

11-09-2018 LETTING ITEM 001

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* 54 - 2 = 52 TOTAL SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	1
		ILLINOIS	CONTRACT NO. 60R79	

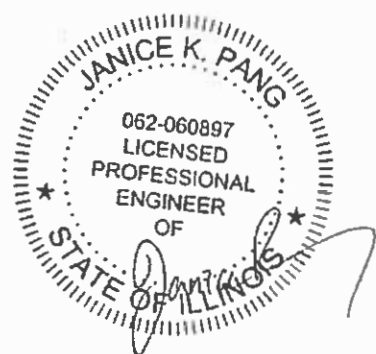
FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED
WITHIN VILLAGE OF FOX LAKE

TRAFFIC DATA

US ROUTE 12:

FUNCTIONAL CLASSIFICATION:
OTHER PRINCIPAL ARTERIAL
ADT (2017)=22,700
P.V.=89% S.U.=6% M.U.=5%
POSTED SPEED LIMIT=40 MPH
DESIGN SPEED LIMIT=40 MPH



PROPOSED
HIGHWAY PLANS

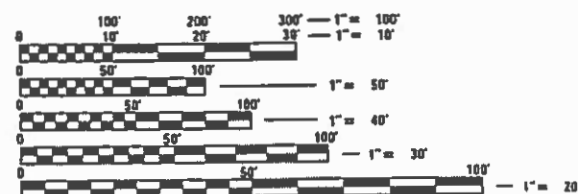
FAP ROUTE 334 (US 12)
OVER NIPPERSINK AND
OVER PISTAKEE LAKE CHANNEL
SECTION 117B-BR-1
PROJECT NHPP JL03(126)
BRIDGE DECK OVERLAY AND
BRIDGE JOINT REPAIR
LAKE COUNTY

C-91-212-12



LOCATION OF SECTION INDICATED THIS: -

CHASTAIN
& ASSOCIATES LLC
CONSULTING ENGINEERS
SERVICE | SOLUTIONS | COMMITMENT

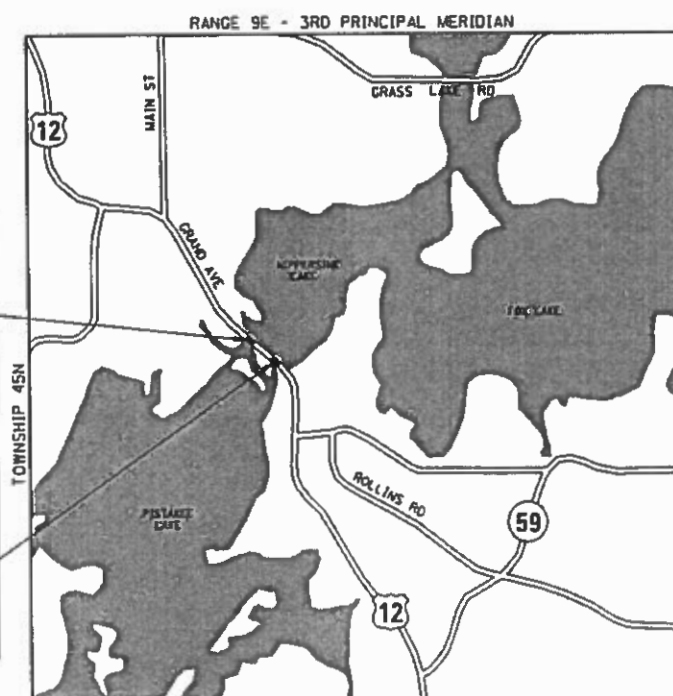


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

BRIDGE REPAIR
SN: 049-0167
US ROUTE 12 OVER
NIPPERSINK LAKE CHANNEL
BEGIN PROJECT:
STA. 427+73
END PROJECT:
STA. 436+10

BRIDGE REPAIR
SN: 049-0019
US ROUTE 12 OVER
PISTAKEE LAKE CHANNEL
BEGIN PROJECT:
STA. 445+45
END PROJECT:
STA. 11+81



LOCATION MAP
(NOT TO SCALE)

GROSS LENGTH = 3,600 FT. = 0.681 MILE
NET LENGTH = 1,089 FT. = 0.206 MILE

PROJECT MANAGER: FAWAD AQUEEL, P.E.
PROJECT ENGINEER: RAGHAD ADEIS-DAHMAN, P.E.

(847) 705-4247
(847) 705-4237

CONTRACT NO. 60R79

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED: August 6, 2018
Anthony A. Chastain REGIONAL ENGINEER
October 5, 2018
Scott E. Etkin ENGINEER OF DESIGN AND ENVIRONMENT
October 5, 2018
Paul P. [Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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18	THIS PAGE DELETED
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STANDARD NO.

BD-32
TC-10
TC-11
TC-13
TC-14
TC-16
TC-22
TC-26

DISTRICT ONE DETAILS

DESCRIPTION
BUTT JOINT AND HMA TAPER DETAILS
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
SHORT-TERM PAVEMENT MARKING LETTERS AND SYMBOLS
ARTERIAL ROAD INFORMATION SIGN
DRIVEWAY ENTRANCE SIGNING

HIGHWAY STANDARDS

STANDARD NO.

000001-06
701101-05
701301-04
701311-03
701427-05
701606-10
701611-01
701701-10
701801-06
701901-07
704001-08
782006

DESCRIPTION
STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS LESS THAN OR EQUAL TO 40 MPH
URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
URBAN LANE CLOSURE, MULTILANE INTERSECTION
SIDEWALK, CORNER OR CROSSWALK CLOSURE
TRAFFIC CONTROL DEVICES
TEMPORARY CONCRETE BARRIER
GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

MIXTURE TABLE

HMA MIXTURE REQUIREMENTS			QUALITY MANAGEMENT PROGRAM (QMP)
OPERATION	MIXTURE TYPE	AIR VOIDS AT NDES	
PAVEMENT RESURFACING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL 9.5mm), (1 3/4")	4% @ 70 GYR.	OC/OA
QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (OC/OA):			

NOTES:

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/50 YD/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
3. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
4. QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (48 HOURS NOTIFICATION REQUIRED).
2. NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.
3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE LOCAL MUNICIPALITY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.
5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
8. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
9. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
10. ALL DAMAGE, DUE TO THE CONTRACTOR'S OPERATIONS, TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
12. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO FIELD VARIATION. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATION SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.
13. TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION WITHIN TWO HOURS FROM THE TIME OF NOTIFICATION.
14. ALL SAW CUTTING REQUIRED SHALL BE INCIDENTAL TO CORRESPONDING PAY ITEMS AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVALS.
15. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, IDOT'S AREA TRAFFIC FIELD ENGINEER, VIA E-MAIL AT WALTER.CZARNY@ILLINOIS.GOV, A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
16. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS INTO THE WATERWAY OR ONTO THE PAVEMENTS BELOW THE STRUCTURE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE ASSOCIATED PAY ITEMS.
17. THE CONTRACTOR SHALL CONTACT THE FOX WATERWAY AGENCY PRIOR TO STARTING CONSTRUCTION. THE CONTACT INFORMATION IS:
MR. ROB BOWMAN, FIELD SUPERINTENDENT FOR FOX WATERWAY
PHONE: 847-587-8540 EXT. 110
EMAIL: ROB@FOXWATERWAY.COM
18. THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A 404 PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE 404 PERMIT IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER USACE PERMITS.

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USER NAME = jpong	DESIGNED - JKP	REVISED -
	DRAWN - DMW	REVISED -
PLOT SCALE = 0.1667' / 1" =	CHECKED - SPF	REVISED -
PLOT DATE = 9/5/2018	DATE - 07-13-2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER NIPPERSINK AND
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	2
CONTRACT NO. 60R79				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				NHPP FUNDS		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY 0006 US 12	STRUCTURAL 0013 049-0167	STRUCTURAL 0013 049-0019
28100705	STONE DUMPED RIPRAP, CLASS A3	SQ YD	12		12	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	1,004		470	534
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	736		368	368
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	218		102	116
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1,402	1,402		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	495	495		
44000600	SIDEWALK REMOVAL	SQ FT	1,402	1,402		
44004250	PAVED SHOULDER REMOVAL	SQ YD	30	30		
48300615	PORTLAND CEMENT CONCRETE SHOULDERS 11 3/4"	SQ YD	30	30		
50102400	CONCRETE REMOVAL	CU YD	97.5		80.1	17.4
50157300	PROTECTIVE SHIELD	SQ YD	2,303		1,334	969
50300255	CONCRETE SUPERSTRUCTURE	CU YD	107.2		87.8	19.4
50300260	BRIDGE DECK GROOVING	SQ YD	6,083		5,277	806
50300300	PROTECTIVE COAT	SQ YD	1,729		1,381	348
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	6,960			6,960

* = SPECIALTY ITEMS

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 PLOT DATE = 8/16/2018

DESIGNED - JKP
 DRAWN - DMW
 CHECKED - SPF
 DATE - 07-13-2018

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER NIPPERSINK AND
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
SUMMARY OF QUANTITIES**

SCALE: SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	3
CONTRACT NO. 60R79			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				NHPP FUNDS		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY	STRUCTURAL	STRUCTURAL
				0006	0013	0013
				US 12	049-0167	049-0019
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	15,300		12,820	2,480
50800515	BAR SPLICERS	EACH	112		88	24
50900105	ALUMINUM RAILING, TYPE L	FOOT	95		95	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	390		260	130
60260100	INLETS TO BE ADJUSTED	EACH	2	2		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6		
67100100	MOBILIZATION	L SUM	1	1		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1,288	1,288		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	429	429		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	14,894	14,894		
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	4,245	4245		
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	630	630		
70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	74	74		
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	23,225	23,225		
70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	217	217		

* = SPECIALTY ITEMS

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PLOT DATE = 8/16/2018

DESIGNED - JKP
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CHECKED - SPF
DATE - 07-13-2018

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK AND
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
SUMMARY OF QUANTITIES

SCALE: SHEET 2 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	4
CONTRACT NO. 60R79				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				NHPP FUNDS		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY	STRUCTURAL	STRUCTURAL
				0006	0013	0013
				US 12	049-0167	049-0019
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,925	1,925		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,925	1,925		
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4		
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4		
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	73	73		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	10,554	10,554		
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	391	391		
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	480	480		
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	73	73		
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	27,065	27,065		
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	217	217		
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	225	225		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	128	128		
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	238	238		
* 78100300	REPLACEMENT REFLECTOR	EACH	241	241		

* = SPECIALTY ITEMS

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	DRAWN - DMW	REVISED -
PLOT SCALE = 0.1667' / 1"	CHECKED - SPF	REVISED -
PLOT DATE = 8/16/2018	DATE - 07-13-2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER NIPPERSINK AND
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
SUMMARY OF QUANTITIES**

SCALE: SHEET 3 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	5
				CONTRACT NO. 60R79
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				NHPP FUNDS		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY 0006 US 12	STRUCTURAL 0013 049-0167	STRUCTURAL 0013 049-0019
78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	312	312		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	128	128		
X0327638	STREAM GAUGE	EACH	2		1	1
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	5,856	5856		
* X2700003	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	480	480		
* X2700005	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 7"	FOOT	480	480		
X4402720	GUTTER REMOVAL (SPECIAL)	FOOT	115	115		
X6060052	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (SPECIAL)	FOOT	495	495		
X6062400	CONCRETE GUTTER (SPECIAL)	FOOT	115	115		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
X7010410	SPEED DISPLAY TRAILER	CAL MO	8	8		
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	56	56		
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	23,566	23,566		
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	241	241		
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	149		23	126

* = SPECIALTY ITEMS

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FILE NAME: 117B79-
184-001397.dgn



USER NAME = jpang
PLOT SCALE = 0.1667' / 1" = 1/6"
PLOT DATE = 8/16/2018

DESIGNED - JKP
DRAWN - DMW
CHECKED - SPF
DATE - 07-13-2018

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK
SUMMARY OF QUANTITIES

SCALE: SHEET 4 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	6
CONTRACT NO. 60R79				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				NHPP FUNDS		
				80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY 0006 US 12	STRUCTURAL 0013 049-0167	STRUCTURAL 0013 049-0019
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	5,515			5,515
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	6,126		5,331	795
Z0007400	BRIDGE SIDEWALK REPAIR (PARTIAL DEPTH)	SQ FT	12			12
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	6,126		5,331	795
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	294		213	81
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	11.0		7.4	3.6
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	127	127		
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		
∅ Z0076600	TRAINEES	HOUR	500	500		
∅ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500		

∅ 0042 * = SPECIALTY ITEMS

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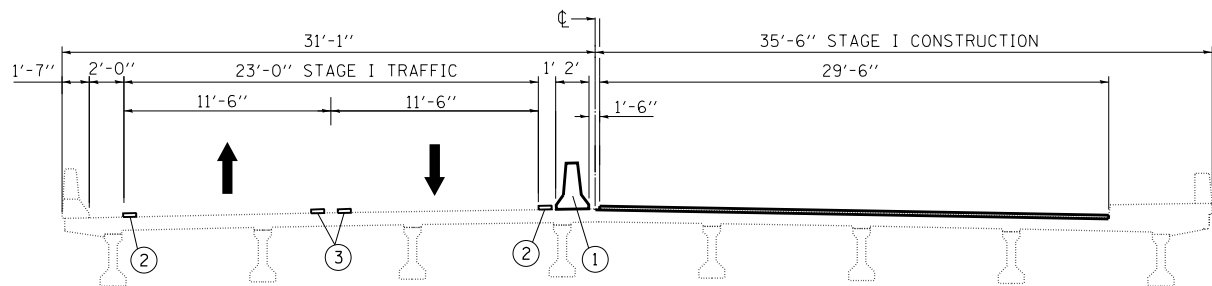


USER NAME = jpong	DESIGNED - JKP	REVISED -
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PLOT DATE = 8/16/2018	CHECKED - SPF	REVISED -
	DATE - 07-13-2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

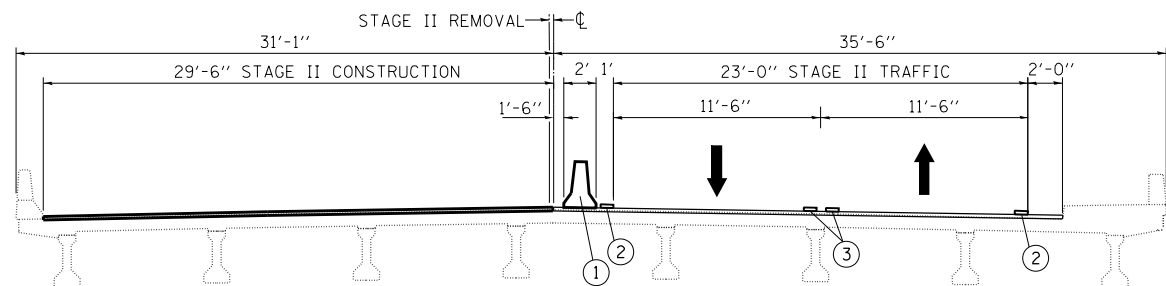
US ROUTE 12 OVER NIPPERSINK SUMMARY OF QUANTITIES		
SCALE:	SHEET 5 OF 5 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	7
CONTRACT NO. 60R79				
ILLINOIS FED. AID PROJECT				



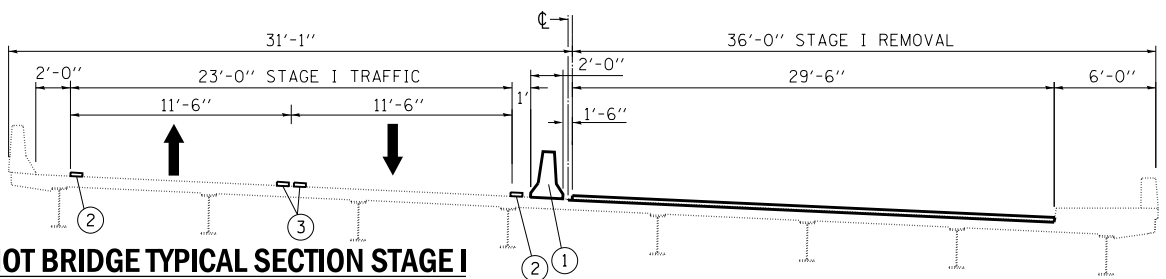
MOT BRIDGE TYPICAL SECTION STAGE I

STRUCTURE NO. 049-0167
 LOOKING SOUTH (STA. 426+90 TO STA. 436+90)



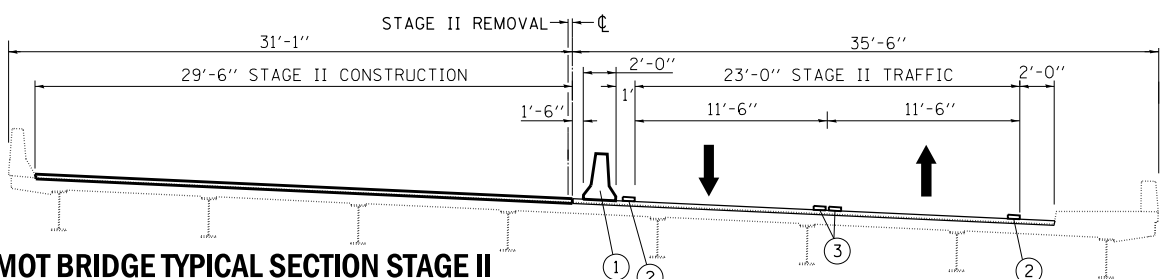
MOT BRIDGE TYPICAL SECTION STAGE II

STRUCTURE NO. 049-0167
 LOOKING SOUTH (STA. 426+90 TO STA. 436+90)



MOT BRIDGE TYPICAL SECTION STAGE I

STRUCTURE NO. 049-0019
 LOOKING SOUTH (STA. 445+10 TO STA. 12+15)



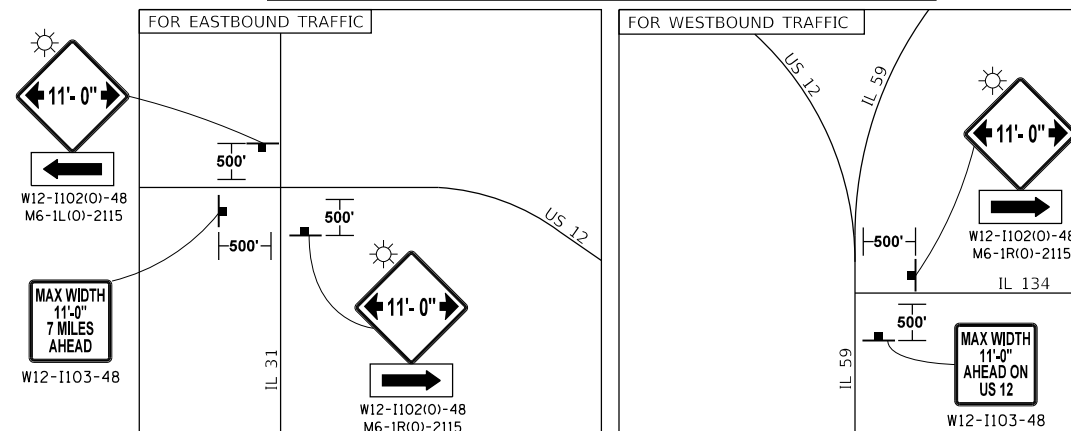
MOT BRIDGE TYPICAL SECTION STAGE II

STRUCTURE NO. 049-0019
 LOOKING SOUTH (STA. 445+10 TO STA. 12+15)

MOT LEGEND

- ① TEMPORARY CONCRETE BARRIER WALL
- ② PAVEMENT MARKING TAPE, TYPE IV, 4" (WHITE)
- ③ PAVEMENT MARKING TAPE, TYPE IV, 4" (YELLOW)

ADVANCED SIGNAGE AT INTERSECTION FOR MOT



SUGGESTED SEQUENCE OF CONSTRUCTION & MAINTENANCE OF TRAFFIC

STAGE I

1. INSTALL ADVANCED WIDTH RESTRICTION SIGNAGE. INSTALL STAGE I TRAFFIC CONTROL ALONG US ROUTE 12. SHIFT TRAFFIC EAST TO STAGE I TRAFFIC LANES.
2. PERFORM BRIDGE REPAIRS ON WEST SIDE SIDEWALK, PARAPETS, AND RAILING.
3. COMPLETE BRIDGE DECK PATCHING, JOINT REPLACEMENT, HMA MILLING, BUTT JOINTS, AND SCARIFYING AND CONCRETE OVERLAY.

STAGE II

1. RELOCATE STAGE I TRAFFIC CONTROL DEVICES TO STAGE II TRAFFIC CONTROL SETTING ALONG US ROUTE 12. SHIFT TRAFFIC EAST TO STAGE I TRAFFIC LANES.
2. PERFORM BRIDGE REPAIRS ON EAST SIDE SIDEWALK, PARAPETS, AND RAILING.
3. COMPLETE BRIDGE DECK PATCHING, JOINT REPLACEMENT, HMA MILLING, BUTT JOINTS, AND SCARIFYING AND CONCRETE OVERLAY.
4. REMOVE STAGE II TRAFFIC CONTROL DEVICES. SHIFT TRAFFIC BACK TO NORMAL LANES ALONG U.S. ROUTE 12.
5. COMPLETE PERMANENT PAVEMENT MARKING ALONG US ROUTE 12 UTILIZING DAYTIME LANE CLOSURES.

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED IN THE HIGHWAY STANDARDS AS SHOWN IN THE INDEX OF SHEETS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL) UNLESS OTHERWISE INDICATED WITHIN THESE GENERAL NOTES, PLANS OR SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR MAINTENANCE OF TRAFFIC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING LABOR, SIGNS AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
4. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING THE WORK.
5. IN ADVANCE OF ALL STAGE CHANGES ON US ROUTE 12, THE CONTRACTOR SHALL PLACE ONE (1) PORTABLE CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT ALONG US ROUTE 12 AS DIRECTED AT A LOCATION DESIGNATED BY THE ENGINEER TO INFORM MOTORISTS OF THE UPCOMING STAGE CHANGE ON US ROUTE 12. THE MESSAGE SHALL BE APPROVED BY THE ENGINEER.
6. ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
7. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL PLAN.
8. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE MAINTENANCE OF TRAFFIC PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER. ANY CHANGES TO THE MAINTENANCE OF TRAFFIC SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTING ANY CHANGES.
9. TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROMPTLY RESPOND AT THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
10. THE ENGINEER SHALL BE INFORMED A MINIMUM OF 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLAN.
11. ALL TEMPORARY PAVEMENT MARKINGS SHOWING DETERIORATION AFTER SEVEN (7) DAYS OF SERVICE SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. ALL MARKINGS THAT REQUIRE REPLACEMENT PRIOR TO SEVEN (7) DAYS OF SERVICE SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
12. WHEN THEY ARE NO LONGER NECESSARY, ALL TRAFFIC CONTROL DEVICES SHALL IMMEDIATELY BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC. WHEN A SIGN IS COVERED, ITS POST SHALL HAVE A REFLECTIVE 3" X 6" DELINEATOR INSTALLED. THE COST OF THE DELINEATOR IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
13. TEMPORARY CONCRETE BARRIERS AND TEMPORARY IMPACT ATTENUATORS SHALL BE PLACED AS SHOWN IN THE PLANS. FURNISHING, INSTALLING AND RELOCATING TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS SHALL BE IN ACCORDANCE WITH IDOT SPECIAL PROVISIONS, IDOT HIGHWAY STANDARDS, STANDARD SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER.
14. IMMEDIATELY AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL PERMANENT PAVEMENT MARKINGS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES THAT WERE COVERED, REMOVED, DAMAGED OR OTHERWISE AFFECTED BY CONSTRUCTION.

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CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 184-001397

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 PLOT DATE = 9/4/2018

DESIGNED - JKP
 DRAWN - DMW
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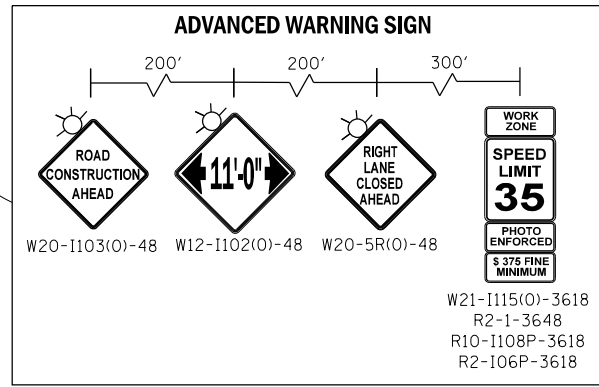
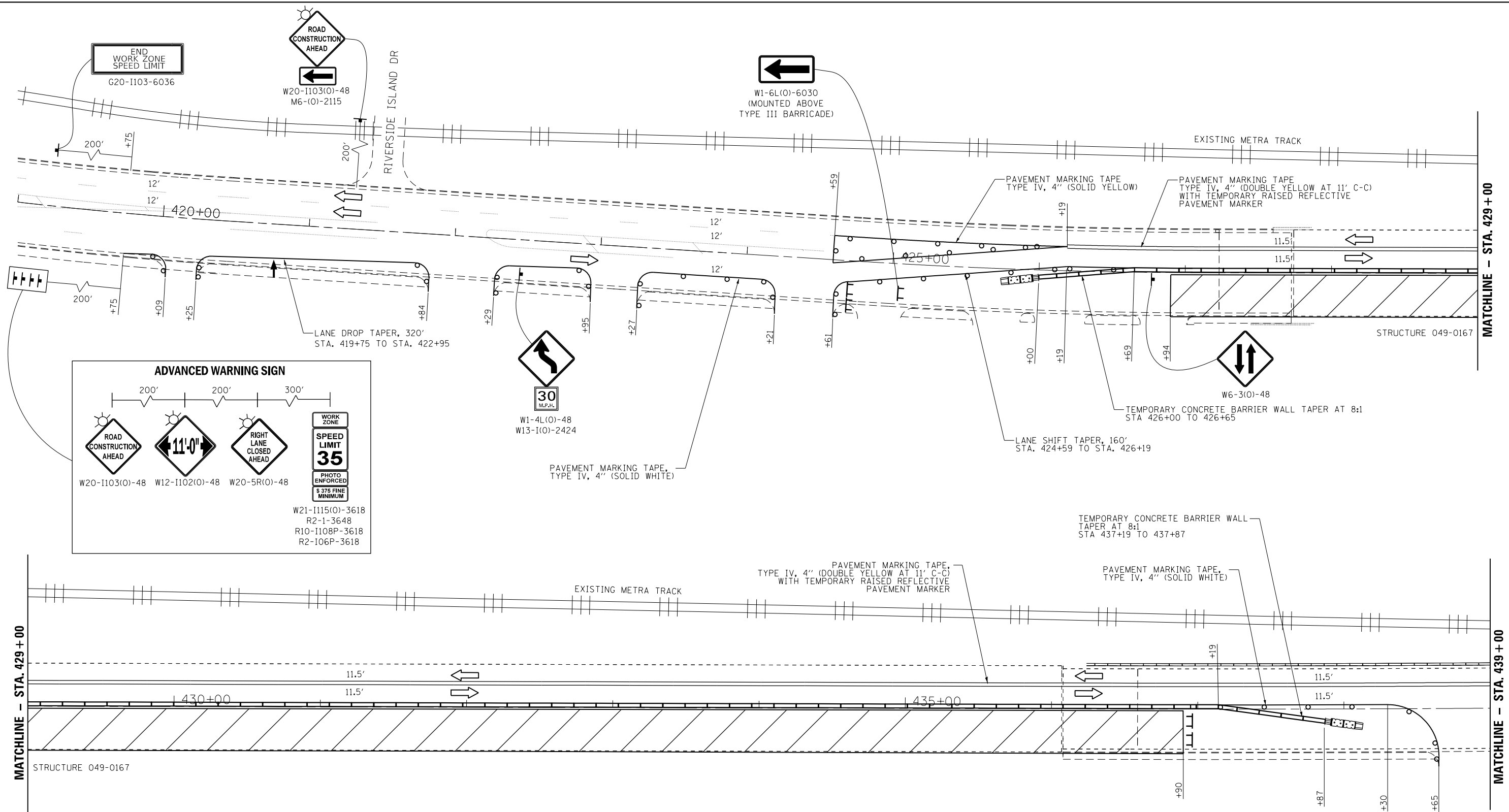
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**US ROUTE 12 OVER NIPPERSINK AND
 US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
 MAINTENANCE OF TRAFFIC - GENERAL NOTES**

SCALE: SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	8
CONTRACT NO. 60R79				
ILLINOIS FED. AID PROJECT				



LEGEND

- WORK ZONE
- ARROW BOARD
- TEMPORARY CONCRETE BARRIER
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- TYPE III BARRICADE
- DIRECTION OF TRAFFIC
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN LIGHT @ 20' C-C
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW, TEST LEVEL 3)
- DRUM AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING IN CURVES/RADII



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CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
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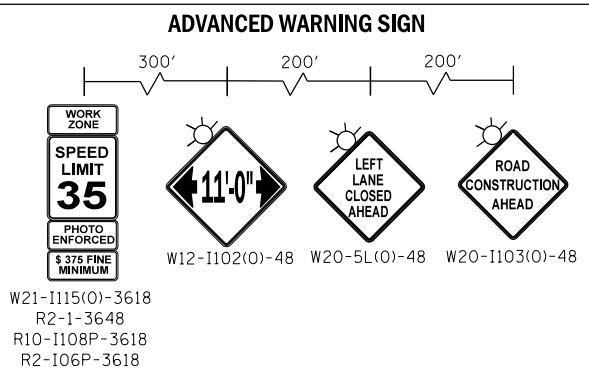
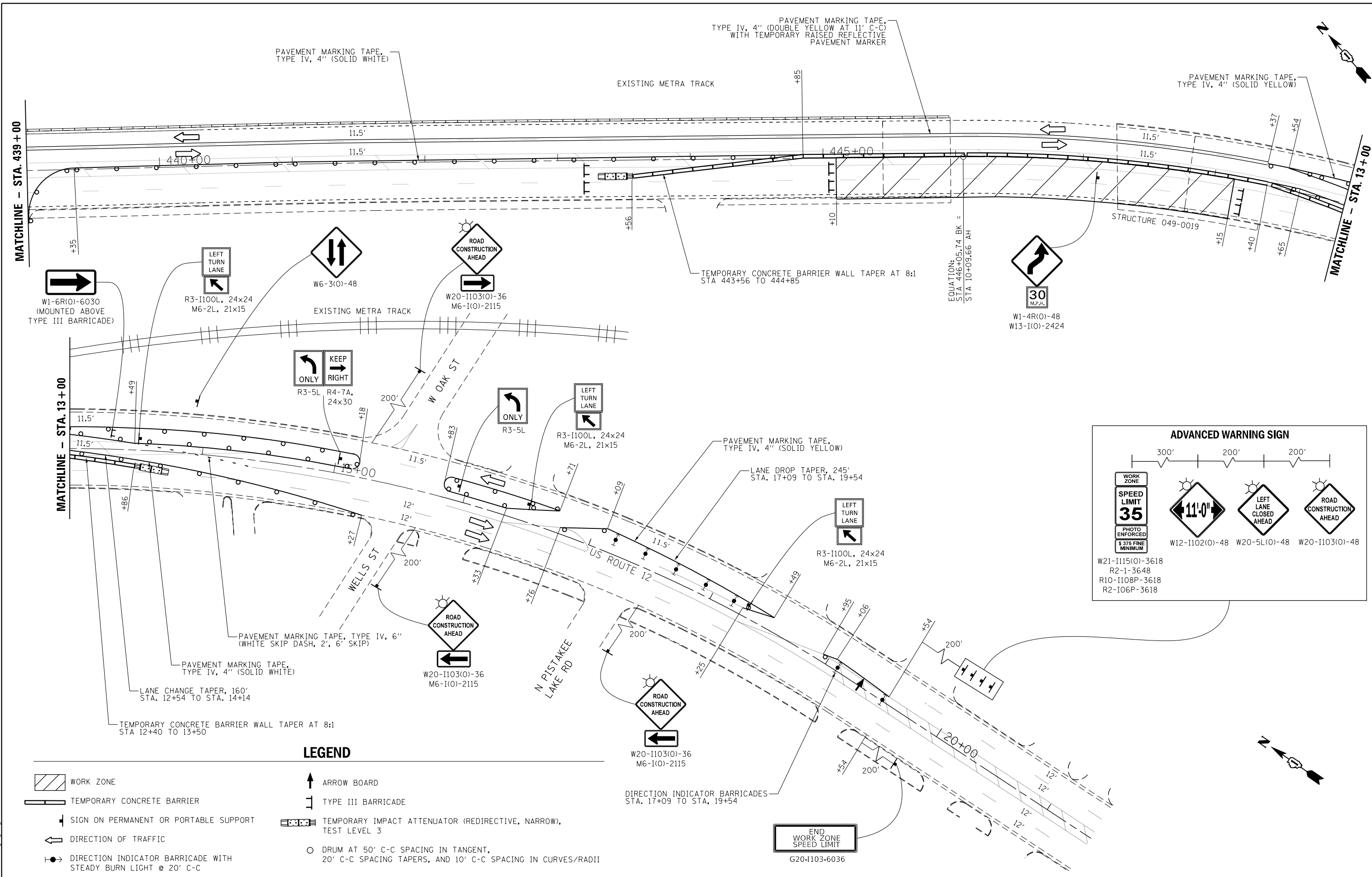
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK AND
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
MAINTENANCE OF TRAFFIC - STAGE 1

SCALE: 1"=50' SHEET 2 OF 5 SHEETS STA. 420+00 TO STA. 440+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	9
CONTRACT NO. 60R79				
ILLINOIS FED. AID PROJECT				



LEGEND

WORK ZONE	ARROW BOARD
TEMPORARY CONCRETE BARRIER	TYPE III BARRICADE
SIGN ON PERMANENT OR PORTABLE SUPPORT	TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
DIRECTION OF TRAFFIC	DRUM AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII
DIRECTION INDICATOR BARRICADE WITH STEADY BURN LIGHT @ 20' C-C	

CHASTAIN & ASSOCIATES LLC
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184-001397

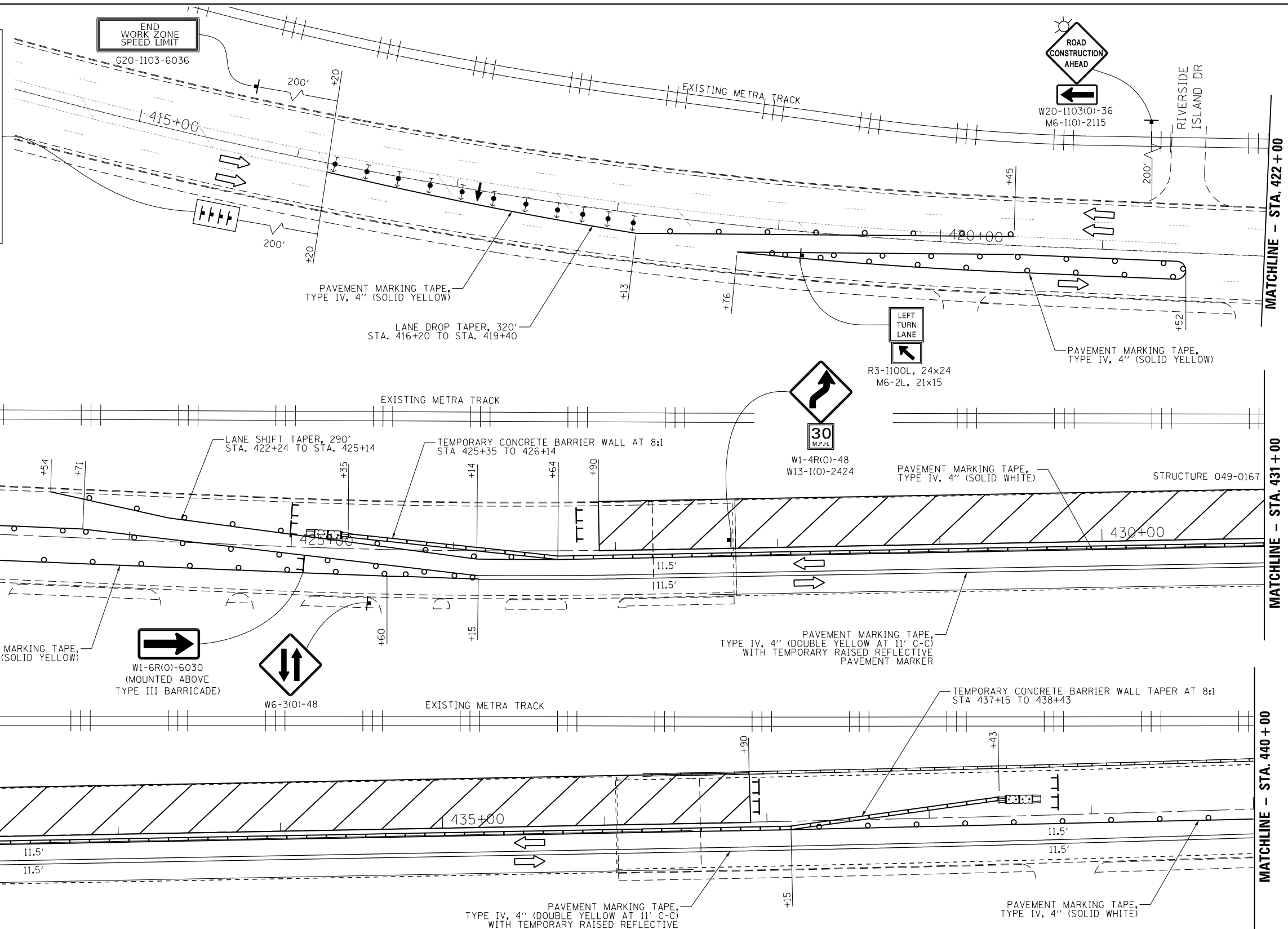
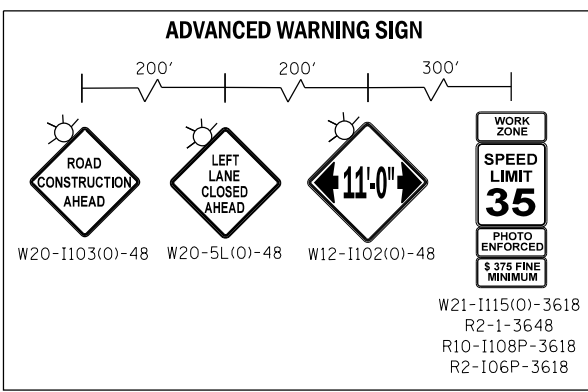
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK AND US ROUTE 12 OVER PISTAKEE LAKE CHANNEL MAINTENANCE OF TRAFFIC - STAGE 1
SCALE: 1"=50' SHEET 3 OF 5 SHEETS STA. 440+00 TO STA. 21+00

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 10
CONTRACT NO. 60R79				ILLINOIS FED. AID PROJECT

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LEGEND

- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- DIRECTION OF TRAFFIC
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN LIGHT @ 20' C-C
- ARROW BOARD
- TYPE III BARRICADE
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- DRUM AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING IN CURVES/RADII



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184-001397

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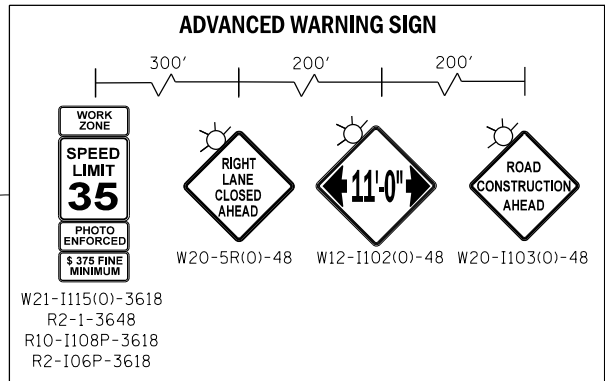
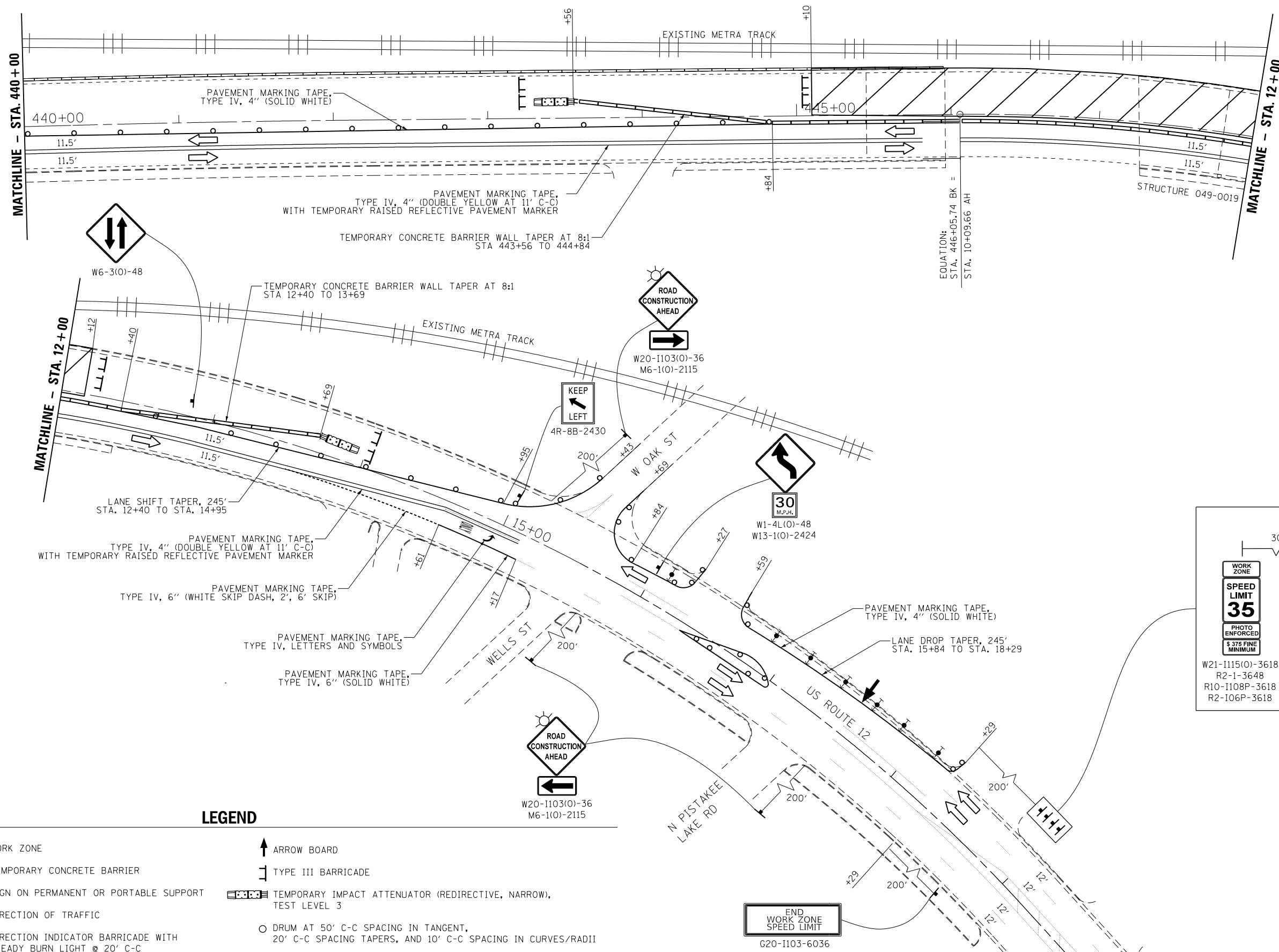
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER NIPPERSINK AND
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
MAINTENANCE OF TRAFFIC - STAGE 2**

SCALE: 1"=50' SHEET 4 OF 5 SHEETS STA. 422+73 TO STA. 440+00

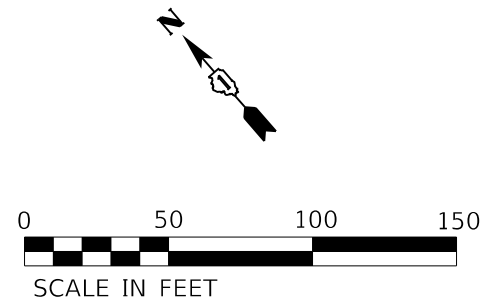
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	11
CONTRACT NO. 60R79				

ILLINOIS FED. AID PROJECT



LEGEND

- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- DIRECTION OF TRAFFIC
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN LIGHT @ 20' C-C
- ARROW BOARD
- TYPE III BARRICADE
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE, NARROW), TEST LEVEL 3
- DRUM AT 50' C-C SPACING IN TANGENT, 20' C-C SPACING TAPERS, AND 10' C-C SPACING IN CURVES/RADII



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CONSULTING ENGINEERS
184-001397

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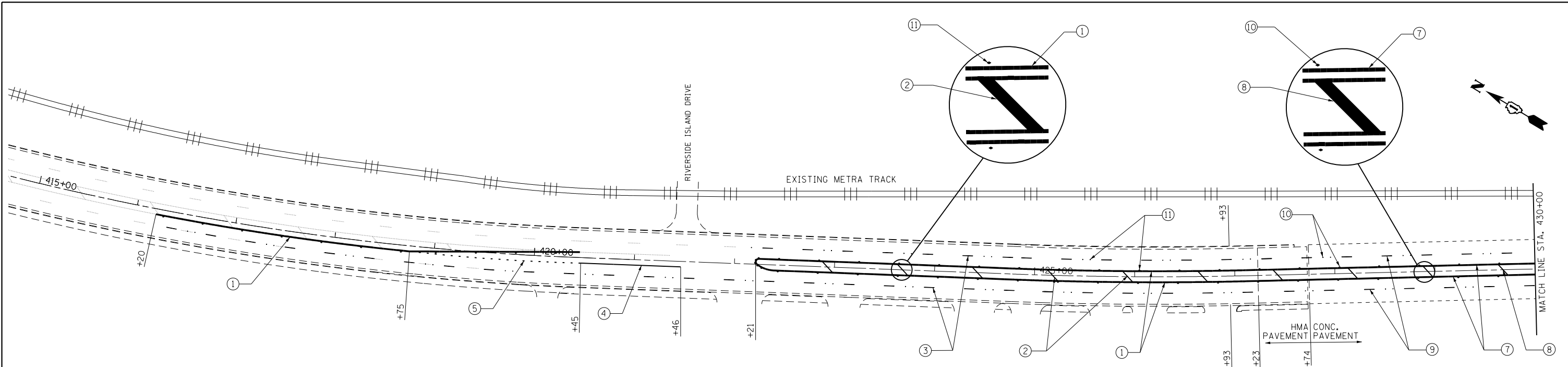
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**US ROUTE 12 OVER NIPPERSINK AND
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
MAINTENANCE OF TRAFFIC - STAGE 2**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	12
CONTRACT NO. 60R79				

SCALE: 1"=50' SHEET 5 OF 5 SHEETS STA. 440+00 TO STA. 18+29

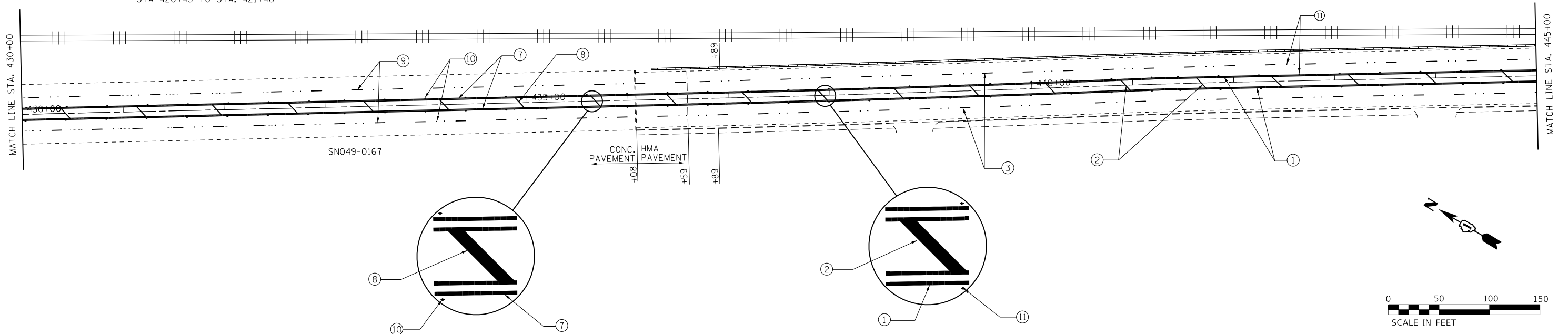
ILLINOIS FED. AID PROJECT



PAVEMENT MARKING LEGEND

- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW)
STA. 416+20 TO STA. 421+45
STA. 422+21 TO STA. 427+74
STA. 436+08 TO STA. 445+00
- ② THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL)
SPACED AT 75' C-C WITH A MINIMUM OF 5
STA. 422+21 TO STA. 427+74
STA. 436+08 TO STA. 445+00
- ③ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SKIP DASH - 10', 30' SKIP)
STA. 422+21 TO STA. 427+74 (NB)
STA. 436+08 TO STA. 445+00 (NB)
STA. 416+20 TO STA. 427+74 (SB)
STA. 436+08 TO STA. 445+00 (SB)
- ④ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (SOLID WHITE)
STA. 420+45 TO STA. 421+46
- ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SKIP DASH - 2', 6' SKIP)
STA. 418+75 TO STA. 420+45
- ⑥ THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
- ⑦ MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW) (PCC PAVEMENT ONLY)
STA. 427+74 TO STA. 436+08
- ⑧ MODIFIED URETHANE PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL) SPACED AT 75' C-C
(PCC PAVEMENT ONLY)
STA. 427+74 TO STA. 436+08
- ⑨ PREFORMED PLASTIC PAVEMENT MARKING TYPE B - INLAID - CONTRAST - LINE 7"
WITH 8" GROOVING (WHITE SKIP DASH - 10', 30' SKIP)
(PCC PAVEMENT ONLY)
STA. 427+74 TO STA. 436+08
- ⑩ RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL)
RAISED REFLECTIVE PAVEMENT MARKER (2-WAY AMBER)
STA. 426+93 TO STA. 436+89
- ⑪ REPLACEMENT REFLECTOR (1-WAY CRYSTAL)
STA. 422+21 TO STA. 426+93 (NB)
STA. 436+89 TO STA. 445+00 (NB)
STA. 416+20 TO STA. 426+93 (SB)
STA. 436+89 TO STA. 445+00 (SB)
REPLACEMENT REFLECTOR (2-WAY AMBER)
STA. 416+20 TO STA. 420+45
STA. 422+21 TO STA. 426+93
STA. 436+89 TO STA. 445+00

NOTES:
1. REFER TO DISTRICT 1 DETAILS TC-11 AND TC-13 FOR ADDITIONAL INFORMATION.



