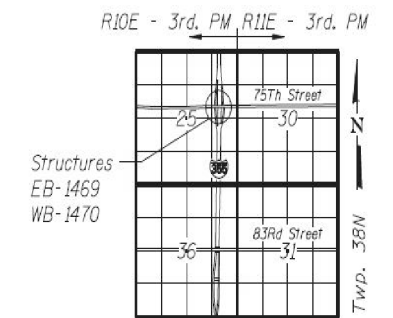
I-355 (UNDER)  
FUNCTIONAL CLASS: INTERSTATE  
ADT: 123,900 (2015)  
ADTT: 11,151 (2015)



**ELEVATION**



**PLAN**



**LOCATION SKETCH**

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DRAWN BY JJS DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018



REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
GENERAL PLAN AND ELEVATION

SAE-01 OF SAE-13  
SHT NO. SAE-01  
DRAWING NO. 908 OF 1517



**GENERAL NOTES**

**CONSTRUCTION**

- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION TOLERANCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
- CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
- NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
- THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COSTS WILL BE AT THE CONTRACTOR'S EXPENSE.
- NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINES BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E. 1-800-892-0123.
- EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH THAT FOR, "CONCRETE REMOVAL".
- WHENEVER THE MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF THE EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
- CONCRETE SEALANT SHALL BE APPLIED TO THE REPAIRED AREAS OF THE VISIBLE FACES OF THE PIER COLUMNS, CRASHWALLS, AND PIER CAPS. EXISTING SURFACES SHALL BE POWERED WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS. AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
- ALL DIMENSIONS ARE TAKEN FROM THE FOLLOWING EXISTING PLANS:  
TOLLWAY CONTRACT NO. RR-08-5475 (2011) AND CIP-612 (1989).
- THE TOP OF THE DECK IS MAINTAINED BY DUPAGE COUNTY.

**GENERAL NOTES (CONT.)**

**CAST-IN-PLACE CONCRETE**

- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/8" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF 1 FOOT BELOW FINISHED GROUND LEVEL.

**REINFORCING BARS**

- REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM 706), GRADE 60, DEFORMED BARS.
- REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY-COATED.
- REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION.
- REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
- COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

**ABBREVIATIONS**

ABUT.	- ABUTMENT
APPROX.	- APPROXIMATE
BPJS	- BONDED PREFORMED JOINT SEAL
BRG.	- BEARING
CL.	- CLEAR
DIM.	- DIMENSION
E.	- EAST
ELEV.	- ELEVATION
EXIST.	- EXISTING
MAX.	- MAXIMUM
MIN.	- MINIMUM
N.	- NORTH
N.B.	- NORTHBOUND
NO.	- NUMBER
P.G.L.	- PROFILE GRADE LINE
S.	- SOUTH
S.B.	- SOUTHBOUND
SDWK	- SIDEWALK
SHLDR.	- SHOULDER
STA.	- STATION
TYP.	- TYPICAL
W.	- WEST

**LIST OF SHEETS**

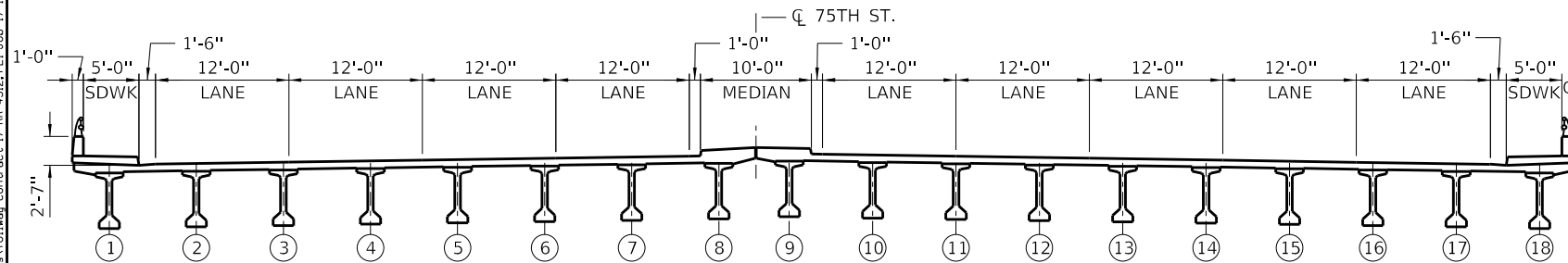
SAE-01	GENERAL PLAN AND ELEVATION
SAE-02	GENERAL DATA, SOQ, CROSS SECTION, AND LIST OF SHEETS
SAE-03	EAST ABUTMENT REPAIR DETAILS
SAE-04	WEST ABUTMENT REPAIR DETAILS
SAE-05	WINGWALL REPAIR DETAILS
SAE-06	SLOPEWALL REPAIR DETAILS
SAE-07	PIER REPAIR DETAILS I
SAE-08	PIER REPAIR DETAILS II
SAE-09	BEAM REPAIR DETAILS I
SAE-10	BEAM REPAIR DETAILS II
SAE-11	BEAM REPAIR DETAILS III
SAE-12	NORTH CRASH WALL MODIFICATIONS
SAE-13	SOUTH CRASH WALL MODIFICATIONS

**TOTAL BILL OF MATERIALS  
(BN 1469 & BN 1470)**

CODE	ITEM	UNIT	SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL	RECORDED QUANTITIES
50102400	CONCRETE REMOVAL	CU YD	45.7	-	45.7	
50200100	STRUCTURE EXCAVATION	CU YD	39.2	-	39.2	
50300225	CONCRETE STRUCTURES	CU YD	21.5	-	21.5	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	5,290	-	5,290	
* JI606050	CONCRETE GUTTER (SPECIAL)	FOOT	264	-	264	
* JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	48	306	354	
JS121300	HIGH PRESSURE EPOXY INJECTION	FOOT	-	372	372	
* JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	43	353	396	
* JT503100	FIBER WRAP REPAIR	SQ FT	-	18	18	
* JT524010	APPLY CONCRETE SEALANT	SQ FT	8,876	1,253	10,129	
* JT599105	SLOPEWALL GAP FILLER REMOVAL AND REPLACEMENT	SQ FT	302	-	302	
* X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	-	48	48	
X0323491	SLOPEWALL CRACK SEALING	FOOT	306	-	306	
** Z0065700	SLOPEWALL REPAIR	SQ YD	4	-	4	

\* TOLLWAY SPECIAL PROVISION ITEM  
\*\* IDOT SPECIAL PROVISION ITEM  
GBSP IDOT GUIDE BRIDGE SPECIAL PROVISION

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**TYPICAL CROSS SECTION**  
(LOOKING EAST)

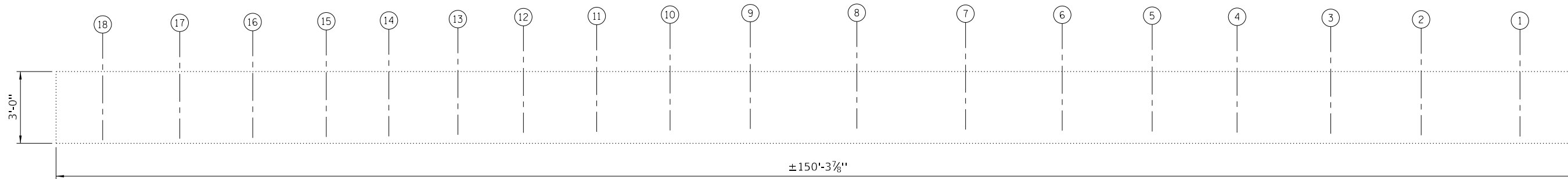
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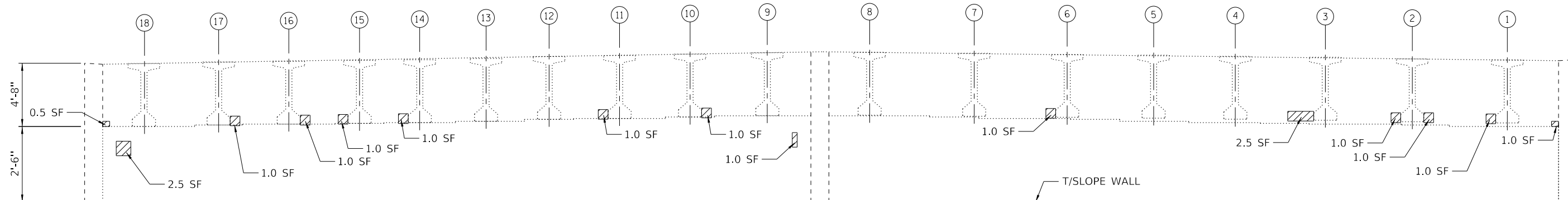
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NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
GENERAL DATA  
SHT NO. SAE-02  
DRAWING NO. 909 OF 1517

SAE-02 OF SAE-13



PLAN



ELEVATION

**LEGEND**

- {      CRACKS TO BE LOW PRESSURE EPOXY INJECTED
- ▨      STRUCTURAL CONCRETE REPAIR (<5")

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF ABUTMENT SHALL BE SEALED WITH CONCRETE SEALANT.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	18

SAE-03 OF SAE-13

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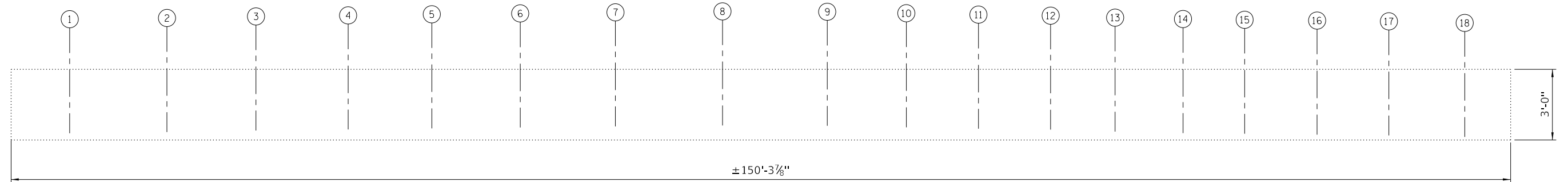


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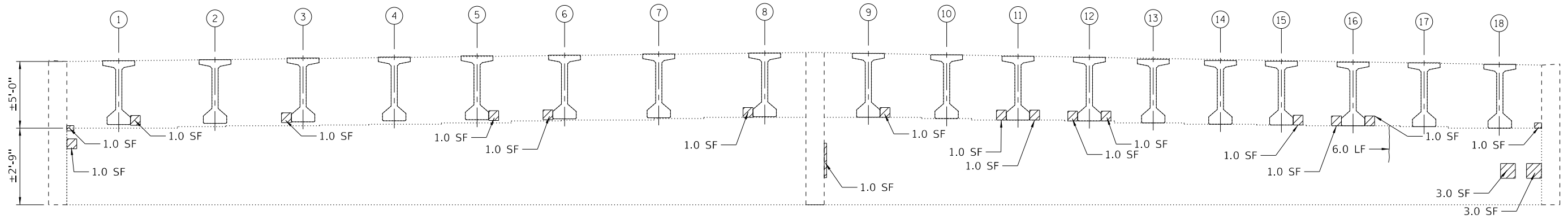
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 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
 WEST ABUTMENT DETAILS

SHT NO. SAE-03  
 DRAWING NO. 910 OF 1517

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PLAN



ELEVATION

**REPAIR NOTES**

1. HAIRLINE CRACKS (<math>< \frac{1}{16} \text{\"}</math>) SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF ABUTMENT SHALL BE SEALED WITH CONCRETE SEALANT.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	6.0
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	24

**LEGEND**

- CRACKS TO BE LOW PRESSURE EPOXY INJECTED
- STRUCTURAL CONCRETE REPAIR (<math>< 5 \text{\"}</math>)

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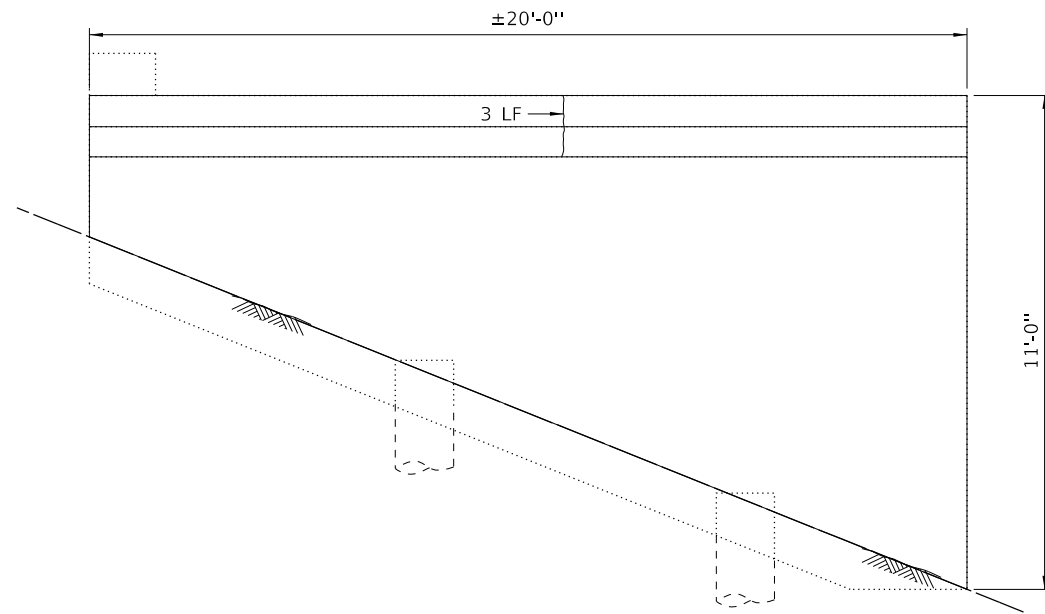


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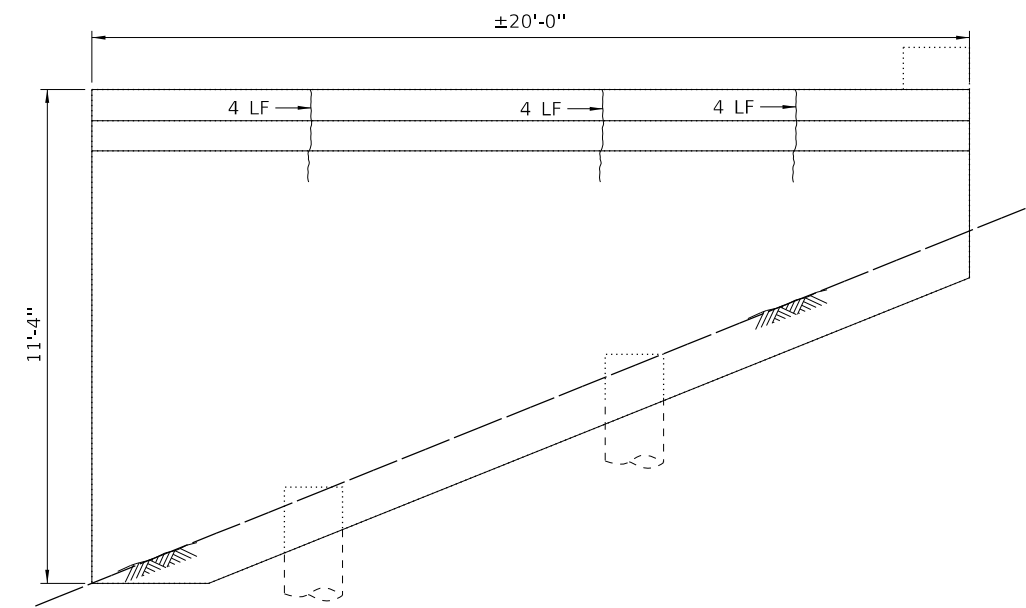
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 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
 EAST ABUTMENT DETAILS

SAE-04 OF SAE-13

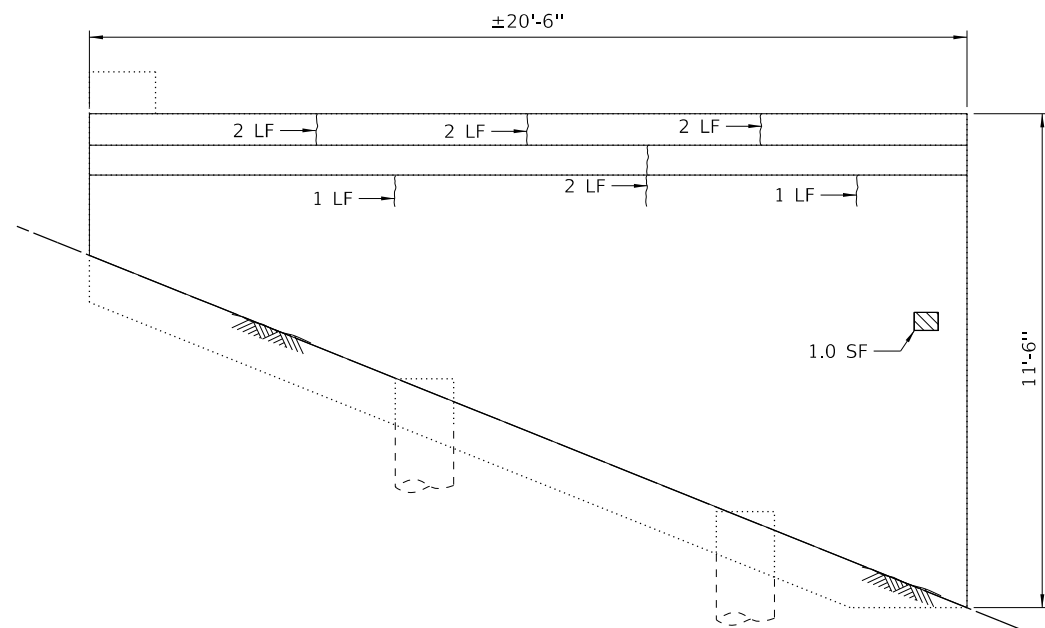
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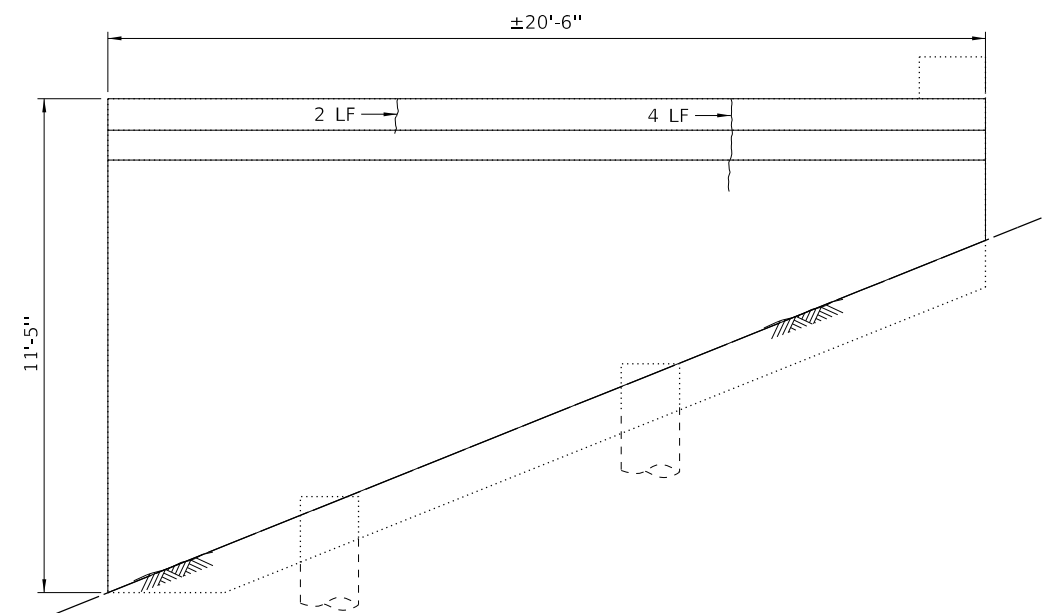
**SOUTH WEST ELEVATION**



**NORTH WEST ELEVATION**



**NORTH EAST ELEVATION**



**SOUTH EAST ELEVATION**

**LEGEND**

- CRACKS TO BE LOW PRESSURE EPOXY INJECTED
- STRUCTURAL CONCRETE REPAIR (<5")

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF WINGWALL SHALL BE SEALED WITH CONCRETE SEALANT.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	31
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1
APPLY CONCRETE SEALANT	SQ FT	460

SAE-05 OF SAE-13

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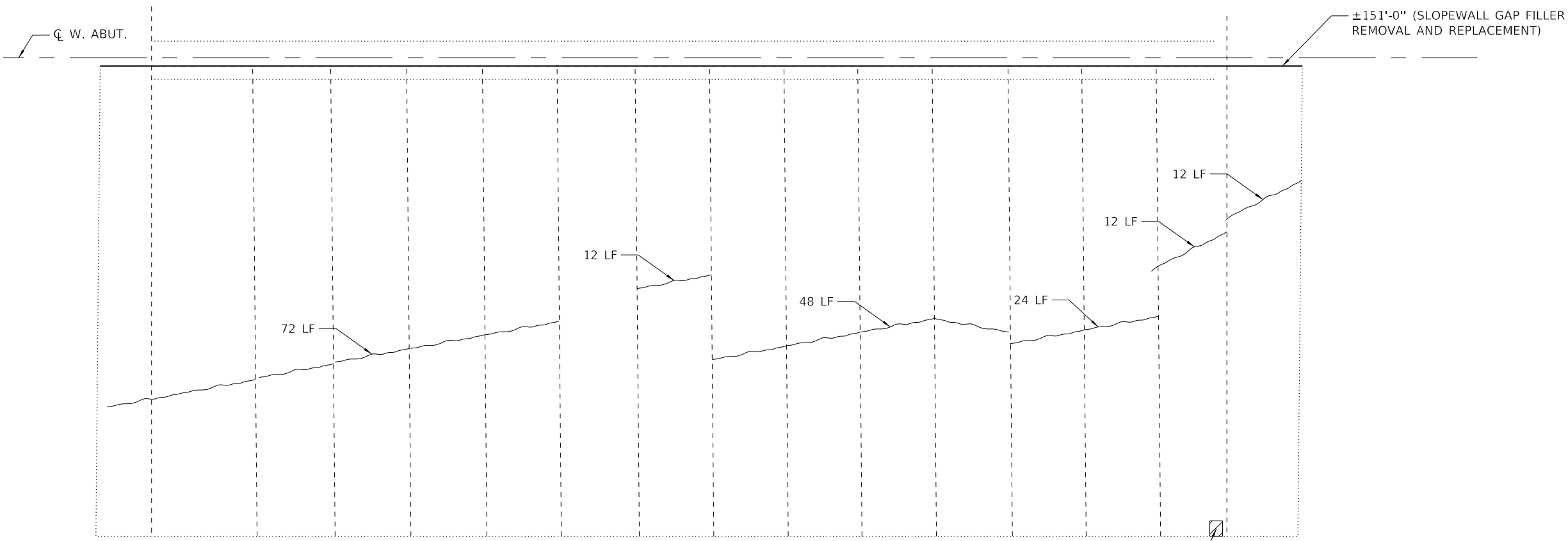


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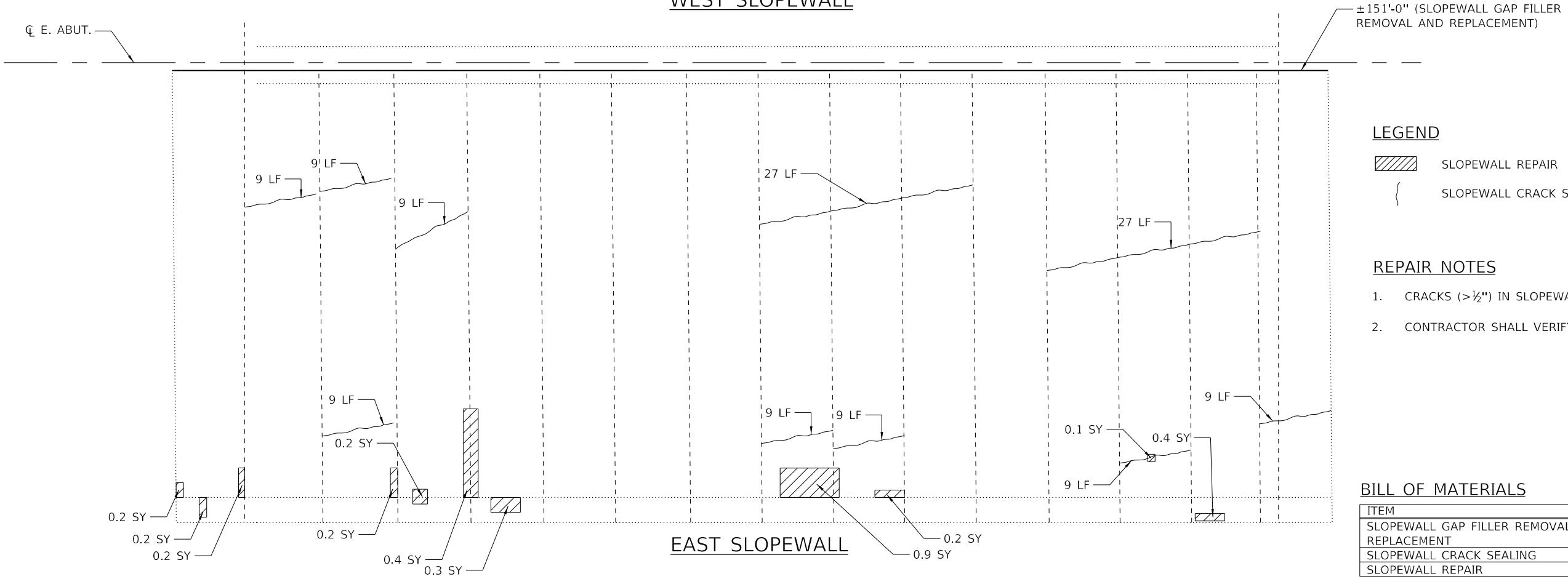
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 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
 WINGWALL REPAIR DETAILS

SHT NO. SAE-05  
 DRAWING NO. 912 OF 1517

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**WEST SLOPEWALL**



**EAST SLOPEWALL**

**LEGEND**

- SLOPEWALL REPAIR
- SLOPEWALL CRACK SEALING

**REPAIR NOTES**

1. CRACKS (> 1/2") IN SLOPEWALLS SHALL BE SEALED..
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
SLOPEWALL GAP FILLER REMOVAL AND REPLACEMENT	FOOT	302
SLOPEWALL CRACK SEALING	FOOT	306
SLOPEWALL REPAIR	SQ YD	4

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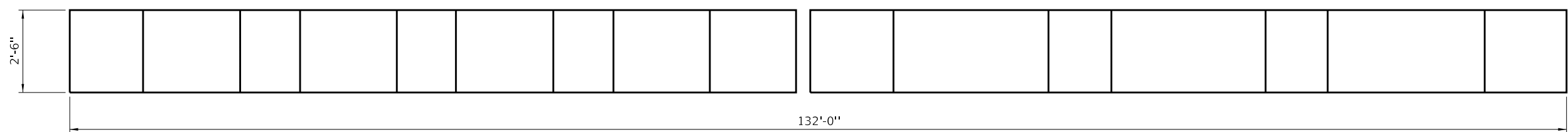
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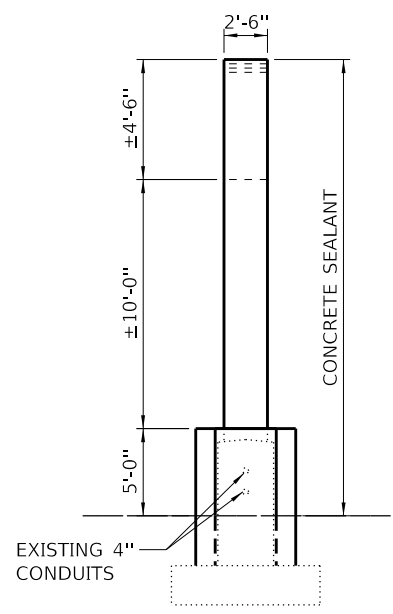
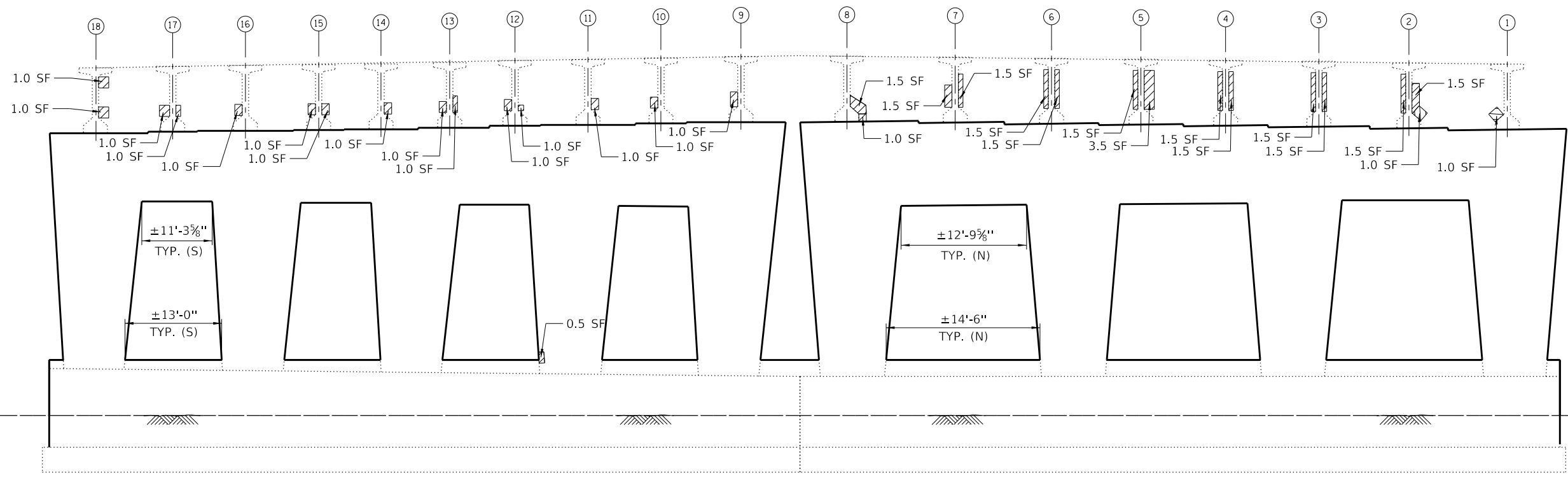
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NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
 SLOPEWALL REPAIR DETAILS

SAE-06 OF SAE-13  
 SHT NO. SAE-06  
 DRAWING NO. 913 OF 1517

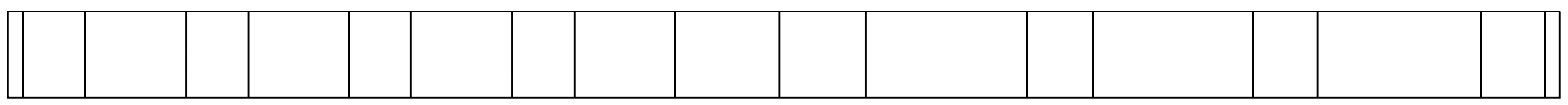


**CAP UNDERSIDE**



**SOUTH END VIEW**

**ELEVATION  
(LOOKING WEST)**



**REPAIR NOTES**

1. HAIRLINE CRACKS (<math>< \frac{1}{16}"</math>) SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF PIER SHALL BE SEALED WITH CONCRETE SEALANT.
4. REPAIRS ON THE DIAPHRAGM ARE INCLUDED WITH SUPERSTRUCTURE.
5. FOR CRASHWALL UPGRADES, SEE SHEET SAE-13 OF SAE-13.
6. ALL STRUCTURAL REPAIR OF CONCRETE LOCATED WITHIN CRASHWALL MODIFICATION AREA SHALL BE CHIPPED AWAY PRIOR TO CRASHWALL MODIFICATION.

**TOP OF CRASHWALL**

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	88
APPLY CONCRETE SEALANT	SQ FT	3,979

**LEGEND**

- STRUCTURAL CONCRETE REPAIR (<math>< 5"</math>)
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

DRAWN BY JJS DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018



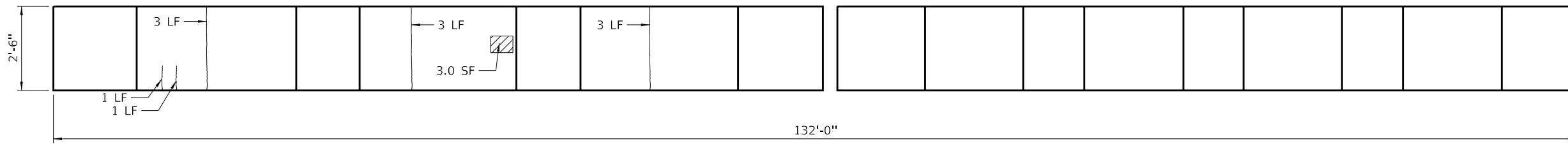
REVISIONS		
NO.	DATE	DESCRIPTION

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 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
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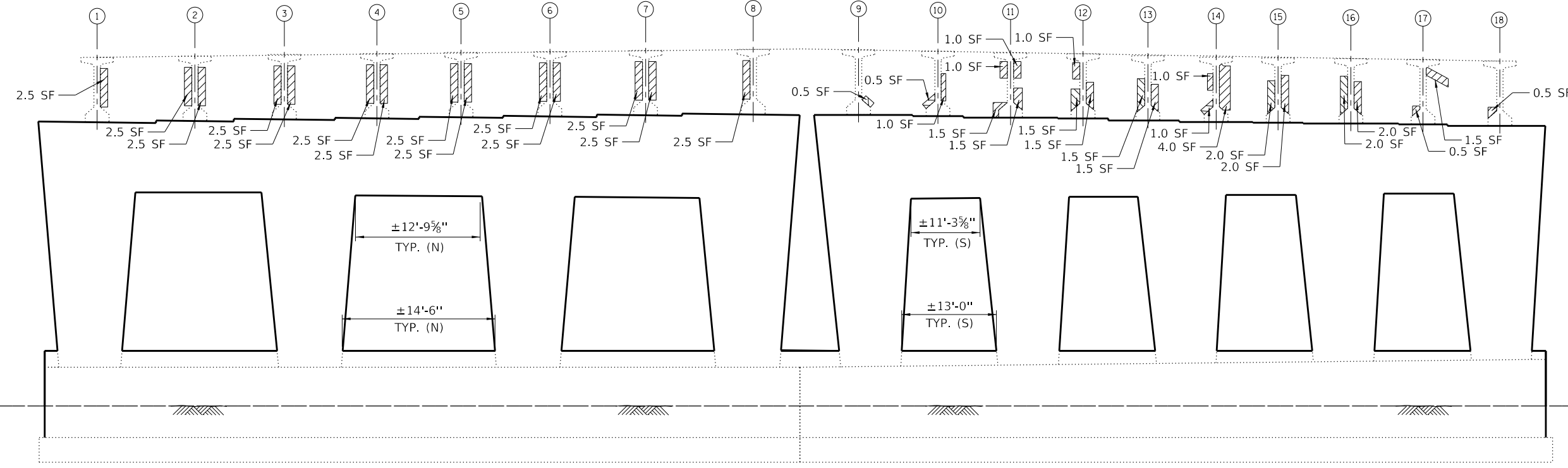
SAE-07 OF SAE-13

SHT NO. SAE-07  
 DRAWING NO. 914 OF 1517

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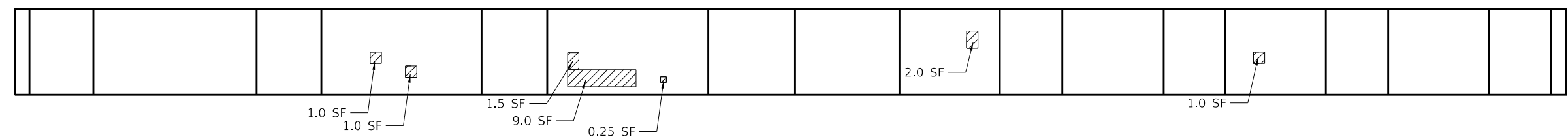


CAP UNDERSIDE



ELEVATION  
(LOOKING EAST)

NORTH END VIEW



TOP OF CRASHWALL

REPAIR NOTES

- HAIRLINE CRACKS ( $< \frac{1}{16}$ " ) SHALL NOT BE EPOXY INJECTED.
- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF PIER SHALL BE SEALED WITH CONCRETE SEALANT.
- REPAIRS ON THE DIAPHRAGM ARE INCLUDED WITH SUPERSTRUCTURE.
- FOR CRASHWALL UPGRADES, SEE SHEET SAE-13 OF SAE-13.
- ALL STRUCTURAL REPAIR OF CONCRETE LOCATED WITHIN CRASHWALL MODIFICATION AREA SHALL BE CHIPPED AWAY PRIOR TO CRASHWALL MODIFICATION.

LEGEND

- CRACKS TO BE LOW PRESSURE EPOXY INJECTED
- STRUCTURAL CONCRETE REPAIR (<5")

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	11
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	106
APPLY CONCRETE SEALANT	SQ FT	3,979

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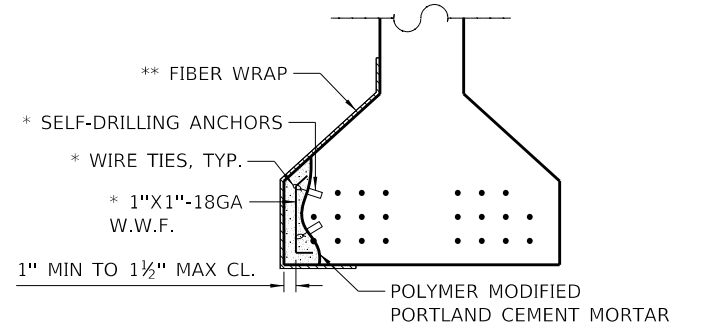
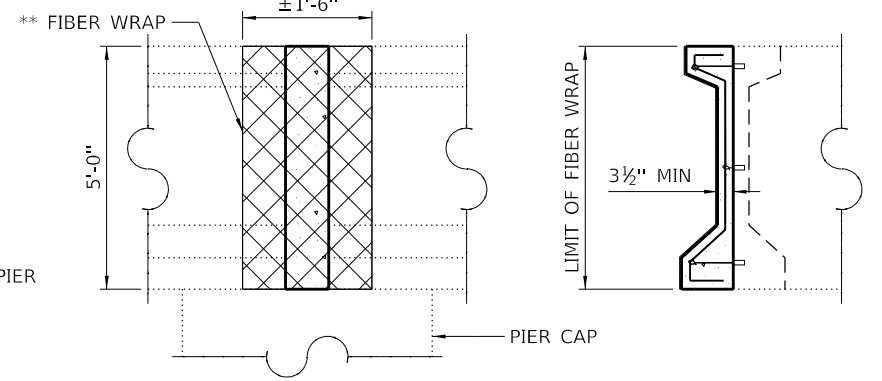
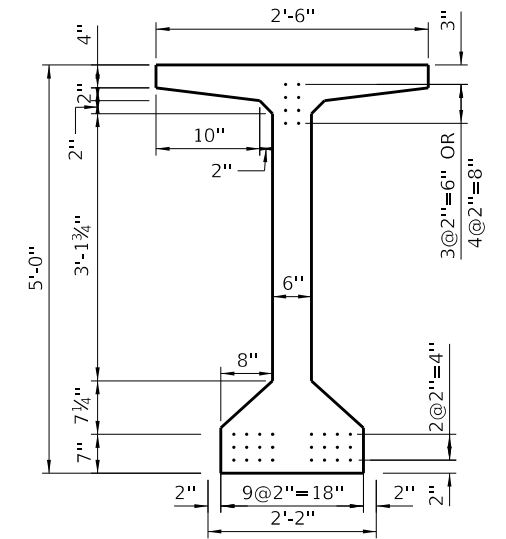
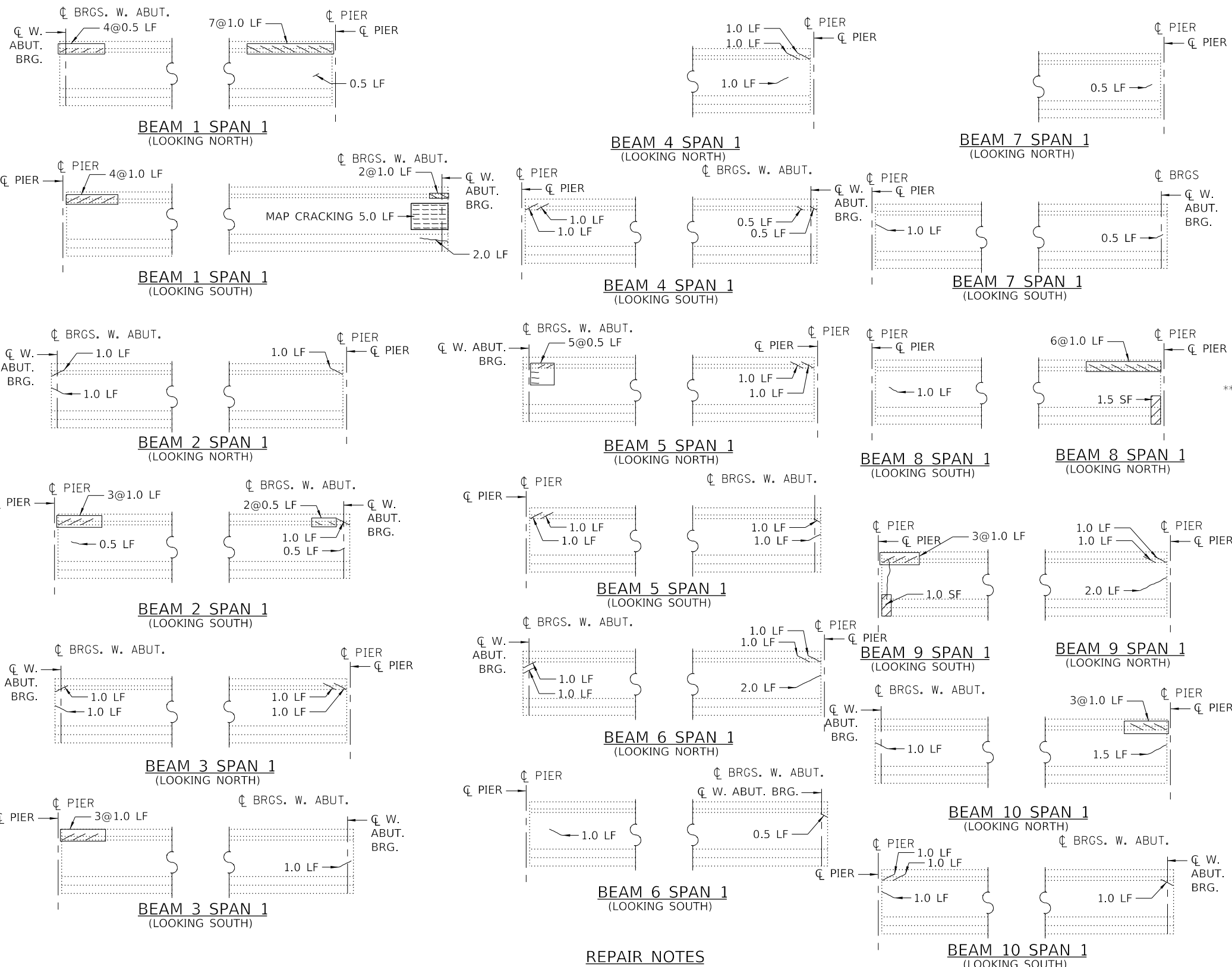


REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
 PIER REPAIR DETAILS II

SAE-08 OF SAE-13  
 SHT NO. SAE-08  
 DRAWING NO. 915 OF 1517

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\* INCLUDED IN THE COST OF POLYMER MODIFIED PORTLAND CEMENT MORTAR  
 \*\* FIBER WRAP SHALL EXTEND AT LEAST 6" BEYOND ALL SIDES OF POLYMER MODIFIED PORTLAND CEMENT MORTAR REPAIR.

**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<math>< \frac{1}{16}</math>") SHALL BE HIGH PRESSURE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. FOR DIAPHRAGM OVER PIER, REMOVE CONCRETE AS SHOWN IN DIAPHRAGM OVER PIER REPAIR DETAIL. REPAIR DIAPHRAGM SAME AS SHOWN IN BEAM REPAIR DETAIL.

**NOTE:**

FOR REPAIR DETAILS AND BILL OF MATERIALS, SEE SHEET SAE-11 OF SAE-13.

SAE-09 OF SAE-13

DRAWN BY JJS DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018



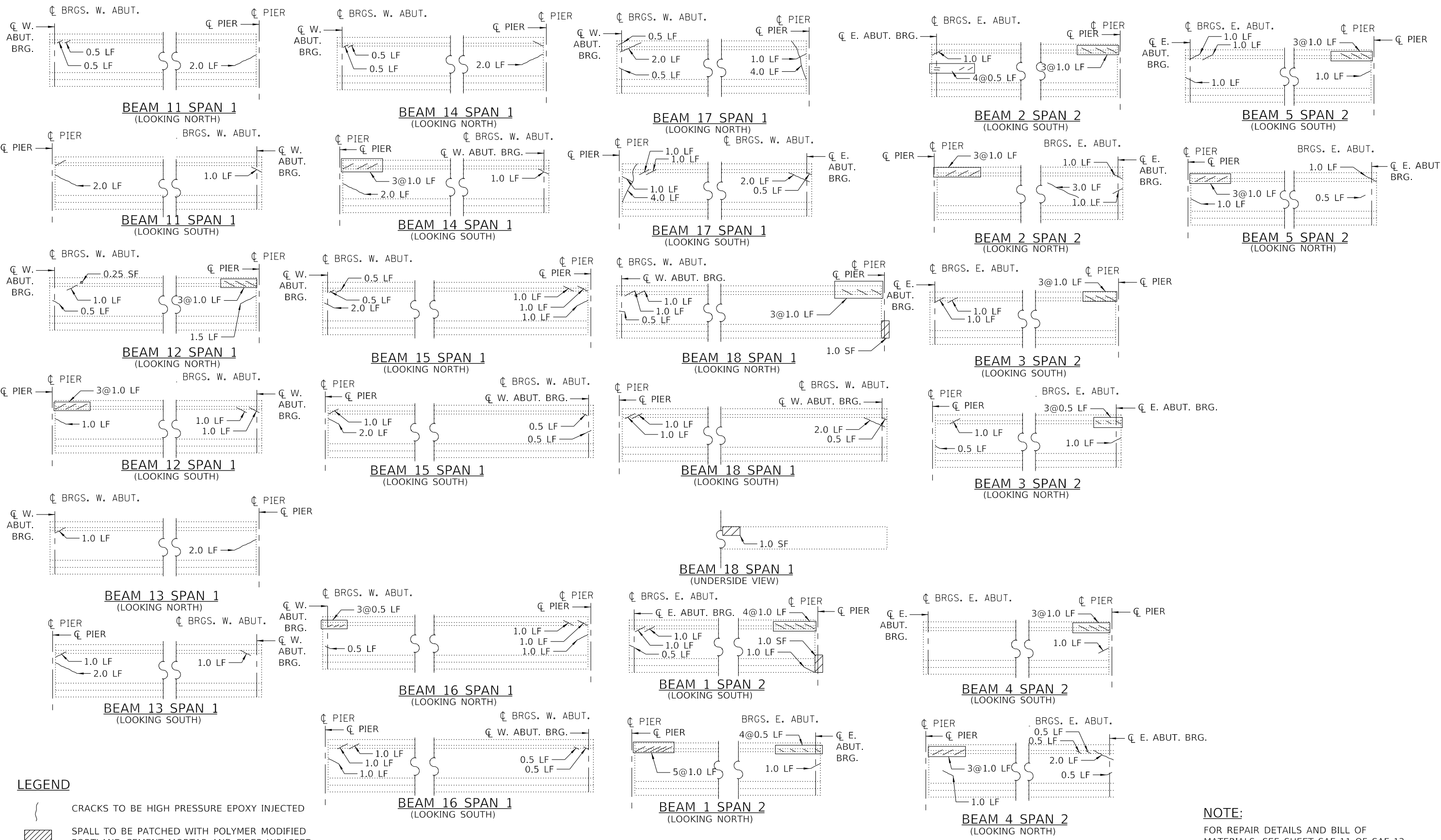
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 BEAM REPAIR DETAILS I

SHT NO. SAE-09  
 DRAWING NO. 916 OF 1517



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**LEGEND**

CRACKS TO BE HIGH PRESSURE EPOXY INJECTED

SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED

**NOTE:**  
 FOR REPAIR DETAILS AND BILL OF MATERIALS, SEE SHEET SAE-11 OF SAE-13.

DRAWN BY JJS DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018

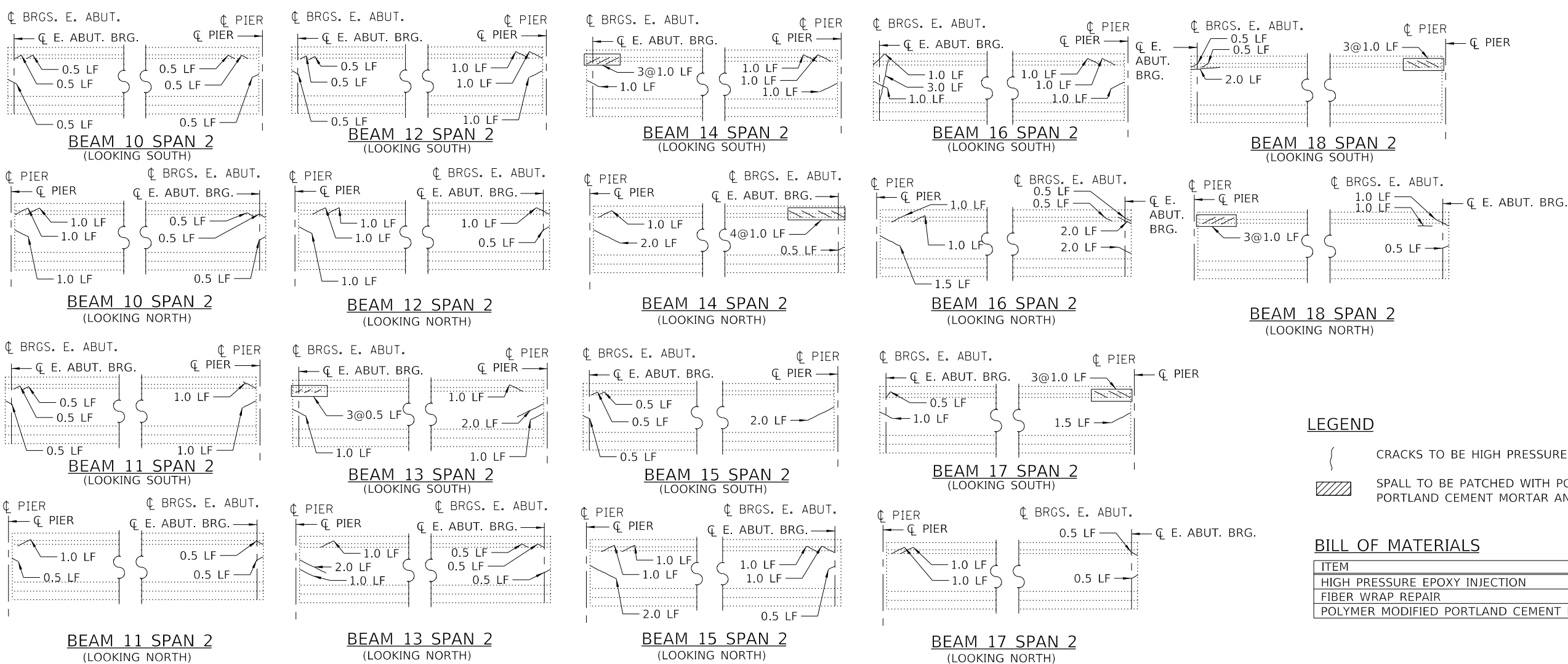
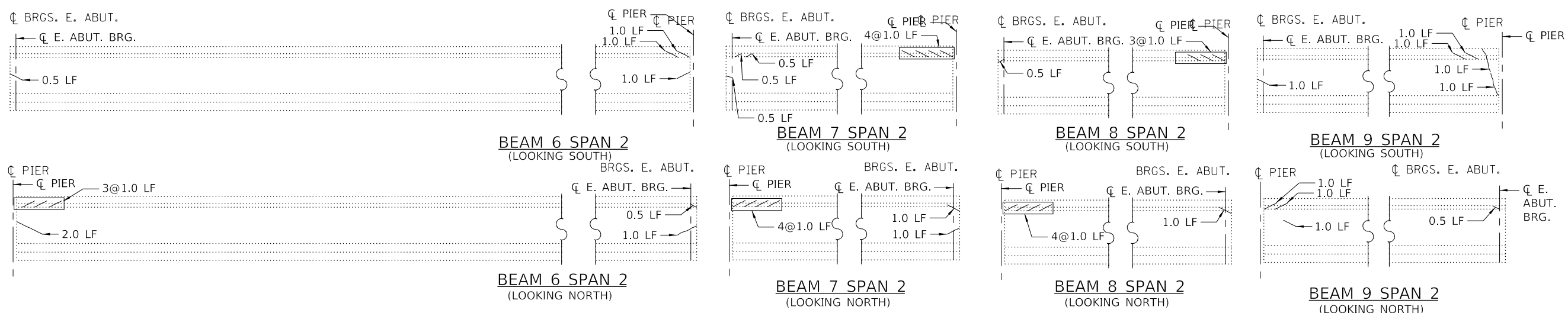


NO.		REVISIONS	
DATE	DESCRIPTION	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
 BEAM REPAIR DETAILS II

SHT NO. SAE-10  
 DRAWING NO. 917 OF 1517

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**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
HIGH PRESSURE EPOXY INJECTION	FOOT	377
FIBER WRAP REPAIR	SQ FT	35
POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	10

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 CHECKED BY PRD DATE 03/11/2018



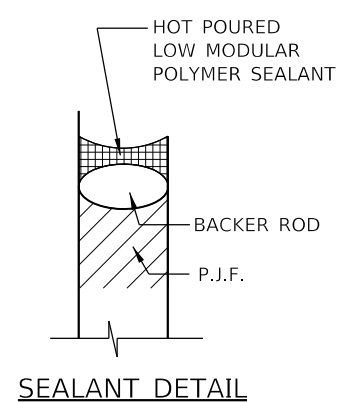
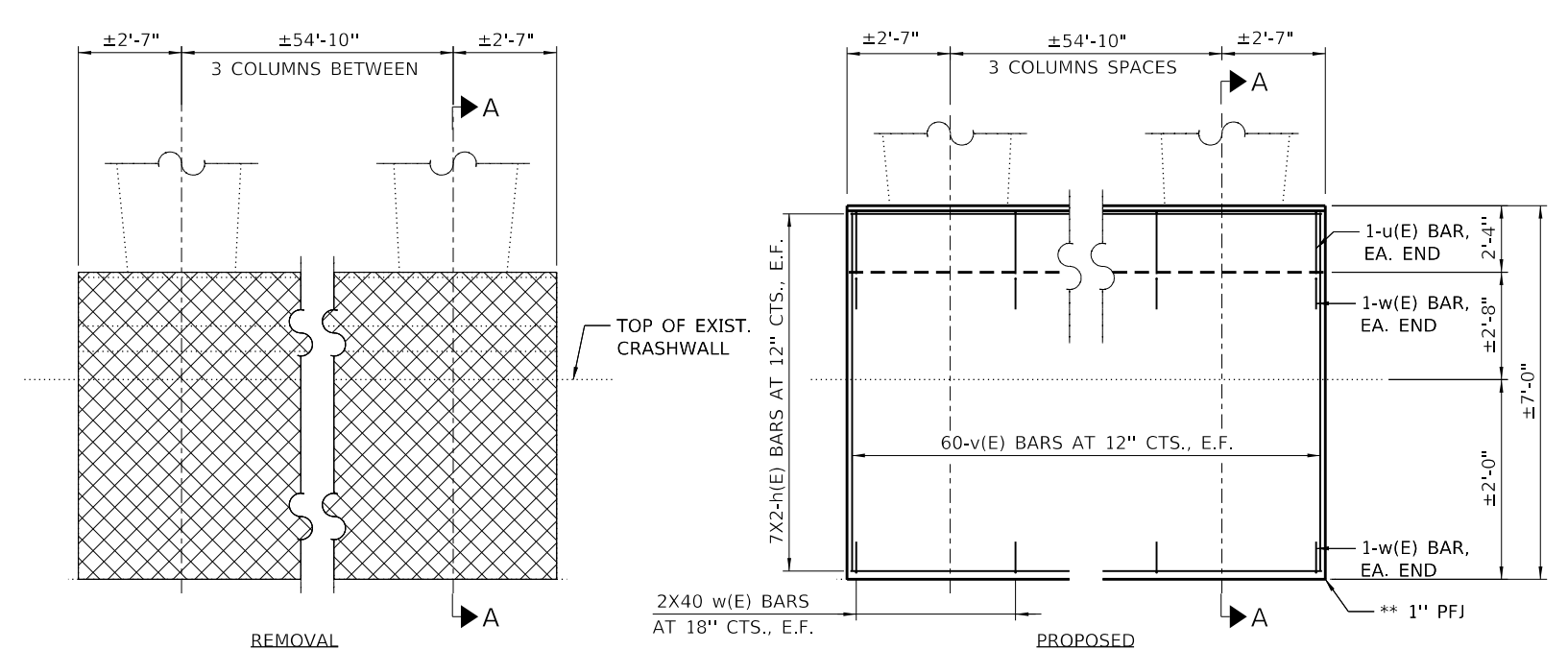
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985)  
 BEAM REPAIR DETAILS II

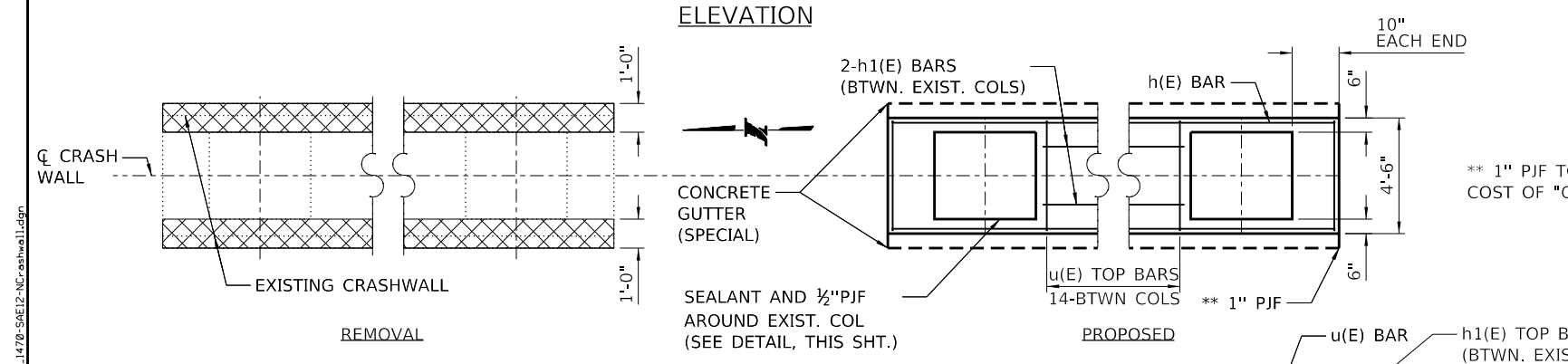
SAE-11 OF SAE-13  
 SHT NO. SAE-11  
 DRAWING NO.  
 918 OF 1517

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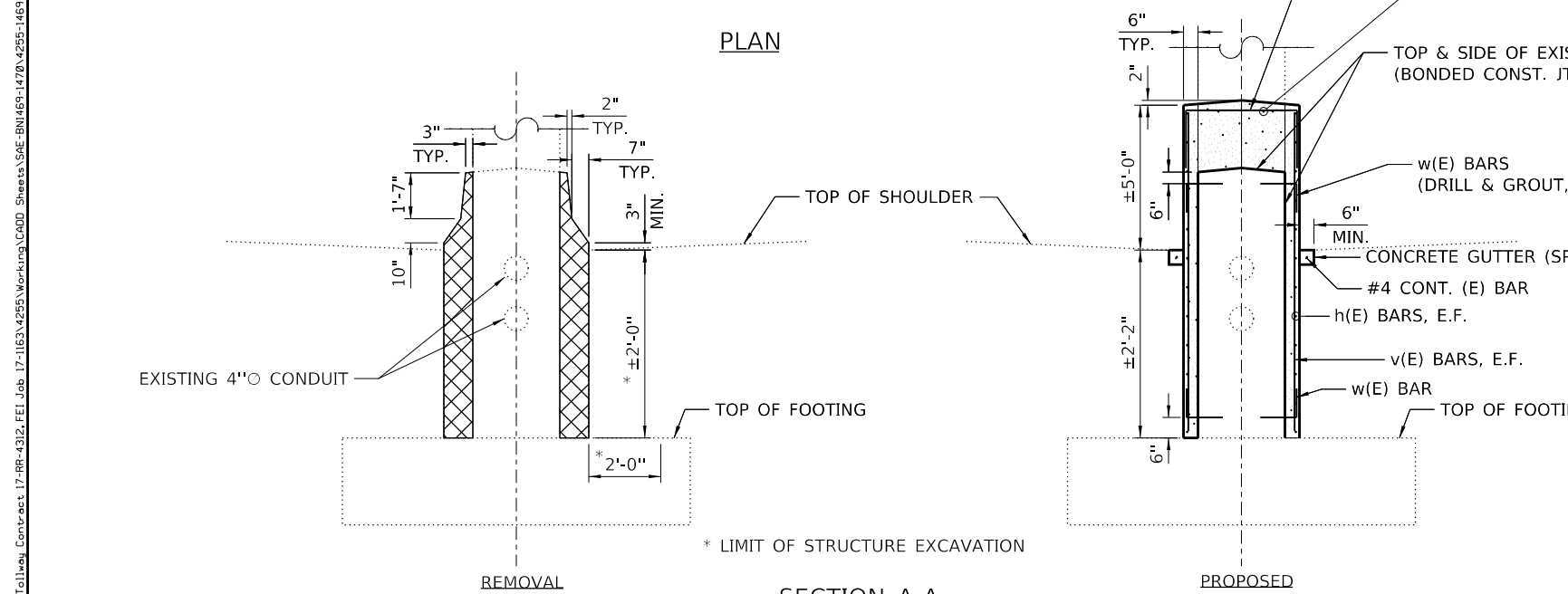
**NOTES:**

1. REMOVE EXISTING CONCRETE CRASHWALL BACK TO FACE OF COLUMNS PRIOR TO PLACING CONCRETE AROUND EXISTING CRASHWALL AND COLUMNS. SURFACES TO RECEIVE NEW CONCRETE SHALL BE BLAST CLEANED. COST OF CLEANING SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL.
2. CONCRETE MEDIAN BARRIER TRANSITION TAPER LENGTHS, PAY LIMITS AND MEASUREMENT, AND BASIS OF PAYMENT ALL IN ACCORDANCE WITH THE ILLINOIS TOLLWAY STANDARD DRAWING C13, C14 AND THE SPECIAL PROVISIONS.
3. THE CLEAR COVER FOR REINFORCEMENT BARS TO THE SURFACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. EXPOSED CONCRETE EDGES SHALL HAVE 3#4"x45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.
6. CONCRETE SEALANT SHALL BE APPLIED TO THE EXPOSED SURFACES OF ALL NEW AND/OR MODIFIED PIER CRASH WALLS. BILL OF MATERIALS FOR "APPLY CONCRETE SEALANT" LOCATED ON SHEETS SAE-07 AND SAE-08 OF SAE-13.
7. E.F. DENOTES EACH FACE
8. CONTRACTOR TO MAINTAIN ANY CONDUIT LOCATED WITHIN WORK ZONE.
9. BARS NOTED THUS, 3X2-#5 INDICATED 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.



