

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083 00-BR	WILL	46	1
CONTRACT NO. 61F12				

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

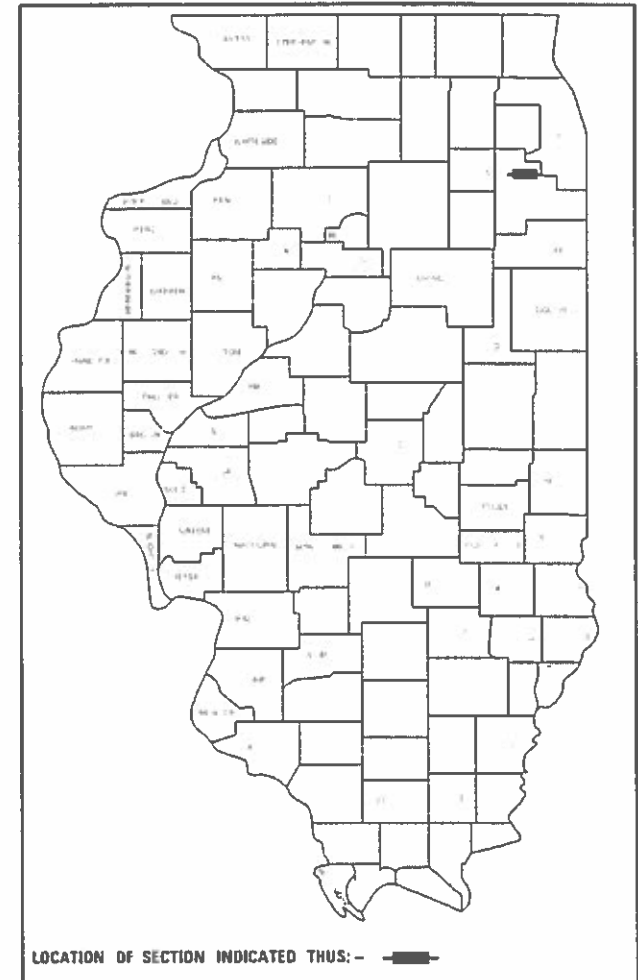
**TRAFFIC DATA**

POSTED SPEED LIMIT - 30 MPH  
 DESIGN SPEED LIMIT - 30 MPH  
 2016 ADT = 450 VPD  
 2040 ADT = 470 VPD

**DESIGN DESIGNATION**

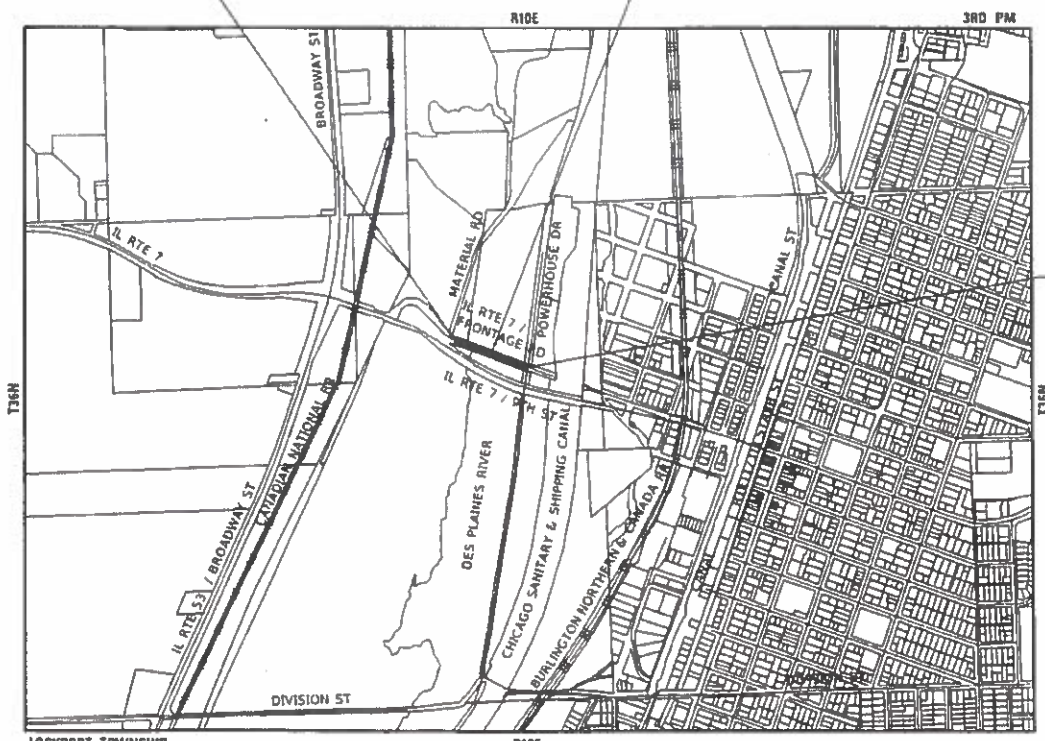
LOCAL ROAD

DEPARTMENT OF TRANSPORTATION  
**PLANS FOR PROPOSED  
 FEDERAL AID HIGHWAY**  
 FAP 351 (IL ROUTE 7) (FRONTAGE ROAD)  
 OVER DES PLAINES RIVER  
 BRIDGE REHABILITATION AND BRIDGE PAINTING  
 SECTION: 15-00083-00-BR  
 PROJECT: AB2A(540)  
 CITY OF LOCKPORT  
 WILL COUNTY  
 JOB: C-91-068-16

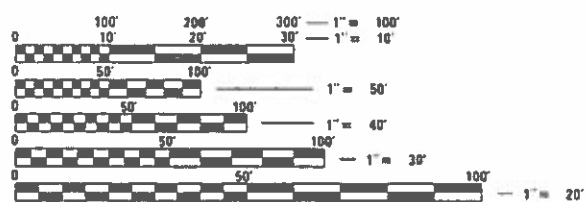


IMPROVEMENT BEGINS  
 STA. 13 + 90.67

EXISTING SN 099-0135



IMPROVEMENT ENDS  
 STA. 22 + 67.42



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.

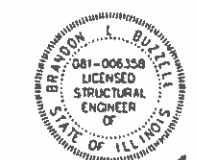
J.U.L.I.E. DESIGN STAGE REQUEST  
 DIG. No. X0460219



CONTACT JULIE AT 811 OR 800-892-0123 WITH THE FOLLOWING:  
 COUNTY = WILL  
 CITY-TOWNSHIP = LOCKPORT  
 SEC. & 1/4 SEC. NO. = 22NE  
 48 HOURS (2 working days) BEFORE YOU DIG

CONTRACT NO. 61F12

GROSS LENGTH = 877 FT. = 0.166 MILE  
 NET LENGTH = 877 FT. = 0.166 MILE



*Jay C. Coleman*  
 PROJECT MANAGER  
 "LICENSE EXPIRES 11-30-2019"

*Bryan D. Buzell*  
 STRUCTURAL ENGINEER  
 "LICENSE EXPIRES 11-30-2020"

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

APPROVED October 16, 2018  
*B.D.C.*  
 CITY OF LOCKPORT

PASSED OCTOBER 31, 2018  
*Christopher...*  
 DISTRICT ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID  
 BASED ON LIMITED  
 REVIEW NOVEMBER 8, 2018  
*Anthony J. Wanjigya*  
 REGIONAL ENGINEER

PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS

10/8/2018 4:40:59 PM (I:\Projects\LOCKPORT\150440-Des Plaines Bridge\CADD\Sheets\PH2\150440\_SHT\_COVER.dgn  
 FEDERAL AID DESIGN PROGRAM ENGINEER: CARMEN E. RAMOS, P.E., SCRUBBURG, IL

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## HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-09	PAVEMENT JOINTS
420401-13	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-10	TRAFFIC BARRIER TERMINAL, TYPE 2
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
664001-02	CHAIN LINK FENCE
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
725001-01	OBJECT AND TERMINAL MARKERS
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
B.L.R. 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL

## DISTRICT 1 DETAILS

BD-34	DISTRICT 1 DETAILS - DETAILS FOR DEPRESSED CURB & GUTTER AND SHOULDER TREATMENT AT TBT TY 1 SPL
TC-10	DISTRICT 1 DETAILS - TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-13	DISTRICT 1 DETAILS - TYPICAL PAVEMENT MARKINGS
TC-22	DISTRICT 1 DETAILS - ARTERIAL ROAD INFORMATION SIGN

## COMMITMENTS

1. TO MINIMIZE DISTURBANCE OF THE BANDED KILLIFISH DURING SPAWNING, NO IN-STREAM WORK SHALL BE PERFORMED FROM MAY 15 TO JUNE 30.
2. SILTATION HAS THE POTENTIAL TO DESTROY THE PREFERRED HABITAT FOR THE BANDED KILLIFISH. THEREFORE, CONTROLLING SILTATION AND REDUCING THE DESTRUCTION OF AQUATIC PLANTS IS CRITICAL.
3. WORK MAY NOT BE PERFORMED IN THE WATER, EXCEPT FOR THE PLACEMENT OF MATERIALS NECESSARY FOR THE CONSTRUCTION OF CAUSEWAYS. ALL MATERIALS FOR CAUSEWAYS AND ANY FILLS USED MUST BE NON-ERODABLE. LOW GROUND-PRESSURE EQUIPMENT IS REQUIRED FOR WORK IN WETLANDS. LUMBAR TO BE USED FOR TEMPORARY CONSTRUCTION ACTIVITIES MUST BE FREE OF ALL CHEMICAL TREATMENT, NO EQUIPMENT MAY ENTER THE WATER AT ANY TIME.

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

### INDEX OF SHEETS, COMMITMENTS AND HIGHWAY STANDARDS

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	2
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST EDITION OF THE FOLLOWING STATE OF ILLINOIS SPECIFICATIONS: "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (REFERRED TO AS THE "STANDARD SPECIFICATIONS"), THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", THE "MANUAL OF TEST PROCEDURES FOR MATERIALS" AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".
2. THE LOCATIONS OF PUBLIC UTILITIES SHOWN ON THE PLANS REPRESENTS ONLY THE OPINION OF THE OWNER AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER AND THE ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND, SURFACE, AND OVERHEAD UTILITIES, INCLUDING SPRINKLER SYSTEMS, EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY OF LOCKPORT PUBLIC WORKS DEPARTMENT AT 1-815-838-0549 AT LEAST 48 HOURS IN ADVANCE OF BEGINNING WORK TO OBTAIN CITY UTILITY LOCATIONS.
4. THE INDISCRIMINATE USE OF FIRE HYDRANTS IS STRICTLY PROHIBITED. WATER FOR CONSTRUCTION SHALL BE METERED OR OTHERWISE ACCOUNTED FOR AND A DAILY LOG MAINTAINED. THE CONTRACTOR SHALL PROVIDE THE WATER TRUCK AND DRIVER REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE CITY RESERVES THE RIGHT TO RESTRICT OR REFUSE THE USE OF CITY WATER IF DEEMED NECESSARY. THE CONTRACTOR SHALL CONTACT CITY OF LOCKPORT PUBLIC WORKS AT 1-815-838-0549 REGARDING OBTAINING WATER.
5. ACCESS TO PRIVATE DRIVEWAYS SHALL BE PROVIDED AT ALL TIMES EXCEPT DURING ACTUAL CONSTRUCTION ADJACENT THERE TO. TEMPORARY RAMPS SHALL BE CONSTRUCTED AS NEEDED TO PROVIDE SUCH ACCESS, UTILIZING CRUSHED STONE OR CRUSHED GRAVEL AS TEMPORARY ACCESS.
6. THE CONTRACTOR SHALL CONTACT THE LOCAL AGENCY MATERIAL INSPECTOR AT LEAST 48 HOURS PRIOR TO ANY CONCRETE OR HOT-MIX ASPHALT MATERIAL DELIVERIES. CONTACT INFORMATION WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING.
7. ALL EXISTING POSTS, RAILROAD TIES, AND DECORATIVE TIMBER AND ROCKS IN CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RELOCATED AS DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR WHEN REMOVING THESE ITEMS TO PRESERVE THEM FROM HARM. ITEMS NOT RELOCATED OR SALVAGED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
8. TRENCH BACKFILL FOR THIS PROJECT SHALL CONSIST OF CRUSHED CA-6 AND SHALL BE COMPACTED BY METHOD 1 ONLY.
9. ANY DAMAGE TO PAVEMENT, SIDEWALK, CURB OR ANY OTHER PORTION OF THE ROADWAY NOT SPECIFICALLY TO BE REMOVED AND REPLACED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL REPLACE ALL STREET SIGNS AND MAIL BOXES REMOVED DURING CONSTRUCTION AS NEAR AS POSSIBLE TO THEIR ORIGINAL LOCATION OR AS DETERMINED BY THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLES 107.20 AND 107.25.
11. NO STOCKPILING MATERIAL WILL BE ALLOWED IN FLOODPLAIN.
12. THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.
13. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.
14. THE ILLINOIS DEPARTMENT OF TRANSPORTATION IS NOT THE OWNER OF RECORD FOR THIS BRIDGE. THOSE SEEKING HISTORICAL AS-BUILT OR OTHER RECORD PLANS AND DOCUMENTS MUST CONTACT THE OWNER OF RECORD TO MAKE ARRANGEMENTS FOR ACCESS TO THIS INFORMATION. CONTACT JAY COLEMAN WITH BAXTER & WOODMAN, INC. AT 1-815-444-3277.
15. THE ILLINOIS DEPARTMENT OF TRANSPORTATION IS NOT THE OWNER OF RECORD FOR THIS BRIDGE. A FULL HYDRAULIC REPORT IS NOT AVAILABLE FOR THIS STRUCTURE, BUT THE IDNR-OWR PERMIT APPLICATION INCLUDING HYDRAULIC INFORMATION IS AVAILABLE. THOSE SEEKING THE IDNR-OWR PERMIT APPLICATION SHOULD CONTACT JAY COLEMAN WITH BAXTER & WOODMAN, INC. AT 1-815-444-3277.

16. IF THE CONTRACTOR'S MEANS AND METHODS REQUIRE THE CONSTRUCTION OF TEMPORARY ACCESS CAUSEWAYS IN THE DES PLAINES RIVER, THE WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE PERMITS AND RECURRING SPECIAL PROVISION FOR TEMPORARY STREAM CROSSINGS AND IN-STREAM WORK PADS.

17. THE PERMITS LISTED BELOW AND INCLUDED IN THE SPECIAL PROVISIONS ARE BEING PROVIDED FOR PROJECT CONSTRUCTION:

- A. METROPOLITAN WATER RECLAMATION DISTRICT OF GREATOR CHICAGO GENERAL PERMIT AND ADDENDUM.
- B. UNITED STATES ARMY CORP OF ENGINEERS PERMIT
- C. ILLINOIS DEPARTMENT OF NATURAL RESOURCES, OFFICE OF WATER RESOURCES PERMIT.
- D. ILLINOIS DEPARTMENT OF NATURAL RESOURCES INCIDENTAL TAKE AUTHORIZATION.

THE PERMITS ACCOMMODATE STAGING AREA, ACCESS ROUTES AND THE INSTALLATION OF TEMPORARY CAUSEWAYS; SEE EACH PERMIT FOR ADDITIONAL INFORMATION. IF THE CONTRACTOR ELECTS TO PURSUE MEANS AND METHODS NOT ACCOMODATED BY THE APPROVED PERMITS, HE WILL BE RESPONSIBLE FOR PERMIT RESUBMITTAL, AGENCY COORDINATION AND RELATED COSTS. NO EXTENSION OF TIME OR COMPENSATION WILL BE GRANTED AS A RESULT OF ANY DELAY IN OBTAINING THE PERMIT TO START CONSTRUCTION.

18. THIS PROJECT REQUIRES AN INCIDENTAL TAKE AUTHORIZATION FROM ILLINOIS DEPARTMENT OF NATURAL RESOURCES FOR CONSTRUCTION ACTIVITIES THAT MAY POTENTIALLY AFFECT THE BANDED KILLIFISH. IN ACCORDANCE WITH THAT AUTHORIZATION, THE FOLLOWING CONDITIONS MUST BE MET IF TEMPORARY ACCESS CAUSEWAYS ARE USED DURING CONSTRUCTION:

- A. TO KEEP AS MUCH RIVER HABITAT OPEN AS POSSIBLE, ONLY ONE CAUSEWAY SHALL BE CONSTRUCTED AND OPERATED AT A TIME. ONCE WORK IS DONE ON ONE SIDE OF THE BRIDGE, THE TEMPORARY CAUSEWAY WILL BE REMOVED AND THE OTHER CAUSEWAY COULD THEN BE CONSTRUCTED.
- B. TEMPORARY CULVERTS SHALL BE PLACED THROUGH THE CAUSEWAYS TO ALLOW THE FLOW OF THE RIVER TO PASS. THIS WILL MINIMIZE TEMPORARY PONDING AND OBSTRUCTIONS OF FLOW, KEEPING THE FLOW CONDITIONS AS CLOSE TO EXISTING CONDITIONS AS POSSIBLE.

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES**

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	3
CONTRACT NO. 61F12				
ILLINOIS		FED. AID PROJECT		

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0013 RURAL
* 20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	60	60
* 20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	18	18
20101000	TEMPORARY FENCE	FOOT	400	400
20101100	TREE TRUNK PROTECTION	EACH	10	10
* 20101200	TREE ROOT PRUNING	EACH	10	10
* 20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	15	15
* 20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	15	15
20200100	EARTH EXCAVATION	CU YD	110	110
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	56	56
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	144	144
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	157	157
* 25000312	SEEDING, CLASS 4A	ACRE	0.10	0.10
* 25000314	SEEDING, CLASS 4B	ACRE	0.04	0.04
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	526	526
28000305	TEMPORARY DITCH CHECKS	FOOT	105	105

\* INDICATES SPECIALTY ITEM  
 \*\* INDICATES CONSTRUCTION CODE 0042 TRAINEES

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	4
CONTRACT NO. 61F12			ILLINOIS FED. AID PROJECT	

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	
				0013	RURAL
28000400	PERIMETER EROSION BARRIER	FOOT	1,017		1,017
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	1,497		1,497
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	27		27
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	136		136
42001300	PROTECTIVE COAT	SQ YD	128		128
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	128		128
44000100	PAVEMENT REMOVAL	SQ YD	262		262
44201299	DOWEL BARS 1 1/2"	EACH	46		46
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	40		40
44213204	TIE BARS 3/4"	EACH	38		38
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	126		126
50102400	CONCRETE REMOVAL	CU YD	41.6		41.6
50200100	STRUCTURE EXCAVATION	CU YD	100		100
50300225	CONCRETE STRUCTURES	CU YD	29.6		29.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	55.3		55.3

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	PLOT SCALE = 20,000' / in.	CHECKED - JCC	REVISED -					351	15-00083-00-BR	WILL	46	5
PLOT DATE = 11/5/2018	DATE - 10-08-18	FILE - 150440_SHT_500.dgn			SCALE: N.T.S.	SHEET 2 OF 6 SHEETS	STA.	TO STA.	CONTRACT NO. 61F12			
								ILLINOIS FED. AID PROJECT				

### SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	
				0013	RURAL
50300260	BRIDGE DECK GROOVING	SQ YD	1,828	1,828	
50300300	PROTECTIVE COAT	SQ YD	298	298	
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	90	90	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	24,608	24,608	
* 50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	L SUM	1	1	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	44,810	44,810	
* 50900200	STEEL RAILING, TYPE 2399	FOOT	1,254	1,254	
51500100	NAME PLATES	EACH	1	1	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	77	77	
52100110	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24	24	
52100120	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	12	12	
52100505	ANCHOR BOLTS, 5/8"	EACH	72	72	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	40	40	
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	4	4	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	50	50	

\* INDICATES SPECIALTY ITEM

\*\* INDICATES CONSTRUCTION CODE 0042 TRAINEES

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

#### SUMMARY OF QUANTITIES

SCALE: N.T.S. SHEET 3 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	6
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	
				0013	RURAL
* 63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	114		114
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1		1
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1		1
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	1		1
63200310	GUARDRAIL REMOVAL	FOOT	548		548
* 66900200	NON-SPECIAL WASTE DISPOSAL	CUYD	143		143
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1		1
* 66901002	ON-SITE MONITORING OR REGULATED SUBSTANCES	DAYS	5		5
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1		1
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	4		4
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6		6
67100100	MOBILIZATION	L SUM	1		1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1		1
* 72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	2		2
* 72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	3		3

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	USER NAME = 488cac	DESIGNED - CAC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	<b>SUMMARY OF QUANTITIES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 20.0000' / in.	DRAWN - CJC	REVISED -			351	15-00083-00-BR	WILL	46	7	
	PLOT DATE = 11/5/2018	CHECKED - JCC	REVISED -			CONTRACT NO. 61F12					
	DATE - 10-08-18	FILE - 150440_SHT_SOQ.dgn	SCALE: N.T.S.			SHEET 4 OF 6 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	
				0013	RURAL
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4		4
* 78008310	POLYUREA PAVEMENT MARKING TYPE II - LINE 4"	FOOT	3,216		3,216
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8		8
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	12		12
Z0001904	STRUCTURAL STEEL REMOVAL	L SUM	1		1
Z0003802	REMOVAL OF EXISTING BEARINGS	EACH	24		24
Z0004552	APPROACH SLAB REMOVAL	SQ YD	128		128
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	1,959		1,959
* Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1		1
Z0012130	BRIDGE DECK SCA RIFICATION 3/4"	SQ YD	1,959		1,959
Z0013798	CONSTRUCTION LAY OUT	L SUM	1		1
Z0015802	PLUG EXISTING DECK DRAINS	EACH	135		135
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	5		5
Z0018004	DRAINAGE SCUPPERS, DS-12	EACH	6		6
Z0022800	FENCE REMOVAL	FOOT	60		60

\* INDICATES SPECIALTY ITEM  
 \*\* INDICATES CONSTRUCTION CODE 0042 TRAINEES

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<b>BAXTER &amp; WOODMAN</b> Consulting Engineers	USER NAME = 488cac	DESIGNED - CAC	REVISED -
	PLOT SCALE = 20,0000' / in.	DRAWN - CJC	REVISED -
	PLOT DATE = 11/5/2018	CHECKED - JCC	REVISED -
		DATE - 10-08-18	FILE - 150440_SHT_SOQ.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

<b>SUMMARY OF QUANTITIES</b>			
SCALE: N.T.S.	SHEET 5 OF 6 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	8
			CONTRACT NO. 61F12	
		ILLINOIS	FED. AID PROJECT	



**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	
				0013	RURAL
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	75	75	
Z0032300	JACKING EXISTING SUPERSTRUCTURE	L SUM	1	1	
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	150	150	
Z0073410	TEMPORARY SUPPORT SYSTEM, LOCATION 1	EACH	1	1	
Z0073420	TEMPORARY SUPPORT SYSTEM, LOCATION 2	EACH	1	1	
**	Z0076600	TRAINEES	HOUR	500	500
**	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500
*	A2002616	TREE, CARYA CORDIFORMIS (BITTERNUT HICKORY), 2" CALIPER, BALLED AND BURLAPPED	EACH	1	1
*	A2002716	TREE, CARYA OVATA (SHAGBARK HICKORY), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2
*	A2006714	TREE, QUERCUS MACROCARPA (BUR OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2
*	X2511630	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	1,497	1,497
	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	2	2
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	78	78
*	X6310088	TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL)	EACH	3	3
*	X6330725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	55	55

\* INDICATES SPECIALTY ITEM  
 \*\* INDICATES CONSTRUCTION CODE 0042 TRAINEES

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	
				0013	RURAL
X6640560	CHAIN LINK FENCE, 6' (SPECIAL)	FOOT	60	60	

\* INDICATES SPECIALTY ITEM  
 \*\* INDICATES CONSTRUCTION CODE 0042 TRAINEES

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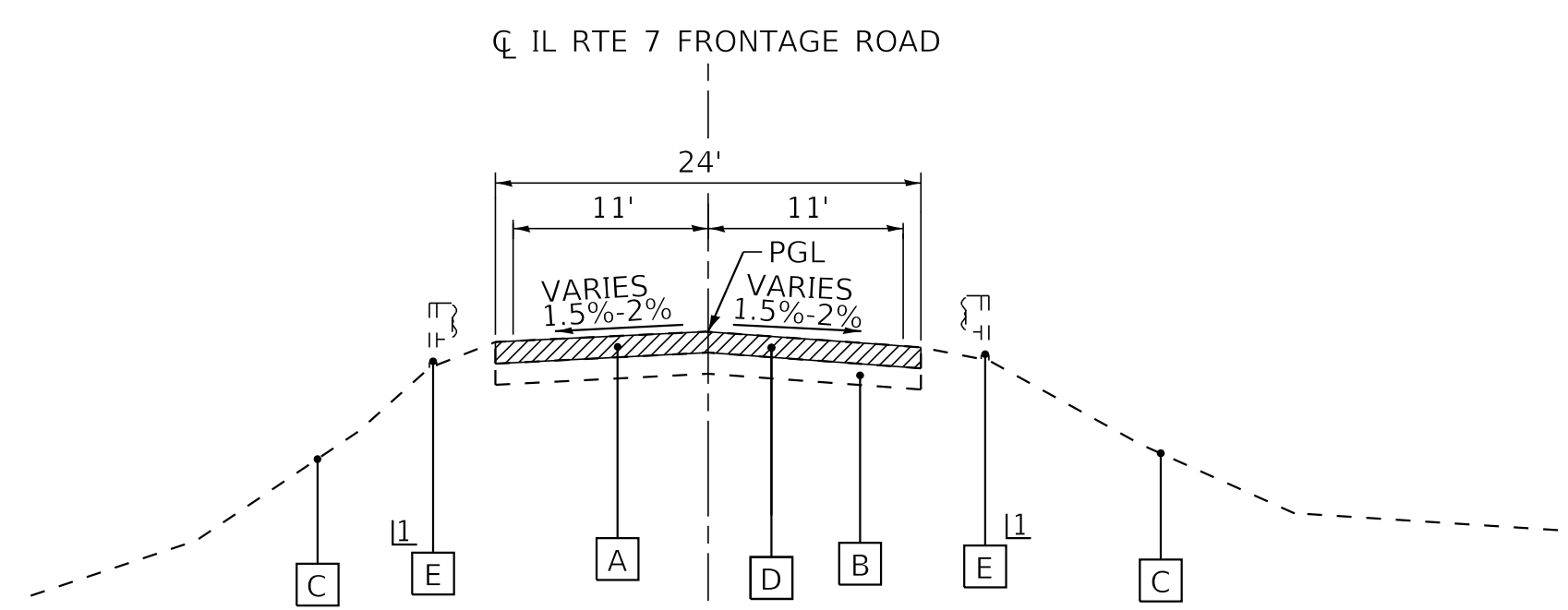
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 6 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61F12	

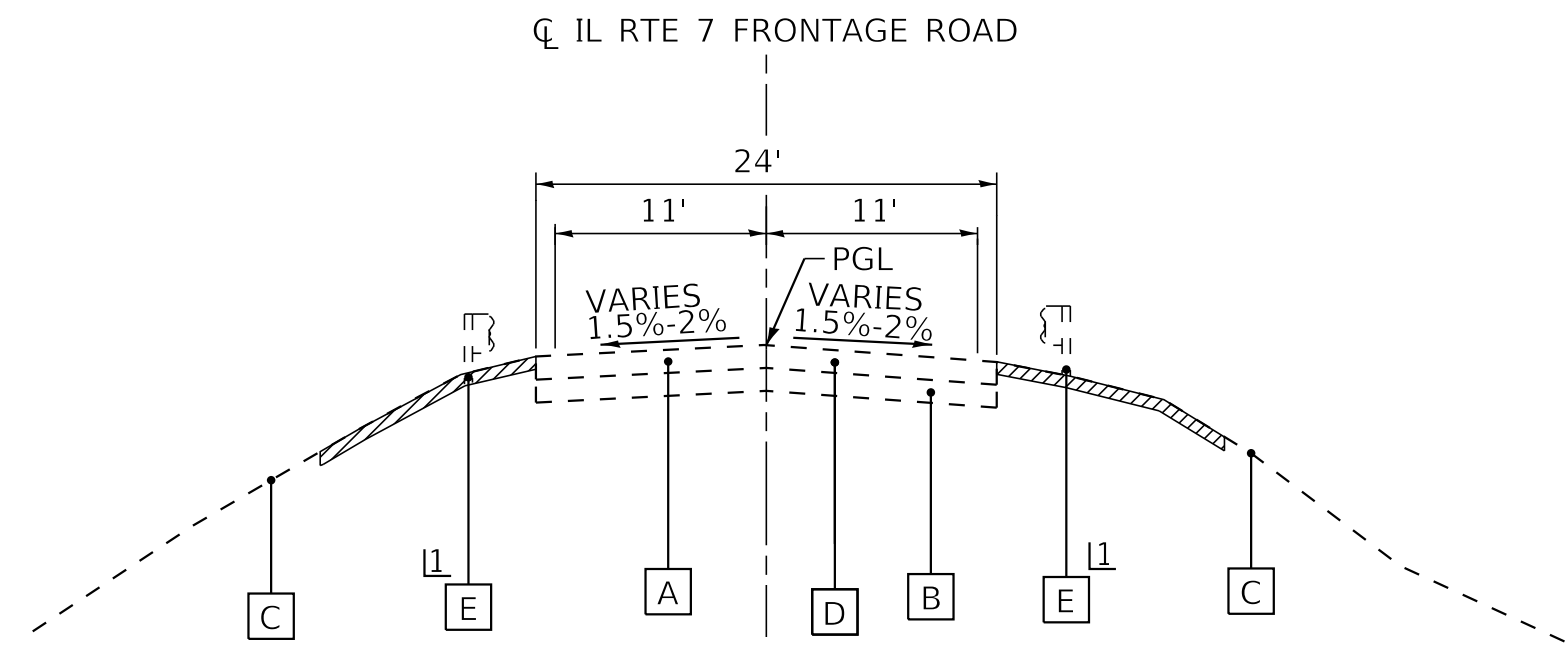
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**EXISTING TYPICAL SECTION**

STA 15+60.60 TO STA 16+09.60, IL ROUTE 7 FRONTAGE ROAD  
 STA 22+14.40 TO STA 22+63.42, IL ROUTE 7 FRONTAGE ROAD

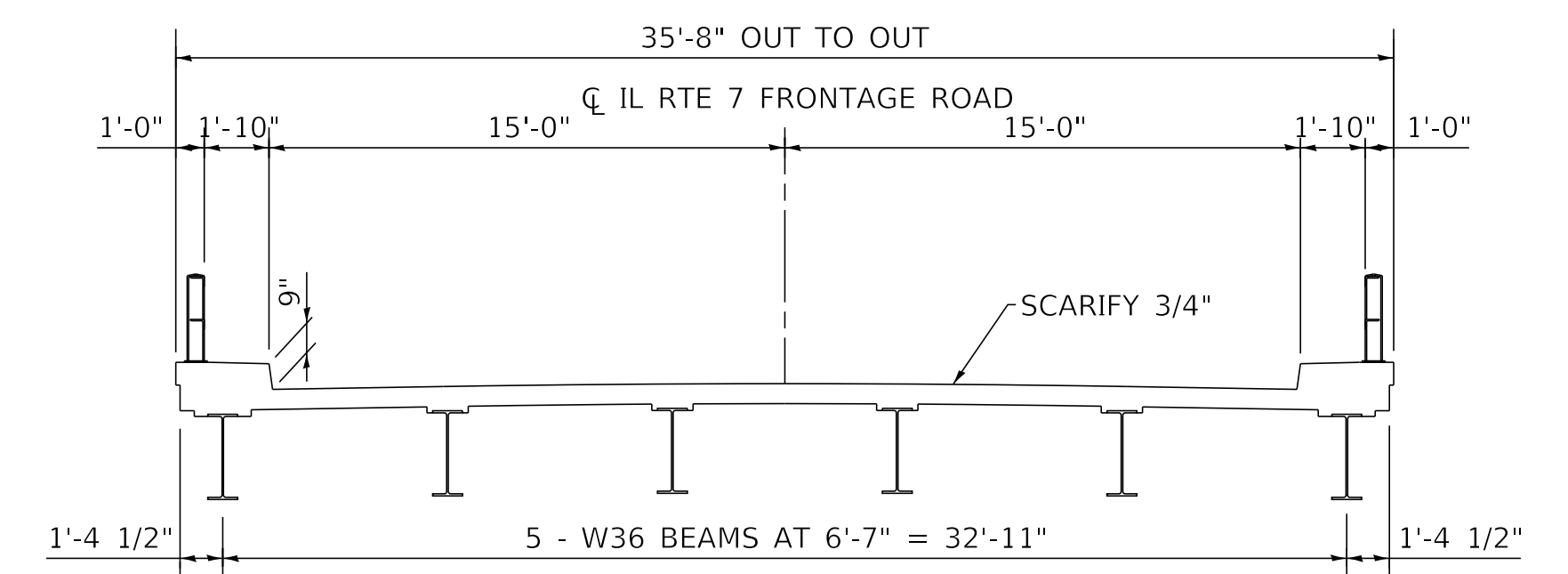
1 SEE EXISTING CONDITIONS AND  
 REMOVAL PLANS FOR LOCATIONS



**EXISTING TYPICAL SECTION**

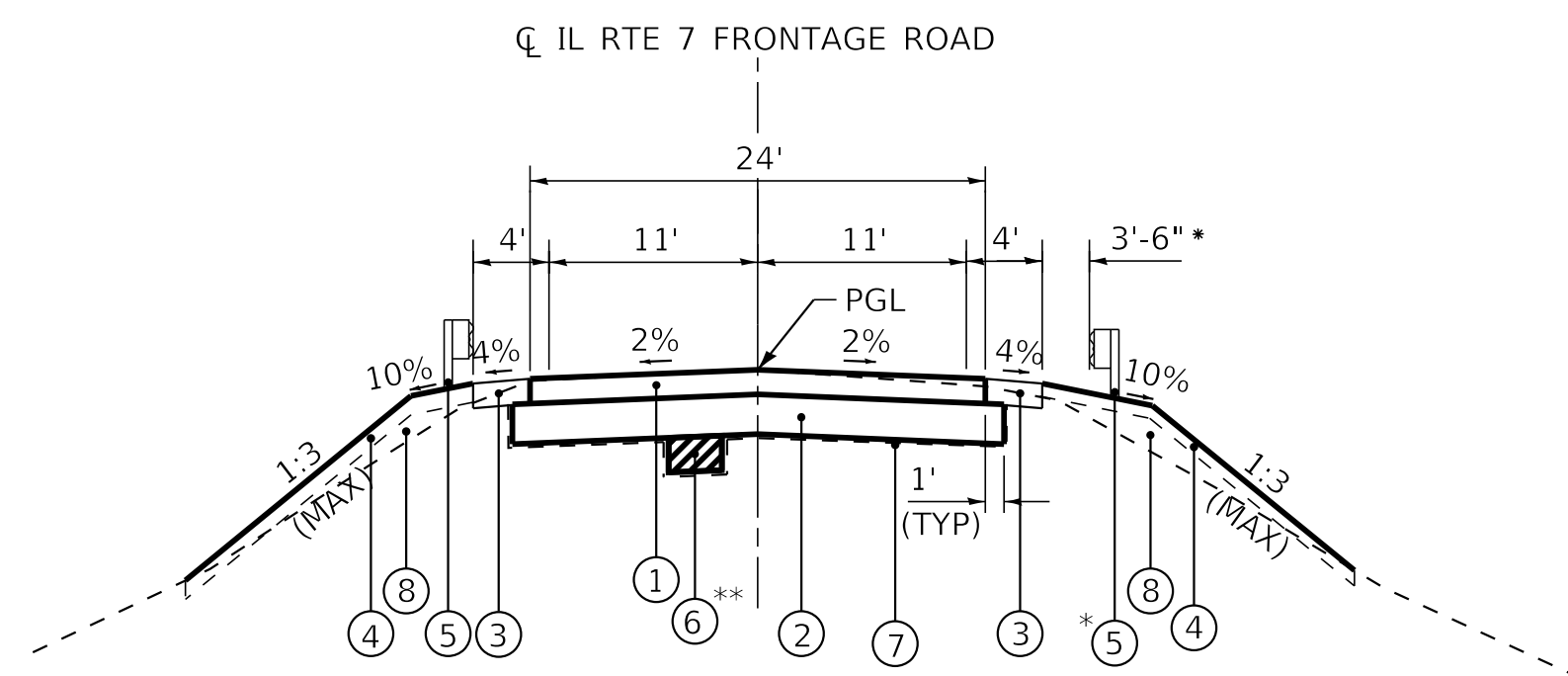
STA 13+90.67 TO 15+60.60, IL ROUTE 7 FRONTAGE ROAD  
 STA 22+63.42 TO STA 22+67.42, IL ROUTE 7 FRONTAGE ROAD

1 SEE EXISTING CONDITIONS AND  
 REMOVAL PLANS FOR LOCATIONS



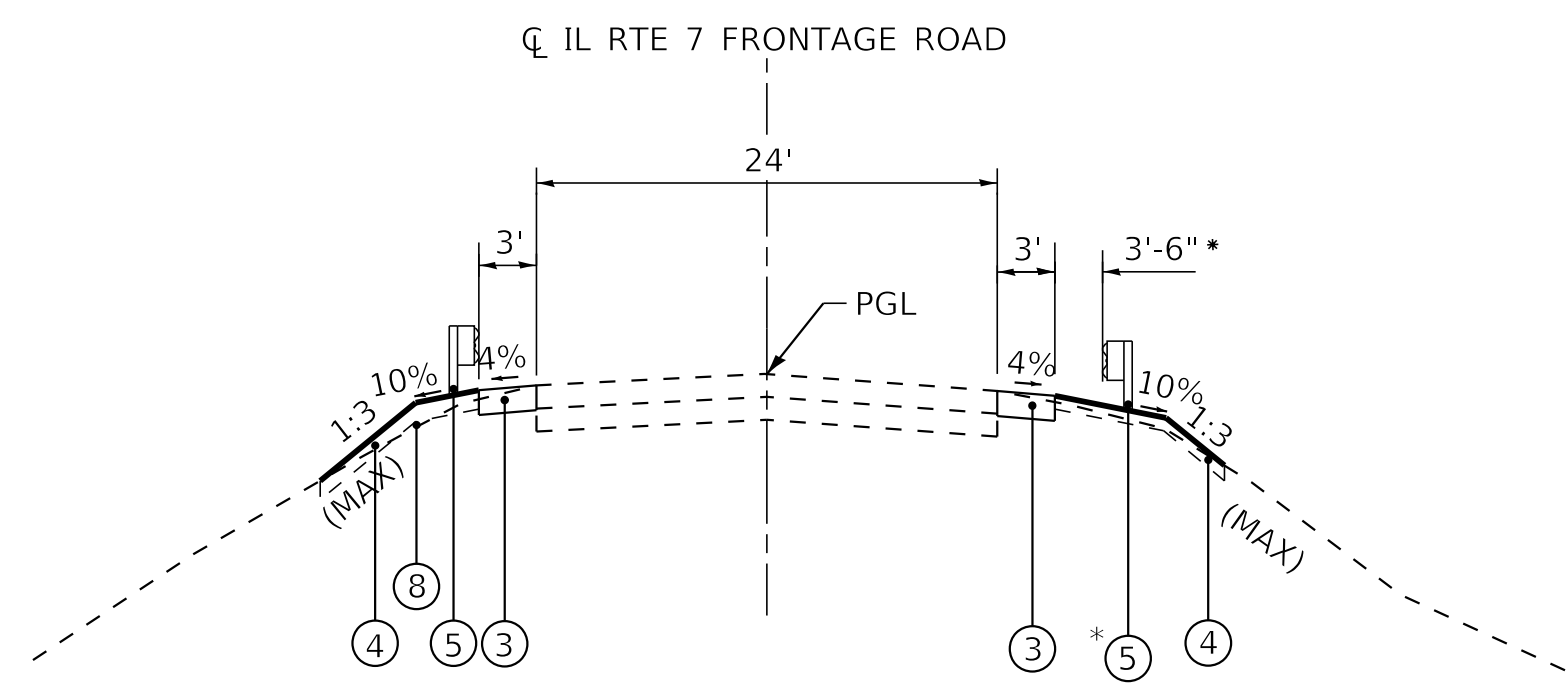
**EXISTING TYPICAL SECTION**

STA 16+09.60 TO STA 22+14.40, IL ROUTE 7 FRONTAGE ROAD



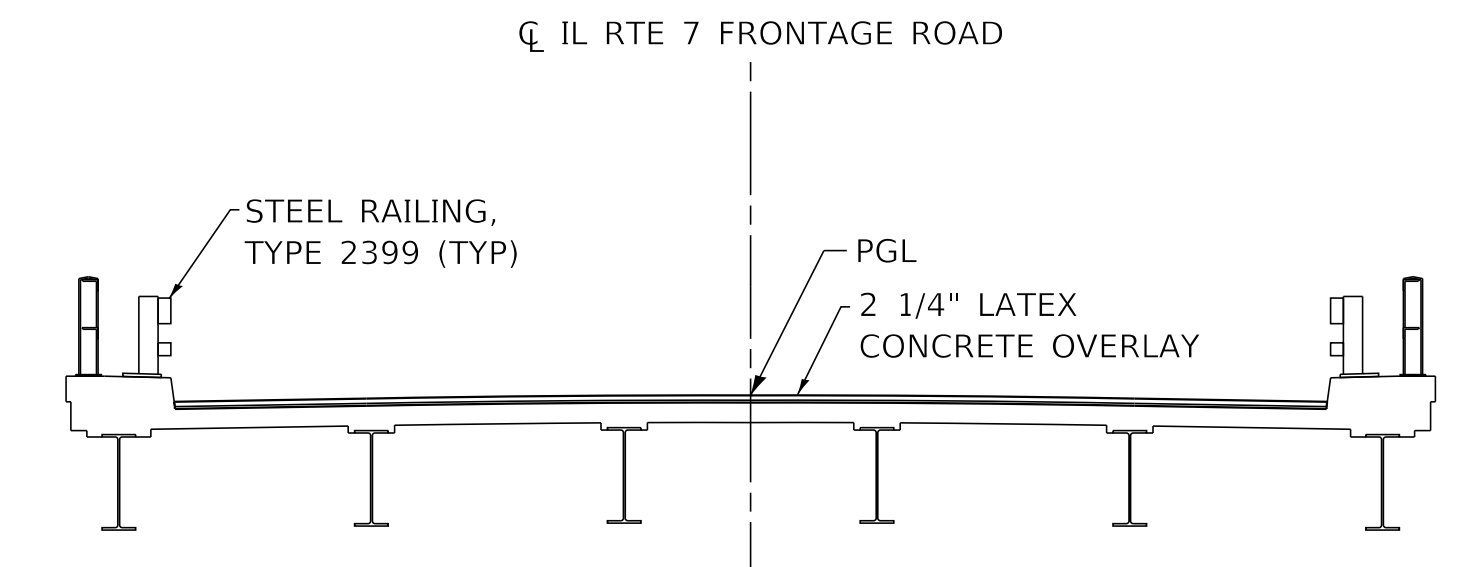
**PROPOSED TYPICAL SECTION**

STA 15+60.60 TO STA 16+09.60 IL ROUTE 7 FRONTAGE ROAD  
 STA 22+14.40 TO STA 22+63.42, IL ROUTE 7 FRONTAGE ROAD



**PROPOSED TYPICAL SECTION**

STA 13+90.67 TO 15+60.60, IL ROUTE 7 FRONTAGE ROAD  
 STA 22+63.42 TO STA 22+67.42, IL ROUTE 7 FRONTAGE ROAD



**PROPOSED TYPICAL SECTION**

STA 16+09.60 TO STA 22+14.40, IL ROUTE 7 FRONTAGE ROAD

**EXISTING LEGEND**

- A PCC PAVEMENT - (VARIES 10" - 11 1/4")
- B AGGREGATE SUBBASE
- C GROUND
- D PAVEMENT REMOVAL
- E GUARDRAIL REMOVAL
- ITEM TO BE REMOVED

**PROPOSED LEGEND**

- 1 PCC PAVEMENT CONNECTOR FOR BRIDGE APPROACH SLAB
- 2 AGGREGATE SUBGRADE IMPROVEMENT, 12"
- 3 AGGREGATE SHOULDERS, TYPE B, 6"
- 4 TOPSOIL EXCAVATION AND PLACEMENT AND SEEDING (6" TOPSOIL REMOVAL, 4" TOPSOIL PLACEMENT - SEE EARTHWORK TABLE)
- 5 \* PROPOSED GUARDRAIL
- 6 REMOVAL OF UNSUITABLE MATERIAL \*\*AGGREGATE SUBGRADE IMPROVEMENT (AT LOCATIONS DETERMINED BY THE ENGINEER)
- 7 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- 8 EMBANKMENT

**NOTES:**

1. \* GUARDRAIL SET BACK TO AVOID CONFLICT WITH AT&T DUCT BANK.
2. \*\*AGGREGATE SUBGRADE IMPROVEMENT (ASI) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ASI WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE MATERIAL IS ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH ASI OR EMBANKMENT AS DETERMINED BY THE ENGINEER. THE REMOVAL AND REPLACEMENT AREA SHALL EXTEND TO 12 INCHES BEYOND THE BACK OF CURB AND GUTTER AND COME UP AT A 1:1 SLOPE TO AGGREGATE SUBGRADE IMPROVEMENT 12". THESE LIMITS MAY BE ALTERED BY THE ENGINEER IF FIELD CONDITIONS SO WARRANT. REMOVAL OF THESE UNSUITABLE SOILS SHALL BE PAID FOR AS "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL." ANY ASI AND REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR GROUND STABILIZATION NOT NEEDED AT THE TIME OF CONSTRUCTION SHALL BE DELETED FROM THE CONTRACT.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
<b>PATCHING</b>	
CLASS D PATCH (HMA BINDER IL-19mm), 10"	4% @ 70 GYR

NOTE: THE CONTRACTOR SHALL MILL BEFORE PATCHING.

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LB/SQ 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. FOR HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS.
3. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.



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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**TYPICAL SECTIONS**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	10
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				

**EARTHWORK**

LOCATION STA TO STA	TOPSOIL EXCAVATION (CU YD)	TOPSOIL EXCAVATION FOR PLACEMENT (15% SHRINKAGE) (CU YD)	21101505 TOPSOIL EXCAVATION AND PLACEMENT (CU YD)	TOPSOIL BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)	30300001 AGGREGATE SUBGRADE IMPROVEMENT (CU YD)	UNSUITABLE EXCAVATION (TOPSOIL) (CU YD)	20201200 REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL (CU YD)	20200100 EARTH EXCAVATION (CU YD)	TOTAL SUITABLE EXCAVATION (CU YD)	EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE) (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+ OR SHORTAGE (-)) (CU YD)	66900200 NON-SPECIAL WASTE DISPOSAL (CU YD)
<b>FRONTAGE ROAD</b>	<b>94</b>	<b>80</b>	<b>52</b>	<b>+29</b>	<b>27</b>	<b>29</b>	<b>56</b>	<b>110</b>	<b>110</b>	<b>93</b>	<b>10</b>	<b>+87</b>	<b>+143</b>
13+90.00 14+00.00	2.0	1.8	1.1	+0.7	-	0.7	0.7	0.1	0.1	0.1	0.5	(-0)	+0
14+00.00 14+50.00	16.3	13.9	9.2	+4.7	-	4.7	4.7	1.0	1.0	1.0	2.8	(-3)	+2
14+50.00 15+00.00	24.3	20.7	12.8	+7.9	-	7.9	7.9	4.0	4.0	3.5	1.8	+2	+10
15+00.00 15+50.00	26.5	22.6	12.9	+9.7	-	9.7	9.7	5.2	5.2	4.5	1.2	+4	+14
15+50.00 15+70.00	10.7	9.1	5.2	+3.9	6.0	3.9	9.9	13.4	13.4	11.4	0.9	+11	+21
15+70.00 16+00.00	11.5	9.8	7.8	+2.0	7.0	2.0	9.0	39.3	39.3	33.4	1.8	+32	+41
16+00.00 16+09.60	2.2	2.0	2.5	(-0.5)	1.0	-	1.0	13.0	13.0	11.1	0.6	+11	+12
16+09.60 16+09.60	0.0	-	0.0	-	-	-	-	-	-	-	-	-	-
16+09.60 22+14.40	0.0	-	0.0	-	-	-	-	-	-	-	-	-	-
22+14.40 22+50.00	0.0	-	0.0	-	5.5	-	5.5	19.3	19.3	16.5	-	+17	+23
22+50.00 22+63.40	0.0	-	0.0	-	7.5	-	7.5	14.6	14.6	12.4	-	+13	+21
<b>TEMPORARY CAUSEWAY</b>	<b>105</b>	<b>90</b>	<b>105</b>	<b>-16</b>									
13+75 14+14 RT	17.0	14.5	17.0	(-2.5)									
14+14 16+15 RT	35.0	29.8	35.0	(-5.2)									
21+35 21+97 LT	35.0	29.8	35.0	(-5.2)									
21+97 22+51 LT	18.0	15.3	18.0	(-2.7)									
<b>TOTALS</b>	<b>199</b>	<b>170</b>	<b>157</b>	<b>13</b>	<b>27</b>	<b>29</b>	<b>56</b>	<b>110</b>	<b>110</b>	<b>93</b>	<b>10</b>	<b>87</b>	<b>143</b>

**EARTHWORK PAY ITEM SUMMARY**

	TOTAL	CU YD
(20200100) EARTH EXCAVATION	110	CU YD
(20201200) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	56	CU YD
(21101505) TOPSOIL EXCAVATION AND PLACEMENT	157	CU YD
(30300001) AGGREGATE SUBGRADE IMPROVEMENT	27	CU YD
(66900200) NON-SPECIAL WASTE DISPOSAL	143	CU YD

**TREE SCHEDULE**

STATION	OFFSET (FT)	SIDE	A2002616 TREE, CARYA CORDIFORMIS (BITTERNUT HICKORY), 2" CALIPER, BALLED AND BURLAPPED EACH	A2002716 TREE, CARYA OVATA (SHAGBARK HICKORY), 2" CALIPER, BALLED AND BURLAPPED EACH	A2006714 TREE, QUERCUS MACROCARPA (BUR OAK), 2" CALIPER, BALLED AND BURLAPPED EACH
15+00	30.0	RT			1
15+25	30.0	RT		1	
15+50	30.0	RT	1		
15+75	30.0	RT		1	
16+00	30.0	RT			1
<b>TOTALS</b>			<b>1</b>	<b>2</b>	<b>2</b>

**ROADWAY SCHEDULE**

FROM	TO	44000100 PAVEMENT REMOVAL SQ YD	42000080 PROPOSED PCC PAVEMENT CONNECTOR FOR BRIDGE APPROACH SLAB SY YD	44201765 CLASS D PATCHES, TYPE II, 10 INCH SY YD	30300112 AGGREGATE SUBGRADE IMPROVEMENT 12" SY YD	21001000 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION SQ YD	48101500 AGGREGATE SHOULDERS, TYPE B 6" SQ YD
<b>IL ROUTE 7 (FRONTAGE ROAD)</b>							
15+60.60	16+09.60	131	64		68	72	
22+14.40	22+63.40	131	64		68	72	
14+50.00	15+60.60						37
13+92.00	15+60.60						57
22+10.00	22+49.00						18
22+48.00	22+67.00			20			
22+48.00	22+67.00			20			
22+18.00	22+48.00						14
<b>TOTALS</b>		<b>262</b>	<b>128</b>	<b>40</b>	<b>136</b>	<b>144</b>	<b>126</b>

**EROSION CONTROL SCHEDULE**

FROM	TO	SIDE	28001100 TEMPORARY EROSION CONTROL BLANKET SQ YD	28000250 TEMPORARY EROSION CONTROL SEEDING POUND	28000305 TEMPORARY DITCH CHECKS FOOT	28000400 PERIMETER EROSION BARRIER FOOT
<b>IL 7 FRONTAGE ROAD</b>						
14+32	16+04	LT	187	66		185
13+92	16+14	RT	241	85		217
22+15	22+31	LT	15	5		
22+27	22+54	RT	13	5		
<b>TEMPORARY ACCESS FOR BRIDGE WORK</b>						
13+75	14+14	RT	515	181	45	300
21+35	21+97	LT	526	185	60	315
<b>TOTALS</b>			<b>1,497</b>	<b>526</b>	<b>105</b>	<b>1,017</b>

**PARKWAY RESTORATION SCHEDULE**

FROM	TO	SIDE	PROPOSED RESTORATION AREA SQ YD	21101505 TOPSOIL EXCAVATION AND PLACEMENT CU YD	25000312 SEEDING, CLASS 4A ACRE	25000314 SEEDING, CLASS 4B ACRE	X2511630 EROSION CONTROL BLANKET (SPECIAL) SQ YD
<b>IL 7 FRONTAGE ROAD</b>							
14+32	16+04	LT	187	21	0.01		187
13+92	16+14	RT	241	27	0.01		241
22+15	22+31	LT	15	2	0.01		15
22+27	22+54	RT	13	2	0.01		13
<b>TEMPORARY ACCESS FOR BRIDGE WORK</b>							
13+75	14+14	RT	178	17	0.02		178
14+14	16+15	RT	337	35		0.02	337
21+35	21+97	LT	338	35	0.02	0.02	338
21+97	22+51	LT	188	18	0.02		188
<b>TOTALS</b>			<b>1,497</b>	<b>157</b>	<b>0.10</b>	<b>0.04</b>	<b>1,497</b>



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES**

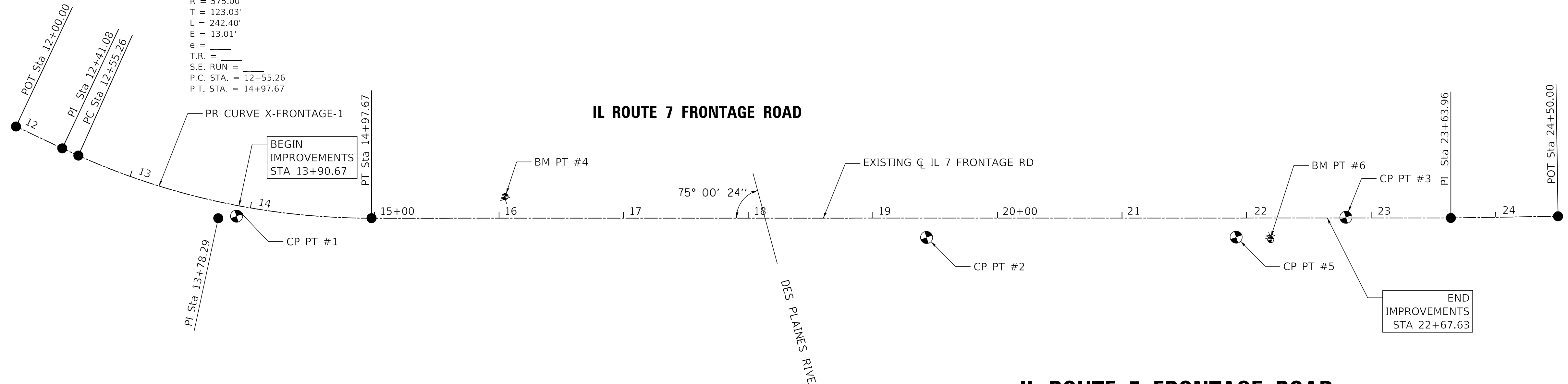
SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	11
CONTRACT NO. 61F12				
ILLINOIS / FED. AID PROJECT				

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PROP. CURVE X-FRONTAGE-1  
 PI STA. = 13+78.29  
 $\Delta = 24^\circ 09' 16''$  (LT)  
 $D = 9^\circ 57' 52''$   
 $R = 575.00'$   
 $T = 123.03'$   
 $L = 242.40'$   
 $E = 13.01'$   
 $e =$   
 $T.R. =$   
 $S.E. RUN =$   
 $P.C. STA. = 12+55.26$   
 $P.T. STA. = 14+97.67$



**BECNCHMARK DATA**

- BM #4 X SET ONTOP CONCRETE PILLAR  
ELEV 578.07 (NAVD 88)
- BM #6 X SET SE ONTOP POST OF BRIDGE  
ELEV 584.63 (NAVD 88)

**CONTROL POINTS**

CP #1	N1794324.331	E1056168.827	ELEV 573.89	CP X CL W BRIDGE
CP #2	N1794125.241	E1056685.927	ELEV 579.023	CP X S WALK CENTER BRIDGE
CP #4	N1794029.313	E1057008.953	ELEV 582.025	CP X CL EAST OF BRIDGE
CP #5	N1794043.384	E1056920.552	ELEV 581.652	CP X S WALK 30' W OF EAST END OF BRIDGE

**IL ROUTE 7 FRONTAGE ROAD**

Chain X-FRONTAGE contains:  
 100 101 CUR X-FRONTAGE-1 102 103

Beginning chain X-FRONTAGE description

```

=====
Point 100          N    1,794,450.78 E    1,056,025.54 Sta    12+00.00
Course from 100 to 101 S 45° 24' 12.41" E Dist 41.08
Point 101          N    1,794,421.94 E    1,056,054.80 Sta    12+41.08
Course from 101 to PC X-FRONTAGE-1 S 46° 34' 10.38" E Dist 14.18
  
```

Curve Data  
\*-----\*

Curve X-FRONTAGE-1			
P.I. Station	13+78.29	N	1,794,327.61 E 1,056,154.44
Delta	=	24° 09' 15.66" (LT)	
Degree	=	9° 57' 52.14"	
Tangent	=	123.03	
Length	=	242.40	
Radius	=	575.00	
External	=	13.01	
Long Chord	=	240.61	
Mid. Ord.	=	12.73	
P.C. Station	12+55.26	N	1,794,412.19 E 1,056,065.09
P.T. Station	14+97.67	N	1,794,287.00 E 1,056,270.57
C.C.	=	N	1,794,829.76 E 1,056,460.39
Back	=	S 46° 34' 10.38" E	
Ahead	=	S 70° 43' 26.04" E	
Chord Bear	=	S 58° 38' 48.21" E	

Course from PT X-FRONTAGE-1 to 102 S 70° 43' 26.04" E Dist 866.29

Point 102 N 1,794,001.01 E 1,057,088.30 Sta 23+63.96

Course from 102 to 103 S 71° 36' 56.69" E Dist 86.04

Point 103 N 1,793,973.88 E 1,057,169.95 Sta 24+50.00

Ending chain X-FRONTAGE description

<b>BAXTER &amp; WOODMAN</b> Consulting Engineers	USER NAME = 488cac	DESIGNED - CAC	REVISED -
	PLOT SCALE = 50.0000' / in.	DRAWN - CJC	REVISED -
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		DATE - 10-08-18	FILE - 150440_SHT_ALIGN.dgn

