

INDIANA
DEPARTMENT OF
TRANSPORTATION

BRIDGE PLANS
FOR SPANS OVER 20 FEET
ON
I-70

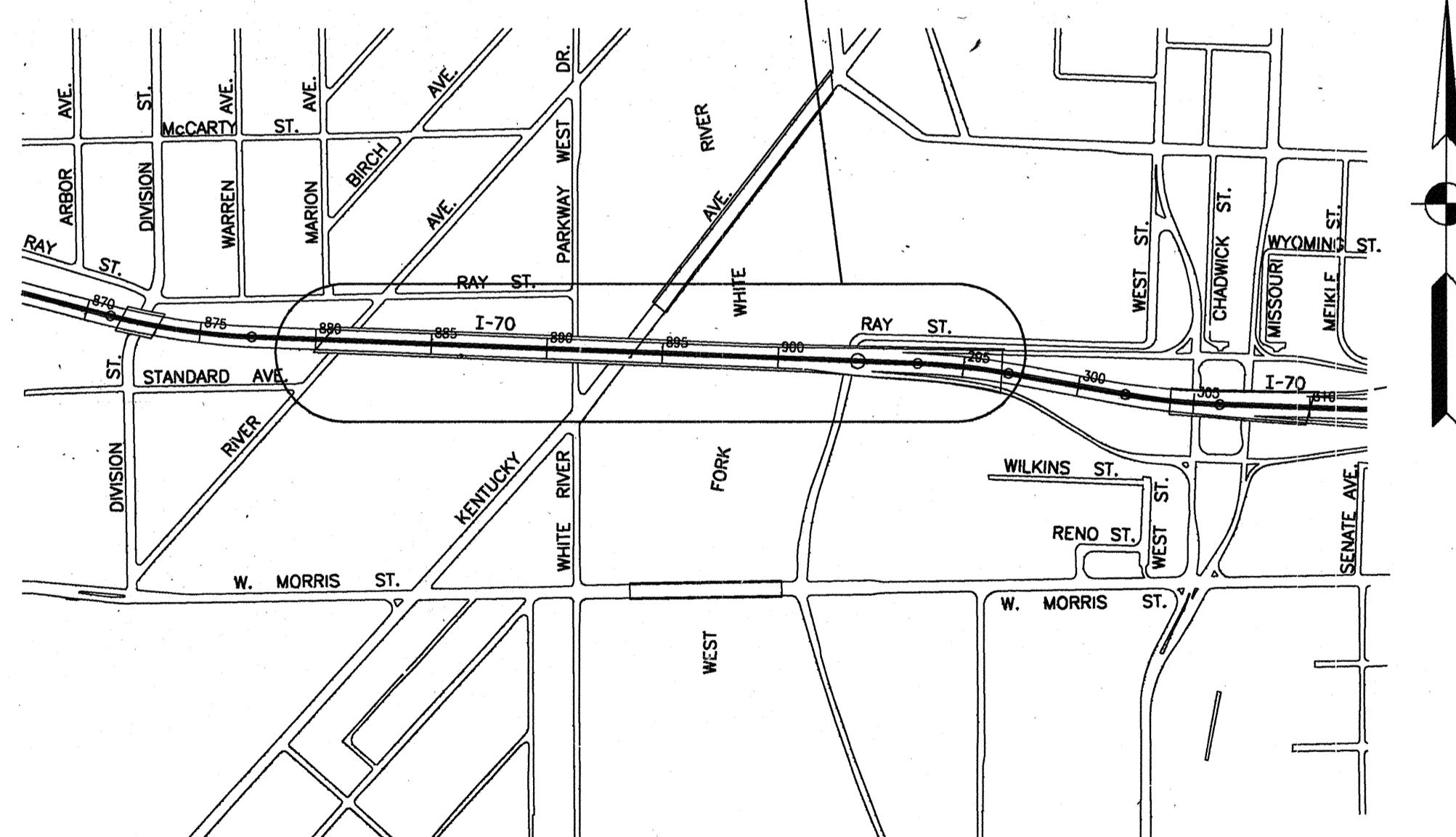
PROJECT NO. MAIR-70-3(184)7 P.E.
ACIM-70-3(193)79 R/W
CONST.

BRIDGE DECK REHABILITATION AND OVERLAY TO STR. NO. I-70-77-2420 & I-70-77-2386
OVER KENTUCKY AVENUE AND WHITE RIVER IN THE CITY OF INDIANAPOLIS, MARION COUNTY.
AT R.R. 79+23

BRIDGE LENGTH: 0.552 MILE
ROADWAY LENGTH: 0.000 MILE
TOTAL LENGTH: 0.552 MILE
MAXIMUM GRADE: +1.680 %

NOTE
WHENEVER I-70-3(193)79
APPEARS ON THESE PLANS OR CONTRACT DOCUMENTS
IT SHALL BE INTERPRETTED AS ACIM-70-3(193)79

BRIDGE DECK OVERLAY
STR. I-70-77-2420A/2386A

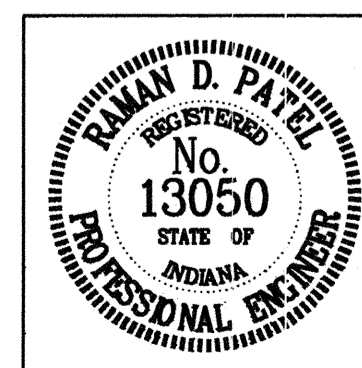


INDEX					
PROJECT	STRUCTURE	TYPE	SPAN	OVER	STATION
ACIM-70-3(193)79	I-70-77-2420A I-70-77-2386A	CONTINUOUS STEEL BEAM & PLATE GIRDER BRIDGE SEE GENERAL PLAN SHEETS	SEE GENERAL PLANS	SEE GENERAL PLANS	SEE GENERAL PLANS
SHEET NO.	SHEET DESIGNATION	SUBJECT			F.H.W.A. APPROVAL
1	ONE SHEET	TITLE SHEET & INDEX			
2	D-1	GENERAL PLAN - SPAN A-L			
3	D-2	GENERAL PLAN - SPAN A-L			
4	D-3	GENERAL PLAN - SPAN A-L			
5	D-4	GENERAL PLAN - SPAN M-Q			
6	D-5	GENERAL PLAN - SPAN R,S,T			
7	D-6	GENERAL PLAN - SPAN U-Z			
8	D-7	GENERAL PLAN - SPAN U-Z			
9	D-8	GENERAL PLAN - SPAN AA, BB, CC			
10	D-9	GENERAL PLAN - SPAN DD THRU GG			
11	D-10	BENT NO. 1 WESTBOUND DETAILS & BILL OF MATERIALS			
12	D-11	BENT NO. 1 EASTBOUND DETAILS & BILL OF MATERIALS			
13	D-12	MISCELLANEOUS DETAILS - BENT NO. 33			
14	D-13	FLOOR PLAN - UNIT "A"			
15	D-14	FLOOR PLAN - UNIT "B"			
16	D-15	FLOOR PLAN - UNIT "C"			
17	D-16	FLOOR PLAN - UNITS "D" AND "E"			
18	D-17	FLOOR PLAN - UNIT "F"			
19	D-18	FLOOR PLAN - UNIT "G"			
20	D-19	FLOOR DETAILS - SECTIONS - SHEET 1			
21	D-20	FLOOR DETAILS - SECTIONS - SHEET 2			
22	D-21	CORNER DETAILS - BENTS NO. 1 & NO. 7			
23	D-22	CORNER DETAILS - BENT NO. 13			
24	D-23	CORNER DETAILS BENT NO. 17 AND BENT NO. 20			
25	D-24	CORNER DETAILS BENT NO. 26 AND BENT NO. 29			
26	D-25	FLOOR DRAINAGE DETAILS @ BENT NO. 26			
27	D-26	FLOOR DRAINAGE DETAILS @ BENT NO. 29			
28	D-27	MISCELLANEOUS FLOOR DETAILS			
29	D-28	BILLS OF MATERIALS WESTBOUND LANES UNITS "A" THRU "G"			
30	D-29	BILLS OF MATERIALS EASTBOUND LANES UNITS "A" THRU "G"			
31	D-30	RAILING PLAN - UNIT "A"			
32	D-31	RAILING PLAN - UNIT "B"			
33	D-32	RAILING PLAN - UNIT "C"			
34	D-33	RAILING PLAN - UNIT "D"			
35	D-34	RAILING PLAN - PART UNIT "E"			
36	D-35	RAILING PLAN - PART UNIT "E"			
37	D-36	RAILING PLAN - UNIT "F"			
38	D-37	RAILING PLAN - UNIT "G" - WESTBOUND			
39	D-38	RAILING PLAN - UNIT "G" - EASTBOUND			
40	D-39	MISCELLANEOUS RAILING DETAILS			
41	D-40	BILLS OF MATERIALS - RAILING UNITS "A" THRU "G" - WESTBOUND			
42	D-41	BILLS OF MATERIALS - RAILING UNITS "A" THRU "G" - EASTBOUND			
43	D-42	APPROACH DETAILS - MEDIAN BARRIER			
44	D-43	APPROACH DETAILS - NORTHWEST AND SOUTHWEST APPROCHES			
45	D-44	APPROACH DETAILS - SOUTHEAST AND RAMP "W-E-A" APPROACHES			
46	D-45	APPROACH DETAILS - RAMP "E-W-A" AND NORTHEAST APPROACHES			
47-55		CATHODIC PROTECTION PLANS			
56-59		CATHODIC PROTECTION DETAILS			
60		BRIDGE SUMMARY			
20A	D-19A	FLOOR DETAILS - SECTIONS - SHEET 1			

TRAFFIC DATA			
A.D.T. (1994)	68,200	V.P.D.	V.P.D.
A.D.T. (20 PROJECTED)		V.P.D.	V.P.D.
D.H.V. (20 PROJECTED)		V.P.D.	V.P.D.
TRUCKS	D.H.V. % A.D.T. %	D.H.V. % A.D.T. %	
POSTED SPEED	55	M.P.H.	M.P.H.
ACCESS CONTROL	LIMITED		
FUNCTIONAL CLASSIFICATION	INTERSTATE		

REVISIONS	
DATE	SHEET NO.
5-16-95	1: Add 20A

PLANS PREPARED BY:
RQAW
REID, QUEBE, ALLISON, WILCOX & ASSOCIATES, INC.
4755 KINGSWAY DRIVE SUITE 400
INDIANAPOLIS, INDIANA 46205
CERTIFIED BY: *Raman D. Patel*
RAMAN D. PATEL P.E.
(317) 255-6060



BRIDGES OVER 20' SPAN					
FEDERAL REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ACIM-70-3(193)79	1994	1	69

INDEX CONTINUED STANDARD DRAWINGS					
SHEET NO.	SHEET DESIGNATION	SUBJECT	PURPOSE/USE	F.H.W.A. APPROVAL	ADOPTED "A" REVISION "R"
	BRIDGE STD. BR-1	CONCRETE BRIDGE RAILING TRANSITION TYPE TGB			
	BRIDGE STD. BR-1A	CONCRETE BRIDGE RAILING TRANSITION TYPE TGB			
	BRIDGE STD. BR-2	CONCRETE BRIDGE RAILING TRANSITION TYPE WGB			
	BRIDGE STD. BR-2A	CONCRETE BRIDGE RAILING TRANSITION TYPE WGB			
61	BRIDGE STD. C1	MISCELLANEOUS DETAILS	REINFORCING & SPLICE BAR NOTES	01-26-93	A DEC., 1992
	BRIDGE STD. C2	MISCELLANEOUS DETAILS			
62	BRIDGE STD. C3	MISCELLANEOUS DETAILS	MISC. JOINTS, OPT. VERT. SPLICE RAILING REINF.	01-26-93	A NOV., 1992
	BRIDGE STD. C4	PRESTRESSED CONCRETE PILES			
	BRIDGE STD. C5	PRECAST DECK PANEL DETAILS			
63	BRIDGE STD. D	CASTING DETAILS AND ROADWAY DRAINS	ROADWAY DRAINS TYPE OS-D & SQ-A	01-11-89	R-- 09-01-88
64	BRIDGE STD. D1	ADJUSTING FRAME DETAILS FOR ROADWAY DRAINS	ADJUSTING FRAME TYPE OS	07-16-83	R-- 06-30-82
	BRIDGE STD.	PRESTRESSED CONCRETE			
	BRIDGE STD.	PRESTRESSED CONCRETE			
	BRIDGE STD. PB10	TOLERANCES FOR FABRICATION OF PRESTRESSED BEAMS			
	BRIDGE STD. PB11	ELASTOMERIC BEARING PADS FOR CONCRETE BEAMS			
65	BRIDGE STD. R2B	BRIDGE LIGHTING DETAILS	MISC. LIGHTING DETAILS	05-19-88	R-- 04-04-88
66	BRIDGE STD. S1	MISCELLANEOUS DETAILS	B-BORROW PLACEMENT	01-22-87	R-- 12-01-86
	BRIDGE STD. SH1	STEEL SHOE DETAILS			
67	BRIDGE STD. SS-1	EXPANSION JOINTS CLASS-SS	STRUCTURAL EXPANSION JOINT	01-20-91	A APR., 1991
68	BRIDGE STD. SS-2	EXPANSION JOINTS CLASS-SS	STRUCTURAL EXPANSION JOINT	01-20-91	A APR., 1991
	BRIDGE STD. T SHEET A	STANDARD TEMPORARY BRIDGE			
	BRIDGE STD. T SHEET B	STANDARD TEMPORARY BRIDGE			
	ROAD STD. SHEET A	STANDARD PAVEMENT JOINTS			
69	ROAD STD. SHEET B	STANDARD PAVEMENT JOINTS	TERMINAL JOINTS, R.C. BR. APPR. REINF.	01-26-93	A NOV., 1992
	ROAD STD. SHEET MA	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MB	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MB-2	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MB-4	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MC	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MC-1	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MD	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MD	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MD	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET ME	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET ME	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MH	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MH-1	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MH-2	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MI	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MI-1	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MI-2	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MN	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MN-1	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MP	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MQ	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MT2	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET MT3	MISCELLANEOUS STANDARDS			
	ROAD STD. SHEET B-1	TYPICAL BRIDGE APPROACH GUARDRAIL			
	ROAD STD. SHEET E-1	GUARDRAIL END TREATMENT TYPE I			
	ROAD STD. SHEET E-2	GUARDRAIL END TREATMENT TYPE OS			
	ROAD STD. SHEET E-3	GUARDRAIL END TREATMENT TYPE MS			
	ROAD STD. SHEET E-4	CURVED W-BEAM GUARDRAIL SYSTEM			
	ROAD STD. SHEET E-4A	CURVED W-BEAM GUARDRAIL SYSTEM			
	ROAD STD. SHEET E-4B	CURVED W-BEAM GUARDRAIL SYSTEM			
	ROAD STD. SHEET G-1	W-BEAM GUARDRAIL COMPONENTS			
	ROAD STD. SHEET G-2	THREE-BEAM GUARDRAIL COMPONENTS			
	ROAD STD. SHEET G-3	W-BEAM GUARDRAIL ASSEMBLIES			
	ROAD STD. SHEET H-1	HAZARD PROTECTION GUARDRAIL			
	ROAD STD. SHEET H-2	HAZARD PROTECTION GUARDRAIL			
	ROAD STD. SHEET P-1	PIER PROTECTION GUARDRAIL			
	ROAD STD. SHEET P-2	PIER PROTECTION GUARDRAIL			
	ROAD STD. SHEET P-3	PIER PROTECTION GUARDRAIL			
	ROAD STD. SHEET P-4	PIER PROTECTION GUARDRAIL			
	ROAD STD. SHEET T-1	GUARDRAIL TRANSITION TYPE TGB			
	ROAD STD. SHEET T-1A	GUARDRAIL TRANSITION TYPE WGB			
	ROAD STD. SHEET T-2	GUARDRAIL TRANSITION TYPE GP			
	ROAD STD. SHEET T-3	GUARDRAIL TRANSITION TYPE VH			
	ROAD STD. SHEET T-4	PIER CONNECTION DETAILS			
	ROAD STD. SHEET CB-1	CONCRETE MEDIAN BARRIER			
	ROAD STD. SHEET CB-2	TEMPORARY CONCRETE BARRIER			
	ROAD STD. SHEET 1	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 1A	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 1B	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 2	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 2A	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 3	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 3A	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 4	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 5	STANDARD DETOUR SIGNS			
	ROAD STD. SHEET 5A	STANDARD DETOUR SIGNS			

APPROVED FOR LETTING: *Philip H. Kliska*
CHIEF DIVISION OF DESIGN -- INDIANA DEPARTMENT OF TRANSPORTATION

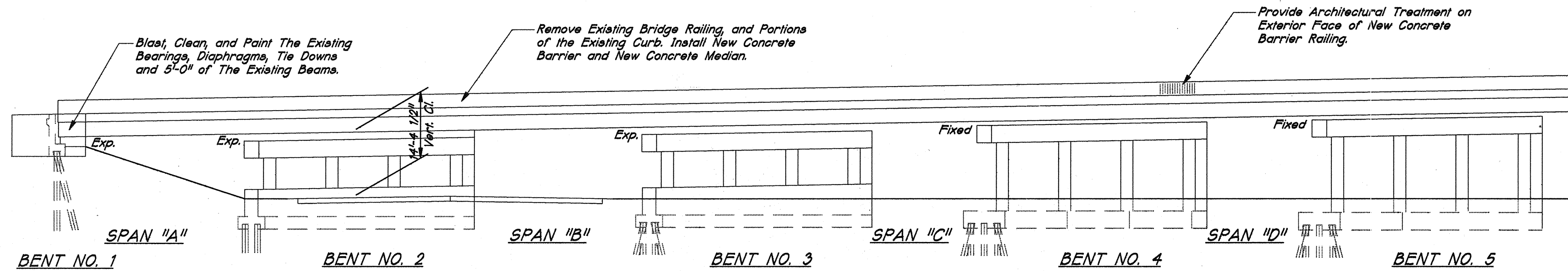
FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
APPROVED: _____
DIVISION ADMINISTRATOR DATE
BRIDGE FILE: I-70-77-2420A & 2386A

I-70-77-2420A TITLESHEET.DWG
SCALE: 1/8"=1'-0"
DATE: 08/30/94 AT 11:45 ROW

INDIANA DEPARTMENT OF HIGHWAYS
STANDARD SPECIFICATIONS DATED 1993
TO BE USED WITH THESE PLANS.
DES. NO. 8459070

RQAW FILE: 91036/3392

STRUCTURE IS BUILT TO A +1.68 % GRADE



PART ELEVATION - UNIT "A"
SCALE: 1/16" = 1'-0"

GENERAL NOTES:

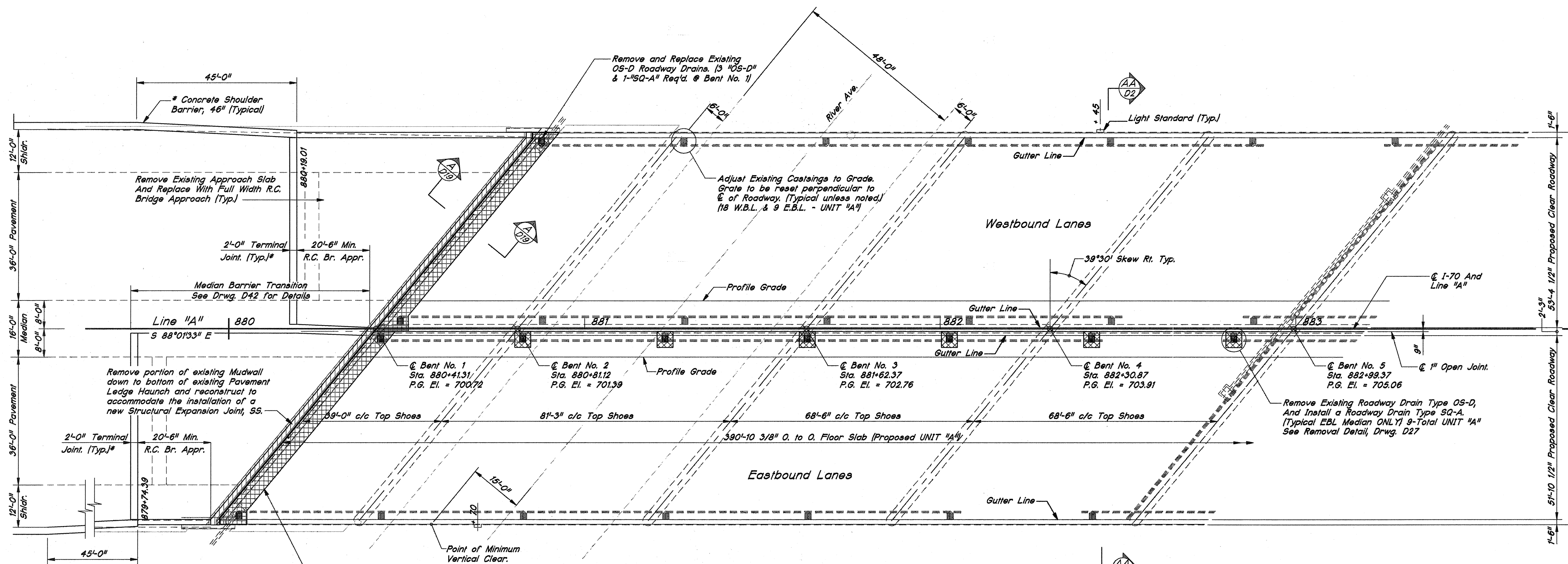
PLANS FOR THE EXISTING STRUCTURE ARE ON FILE IN THE BRIDGE DEPARTMENT OF THE INDIANA DEPARTMENT OF TRANSPORTATION AS BRIDGE FILE I-70-77-2420 (PARTS A & B) AND I-70-77-2386 ARE AVAILABLE UPON REQUEST.

MATERIAL NOTES:

- BRIDGE DECK OVERLAY
- 1 3/4" MODIFIED PORTLAND CEMENT CONCRETE OVERLAY
- OR
- 2 1/2" DENSE PORTLAND CEMENT CONCRETE OVERLAY

An Undersized 100 Lft. of 6" # Steel Drain Pipe For Repair to Existing Drainage System Shall Be Provided.

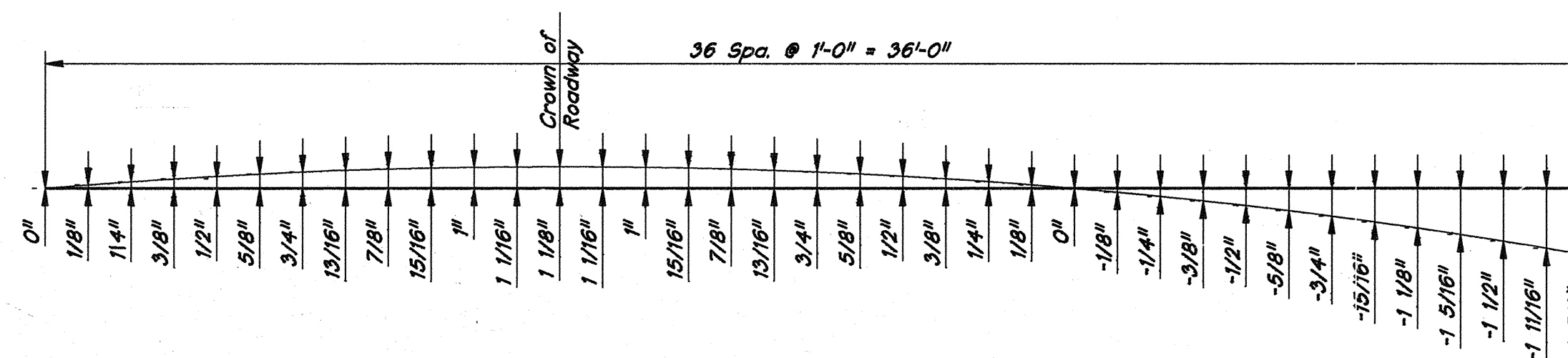
After The Completion Of Construction The Bridge Drainage System Shall Be Cleaned And Flushed To Their Outlet. This Includes Any Berm Drainage.



PART PLAN - UNIT "A"
SCALE: 1/16" = 1'-0"

* Indicates Items Included in the Road Portion of This Contract.

CROSS - HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"



PAVEMENT OFFSETS
SCALE: NONE

GENERAL PLAN - SPANS A-L

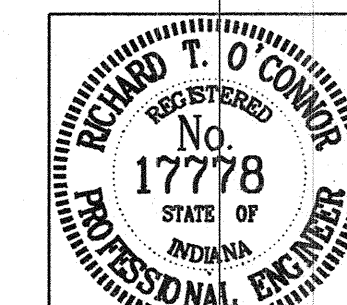
BRIDGE DECK REHABILITATION AND OVERLAY
CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
12 SPANS: 39'-0", 81'-3", 9 @ 68'-6", 57'-3 5/8"
SKEW: 39°30' RIGHT CLEAR ROADWAY: 53'-4 1/2" (WBL), 51'-10 1/2" (EBL)
I-70 OVER WHITE RIVER

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE SEPTEMBER 2, 1994

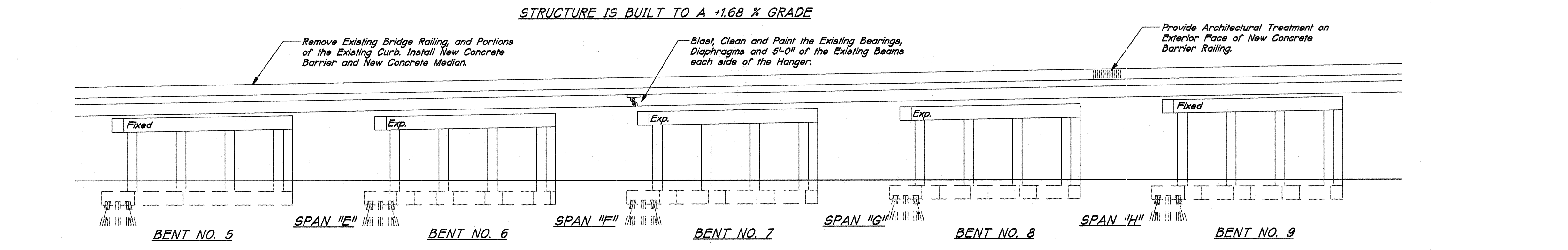
SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
DRAWING: DI OF D45 SHEET: 2 OF 69

PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A

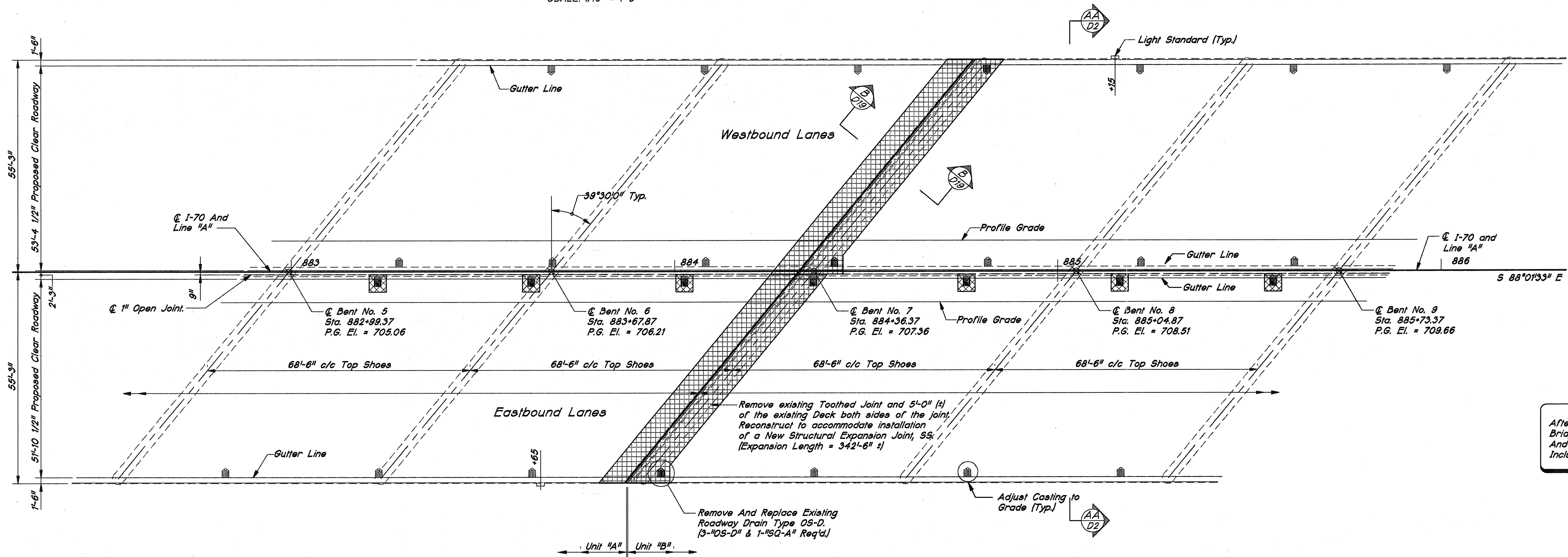


DAI-70-3392-3392-001.DWG
Scale: 1" = 100'00'
Time: 08/18/94 at 11:58 ROAW

DRAWN	GKM/DRD	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayD	CHK.	SCJ



PART ELEVATION - UNITS "A" & "B"
SCALE: 1/16" = 1'-0"

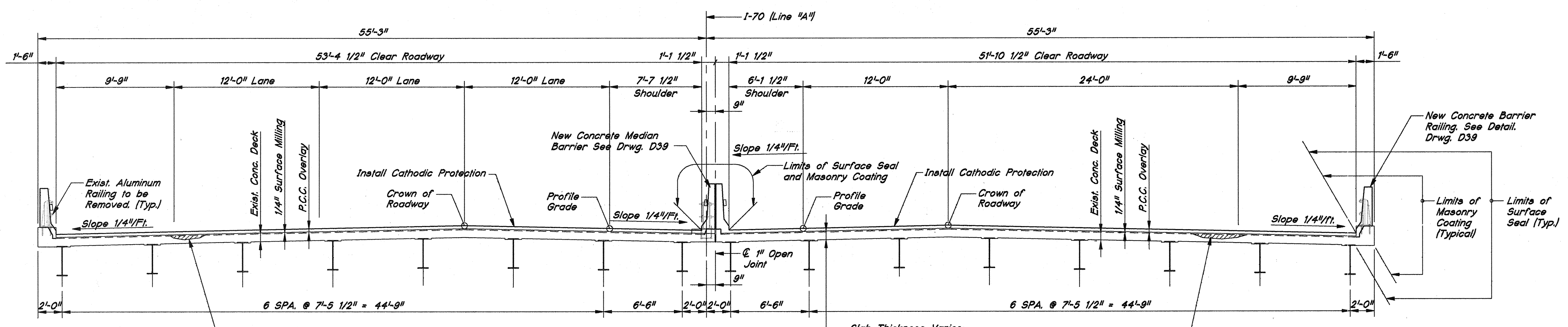


PART PLAN - UNITS "A" & "B"
SCALE: 1/16" = 1'-0"

CROSS - HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"

After The Completion Of Construction The Bridge Drainage System Shall Be Cleaned And Flushed To Their Outlet. This Includes Any Barm Drainage.

NOTE:
FOR GENERAL NOTES, SEE DRAWING D1.

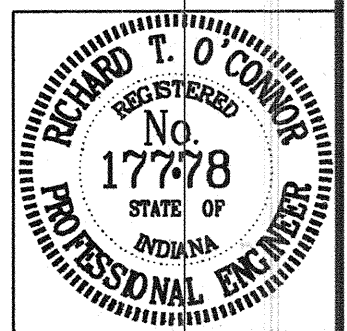


SECTION AA-D2
SCALE: 3/16" = 1'-0"

GENERAL PLAN - SPANS A-L
BRIDGE DECK REHABILITATION AND OVERLAY
CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
12 SPANS: 39'-0", 81'-3", 9 @ 68'-6", 57'-3 5/8"
SKEW: 39°30' RIGHT CLEAR ROADWAY: 53'-4 1/2" (WBL), 51'-10 1/2" (EBL)
I-70 OVER WHITE RIVER

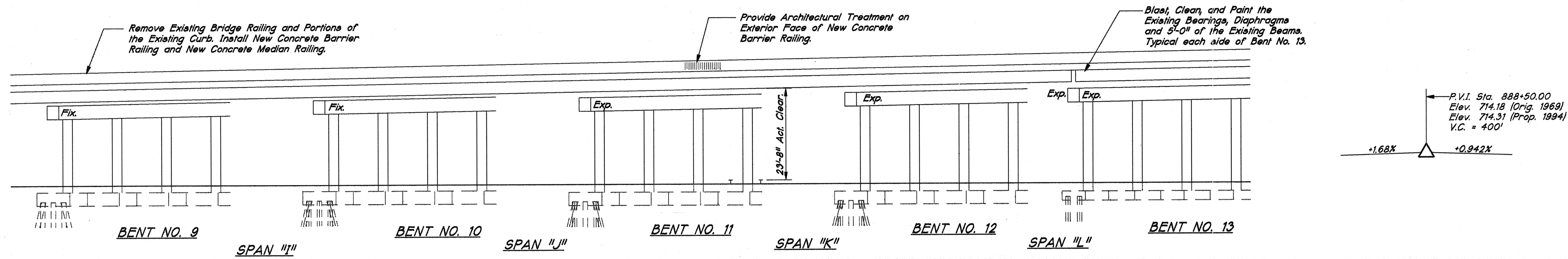
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
DRAWING: D2 OF D45 SHEET: 3 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A

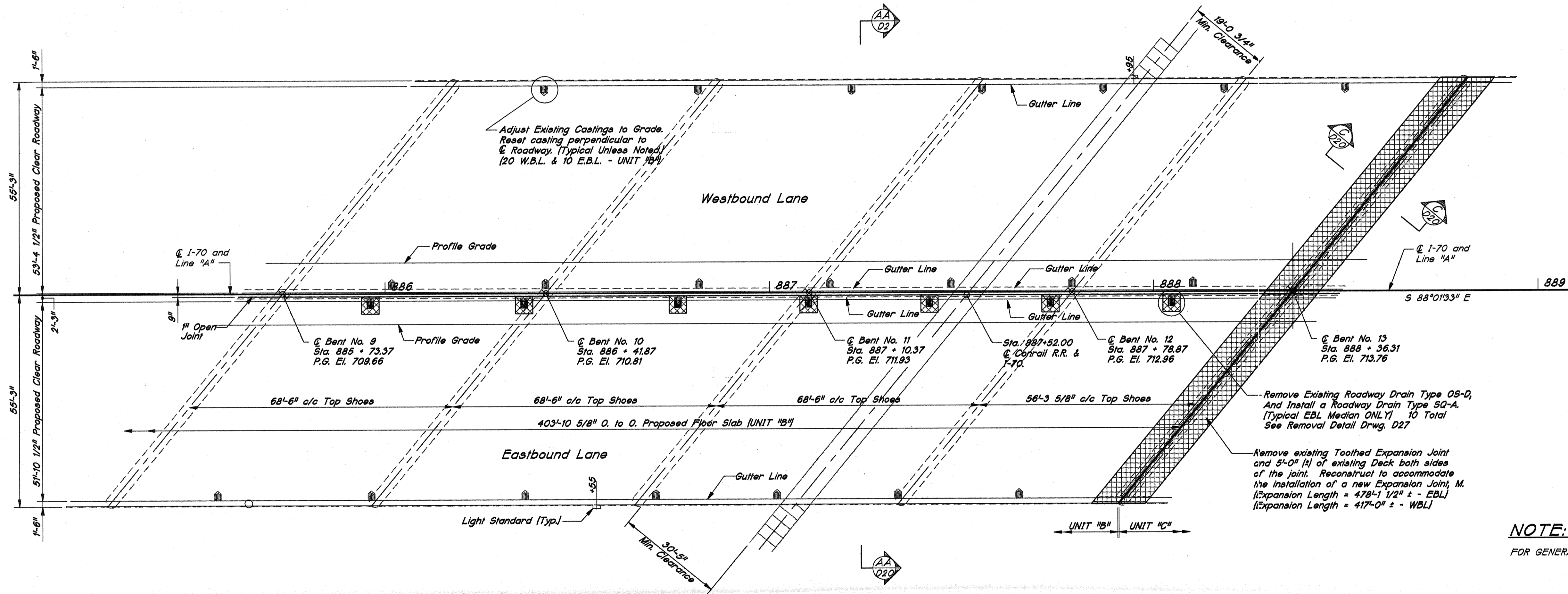
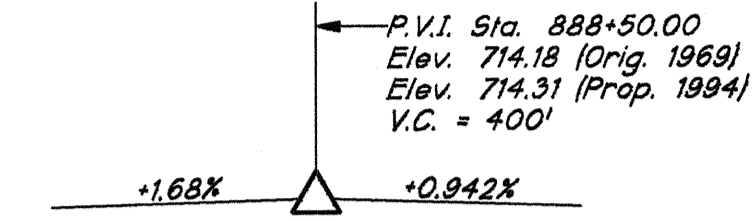


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STRUCTURE IS BUILT TO A +1.68% GRADE AND A 400' VERTICAL CURVE



PART ELEVATION - UNIT "B"
SCALE: 1/16" = 1'-0"



PART PLAN - UNIT "B"
SCALE: 1/16" = 1'-0"

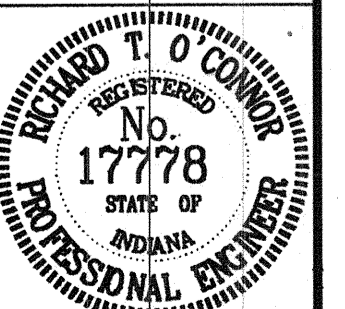
NOTE:
FOR GENERAL NOTES, SEE DRAWING D1.

CROSS - HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS".

After The Completion Of Construction The Bridge Drainage System Shall Be Cleaned And Flushed To Their Outlet. This Includes Any Berm Drainage.

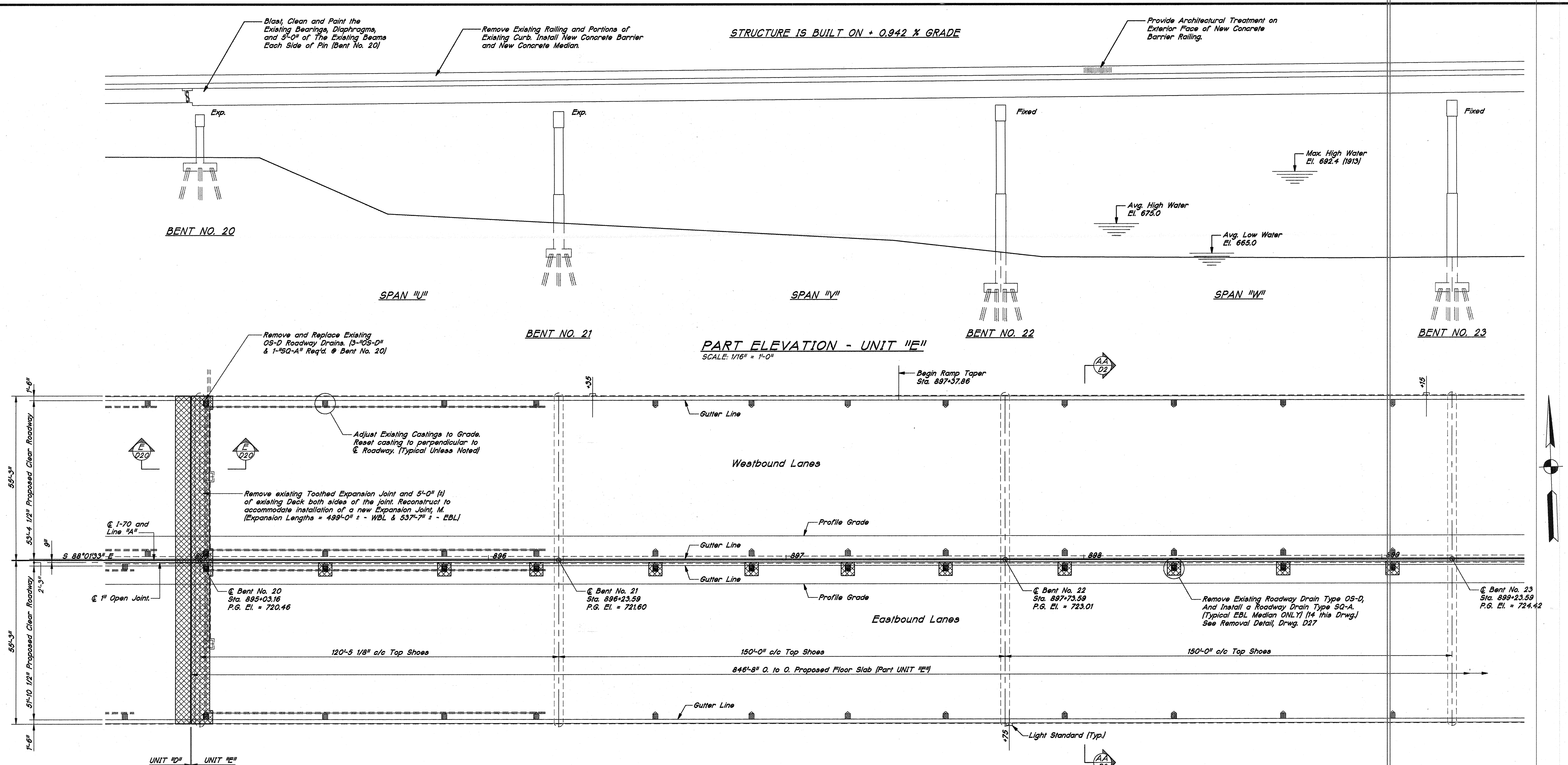
GENERAL PLAN - SPANS A-L
BRIDGE DECK REHABILITATION AND OVERLAY
CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
12 SPANS: 39'-0", 81'-3", 9 @ 68'-6", 57'-3 5/8"
SKEW: 39°30' RIGHT CLEAR ROADWAY: 53'-4 1/2" (WBL), 51'-10 1/2" (EBL)
I-70 OVER WHITE RIVER
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
DRAWING: D3 OF D45 SHEET: 4 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A

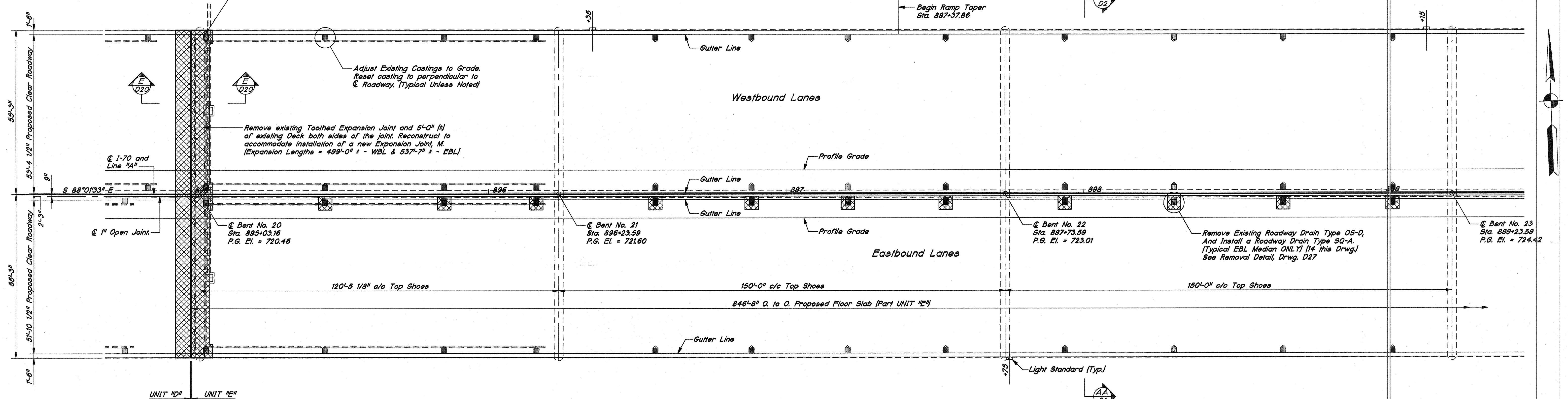


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Time: 08/30/94 at 11:57 ROAW

DRAWN: GKM/DRD CHK: SCJ
DESIGNED: CHK:
TRACED: KayQ CHK: SCJ



PART ELEVATION - UNIT "E"
SCALE: 1/16" = 1'-0"



PART PLAN - UNIT "E"
SCALE: 1/16" = 1'-0"

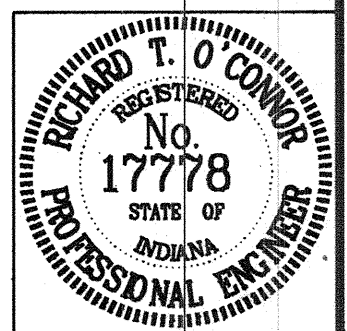
CROSS - HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"

After The Completion Of Construction The Bridge Drainage System Shall Be Cleaned And Flushed To Their Outlet. This Includes Any Berm Drainage.

NOTE:
FOR GENERAL NOTES, SEE DRAWING D1.

GENERAL PLAN - SPANS U THRU Z
BRIDGE DECK REHABILITATION AND OVERLAY
CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
6 SPANS: 120'-5 1/8", 4 @ 150'-0", 120'-5 1/8"
SKEW: SQUARE CLEAR ROADWAY: VARIES
I-70 OVER WHITE RIVER
INDIANA DEPARTMENT OF TRANSPORTATION

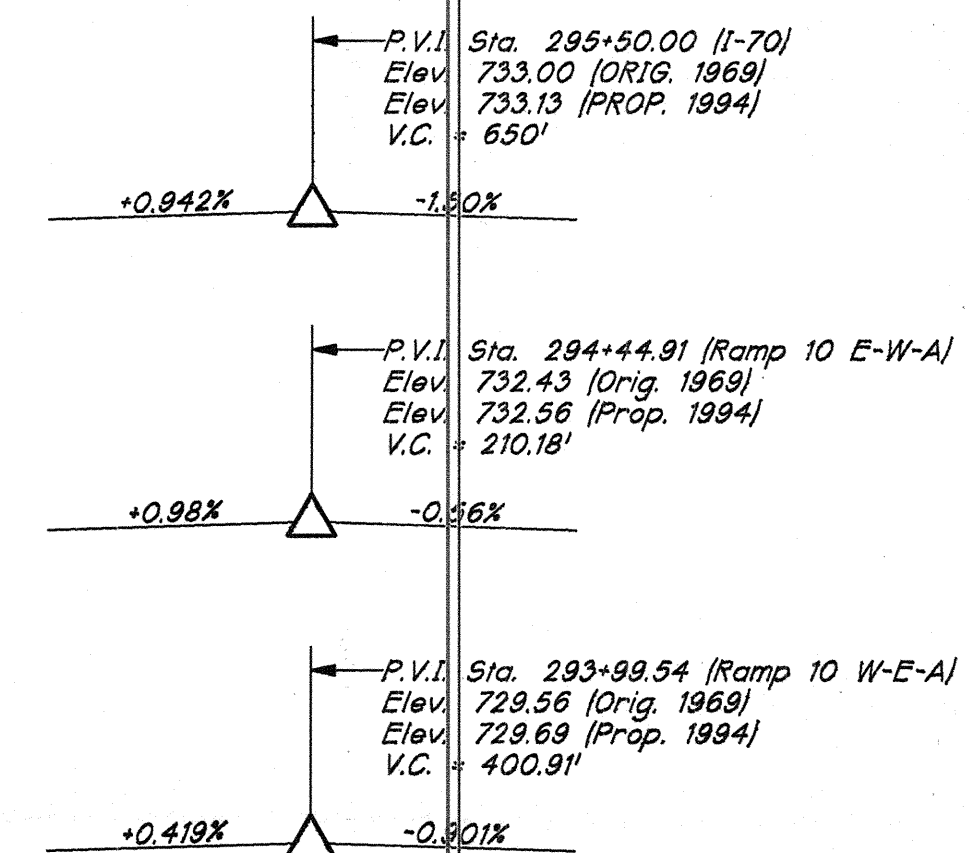
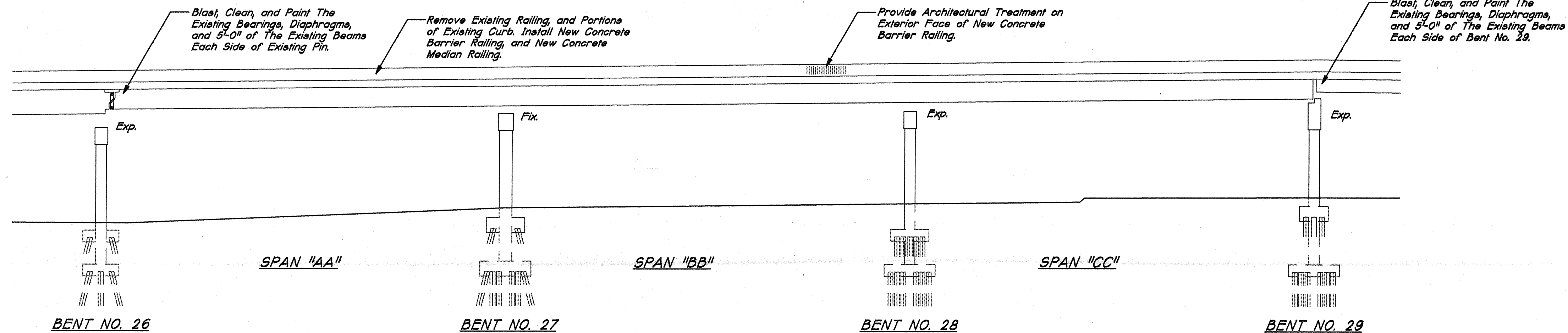
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SUBMITTED FOR APPROVAL: *Richard O'Connor*
DRAWING: D6 OF D45 SHEET: 7 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A



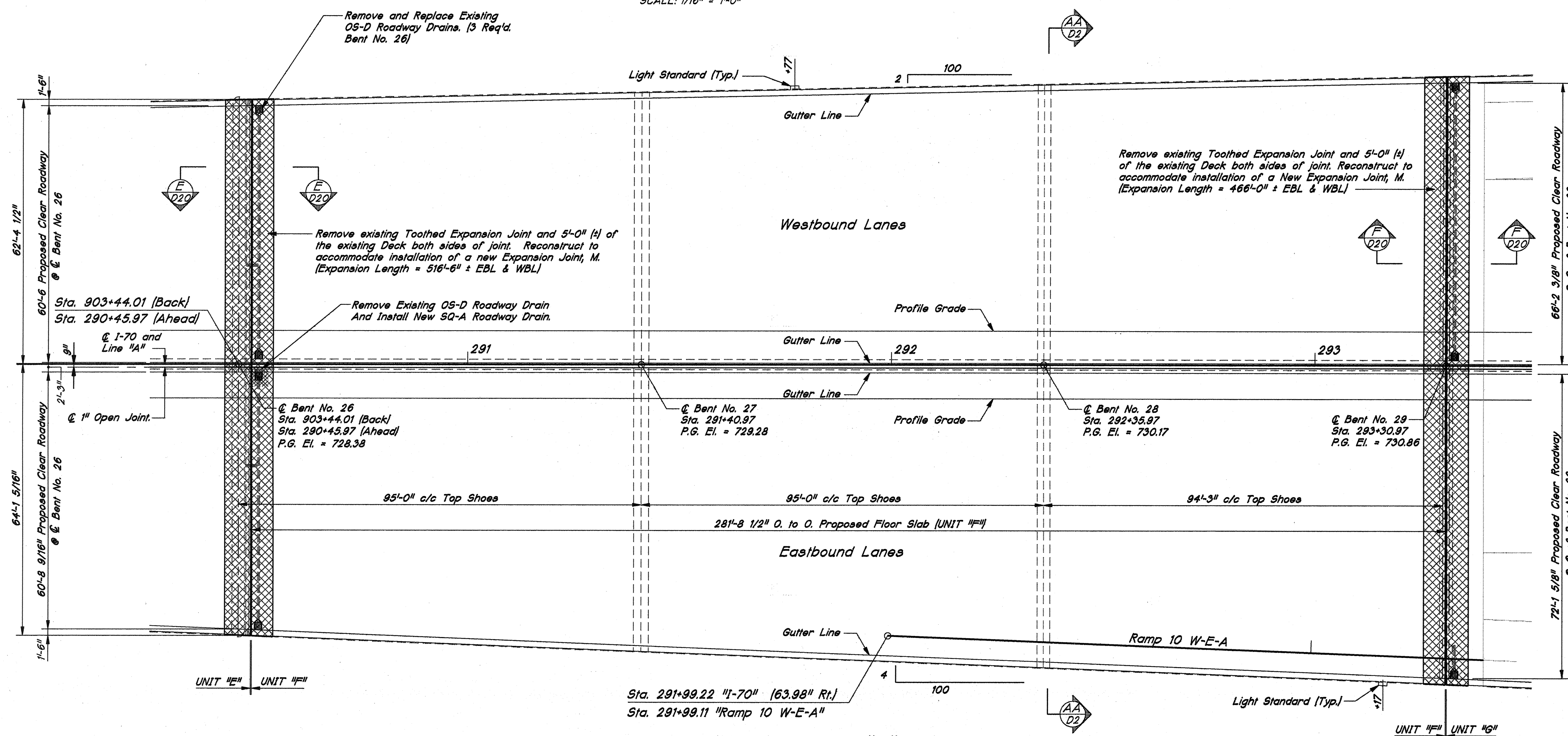
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Scale: 1" = 100'00"
Time: 08/30/94 at 14:42 RQAW

DRAWN	GKM/DRD	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayD	CHK.	SCJ

STRUCTURE IS BUILT TO + 0.942% GRADE
AND A 650' VERTICAL CURVE



ELEVATION - UNIT "F"
SCALE: 1/16" = 1'-0"

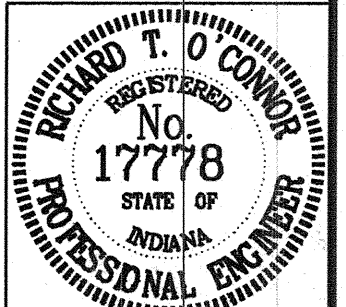


PLAN - UNIT "F"
SCALE: 1/16" = 1'-0"

NOTE:
FOR GENERAL NOTES, SEE DRAWING D1.

GENERAL PLAN - SPANS AA, BB, & CC
BRIDGE DECK REHABILITATION AND OVERLAY
CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
3 SPANS: 92'-6", 95'-0", 94'-3"
SKEW: SQUARE CLEAR ROADWAY: VARIES
I-70 OVER CONRAIL & DAKOTA ST.
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
DRAWING: D8 OF D45 SHEET: 9 OF 89
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A

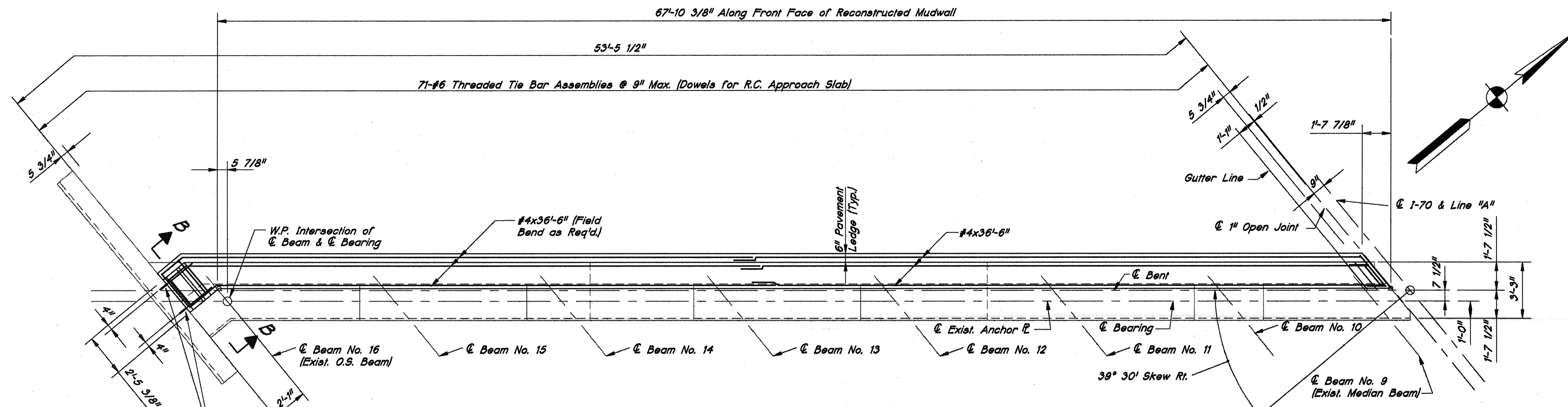


After The Completion Of Construction The Bridge Drainage System Shall Be Cleaned And Flushed To Their Outlet. This Includes Any Berm Drainage.

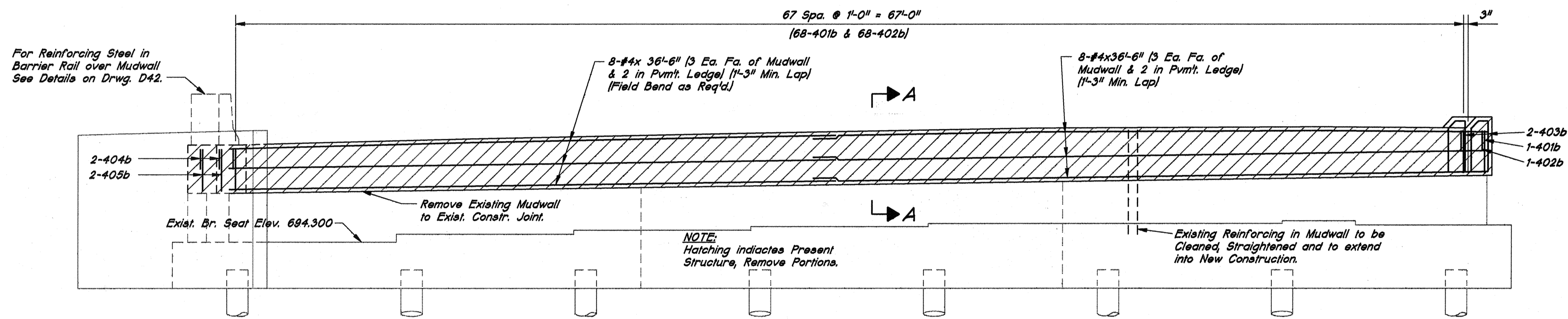
CROSS-HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"

J:\1-70\3392\3392-008.DWG
Scale: 1" = 100.00
Time: 08/30/94 at 14:53 RQAW

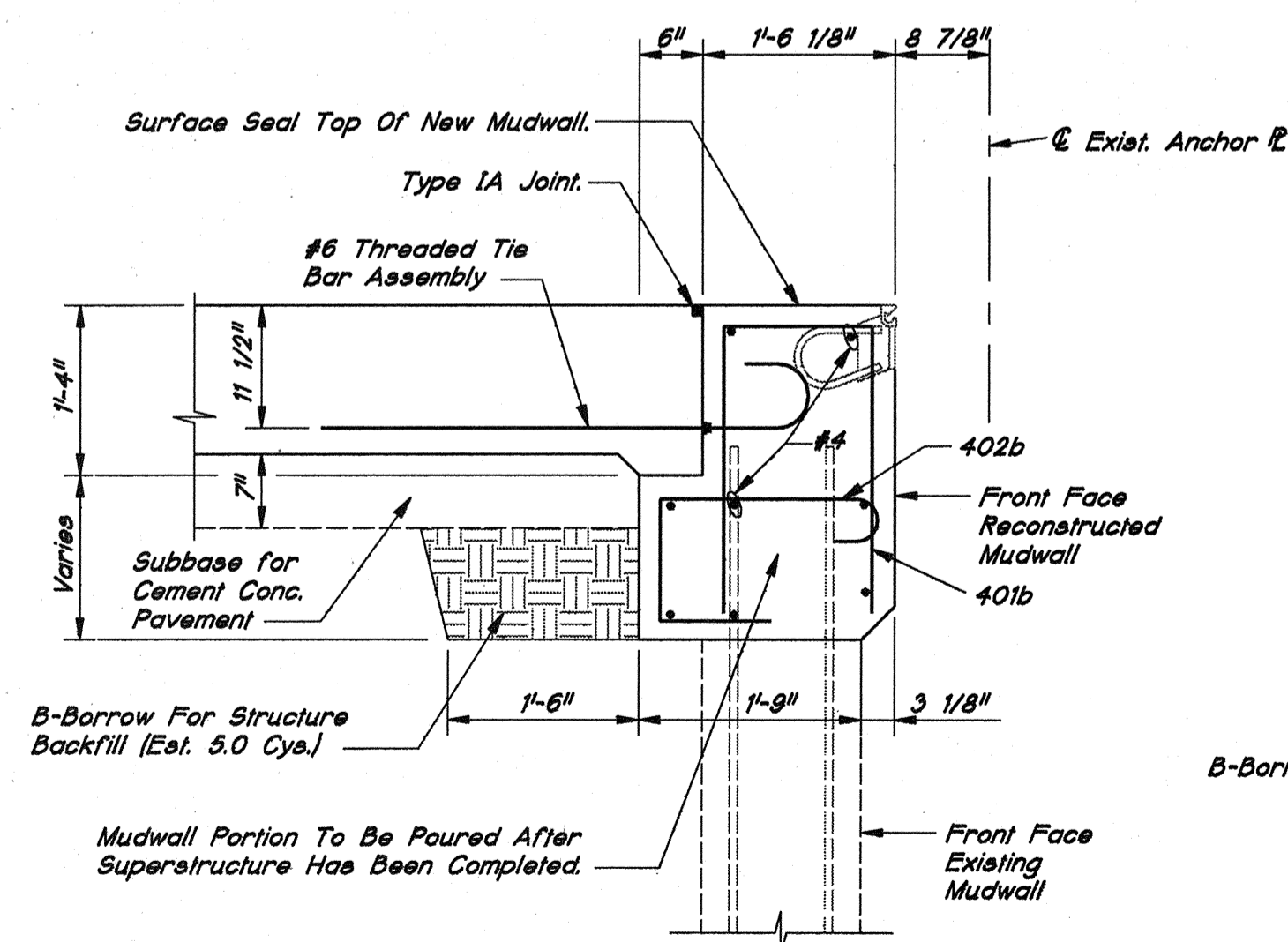
DRAWN	KayD	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayD	CHK.	SCJ



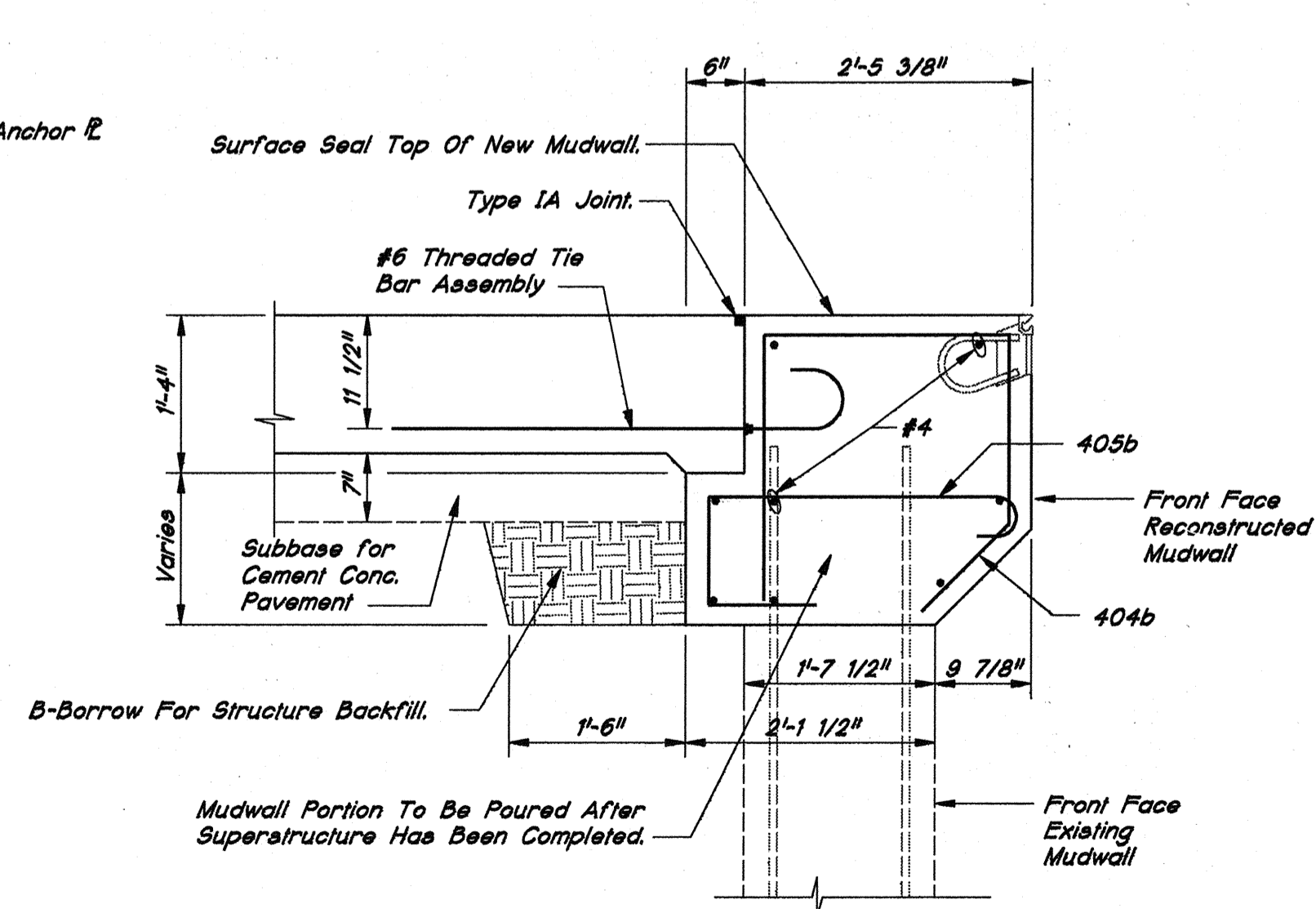
PLAN - EASTBOUND BENT NO. 1
SCALE: 1/4" = 1'-0"



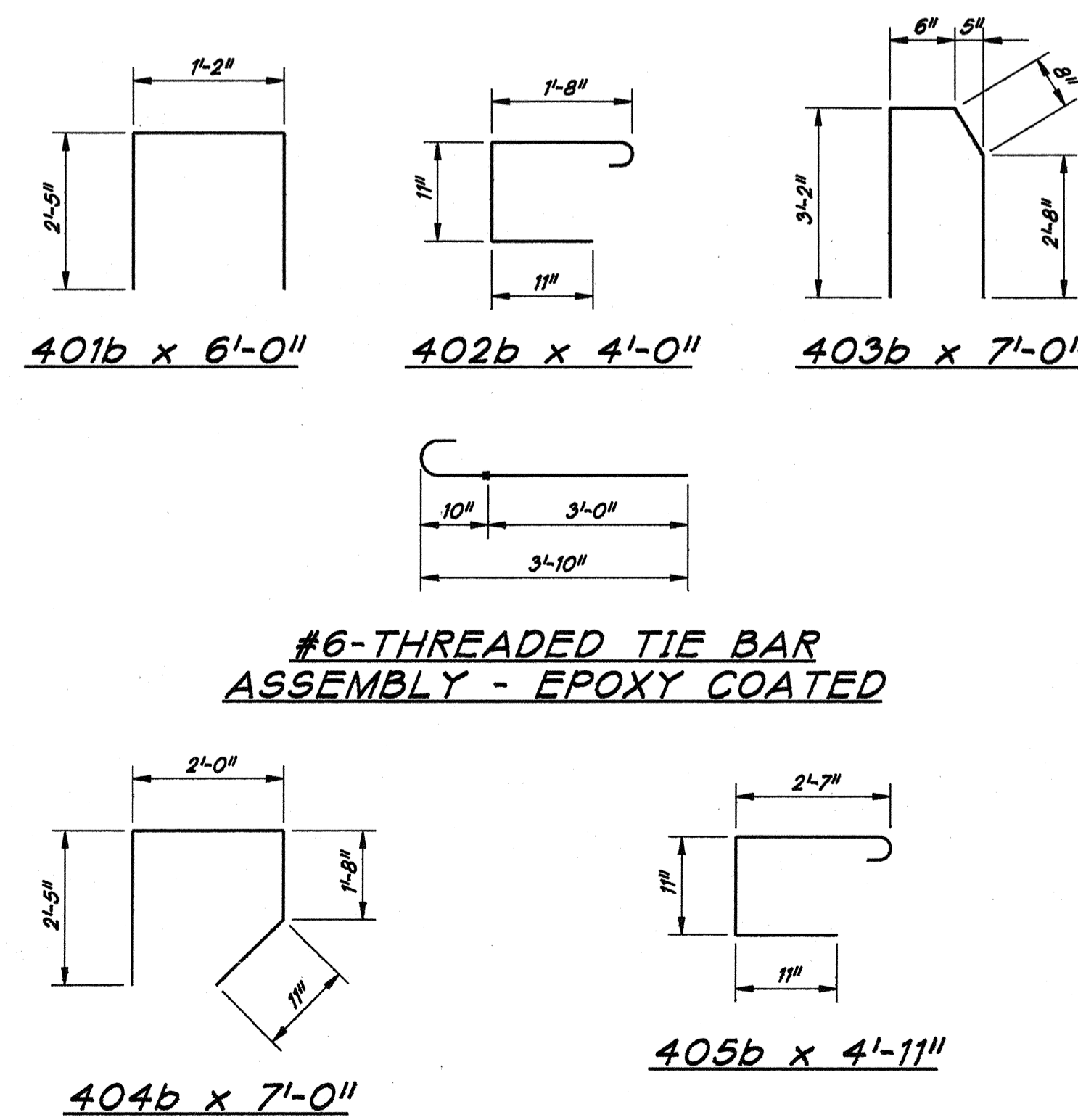
ELEVATION - EASTBOUND BENT NO. 1
SCALE: 1/4" = 1'-0"



SECTION A-A
SCALE: 3/4" = 1'-0"



SECTION B-B
SCALE: 3/4" = 1'-0"



BILL OF MATERIALS
BENT NO. 1 - EASTBOUND

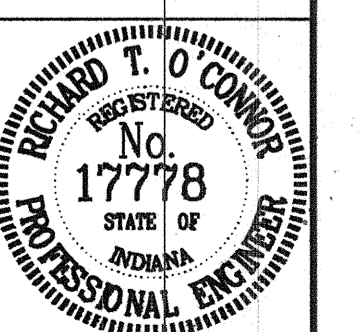
REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
401b	69	6'-0"	
402b	69	4'-0"	
403b	2	7'-0"	
404b	2	7'-0"	
405b	2	4'-10"	
#4	16	36'-6"	
#4	2	2'-3"	
TOTAL #4			879
TOTAL EPOXY COATED REINF.			879
CONCRETE		(CYS.)	
CLASS 'C' IN SUPERSTRUCTURE			
POLY. NO. 1		13.0 CYS	
TOTAL CLASS C CONCRETE		13.0 CYS	
MISCELLANEOUS		(QTY.)	
SURFACE SEAL (ESTIMATED)		112 SFT.	
THREADED TIE BAR ASSEMBLY, EPOXY COATED, #6		71 EACH	
B BORROW FOR STRUCTURE			
BACKFILL		6.6 CYS	
EXCAVATION, FOUNDATION, UNCLASSIFIED		6.6 CYS	
FIELD DRILLED HOLES, IN CONCRETE		2 EACH	
CONDUIT, STEEL, GALV., 2 IN		10 LFT.	

