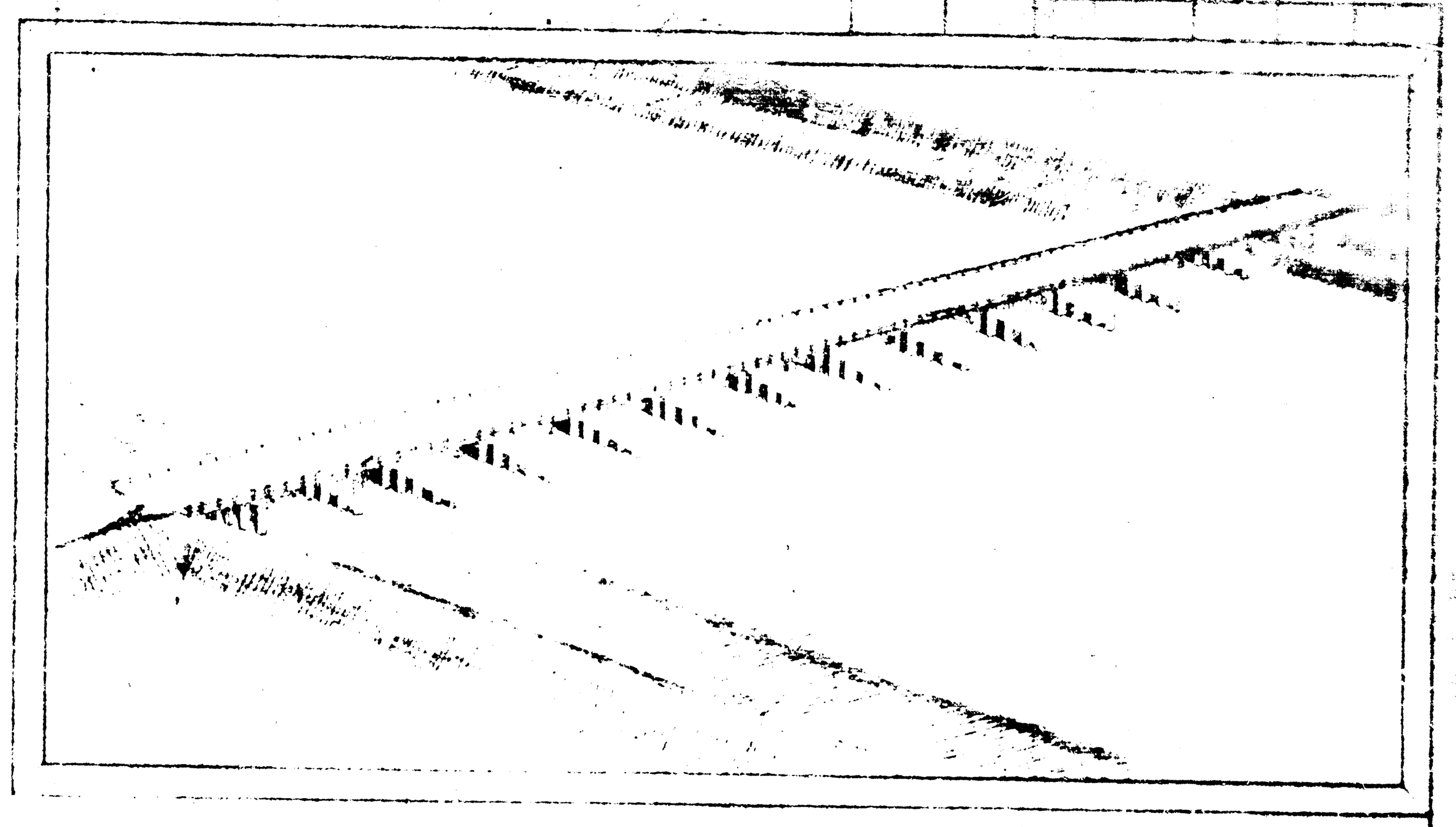
STATE OF KANSAS
STATE HIGHWAY COMMISSION
SEDGWICK COUNTY

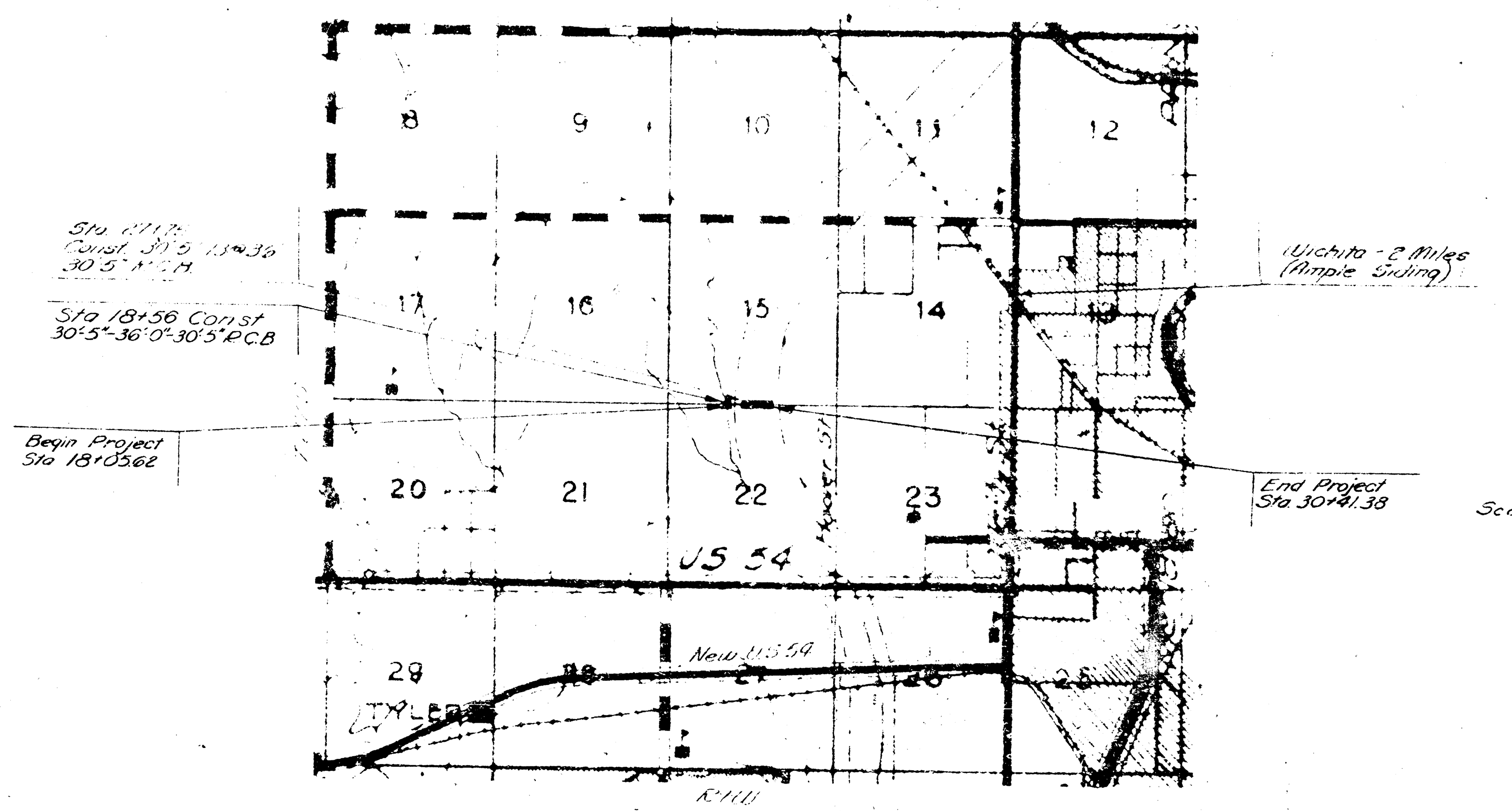
PLAN AND PROFILE

PROJECT F. C. 314 (B)

INDEX OF SHEETS



	(COMBINED)
Concrete Class A (AE)	794.1 C.Y.
Reinforcing Steel	169,100 Lb.
14"x14" Conc. Piling	4,070 L.F.
Bearing Devices	7,570 Lb.
Metal Handrail	1,291.5 L.F.
Structural Steel	22,150 Lb.