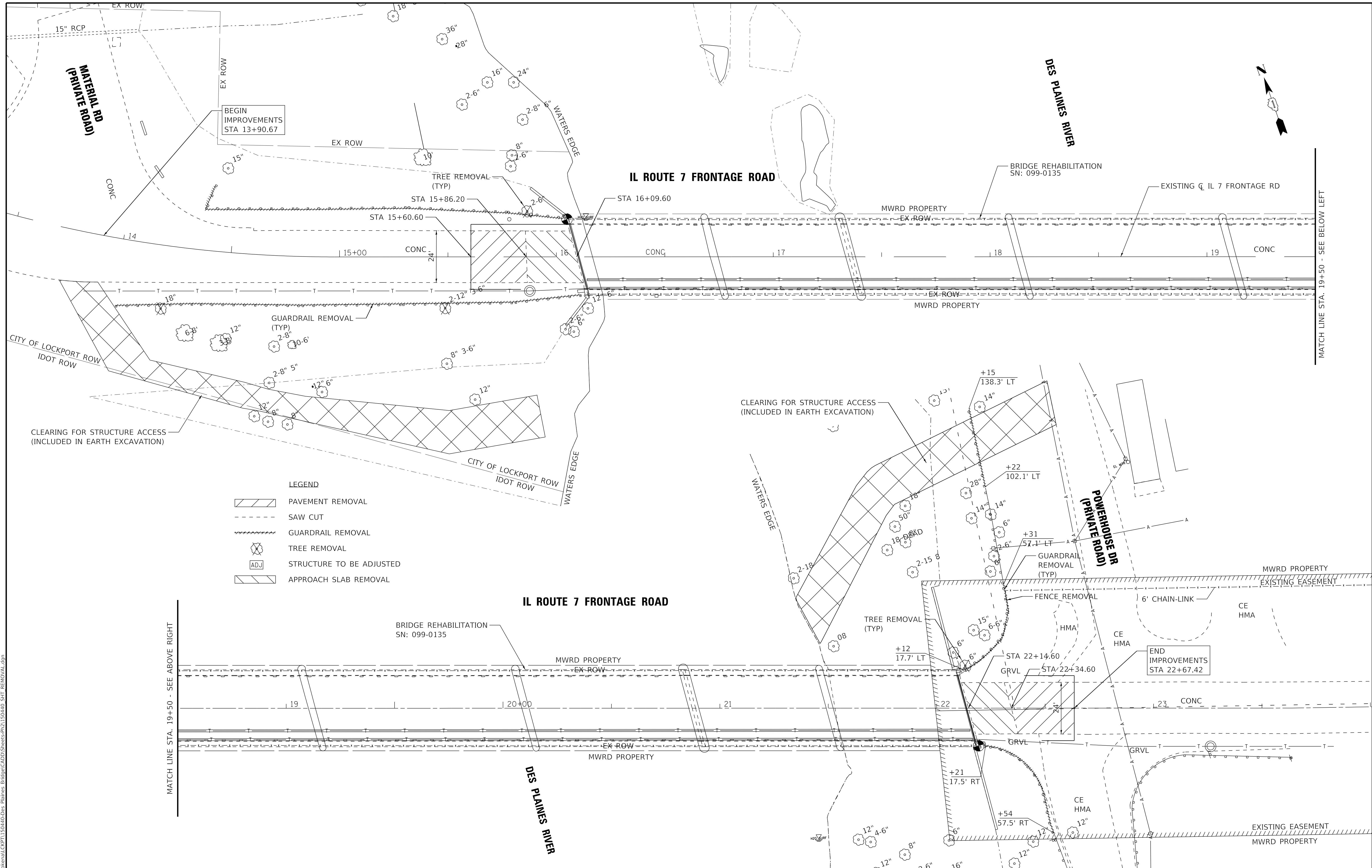
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**ALIGNMENT, TIES AND BENCHMARKS**

SCALE: 1" = 20' SHEET OF SHEETS STA. 13+50 TO STA. 24+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	12
CONTRACT NO. 61F12				
ILLINOIS		FED. AID PROJECT		

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- LEGEND**
- PAVEMENT REMOVAL
  - SAW CUT
  - GUARDRAIL REMOVAL
  - TREE REMOVAL
  - STRUCTURE TO BE ADJUSTED
  - APPROACH SLAB REMOVAL



USER NAME = 488cac	DESIGNED - CAC	REVISED -
DRAWN - CJC	REVISOR -	
PLOT SCALE = 20.0000' / in.	CHECKED - JCC	REVISOR -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

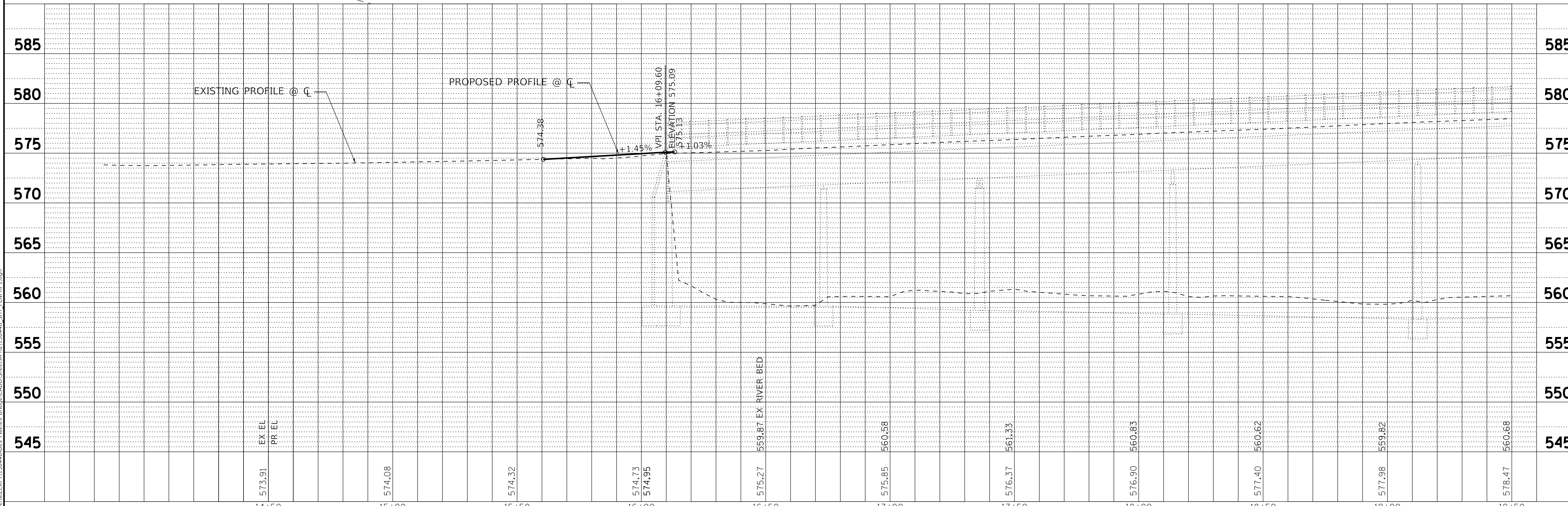
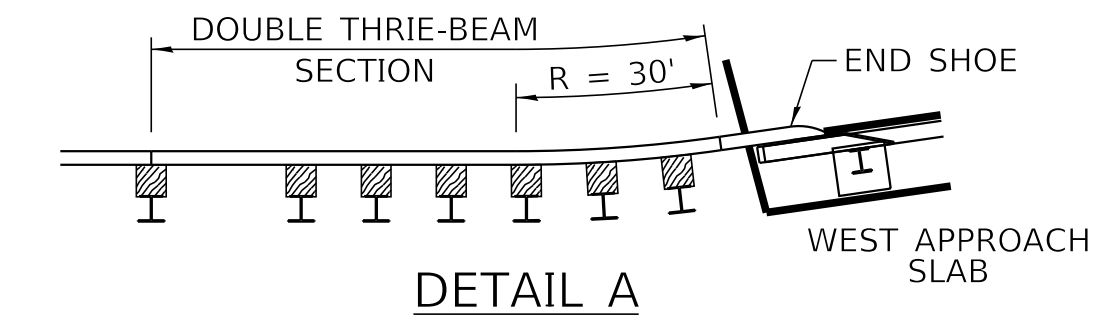
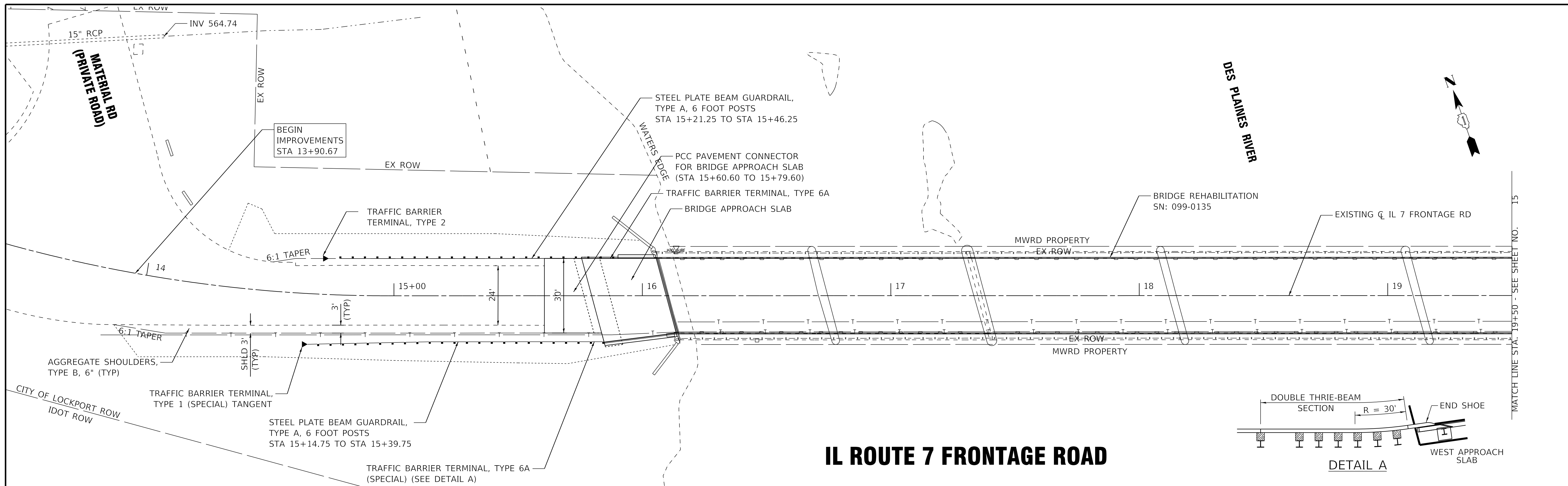
**EXISTING CONDITIONS AND REMOVAL PLAN**  
SCALE: 1" = 20' SHEET OF SHEETS STA. 13+50 TO STA. 24+00

F.A.P. RTE. 351	SECTION 15-00083-00-BR	COUNTY WILL	TOTAL SHEETS 46	SHEET NO. 13
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

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PLOT DATE = 11/5/2018	DATE - 10-08-18	FILE - 150440_SHT_PLNPRF1.dgn

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCALE: H: 1"=20'	
V: 1"=5'	
SHEET	OF SHEETS
STA. 13+50	TO STA. 19+50

PLAN & PROFILE

F.A.P. RTE. 351	SECTION 15-00083-00-BR	COUNTY WILL	TOTAL SHEETS 46	SHEET NO. 14
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT A62A(540)				

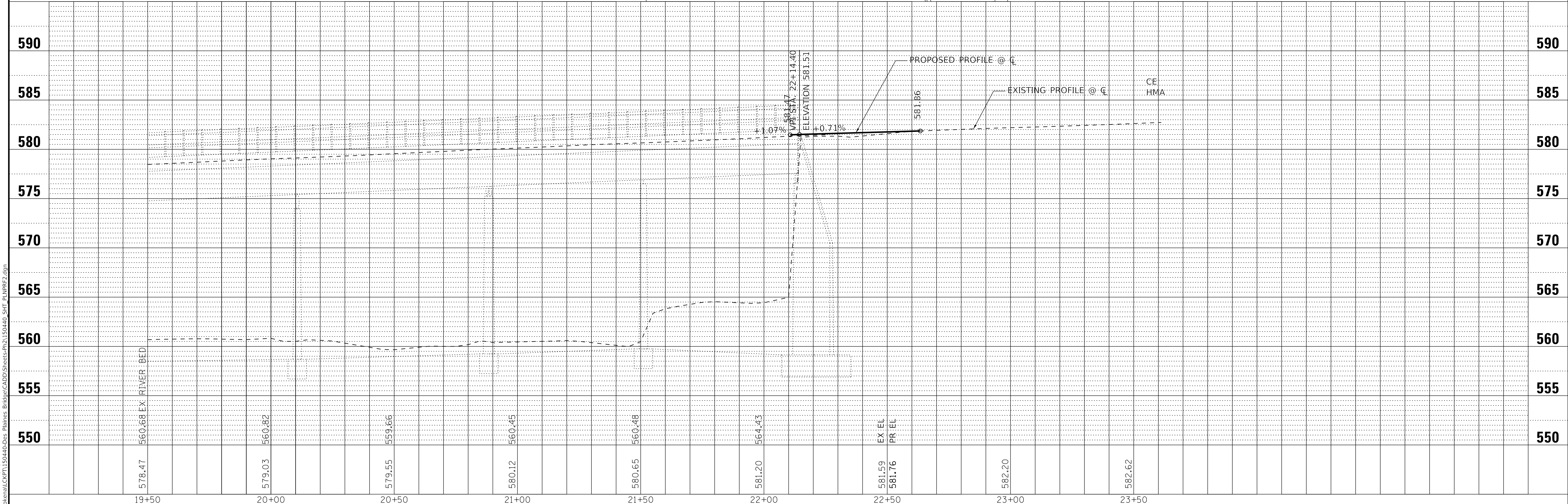
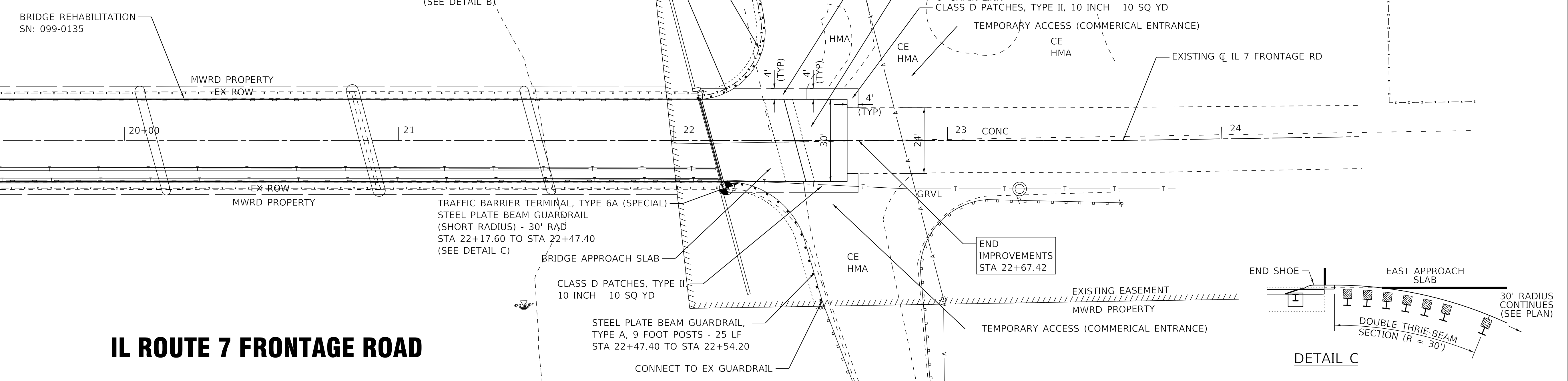
MATCH LINE STA. 19+50 - SEE SHEET NO. 15

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
	NOTE BOOK	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	NOTE BOOK	
	NO.	

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MATCH LINE STA. 19+50 - SEE SHEET NO. 14



**BAXTER & WOODMAN**  
 Consulting Engineers

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PLOT SCALE = 20.0000' / in.	DRAWN - CJC	REVISED -
PLOT DATE = 11/5/2018	CHECKED - JCC	REVISED -
	DATE - 10-08-18	FILE - 150440_SHT_PLNPRF2.dgn

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCALE: H:1"=20'	
V:1"=5'	
SHEET	OF SHEETS
STA. 19+50	TO STA. 24+50

PLAN & PROFILE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	15
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT A62A(540)				

**MAINTENANCE OF TRAFFIC AND CONSTRUCTION STAGING NOTES**

- IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER, BUSINESSES, RESIDENTS AND THE CITY WHEN ACCESS TO DRIVEWAYS WILL BE TEMPORARILY CLOSED DUE TO CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DISTRIBUTE NOTICES PROVIDED BY THE CITY TO BUSINESSES AND RESIDENTS AT LEAST 24 HOURS PRIOR TO PLANNED CLOSURES. EVERY EFFORT SHALL BE MADE TO NOTIFY RESIDENTS INCLUDING KNOCKING ON DOORS WHEN DRIVEWAYS ARE ABOUT TO BE CLOSED.
- THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE IN CONSTRUCTION STAGING.
- THE FURNISHING, INSTALLING, AND RELOCATION OF ALL TRAFFIC SIGNS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION. ALL CONFLICTING TRAFFIC SIGNS SHALL BE COVERED AS DIRECTED BY THE ENGINEER. THIS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS TO COMMERCIAL DRIVEWAYS DURING CONSTRUCTION UTILIZING THE PAY ITEM FOR TEMPORARY ACCESS (COMMERCIAL ENTRANCE).
- THE CONTRACTOR SHALL SUBMIT A PREPLANNED SEQUENCE OF WORK AT THE PRECONSTRUCTION CONFERENCE FOR REVIEW AND APPROVAL. WORK SHALL BE SCHEDULED TO MINIMIZE INCONVENIENCE TO RESIDENTS AND BUSINESSES AND TO MAINTAIN A REASONABLE LEVEL OF CONSTRUCTION EFFICIENCY. THE ENGINEER RESERVES THE RIGHT TO RESTRICT WORK ON ANY ROADWAY SEGMENT IF CONSTRUCTION OPERATIONS ON A PREVIOUS SEGMENT ARE UNACCEPTABLE; TRAFFIC CONTROL OPERATIONS BECOME UNACCEPTABLE; OR AN EROSION CONTROL DEFICIENCY EXISTS.
- CONSTRUCTION VEHICLES AND/OR EQUIPMENT SHALL NOT BE PARKED OVERNIGHT WITHIN THE RIGHT-OF-WAY. THE ENGINEER WILL ASSIST THE CONTRACTOR IN IDENTIFYING CONSTRUCTION STAGING LOCATIONS AT THE START OF CONSTRUCTION.

**SUGGESTED SEQUENCE OF CONSTRUCTION**

STAGE 1

CONSTRUCTION

- ESTABLISH EROSION CONTROL MEASURES AND TREE PROTECTION.
- COMPLETE TREE REMOVAL.
- COMPLETE UTILITY RELOCATIONS.

TRAFFIC

- UTILIZE B.L.R. 21-9 FOR CLOSURE OF IL 7 FRONTAGE ROAD. MODIFY AND/OR SUPPLEMENT THE ROAD CLOSURE HIGHWAY STANDARD B.L.R. 21-9. R11-2 SIGN, SPECIFIED IN THE HIGHWAY STANDARD, SHALL READ "BRIDGE CLOSED".
- EXISTING TYPE III BARRICADES AND TEMPORARY CONCRETE BARRIER SHALL BE RELOCATED TO THE LOCKPORT PUBLIC WORKS YARD AT 17112 PRIME BOULEVARD UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- FOR WORK OUTSIDE THE ROAD CLOSURE, UTILIZE TRAFFIC CONTROL STANDARDS AND LANE CLOSURES AS APPROVED BY THE ENGINEER ACCORDING TO HIGHWAY STANDARDS 701001, 701006, 701011, 701301, AND 701311.

STAGE 2

CONSTRUCTION

- INSTALL TEMPORARY SUPPORT SYSTEM AT PIERS 2 & 6.
- PERFORM STRUCTURAL REPAIRS OF BRIDGE (SEE BRIDGE PLANS FOR SPECIFIC STAGING).
- REMOVE EXISTING PAVEMENT AND GUARDRAIL.
- PERFORM EARTHWORK GRADING.
- CONSTRUCT AGGREGATE SUBGRADE IMPROVEMENTS.
- CONSTRUCT APPROACH AND CONNECTOR PAVEMENT.
- INSTALL PAVEMENT MARKINGS.
- INSTALL GUARDRAIL AND TERMINAL SECTIONS

TRAFFIC

- MAINTAIN THE ROAD CLOSURE ACCORDING TO HIGHWAY STANDARD B.L.R. 21-9.
- FOR WORK OUTSIDE THE ROAD CLOSURE, UTILIZE TRAFFIC CONTROL STANDARDS AND LANE CLOSURES AS APPROVED BY THE ENGINEER ACCORDING TO HIGHWAY STANDARDS 701001, 701006, 701011, 701301, AND 701311.

STAGE 3

CONSTRUCTION

- REOPEN ROADWAY.
- COMPLETE PUNCH LIST ITEMS.
- REMOVE TEMPORARY EROSION CONTROL ITEMS ONCE SEED ESTABLISHES.

TRAFFIC

- UTILIZE TRAFFIC CONTROL STANDARDS AND LANE CLOSURES AS APPROVED BY THE ENGINEER ACCORDING TO HIGHWAY STANDARDS 701001, 701006, 701011, 701301, AND 701311.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**SUGGESTED MAINTENANCE OF TRAFFIC NOTES  
AND SEQUENCE OF CONSTRUCTION**

SCALE: SHEET OF SHEETS STA. TO STA.

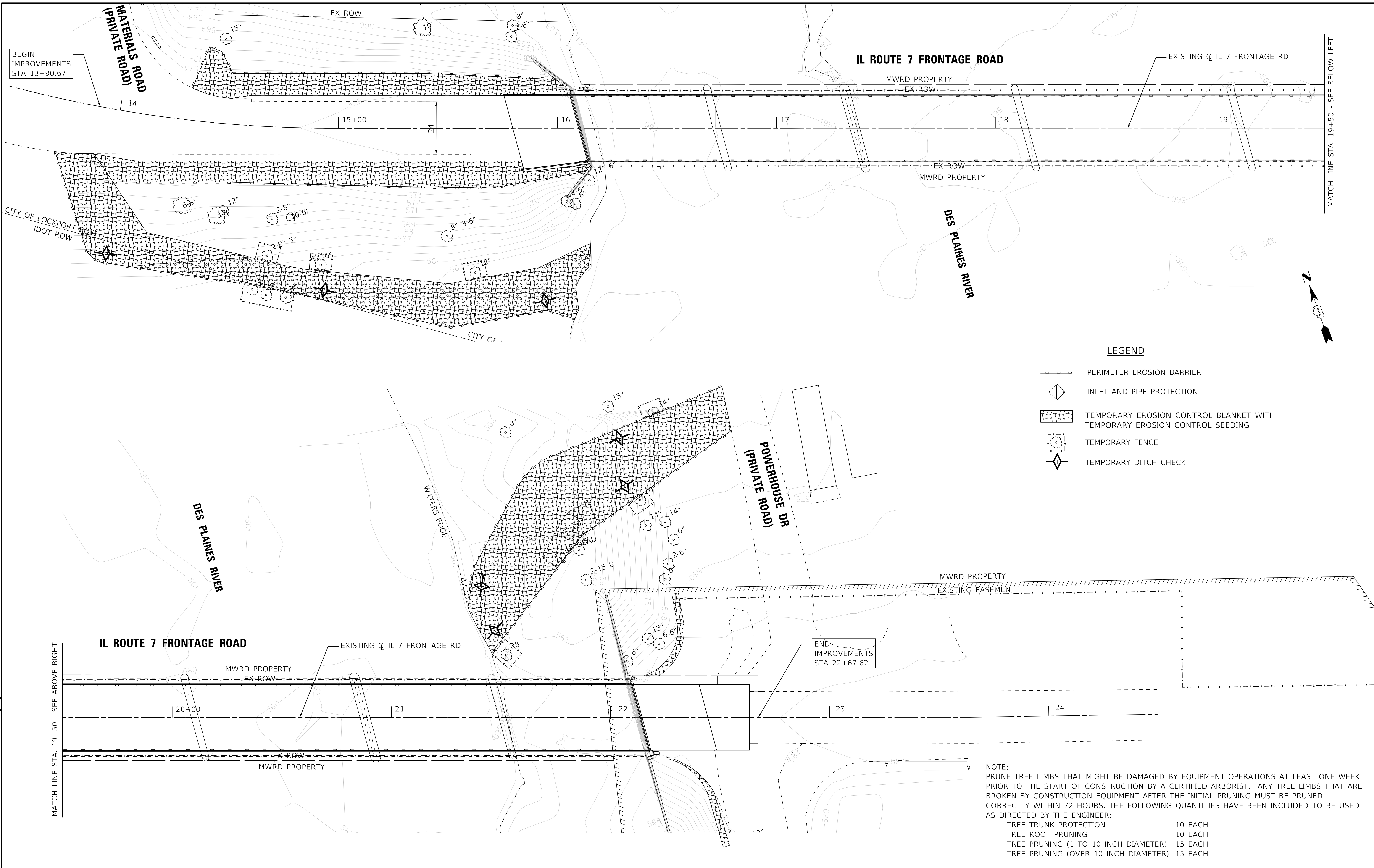
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	16
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				



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**LEGEND**

- PERIMETER EROSION BARRIER
- INLET AND PIPE PROTECTION
- TEMPORARY EROSION CONTROL BLANKET WITH TEMPORARY EROSION CONTROL SEEDING
- TEMPORARY FENCE
- TEMPORARY DITCH CHECK

NOTE:  
 PRUNE TREE LIMBS THAT MIGHT BE DAMAGED BY EQUIPMENT OPERATIONS AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION BY A CERTIFIED ARBORIST. ANY TREE LIMBS THAT ARE BROKEN BY CONSTRUCTION EQUIPMENT AFTER THE INITIAL PRUNING MUST BE PRUNED CORRECTLY WITHIN 72 HOURS. THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED TO BE USED AS DIRECTED BY THE ENGINEER:

TREE TRUNK PROTECTION	10 EACH
TREE ROOT PRUNING	10 EACH
TREE PRUNING (1 TO 10 INCH DIAMETER)	15 EACH
TREE PRUNING (OVER 10 INCH DIAMETER)	15 EACH

<b>BAXTER &amp; WOODMAN</b> Consulting Engineers	USER NAME = 488cac	DESIGNED - CAC	REVISED -
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	PLOT DATE = 11/5/2018	CHECKED - JCC	REVISED -
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLAN**

SCALE: 1" = 20'    SHEET 1 OF 1 SHEETS    STA. 13+50 TO STA. 24+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	17
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				

**GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES**

- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES IMMEDIATELY AFTER DISTURBANCE, OR REDISTURBANCE.
- AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V, AND APPROVED BY THE ENFORCEMENT OFFICER, SHALL BE STABILIZED WITH MAT OR BLANKET IN COMBINATION WITH SEEDING.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR OF EROSION CONTROL MEASURES.
- IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (e.g. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE. DEWATERING DIRECTLY INTO STREAMS, WETLANDS, FIELD TILES OR STORM WATER STRUCTURES IS PROHIBITED.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE WILL-SOUTH COOK COUNTY SWCD, ENGINEER, OR LOCAL AGENCY.
- THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH WILL-SOUTH COOK COUNTY SOIL AND WATER CONSERVATION DISTRICT AND OTHER INTERESTED REGULATORY AGENCIES AND OFFICIALS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS FROM THE U.S. ARMY CORPS OF ENGINEERS, WILL-SOUTH COOK COUNTY SOIL AND WATER CONSERVATION DISTRICT, AND CITY OF LOCKPORT.
- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL.
- ALL EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EACH RAIN EVENT RESULTING IN RUNOFF FROM THE SITE.
- WORK IN THE WATERWAY SHOULD BE TIMED TO TAKE PLACE DURING LOW FLOW CONDITIONS.
- WORK MAY NOT BE PERFORMED IN THE WATER, EXCEPT FOR THE PLACEMENT OF MATERIALS NECESSARY FOR THE CONSTRUCTION OF CAUSEWAYS. ALL MATERIALS FOR CAUSEWAYS AND ANY FILLS USED MUST BE NON-ERODABLE AND CONSTRUCTED TO WITHSTAND HIGH FLOWS. LOW GROUND-PRESSURE EQUIPMENT IS REQUIRED FOR WORK IN WETLANDS. LUMBER TO BE USED FOR TEMPORARY CONSTRUCTION ACTIVITIES MUST BE FREE OF ALL CHEMICAL TREATMENT. NO EQUIPMENT MAY ENTER THE WATER AT ANY TIME.

- IF BYPASS PUMPING IS NECESSARY, THE PUMP SHALL BE PLACED ON A STABLE SURFACE OR FLOATED TO PREVENT SEDIMENT FROM BEING SUCKED INTO THE HOSE. THE BYPASS DISCHARGE SHALL BE PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE (ROCK CHECK DAM, PLYWOOD, SHEET PILE, ETC.) PRIOR TO REJOINING THE STREAM FLOW AND SHALL NOT CAUSE EROSION OF DOWNSTREAM AREAS. CLEANING OR FILTERING OF BYPASS WATER IS NOT NECESSARY UNLESS THE BYPASS WATER HAS BECOME SEDIMENT LADEN AS A RESULT OF THE CURRENT CONSTRUCTION ACTIVITIES.
- DEWATERING MEASURES SHALL COMPLY WITH THE ILLINOIS URBAN MANUAL. DURING DEWATERING, THE WATER SHALL BE FILTERED TO REMOVE SEDIMENT PRIOR TO DISCHARGE TO THE STREAM. POSSIBLE OPTIONS FOR SEDIMENT REMOVAL INCLUDE BAFFLE SYSTEMS, ANIONIC POLYMERS, DEWATERING BAGS, OR OTHER APPROPRIATE METHODS. FILTRATION AREA SHALL BE PLACED ON A STABILIZED AREA OR DISCHARGE TO AN ENERGY DISSIPATING SURFACE PRIOR TO BEING RE-INTRODUCED TO DOWNSTREAM WATERWAY. DISCHARGE WATER IS CONSIDERED CLEAN IF IT DOES NOT RESULT IN A VISUALLY IDENTIFIABLE DEGRADATION OF WATER CLARITY. THE DISCHARGE FROM THE DEWATERING DEVICE SHALL NOT CAUSE EROSION. ANY TREATMENT REQUIRED IS THE CONTRACTORS RESPONSIBILITY AND NO EXTRA COSTS WILL BE PAID.
- PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED FOR REVIEW BY THE WILL-SOUTH COOK COUNTY SWCD.
- EXCEPT WHERE SHOWN OTHERWISE ON THE PLANS, THE SIDE SLOPES MUST BE RESEEDED AND STABILIZED IMMEDIATELY AFTER FINAL GRADING WITH AN APPROPRIATE EROSION CONTROL BLANKET PRIOR TO ACCEPTING FLOWS. THE BOTTOM OF THE CHANNEL MUST BE BROUGHT BACK TO ITS ORIGINAL GRADE AND STABLE ENOUGH TO ACCEPT FLOWS.
- THE PORTION OF THE SIDE SLOPE THAT IS ABOVE THE OBSERVED WATER ELEVATION SHALL BE STABILIZED AS SPECIFIED IN THE PLANS PRIOR TO ACCEPTING FLOWS. THE SUBSTRATE AND TOE OF SLOPE THAT HAS BEEN DISTURBED DUE TO CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO PROPOSED OR PRE-CONSTRUCTION CONDITIONS AND FULLY STABILIZED PRIOR TO ACCEPTING FLOWS.
- STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
- CONCRETE WASHOUT FACILITIES SHALL BE INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.
- ALL ADJACENT ROADWAYS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY AND CLEANED WHEN NECESSARY.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- FINAL ACCEPTANCE OF PROJECT WILL BE CONTINGENT ON RECORD DRAWING APPROVAL BY THE ENGINEER.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS, PERMITS, AND ASSURE COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE RECEPTACLES FOR THE DEPOSITION OF ALL CONSTRUCTION MATERIAL DEBRIS GENERATED DURING THE DEVELOPMENT PROCESS. THE CONTRACTOR SHALL NOT CAUSE OR PERMIT THE DUMPING, DEPOSITING, DROPPING, THROWING, DISCARDING OR LEAVING OF CONSTRUCTION MATERIAL DEBRIS UPON OR INTO THE DEVELOPMENT SITE, CHANNEL, WATERS OF THE U.S. OR ISOLATED WATERS OF WILL COUNTY. THE CONTRACTOR SHALL MAINTAIN THE DEVELOPMENT SITE FREE OF CONSTRUCTION MATERIAL DEBRIS.
- THIS PROJECT REQUIRES ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE CITY, AS A CONDITION OF THIS PERMIT. THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO WILL-SOUTH COOK SWCD FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES CAN BE FOUND ON THE USACE WEBSITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK.  
  
THE COST OF ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE, ACCESS, AND IMPLEMENT AN IN-STREAM WORK PLAN WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR THE WORK FOR WHICH IT IS REQUIRED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

**MAINTENANCE SCHEDULE**

- SILT FENCE - AT A MINIMUM, THE CONTRACTOR SHALL INSPECT ALL SILT FENCE WEEKLY OR AFTER EACH ONE-HALF INCH OR GREATER RAINFALL EVENT. ANY REQUIRED REPAIRS SHALL BE MADE BY THE CONTRACTOR TO KEEP THE SILT FENCE FUNCTIONAL AS DESIGNED.
- EROSION BLANKET - AT A MINIMUM, THE CONTRACTOR SHALL INSPECT ALL EROSION BLANKET WEEKLY OR AFTER EACH ONE-HALF INCH OR GREATER RAINFALL EVENT. ANY REQUIRED REPAIRS SHALL BE MADE BY THE CONTRACTOR TO KEEP THE EROSION BLANKET FUNCTIONAL AS DESIGNED.
- THE EROSION CONTROL QUANTITIES PROVIDED IN THE PLANS ARE APPROXIMATE. THE ACTUAL NEED FOR QUANTITIES WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

**SUGGESTED CONSTRUCTION SEQUENCING**

- INSTALL SEDIMENT AND EROSION CONTROL SYSTEMS.
- INSTALL FIRST CAUSEWAY (EITHER SIDE).
- PERFORM WORK WITHOUT DEBRIS ENTERING THE EXISTING WATERWAY.
- DECONSTRUCT FIRST CAUSEWAY.
- INSTALL SECOND CAUSEWAY ON OPPOSITE SIDE OF THE RIVER.
- PERFORM WORK WITHOUT DEBRIS ENTERING THE EXISTING WATERWAY.
- DECONSTRUCT SECOND CAUSEWAY.
- COMPLETE RESTORATION OF ALL DISTURBED AREAS.
- REMOVE EROSION CONTROL MEASURES.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**EROSION AND SEDIMENT CONTROL NOTES**

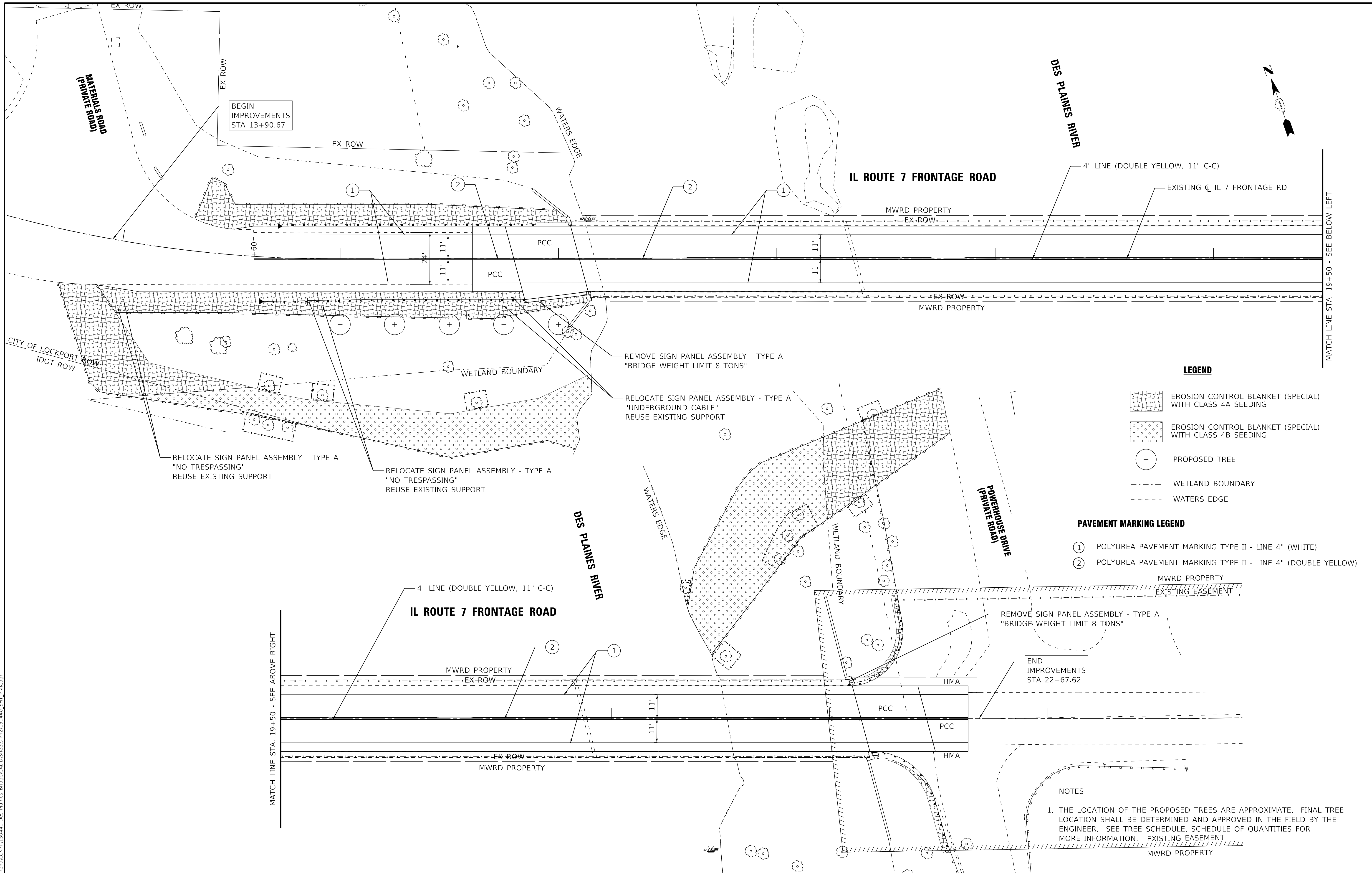
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	DRAWN - CJC	REVISED -
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PLOT DATE = 11/5/2018	DATE - 10-08-18	FILE - 150440_SHT_EROS-DET.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	18
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				

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**LEGEND**

- EROSION CONTROL BLANKET (SPECIAL) WITH CLASS 4A SEEDING
- EROSION CONTROL BLANKET (SPECIAL) WITH CLASS 4B SEEDING
- PROPOSED TREE
- WETLAND BOUNDARY
- WATERS EDGE

**PAVEMENT MARKING LEGEND**

- ① POLYUREA PAVEMENT MARKING TYPE II - LINE 4" (WHITE)
- ② POLYUREA PAVEMENT MARKING TYPE II - LINE 4" (DOUBLE YELLOW)

**NOTES:**

1. THE LOCATION OF THE PROPOSED TREES ARE APPROXIMATE. FINAL TREE LOCATION SHALL BE DETERMINED AND APPROVED IN THE FIELD BY THE ENGINEER. SEE TREE SCHEDULE, SCHEDULE OF QUANTITIES FOR MORE INFORMATION. EXISTING EASEMENT



USER NAME = 488cac	DESIGNED - CAC	REVISED -
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PLOT SCALE = 20.0000' / in.	CHECKED - JCC	REVISED -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKING, SIGNING AND LANDSCAPE PLAN**

SCALE: 1" = 20' SHEET OF SHEETS STA. 13+50 TO STA. 24+00

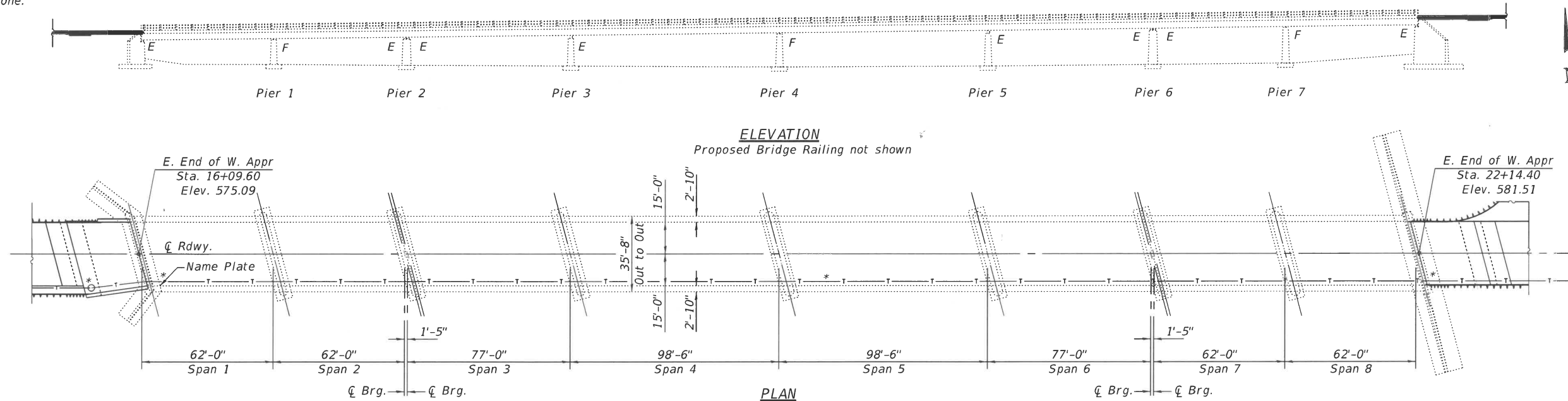
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	19
			CONTRACT NO. 61F12	
		ILLINOIS	FED. AID PROJECT	

MATCH LINE STA. 19+50 - SEE BELOW LEFT

Benchmark: See Alignment & Ties Sheet

Existing Structure: S.N. 099-0135 is an 8-span steel superstructure with concrete deck, built in 1957 under Section 535-B-F-1, F.A. Route 62. Bridge skew is 15 degree (right). Configuration for spans 1-2 continuous 62'-62'; spans 3-6 continuous 77'-98'-6"-98'-6"-77'; spans 7-8 continuous 62'-62'. Overall span back to back of abutments is 603'-0 1/2" with an out to out width of 35'-8". 36" steel girders spaced at 6'-7" support a non-composite 7" concrete slab. Steel roller bearings at abutment and piers 2 & 6; steel rocker bearings at Piers 3 & 5; fixed steel bearings at piers 1, 4 & 7. Closed concrete abutments supported on spread footing, keyed into rock. Solid wall concrete piers on spread footings, keyed into rock.

Salvage: None.



\* Existing AT&T Conduits to be maintained in place and incorporated into new construction. Manhole details and abutment penetration details to be coordinated with AT&T.

**PROPOSED SCOPE OF WORK**

1. Install Temporary Support System at Piers 2 & 6.
2. Remove portions of existing bridge deck over Piers 2 & 6 and Abutments.
3. Perform Structural Steel Repairs at beam ends, Piers 2 & 6.
4. Remove and replace existing diaphragms at Piers 2 & 6.
5. Clean existing diaphragms at abutments and incorporate into Semi-integral abutment conversion.
6. Remove and replace expansion bearings at Piers 2 & 6 and Abutments.
7. Replace bridge deck and expansion joint at Piers 2 & 6.
8. Replace bridge deck and construct concrete diaphragm at abutments.
9. Remove Temporary Support System.
10. Scarify existing bridge deck.
11. Construct Latex Concrete Overlay.
12. Install Type 2399 Railing and approach guardrail terminals.
13. Remove and replace approach slabs.
14. Clean & Paint Structural Steel.

**LOAD RATING SPECIFICATIONS**

AASHTO Manual for Bridge Evaluation  
2nd Edition with Interims

**DESIGN SPECIFICATIONS**

AASHTO Standard Specifications for Highway Bridges  
17th Edition

**DESIGN STRESSES**

**EXISTING UNITS (ALLOWABLE)**

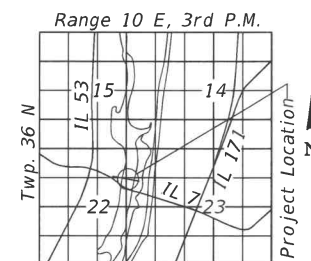
$f_c = 1,400$  psi (super)  
 $f_c = 800$  psi (sub)  
 $f_y = 18,000$  psi (structural steel)  
 $f_y = 20,000$  psi (reinforcement)

**FIELD UNITS**

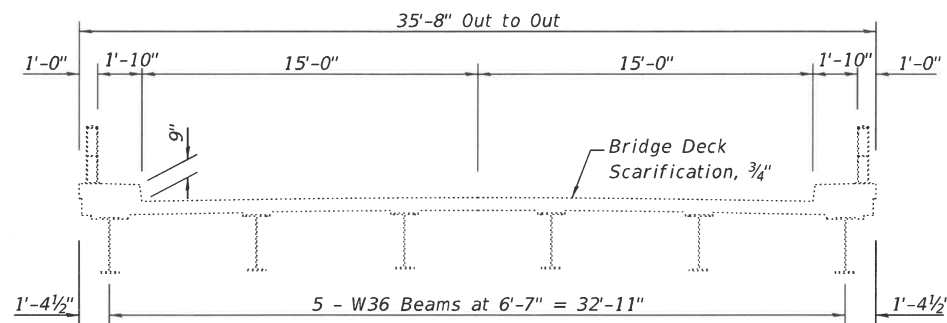
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50)

**LOADING HS-20**

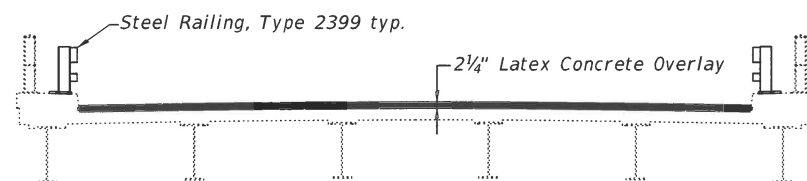
No allowance for future wearing surface.



**LOCATION SKETCH**



**EXISTING CROSS SECTION**



**PROPOSED CROSS SECTION**

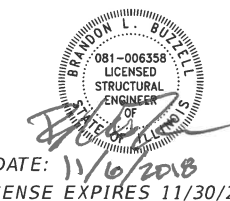
DES PLAINES RIVER  
REHABILITATED 2019 BY  
CITY OF LOCKPORT  
SEC. 15-00083-00-BR  
F.A.P. RT. 0351 STA. 19+12  
STR. NO. 099-0135 LOADING HS-20

**NAME PLATE**

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate on new railing near southwest corner. Cost included with Name Plates.

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current AASHTO LRFD Bridge Design Specifications.



**GENERAL PLAN**  
**IL-7 FRONTAGE ROAD OVER DES PLAINES RIVER**  
**SECTION 15-00083-00-BR**  
**WILL COUNTY**  
**STATION 19+12**  
**STRUCTURE NO. 099-0135**

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<b>BAXTER &amp; WOODMAN</b> Consulting Engineers	USER NAME =	DESIGNED - BLB	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL PLAN</b> <b>STRUCTURE NO. 099-0135</b> SHEET NO. 1 OF 21 SHEETS	F.A.P. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
	PLOT SCALE =	CHECKED - BAB	REVISED -			351	15-00083-00-BR	WILL	46	20
	PLOT DATE =	DRAWN - BLB	REVISED -			CONTRACT NO. 61F12				
	DATE = 10-08-18	REVISED -				ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas. Bolts 7/8-in. Ø, holes 1-in. Ø, unless otherwise noted.

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

Reinforcement bars designated (E) shall be epoxy coated.

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.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

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

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of 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 Interstate Green, Munsell No. 7.5G 4/8.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except causeways.

Copies of record drawings for the existing bridge are available upon request. Contact Baxter & Woodman at (815) 459-1260 Ext. 4415 and allow up to two business days.

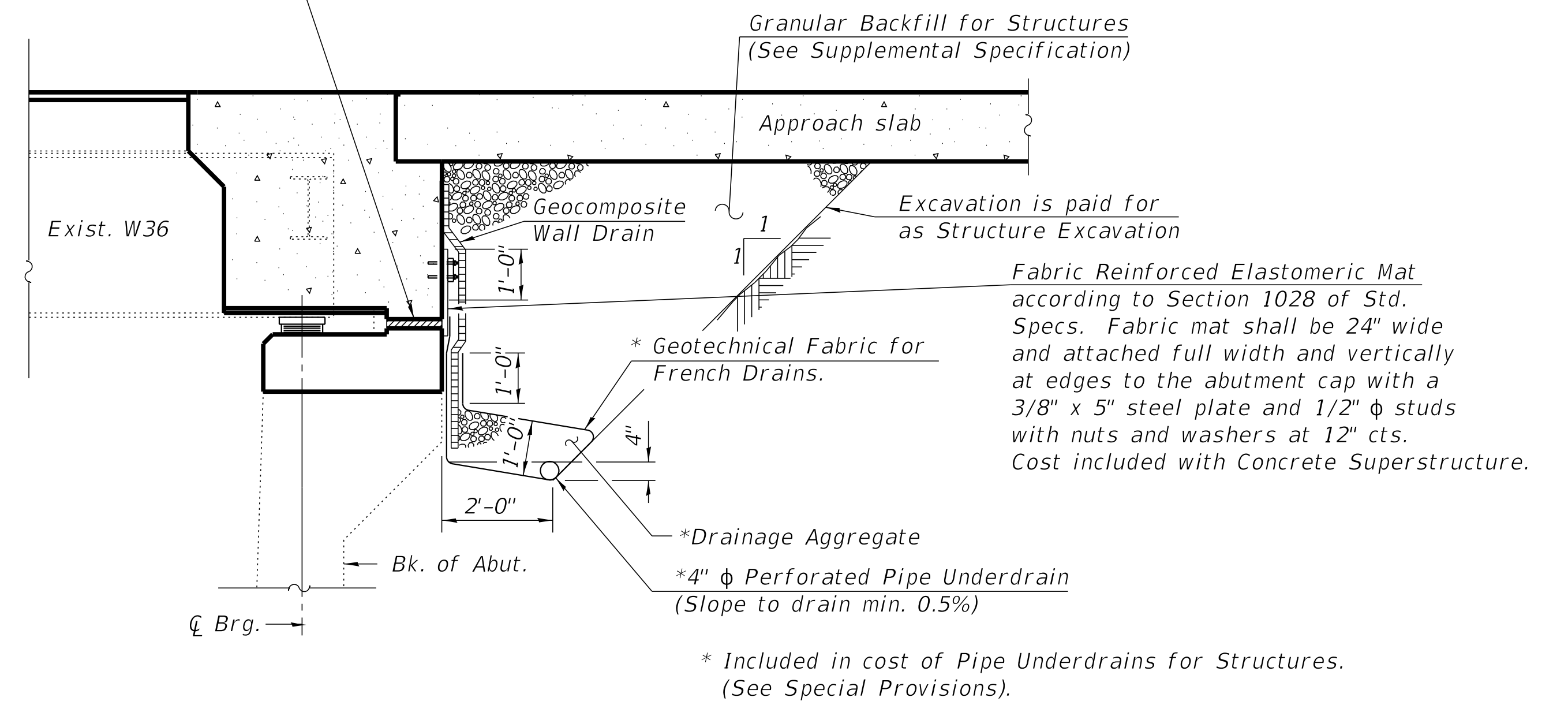
**INDEX OF SHEETS**

1. General Plan
2. General Data
3. Deck Repair I
4. Deck Repair II
5. Expansion Joint Replacement Details
6. Preformed Joint Strip Seal
7. Diaphragm Details
8. West Approach Slab Details I
9. West Approach Slab Details II
10. East Approach Slab Details
11. Bearing Details at Abutments
12. Bearing Details I at Piers 2 & 6
13. Bearing Details II at Piers 2 & 6
14. Abutment Removal Details
15. West Abutment
16. East Abutment
17. Structural Steel Repairs I
18. Structural Steel Repairs II
19. Structural Steel Repairs III
20. Drainage Scupper, DS-12
21. Steel Railing, Type 2399

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	41.6
Structure Excavation	Cu Yd	100
Concrete Structures	Cu Yd	29.6
Concrete Superstructure	Cu Yd	55.3
Bridge Deck Grooving	Sq Yd	1,828
Protective Coat	Sq Yd	298
Concrete Superstructure (Approach Slab)	Cu Yd	90
Furnishing And Erecting Structural Steel	Pound	24,608
Cleaning and Painting Structural Steel, Location 1	L Sum	1
Reinforcement Bars, Epoxy Coated	Pound	44,810
Steel Railing, Type 2399	Foot	1,254
Name Plates	Each	1
Preformed Joint Strip Seal	Foot	77
Elastomeric Bearing Assembly, Type I	Each	24
Elastomeric Bearing Assembly, Type II	Each	12
Anchor Bolts, 5/8"	Each	72
Geocomposite Wall Drain	Sq Yd	40
Granular Backfill for Structures	Cu Yd	78
Jack and Remove Existing Bearings	Each	12
Structural Steel Removal	L Sum	1
Removal of Existing Bearings	Each	24
Approach Slab Removal	Sq Yd	128
Bridge Deck Latex Concrete Overlay, 2 1/4 Inches	Sq Yd	1,959
Containment and Disposal of Lead Paint Cleaning Residues	L Sum	1
Bridge Deck Scarification 3/4"	Sq Yd	1,959
Plug Existing Deck Drains	Each	135
Deck Slab Repair (Full Depth, Type I)	Sq Yd	5
Drainage Scuppers, DS-12	Each	6
Jacking Existing Superstructure	L Sum	1
Pipe Underdrains for Structures 4"	Foot	150
Temporary Support System, Location 1	Each	1
Temporary Support System, Location 2	Each	1

2" PJF (per Article 1051.09 of Standard Specifications) full width and vertically at edges bonded to abutment cap with suitable adhesive as recommended by supplier.

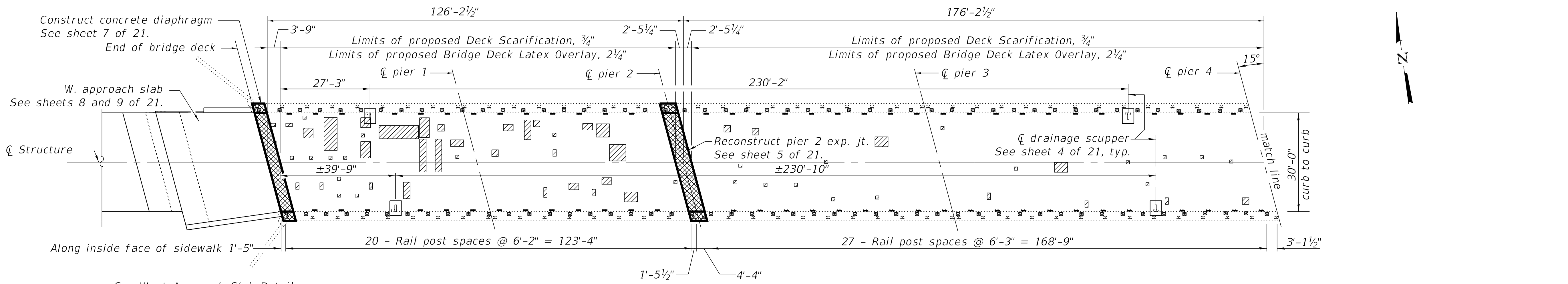


**SECTION THRU SEMI-INTEGRAL ABUTMENT**  
(Horiz. dims. @ Rt. L's)

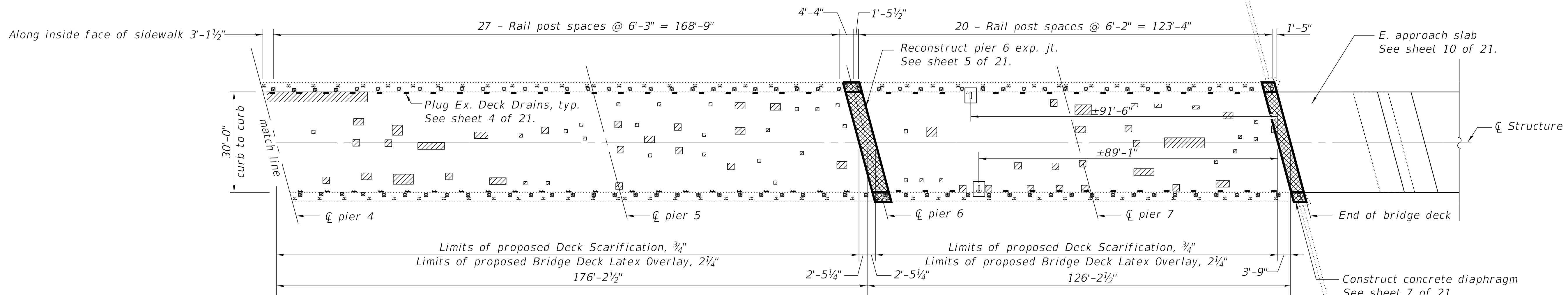
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)

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	PLOT DATE	DRAWN - BLB	REVISED -			CONTRACT NO. 61F12				
		DATE - 10-08-18	REVISED -			ILLINOIS FED. AID PROJECT				



PLAN SPANS 1-4



PLAN SPANS 5-8

Notes:  
 Entire existing deck to be scarified 3/4" and overlaid with 2 1/4" Latex Concrete.  
 Existing reinforcement bars & dowel rods extending into new concrete are to be cleaned and incorporated into new construction.  
 Deck repair areas are estimated from field visit Fall 2015. Actual locations or repairs made shall be shown by the Engineer on As Built plans.  
 Drains shall be located clear of all diaphragms.

LEGEND  
 [Cross-hatched box] Deck reconstruction  
 [Diagonal hatched box] \*\*Partial Depth Patching (88 Sq Yd, for entire deck)  
 \*\*Partial Depth Patching shown for information only.

