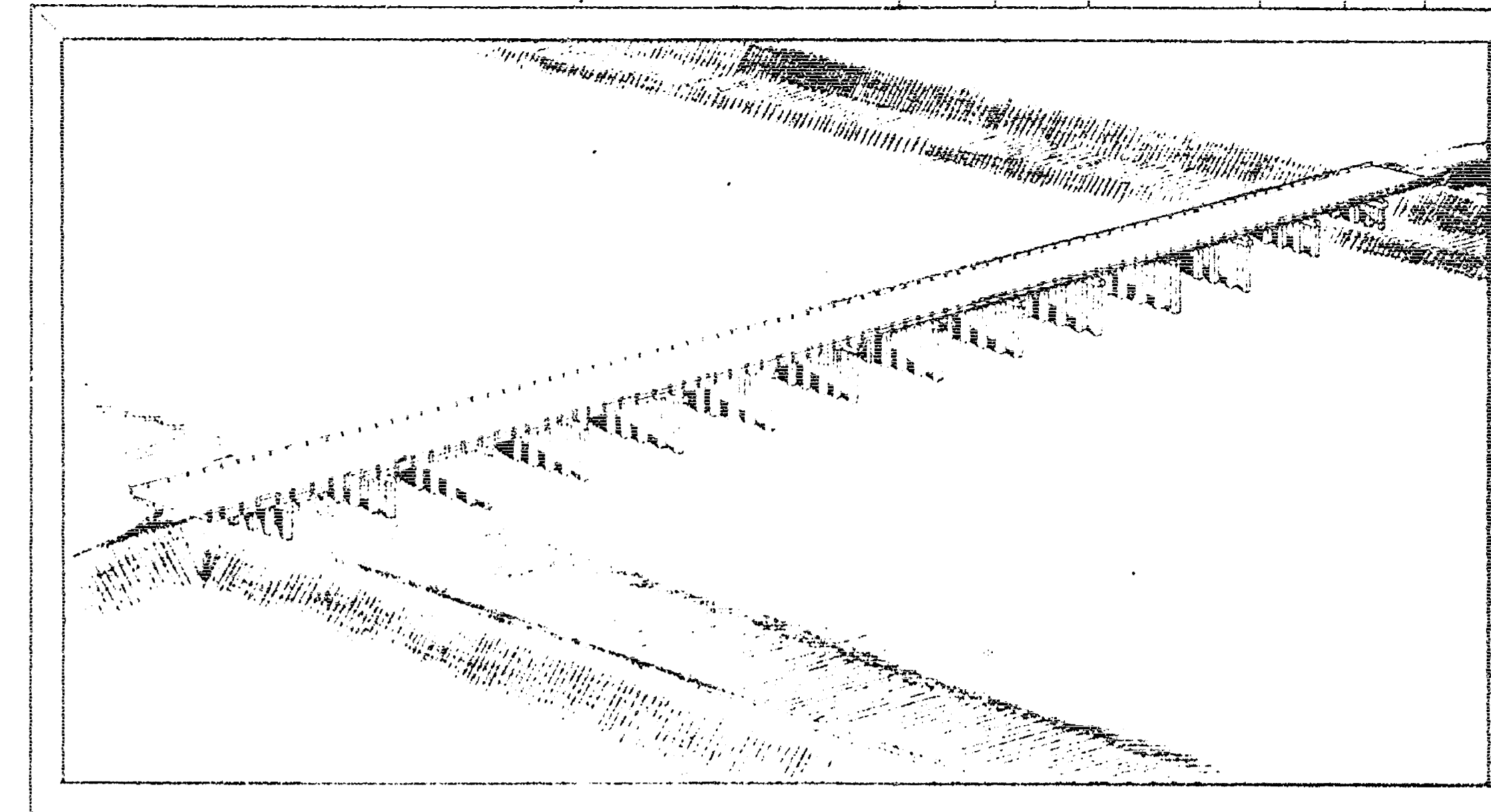


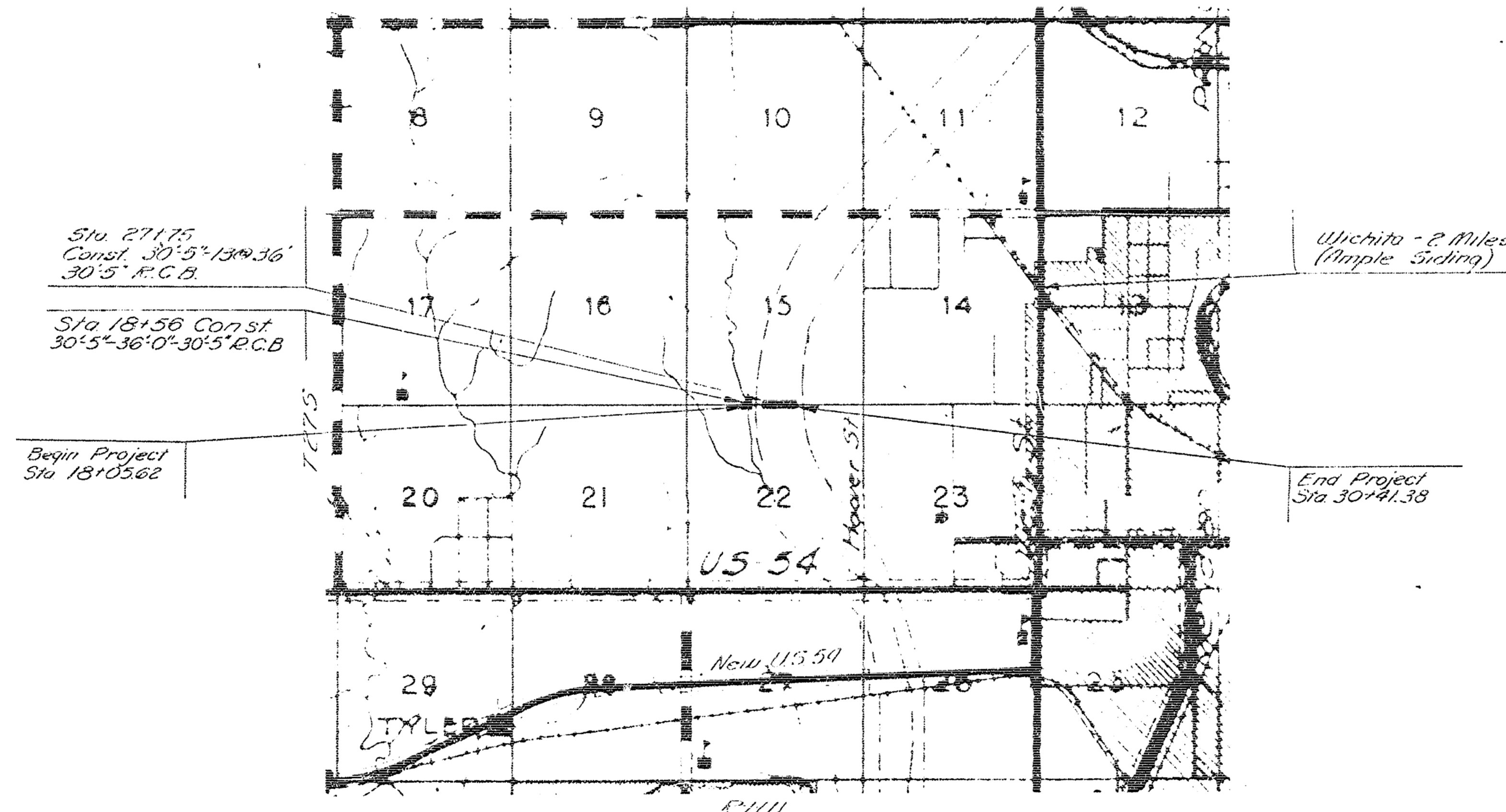
STATE OF KANSAS  
STATE HIGHWAY COMMISSION  
SEDGWICK COUNTY  
PLAN AND PROFILE



INDEX OF SHEETS

- 1 - Title Sheet
- 2 - Topography
- 3 & 4 - Plan & Profile
- 5 - Construction Layout (618-22-2775)
- 6 - Piling Location in Levees "
- 7 - General Details "
- 8 - Auxiliary " *(618-22-1554)*
- 9 - Reinforcing " "
- 10 - Piling " "
- 11 - Construction Layout (618-22-1856)
- 12 - General Details "
- 13 - Auxiliary " "
- 14 - Reinforcing " "
- 15 - Piling "

SUMMARY OF QUANTITIES (COMBINED)	
Concrete Class A (AE)	79,41 CY
Reinforcing Steel	169,100 Lb
14"x14" Conc. Piling	4,070 LF
Bearing Devices	7,570 Lb
Metal Handrail	1,291.5 LF
Structural Steel	22,150 Lb



BRIDGES ONLY



Scale 2" = 1 mile

CONVENTIONAL SIGNS

- COUNTY LINE -----
- SECTION LINE -----
- WIRE FENCE -----
- HEDGE ROW -----
- RAILROAD -----
- SURVEY LINE -----
- RIGHT OF WAY -----
- TELEPHONE -----
- POWER POLE -----
- TRAVELED WAY -----
- CITY LIMITS -----
- TOWNSHIP BOUNDARY -----

GROSS LENGTH OF PROJECT	1235.76 FT.	0.234 MILES
EXCEPTIONS	602.26 FT.	0.114 "
ADDITIONS		
NET LENGTH OF PROJECT	633.50 FT.	0.120 MILES
NET LENGTH OF BRIDGES	633.50 FT.	0.120 MILES
NET LENGTH OF ROAD	FT.	MILES

