

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION CLA-70-0.51

CLARK COUNTY CLA-70-0.51	OHIO	1
IR-70-2(31)41	FHWA REGION 5	238
	FEDERAL PROJECT	

DESIGN DESIGNATION

	(SR 235 TO IR 675)	(IR 675 TO SR 4)
Current A.D.T. (1990).....	= 28,340	41,850
Design Year A.D.T. (2010).....	= 36,590	54,000
D.H.V.....	= 3,650	5,400
D.....	= 56%	56%
T.....	= 20%	20%
V.....	= 70 m.p.h.	70 m.p.h.
Legal Speed.....	= 65 m.p.h.	65 m.p.h.
Functional Classification.....	= Rural Interstate	
Design Exceptions.....	= None	

**LIMITED ACCESS**

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director in accordance with the provisions of Section 5511.02 of the Revised Code of the State of Ohio.

## BETHEL & MAD RIVER TOWNSHIPS CLARK COUNTY

CONVENTIONAL SIGNS

County Line _____	Limited Access (only) _____	LA _____
Township Line _____	Right of Way (only) _____	RW _____
Section Line _____	Limited Access & Right of Way _____	LA&RW _____
Corporation Line _____	Existing Right of Way _____	
Fence Line (existing) _____	Property Line _____ (in existing fence) _____	
Center Line _____	Railroad _____	
Trees  Stumps  (to be removed)	Guardrail (existing) _____	Guardrail (proposed) _____
Utility Poles: Telephone , Power , Light		

**1989 SPECIFICATIONS**

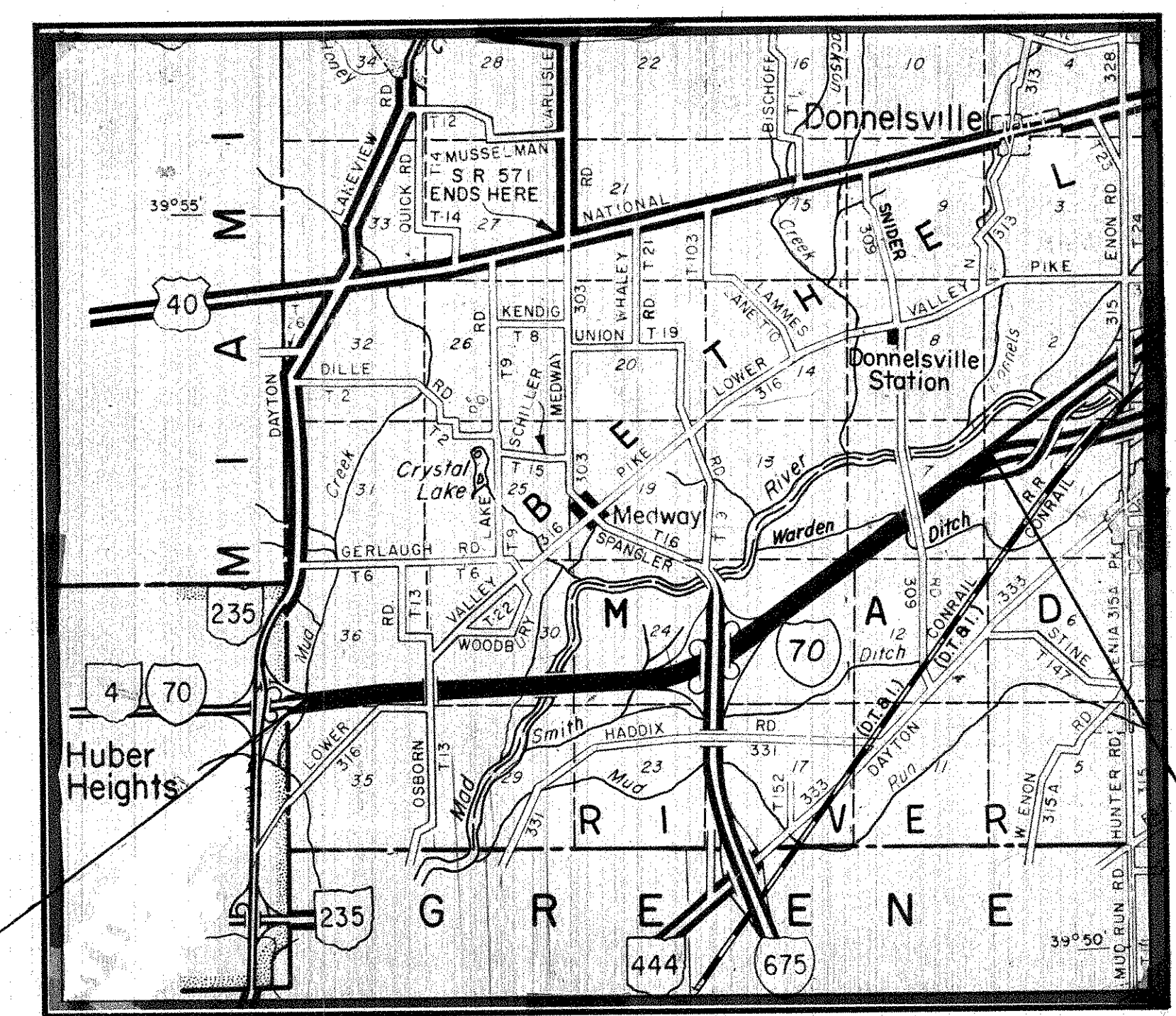
The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway, except as noted on Sheet 16, and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

"Under authority of section 4511.21, division (1) of the revised code of Ohio, the revised prima facie speed limits as indicated herein are determined to be reasonable and safe, and are hereby established for the duration of this project. The prima facie speed limit or limits hereby established shall become effective when appropriate signs giving notice thereof are erected."

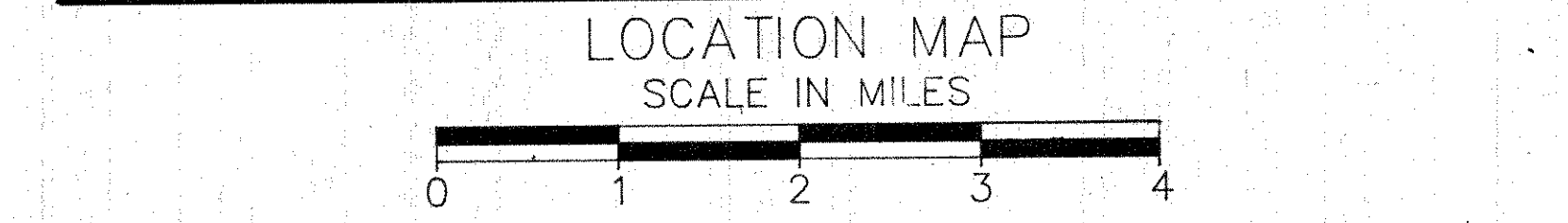
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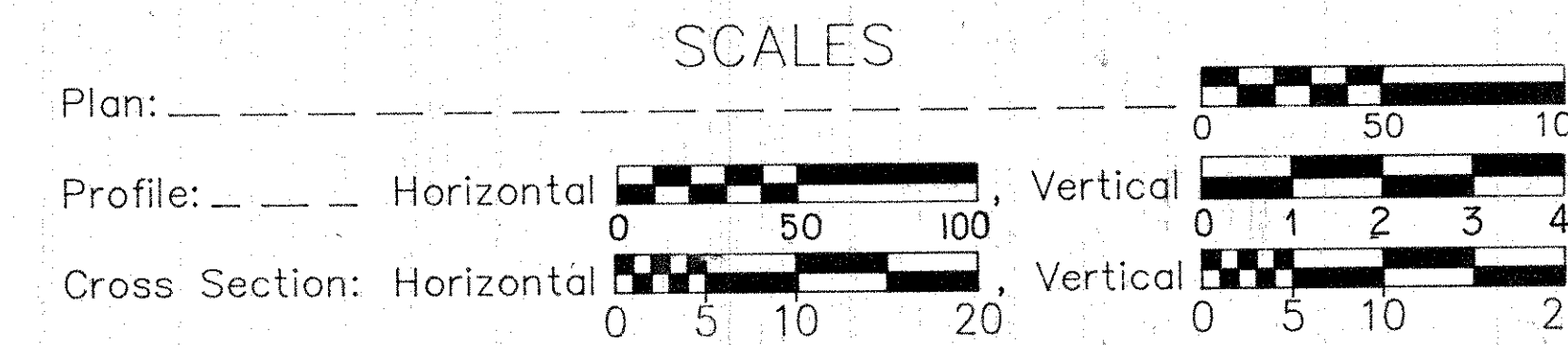


BEGIN PROJECT  
CLA-70-0.51  
STA. 27+05.99

END PROJECT  
CLA-70-0.51  
STA. 309+26.55



Portion to be Improved \_\_\_\_\_  
State & Federal Routes \_\_\_\_\_  
Other Roads \_\_\_\_\_



SUPPLEMENTAL SPECIFICATIONS

802	4-13-90	942	11-27-89
		944	6-24-89
847	10-17-83	947	10-17-83
852	6-10-87	952	12-14-88
931	6-18-85		

LINE DATA

STATION EQUATION:

BEGIN WORK = STA. 12+50.00  
 BEGIN PROJECT = STA. 27+05.99  
 STA. 279+61.16 BACK = STA. 284+00.00 AHEAD  
 END PROJECT = STA. 309+26.55  
 END WORK = STA. 320+00.00

Add For Length of Work on Approaches:  
 Osborn Road Sta. 12+90 to Sta. 25+03 = 1,213.00 Lin. Ft.  
 Snider Road Sta. 7+33 to Sta. 22+10 = 1,477.00 Lin. Ft.

LENGTH OF PROJECT = 27,781.72 LIN. FT. = 5.262 MILES  
 LENGTH OF WORK = 33,001.16 LIN. FT. = 6.250 MILES

UNDERGROUND UTILITIES  
TWO WORKING DAYS  
BEFORE YOU DIG  
Call 800-362-2764 (Toll Free)  
OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS  
MUST BE CALLED DIRECTLY

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-1	6-1-65	GR-4	2-5-82	I-2A	12-18-84	HL-60.11	5-01-87	TC-41.20	3-26-79	MT-98.14	8-25-89
BP-2	1-11-85	GR-4A	1-30-84	I-3A & B	4-1-80	HL-60.12	5-01-87	TC-42.20	3-26-79	MT-98.15	8-25-89
BP-3	12-6-76	GR-5	2-5-82	DBR-2-73	4-10-73	TC-7.65	3-01-79	TC-51.10	1-20-84	MT-99.10	11-14-86
BP-4	10-1-87	MC-4	7-26-76	AS-1-81	11-27-81	TC-12.30	1-20-84	TC-52.10	4-03-79	MT-99.20	4-29-88
BP-5	10-1-87	MC-9	1-30-84	TC-21.10	1-20-84	TC-61.10	4-05-82	RB-1-55		2-02-59	
BP-7	10-1-87	MC-9A	1-11-85	SD-1-69	6-12-69	TC-21.40	3-01-79	TC-72.20	2-26-82		
BP-10	1-30-84	CB-4	11-10-83	HL-20.13	5-01-87	TC-22.20	3-01-79	MT-95.30	10-10-88	EXJ-4-87	1-05-89
		CB-6	5-1-79	HL-30.11	5-01-87	TC-31.21	3-06-79	MT-95.31	10-10-88	CPP-2-73	4-10-73
GR-1	1-11-85	HW-4A	4-1-80	HL-30.21	5-01-87	TC-35.10	8-29-84	MT-98.12	8-25-89	CS-2-73	4-10-73
GR-2B	2-5-82	HW-4B	4-1-80	HL-30.31	5-01-87	TC-41.10	8-29-84	MT-98.13	8-25-89		
GR-3	10-25-90										

Approved G. Kenneth Capella, P.E.  
Date 11/6/90 District Deputy Director  
of Transportation

Approved B. D. Hankilamin  
Date 12-17-90 Engineer, Bureau of Bridges and  
Structural Design

Approved Kenneth M. Miller  
Date 1-23-91 Chief Engineer, Planning and Design

Approved Janey Wray  
Date 1-23-91 Director, Department of Transportation

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

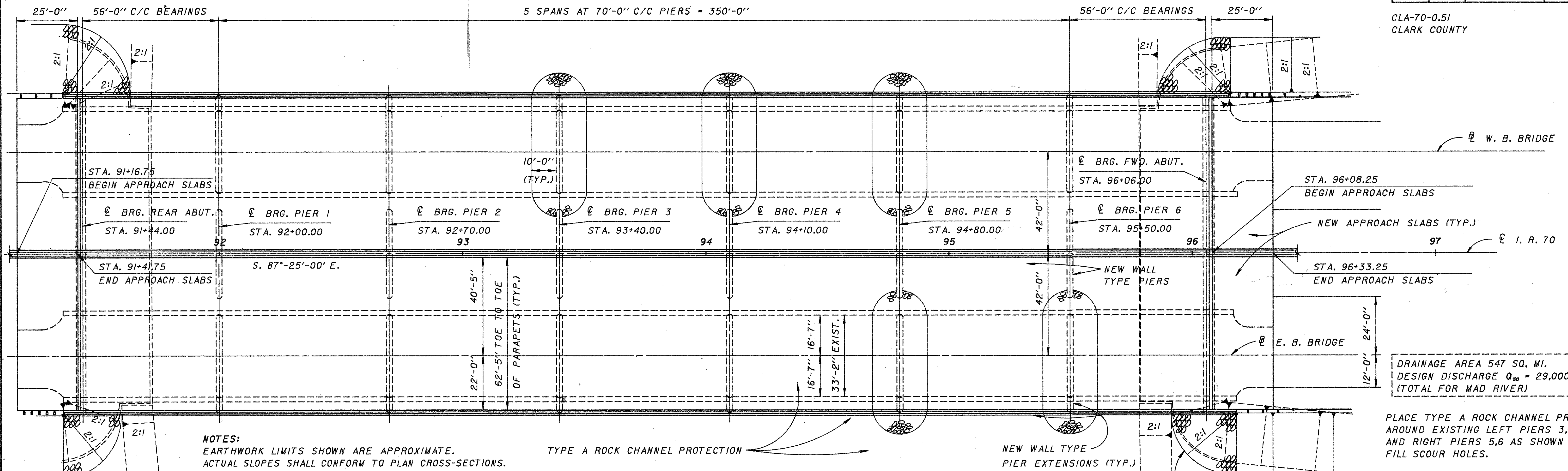
DIVISION ADMINISTRATOR \_\_\_\_\_ DATE \_\_\_\_\_

Project CLA-70-0.51  
Date of Letting 19 Contract No. \_\_\_\_\_

Plan Prepared By:  
DISTRICT NO. 7  
OHIO DEPARTMENT OF  
TRANSPORTATION

SEAL

CLA-70-0.51  
CLARK COUNTY



**NOTES:**  
EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS. EXISTING GUARDRAIL TO BE REMOVED AND MEDIAN DITCH ON ROADWAY APPROACHES TO BE FILLED TO PROPOSED SUBGRADE ELEVATION.

AT THE ABUTMENTS THE PILES SHALL BE 12 INCH DIAMETER CAST-IN-PLACE REINFORCED CONCRETE. AT THE PIERS THE PILES SHALL BE 14 INCH DIAMETER CAST-IN-PLACE REINFORCED CONCRETE.

THE ESTIMATED PILE LENGTHS FOR THE PILES ARE:  
BOTH ABUTMENTS - 30 FEET  
ALL PIERS - 35 FEET  
ALL DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE I. R. 70.

**PLAN**

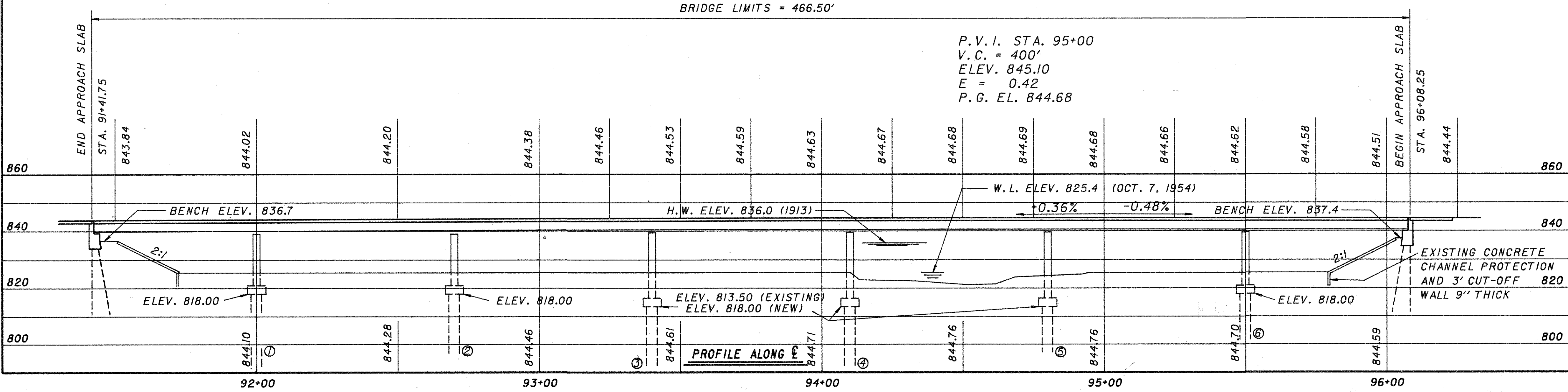
DRAINAGE AREA 547 SQ. MI.  
DESIGN DISCHARGE  $Q_{50} = 29,000$  C. F. S.  
(TOTAL FOR MAD RIVER)

PLACE TYPE A ROCK CHANNEL PROTECTION AROUND EXISTING LEFT PIERS 3, 4, 5 AND RIGHT PIERS 5, 6 AS SHOWN TO FILL SCOUR HOLES.