BILL OF MATERIAL

Item	Unit	Total
* Deck Slab Repair (Full Depth, Type I)	Sq Yd	5
Bridge Deck Scarification, 3/4"	Sq Yd	1,959
Bridge Deck Grooving	Sq Yd	1,828
Bridge Deck Latex Concrete Overlay, 2 1/4"	Sq Yd	1,959

\* Quantity is estimated. (not shown on plan)

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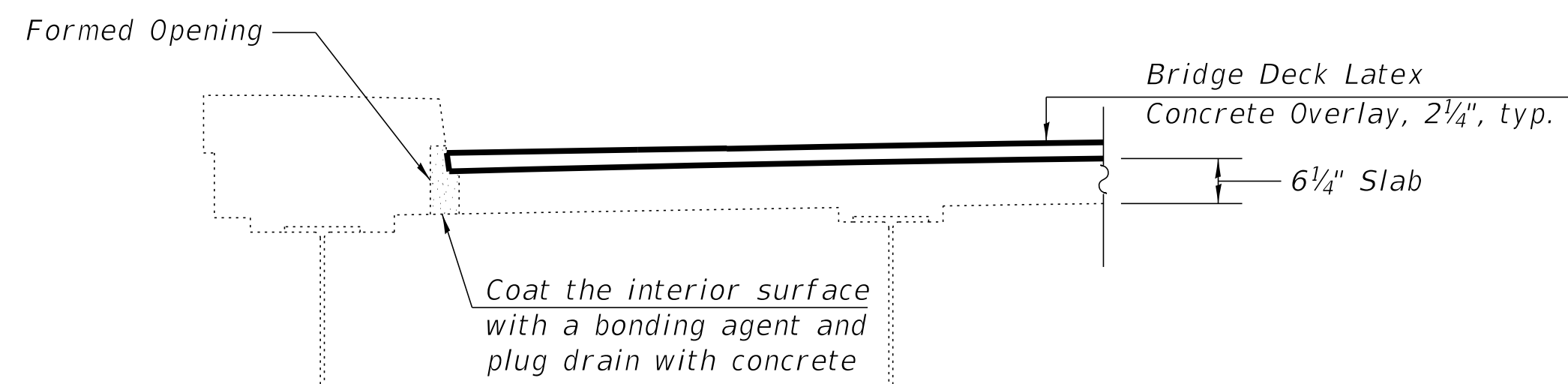


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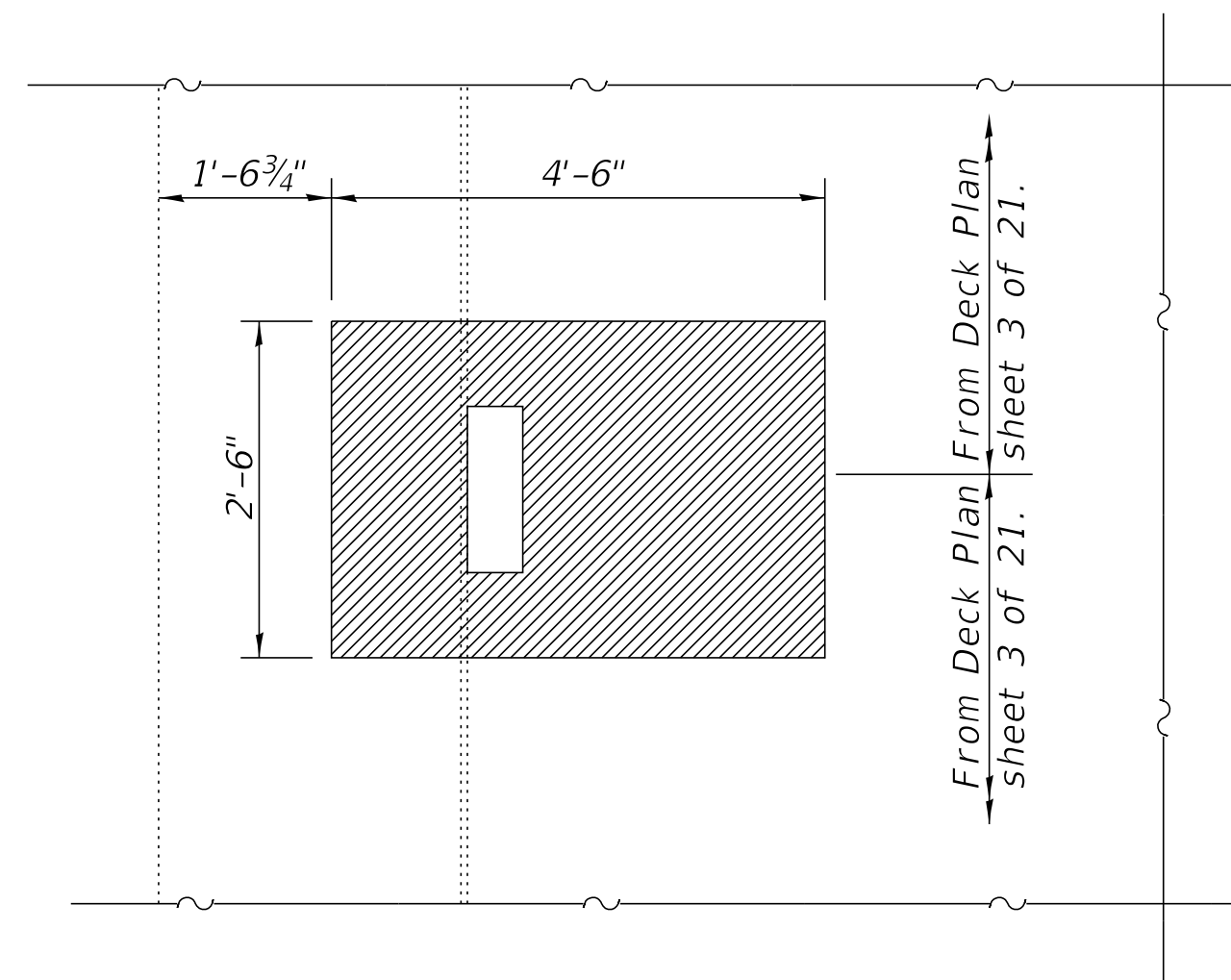
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 DEPARTMENT OF TRANSPORTATION

DECK REPAIRS I  
 STRUCTURE NO. 099-0135  
 SHEET NO. 3 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	22
CONTRACT NO. 61F12				
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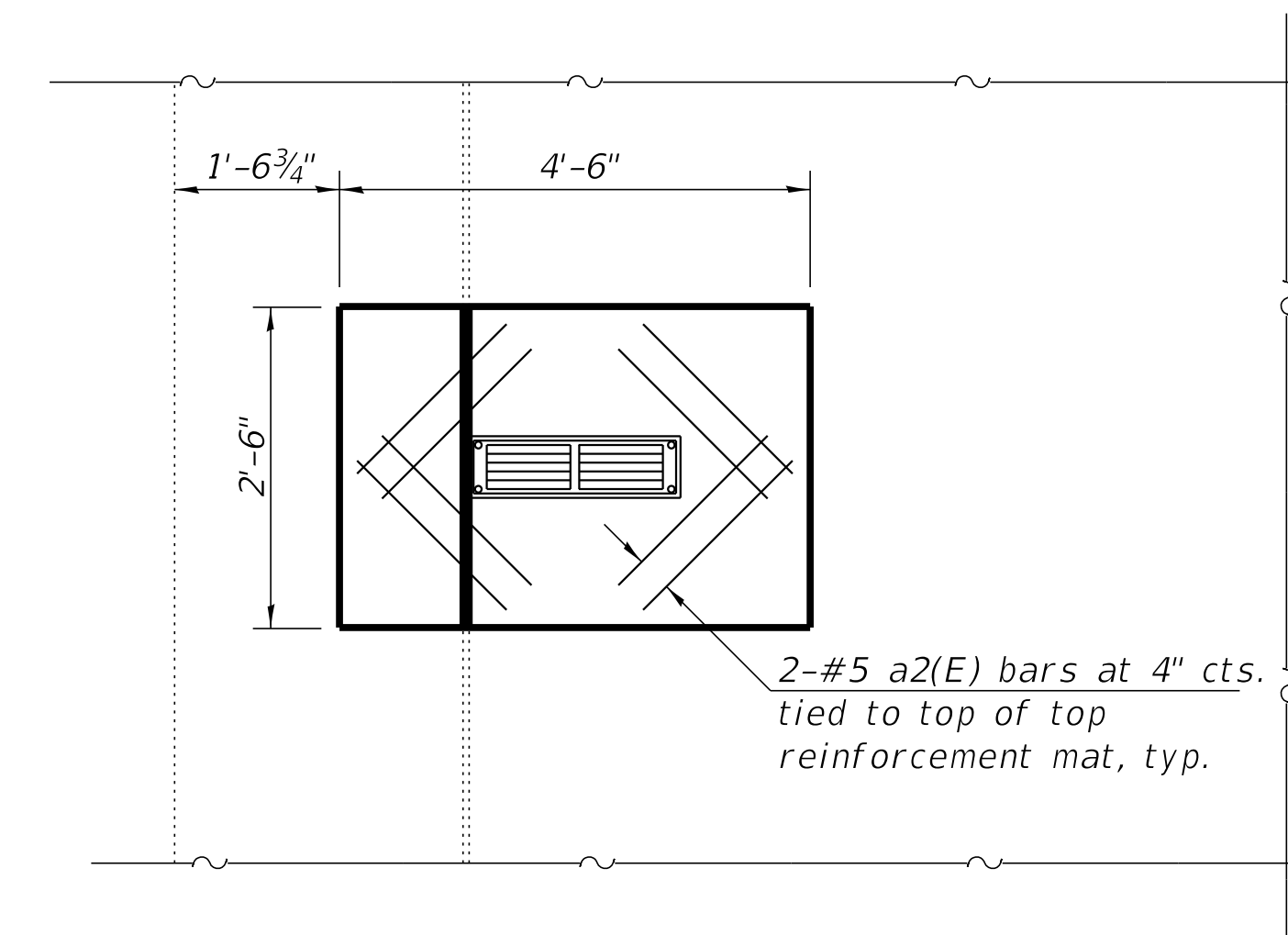


**DRAINS TO BE PLUGGED DETAIL**



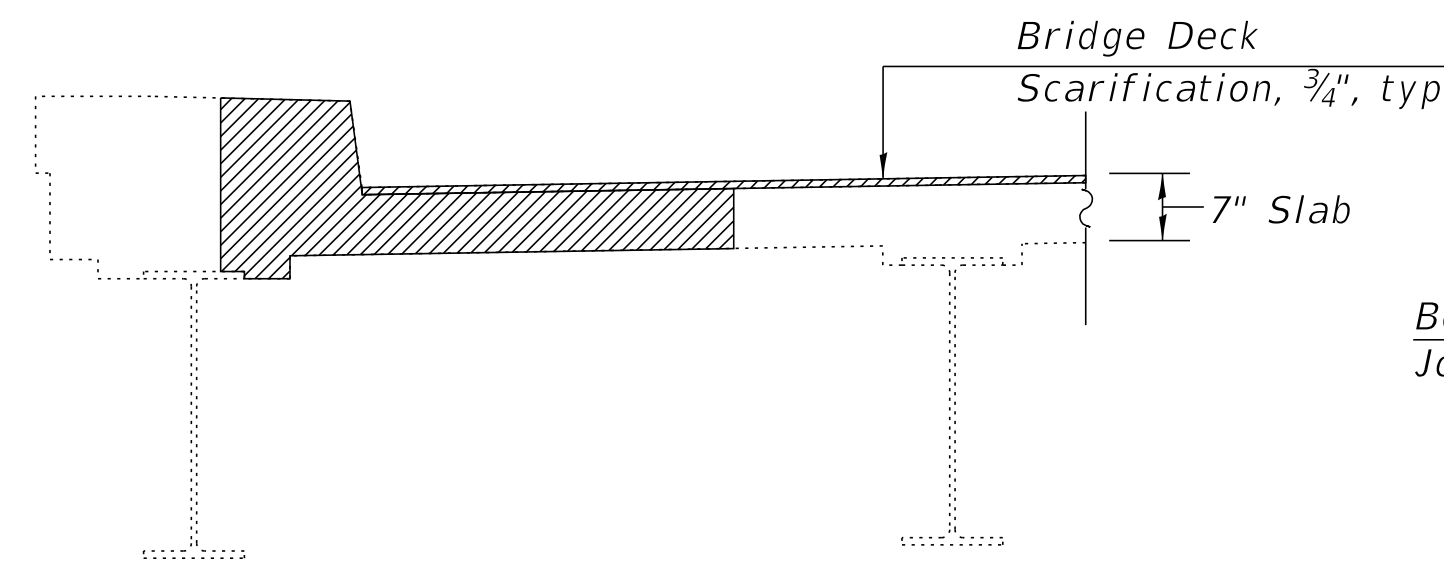
**REMOVAL PLAN FOR SCUPPER**

Location of existing deck drain may vary.  
Bridge Rail not shown for clarity.

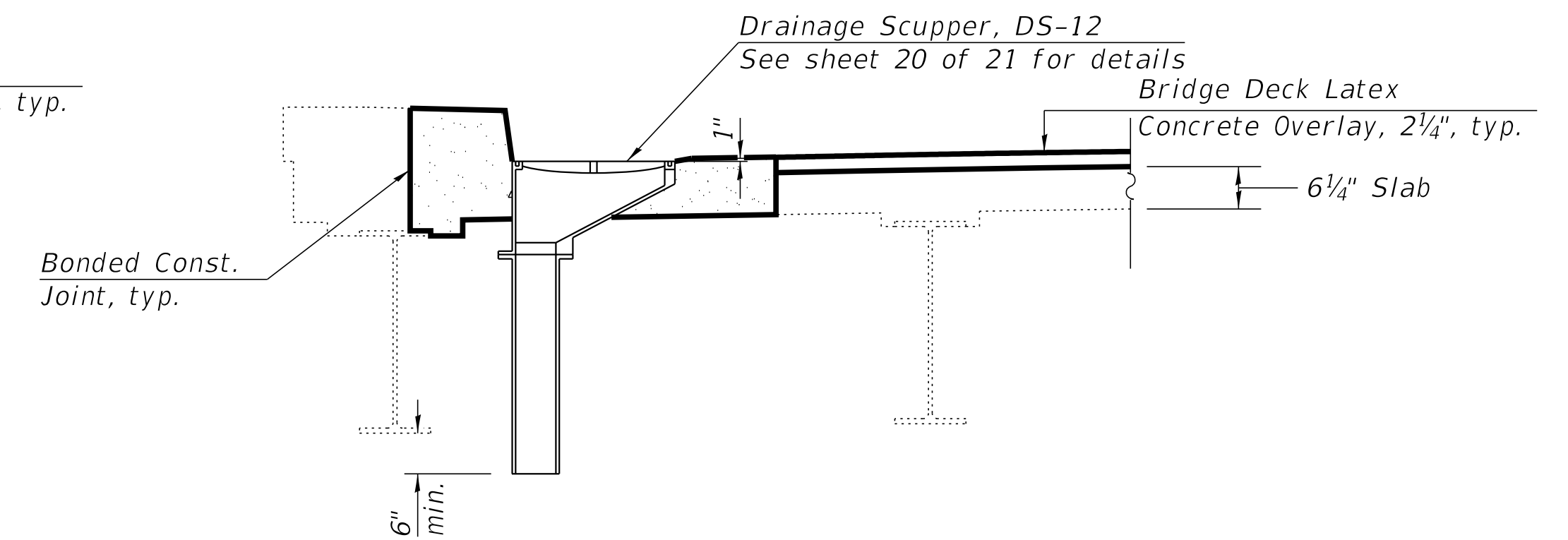


**DRAINAGE SCUPPER PLAN**

Cut longitudinal reinforcement to clear drainage scuppers.



**REMOVAL SECTION FOR SCUPPER**



**DRAINAGE SCUPPER SECTION**

Existing reinforcement not shown.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a2(E)	48	#5	2'-0"	—
Concrete Removal			Cu Yd	2.0
Plug Existing Deck Drains			Each	135
Reinforcement Bars, Epoxy Coated			Pound	110
Concrete Superstructure			Cu Yd	2.1
Protective Coat			Sq Yd	9

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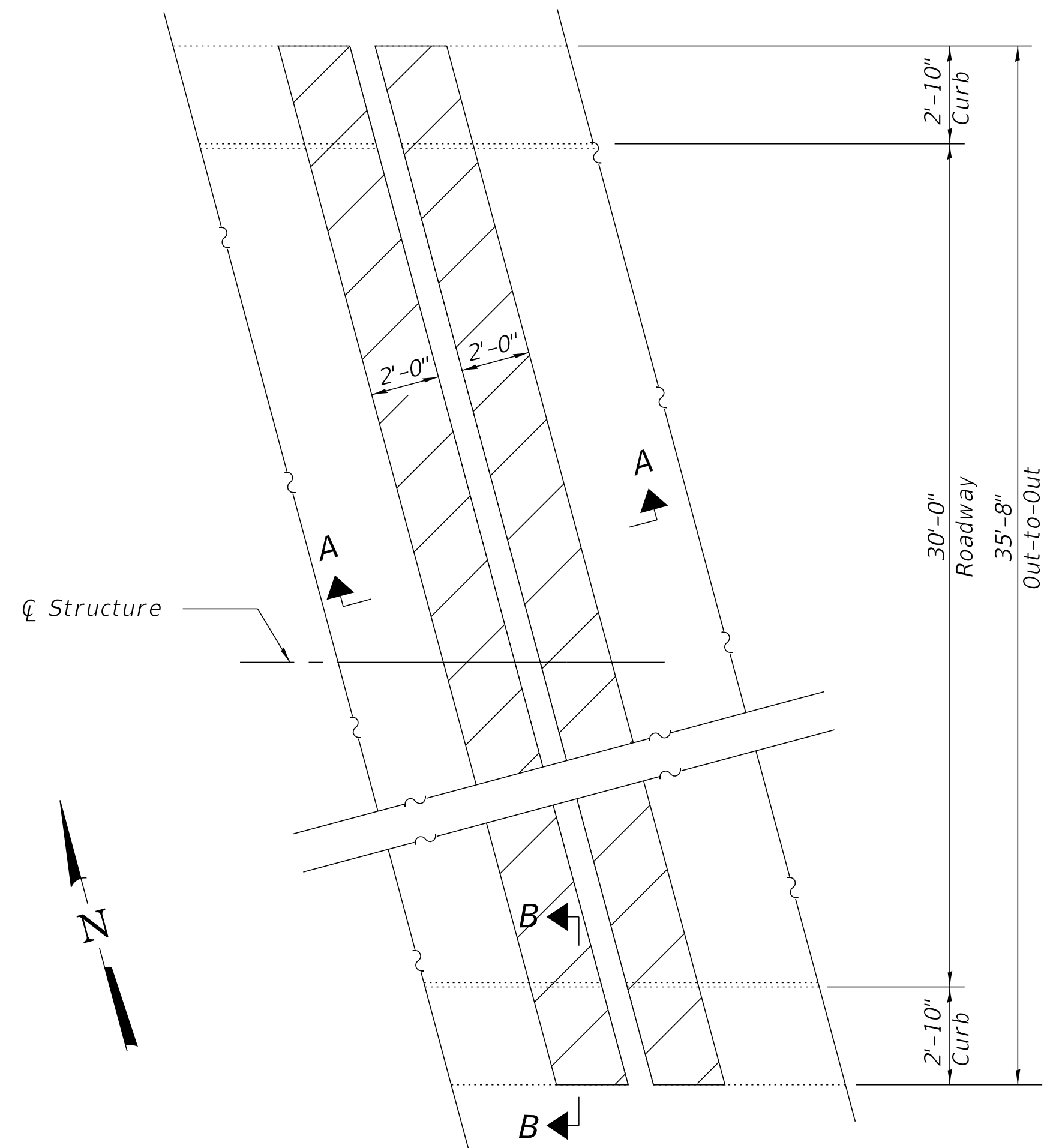
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DEPARTMENT OF TRANSPORTATION**

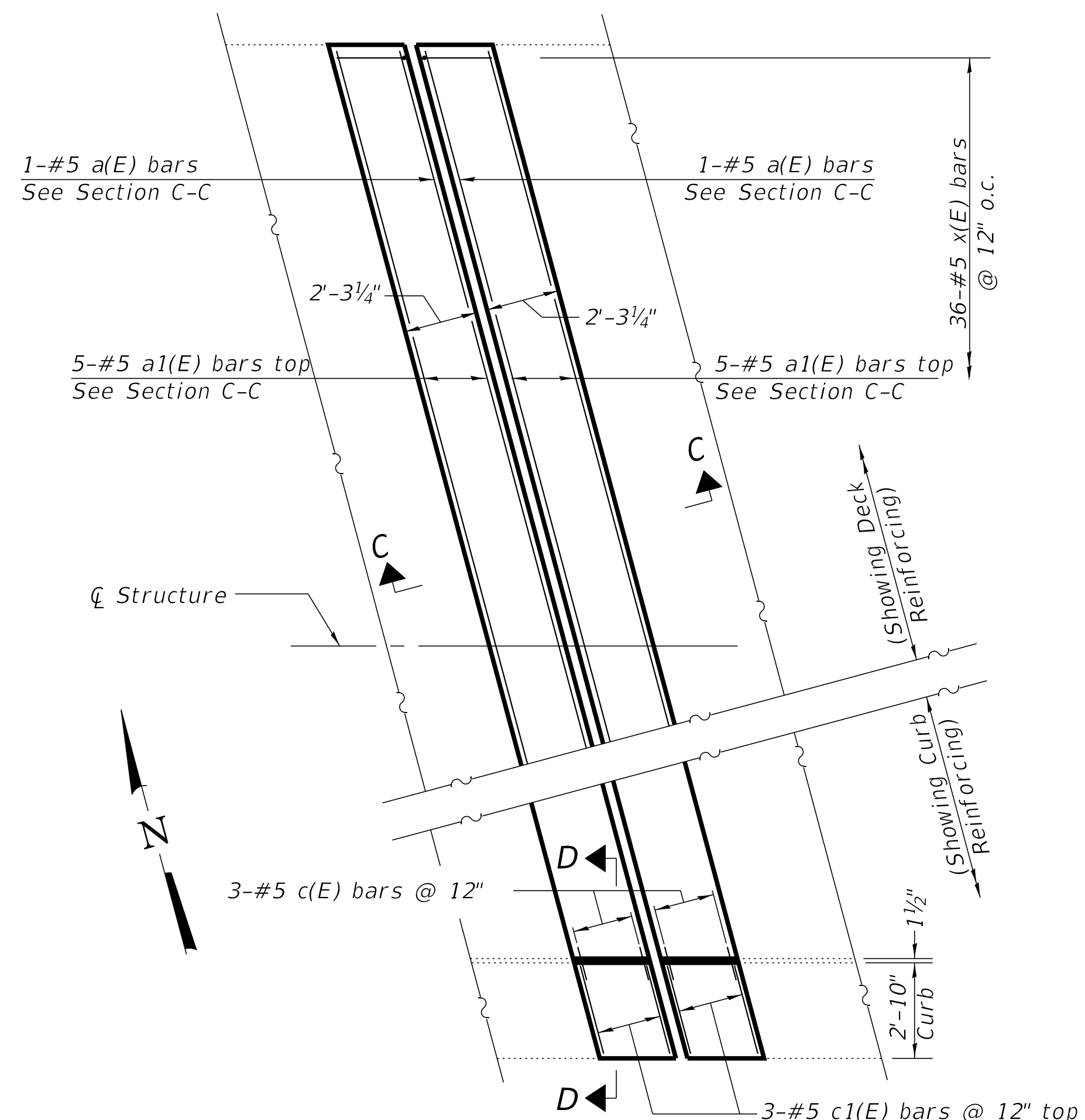
**DECK REPAIRS II  
STRUCTURE NO. 099-0135**

SHEET NO. 4 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	23
CONTRACT NO. 61F12				
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**JOINT REMOVAL PLAN - PIERS NO. 2 & NO. 6**



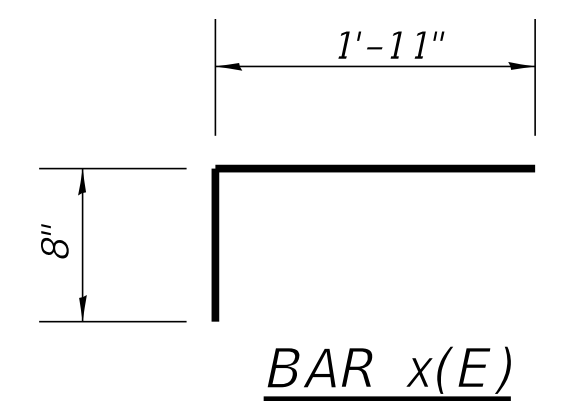
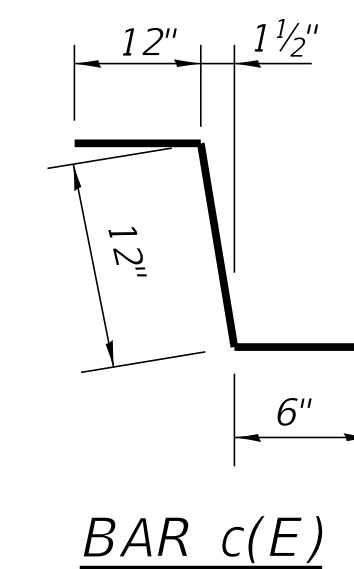
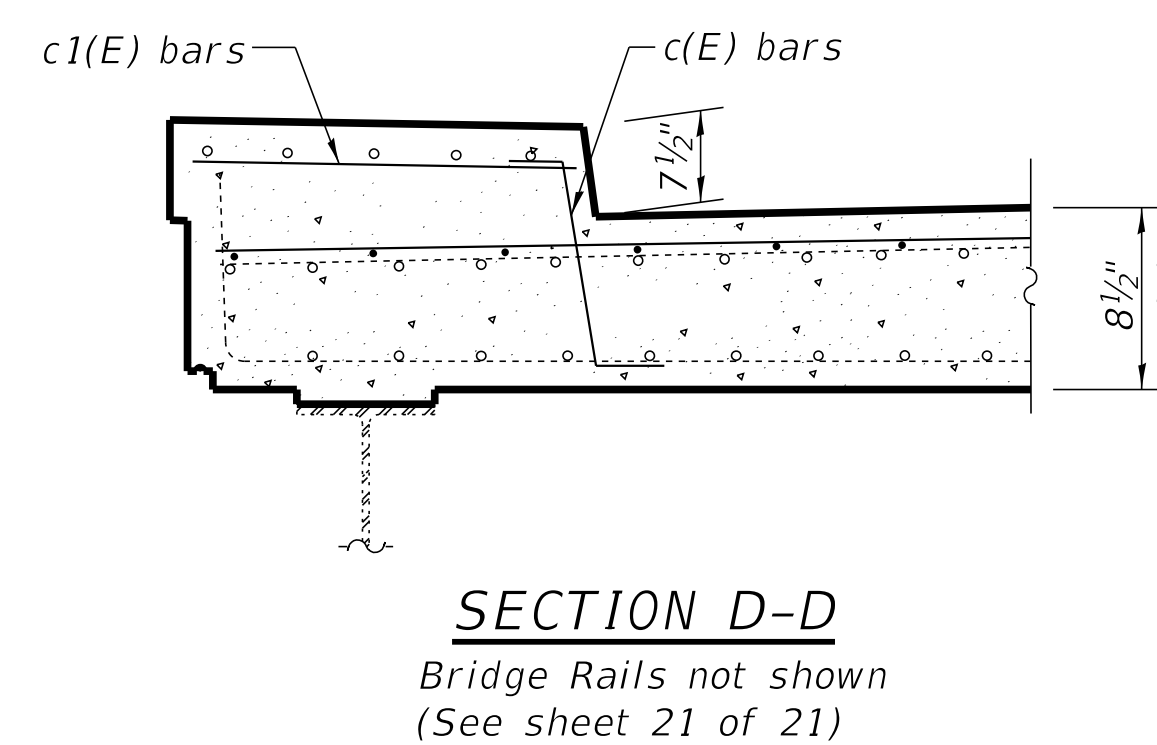
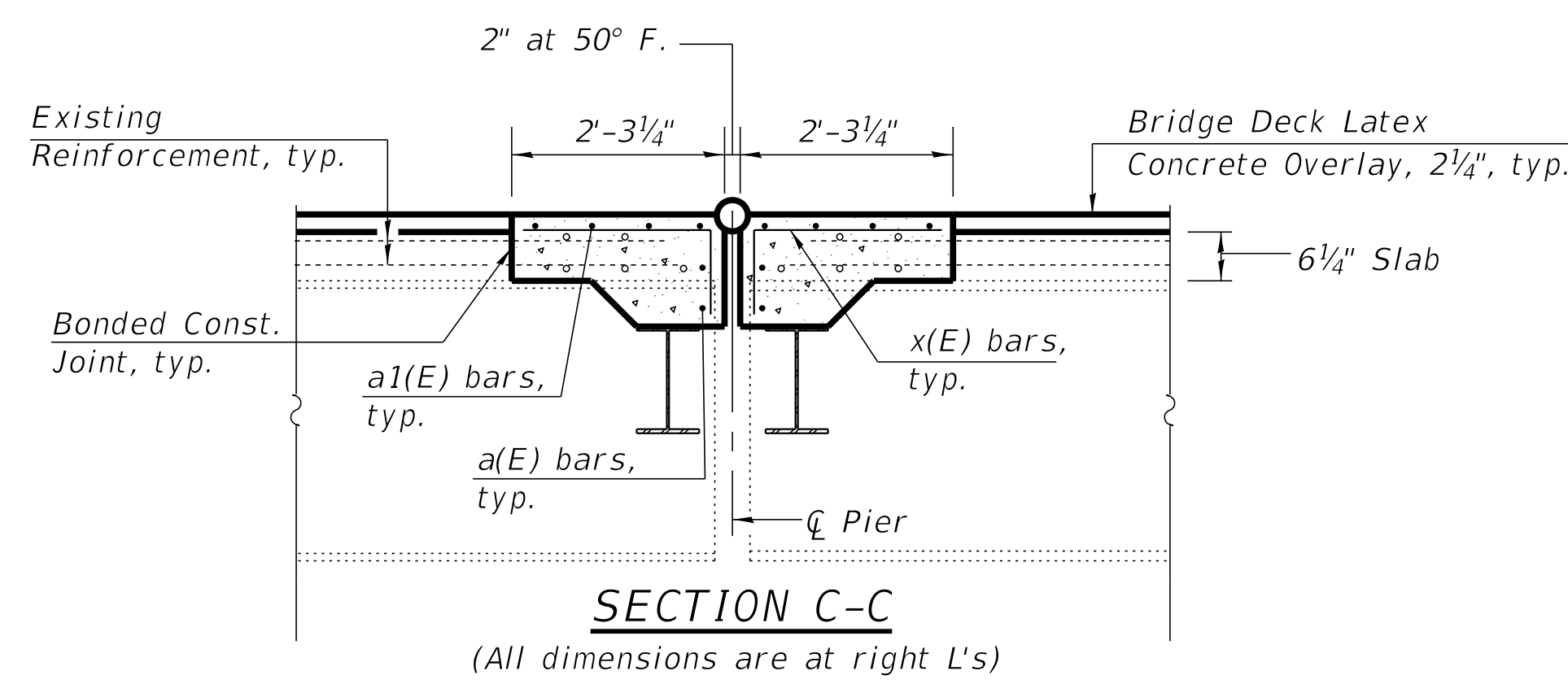
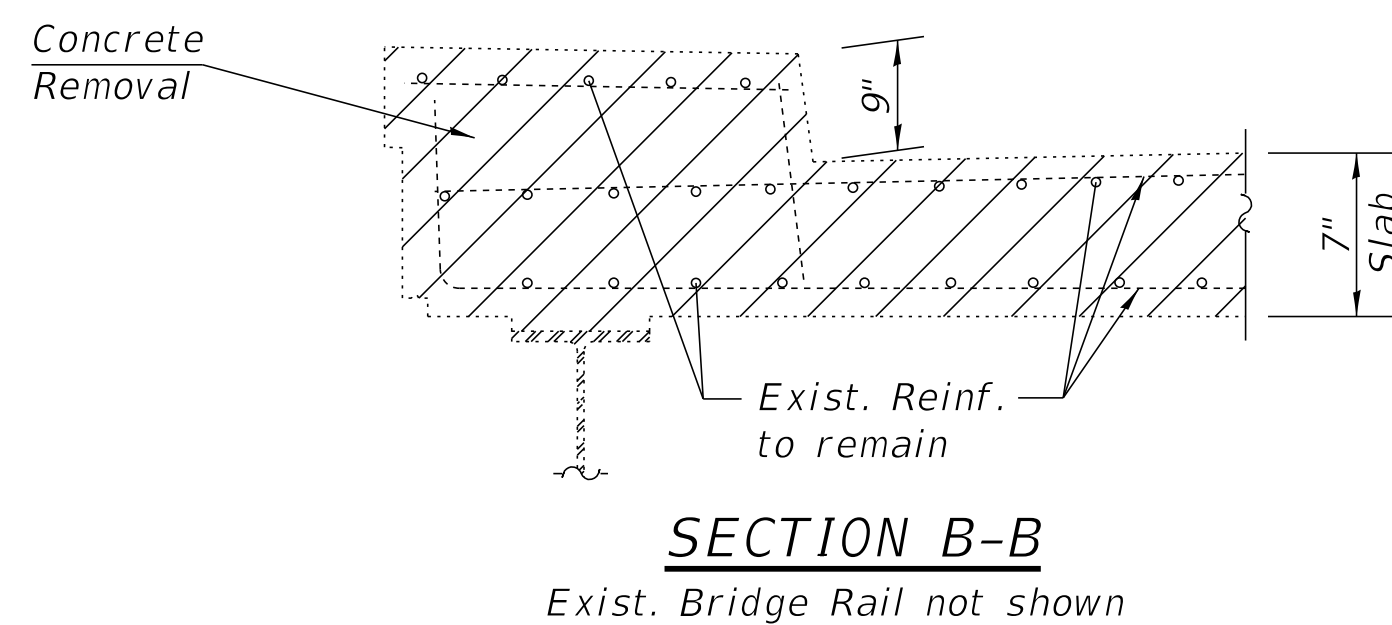
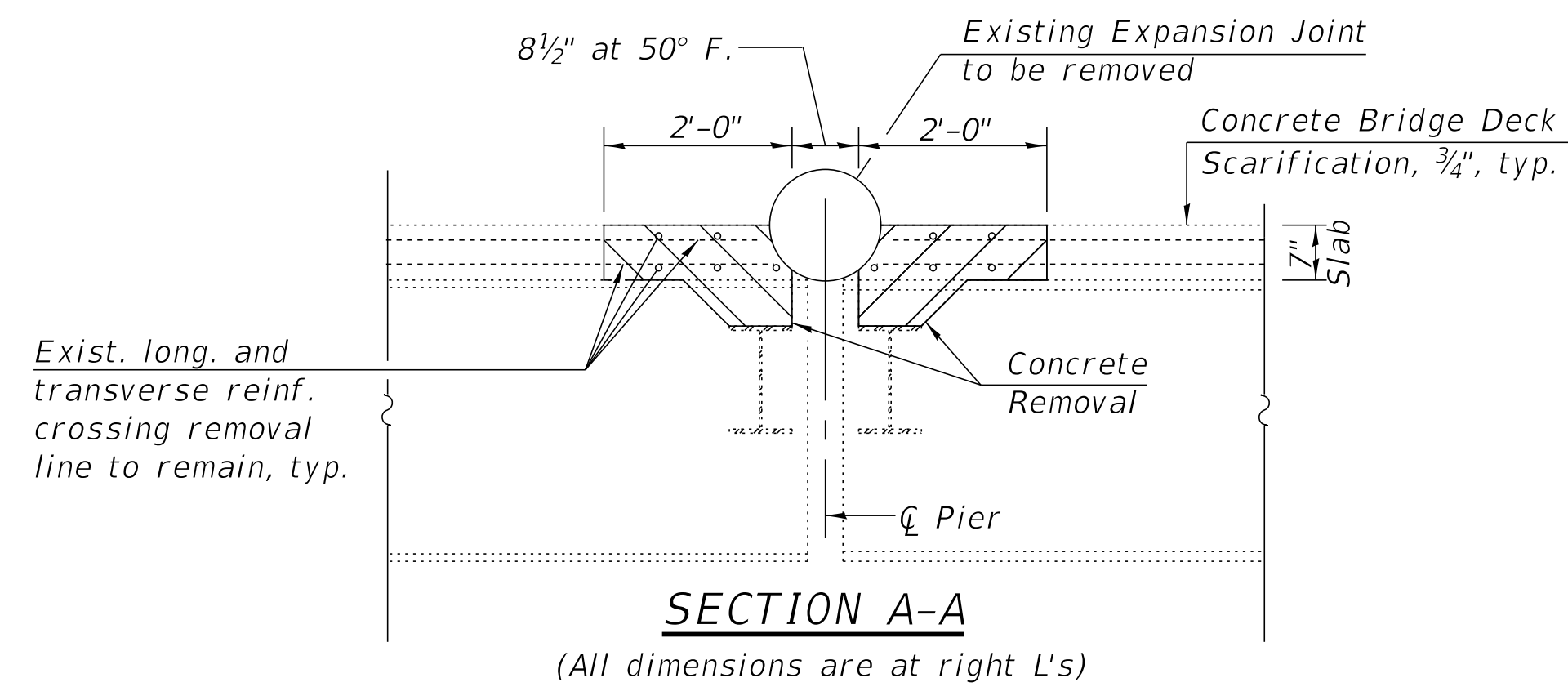
**JOINT REPLACEMENT PLAN - PIERS NO. 2 & NO. 6**

**Notes:**

Hatched areas indicate concrete sections to be removed. Care shall be exercised by the contractor during and following Concrete Removal operations to ensure that the existing rebar remaining in place are not damaged. All existing reinforcement to be incorporated into new construction shall be blast-cleaned, straightened, and properly positioned prior to concrete placement. Any reinforcement damaged during Concrete Removal shall be repaired or replaced using an approved Bar Splicer or Mechanical System. Cost Included with Concrete Removal. Existing railing posts and anchorage devices adjacent to expansion joints shall be maintained in place, cleaned and incorporated into new construction Cost included with Concrete Removal. Existing reinforcement bars that are parallel to the expansion joint shall be removed. Removal of the existing expansion joints will not be paid for separately, but shall be included with the cost of Structural Steel Removal. Top Surface of new concrete shall be constructed 1½" higher than existing slab elevation, after all Jacking Superstructure operations are completed.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	20	#5	6'-3"	—
a1(E)	20	#5	36'-4"	—
c(E)	24	#5	2'-6"	⌒
c1(E)	24	#5	2'-7"	⌒
x(E)	144	#5	2'-7"	⌒
Concrete Removal			Cu Yd	10.2
Reinforcement Bars, Epoxy Coated			Pound	1,920
Concrete Superstructure			Cu Yd	12.6
Protective Coat			Sq Yd	37



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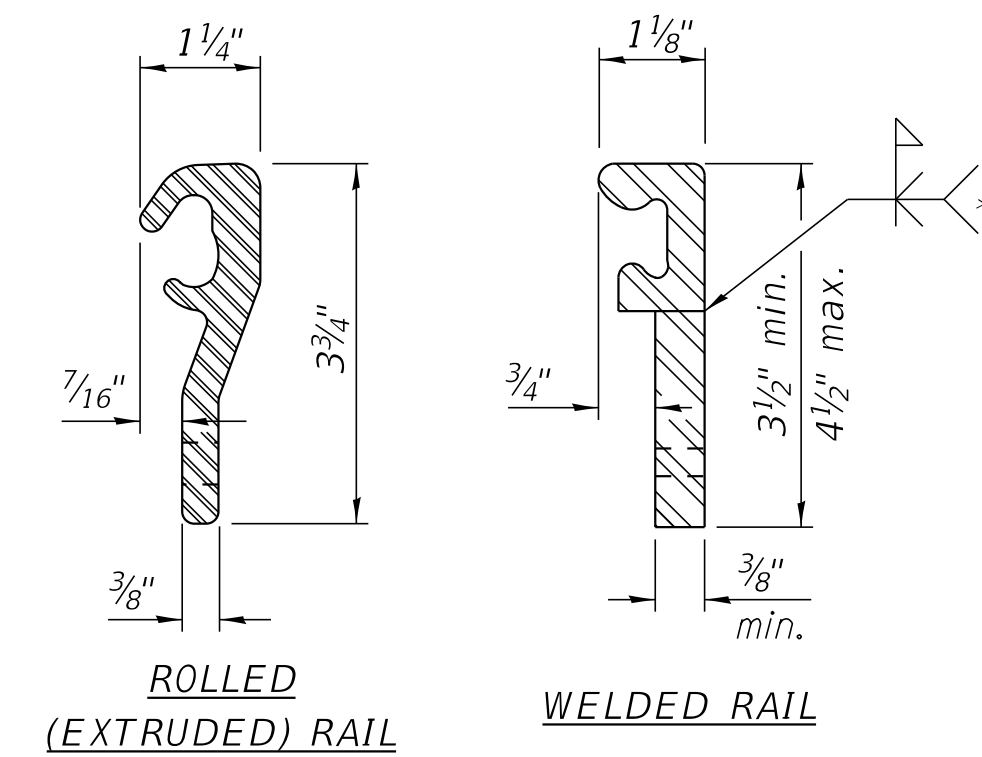
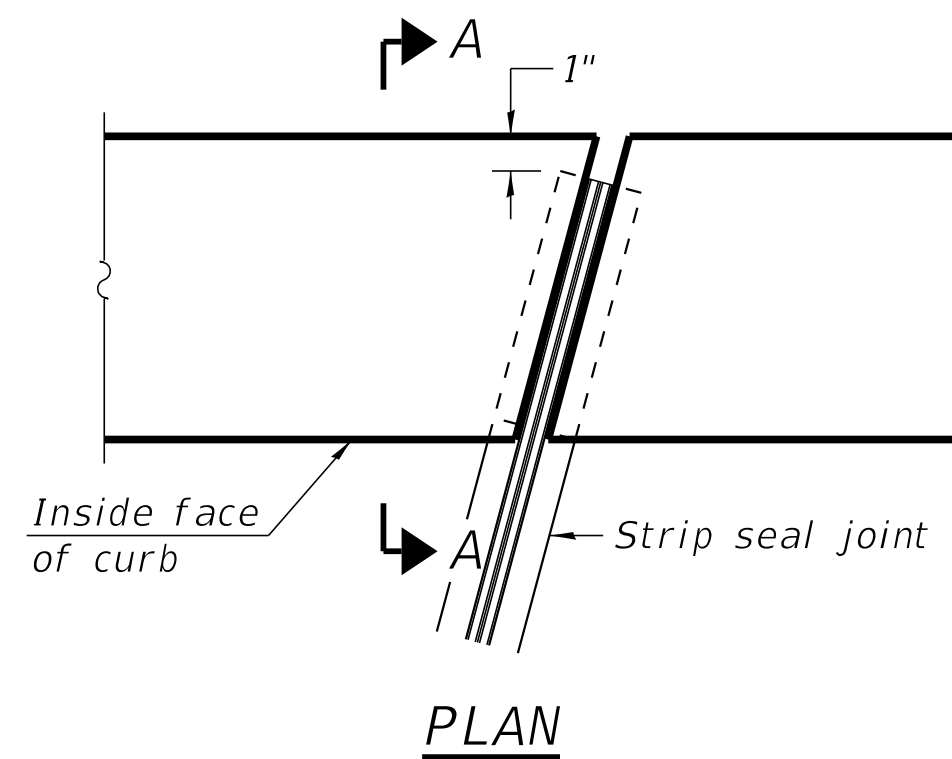
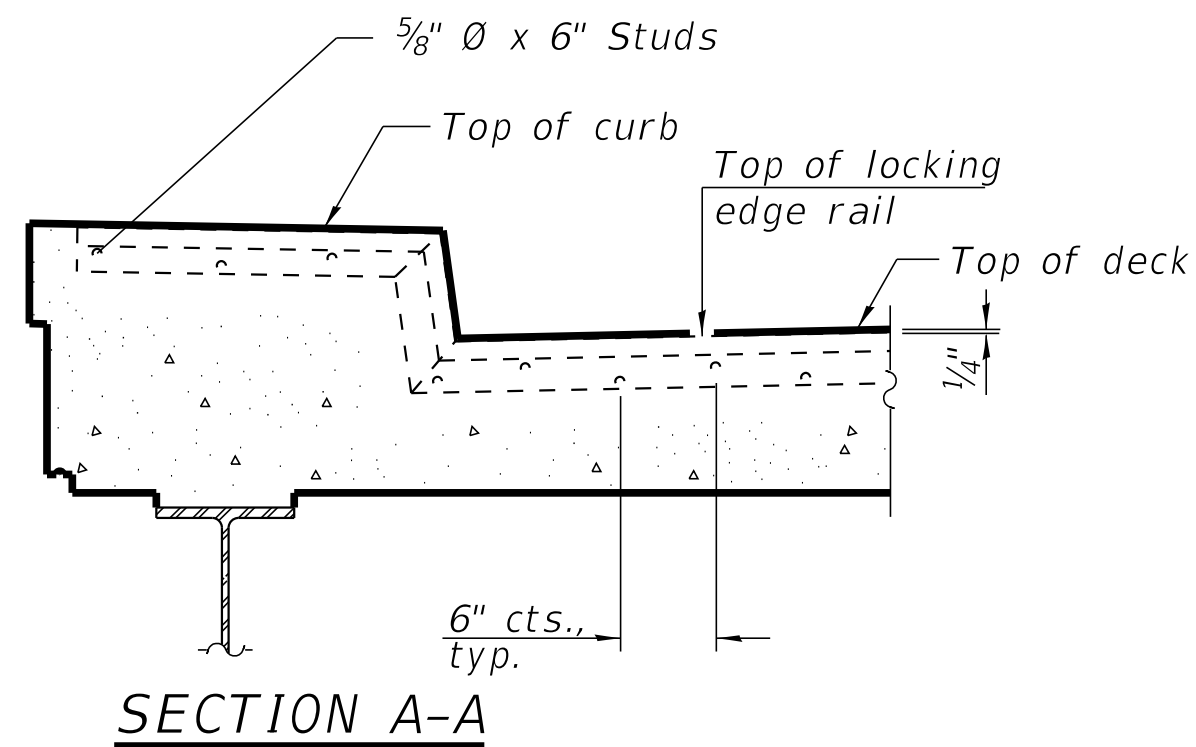
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT REPLACEMENT DETAILS  
STRUCTURE NO. 099-0135**

SHEET NO. 5 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 61F12	
ILLINOIS FED. AID PROJECT				

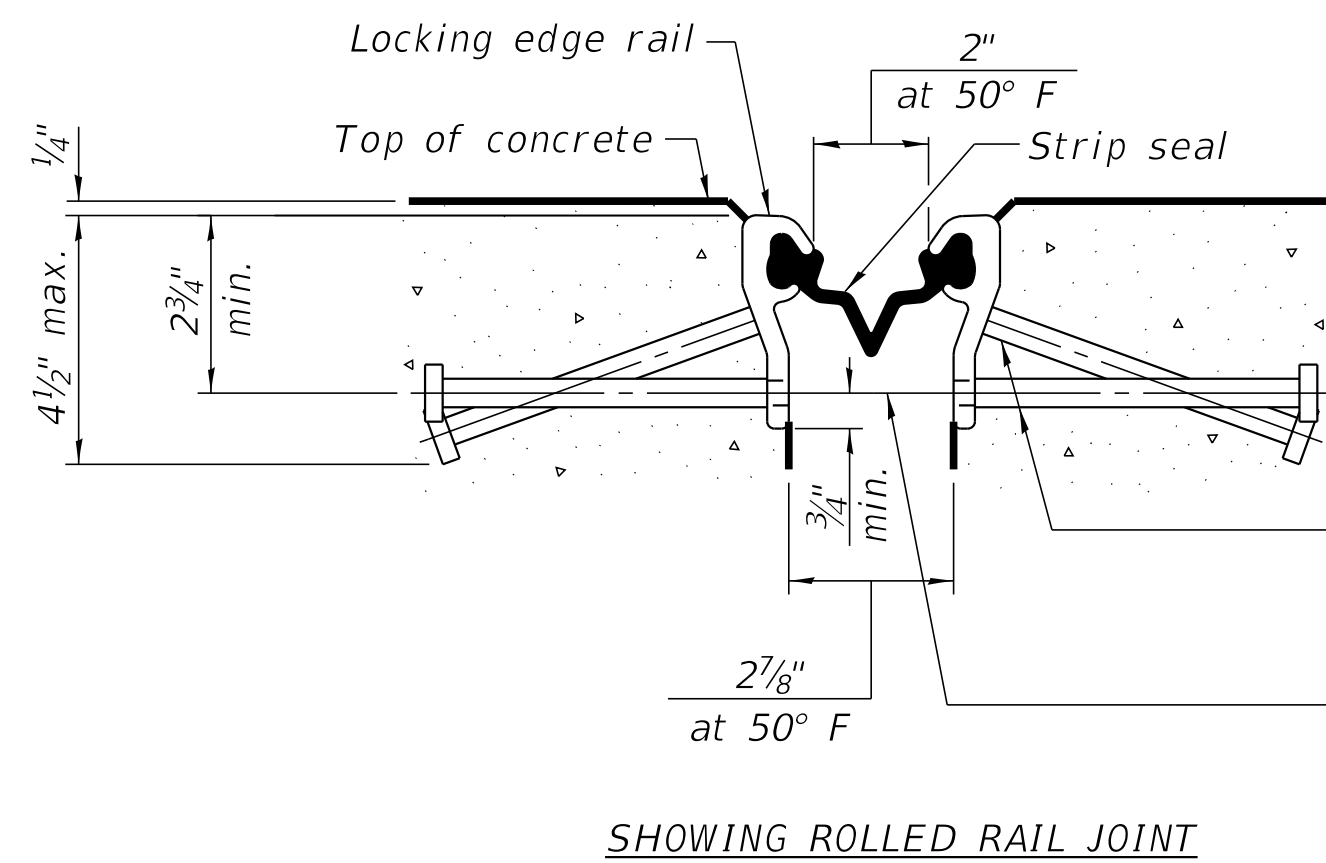




**LOCKING EDGE RAIL SPLICE**  
 The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

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

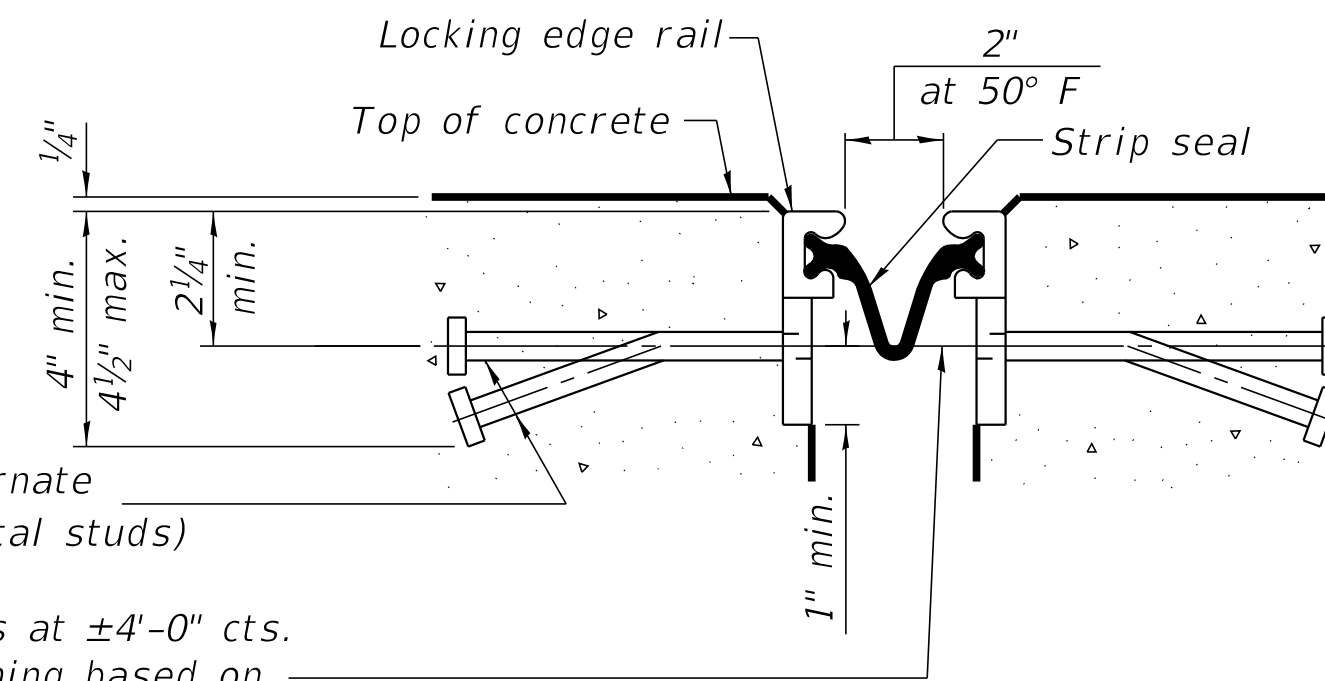
**LOCKING EDGE RAILS**



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

3/8"  $\phi$  threaded rods in 7/16"  $\phi$  holes at  $\pm 4'-0"$  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 ROLLED RAIL JOINT**



**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.

**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 shall be welded as shown in the locking edge rail splice detail.

Cost of embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck 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.

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	77

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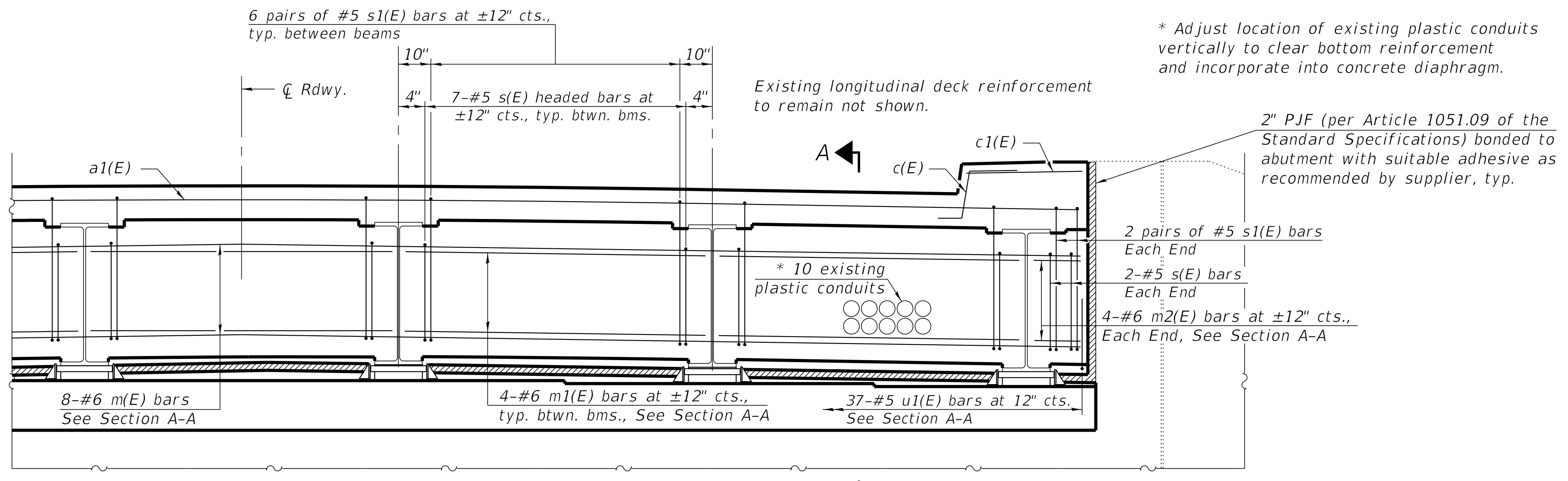
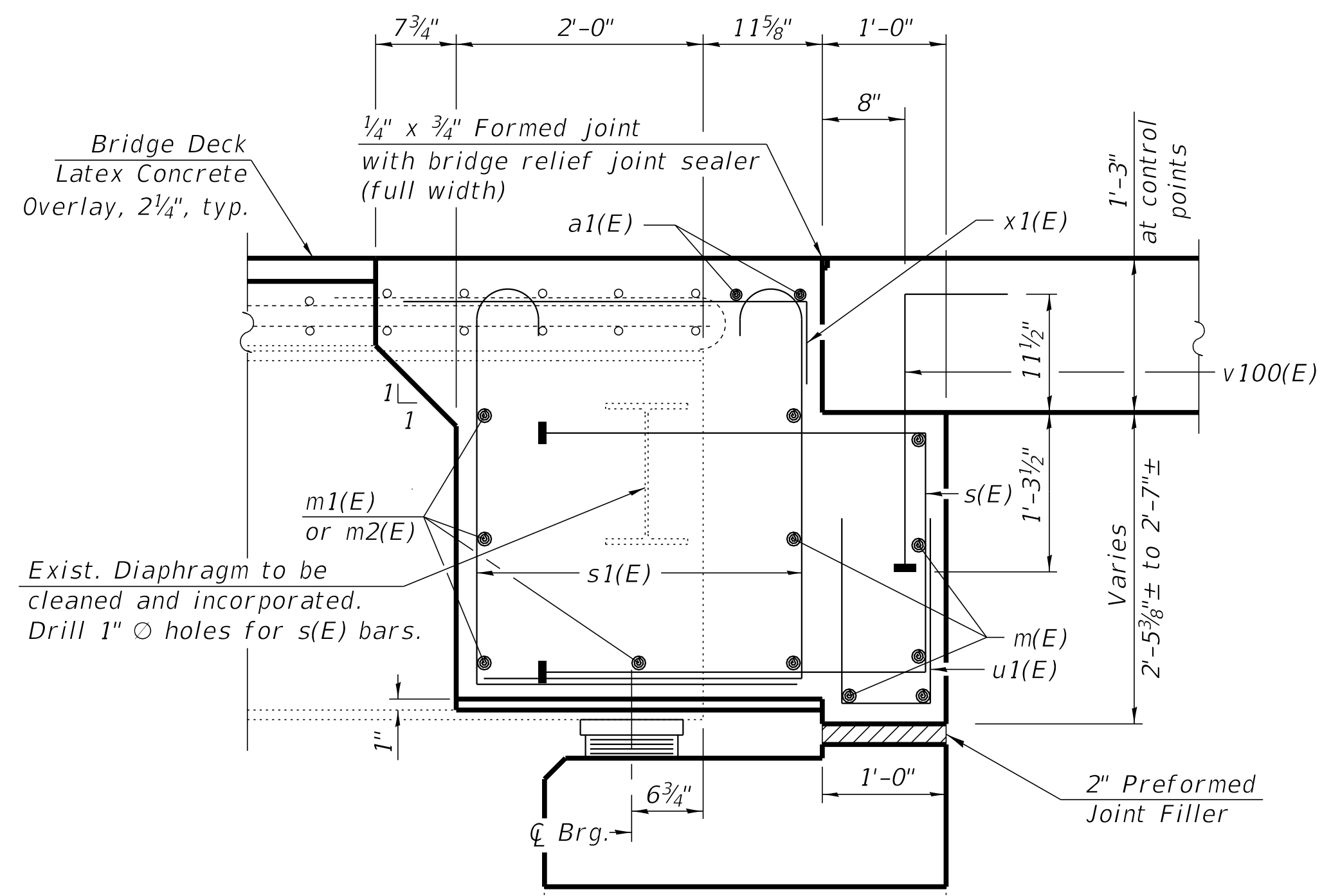
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**PREFORMED JOINT STRIP SEAL  
 STRUCTURE NO. 099-0135**

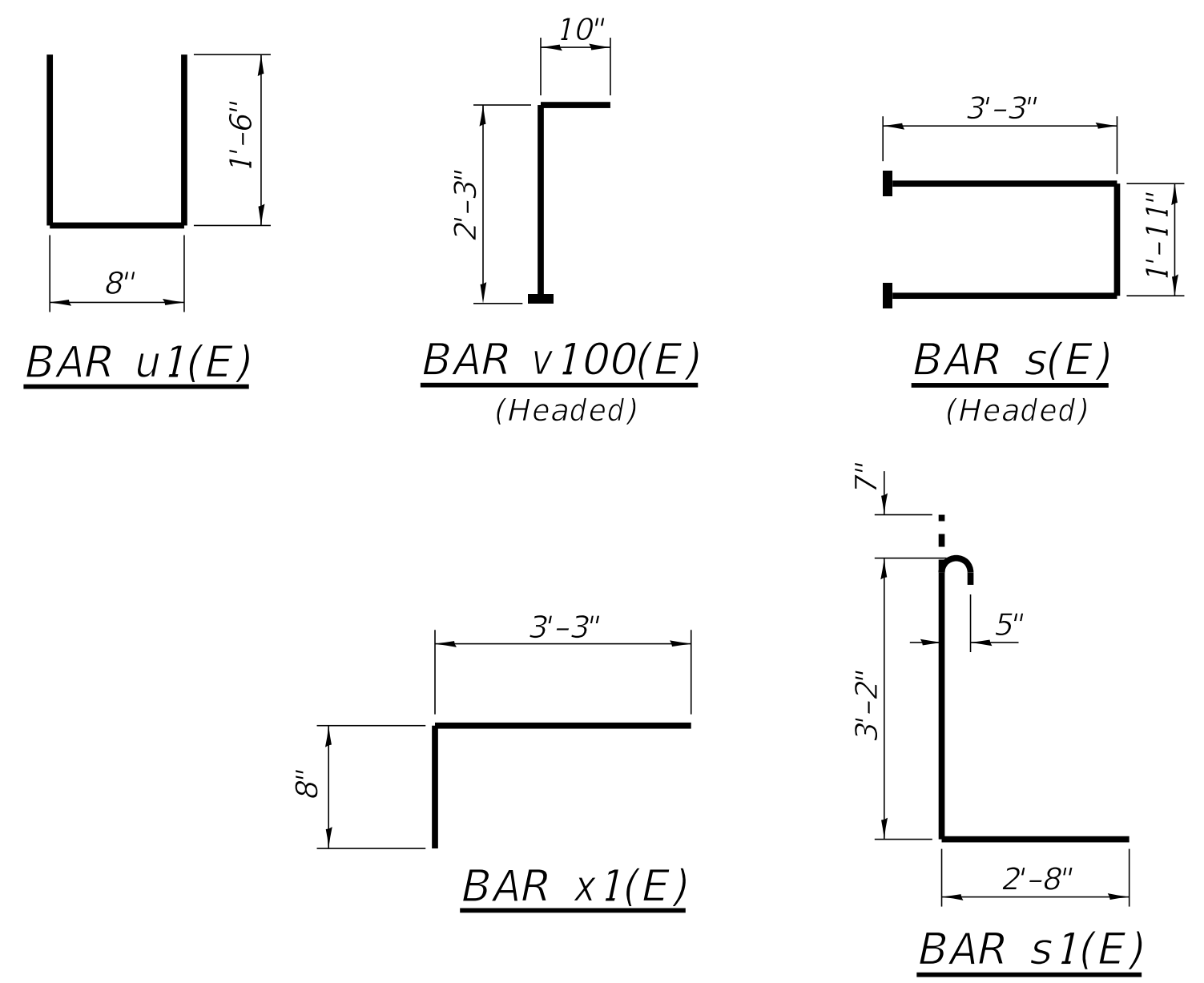
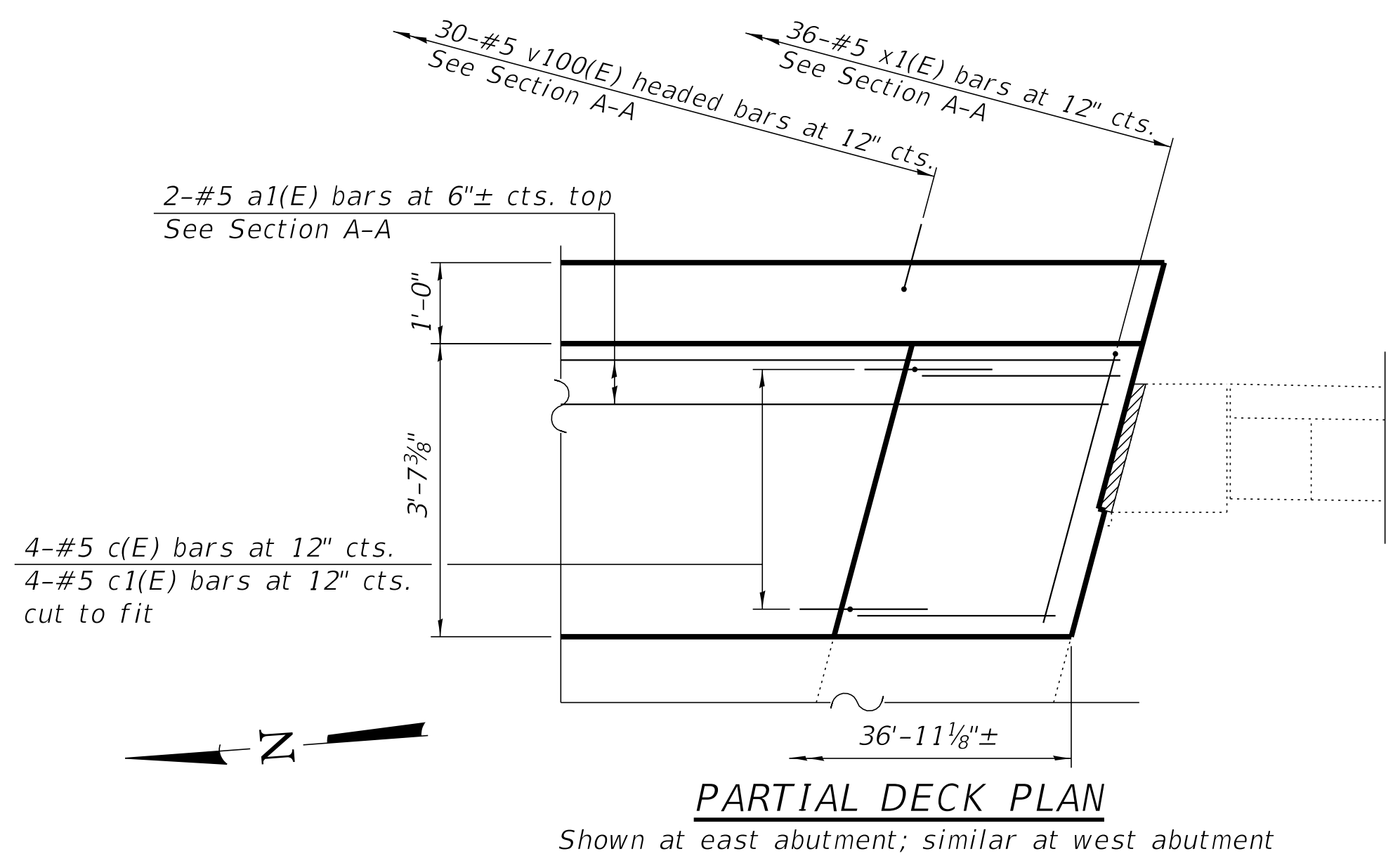
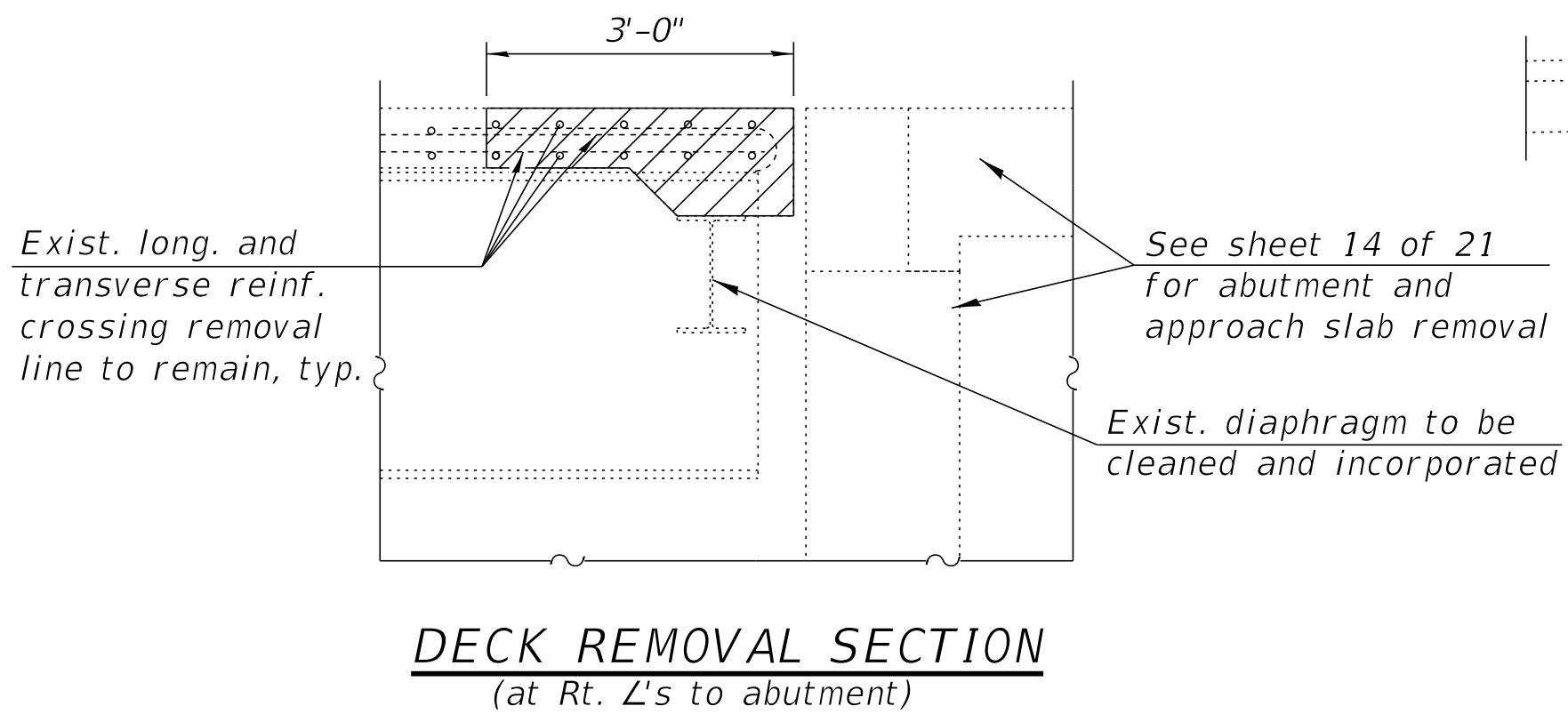
SHEET NO. 6 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	25
			CONTRACT NO. 61F12	
		ILLINOIS / FED. AID PROJECT		

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 I:\plotdrv\pdf\BW\_Default.plt



**Notes:**  
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.  
 The s(E), s1(E) and x1(E) bars shall be placed parallel to the beams. Spacing for those bars shall be at right angles to the beams.  
 See sheet 5 of 21 for bar c(E) details.  
 The approach slab seat shall have a constant slope determined from the control points at  $\bar{C}$  of Roadway and at inside edges of curbs.  
 For bearing details see sheet 11 of 21.  
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.  
 Cost of 2" PJF included with Concrete Superstructure.