PLANS PREPARED BY:  
\_\_\_\_\_  
COUNTY ENGINEER  
DATE: 11-20-53

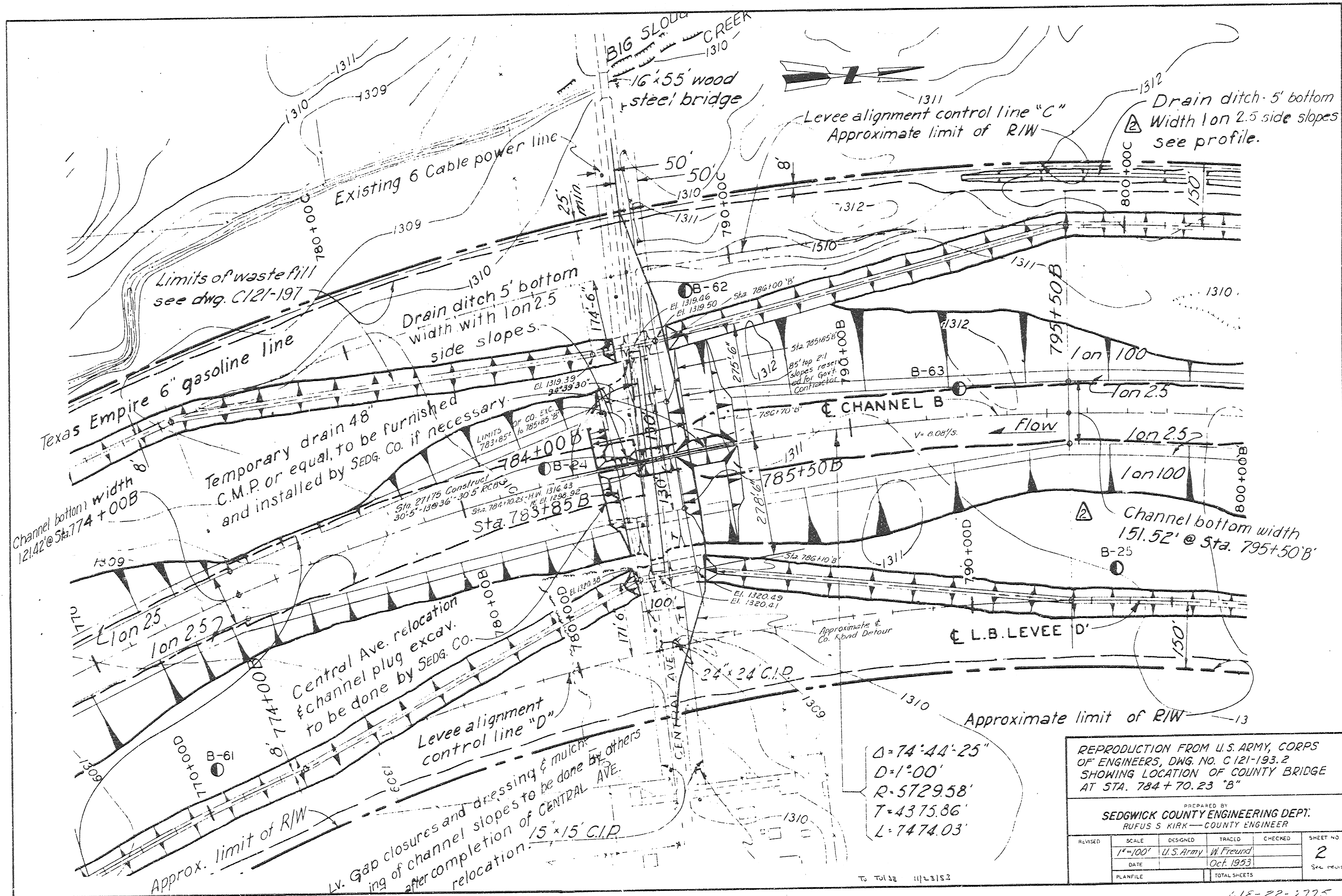
APPROVED:  
\_\_\_\_\_  
COUNTY COMMISSIONER  
DATE: 11-20-53

RECOMMENDED FOR APPROVAL DATE  
\_\_\_\_\_  
ENGINEER OF SECONDARY ROADS  
STATE HIGHWAY COMMISSION OF KANSAS

RECOMMENDED FOR APPROVAL DATE  
\_\_\_\_\_  
DISTRICT ENGINEER  
PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS AGENCY

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
STATE HIGHWAY ENGINEER  
STATE HIGHWAY COMMISSION OF KANSAS

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
DIVISION ENGINEER  
PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS AGENCY



$\Delta = 74^{\circ}44'25''$   
 $D = 1^{\circ}00'$   
 $R = 572958'$   
 $T = 4375.86'$   
 $L = 7474.03'$

REPRODUCTION FROM U.S. ARMY, CORPS OF ENGINEERS, DWG. NO. C 121-193.2  
 SHOWING LOCATION OF COUNTY BRIDGE AT STA. 784+70.23 "B"

PREPARED BY  
**SEDGWICK COUNTY ENGINEERING DEPT.**  
 RUFUS S. KIRK - COUNTY ENGINEER

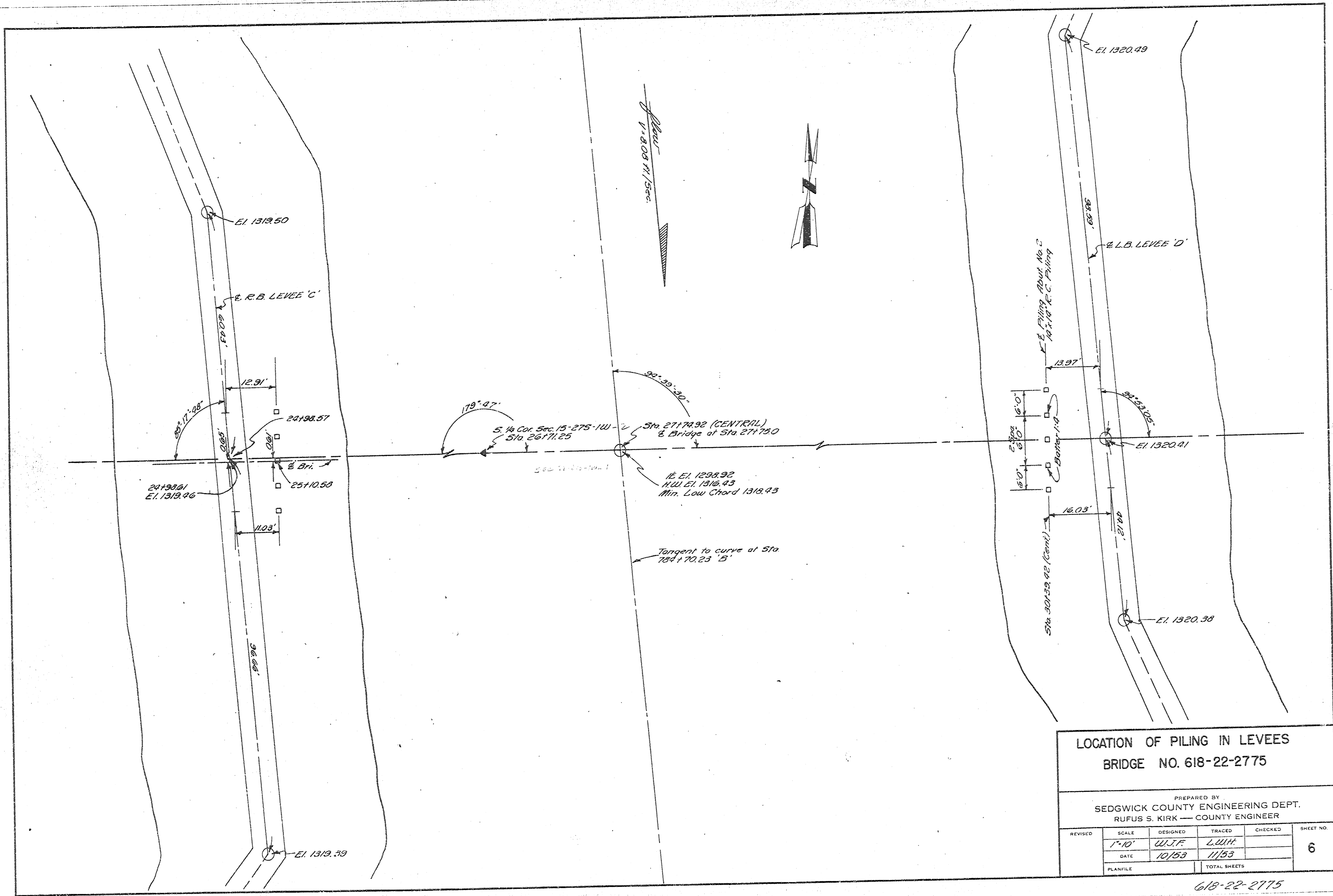
REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1"=100'	U.S. Army	W. Freund		2
					Sec. 2000