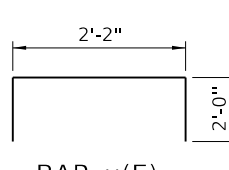
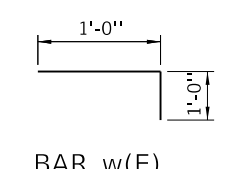
**ELEVATION**

**PLAN**



**SECTION A-A**

**LEGEND**



**MIN. BAR LAP**  
#5 BAR = 3'-6"

**BILL OF MATERIALS**

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	28	#5	33'-5"	—
h1(E)	6	#5	14'-2"	—
u(E)	44	#5	6'-2"	┌
v(E)	120	#5	6'-7"	—
w(E)	168	#4	2'-0"	┌
CONCRETE REMOVAL			CU YD	20.3
STRUCTURE EXCAVATION			CU YD	16.9
CONCRETE STRUCTURES			CU YD	25.2
REINFORCEMENT BARS, EPOXY COATED			POUND	2,400
CONCRETE GUTTER (SPECIAL)			FOOT	120

DRAWN BY JJS DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018

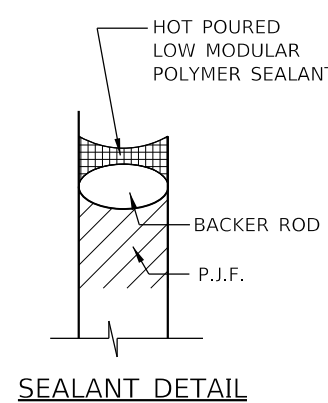
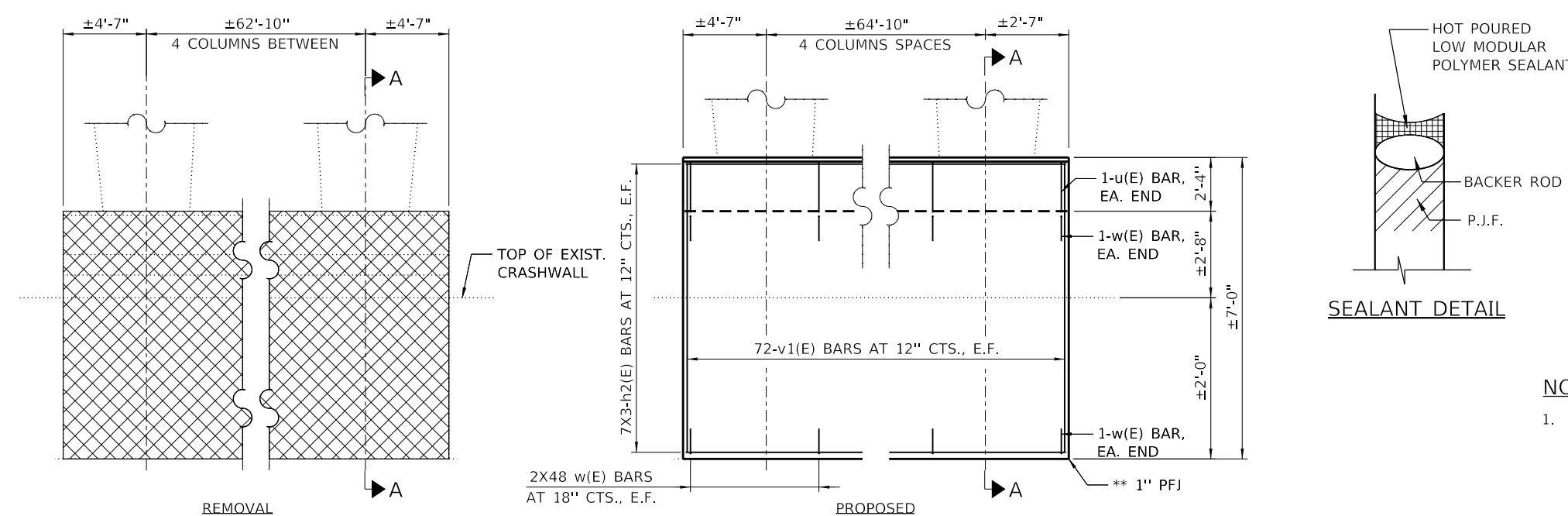


REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255 SHT NO. SAE-12  
 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985) DRAWING NO. 919 OF 1517  
 NORTH END CRASH WALL MODIFICATIONS

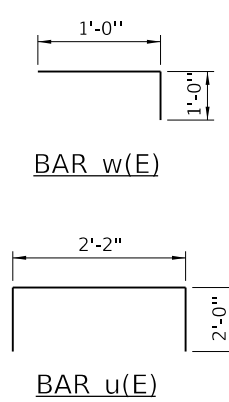
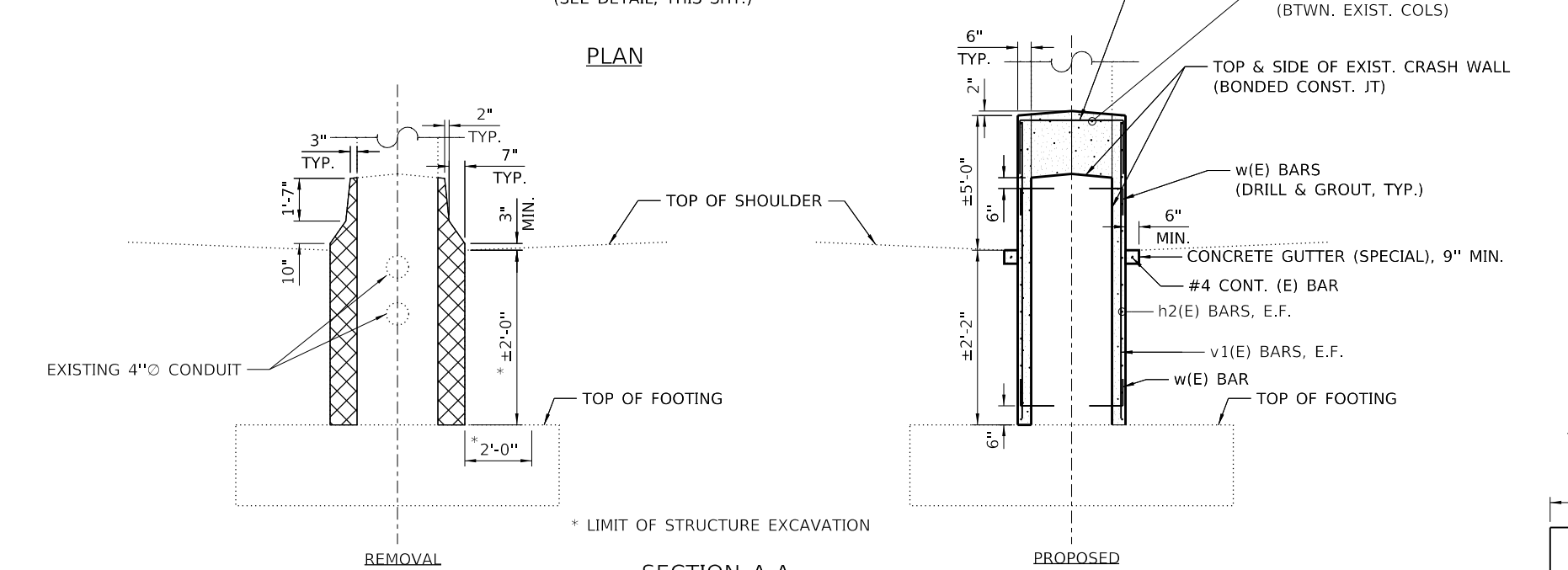
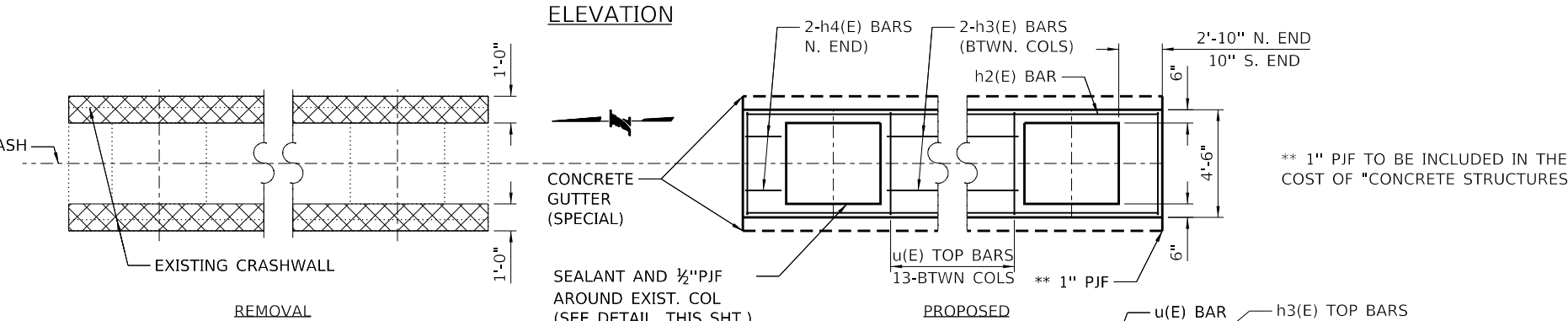
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**NOTES:**

- REMOVE EXISTING CONCRETE CRASHWALL BACK TO FACE OF COLUMNS PRIOR TO PLACING CONCRETE AROUND EXISTING CRASHWALL AND COLUMNS. SURFACES TO RECEIVE NEW CONCRETE SHALL BE BLAST CLEANED. COST OF CLEANING SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL.
- CONCRETE MEDIAN BARRIER TRANSITION TAPER LENGTHS, PAY LIMITS AND MEASUREMENT, AND BASIS OF PAYMENT ALL IN ACCORDANCE WITH THE ILLINOIS TOLLWAY STANDARD DRAWING C13, C14 AND THE SPECIAL PROVISIONS.
- THE CLEAR COVER FOR REINFORCEMENT BARS TO THE SURFACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN.
- REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
- EXPOSED CONCRETE EDGES SHALL HAVE 3#4"x45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.
- CONCRETE SEALANT SHALL BE APPLIED TO THE EXPOSED SURFACES OF ALL NEW AND/OR MODIFIED PIER CRASH WALLS. BILL OF MATERIALS FOR "APPLY CONCRETE SEALANT" LOCATED ON SHEETS SAE-07 AND SAE-08 OF SAE-13.
- E.F. DENOTES EACH FACE
- CONTRACTOR TO MAINTAIN ANY CONDUIT WITHIN WORK ZONE.
- BARS NOTED THUS, 3X2-#5 INDICATED 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.



**BILL OF MATERIALS**

BAR	NO.	SIZE	LENGTH	SHAPE
h2(E)	42	#5	27'-2"	—
h3(E)	6	#5	12'-8"	—
h4(E)	2	#5	2'-6"	—
u(E)	55	#5	6'-2"	—
v1(E)	144	#5	6'-9"	┌
w(E)	200	#4	2'-0"	┌
CONCRETE REMOVAL			CU YD	25.4
STRUCTURE EXCAVATION			CU YD	22.4
CONCRETE STRUCTURES			CU YD	30.6
REINFORCEMENT BARS, EPOXY COATED			POUND	2,910
CONCRETE GUTTER (SPECIAL)			FOOT	144

**LEGEND**



**MIN. BAR LAP**  
#5 BAR = 3'-6"

DRAWN BY JJS DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018

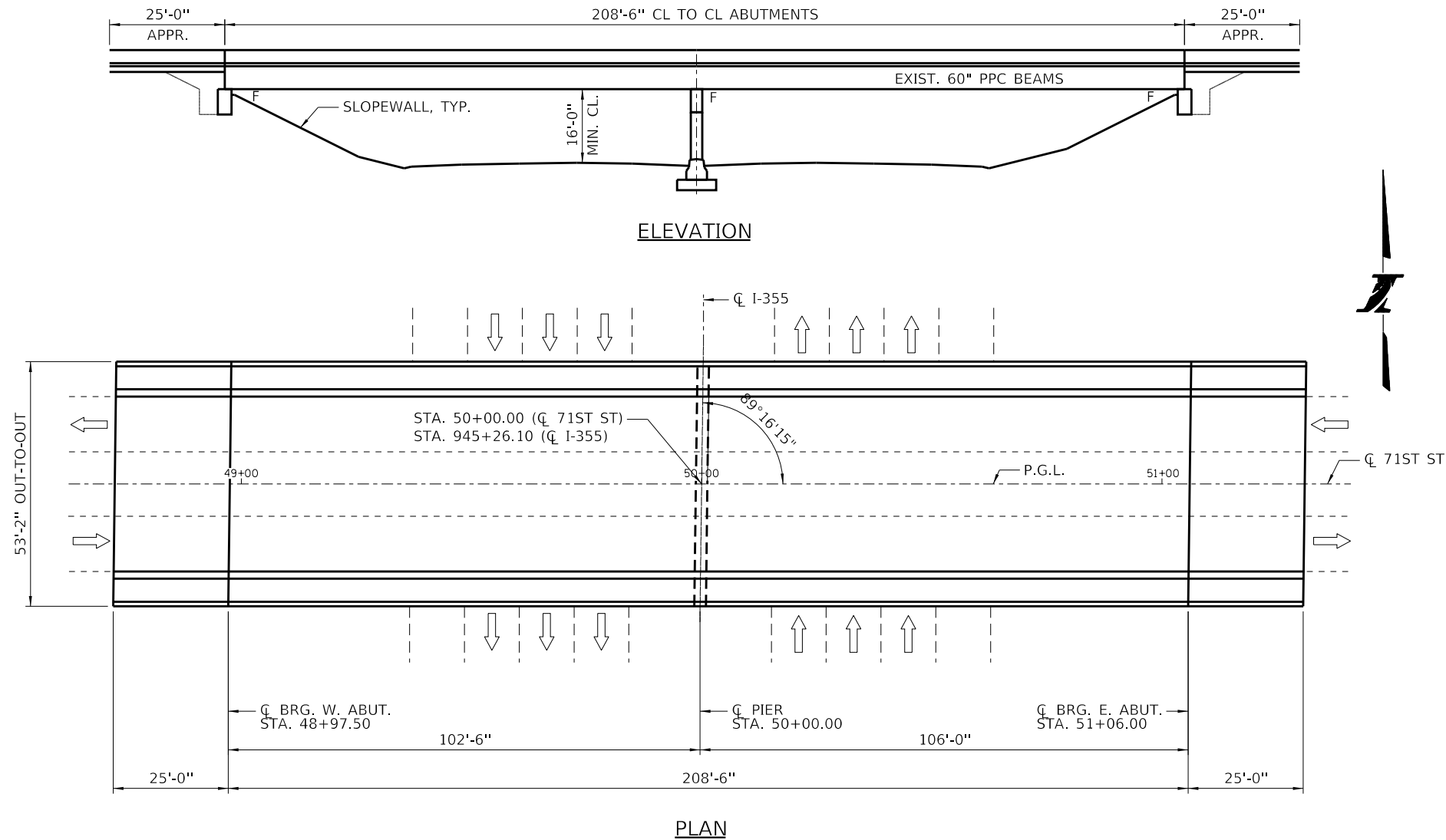


REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255 SHT NO. SAE-13  
 BRIDGE NO. 1469 AND 1470 (S.N. 022-9985) DRAWING NO. 920 OF 1517  
 SOUTH END CRASH WALL MODIFICATIONS

EXISTING STRUCTURES, BN 1467, BUILT AS PART OF CONTRACT CIP-612 IN 1990, SLOPEWALL MODIFICATIONS IN 2008 AS PART OF CONTRACT I-07-5475, AND REPAIRS IN 2010 AS PART OF CONTRACT RR-08-5475. LENGTH IS 208'-6" CL TO CL OF ABUTMENTS WITH TWO SPANS, 102'-6" AND 106'-0". 60" PPC BEAMS WITH INTEGRAL ABUTMENTS.

BENCH MARK: N/A



**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED MARCH 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL, ADOPTED JANUARY 2012

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS, (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL SERVICES MANUAL ADOPTED JUNE 30, 2017.

**LOADING HS20-44**

(FROM 1987 PLANS)

ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE

**DESIGN STRESSES**

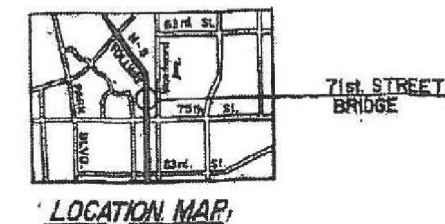
**FIELD UNITS**

- f'c = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)
- f'c = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)
- f'c = 4,000 PSI (CLASS AX BRIDGE DECK & APPROACH SLAB REPAIRS)
- fy = 60,000 PSI (REINFORCEMENT)

**HIGHWAY CLASSIFICATION**

71ST STREET (ON ROUTE)  
FUNCTIONAL CLASS: URBAN  
ADT: 7,050 (2012)  
ADTT: 70 (2012)

I-355 (UNDER)  
FUNCTIONAL CLASS: INTERSTATE  
ADT: 124,700 (2014)  
ADTT: 11,223 (2014)



**PROPOSED SCOPE OF WORK**

1. HIGH PRESSURE EPOXY INJECT HAIRLINE CRACKS ON BEAMS.
2. APPLY CONCRETE SEALANT TO PIER.
3. REPAIR SPALLED AND DELAMINATED CONCRETE IN ABUTMENTS, PIERS, WINGWALLS, AND SLOPE WALLS.
4. CLEAN AND SEAL CRACKS WIDER THAN 1/16" AND ALL LEACHING CRACKS IN ABUTMENTS AND PIERS. SEAL ALL CRACKS IN SLOPEWALL GREATER THAN 1/2".
5. REPAIR SPALLED AND DELAMINATED CONCRETE WITH POLYMER CONCRETE CEMENT MORTAR WITH FIBER WRAP ON PPC BEAMS. FIBER WRAP ONLY TO BE APPLIED OVER SHOULDERS AND LANES OF TRAFFIC.
6. MODIFY EXISTING CRASHWALLS AT PIER TO MEET CURRENT TOLLWAY STANDARDS.

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DRAWN BY EML DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018



REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1467 (S.N. 022-9984)  
GENERAL PLAN AND ELEVATION

SAF-01 OF SAF-10  
SHT NO. SAF-01  
DRAWING NO. 921 OF 1517

**GENERAL NOTES**

**CONSTRUCTION**

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION TOLERANCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
2. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
3. NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
4. THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COSTS WILL BE AT THE CONTRACTOR'S EXPENSE.
5. NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E. 1-800-892-0123.
7. EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH THAT FOR, "CONCRETE REMOVAL".
8. WHENEVER THE MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF THE EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
9. CONCRETE SEALANT SHALL BE APPLIED TO THE REPAIRED AREAS OF THE VISIBLE FACES OF THE PIER COLUMNS, CRASHWALLS, AND PIER CAPS. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
10. AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
11. ALL DIMENSIONS ARE TAKEN FROM THE FOLLOWING EXISTING PLANS:  
TOLLWAY CONTRACT NO. RR-08-5475 (2011) AND CIP-612 (1989).
12. THE TOP OF THE DECK IS MAINTAINED BY DUPAGE COUNTY.

**GENERAL NOTES (CONT.)**

**CAST-IN-PLACE CONCRETE**

1. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF 1 FOOT BELOW FINISHED GROUND LEVEL.

**REINFORCING BARS**

1. REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM 706), GRADE 60, DEFORMED BARS.
2. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY-COATED.
3. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION.
4. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
5. COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

**ABBREVIATIONS**

- ABUT. - ABUTMENT
- APPROX. - APPROXIMATE
- BPJS - BONDED PREFORMED JOINT SEAL
- BRG. - BEARING
- CL. - CLEAR
- DIM. - DIMENSION
- E. - EAST
- ELEV. - ELEVATION
- EXIST. - EXISTING
- MAX. - MAXIMUM
- MIN. - MINIMUM
- N. - NORTH
- N.B. - NORTHBOUND
- NO. - NUMBER
- P.G.L. - PROFILE GRADE LINE
- S. - SOUTH
- S.B. - SOUTHBOUND
- SHLDR. - SHOULDER
- STA. - STATION
- TYP. - TYPICAL
- W. - WEST

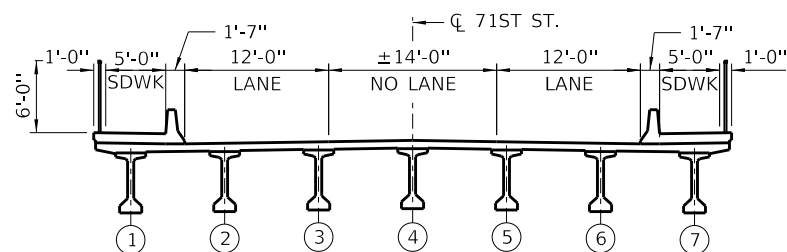
**LIST OF SHEETS**

SAF-01	GENERAL PLAN AND ELEVATION
SAF-02	GENERAL DATA, SOQ, CROSS SECTION, AND LIST OF SHEETS
SAF-03	WEST ABUTMENT REPAIR DETAILS
SAF-04	EAST ABUTMENT REPAIR DETAILS
SAF-05	WINGWALL REPAIR DETAILS
SAF-06	SLOPEWALL REPAIR DETAILS
SAF-07	PIER REPAIR DETAILS
SAF-08	TYPICAL BEAM AND DIAPHRAGM REPAIR DETAILS
SAF-09	MISCELLANEOUS REPAIR DETAILS
SAF-10	CRASHWALL UPGRADE DETAILS

**TOTAL BILL OF MATERIALS  
(BN 1467)**

CODE	ITEM	UNIT	SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL	RECORDED QUANTITIES
50102400	CONCRETE REMOVAL	CU YD	22.7	-	22.7	
50200100	STRUCTURE EXCAVATION	CU YD	36	-	36	
50300225	CONCRETE STRUCTURES	CU YD	32.7	-	32.7	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,400	-	2,400	
* JI606050	CONCRETE GUTTER (SPECIAL)	FOOT	102	-	102	
* JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	44	-	44	
* JS121300	HIGH PRESSURE EPOXY INJECTION	FOOT	-	41	41	
* JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	3	41	41	
* JT503100	FIBER WRAP REPAIR	SQ FT	-	56	56	
* JT524010	APPLY CONCRETE SEALANT	SQ FT	3,017	-	3,017	
* JT599105	SLOPE WALL GAP FILLER REMOVAL AND REPLACEMENT	FOOT	107	-	107	
GBSP X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	-	12	12	
** X0323491	SLOPE WALL CRACK SEALING	FOOT	86	-	86	
** Z0065700	SLOPE WALL REPAIR	SQ YD	4	-	4	

- \* TOLLWAY SPECIAL PROVISION ITEM
- \*\* IDOT SPECIAL PROVISION ITEM
- GBSP IDOT GUIDE BRIDGE SPECIAL PROVISION



**TYPICAL CROSS SECTION  
(LOOKING EAST)**

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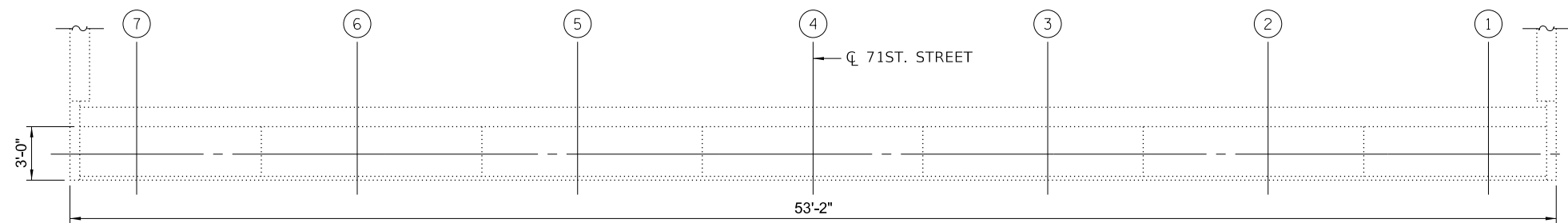
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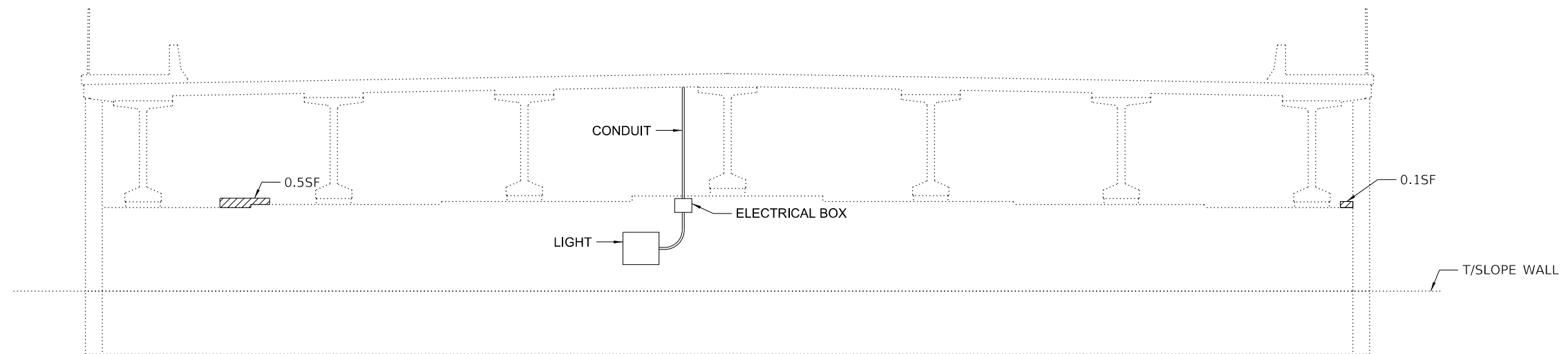
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NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1467 (S.N. 022-9984)  
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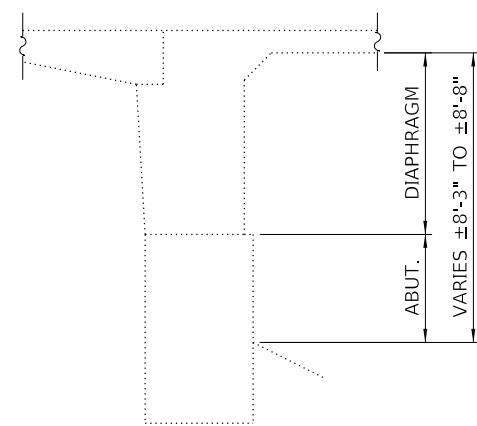
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DRAWING NO. 922 OF 1517



WEST ABUTMENT PLAN



WEST ABUTMENT ELEVATION  
(LOOKING WEST)



SECTION THRU ABUTMENT

LEGEND

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

REPAIR NOTES

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	26
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1

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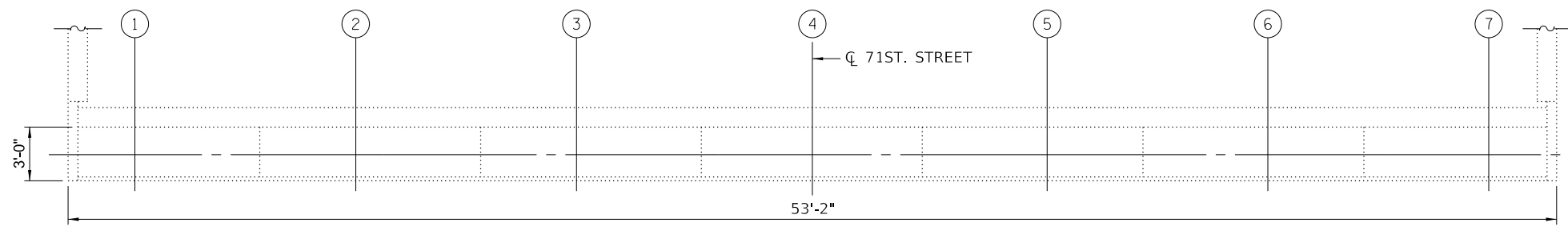
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CHECKED BY PRD DATE 03/11/2018



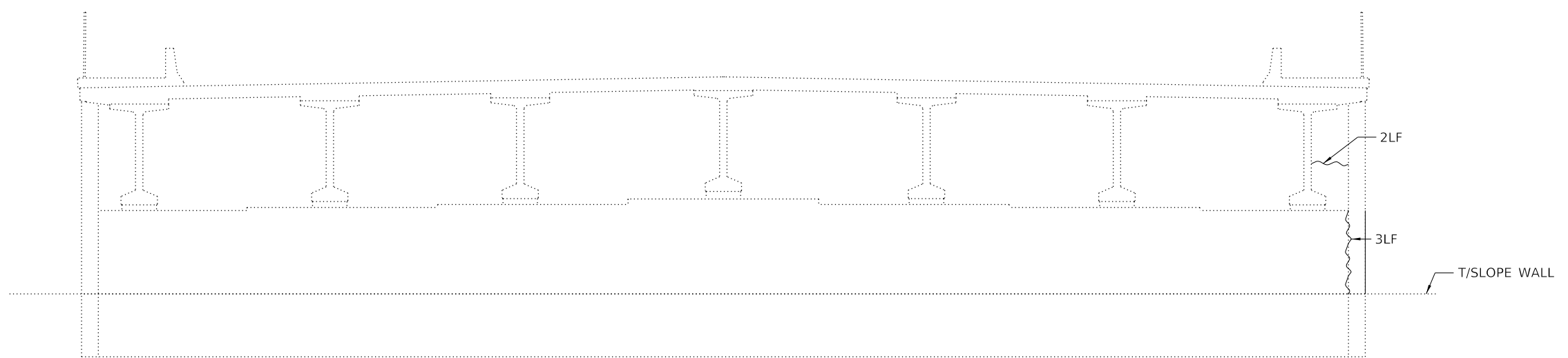
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NO.	DATE

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1467 (S.N. 022-9984)  
WEST ABUTMENT REPAIR DETAILS

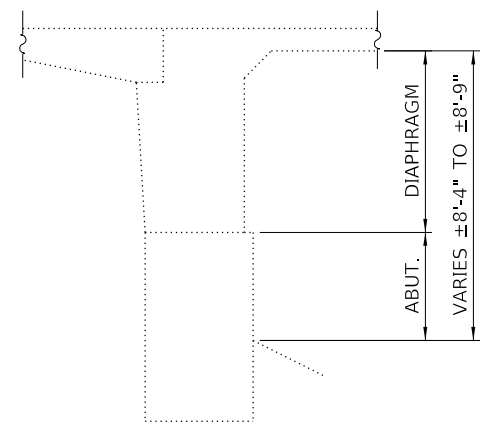
SAF-03 OF SAF-10  
SHT NO. SAF-03  
DRAWING NO. 923 OF 1517



EAST ABUTMENT PLAN



EAST ABUTMENT ELEVATION  
(LOOKING EAST)



SECTION THRU ABUTMENT

LEGEND

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

REPAIR NOTES

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	17

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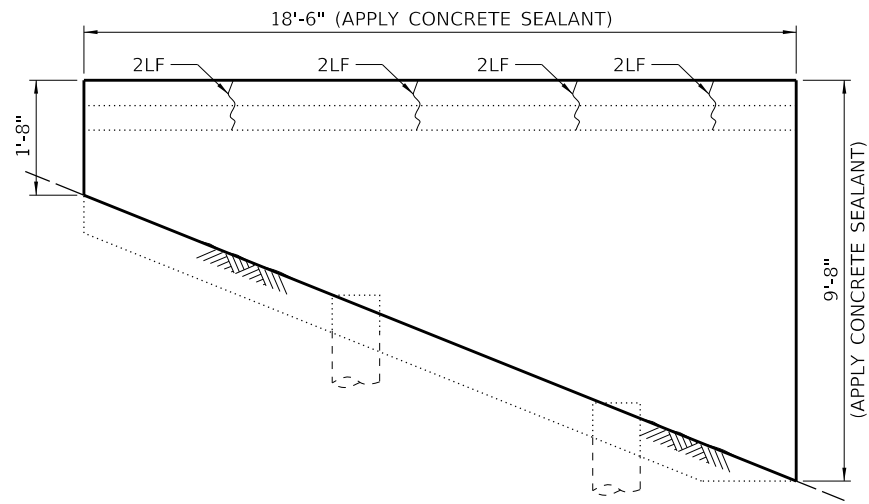


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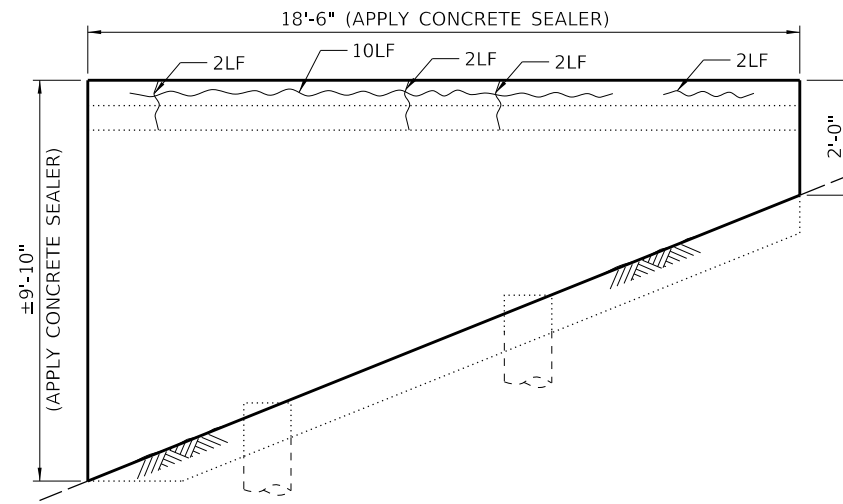
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 BRIDGE NO. 1467 (S.N. 022-9984)  
 EAST ABUTMENT REPAIR DETAILS

SAF-04 OF SAF-10  
 SHT NO. SAF-04  
 DRAWING NO. 924 OF 1517

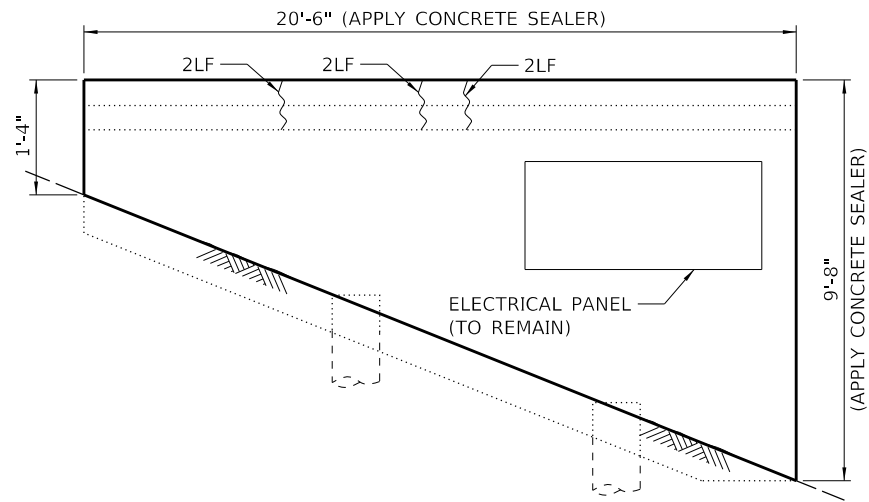




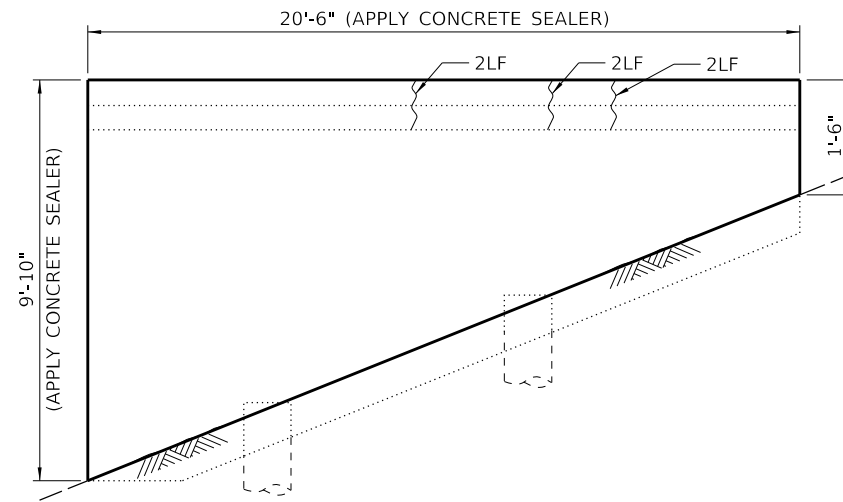
**SOUTHWEST ELEVATION**



**NORTHWEST ELEVATION**



**NORTHEAST ELEVATION**



**SOUTHEAST ELEVATION**

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
APPLY CONCRETE SEALANT	SQ FT	446

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DRAWN BY EML DATE 03/11/2018  
 CHECKED BY PRD DATE 03/11/2018

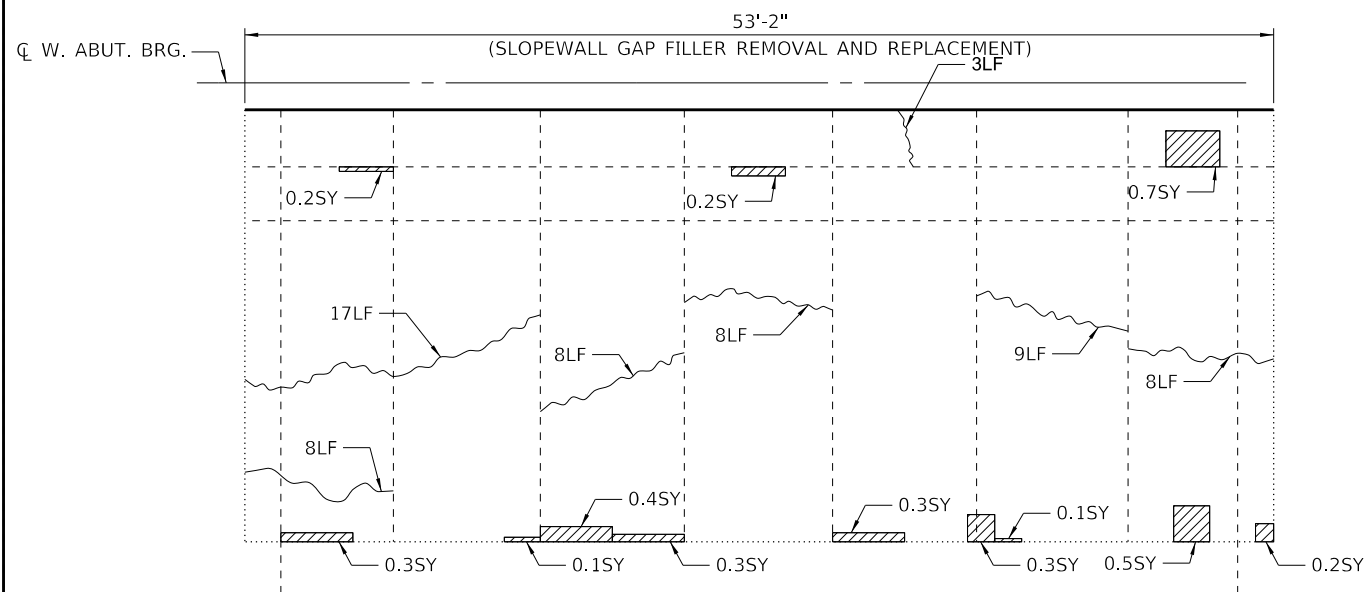


REVISIONS		
NO.	DATE	DESCRIPTION

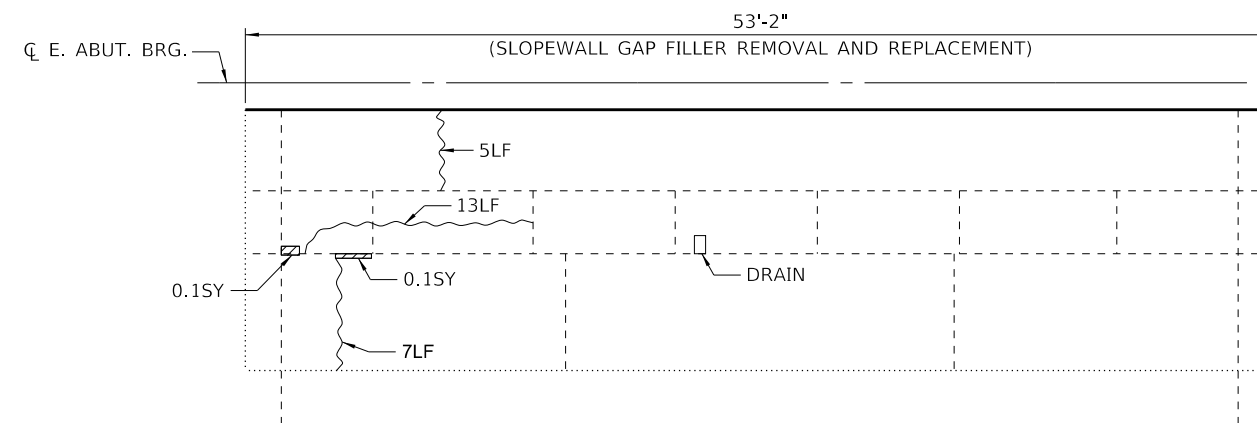
CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1467 (S.N. 022-9984)  
 WINGWALL REPAIR DETAILS

SAF-05 OF SAF-10  
 SHT NO. SAF-05  
 DRAWING NO. 925 OF 1517

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WEST SLOPEWALL



EAST SLOPEWALL

**LEGEND**

- SLOPE WALL CRACK SEALING
- SLOPE WALL REPAIR

**REPAIR NOTES**

1. CRACKS (>1/2") IN SLOPEWALLS SHALL BE SEALED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
SLOPE WALL GAP FILLER REMOVAL AND REPLACEMENT	FOOT	107
SLOPE WALL CRACK SEALING	FOOT	86
SLOPE WALL REPAIR	SQ YD	4

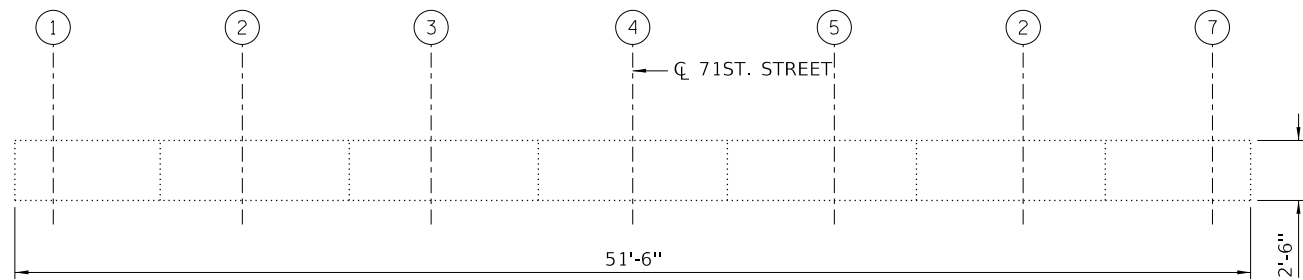
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 CHECKED BY PRD DATE 03/11/2018



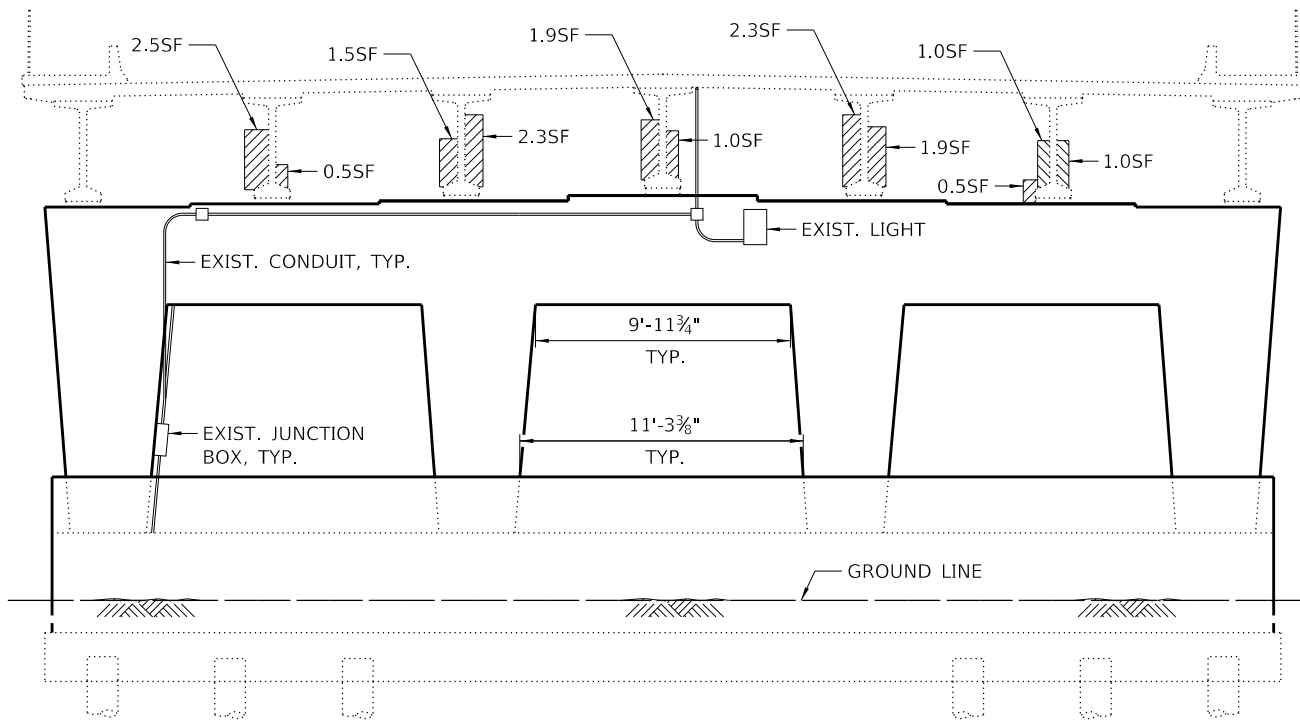
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1467 (S.N. 022-9984)  
 SLOPEWALL REPAIR DETAILS

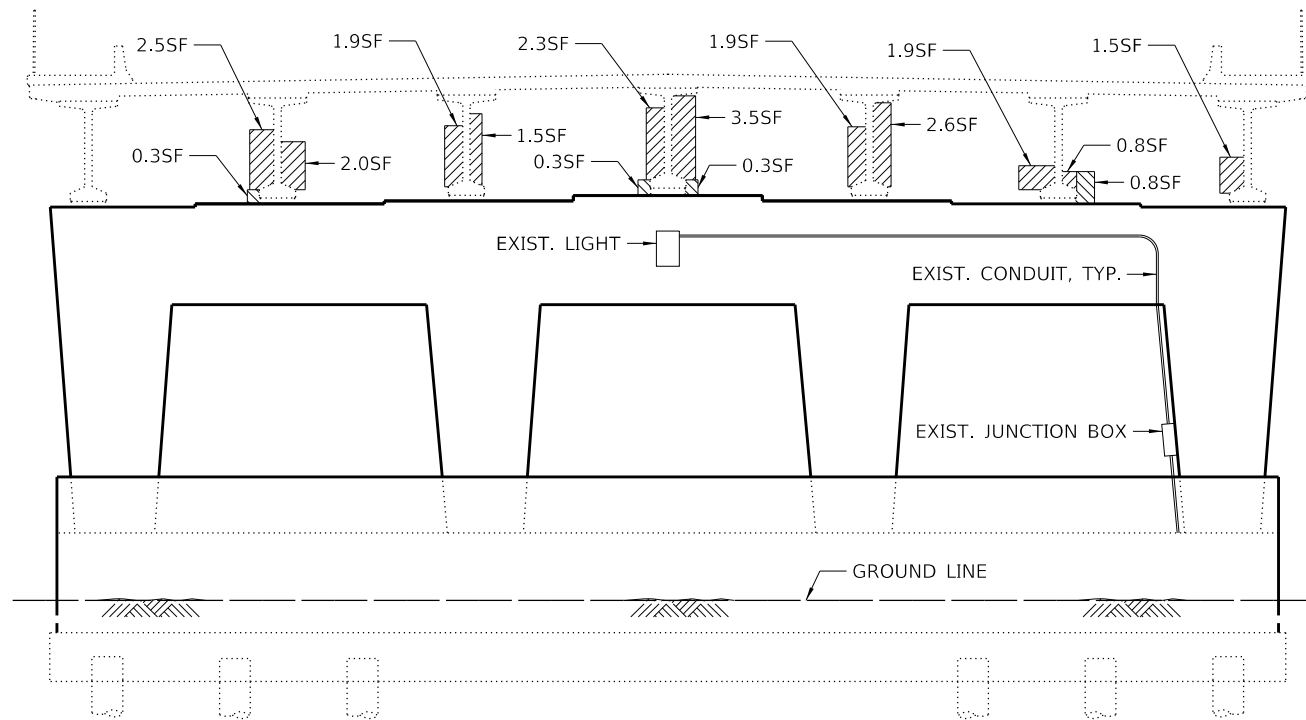
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 DRAWING NO. 926 OF 1517



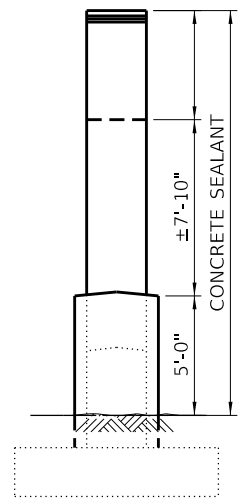
TOP PLAN



ELEVATION  
(LOOKING EAST)



ELEVATION  
(LOOKING WEST)



END VIEW

REPAIR NOTES

- HAIRLINE CRACKS ( $< \frac{1}{16}$ " ) SHALL NOT BE EPOXY INJECTED.
- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF PIER AND DIAPHRAGM SHALL BE SEALED WITH CONCRETE SEALANT.
- REPAIRS ON THE DIAPHRAGM ARE INCLUDED WITH SUPERSTRUCTURE.
- FOR CRASHWALL UPGRADES, SEE SHEET SAF-10 OF SAF-10.
- ALL STRUCTURAL REPAIR OF CONCRETE LOCATED WITHIN CRASHWALL MODIFICATION AREA SHALL BE CHIPPED AWAY PRIOR TO CRASHWALL MODIFICATION.

LEGEND

- CONCRETE REPAIR ( $< 5$ " )
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	41
APPLY CONCRETE SEALANT	SQ FT	1,710

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CHECKED BY PRD DATE 03/11/2018

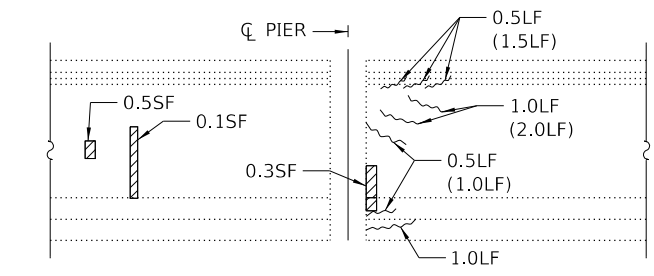


REVISIONS		
NO.	DATE	DESCRIPTION

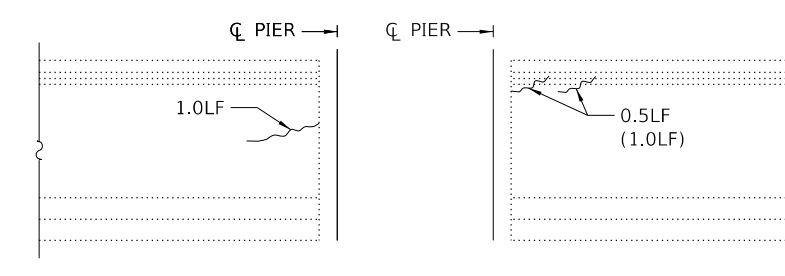
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BRIDGE NO. 1467 (S.N. 022-9984)  
PIER REPAIR DETAILS

SAF-07 OF SAF-10  
SHT NO. SAF-07  
DRAWING NO. 927 OF 1517

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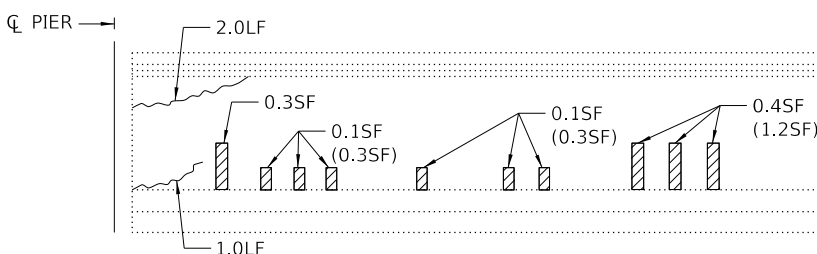


**BEAM 1**  
(LOOKING NORTH)

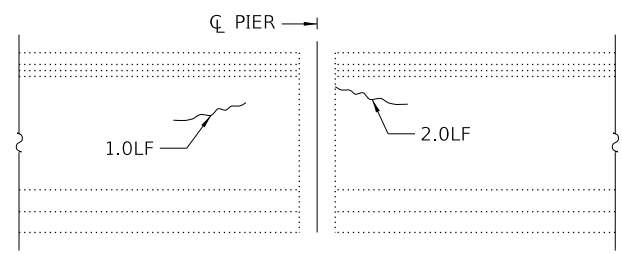


**BEAM 3 SPAN 2**  
(LOOKING SOUTH)

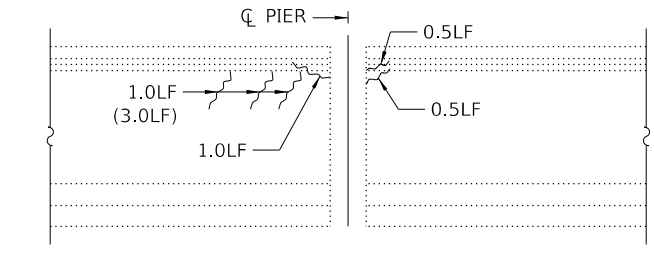
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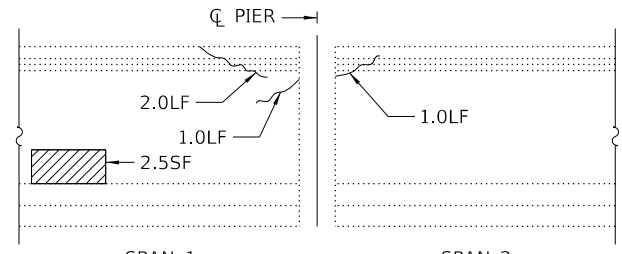
**BEAM 1 SPAN 1**  
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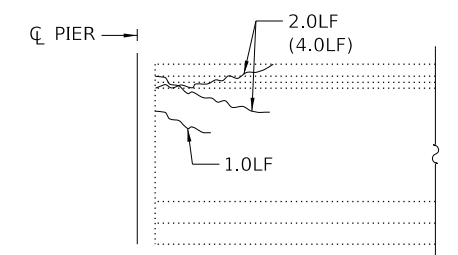
**BEAM 5**  
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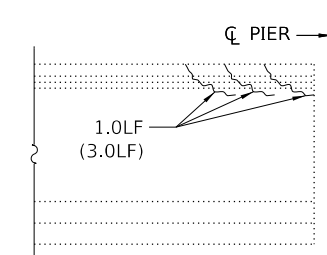
**BEAM 2**  
(LOOKING NORTH)



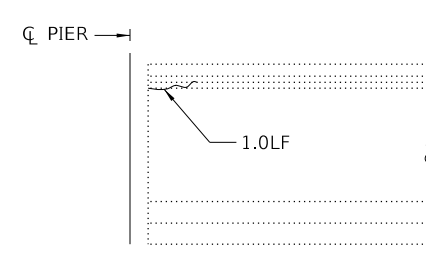
**BEAM 6**  
(LOOKING NORTH)



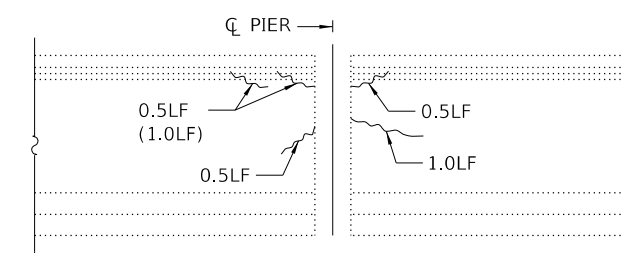
**BEAM 2 SPAN 1**  
(LOOKING SOUTH)



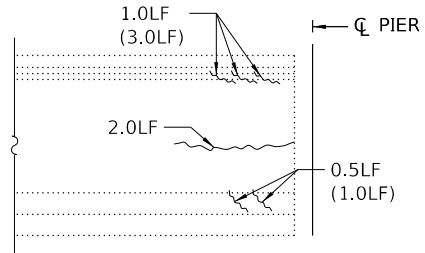
**BEAM 6 SPAN 2**  
(LOOKING SOUTH)



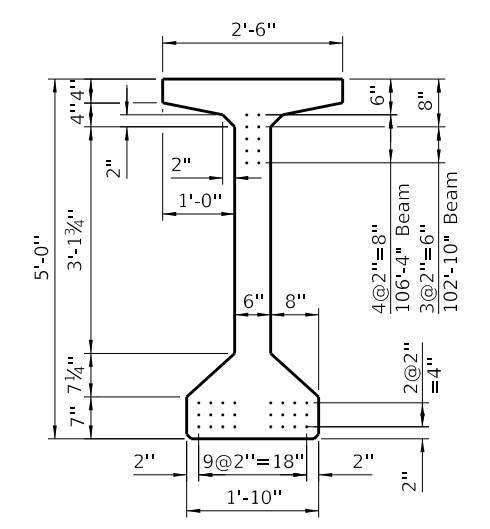
**BEAM 7 SPAN 2**  
(LOOKING NORTH)



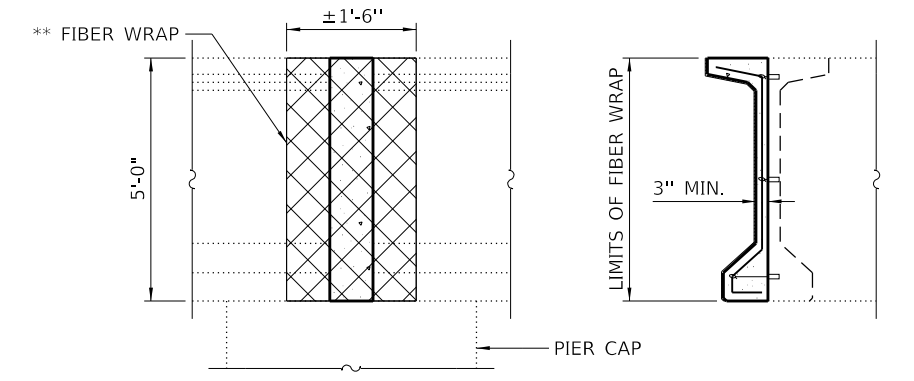
**BEAM 3**  
(LOOKING NORTH)



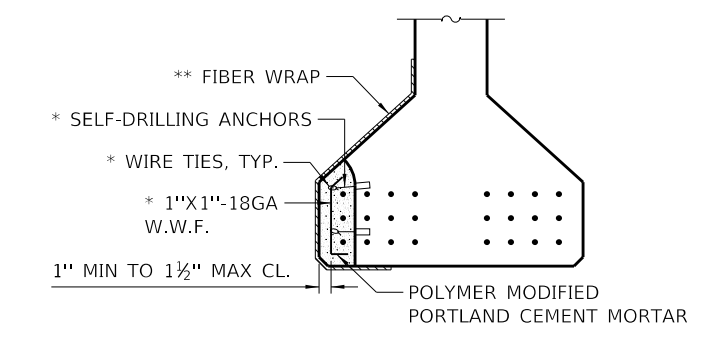
**BEAM 7 SPAN 2**  
(LOOKING SOUTH)



**TYPICAL BEAM SECTION**  
(AT BEAM ENDS)



**DIAPHRAGM OVER PIER REPAIR**



**BEAM REPAIR DETAIL**

**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED

**REPAIR NOTES**

1. HAIRLINE CRACKS (<math>< \frac{1}{16}"</math>) SHALL BE HIGH PRESSURED EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. FOR DIAPHRAGM OVER PIER, REMOVE CONCRETE AS SHOWN IN DIAPHRAGM OVER PIER REPAIR DETAIL. REPAIR DIAPHRAGM SAME AS SHOWN IN BEAM REPAIR DETAIL.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
HIGH PRESSURE EPOXY INJECTION	FOOT	56
FIBER WRAP REPAIR	SQ FT	41
POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	12

- \* INCLUDED IN THE COST OF POLYMER MODIFIED PORTLAND CEMENT MORTAR
- \*\* FIBER WRAP SHALL EXTEND AT LEAST 6" BEYOND ALL SIDES OF POLYMER MODIFIED PORTLAND CEMENT MORTAR REPAIR.

SAF-08 OF SAF-10

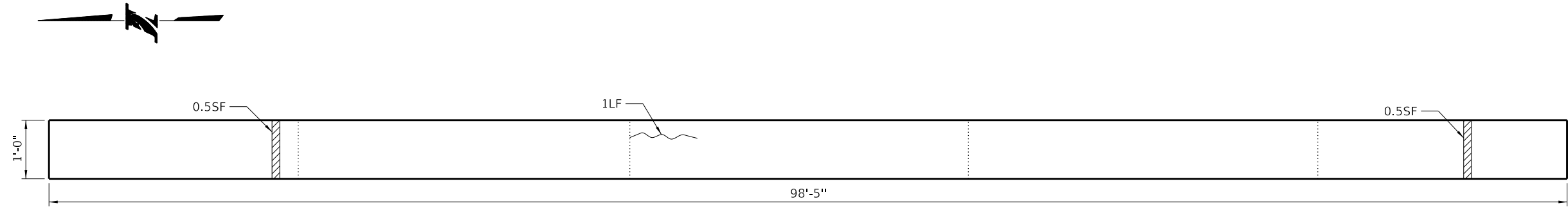
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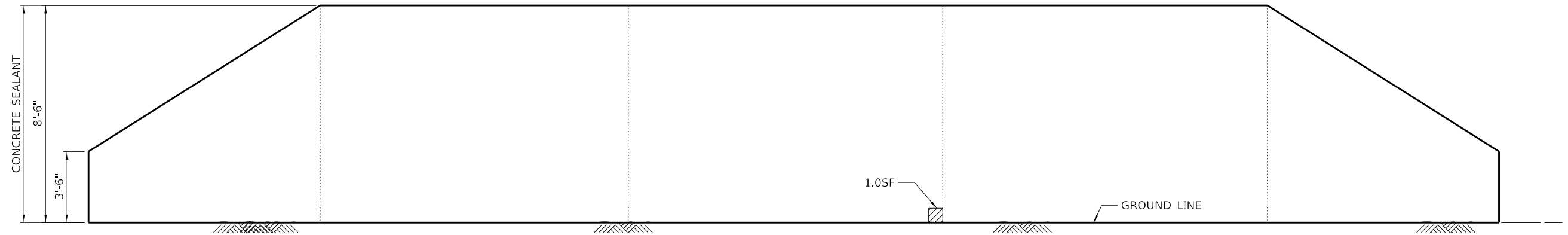
NO.		DATE	REVISIONS DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1467 (S.N. 022-9984)  
 TYPICAL BEAM & DIAPHRAGM REPAIR DETAILS

SHT NO. SAF-08  
 DRAWING NO. 928 OF 1517





EAST RETAINING PLAN



EAST RETAINING ELEVATION  
(LOOKING EAST)

LEGEND

-  CONCRETE REPAIR (<5")
-  CRACKS TO BE LOW PRESSURE EPOXY INJECTED

REPAIR NOTES

1. HAIRLINE CRACKS (<math>< \frac{1}{16}</math>") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF RETAINING WALLS SHALL BE SEALED WITH CONCRETE SEALANT.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	1
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	2
APPLY CONCRETE SEALANT	SQ FT	861

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 CHECKED BY PRD DATE 03/11/2018

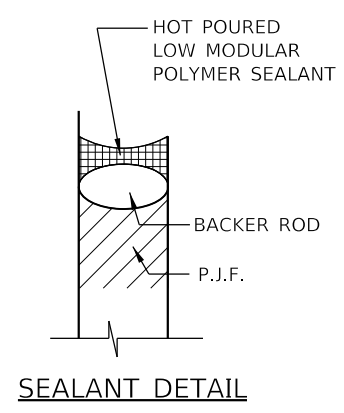
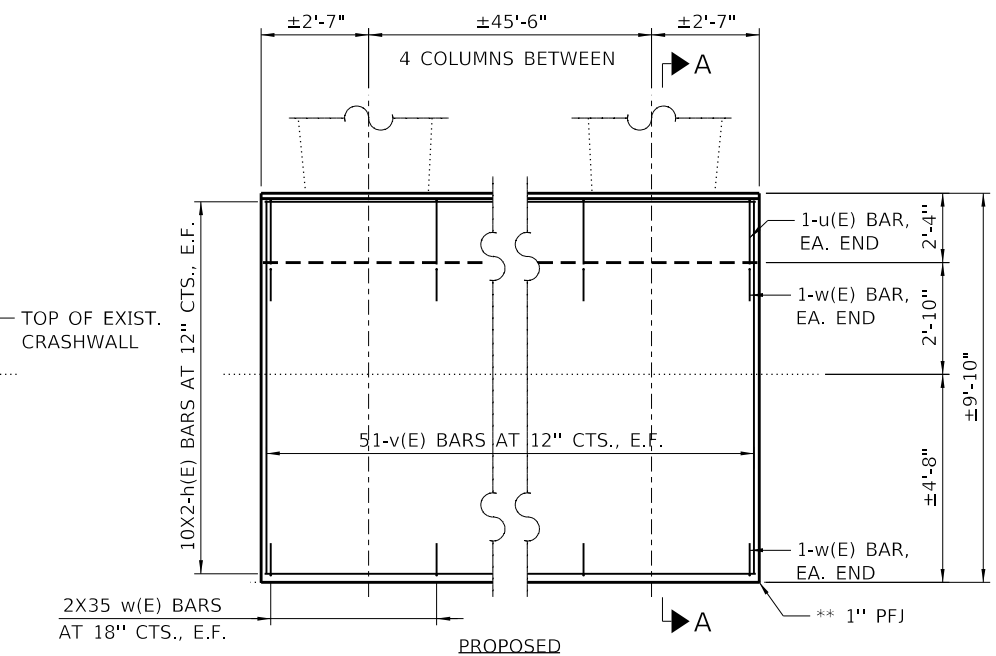
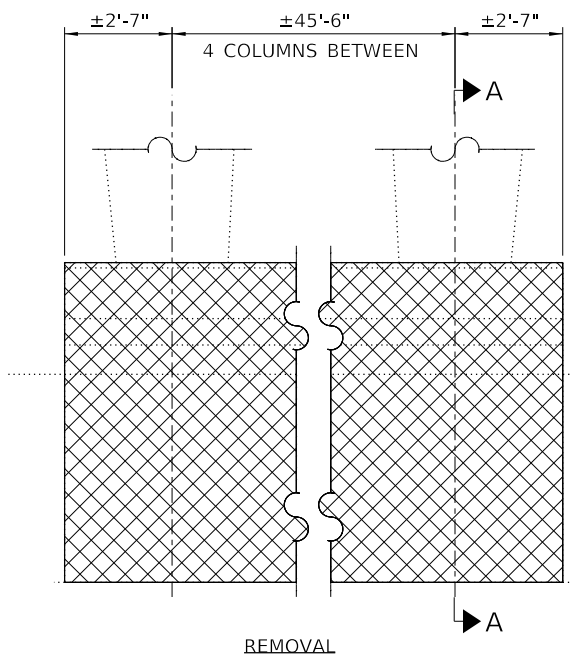


REVISIONS		DESCRIPTION
NO.	DATE	

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1467 (S.N. 022-9984)  
 MISCELLANEOUS REPAIR DETAILS

SAF-09 OF SAF-10  
 SHT NO. SAF-09  
 DRAWING NO. 929 OF 1517

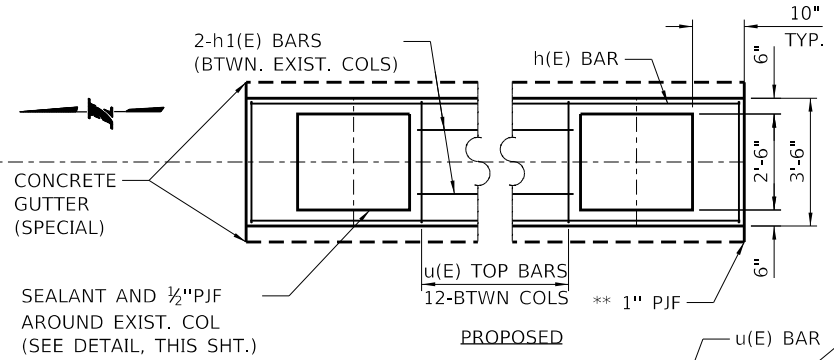
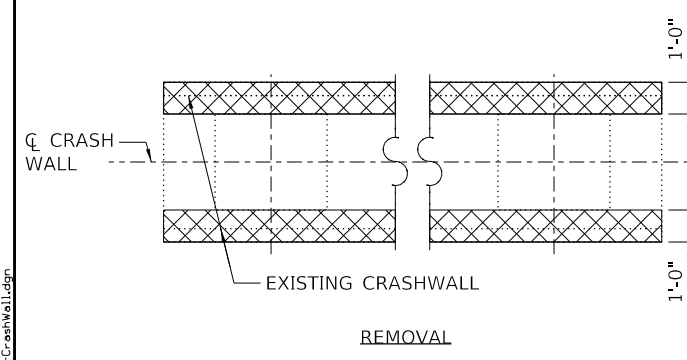
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**NOTES:**

1. REMOVE EXISTING CONCRETE CRASHWALL BACK TO FACE OF COLUMNS PRIOR TO PLACING CONCRETE AROUND EXISTING CRASHWALL AND COLUMNS. SURFACES TO RECEIVE NEW CONCRETE SHALL BE BLAST CLEANED. COST OF CLEANING SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL.
2. CONCRETE MEDIAN BARRIER TRANSITION TAPER LENGTHS, PAY LIMITS AND MEASUREMENT, AND BASIS OF PAYMENT ALL IN ACCORDANCE WITH THE ILLINOIS TOLLWAY STANDARD DRAWING C13, C14 AND THE SPECIAL PROVISIONS.
3. THE CLEAR COVER FOR REINFORCEMENT BARS TO THE SURFACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. EXPOSED CONCRETE EDGES SHALL HAVE 3/4"x45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.
6. CONCRETE SEALANT SHALL BE APPLIED TO THE EXPOSED SURFACES OF ALL NEW AND/OR MODIFIED PIER CRASH WALLS. BILL OF MATERIAL FOR "APPLY CONCRETE SEALANT" ON PIER REPAIR SHEET, SAF-07 OF SAF-10.
7. E.F. DENOTES EACH FACE
8. BARS NOTED THUS, 3X2-#5 INDICATED 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

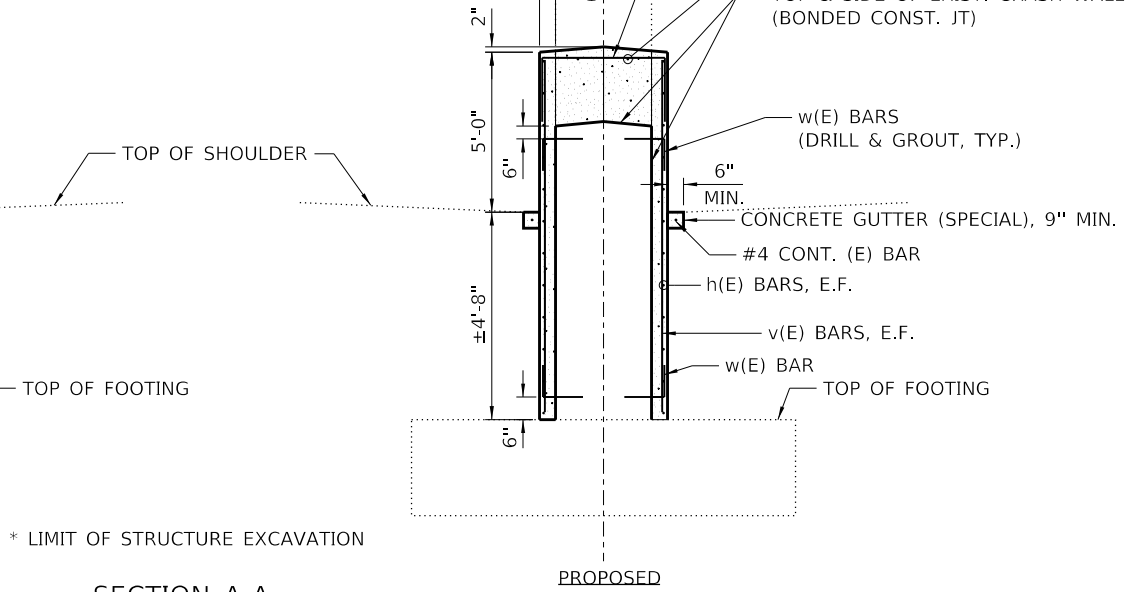
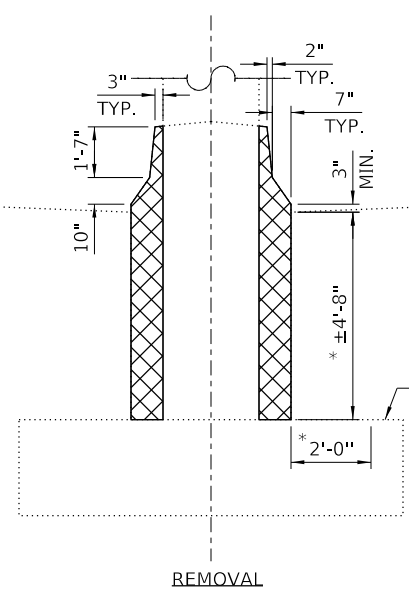
**ELEVATION**



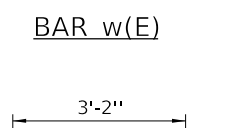
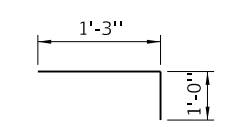
\*\* 1" P.J.F TO BE INCLUDED IN THE COST OF "CONCRETE STRUCTURES"

**PLAN**

**MIN. BAR LAP**  
#5 BAR = 3'-6"



\* LIMIT OF STRUCTURE EXCAVATION



**LEGEND**

CONCRETE REMOVAL

**BILL OF MATERIALS**

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	40	#5	27'-0"	—
h1(E)	6	#5	10'-10"	—
u(E)	38	#5	7'-2"	┌
v(E)	102	#5	6'-8"	—
w(E)	140	#4	2'-3"	┌
<b>CONCRETE REMOVAL</b>				
			CU YD	22.7
<b>STRUCTURE EXCAVATION</b>				
			CU YD	36
<b>CONCRETE STRUCTURES</b>				
			CU YD	32.7
<b>REINFORCEMENT BARS, EPOXY COATED</b>				
			POUND	2,400
<b>CONCRETE GUTTER (SPECIAL)</b>				
			FOOT	102

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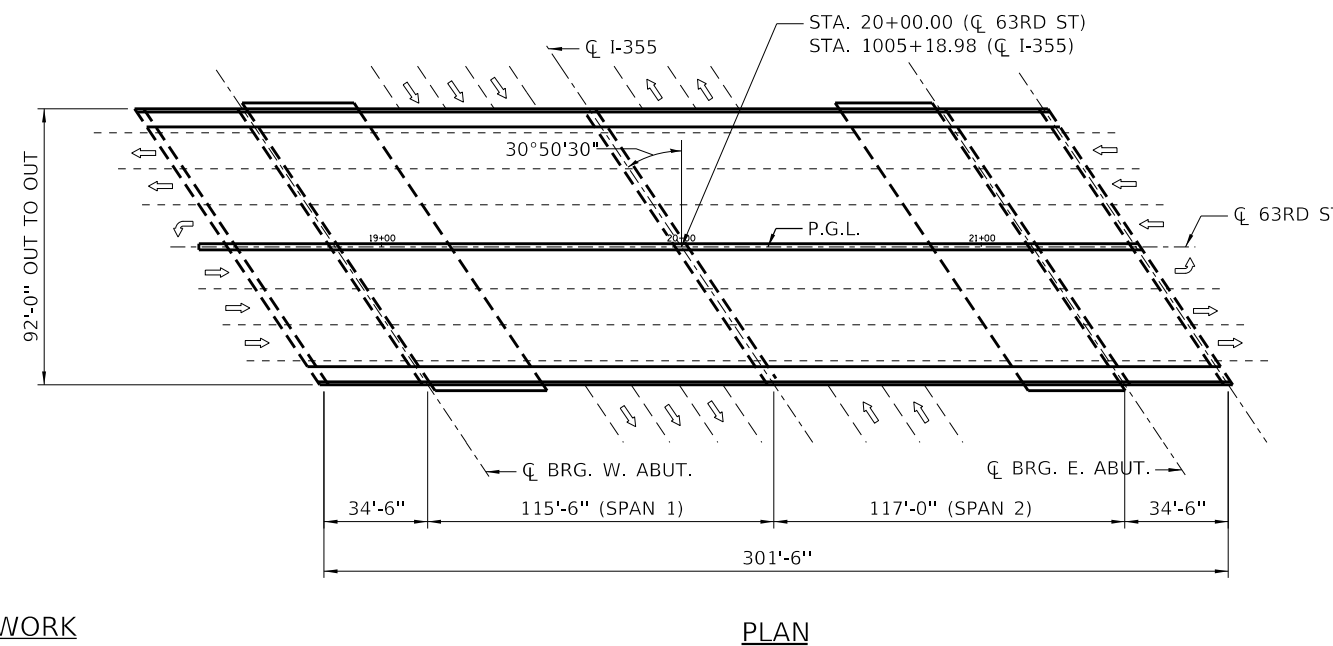
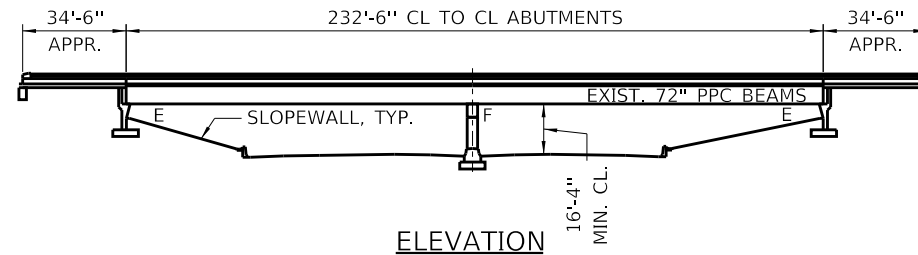
REVISIONS	
NO.	DATE DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1467 (S.N. 022-9984)  
CRASH WALL UPGRADE DETAILS

SAF-10 OF SAF-10  
SHT NO. SAF-10  
DRAWING NO. 930 OF 1517

EXISTING STRUCTURES, BN 1465, BUILT AS PART OF CONTRACT CIP-614 IN 1989, SLOPEWALL MODIFICATIONS IN 2008 AS PART OF CONTRACT I-07-5476, AND CURRENTLY (2018) UNDERGOING DECK AND JOINT REPAIRS AS PART OF SECTION 17-JTREP-00-BR. LENGTH IS 232'-6" CL TO CL OF ABUTMENTS WITH TWO SPANS, 115'-6" AND 117'-0". 72" PPC BEAMS WITH INTEGRAL ABUTMENTS.