Bar	No.	Size	Length	Shape
a1(E)	4	#5	36'-4"	—
c(E)	16	#5	2'-6"	┌
c1(E)	16	#5	2'-7"	—
m(E)	16	#6	36'-4"	—
m1(E)	40	#6	6'-5"	—
m2(E)	16	#6	0'-11"	—
s(E)	78	#5	8'-5"	┌
s1(E)	136	#5	6'-5"	┌
u1(E)	74	#5	3'-8"	┌
v100(E)	60	#5	3'-1"	┌
x1(E)	72	#5	3'-11"	┌
Concrete Removal			Cu Yd	7.6
Concrete Superstructure			Cu Yd	38.8
Reinforcement Bars, Epoxy Coated			Pound	3,890
Protective Coat			Sq Yd	32

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

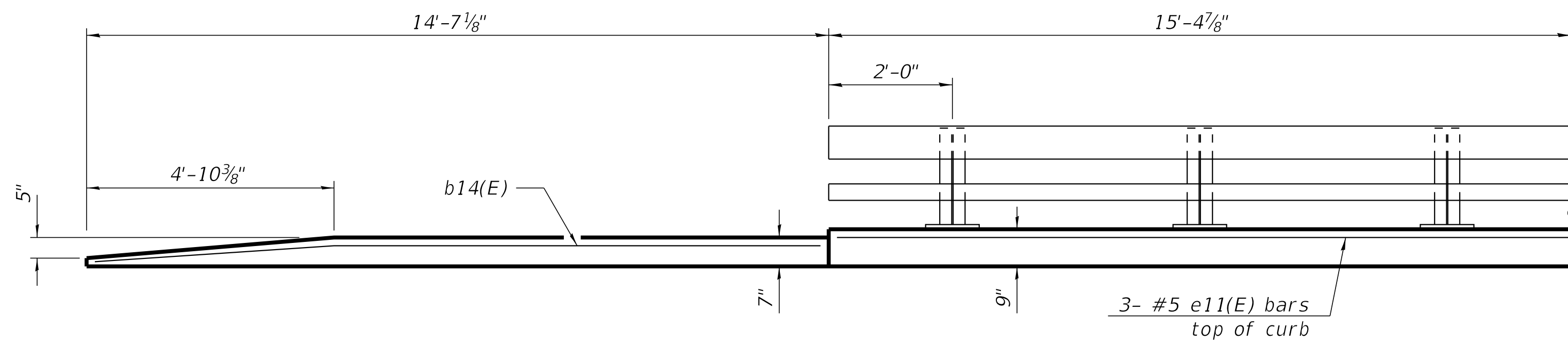
DIAPHRAGM DETAILS  
 STRUCTURE NO. 099-0135

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	26
CONTRACT NO. 61F12				

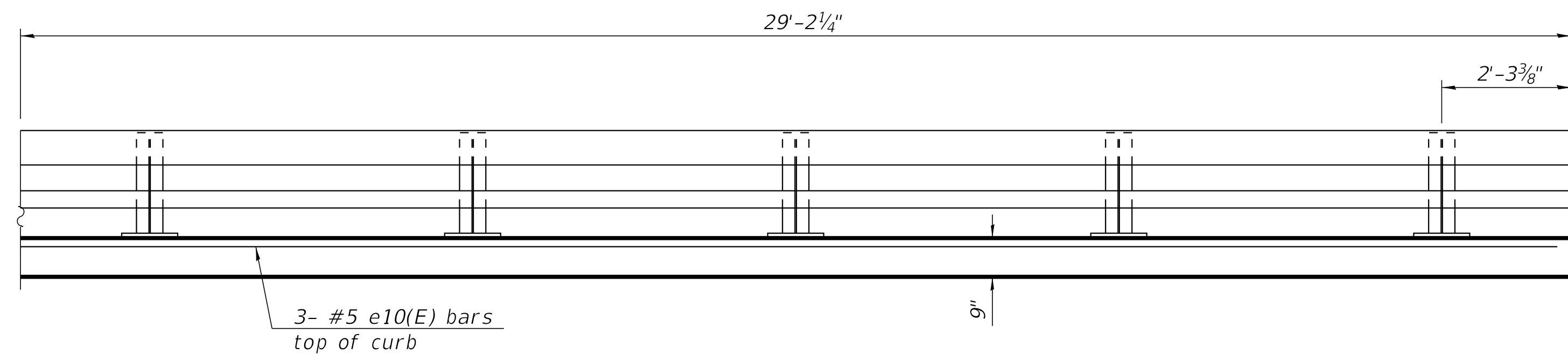
SHEET NO. 7 OF 21 SHEETS

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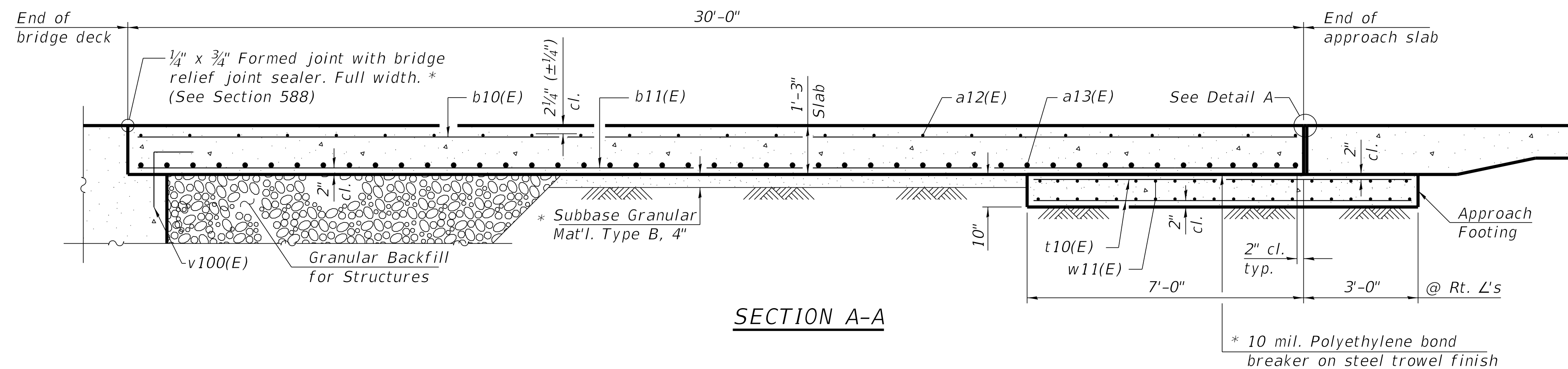


**INSIDE ELEVATION OF NORTH RAILING AND CURB**

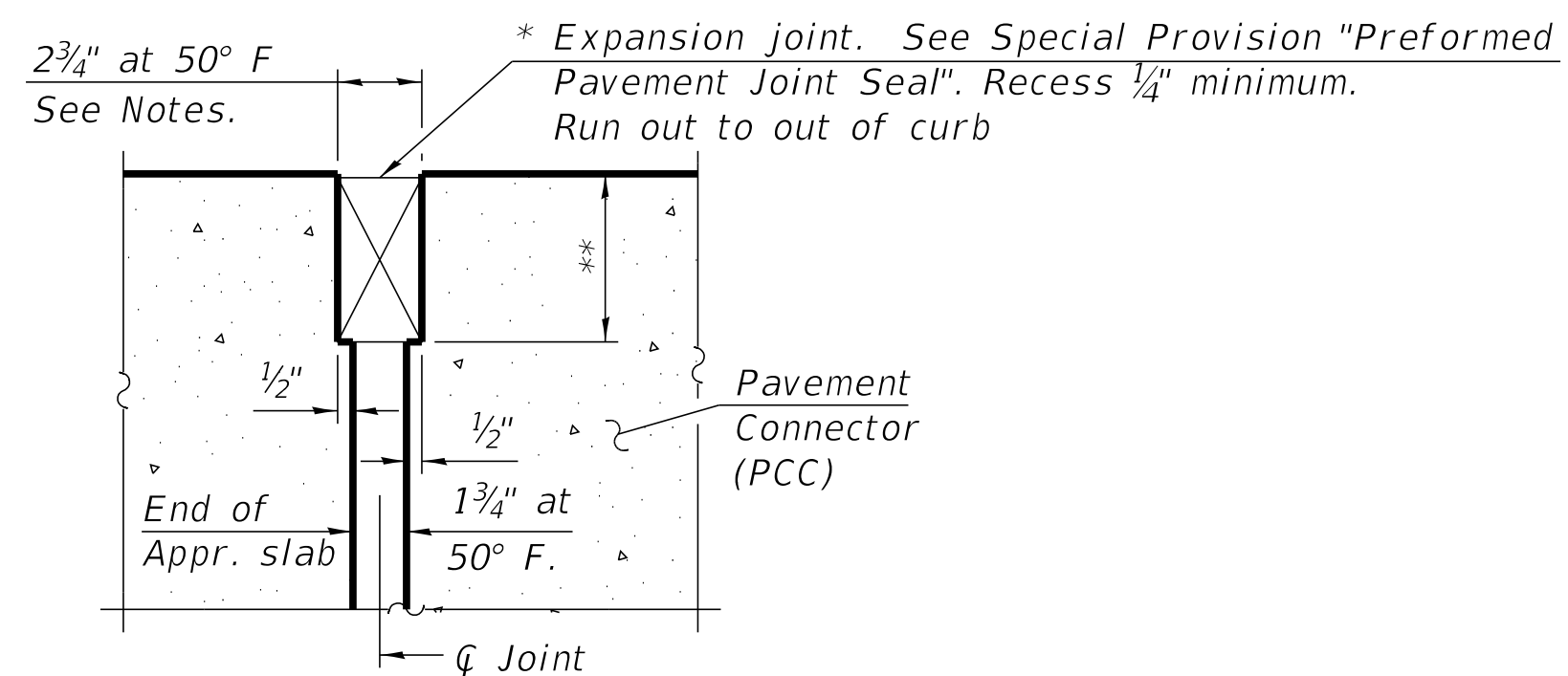


**INSIDE ELEVATION OF SOUTH RAILING AND CURB**

**Notes:**  
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.  
 Curb concrete under railing shall be paid for as Concrete Superstructure.  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 21.  
 For railing details, see sheet 21 of 21.



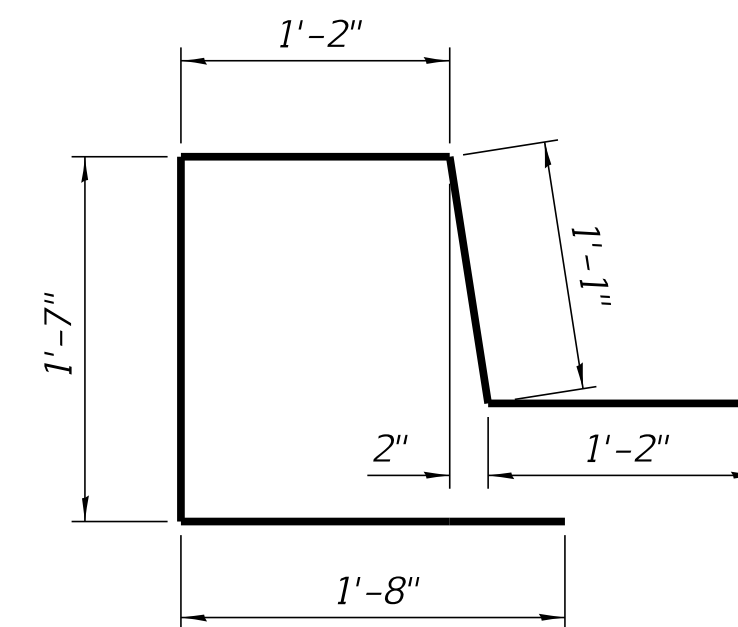
**SECTION A-A**



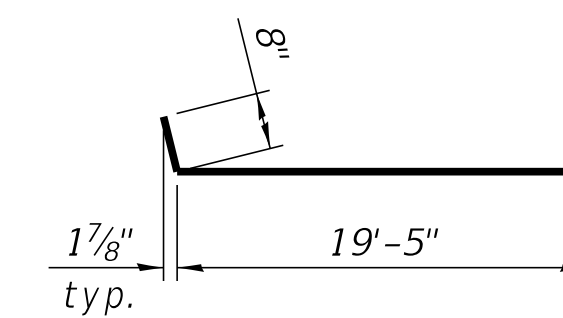
**DETAIL A**

\* Cost included with Concrete Superstructure (Approach Slab).

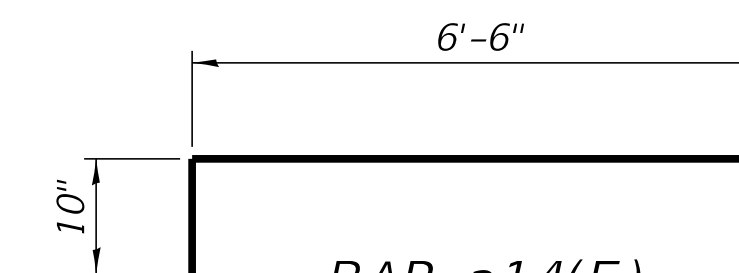
\*\* Per manufacturer recommendations



**BAR d10(E)**



**BAR a12(E)**

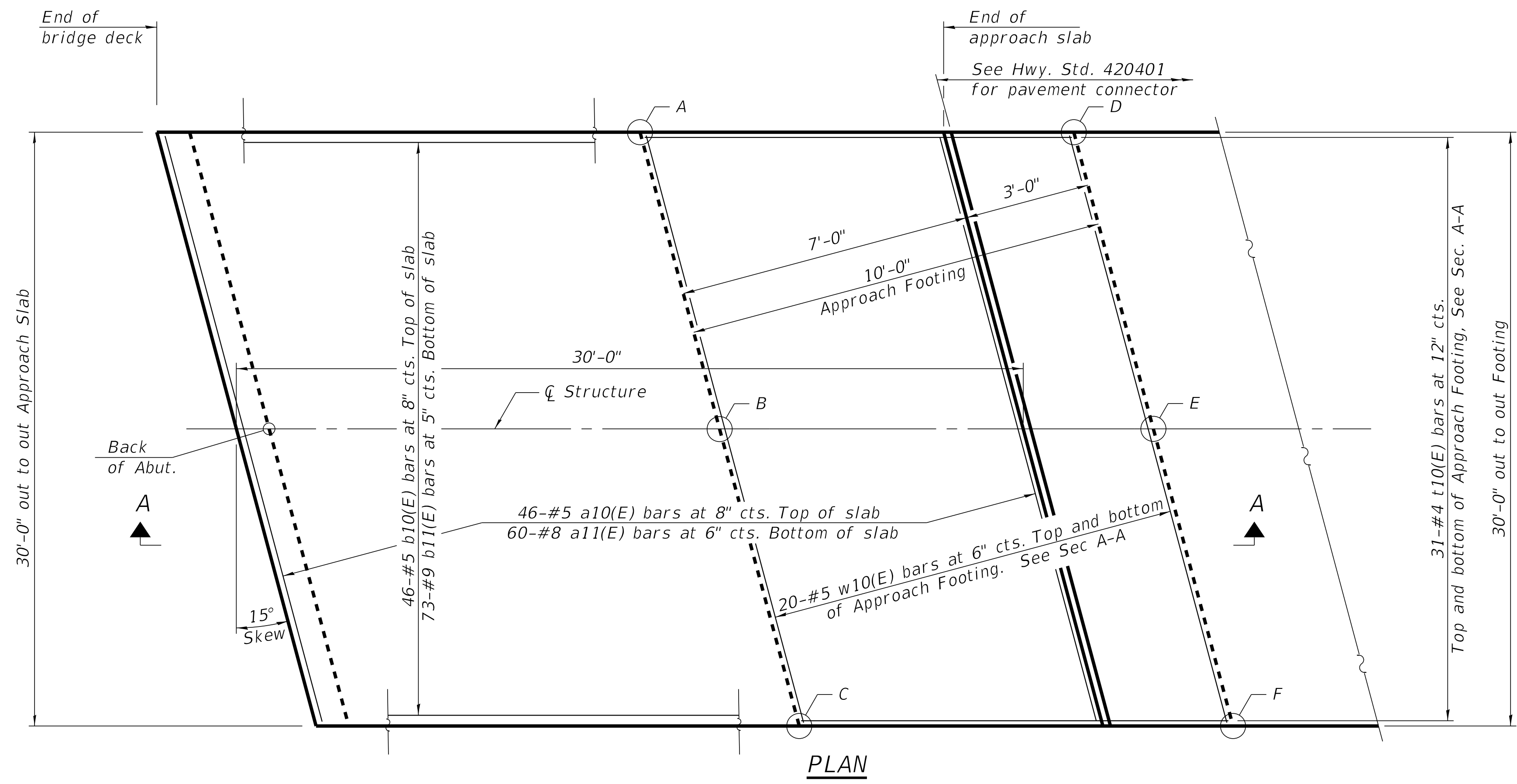


**BAR a14(E)**

**WEST APPROACH  
BILL OF MATERIAL**

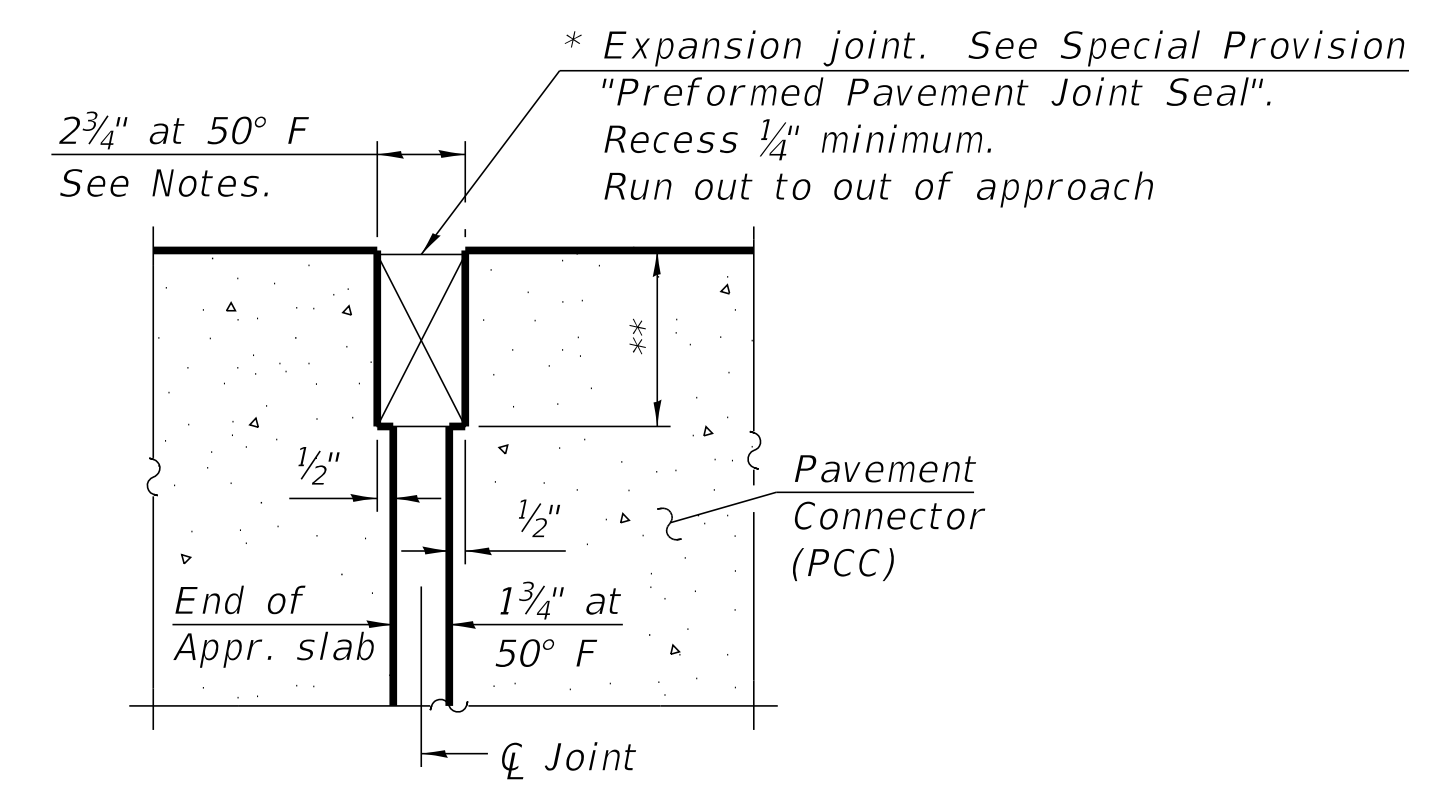
Bar	No.	Size	Length	Shape
a12(E)	92	#5	20'-1"	—
a13(E)	60	#8	35'-10"	—
a14(E)	67	#5	7'-4"	—
b10(E)	55	#5	29'-8"	—
b11(E)	87	#9	29'-8"	—
b12(E)	4	#5	28'-10"	—
b13(E)	4	#5	14'-8"	—
b14(E)	1	#4	14'-4"	—
d10(E)	49	#5	6'-8"	⊓
e10(E)	3	#5	28'-10"	—
e11(E)	3	#5	14'-8"	—
t10(E)	70	#4	10'-0"	—
w11(E)	40	#5	36'-0"	—
Concrete Superstructure		Cu Yd	1.8	
Concrete Superstructure (Approach Slab)		Cu Yd	48.3	
Concrete Structures		Cu Yd	10.9	
Reinforcement Bars, Epoxy Coated		Pound	21,300	
Protective Coat		Sq Yd	120	

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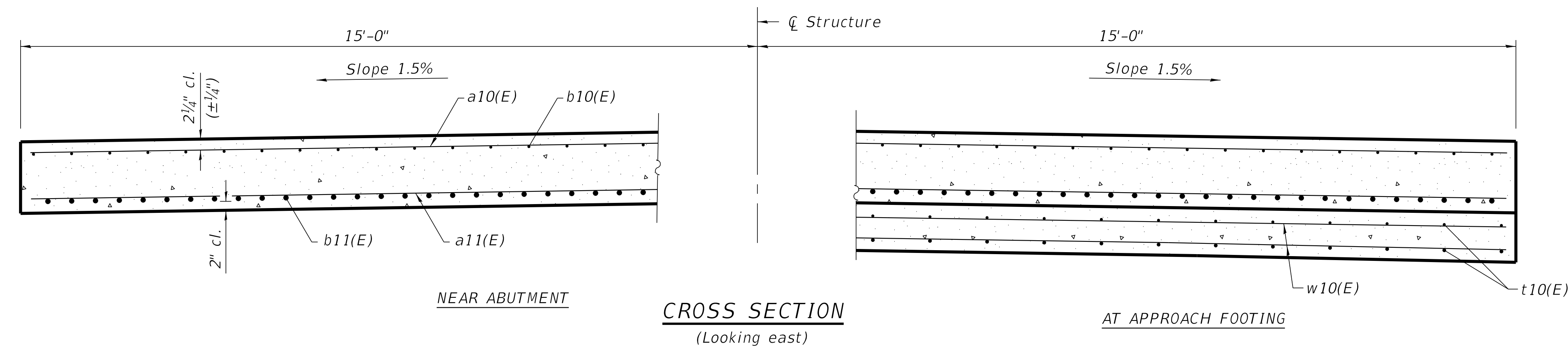
**TOP AND BOTTOM ELEVATIONS FOR EAST APPROACH FOOTING**

Point	East Approach	
	Top	Bottom
A	580.17	579.34
B	580.42	579.59
C	580.23	579.40
D	580.24	579.41
E	580.50	579.67
F	580.30	579.47



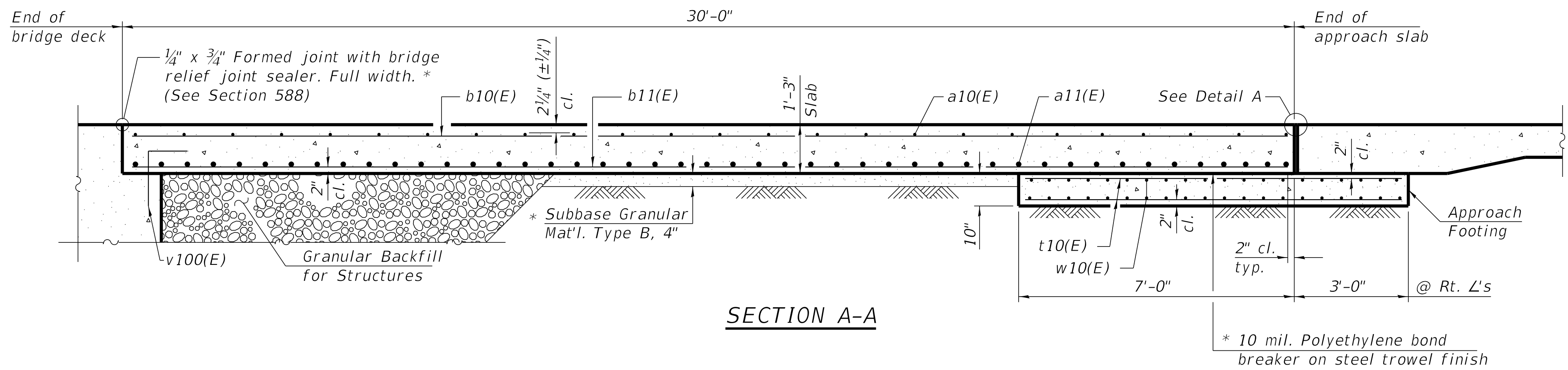
**DETAIL A**  
(@ Rt. L's)

\* Cost included with Concrete Superstructure (Approach Slab).  
\*\* Per manufacturer recommendations



**EAST APPROACH BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a10(E)	46	#5	30'-8"	—
a11(E)	60	#8	30'-8"	—
b10(E)	46	#5	29'-8"	—
b11(E)	73	#9	29'-8"	—
t10(E)	62	#4	10'-0"	—
w10(E)	40	#5	30'-8"	—
Concrete Superstructure (Approach Slab)			Cu Yd	41.7
Concrete Structures			Cu Yd	9.6
Reinforcement Bars, Epoxy Coated			Pound	16,870
Protective Coat			Sq Yd	100



Notes:  
The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.  
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
Approach footing concrete shall be paid for as Concrete Structures.  
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
Cost of excavation for approach footing included with Concrete Structures.  
For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 21.

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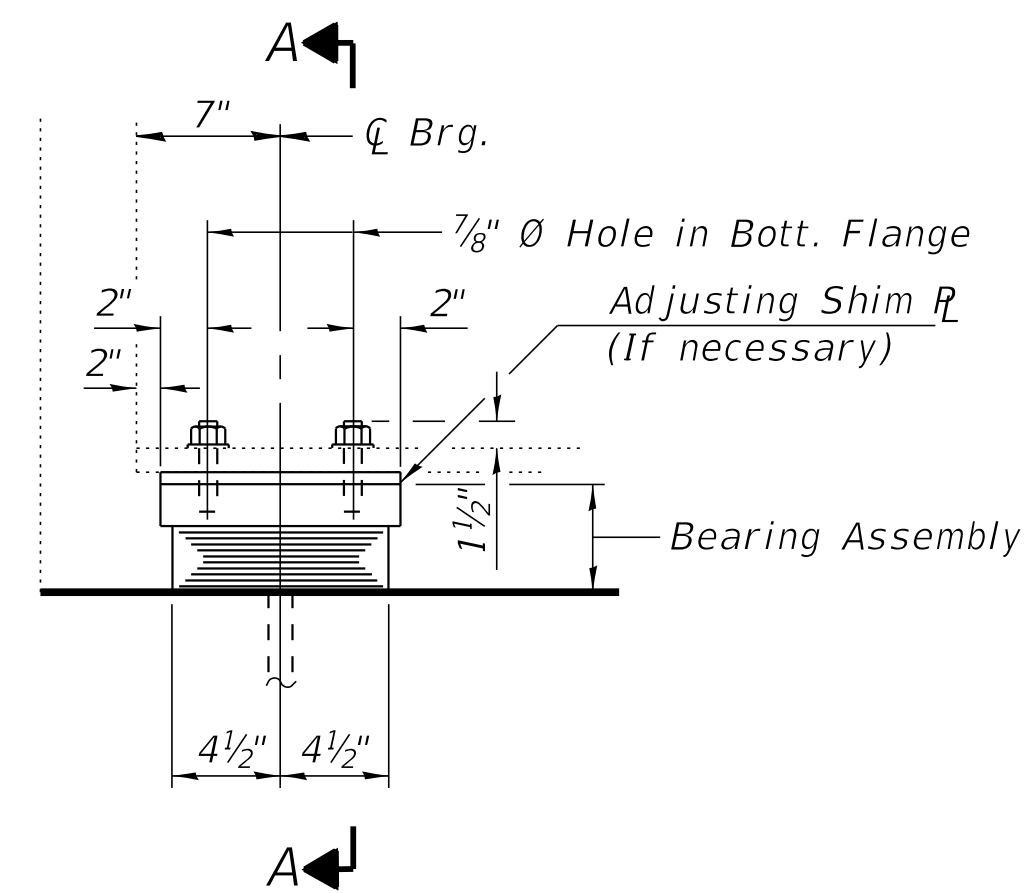
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	CHECKED - BAB	REVISED -
PLOT SCALE =	DRAWN - BLB	REVISED -
PLOT DATE	DATE - 10-08-18	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

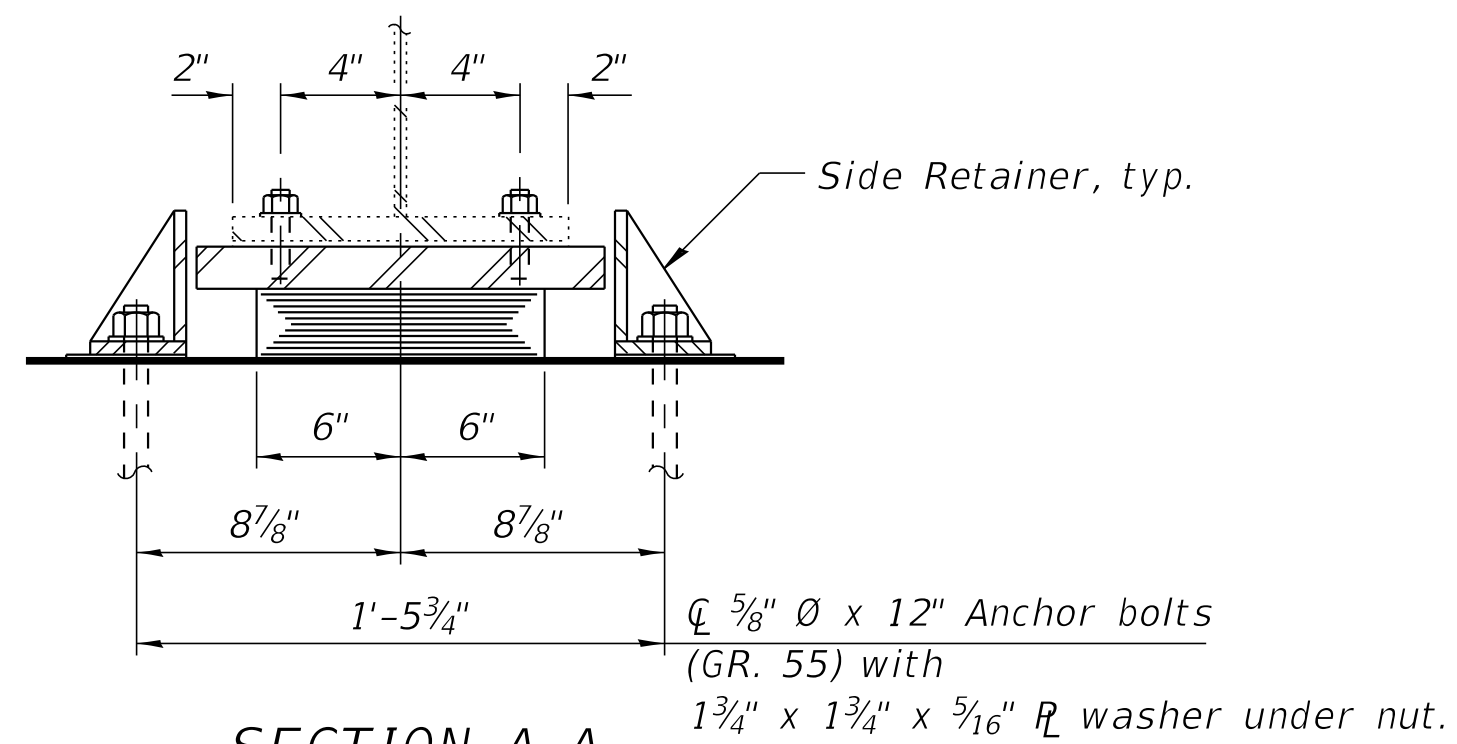
**EAST APPROACH SLAB DETAILS**  
**STRUCTURE NO. 099-0135**

SHEET NO. 10 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	29
			CONTRACT NO. 61F12	
		ILLINOIS FED. AID PROJECT		

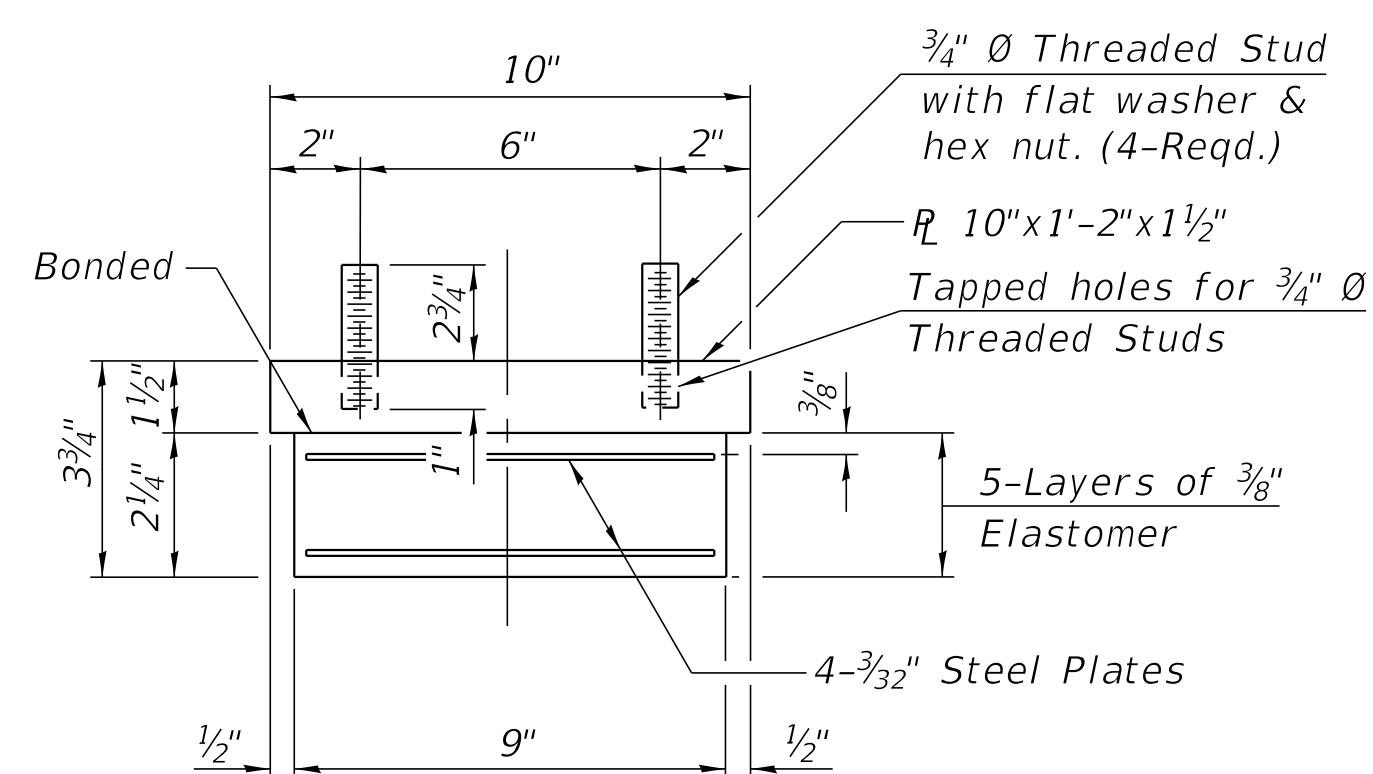


ELEVATION AT ABUT.



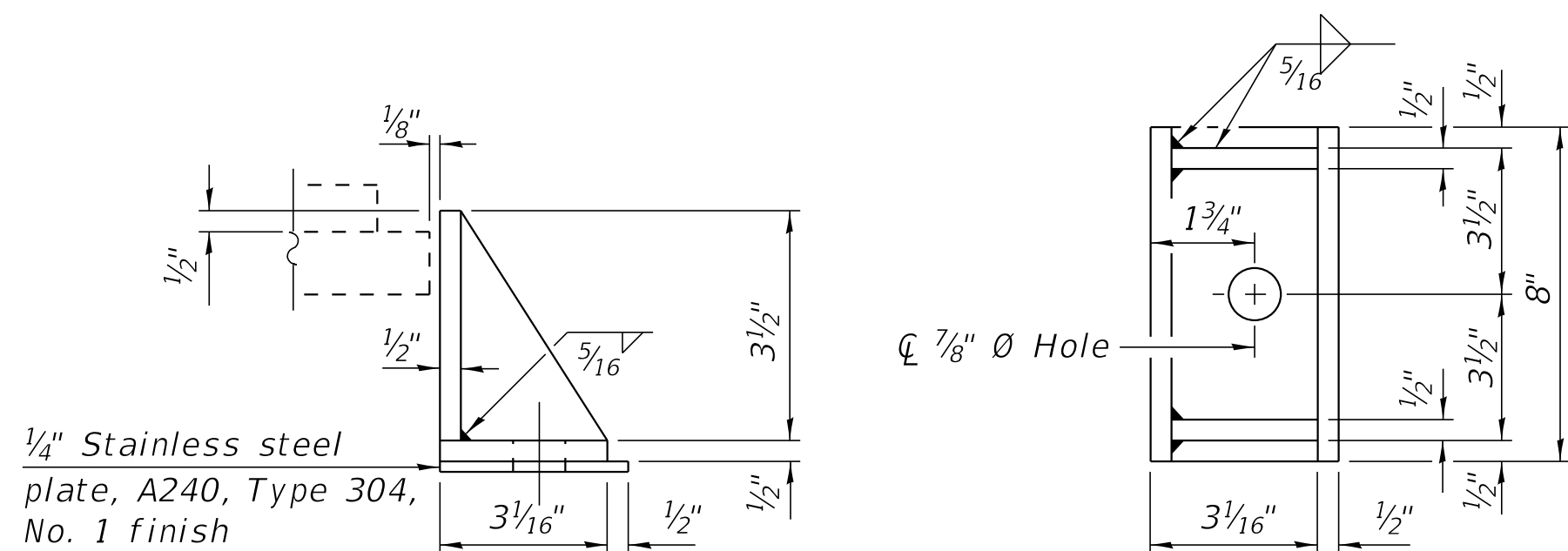
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note:  
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

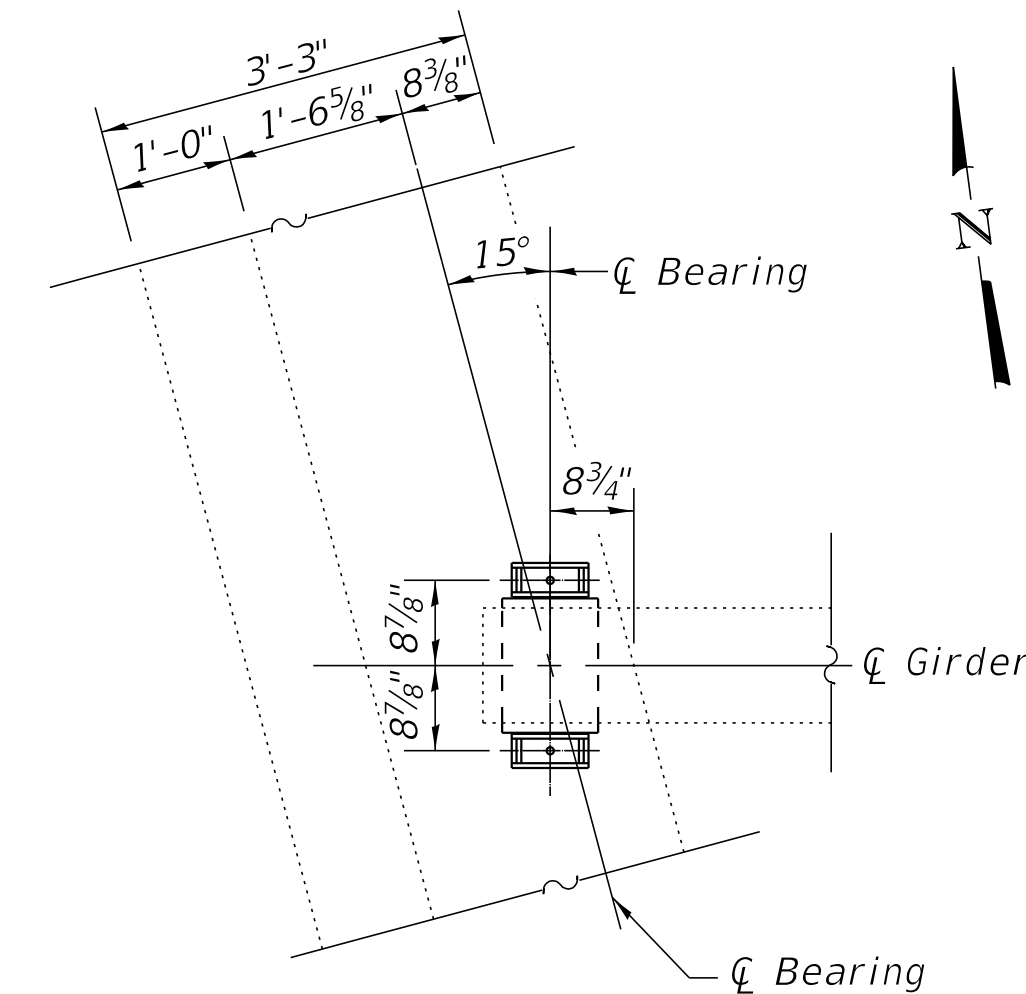
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BEAM REACTIONS AT ABUTMENTS		East & West
R $\bar{D}$	(K)	35.7
R $\bar{L}$	(K)	35.3
IMP.	(K)	9.4
R (Total)	(K)	80.4

	East Abut.	West Abut.
Beam 1		
Beam 2		
Beam 3		
Beam 4	1/4"	1/4"
Beam 5	3/8"	3/8"
Beam 6		

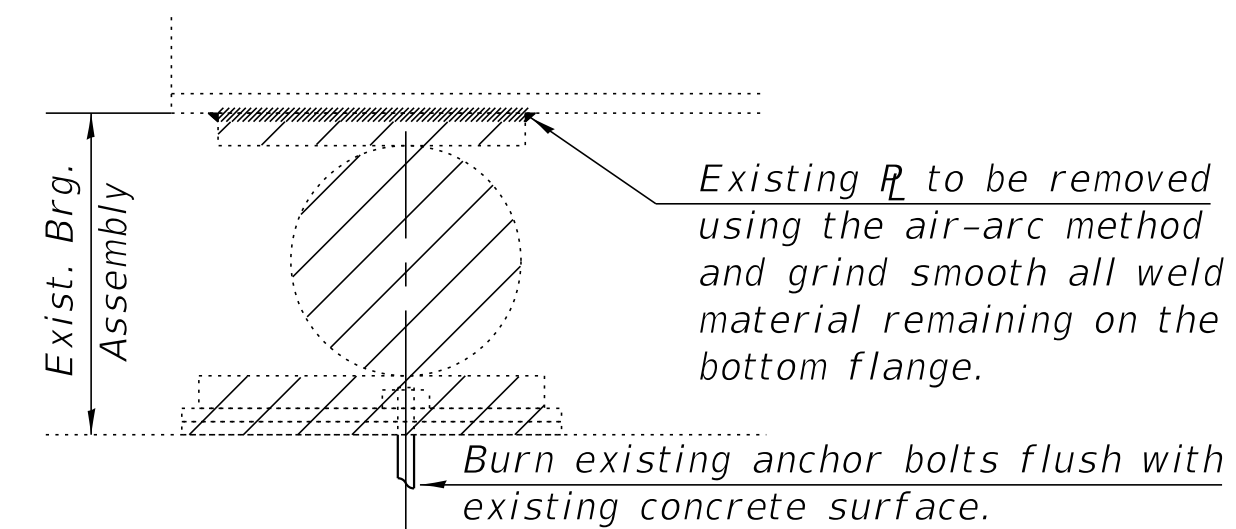
SHIM TABLE

Match plan dimension of top bearing plate. Weight included with Furnishing and Erecting Structural Steel.



PLAN AT ABUTMENTS

West Abutment (as shown)  
East Abutment is similar - opposite hand



EXISTING BEARING REMOVAL DETAIL

Cost Included with Jack and Remove Existing Bearings

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Anchor Bolts, 5/8"	Each	24
Furnishing and Erecting Structural Steel	Pound	169
Jack and Remove Existing Bearings	Each	12

Notes:  
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

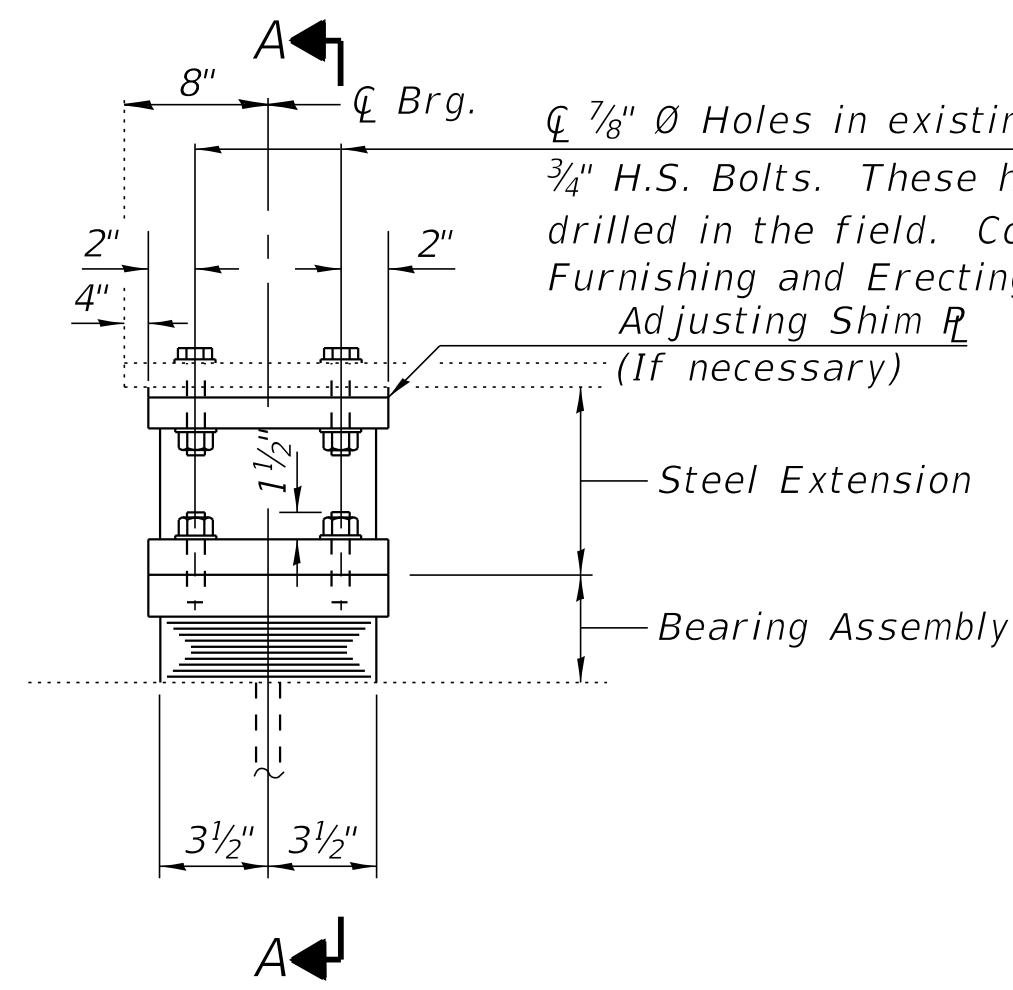
Min Jack Capacity = 62 Tons.  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

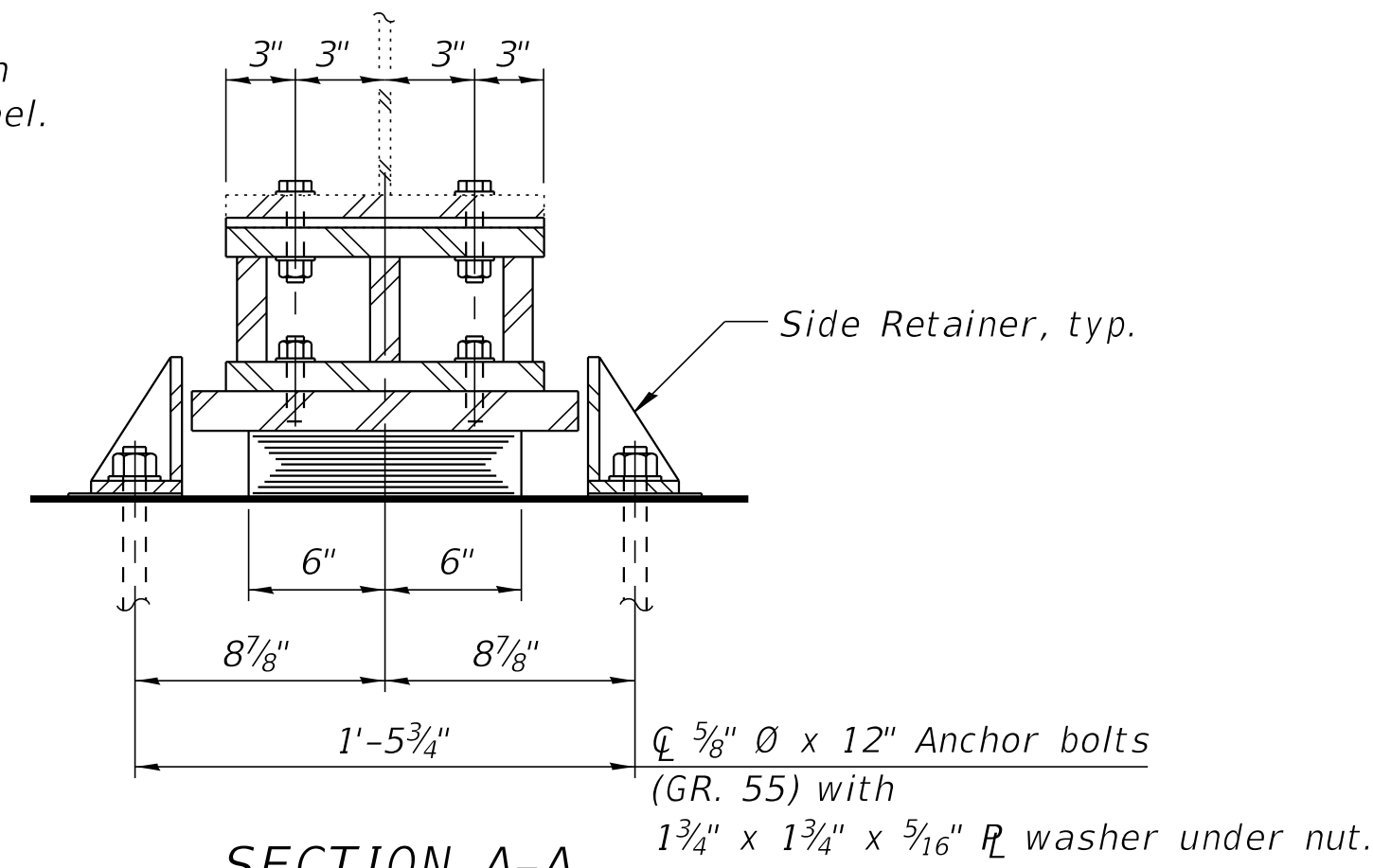
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 207, Grade 50.

Two 1/2 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

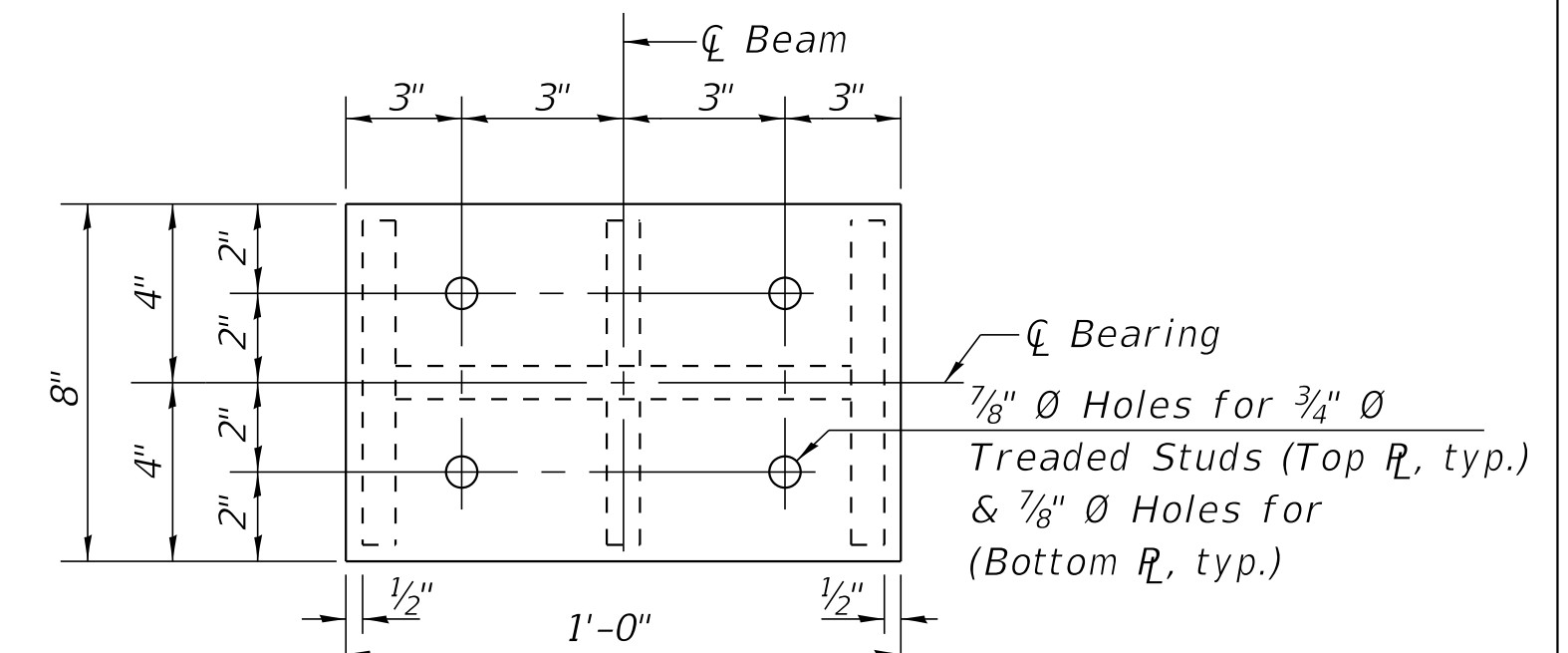
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ELEVATION AT PIER

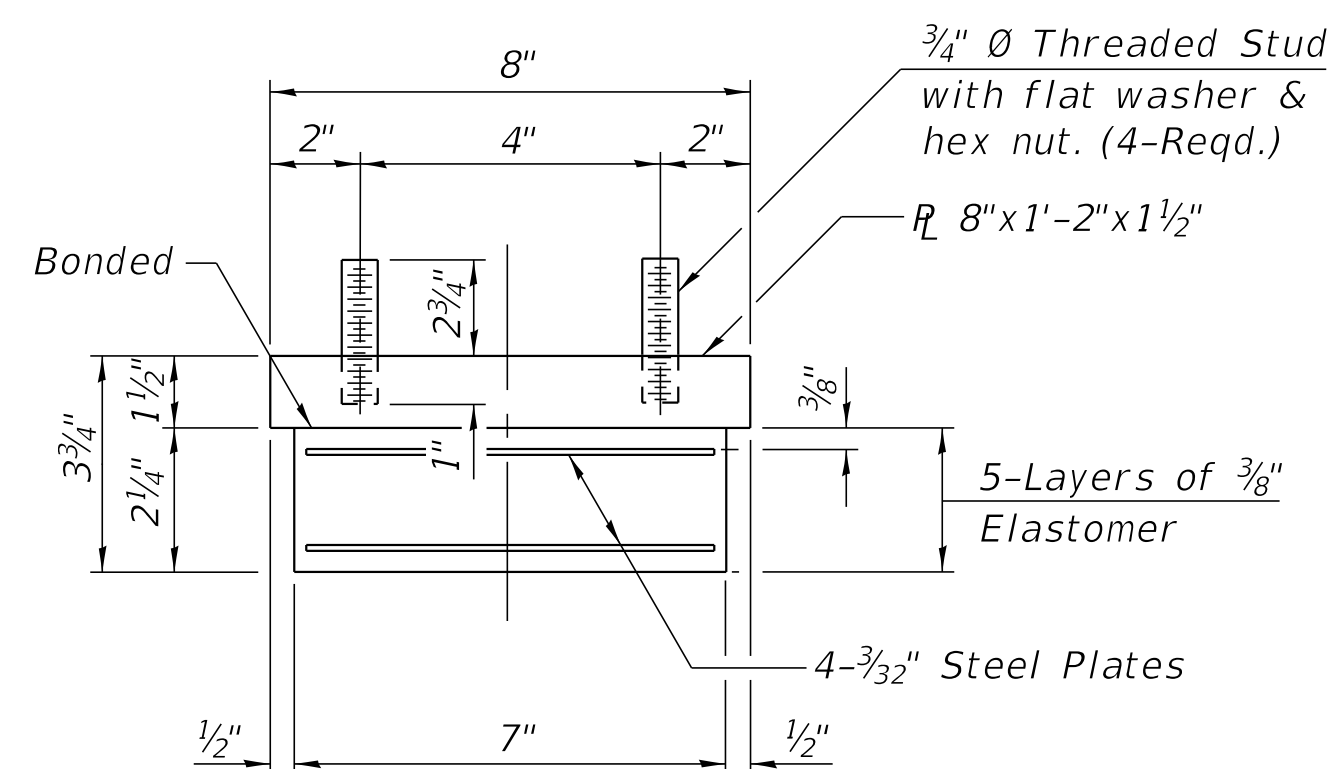


SECTION A-A

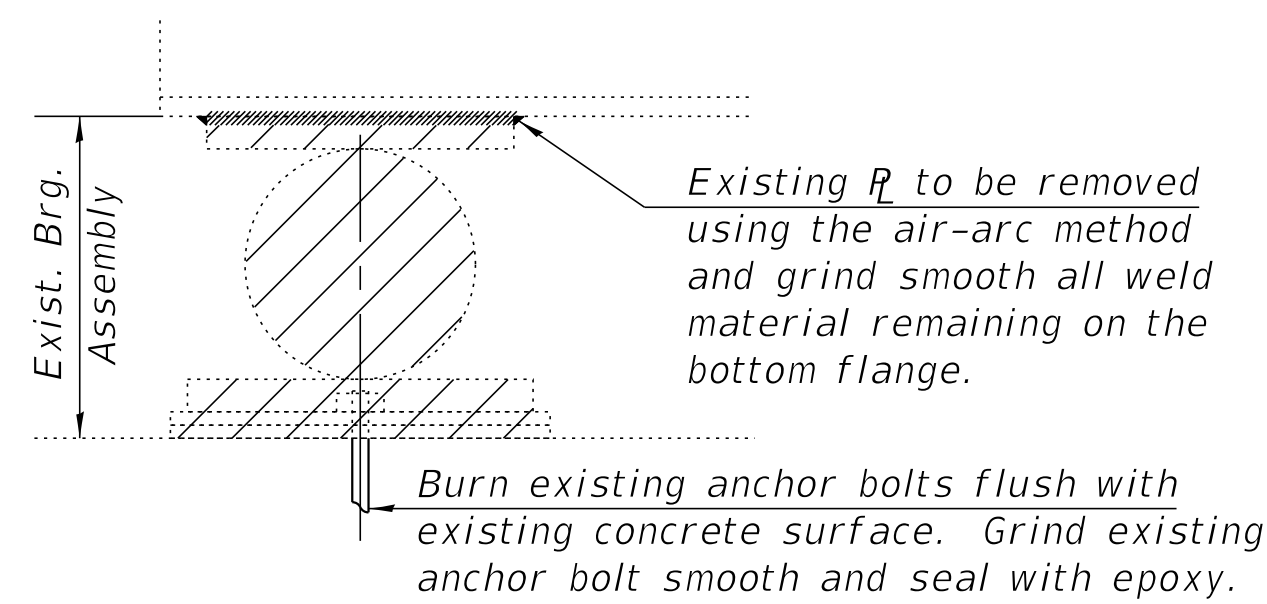


STEEL EXTENSION PLAN

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY



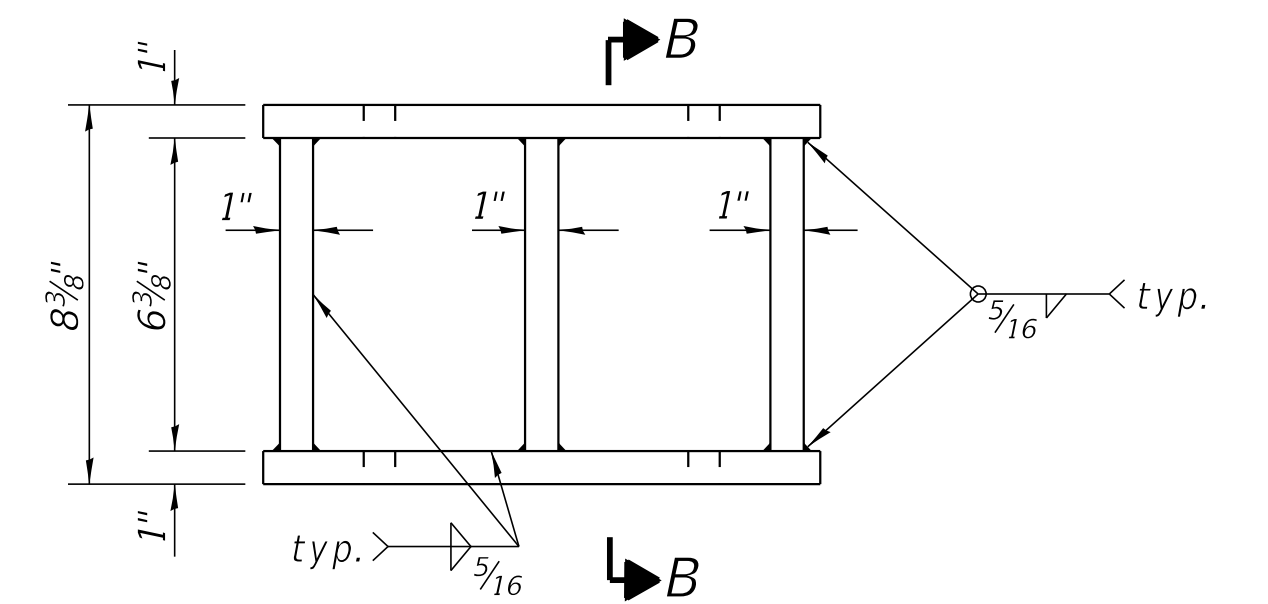
EXISTING BEARING REMOVAL DETAIL

BEAM REACTIONS AT SPANS 2 & 7		Piers 2 & 6
R D	(K)	21.9
R L	(K)	35.3
IMP.	(K)	9.4
R (Total)	(K)	66.6

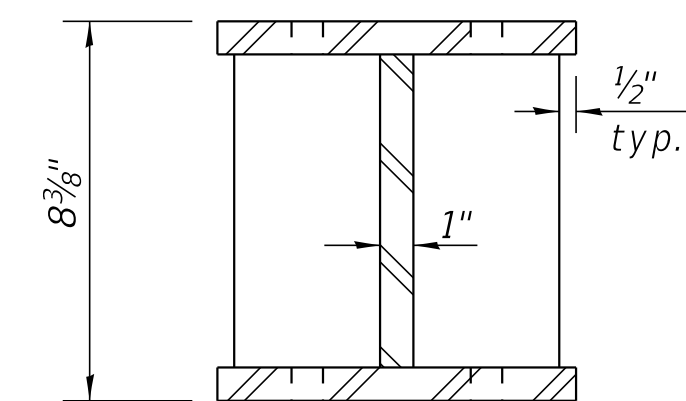
	Pier 2	Pier 6
Beam 1	1/2"	1/2"
Beam 2		
Beam 3	1/2"	1/2"
Beam 4	1/4" & 1/2"	1/4" & 1/2"
Beam 5	3/8"	3/8"
Beam 6	1/2"	1/2"

SHIM TABLE

Match plan dimension of steel extension. Weight included with Furnishing and Erecting Structural Steel.

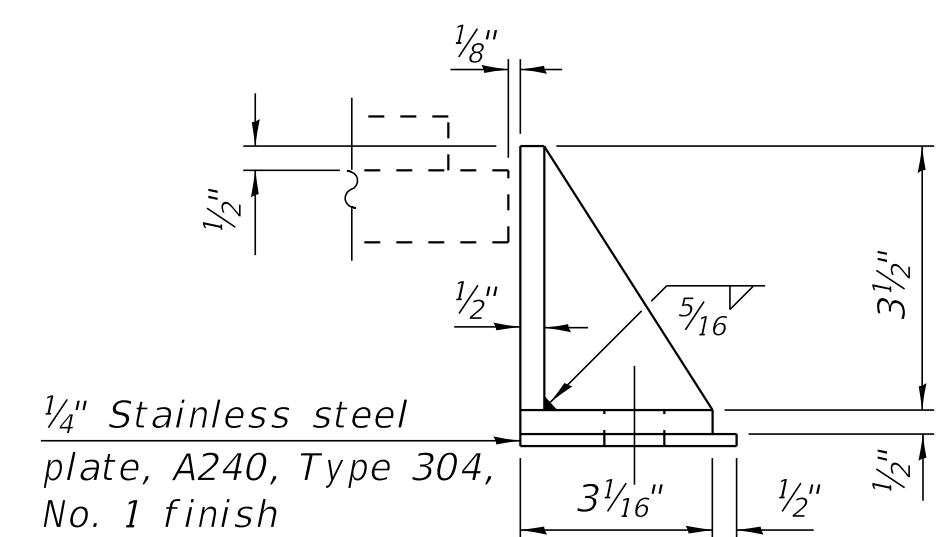


STEEL EXTENSION ELEVATION



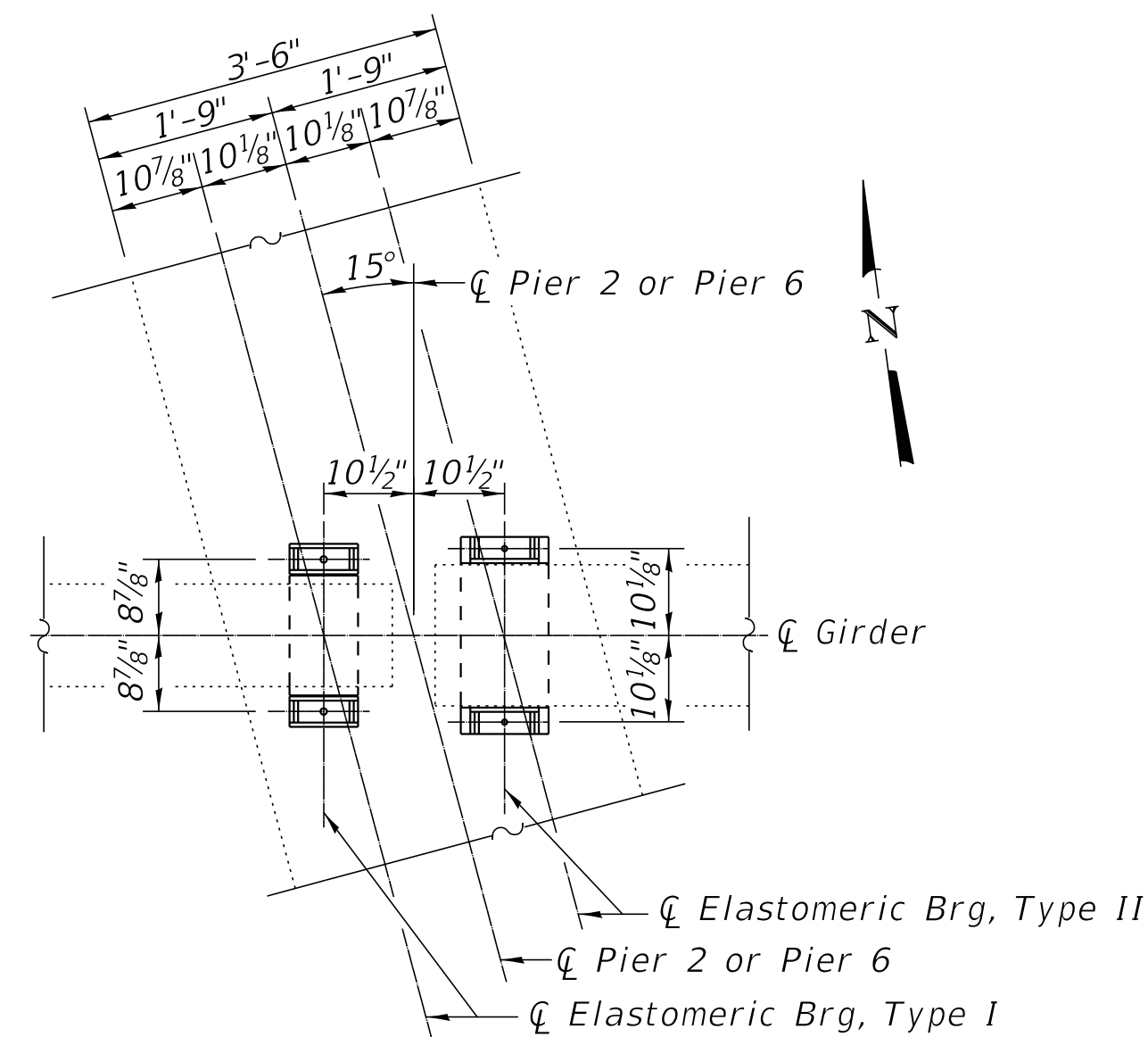
SECTION B-B

Note:  
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN AT PIERS 2 & 6

Pier 2 (as shown)  
Pier 6 is similar - opposite hand

Notes:

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 207, Grade 50.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

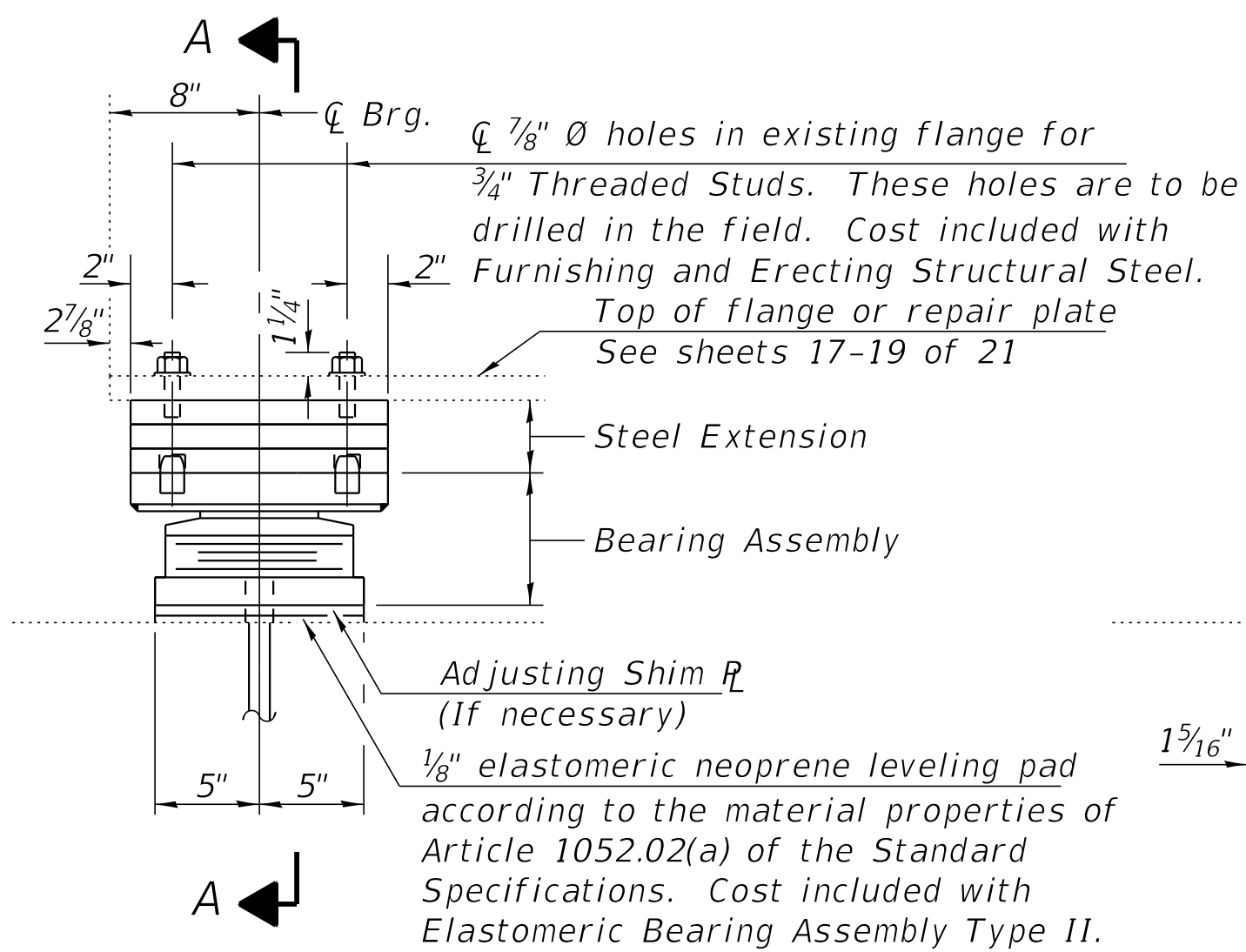
Length of 3/4" bolts connecting to bottom beam flange varies by location. See sheets 17-19 of 21 for additional plates not shown here.

BILL OF MATERIAL

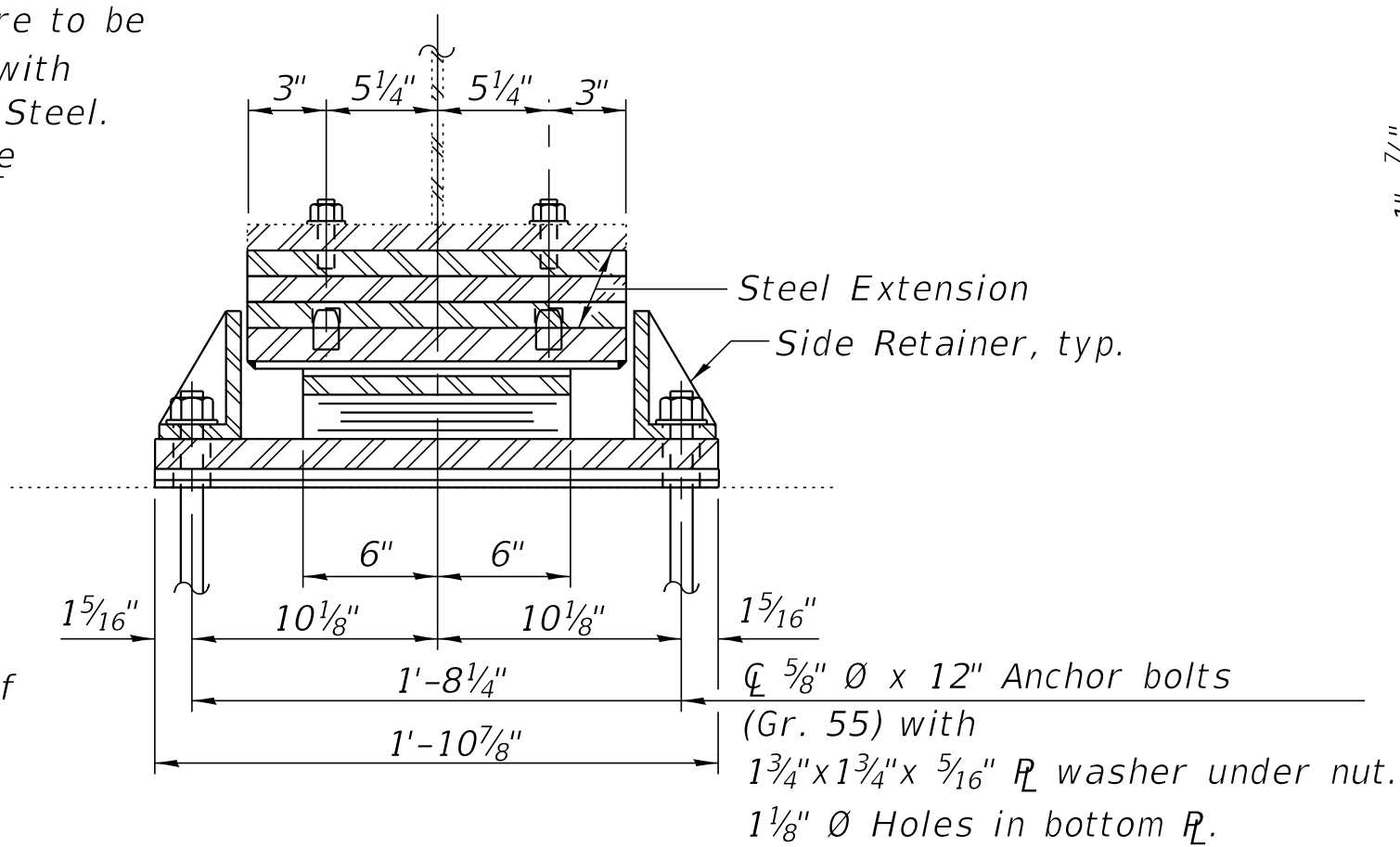
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Anchor Bolts, 5/8"	Each	24
Furnishing and Erecting Structural Steel	Pound	1,528
Removal of Existing Bearings	Each	12

USER NAME =	DESIGNED - BLB	REVISED -
	CHECKED - BAB	REVISED -
PLOT SCALE =	DRAWN - BLB	REVISED -
PLOT DATE	DATE - 10-08-18	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	31
CONTRACT NO. 61F12				
		ILLINOIS	FED. AID PROJECT	

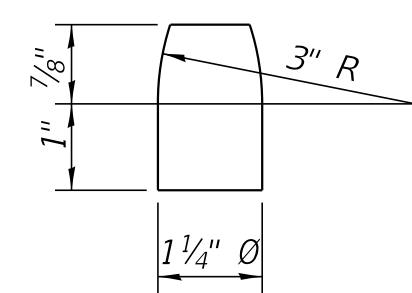


**ELEVATION AT PIER**



**SECTION A-A**

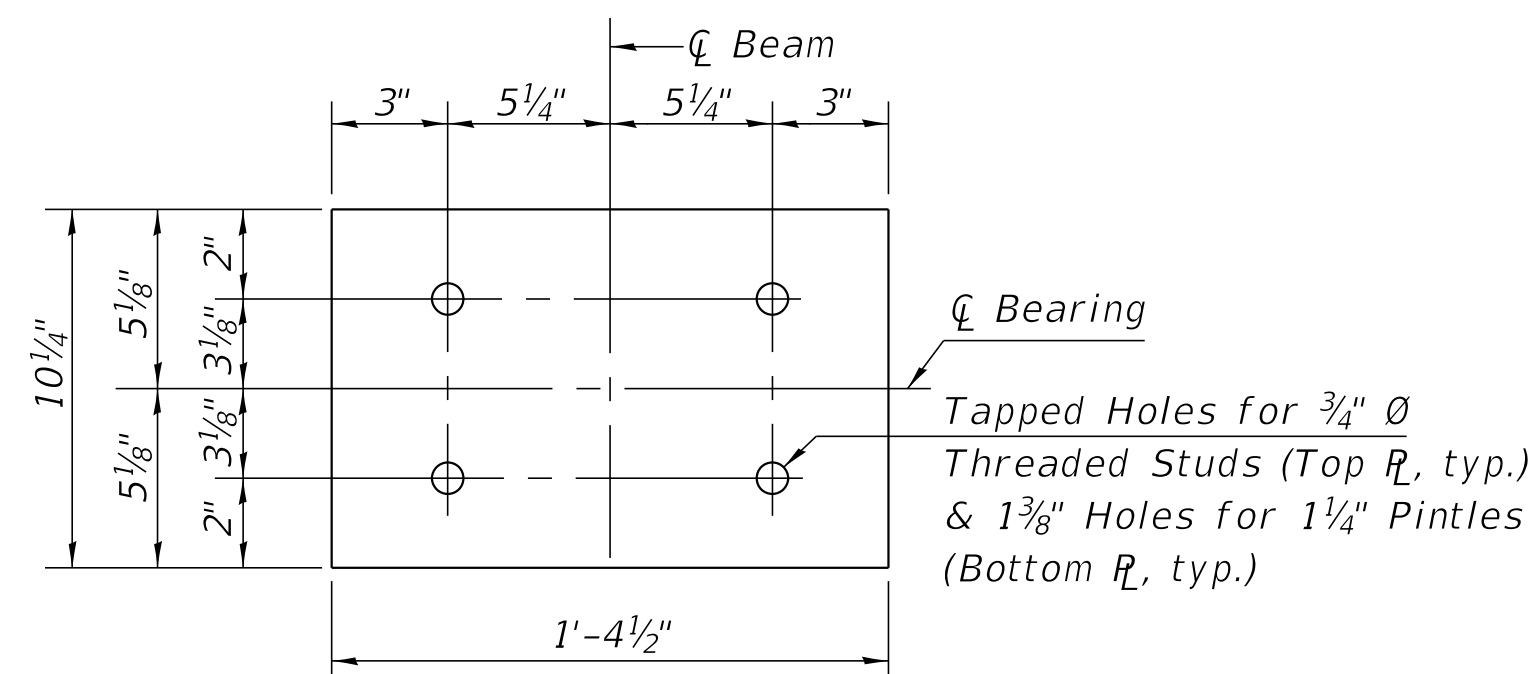
**TYPE II ELASTOMERIC EXP. BRG.**



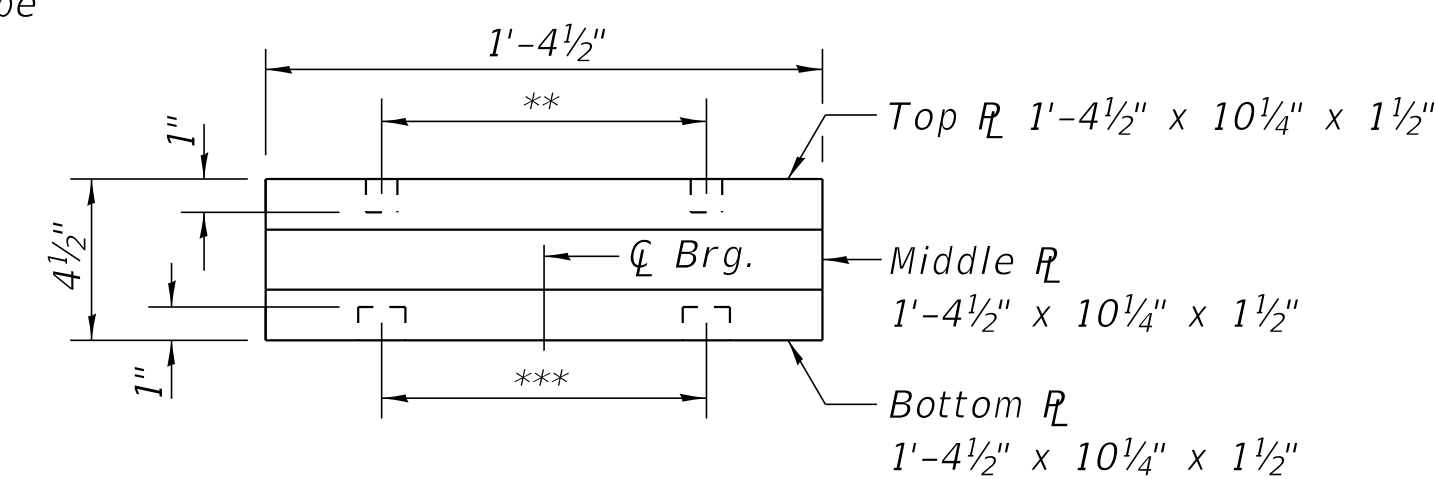
**PINTLE**

\*\* Tapped Holes for 3/4" Ø Threaded Studs (may be tapped in field)

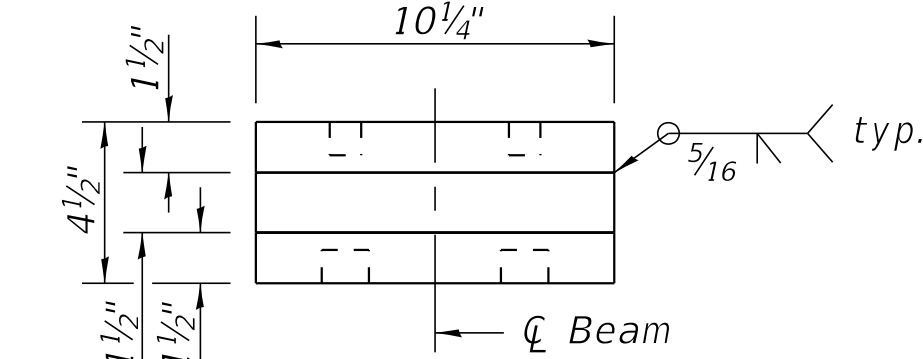
\*\*\* 1 3/8" Holes for 1 1/4" Pintles



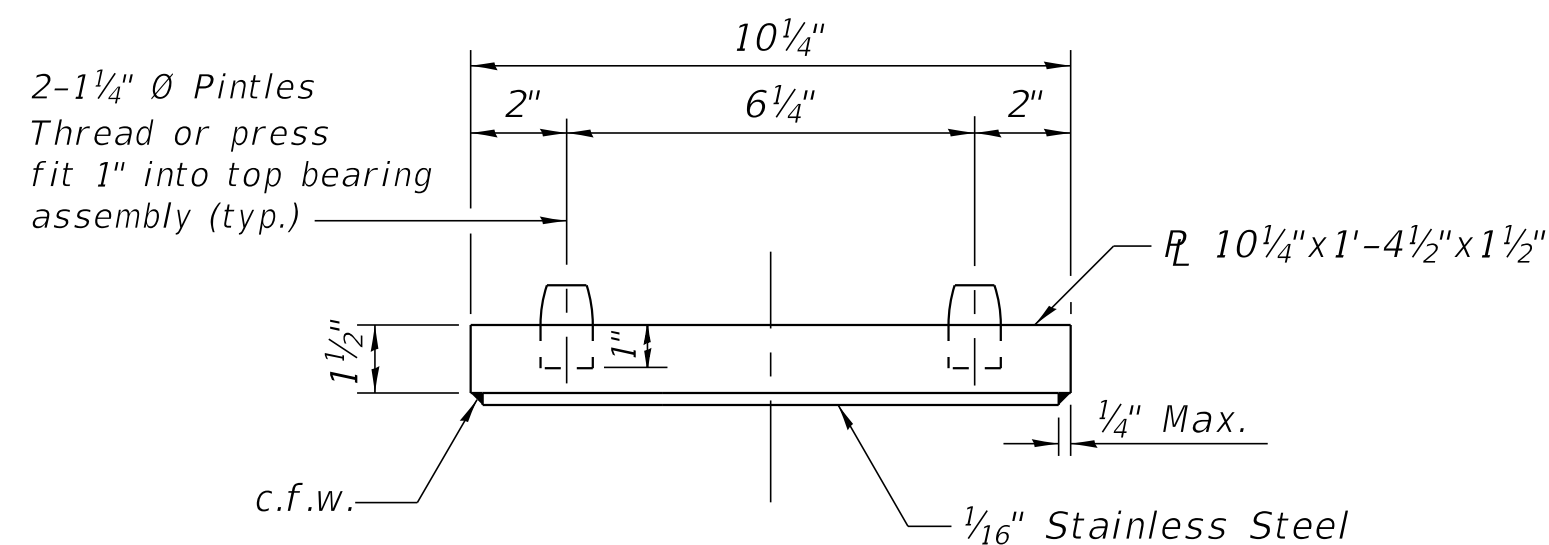
**STEEL EXTENSION PLAN**



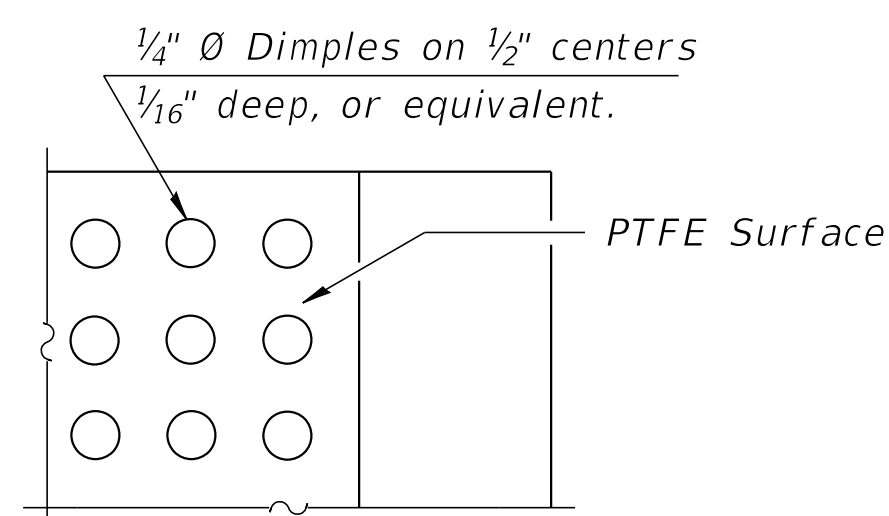
**STEEL EXTENSION ELEVATION**



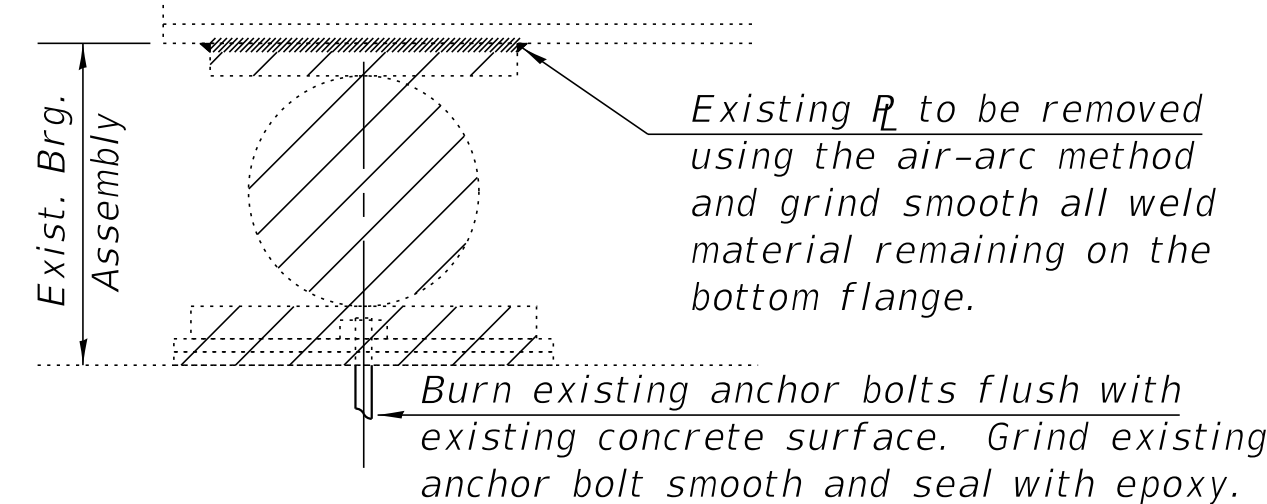
**STEEL EXTENSION END VIEW**



**TOP BEARING ASSEMBLY**

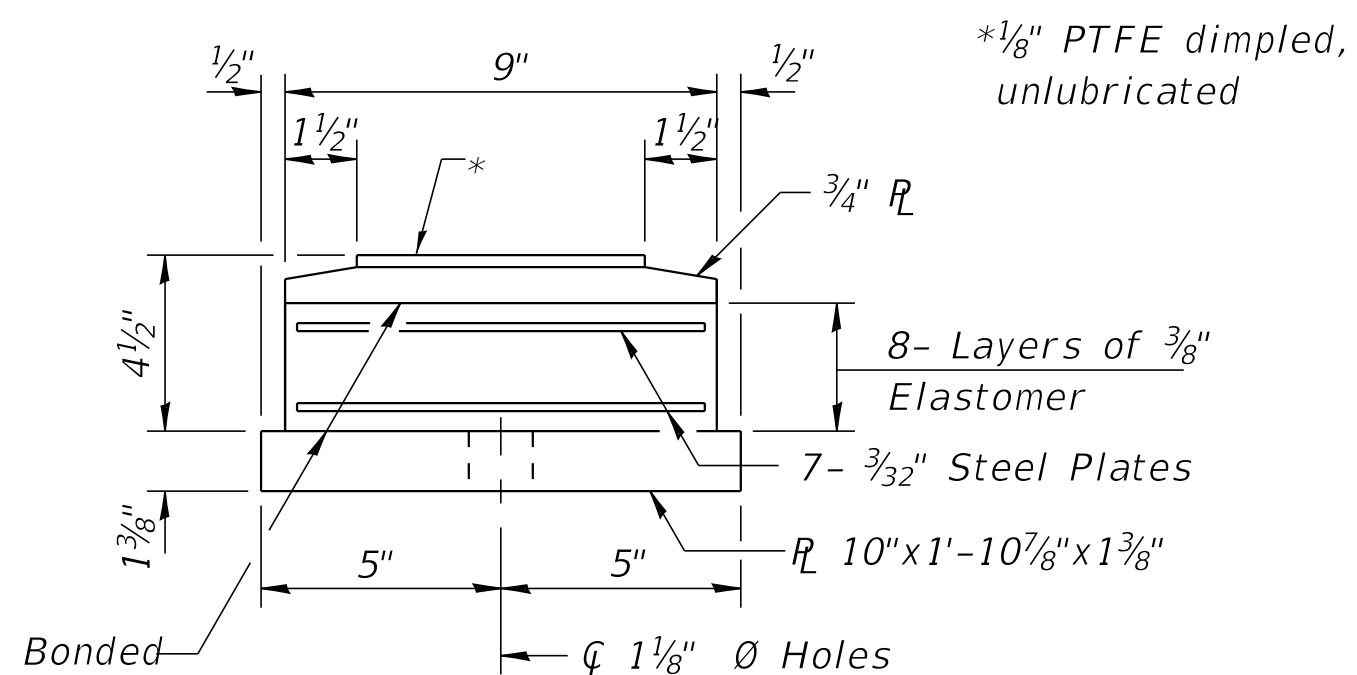


**PLAN-PTFE SURFACE**

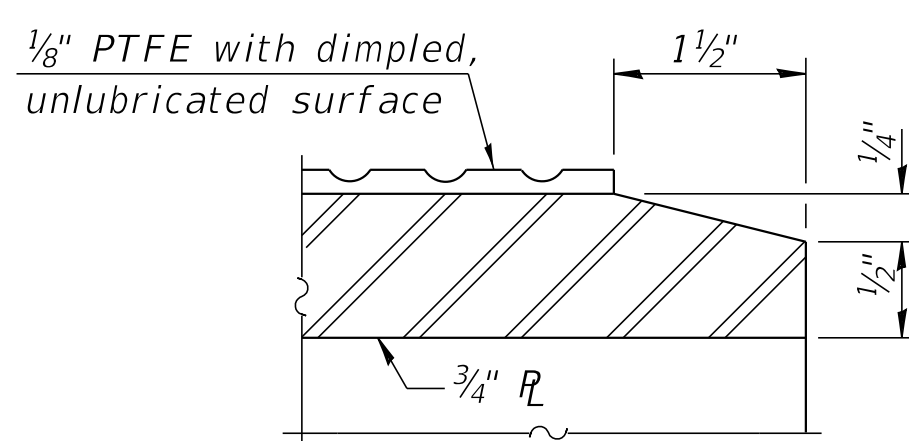


**EXISTING BEARING REMOVAL DETAIL**

Cost Included with Removal of Existing Bearings



**BOTTOM BEARING ASSEMBLY**



**SECTION THRU PTFE**

BEAM REACTIONS AT SPANS 3 & 6		
Piers 2 & 6		
R D	(K)	29.2
R L	(K)	36.5
IMP.	(K)	9.0
R (Total)	(K)	74.7

	Pier 2	Pier 6
Beam 1	1/2"	1/2"
Beam 2		
Beam 3		
Beam 4	1/4" & 1/2"	1/4" & 1/2"
Beam 5	3/8"	3/8"
Beam 6	1/2"	1/2"

**SHIM TABLE**

Match plan dimension of bottom bearing plate. Weight included with Furnishing and Erecting Structural Steel.

Notes:

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if Present).

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M 270, Grade 50.

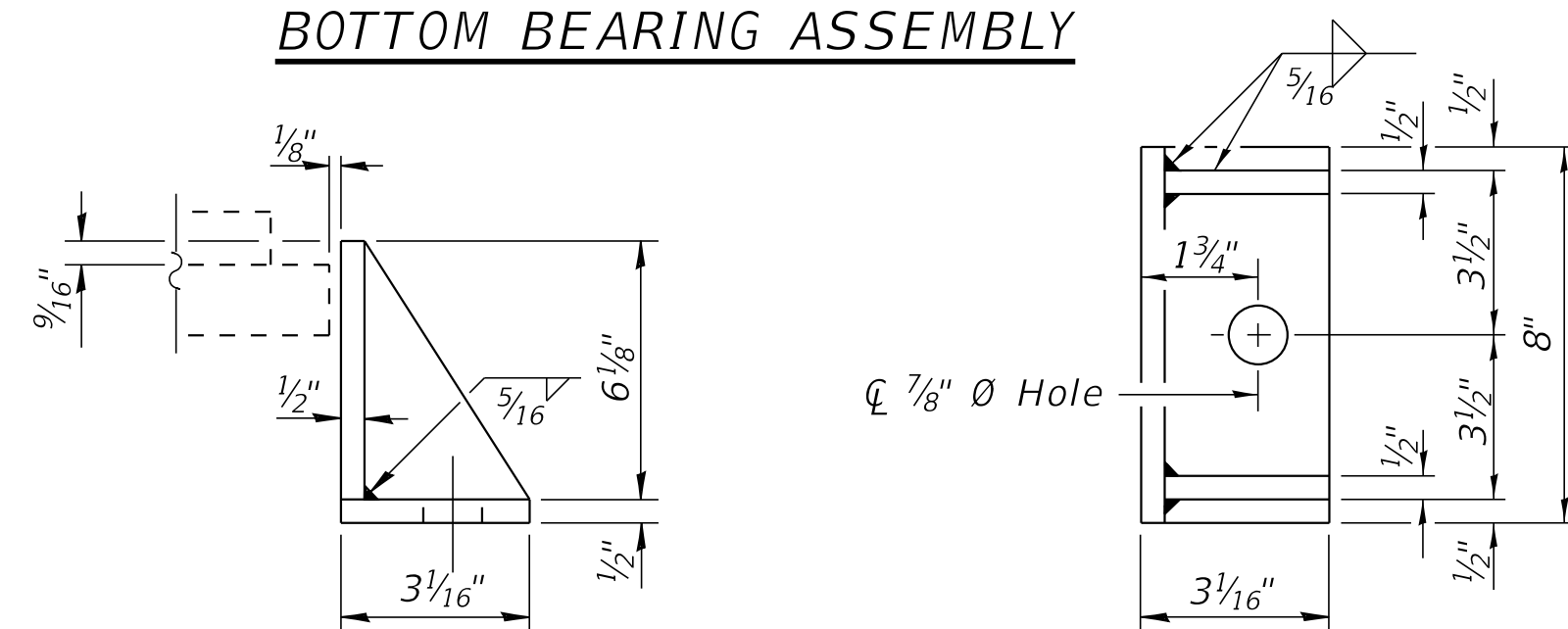
The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

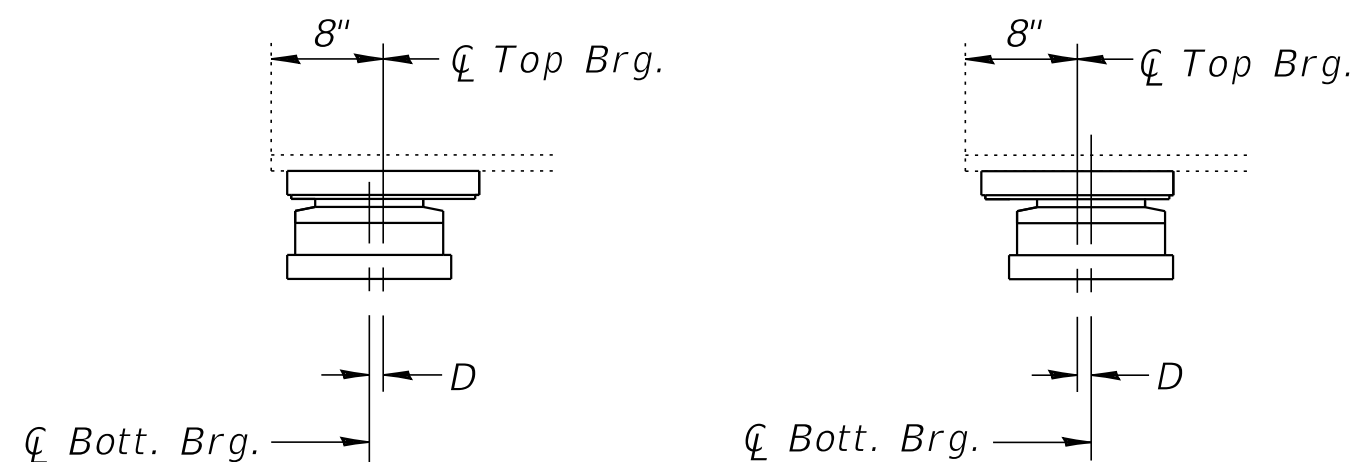
See sheet 12 of 21 for Plan at Piers 2 & 6.

Length of 3/4" threaded studs varies by location. See sheets 17-19 of 21 for additional plates not shown here.



**SIDE RETAINER**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50°F.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

ABOVE 50°F.

**EXPANSION BEARING ORIENTATION**

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

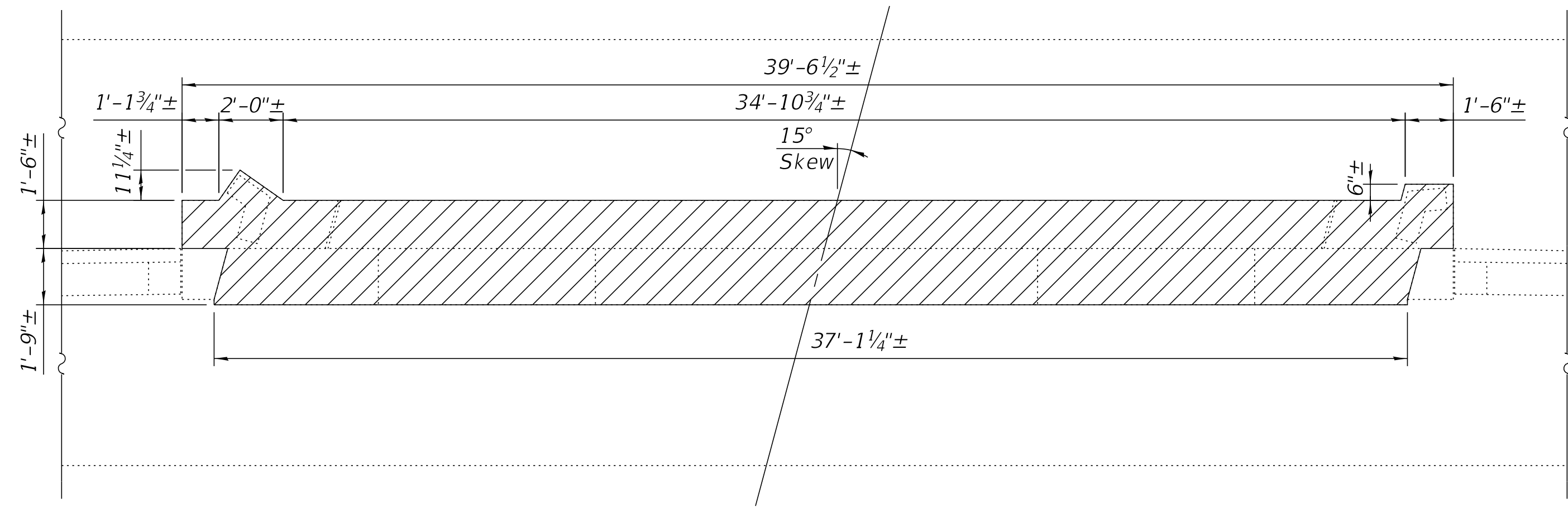
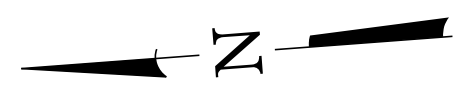
**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	12
Anchor Bolts, 3/8"	Each	24
Furnishing and Erecting Structural Steel	Pound	3,084
Removal of Existing Bearings	Each	12

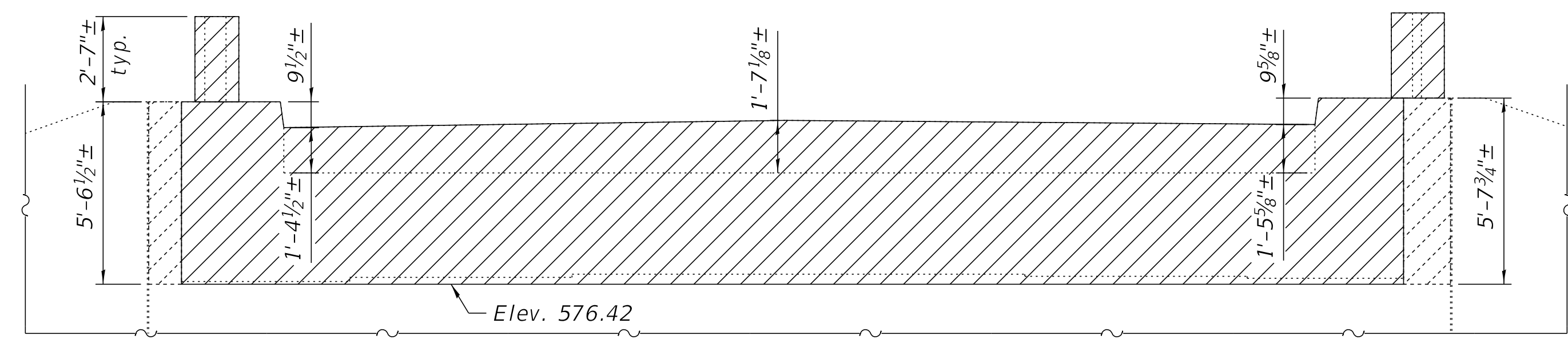
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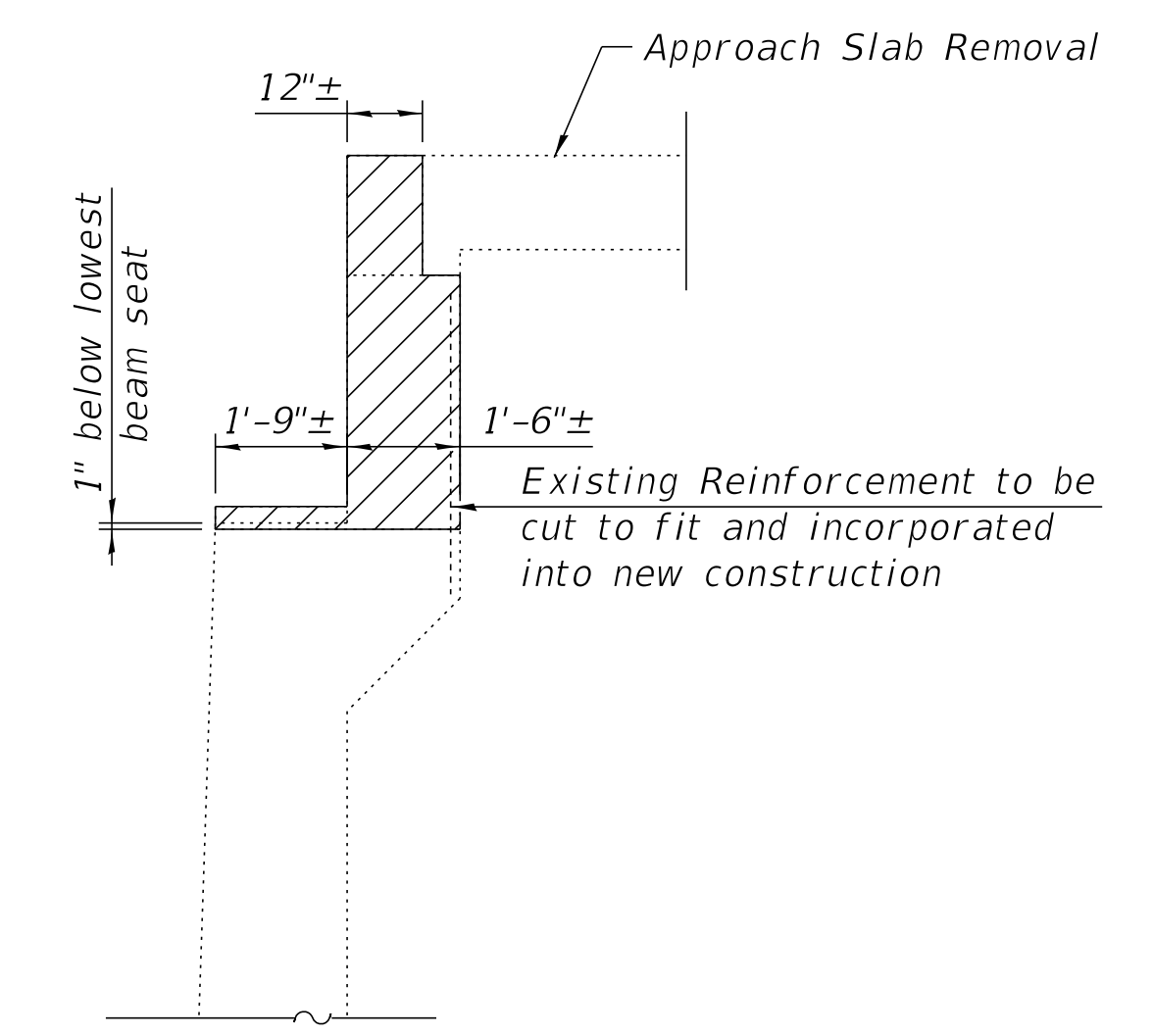
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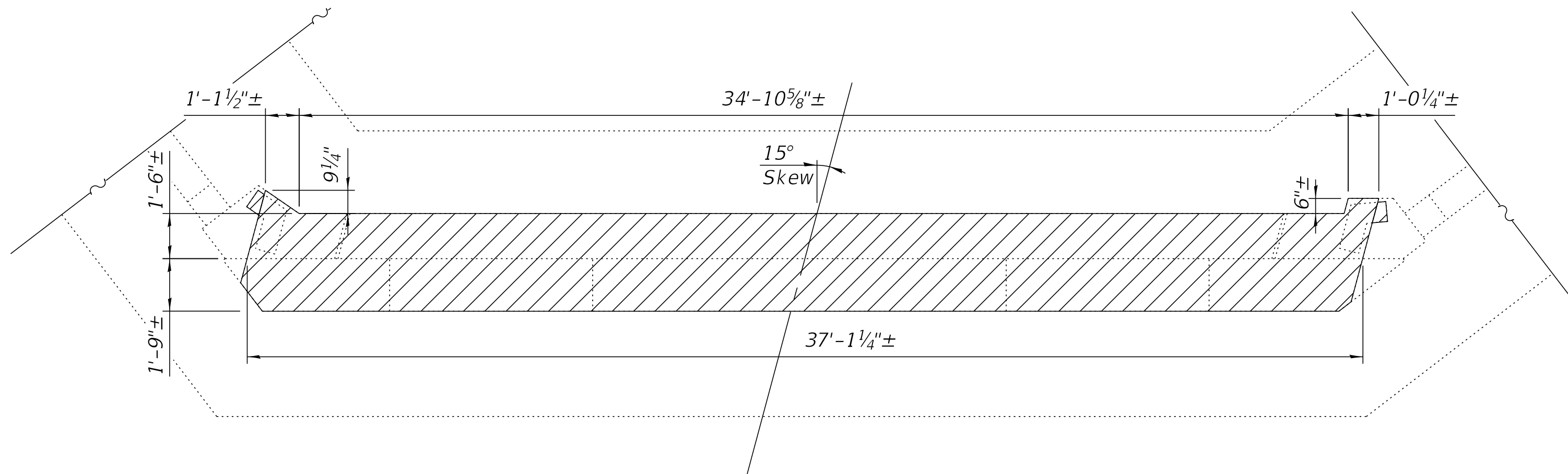
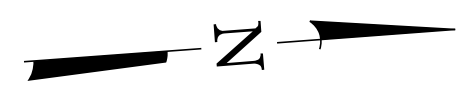
**PLAN**



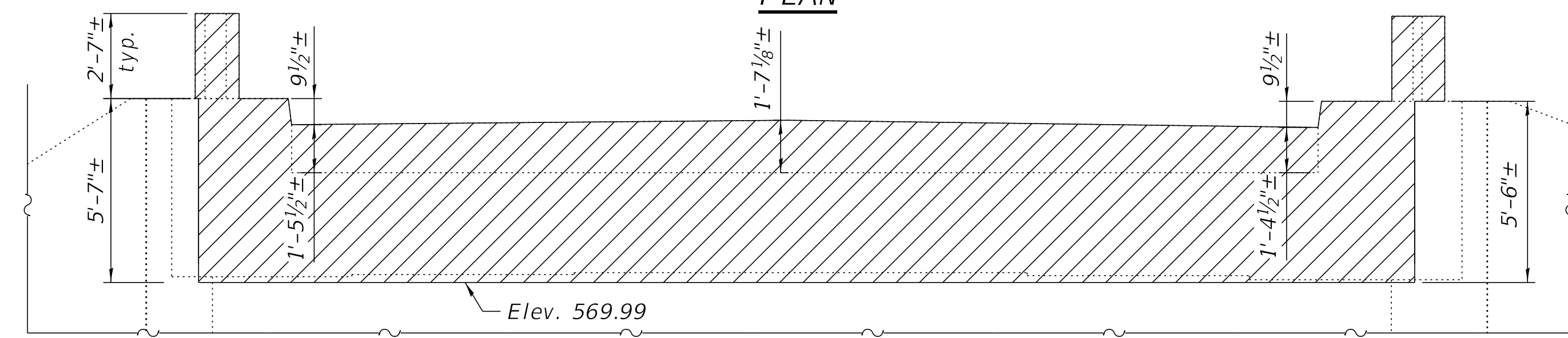
**ELEVATION  
EAST ABUTMENT REMOVAL**



**TYPICAL SECTION THRU ABUTMENT**  
Dimensions at right angles to abutment.



**PLAN**



**ELEVATION  
WEST ABUTMENT REMOVAL**

**Notes:**  
 Hatched areas indicate Concrete Removal.  
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.  
 See sheets 15 and 16 of 21 for Concrete Removal quantities for abutments.