NOTES:

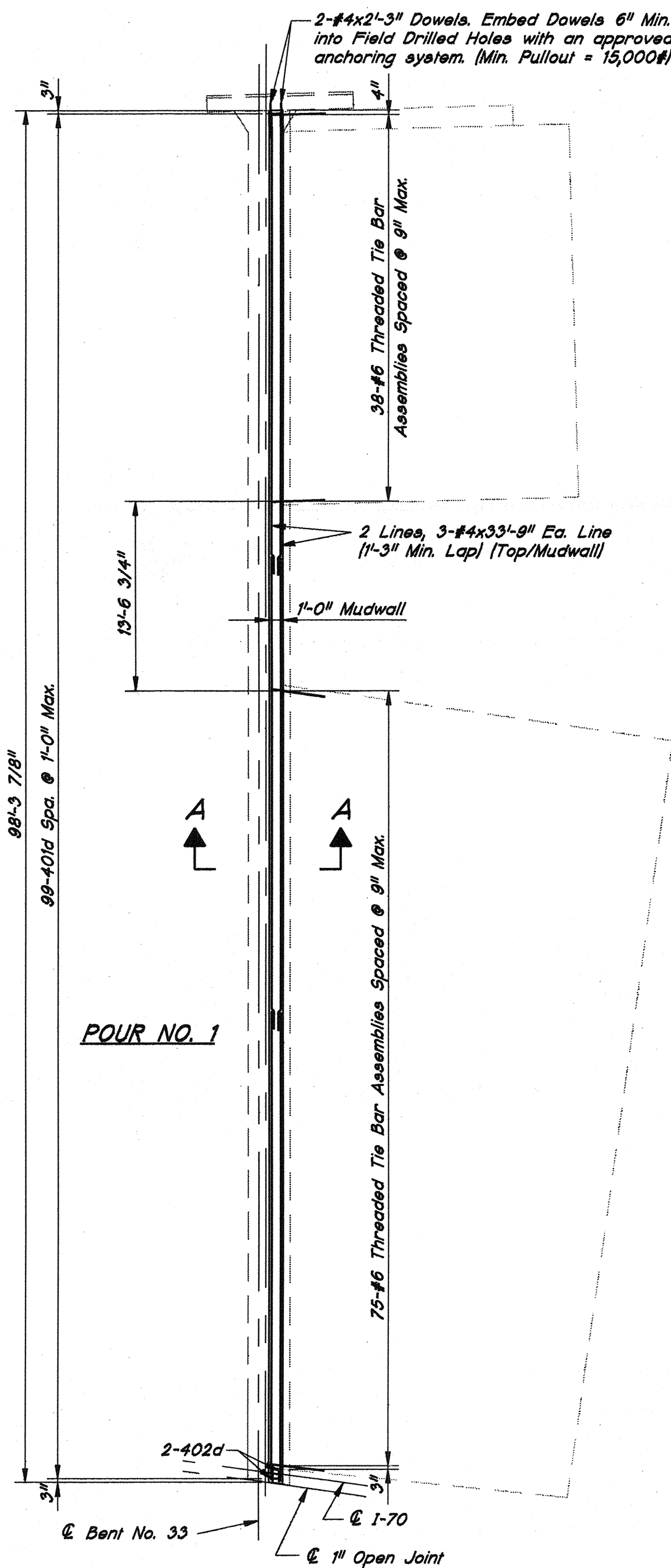
FOR GENERAL NOTES, SEE DRAWING D-1.
ALL REINFORCING IN THE BENT SHALL BE EPOXY COATED.
LAPS SHOWN ARE MINIMUM LAP LENGTHS.
FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.

BENT NO. 1 EASTBOUND DETAILS
AND BILL OF MATERIALS
INDIANA DEPARTMENT OF TRANSPORTATION

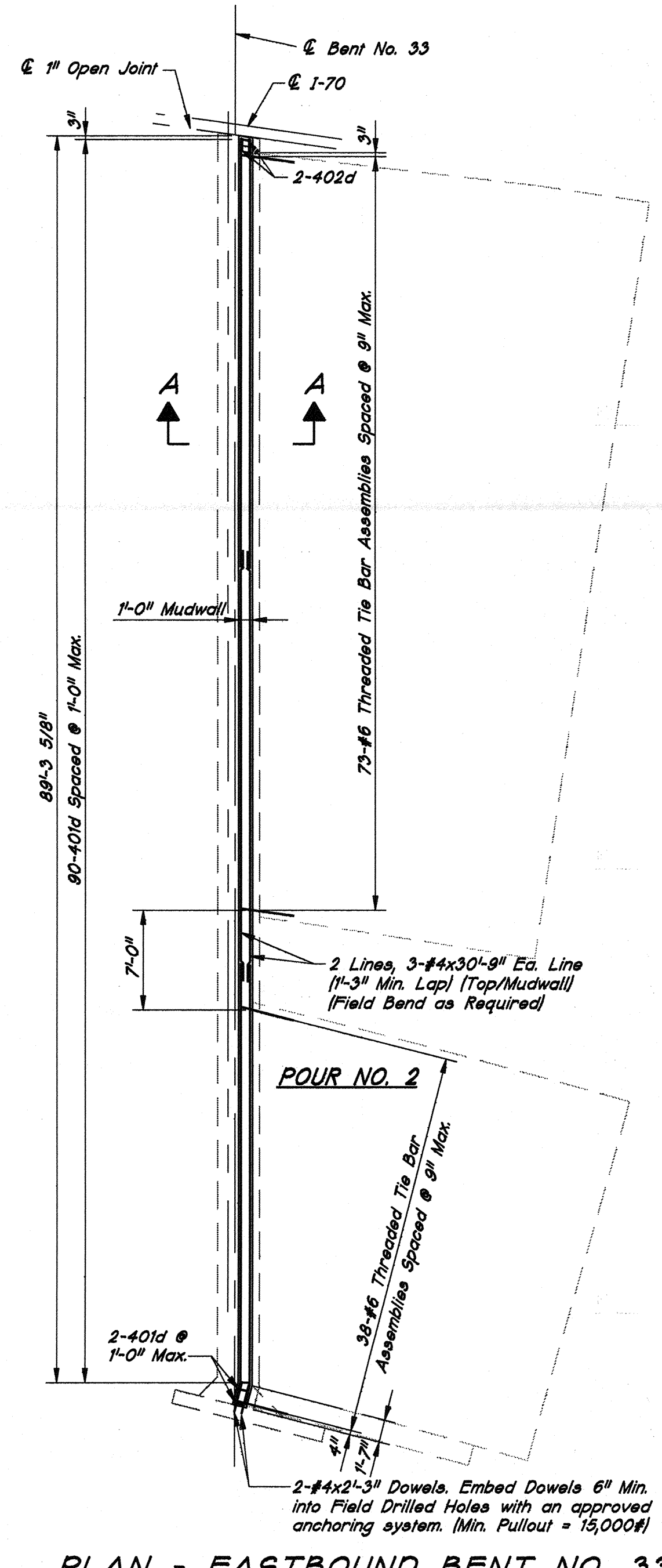
SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
DRAWING: D11 OF D45 SHEET: 12 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A



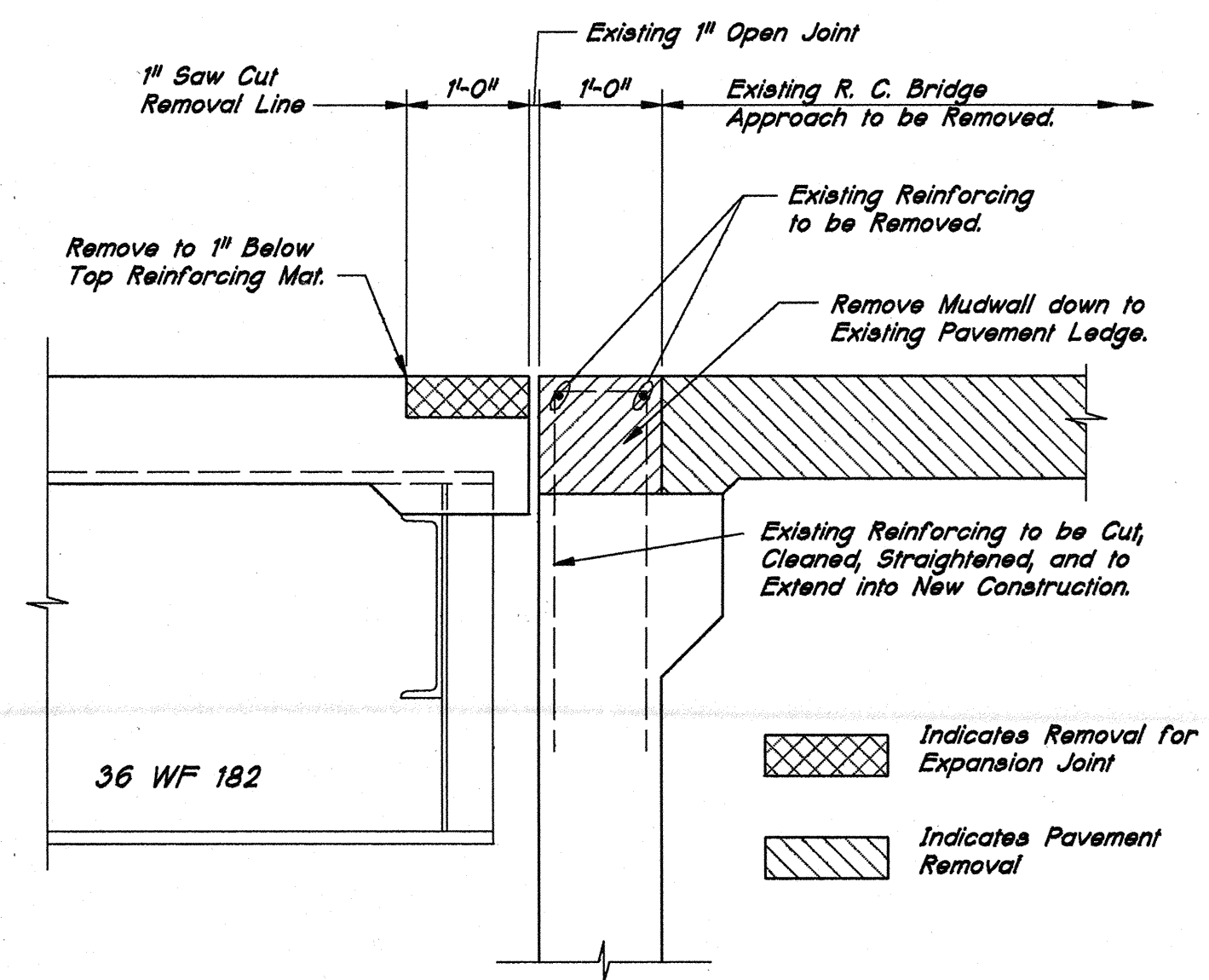
I-70-3392/D11.DWG
Scale: 1/4" = 1'-0"
Time: 08/30/94 at 23:14 RQAW



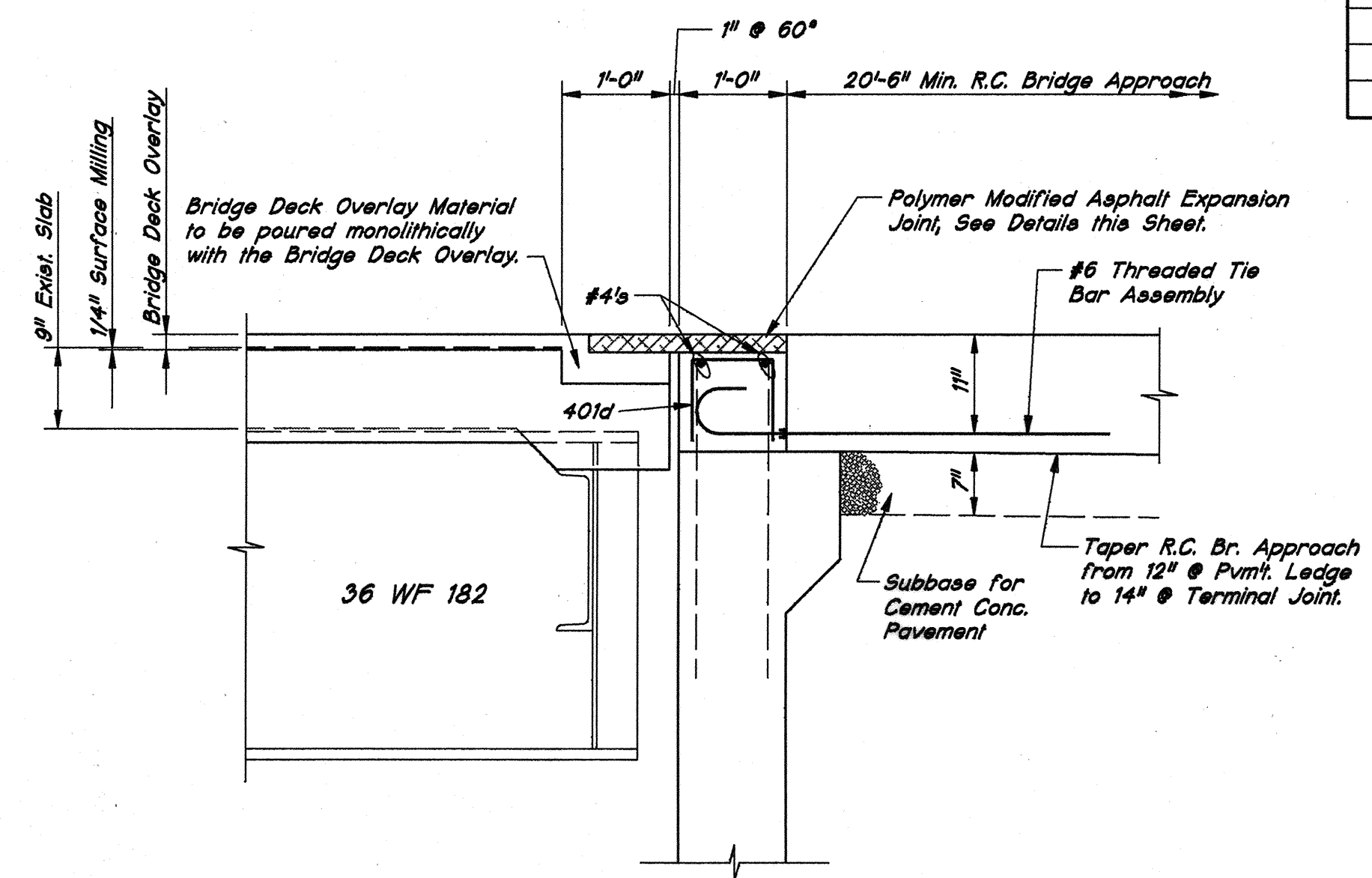
PLAN - WESTBOUND BENT NO. 33
SCALE: 1/8" = 1'-0"



PLAN - EASTBOUND BENT NO. 33
SCALE: 1/8" = 1'-0"



SECTION AA - REMOVAL
SCALE: 3/4" = 1'-0"



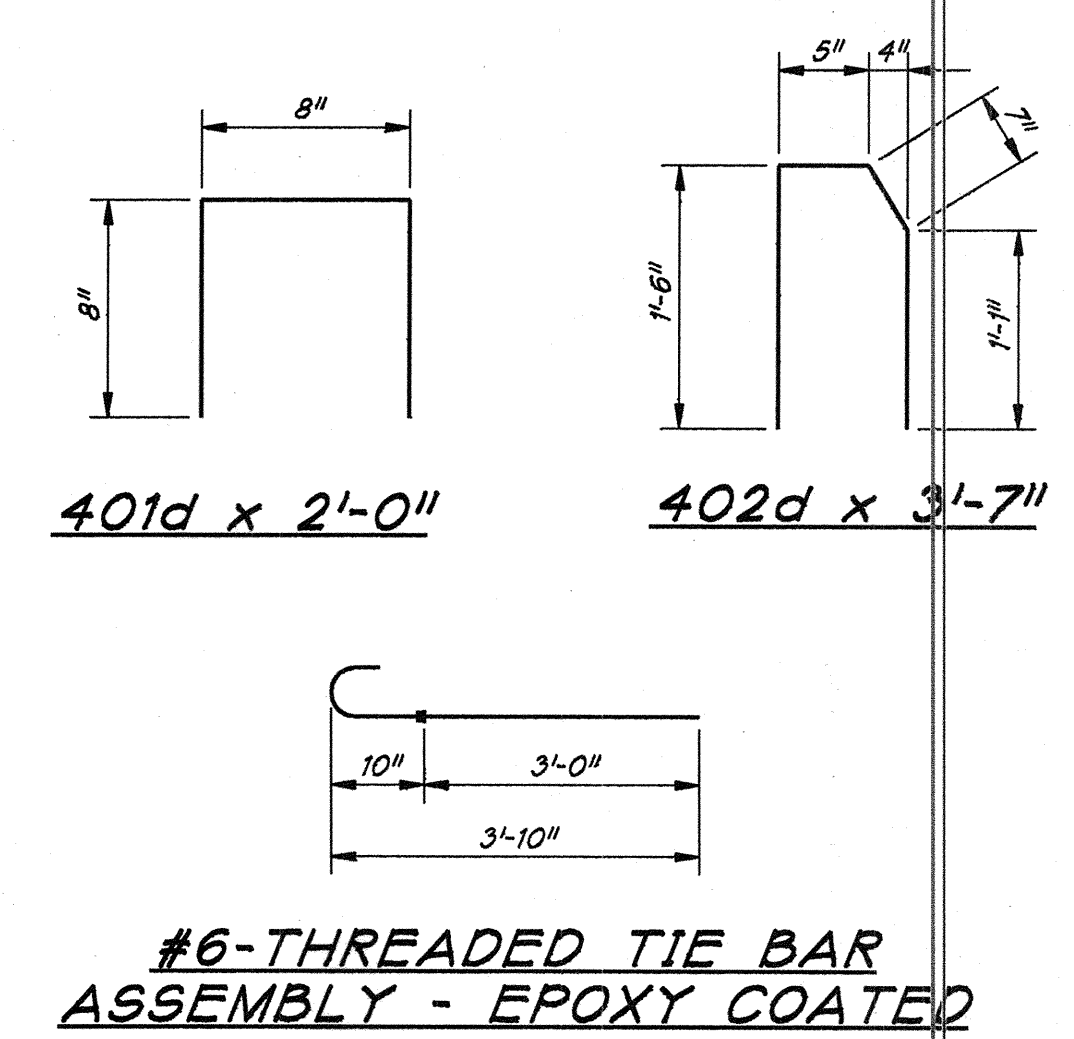
SECTION AA - RECONSTRUCTION
SCALE: 3/4" = 1'-0"

BILL OF MATERIALS BENT NO. 33 - WESTBOUND

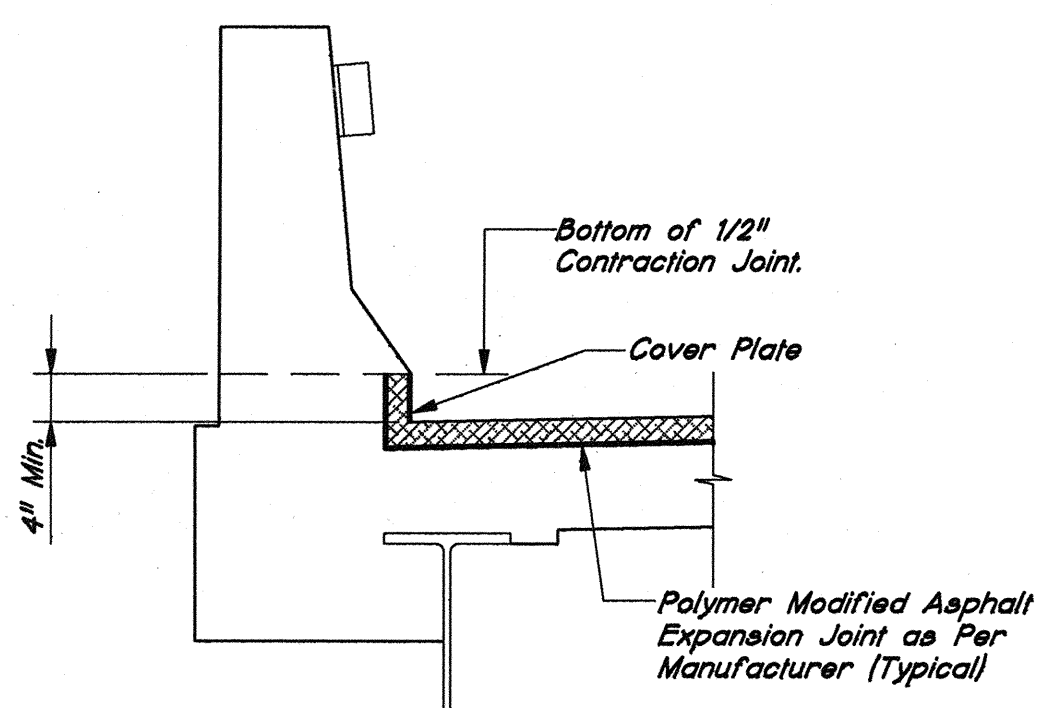
REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
401d	89	2'-0"	
402d	2	3'-7"	
#4	6	33'-9"	
#4	2	2'-3"	
TOTAL #4			275
TOTAL EPOXY COATED REINF.			275
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 1			3.5
TOTAL CLASS C			3.5
MISCELLANEOUS (QTY.)			
Threaded Tie Bar Assembly, Epoxy Coated, #6			
			113 Each
Polymer Modified Asphalt Joint System			
			96 Lft.
Field Drilled Holes In Concrete			2 Each
Conduit, Steel, Galvanized, 2 In.			10 Lft.

BILL OF MATERIALS BENT NO. 33 - EASTBOUND

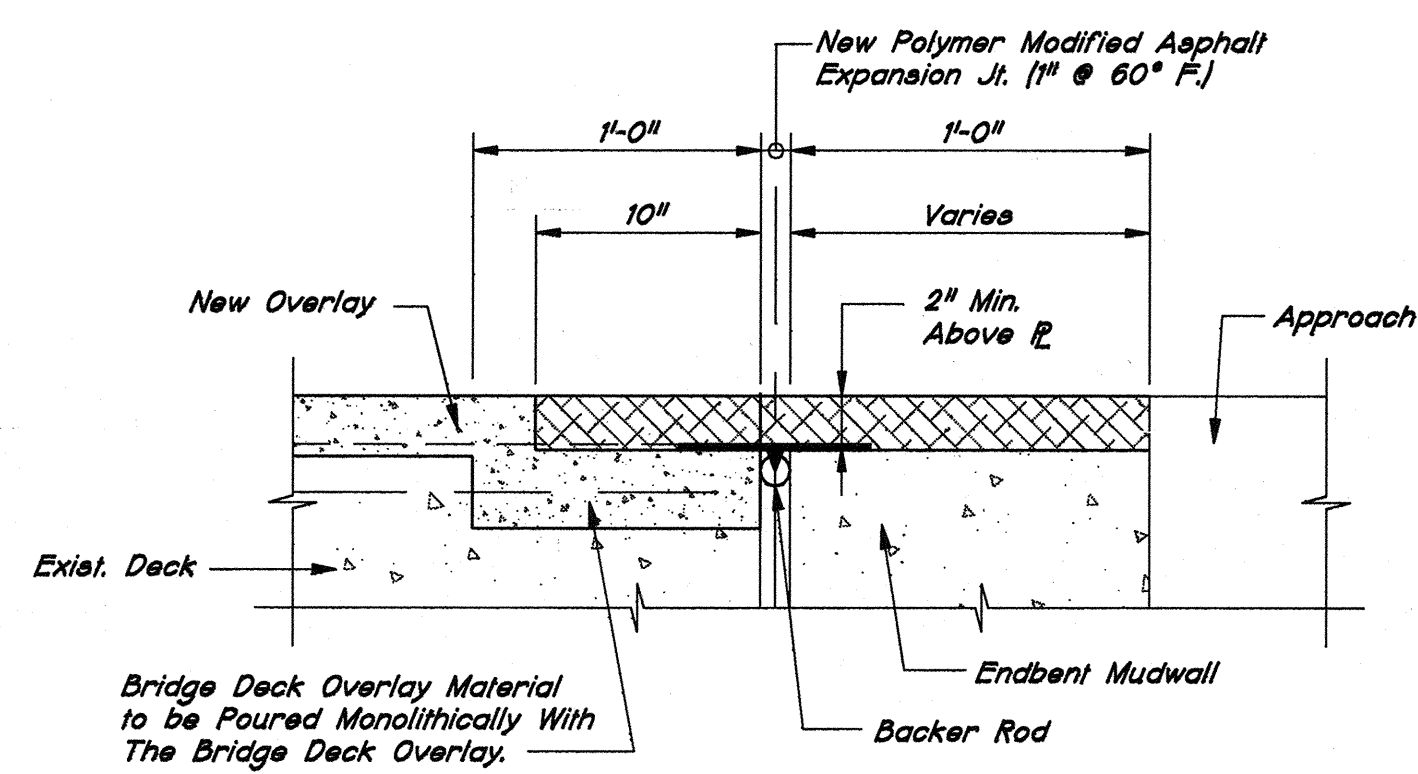
REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
401d	90	2'-0"	
402d	2	3'-7"	
#4	6	30'-9"	
#4	2	2'-3"	
TOTAL #4			251
TOTAL EPOXY COATED REINF.			251
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 2			3.9
TOTAL CLASS C			3.9
MISCELLANEOUS (QTY.)			
Threaded Tie Bar Assembly, Epoxy Coated, #6			
			111 Each
Polymer Modified Asphalt Joint System			
			89 Lft.
Field Drilled Holes In Concrete			2 Each
Conduit, Steel, Galvanized, 2 In.			10 Lft.



#6-THREADED TIE BAR ASSEMBLY - EPOXY COATED



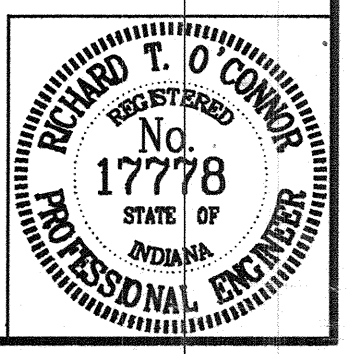
EXPANSION JOINT - POLYMER MODIFIED ASPHALT @ RAILING
SCALE: 3/4" = 1'-0"



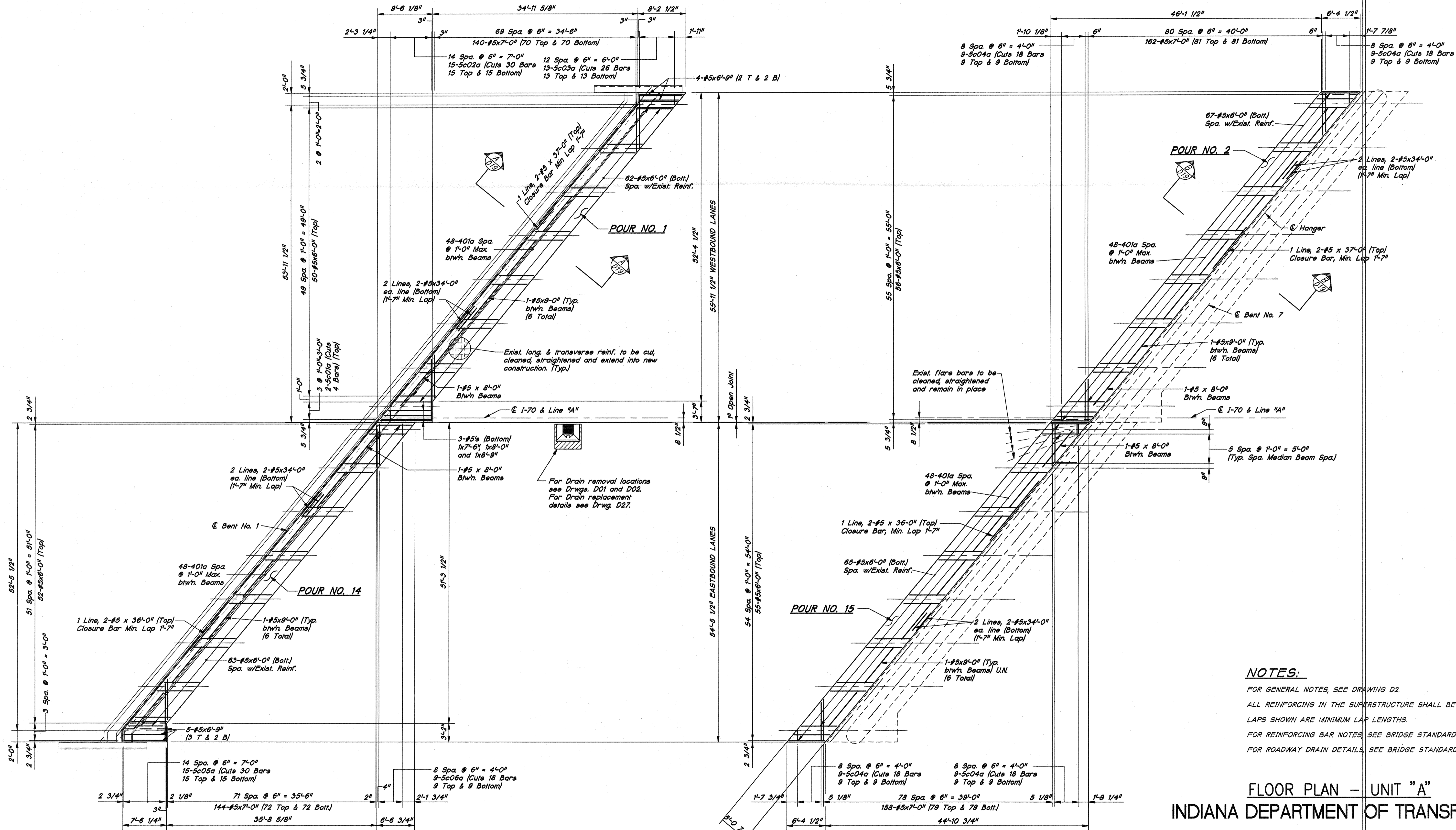
SECTION THRU EXPANSION JOINT, POLYMER MODIFIED ASPHALT
SCALE: NONE

MISCELLANEOUS DETAILS - BENT NO. 33
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
 DRAWING: D12 OF D45 SHEET: 13 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: 1-70-77-2420A & 2386A



u:\1-70\3392\012.DWG
 Scale: 1" = 1,000'
 Time: 06/30/94 at 23:19 RQAW
 DRAWN: KayD CHK: SCJ
 DESIGNED: CHK:
 TRACED: KayD CHK: SCJ



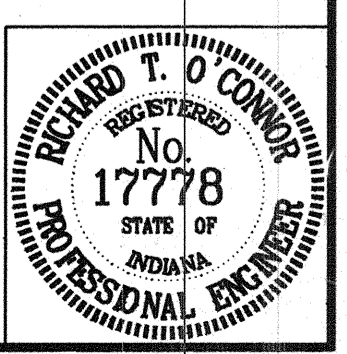
PLAN @ BENT NO. 1 - UNIT "A"
SCALE: 1/8" = 1'-0"

PLAN @ BENT NO. 7 - UNIT "A"
SCALE: 1/8" = 1'-0"

NOTES:
 FOR GENERAL NOTES, SEE DRAWING D2.
 ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
 LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

FLOOR PLAN - UNIT "A"
INDIANA DEPARTMENT OF TRANSPORTATION

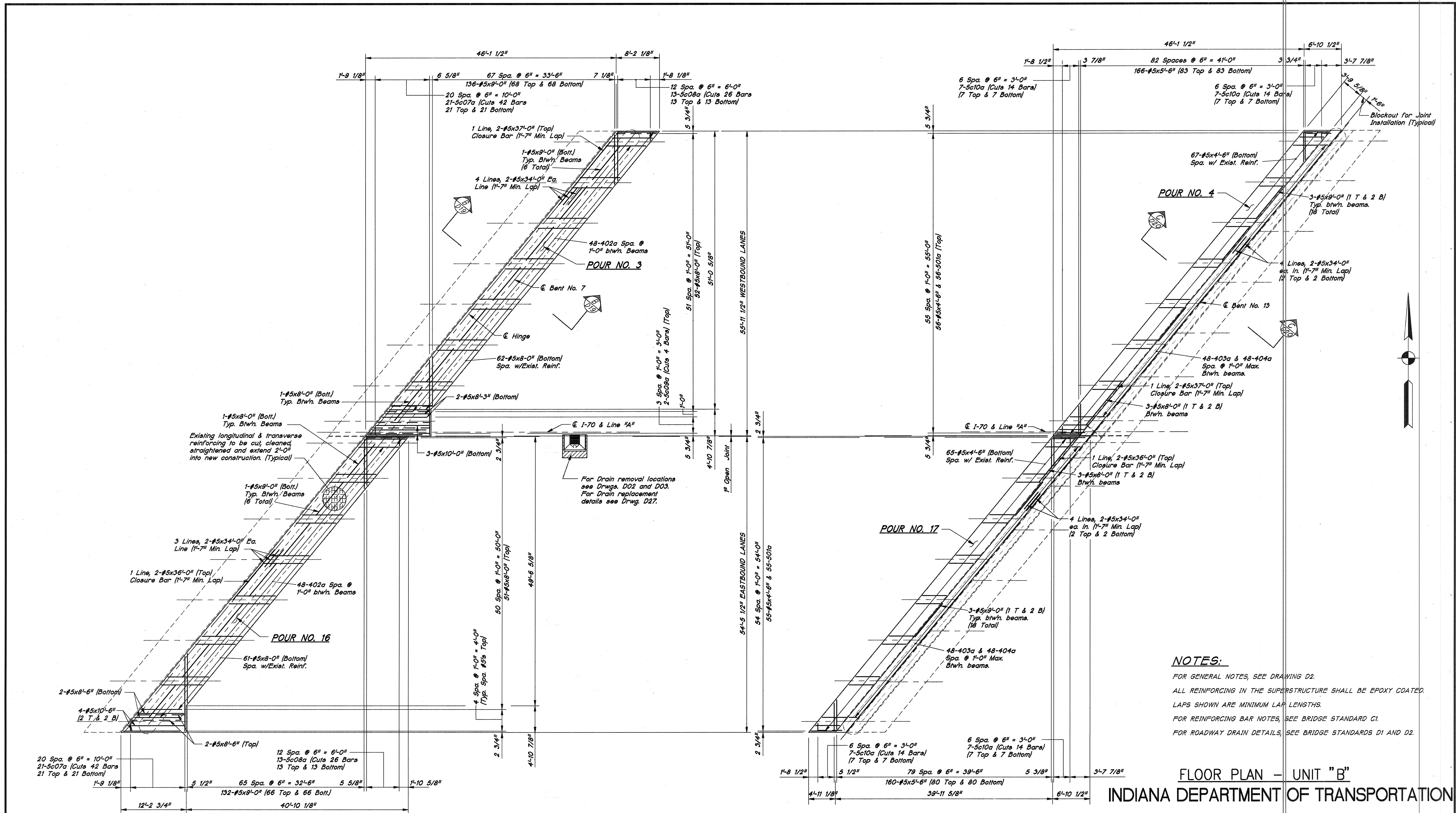
SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
 DRAWING: D13 OF D45 SHEET: 14 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



DRAWN	Kay0	CHK	SCJ
DESIGNED		CHK	
TRACED	Kay0	CHK	SCJ

4\1-70\3392\013.DWG
 Scale: 1" = 1'-0"
 Time: 08/30/94 at 23:23 RQAW

D:\1-70\3392\14.DWG
 Scale: 1" = 1'-0"
 Time: 08/15/94 at 14:13 RQAW



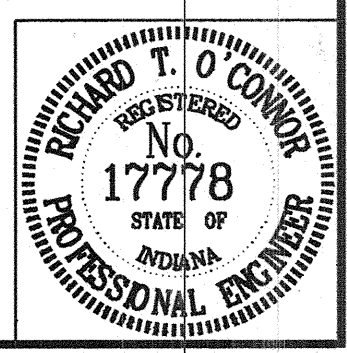
PLAN @ BENT NO. 7 - UNIT "B"
 SCALE: 1/8" = 1'-0"

PLAN @ BENT NO. 13 - UNIT "B"
 SCALE: 1/8" = 1'-0"

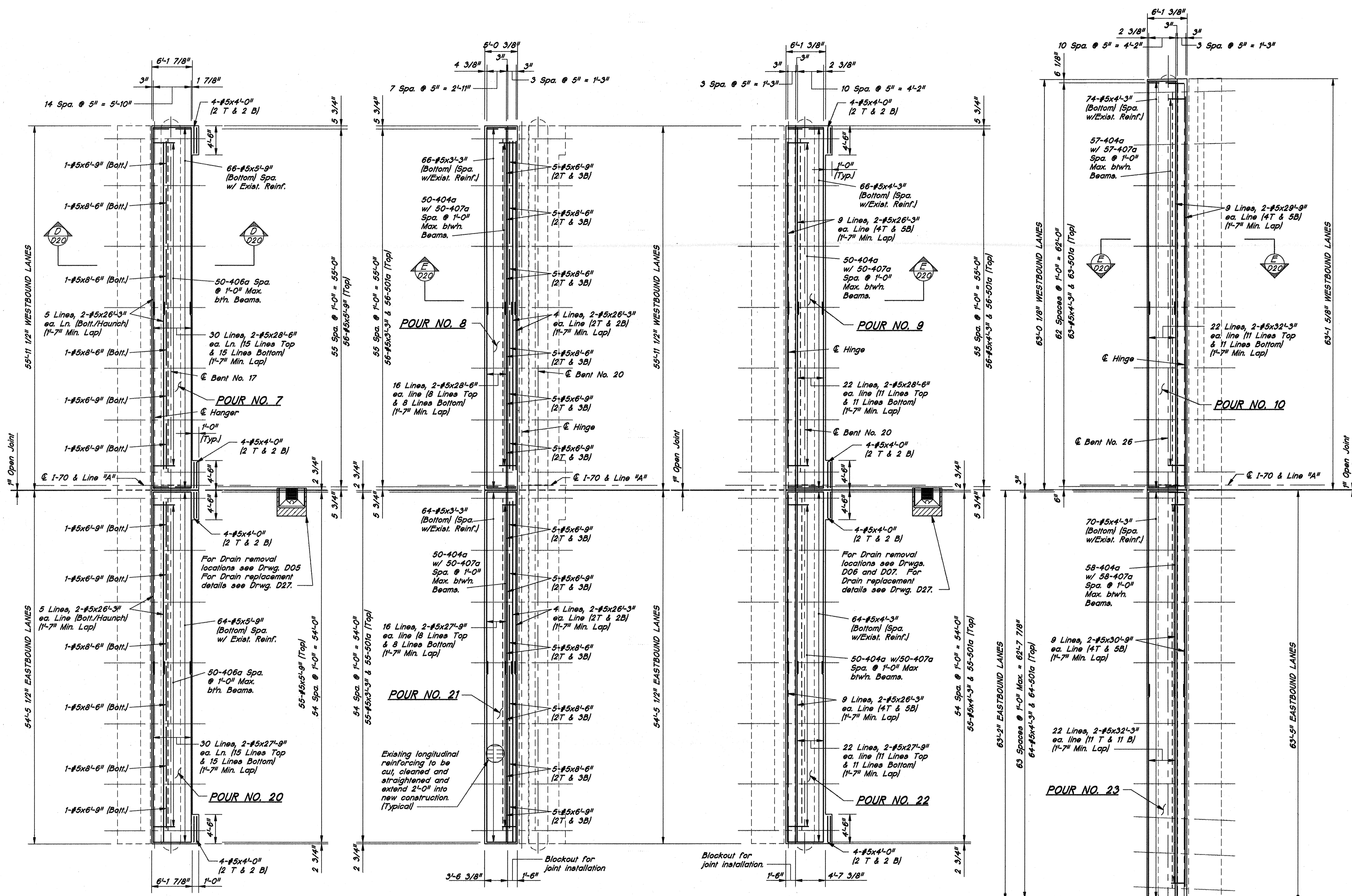
NOTES:
 FOR GENERAL NOTES, SEE DRAWING D2.
 ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
 LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

FLOOR PLAN - UNIT "B"
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
 DRAWING: D14 OF D45 SHEET: 15 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



DRAWN	KayD	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayD	CHK.	SCJ



PLAN @ BENT NO. 20 - UNIT "D"
SCALE: 1/8" = 1'-0"

PLAN @ BENT NO. 20 - UNIT "E"
SCALE: 1/8" = 1'-0"

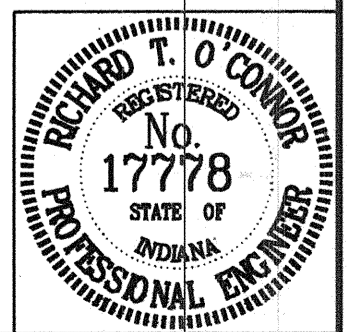
PLAN @ BENT NO. 20 - UNIT "F"
SCALE: 1/8" = 1'-0"

FLOOR PLAN - UNITS "D" AND "E"
INDIANA DEPARTMENT OF TRANSPORTATION

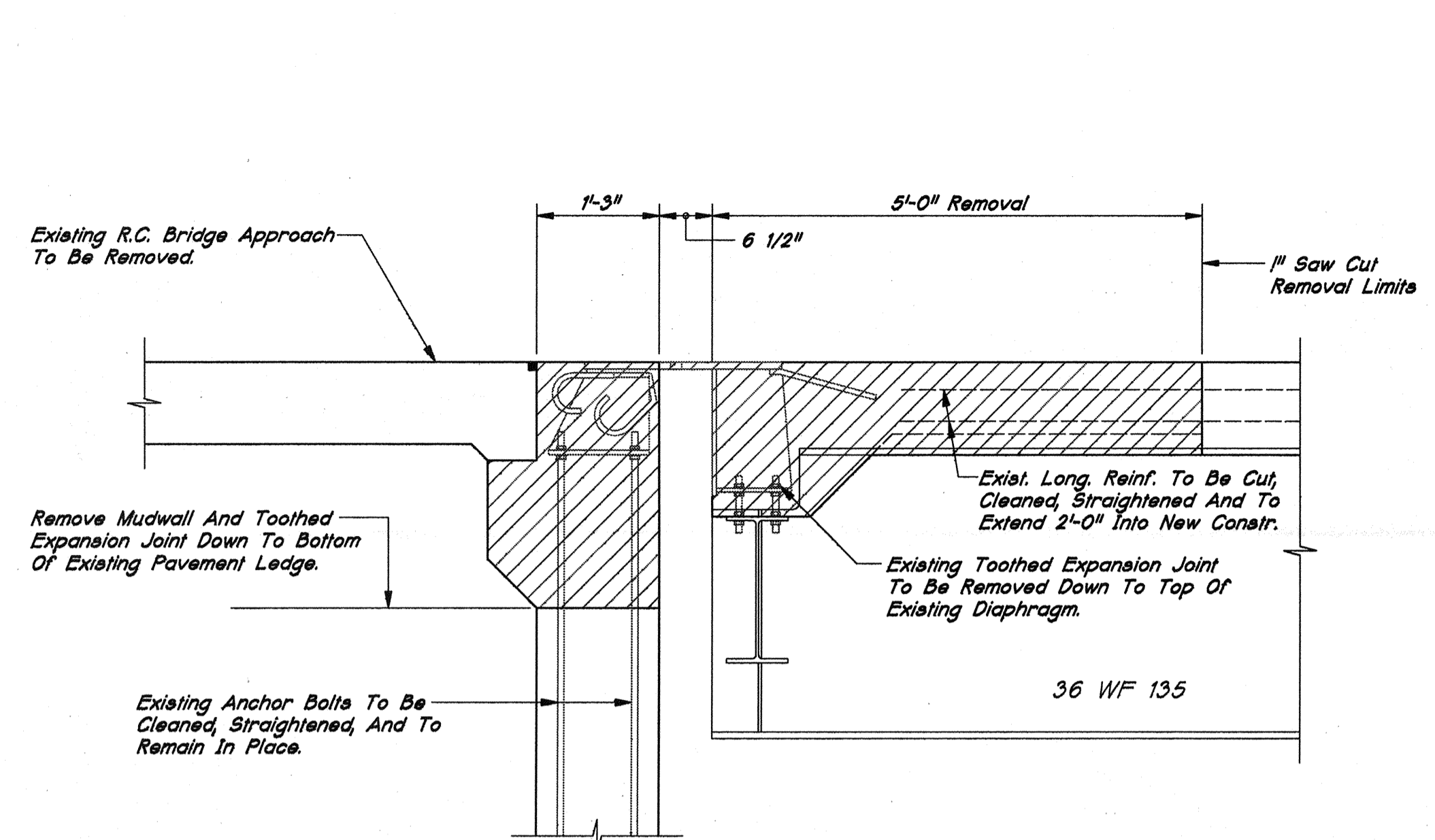
NOTES:
 FOR GENERAL NOTES, SEE DRAWING D2.
 ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
 LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

PLAN @ BENT NO. 26 - UNIT "E"
SCALE: 1/8" = 1'-0"

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D16 OF D45 SHEET: 17 OF 89
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

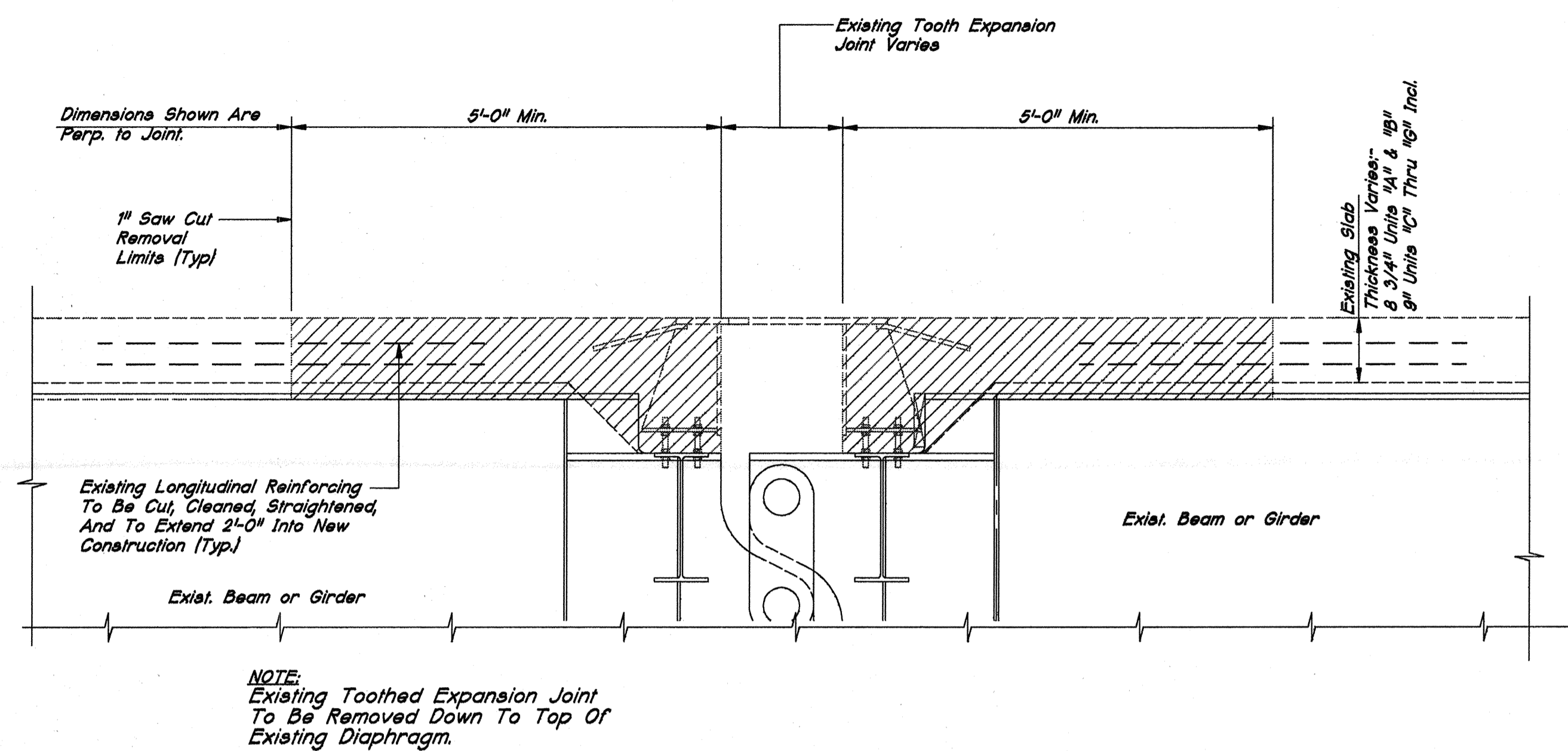


2\1-70\3392\016.DWG	DRAWN	KayO	CHK.	SCJ
Scale: 08/30/94	DESIGNED		CHK.	
Time: 2:53:36	TRACED	KayO	CHK.	SCJ



NOTE:
HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"

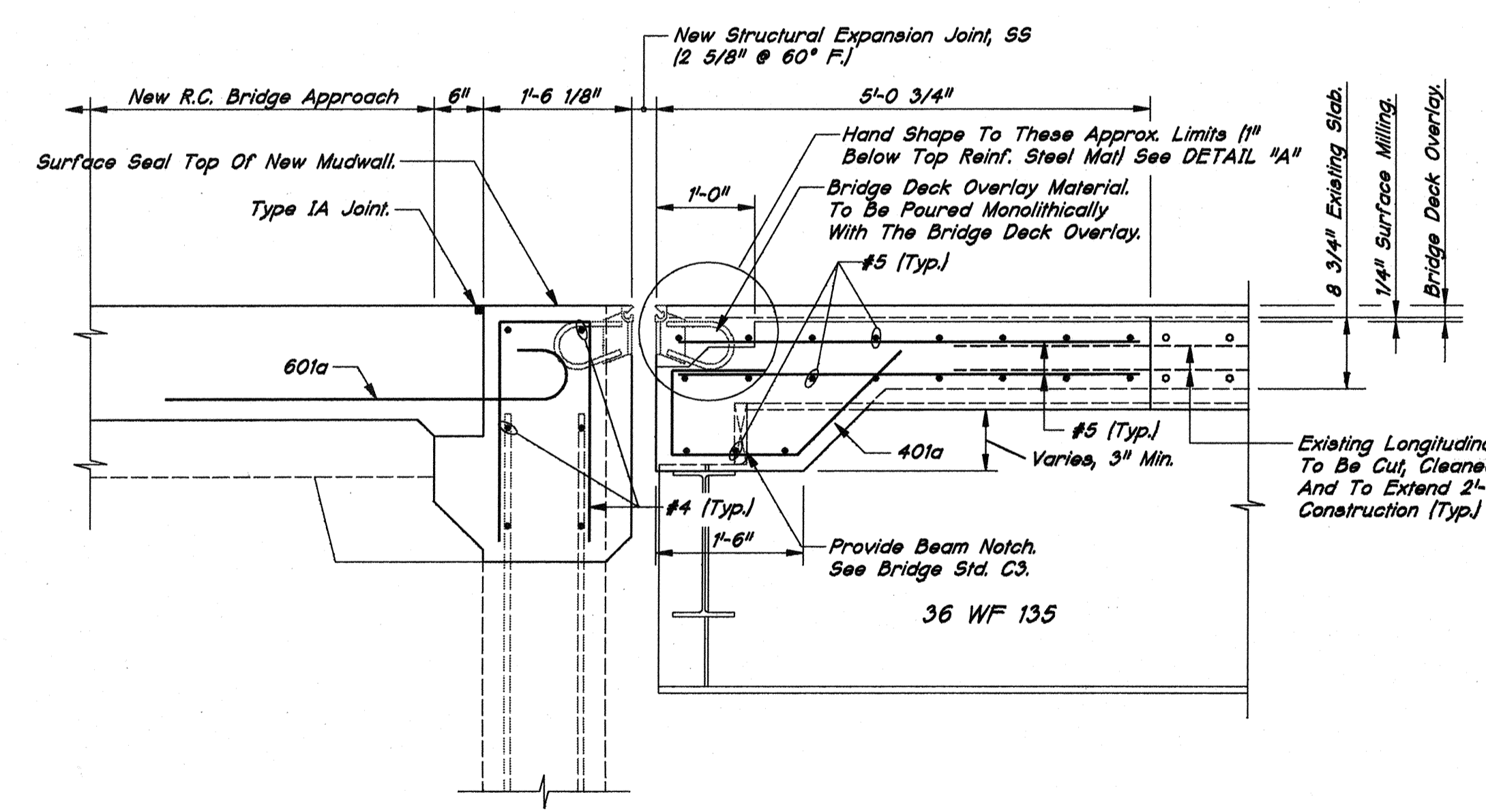
SECTION A REMOVAL
SCALE: 3/4" = 1'-0" D19



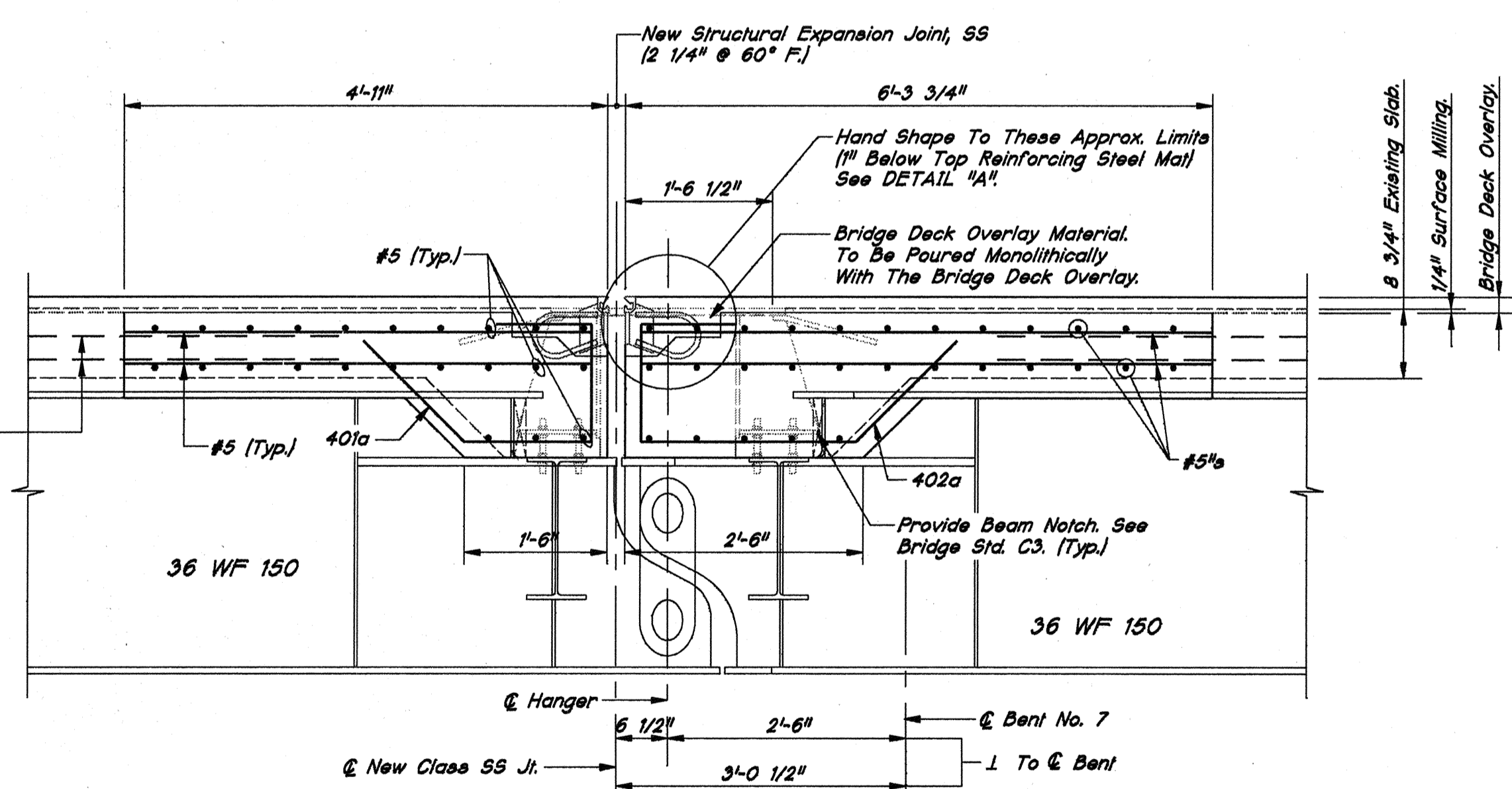
NOTE:
Existing Toothed Expansion Joint To Be Removed Down To Top Of Existing Diaphragm.

NOTE:
HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"

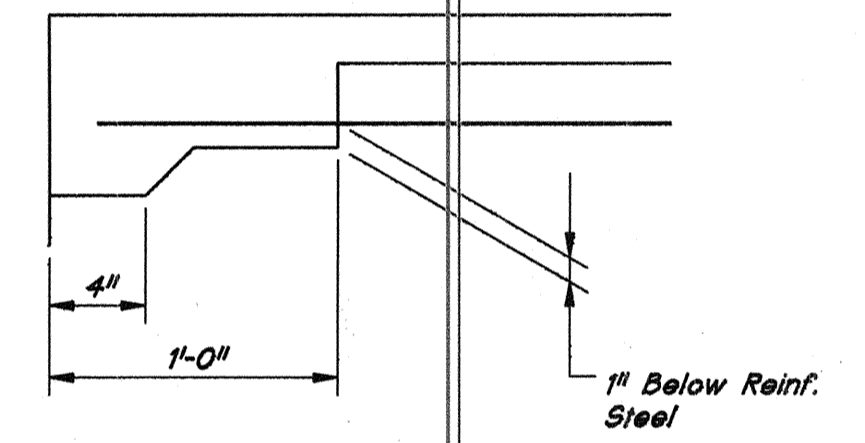
TYPICAL REMOVAL SECTION @ INT. JOINTS
SCALE: 3/4" = 1'-0"



SECTION A RECONSTRUCTION
SCALE: 3/4" = 1'-0" D19



SECTION B RECONSTRUCTION
SCALE: 3/4" = 1'-0" D19

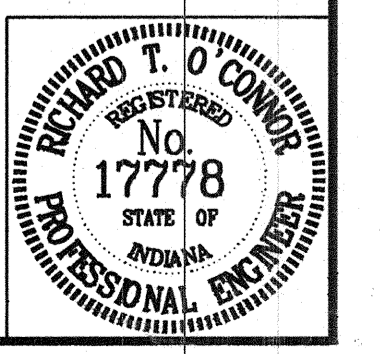


DETAIL "A"
SCALE: 1 1/2" = 1'-0"

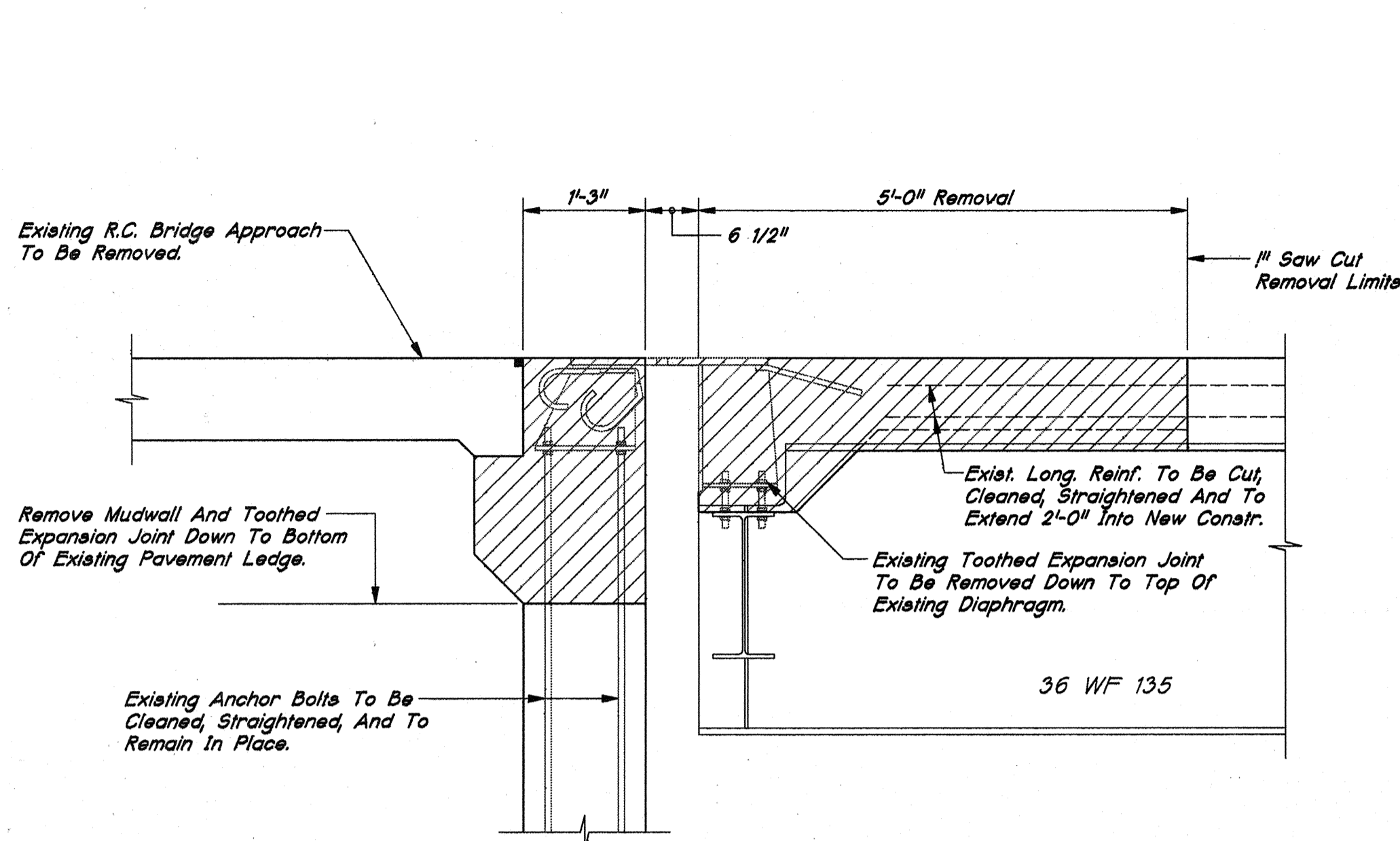
NOTES:
FOR GENERAL NOTES, SEE DRAWING D2.
ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
LAPS SHOWN ARE MINIMUM LAP LENGTHS.
FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

FLOOR DETAILS - SECTIONS - SHEET 1
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
DRAWING: D19 OF D45 SHEET: 20 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: 1-70-77-2420A & 2386A

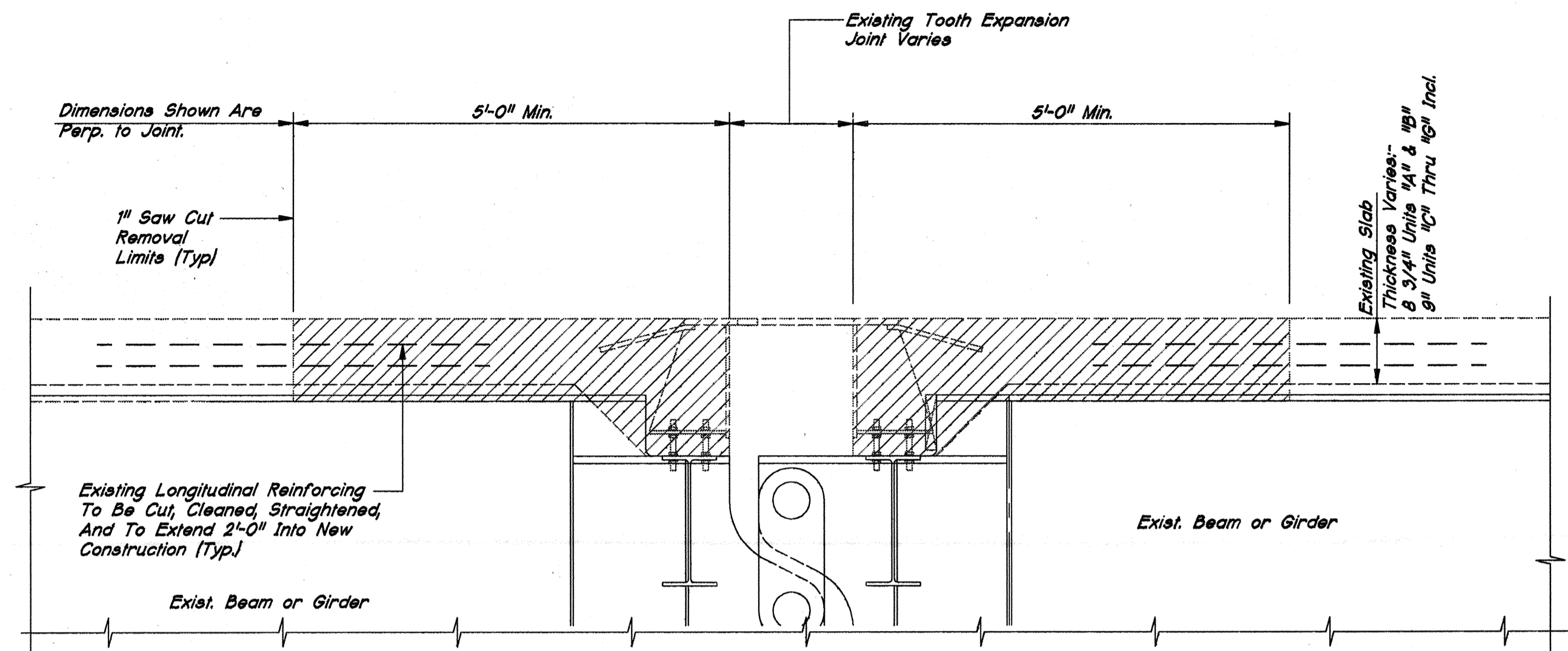


IN-70-3392A.D19.DWG
Scale: 1" = 1'-0"
Time: 08/30/94, at 2:35:11 RQAW
DRAWN: KyoD CHK: SCJ
DESIGNED: CHK
TRACED: KyoD CHK: SCJ



SECTION A REMOVAL
SCALE: 3/4" = 1'-0"
D19

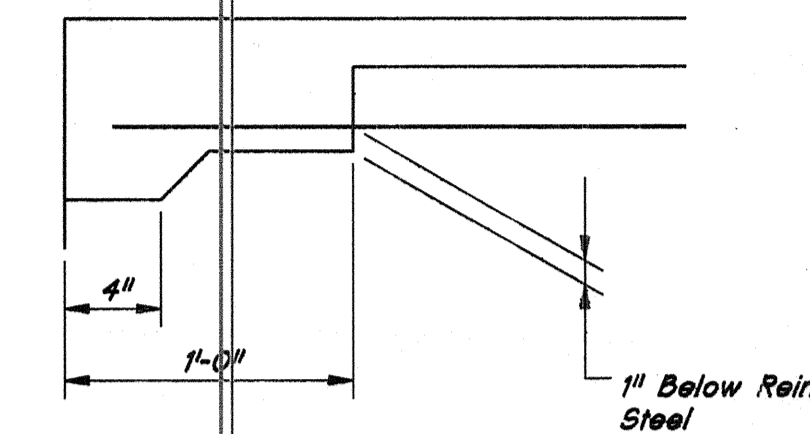
NOTE: HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"



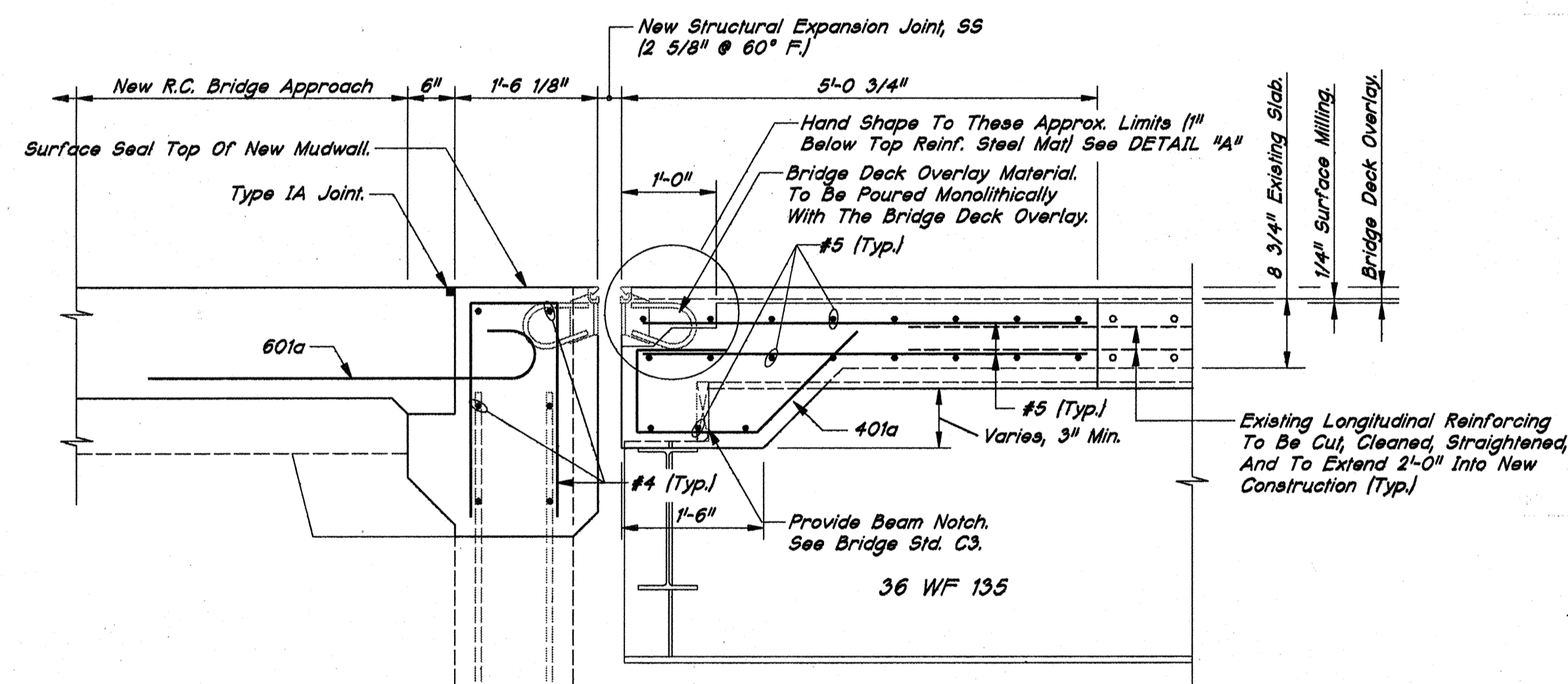
TYPICAL REMOVAL SECTION @ INT. JOINTS
SCALE: 3/4" = 1'-0"

