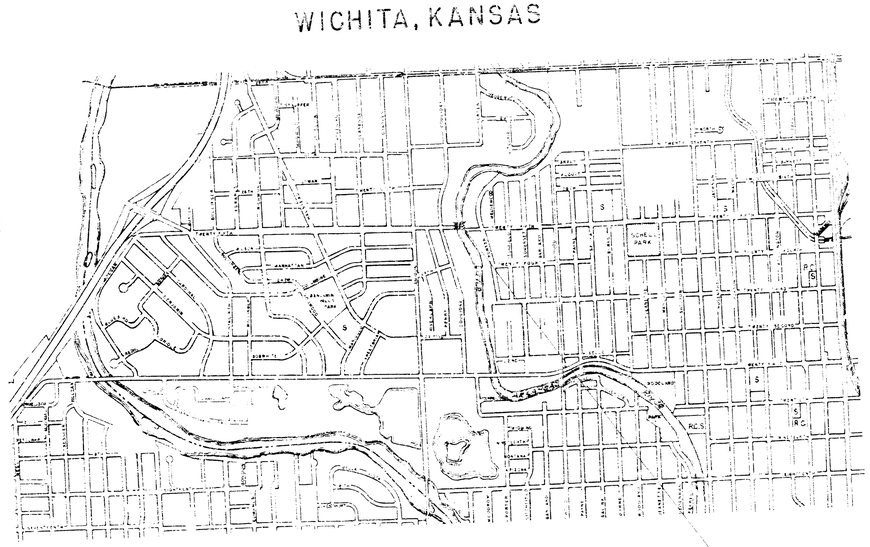
TWENTY-FIFTH STREET BRIDGE

OVER THE

LITTLE ARKANSAS RIVER

NORTH WICHITA THRUWAY

WICHITA, KANSAS



INDEX OF SHEETS

DEPARTMENT OF PUBLIC WORKS

CITY OF WICHITA

B. E. SMITH, CITY ENGINEER

PROJECT 016-37

PLANS PREPARED BY

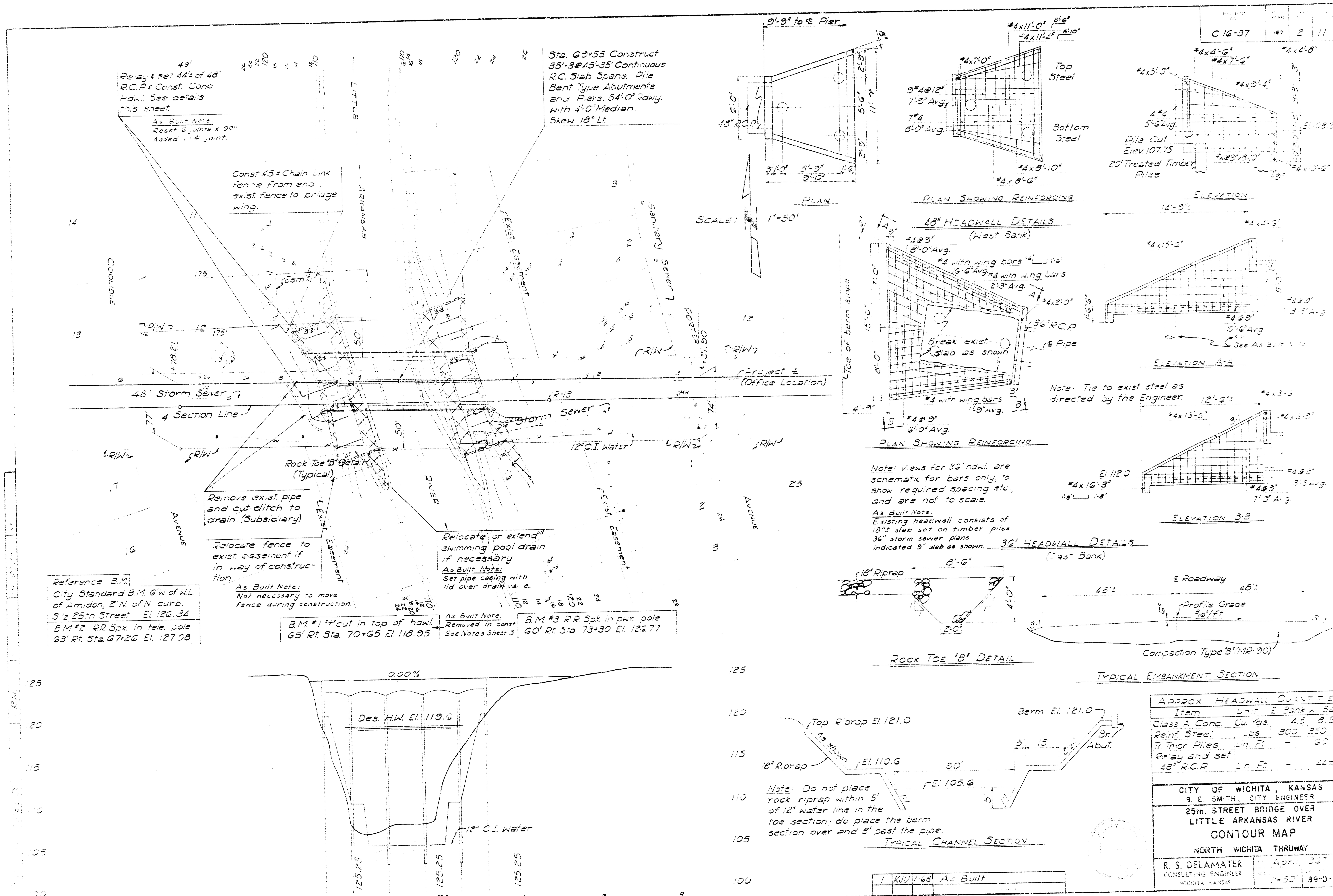
R. S. DELAMATER, CONSULTING ENGINEER

WICHITA, KANSAS

APRIL, 1967

Revised As Built, January, 1968

AB T S VWXY TUVW


Sta. 68+55 Construct 35'-3@45'-35' Continuous R.C. Slab Spans. Pile Bent Type Abutments and Piers. 54'-0" Rdwy. with 4'-0" Median. Skew 18° Lt.
Relay & set 44'± of 48" R.C.P. & Const. Conc. Hdwl. See details this sheet.
As Built Note: Reset 6 joints x 90" Added 1-4' joint.
Const. 4.5' Chain Link fence from end exist. fence to bridge wing.
LITTLE ARKANSAS RIVER
COOLIDGE AVENUE
SCALE: 1"=50'
Sanitary Sewer
Exist. Easement
48" Storm Sewer
Storm Sewer
Project ℄ (Office Location)
℄ Section Line
R/W
12" C.I. Water
Rock Toe 'B' Detail (Typical)
Remove exist. pipe and cut ditch to drain (Subsidiary)
Relocate fence to exist. easement if in way of construction.
As Built Note: Not necessary to move fence during construction.
Relocate or extend swimming pool drain if necessary
As Built Note: Set pipe casing with lid over drain valve.
Reference B.M.
City Standard B.M. 6' W. of W.L. of Amidon, 2' N. of N. curb S/2 25th Street El. 126.34
B.M. #2 R.R. Spk. in tele. pole 63' Rt. Sta. 67+26 El. 127.08
B.M. #1 "+" cut in top of hdwl. 65' Rt. Sta. 70+65 El. 118.95
As Built Note: Removed in constr. See Notes Sheet 3
B.M. #3 R.R. Spk. in pwr. pole 60' Rt. Sta. 73+80 El. 126.77
Des. H.W. El. 119.6
12" C.I. Water
0.00%
PLAN
PLAN SHOWING REINFORCING
ELEVATION
48" HEADWALL DETAILS (West Bank)
ELEVATION A-A
Note: Tie to exist. steel as directed by the Engineer.
Break exist. slab as shown
PLAN SHOWING REINFORCING
Note: Views for 36" hdwl. are schematic for bars only, to show required spacing etc., and are not to scale.
As Built Note: Existing headwall consists of 18" slab set on timber piles. 36" storm sewer pipe indicated 9" slab as shown.
36" HEADWALL DETAILS (East Bank)
ELEVATION B-B
Pile Cut Elev. 107.75
20' Treated Timber Piles
18" Riprap
ROCK TOE 'B' DETAIL
℄ Roadway
Profile Grade
Compaction Type 'B' (MR-90)
TYPICAL EMBANKMENT SECTION
Top Riprap El. 121.0
Berm El. 121.0
18" Riprap
El. 110.6
El. 105.6
Br. Abut.
Note: Do not place rock riprap within 5' of 12" water line in the toe section; do place the berm section over and 8' past the pipe.
TYPICAL CHANNEL SECTION
1 | KJU | 1-68 | As Built

