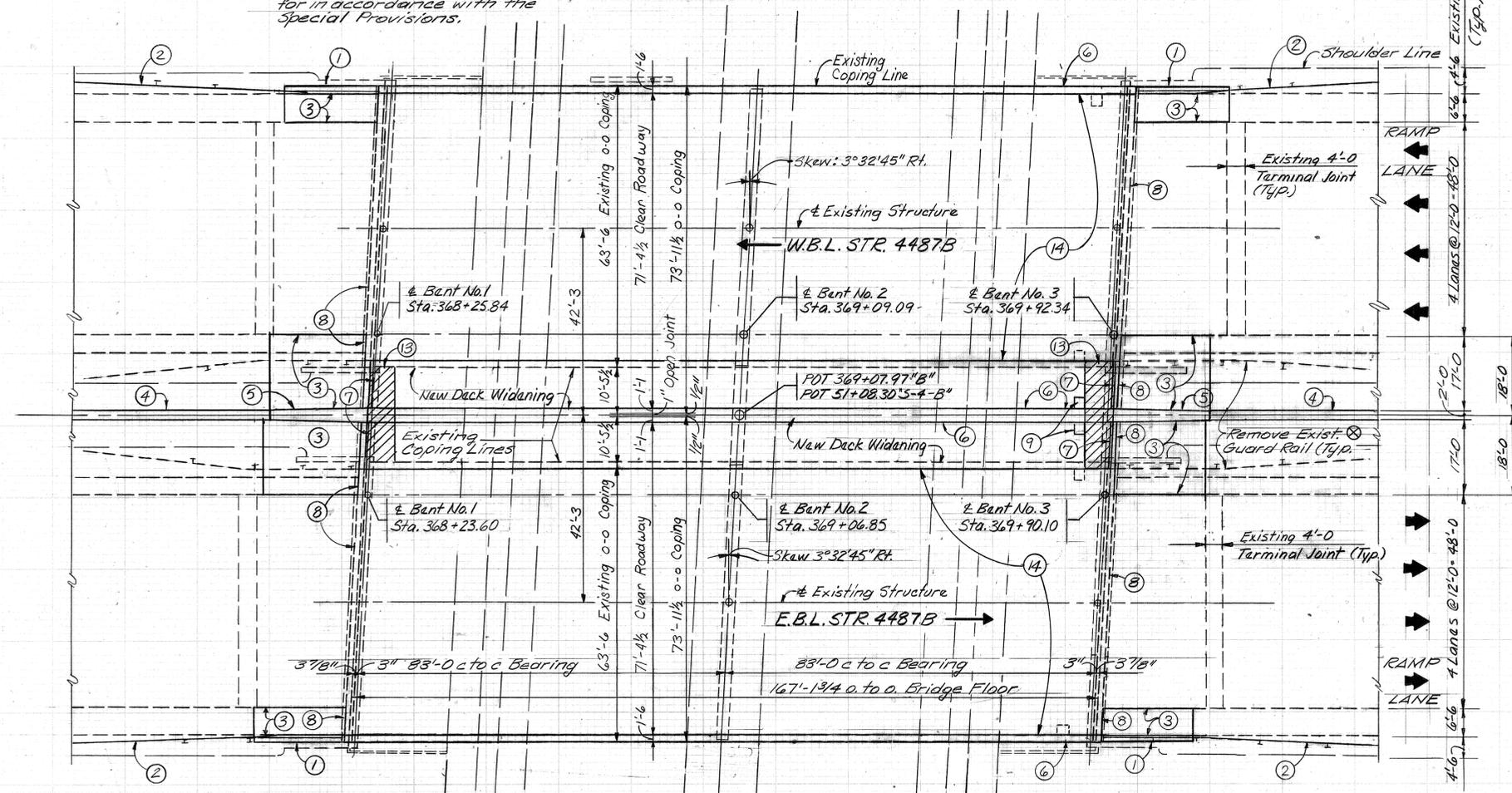


DESIGN DATA

Live Load: HS 20-44 and Military Loading with impact and distribution of loads in accordance with 1989 AASHTO Specifications and Interim Specifications.

Dead Load: Actual plus 35 Lbs. per sq. ft. for Future Wearing Surface Slab designed with a 1/2" wearing surface.

Stresses: In accordance with 1989 AASHTO Specifications and Interim Specifications.



- LEGEND**
- ① Construct Standard Barrier Rail Transition With Approach Slab Extension, see Dwg. W14
 - ② Install W-Beam Guard Rail
 - ③ Construct R.C. Bridge Approach (see Dwg. W14)
 - ④ Construct Standard Concrete Median Barrier
 - ⑤ Construct Median Barrier Transition Piece (see Dwg. W14)
 - ⑥ Construct Concrete Structure Railing
 - ⑦ Remove Exist. BS Joint and Install new BS-11 Joint (Typical Each End of Both Structures)
 - ⑧ Type 1A Joint
 - ⑨ Relocated Existing Roadway Drain (See Dwg. W13)
 - ⑩ 18" Borrow for Structure Backfill (Est. Qty.)
Bent No. 1 = 18.9 Cys., Bent No. 2 = 27.2 Cys.
Bent No. 3 = 18.9 Cys.
- ⊗ Indicates Items not included in Bridge Quantities.

NOTES:

Median Barrier Transition Piece varies in width from 2'-3" of structure to 2'-0" of standard barrier in 20'-6"±.

For General Notes, Construction Procedure, Standard Drawings and additional details, see Dwg. W5.

For Existing and Proposed Typical Sections and additional details, see Dwg. W2.

The cost of Fill is included in the cost of "Borrow" ⊗

See Road Plans for location and number of "Raised Pavement Markers" ⊗

- LEGEND (CONTIN.)**
- ⑪ Replace Existing Bitum. Shoulder with 330 #/Sys. Bitum. Mixture for Approaches, MV (17 Tons - Req'd.) over 6" Compacted Aggregate for Base, Type "D". (34 Tons - Req'd.)
 - ⑫ Reset Existing Guard Rail = 112 Lft.
 - ⑬ Remove Existing Slopewall and Replace with 4" Slopewall Typ. Each End. (Hatched Area) (Total 20.0 Sys. of New Slopewall) & (30.0 Sys. of Slopewall Removal).
 - ⑭ Bridge Deck Overlay, Patching, 55 Sys. Ea. Str. = 110 Sys. Req'd.

GENERAL PLAN

BRIDGE DECK WIDENING

TWIN CONTINUOUS COMPOSITE STEEL BEAM BRIDGES
2 SPANS @ 83° D SKEW: 3° 32' 45" RIGHT
71'-4 1/2" CLEAR ROADWAY I-94 OVER U.S. 20 & U.S. 35

INDIANA DEPARTMENT OF HIGHWAYS

LA PORTE COUNTY

SCALE: -1 1/16" = 1'-0", Unless Noted DATE: 7/20 1992

DRAWING: W1 OF W SHEET: 2 OF 40

PROJECT: MAIN-94-2(081)

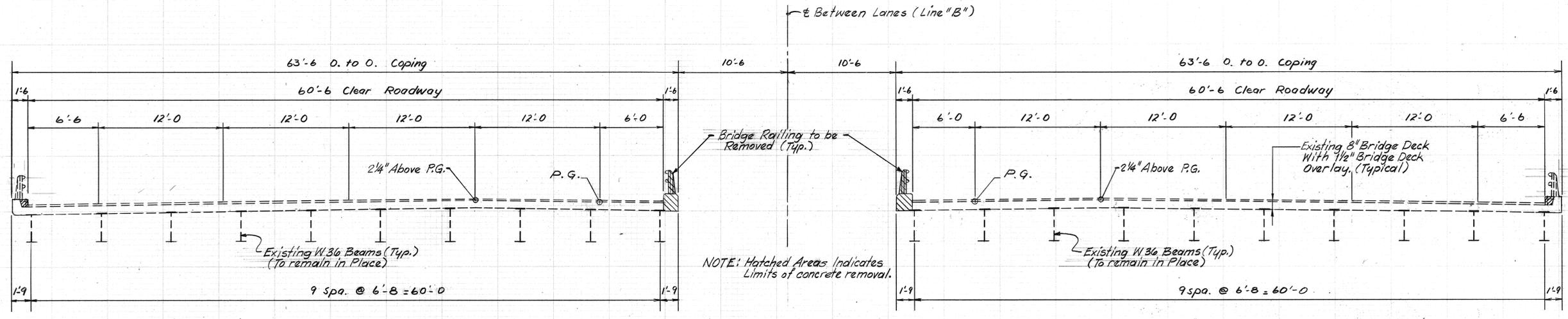
BRIDGE CONTRACT NO. R-20060

BRIDGE FILE: I-94-45-4487B

LARRY J. BRUNS
REGISTERED
No. 880072
STATE OF INDIANA
PROFESSIONAL ENGINEER

DESIGNED: PAM C.K'D LJB
DRAWN: FU C.K'D WRD
TRACED: C.K'D

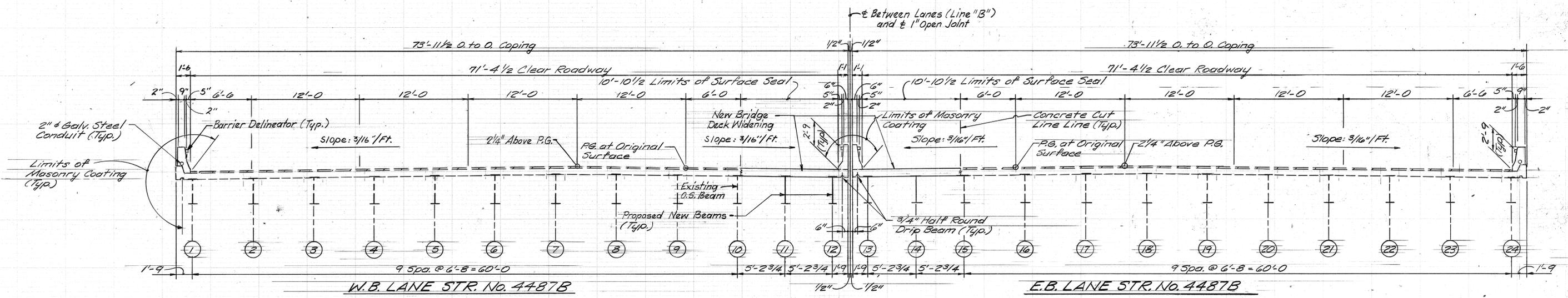
SF-22317



W.B. LANE STR. No. 44875A

EXISTING SECTIONS

E.B. LANE STR. No. 44875A



W.B. LANE STR. No. 4487B

PROPOSED SECTIONS

E.B. LANE STR. No. 4487B

Notes:
 For General Notes, Construction Procedures,
 Standard Drawings, see Dwg. W3.

GENERAL PLAN (CONT.)
 BRIDGE DECK REPLACEMENT + WIDENING

INDIANA DEPARTMENT OF HIGHWAYS

SCALE: - 3/16" = 1'-0"

DATE: 7/20

1992

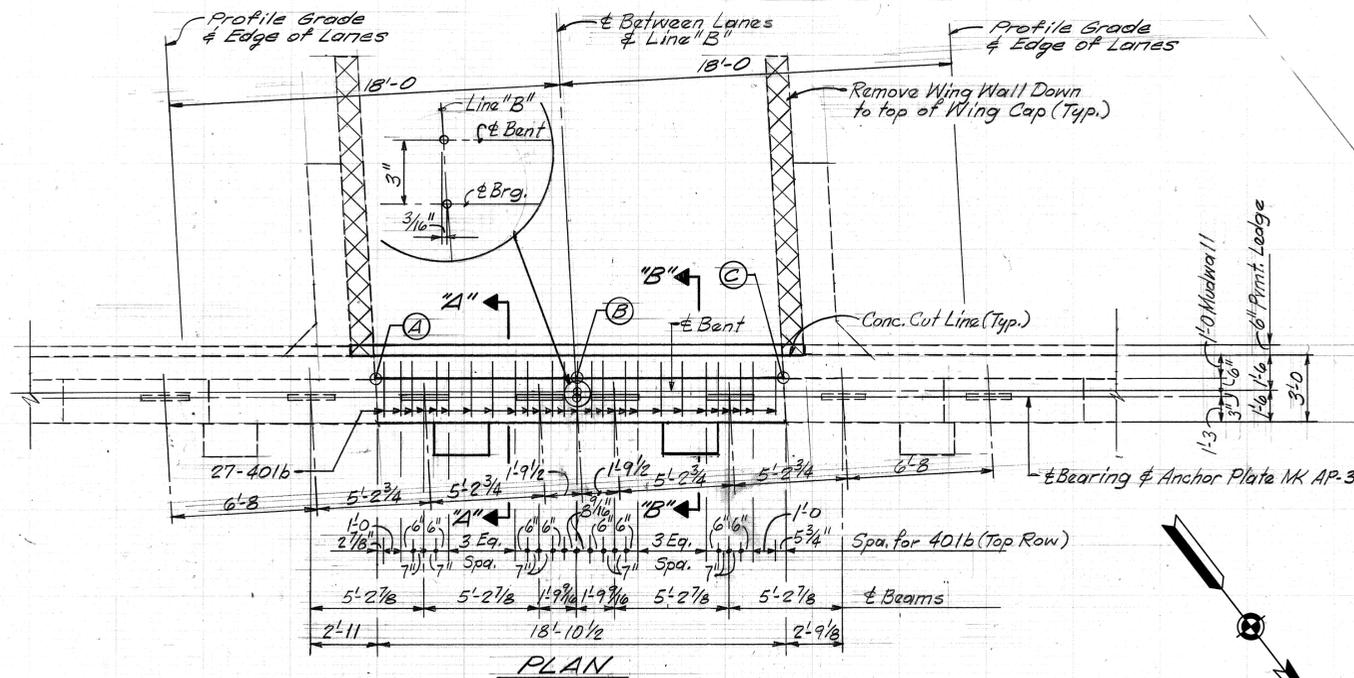
DRAWING: W2 OF W
 PROJECT: M1M-94-2(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: I-94-45-4487B

SHEET: 5 OF 40

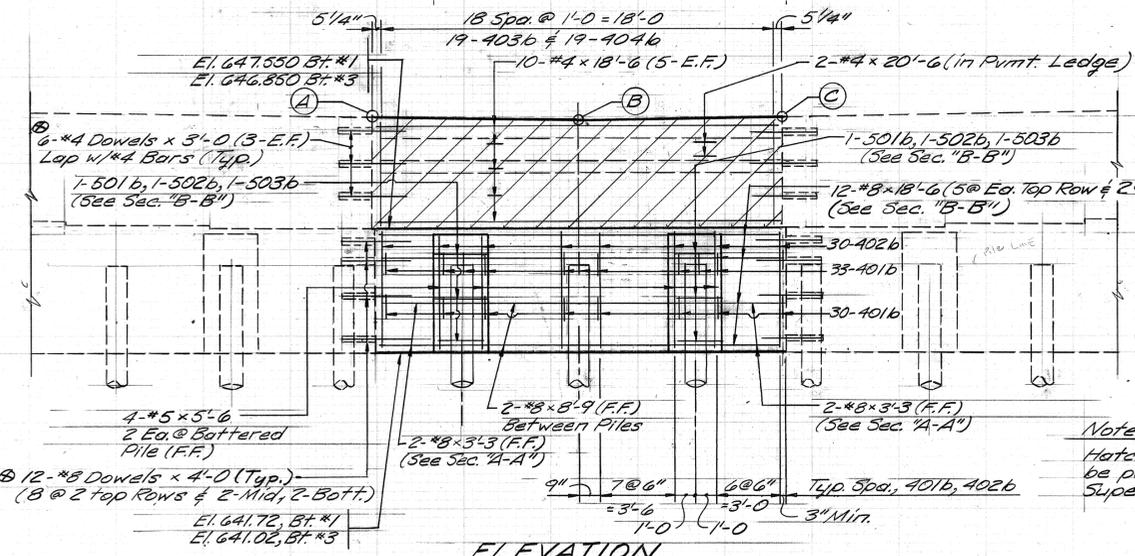


DESIGNED: PAM C'KD LJB
 DRAWN: FU C'KD WRD
 TRACED: C'KD

SF-22317



PLAN

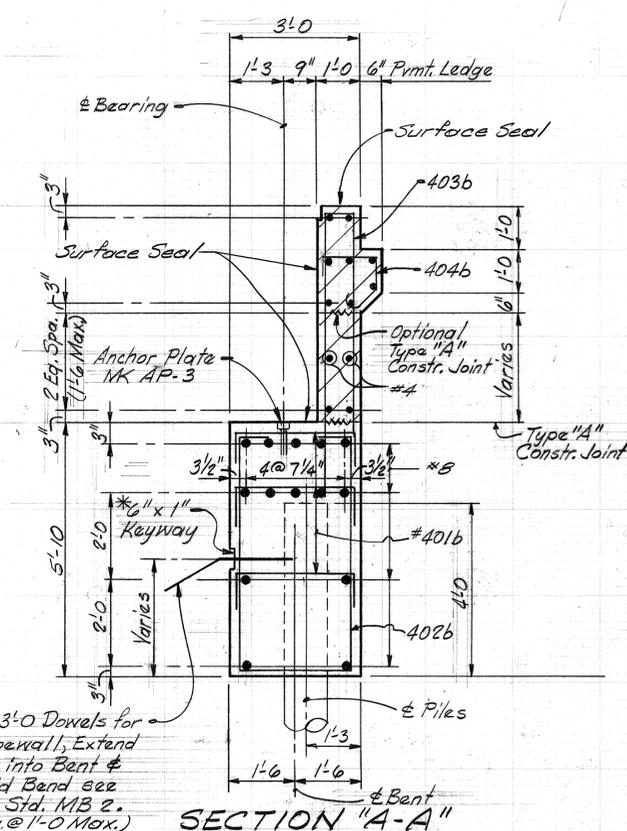


ELEVATION

ELEVATION TABLE

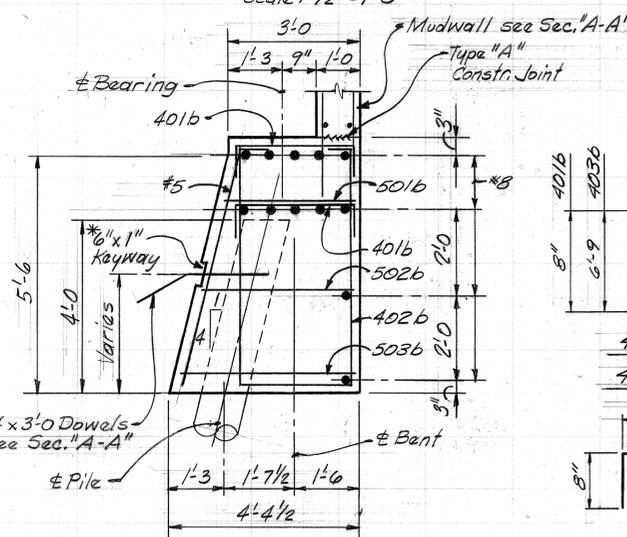
ELEV.	Bent No.1	Bent No.3
(A)	653.09	652.38
(B)	652.90	652.20
(C)	653.09	652.39

Note:
Hatched Area Indicates Mudwall Concrete to be poured and Billed with the Superstructure.



SECTION "A-A"

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



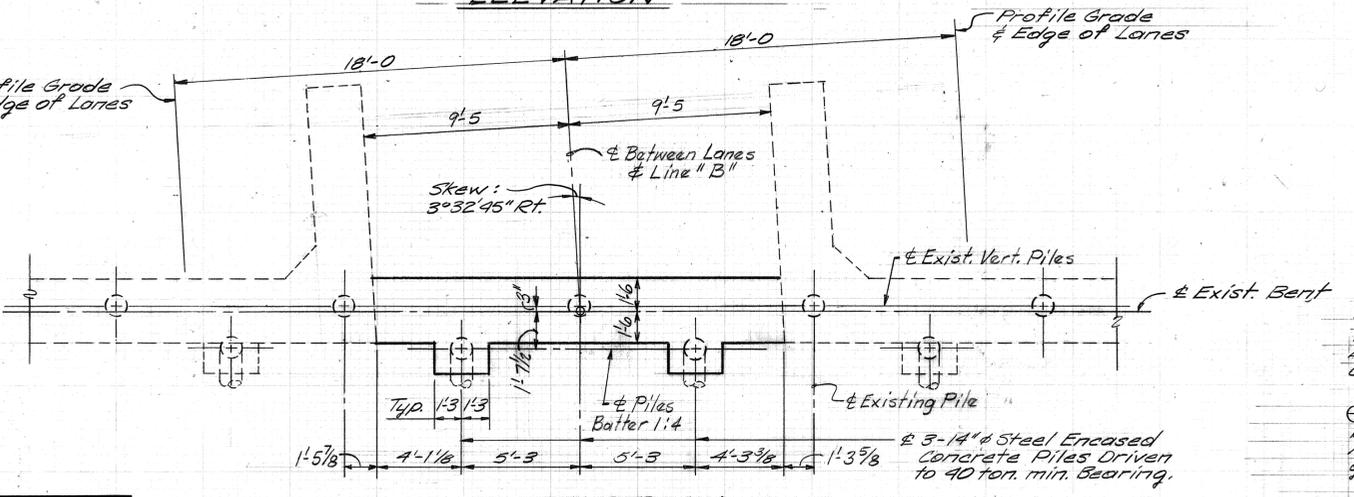
SECTION "B-B"

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

* Note: 6" x 1" Keyway to Match Existing Keyways.

BILL OF MATERIALS
BENT NO.1 (NO.3 SAME)

EPOXY COATED REINFORCING STEEL			
Mark or Size	No. of Bars	Length (FE)	Weight (Lbs)
#8	12	18'-6"	
#8	2	8'-9"	
#8	24	4'-0"	
#8	4	3'-3"	
Total No. 8 =			987
501b	2	9'-8"	
502b	2	10'-8"	
503b	2	11'-8"	
#5	4	5'-6"	
Total No. 5 =			90
401b	90	4'-0"	
402b	30	15'-0"	
403b	19	14'-2"	
404b	19	3'-10"	
#4	2	20'-6"	
#4	10	18'-6"	
#4	31	3'-0"	
Total No. 4 =			983
Total Epoxy Coated Reinf. =			2004
CONCRETE			
Conc. Cl. A in Substr. = 13.0 Cys.			
MISCELLANEOUS			
Anchor Plates MK AP-3 4 Ea.			
3-14" x (76ga) Steel Encased Concrete Piles @ 50'-0" Ea. = 150 Lbs.			
Foundation Excavation: 2-339 Cys.			
Field Drilled Holes in Conc. 36 Ea.			
Surface Seal = 166.35 Sft.			



PILE PLAN

Notes:
For Reinforcing Bar Notes See Bridge Std. Cl.
All Anchor Plate MK AP-3 shall be pre-set in concrete, and for details see Dwg. No.
Drill Holes 2" into Existing Bent, for #8 Bars Drill 2'-0" Holes, for #4 Bars Drill 1'-6" Holes
Min. Place Bars with Approved Non-shrinking grout at a 4" Min. from Face of Existing Concrete.