Scale 2" = 1 mile

BRIDGES ONLY

CONVENTIONAL SIGNS

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

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

APPROVED

COUNTY COMMISSIONER

DATE

RECOMMENDED FOR APPROVAL DATE

ENGINEER OF SECONDARY ROADS
STATE HIGHWAY COMMISSION OF KANSAS

APPROVED DATE

STATE HIGHWAY ENGINEER
STATE HIGHWAY COMMISSION OF KANSAS

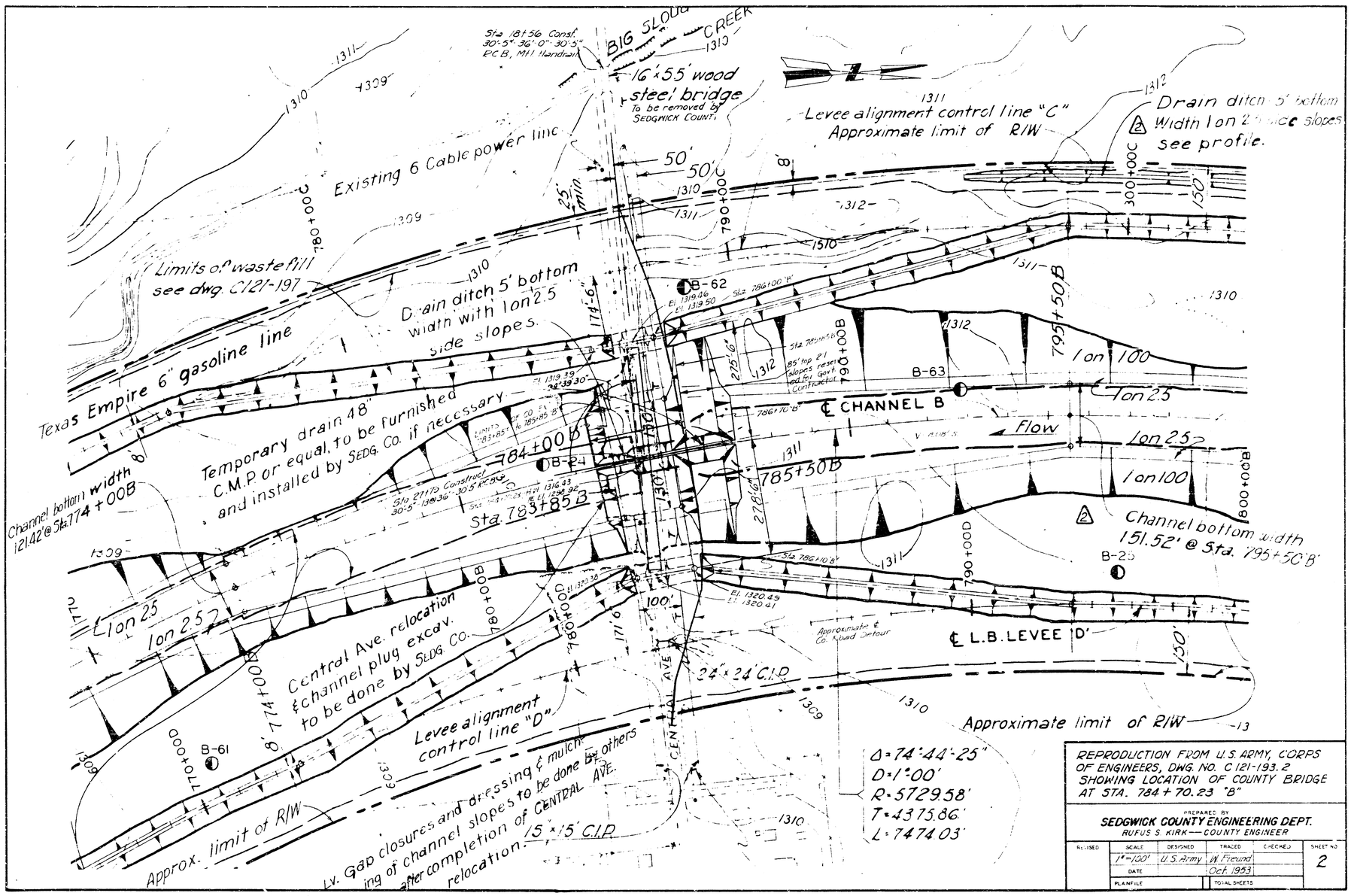
RECOMMENDED FOR APPROVAL DATE

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED DATE

DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

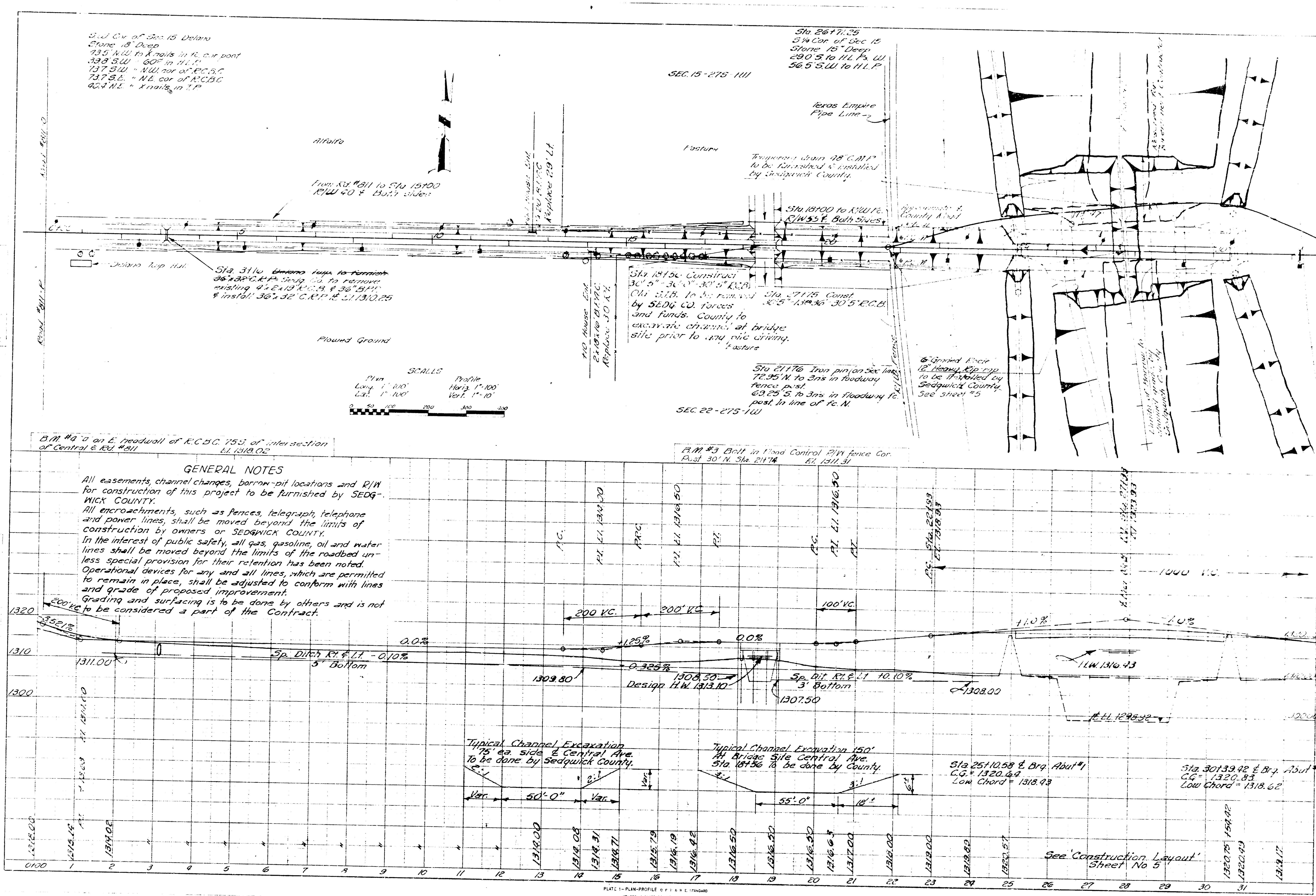
618-22-1856 AND 618-22-2775



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
	DATE		Oct. 1953		
	PLANFILE		TOTAL SHEETS		


S.W. Cor. of Sec. 15 Delano
Stone 18" Deep
43.5' N.W. to X nails in fc. cor post
39.8' S.W. " 60^d in H.L.P.
73.7' S.W. " N.W. cor of R.C.B.C.
73.7' S.E. " N.E. cor of R.C.B.C.
40.4' N.E. " X nails in T.P.
SEC. 15-27S-1W
Sta. 26+71.25
S 1/4 Cor. of Sec. 15
Stone 15" Deep
29.0' S. to H.L. Ps. W.
56.5' S.W. to H.L.P.
Texas Empire Pipe Line
Alfalfa
Pasture
Temporary drain 48" C.M.P. to be furnished & installed by Sedgwick County.
From Rd. #811 to Sta. 15+00 R/W 40' ¢ Both sides
Replace 29' Lt.
Sta. 18+00 to R/W Fc. R/W 55' ¢ Both Sides
Approximate ¢ County Road
Road #811-P
Delano Twp. Hal.
Sta. 31+10 36"x32" C.R.P. Sedg. Co. to remove existing 4'x2x19' R.C.B. & 36" B.P.P. & install 36"x32" C.R.P. Fl. El. 1310.25
Sta. 18+56 Construct 30'5"-36'0"-30'5" R.C.B. Old S.T.B. to be removed by SEDG. CO. forces and funds. County to excavate channel at bridge site prior to any pile driving.
Sta. 27+75 Const. 30'5"-13@36'-30'5" R.C.B.
+10 House Ent. 2x18x10' B.P.A.C. Replace 30' Rt.
Plowed Ground
SCALES
Plan Long. 1"=100' Lat. 1"=100'
Profile Horiz. 1"=100' Vert. 1"=10'
0 50 100 200 300 400
Sta. 21+76 Iron pin (on Sec. line) 72.95' N. to 3n's in floodway fence post. 69.25' S. to 3n's in floodway fc. post. In line of fc. N.
SEC. 22-27S-1W
R/W Fence
6" Graded Rock 12" Heavy Rip-rap to be installed by Sedgwick County. See sheet #5
Limits of Borrow to channel grade by Sedgwick County
B.M. #4 "□" on E. headwall of R.C.B.C. 75' S. of intersection of Central & Rd. #811 El. 1318.02
B.M. #3 Bolt in Flood Control R/W fence Cor. Post 30' N. Sta. 21+74 El. 1311.31
GENERAL NOTES
All easements, channel changes, borrow-pit locations and R/W for construction of this project to be furnished by SEDGWICK COUNTY.
All encroachments, such as fences, telegraph, telephone and power lines, shall be moved beyond the limits of construction by owners or SEDGWICK COUNTY.
In the interest of public safety, all gas, gasoline, oil and water lines shall be moved beyond the limits of the roadbed unless special provision for their retention has been noted.
Operational devices for any and all lines, which are permitted to remain in place, shall be adjusted to conform with lines and grade of proposed improvement.
Grading and surfacing is to be done by others and is not to be considered a part of the Contract.
1320
1310
1300
200' V.C.
-3.521%
1311.00
0.0%
Sp. Ditch Rt. & Lt. -0.10%
5' Bottom
P.C.
P.I. El. 1314.00
P.R.C.
P.I. El. 1316.50
P.T.
200 V.C.
200' V.C.
+1.25%
0.0%
-0.325%
1309.80
1308.50
Design H.W. 1313.10
1307.50
P.C.
P.I. El. 1316.50
P.T.
100' V.C.
Sp. Dit. Rt. & Lt. +0.10%
3' Bottom
1308.00
P.C. Sta. 22+93 El. 1318.93
1000' V.C.
+1.0%
-1.0%
H.W. 1316.43
¢ El. 1298.32
Typical Channel Excavation 75' ea. side ¢ Central Ave. To be done by Sedgwick County.
2:1
Var.
50'-0"
Typical Channel Excavation 150' At Bridge Site Central Ave. Sta. 18+56 To be done by County.
3:1
55'-0"
18'±
6'±
Sta. 25+10.58 ¢ Brg. Abut #1
C.G. = 1320.64
Low Chord = 1318.43
Sta. 30+39.42 ¢ Brg. Abut #2
C.G. = 1320.83
Low Chord = 1318.62
See 'Construction Layout' Sheet No 5
1318.00
1315.14
P.I. 1318.63 El. 1311.00
1314.02
1314.00
1314.08
1314.31
1314.71
1315.79
1316.19
1316.42
1316.50
1316.50
1316.50
1316.63
1317.00
1318.00
1319.00
1319.82
1320.57
1320.75
+54.42
1320.49
1319.17
0+00 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
PLATE 1 - PLAN-PROFILE
KEUFFEL & ESSER CO., NEW YORK

SEC 15 - 27S - 1W

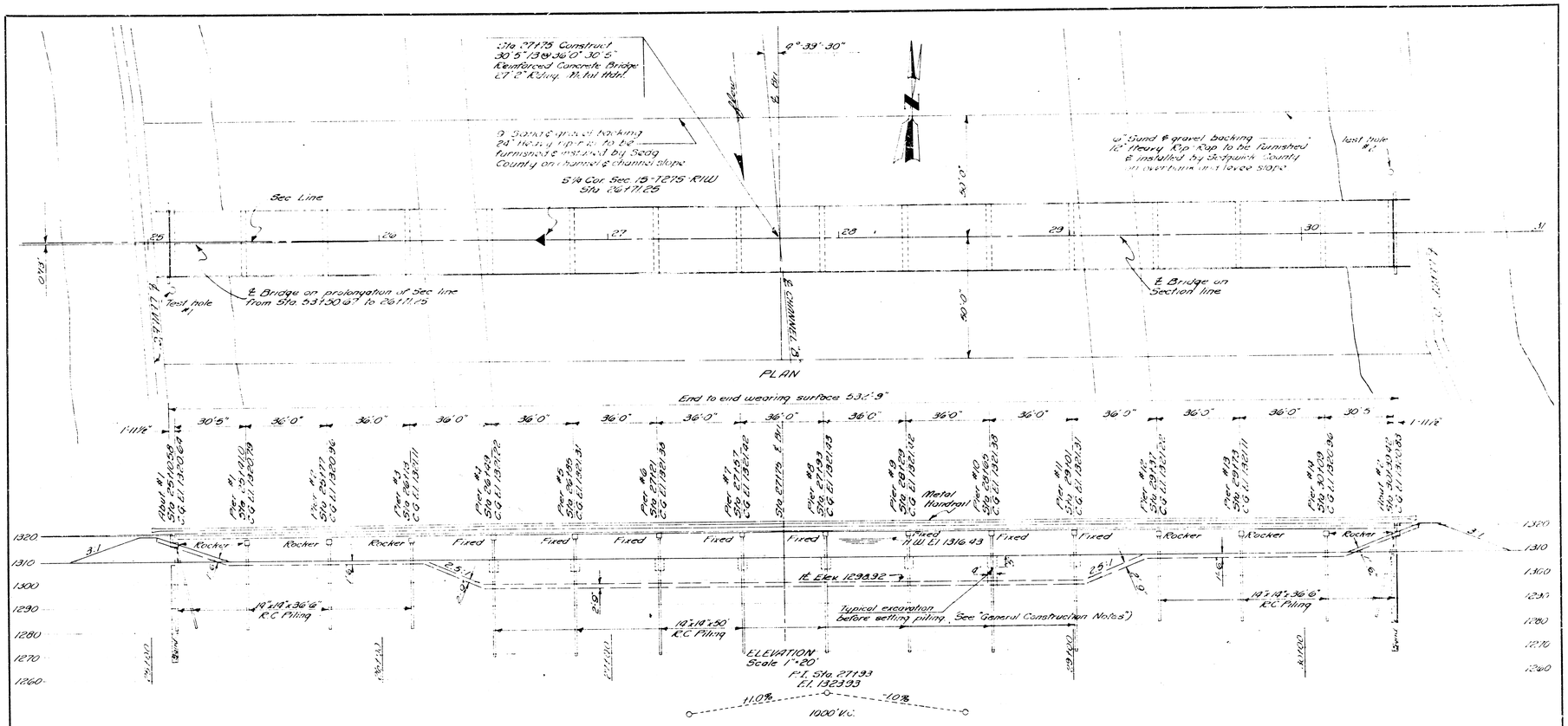
SEC 22 - 27S - 1W

PLAN

PROFILE

See "Construction Layout" Sheet No. 15

618-20-2775 Sheet No. 4 of 14



FLOODWAY DATA

Top of Levee 'C' El. 1319.96
Top of Levee 'D' El. 1320.91
Bottom of channel El. 1298.92
Highwater El. 1316.43
Width of channel @ bottom 260'
Side slopes of channel 1 on 2.5
Side slopes of Levees 1 on 3
Width of floodway, ctr. to ctr. of levees 559'
Estimated flow 96,500
Estimated Velocity 8.08'/Sec.

GENERAL NOTES

Design: According to AASHO Specifications, Edition of 1949 H20 44 Loading; f_s = 20,000 psi; f'_c = 1,000 psi.

Soundings: Taken by SEDGWICK COUNTY with ¾" jet.

Filing: Concrete piling to be driven to a computed resistance of 128 tons per pile.

Concrete: Use class A-985 concrete throughout. Bevel all exposed edges with a ¾" triangular molding.

Forms: Contractor shall use preformed 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 locations in channelway.

GENERAL CONSTRUCTION NOTES

Timber cribbing at centerline of each span on this project will be required.

Two sets of short forms and five sets of long forms are available for these projects. Since the concrete in a 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 cement be used.

Forms for these projects shall be picked up by Contractor at the SEDGWICK COUNTY YARDS, 1015 Stillwell, Wichita, and returned to this location unless otherwise instructed by the Engineer. (See "Special Provisions in Specifications & Proposal Booklet.)

