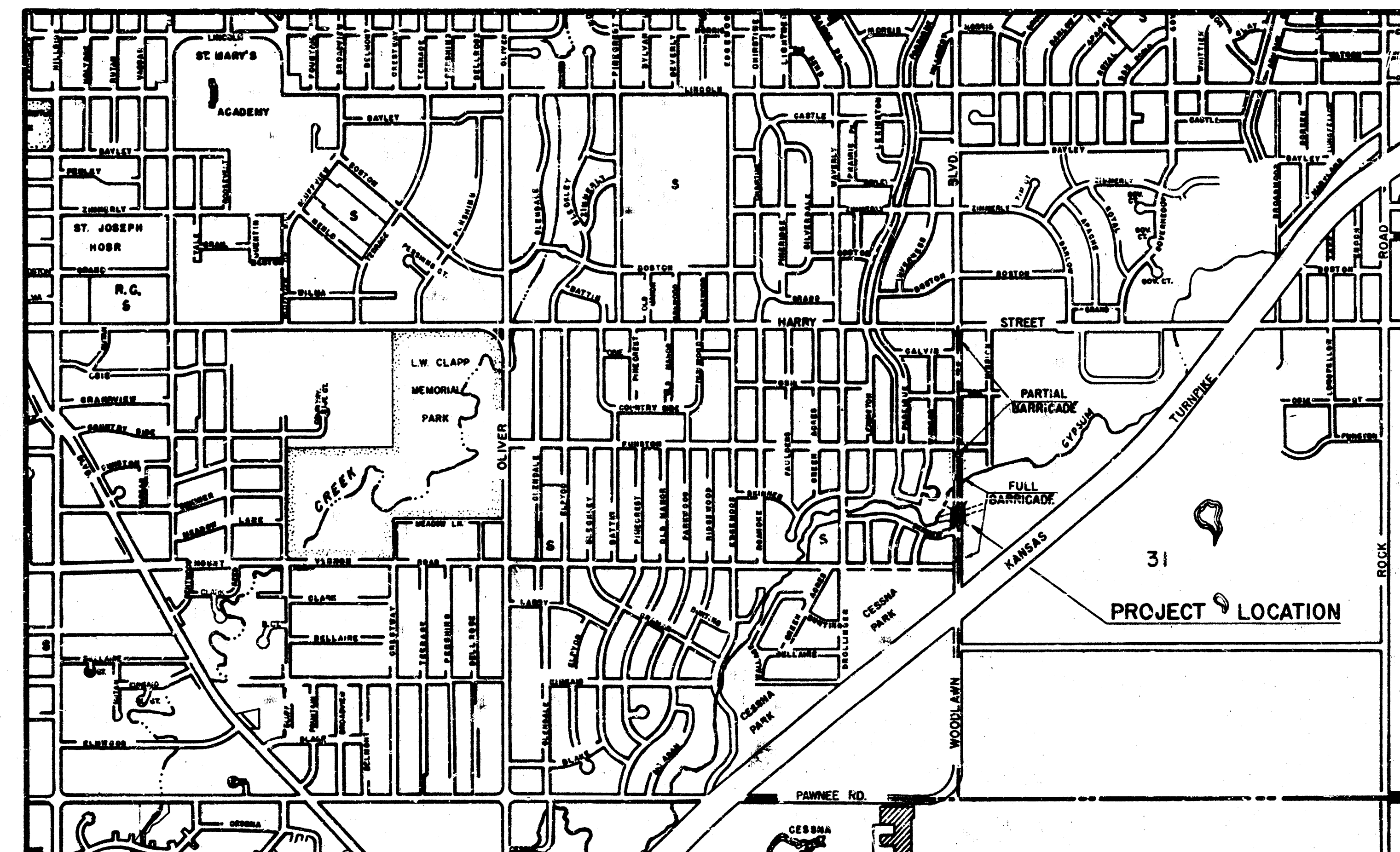


WOODLAWN BRIDGE

OVER

GYPSUM CREEK



CITY OF WICHITA

DEPARTMENT OF PUBLIC WORKS

R. W. BRUGGEMAN, P.E. DIRECTOR OF PUBLIC WORKS
R. W. LINN, P.E. CITY ENGINEER

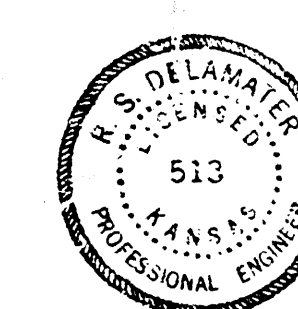
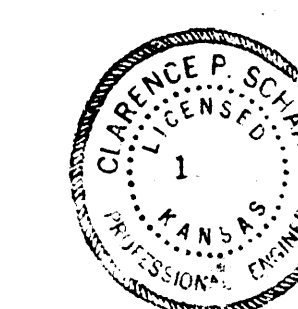
R. S. DELAMATER & ASSOCIATES, WICHITA, CONSULTING ENGINEERS