618-22-2775









**LOCATION OF PILING IN LEVEES  
BRIDGE NO. 618-22-2775**

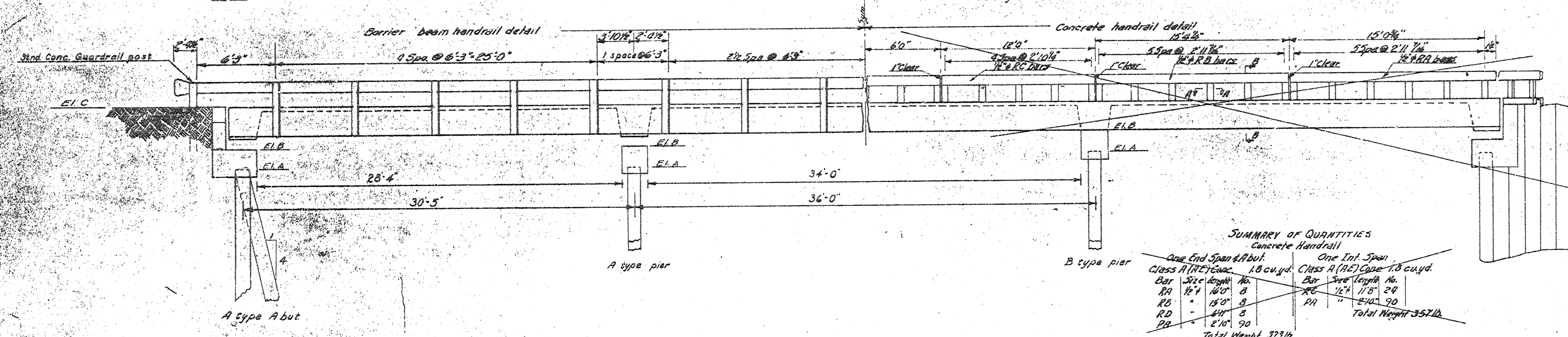
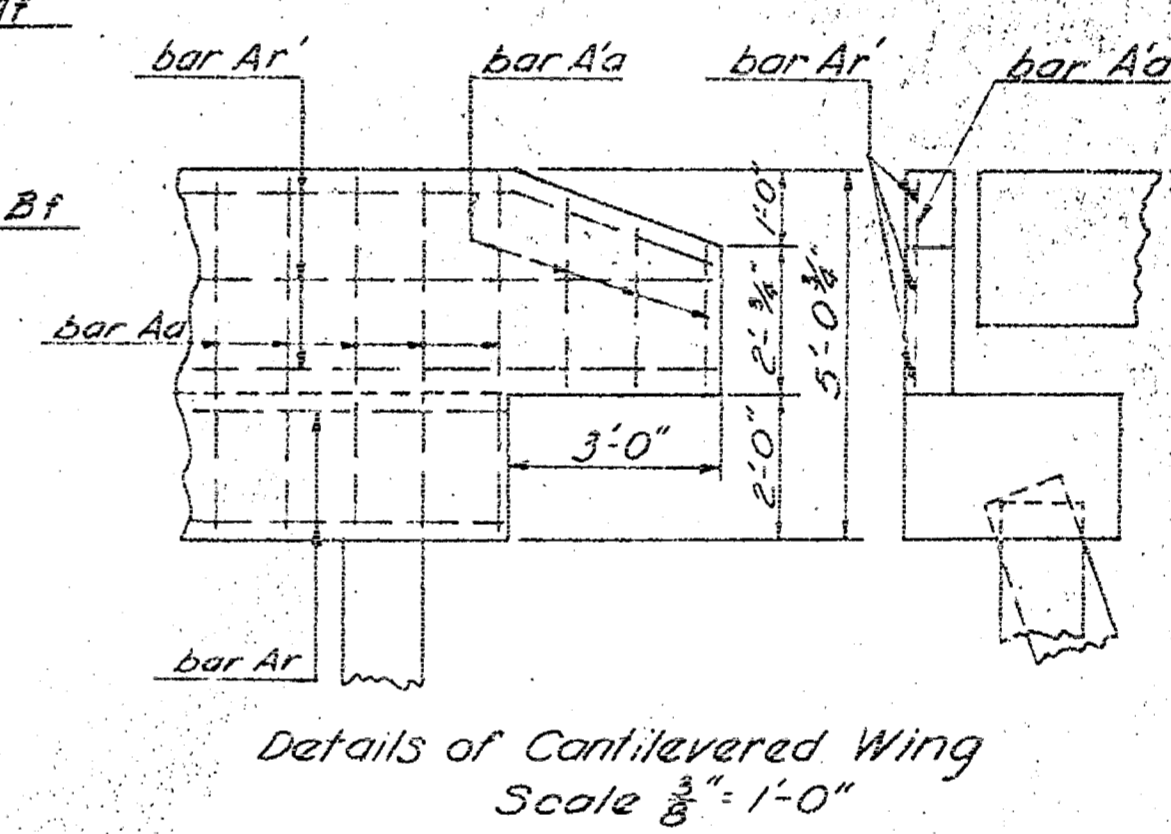
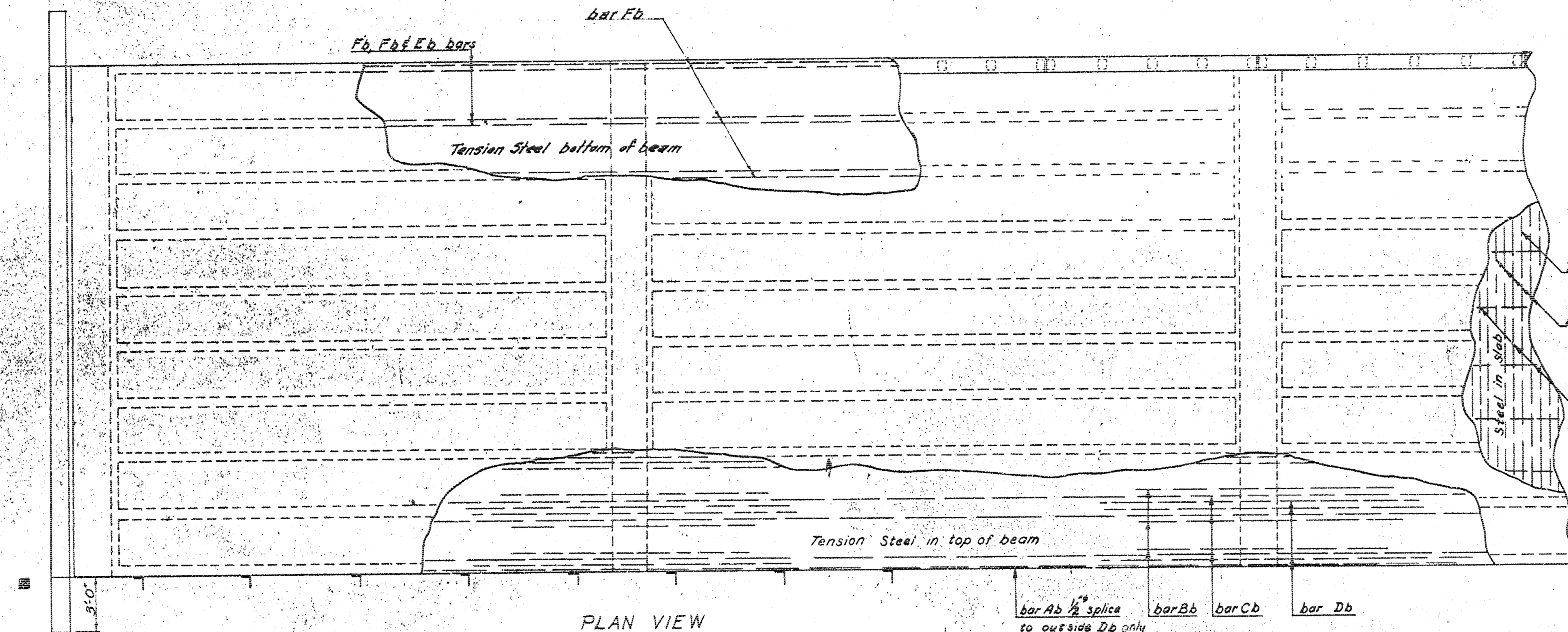
PREPARED BY  
SEDGWICK COUNTY ENGINEERING DEPT.  
RUFUS S. KIRK — COUNTY ENGINEER

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1"=10'	W.J.F.	L.W.H.		6
		DATE	10/53	11/53	
		PLANFILE	TOTAL SHEETS		

618-22-2775

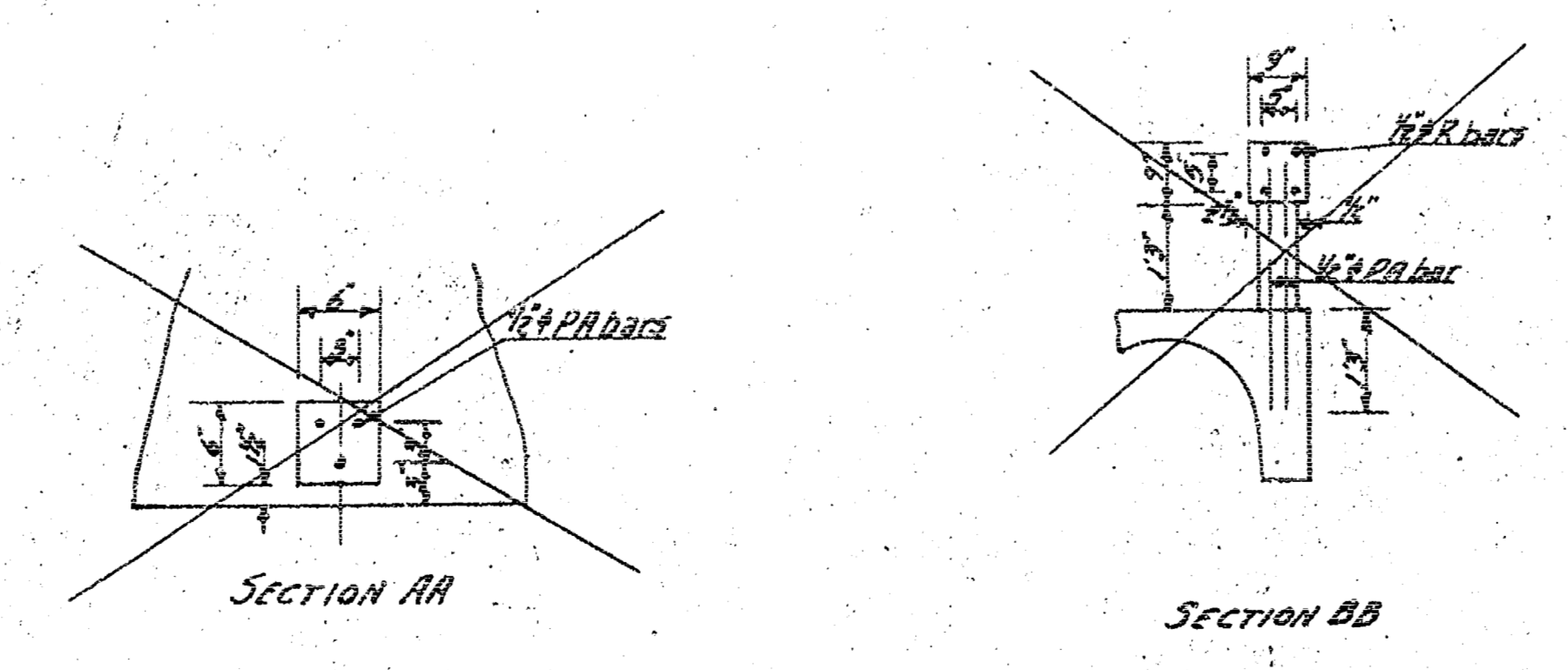
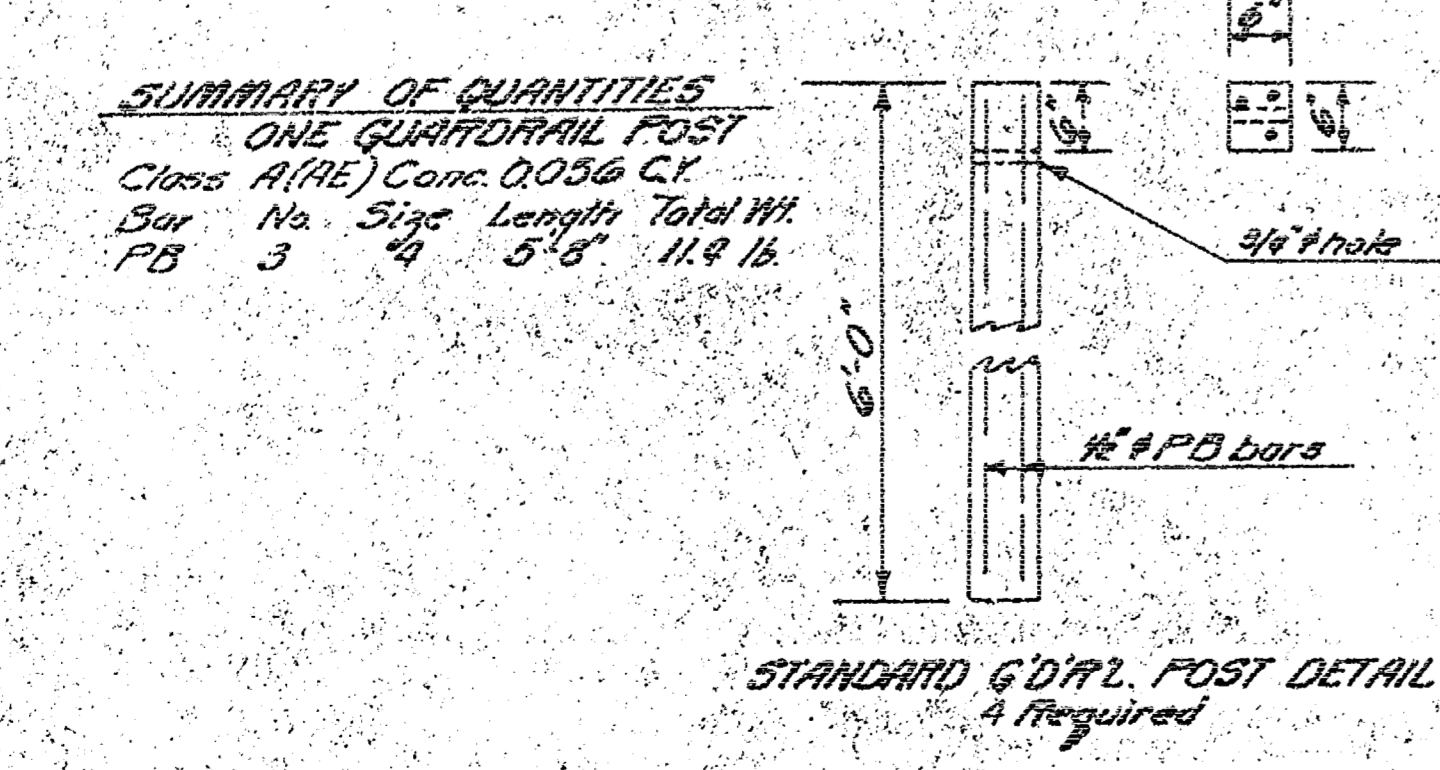
**GENERAL NOTES**