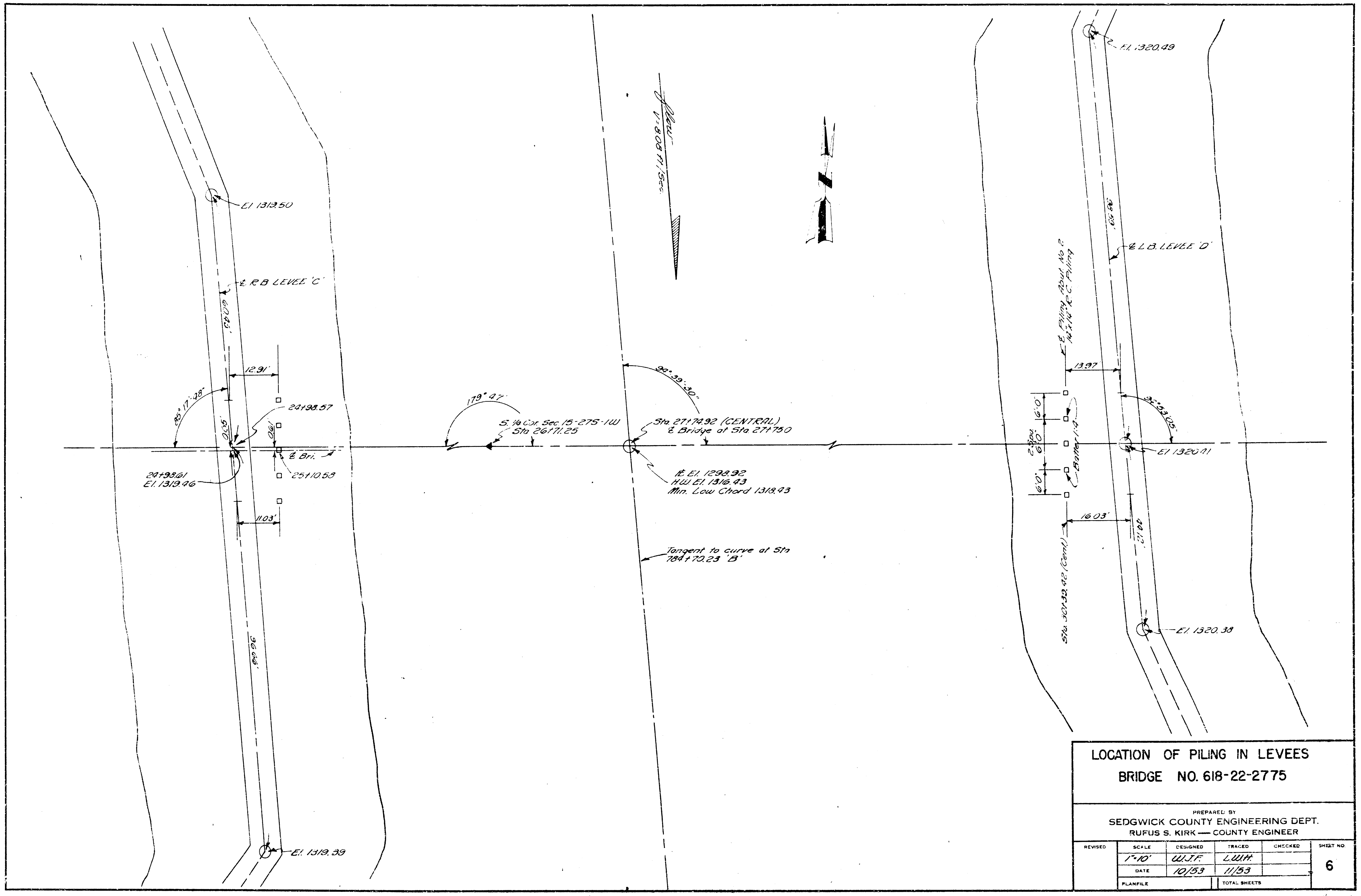
The wearing surface and all other exposed surfaces of wings, caps, abutments and piling shall be cured and protected in accordance with Section 5048 of the Standard Specifications for State Road & Bridge Construction, Edition of 1951. As an alternate, a paraffin base curing compound applied immediately 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.

Since the speed and simplicity of these projects will be greatly increased if construction is well underway before the waterway unit levees are constructed, work on forming of piling must start within two weeks and pile driving must start within three weeks after the contract is let. A trench 5'-0 x 28' to be excavated before setting piling and backfilled before any farm work for caps proceeds at each pier location in channelway. Excavation and back filling not to be paid for directly, but shall be included in the unit price bid for concrete piling.

CONSTRUCTION LAYOUT
BRIDGE NO. 618-22-2775

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

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO
	1"=20'	W.J.F.	L.W.H.		5
	DATE	11/53	11/53		
	PLANFILE		TOTAL SHEETS		

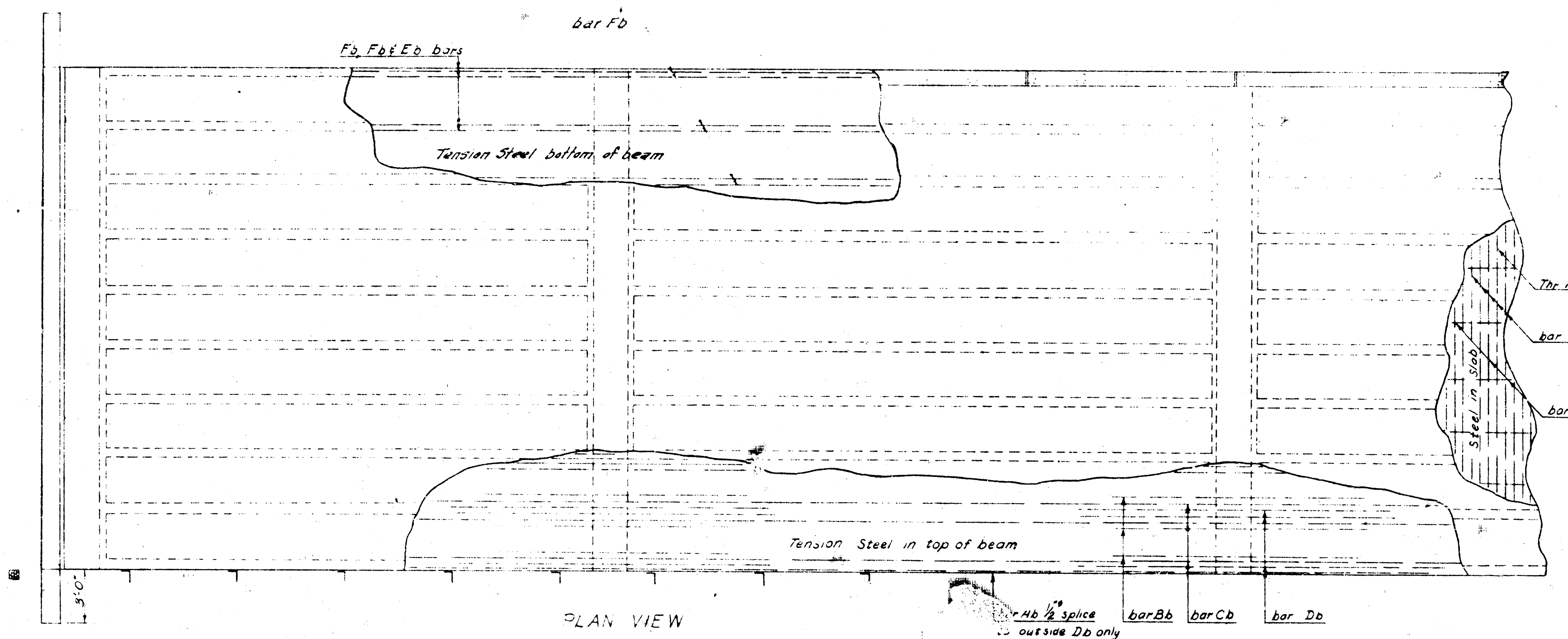


LOCATION OF PILING IN LEVEES
BRIDGE NO. 618-22-2775

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 #6 of 14



GENERAL NOTES

Design: Designed for H-20-44 loading AASHO specifications fs = 20,000 psi, fc = 1,000 psi

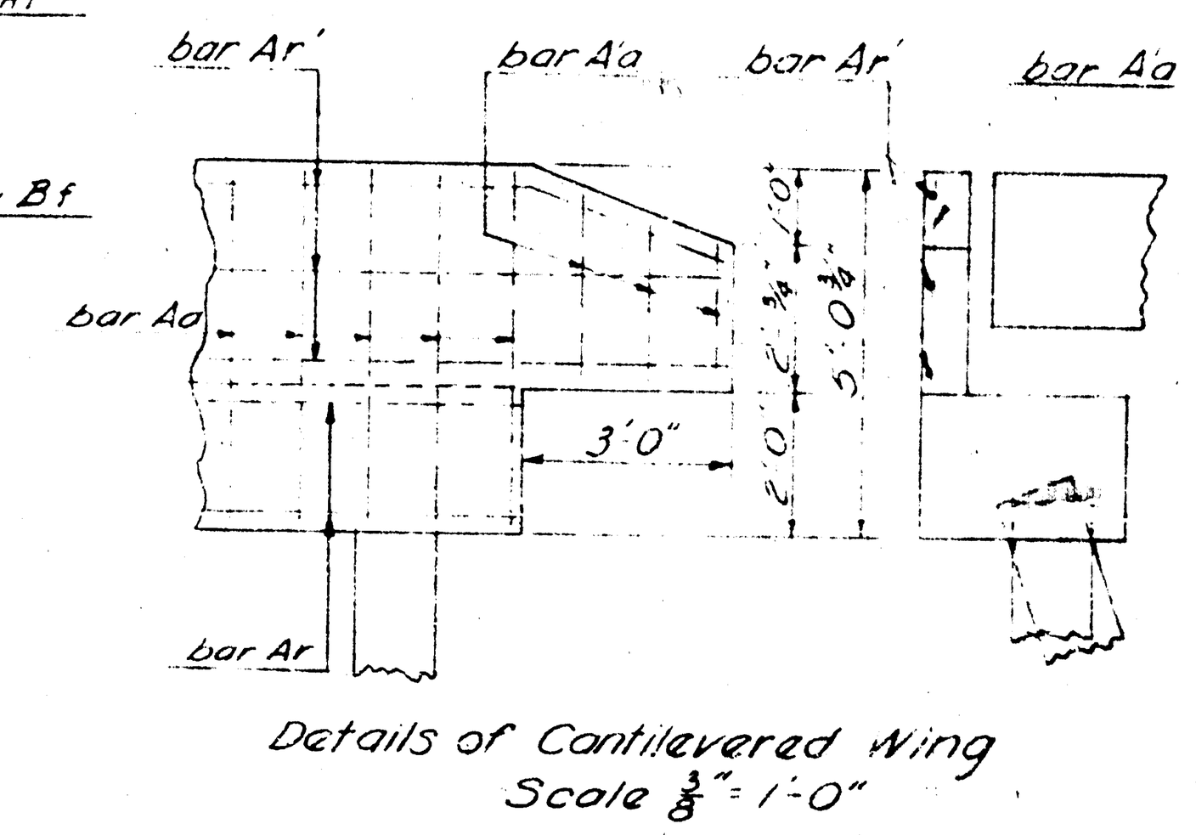
Soundings: To be taken by Sedgwick County

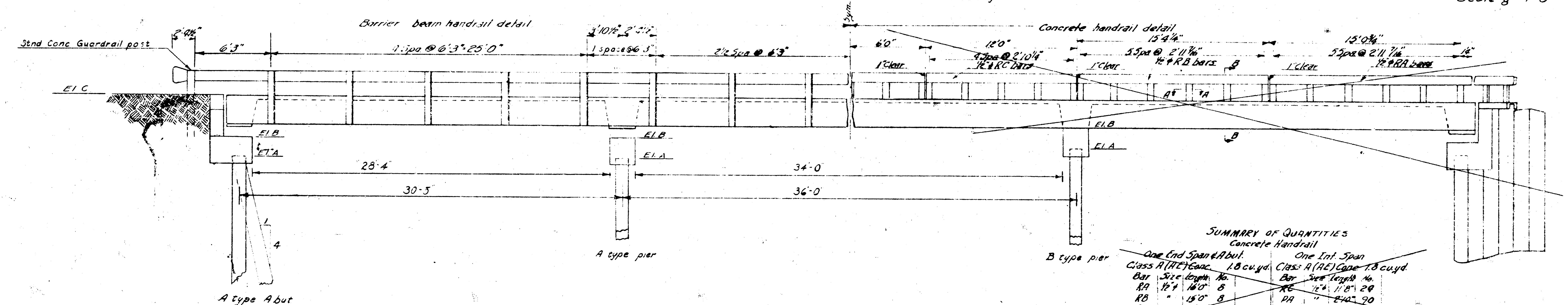
Piling: Concrete piling to be driven to a Calculated resistance of 28 ton

~~Old Struct: To be removed by Sedgwick County~~

Concrete: Class A (AE) concrete used throughout. Bevel all exposed edges with a ¾" Δ 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. Class A (AE) Conc. 1.8 cu.yd.~~

Bar	Size	Length	No.
RA	½"ф	16'0"	8
RB	"	15'0"	8
RD	"	6'11"	8
PA	"	2'10"	90

Total Weight 373 lb.