NOTE: HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"

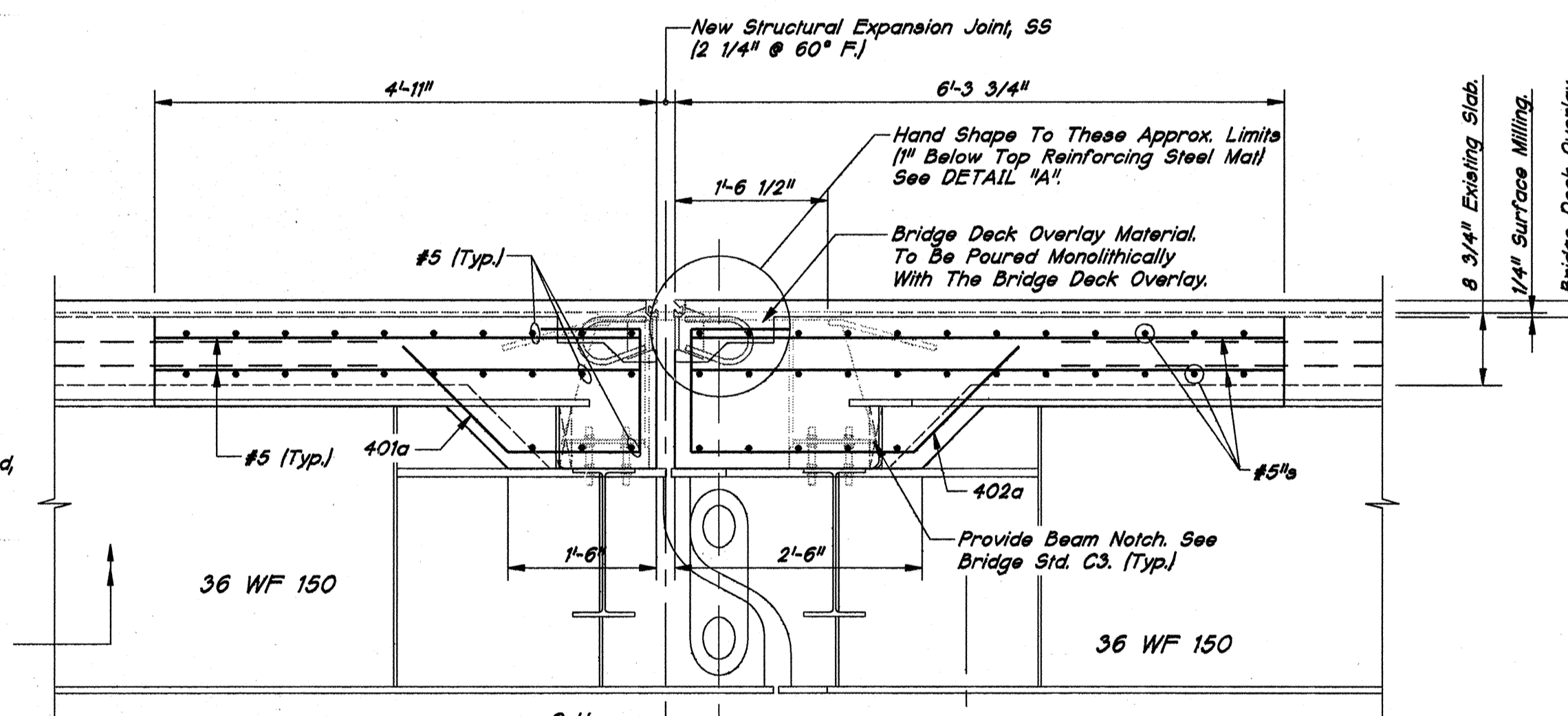
NOTE: HATCHING INDICATES "PRESENT STRUCTURE, REMOVE PORTIONS"



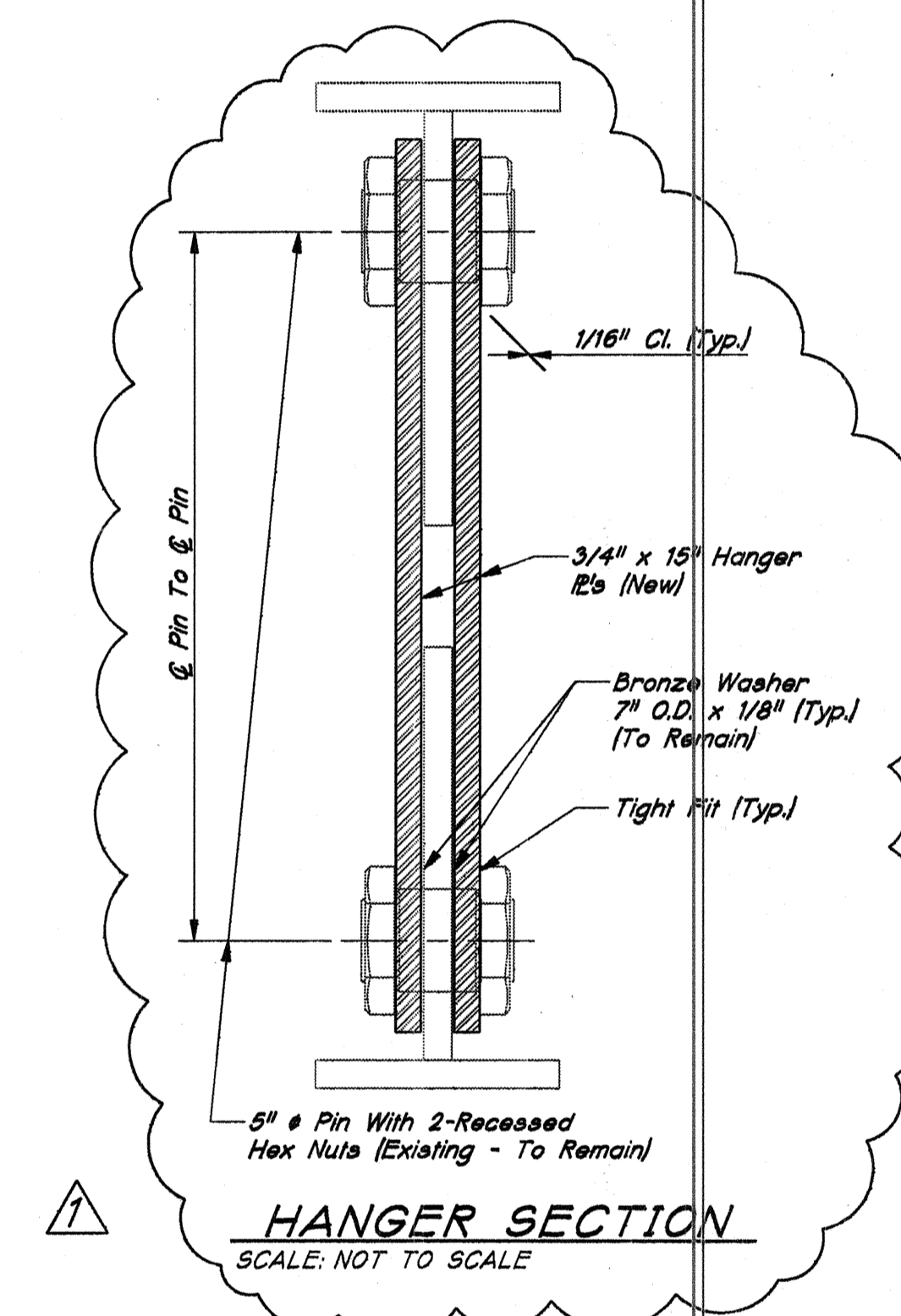
DETAIL "A"
SCALE: 1 1/2" = 1'-0"



SECTION A RECONSTRUCTION
SCALE: 3/4" = 1'-0"
D19

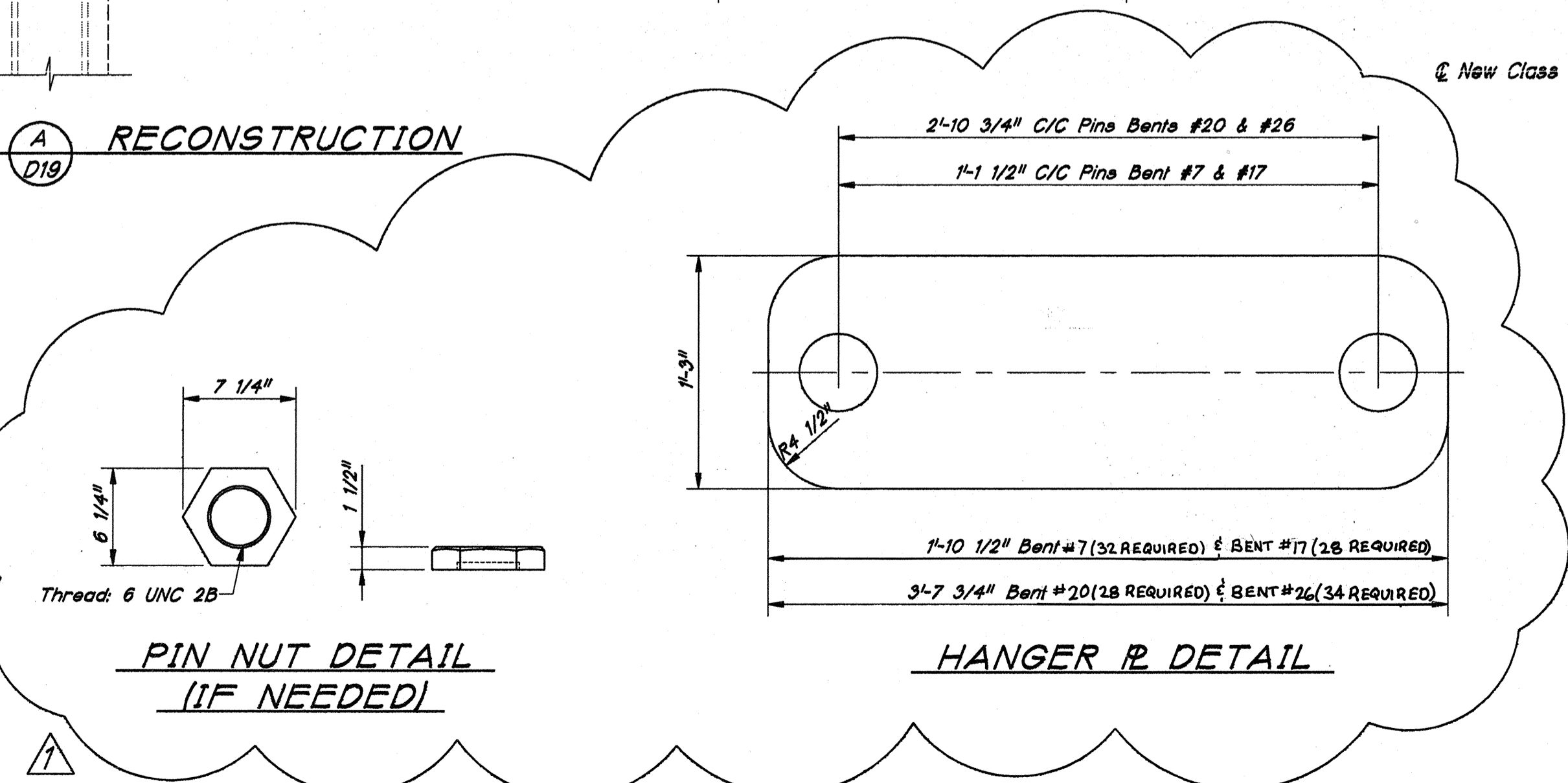


SECTION B RECONSTRUCTION
SCALE: 3/4" = 1'-0"
D19



NOTES:

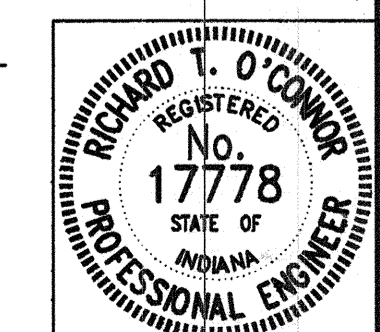
- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.



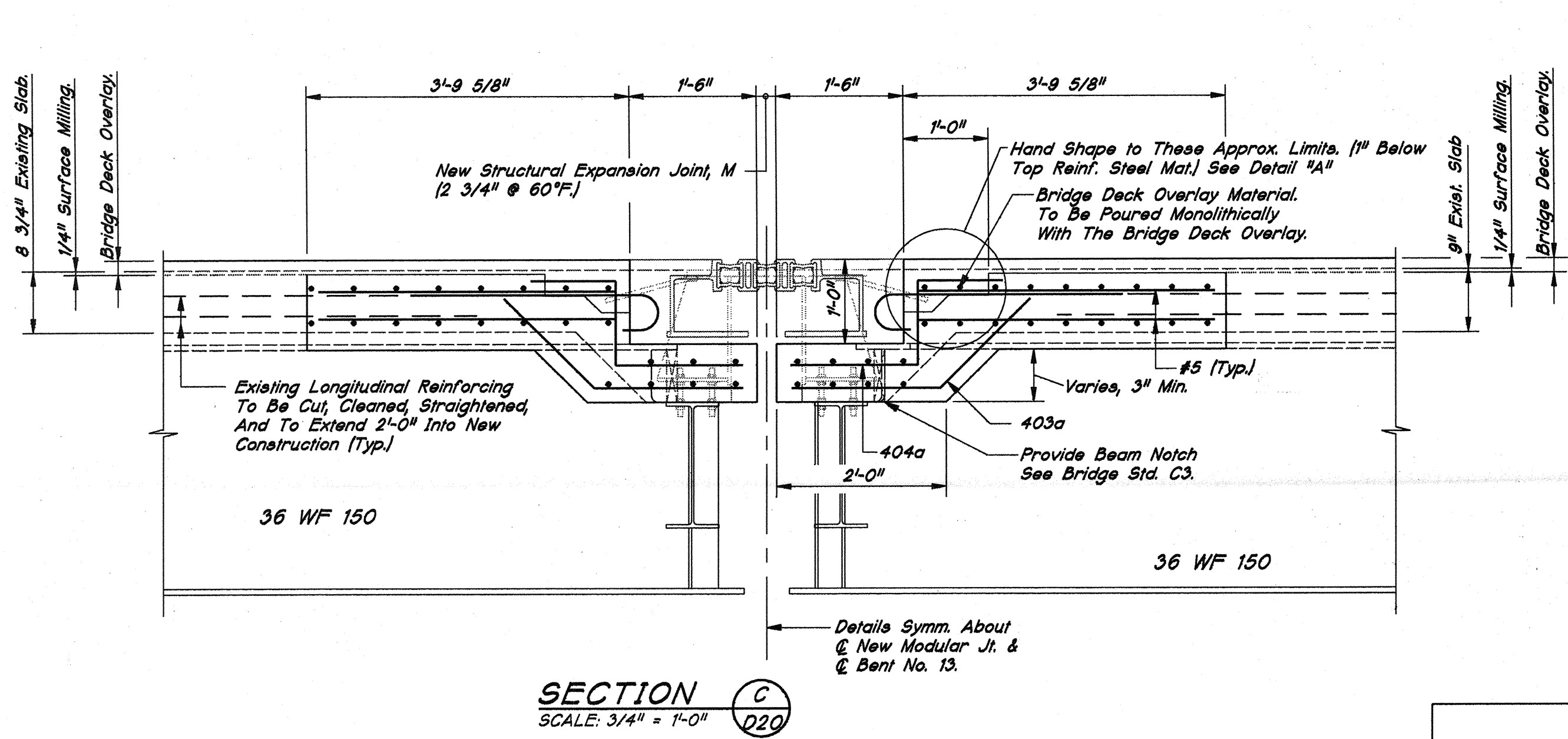
WHERE NEW WORK IS TO BE FITTED TO OLD WORK, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES AND/OR ERRORS TO THE ENGINEER.

FLOOR DETAILS - SECTIONS - SHEET 1
INDIANA DEPARTMENT OF TRANSPORTATION

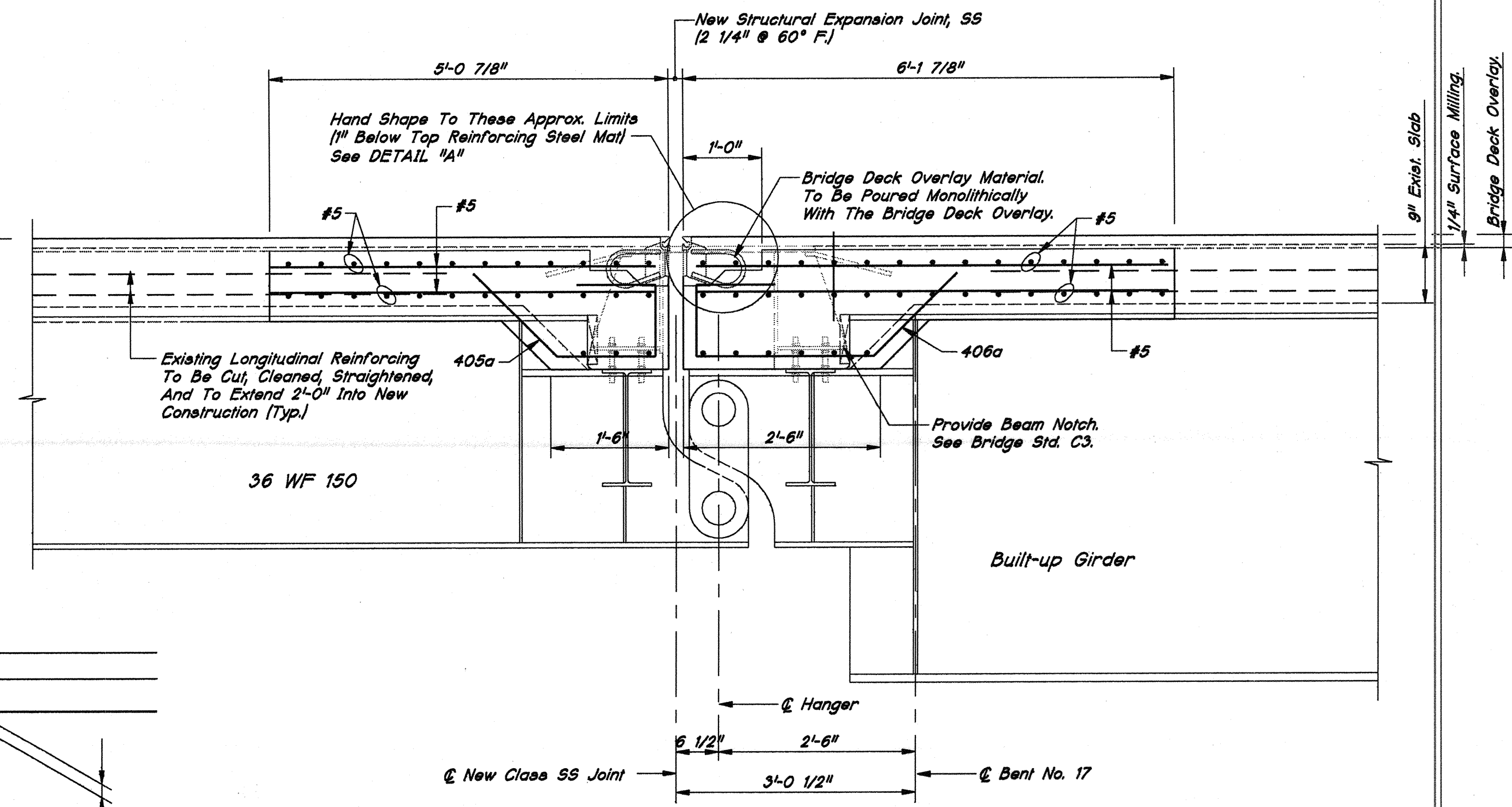
SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
DRAWING: D19A OF D45 SHEET: 20A OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A



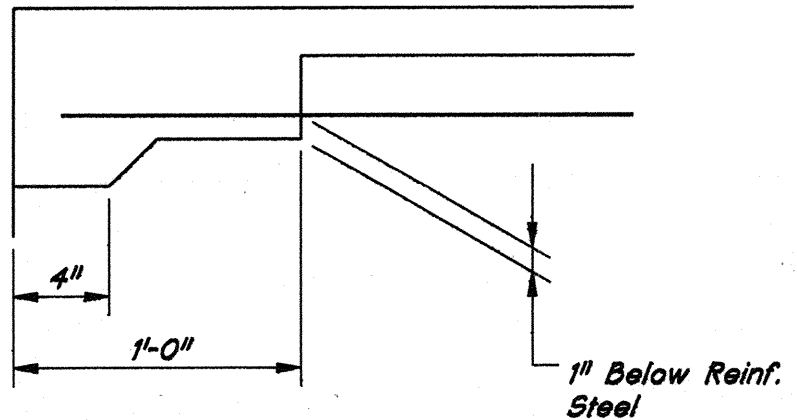
DRWN	KayO	CHK	SCJ
DESIGNED		CHK	
TRACED	KayO	CHK	SCJ



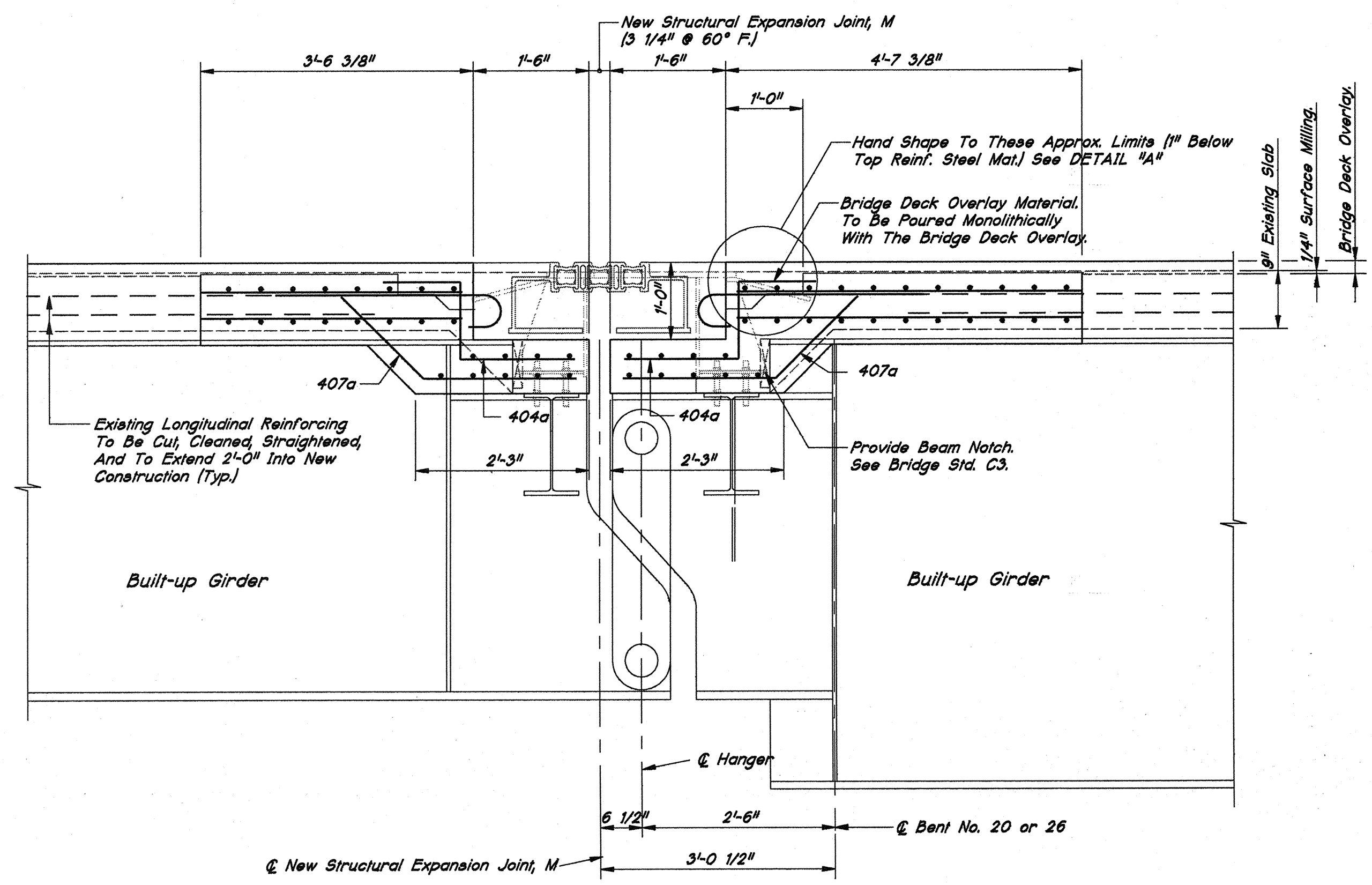
SECTION C
SCALE: 3/4" = 1'-0" (D20)



SECTION D
SCALE: 3/4" = 1'-0" (D20)

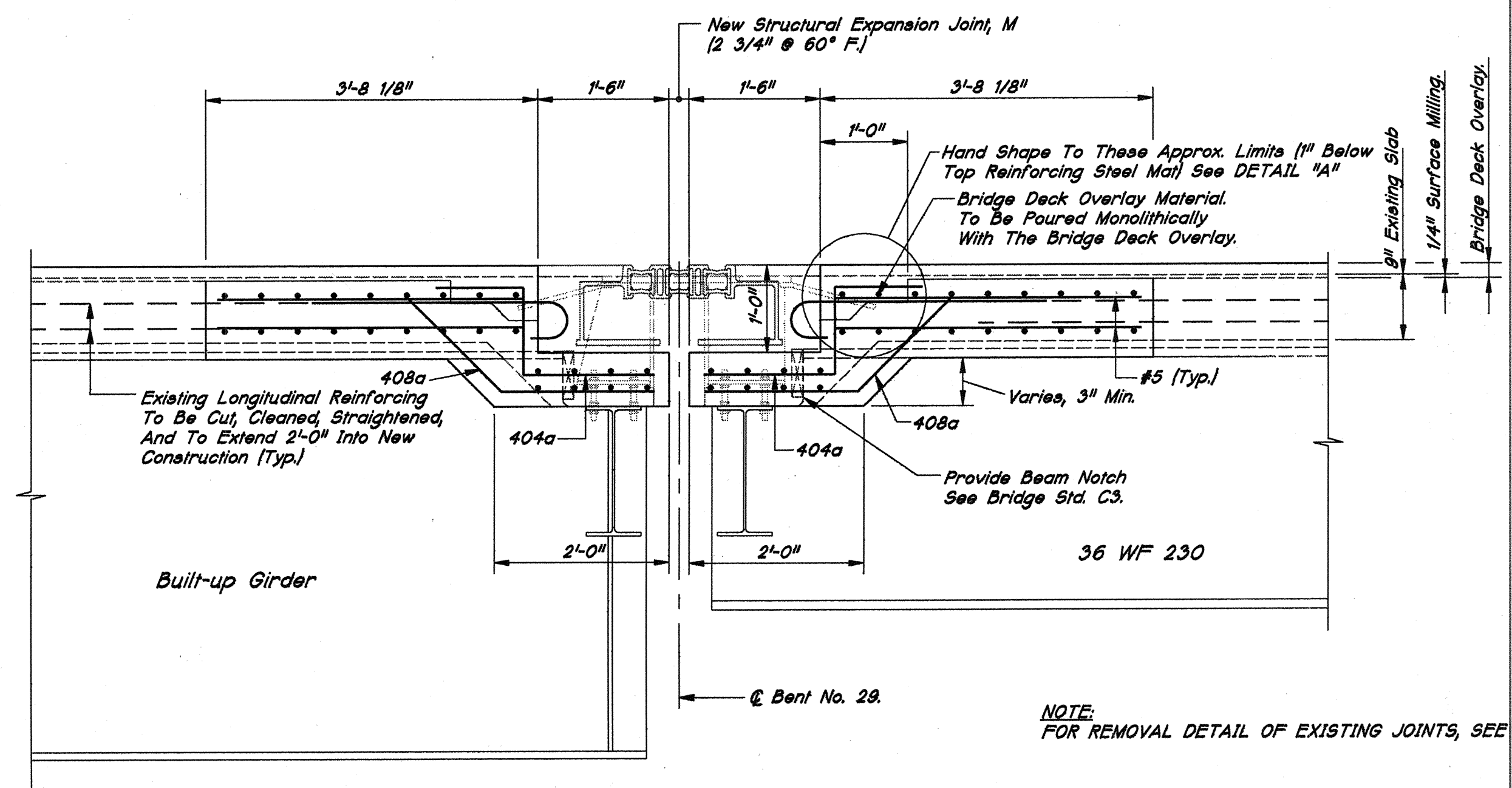


DETAIL "A"
SCALE: 1 1/2" = 1'-0"



BENT NO. 20 - AS SHOWN
BENT NO. 26 - SAME BY OPPOSITE HAND

SECTION E
SCALE: 3/4" = 1'-0" (D20)



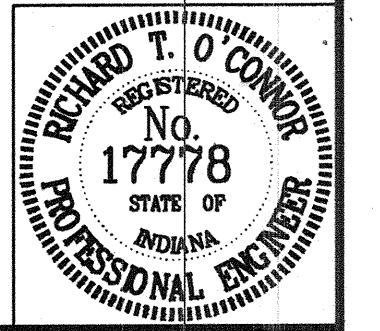
SECTION F
SCALE: 3/4" = 1'-0" (D20)

NOTE:
FOR REMOVAL DETAIL OF EXISTING JOINTS, SEE DRWG. D19.

- NOTES:**
- FOR GENERAL NOTES, SEE DRAWING D2.
 - ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
 - LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 - FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 - FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

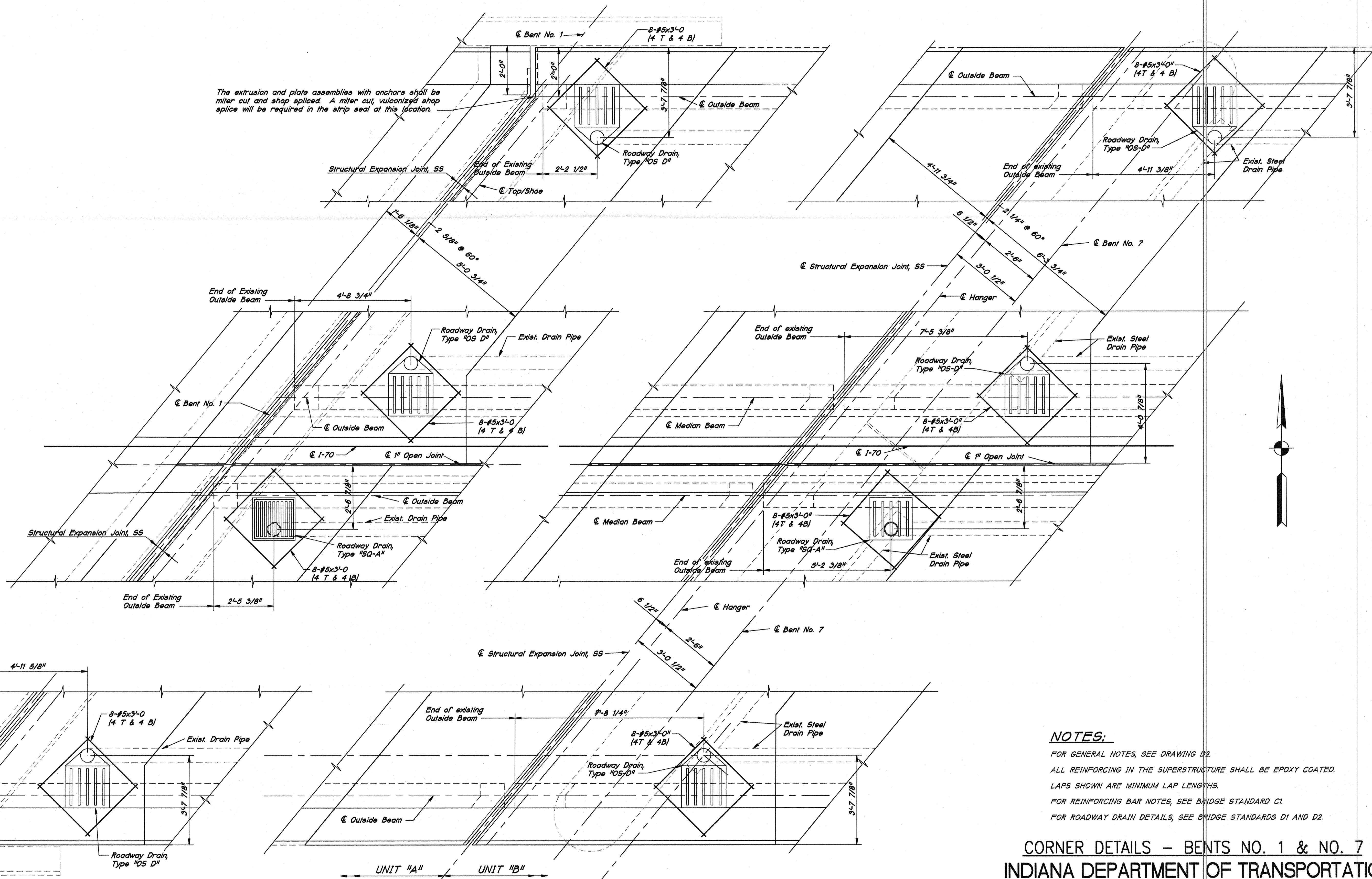
FLOOR DETAILS - SECTIONS - SHEET 2
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
 DRAWING: D20 OF D45 SHEET: 21 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



DATE: 08/20/94	TIME: 2:35:56	ROWAW
FILE: I-70-3392\070.DWG	SCALE: 3/4" = 1'-0"	DATE: 08/20/94
DESIGNED: KayD	CHK: SCJ	
TRACED: KayD	CHK: SCJ	

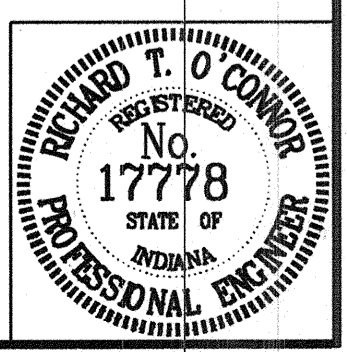
The extrusion and plate assemblies with anchors shall be miter cut and shop applied. A miter cut, vulcanized shop splice will be required in the strip seal at this location.



NOTES:
 FOR GENERAL NOTES, SEE DRAWING D2.
 ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
 LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

CORNER DETAILS - BENTS NO. 1 & NO. 7
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D21 OF D45 SHEET: 22 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

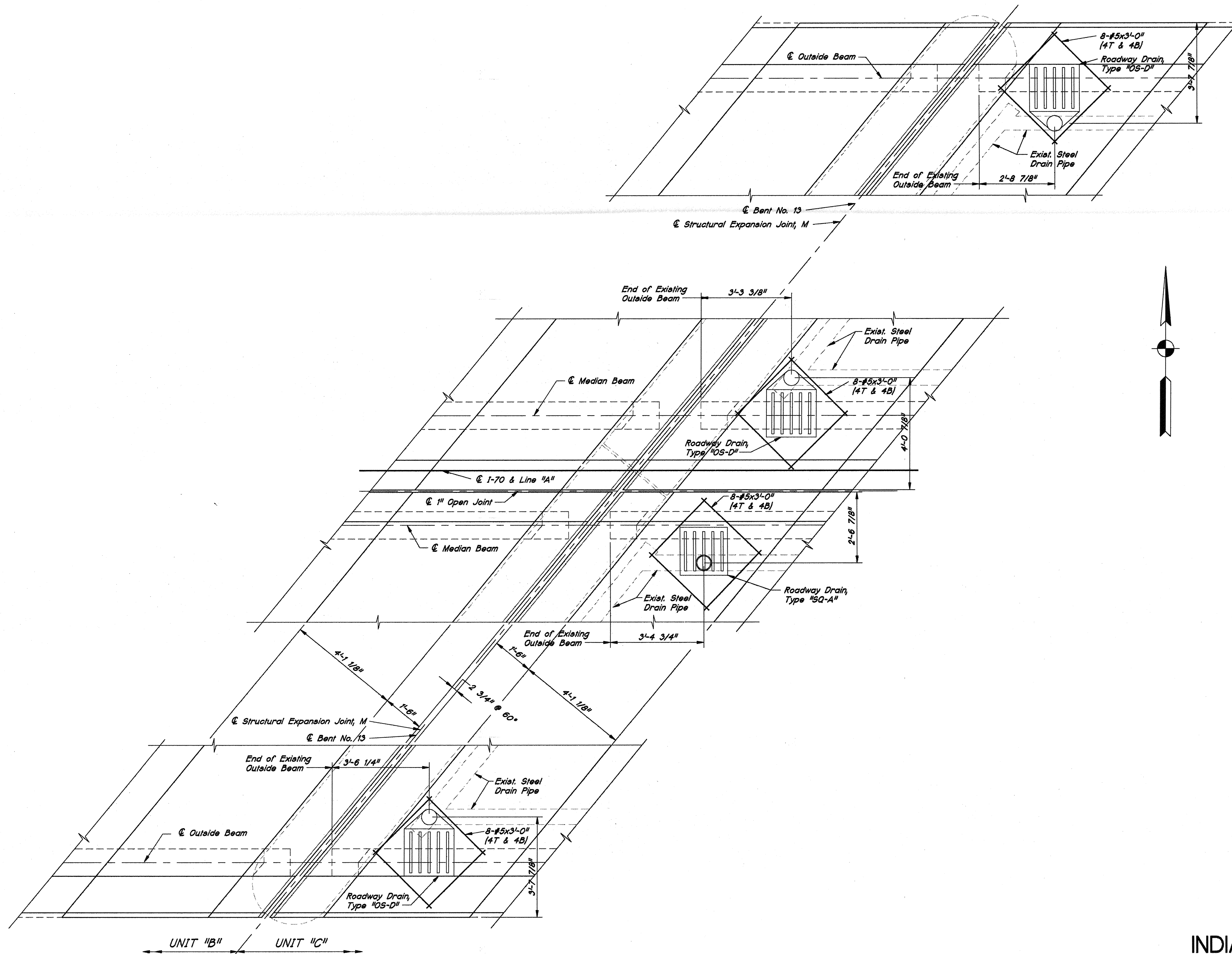


CORNER DETAILS - BENT NO. 1
 SCALE: 1/2" = 1'-0"

CORNER DETAILS - BENT NO. 7
 SCALE: 1/2" = 1'-0"

The extrusion and plate assemblies with anchors shall be miter cut and shop applied. A miter cut, vulcanized shop splice will be required in the strip seal at this location.

4A-L-70-339A-D21.DWG	Scale: 1/2" = 1'-0"	Time: 08/31/94 at 00:04	ROWAW
DRAWN	KayO	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayO	CHK.	SCJ



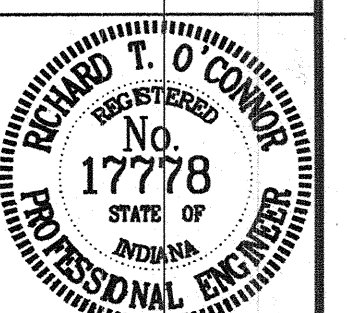
CORNER DETAILS - BENT NO. 13
 SCALE: 1/2" = 1'-0"

NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

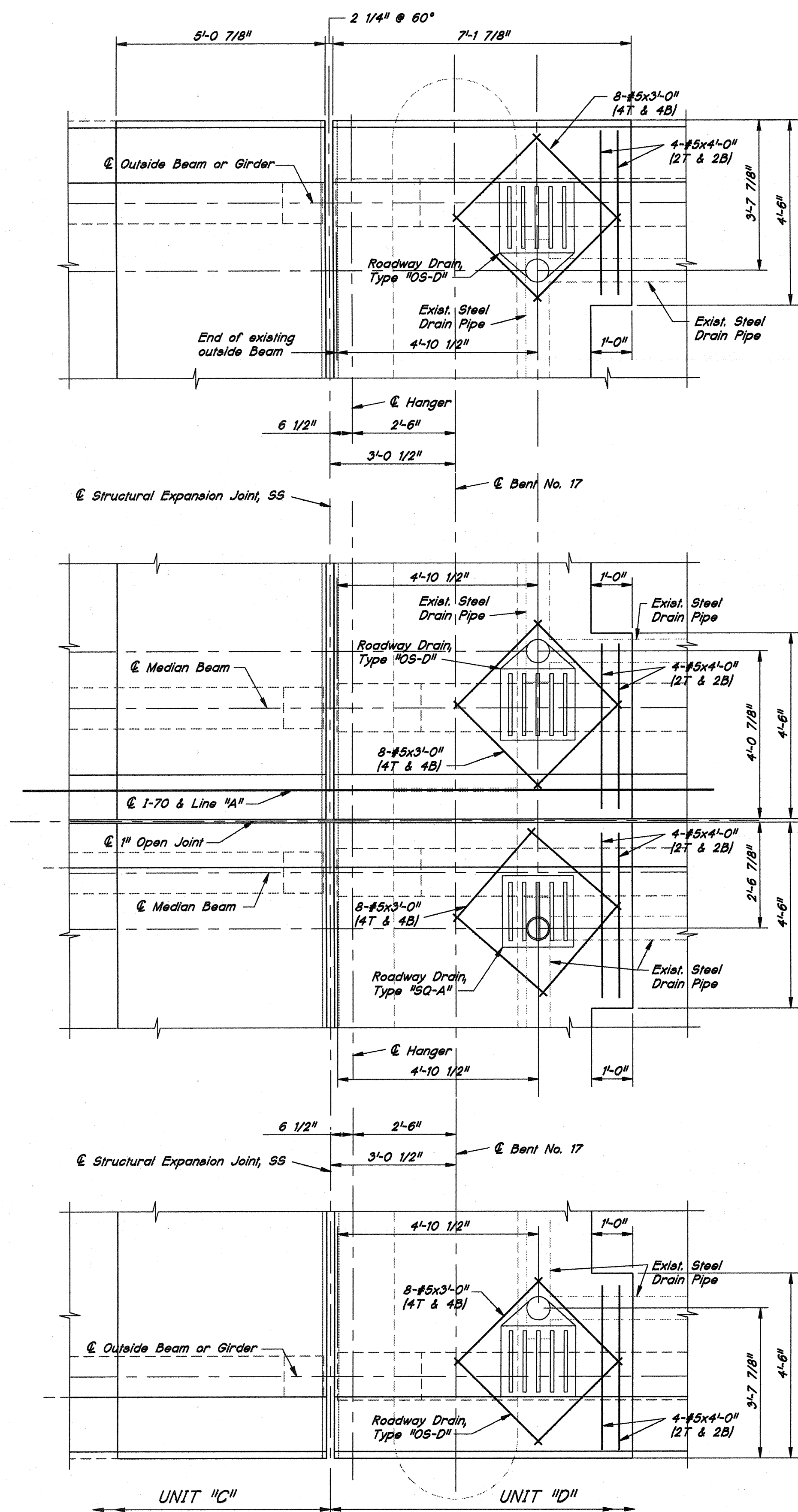
CORNER DETAILS - BENT NO. 13
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D22 OF D45 SHEET: 23 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



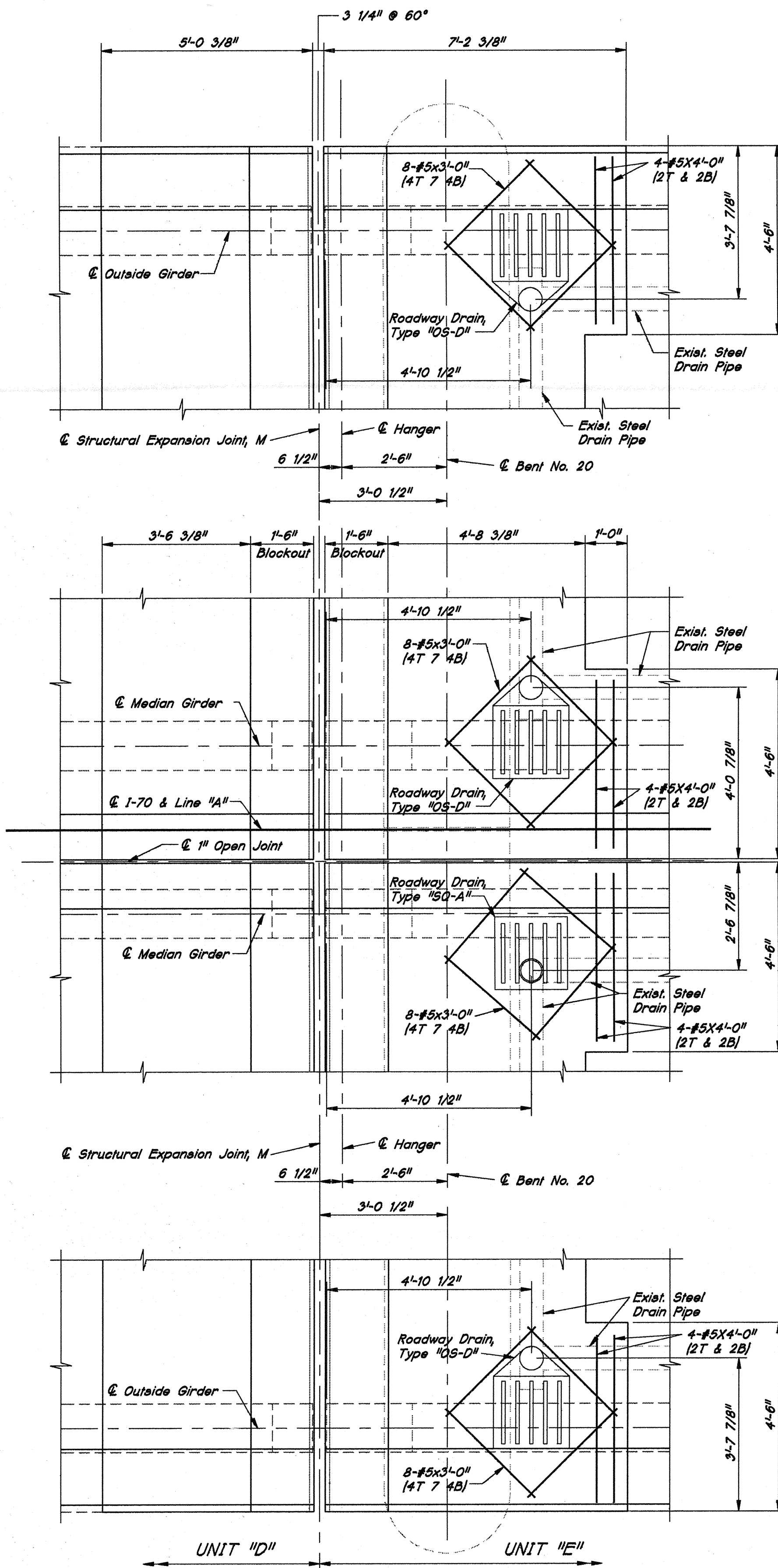
J:\I-70\3392\022.DWG
 Scale: 1 = 1,000
 Time: 08/31/94 at 00:07 RQAW

DRAWN	KeyD	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KeyD	CHK.	SCJ



CORNER DETAILS - BENT NO. 17

SCALE: 1/2" = 1'-0"



CORNER DETAILS - BENT NO. 20

SCALE: 1/2" = 1'-0"



NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

**CORNER DETAILS
BENT NO. 17 AND BENT NO. 20
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994

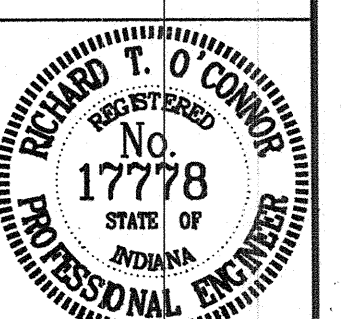
SUBMITTED FOR APPROVAL: *Richard T. Connor*

DRAWING: D23 OF D45 SHEET: 24 OF 69

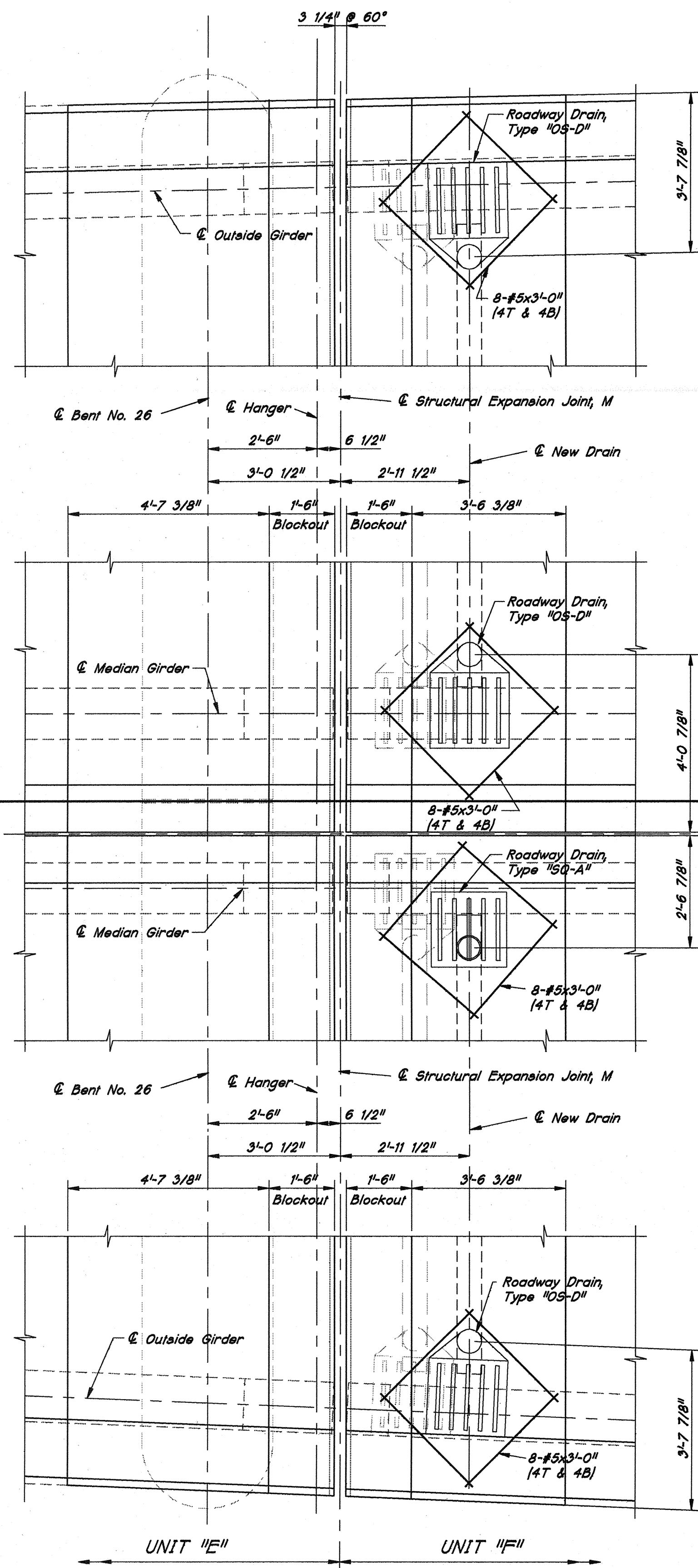
PROJECT: IM-70-3(193) 78

BRIDGE CONTRACT NO: R-21476

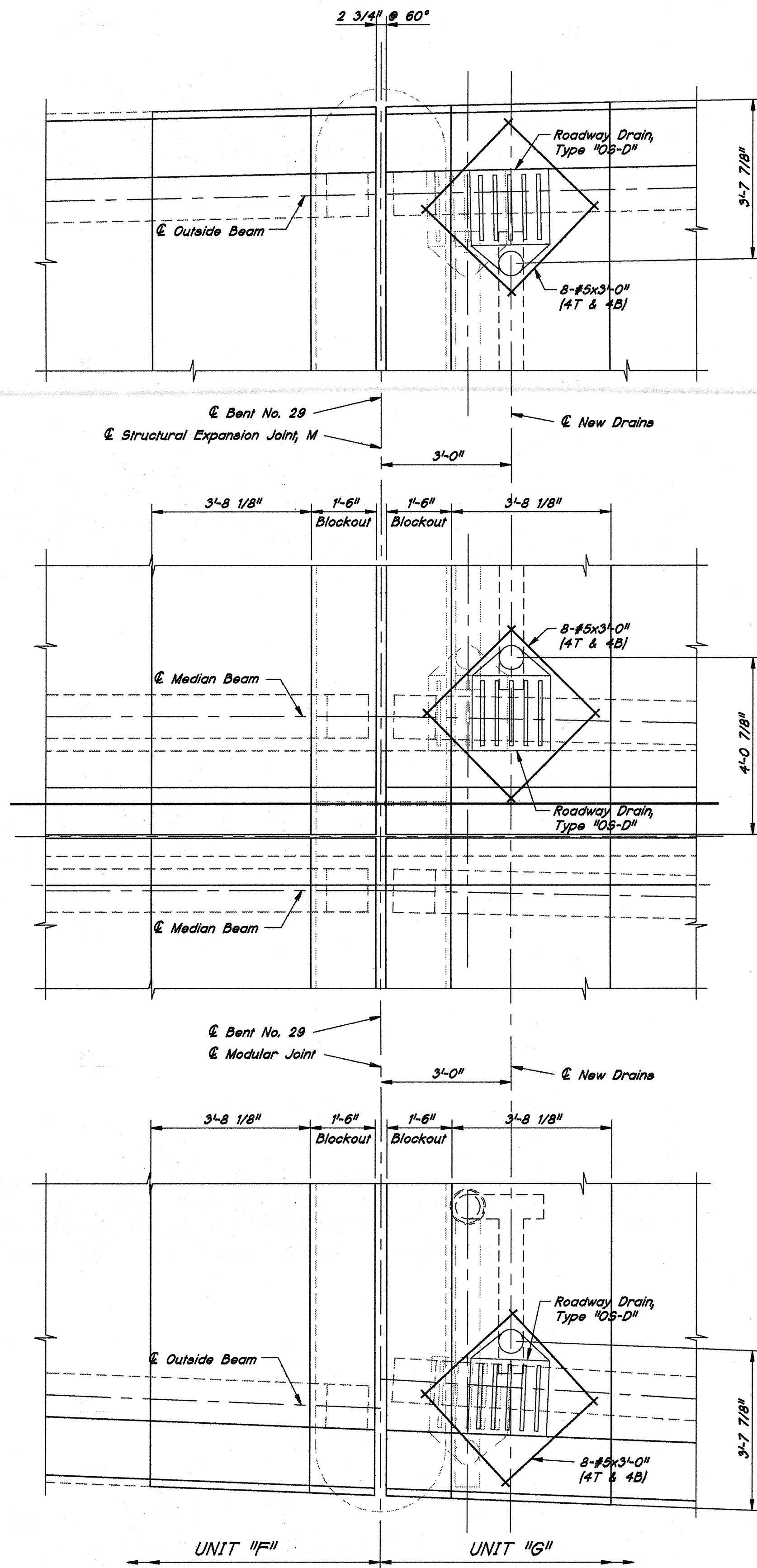
BRIDGE FILE: 1-70-77-2420A & 2386A



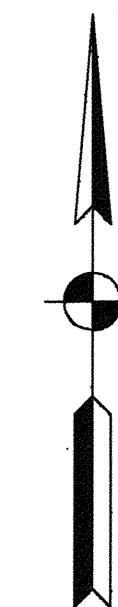
DRAWN	KayQ	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayQ	CHK.	SCJ



CORNER DETAILS - BENT NO. 26
SCALE: 1/2" = 1'-0"



CORNER DETAILS - BENT NO. 29
SCALE: 1/2" = 1'-0"

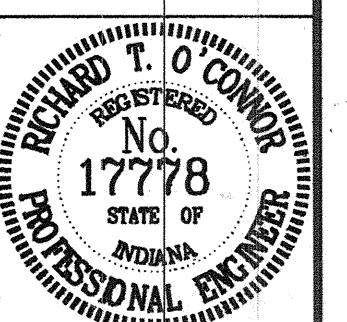


NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE SUPERSTRUCTURE SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR ROADWAY DRAIN DETAILS, SEE BRIDGE STANDARDS D1 AND D2.

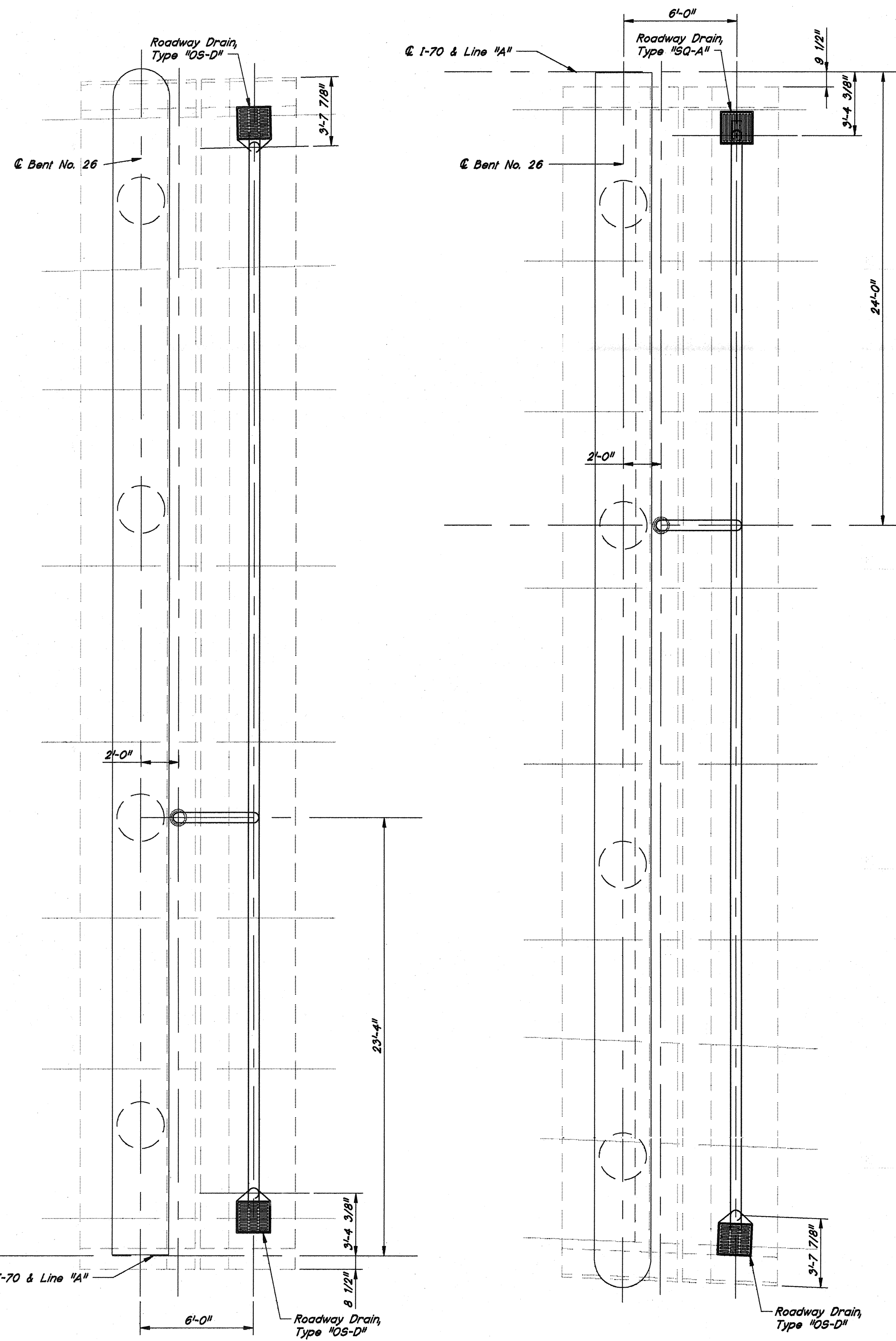
**CORNER DETAILS
BENT NO. 26 AND BENT NO. 29
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
 DRAWING: D24 OF D45 SHEET: 25 OF 89
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



J:\I-70\3392\024.DWG
 Scale: 1" = 1'-0"
 Time: 08/31/94 at 00:15 RQAW

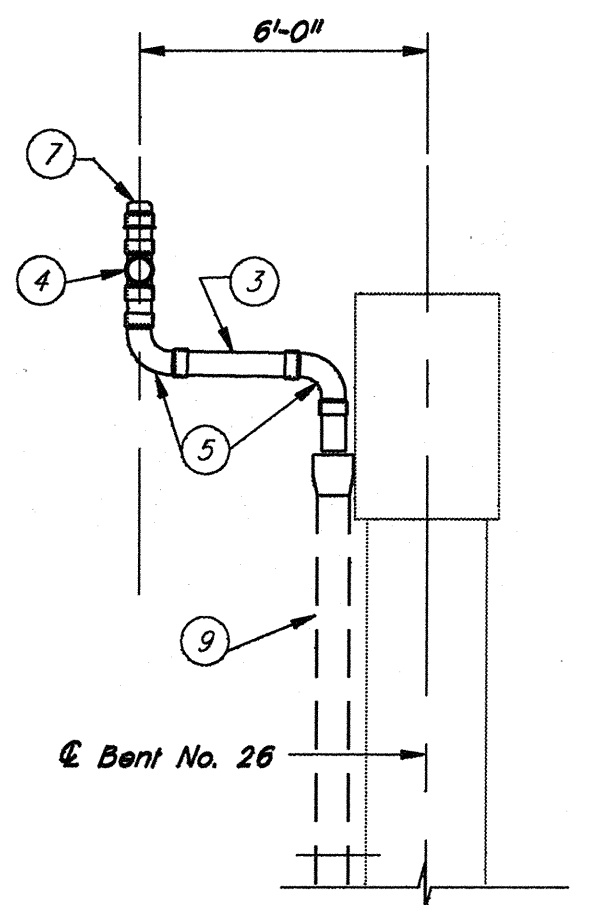
DRAWN	KayD	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayD	CHK.	SCJ



PLAN - WESTBOUND LANES

PLAN - EASTBOUND LANES

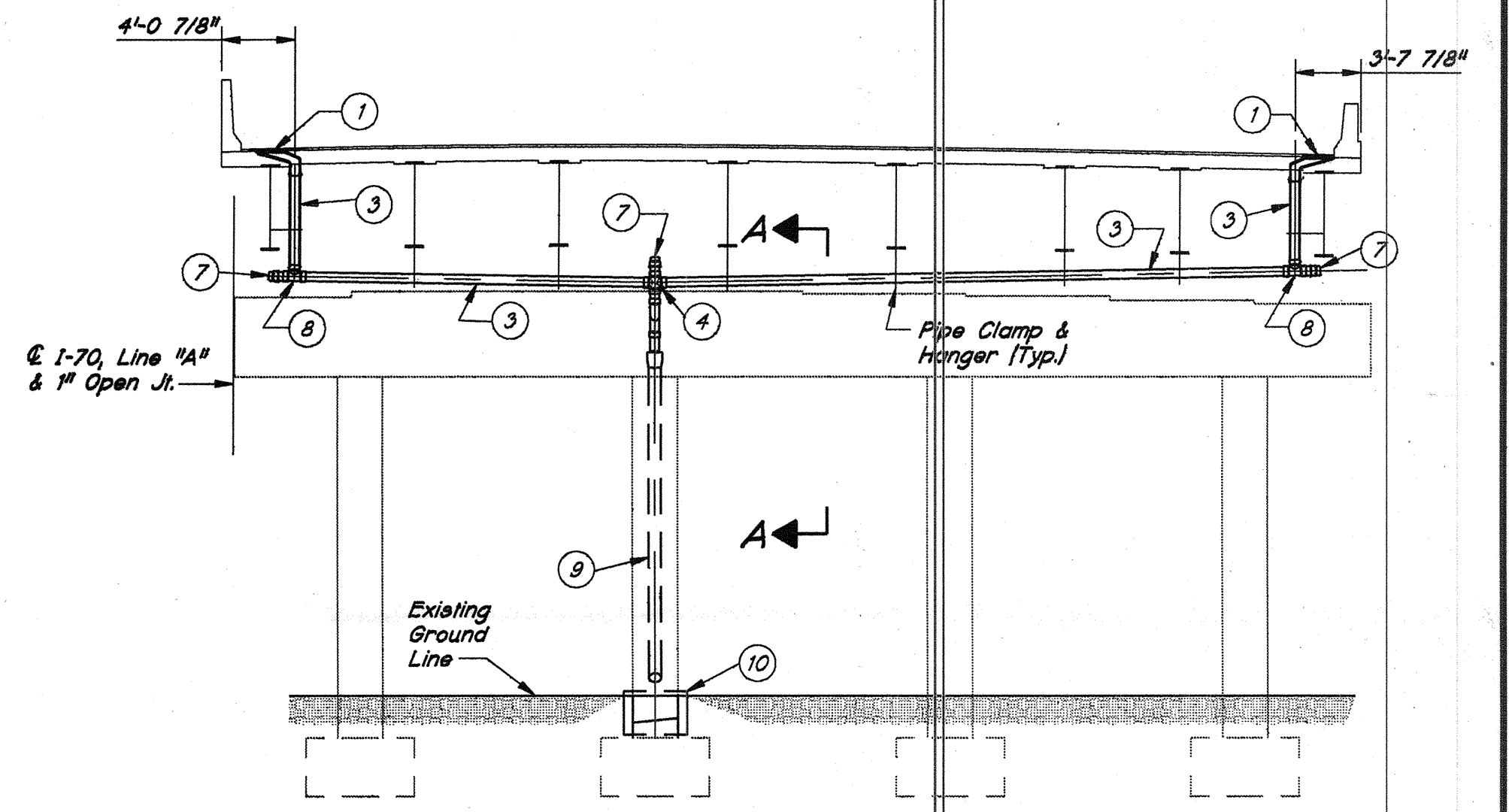
DRAINAGE PLAN @ BENT NO. 26
SCALE: 1/4" = 1'-0"



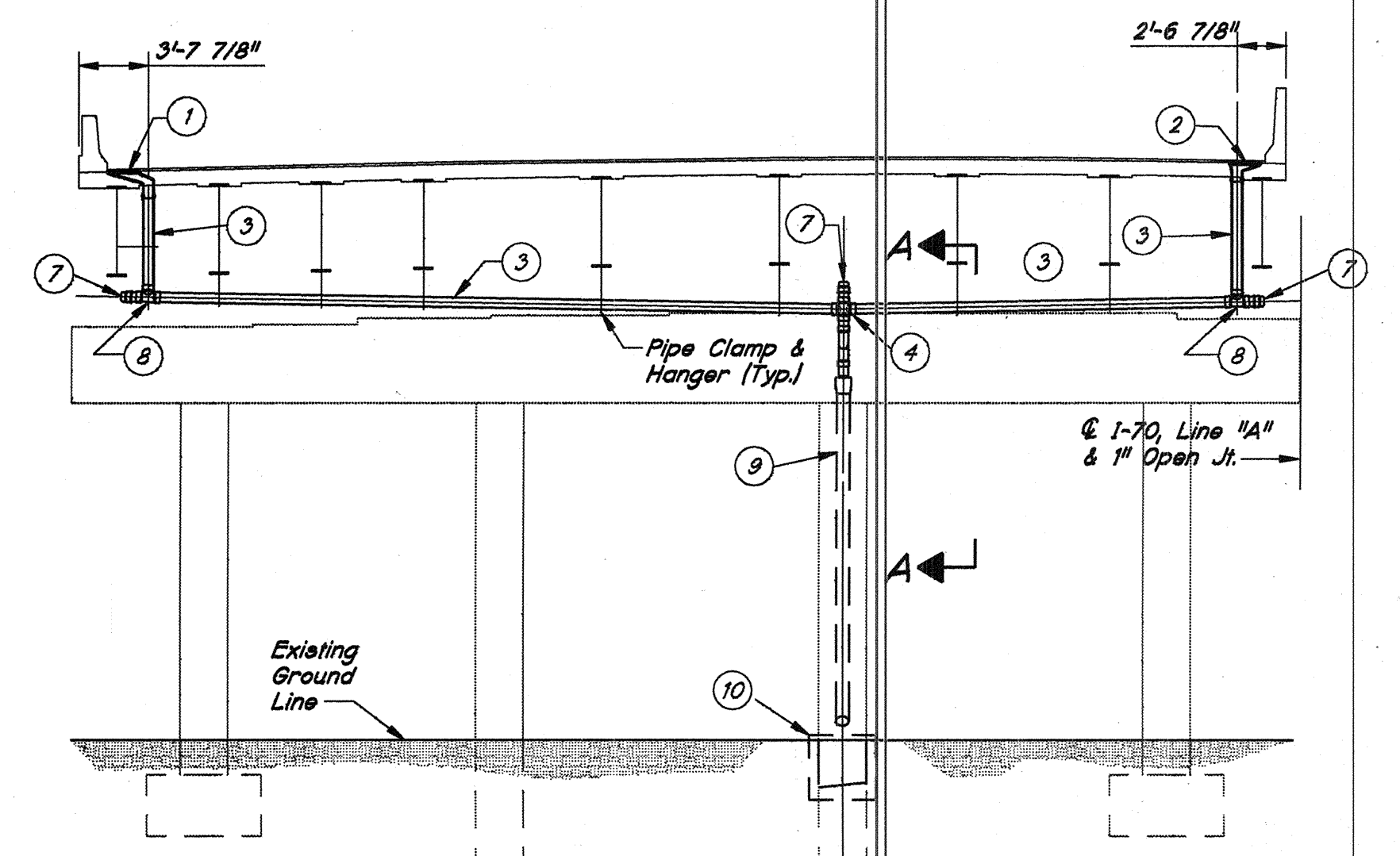
SECTION A-A
SCALE: 1/4" = 1'-0"

LEGEND

- ① NEW ROADWAY DRAIN TYPE "OS-D"
- ② NEW ROADWAY DRAIN TYPE "SQ-A"
- ③ 6" PIPE (PVC)
- ④ 6" CROSS (PVC)
- ⑤ 6" ELBOW - 90° (PVC)
- ⑥ 6" ELBOW - 22.5° (PVC)
- ⑦ 6" END CAP (PVC)
- ⑧ 6" TEE (PVC)
- ⑨ EXISTING 8" STEEL PIPE
- ⑩ EXISTING INLET STRUCTURE



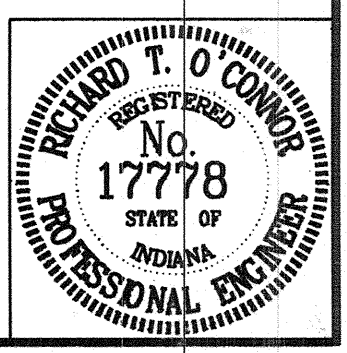
ELEVATION - WESTBOUND BENT NO. 26
SCALE: 1/8" = 1'-0"