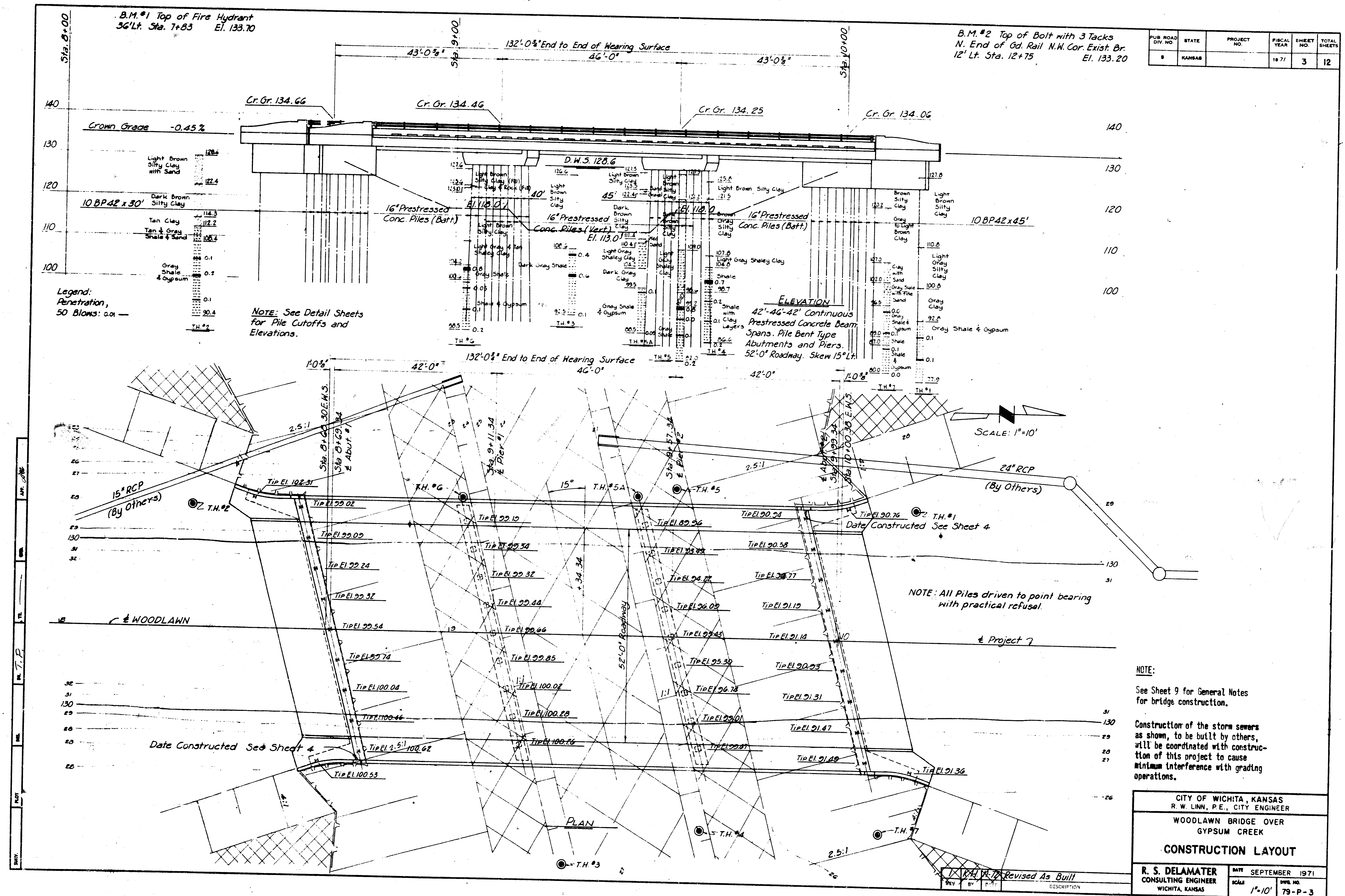
PROJECT DAKB 571018

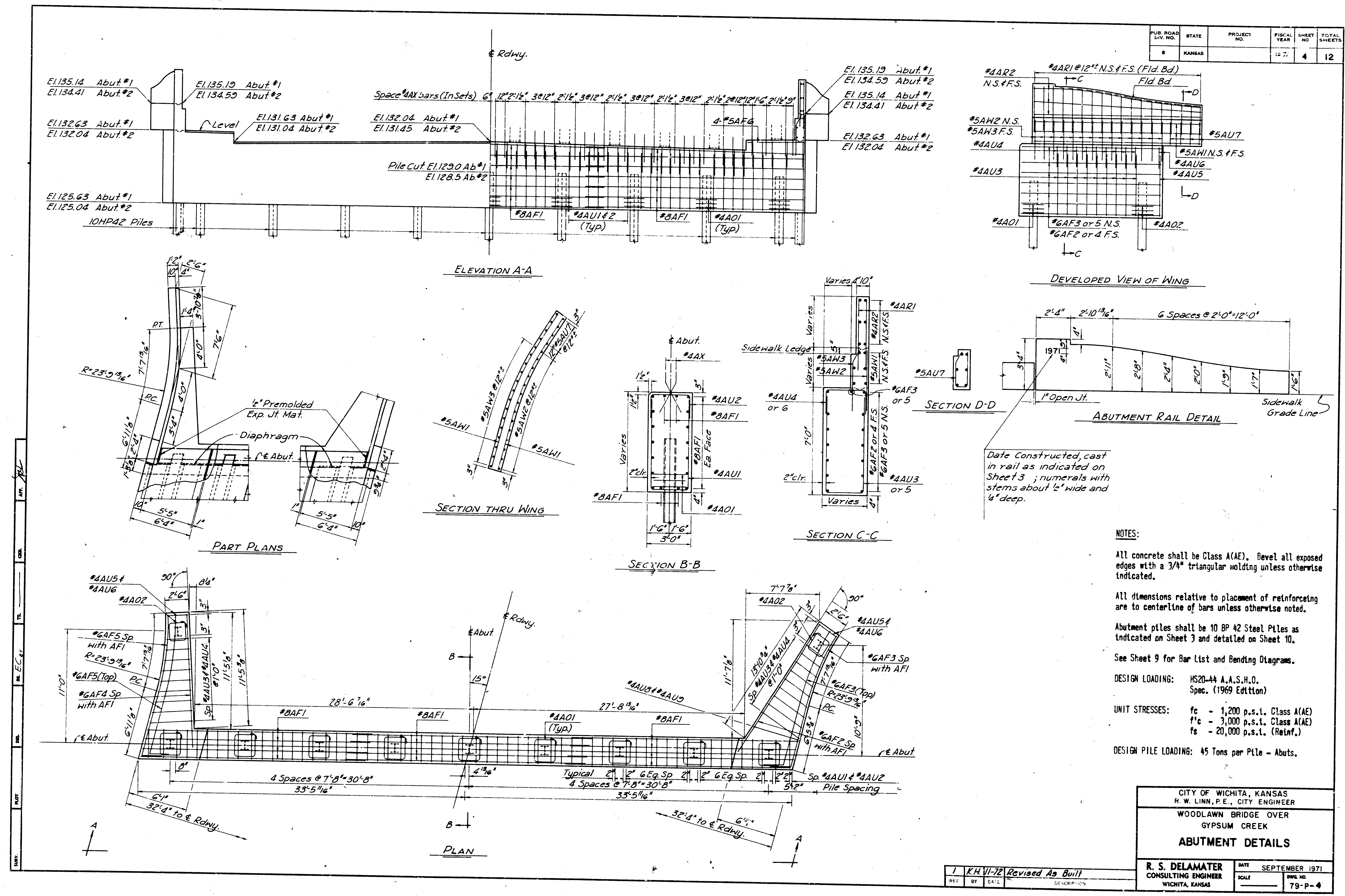
SEPTEMBER, 1971

INDEX OF SHEETS

Sheet No.	Description
1.	Title Sheet
2.	Contour Map
3.	Construction Layout
4.	Abutment Details
5.	Pier Details
6.	Prestressed Beam Details
7.	Superstructure Layout
8.	Superstructure Details
9.	Auxiliary Details
10.	Standard Pile Details
11.	Approach Slab Details
12.	Bar Supports, Bridge Excavation, Handrail Details, and Summary of Quantities







PUB. ROAD	STATE	PROJECT	FISCAL	SHEET	TOTAL
LIV. NO.		NO.	YEAR	NO.	SHEETS
8	KANSAS		1971	4	12

NOTES:

All concrete shall be Class A(AE). Bevel all exposed edges with a 3/4" triangular molding unless otherwise indicated.