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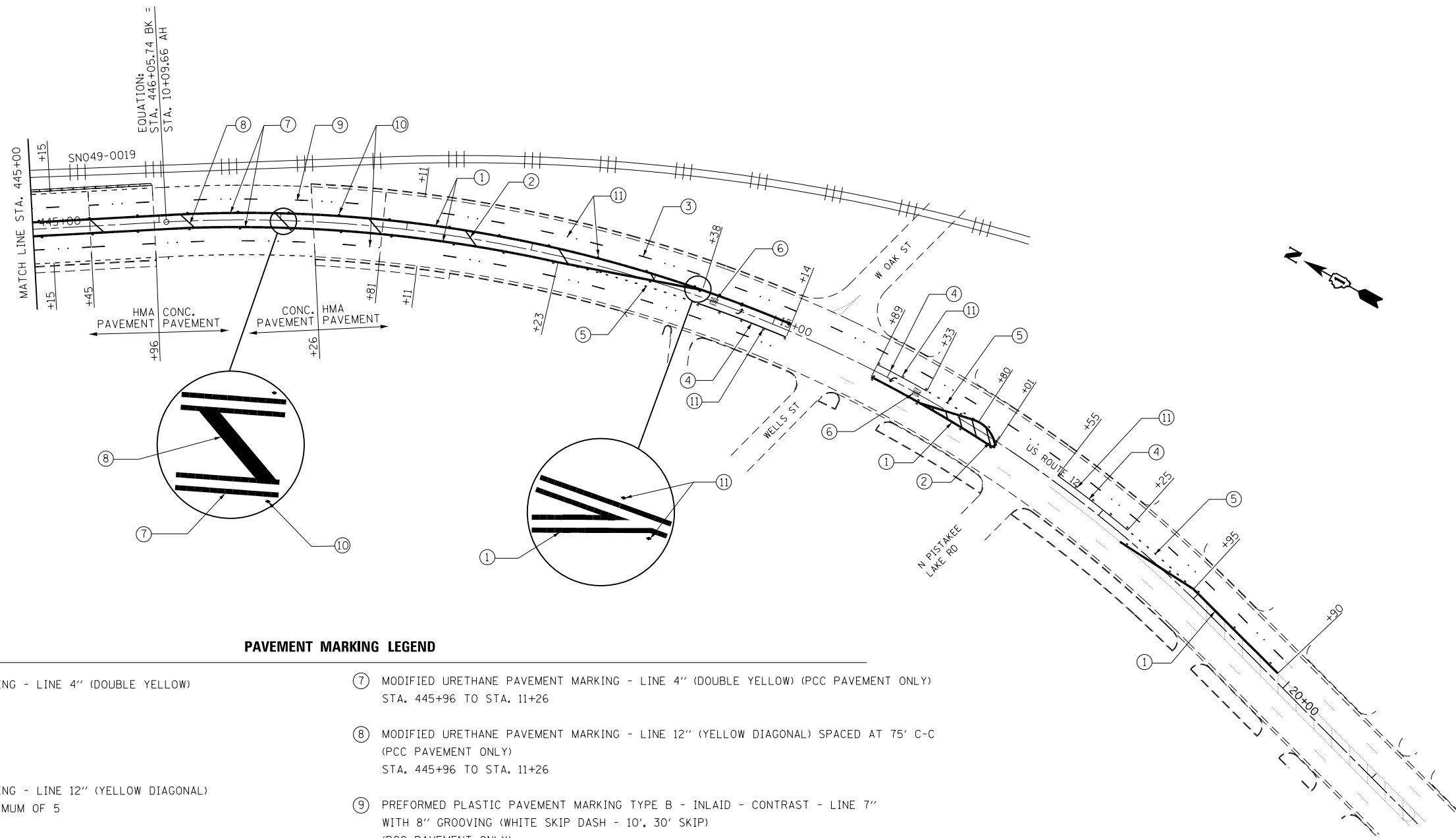
CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

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PLOT DATE = 8/13/2018	CHECKED - SPF	REVISED -
	DATE - 07-13-2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER NIPPERSINK AND
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
PAVEMENT MARKING PLAN**
SCALE: 1"=50' SHEET 1 OF 2 SHEETS STA. 420+00 TO STA. 445+00

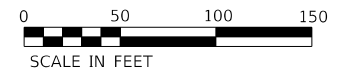
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	13
CONTRACT NO. 60R79				
ILLINOIS FED. AID PROJECT				



PAVEMENT MARKING LEGEND

- | | |
|---|--|
| <p>① THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW)
 STA. 445+00 TO STA. 445+96
 STA. 11+26 TO STA. 15+14
 STA. 15+89 TO STA. 17+01
 STA. 18+25 TO STA. 19+90</p> <p>② THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL)
 SPACED AT 75' C-C WITH A MINIMUM OF 5
 STA. 445+00 TO STA. 445+96
 STA. 11+26 TO STA. 14+38
 STA. 16+33 TO STA. 17+01</p> <p>③ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SKIP DASH - 10', 30' SKIP)
 STA. 445+00 TO STA. 445+96 (NB)
 STA. 11+26 TO STA. 19+90 (NB)
 STA. 445+00 TO STA. 445+96 (SB)
 STA. 11+26 TO STA. 15+14 (SB)</p> <p>④ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (SOLID WHITE)
 STA. 14+38 TO STA. 15+14
 STA. 15+89 TO STA. 16+33
 STA. 17+55 TO STA. 18+25</p> <p>⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SKIP DASH - 2', 6' SKIP)
 STA. 13+23 TO STA. 14+38
 STA. 16+33 TO STA. 16+80
 STA. 18+25 TO STA. 18+95</p> <p>⑥ THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
 STA. 14+40
 STA. 16+20</p> | <p>⑦ MODIFIED URETHANE PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW) (PCC PAVEMENT ONLY)
 STA. 445+96 TO STA. 11+26</p> <p>⑧ MODIFIED URETHANE PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL) SPACED AT 75' C-C (PCC PAVEMENT ONLY)
 STA. 445+96 TO STA. 11+26</p> <p>⑨ PREFORMED PLASTIC PAVEMENT MARKING TYPE B - INLAID - CONTRAST - LINE 7" WITH 8" GROOVING (WHITE SKIP DASH - 10', 30' SKIP) (PCC PAVEMENT ONLY)
 STA. 445+96 TO STA. 11+26</p> <p>⑩ RAISED REFLECTIVE PAVEMENT MARKER (1-WAY CRYSTAL)
 RAISED REFLECTIVE PAVEMENT MARKER (2-WAY AMBER)
 STA. 445+15 TO STA. 12+11</p> <p>⑪ REPLACEMENT REFLECTOR (1-WAY CRYSTAL)
 STA. 445+00 TO STA. 445+15 (NB)
 STA. 12+11 TO STA. 19+90 (NB)
 STA. 445+00 TO STA. 445+15 (SB)
 STA. 12+11 TO STA. 15+14 (SB)
 STA. 14+38 TO STA. 15+14 (LEFT TURN)
 STA. 15+89 TO STA. 16+33 (LEFT TURN)
 STA. 17+55 TO STA. 18+25 (LEFT TURN)
 REPLACEMENT REFLECTOR (2-WAY AMBER)
 STA. 445+00 TO STA. 445+15
 STA. 12+11 TO STA. 15+14
 STA. 15+89 TO STA. 17+01
 STA. 18+25 TO STA. 19+90</p> |
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NOTES:
 1. REFER TO DISTRICT 1 DETAILS TC-11 AND TC-13 FOR ADDITIONAL INFORMATION.



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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER NIPPERSINK AND
 US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
 PAVEMENT MARKING PLAN**

SCALE: 1"=50' SHEET 2 OF 2 SHEETS STA. 445+00 TO STA. 21+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	14
CONTRACT NO. 60R79				
ILLINOIS FED. AID PROJECT				

BENCH MARK:

TBM RM-11: Elev. 748.371 Top of bolt in railroad tie on the south side of the railroad track located on the northwest corner of the Milwaukee Road railroad bridge over the Northwest channel of Pistakee Lake. Station 431+44.00' 75' Left

EXISTING STRUCTURE:

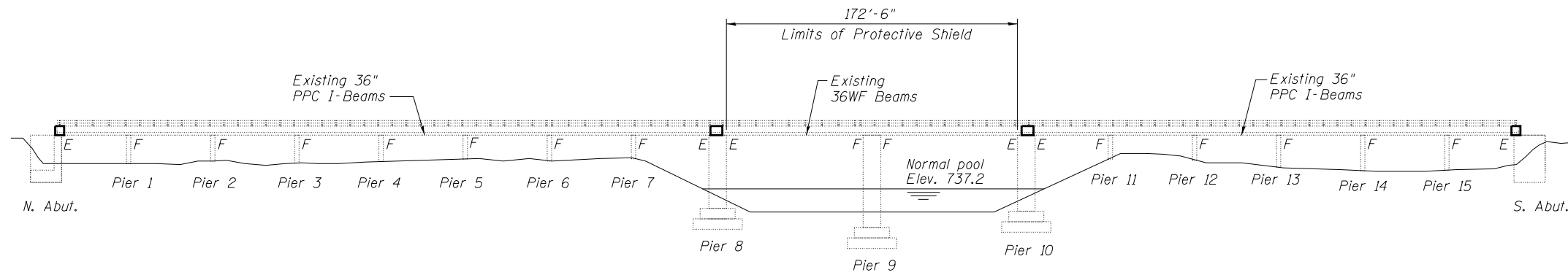
The existing Bridge has an overall length of 837 Ft. The superstructure consists of a reinforced concrete deck supported by 15 approach spans, each 40 or 48 Ft. long and 2 main spans each 88 Ft. long. The approach spans consist of 36" PPC I beams while the main spans consists of composite 36" steel wide flange beams. The superstructure is supported by 15 reinforced concrete piers and two reinforced concrete abutments all on metal shell piles.

SCOPE OF WORK:

1. Remove and replace deck joints with preformed joint strip seal.
2. Repair bridge deck slab, sidewalk, parapets, and railing.
3. Bridge deck scarification 3/4".
4. Place bridge deck latex concrete overlay, 2 1/2"
5. Apply protective coat to parapet and top of deck new concrete but does not include the latex concrete overlay.
6. Repair substructure.
7. Overlay approaches.

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 General Notes and Bill of Material
- 3 Stage Construction Details
- 4 This Page Left Blank Intentionally
- 5 Bridge Deck Repairs
- 6 Bridge Deck Repairs
- 7 Parapet Replacement Details
- 8 Joint Replacement (North Abutment)
- 9 Joint Replacement (South Abutment)
- 10 Joint Replacement (Pier #8)
- 11 Joint Replacement (Pier #10)
- 12 Preformed Joint Strip Seal - Sidewalk
- 13 Preformed Joint Strip Seal - Sidewalk
- 14 Preformed Joint Strip Seal - Sidewalk
- 15 Substructure Repairs
- 16 Bar Splicer Assembly and Mechanical Splicer Details
- 17 Miscellaneous Details



ELEVATION

DESIGN STRESSES

EXISTING STRUCTURE

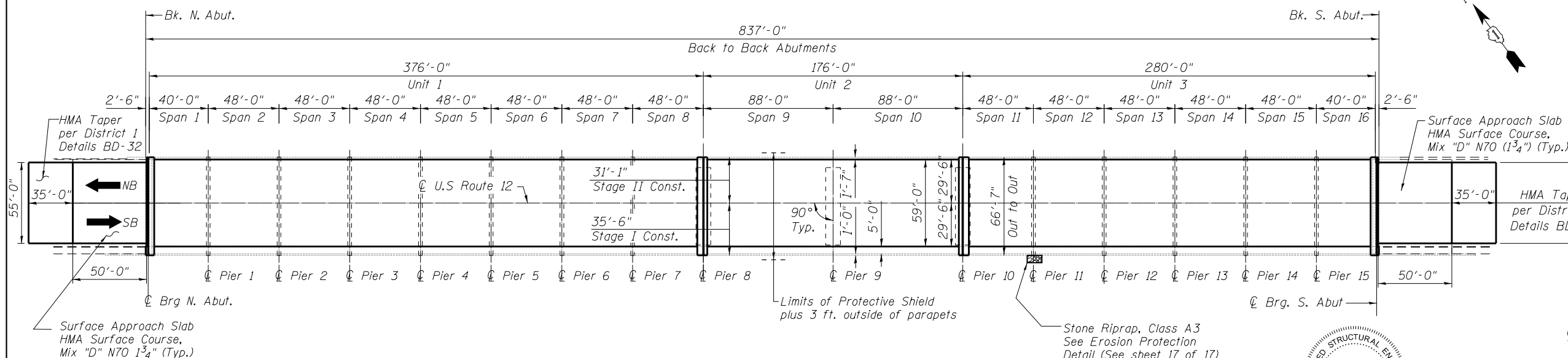
- f'c = 3,500 psi (Reinforced Concrete)
- f'c = 6,000 psi (Prestressed Concrete)
- fy = 60,000 psi (Reinforcement)
- fy = 36,000 psi (M-183 Structural Steel)
- fy = 50,000 psi (M-223 Grade 50 Structural Steel)

DESIGN SPECIFICATIONS

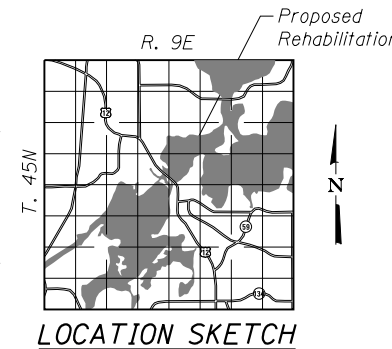
(New Construction)
2002 AASHTO Standard Specifications,
17th Edition

LOADING HS 20-44

Original Construction

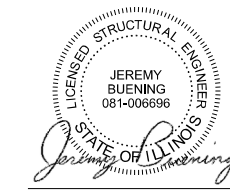


PLAN



LOCATION SKETCH

**GENERAL PLAN AND ELEVATION
US ROUTE 12 OVER
NIPPERSINK LAKE CHANNEL
FAP RTE 334 SEC 117B-BR-1
LAKE COUNTY
STATION 432+39.00
STRUCTURE NO. 049-0167**



Jeremy Buening, P.E., S.E.
License Expires 11/30/18
Date: 8/7/2018

MODEL: D:\p\15... FILE: 1049-0167-60R79-001-GPE.dgn



USER NAME = jpong	DESIGNED - BCG	REVISED -
PLOT SCALE = 79.9997' / in.	DRAWN - DMW	REVISED -
PLOT DATE = 9/5/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL GENERAL PLAN AND ELEVATION	
SCALE:	SHEET 1 OF 17 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	15
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The CONTRACTOR shall field verify existing dimensions and details affecting new construction 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 scope of the work, however the CONTRACTOR will be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement bars designated (E) shall be epoxy coated.

Joint openings shall be adjusted according to Art. 520.04. in the Standard Specs. when the deck is poured at an ambient temperature other than 50°F.

No field welding is permitted except as specified in the contract documents.

Expansion joints shall be fabricated and installed according to the Manufacturer's recommendations and as approved by the Engineer.

Expansion joints shall be fabricated to conform to the existing cross slopes of the bridge.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Bituminous Materials (Tack Coat)	Pound	470	-	470
Hot-Mix Asphalt Surface Removal - Butt Joint	Sq. Yd.	368	-	368
* Hot-Mix Asphalt Surface Course, Mix "D", N70, (1 ³ / ₄ "	Ton	102	-	102
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	7.4	-	7.4
Concrete Removal	Cu. Yd.	80.1	-	80.1
Concrete Superstructure	Cu. Yd.	87.8	-	87.8
Bridge Deck Grooving	Sq. Yd.	5277	-	5277
Protective Coat	Sq. Yd.	1381	-	1381
Protective Shield	Sq. Yd.	1334	-	1334
Reinforcement Bars, Epoxy Coated	Pound	12820	-	12820
Preformed Joint Strip Seal	Foot	260	-	260
Bridge Deck Latex Concrete Overlay, 2 ¹ / ₂ "	Sq. Yd.	5331	-	5331
Bridge Deck Scarification ³ / ₄ "	Sq. Yd.	5331	-	5331
Structural Repair of Concrete (Depth Equal To or Less Than 5 Inches)	Sq. Ft.	65	148	213
Stone Dumped Riprap, Class A3	Sq. Yd.	12	-	12
Bar Splicers	Each	88	-	88
Stream Gauge	Each	-	1	1
Aluminum Railing, Type L	Foot	95	-	95
Approach Slab Repair (Full Depth)	Sq. Yd.	23	-	23

* The unit weight used to calculate all HMA surface mixture quantities 112 LBS/SQ YD/IN

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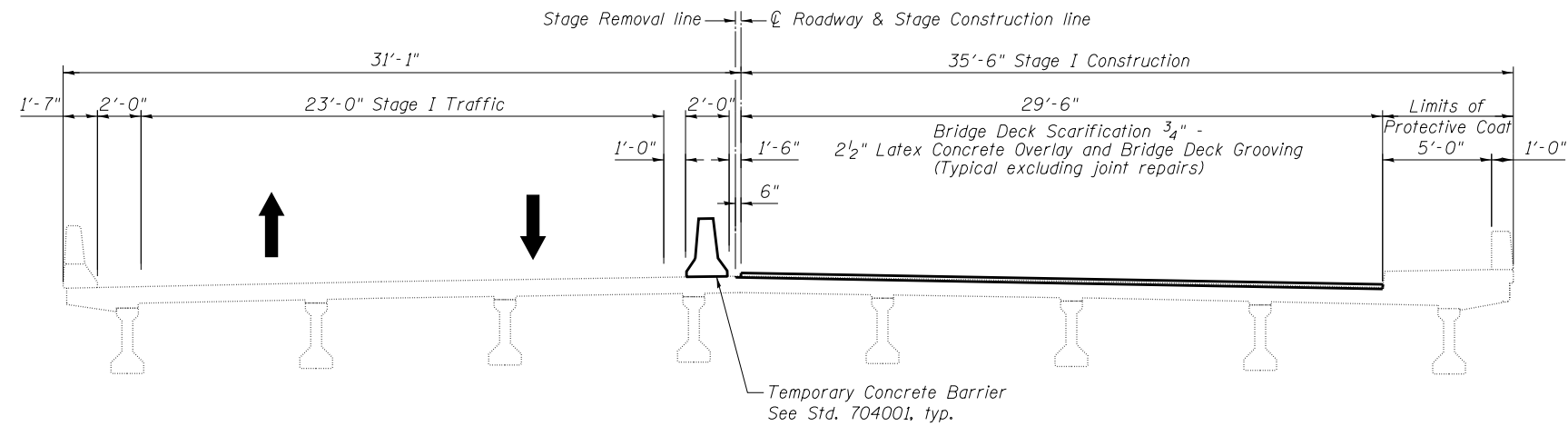
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PLOT DATE = 8/16/2018	DATE - 07-13-2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
GENERAL NOTES AND BILL OF MATERIAL**

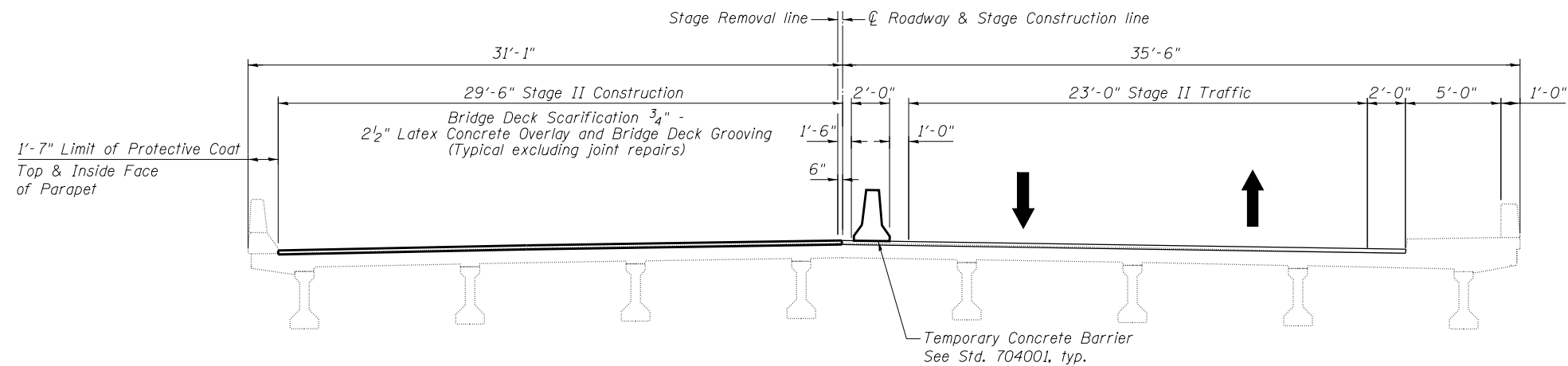
SCALE: SHEET 2 OF 17 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	16
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



STAGE I REMOVAL & CONSTRUCTION

(Looking South)



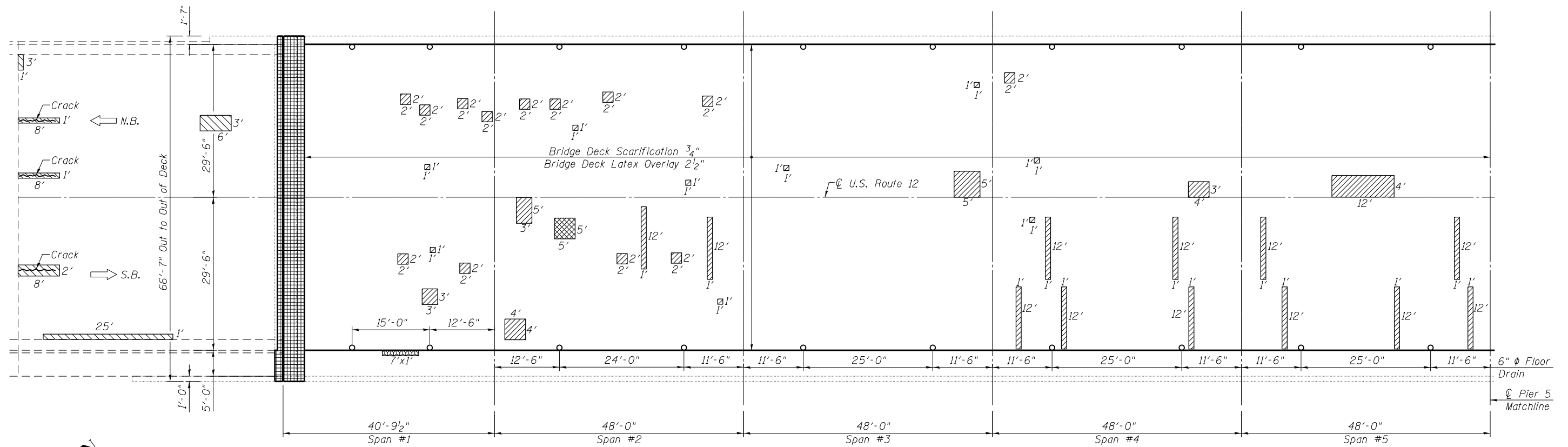
STAGE II REMOVAL & CONSTRUCTION

(Looking South)

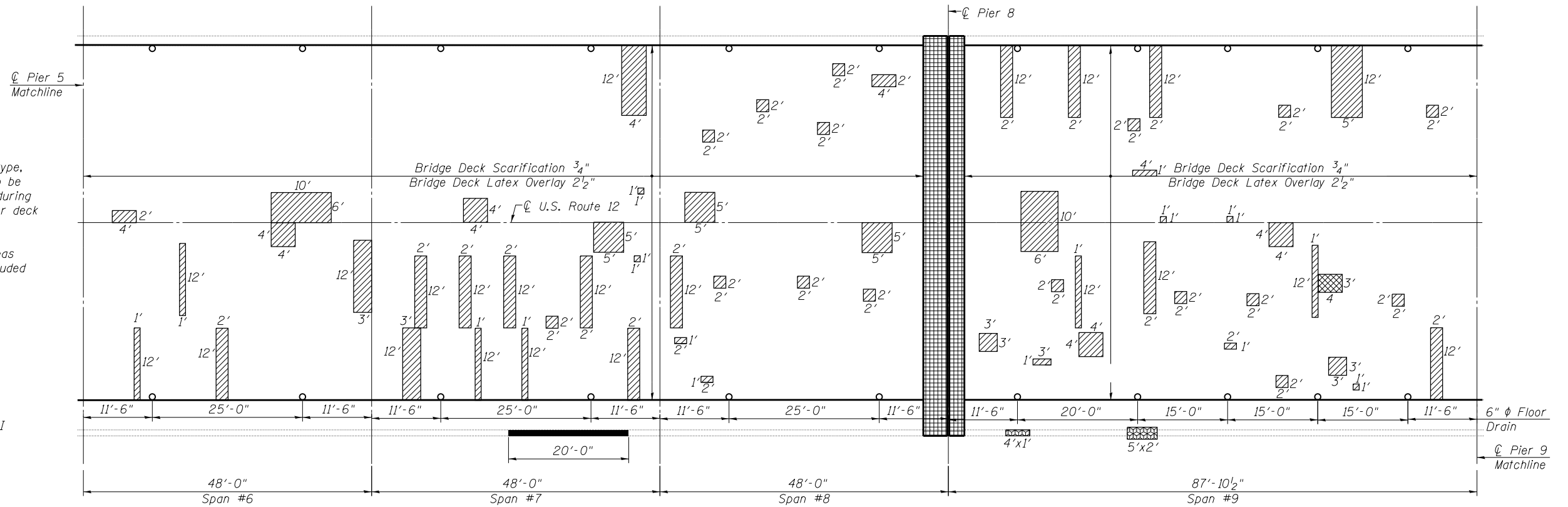
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	DRAWN - DMW	REVISED -
PLOT SCALE = 8.0000' / in.	CHECKED - JMB	REVISED -
PLOT DATE = 8/9/2018	DATE - 07-13-2018	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	17
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



PARTIAL PLAN
(Spans 1 thru 5)



PARTIAL PLAN
(Spans 6 thru 9)

NOTES:

Areas of deck repairs are estimated. Actual type, location, and dimensions of deck repairs are to be determined and documented by the ENGINEER during construction. ENGINEER shall sound deck after deck scarification.

Removal of the existing aluminum railing, in areas requiring railing replacement, is considered included with Aluminum Railing, Type L.

LEGEND

- Approach Slab Repair (Full Depth)
- Deck Slab Repair (Full Depth), Type II
- Deck Slab Repair (Partial Depth)
- Area of Joint Repair
- Structural Repair of Concrete (Depth Equal to or less than 5")
- Concrete Superstructure and Conc. Removal
- Aluminum Railing Type L, Full Removal and Replacement

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = jpong
DESIGNED - BCG
DRAWN - DMW
CHECKED - JMB
DATE - 07-13-2018
PLOT SCALE = 1/8" = 1'-0"
PLOT DATE = 8/15/2018

DESIGNED - BCG
DRAWN - DMW
CHECKED - JMB
DATE - 07-13-2018

REVISED -
REVISED -
REVISED -
REVISED -

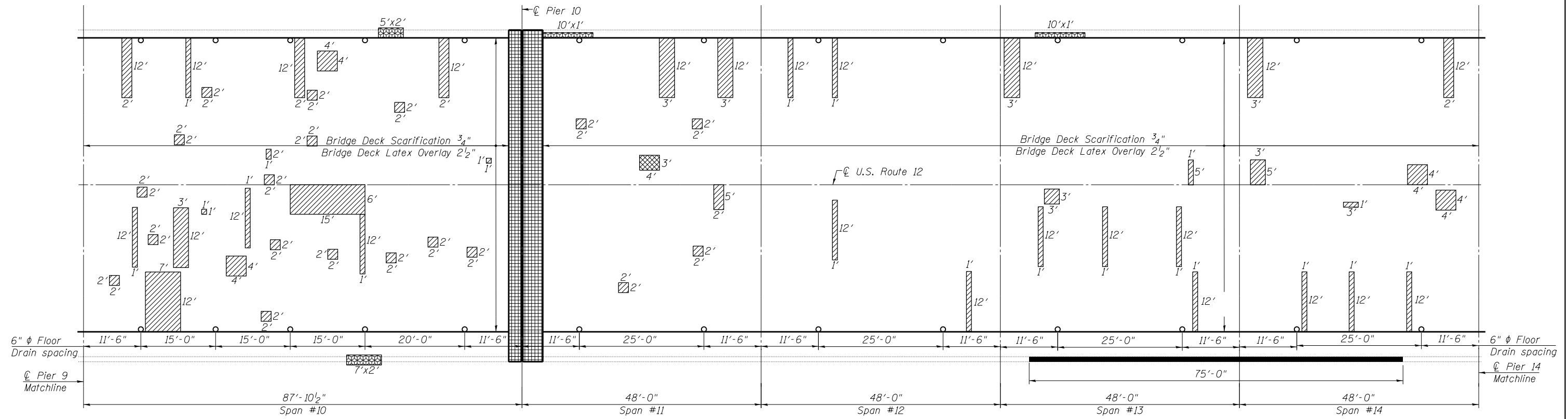
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
BRIDGE DECK REPAIRS

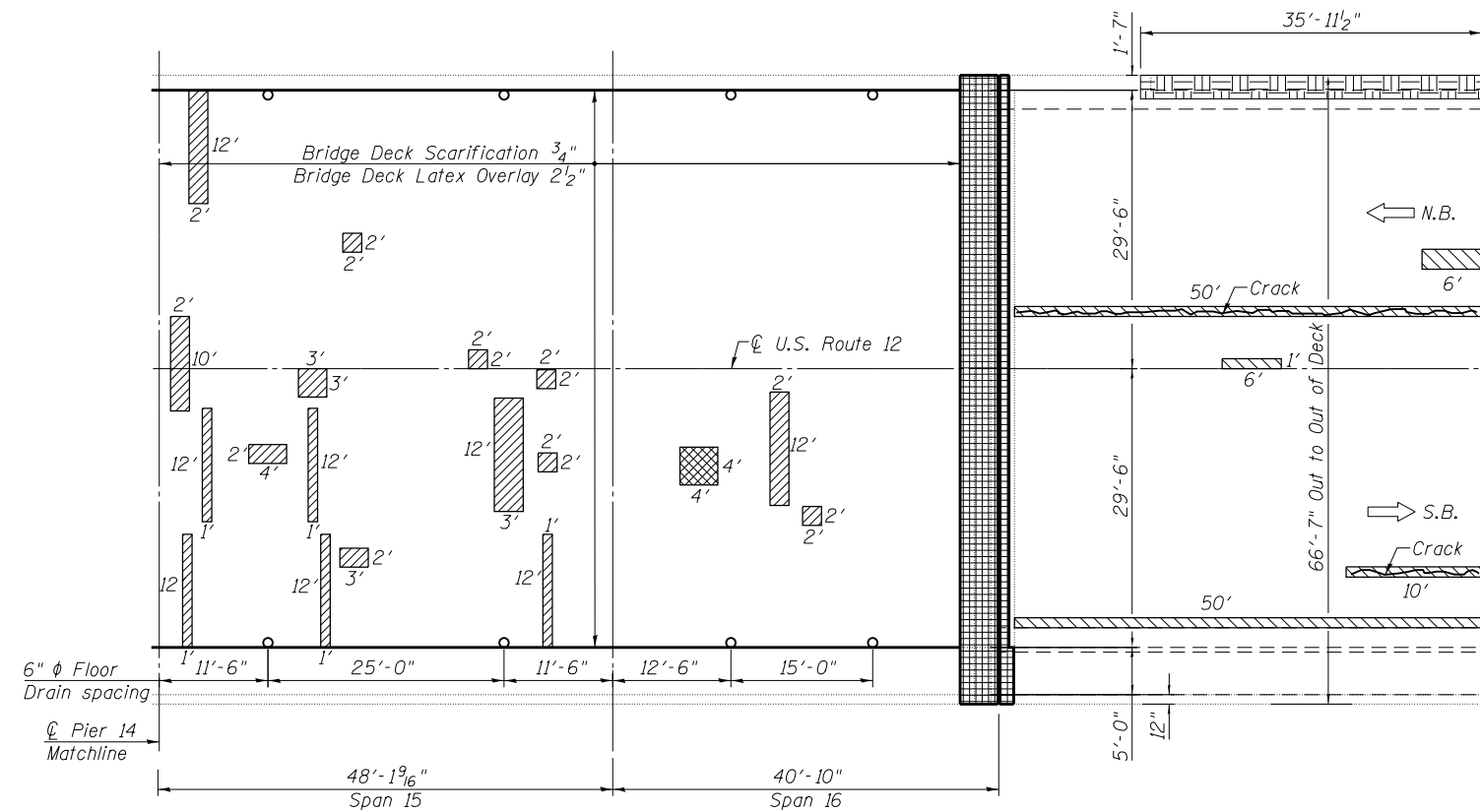
SCALE: SHEET 5 OF 17 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	19
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

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PARTIAL PLAN
(Spans 10 thru 14)



PARTIAL PLAN
(Spans 15 thru 16)

NOTES:

Areas of deck repairs are estimated. Actual type, location, and dimensions of deck repairs are to be determined and documented by the ENGINEER during construction. ENGINEER shall sound deck after deck scarification.

Removal of the existing aluminum railing, in areas requiring railing replacement, is considered included with Aluminum Railing, Type L.

LEGEND

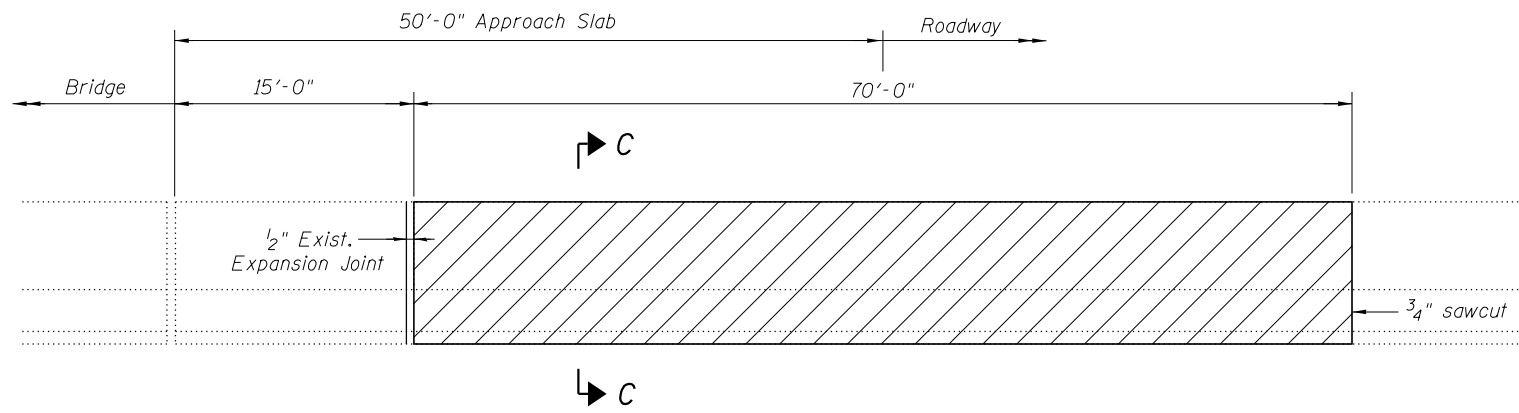
- Approach Slab Repair (Full Depth)
- Deck Slab Repair (Full Depth), Type II
- Deck Slab Repair (Partial Depth)
- Area of Joint Repair
- Structural Repair of Concrete (Depth Equal to or less than 5")
- Concrete Superstructures and Removal
- Aluminum Railing Type L, Full Removal and Replacement

BILL OF MATERIAL

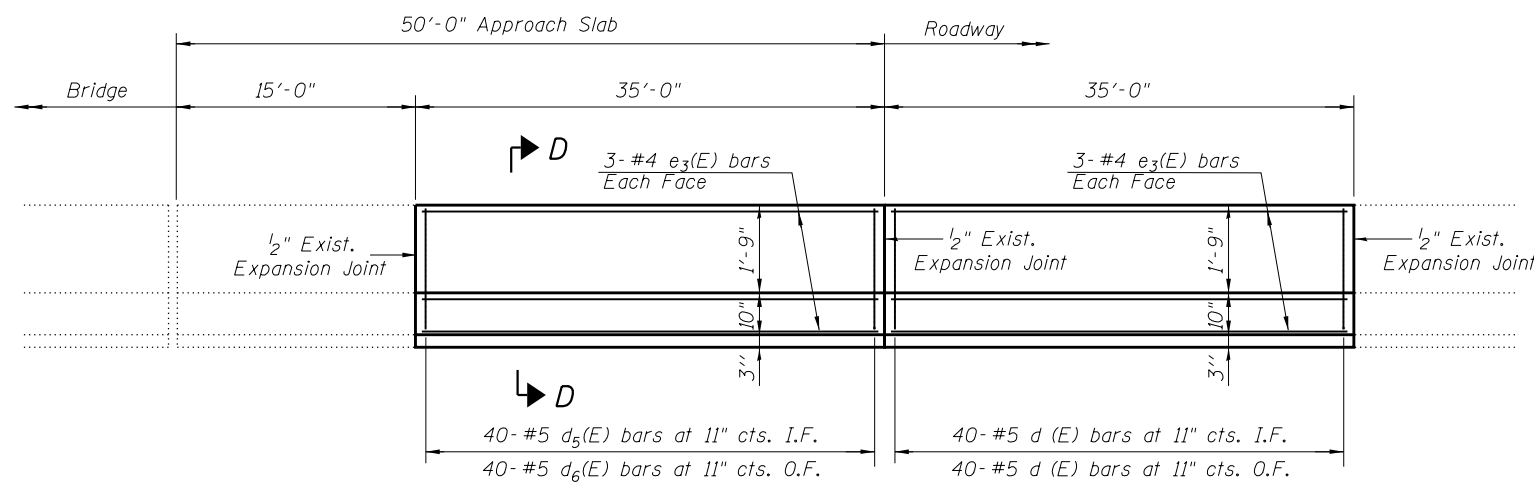
ITEM	UNIT	QUANTITY
Approach Slab Repair (Full Depth)	Sq. Yd.	23
Deck Slab Repair (Full Depth), Type II	Sq. Yd.	7.4
Deck Slab Repair (Partial Depth)	Sq. Yd.	251.1
Protective Coat	Sq. Yd.	1381
Bridge Deck Grooving	Sq. Yd.	5277
Bridge Deck Latex Concrete Overlay 2 1/2"	Sq. Yd.	5331
Bridge Deck Scarification 3/4"	Sq. Yd.	5331
Aluminum Railing, Type L	Foot	95
Structural Repair of Concrete (Depth Equal to or less than 5")	Sq. Ft.	65

For information only to assist the Contractor in bidding. See Special Provisions for "Bridge Deck Latex Concrete Overlay" and "Deck Slab Repair".

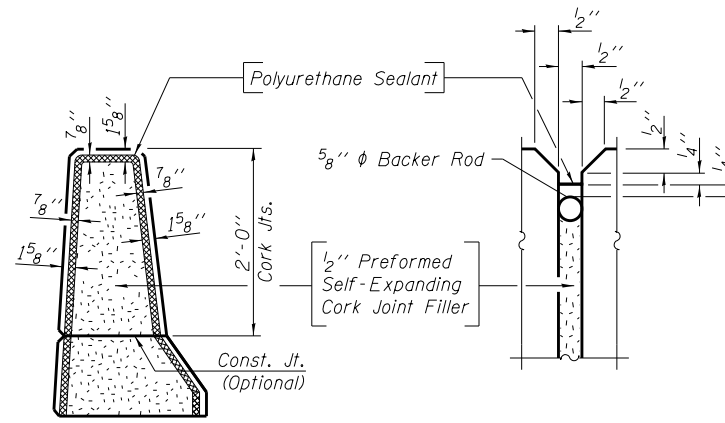
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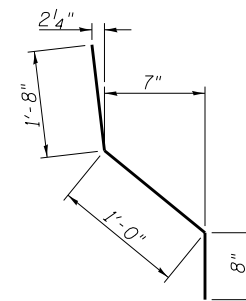
ELEVATION VIEW OF EAST PARAPET SHOWING REMOVAL
(South Abutment)



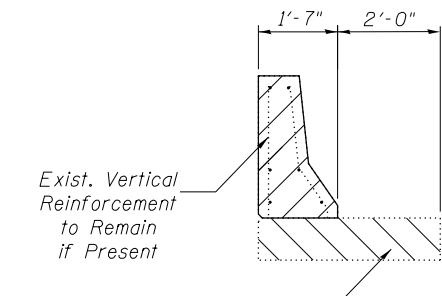
ELEVATION VIEW OF EAST PARAPET SHOWING REPLACEMENT
(South Abutment)



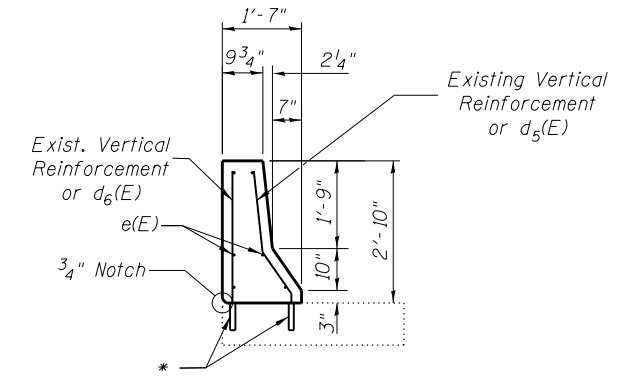
PARAPET JOINT DETAILS



BAR d5(E)



SECTION C-C



SECTION D-D

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d ₅ (E)	80	#5	3'-2"	
d ₆ (E)	80	#5	3'-4"	
e(E)	12	#4	35'-6"	
Concrete Removal			Cu. Yd.	8.2
Concrete Superstructure			Cu. Yd.	8.2
Reinforcement Bars, Epoxy Coated			Pound	820

Note: Vertical reinforcement or anchorage of parapet to PCC Shoulder is unknown. Removal of concrete shall be done with extreme care to expose existing reinforcement. If existing reinforcement extends into the shoulder, they may be reused at the discretion of the Engineer and the proposed d₅(E) and d₆(E) bars may be omitted.

LEGEND

Concrete Removal

* Core and set #5 d₅(E) and d₆(E) bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

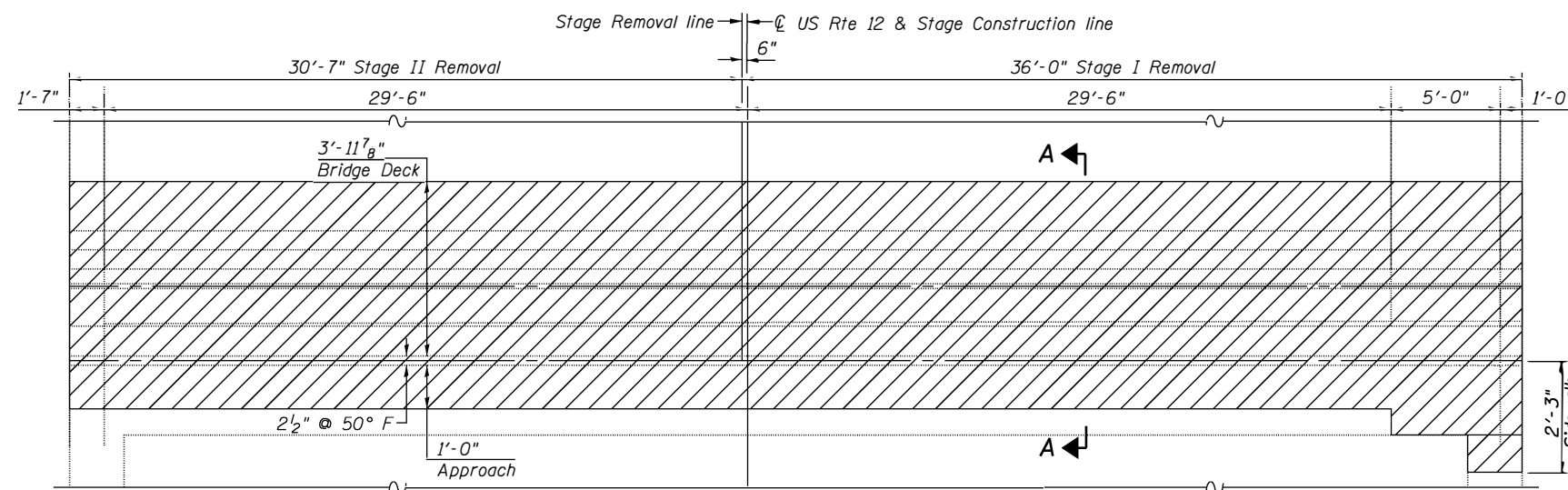
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	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

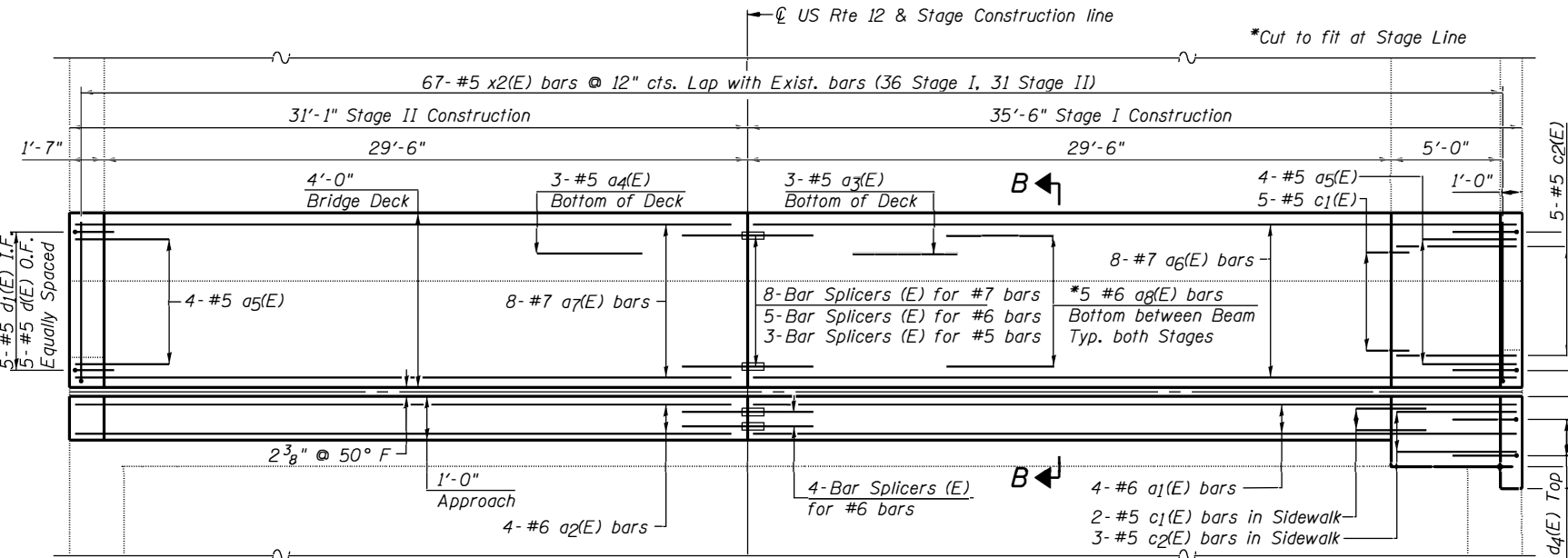
US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
PARAPET REPLACEMENT DETAILS

SCALE: SHEET 7 OF 17 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	21
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



EXISTING JOINT (NORTH ABUTMENT)

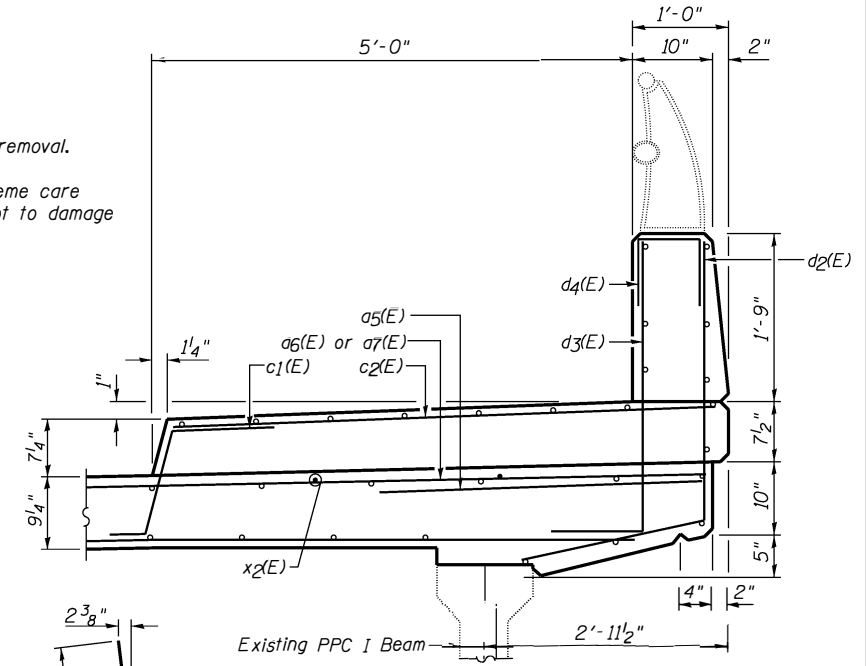


PROPOSED JOINT (NORTH ABUTMENT)

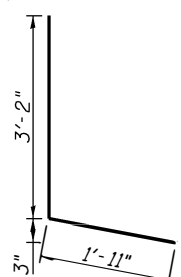
LEGEND

Concrete Removal

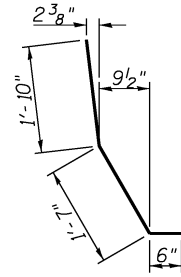
Note:
Hatched area indicates concrete removal.
The CONTRACTOR shall use extreme care during concrete removal so as not to damage the PPC I-beams.