~~One Int. Span Class A (AE) Conc. 1.8 cu.yd.~~

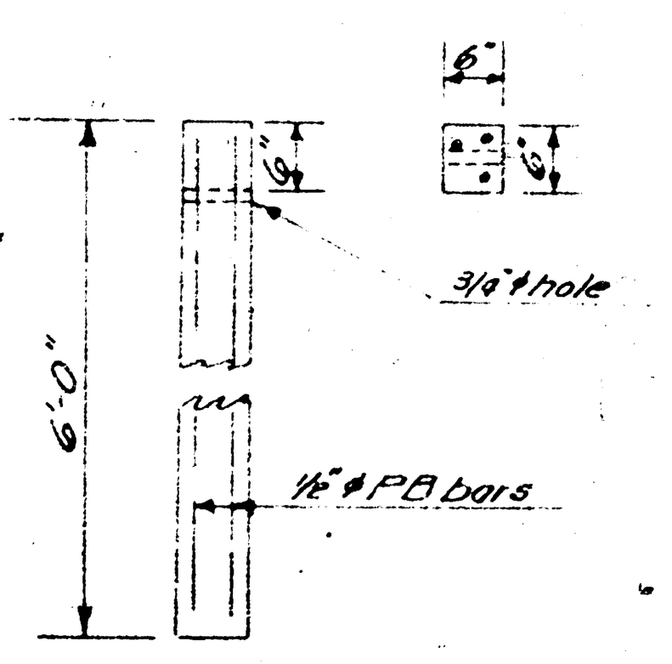
Bar	Size	Length	No.
RE	½"ф	11'8"	29
PA	"	2'10"	90

~~Total Weight 357 lb.~~

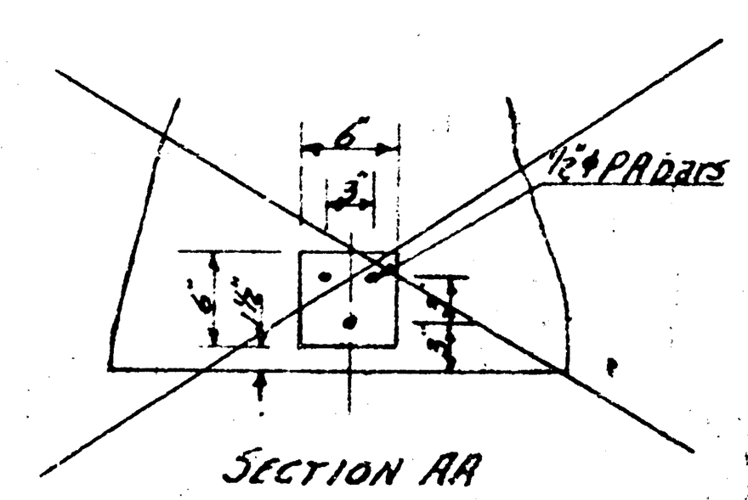
SUMMARY OF QUANTITIES
ONE GUARDRAIL POST

Class A(AE) Conc. 0.056 C.Y.

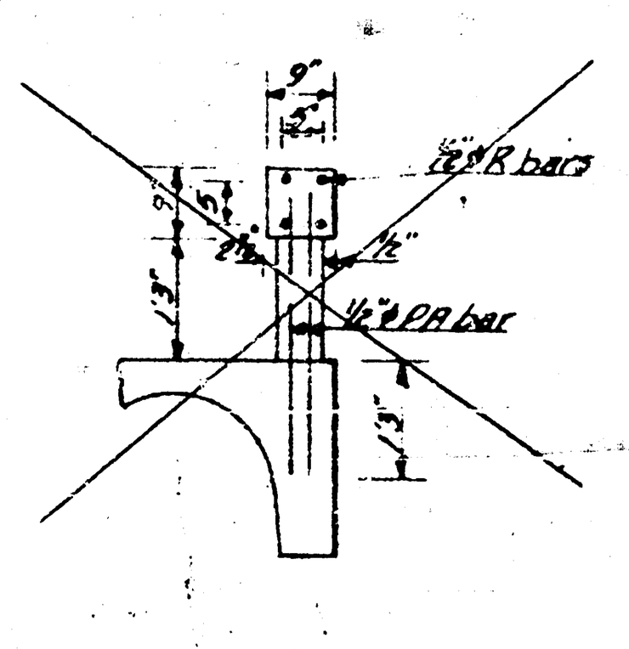
Bar	No.	Size	Length	Total Wt.
PB	3	4	5'8"	11.9 lb.



STANDARD G'D'R'L. POST DETAIL
4 Required



SECTION AA



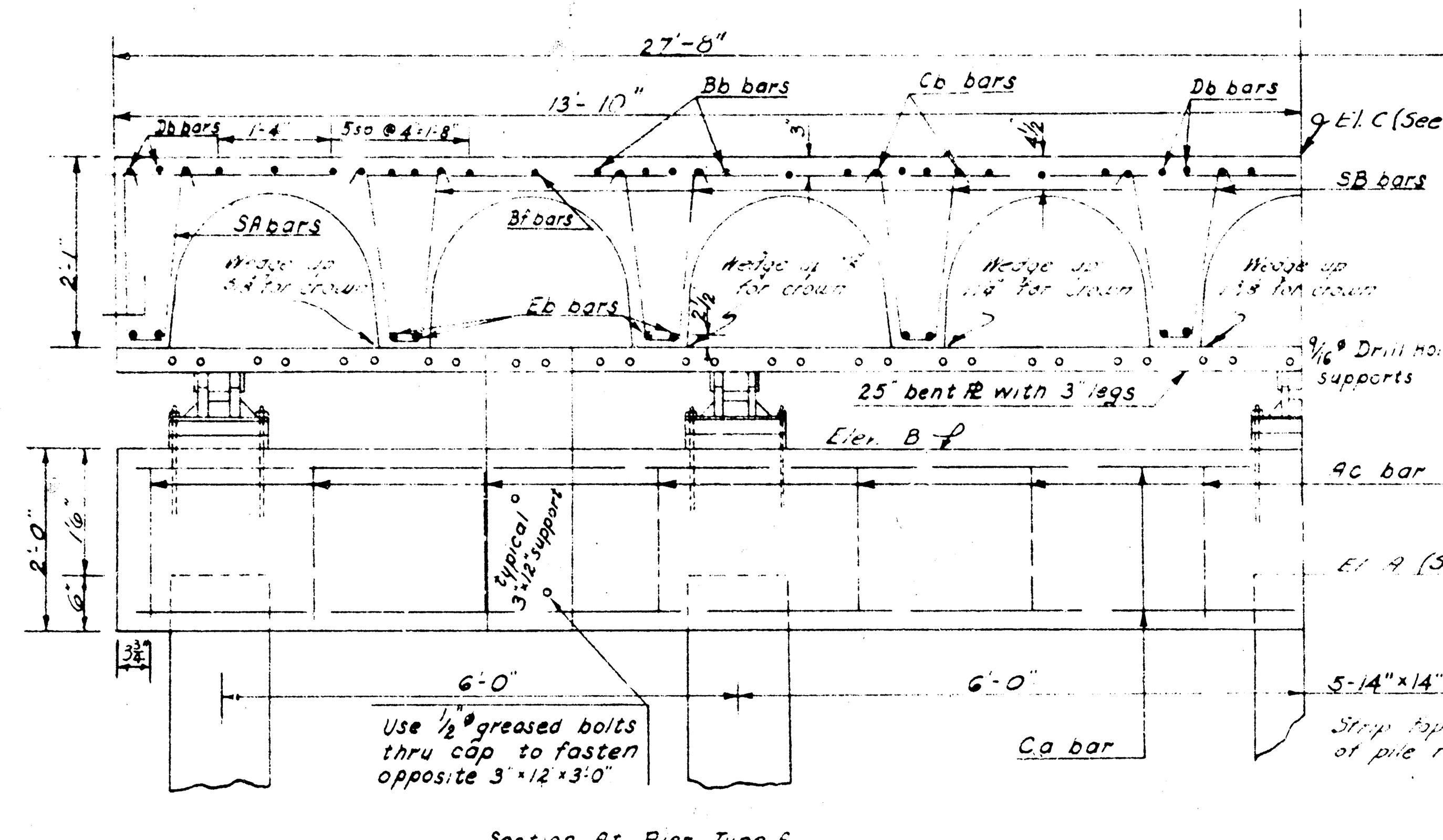
SECTION BB

~~Note: PA bars to be placed immediately after slab screeding~~

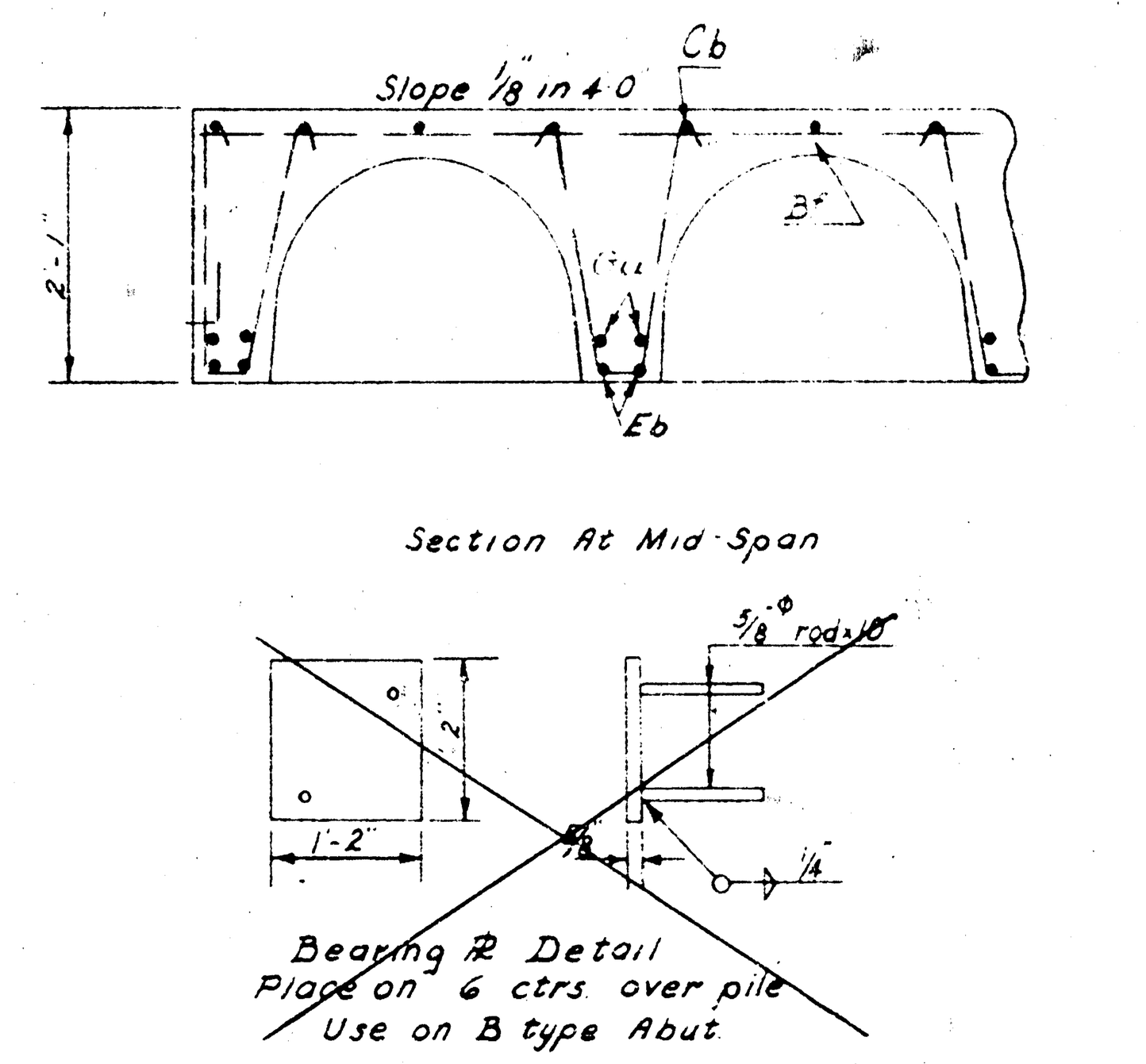
RE. CONC. MODIFIED T-BEAM BRIDGE
BRIDGE NO. 618-22-2775

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

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
2-51 M.S. 11-53 C.L.F.	1/4" = 1'	R.R.J.	C.D.H.		7
	DATE	9-50	9-18-50		
	PLANFILE		TOTAL SHEETS		

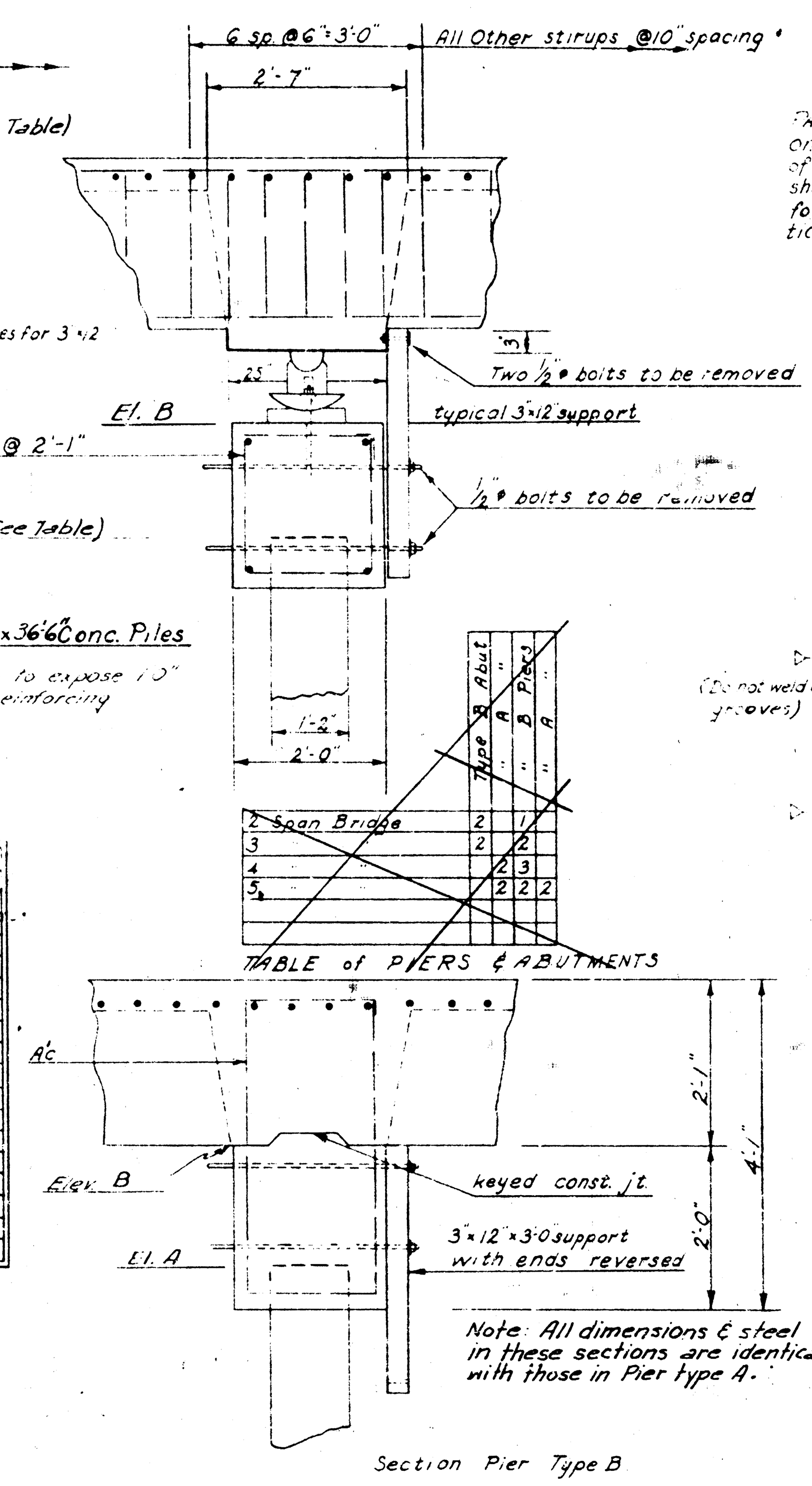


Section At Pier Type A
Use at Pier No's. 1, 2, 3, 12, 13 & 14



Section At Mid-Span

Bearing ℞ Detail
Place on 6" ctrs over pile
Use on B type Abut.



Note: All dimensions & steel in these sections are identical with those in Pier type A.

Section Pier Type B
Use at Pier No's. 4, 5, 6, 7, 8, 9, 10, & 11

TABLE OF ELEVATIONS:

	Abut. #1	Pier #1	Pier #2	Pier #3
Elev. A	1315.95	1316.10	1316.27	1316.42
Elev. B	1317.45	1317.60	1317.77	1317.92
Elev. C	1320.64	1320.79	1320.96	1321.11
	Pier #4	Pier #5	Pier #6	Pier #7
Elev. A	1317.51	1317.60	1317.67	1317.71
Elev. B	1319.01	1319.10	1319.17	1319.21
Elev. C	1321.22	1321.31	1321.38	1321.42
	Pier #8	Pier #9	Pier #10	Pier #11
Elev. A	1317.72	1317.71	1317.67	1317.60
Elev. B	1319.22	1319.21	1319.17	1319.10
Elev. C	1321.43	1321.42	1321.38	1321.31
	Pier #12	Pier #13	Pier #14	Abut. #2
Elev. A	1316.53	1316.42	1316.27	1316.14
Elev. B	1318.03	1317.92	1317.77	1317.64
Elev. C	1321.22	1321.11	1320.96	1320.83

GENERAL NOTES.

Bevel all exposed edges with ¾ molding.

PAINT: All parts of the Metal Handrail shall receive one shop coat of red lead paint. All exposed surfaces of Structural Steel, Bearing Devices and Metal Handrail shall receive one coat of tinted aluminum paint followed by one coat of aluminum paint after erection.

Reinforcing Steel

Note. Quantities shown on this sheet are for computation only. Actual structure quantities are shown on following sheet.

27'-7" Rdwy ABUTMENT QUANTITIES

A TYPE	B TYPE
back wall boards	back wall boards
Five bearing piling	Five bearing piling
Eight sheet piling	Eight sheet piling
83 cu yd concrete	78 cu yd. concrete
599 lbs reinforcing	579 lbs reinforcing steel
Five bearing devices	Five bearing plates
One bent plate	One bent plate

Bar	No	Length	Size	Bar	No	Length	Size
Aa	41	4'-8"	½"φ	Aa	41	4'-0	½"φ
Ar	5	27'-0		Ar	5	27'-0	
Ba	14	9'-8		Ba	14	9'-8	
Ca	4	27'-0"	1"φ	Ca	4	27'-0"	1"φ

27'-7" Rdwy PIER QUANTITIES

A TYPE	B TYPE
Five bearing piling	Five bearing piling
4.1 cu yd concrete	4.1 cu yd concrete
360 lbs reinforcing steel	397 lbs reinforcing steel
5 bearing devices	
One bent plate	

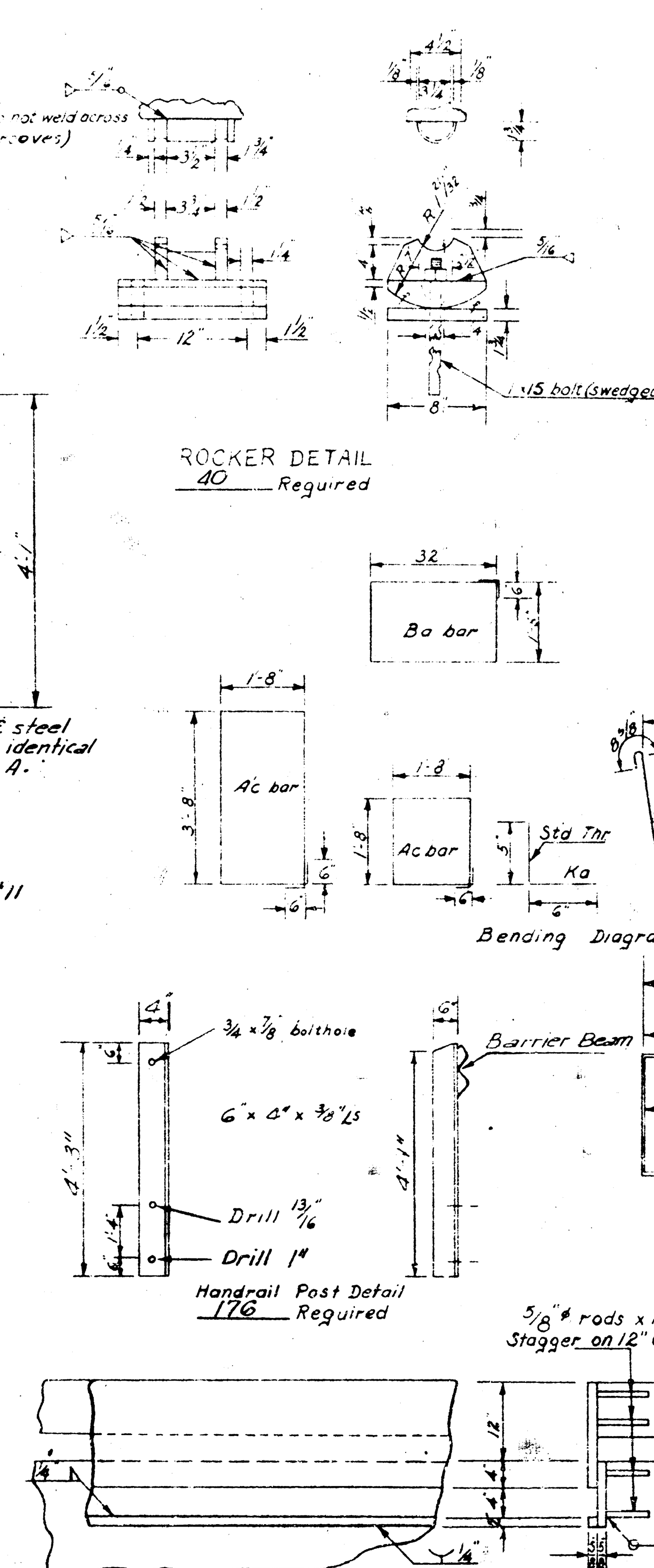
Bar	No	Length	Size	Bar	No	Length	Size
Ac	14	7'-8"	½"φ	Ac	14	11'-8	½"φ
Ca	4	27'-0"	1"φ	Ca	4	27'-0	1"φ

27'-7" Rdwy. SPAN QUANITITIES*

ONE END SPAN	ONE INT SPAN
36.4 cu yd conc.	39.6 cu yd conc.
8590 lbs. reinforcing steel	8868 lbs reinforcing steel
10 hndr'l posts (steel)	12 hndr'l posts
72' Barrier Beam	72' Barrier Beam
1-expansion device	
2 Concrete Posts	

Bar	No	Length	Size	Bar	No	Length	Size
SA	83	5'-2"	½"φ	SA	92	5'-2"	½"φ
SB	332	5'-2		SB	368	5'-2"	
Fb	20	28'-6	1"φ	Db	20	23'-6	⅞"φ
				E'b	20	38'-4	1"φ
Eb	20	33'-4	1"φ	A'b	2	22'-0	½"φ
Ab	2	25'-0	½"φ	Ka	12	0'-11	¾"φ
Af	59	27'-0		Af	66	27'-0	½"φ
Bf	9	33'-0		B'f	9	38'-0	
Ka	10	0'-11	¾"φ	C'b	18	38'-0	⅞"φ
Cb	18	33'-0	⅞"φ	Bb	18	14'-0	
Bb	9	14'-0		thr rd	6	28'-0	¾"φ
thr rd	5	28'-0	¾"φ	Ga	20	18'-0	⅞"φ