CURRENT A.D.T. (1987) = 28,340  
DESIGN YEAR A.D.T. (2007) = 36,590  
DESIGN YEAR A.D.T.T. (2007) = 11,700

**EXISTING STRUCTURE**  
TYPE: CONTINUOUS STEEL BEAM BRIDGE WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE  
SPANS: 56'-0", 5 @ 70'-0", 56'-0" C/C BEARINGS  
ROADWAY: 2 @ 33'-2" TOE TO TOE OF BARRIERS  
LOADING: CF-2000  
WEARING SURFACE: LATEX MODIFIED CONCRETE  
SKEW: NONE  
ALIGNMENT: TANGENT  
APPROACH SLABS: 15'-0" LONG  
SFN: 1203630 LEFT, 1203665 RIGHT  
DATE BUILT: 1957

**PROPOSED STRUCTURE**  
PROPOSED WORK: REPLACE ENTIRE DECK AND WIDEN THE SUPERSTRUCTURE.  
TYPE: CONTINUOUS STEEL BEAM (A36) WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE  
SPANS: 56'-0", 5 @ 70'-0", 56'-0" C/C BEARINGS  
ROADWAY: 2 @ 62'-5" TOE TO TOE OF BARRIERS  
LOADING: HS20-44 CASE I AND THE ALTERNATE MILITARY LOADING  
WEARING SURFACE: MONOLITHIC CONCRETE  
SKEW: NONE  
ALIGNMENT: TANGENT  
APPROACH SLABS: AS-1-81 (25'-0" LONG)



STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

**SITE PLAN**  
BRIDGE NO. CLA-70-0173 L/R  
I. R. 70 OVER MAD RIVER  
CLARK COUNTY  
STA. 91+41.75  
STA. 96+08.25

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
		ULH	REF	MJR	RLE

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	ITEM EXT.	DESCRIPTION	ABUTS.	PIERS	SUPER.	GEN.
202	LUMP		11202	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN				LUMP
503	LUMP		11100	COFFERDAMS, CRIBS AND SHEETING				LUMP
503	LUMP		21900	UNCLASSIFIED EXCAVATION				LUMP
505	LUMP		11100	PILE DRIVING EQUIPMENT MOBILIZATION				LUMP
507	1020	LIN. FT.	22201	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN	1020			
507	4620	LIN. FT.	42201	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN		4620		
509	101,398	LB.	15400	REINFORCING STEEL, GRADE 60	7820	93,378		200
509	456,001	LB.	15800	EPOXY COATED REINFORCING STEEL, GRADE 60	13246		442,555	
510	456	EACH	11100	DOWEL HOLES	132	324		
511	212	CU. YD.	45700	CLASS C CONCRETE, ABUTMENTS	212			
511	537	CU. YD.	40500	CLASS C CONCRETE, PIER FOOTINGS		537		
511	229	CU. YD.	46500	CLASS C CONCRETE, PIER FOOTINGS		229		
* 511	1825	CU. YD.	31500	CLASS S CONCRETE, SUPERSTRUCTURE			1825	
512	6	SQ. YD.	44400	TYPE B WATERPROOFING	6			
513	786,800	LB.	11100	STRUCTURAL STEEL (AISC CATEGORY 1) (SEE PROPOSAL NOTE)			786,800	
513	180	EACH	16800	FATIGUE RETROFIT, EXISTING BEAM FLANGES, AS PER PLAN			180	
513	60	EACH	16800	FATIGUE RETROFIT, EXISTING BEAM WEBS, AS PER PLAN			60	
516	258	LIN. FT.	11210	STRUCTURAL EXPANSION JOINT (INCLUDING ELASTOMERIC STRIP SEAL)			258	
518	76	CU. YD.	21101	POROUS BACKFILL, AS PER PLAN (SEE SHT. 216)	76			
518	250	LIN. FT.	41100	6" PERFORATED, HELICAL CORRUGATED STEEL PIPE, 707.01	250			
518	40	LIN. FT.	41200	6" NON-PERFORATED, HELICAL CORRUGATED STEEL PIPE, INCLUDING SPECIALS, 707.01	40			
523	3	HOURL	11100	DYNAMIC LOAD TEST		3		
SPECIAL	1873	SQ. YD.	51267502	SEALING OF CONCRETE SURFACES (EPOXY) (SEE PROPOSAL NOTE)	223		1650	
SPECIAL	47,904	SQ. FT.	51400050	SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU (SEE PROPOSAL NOTES)			47,904	
SPECIAL	47,904	SQ. FT.	51400056	FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU (SEE PROPOSAL NOTES)			47,904	
SPECIAL	47,904	SQ. FT.	51400060	FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU (SEE PROPOSAL NOTES)			47,904	
SPECIAL	47,904	SQ. FT.	51400066	FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU (SEE PROPOSAL NOTES)			47,904	
SPECIAL	LUMP		51400600	PAINTING OF NEW STEEL, SYSTEM IZEU, (SEE PROPOSAL NOTE)			LUMP	
SPECIAL	LUMP		51426500	HAZARDOUS WASTE MANAGEMENT (SEE PROPOSAL NOTE)			LUMP	
SPECIAL	LUMP		51426510	NON-HAZARDOUS WASTE MANAGEMENT (SEE PROPOSAL NOTE)			LUMP	
SPECIAL	1000	LIN. FT.	51400500	CAULKING (SEE PROPOSAL NOTE)			1000	
SPECIAL	100	HOURL	51400504	GRINDING FINS, TEARS, SLIVERS (SEE PROPOSAL NOTE)			100	
SPECIAL	LUMP		53000200	REMOVAL OF WELDED ATTACHMENTS TO EXISTING BEAMS			LUMP	
* ALTERNATE BID ITEM								
511	1825	CU. YD.	33404	CLASS S CONCRETE, SUPERSTRUCTURE, USING SHRINKAGE COMPENSATING CEMENT (SEE PROPOSAL NOTE)			1825	

FHWA REGION	STATE	PROJECT
5	OHIO	

214  
238

CLA-70-0.51  
CLARK COUNTY

GENERAL NOTES

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-81	DATED	11-27-81
RB-1-55	DATED	2-2-59
SD-1-69	DATED	6-12-69
EXJ-4-87	DATED	1-5-89
GR-3	DATED	10-25-90

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1989, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN LOADING-HS20-44 CASE I AND THE ALTERNATE MILITARY LOADING

DESIGN STRESS:

CONCRETE, CLASS S- COMPRESSIVE STRENGTH 4500 P.S.I.  
CONCRETE, CLASS C- COMPRESSIVE STRENGTH 4000 P.S.I.  
REINFORCING STEEL- ASTM A615, A616 OR A617 - GRADE 60  
MINIMUM YIELD STRENGTH 60,000 P.S.I.  
EXISTING STRUCTURAL STEEL ASTM A373- YIELD STRENGTH 32,000 P.S.I.  
NEW STRUCTURAL STEEL ASTM A36- YIELD STRENGTH 36,000 P.S.I.

DECK PROTECTION METHOD- EPOXY COATED REINFORCING STEEL, TOP AND BOTTOM MATS.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

REPLACEMENT OF EXISTING REINFORCING STEEL: ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT HIS COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL. AN ALLOWANCE OF 200 POUNDS IS INCLUDED IN ITEM 509 FOR THIS PURPOSE.

PILE DESIGN LOADS: THE DESIGN LOAD FOR THE ABUTMENT PILES IS 30 TONS PER PILE AND THE DESIGN LOAD FOR THE PIER PILES IS 50 TONS PER PILE.

PILE DRIVING CONSTRAINTS: PRIOR TO DRIVING PILES, THE BRIDGE APPROACH EMBANKMENT SHALL BE CONSTRUCTED UP TO THE SUBGRADE ELEVATION FOR A MINIMUM DISTANCE OF 150 FEET BEHIND EACH ABUTMENT. THE EXCAVATION FOR THE ABUTMENT FOOTINGS AND THE INSTALLATION OF THE ABUTMENT PILES SHALL NOT BEGIN UNTIL AFTER THE ABOVE REQUIRED EMBANKMENT HAS BEEN CONSTRUCTED.

PILE WALL THICKNESS: THE RESPONSIBILITY OF CHOOSING AND PROVIDING A SATISFACTORY PILE WALL THICKNESS FOR THIS PROJECT SHALL BE BORNE BY THE CONTRACTOR EXCEPT THAT THE PILE WALL THICKNESS SHALL NOT BE LESS THAN .205 INCHES. IF A PILE WALL THICKNESS GREATER THAN .205 INCHES IS NECESSARY TO RESIST THE PILE INSTALLATION DRIVING STRESS, THE CONTRACTOR SHALL MAKE THIS DETERMINATION AND SHALL FURNISH A PILE WITH AN ACCEPTABLE WALL THICKNESS. IF MONOTUBE PILES ARE USED, THE MONOTUBE PILES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.160 INCHES.

PILE HAMMER: THE PILE HAMMER USED TO INSTALL THE CAST-IN-PLACE PILES SHALL HAVE A STATE'S ENERGY RATING OF NOT LESS THAN 18000 FOOT-POUNDS. THIS REQUIREMENT DOES NOT RELIEVE THE CONTRACTOR FROM 108.5 WHICH STATES THAT THE CONTRACTOR IS TO PROVIDE SUFFICIENT EQUIPMENT FOR PROSECUTING THE REQUIRED WORK. REFER TO "ODOT'S MANUAL OF PROCEDURES FOR STRUCTURES" TO OBTAIN THE STATE'S ENERGY RATING.

FATIGUE RETROFIT: THE EXISTING BEAMS SHALL HAVE SPLICE PLATES INSTALLED ON THE TOP FLANGE AT THE ENDS OF THE MOMENT PLATES AND ON THE TOP FLANGE AND WEB AT THE WELDED BUTT-SPLICE IN THE BEAM AT THE PIERS. BOLT HOLES IN THE SPLICE PLATES SHALL BE DRILLED IN THE BEAM AND THE PLATES SHALL BE USED AS A TEMPLATE FOR DRILLING THE HOLES IN THE BEAMS. THE WELDS IN THE EXISTING BEAM ON THE WEB AND THE UNDERSIDE OF THE TOP FLANGE SHALL BE GROUND FLUSH WHERE THE SPLICE PLATES ARE TO BE INSTALLED. THE GRINDING SHALL BE IN THE DIRECTION OF THE LONGITUDINAL AXIS OF THE BEAM. SPLICE PLATES SHALL FIT FLAT AGAINST THE SURFACE OF THE BEAM AND FILL PLATES SHALL BE USED TO COMPENSATE FOR ANY MISALIGNMENT OF MORE THAN 1/16". AFTER HOLES ARE DRILLED IN THE BEAM, BUT BEFORE FINAL ASSEMBLY, THE CONTACT SURFACES BETWEEN BEAM AND SPLICE PLATES SHALL BE PREPARED AND GIVEN THE PRIME COAT AS PER SYSTEM OZEU. THE QUANTITY TO BE PAID FOR SHALL BE THE NUMBER OF FLANGE SPLICES OR WEB SPLICES COMPLETE IN PLACE AND ACCEPTED. THE CONTRACT PRICE BID FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE WORK.

ITEM SPECIAL - REMOVAL OF WELDED ATTACHMENTS TO EXISTING BEAMS: AFTER THE EXISTING CONCRETE DECK HAS BEEN REMOVED, ANY WELDED ATTACHMENTS TO THE TOP FLANGE (OR MOMENT PLATE) OF THE EXISTING BEAMS SHALL BE REMOVED FROM THE AREAS DESIGNATED AS "TENSION" (SEE SHEET 11/13). WELDED ATTACHMENTS TO BE REMOVED MAY INCLUDE, BUT WILL NOT BE LIMITED TO, FINISHING MACHINE SUPPORTS, SCREED SUPPORTS, GUTTER AND SCUPPER SUPPORTS AND FORM SUPPORTS. REMOVAL SHALL BE MADE IN SUCH A MANNER AS TO AVOID GOUGING OR OTHERWISE DAMAGING THE BEAM. SURFACE OF BEAM AFTER REMOVAL SHALL BE FLUSH AND SMOOTH. ANY GRINDING SHALL BE IN THE DIRECTION OF THE LONGITUDINAL AXIS OF THE BEAM. THE CONTRACT PRICE BID FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE WORK.

PAYMENT WILL BE MADE AT THE CONTRACT PRICE BID FOR:  
ITEM UNIT DESCRIPTION  
SPECIAL LUMP REMOVAL OF WELDED ATTACHMENTS TO EXISTING BEAMS

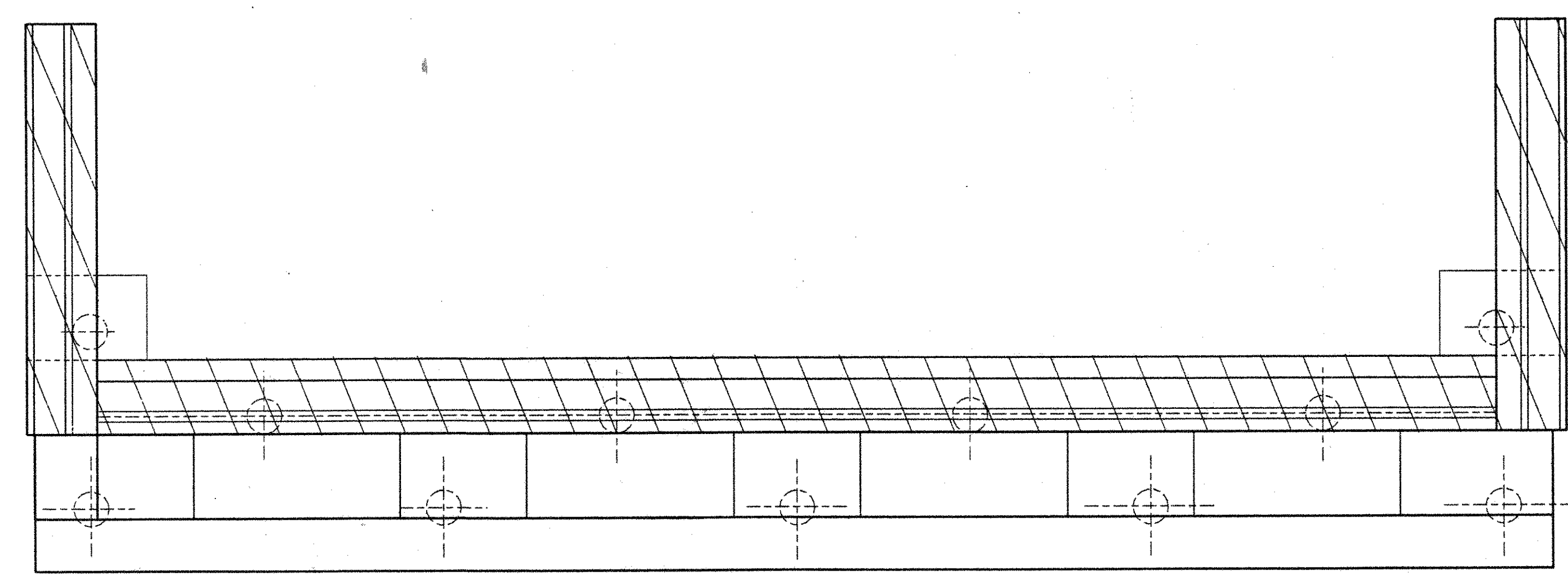
FALSEWORK AND FINISHING MACHINE SUPPORTS: FALSEWORK FOR EACH STAGE OF CONSTRUCTION SHOULD BE COMPLETELY DIVORCED FROM FALSEWORK FOR ANY OTHER STAGE, I.E. THE DECK SLAB FORMS FOR ANY ONE STAGE OF DECK CONSTRUCTION SHALL NOT BE SUPPORTED BY FALSEWORK WHICH IS CONNECTED TO FALSEWORK, BEAMS OR SUPERSTRUCTURE CONCRETE WHICH IS A PART OF ANY OTHER STAGE OF DECK CONSTRUCTION. FINISHING MACHINES SHALL IN NO WAY BE SUPPORTED BY THE DECK OR BEAMS WHICH ARE PART OF ANOTHER STAGE. THE ABOVE LIMITATIONS DO NOT APPLY TO THE PLACING OF THE CLOSURE SECTION.

PAINT: THE COLOR OF THE FINISH COAT OF PAINT SHALL BE GREEN.

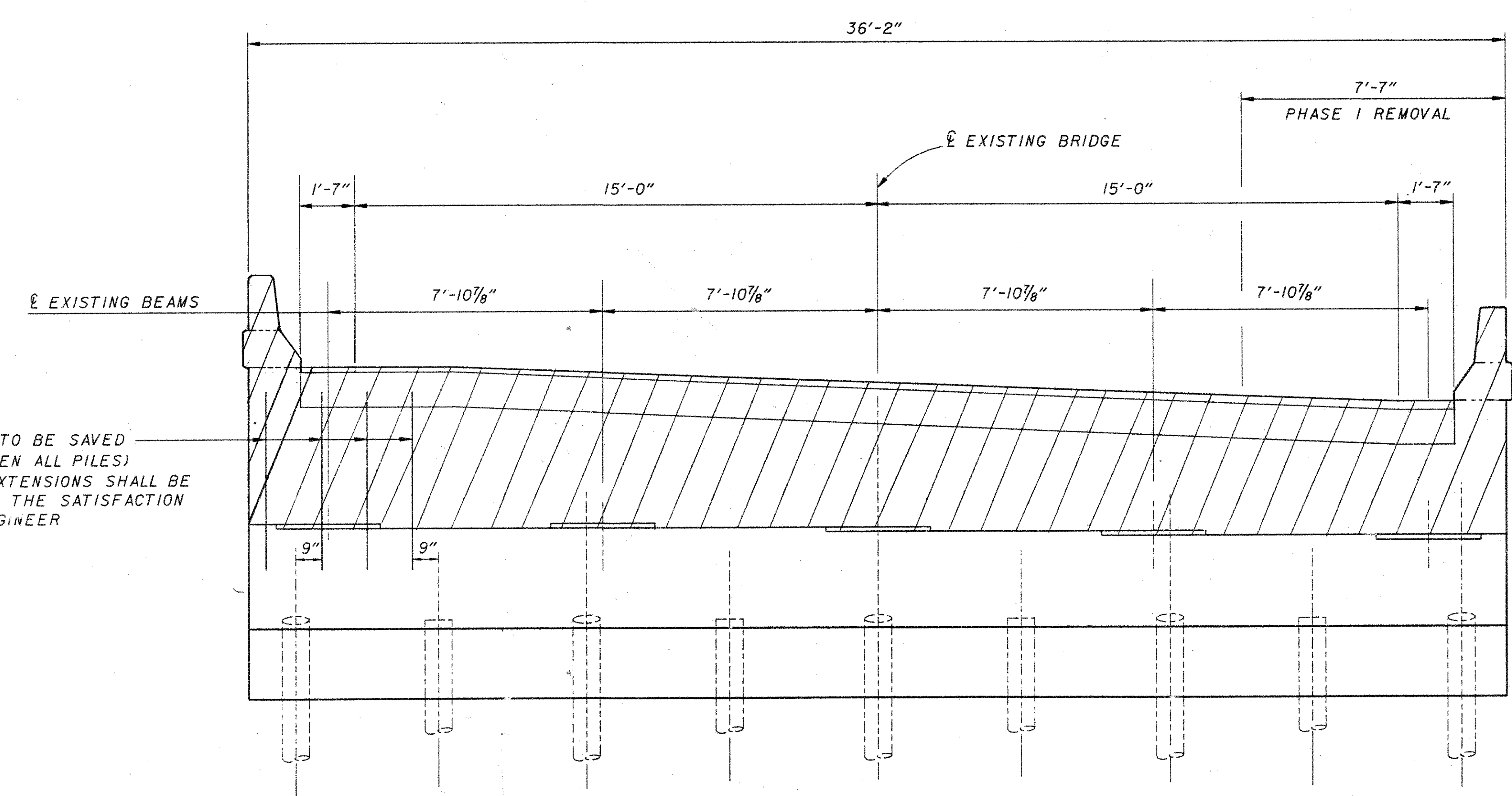
REVISED 4-3-91

STATE OF OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF BRIDGES AND STRUCTURAL DESIGN						
ESTIMATED QUANTITIES & GENERAL NOTES						2/13
BRIDGE NO. CLA-70-0173 L/R I. R. 70 OVER MAD RIVER						
CLARK COUNTY						STA. 91+41.75 STA. 96+08.25
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FO	REF		FFE 6-22-90	WTF	7-23-90	