Approx. Headwall Quantities			
Item	Unit	E. Bank	W. Bank
Class A Conc.	Cu. Yds.	4.5	8.5
Reinf. Steel	Lbs.	300	350
Tr. Tmbr. Piles	Lin. Ft.	–	60
Relay and set 48" R.C.P.	Lin. Ft.	–	44±

CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER

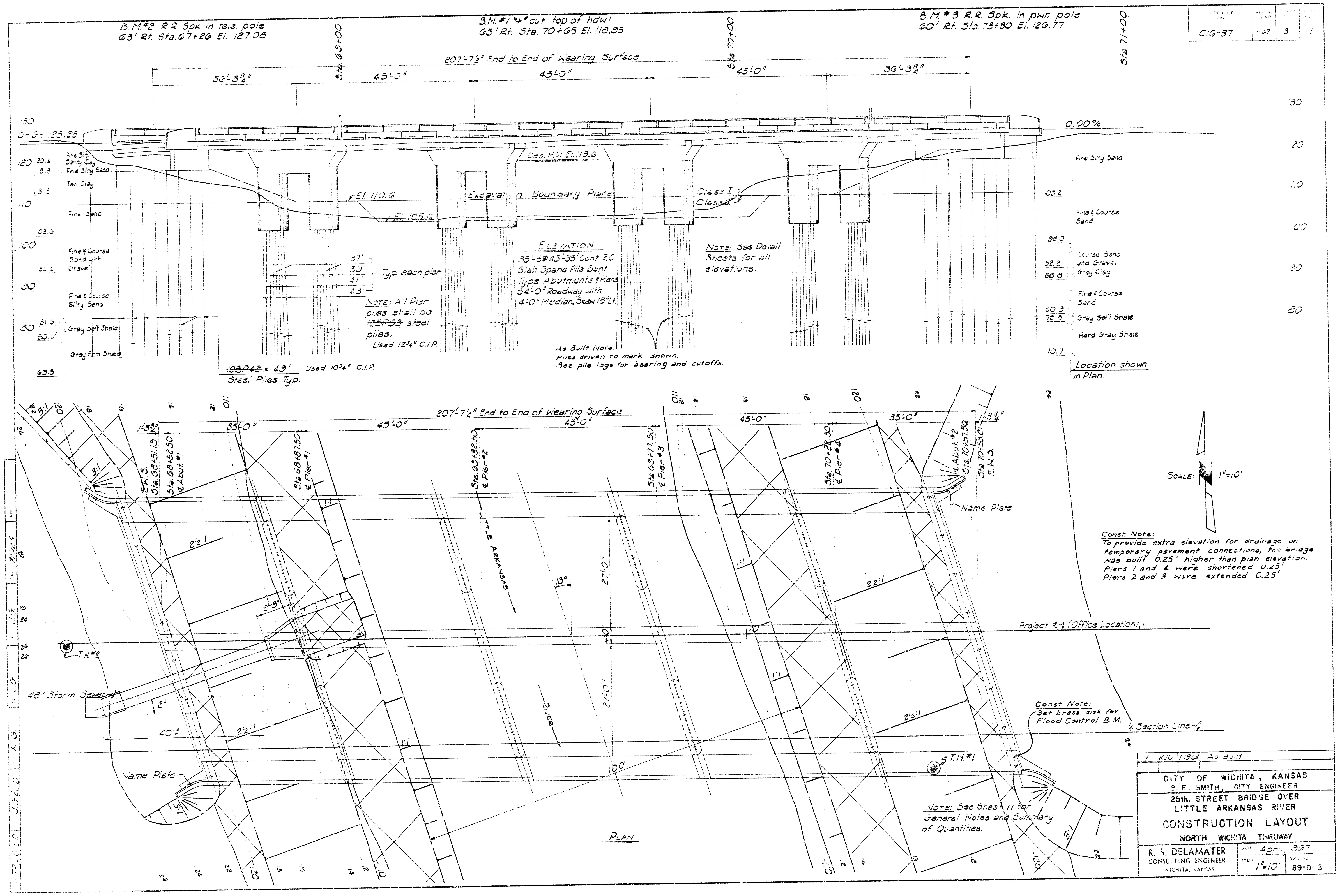
25th. STREET BRIDGE OVER
LITTLE ARKANSAS RIVER

CONTOUR MAP

NORTH WICHITA THRUWAY

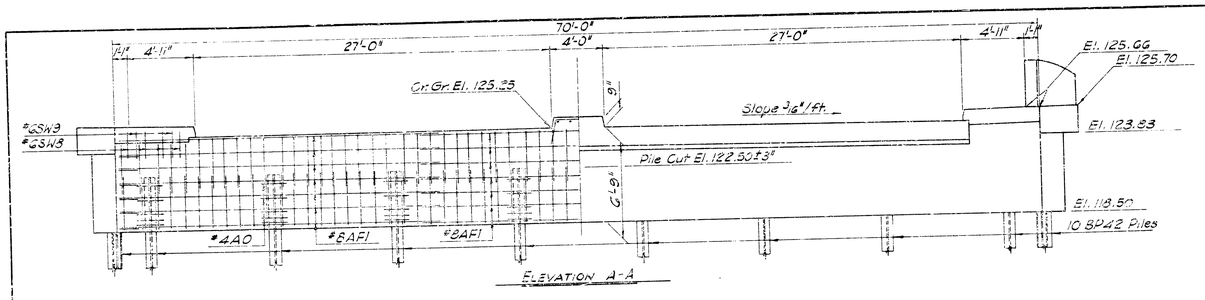
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

April, 1967 | 1" = 50' | 89-D-2

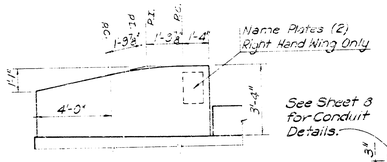


C16-37 3 11
B.M.#2 R.R. Spk in tele. pole
63' Rt. Sta. 67+26 El. 127.06
B.M.#1 "+" cut top of hdwl.
65' Rt. Sta. 70+65 El. 118.95
B.M.#3 R.R. Spk. in pwr. pole
50' Rt. Sta. 73+30 El. 126.77
207'-7½" End to End of Wearing Surface
0.00%
Des. H.W. El. 119.6
El. 110.6
Excavation Boundary Plane
Class I
Class II
Fine Silty Sand
Fine & Course Sand
Course Sand and Gravel
Gray Clay
Fine & Course Sand
Gray Soft Shale
Hard Gray Shale
Tan Clay
Fine Sand
Fine & Course Sand with Gravel
Fine & Course Silty Sand
Gray Soft Shale
Gray Firm Shale
Typ. each pier
Note: All Pier piles shall be 10BP53 steel piles.
Used 12¾" C.I.P.
10BP42 x 43' Steel Piles Typ.
Used 10¾" C.I.P.
ELEVATION
35'-3@45'-35' Cont. R.C. Slab Spans Pile Bent Type Abutments & Piers 54'-0" Roadway with 4'-0" Median. Skew 18° Lt.
Note: See Detail Sheets for all elevations.
As Built Note:
Piles driven to mark shown.
See pile logs for bearing and cutoffs.
Location shown in Plan.
Sta. 68+51.19 Abut. #1
Sta. 68+87.50 Pier #1
Sta. 69+32.50 Pier #2
Sta. 69+77.50 Pier #3
Sta. 70+22.50 Pier #4
Sta. 70+57.50 Abut. #2
LITTLE ARKANSAS
Name Plate
48" Storm Sewer
T.H. #2
S.T.H. #1
Project ℄ (Office Location)
¼ Section Line ℄
SCALE: 1"=10'
Const. Note:
To provide extra elevation for drainage on temporary pavement connections, the bridge was built 0.25' higher than plan elevation. Piers 1 and 4 were shortened 0.25'. Piers 2 and 3 were extended 0.25'.
Const. Note:
Set brass disk for Flood Control B.M.
Note: See Sheet 11 for General Notes and Summary of Quantities.
PLAN
1 KJU 1-19-68 As Built
CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER
25th. STREET BRIDGE OVER LITTLE ARKANSAS RIVER
CONSTRUCTION LAYOUT
NORTH WICHITA THRUWAY
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS
DATE April 1967
SCALE 1"=10'
DWG. NO. 89-D-3

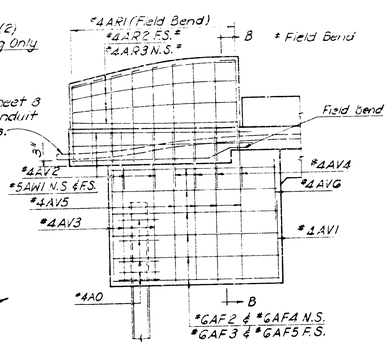
PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
CIG-37	1967	4	11