BENT NO.1 AND NO.3 DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION

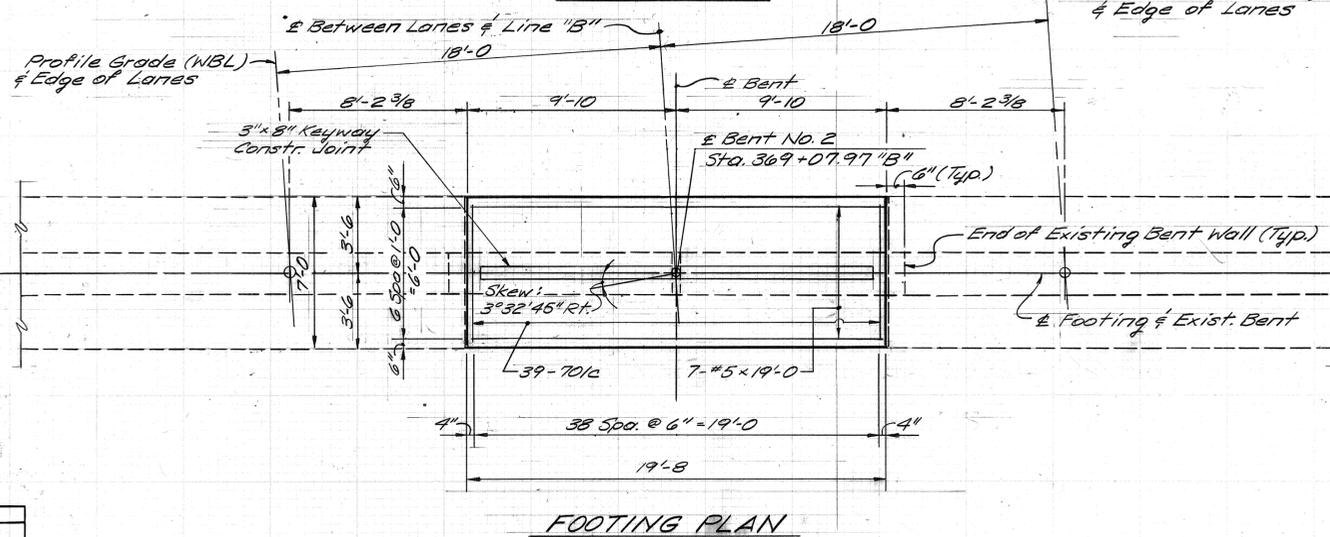
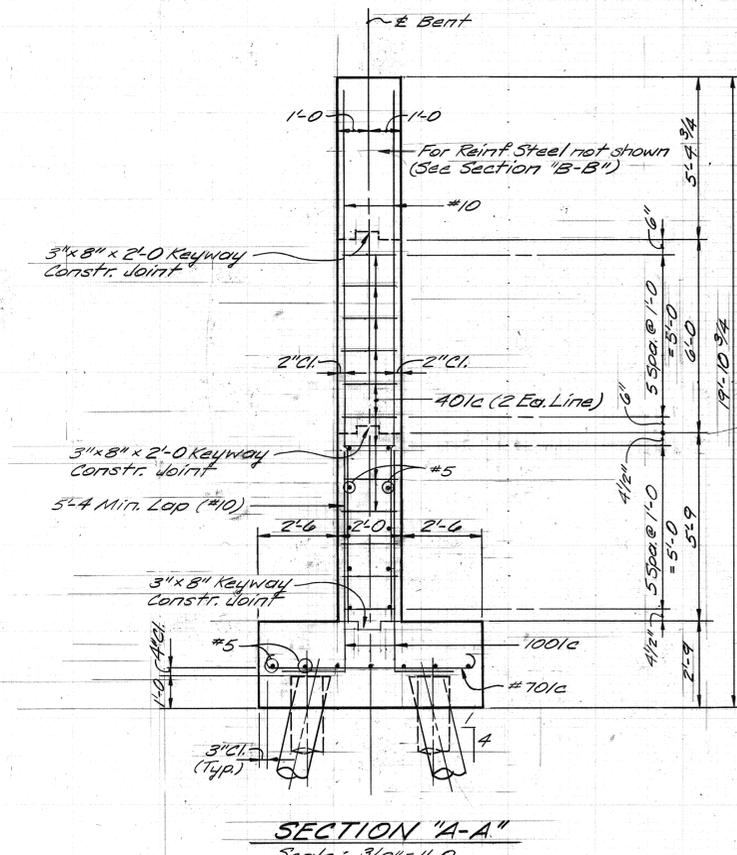
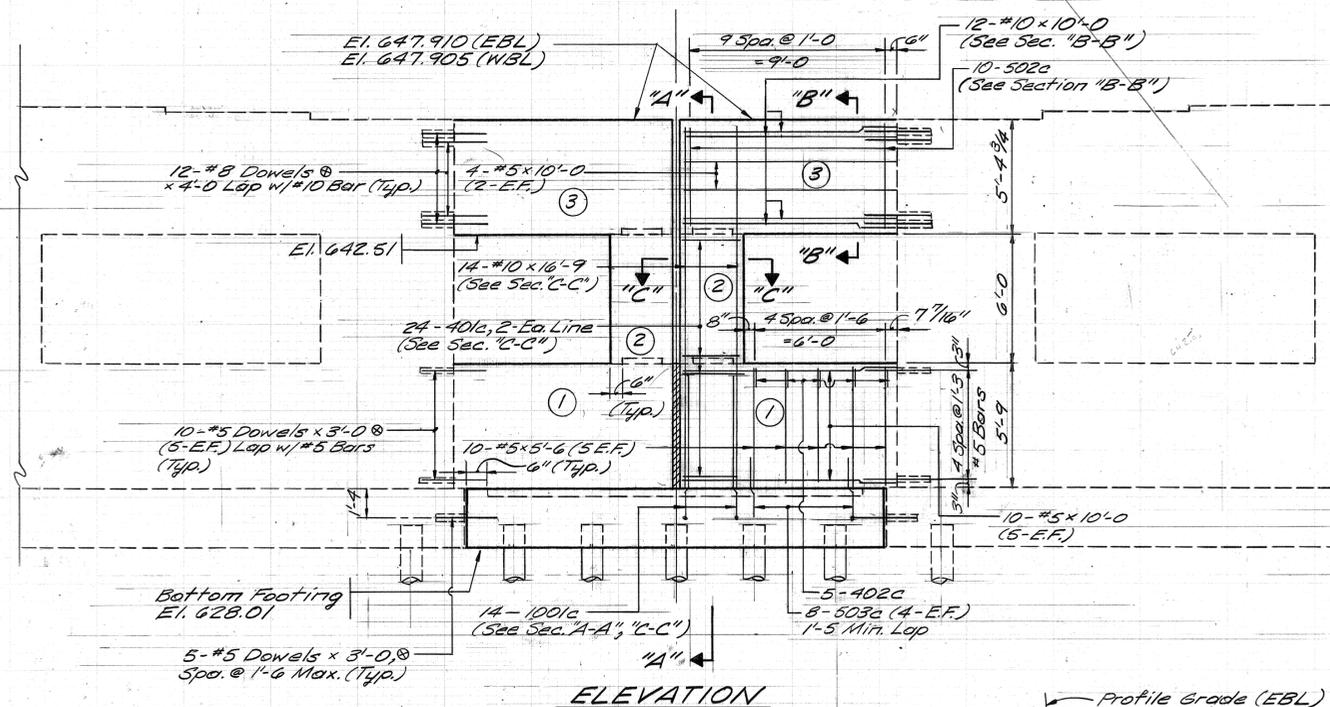
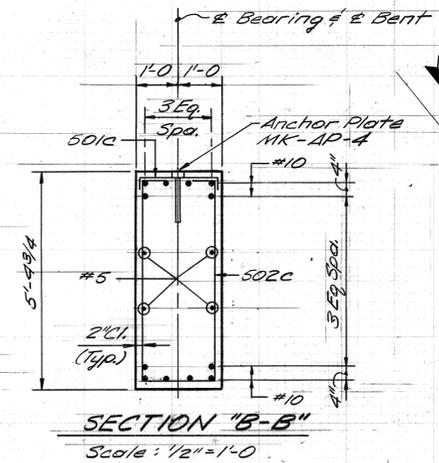
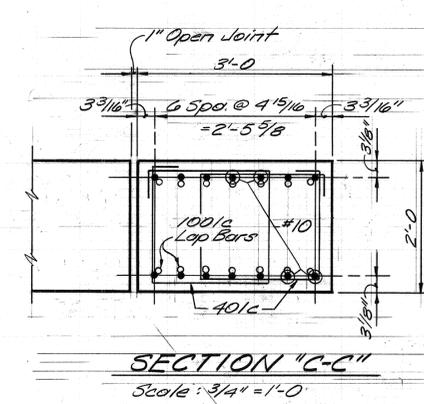
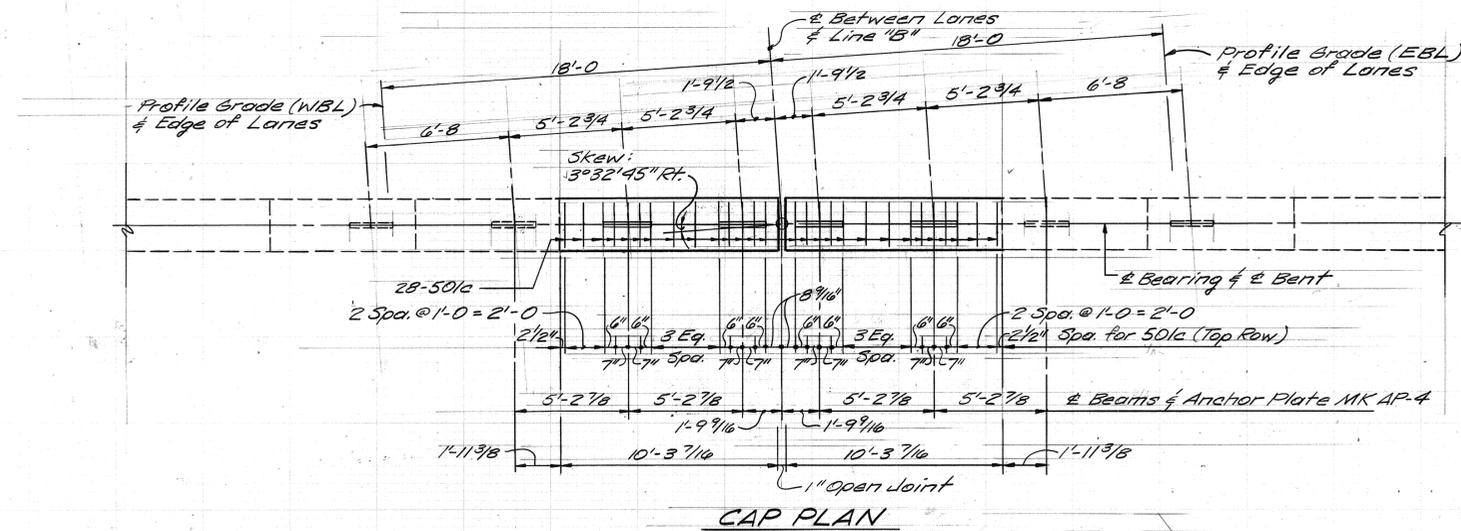
SCALE: 1/4" = 1'-0", Unless Noted DATE: 7/20

DRAWING: W4 OF W SHEET: 5 OF 40
PROJECT: MAIM-94-2(081)
BRIDGE CONTRACT NO. R-20060
BRIDGE FILE: I-94-45-44878



DESIGNED: PAM C.K.D. LJB
DRAWN: WED & FL C.K.D. WED
TRACED: C.K.D.

SF-22317



Notes:

For Reinforcing Bar Notes, See Bridge Std. C1.

For Pile Plan, Bill of Materials and Anchor Plate MK AP-4 Detail, see Dwg. W6

All Anchor Plates, MK AP-4 shall be pre-set in concrete.

Number indicates concrete pours.

Drill Holes 2" dia into Existing Bent #8 @ 2'-0", #5 @ 1'-6" Min. Place Bars with Approved non-shrinking Grout at a 4" Min. from face of Existing Concrete.

BENT NO. 2 DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - 1/4" = 1'-0", Unless Noted DATE: 7/20 1972

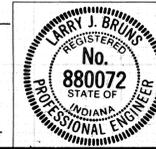
DRAWING: W5 OF W SHEET: 6 OF 40

BRIDGE CONTRACT NO. R-20060

BRIDGE FILE: I-94-45-4487B

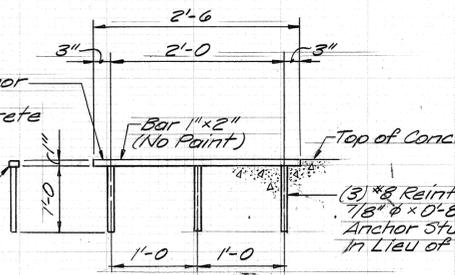
DESIGNED: PAM C.K.D. LJB
DRAWN: FU C.K.D. WRD
TRACED: C.K.D.

SF-22317



Setting Tolerance of Anchor Plates Level, to Not More Than 1/16" Below Top of Concrete

Full Penetration Shop Weld (Typ.)

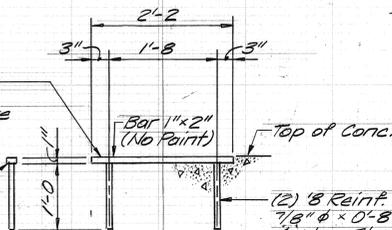


ANCHOR PLATE MK-AP4 DETAIL

Scale: No. Scale

Setting Tolerance of Anchor Plates Level, to Not More Than 1/16" Below Top of Concrete

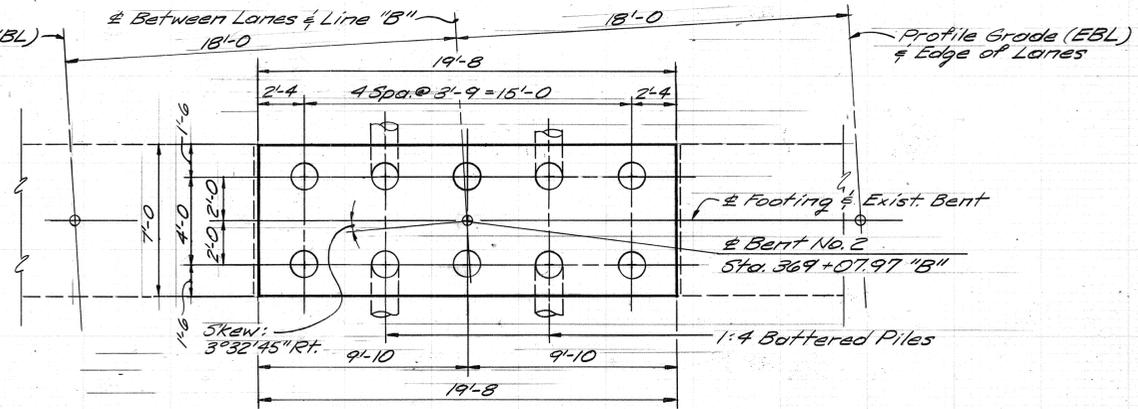
Full Penetration Shop Weld (Typ.)



ANCHOR PLATE MK-AP3 DETAIL

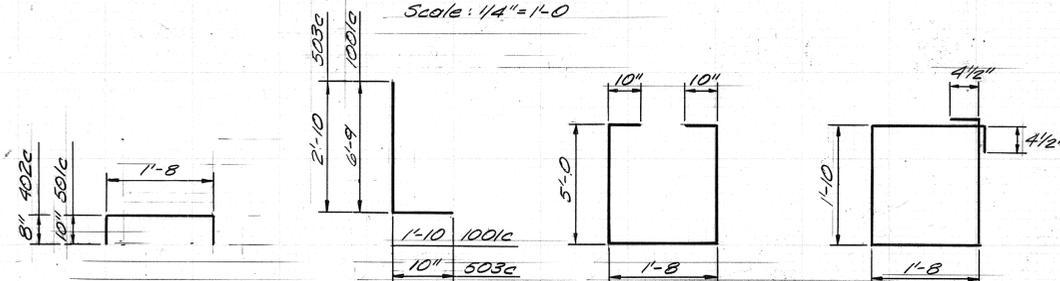
Scale: 3/4" = 1'-0"

Profile Grade (WBL) ± Edge of Lanes



PILE PLAN

Scale: 1/4" = 1'-0"



501c x 3'-4

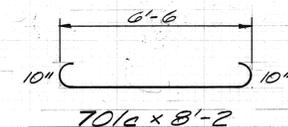
402c x 3'-0

1001c x 8'-7

503c x 3'-8

502c x 13'-4

401c x 7'-9



701c x 8'-2

BILL OF MATERIALS BENT NO. 2

REINFORCING STEEL			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
1001c	28	8'-7	
#10	28	16'-9	
#10	24	10'-0	
Total No. 10 =			4085
#8	24	4'-0	
Total No. 8 =			256
701c	39	8'-2	
Total No. 7 =			651
501c	28	3'-4	
502c	20	13'-4	
503c	10	3'-8	
#5	7	19'-0	
#5	28	10'-0	
#5	20	5'-6	
#5	30	3'-0	
Total No. 5 =			1076
401c	48	7'-9	
402c	10	3'-0	
Total No. 4 =			269
Total Reinforcing Steel = 6337			
CONCRETE			
Concrete Cl. "B" in Footing			
1 @ 14.0 Cys. =			14.0 Cys.
Concrete Cl. "B" Above Footing			
Pour No. 1 2 @ 4.4 Cys.			
Total Class "B" Above Ftg. = 3.3 Cys.			
Concrete Cl. "A" in Substructure			
Pour No. 2 2 @ 1.3 Cys.			
Pour No. 3 2 @ 4.1 Cys.			
Total Class "A" in Substr. = 10.8 Cys.			
MISCELLANEOUS			
Anchor Plates MK-AP4			4 Ea.
Field Drilled Holes in Conc. 54 Ea.			
10-14" (16g) SH Encased Conc.			
Piles @ 30'-0 Ea.			300 Lft.
Foundation Excavation			45.9 Cys.

Notes:
For Reinforcing Bar Notes, See Bridge Std. Cl.

BENT NO. 2 DETAILS (CONTIN.)

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - As Noted DATE: 7/20 1972

DRAWING: WG OF W SHEET: 7 OF 40

PROJECT: - MA1M-94-2(081)

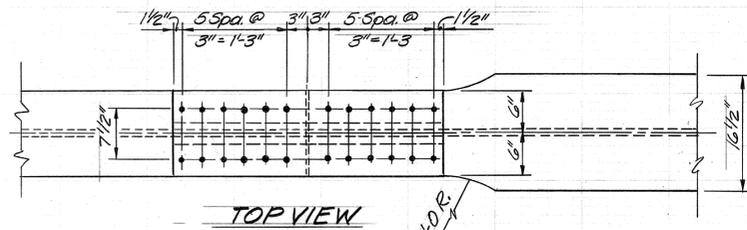
BRIDGE CONTRACT NO. R-20060

BRIDGE FILE: - I-94-45-4487B

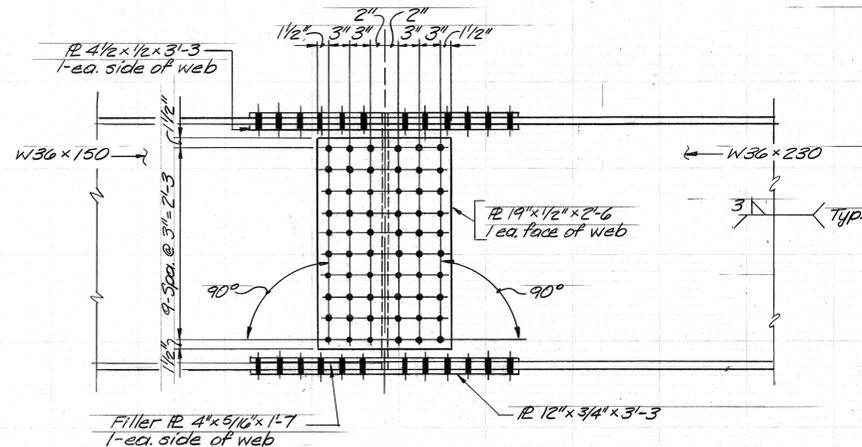


DESIGNED: PAM CKD LJR
DRAWN: FU CKD WRD
TRACED: CKD

SF-22317

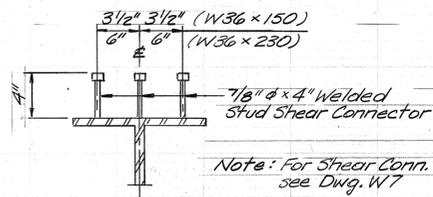


TOP VIEW



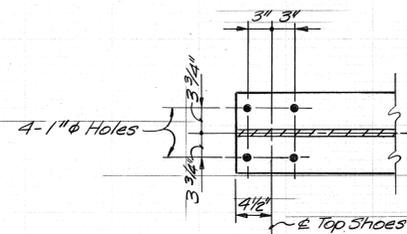
Note: Top and Bot. Plates to be the same.

ELEVATION
TYPICAL SPLICE DETAILS
Scale 1" = 1'-0"



Note: For Shear Conn. Locations see Dwg. W7

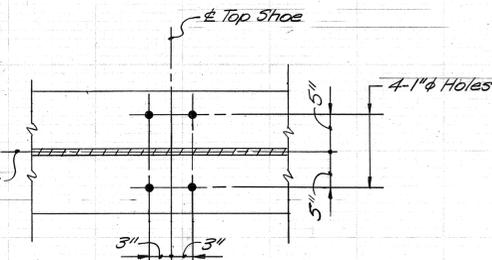
TYPICAL SHEAR CONNECTOR DETAIL



SECTION "A-A"

BEAM DETAIL @ BENTS NO.1 & 3

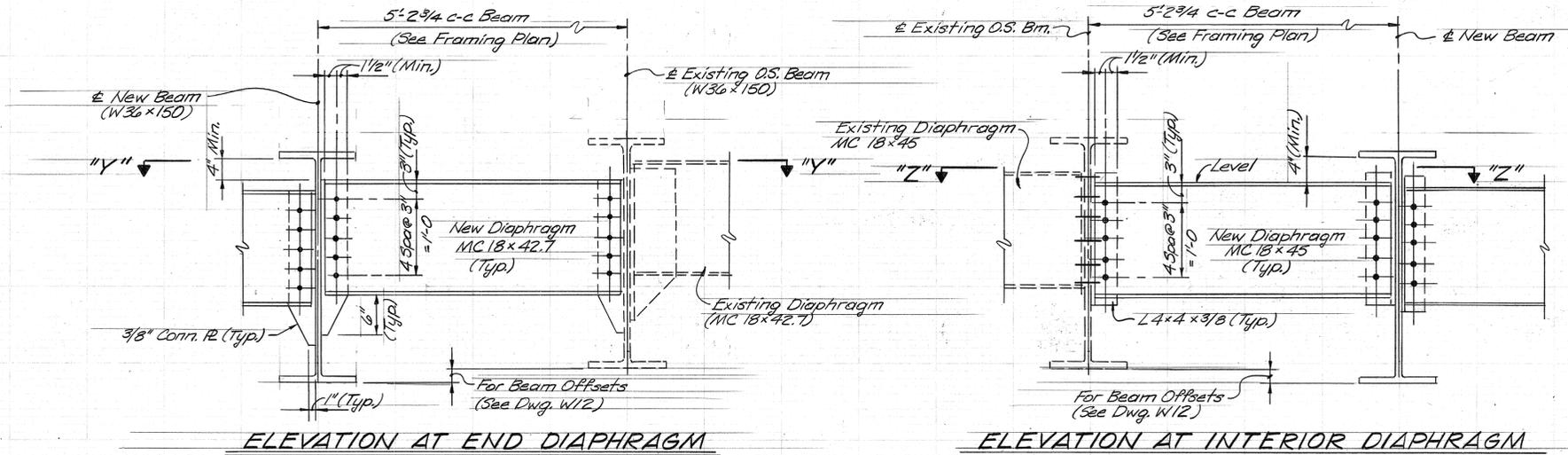
Scale: 1" = 1'-0"



SECTION "B-B"

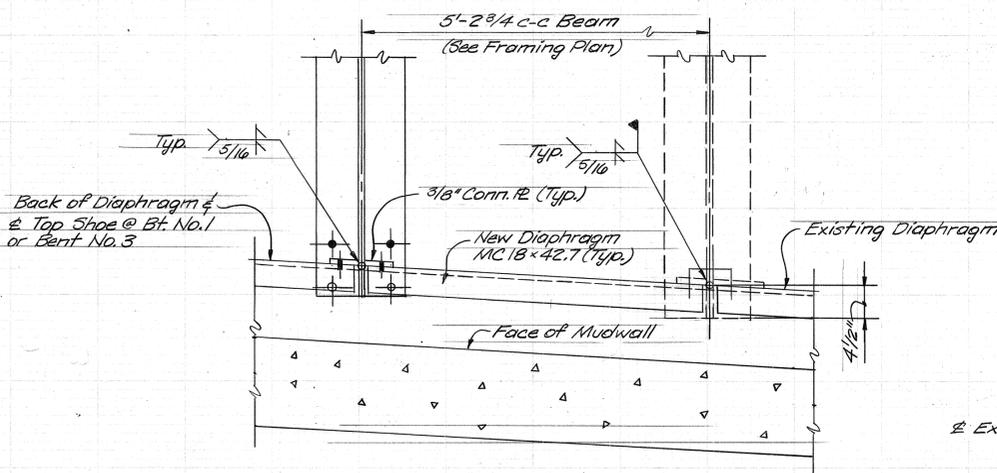
BEAM DETAIL @ BENT NO.2

Scale: 1" = 1'-0"