← FOR E. ABUT. OF E.B. BRIDGE  
→ FOR W. ABUT. OF W.B. BRIDGE

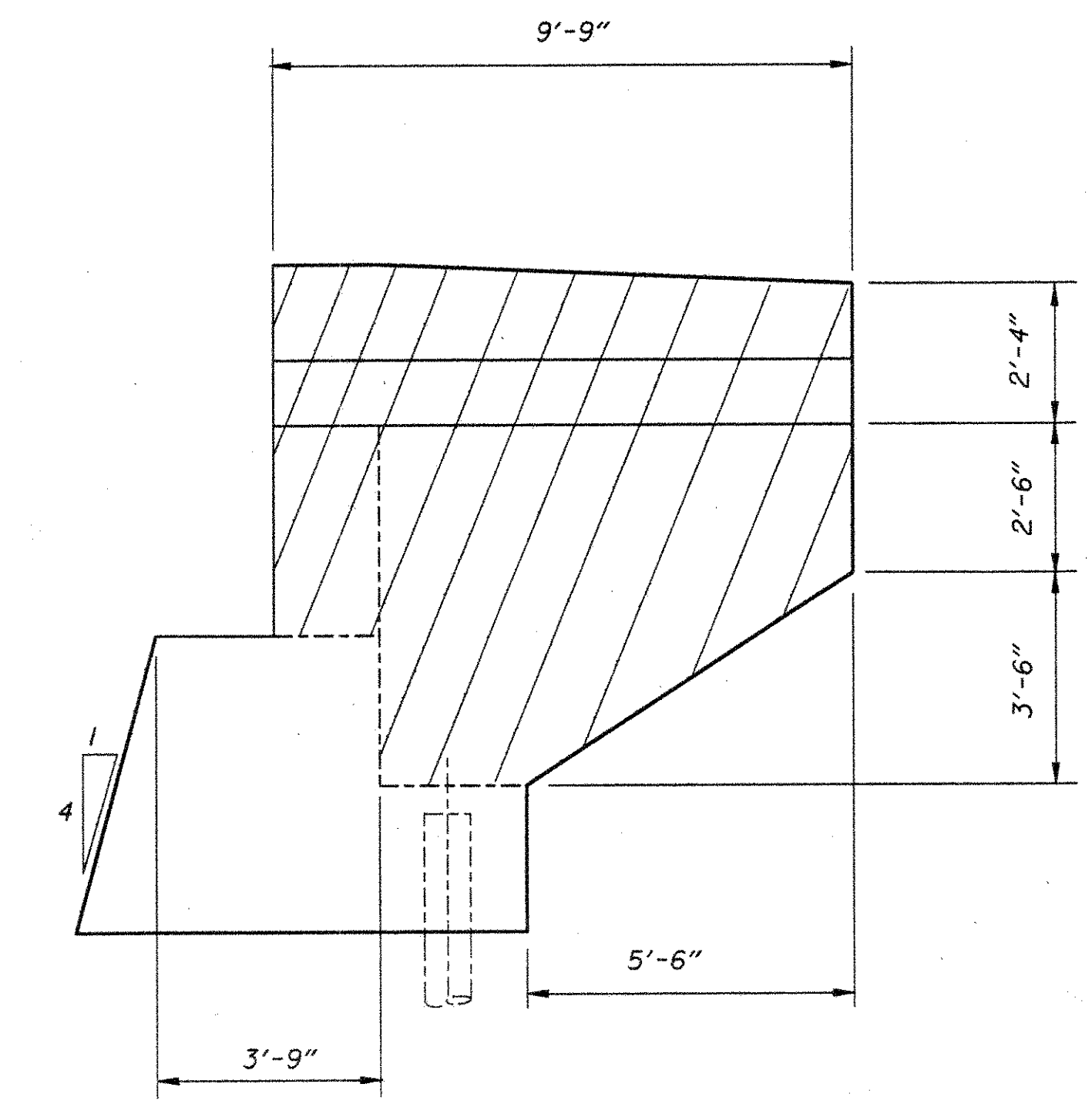


PLAN

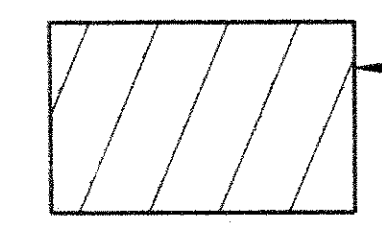


ELEVATION

EAST ABUTMENT OF E.B. BRIDGE & WEST ABUTMENT OF W.B. BRIDGE~AS SHOWN  
WEST ABUTMENT OF E.B. BRIDGE & EAST ABUTMENT OF W.B. BRIDGE~OPPOSITE HAND



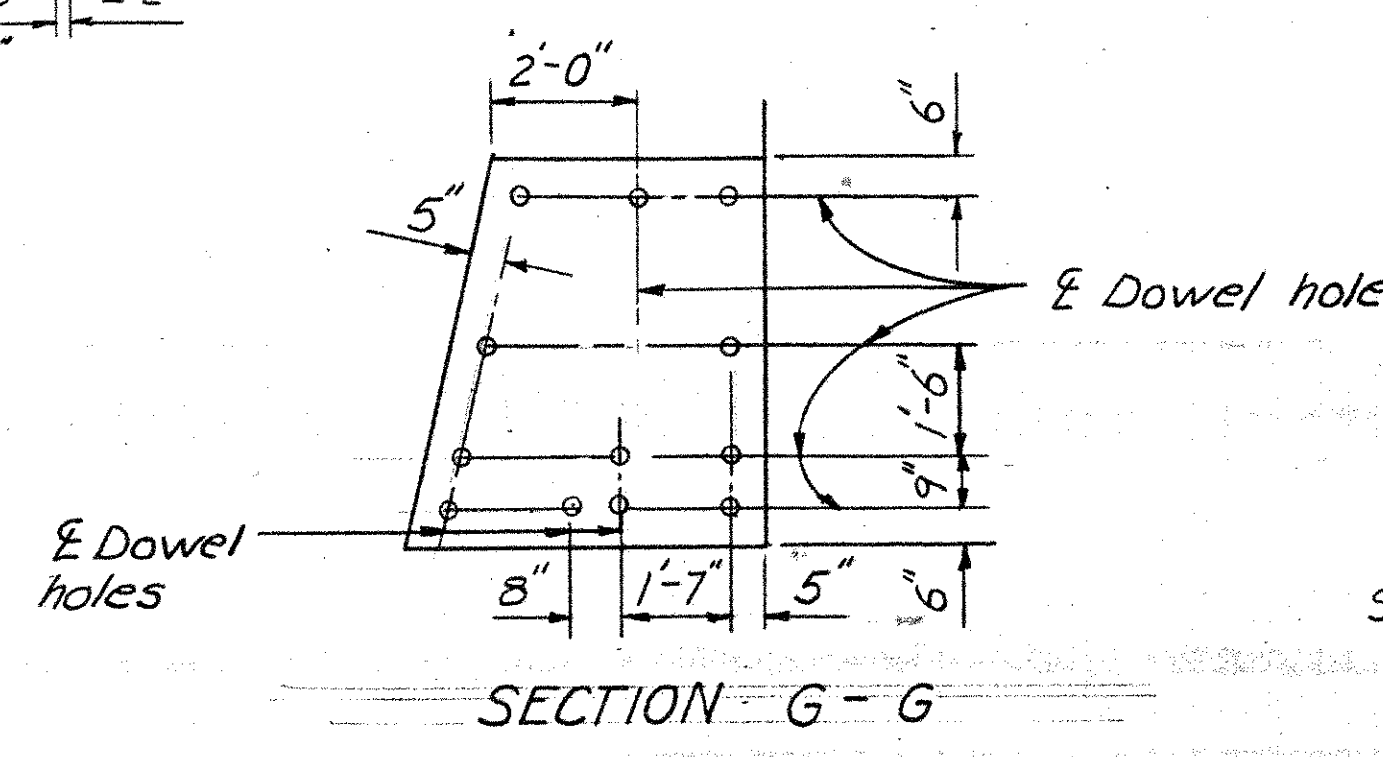
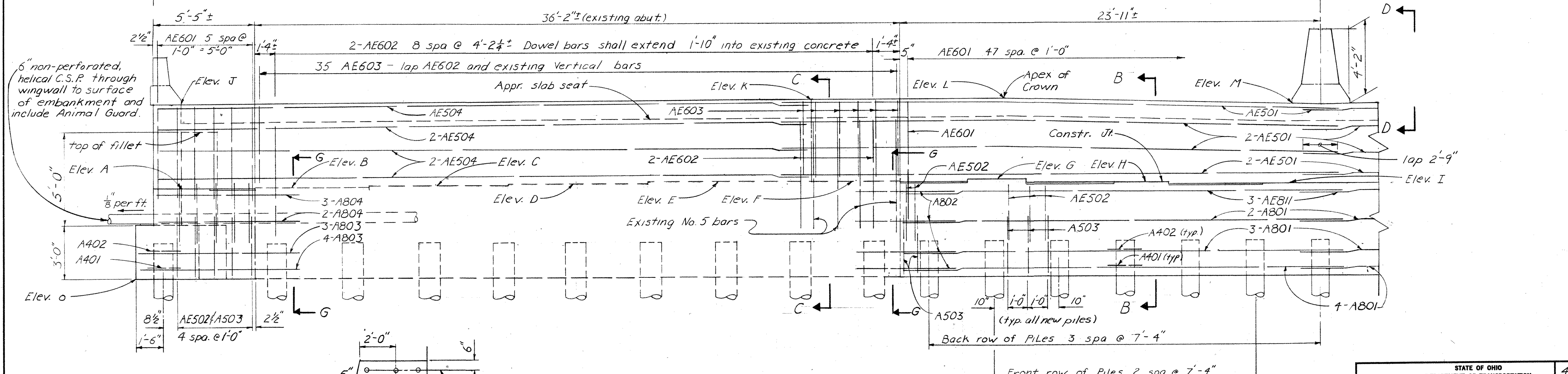
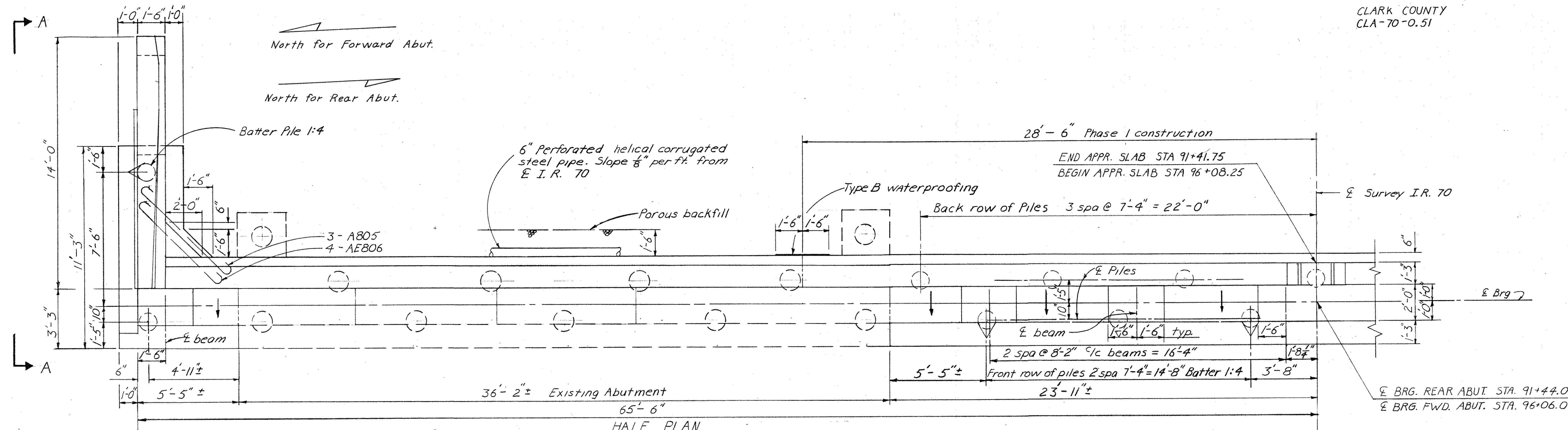
VIEW A-A



DENOTES AREA OF ABUTMENT TO BE REMOVED

STATE OF OHIO						3 / 13
DEPARTMENT OF TRANSPORTATION						
BUREAU OF BRIDGES AND STRUCTURAL DESIGN						
ABUTMENT REMOVAL DETAILS						
BRIDGE NO. CLA-70-01731/R						
I.R.70 OVER MAD RIVER						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DJH	GFJ	—	FFE	WTF	7-23-90	

CLARK COUNTY  
CLA-70-0.51

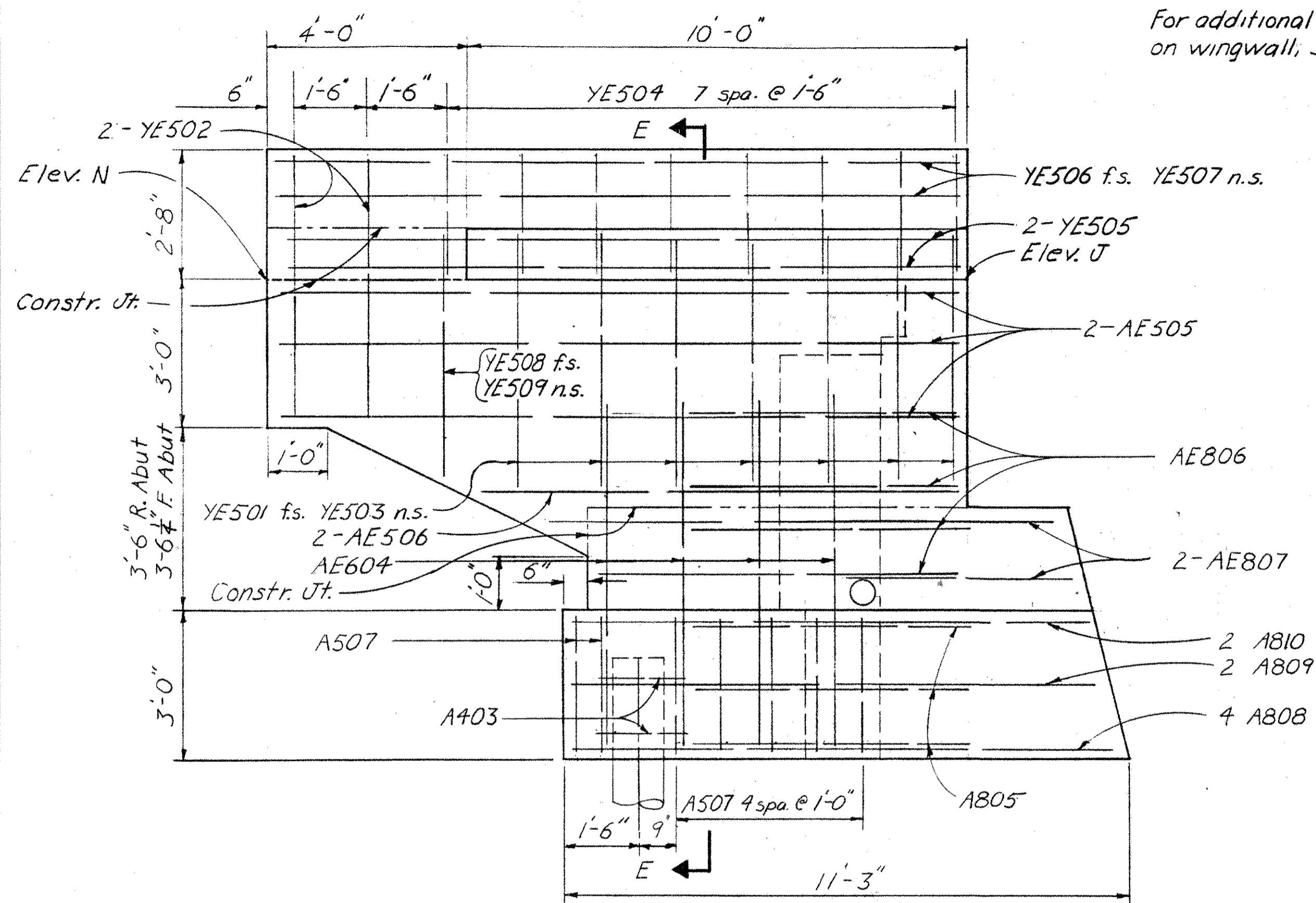


NOTE: A802, A803 & A804 Dowel bars shall extend 2'-6" into existing abutment concrete

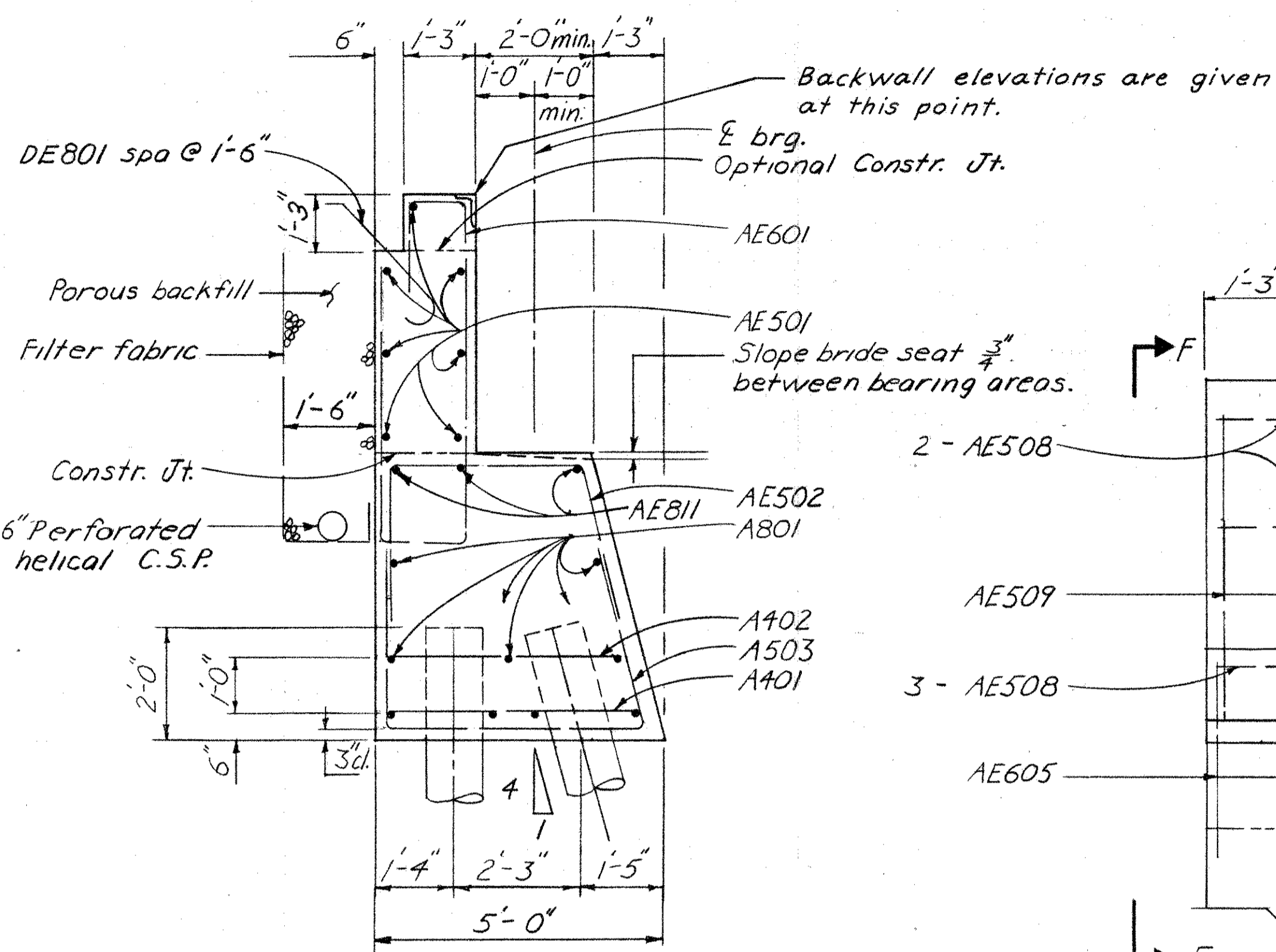
STATE OF OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF BRIDGES AND STRUCTURAL DESIGN						4	13
ABUTMENT DETAILS							
BRIDGE NO. CLA-70-0173 L/R I.R. 70 OVER MAD RIVER							
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED	
DJH	DJH		FFE	WTF	7-23-90		