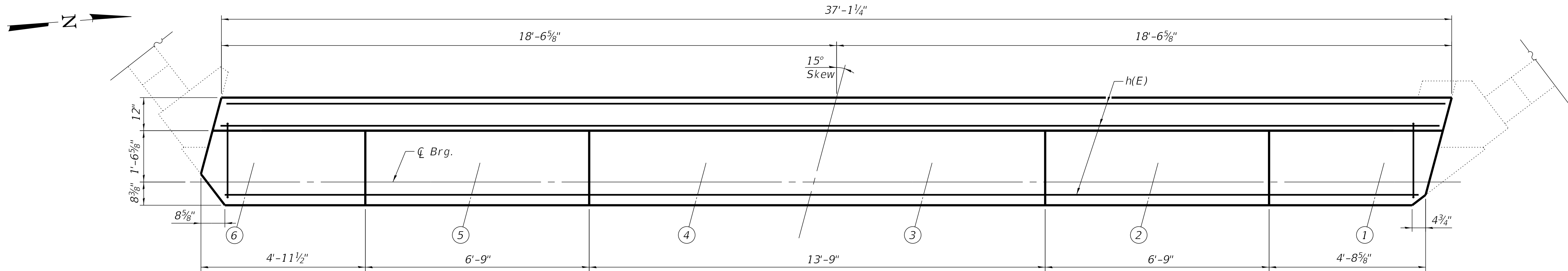
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PLOT DATE =	DATE - 10-08-18	REVISED -

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DEPARTMENT OF TRANSPORTATION**

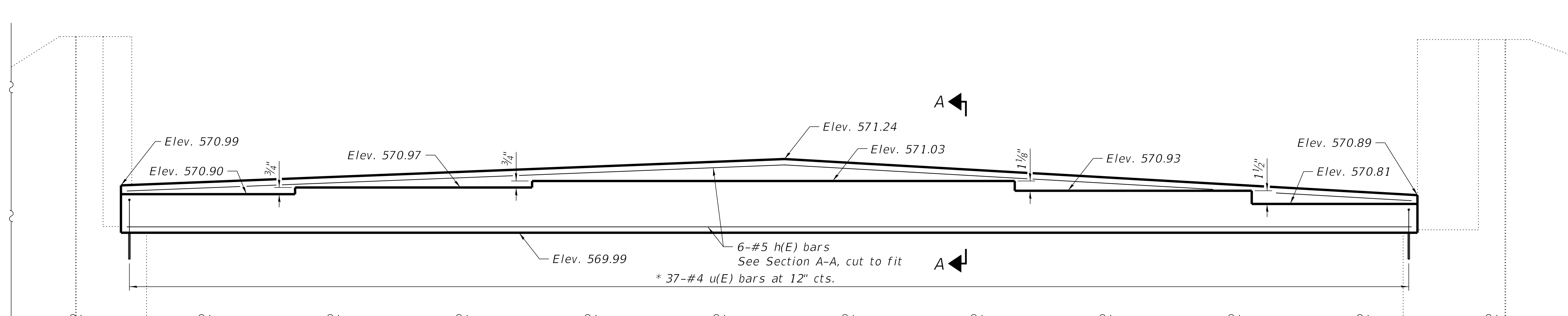
**ABUTMENT REMOVAL DETAILS  
STRUCTURE NO. 099-0135**

SHEET NO. 14 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	33
CONTRACT NO. 61F12				
		ILLINOIS	FED. AID PROJECT	

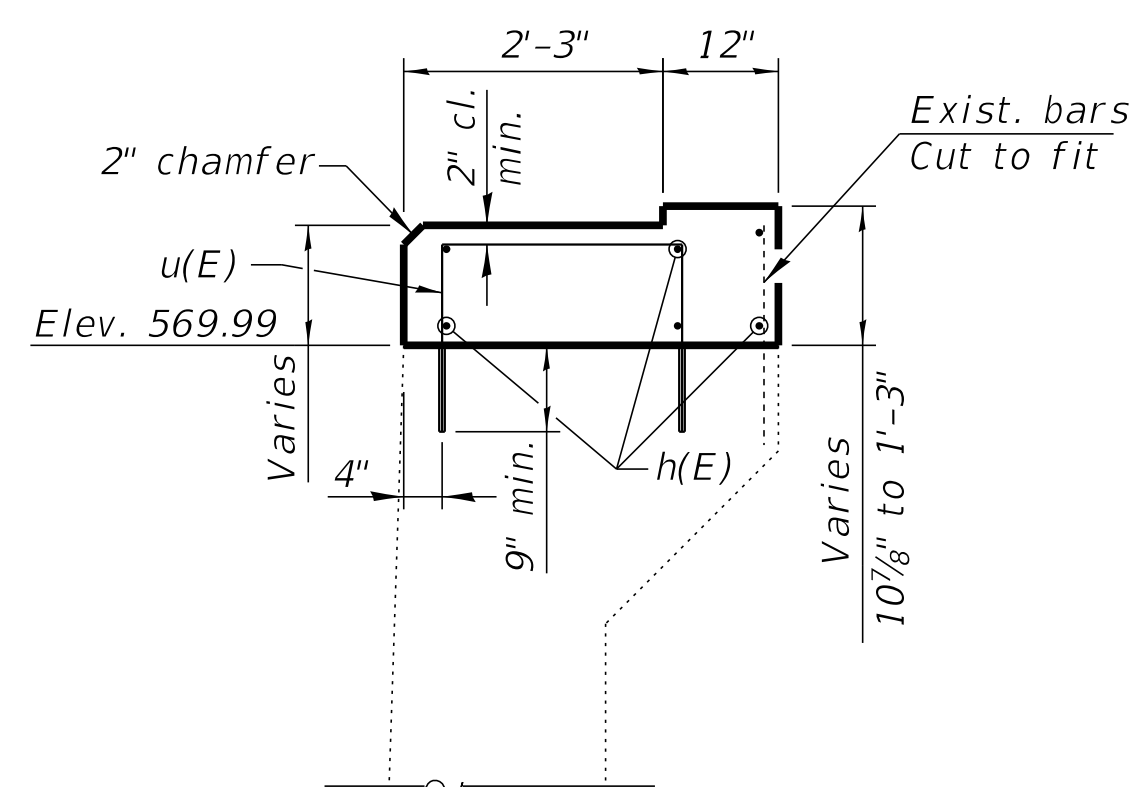


**PLAN**



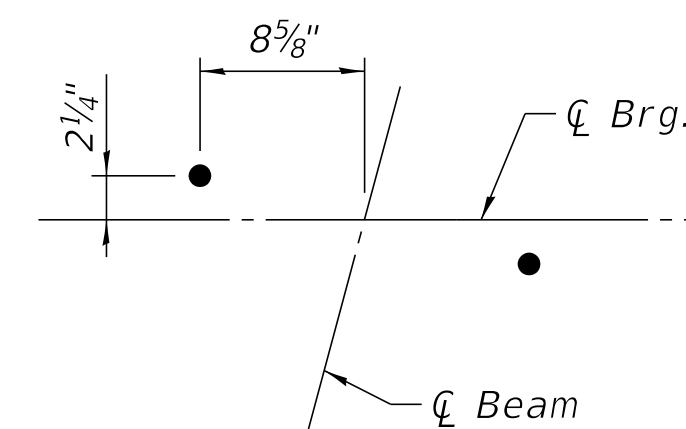
**ELEVATION**

\* Cut bars or drill deeper holes to fit

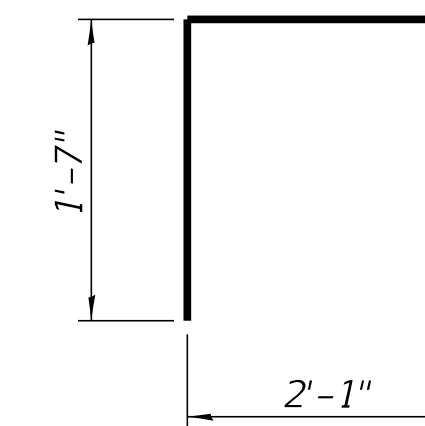


**SECTION A-A**

Dimensions at right angles to abutment.



**ANCHOR BOLT LAYOUT**



**BAR u(E)**

Notes:

All construction joints between new and existing concrete shall be Bonded Construction Joints. Space reinforcement in cap to miss anchor bolts. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

**WEST ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	6	#5	36'-9"	—
u(E)	37	#4	5'-3"	□
Concrete Removal			Cu. Yd.	10.4
Concrete Structures			Cu. Yd.	4.5
Reinforcement Bars, Epoxy Coated			Pound	360

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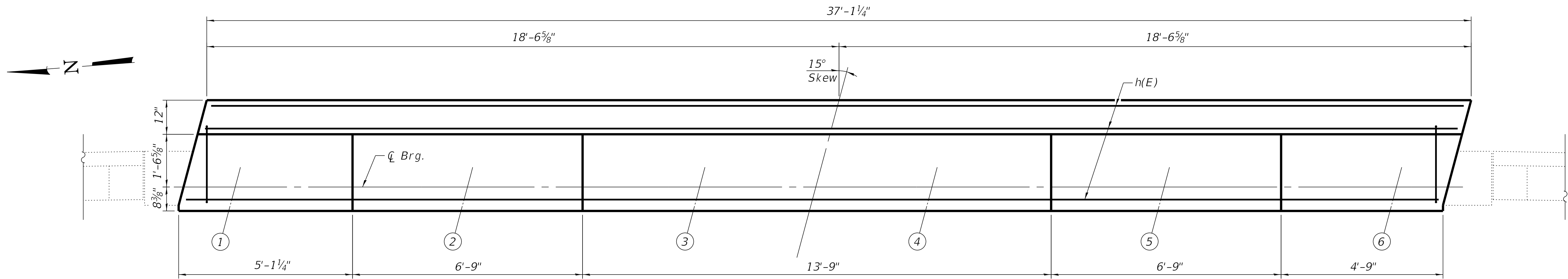
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

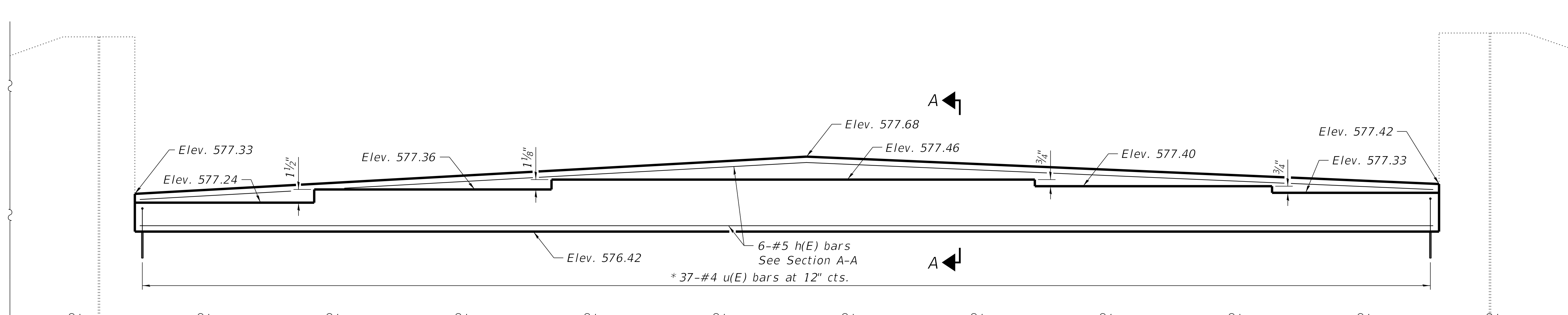
**WEST ABUTMENT  
STRUCTURE NO. 099-0135**

SHEET NO. 15 OF 21 SHEETS

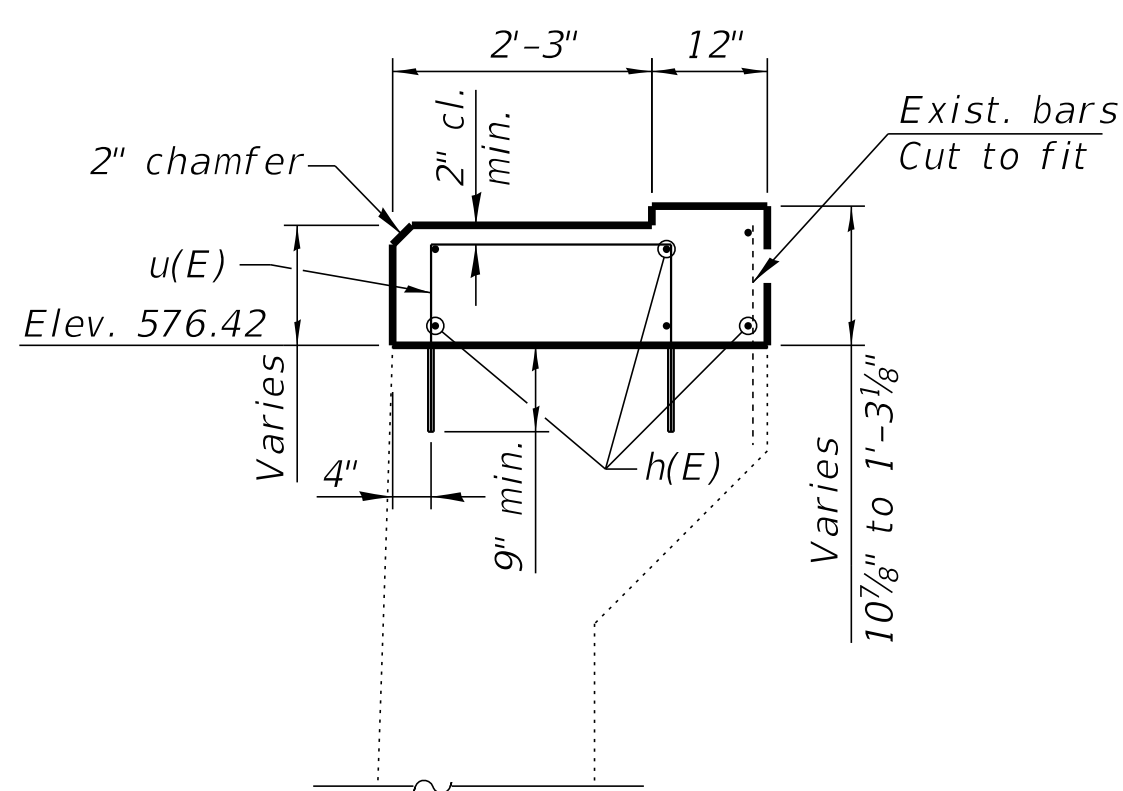
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	34
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				



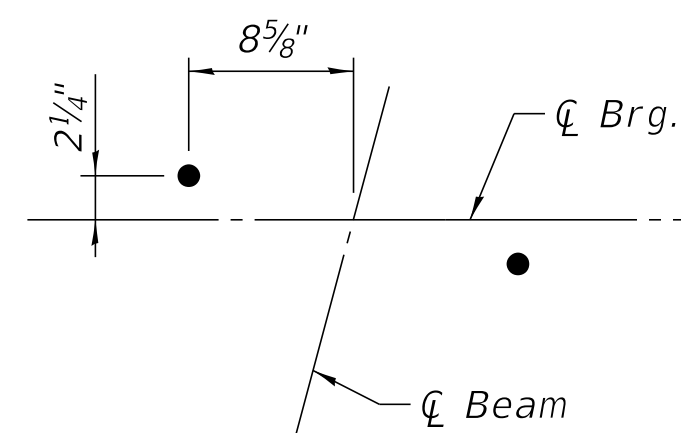
PLAN



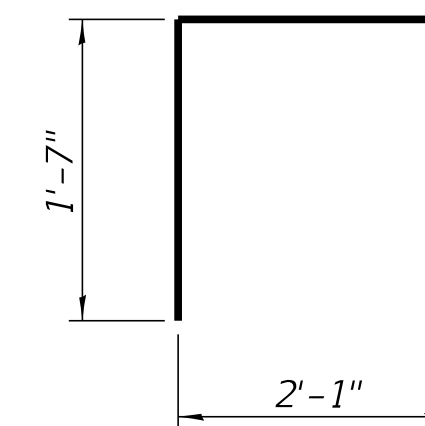
ELEVATION



SECTION A-A  
Dimensions at right angles to abutment.



ANCHOR BOLT LAYOUT



BAR u(E)

Notes:  
All construction joints between new and existing concrete shall be Bonded Construction Joints.  
Space reinforcement in cap to miss anchor bolts.  
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

EAST ABUTMENT  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	6	#5	36'-9"	—
u(E)	37	#4	5'-3"	□
Concrete Removal			Cu. Yd.	11.4
Concrete Structures			Cu. Yd.	4.6
Reinforcement Bars, Epoxy Coated			Pound	360

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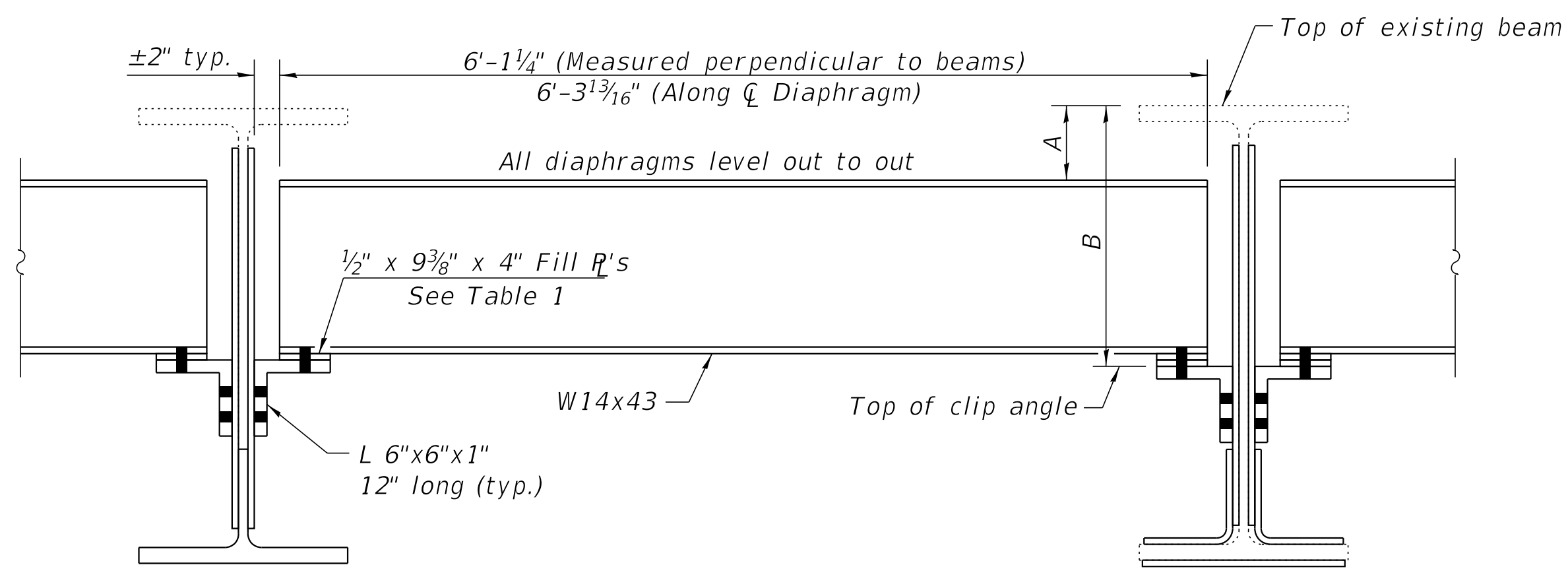
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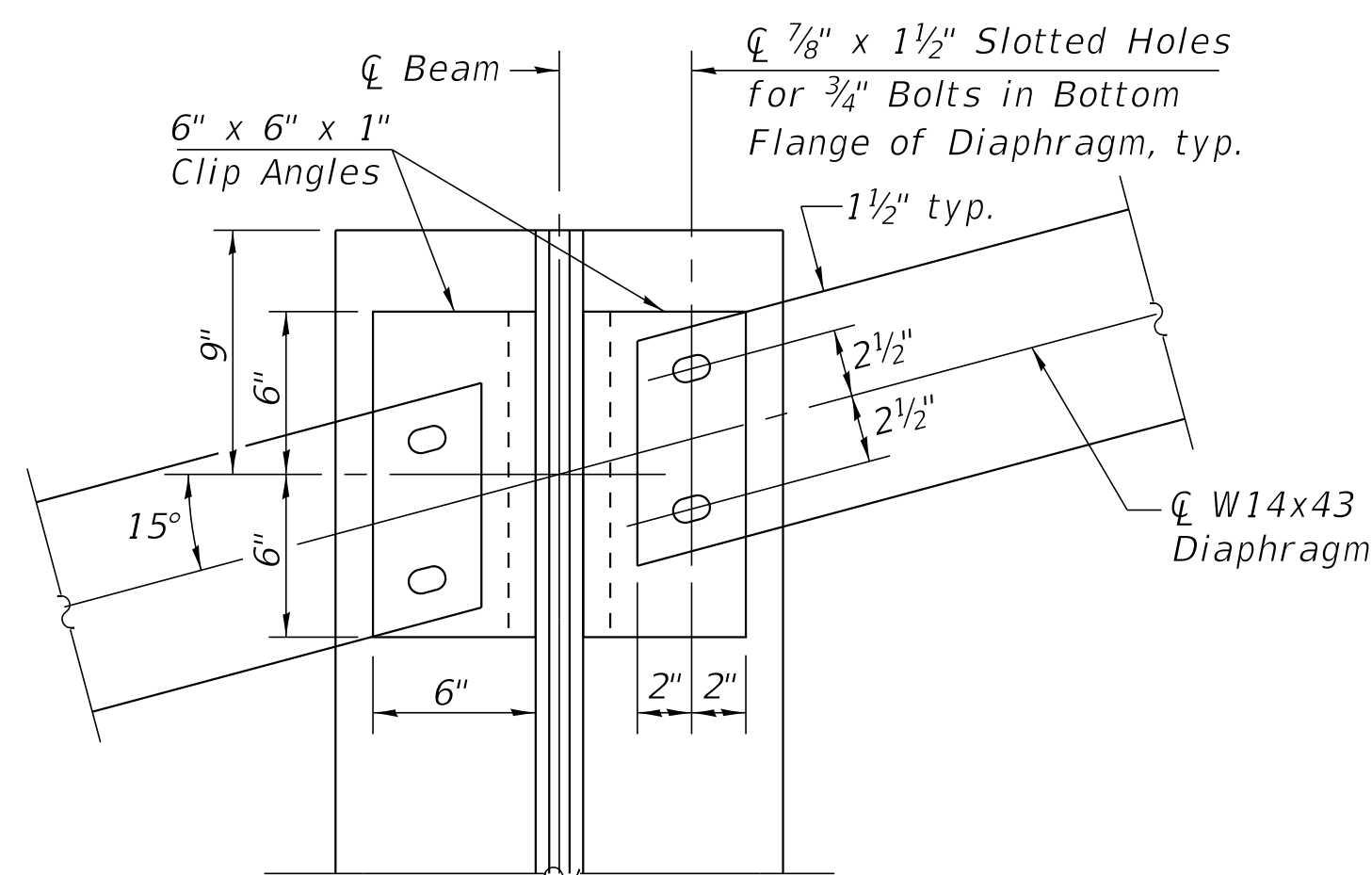
EAST ABUTMENT  
STRUCTURE NO. 099-0135

SHEET NO. 16 OF 21 SHEETS

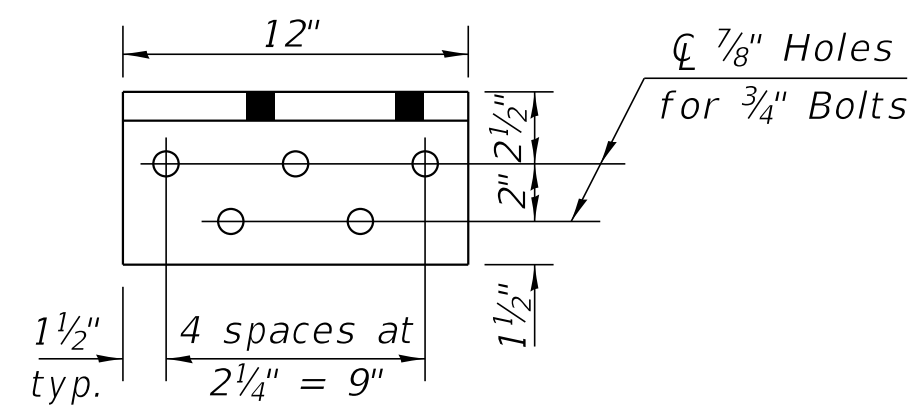
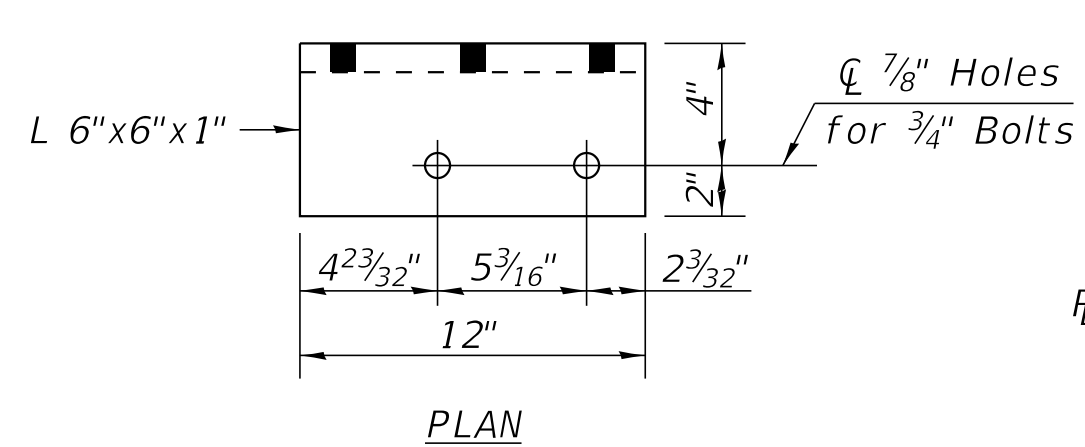
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351	15-00083-00-BR	WILL	46	35
			CONTRACT NO. 61F12	
		ILLINOIS FED. AID PROJECT		



TYPICAL DIAPHRAGM ELEVATION  
(20 Required)

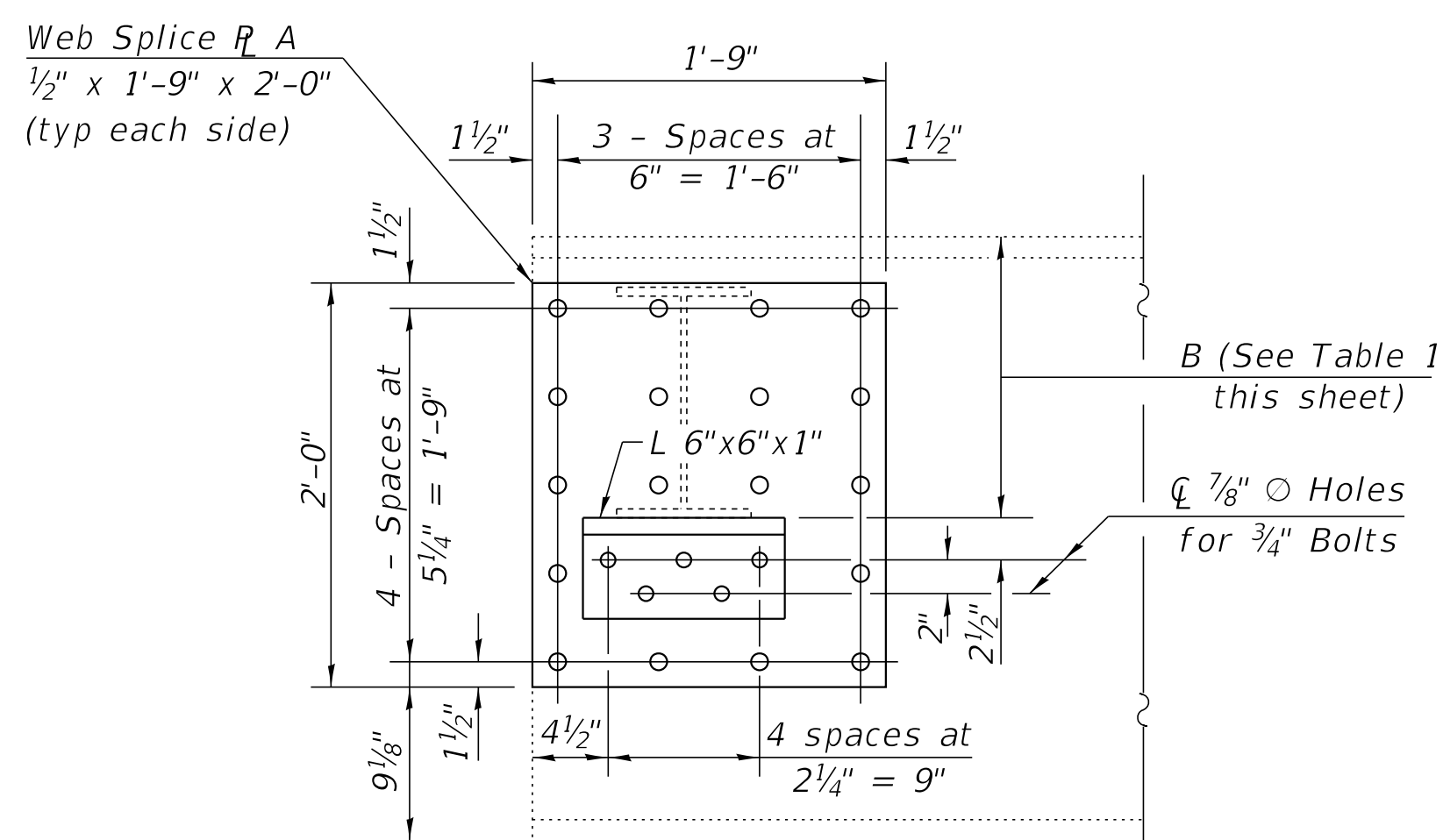


TYPICAL DIAPHRAGM PLAN



CLIP ANGLE DETAILS  
(40 Required)

At Contractor's option,  
holes in clip angles  
maybe field drilled.



REPAIR "A"  
(8 Required)

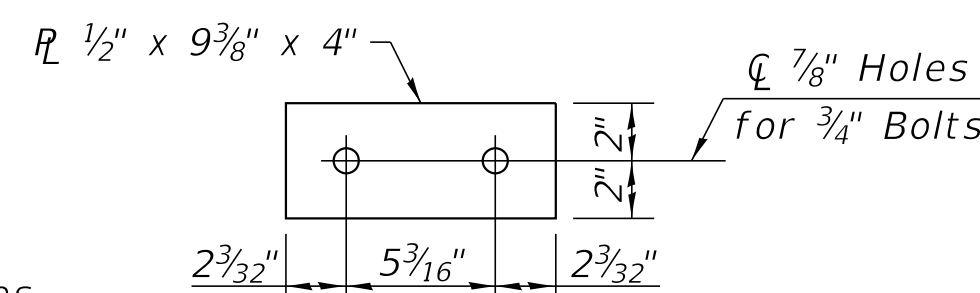
TABLE 1  
SPANS 2 & 7

Beam No.	A	B	# of Fill P
1	3"	1'-4 3/4"	0
2	4 1/2"	1'-7 3/4"	3
3	5 5/8"	1'-8 7/8"	3
4	5 7/8"	1'-8 5/8"	2
5	5 1/4"	1'-8"	2
6	4 1/8"	1'-5 7/8"	0

SPANS 3 & 6

Beam No.	A	B	# of Fill P
1	3"	1'-4 3/4"	0
2	4 1/2"	1'-7 3/4"	3
3	5 5/8"	1'-7 7/8"	1
4	5 7/8"	1'-8 5/8"	2
5	5 1/4"	1'-8"	2
6	4 1/8"	1'-5 7/8"	0

Note:  
Dimensions "A" and "B" are after  
Jacking Existing Superstructure  
operations are complete.



BILL OF MATERIAL

Item	Unit	Total
Temporary Support System, Location No. 1	Each	1
Temporary Support System, Location No. 2	Each	1
Jacking Existing Superstructure	L Sum	1
Structural Steel Removal	L Sum	1
Furnishing and Erecting Structural Steel	Pound	19,827

Notes:

All holes 1" O for 7/8" bolts unless noted otherwise. Cost of drilling holes in existing steel members is included with Furnishing and Erecting Structural Steel.

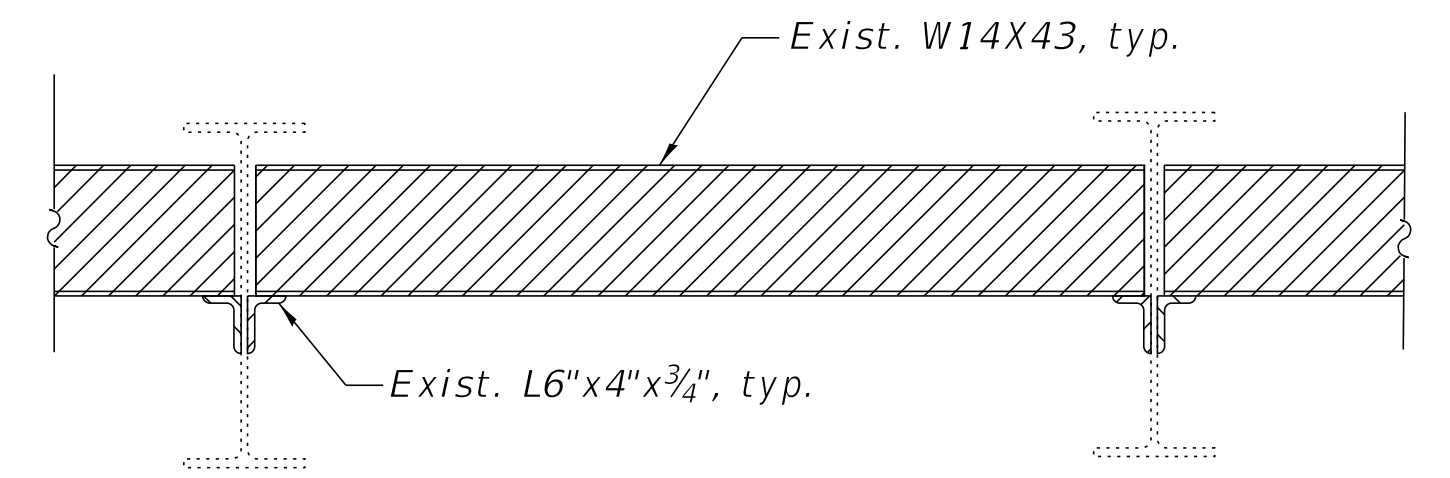
See sheets 18 and 19 of 21 for Repairs "B" thru "F".

Existing beams shall be cleaned but not painted prior to installation of repair plates.

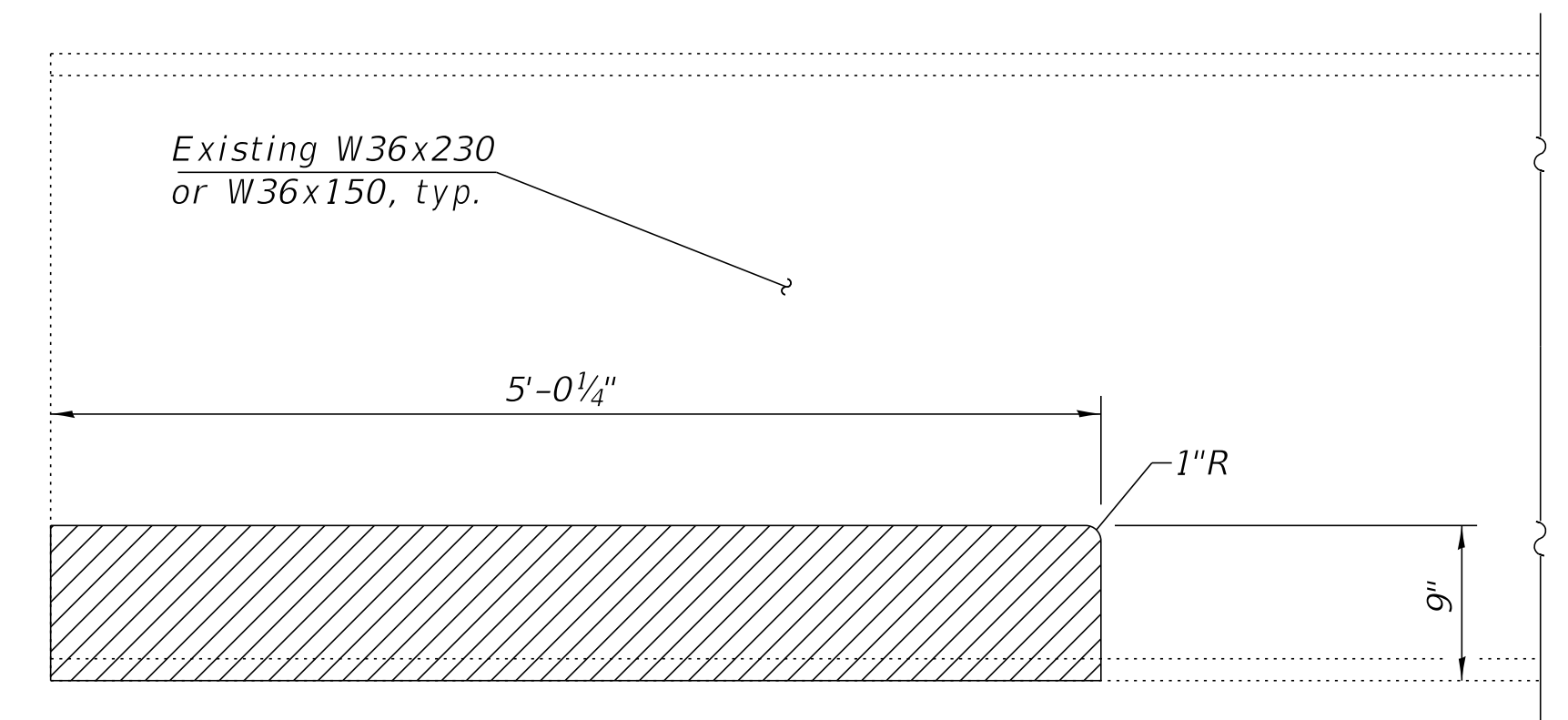
Installation of new diaphragms shall not commence until all bolts for new web plates and clip angles are fully tightened, Jacking Existing Superstructure operations are completed, and all beams are in their final relative positions.

Removal of the existing expansion joints will not be paid for separately, but shall be included with cost of Structural Steel Removal.

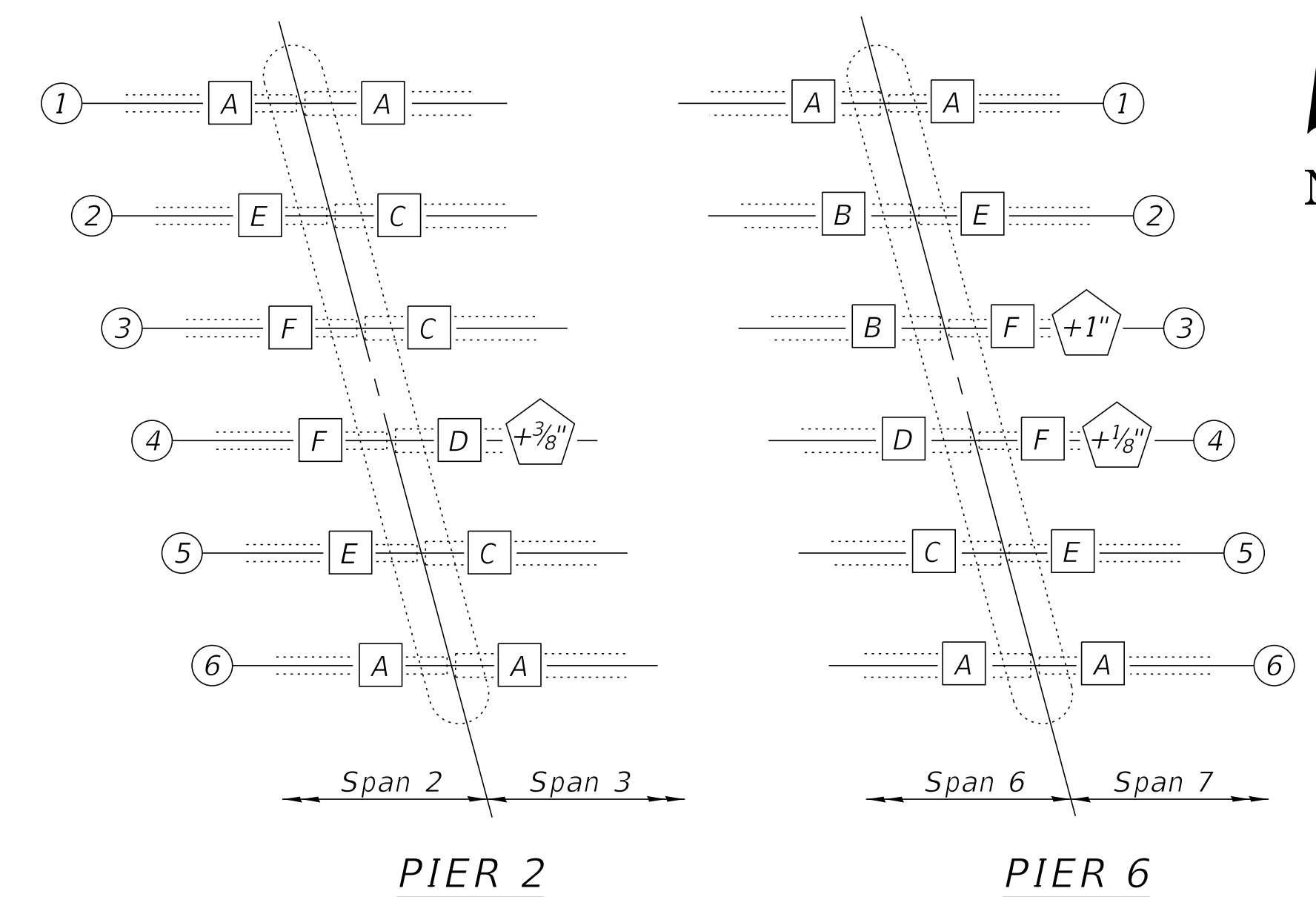
Jacking Existing Superstructure shall consist of permanently adjusting the designated beam ends upward from their current positions, as shown in the Steel Repair Location Plan on this sheet. Three beams shall receive this adjustment, at the locations shown and by the amounts shown. Cost of these adjustments shall be included with Jacking Existing Superstructure.



DIAPHRAGM REMOVAL DETAIL



REMOVAL DETAIL "D" & "F"  
Diaph. & Clip L's not shown for clarity



STEEL REPAIR LOCATION PLAN

- ② Beam Number
- B Repair Type
- +3/8" Jacking Existing Superstructure

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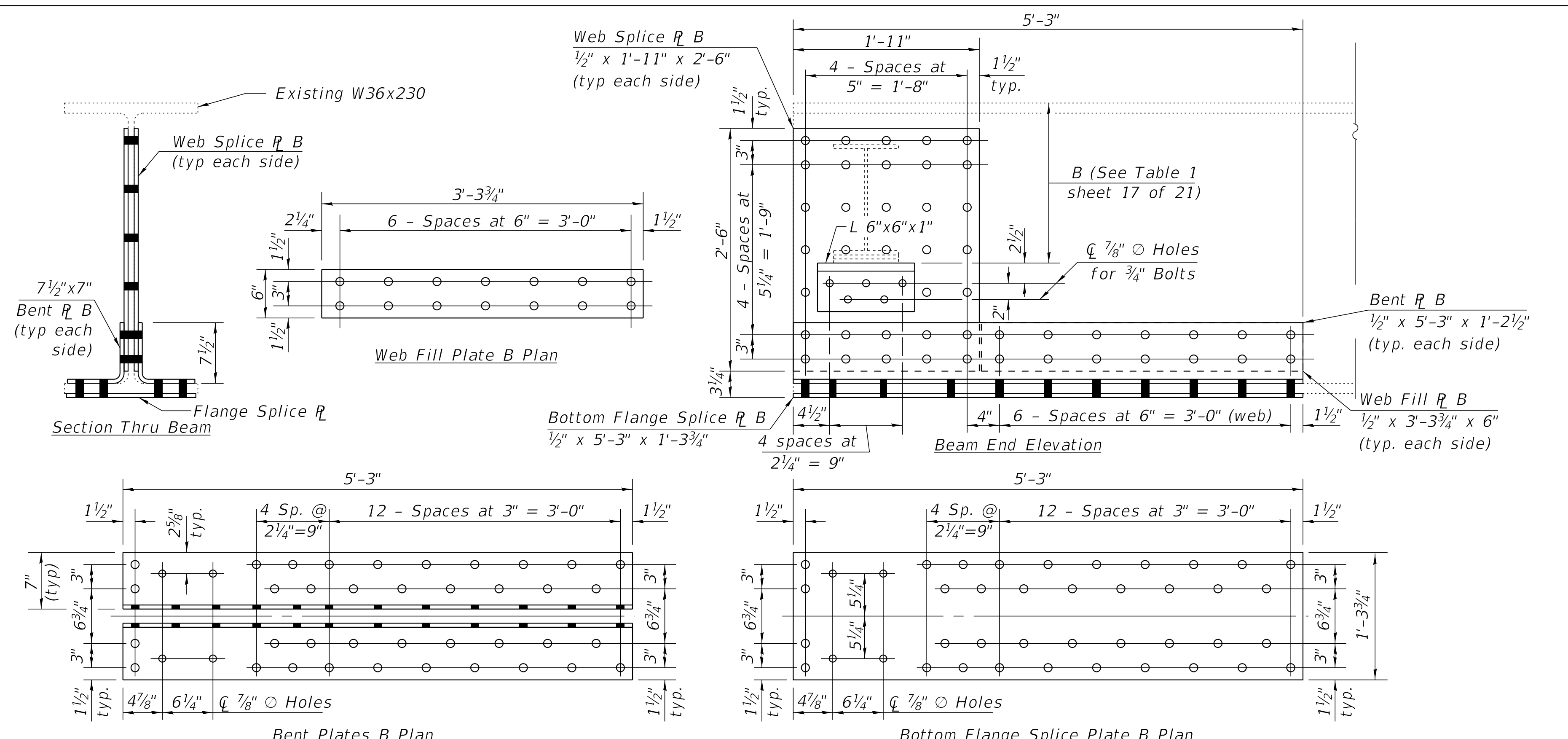
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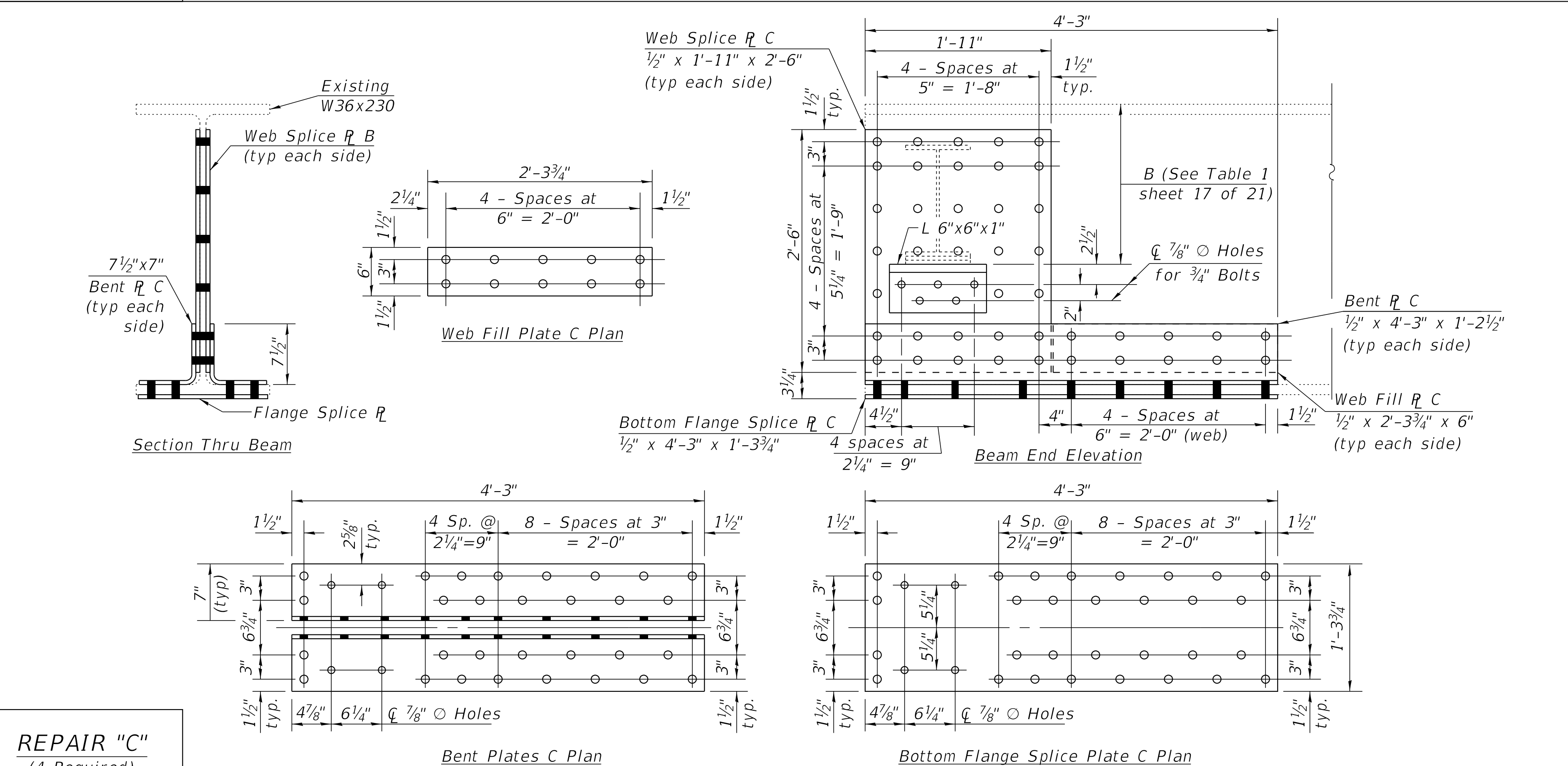
STRUCTURAL STEEL REPAIRS I  
STRUCTURE NO. 099-0135

SHEET NO. 17 OF 21 SHEETS

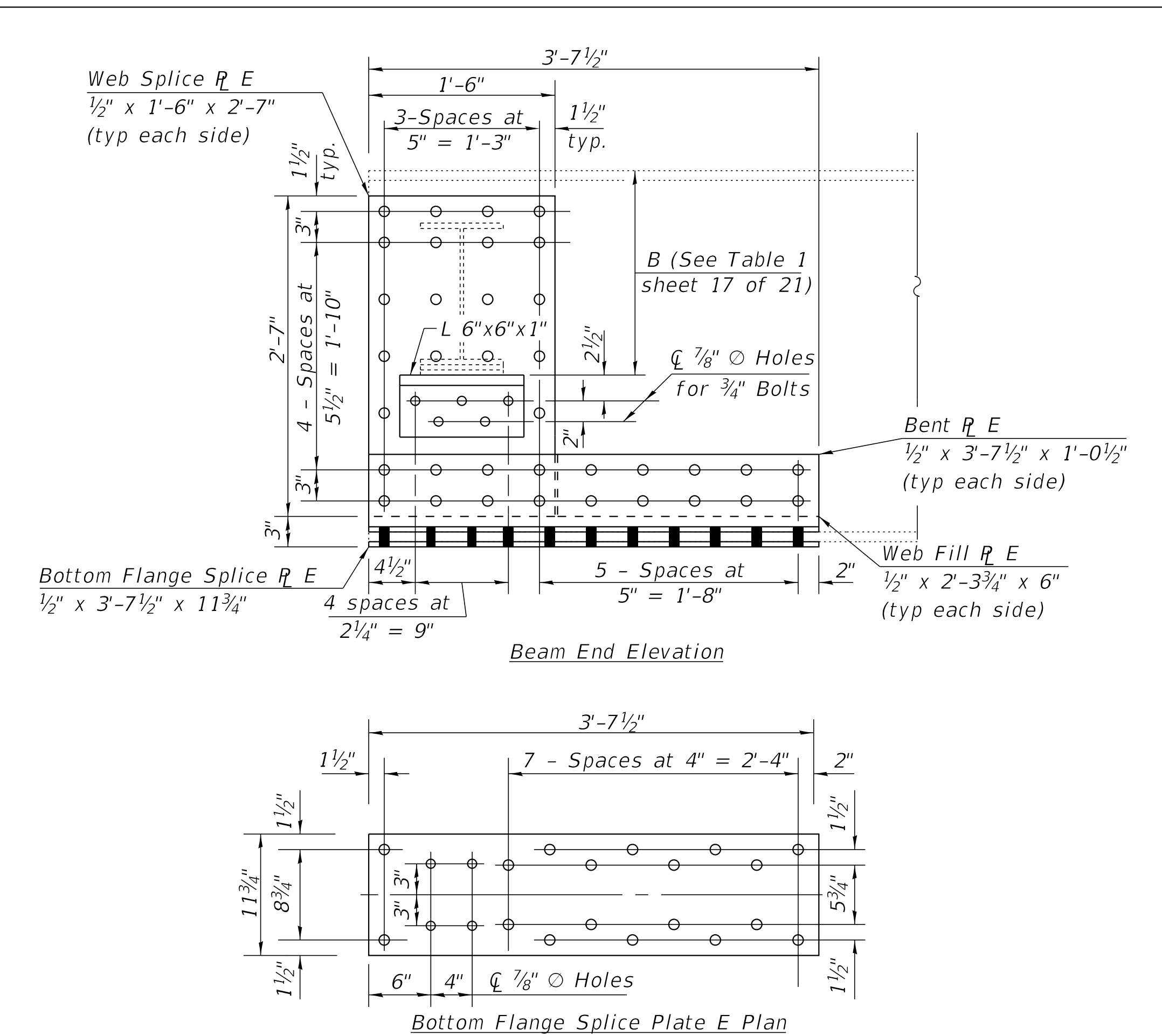
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	36
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				



**REPAIR "B"**  
(2 Required)



**REPAIR "C"**  
(4 Required)



**REPAIR "E"**  
(4 Required)

See sheet 17 of 21 for structural steel repair notes.