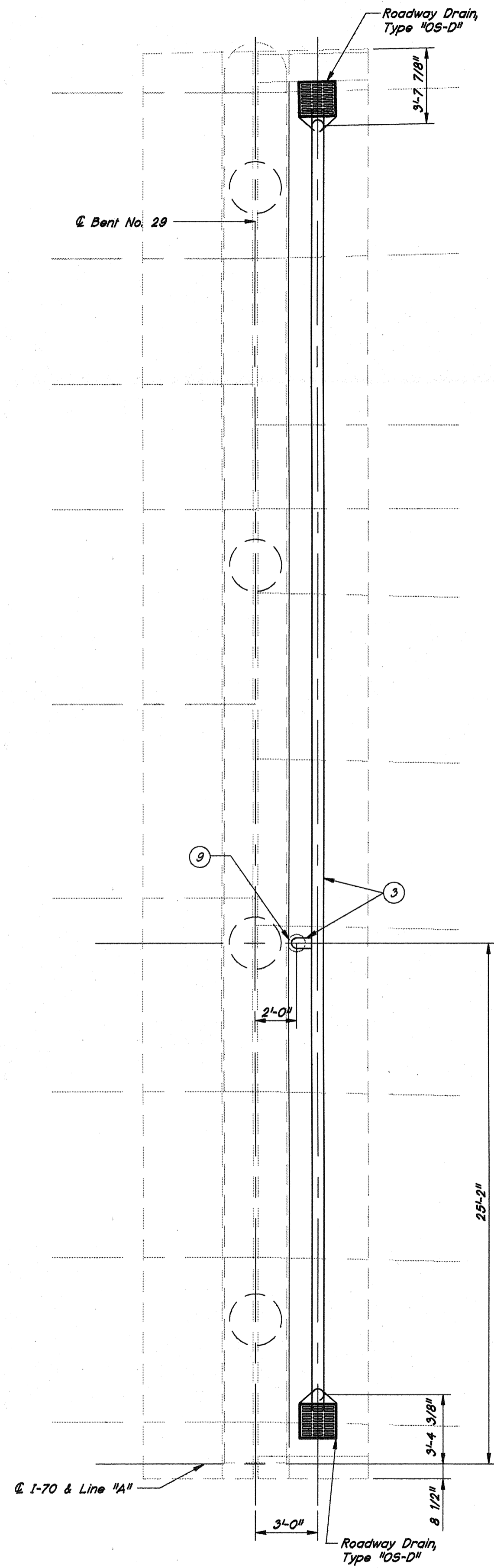
ELEVATION - EASTBOUND BENT NO. 26
SCALE: 1/8" = 1'-0"

FLOOR DRAINAGE DETAILS @ BENT NO. 26
INDIANA DEPARTMENT OF TRANSPORTATION

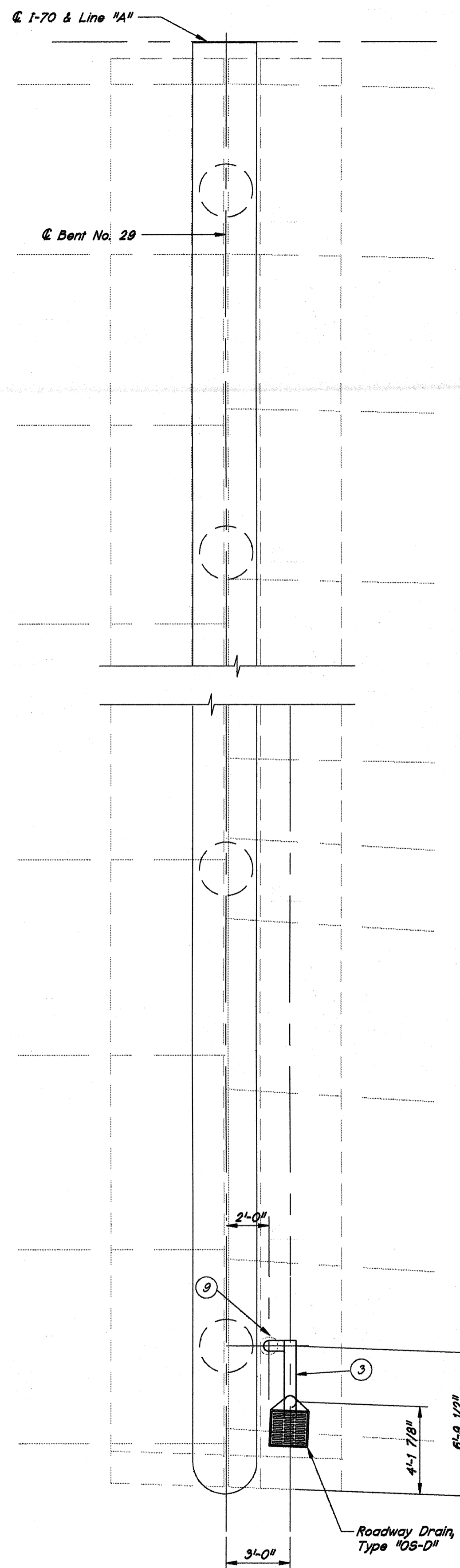
SCALE: AS SHOWN DATE SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: 025 OF 045 SHEET: 26 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



DRAWN: KyoD CHK: SCJ
 DESIGNED: CHK
 TRACED: KyoD CHK: SCJ
 I:\1-70\3392\025.DWG
 Scale: 1" = 100'
 Time: 08/31/94 at 00:19 ROW



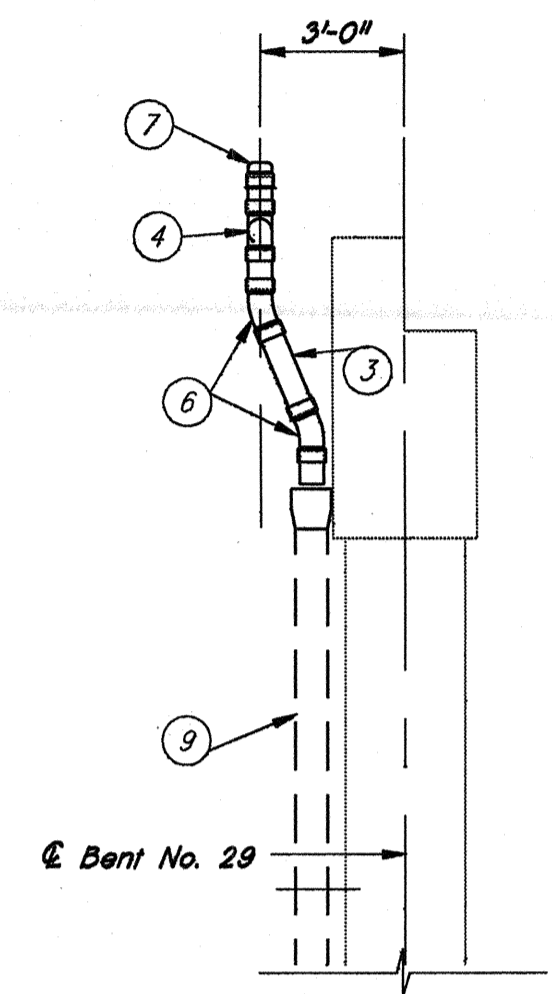
PLAN - WESTBOUND LANES



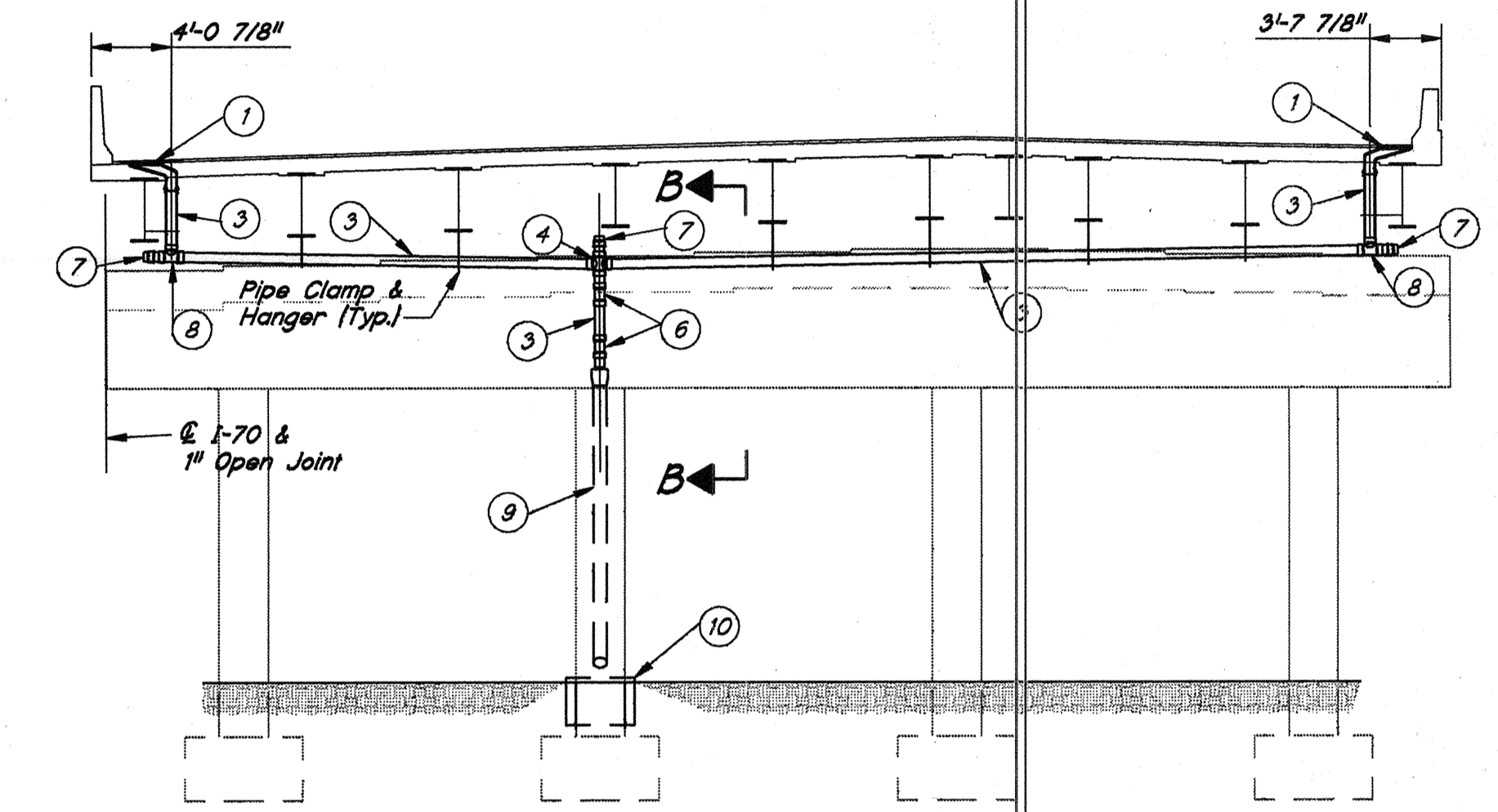
PLAN - EASTBOUND LANES

DRAINAGE PLAN @ BENT NO. 29
SCALE: 1/4" = 1'-0"

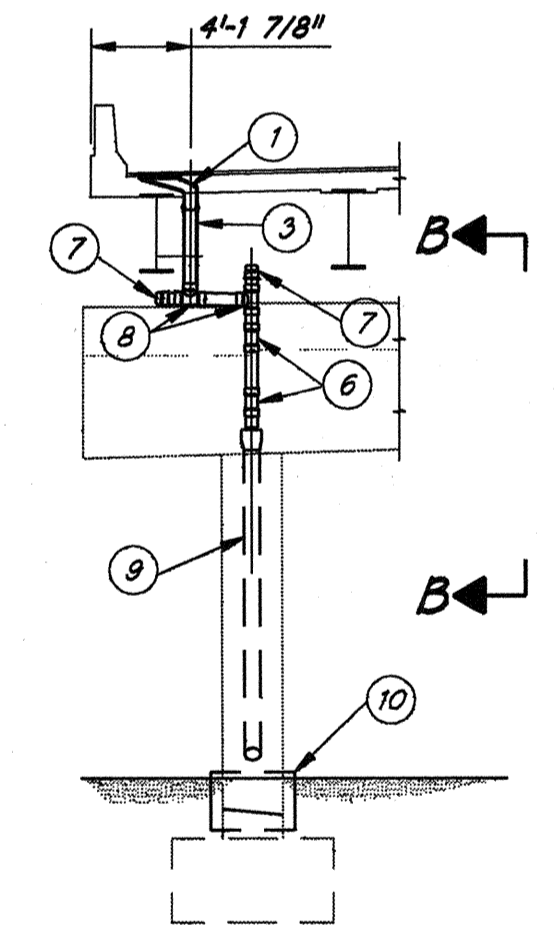
DRAWN	KeyD	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KeyD	CHK.	SCJ



SECTION BB
SCALE: 1/4" = 1'-0"



ELEVATION - WESTBOUND BENT NO. 29
SCALE: 1/8" = 1'-0"



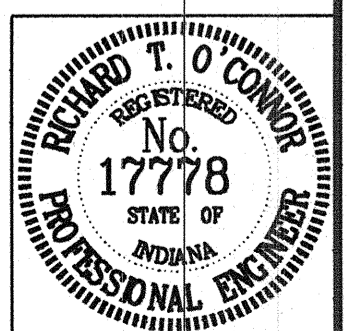
ELEVATION - EASTBOUND BENT NO. 29
SCALE: 1/8" = 1'-0"

LEGEND

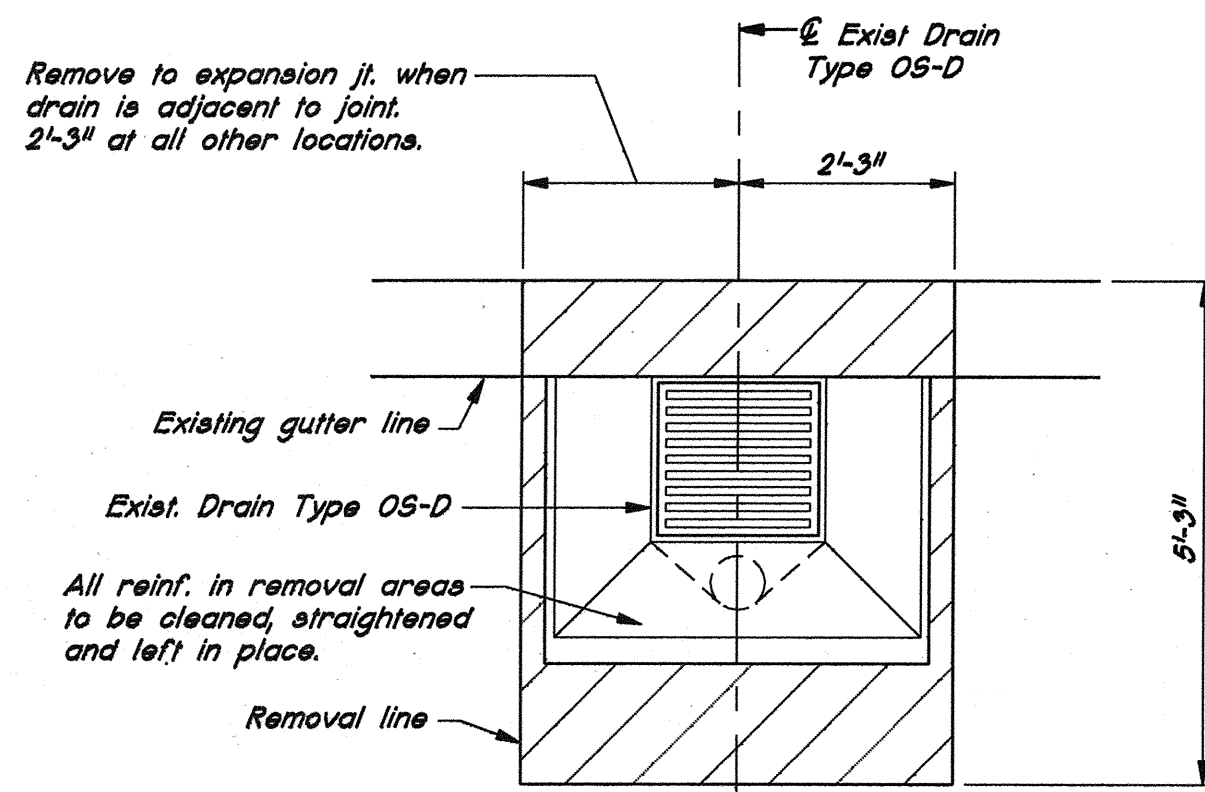
- ① NEW ROADWAY DRAIN TYPE "OS-D"
- ② NEW ROADWAY DRAIN TYPE "SQ-A"
- ③ 6" # PIPE (PVC)
- ④ 6" CROSS (PVC)
- ⑤ 6" ELBOW - 90° (PVC)
- ⑥ 6" ELBOW - 22.5° (PVC)
- ⑦ 6" END CAP (PVC)
- ⑧ 6" TEE (PVC)
- ⑨ EXISTING 8" STEEL PIPE
- ⑩ EXISTING INLET STRUCTURE

FLOOR DRAINAGE DETAILS @ BENT NO. 29
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. Connor*
 DRAWING: D26 OF D45 SHEET: 27 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

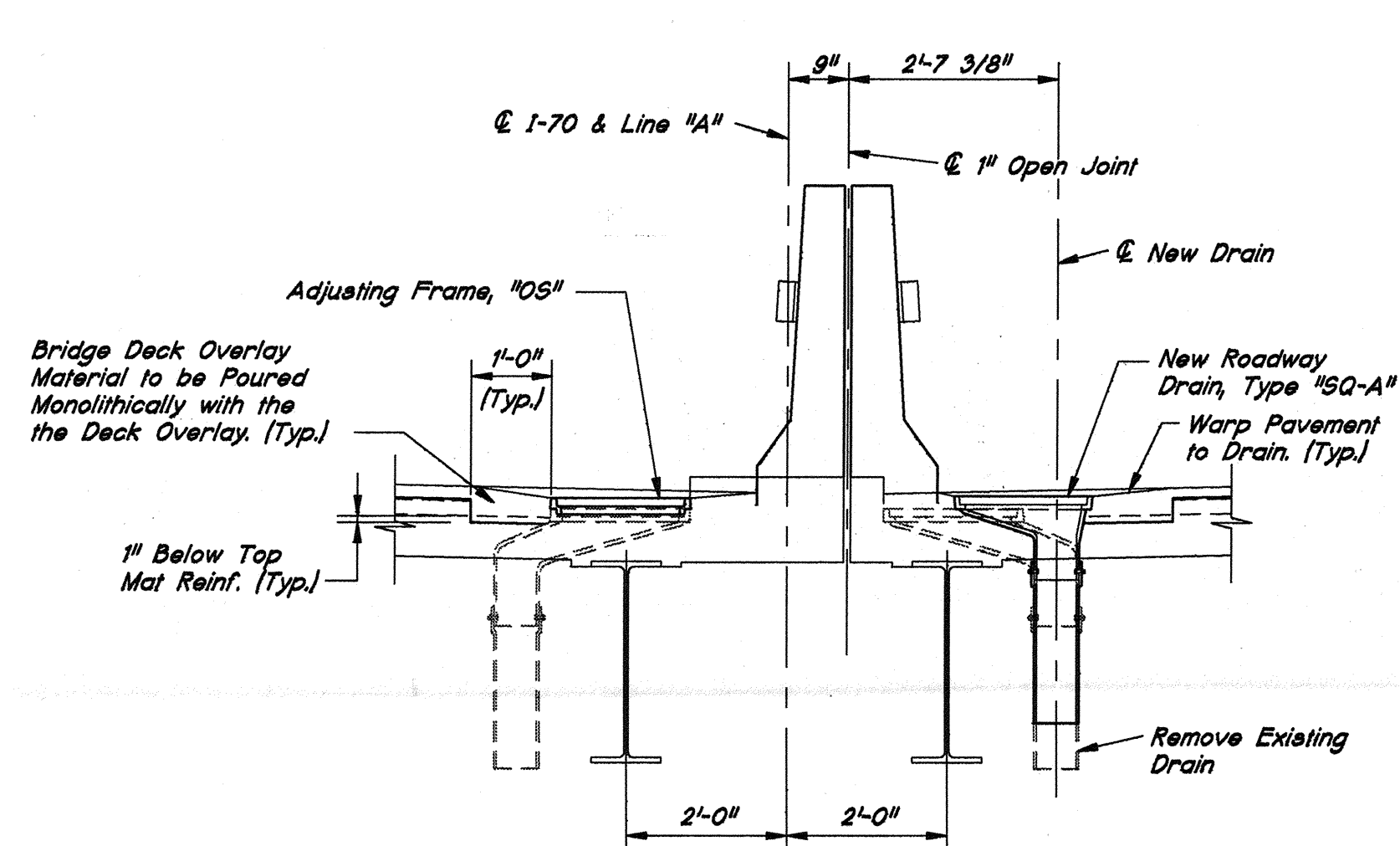


I:\I-70\3392\026.DWG
 Scale: 1" = 10'-0"
 Date: 08/31/94 at 00:22 RCQW

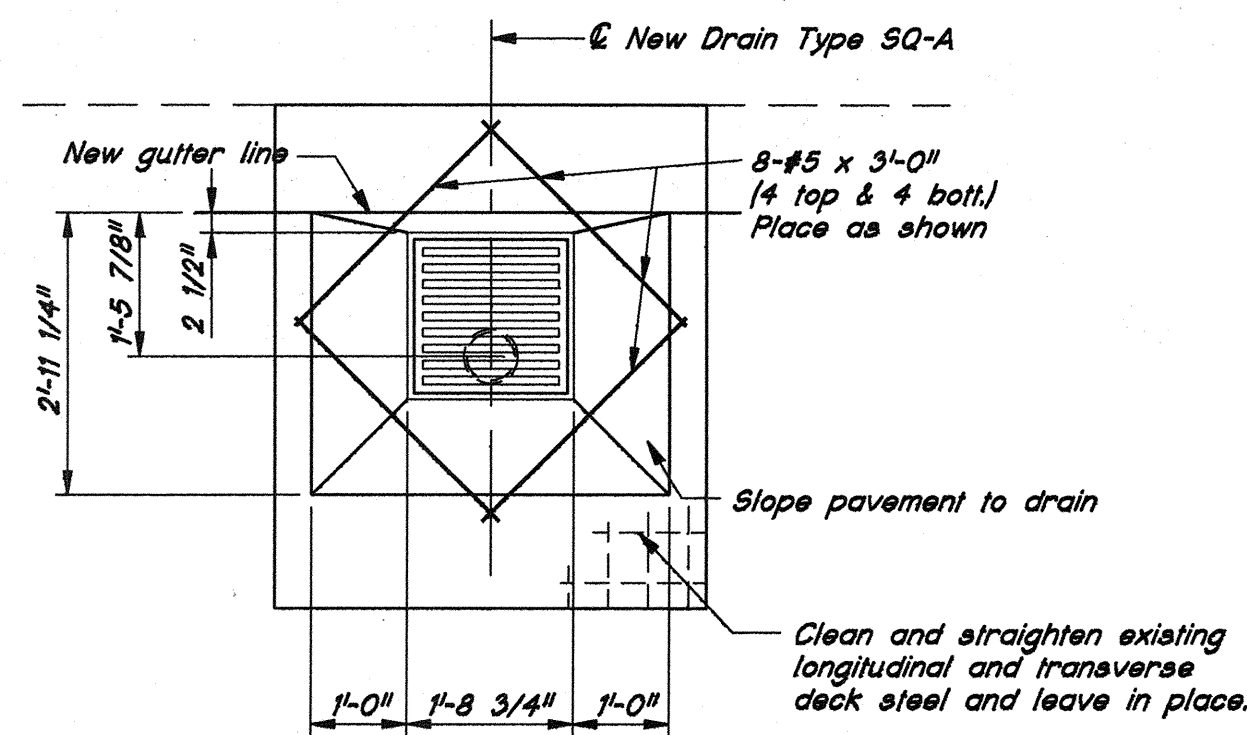


DRAIN REMOVAL
SCALE: 1/2" = 1'-0"

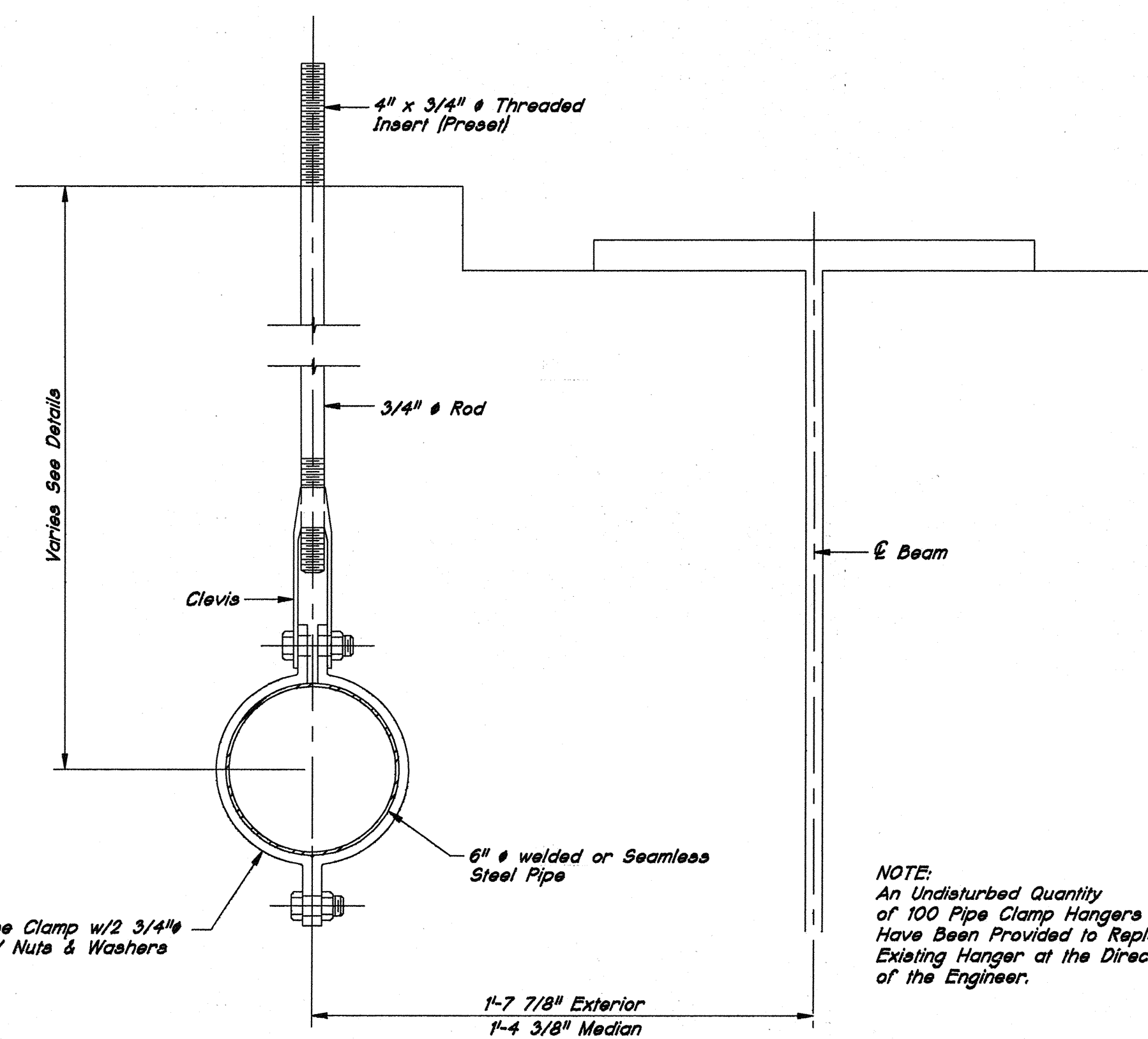
Note:
Hatching indicates concrete removal areas.
Removal of existing drains to be included in the cost of "Present Structure, Remove Portions."



SECTION THRU DRAIN
SCALE: 1/2" = 1'-0"

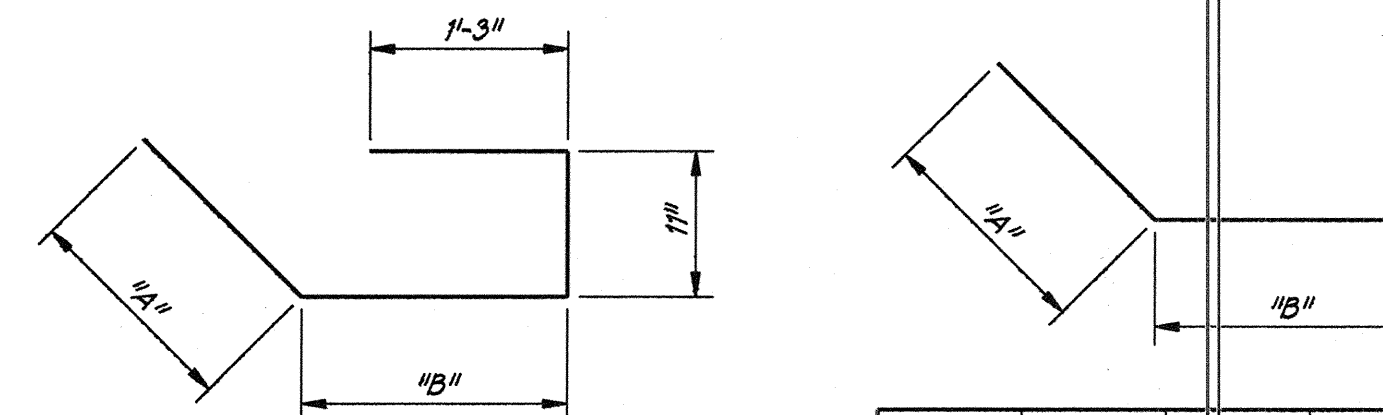


DRAIN REPLACEMENT
SCALE: 1/2" = 1'-0"



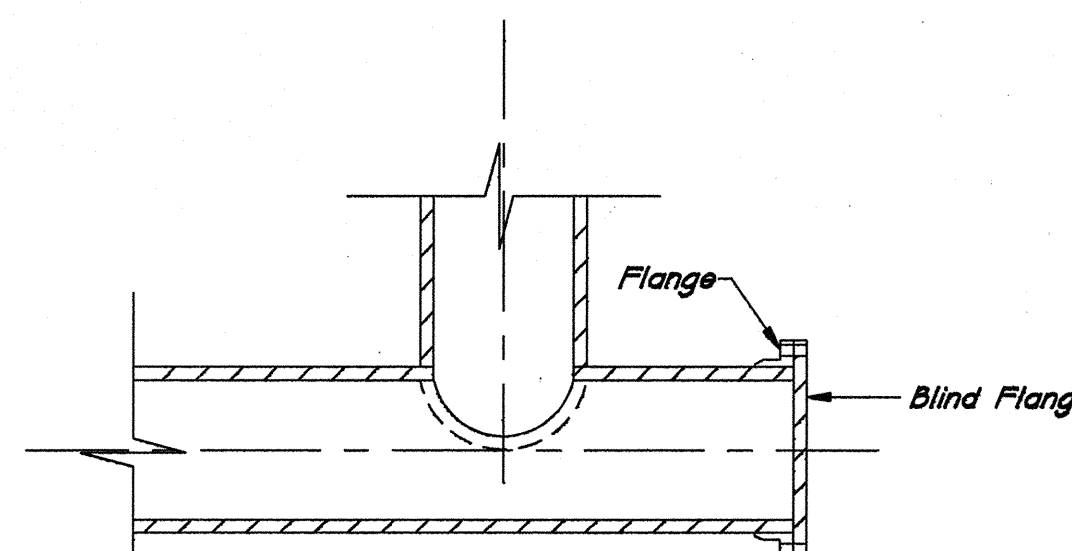
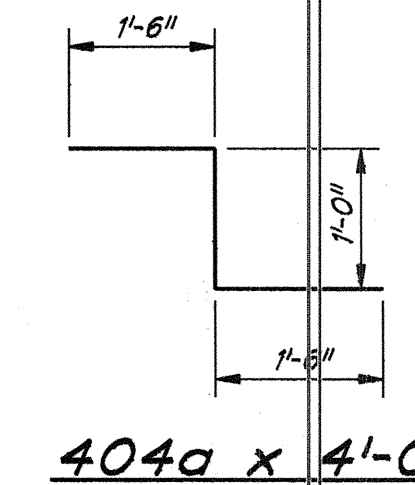
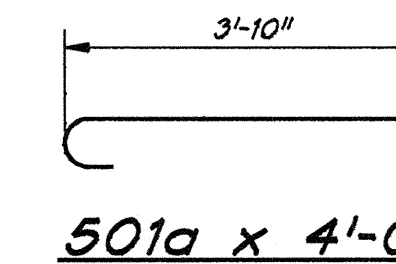
PIPE CLAMP HANGER DETAIL
SCALE: NONE

NOTE:
An Undisturbed Quantity
of 100 Pipe Clamp Hangers
Have Been Provided to Replace
Existing Hanger at the Direction
of the Engineer.



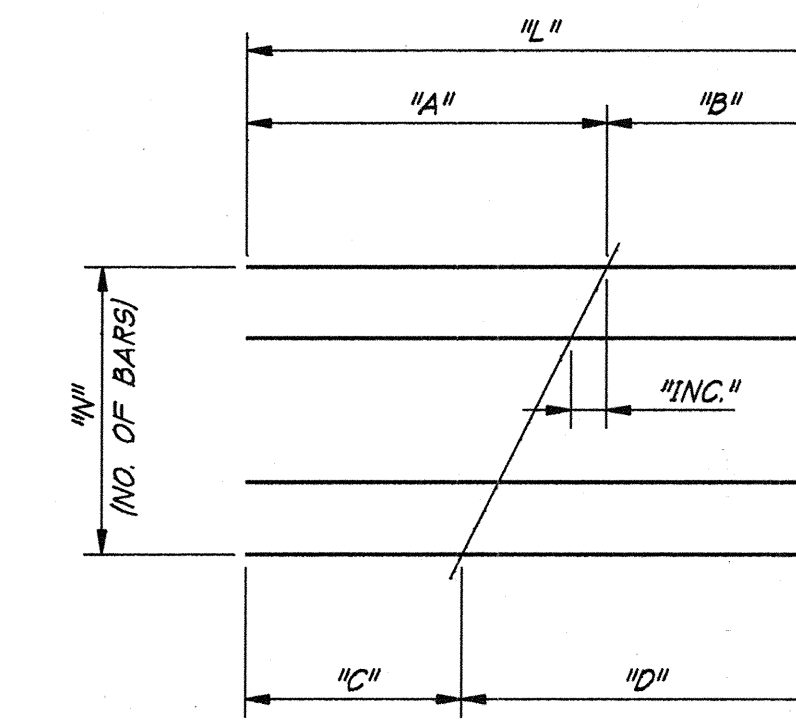
MARK	"A"	"B"	LENGTH
401a	1'-6"	1'-5"	5'-1"
402a	1'-6"	2'-8"	6'-4"
405a	1'-6"	1'-3"	4'-11"
406a	1'-6"	2'-3"	5'-11"

MARK	"A"	"B"	LENGTH
403a	1'-6"	2'-3"	3'-9"
407a	1'-6"	2'-0"	3'-6"
408a	1'-6"	1'-9"	3'-3"



TYPICAL EXISTING CLEANOUT
SCALE: NONE

If Blind Flange is Removed During Structure Plumbing
Cleaning They Shall Be Cleaned and Reinstalled.
See Special Provisions.



CUTTING DIAGRAM

TABLE							
MARK	"N"	"L"	"A"	"B"	"C"	"D"	"INC"
5c01a	2	14'-10"	6'-2"	8'-8"	7'-0"	7'-10"	10"
5c02a	15	12'-5"	1'-10"	10'-7"	10'-7"	1'-10"	7 1/2"
5c03a	13	11'-1"	1'-11"	9'-2"	9'-2"	1'-11"	7 1/4"
5c04a	9	8'-4"	1'-9"	6'-7"	6'-7"	1'-9"	7 1/4"
5c05a	15	12'-0"	1'-9"	10'-3"	10'-3"	1'-9"	7 1/4"
5c06a	9	8'-10"	2'-0"	6'-10"	6'-10"	2'-0"	7 1/4"
5c07a	21	15'-5"	1'-8"	13'-9"	13'-9"	1'-8"	7 1/4"
5c08a	13	10'-5"	1'-7"	8'-10"	8'-10"	1'-7"	7 1/4"
5c08a	2	20'-0"	8'-9"	11'-3"	8'-7"	10'-5"	10"
5c10a	7	6'-9"	1'-6"	5'-3"	5'-3"	1'-6"	7 1/2"
5c11a	8	6'-6"	1'-6"	5'-0"	5'-0"	1'-6"	6"

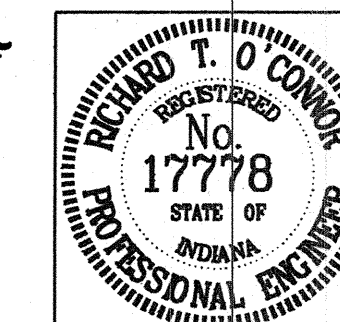
MISCELLANEOUS FLOOR DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE SEPTEMBER 2, 1994

SUBMITTED FOR APPROVAL: *Richard T. O'Connor*

DRAWING: D27 OF D45 SHEET: 28 OF 69

PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A



**BILL OF MATERIALS
FLOOR - UNIT "A" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
5c01a	2	14'-10"	
5c02a	15	12'-5"	
5c03a	13	11'-1"	
5c04a	18	8'-4"	
#5	4	37'-0"	
#5	8	34'-0"	
#5	12	9'-0"	
#5	1	8'-9"	
#5	5	8'-0"	
#5	1	7'-6"	
#5	302	7'-0"	
#5	4	6'-9"	
#5	235	6'-0"	
#5	16	3'-0"	
TOTAL #5			4,895
401a	96	5'-1"	
TOTAL #4			326
TOTAL REINFORCING - E.C.			5,221
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 1			13.8
POUR NO. 2			13.7
TOTAL CLASS "C"			27.5
MISCELLANEOUS (QTY.)			
Br. Deck Patching, Partial Depth			4,173 Sys.
Bridge Deck Patching, Full Depth			100 Sft.
Surface Milling			2,318 Sys.
Bridge Deck Overlay			2,318 Sys.
Bridge Deck Overlay, Additional			32.4 Cys.
Cast Iron Grates, Basins & Fittings			
18-Adjusting Frames, "OS"			@ 89 Lbs. Each 1602 Lbs.
2-Roadway Drains, Type "OS-D"			@ 322 Lbs. Each 644 Lbs.
Total Cast Iron			2246 Lbs.
Structural Expansion Joint, SS			
@ Bent No. 1			71 Lft.
@ Bent No. 7			70 Lft.
Total Str. Exp. SS			141 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "B" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
501a	56	4'-0"	
5c07a	21	15'-5"	
5c08a	13	10'-5"	
5c09a	2	20'-0"	
5c10a	14	6'-9"	
#5	4	37'-0"	
#5	16	34'-0"	
#5	3	10'-0"	
#5	160	9'-0"	
#5	2	8'-3"	
#5	118	8'-0"	
#5	166	5'-6"	
#5	123	4'-6"	
#5	16	3'-0"	
TOTAL #5			5,689
402a	48	6'-4"	
403a	48	3'-9"	
404a	48	4'-0"	
TOTAL #4			452
TOTAL REINFORCING - E.C.			6,141
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 3			17.8
POUR NO. 4			15.0
TOTAL CLASS "C"			32.8
MISCELLANEOUS (QTY.)			
Br. Deck Patching, Partial Depth			4,309 Sys.
Bridge Deck Patching, Full Depth			100 Sft.
Surface Milling			2,394 Sys.
Bridge Deck Overlay			2,394 Sys.
Bridge Deck Overlay, Additional			33.5 Cys.
Cast Iron Grates, Basins & Fittings			
20-Adjusting Frames, "OS"			@ 89 Lbs. Each 1,780 Lbs.
2-Roadway Drains, Type "OS-D"			@ 322 Lbs. Each 644 Lbs.
Total Cast Iron			2,424 Lbs.
Structural Expansion Joint, M			
@ Bent No. 13			70 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "C" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
501a	56	4'-0"	
5c11a	16	6'-6"	
#5	2	37'-0"	
#5	12	34'-0"	
#5	48	28'-6"	
#5	4	26'-6"	
#5	6	10'-6"	
#5	6	8'-9"	
#5	3	8'-6"	
#5	3	6'-9"	
#5	200	5'-6"	
#5	244	4'-6"	
#5	16	3'-0"	
TOTAL #5			4,893
403a	50	3'-9"	
404a	50	4'-0"	
405a	50	4'-11"	
TOTAL #4			406
TOTAL REINFORCING - E.C.			5,299
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 5			15.2
POUR NO. 6			10.7
TOTAL CLASS "C"			25.9
MISCELLANEOUS (QTY.)			
Br. Deck Patching, Partial Depth			2,936 Sys.
Bridge Deck Patching, Full Depth			100 Sft.
Surface Milling			1,762 Sys.
Bridge Deck Overlay			1,762 Sys.
Bridge Deck Overlay, Additional			24.7 Cys.
Cast Iron Grates, Basins & Fittings			
15-Adjusting Frames, "OS"			@ 89 Lbs. Each 1,335 Lbs.
2-Roadway Drains, Type "OS-D"			@ 322 Lbs. Each 644 Lbs.
Total Cast Iron			1,979 Lbs.
Structural Expansion Joint, SS			
@ Bent No. 17			53 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "D" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
501a	175	4'-0"	
#5	92	28'-6"	
#5	18	26'-3"	
#5	18	8'-6"	
#5	18	6'-9"	
#5	122	5'-9"	
#5	8	4'-0"	
#5	122	3'-3"	
#5	16	3'-0"	
TOTAL #5			4,976
404a	50	4'-0"	
406a	50	5'-11"	
407a	50	3'-6"	
TOTAL #4			448
TOTAL REINFORCING - E.C.			5,424
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 7			14.1
POUR NO. 8			11.6
TOTAL CLASS "C"			25.7
MISCELLANEOUS (QTY.)			
Br. Deck Patching, Partial Depth			3,673 Sft.
Bridge Deck Patching, Full Depth			100 Sft.
Surface Milling			2,040 Sys.
Bridge Deck Overlay			2,040 Sys.
Bridge Deck Overlay, Additional			28.6 Cys.
Cast Iron Grates, Basins & Fittings			
20-Adjusting Frames, "OS"			@ 89 Lbs. Each 1,780 Lbs.
2-Roadway Drains, Type "OS-D"			@ 322 Lbs. Each 644 Lbs.
Total Cast Iron			2,424 Lbs.
Structural Expansion Joint, M			
@ Bent No. 20			53 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "E" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
501a	119	4'-0"	
#5	44	32'-3"	
#5	18	29'-9"	
#5	44	28'-6"	
#5	18	26'-3"	
#5	259	4'-3"	
#5	8	4'-0"	
#5	32	3'-0"	
TOTAL #5			4,524
404a	107	4'-0"	
407a	107	3'-6"	
TOTAL #4			536
TOTAL REINFORCING - E.C.			5,060
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 9			13.5
POUR NO. 10			14.6
TOTAL CLASS "C"			28.1
MISCELLANEOUS (QTY.)			
Br. Deck Patching, Partial Depth			9,557 Sft.
Bridge Deck Patching, Full Depth			100 Sft.
Surface Milling			5,309 Sys.
Bridge Deck Overlay			5,309 Sys.
Bridge Deck Overlay, Additional			74.4 Cys.
Cast Iron Grates, Basins & Fittings			
44-Adjusting Frames, "OS"			@ 89 Lbs. Each 3,916 Lbs.
2-Roadway Drains, Type "OS-D"			@ 322 Lbs. Each 644 Lbs.
Total Cast Iron			4,560 Lbs.
Structural Expansion Joint, M			
@ Bent No. 26			62 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "F" WB**

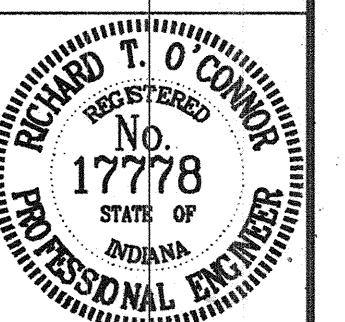
REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
501a	134	4'-0"	
#5	36	35'-0"	
#5	12	32'-6"	
#5	32	32'-3"	
#5	8	29'-9"	
#5	21	8'-6"	
#5	21	6'-9"	
#5	9	5'-6"	
#5	286	3'-3"	
#5	16	3'-0"	
TOTAL #5			2,642
404a	55	4'-0"	
408a	55	3'-3"	
TOTAL #4			266
TOTAL REINFORCING - E.C.			2,908
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 13			17.8
TOTAL CLASS "C"			17.8
MISCELLANEOUS (QTY.)			
Br. Deck Patching, Partial Depth			5,014 Sft.
Bridge Deck Patching, Full Depth			100 Sft.
Surface Milling			2,786 Sys.
Bridge Deck Overlay			2,786 Sys.
Bridge Deck Overlay, Additional			39.0 Cys.
Cast Iron Grates, Basins & Fittings			
2-Adjusting Frames, "OS"			@ 89 Lbs. Each 178 Lbs.
2-Roadway Drains, Type "OS-D"			@ 322 Lbs. Each 644 Lbs.
Total Cast Iron			822 Lbs.
*Pipe			
for Drainage @ Bent No. 29			90 Lft.
Removal for Expansion Joint			
@ Bent No. 29			66 Lft.
*Pipe			
for Drainage @ Bent No. 26			80 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "G" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
501a	70	4'-0"	
#5	36	35'-0"	
#5	12	32'-6"	
#5	7	6'-9"	
#5	2	3'-6"	
#5	154	3'-3"	
#5	16	3'-0"	
TOTAL #5			2,642
404a	55	4'-0"	
408a	55	3'-3"	
TOTAL #4			266
TOTAL REINFORCING - E.C.			2,908
CONCRETE (CYS.)			
CLASS "C" IN SUPERSTRUCTURE			
POUR NO. 13			17.8
TOTAL CLASS "C"			17.8
MISCELLANEOUS (QTY.)			
Br. Deck Patching, Partial Depth			5,014 Sft.
Bridge Deck Patching, Full Depth			100 Sft.
Surface Milling			2,786 Sys.
Bridge Deck Overlay			2,786 Sys.
Bridge Deck Overlay, Additional			39.0 Cys.
Cast Iron Grates, Basins & Fittings			
2-Adjusting Frames, "OS"			@ 89 Lbs. Each 178 Lbs.
2-Roadway Drains, Type "OS-D"			@ 322 Lbs. Each 644 Lbs.
Total Cast Iron			822 Lbs.
*Pipe			
for Drainage @ Bent No. 29			90 Lft.
Removal for Expansion Joint			
@ Bent No. 29			66 Lft.

**BILLS OF MATERIALS
WESTBOUND LANES UNITS "A" THRU "F"
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D28 OF D45 SHEET: 29 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



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 Scale: 08/01/94 at 16:51 RQAW

DRAWN	KayO	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayO	CHK.	SCJ

**BILL OF MATERIALS
FLOOR - UNIT "A" EB**

REINFORCING STEEL EPOXY COATED				
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)	
5c04a	18	8'-4"		
5c05a	15	12'-0"		
5c06a	9	8'-10"		
#5	4	36'-0"		
#5	8	34'-0"		
#5	12	9'-0"		
#5	2	8'-0"		
#5	302	7'-0"		
#5	5	6'-9"		
#5	235	6'-0"		
#5	88	3'-0"		
TOTAL #5			4,976	
401a	96	5'-11"		
TOTAL #4			326	
TOTAL REINFORCING - E.C.			5,302	
CONCRETE (CYS.)				
CLASS "C" IN SUPERSTRUCTURE				
POUR NO. 14				13.4
POUR NO. 15				13.4
DRAIN REPLACEMENTS				5.7
TOTAL CLASS "C"				32.5
MISCELLANEOUS (QTY.)				
Br. Deck Patching, Partial Depth				4,055 Sys.
Bridge Deck Patching, Full Depth				100 Sft.
Surface Milling				2,252 Sys.
Bridge Deck Overlay				2,252 Sys.
Bridge Deck Overlay, Additional				31.5 Cys.
Cast Iron Grates, Basins & Fittings				
9-Adjusting Frames, "OS"				
@ 89 Lbs. Each				801 Lbs.
10-Roadway Drains, Type "SQ-A"				
@ 192 Lbs. Each				1,920 Lbs.
1-Roadway Drains, Type "OS-D"				
@ 322 Lbs. Each				322 Lbs.
Total Cast Iron				3,043 Lbs.
Structural Expansion Joint, SS				
@ Bent No. 1				68 Lft.
@ Bent No. 7				68 Lft.
Total Str. Exp., SS				136 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "B" EB**

REINFORCING STEEL EPOXY COATED				
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)	
501a	55	4'-0"		
5c07a	21	15'-5"		
5c08a	13	10'-5"		
5c10a	14	6'-9"		
#5	4	36'-0"		
#5	14	34'-0"		
#5	4	10'-6"		
#5	156	9'-0"		
#5	4	8'-6"		
#5	116	8'-0"		
#5	160	5'-6"		
#5	120	4'-6"		
#5	96	3'-0"		
TOTAL #5			5,747	
402a	48	6'-4"		
403a	48	3'-9"		
404a	48	4'-0"		
TOTAL #4			452	
TOTAL REINFORCING - E.C.			6,199	
CONCRETE (CYS.)				
CLASS "C" IN SUPERSTRUCTURE				
POUR NO. 16				17.5
POUR NO. 17				14.7
DRAIN REPLACEMENT				6.4
TOTAL CLASS "C"				38.6
MISCELLANEOUS (QTY.)				
Br. Deck Patching, Partial Depth				4,188 Sys.
Bridge Deck Patching, Full Depth				100 Sft.
Surface Milling				2,326 Sys.
Bridge Deck Overlay				2,326 Sys.
Bridge Deck Overlay, Additional				32.5 Cys.
Cast Iron Grates, Basins & Fittings				
10-Adjusting Frames, "OS"				
@ 89 Lbs. Each				890 Lbs.
11-Roadway Drains, Type "SQ-A"				
@ 192 Lbs. Each				2,112 Lbs.
1-Roadway Drains, Type "OS-D"				
@ 322 Lbs. Each				322 Lbs.
Total Cast Iron				3,324 Lbs.
Structural Expansion Joint, M				
@ Bent No. 13				68 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "C" EB**

REINFORCING STEEL EPOXY COATED				
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)	
501a	55	4'-0"		
5c11a	16	6'-6"		
#5	2	36'-0"		
#5	12	34'-0"		
#5	48	27'-9"		
#5	4	26'-6"		
#5	6	10'-6"		
#5	6	8'-9"		
#5	3	8'-6"		
#5	3	6'-9"		
#5	194	5'-6"		
#5	238	4'-6"		
#5	80	3'-0"		
TOTAL #5			4,987	
403a	50	3'-9"		
404a	50	4'-0"		
405a	50	4'-11"		
TOTAL #4			406	
TOTAL REINFORCING - E.C.			5,393	
CONCRETE (CYS.)				
CLASS "C" IN SUPERSTRUCTURE				
POUR NO. 18				14.9
POUR NO. 19				10.5
DRAIN REPLACEMENTS				5.3
TOTAL CLASS "C"				30.7
MISCELLANEOUS (QTY.)				
Br. Deck Patching, Partial Depth				3,551 Sys.
Bridge Deck Patching, Full Depth				100 Sft.
Surface Milling				1,973 Sys.
Bridge Deck Overlay				1,973 Sys.
Bridge Deck Overlay, Additional				27.6 Cys.
Cast Iron Grates, Basins & Fittings				
15-Adjusting Frames, "OS"				
@ 89 Lbs. Each				801 Lbs.
9-Roadway Drains, Type "SQ-A"				
@ 192 Lbs. Each				1,728 Lbs.
1-Roadway Drains, Type "OS-D"				
@ 322 Lbs. Each				322 Lbs.
Total Cast Iron				2,851 Lbs.
Structural Expansion Joint, SS				
@ Bent No. 17				52 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "D" EB**

REINFORCING STEEL EPOXY COATED				
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)	
501a	55	4'-0"		
#5	92	27'-9"		
#5	18	30'-9"		
#5	18	8'-6"		
#5	18	6'-9"		
#5	119	5'-9"		
#5	8	4'-0"		
#5	119	3'-3"		
#5	72	3'-0"		
TOTAL #5			5,047	
404a	50	4'-0"		
406a	50	5'-11"		
407a	50	3'-6"		
TOTAL #4			448	
TOTAL REINFORCING - E.C.			5,495	
CONCRETE (CYS.)				
CLASS "C" IN SUPERSTRUCTURE				
POUR NO. 20				13.8
POUR NO. 21				11.4
DRAIN REPLACEMENTS				5.9
TOTAL CLASS "C"				31.1
MISCELLANEOUS (QTY.)				
Br. Deck Patching, Partial Depth				3,543 Sft.
Bridge Deck Patching, Full Depth				100 Sft.
Surface Milling				1,983 Sys.
Bridge Deck Overlay				1,983 Sys.
Bridge Deck Overlay, Additional				27.6 Cys.
Cast Iron Grates, Basins & Fittings				
9-Adjusting Frames, "OS"				
@ 89 Lbs. Each				801 Lbs.
10-Roadway Drains, Type "SQ-A"				
@ 192 Lbs. Each				1,920 Lbs.
1-Roadway Drain, Type "OS-D"				
@ 322 Lbs. Each				322 Lbs.
Total Cast Iron				3,043 Lbs.
Structural Expansion Joint, M				
@ Bent No. 20				52 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "E" EB**

REINFORCING STEEL EPOXY COATED				
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)	
501a	119	4'-0"		
#5	44	32'-3"		
#5	18	30'-9"		
#5	44	27'-9"		
#5	18	26'-3"		
#5	253	4'-3"		
#5	8	4'-0"		
#5	280	3'-0"		
TOTAL #5			6,026	
404a	108	4'-0"		
407a	108	3'-6"		
TOTAL #4			541	
TOTAL REINFORCING - E.C.			6,567	
CONCRETE (CYS.)				
CLASS "C" IN SUPERSTRUCTURE				
POUR NO. 22				13.3
POUR NO. 23				14.6
DRAIN REPLACEMENTS				14.4
TOTAL CLASS "C"				42.3
MISCELLANEOUS (QTY.)				
Br. Deck Patching, Partial Depth				3,985 Sft.
Bridge Deck Patching, Full Depth				100 Sft.
Surface Milling				5,337 Sys.
Bridge Deck Overlay				5,337 Sys.
Bridge Deck Overlay, Additional				70.9 Cys.
Cast Iron Grates, Basins & Fittings				
22-Adjusting Frames, "OS"				
@ 89 Lbs. Each				1,958 Lbs.
23-Roadway Drains, Type "SQ-A"				
@ 192 Lbs. Each				4,416 Lbs.
1-Roadway Drains, Type "OS-D"				
@ 322 Lbs. Each				322 Lbs.
Total Cast Iron				6,696 Lbs.
Structural Expansion Joint, M				
@ Bent No. 26				61 Lft.

**BILL OF MATERIALS
FLOOR - UNIT "F" EB**

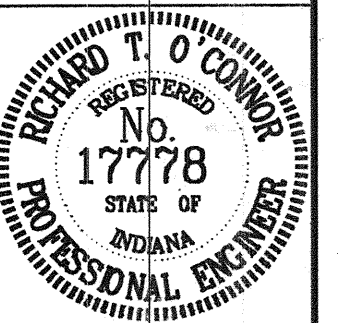
REINFORCING STEEL EPOXY COATED				
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)	
501a	133	4'-0"		
#5	36	38'-0"		
#5	12	36'-3"		
#5	32	32'-3"		
#5	8	30'-9"		
#5	27	8'-6"		
#5	14	6'-9"		
#5	15	4'-6"		
#5	296	3'-3"		
#5	16	3'-0"		
TOTAL #5			5,230	
404a	128	4'-0"		
407a	58	3'-6"		
408a	70	3'-3"		
TOTAL #4			300	
TOTAL REINFORCING - E.C.			3,148	
CONCRETE (CYS.)				
CLASS "C" IN SUPERSTRUCTURE				
POUR NO. 26				14.2
TOTAL CLASS "C"				14.2
MISCELLANEOUS (QTY.)				
Br. Deck Patching, Partial Depth				5,120 Sft.
Bridge Deck Patching, Full Depth				100 Sft.
Surface Milling				2,845 Sys.
Bridge Deck Overlay				2,845 Sys.
Bridge Deck Overlay, Additional				39.9 Cys.
Cast Iron Grates, Basins & Fittings				
1-Adjusting Frames, "OS"				
@ 89 Lbs. Each				89 Lbs.
1-Roadway Drains, Type "SQ-A"				
@ 192 Lbs. Each				192 Lbs.
1-Roadway Drains, Type "OS-D"				
@ 322 Lbs. Each				322 Lbs.
Total Cast Iron				411 Lbs.
*Pipe,				
for Drainage @ Bent No. 29				20 Lft.
Removal for Expansion Joint				91.0 Sft.

**BILL OF MATERIALS
FLOOR - UNIT "G" EB**

REINFORCING STEEL EPOXY COATED				
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)	
501a	55	4'-0"		
#5	56	38'-0"		
#5	12	36'-6"		
#5	8	6'-9"		
#5	165	3'-3"		
#5	10	3'-0"		
TOTAL #5			2,848	
404a	52	4'-0"		
408a	52	3'-3"		
TOTAL #4			300	
TOTAL REINFORCING - E.C.			3,148	
CONCRETE (CYS.)				
CLASS "C" IN SUPERSTRUCTURE				
POUR NO. 26				14.2
TOTAL CLASS "C"				14.2
MISCELLANEOUS (QTY.)				
Br. Deck Patching, Partial Depth				5,120 Sft.
Bridge Deck Patching, Full Depth				100 Sft.
Surface Milling				2,845 Sys.
Bridge Deck Overlay				2,845 Sys.
Bridge Deck Overlay, Additional				39.9 Cys.
Cast Iron Grates, Basins & Fittings				
1-Adjusting Frames, "OS"				
@ 89 Lbs. Each				89 Lbs.
1-Roadway Drains, Type "SQ-A"				
@ 192 Lbs. Each				192 Lbs.
1-Roadway Drains, Type "OS-D"				
@ 322 Lbs. Each				322 Lbs.
Total Cast Iron				411 Lbs.
*Pipe,				
for Drainage @ Bent No. 29				20 Lft.
Removal for Expansion Joint				91.0 Sft.

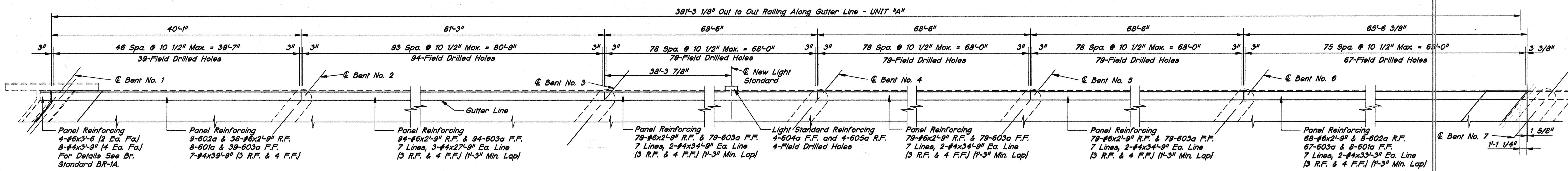
**BILLS OF MATERIALS
EASTBOUND LANES UNITS "A" THRU "F"
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D29 OF D45 SHEET: 30 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

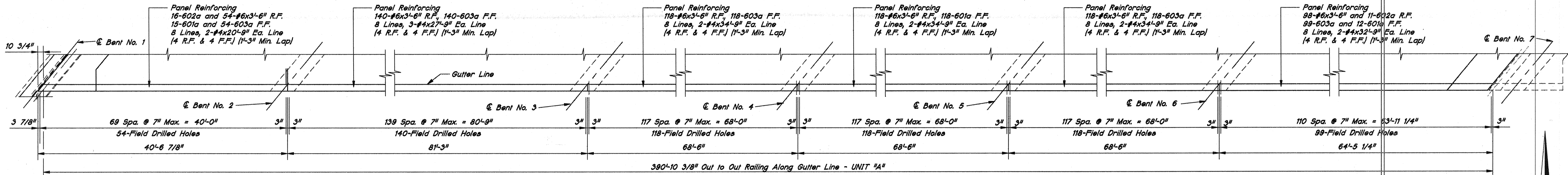


21-70-3392.DWG
 Scale: 09/01/94 at 16:56 RQAW

DRAWN	KayQ	CHK	SCJ
DESIGNED		CHK	
TRACED	KayQ	CHK	SCJ

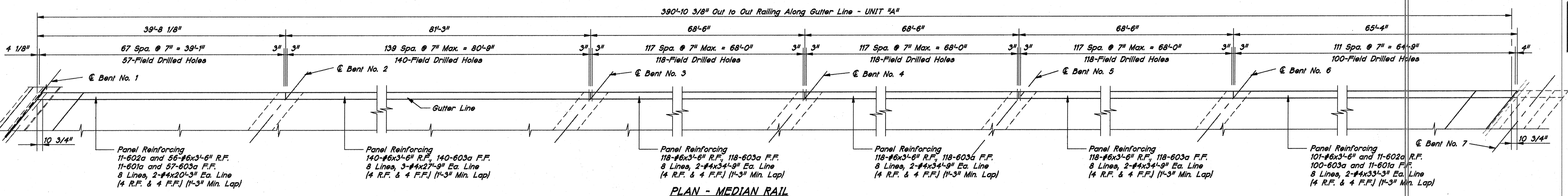


PLAN - SHOULDER RAIL

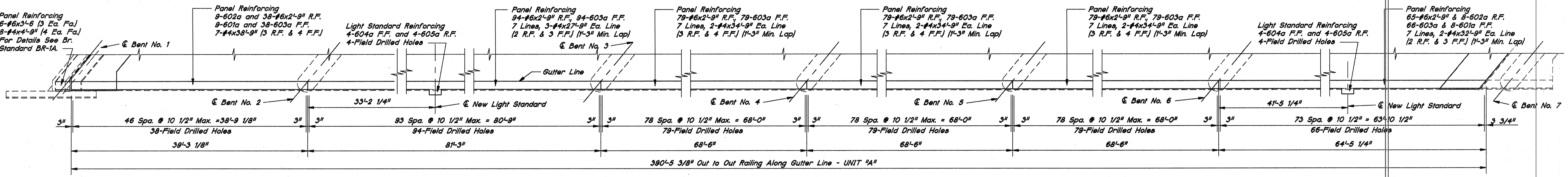


PLAN - MEDIAN RAIL

RAILING PLAN - UNIT "A" - WESTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"



PLAN - MEDIAN RAIL



PLAN - SHOULDER RAIL

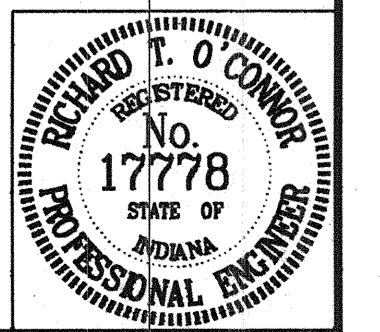
RAILING PLAN - UNIT "A" - EASTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
- FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

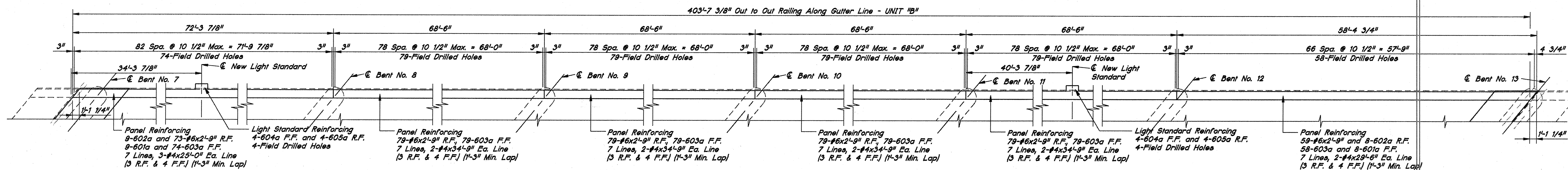
RAILING PLAN - UNIT "A"
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN
DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard L. O'Connor*
DRAWING: D30 OF D45 SHEET: 31 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A

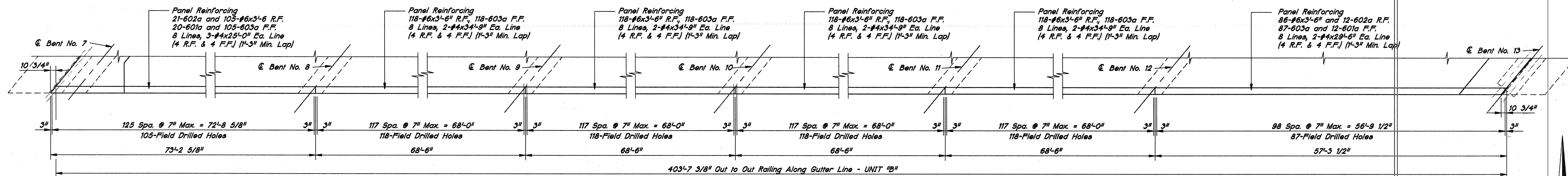


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 Scale: 1/8" = 1'-0"
 Date: 08/31/94 at 14:43 RCW

DRAWN	Key0	CHK	SCJ
DESIGNED		CHK	
TRACED	Key0	CHK	SCJ



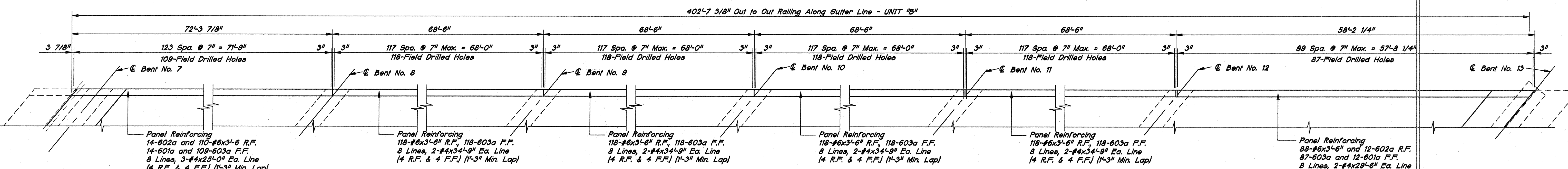
PLAN - SHOULDER RAIL



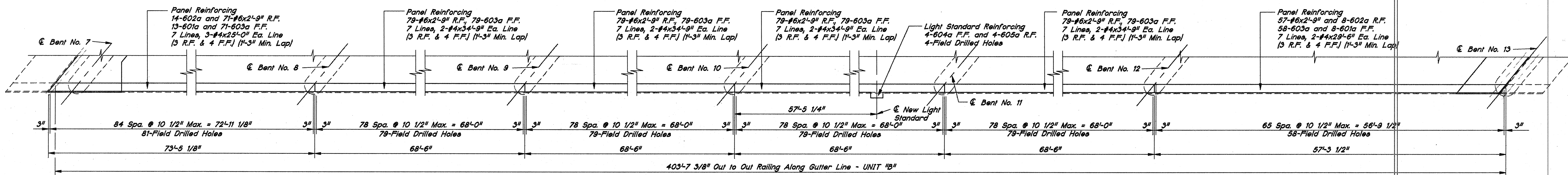
PLAN - MEDIAN RAIL

RAILING PLAN - UNIT "B" - WESTBOUND STRUCTURE

SCALE: 1/8" = 1'-0"



PLAN - MEDIAN RAIL



PLAN - SHOULDER RAIL

RAILING PLAN - UNIT "B" - EASTBOUND STRUCTURE

SCALE: 1/8" = 1'-0"

NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
- FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

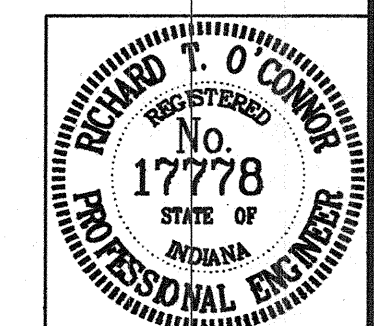
RAILING PLAN - UNIT "B"
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE SEPTEMBER 2, 1994

SUBMITTED FOR APPROVAL: *Richard T. O'Connor*

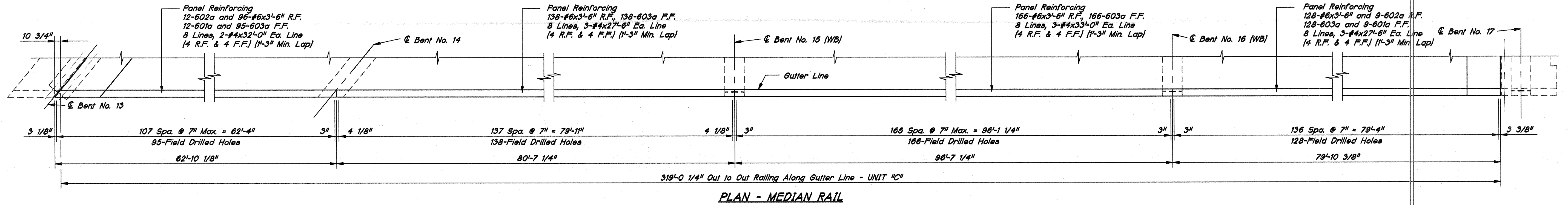
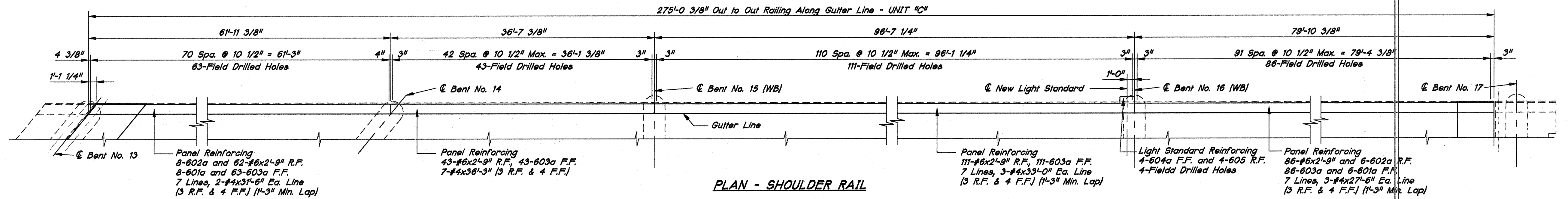
DRAWING: D31 OF D45 SHEET: 32 OF 69

PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A

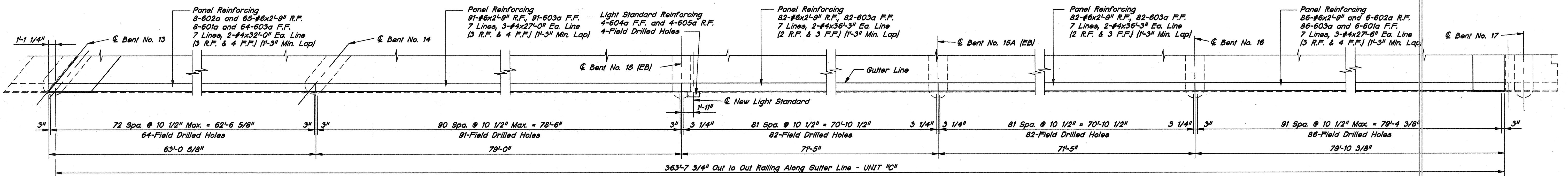
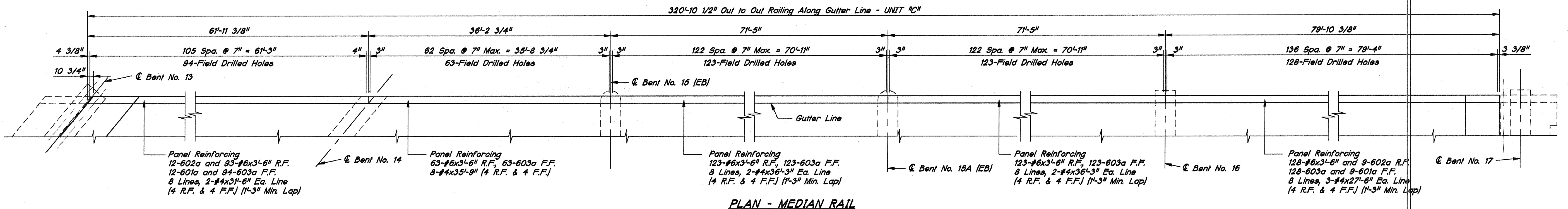


I:\1-70\3392\031.DWG
 Scale: 1" = 1'-0"
 Time: 09/31/94 at 14:50 ROW

DRAWN	Kay0	CHK	SCJ
DESIGNED		CHK	
TRACED	Kay0	CHK	SCJ



RAILING PLAN - UNIT "C" - WESTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

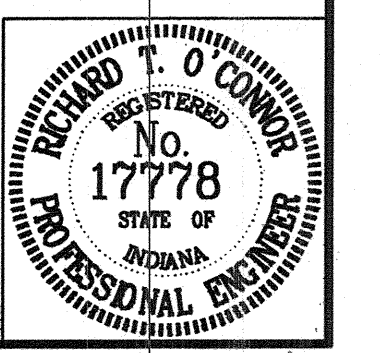


RAILING PLAN - UNIT "C" - EASTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

- NOTES:**
- FOR GENERAL NOTES, SEE DRAWING D2.
 - ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
 - LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 - FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 - FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
 - FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

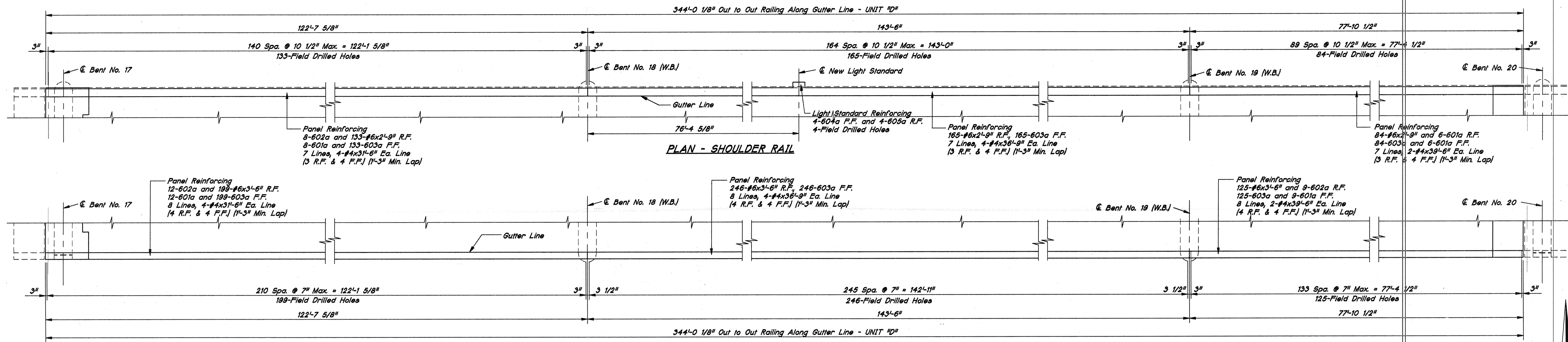
RAILING PLAN - UNIT "C"
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN
DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
DRAWING: D32 OF D45 SHEET: 33 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A

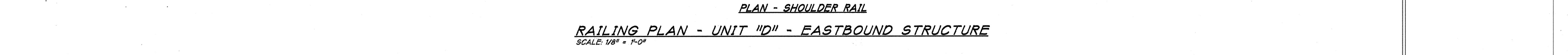
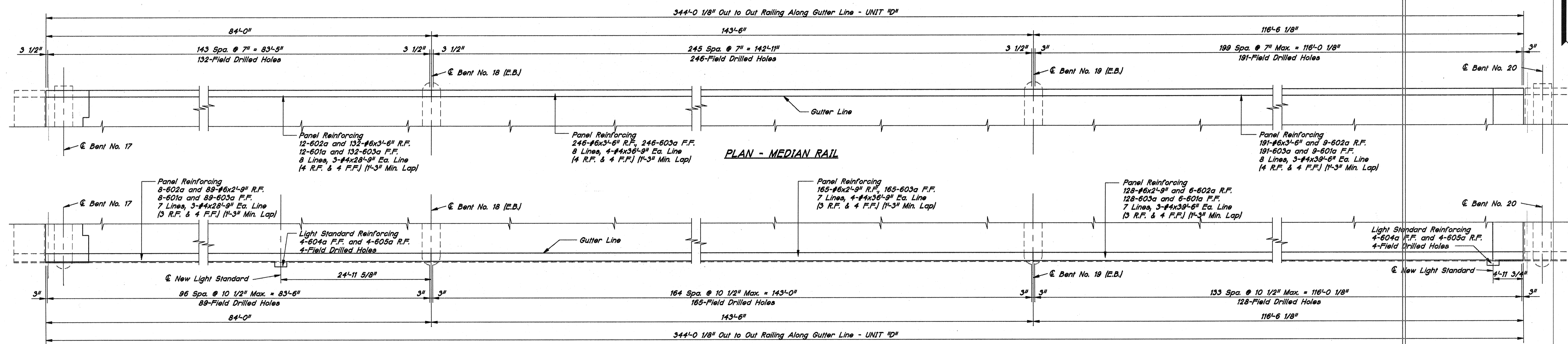


J:\1-70\3392\032.DWG
 Scale: 1" = 1'-0"
 Date: 08/31/94 at 15:01 RQAW

DRAWN	Kay0	CHK.	SCJ
DESIGNED		CHK.	
TRACED	Kay0	CHK.	SCJ



RAILING PLAN - UNIT "D" - WESTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"



RAILING PLAN - UNIT "D" - EASTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

- NOTES:**
- FOR GENERAL NOTES, SEE DRAWING D2.
 - ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
 - LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 - FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 - FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
 - FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

RAILING PLAN - UNIT "D"
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994

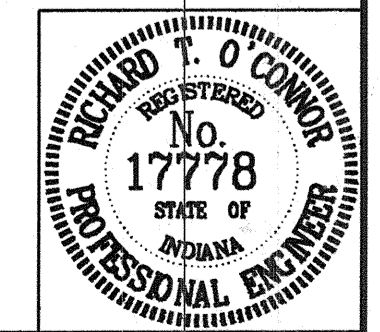
SUBMITTED FOR APPROVAL: *Richard T. O'Connor*

DRAWING: D33 OF D45 SHEET: 34 OF 69

PROJECT: IM-70-3(193) 78

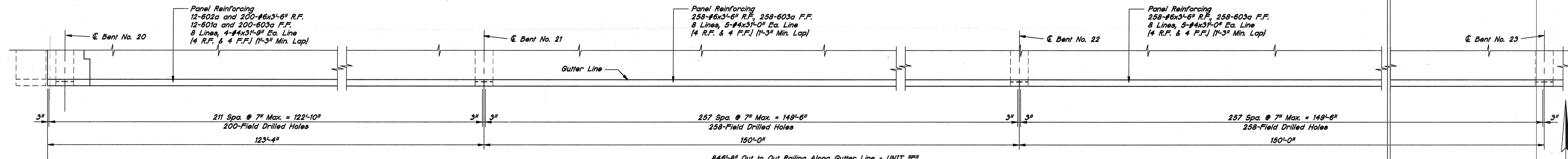
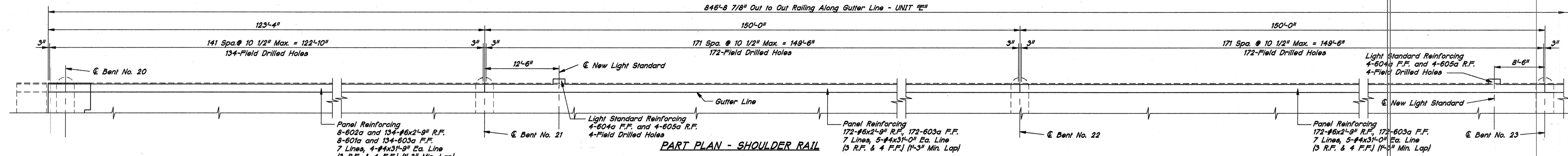
BRIDGE CONTRACT NO: R-21476

BRIDGE FILE: 1-70-77-2420A & 2386A

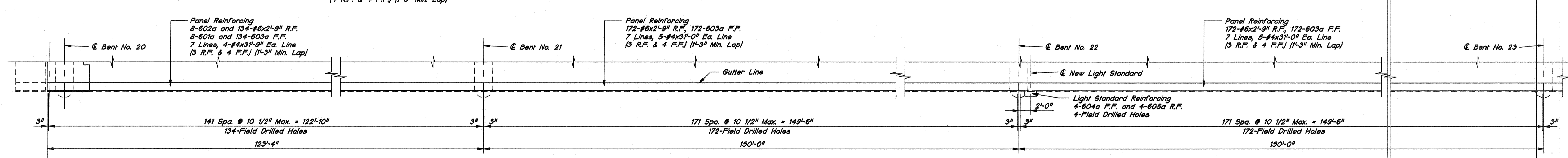
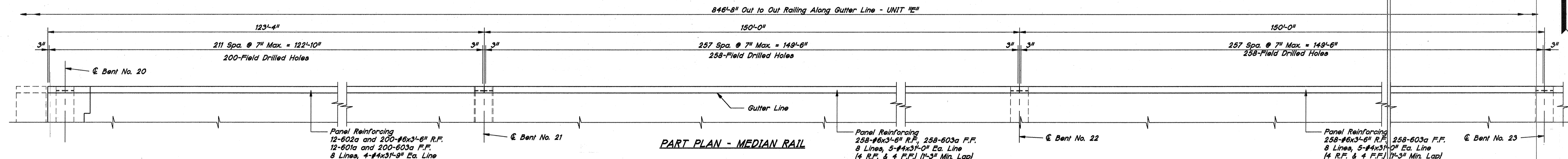


RAY-70-3392A.033.DWG
Scale: 1" = 1'-0"
Time: 08/31/94 at 15:20 RQAW

DRAWN	Kay0	CHK	SCJ
DESIGNED		CHK	
TRACED	Kay0	CHK	SCJ



RAILING PLAN - PART UNIT "E" - WESTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

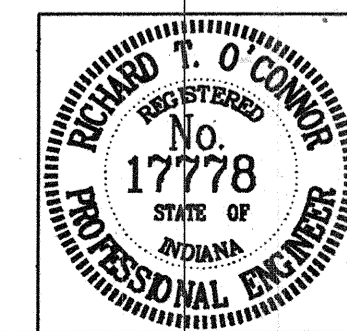


RAILING PLAN - PART UNIT "E" - EASTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

NOTES:
 FOR GENERAL NOTES, SEE DRAWING D2.
 ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
 LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
 FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

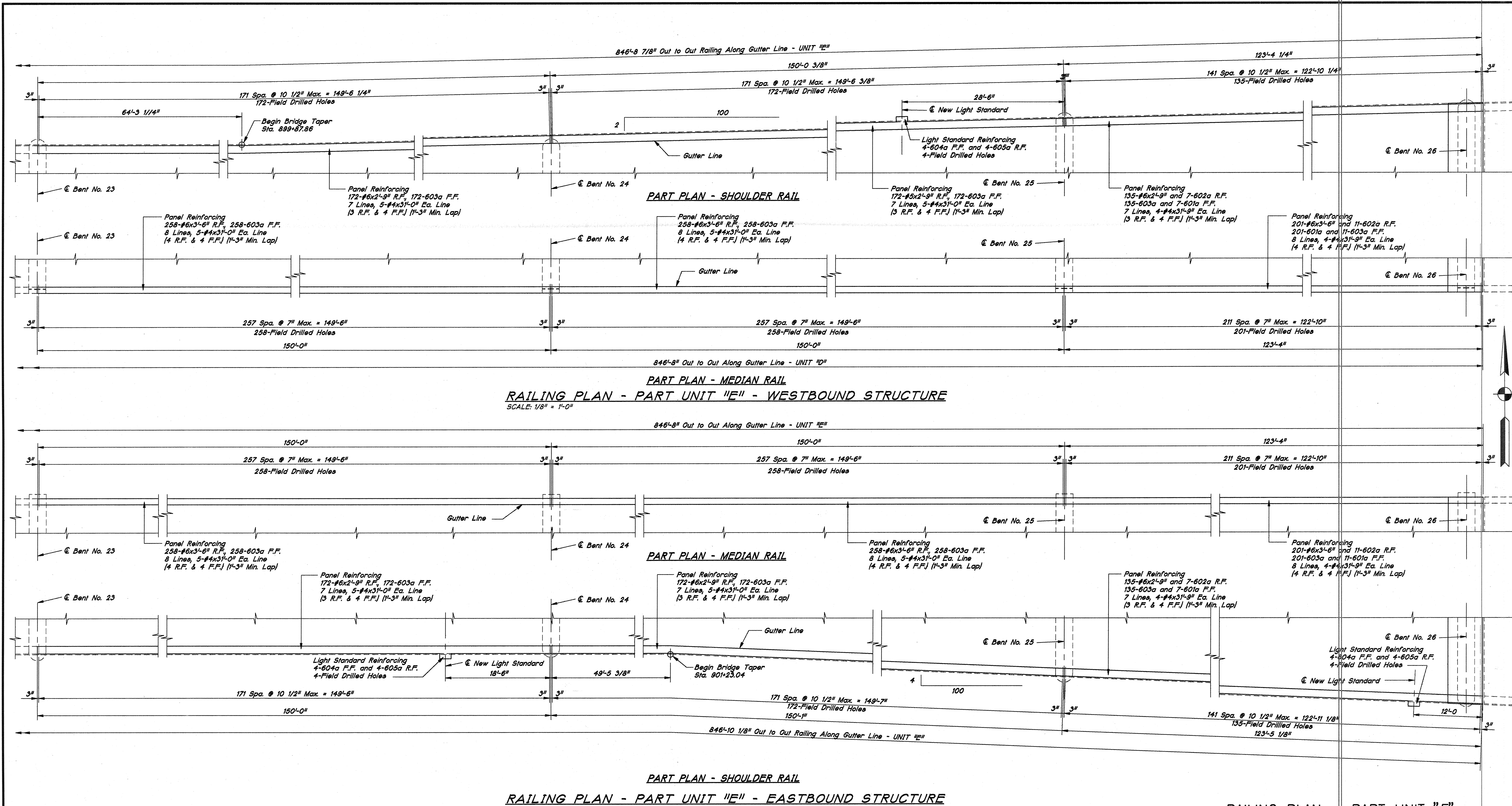
RAILING PLAN - PART UNIT "E"
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D34 OF D45 SHEET: 35 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



J:\1-70\3392\034.DWG
 Scale: 1" = 1,000'
 Time: 09/31/94 at 15:32 RQAW

DRAWN	KayO	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayO	CHK.	SCJ



RAILING PLAN - PART UNIT "E" - WESTBOUND STRUCTURE

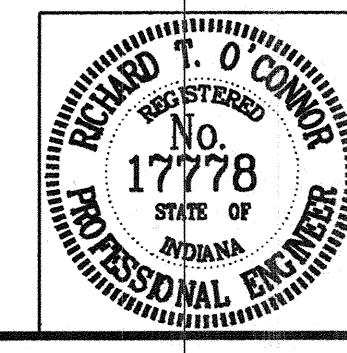
SCALE: 1/8" = 1'-0"

NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
- FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

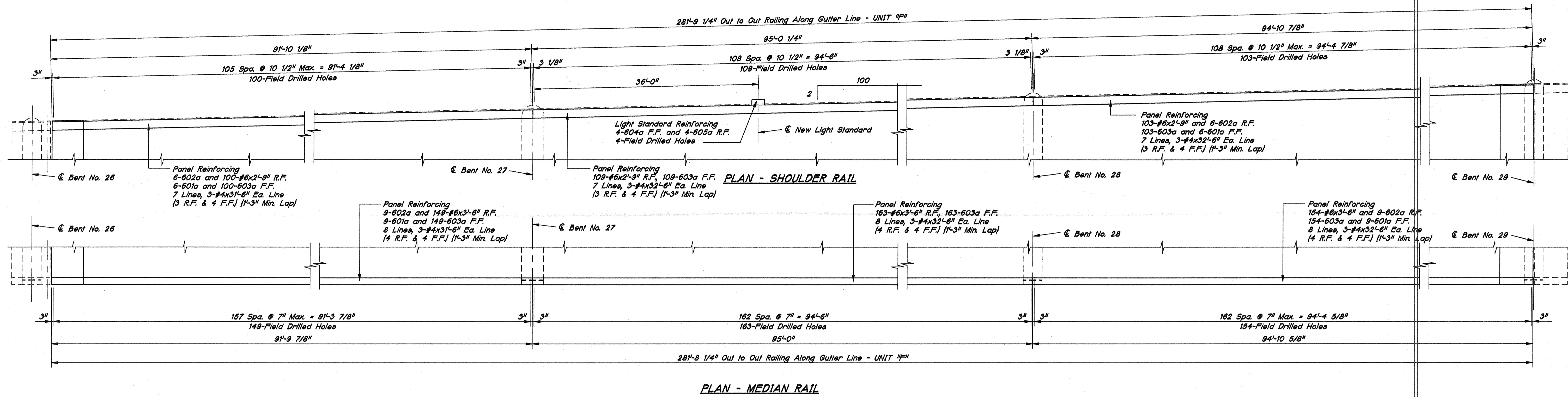
RAILING PLAN - PART UNIT "E"
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D35 OF D45 SHEET: 36 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

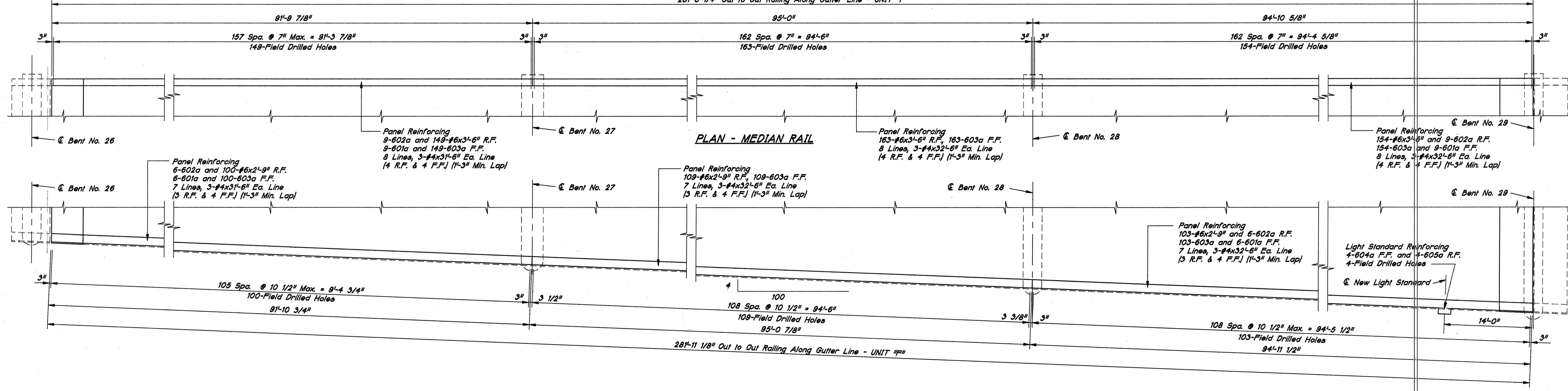


J:\1-70\3392\035.DWG
 Scale: 1" = 1'-0"
 Time: 08/31/94 at 15:38 RQAW

DRAWN	Kay0	CHK	SCJ
DESIGNED		CHK	
TRACED	Kay0	CHK	SCJ



RAILING PLAN - UNIT "F" - WESTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

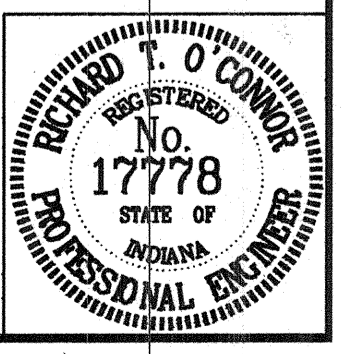


RAILING PLAN - UNIT "F" - EASTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

- NOTES:**
- FOR GENERAL NOTES, SEE DRAWING D2.
 - ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
 - LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 - FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 - FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
 - FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

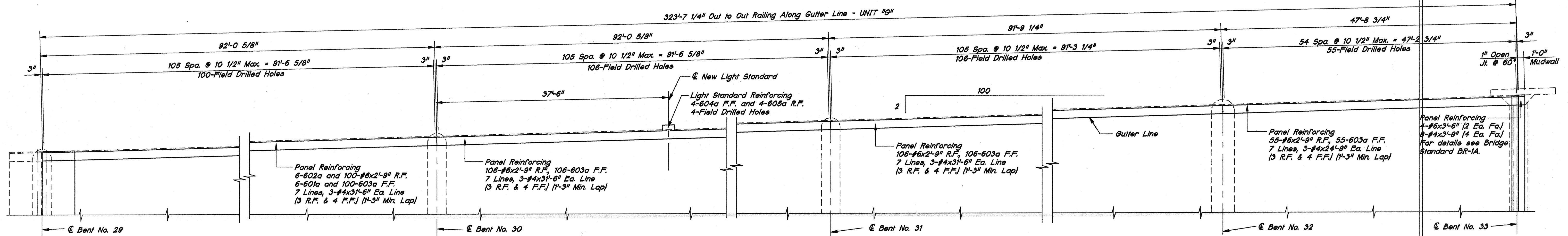
RAILING PLAN - UNIT "F"
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard J. Connor*
 DRAWING: D36 OF D45 SHEET: 37 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

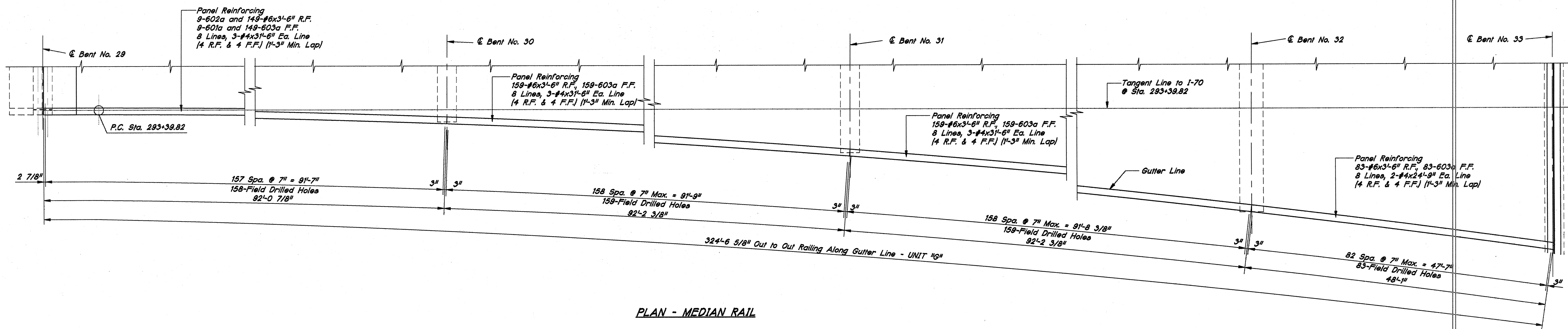


J:\1-70\3392\036.DWG
 Scale: 1" = 1,000'
 Time: 08/31/94 at 15:42 RCW

DRAWN	KayD	CHK	SCJ
DESIGNED		CHK	
TRACED	KayD	CHK	SCJ



PLAN - SHOULDER RAIL



PLAN - MEDIAN RAIL

RAILING PLAN - UNIT "G" - WESTBOUND STRUCTURE

SCALE: 1/8" = 1'-0"

NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
- FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

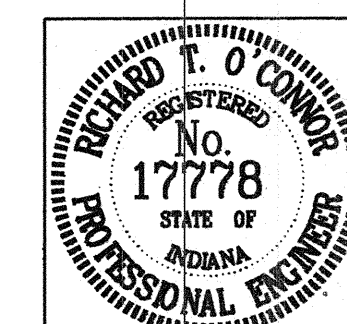
RAILING PLAN - UNIT "G" - WESTBOUND
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994

SUBMITTED FOR APPROVAL: *Richard J. O'Connor*

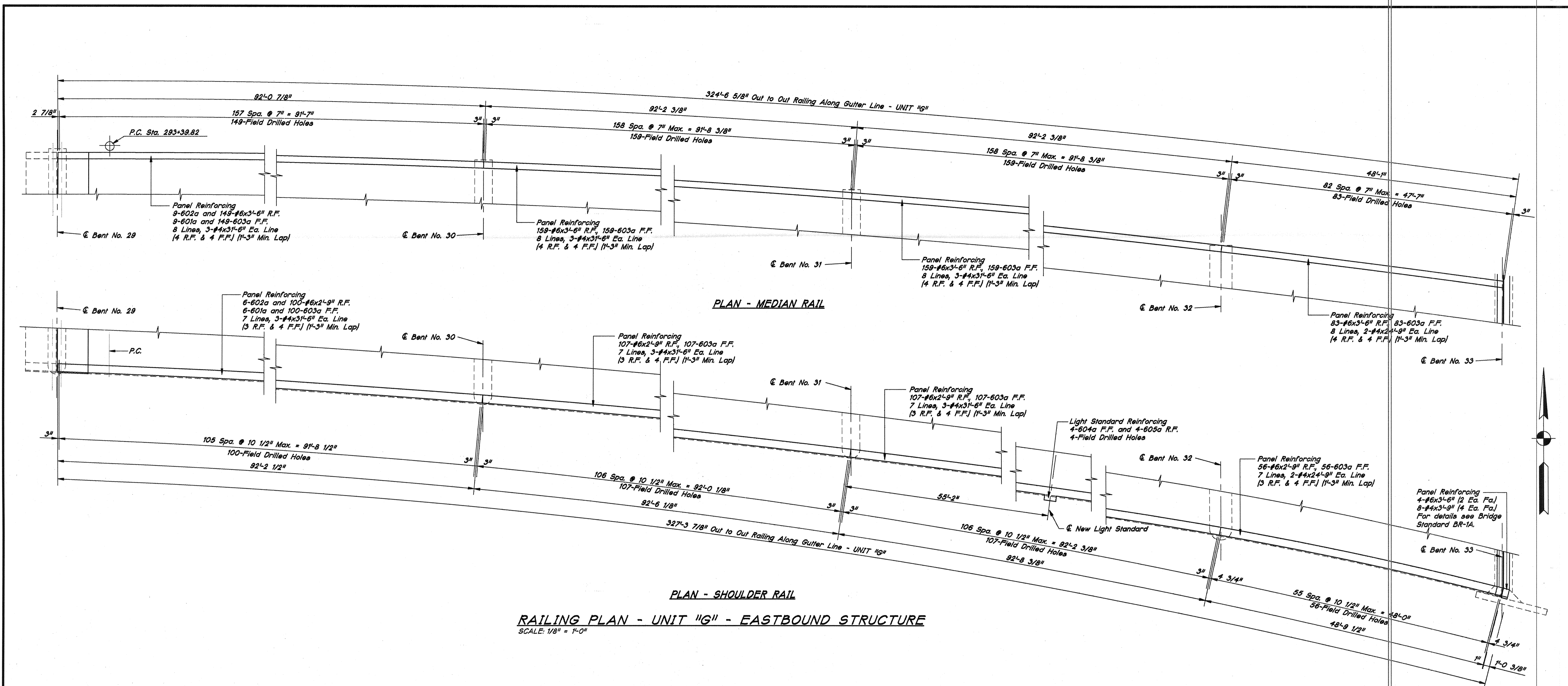
DRAWING: D37 OF D45 SHEET: 38 OF 69

PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: 1-70-77-2420A & 2388A



I:\1-70\3392\037.DWG
 Scale: 1" = 1'-0"
 Date: 08/31/94 at 15:52 ROW

DRAWN	KayO	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayO	CHK.	SCJ



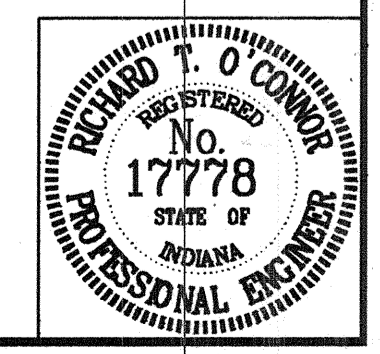
RAILING PLAN - UNIT "G" - EASTBOUND STRUCTURE
SCALE: 1/8" = 1'-0"

NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
- FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D3E.

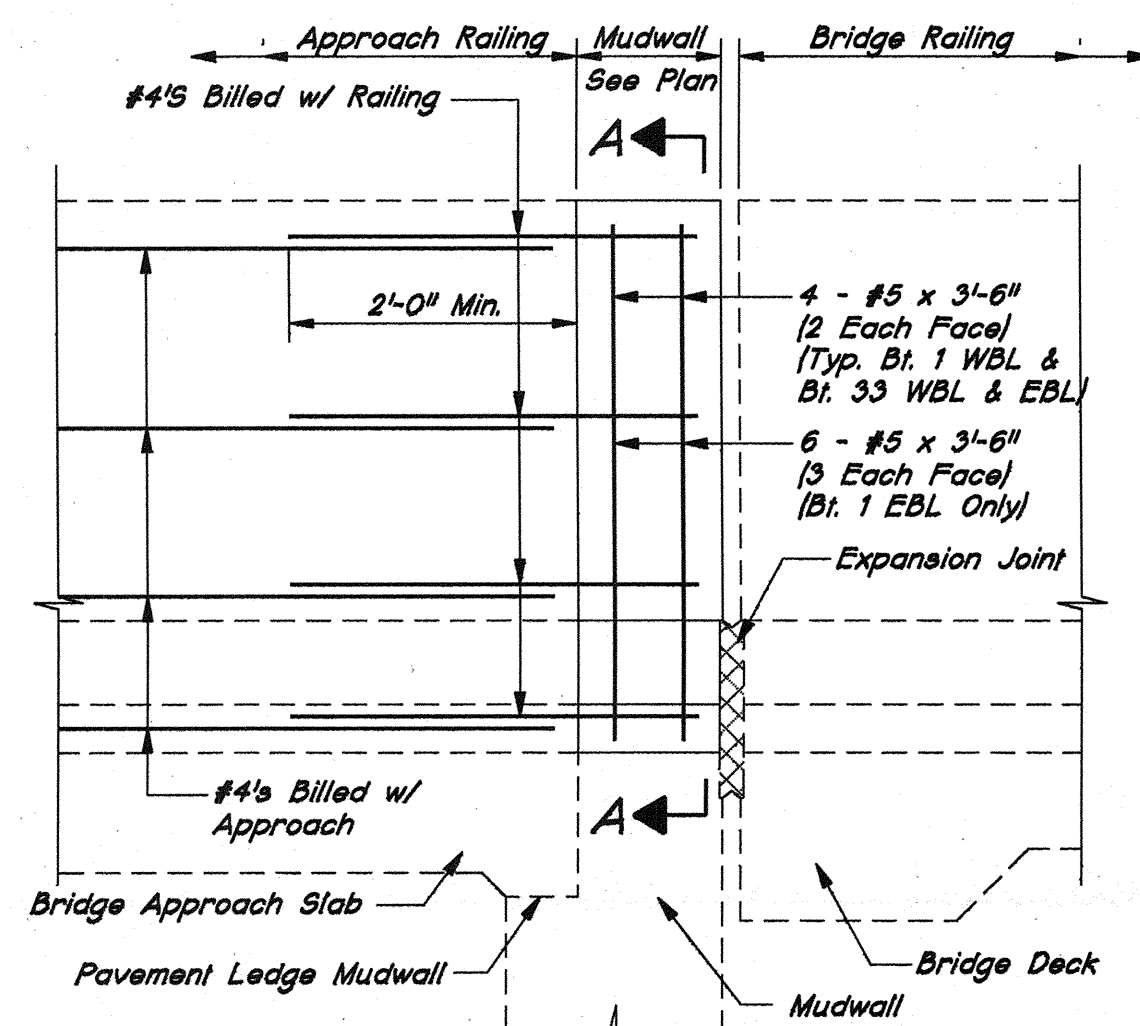
RAILING PLAN - UNIT "G" - EASTBOUND
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D38 OF D45 SHEET: 39 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

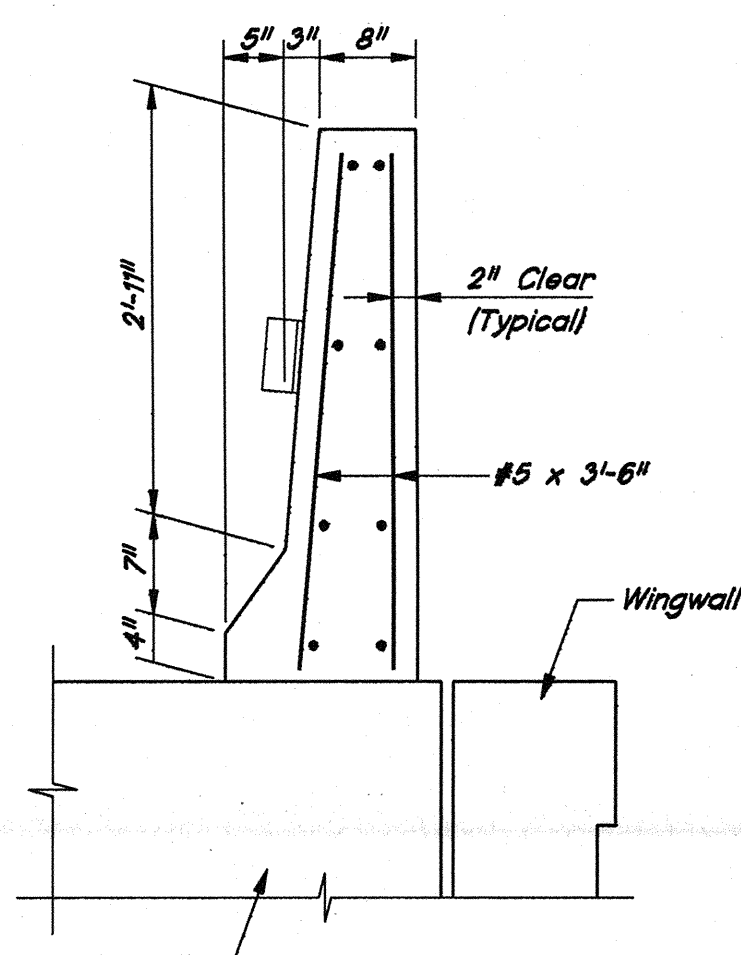


J:\1-70\3392\038.DWG
 Scale: 1" = 1'-0"
 Time: 08/31/94 at 15:56 RQAW

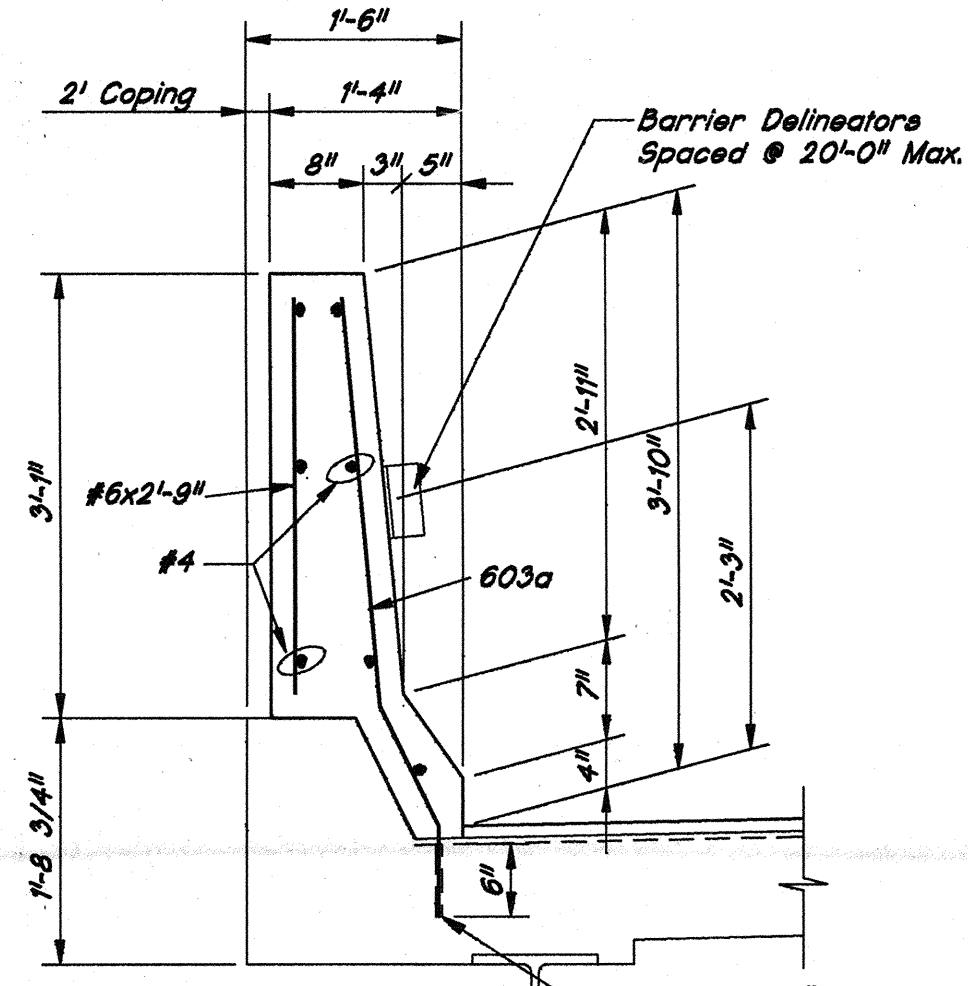
DRAWN	KoyO	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KoyO	CHK.	SCJ



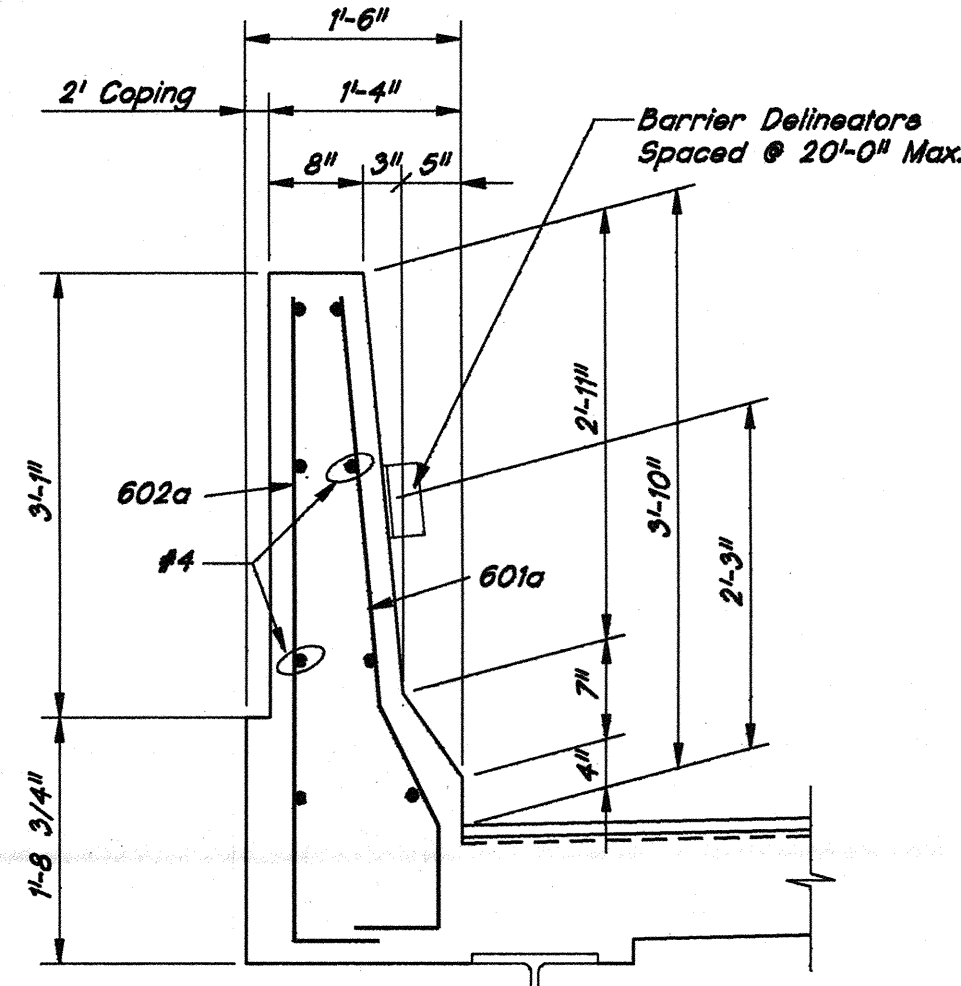
ELEVATION
BARRIER RAIL DETAILS @ MUDWALL
SCALE: 3/4" = 1'-0"



SECTION A-A

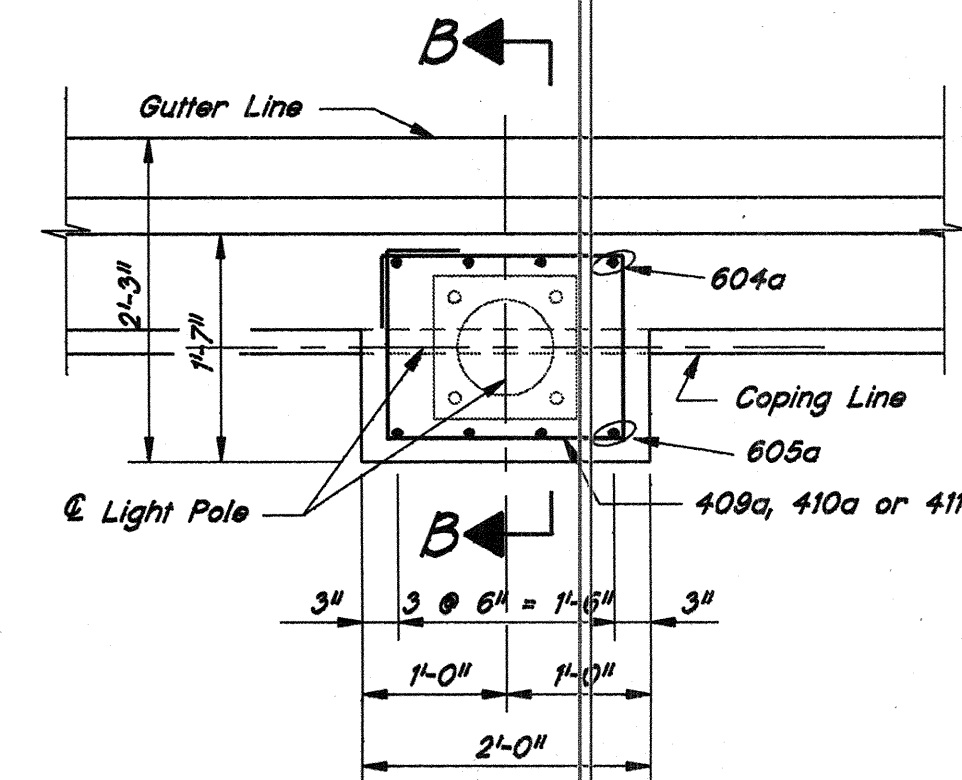


@ EXISTING SLAB



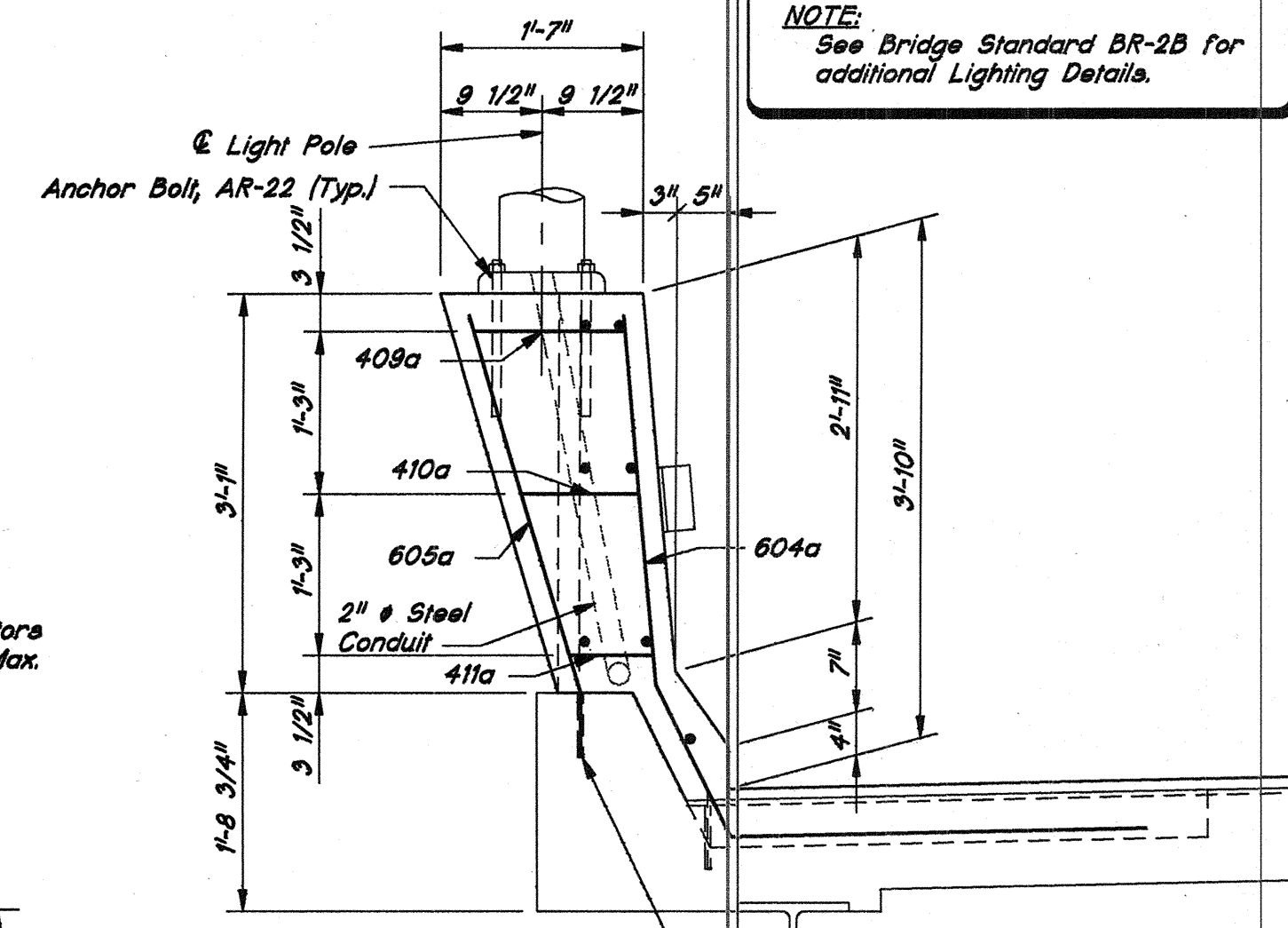
@ NEW SLAB

BARRIER RAIL DETAILS
SCALE: 3/4" = 1'-0"



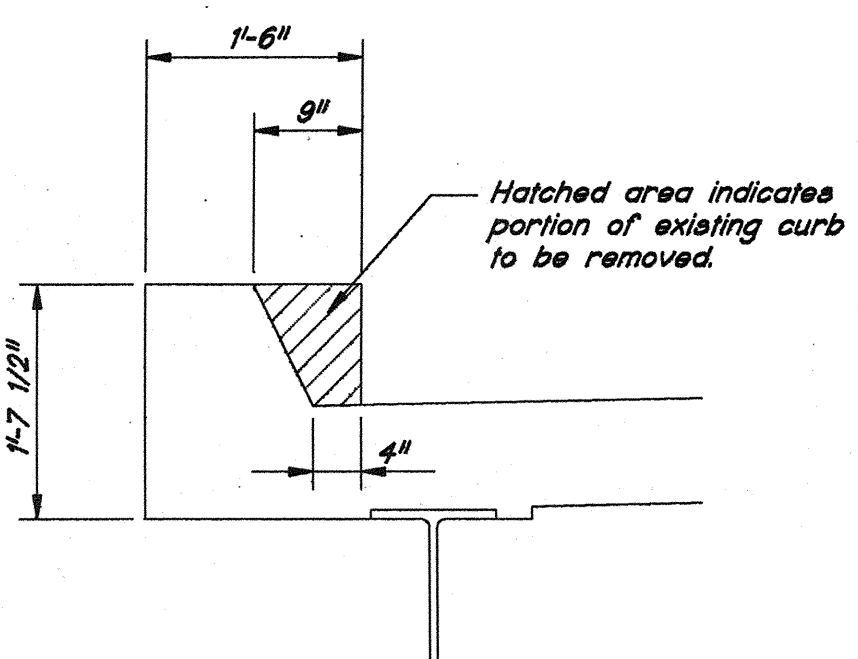
TYPICAL PLAN @ LIGHT STANDARD
SCALE: 3/4" = 1'-0"

NOTE:
See Bridge Standard BR-2B for additional Lighting Details.

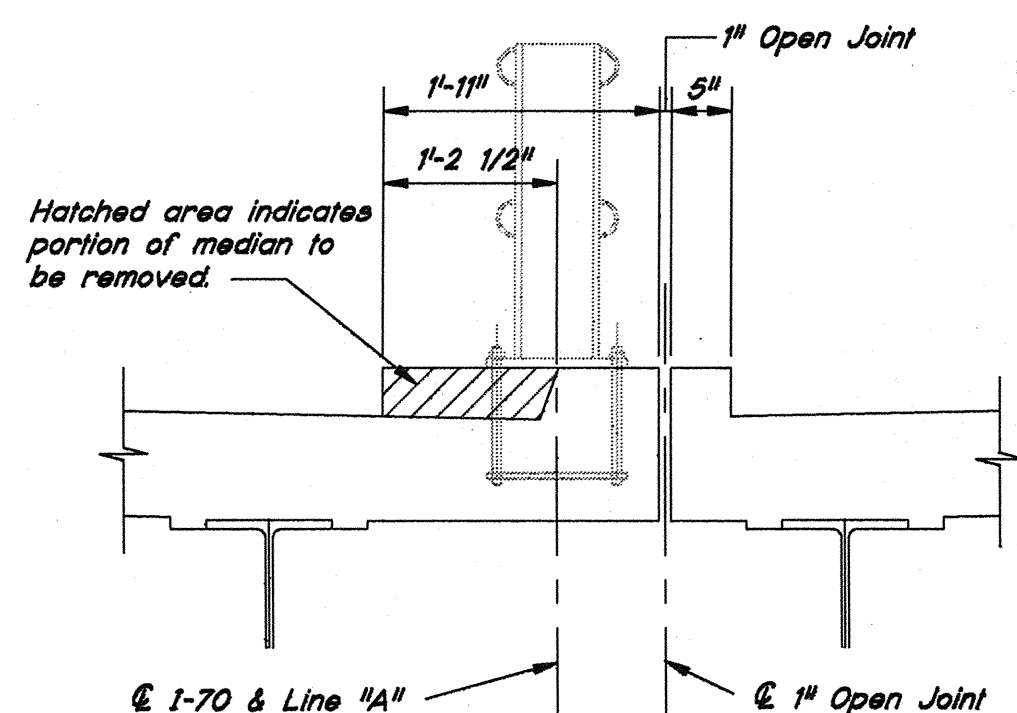


SECTION B-B
SCALE: 3/4" = 1'-0"

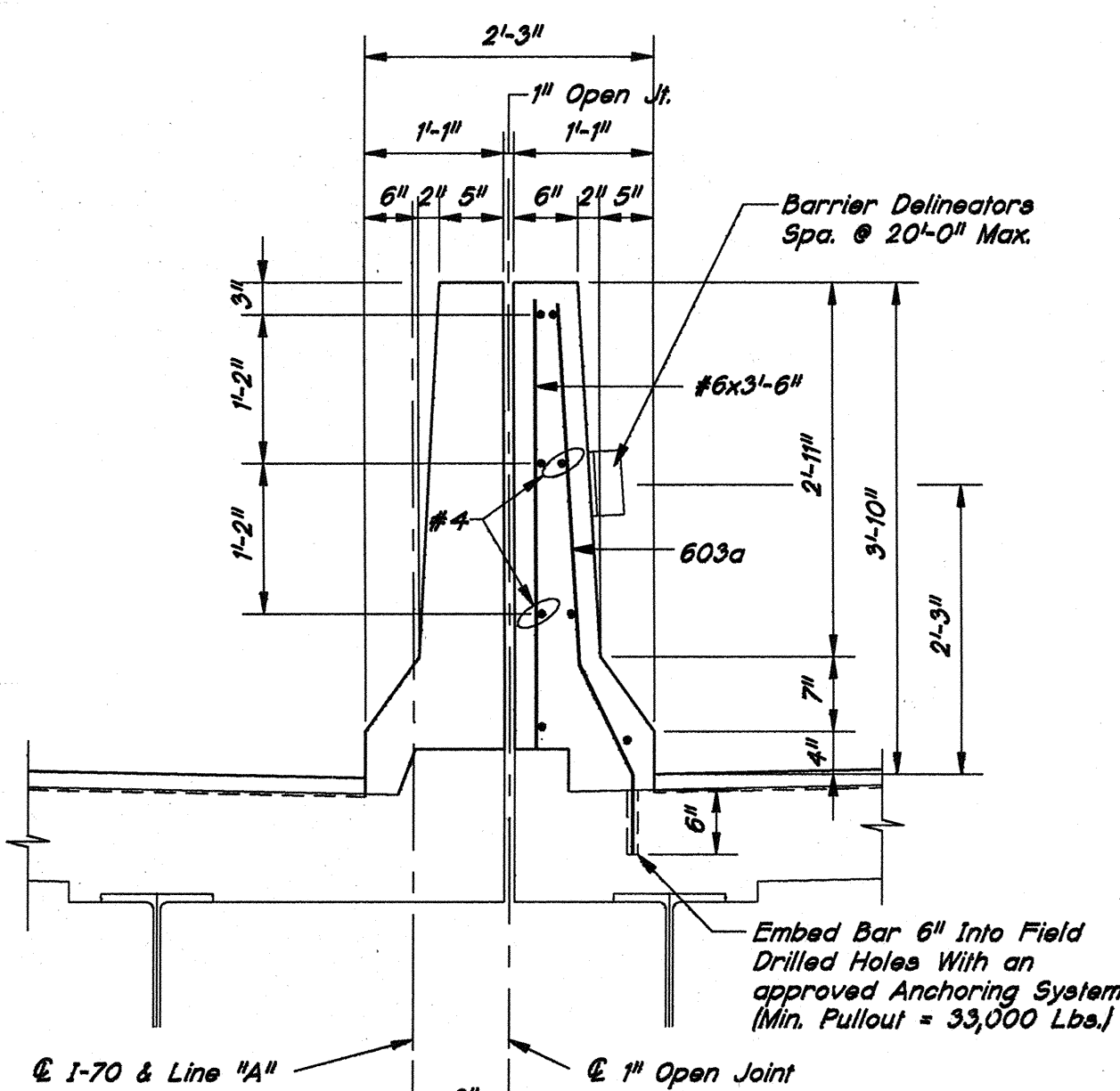
NOTES:
FOR GENERAL NOTES, SEE DRAWING D39.
ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
LAPS SHOWN ARE MINIMUM LAP LENGTHS.
FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.



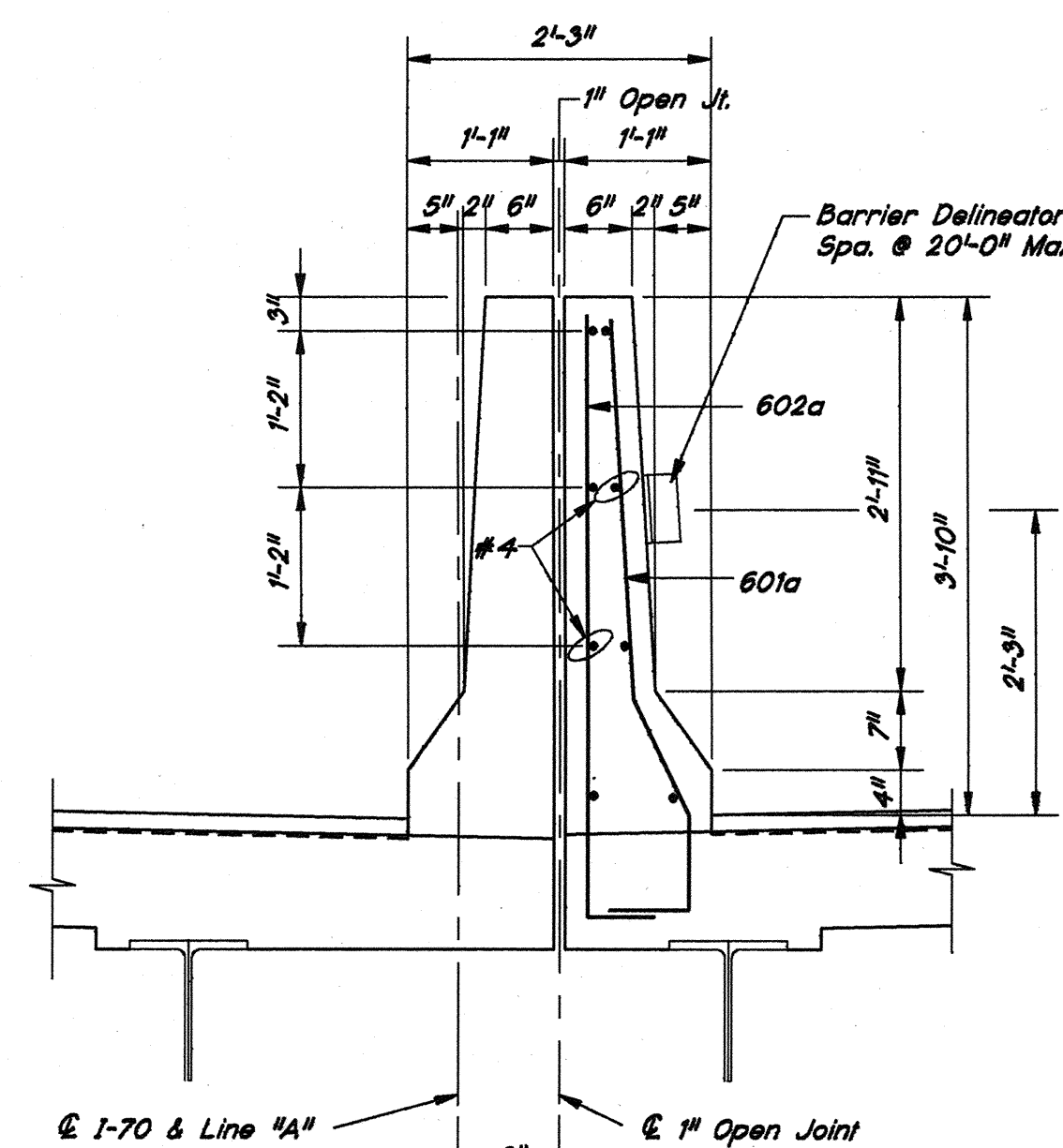
OUTSIDE CURB - REMOVAL
SCALE: 3/4" = 1'-0"



MEDIAN - REMOVAL
SCALE: 3/4" = 1'-0"

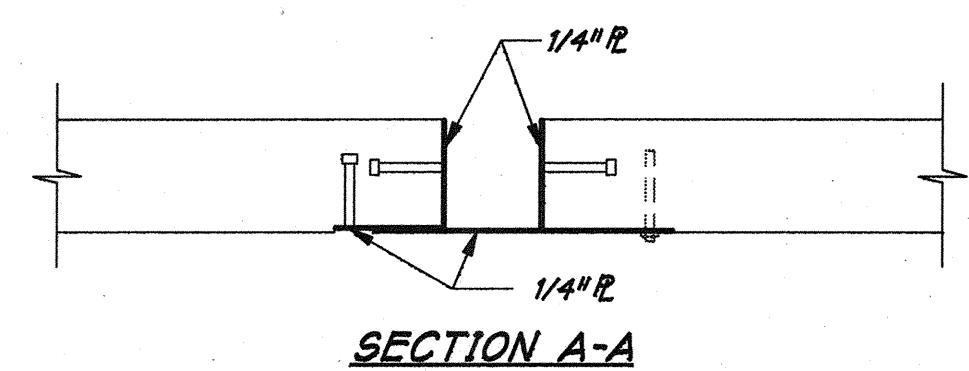


@ EXISTING SLAB



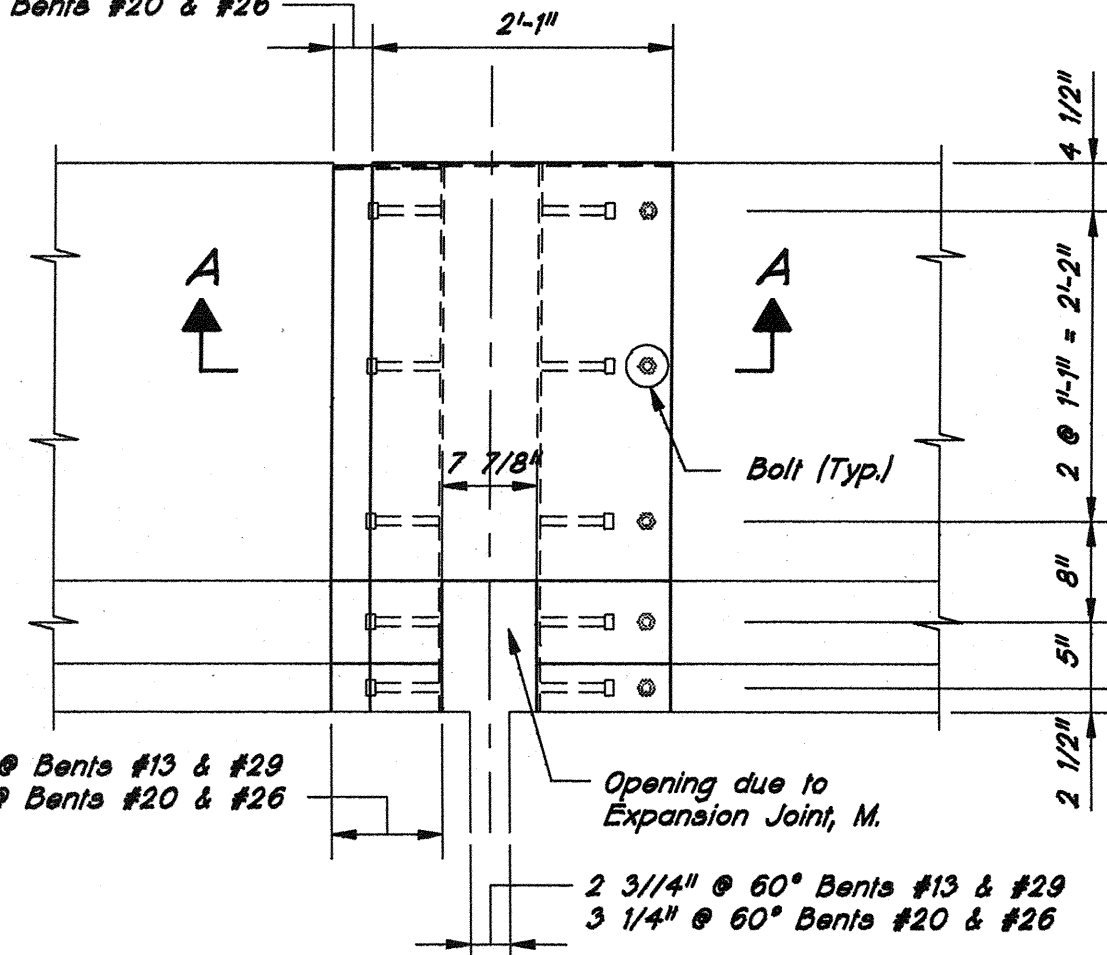
@ NEW SLAB

MEDIAN RAIL DETAILS
SCALE: 3/4" = 1'-0"

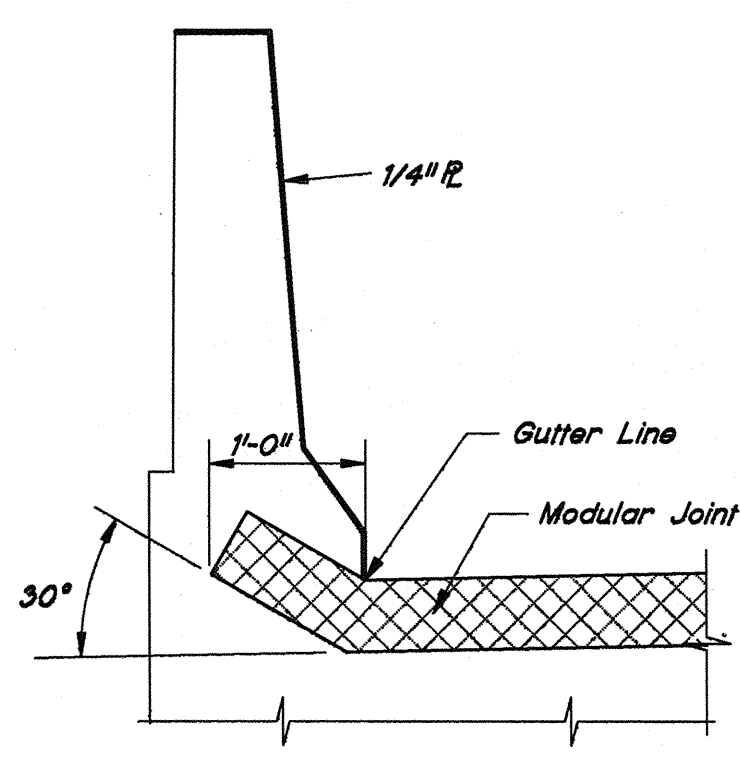


SECTION A-A

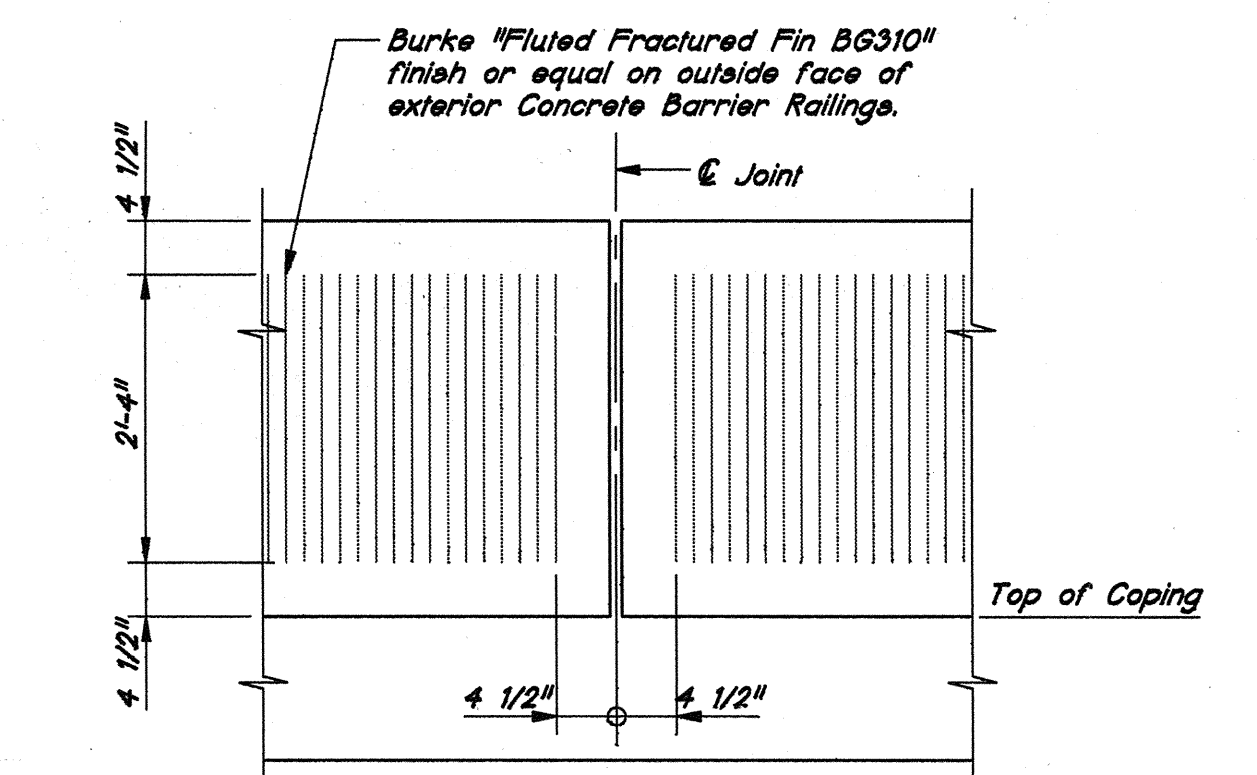
2 3/4" @ 60° Bents #13 & #29
3 1/4" @ 60° Bents #20 & #26



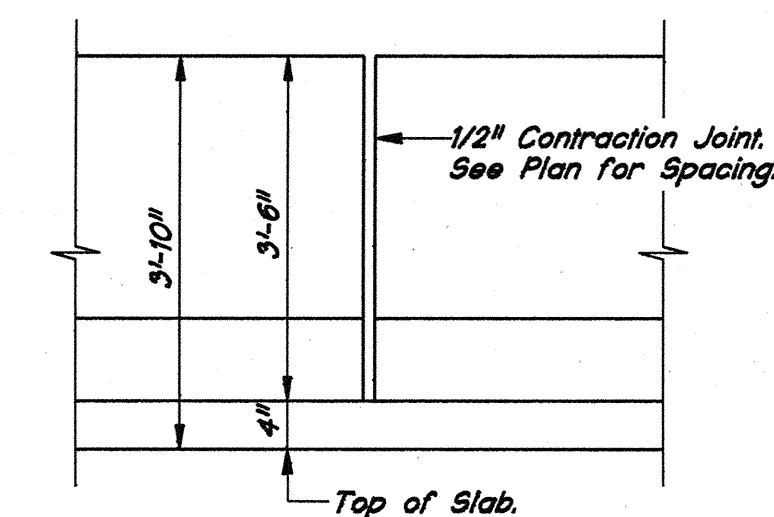
EXPANSION JOINT, M
RAILING COVER PLATE
SCALE: 3/4" = 1'-0"



EXPANSION JOINT, M
@ RAILING
SCALE: 3/4" = 1'-0"



ARCHITECTURAL TREATMENT OF BARRIER RAIL
SCALE: NONE



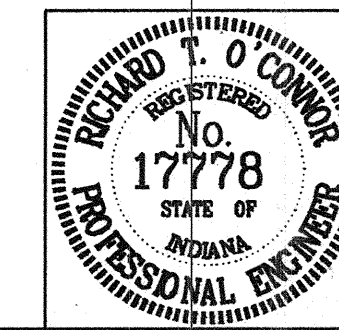
CONTRACTION JOINT DETAIL
SCALE: 3/4" = 1'-0"

J:\1-70\3392\039.DWG
Scale: 1" = 1'-0"
Time: 08/31/94 at 16:02 ROAW

DRAWN	Kay0	CHK.	SCJ
DESIGNED		CHK.	
TRACED	Kay0	CHK.	SCJ

MISCELLANEOUS RAILING DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN
SUBMITTED FOR APPROVAL: *Richard O'Connor*
DRAWING: D39 OF D45 SHEET: 40 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A



**BILL OF MATERIALS
RAILING - UNIT "A" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	43	4'-11"	
602a	44	4'-10"	
603a	1084	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	650	3'-6"	
#6	437	2'-9"	
TOTAL #6			12,984
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	7	39'-9"	
#4	90	34'-9"	
#4	14	33'-3"	
#4	16	32'-9"	
#4	45	27'-9"	
#4	16	20'-6"	
#4	8	3'-9"	
TOTAL #4			4,022
TOTAL REINFORCING -E.C.			17,006
MISCELLANEOUS		(QTY.)	
Railing, Concrete, C			782.1 Lft.
Field Drilled Holes in Concrete			1,088 Each
Barrier Delineators			40 Each
Surface Seal (Estimated)			6,112 Sft.
Masonry Coating (Estimated)			5,329 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			398 Lft.