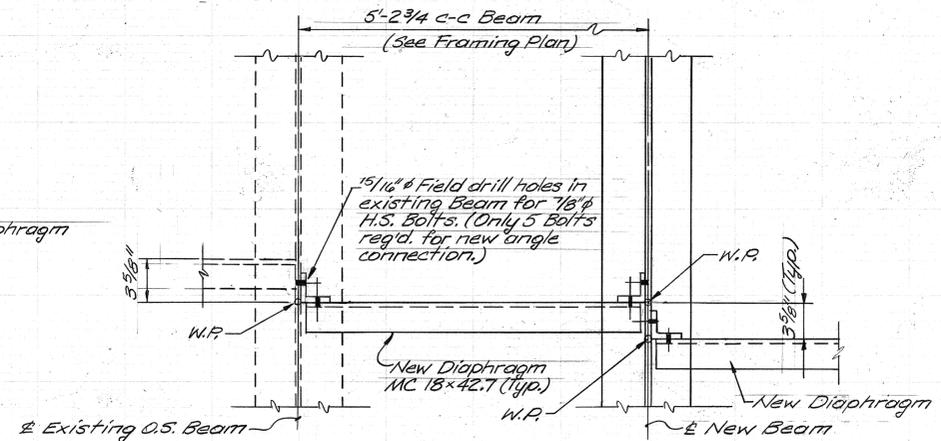
ELEVATION AT END DIAPHRAGM

ELEVATION AT INTERIOR DIAPHRAGM



SECTION "Y-Y"

DIAPHRAGM DETAILS



SECTION "Z-Z"

STRUCTURAL STEEL DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: 1" = 1'-0, Unless Noted DATE: 7/20

19 97

DRAWING: W8 OF W SHEET: 9 OF 40

PROJECT: MAIM - 94 - Z(081)

BRIDGE CONTRACT NO. R-20060

BRIDGE FILE: I-94-45-4487B

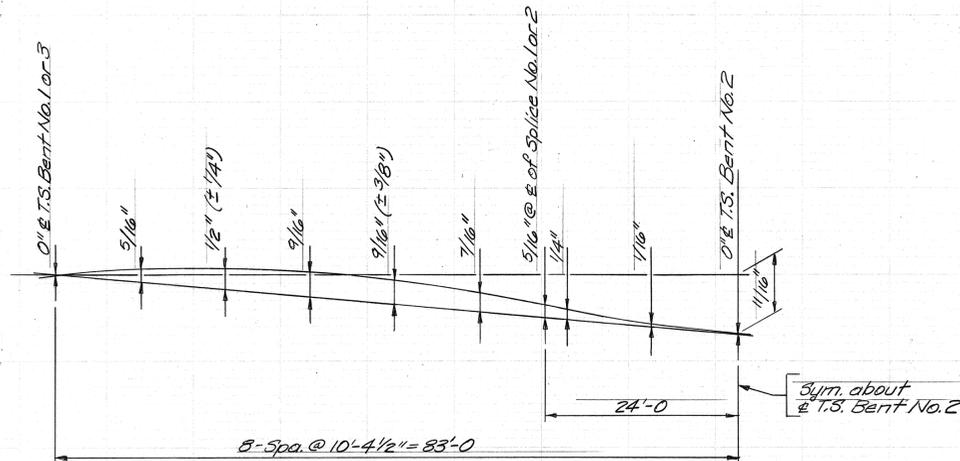


DESIGNED: PAM C.K'D LJB
DRAWN: FJ C.K'D WRD
TRACED: C.K'D

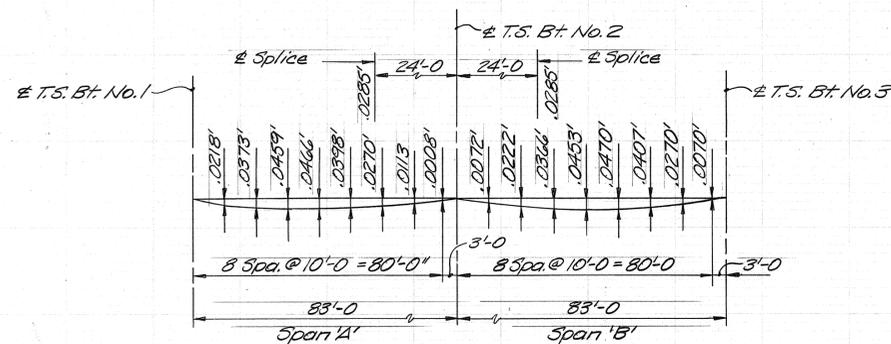
SF-22317

GENERAL PROCEDURE

1. After the new beams have been erected, install the diaphragms necessary to connect the new beams securely to each other.
2. Adjust the new beam system longitudinally so that dimension "C" from the center-line of top shoe to the face of the mudwall at Bent No.1 and Bent No.3 are equal.
3. Field drill the necessary holes in the existing outside beams and install the remaining diaphragms. Tighten all bolts and complete the welding of end diaphragm connections.
4. After the above operations are complete, weld the fixed shoes Assembly to the anchor plates at Bent No.2.
5. Adjust the expansion plate under each expansion shoe in accordance with Dimension "A" in Table I for the prevailing temperature. Note that Dimension "A" is always the distance from a vertical line through the center of top shoes in a direction away from the fixed shoe. Weld the expansion plates to the anchor plates at Bent No.1 and Bent No.3.
6. Screenshot elevations shall be determined by adding the concrete dead load deflection to the required final concrete elevations of all screed points. Subtract these elevations from the elevations corrected for deflection and use the resulting dimensions as the height for setting the screed form above the top of the beam. These dimensions remain constant regardless of how much or in what order the concrete is poured. DO NOT SET SCREEDS BY LEVELING.
7. No concrete in the floor is to be poured until the above operations are completed.
8. Screenshot elevations will be furnished upon request.



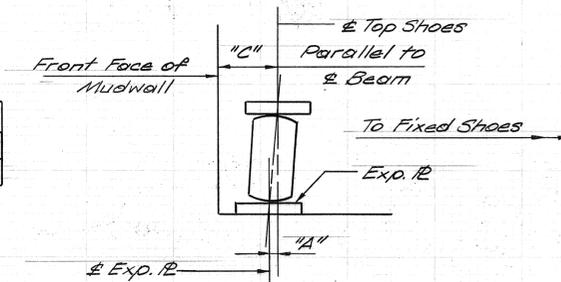
NO LOAD CAMBER AND REAMING DIAGRAM



CONCRETE DEAD LOAD DEFLECTION DIAGRAM

Notes:
See drawing W3 for General Notes

Temperature	0°	20°	40°	60°	80°	100°	120°
Dimension "A"	1/8"	3/4"	5/8"	1/2"	3/8"	1/4"	1/8"



SHOE SETTING DIAGRAM

STRUCTURAL STEEL DETAILS (CONTIN.)

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - No Scale, Unless Noted DATE: 7/20

19 92

DRAWING: W9 OF W SHEET: 10 OF 40

PROJECT: - M1M-94-2(081)

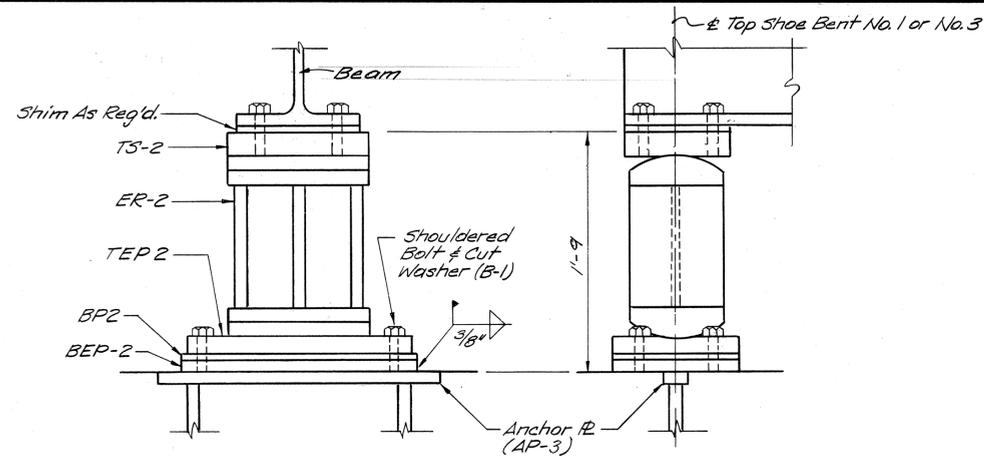
BRIDGE CONTRACT NO. R-20060

BRIDGE FILE: - I-94-45-4487B

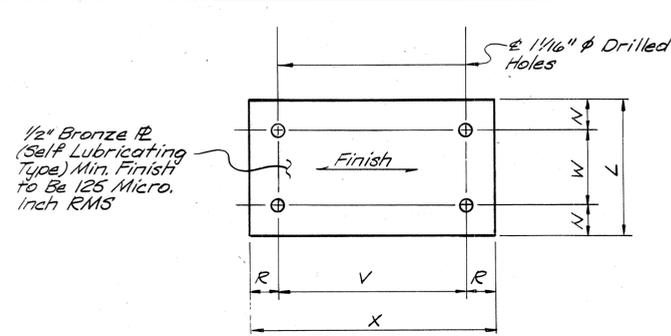


DESIGNED: FAM C.K.D. LWB
DRAWN: FL C.K.D. WRD
TRACED: C.K.D.

SF-22317

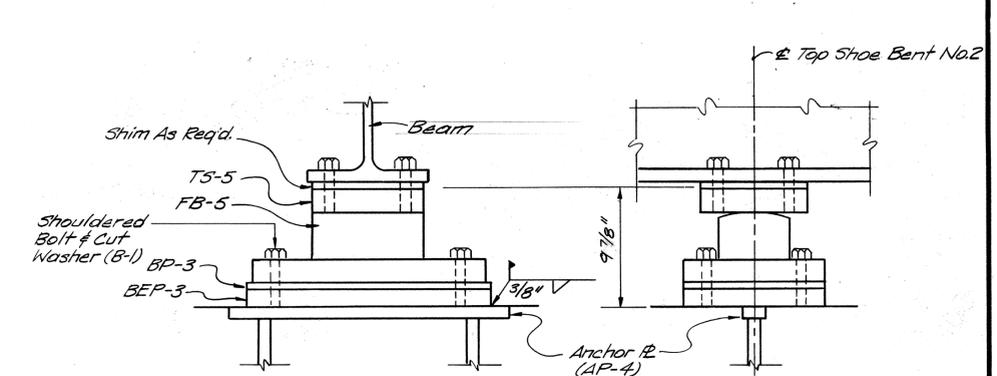


EXPANSION SHOE ASSEMBLY ES-2(L)
AT BENTS NO. 1 & NO. 3
 (WITH LATERAL EXPANSION)
 (4 REQUIRED W.B.L.)
 (4 REQUIRED E.B.L.)

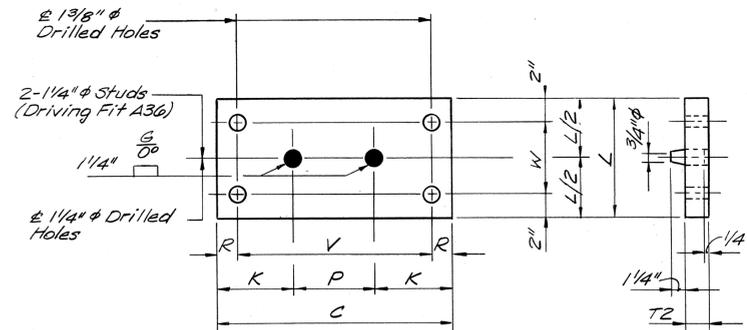


BRONZE PLATE BP-2 & BP-3

MARK	X	L	V	W	R	N	SECTION
BP-2	1'-8"	9"	1'-3 1/2"	5"	2 1/4"	2"	R 9 x 1 1/2"
BP-3	2'-1"	1'-0"	1'-8"	8"	2 1/2"	2"	R 12 x 1 1/2"

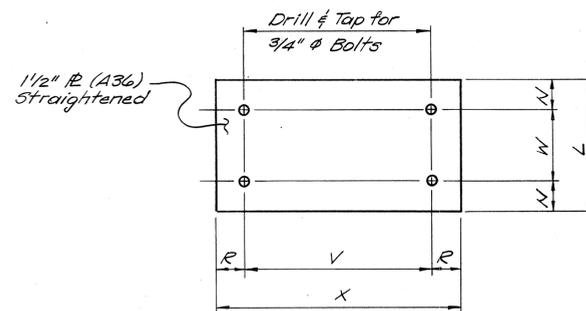


FIXED SHOE ASSEMBLY F-2(L)
AT BENT NO. 2
 (WITH LATERAL EXPANSION)
 (2 REQUIRED W.B.L.)
 (2 REQUIRED E.B.L.)



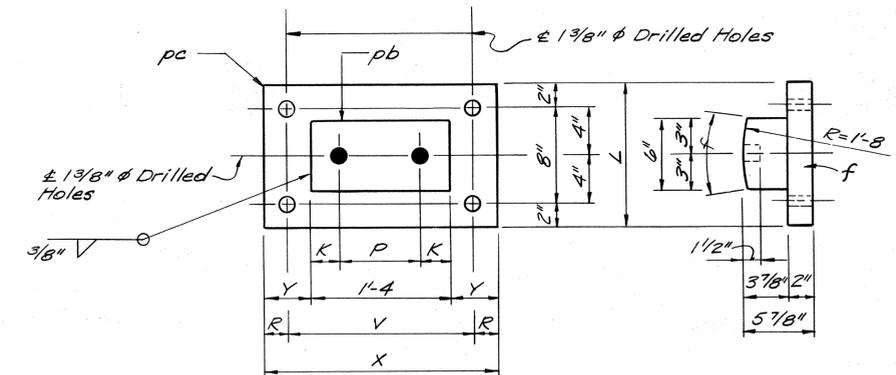
TOP EXPANSION PLATE TEP-2

MARK	C	L	T2	K	P	V	W	R	SECTION	MATERIAL
TEP-2	1'-7"	9"	2"	6"	7"	1'-3 1/2"	5"	1 3/4"	R 9 x 2"	A36



BOTTOM EXPANSION PLATE BEP-2 AND BEP-3

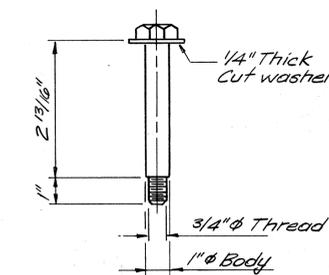
MARK	X	L	V	W	R	N	SECTION
BEP-2	1'-8"	9"	1'-3 1/2"	5"	2 1/4"	2"	R 9 x 1 1/2"
BEP-3	2'-1"	1'-0"	1'-8"	8"	2 1/2"	2"	R 12 x 1 1/2"



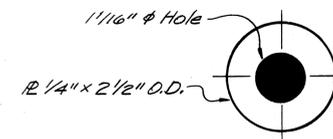
FIXED BASE FB-5

Notes:
 All material to be A36 steel
 Section 'pb' to be finished from 4" thickness while
 Section 'pc' is to be straightened.

MARK	X	L	V	R	K	P	Y	SECTIONS	
								pb	pc
FB-5	2'-0"	1'-0"	1'-8"	2"	3 1/4"	9 1/2"	4"	R 6 x 4	R 12 x 2



SHOULDERED BOLTS B-1



CUT WASHER

NOTES

For top shoes (TS-2) & (TS-5) and Expansion Roller (ER-2) Details, see Bridge Std. SH1

Curved surfaces of shoes to be machined after weldments have been completed

At the contractor's option the following substitutions of materials will be allowed at no increase in unit price of material:

- A588 Steel may be used in lieu of A36 steel
- A514 Steel may be used in lieu of A588 or A36 Steels

All Top shoes, Top Expansion Plates and Bottom Expansion plates to be straightened.

SHOE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: None

DATE: 7/20
 [Signature]

1972

DRAWING: W10 OF W

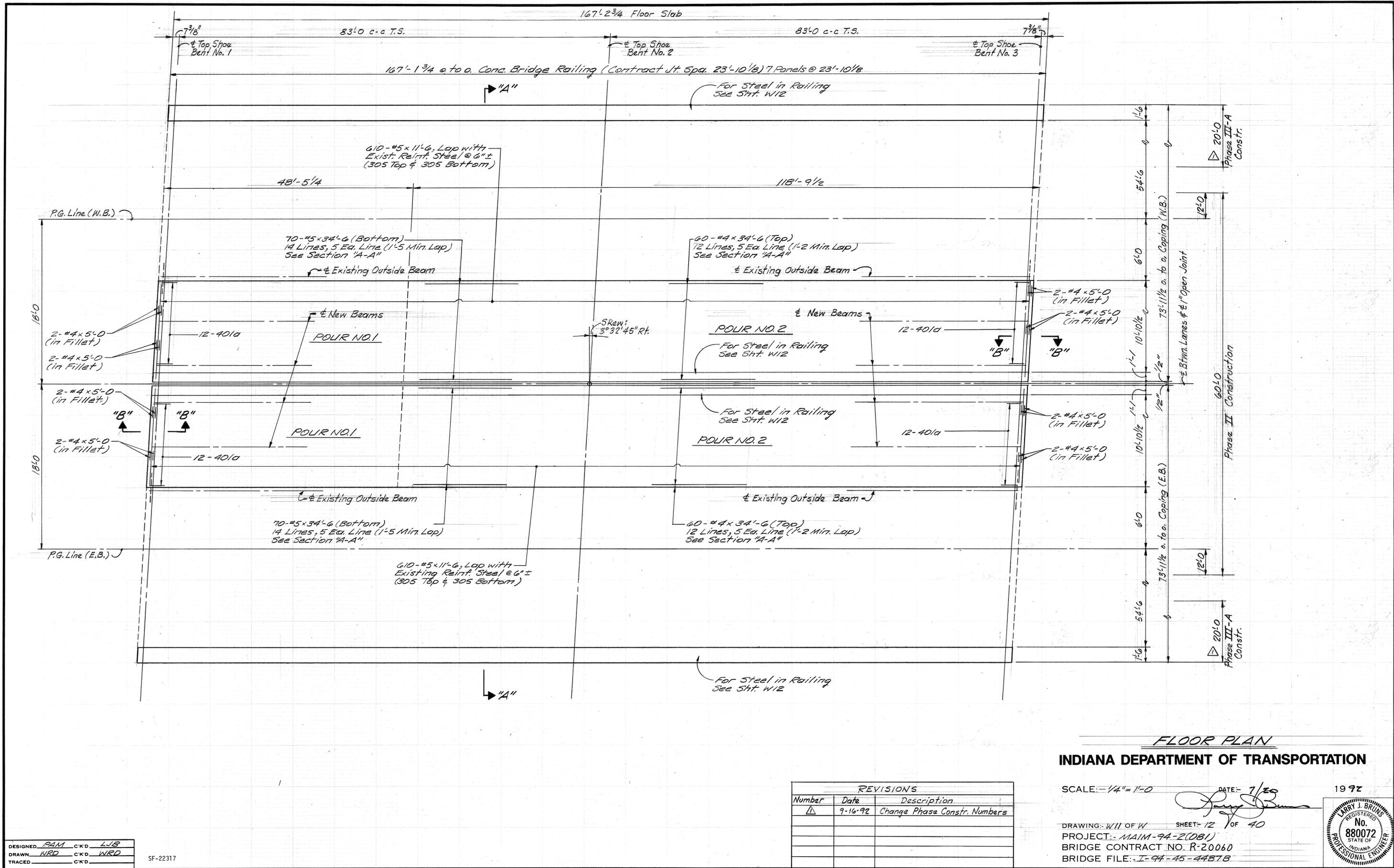
SHEET: 11 OF 40

PROJECT: MAIM-94-2(0B1)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: I-94-45-4487B



DESIGNED: PAM CKD LJB
 DRAWN: FU CKD WRD
 TRACED: CKD

SF-22317



FLOOR PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: 1/4" = 1'-0" DATE: 7/20 1992

DRAWING: W11 OF W SHEET: 12 OF 40

PROJECT: MAIM-94-2(081)

BRIDGE CONTRACT NO. R-20060

BRIDGE FILE: I-94-45-4487B

REVISIONS		
Number	Date	Description
Δ	9-16-92	Change Phase Constr. Numbers

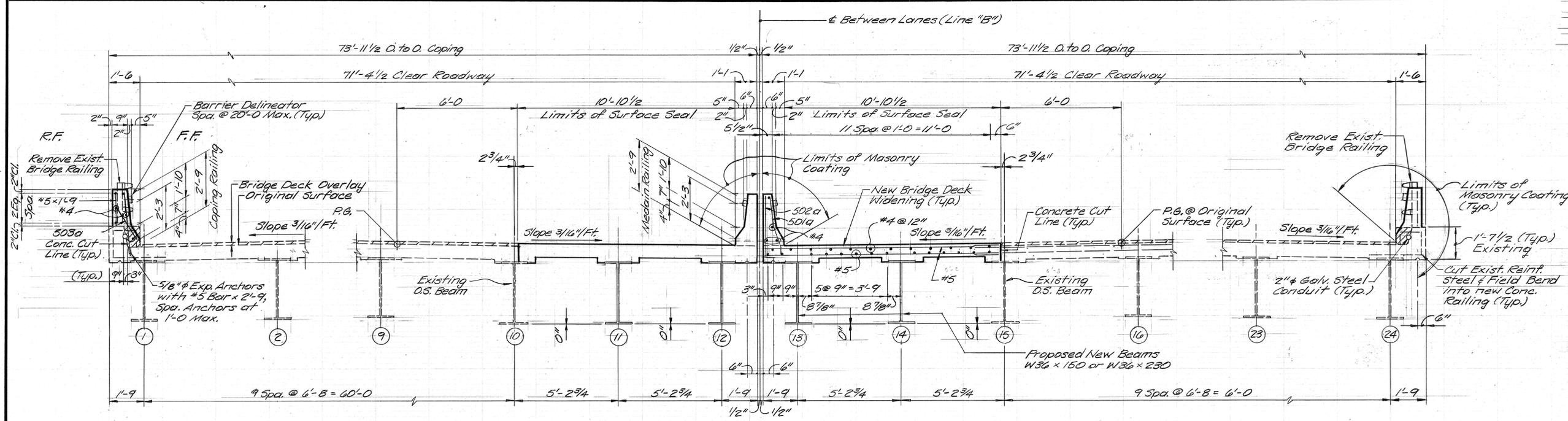
DESIGNED: PAM C.K.D. LJS
 DRAWN: WRD C.K.D. WRD
 TRACED: C.K.D.