All dimensions relative to placement of reinforcing are to centerline of bars unless otherwise noted.

Abutment piles shall be 10 BP 42 Steel Piles as indicated on Sheet 3 and detailed on Sheet 10.

See Sheet 9 for Bar List and Bending Diagrams.

DESIGN LOADING: HS20-44 A.A.S.H.O. Spec. (1969 Edition)

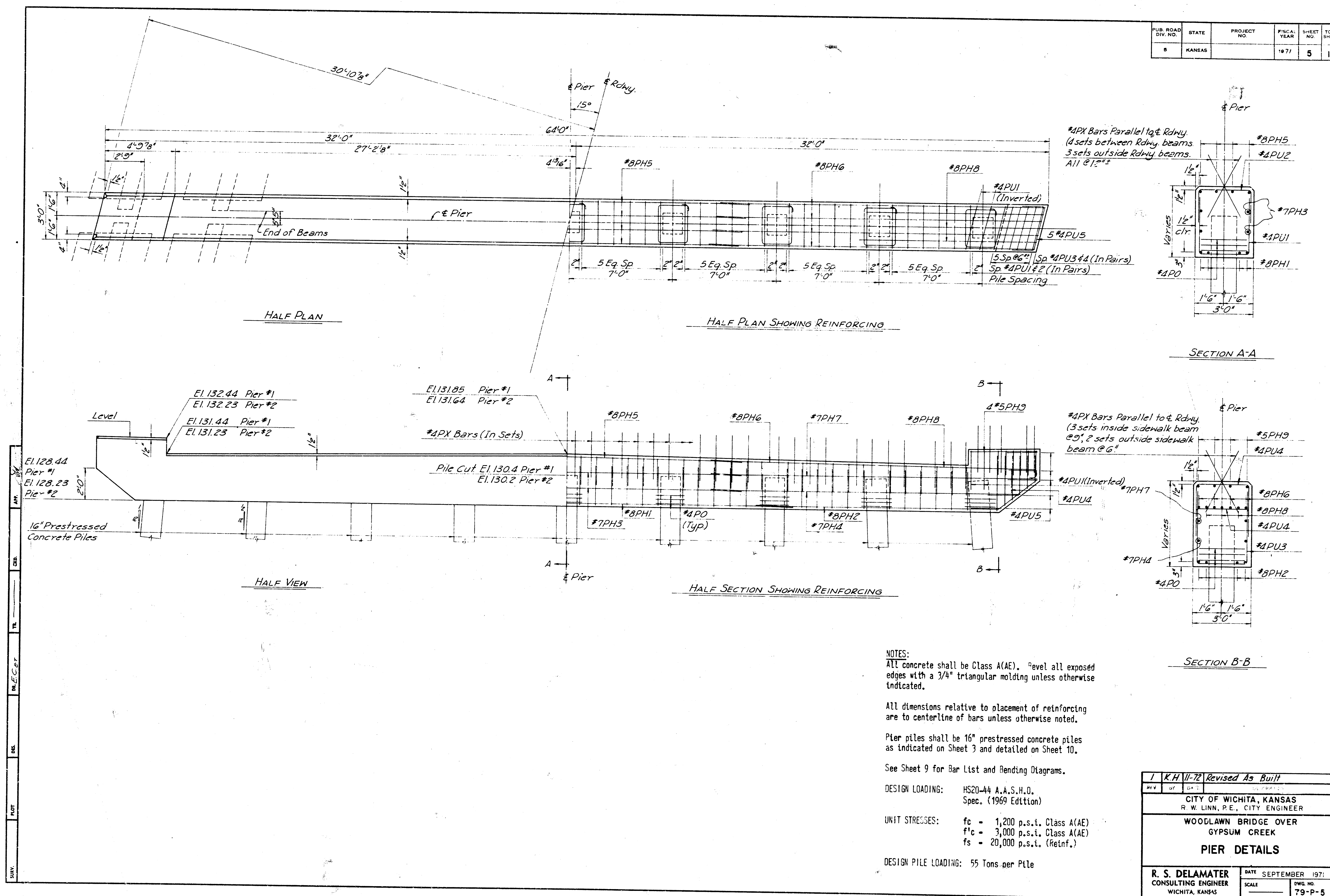
UNIT STRESSES: f_c - 1,200 p.s.i. Class A(AE)
 f'_c - 3,000 p.s.i. Class A(AE)
 f_s - 20,000 p.s.i. (Reinf.)

DESIGN PILE LOADING: 45 Tons per Pile - Abuts.

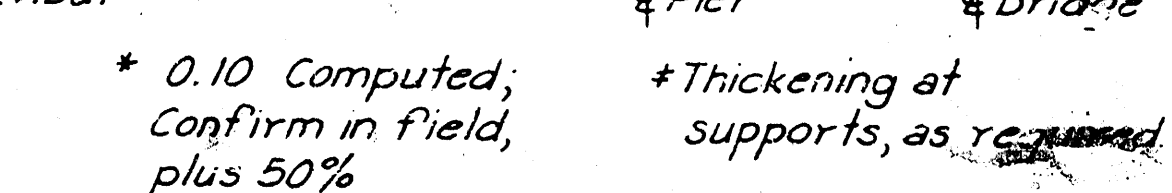
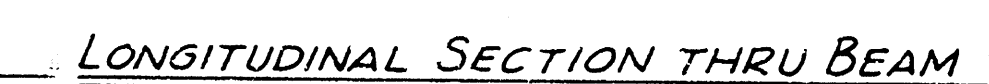
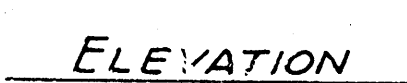
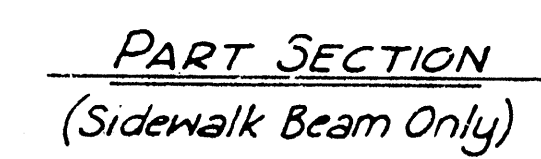
CITY OF WICHITA, KANSAS R. W. LINN, P.E., CITY ENGINEER	
WOODLAWN BRIDGE OVER GYPSUM CREEK	
ABUTMENT DETAILS	
R. S. DELAMATER CONSULTING ENGINEER WICHITA, KANSAS	DATE: SEPTEMBER 1971 SCALE: 1" = 1'-0" DWG. NO.: 79-P-4

1	K.H.VI-72	Revised As Built
REV	BY	DATE

PUB. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	KANSAS		1971	5	12

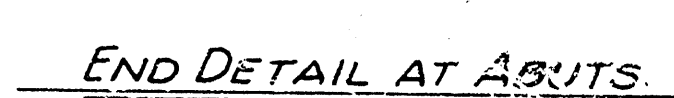
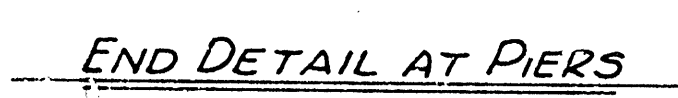


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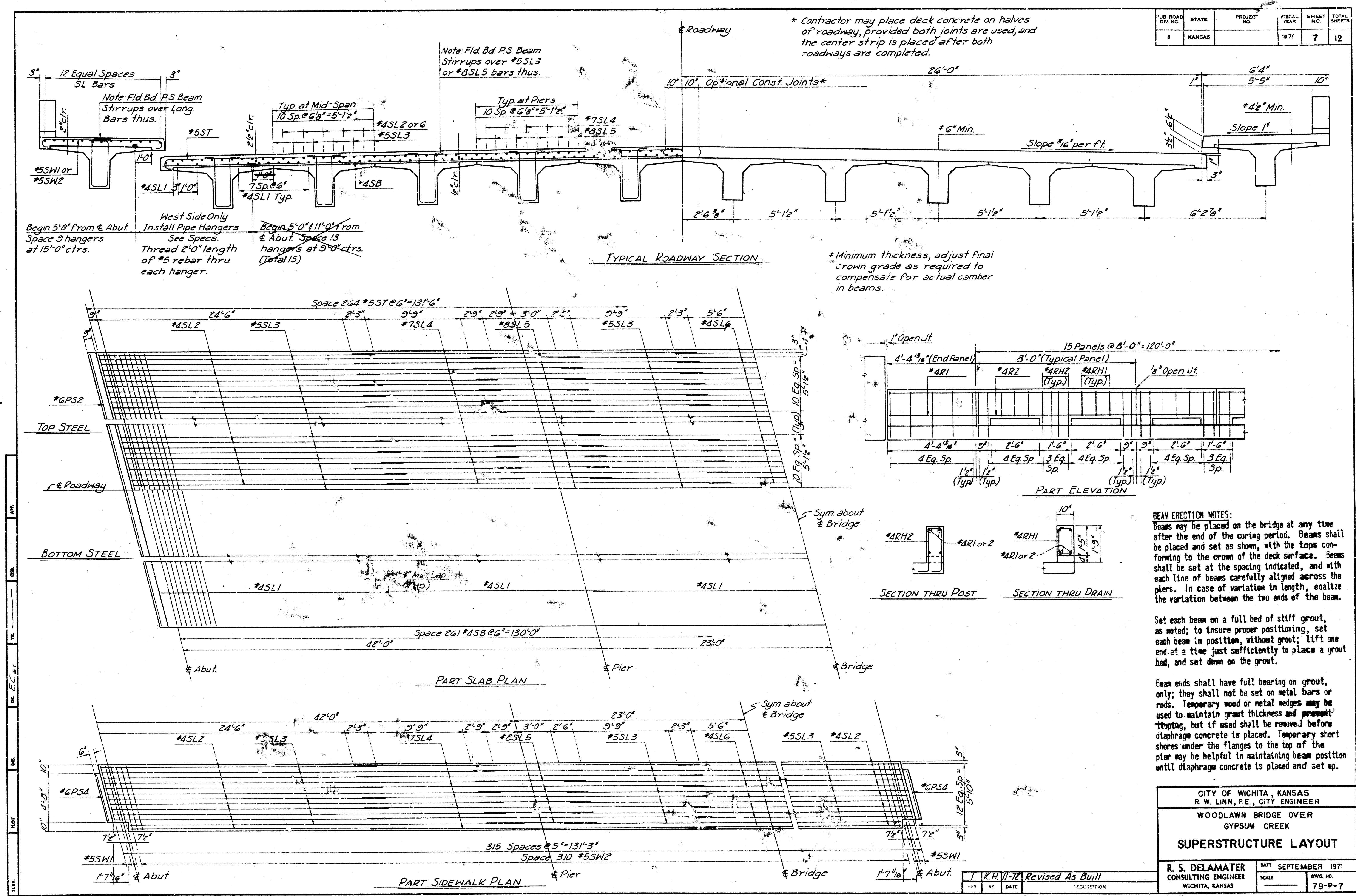
DEADLOAD DEFLECTION DIAGRAM

NOTE: Set final crown grade at minimum thickness over high point of beams, and adjust back to supports as required.



See Sheet 7 for Beam Erection Notes

1	K.H.	11-72	Revised As Built
REV	BY	DATE	
CITY OF WICHITA, KANSAS R. W. LINN, P.E., CITY ENGINEER			
WOODLAWN BRIDGE OVER GYPSUM CREEK			
PRESTRESSED BEAM DETAILS			
R. S. DELAMATER CONSULTING ENGINEER WICHITA, KANSAS		DATE SCALE	SEPTEMBER 1971 79-P-6



[illegible]

HALF ELEVATION OF CURTAIN WALL AT ABUTMENTS

#4DV4 T 6'3 1/4' x 6'2 3/4' 2'0" 2'0" 4Eq Sp 2'0" 4Eq Sp 2'0" 4Eq Sp 2'0" 4Eq Sp 2'0" 4Eq Sp #4DV4 T

1'7" #4DH5 NS & FS #4DH1 NS & FS Rdy.

#4DV5

#4PX Bars (In Sets) See Sheet 5

6" Sleeve for Gas Service Co. West Side Only

#4DH9 #4DH8 NS & FS #4DH11 #4DH3 NS & FS #4DH3 NS & FS #4DH3 NS & FS #4DH3 NS & FS #4DH3 NS & FS

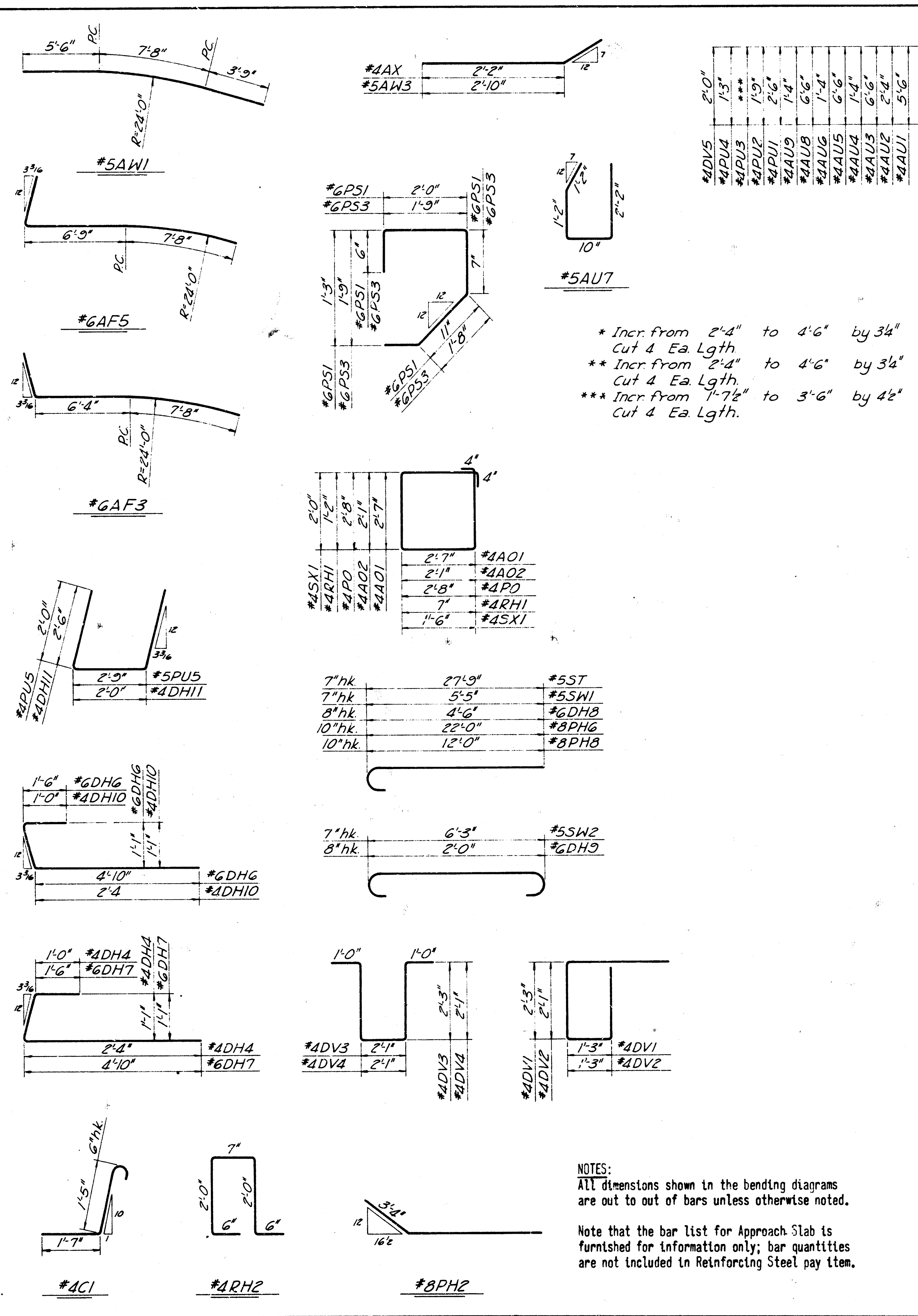
74" Sleeve for Wichita Water Dept

D-D

SECTION F-F

1		K.H. VI-72		Revised As Built	
REV	BY	DATE	Description		
CITY OF WICHITA, KANSAS					
R. W. LINN, P.E., CITY ENGINEER					
WOODLAWN BRIDGE OVER					
GYPSUM CREEK					
SUPERSTRUCTURE DETAILS					
R. S. DELAMATER CONSULTING ENGINEER WICHITA, KANSAS			DATE	SEPTEMBER 1971	
			SCALE	DWG. NO.	
				79-P-8	

BAR LIST									
ONE ABUTMENT									
STRAIGHT BARS					BENT BARS				
Mark	No	Req	Size	Length	Mark	No	Req	Size	Length
AF1	54	8	24"6"		AF3	8	6	16"0"	
AF2	7	6	15"6"		AF5	8	6	16"6"	
AF4	7	6	15"0"						
AF6	8	5	6"0"		AO1	27	4	11"0"	
					AO2	6	4	9"0"	
					AU1	60	4	13"8"	
					AU2	60	4	7"4"	
					AU3	18	4	*	
					AU4	18	4	*	
ARI	72	4	4"0"		AU5	2	4	13"2"	
AR2	12	4	17"0"		AU6	2	4	4"0"	
					AU7	8	5	5"4"	
					AU8	1	4	17"8"	
					AU9	1	4	10"0"	
AW2	28	5	4"0"		AW1	12	5	16"11"	
					AW3	28	5	4"0"	
					AX	100	4	5"0"	
*See Bending Diagrams									
ONE PIER									
PH1	4	8	30"0"		PH2	8	8	19"6"	
PH3	4	7	24"0"						
PH4	4	7	21"0"		PH6	8	8	22"4"	
PH5	4	8	24"0"						
PH7	4	7	22"0"		PH8	6	8	12"10"	
PH9	8	5	4"6"		PO	27	4	11"4"	
PX	104	4	3"6"		PUI	52	4	7"9"	
					PUP	48	4	6"3"	
					PUS	12	4	*	
					PUD	14	4	5"3"	
					PUS	10	4	6"9"	
*See Bending Diagrams									
SUPERSTRUCTURE									
SL1	456	4	23"0"		DV1	102	4	7"9"	
SL2	132	4	27"6"		DV2	20	4	7"5"	
SL3	213	5	40"0"		DV3	102	4	8"7"	
SL4	152	7	35"0"		DV4	20	4	8"3"	
SL5	142	8	11"0"		DV5	26	4	4"9"	
SL6	66	4	15"6"		ST	528	5	28"4"	
SB	522	4	27"9"		SW1	12	5	6"0"	
DH1	49	6	19"6"		SW2	620	5	7"5"	
DH2	12	6	21"0"		DH4	4	4	4"6"	
DH3	162	4	3"9"		DH6	12	6	7"5"	
DH5	32	4	5"0"		DH7	4	6	7"5"	
					DH8	24	6	5"2"	
					DH9	12	6	3"4"	
RI	16	4	4"2"		DH10	4	4	4"6"	
R2	120	4	7"9"		DH11	8	4	7"0"	
					RH1	180	4	4"2"	
PS2	12	6	19"6"		RH2	260	4	5"7"	
PS4	8	6	4"6"		PS1	102	6	5"4"	
					PS3	20	6	5"1"	
ONE APPROACH SLAB									
CT1	2	6	12"0"		CI	26	4	3"6"	
AS1	76	8	11"8"						
AS2	26	5	29"0"		SX1	57	4	7"8"	
SX2	12	8	30"0"						



GENERAL NOTES:

EXISTING STRUCTURE: The Contractor shall remove the existing structure, consisting of 100', three span steel beam bridge, on wood pile piers and abutments, with laminated timber deck; salvage to become the property of the Contractor, to be removed from the job.

COMPACTED EMBANKMENTS: The Contractor shall construct the embankments and the berms at the abutments as shown on Sheet No. 3 and on the Contour Map prior to construction of the bridge.

BRIDGE EXCAVATION: All bridge excavation shall be Class III. See Sheet 12 for limits of pay excavation.

SOUNDING: Sounding information shown on Sheet 3 is as obtained from borings made in the field, by Engineering Testing Company, and represents the best information available to the City of Wichita.

PILES: Piles shall be 16" prestressed concrete in piers and 10" steel piles in abutments, as described and detailed on Sheet 10. Piles shall be driven to the penetration shown unless in the opinion of the Engineer such penetration cannot be secured without injury to the pile. All piles shall be driven to a minimum computed bearing value of 45 tons per pile in abutments, 55 tons per pile in piers.

PILE DRIVING: All piles shall be driven with a steam or diesel hammer; if a diesel hammer is used, sufficient hammer data shall be provided to permit rating by the Engineer before driving starts.

CONCRETE: Class A(AE) concrete shall be used in abutments and piers, except for prestressed piles. Class AAA(AE) concrete shall be used in the superstructure, including curbs and diaphragms, except for prestressed beams. Bevel all exposed edges with a 3/4" triangular molding unless otherwise noted.

REINFORCING STEEL: All dimensions relative to reinforcing steel placement are to centerline of bars unless otherwise noted. All dimensions shown in bending diagrams are out to out of bars.

UTILITY HANGERS: Concrete inserts for pipe hangers for gas and water lines are to be furnished by the Contractor and installed as shown and detailed.

DESIGN:
Design Loading: HS20-44 A.A.S.H.O. Spec. (1969 Edition)

Unit Stress: fc = 1,600 psi Class AAA(AE)
fc = 1,200 psi Class A(AE)
fs = 20,000 psi (Rein.)
f'c = 4,000 psi Class AAA(AE)
f'c = 3,000 psi Class A(AE)

Pile Loading: 55 tons per pile in piers
45 tons per pile in abutments

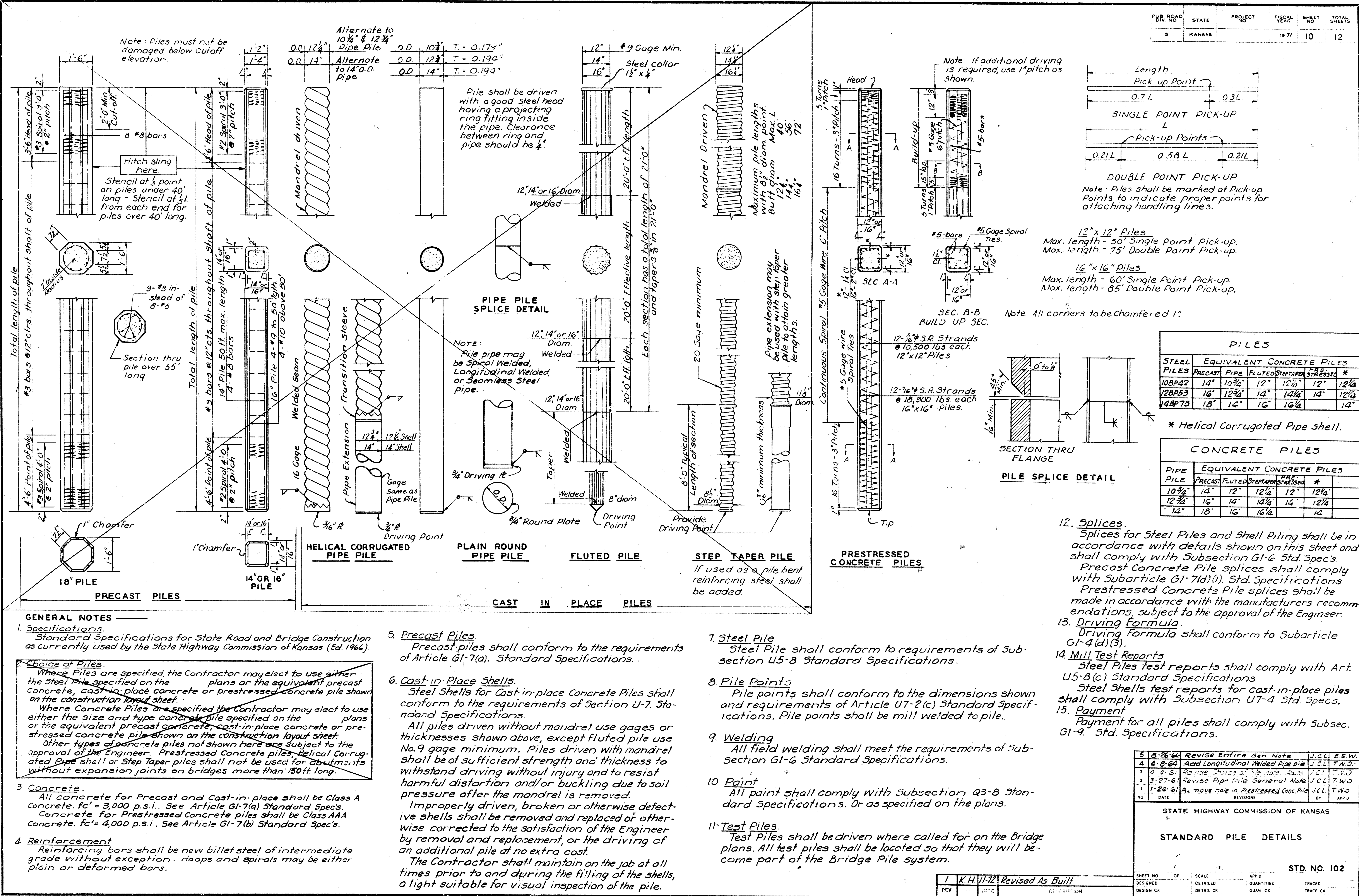
QUANTITIES: All quantities shown on these plans shall be used as final pay quantities except that measurement and payment for piling, common excavation and compaction of earthwork shall be in accordance with the specifications.

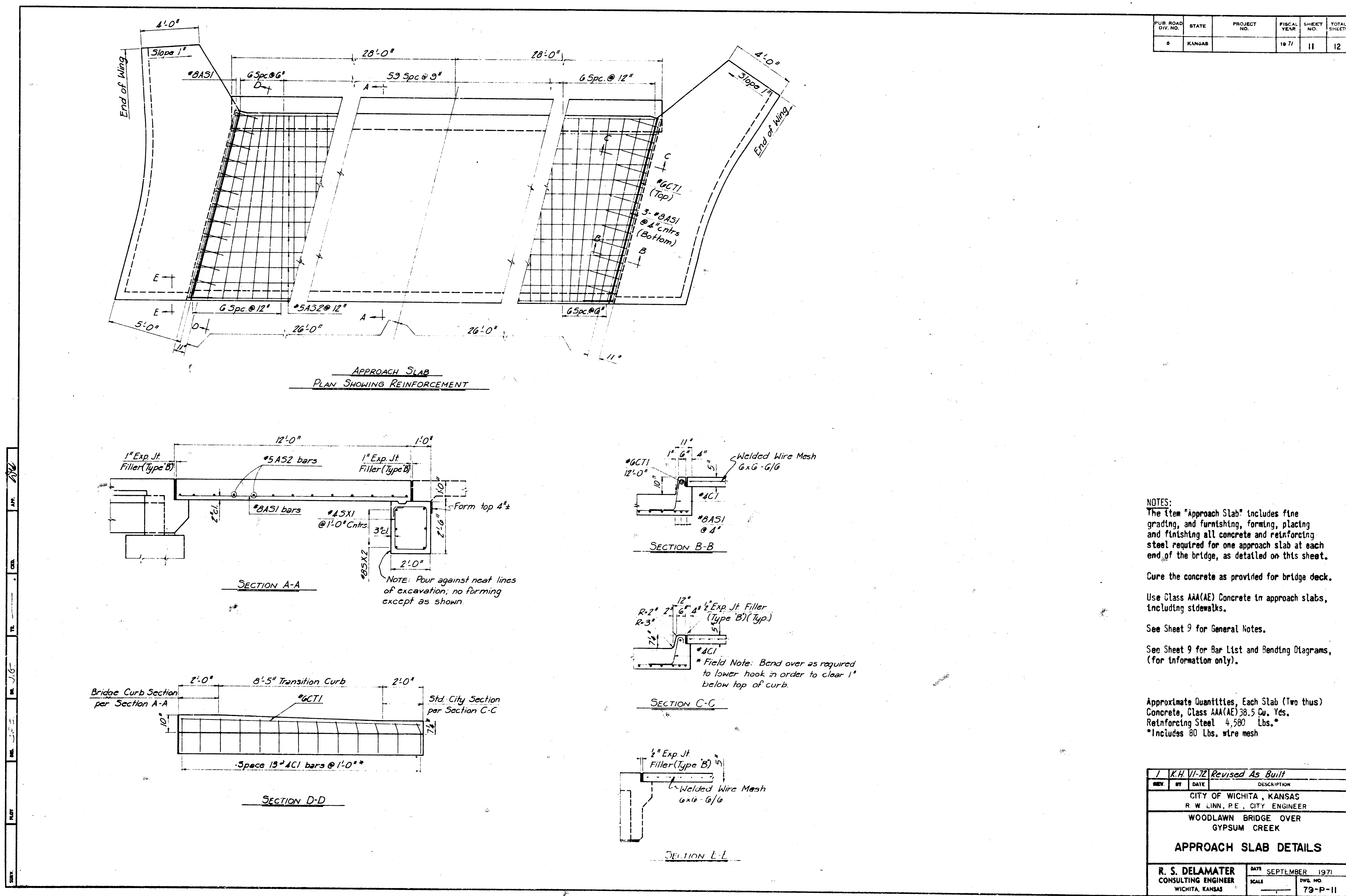
GENERAL REQUIREMENTS: It is the intention of these plans and specifications that construction of the bridge shall be in accordance with applicable standard specifications and requirements of the Kansas State Highway Commission and that materials shall conform to these specifications unless otherwise noted.

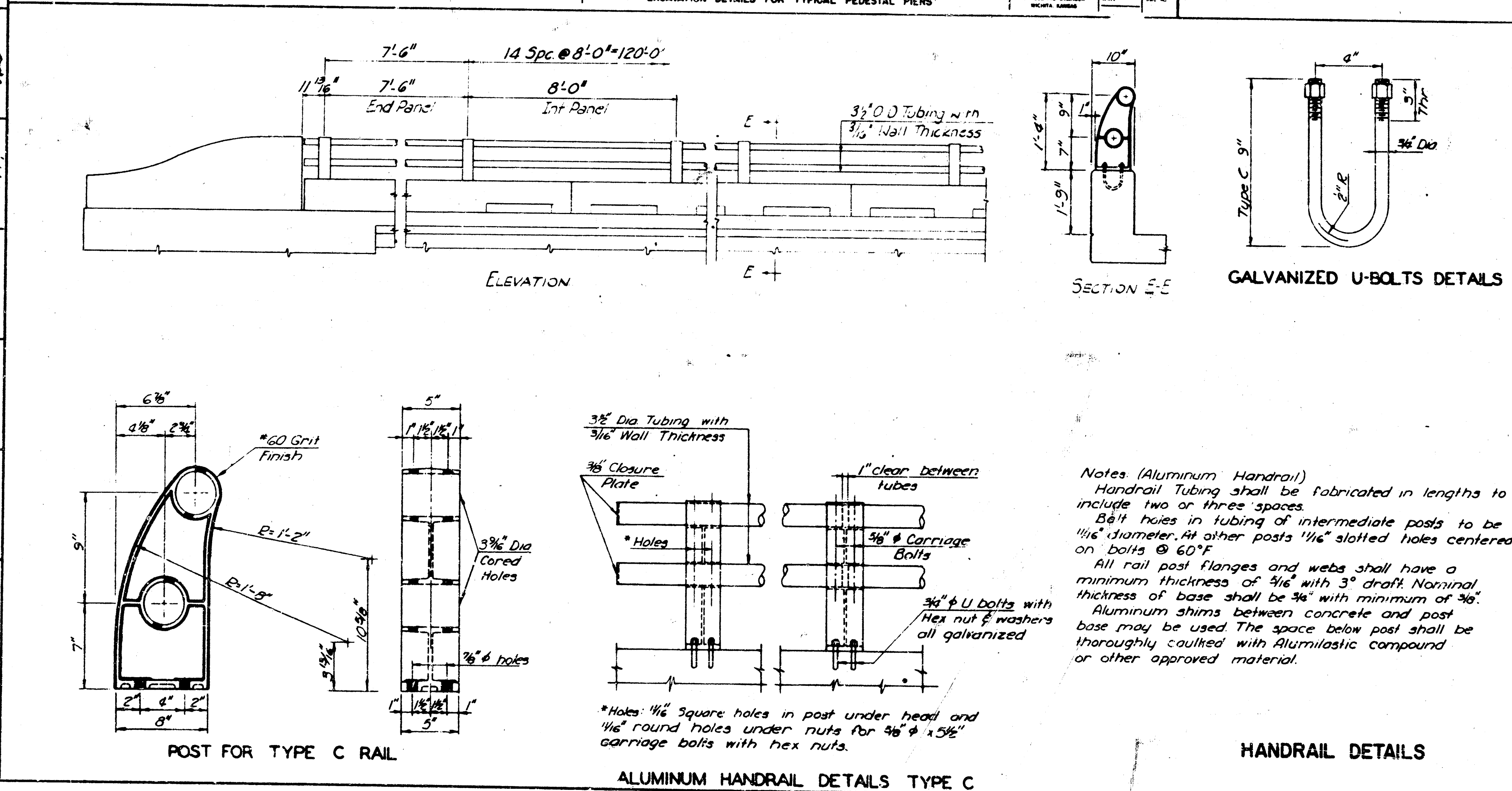
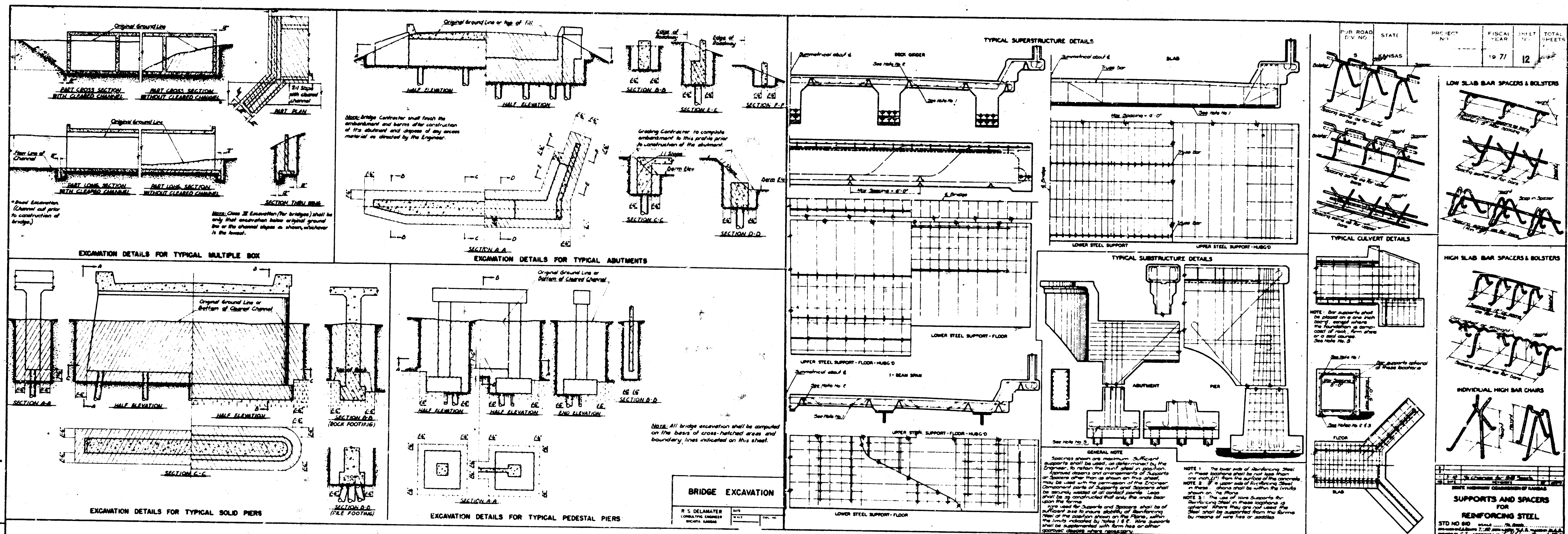
PUB. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	KANSAS		19	9	12

K.H.VI-72 Revised As Built		
REV	BY	DATE
CITY OF WICHITA, KANSAS		
W. L. LINN, P.E., CITY ENGINEER		
WOODLAWN BRIDGE OVER GYPSUM CREEK		
AUXILIARY DETAILS		
R. S. DELAMATER		DATE SEPTEMBER 1971
CONSULTING ENGINEER		SCALE
WICHITA, KANSAS		DWG. NO. 79-P-9

PUB. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
5	KANSAS		1977	10	12







SUMMARY OF BRIDGE QUANTITIES							
Item	Abut #1	Pier #1	Pier #2	Abut #2	Superst.	Total	Unit
Excavation, Class III	100			100		200	Cu. Yds.
Class AAA(AE) Conc.					203.4	203.4	Cu. Yds.
Class A(AE) Conc.	747	230	230	747		1954	Cu. Yds.
Reinforcing Steel	6,680	3,350	3,350	6,680	71,900	91,960	Lbs.
Prestress'd Conc. Beams					36	36	Each
Aluminum Handrail					254	254	Lin. Ft.
Steel Piles (10')	330				495	825	Lin. Ft.
Prestress'd Conc. Piles (16')		360	405			765	Lin. Ft.
Approach Slabs						2	Each

SUMMARY OF GRADING QUANTITIES		
Item	Quan.	Unit
Large Trees	10	Each
Common Excavation	34,360	Cu. Yds.
Compaction of Earthwork	18,940	Cu. Yds.
Removal of Exist. Structure	L.S.	L.S.
Dumped Rock Rip Rap	2,150	Sq. Yds.

*NOTE: Superstructure concrete quantity includes allowance for concrete required to level up prestressed beam camber.

REVISED AS BUILT	DATE	DESCRIPTION
BY		
CITY OF WICHITA, KANSAS		
R. W. LINN, P.E., CITY ENGINEER		
WOODLAWN BRIDGE OVER GYPSUM CREEK		
BAR SUPPORTS, BR. EXC., HANDRAIL		
SUMMARY OF QUANTITIES		
R. S. DELAMATER CONSULTING ENGINEER	DATE	SEPTEMBER 1971
WICHITA, KANSAS	SCALE	79-P-12