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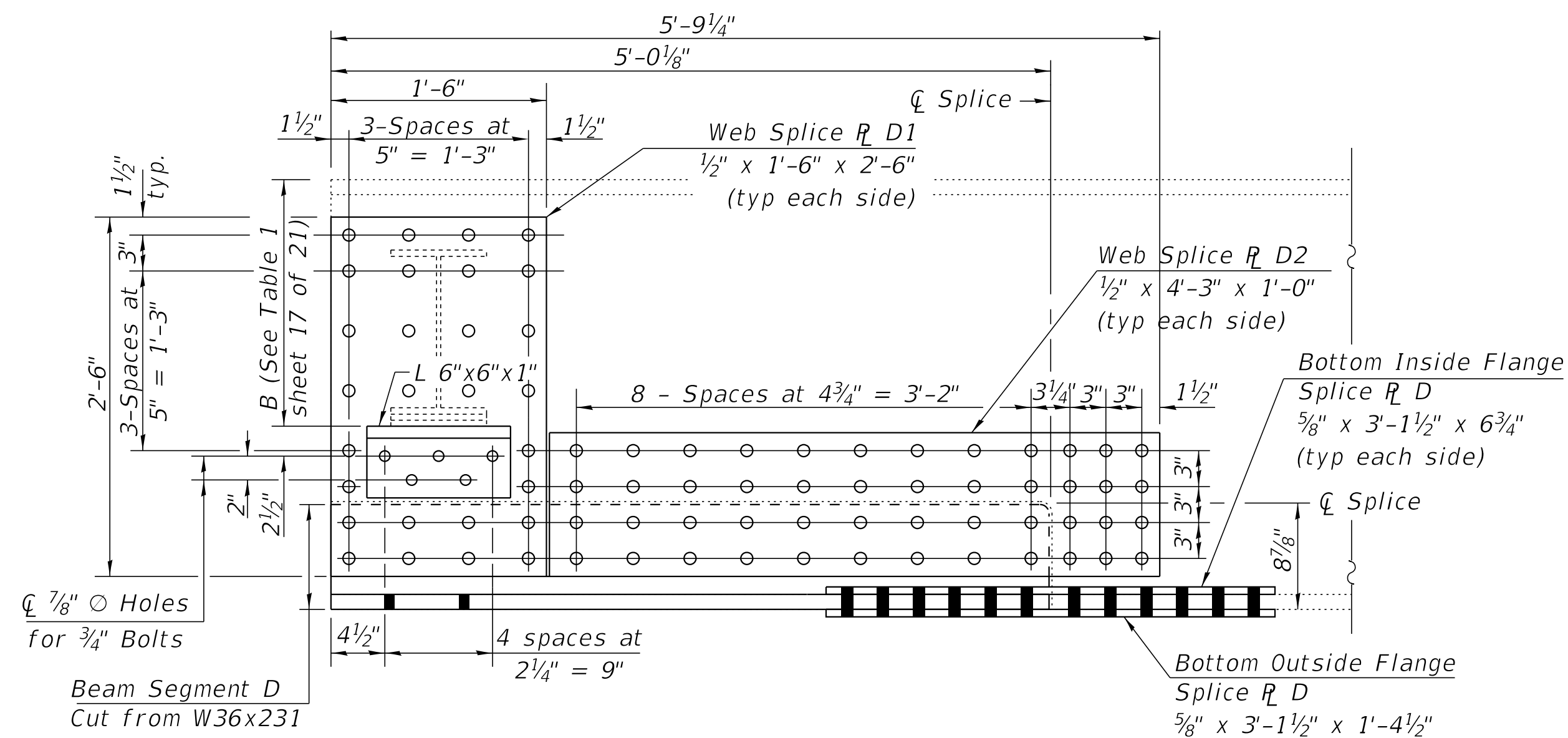
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STATE OF ILLINOIS  
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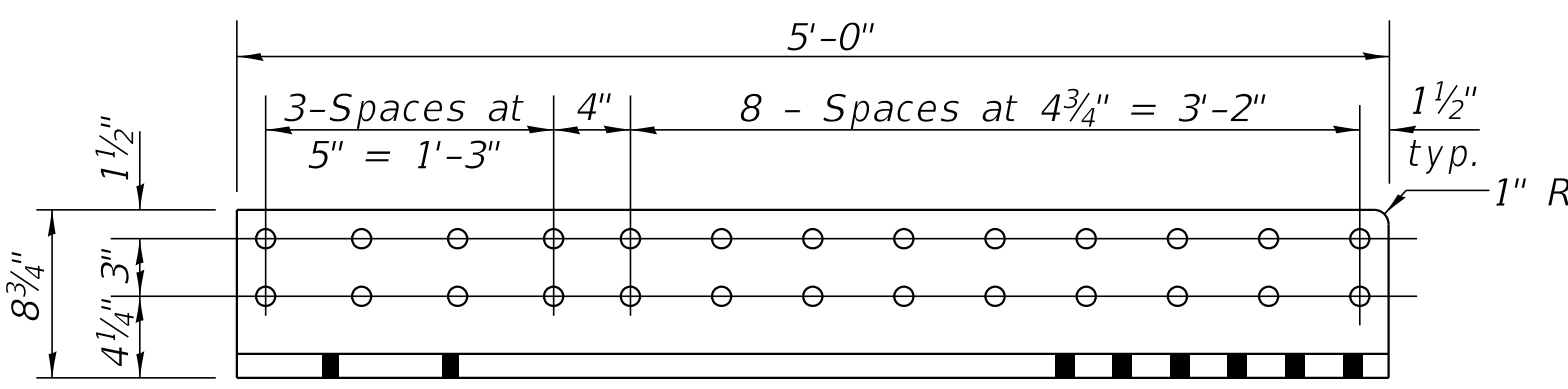
STRUCTURAL STEEL REPAIRS II  
STRUCTURE NO. 099-0135

SHEET NO. 18 OF 21 SHEETS

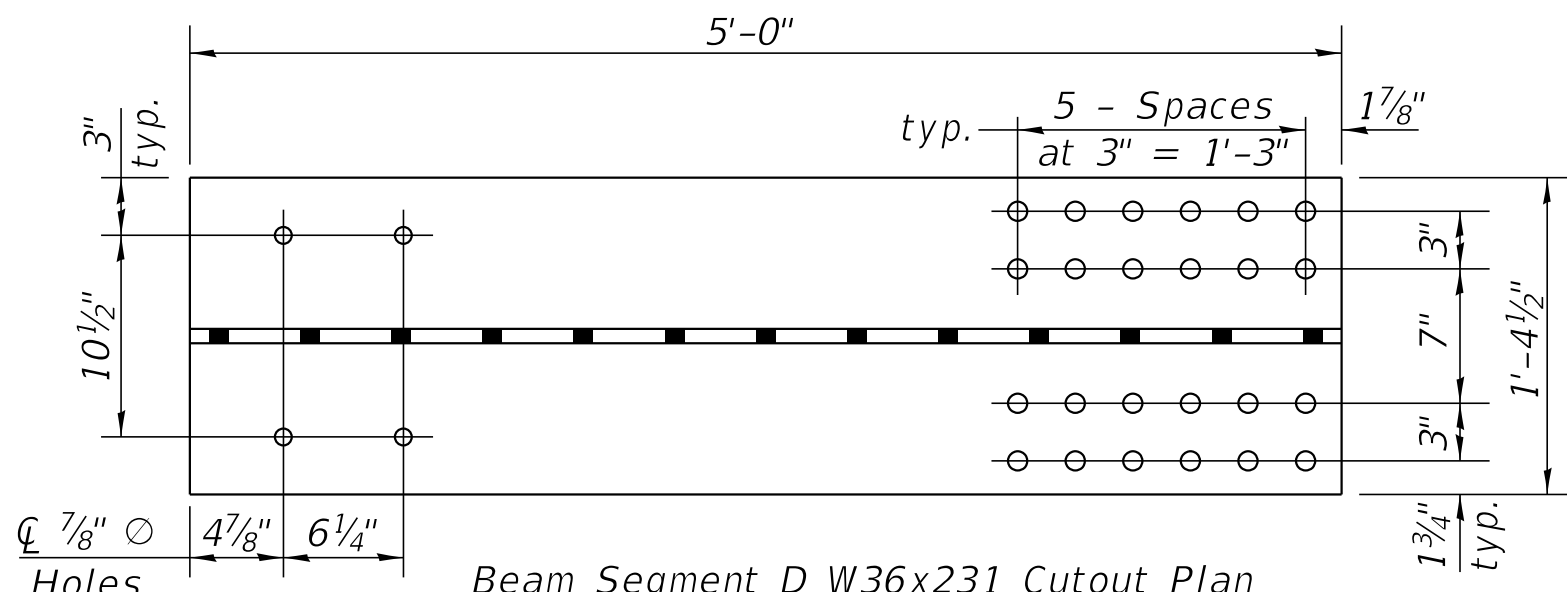
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61F12				
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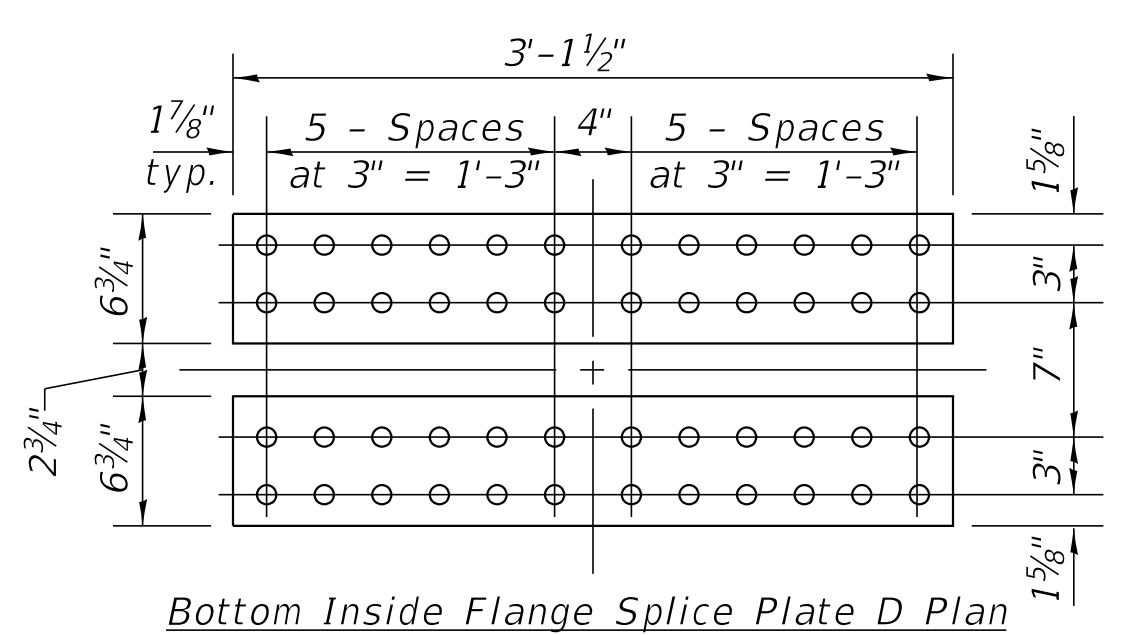
Beam End Elevation



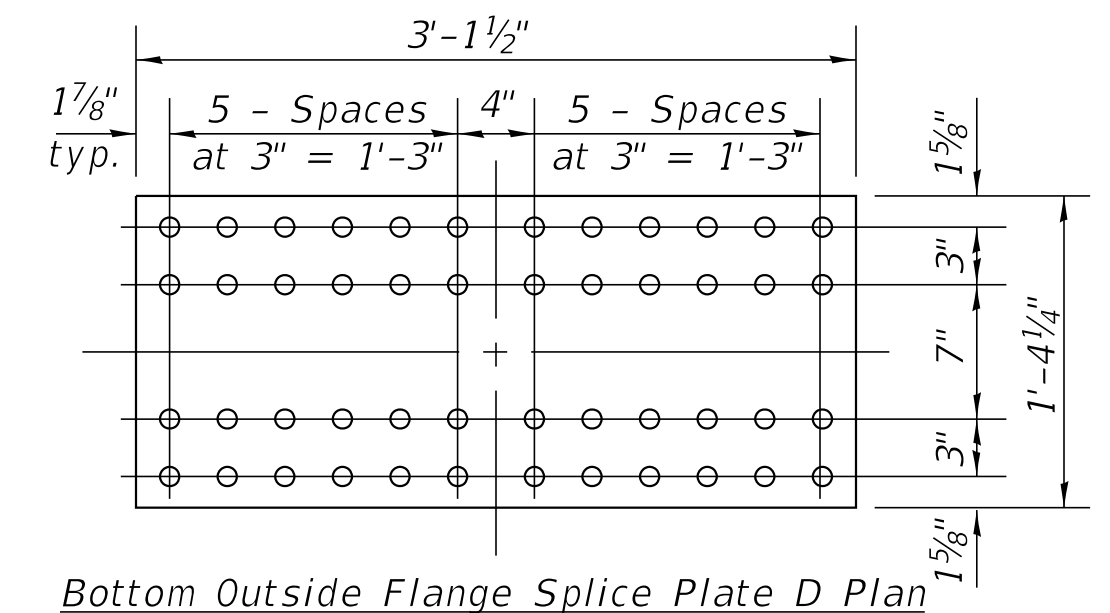
Beam Segment D W36x231 Cutout Elevation



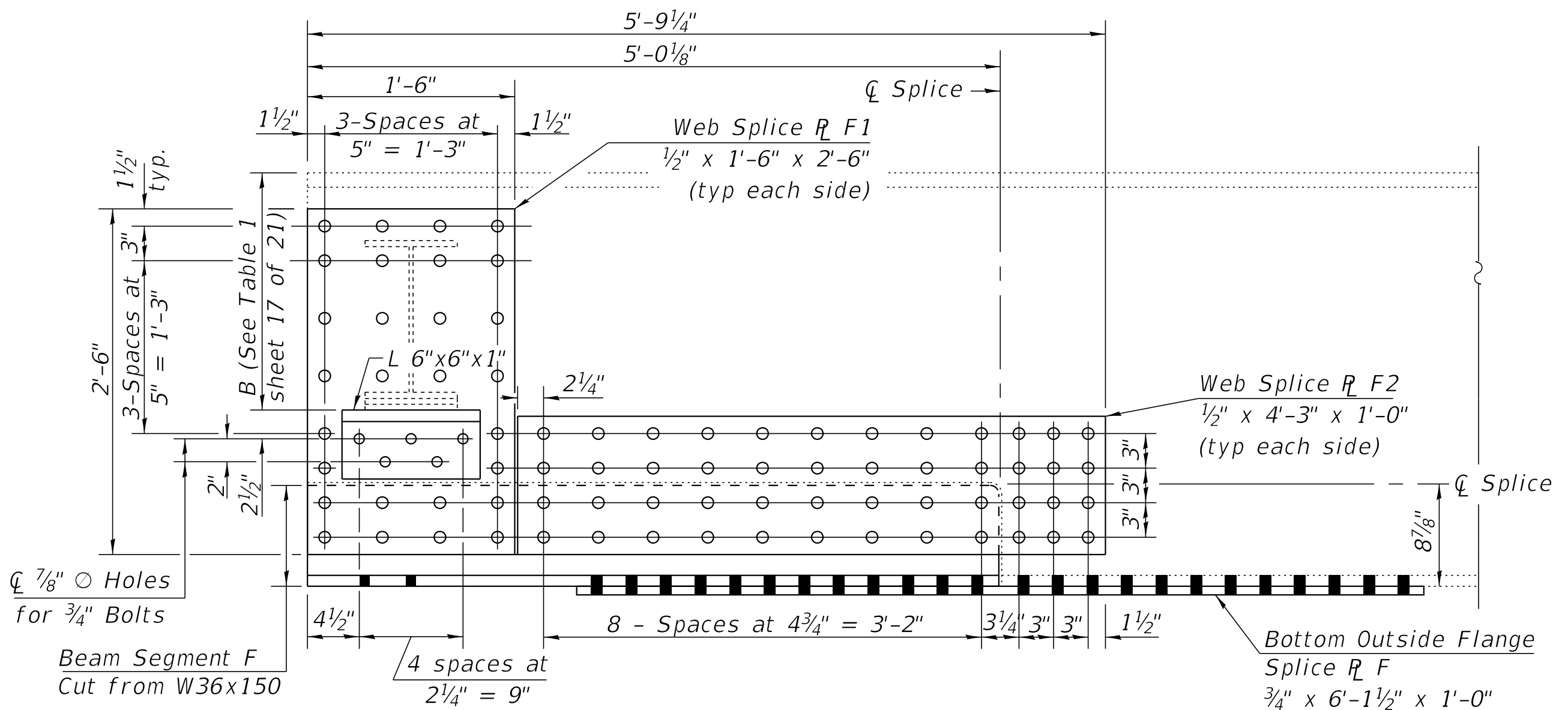
Beam Segment D W36x231 Cutout Plan



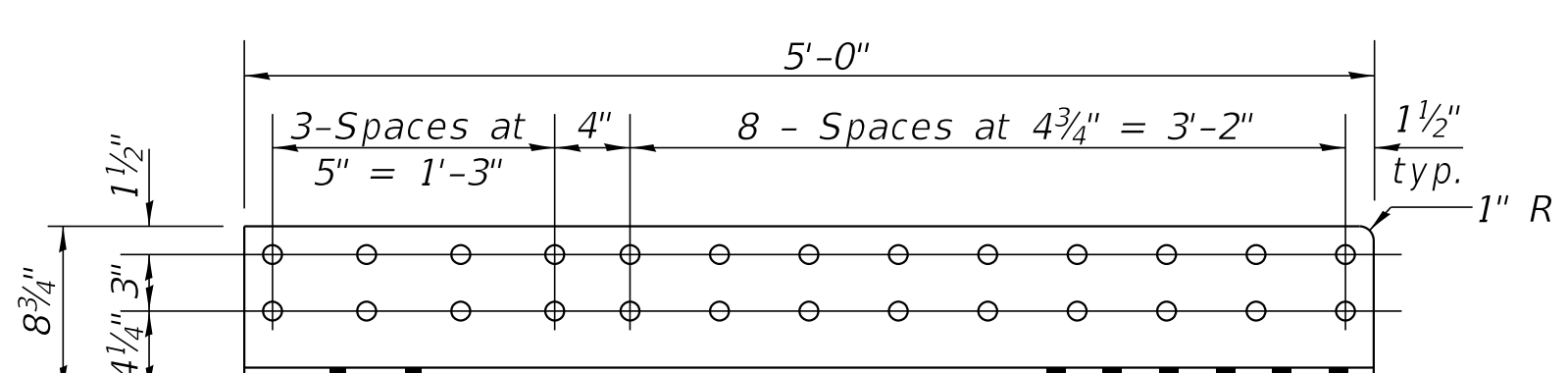
Bottom Inside Flange Splice Plate D Plan



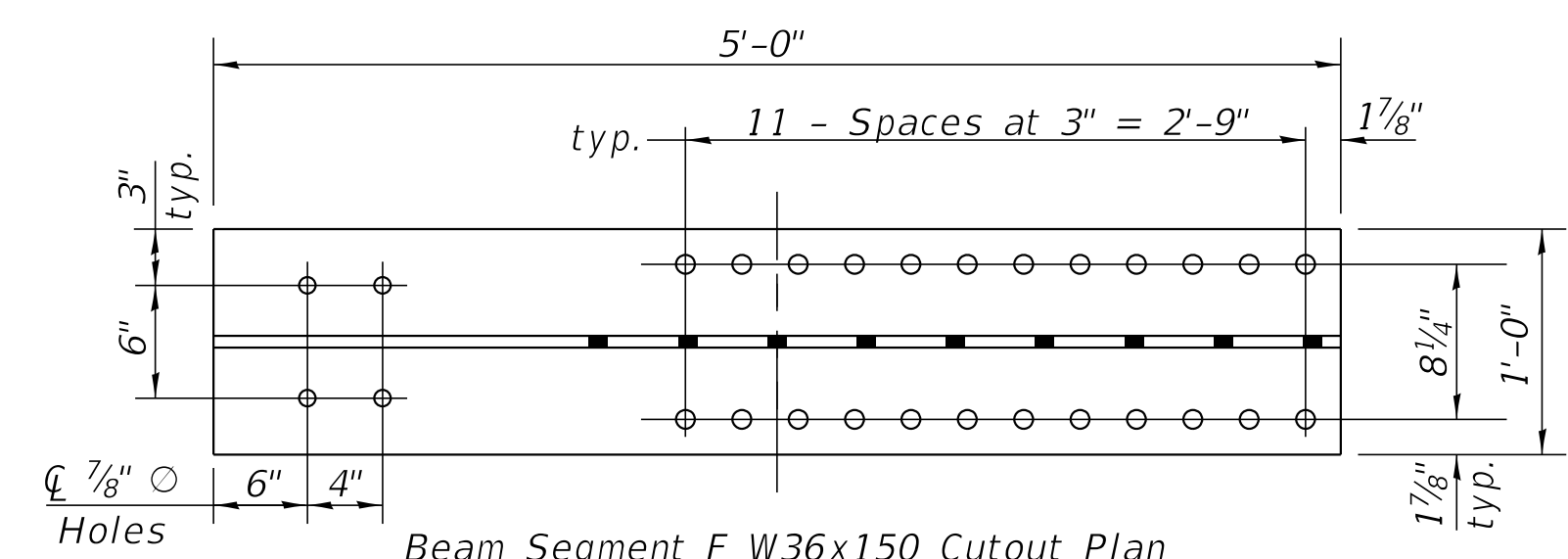
Bottom Outside Flange Splice Plate D Plan



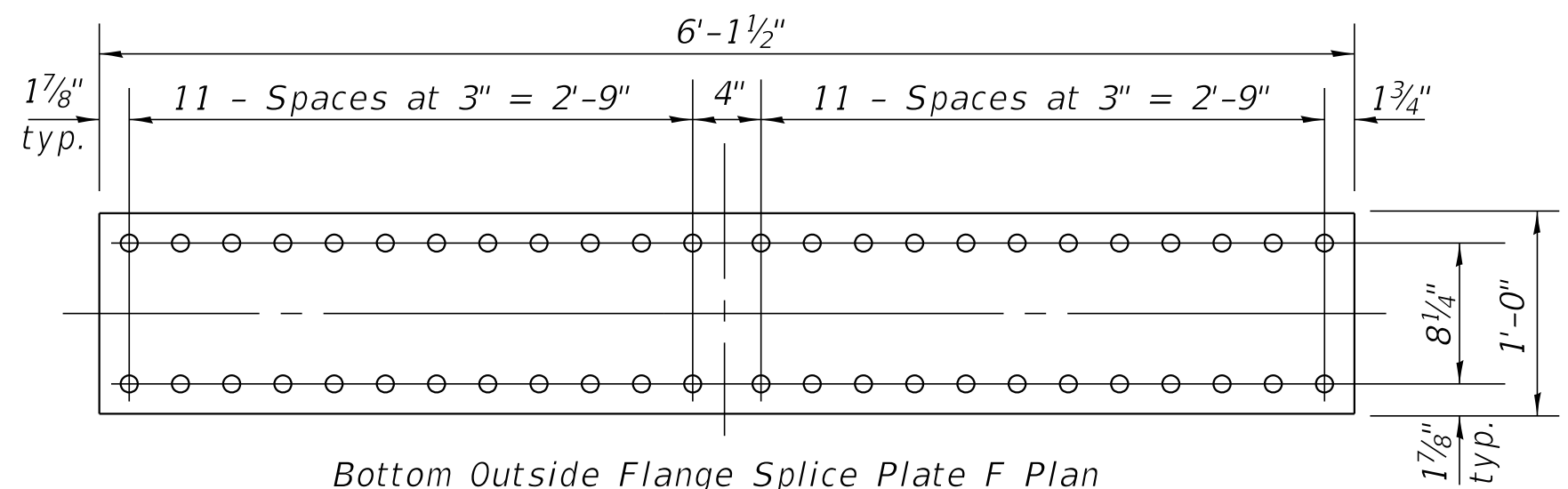
Beam End Elevation



Beam Segment F W36x150 Cutout Elevation



Beam Segment F W36x150 Cutout Plan



Bottom Outside Flange Splice Plate F Plan

**REPAIR "D"**  
(2 Required)

**REPAIR "F"**  
(4 Required)

See sheet 17 of 21 for structural steel repair notes.

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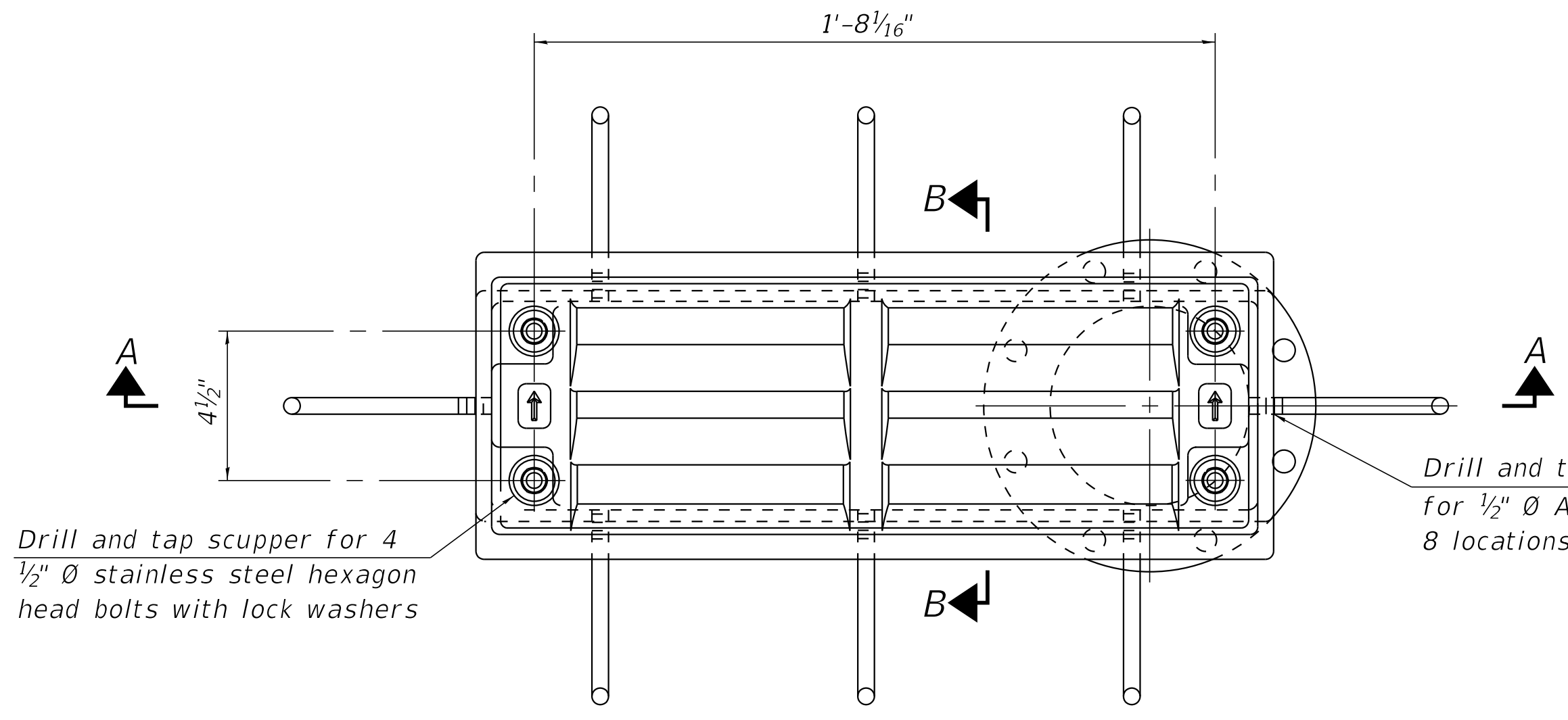


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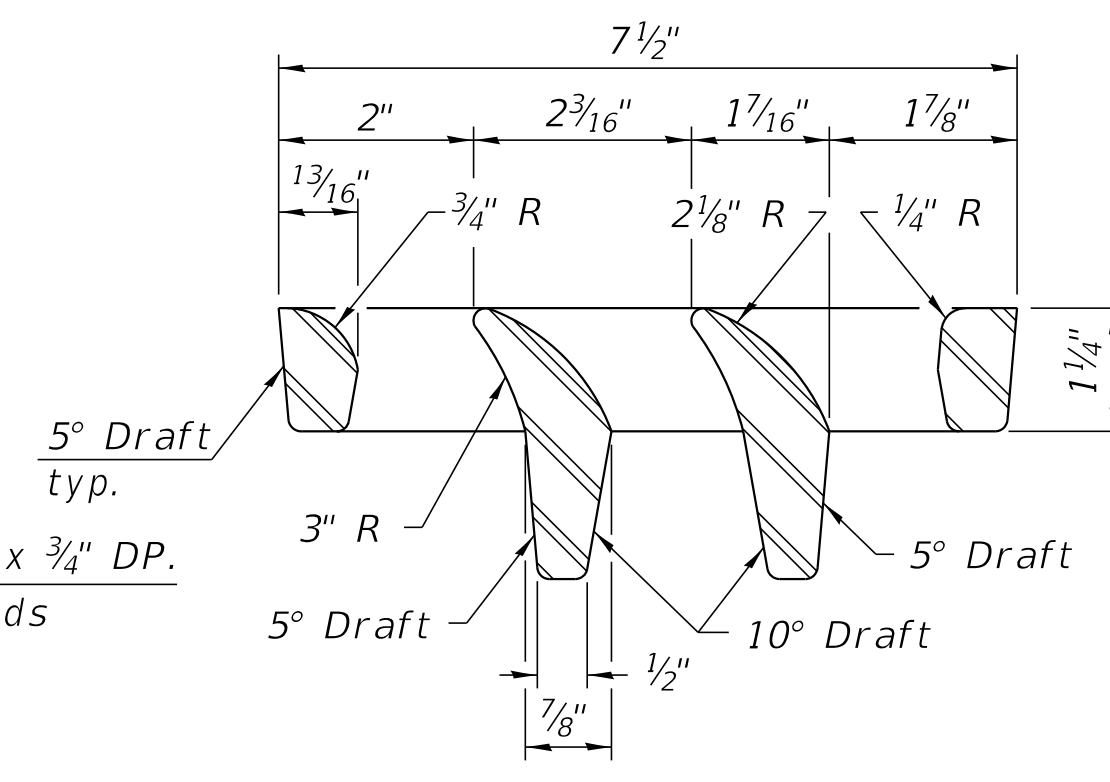
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**STRUCTURAL STEEL REPAIRS III**  
**STRUCTURE NO. 099-0135**  
SHEET NO. 19 OF 21 SHEETS

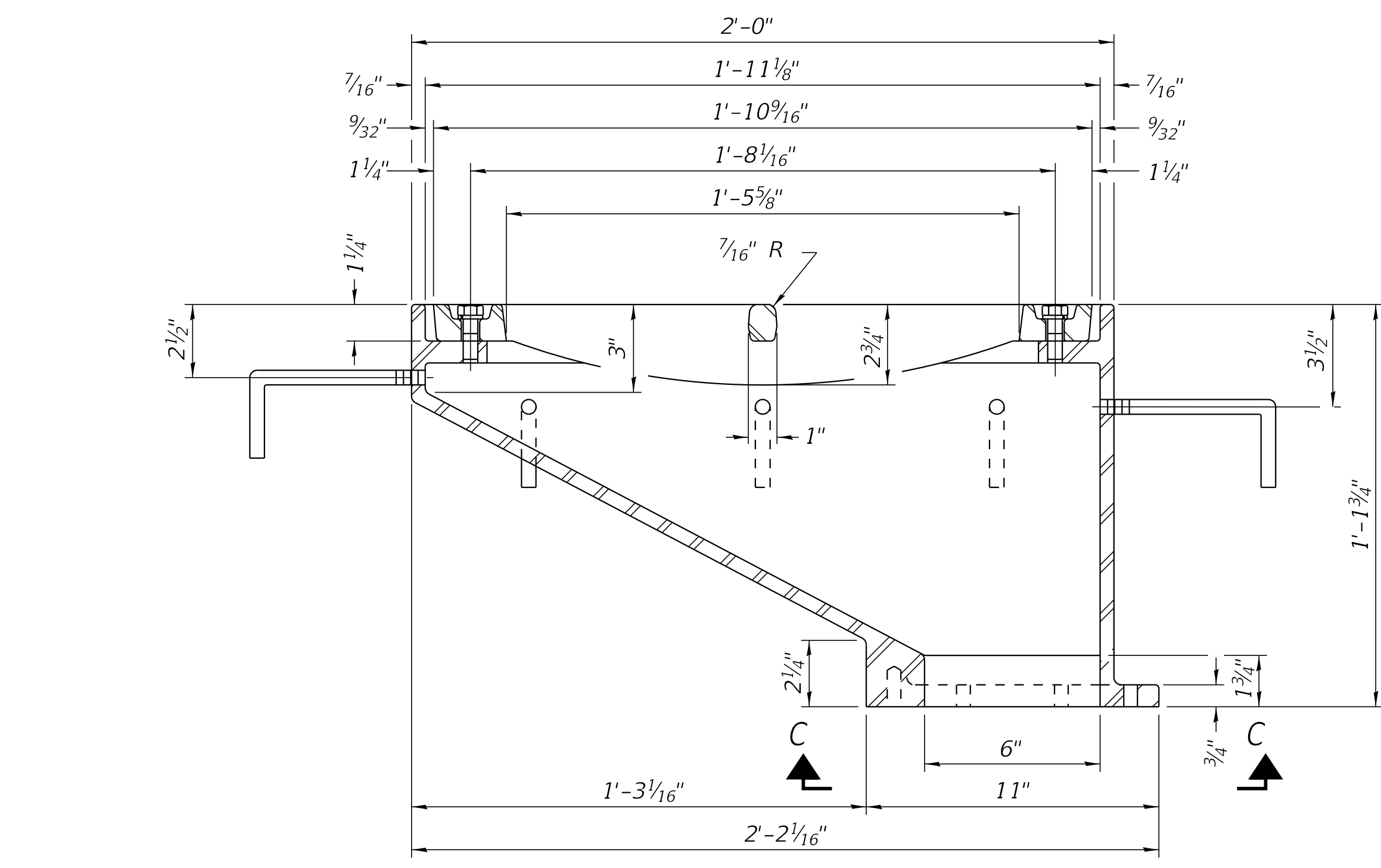
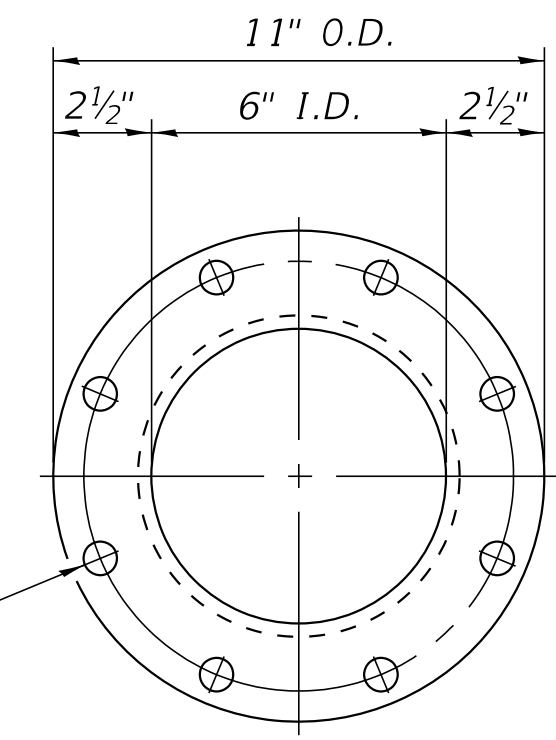
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CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				



PLAN

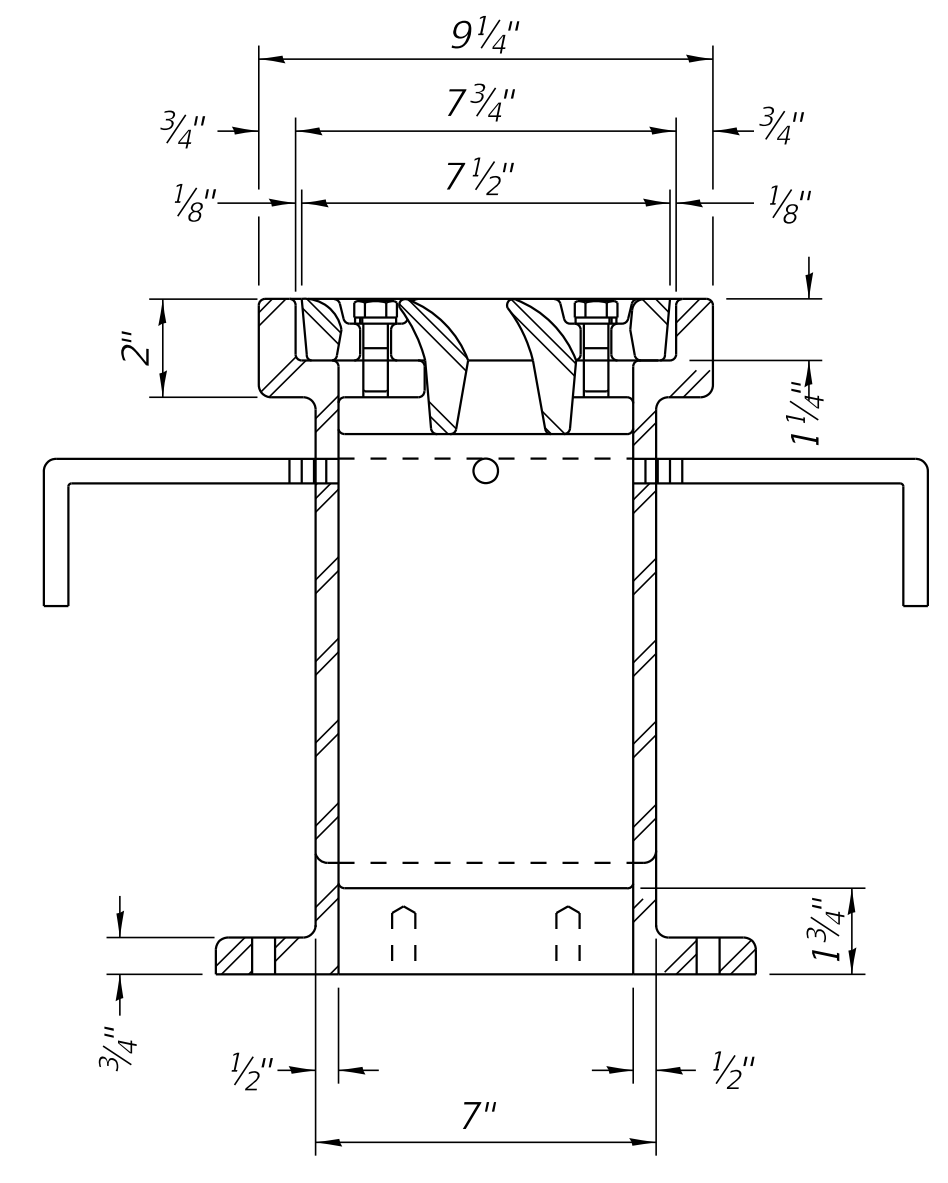


VANE GRATE DETAIL

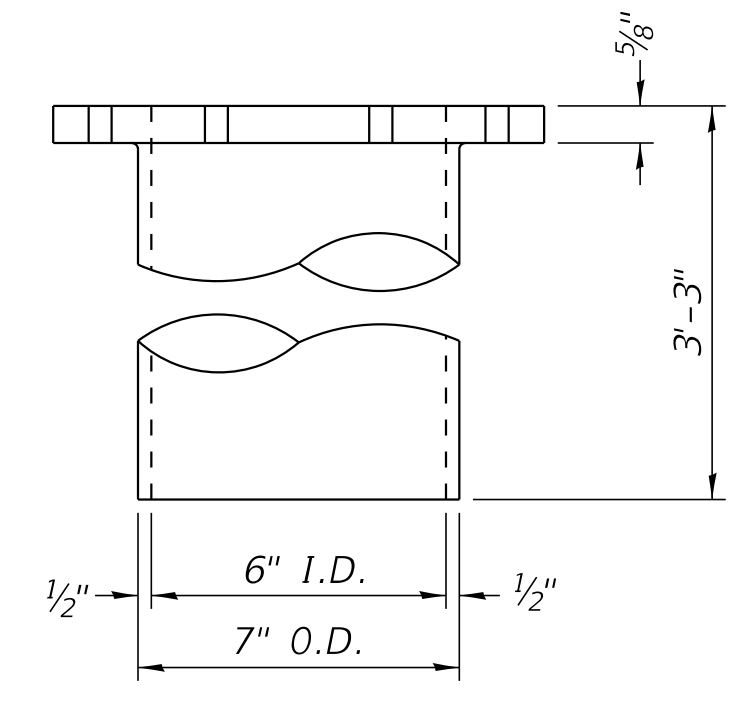


SECTION A-A

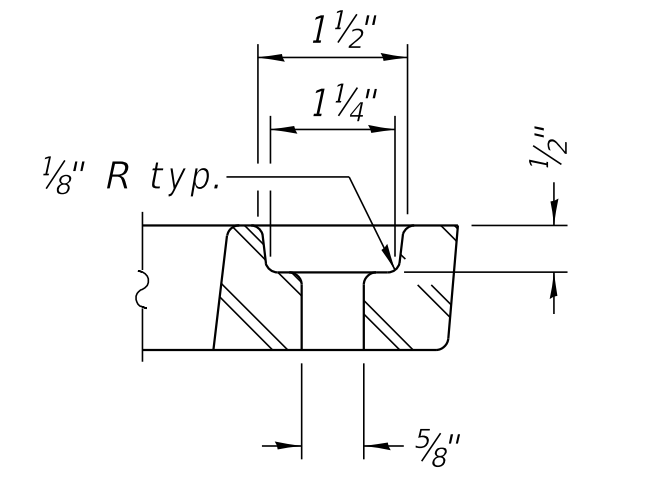
See sheet 4 of 21 for scupper locations.



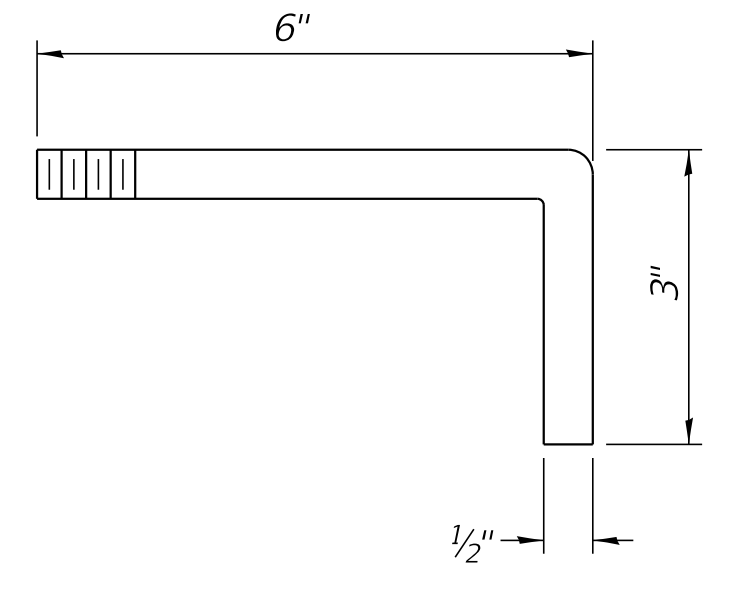
SECTION B-B



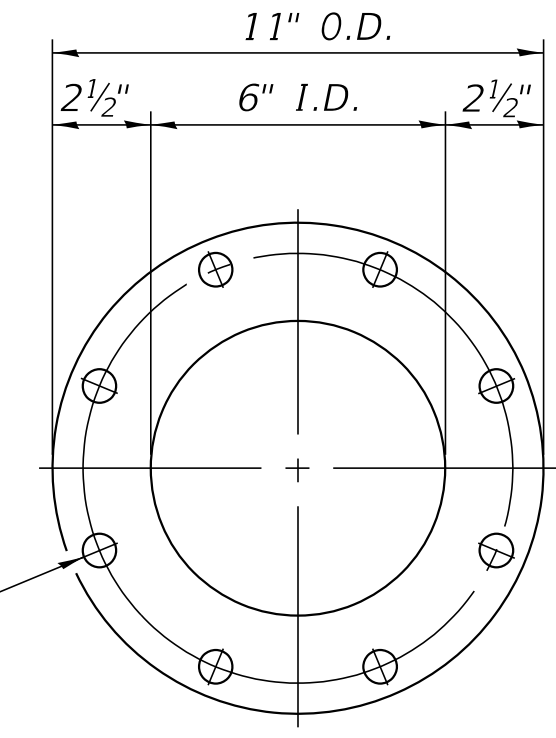
DOWNSPOUT



BOLT HOLE DETAIL



ANCHOR STUD DETAIL



VIEW C-C

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	6

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DS-12

2-17-2017



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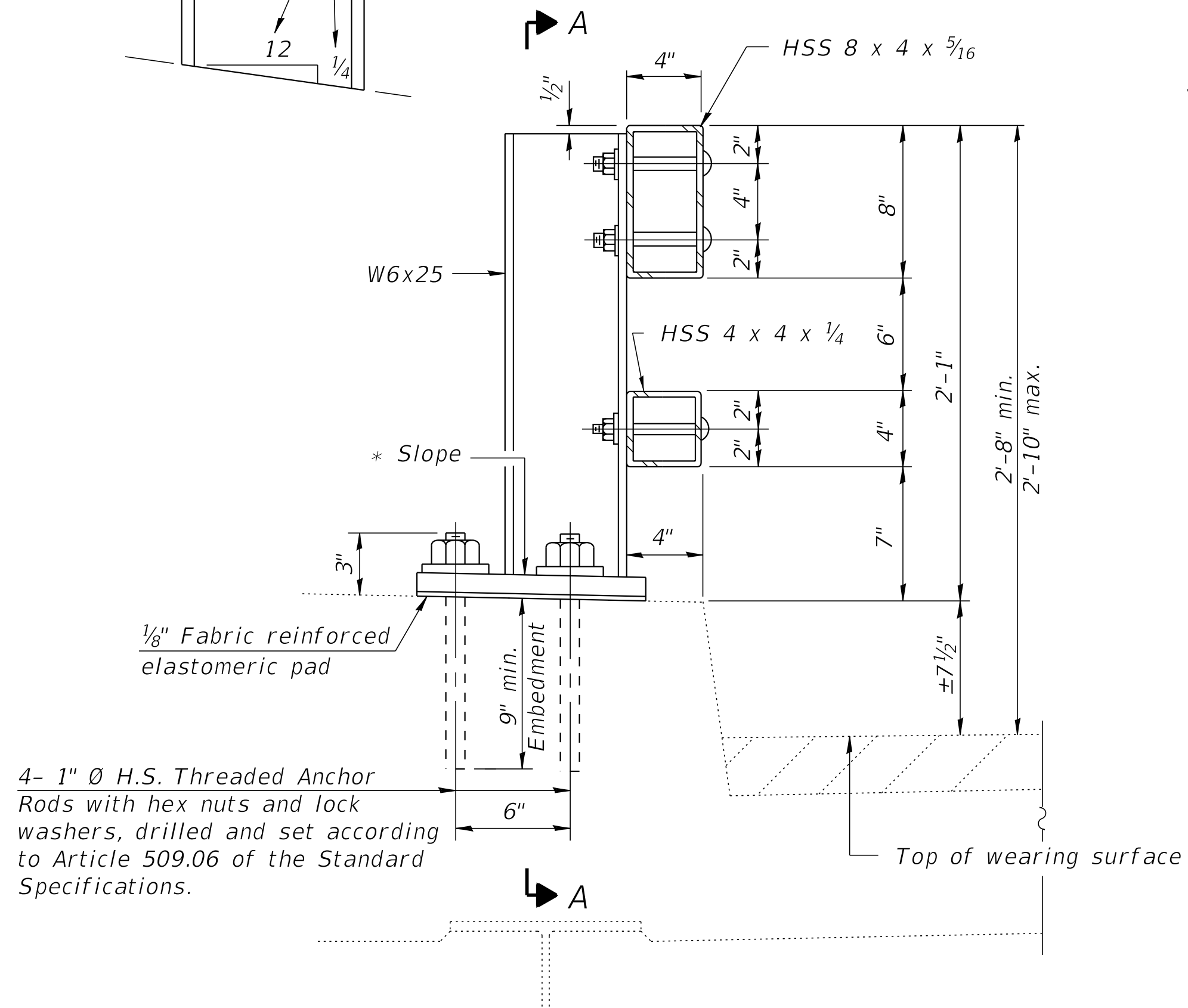
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SCUPPER DETAILS  
STRUCTURE NO. 099-0135

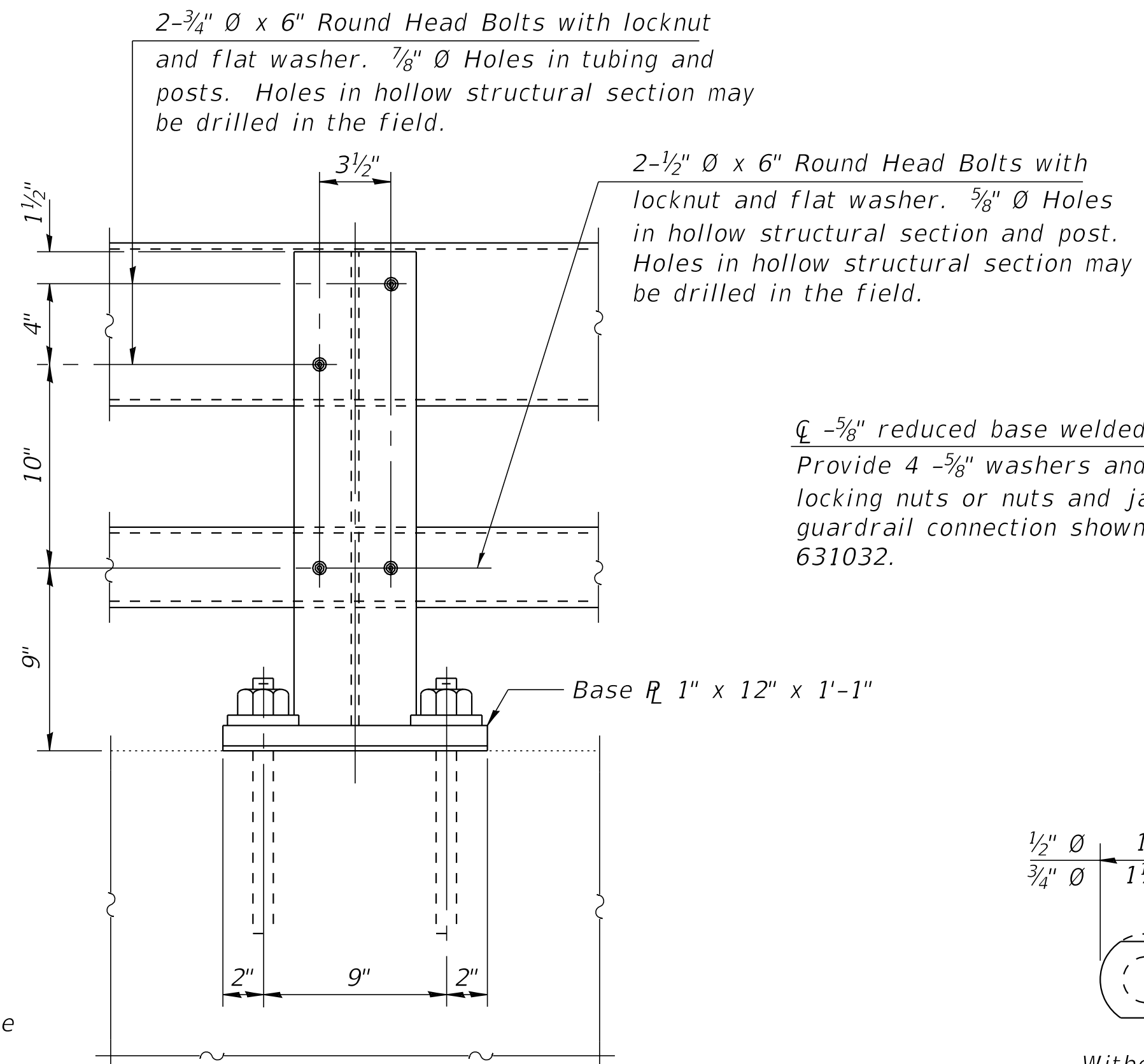
SHEET NO. 20 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	39
			CONTRACT NO. 61F12	
		ILLINOIS	FED. AID PROJECT	

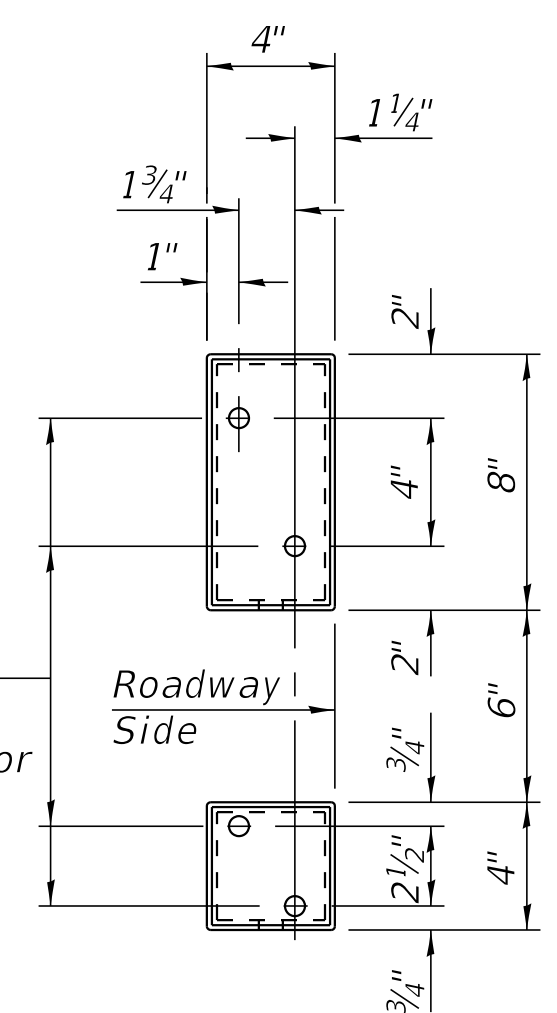
\* Cut bottom end of post to curb slope.