BENCH MARK: MONUMENT No. 4 BRASS PLUG ENCASED IN CONCRETE PEDESTAL. STA. 1010+00 (N-S TOLLWAY) 345' RT. ELEV. = 710.09



**PROPOSED SCOPE OF WORK**

1. REPAIR SPALLED AND DELAMINATED CONCRETE IN ABUTMENTS, PIERS, WINGWALLS, AND SLOPE WALLS.
2. CLEAN AND SEAL CRACKS WIDER THAN 1/16" AND ALL LEACHING CRACKS IN ABUTMENTS AND PIERS. SEAL ALL CRACKS IN SLOPEWALL GREATER THAN 1/2".
3. CLEAN AND SEAL ALL CRACKS ON THE PPC BEAMS.
4. CLEAN AND PAINT BEARINGS.
5. REPAIR SPALLED AND DELAMINATED CONCRETE WITH POLYMER CONCRETE CEMENT MORTAR WITH FIBER WRAP ON PPC BEAMS. FIBER WRAP ONLY OVER SHOULDERS AND LANES OF TRAFFIC.
6. APPLY CONCRETE SEALANT TO ABUTMENTS, BRIDGE SEATS, BACKWALLS AND PIERS.
7. MODIFY EXISTING CRASHWALLS AT PIER TO MEET CURRENT TOLLWAY STANDARDS.

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED MARCH 2017.

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS, (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL SERVICES MANUAL ADOPTED JUNE 30, 2017.

**LOADING HS20-44**

(FROM 1987 PLANS)

ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE

**DESIGN STRESSES**

**FIELD UNITS**

- f'c = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)
- f'c = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)
- f'c = 4,000 PSI (CLASS AX BRIDGE DECK & APPROACH SLAB REPAIRS)
- fy = 60,000 PSI (REINFORCEMENT)

**HIGHWAY CLASSIFICATION**

63RD STREET (ON ROUTE)  
FUNCTIONAL CLASS: URBAN  
ADT: 30,900 (2016)  
ADTT: 1,854 (2016)

I-355 (UNDER)  
FUNCTIONAL CLASS: INTERSTATE  
ADT: 133,600 (2014)  
ADTT: 12,024 (2014)



SAG-01 OF SAG-13

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DRAWN BY THW DATE 03/11/2018  
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REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1465 (S.N. 022-9983)  
GENERAL PLAN AND ELEVATION

SHT NO. SAG-01  
DRAWING NO. 931 OF 1517

**GENERAL NOTES**

**CONSTRUCTION**

- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION TOLERANCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
- CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
- NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
- THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COSTS WILL BE AT THE CONTRACTOR'S EXPENSE.
- NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINES BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E. 1-800-892-0123.
- EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH THAT FOR, "CONCRETE REMOVAL".
- WHENEVER THE MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF THE EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
- CONCRETE SEALANT SHALL BE APPLIED TO THE REPAIRED AREAS OF THE VISIBLE FACES OF THE PIER COLUMNS, CRASHWALLS AND CAPS, PIERS AND ABUTMENTS, BACKWALLS, AND BEARING SEATS. EXISTING SURFACES SHALL BE POWERED WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS. AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
- ALL DIMENSIONS ARE TAKEN FROM THE FOLLOWING EXISTING PLANS:  
TOLLWAY CONTRACT NO. CIP-614 (1986).
- THE TOP OF THE DECK IS MAINTAINED BY DUPAGE COUNTY.

**GENERAL NOTES (CONT.)**

**CAST-IN-PLACE CONCRETE**

- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF 1 FOOT BELOW FINISHED GROUND LEVEL.
- REINFORCING BARS**
- REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM 706), GRADE 60, DEFORMED BARS.
  - REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY-COATED.
  - REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION.
  - REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
  - COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

**ABBREVIATIONS**

- ABUT. - ABUTMENT
- APPROX. - APPROXIMATE
- BPJS - BONDED PREFORMED JOINT SEAL
- BRG. - BEARING
- CL. - CLEAR
- DIM. - DIMENSION
- E. - EAST
- ELEV. - ELEVATION
- EXIST. - EXISTING
- MAX. - MAXIMUM
- MIN. - MINIMUM
- N. - NORTH
- N.B. - NORTHBOUND
- NO. - NUMBER
- P.G.L. - PROFILE GRADE LINE
- S. - SOUTH
- S.B. - SOUTHBOUND
- SDWK - SIDEWALK
- SHLDR. - SHOULDER
- STA. - STATION
- TP. - TYPICAL
- W. - WEST

**LIST OF SHEETS**

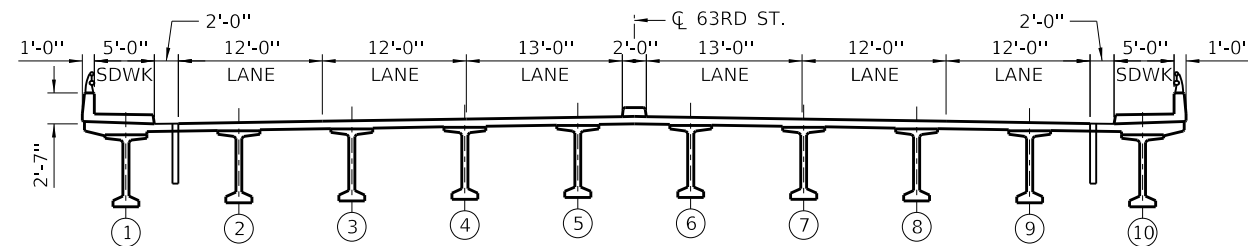
SAG-01	GENERAL PLAN AND ELEVATION
SAG-02	GENERAL DATA, SOQ, CROSS SECTION, AND LIST OF SHEETS
SAG-03	EAST ABUTMENT REPAIR DETAILS
SAG-04	WEST ABUTMENT REPAIR DETAILS
SAG-05	WINGWALL REPAIR DETAILS
SAG-06	SLOPEWALL REPAIR DETAILS
SAG-07	PIER REPAIR DETAILS I
SAG-08	PIER REPAIR DETAILS II
SAG-09	BEAM REPAIR DETAILS (SPAN 1) - I
SAG-10	BEAM REPAIR DETAILS (SPAN 1) - II
SAG-11	BEAM REPAIR DETAILS (SPAN 2) - I
SAG-12	BEAM REPAIR DETAILS (SPAN 2) - II
SAG-13	CRASH WALL MODIFICATIONS

**TOTAL BILL OF MATERIALS  
(BN 1465)**

CODE	ITEM	UNIT	SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL	RECORD QUANTITIES
50102400	CONCRETE REMOVAL	CU YD	38.7		38.7	
50200100	STRUCTURE EXCAVATION	CU YD	34.7		34.7	
50300225	CONCRETE STRUCTURES	CU YD	58.3		58.3	
50800205	REINFORCEMENT BARS ,EPOXY COATED	POUND	4580		4580	
* J1606050	CONCRETE GUTTER (SPECIAL)	FOOT	216		216	
* JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	422		422	
* JS121300	HIGH PRESSURE EPOXY INJECTION	FOOT		107	107	
* JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	304	13	317	
* JT503100	FIBER WRAP REPAIR	SQ FT		22	22	
* JT524010	APPLY CONCRETE SEALANT	SQ FT	7086		7086	
* JT599105	SLOPE WALL GAP FILLER REMOVAL AND REPLACEMENT	FOOT	230		230	
GBSP X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT		14	14	
** X0323491	SLOPE WALL CRACK SEALING	FOOT	75		75	
** X0326331	CLEANING AND PAINTING BEARINGS	EACH		20	20	
** X8430100	REMOVE EXISTING CONDUIT ATTACHED TO STRUCURE	FOOT	115		115	
** Z0065700	SLOPE WALL REPAIR	SQ YD	5		5	

\* TOLLWAY SPECIAL PROVISION ITEM  
 \*\* IDOT SPECIAL PROVISION ITEM  
 GBSP IDOT GUIDE BRIDGE SPECIAL PROVISION

SAG-02 OF SAG-13



**TYPICAL CROSS SECTION  
(LOOKING EAST)**

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 CHECKED BY PRD DATE 03/11/2018



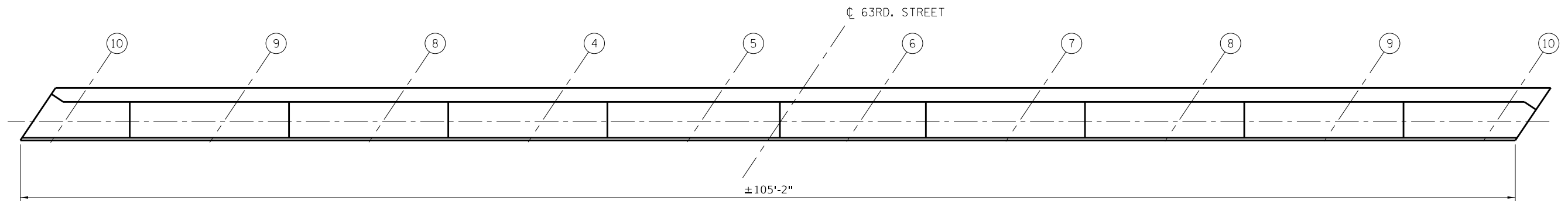
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		DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1465 (S.N. 022-9983)  
 GENERAL DATA

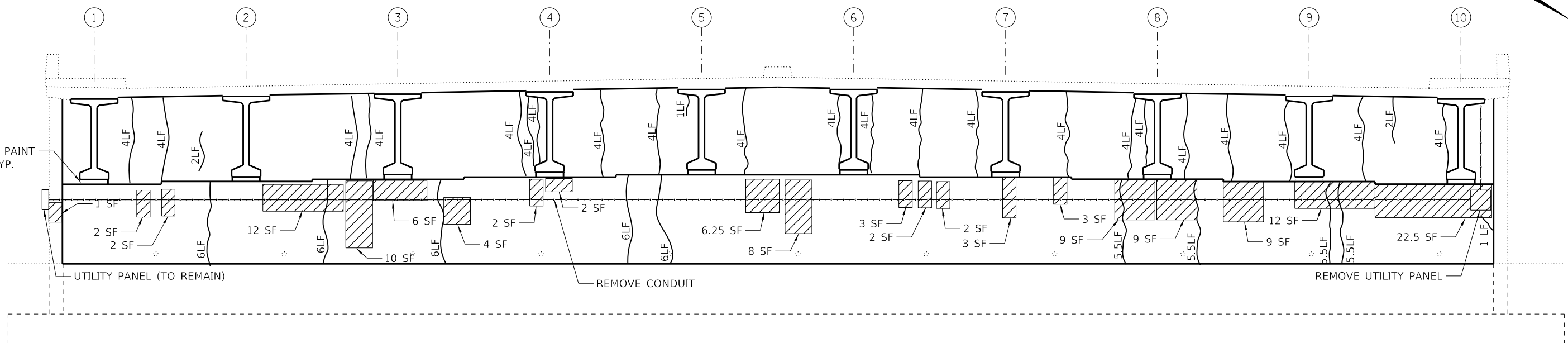
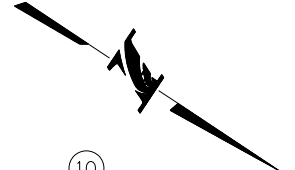
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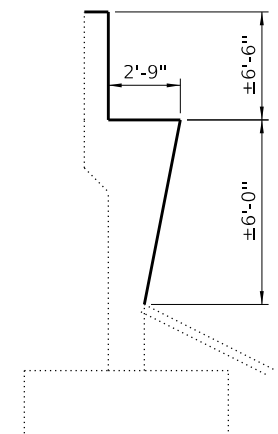




WEST ABUTMENT PLAN



WEST ABUTMENT ELEVATION



SECTION THRU ABUTMENT  
(SHOWING LIMITS OF CONCRETE SEALANT)

**REPAIR NOTES**

1. HAIRLINE CRACKS ( $< \frac{1}{16}$ " ) SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF ABUTMENTS SHALL BE SEALED WITH CONCRETE SEALANT.

**LEGEND**

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE INJECTED

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	146
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	132
APPLY CONCRETE SEALANT	SQ FT	1,604
REMOVAL OF EXISTING CONDUIT ON STRUCTURE	FOOT	115
CLEANING AND PAINTING BEARINGS	EACH	10

SAG-03 OF SAG-13

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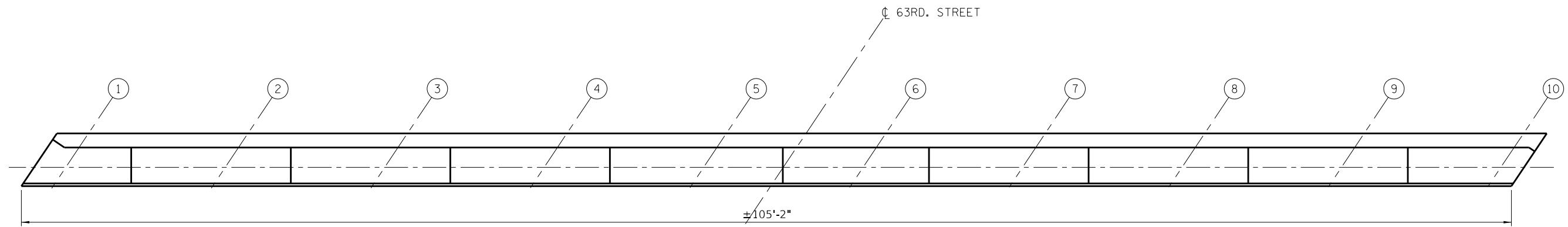


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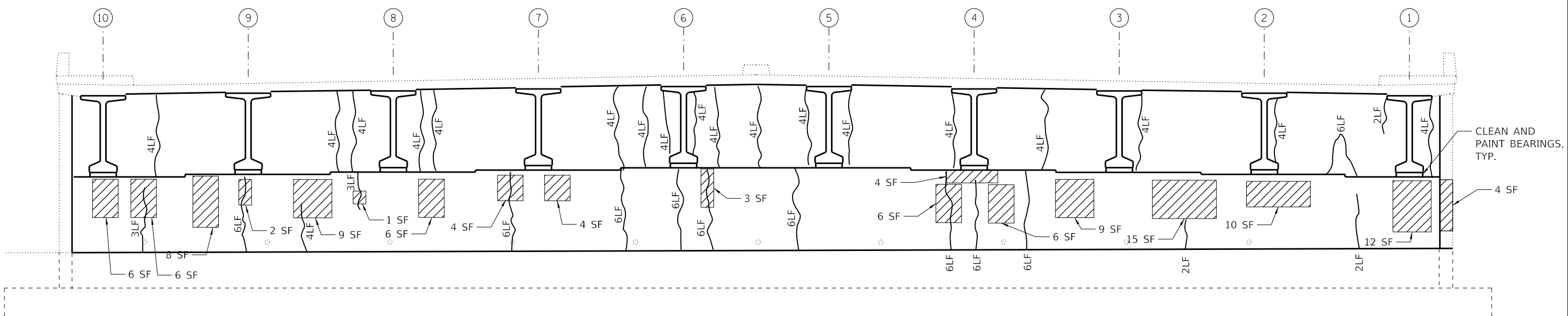
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 BRIDGE NO. 1465 (S.N. 022-9983)  
 WEST ABUTMENT REPAIR DETAILS

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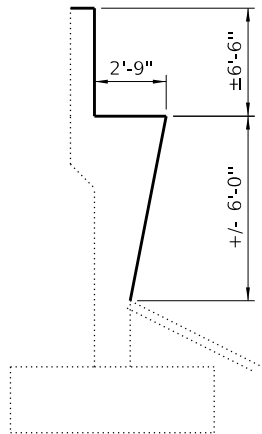
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EAST ABUTMENT PLAN



EAST ABUTMENT ELEVATION



SECTION THRU ABUTMENT  
(SHOWING LIMITS OF CONCRETE SEALANT)

REPAIR NOTES

- HAIRLINE CRACKS ( $< \frac{1}{16}$ " ) SHALL NOT BE EPOXY INJECTED.
- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF ABUTMENTS SHALL BE SEALED WITH CONCRETE SEALANT.

LEGEND

- CONCRETE REPAIR ( $< 5$ " )
- CRACKS TO BE LOW PRESSURE INJECTED

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	148
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	115
APPLY CONCRETE SEALANT	SQ FT	1,604
CLEANING AND PAINTING BEARINGS	EACH	10

SAG-04 OF SAG-13

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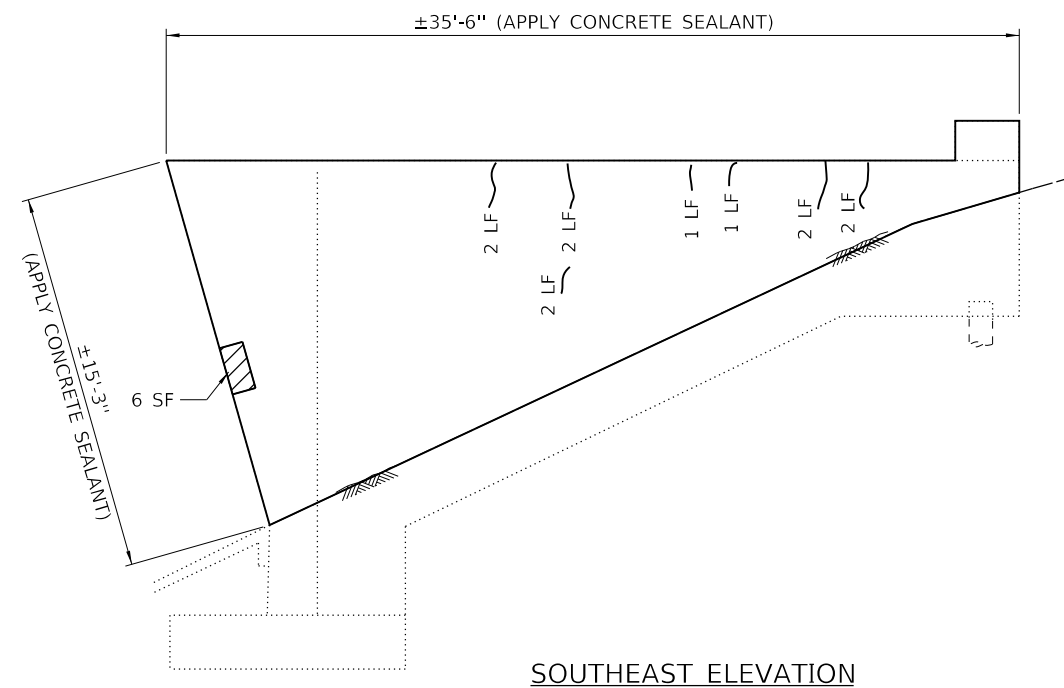
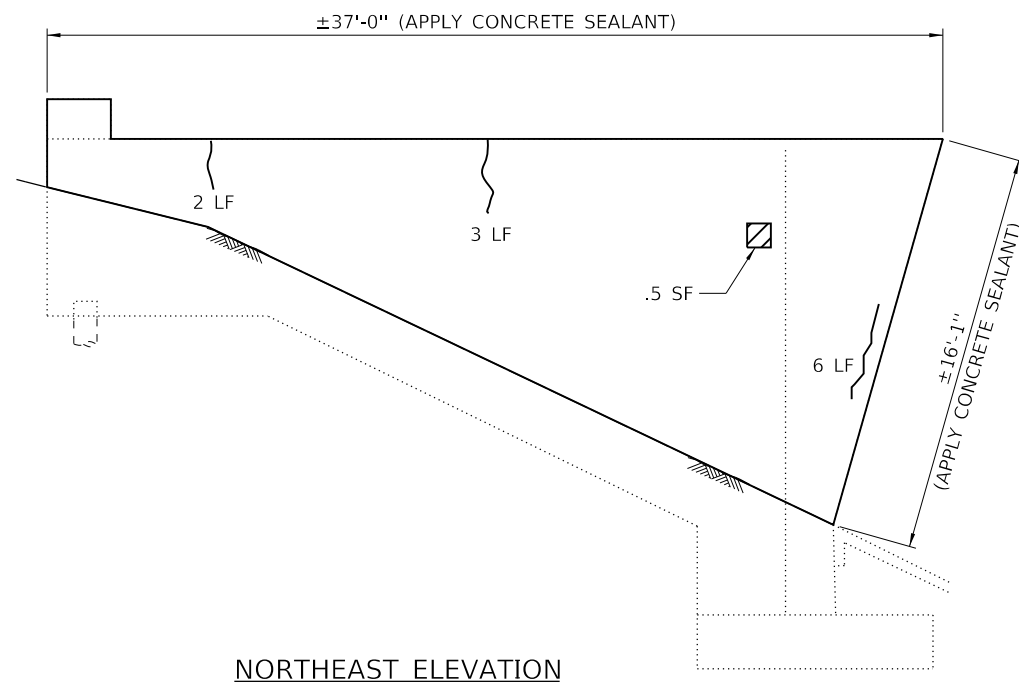
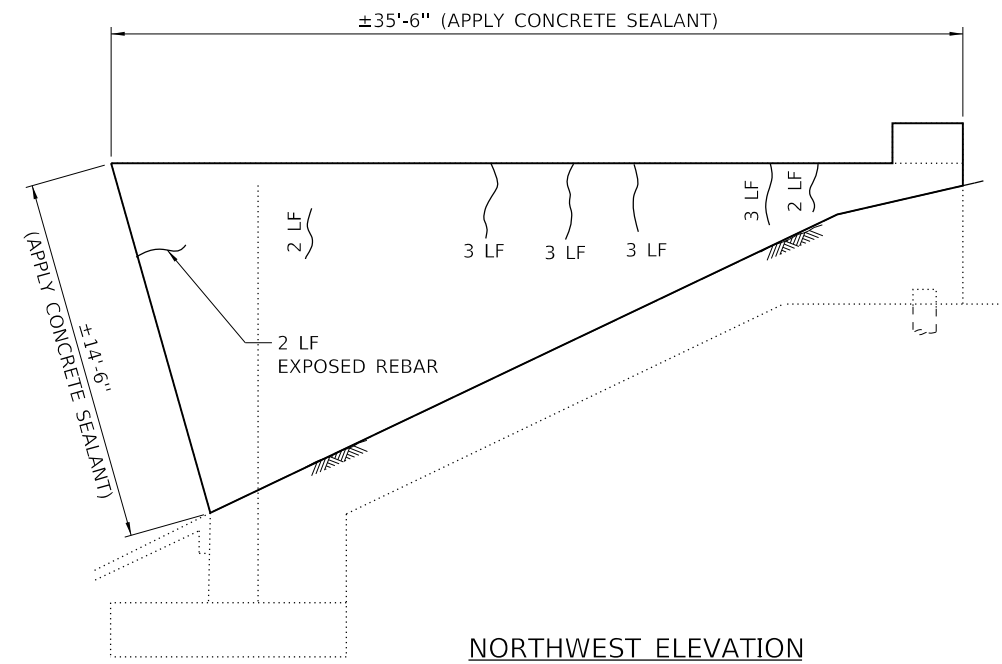
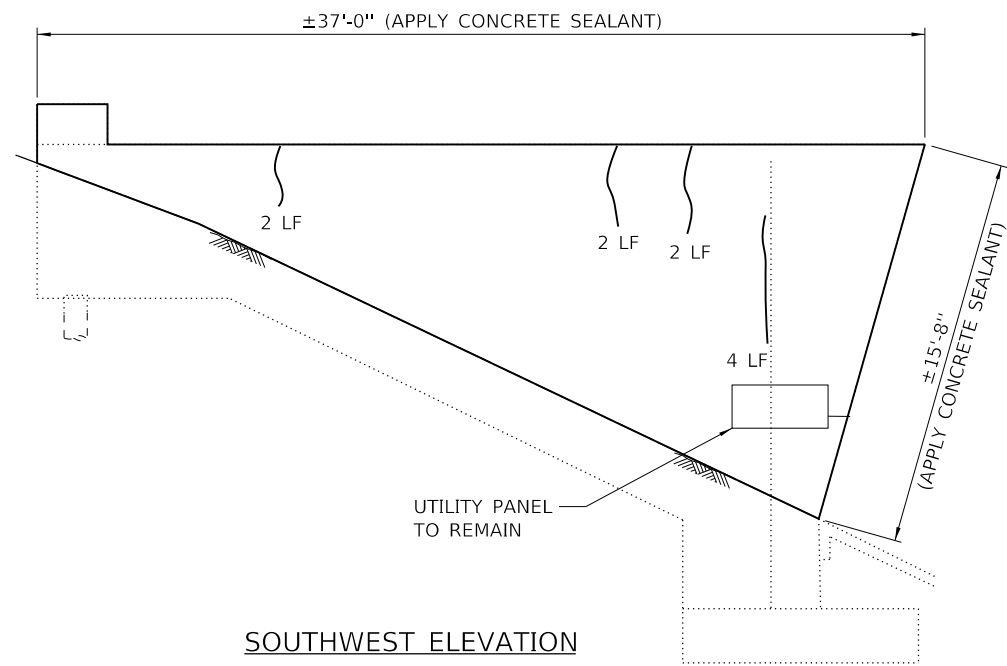


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NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1465 (S.N. 022-9983)  
EAST ABUTMENT REPAIR DETAILS

SHT NO. SAG-04  
DRAWING NO. 934 OF 1517

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**REPAIR NOTES**

- HAIRLINE CRACKS (<math>< \frac{1}{16}"</math>) SHALL NOT BE EPOXY INJECTED.
- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF WINGWALLS SHALL BE SEALED WITH CONCRETE SEALANT.

**LEGEND**



}

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	51
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	7
APPLY CONCRETE SEALANT	SQ FT	826

SAG-05 OF SAG-13

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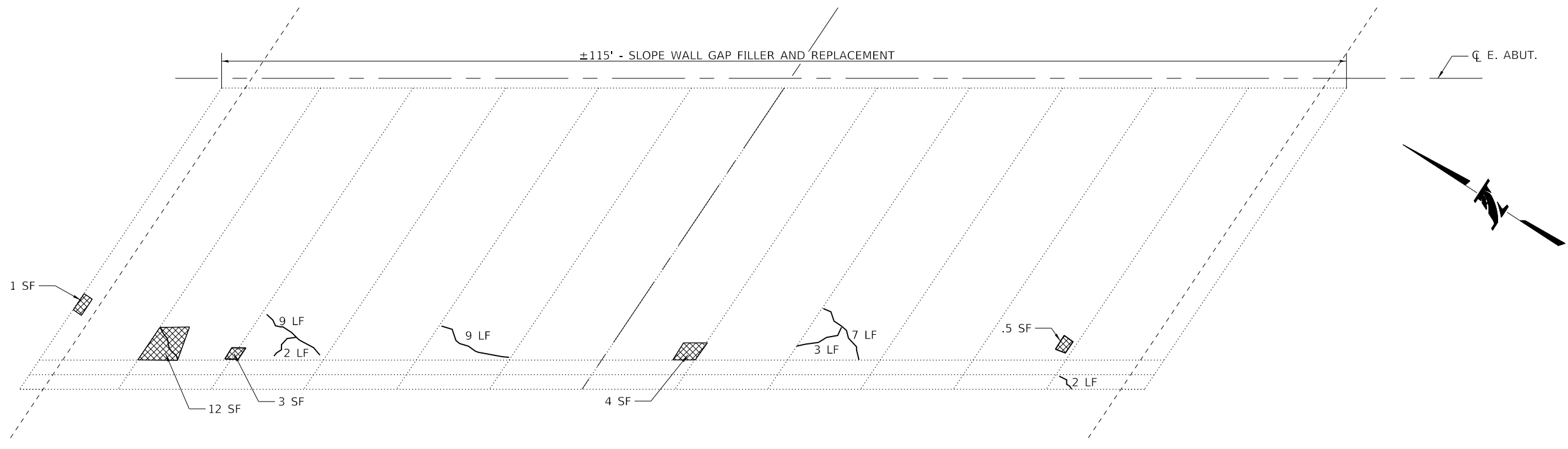
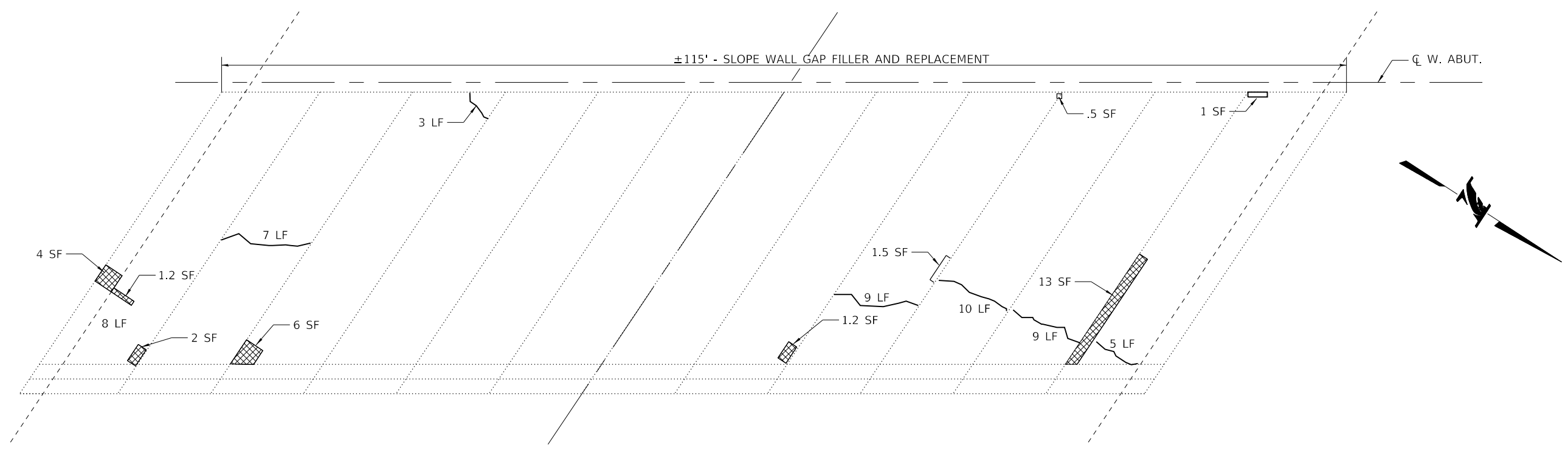
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REVISIONS		
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 BRIDGE NO. 1465 (S.N. 022-9983)  
 WINGWALL REPAIR DETAILS

SHT NO. SAG-05  
 DRAWING NO. 935 OF 1517



**LEGEND**

- SLOPEWALL REPAIR
- SLOPEWALL CRACK SEALING

**REPAIR NOTES**

1. CRACKS (> 1/2") IN SLOPEWALLS SHALL BE SEALED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
SLOPE WALL GAP FILLER REMOVAL AND REPLACEMENT	FOOT	230
SLOPE WALL CRACK SEALING	FOOT	75
SLOPE WALL REPAIR	SQ YD	5

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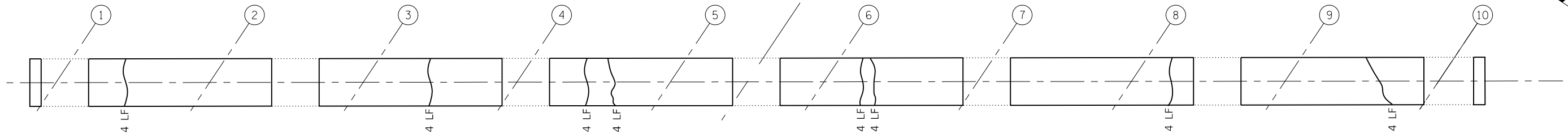
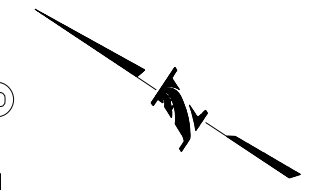
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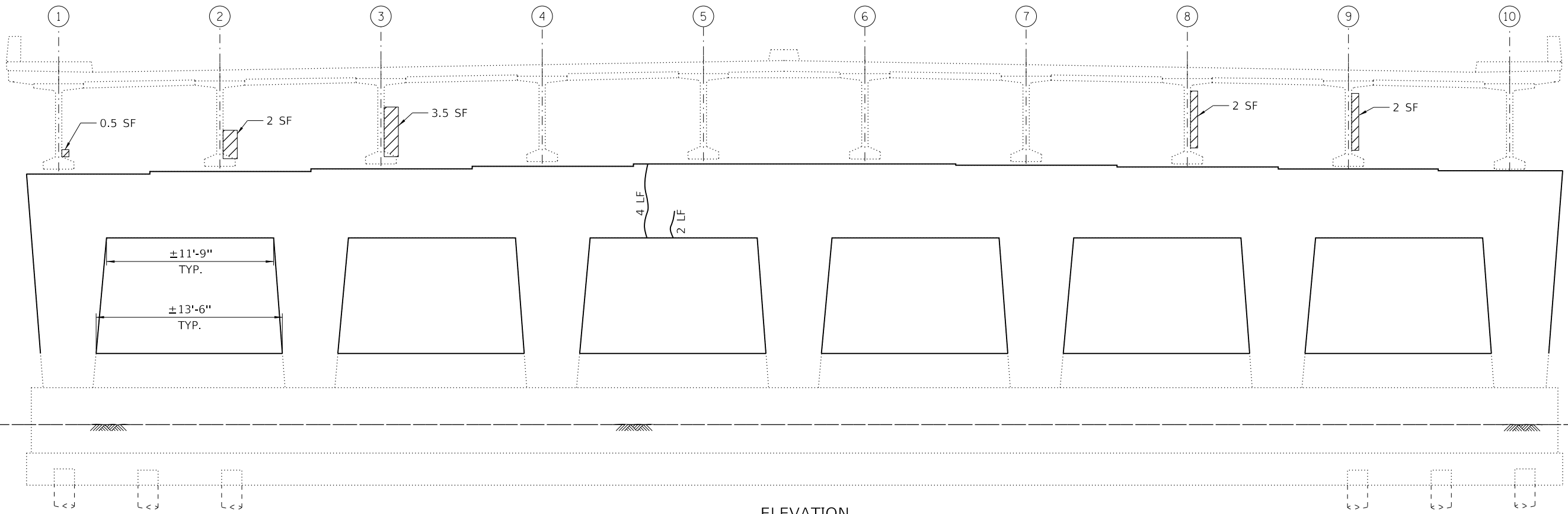
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 BRIDGE NO. 1465 (S.N. 022-9983)  
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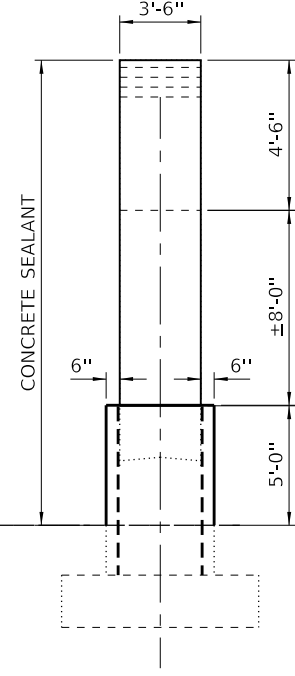
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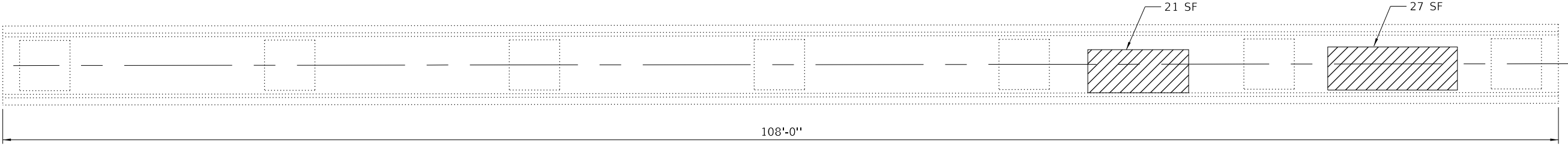
CAP UNDERSIDE PLAN



ELEVATION  
(LOOKING EAST)



NORTH END VIEW



CRASHWALL PLAN

REPAIR NOTES

- HAIRLINE CRACKS (<math>< \frac{1}{16}"</math>) SHALL NOT BE EPOXY INJECTED.
- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF PIERS SHALL BE SEALED WITH CONCRETE SEALANT.
- ALL REPAIRS IN THE DIAPHRAGM SHALL BE INCLUDED IN SUPERSTRUCTURE.

LEGEND

- CONCRETE REPAIR (<math>< 5"</math>)
- CRACKS TO BE EPOXY INJECTED

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	38
STRUCTURAL REPAIR OF CONCRETE DEPTH EQUAL TO OR LESS THAN 5 INCHES	SQ FT	58
APPLY CONCRETE SEALANT	SQ FT	3,408

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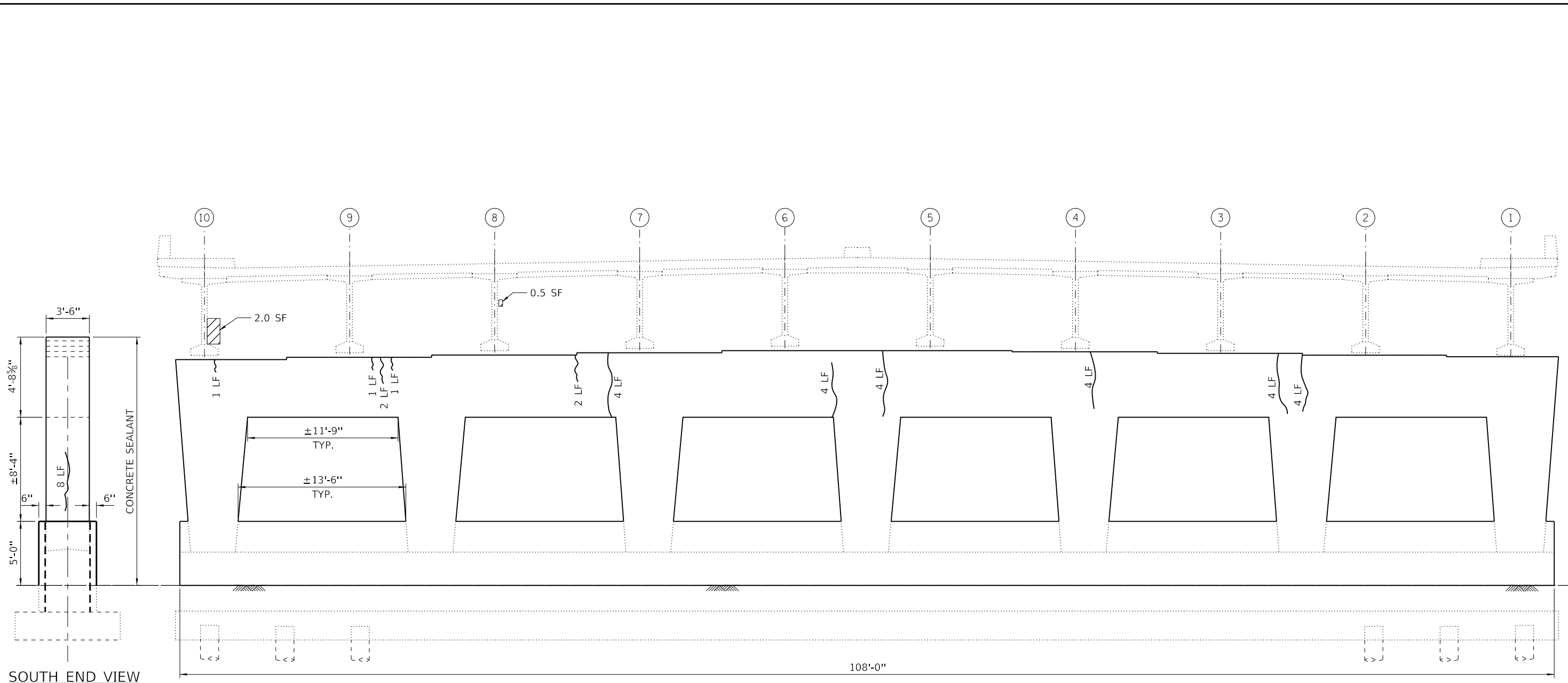


REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1465 (S.N. 022-9983)  
 PIER REPAIR DETAILS I

SAG-07 OF SAG-13  
 SHT NO. SAG-07  
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SOUTH END VIEW

ELEVATION  
(LOOKING WEST)

**REPAIR NOTES**

1. HAIRLINE CRACKS ( $< \frac{1}{16}$ " ) SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF PIERS SHALL BE SEALED WITH CONCRETE SEALANT.
4. ALL REPAIRS IN THE DIAPHRAGM SHALL BE INCLUDED IN SUPERSTRUCTURE.

**LEGEND**

- CONCRETE REPAIR ( $< 5$ " )
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	39
STRUCTURAL REPAIR OF CONCRETE DEPTH EQUAL TO OR LESS THAN 5 INCHES	SQ FT	3
APPLY CONCRETE SEALANT	SQ FT	3,446

SAG-08 OF SAG-13

DRAWN BY THW DATE 03/11/2018  
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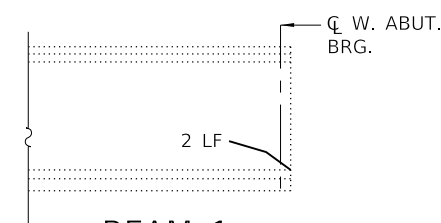


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NO.	DATE

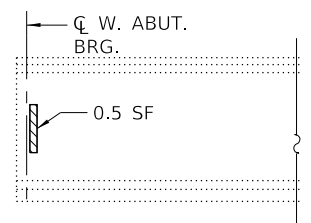
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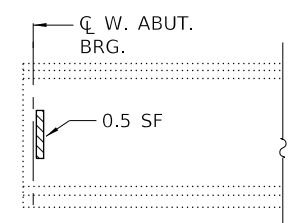
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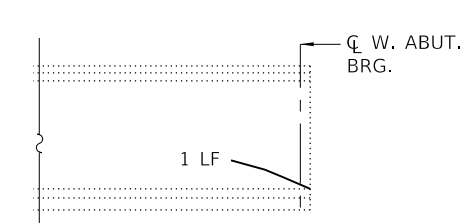
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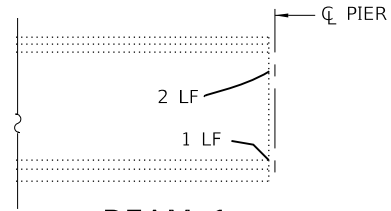
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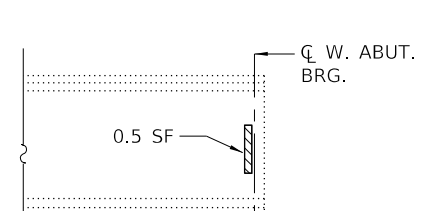
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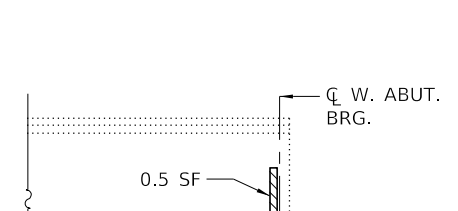
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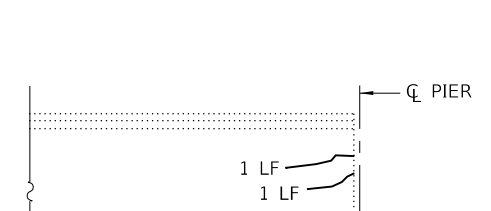
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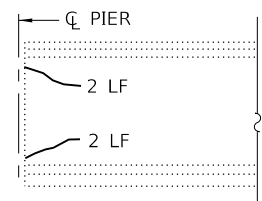
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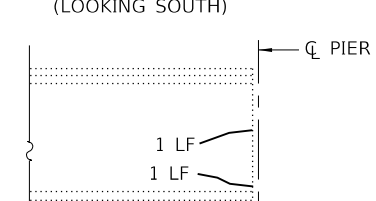
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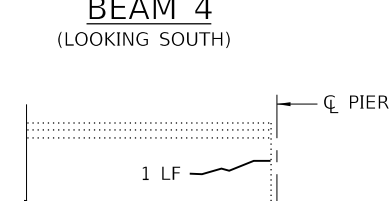
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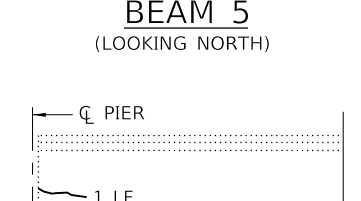
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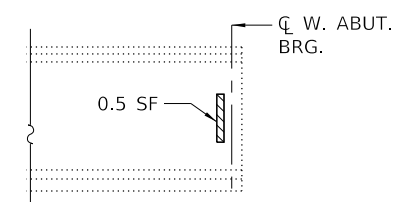
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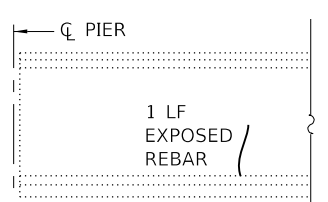
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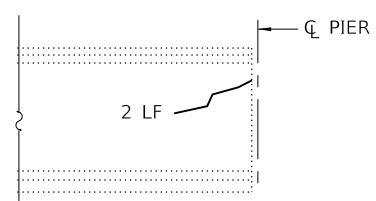
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**BEAM 2**  
(LOOKING SOUTH)



**BEAM 3**  
(LOOKING SOUTH)



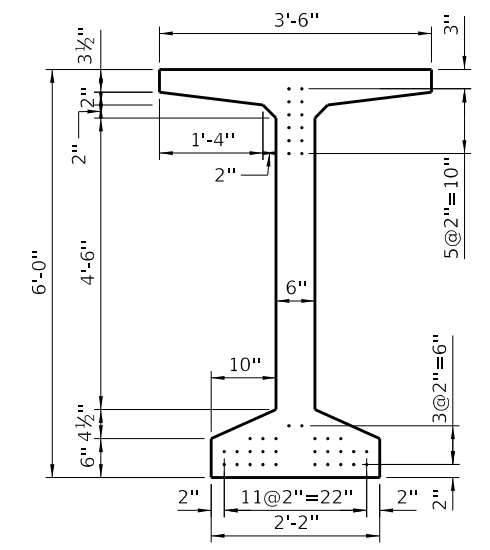
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(LOOKING NORTH)

**LEGEND**

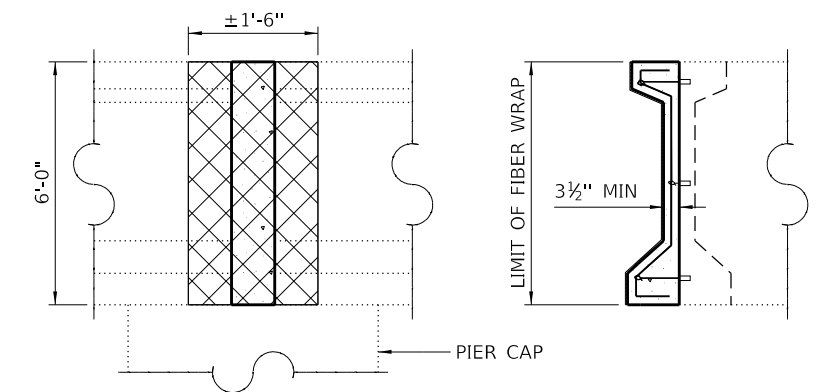
- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR ONLY (NO FIBER WRAP)

**NOTE:**

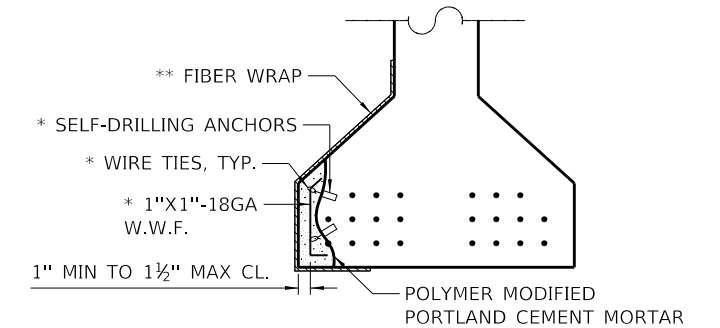
FOR REPAIR DETAILS AND BILL OF MATERIALS, SEE SHEET SAG-12 OF SAG-13.



**TYPICAL BEAM SECTION**  
(AT BEAM ENDS)



**DIAPHRAGM OVER PIER REPAIR**



**BEAM REPAIR DETAIL**

\* INCLUDED IN THE COST OF POLYMER MODIFIED PORTLAND CEMENT MORTAR

\*\* FIBER WRAP SHALL EXTEND AT LEAST 6" BEYOND ALL SIDES OF POLYMER MODIFIED PORTLAND CEMENT MORTAR REPAIR.

DRAWN BY THW DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018

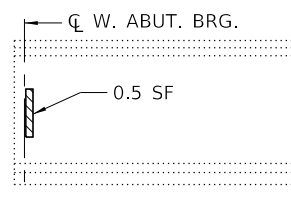


REVISIONS		
NO.	DATE	DESCRIPTION

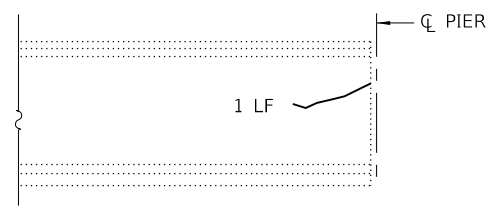
CONTRACT NO. RR-16-4255  
BRIDGE NO. 1465 (S.N. 022-9983)  
BEAM REPAIR DETAILS (SPAN 1) - I

SHT NO. SAG-09  
DRAWING NO. 939 OF 1517

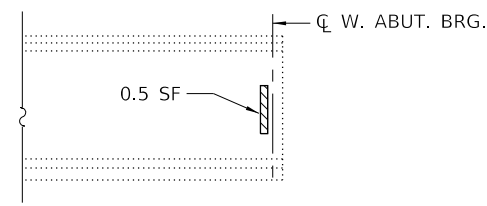
SAG-09 OF SAG-13



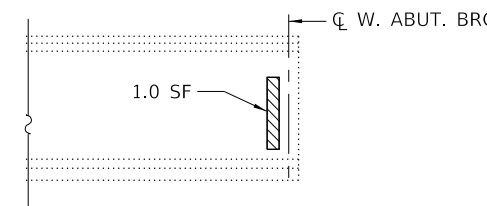
**BEAM 6**  
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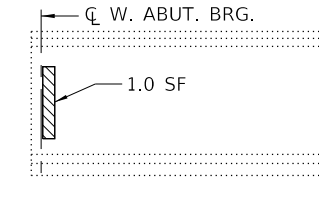
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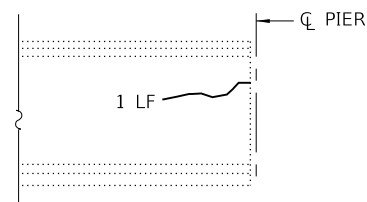
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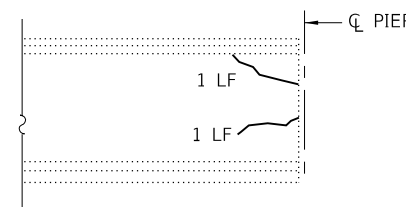
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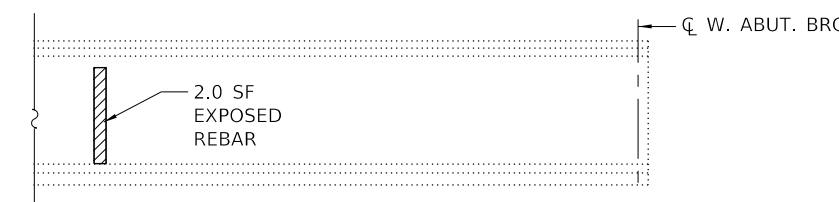
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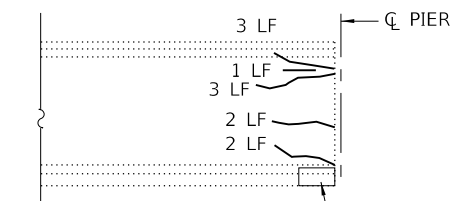
**BEAM 6**  
(LOOKING NORTH)



**BEAM 8**  
(LOOKING NORTH)



**BEAM 10**  
(LOOKING SOUTH)



**BEAM 10**  
(LOOKING NORTH)

**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR ONLY (NO FIBER WRAP)

**NOTES:**

FOR REPAIR DETAILS AND BILL OF MATERIALS, SEE SHEET SAG-12 OF SAG-13.

FIBER WRAP ONLY TO BE APPLIED TO REPAIR AREAS OVER SHOULDERS AND LANES OF TRAFFIC.

SAG-10 OF SAG-13

C:\Users\Gunter\Dropbox (FEI)\Projects\Tolway Contract 17-RR-4312.FEI Job 17-1163\4255\Working\CADD Sheets\SAG-BN\465\4255-1465-SAG10-BeamSpan1.dgn

DRAWN BY THW DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018



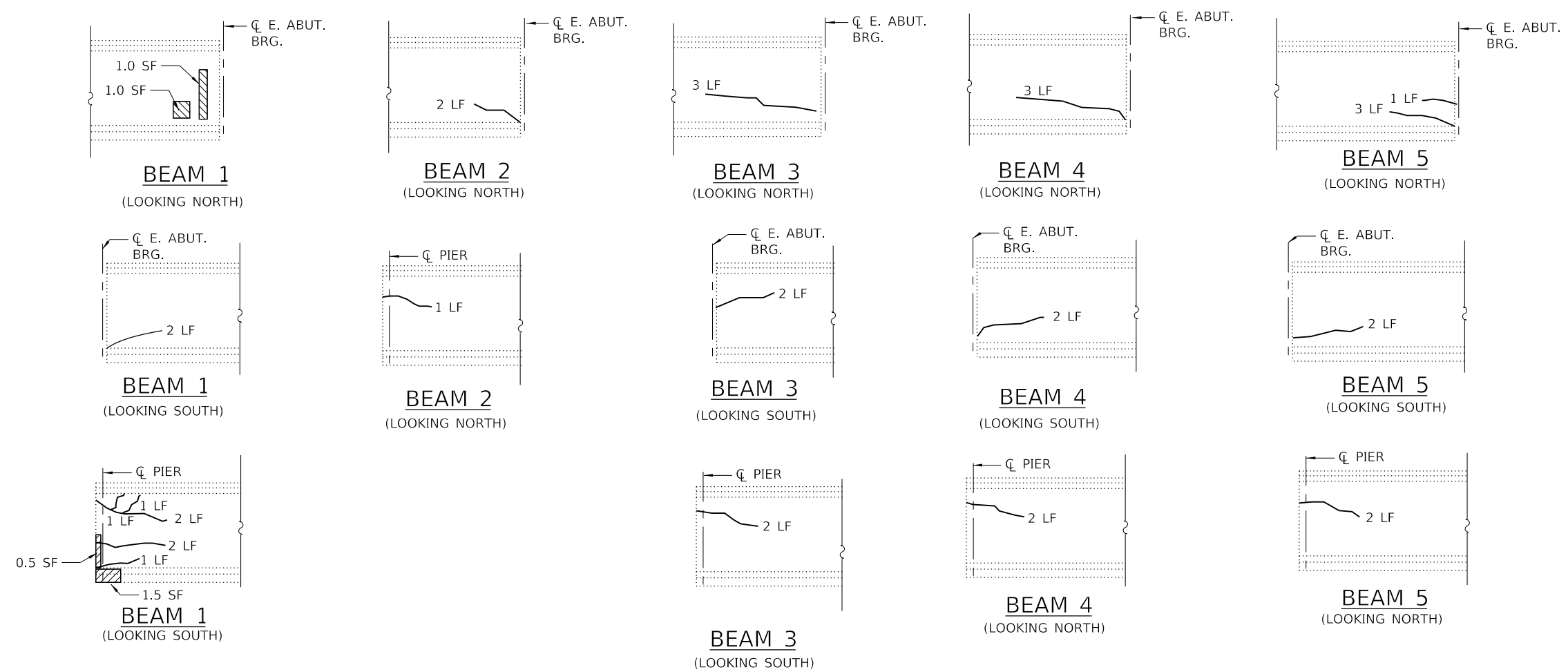
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1465 (S.N. 022-9983)  
BEAM REPAIR DETAILS (SPAN 1) - II

SHT NO. SAG-10  
DRAWING NO. 940 OF 1517



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**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR ONLY (NO FIBER WRAP)

**NOTE:**  
FOR REPAIR DETAILS AND BILL OF MATERIALS, SEE SHEET SAG-12 OF SAG-13.

DRAWN BY THW DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018

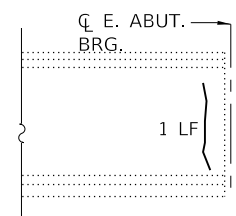


REVISIONS		
NO.	DATE	DESCRIPTION

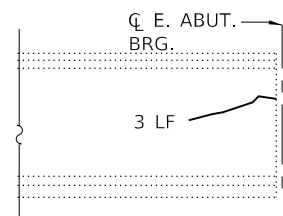
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BRIDGE NO. 1465 (S.N. 022-9983)  
BEAM REPAIR DETAILS (SPAN 2) - I

SHT NO. SAG-11  
DRAWING NO. 941 OF 1517

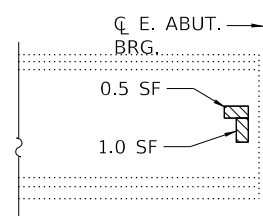
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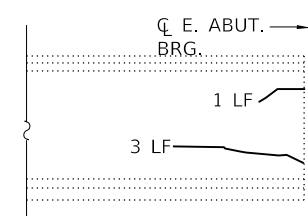
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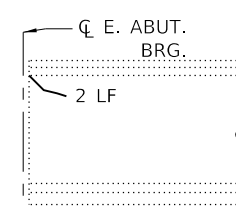
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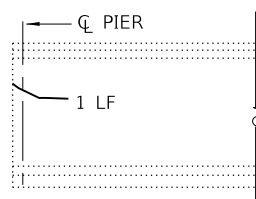
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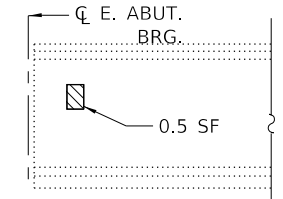
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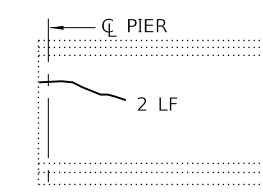
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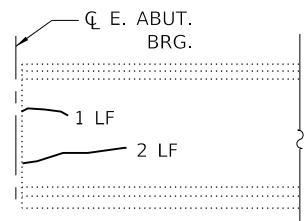
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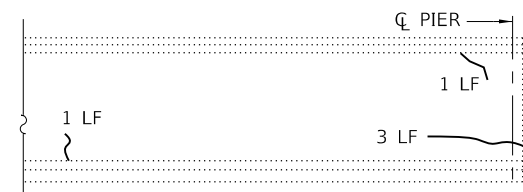
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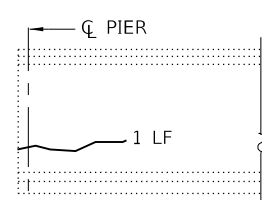
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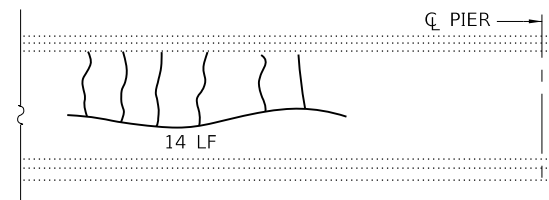
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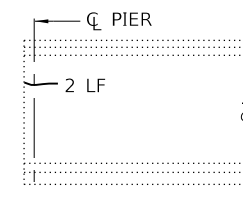
**BEAM 10**  
(LOOKING SOUTH)



**BEAM 7**  
(LOOKING NORTH)



**BEAM 8**  
(LOOKING NORTH)



**BEAM 9**  
(LOOKING NORTH)

**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALLS TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR ONLY (NO FIBER WRAP)

**NOTE:**

FOR REPAIR DETAILS AND BILL OF MATERIALS, SEE SHEET SAG-12 OF SAG-13.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
HIGH PRESSURE EPOXY INJECTION	FOOT	107
FIBER WRAP REPAIR	SQ FT	22
POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	14

SAG-12 OF SAG-13

DRAWN BY THW DATE 03/11/2018  
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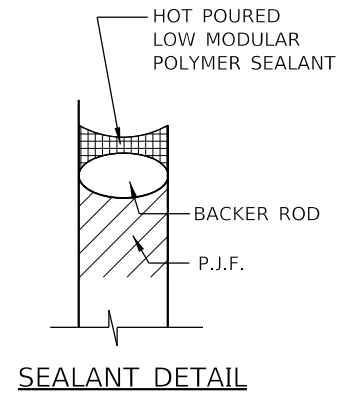
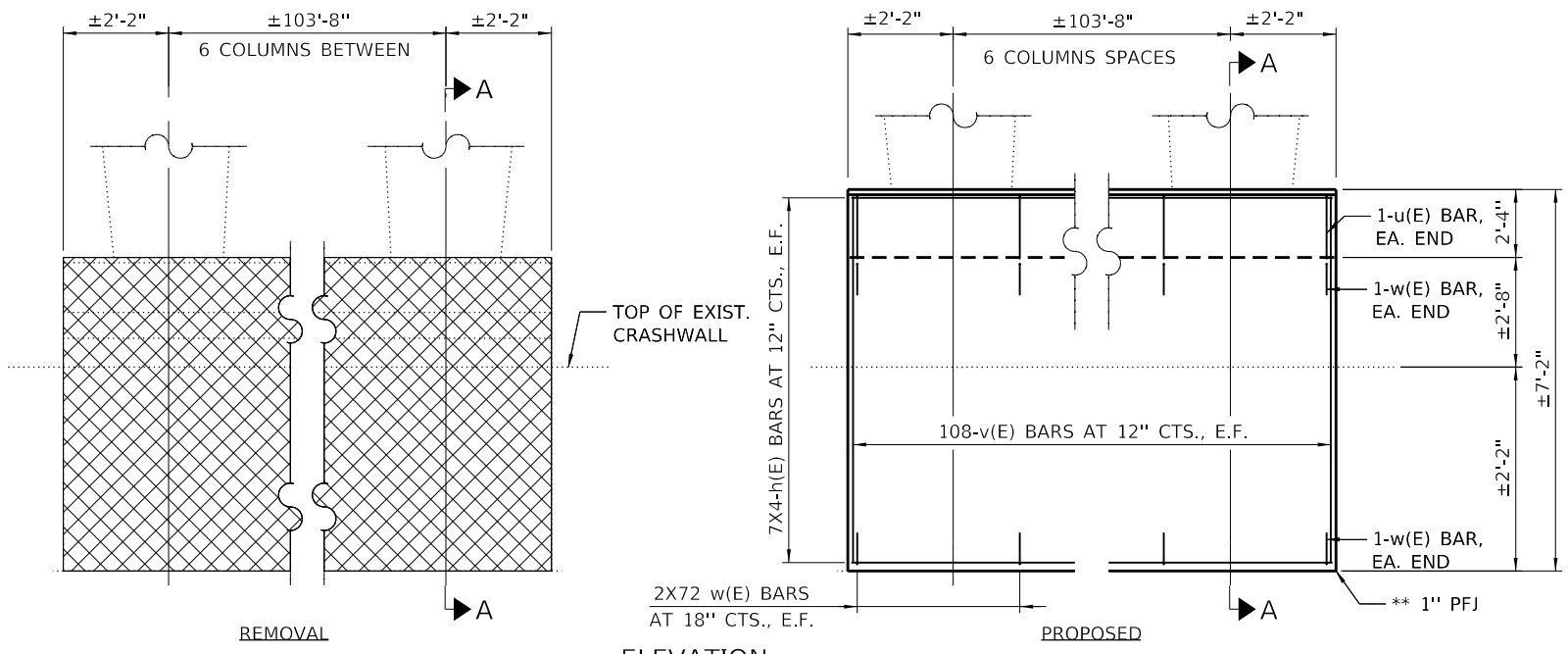


REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1465 (S.N. 022-9983)  
BEAM REPAIR DETAILS (SPAN 2) - II

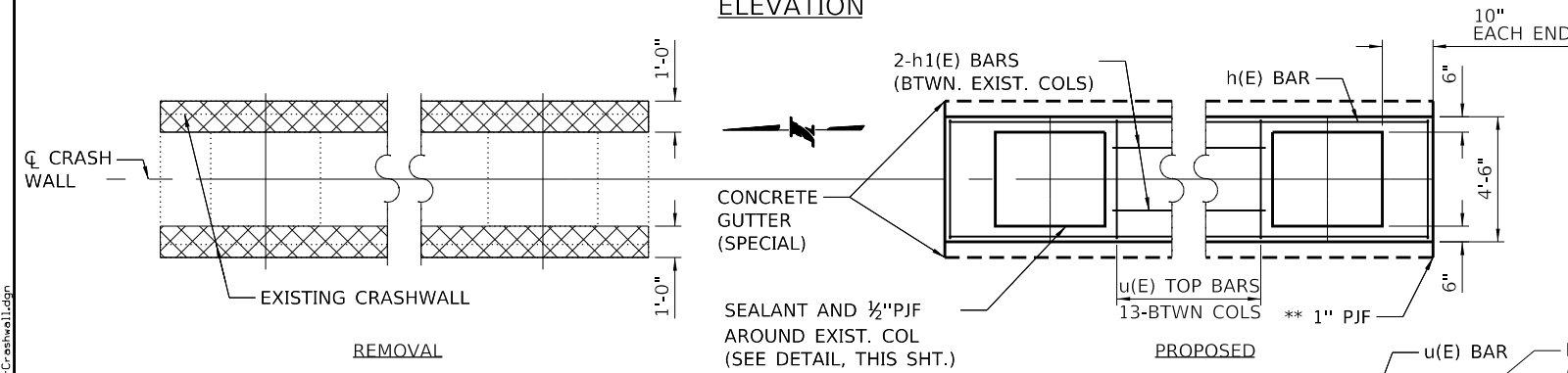
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DRAWING NO. 942 OF 1517

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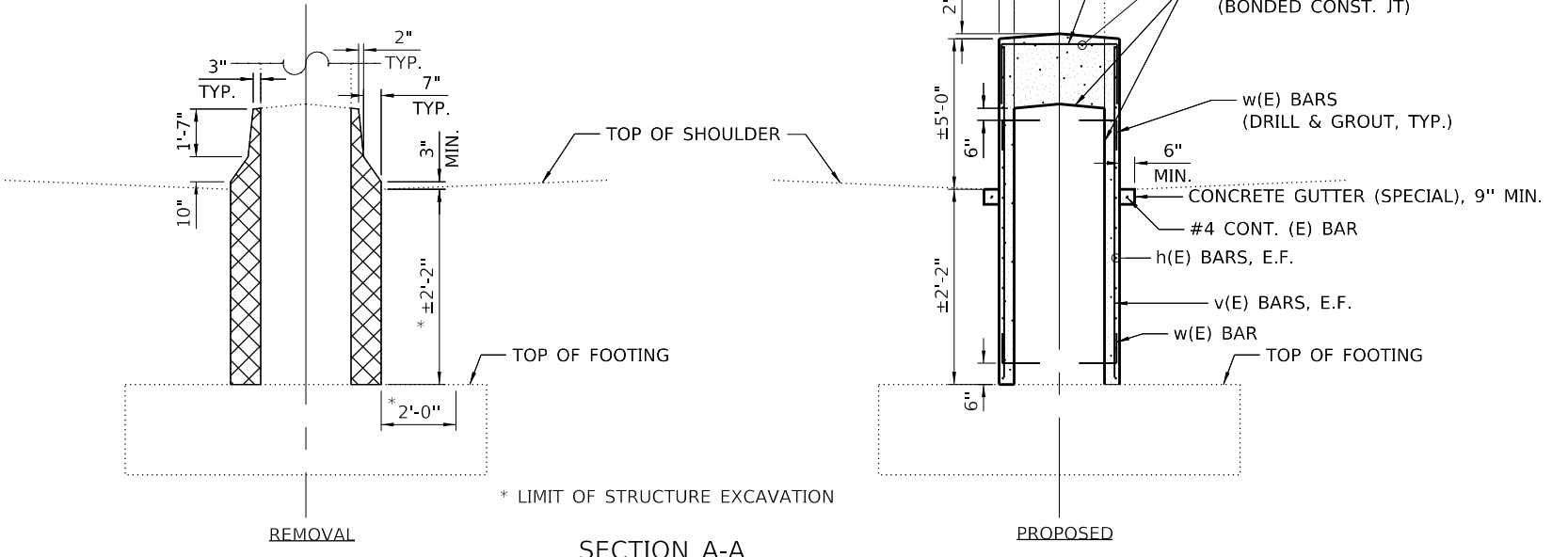
**NOTES:**

1. REMOVE EXISTING CONCRETE CRASHWALL BACK TO FACE OF COLUMNS PRIOR TO PLACING CONCRETE AROUND EXISTING CRASHWALL AND COLUMNS. SURFACES TO RECEIVE NEW CONCRETE SHALL BE BLAST CLEANED. COST OF CLEANING SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL.
2. CONCRETE MEDIAN BARRIER TRANSITION TAPER LENGTHS, PAY LIMITS AND MEASUREMENT, AND BASIS OF PAYMENT ALL IN ACCORDANCE WITH THE ILLINOIS TOLLWAY STANDARD DRAWING C13, C14 AND THE SPECIAL PROVISIONS.
3. THE CLEAR COVER FOR REINFORCEMENT BARS TO THE SURFACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. EXPOSED CONCRETE EDGES SHALL HAVE 3#4"x45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL. BILL OF MATERIALS FOR "APPLY CONCRETE SEALANT" LOCATED ON SHEETS SAG-07 AND SAG-08 OF SAG-13.
6. CONCRETE SEALANT SHALL BE APPLIED TO THE EXPOSED SURFACES OF ALL NEW AND/OR MODIFIED PIER CRASH WALLS.
7. E.F. DENOTES EACH FACE
8. BARS NOTED THUS, 3X2-#5 INDICATED 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

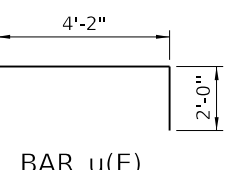
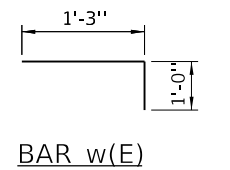


\*\* 1" P.F. TO BE INCLUDED IN THE COST OF "CONCRETE STRUCTURES"

**PLAN**



\* LIMIT OF STRUCTURE EXCAVATION



**LEGEND**



**BILL OF MATERIALS**

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	56	#5	30'-6"	—
h1(E)	12	#5	13'-2"	—
u(E)	80	#5	8'-2"	┌
v(E)	216	#5	6'-8"	—
w(E)	296	#4	2'-3"	┌
CONCRETE REMOVAL			CU YD	38.7
STRUCTURE EXCAVATION			CU YD	34.7
CONCRETE STRUCTURES			CU YD	58.3
REINFORCEMENT BARS, EPOXY COATED			POUND	4,580
CONCRETE GUTTER (SPECIAL)			FOOT	216

MIN. BAR LAP  
#5 BAR = 3'-6"

DRAWN BY THW DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018



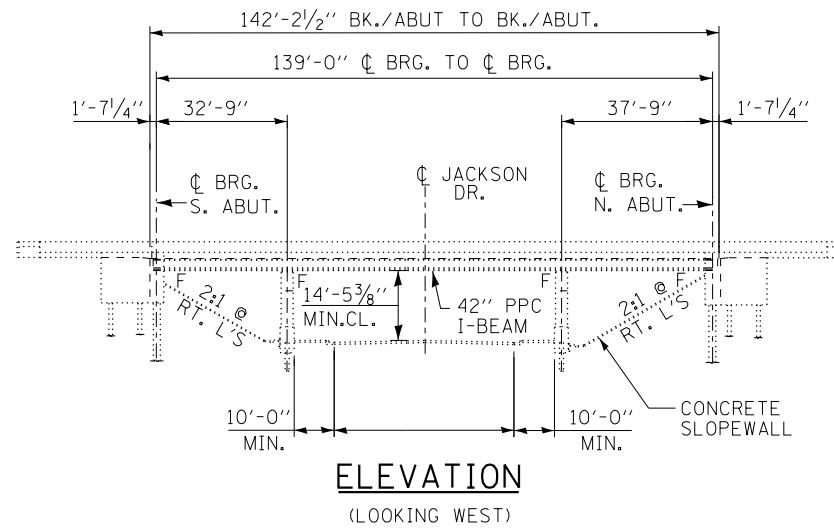
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1465 (S.N. 022-9983)  
CRASH WALL MODIFICATIONS

SAG-13 OF SAG-13  
SHT NO. SAG-13  
DRAWING NO. 943 OF 1517

BENCH MARK:  
MONUMENT NO. 4 BRASS PLUG ENCASED IN CONCRETE PEDESTAL.  
EXISTING. STA. 100+03.99 (N-S TOLL.) 345 RT. ELEV. 710.087

EXISTING STRUCTURE:  
BRIDGE NUMBER 1463 (SB I-355) AND 1464 (NB I-355) WERE  
ORIGINALLY CONSTRUCTED IN 1989 UNDER THE ISTHA  
CONTRACT CIP-614. THESE STRUCTURES ARE THREE-SPAN  
PRECAST PRESTRESSED CONCRETE (PPC) I-BEAM STRUCTURES,  
APPROXIMATELY 142 LONG, WHICH CARRY INTERSTATE 355  
OVER JACKSON DRIVE. THE OUT-TO-OUT WIDTH OF THE DECK  
VARIES ALONG THE BRIDGE DUE TO THE RAMPS. BRIDGE NO. 1463  
WIDTH IS 104'-3<sup>3</sup>/<sub>8</sub>" AT THE SOUTH ABUTMENT AND 97'-6<sup>3</sup>/<sub>4</sub>"  
AT THE NORTH ABUTMENT. BRIDGE NO. 1464 WIDTH IS 96'-9<sup>1</sup>/<sub>4</sub>" AT  
THE SOUTH ABUTMENT AND 93'-11<sup>7</sup>/<sub>8</sub>" AT THE NORTH ABUTMENT.  
THE BRIDGES ARE SKEWED 20°-53'-57" AHEAD LEFT. IN 1995,  
UNDER CONTRACT MIP-92-542, THE BRIDGE EXPANSION JOINTS  
WERE REPLACED AND SLAB JACKING WAS PERFORMED ON THE  
APPROACHES. IN 2010 UNDER CONTRACT RR-08-5475 REPAIR  
WORK WAS PERFORMED. IN 2013, UNDER CONTRACT RR-12-4047  
REPAIR WORK WAS COMPLETED.  
TRAFFIC TO BE MAINTAINED UTILIZING STAGE CONSTRUCTION.



### HIGHWAY CLASSIFICATION

#### ROUTE OVER I-355

ROADWAY CLASSIFICATION: INTERSTATE  
ADT (2015): 146,700  
ADTT (2015): 14,670

#### ROUTE UNDER JACKSON DRIVE

ROADWAY CLASSIFICATION: LOCAL  
ADT (2016): 675  
ADTT (2016): 47

### DESIGN LOADS

#### EXISTING STRUCTURE

LIVE LOAD:  
HS20-44 AND ALTERNATE MILITARY LOADING  
DEAD LOAD:  
50 PSF FOR FUTURE WEARING SURFACE

### DESIGN STRESSES

#### NEW CONSTRUCTION

f'c = 3,500 PSI (CLASS SI - SUBSTRUCTURE REPAIRS)  
f'c = 4,000 PSI (CLASS BS-REPAIRS PARAPETS & BARRIER)  
f'c = 4,000 PSI PERFORMANCE MIX CLASS AX HIGH EARLY  
STRENGTH (BRIDGE DECK, BRIDGE APPROACH &  
TRANSITION SLAB PATCH REPAIRS)  
fy = 60,000 PSI (REINFORCEMENT)

### DESIGN SPECIFICATIONS

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY  
BRIDGES, 17TH EDITION WITH ALL INTERIMS.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED  
MARCH 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION -  
BRIDGE MANUAL JANUARY 2012.

ILLINOIS DEPARTMENT OF TRANSPORTATION ALL BRIDGE  
DESIGN MEMORANDA.

### CONSTRUCTION SPECIFICATIONS

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS  
DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS  
FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

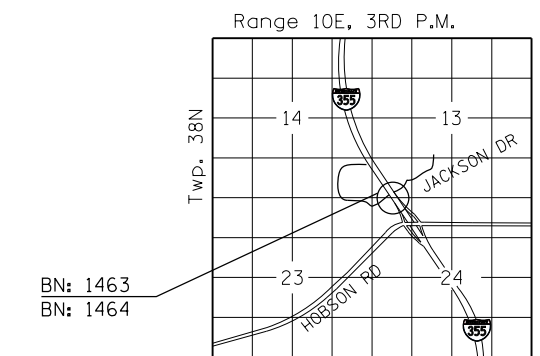
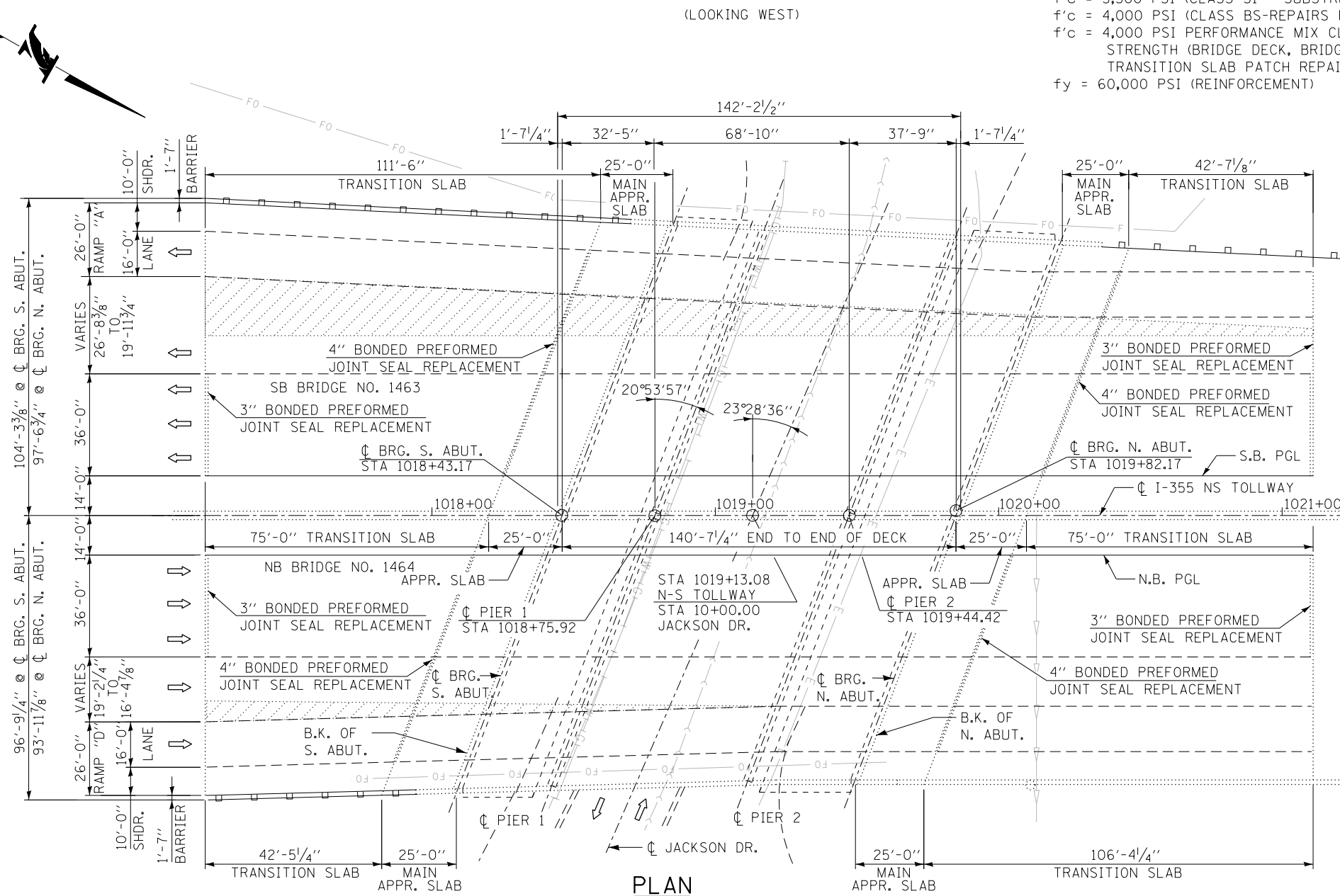
ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE  
SPECIAL PROVISIONS (GBSP'S).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL  
SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS  
ADOPTED JANUARY 1, 2018.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD  
SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION  
ADOPTED APRIL 1, 2016.

### PROPOSED SCOPE OF WORK:

- BRIDGE DECK AND APPROACH SLAB 1" SCARIFICATION.
- JOINT REPLACEMENT FOR THE JOINTS BETWEEN THE MAIN AND  
TRANSITION APPROACH SLAB AND BETWEEN THE TRANSITION  
APPROACH SLAB AND ADJACENT ROADWAY PAVEMENT.
- PARAPET REPAIR.
- BRIDGE DECK LATEX CONCRETE OVERLAY, 2<sup>1</sup>/<sub>4</sub>".
- EPOXY CRACK SEALING FOR ALL CRACKS IN THE PPC I-BEAMS.
- EPOXY CRACK SEALING FOR OPEN CRACKS AND STRUCTURAL REPAIR  
OF CONCRETE OF THE DIAPHRAGMS.
- PJF REPLACEMENT BETWEEN THE WINGWALL AND ADJACENT BRIDGE  
STRUCTURE.
- EPOXY CRACK SEALING AND STRUCTURAL REPAIR OF CONCRETE OF  
THE PIERS AND ABUTMENTS.
- SLOPEWALL REPAIR FOR THE CRACKS AND SPALLS.
- CONTROLLED LOW STRENGTH MATERIAL FILL TO CORRECT THE  
UNDERMINING OF THE APPROACH SLABS.
- APPLY CONCRETE SEALANT TO FRONT FACE OF EACH PIER ON  
ROADWAY SIDE, TWO SIDES OF EACH COLUMN, ENDS OF CRASH  
WALLS AND CAP BEAMS, TOP OF CRASH WALLS AND UNDERSIDE OF  
CAP BEAMS.
- BRIDGE DECK GROOVING.



LOCATION SKETCH

DRAWN BY GEW/PY DATE 3/11/2018  
CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



100 S. Wacker Drive, Suite 700 • Chicago, IL 60606 • P 312/664-0910 • F 312/664-0415



2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

NO.		REVISIONS	
NO.	DATE	DESCRIPTION	

CONTRACT NO. RR-16-4255	SB-01 OF SB-30
B.N. 1463(SB) & 1464(NB) (SN:022-9982)	DRAWING NO. 944 OF 1517
GENERAL PLAN & ELEVATION	

# GENERAL NOTES

## CAST-IN-PLACE CONCRETE GENERAL NOTES:

- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

## REINFORCEMENT BARS

- REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.
- REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
- REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315.
- REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT-TO-OUT.
- BARS NOTED THUS, 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.
- COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

## CONSTRUCTION

- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
- CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.
- NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
- THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.
- NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS" AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CABLE.
- EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH "CONCRETE REMOVAL."
- THE PROTECTIVE SHIELD SYSTEM SHALL EXTEND A MINIMUM OF 10' BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5' BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIR AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER.
- WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
- CONCRETE SEALER SHALL BE APPLIED TO THE SURFACES OF ALL PIER AND ABUTMENT SEATS, INCLUDING BACKWALLS LOCATED BELOW ROADWAY EXPANSION JOINTS. SEALER SHALL ALSO BE APPLIED TO ALL EXPOSED SURFACES OF PIERS IN THE MEDIAN OR PIERS, ABUTMENTS AND WINGWALLS THAT ARE ADJACENT TO THE ROADWAY. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

- AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
- A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

# INDEX OF SHEETS

SB-01	GENERAL PLAN AND ELEVATION
SB-02	GENERAL NOTES & BILL OF MATERIAL
SB-03	CONSTRUCTION STAGING
SB-04	SLOPE WALL REPAIRS
SB-05	SOUTH ABUTMENT REPAIRS
SB-06	NORTH ABUTMENT REPAIRS
SB-07	WINGWALL REPAIRS
SB-08	PIER 1 REPAIRS - BN: 1463
SB-09	PIER 2 REPAIRS - BN: 1463
SB-10	PIER 1 REPAIRS - BN: 1464
SB-11	PIER 2 REPAIRS - BN: 1464
SB-12	PPC BEAM FRAMING PLAN - BN: 1463
SB-13	PPC BEAM FRAMING PLAN - BN: 1464
SB-14	PPC BEAM REPAIRS - 1
SB-15	PPC BEAM REPAIRS - 2
SB-16	PPC BEAM REPAIRS - 3
SB-17	PPC BEAM REPAIRS - 4
SB-18	PPC BEAM REPAIRS - 5
SB-19	PPC BEAM REPAIRS - 6
SB-20	ABUTMENT DIAPHRAGM REPAIRS
SB-21	PIER DIAPHRAGM REPAIRS - 1
SB-22	PIER DIAPHRAGM REPAIRS - 2
SB-23	DECK REPAIR PLAN
SB-24	STRUCTURE CROSS SECTION
SB-25	WEST PARAPET REPAIRS
SB-26	EAST PARAPET REPAIRS
SB-27	MEDIAN PARAPET REPAIRS
SB-28	APPROACH SLAB REPAIR
SB-29	APPROACH REPAIR DETAILS
SB-30	BAR SPLICER DETAILS

# TOTAL BILL OF MATERIAL

S.P.	PAY ITEM NO.	ITEM	UNIT	BRIDGE 1463		BRIDGE 1464		TOTAL	RECORDED QUANTITY
				SUPER	SUB	SUPER	SUB		
	50102400	CONCRETE REMOVAL	CU. YD.	18.5	-	17.5	-	36.0	
	50157300	PROTECTIVE SHIELD	SQ. YD.	98	-	-	-	98	
	50300260	BRIDGE DECK GROOVING	SQ. YD.	2,025	-	1,895	-	3,920	
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,660	-	1,550	-	3,210	
	50800515	BAR SPLICERS	EACH	27	-	36	-	63	
*	J1593010	CONTROLLED LOW-STRENGTH MATERIAL (SPECIAL)	CU. YD.	10	-	10	-	20	
**	JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	-	99	-	89	188	
*	JT503013	ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ. YD.	33	-	31	-	64	
*	JT503033	ACCELERATED APPROACH SLAB REPAIR (FULL DEPTH, TYPE II)	SQ. YD.	36	-	33	-	69	
*	JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH LESS THAN OR EQUAL TO 5 IN.)	SQ. FT.	4	95	3	84	186	
*	JT503041	STRUCTURAL REPAIR OF CONCRETE (GREATER THAN 5 IN.)	SQ. FT.	3	-	5	-	8	
*	JT503050	SHALLOW CONCRETE REPAIR	EACH	31	13	14	10	68	
*	JT524010	APPLY CONCRETE SEALANT	SQ. FT.	-	4,456	-	4,208	8,664	
*	JT524015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	1,308	-	1,330	-	2,638	
*	JT525230	BONDED PREFORMED JOINT SEAL REPLACEMENT, 3 IN.	FOOT	149	-	139	-	288	
*	JT525235	BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	160	-	150	-	310	
*	X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ. FT.	-	-	11	-	11	
*	X0323491	SLOPE WALL CRACK SEALING	FOOT	-	310	-	193	503	
*	Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 IN.	SQ. YD.	2,053	-	1,939	-	3,992	
*	Z0012132	BRIDGE DECK SCARIFICATION, 1 IN.	SQ. YD.	2,053	-	1,939	-	3,992	
*	Z0012800	CONCRETE PAVEMENT SCARIFICATION	SQ. YD.	1,293	-	1,153	-	2,446	
*	Z0043900	PREFORMED JOINT FILLER	FOOT	-	21	-	21	42	
*	Z0065700	SLOPE WALL REPAIR	SQ. YD.	-	2	-	-	2	

- \* INDICATES SPECIAL PROVISION
- \*\* INDICATES TOLLWAY SUPPLEMENTAL SPECIFICATION

# LIST OF ABBREVIATIONS

N.B.	NORTHBOUND
S.B.	SOUTHBOUND
STA.	STATION
ELEV.	ELEVATION
C.I.P	CAST-IN-PLACE
CL	CENTERLINE
BRG	BEARING
S. ABUT.	SOUTH ABUTMENT
N. ABUT.	NORTH ABUTMENT
TYP.	TYPICAL
MAX.	MAXIMUM
MIN.	MINIMUM
BOT.	BOTTOM
EXIST.	EXISTING
EXP.	EXPANSION
SHLDR	SHOULDER
BL	BASELINE
P.G.L.	PROFILE GRADE LINE
E.F.	EACH FACE
F.F.	FRONT FACE
B.F.	BACK FACE
I.F.	INSIDE FACE
O.F.	OUTSIDE FACE
P.J.F.	PREFORMED JOINT FILLER
P.J.S.	PREFORMED JOINT SEALER
BK.	BACK OF
B/	BOTTOM OF
T/	TOP OF
PROP.	PROPOSED
HP	H-PILE
WF	W-FLANGE
CL.	CLEARANCE
SQ. FT.	SQUARE FOOT
SQ. YD.	SQUARE YARD
L.F.	LINEAR FOOT
CU. FT.	CUBIC FEET
EA	EACH
BIT.	BITUMINOUS
PAV.	PAVEMENT

SB-02 OF SB-30

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



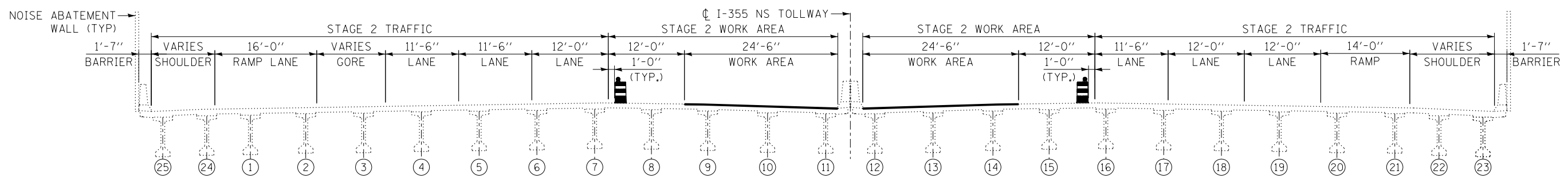
100 S. Wacker Drive, Suite 700 • Chicago, IL 60606 • P 312/606-0910 • F 312/606-0415



2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

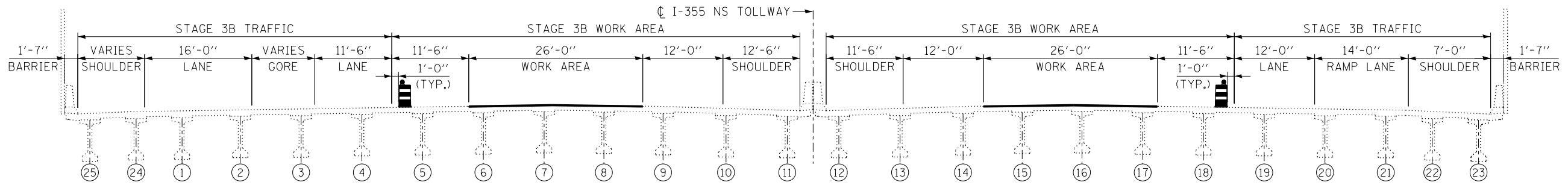
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NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255	SHT NO. SB-02
BN: 1463 (SB) & BN: 1464 (NB) - GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL	DRAWING NO. 945 OF 1517



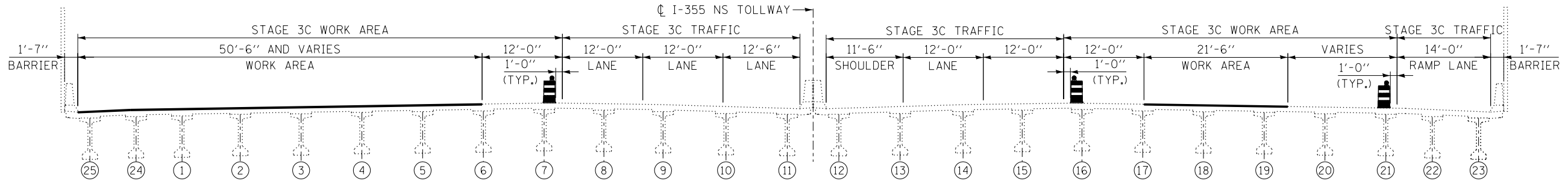
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**B.N. 1464 STAGE 2**  
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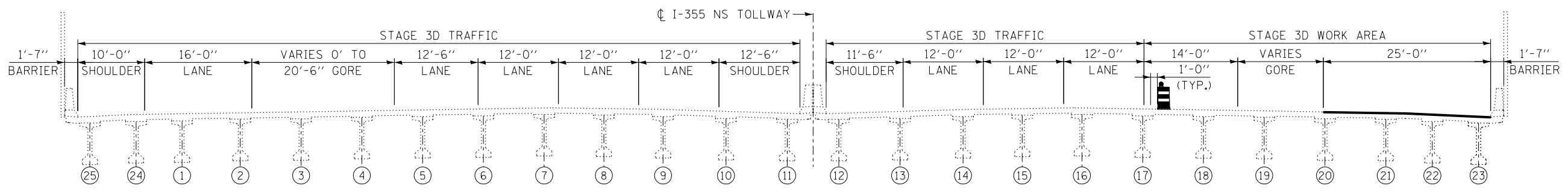
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**B.N. 1464 STAGE 3B**  
(LOOKING NORTH)



**B.N. 1463 STAGE 3C**  
(LOOKING NORTH)

**B.N. 1464 STAGE 3C**  
(LOOKING NORTH)



**B.N. 1463 STAGE 3D**  
(LOOKING NORTH)

**B.N. 1464 STAGE 3D**  
(LOOKING NORTH)

NOTE:  
SEE MOT-04 THRU  
MOT-06 FOR MORE  
DETAILS

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 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



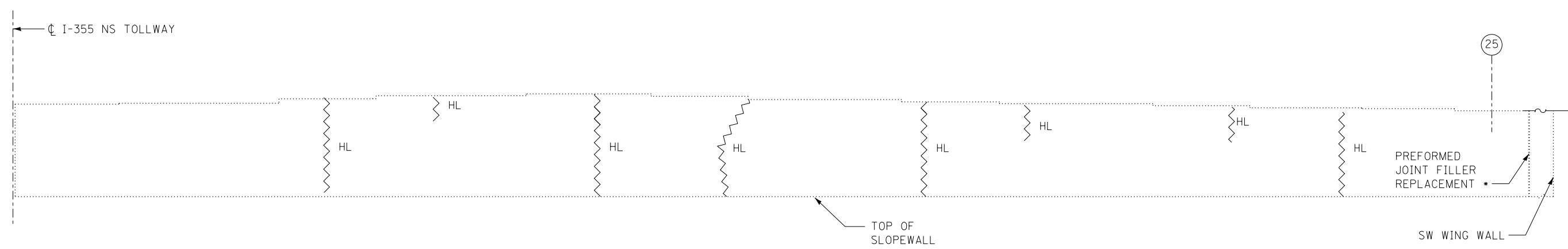
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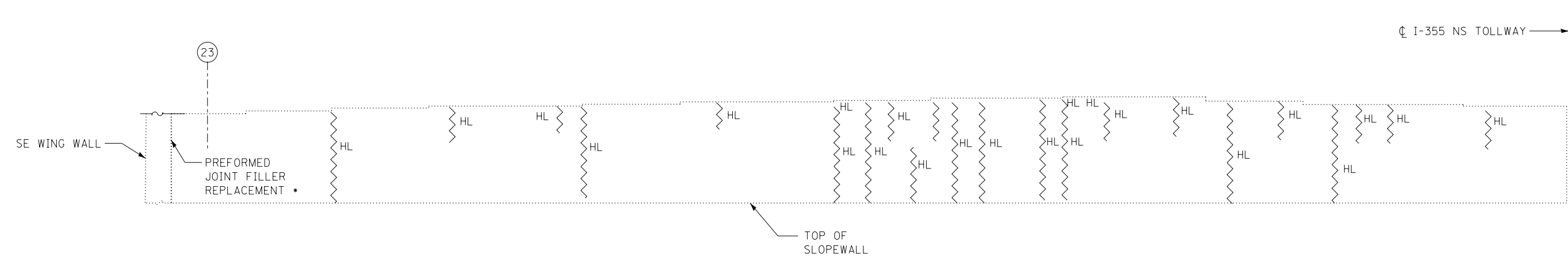
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SHT NO.SB-03  
DRAWING NO.  
946 OF 1517



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**BN: 1463 SOUTH ABUTMENT ELEVATION**  
 (LOOKING SOUTH)



**BN: 1464 SOUTH ABUTMENT ELEVATION**  
 (LOOKING SOUTH)

• FOR BILL OF MATERIAL SEE SHEET SB-06 OF SB-30

**LEGEND:**

HL HAIRLINE CRACK (FOR INFORMATION ONLY)

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

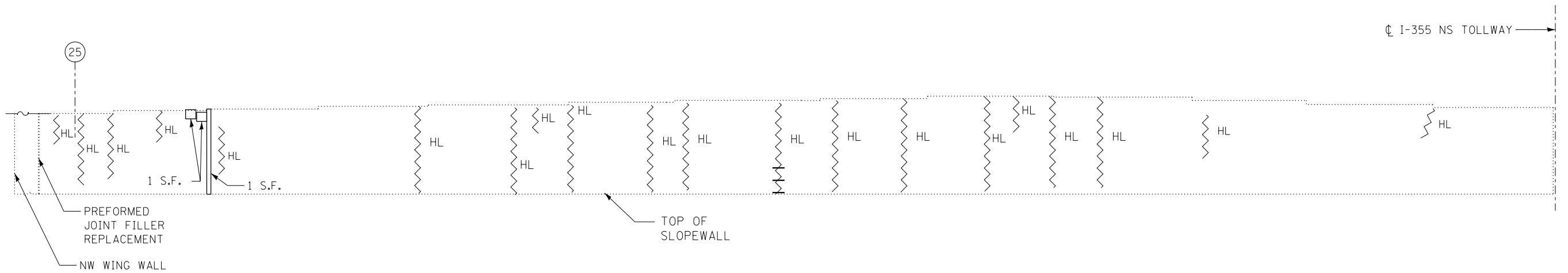


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NO.	DATE

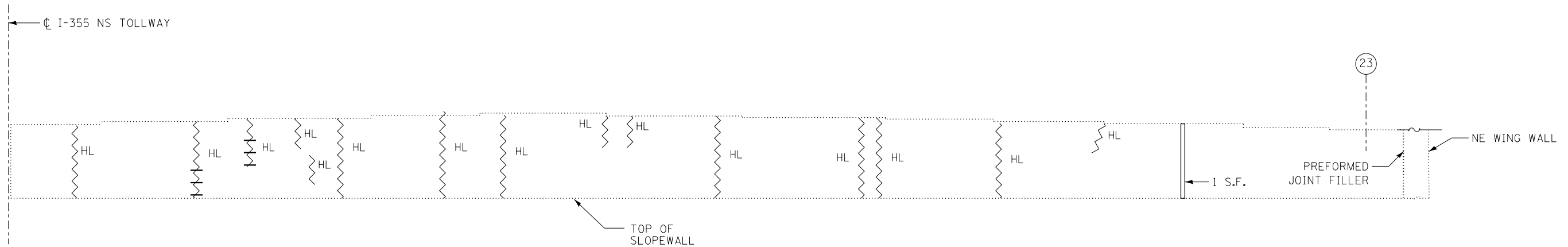
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 SOUTH ABUTMENT REPAIRS

SB-05 OF SB-30  
 SHT NO. SB-05  
 DRAWING NO.  
 948 OF 1517





**BN: 1463 NORTH ABUTMENT ELEVATION**  
(LOOKING NORTH)



**BN: 1464 NORTH ABUTMENT ELEVATION**  
(LOOKING NORTH)

**LEGEND:**

- SHALLOW CONCRETE REPAIR
- HL HAIRLINE CRACK \*
- CRACK WITH EFFLORESCENCE \*
- \* FOR INFORMATION ONLY

**BILL OF MATERIAL**  
(FOR ALL ABUTMENTS)

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JT503050	SHALLOW CONCRETE REPAIR	SO. FT.	3	1	4
Z0043900	PREFORMED JOINT FILLER **	FOOT	21	21	42

\*\* THICKNESS PER FIELD MEASUREMENTS

DRAWN BY GEW/PY DATE 3/11/2018  
CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

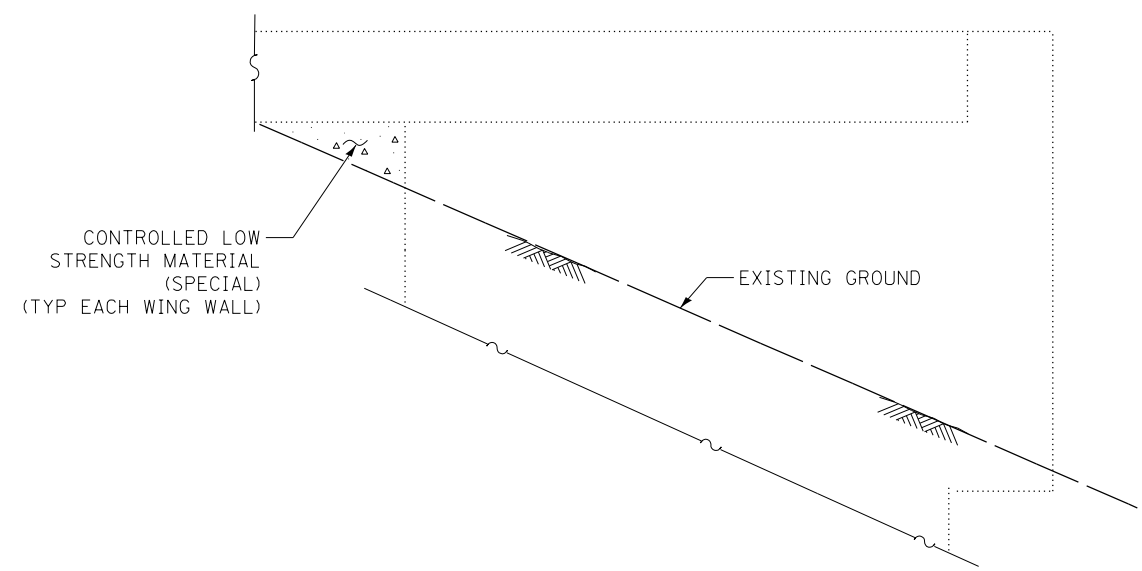
REVISIONS	
NO.	DATE DESCRIPTION

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B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
NORTH ABUTMENT REPAIRS

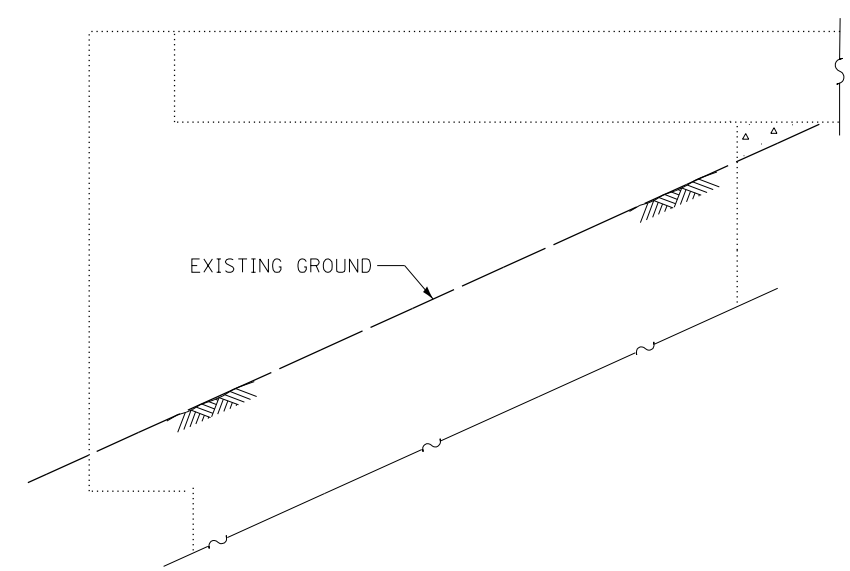
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SHT NO. SB-06  
DRAWING NO.  
949 OF 1517

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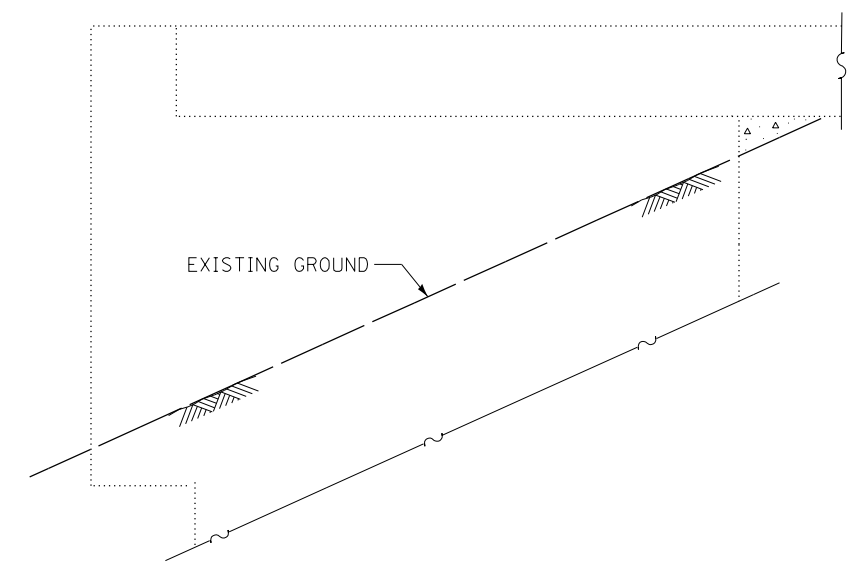
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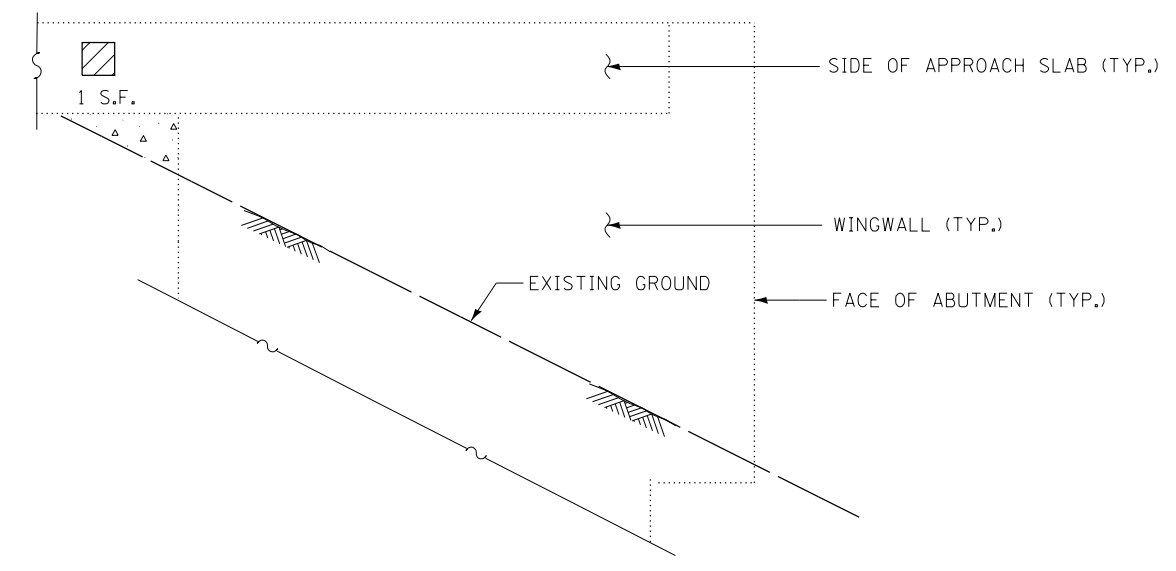
**NORTH WEST WINGWALL BN: 1463**



**NORTH EAST WINGWALL BN: 1464**



**SOUTH WEST WINGWALL BN: 1463**



**SOUTH EAST WINGWALL BN: 1464**

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
J1593010	CONTROLLED LOW STRENGTH MATERIAL (SPECIAL)	CU. YD.	10	10	20
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)	SQ. FT.	-	1	1

**LEGEND:**

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)
- CONTROLLED LOW STRENGTH MATERIAL - 5 CU. YD. AT EACH WING WALL

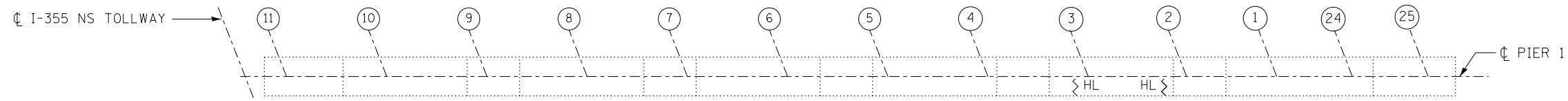
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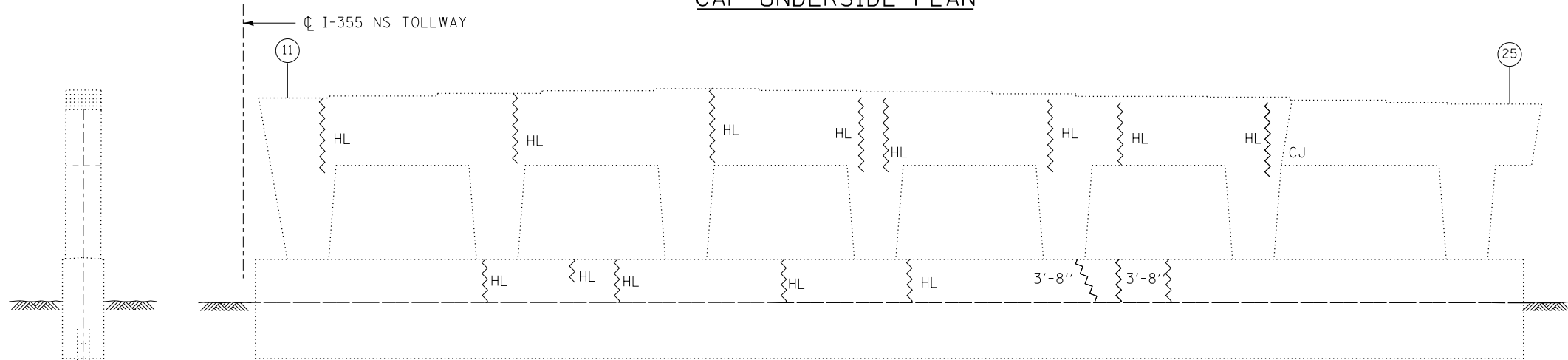
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NO.	DESCRIPTION

CONTRACT NO. **RR-16-4255**  
**B.N. 1463(SB) & 1464(NB) (SN:022-9982)**  
**WINGWALL REPAIRS**

SB-07 OF SB-30  
 SHT NO. SB-07  
 DRAWING NO. 950 OF 1517

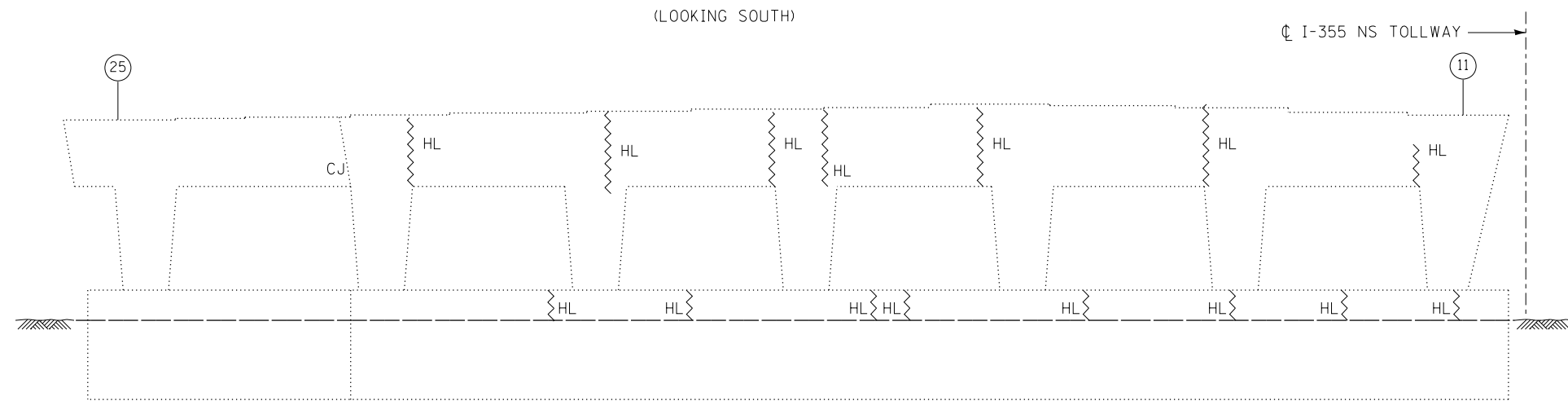


CAP UNDERSIDE PLAN



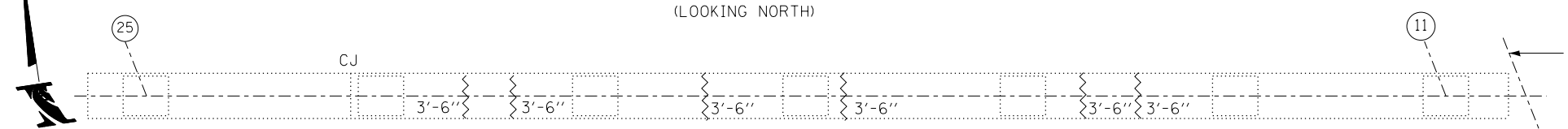
BN: 1463 PIER 1 ELEVATION (NORTH FACE)

(LOOKING SOUTH)

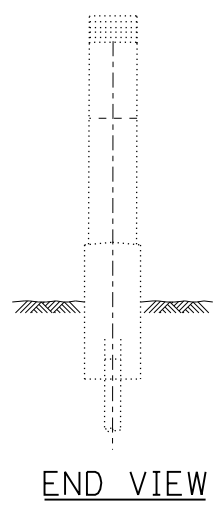


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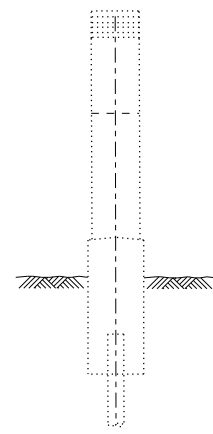
(LOOKING NORTH)



CRASHWALL TOP PLAN



END VIEW



END VIEW

- NOTE:
- "APPLY CONCRETE SEALANT" TO ALL EXPOSED CONCRETE SURFACES EXCEPT AT BACK FACE AWAY FROM ROADWAY.
  - CRACK WIDTHS ARE  $\frac{1}{8}'' \pm \frac{1}{16}''$  UNLESS OTHERWISE NOTED,

LEGEND:

- LF LOW PRESSURE EPOXY INJECTION
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)
- CJ CONSTRUCTION JOINT

BILL OF MATERIAL

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	29	-	29
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	2,253	-	2,253

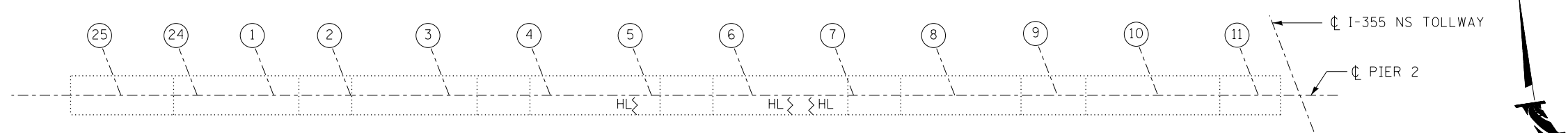
DRAWN BY GEW/PY DATE 3/11/2018  
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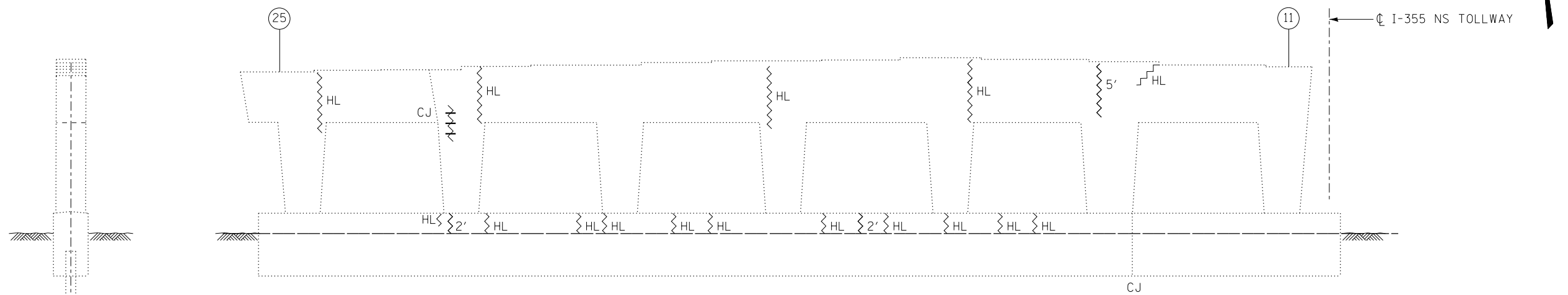
REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PIER 1 REPAIRS - BN: 1463

SB-08 OF SB-30  
 SHT NO. SB-08  
 DRAWING NO.  
 951 OF 1517

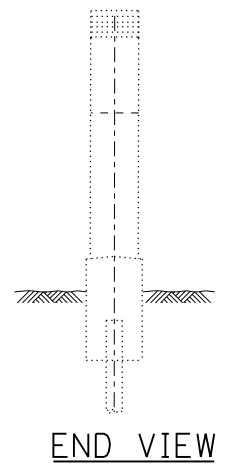


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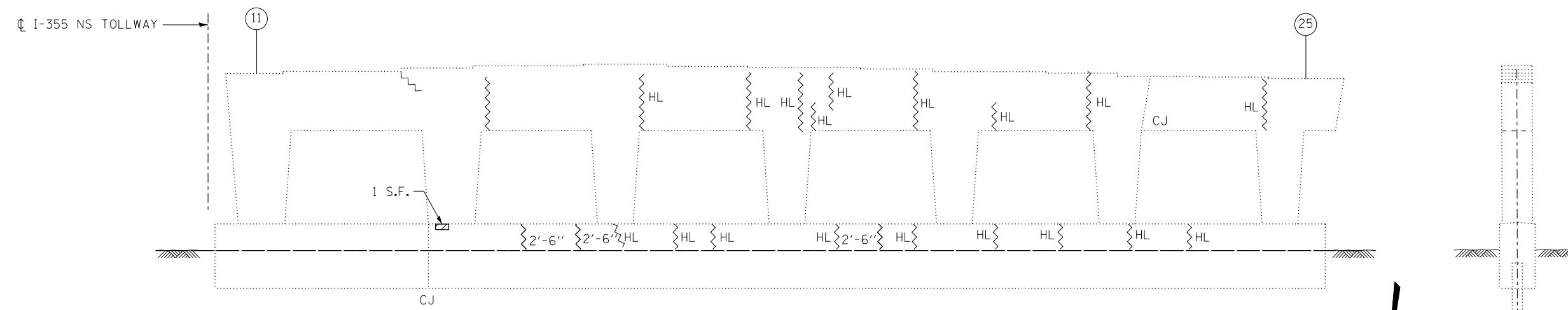


BN: 1463 PIER 2 ELEVATION (SOUTH FACE)

(LOOKING NORTH)

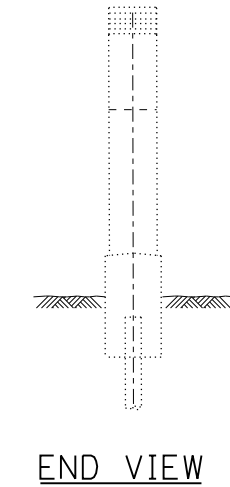


END VIEW

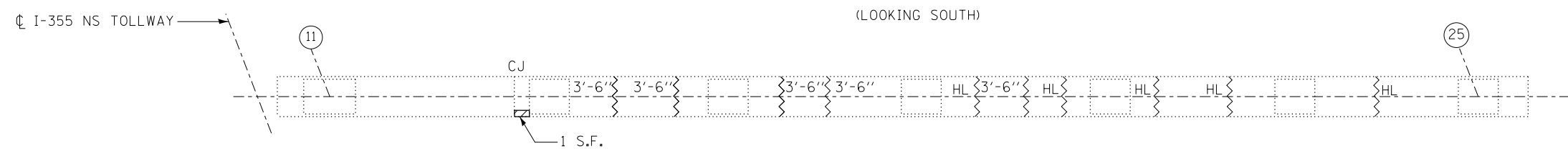


BN: 1463 PIER 2 ELEVATION (NORTH FACE)

(LOOKING SOUTH)



END VIEW



CRASHWALL TOP PLAN

BILL OF MATERIAL

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	34	-	34
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)	SQ. FT.	2	-	2
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	2,203	-	2,203

LEGEND:

- STRUCTURE REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)
- LOW PRESSURE EPOXY INJECTION
- HAIRLINE CRACK (FOR INFORMATION ONLY)
- CONSTRUCTION JOINT
- CRACK WITH EFFLORESCENCE (FOR INFORMATION ONLY)

NOTE:

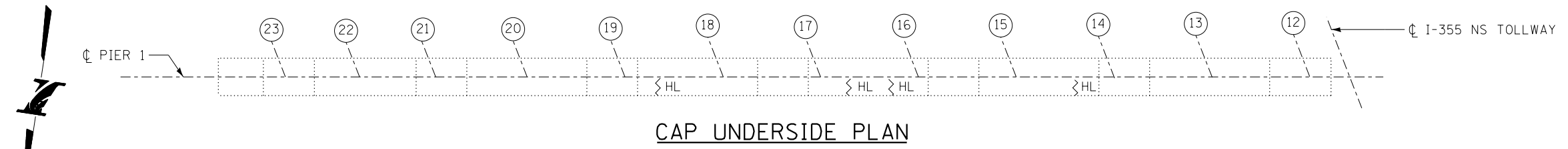
1. "APPLY CONCRETE SEALANT" TO ALL EXPOSED CONCRETE SURFACES EXCEPT AT BACK FACE AWAY FROM ROADWAY.
2. CRACK WIDTHS ARE  $\frac{1}{8}'' \pm \frac{1}{16}''$  UNLESS OTHERWISE NOTED,

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

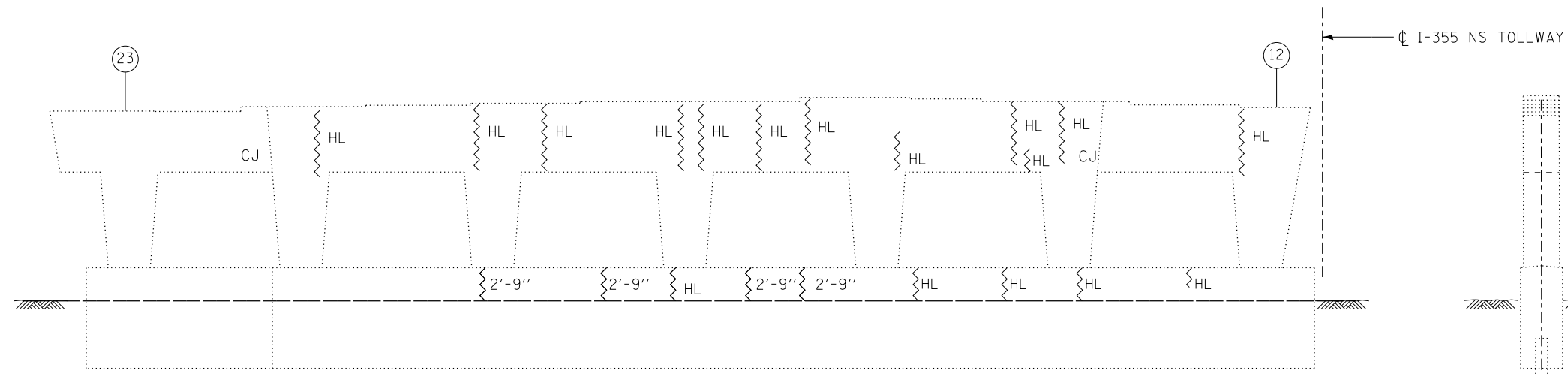


REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PIER 2 REPAIRS - BN: 1463

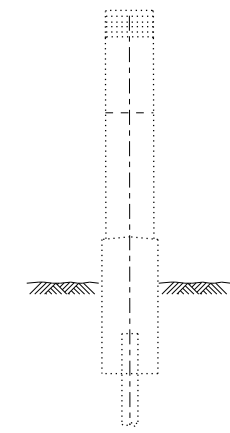


CAP UNDERSIDE PLAN

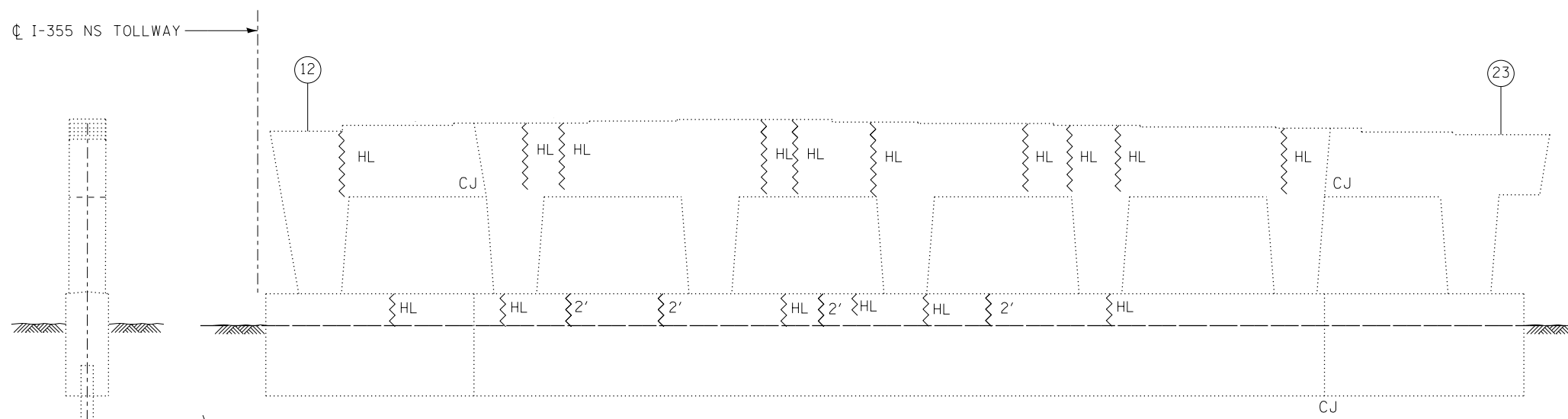


BN: 1464 PIER 1 ELEVATION (NORTH FACE)

(LOOKING SOUTH)

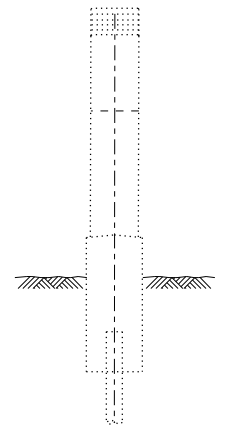


END VIEW

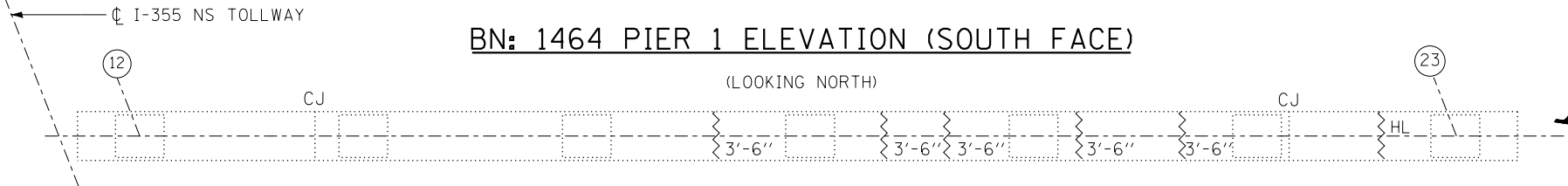


BN: 1464 PIER 1 ELEVATION (SOUTH FACE)

(LOOKING NORTH)



END VIEW



CRASHWALL TOP PLAN



BILL OF MATERIAL

LEGEND:

- LF LOW PRESSURE EPOXY INJECTION
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)
- CJ CONSTRUCTION JOINT

NOTE:

1. "APPLY CONCRETE SEALANT" TO ALL EXPOSED CONCRETE SURFACES EXCEPT AT BACK FACE AWAY FROM ROADWAY.
2. CRACK WIDTHS ARE 1/8" ± 1/16" UNLESS OTHERWISE NOTED.

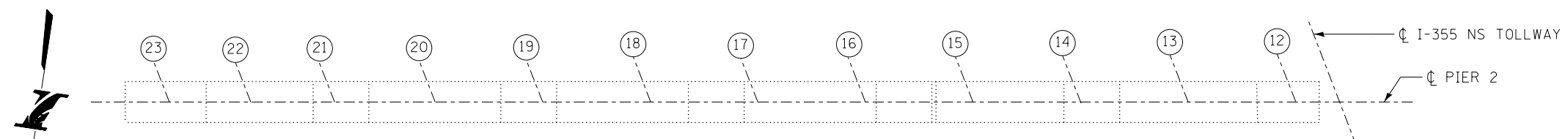
PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	-	37	37
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	-	2,093	2,093

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

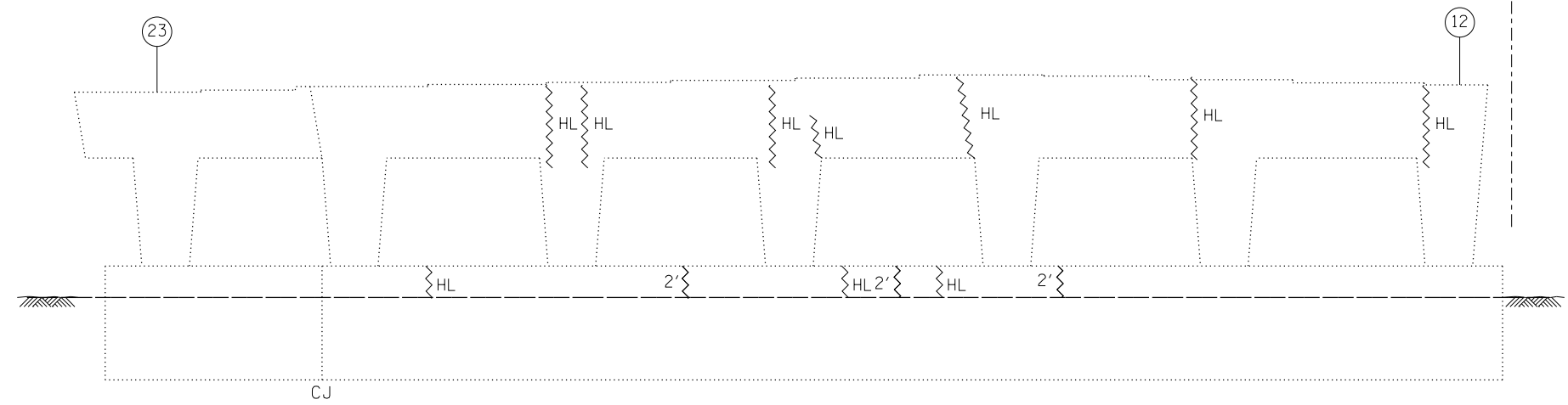


REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PIER 1 REPAIRS - BN: 1464

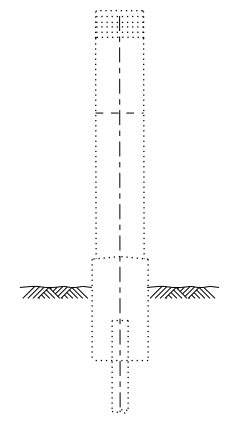


CAP UNDERSIDE PLAN

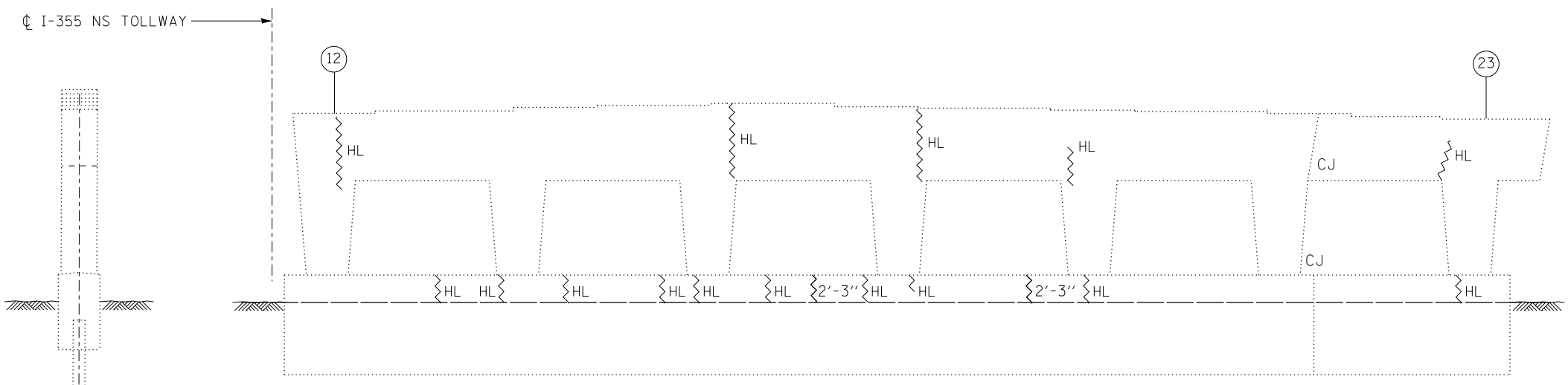


BN: 1464 PIER 2 ELEVATION (NORTH FACE)

(LOOKING SOUTH)

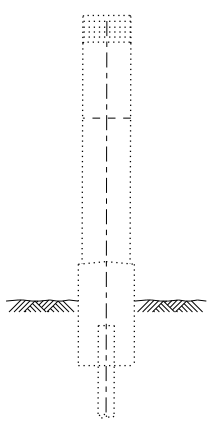


END VIEW

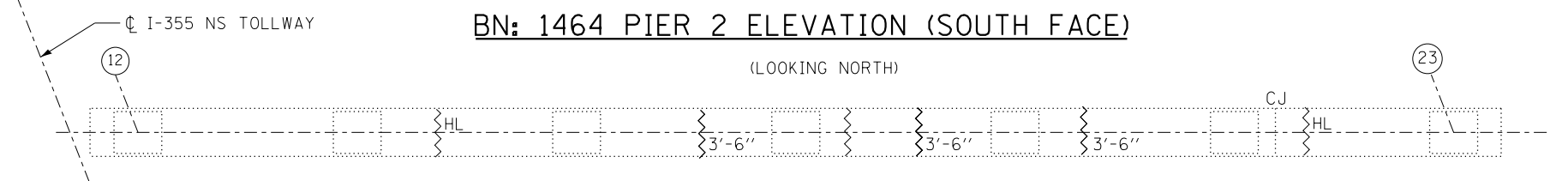


BN: 1464 PIER 2 ELEVATION (SOUTH FACE)

(LOOKING NORTH)



END VIEW



CRASHWALL TOP PLAN

BILL OF MATERIAL

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	-	21	21
JT524010	APPLY CONCRETE SEALANT	SO. FT.	-	2,115	2,115

LEGEND:

- LF LOW PRESSURE EPOXY INJECTION
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)
- CJ CONSTRUCTION JOINT

- NOTE:
1. "APPLY CONCRETE SEALANT" TO ALL EXPOSED CONCRETE SURFACES EXCEPT AT BACK FACE AWAY FROM ROADWAY.
  2. CRACK WIDTHS ARE  $\frac{1}{8}'' \pm \frac{1}{16}''$  UNLESS OTHERWISE NOTED.

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

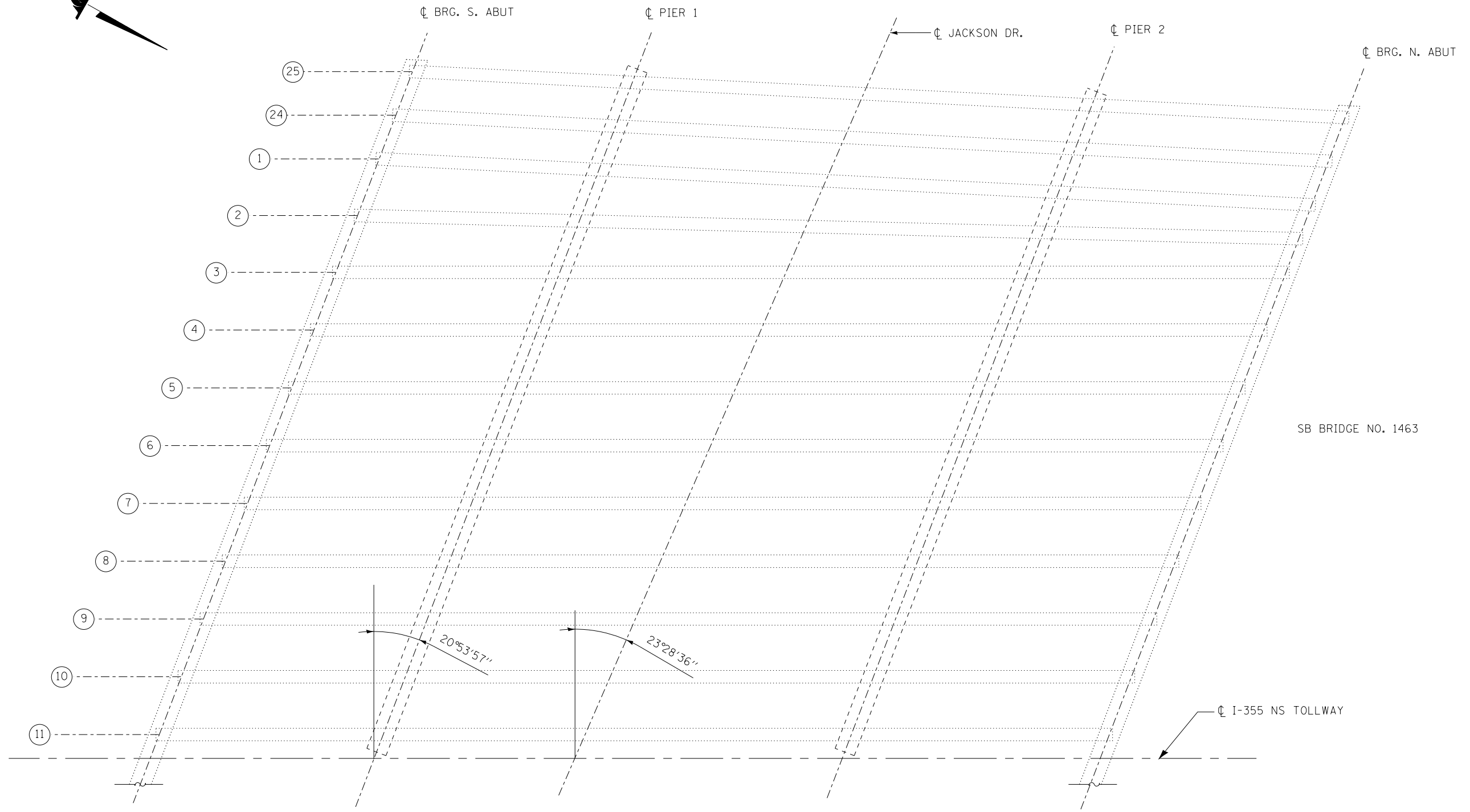
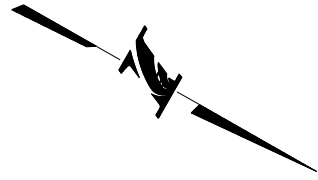


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PIER 2 REPAIRS - BN: 1464

SB-11 OF SB-30  
 SHT NO. SB-11  
 DRAWING NO. 954 OF 1517



BN: 1463 (SB) FRAMING PLAN

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

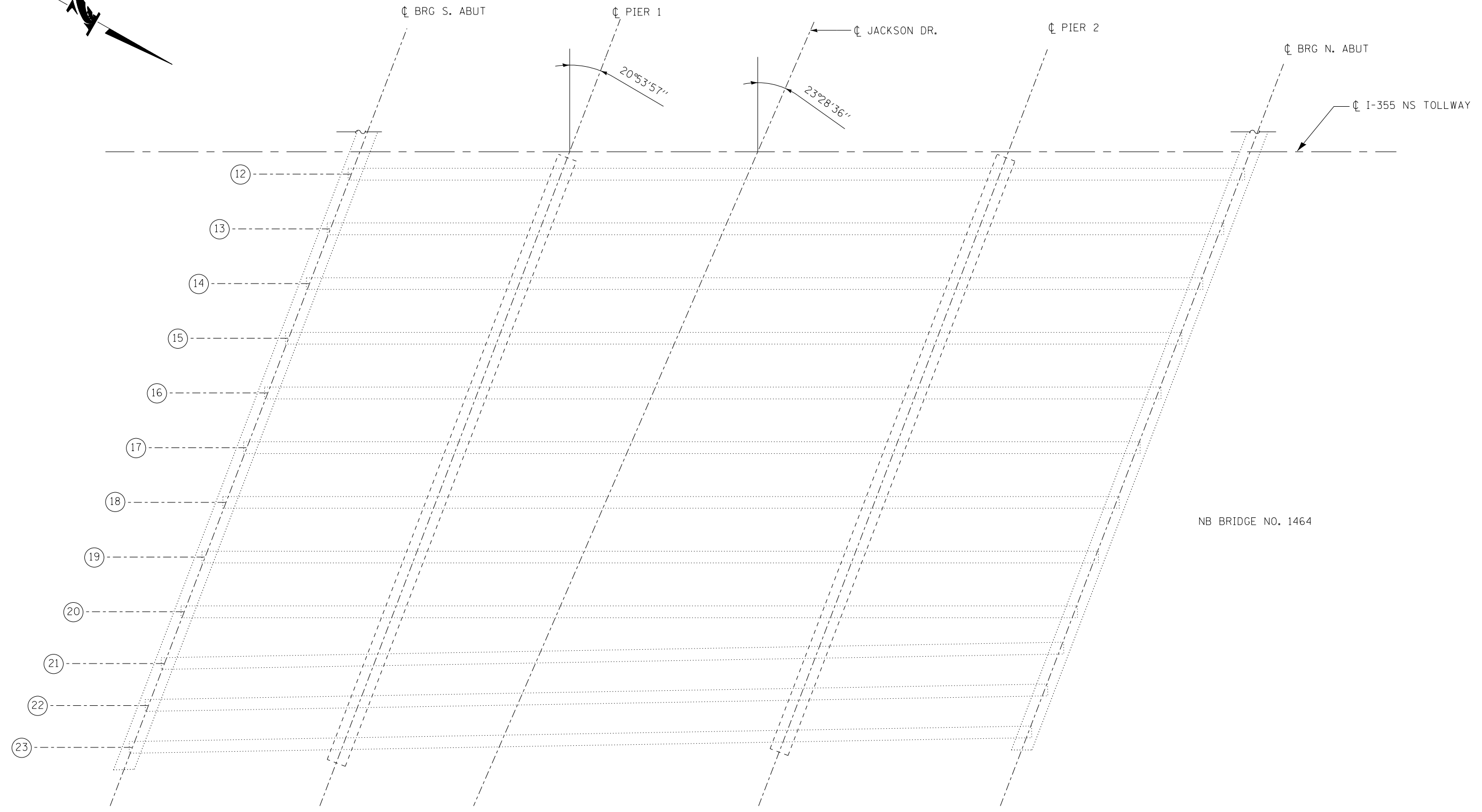


NO.		DATE	REVISIONS DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PPC BEAM FRAMING PLAN - BN: 1463

SB-12 OF SB-30  
 SHT NO. SB-12  
 DRAWING NO. 955 OF 1517

Projects\2016\20161616\_Veterans Memorial Tollway\Drawings\Current Drawings\Files\4255\Structural\Sheet\4255-sh-1463-1464-Framing-PEL01.dgn



BN: 1464 (NB) FRAMING PLAN

NB BRIDGE NO. 1464

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DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



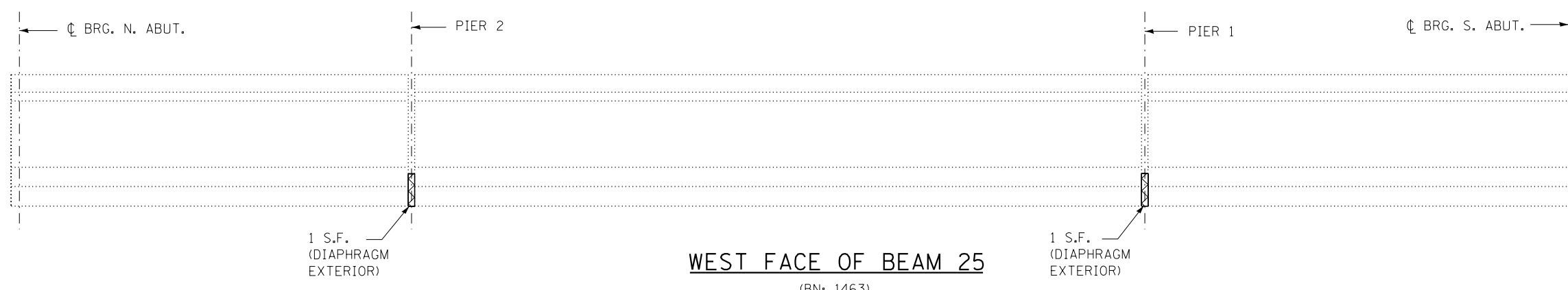
NO.		DATE	REVISIONS DESCRIPTION

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 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PPC BEAM FRAMING PLAN - BN: 1464

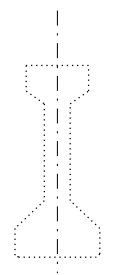
SB-13 OF SB-30  
 SHT NO. SB-13  
 DRAWING NO.  
 956 OF 1517



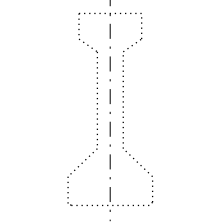
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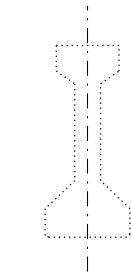
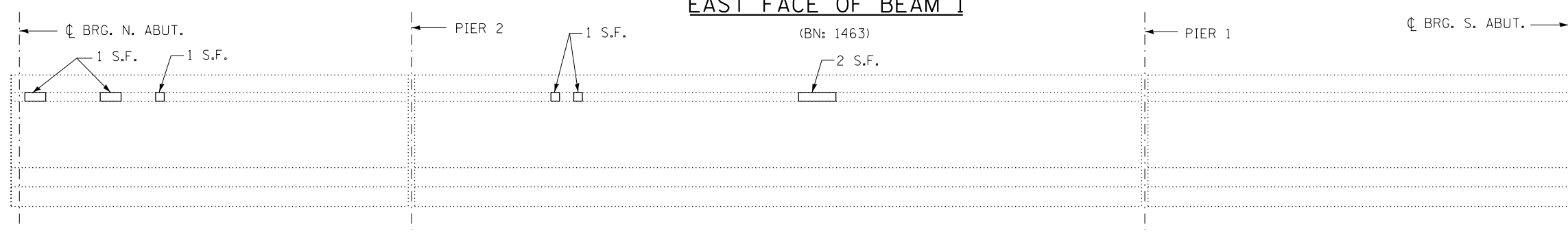
END VIEW



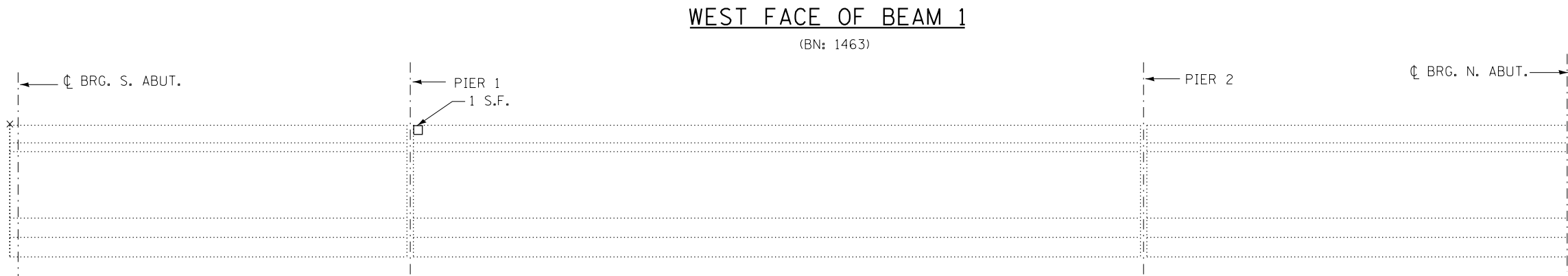
END VIEW



END VIEW



END VIEW



**LEGEND:**

- SHALLOW CONCRETE REPAIR
- STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JT503041	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ. FT.	2	-	2
JT503050	SHALLOW CONCRETE REPAIR	EACH	14	-	14

SB-14 OF SB-30

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



REVISIONS	
NO.	DATE DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PPC BEAM REPAIRS - 1

SHT NO. SB-14  
 DRAWING NO. 957 OF 1517

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END VIEW

EAST FACE OF BEAM 2

(BN: 1463)

WEST FACE OF BEAM 3

(BN: 1463)

EAST FACE OF BEAM 5

(BN: 1463)

END VIEW

END VIEW

**LEGEND:**

 SHALLOW CONCRETE REPAIR

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JT503050	SHALLOW CONCRETE REPAIR	EACH	15	-	15

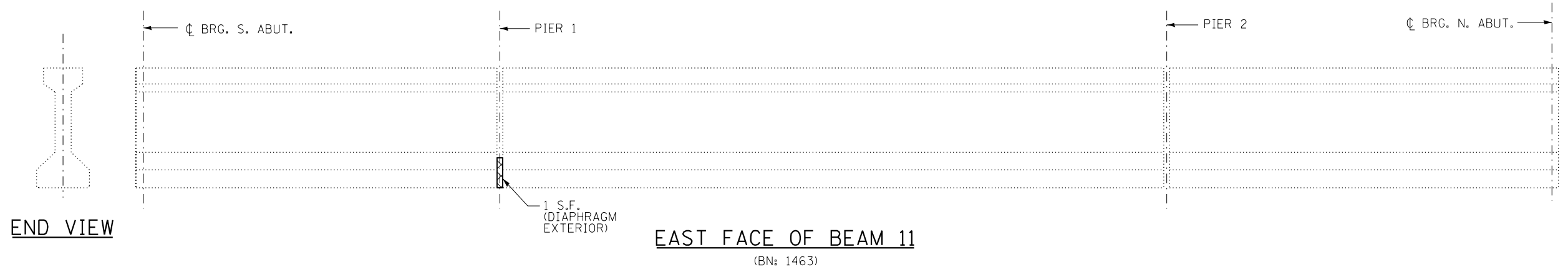
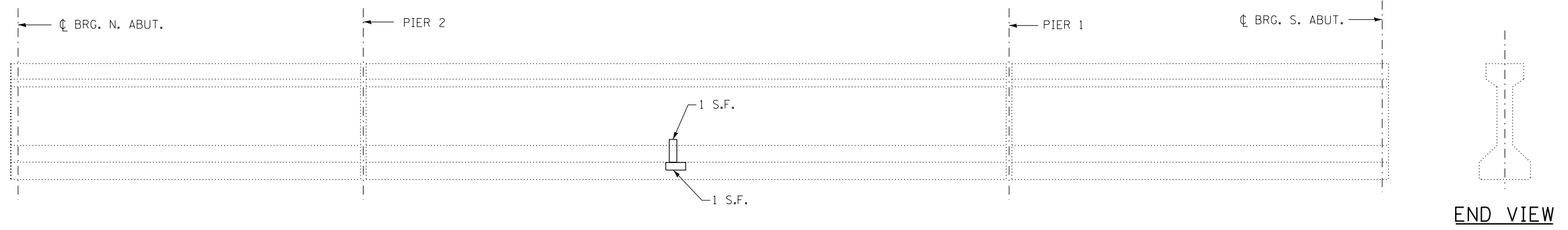
DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PPC BEAM REPAIR - 2

SB-15 OF SB-30  
 SHT NO. SB-15  
 DRAWING NO.  
 958 OF 1517



**LEGEND:**

- SHALLOW CONCRETE REPAIR
- STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JT503041	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SO. FT.	1	-	1
JT503050	SHALLOW CONCRETE REPAIR	EACH	2	-	2

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

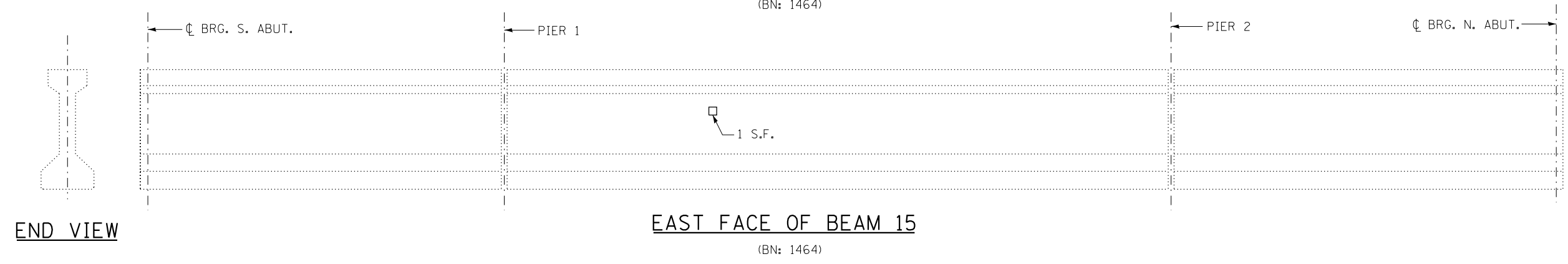
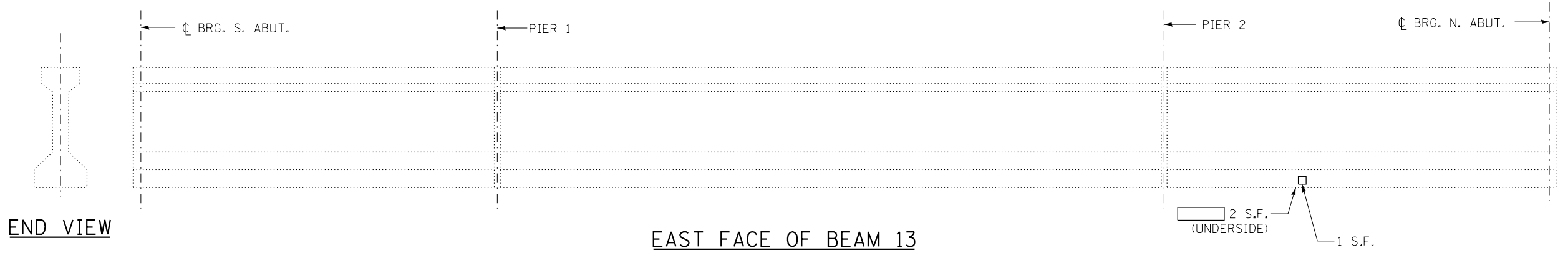
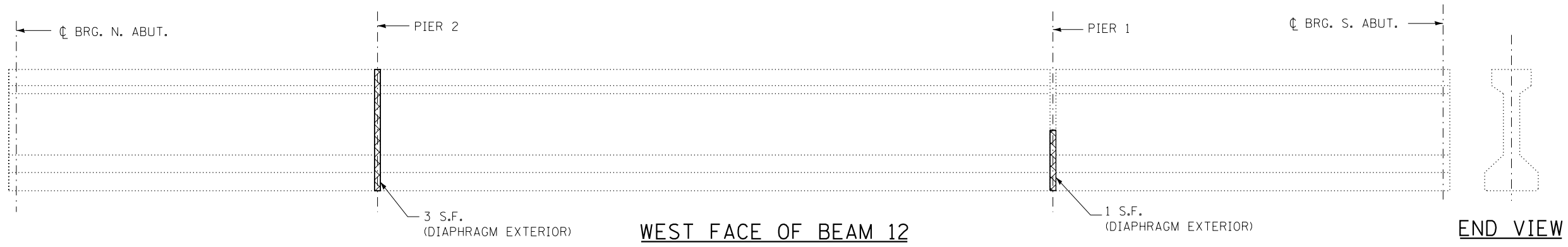


REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PPC BEAM REPAIRS - 3

SB-16 OF SB-30  
 SHT NO. SB-16  
 DRAWING NO. 959 OF 1517

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**LEGEND:**

- SHALLOW CONCRETE REPAIR
- STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JT503041	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SO. FT.	-	4	4
JT503050	SHALLOW CONCRETE REPAIR	EACH	-	4	4

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



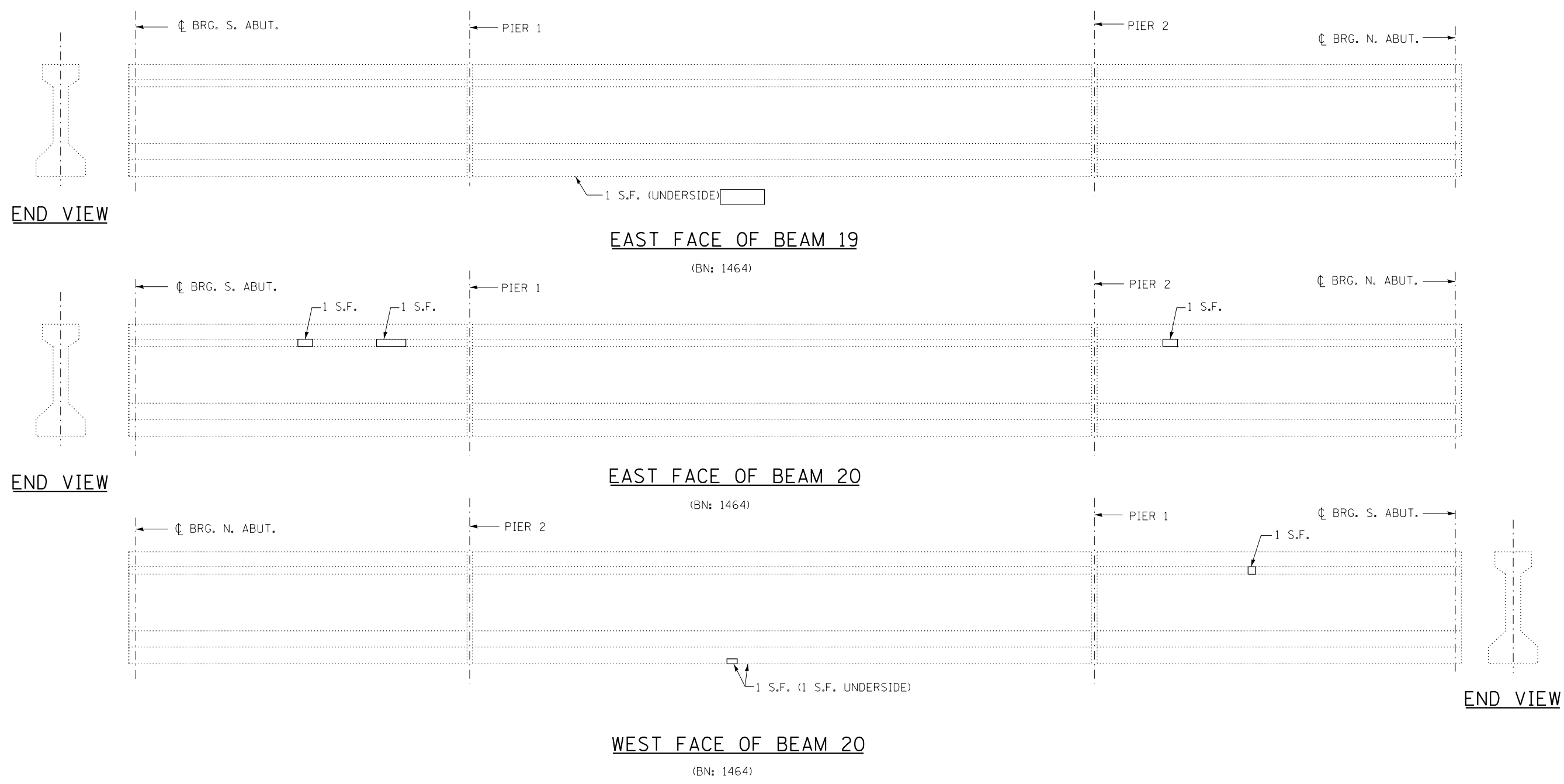
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PPC BEAM REPAIRS - 4

SB-17 OF SB-30  
 SHT NO. SB-17  
 DRAWING NO. 960 OF 1517

Projects\2016\20161616-Veterans Memorial Tollway\Drawings\Current Drawing Files\4255\Structural\Sheet\4255-sht-1463-1464-beam-4-FEL05.dgn

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**LEGEND:**  
 SHALLOW CONCRETE REPAIR

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JT503050	SHALLOW CONCRETE REPAIR	EACH	-	7	7

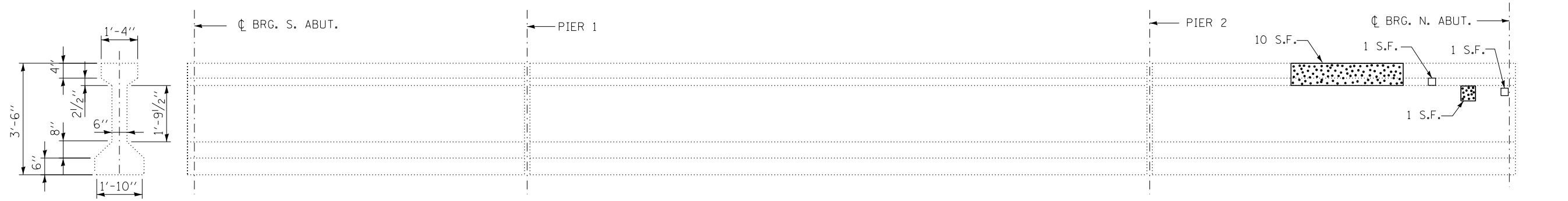
DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PPC BEAM REPAIRS - 5

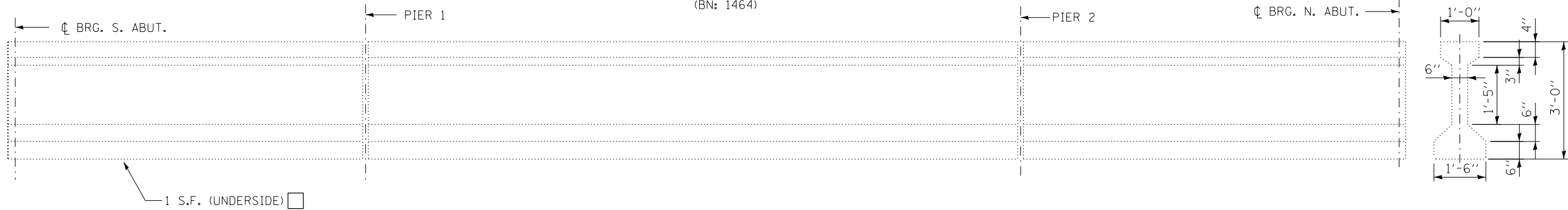
SB-18 OF SB-30  
 SHT NO. SB-18  
 DRAWING NO.  
 961 OF 1517



**END VIEW**  
(BEAMS 1 TO 21)

**EAST FACE OF BEAM 21**

(BN: 1464)



**END VIEW**  
(BEAMS 22 TO 25)

**EAST FACE OF BEAM 22**

(BN: 1464)



**END VIEW**

**EAST FACE OF BEAM 23**

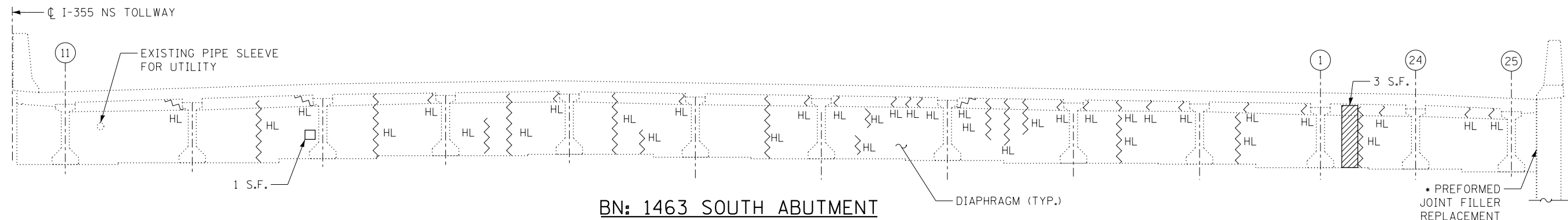
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**LEGEND:**

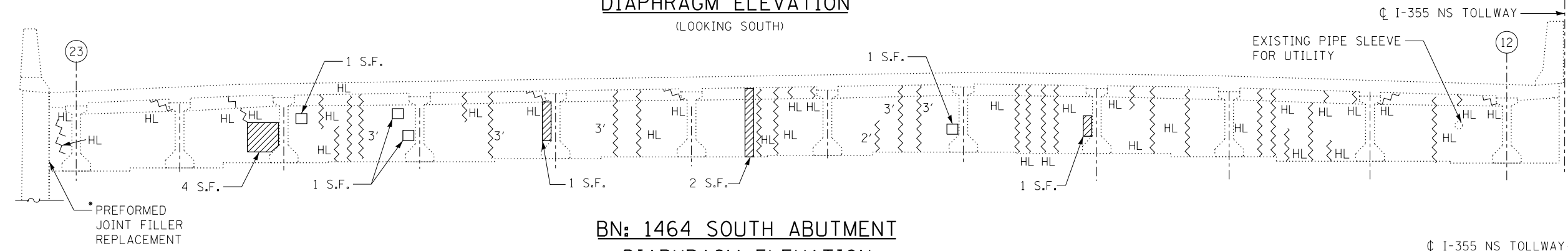
- SHALLOW CONCRETE REPAIR
- STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)
- POLYMER MODIFIED PORTLAND CEMENT MORTAR (PPC BEAM REPAIR)

**BILL OF MATERIAL**

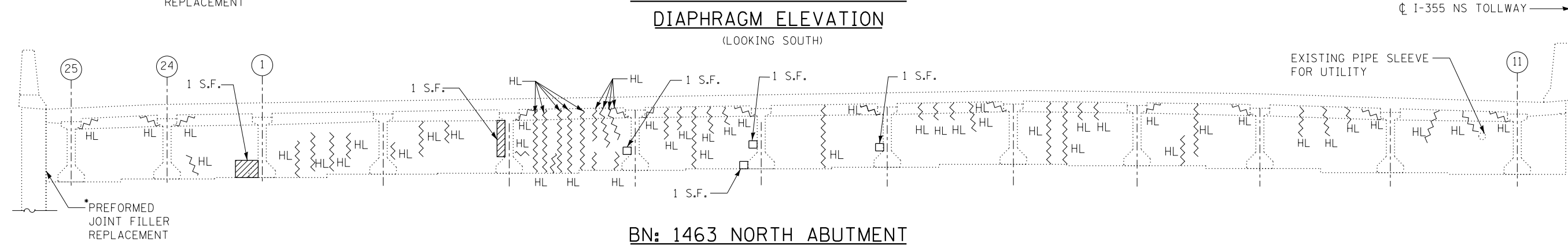
PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JT503041	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ. FT.	-	1	1
JT503050	SHALLOW CONCRETE REPAIR	EACH	-	3	3
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ. FT.	-	11	11



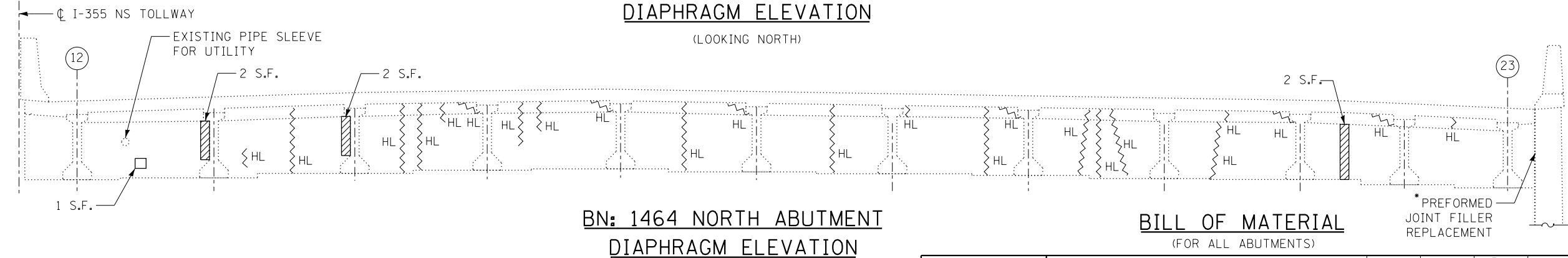
**BN: 1463 SOUTH ABUTMENT  
DIAPHRAGM ELEVATION**  
(LOOKING SOUTH)



**BN: 1464 SOUTH ABUTMENT  
DIAPHRAGM ELEVATION**  
(LOOKING SOUTH)



**BN: 1463 NORTH ABUTMENT  
DIAPHRAGM ELEVATION**  
(LOOKING NORTH)



**BN: 1464 NORTH ABUTMENT  
DIAPHRAGM ELEVATION**  
(LOOKING NORTH)

**BILL OF MATERIAL**  
(FOR ALL ABUTMENTS)

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	-	17	17
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)	SQ. FT.	5	14	19
JT503050	SHALLOW CONCRETE REPAIR	SQ. FT.	5	5	10

\* FOR BILL OF MATERIAL SEE SHEET SB-06

**LEGEND:**

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)
- SHALLOW CONCRETE REPAIR
- LF LOW PRESSURE EPOXY INJECTION
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)

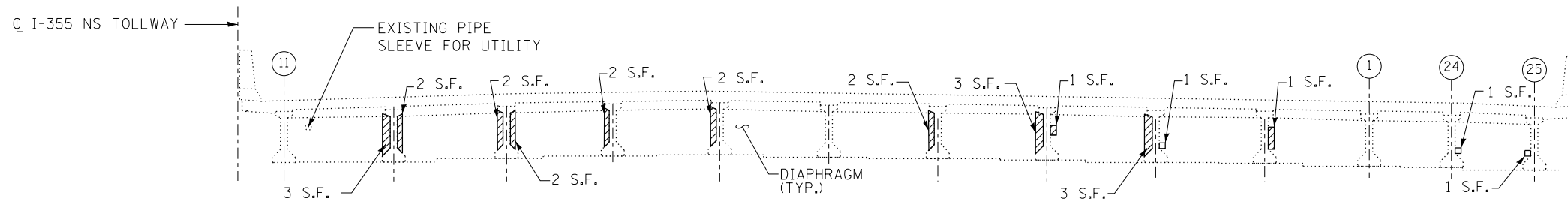
NOTE:  
1. CRACK WIDTHS ARE 1/8" ± 1/16" UNLESS OTHERWISE NOTED.

DRAWN BY GEW/PY DATE 3/11/2018  
CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

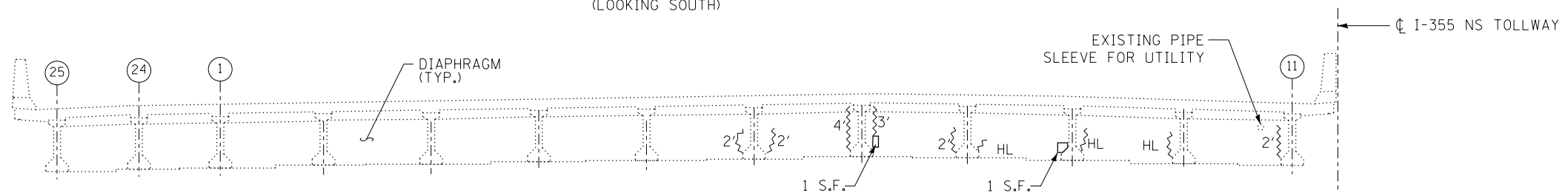


REVISIONS	
NO.	DESCRIPTION

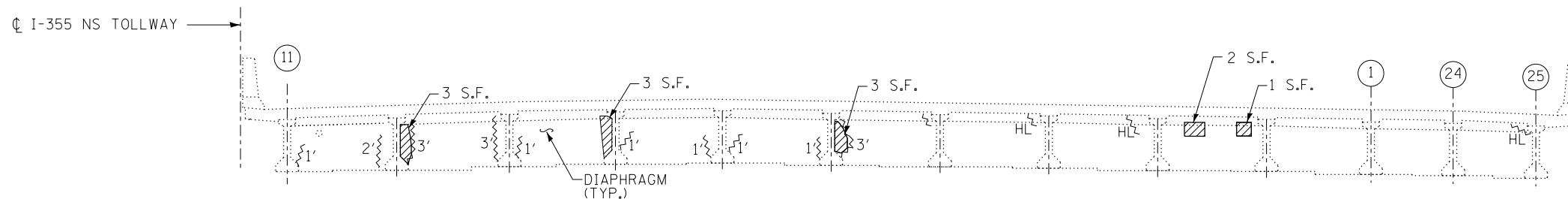
CONTRACT NO. RR-16-4255  
B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
ABUTMENT DIAPHRAGM REPAIRS



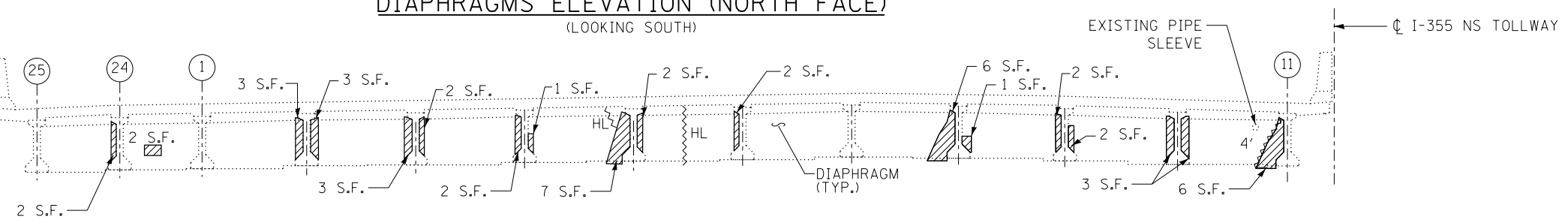
BN: 1463 PIER 1  
DIAPHRAGMS ELEVATION (NORTH FACE)  
(LOOKING SOUTH)



BN: 1463 PIER 1  
DIAPHRAGMS ELEVATION (SOUTH FACE)  
(LOOKING NORTH)



BN: 1463 PIER 2  
DIAPHRAGMS ELEVATION (NORTH FACE)  
(LOOKING SOUTH)



BN: 1463 PIER 2  
DIAPHRAGMS ELEVATION (SOUTH FACE)  
(LOOKING NORTH)

**LEGEND:**

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)
- SHALLOW CONCRETE REPAIR
- LF LOW PRESSURE CONCRETE INJECTION
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)

NOTE:  
1. CRACK WIDTHS ARE  $\frac{1}{8}'' \pm \frac{1}{16}''$  UNLESS OTHERWISE NOTED.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	36	-	36
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)	SQ. FT.	88	-	88
JT503050	SHALLOW CONCRETE REPAIR	SQ. FT.	5	-	5

DRAWN BY GEW/PY DATE 3/11/2018  
CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

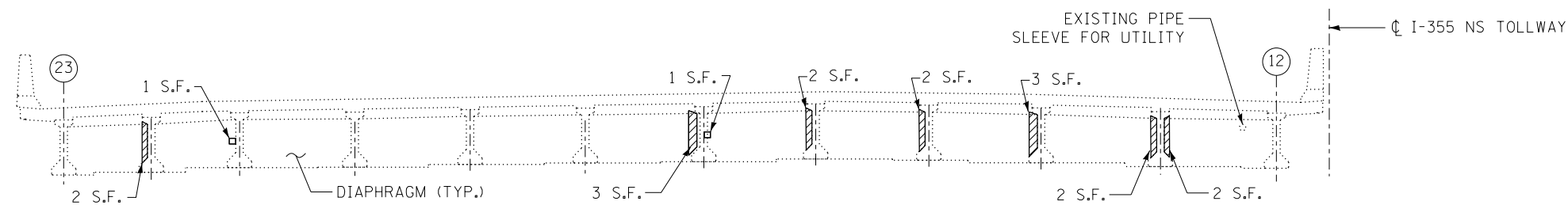


REVISIONS		
NO.	DATE	DESCRIPTION

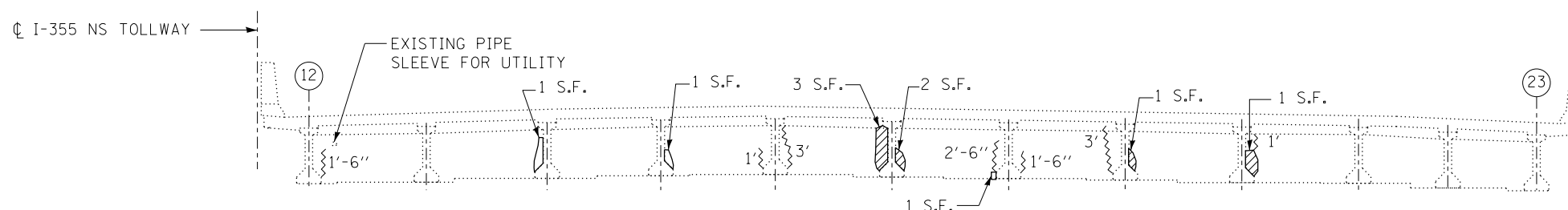
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B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
PIER DIAPHRAGM REPAIRS - 1

SB-21 OF SB-30  
SHT NO. SB-21  
DRAWING NO. 964 OF 1517

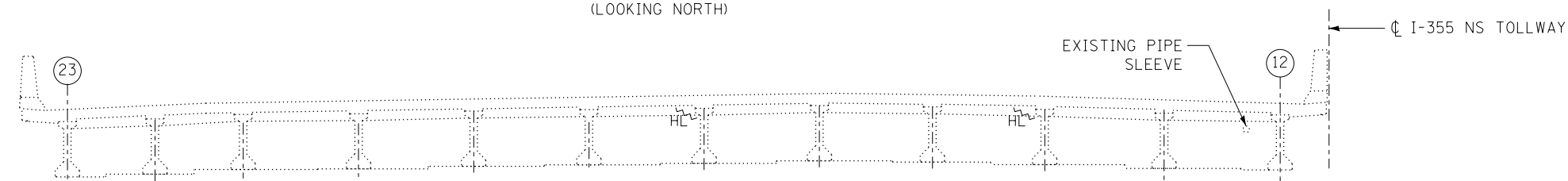




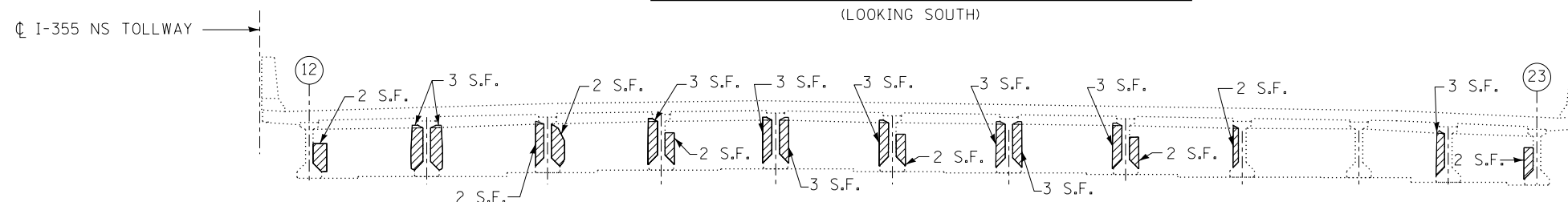
**BN: 1464 PIER 1**  
**DIAPHRAGMS ELEVATION (NORTH FACE)**  
 (LOOKING SOUTH)



**BN: 1464 PIER 1**  
**DIAPHRAGMS ELEVATION (SOUTH FACE)**  
 (LOOKING NORTH)



**BN: 1464 PIER 2**  
**DIAPHRAGMS ELEVATION (NORTH FACE)**  
 (LOOKING SOUTH)



**BN: 1464 PIER 2**  
**DIAPHRAGMS ELEVATION (SOUTH FACE)**  
 (LOOKING NORTH)

**LEGEND:**

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)
- SHALLOW CONCRETE REPAIR
- LF LOW PRESSURE CONCRETE INJECTION
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)

NOTE:  
 1. CRACK WIDTHS ARE  $\frac{1}{8}'' \pm \frac{1}{16}''$  UNLESS OTHERWISE NOTED,

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	-	14	14
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)	SQ. FT.	-	69	69
JT503050	SHALLOW CONCRETE REPAIR	SQ. FT.	-	4	4

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

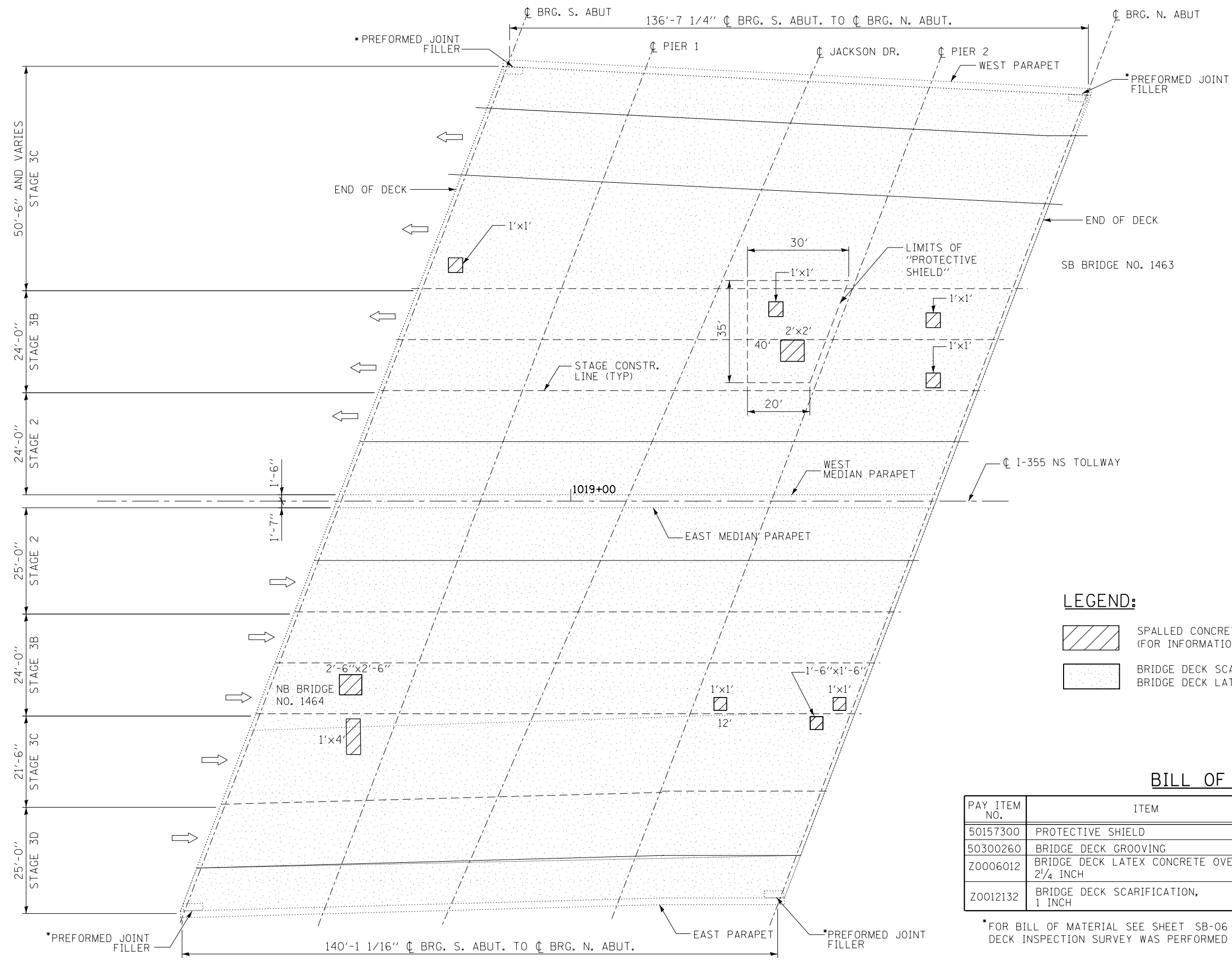


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 PIER DIAPHRAGM REPAIRS - 2

SB-22 OF SB-30  
 SHT NO. SB-22  
 DRAWING NO. 965 OF 1517



**LEGEND:**

- SPALLED CONCRETE (FOR INFORMATION ONLY)
- BRIDGE DECK SCARIFICATION, 1 INCH  
BRIDGE DECK LATEX CONCRETE OVERLAY, 2-1/4 INCH

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
50157300	PROTECTIVE SHIELD	SQ. YD.	98	-	98
50300260	BRIDGE DECK GROOVING	SQ. YD.	1,519	1,416	2,935
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCH	SQ. YD.	1,535	1,448	2,983
Z0012132	BRIDGE DECK SCARIFICATION, 1 INCH	SQ. YD.	1,535	1,448	2,983

\*FOR BILL OF MATERIAL SEE SHEET SB-06  
DECK INSPECTION SURVEY WAS PERFORMED ON 10/17/2017

**DECK PLAN**

DRAWN BY GEW/PY DATE 3/11/2018  
CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

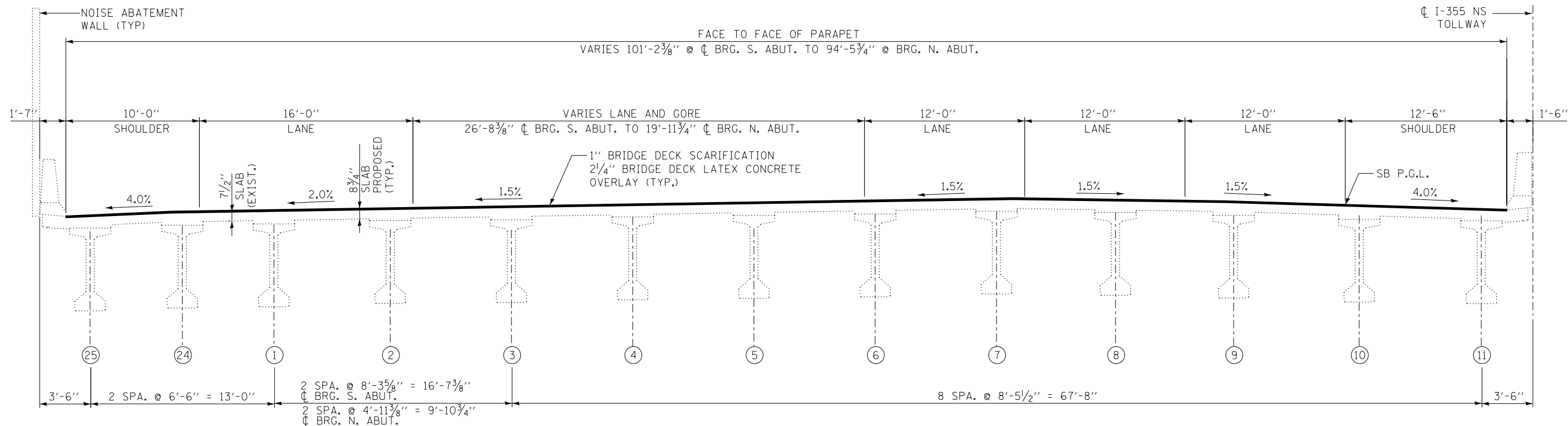


REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
DECK REPAIR PLAN

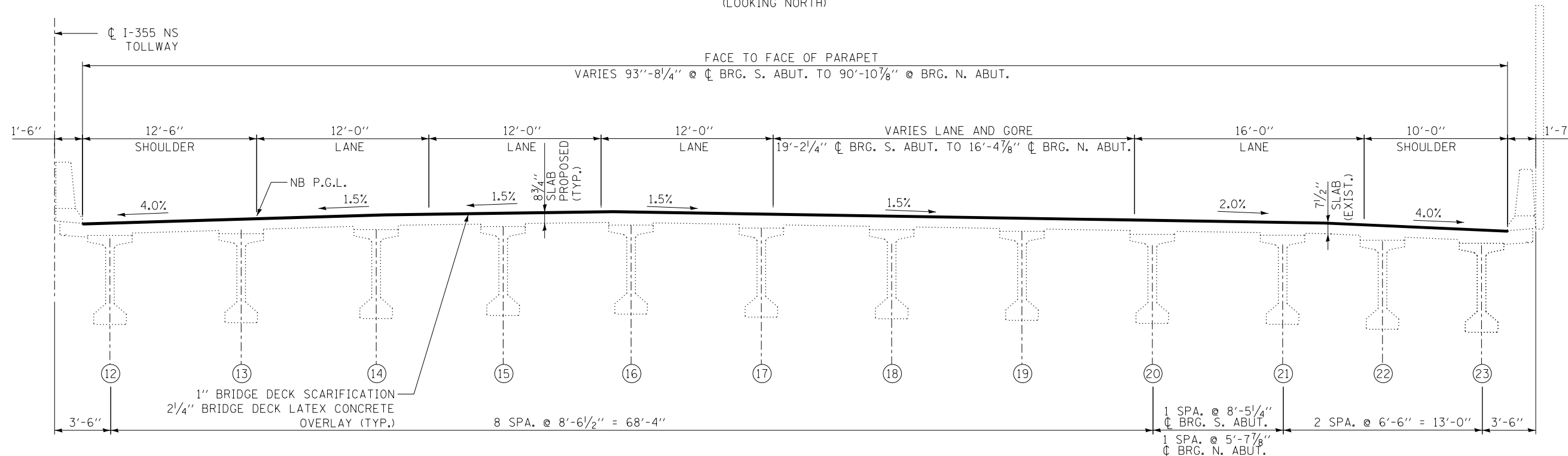
SB-23 OF SB-30  
SHT NO. SB-23  
DRAWING NO. 966 OF 1517

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**S.B. - BN: 1463 CROSS SECTION**

(LOOKING NORTH)



**N.B. - BN: 1464 CROSS SECTION**

(LOOKING NORTH)

PPC I-BEAMS 1 TO 21 - 42" DEEP  
PPC I-BEAMS 22 TO 25 - 36" DEEP

Projects\2016\20161616 - Veterans Memorial Tollway\Drawings\Current Drawings\Files\2016\Structural\Sheet\2016-1463-1464-structure-REL.Dwg  
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DRAWN BY GEW/PY DATE 3/11/2018  
CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

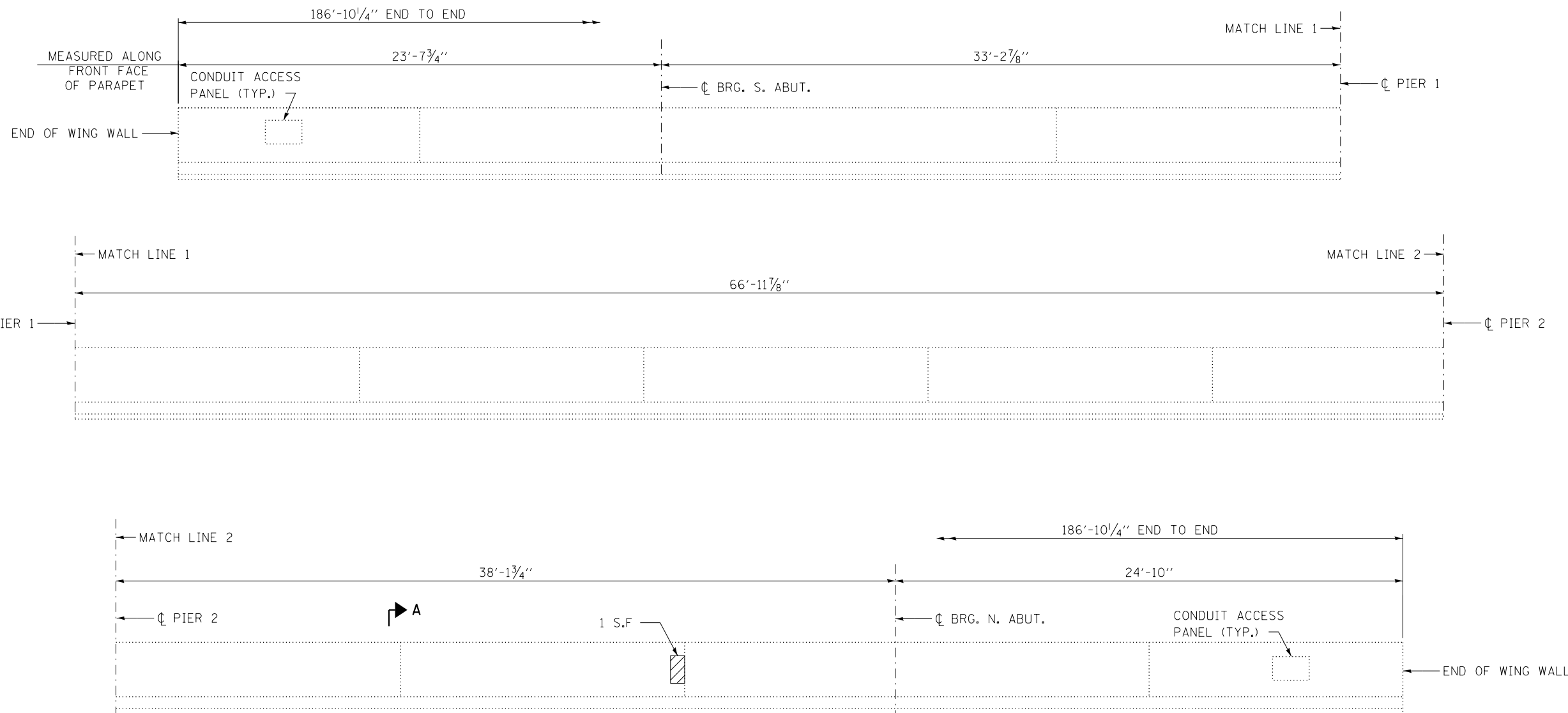


REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
STRUCTURE CROSS SECTION

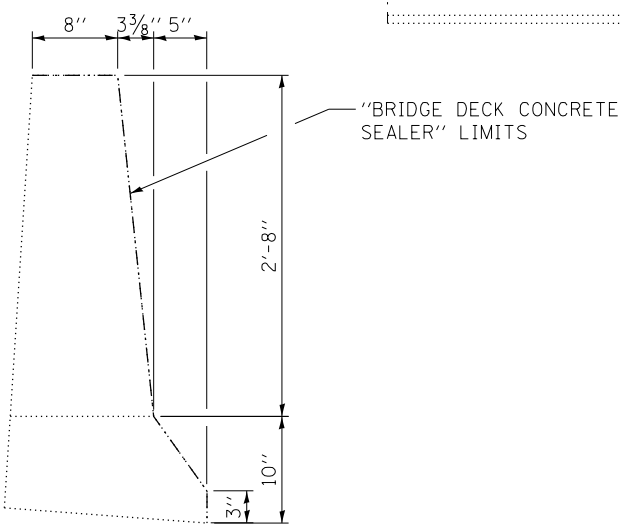
SB-24 OF SB-30  
SHT NO. SB-24  
DRAWING NO. 967 OF 1517

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**ELEVATION WEST PARAPET (INSIDE FACE)**

**BN: 1463**  
(LOOKING WEST)



**SECTION A-A**

**LEGEND:**  
 STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)	SQ. FT.	4	3	7
JT524015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	1,308	1,330	2,638

DRAWN BY **GEW/PY** DATE **3/11/2018**  
 CHECKED BY **MMH/RRD/MMZ** DATE **3/11/2018**

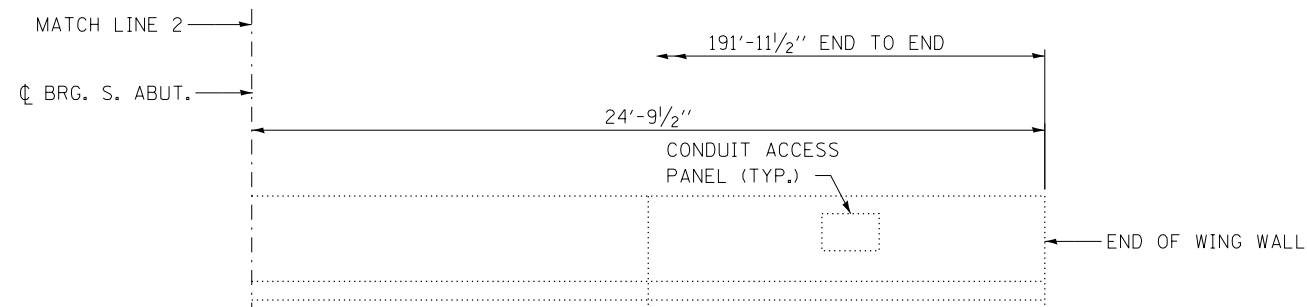
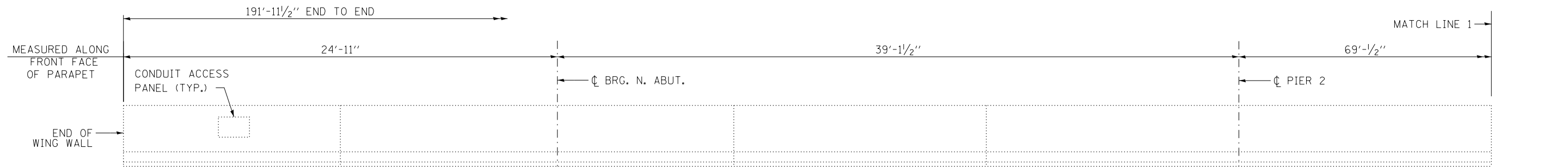


REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. **RR-16-4255**  
**BN: 1463**  
**WEST PARAPET REPAIRS**

SB-25 OF SB-30  
 SHT NO. SB-25  
 DRAWING NO. **968** OF **1517**

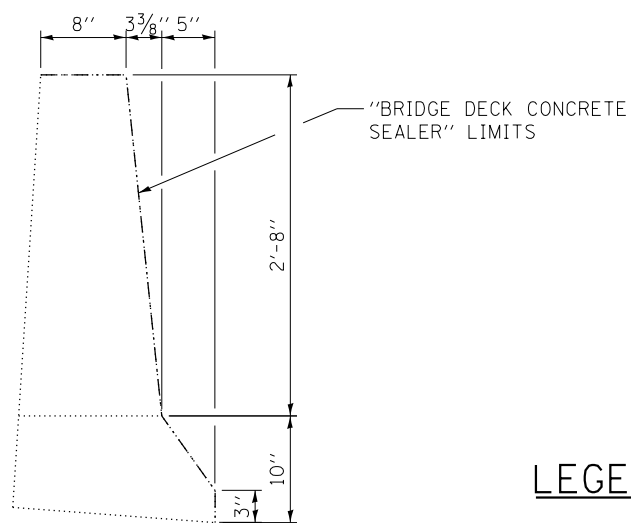
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**ELEVATION EAST PARAPET (INSIDE FACE)**

**BN: 1464**

(LOOKING EAST)



**SECTION A-A**

**LEGEND:**

STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)

FOR BILL OF MATERIAL SEE SHEET SB-25 OF SB-30

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

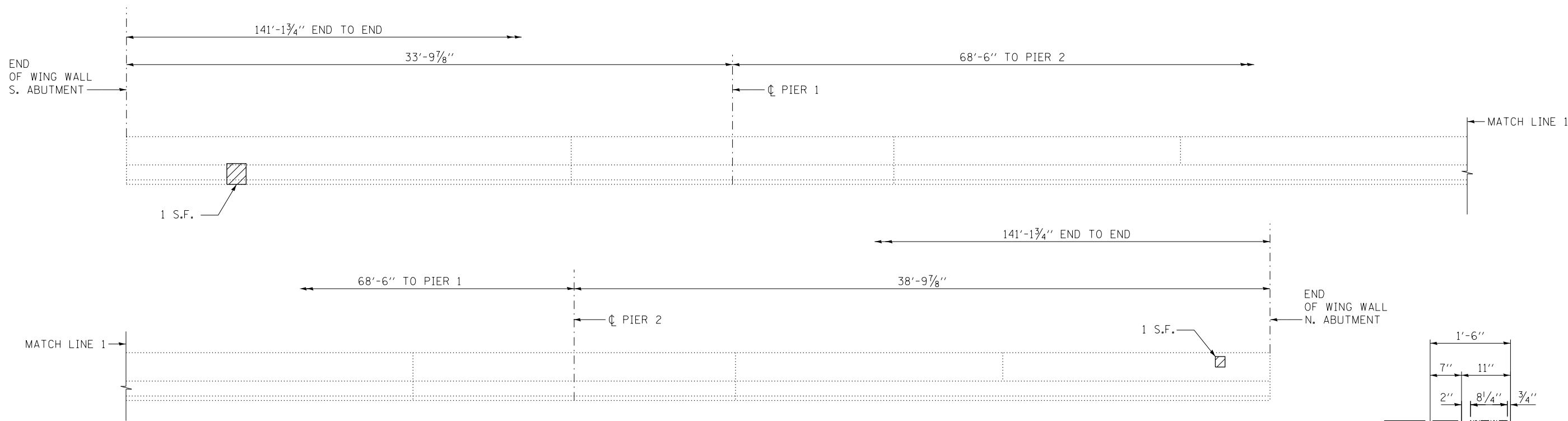


REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
 BN: 1464  
 EAST PARAPET REPAIRS

SHT NO. SB-26  
 DRAWING NO.  
 969 OF 1517

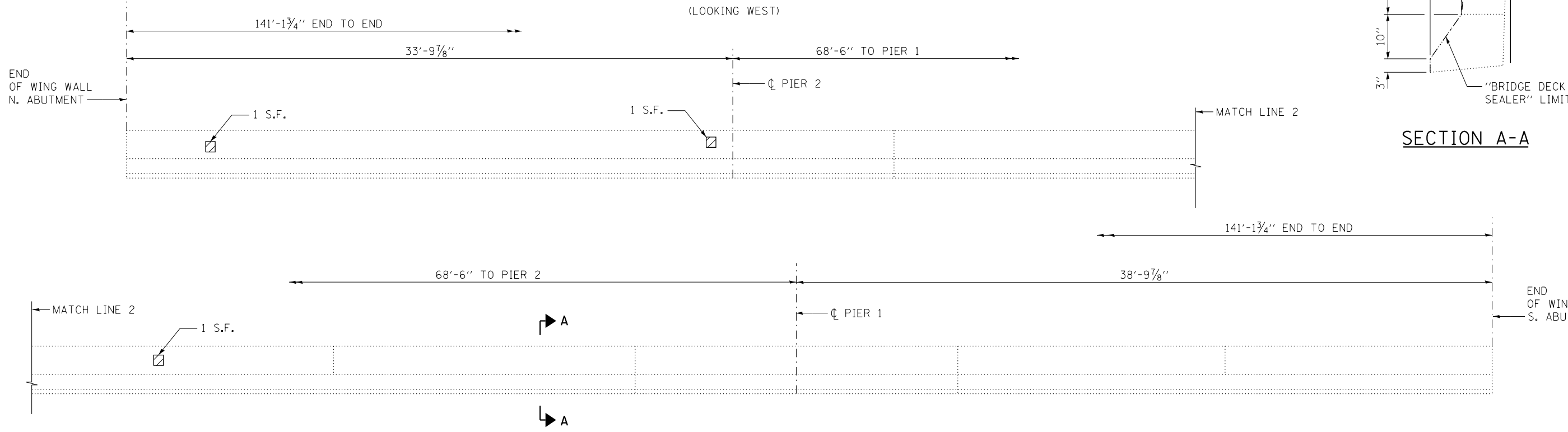
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**ELEVATION WEST MEDIAN PARAPET**

**BN: 1464**

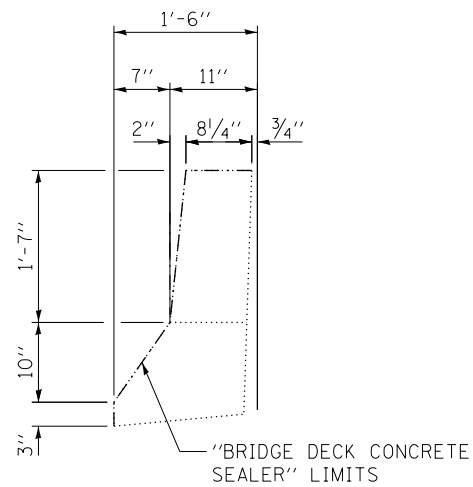
(LOOKING WEST)



**ELEVATION EAST MEDIAN PARAPET**

**BN: 1463**

(LOOKING EAST)



**SECTION A-A**

**LEGEND:**

STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL OR LESS THAN 5 INCHES)

FOR BILL OF MATERIAL SEE SHEET SB-25 OF SB-30

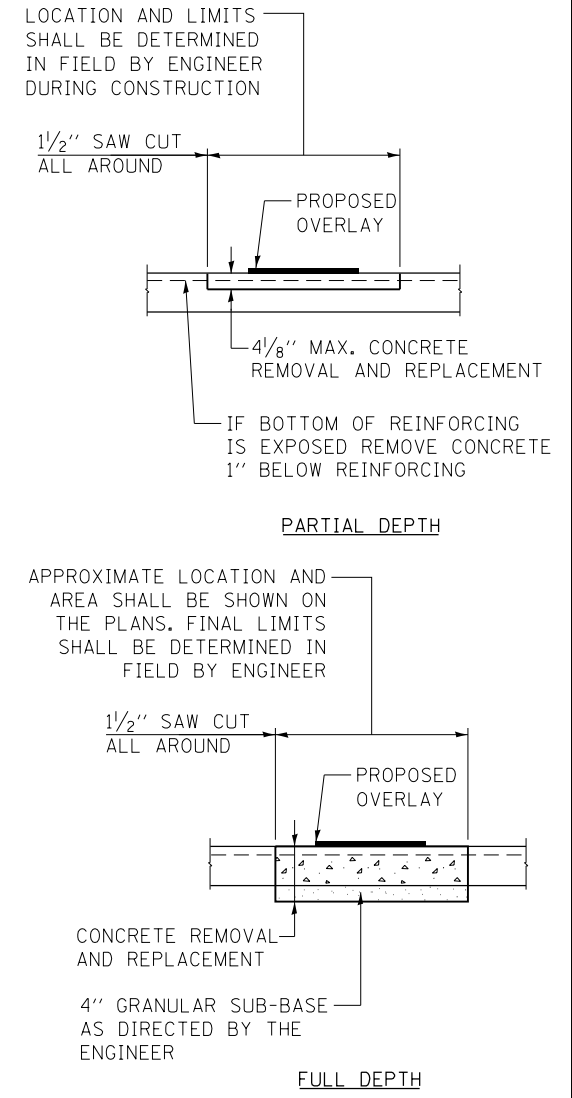
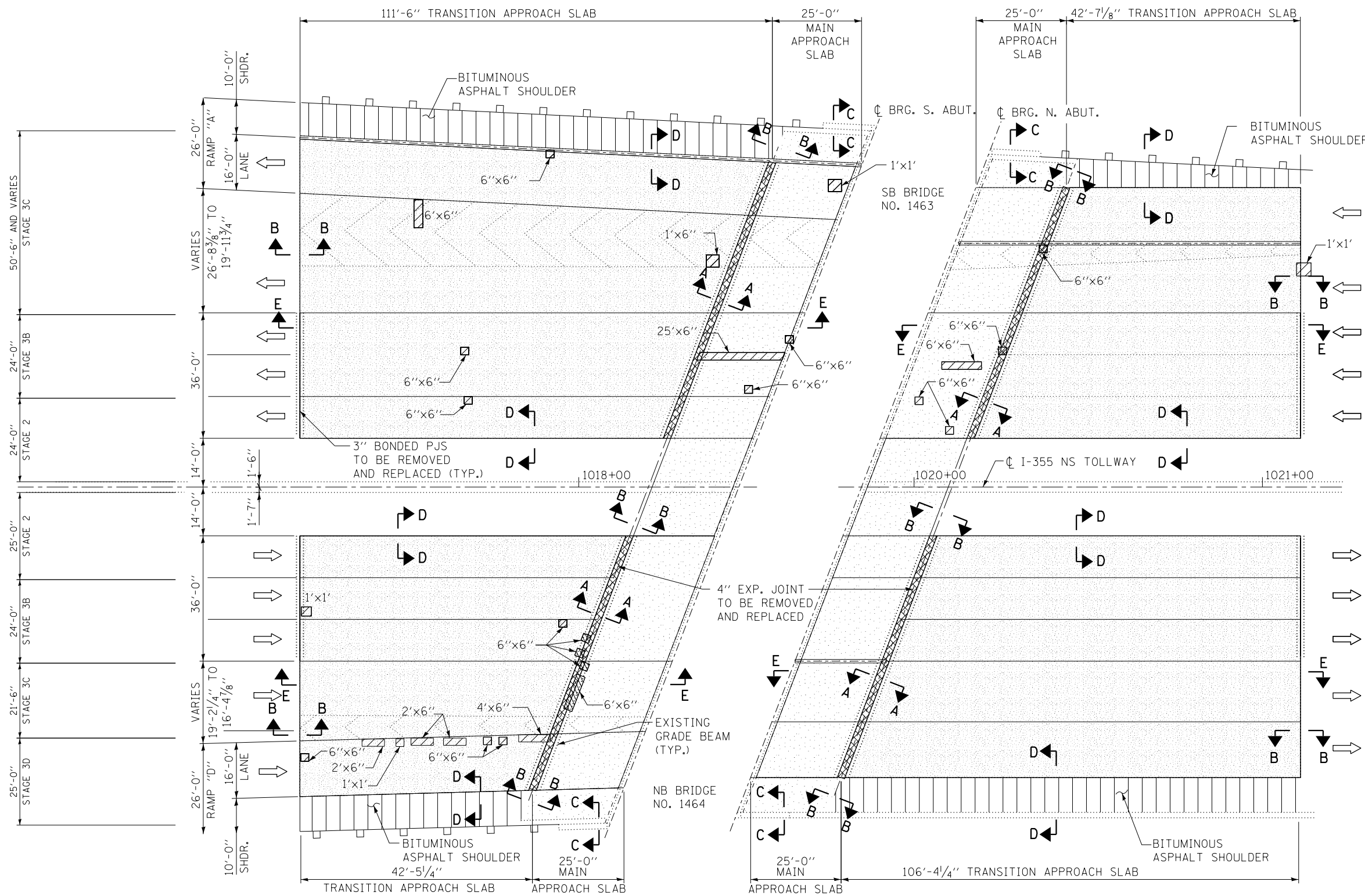
DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BN: 1463/1464  
 MEDIAN PARAPETS REPAIR

SB-27 OF SB-30  
 SHT NO. SB-27  
 DRAWING NO. 970 OF 1517



**APPROACH SLAB REPAIR DETAILS**

**LEGEND:**

- SPALLED CONCRETE (FOR INFORMATION ONLY)
- BRIDGE DECK SCARIFICATION 1 IN. BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 IN.
- CONCRETE PAVEMENT SCARIFICATION, 3/4 IN
- CONCRETE REMOVAL & ACCELERATED APPROACH SLAB REPAIR (FULL DEPTH, TYPE II)
- ACCELERATED APPROACH SLAB REPAIR (FULL DEPTH TYPE I)

PAY ITEM NO.	ITEM	UNIT	BN: 1463	BN: 1464	TOTAL QUANTITY
50300260	BRIDGE DECK GROOVING	SQ. YD.	506	479	985
JT503033	ACCELERATED APPROACH SLAB REPAIR, (FULL DEPTH, TYPE II)	SQ. YD.	36	33	69
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 IN.	SQ. YD.	518	491	1,009
Z0012132	BRIDGE DECK SCARIFICATION, 1 IN.	SQ. YD.	518	491	1,009
Z0012800	CONCRETE PAVEMENT SCARIFICATION, 3/4 IN	SQ. YD.	1,293	1,153	2,446

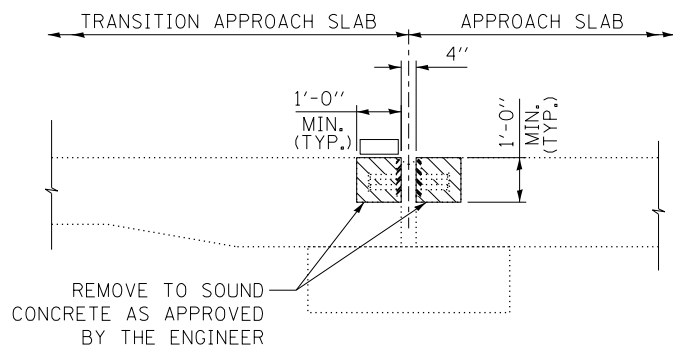
SB-28 OF SB-30

DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

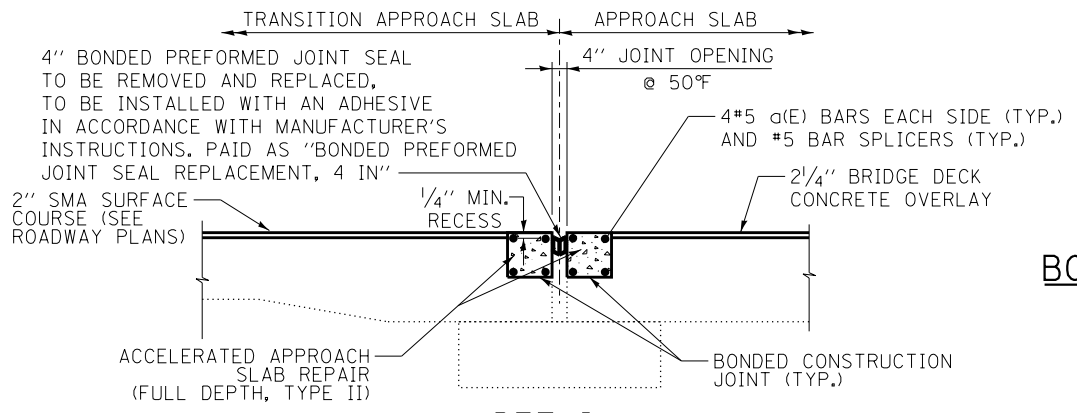


REVISIONS	
NO.	DATE

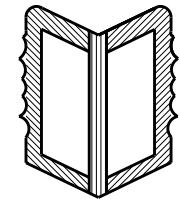
CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 APPROACH SLAB REPAIRS  
 SHT NO. SB-28  
 DRAWING NO. 971 OF 1517



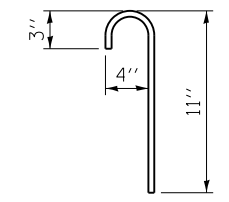
**SECTION A-A  
EXISTING EXPANSION JOINT**



**DETAIL A  
PROPOSED EXPANSION JOINT**



**BONDED PREFORMED  
JOINT SEAL**



**d(E) BARS**

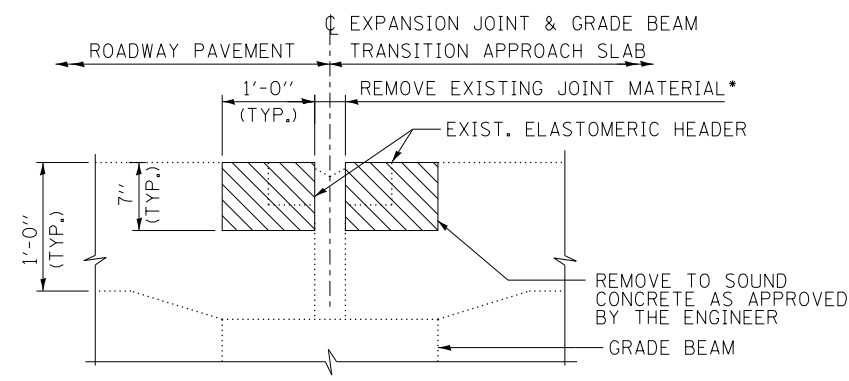
**NOTES:**

1. SUBJECT TO THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY ELECT TO MODIFY THE SHOWN REMOVAL AND PROPOSED DIMENSIONS TO SUIT THEIR MEANS AND METHOD FOR JOINT INSTALLATION; THE OVERALL TRAFFIC STAGING SCHEME SHALL NOT BE MODIFIED.
2. ALL EXISTING CONCRETE SURFACES TO BE IN CONTACT WITH NEW CONCRETE SHALL BE BLAST CLEANED BEFORE NEW CONCRETE CONSTRUCTION.
3. ALL WORK SHALL BE PERFORMED WITH THE USE OF TEMPORARY ONE-LANE AND TWO-LANE CLOSURES ONLY AS PER MOT PLANS. FOR ALLOWABLE CLOSURE TIMES AND DURATIONS, SEE MOT PLANS AND SPECIAL PROVISIONS.
4. MANUFACTURED SPLICE TO BE ALLOWED FOR JOINT INSTALLATION PER MANUFACTURER'S REQUIREMENTS.
5. FOR SECTIONS A-A, B-B, C-C, D-D & E-E SEE SHEET SB-28 OF SB-30.

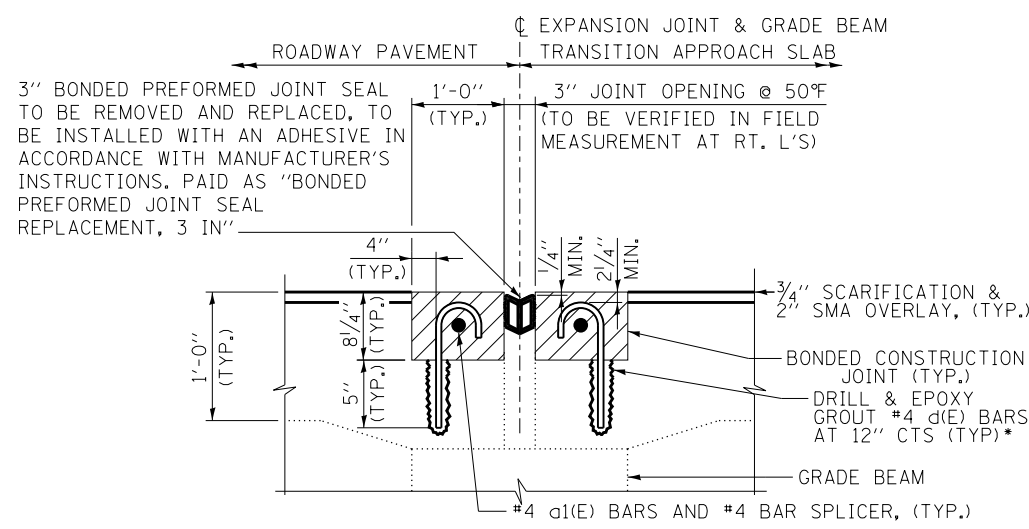
**LEGEND**

- ACCELERATED APPROACH SLAB REPAIR (PARTIAL)
- CONCRETE REMOVAL COST INCLUDES ARMOR REMOVAL
- BITUMINOUS ASPHALT PAVEMENT

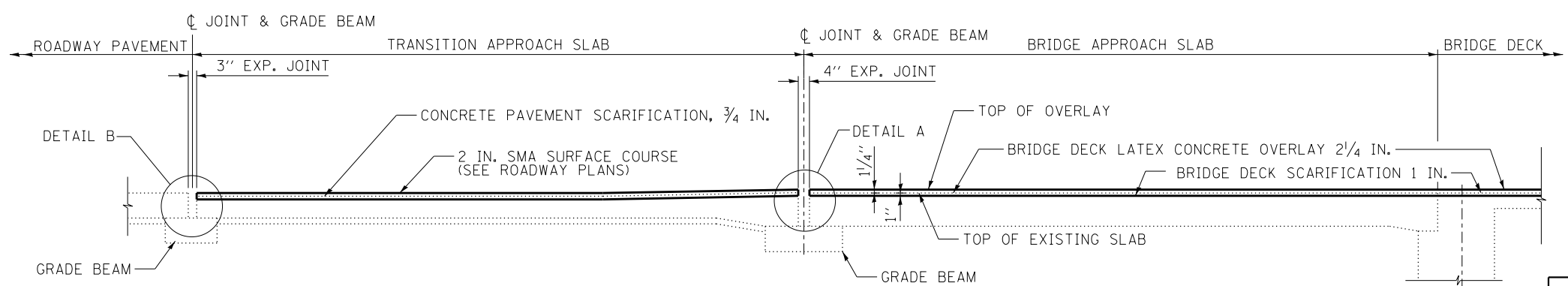
\* CUT BARS AND PROVIDE BAR SPLICERS AT STAGE CONSTRUCTION LINES.



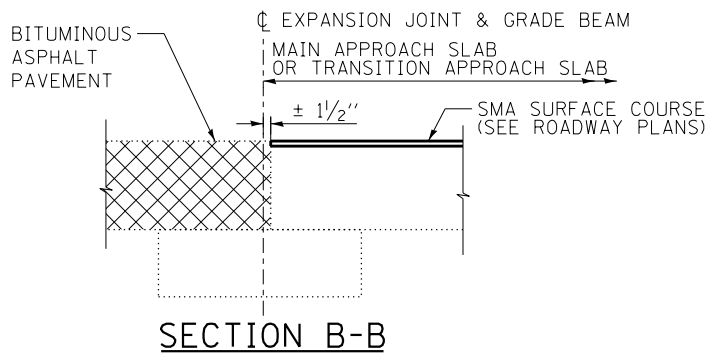
**EXISTING TRANSITION SLAB EXPANSION JOINT  
OR PRESSURE RELIEF JOINT**



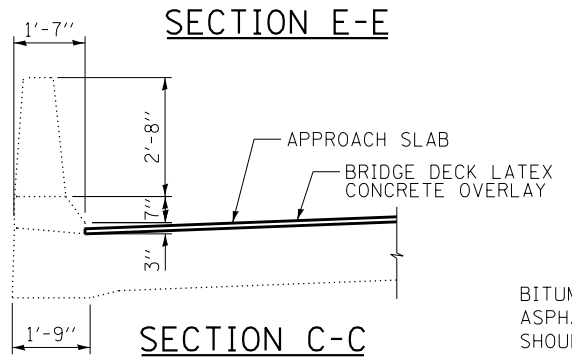
**DETAIL B PROPOSED EXPANSION JOINT**  
\*COST INCLUDED WITH REINFORCEMENT BARS, EPOXY COATED



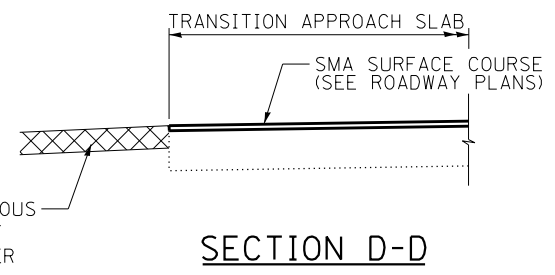
**SECTION E-E**



**SECTION B-B**



**SECTION C-C**



**SECTION D-D**

**BILL OF MATERIAL**

PAY ITEM NO.	DESCRIPTION	UNIT	LENGTH		TOTAL QUANTITY
			BN: 1463	BN: 1464	
50102400	CONCRETE REMOVAL	CU. YD.	18.5	17.5	36.0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,660	1,550	3,210
50800515	BAR SPLICERS	EACH	27	36	63
JT503013	ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ. YD.	33	31	64
JT525230	BONDED PREFORMED JOINT SEAL REPLACEMENT, 3 IN.	FOOT	149	139	288
JT525235	BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	160	150	310

DRAWN BY GEW/PY DATE 3/11/2018  
CHECKED BY MMH/RRD/MMZ DATE 3/11/2018

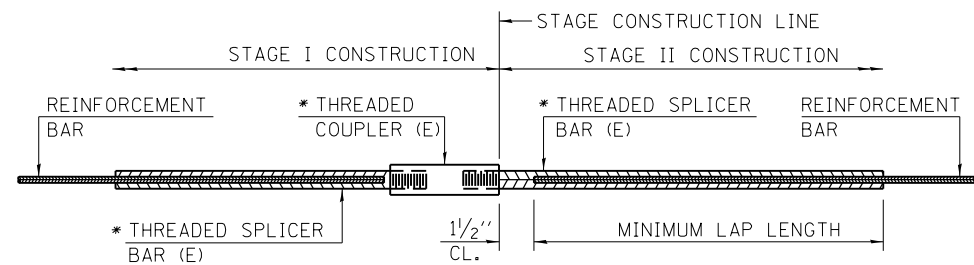


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
APPROACH REPAIR DETAILS  
SHT NO. SB-29  
DRAWING NO. 972 OF 1517



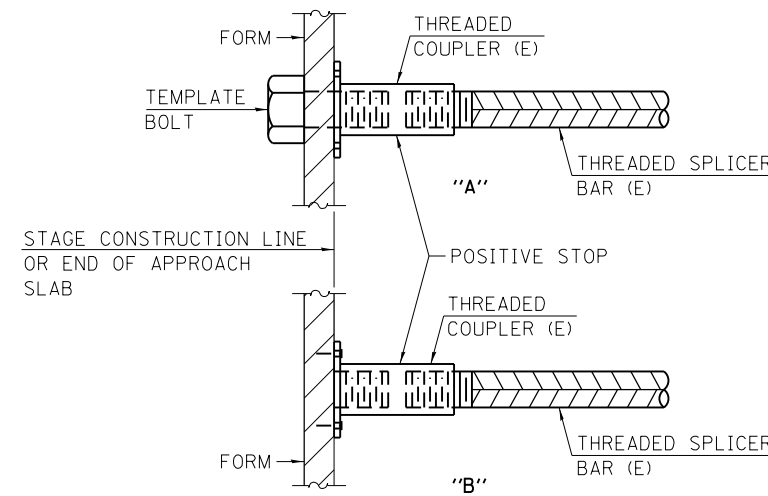


**STANDARD BAR SPLICER ASSEMBLY**

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + 1/2" + THREAD LENGTH

- EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
BN: 1463	#5	24	2'-7"
BN: 1464	#5	32	2'-7"
BN: 1463	#4	3	2'-0"
BN: 1464	#4	4	2'-0"



**INSTALLATION AND SETTING METHODS**

- "A" : SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT.
- "B" : SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS.
- (E) : INDICATES EPOXY COATING.

**NOTES**

- SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.
- ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.
- BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS.
- FOR REINFORCEMENT BARS, SEE SECTION 508 OF THE STANDARD SPECIFICATIONS.
- SEE APPROVED LIST OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.

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DRAWN BY GEW/PY DATE 3/11/2018  
 CHECKED BY MMH/RRD/MMZ DATE 3/11/2018



REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
 B.N. 1463(SB) & 1464(NB) (SN:022-9982)  
 BAR SPLICER DETAILS

SB-30 OF SB-30  
 SHT NO.SB-30  
 DRAWING NO.  
 973 OF 1517

EXISTING STRUCTURES, BN 1461 AND BN 1462, BUILT AS PART OF CONTRACT CIP-614 IN 1989. SLOPEWALL MODIFICATIONS IN 2008 AS PART OF CONTRACT I-07-5476, A BRIDGE MOUNTED SIGN WAS INSTALL ON BN 1462 IN 2012 AS PART OF CONTRACT RR-12-4047, AND CURRENTLY (2018) UNDERGOING DECK AND JOINT REPAIRS AS PART OF SECTION 17-JTREP-00-BR. LENGTH IS 229'-5 3/4" BACK TO BACK OF ABUTMENTS WITH TWO SPANS, 116'-0" AND 110'-3". 72" PPC BEAMS WITH INTEGRAL ABUTMENTS.

BENCH MARK: MONUMENT NO. 5, BRASS PLUG ENCLOSED IN CONCRETE PEDESTAL, STA. 1058+93 (I-355) 949'-0" RT. ELEV. 760.016

**PROPOSED SCOPE OF WORK**

1. APPLY CONCRETE SEALANT TO WINGWALLS AND PIERS.
2. REPAIR SPALLED AND DELAMINATED CONCRETE IN ABUTMENTS, PIERS, WINGWALLS, AND SLOPE WALLS.
3. CLEAN AND SEAL CRACKS WIDER THAN 1/16" AND ALL LEACHING CRACKS IN ABUTMENTS AND PIERS. SEAL ALL CRACKS IN SLOPEWALL GREATER THAN 1/2".
4. REPLACE GAP FILLER BETWEEN SLOPE WALL AND ABUTMENT.
5. CLEAN AND SEAL ALL CRACKS ON THE PPC BEAMS.
6. REPAIR SPALLED AND DELAMINATED CONCRETE WITH POLYMER CONCRETE CEMENT MORTAR ON PPC BEAMS. FOR REPAIRS OVER LANES OF TRAFFIC AND SHOULDERS APPLY FIBER WRAP.
7. MODIFY EXISTING CRASHWALLS TO MEET CURRENT TOLLWAY STANDARDS.

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, ADOPTED MARCH 2017.

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS, (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION STRUCTURAL SERVICES MANUAL ADOPTED JUNE 30, 2017.

**LOADING HS20-44**

(FROM 1989 RECORD PLANS)

ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE

**DESIGN STRESSES**

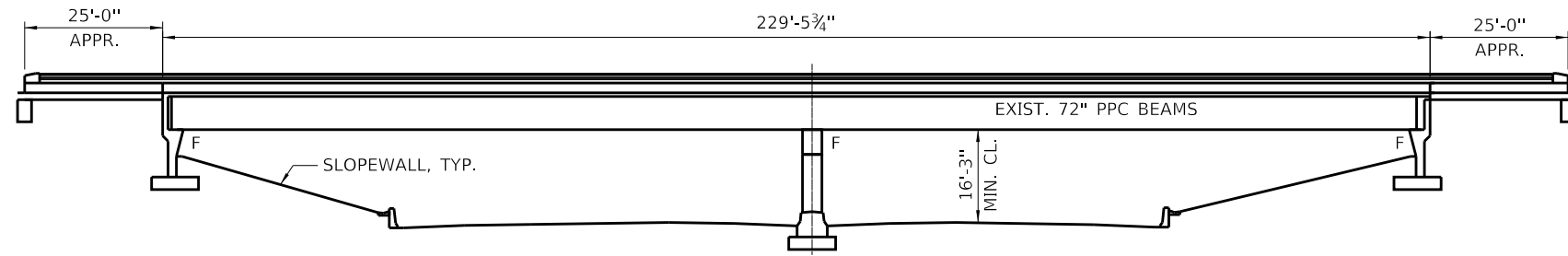
**FIELD UNITS**

- f'c = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)
- f'c = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)
- f'c = 4,000 PSI (CLASS AX BRIDGE DECK & APPROACH SLAB REPAIRS)
- fy = 60,000 PSI (REINFORCEMENT)

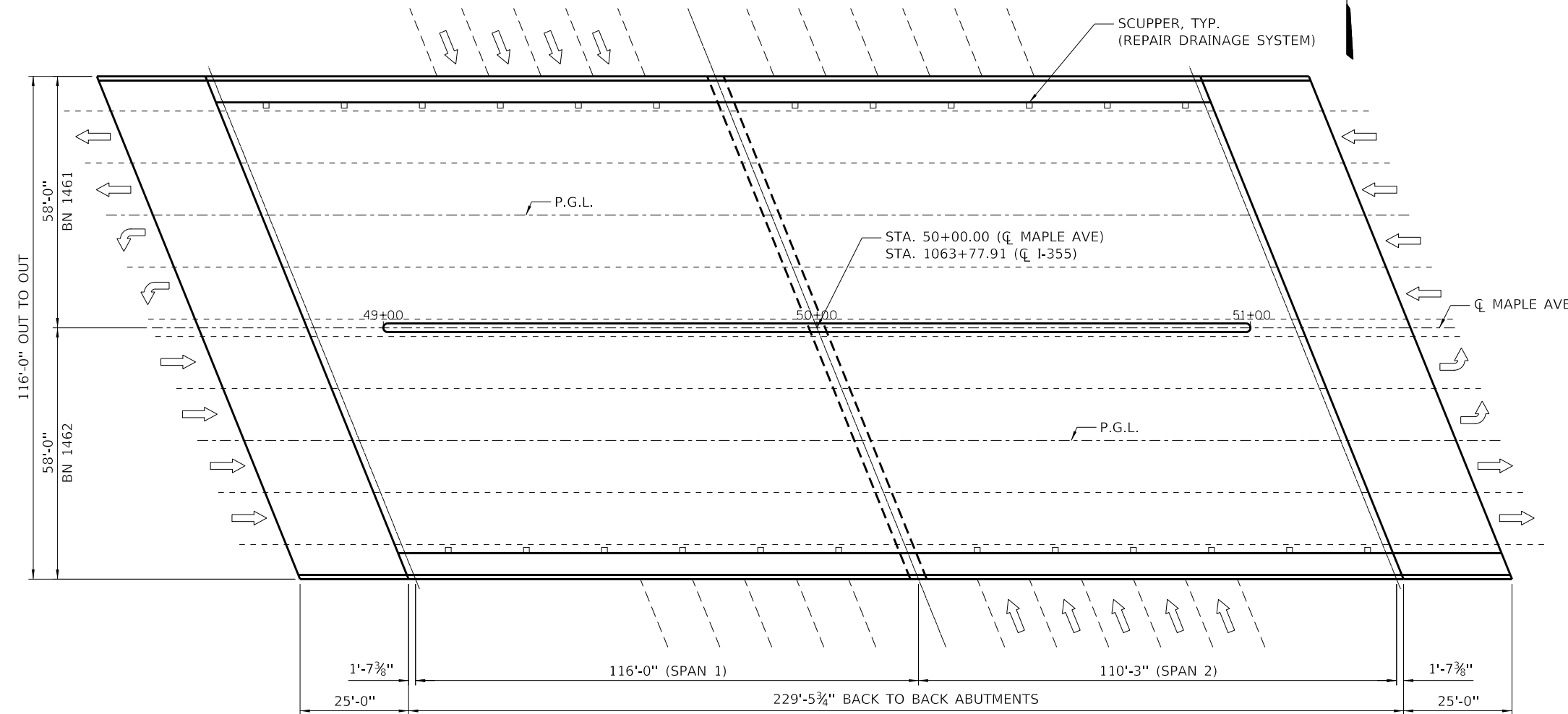
**HIGHWAY CLASSIFICATION**

MAPLE AVENUE (ON ROUTE)  
FUNCTIONAL CLASS: URBAN  
ADT: 23,200 (2016)  
ADTT: 232 (2016)

I-355 (UNDER)  
FUNCTIONAL CLASS: INTERSTATE  
ADT: 136,600 (2014)  
ADTT: 12,294 (2014)



**ELEVATION**



**PLAN**



**LOCATION SKETCH**  
Proposed Structure

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DRAWN BY JMM DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1461 AND 1462 (S.N. 022-9981)  
GENERAL PLAN AND ELEVATION

SBA-01 OF SBA-09  
SHT NO. SBA-01  
DRAWING NO. 974 OF 1517

**GENERAL NOTES**

**CONSTRUCTION**

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION TOLERANCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
2. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
3. NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
4. THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COSTS WILL BE AT THE CONTRACTOR'S EXPENSE.
5. NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINES BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E. 1-800-892-0123.
7. EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH THAT FOR, "CONCRETE REMOVAL".
8. WHENEVER THE MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF THE EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
9. CONCRETE SEALANT SHALL BE APPLIED TO THE REPAIRED AREAS OF THE VISIBLE FACES OF THE PIER COLUMNS, CRASHWALLS AND CAPS, PIERS. EXISTING SURFACES SHALL BE POWERED WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
10. AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS. AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.
11. ALL DIMENSIONS ARE TAKEN FROM THE FOLLOWING EXISTING PLANS:  
TOLLWAY CONTRACT NO. CIP-614 (1986) AND I-07-5476 (2008).
12. THE TOP OF THE DECK IS MAINTAINED BY DUPAGE COUNTY.

**GENERAL NOTES (CONT.)**

**CAST-IN-PLACE CONCRETE**

1. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF 1 FOOT BELOW FINISHED GROUND LEVEL.

**REINFORCING BARS**

1. REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM 706), GRADE 60, DEFORMED BARS.
2. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY-COATED.
3. REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION.
4. REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
5. COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

**ABBREVIATIONS**

- ABUT. - ABUTMENT
- APPROX. - APPROXIMATE
- BRG. - BEARING
- CL. - CLEAR
- DIM. - DIMENSION
- E. - EAST
- ELEV. - ELEVATION
- EXIST. - EXISTING
- MAX. - MAXIMUM
- MIN. - MINIMUM
- N. - NORTH
- N.B. - NORTHBOUND
- NO. - NUMBER
- P.G.L. - PROFILE GRADE LINE
- S. - SOUTH
- S.B. - SOUTHBOUND
- SDWK - SIDEWALK
- SHLDR. - SHOULDER
- STA. - STATION
- TYP. - TYPICAL
- W. - WEST

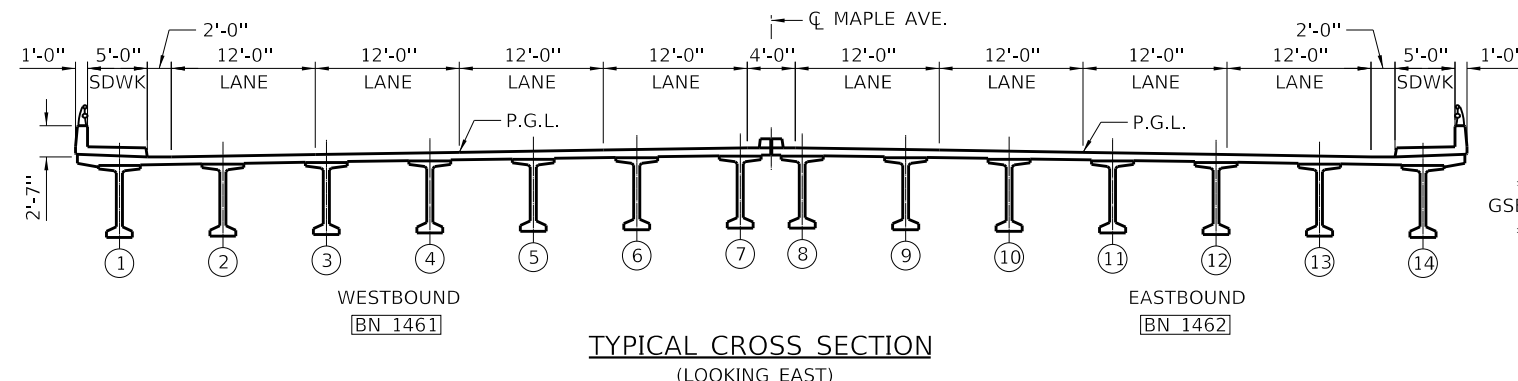
**LIST OF SHEETS**

SBA-01	GENERAL PLAN AND ELEVATION
SBA-02	GENERAL DATA, SOQ, CROSS SECTION, AND LIST OF SHEETS
SBA-03	ABUTMENT REPAIR DETAILS
SBA-04	WINGWALL REPAIR DETAILS
SBA-05	SLOPE WALL REPAIR DETAILS
SBA-06	PIER REPAIR DETAILS
SBA-07	BEAM REPAIR DETAILS I
SBA-08	BEAM REPAIR DETAILS II
SBA-09	CRASH WALL MODIFICATIONS

**TOTAL BILL OF MATERIALS  
(BN 1461 & BN 1462)**

CODE	ITEM	UNIT	SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL	RECORDED QUANTITIES
50102400	CONCRETE REMOVAL	CU YD	43.2	-	43.2	
50200100	STRUCTURE EXCAVATION	CU YD	44.4	-	44.4	
50300225	CONCRETE STRUCTURES	CU YD	41.2	-	41.2	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4,560	-	4,560	
* JI505040	REPAIR BRIDGE DRAINAGE SYSTEM	EACH	-	1	1	
* JI606050	CONCRETE GUTTER (SPECIAL)	FOOT	248	-	248	
* JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	74	-	74	
* JS121300	HIGH PRESSURE EPOXY INJECTION	FOOT	-	94	94	
* JT503040	STRUCTURAL REPAIR OF CONCRETE DEPTH EQUAL TO OR LESS THAN 5 IN.	SQ FT	41	17	58	
* JT503100	FIBER WRAP REPAIR	SQ FT	-	50	50	
* JT524010	APPLY CONCRETE SEALANT	SQ FT	5,788	-	5,788	
* JT599105	SLOPE WALL GAP FILTER REMOVAL AND REPLACEMENT	FOOT	248	-	248	
** X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	-	14	14	
GSBP X0323491	SLOPE WALL CRACK SEALING	FOOT	90	-	90	
** Z0065700	SLOPE WALL REPAIR	SQ YD	15	-	15	

- \* TOLLWAY SPECIAL PROVISION ITEM
- \*\* IDOT SPECIAL PROVISION ITEM
- GSBP IDOT GUIDE BRIDGE SPECIAL PROVISION



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CHECKED BY PRD DATE 03/11/2018

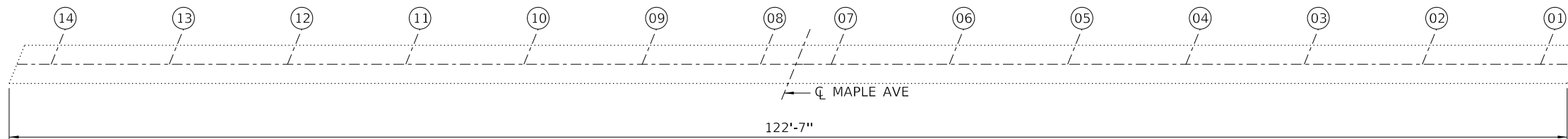


REVISIONS		
NO.	DATE	DESCRIPTION

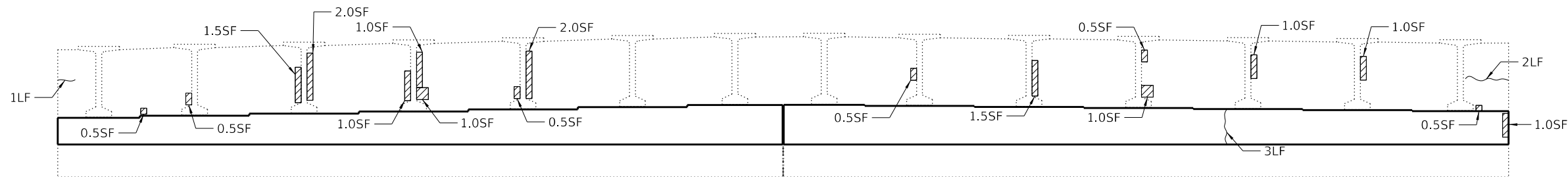
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BRIDGE NO. 1461 AND 1462 (S.N. 022-9981)  
GENERAL DATA

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DRAWING NO. 975 OF 1517

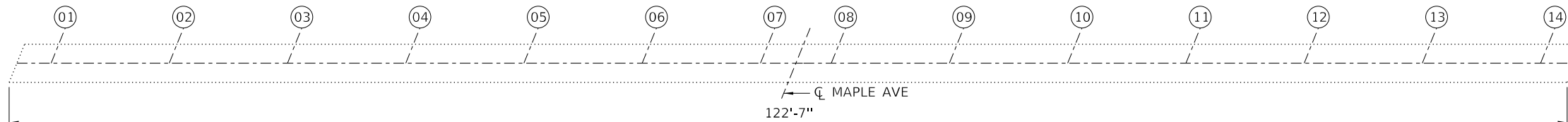
SBA-02 OF SBA-09



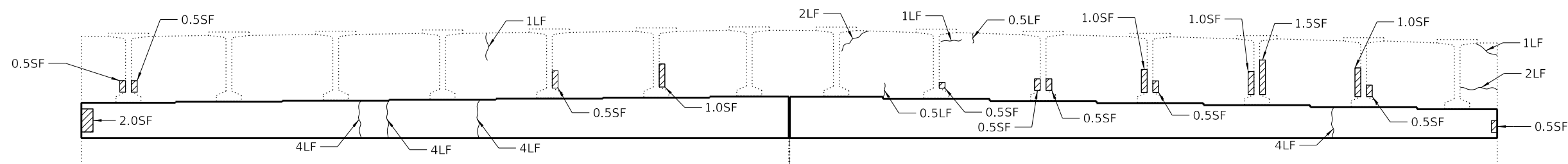
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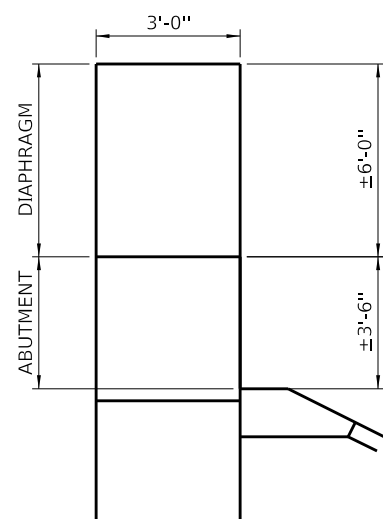
WEST ABUTMENT ELEVATION  
(LOOKING WEST)



EAST ABUTMENT PLAN



EAST ABUTMENT ELEVATION  
(LOOKING EAST)



TYPICAL CROSS SECTION

LEGEND

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

REPAIR NOTES

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF ABUTMENTS SHALL BE SEALED WITH CONCRETE SEALANT.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	28
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	36

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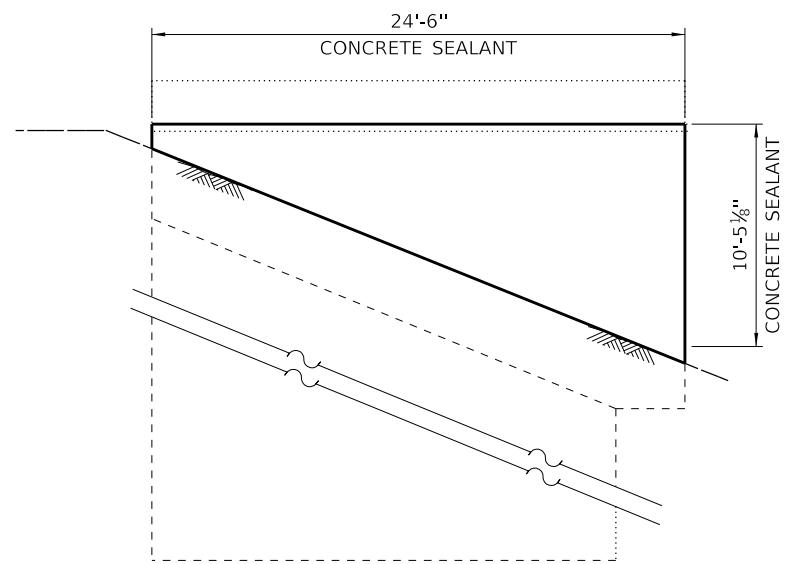
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BRIDGE NO. 1461 AND 1462 (S.N. 022-9981)  
ABUTMENT REPAIR DETAILS

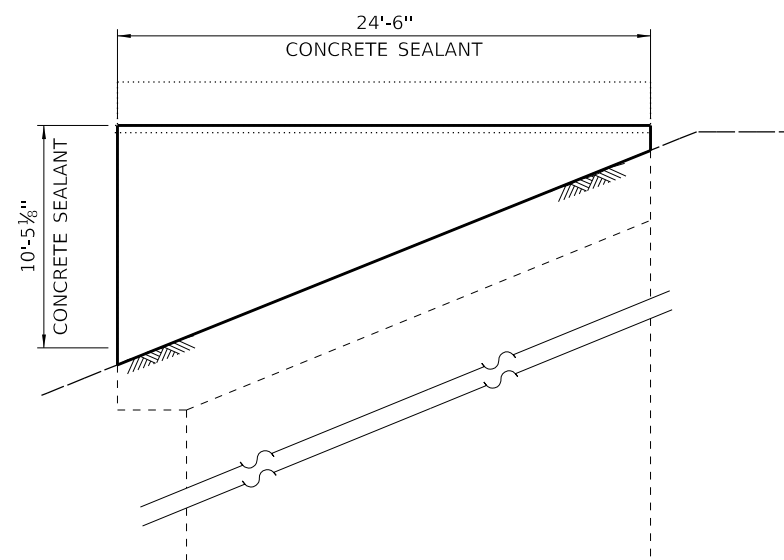
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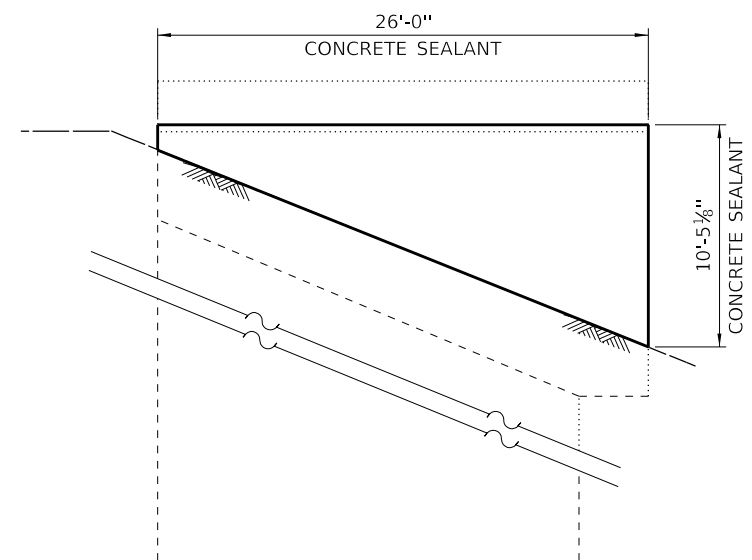
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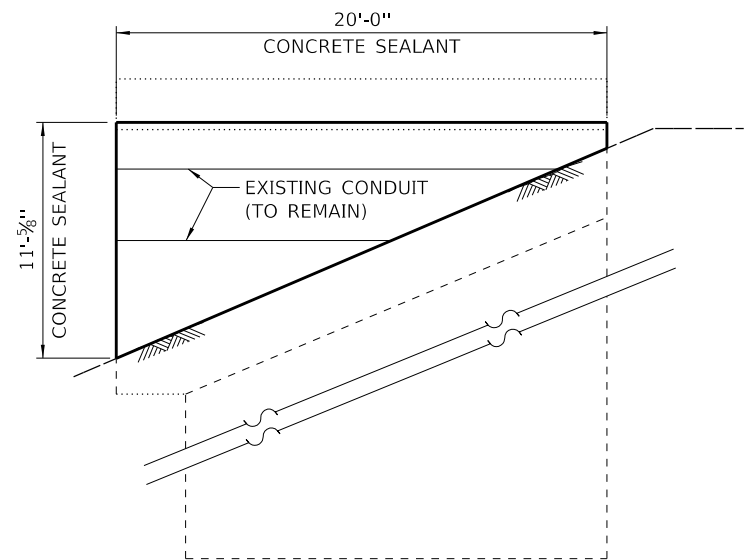
**SOUTHWEST ELEVATION**



**NORTHWEST ELEVATION**



**NORTHEAST ELEVATION**



**SOUTHEAST ELEVATION**

**REPAIR NOTES**

1. HAIRLINE CRACKS (<math>< \frac{1}{16}</math>") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF WINGWALL SHALL BE SEALED WITH CONCRETE SEALANT.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
APPLY CONCRETE SEALANT	SQ FT	595

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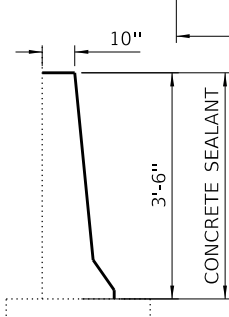
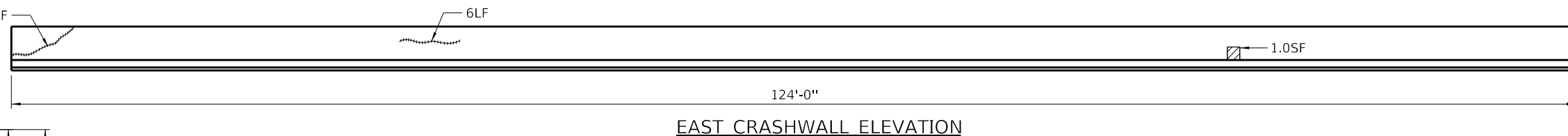
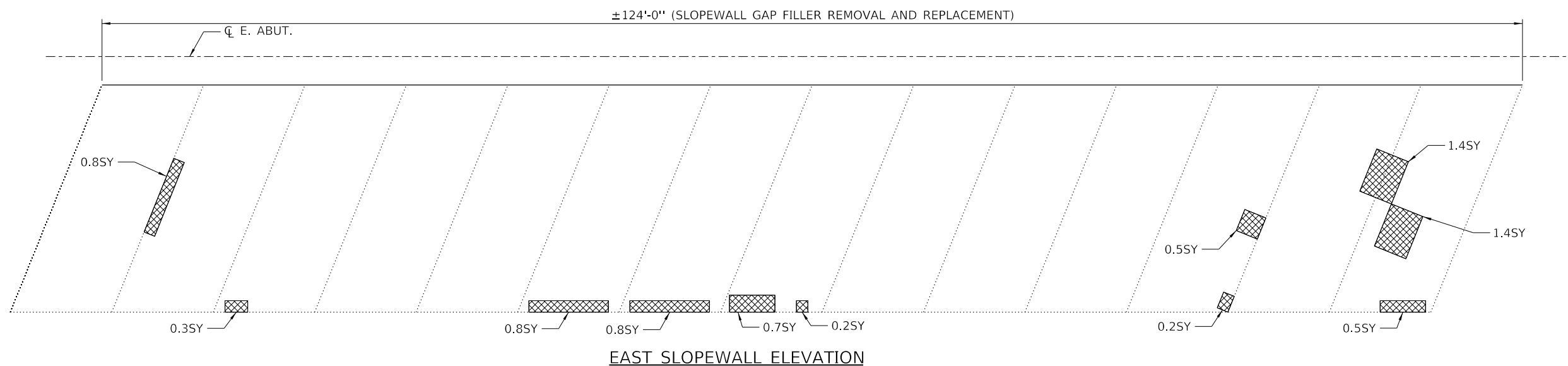
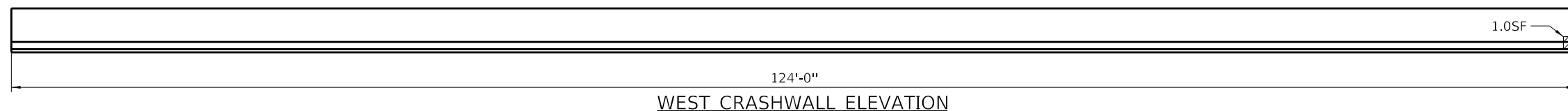
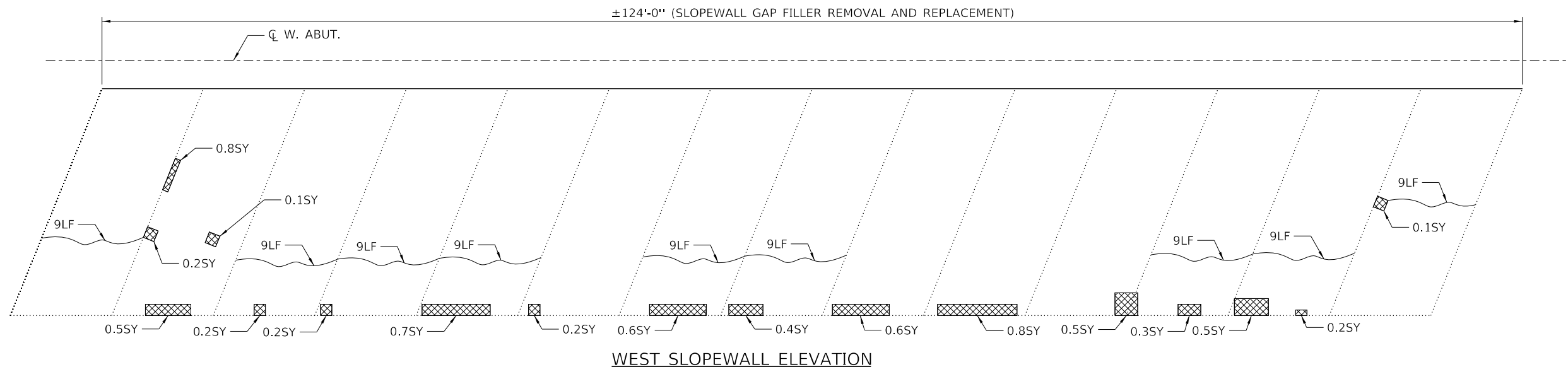


REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1461 AND 1462 (S.N. 022-9981)  
 WINGWALL REPAIR DETAILS

SHT NO. SBA-04  
 DRAWING NO. 977 OF 1517

SBA-04 OF SBA-09



**LEGEND**

- CONCRETE REPAIR (<5")
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED
- SLOPEWALL REPAIR
- SLOPEWALL CRACK SEALING

**REPAIR NOTES**

1. HAIRLINE CRACKS (<1/16") SHALL NOT BE EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. ALL EXPOSED FACES OF CRASHWALLS SHALL BE SEALED WITH CONCRETE SEALANT.
4. CRACKS (>1/2") IN SLOPEWALLS SHALL BE SEALED.

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	15
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	2
APPLY CONCRETE SEALANT	SQ FT	868
SLOPEWALL GAP FILLER REMOVAL AND REPLACEMENT	FOOT	248
SLOPEWALL CRACK SEALING	FOOT	90
SLOPEWALL REPAIR	SQ YD	15

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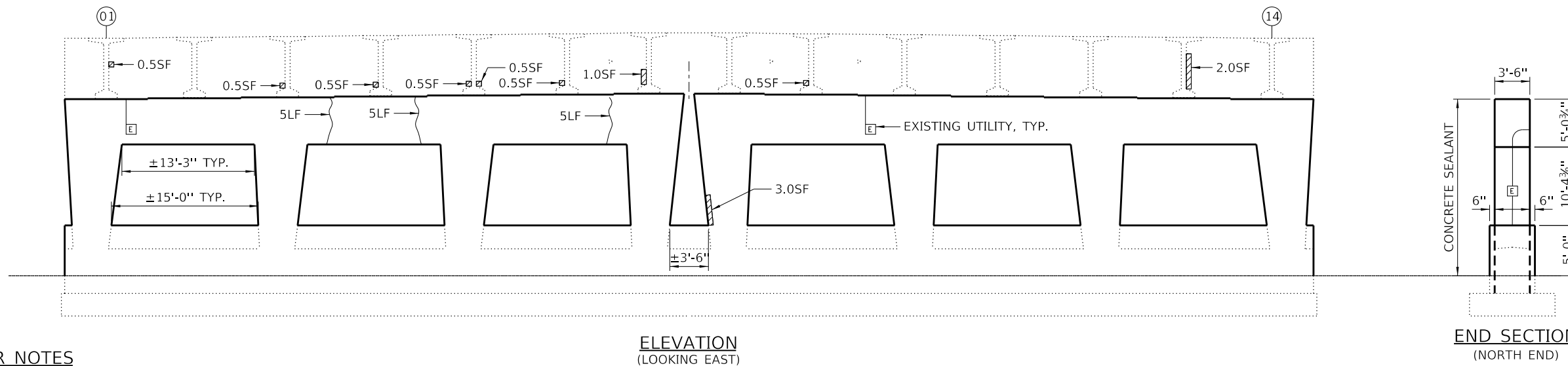
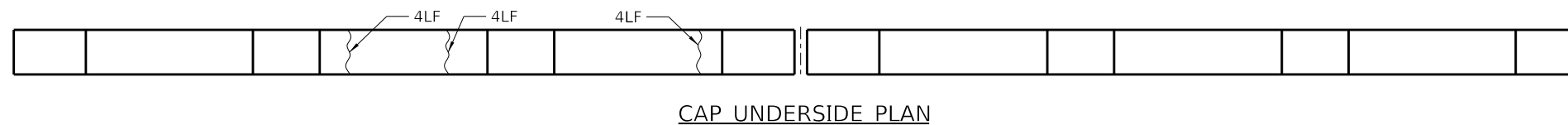
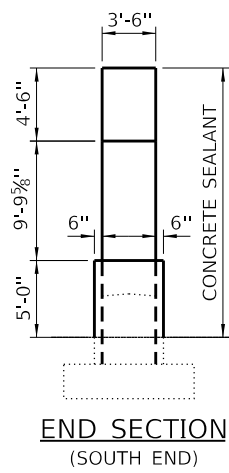
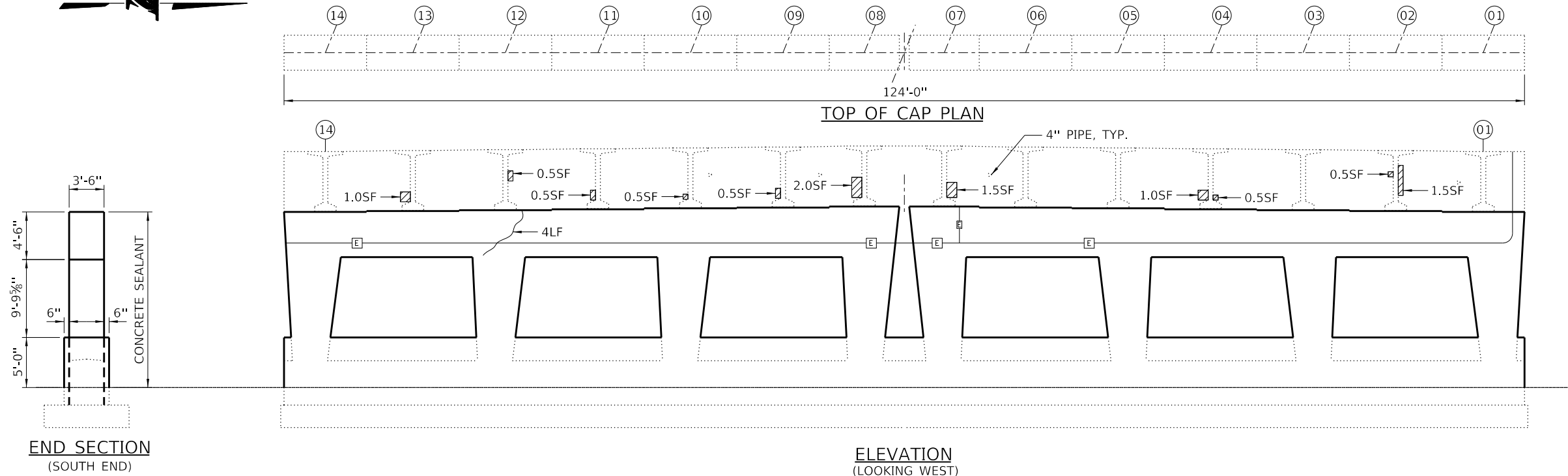
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REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1461 AND 1462 (S.N. 022-9981)  
 SLOPEWALL REPAIR DETAILS

SBA-05 OF SBA-09  
 SHT NO. SBA-05  
 DRAWING NO. 978 OF 1517



**REPAIR NOTES**

- HAIRLINE CRACKS (<math>< \frac{1}{16}"</math>) SHALL NOT BE EPOXY INJECTED.
- CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
- ALL EXPOSED FACES OF PIER SHALL BE SEALED WITH CONCRETE SEALANT.
- REPAIRS ON THE DIAPHRAGM ARE INCLUDED WITH SUPERSTRUCTURE.
- FOR CRASHWALL UPGRADES, SEE SHEET SBA-09 OF SBA-09.
- ALL STRUCTURAL REPAIR OF CONCRETE LOCATED WITHIN CRASHWALL MODIFICATION AREA SHALL BE CHIPPED AWAY PRIOR TO CRASHWALL MODIFICATION.

**ELEVATION (LOOKING EAST)**

**LEGEND**

- CONCRETE REPAIR (<math>< 5''</math>)
- CRACKS TO BE LOW PRESSURE EPOXY INJECTED

**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
LOW PRESSURE EPOXY INJECTION	FOOT	31
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	20
APPLY CONCRETE SEALANT	SQ FT	4,326

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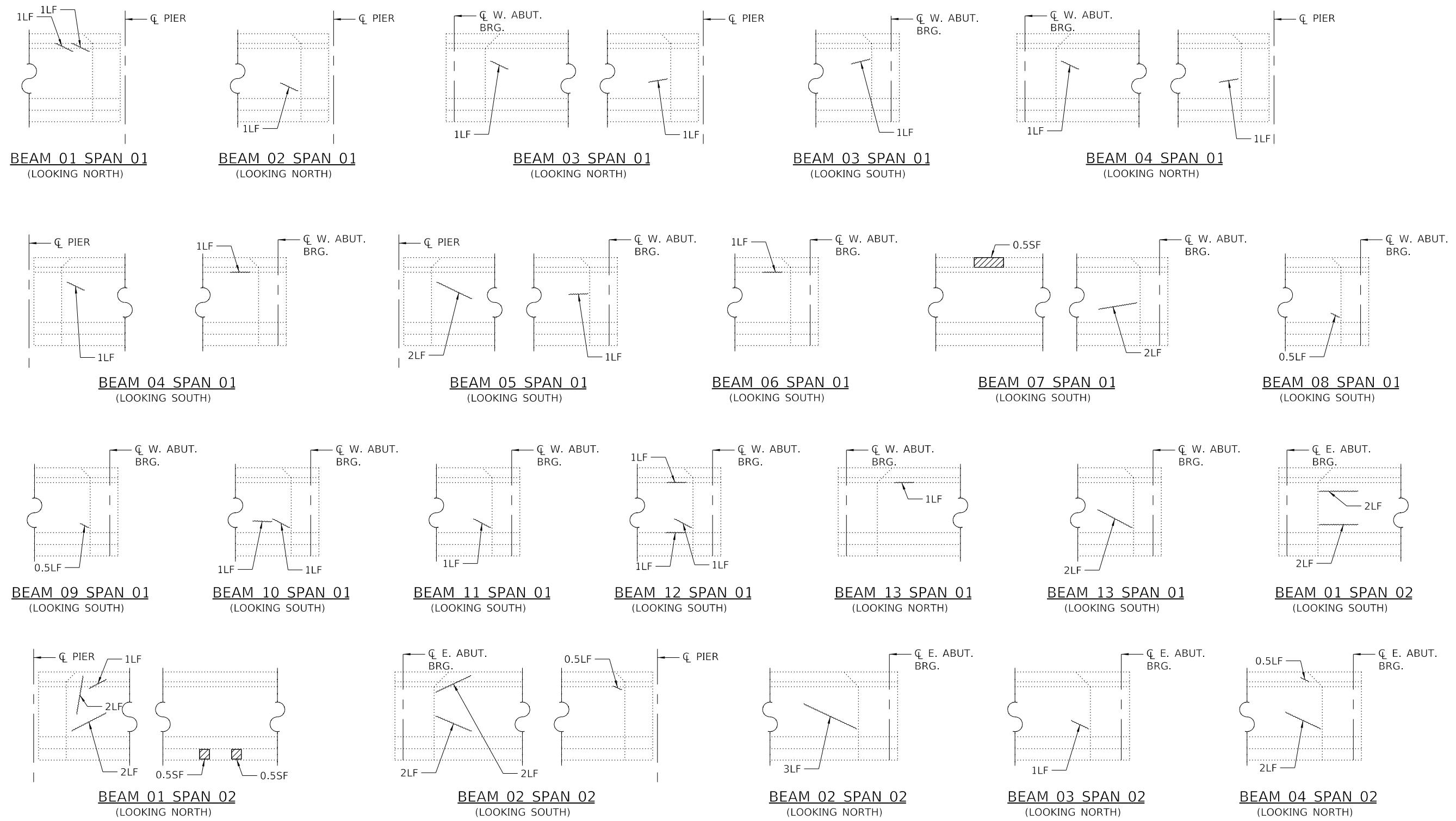
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BRIDGE NO. 1461 AND 1462 (S.N. 022-9981)  
PIER REPAIR DETAILS

SBA-06 OF SBA-09

SHT NO. SBA-06  
DRAWING NO. 979 OF 1517

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**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR AND FIBER WRAPPED

**NOTES:**

1. ONLY FIBER WRAP SPALLS OVER SHOULDERS AND TRAFFIC LANES.
2. FOR REPAIR DETAILS AND BILL OF MATERIALS, SEE SHEET SBA-08 OF SBA-09.

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REVISIONS	
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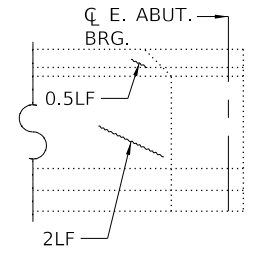
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 BEAM REPAIR DETAILS I

SHT NO. SBA-07  
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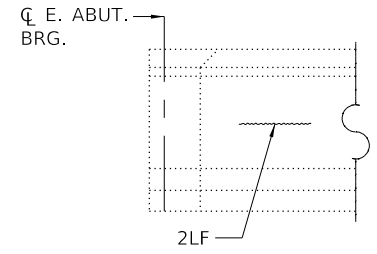
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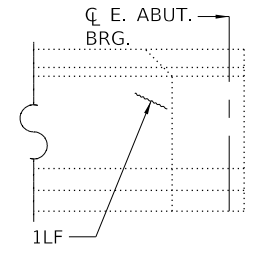
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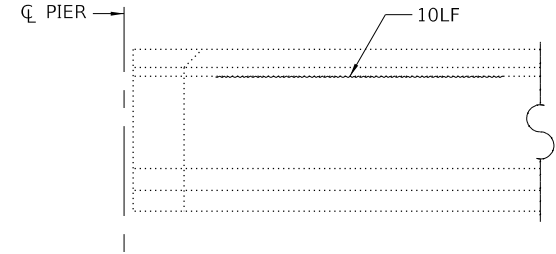
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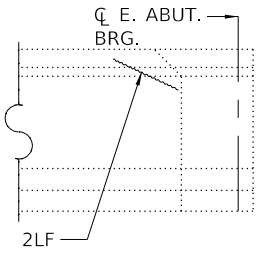
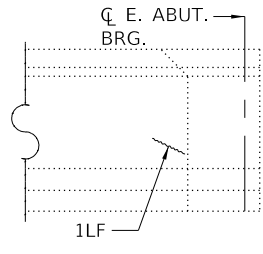
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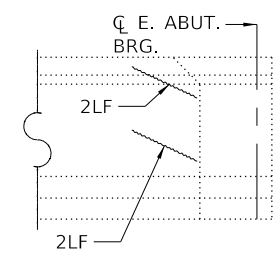
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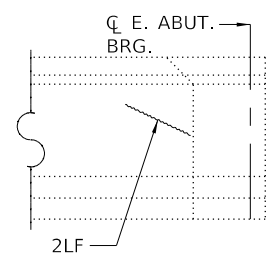
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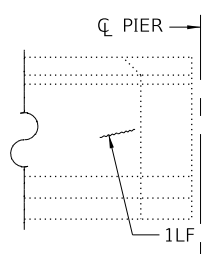
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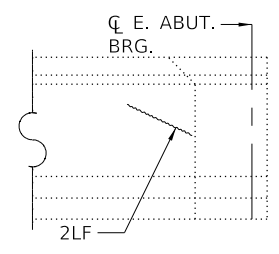
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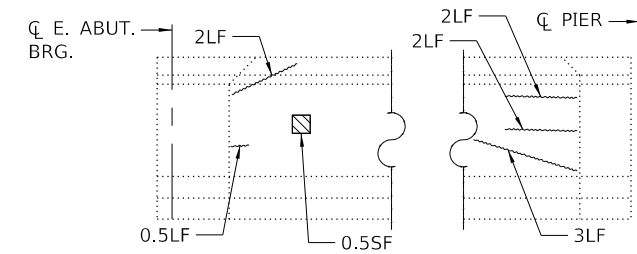
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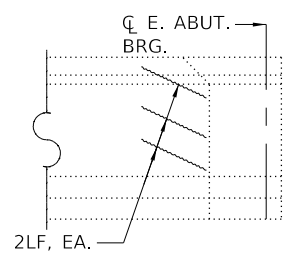
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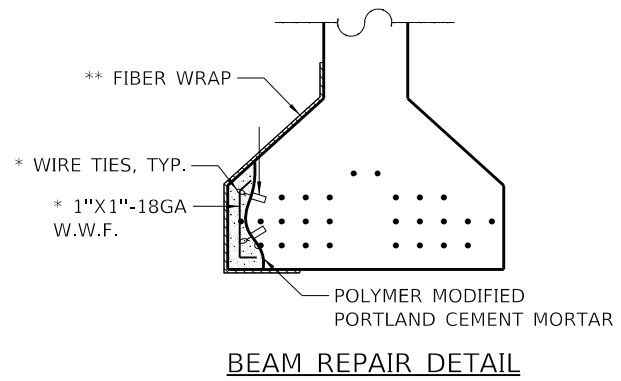
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**BEAM 14 SPAN 02**  
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**BEAM 14 SPAN 02**  
(LOOKING NORTH)



\* INCLUDED IN THE COST OF POLYMER MODIFIED PORTLAND CEMENT MORTAR

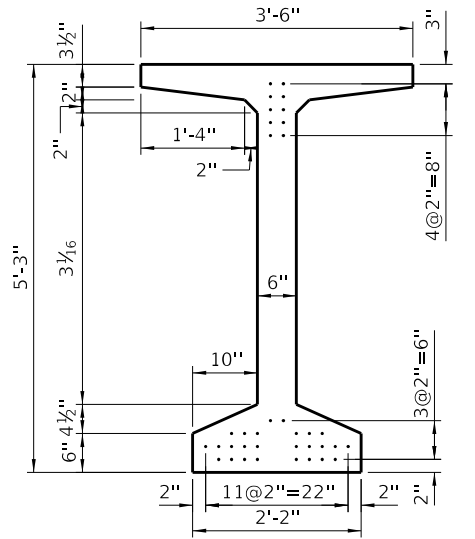
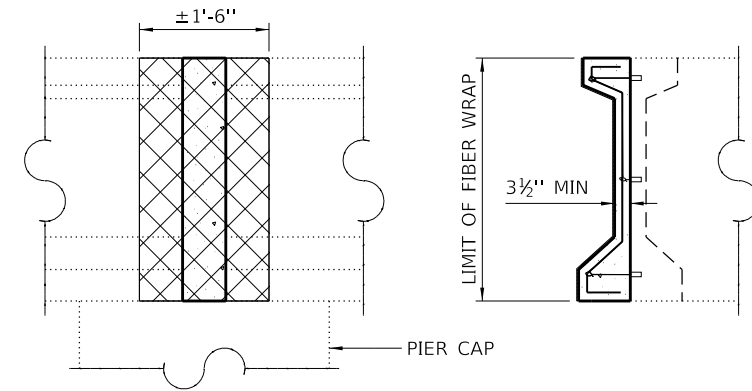
\*\* FIBER WRAP SHALL EXTEND AT LEAST 6" BEYOND ALL SIDES OF POLYMER MODIFIED PORTLAND CEMENT MORTAR REPAIR.

**LEGEND**

- CRACKS TO BE HIGH PRESSURE EPOXY INJECTED
- SPALL TO BE PATCHED WITH POLYMER MODIFIED PORTLAND CEMENT MORTAR ONLY (NO FIBER WRAP)

**REPAIR NOTES**

1. HAIRLINE CRACKS (<math>< 1/16''</math>) SHALL BE HIGH PRESSURED EPOXY INJECTED.
2. CONTRACTOR SHALL VERIFY ALL REPAIR ITEMS SHOWN ON PLANS.
3. FOR DIAPHRAGM OVER PIER, REMOVE CONCRETE AS SHOWN IN DIAPHRAGM OVER PIER REPAIR DETAIL. REPAIR DIAPHRAGM SAME AS SHOWN IN BEAM REPAIR DETAIL.



**BILL OF MATERIALS**

ITEM	UNIT	QUANTITY
HIGH PRESSURE EPOXY INJECTION	FOOT	94
FIBER WRAP REPAIR	SQ FT	50
POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	14

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**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

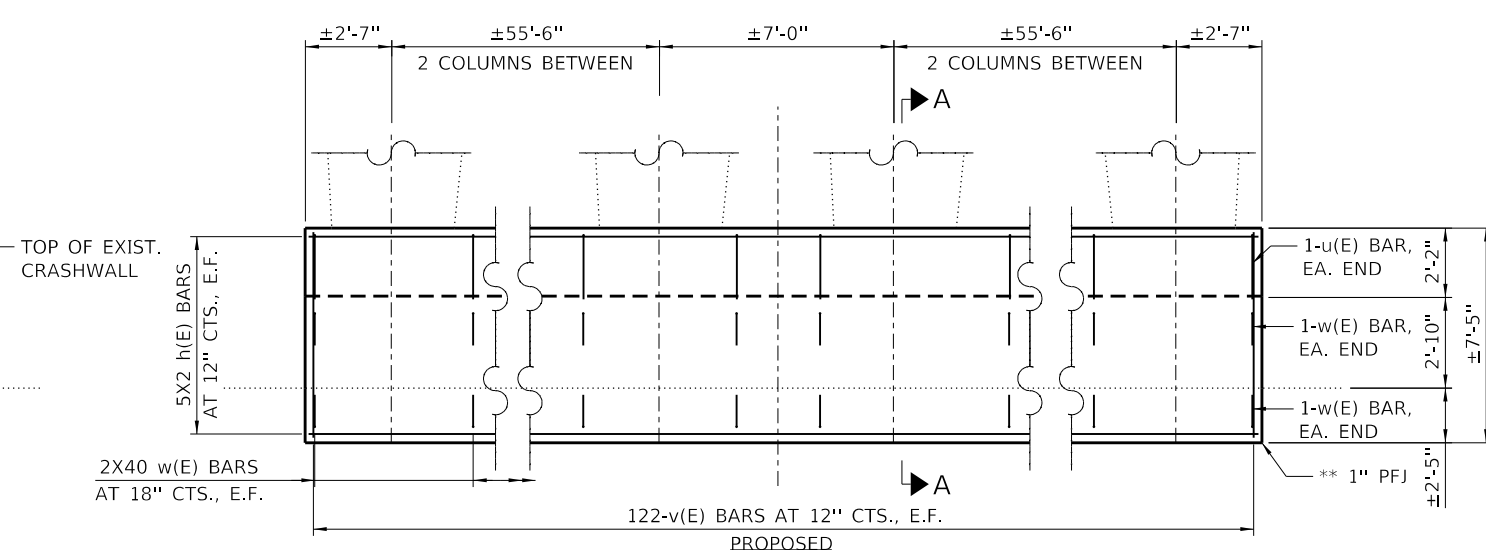
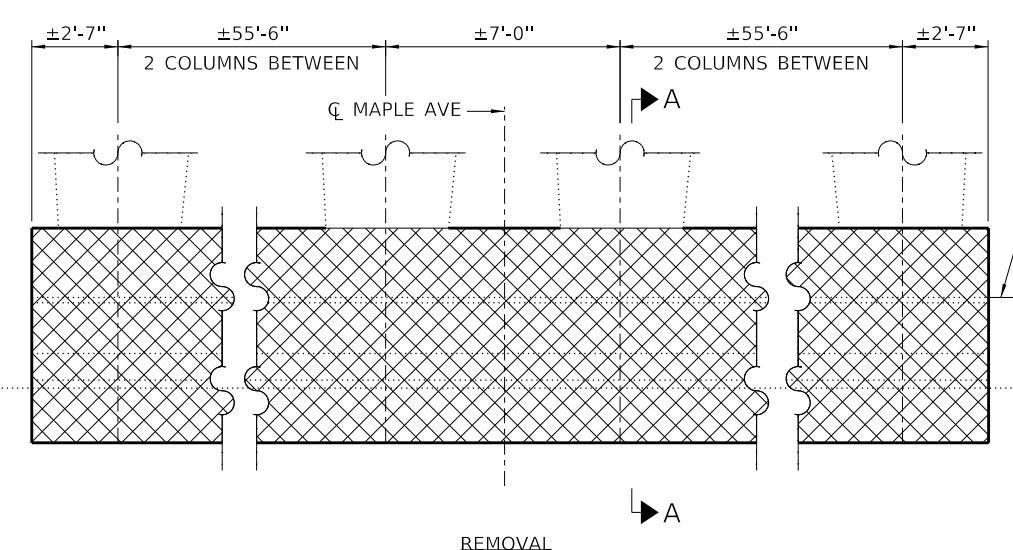
REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 BRIDGE NO. 1461 AND 1462 (S.N. 022-9981)  
 BEAM REPAIR DETAILS II

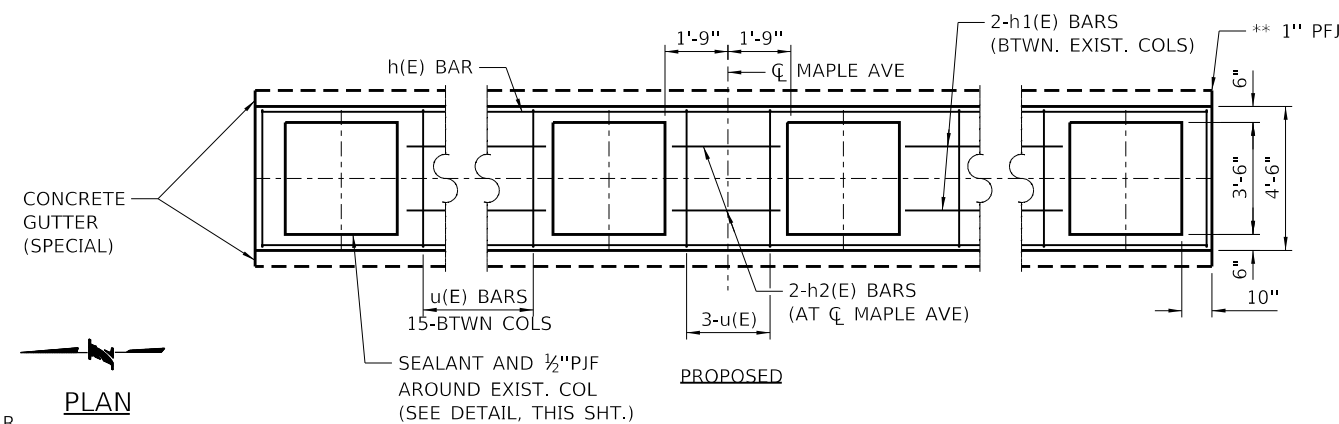
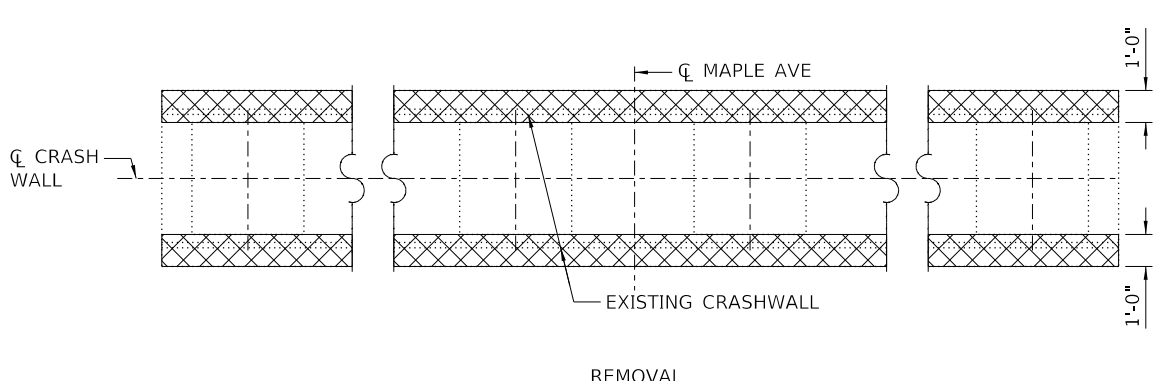
SHT NO. SBA-08  
 DRAWING NO. 981 OF 1517

SBA-08 OF SBA-09

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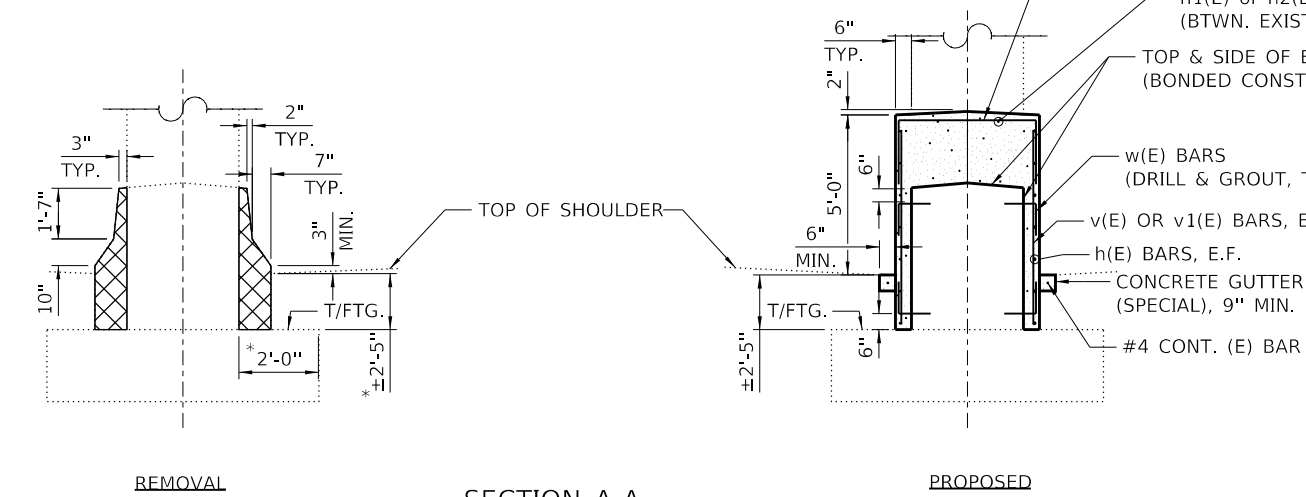


**ELEVATION**



**PLAN**

**MIN. BAR LAP**  
#5 BAR = 3'-6"



**SECTION A-A**

\* LIMIT OF STRUCTURE EXCAVATION

**LEGEND**



**NOTES:**

1. REMOVE EXISTING CONCRETE CRASHWALL BACK TO FACE OF COLUMNS PRIOR TO PLACING CONCRETE AROUND EXISTING CRASHWALL AND COLUMNS. SURFACES TO RECEIVE NEW CONCRETE SHALL BE BLAST CLEANED. COST OF CLEANING SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL.
2. CONCRETE MEDIAN BARRIER TRANSITION TAPER LENGTHS, PAY LIMITS AND MEASUREMENT, AND BASIS OF PAYMENT ALL IN ACCORDANCE WITH THE ILLINOIS TOLLWAY STANDARD DRAWING C13, C14 AND THE SPECIAL PROVISIONS.
3. THE CLEAR COVER FOR REINFORCEMENT BARS TO THE SURFACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN.
4. REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
5. EXPOSED CONCRETE EDGES SHALL HAVE 3#4"x45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.
6. CONCRETE SEALANT SHALL BE APPLIED TO THE EXPOSED SURFACES OF ALL NEW AND/OR MODIFIED PIER CRASH WALLS. BILL OF MATERIAL FOR "APPLY CONCRETE SEALANT" ON PIER REPAIR SHEET, SBA-06 OF SBA-09.
7. E.F. DENOTES EACH FACE
8. BARS NOTED THUS, 3X2-#5 INDICATED 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

**BILL OF MATERIALS**

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	40	#5	33'-6"	—
h1(E)	12	#5	14'-8"	—
h2(E)	4	#5	1'-6"	—
u(E)	95	#5	8'-2"	┌
v(E)	244	#5	6'-7"	—
w(E)	320	#4	2'-3"	┌
CONCRETE REMOVAL			CU YD	43.2
STRUCTURE EXCAVATION			CU YD	44.4
CONCRETE STRUCTURES			CU YD	41.2
REINFORCEMENT BARS, EPOXY COATED			POUND	4,560
CONCRETE GUTTER (SPECIAL)			FOOT	248

DRAWN BY JMM DATE 03/11/2018  
CHECKED BY PRD DATE 03/11/2018



REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
BRIDGE NO. 1461 AND 1462 (S.N. 022-9981)  
CRASH WALL MODIFICATIONS

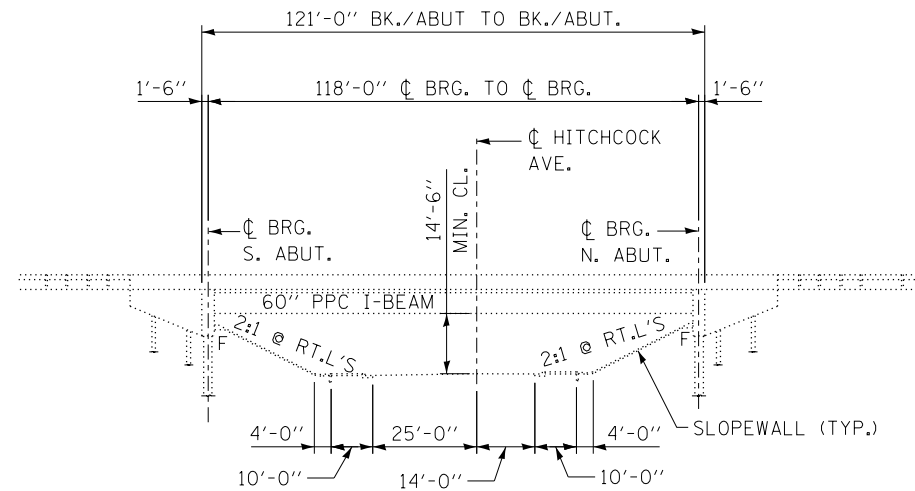
SHT NO. SBA-09  
DRAWING NO. 982 OF 1517

SBA-09 OF SBA-09

BENCH MARK:  
 MONUMENT NO.5 - BRASS PLUG ENCASED IN CONCRETE  
 PEDESTAL. EXIST. STA. 1058+97 (N-S TOLL.) 949' RT.  
 - EL. 760.016

EXISTING STRUCTURE:  
 BRIDGE NUMBERS 1459 & 1460 WERE ORIGINALLY  
 CONSTRUCTED IN 1989 UNDER THE ISTHA CONTRACT  
 CIP-614. BRIDGE NUMBER 1459 CARRIES FIVE LANES OF  
 SOUTHBOUND (SB) TRAFFIC AND BRIDGE NUMBER 1460  
 CARRIES FOUR LANES OF NORTHBOUND (NB) TRAFFIC ON  
 I-355 OVER HITCHCOCK AVENUE. EACH BRIDGE HAS  
 SINGLE SPAN PRECAST, PRESTRESSED CONCRETE (P.P.C.)  
 BEAMS AND A REINFORCED CONCRETE DECK  
 SUPERSTRUCTURE SUPPORTED BY INTEGRAL ABUTMENTS.  
 THE LENGTH IS 121'-0" MEASURED BACK-TO-BACK OF  
 ABUTMENTS AND HAS A VARYING OUT-TO-OUT WIDTH. THE  
 ABUTMENT FOOTINGS ARE SUPPORTED BY  
 CONCRETE-FILLED METAL SHELL PILES AND H-PILES IN  
 THE WIDENED PORTION.

TRAFFIC TO BE MAINTAINED UTILIZING STAGE  
 CONSTRUCTION.



**ELEVATION**  
 (LOOKING WEST)

**HIGHWAY CLASSIFICATION**

**I-355**  
 FUNCTIONAL CLASS: INTERSTATE  
 ADT: 152,000 (2015), 152,841 (2032)  
 ADTT: 15,200 (2015), 15,284 (2032)  
 DHV: 8,990/8,655 NB/SB (2015),  
 9,040/8,703 NB/SB (2032)  
 DESIGN SPEED: 65 MPH  
 POSTED SPEED: 60 MPH  
 DIRECTIONAL DISTRIBUTION: 51:49

**HITCHCOCK AVENUE**

FUNCTIONAL CLASS: MAJOR COLLECTOR  
 ADT: 2,300 (2016), 2,395 (2032)  
 ADTT: 184 (2016), 192 (2032)  
 DHV: 348 (2015), 362 (2032)  
 DESIGN SPEED: 35 MPH  
 POSTED SPEED: 30 MPH  
 DIRECTIONAL DISTRIBUTION: 50:50

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY  
 BRIDGES, 17TH EDITION WITH ALL INTERIMS.  
 ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL, MARCH 2017.  
 ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL,  
 JANUARY 2012.

ILLINOIS DEPARTMENT OF TRANSPORTATION ALL BRIDGE DESIGN  
 MEMORANDA.

**CONSTRUCTION SPECIFICATIONS**

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE  
 ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD  
 SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED  
 MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE  
 SPECIAL PROVISIONS (GBSP's).

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL  
 SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED  
 JANUARY 1, 2018.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD  
 SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED  
 APRIL 1, 2016.

**DESIGN STRESSES**

**NEW CONSTRUCTION**

f'c = 3,500 PSI (CLASS SI SUBSTRUCTURE REPAIRS)  
 f'c = 4,000 PSI (CLASS BS PARAPETS AND BARRIER REPAIRS)  
 f'c = 4,000 PSI (CLASS AX BRIDGE DECK, APPROACH AND  
 TRANSITION SLAB REPAIRS)  
 fy = 60,000 PSI (REINFORCEMENT)

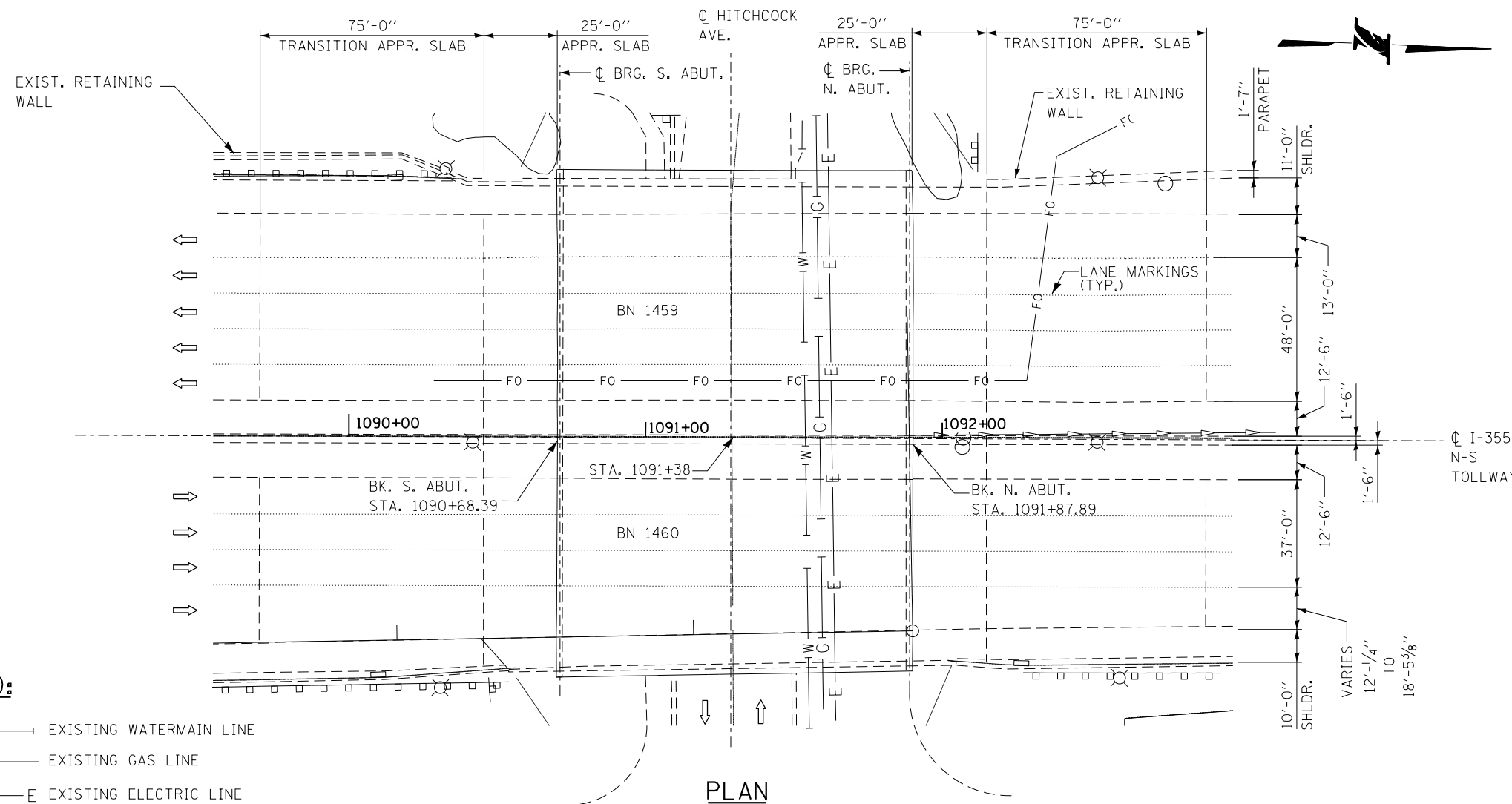
**DESIGN LOADS**

**EXISTING STRUCTURE**

LIVE LOAD:  
 HS20-44 AND ALTERNATE MILITARY LOADING  
 DEAD LOAD:  
 25 PSF FOR FUTURE WEARING SURFACE

**PROPOSED SCOPE OF WORK**

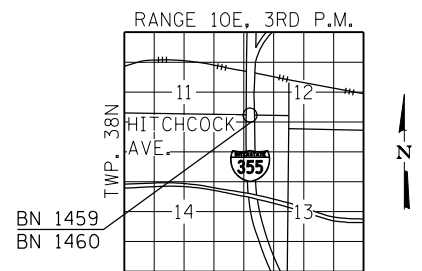
1. SCARIFY 1" EXISTING BRIDGE DECKS AND APPROACH SLABS, AND 3/4" ON TRANSITION SLABS.
2. RESURFACE BOTH BRIDGE DECKS AND APPROACH SLABS USING 2 1/4" BRIDGE DECK LATEX CONCRETE OVERLAY AND BRIDGE DECK GROOVING. SEE ROADWAY PLANS FOR TRANSITION SLAB RESURFACING.
3. SEAL CRACKS WITH EPOXY INJECTION, REPAIR SPALLS AND APPLY CONCRETE SEALANT TO PARAPETS AND MEDIAN BARRIER.
4. RECONSTRUCT APPROACH AND TRANSITION SLAB EXPANSION JOINTS.
5. REPAIR SPALLS AND SEAL ALL CRACKS WITH EPOXY ON PPC I-GIRDERS.
6. SEAL CRACKS WITH EPOXY AND REPAIR DELAMINATED AND SPALLED CONCRETE IN SUBSTRUCTURE.
7. REMOVE AND REPLACE PREFORMED JOINT FILLER BETWEEN WINGWALLS AND BRIDGE 1459 ABUTMENTS.



**PLAN**

**LEGEND:**

- |W|— EXISTING WATERMAIN LINE
- |G|— EXISTING GAS LINE
- |E|— EXISTING ELECTRIC LINE
- |FO|— EXISTING FIBER OPTIC LINE
- |SS|— EXISTING STORM SEWER LINE
- ⊗ EXISTING LIGHT POLE
- DRAINAGE CATCH BASIN



**LOCATION SKETCH**

DRAWN BY MMZ/PAB DATE 3/11/2018  
 CHECKED BY MMH DATE 3/11/2018



100 S. Wacker Drive, Suite 700 • Chicago, IL 60606 • P 312/606-0910 • F 312/606-0415



2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 GENERAL PLAN & ELEVATION

SC-01 OF SC-18

SHT NO. SC-01  
 DRAWING NO.  
 983 OF 1517

**INDEX OF SHEETS**

SC-01	GENERAL PLAN AND ELEVATION
SC-02	GENERAL NOTES, TOTAL BILL OF MATERIAL, INDEX OF SHEETS
SC-03	CONSTRUCTION STAGING
SC-04	SLOPEWALL REPAIRS
SC-05	DIAPHRAGM REPAIRS
SC-06	ABUTMENT REPAIRS
SC-07	WINGWALL REPAIRS
SC-08	FRAMING PLAN
SC-09	PPC BEAM REPAIRS
SC-10	DECK REPAIR PLAN
SC-11	DECK CROSS SECTION
SC-12	PARAPET REPAIRS 1
SC-13	PARAPET REPAIRS 2
SC-14	APPROACH SLAB REPAIRS
SC-15	EXPANSION JOINT REPAIR DETAILS 1
SC-16	EXPANSION JOINT REPAIR DETAILS 2
SC-17	EXPANSION JOINT REPAIR DETAILS 3
SC-18	BAR SPLACER DETAILS

**LIST OF ABBREVIATIONS**

N.B.	NORTHBOUND
S.B.	SOUTHBOUND
STA.	STATION
ELEV.	ELEVATION
C.I.P	CAST-IN-PLACE
CL	CENTERLINE
BRG	BEARING
S. ABUT.	SOUTH ABUTMENT
N. ABUT.	NORTH ABUTMENT
TYP.	TYPICAL
MAX.	MAXIMUM
MIN.	MINIMUM
BOT.	BOTTOM
EXIST.	EXISTING
EXP.	EXPANSION
SHLDR	SHOULDER
B	BASELINE
P.G.L.	PROFILE GRADE LINE
E.F.	EACH FACE
F.F.	FRONT FACE
B.F.	BACK FACE
I.F.	INSIDE FACE
O.F.	OUTSIDE FACE
P.J.F.	PREFORMED JOINT FILLER
P.J.S.	PREFORMED JOINT SEALER
BK/	BACK OF
B/	BOTTOM OF
T/	TOP OF
PROP.	PROPOSED
HP	H-PILE
WF	W-FLANGE
CL.	CLEARANCE
SQ. FT.	SQUARE FOOT
SQ. YD.	SQUARE YARD
L.F.	LINEAR FOOT
CU. FT.	CUBIC FEET
EA	EACH
BIT.	BITUMINOUS
PAV.	PAVEMENT

**GENERAL NOTES**

**CAST-IN-PLACE CONCRETE:**

- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

**REINFORCING BARS:**

- REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.
- REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
- REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315, LATEST EDITION.
- REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT-TO-OUT.
- COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

**CONSTRUCTION:**

- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.
- THE CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.
- NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
- THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.
- NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 811.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS" AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CABLE.

**TOTAL BILL OF MATERIAL**

S.P.	PAY ITEM NO.	DESCRIPTION	UNIT	BRIDGE 1459		BRIDGE 1460		TOTAL PLAN QUANTITY	RECORDED QUANTITY
				SUPER	SUB	SUPER	SUB		
	50157300	PROTECTIVE SHIELD	SQ. YD.	69	-	-	-	69	
	50300260	BRIDGE DECK GROOVING	SQ. YD.	1,560	-	1,329	-	2,889	
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	708	-	698	-	1,406	
	50800515	BAR SPLICERS	EACH	16	-	16	-	32	
**	JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	72	37	-	26	135	
**	JS121300	HIGH PRESSURE EPOXY INJECTION	FOOT	10	-	3	-	13	
*	JT503013	ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ. YD.	50	-	48	-	98	
*	JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ. FT.	1	8	3	2	14	
*	JT503050	SHALLOW CONCRETE REPAIR	EACH	-	4	-	2	6	
*	JT524015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	1,363	-	1,156	-	2,519	
*	JT525230	BONDED PREFORMED JOINT SEAL REPLACEMENT, 3 IN.	FOOT	96	-	106	-	202	
*	JT525235	BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	122	-	106	-	228	
*	X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ. FT.	1	-	-	-	1	
*	X0323491	SLOPE WALL CRACK SEALING	FOOT	-	8	-	11	19	
*	Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ. YD.	1,597	-	1,368	-	2,965	
*	Z0012132	BRIDGE DECK SCARIFICATION 1"	SQ. YD.	1,597	-	1,368	-	2,965	
*	Z0012800	CONCRETE PAVEMENT SCARIFICATION	SQ. YD.	1,018	-	875	-	1,893	
*	Z0043900	PREFORMED JOINT FILLER	FOOT	-	12	6	-	18	
*	Z0065700	SLOPE WALL REPAIR	SQ. YD.	-	2	-	-	2	

- \* INDICATES SPECIAL PROVISION
- \*\* INDICATES ISTHA SUPPLEMENTAL SPECIAL PROVISION

**CONSTRUCTION (CONT.):**

- EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE CLEANED, STRAIGHTENED (WITHOUT HEATING), AND CUT AND/OR BENT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH "STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)" OR "ACCELERATED APPROACH SLAB REPAIR (PARTIAL)".
- THE PROTECTIVE SHIELD SYSTEM SHALL EXTENDED A MINIMUM OF 10' BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5' BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIR AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER.
- CONCRETE SEALANT SHALL BE APPLIED TO THE TOP AND TRAFFIC FACE OF ALL REPAIRED AREAS OF THE BRIDGE DECK BARRIERS AND PARAPET, INCLUDING PARAPETS ON BRIDGE WINGWALLS. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THAT DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.
- A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURAL ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.
- AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP), WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTIONS STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

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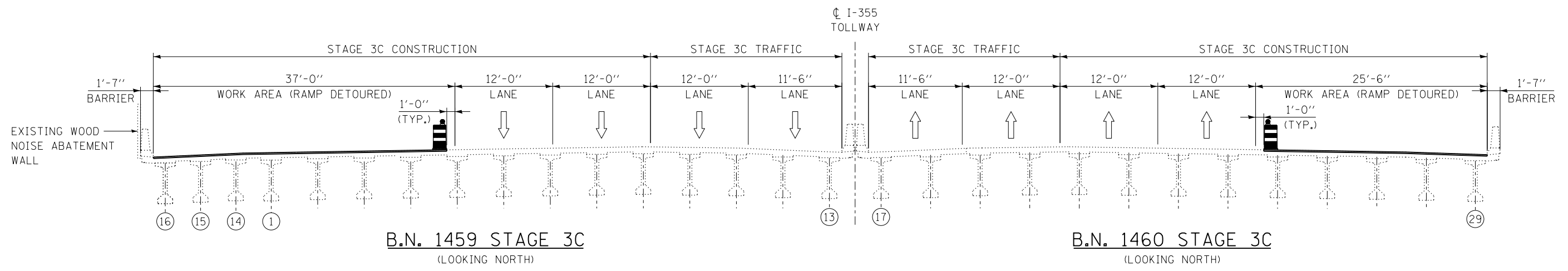
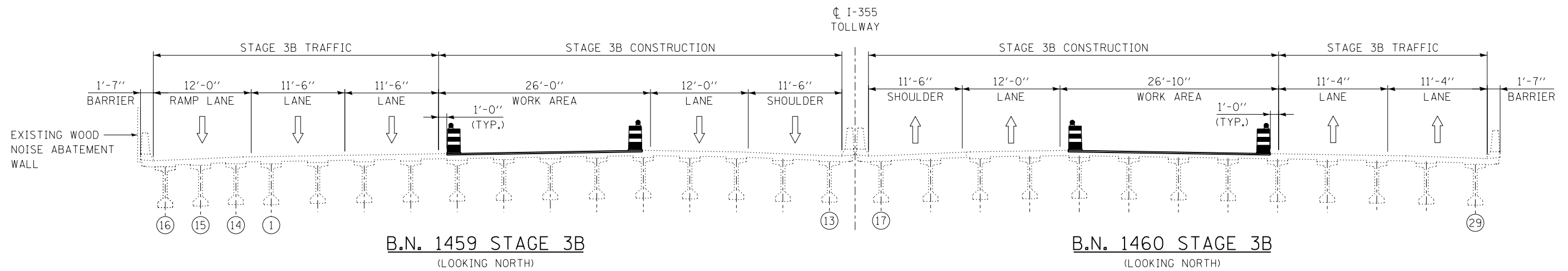
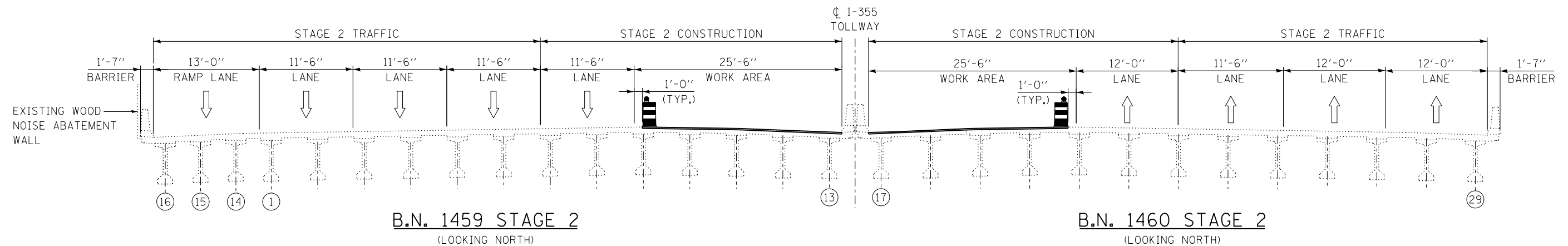
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CHECKED BY	MMH	DATE	3/11/2018



REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255	B.N. 1459 & 1460 (S.N. 022-9980)
GEN. NOTES, INDEX OF SHEETS, T.B.O.M.	

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NOTE:  
SEE MOT-07 THRU MOT-09 FOR MORE DETAILS

DRAWN BY MMZ/PAB DATE 3/11/2018  
CHECKED BY MMH DATE 3/11/2018

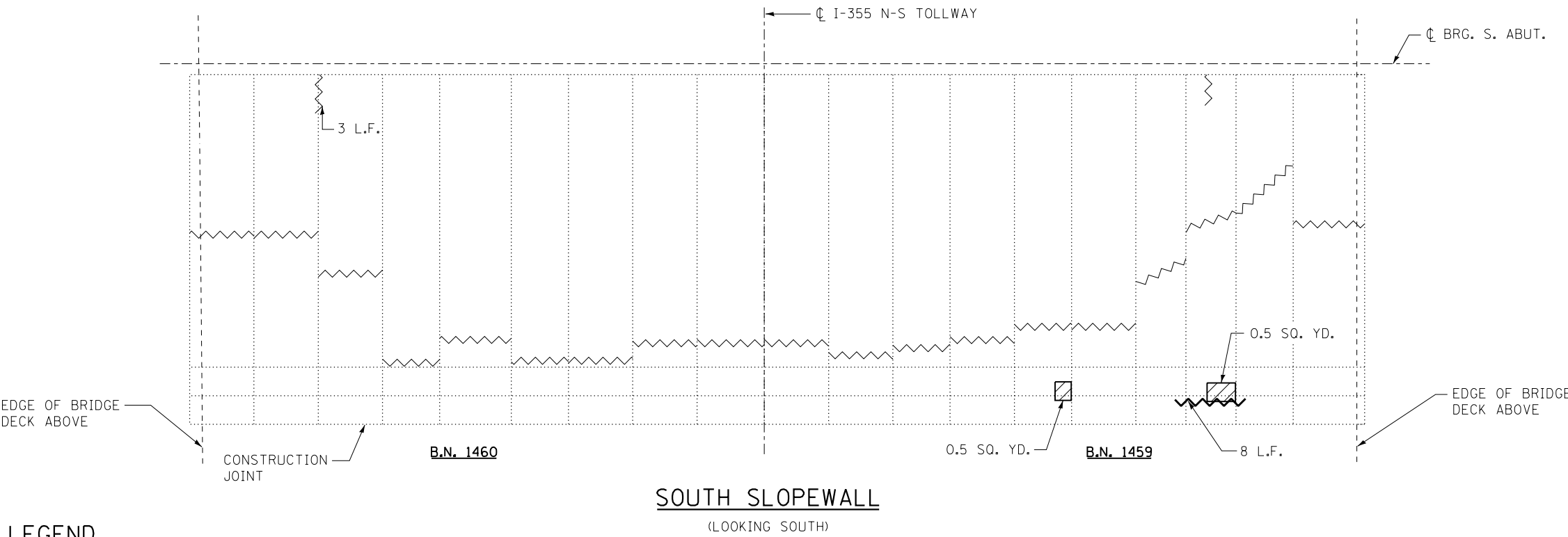
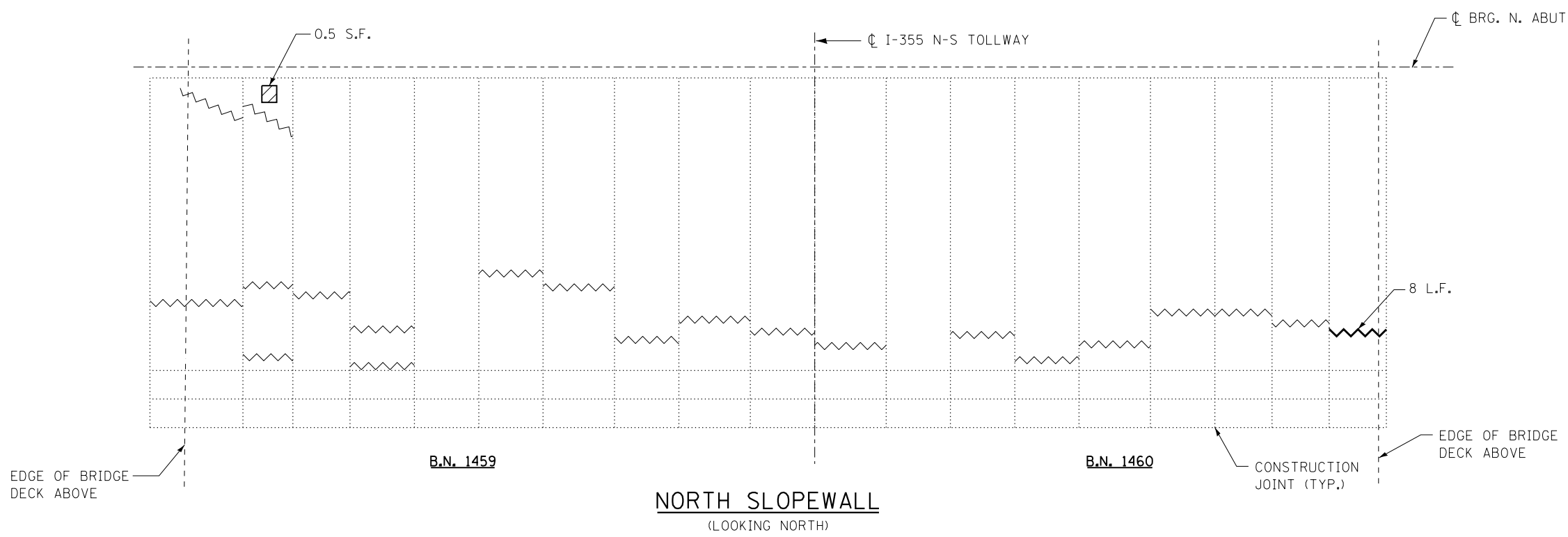


REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
B.N. 1459 & 1460 (S.N. 022-9980)  
CONSTRUCTION STAGING

SC-03 OF SC-18  
SHT NO. SC-03  
DRAWING NO.  
985 OF 1517

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**LEGEND**

- SLOPE WALL REPAIR
- SLOPEWALL CRACK SEALING  
L.F.
- CRACKS < 1/4" (FOR INFORMATION ONLY)

NOTE:  
CRACKS 1/4" AND LARGER SHALL BE SEALED WITH "SLOPE WALL CRACK SEALING".

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
X0323491	SLOPE WALL CRACK SEALING	FOOT	8	11	19
Z0065700	SLOPE WALL REPAIR	SQ. YD.	2	-	2

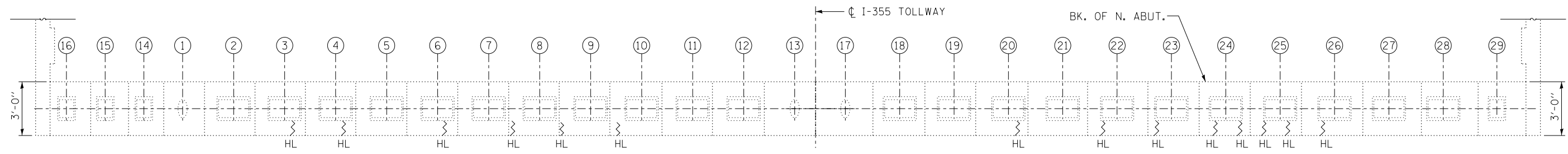
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CHECKED BY MMH DATE 3/11/2018



REVISIONS	
NO.	DESCRIPTION

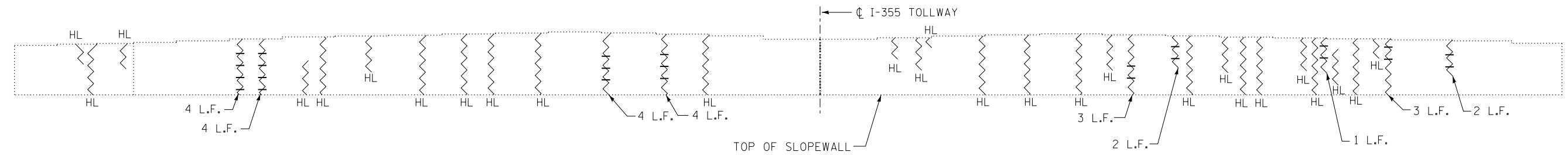
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B.N. 1459 & 1460 (S.N. 022-9980)  
SLOPEWALL REPAIRS

SHT NO. SC-04  
DRAWING NO. 986 OF 1517



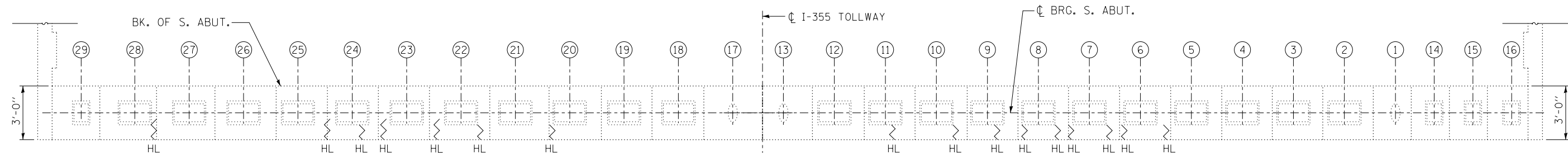
**B.N. 1459 NORTH BEAM SEAT PLAN**

**B.N. 1460 NORTH BEAM SEAT PLAN**



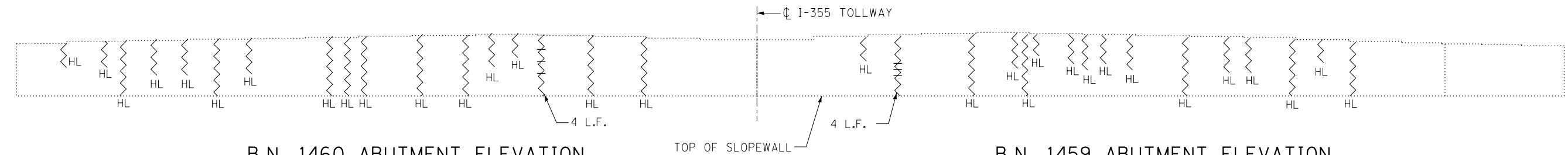
**B.N. 1459 ABUTMENT ELEVATION**  
(LOOKING NORTH)

**B.N. 1460 ABUTMENT ELEVATION**  
(LOOKING NORTH)



**B.N. 1460 SOUTH BEAM SEAT PLAN**




**B.N. 1459 SOUTH BEAM SEAT PLAN**



**B.N. 1460 ABUTMENT ELEVATION**  
(LOOKING SOUTH)

**B.N. 1459 ABUTMENT ELEVATION**  
(LOOKING SOUTH)

**LEGEND**

-  STRUCTURAL REPAIR OF CONCRETE (DEPTH LESS THAN OR EQUAL TO 5 IN.)
-  L.F. LOW PRESSURE EPOXY INJECTION
-  HAIRLINE CRACK (FOR INFORMATION ONLY)

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	20	15	35

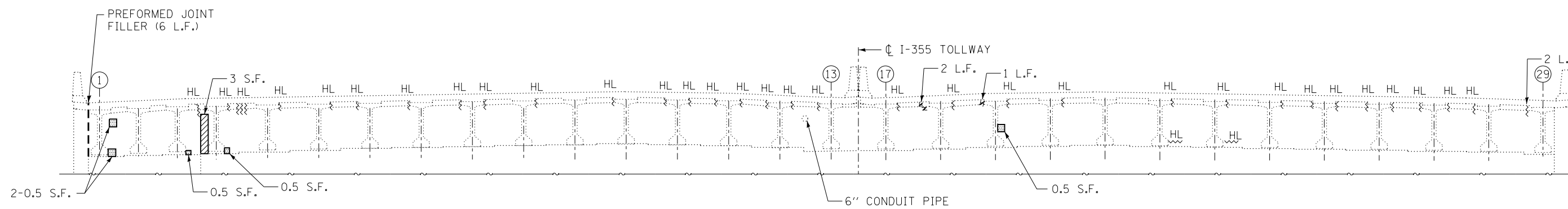
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NO.	DESCRIPTION

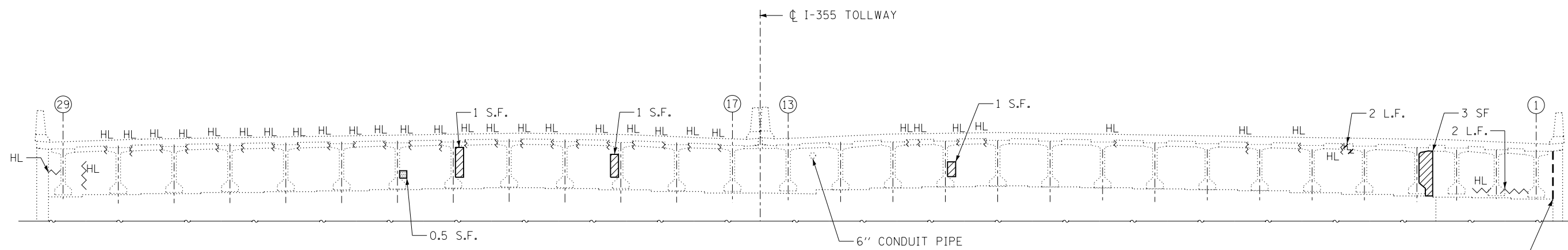
CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 ABUTMENT REPAIRS

SC-05 OF SC-18  
 SHT NO. SC-05  
 DRAWING NO. 987 OF 1517



**B.N. 1459 NORTH DIAPHRAGM ELEVATION**  
(LOOKING NORTH)





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(LOOKING NORTH)



**B.N. 1460 SOUTH DIAPHRAGM ELEVATION**  
(LOOKING SOUTH)

**B.N. 1459 SOUTH DIAPHRAGM ELEVATION**  
(LOOKING SOUTH)

**LEGEND**

-  SHALLOW CONCRETE REPAIR
-  STRUCTURAL REPAIR OF CONCRETE (DEPTH LESS THAN OR EQUAL TO 5 IN.)
-  L.F. LOW PRESSURE EPOXY INJECTION
-  L.F. PREFORMED JOINT FILLER
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	4	5	9
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH LESS THAN OR EQUAL TO 5 IN.)	SO. FT.	7	2	9
JT503050	SHALLOW CONCRETE REPAIR	EACH	4	2	6
Z0043900	PREFORMED JOINT FILLER	FOOT	12	-	12

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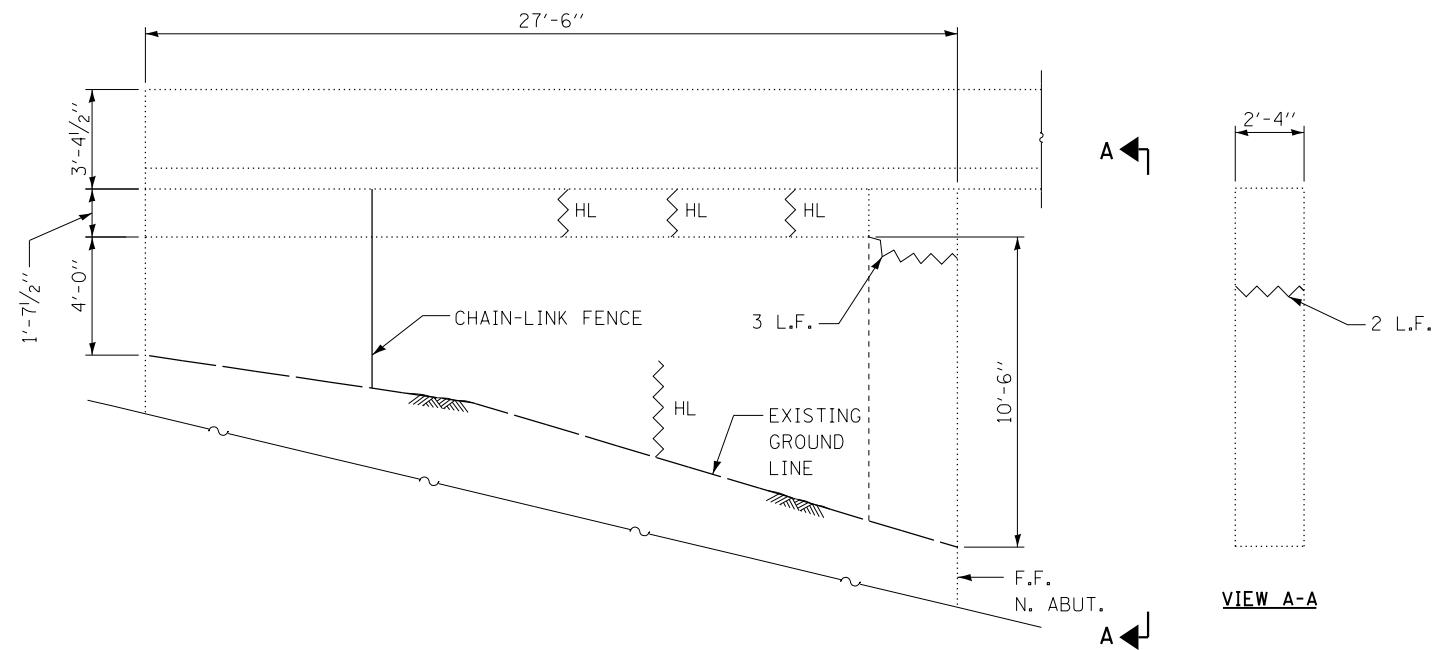
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CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 DIAPHRAGM REPAIRS

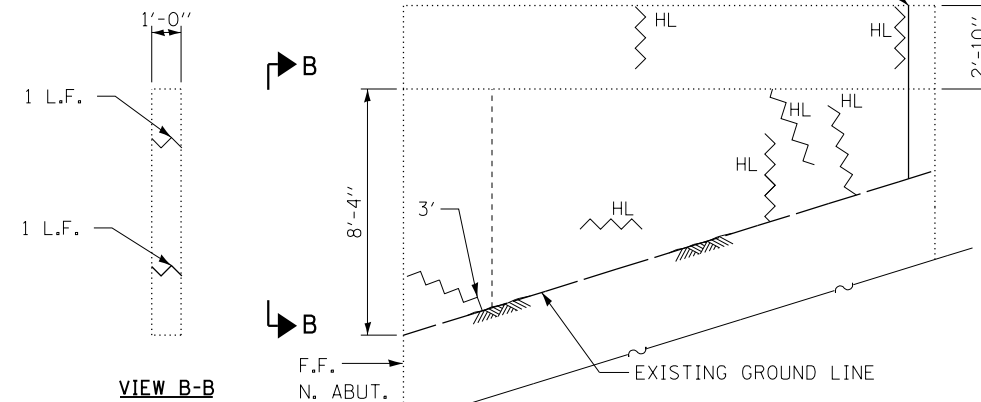
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 SHT NO. SC-06  
 DRAWING NO. 988 OF 1517



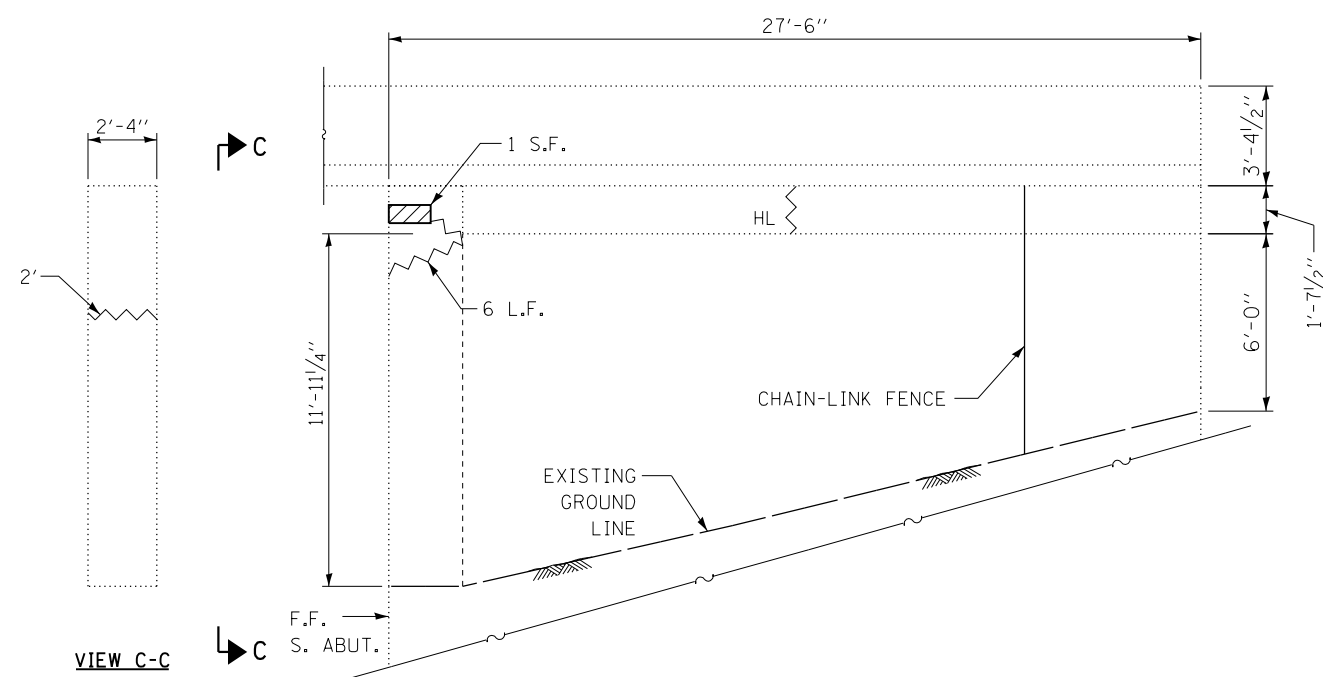
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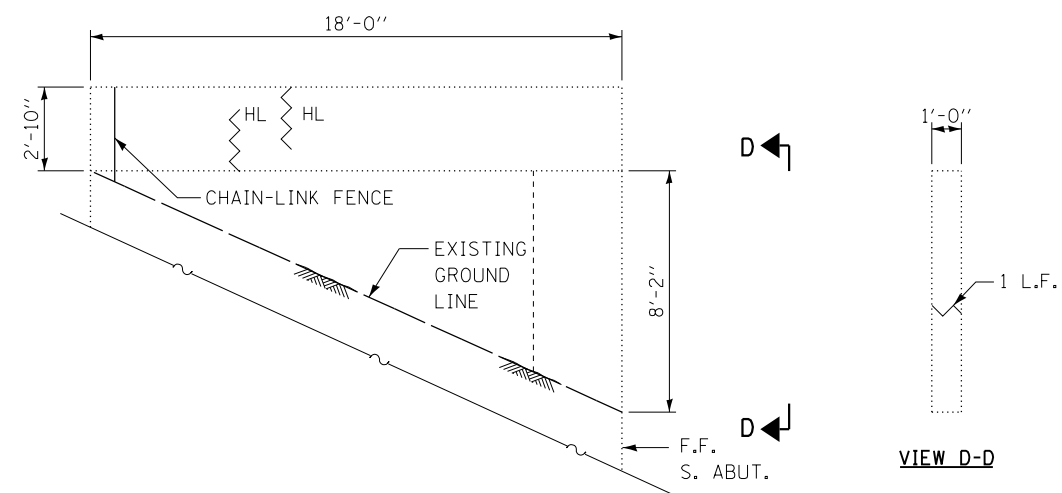
**B.N. 1459 NORTH WEST WINGWALL**  
(LOOKING EAST)



**B.N. 1460 NORTH EAST WINGWALL**  
(LOOKING WEST)



**B.N. 1459 SOUTH WEST WINGWALL**  
(LOOKING EAST)



**B.N. 1460 SOUTH EAST WINGWALL**  
(LOOKING WEST)

**LEGEND**

- CLEANING AND PAINTING EXPOSED REBAR
- STRUCTURAL REPAIR OF CONCRETE (DEPTH LESS THAN OR EQUAL TO 5 IN.)
- L.F. LOW PRESSURE EPOXY INJECTION
- HL HAIRLINE CRACK (FOR INFORMATION ONLY)

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE		TOTAL QUANTITY
			1459	1460	
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	13	6	19
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ. FT.	1	-	1

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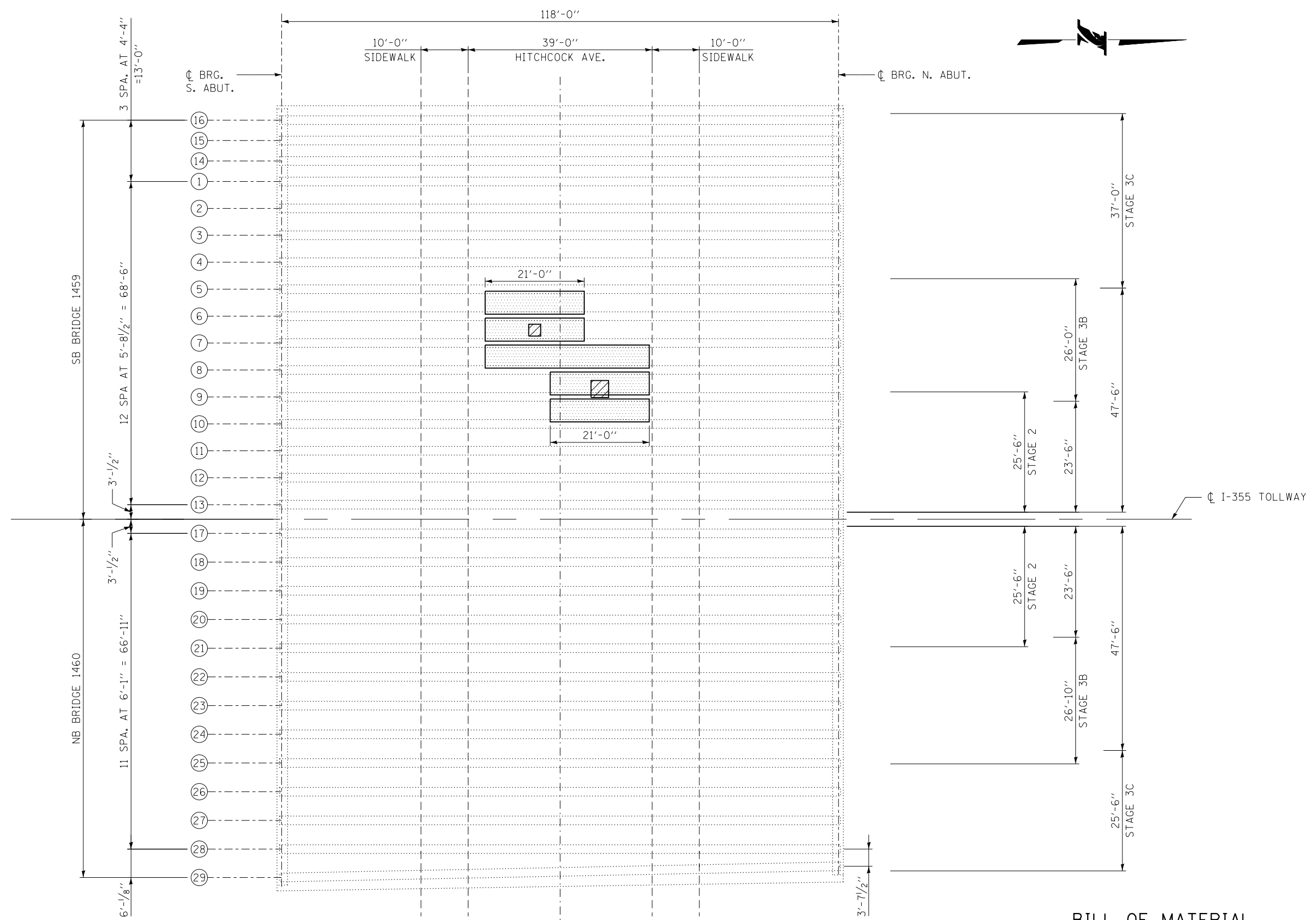
**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 WINGWALL REPAIRS

SC-07 OF SC-18  
 SHT NO. SC-07  
 DRAWING NO.  
 989 OF 1517

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**LEGEND**

- PROTECTIVE SHIELD
- DECK SPALLS (FOR INFORMATION ONLY)

**FRAMING PLAN**  
(UNDERSIDE VIEW)

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
50157300	PROTECTIVE SHIELD	SQ. YD.	69	-	69

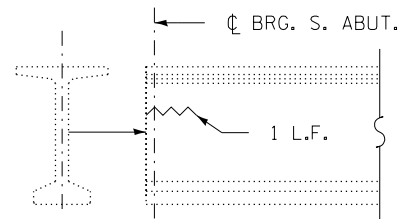
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 CHECKED BY MMH DATE 3/11/2018



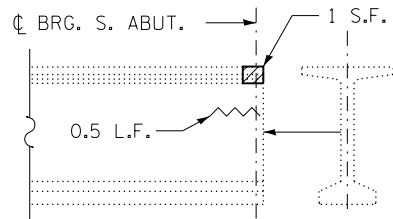
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NO.	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 FRAMING PLAN

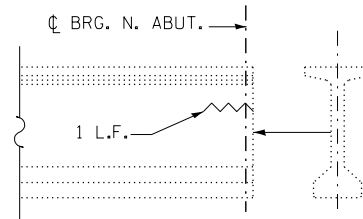
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 SHT NO. SC-08  
 DRAWING NO. 990 OF 1517



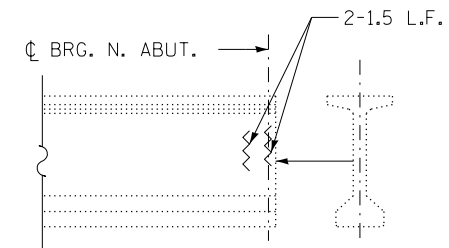
EAST FACE OF FASCIA BEAM 16



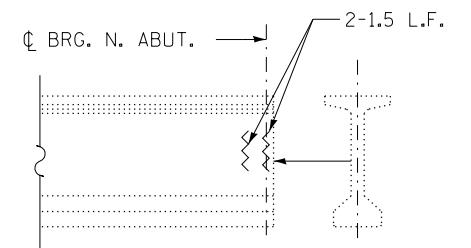
WEST FACE OF FASCIA BEAM 16



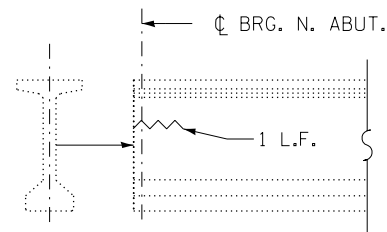
EAST FACE OF BEAM 1



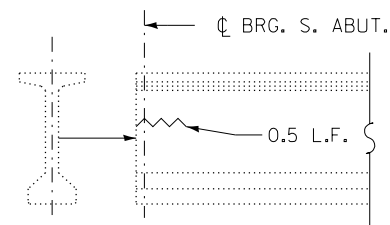
EAST FACE OF BEAM 7



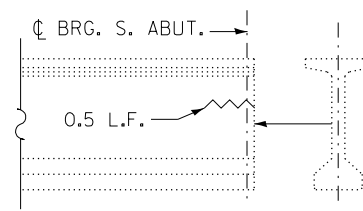
EAST FACE OF BEAM 8



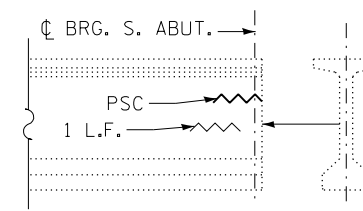
WEST FACE OF BEAM 11



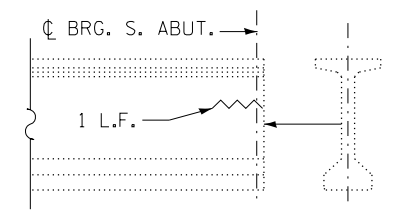
EAST FACE OF BEAM 19



WEST FACE OF BEAM 20



WEST FACE OF BEAM 24



WEST FACE OF BEAM 26

**LEGEND:**

- L.F. HIGH PRESSURE EPOXY INJECTION
- POLYMER MODIFIED PORTLAND CEMENT MORTAR
- PREVIOUSLY SEALED CRACK (FOR INFORMATION ONLY)
- PSC

**NOTES:**

1. CRACK WIDTHS HL AND LARGER SHALL BE SEALED WITH HIGH PRESSURE EPOXY INJECTION.
2. BEAMS 1-16 SUPPORT BRIDGE 1459. BEAMS 17-29 SUPPORT BRIDGE 1460.
3. BEAMS 14-16 WERE CONSTRUCTED UNDER CONTRACT I-07-5476 IN 2008.
4. REPAIR OF THE EXISTING BEAMS SHALL INCLUDE BUT MAY NOT BE LIMITED TO THE AREAS SHOWN. THE ACTUAL AREAS TO BE REPAIRED WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
JS121300	HIGH PRESSURE EPOXY INJECTION	FOOT	10	3	13
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ. FT.	1	-	1

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 DOWNERS GROVE,  
 ILLINOIS 60515

REVISIONS	
NO.	DATE



CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 PPC BEAM REPAIRS

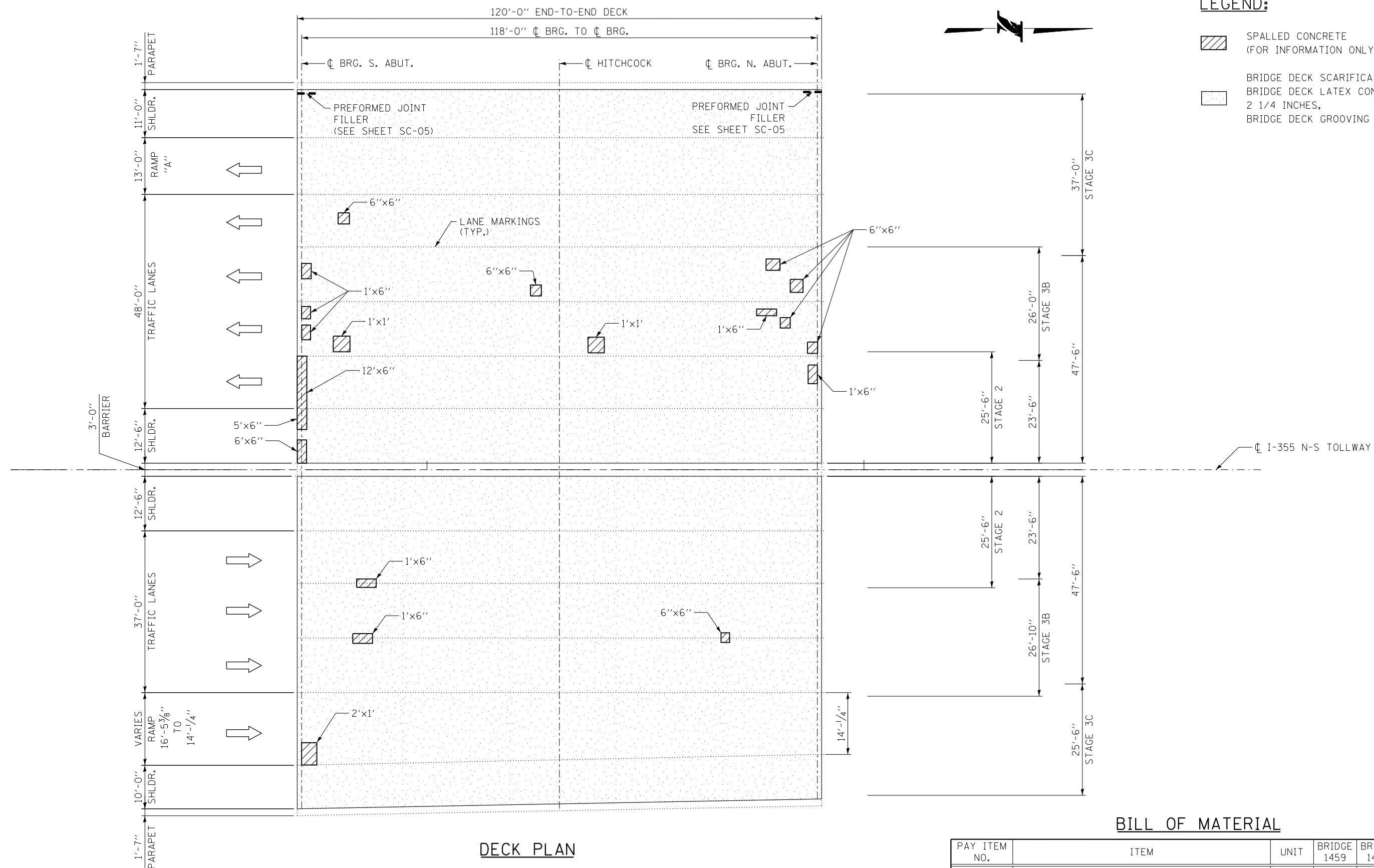
SC-09 OF SC-18

SHT NO. SC-09  
 DRAWING NO.  
 991 OF 1517

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**LEGEND:**

-  SPALLED CONCRETE (FOR INFORMATION ONLY)
-  BRIDGE DECK SCARIFICATION 1", BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES, BRIDGE DECK GROOVING



**DECK PLAN**

- NOTES:
- DECK SURVEY WAS CONDUCTED ON 10/13/2016.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
50300260	BRIDGE DECK GROOVING	SQ. YD.	1,100	970	2,070
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ. YD.	1,127	997	2,124
Z0012132	BRIDGE DECK SCARIFICATION 1"	SQ. YD.	1,127	997	2,124

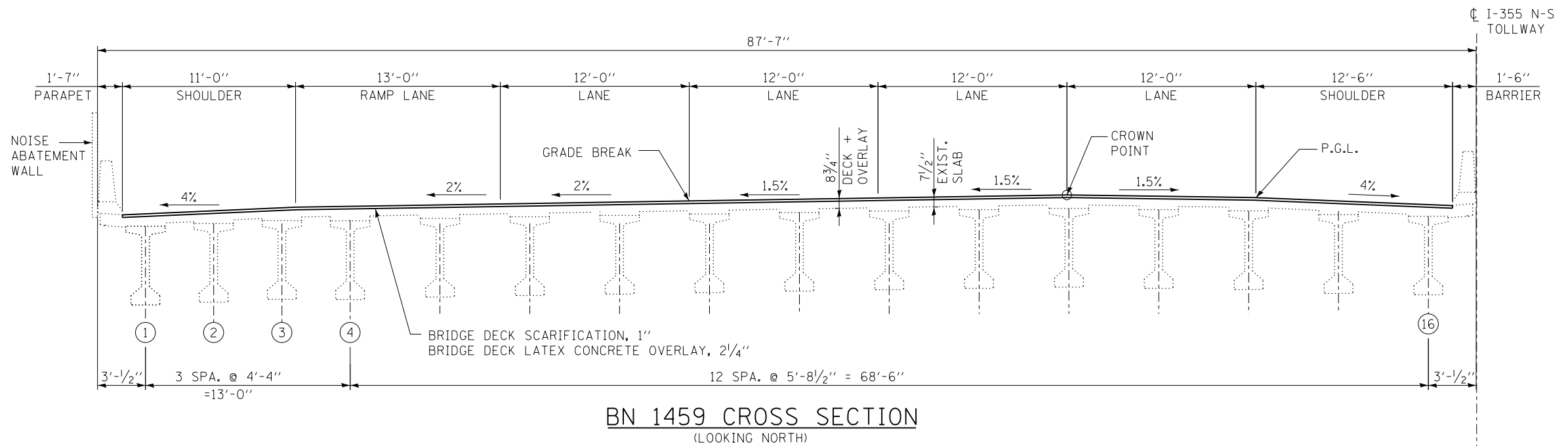
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 CHECKED BY MMH DATE 3/11/2018



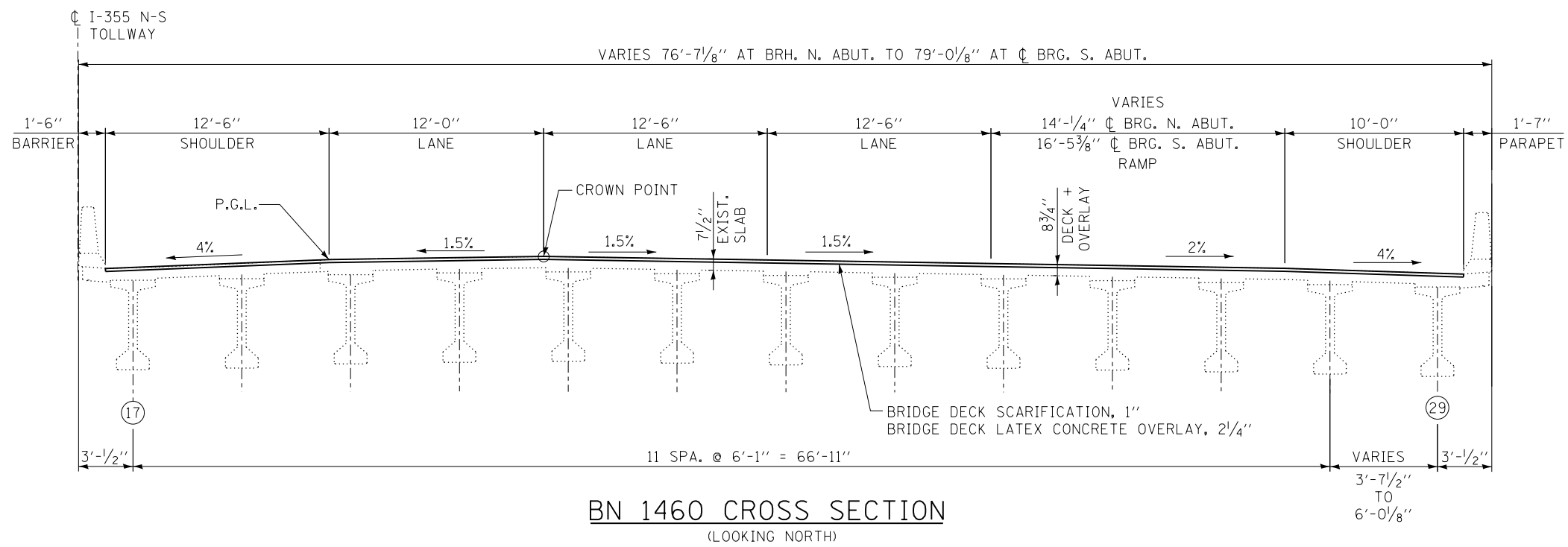
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NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 DECK REPAIR PLAN

SC-10 OF SC-18  
 SHT NO. SC-10  
 DRAWING NO. 992 OF 1517



**BN 1459 CROSS SECTION**  
(LOOKING NORTH)



**BN 1460 CROSS SECTION**  
(LOOKING NORTH)

**LEGEND**

- BRIDGE DECK SCARIFICATION, 1"
- BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4"

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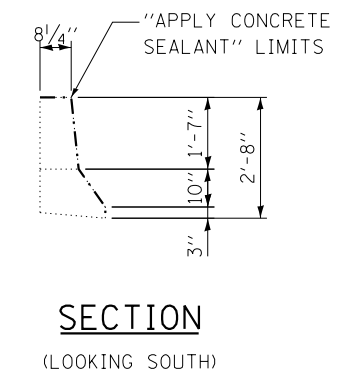
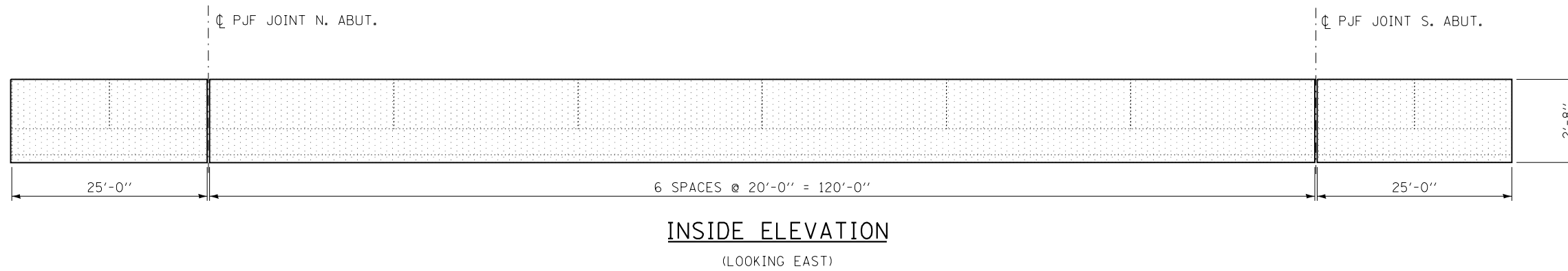


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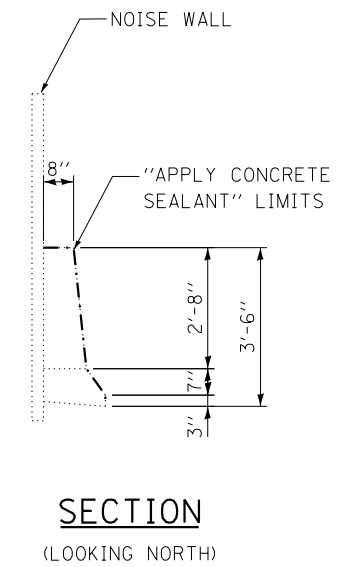
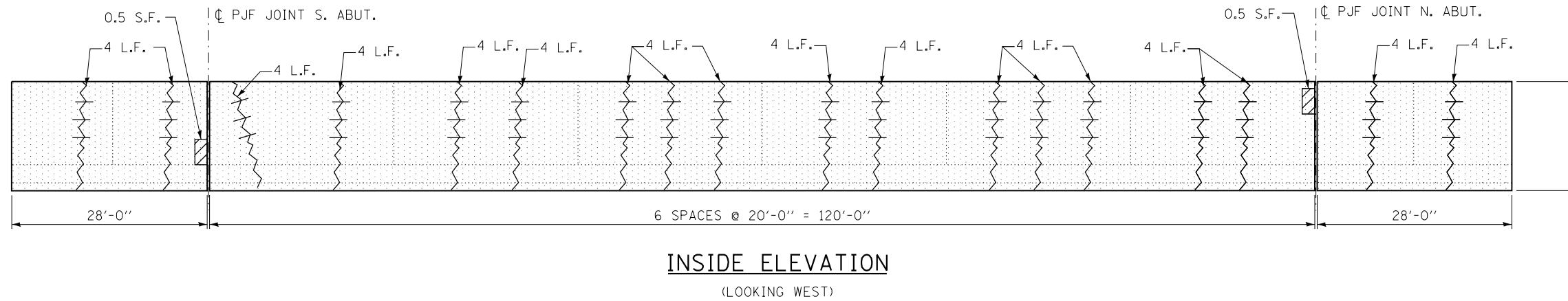
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B.N. 1459 & 1460 (S.N. 022-9980)  
DECK CROSS SECTION

SC-11 OF SC-18  
SHT NO. SC-11  
DRAWING NO. 993 OF 1517

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**BRIDGE 1459 MEDIAN BARRIER**



**BRIDGE 1459 PARAPET**

**LEGEND**

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)
- BRIDGE DECK CONCRETE SEALER
- L.F. LOW PRESSURE EPOXY INJECTION

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	72	-	72
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ. FT.	1	-	1
JT524015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	1,363	-	1,363

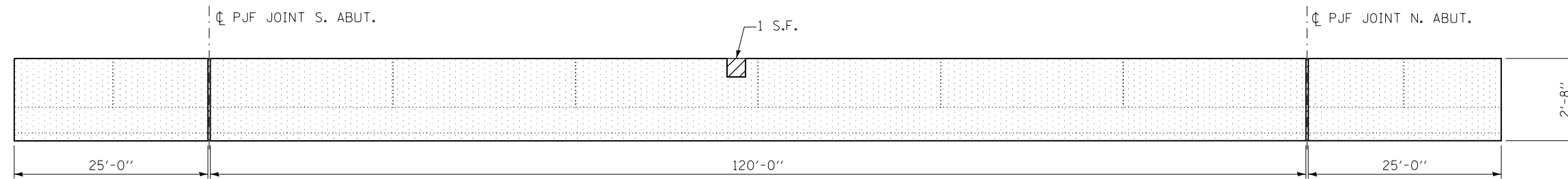
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 DOWNERS GROVE,  
 ILLINOIS 60515

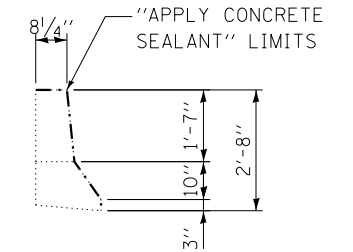
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CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
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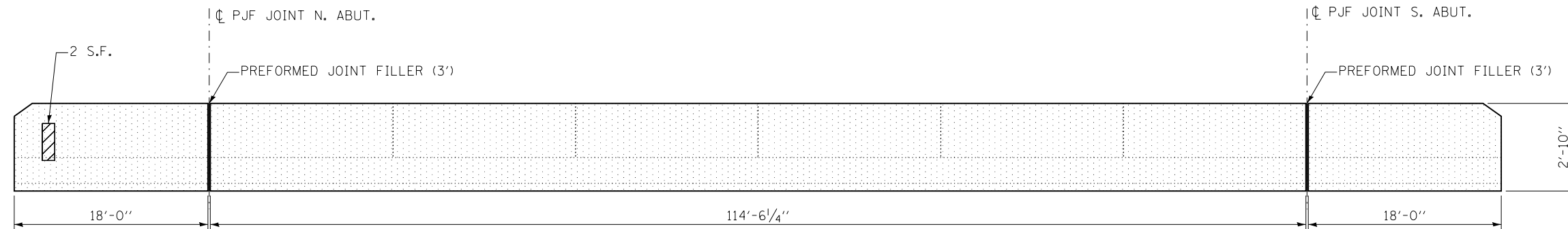


**INSIDE ELEVATION**  
(LOOKING WEST)

**BRIDGE 1460 MEDIAN BARRIER**

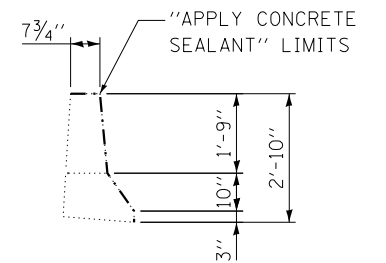


**SECTION**  
(LOOKING NORTH)







**INSIDE ELEVATION**  
(LOOKING EAST)

**BRIDGE 1460 PARAPET**



**SECTION**  
(LOOKING SOUTH)

**LEGEND**

-  CLEANING AND PAINTING EXPOSED REBAR
-  STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)
-  BRIDGE DECK CONCRETE SEALER
-  L.F. LOW PRESSURE EPOXY INJECTION

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ. FT.	-	3	3
JT524015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	-	1,156	1,156
Z0043900	PREFORMED JOINT FILLER	FOOT	-	6	6

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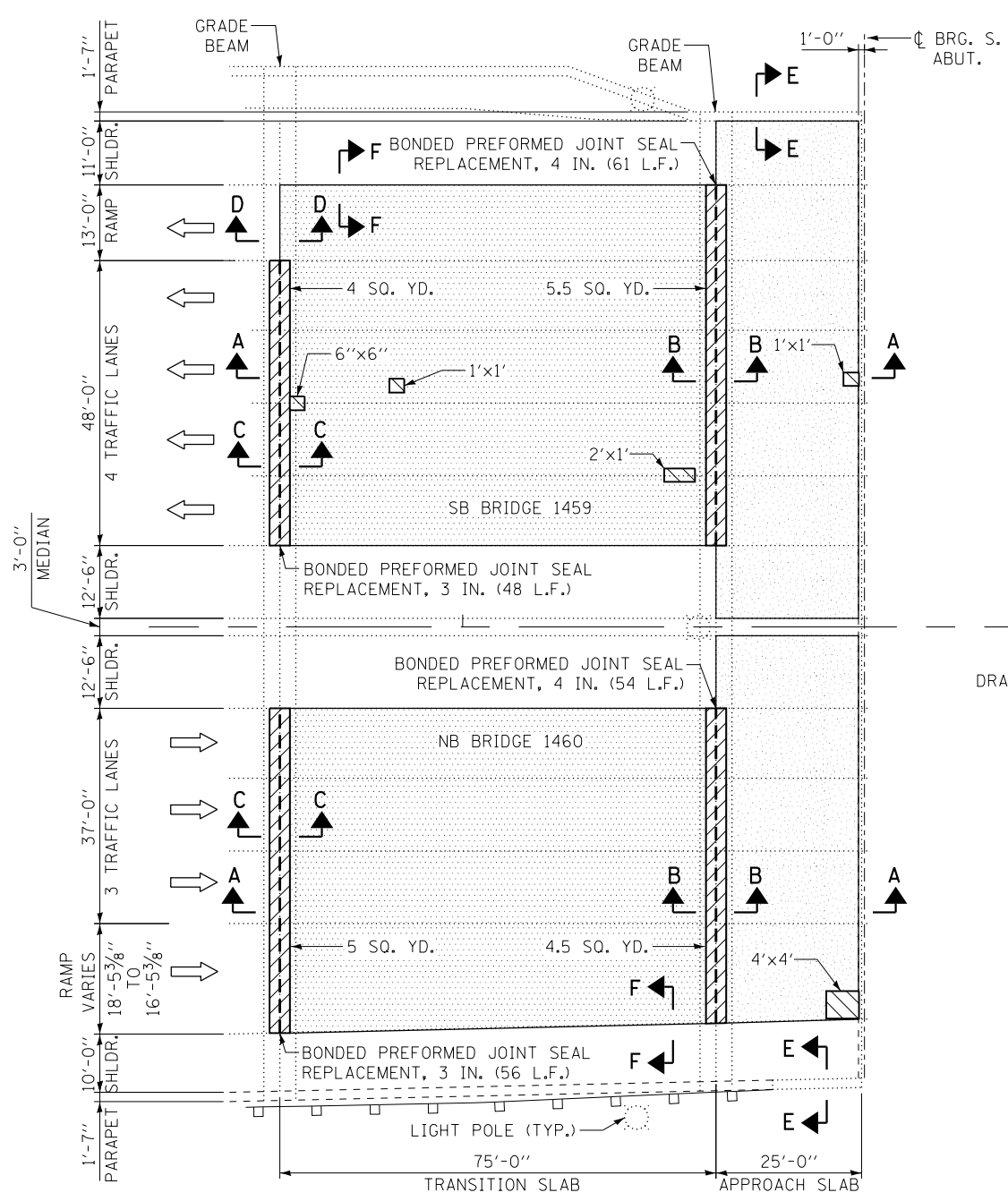


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2700 OGDEN AVENUE  
DOWNERS GROVE,  
ILLINOIS 60515

REVISIONS	
NO.	DATE DESCRIPTION

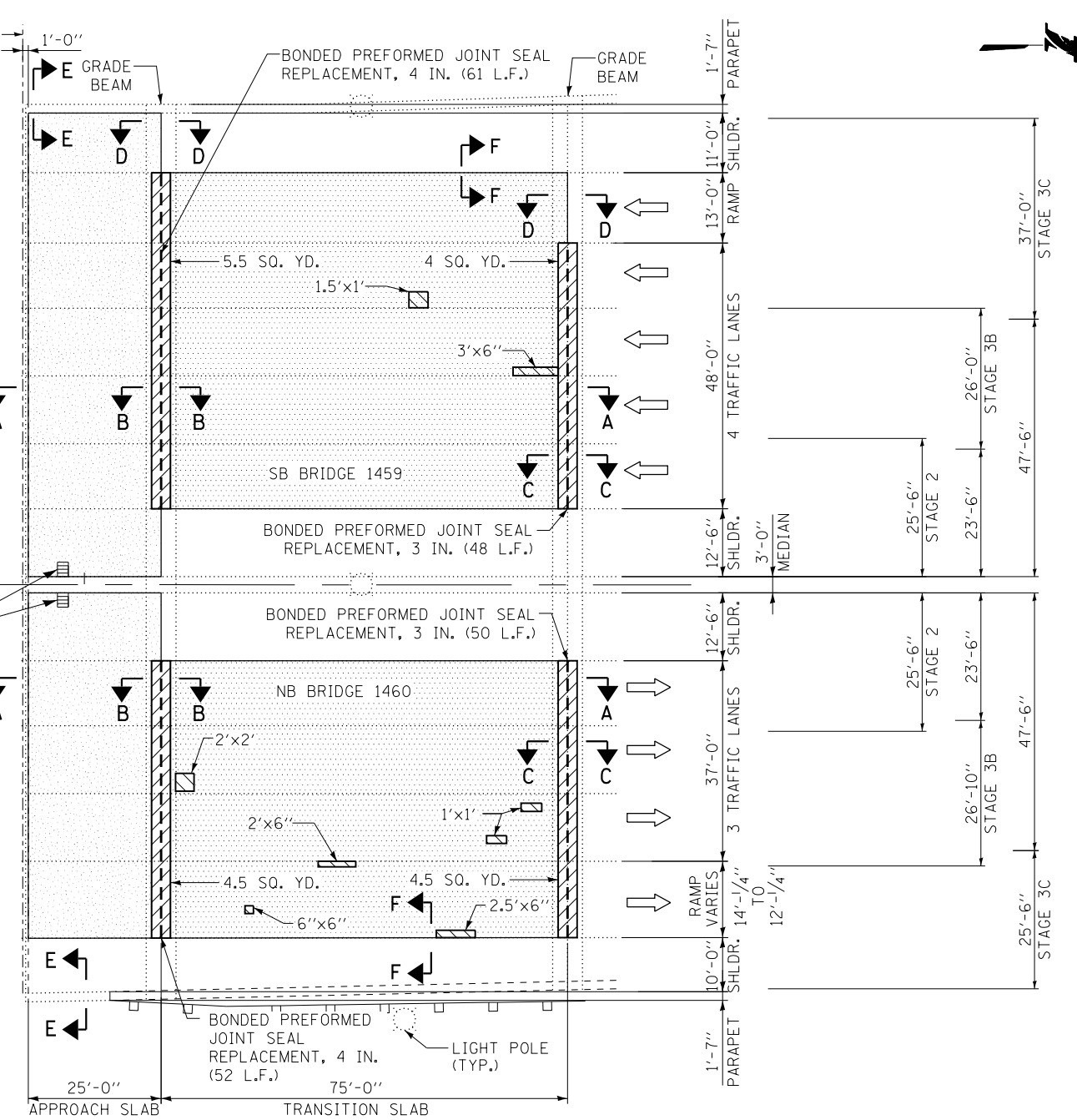
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B.N. 1459 & 1460 (S.N. 022-9980)  
PARAPET REPAIRS 2

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**SOUTH APPROACH PLAN**

CL I-355 TOLLWAY  
 DRAINS TO BE ADJUSTED, SEE DRAINAGE PLANS



**NORTH APPROACH PLAN**

**LEGEND**

- BRIDGE DECK SCARIFICATION, 1",  
BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES.  
BRIDGE DECK GROOVING
- CONCRETE PAVEMENT SCARIFICATION  
ASPHALT OVERLAY (SEE ROADWAY PLANS)
- SPALLS (FOR INFORMATION ONLY)
- ACCELERATED APPROACH SLAB REPAIR (PARTIAL)
- BONDED PREFORMED JOINT SEAL REPLACEMENT

**NOTES:**  
 1. SEE SC-15 THROUGH SC-18 FOR JOINT REPAIR DETAILS AND SECTIONS A-A, B-B, C-C, D-D, E-E & F-F.

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
50300260	BRIDGE DECK GROOVING	SQ. YD.	460	359	819
JT503013	ACCELERATED APPROACH SLAB REPAIR (PARTIAL)	SQ. YD.	50	48	98
JT525230	BONDED PREFORMED JOINT SEAL REPLACEMENT, 3 IN.	FOOT	96	106	202
JT525235	BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	122	106	228
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ. YD.	470	371	841
Z0012132	BRIDGE DECK SCARIFICATION, 1"	SQ. YD.	470	371	841
Z0012800	CONCRETE PAVEMENT SCARIFICATION	SQ. YD.	1,018	875	1,893

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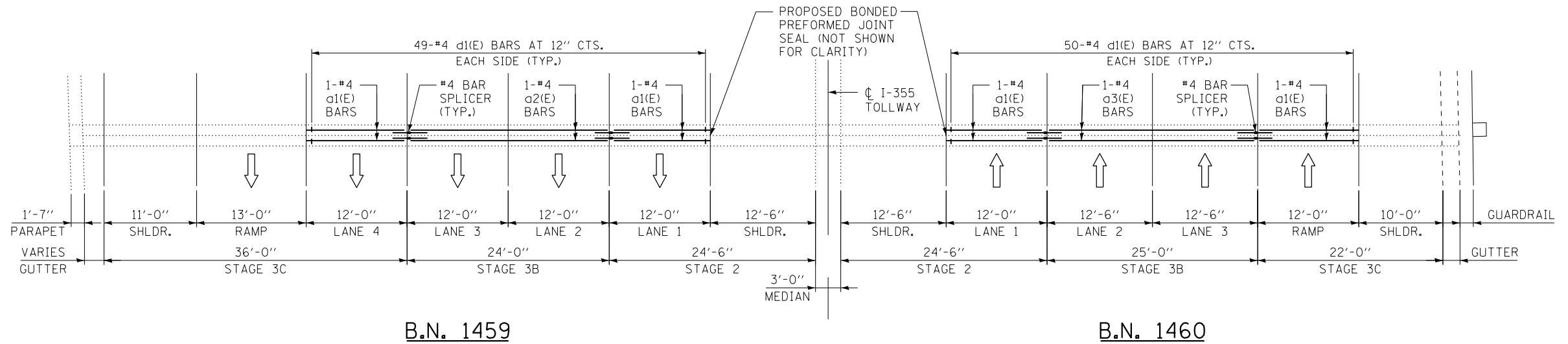


REVISIONS		
NO.	DATE	DESCRIPTION

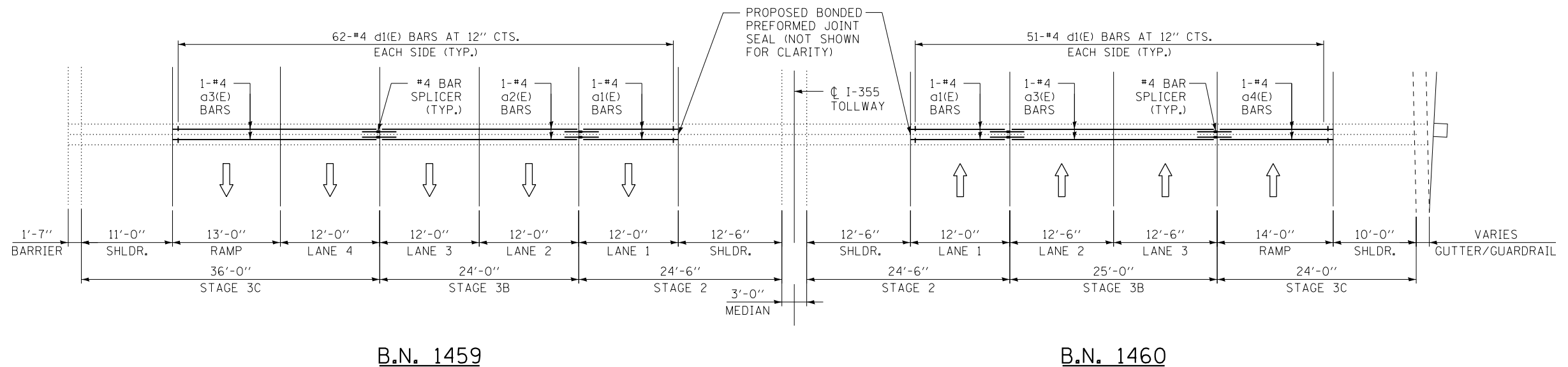
CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 APPROACH SLAB REPAIRS

SHT NO. SC-14  
 DRAWING NO. 996 OF 1517





**NORTH TRANSITION APPROACH JOINT REPAIR PLAN**



**NORTH MAIN APPROACH JOINT REPAIR PLAN**

**BAR SCHEDULE**

BAR	NO.		SIZE	LENGTH	SHAPE
	BN: 1459	BN: 1460			
q1(E)	6	6	#4	11'-8"	—
q2(E)	4	-	#4	23'-8"	—
q3(E)	2	4	#4	24'-8"	—
q4(E)	-	2	#4	13'-8"	—
d1(E)	222	202	#4	1'-5"	C

**BILL OF MATERIAL**

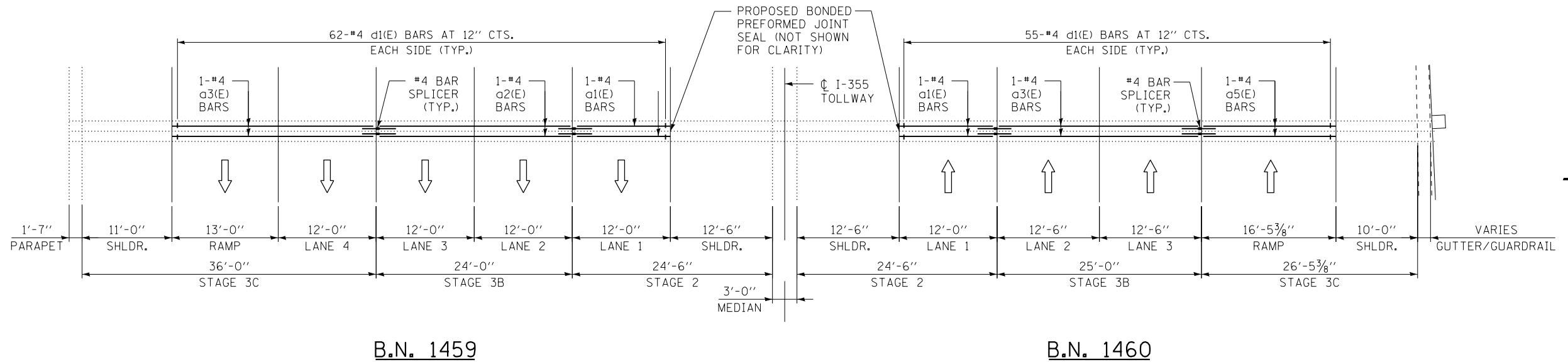
PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	360	330	690
50800515	BAR SPLICERS	EACH	8	8	16

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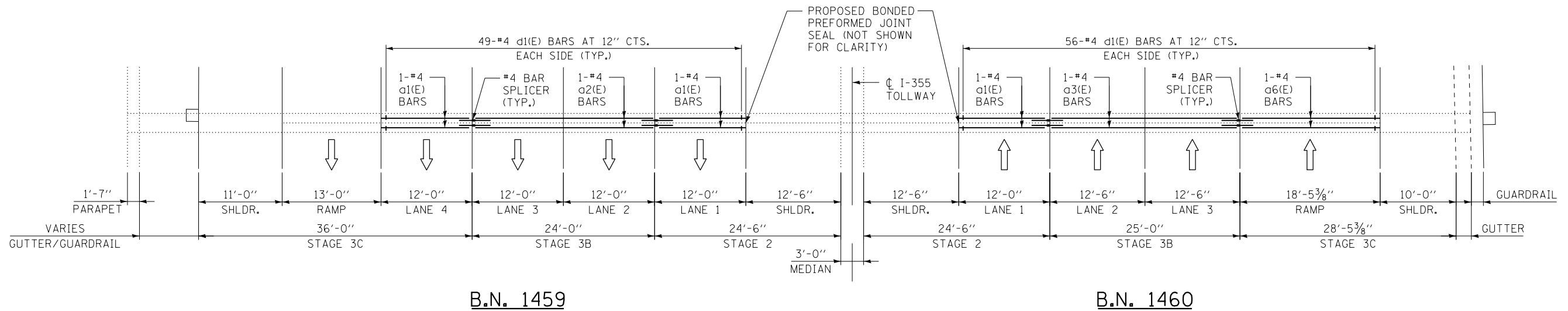


REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 EXPANSION JOINT DETAILS 1



**SOUTH MAIN APPROACH JOINT REPAIR PLAN**



**SOUTH TRANSITION APPROACH JOINT REPAIR PLAN**

**BAR SCHEDULE**

BAR	NO.		SIZE	LENGTH	SHAPE
	BN: 1459	BN: 1460			
ø1(E)	6	4	#4	11'-8"	—
ø2(E)	4	-	#4	23'-8"	—
ø3(E)	2	4	#4	24'-8"	—
ø5(E)	-	4	#4	16'-2"	—
ø6(E)	-	2	#4	18'-2"	—
d1(E)	222	222	#4	1'-5"	C

**BILL OF MATERIAL**

PAY ITEM NO.	ITEM	UNIT	BRIDGE 1459	BRIDGE 1460	TOTAL QUANTITY
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	360	380	740
50800515	BAR SPLICERS	EACH	8	8	16

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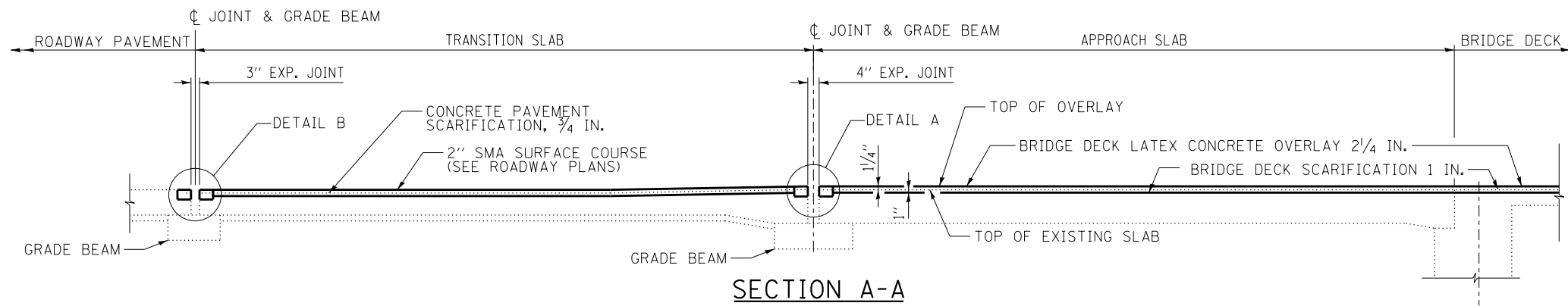
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 CHECKED BY MMH DATE 3/11/2018



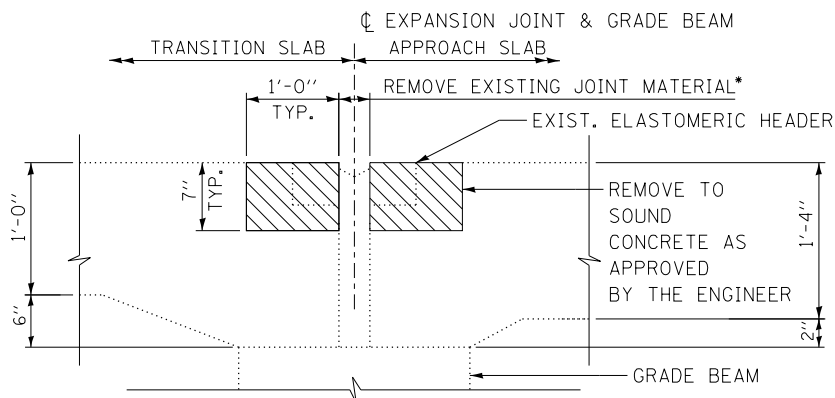
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 EXPANSION JOINT DETAILS 2

SC-16 OF SC-18  
 SHT NO. SC-16  
 DRAWING NO. 998 OF 1517

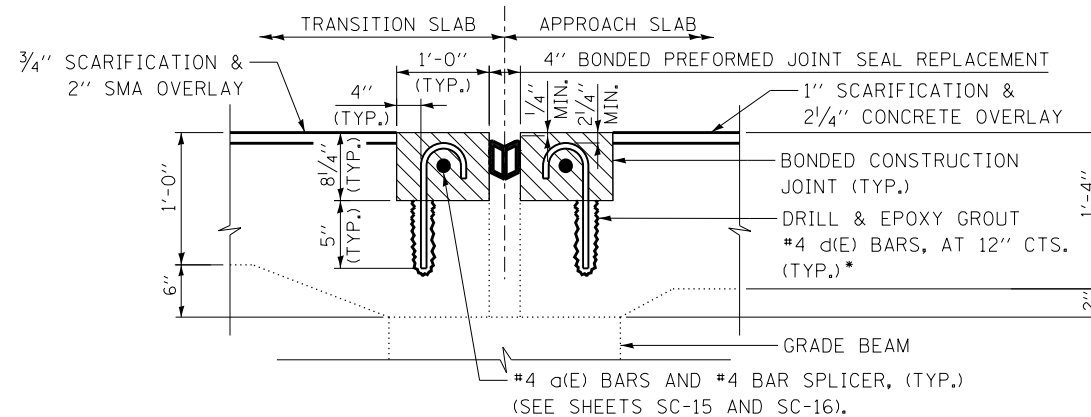


**SECTION A-A**



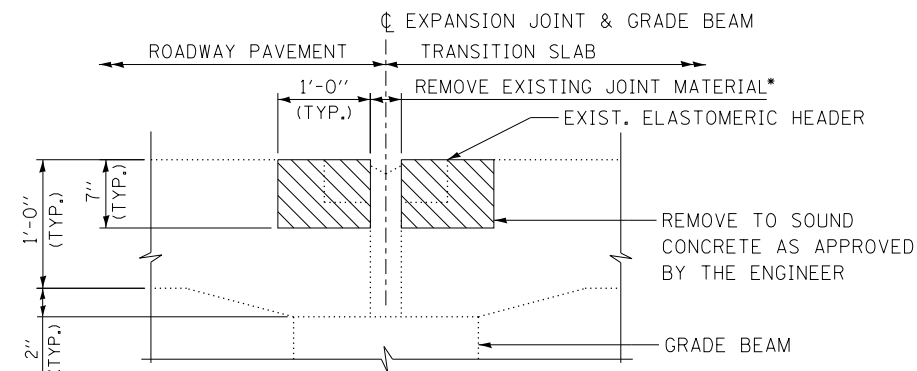
**SECTION B-B EXPANSION JOINT REMOVAL**

\*COST INCLUDED WITH ACCELERATED APPROACH SLAB REPAIR (PARTIAL)



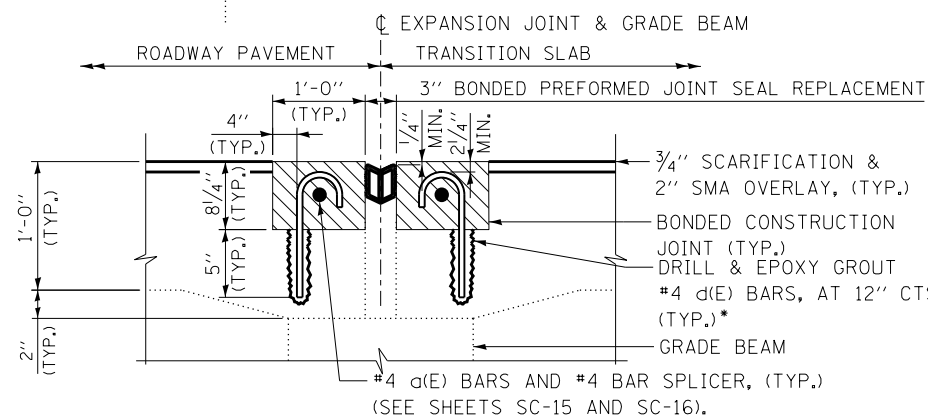
**DETAIL A PROPOSED EXPANSION JOINT**

\*COST INCLUDED WITH REINFORCEMENT BARS, EPOXY COATED



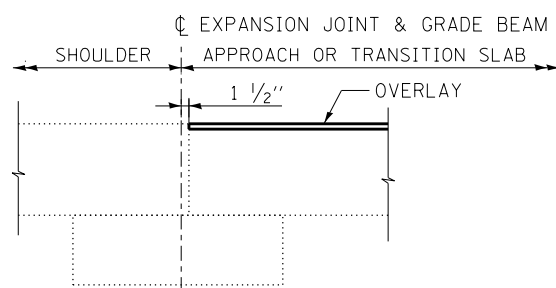
**SECTION C-C EXPANSION JOINT REMOVAL**

\*COST INCLUDED WITH ACCELERATED APPROACH SLAB REPAIR (PARTIAL)

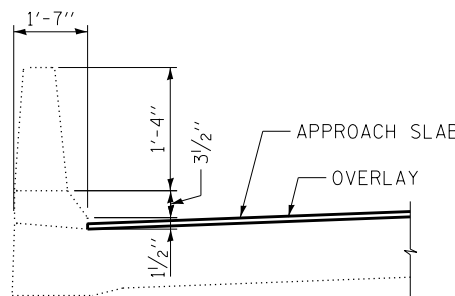


**DETAIL B PROPOSED EXPANSION JOINT**

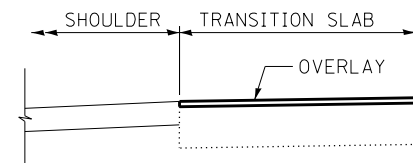
\*COST INCLUDED WITH REINFORCEMENT BARS, EPOXY COATED



**SECTION D-D**



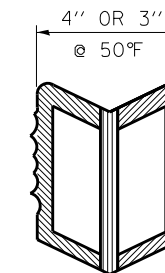
**SECTION E-E**



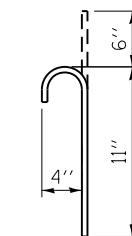
**SECTION F-F**

**NOTES:**

1. SUBJECT TO THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY ELECT TO MODIFY THE SHOWN REMOVAL AND PROPOSED DIMENSIONS TO SUIT THEIR MEANS AND METHOD FOR JOINT INSTALLATION; HOWEVER THE OVERALL TRAFFIC STAGING SCHEME SHALL NOT BE MODIFIED.
2. ALL EXISTING CONCRETE SURFACES TO BE IN CONTACT WITH NEW CONCRETE SHALL BE BLAST CLEANED BEFORE NEW CONCRETE CONSTRUCTION.
3. ALL WORK SHALL BE PERFORMED WITH THE USE OF TEMPORARY ONE-LANE AND TWO-LANE CLOSURES ONLY AS PER MOT PLANS. FOR ALLOWABLE CLOSURE TIMES AND DURATIONS, SEE MOT PLANS AS WELL AS SPECIAL PROVISIONS.
4. DIMENSIONS TAKEN FROM EXISTING PLANS. ACTUAL SIZE AND LOCATION OF REPAIR AREAS SHALL BE FIELD VERIFIED BY THE ENGINEER.
5. FOR PAY ITEMS, QUANTITIES AND LOCATIONS OF SECTIONS A-A, B-B, C-C, D-D, E-E & F-F SEE SHEET SC-14.



**BONDED PREFORMED JOINT SEAL**



**d(E) BARS**

**LEGEND**

ACCELERATED APPROACH SLAB REPAIR (PARTIAL)

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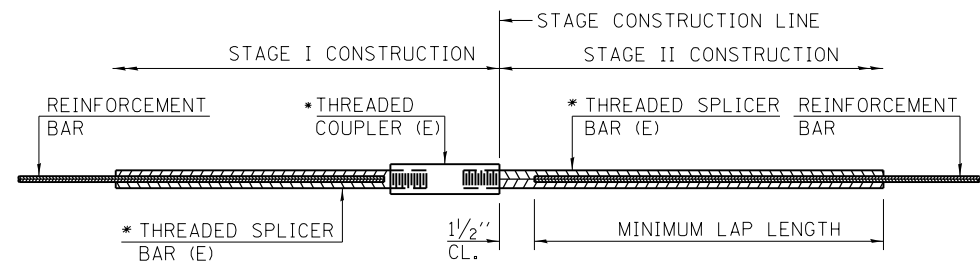


**THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY**  
 2700 OGDEN AVENUE  
 DOWNERS GROVE,  
 ILLINOIS 60515

NO.		DATE	REVISIONS DESCRIPTION

CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 EXPANSION JOINT REPAIR DETAILS 3

SC-17 OF SC-18  
 SHT NO. SC-17  
 DRAWING NO. 999 OF 1517

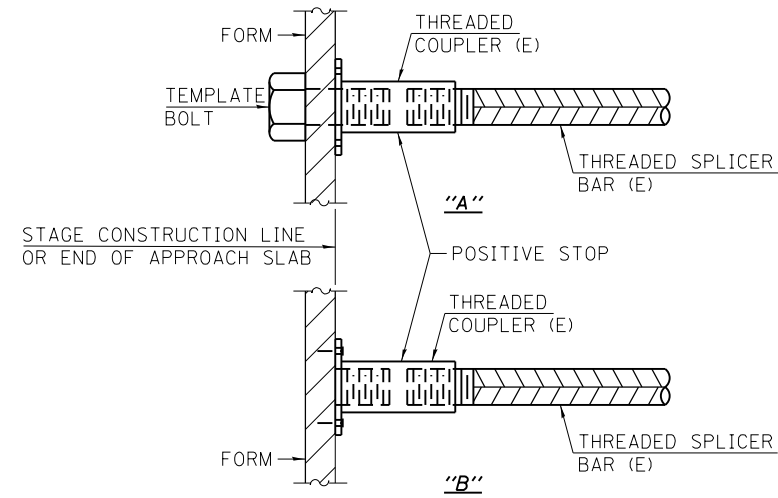


**STANDARD BAR SPLICER ASSEMBLY**

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + 1 1/2" + THREAD LENGTH

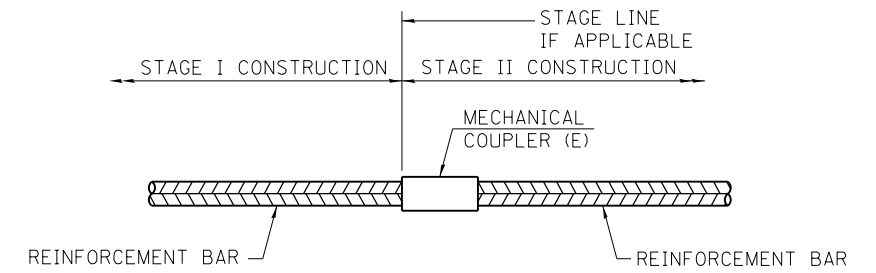
- \* EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
1459 APPR. SLABS	#4	16	2'-0"
1460 APPR. SLABS	#4	16	2'-0"



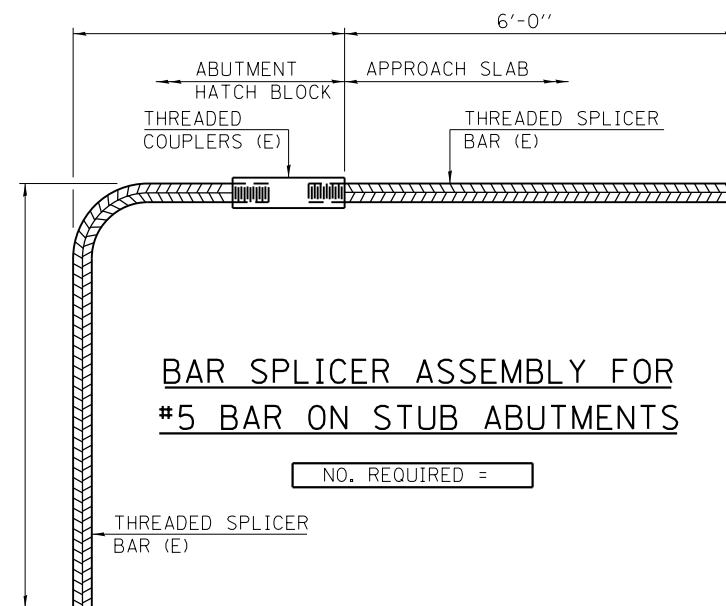
**INSTALLATION AND SETTING METHODS**

- "A" : SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT.
- "B" : SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS.
- (E) : INDICATES EPOXY COATING.



**STANDARD MECHANICAL SPLICER**

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

NO. REQUIRED =

**NOTES**

- SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.
- ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.
- BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD SPECIFICATIONS.
- SEE APPROVED LIST OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.

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2700 OGDEN AVENUE  
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 ILLINOIS 60515

REVISIONS	
NO.	DATE

CONTRACT NO. RR-16-4255  
 B.N. 1459 & 1460 (S.N. 022-9980)  
 BAR SPLICER DETAILS

SD-18 OF SC-18  
 SHT NO. SC-18  
 DRAWING NO.  
 1000 OF 1517