SF-22317

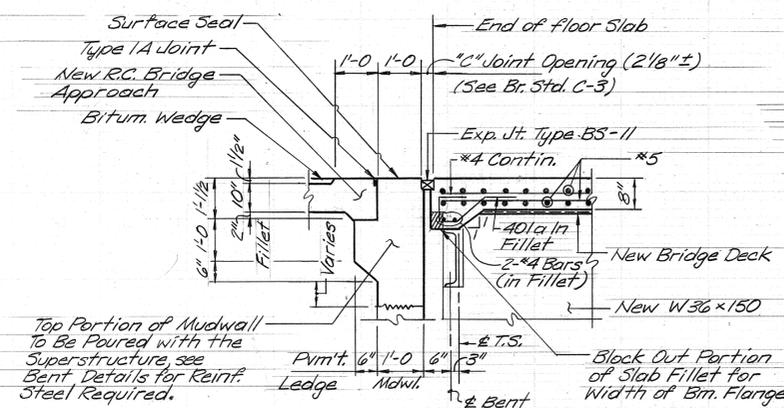


**BILL OF MATERIALS
SUPERSTRUCTURE
W.B. & E.B. LANES**

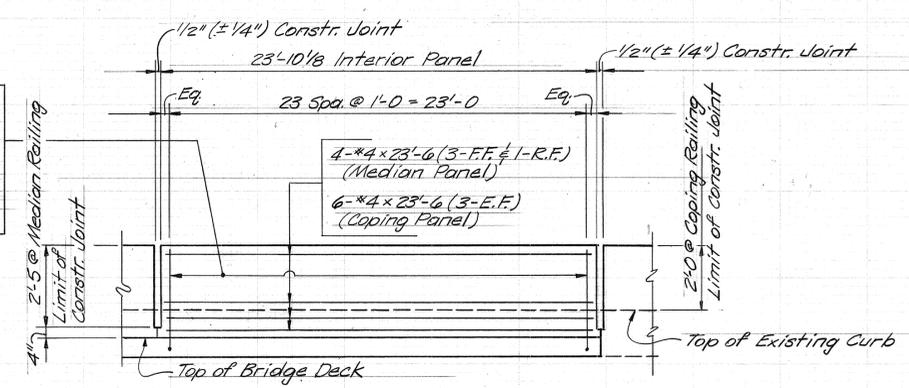
EPOXY COATED REINF. STEEL			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
401a	48	3'-8"	
#4	120	34'-6"	
#4	140	23'-6"	
#4	10	5'-0"	
Total No. 4			5134
#501a	336	3'-11"	
#502a	336	3'-9"	
#503a	336	2'-7"	
#5	140	34'-6"	
#5	1220	11'-6"	
#5	336	2'-9"	
#5	336	1'-9"	
Total No. 5			24,840
Total Epoxy Coated Reinf. Steel			29,974
CONCRETE			
Class 1" Conc. in Superstructure			
Pour No. 1 2 @ 15.5		30.0 Cys.	
Pour No. 2 2 @ 36.9		73.8 Cys.	
Total in Superstructure 103.8 Cys.			
Top of Mudwall			
Bent No. 1		4.3 Cys.	
Bent No. 2		4.3 Cys.	
Total in Superstructure 113.0 Cys.			
41/2" Conc. Railing (Median)			
14 Panels @ 1.7 Cys. =		23.8 Cys.	
41/2" Conc. Railing (Coping)			
14 Panels @ 1.8 Cys. =		25.2 Cys.	
Total Conc. Railing 49.0 Cys.			
MISCELLANEOUS			
Exp. Joint, Type "BS-11"			
4 Jts. @ 74.1 Lft. =		296.4 Lft.	
Surface Seal 3438 Sqt.			
Barrier Delineators 44 Eol.			
Masonry Coating 4038 Sqt.			
2" Galv. Steel Conduit			
2 @ 208		416 Lft.	
6" Sch. 40 PVC Pipe = 25 Lft.			
5/8" Exp. Anchors (2 @ 168) = 336 Eol.			



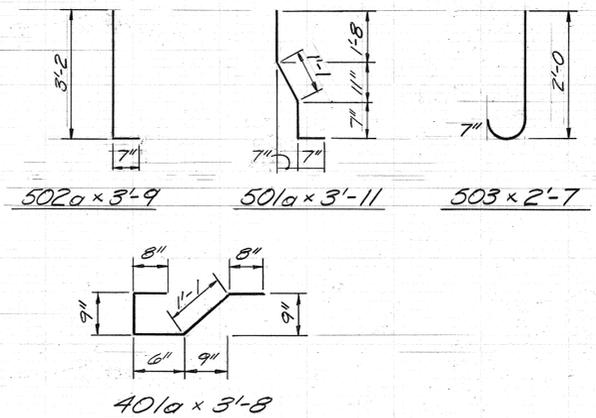
SECTION "A-A"



SECTION "B-B"
Scale 1/2" = 1'-0"



TYPICAL MEDIAN & COPING RAILING PANELS
No Scale



NOTES

After structural steel has been erected, concrete forms shall not be blocked against the expansion end of steel in making any pours adjacent to steel spans.

Floor forms shall not be blocked between adjacent beams at open joint if blocking is used both sides shall be poured simultaneously.

Sequence of Pours to be made in order of pour nos. All superstructure construction joints are optional except as noted, and pours may be made continuous provided the pour terminates at a construction joint indicated on plans. The Contractor may change the width of pours, or location of construction joints subject to Approval of the Engineer.

The top reinforcing in the deck shall be securely tied to deck forms and or beams to prevent lifting during concrete placement.

The Contractor will have the option of using permanent metal forms for the concrete bridge deck in lieu of removable forms in this contract. See article 102.12 of the specifications.

All steel in the slab and railing to be epoxy coated.

For temporary concrete barrier connection details see Road Standard CB2

For reinforcing bar notes see Bridge Standard C1

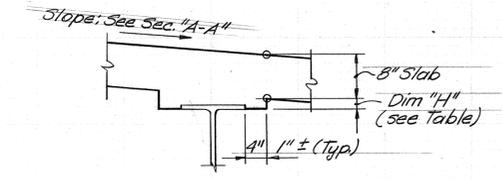
For screed setting procedure see General Procedure Notes on Dwg. W 9.

For corner details, see Dwg. No. W13.

5/8" Expansion Anchors shall be of a type approved by the Engineer. Exp. Anchors shall be embedded a Min. 3' and capable of a Pull-Out Test of 9,000 lbs. To be included in the Cost of Concrete.

TABLE OF FILLET HEIGHTS

Beam Line No.	Beam	Dim. "H"
10	Existing	2 7/8"
11	New	1 15/16"
12	New	1 5/16"
13	New	1 5/16"
14	New	1 15/16"
15	Existing	2 7/8"



TYPICAL SLAB FILLET DETAIL
Scale 3/4" = 1'-0"

SUPERSTRUCTURE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: 3/8" = 1'-0" Unless Noted DATE: 7/20

1992

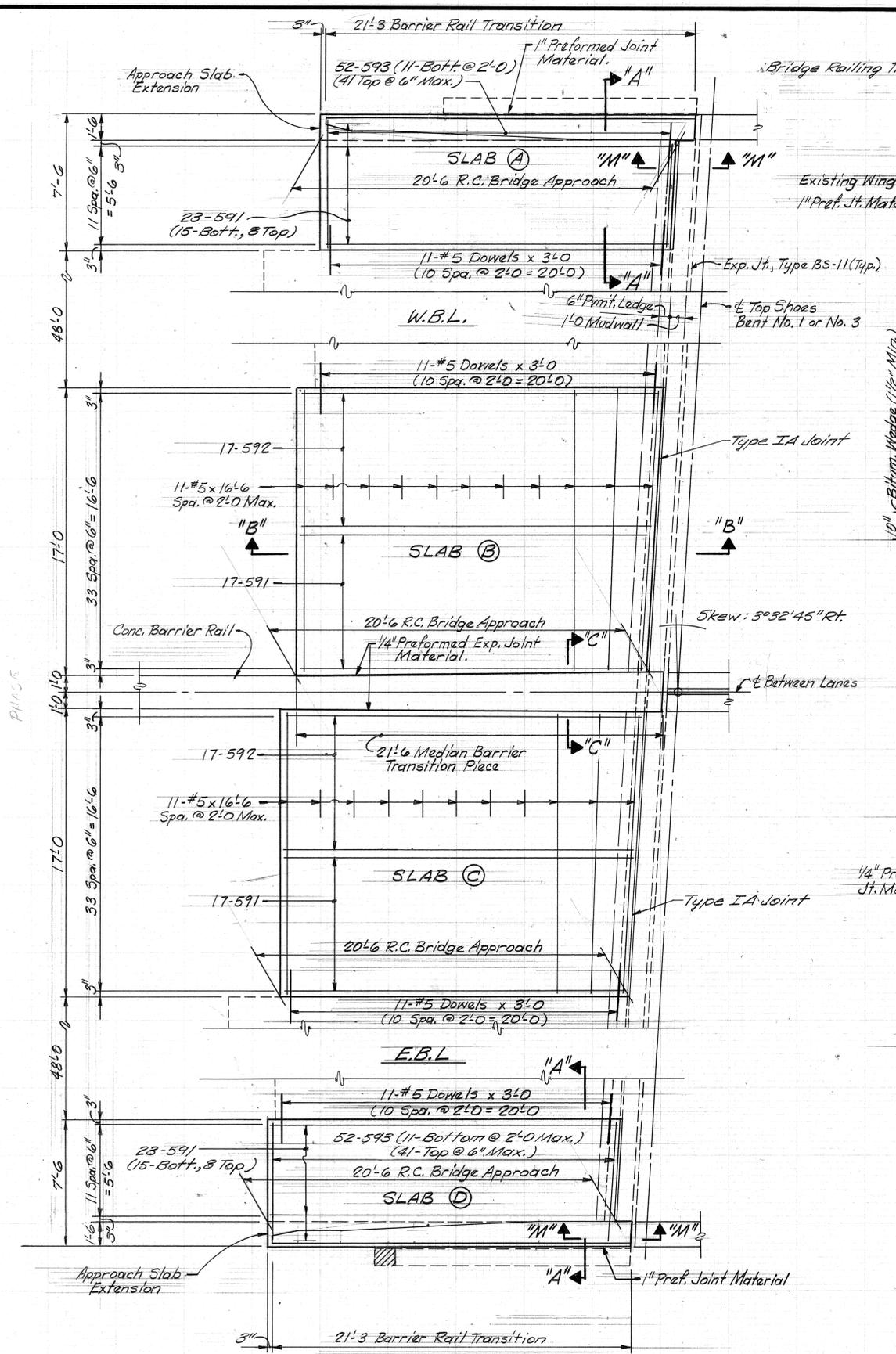
DRAWING: W12 OF W SHEET: 13 OF 40
PROJECT: M1M-94-2(081)
BRIDGE CONTRACT NO. R-20060
BRIDGE FILE: I-94-45-44878



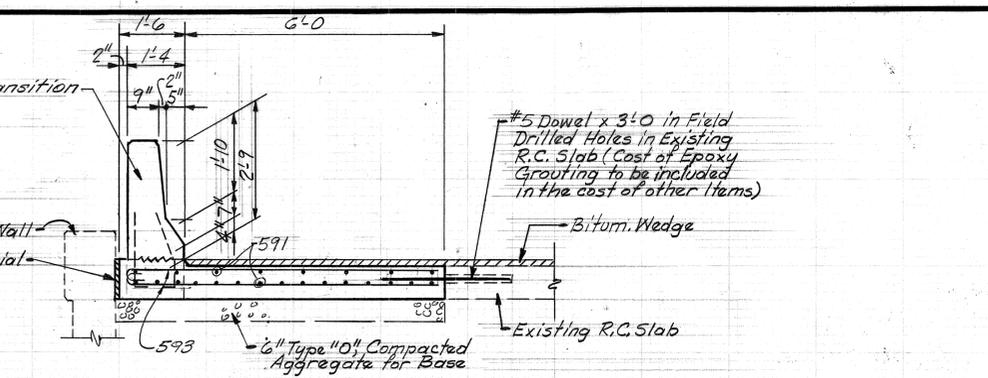
DESIGNED: PAM C'KD LJB
DRAWN: FU C'KD WRD
TRACED: C'KD

SF-22317

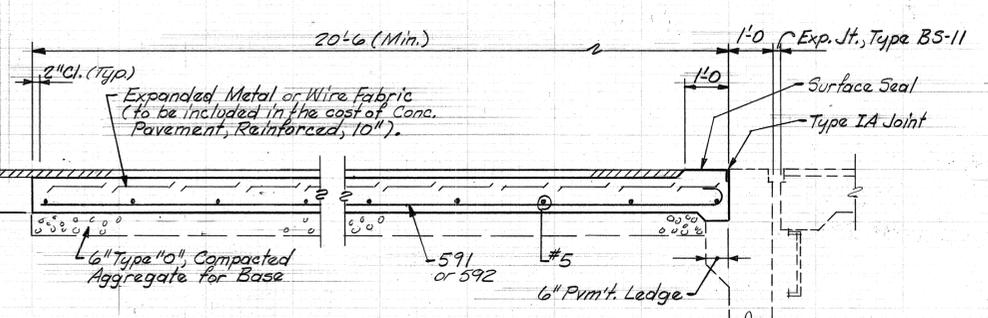
I
PHASE II
PHASE I
I



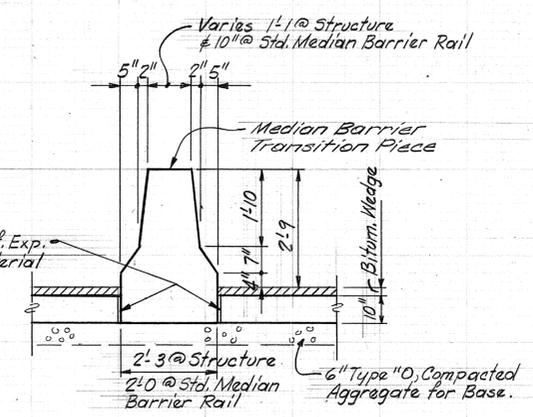
R.C. BRIDGE APPROACH SLAB PLAN @ BENT No. 1
(BENT No. 3 SAME BY 180° ROTATION)
Scale: 1/4" = 1'-0"



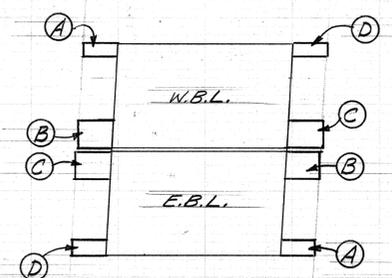
SECTION "A-A"
Scale: 1/2" = 1'-0"



SECTION "B-B"
Scale: 1/2" = 1'-0"



SECTION "C-C"
Scale: 1/2" = 1'-0"



KEY PLAN FOR BRIDGE APPROACH SLABS
No Scale

Notes:
For Reinforcing Bar Notes, see Bridge Standard C-1.
For Type "BS-11" Joint See Bridge Standard C-3.
Median Barrier Transition Piece to be Paid for as 21.5 Lft. of Concrete Median Barrier.
For Section "M-M", see Dwg. W13.
For Bridge Railing Transition Details see Dwg. W30.

20'-0"	591
20'-6"	592
7'-2"	582
591 x 20'-7"	
592 x 21'-1"	
593 x 7'-9"	

**BILL OF MATERIALS
R.C. SLAB APPROACHES**

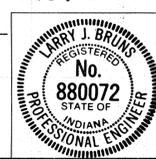
SLAB "A" (SLAB "D" SAME) ONE SLAB				SLAB "B" (SLAB "C" SAME) ONE SLAB			
EPOXY COATED REINF. STEEL				EPOXY COATED REINF. STEEL			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)	Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
591	46	20'-7"		591	34	20'-7"	
593	104	7'-9"		592	34	21'-1"	
#5	22	3'-0"		#5	22	16'-6"	
Total No. 5 =			1897	Total No. 5 =			1925
Total Epoxy Coated Reinf. = 1897				Total Epoxy Coated Reinf. = 1925			
MISCELLANEOUS				MISCELLANEOUS			
10" R.C. Conc. Pavement				10" R.C. Conc. Pavement			
Slab A =		171 Sys.		Slab B =		39.7 Sys.	
Slab D =		171 Sys.		Slab C =		39.7 Sys.	
Total =		342 Sys.		Total =		79.4 Sys.	
Field Drilled Holes in Concrete = 22 Ea.				Field Drilled Holes in Concrete = 22 Ea.			
Surface Seal (2 @ 6 Sft.) = 12 Sft.				Surface Seal (2 @ 13 Sft.) = 26 Sft.			
Median Barrier Transition = 21.5 Lft.				Median Barrier Transition = 21.5 Lft.			
6" Type 'O' Comp. Agg. Base @ 5.7 = 11.4 Tons				6" Type 'O' Comp. Agg. Base @ 13.2 = 26.4 Tons			

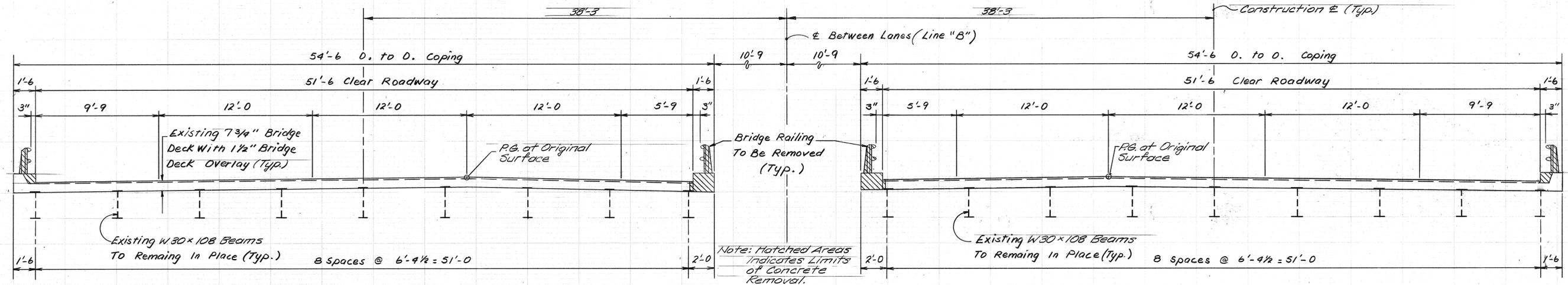
BARRIER RAIL TRANSITIONS

TOTAL EPOXY COATED REINFORCING STEEL	4 @ 340 = 1360 Lbs.
Class "C" Conc. in Railing =	4 @ 1.9 = 7.6 Cys.
Masonry Coating	4 @ 142 = 568 Sft.

R.C. BRIDGE APPROACH DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: 1/4" = 1'-0", Unless Noted DATE: 1/30 1972
DRAWING: W14 OF M1 SHEET: 15 OF 40
PROJECT: M1M-94-2(081)
BRIDGE CONTRACT NO. R-20060
BRIDGE FILE: I-94-45-44878

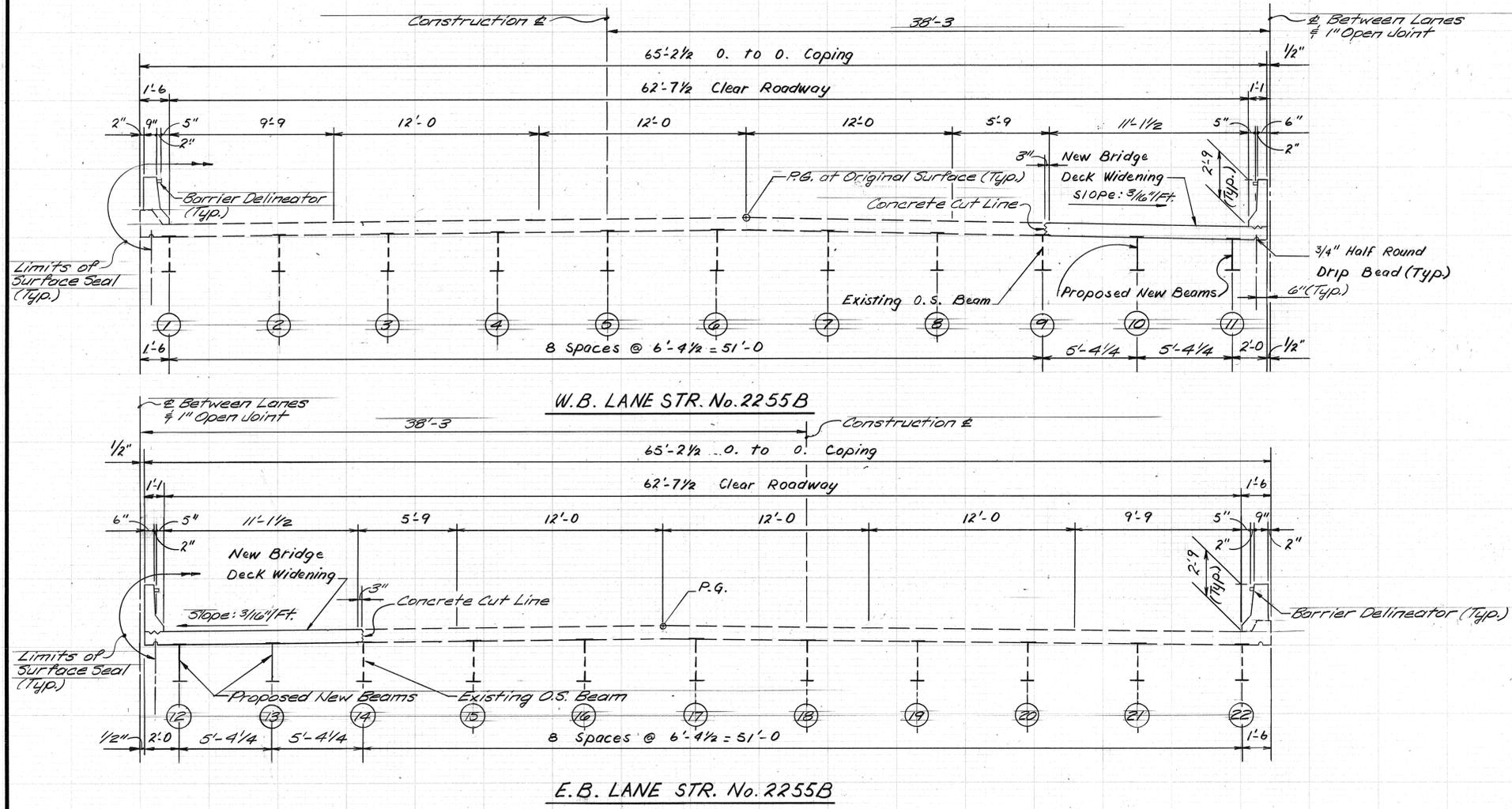




W.B. LANE STR. No. 2255

EXISTING SECTIONS

E.B. LANE STR. No. 2255



NOTES
 For General Notes, Construction Procedures, Standard Drawings, see Dwg. W3.

**GENERAL PLAN (CONT.)
 BRIDGE DECK REPLACEMENT + WIDENING**

INDIANA DEPARTMENT OF HIGHWAYS

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

DATE: 7/20
[Signature]

199Z

DRAWING: WIG OF W SHEET: 17 OF 40
 PROJECT: - M1M-94-2(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: - I-94-50-2255B

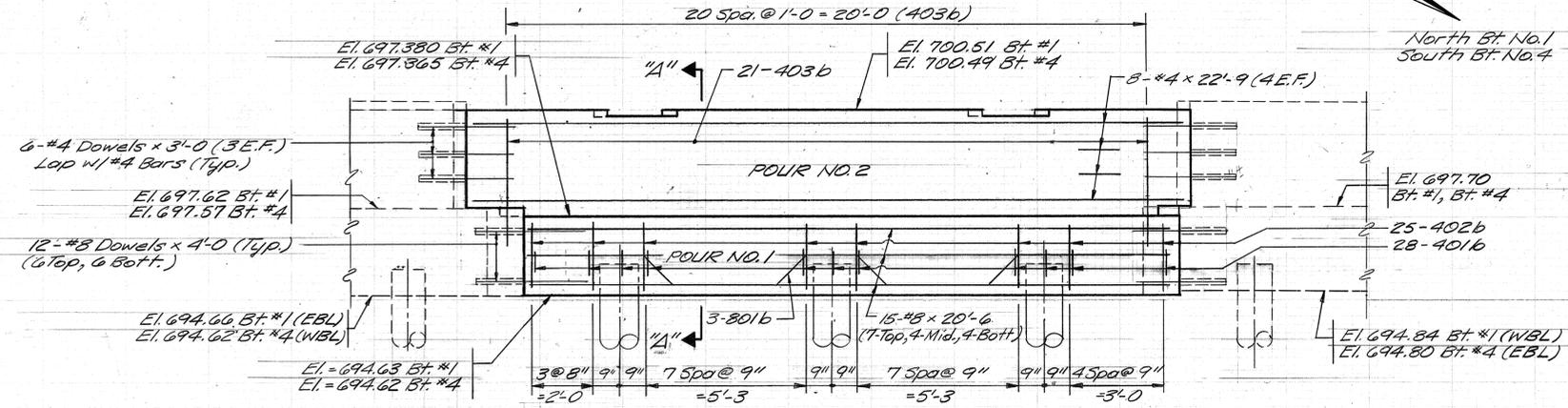
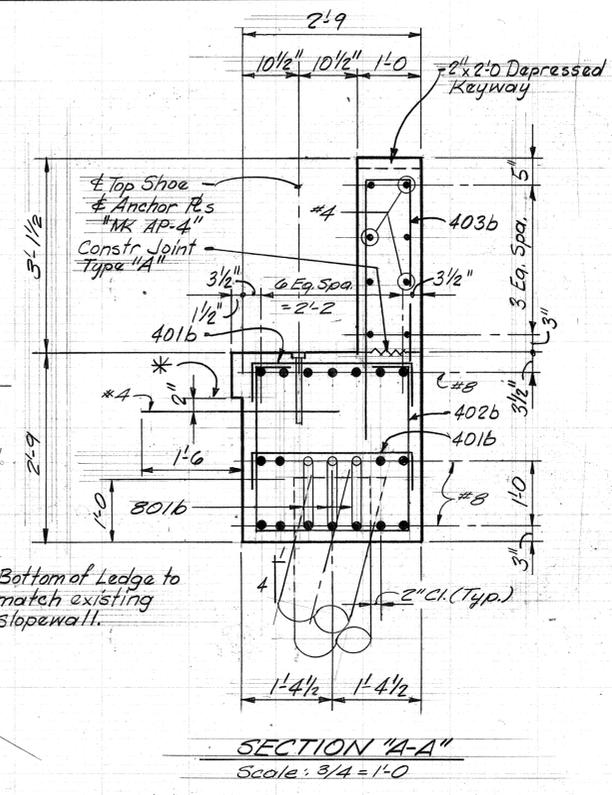
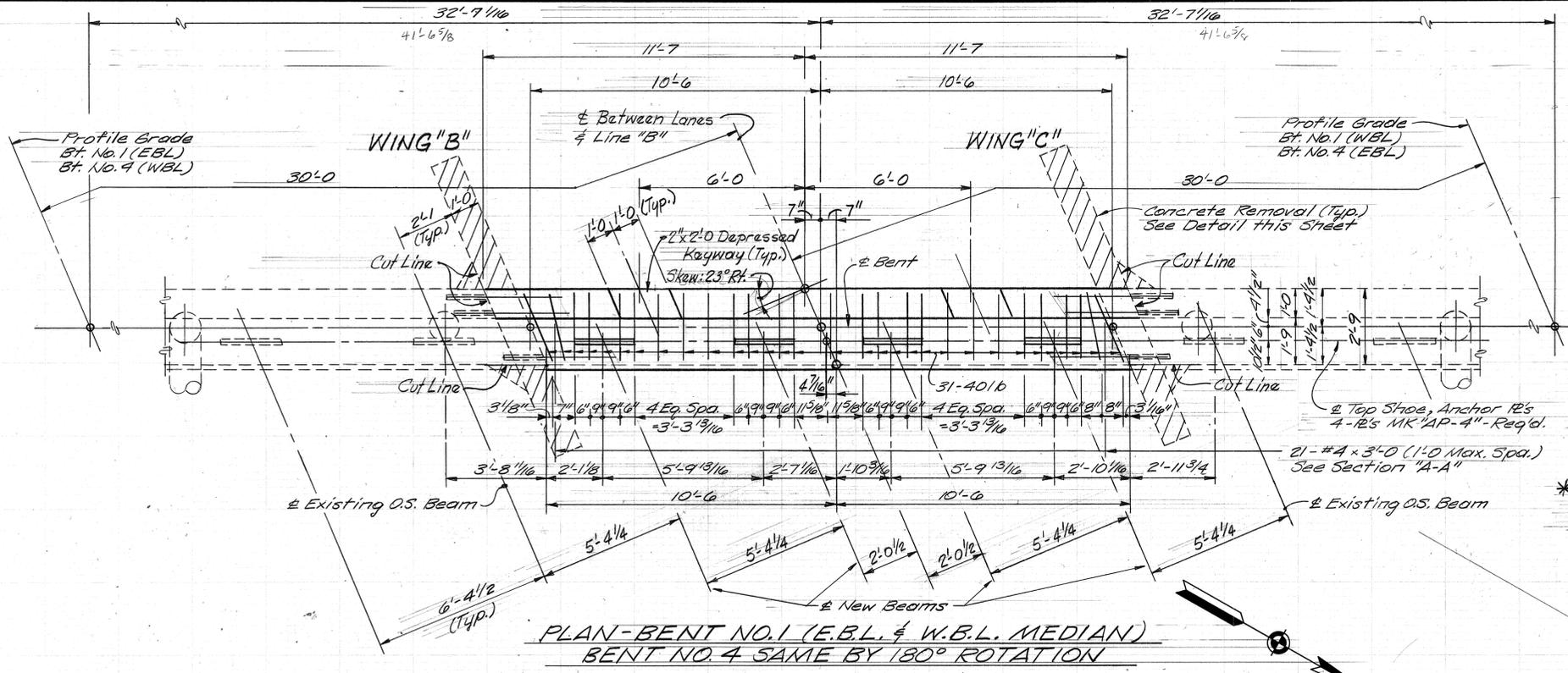


DESIGNED: PAM C.K.D. LJB
 DRAWN: RL, FU C.K.D. WED
 TRACED: C.K.D.

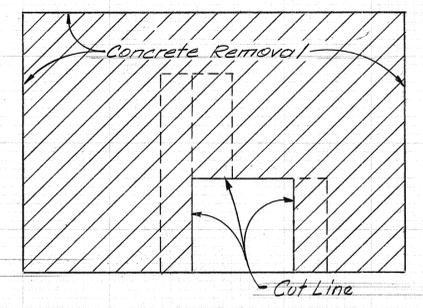
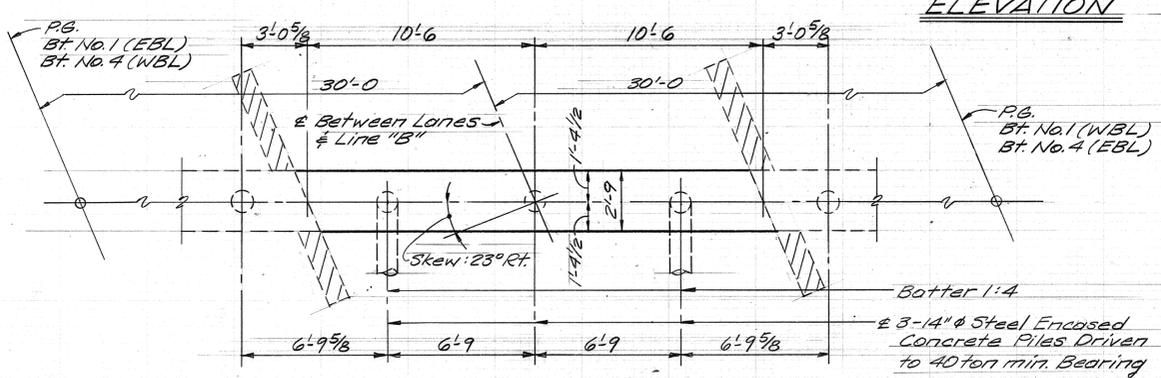
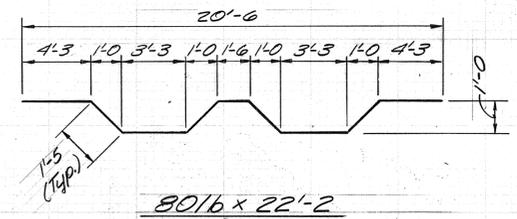
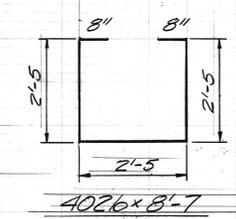
SF-22317

**BILL OF MATERIALS
BENT NO. 1 (NO. 4 SAME)**

EPOXY COATED REINF. STEEL			
MARK OR SIZE	No. of Bars	Length (Ft.)	Weight (Lbs.)
801b	3	22'-2"	
#8	15	20'-0"	
#8	24	4'-0"	
Total No. 8 =			1255
401b	59	3'-9"	
402b	25	8'-7"	
403b	21	9'-0"	
#4	8	22'-9"	
#4	12	3'-0"	
Total No. 4 =			503
Total Epoxy Coated Reinf. = 1818			
CONCRETE			
Class "A" Concrete in Substr.			
Pour No. 1		5.9	
Pour No. 2		2.7	
Total Class "A" Conc. = 8.6			
MISCELLANEOUS			
Anchor Plates MK-AP-4		4 Ea.	
3-14" x (100) SFI Encased Concrete Piles @ 45'-0" Ea.		135 Lft.	
Foundation Excavation = 201 Cud.			
Field Drilled Holes in Concrete = 36 Ea.			



Mark	a	b	Length
401b	8"	2'-5"	3'-9"
403b	4'-2"	8"	9'-0"



Notes:
 For Reinforcing Bar Notes, See Bridge Std. Cl.
 For Anchor Plate MK "AP-4" Detail, see Dwg. W6
 Drill Holes 2" ϕ into Existing Bent, for #8 Bars
 Drill 2'-0" Holes, for #4 Bars Drill 1'-6" Holes
 Min. Place Bars with Approved Non-shrinking
 grout at a 4" Min. from Face of Existing Concrete.

**BENT NO. 1 AND NO. 4 DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION**

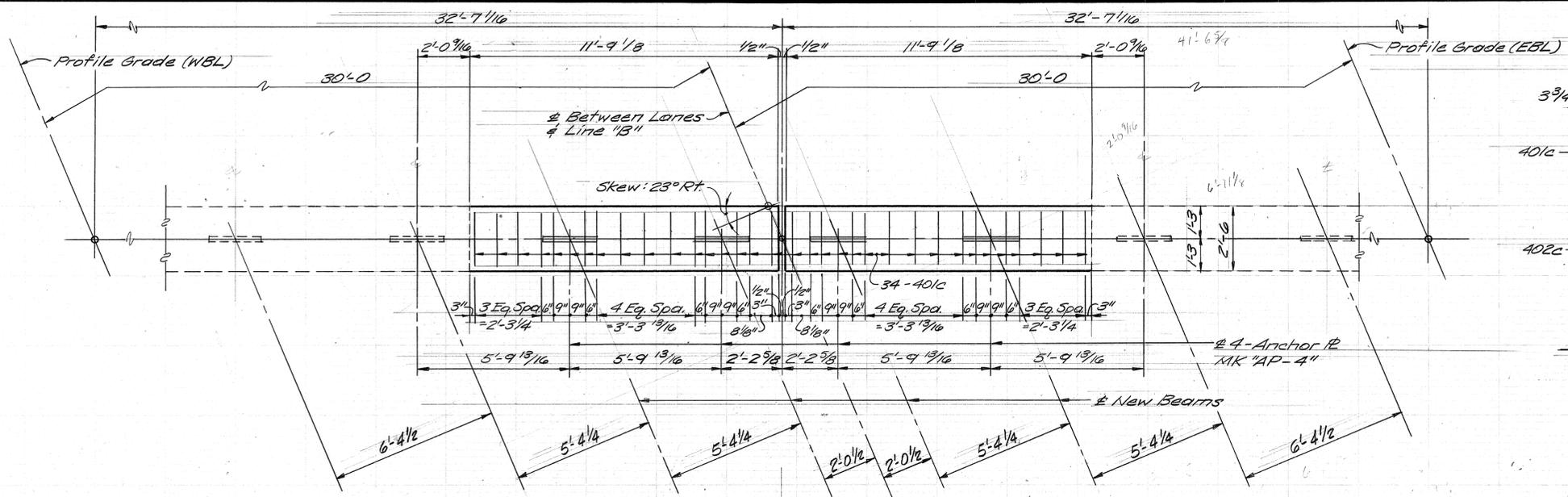
SCALE: - 3/8" = 1'-0" Unless Noted DATE: 7/20 1992
 DRAWING: W18 OF W18 SHEET: 19 OF 40
 PROJECT: M1M-94-Z(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: I-94-50-2255 B

DESIGNED: RAM C.K.D. LJB
 DRAWN: WRD & EL C.K.D. WRD
 TRACED: C.K.D.

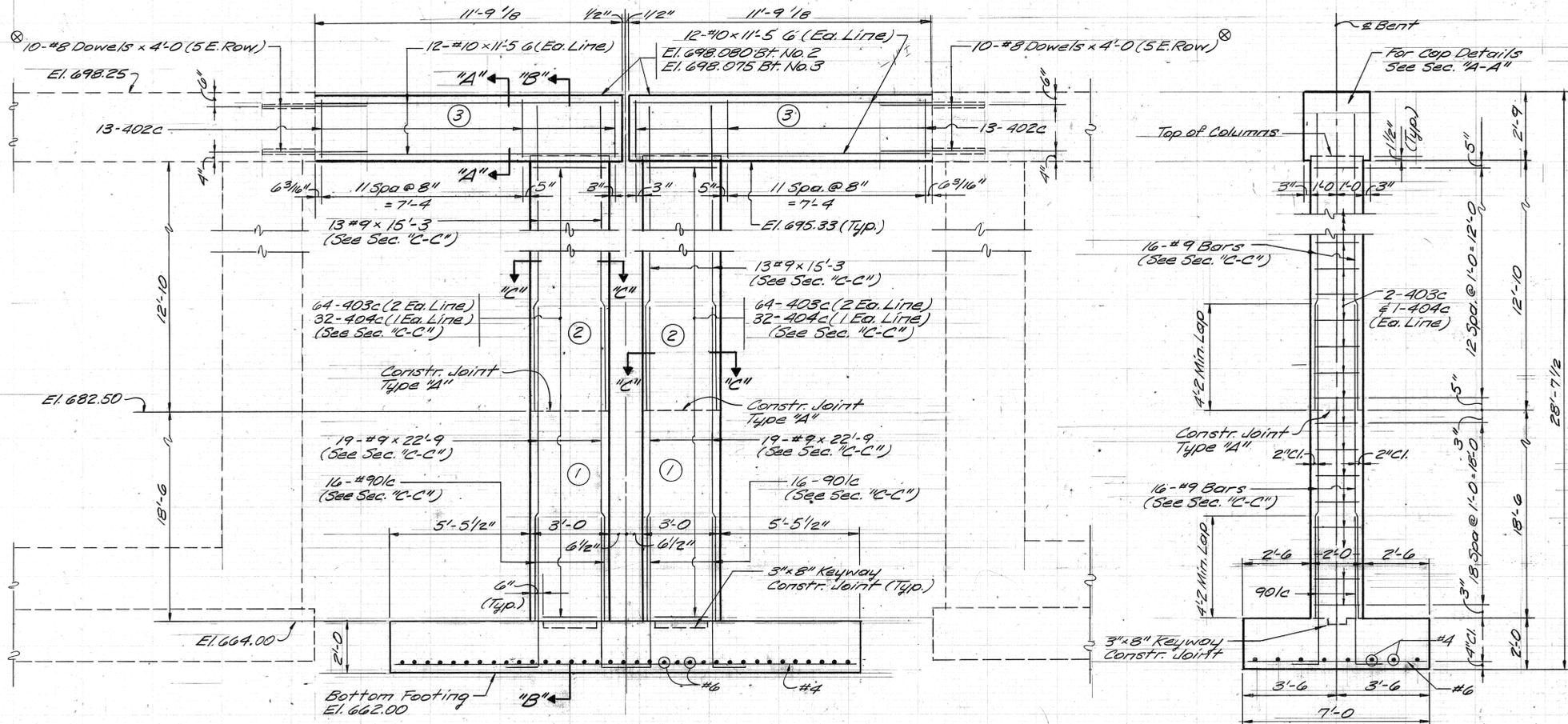
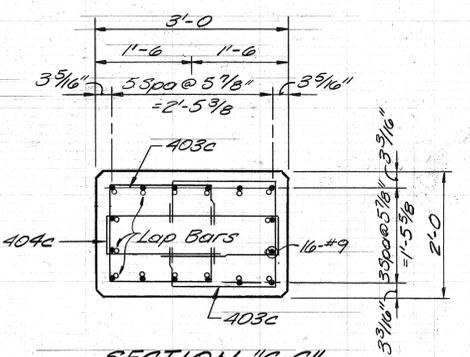
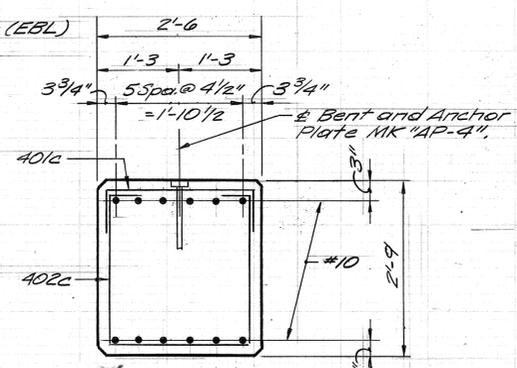
SF-22317



NA



PLAN



ELEVATION

SECTION "B-B"

Notes:

- For Reinforcing Bar Notes, See Bridge Std. C1.
- For Footing Plan, Bill of Materials and Anchor Plate MK "AP-4" Detail, see Dwg. W6
- All Anchor Plates, MK "AP-4" shall be pre-set in concrete.
- ⊙ Drill Holes 2" into Existing Bent, for #8 Bars, Drill 2'-0" Holes Min. Place BBars with Approved Non-Shrinking Grout at a 4" Min. from Face of Existing Concrete.
- ⊙ Number Indicates Concrete Pours.

BENT NO. 2 AND NO. 3 DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - 3/8" = 1'-0", Unless Noted DATE: 7/10 1992

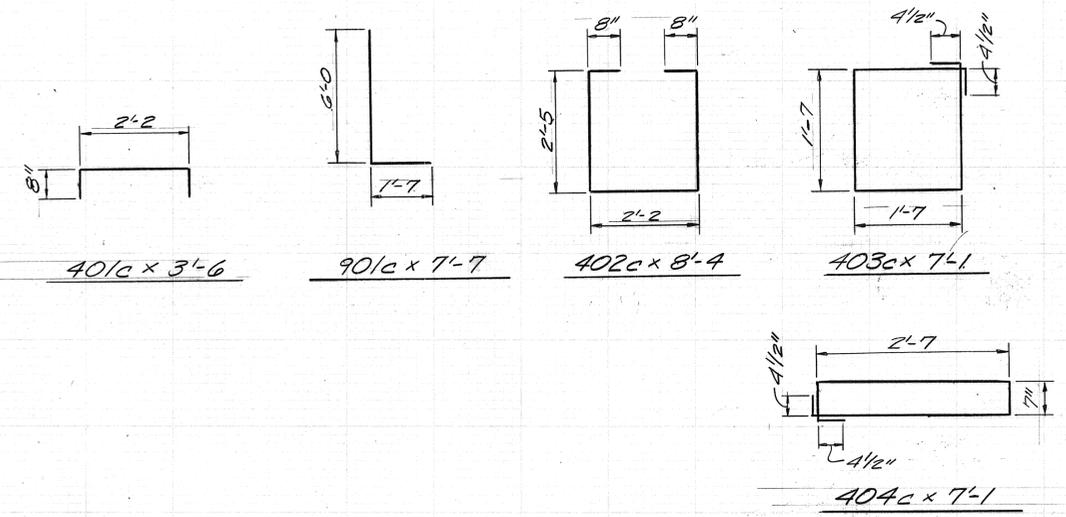
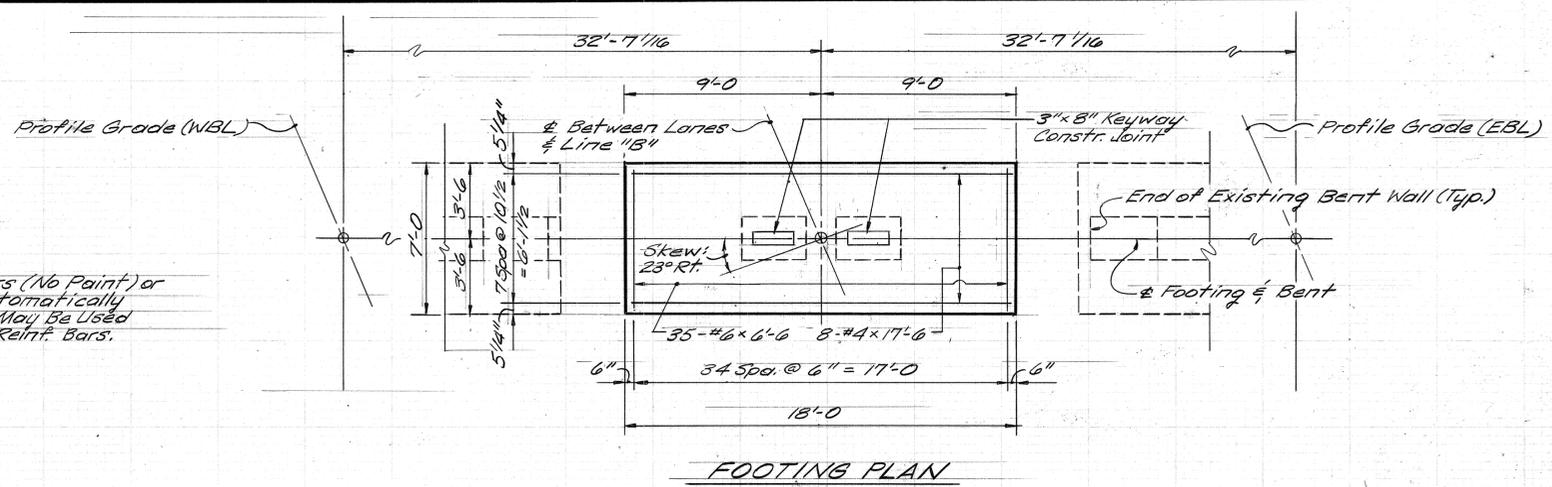
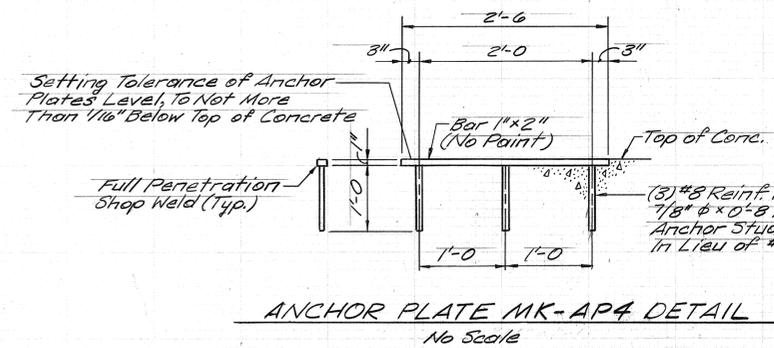
Larry J. Bruns

DRAWING: W19 OF W SHEET: 20 OF 40
PROJECT: MAIN-94-2(081)
BRIDGE CONTRACT NO. R-20060
BRIDGE FILE: I-94-50-2255 B



DESIGNED: PAM C'KD LJB
DRAWN: WRD/FJ C'KD WRD
TRACED: C'KD

SF-22317



**BILL OF MATERIALS
BENT NO.2 (NO.3 SAME)**

REINFORCING STEEL			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
#10	24	11'-3	
Total No. 10 =			1179
901c	32	7'-7	
#9	38	22'-9	
#9	20	15'-3	
Total No. 9 =			513
#8	20	4'-0	
Total No. 8 =			214
#6	35	6'-6	
Total No. 6 =			342
401c	34	3'-6	
402c	26	8'-4	
403c	128	7'-1	
404c	64	7'-1	
#4	8	17'-6	
Total No. 4 =			1226
Total Reinforcing Steel =			8074
CONCRETE			
Class "B" Conc. in Footing = 9.3 Cys.			
Class "A" Conc. in Substructure			
Pour No. 1 2 @ 4.1		8.2 Cys.	
Pour No. 2 2 @ 2.9		5.8 Cys.	
Pour No. 3 2 @ 3.0		6.0 Cys.	
Total Class "A" in Substr. = 20.0 Cys.			
MISCELLANEOUS			
Anchor Plates MK-AP4 = 4 Ea.			
Foundation Excavation = 1773 Cys.			
Field Drilled Holes in Conc. = 20 Ea.			

BENT NO.2 AND NO.3 DETAILS (CONTIN.)

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - 1/4" = 1'-0, Unless Noted DATE: 7/20

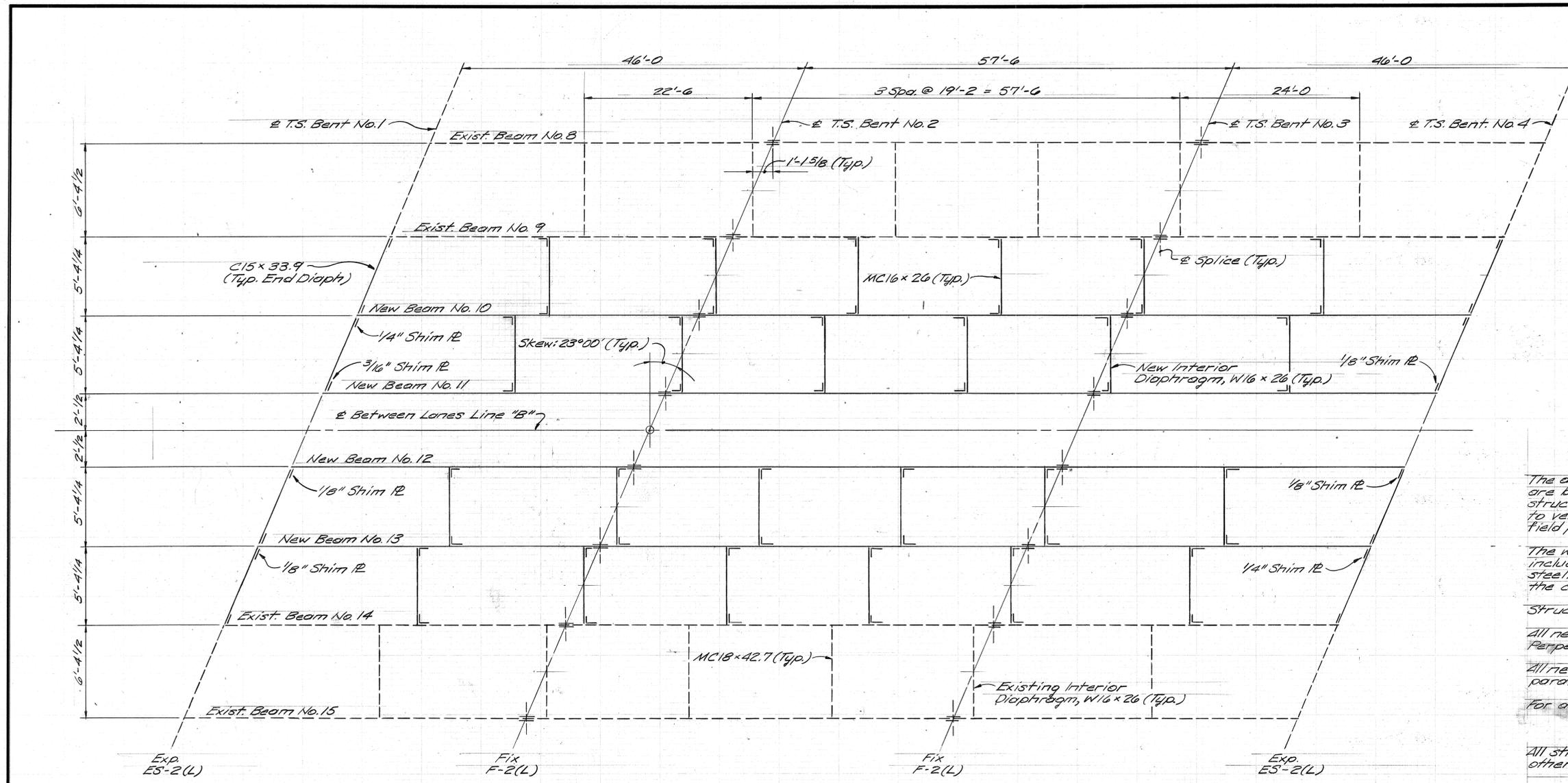
1992

DRAWING: W20 OF W SHEET: 21 OF 40
PROJECT: - M1M-94-2(081)
BRIDGE CONTRACT NO. R-20060
BRIDGE FILE: - I-94-50-2255B

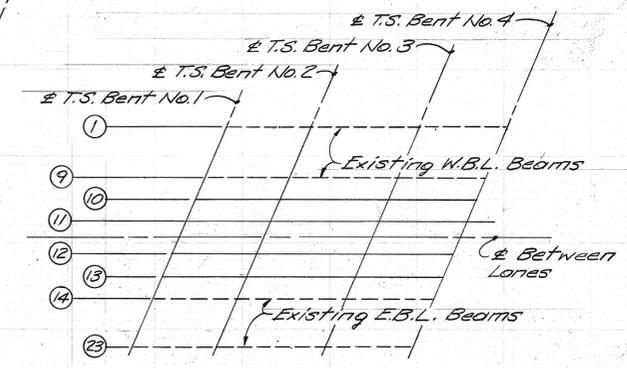


DESIGNED: PAM C.K'D. LJB
DRAWN: EJ C.K'D. WRD
TRACED: C.K'D.

SF-22317



PLAN



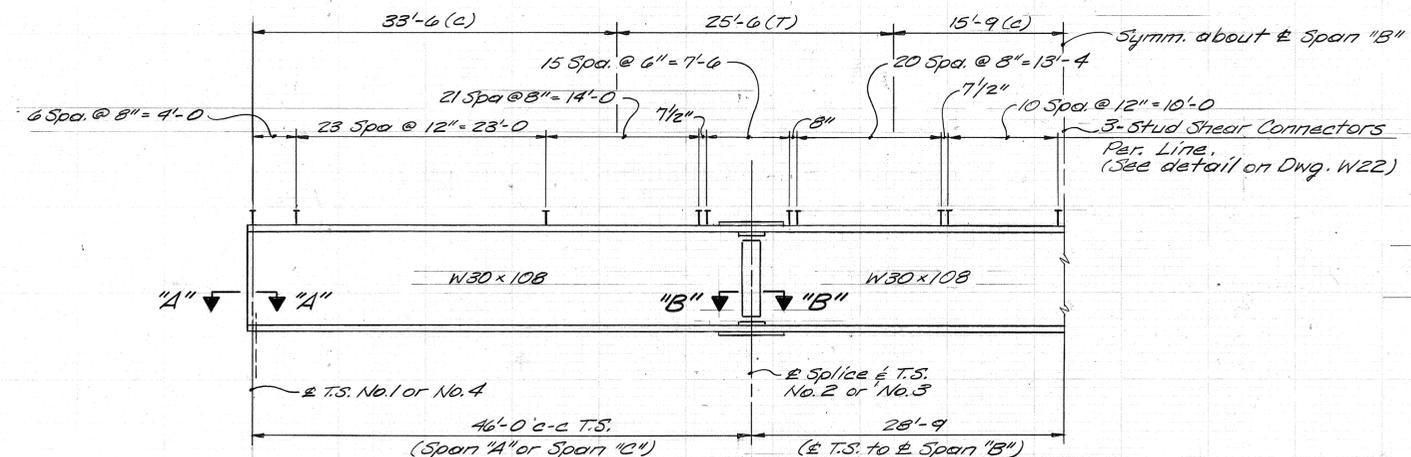
BEAM KEY PLAN

NOTES

- The dimension used for these details plans are based on the original plans for this structure. It is the contractor's responsibility to verify the controlling dimensions in the field prior to fabrication of steel.
- The weight of the high strength bolts is not included in the estimated weight of structural steel. The cost of bolts shall be included in the cost of structural steel.
- Structural steel shall be paid for "Lum Sum"
- All new Interior Diaphragms are to be Erected Perpendicular to the Beam Lines.
- All new end Diaphragms are to be erected parallel to the skew.
- For additional structural details see Dwg. W22, W23
- All structural steel is to be ASTM A36 unless otherwise noted.
- For shoe setting procedure see General Procedure notes on Dwg. W23.
- For Typical shear stud connector detail see Dwg. W22
- For Section "A-A" & "B-B" see Dwg. W22

DESIGN DATA

- Live Load: HS20-44 and military loading with impact and distribution of loads in accordance with 1989 AASHTO Specs. and interim specs.
- Dead Load: Actual weight plus 35 lbs./sq. ft. to provided for weight of future wearing surface.
- Floor Slab: Designed for 16,000 lbs. wheel load plus impact.
- Stresses: In accordance with 1989 AASHTO specs. and interim specs.



BEAM ELEVATION

Scale: 1" = 1/8 Horiz 1/2" = 1'-0 Vert.

Note: No paint along top flange or shear connectors.

LEGEND

- T = Tension
- C = Compression

EST. WEIGHT OF STRUCTURAL STEEL = 87,989

- Includes: A314 = 2244
- Weight of Bronze = 626
- Field Drilled Holes = 48

FRAMING PLAN

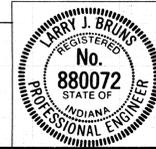
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - No Scale

DATE: 1/20

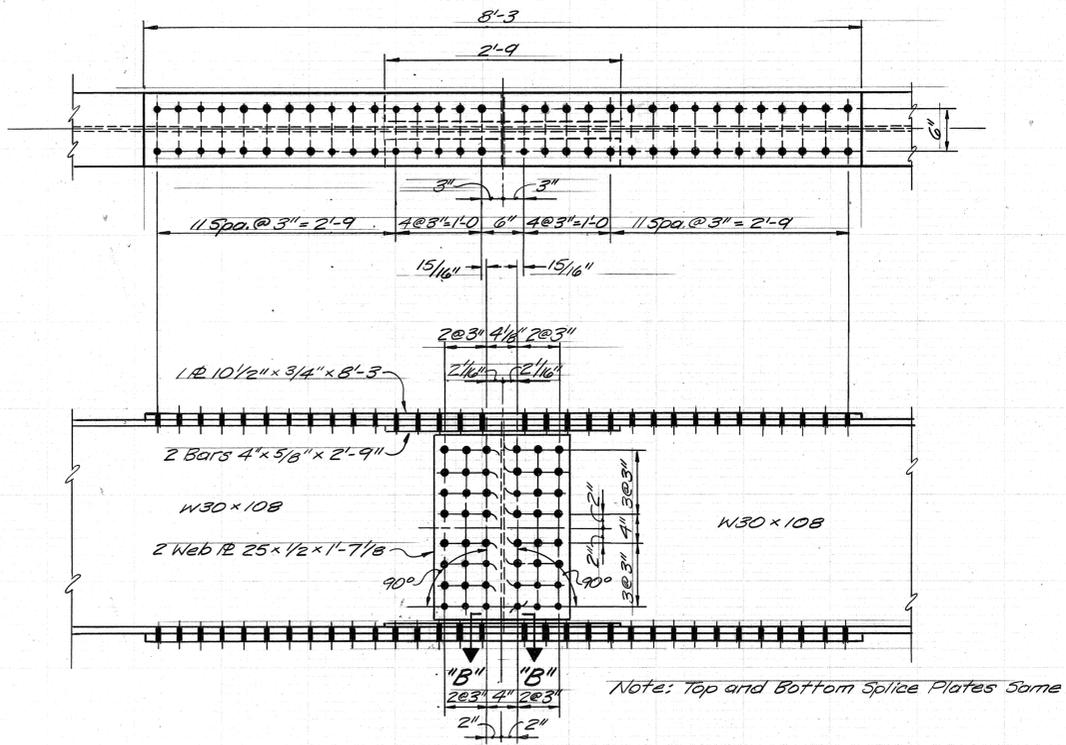
1972

DRAWING: W21 OF W SHEET: 22 OF 40
 PROJECT: MA1M-94-2(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: I-94-50-2255B

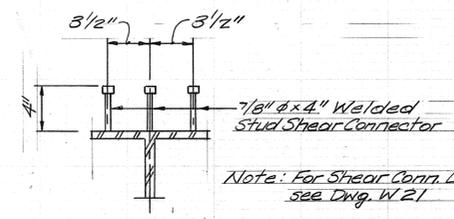


DESIGNED: PAM C.K.D. LJB
 DRAWN: FL C.K.D. WJD
 TRACED: C.K.D.

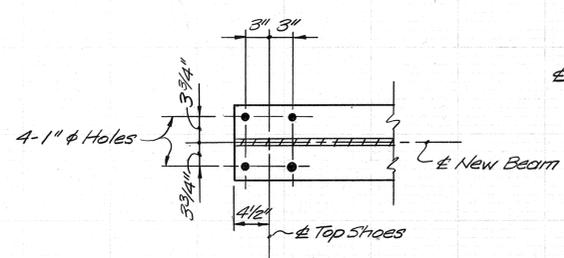
SF-22317



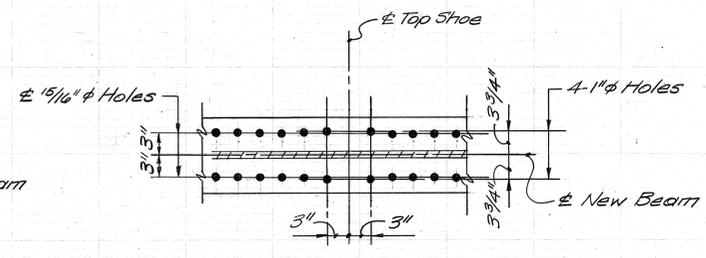
INTERIOR AND EXTERIOR BEAM SPLICE
Scale: 1" = 1'-0"



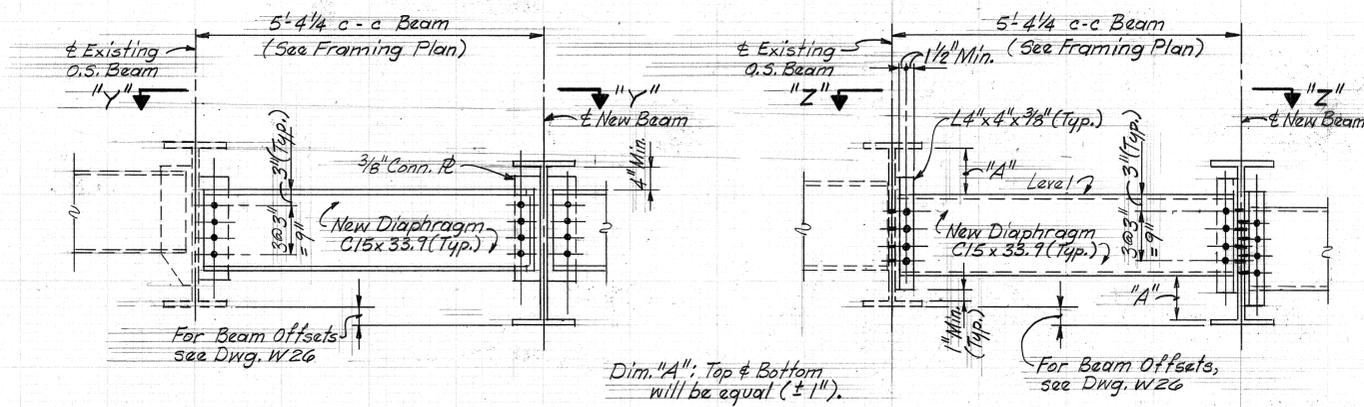
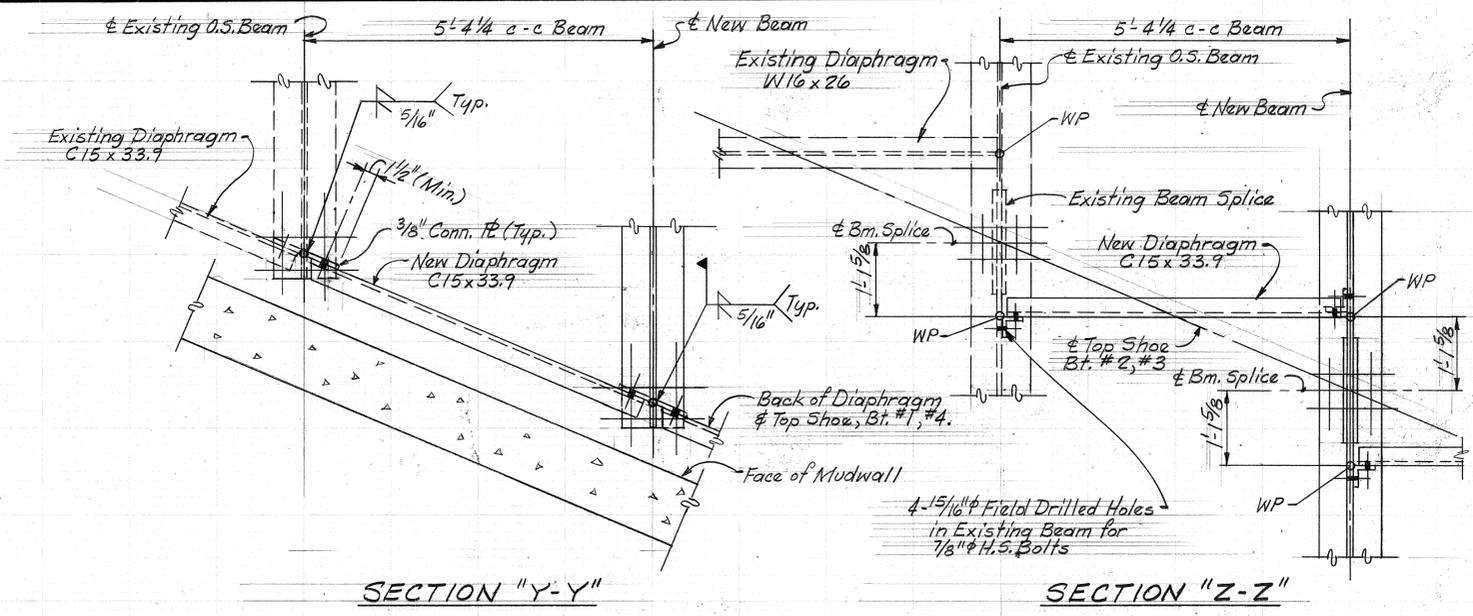
TYPICAL SHEAR CONNECTOR DETAIL



SECTION "A-A"
BEAM DETAIL @ BENTS NO. 1 & 4
Scale: 1" = 1'-0"



SECTION "B-B"
BEAM DETAIL @ BENT NO. 2 & 3
Scale: 1" = 1'-0"



DIAPHRAGM DETAILS
Scale: 3/4" = 1'-0"

STRUCTURAL STEEL DETAILS
INDIANA DEPARTMENT OF TRANSPORTATION

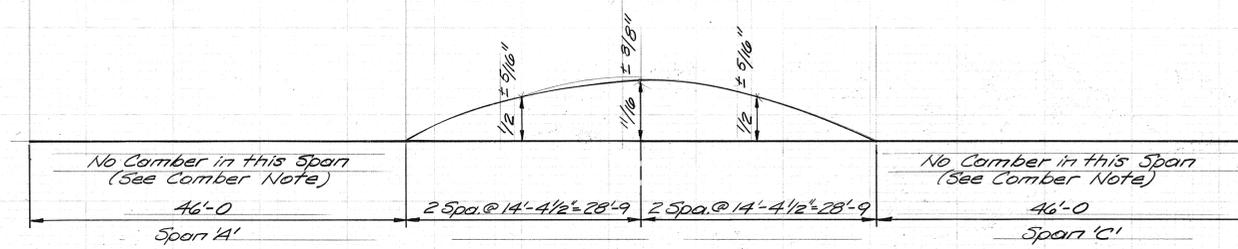
SCALE: 1" = 1'-0" Unless Noted DATE: 7/20 1992
DRAWING: W22 OF W SHEET: 23 OF 40
PROJECT: MAM-94-2(081)
BRIDGE CONTRACT NO. R-20060
BRIDGE FILE: I-94-50-2255B
LARRY J. BRUNS
REGISTERED
No. 880072
STATE OF INDIANA
PROFESSIONAL ENGINEER

DESIGNED: PAM C.K'D. LJB
DRAWN: WRD & FL C.K'D. WRD
TRACED: C.K'D.

SF-22317

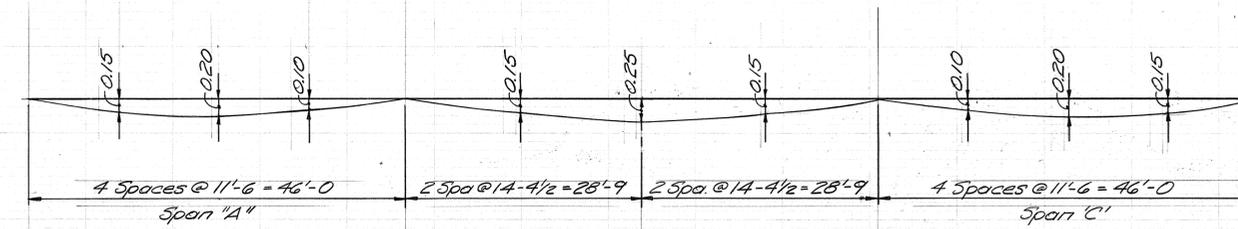
GENERAL PROCEDURE

1. After the new beams have been erected, install the diaphragms necessary to connect the new beams securely to each other.
2. Adjust the new beam system longitudinally so that dimension "C" from the center line of top shoe to the face of the mudwall at Bent No. 1 and Bent No. 4 are equal.
3. Field drill the necessary holes in the existing outside beams and install the remaining diaphragms. Tighten all bolts and complete the welding of end diaphragm connections.
4. After the above operations are complete, weld the fixed shoes assembly to the anchor plates at Bent No. 2 and Bent No. 3.
5. Adjust the expansion plate under each expansion shoe in accordance with Dimension "A" in Table I for the prevailing temperature. Note that Dimension "A" is always the distance from a vertical line through the center of top shoes in a direction away from the shoe. Weld the expansion plates to the anchor plates at Bent No. 1 and Bent No. 4.
6. Screenshot elevations shall be determined by adding the concrete dead load deflection to the required final concrete elevations at all screed points. Subtract these elevations from the elevations corrected for deflection and use the resulting dimensions as the height for setting the screed form above the top of the beam. These dimensions remain constant regardless of how much or in what order the concrete is poured. **DO NOT SET SCREEDS BY LEVELING.**
7. No concrete in the floor is to be poured until the above operations are completed.
8. Screenshot elevations will be furnished upon request.



CAMBER DIAGRAM

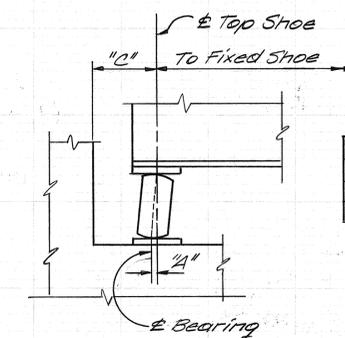
Scale: 3/32 = 1'-0



CONCRETE D.L. DEFLECTION

Scale: 3/32 = 1'-0

Note: See Drawing W3 for General Notes



BENT NO. 1 or NO. 4
No Scale

Temperature	Dimension "A"						
	0°	20°	40°	60°	80°	100°	120°
± Top Shoe to ± Exp. Pl. @ Bt. #1 or #4	7/8"	3/4"	3/8"	1/2"	3/8"	1/4"	1/8"

STRUCTURAL STEEL DETAILS (CONTIN.)

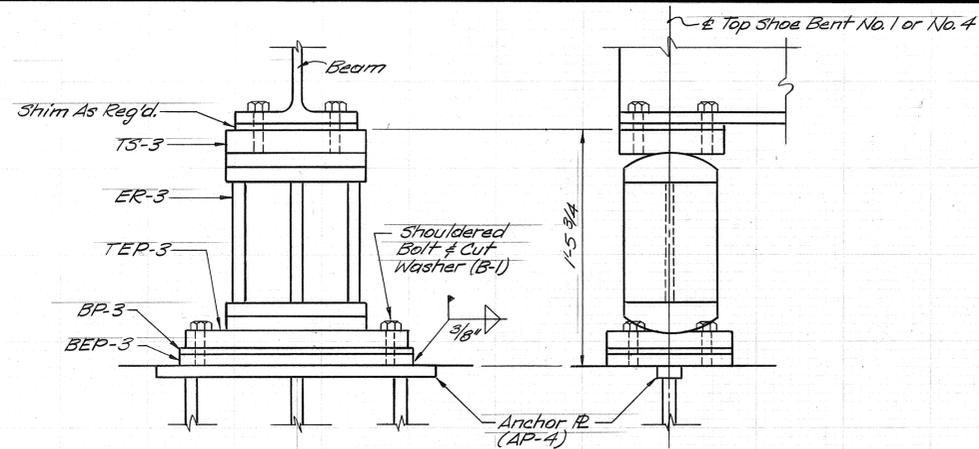
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - 3/32 = 1'-0
 DATE: 7/20
 SHEET: 24 OF 40
 PROJECT: - M1M-94-2(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: - I-94-50-2255B

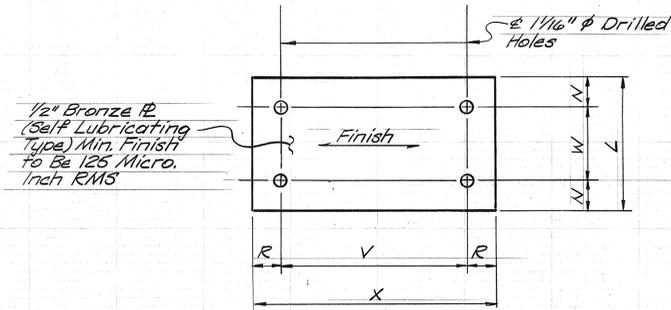


DESIGNED: FAM C'K'D LWB
 DRAWN: FLI C'K'D WRD
 TRACED: C'K'D

SF-22317

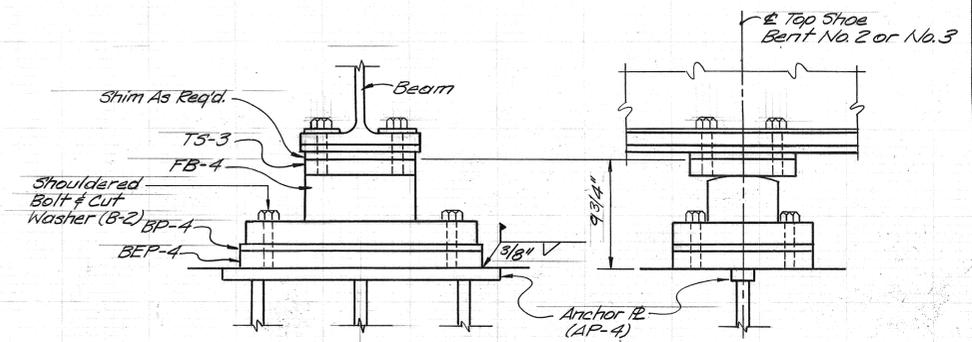


EXPANSION SHOE ASSEMBLY ES-3(L)
AT BENTS NO. 1 & NO. 4
 (WITH LATERAL EXPANSION)
 (4 REQUIRED W.B.L.)
 (4 REQUIRED E.B.L.)

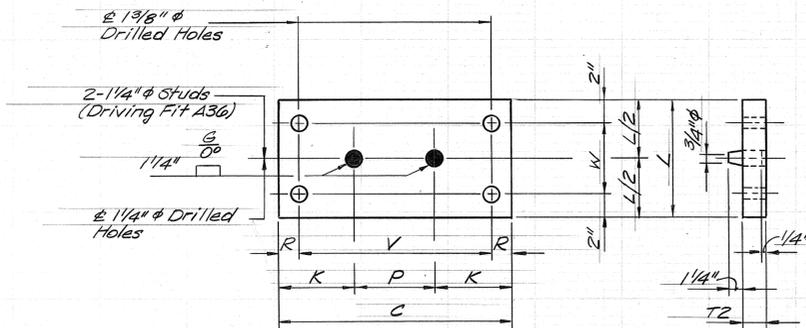


BRONZE PLATE BP-3 & BP-4

MARK	X	L	V	W	R	N	SECTION
BP-3	1'-8"	1'-3"	1'-3 1/2"	11"	2 1/4"	2"	B 15 x 1/2"
BP-4	1'-9"	1'-0"	1'-4"	8"	2 1/2"	2"	B 12 x 1/2"



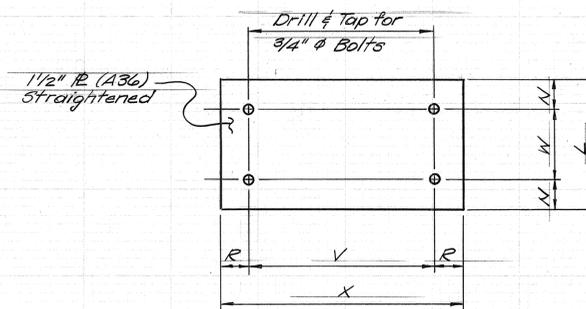
FIXED SHOE ASSEMBLY F-3(L)
AT BENT NO. 2 & NO. 3
 (WITH LATERAL EXPANSION)
 (4 REQUIRED W.B.L.)
 (4 REQUIRED E.B.L.)



TOP EXPANSION PLATE TEP-3

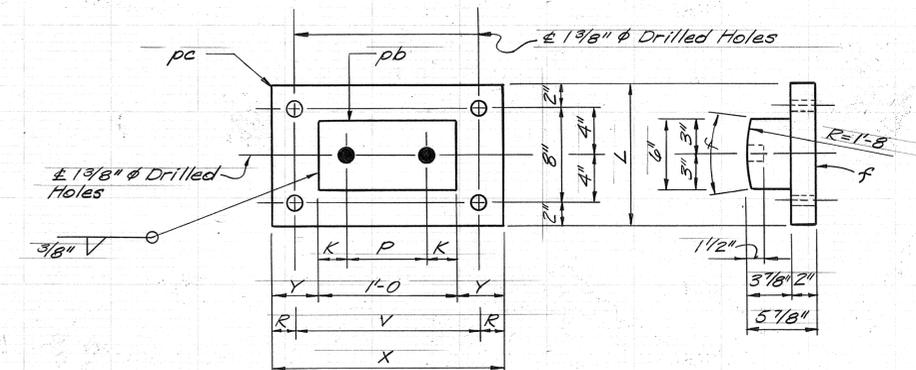
MARK	C	L	*T2	K	P	V	W	R	SECTION	MATERIAL
TEP-3	1'-7"	1'-3"	1 1/8"	6 1/4"	6 1/2"	1'-3 1/2"	11"	1 3/4"	B 15 x 2	A-5 1/4

* To be Finished from 2" Thickness



BOTTOM EXPANSION PLATE BEP-3 AND BEP-4

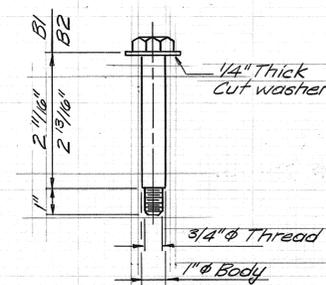
MARK	X	L	V	W	R	N	SECTION
BEP-3	1'-8"	1'-3"	1'-3 1/2"	11"	2 1/4"	2"	B 15 x 1 1/2"
BEP-4	1'-9"	1'-0"	1'-4"	8"	2 1/2"	2"	B 12 x 1 1/2"



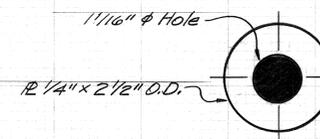
FIXED BASE FB-4

Notes:
 All material to be A36 steel
 Section "pb" to be finished from 4" thickness while
 Section "pc" is to be straightened.

MARK	X	L	V	R	K	P	Y	pb	pc
FB-3	1'-8"	1'-0"	1'-4"	2"	2 3/4"	6 1/2"	4"	B 6 x 4	B 12 x 2



SHOULDERED BOLTS B-1 & B-2



CUT WASHER

NOTES

- For top shoes (TS-3) and Expansion Roller (ER-3) Details, see Bridge Std. SH1
- Curved surfaces of shoes to be machined after weldments have been completed
- At the contractor's option the following substitutions of materials will be allowed at no increase in unit price of material:
 - A588 Steel may be used in lieu of A36 steel
 - A614 Steel may be used in lieu of A588 or A36 Steels
- All Bottom Expansion plates to be straightened.

SHOE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - None

DATE: 7/20

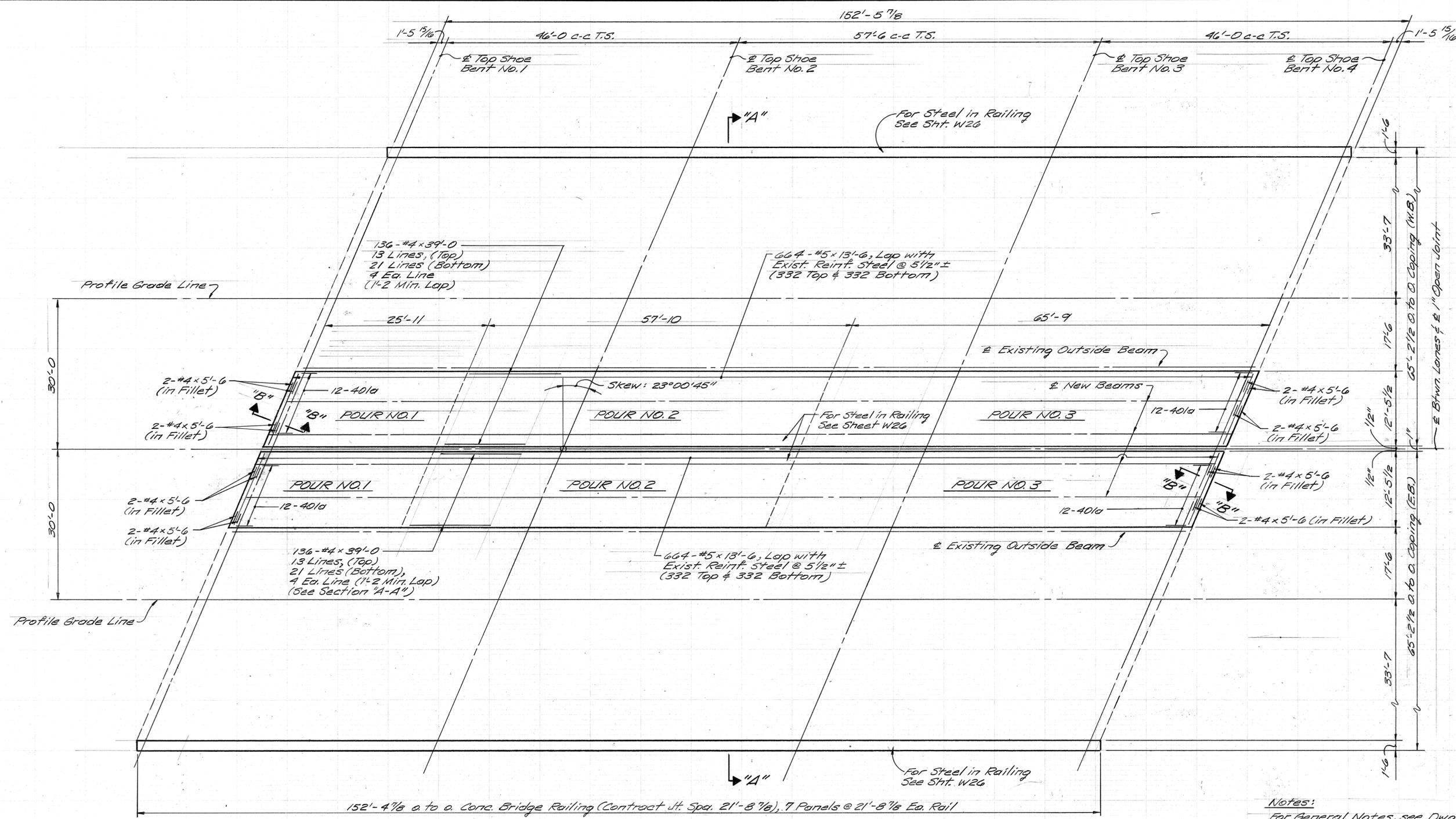
1992

DRAWING: W24 OF W SHEET: 28 OF 40
 PROJECT: - MAIN-94-2(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: - I-94-50-2255 B



DESIGNED: PAM C.K.D. LJB
 DRAWN: FU C.K.D. WRD
 TRACED: C.K.D.

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152'-4 7/8 o to o. Conc. Bridge Railing (Contract Jt. Spa. 21'-8 7/8), 7 Panels @ 21'-8 7/8 Ea. Rail

FLOOR PLAN

Notes:
 For General Notes, see Dwg. D2
 For reinforcing bar notes, see Br. Std. C1

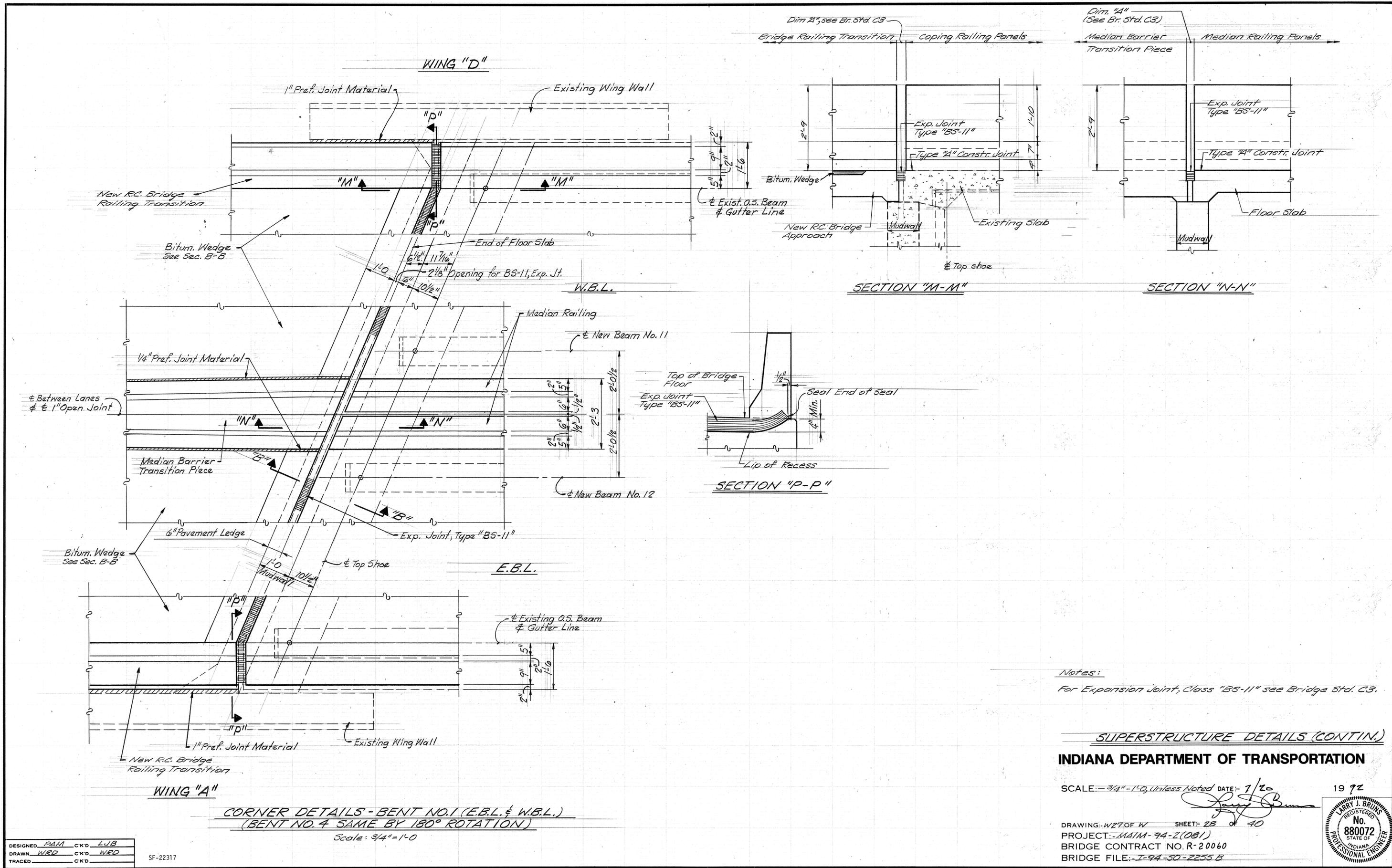
FLOOR PLAN
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - No Scale
 DATE: 7/20 1992
 DRAWING: W25 OF W SHEET: 26 OF 40
 PROJECT: MAIM-94-2(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: I-94-50-2255 B



DESIGNED: PAM C.K'D LJB
 DRAWN: WRD C.K'D WRD
 TRACED: C.K'D

SF-22317



Notes:
 For Expansion Joint, Class "BS-11" see Bridge Std. C3.

SUPERSTRUCTURE DETAILS (CONTIN.)
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - 3/4" = 1'-0", Unless Noted DATE: - 7/20
 DRAWING: - W27 OF W SHEET: - 28 OF 40
 PROJECT: - MA1M-94-2(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: - I-94-50-2255 B

19 92

LARRY J. BRUNS
 REGISTERED
 No. 880072
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

DESIGNED: PAM C.K.D. LJB
 DRAWN: WRD C.K.D. WRD
 TRACED: C.K.D.

SF-22317

CORNER DETAILS - BENT NO. 1 (E.B.L. & W.B.L.)
(BENT NO. 4 SAME BY 180° ROTATION)

Scale: 3/4" = 1'-0"

BILL OF MATERIALS

TWO R.C. BRIDGE APPROACH SLABS A-(D)

EPOXY COATED REINF STEEL			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
592	22	20'-9"	
593	104	3'-10"	
Total No. 5 =			892
Total Epoxy Coated Reinf = 892			
MISCELLANEOUS			
10" R.C. Conc. Pavement			
Slab A =		8.4 Sys.	
Slab D =		8.4 Sys.	
Total =		16.8 Sys.	
Pavement Removal			
Slab A =		4.8 Sys.	
Slab B =		4.4 Sys.	
Total =		9.2 Sys.	
Surface Seal			
2 @ 2.2 Sft.		4.4 Sft.	
Median Barrier Transition = 20.5 Lft.			
6" Type "O" Comp. Agg. Base = 3.6 Tons			

BILL OF MATERIALS

TWO R.C. BRIDGE APPROACH SLABS B-(C)

EPOXY COATED REINF STEEL			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
591	22	45'-8"	
45	22	11'-7"	
45	2	11'-0"	
45	2	6'-0"	
45	18	3'-0"	
Total No. 5 =			1428
Total Epoxy Coated Reinf = 1428			
MISCELLANEOUS			
10" R.C. Conc. Pavement			
Slab B =		28.7 Sys.	
Slab C =		28.7 Sys.	
Total =		57.4 Sys.	
Field Drilled Holes in Concrete = 19 Sq. Ft.			
Surface Seal (2 @ 12.2) = 24.4 Sft.			
Median Barrier Transition = 20.5 Lft.			
6" Type "O" Comp. Agg. Base = 24.8 Tons			

BARRIER RAIL TRANSITIONS

TOTAL EPOXY COATED REINFORCING STEEL	4 @ 340 = 1360 Lbs.
Class "C" Conc. in Railing	4 @ 1.9 = 7.6 Cys.
Surface Seal	4 @ 142 = 568 Sft.

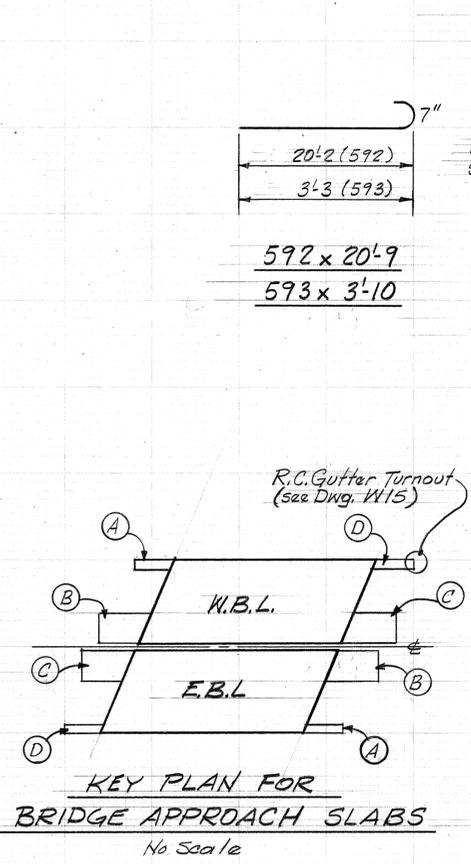
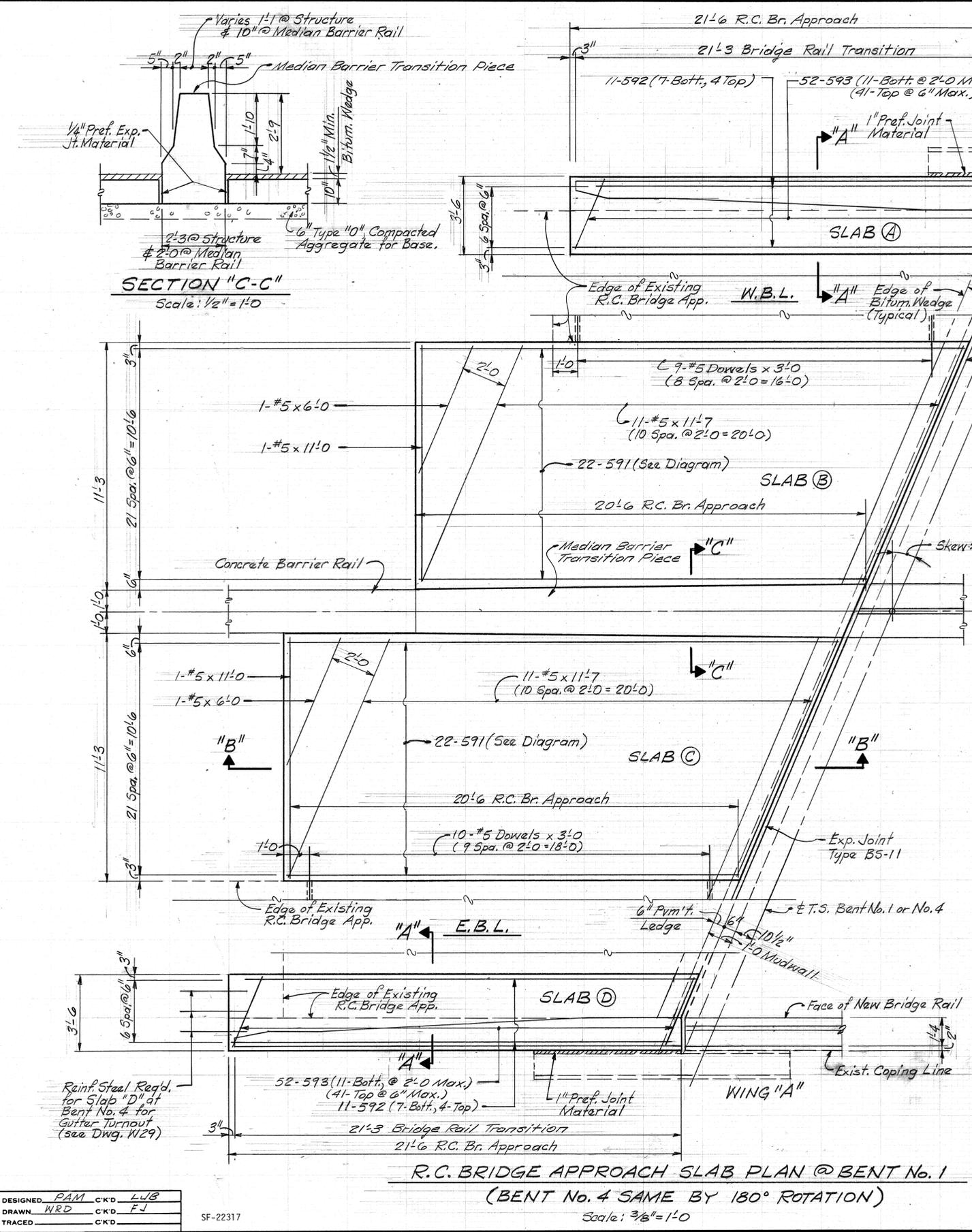
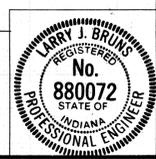
Notes:
 For Reinforcing Bar Notes, See Bridge Standard C-1.
 For Type "BS-11" Joint See Bridge Standard C-3.
 Median Barrier Transition Piece to be Paid for as 20.5 Lft. of Concrete Median Barrier.
 For Bridge Railing Transition Details see Dwg. W30.

R.C. BRIDGE APPROACH DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - 3/8" = 1'-0", Unless Noted DATE: 7/25 1972

DRAWING: W28 OF W SHEET: 29 OF 40
 PROJECT: M1M-94-2(081)
 BRIDGE CONTRACT NO. R-20060
 BRIDGE FILE: I-94-50-2255B



SECTION "B-B"
 Scale: 1/2" = 1'-0"

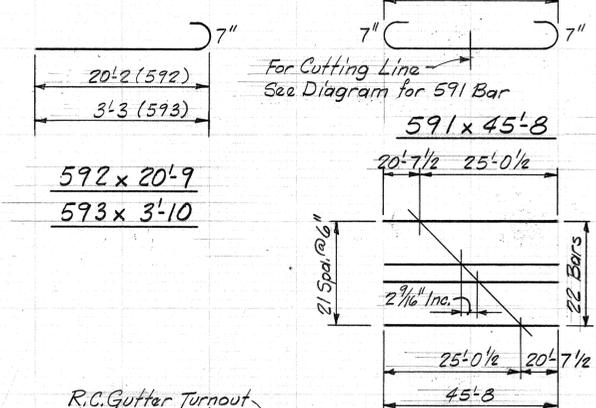
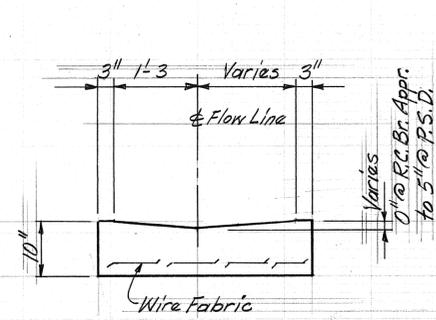


DIAGRAM FOR 591 BARS
 One Bar makes Two

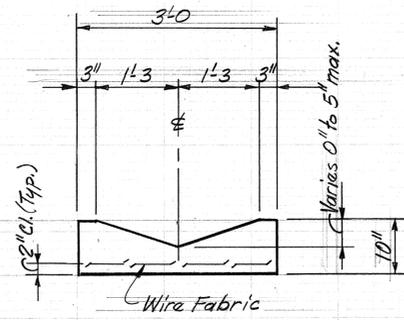
R.C. BRIDGE APPROACH DETAILS

DESIGNED: PAM C'KD LJB
 DRAWN: WRD C'KD FJ
 TRACED: C'KD

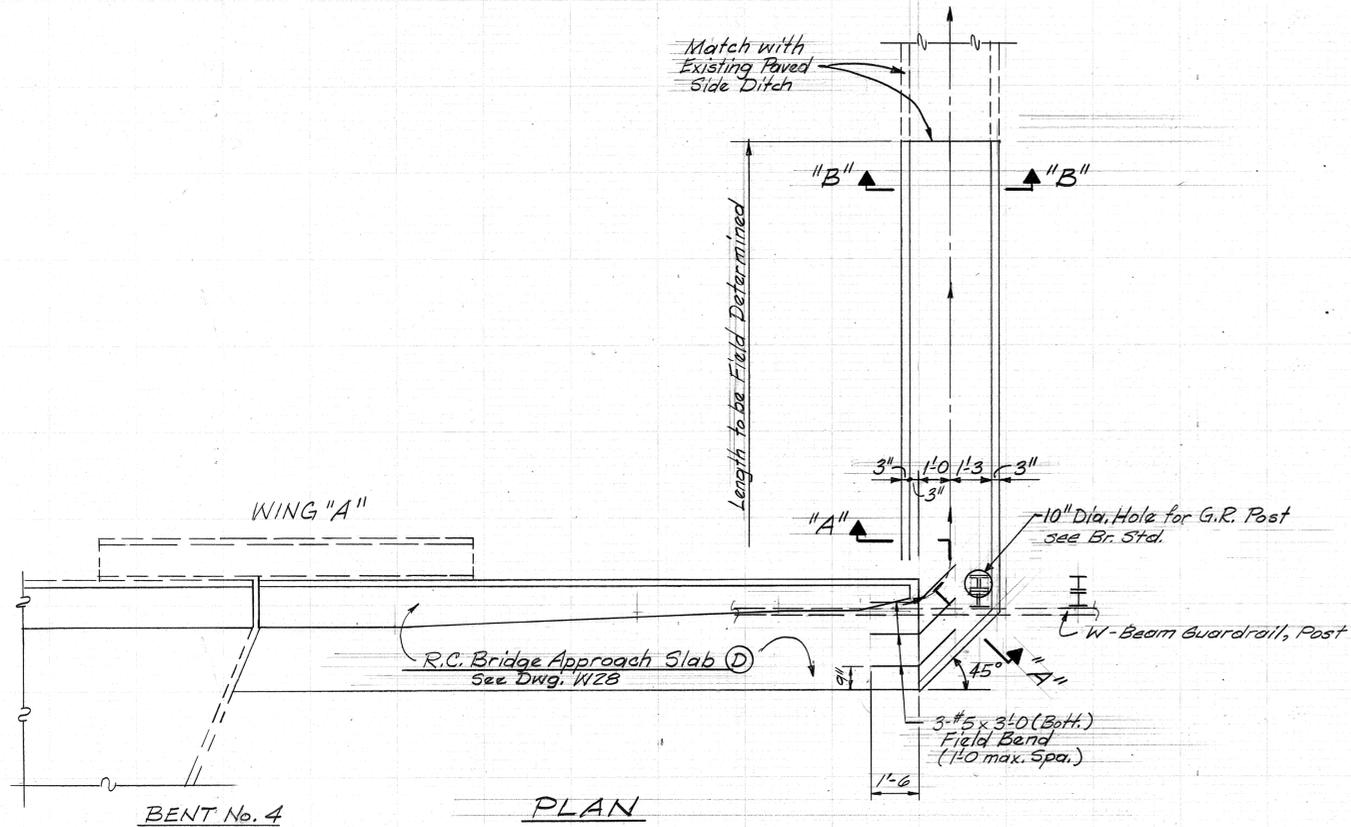
SF-22317



SECTION "A-A"
Scale: 1/2" = 1'-0"



SECTION "B-B"
Scale: 1/2" = 1'-0"



R.C. GUTTER TURNOUT
Scale: 3/8" = 1'-0"

Note:
R.C. Gutter Turnout will be paid for as \$5 Lft. of Paved Side Ditch, Type "A", Additional Length as required for R.C. Gutter Turnout, and the cost of Reinforcing steel, Wire Fabric to be included in the cost of R.C. Gutter Turnout.

Notes:
For Reinforcing Bar Notes, See Bridge Standard C-1

R.C. GUTTER TURNOUT DETAIL

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: - 3/8" = 1'-0, Unless Noted DATE: 7/30

1972

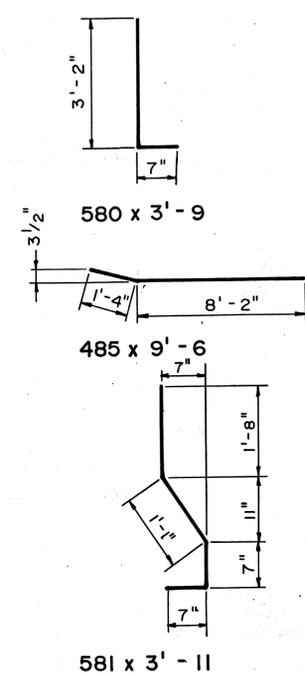
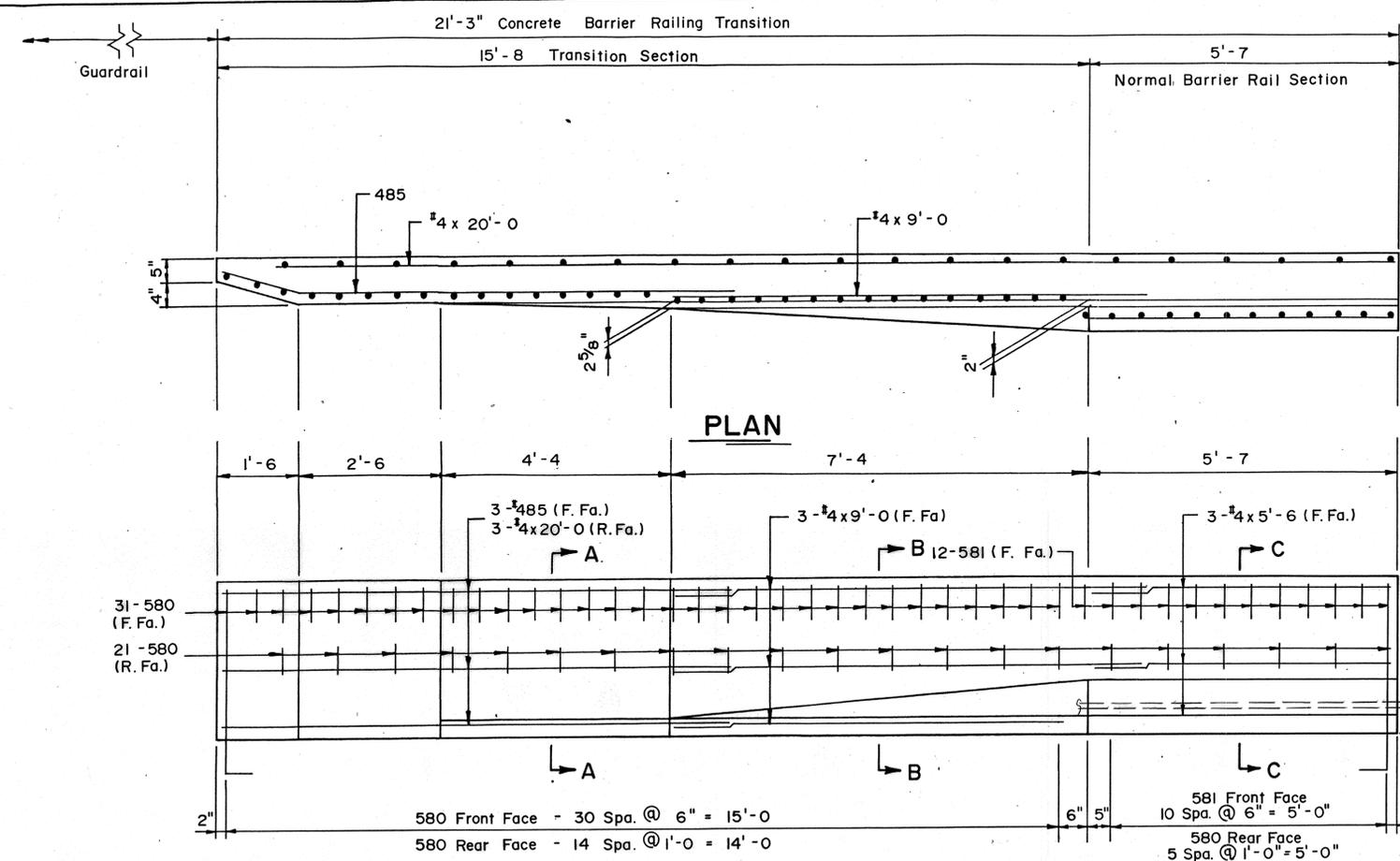
DRAWING: W29 OF W SHEET: 30 OF 40

PROJECT: - M1M-94-2(081)
BRIDGE CONTRACT NO. R-20060
BRIDGE FILE: - I-94-50-2255 B

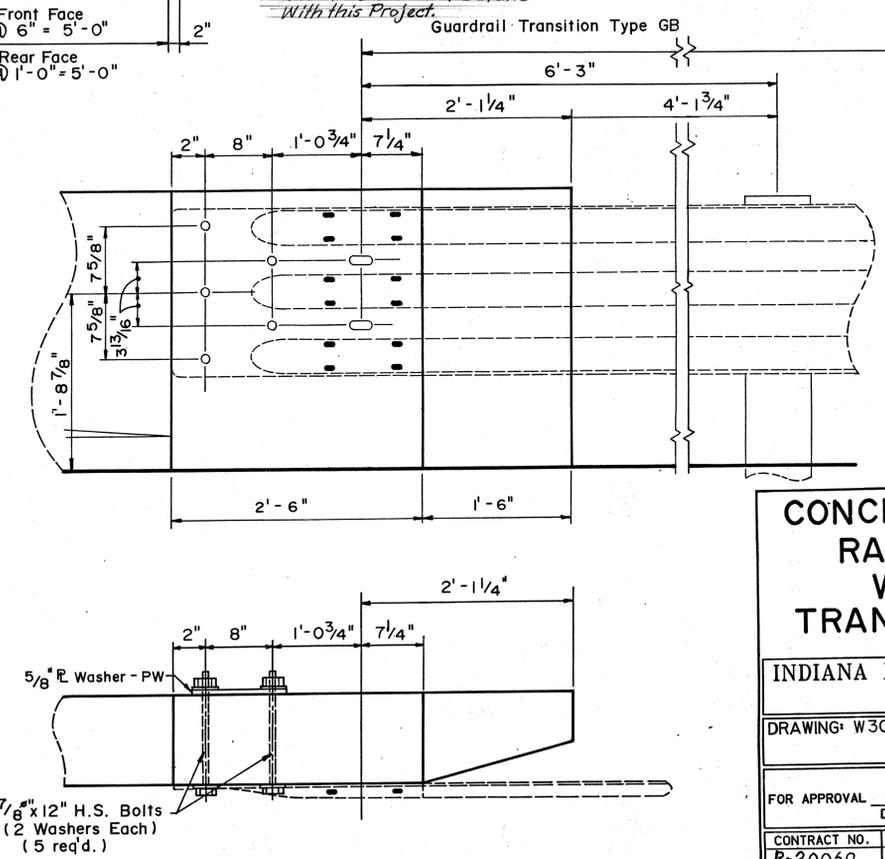
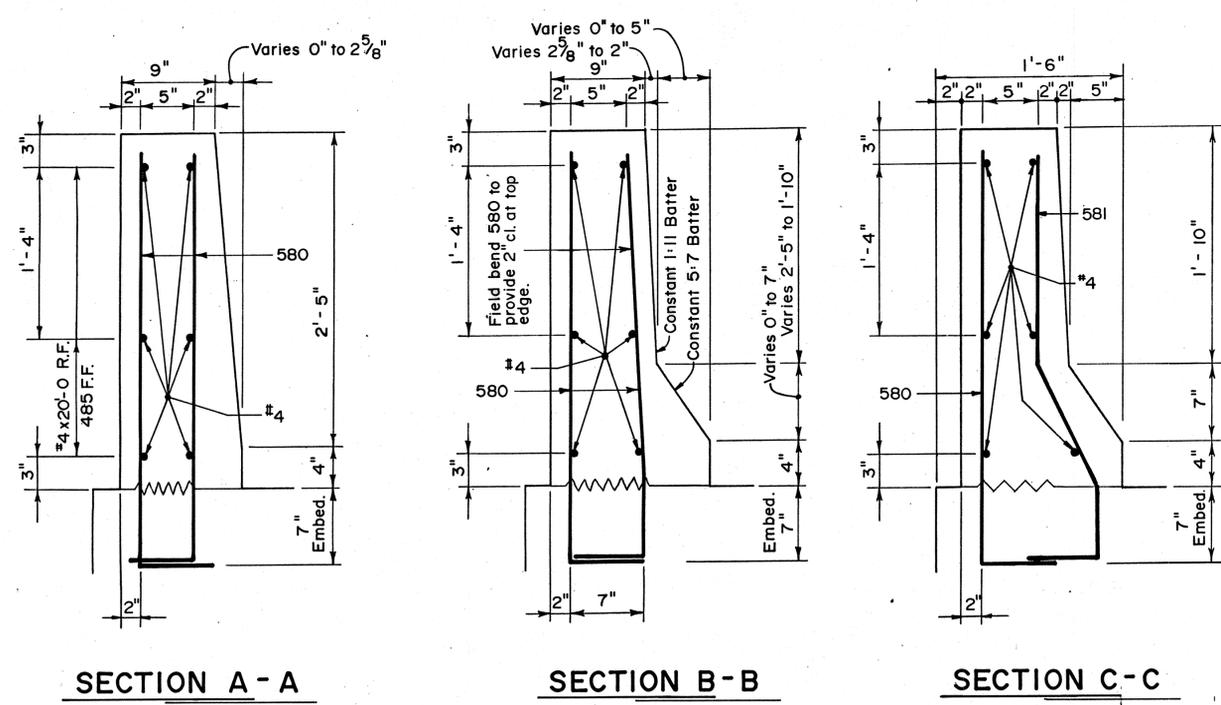
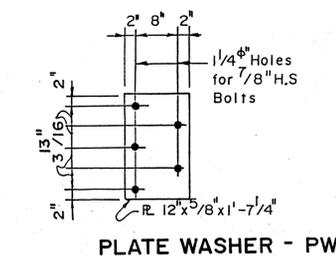


DESIGNED: PAM C.K'D LJB
DRAWN: WFD C.K'D FJ
TRACED: C.K'D

SF-22317



BILL OF MATERIALS				BILL OF MATERIALS			
EPOXY COATED REIN. STEEL				REINFORCING STEEL			
SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT #	SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT #
580	52	3'-9"					
581	12	3'-11"					
Total # 5			252				
485	3	9'-6"					
#4	3	20'-0"					
#4	3	9'-0"					
#4	3	5'-6"					
Total # 4			88				
Total Epoxy Coated Stl.			340				
Class "C" Concrete Railing							1.9 Cys.



NOTE
Extension of the approach slab, will be as shown in these Plans.

CONCRETE BARRIER BRIDGE RAILING TRANSITION W/ THRIE BEAM TRANSITION CONNECTION

INDIANA DEPARTMENT OF TRANSPORTATION

DRAWING: W30 OF W

FOR APPROVAL: _____ DESIGN ENGINEER DATE _____

CONTRACT NO. R-20060 STRUCTURE NO. 1-94-45-4487 B, 1-94-50-2255B

DES. NO. 16955, 16965 PROJECT NO. MAIM-94-2(081) YEAR 1992 SHEET 31 TOTAL 40

ATTACHMENT TO GUARDRAIL TRANSITION TYPE GB

7/20/92

[Code-TRBR]

BRIDGE FILE	ITEM	STRUCTURE												QUANTITIES																							
		CONCRETE				R. CONC. GUTTER TURNOUT	5/8" EXP. ANCHOR	CONCRETE RAILING CLASS C	REINF. STEEL TOTAL	STRUCT. STEEL ***	EPOXY COATED REINF. STEEL	ANCHOR PLATES MK-AP4	ANCHOR PLATES MK-AP3	PILES			CAST IRON DRAIN PIPE	6" SCH. 40 PVC	** SHEET PILING	EXP. JOINT TYPE BS-II	EXP. JOINT TYPE	* SURFACE SEAL	MASONRY COATING	2" GALV. STEEL CONDUIT	FIELD DRILLED HOLES IN CONCRETE	FIELD DRILLED HOLES IN STEEL	BARRIER DELINEATOR	CONCRETE MEDIAN RAIL TRANSITION	*B-BORROW FOR STR. BACKFILL	FOUNDATION EXCAVATION	R.C. PVM'T 10"	6" COMP. AGG. FOR BASE TYPE "C"	PVM'T REMOVAL				
		CLASS C SUPERSTR	CLASS A SUBSTR	CLASS B ABOVE FTG.	CLASS B IN FTG.									NO.	14" STEEL ENCASED CONC.	STEEL H BEARING																		NO.	NO.	NO.	NO.
CU. YDS.	CU. YDS.	CU. YDS.	CU. YDS.	LFT.	EACH	CU. YDS.	LIN. FT.	LBS.	LBS.	LBS.	EACH	EACH	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.				
SUBSTRUCTURE																																					
BENT NO. 1																																					
BENT NO. 2																																					
BENT NO. 3																																					
SUPERSTRUCTURE																																					
R.C. BRIDGE APPROACH																																					
BARRIER RAIL TRANSITION																																					
TOTALS (4487B) =																																					
SUBSTRUCTURE																																					
BENT NO. 1																																					
BENT NO. 2																																					
BENT NO. 3																																					
BENT NO. 4																																					
SUPERSTRUCTURE																																					
R.C. BRIDGE APPROACH																																					
BARRIER RAIL TRANSITION																																					
R.C. GUTTER TURNOUT																																					
TOTALS (2255B) =																																					
TOTALS (BOTH STR.) =																																					

BRIDGE FILE	STRUCT. NO.	APPROACH				STRUCTURES			REMARKS
		LOCATION	SIZE	DESCRIPTION	LENGTH	CONCR. CL. A IN STRS.	REINF. STEEL	PIPE END SEC.	
					LINE. FT.	CU. YDS.	LBS.	EACH	
TOTALS									

BRIDGE FILE	STATION TO STATION	PAVED SIDE DITCH (LIN. FT.)						SODDING (SQ. YD.)				
		TYPE	PAY LENGTH	NO. OF LUGS	PAY LENGTH	CUT OFF WALLS	PAY LENGTH	TOTAL PAY LENGTH	FOR PSD	FOR DITCHES	SHOULDERS	OTHER
TOTALS												

* ESTIMATED QUANTITIES TO BE PAID FOR AS LUMP SUM.
 ** THIS IS NOT A PAY ITEM, BUT SHALL BE INCLUDED IN OTHER PAY ITEMS, SEE SPECIAL PROVISIONS.
 Ø R.C. GUTTER TURNOUT WILL BE PAID FOR AS 45 LIN. FT. OF PAVED SIDE DITCH.

APPROACH TABLE																	
LOCATION	WIDTH	RADI	GRADE	LENGTH	EXCAVATION	BITUM. SURFACE	BITUM. BINDER	BITUM. MIXTURE	FOR APPROACHES, MV	COMP. AGG. BASE							
LINE	STATION TO STATION	FT.	FT.	%	FT.	BY YD.	EXCAVATION	CUT	FILL	#/SQ. YD.	TONS	#/SQ. YD.	TONS	#/SQ. YD.	TONS	Depth (in)	TONS
S-4-B	50+80	51+36										330	17	6	34		

NOTES:
 Weight of Spirals includes weight of 1/2 extra turns top and bottom.
 Spacers and 1/2 turns at laps included in cost of Spiral.
 *** The weight of structural steel is approximate only, and it shall be the Contractor's responsibility to determine the weight on which he bases his bid.
 For Test Bar Samples See Bridge Standard CI.

REVISIONS	
DATE	ITEM

BRIDGE SUMMARY

INDIANA DEPARTMENT OF TRANSPORTATION

DATE: 7/20/92

SHEET 32 OF 40

PROJECT: MAIM-94-2(081)
 CONTRACT NO: R-20060
 BRIDGE FILE: I-94-45-4487B, I-94-50-2255 B