**BILL OF MATERIALS
RAILING - UNIT "B" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	49	4'-11"	
602a	50	4'-10"	
603a	1112	4'-4"	
604a	8	8'-0"	
605a	8	3'-6"	
#6	663	3'-6"	
#6	448	2'-9"	
TOTAL #6			13,437
409a	2	7'-0"	
410a	2	6'-6"	
411a	2	6'-0"	
#4	120	34'-9"	
#4	30	29'-6"	
#4	45	25'-0"	
TOTAL #4			4,154
TOTAL REINFORCING - E.C.			17,591
MISCELLANEOUS		(QTY.)	
Railing, Concrete, C			807.2 Lft.
Field Drilled Holes in Concrete			1120 Each
Barrier Delineators			42 Each
Surface Seal (Estimated)			6,306 Sft.
Masonry Coating (Estimated)			5,499 Sft.
Anchor Bolts, AR-22			8 Each
Conduit, Steel, Galvanized, 2 In.			418 Lft.

**BILL OF MATERIALS
RAILING - UNIT "C" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	35	4'-11"	
602a	35	4'-10"	
603a	830	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	528	3'-6"	
#6	302	2'-9"	
TOTAL #6			10,007
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	7	36'-3"	
#4	45	33'-0"	
#4	16	32'-0"	
#4	14	31'-6"	
#4	69	27'-6"	
TOTAL #4			3,079
TOTAL REINFORCING - E.C.			13,086
MISCELLANEOUS		(QTY.)	
Railing, Concrete, C			594.1 Lft.
Field Drilled Holes in Concrete			834 Each
Barrier Delineators			30 Each
Surface Seal (Estimated)			4,494 Sft.
Masonry Coating (Estimated)			3,944 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			282 Lft.

**BILL OF MATERIALS
RAILING - UNIT "D" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	35	4'-11"	
602a	35	4'-10"	
603a	862	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	570	3'-6"	
#6	382	2'-9"	
TOTAL #6			11,352
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	30	38'-0"	
#4	60	36'-9"	
#4	60	31'-6"	
TOTAL #4			3,510
TOTAL REINFORCING - E.C.			14,862
MISCELLANEOUS		(QTY.)	
Railing, Concrete, C			688.0 Lft.
Field Drilled Holes in Concrete			856 Each
Barrier Delineators			34 Each
Surface Seal (Estimated)			5,376 Sft.
Masonry Coating (Estimated)			4,687 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			351 Lft.

**BILL OF MATERIALS
RAILING - UNIT "E" WB**

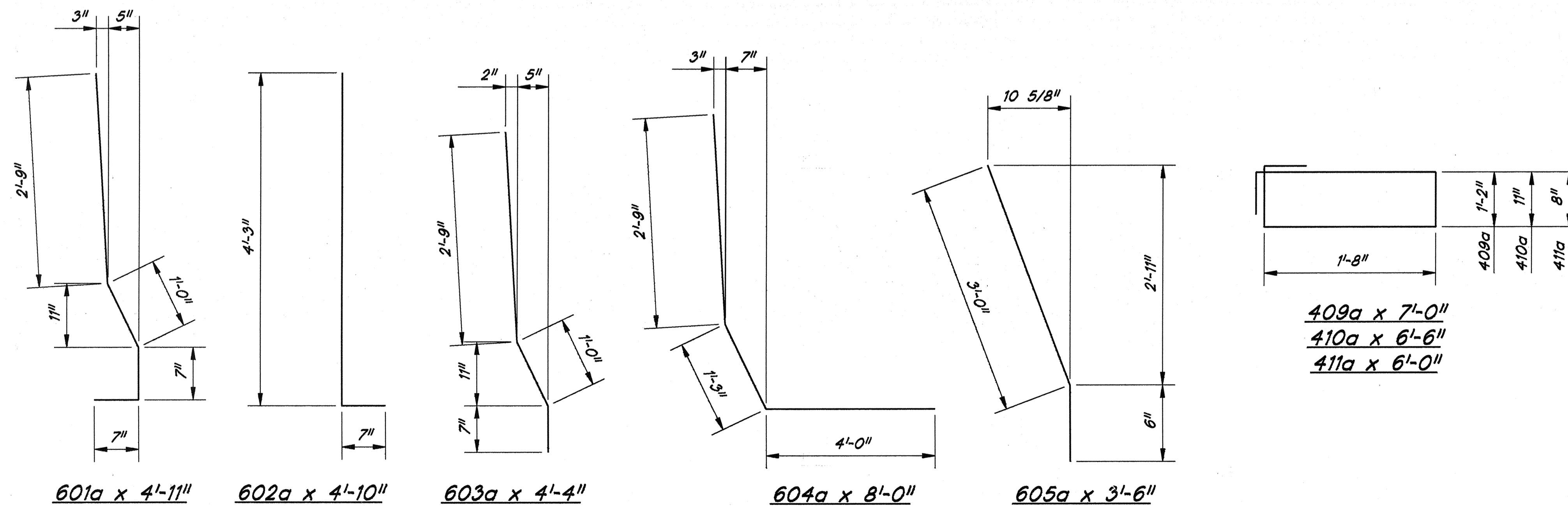
REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	38	4'-11"	
602a	38	4'-10"	
603a	2,390	4'-4"	
604a	12	8'-0"	
605a	12	3'-6"	
#6	1433	3'-6"	
#6	957	2'-9"	
TOTAL #6			27,806
409a	3	7'-0"	
410a	3	6'-6"	
411a	3	6'-0"	
#4	120	31'-9"	
#4	300	31'-0"	
TOTAL #4			8,797
TOTAL REINFORCING -E.C.			36,603
MISCELLANEOUS		(QTY.)	
Railing, Concrete, C			1693.4 Lft.
Field Drilled Holes in Concrete			2,402 Each
Barrier Delineators			84 Each
Surface Seal (Estimated)			13,229 Sft.
Masonry Coating (Estimated)			11,535 Sft.
Anchor Bolts, AR-22			12 Each
Conduit, Steel, Galvanized, 2 In.			868 Lft.

**BILL OF MATERIALS
RAILING - UNIT "F" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	30	4'-11"	
602a	30	4'-10"	
603a	778	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	466	3'-6"	
#6	312	2'-9"	
TOTAL #6			9,311
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	90	32'-6"	
#4	45	31'-6"	
TOTAL #4			2,914
TOTAL REINFORCING -E.C.			12,225
MISCELLANEOUS		(QTY.)	
Railing, Concrete, C			563.5 Lft.
Field Drilled Holes in Concrete			782 Each
Barrier Delineators			28 Each
Surface Seal (Estimated)			4,402 Sft.
Masonry Coating (Estimated)			3,839 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			289 Lft.

**BILL OF MATERIALS
RAILING - UNIT "G" WB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	15	4'-11"	
602a	15	4'-10"	
603a	917	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	554	3'-6"	
#6	367	2'-9"	
TOTAL #6			10,685
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	135	31'-6"	
#4	30	24'-9"	
#4	8	3'-9"	
TOTAL #4			3,370
TOTAL REINFORCING -E.C.			14,055
MISCELLANEOUS		(QTY.)	
Railing, Concrete, C			648.1 Lft.
Field Drilled Holes in Concrete			921 Each
Barrier Delineators			32 Each
Surface Seal (Estimated)			5,060 Sft.
Masonry Coating (Estimated)			4,413 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			332 Lft.

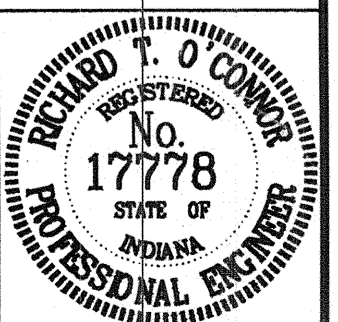


NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
- LAPS SHOWN ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
- FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

**BILLS OF MATERIALS - RAILING
UNITS "A" THRU "G" - WESTBOUND
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D40 OF D45 SHEET: 41 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



DRAWN	KayQ	CHK.	SCJ
DESIGNED		CHK.	
TRACED	KayQ	CHK.	SCJ

**BILL OF MATERIALS
RAILING - UNIT "A" EB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	39	4'-11"	
602a	39	4'-10"	
603a	1086	4'-4"	
604a	8	8'-0"	
605a	8	3'-6"	
#6	657	3'-6"	
#6	434	2'-9"	
TOTAL #6			13,024
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	7	38'-9"	
#4	90	34'-9"	
#4	16	33'-3"	
#4	14	32'-9"	
#4	45	27'-9"	
#4	16	20'-3"	
#4	8	4'-9"	
TOTAL #4			4,034
TOTAL REINFORCING - E.C.			17,058
MISCELLANEOUS (QTY.)			
Railing, Concrete, C			781.3 Lft.
Field Drilled Holes in Concrete			1,094 Each
Barrier Delineators			40 Each
Surface Seal (Estimated)			6,110 Sft.
Masonry Coating (Estimated)			5,322 Sft.
Anchor Bolts, AR-22			8 Each
Conduit, Steel, Galvanized, 2 In.			405 Lft.

**BILL OF MATERIALS
RAILING - UNIT "B" EB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	47	4'-11"	
602a	48	4'-10"	
603a	1113	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	670	3'-6"	
#6	444	2'-9"	
TOTAL #6			13,365
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	120	34'-9"	
#4	30	29'-6"	
#4	45	25'-0"	
TOTAL #4			4,141
TOTAL REINFORCING - E.C.			17,506
MISCELLANEOUS (QTY.)			
Railing, Concrete, C			807.2 Lft.
Field Drilled Holes in Concrete			1117 Each
Barrier Delineators			42 Each
Surface Seal (Estimated)			6,306 Sft.
Masonry Coating (Estimated)			5,499 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			411 Lft.

**BILL OF MATERIALS
RAILING - UNIT "C" EB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	35	4'-11"	
602a	35	4'-10"	
603a	936	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	528	3'-6"	
#6	406	2'-9"	
TOTAL #6			11,137
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	60	36'-3"	
#4	8	35'-9"	
#4	14	32'-0"	
#4	16	31'-6"	
#4	45	27'-6"	
#4	21	27'-0"	
TOTAL #4			3,498
TOTAL REINFORCING - E.C.			14,635
MISCELLANEOUS (QTY.)			
Railing, Concrete, C			684.5 Lft.
Field Drilled Holes in Concrete			940 Each
Barrier Delineators			34 Each
Surface Seal (Estimated)			5,490 Sft.
Masonry Coating (Estimated)			4,763 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			371 Lft.

**BILL OF MATERIALS
RAILING - UNIT "D" EB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	35	4'-11"	
602a	35	4'-10"	
603a	1032	4'-4"	
604a	8	8'-0"	
605a	8	3'-6"	
#6	569	3'-6"	
#6	463	2'-9"	
TOTAL #6			12,271
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	35	38'-9"	
#4	60	36'-9"	
#4	35	28'-9"	
TOTAL #4			3,077
TOTAL REINFORCING - E.C.			15,348
MISCELLANEOUS (QTY.)			
Railing, Concrete, C			688.0 Lft.
Field Drilled Holes in Concrete			1040 Each
Barrier Delineators			34 Each
Surface Seal (Estimated)			5,376 Sft.
Masonry Coating (Estimated)			4,687 Sft.
Anchor Bolts, AR-22			8 Each
Conduit, Steel, Galvanized, 2 In.			358 Lft.

**BILL OF MATERIALS
RAILING - UNIT "E" EB**

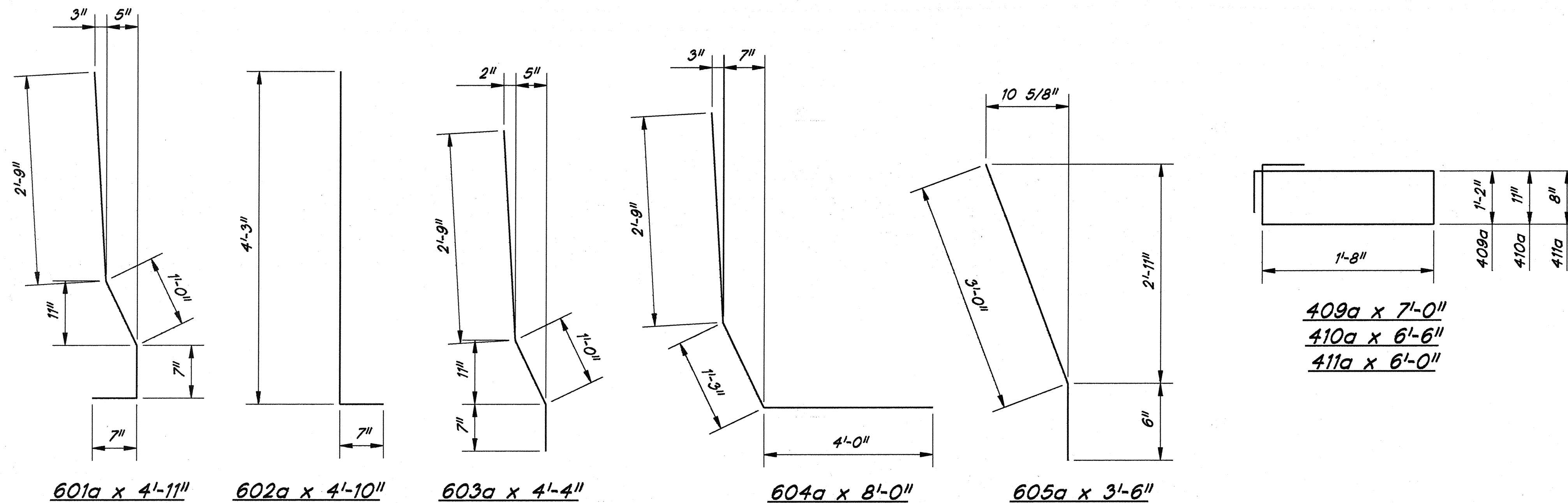
REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	38	4'-11"	
602a	38	4'-10"	
603a	2390	4'-4"	
604a	12	8'-0"	
605a	12	3'-6"	
#6	1433	3'-6"	
#6	957	2'-9"	
TOTAL #6			27,806
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	120	31'-9"	
#4	300	31'-0"	
TOTAL #4			8,797
TOTAL REINFORCING - E.C.			36,603
MISCELLANEOUS (QTY.)			
Railing, Concrete, C			1693.5 Lft.
Field Drilled Holes in Concrete			2402 Each
Barrier Delineators			84 Each
Surface Seal (Estimated)			13,230 Sft.
Masonry Coating (Estimated)			11,536 Sft.
Anchor Bolts, AR-22			12 Each
Conduit, Steel, Galvanized, 2 In.			868 Lft.

**BILL OF MATERIALS
RAILING - UNIT "F" EB**

REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	30	4'-11"	
602a	30	4'-10"	
603a	778	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	466	3'-6"	
#6	312	2'-9"	
TOTAL #6			9,311
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	90	32'-6"	
#4	45	31'-6"	
TOTAL #4			2,914
TOTAL REINFORCING - E.C.			12,225
MISCELLANEOUS (QTY.)			
Railing, Concrete, C			563.6 Lft.
Field Drilled Holes in Concrete			782 Each
Barrier Delineators			28 Each
Surface Seal (Estimated)			4,404 Sft.
Masonry Coating (Estimated)			3,840 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			289 Lft.

**BILL OF MATERIALS
RAILING - UNIT "G" EB**

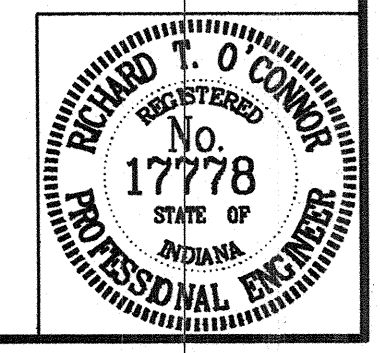
REINFORCING STEEL EPOXY COATED			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
601a	15	4'-11"	
602a	15	4'-10"	
603a	920	4'-4"	
604a	4	8'-0"	
605a	4	3'-6"	
#6	554	3'-6"	
#6	370	2'-9"	
TOTAL #6			10,717
409a	1	7'-0"	
410a	1	6'-6"	
411a	1	6'-0"	
#4	135	31'-6"	
#4	30	24'-9"	
#4	8	3'-9"	
TOTAL #4			3,370
TOTAL REINFORCING - E.C.			14,087
MISCELLANEOUS (QTY.)			
Railing, Concrete, C			650.7 Lft.
Field Drilled Holes in Concrete			924 Each
Barrier Delineators			32 Each
Surface Seal (Estimated)			5,089 Sft.
Masonry Coating (Estimated)			4,436 Sft.
Anchor Bolts, AR-22			4 Each
Conduit, Steel, Galvanized, 2 In.			333 Lft.



NOTES:
 FOR GENERAL NOTES, SEE DRAWING D2.
 ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
 LAPS SHOWN ARE MINIMUM LAP LENGTHS.
 FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
 FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING, SEE BRIDGE STANDARD C3.
 FOR DETAILS OF NEW LIGHT STANDARD AND RAILING SEE DRAWING D39.

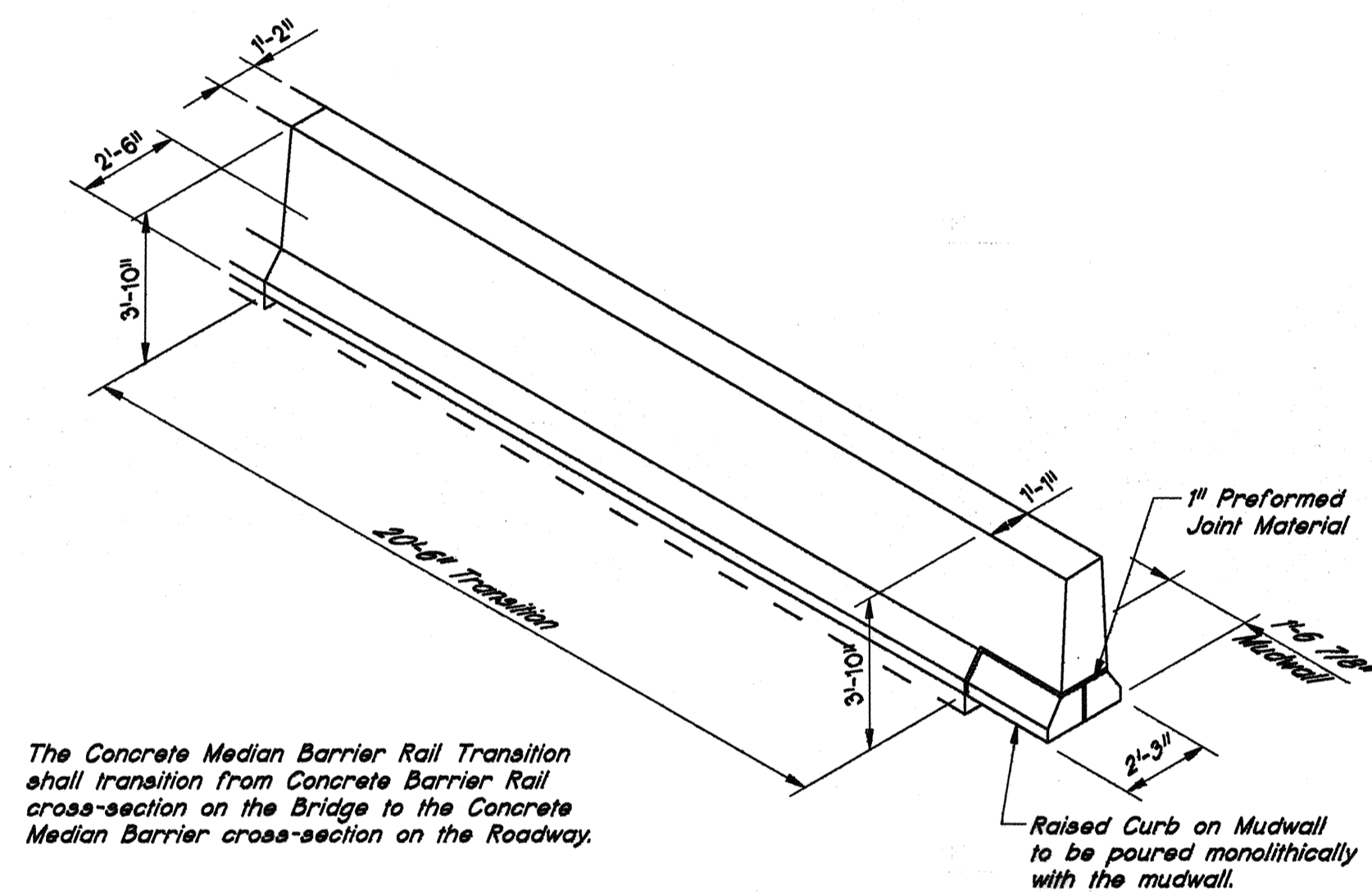
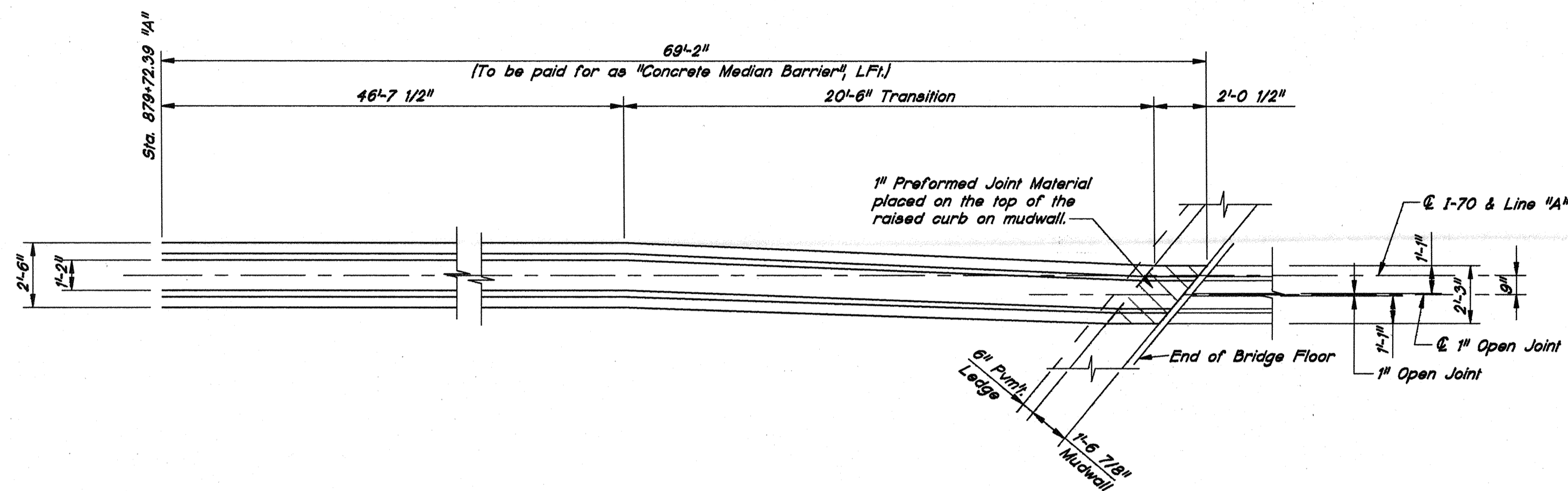
**BILLS OF MATERIALS - RAILING
 UNITS "A" THRU "G" - EASTBOUND
 INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard T. O'Connor*
 DRAWING: D41 OF D45 SHEET: 42 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



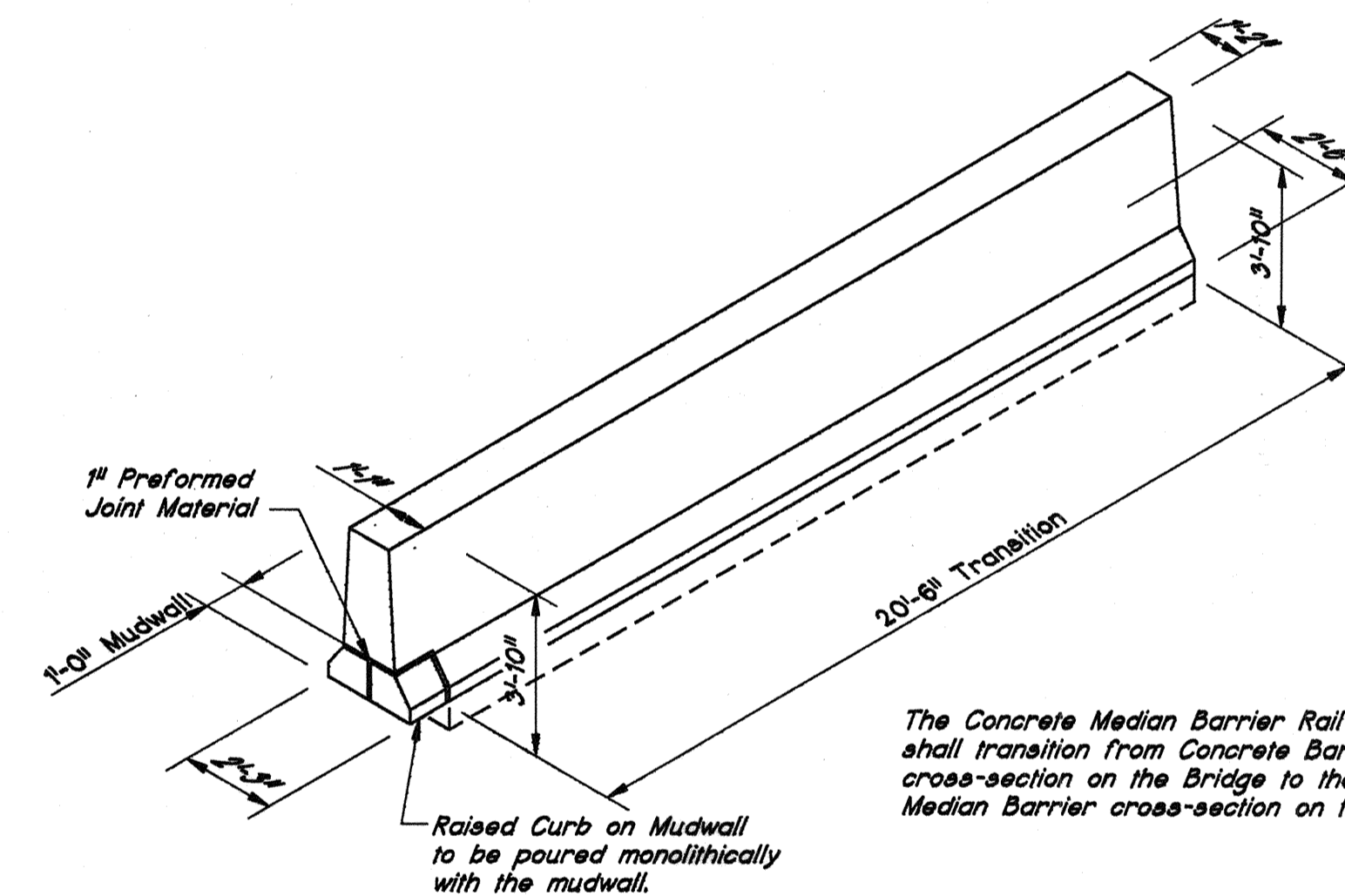
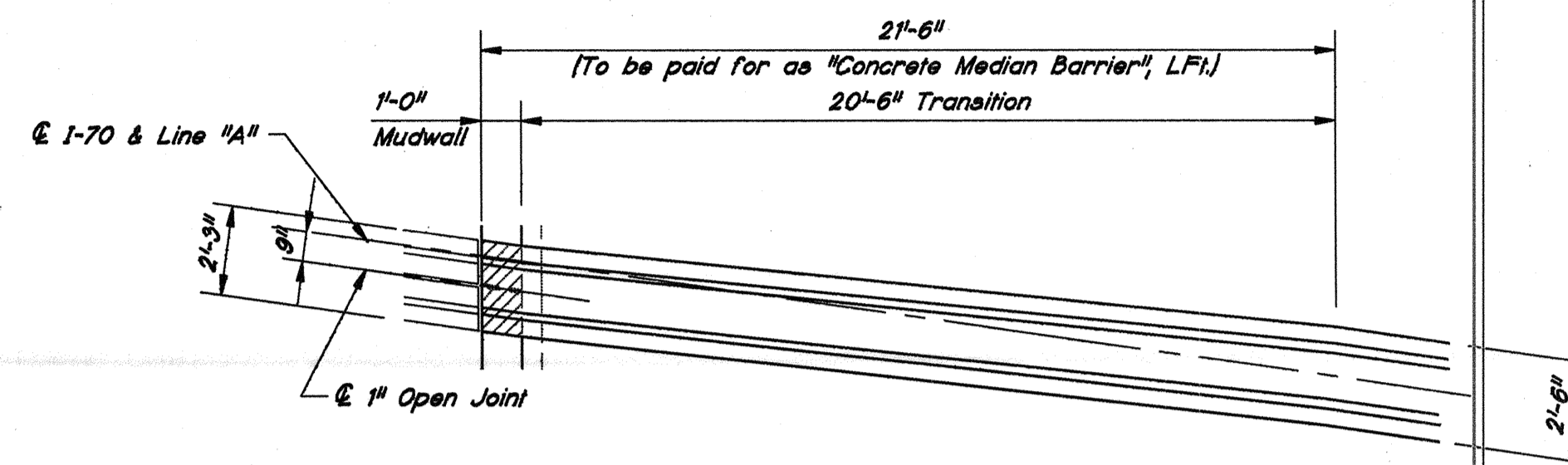
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 Time: 08/31/94 at 16:20 RQAW

DRAWN	Kay0	CHK	SCJ
DESIGNED		CHK	
TRACED	Kay0	CHK	SCJ



The Concrete Median Barrier Rail Transition shall transition from Concrete Barrier Rail cross-section on the Bridge to the Concrete Median Barrier cross-section on the Roadway.

MEDIAN BARRIER RAIL TRANSITION - BENT NO. 1
SCALE: NONE



The Concrete Median Barrier Rail Transition shall transition from Concrete Barrier Rail cross-section on the Bridge to the Concrete Median Barrier cross-section on the Roadway.

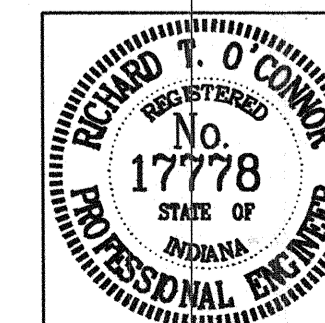
MEDIAN BARRIER RAIL TRANSITION - BENT NO. 33
SCALE: NONE

NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
- ALL LAPS ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING AND TYPE A CONSTRUCTION JOINT, SEE BRIDGE STANDARD C3.

APPROACH DETAILS - MEDIAN BARRIER
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
 DRAWING: D42 OF D45 SHEET: 43 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

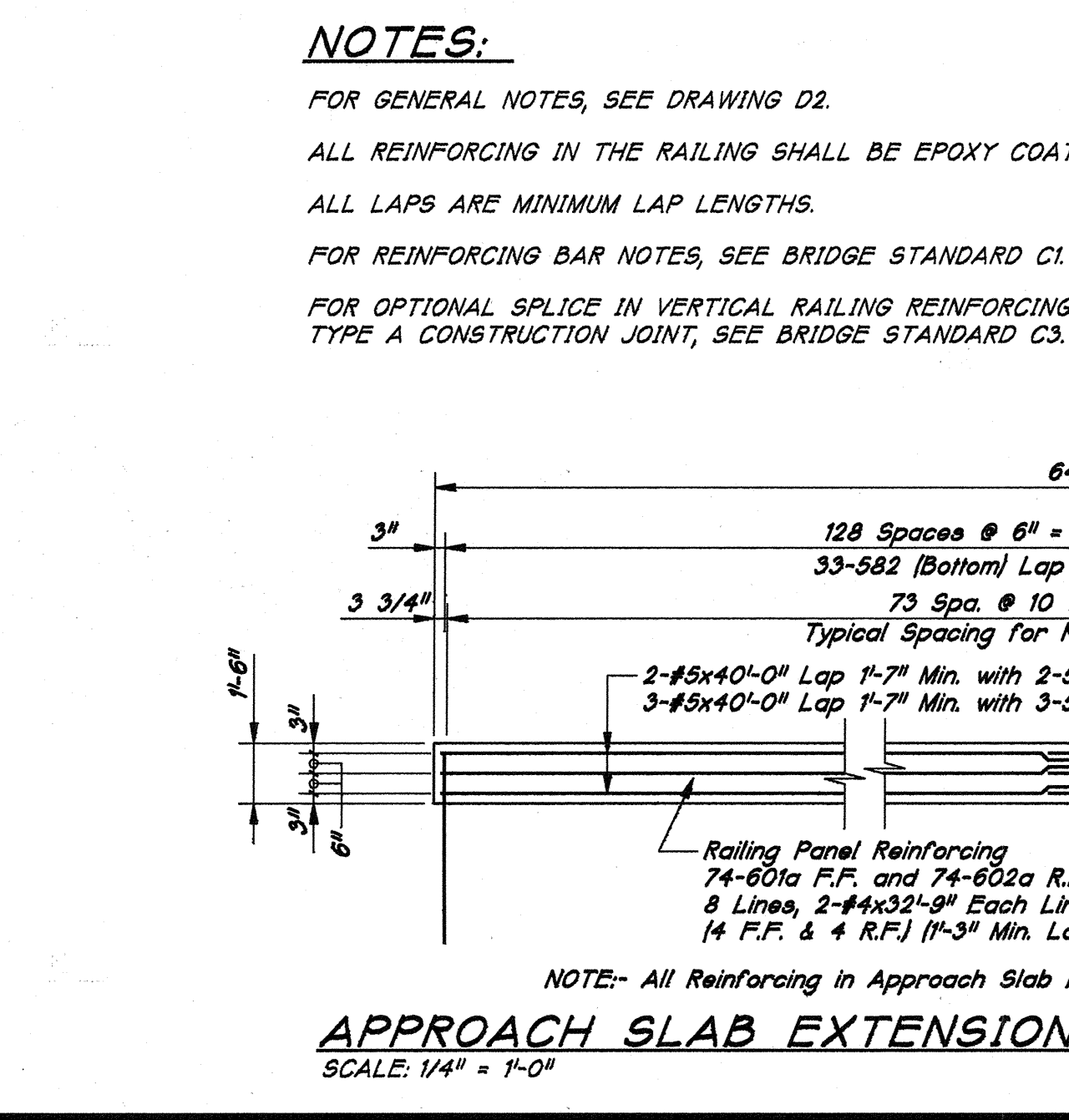
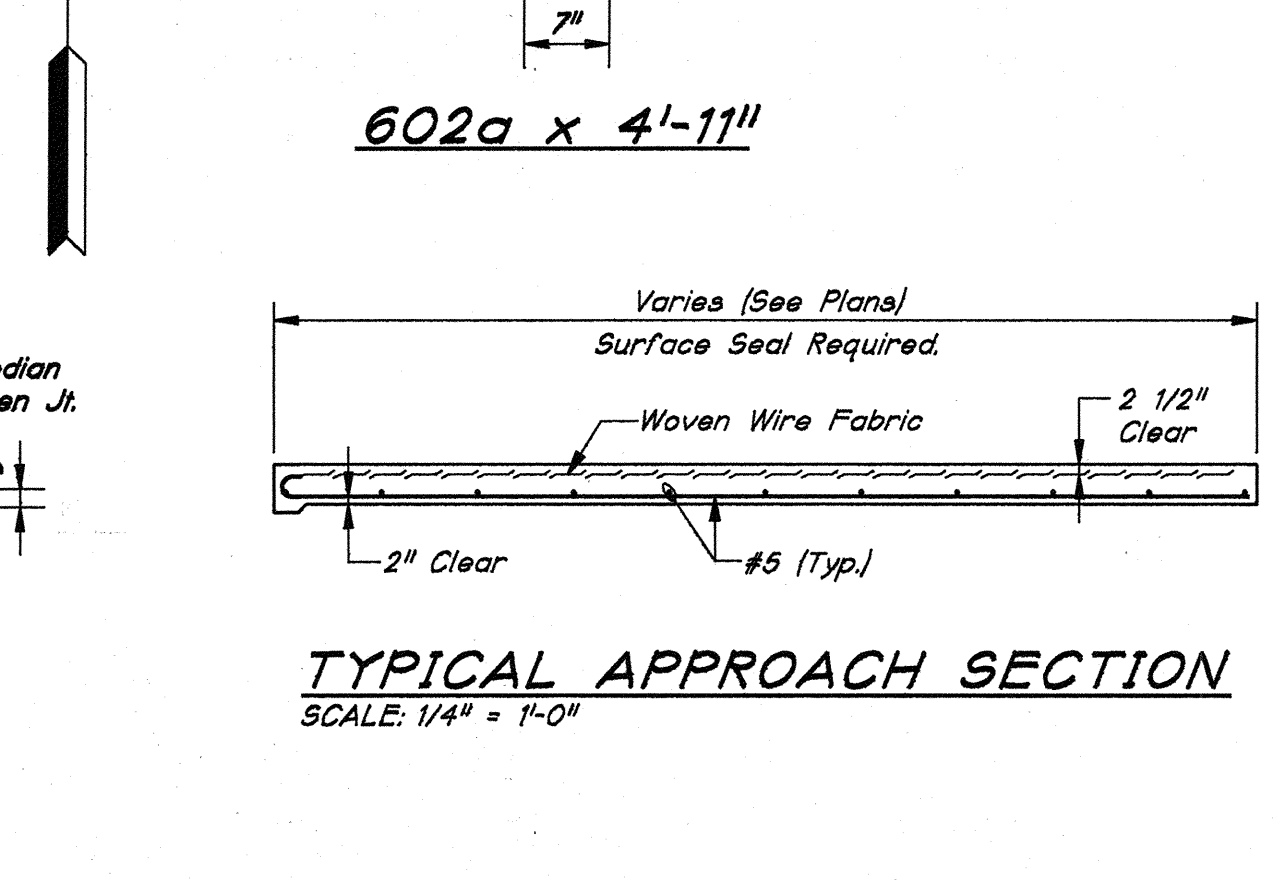
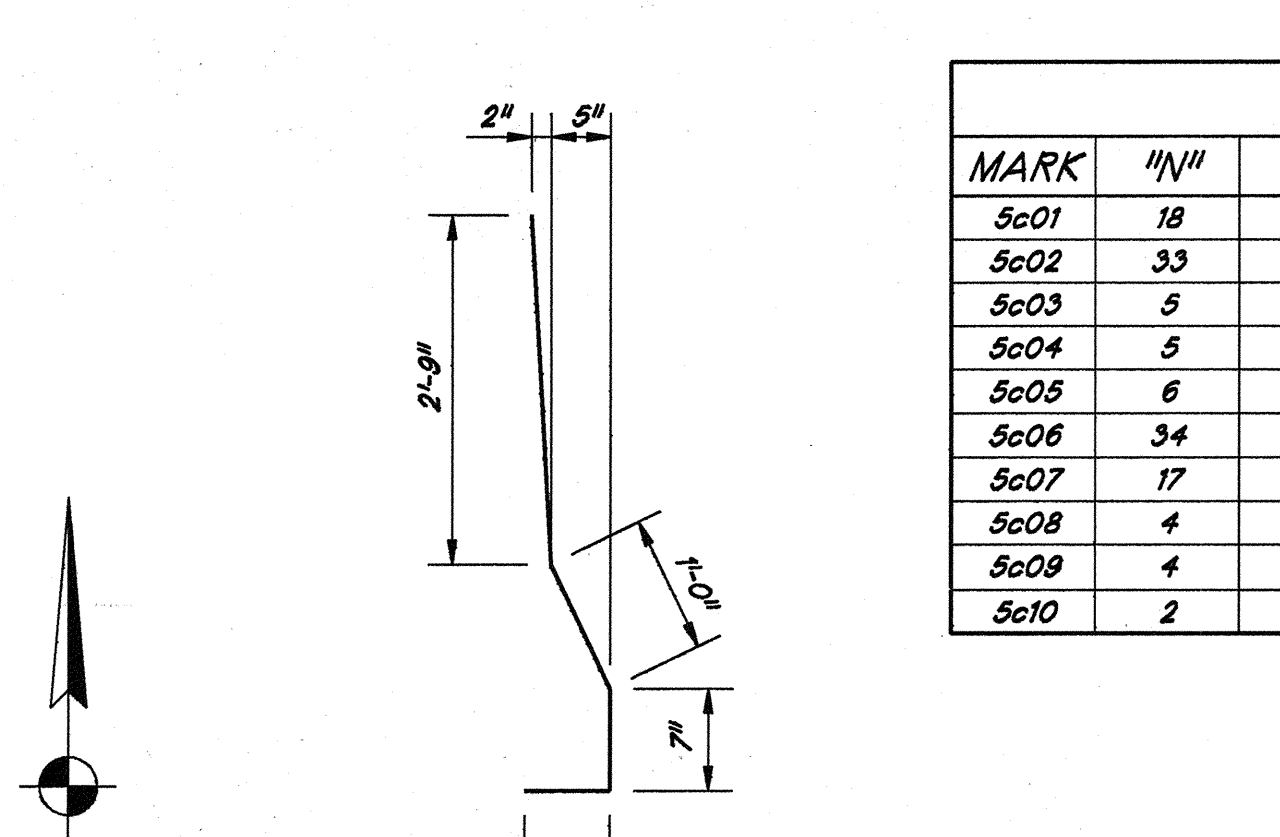
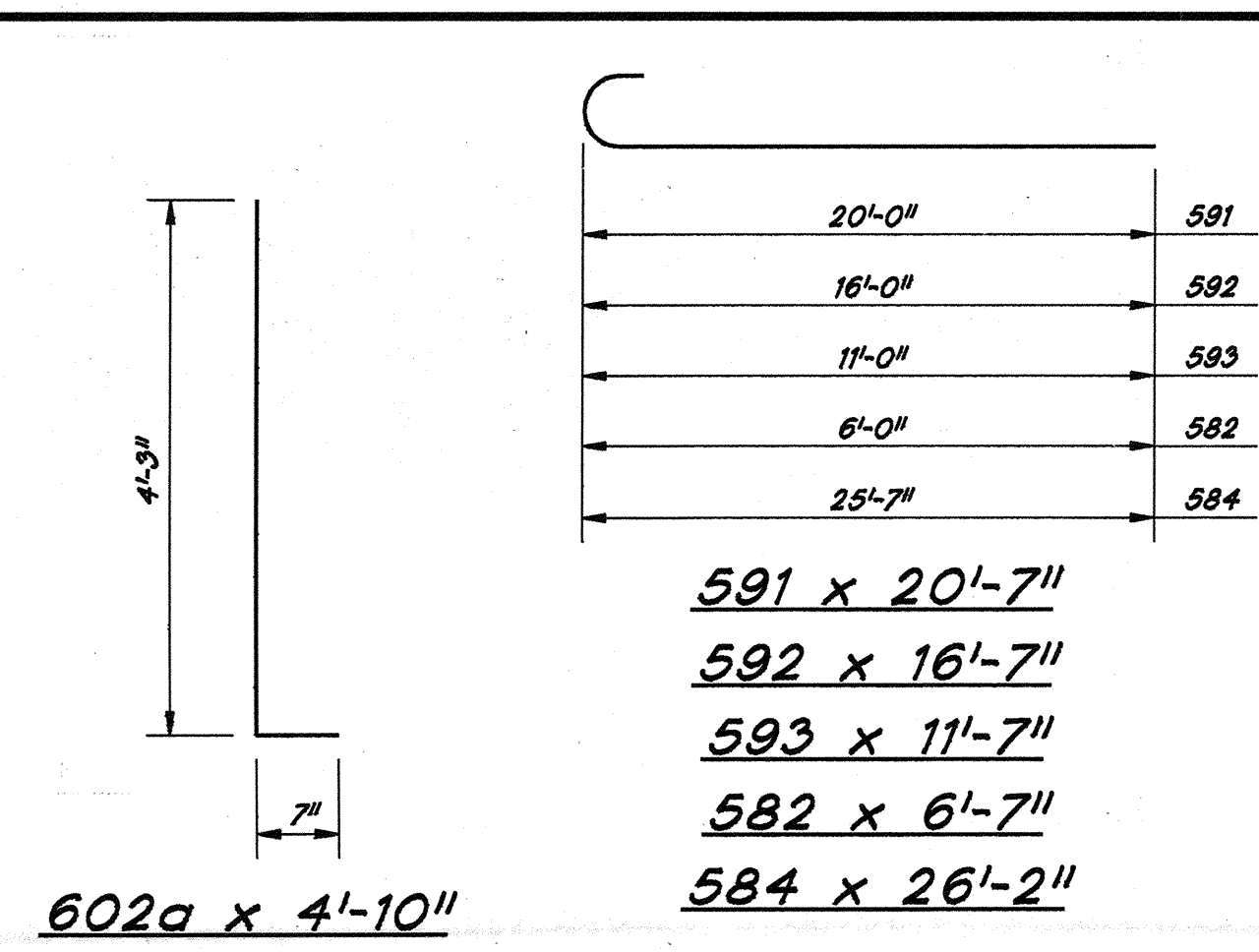
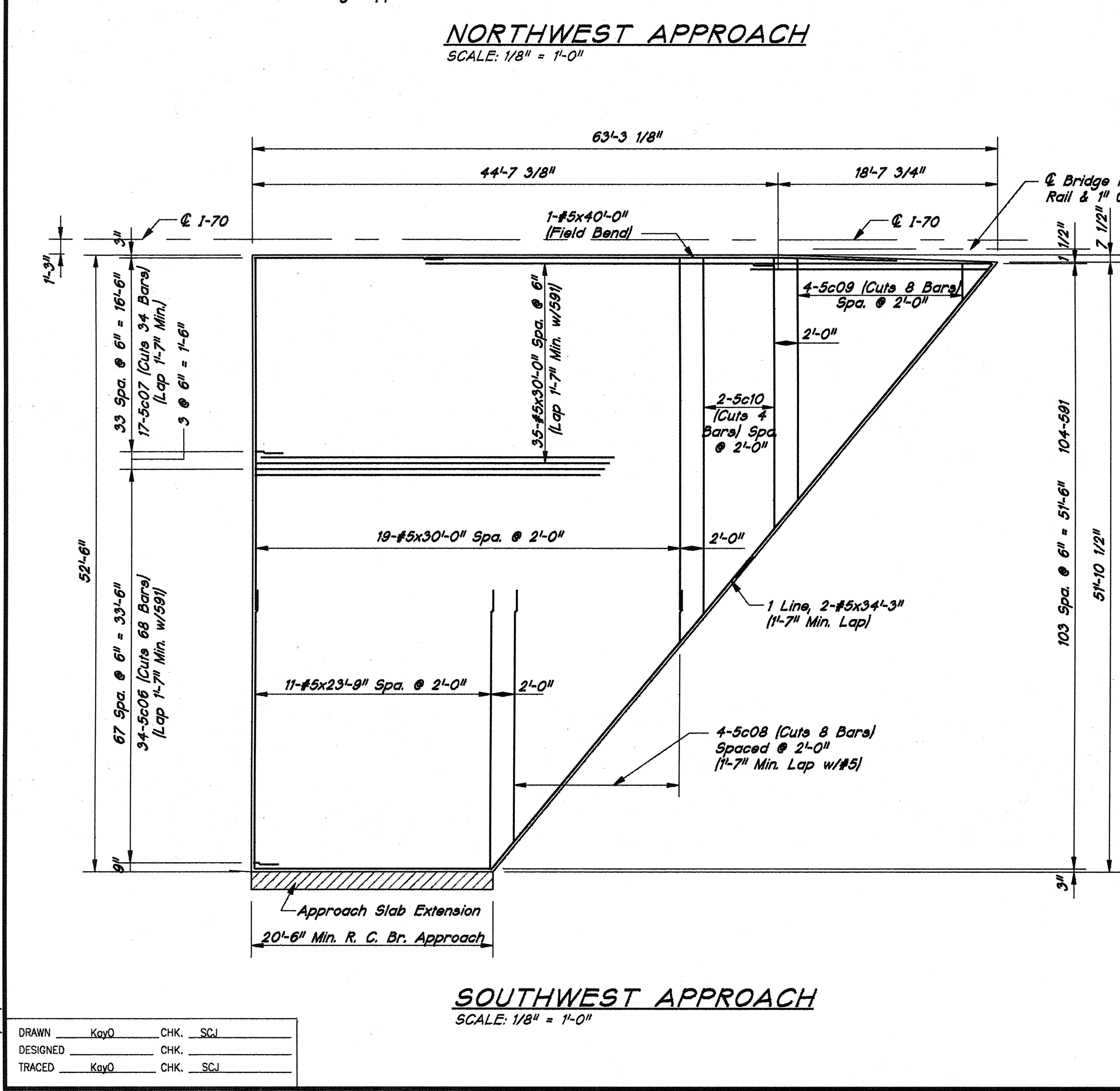
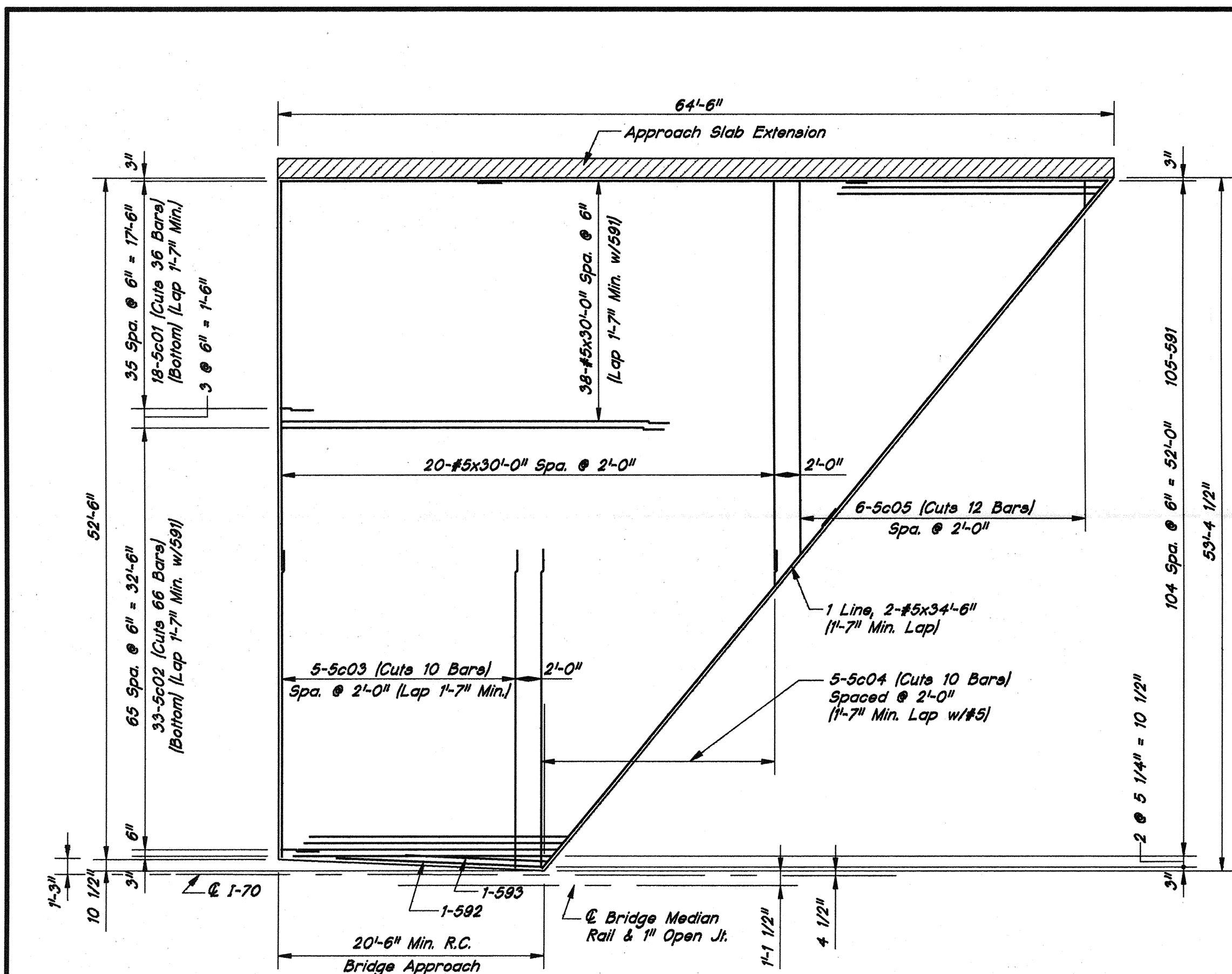


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 Scale: 1" = 1'-0"
 Time: 08/31/94 at 16:29 RQAW

DRAWN	Kay0	CHK.	SCJ
DESIGNED		CHK.	
TRACED	Kay0	CHK.	SCJ

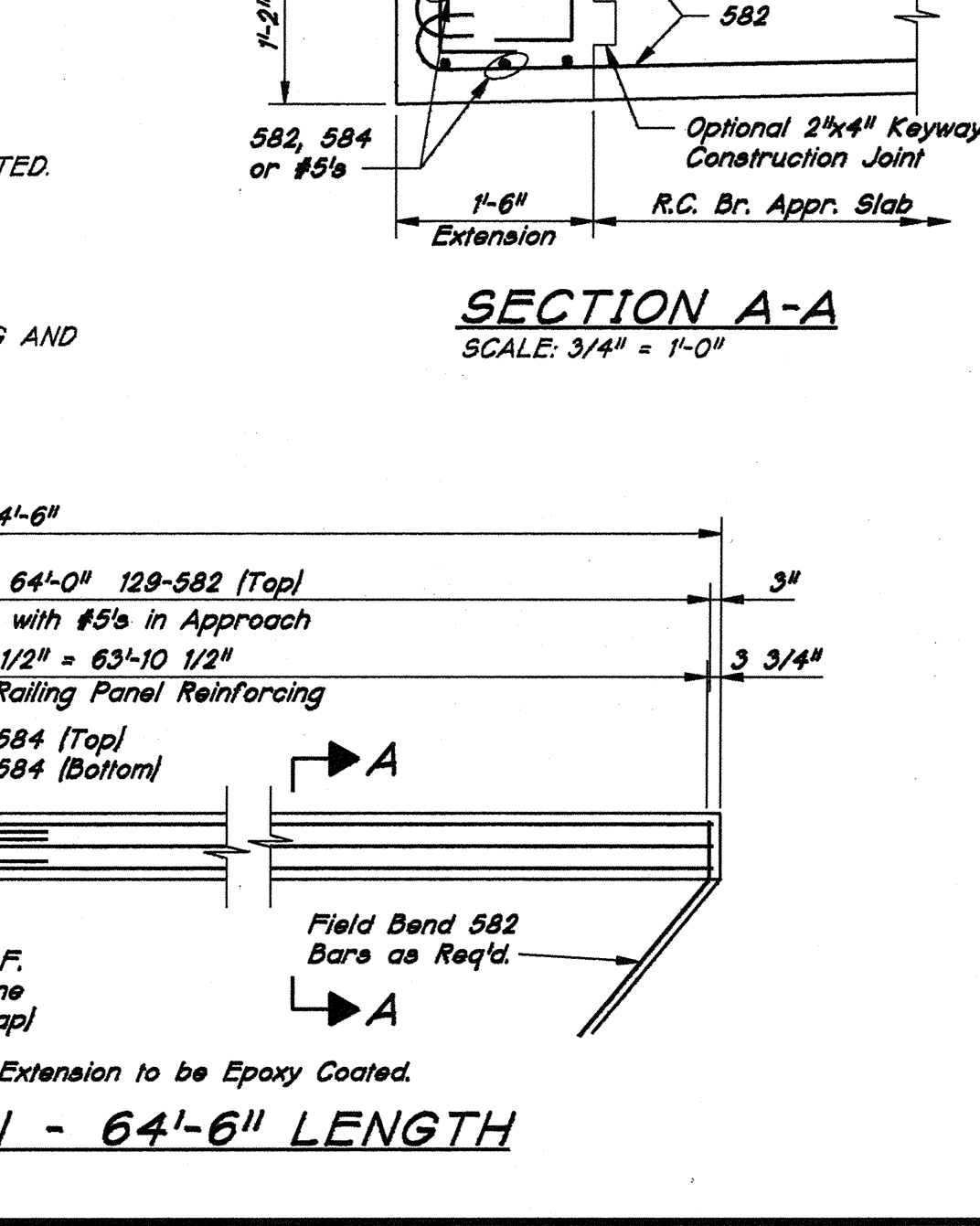
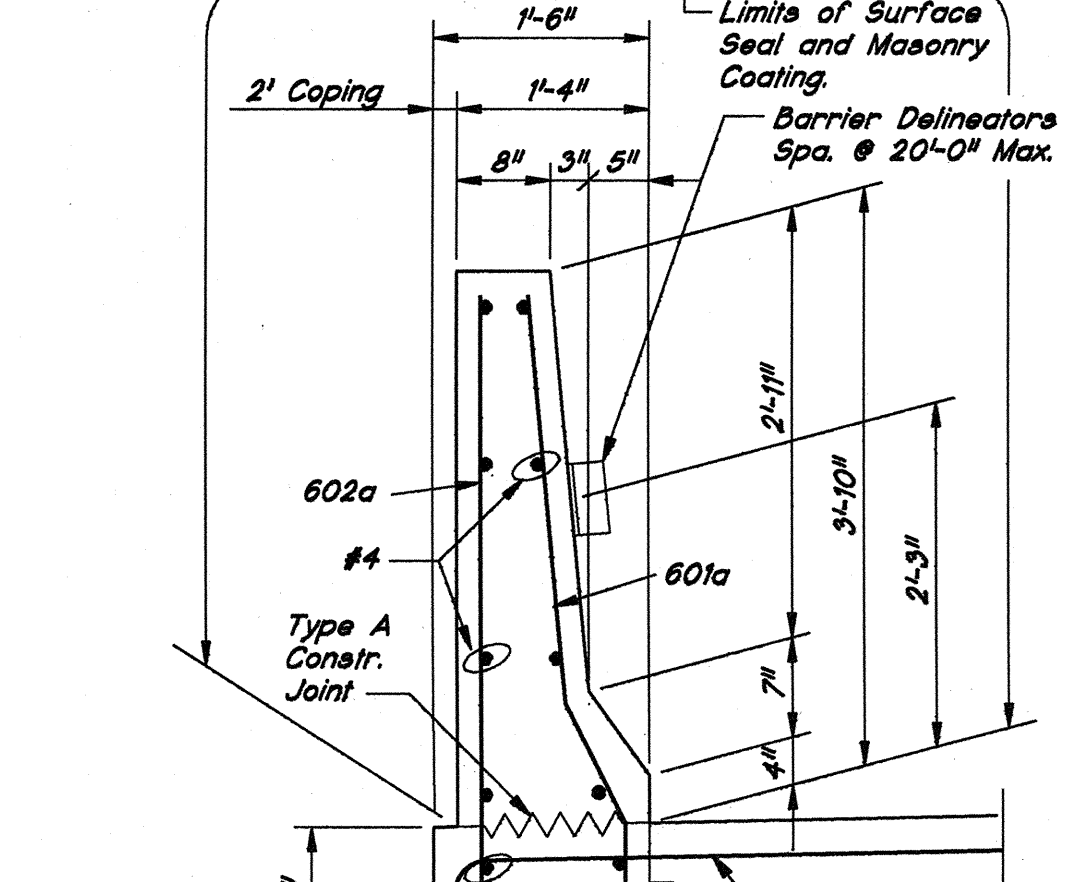
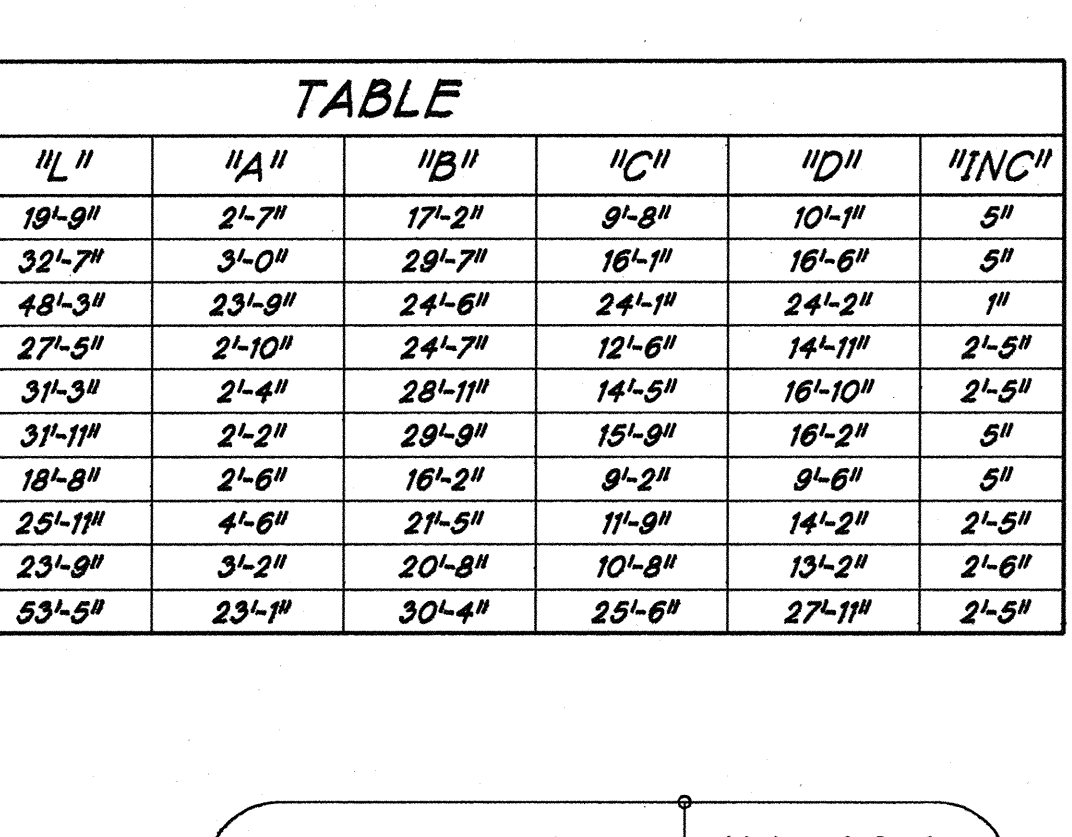
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Scale: 1" = 1'-0"
Time: 09/27/94 at 16:35 ROW

DRAWN	KayO	CHK	SCJ
DESIGNED		CHK	
TRACED	KayO	CHK	SCJ



TABLE

MARK	1/4"	1/2"	3/4"	1"	1 1/4"	1 3/4"	2"
5c01	18	19'-9"	2'-7"	17'-2"	9'-8"	10'-1"	5"
5c02	33	32'-7"	3'-0"	29'-7"	16'-1"	16'-6"	5"
5c03	5	48'-3"	23'-9"	24'-6"	24'-6"	24'-2"	1"
5c04	5	27'-5"	2'-10"	24'-7"	12'-6"	14'-11"	2'-5"
5c05	6	31'-3"	2'-4"	28'-11"	14'-5"	16'-10"	2'-5"
5c06	34	31'-11"	2'-2"	29'-9"	15'-9"	16'-2"	5"
5c07	17	18'-8"	2'-6"	16'-2"	9'-2"	9'-6"	5"
5c08	4	25'-11"	4'-6"	21'-5"	11'-9"	14'-2"	2'-5"
5c09	4	23'-9"	3'-2"	20'-8"	10'-8"	13'-2"	2'-6"
5c10	2	53'-5"	23'-11"	30'-4"	25'-6"	27'-11"	2'-5"

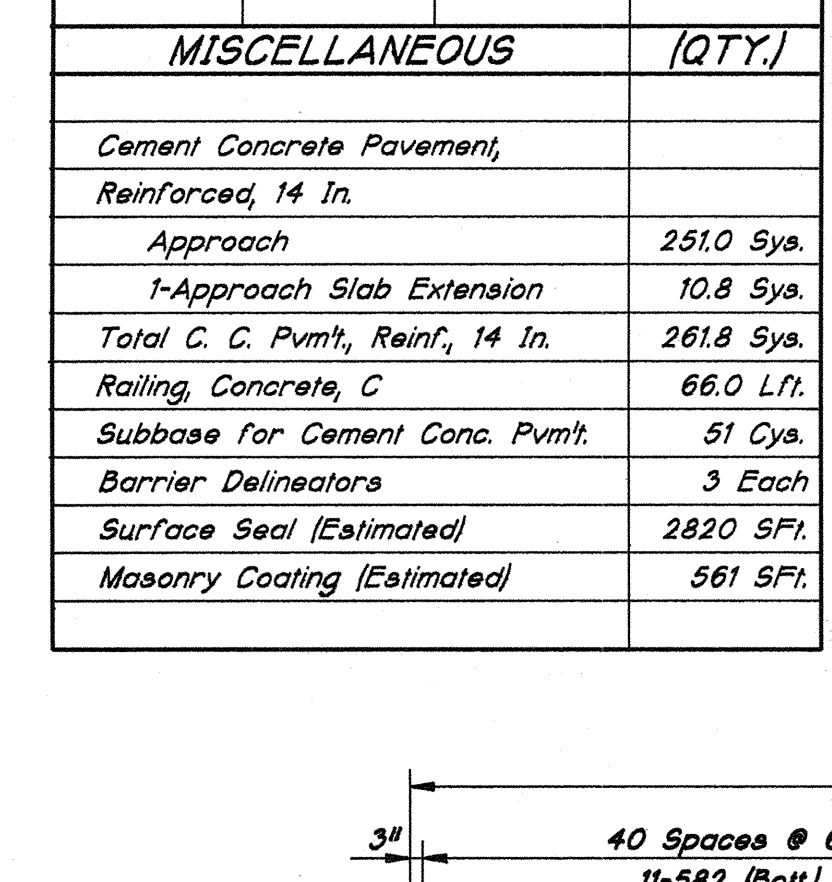


BILL OF MATERIALS NORTHWEST APPROACH

REINFORCING STEEL			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
591	105	20'-7"	
592	1	16'-7"	
593	1	11'-7"	
5c01	18	19'-9"	
5c02	33	32'-7"	
5c03	5	48'-3"	
5c04	5	27'-5"	
5c05	6	31'-3"	
#5	2	34'-6"	
#5	58	30'-0"	
TOTAL #5			6,253
TOTAL REINFORCING STEEL			6,253
REINFORCING STEEL EPOXY COATED			
601a	74	4'-10"	
602a	74	4'-11"	
TOTAL #6			1,084
582	162	6'-7"	
584	5	26'-2"	
#5	5	40'-0"	
TOTAL #5			1,457
#4	16	32'-9"	
TOTAL #4			350
TOTAL EPOXY COATED REINF.			2,891
MISCELLANEOUS (QTY.)			
Cement Concrete Pavement, Reinforced, 14 In.			
Approach	251.0 Sys.		
1-Approach Slab Extension	10.8 Sys.		
Total C. C. Pvm't, Reinf., 14 In.	261.8 Sys.		
Railing, Concrete, C	66.0 Lft.		
Subbase for Cement Conc. Pvm't.	51 Cys.		
Barrier Delineators	3 Each		
Surface Seal (Estimated)	2820 SFt.		
Masonry Coating (Estimated)	561 SFt.		