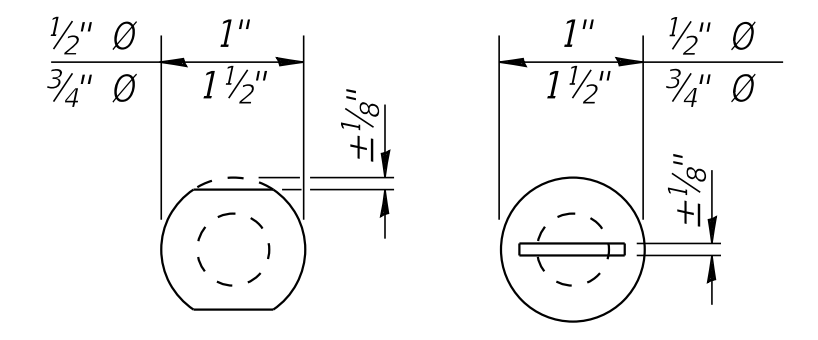
**SECTION AT RAIL POST**



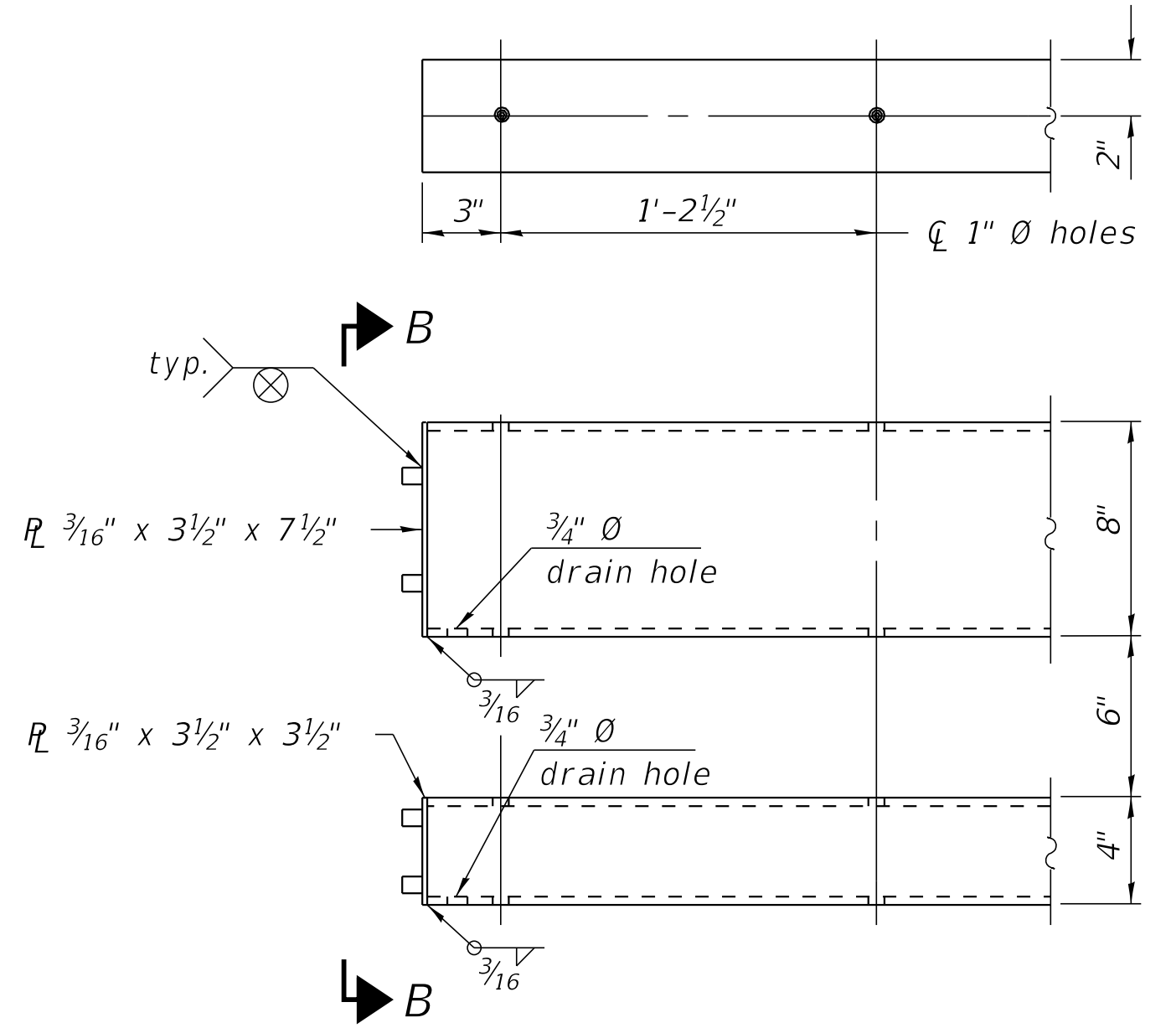
**SECTION A-A**



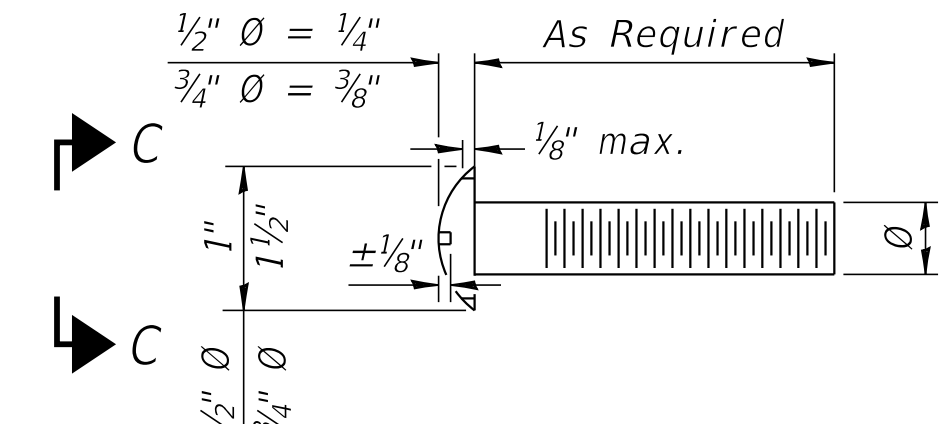
**VIEW B-B**



**VIEW C-C**

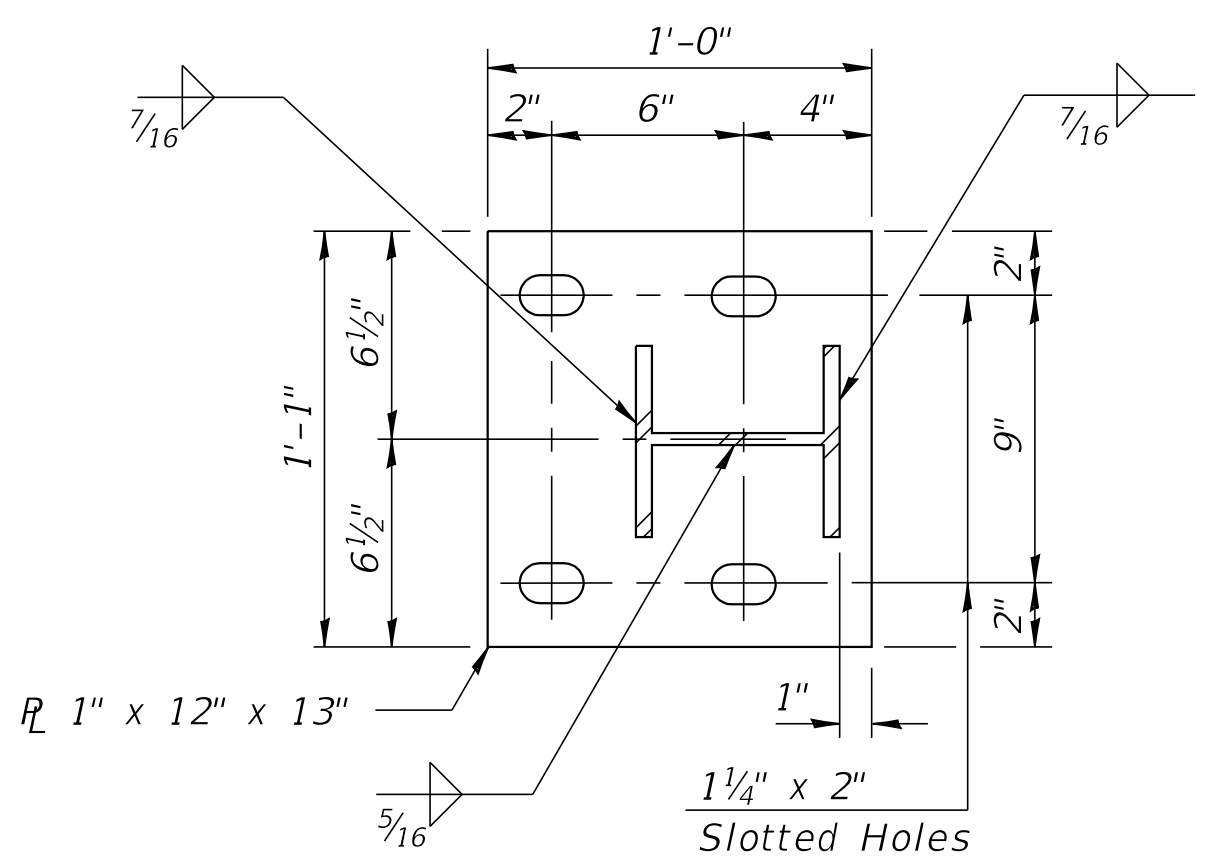


**END OF RAIL DETAILS**

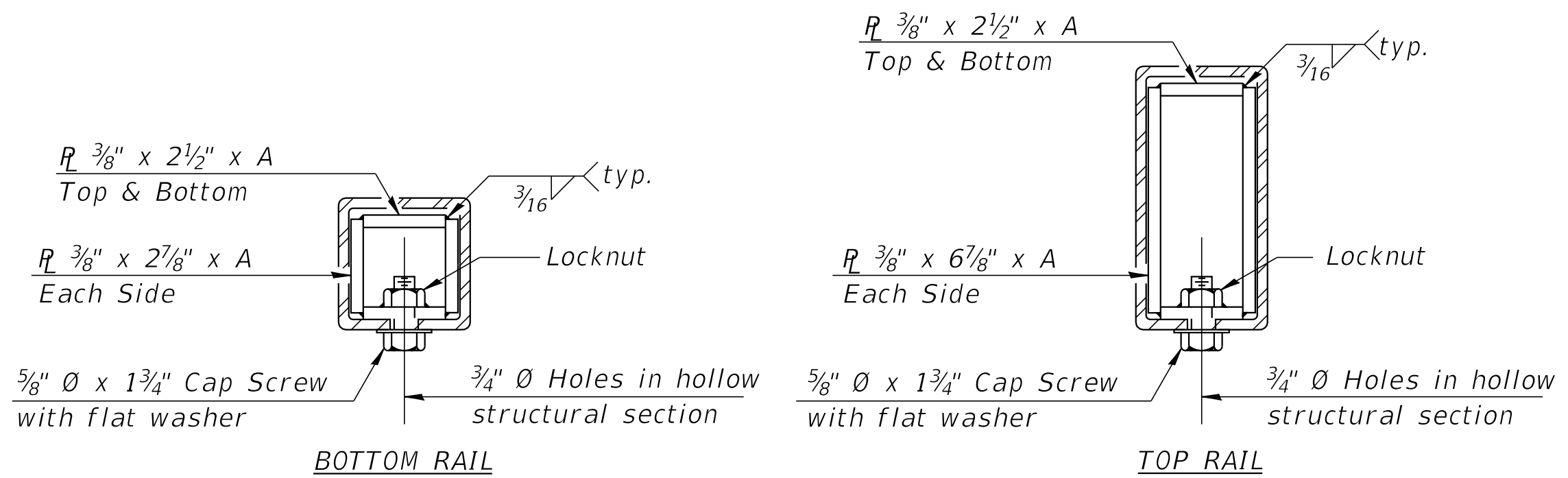


**DETAIL OF 1/2" & 3/4" ROUND HEAD BOLTS**

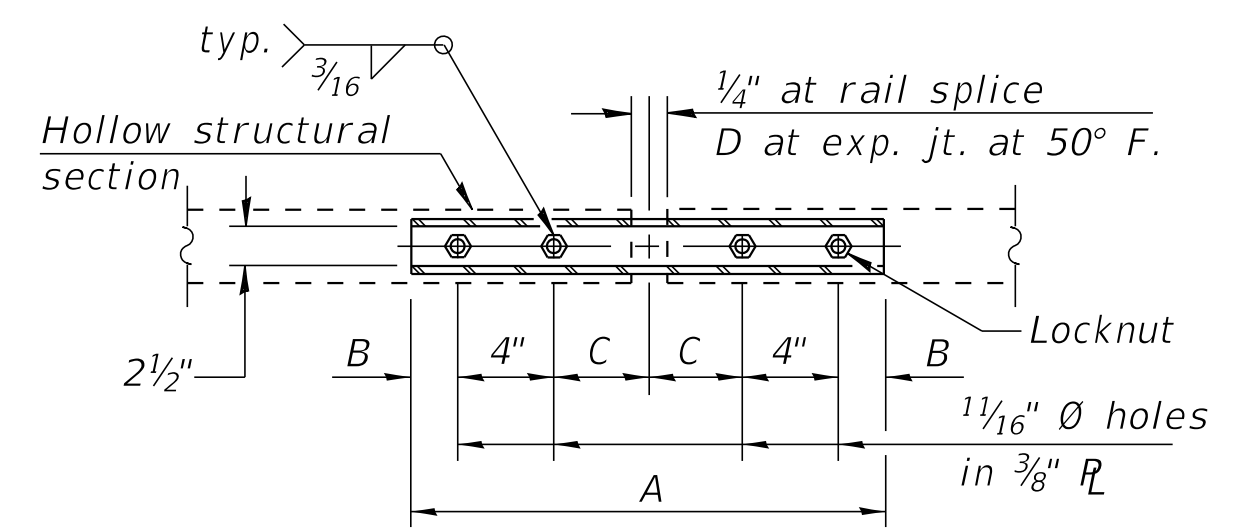
**NOTES:**  
 Top and Bottom rail sections shall be fabricated with a mitered angle to accommodate the transition from bridge to approach slab at southwest corner. See West Approach Slab Details and Deck Repair I for rail post locations and other dimensions.  
 Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.  
 Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.  
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.  
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



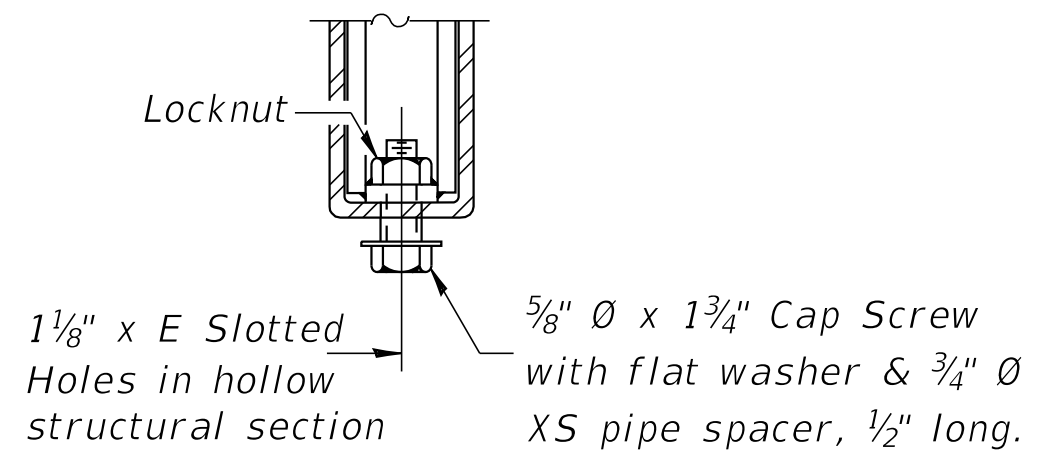
**BASE PLATE DETAIL**



**SECTIONS AT RAIL SPLICE**



**PLAN-BOT. SPLICE R TYPICAL**



**RAIL SPLICE CONNECTION AT EXPANSION JT.**

**SPLICE DIMENSIONS**

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	1,254

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 LICENSE NO. - 184-001121 - EXPIRES 4/30/2019  
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R-31

8-11-2017

(6'-3" Maximum Post Spacing)

USER NAME =	DESIGNED -	REVISIONS -
BLB	BLB	-
CHECKED -	BAB	REVISIONS -
BAB		-
PLOT SCALE =	BLB	REVISIONS -
BLB		-
PLOT DATE	10-08-18	REVISIONS -
		-

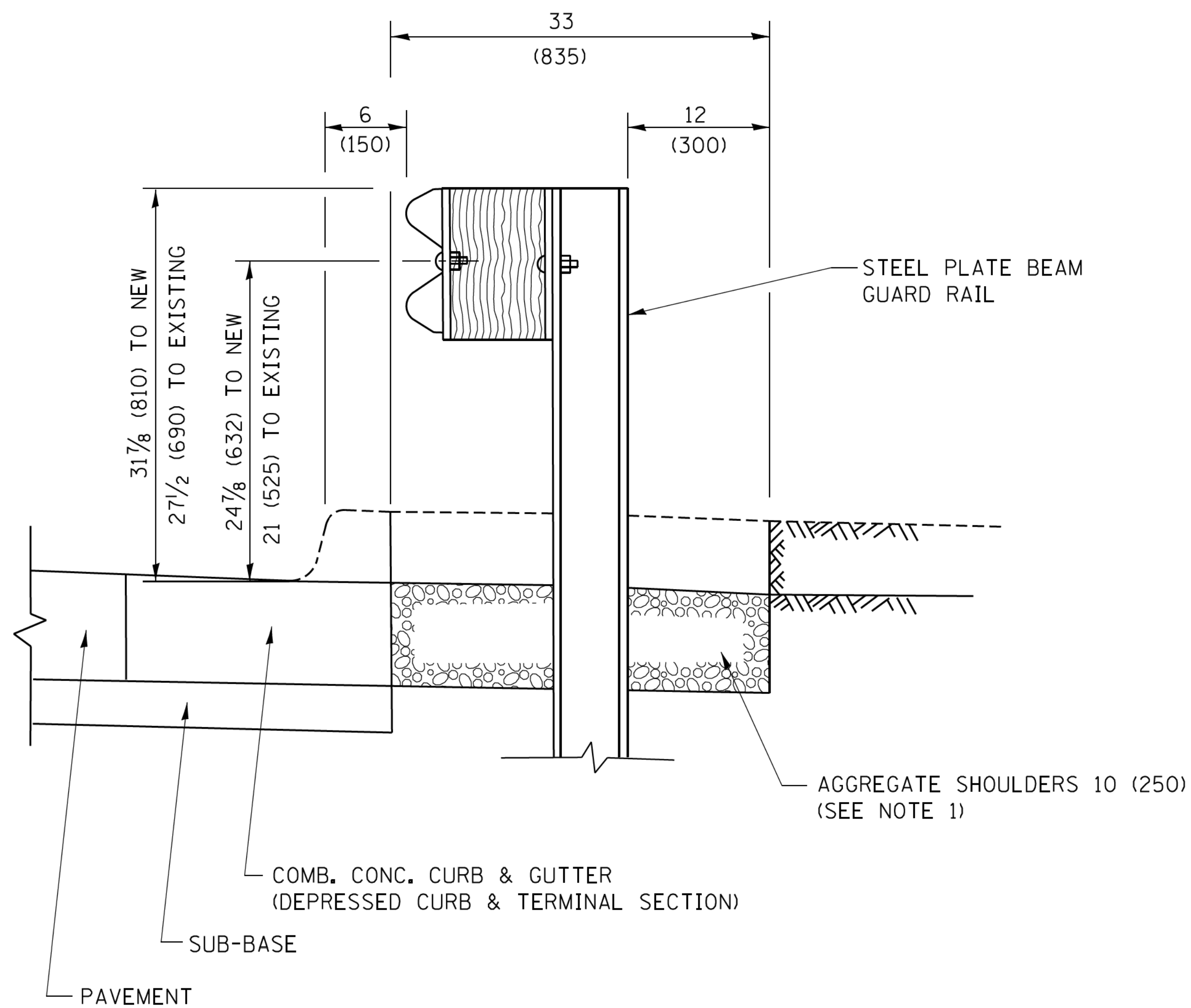
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**STEEL RAILING, TYPE 2399  
 STRUCTURE NO. 099-0135**

SHEET NO. 21 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	40
CONTRACT NO. 61F12				
ILLINOIS / FED. AID PROJECT				

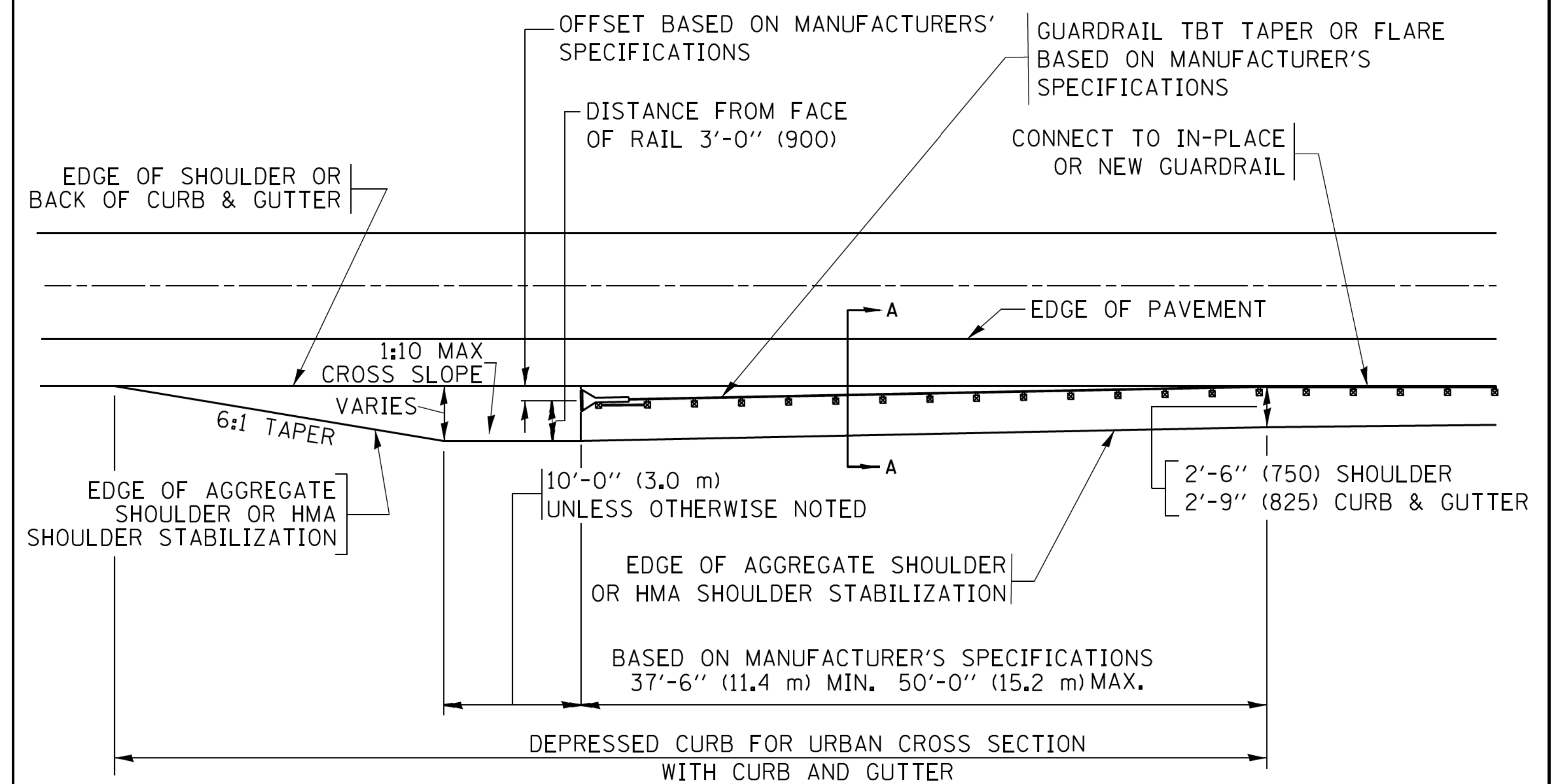




SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
  2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
  3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

**DETAILS FOR STEEL PLATE BEAM  
GUARD RAIL ADJACENT TO CURB AND GUTTER  
[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]**



**DEPRESSED CURB AND GUTTER AND  
SHOULDER TREATMENT AT TBT TY. 1 SPL.**

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL  
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)  
UNLESS OTHERWISE SHOWN.

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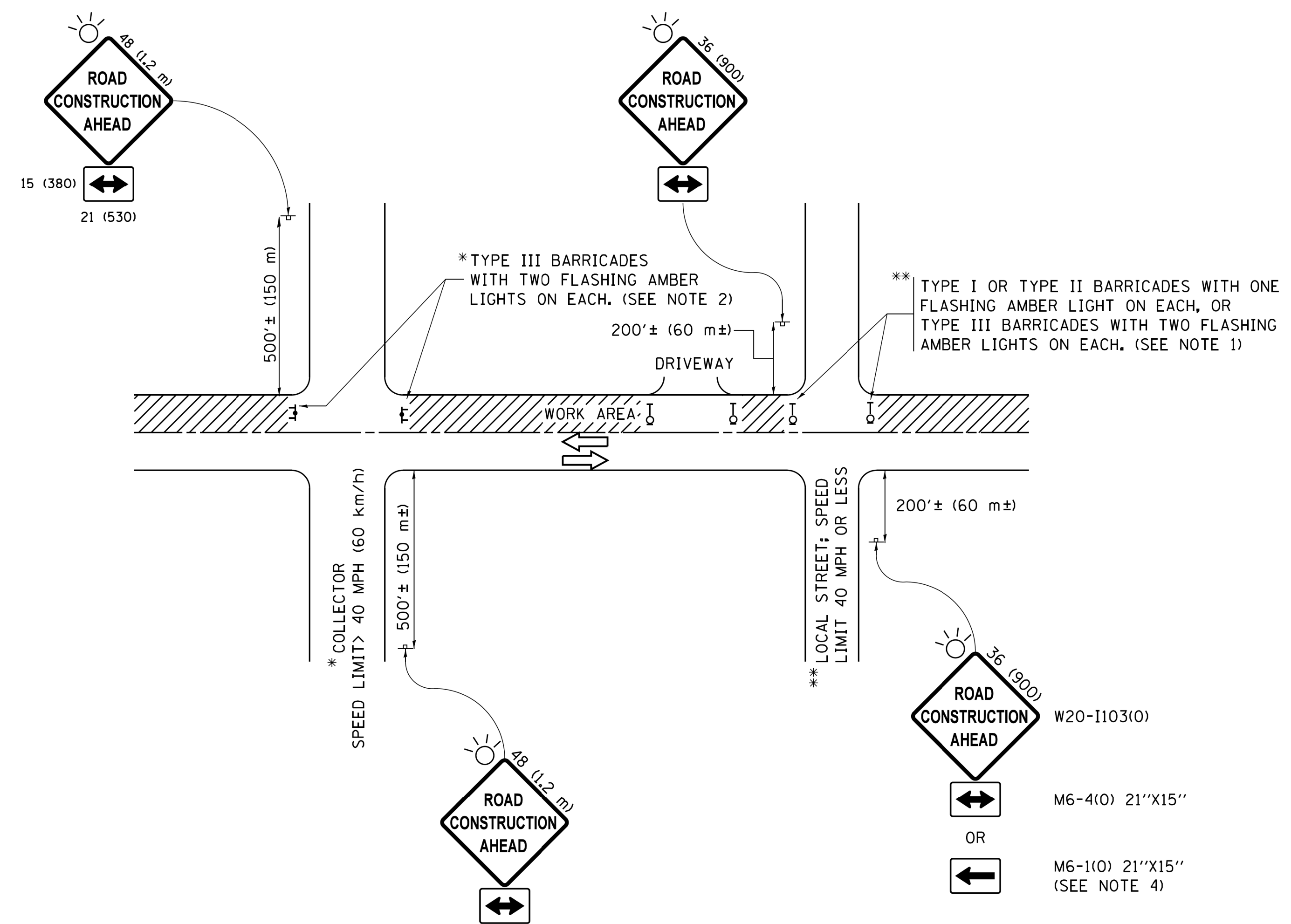
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Default	PLOT DATE = 12/21/2015	DATE - 09-22-90	REVISED - R. BORO 05-08-2015

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR DEPRESSED CURB & GUTTER AND  
SHOULDER TREATMENT AT TBT TY.1 SPL.**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	41
BD600-10 (BD 34)		CONTRACT NO. 61F12		
ILLINOIS FED. AID PROJECT				



**NOTES:**

5. 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.
6. 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.
7. 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.
8. 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).
9. 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.
10. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
11. 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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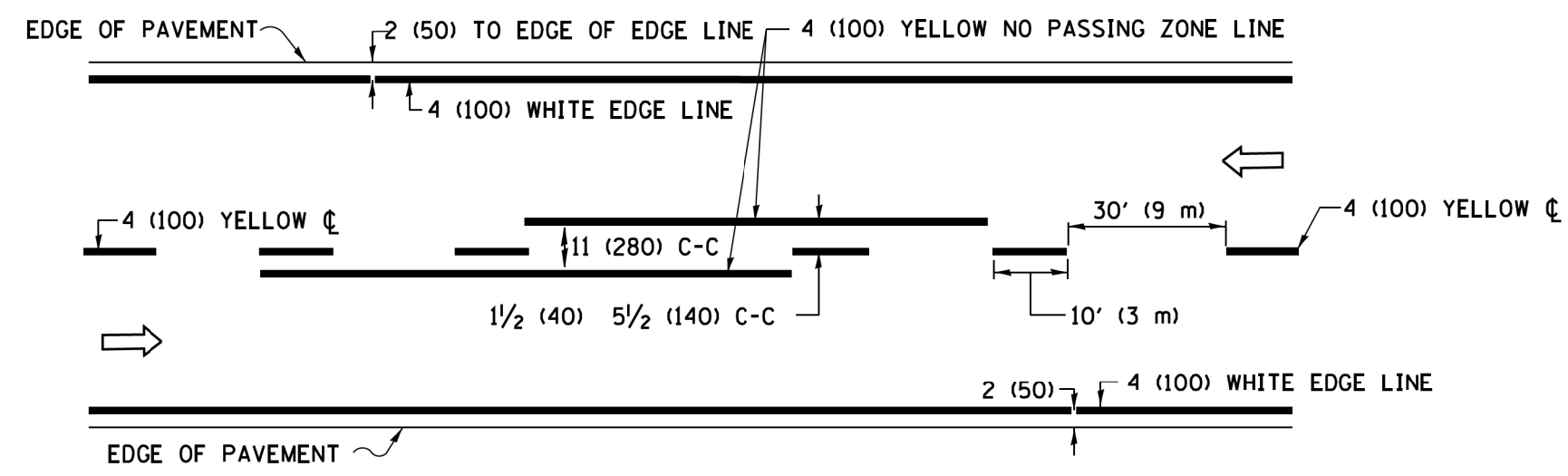
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

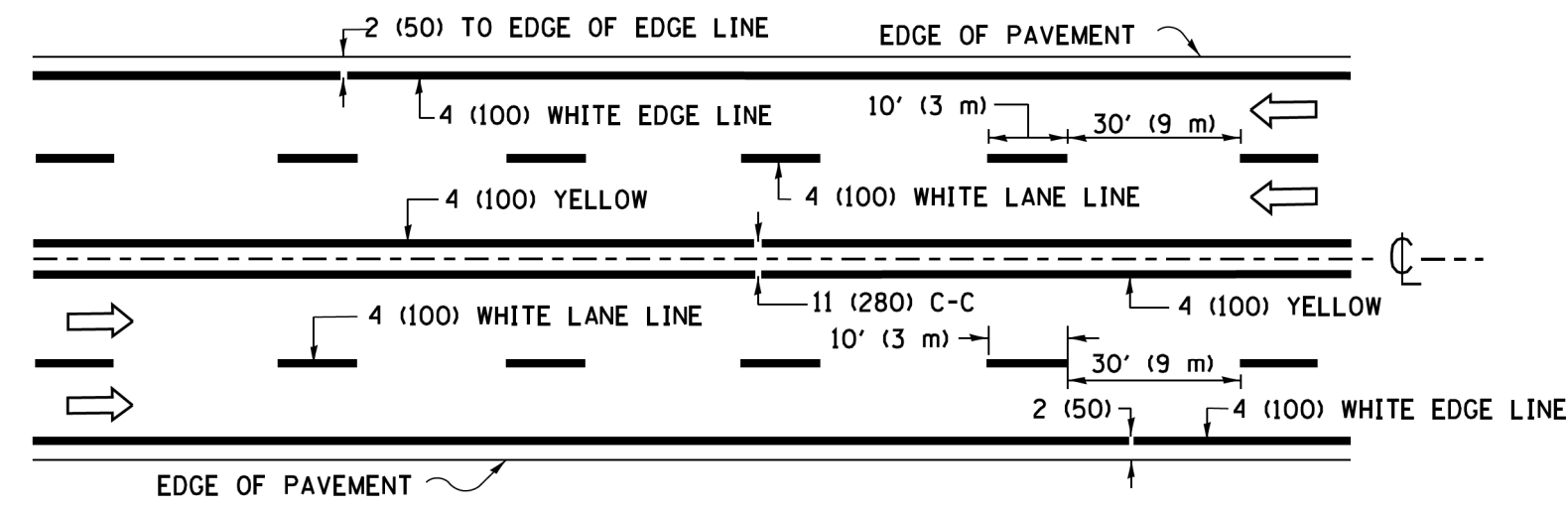
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<small>ILLINOIS FED. AID PROJECT</small>				

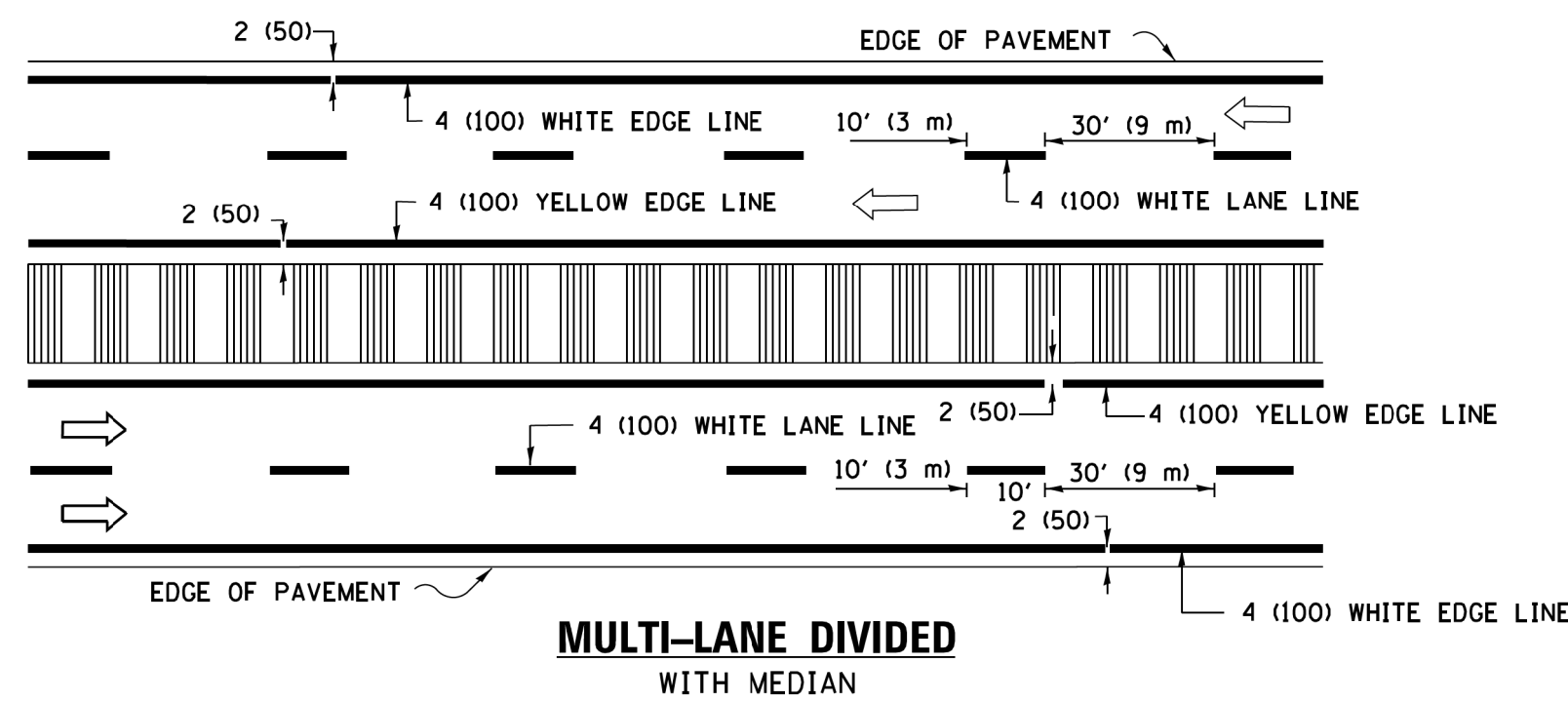
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**2-LANE ROADWAY**

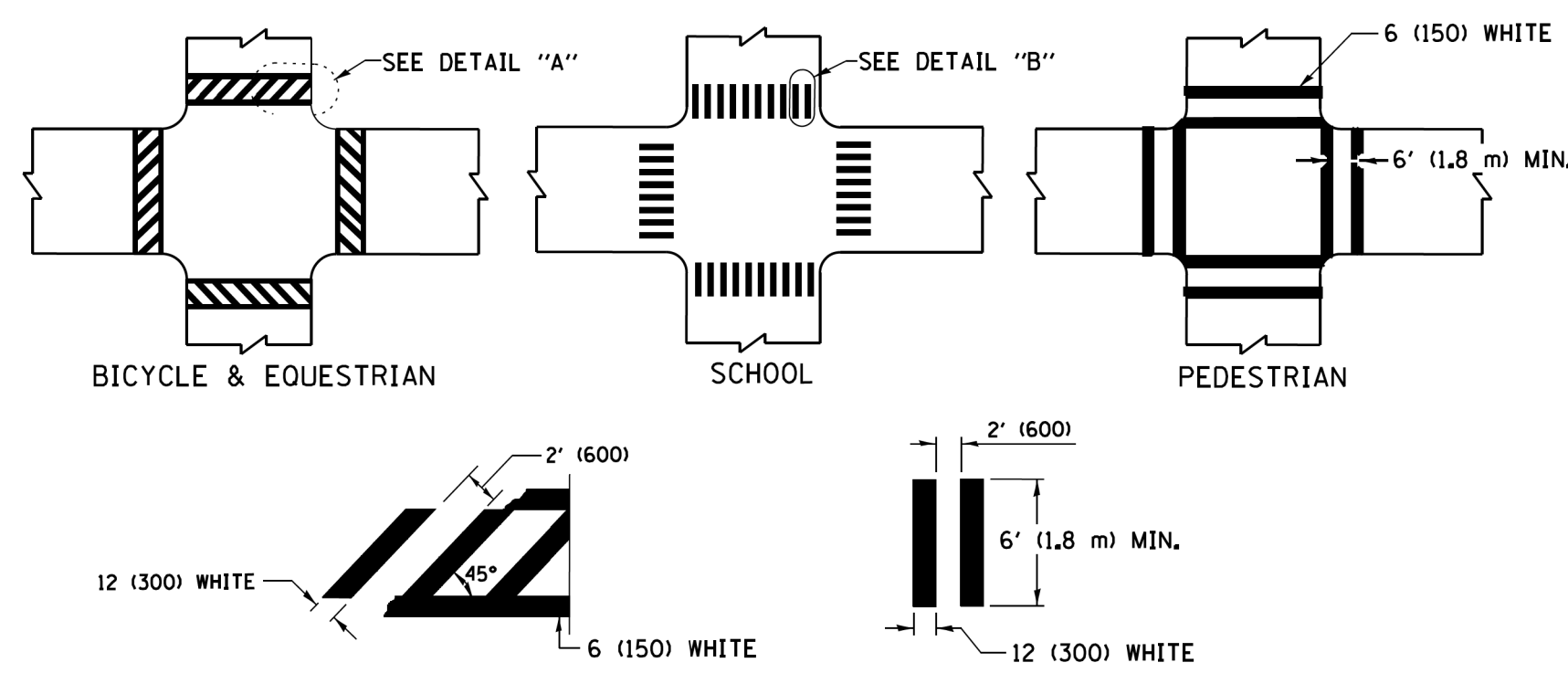


**MULTI-LANE UNDIVIDED**



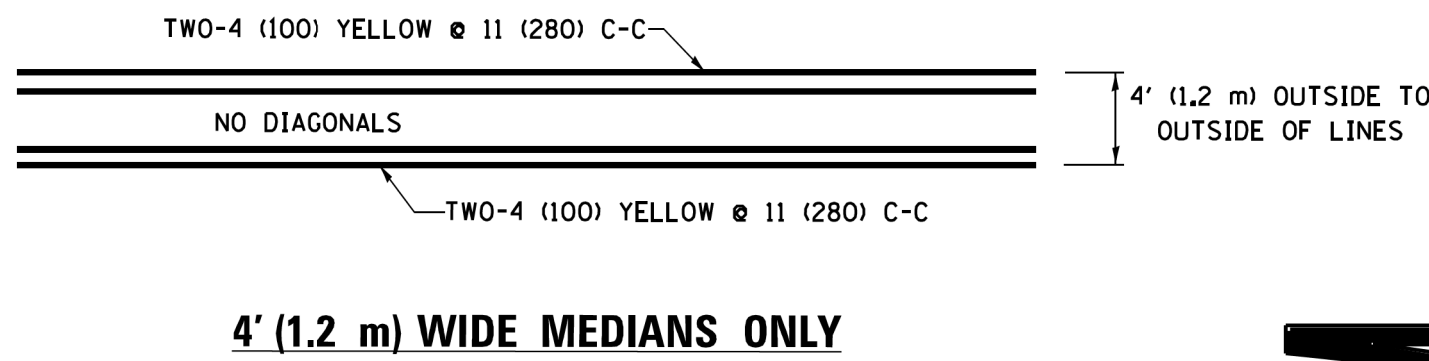
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

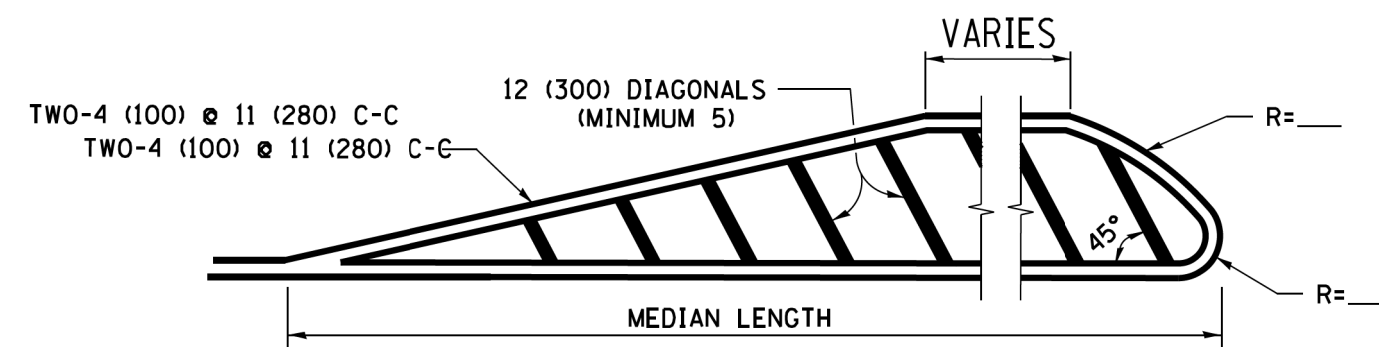


**TYPICAL CROSSWALK MARKING**

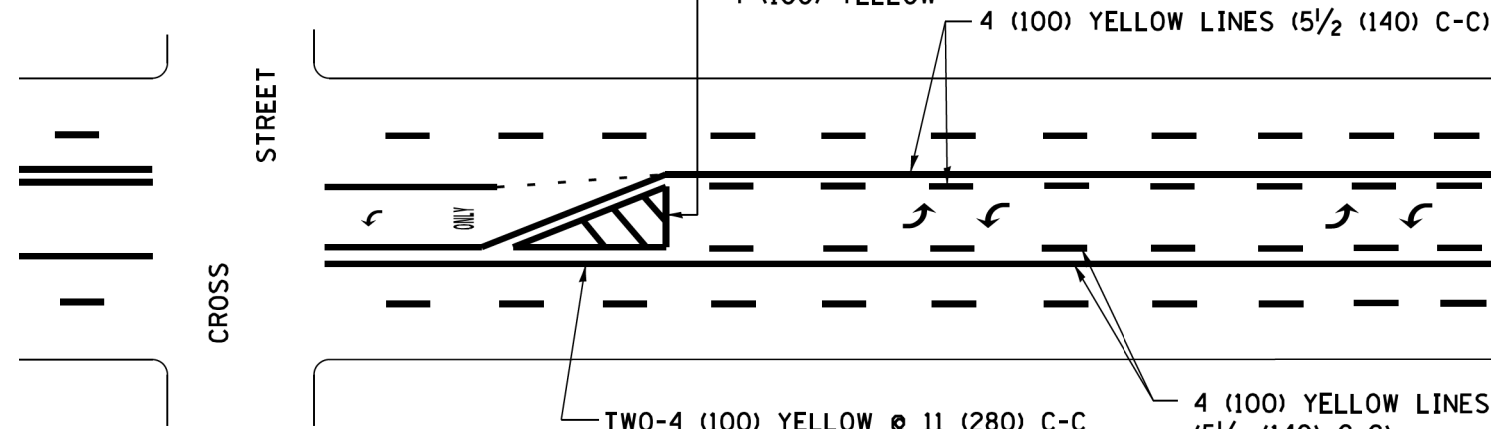
\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



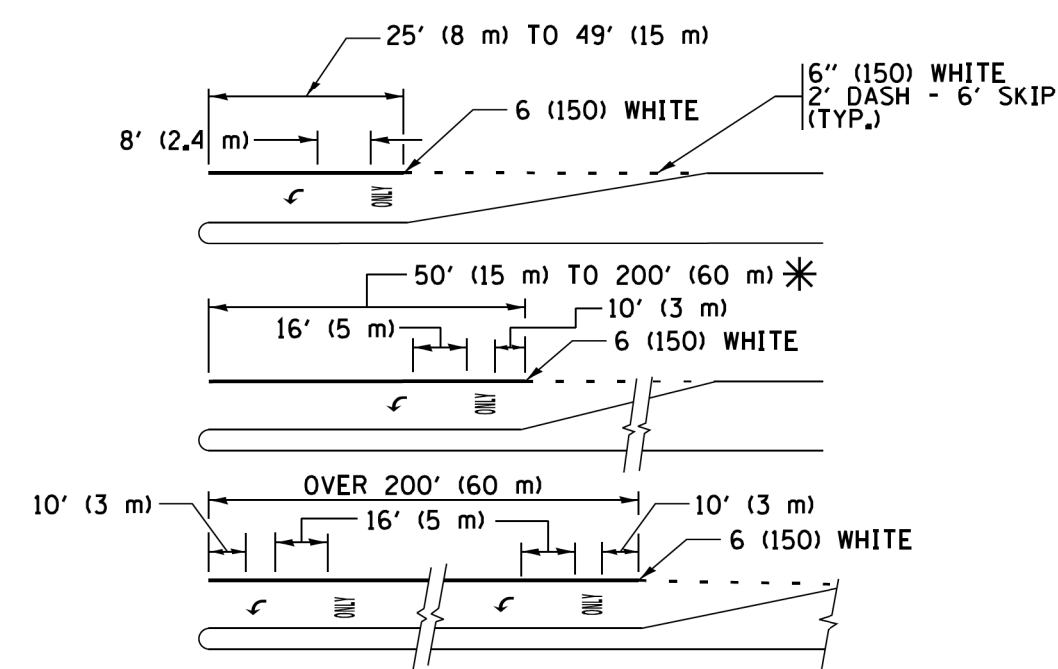
**4' (1.2 m) WIDE MEDIANS ONLY**



**MEDIANS OVER 4' (1.2 m) WIDE**

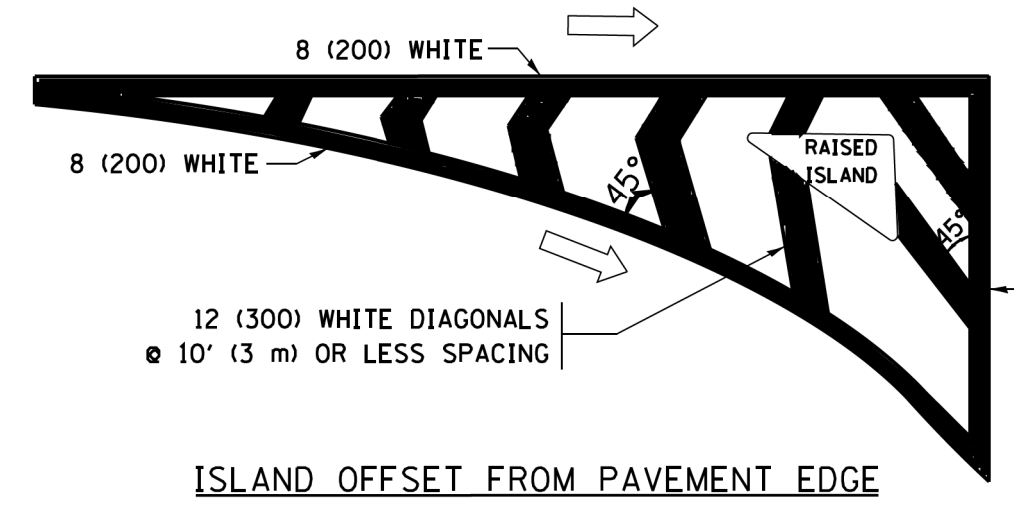


**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**

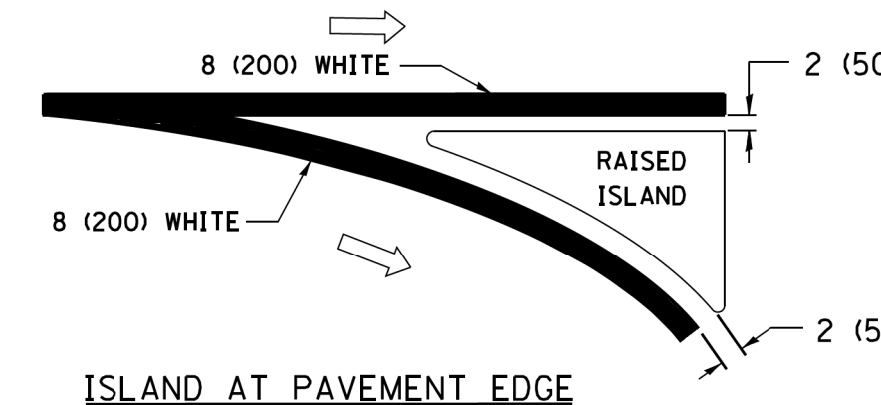


**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**

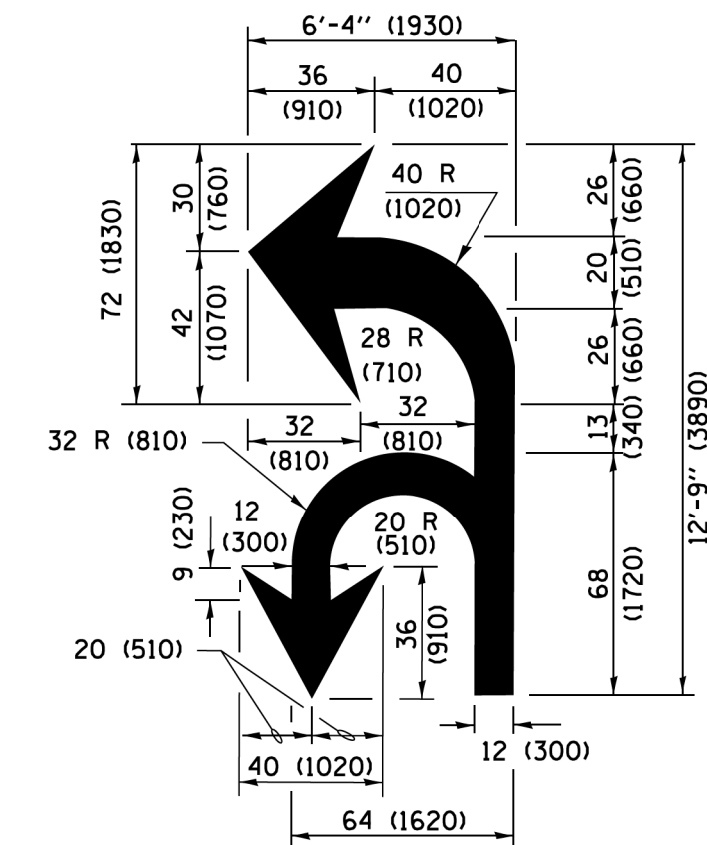


**ISLAND OFFSET FROM PAVEMENT EDGE**

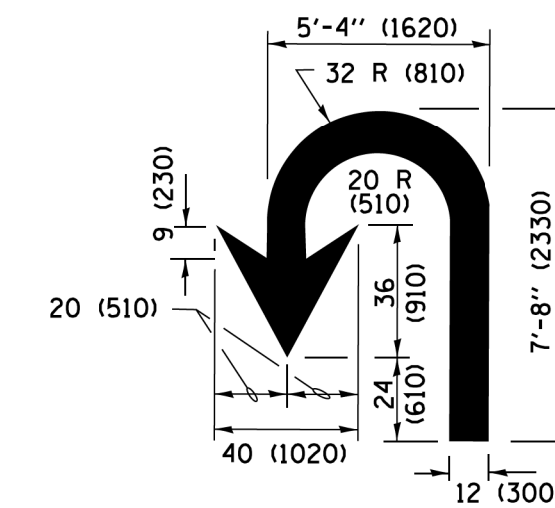


**ISLAND AT PAVEMENT EDGE**

**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	5/2 (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 5/2 (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 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
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.

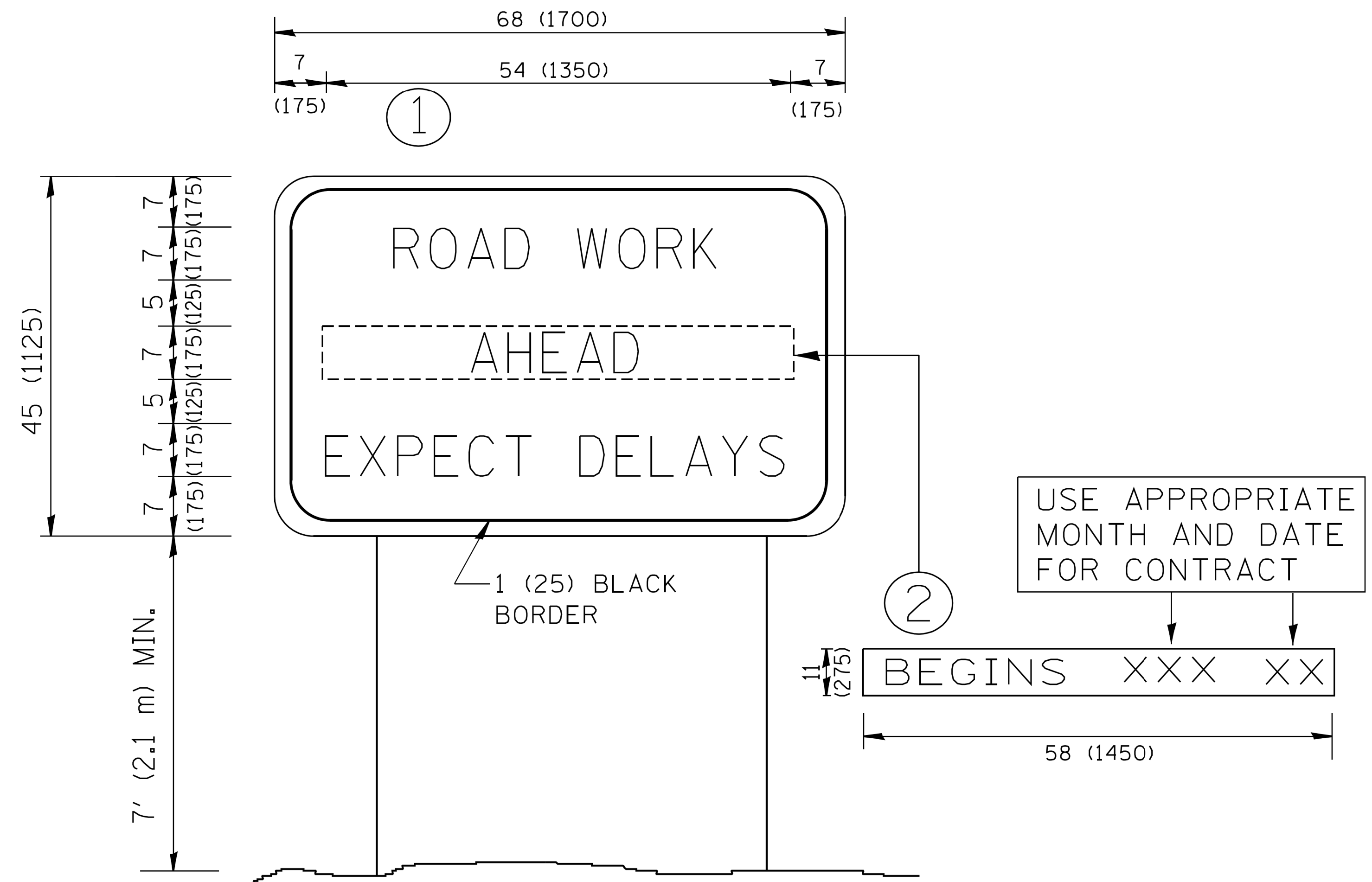
All dimensions are in inches (millimeters) unless otherwise shown.

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			C. JUCIUS 12-21-15
		DATE -	REVISED -
		03-19-90	C. JUCIUS 04-12-16

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		15-00083-00-BR	WILL	46	43
SCALE: NONE		TC-13	CONTRACT NO. 61F12		
SHEET 1 OF 1 SHEETS		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 =	USER NAME = geglanoet	DESIGNED -	REVISED - R. MIRS 09-15-97
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

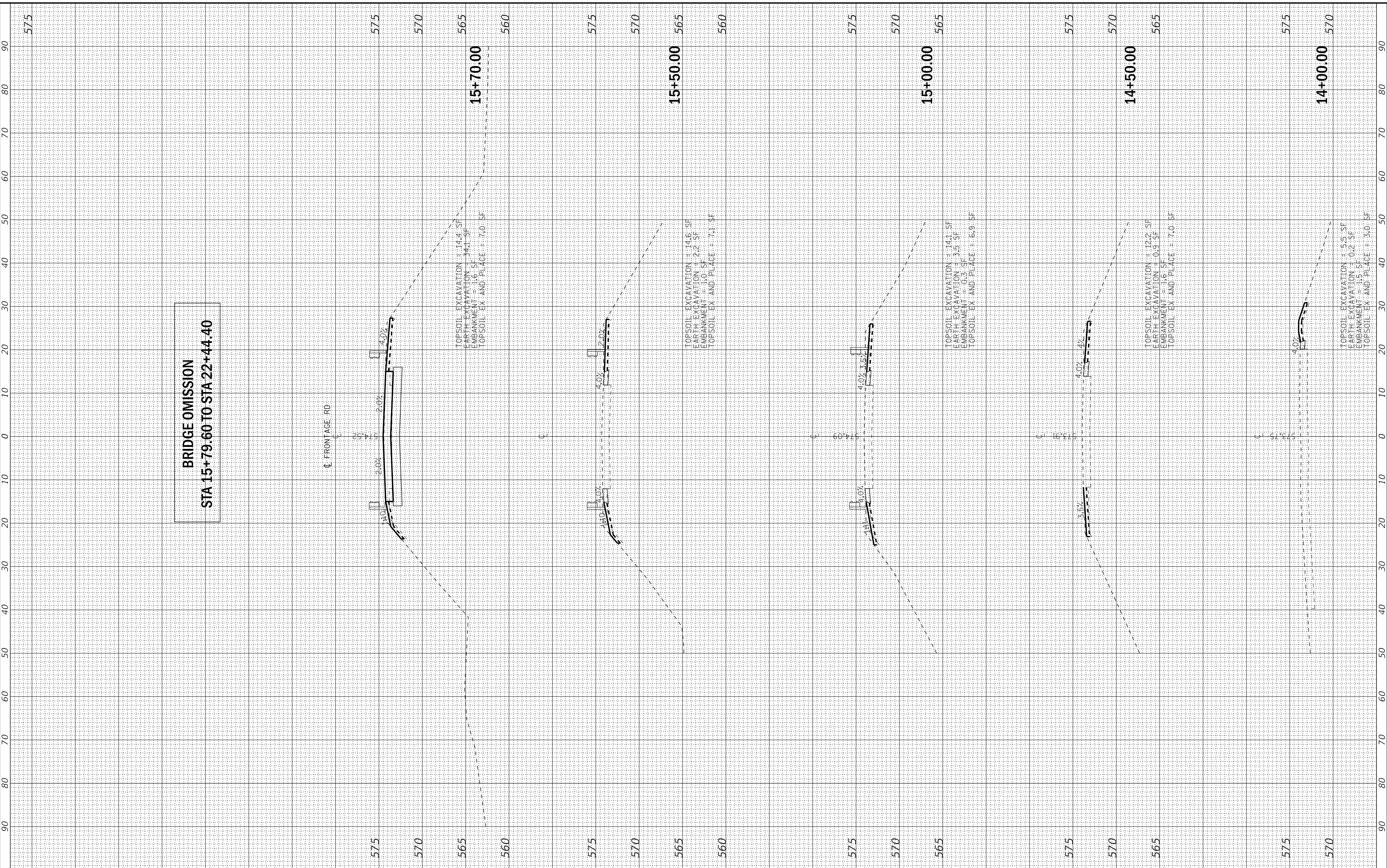
**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	44
TC-22		CONTRACT NO. 61F12		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED BY	DATE
NO.	PLOTTED TEMPLATE AREAS CHECKED	

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**BAXTER & WOODMAN**  
Consulting Engineers

USER NAME = 488cac	DESIGNED - CAC	REVISED -
PLOT SCALE = 10.0000' / in.	DRAWN - CJC	REVISED -
PLOT DATE = 11/5/2018	CHECKED - JCC	REVISED -
	DATE - 10-08-18	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: 1" = 10' H;  
1" = 5' V

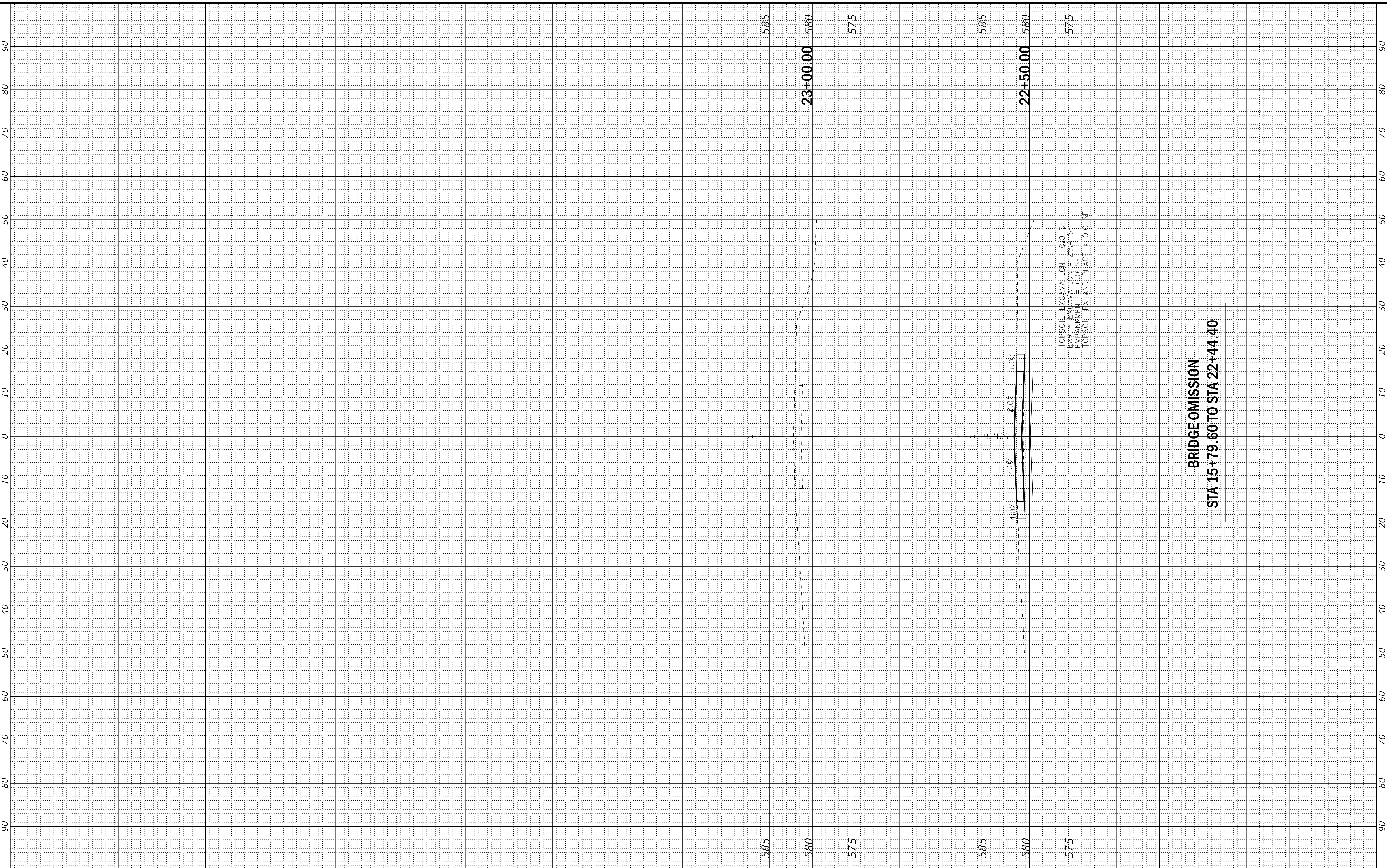
SHEET 1 OF 2 SHEETS STA. 14+00.00 TO STA. 16+00.00

**CROSS SECTIONS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	45
CONTRACT NO. 61F12				
ILLINOIS FED. AID PROJECT				

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FINAL SURVEY NO.	SURVEY PLOTTED	BY	DATE
NOTE BOOK	TEMPLATE		
	AREAS		
	AREAS CHECKED		



**BAXTER & WOODMAN**  
Consulting Engineers

USER NAME = 488cac	DESIGNED - CAC	REVISED -
PLOT SCALE = 10.0000' / in.	DRAWN - CJC	REVISED -
PLOT DATE = 11/5/2018	CHECKED - JCC	REVISED -
	DATE - 10-08-18	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS**

SCALE:  $\frac{1"}{30'}$  H:  $\frac{1"}{3'}$  V

SHEET 2 OF 2 SHEETS STA. 21+00.00 TO STA. 20+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	15-00083-00-BR	WILL	46	46
CONTRACT NO. 61F12				
		ILLINOIS	FED. AID PROJECT	