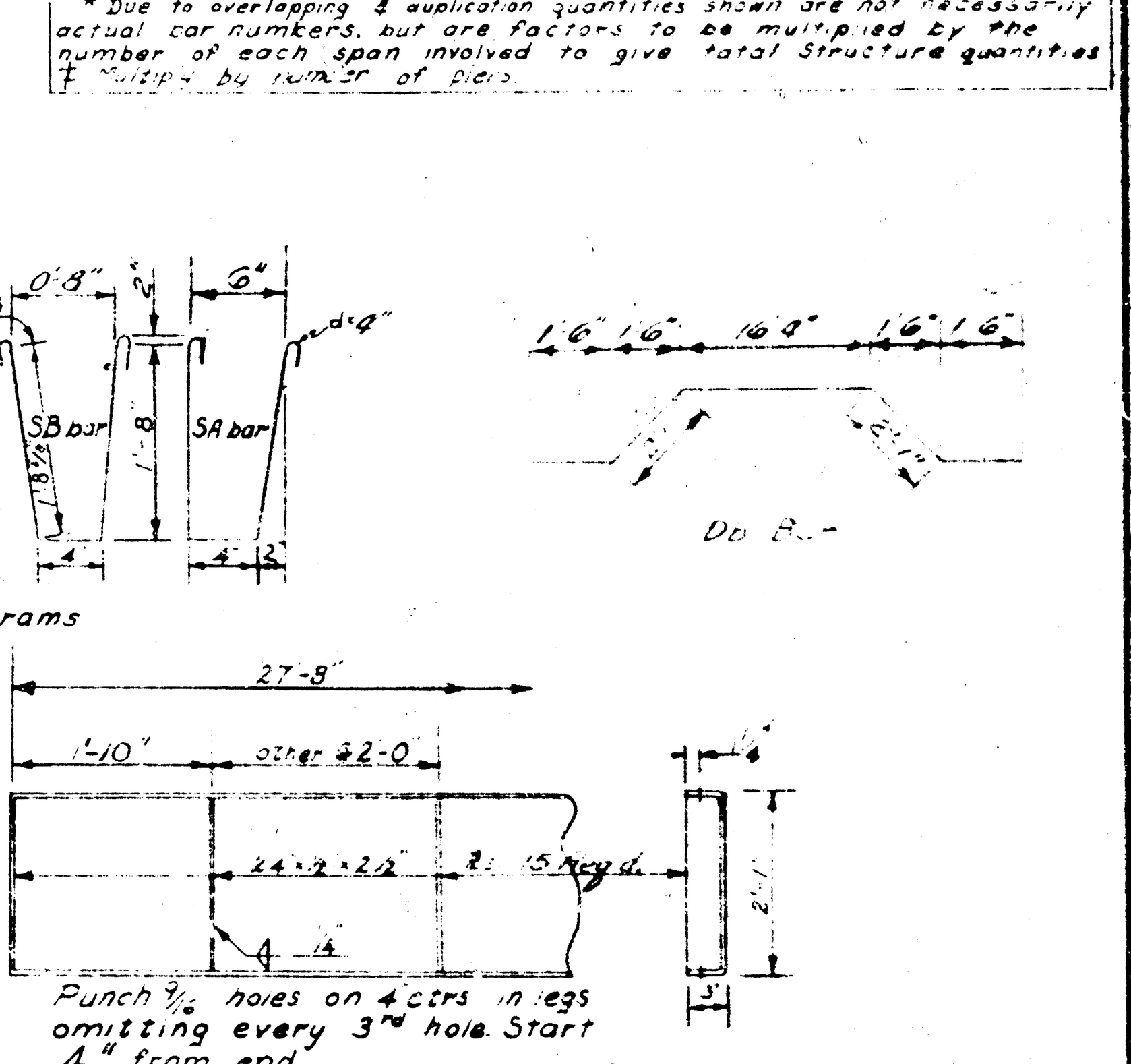
* Due to overlapping & duplication quantities shown are not necessarily actual bar numbers, but are factors to be multiplied by the number of each span involved to give total Structure quantities.
‡ Multiply by number of piers.



ROCKER DETAIL
40 Required

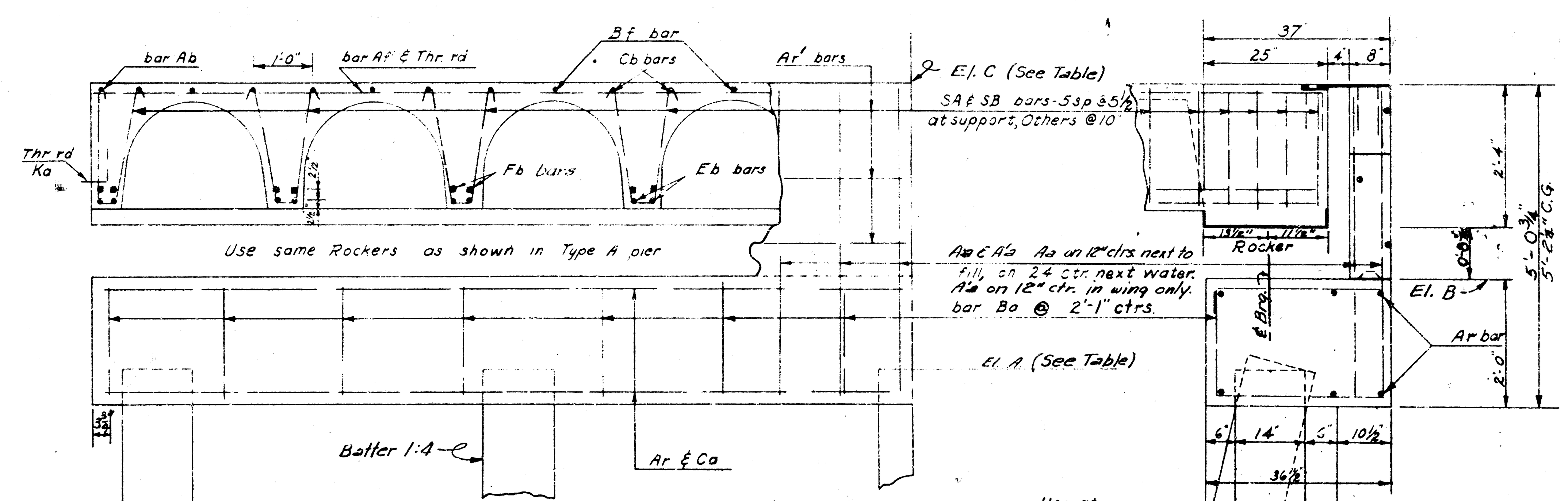
Handrail Post Detail
176 Required

Expansion Detail ℞ to be 27'-7" unless
2 Required other wise noted



Bending Diagrams

Punch 9/16 holes on 4" ctrs in legs omitting every 3rd hole. Start 4" from end.
Detail of bent ½" Plate 8 Required



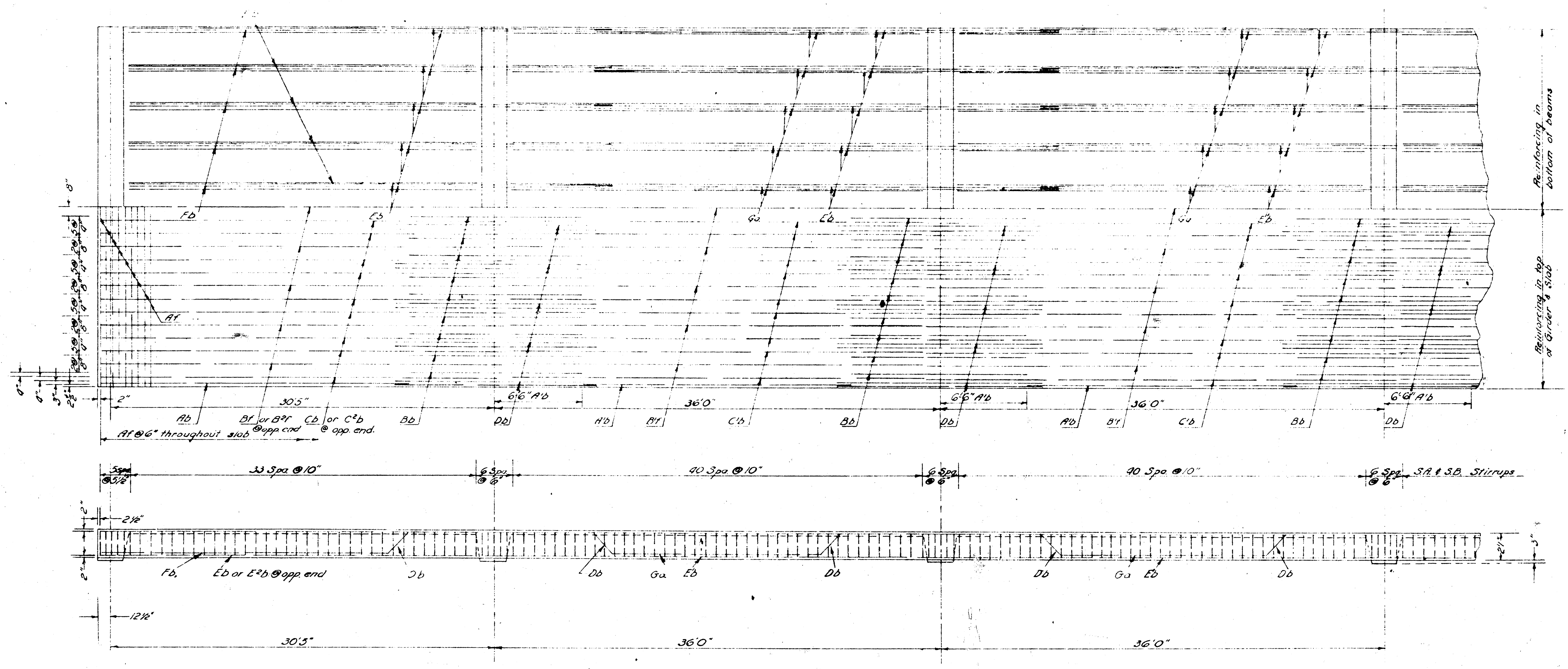
Sections of Abut Type A. Use at Abut. No's. 1 & 2

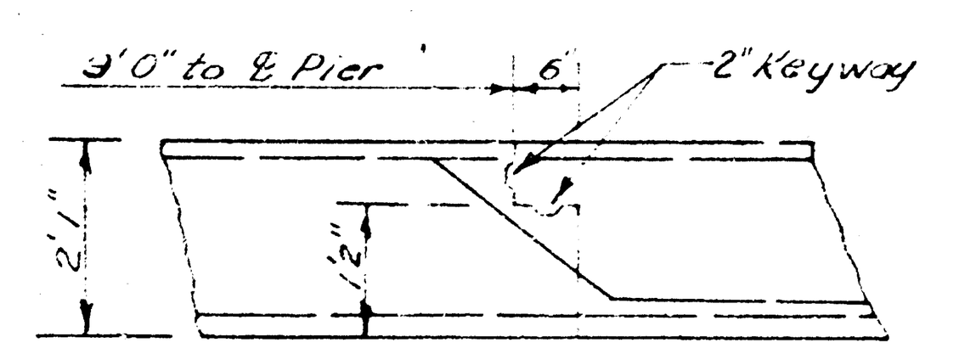
RE CONC. MODIFIED T-BEAM BRIDGE
AUXILIARY DETAILS
BRIDGE NO. 618-22-2775

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

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
12-51 M.S. 11-53 W.J.F.		R. R. J.	C. D. H.		8
	DATE	9-50	9-23-50		
	PLANFILE		TOTAL SHEETS		

618-22-2775 #5 14





TYPICAL CONSTRUCTION JOINT

SUMMARY OF QUANTITIES

30'5" - 13 @ 36' - 30'5" * Continuous Spans; 27'-2" Roadway; Metal Handrail

Bar	Aa	A'a	Ar	Ba	Ca	Ac	A'c	Ab	A'b	Af	Bb	Bf	B'f	Cb	C'b	Db	Eb	E'b	Fb	Ga	SA	SB	Ka	Thr. Rod	RA	RB	RC	RD	PA	Ca'	E²b	B²f	C²b	Ar'
No.	82	12	4	28	64	84	112	4	26	1063	252	9	117	18	234	280	20	260	40	260	1362	5448	176	88	16	16		16			20	9	18	6
Size	#4	#4	#4	#4	#8	#4	#4	#4	#4	#4	#7	#4	#4	#7	#7	#7	#8	#8	#9	#7	#4	#4	3/4φ	3/4φ	#4	#4	#4	#8	#4	#8	#8	#4	#7	#4
Length	9'8"	*	27'4"	3'8"	27'0"	7'8"	11'8"	25'0"	23'0"	27'4"	17'0"	42'6"	28'0"	42'6"	38'0"	23'6"	42'6"	38'0"	21'7"	16'6"	5'2"	5'2"	0'11"	28'0"	16'0"	15'0"	11'8"	6'11"	2'10"		21'7"	21'7"	21'7"	33'2"

Concrete Class A	657.5 Cu. Yd.	Metal Handrail	1079 Lin. Ft.
Reinforcing Steel	141,510 Lb.	Structural Steel	15,690 Lb.
14"x14" Conc. Piles	3460 Lin. Ft.		Lin. Ft.
Bearing Devices	7,200 Lb.		Lin. Ft.

*Cut 4 bars @ 1'-9"
4 " " 2'-1"
4 " " 2'-5"

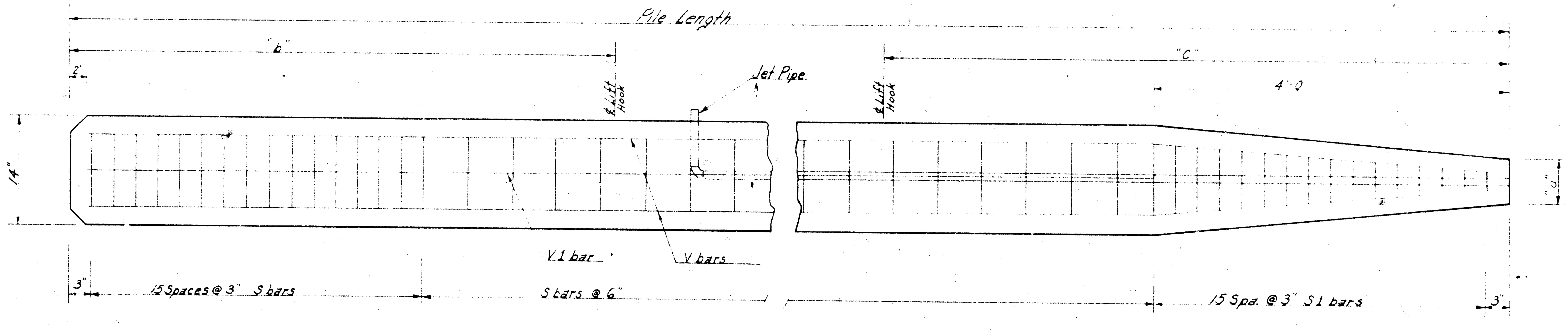
REINFORCING DETAIL
BRIDGE NO. 618-22-2775

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

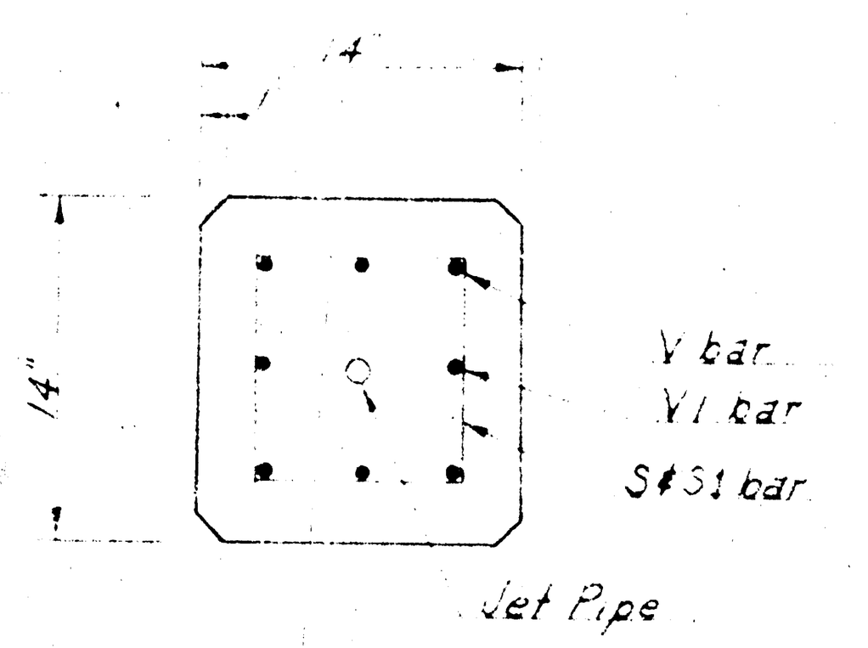
REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
11-18-53	1/4"=1'0"	M.E.S.			9
	DATE				
	PLANFILE		TOTAL SHEETS		

618-22-2775 #9 of 14

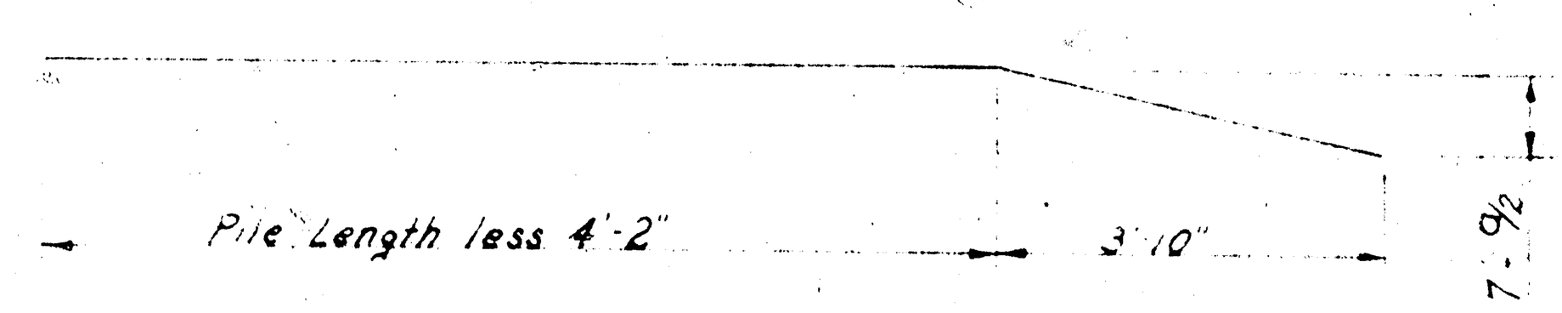
Pub Ra Div No.	State	Project No	Fiscal Year	Sheet No	Total Sheets
5	Kansas		1951		



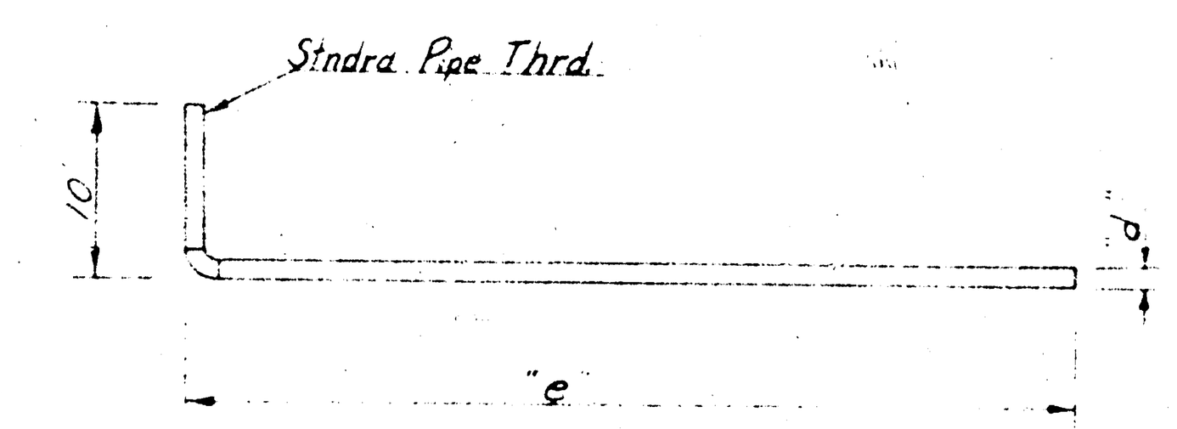
ELEVATION



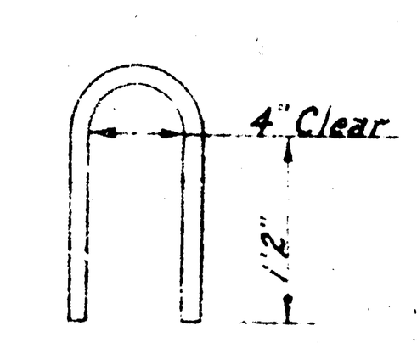
END VIEW



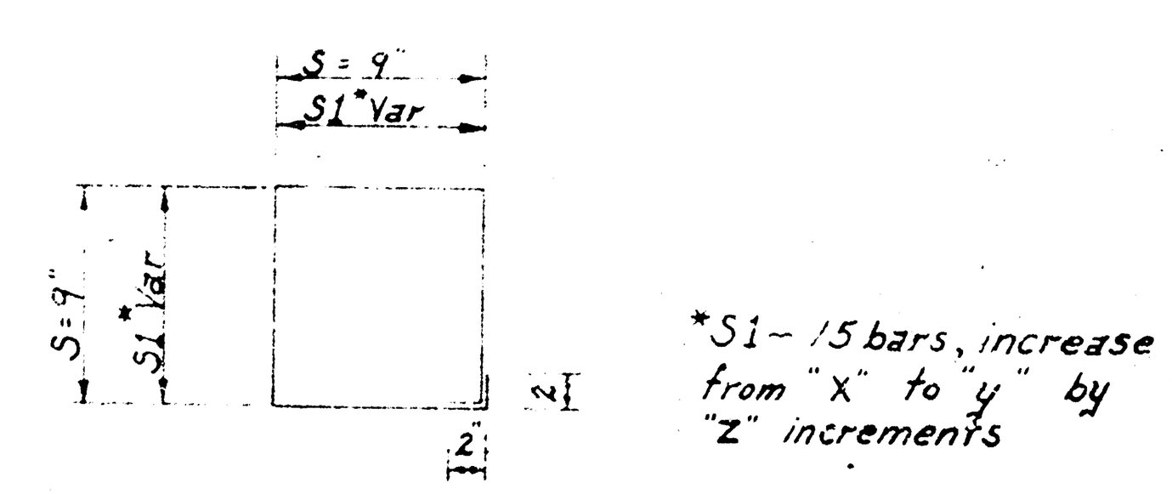
V bar



d" Dia Jet Pipe



#8 Lift Hook



S & S1 bar

	10 req'd									10 req'd			40 req'd					
Pile Length	20'6"			24'6"			28'3"			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													#6	32'6"	4	#6	36'0"	4
S	#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															1			
"a"	6"			6"			6"			6"			6"			6"		
"b"	6'0"			7'2"			8'4"			9'6"			10'8"			[illegible]		
"c"	8'0"			9'2"			10'4"			11'6"			12'8"			[illegible]		
"d"													1 1/4"					
"e"													29'0"					
"x" "y" "z"	3 3/8" to 8 5/8" by 3/8"			3 3/8" to 8 5/8" by 3/8"			3 3/8" to 8 5/8" by 3/8"			3 3/8" to 8 5/8" by 3/8"			3 3/8" to 8 5/8" by 3/8"			3 3/8" to 8 5/8" by 3/8"		
Concrete	.94 Cu. Yds.			1.14 Cu. Yds			1.34 Cu Yds.			1.55 Cu. Yds.			1.75 Cu Yds			1.95 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	Length	No	Size	Length	No	Size	Length	No	Size	Length	No	Size	Length	No	Size	Length	No
V	#6	36'8"	4	#7	49'8"	4												
V1	#6	33'0"	4	#8	45'10"	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			1			1												
"a"	10"			6"														
"b"	10'10"			14'0"														
"c"	11'11"			16'0"														
"d"				1 1/4"														
"e"				41'0"														
"x" "y" "z"	5 1/4 to 9 3/4 by 1/4"			3 3/8" to 8 5/8 by 3/8"														
Concrete	1.82 Cu. Yds.			2.43 Cu Yds														
Rebar	482 Lbs			956 lb.														

General Notes

Design: According to AASHO Specifications. 1949 Edition fs=12,000 psi fc.=1,000 psi

Concrete: Use class A throughout if Piling are to be encased or otherwise protected. Use class A (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.

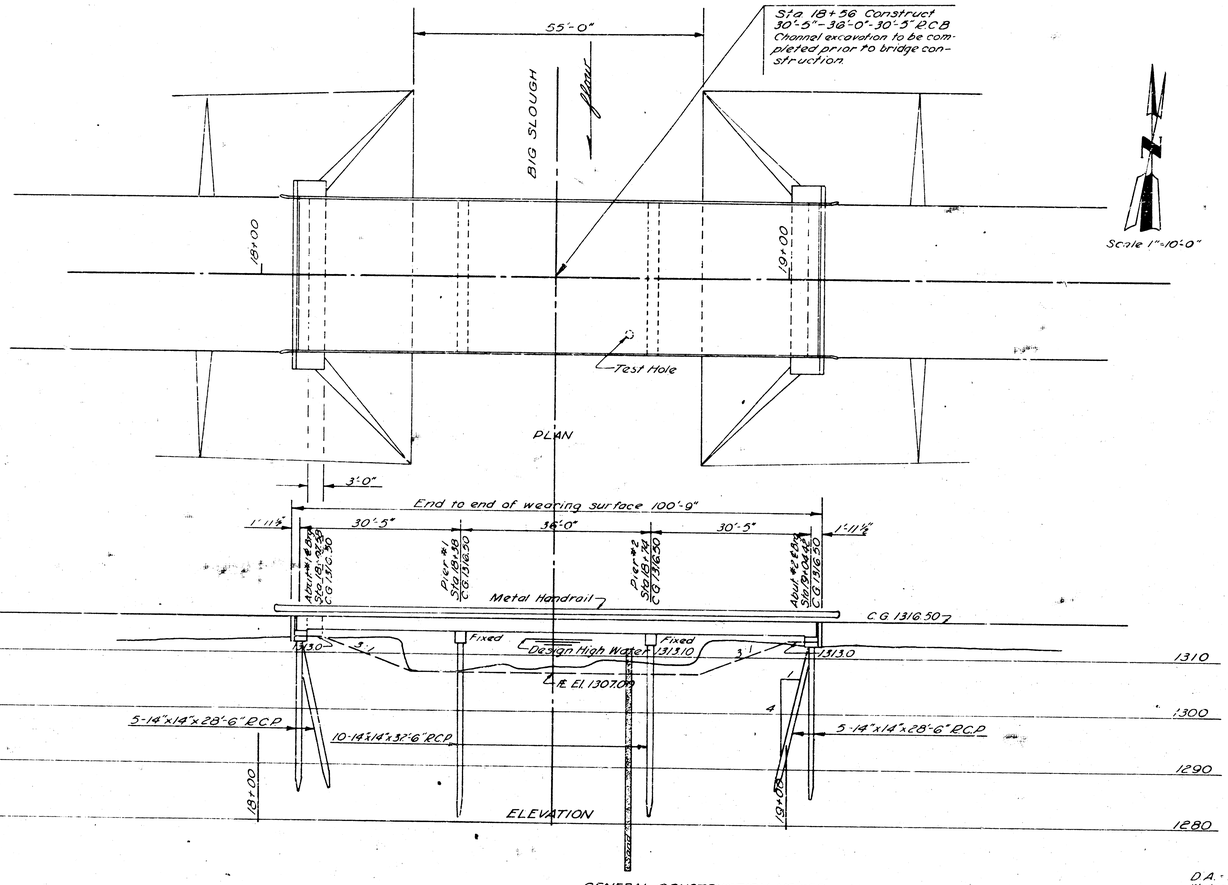
14"x 14"x Re. Conc. Piling

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	Houseman		10
	DATE	12-51	1-52		
	PLANFILE		TOTAL SHEETS		

618-22-2775 #10 of 12



Scale 1"=10'-0"

D.A. - 30 Square Miles C - 0.25
Waterway provided 414 sq ft

GENERAL NOTES

Design: According to AASHO Specifications Edition of 1949 H20-44 Loading, fs=20,000 psi, fc=1,000 psi.
Soundings Taken by Sedgwick County with ¾" jet.
Piling: Concrete Piling to be driven to a computed resistance of 28 tons per pile.
Concrete: Use Class A(AE) concrete throuout. Bevel all exposed edges with a ¾" triangular moulding.
Forms: Contractor shall use prefabricated 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 five sets of long forms are available for these projects. Since the concrete in a full span ahead of any forms to be removed must have attained 1/3 design strength before removal of these forms it is suggested that high early strength concrete be used.
Forms for these projects shall be picked up by the contractor at the SEDGWICK COUNTY YARDS, 701 E. 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. 2.09 of the Standard Specifications for State Road & Bridge Construction, Edition of 1951. 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.

CONSTRUCTION LAYOUT
BRIDGE NO. 618-22-1856

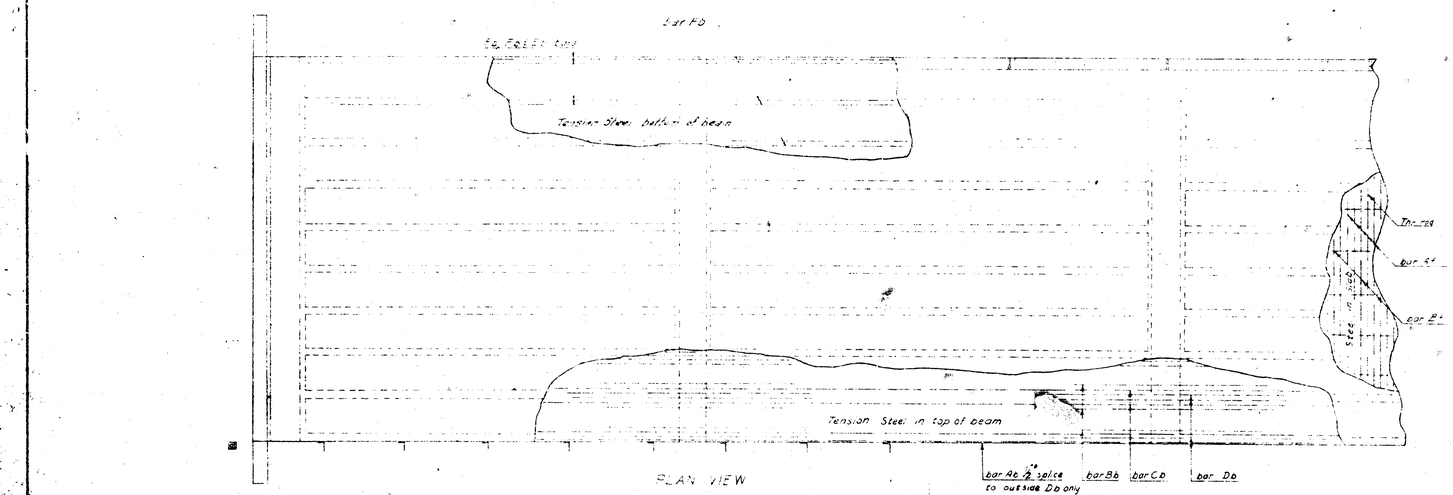
PREPARED BY
SEDGWICK COUNTY ENGINEERING DEPT.
RUFUS S. KIRK — COUNTY ENGINEER

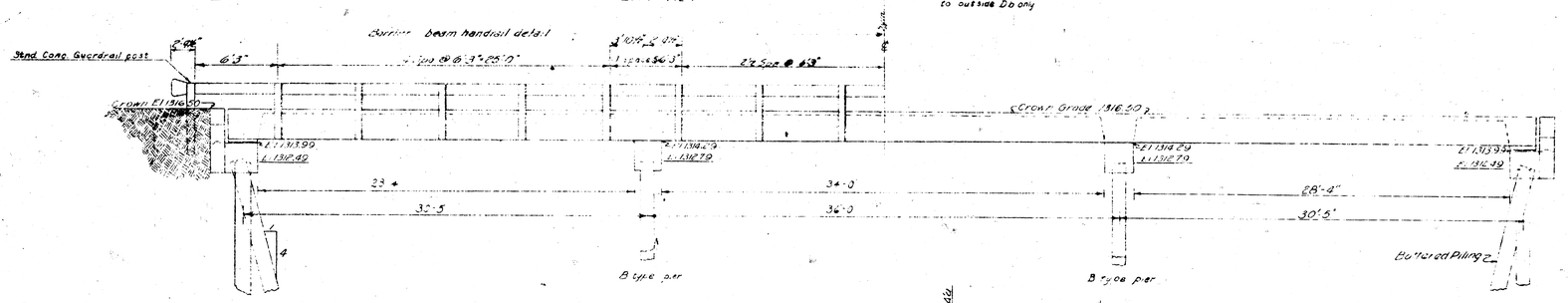
REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1"=10'	W.J.F.	C.J.F.		11
	DATE	11-53	11-53		
	PLANFILE		TOTAL SHEETS		

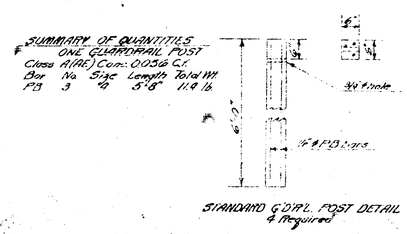
618-22-1856 Sh. # 11 of 14

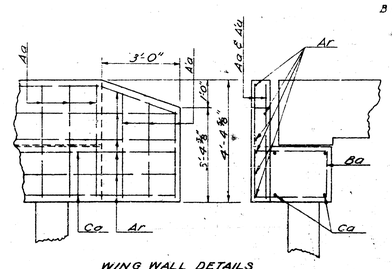
GENERAL NOTES

Design: Designed for H-20-44 loading AASHO specifications fs 20,000 psi, fc 1,000 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 A(AE) concrete used throughout Bevel all exposed edges with a 3/4" Δ moulding 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









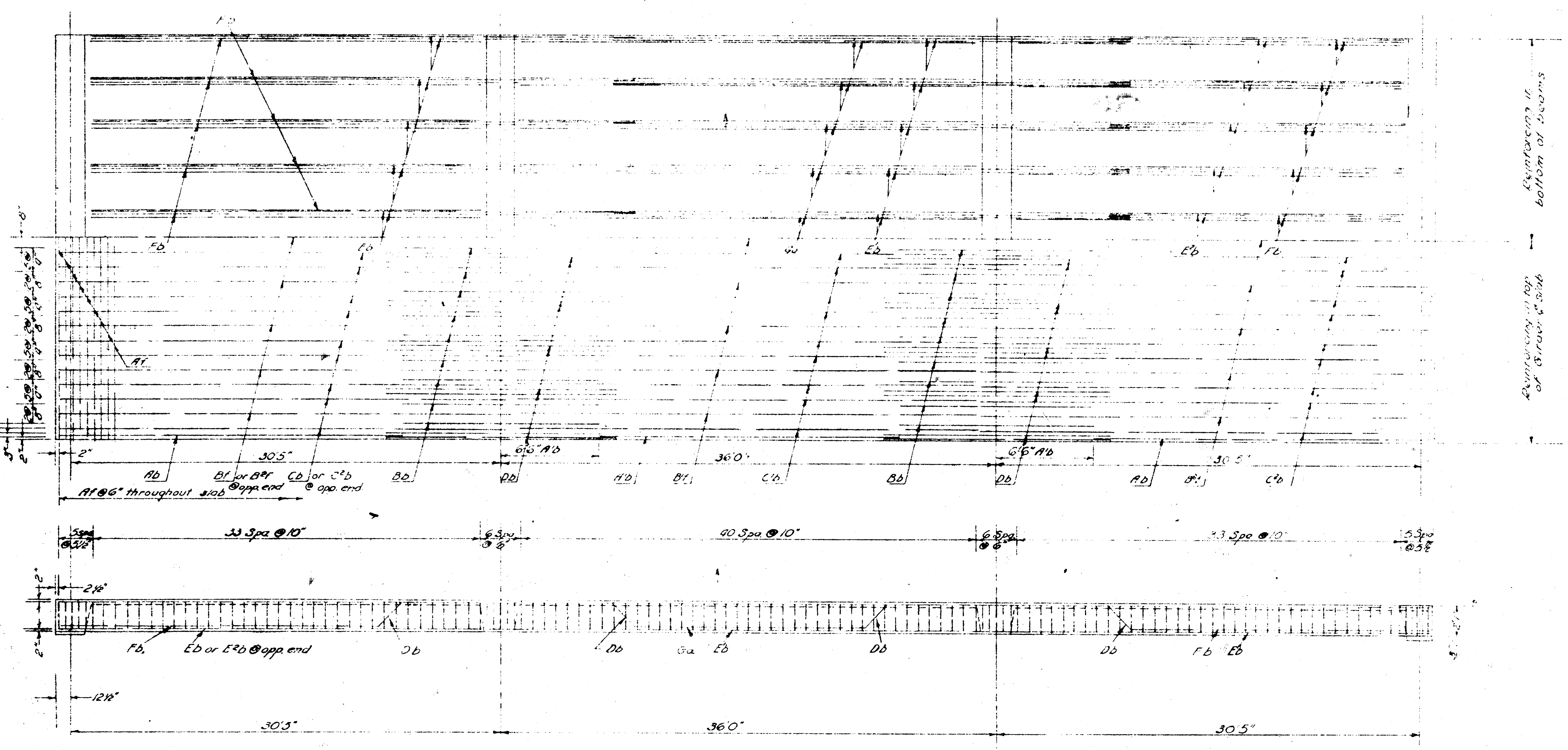
RE. CONC. MODIFIED T-BEAM. BRIDGE

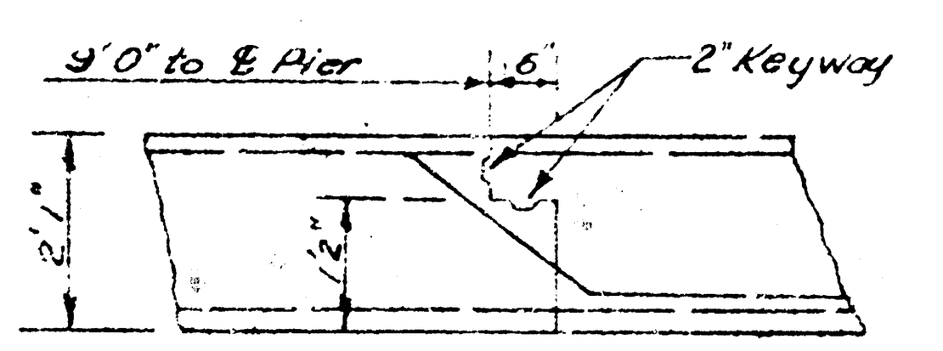
BRIDGE NO. 618-22-1856

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

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

618-22-1856 Sh #12 of 14





TYPICAL CONSTRUCTION JOINT

SUMMARY OF QUANTITIES

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

Bar	Aa	A'a	Ar	Ba	Ca	Ac	A'c	Ab	A'b	Af	Bb	Bf	B'f	Cb	C'b	Db	Eb	E'b	Fb	Ga	SA	SB	Ka	Thr. Rod	RA	RB	RC	RD	PA	Ca'	E2b	B2f	C'b
No.	84	24	12	28	16		28	4	2	198	36	9	9	18	18	40	20	20	40	20	258	1032	32	16	16	16		16			20	9	18
Size	#4	#4	#4	#4	#8	#8	#4	#4	#4	#4	#7	#4	#4	#7	#7	#7	#8	#8	#9	#7	#4	#4	3/4"	3/4"	#4	#4	#4	#4	#4	#8	#8	#4	#7
Length	4'0"	*	33'4"	39'8"	27'0"	7'8"	11'8"	25'0"	23'0"	27'4"	17'0"	32'6"	38'0"	32'6"	38'0"	23'6"	32'6"	38'0"	21'7"	16'6"	5'2"	5'2"	0'11"	28'0"	16'0"	15'0"	11'8"	6'11"	2'10"		21'7"	21'7"	21'7"

Concrete Class A	136.6 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"

REINFORCING DETAIL
BRIDGE NO. 618-22-1856

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

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET
	1/4" = 1'0"	M.E.S.			14
	DATE				
	PLANFILE		TOTAL SHEETS		

618-22-1856 Sh. #14 of 14