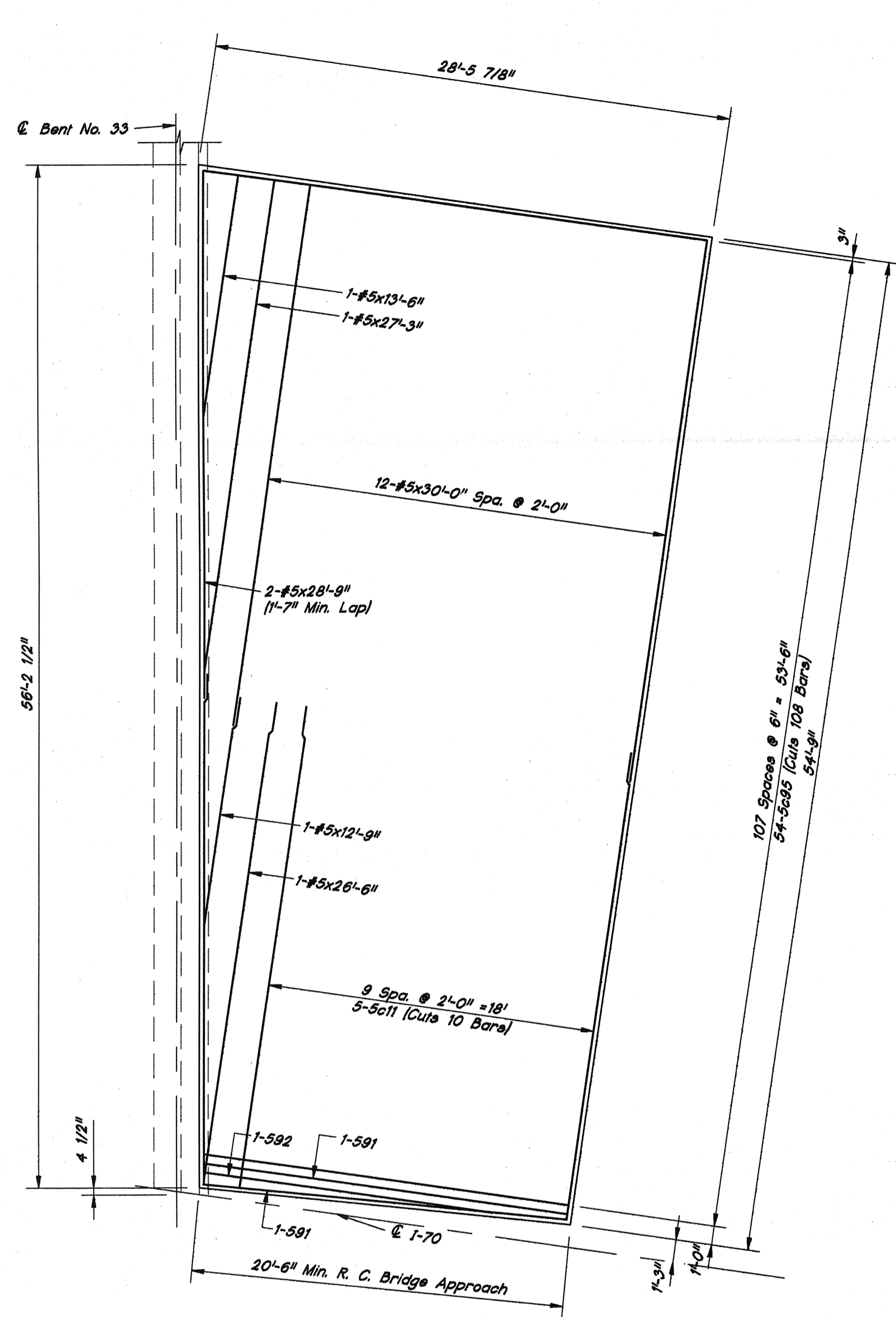
BILL OF MATERIALS SOUTHWEST APPROACH

REINFORCING STEEL			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
591	104	20'-7"	
5c06	34	31'-11"	
5c07	17	18'-8"	
5c08	4	25'-11"	
5c09	4	23'-9"	
5c10	2	53'-5"	
#5	1	40'-0"	
#5	2	34'-3"	
#5	54	30'-0"	
#5	11	23'-9"	
TOTAL #5			6,089
TOTAL REINFORCING STEEL			6,089
REINFORCING STEEL EPOXY COATED			
601a	24	4'-10"	
602a	24	4'-11"	
TOTAL #6			351
582	52	6'-7"	
591	5	20'-7"	
TOTAL #5			464
#4	8	20'-0"	
TOTAL #4			107
TOTAL EPOXY COATED REINF.			922
MISCELLANEOUS (QTY.)			
Cement Concrete Pavement, Reinforced, 14 In.			
Approach	245.1 Sys.		
1-Approach Slab Extension	3.4 Sys.		
Total C. C. Pvm't, Reinf., 14 In.	248.5 Sys.		
Subbase for Cement Conc. Pvm't.	49 Cys.		
Railing, Concrete C	23.0 Lft.		
Concrete Median Barrier	63.2 Lft.		
Barrier Delineators	6 Each		
Surface Seal (Estimated)	2992 SFt.		
Masonry Coating (Estimated)	786 SFt.		

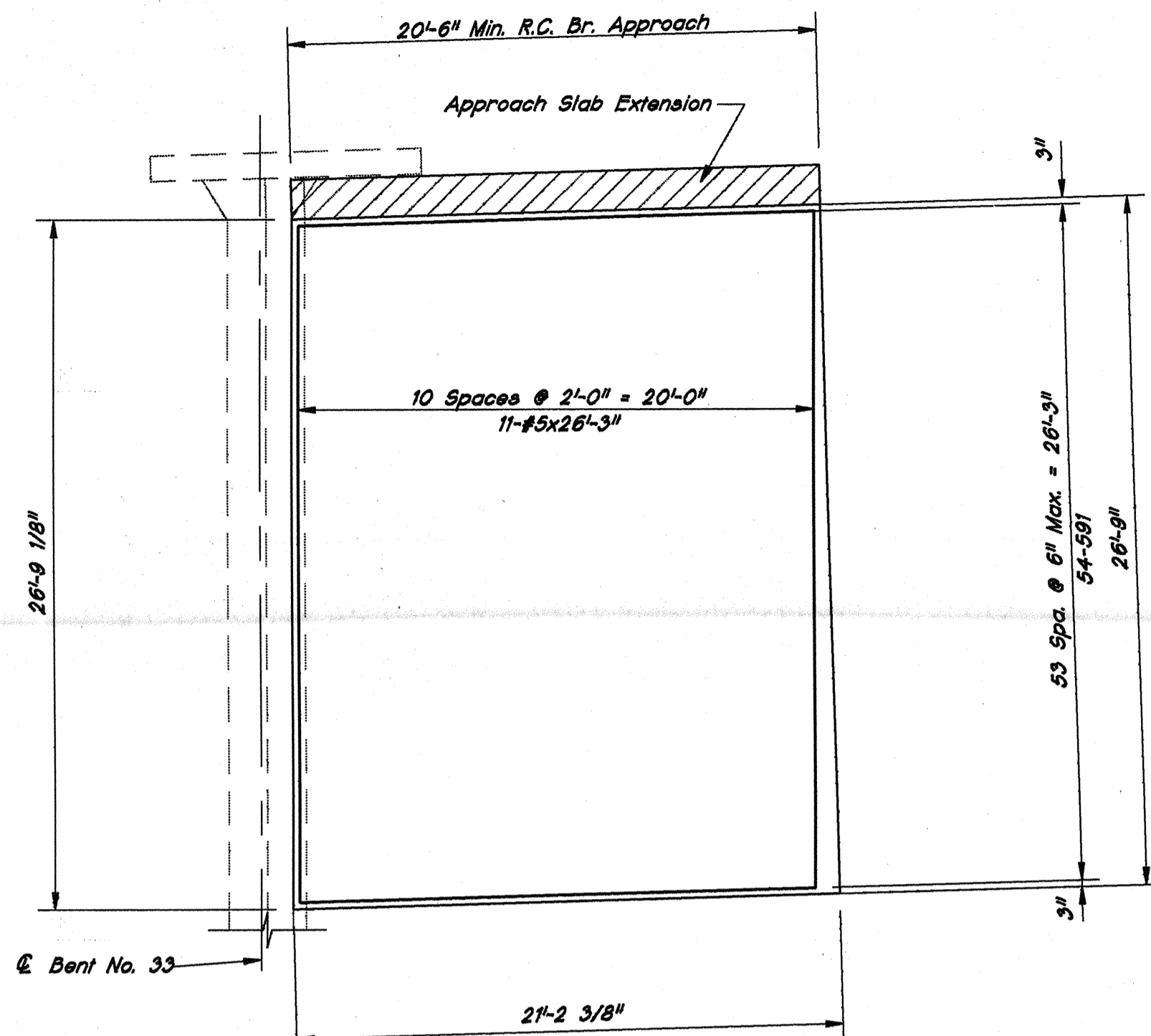


APPROACH DETAILS - NORTHWEST AND SOUTHWEST APPROACHES
INDIANA DEPARTMENT OF TRANSPORTATION

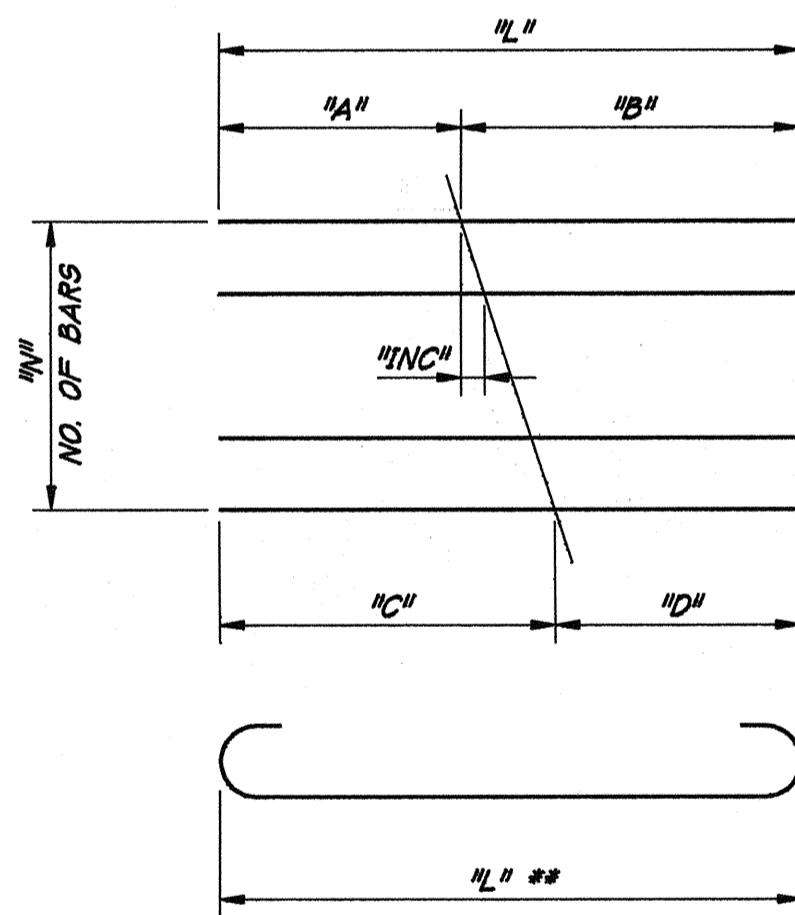
SCALE: AS SHOWN
DATE: SEPTEMBER 2, 1994
SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
DRAWING: D43 OF D45 SHEET: 44 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A



PLAN - NORTHEAST APPROACH
SCALE: 3/16" = 1'-0"



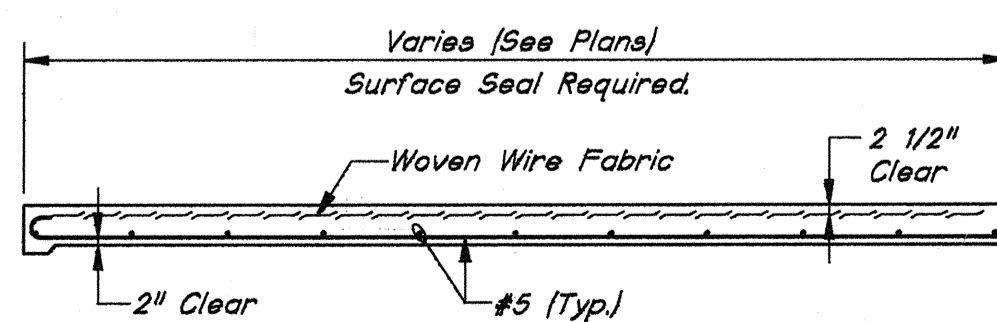
PLAN - RAMP "10E-W-A"
SCALE: 3/16" = 1'-0"



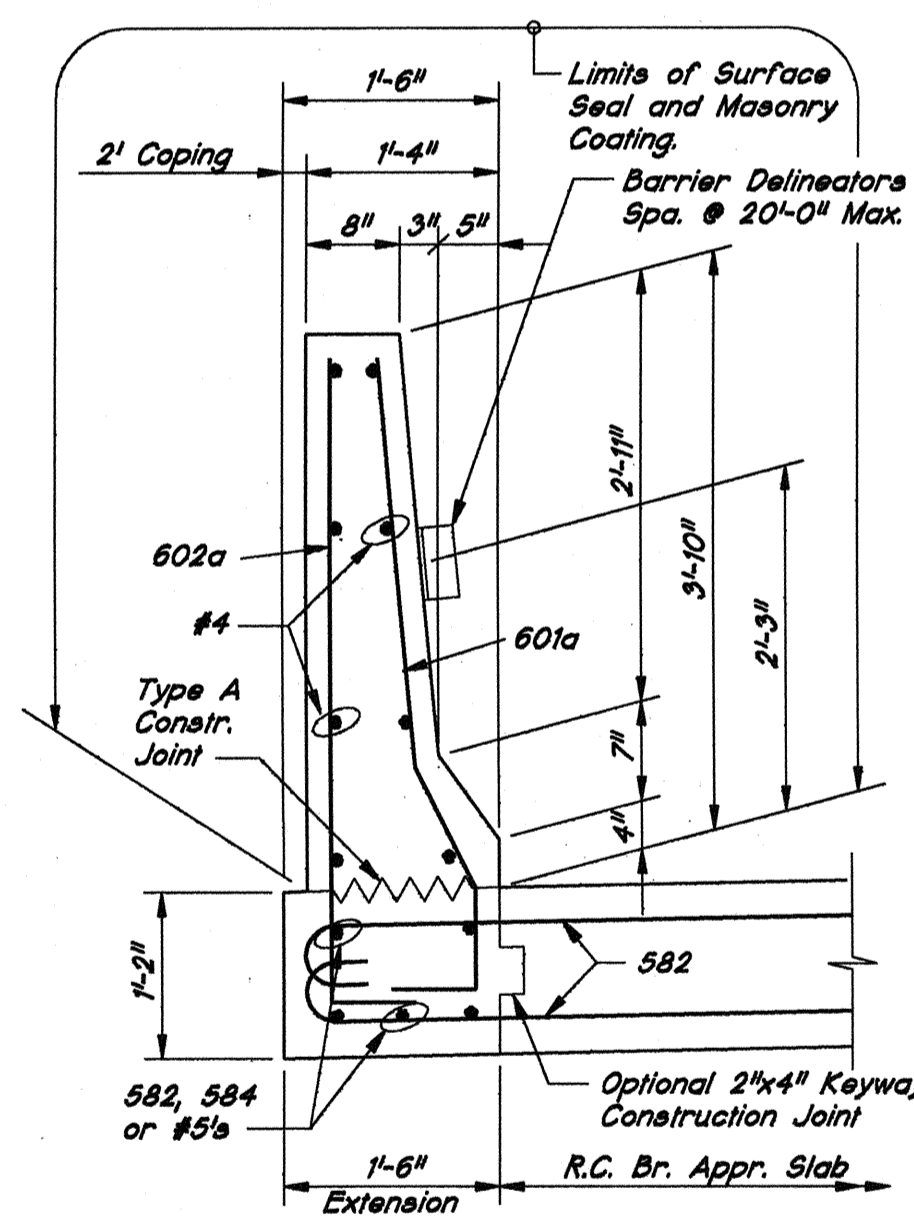
CUTTING DIAGRAM

TABLE							
MARK	"N"	"L"	"A"	"B"	"C"	"D"	"INC"
5c95	54	49'-4"	20'-0"	28'-7"	24'-7 1/2"	24'-8 1/2"	7/8" +

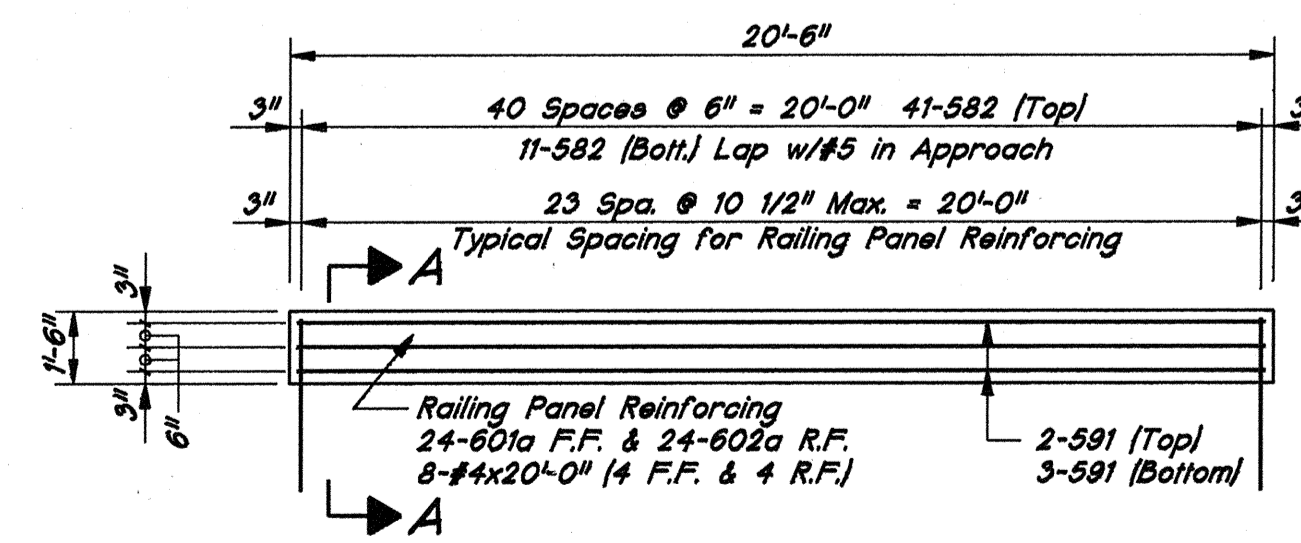
** Includes Length for 2 Hooks.



TYPICAL APPROACH SECTION
SCALE: 1/4" = 1'-0"



SECTION A-A
SCALE: 3/4" = 1'-0"



APPROACH SLAB EXTENSION - 20'-6" LENGTH
SCALE: 1/4" = 1'-0"

BILL OF MATERIALS
NORTHEAST APPROACH

REINFORCING STEEL PLAIN			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
5c95	54	49'-4"	
591	2	20'-7"	
592	1	16'-7"	
5c11	5	52'-9"	
#5	12	30'-0"	
#5	2	28'-9"	
#5	1	27'-3"	
#5	1	26'-6"	
#5	1	13'-6"	
#5	1	12'-9"	
TOTAL #5			3,528
TOTAL REINFORCING PLAIN			3,528
MISCELLANEOUS (QTY.)			
Cement Concrete Pavement, Reinforced, 14 In.			
			150.2 Sys.
Subbase for Cement Conc. Pvm't.			
			29 Cys.
Surface Seal (Estimated)			
			1352 SF.

BILL OF MATERIALS
RAMP-"E-W-A"

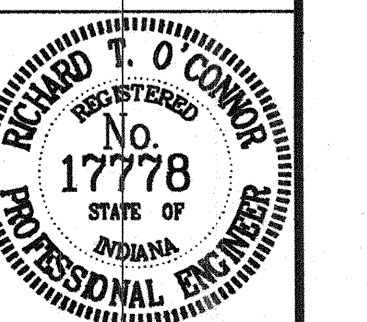
REINFORCING STEEL PLAIN			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
591	54	20'-7"	
#5	11	26'-3"	
TOTAL #5			1,449
TOTAL REINFORCING PLAIN			1,449
REINFORCING STEEL EPOXY COATED			
602a	24	4'-11"	
602b	24	4'-10"	
TOTAL #6			351
582	52	6'-7"	
591	5	20'-7"	
TOTAL #5			464
#4	8	20'-0"	
TOTAL #5			107
TOTAL EPOXY COATED REINF.			922
MISCELLANEOUS (QTY.)			
Cement Concrete Pavement, Reinforced, 14 In.			
			62.0 Sys.
Approach Slab Extension			
			3.4 Sys.
Total Cement Concrete Pavement, Reinforced, 14 In.			
			65.4 Sys.
Subbase for Cement Conc. Pvm't.			
			13 Cys.
Railing, Concrete C			
			21.5 L.F.
Barrier Delineators			
			1 Each
Surface Seal (Estimated)			
			745 SF.
Masonry Coating (Estimated)			
			187 SF.

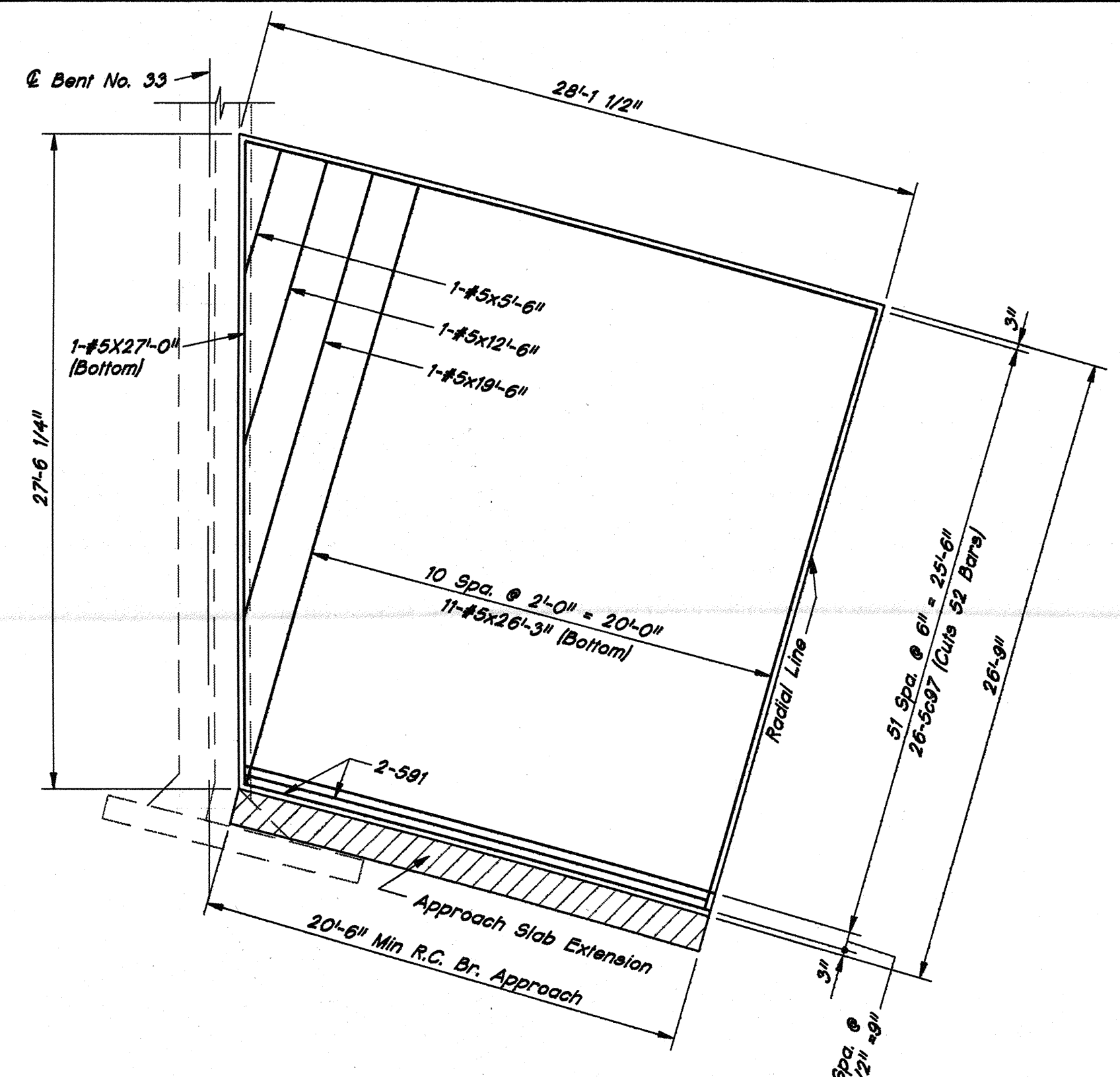
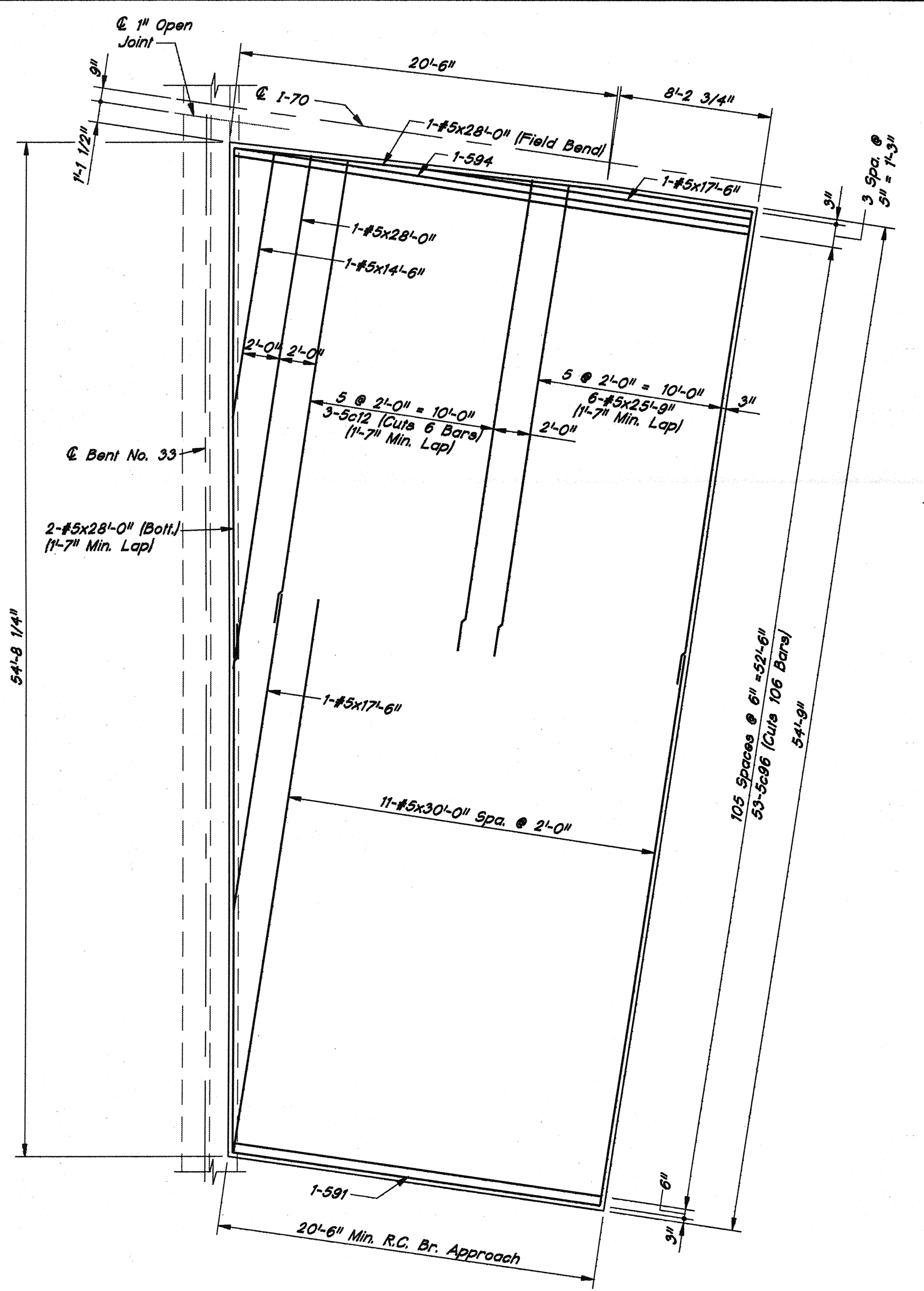
NOTES:

- FOR GENERAL NOTES, SEE DRAWING D2.
- ALL REINFORCING IN THE RAILING SHALL BE EPOXY COATED.
- ALL LAPS ARE MINIMUM LAP LENGTHS.
- FOR REINFORCING BAR NOTES, SEE BRIDGE STANDARD C1.
- FOR OPTIONAL SPLICE IN VERTICAL RAILING REINFORCING AND TYPE A CONSTRUCTION JOINT, SEE BRIDGE STANDARD C3.

APPROACH DETAILS -
RAMP "E-W-A" AND NORTHEAST APPROACHES
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN
SUBMITTED FOR APPROVAL: *Richard J. O'Connor*
DRAWING: D44 OF D45 SHEET: 45 OF 69
PROJECT: IM-70-3(193) 78
BRIDGE CONTRACT NO: R-21476
BRIDGE FILE: I-70-77-2420A & 2386A



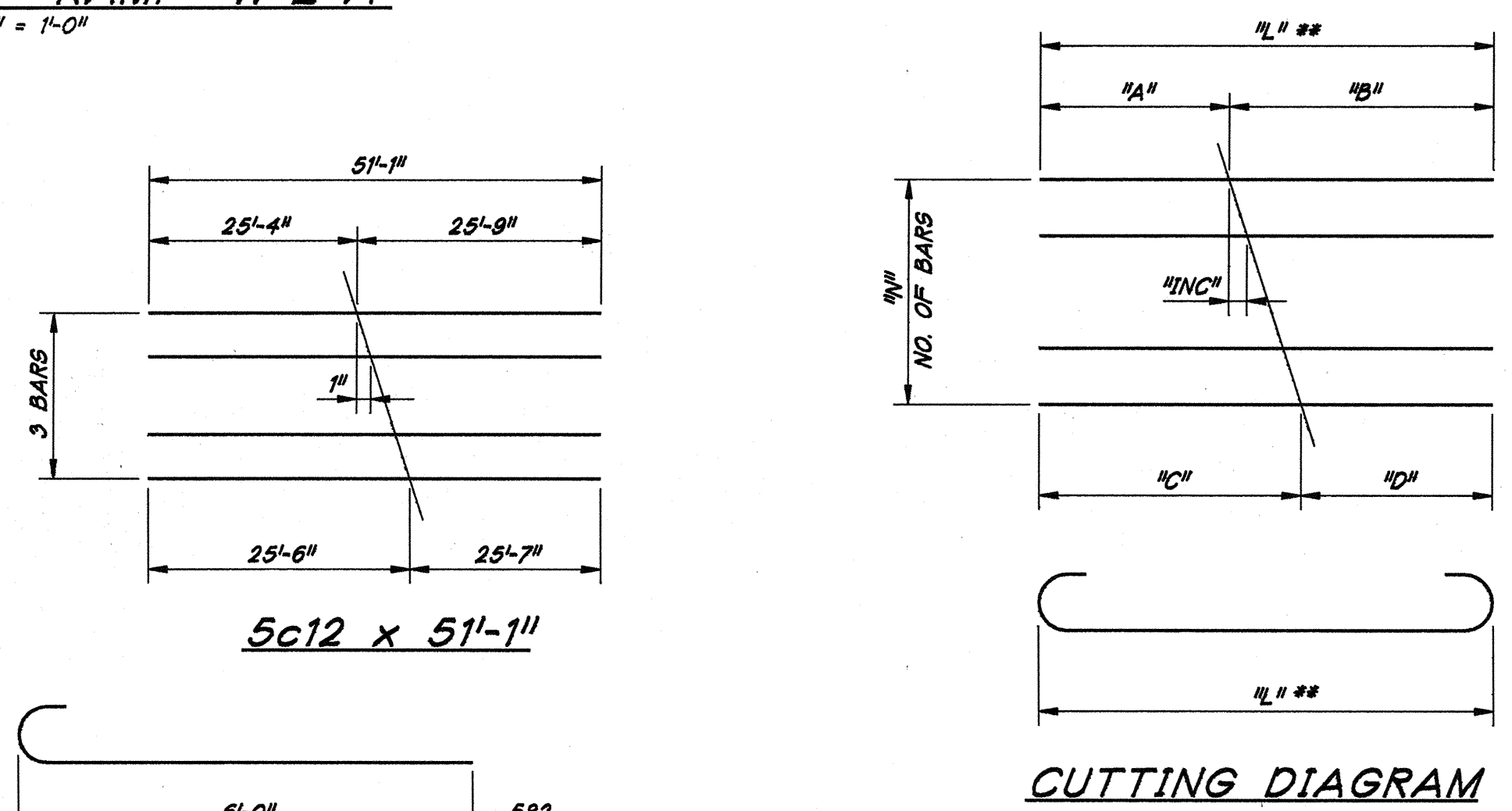


**BILL OF MATERIALS
SOUTHEAST APPROACH**

REINFORCING STEEL PLAIN			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
5c96	53	49'-5"	
591	1	20'-7"	
594	1	28'-9"	
5c12	3	51'-11"	
#5	11	30'-0"	
#5	4	28'-0"	
#5	6	25'-9"	
#5	2	17'-6"	
#5	1	14'-6"	
TOTAL #5			3,617
TOTAL REINFORCING - PLAIN			3,617
MISCELLANEOUS (QTY.)			
Cement Concrete Pavement, Reinforced, 14 In. 149.3 Sys.			
Subbase for Cement Conc. Pvm't. 29 Cys.			
Concrete Median Barrier 30.8 LFI.			
Barrier Delineators 4 Each			
Surface Seal (Estimated) 1612 SFt.			
Masonry Coating (Estimated) 268 SFt.			

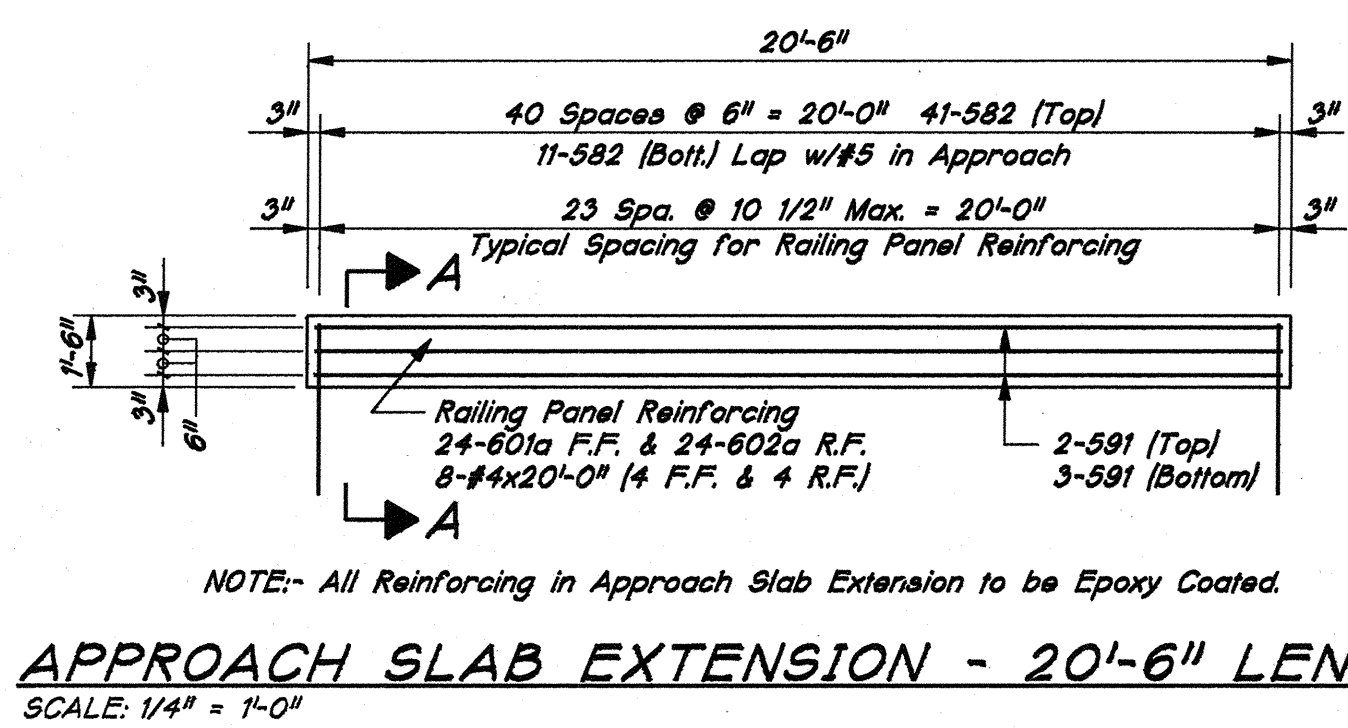
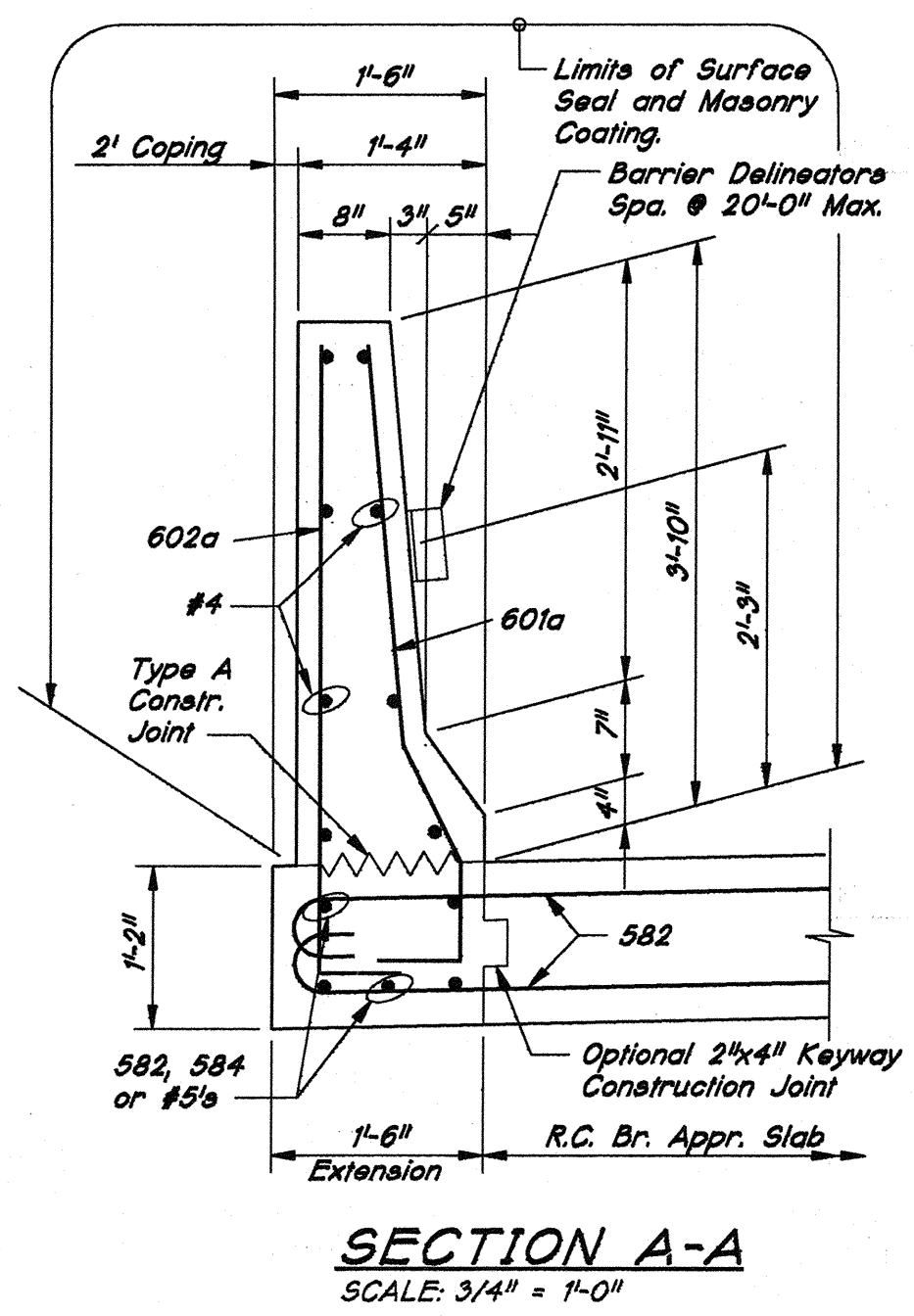
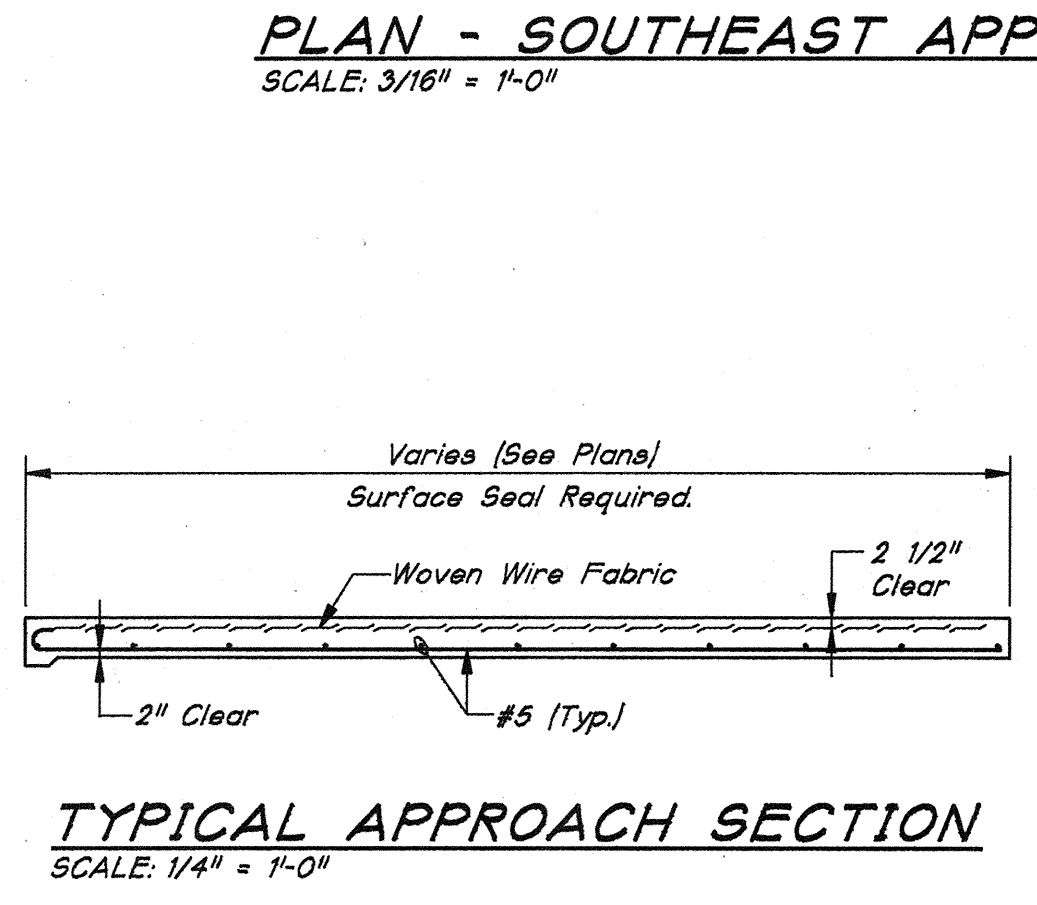
**BILL OF MATERIALS
RAMP-"W-E-A"**

REINFORCING STEEL PLAIN			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
5c97	26	49'-2"	
591	2	20'-7"	
#5	1	27'-0"	
#5	11	26'-3"	
#5	1	19'-6"	
#5	1	12'-6"	
#5	1	5'-6"	
TOTAL #5			1,745
TOTAL REINFORCING PLAIN			1,745
REINFORCING STEEL EPOXY COATED			
601a	24	4'-11"	
602a	24	4'-10"	
TOTAL #6			351
582	52	6'-7"	
591	5	20'-7"	
TOTAL #5			464
#4	8	20'-0"	
TOTAL #4			107
TOTAL EPOXY COATED REINF.			922
MISCELLANEOUS (QTY.)			
Cement Concrete Pavement, Reinforced, 14 In. 72.2 Sys.			
Approach 1-Approach Slab Extension 3.4 Sys.			
Total Cement Concrete Pavement, Reinforced, 14 In. 75.6 Sys.			
Subbase for Cement Conc. Pvm't. 15 Cys.			
Railing, Concrete C 21.5 LFI.			
Barrier Delineators 1 Each			
Surface Seal (Estimated) 837 SFt.			
Masonry Coating (Estimated) 187 SFt.			



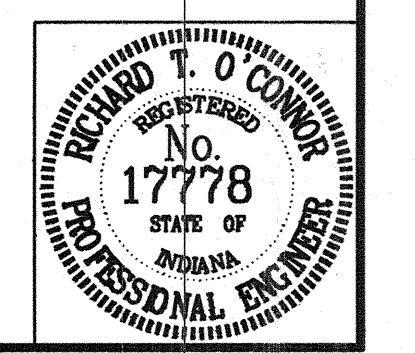
** Includes lengths for 2 Hooks.

TABLE							
MARK	1/4"	1/2" **	3/4"	1"	1 1/4"	1 1/2"	1 3/8"
5c96	53	49'-5"	20'-8"	28'-9"	24'-8"	24'-9"	7/8" *
5c97	26	49'-2"	21'-1"	28'-1"	24'-6"	24'-8"	1 5/8" *



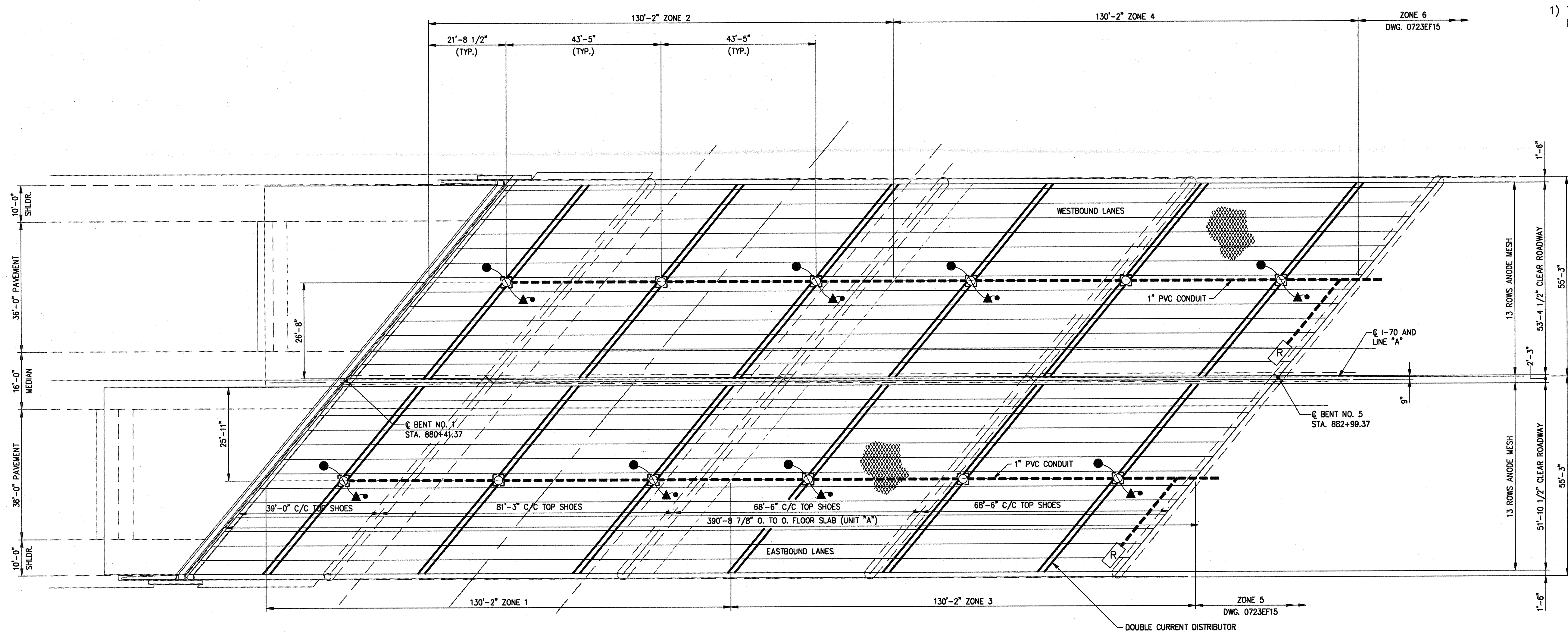
**APPROACH DETAILS -
SOUTHEAST AND RAMP "W-E-A" APPROACHES
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: AS SHOWN DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: *Robert J. O'Connor*
 DRAWING: D45 OF D45 SHEET: 46 OF 89
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A



JAN-70-3392\045.DWG
 Scale: 1" = 1.0000
 Time: 09/31/94 at 16:42 RQAW

DRAWN	Kay0	CHK.	SCJ
DESIGNED		CHK.	
TRACED	Kay0	CHK.	SCJ



1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.

PLAN VIEW - UNIT "A"
 I-70-77-2420A & I-70-77-2386A
 SCALE: 1/16"=1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
•	REFERENCE CELL GROUND	(RCG)
⊠	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
----	CONDUIT RUN	
[R]	RECTIFIER/REMOTE MONITOR	

CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

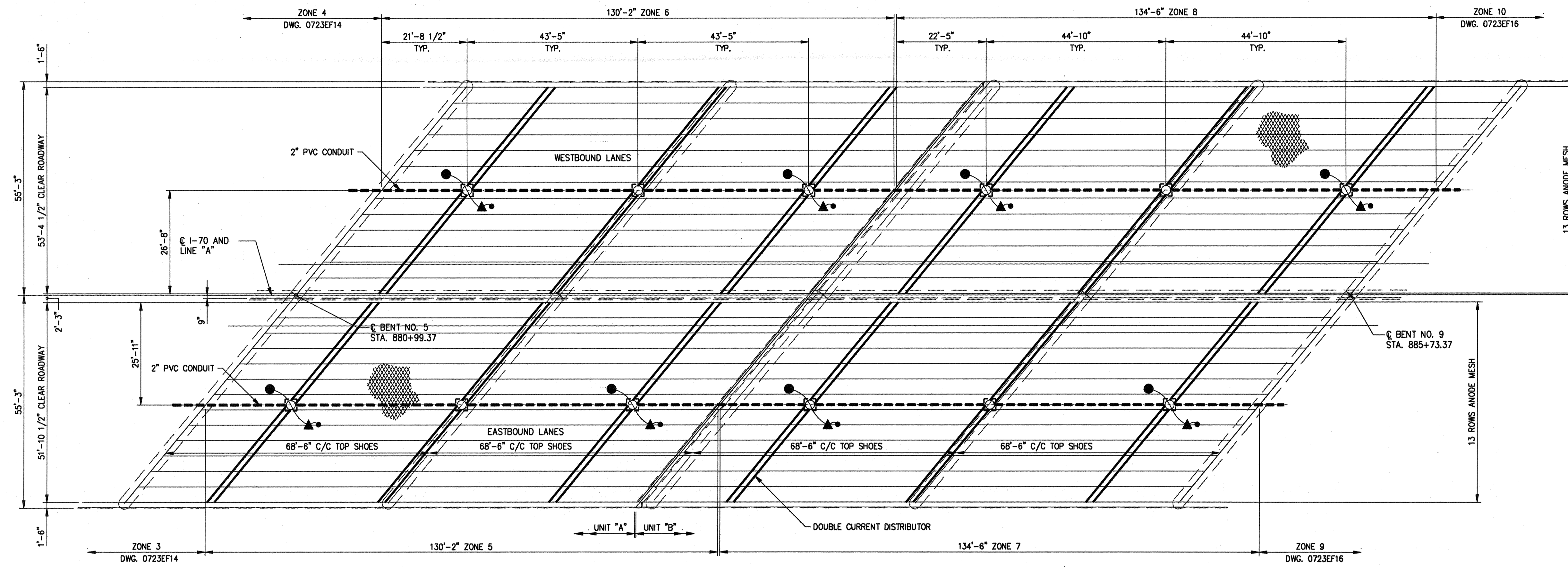
SCALE: 1/16"=1'-0" DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 47 OF 69
 PROJECT: IM-70-3(193)78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

J:\I-70\PROJECT\0723EF14.DWG
 Scale: 1 = 192.0000
 Time: 08/16/94 at 11:41 RQAW

DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:

1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.



PLAN VIEW - UNITS "A" & "B"

I-70-77-2420A & I-70-77-2386A
SCALE: 1/16"=1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
•	REFERENCE CELL GROUND	(RCG)
⊠	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
----	CONDUIT RUN	
⊠ R	RECTIFIER/REMOTE MONITOR	

**CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: 1/16"=1'-0" DATE SEPTEMBER 2, 1994

SUBMITTED FOR APPROVAL: _____

DRAWING: OF SHEET: 48 OF 69

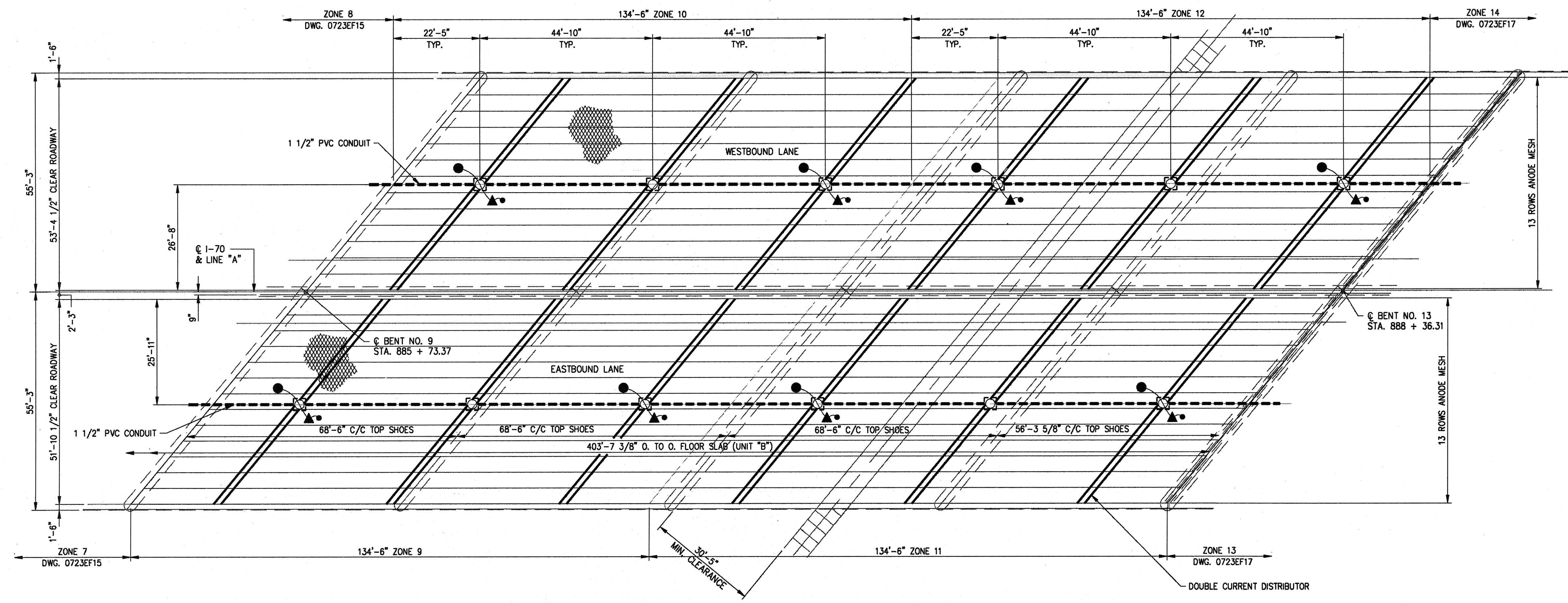
PROJECT: IM-70-3(193)78
BRIDGE CONTRACT NO: **R-21476**
BRIDGE FILE: I-70-77-2420A & 2386A

J:\I-70\PROJECT\0723EF15.DWG
 Scale: 08/16/94 at 11:54 RQAW

DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:

1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.



PLAN VIEW - UNIT "B"
 I-70-77-2420A & I-70-77-2386A
 SCALE: 1/16"=1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
•	REFERENCE CELL GROUND	(RCG)
⊠	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
----	CONDUIT RUN	
⊠	RECTIFIER/REMOTE MONITOR	

CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

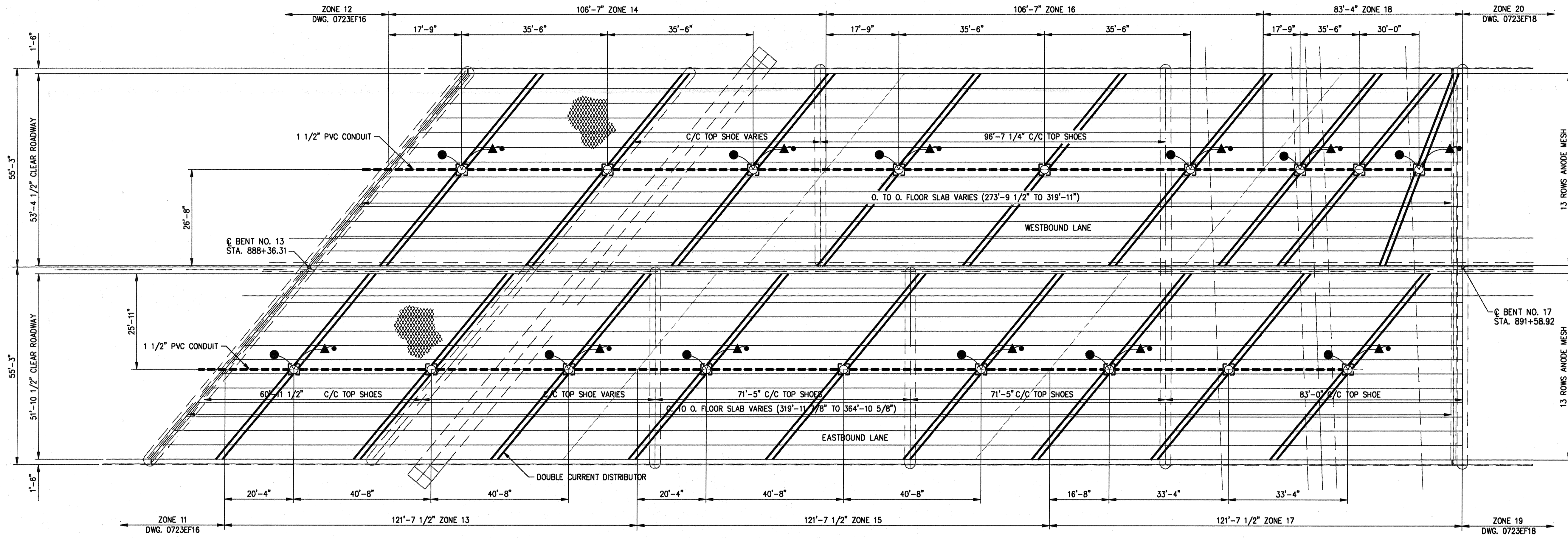
SCALE: 1/16"=1'-0" DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 49 OF 69
 PROJECT: IM-70-3(193)78
 BRIDGE CONTRACT NO: *R-21476*
 BRIDGE FILE: I-70-77-2420A & 2386A

I:\1-70\PROTECT\0723EF16.DWG
 Scale: 1/16"=1'-0"
 Date: 08/16/94 at 11:55 RQAW

DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:

1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.



PLAN VIEW - UNIT "C"
 I-70-77-2420A & I-70-77-2386A
 SCALE: 1/16"=1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
•	REFERENCE CELL GROUND	(RCG)
□	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
----	CONDUIT RUN	
□ R	RECTIFIER/REMOTE MONITOR	

CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: 1/16"=1'-0" DATE: SEPTEMBER 2, 1994

SUBMITTED FOR APPROVAL: _____

DRAWING: OF SHEET: 50 OF 69

PROJECT: IM-70-3(193)78

BRIDGE CONTRACT NO: *R-21476*

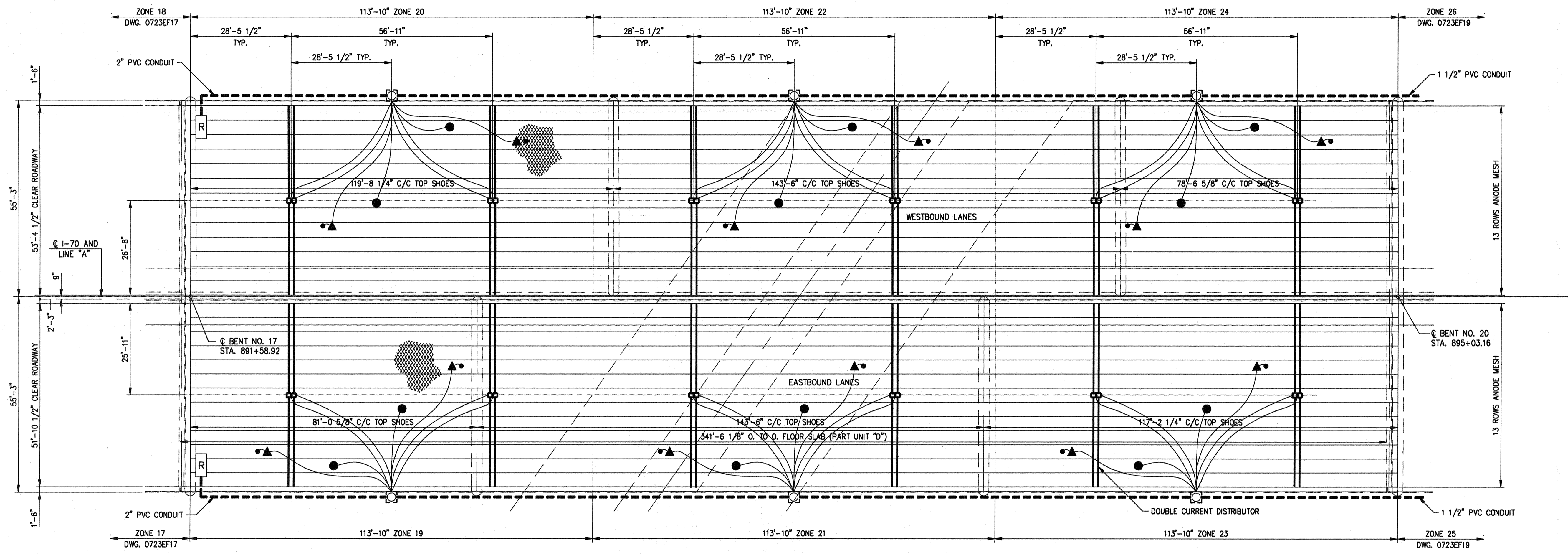
BRIDGE FILE: I-70-77-2420A & 2386A

DRAWN: RLM CHK: _____
 DESIGNED: CHK: _____
 TRACED: CHK: _____

Time: 08/16/94 at 11:57 RQAW

RQAW FILE:

1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.



PLAN VIEW - UNIT "D"
 I-70-77-2420A & I-70-77-2386A
 SCALE: 1/16" = 1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
•	REFERENCE CELL GROUND	(RCG)
⊠	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
—○—	ANODE LEAD CONNECTION	
----	CONDUIT RUN	
⊠ R	RECTIFIER/REMOTE MONITOR	

CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

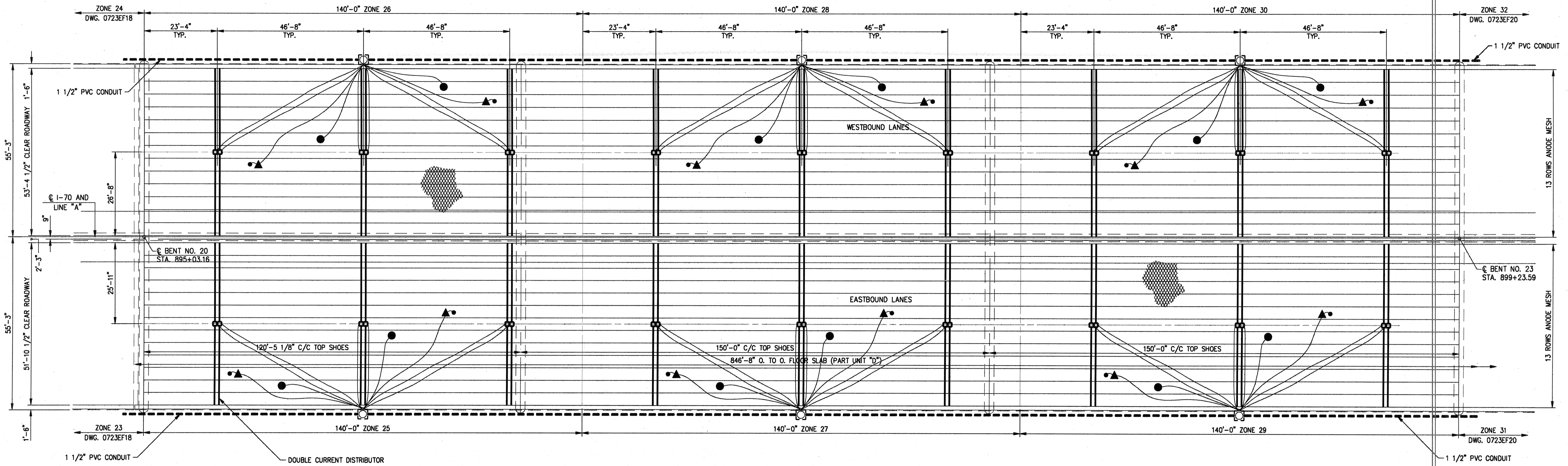
SCALE: 1/16" = 1'-0" DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 51 OF 69
 PROJECT: IM-70-3(193)78
 BRIDGE CONTRACT NO: **R-21476**
 BRIDGE FILE: I-70-77-2420A & 2386A

I-70-77-PROTECT\0723EF18.DWG
 Scale: 08/16/94 at 11:59 RQAW

DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:

1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.



PLAN VIEW - PART UNIT "E"
 I-70-77-2420A & I-70-77-2386A
 SCALE: 1/16"=1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
•	REFERENCE CELL GROUND	(RCG)
⊠	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
—○—	ANODE LEAD CONNECTION	
----	CONDUIT RUN	
⊠	RECTIFIER/REMOTE MONITOR	

CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

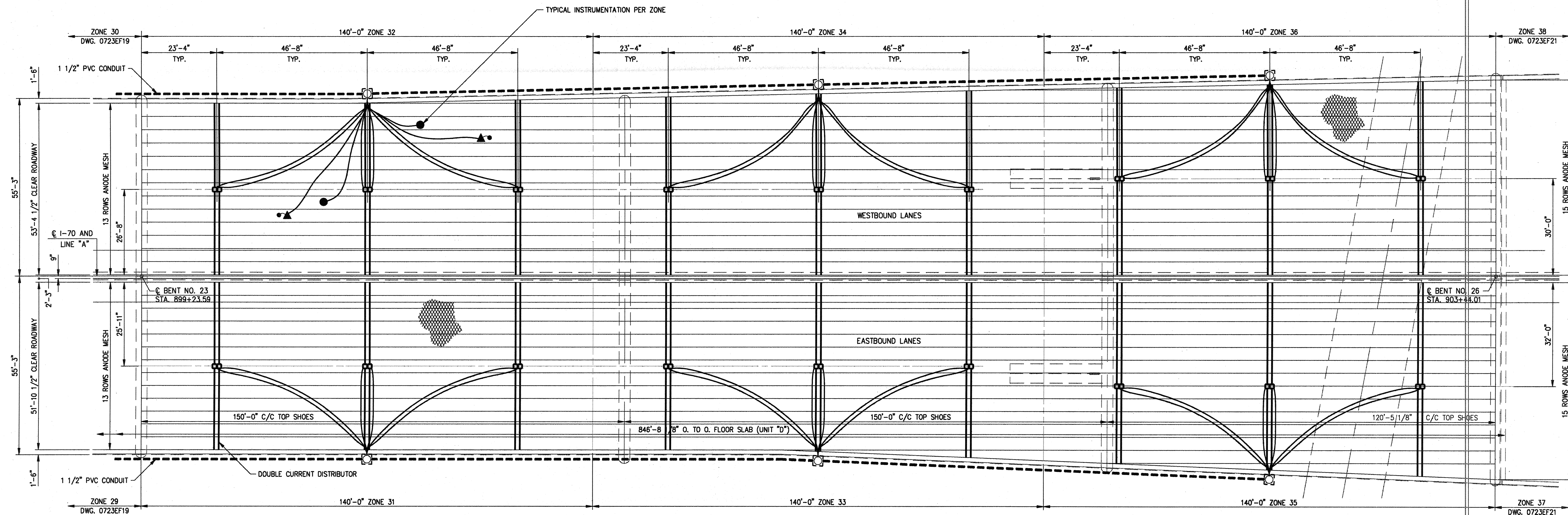
SCALE: 1/16"=1'-0" DATE SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 52 OF 69
 PROJECT: IM-70-3(193)78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

I:\1-70\PROJECT\0723EF19.DWG
 Scale: 08/15/94 at 12:01 RQAW

DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:

1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.



PLAN VIEW - PART UNIT "E"

I-70-77-2420A & I-70-77-2386A

SCALE: 1/16"=1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
•	REFERENCE CELL GROUND	(RCG)
⊠	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
— —	ANODE LEAD CONNECTION	
- - - -	CONDUIT RUN	
⊠ R	RECTIFIER/REMOTE MONITOR	

**CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: 1/16"=1'-0" DATE SEPTEMBER 2, 1994

SUBMITTED FOR APPROVAL: _____

DRAWING: OF SHEET: 53 OF 69

PROJECT: IM-70-3(193)78

BRIDGE CONTRACT NO: R-21476

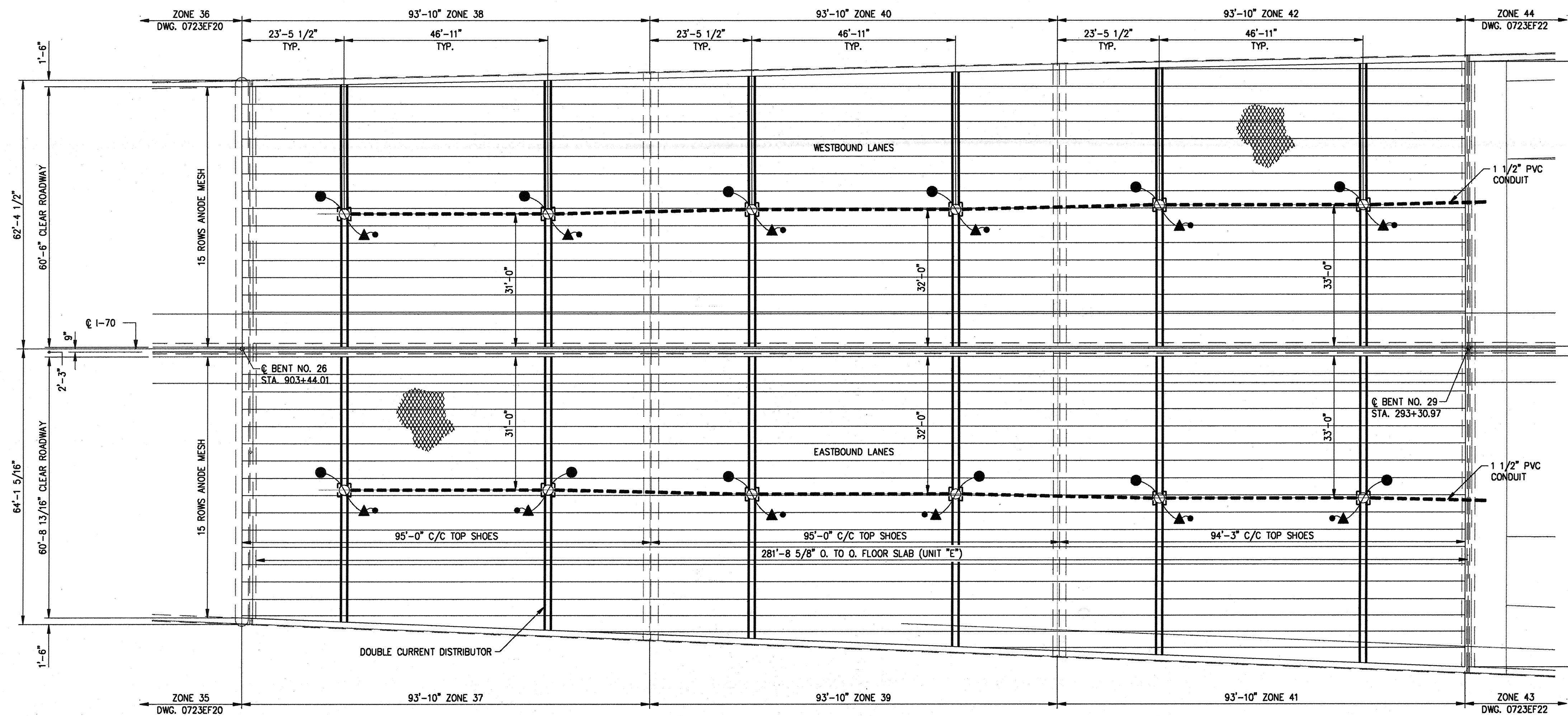
BRIDGE FILE: I-70-77-2420A & 2386A

I-70 PROJECT\0723EF20.DWG
 Scale: 08/09/94 at 10:31 RQAW

DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:

1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.