CLARK COUNTY  
CLA-70-0.51

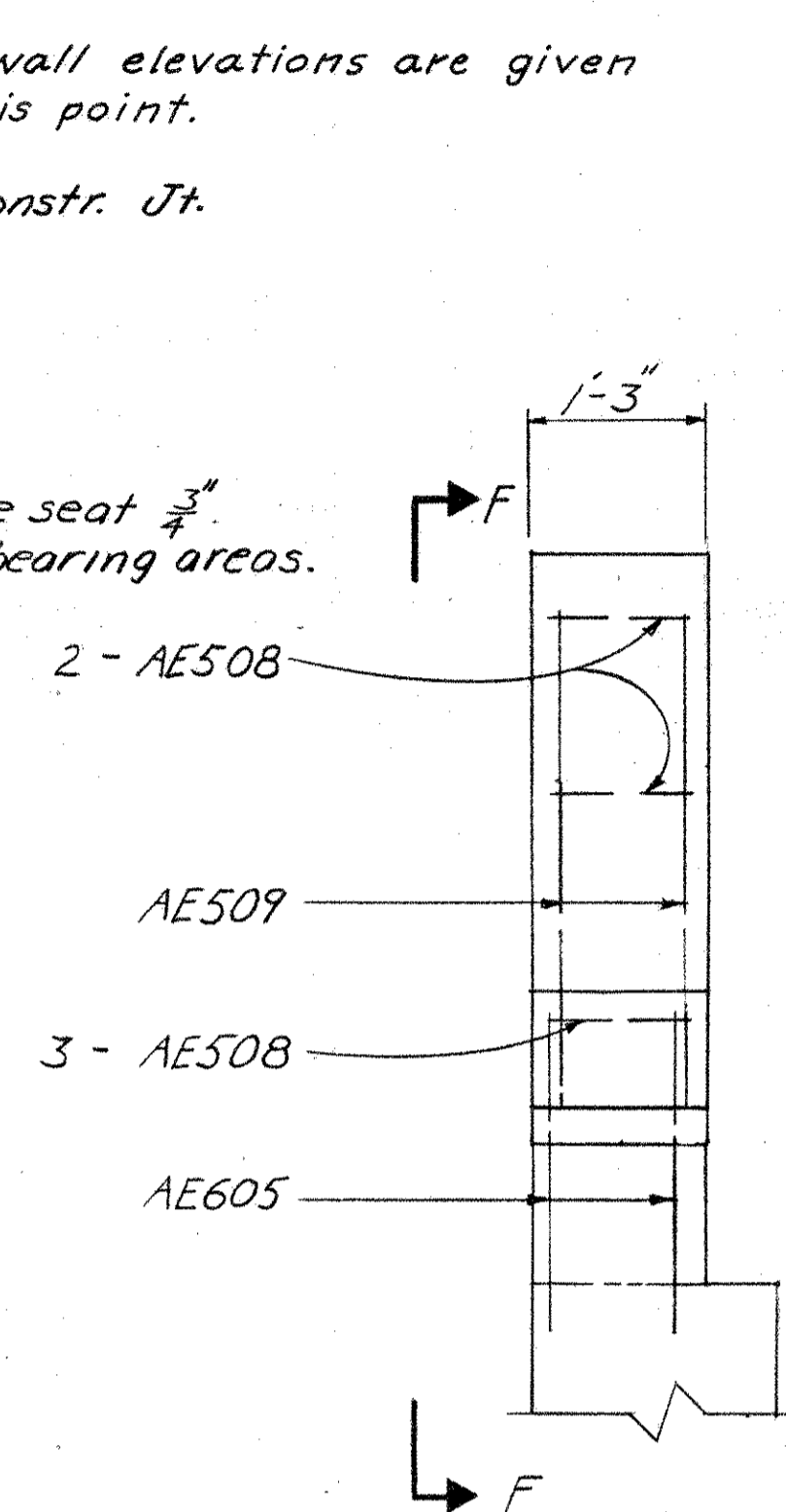
For additional details of parapet on wingwall, see sheet 6/13



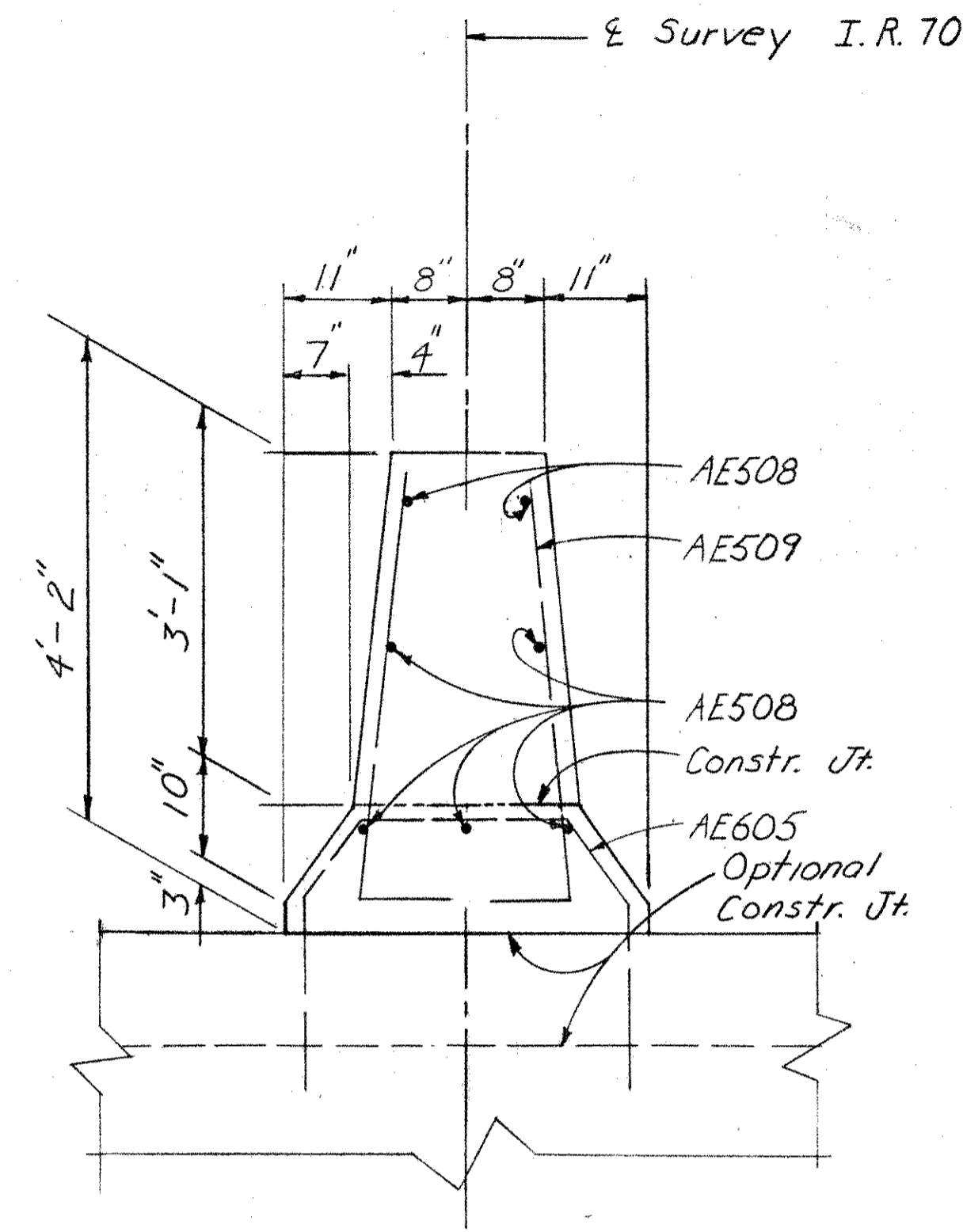
VIEW A-A



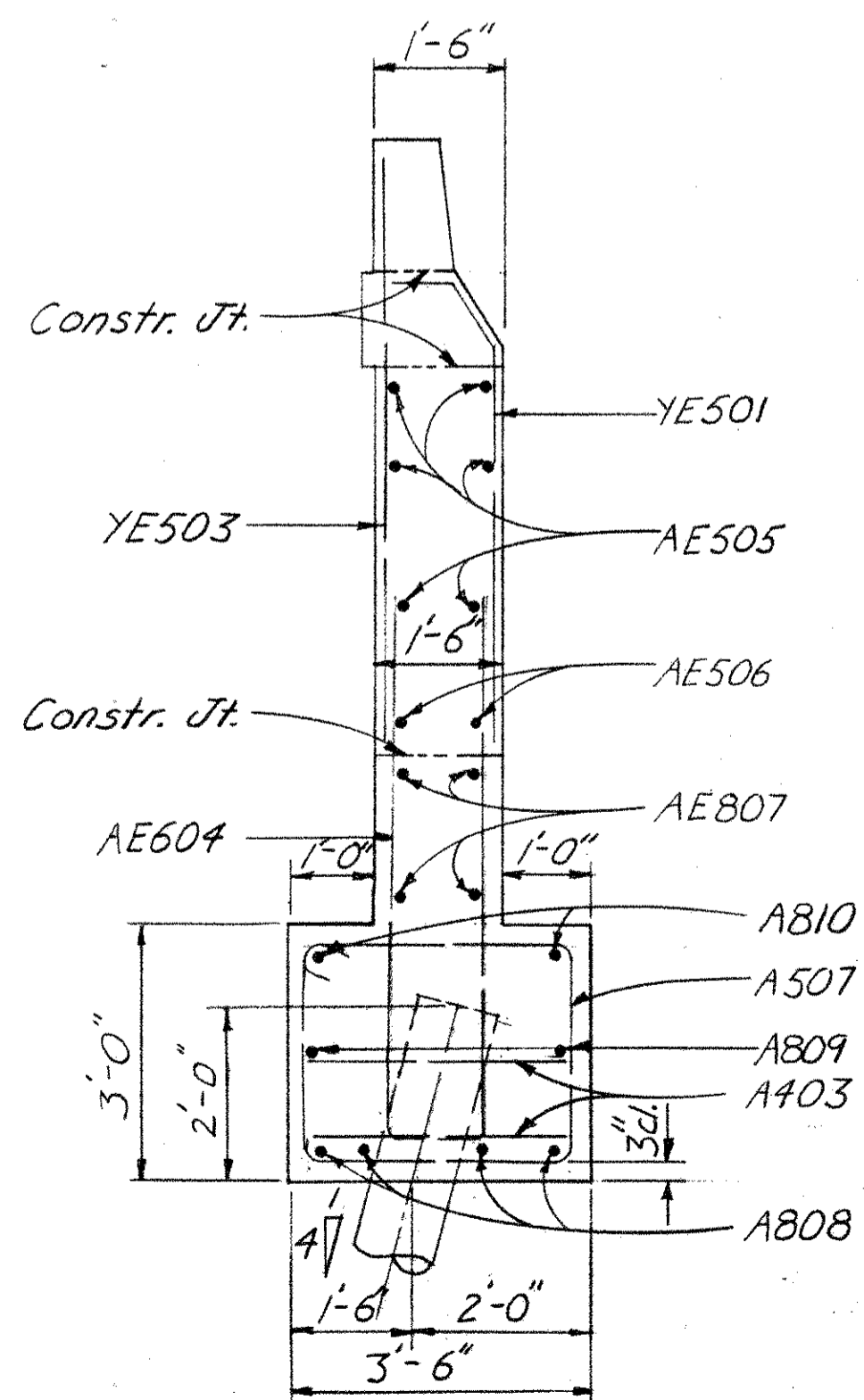
SECTION B-B



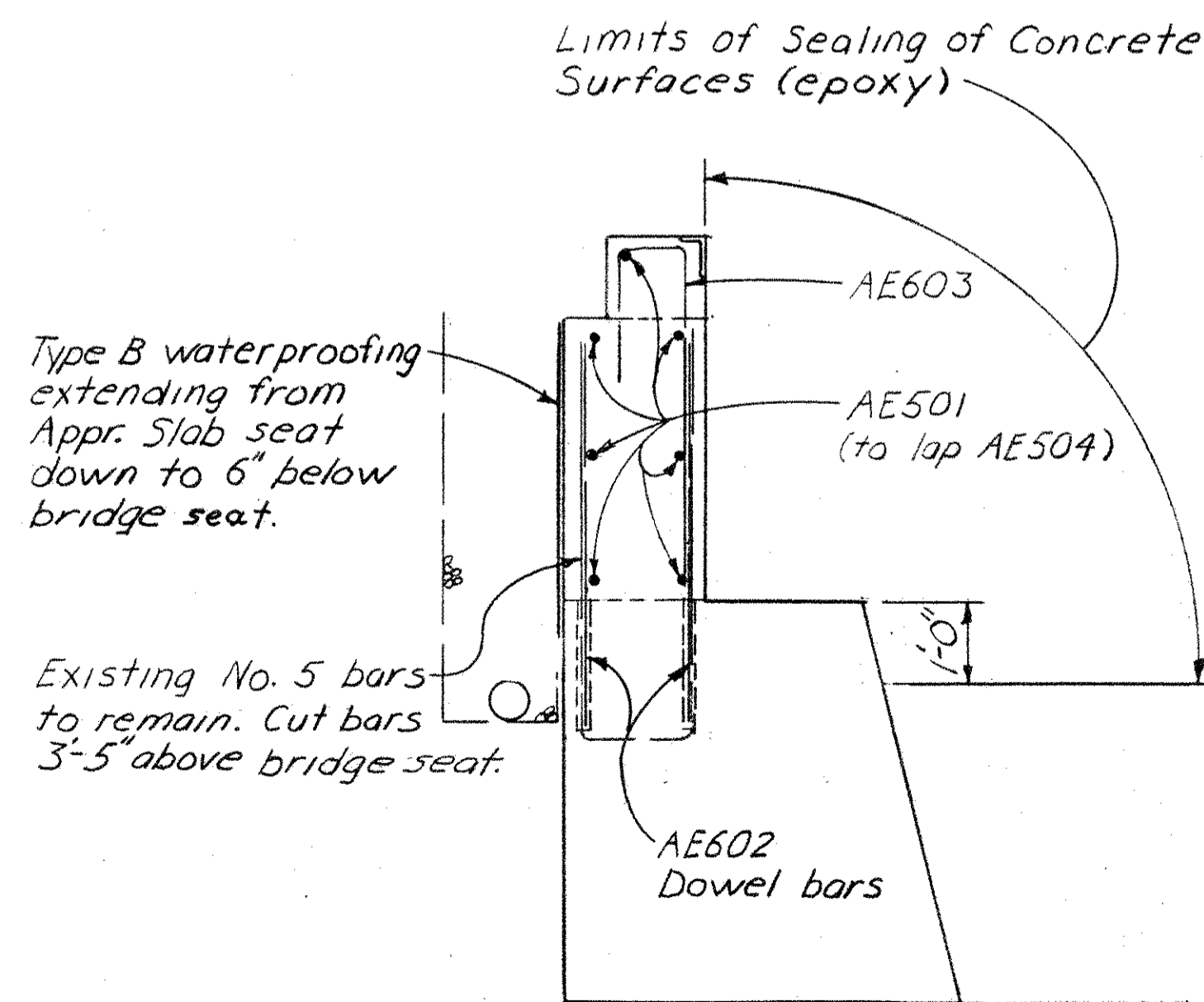
VIEW D-D



SECTION F-F



SECTION E-E



SECTION C-C

ELEV.	A	B*	C*	D*	E*	F*	G	H	I	J	K	L	M	N	O
R. ABUT.	838.63	838.73	838.85	838.97	839.10	839.10	839.35	839.22	839.09	843.28	843.84	844.00	843.75	843.23	833.73
F. ABUT.	839.31	839.40	839.53	839.65	839.78	839.78	840.03	839.90	839.77	843.96	844.52	844.68	844.43	843.92	834.40

\* Existing beam seat elevations taken from plans for existing bridge and are given for information only.

NOTES

POROUS BACKFILL SHALL EXTEND UP TO THE BOTTOM OF THE APPROACH SLAB AND LATERALLY TO THE WING WALLS.

BACKWALL CONCRETE IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.

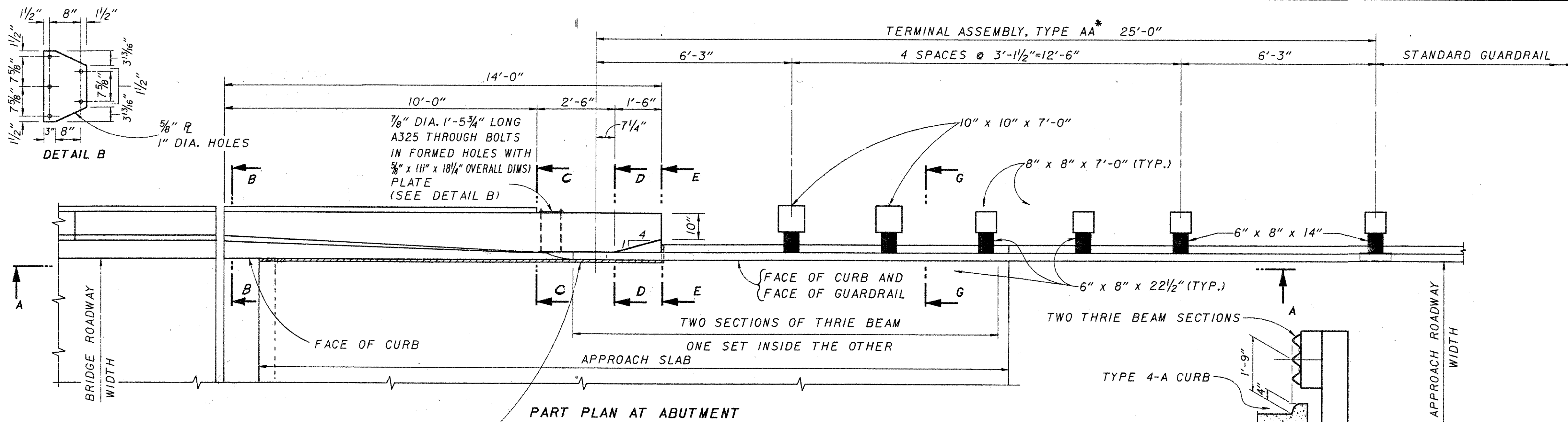
FILTER FABRIC SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND THE APPROACH FILL. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL AND RETURN UP 6 INCHES AGAINST THE BACK FACE OF THE ABUTMENT. THE FABRIC SHALL CONFORM THE 712.09 TYPE A AND BE INCLUDED WITH THE POROUS BACKFILL FOR PAYMENT.

STATE OF OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF BRIDGES AND STRUCTURAL DESIGN						5/13
ABUTMENT DETAILS						
BRIDGE NO. CLA-70-0173 LIR I.R. 70 OVER MAD RIVER						
DESIGNED DJH	DRAWN DJH	TRACED	CHECKED FFE	REVIEWED WTF	DATE 7-23-90	REVISED

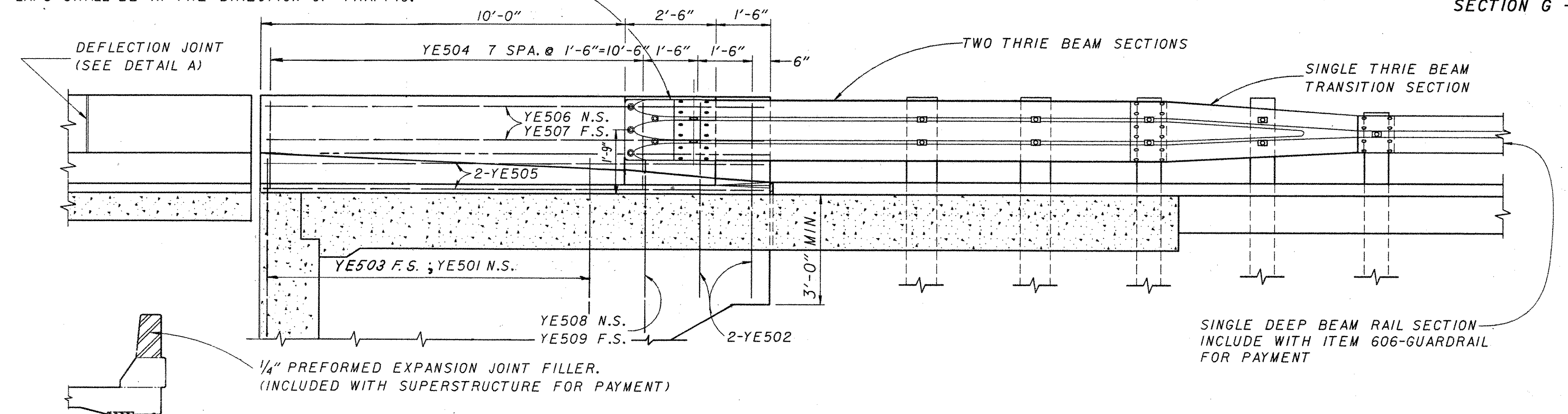
FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
5	OHIO		

218  
238

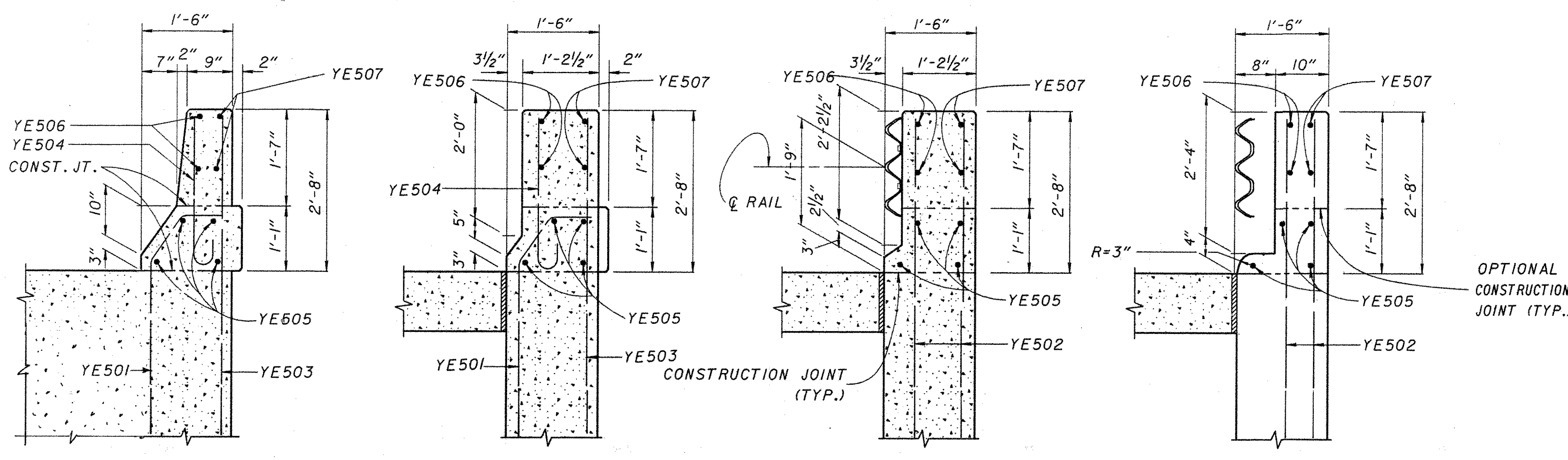
CLARK COUNTY  
CLA-70-0.51



NOTE: THE THRIE BEAM TERMINAL CONNECTOR SHALL FIT UNDER THE STANDARD GUARDRAIL SECTION AT THE APPROACH END. ALL LAPS SHALL BE IN THE DIRECTION OF TRAFFIC.



DETAIL A  
SECTION THROUGH DEFLECTION JOINT



SECTION B - B

SECTION C - C

SECTION D - D

SECTION E - E

NOTES

PREFORMED EXPANSION JOINT FILLER IN THE PARAPET DEFLECTION JOINTS MAY BE EITHER 1/4" GRAY SPONGE RUBBER OR 1/4" GRAY CELLULAR POLYVINYL CHLORIDE (PVC) SPONGE. SPONGE RUBBER FILLER SHALL CONFORM TO AASHTO M-153, TYPE I. DENSITY OF PVC SPONGE NOT BE LESS THAN 20 LBS. PER CU. FT.

CONCRETE PARAPETS ABOVE UPPER CONSTRUCTION JOINT SHALL BE PLACED IN ALTERNATE SECTIONS BY THE USE OF BULKHEADS. CLOSING SECTIONS SHALL BE PLACED AFTER REMOVAL OF BULKHEADS AND AFTER PLACEMENT OF EXPANSION JOINT FILLER. EXPOSED EDGES OF THE FILLER SHALL BE FLUSH WITH THE SURFACE OF CONCRETE AND SHALL BE FREE OF MORTAR.

\*See Std. Drg. GR-3 for bridge terminal assembly Type AT. Concrete railing transition is identical to that which connects to bridge terminal assembly Type AA.

Note: For additional wingwall details, see Sheet 5/13

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

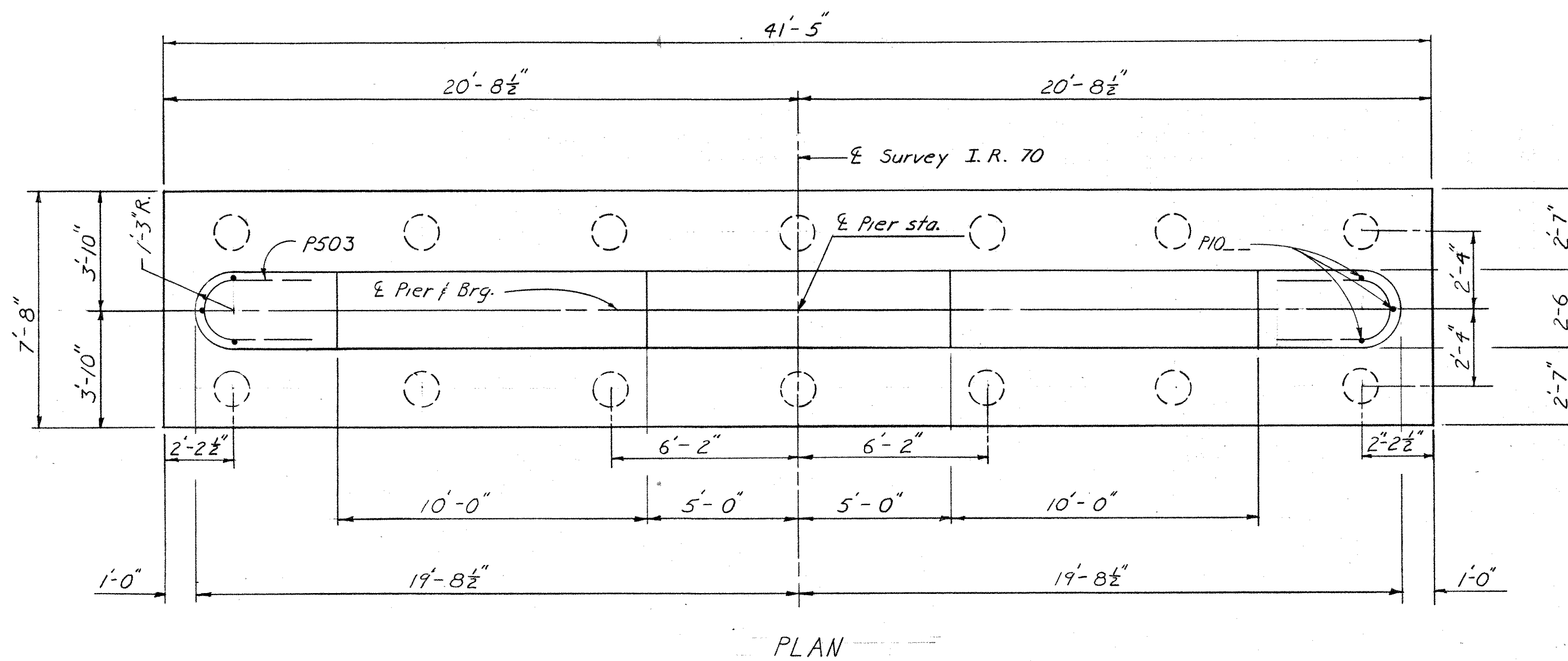
6/13

BRIDGE RAILING  
TRANSITION DETAILS

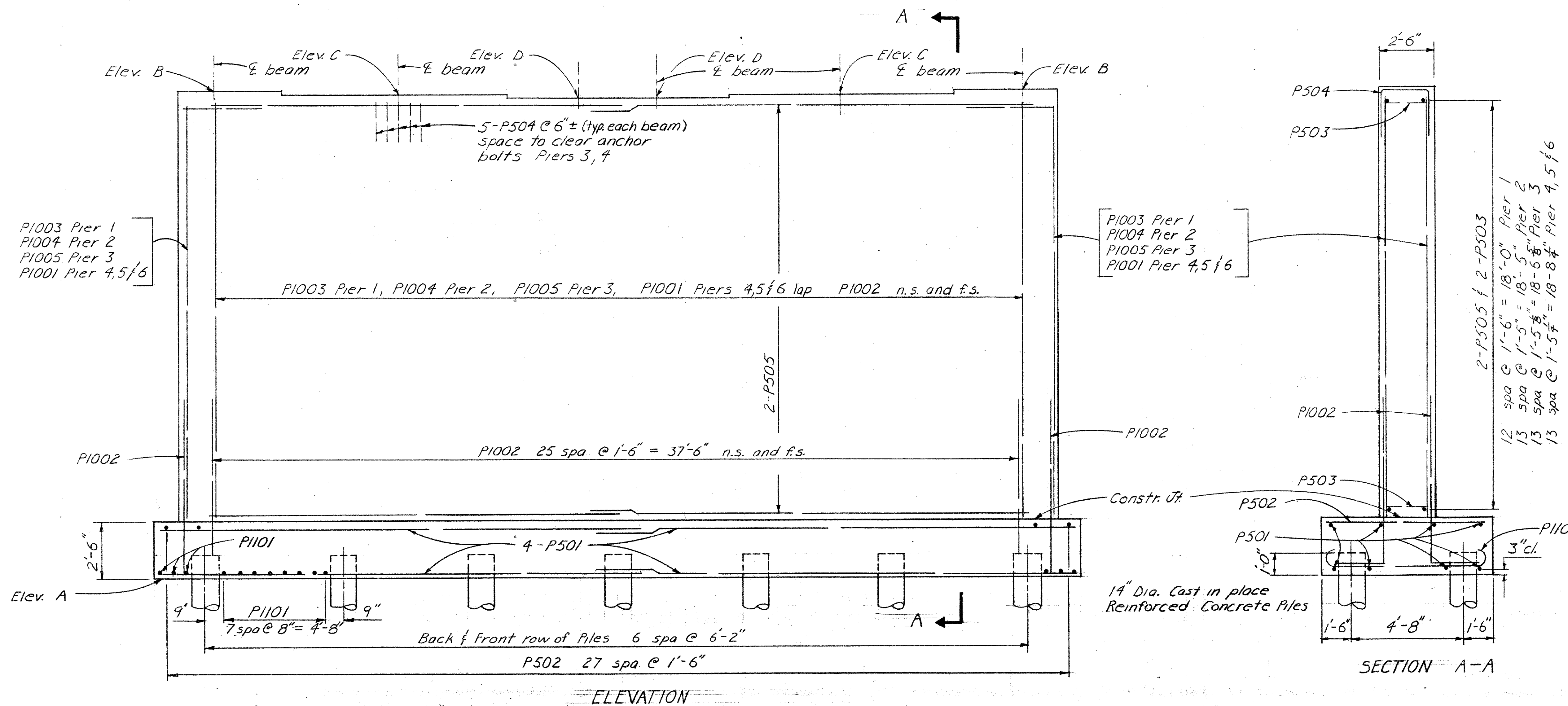
BRIDGE NO. CLA-70-0173 L/R  
I.R.70 OVER MAD RIVER

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DJH	DJH		FFE	WTF	7-23-90	

CLARK COUNTY  
CLA 70 0.51



Pier No.	Station & Brg.	Elevation				
		A	B	C	D	E
1	92+00.00	818.00	839.18	839.05	838.72	838.46
2	92+70.00	818.00	839.43	839.30	839.17	838.71
3	93+40.00	818.00	839.66	839.54	839.41	838.74
4	94+10.00	818.00	839.80	839.68	839.55	839.09
5	94+80.00	818.00	839.84	839.72	839.59	839.13
6	95+50.00	818.00	839.78	839.65	839.53	839.06



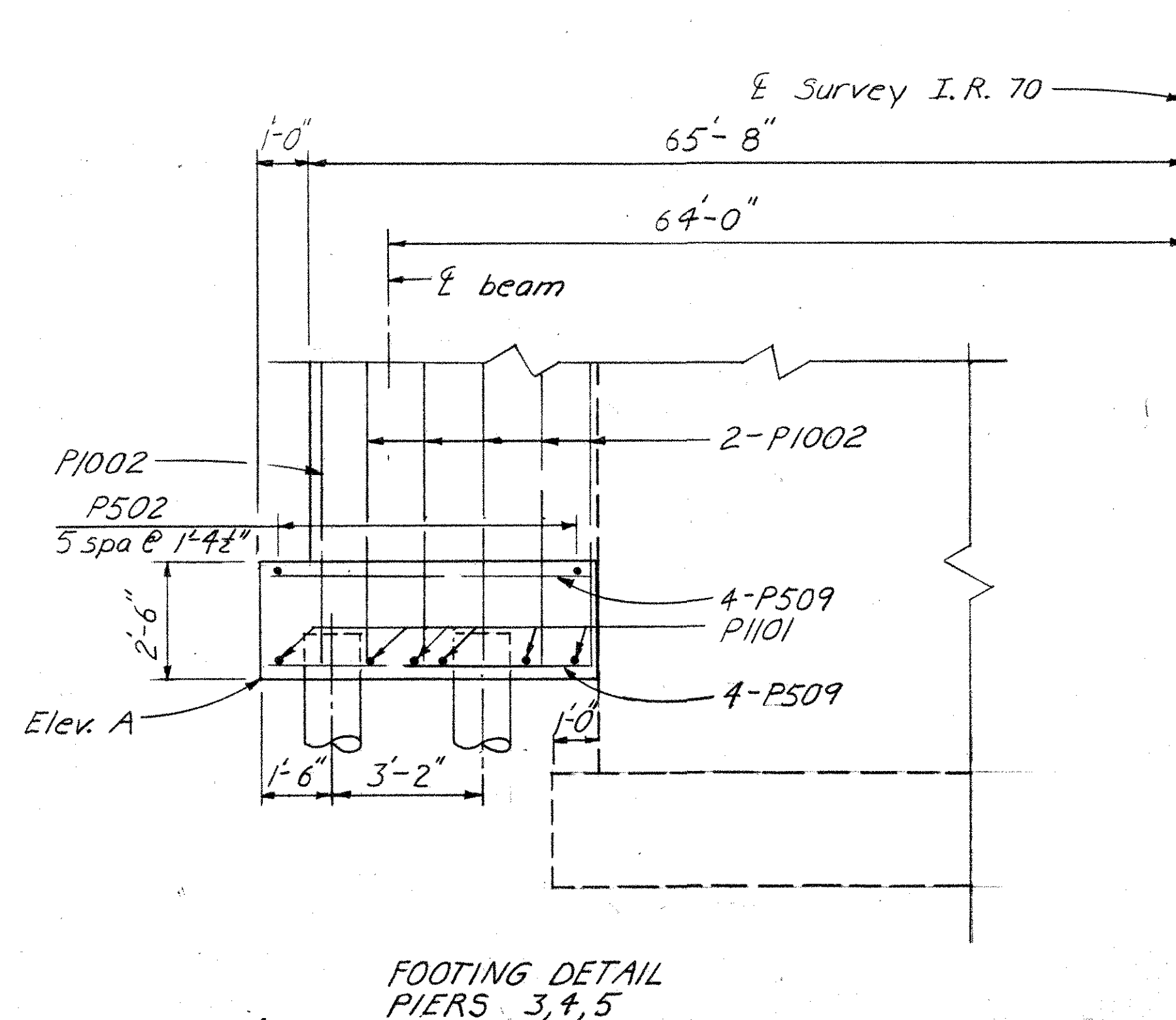
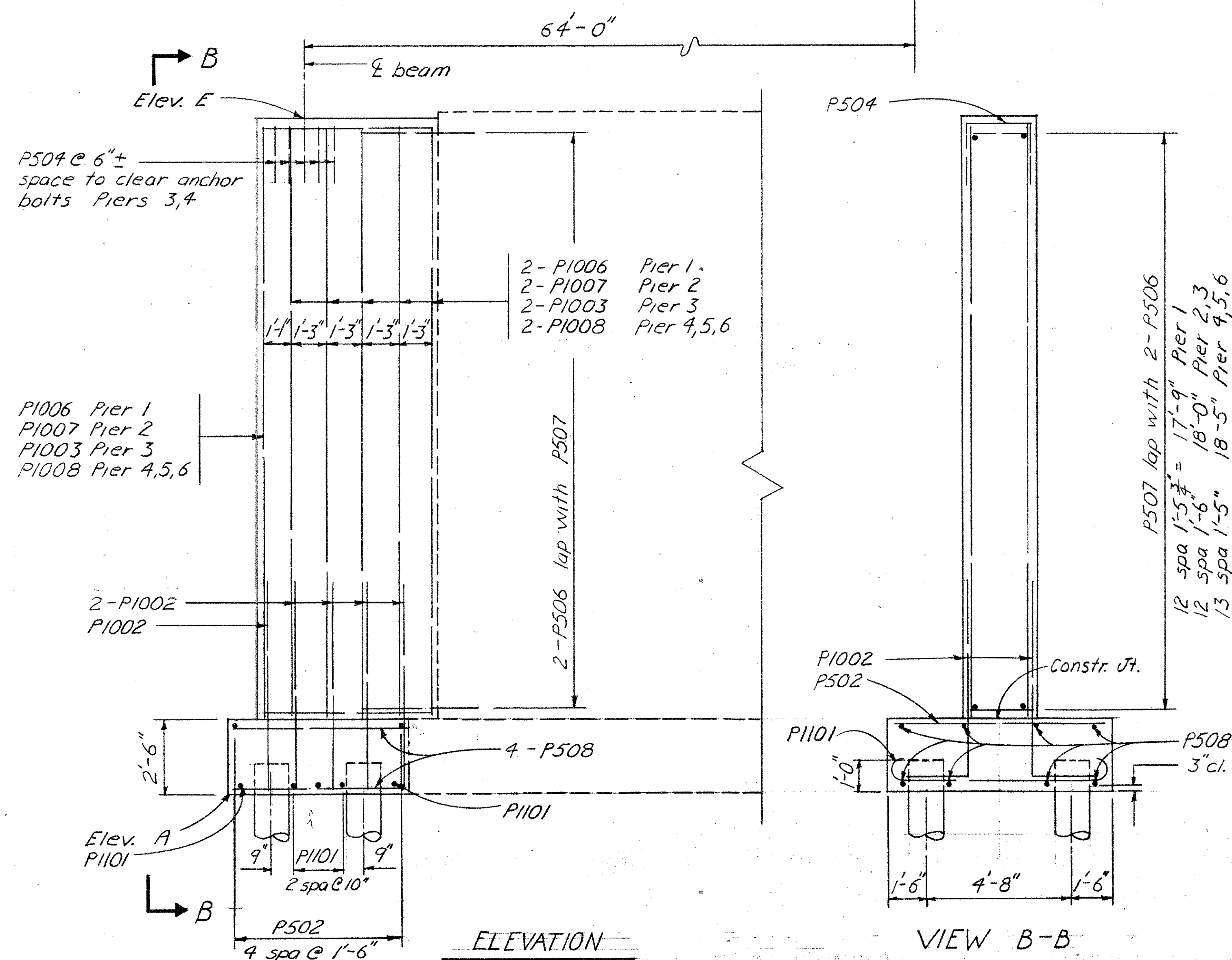
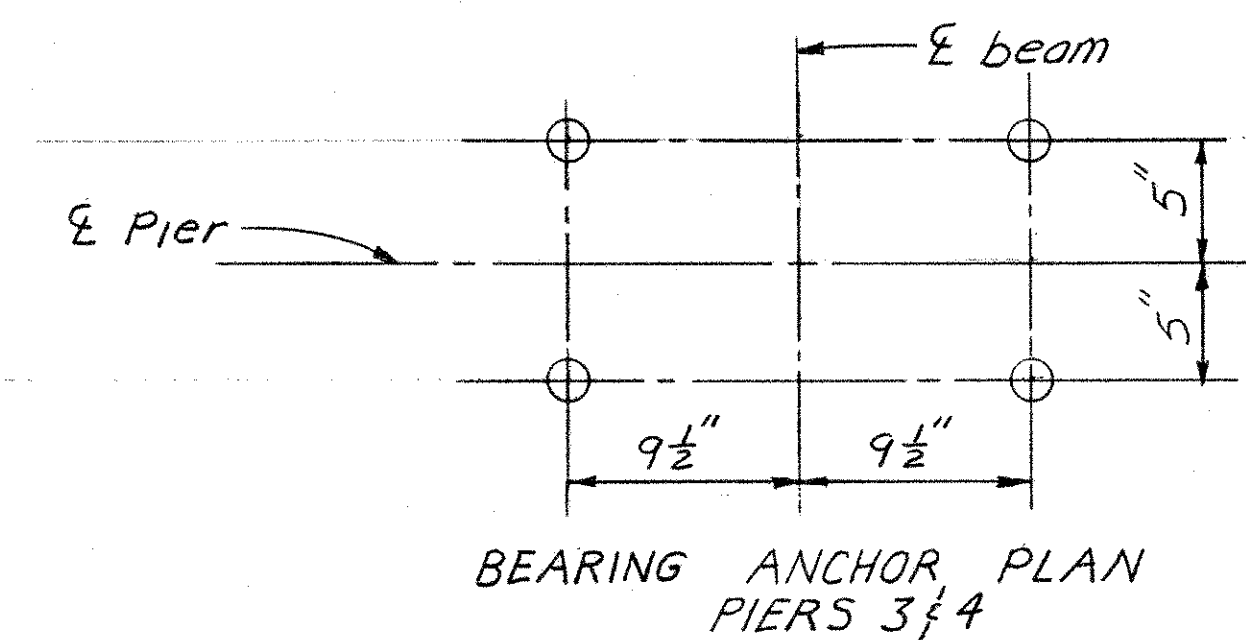
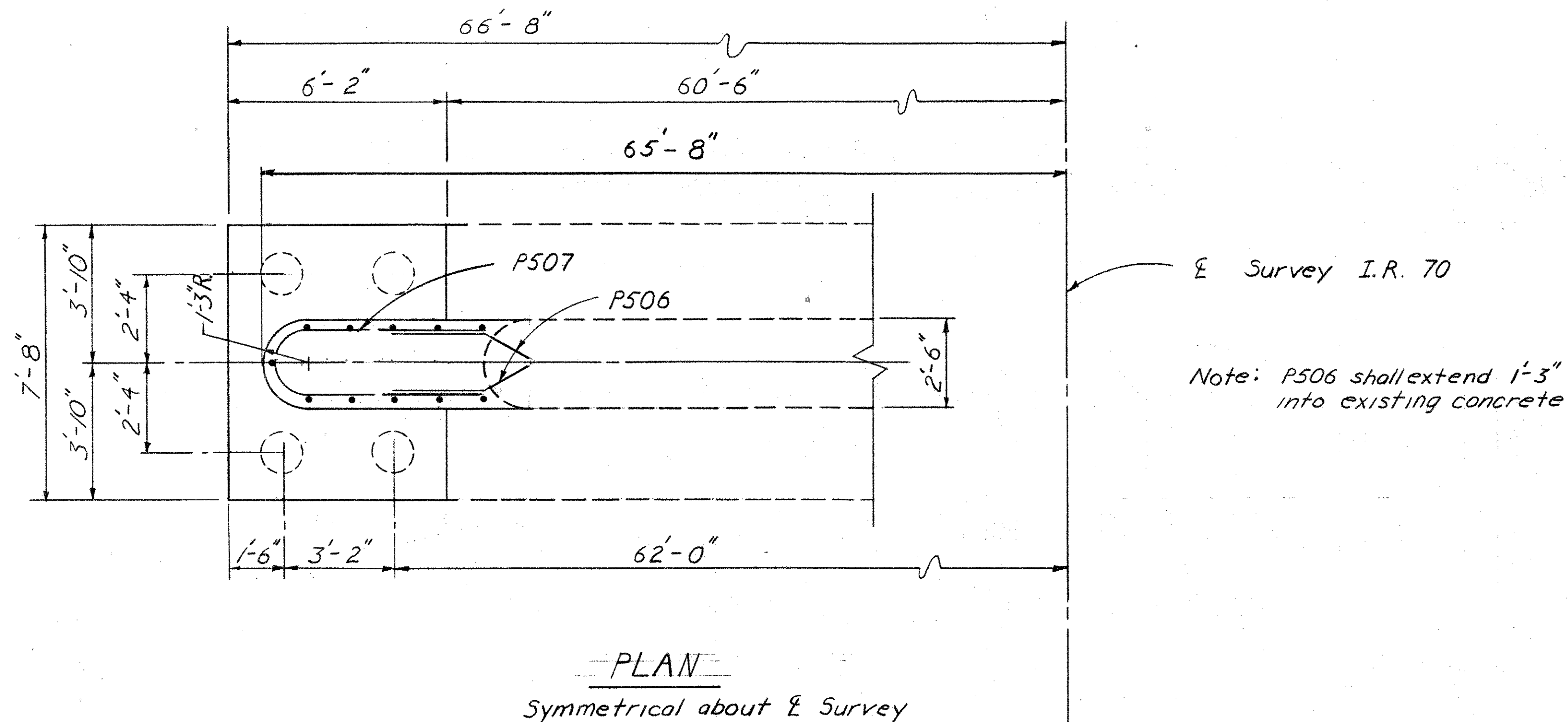
STATE OF OHIO						7	13
DEPARTMENT OF TRANSPORTATION							
BUREAU OF BRIDGES AND STRUCTURAL DESIGN							
PIER DETAILS							
BRIDGE NO. CLA-70 0173 LIR							
I.R. 70 OVER MAD RIVER							
DESIGNED	DJH	DRAWN	DJH	TRACED	FFE	CHECKED	WTF
REVIEWED	DATE	REVIS					
	7-23-90						



FHWA REGION	STATE	PROJECT
5	OHIO	

220  
238

CLARK COUNTY  
CLA-70-0.51

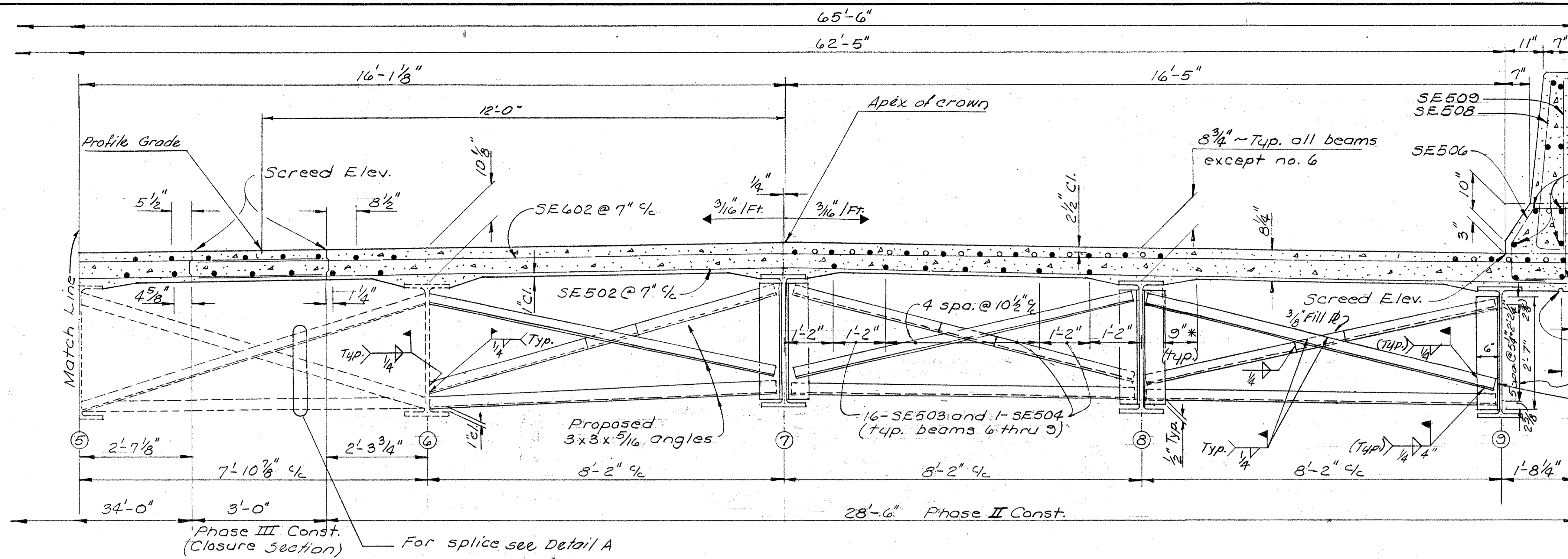


BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of bearing anchor holes or the pre-setting of bearing anchors.

BEARING ANCHORS: At the option of the contractor, bearing anchors (or formed holes) located and supported by templates, may be cast in place

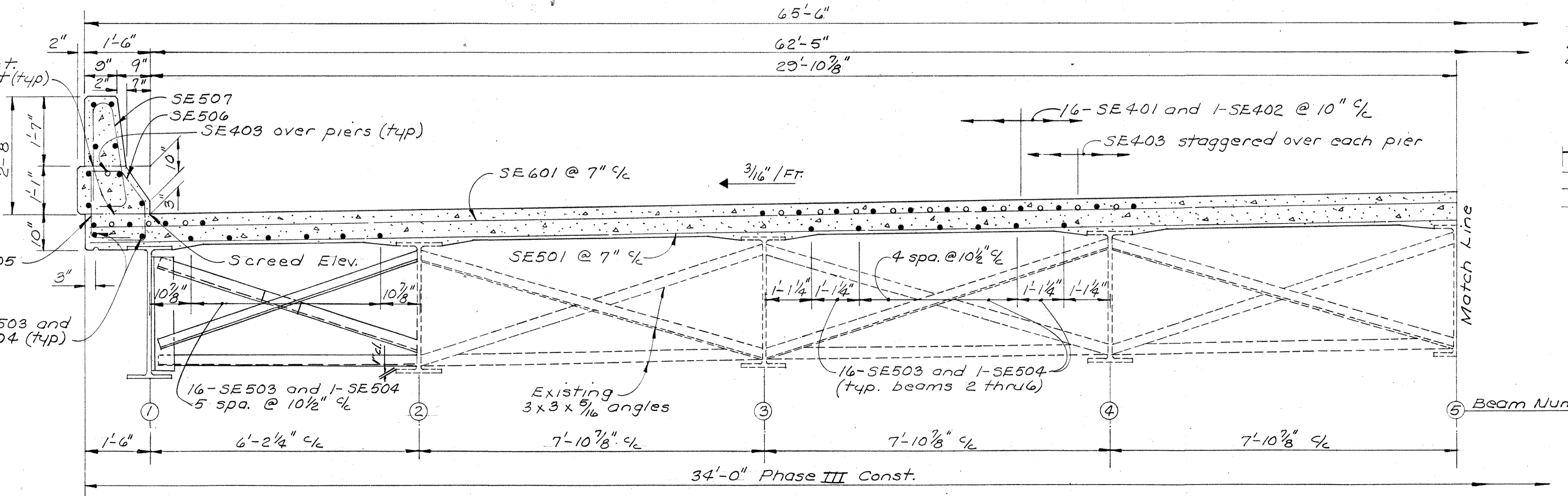
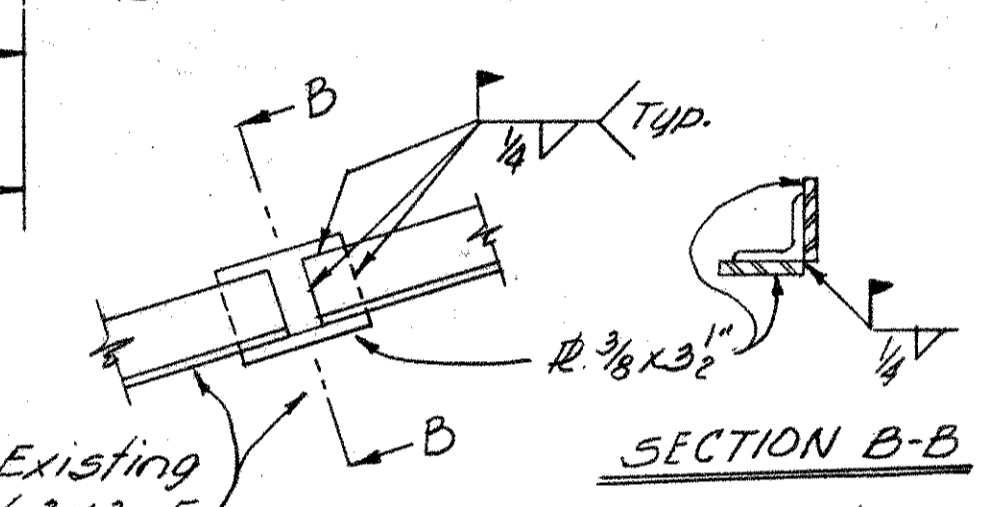
STATE OF OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF BRIDGES AND STRUCTURAL DESIGN						8 / 13
PIER DETAILS BRIDGE NO. CLA-70-0173 LIR I.R. 70 OVER MAD RIVER						
DESIGNED DJH	DRAWN DJH	TRACED	CHECKED FFE	REVIEWED WTF	DATE 7-23-90	REVISED

CLA-70-0.51  
For median barrier and parapet details, see sheet 10/13.



16-SE503 and 1-SE504  
Symmetrical about  $\bar{E}$  I-70

1"  $\phi$  half-round drip groove (typ)  
4" ASTM A325 bolts  
1/2" x 4" x 3/8" x 2'-7" (typ) for new beams.



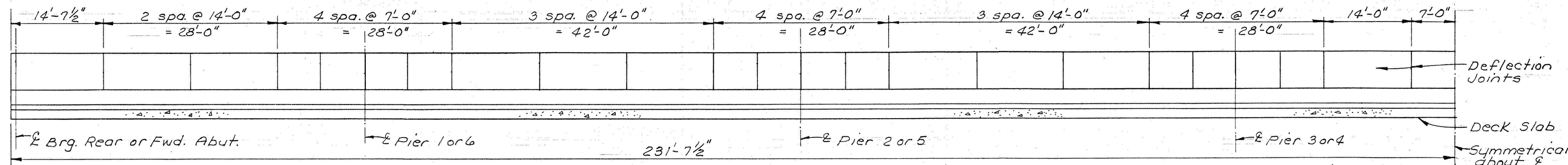
STAGGER OF SE403 BARS OVER PIERS

**BEAM DATA**  
Existing beam lines 2 thru 6 are all 36WF182.  
Proposed beam lines 1 and 7 thru 9 are all W36 x 182.

**HALF-TRANSVERSE SECTION**  
Bar Lap Lengths:  
No. 4 = 1'-8" min.  
No. 5 = 2'-6" min.  
No. 6 = 2'-6" min.

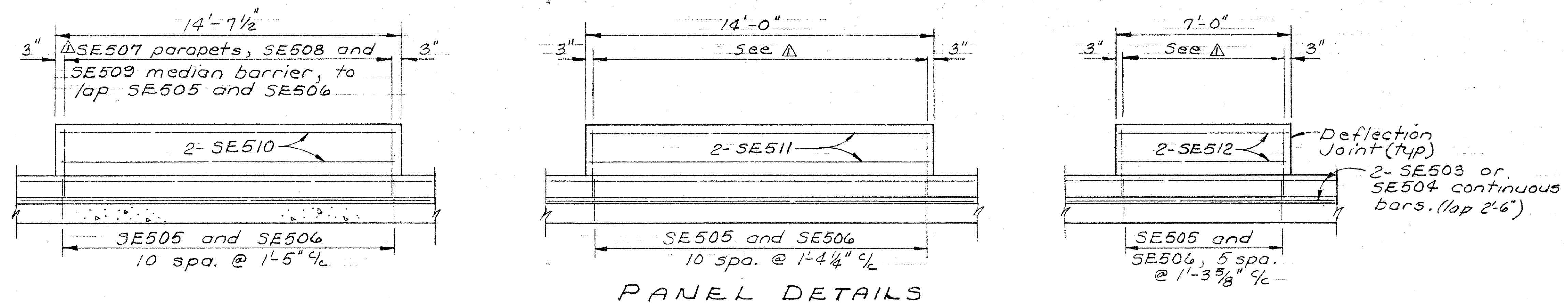
**NOTE**  
For parapet and median barrier sealing limits and additional detail notes, see sheet 10/13.

STATE OF OHIO						9	13
DEPARTMENT OF TRANSPORTATION							
BUREAU OF BRIDGES AND STRUCTURAL DESIGN							
SUPERSTRUCTURE							
DETAILS							
BRIDGE No. CLA-70-0173 1/2							
I-70 OVER MAD RIVER							
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED	
FO	FO		FFE	WTF	7-23-90		



PARAPET AND MEDIAN BARRIER  
HALF-ELEVATION

For additional parapet details see sheet 6/13 and 9/13

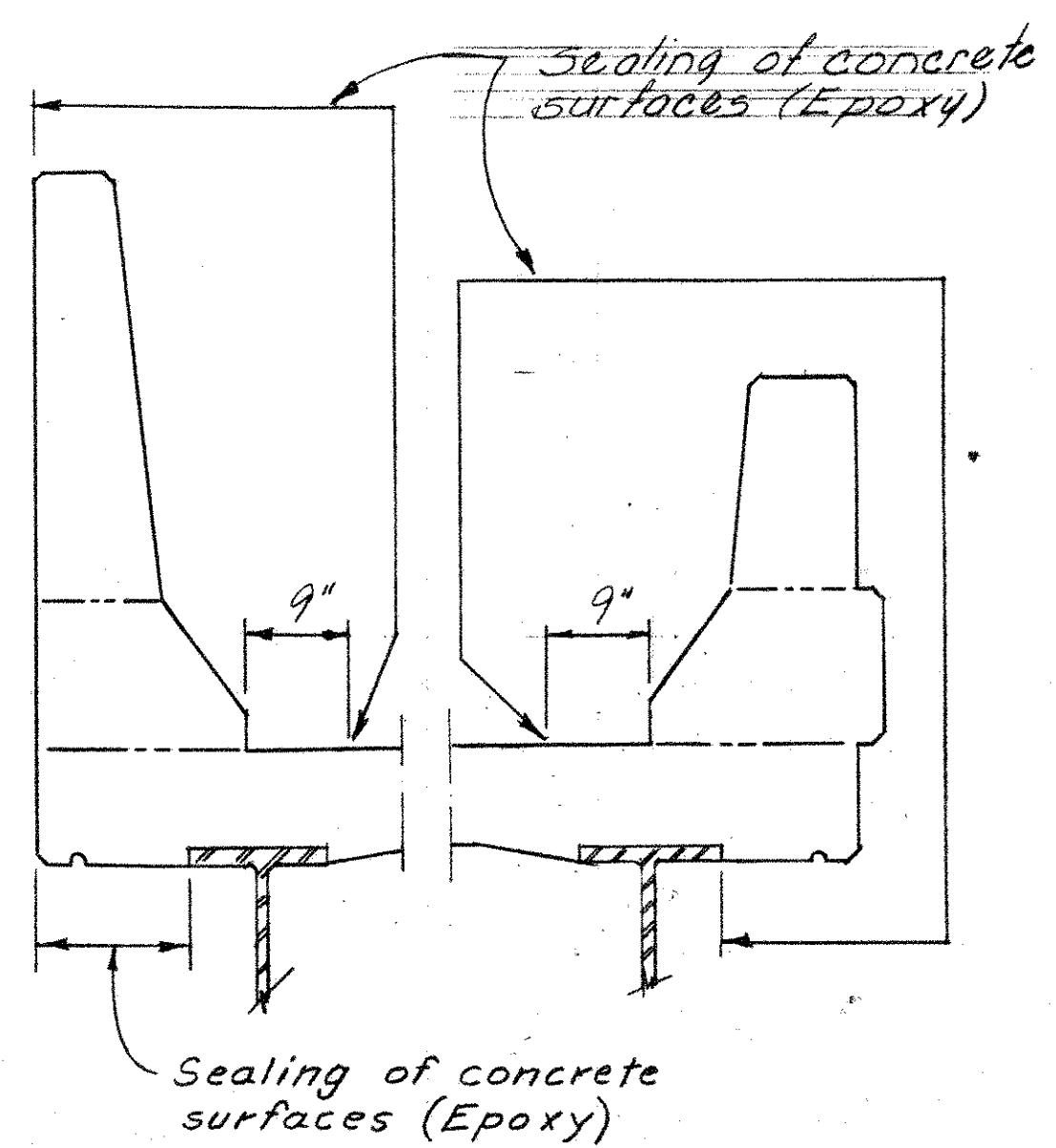


PANEL DETAILS

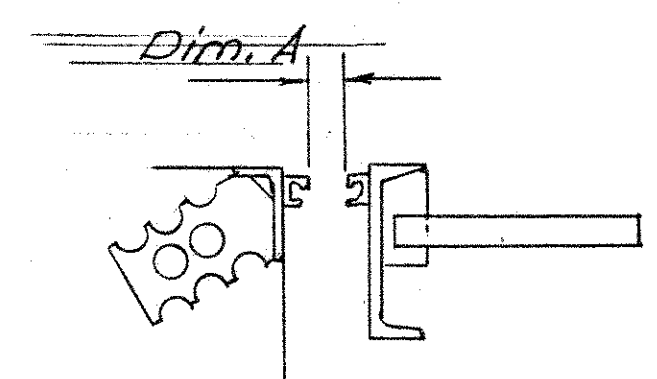
SCREED ELEVATIONS  
Left and Right of I-70

Station	Location	1'-7" Rt. and Lt.	28'-6" Rt. and Lt.	31'-6" Rt. and Lt.	64'-0" Rt. and Lt.
91+44.00	Brig. Rear A.	843.75	843.84	843.80	843.29
91+58.00	1/4 Span	843.82	843.91	843.86	843.35
91+72.00	1/2 "	843.87	843.96	843.92	843.41
91+86.00	3/4 "	843.91	844.00	843.96	843.45
92+00.00	Brig. Pier No. 1	843.95	844.04	844.00	843.49
92+17.50	1/4 Span	844.03	844.12	844.07	843.56
92+35.00	1/2 "	844.11	844.19	844.15	843.64
92+52.50	3/4 "	844.16	844.25	844.20	843.69
92+70.00	Brig. Pier No. 2	844.20	844.30	844.25	843.74
92+87.50	1/4 Span	844.28	844.37	844.32	843.82
93+05.00	1/2 "	844.36	844.44	844.40	843.89
93+22.50	3/4 "	844.40	844.49	844.44	843.94
93+40.00	Brig. Pier No. 3	844.44	844.53	844.48	843.98
93+57.50	1/4 Span	844.50	844.59	844.54	844.03
93+75.00	1/2 "	844.55	844.64	844.59	844.08
93+92.50	3/4 "	844.57	844.66	844.61	844.10
94+10.00	Brig. Pier No. 4	844.58	844.67	844.63	844.12
94+27.50	1/4 Span	844.61	844.70	844.66	844.15
94+45.00	1/2 "	844.64	844.73	844.68	844.17
94+62.50	3/4 "	844.65	844.72	844.68	844.17
94+80.00	Brig. Pier No. 5	844.62	844.71	844.66	844.16
94+97.50	1/4 Span	844.63	844.72	844.67	844.16
95+15.00	1/2 "	844.63	844.72	844.67	844.16
95+32.50	3/4 "	844.60	844.69	844.64	844.13
95+50.00	Brig. Pier No. 6	844.55	844.65	844.60	844.09
95+64.00	1/4 Span	844.54	844.63	844.58	844.08
95+78.00	1/2 "	844.52	844.61	844.57	844.06
95+92.00	3/4 "	844.48	844.58	844.53	844.02
96+06.00	Brig. Fwd. A.	844.40	844.52	844.45	843.97

Screed elevations are those required before concrete is placed & include an allowance for deflection due to the weight of the concrete.



SEALING LIMITS FOR SUPERSTRUCTURE



Section through expansion joint for additional details see Std. Drawg. E.XJ-4-87

Required Strip Seal Movement Rating = 4"

Temp °F	Dim. A
30°	2 3/4"
40°	2 5/8"
50°	2 7/8"
60°	2 1/4"
70°	2 1/8"
80°	1 7/8"
90°	1 1/2"

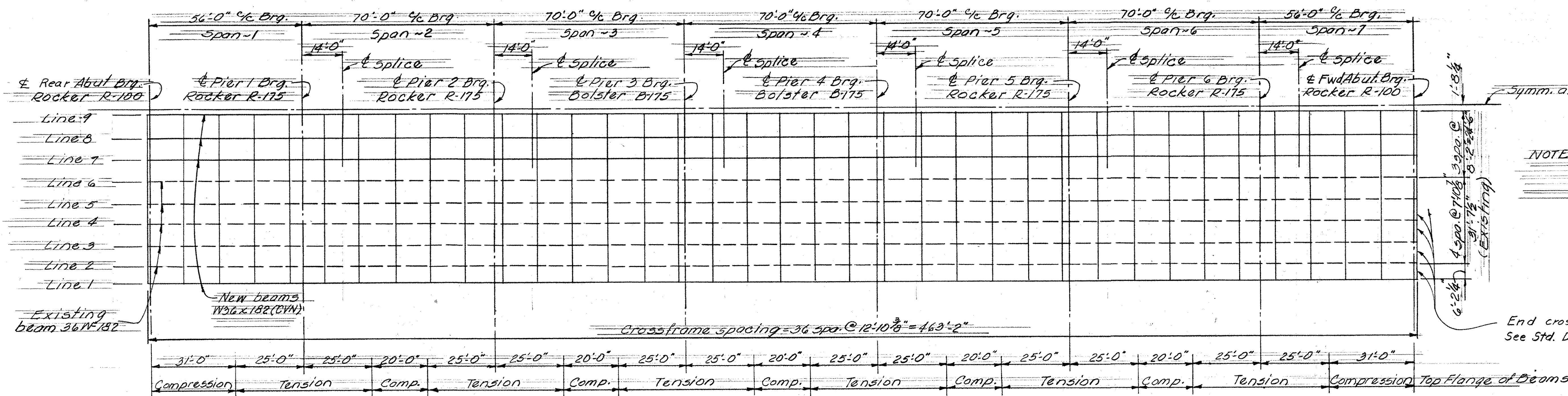
DECK SLAB: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMANCE REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE.

A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" WIDTH.)

DECK CLOSURE SECTION: THE EXISTING INTERMEDIATE CROSSFRAME ANGLES BETWEEN EXISTING INTERIOR BEAM (LINE 5) AND EXISTING EXTERIOR BEAM ADJACENT TO THE MEDIAN (LINE 6) SHALL BE CUT AFTER PHASE I PARTIAL EXISTING DECK REMOVAL HAS BEEN COMPLETED BUT BEFORE THE PROPOSED CROSSFRAME ANGLES BETWEEN THE EXISTING EXTERIOR BEAM (LINE 6) AND THE PROPOSED NEW BEAM (LINE 7) ARE INSTALLED. AFTER BOTH PHASE I AND PHASE II DECK CONSTRUCTION HAS BEEN COMPLETED BUT BEFORE THE CLOSURE SECTION IS PLACED, THE CROSSFRAME ANGLES BETWEEN BEAM LINES 5 & 6 SHALL BE RE-CONNECTED BY SPLICING THE ANGLES AS SHOWN ON THE PLANS. TRANSVERSE REINFORCING BARS, WHICH ARE SPLICED IN THE CLOSURE SECTION, SHOULD NOT BE TIED TOGETHER UNTIL AFTER BOTH PHASE I AND PHASE II DECK CONCRETE HAS BEEN PLACED AND CURED AND THE CROSSFRAMES BETWEEN BEAMS 5 & 6 HAVE BEEN RE-CONNECTED. THE CONCRETE FOR THE CLOSURE SECTION SHALL THEN BE PLACED. CUTTING AND RE-CONNECTING CROSSFRAMES SHALL BE INCLUDED IN ITEM 513 STRUCTURAL STEEL FOR PAYMENT.

STATE OF OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF BRIDGES AND STRUCTURAL DESIGN		10/13
SUPERSTRUCTURE DETAILS BRIDGE No. CLA-70-0173 1/2 I-70 OVER MAD RIVER		
DESIGNED FO	DRAWN FD	TRACED FF
CHECKED FF	REVIEWED WTF	DATE 7-23-90
REVISED		

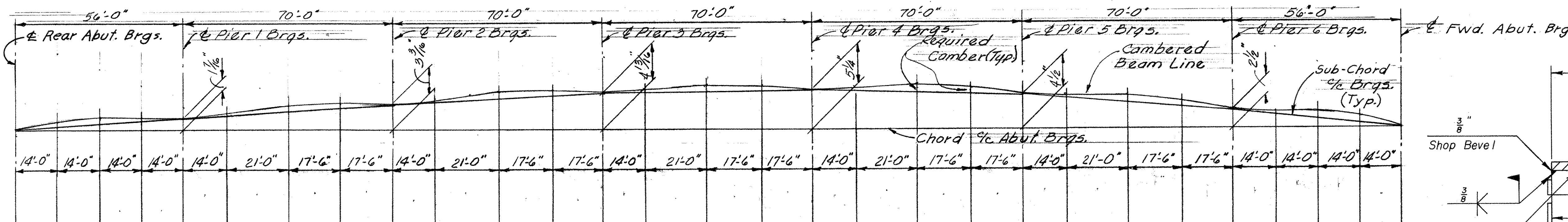
CLA-70-0.51



HALF PLAN OF STEEL FRAMING

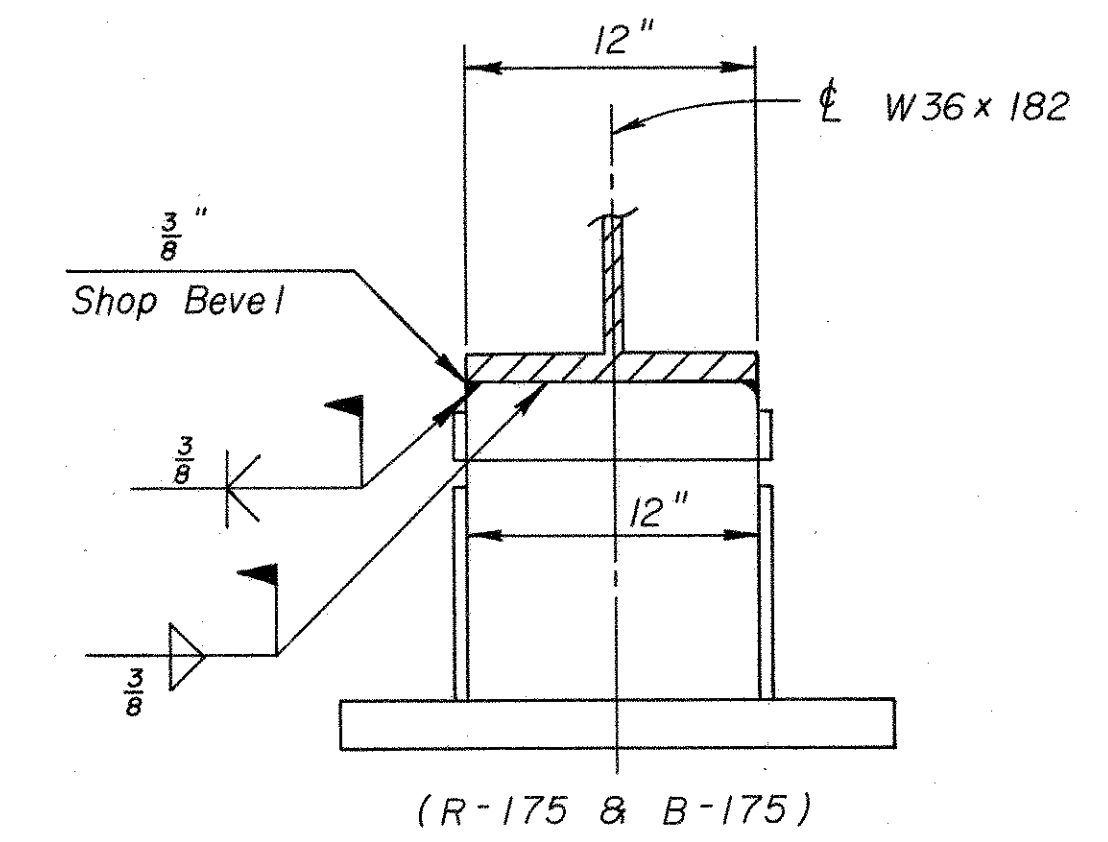
NOTE: Beams shall extend 4' beyond abutment bearings. See Std. Drwg. EXJ-4-87.

End crossframes Ls 4x4x5/8 See Std. Drwgs. EXJ-4-87 and SD-1-69



Deflection due to weight of steel	1/16"	1/16"	0	0	1/16"	1/16"	0	1/16"	1/16"	0	1/16"	1/16"	0	1/16"	1/16"	0	1/16"	1/16"	0	1/16"	1/16"
Deflection due to remaining D.L.	1/4"	1/4"	1/8"	1/8"	5/16"	3/16"	1/8"	5/16"	3/16"	1/8"	5/16"	3/16"	1/8"	5/16"	3/16"	1/8"	5/16"	3/16"	1/8"	5/16"	3/16"
Adjustment reqd. for Vertical Curve	0	0	0	0	0	0	1/16"	1/8"	1/16"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/16"	1/8"	1/16"
Sum of Deflections & Adjustments equals required shop camber	5/16"	5/16"	1/8"	1/8"	3/8"	1/4"	3/16"	1/2"	5/16"	1/4"	1/2"	3/8"	1/4"	1/2"	3/8"	1/4"	1/2"	3/8"	3/16"	7/16"	3/8"

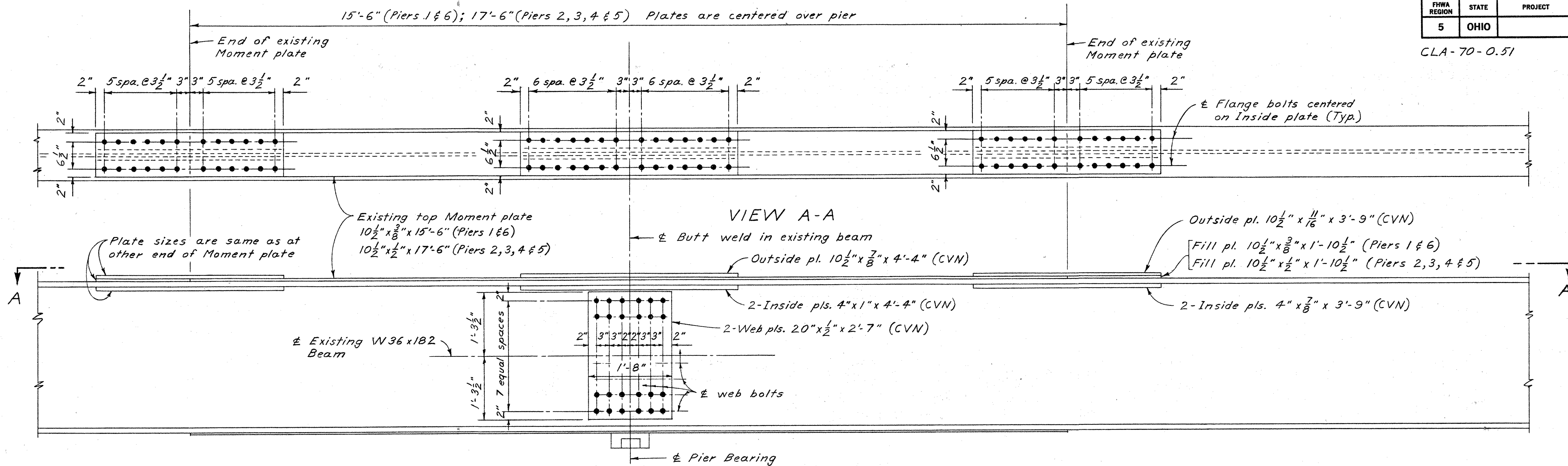
DEFLECTION AND CAMBER



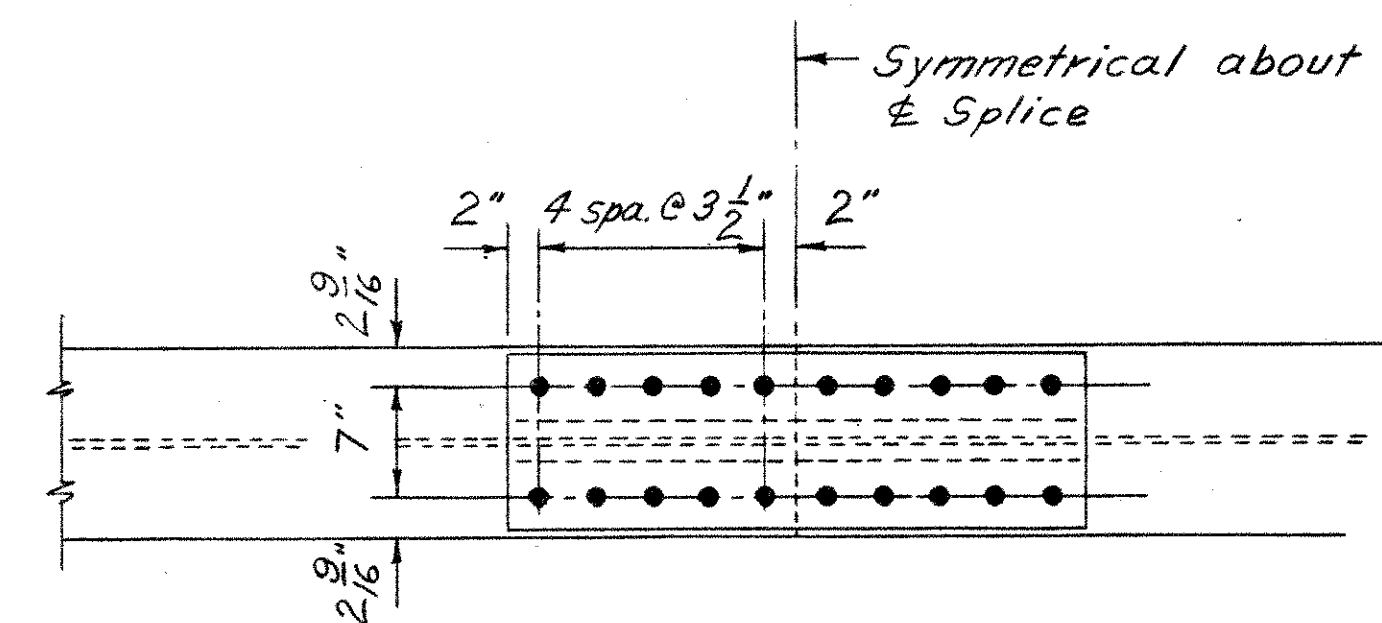
BEARING WELD DETAILS

WELDED ATTACHMENT of supports for concrete deck finishing machine may be made to areas of the stringer flanges designated "Compression". Attachments shall not be made to areas designated "Tension". Fillet welds to compression flanges shall be not closer than 1" from edge of flange, be not more than 2" long, and be not smaller than the minimum size required by AASHTO.

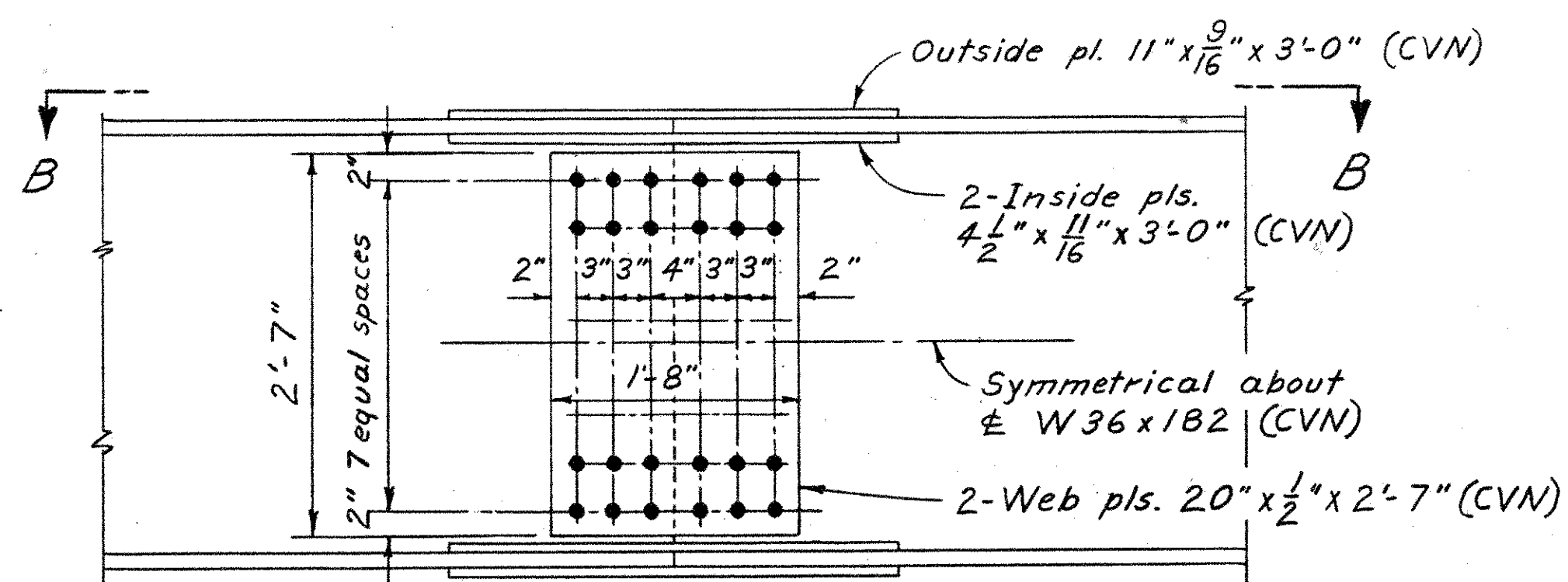
STATE OF OHIO DEPARTMENT OF TRANSPORTATION BUREAU OF BRIDGES AND STRUCTURAL DESIGN						11/13
SUPERSTRUCTURE DETAILS						
BRIDGE NO. CLA-70-0175-1R						
1-70 OVER MAD RIVER						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
	Bob		FFE	WTF	7-23-90	



PART ELEVATION OF EXISTING BEAMS  
FATIGUE RETROFIT



VIEW B-B



SPLICE DETAIL FOR NEW BEAMS

FATIGUE RETROFIT DETAILS

Paint from planned beam and moment plate faying surface areas shall be removed prior to the addition of retrofit plates. Areas shall be blasted to near white metal (Sa 2 1/2) according to ASTM D 2200 or SSPC-SP-10. The final appearance of the blasted surfaces shall be equal to visual standards SSPC-Vis 1 or Swedish Pictorial D Sa 2 1/2. The profile height of the blasted surfaces shall be 1 to 2 mils. After the plates have been installed, their exposed surfaces, welds and bolt heads shall be field painted with System OZEU paint along with the existing steel according to the proposal.

HIGH STRENGTH BOLTS shall be 1" diameter ASTM A325 unless otherwise noted.

STEEL NOTCH TOUGHNESS REQUIREMENT (CHARPY V-NOTCH) Where a shape or plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of CMS.

STATE OF OHIO						12	13
DEPARTMENT OF TRANSPORTATION							
BUREAU OF BRIDGES AND STRUCTURAL DESIGN							
SUPERSTRUCTURE DETAILS							
BRIDGE NO. CLA-70-0173 LER							
I. R. 70 OVER MAD RIVER							
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED	
FFE	FFE			WTF	7-23-90		

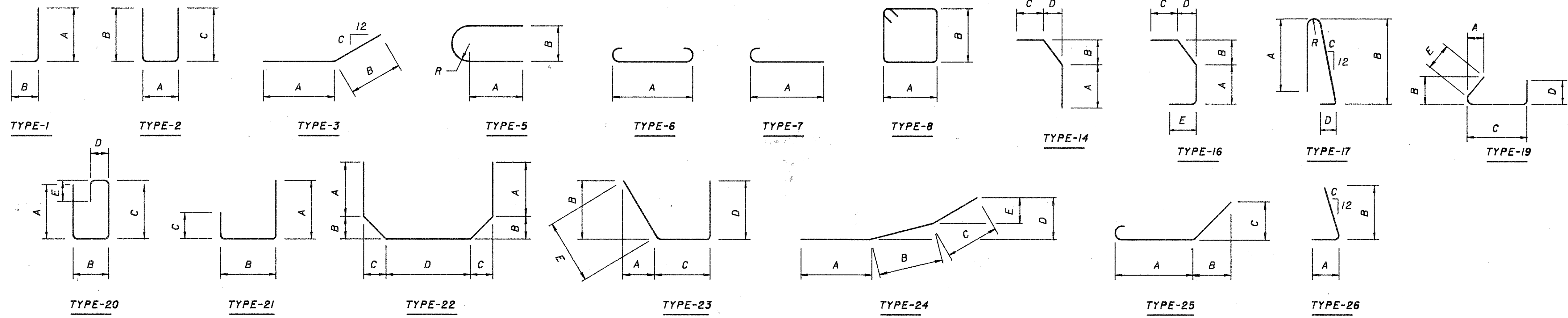
CLA-70-0.51  
CLARK COUNTY

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS					
	REAR	FWD	TOTAL				A	B	C	D	E	R
<b>ABUTMENTS</b>												
A401	15	15	30	12'- 8"	254	8	1'- 9"	4'- 4"				
A402	15	15	30	12'- 2"	244	8	1'- 9"	4'- 1"				
A403	4	4	8	10'- 0"	53	8	1'- 9"	3'- 0"				
A503	50	50	100	11'- 5"	1191	19	0'-10 1/2"	3'- 6"	4'- 7"	3'- 6"	3'- 7"	
A507	14	14	28	12'- 1"	353	8	3'- 2"	2'- 7"				
A801	18	18	36	26'- 3"	2523	STR.						
A802	24	24	48	7'- 6"	961	STR.						
A803	14	14	28	8'- 8"	648	STR.						
A804	10	10	20	7'- 8"	409	STR.						
A805	6	6	12	8'- 9"	280	6	6'-11"					
A808	8	8	16	10'-10"	463	STR.						
A809	4	4	8	10'- 6"	224	STR.						
A810	4	4	8	10'- 2"	217	STR.						
DE801	85	85	170	4'- 7"	2080	25	2'- 3"	1'- 0"	1'- 0"			
AE501	14	14	28	33'- 1"	966	STR.						
AE502	50	50	100	10'- 3"	1069	23	0'-10 1/2"	3'- 6"	3'- 5"	3'- 6"	3'- 7"	
AE504	14	14	28	36'- 8"	1071	STR.						
AE505	12	12	24	13'- 8"	342	STR.						
AE506	4	4	8	9'- 6"	79	STR.						
AE508	7	7	14	0'-11"	13	STR.						
AE509	4	4	8	4'- 7"	38	1	3'-10"	0'-10"				
YE501	14	14	28	6'- 0"	175	14	4'- 7"	0'- 8 1/2"	0'- 8"	0'- 6"		
YE502	8	8	16	5'- 3"	88	STR.						
YE503	14	14	28	7'- 0"	204	STR.						
YE504	16	16	32	3'- 0"	100	7	2'- 5"					
YE505	8	8	16	13'- 8"	228	STR.						
YE506	4	4	8	13'- 8"	114	24	9'-11"	2'- 4"	1'- 5"	0'- 6 1/2"	0'- 5"	
YE507	4	4	8	13'- 8"	114	STR.						
YE508	2	2	4	5'- 5"	23	14	4'- 0"	0'- 8 1/2"	0'- 8"	0'- 6"		
YE509	2	2	4	6'- 5"	27	STR.						
AE601	60	60	120	14'-10"	2673	20	5'- 1"	1'- 5"	6'- 1"	0'-11"	2'- 0"	
AE602	36	36	72	5'- 3"	568	STR.						
AE603	70	70	140	6'- 7"	1384	21	4'- 0"	0'- 11"	2'- 0"			
AE604	8	8	16	14'- 2"	340	2	1'- 2"	6'- 8"	6'- 8"			
AE605	2	2	4	9'- 2"	55	22	3'- 0"	0'- 8 1/2"	0'- 6"	1'-10"		
AE806	6	6	12	8'- 1"	259	6	6'- 3"					
AE807	8	8	16	9'- 3"	395	STR.						
AE811	6	6	12	26'- 3"	841	STR.						

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS					
		TOTAL					A	B	C	D	E	R
<b>PIERS</b>												
P501		96		21'- 8"	2169	STR.						
P502		234		7'- 4"	1790	STR.						
P503		166		8'- 0"	1385	5	2'- 6"	1'-11"			0'-10 7/8"	
P504		240		5'- 5"	1356	2	2'- 2"	1'- 9"	1'- 9"			
P505		332		19'- 8"	6810	STR.						
P506		324		4'- 1"	1380	3	2'- 9"	1'- 4"	0'-10"			
P507		162		12'- 8"	2140	5	4'-10"	1'-11"			0'-10 7/8"	
P508		48		5'-11"	296	STR.						
P509		48		6'-11"	346	STR.						
P1001		162		18'-10"	13,128	STR.						
P1002		444		9'- 3"	17,672	1	7'- 9"	1'-10"				
P1003		76		18'- 2"	5941	STR.						
P1004		54		18'- 5"	4279	STR.						
P1005		54		18'- 8"	4338	STR.						
P1006		22		17'- 9"	1680	STR.						
P1007		22		18'- 0"	1704	STR.						
P1008		66		18'- 4"	5207	STR.						
P1101		390		10'- 6"	21,757	6	7'- 4"					
<b>SUPERSTRUCTURE</b>												
SE401		2528		30'- 0"	50,661	STR.						
SE402		158		10'- 0"	1055	STR.						
SE403		960		32'- 0"	20,521	STR.						
SE501		1590		36'- 7"	60,669	STR.						
SE502		1590		31'- 0"	51,409	STR.						
SE503		2144		30'- 0"	67,086	STR.						
SE504		134		23'- 2"	3238	STR.						
SE505		1500		2'- 4"	3650	1	1'-7 1/2"	0'-10"				
SE506		1500		3'- 0"	4694	16	0'-10"	0'- 8 1/2"	0'- 9"	0'- 6"	0'-10"	
SE507		750		5'- 3"	4107	17	2'- 2"	2'- 5"	0'- 1 1/4"	0'-7 1/2"	0'- 2"	
SE508		750		4'- 5"	3455	26	0'- 7 1/2"	3'-11"	0'- 1 1/4"			
SE509		750		4'- 0"	3129	STR.						
SE510		32		14'- 3"	476	STR.						
SE511		304		13'- 8"	4333	STR.						
SE512		384		6'- 8"	2670	STR.						
SE601		1590		36'- 7"	87,368	STR.						
SE602		1590		31'- 0"	74,034	STR.						

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A700 IS A NO.7 AND A1014 IS A NO.10 SIZE. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.

"E" IN PREFIX DESIGNATES EPOXY COATED



STATE OF OHIO						13/13
DEPARTMENT OF TRANSPORTATION						
BUREAU OF BRIDGES AND STRUCTURAL DESIGN						
<b>REINFORCING STEEL LIST</b>						
BRIDGE NO. CLA-70-0173 L/R						
I. R. 70 OVER MAD RIVER						
CLARK COUNTY						
STA. 91+41.75						
STA. 96+08.25						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FO	REF		FFE	WTF	7-23-90	