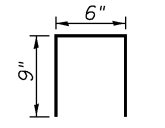
SECTION THRU SIDEWALK AT JOINT



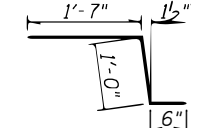
BAR d(E)



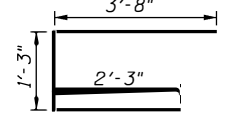
BAR d1(E)



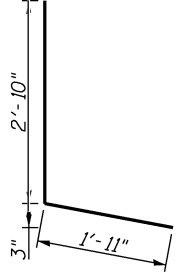
BAR d4(E)



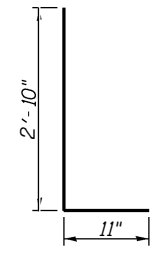
BAR c1(E)



BAR x2(E)



BAR d2(E)



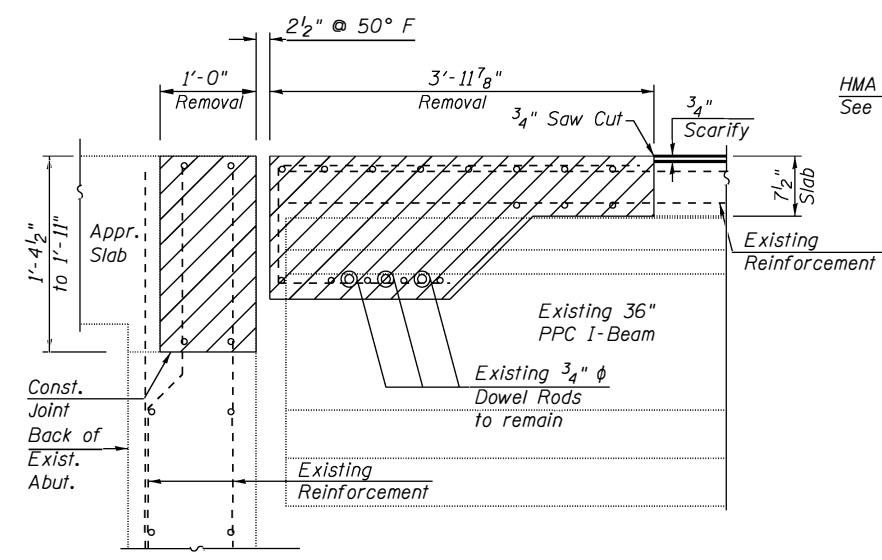
BAR d3(E)

BILL OF MATERIAL

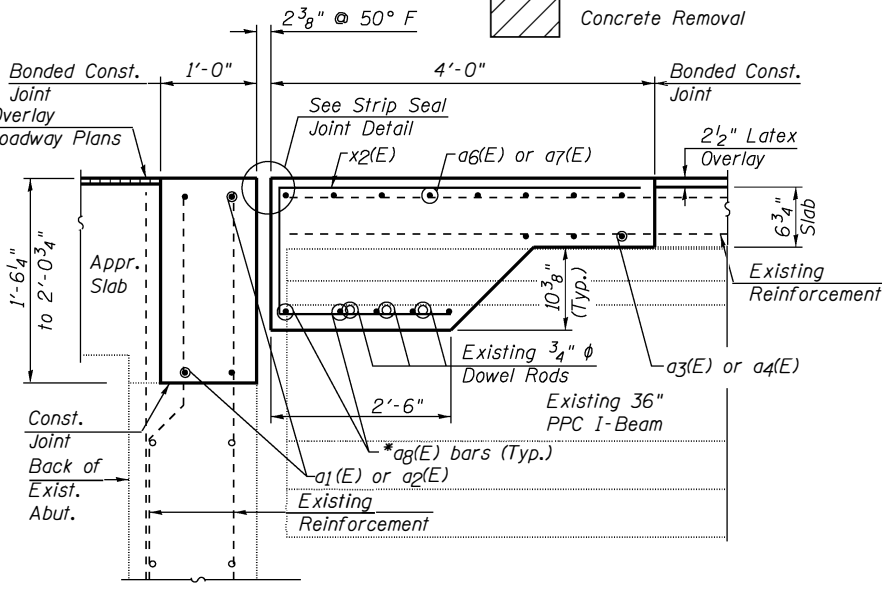
Bar	No.	Size	Length	Shape
a1(E)	4	#6	35'-0"	—
a2(E)	4	#6	30'-7"	—
a3(E)	3	#5	35'-0"	—
a4(E)	3	#5	30'-7"	—
a5(E)	8	#5	4'-0"	—
a6(E)	8	#7	35'-0"	—
a7(E)	8	#7	30'-7"	—
a8(E)	35	#6	7'-10"	—
c1(E)	7	#5	3'-1"	└
c2(E)	8	#5	5'-6"	—
d(E)	5	#5	5'-1"	└
d1(E)	5	#5	3'-11"	└
d2(E)	5	#5	4'-9"	└
d3(E)	5	#6	3'-9"	└
d4(E)	8	#4	2'-0"	└
x2(E)	67	#5	7'-2"	└
Concrete Removal			Cu. Yd.	18.0
Concrete Superstructure			Cu. Yd.	19.8
Reinforcement Bars, Epoxy Coated			Pound	2800

Note:
Existing horizontal bars in parapet and existing longitudinal bars in slab and sidewalk shall remain and be incorporated into the new construction.

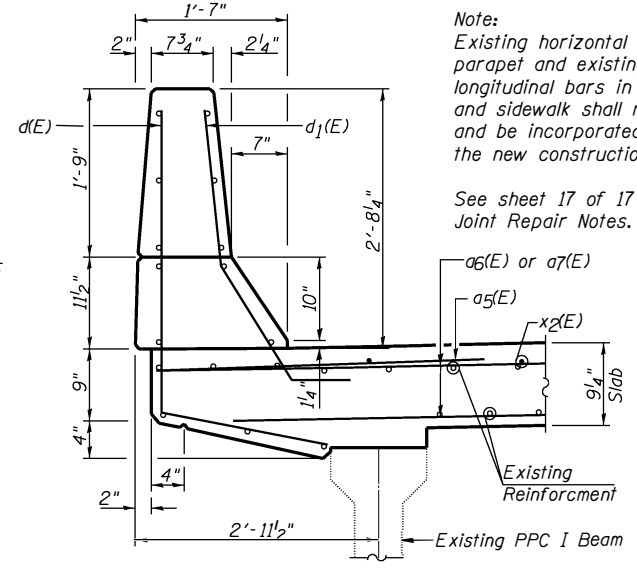
See sheet 17 of 17 for Joint Repair Notes.



SECTION A-A



SECTION B-B



SECTION THRU PARAPET AT JOINT

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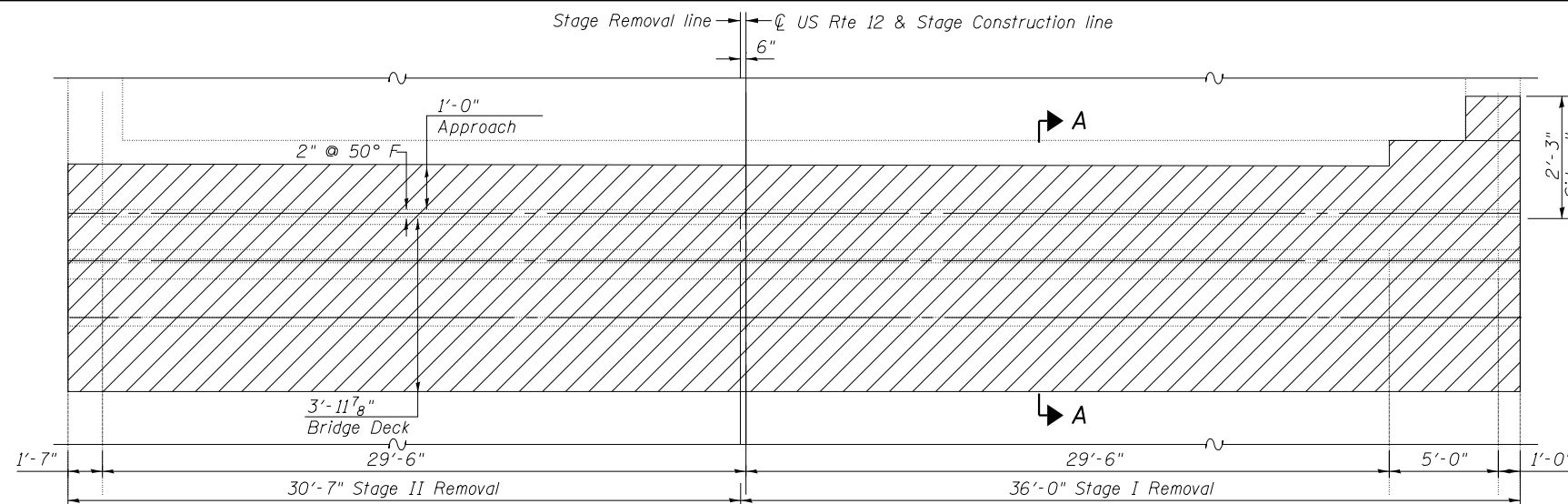
CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = jpong	DESIGNED - BCG	REVISED -
PLOT SCALE = 8.0000' / in.	DRAWN - DMW	REVISED -
PLOT DATE = 8/9/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

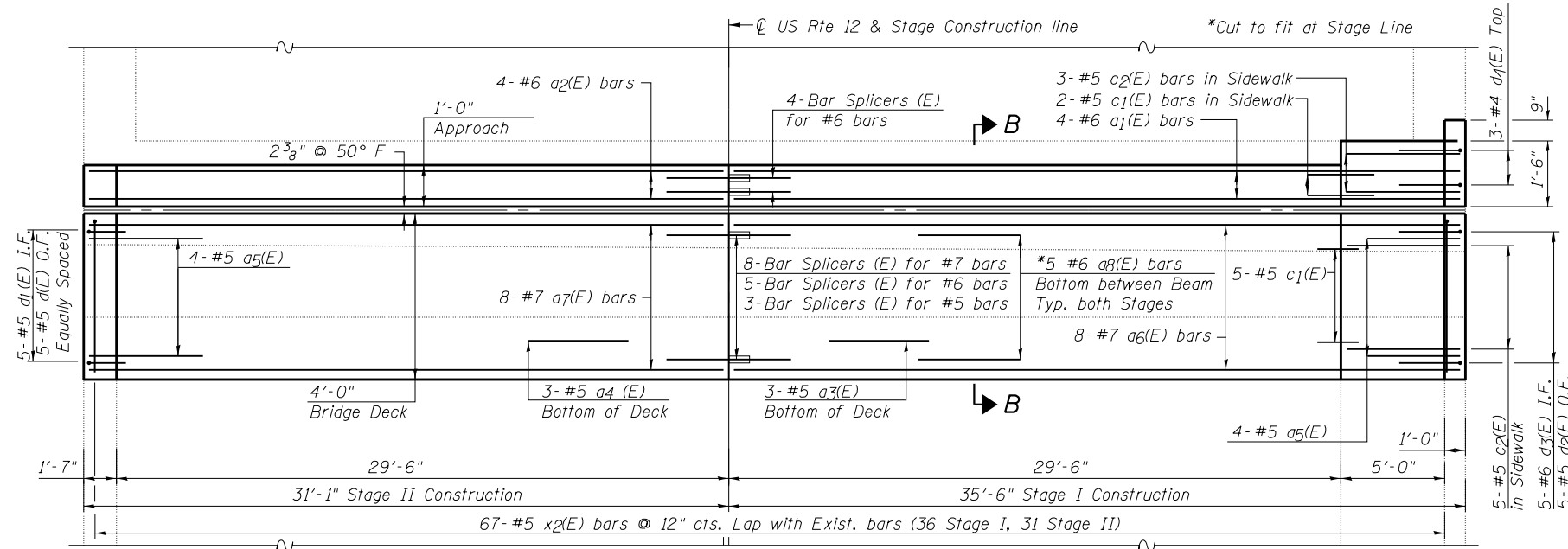
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
JOINT REPLACEMENT (NORTH ABUTMENT)
SCALE: SHEET 8 OF 17 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 22
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



EXISTING JOINT (SOUTH ABUTMENT)



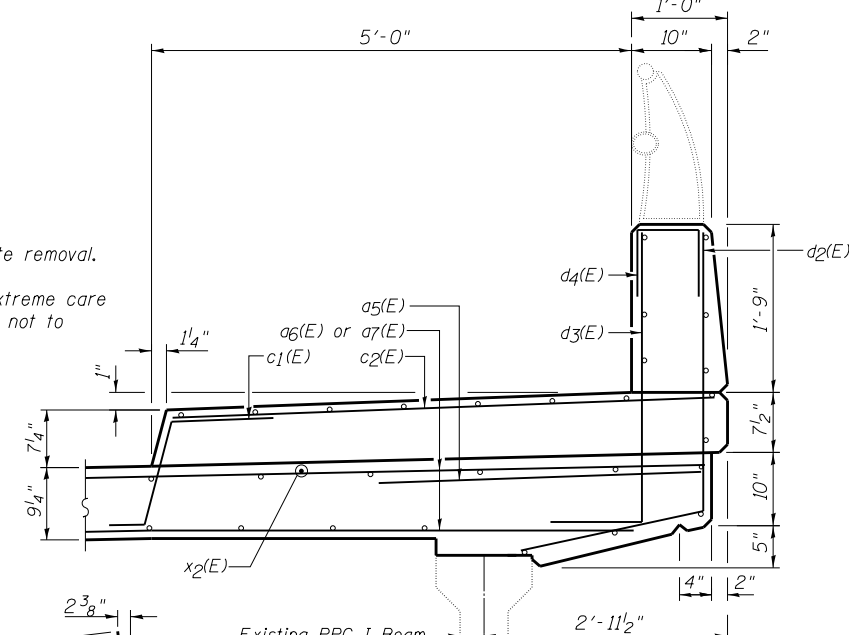
PROPOSED JOINT (SOUTH ABUTMENT)

LEGEND

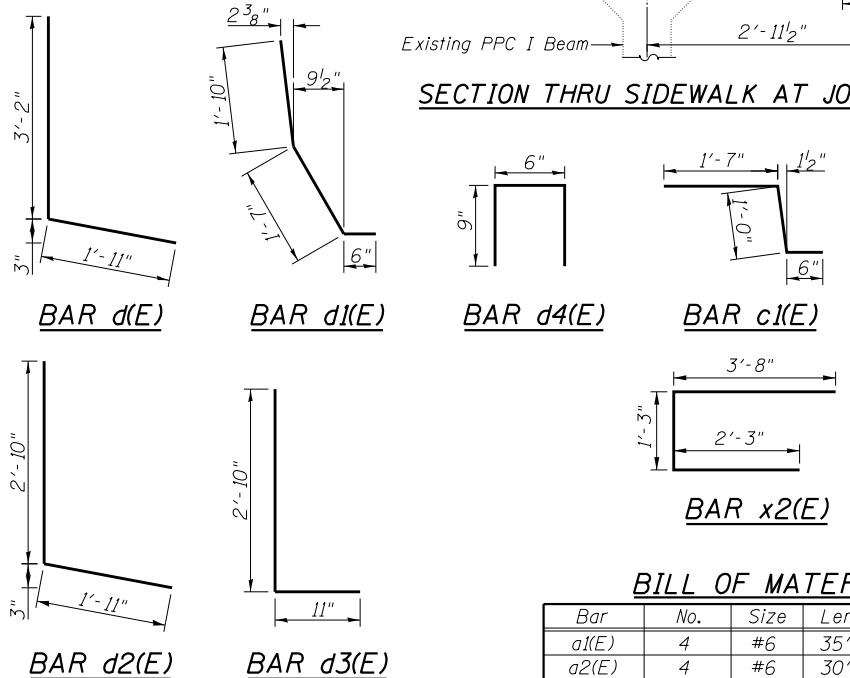
Concrete Removal

Note:
Hatched area indicates concrete removal.

The CONTRACTOR shall use extreme care during concrete removal so as not to damage the PPC I-beams.



SECTION THRU SIDEWALK AT JOINT

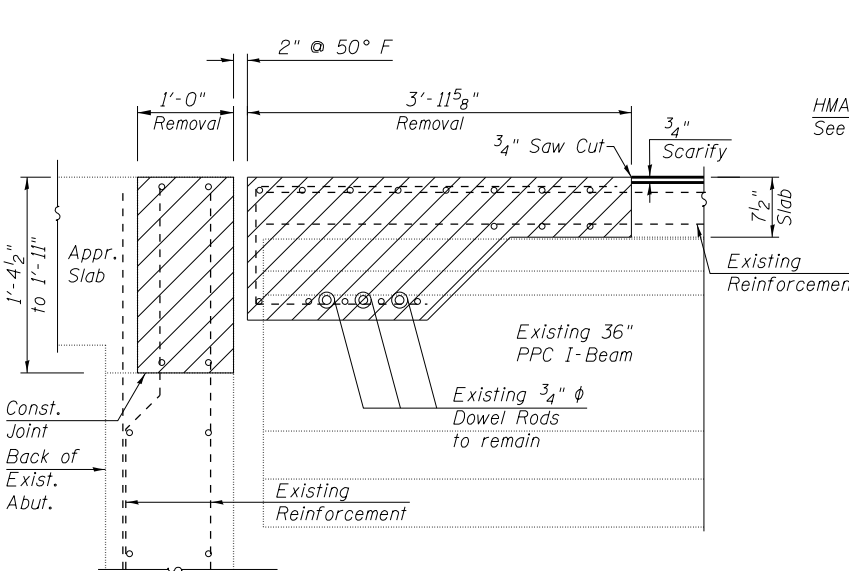


BILL OF MATERIAL

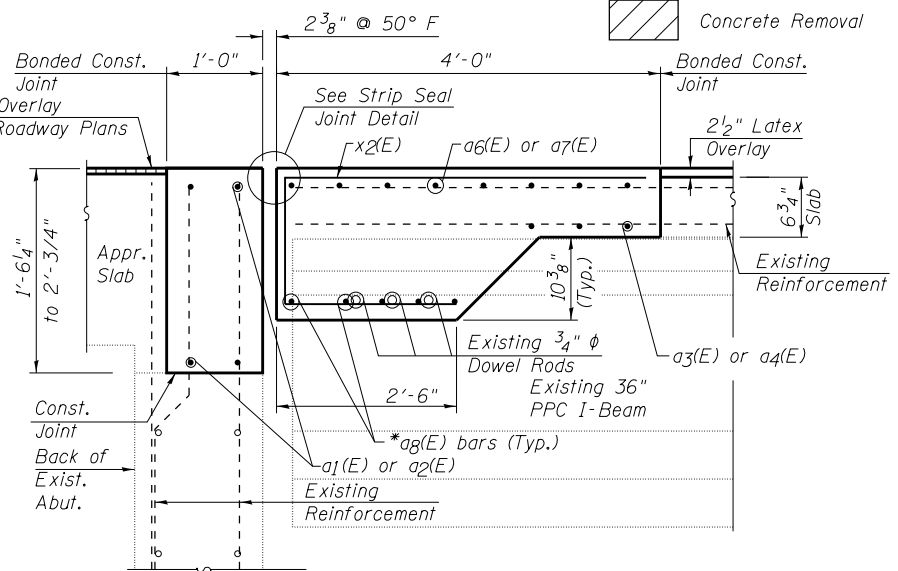
Bar	No.	Size	Length	Shape
a1(E)	4	#6	35'-0"	—
a2(E)	4	#6	30'-7"	—
a3(E)	3	#5	35'-0"	—
a4(E)	3	#5	30'-7"	—
a5(E)	8	#5	4'-0"	—
a6(E)	8	#7	35'-0"	—
a7(E)	8	#7	30'-7"	—
a8(E)	35	#6	7'-10"	—
c1(E)	7	#5	3'-1"	┌
c2(E)	8	#5	5'-6"	┌
d(E)	5	#5	5'-1"	┌
d1(E)	5	#5	3'-11"	┌
d2(E)	5	#5	4'-9"	┌
d3(E)	5	#6	3'-9"	┌
d4(E)	8	#4	2'-0"	┌
x2(E)	67	#5	7'-2"	┌
Concrete Removal			Cu. Yd.	18.0
Concrete Superstructure			Cu. Yd.	19.8
Reinforcement Bars, Epoxy Coated			Pound	2800

Note:
Existing horizontal bars in parapet and existing longitudinal bars in slab and sidewalk shall remain and be incorporated into the new construction.

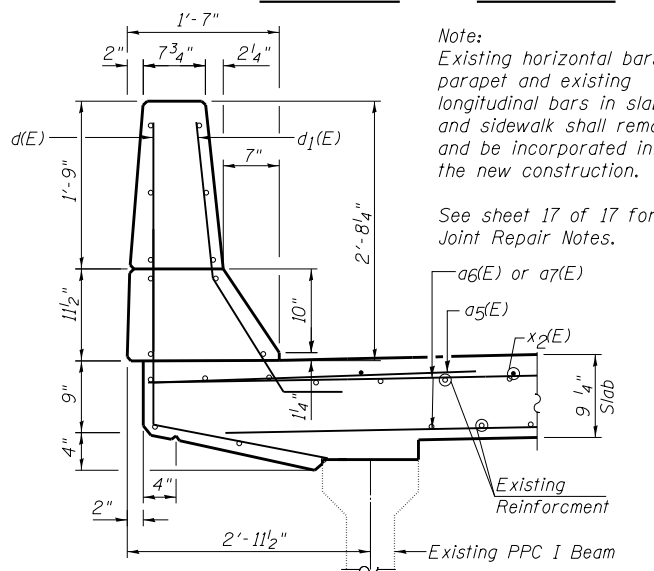
See sheet 17 of 17 for Joint Repair Notes.



SECTION A-A



SECTION B-B



SECTION THRU PARAPET AT JOINT

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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

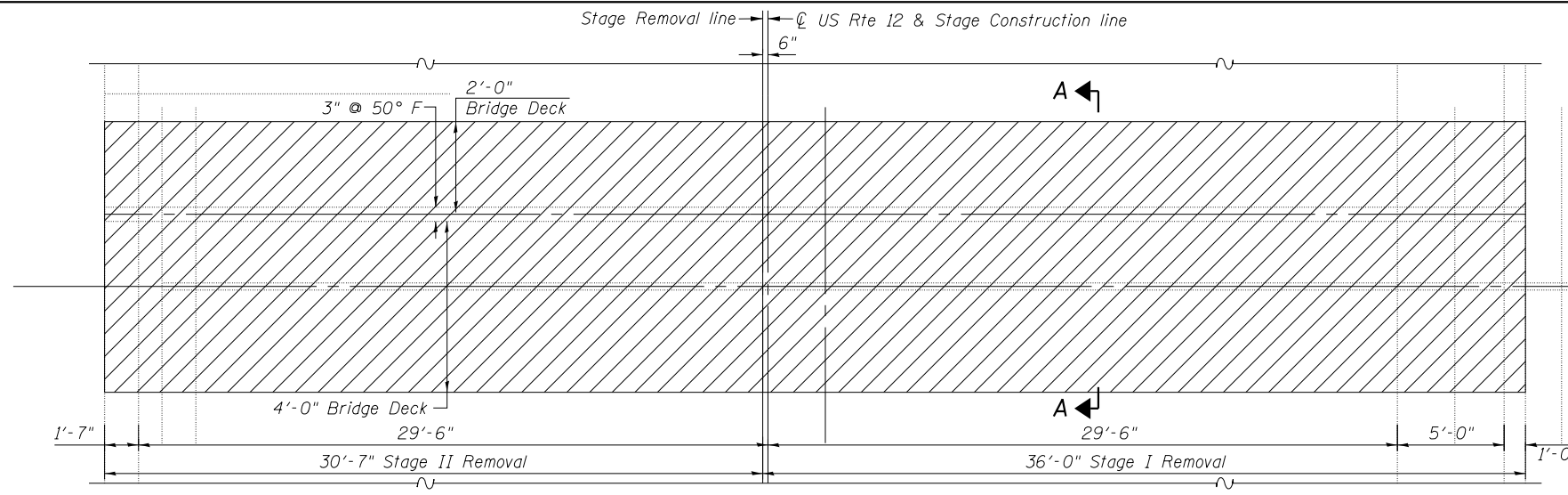
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DESIGNED - BCG
DRAWN - DMW
CHECKED - JMB
DATE - 07-13-2018

REVISED -
REVISED -
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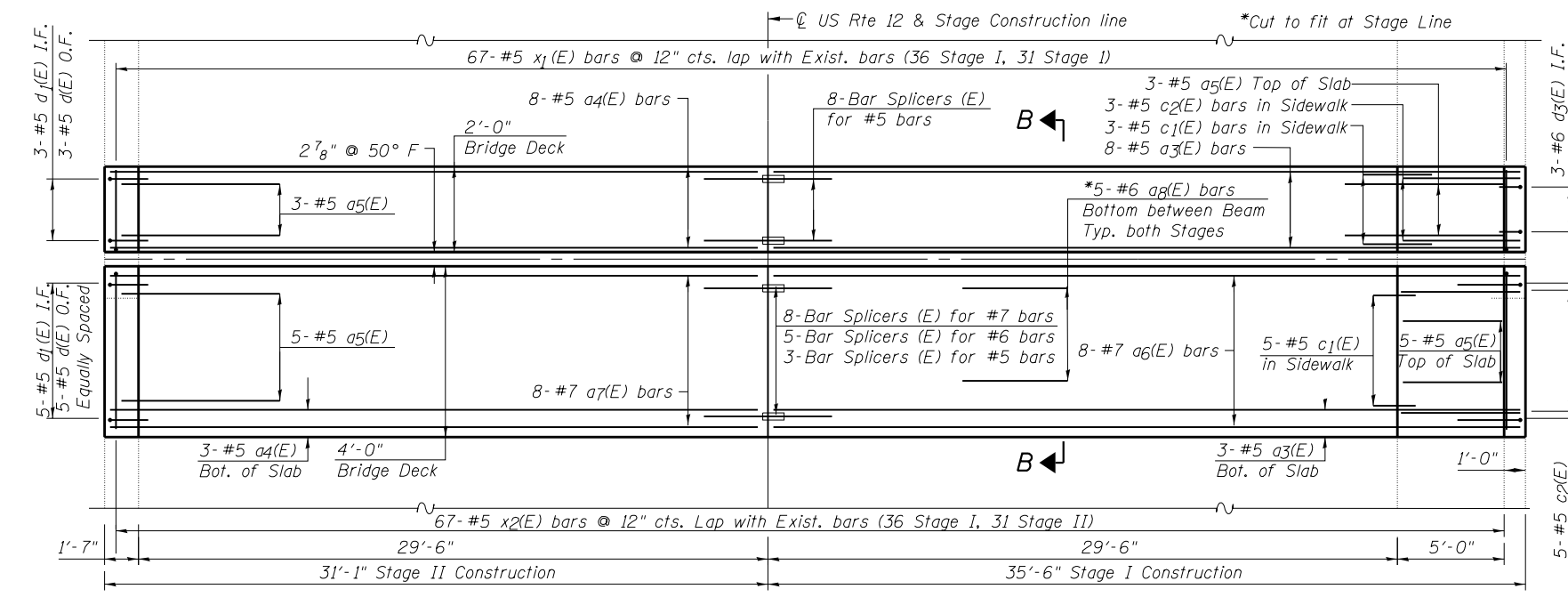
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
JOINT REPLACEMENT (SOUTH ABUTMENT)
SCALE: SHEET 9 OF 17 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 23
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



EXISTING JOINT (PIER #8)

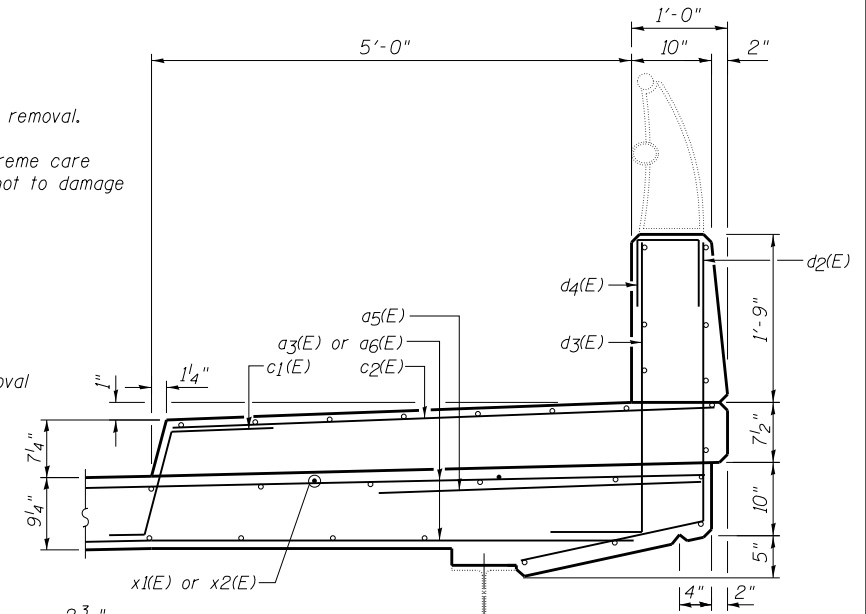


PROPOSED JOINT (PIER #8)

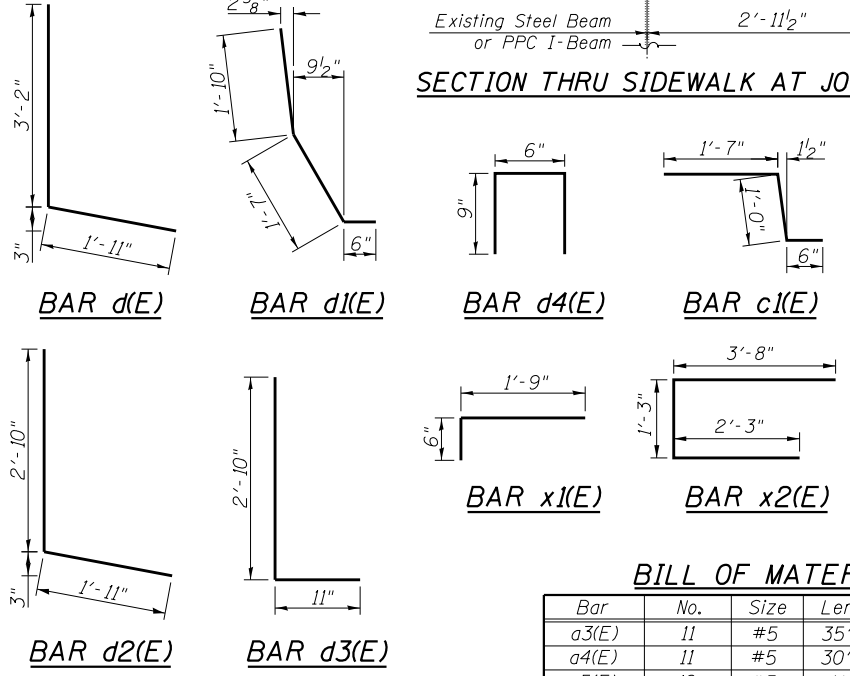
Note:
Hatched area indicates concrete removal.
The CONTRACTOR shall use extreme care during concrete removal so as not to damage the PPC I-beams.

LEGEND

Concrete Removal



SECTION THRU SIDEWALK AT JOINT

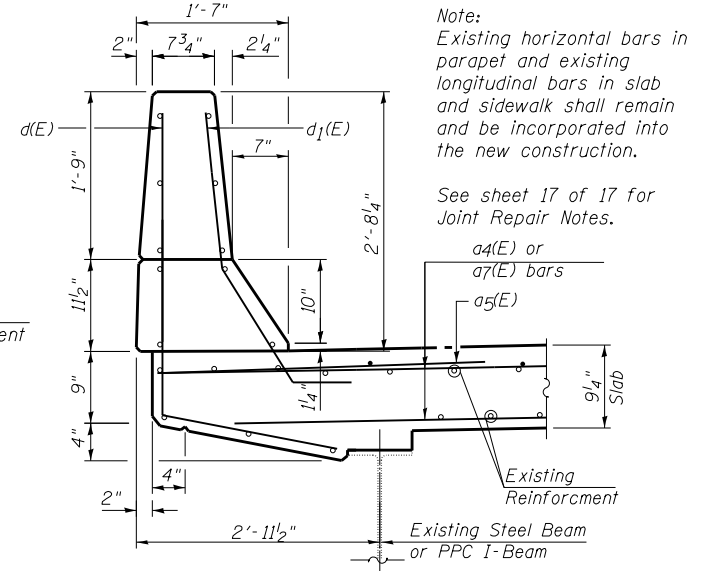


BAR d(E) **BAR d1(E)** **BAR d4(E)** **BAR c1(E)**
BAR x1(E) **BAR x2(E)**
BAR d2(E) **BAR d3(E)**

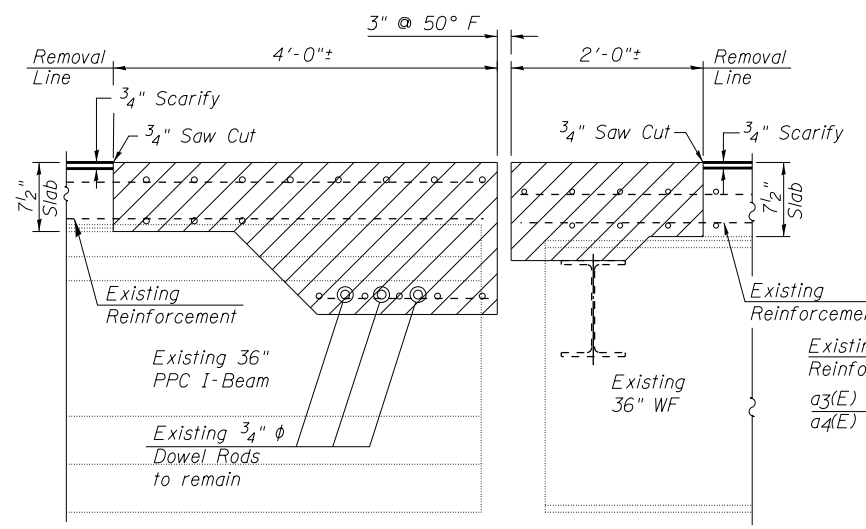
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a3(E)	11	#5	35'-0"	—
a4(E)	11	#5	30'-7"	—
a5(E)	16	#5	4'-0"	—
a6(E)	8	#7	35'-0"	—
a7(E)	8	#7	30'-7"	—
a8(E)	35	#6	7'-10"	—
c1(E)	8	#5	3'-1"	┌
c2(E)	8	#5	5'-6"	—
d(E)	8	#5	5'-1"	┌
d1(E)	8	#5	3'-11"	┌
d2(E)	8	#5	4'-9"	┌
d3(E)	8	#6	3'-9"	┌
d4(E)	8	#4	2'-0"	□
x1(E)	67	#5	2'-3"	┌
x2(E)	67	#5	7'-2"	┌
Concrete Removal			Cu. Yd.	18.0
Concrete Superstructure			Cu. Yd.	20.0
Reinforcement Bars, Epoxy Coated			Pound	3200

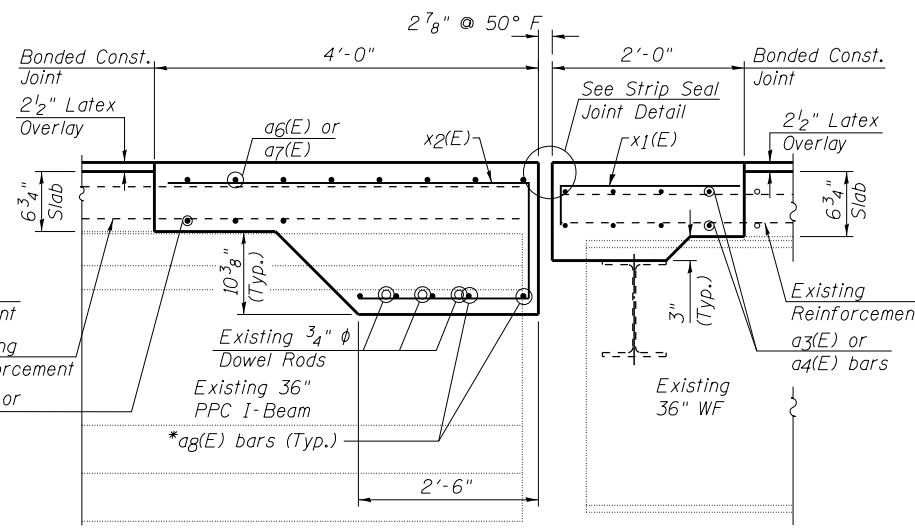
Note:
Existing horizontal bars in parapet and existing longitudinal bars in slab and sidewalk shall remain and be incorporated into the new construction.
See sheet 17 of 17 for Joint Repair Notes.



SECTION THRU PARAPET AT JOINT



SECTION A-A



SECTION B-B

MODEL Dwg. 011
FILE NAME: 0420187-60R79-005-1TP.dwg

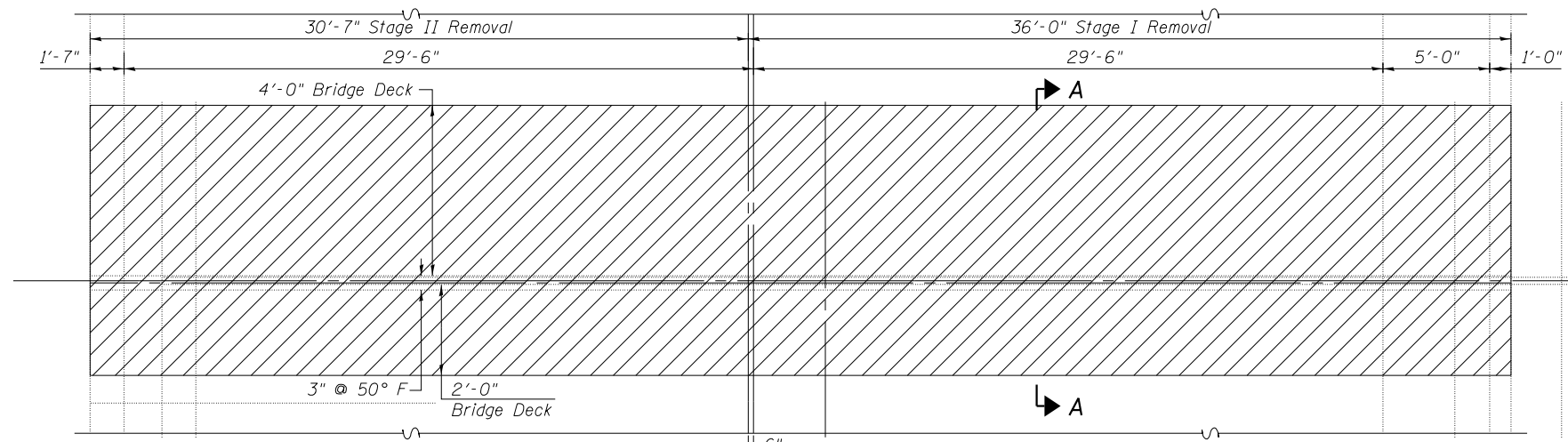
CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = jpong	DESIGNED - BCG	REVISED -
PLOT SCALE = 8.0000' / 1"	DRAWN - DMW	REVISED -
PLOT DATE = 8/9/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

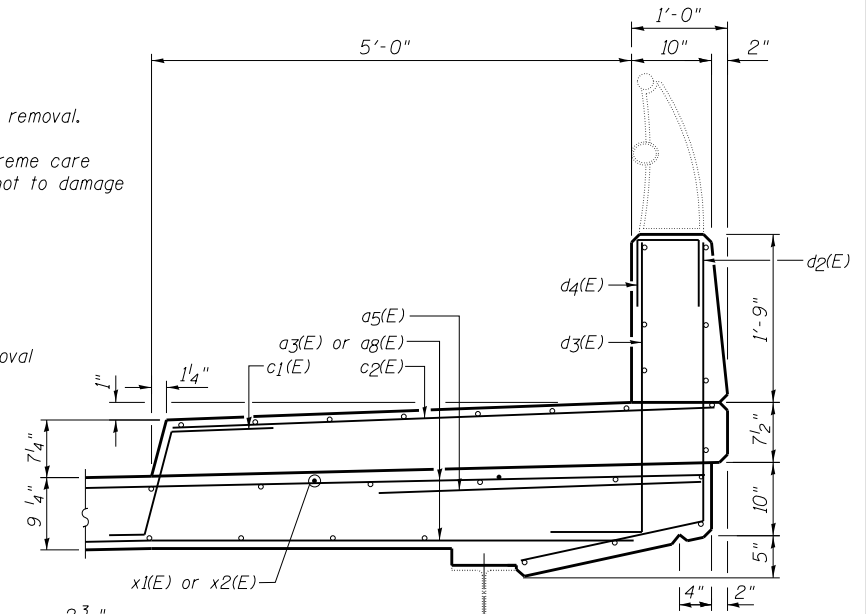
US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
JOINT REPLACEMENT (PIER #8)
SCALE: SHEET 10 OF 17 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 24
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

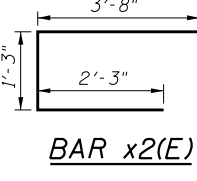
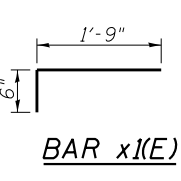
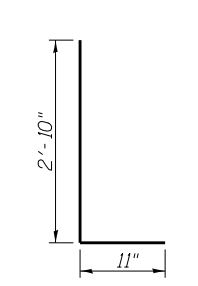
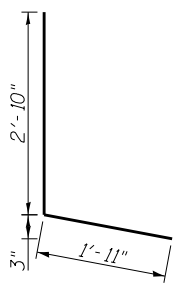
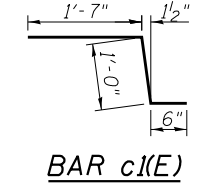
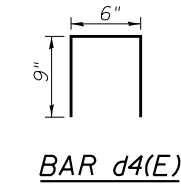
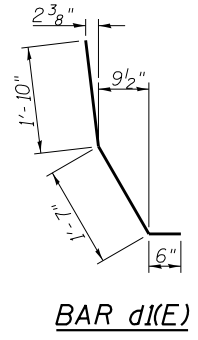
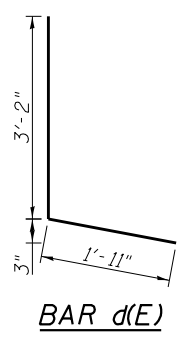
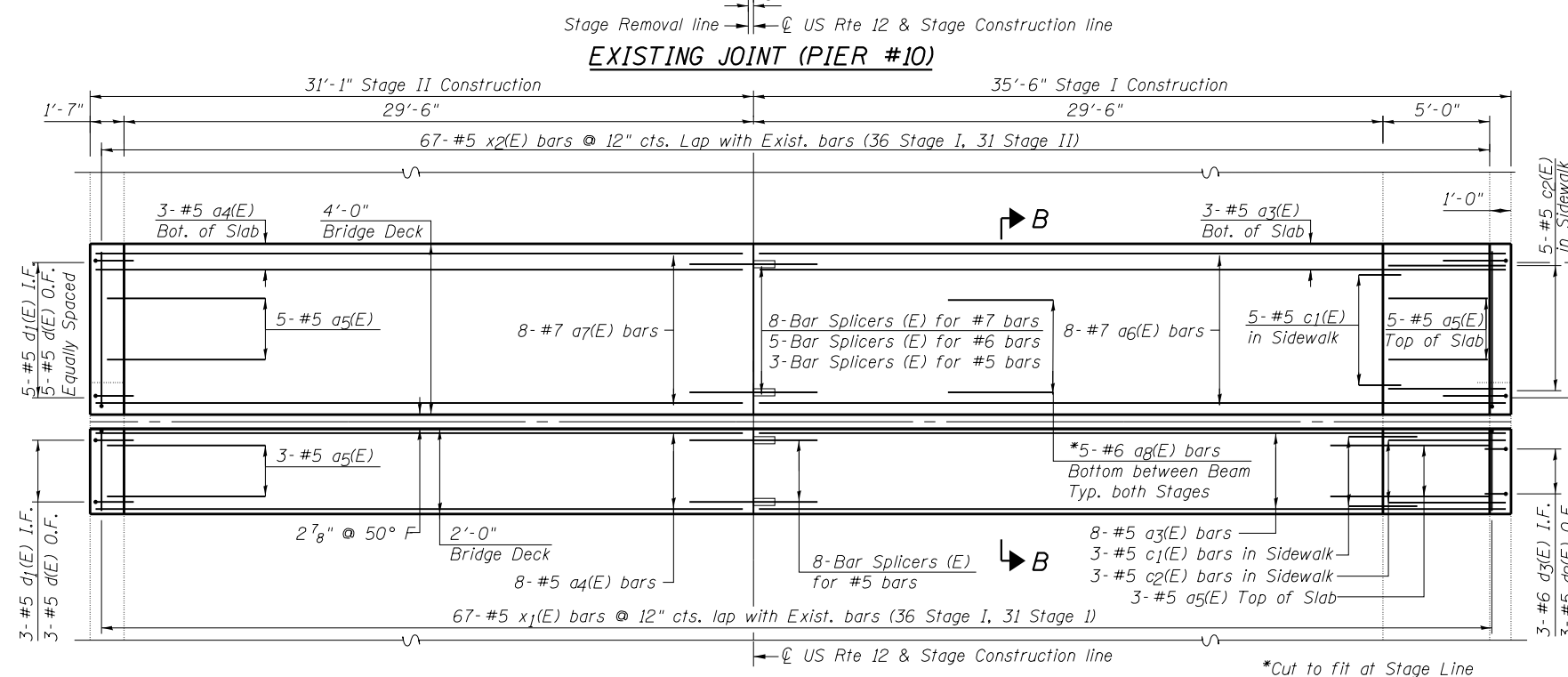


Note:
Hatched area indicates concrete removal.
The CONTRACTOR shall use extreme care during concrete removal so as not to damage the PPC I-beams.