PLAN VIEW - UNIT "F"
 I-70-77-2420A & I-70-77-2386A
 SCALE: 1/16"=1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
•	REFERENCE CELL GROUND	(RCG)
⊠	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
-----	CONDUIT RUN	
⌚	RECTIFIER/REMOTE MONITOR	

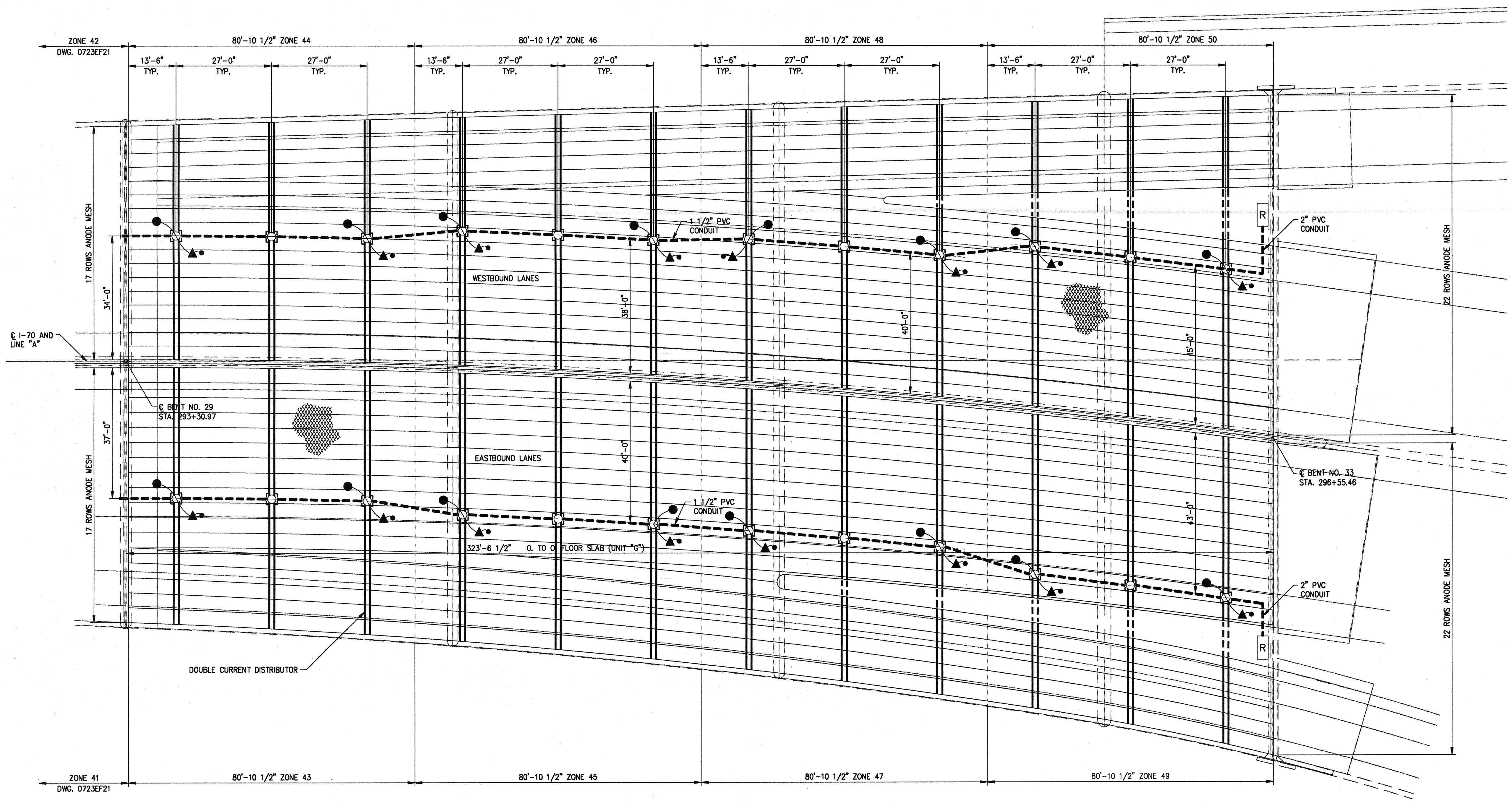
CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: 1/16"=1'-0" DATE SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 54 OF 69
 PROJECT: IM-80-3(193)78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

J:\I-70\PROJECT\0723EF21.DWG
 Scale: 1/16"=1'-0"
 Date: 08/16/94 at 12:06 RQAW

DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:



1) TRIM MESH TWO INCHES FROM EXPANSION JOINTS.

PLAN VIEW - UNIT "G"
 I-70-77-2420A & I-70-77-2386A
 SCALE: 1/16"=1'-0"

SYMBOL LEGEND

●	SYSTEM NEGATIVE	(SN)
▲	REFERENCE CELL	(RC)
●	REFERENCE CELL GROUND	(RCG)
⊠	JUNCTION BOX & ACCESS HOLE	(JB)
====	DOUBLE CURRENT DISTRIBUTOR	
----	CONDUIT RUN	
[R]	RECTIFIER/REMOTE MONITOR	

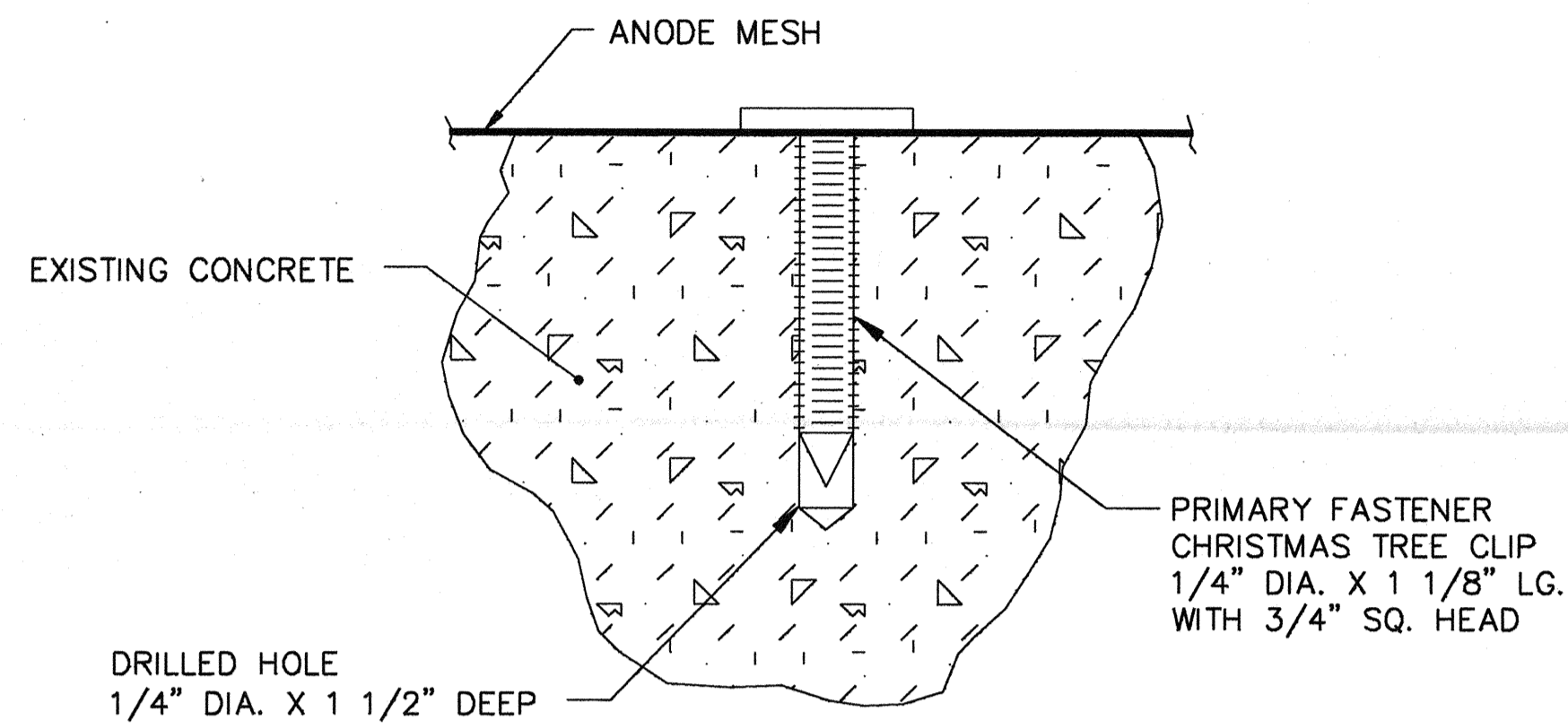
CATHODIC PROTECTION PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: 1/16"=1'-0" DATE: SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 55 OF 69
 PROJECT: IM-70-3(193)78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

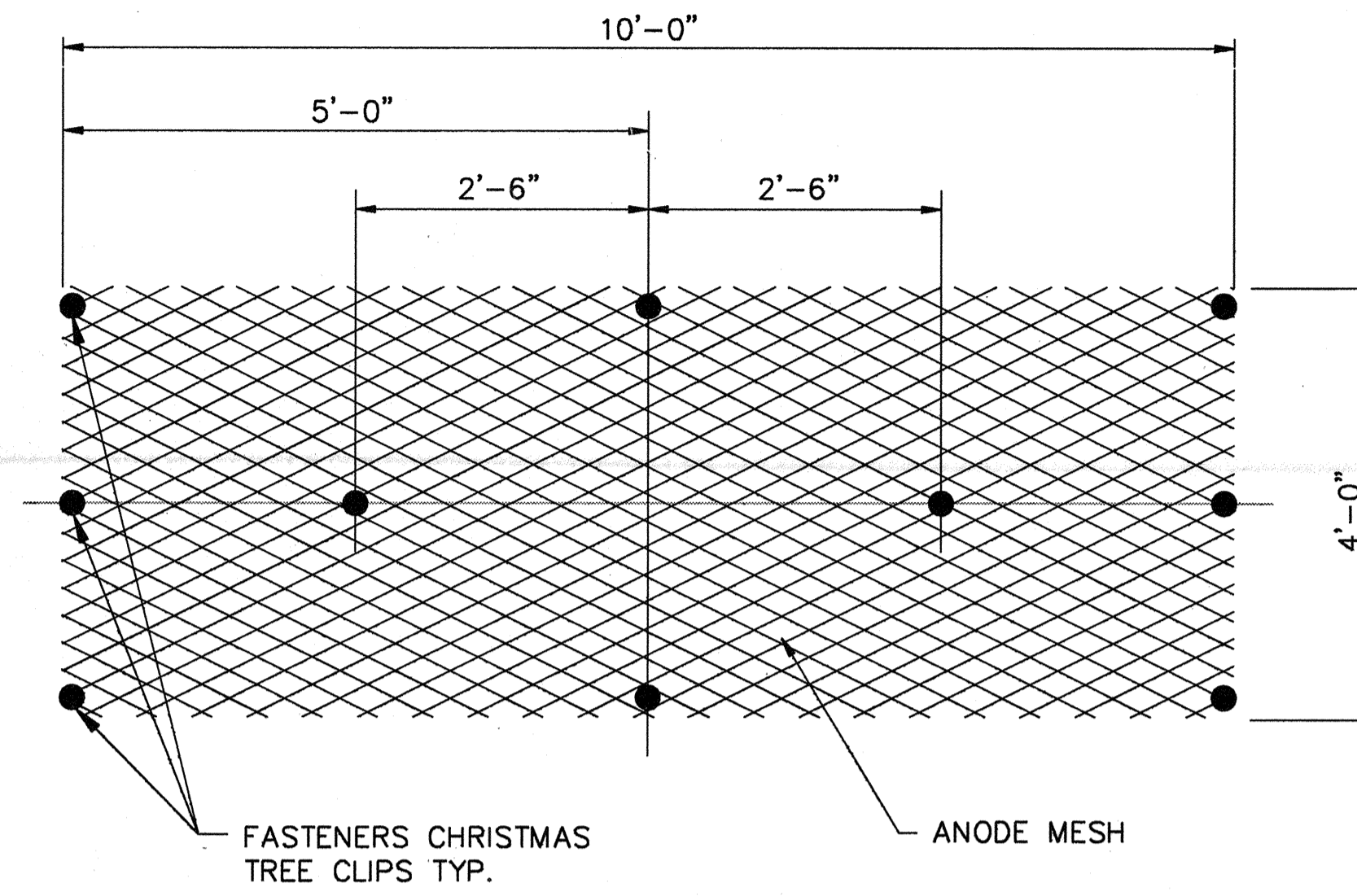
J:\I-70\PROJECT\0723EF22.DWG
 Scale: 1" = 192.0000
 Time: 08/16/94 at 12:08 RQAW

DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:

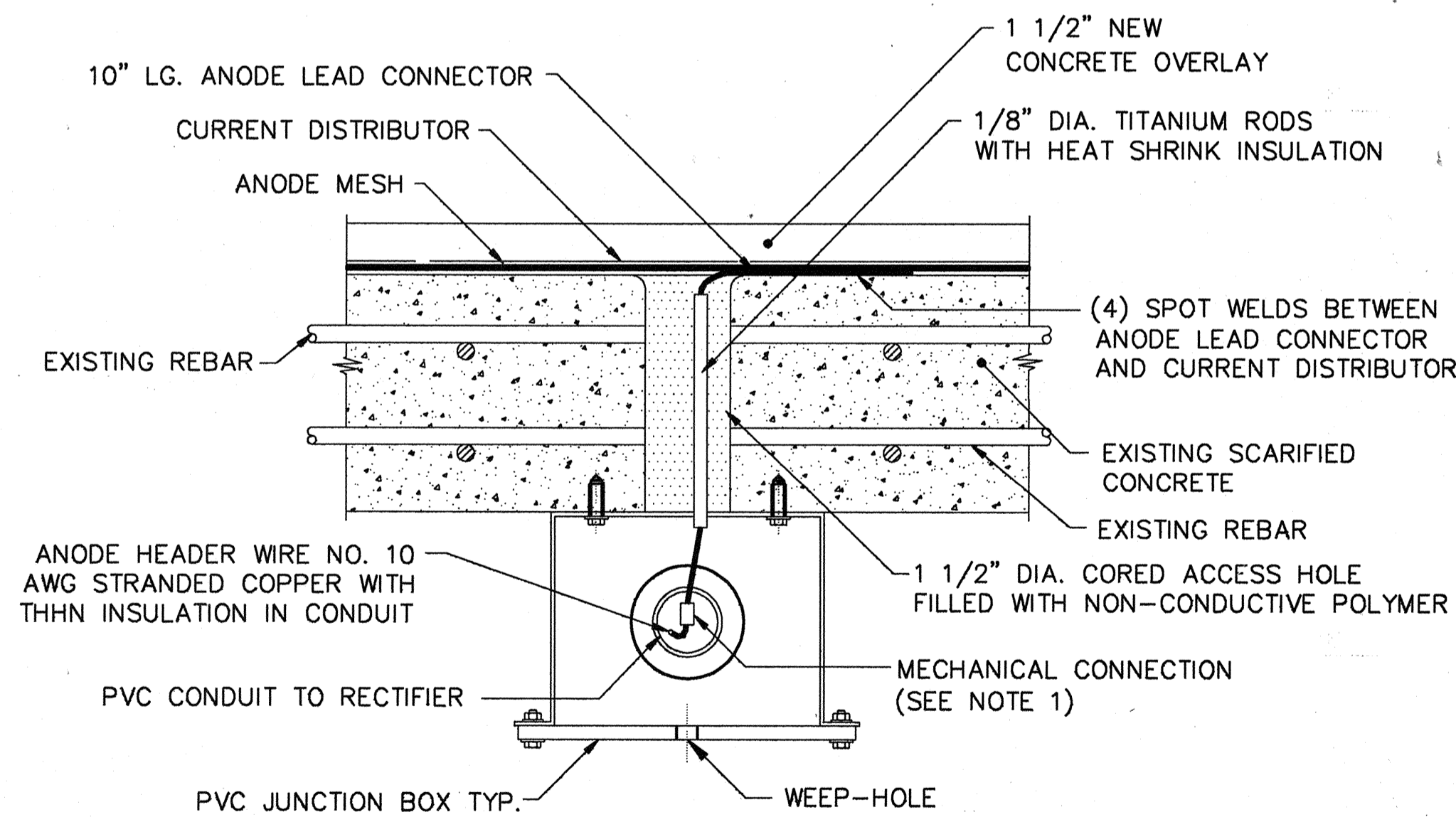


ANODE FASTENER DETAIL
CHRISTMAS TREE CLIP
 (N.T.S.)

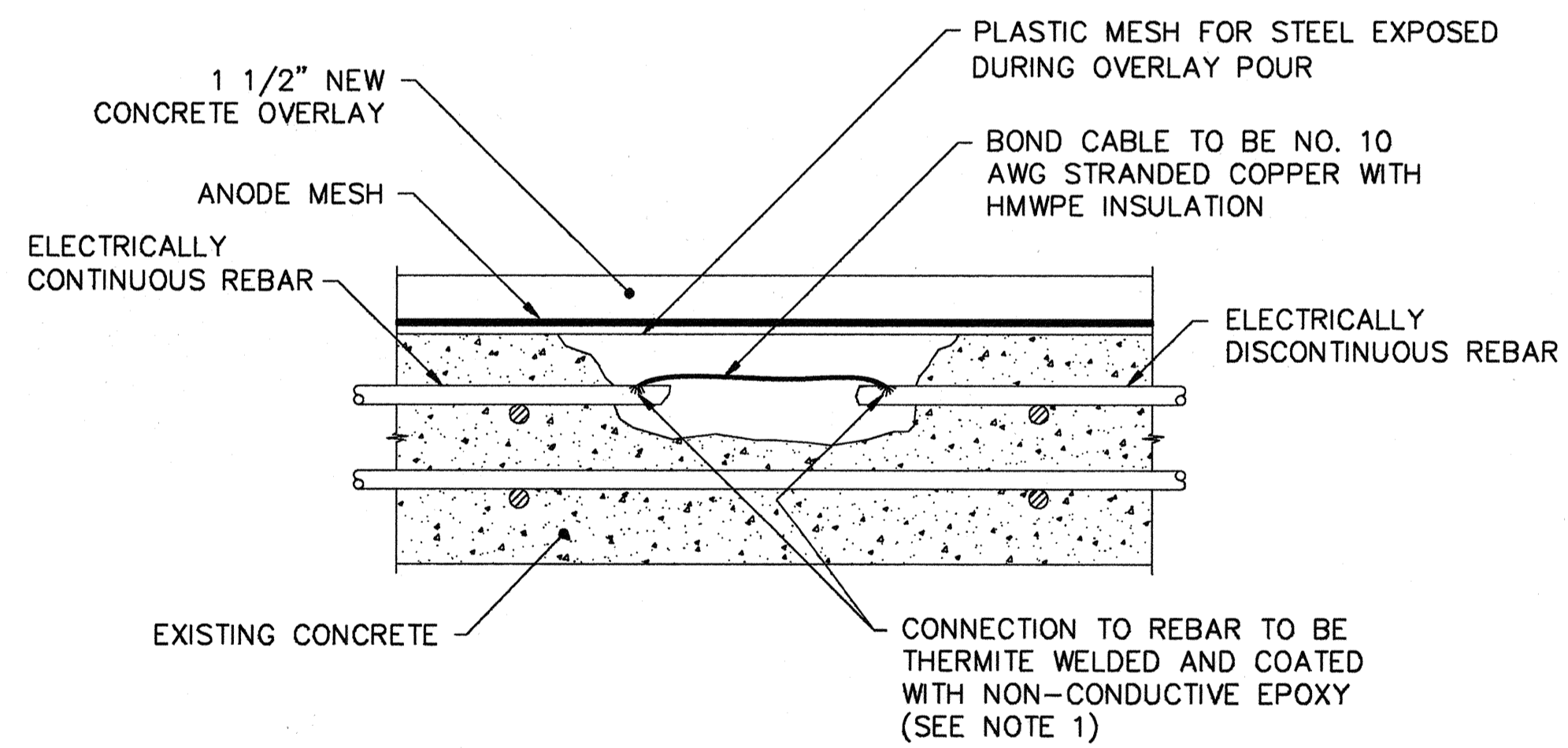


ANODE FASTENER LAYOUT
 (ONE FASTENER PER FIVE SQ. FT. OF MESH)

1) UNLESS OTHERWISE NOTED, SPLICES MADE IN JUNCTION BOXES BENEATH DECK SHALL BE MECHANICALLY CONNECTED (CRIMP CONNECTION) AND INSULATED IN A HEAT-SHRINKABLE MATERIAL SUCH AS ALPHA'S SERIES FIT-700 OR 3M SCOTCH E-Z SEAL



ANODE LEAD ROD CONNECTOR DETAIL
 (N.T.S.)



CONTINUITY BOND DETAIL
 (N.T.S.)

ALTERNATE: RESISTANCE SPOT WELDING OF 1/16\"/>

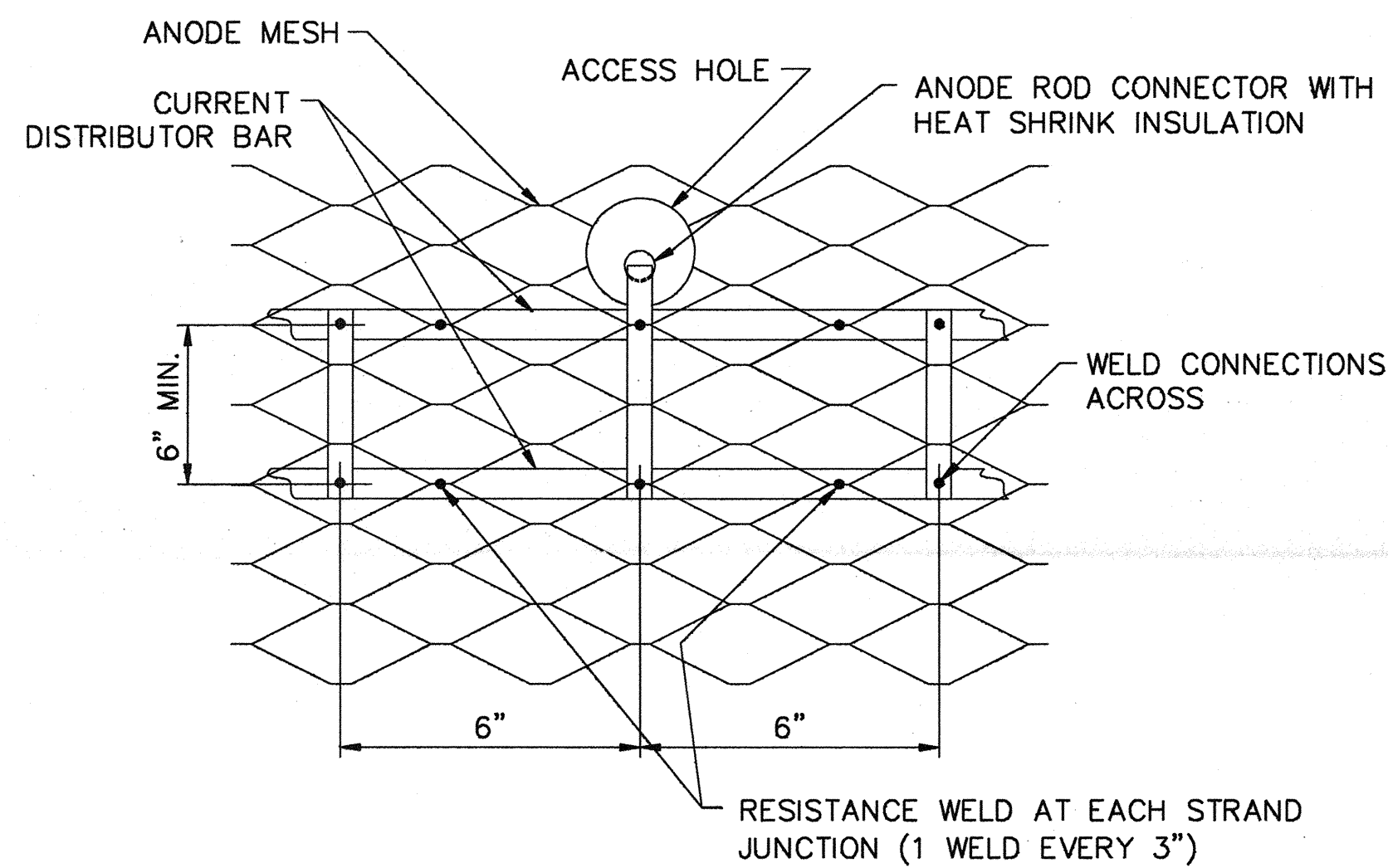
CATHODIC PROTECTION DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: NONE DATE SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 56 OF 69
 PROJECT: IM-70-3(193)78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

J:\I-70\PROTECT\0723EF23.DWG
 Scale: 1/8\"/>

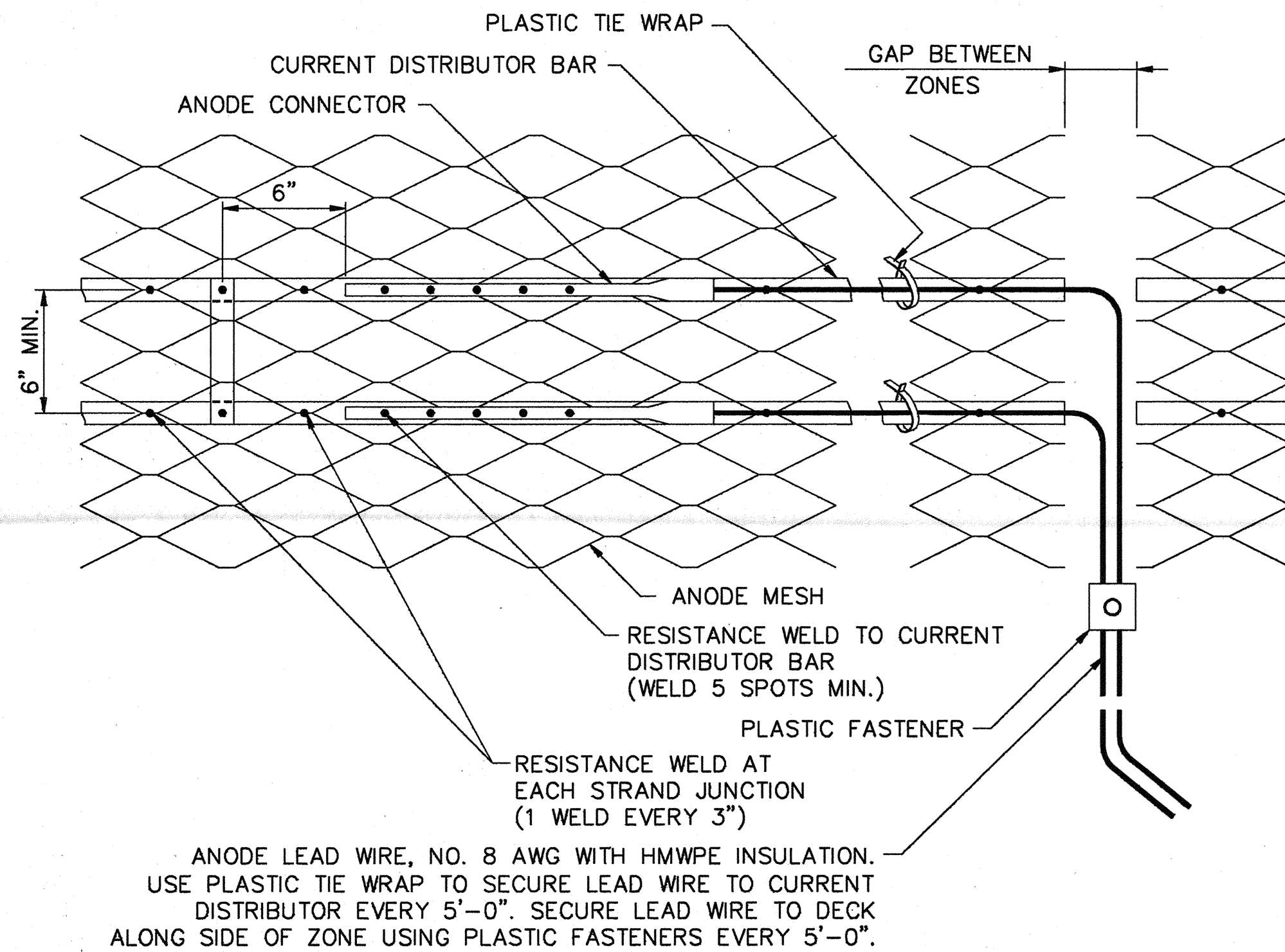
DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____

RQAW FILE:



**DOUBLE CURRENT
DISTRIBUTOR WELDING DETAIL**

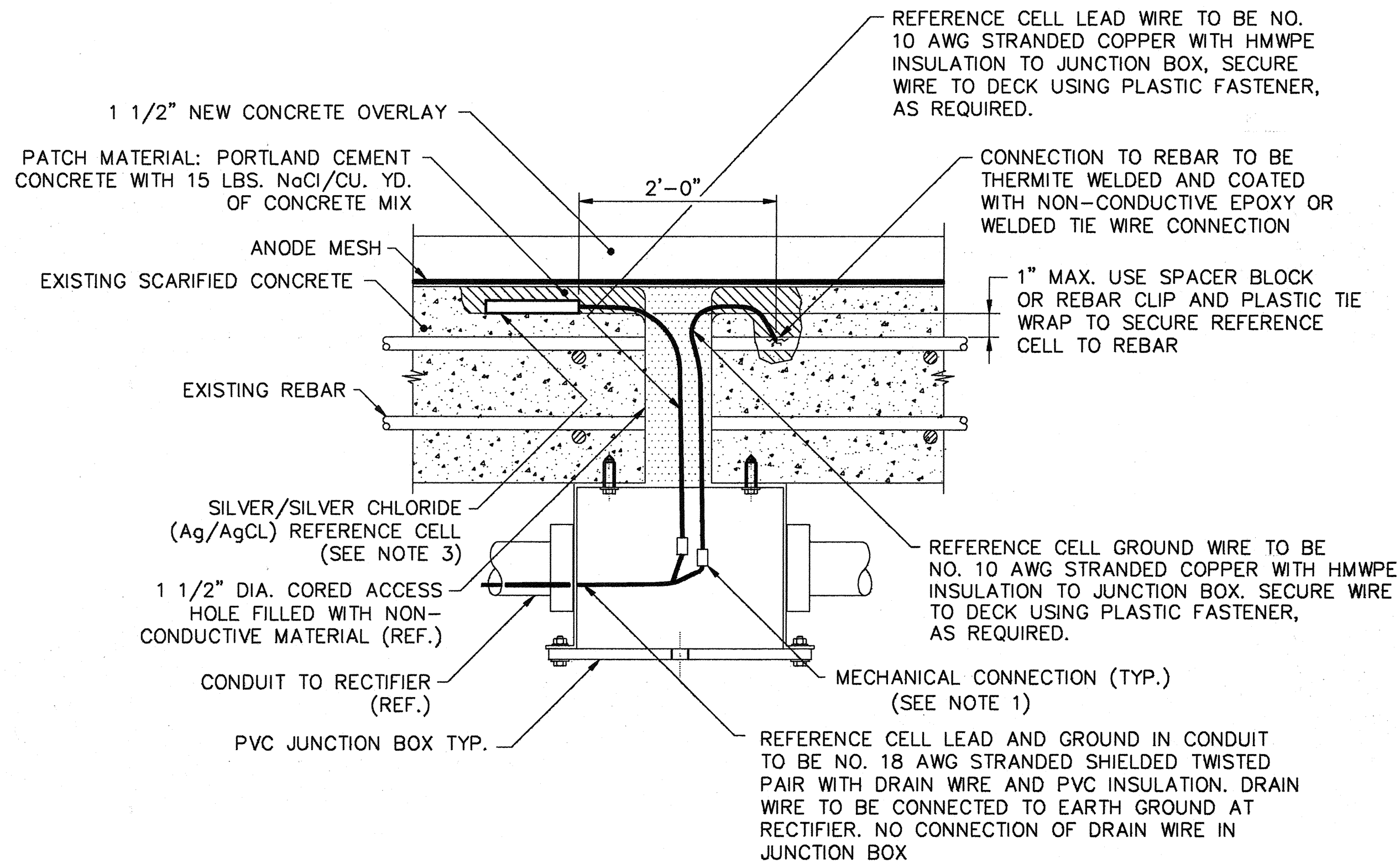
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ANODE CONNECTOR WELDING DETAIL

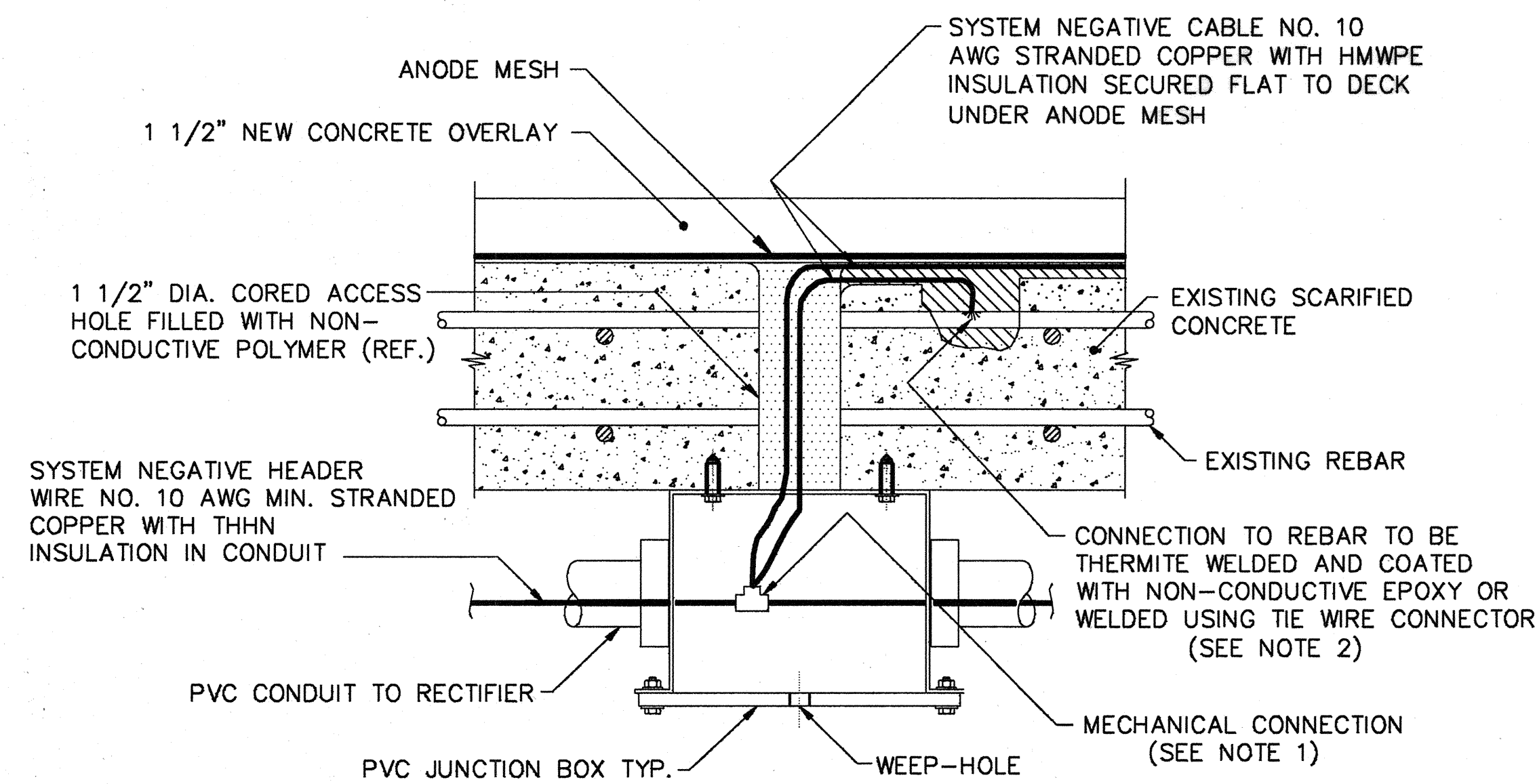
(BRIDGE 2420A & 2386A AS REQUIRED)
(N.T.S.)

- 1) UNLESS OTHERWISE NOTED, SPLICES MADE IN JUNCTION BOXES BENEATH DECK SHALL BE MECHANICALLY CONNECTED (CRIMP CONNECTION) AND INSULATED IN A HEAT-SHRINKABLE MATERIAL SUCH AS ALPHA'S SERIES FIT-700 OR 3M SCOTCH E-Z SEAL
- 2) AFTER THERMITE WELDED CONNECTION IS MADE GENTLY TAP AND REMOVE SLAG FROM WELD.
- 3) INSTALL REFERENCE CELL AT A MAXIMUM OF 1" BUT NOT TOUCHING REINFORCING STEEL AT LOCATIONS INDICATED.



REFERENCE CELL DETAIL

(N.T.S.)



SYSTEM NEGATIVE CONNECTION DETAIL

(N.T.S.)

**CATHODIC PROTECTION DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: NONE DATE SEPTEMBER 2, 1994

SUBMITTED FOR APPROVAL:

DRAWING: OF SHEET: 57 OF 69

PROJECT: IM-70-3(193) 78

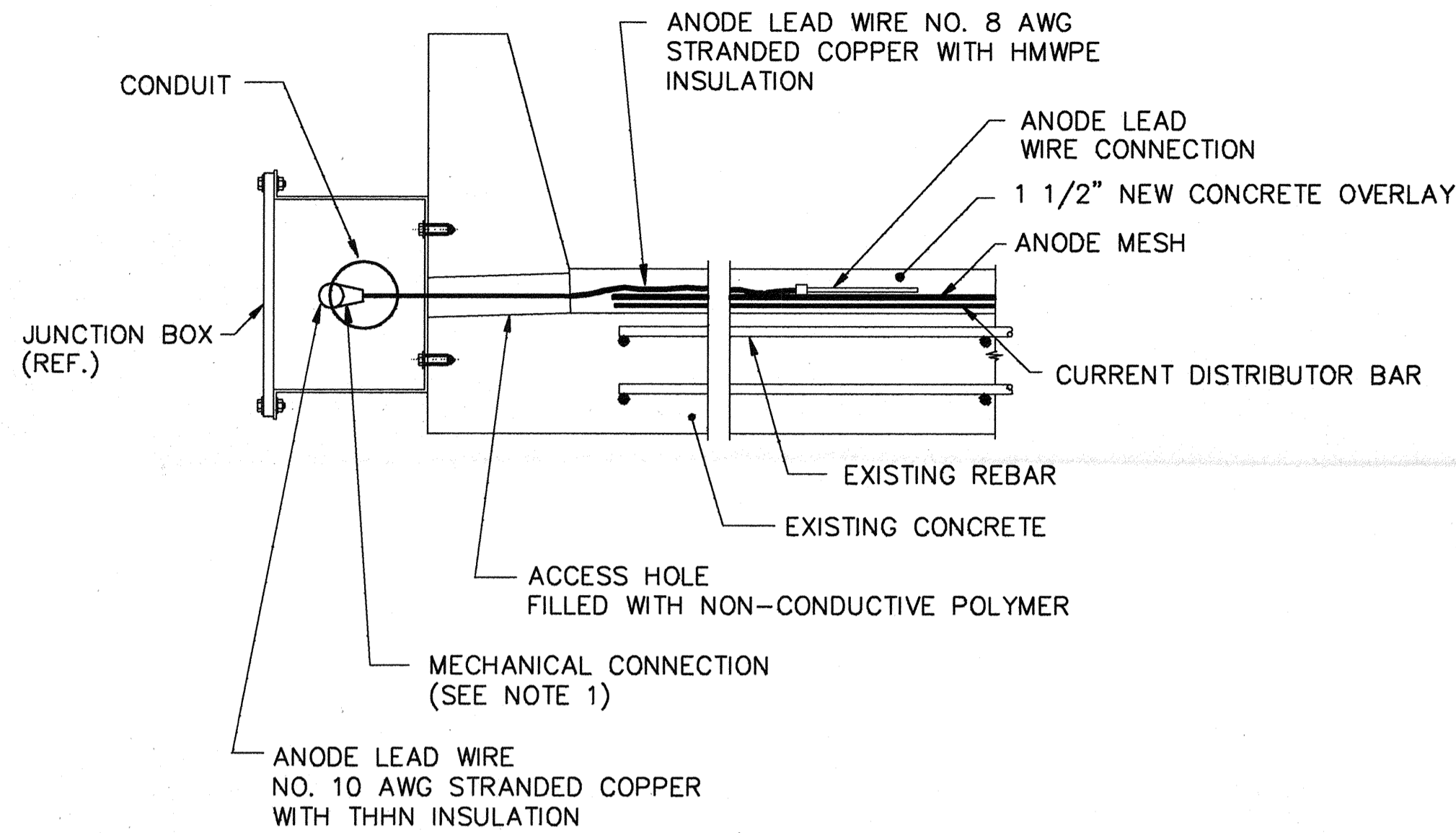
BRIDGE CONTRACT NO: R-21476

BRIDGE FILE: I-70-77-2420A & 2386A

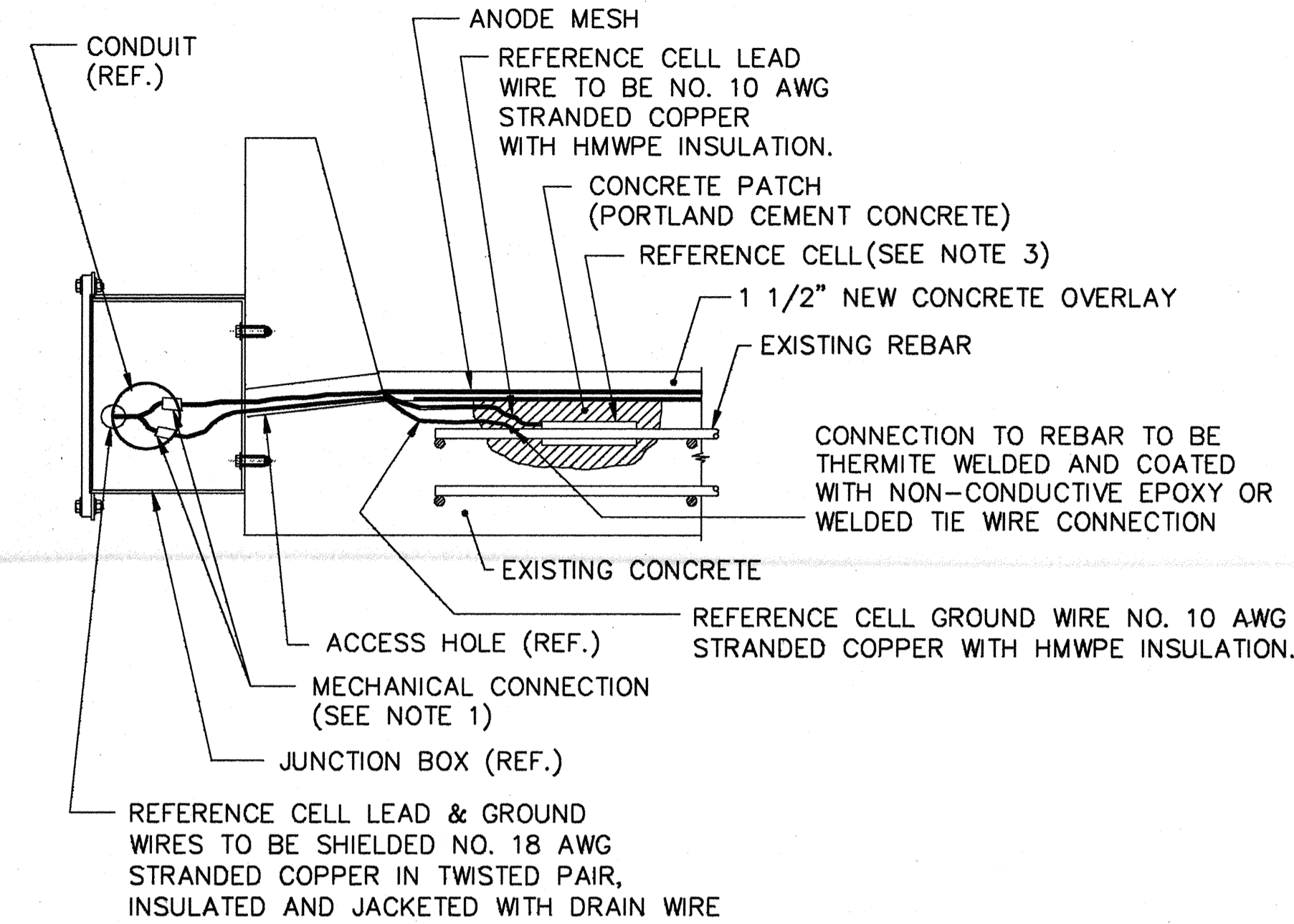
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DRAWN	RLM	CHK.	
DESIGNED		CHK.	
TRACED		CHK.	

RQAW FILE:

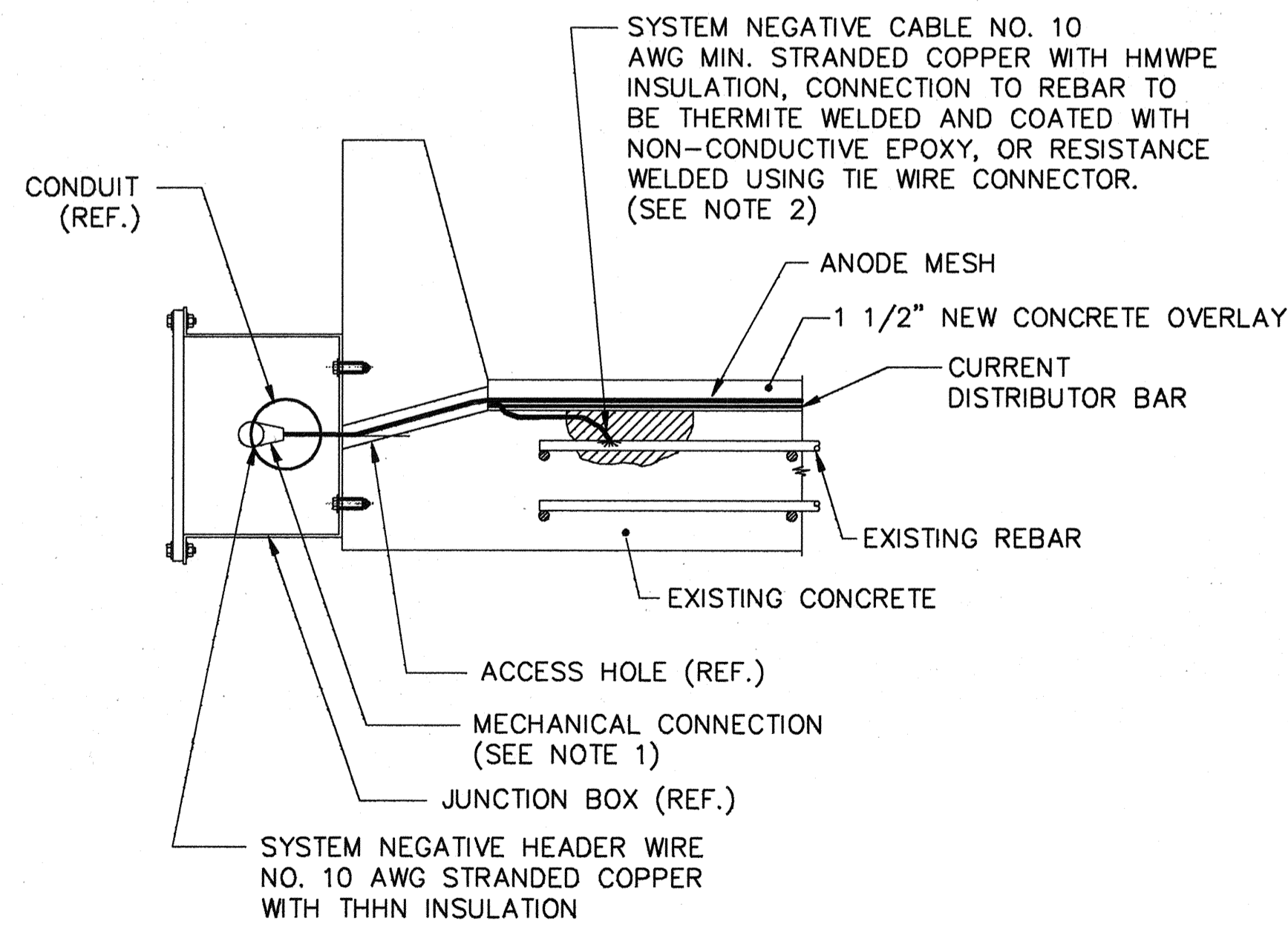


ANODE LEAD WIRE CONNECTION DETAIL
 (BRIDGE 2420A & 2386A AS REQUIRED)
 (N.T.S.)



REFERENCE CELL DETAIL
 (BRIDGE 2420A & 2386A AS REQUIRED)
 (N.T.S.)

- 1) UNLESS OTHERWISE NOTED, SPLICES MADE IN JUNCTION BOXES BENEATH DECK SHALL BE MECHANICALLY CONNECTED (CRIMP CONNECTION) AND INSULATED IN A HEAT-SHRINKABLE MATERIAL SUCH AS ALPHA'S SERIES FIT-700 OR 3M SCOTCH E-Z SEAL
- 2) AFTER THERMITE WELDED CONNECTION IS MADE GENTLY TAP AND REMOVE SLAG FROM WELD.
- 3) INSTALL REFERENCE CELL AT A MAXIMUM OF 1" BUT NOT TOUCHING REINFORCING STEEL AT LOCATIONS INDICATED.



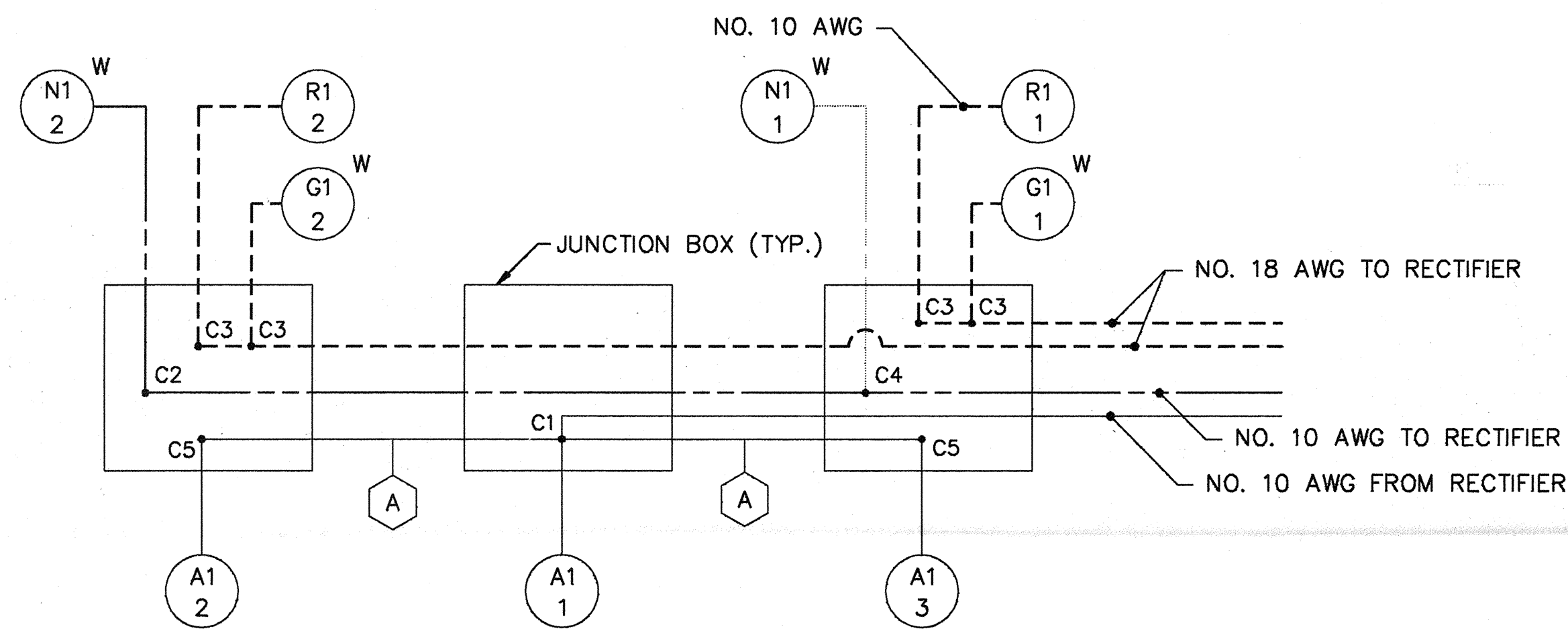
SYSTEM NEGATIVE DETAIL
 (BRIDGE 2420A & 2386A AS REQUIRED)
 (N.T.S.)

CATHODIC PROTECTION DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: NONE DATE SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 58 OF 69
 PROJECT: IM-70-3(193)78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

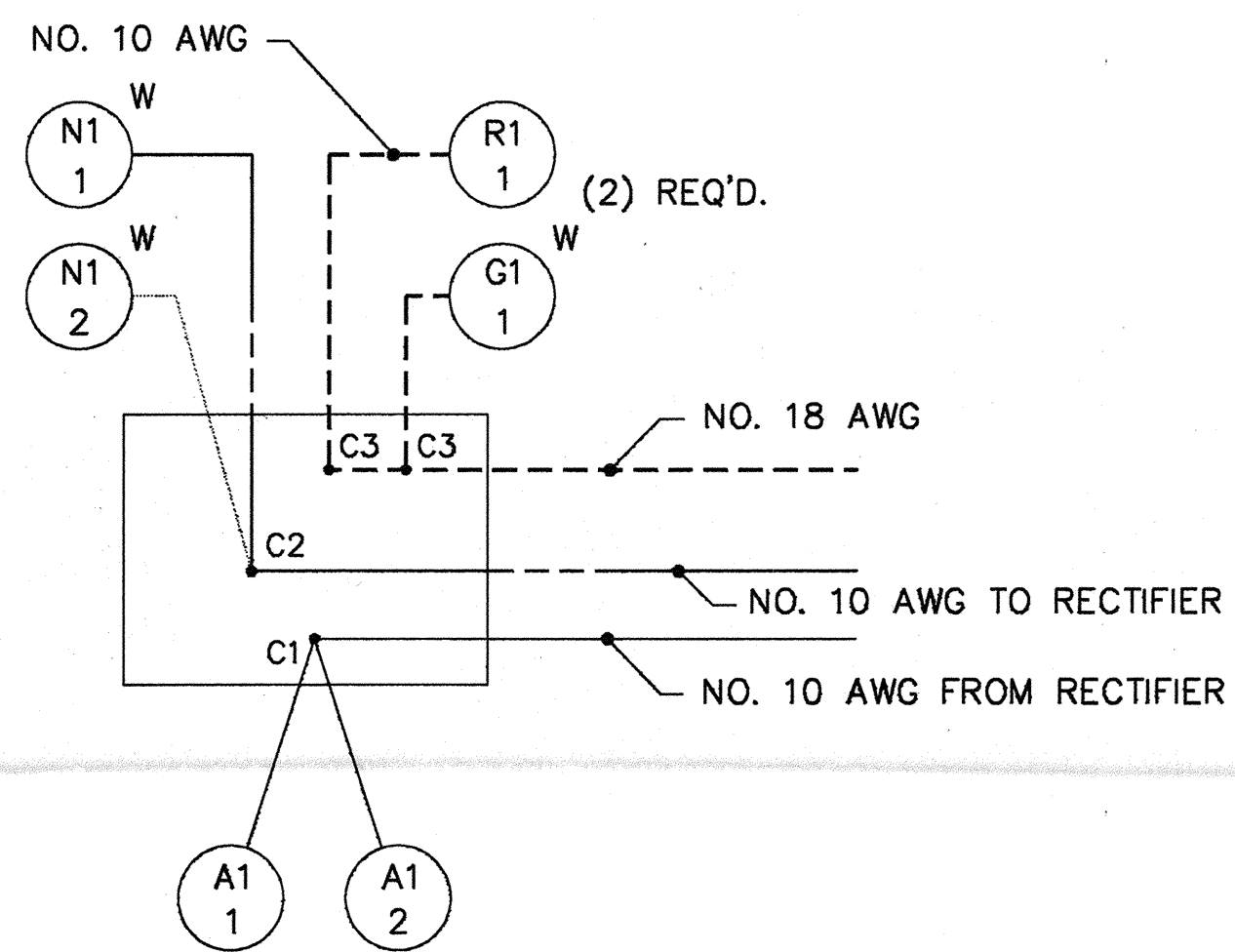
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DRAWN	RLM	CHK.	_____
DESIGNED	_____	CHK.	_____
TRACED	_____	CHK.	_____



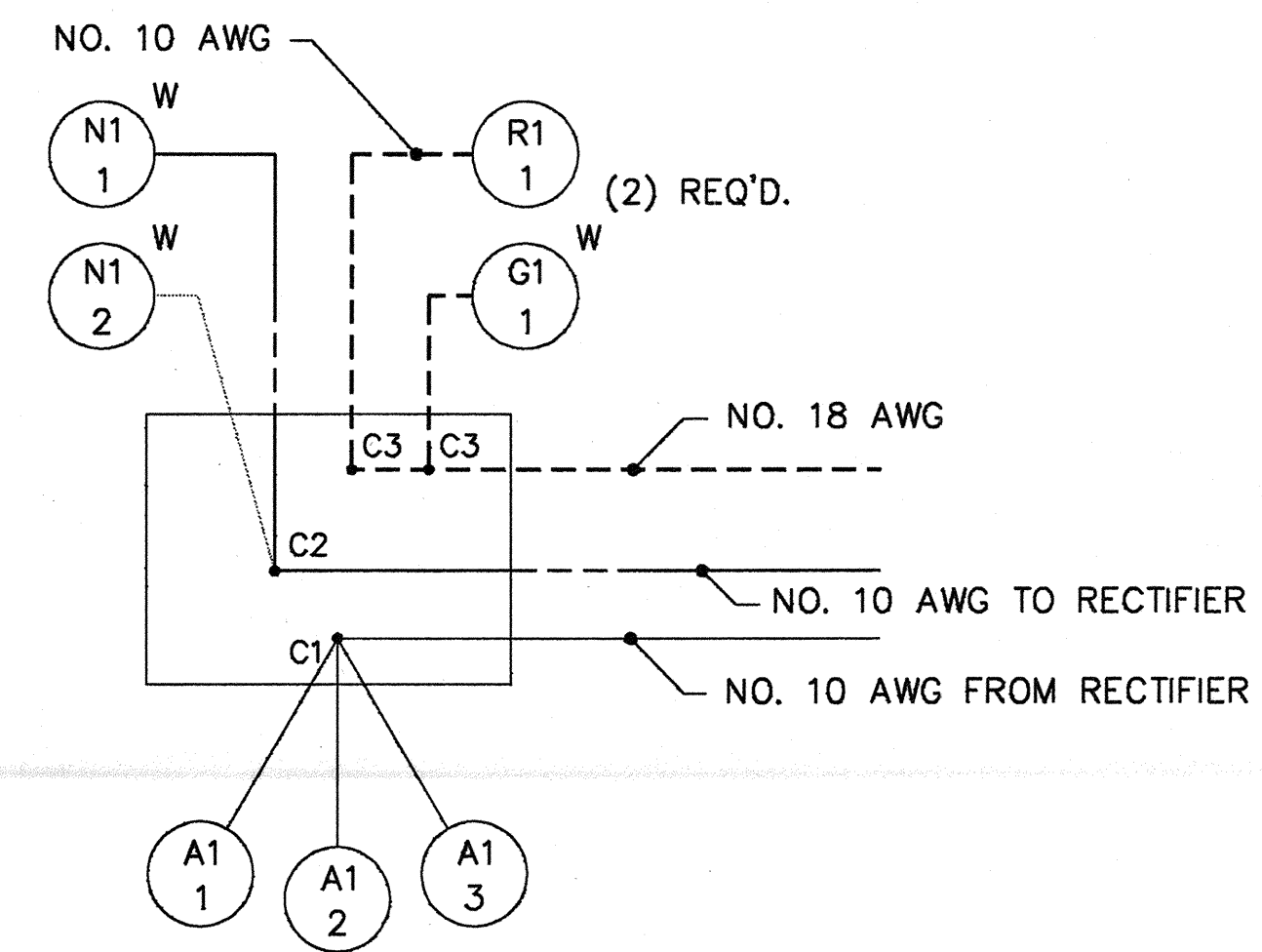
BRIDGES

2386/2420 (ZONES 1-12), 2386/2420 (ZONES 13-18), 2386/2420 (ZONES 43-50)



BRIDGES

2386/2420 (ZONES 19-24)

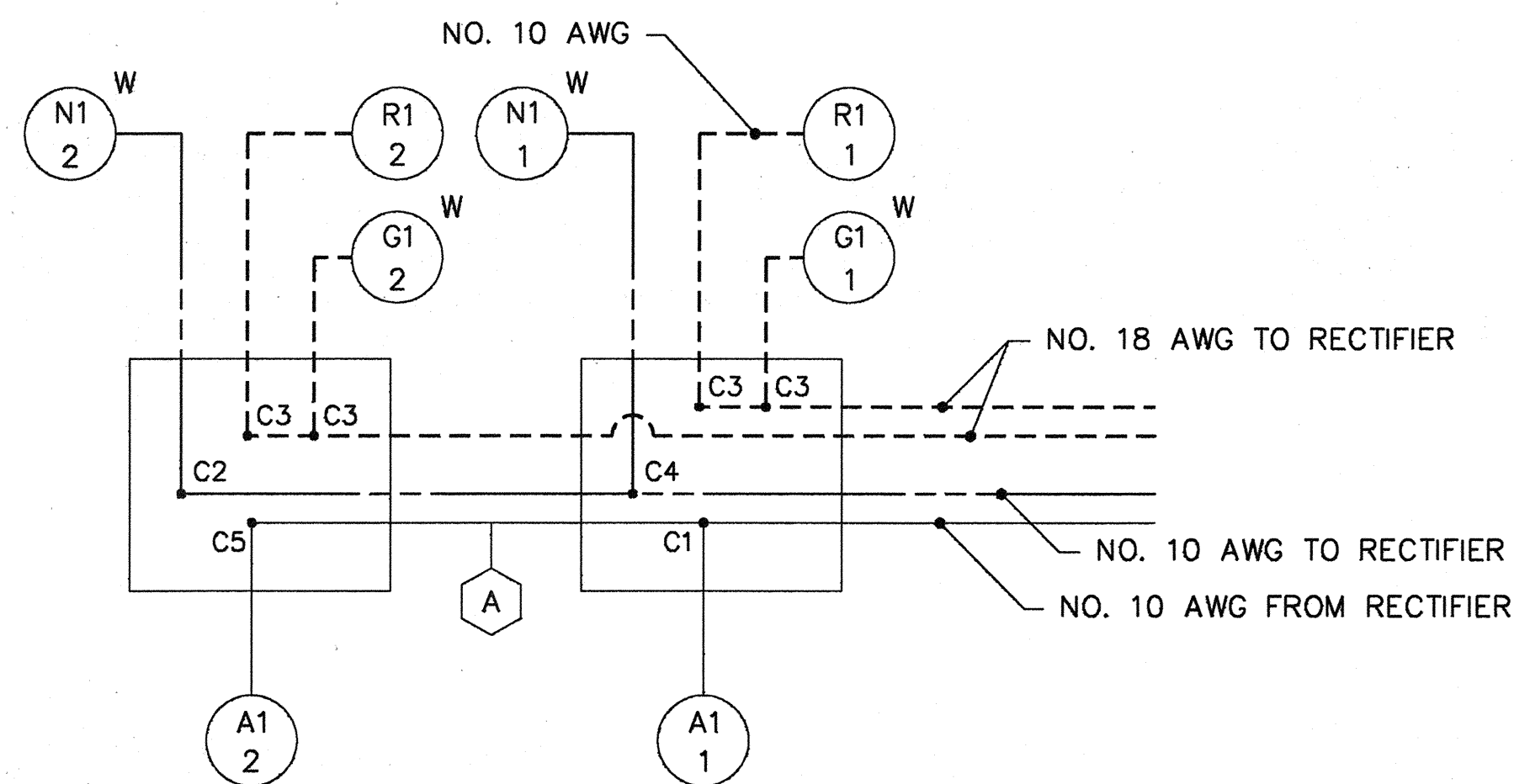
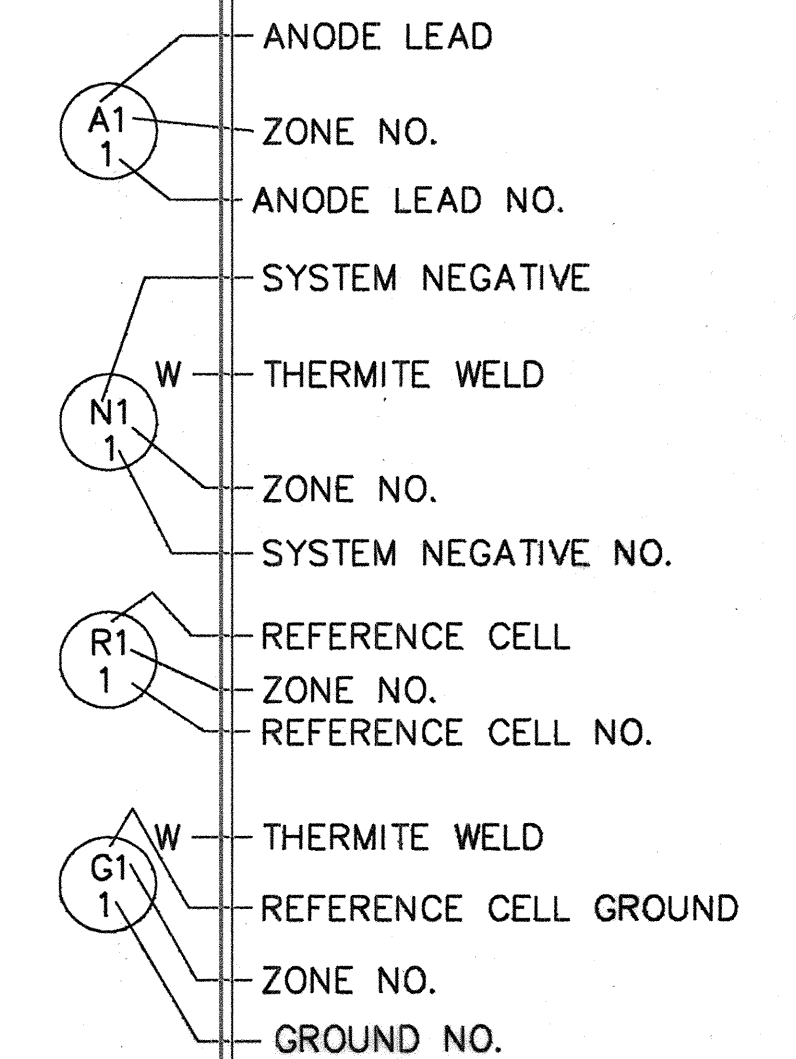


BRIDGES

2386/2420 (ZONES 25-36)

- 1) THE PURPOSE OF THIS DRAWING IS TO SHOW THE RECTIFIER TO INDIVIDUAL ZONE WIRING RELATIONSHIP. ACTUAL ORIENTATION OF THE RECTIFIER AND CONDUIT RUNS IS THE RESPONSIBILITY OF THE ELECTRICAL SUB-CONTRACTOR.
- 2) WIRES SHALL BE IDENTIFIED WITH MARKERS AT SPLICE CONNECTIONS AND RECTIFIER.

SYMBOL LEGEND



BRIDGES

2386/2420 (ZONES 37-42)

- A NO. 4 AWG BRIDGES 2386/2420 (ZONES 1-12)
- NO. 2 AWG BRIDGES 2386/2420 (ZONES 13-18) (ZONES 37-42)
- NO. 6 AWG BRIDGES 2386/2420 (ZONES 43-50)

SPLICE CONNECTIONS

- C1; NO. 10 AWG TO ANODE CONNECTOR
- C2; NO. 10 AWG TO NO. 10 AWG
- C3; NO. 10 AWG TO NO. 18 AWG
- C4; NO. 10 AWG TO NO. 10 AWG
- C5; NO. 2, 4 OR 6 AWG TO ANODE CONNECTOR

**CATHODIC PROTECTION DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION**

SCALE: NONE DATE SEPTEMBER 2, 1994
 SUBMITTED FOR APPROVAL: _____
 DRAWING: OF SHEET: 59 OF 69
 PROJECT: IM-70-3(193) 78
 BRIDGE CONTRACT NO: R-21476
 BRIDGE FILE: I-70-77-2420A & 2386A

J:\1-70\PROTECT\0723EF26.DWG
 Scale: 08/16/94 at 13:15 RQAW

DRAWN	RLM	CHK.	
DESIGNED		CHK.	
TRACED		CHK.	

RQAW FILE:

