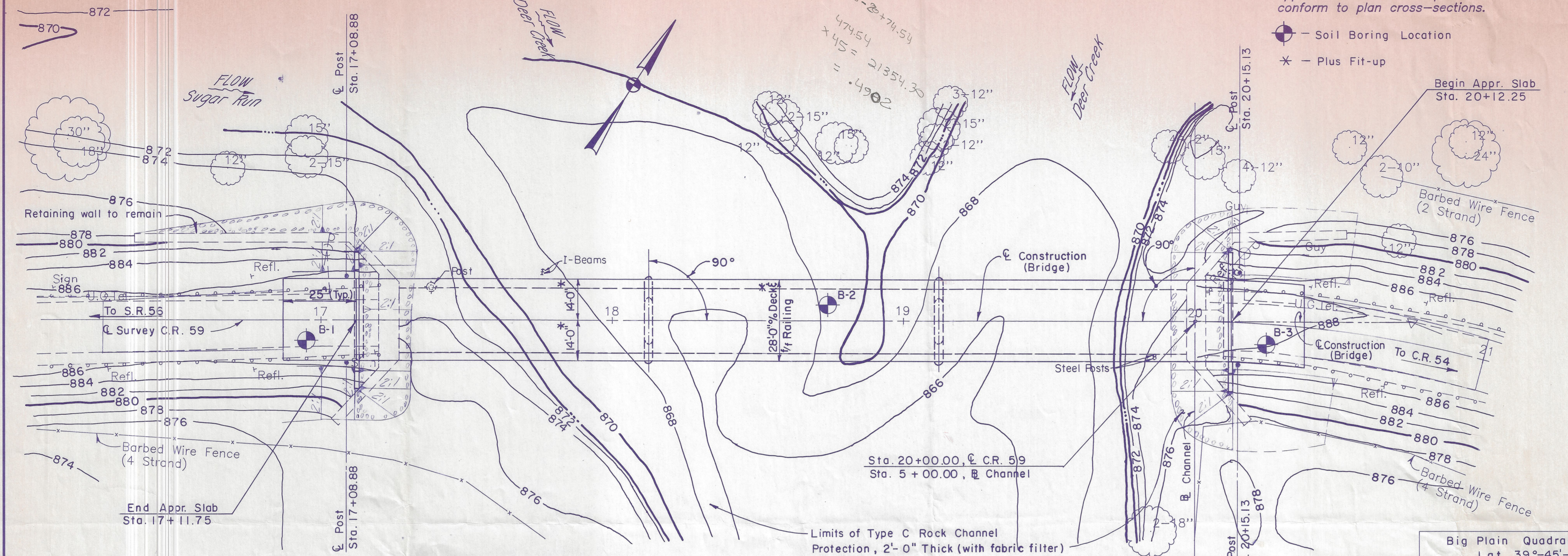


EARTHWORK LIMITS shown are approximate. Actual slopes shall conform to plan cross-sections.

- Soil Boring Location
- Plus Fit-up

CURVE DATA (C Survey)
 P.C. Sta. 20+00.00
 P.I. Sta. 20+74.54
 $\Delta = 21^\circ-43'-20''$
 $D_c = 14^\circ-44'-52.5''$
 $R = 388.50'$
 $T = 74.54'$
 $L = 147.29'$
 $E = 7.09'$



PLAN

Limits of Type C Rock Channel Protection, 2'-0" Thick (with fabric filter)

Big Plain Quadrangle
 Lat. 39°-45'-26"
 Long. 83°-17'-25"

TRAFFIC: 2011 ADT = 792

DRAINAGE AREA = 199 sq. mi.

Clears 10 YR.H.W. By 3.9'
 Clears 100 YR. H.W. By 1.2'

EXISTING STRUCTURE
 TYPE: Single-span Steel Warren Polygonal Chord Through Truss
 SPANS: 275' % Bearings
 ROADWAY: 18'-1" 1/2 Railing
 SKEW: None
 LOADING: Posted Bridge Weight Limit 18 Tons
 DECK: 6" Reinforced Concrete
 WEARING SURFACE: Concrete
 APPROACH SLABS: None
 ALIGNMENT: Tangent
 SUPERELEVATION: None
 DATE BUILT: 1924
 STRUCTURE FILE NUMBER: 4931467
 (To be removed)

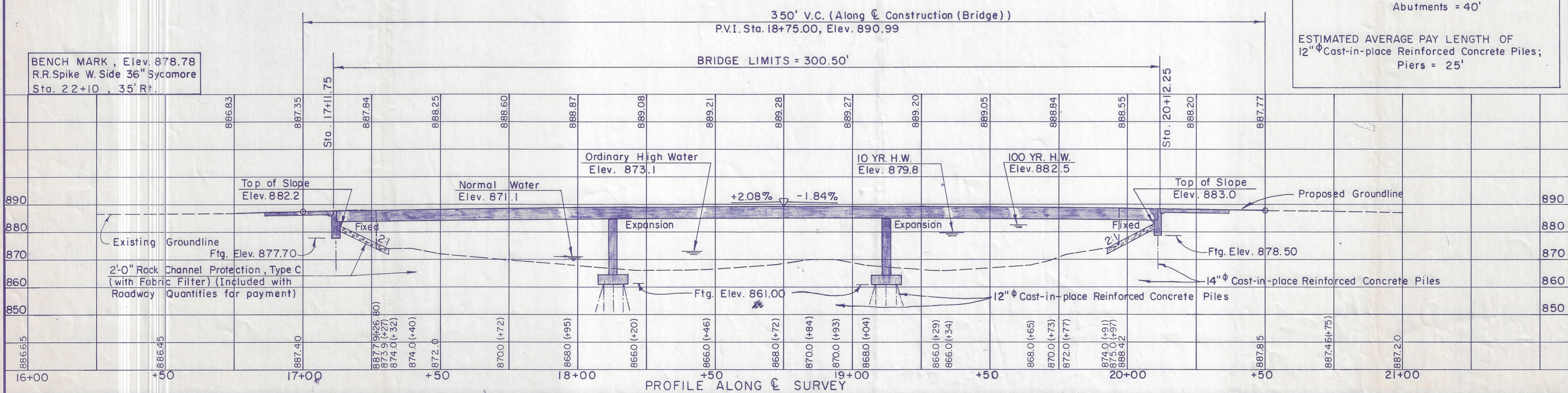
Flood Discharge	Through Bridge				Over Roadway		Upstream Backwater Elevation
	Discharge	Net area of flow	Mean Velocity	Water Surface Elevation	Discharge	Mean Velocity	
c.f.s.	c.f.s.	sq. ft.	f.p.s.	ft.	c.f.s.	f.p.s.	ft.
(Design) Q ₁₀ =9,040	9,040	2,940	3.1	879.8	-0-	-0-	880.0
Q ₁₀₀ =14,500	14,500	3,707	3.9	882.5	-0-	-0-	882.6

ESTIMATED AVERAGE PAY LENGTH OF 14" Cast-in-place Reinforced Concrete Piles; Abutments = 40'

ESTIMATED AVERAGE PAY LENGTH OF 12" Cast-in-place Reinforced Concrete Piles; Piers = 25'

PROPOSED STRUCTURE
 TYPE: 3-span prestressed concrete box beams with reinforced concrete substructures
 SPANS: 98.0'-98.0'-98.0' % Brg's. ⊕
 ROADWAY: 28'-0" f/f Railing
 SKEW: None
 LOADING: HS 20-44 Alternate Military Loading
 WEARING SURFACE: 2 1/2" asphalt concrete
 APPROACH SLABS: AS-1-81 (25' long)
 ALIGNMENT: Tangent along C Back Tangent
 SUPERELEVATION: None
 CROWN: 3/16" per foot

BENCH MARK, Elev. 878.78
 R.R. Spike W. Side 36" Sycamore
 Sta. 22+10, 35' R.



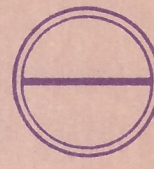
⊕ Measured along C Construction (Bridge)

STICKLEN-BELSHEIM & ASSOCIATES ENGINEERS COLUMBUS OHIO

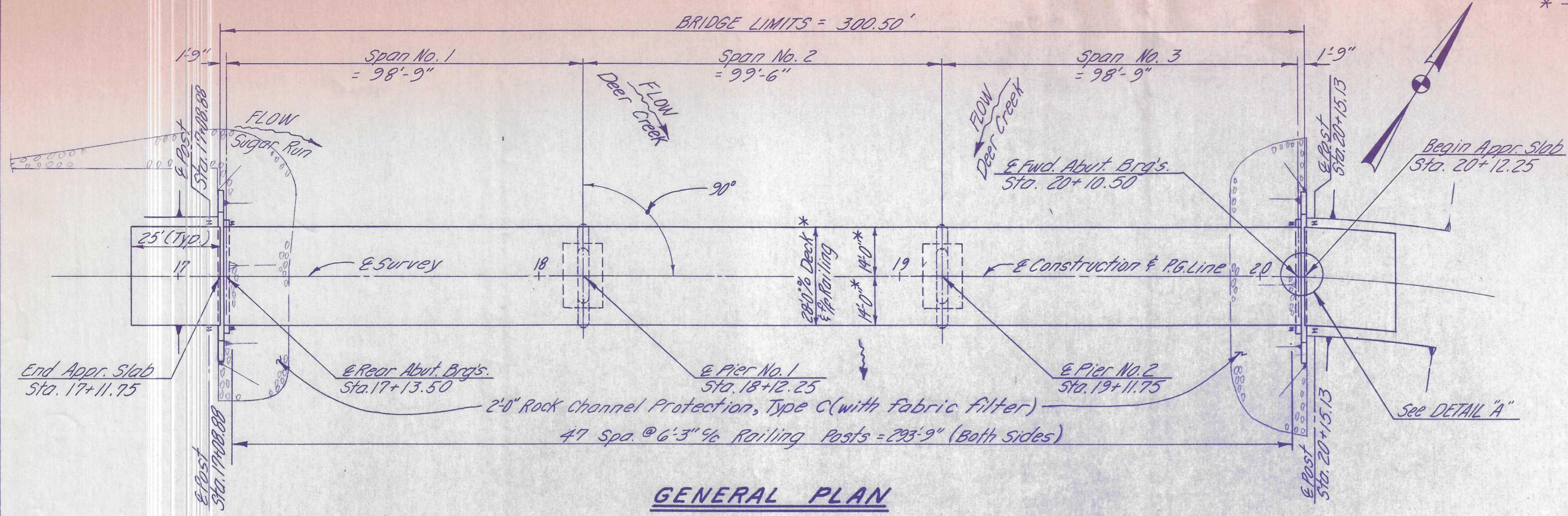
SITE PLAN

BRIDGE NO. PLE-59-0035
 PLEASANT TWP. C.R. 59
 (ANDERSON - ANTIOCH RD.)
 OVER DEER CREEK

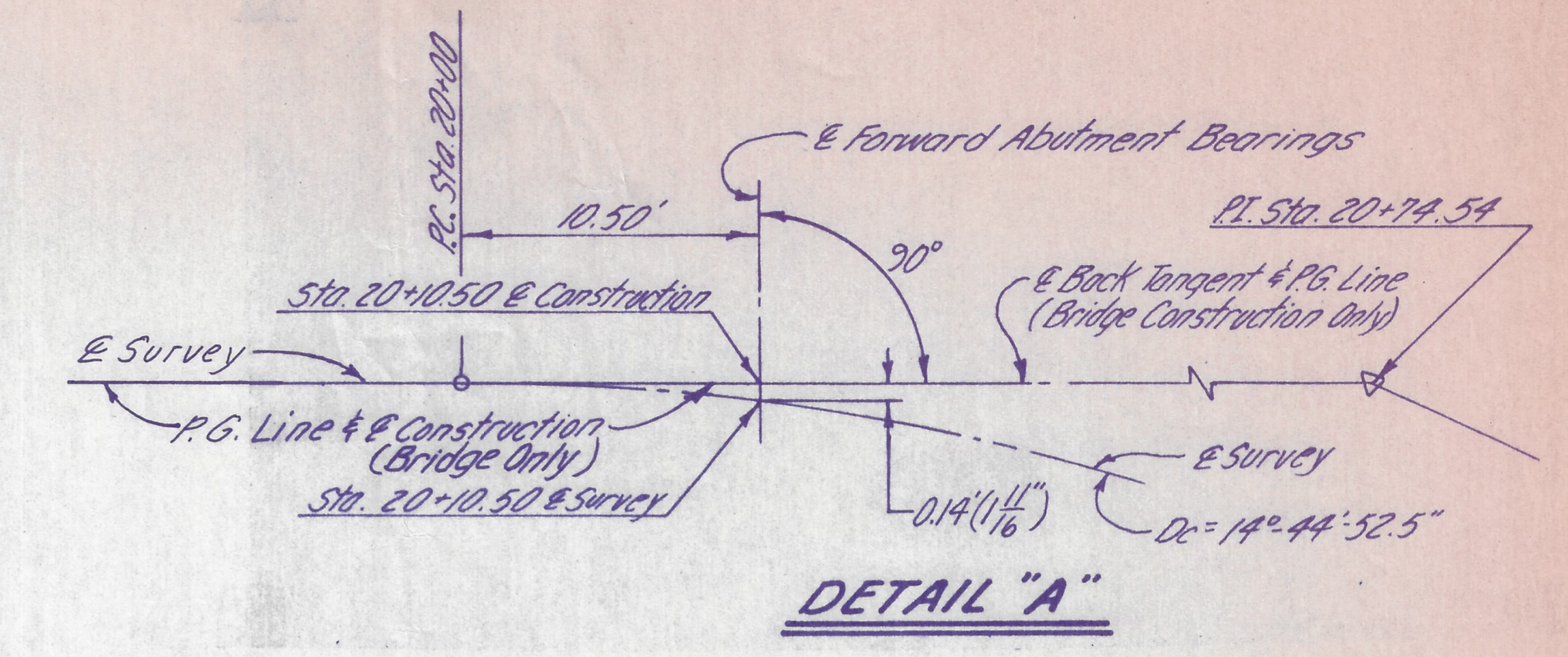
MADISON CO. DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISION
 SDS R.D.V. G.T. 7/20 12/28/90



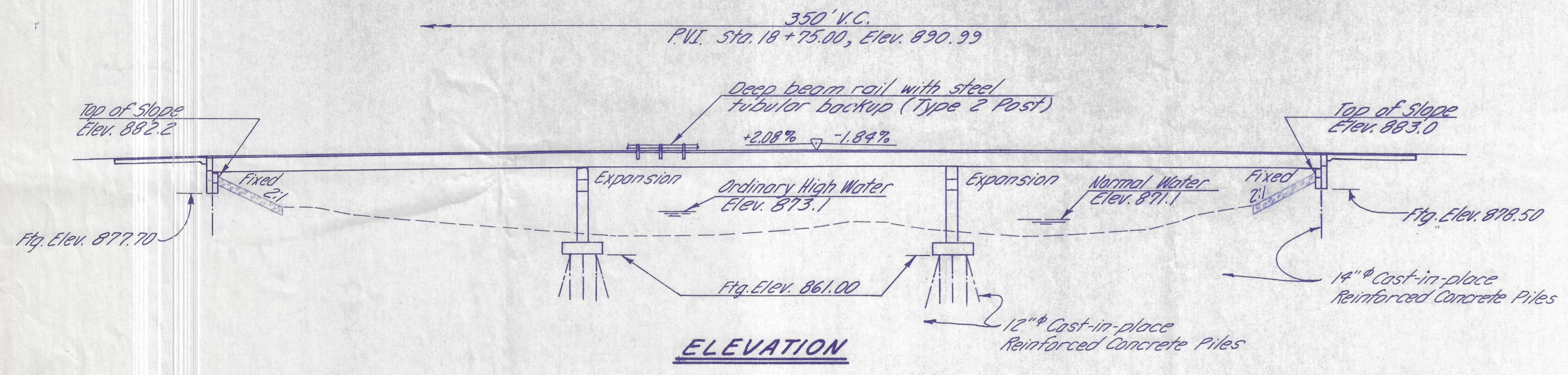
* - Plus Fit-up



GENERAL PLAN



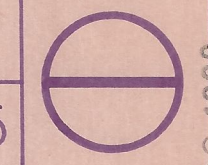
DETAIL "A"



ELEVATION

STICKLEN - BELSHEIM & ASSOCIATES ENGINEERS					
COLUMBUS			OHIO		
GENERAL PLAN & ELEVATION					
BRIDGE No. PLE-59-0035 PLEASANT TWP. C.R. 59 (ANDERSON - ANTIOCH RD.) OVER DEER CREEK					
MADISON C.O.					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
G.T.		R.D.Y.	SDS.	J.R.O.	12/28/90
					STA. 17+11.75 20+12.25

GENERAL NOTES



DEC 26 1990

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

PSBD-1-81 DATED 6-20-89
AS-1-81 DATED 11-27-81
EXJ-3-82 DATED 8-01-84
DBR-2-73 DATED 4-10-73

AND TO SUPPLEMENTAL SPECIFICATIONS:

836 DATED 11-12-85
849 DATED 12-24-85
949 DATED 9-26-86

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 AND THE ALTERNATE MILITARY LOADING.
PRESTRESSED CONCRETE BEAMS:

REINFORCING STEEL = ASTM A615, A616 OR A617
GRADE 60 - UNIT STRESS 24,000 P.S.I. OR
GRADE 40 - UNIT STRESS 20,000 P.S.I.

CONCRETE UNIT STRESS - 2,200 P.S.I. COMPRESSION
CONCRETE UNIT STRESS - 444 P.S.I. TENSION

MINIMUM CONCRETE COMPRESSIVE STRENGTH AT TIME OF INITIAL
PRESTRESS F'ci = 4,000 P.S.I.

MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS F'c=5,500 P.S.I.

PRESTRESSING STEEL:

ASTM A416 GRADE 270, 1/2" DIAMETER, SEVEN-WIRE, UNCOATED,
STRESS-RELIEVED STRAND.

A*S = 0.153 SQ.IN.

F'S = 270,000 P.S.I.

INITIAL STRESS 0.7F'S = 189,000 P.S.I.

STRESS AT RELEASE 0.63 F'S = 170,100 P.S.I.

(ASSUMED AT SECTION OF MAXIMUM MOMENT)

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4,000 P.S.I., FOR SUBSTRUCTURE.

CONCRETE CLASS S, HIGH EARLY STRENGTH - COMPRESSIVE STRENGTH 4,500 P.S.I.
FOR SUPERSTRUCTURE.

REINFORCING STEEL -ASTM A615, A616 OR A617 - GRADE 60, MINIMUM YIELD
STRENGTH 60,000 P.S.I., FOR SUBSTRUCTURE AND
SUPERSTRUCTURE (EXCLUDING PRESTRESSED CONCRETE BEAMS).

DECK PROTECTION METHOD: TYPE D WATERPROOFING, ASPHALT CONCRETE OVERLAY,
STEEL DRIP STRIP AND SEALING OF CONCRETE SURFACES.

EXISTING STRUCTURE PLANS: PLANS PERTAINING TO THE EXISTING STRUCTURE
MAY BE OBTAINED OR VIEWED BY INTERESTED PARTIES AT THE MADISON COUNTY
ENGINEER'S OFFICE IN LONDON, OHIO.

REMOVAL OF EXISTING STRUCTURE: WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC,
THE EXISTING STRUCTURE SHALL BE REMOVED IN ACCORDANCE WITH ITEM 202 OF THE
CONSTRUCTION AND MATERIALS SPECIFICATIONS. SUITABLE WASTE MASONRY MAY BE
PLACED AS BANK PROTECTION AS DIRECTED BY THE ENGINEER.

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 AND 105.02.

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.

ABUTMENT PILING: ABUTMENT PILING BENDING STRESS MAY APPROACH, REACH OR
EXCEED YIELD STRESS.

PILE DESIGN LOADS: THE DESIGN LOAD FOR THE ABUTMENT PILES IS 62 TONS PER
PILE AND THE DESIGN LOAD FOR THE PIER PILES IS 44 TONS PER PILES.

PREBORED HOLES: THE CONTRACTOR SHALL PREBORE TO AT LEAST ELEVATION 861 TO
ASSURE NO INTERFERENCE OF THE EXISTING ABUTMENT FOOTING WITH THE PILE.
THE CONTRACTOR SHALL THEN INSTALL THE PILE, BACKFILL THE HOLE WITH SAND OR
FINE GRAVEL AND DRIVE THE PILE TO THE REQUIRED CAPACITY. SEE C.M.S. 507.12
FOR ADDITIONAL REQUIREMENTS. PAYMENT FOR PREBORING, FURNISHING AND PLACING
BACKFILL MATERIAL AND DISPOSAL OF REMOVED MATERIAL SHALL BE INCLUDED IN THE
UNIT PRICE BID FOR ITEM 507, PREBORED HOLES.

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 BE NOT LESS THAN
0.22 INCHES. IF A PILE WALL THICKNESS GREATER THAN 0.22 INCHES IS
NECESSARY TO RESIST THE PILE INSTALLATION DRIVING STRESSES, THE
CONTRACTOR SHALL MAKE THIS DETERMINATION AND SHALL FURNISH A PILE WITH
AN ACCEPTABLE WALL THICKNESS.

ITEM SPECIAL, SEALING OF CONCRETE SURFACES: A CONCRETE SEALER SHALL BE
APPLIED TO THE FOLLOWING CONCRETE SURFACES (SUPERSTRUCTURE): SEE DRIP
STRIP DETAIL, SHEET [7/9]. SEE THE PROPOSAL NOTE FOR SURFACE PREPARATION
REQUIREMENTS, APPLICATION RATES, MATERIAL REQUIREMENTS AND APPLICATION
PROCEDURES.

ITEM SPECIAL, SEALING OF CONCRETE SURFACES (EPOXY): AN EPOXY CONCRETE
SEALER SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES (ABUTMENTS
AND PIERS): SEE SHEETS [4/9] & [6/9]. SEE THE PROPOSAL NOTE FOR SURFACE
PREPARATION REQUIREMENTS, APPLICATION RATES, MATERIAL REQUIREMENTS AND
APPLICATION PROCEDURES.

ELASTOMERIC TEST PAD: THE ELASTOMERIC BEARING MANUFACTURER SHALL SUPPLY A
PLAIN ELASTOMERIC PAD FOR TESTING PURPOSES. THE PAD SHALL BE FURNISHED
FROM THE SAME BATCH OF NEOPRENE THAT IS USED IN THE FABRICATION OF THE
LAMINATED ELASTOMERIC BEARINGS AND THE FABRICATOR SHALL CERTIFY THE
IDENTITY OF THE ELASTOMER. THE PAD SHALL HAVE A 1/2 INCH THICKNESS AND
SHALL HAVE MINIMUM LENGTH AND WIDTH DIMENSIONS OF 6 INCHES. PAYMENT FOR
THE TEST PAD WILL BE INCLUDED IN THE PRICE BID FOR THE BEARINGS.

UTILITY LINES: ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY
LINES SHALL BE BORNE BY THE OWNER(S). THE CONTRACTOR AND OWNER(S) ARE
REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT
INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

TEMPORARY STREAM CROSSING FORDS: WHERE STREAM CROSSING FORDS ARE
REQUIRED FOR EQUIPMENT CROSSINGS, THE FOLLOWING SHALL APPLY TO THE
CONTRACTOR'S OPERATIONS:

THE CROSSING SHALL CONSIST OF CLEAN NON-TOXIC GRANULAR OR ROCK
MATERIAL, PROPERLY MAINTAINED TO PREVENT EROSION WITH PROVISIONS
FOR CONVEYANCE OF ANTICIPATED HIGH FLOWS. FURTHERMORE, IT SHALL
FOLLOW PART 330.5 SPECIFIC CATEGORIES OF DISCHARGES-NATIONALLY
PERMITTED, PARAGRAPH (A) (14) MINOR ROAD CROSSING FILLS OF THE
FEDERAL REGISTER CORPS OF ENGINEERS INTERIM FINAL REGULATIONS-
PUBLISHED JULY 22, 1982.

IF THE CONTRACTOR DETERMINES THAT A STREAM CROSSING FORD IS REQUIRED,
HE WILL BE RESPONSIBLE FOR OBTAINING THE REQUIRED U.S. ARMY CORPS
OF ENGINEERS 404 PERMIT.

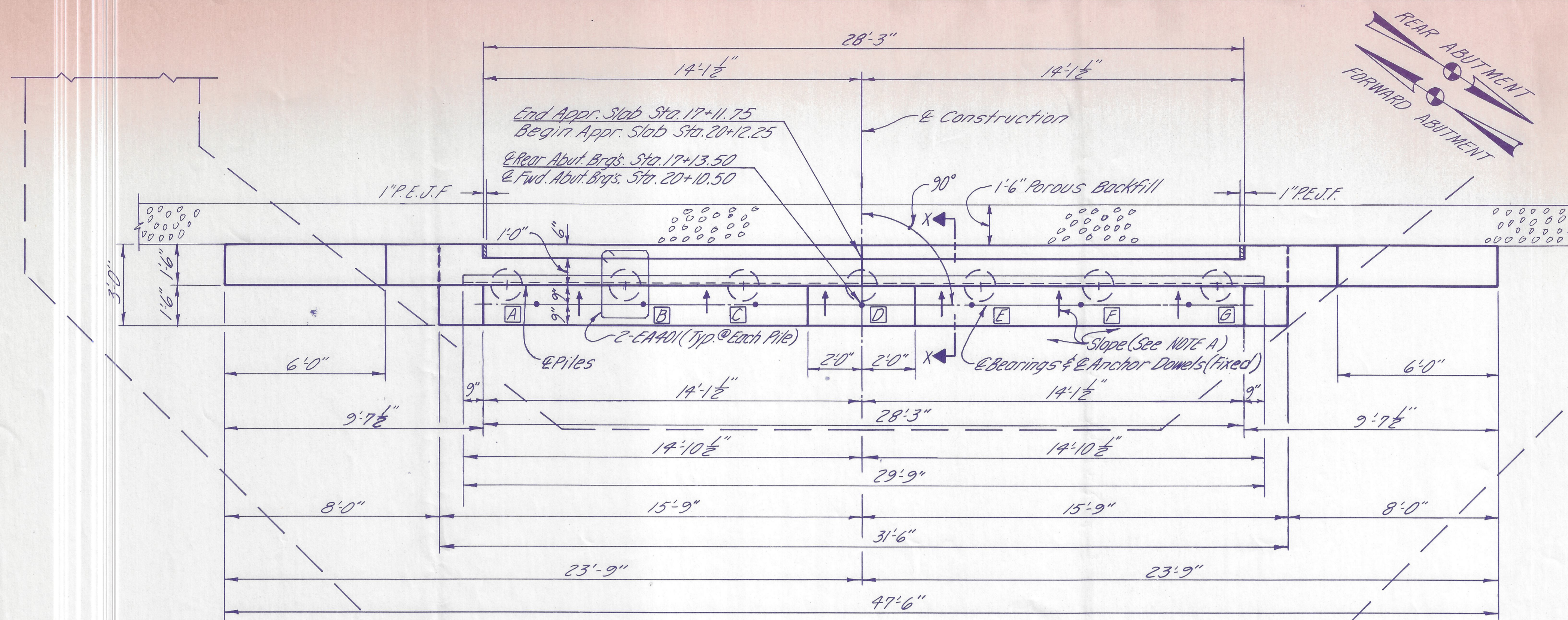
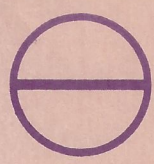
QUANTITIES CALCULATED BY G.T. NOVEMBER 15, 1990					ESTIMATED QUANTITIES				QUANTITIES CHECKED BY S.D.S. NOVEMBER 20, 1990			
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIER	SUPERSTR.	GENERAL				
202	11002	LUMP		STRUCTURE REMOVED, OVER 20 FOOT SPAN				LUMP				
403	20000	32	CU YD	ASPHALT CONCRETE, AC-20			32					
404	20000	32	CU YD	ASPHALT CONCRETE, AC-20			32					
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING				LUMP				
503	21100	212	CU YD	UNCLASSIFIED EXCAVATION	96	116						
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP				
507	21100	900	LIN FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES		900						
507	41100	560	LIN FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES	560							
507	92200	68	LIN FT	PREBORED HOLES	68							
509	15800	21885	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	6756	13973	1156					
511	34002	9	CU YD	CLASS S CONCRETE, HIGH EARLY STRENGTH			9					
511	42000	81	CU YD	CLASS C CONCRETE, PIER ABOVE FOOTINGS		81						
511	43500	61	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING	61							
511	46500	49	CU YD	CLASS C CONCRETE, FOOTING		49						
512	55800	929	SQ YD	TYPE D WATERPROOFING			929					
SPECIAL	51267500	265	SQ YD	SEALING OF CONCRETE SURFACES (SEE PROPOSAL NOTE)			265					
SPECIAL	51267502	74	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY) (SEE PROPOSAL NOTE)	65	9						
515	54700	21	EACH	PRESTRESSED CONCRETE BOX BEAM (48" WIDE, GREATER THAN 90' LENGTH) (B42-48, 99'-0" BEAM LENGTH) (SEE PROPOSAL NOTE)			21					
516	10500	59.5	LIN FT	STRUCTURAL STEEL JOINT AND ELASTOMERIC COMPRESSION SEAL			59.5					
516	43100	84	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (1 3/8"X9"X9") (SEE PROPOSAL NOTE)	28	56						
517	72300	612.5	LIN FT	RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS AND ANCHOR BOLTS) (SEE PROPOSAL NOTE)			612.5					
518	21100	29	CU YD	POROUS BACKFILL	29							
SPECIAL	51822300	591	LIN FT	STEEL DRIP STRIP			591					
523	11100	3	HOUR	DYNAMIC LOAD TEST	3							

STICKLEN-BELSHEIM & ASSOCIATES
ENGINEERS
COLUMBUS OHIO

**GENERAL NOTES
& ESTIMATED QUANTITIES**
BRIDGE NO. PLE-59-0035
PLEASANT TWP. C.R. 59
(ANDERSON-ANTIOCH RD.)
OVER DEER CREEK STA.17+11.75
20+12.25

MADISON CO. 20+12.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.T.	G.T.		S.D.S.	TRO	12/28/90	



PLAN

Limits of Existing Forward (East) Abutment Footer, Footer Elevation 861.2 ±
(Existing Rear (West) Abutment Position Similar, Footer Elevation 861.3 ±)

BRIDGE SEAT REINFORCING: REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR DOWEL HOLES.

POROUS BACKFILL SHALL EXTEND UPWARD TO THE PLANE OF THE SUBGRADE AND LATERALLY TO THE SURFACE OF THE EMBANKMENT SLOPES. EXCAVATION IN EXCESS OF THAT REQUIRED FOR THE CONSTRUCTION OF THE ABUTMENTS SHALL BE INCLUDED WITH THE UNIT PRICE BID FOR POROUS BACKFILL FOR PAYMENT.

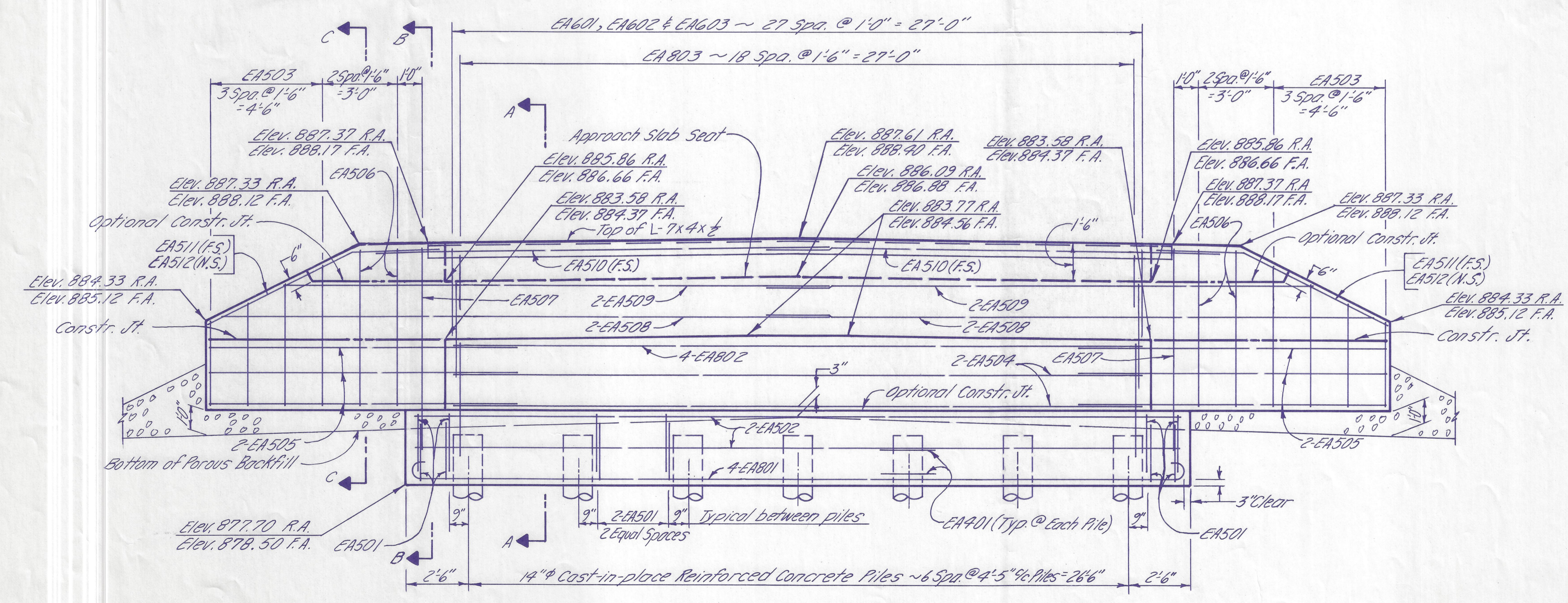
LEGEND

P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
N.S. = NEAR SIDE
F.S. = FAR SIDE
R.A. = REAR ABUTMENT
F.A. = FORWARD ABUTMENT
E.F. = EACH FACE

MINIMUM REINFORCING BAR SPLICE LAP LENGTH

NO. 5 BAR = 2'-9" (HORIZONTAL); 1'-11" (VERTICAL)
NO. 6 BAR = 2'-4"

A CONCRETE EPOXY SEALER SHALL BE APPLIED TO THE FRONT FACE OF ABUTMENT BACKWALLS FROM TOP TO BRIDGE SEAT, BRIDGE SEAT AND BREASTWALL DOWN TO THE GROUNDLINE, THE ENTIRE FRONT FACE ABOVE THE GROUNDLINE OF WINGWALLS AND TOPS OF WINGWALLS. PAYMENT SHALL BE INCLUDED IN ITEM SPECIAL, SEALING OF CONCRETE SURFACES (EPOXY).



ELEVATION

ABUTMENT	PILE NUMBER						
	A	B	C	D	E	F	G
REAR	1	2	3	4	5	6	7
FORWARD	44	45	46	47	48	49	50

NOTE: THE LOCATION OF PILE NUMBERS 1 AND 7 OF THE REAR ABUTMENT AND PILE NUMBERS 44 AND 50 OF THE FORWARD ABUTMENT SHALL BE PREBORED PRIOR TO PILE DRIVING AS PER THE GENERAL NOTE PREBORED HOLES FOUND ON SHEET 3/9.

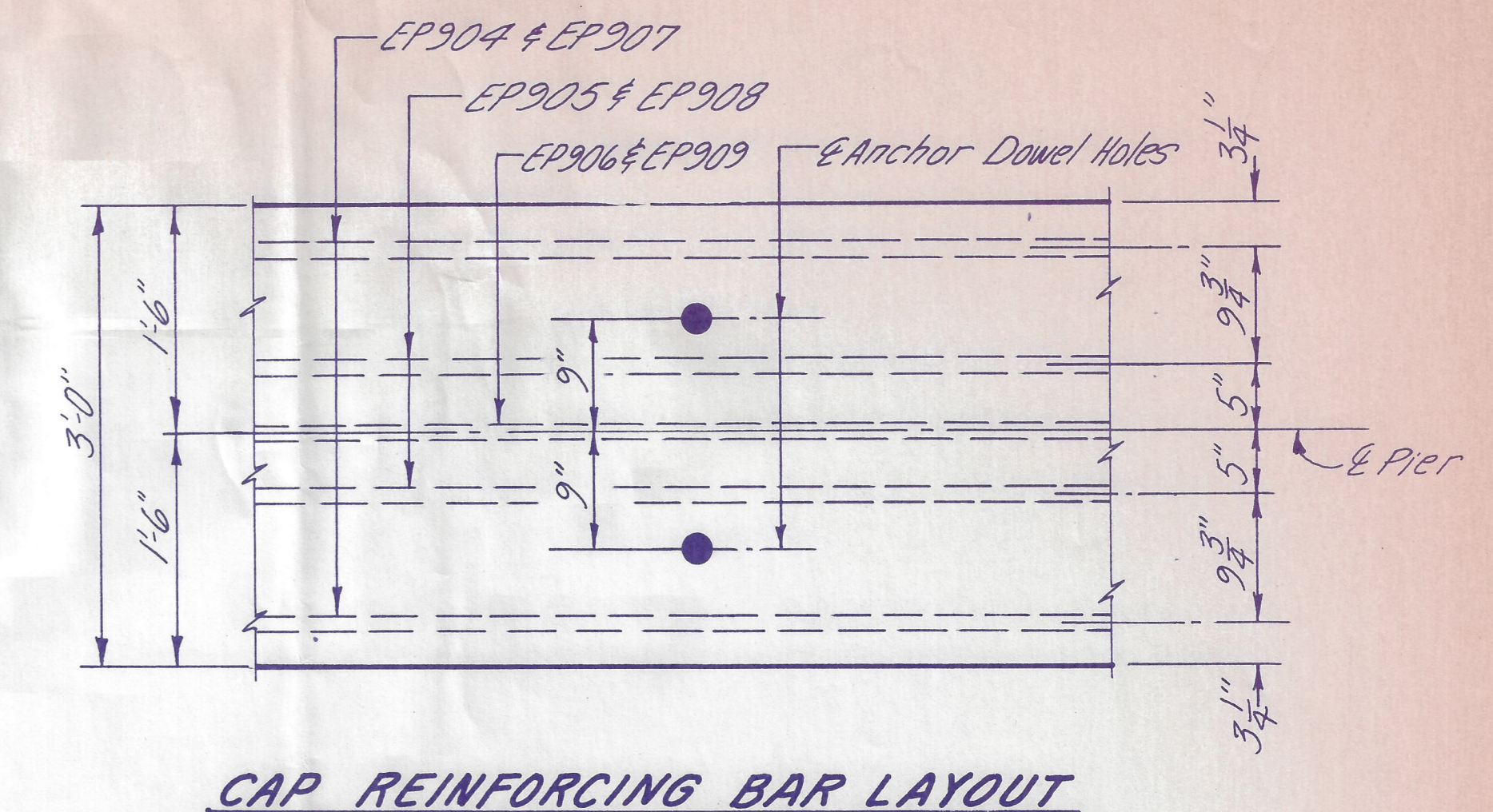
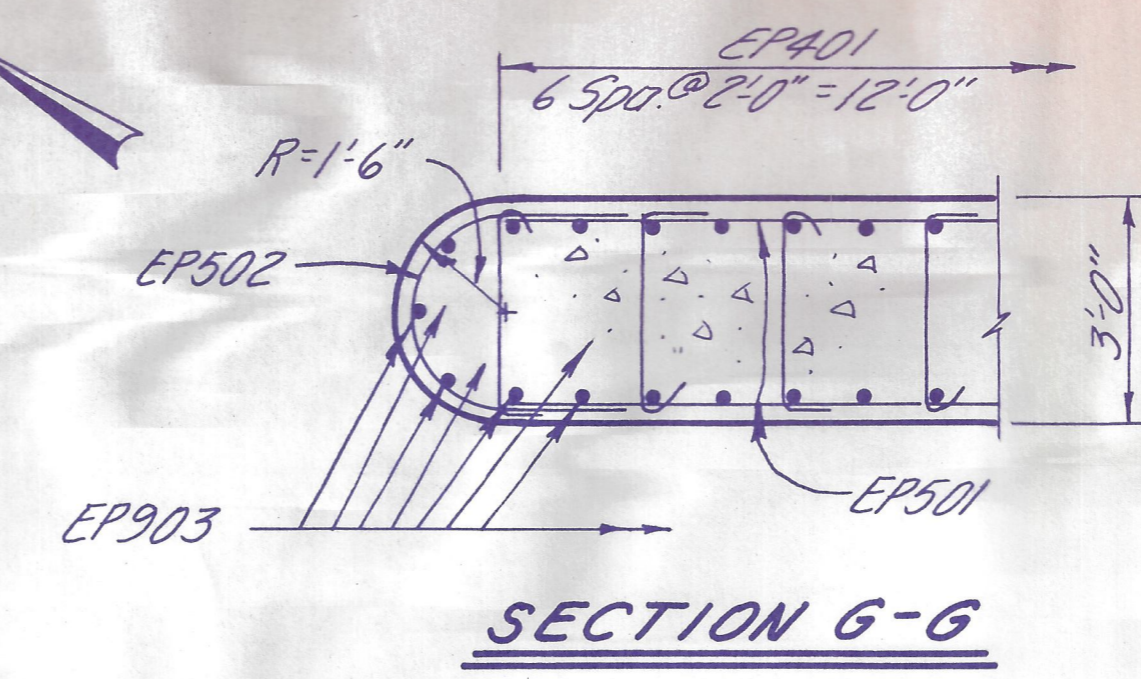
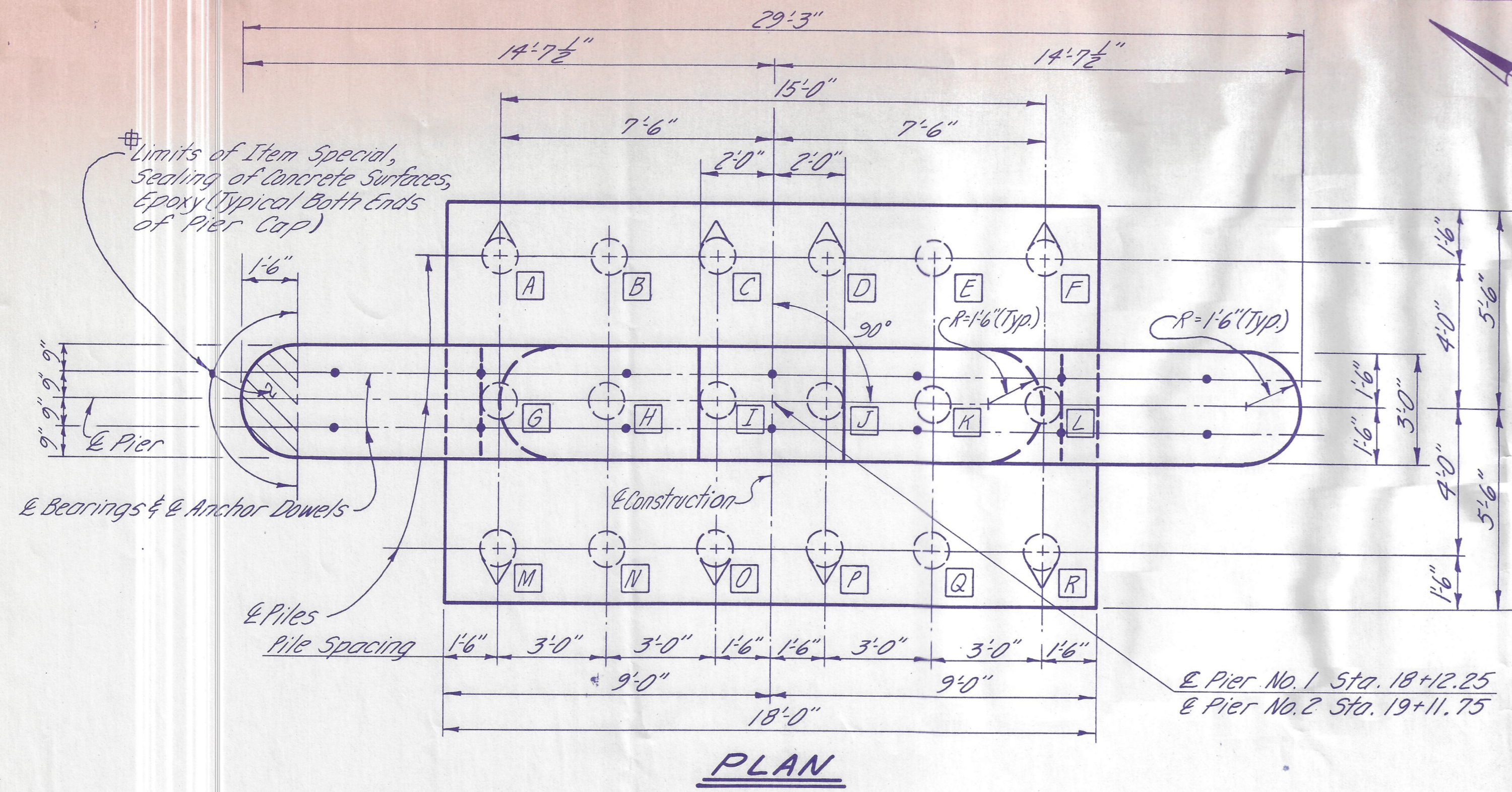
NOTE: FOR SECTIONS AND ADDITIONAL NOTES SEE SHEET 5/9.

STICKLEN-BELSHEIM & ASSOCIATES
ENGINEERS
COLUMBUS, OHIO

ABUTMENT DETAILS
BRIDGE NO. PLE-59-0035
PLEASANT TWP. C.R. 59
(ANDERSON-ANTIOCH RD.)
OVER DEER CREEK

MADISON CO. STA. 17+11.75
20+12.25

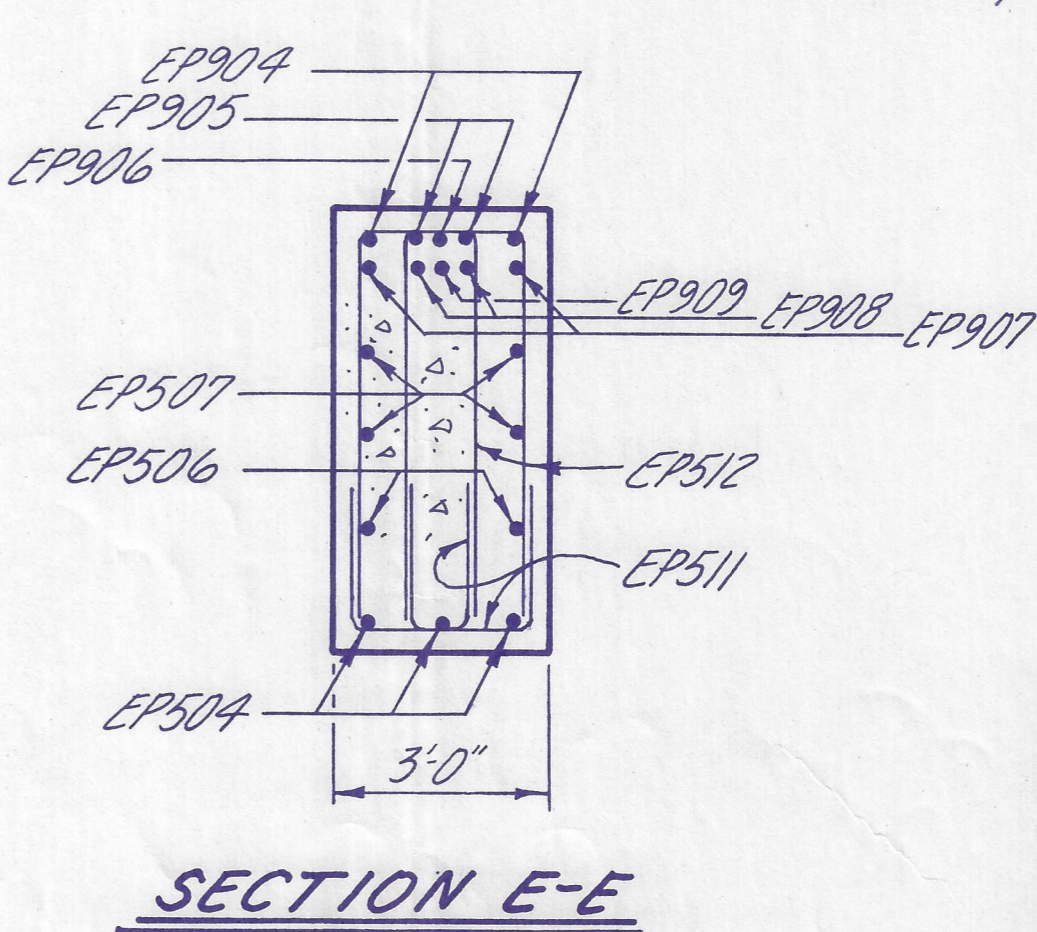
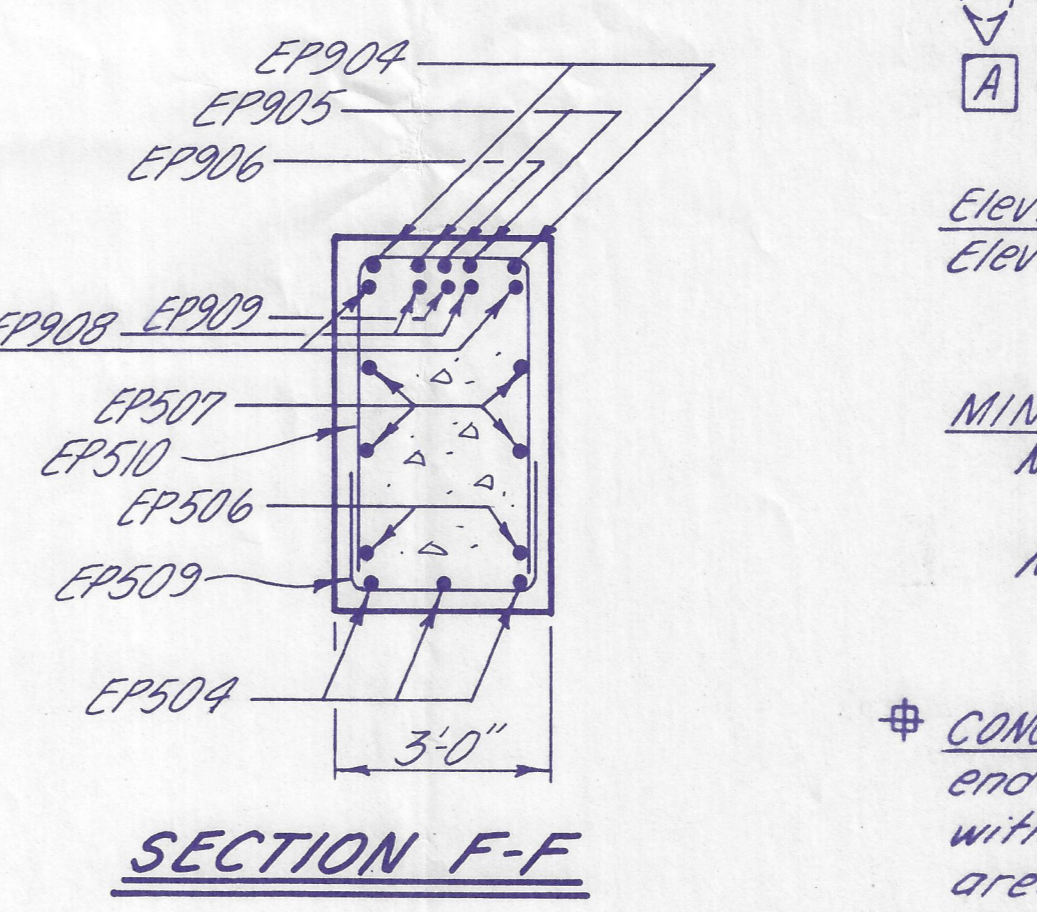
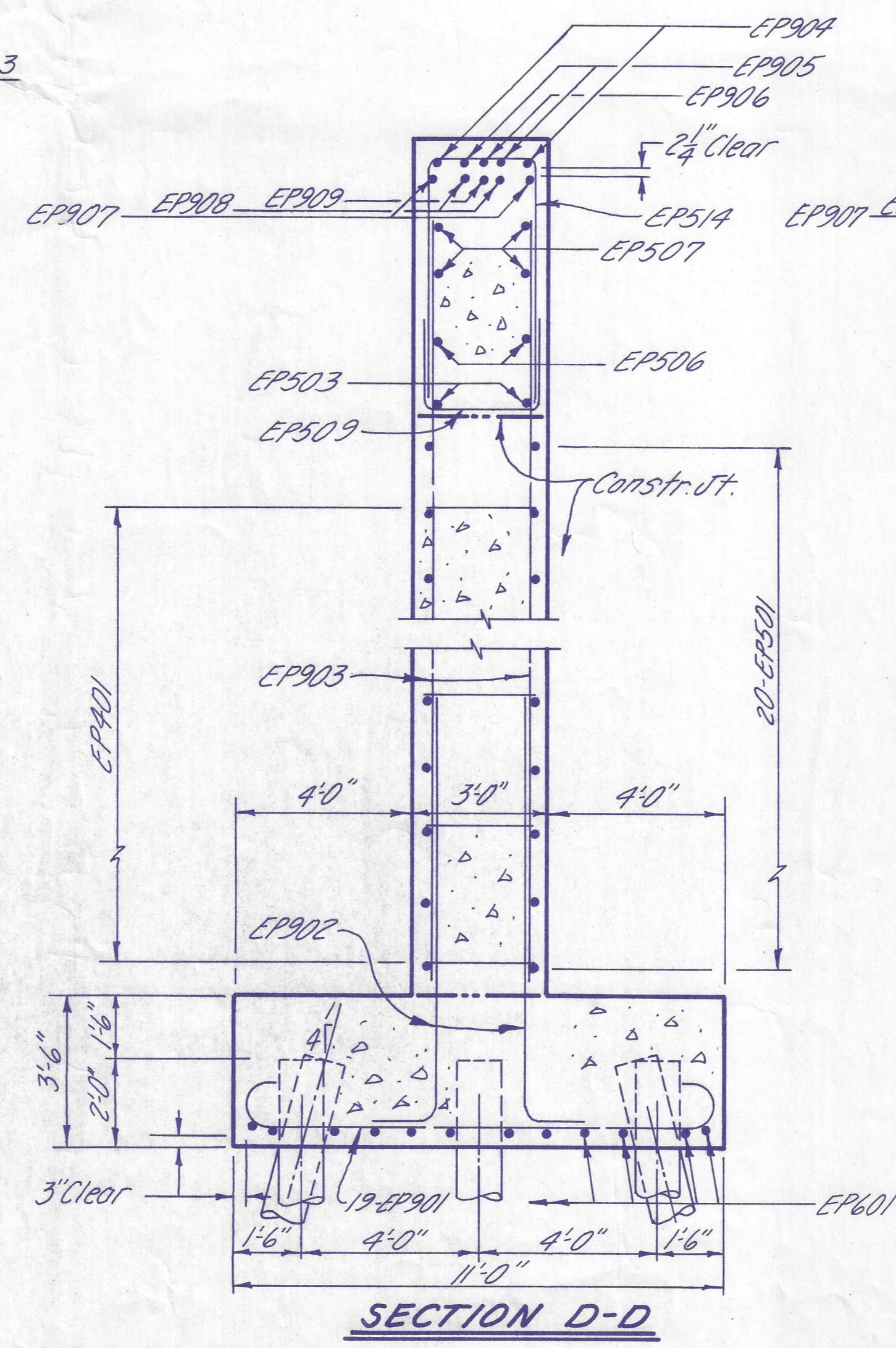
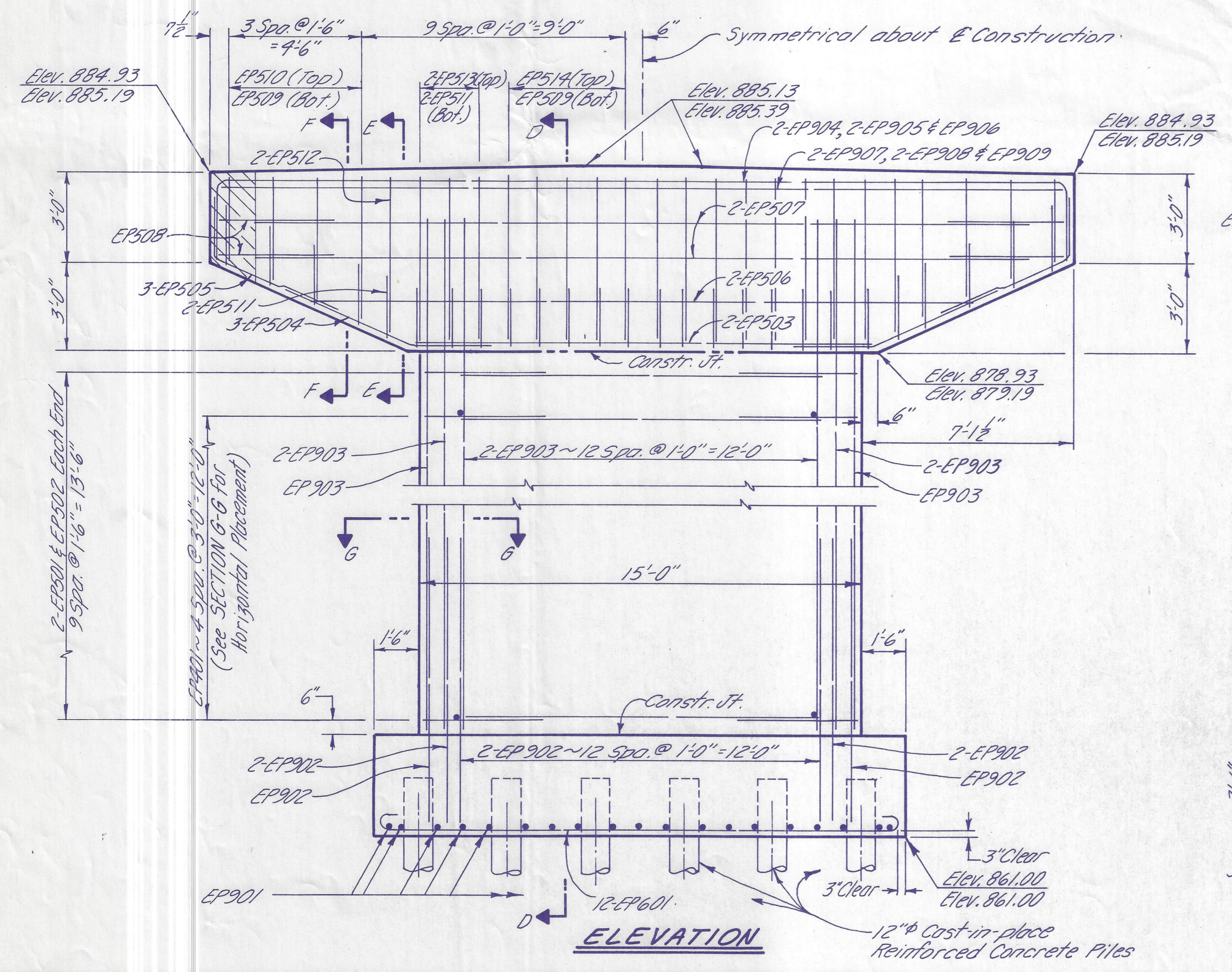
DESIGNED: G.T. DRAWN: D.L.S. TRACED: R.D.Y. CHECKED: S.D.S. REVIEWED: T.R.O. DATE: 12/28/90



PIER PILE NUMBER TABLE

PILE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Pier No. 1	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Pier No. 2	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43

BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor dowel holes.



LEGEND

- - Indicates vertical pile
- ◐ - Indicates battered pile (1:4)
- A - Indicates pile number (See Pier Pile Number Table)

Elev. 8XX.XX = Pier No. 1
Elev. 8XX.XX = Pier No. 2

MINIMUM LAP SLICE LENGTH

No. 5 bar = 2' 9" (Horizontal)
1' 8" (Vertical)

No. 9 bar = 6' 4"

CONCRETE SEALER (EPOXY): 1' 6" of the ends of the pier cap shall be sealed with an epoxy concrete sealer. The area to be sealed shall include the top and sides of the cap.

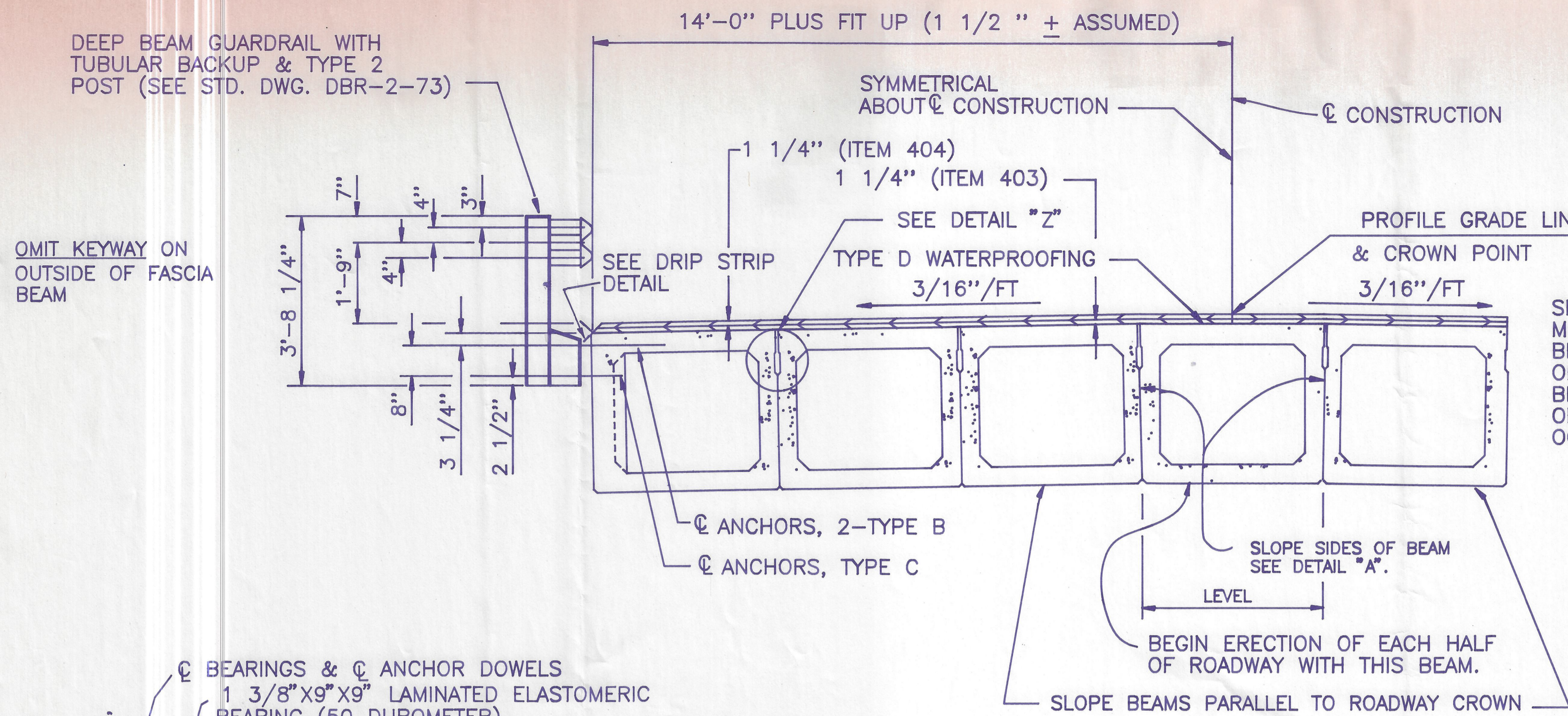
STICKLEN - BELSHEIM & ASSOCIATES
ENGINEERS
COLUMBUS OHIO

PIER DETAILS

BRIDGE No. PLE-59-0035
PLEASANT TWP. C.R. 59
(ANDERSON - ANTIOCH RD.)
OVER DEER CREEK

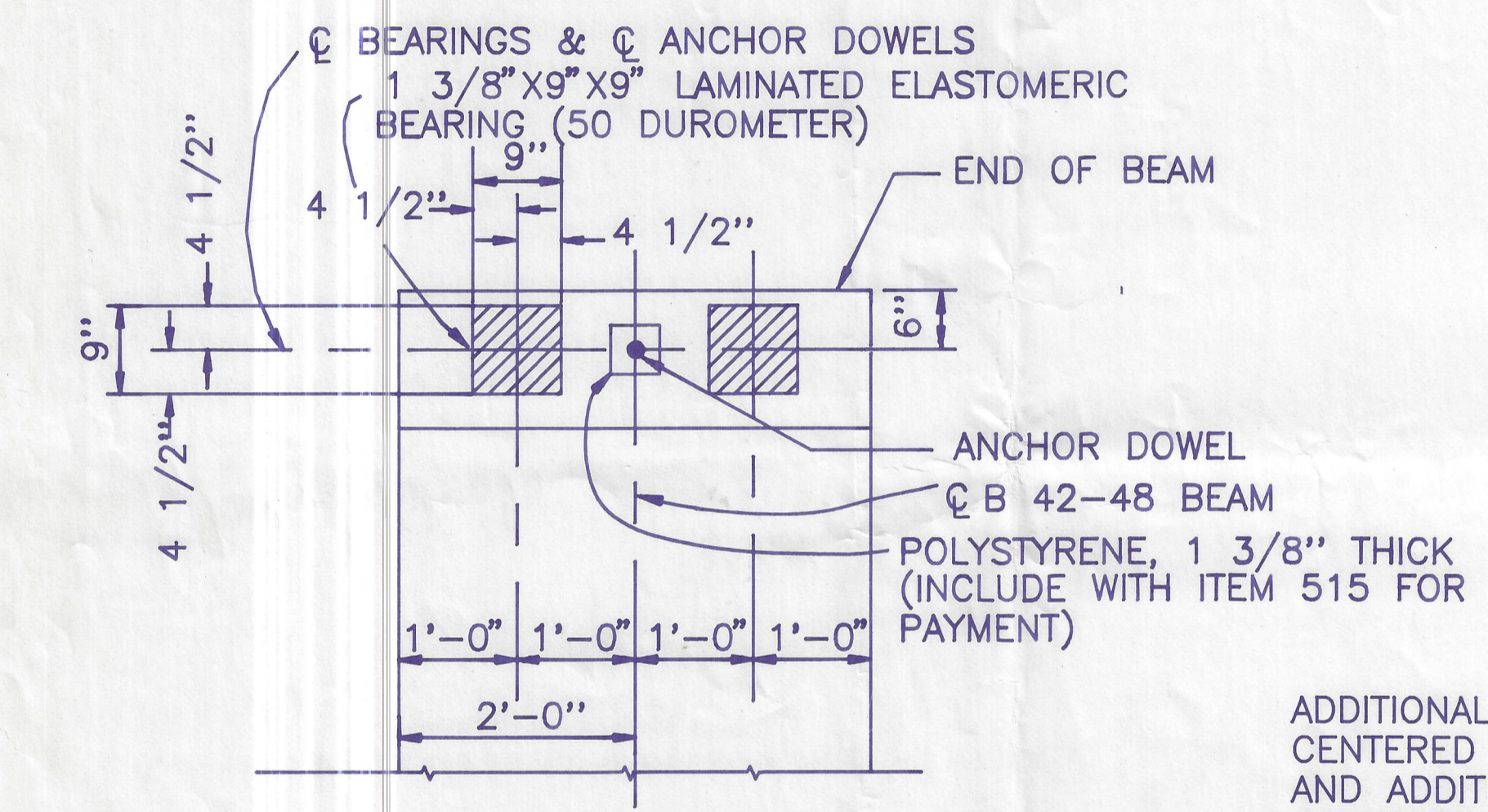
MADISON CO. STA. 17+11.75
20+12.25

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.T.	G.T.	R.D.V.	S.D.S.	TRC	12/28/90	



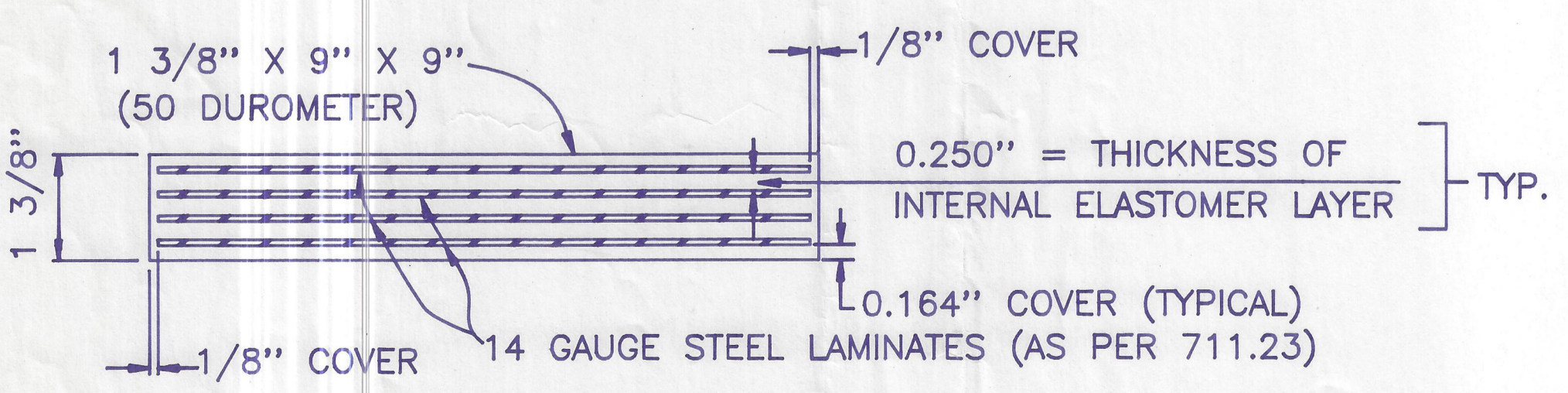
HALF TRANSVERSE SECTION

NOTE:
BEAM MANUFACTURER WILL TAKE EXTRA CARE
IN STORING BEAMS PRIOR TO SHIPMENT
TO SITE. THEY SHALL BE STORED IN THE
POSITION WHICH SHALL CORRESPOND WITH
THEIR ERECTED POSITION.

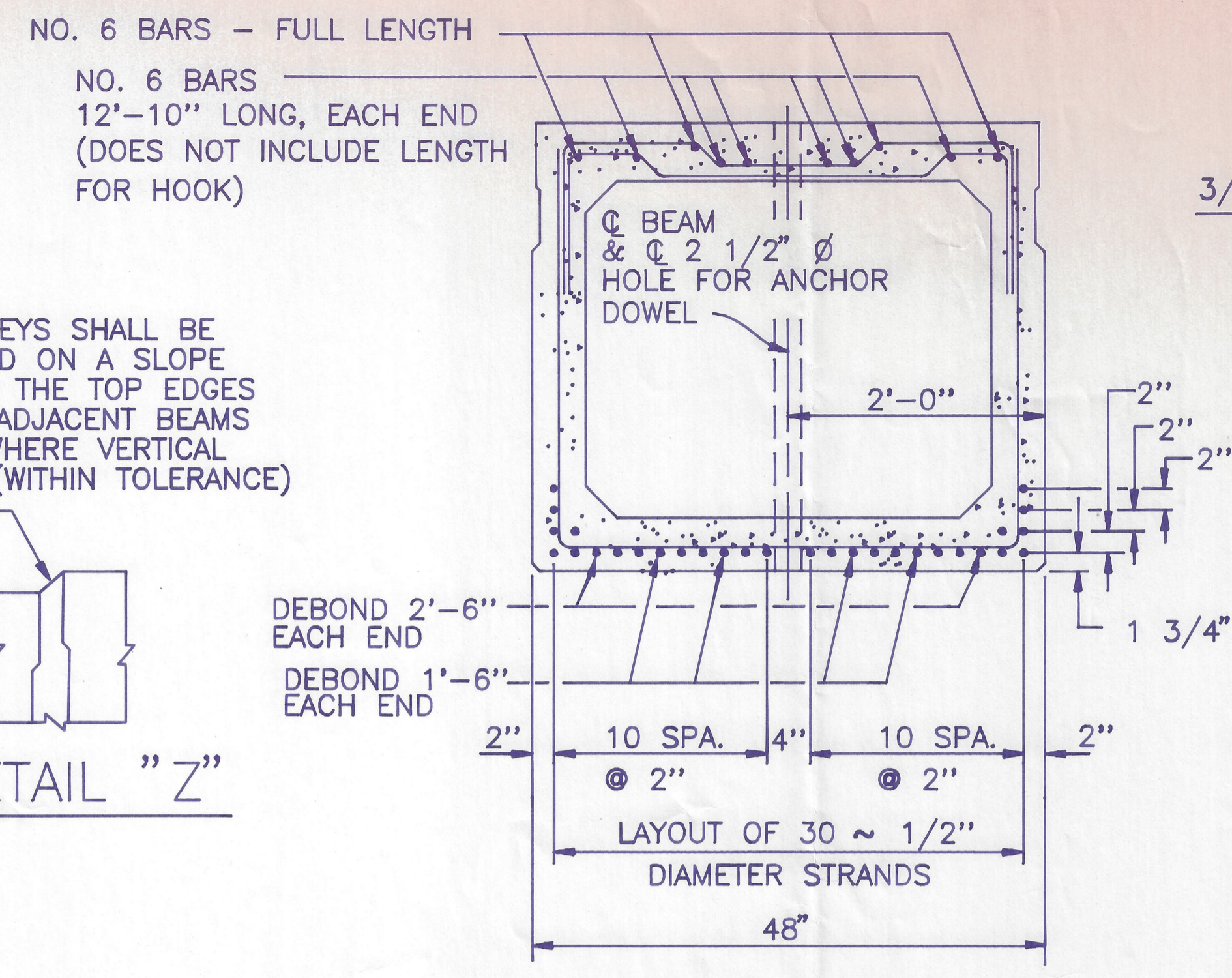


**TYPICAL ANCHOR DOWEL &
BEARING PAD LAYOUT**

	ABUTMENT	PIER
DEADLOAD REACTION	30,800 LBS.	30,100 LBS.
LIVELoad REACTION	10,400 LBS.	8,400 LBS.
MAXIMUM DESIGN LOAD	41,200 LBS.	38,500 LBS.



LAMINATED BEARING

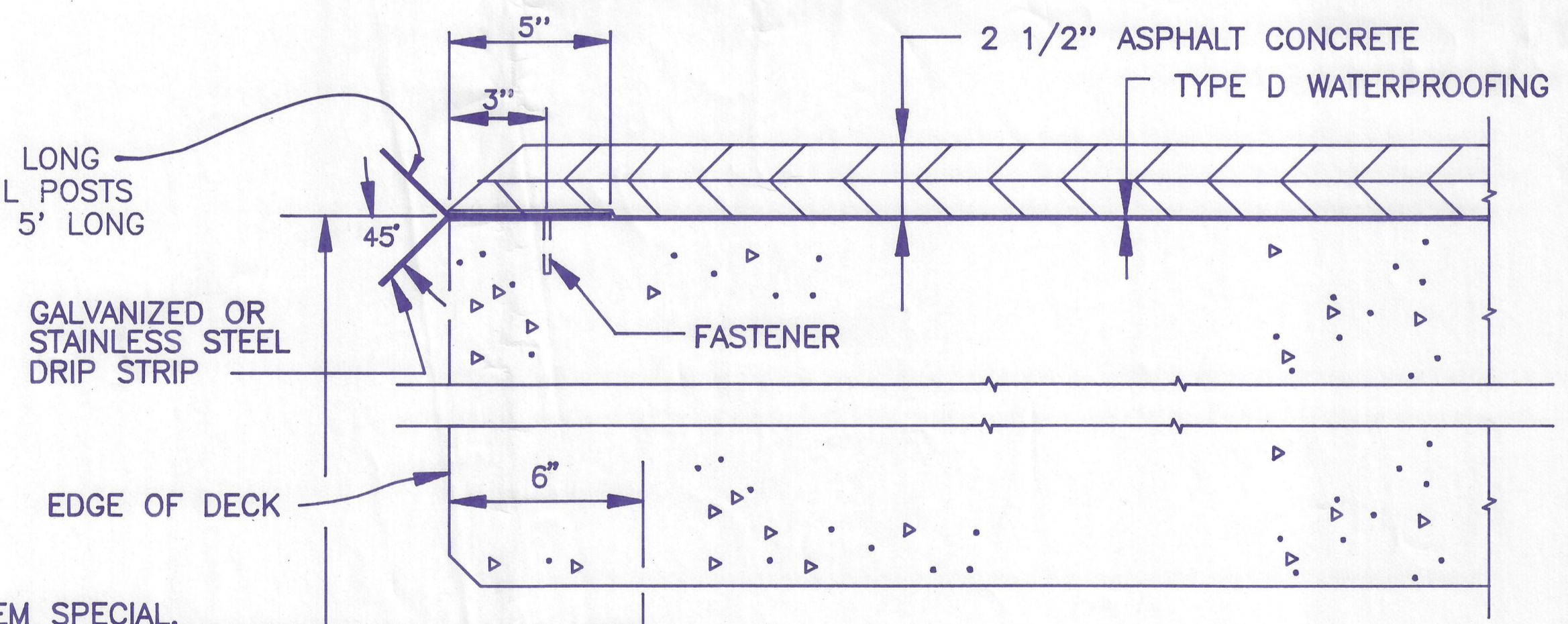


DETAIL "A"
(BOX BEAM AT CROWN POINT ONLY)

NOTE:
DEBONDED STRANDS SHALL BE
SYMMETRICAL ABOUT THE VERTICAL
C OF BEAM. LENGTH OF STRANDS
TO BE DEBONDED SHALL BE
MEASURED FROM ENDS OF BEAMS.
DEBONDED STRANDS SHALL BE IN
BOTTOM LAYER.

B42-48

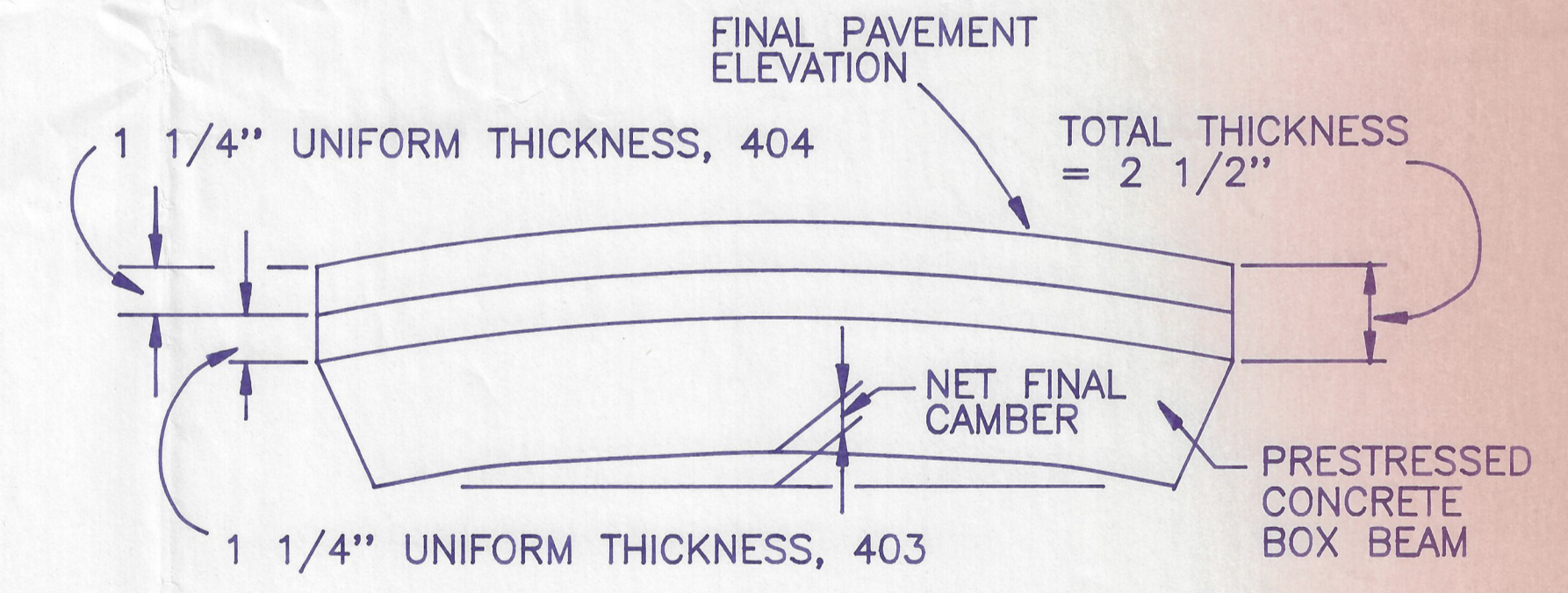
ADDITIONAL DRIP STRIP, 12" LONG
CENTERED AT ALL GUARDRAIL POSTS
AND ADDITIONAL DRIP STRIP 5' LONG
CENTERED AT ALL PIERS.



DRIP STRIP DETAIL

LIMITS OF ITEM SPECIAL,
SEALING OF CONCRETE SURFACES.

STEEL DRIP STRIP: PRIOR TO APPLYING DECK TYPE D WATERPROOFING, A BENT STRIP SHALL
BE INSTALLED ALONG THE EDGES OF THE DECK AS SHOWN. THE STRIPS SHALL BE FASTENED
AT 1'-6" C/C MAXIMUM WITH 1 1/4" X 5/32" X 1/4" FLAT HEAD DRIVE PIN AND
WASHER (LENGTH X SHANK DIA. X HEAD DIA.) OR #10 GALVANIZED SCREWS AND EXPANSION
ANCHORS, SUBJECT TO THE APPROVAL OF THE ENGINEER. THE STRIPS SHALL BE PLACED THE
FULL LENGTH OF THE DECK, ENDING AT THE NOTCH. WHERE SPLICES ARE REQUIRED A 3" (MIN.)
LAP SHALL BE USED WITH A FASTENER THROUGH THE LAP. STEEL FOR GALVANIZED
STRIPS SHALL BE 8" X 0.105" AND SHALL MEET THE REQUIREMENTS OF ASTM A568.
GALVANIZING SHALL BE IN ACCORDANCE WITH 711.02. STAINLESS STEEL SHALL BE 20 GAUGE
ASTM A167, TYPE 304, MILL FINISH. PAYMENT SHALL BE AT THE CONTRACT PRICE BID FOR
ITEM SPECIAL, LIN. FT. STEEL DRIP STRIP, WHICH SHALL INCLUDE ALL MATERIALS,
LABOR, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.



ASPHALT THICKNESS DIAGRAM

1. CALCULATED CAMBER AT TIME OF PAVING, INCLUDING ALLOWANCE FOR CAMBER GROWTH DUE TO CREEP IS 1 7/8".
2. CALCULATED DEFLECTION DUE TO WEIGHT OF SURFACE COURSE AND RAILING IS 1/4".
3. CAMBER OF 1 5/8" AT CENTER OF SPANS IS REQUIRED FOR CREST VERTICAL CURVE.
4. NET FINAL CAMBER OF BEAMS EQUALS REQUIRED CAMBER. NO VARIATION IN THICKNESS OF 403 LEVELING COURSE IS REQUIRED.

STICKLEN-BELSHEIM & ASSOCIATES
ENGINEERS

COLUMBUS OHIO

SUPERSTRUCTURE DETAILS

BRIDGE NO. PLE-59-0035
PLEASANT TWP. C.R. 59
(ANDERSON-ANTIOCH RD.)
OVER DEER CREEK STA. 17+11.75
20+12.25

MADISON CO.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
G.T.	DLS		SDS	TTC	12/20/90	