LEGEND
 Concrete Removal



SECTION THRU SIDEWALK AT JOINT

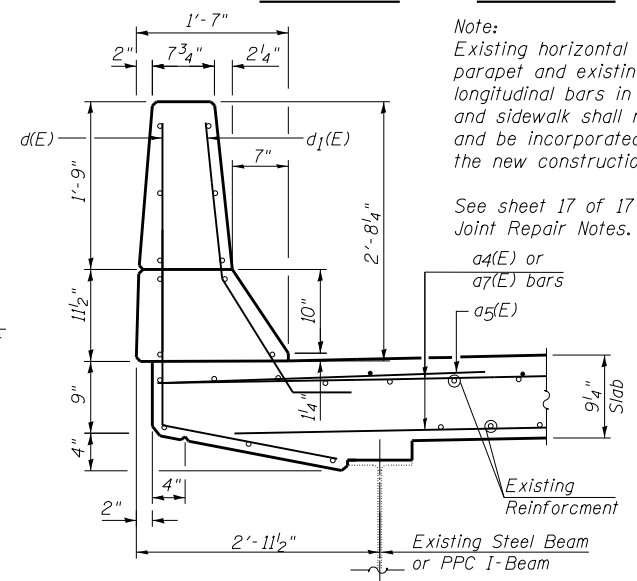


BILL OF MATERIAL

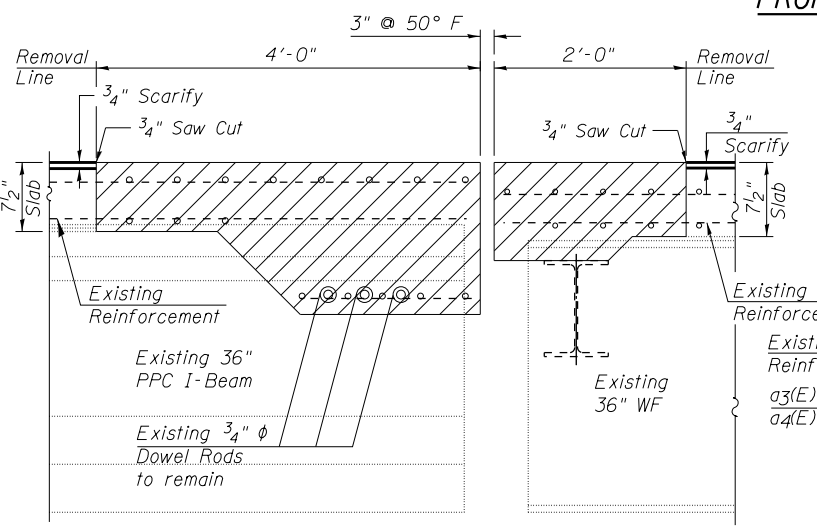
Bar	No.	Size	Length	Shape
a3(E)	11	#5	35'-0"	—
a4(E)	11	#5	30'-7"	—
a5(E)	16	#5	4'-0"	—
a6(E)	8	#7	35'-0"	—
a7(E)	8	#7	30'-7"	—
a8(E)	35	#6	7'-10"	—
c1(E)	8	#5	3'-1"	┌
c2(E)	8	#5	5'-6"	—
d(E)	8	#5	5'-1"	┌
d1(E)	8	#5	3'-11"	┌
d2(E)	8	#5	4'-9"	┌
d3(E)	8	#6	3'-9"	┌
d4(E)	8	#4	2'-0"	┌
x1(E)	67	#5	2'-3"	┌
x2(E)	67	#5	7'-2"	┌
Concrete Removal		Cu. Yd.	18.0	
Concrete Superstructure		Cu. Yd.	20.0	
Reinforcement Bars, Epoxy Coated		Pound	3200	

Note:
Existing horizontal bars in parapet and existing longitudinal bars in slab and sidewalk shall remain and be incorporated into the new construction.

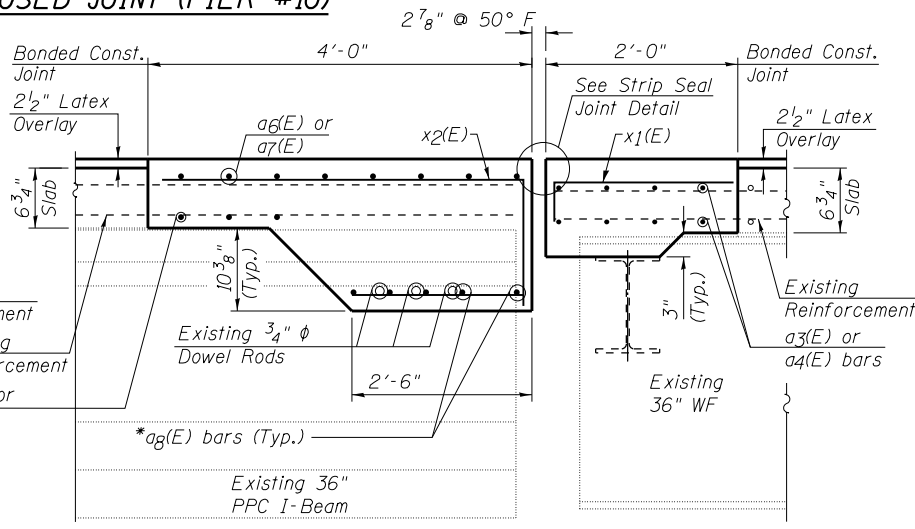
See sheet 17 of 17 for Joint Repair Notes.



SECTION THRU PARAPET AT JOINT



SECTION A-A



SECTION B-B

MODEL: Def.mxd; FILE: \\NRE\0160167-60R79-010-JTP.dgn

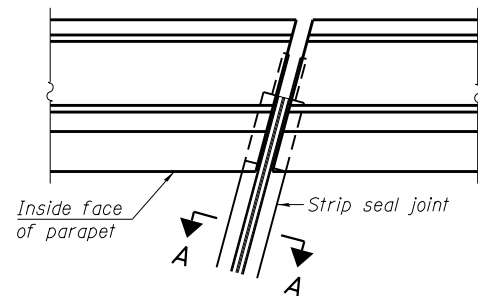
CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = jpong	DESIGNED - BCG	REVISED -
PLOT SCALE = 8.0000' / 1"	DRAWN - DMW	REVISED -
PLOT DATE = 8/9/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

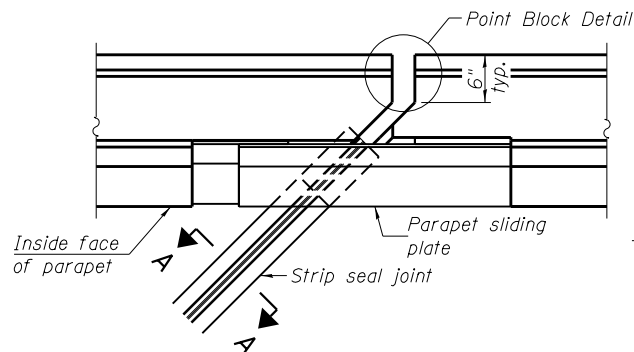
US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
JOINT REPLACEMENT (PIER #10)
SCALE: SHEET 11 OF 17 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 25
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

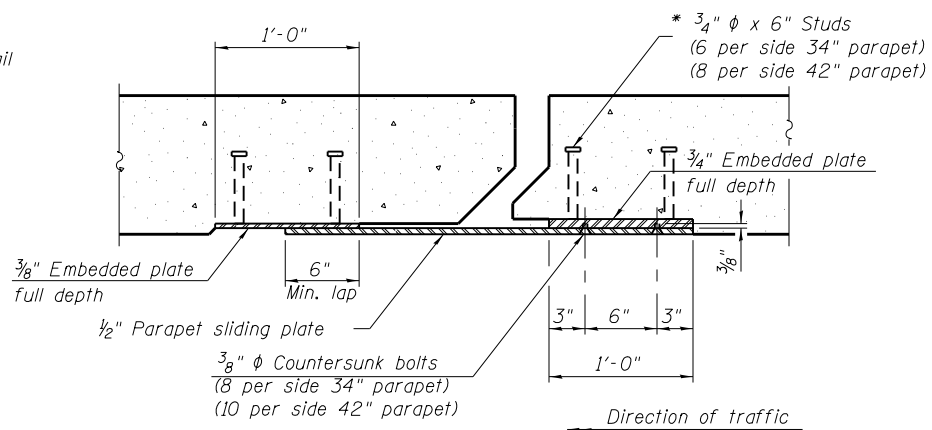


FOR SKEWS = 30°

PLAN AT PARAPET



FOR SKEWS > 30°



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

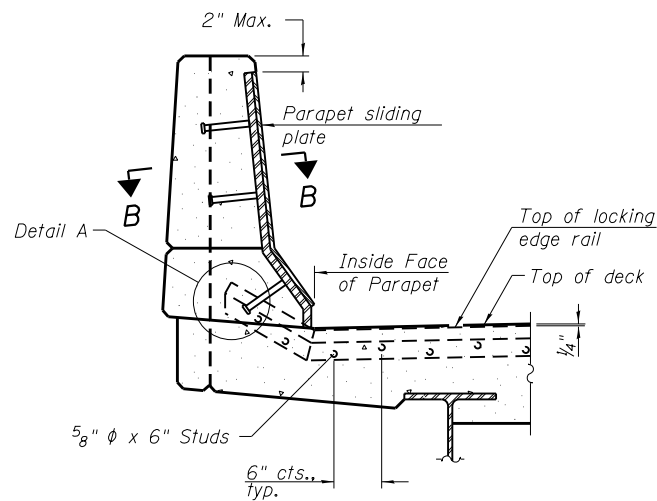
The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

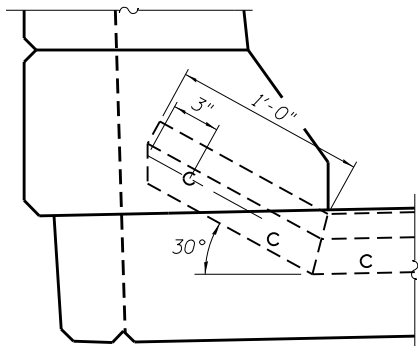
34" F-shape barrier shown, 42" F-shape similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

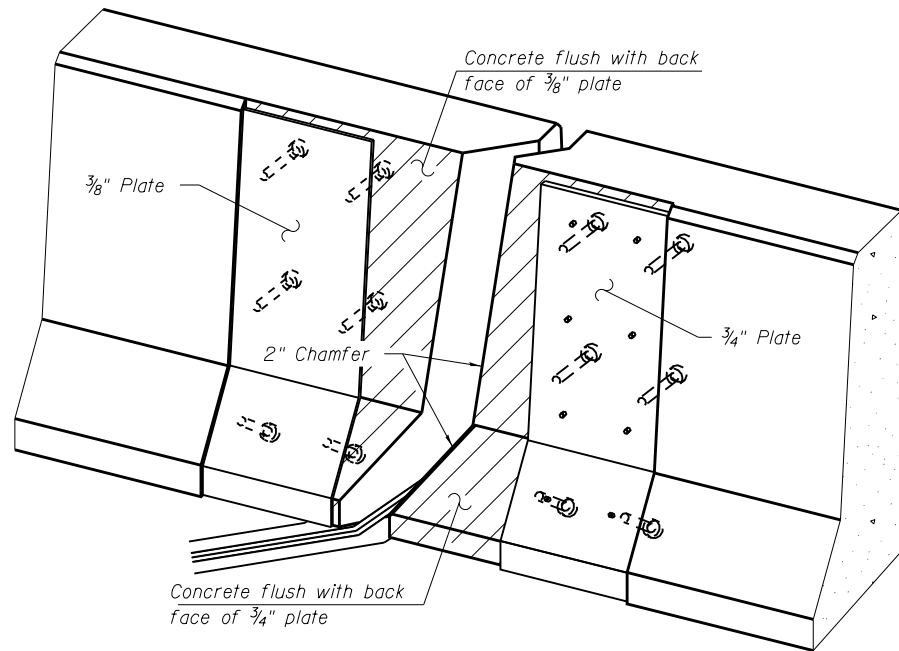


ELEVATION AT PARAPET

(Skews > 30° shown. Skews = 30° similar except as shown in plan view.)

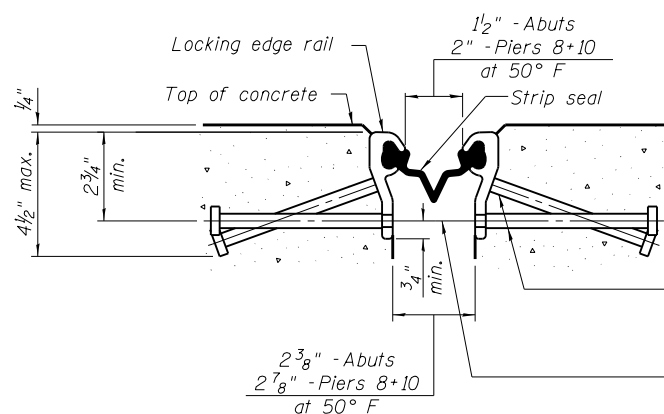


DETAIL A



TRIMETRIC VIEW

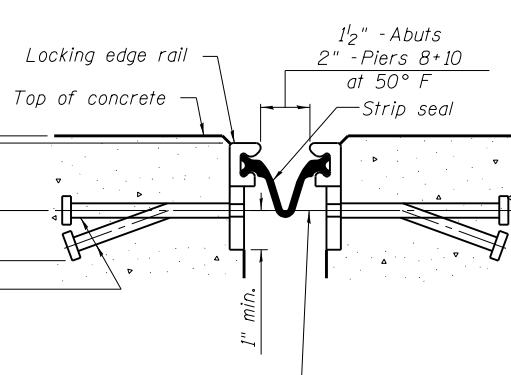
(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

* 5/8" φ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

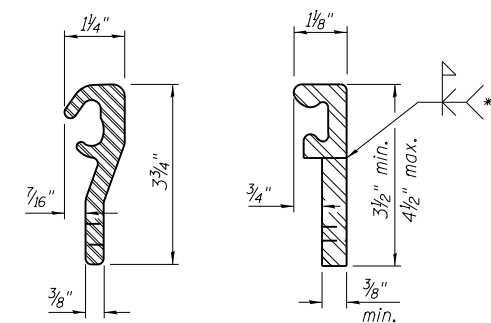
3/8" φ threaded rods in 7/16" φ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



SHOWING WELDED RAIL JOINT

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

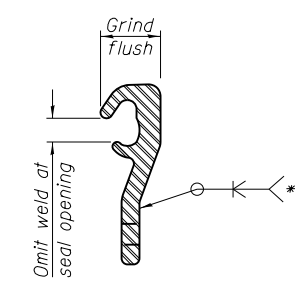


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	260

MODEL: D:\p1\184-001397.dgn FILE NAME: 0430187-60R79-011-DET.dgn

EJ-SS-S

8-11-17

(Sheet 1 of 3)

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

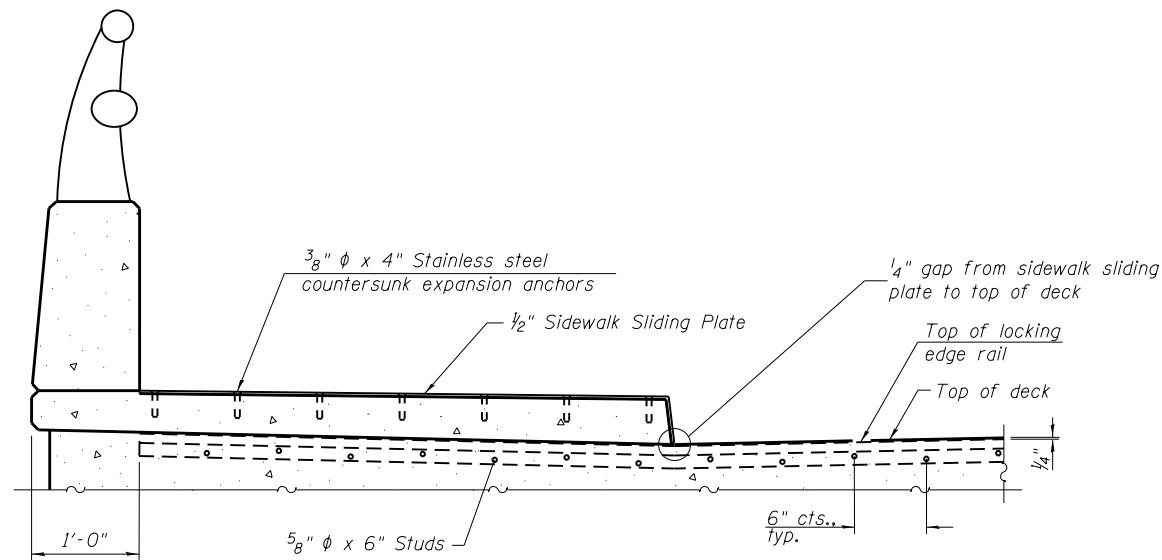
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PLOT SCALE = 0.1667' / in.	DRAWN - DMW	REVISED -
PLOT DATE = 8/9/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

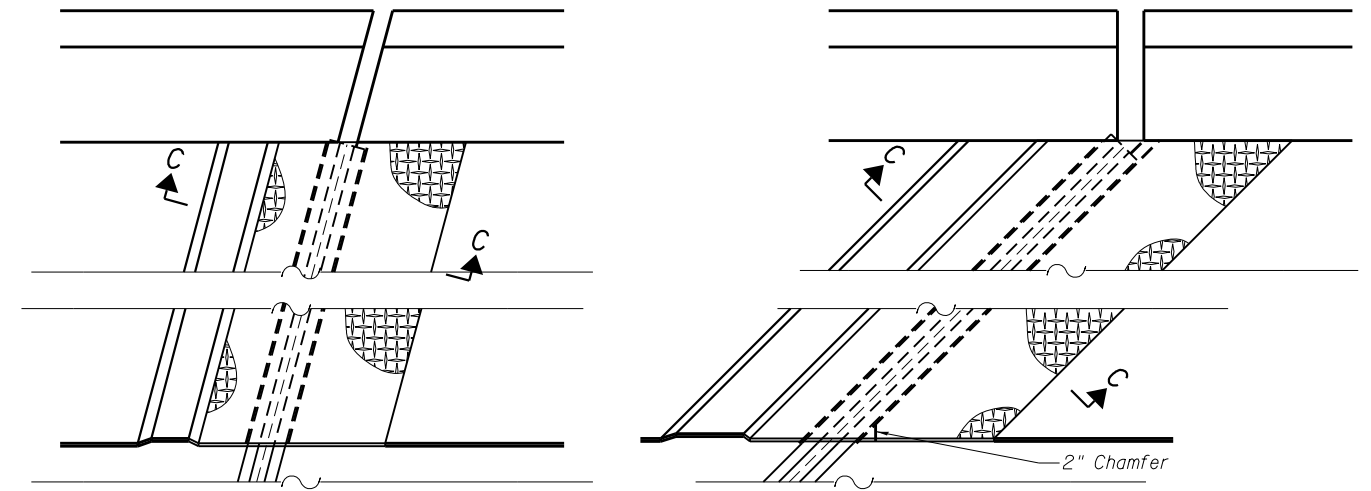
US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
PREFORMED JOINT STRIP SEAL - SIDEWALK

SCALE: SHEET 12 OF 17 SHEETS STA. TO STA.

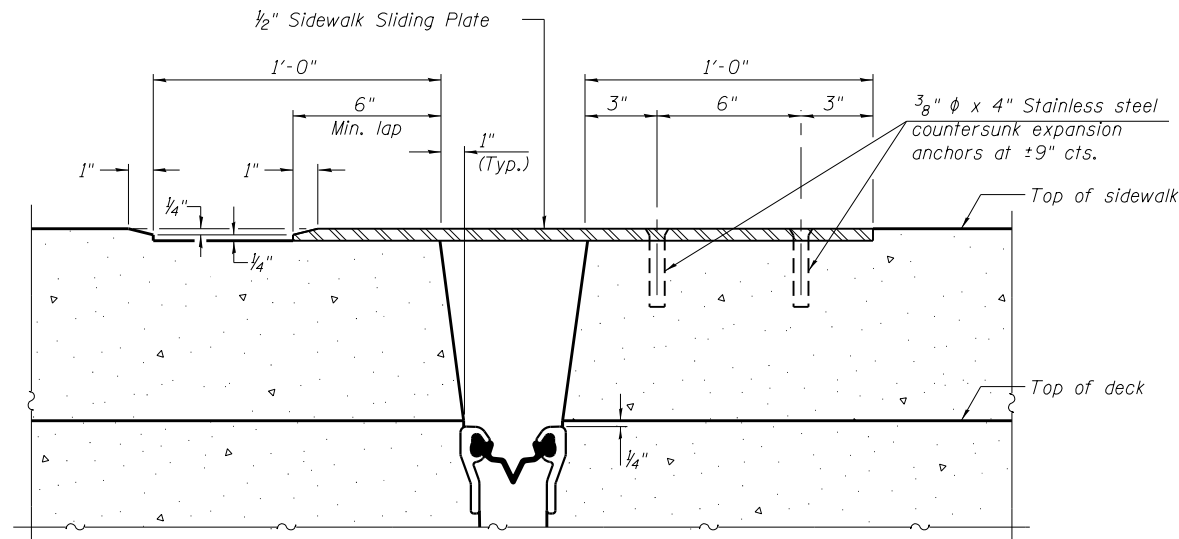
F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 26
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



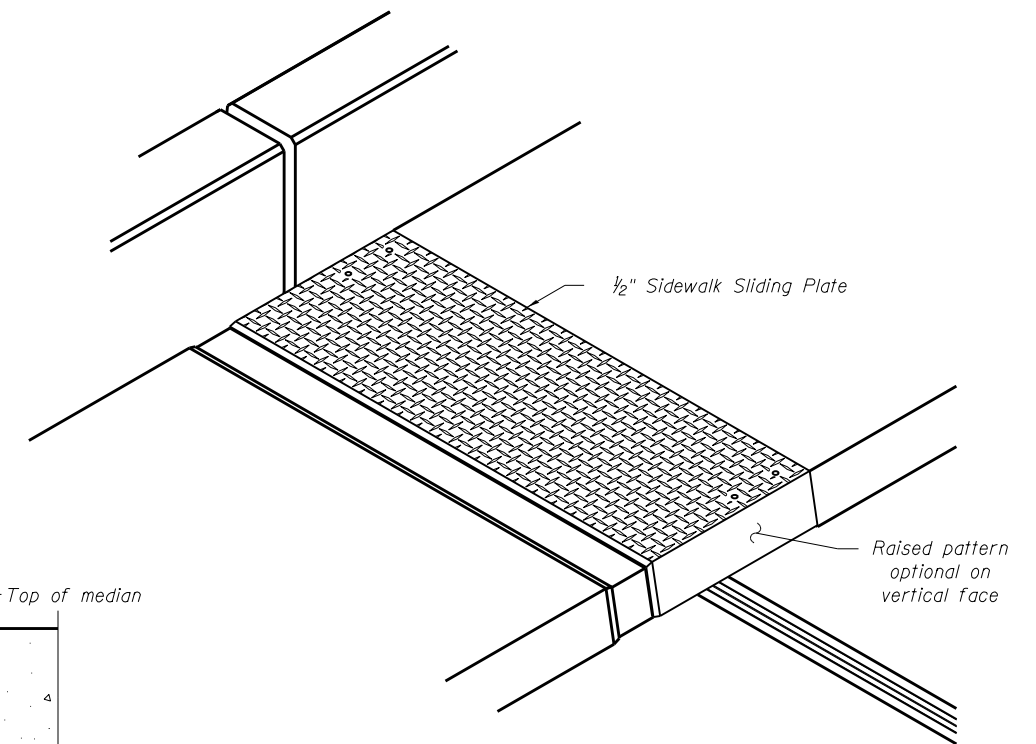
ELEVATION AT RAISED SIDEWALK



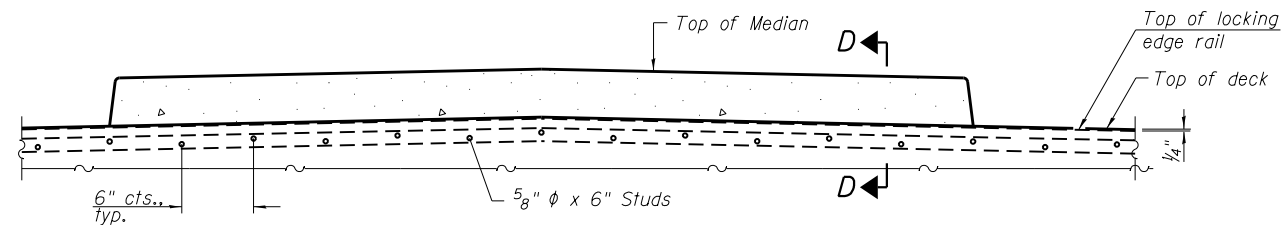
PLAN AT RAISED SIDEWALK



SECTION C-C

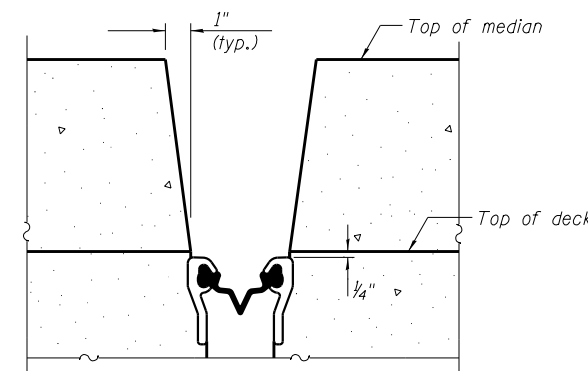


TRIMETRIC VIEW



ELEVATION AT MEDIAN

For skews > 30°, chamfer acute corners 2" similar to sidewalk.



SECTION D-D
 (at Rt. ∠'s)

(Sheet 2 of 3)

MODEL: D:\ef\proj\...
 FILE: 117B-BR-1\0187-60R79-011-DET.dgn

EJ-SS-S

8-11-17

CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 184-001397

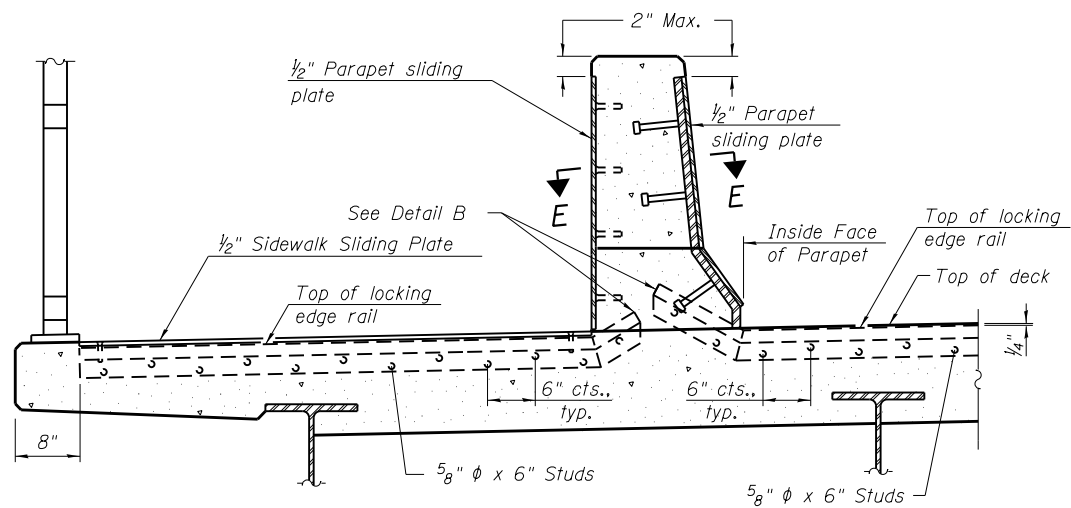
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PLOT SCALE = 0.1667' / in.	DRAWN - DMW	REVISED -
PLOT DATE = 8/9/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
PREFORMED JOINT STRIP SEAL - SIDEWALK

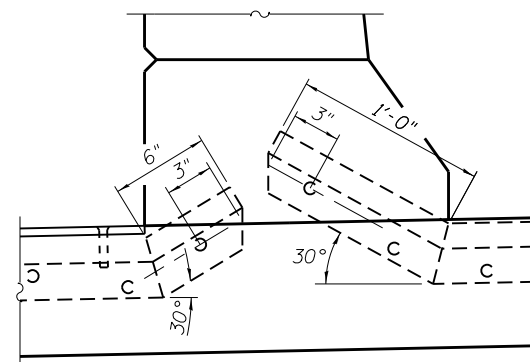
SCALE: SHEET 13 OF 17 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 27
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

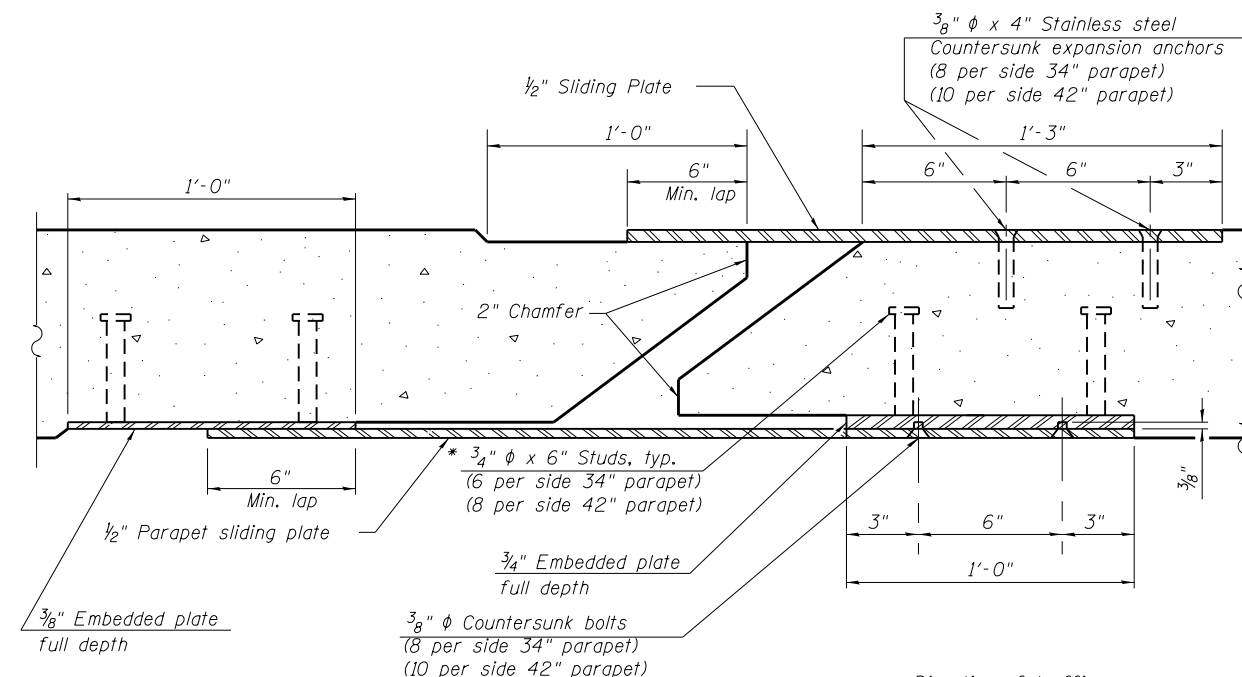


ELEVATION AT DECK LEVEL SIDEWALK

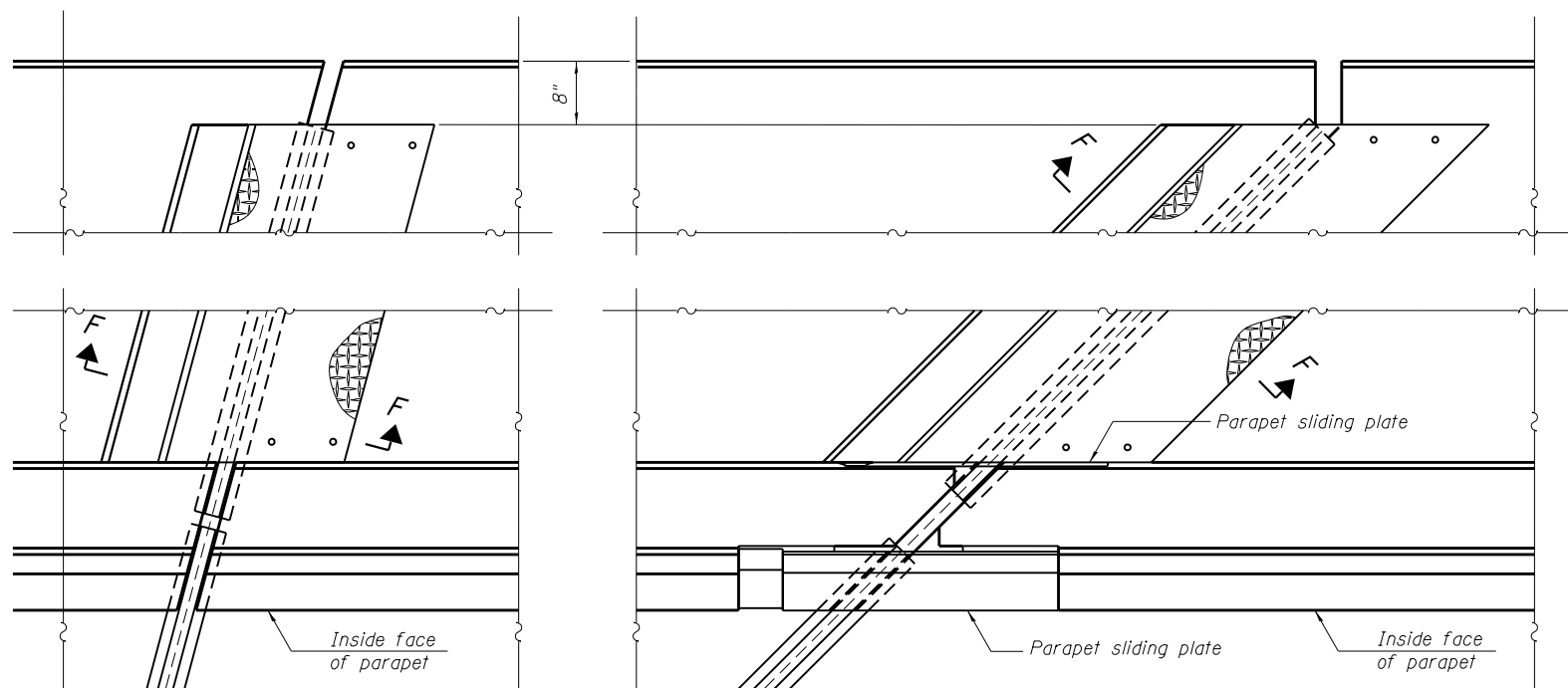
(Skews > 30° shown. Skews = 30° similar except as shown in plan view.)



DETAIL B



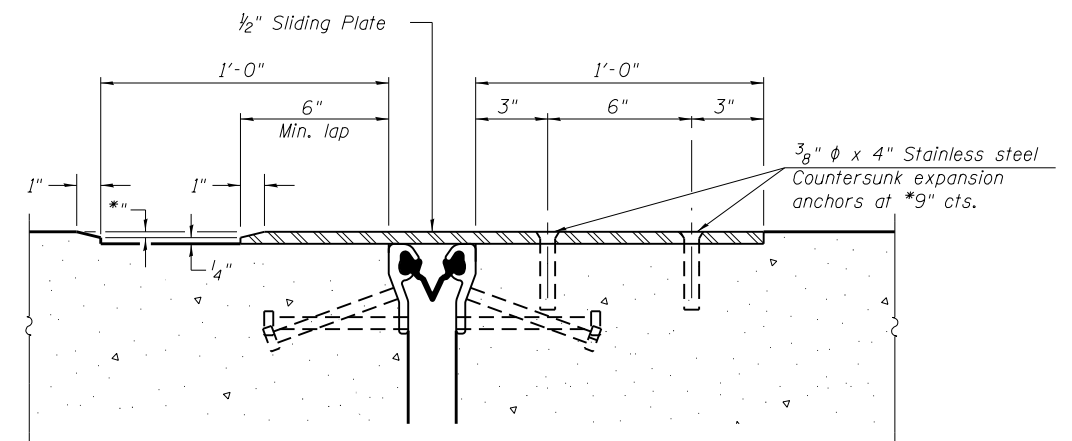
SECTION E-E



(FOR SKEWS = 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

(Sheet 3 of 3)

MODEL: D:\p\117B-1\117B-1.dgn
 FILE NAME: 049-0167-60R79-011-DET.dgn

EJ-SS-S

8-11-17

CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 184-001397

USER NAME = jpong
 PLOT SCALE = 0.1667' / 1"
 PLOT DATE = 8/9/2018

DESIGNED - BCG
 DRAWN - DMW
 CHECKED - JMB
 DATE - 07-13-2018

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
 PREFORMED JOINT STRIP SEAL - SIDEWALK**

SCALE: SHEET 14 OF 17 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	28
SN 049-0167			CONTRACT NO. 60R79	
ILLINOIS FED. AID PROJECT				

NOTES:

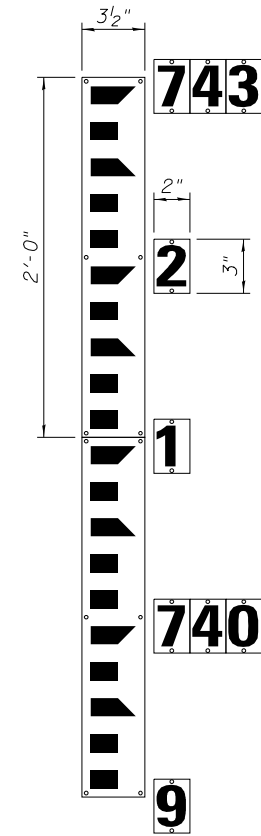
The gauge plates shall be porcelain enameled iron plate graduated in feet and tenths, unnumbered, and 3 1/2" wide. Gauge plates shall be "WaterMark" Style "E" or approved equivalent.

Each individual number plate should be a black numeral on a 2"x 3" white porcelain enameled iron plate. Number plates shall be "Watermark" Style "E" or approved equivalent.

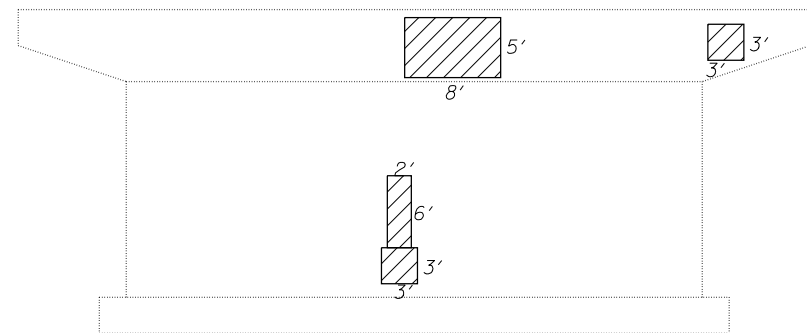
Both the gauge plates and number plates shall be fastened directly to the pier with a 1/4" diameter, 1 1/2" long masonry screw with a hex washer head.

Three digit elevations to be installed at the top of the gauge and at every elevation ending with 0. At all of the other whole elevations, place the last digit as shown in the example to the right.

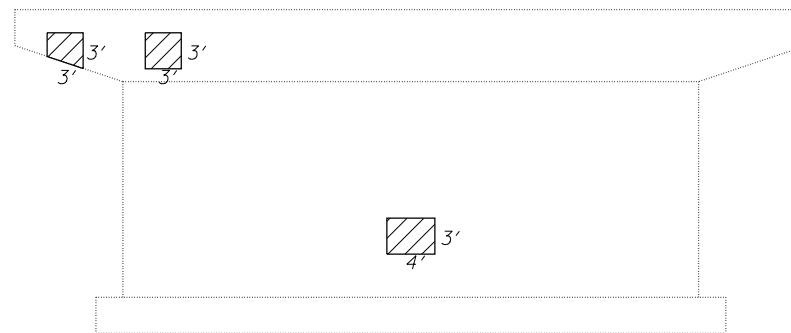
Elevations 733 thru 743 to be installed. Install 3 digits for the top elevation and all others ending in 0. All other whole number elevations to have only the last digit installed. See "Stream Gauge Detail" for location of digits to be installed.



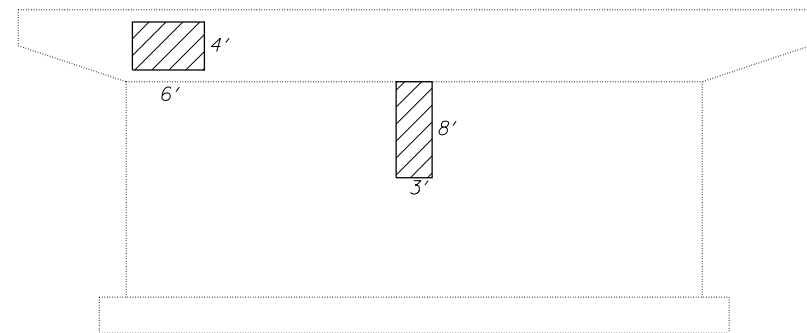
STREAM GAUGE DETAIL
(Partial Detail Shown)



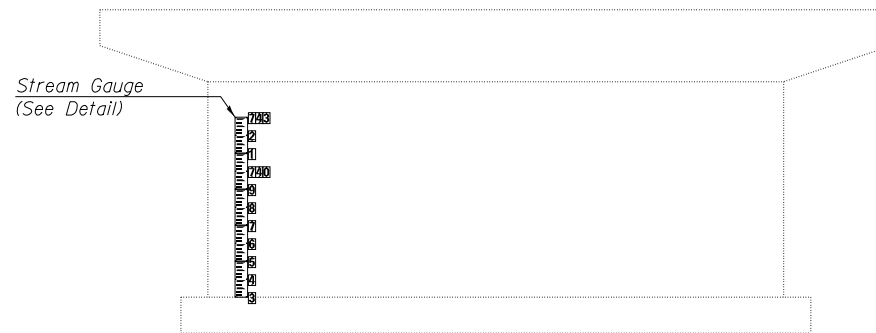
PIER 8 WEST FACE
(Looking East)



PIER 10 EAST FACE
(Looking West)



PIER 8 EAST FACE
(Looking West)



PIER 10 WEST FACE
(Looking East)

NOTE:

Repair of the existing abutment and piers 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.

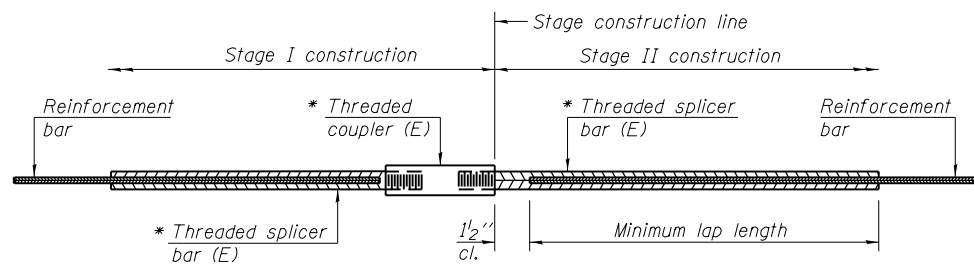
BILL OF MATERIAL

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal To or Less Than 5")	Sq. Ft.	148
	Stream Gauge	Each	1

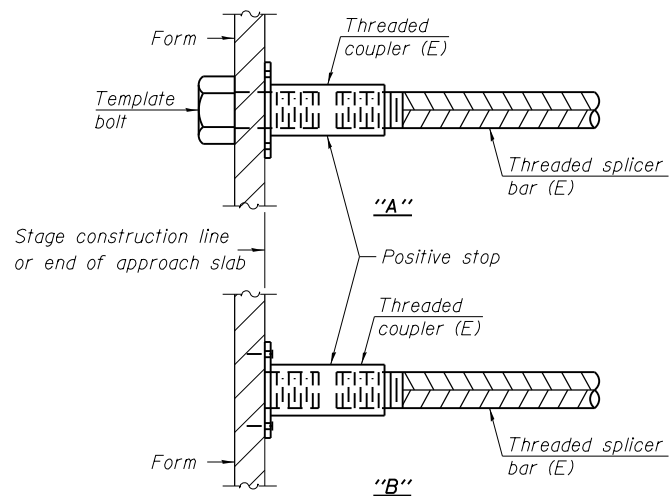
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	DATE - 07-13-2018	REVISED -

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 29
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

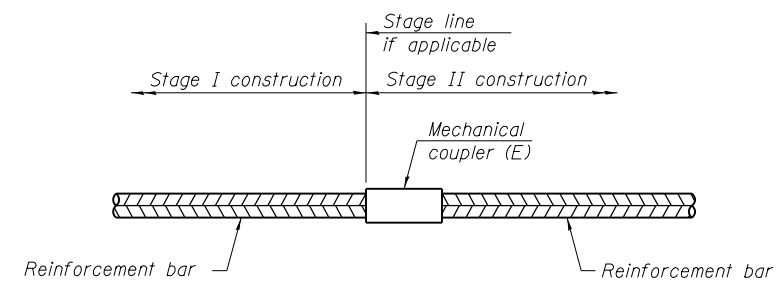


STANDARD BAR SPLICER ASSEMBLY



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.



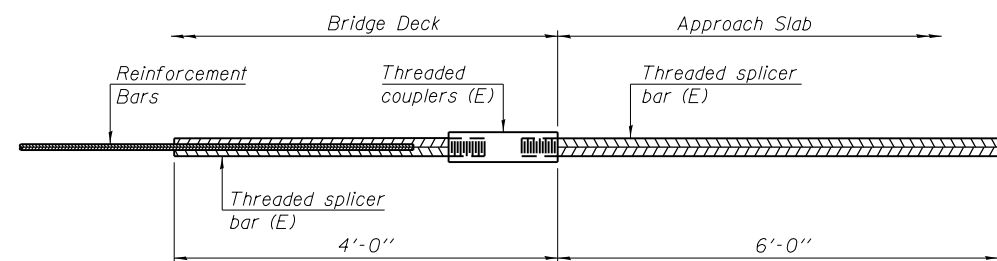
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

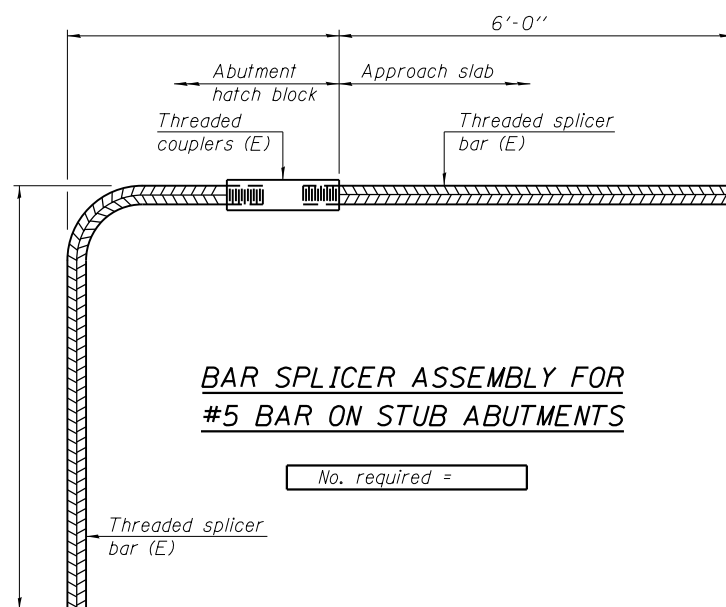
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
N. Abut. Joint	#5	3	3'-0"
N. Abut. Joint	#6	9	3'-7"
N. Abut. Joint	#7	8	4'-8"
S. Abut. Joint	#5	3	3'-0"
S. Abut. Joint	#6	9	3'-7"
S. Abut. Joint	#7	8	4'-8"
Pier 8 Joint	#5	11	3'-0"
Pier 8 Joint	#6	5	3'-7"
Pier 8 Joint	#7	8	4'-8"
Pier 10 Joint	#5	11	3'-0"
Pier 10 Joint	#6	5	3'-7"
Pier 10 Joint	#7	8	4'-8"



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. 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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FILE NAME: 184-001397-60R79-013-DET.dgn

BSD-1

2-17-2017

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

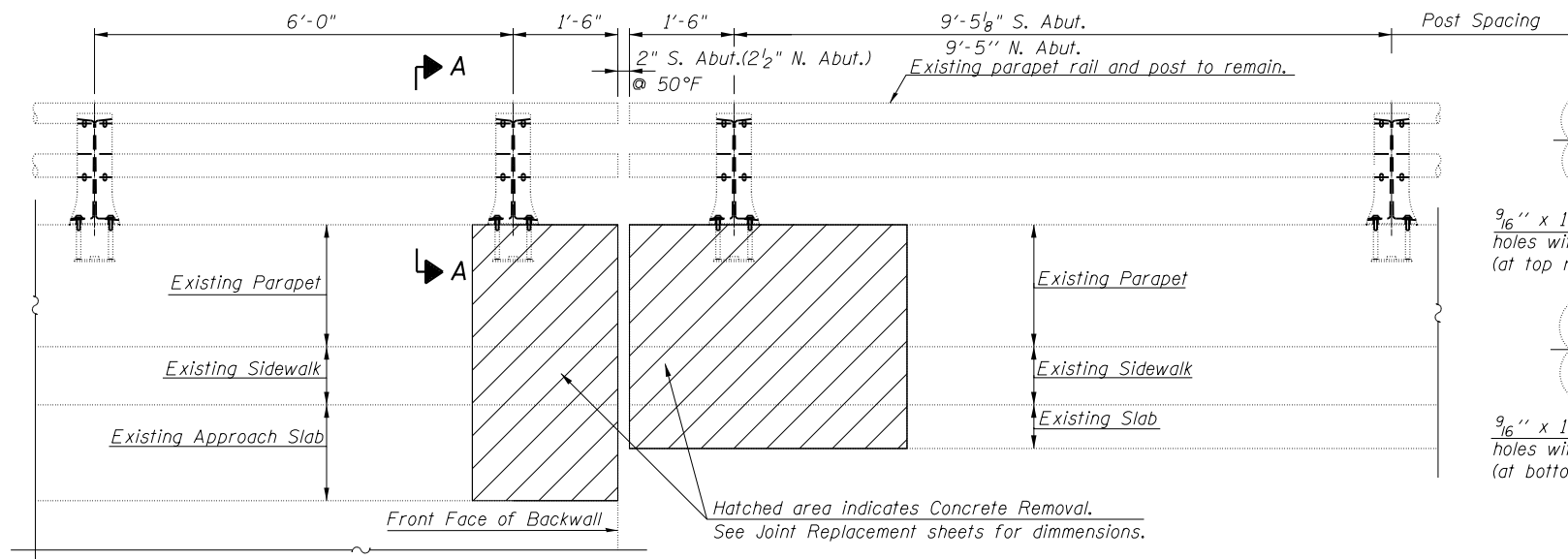
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

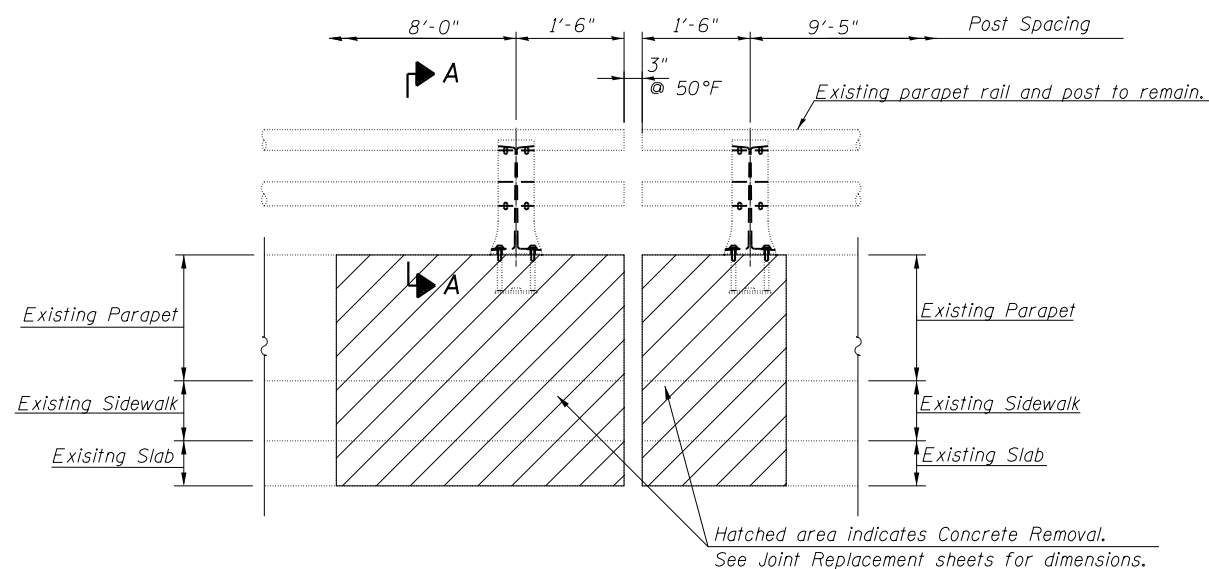
US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS

SCALE: SHEET 16 OF 17 SHEETS STA. TO STA.

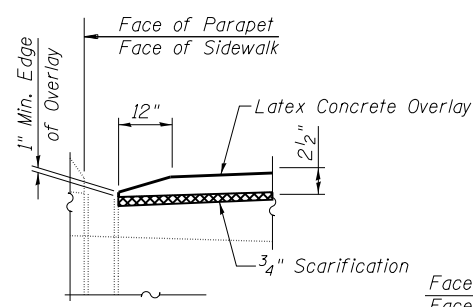
F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 30
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



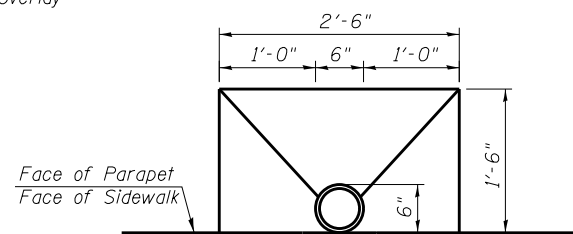
EXISTING INSIDE FACE OF WEST PARAPET RAIL POST SPACING
(S. Abutment shown, N. Abutment opposite hand)



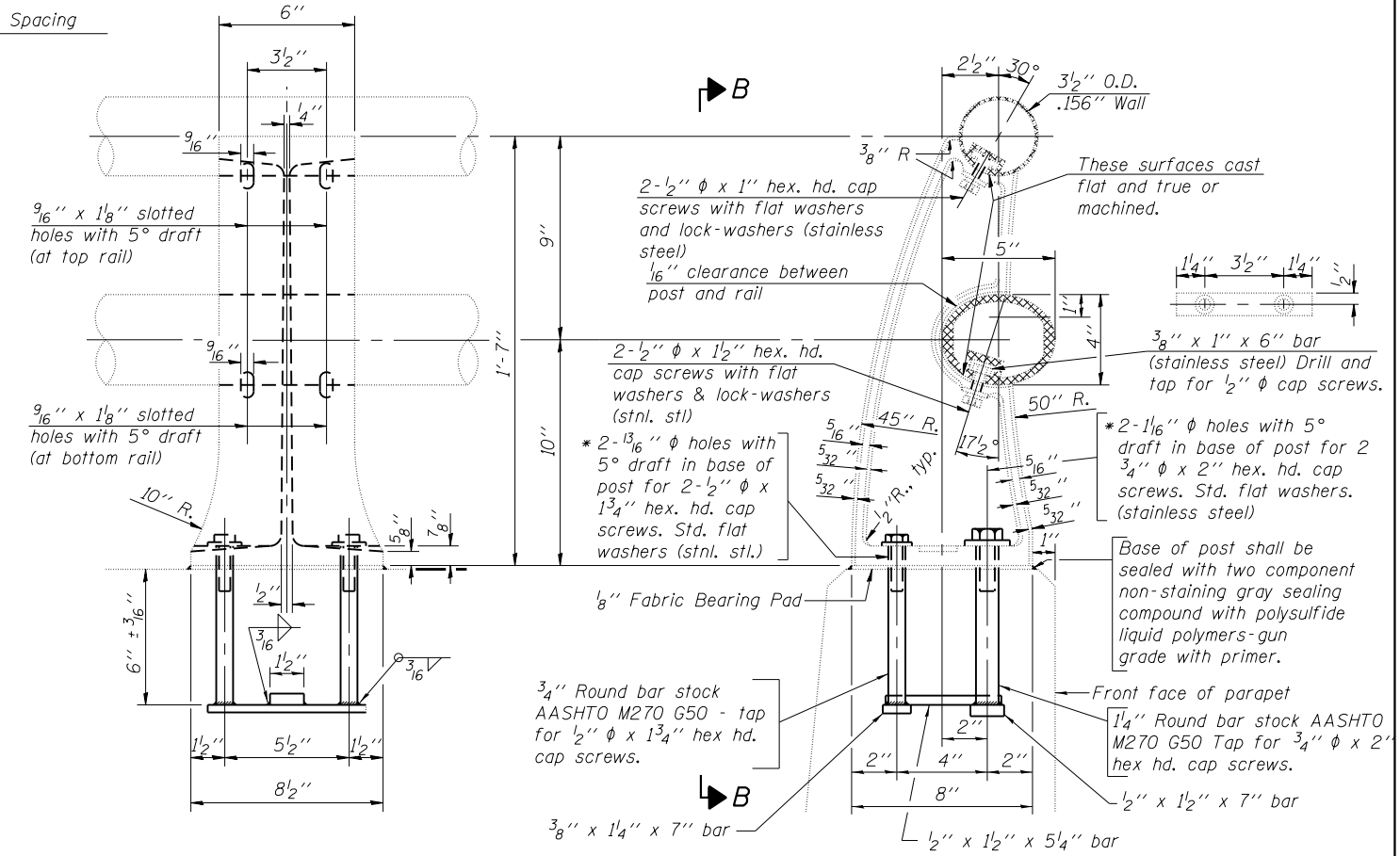
EXISTING INSIDE FACE OF WEST PARAPET RAIL POST SPACING
(Pier 8 shown, Pier 10 opposite hand)



SECTION AT FLOOR DRAIN



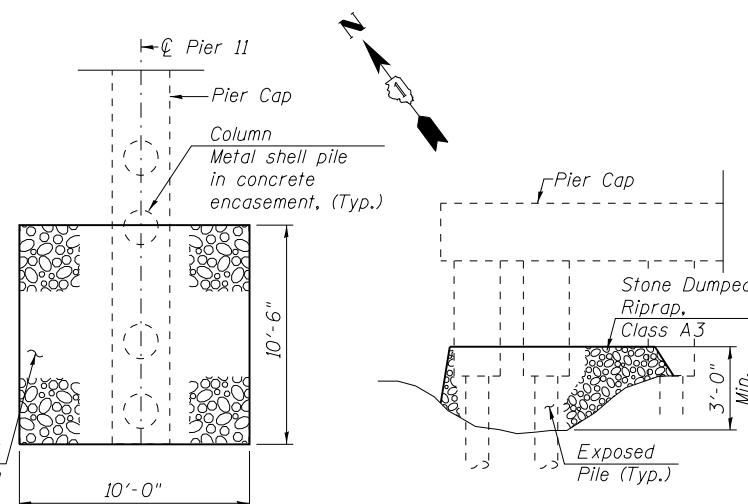
PLAN AT DRAIN



VIEW B-B

RAIL POST DETAILS

SECTION A-A



PLAN

PARTIAL ELEVATION

PIER 11 EROSION PROTECTION DETAIL

JOINT REPAIR NOTES

- Existing reinforcement bars extending into the concrete removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost include with Concrete Removal.
- Existing reinforcement bars in the concrete removal area parallel to the expansion joints shall be removed.
- Removal and disposal of the existing expansion joints will not be paid for separately, but shall be included with the cost of Concrete Removal.
- Existing Handrail and posts in areas of parapet reconstruction shall be removed and stored. Posts shall be reset in the new parapet concrete with new anchors, nuts and washers. Handrails shall be reset prior to opening sidewalk to pedestrian traffic. Cost of removal, storage, and replacement included with Concrete Superstructure.
- Contractor may remove and reinstall the existing diaphragm members as necessary to complete the required concrete removal and reconstruction. Cost included with Concrete Removal.
- Work this sheet with Expansion Joint Repairs and Preformed Joint Strip Seal sheets.

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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = dwoznarski
PLOT SCALE = 0.1667' / 1" =
PLOT DATE = 8/16/2018

DESIGNED - BCG
DRAWN - DMW
CHECKED - JMB
DATE - 07-13-2018

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
MISCELLANEOUS DETAILS

SCALE: SHEET 17 OF 17 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	31
SN 0149-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

BENCH MARK:

B.M. EE-304: Elev. 748.25 Square cut top of wing wall S.E. corner of East Road Bridge over Pistakee Lake. Station 11+35.00 23' LT.

EXISTING STRUCTURE:

The existing Bridge has an overall length of 128'-8". The Superstructure consists of a reinforced concrete deck composite with 24" steel wide flange beams. There are three spans 35'-6", 52'-7 1/4", and 35'-6 5/8". The Superstructure is supported by two reinforced concrete piers and two reinforced concrete abutments.

SCOPE OF WORK:

1. Remove and replace deck joints at north and south abutments with preformed joint strip seal.
2. Repair bridge deck slab.
3. Bridge deck hydroscarification 3/4".
4. Place bridge deck latex concrete overlay, 2 1/2"
5. Apply protective coat to parapet and top of deck new concrete but does not include the latex concrete overlay.
6. Repair substructure.
7. Replace end diaphragms.
8. Patch and overlay approaches.

DESIGN STRESSES

EXISTING STRUCTURE

f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)
 fy = 36,000 psi (M-183 Structural Steel)
 fy = 50,000 psi (M-223 Grade 50 Structural Steel)

DESIGN SPECIFICATIONS

(New Construction) 2002 AASHTO Standard Specifications, 7th Edition

LOADING HS 20-44

Original Construction

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. This Page Left Blank Intentionally
4. Superstructure Repair
5. Joint Replacement (North Abutment)
6. Joint Replacement (South Abutment)
7. Preformed Joint Strip Seal - Sidewalk
8. Preformed Joint Strip Seal - Sidewalk
9. Preformed Joint Strip Seal - Sidewalk
10. Structural Steel Repair
11. Substructure Repair
12. Bar Splicer Assembly and Mechanical Splicer Details
13. Miscellaneous Details

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The CONTRACTOR shall field verify existing dimensions and details affecting new construction 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 scope of the work, however the CONTRACTOR will be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement bars designated (E) shall be epoxy coated.
 Joint openings shall be adjusted according to Art. 520.04, in the Standard Specs. when the deck is poured at an ambient temperature other than 50°F.
 Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4" φ, holes 15/16" φ, unless otherwise noted.
 All structural steel shall be AASHTO M 270 Grade 36.
 Reinforcement bars designated (E) shall be epoxy coated.
 No field welding is permitted except as specified in the contract documents.
 Expansion joints shall be fabricated and installed according to the Manufacturer's recommendations and as approved by the Engineer.
 Expansion joints shall be fabricated to conform to the existing cross slopes of the bridge.

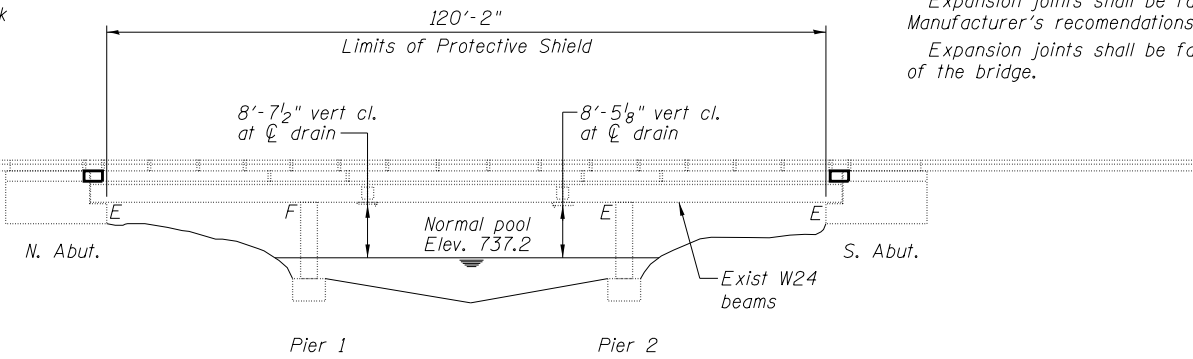
Existing structural steel that will be in contact with the new structural steel shall be cleaned and painted prior to erection as required by the GBSP ("Cleaning and Painting Contact Surface Areas of Existing Steel Structures.")

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be reddish brown, Reddish Brown, Munsell No. 2.5YR 3/4.

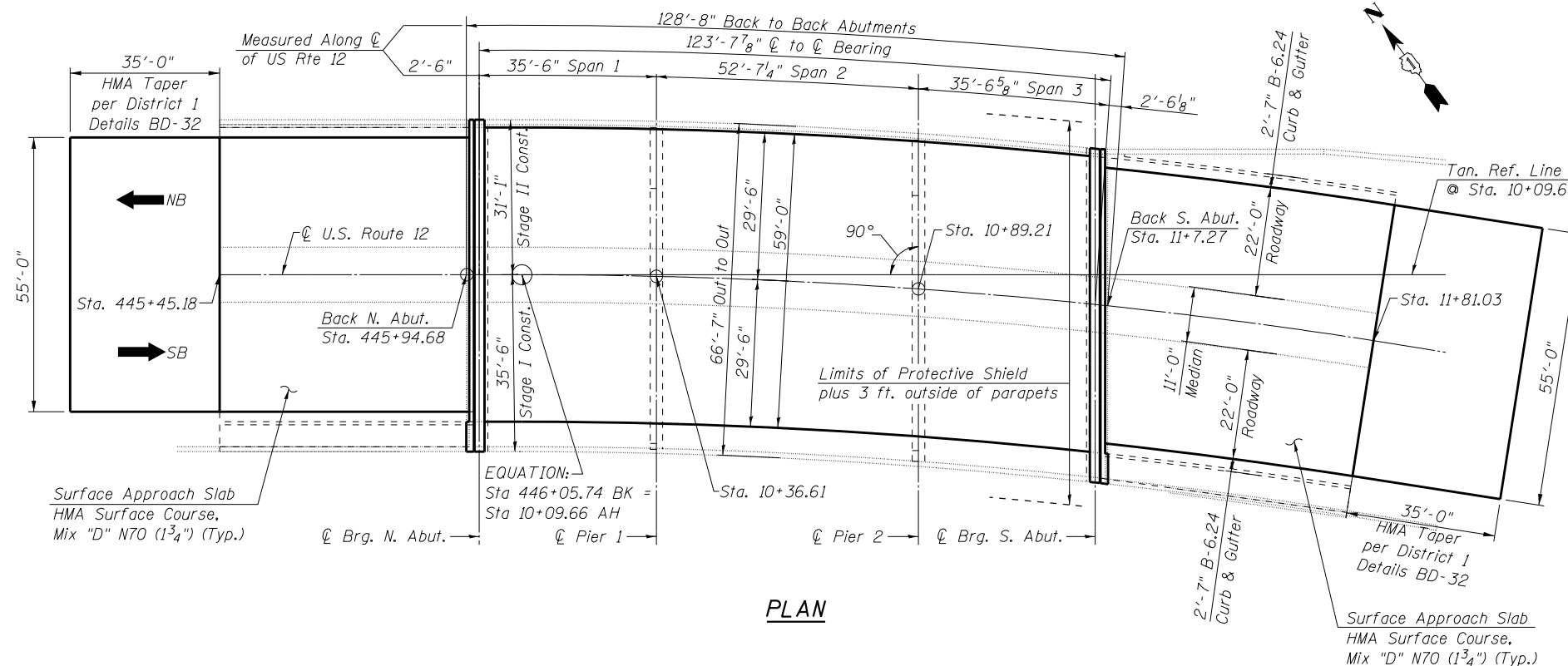


ELEVATION

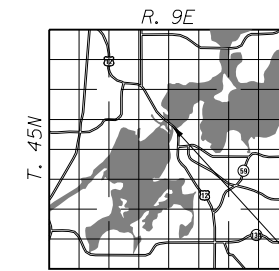
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Bituminous Materials (Tack Coat)	Pound	534	-	534
Hot-Mix Asphalt Surface Removal - Butt Joint	Sq. Yd.	368	-	368
Hot-Mix Asphalt Surface Course, Mix "D", N70 (1 3/4")	Ton	116	-	116
Concrete Removal	Cu. Yd.	17.4	-	17.4
Concrete Superstructure	Cu. Yd.	19.4	-	19.4
Bridge Deck Grooving	Sq. Yd.	806	-	806
Protective Coat	Sq. Yd.	348	-	348
Protective Shield	Sq. Yd.	969	-	969
Reinforcement Bars, Epoxy Coated	Pound	2480	-	2480
Preformed Joint Strip Seal	Foot	130	-	130
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	795	-	795
Bridge Deck Scarification 3/4"	Sq. Yd.	795	-	795
Structural Repair of Concrete (Depth Equal To or Less Than 5 Inches)	Sq. Ft.	-	81	81
Furnishing & Erecting Structural Steel	Pound	6960	-	6960
Structural Steel Removal	Pound	5515	-	5515
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	3.6	-	3.6
Bridge Sidewalk Repair (Partial Depth)	Sq. Ft.	12	-	12
Approach Slab Repair (Full Depth)	Sq. Yd.	126	-	126
Bar Splicers	Each	24	-	24
Stream Gauge	Each	-	1	1

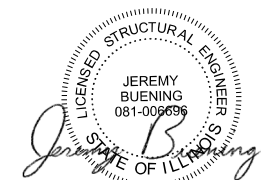
* The unit weight used to calculate all HMA surface mixture quantities 112 LBS/SQ YD/1N



PLAN



LOCATION SKETCH



8/7/2018
 Date
 Jeremy Buening, P.E., S.E.
 License Expires 11/30/18

**GENERAL PLAN AND ELEVATION
 US ROUTE 12 OVER
 PISTAKEE LAKE CHANNEL
 FAP RTE 334 SEC 117B-BR
 LAKE COUNTY
 STATION 10+62.91
 STRUCTURE NO. 049-0019**

MODEL Dwg: j1; FILE NAME: 0490019-60R79-001_GPE.dwg

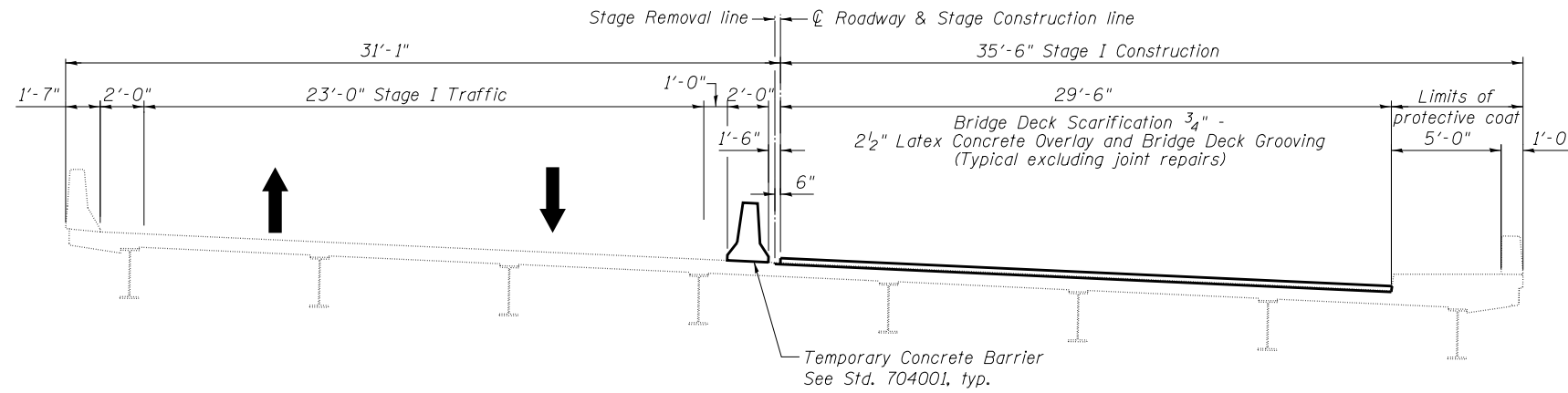
CHASTAIN & ASSOCIATES LLC
 CONSULTING ENGINEERS
 184-001397

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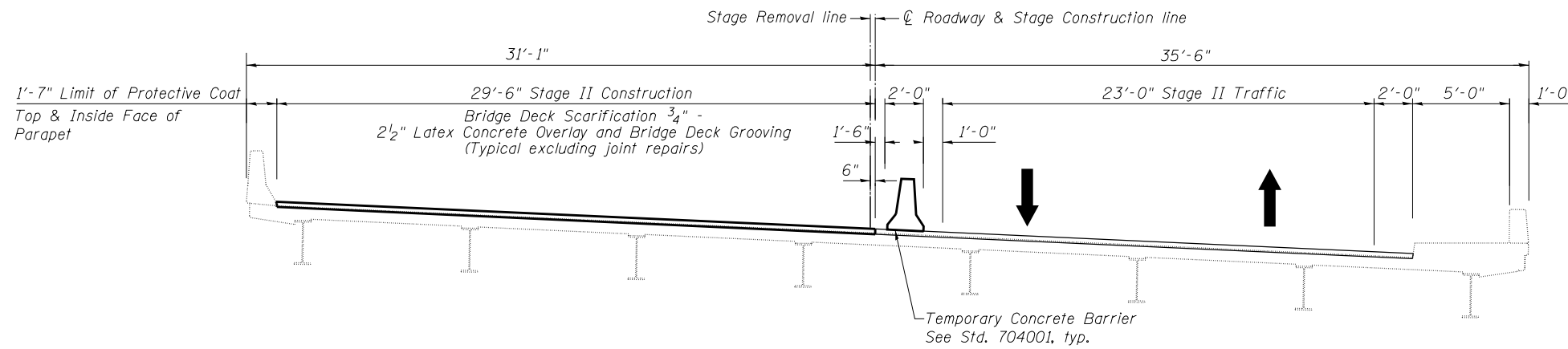
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

US ROUTE 12 OVER PISTAKEE LAKE CHANNEL GENERAL PLAN AND ELEVATION	
SCALE:	SHEET 1 OF 13 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	32
SN 049-0019		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



STAGE I REMOVAL & CONSTRUCTION
(Looking South)



STAGE II REMOVAL & CONSTRUCTION
(Looking South)

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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = jpong	DESIGNED - BCG	REVISED -
DRAWN - DMW	REVISOR -	
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

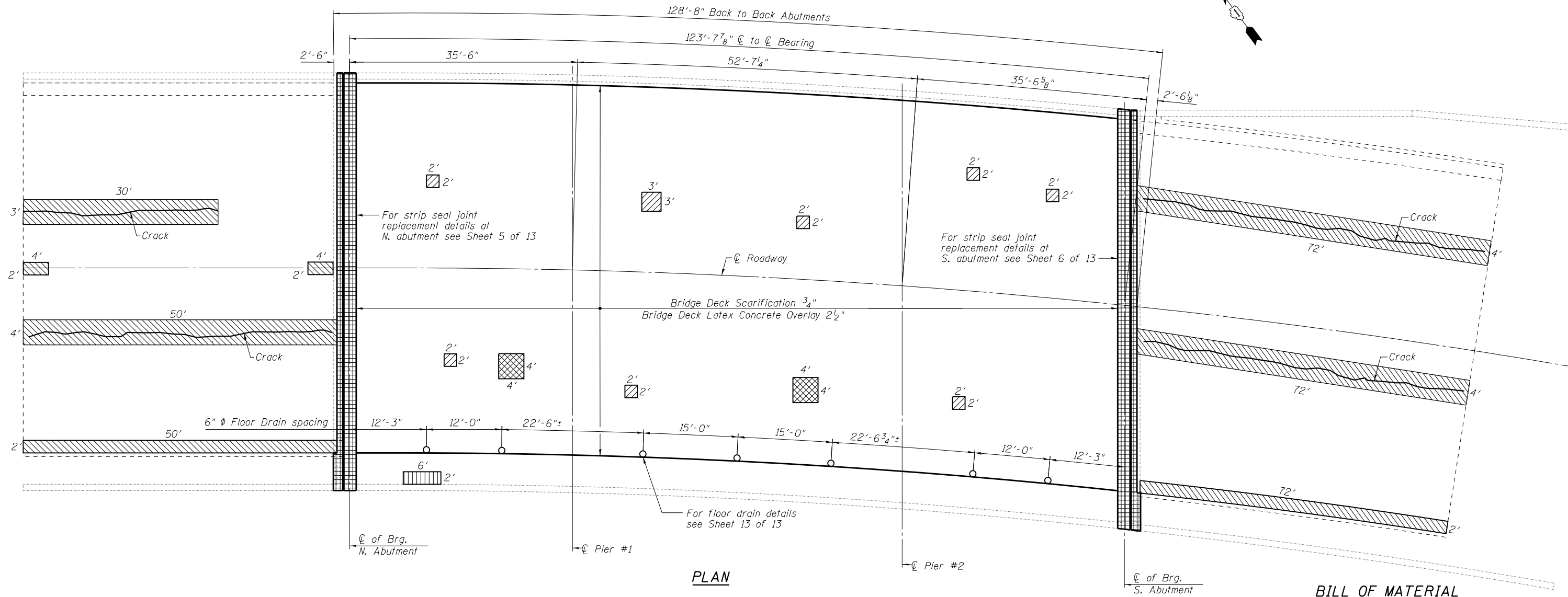
**US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
STAGE CONSTRUCTION DETAILS**

SCALE: SHEET 2 OF 13 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	33
SN 049-0019			CONTRACT NO. 60R79	
ILLINOIS FED. AID PROJECT				

NOTES:

Areas of deck repairs are estimated. Actual type, location and dimensions of deck repairs are to be determined and documented by the ENGINEER during construction. ENGINEER shall sound deck after deck sarification.



PLAN

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth), Type II	Sq. Yd.	3.6
* Deck Slab Repair (Partial)	Sq. Yd.	4.1
Bridge Sidewalk Repair (Partial Depth)	Sq. Ft.	12
Approach Slab Repair (Full Depth)	Sq. Yd.	126
Protective Coat	Sq. Yd.	348
Bridge Deck Grooving	Sq. Yd.	806
Bridge Deck Latex Concrete Overlay 2 1/2"	Sq. Yd.	795
Bridge Deck Scarification 3/4"	Sq. Yd.	795

* For information only to assist the Contractor in bidding. See Special Provisions for "Bridge Deck Latex Concrete Overlay" and "Deck Slab Repair".

LEGEND

- Deck Slab Repair (Full Depth), Type II
- Deck Slab Repair (Partial)
- Bridge Sidewalk Repair (Partial Depth)
- Approach Slab Repair (Full Depth)
- Area of Joint Repair

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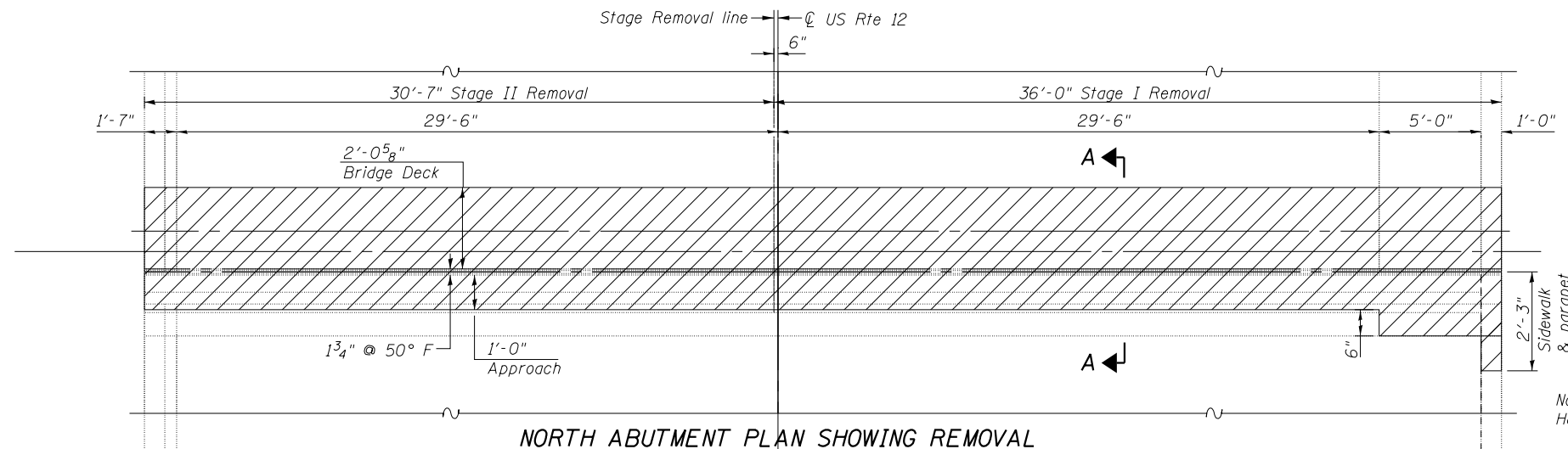
CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

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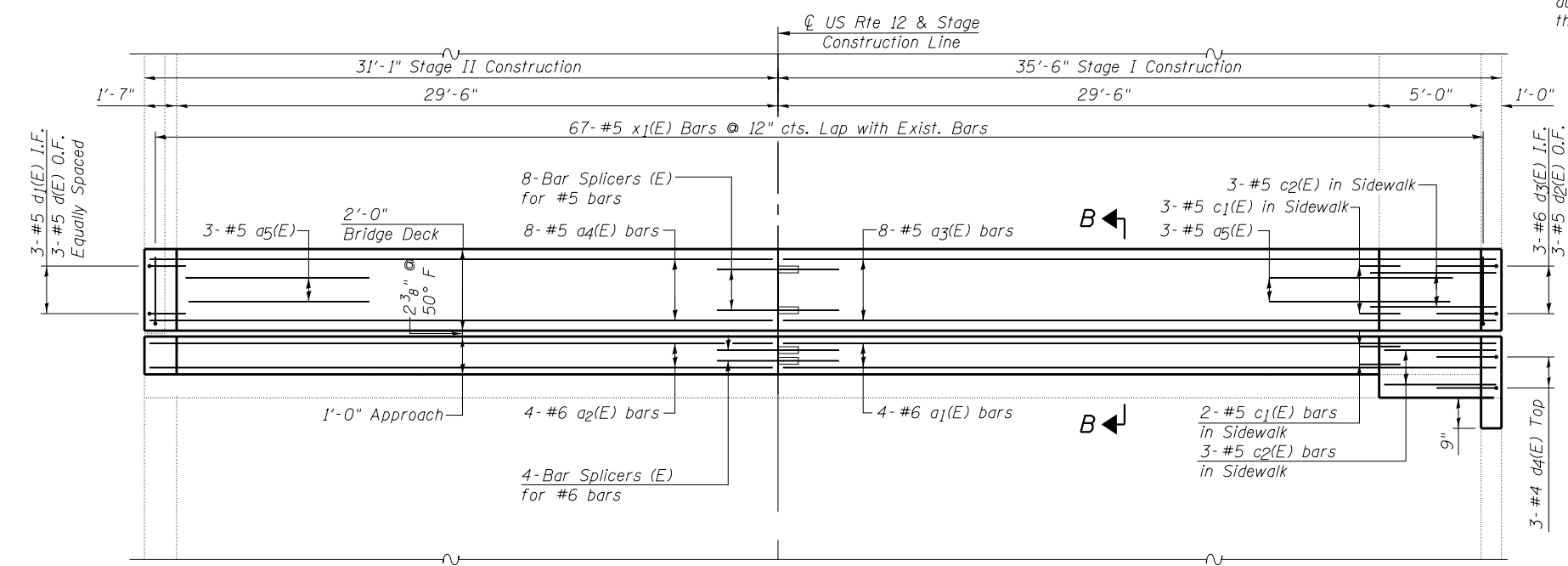
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER PISTAKEE LAKE CHANNEL	
SUPERSTRUCTURE REPAIR	
SCALE:	SHEET 4 OF 13 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 35
SN 049-0019		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



NORTH ABUTMENT PLAN SHOWING REMOVAL



NORTH ABUTMENT PLAN SHOWING REPLACEMENT

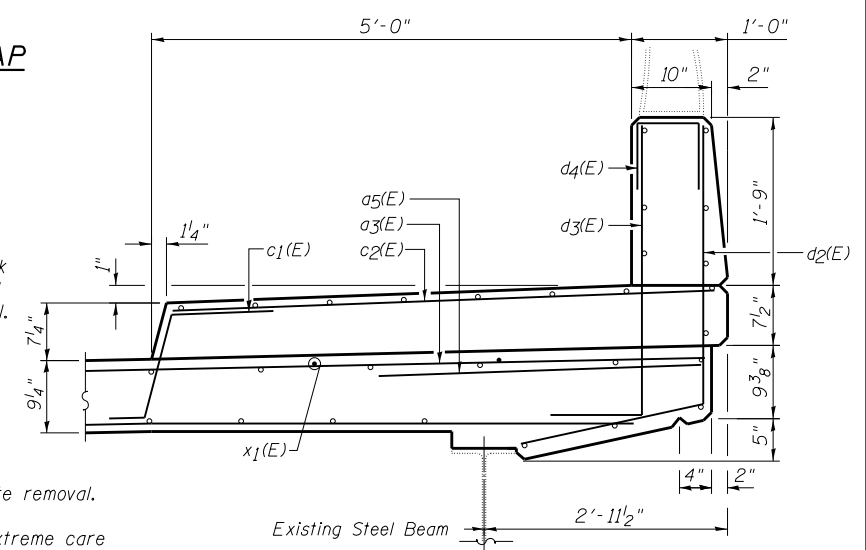
MINIMUM BAR LAP

- #4 Bars = 2'-7"
- #5 Bars = 3'-2"

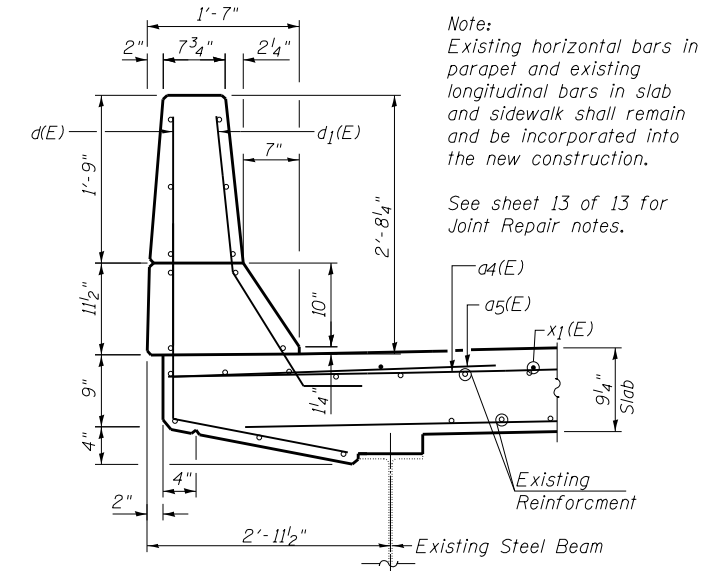
Note:
Existing name plate shall be removed and re-installed. This work is considered included with Concrete Removal.

Note:
Hatched area indicates concrete removal.

The CONTRACTOR shall use extreme care during concrete removal so as not to damage the existing steel beams.



SECTION THRU SIDEWALK AT JOINT



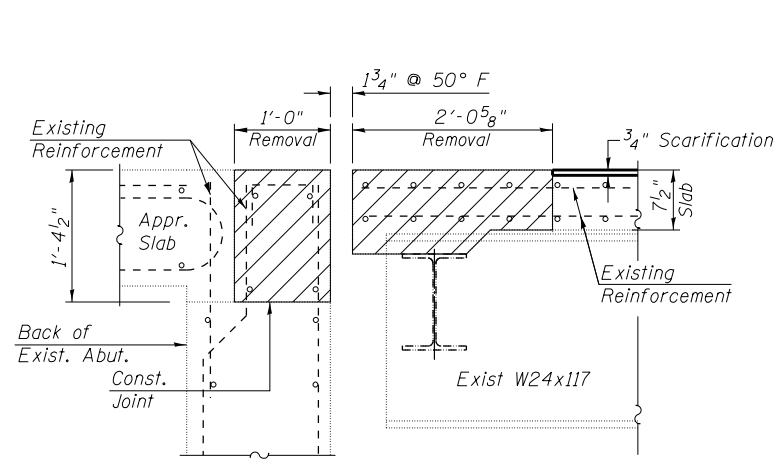
SECTION THRU PARAPET AT JOINT

LEGEND

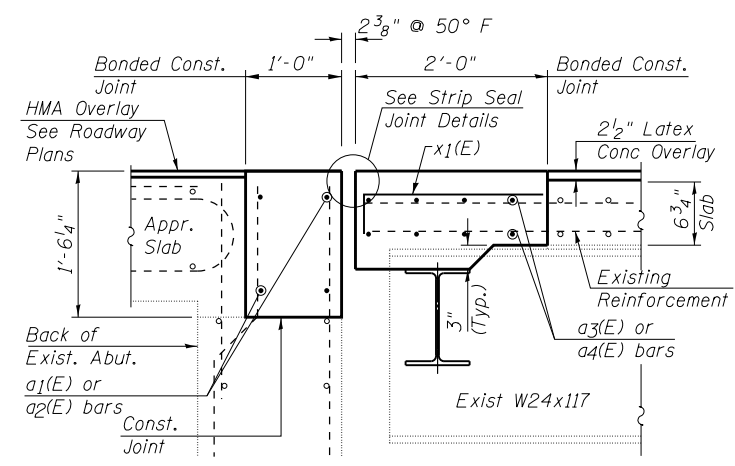
Concrete Removal

BILL OF MATERIAL

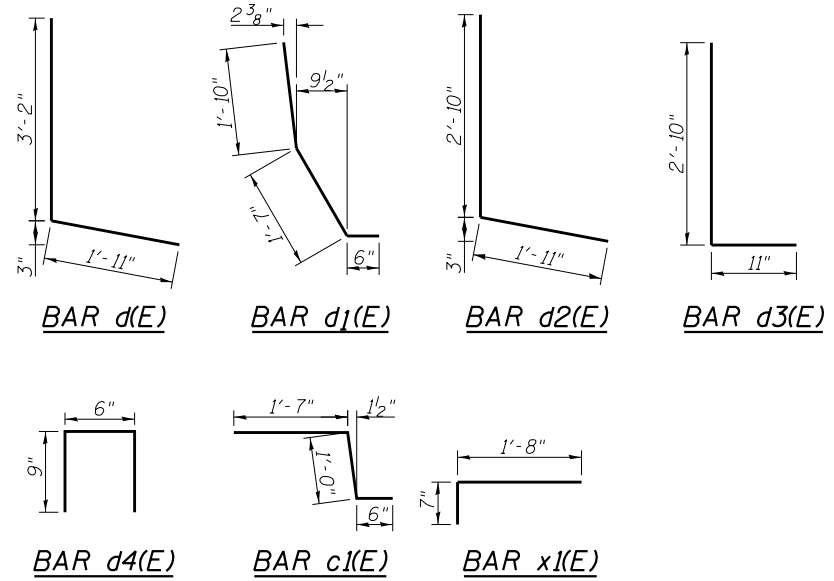
Bar	No.	Size	Length	Shape
a1(E)	4	#6	35'-0"	—
a2(E)	4	#6	30'-7"	—
a3(E)	8	#5	35'-0"	—
a4(E)	8	#5	30'-7"	—
a5(E)	6	#5	4'-0"	—
c1(E)	5	#5	3'-1"	┌
c2(E)	6	#5	5'-6"	—
d(E)	3	#5	5'-1"	┌
d1(E)	3	#5	3'-11"	┌
d2(E)	3	#5	4'-9"	┌
d3(E)	3	#6	3'-9"	┌
d4(E)	6	#4	2'-0"	┌
x1(E)	67	#5	2'-3"	┌
Concrete Removal			Cu. Yd.	8.7
Concrete Superstructure			Cu. Yd.	9.7
Reinforcement Bars, Epoxy Coated			Pound	1,240



SECTION A-A



SECTION B-B



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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

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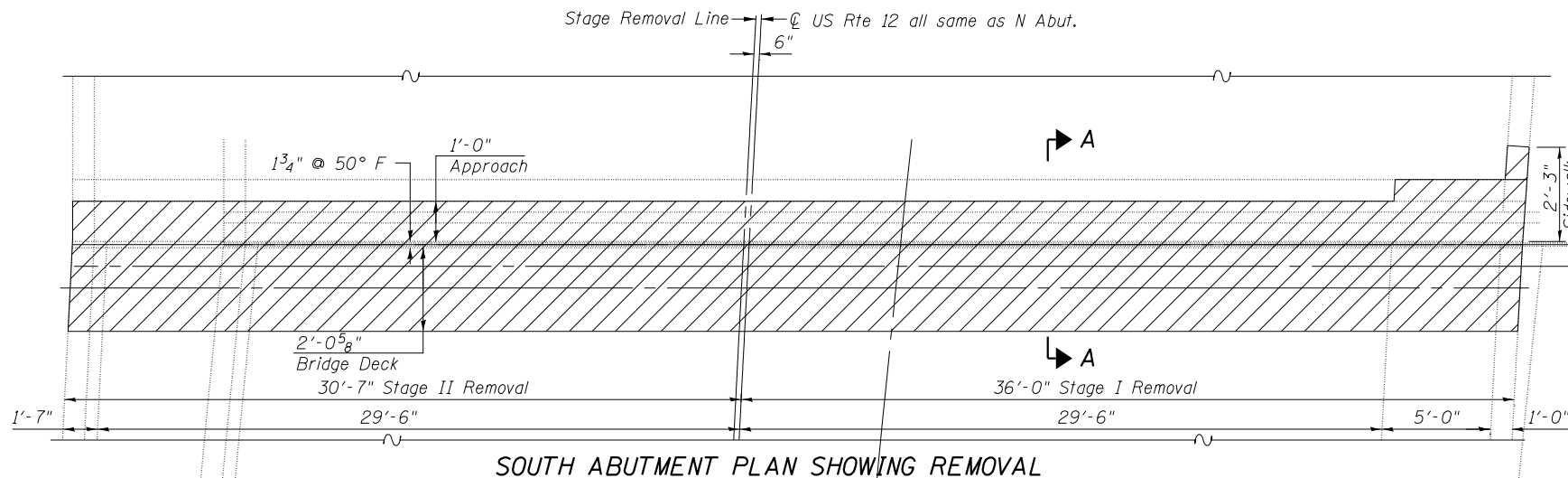
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
JOINT REPLACEMENT (NORTH ABUTMENT)

SCALE: SHEET 5 OF 13 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 36
SN 049-0019		CONTRACT NO. 60R79		

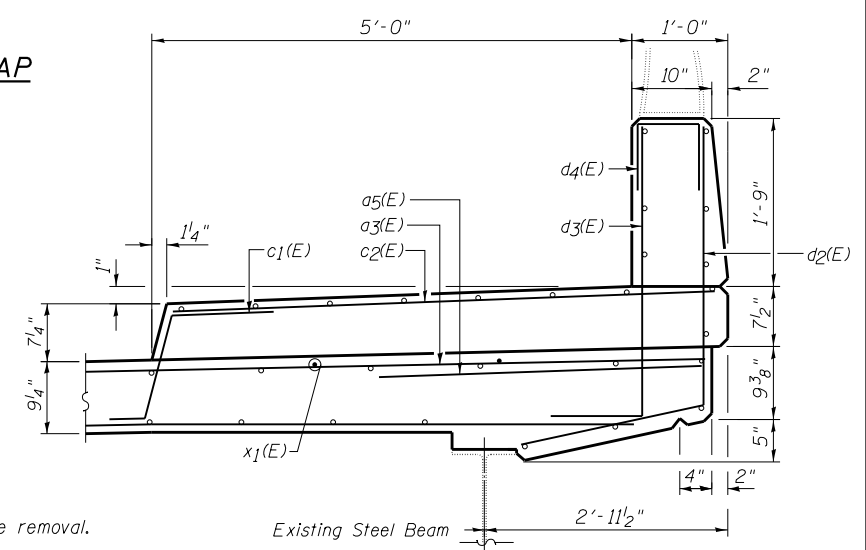
ILLINOIS FED. AID PROJECT



SOUTH ABUTMENT PLAN SHOWING REMOVAL

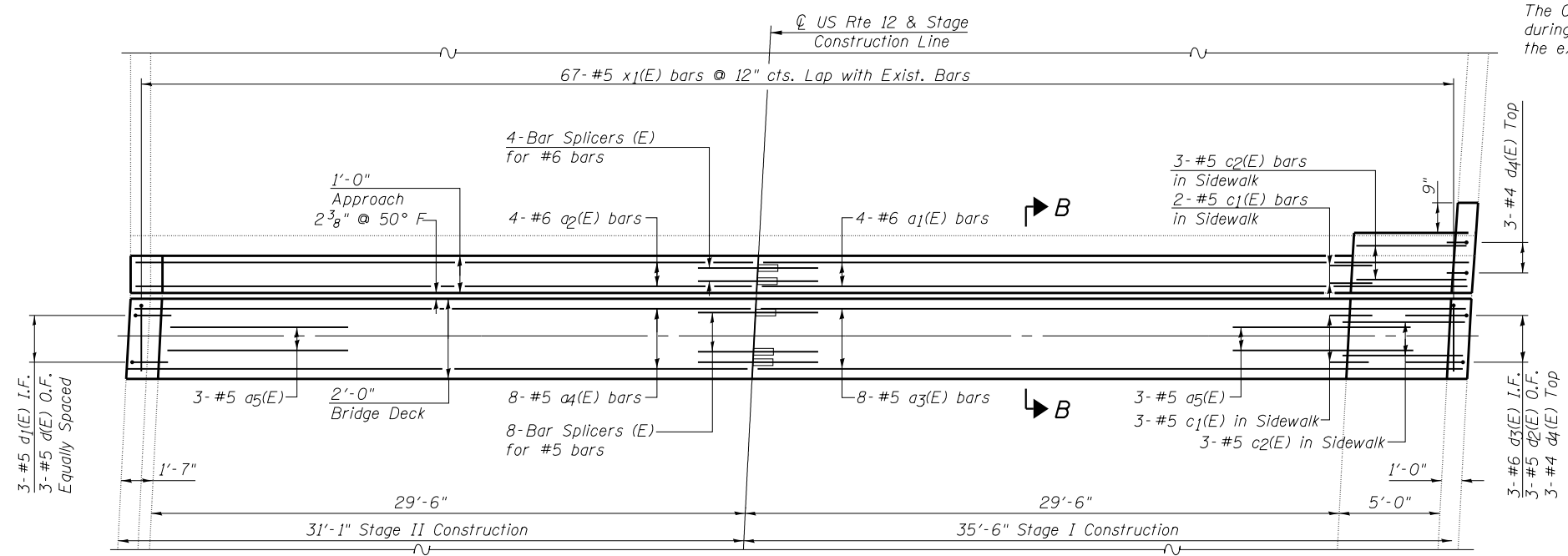
MINIMUM BAR LAP

#4 Bars = 2'-7"
#5 Bars = 3'-2"

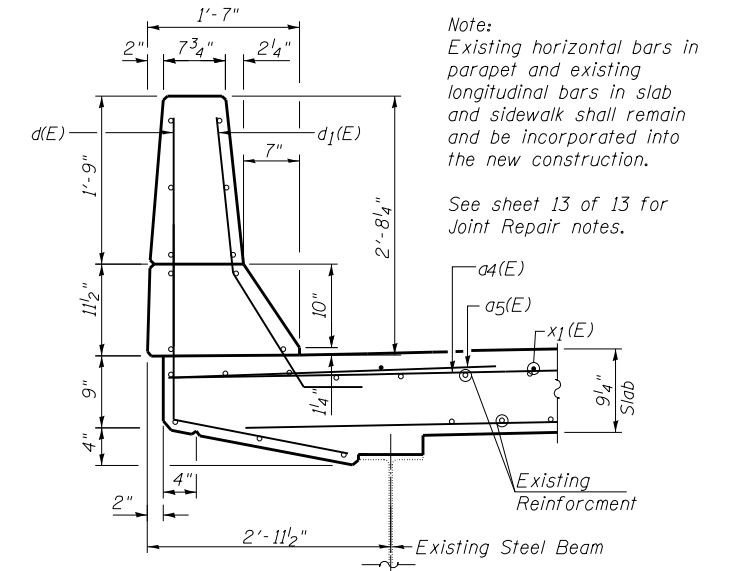


SECTION THRU SIDEWALK AT JOINT

Note:
Hatched area indicates concrete removal.
The CONTRACTOR shall use extreme care during concrete removal so as not to damage the existing steel beams.