Design: Designed for H-20-44 loading AASHTO specifications.  $f'_c = 20,000$  psi;  $f_y = 100,000$  psi.  
 Soundings: To be taken by Sedgwick County.  
 Piling: Concrete piling to be driven to a calculated resistance of 28 ton.  
 Old Structure: To be removed by Sedgwick County.  
 Concrete: Class R (RE) concrete used throughout.  
 Bevel all exposed edges with a  $\frac{3}{4}$ "  $\Delta$  molding unless otherwise noted. Forms shall be preformed steel pans used as directed by the Engineer in charge.  
 Guardrail: To be of standard barrier beam or concrete as shown on Construction layout. Concrete rail to be constructed after the removal of deck forms.



**SUMMARY OF QUANTITIES**  
Concrete Handrail

One End Span & Abut.		One Int. Span	
Class R (RE) Conc.	18 cu. yd.	Class R (RE) Conc.	18 cu. yd.
Bar Size (Length)	No.	Bar Size (Length)	No.
RA 1/2" (180")	8	RA 1/2" (178")	24
RB 3/8" (150")	8	RB 3/8" (148")	24
RD 3/8" (120")	5	RD 3/8" (118")	20
RE 3/8" (90")	5	RE 3/8" (88")	20
Total Weight 357 lb.		Total Weight 357 lb.	



Note: RA bars to be placed immediately after slab concreting.

**RE. CONC. MODIFIED T-BEAM BRIDGE**  
BRIDGE NO. 618-22-2775

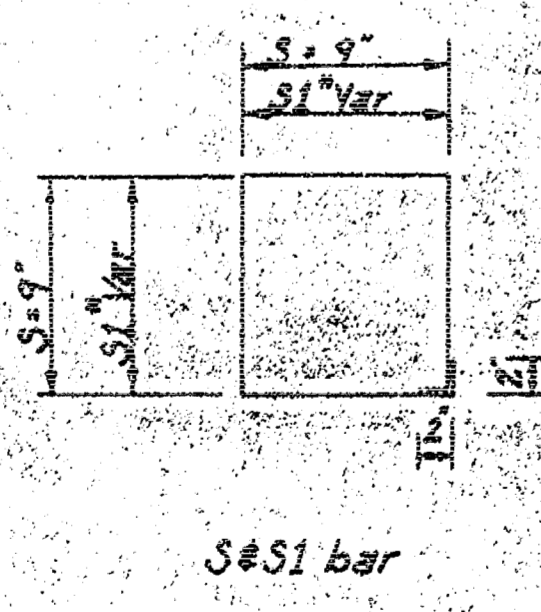
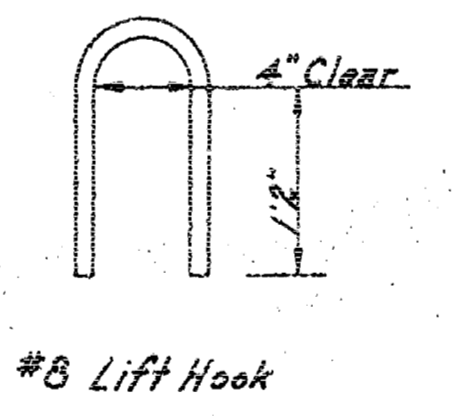
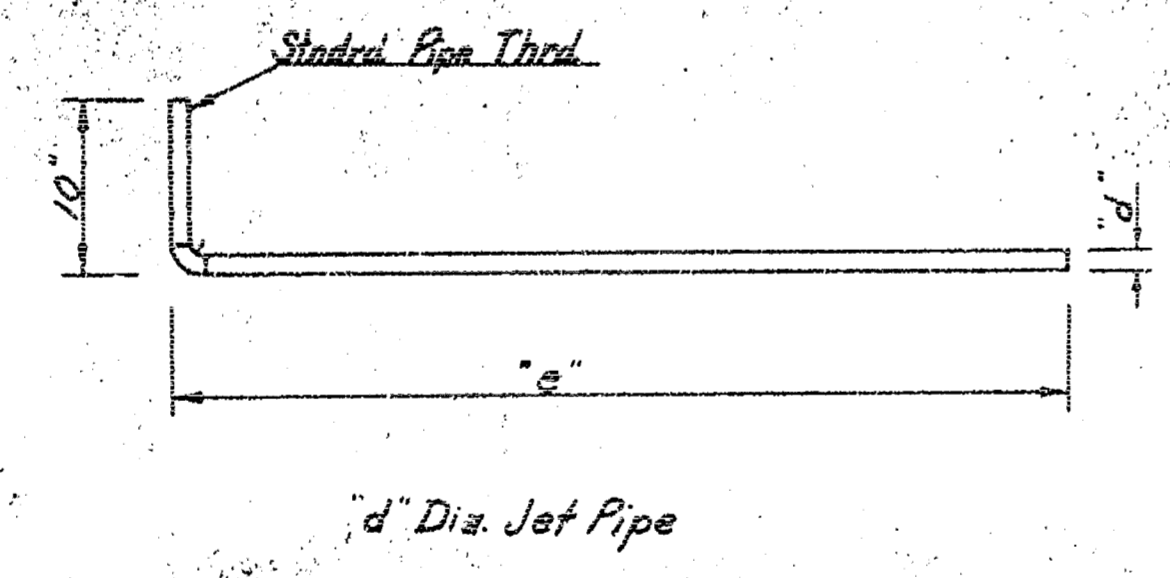
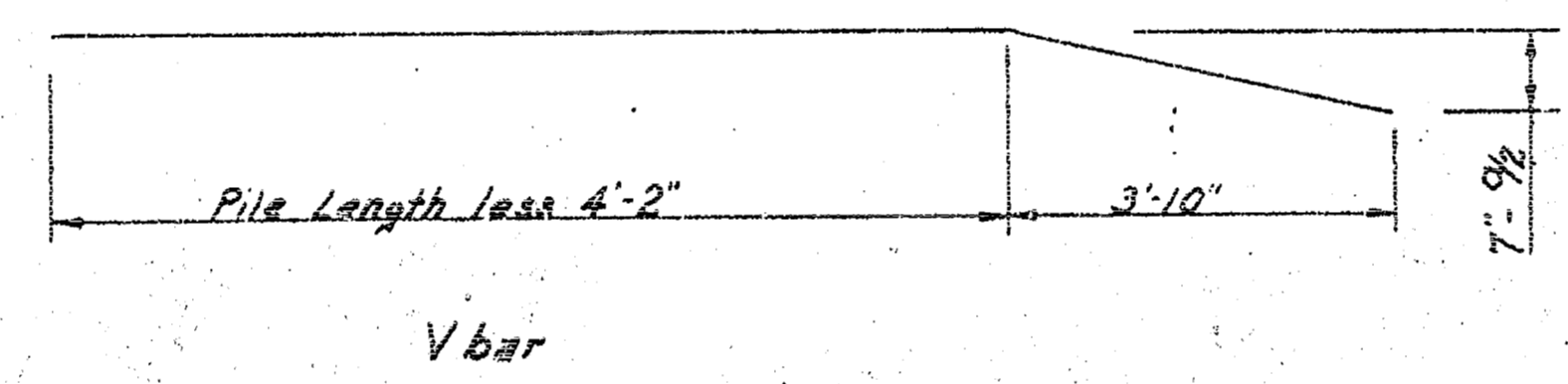
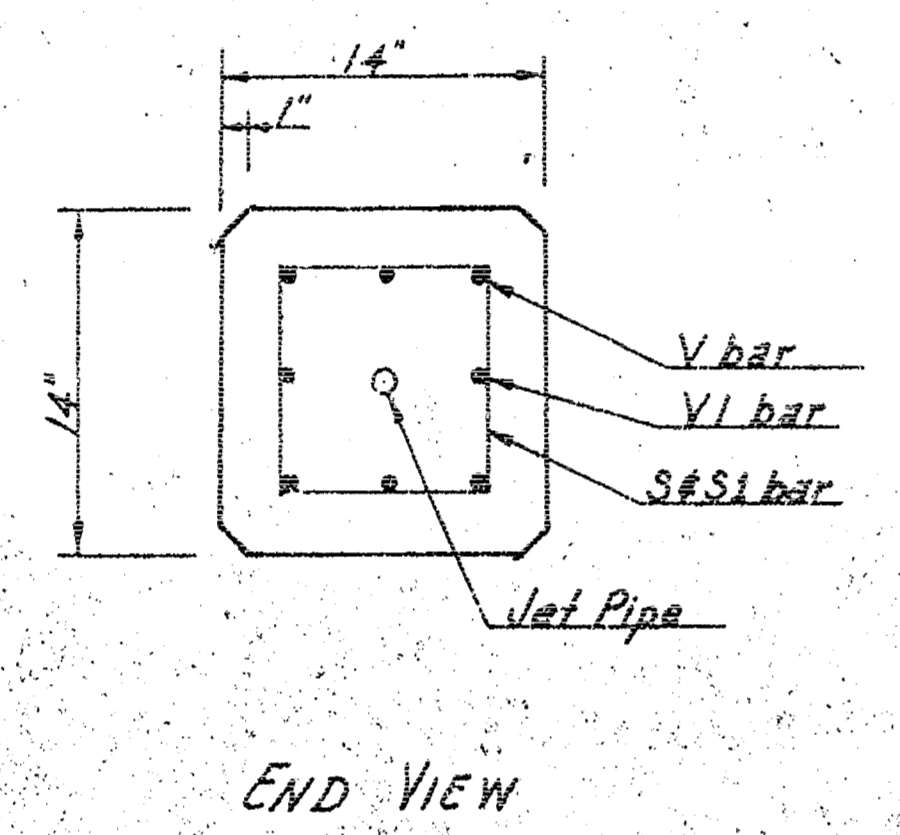
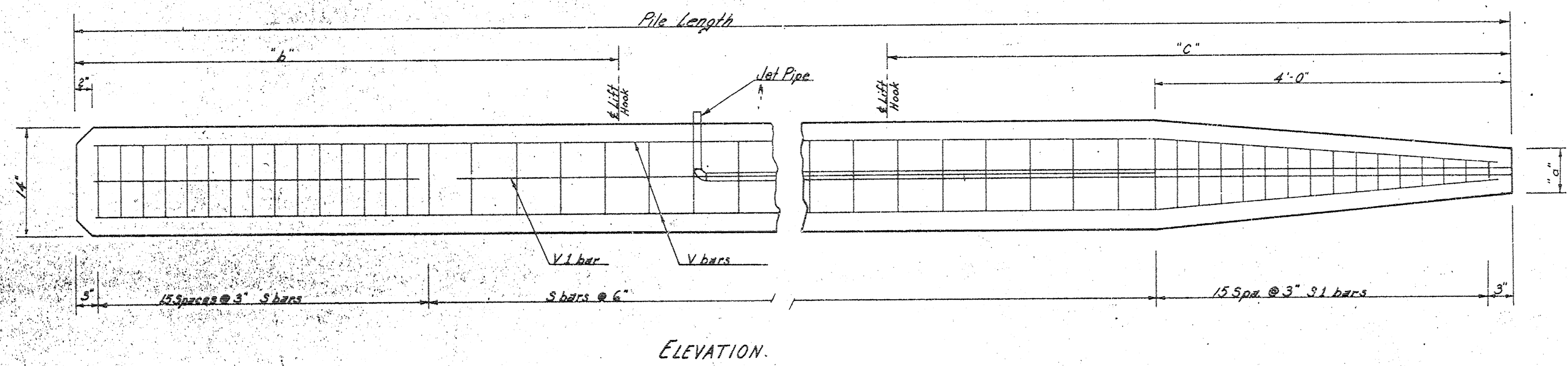
PREPARED BY  
**RUFUS S. KIRK** COUNTY ENGINEER  
SEDGWICK COUNTY ENGINEERING DEPT.

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
11-33 C.L.P.	1/4" = 1'	R. R. J.	C. D. H.		7
		DATE	9-50	9-18-50	
		PLANFILE		TOTAL SHEETS	





Pub. Rd. Div. No.	State	Project No.	Fiscal Year	Sheet No.	Total Sheets
5	Kansas		1951		



\*S1- 15 bars, increase from 'x' to 'y' by 'z' increments

**General Notes**  
 Design: According to ARSMD Specifications, 1949 Edition.  $f_c = 12,000$  psi.  $f_s = 1,000$  psi.  
 Concrete: Use class A throughout if piling are to be encased or otherwise protected. Use class B (BE) if piling are to form open bent, unless otherwise noted.  
 Reinforcing: All dimensions are to center of bars unless otherwise noted.  
 Jet Pipe: Standard pipe of Dimensions shown unless otherwise approved by Engineer.  
 Curing: Piling shall be left in forms or otherwise properly cured for at least 7 days. Piling shall not be moved until concrete has attained its design strength or a minimum of 4 weeks after casting.  
 Payment: The cost of material and labor used for casting and driving of piles shall be included in the unit bid for concrete piling.  
 Handling: Piling shall only be lifted by handling hooks or by rigging within 18" of hook location.

Note: Concrete at end of piles shall be removed to expose reinforcing as stated elsewhere on plans. The length for payment of piles shall be as stated in sect 59.40 of the Standard Specifications of Kansas, 1951 Edition

40 req'd

Pile Length	20'-6"	24'-6"	28'-6"	32'-6"	36'-6"	40'-6"
Bar Size	#7	#7	#7	#7	#6	#6
V	20'-6" 4	24'-6" 4	28'-6" 4	32'-6" 4	36'-6" 4	40'-6" 4
V I	#2 3'-4" 41	#2 3'-4" 49	#2 3'-4" 57	#2 3'-4" 65	#2 3'-4" 73	#2 3'-4" 81
S	#2 Var 15	#2 Var 15	#2 Var 15	#2 Var 15	#2 Var 15	#2 Var 15
Lift Hook	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2
Jet Pipe						
"a"	6"	6"	6"	6"	6"	6"
"b"	6'-0"	7'-2"	8'-4"	9'-6"	10'-8"	11'-10"
"c"	8'-0"	9'-2"	10'-4"	11'-6"	12'-8"	13'-10"
"d"				1 1/4"		
"e"				20'-0"		
x" y" x"	5 1/2" to 8 1/2" by 3/8"	5 1/2" to 8 1/2" by 3/8"	5 1/2" to 8 1/2" by 3/8"	5 1/2" to 8 1/2" by 3/8"	5 1/2" to 8 1/2" by 3/8"	5 1/2" to 8 1/2" by 3/8"
Concrete	94 Cu. Yds.	116 Cu. Yds.	134 Cu. Yds.	155 Cu. Yds.	179 Cu. Yds.	198 Cu. Yds.
Rebar	209 Lbs.	247 Lbs.	284 Lbs.	321 Lbs.	472 Lbs.	524 Lbs.

40 req'd

Pile Length	37'-0"	50'-0"
Bar Size	#6	#7
V	36'-8" 4	49'-0" 4
V I	#6 33'-0" 4	#8 45'-0" 4
S	#2 3'-4" 74	#2 3'-4" 100
S1	#2 Var 15	#2 Var 15
Lift Hook	#8 3'-0" 2	#8 3'-0" 2
Jet Pipe		
"a"	10"	6"
"b"	10'-10"	14'-0"
"c"	11'-11"	16'-0"
"d"	1 1/4"	1 1/4"
"e"		41'-0"
x" y" x"	5 1/2" to 8 1/2" by 3/8"	5 1/2" to 8 1/2" by 3/8"
Concrete	182 Cu. Yds.	243 Cu. Yds.
Rebar	482 Lbs.	956 Lbs.

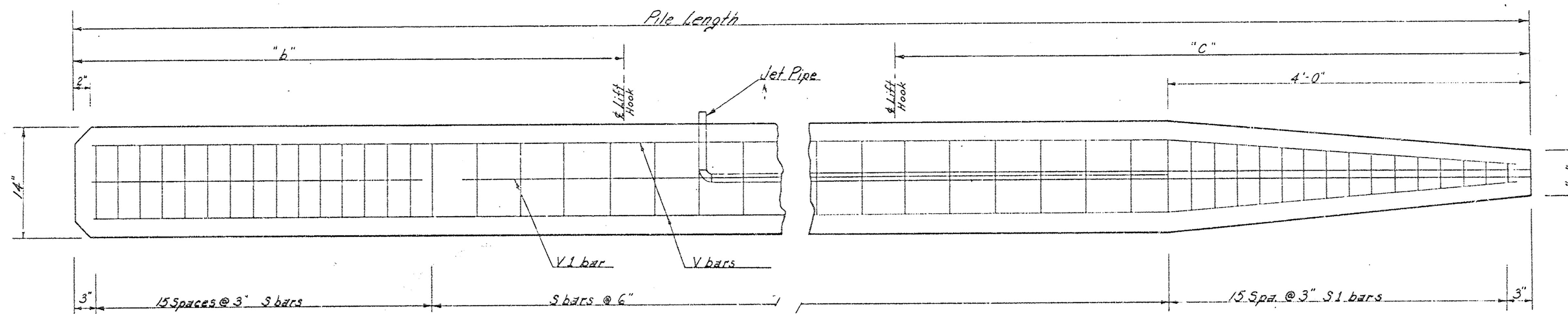
**14" x 14" Re. Conc. Piling**  
**BRIDGE NO. 618-22-2775**

PREPARED BY  
**SEDGWICK COUNTY ENGINEERING DEPT.**  
**RUFUS S. KIRK — COUNTY ENGINEER**

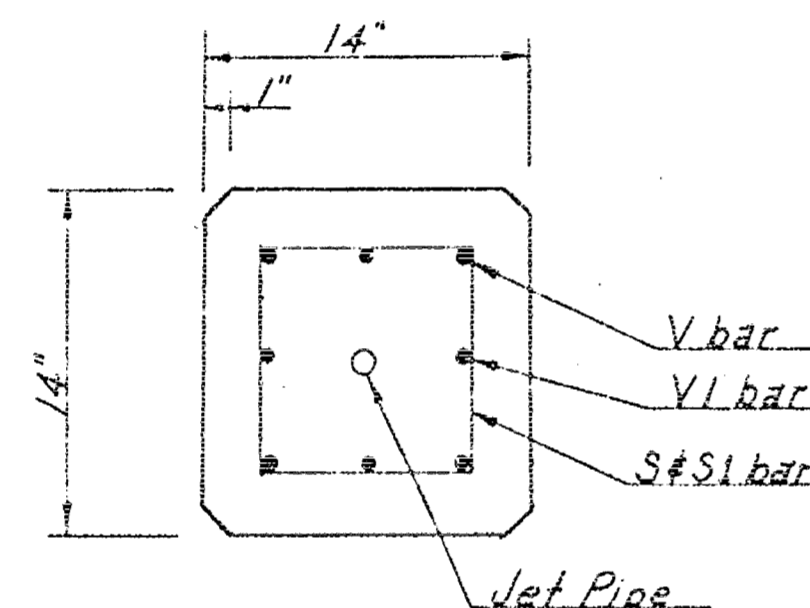
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		DATE	12-51	7-52	
		PLANFILE	TOTAL SHEETS		

D 7117 11/21/52

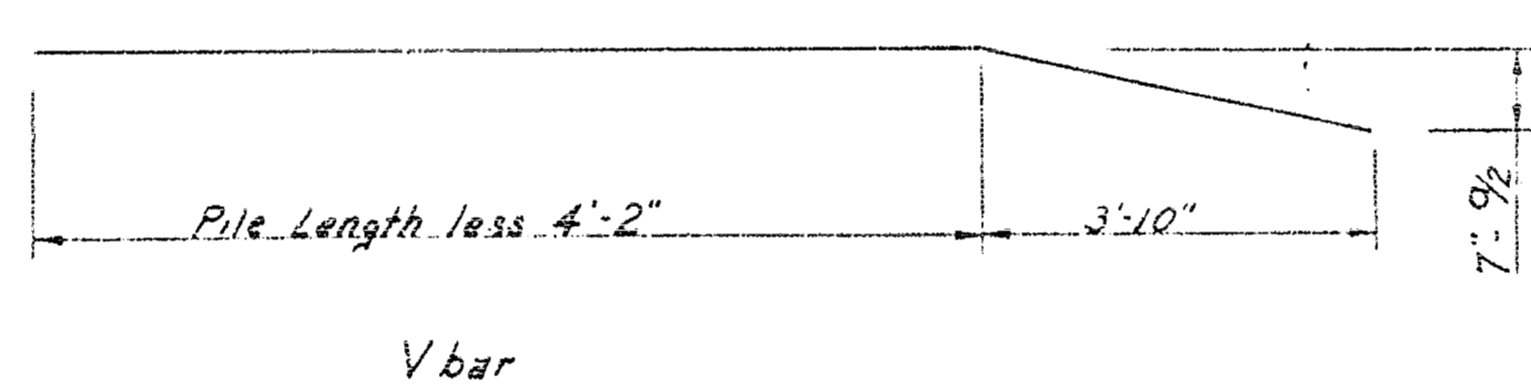
Pub. Rd. Div. No.	State	Project No.	Fiscal Year	Sheet No.	Total Sheets
5	Kansas		1951		