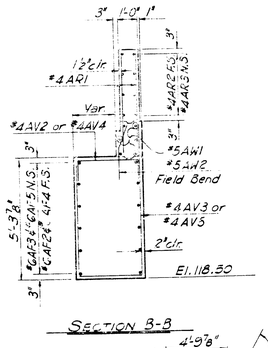
ELEVATION A-A



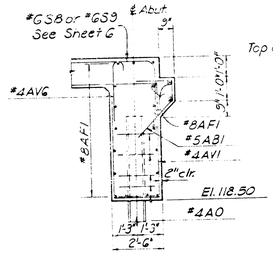
ABUTMENT RAIL DETAILS



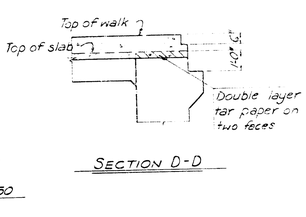
DEVELOPED VIEW OF WINGWALL



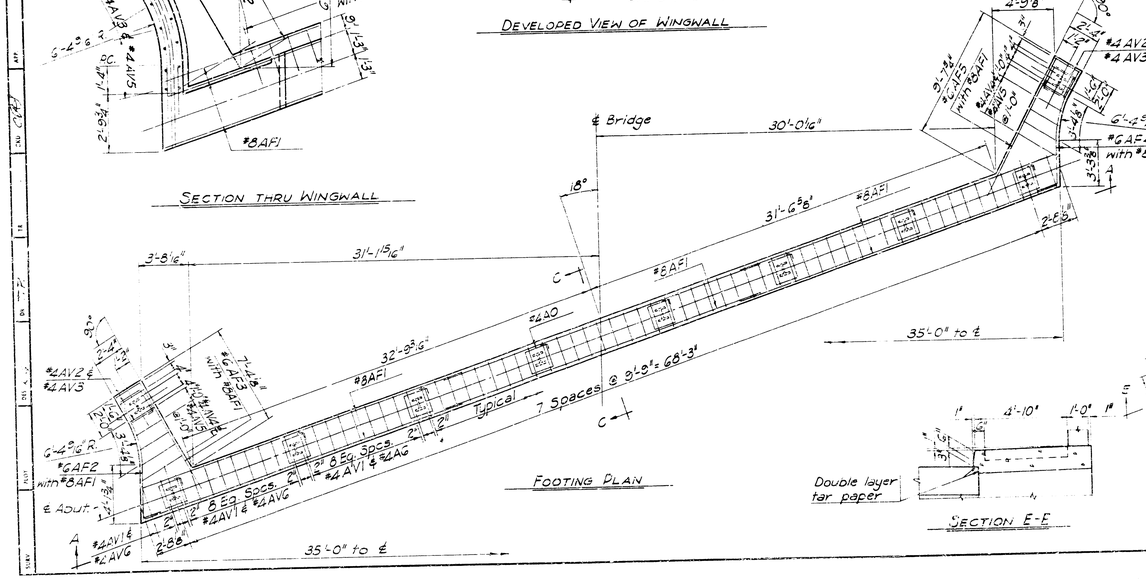
SECTION B-B



SECTION C-C



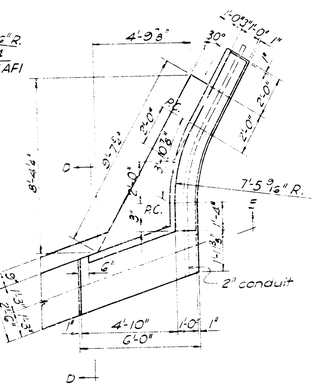
SECTION D-D



SECTION THRU WINGWALL

FOOTING PLAN

SECTION E-E



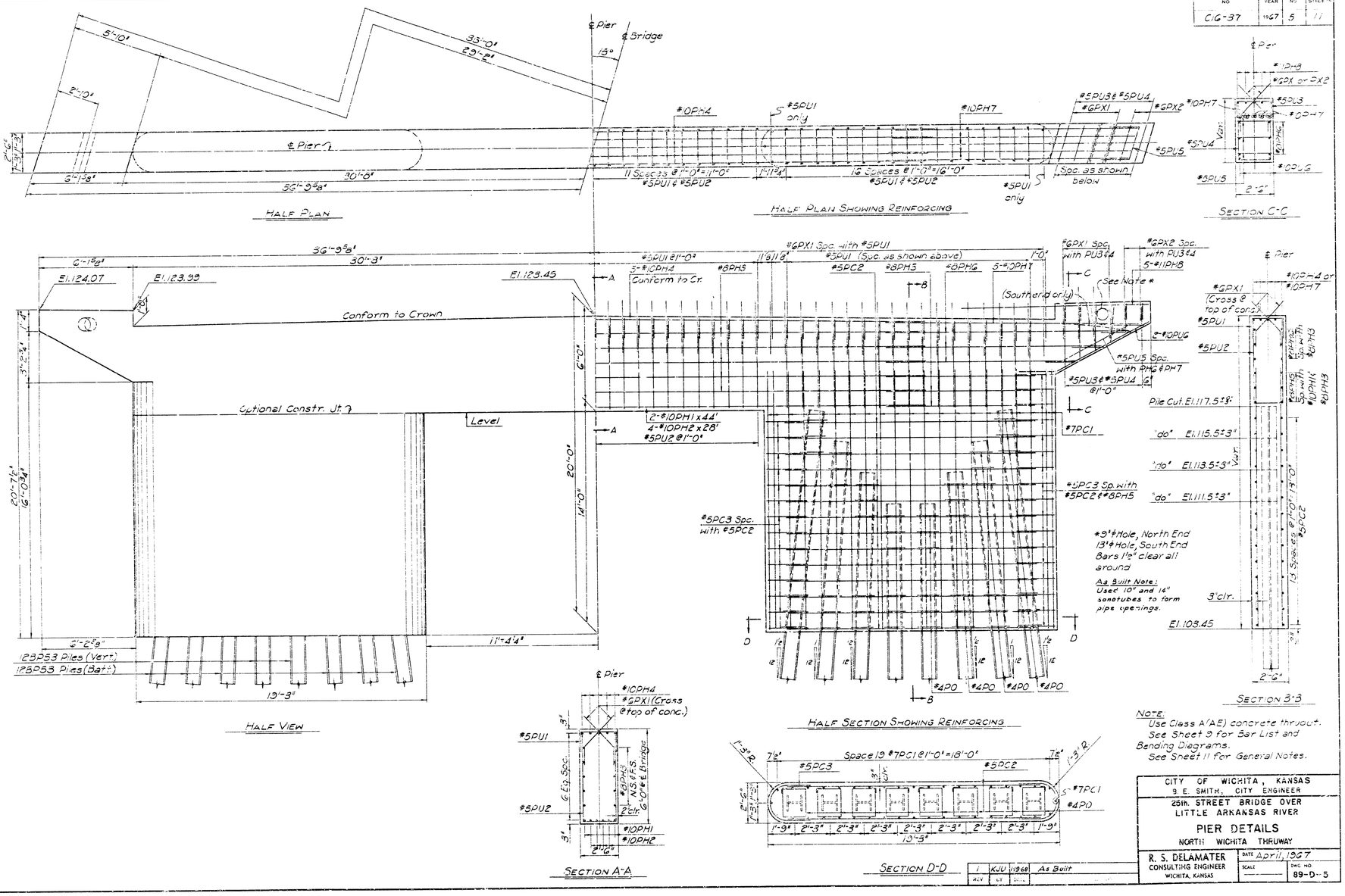
PART PLAN

NOTE:
Use Class AAA(AE) concrete throughout

See Sheet 9 for Bar List and Bending Diagrams
See Sheet 11 for General Notes.

CITY OF WICHITA, KANSAS B. E. SMITH, CITY ENGINEER	
25th. STREET BRIDGE OVER LITTLE ARKANSAS RIVER	
ABUTMENT DETAILS NORTH WICHITA THRUWAY	
R. S. DELAMATER CONSULTING ENGINEER WICHITA, KANSAS	DATE April, 1967 SCALE —— DWG. NO. 89-D-4

PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
CIG-37	1967	5	11



1	KJU	11/68	As Built	
A.V.	E.T.	DATE		

Note:
Use Class A (AE) concrete thruout.
See Sheet 9 for Bar List and Bending Diagrams.
See Sheet 11 for General Notes.

CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER

25th STREET BRIDGE OVER LITTLE ARKANSAS RIVER

PIER DETAILS

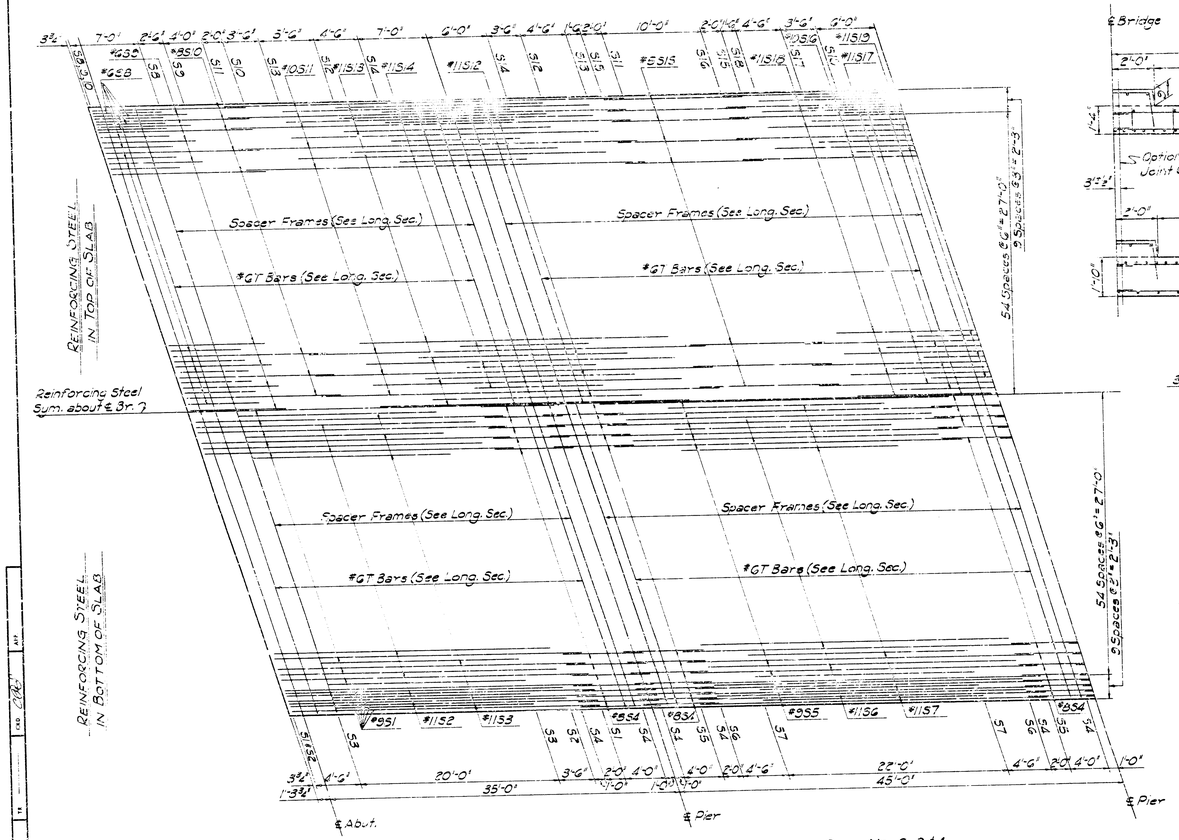
NORTH WICHITA THRUWAY

R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

DATE April, 1967
SCALE ———
DWG. NO. 89-D-5

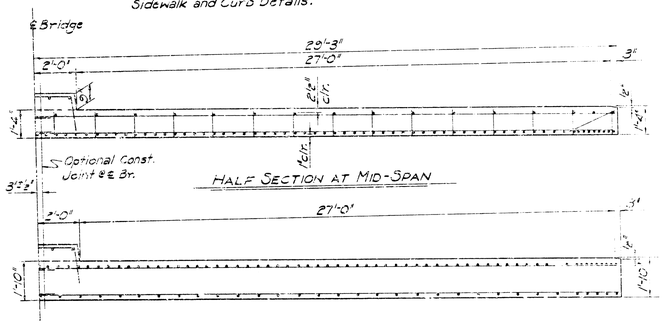
PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
CIG-37	1967	6	11

NOTE:
See Sheet 7 for Deck Section, Sidewalk and Curb Details.



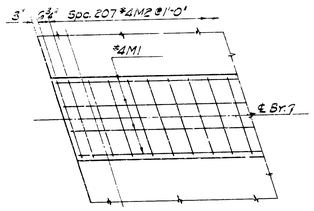
SPAN NO. 1 OR 5 SPAN NO. 2, 3 & 4

PART PLAN SHOWING REINFORCING

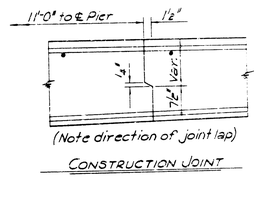


HALF SECTION AT MID-SPAN

HALF SECTION AT PIER

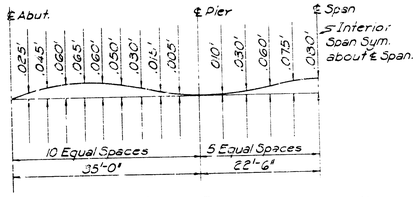


REINFORCING STEEL IN MEDIAN



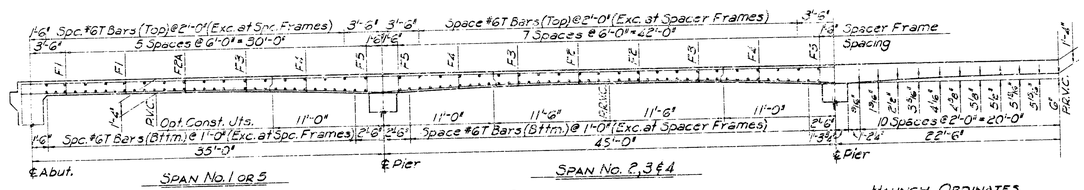
(Note direction of joint lap)

CONSTRUCTION JOINT



DEAD LOAD CAMBER DIAGRAM

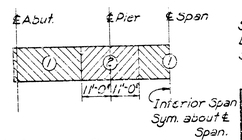
NOTE:
Use Class AAA(AE) concrete thruout.



SPAN NO. 1 OR 5 SPAN NO. 2, 3 & 4

PART LONGITUDINAL SECTION AT ℄ BRIDGE

HAUNCH ORDINATES



* POURING SEQUENCE

* To be used only if falsework is steel beams.

See Sheet 9 for Bar List and Bending Diagrams.
See Sheet 11 for General Notes.

CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER

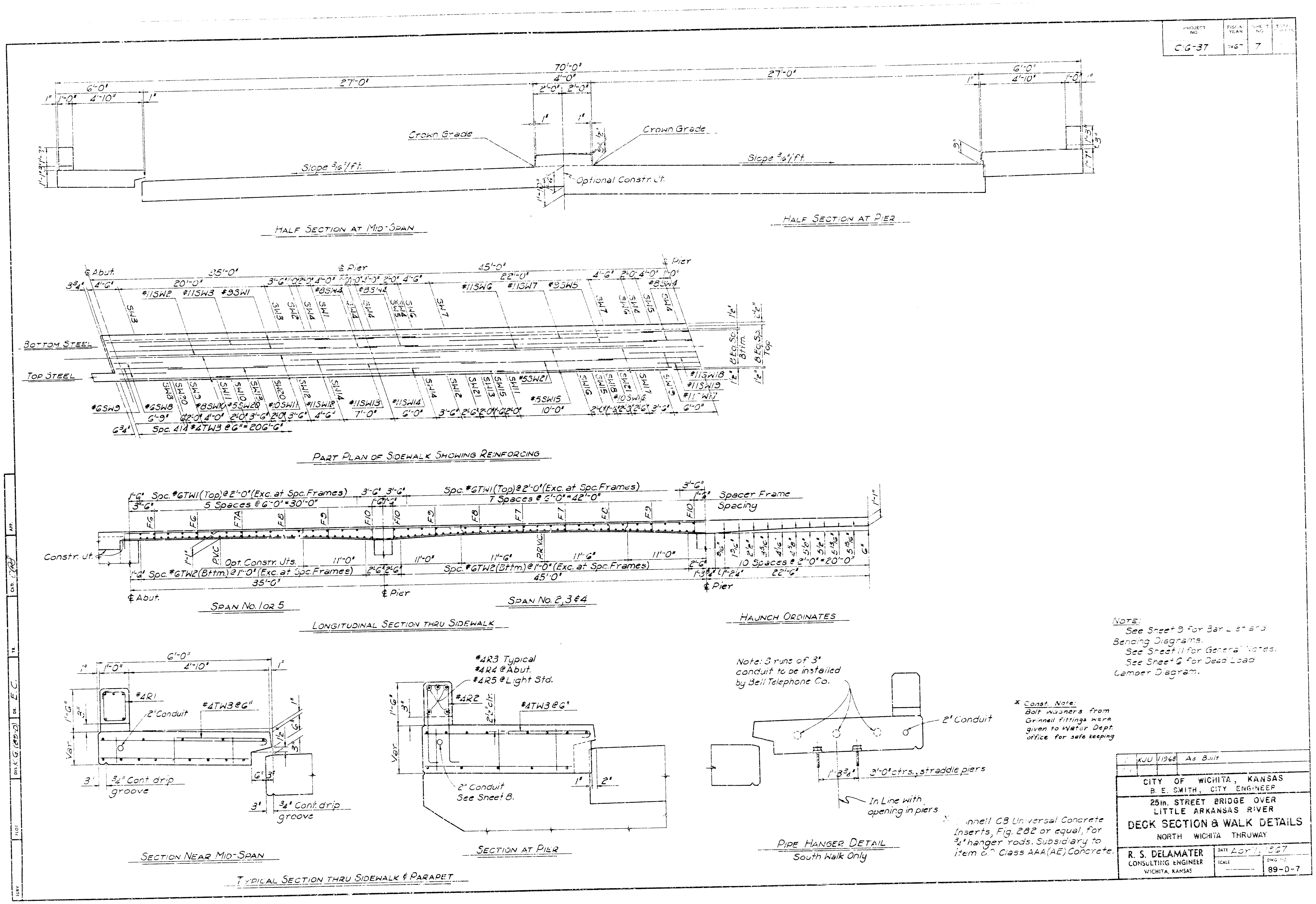
25th. STREET BRIDGE OVER LITTLE ARKANSAS RIVER

SUPERSTRUCTURE DETAILS

NORTH WICHITA THRUWAY

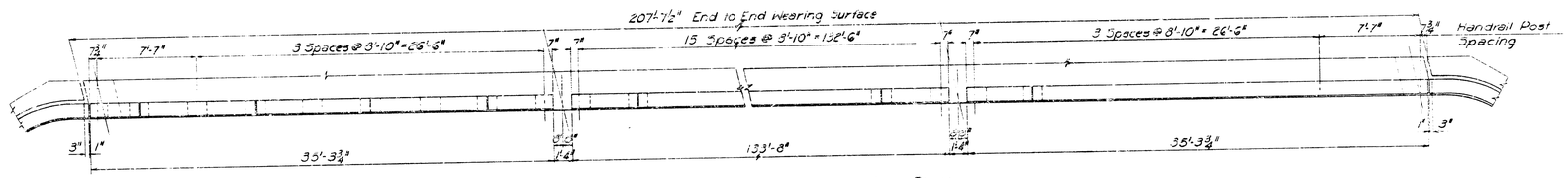
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

DATE April 1967
SCALE ———
DWG. NO. 89-D-6

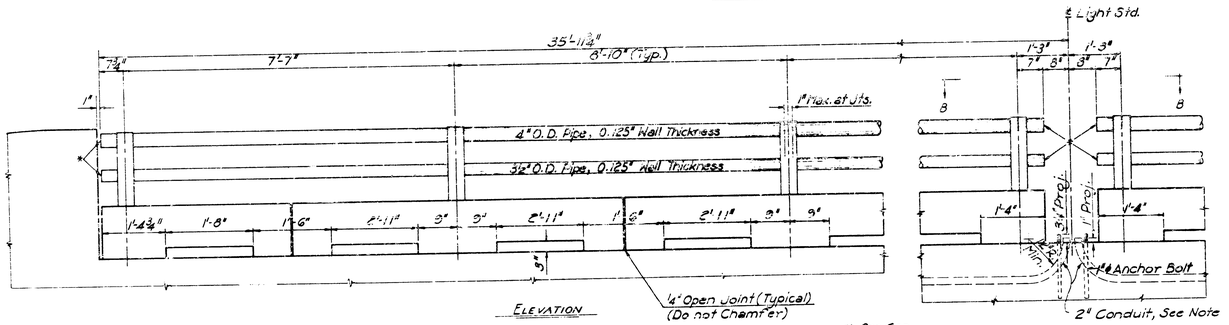


C-G-37
7
HALF SECTION AT MID-SPAN
HALF SECTION AT PIER
Crown Grade
Slope 3/16"/Ft.
Optional Constr. Jt.
PART PLAN OF SIDEWALK SHOWING REINFORCING
Bottom Steel
Top Steel
LONGITUDINAL SECTION THRU SIDEWALK
Span No. 1 or 5
Span No. 2, 3 & 4
Haunch Ordinates
Spacer Frame Spacing
Constr. Jt.
Opt. Constr. Jts.
NOTE:
See Sheet 9 for Bar List and Bending Diagrams.
See Sheet 11 for General Notes.
See Sheet 6 for Dead Load Camber Diagram.
Note: 3 runs of 3" conduit to be installed by Bell Telephone Co.
2" Conduit
See Sheet 8.
3'-0" ctrs., straddle piers
In Line with opening in piers
Grinnell CB Universal Concrete Inserts, Fig. 282 or equal, for 3/4" hanger rods. Subsidiary to item of Class AAA(AE) Concrete.
Const. Note: Bolt washers from Grinnell fittings were given to Water Dept. office for safe keeping
3/4" Cont. drip groove
SECTION NEAR MID-SPAN
SECTION AT PIER
PIPE HANGER DETAIL
South Walk Only
TYPICAL SECTION THRU SIDEWALK & PARAPET
1 KJU 1-1968 As Built
CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER
25th. STREET BRIDGE OVER LITTLE ARKANSAS RIVER
DECK SECTION & WALK DETAILS
NORTH WICHITA THRUWAY
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS
DATE April 1967
DWG NO 89-D-7

CIG-37 67 8 11

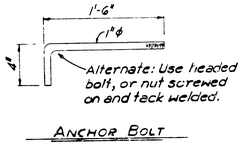


HANDRAIL PARAPET WALL PLAN



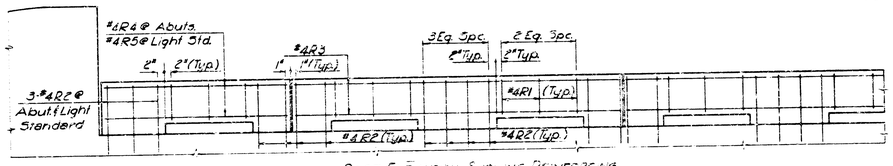
ELEVATION

* 3rs Cap Detail

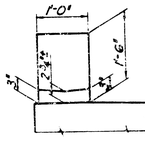


Alternate: Use headed bolt, or nut screwed on and tack welded.

ANCHOR BOLT



PART ELEVATION SHOWING REINFORCING



NOTE: At the option of the Contractor, the parapet slot may be constructed to the dimensions shown, or similarly, to expedite form removal.

OPTIONAL CURB SECTION

NOTE:

The top surface of the parapet wall shall be given a troweled finish, with special care given to provide smooth contact surfaces under handrail posts.

Rail sections shall be of such length as to span at least two full handrail panels.

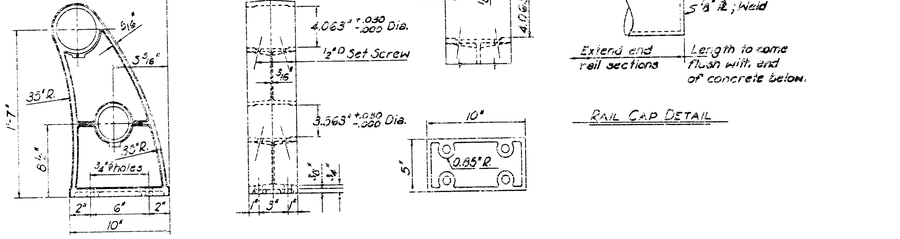
This handrail is intended to be identical, except for panel lengths, to that previously used on the Amicon Bridge for the City of Wichita.

Bevel exposed edges of parapet slots ½".

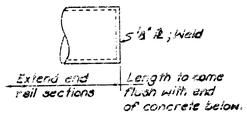
See Sheet 11 for General Notes.

See Sheet 9 for Bar List and Bending Diagrams.

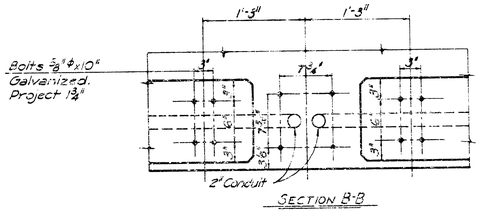
2" Galvanized Rigid Conduit shall be approved by Underwriters Laboratories. All conduit ends shall be closed, using permanent type caps.



HANDRAIL POST DETAILS



RAIL CAP DETAIL



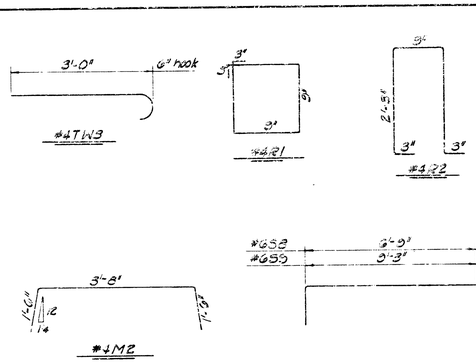
SECTION B-B

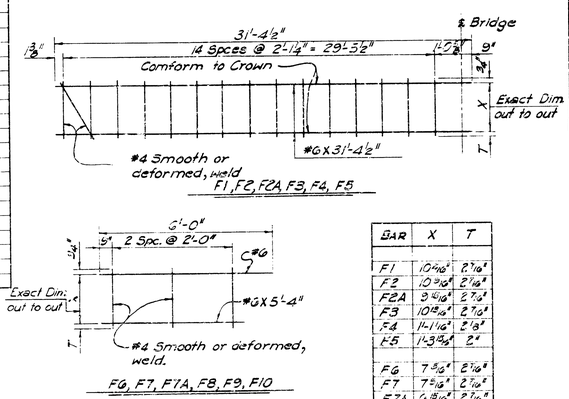
CITY OF WICHITA, KANSAS B. E. SMITH, CITY ENGINEER	
25th. STREET BRIDGE OVER LITTLE ARKANSAS RIVER	
HANDRAIL DETAILS NORTH WICHITA THRUWAY	
R. S. DELAMATER CONSULTING ENGINEER WICHITA, KANSAS	DATE April, 1967 SCALE ——— DWG NO 89-D-8

PROJECT NO	FED. AID PROJ. NO.	STATE	TOTAL SHEETS
C16-37	1967	D	11

SUPERSTRUCTURE

Straight Bars				Bent Bars			
Mark	No.	Size	Length	Mark	No.	Size	Length
S1	126	#9	31'-0"	F1	8	*	*
S2	60	#11	28'-0"	F2	12	*	*
S3	64	#11	20'-0"	F2A	4	*	*
S4	504	#8	8'-0"	F3	16	*	*
S5	189	#9	58'-0"	F4	16	*	*
S6	90	#11	31'-0"	F5	16	*	*
S7	96	#11	22'-0"	F6	6	*	*
S10	64	#8	15'-8"	F7	12	*	*
S11	64	#10	40'-0"	F7A	4	*	*
S12	64	#11	21'-0"	F8	16	*	*
S13	62	#11	31'-0"	F9	16	*	*
S14	60	#11	13'-0"	F10	16	*	*
S15	96	#3	14'-0"				
S16	64	#10	35'-0"	S8	124	#6	9'-0"
S17	44	#11	19'-0"	S9	62	#6	11'-6"
S18	62	#11	28'-0"				
S19	60	#11	12'-0"				
M1	32	#4	27'-0"	M2	209	#4	6'-8"
T	446	#6	31'-4"				
TW1	128	#6	6'-0"	TW3	828	#4	3'-6"
TW2	318	#6	5'-3"				
R3	200	#4	6'-9"	R1	276	#4	3'-6"
R4	20	#4	3'-7"	R2	380	#4	5'-9"
R5	40	#4	4'-10"				
SW1	20	#9	31'-0"				
SW2	8	#11	28'-0"				
SW3	8	#11	20'-0"	*See Bending Diagram			
SW4	80	#3	8'-0"				
SW5	30	#9	35'-0"				
SW6	12	#11	31'-0"				
SW7	12	#11	22'-0"				
SW10	12	#8	15'-3"				
SW11	12	#10	40'-0"				
SW12	8	#11	21'-0"				
SW13	8	#11	31'-0"				
SW14	8	#11	13'-0"				
SW15	16	#5	14'-0"				
SW16	12	#10	35'-0"				
SW17	8	#11	19'-0"				
SW18	8	#11	28'-0"				
SW19	8	#11	12'-0"				
SW20	8	#5	13'-5"				
SW21	12	#5	21'-0"				





BAR	X	T
F1	10 7/16"	2 7/16"
F2	10 7/16"	2 7/16"
F2A	3 7/16"	2 7/16"
F3	10 7/16"	2 7/16"
F4	11-11/16"	2 1/8"
F5	11-3 5/8"	2"
F6	7 5/16"	2 7/16"
F7	7 5/16"	2 7/16"
F7A	6 5/16"	2 7/16"
F8	7 5/16"	2 7/16"
F9	10 1/16"	2 1/8"
F10	11-0 15/16"	2"

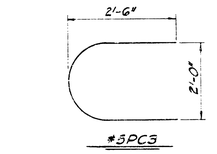
ONE ABUTMENT (2 THUS)

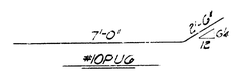
Straight Bars				Bent Bars			
Mark	No.	Size	Length	Mark	No.	Size	Length
AF1	57	#6	23'-3"	AB1	59	#5	5'-5"
AF3	6	#6	9'-0"	AF2	6	#6	10'-7"
AF5	6	#6	11'-3"	AF4	6	#6	3'-9"
AR1	36	#4	3'-0"	AV1	67	#4	12'-3"
AR2	8	#4	3'-10"	AV2	6	#4	4'-0"
AR3	6	#4	8'-4"	AV3	6	#4	13'-10"
				AV4	3	#4	*
AN1	12	#5	10'-6"	AV5	3	#4	*
AW2	14	#5	3'-6"	AV6	67	#4	3'-6"
				AO	30	#4	8'-8"
				SW3	8	#6	9'-9"
				SW4	4	#6	12'-3"

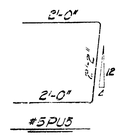
ONE PIER (4 THUS)

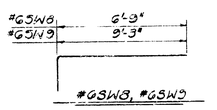
PC1	80	#7	16'-6"				
PC2	56	#5	16'-6"				
				PC3	62	#5	6'-2"
PH1	2	#10	44'-0"				
PH2	4	#10	29'-0"	PO	36	#4	7'-2"
PH3	10	#8	44'-0"				
PH4	5	#10	44'-0"	PU1	61	#5	5'-2"
PH5	12	#8	10'-0"	PU2	57	#5	12'-6"
PH6	12	#8	*	PU3	12	#5	4'-3"
PH7	10	#10	16'-9"	PU4	12	#5	*
PH8	10	#11	12'-0"	PU5	8	#5	6'-2"
				PU6	4	#10	9'-6"
PX2	8	#6	3'-9"	PX1	138	#6	4'-6"

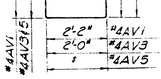
* See Bending Diagram

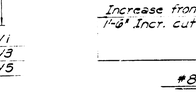


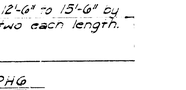


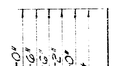


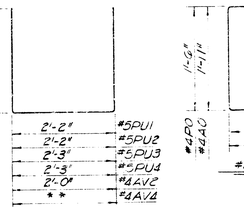


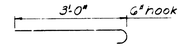




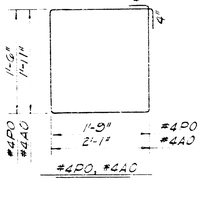








Increase from 12'-6" to 15'-6" by 1'-6" Incr. cut two each length.



* ½ crease from 2'-1" to 3'-4¾" by 5/4" incr. Cut 2 each length

** Increase from 2'-1" to 3'-4¾" by 5/4" increment cut two each length.
* Increase from 1'-1½" to 3'-10" by 6½" incr. cut two each length.

1	KJU	11/24/67	As Built

CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER

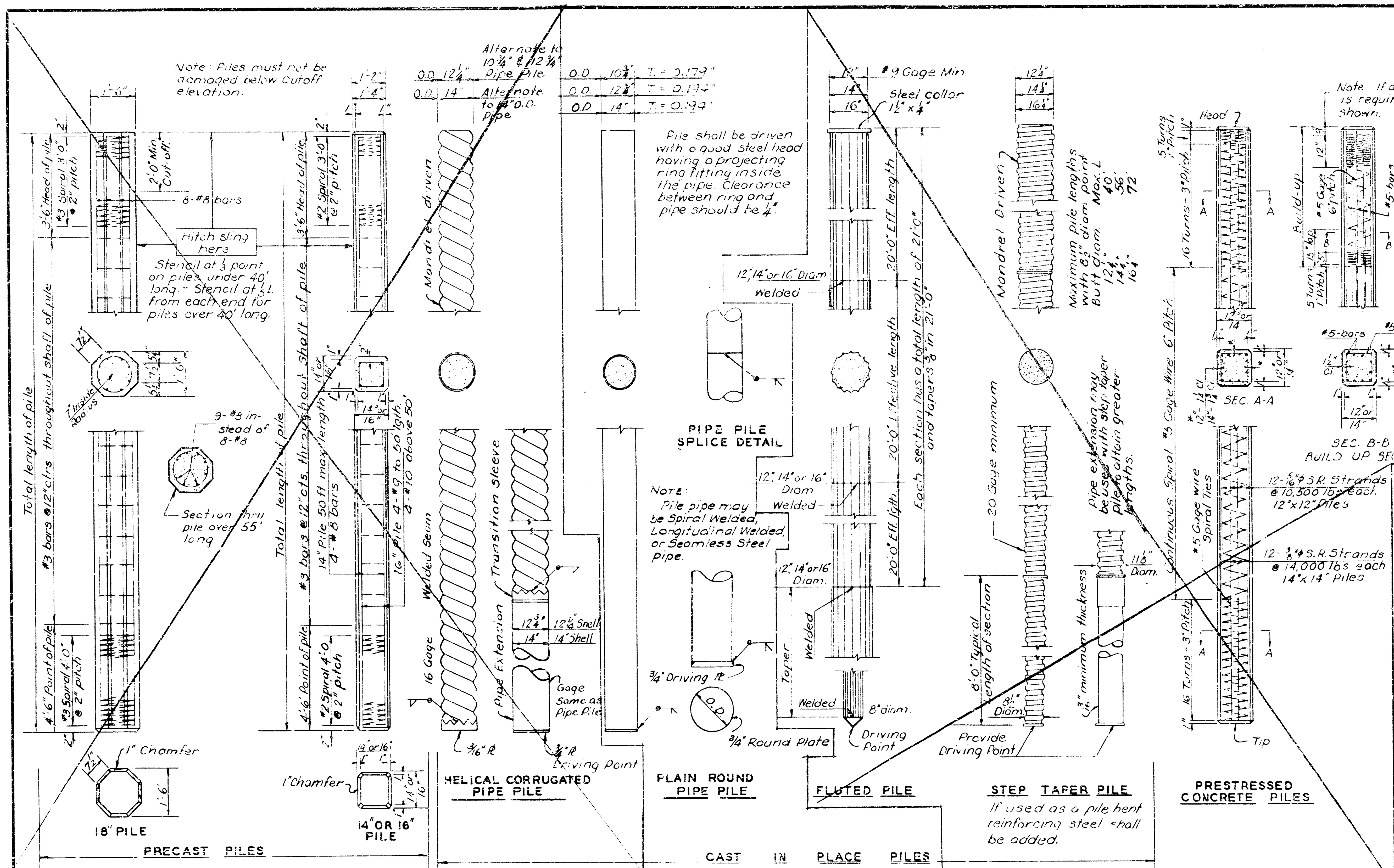
25th STREET BRIDGE OVER LITTLE ARKANSAS RIVER

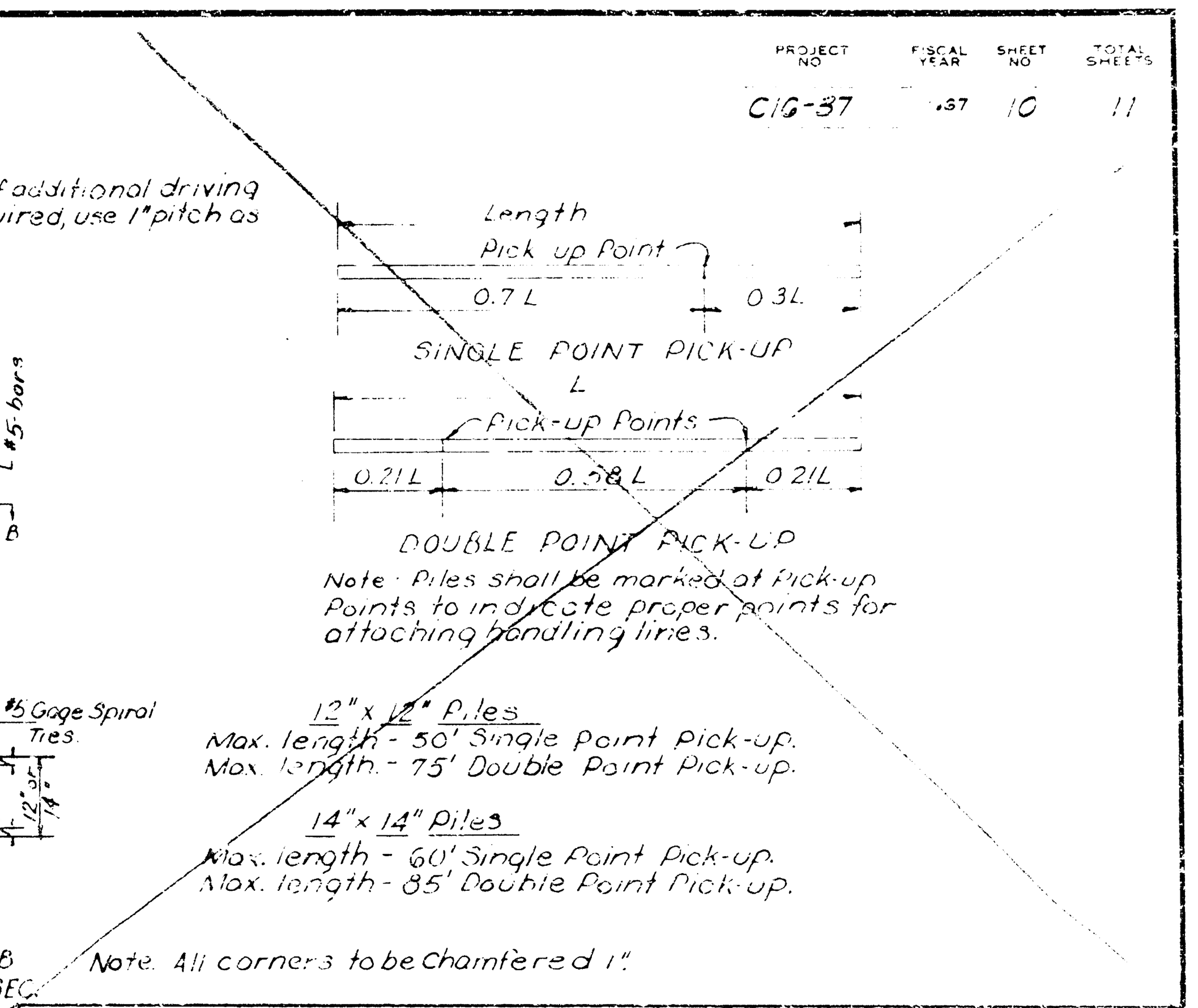
BAR LIST

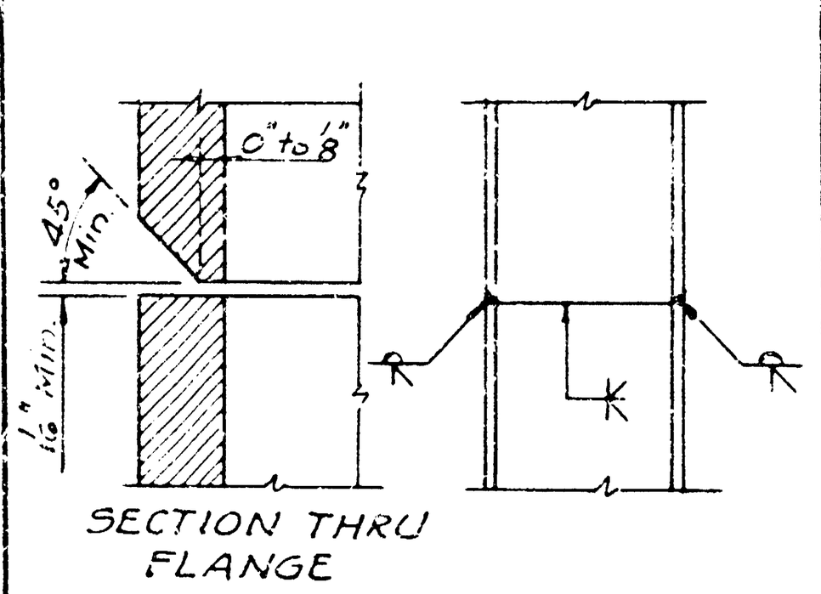
NORTH WICHITA THRUWAY

R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

DATE April, 1967
SCALE ———
DWG NO 69-D-9







PILE SPLICE DETAIL

PILES

STEEL PILES	EQUIVALENT CONCRETE PILES					
	PRECAST	PIPE	FLUTED	STEPTAPER	PRE-STRESSED	*
10BP42	14"	10¾"	12"	12¼"	12"	12¼
12BP53	16"	12¾"	14"	14¼"	14"	14¼
14BP73	18"	14"	16"	16¼"		14"

* Helical Corrugated Pipe shell.