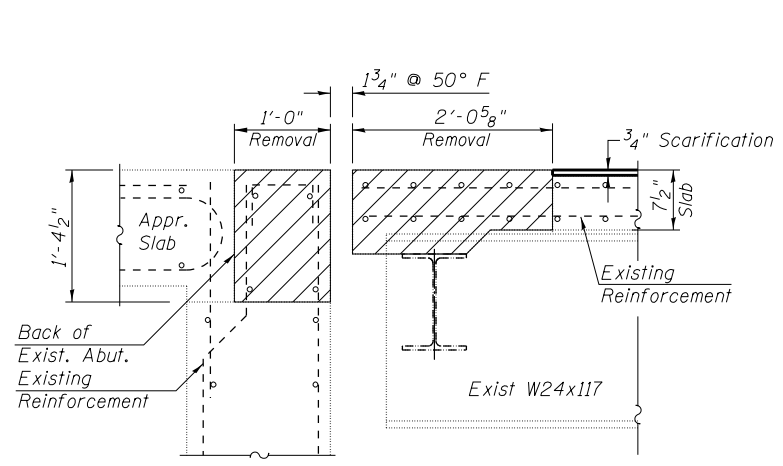
SOUTH ABUTMENT PLAN SHOWING REPLACEMENT



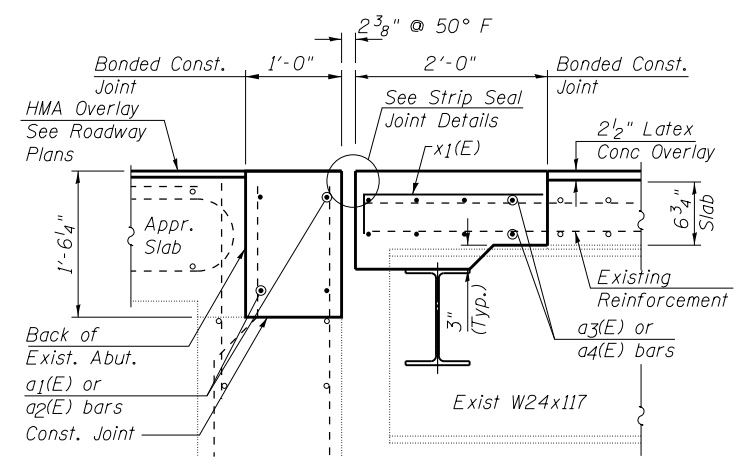
SECTION THRU PARAPET AT JOINT

Note:
Existing horizontal bars in parapet and existing longitudinal bars in slab and sidewalk shall remain and be incorporated into the new construction.
See sheet 13 of 13 for Joint Repair notes.

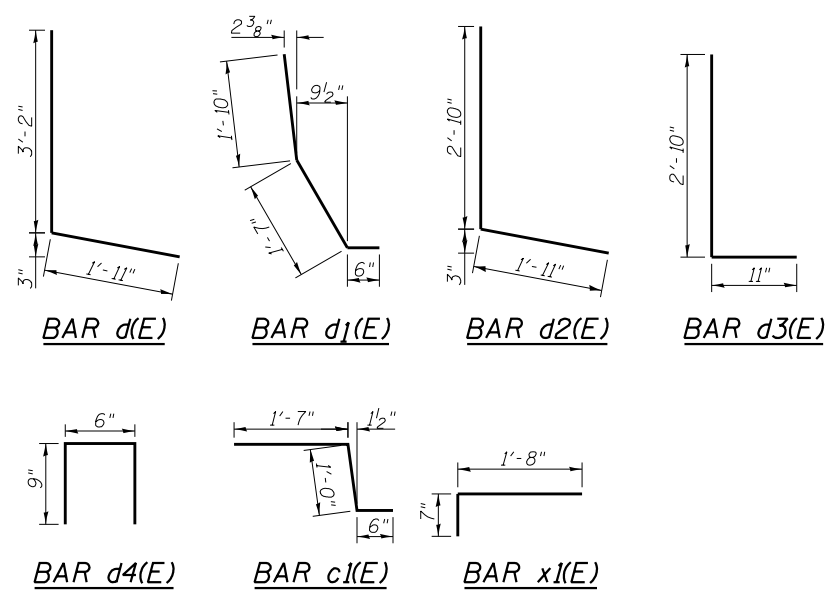
LEGEND
 Concrete Removal



SECTION A-A



SECTION B-B



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	4	#6	35'-0"	—
a2(E)	4	#6	30'-7"	—
a3(E)	8	#5	35'-0"	—
a4(E)	8	#5	30'-7"	—
a5(E)	6	#5	4'-0"	—
c1(E)	5	#5	3'-1"	┌
c2(E)	6	#5	5'-6"	—
d(E)	3	#5	5'-1"	└
d1(E)	3	#5	3'-11"	└
d2(E)	3	#5	4'-9"	└
d3(E)	3	#6	3'-9"	└
d4(E)	6	#4	2'-0"	□
x1(E)	67	#5	2'-3"	┌
Concrete Removal			Cu. Yd.	8.7
Concrete Superstructure			Cu. Yd.	9.7
Reinforcement Bars, Epoxy Coated			Pound	1,240

MODEL: D:\p\... FILE: W:\E:\0420019-60R79-005-JTA.dwg

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184-001397

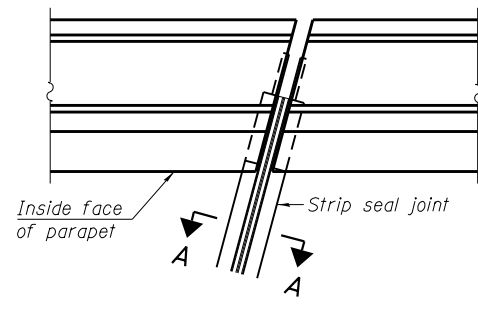
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PLOT SCALE = 8.0000' / in.	DRAWN - DMW	REVISED -
PLOT DATE = 8/9/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
JOINT REPLACEMENT (SOUTH ABUTMENT)

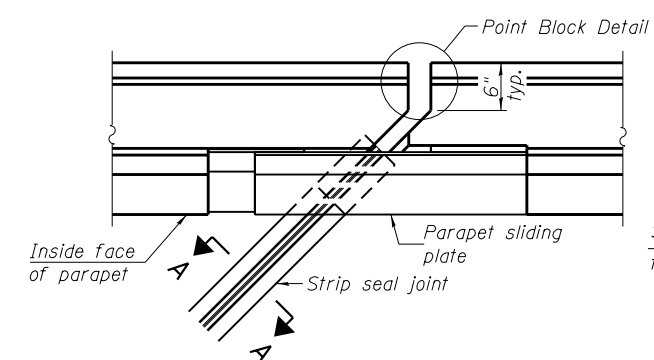
F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 37
SN 049-0019		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 6 OF 13 SHEETS STA. TO STA.

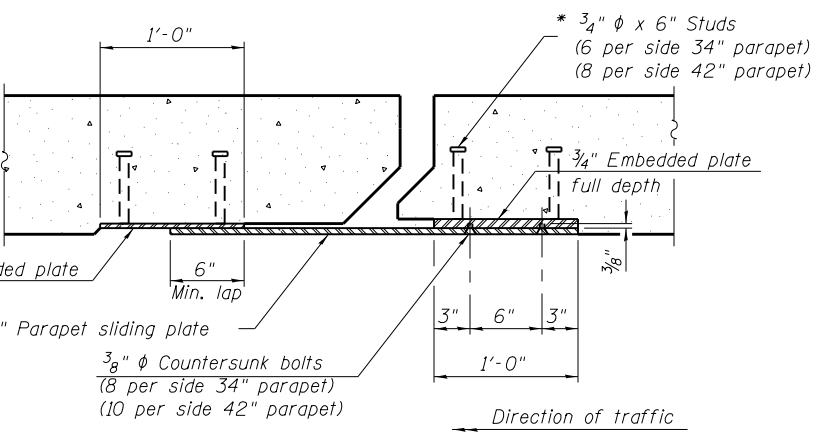


FOR SKEWS = 30°

PLAN AT PARAPET

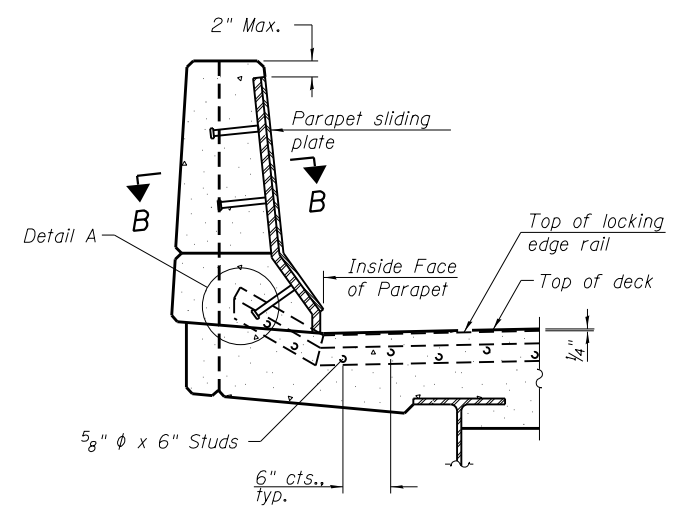


FOR SKEWS > 30°



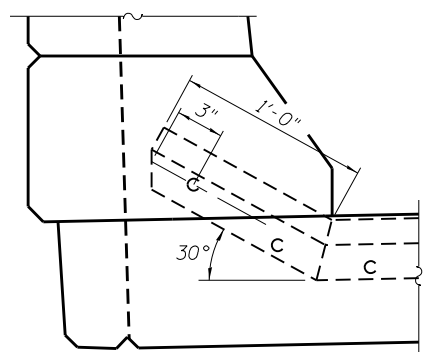
SECTION B-B

Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.
 The manufacturer's recommended installation methods shall be followed.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.
 The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.
 Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.
 34" F-shape barrier shown, 42" F-shape similar as noted.
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

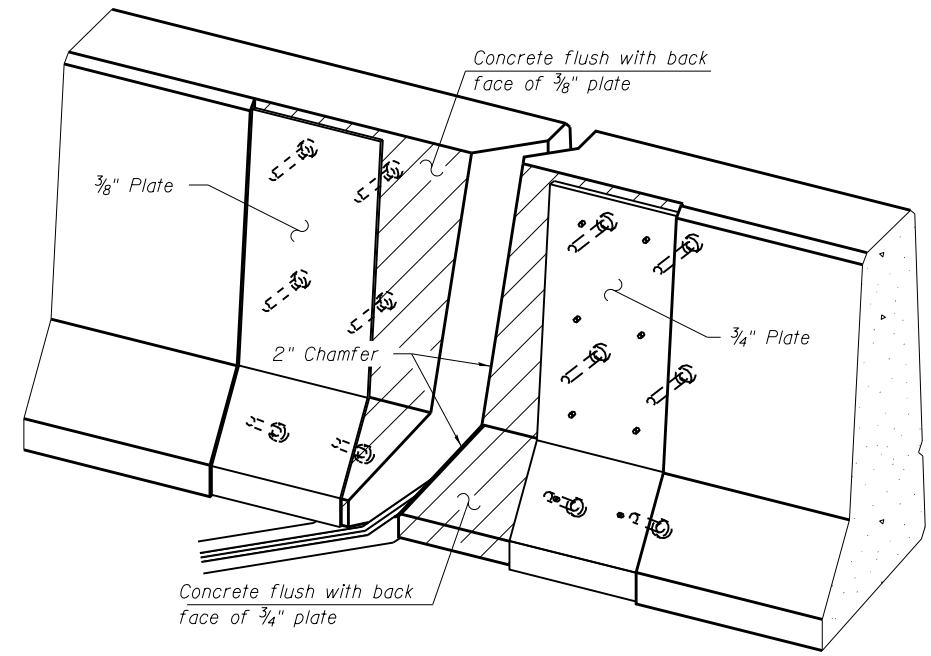


ELEVATION AT PARAPET

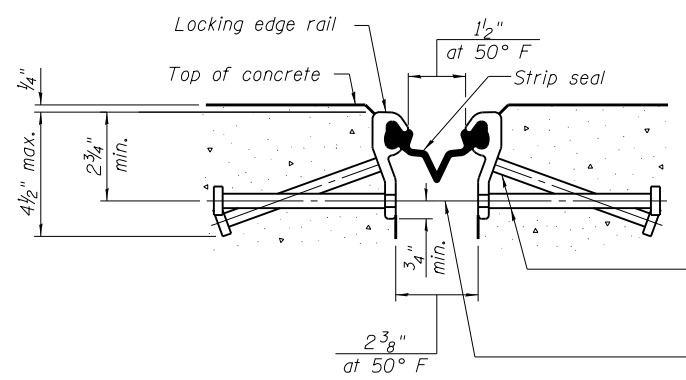
(Skews > 30° shown. Skews = 30° similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
 (Showing embedded plates only)

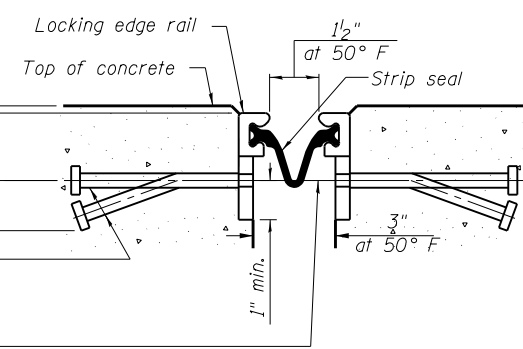


SHOWING ROLLED RAIL JOINT

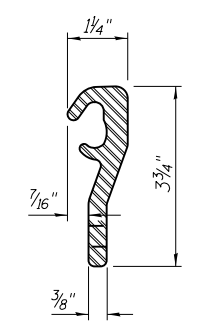
* 5/8" φ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 3/8" φ threaded rods in 7/16" φ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

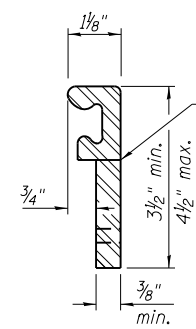
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SHOWING WELDED RAIL JOINT



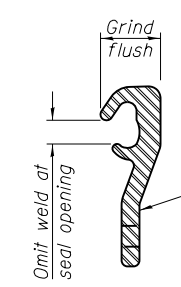
ROLLED (EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	130

EJ-SS-S

8-11-17

(Sheet 1 of 3)



USER NAME = jpong	DESIGNED - BCG	REVISED -
PLOT SCALE = 0.1667' / 1"	DRAWN - DMW	REVISED -
PLOT DATE = 8/9/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

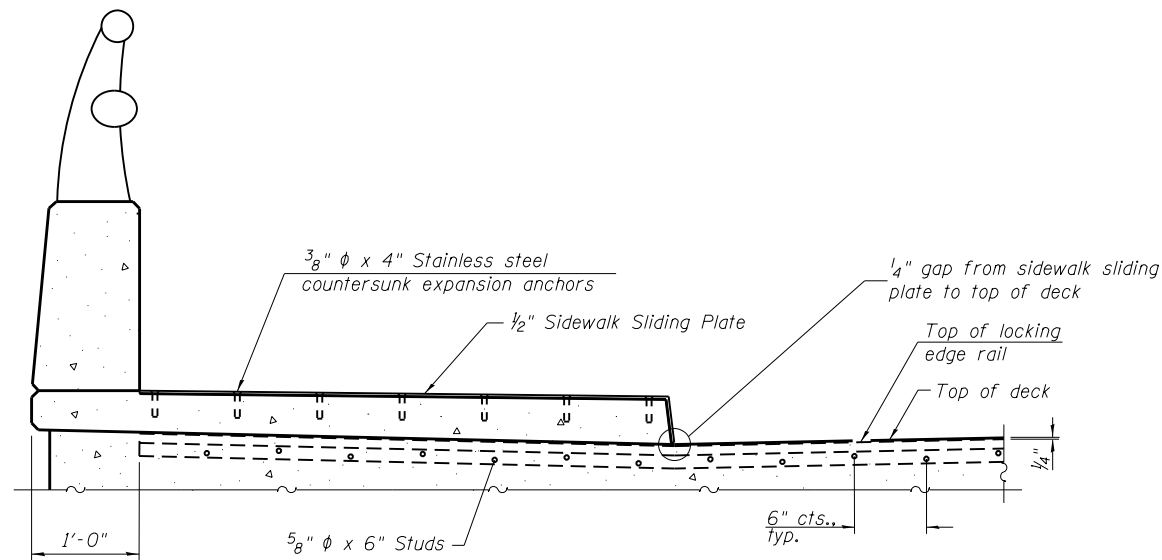
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
 PREFORMED JOINT STRIP SEAL - SIDEWALK

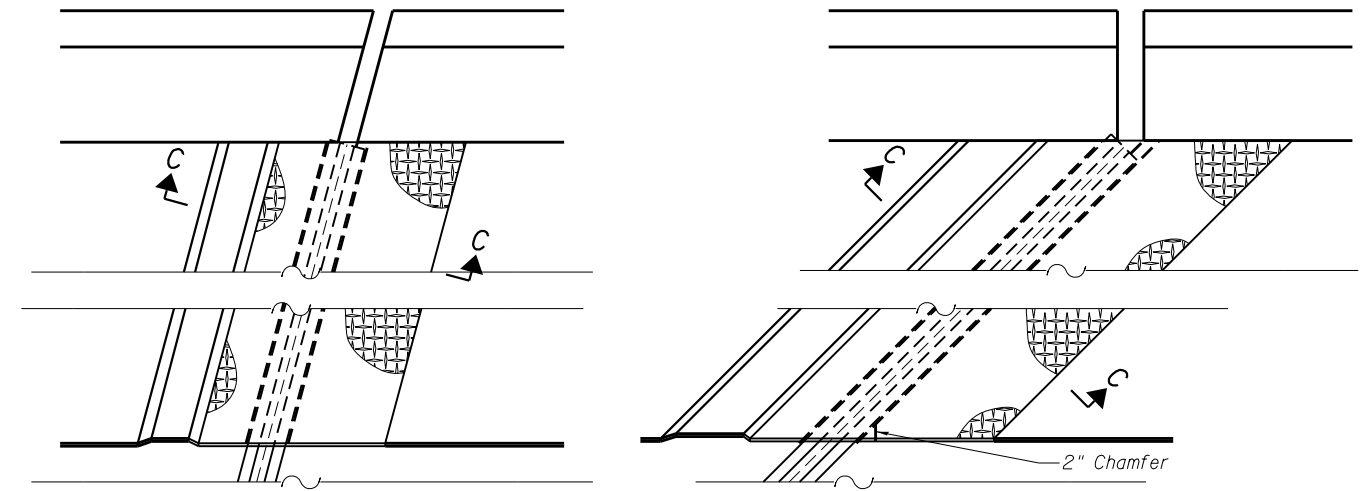
SCALE: SHEET 7 OF 13 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 38
SN 049-0019		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

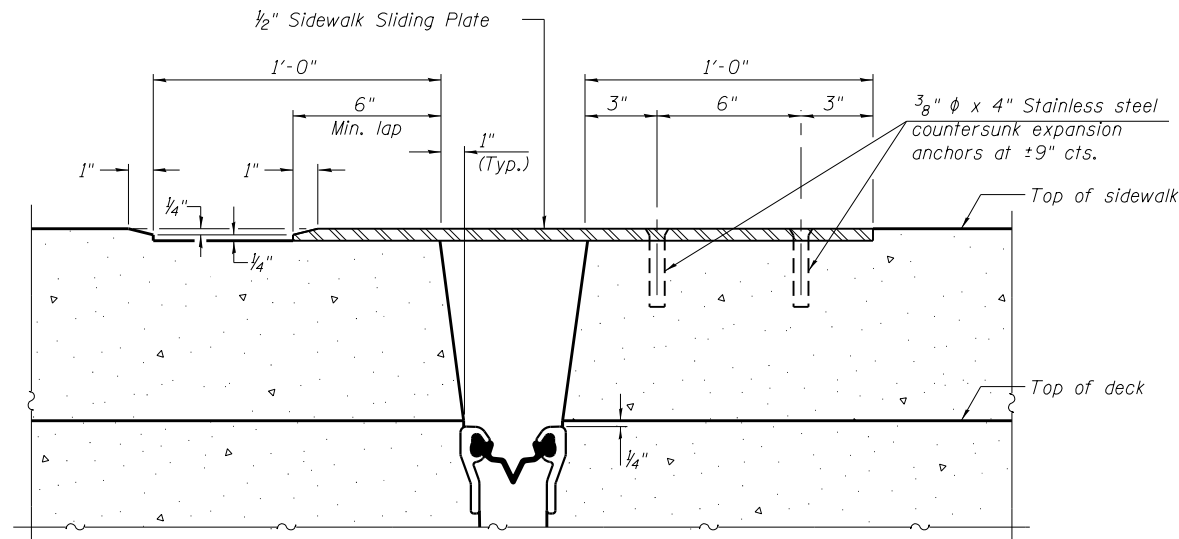
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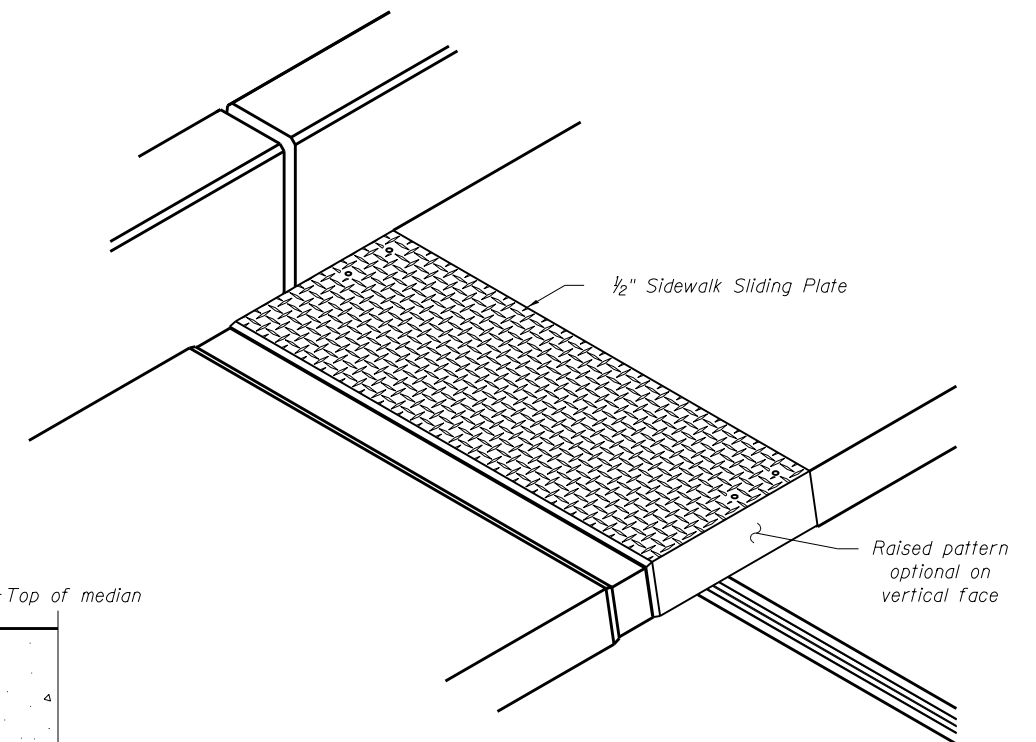
ELEVATION AT RAISED SIDEWALK



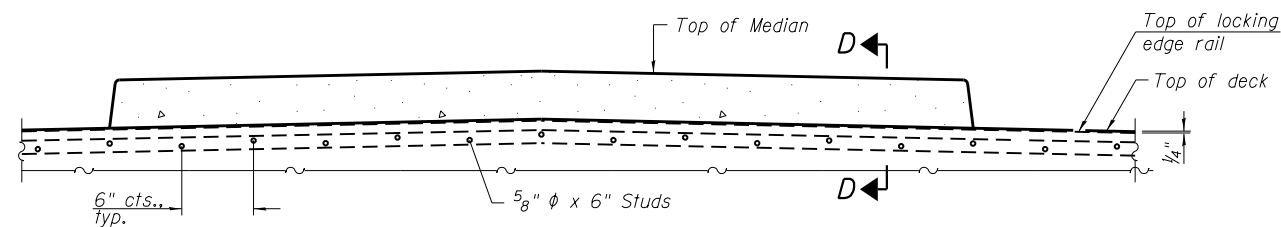
PLAN AT RAISED SIDEWALK



SECTION C-C

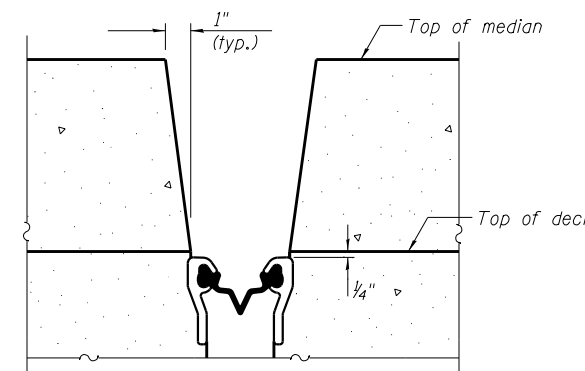


TRIMETRIC VIEW



ELEVATION AT MEDIAN

For skews > 30°, chamfer acute corners 2" similar to sidewalk.



SECTION D-D
 (at Rt. ∠'s)

(Sheet 2 of 3)

MODEL: D:\p\11
 FILE NAME: 0490019-60R79-007-DET.dwg

EJ-SS-S

8-11-17

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 184-001397

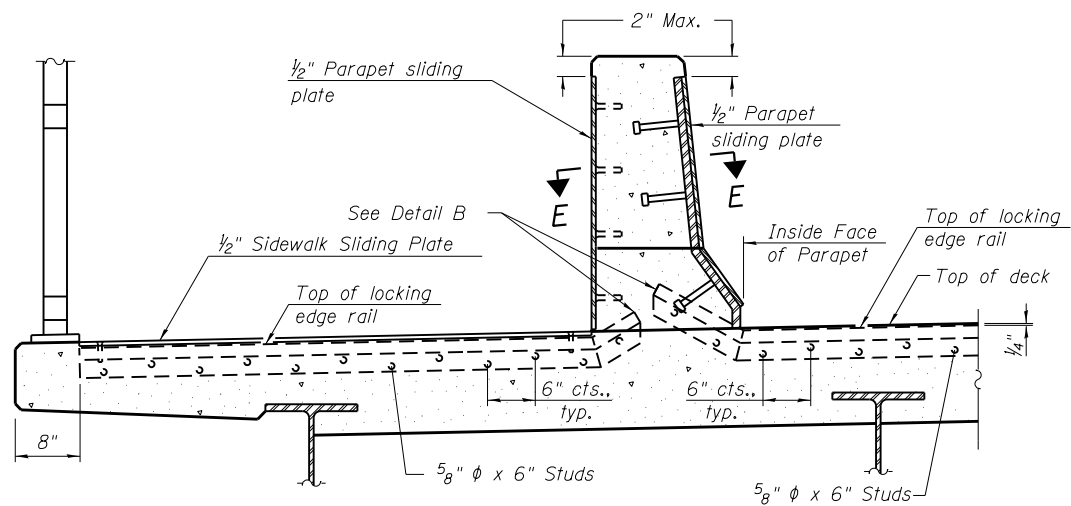
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	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
PREFORMED JOINT STRIP SEAL - SIDEWALK

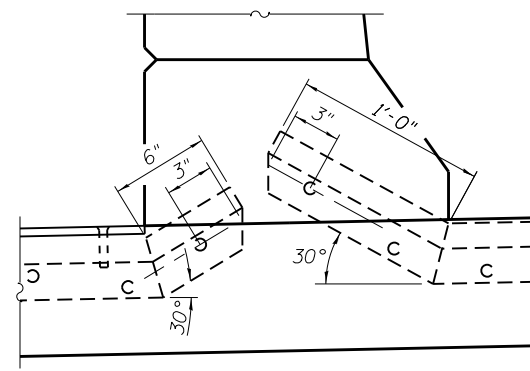
SCALE: SHEET 8 OF 13 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	39
SN 049-0019			CONTRACT NO. 60R79	
ILLINOIS FED. AID PROJECT				

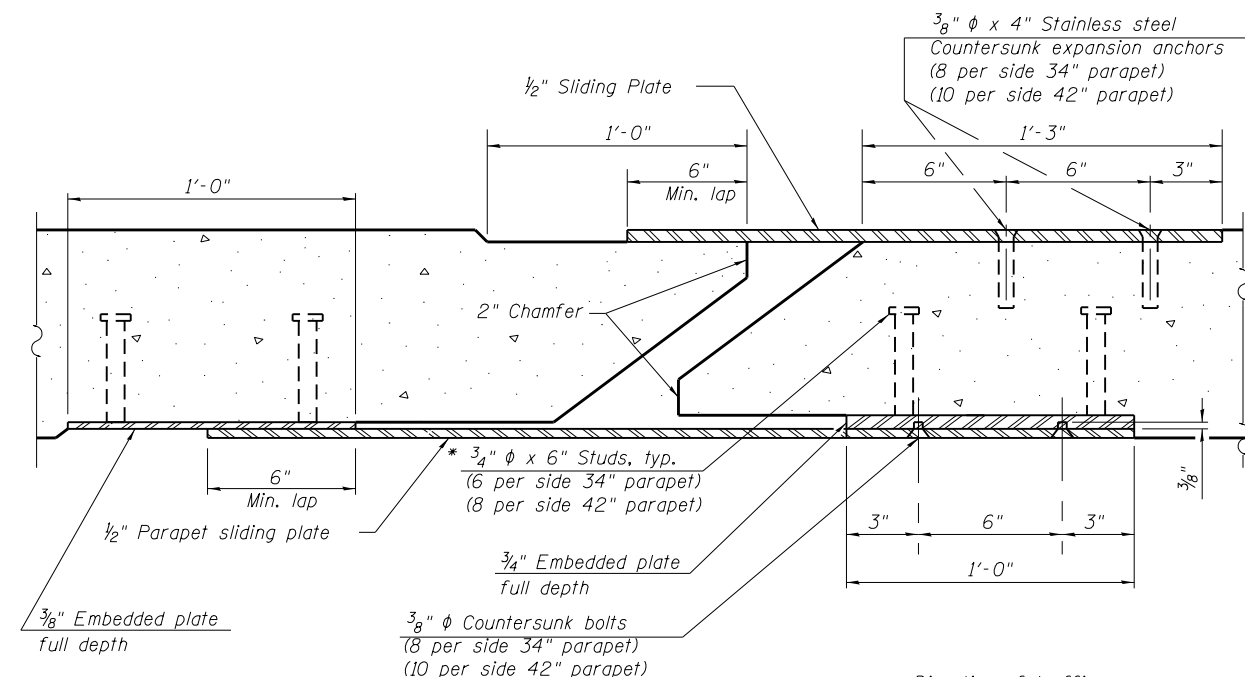


ELEVATION AT DECK LEVEL SIDEWALK

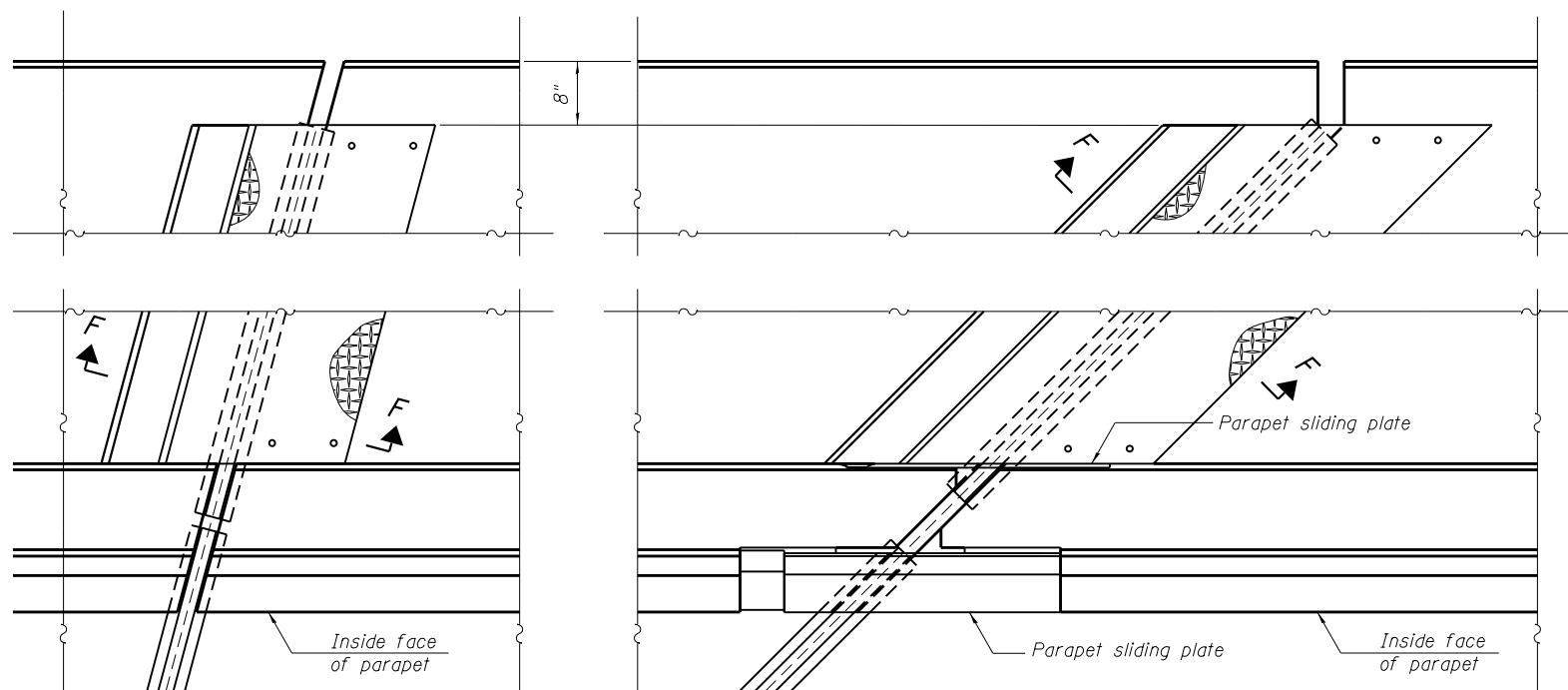
(Skews > 30° shown. Skews = 30° similar except as shown in plan view.)



DETAIL B



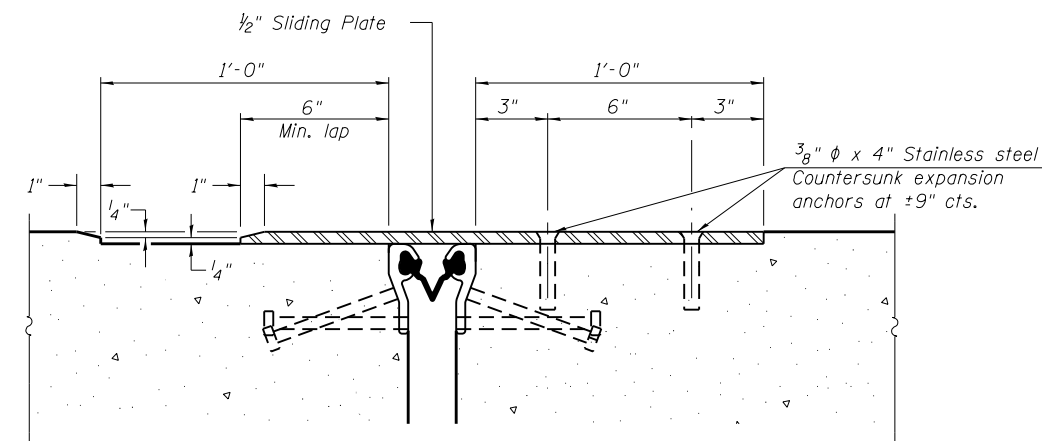
SECTION E-E



(FOR SKEWS = 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

EJ-SS-S

8-11-17

(Sheet 3 of 3)

MODEL: D:\p\1178-1\1178-1.dwg
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 CONSULTING ENGINEERS
 184-001397

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 PLOT DATE = 8/9/2018

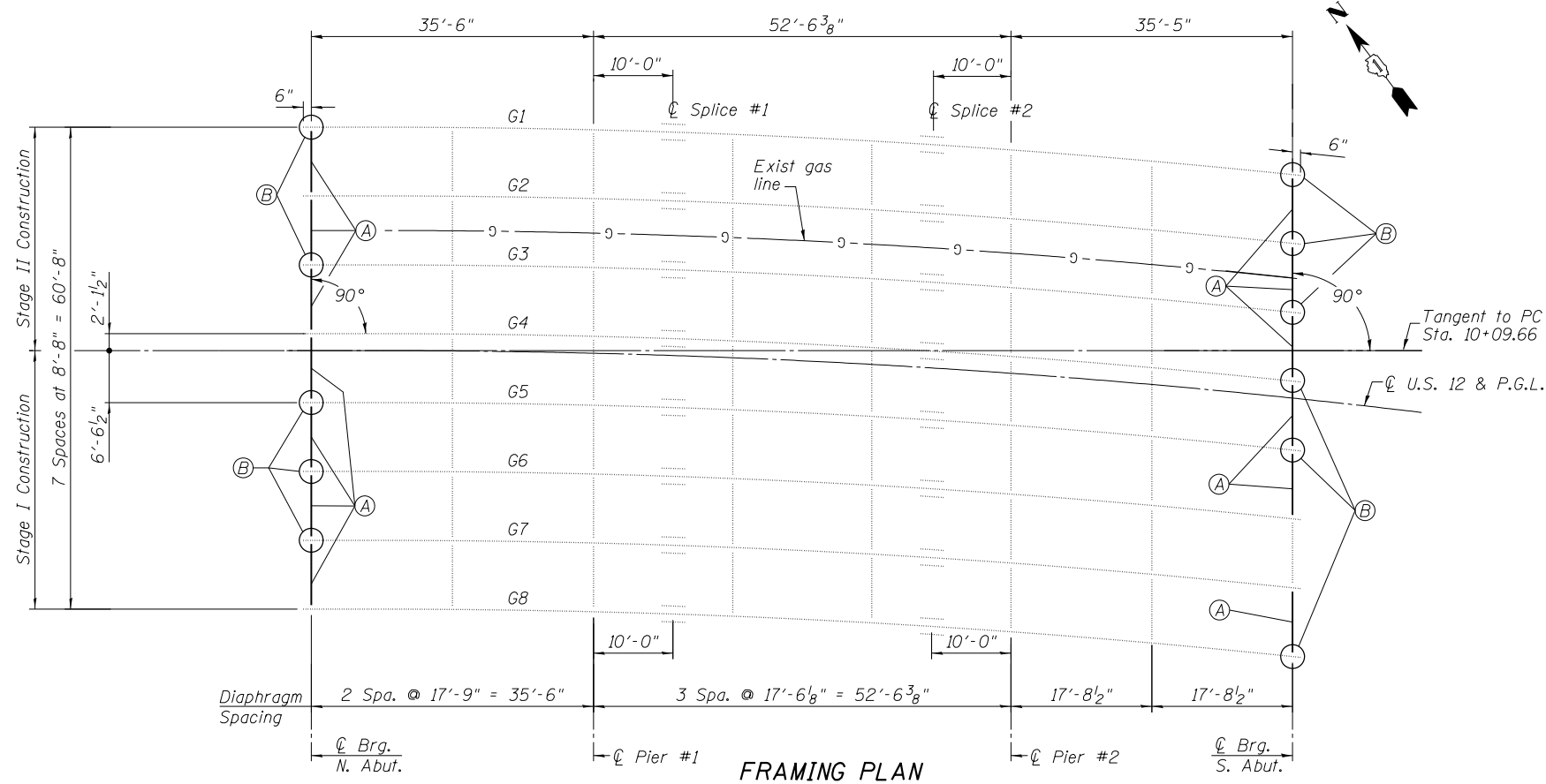
DESIGNED - BCG
 DRAWN - DMW
 CHECKED - JMB
 DATE - 07-13-2018

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
 PREFORMED JOINT STRIP SEAL - SIDEWALK**
 SCALE: SHEET 9 OF 13 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	40
SN 049-0019			CONTRACT NO. 60R79	
ILLINOIS FED. AID PROJECT				



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing & Erecting Structural Steel	Lbs.	6960
Structural Steel Removal	Lbs.	5515

NOTES:

Diaphragm at stage line shall be bolted to G5 but not connected to G4 during Stage I construction. Diaphragm shall be supported by timber blocking until bolting to G4 is completed during Stage II construction. Extreme care shall be used to avoid damaging new diaphragm during Stage II removal.

Contractor shall verify existing conditions and dimensions prior to ordering new material.

Refer to existing bridge plans for additional framing layout dimensions.

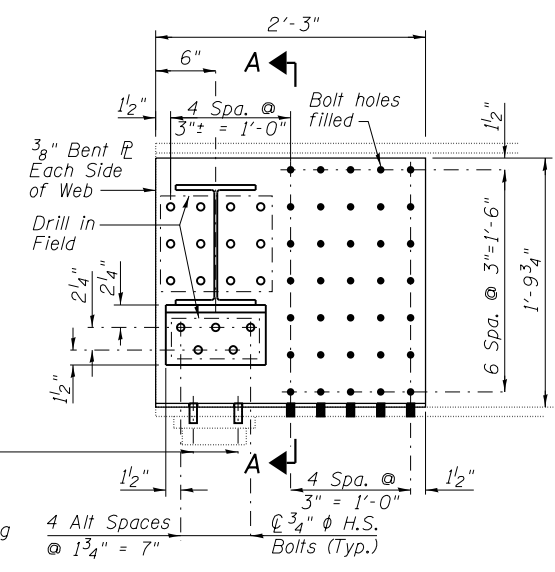
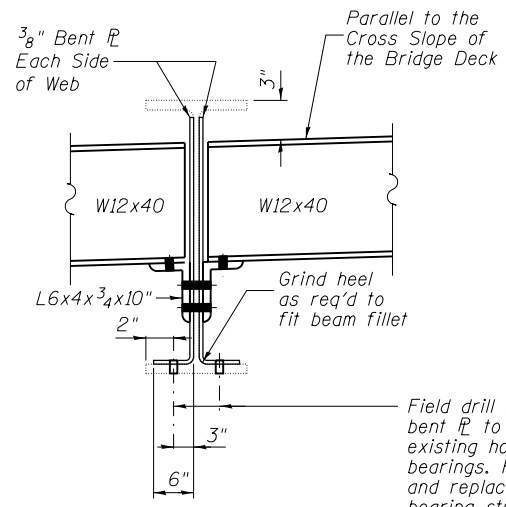
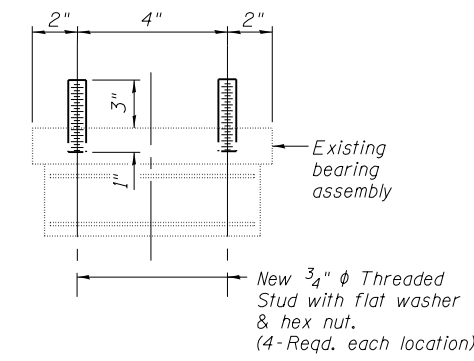
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Cleaning and painting of all connections on this sheet shall meet the requirements for Primary Connections as specified in the special provision for "Cleaning and Painting Contact Surface Areas of Existing Steel Structures."