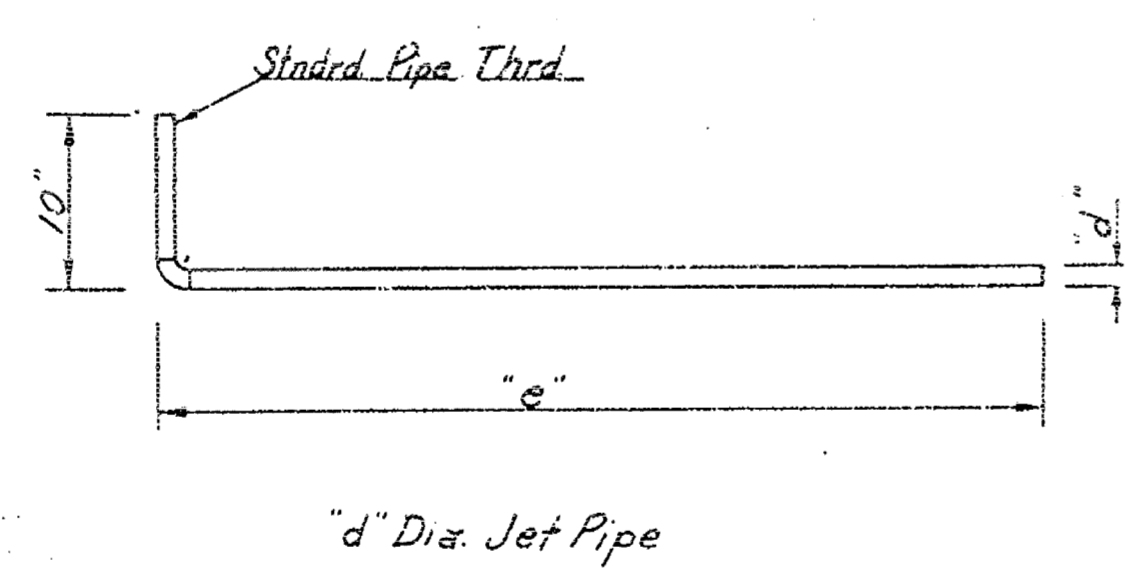
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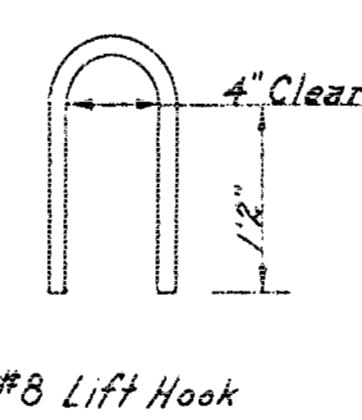
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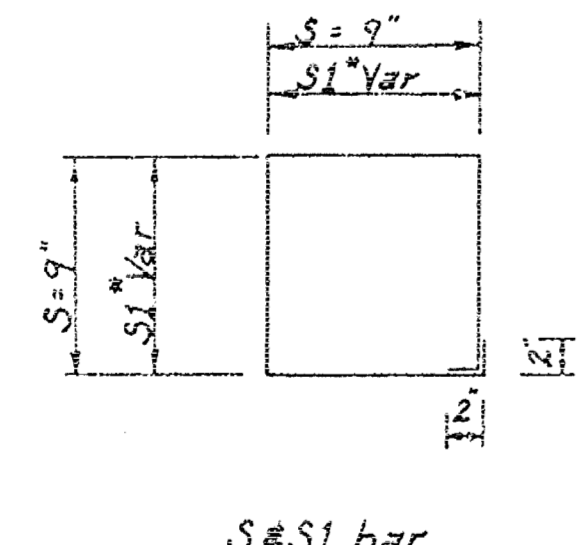
V bar



"d" Dia. Jet Pipe



#8 Lift Hook



S#1 bar

\*S1 - 15 bars, increase from "x" to "y" by "z" increments

**General Notes**  
 Design: According to AASHTO Specifications, 1947 Edition 7s/12,000 psi, Fc = 1,000 psi.  
 Concrete: Use class A throughout if piling are to be encased or otherwise protected. Use class B (AE) if piling are to form open bent, unless otherwise noted.  
 Reinforcing: All dimensions are to center of bars unless otherwise noted.  
 Jet Pipe: Standard pipe of dimensions shown unless otherwise approved by Engineer.  
 Curing: Piling shall be left in forms or otherwise properly cured for at least 7 days. Piling shall not be moved until concrete has attained its design strength or a minimum of 4 weeks after casting.  
 Payment: The cost of material and labor used for casting and driving of piles shall be included in the unit bid for concrete piles.  
 Handling: Piling shall only be lifted by handling hooks or by rigging within 18" of hook location.

Note: Concrete at end of piles shall be removed to expose reinforcing as stated elsewhere on plans. The length for payment of piles shall be as stated in sect 59.40 of the standard specifications of Kansas, 1951 Edition.

Pile Length	20'-6"	24'-6"	28'-6"	32'-6"	36'-6"	40'-6"
Bar	Size Length No.	Size Length No.	Size Length No.	Size Length No.	Size Length No.	Size Length No.
V	#7 20'-6" 4	#7 24'-2" 4	#7 28'-2" 4	#7 32'-2" 4	#6 36'-2" 4	#6 40'-2" 4
V1	#2 3'-4" 41	#2 3'-4" 49	#2 3'-4" 57	#2 3'-4" 65	#2 3'-4" 73	#2 3'-4" 81
S1	#2 Var 15	#2 Var 15	#2 Var 15	#2 Var 15	#2 Var 15	#2 Var 15
Lift Hook	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2
Jet Pipe	6"	6"	6"	6"	6"	6"
"a"	6'-0"	7'-2"	8'-4"	9'-6"	10'-8"	11'-10"
"b"	8'-0"	9'-2"	10'-4"	11'-6"	12'-8"	13'-10"
"c"				1 1/2"		
"d"				29'-0"		
"e"						
x-y-z	3/8" to 5/8" by 20'	3/8" to 5/8" by 24'	3/8" to 5/8" by 28'	3/8" to 5/8" by 32'	3/8" to 5/8" by 36'	3/8" to 5/8" by 40'
Concrete	174 Cu. Yds.	114 Cu. Yds.	134 Cu. Yds.	155 Cu. Yds.	175 Cu. Yds.	195 Cu. Yds.
Rebar	207 Lbs.	247 Lbs.	284 Lbs.	321 Lbs.	472 Lbs.	524 Lbs.

Pile Length	37'-0"	40'-0"	43'-0"	46'-0"	49'-0"
Bar	Size Length No.	Size Length No.	Size Length No.	Size Length No.	Size Length No.
V	#6 36'-8" 4	#7 40'-8" 4	#7 45'-8" 4	#7 50'-8" 4	#7 55'-8" 4
V1	#6 33'-0" 4	#6 35'-0" 4	#6 37'-0" 4	#6 39'-0" 4	#6 41'-0" 4
S1	#2 Var 15	#2 Var 15	#2 Var 15	#2 Var 15	#2 Var 15
Lift Hook	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2	#8 3'-0" 2
Jet Pipe	1	1	1	1	1
"a"	10'	8'			
"b"	10'-10"	13'-0"			
"c"	11'-11"	16'-0"			
"d"		1 1/2"			
"e"		41'-0"			
x-y-z	3/8" to 5/8" by 37'	3/8" to 5/8" by 40'	3/8" to 5/8" by 43'	3/8" to 5/8" by 46'	3/8" to 5/8" by 49'
Concrete	182 Cu. Yds.	243 Cu. Yds.			
Rebar	482 Lbs.	356 Lbs.			

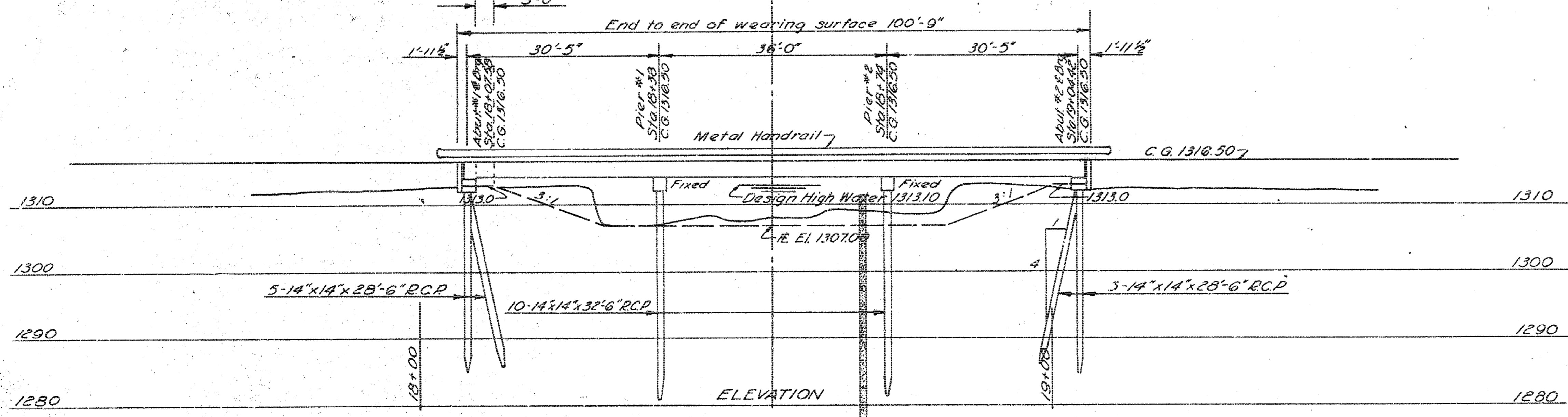
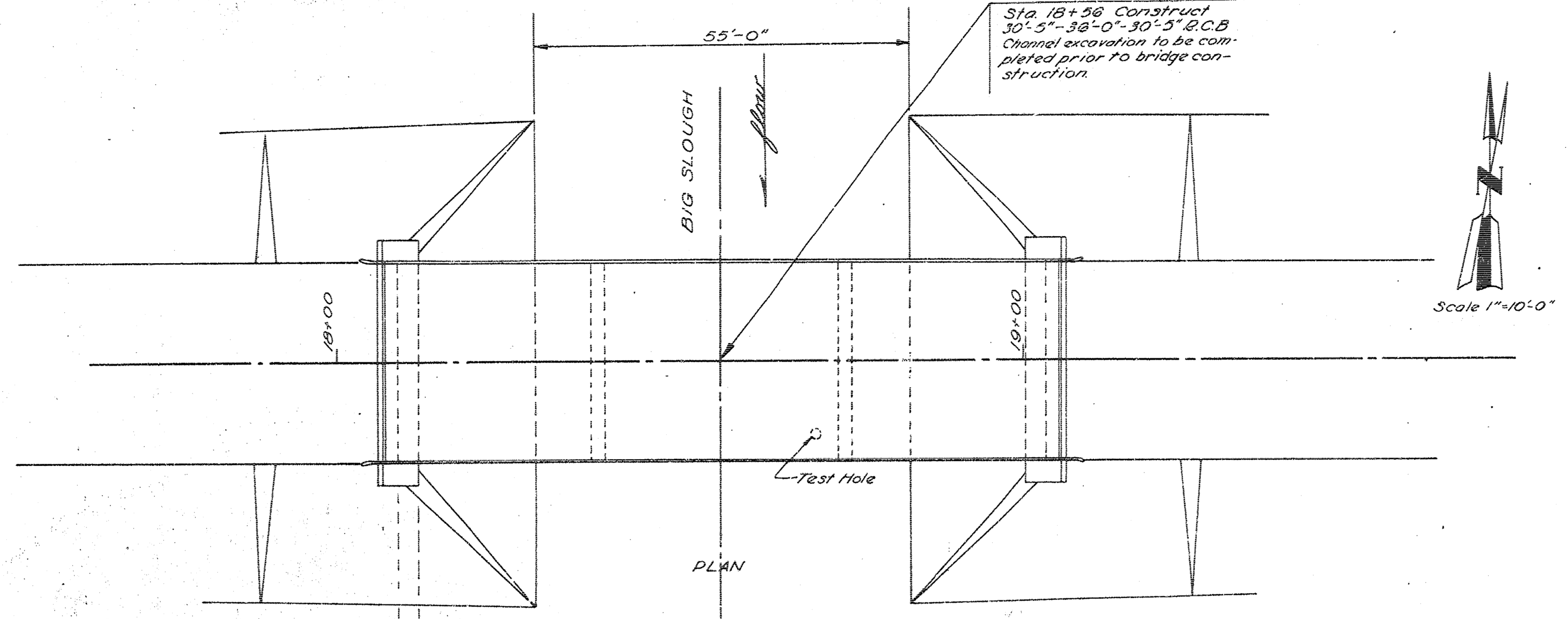
**14" x 14" Re. Conc. Piling**  
**BRIDGE NO. 618-22-2775**  
**& 618-22-1856**

PREPARED BY  
**SEDGWICK COUNTY ENGINEERING DEPT.**  
**RUFUS S. KIRK — COUNTY ENGINEER**

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
		Schwab	Houserman		10
		DATE 12-51	1-52		
		PLANFILE	TOTAL SHEETS		

To 701# 12/3/52

C. 18-22-2775 #10



**GENERAL NOTES**

Design: According to A.A.S.H.O. Specifications, Edition of 1949, 11-20-54. Loading: 15,000 psi, 16,000 psi.  
 Soundings Taken by Sedgwick County with 1/4" jet.  
 Piling: Concrete Piling to be driven to a computed resistance of 23 tons per pile.  
 Concrete: Use Class AA concrete thruout. Bevel all exposed edges with a 1/4" triangular moulding.  
 Forms: Contractor shall use pre-finished metal forms owned by SEDGWICK COUNTY.  
 Embankment: To be constructed by SEDGWICK COUNTY or others. No earthwork is to be considered a part of this project except at pier and abutment locations—the cost of which is to be included in the unit price bid for piling.

**GENERAL CONSTRUCTION NOTES**

Timber cribbing at the centerline of each span on this project will be required.  
 Two sets of short forms and four sets of long forms are available for these projects. Since the concrete in full span ahead of any forms to be removed must have attained its design strength before removal of these forms it is suggested that high-early strength concrete be used.  
 Forms for this project shall be picked up by the contractor at the SEDGWICK COUNTY YARDS, R15 Stillwell, Wichita, and returned to this location unless otherwise instructed by the Engineer. (See Special Provisions in Specifications and Proposals Booklet.)  
 The wearing surface and all other exposed surfaces of wings, caps, abutments, and piling shall be cured and protected in accordance with Sec. 5048 of the Standard Specifications for State Road & Bridge Construction, Edition of 1954. As an alternate, a paraffin base curing compound applied immediately after finishing of concrete, and covered with dry burlap, or any suitable material satisfactory to the Engineer in charge, for a minimum of 72 hours may be used.

D.A. = 30 square miles C:025  
 Waterway provided #14 sq ft

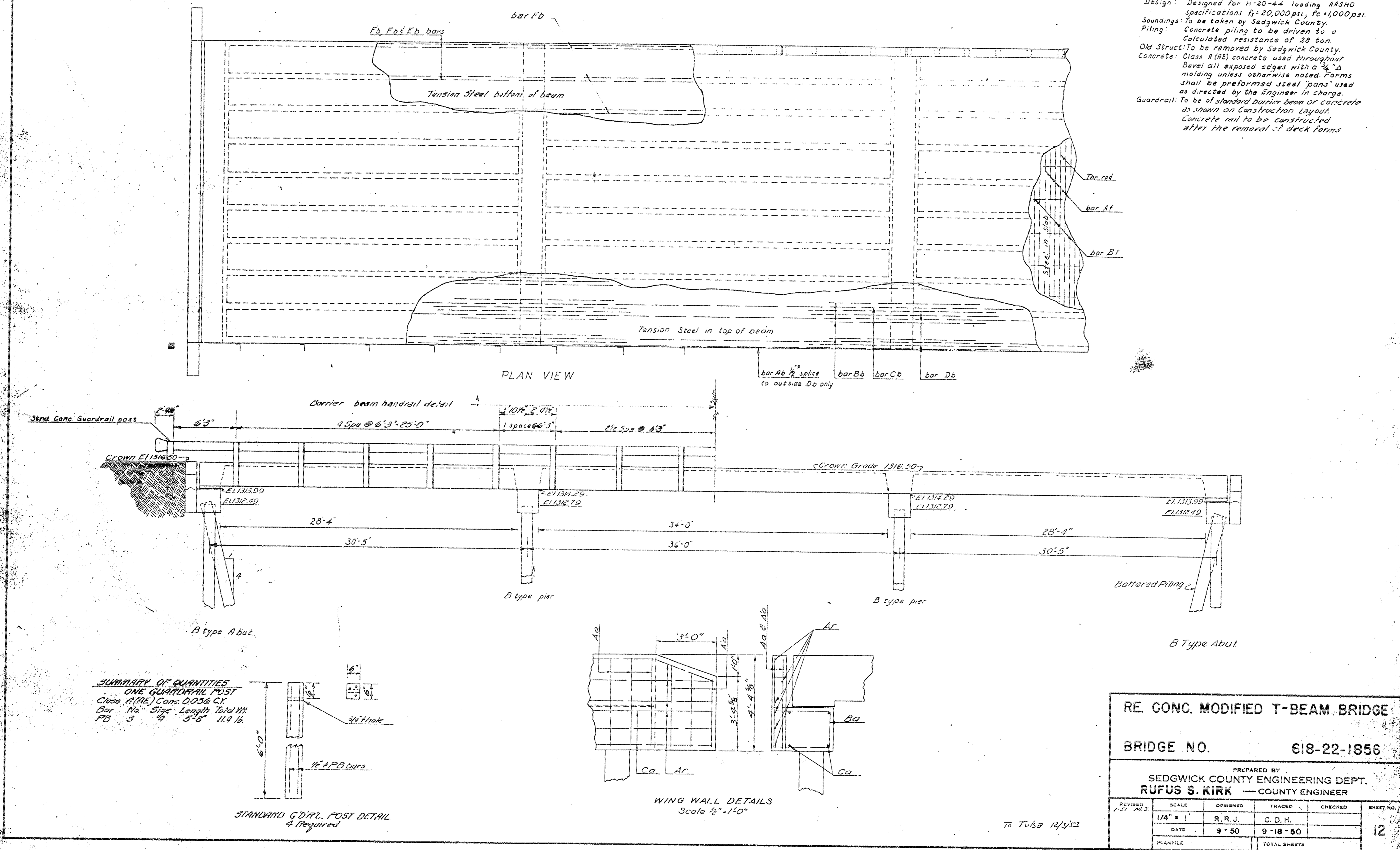
CONSTRUCTION LAYOUT					
BRIDGE NO. 618-22-1856					
PREPARED BY SEDGWICK COUNTY ENGINEERING DEPT. RUFUS S. KIRK — COUNTY ENGINEER					
REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1"=10'	W.J.F.	C.J.F.		11
		DATE	11-53	11-53	
		PLANFILE	TOTAL SHEETS		

70 7/132 12/4/52

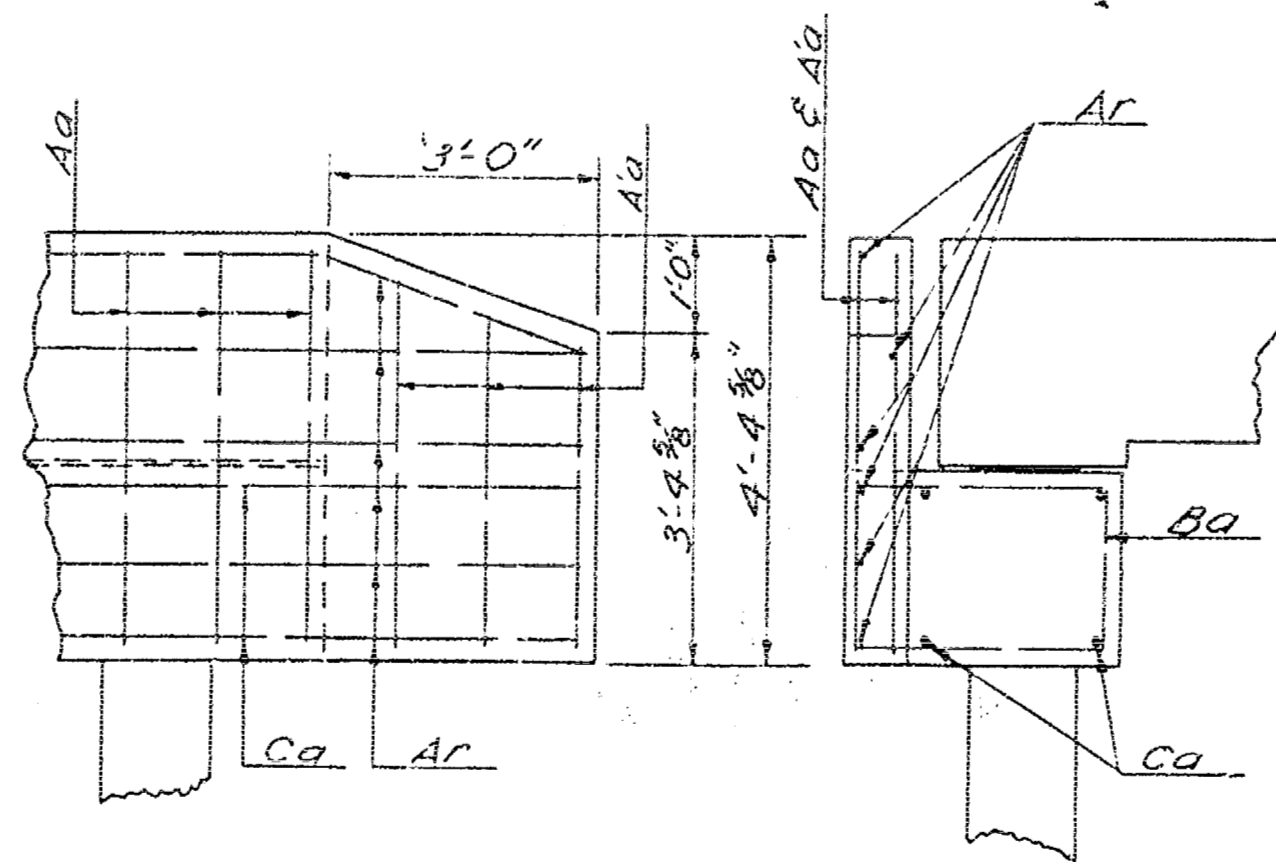
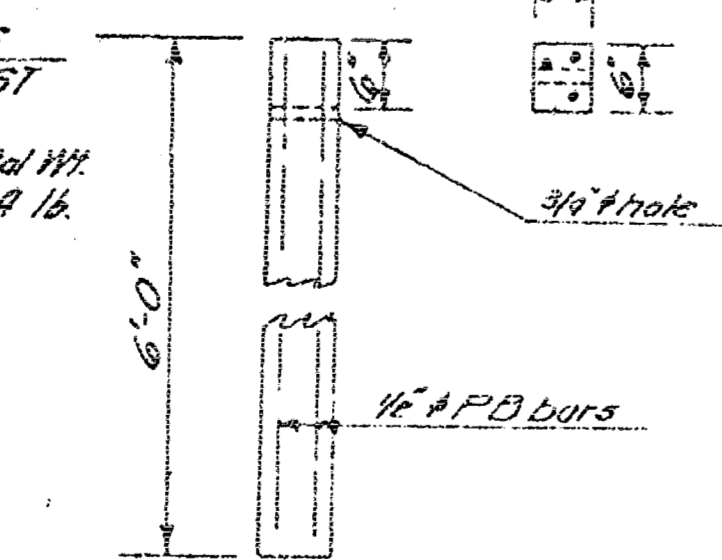
618-22-1856 Sh. #11 of 14

**GENERAL NOTES**

Design: Designed for H-20-44 loading AASHTO specifications  $f_c = 20,000 \text{ psi}$ ;  $f_s = 100,000 \text{ psi}$ .  
 Soundings: To be taken by Sedgwick County.  
 Piling: Concrete piling to be driven to a calculated resistance of 28 ton.  
 Old Struct: To be removed by Sedgwick County.  
 Concrete: Class R (RE) concrete used throughout.  
 Bevel all exposed edges with a  $\frac{1}{4}$ "  $\Delta$  molding unless otherwise noted. Forms shall be preformed steel pans used as directed by the Engineer in charge.  
 Guardrail: To be of standard barrier beam or concrete as shown on Construction Layout. Concrete rail to be constructed after the removal of deck forms.



**SUMMARY OF QUANTITIES**  
 ONE GUARDRAIL POST  
 Class R (RE) Conc. 0.056 C.F.  
 Bar No. Size Length Total Wt.  
 PD 3 #4 5'8" 119 lb



**RE. CONC. MODIFIED T-BEAM BRIDGE**

BRIDGE NO. 618-22-1856

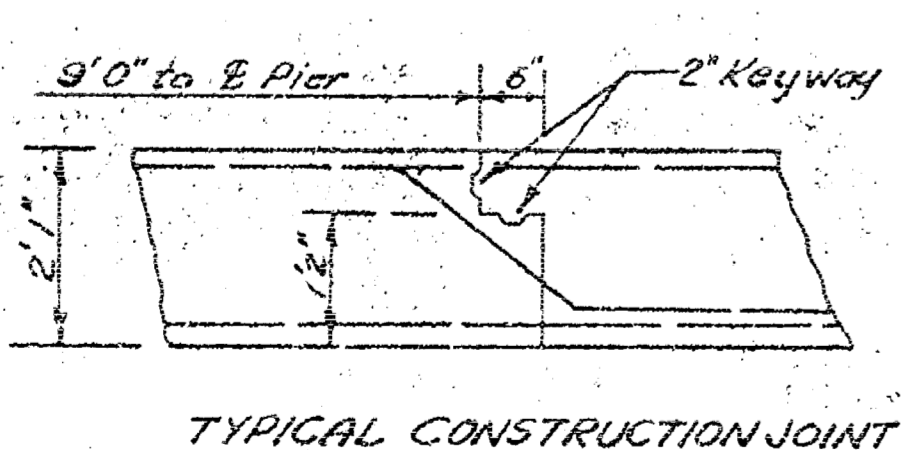
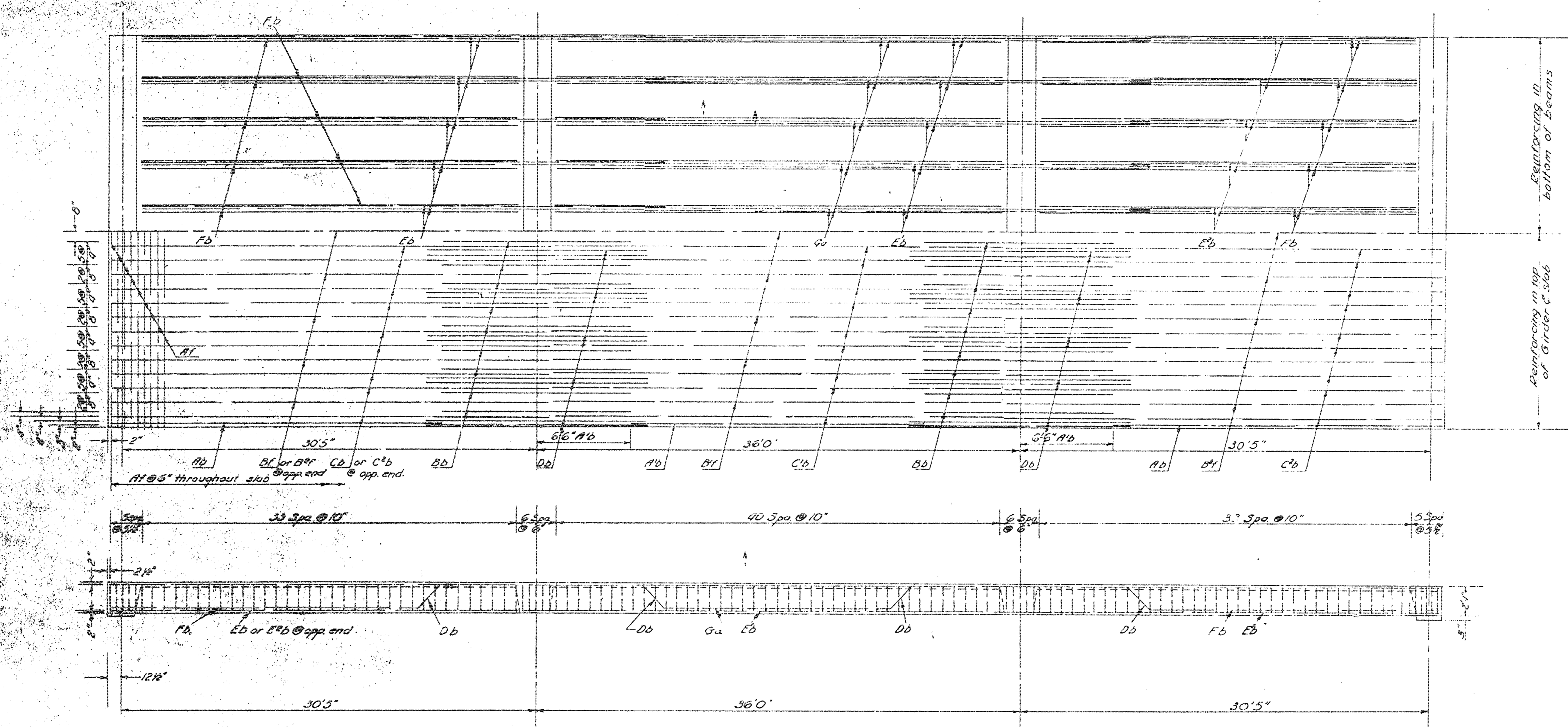
PREPARED BY  
 SEDGWICK COUNTY ENGINEERING DEPT.  
 RUFUS S. KIRK — COUNTY ENGINEER

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
1-25-83	1/4" = 1'	R. R. J.	C. D. H.		12
		DATE	9-50	9-18-80	
		PLANFILE		TOTAL SHEETS	

To Tulsa 12/3/83

618-22-1856 Sh. #12 of 14





**SUMMARY OF QUANTITIES**

30'5" - 1 @ 36'-30'5" Continuous Spans; 27'2" Roadway; Metal Handrail

Bar	No.	Size	Length	Weight	Notes
A1	12	#4	334.0'	27.0	
A2	12	#4	334.0'	27.0	
A3	12	#4	334.0'	27.0	
A4	12	#4	334.0'	27.0	
A5	12	#4	334.0'	27.0	
A6	12	#4	334.0'	27.0	
A7	12	#4	334.0'	27.0	
A8	12	#4	334.0'	27.0	
A9	12	#4	334.0'	27.0	
A10	12	#4	334.0'	27.0	
A11	12	#4	334.0'	27.0	
A12	12	#4	334.0'	27.0	
B1	12	#4	334.0'	27.0	
B2	12	#4	334.0'	27.0	
B3	12	#4	334.0'	27.0	
B4	12	#4	334.0'	27.0	
B5	12	#4	334.0'	27.0	
B6	12	#4	334.0'	27.0	
B7	12	#4	334.0'	27.0	
B8	12	#4	334.0'	27.0	
B9	12	#4	334.0'	27.0	
B10	12	#4	334.0'	27.0	
B11	12	#4	334.0'	27.0	
B12	12	#4	334.0'	27.0	
C1	12	#4	334.0'	27.0	
C2	12	#4	334.0'	27.0	
C3	12	#4	334.0'	27.0	
C4	12	#4	334.0'	27.0	
C5	12	#4	334.0'	27.0	
C6	12	#4	334.0'	27.0	
Concrete Class #1			1366 Cu Yd		Metal Handrail 212.5 Lin Ft.
Reinforcing Steel			27,590 Lb.		Structural Steel 6,460 Lb.
14"x14" Conc. Piles			610 Lin Ft.		Lin Ft.
Bearing Devices			370 Lb.		Lin Ft.

\* Cut 8 @ 3'-0"  
8 @ 3'-4"  
8 @ 3'-8"

B

SEDC

REVISED

1/2"

1/4"

1/8"

1/16"

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