Fasteners shall be high strength bolts. Holes shall be 1/16" diameter for 3/8" diameter bolts, unless otherwise noted.

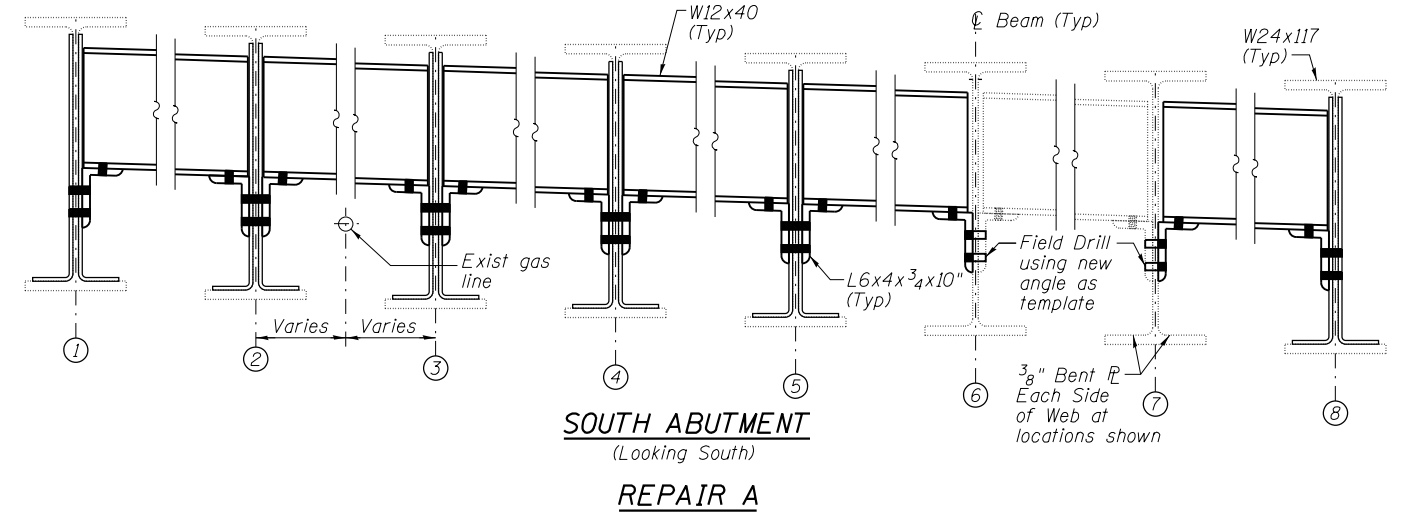
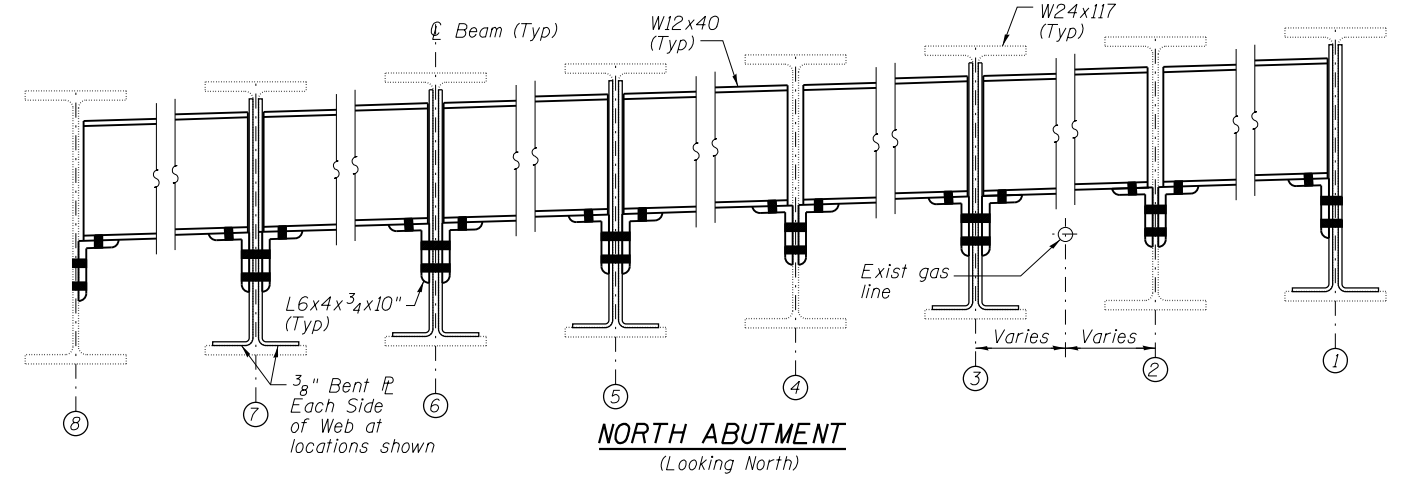
Diaphragm connection holes shall be 1/8" diameter for 3/4" diameter bolts. Two hardened washers shall be required over all oversize holes for diaphragms.

Removal of existing diaphragm angle brackets shall be done using the air-arc method and grind smooth all weld material remaining on the web.



Note: Remove existing threaded rods that connect beam to bearing. Install new longer threaded rods so as to bolt repair plates.

REPAIR B



REPAIR A

MODEL: D:\p1\11
FILE: 117B-BR-1-60R79-008-D1A.dgn

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

USER NAME = jpong
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PLOT DATE = 8/9/2018

DESIGNED - BCG
DRAWN - DMW
CHECKED - JMB
DATE - 07-13-2018

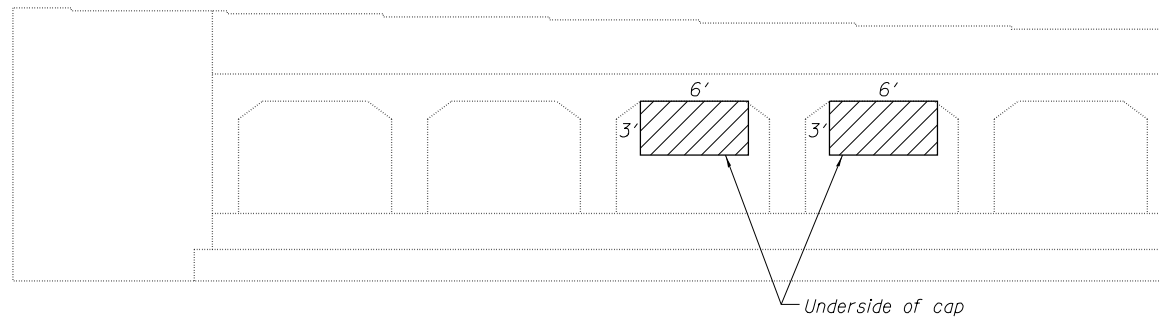
REVISED -
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REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

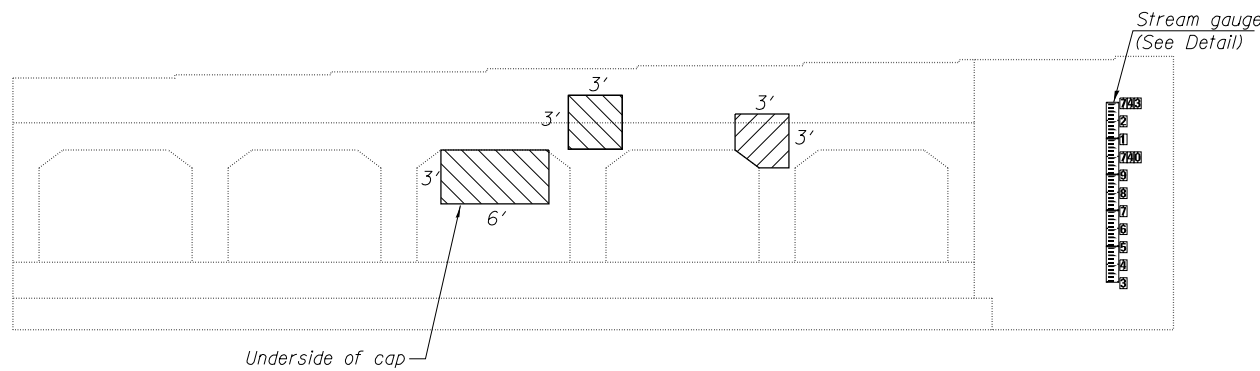
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
STRUCTURAL STEEL REPAIR

SCALE: SHEET 10 OF 13 SHEETS STA. TO STA.

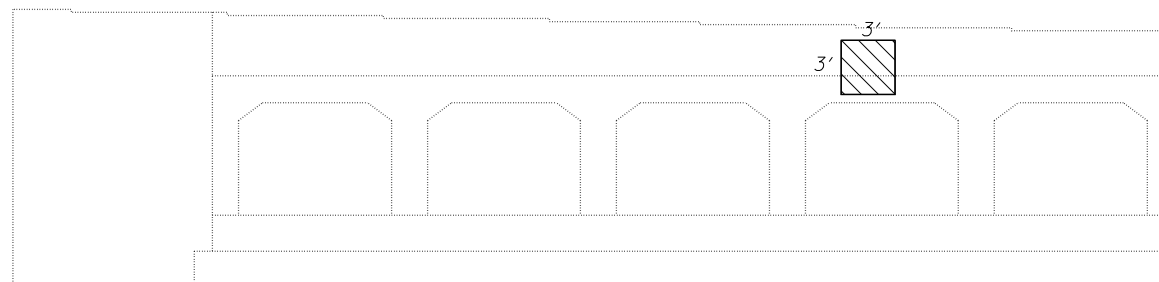
F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 41
SN 049-0019		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



PIER 2
(LOOKING EAST)



PIER 1
(LOOKING WEST)



PIER 1
(LOOKING EAST)

NOTES:

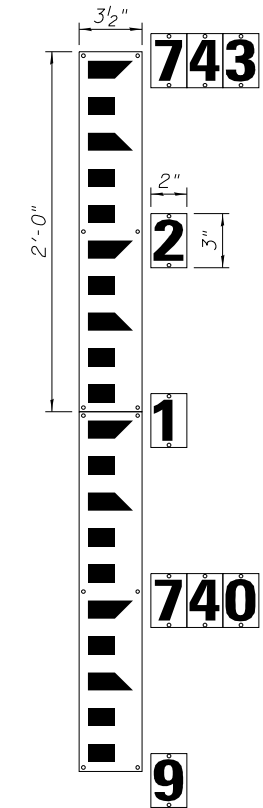
The gauge plates shall be porcelain enameled iron plate graduated in feet and tenths, unnumbered, and 3 1/2" wide. Gauge plates shall be "WaterMark" Style "E" or approved equivalent.

Each individual number plate should be a black numeral on a 2"x 3" white porcelain enameled iron plate. Number plates shall be "Watermark" Style "E" or approved equivalent.

Both the gauge plates and number plates shall be fastened directly to the pier with a 1/4" diameter, 1 1/2" long masonry screw with a hex washer head.

Three digit elevations to be installed at the top of the gauge and at every elevation ending with 0. At all of the other whole elevations, place the last digit as shown in the example to the left.

Elevations 733 thru 743 to be installed. Install 3 digits for the top elevation and all others ending in 0. All other whole number elevations to have only the last digit installed. See "Stream Gauge Detail" for location of digits to be installed.



STREAM GAUGE DETAIL
(Partial Detail Shown)

Notes:

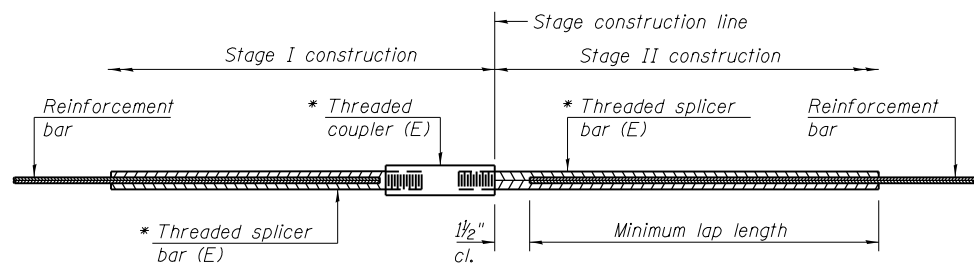
Repair details shown on this sheet were taken from the District's inspection sheets. Actual locations, size, and depth shall be verified in the field.

BILL OF MATERIAL

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth <= 5")	Sq. Ft.	81
	Stream Gauge	Ea.	1.0

MODEL: D:\p\11... FILE NAME: 04-202019-60R79-60R79-60R79-REF.dgn

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PLOT DATE = 8/9/2018	DATE - 07-13-2018	REVISED -

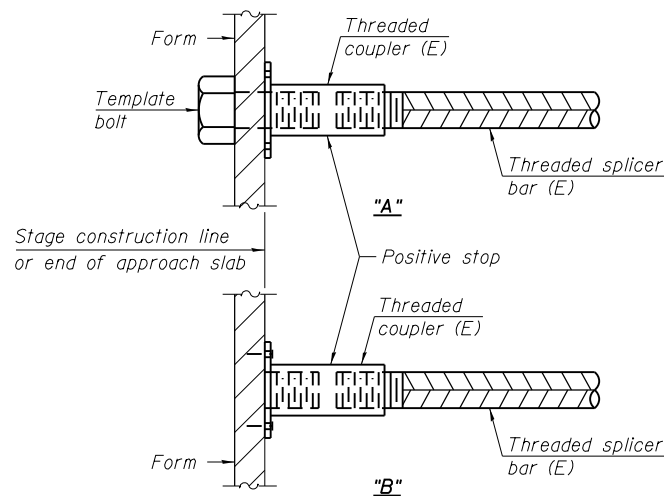


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

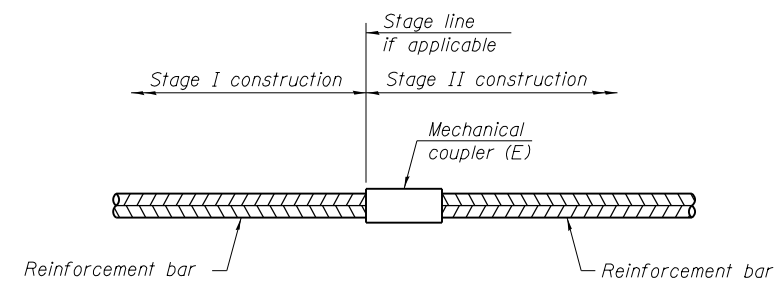
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
N. Abut. Joint	#5	8	3'-0"
N. Abut. Joint	#6	4	3'-7"
S. Abut. Joint	#5	8	3'-0"
S. Abut. Joint	#6	4	3'-7"



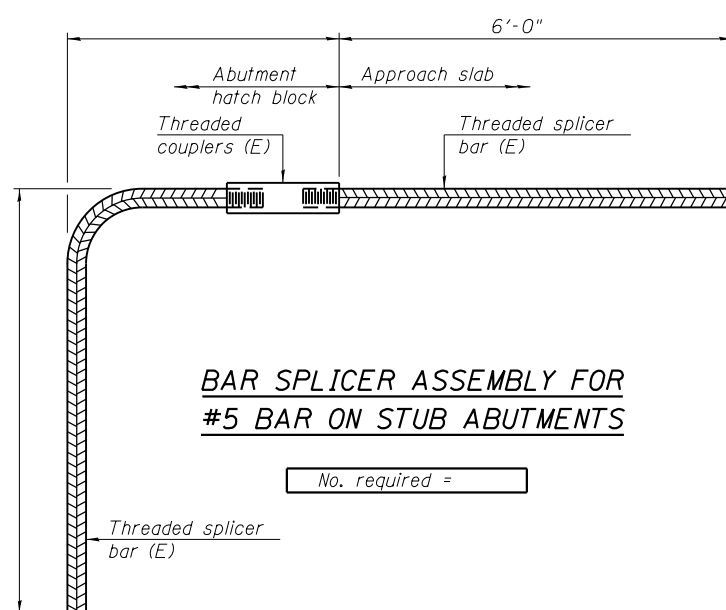
INSTALLATION AND SETTING METHODS

"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.

MODEL: D:\p\11... FILE NAME: 0490019-60R79-010-DET.dgn

BSD-1

2-17-2017

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 184-001397

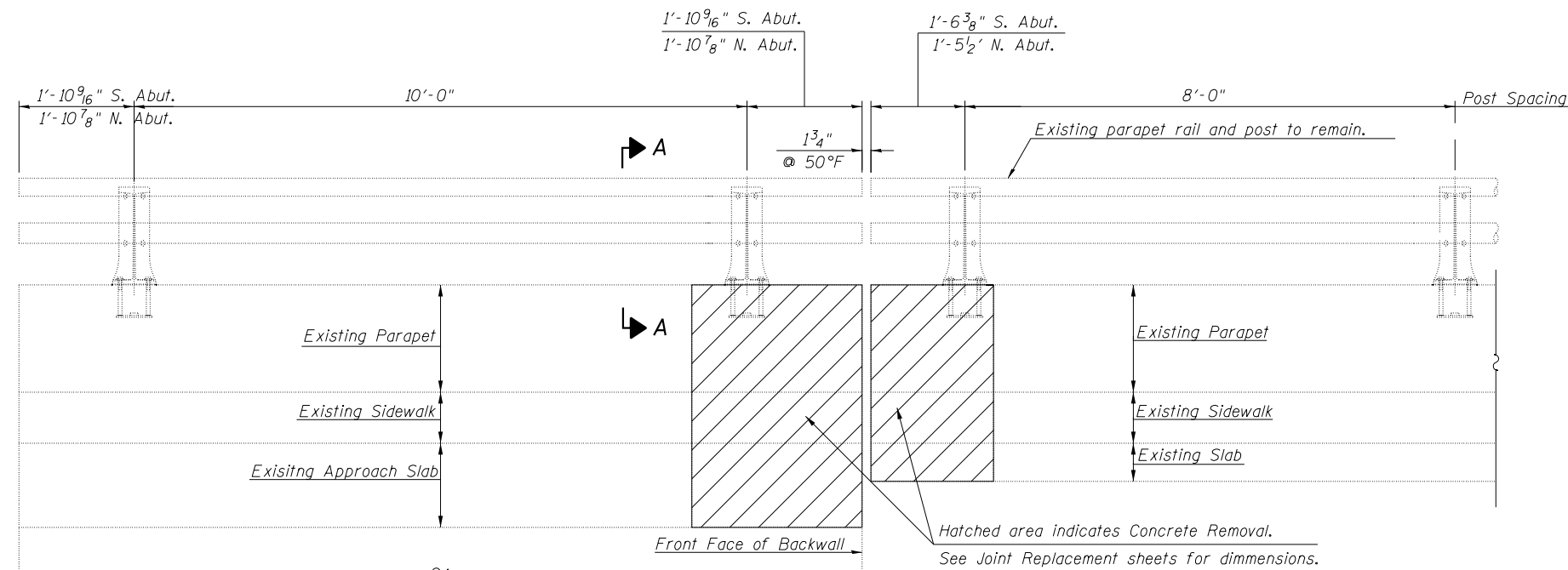
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PLOT DATE = 8/9/2018	CHECKED - JMB	REVISED -
	DATE - 07-13-2018	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
 BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS**

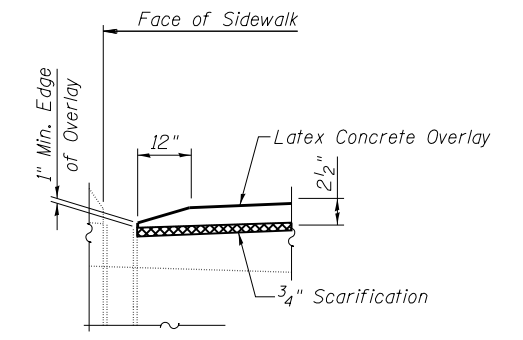
SCALE: SHEET 12 OF 13 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	43
SN 049-0019		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

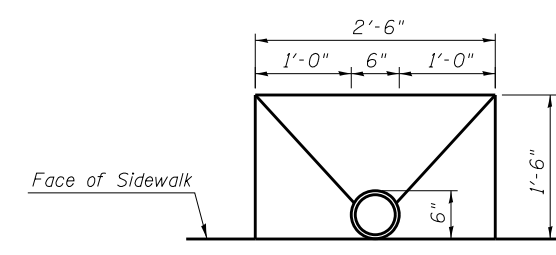


EXISTING INSIDE FACE OF WEST PARAPET RAIL POST SPACING

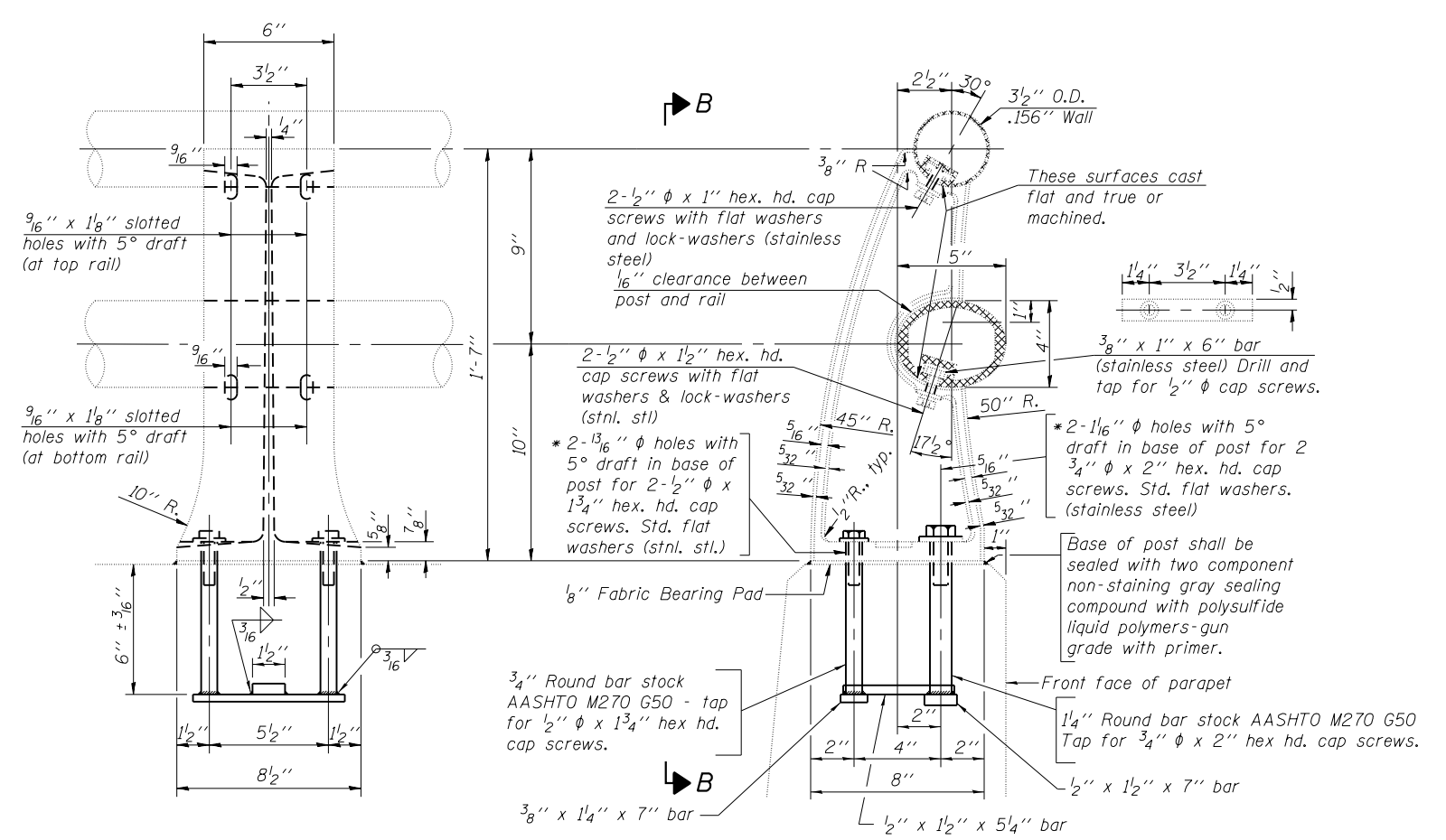
(S. Abutment shown, N. Abutment opposite hand)



SECTION AT FLOOR DRAIN



PLAN AT DRAIN
(At 7 locations - showing sloped area with new overlay)



VIEW B-B

SECTION A-A

RAIL POST DETAILS

JOINT REPAIR NOTES

- Existing reinforcement bars extending into the concrete removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost include with concrete Removal.
- Existing reinforcement bars in the concrete removal area parallel to the expansion joints shall be removed.
- Removal and disposal of the existing expansion joints will not be paid for separately, but shall be included with the cost of Concrete Removal.
- Existing Handrail and posts in areas of parapet reconstruction shall be supported and reattached to the new parapet concrete. New anchors, nuts and washers shall be provided. Cost included with Concrete Superstructure.
- CONTRACTOR may remove and reinstall the existing diaphragm members as necessary to complete the required concrete removal and reconstruction. Cost included with concrete Removal.
- Work this sheet with Expansion Joint Repairs and Preformed Joint Strip Seal sheets.

MODEL Dwg: 11
FILE NAME: 04202019-60R79-011-DET.dgn

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

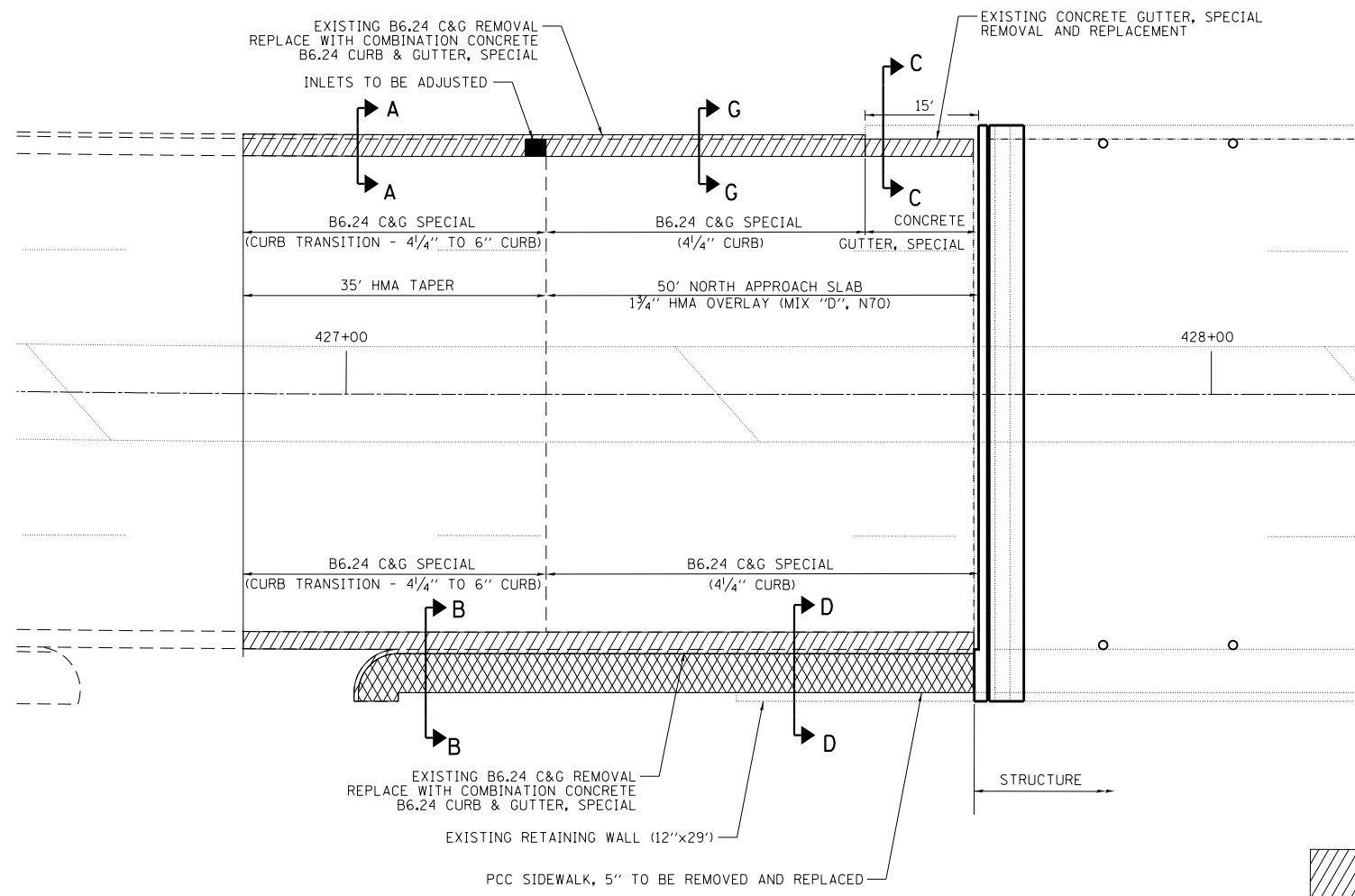
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	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

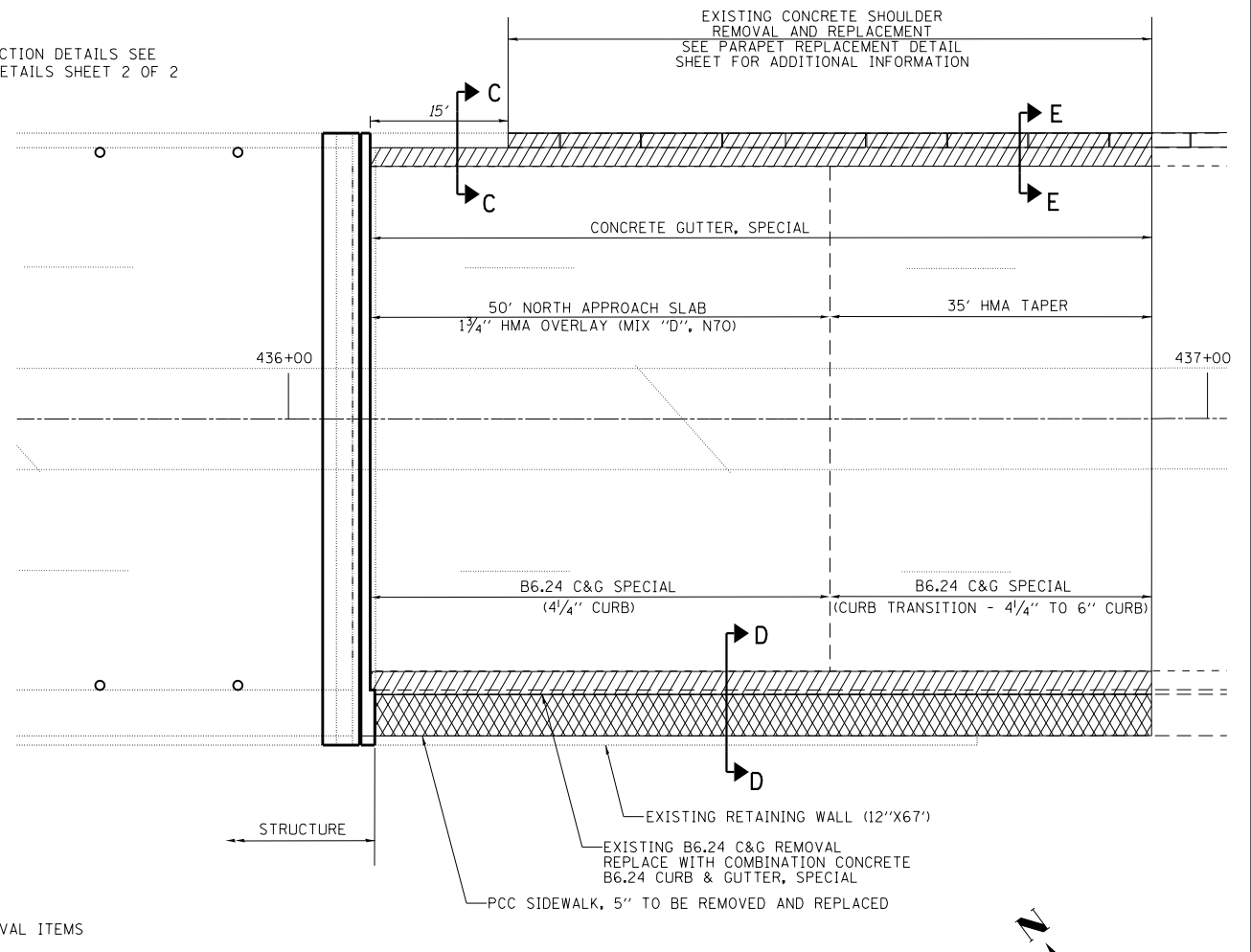
US ROUTE 12 OVER PISTAKEE LAKE CHANNEL
MISCELLANEOUS DETAILS

SCALE: SHEET 13 OF 13 SHEETS STA. TO STA.

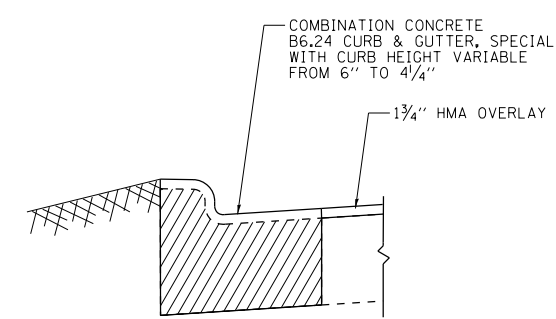
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	44
SN 049-0019		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				



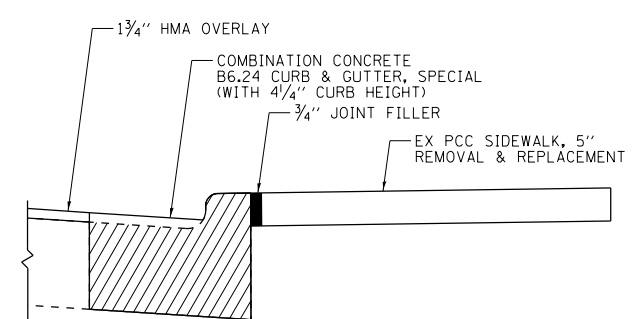
PLAN VIEW
WEST APPROACH SLAB



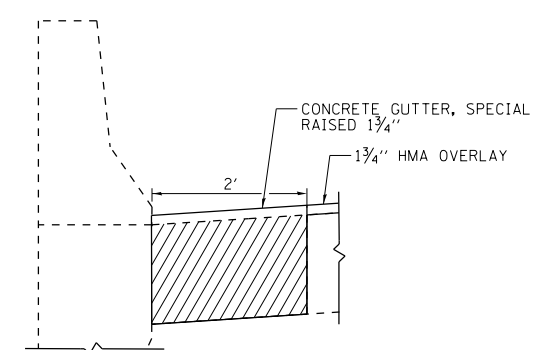
PLAN VIEW
EAST APPROACH SLAB



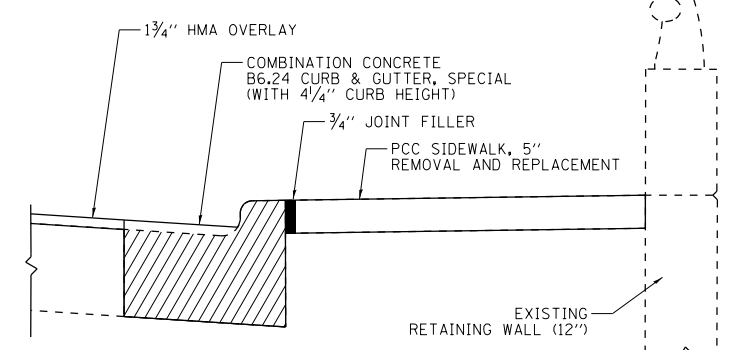
SECTION A-A
CURB AND GUTTER TRANSITION DETAIL



SECTION B-B
CURB AND GUTTER WITH SIDEWALK



SECTION C-C
RETAINING WALL WITH PARAPET DETAIL



SECTION D-D
C&G, SIDEWALK, AND RETAINING WALL DETAIL

NOTES:
FOR ADDITIONAL SECTION DETAILS SEE
NEXT TRANSITION DETAILS SHEET 2 OF 2

MODEL: D:\of\wil\13\CADD_Sheets\1166879_sht_details.dgn
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CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
184-001397

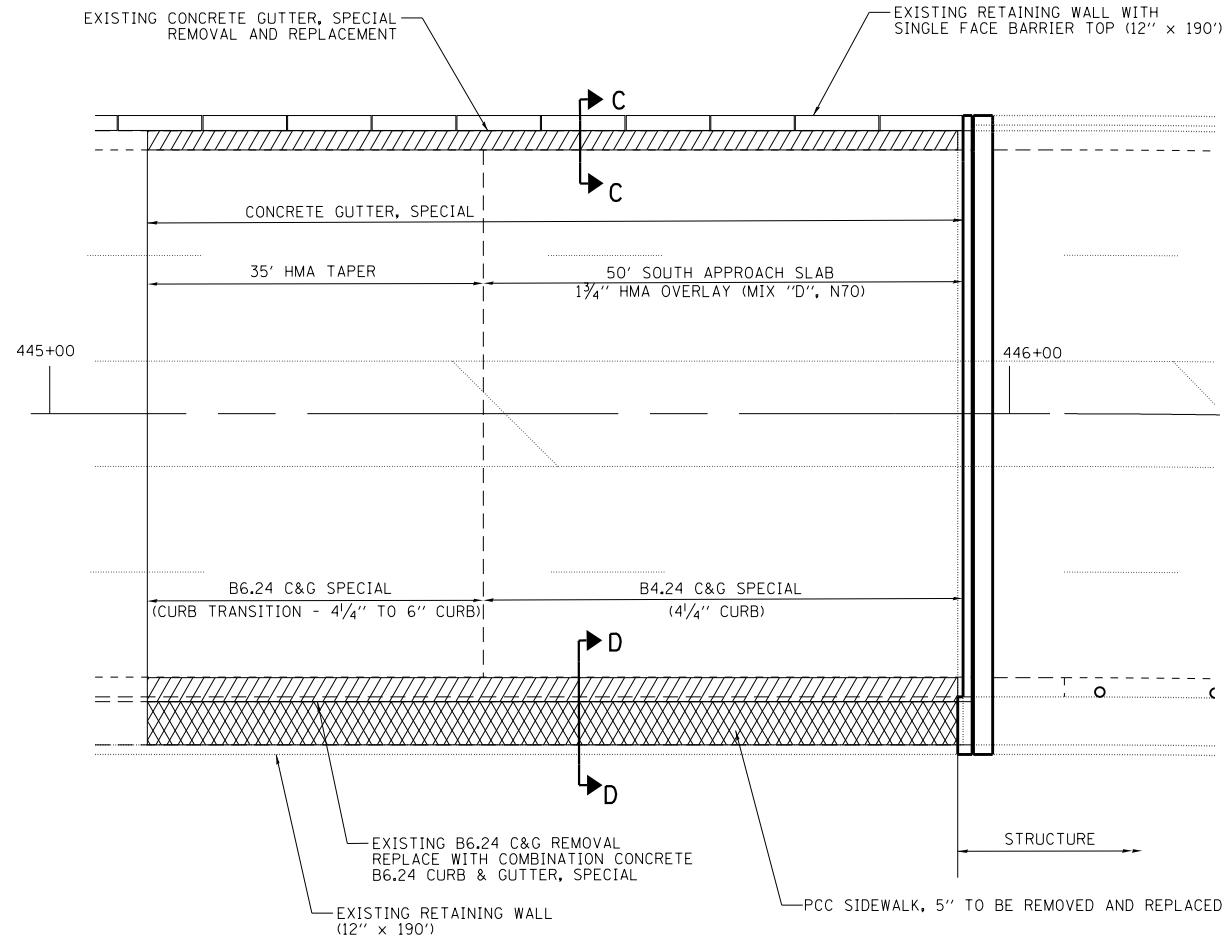
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	DATE - 07-13-2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 12 OVER NIPPERSINK LAKE CHANNEL
TRANSITION DETAILS

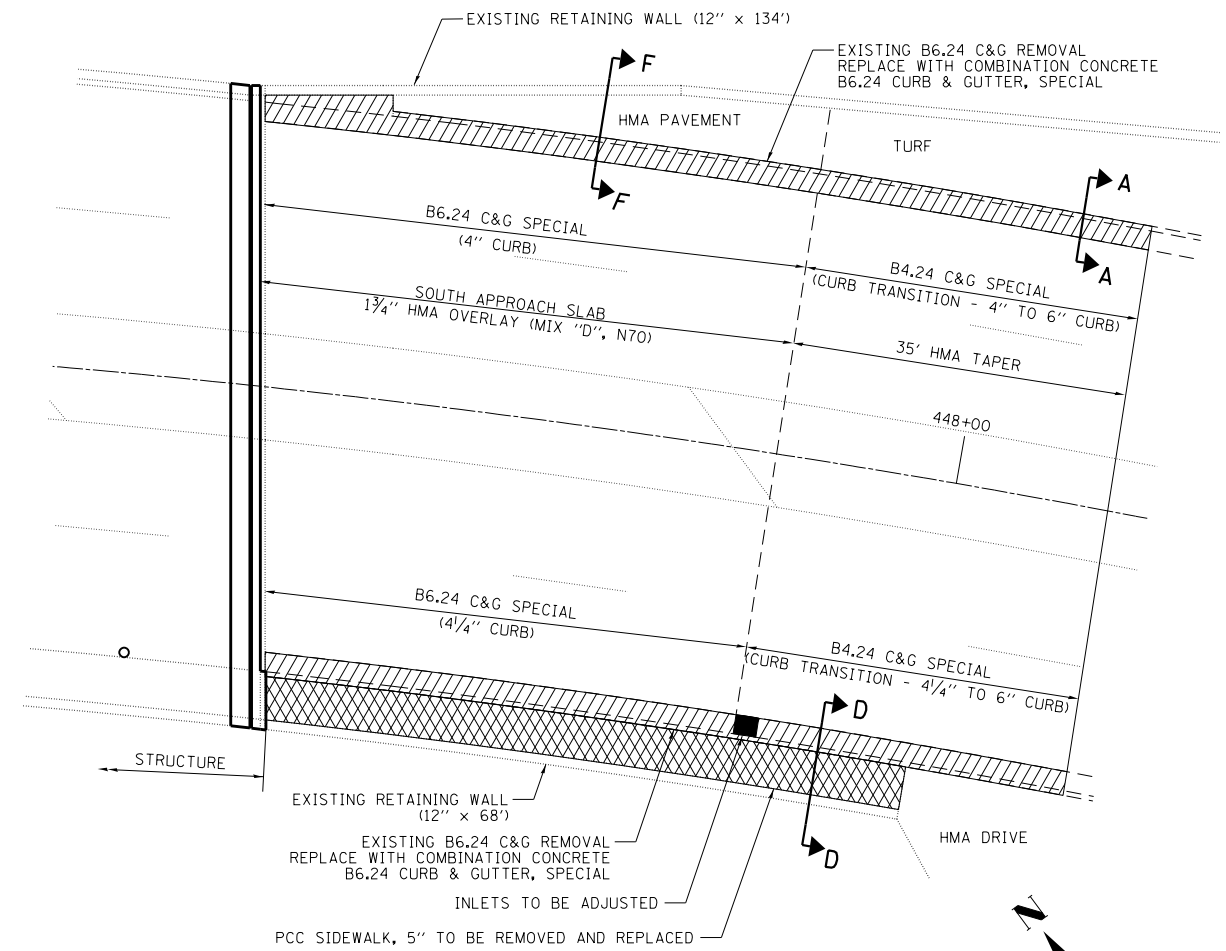
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F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 45
SN 049-0167		CONTRACT NO. 60R79		
ILLINOIS FED. AID PROJECT				

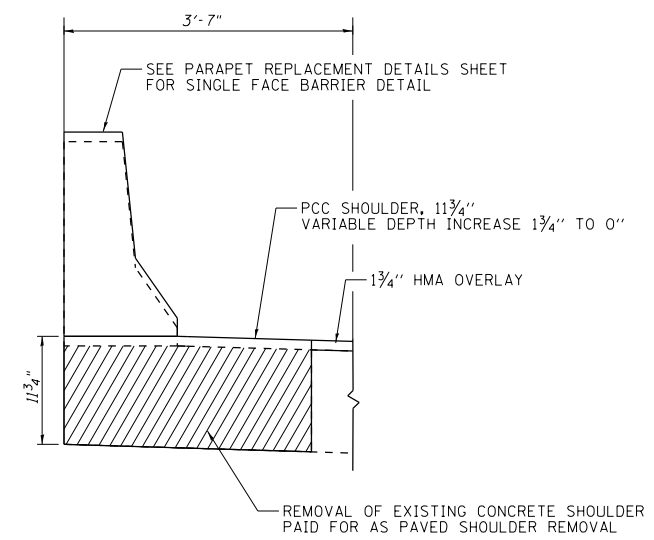


PLAN VIEW
WEST APPROACH SLAB

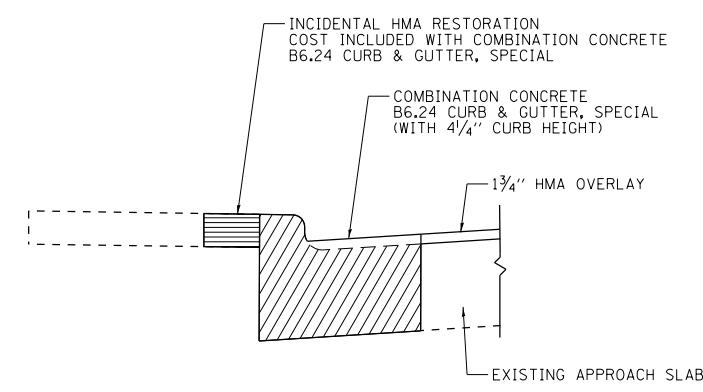
NOTES:
FOR ADDITIONAL SECTION DETAILS SEE
PREVIOUS TRANSITION DETAILS SHEET 1 OF 2



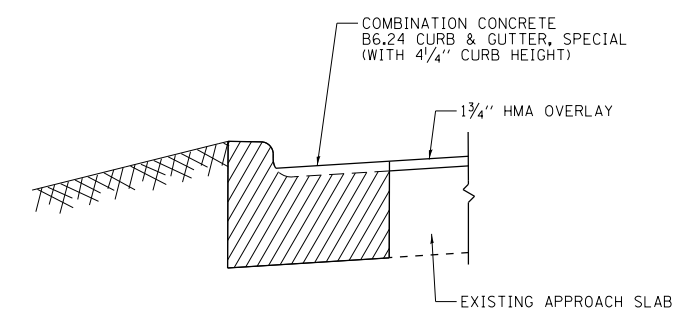
PLAN VIEW
EAST APPROACH SLAB



SECTION E-E
CONCRETE GUTTER, SPECIAL WITH BARRIER



SECTION F-F
CURB AND GUTTER WITH HMA PAVEMENT
AND INCIDENTAL HMA RESTORATION



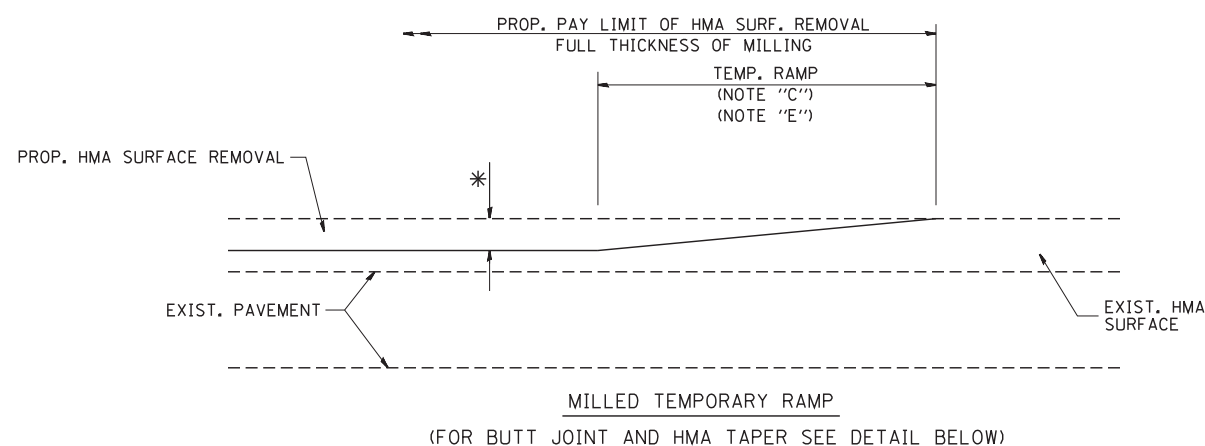
SECTION G-G
CURB AND GUTTER WITH HMA PAVEMENT

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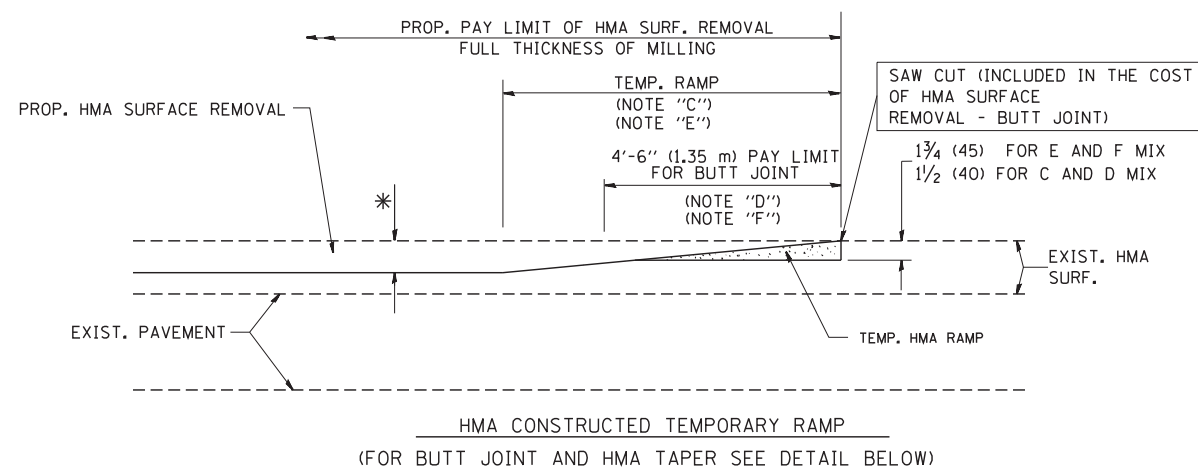
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US ROUTE 12 OVER PISTAKEE LAKE CHANNEL	
TRANSITION DETAILS	
SCALE:	SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 46
SN 049-0019		CONTRACT NO. 60R79		
SN 049-0019 ILLINOIS FED. AID PROJECT				

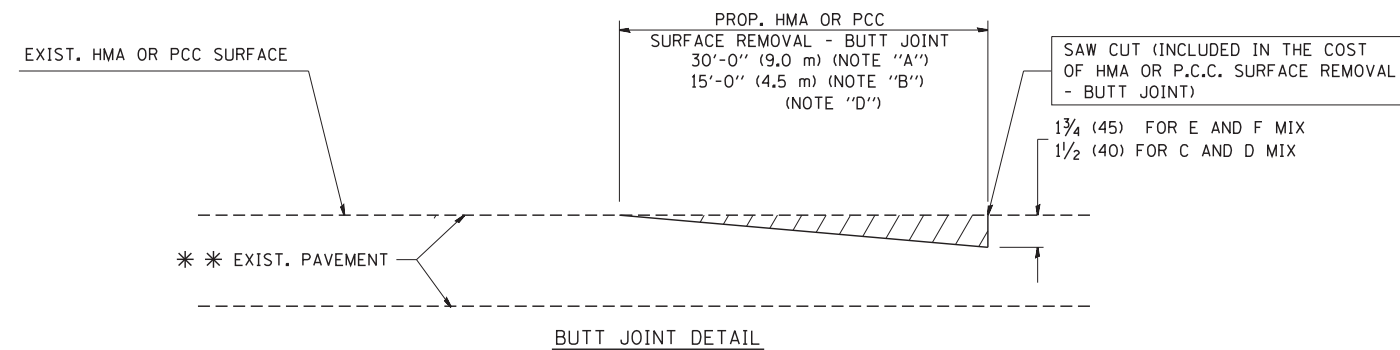


OPTION 1

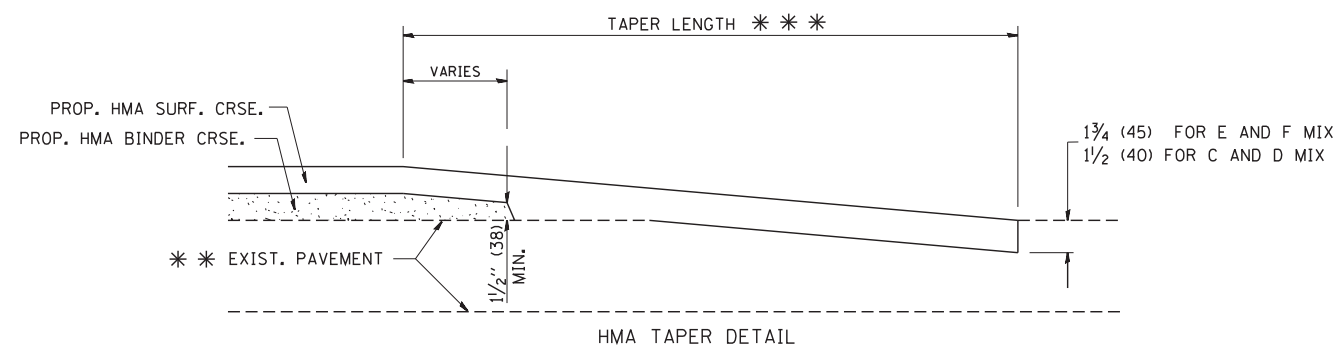


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

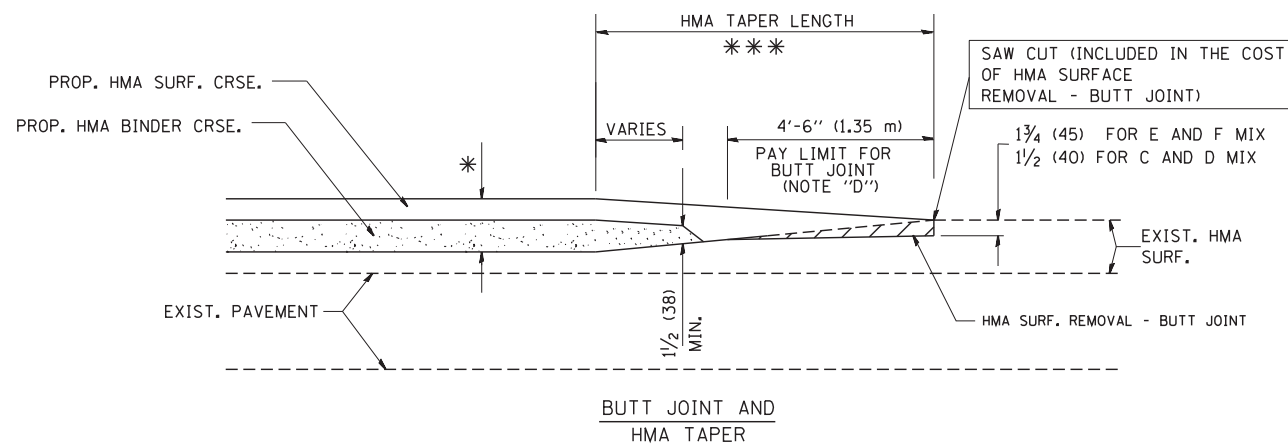
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

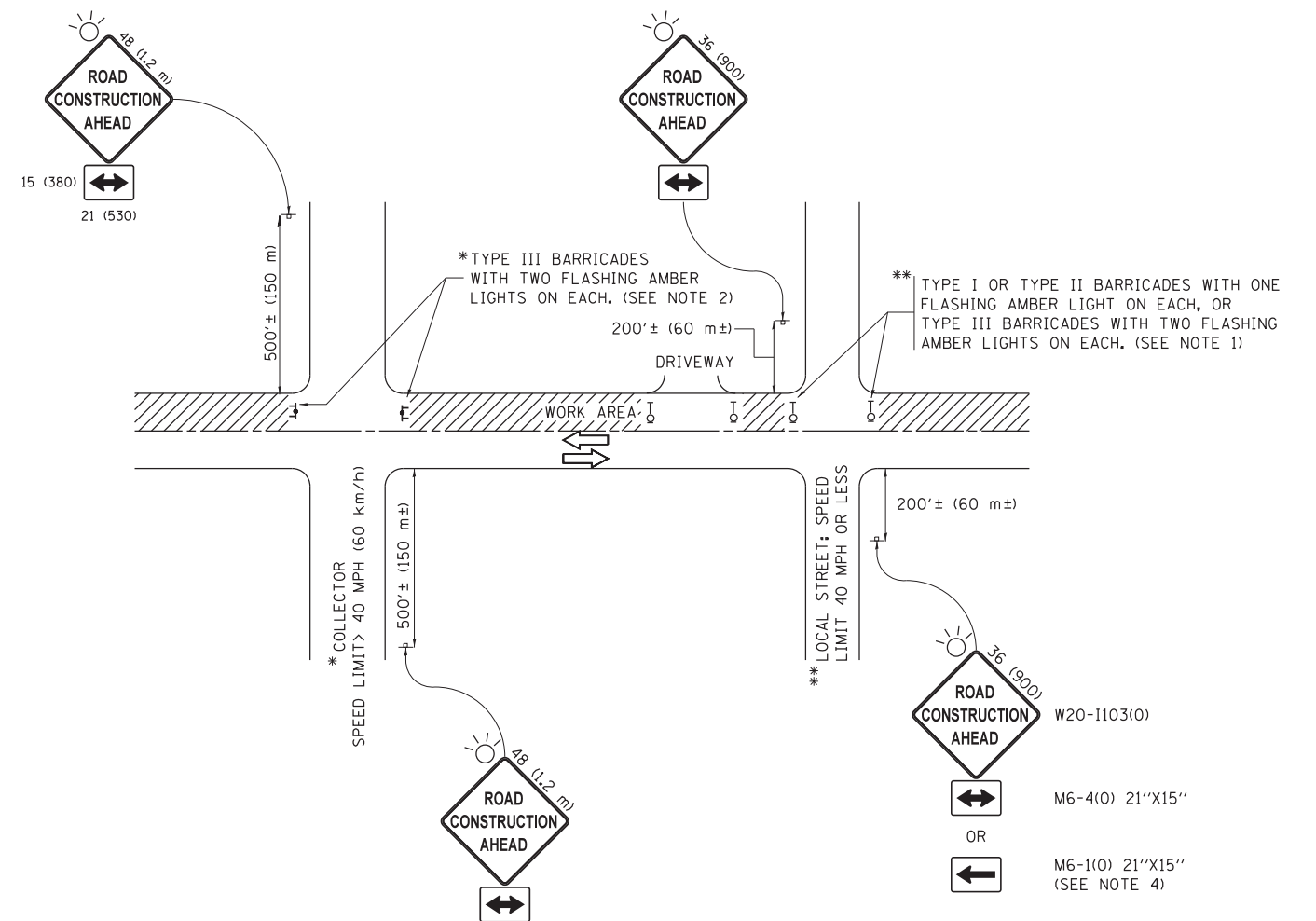
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	47
BD400-05 BD32		CONTRACT NO. 60R79		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

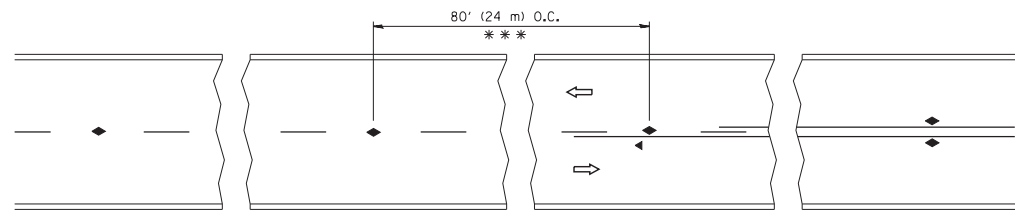
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

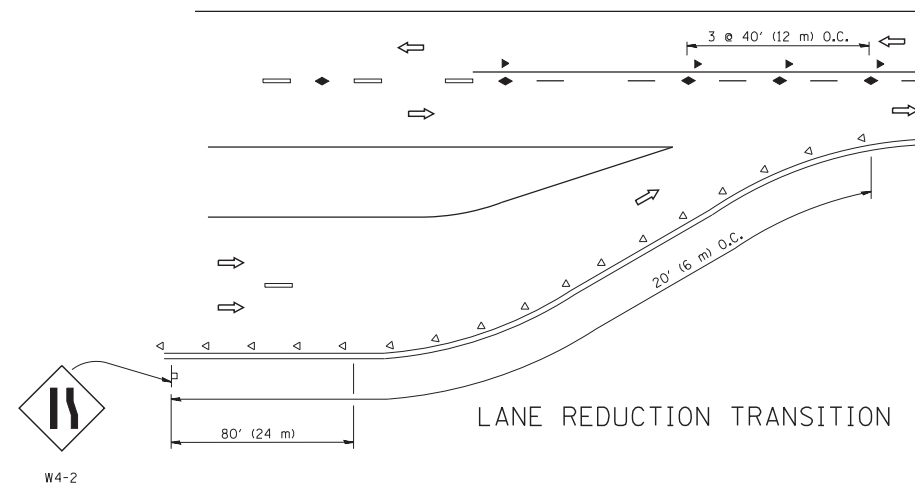
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 60R79	
ILLINOIS FED. AID PROJECT				

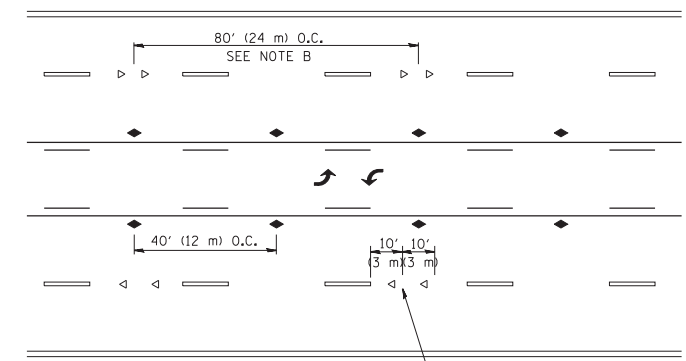


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

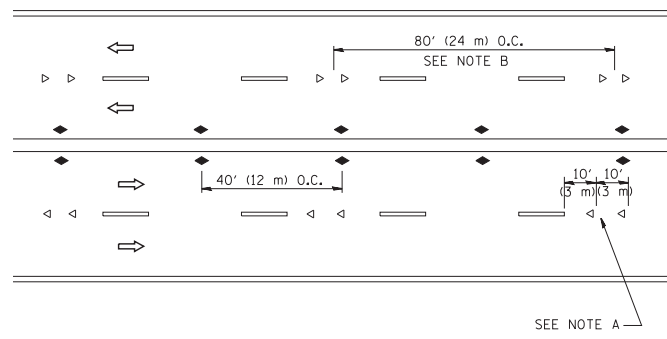
TWO-LANE/TWO-WAY



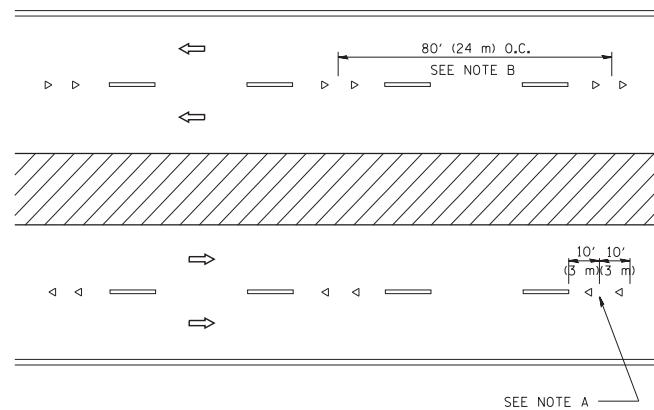
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

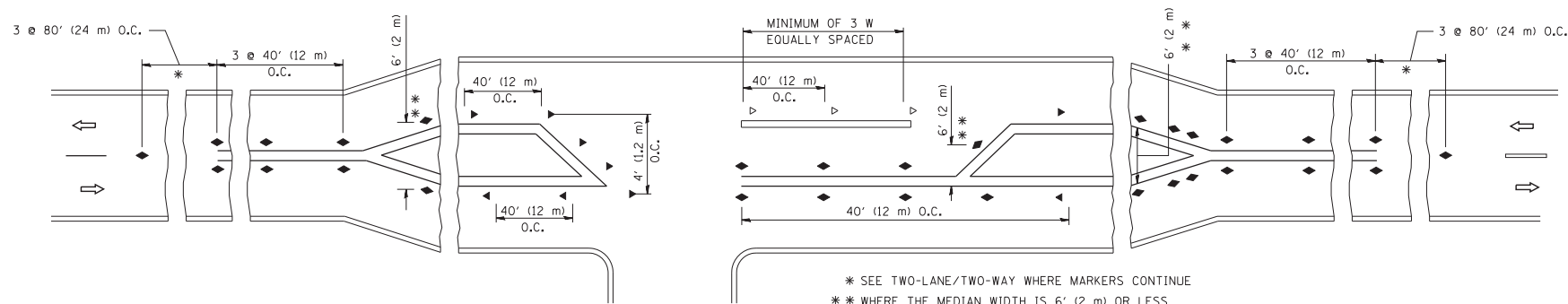
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

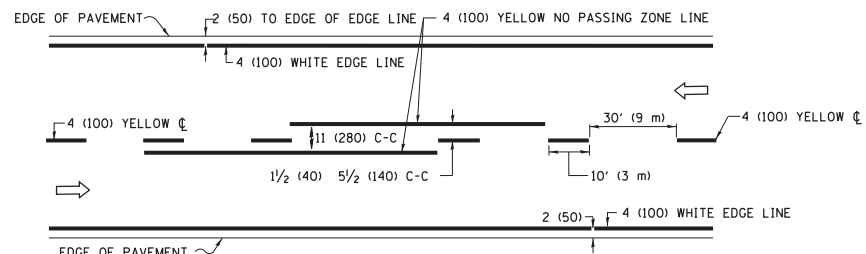
All dimensions are in inches (millimeters) unless otherwise shown.

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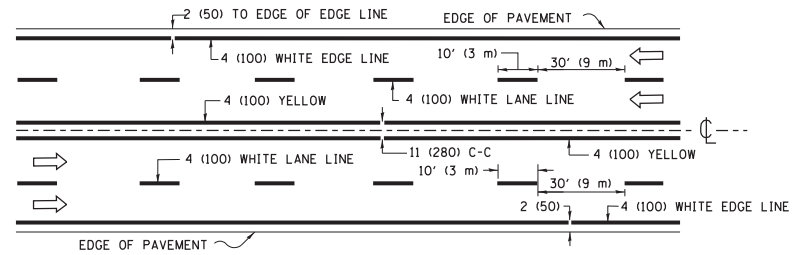
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

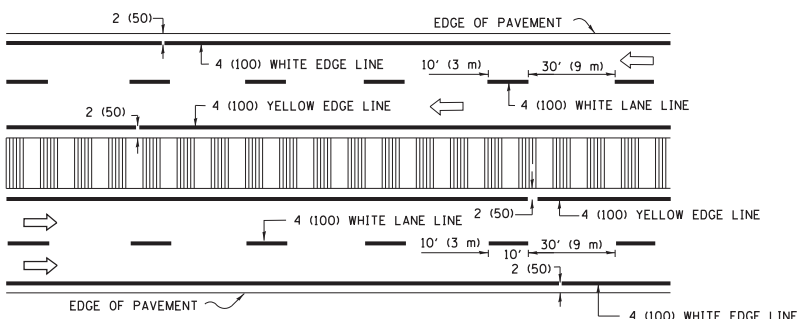
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	49
TC-11			CONTRACT NO. 60R79	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

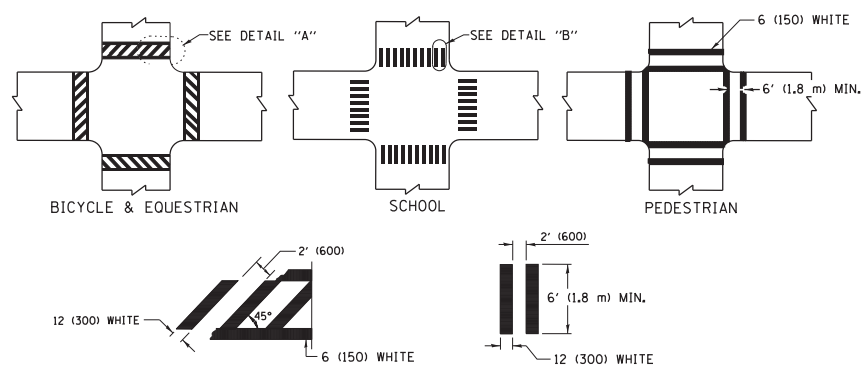


MULTI-LANE UNDIVIDED



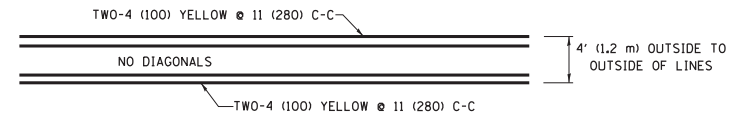
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

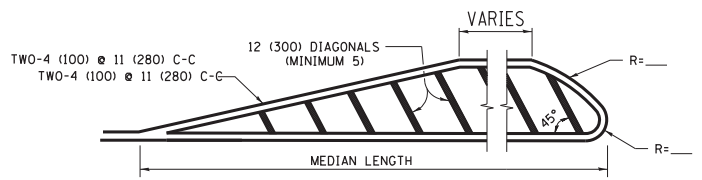


TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

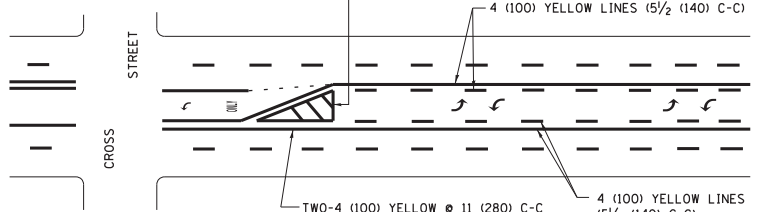


4' (1.2 m) WIDE MEDIANS ONLY

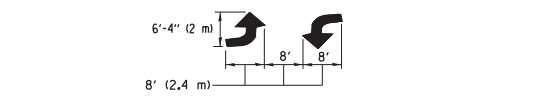


MEDIANS OVER 4' (1.2 m) WIDE

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))



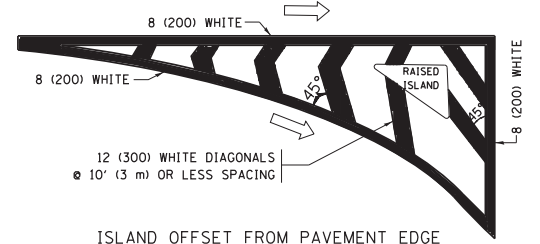
MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING



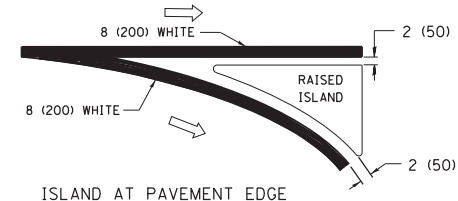
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

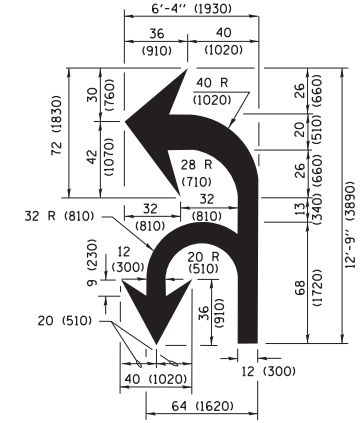
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



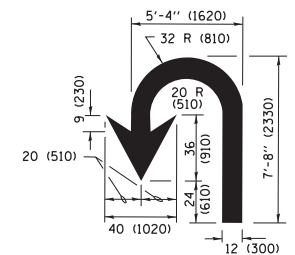
ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\diststd\22x34\to13.dgn	USER NAME = l1eyso	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
Default	PLOT SCALE = 50.000' / in.	DRAWN -	REVISED - C. JUCIUS 07-01-13
	PLOT DATE = 6/23/2017	CHECKED -	REVISED - C. JUCIUS 12-21-15
		DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 334	SECTION 117B-BR-1	COUNTY LAKE	TOTAL SHEETS 54	SHEET NO. 50
TC-13		CONTRACT NO. 60R79	ILLINOIS FED. AID PROJECT	

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

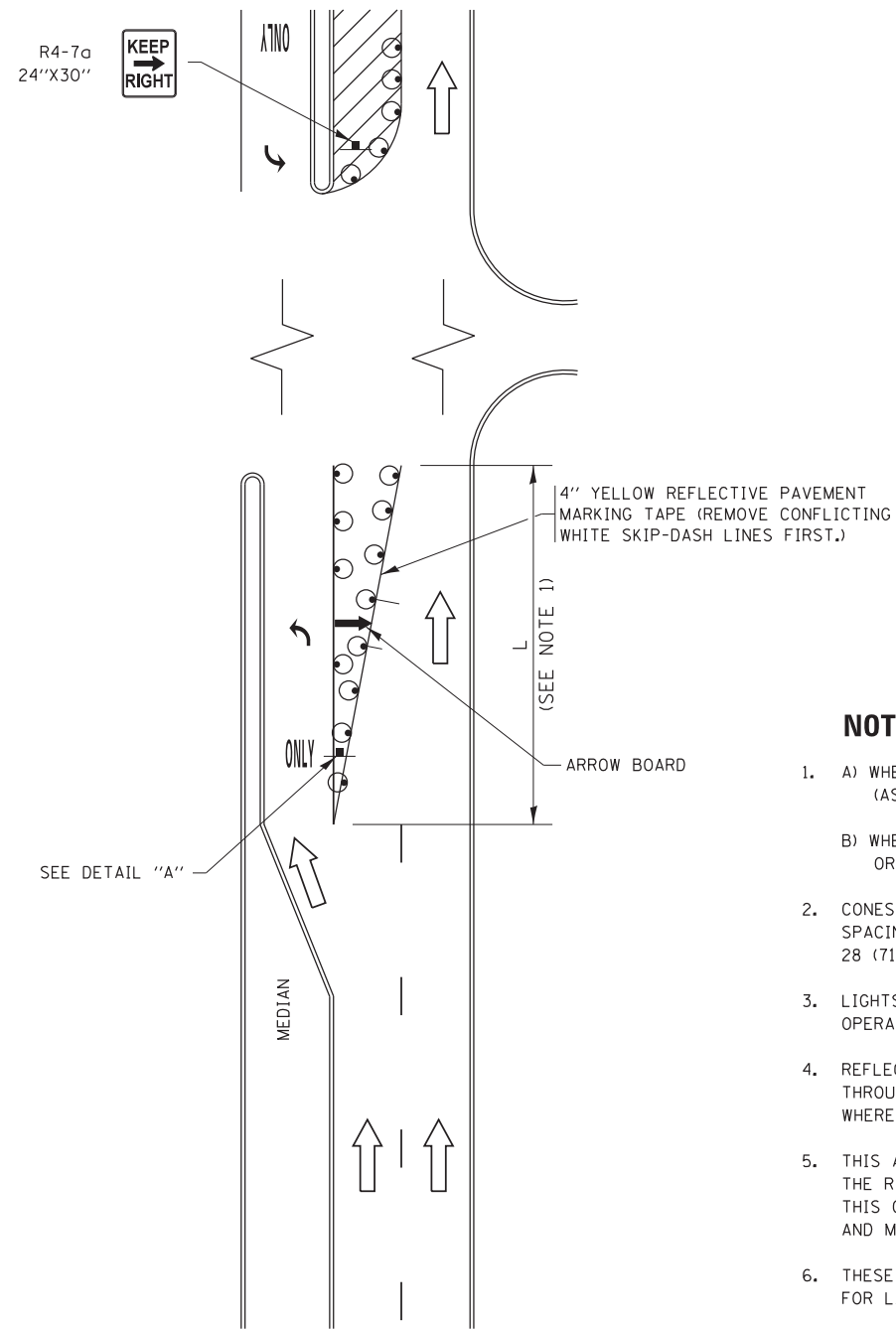


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

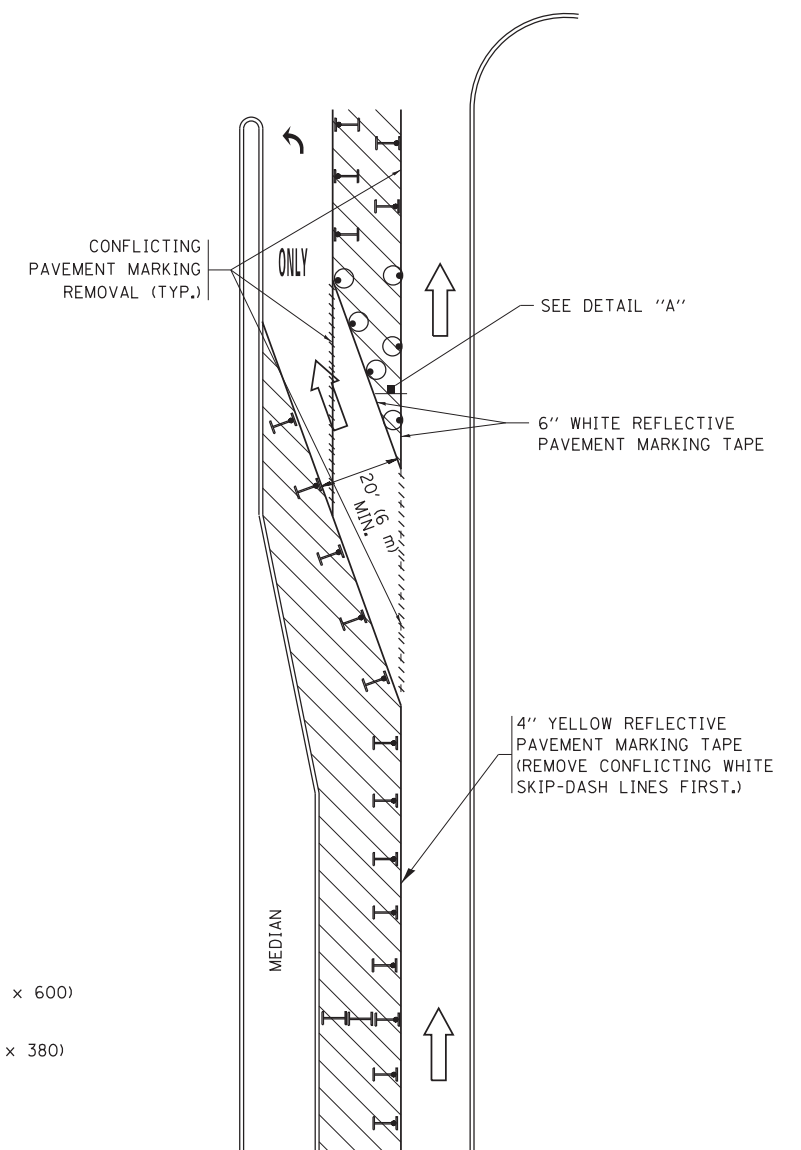


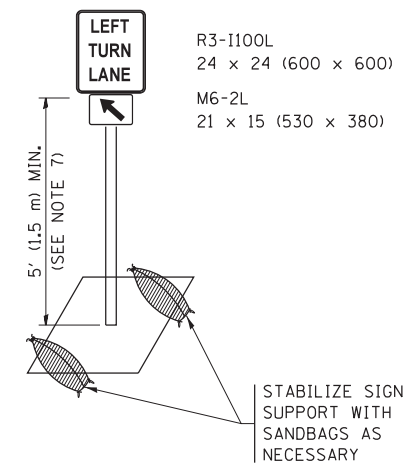
FIGURE 2

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

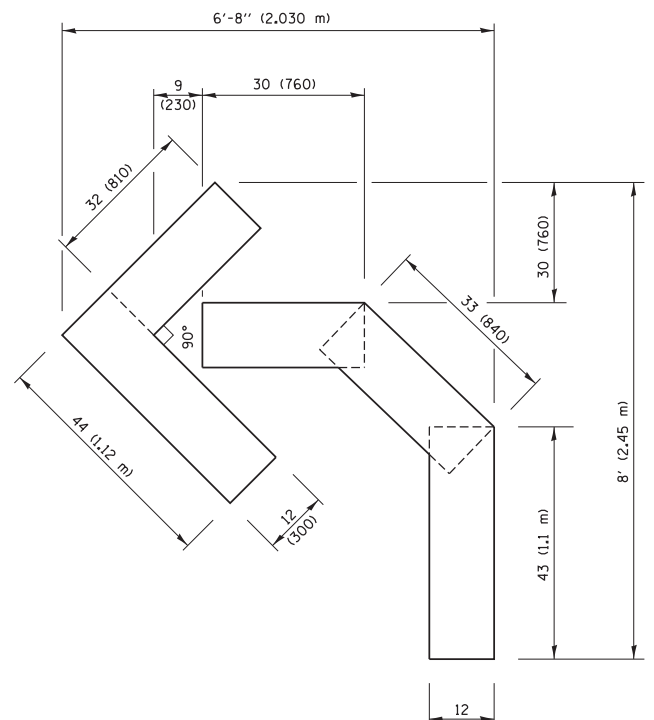


DETAIL A

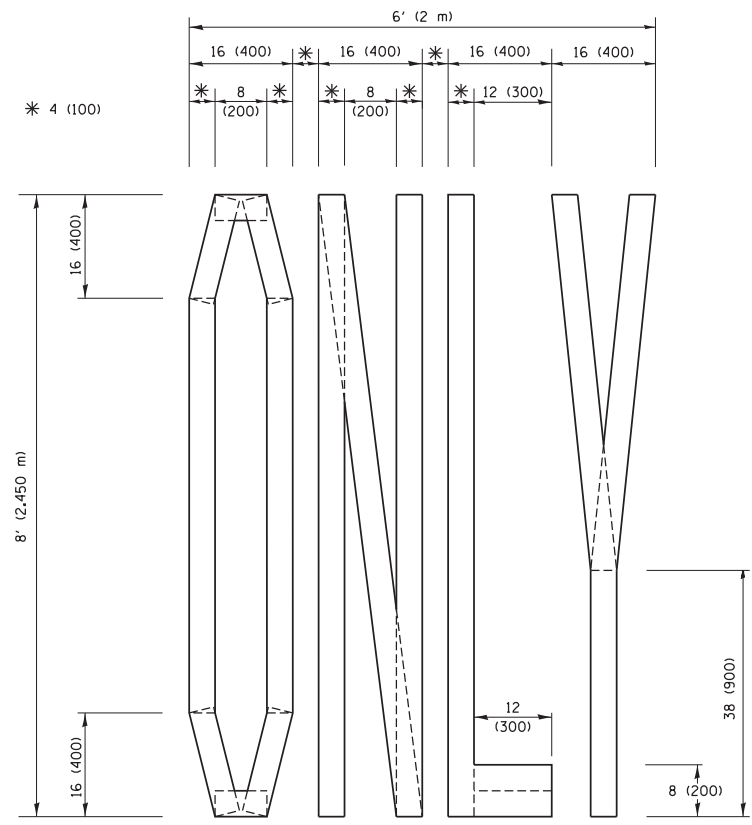
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG.illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\Dist 1\ADDData\CAHOUSEH1407-95	REVISED - A. SCHUETZE 07-01-13	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16					334	117B-BR-1	LAKE	54	51	
Default	PLOT SCALE = 50.0000' / in.	REVISED - T. RAMMACHER 01-06-00	REVISED -					TC-14			CONTRACT NO. 60R79		
	PLOT DATE = 9/15/2016							ILLINOIS FED. AID PROJECT					

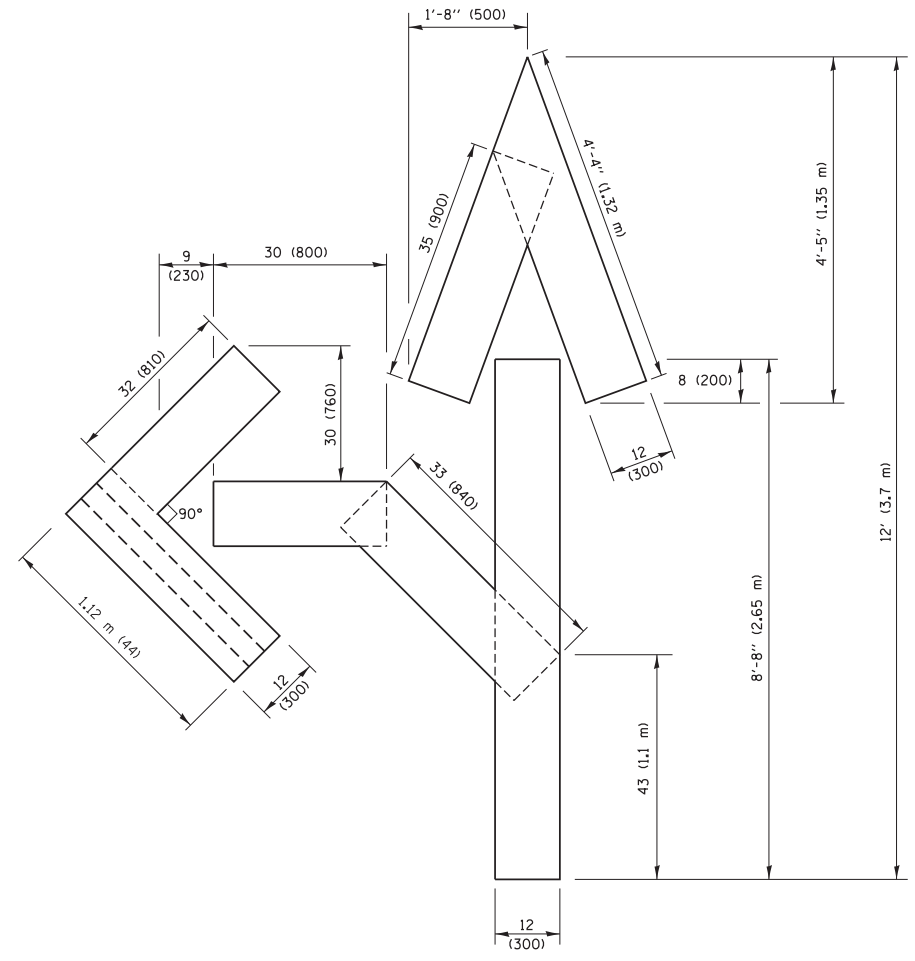
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.41 sq. m)

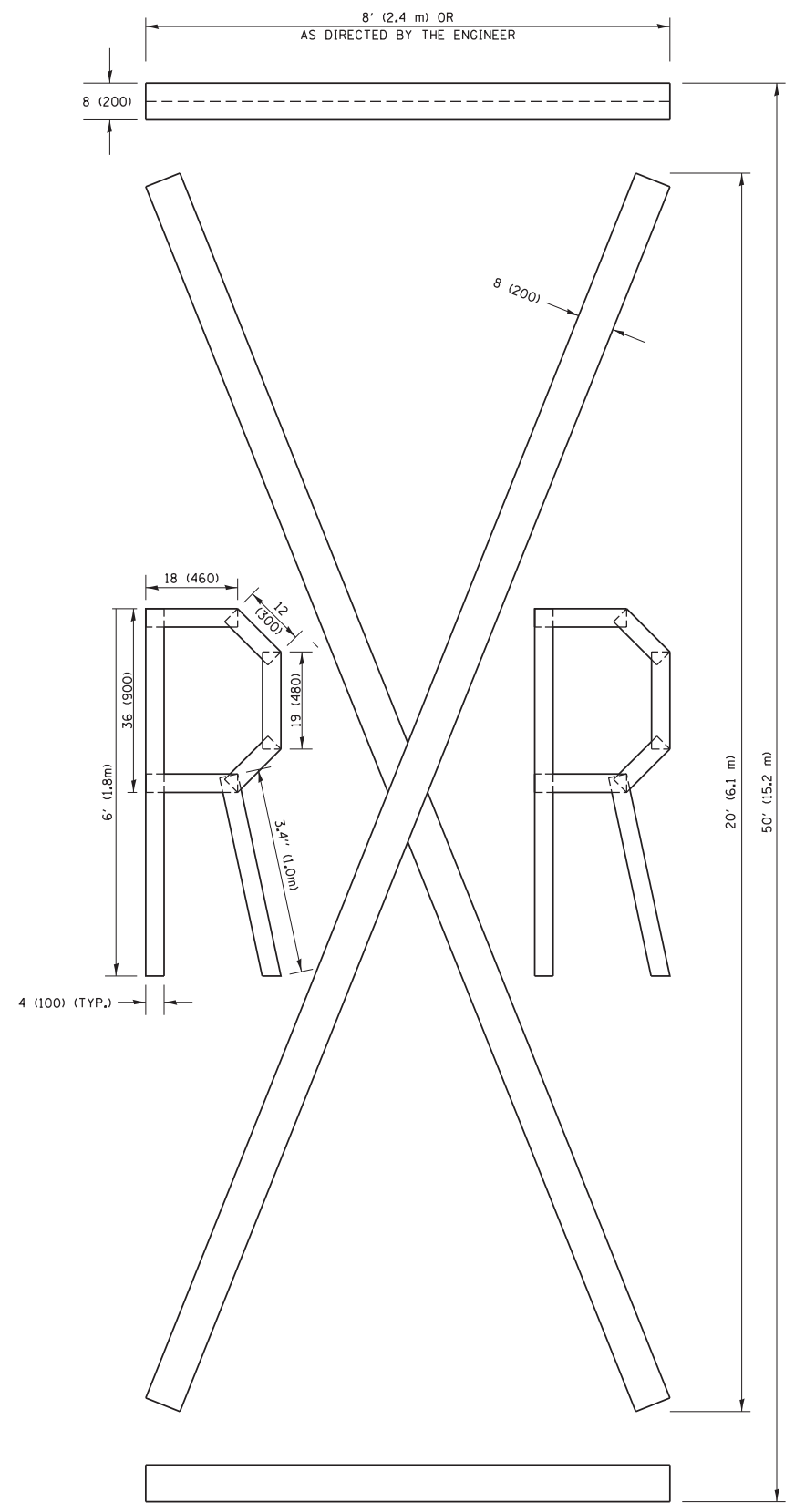


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.1 m)
 27.5 sq. ft. (2.53 sq. m)

NOTE:
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY
 4 (100) LINE = 225.9 ft. (68.9 m)
 75.3 sq. ft. (6.99 sq. m)

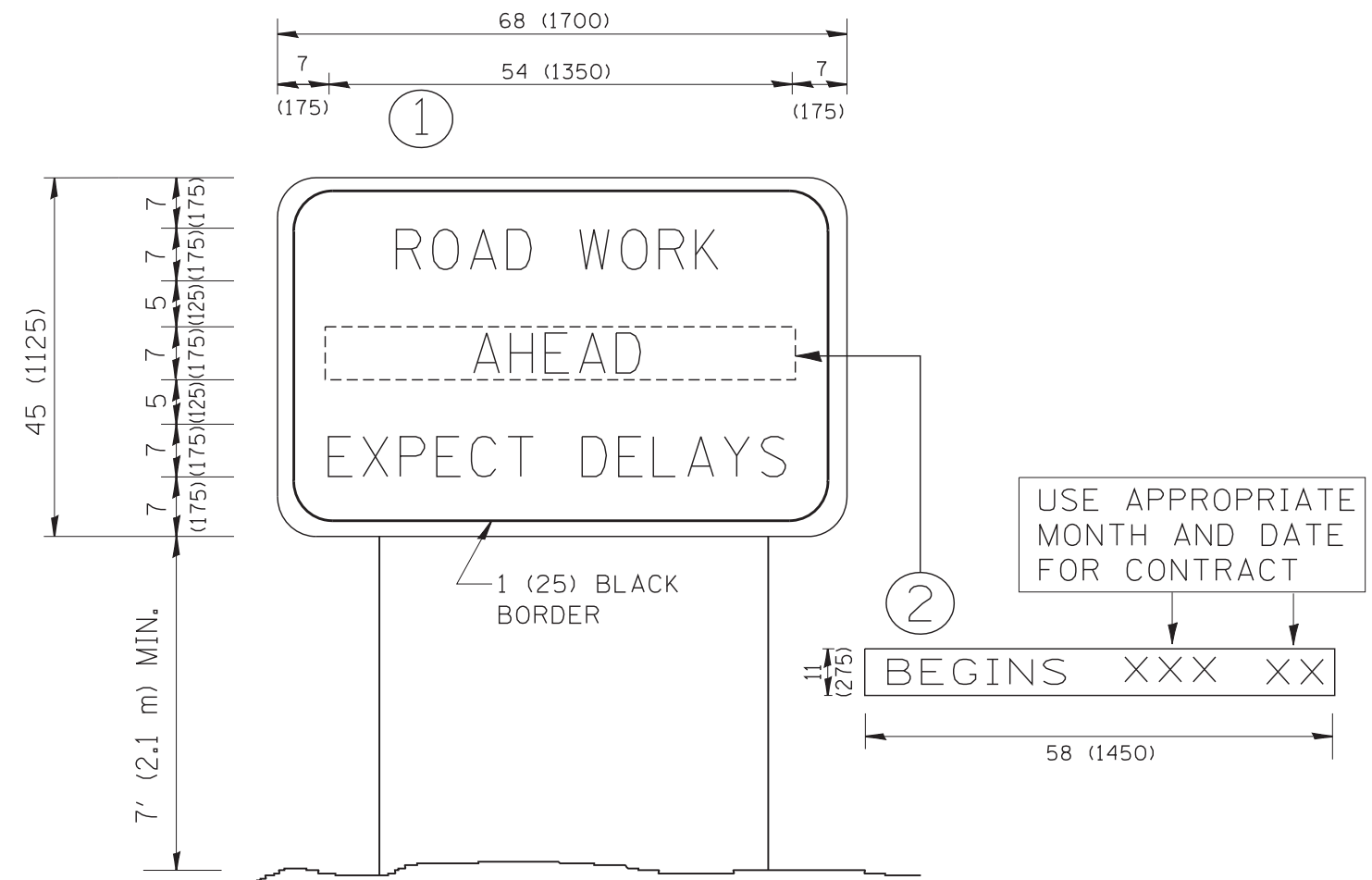
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
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PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - E. GOMEZ 08-28-00	
PLOT DATE = 9/15/2016	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	52
TC-16			CONTRACT NO. 60R79	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

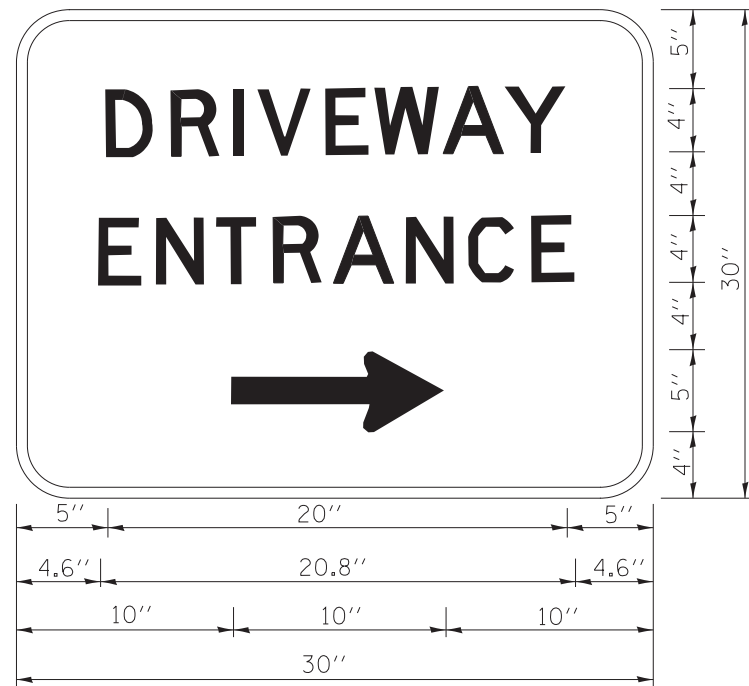
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -
		DESIGNED - CHECKED -	REVISED - REVISED -
		DESIGNED - DATE -	REVISED - REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	53
TC-22		CONTRACT NO. 60R79		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = gegl1enobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
ct:\pwork\pwork\gagl1enobt\d0108315\to26.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2012	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	117B-BR-1	LAKE	54	54
TC-26			CONTRACT NO. 60R79	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				