CONCRETE PILES

PIPE PILE	EQUIVALENT CONCRETE PILES				
	PRECAST	FLUTED	STEPTAPER	PRE-STRESSED	*
10¾"	14"	12"	12¼"	12"	12¼"
12¾"	16"	14"	14¼	14	12¼
14"	18"	16"	16¼		14

GENERAL NOTES

1. *Specifications.*
Standard Specifications for State Road and Bridge Construction as currently used by the State Highway Commission of Kansas (Ed. 1966).

2. *Choice of Piles.*
Where Piles are specified, the Contractor may elect to use either the Steel Pile specified on the footing plans or the equivalent precast concrete, cast-in-place concrete or prestressed concrete pile shown in the table on this sheet.
Where Concrete Piles are specified the Contractor may elect to use either the size and type concrete pile specified on the footing plans or the equivalent precast concrete, cast-in-place concrete or prestressed concrete pile shown in the table on this sheet.
Other types of concrete piles not shown here are subject to the approval of the Engineer. Prestressed Concrete piles, Helical Corrugated Pipe shell or Step Taper piles shall not be used for abutments without expansion joints on bridges more than 150 ft. long.

3. *Concrete.*
All concrete for Precast and Cast-in-place shall be Class A Concrete. fc' = 3,000 p.s.i.. See Article G1-7(a) Standard Spec's.
Concrete for Prestressed Concrete piles shall be Class AAA concrete. fc' = 4,000 p.s.i.. See Article G1-7(b) Standard Spec's.

4. *Reinforcement*
Reinforcing bars shall be new billet steel of intermediate grade without exception. Hoops and spirals may be either plain or deformed bars.

5. *Precast Piles*
Precast piles shall conform to the requirements of Article G1-7(a). Standard Specifications.

6. *Cast-in-Place Shells.*
Steel Shells for Cast-in-place Concrete Piles shall conform to the requirements of Section U-7. Standard Specifications.
All piles driven without mandrel use gages or thicknesses shown above, except fluted pile use No. 9 gage minimum. Piles driven with mandrel shall be of sufficient strength and thickness to withstand driving without injury and to resist harmful distortion and/or buckling due to soil pressure after the mandrel is removed.
Improperly driven, broken or otherwise defective shells shall be removed and replaced or otherwise corrected to the satisfaction of the Engineer by removal and replacement, or the driving of an additional pile at no extra cost.
The Contractor shall maintain on the job at all times prior to and during the filling of the shells, a light suitable for visual inspection of the pile.

7. *Steel Pile*
Steel Pile shall conform to requirements of Subsection U5-8 Standard Specifications.

8. *Pile Points*
Pile points shall conform to the dimensions shown and requirements of Article U7-2(c) Standard Specifications. Pile points shall be mill welded to pile.

9. *Welding*
All field welding shall meet the requirements of Subsection G1-6 Standard Specifications.

10. *Paint*
All paint shall comply with Subsection Q3-8 Standard Specifications. Or as specified on the plans.

11. *Test Piles.*
Test Piles shall be driven where called for on the Bridge plans. All test piles shall be located so that they will become part of the Bridge Pile system.

12. *Splices.*
Splices for Steel Piles and Shell Piling shall be in accordance with details shown on this sheet and shall comply with Subsection G1-6 Std. Spec's.
Precast Concrete Pile splices shall comply with Subarticle G1-7(d)(1). Std. Specifications.
Prestressed Concrete Pile splices shall be made in accordance with the manufacturers recommendations, subject to the approval of the Engineer.

13. *Driving Formula.*
Driving Formula shall conform to Subarticle G1-4(d)(3).

14. *Mill Test Reports*
Steel Piles test reports shall comply with Art. U5-8(c) Standard Specifications.
Steel Shells test reports for cast-in-place piles shall comply with Subsection U7-4 Std. Spec's.

15. *Payment*
Payment for all piles shall comply with Subsec. G1-9. Std. Specifications.

NO.	DATE	REVISIONS	BY	APP.
5	8-26-66	Revise Entire Gen. Note	J.C.L.	E.E.W.
4	4-8-64	Add Longitudinal Welded Pipe pile	J.C.L.	T.A.C.
3	[illegible]	[illegible]	J.C.L.	T.A.C.
2	3-27-6[illegible]	Revise Pipe Pile General Note	J.C.L.	T.A.C.
1	1-24-6[illegible]	Remove hole in Prestressed Conc. Pile	J.C.L.	T.A.C.

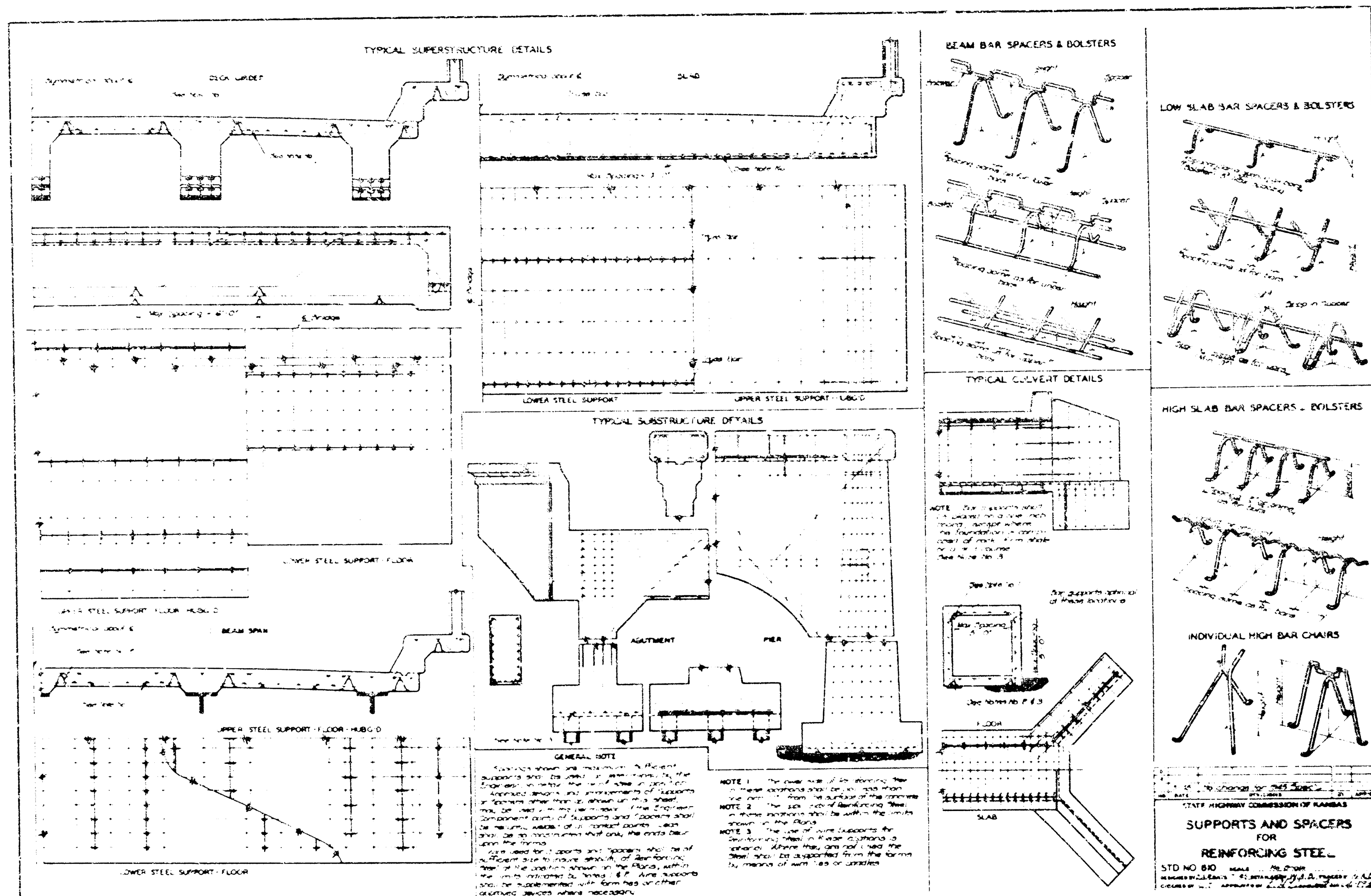
STATE HIGHWAY COMMISSION OF KANSAS

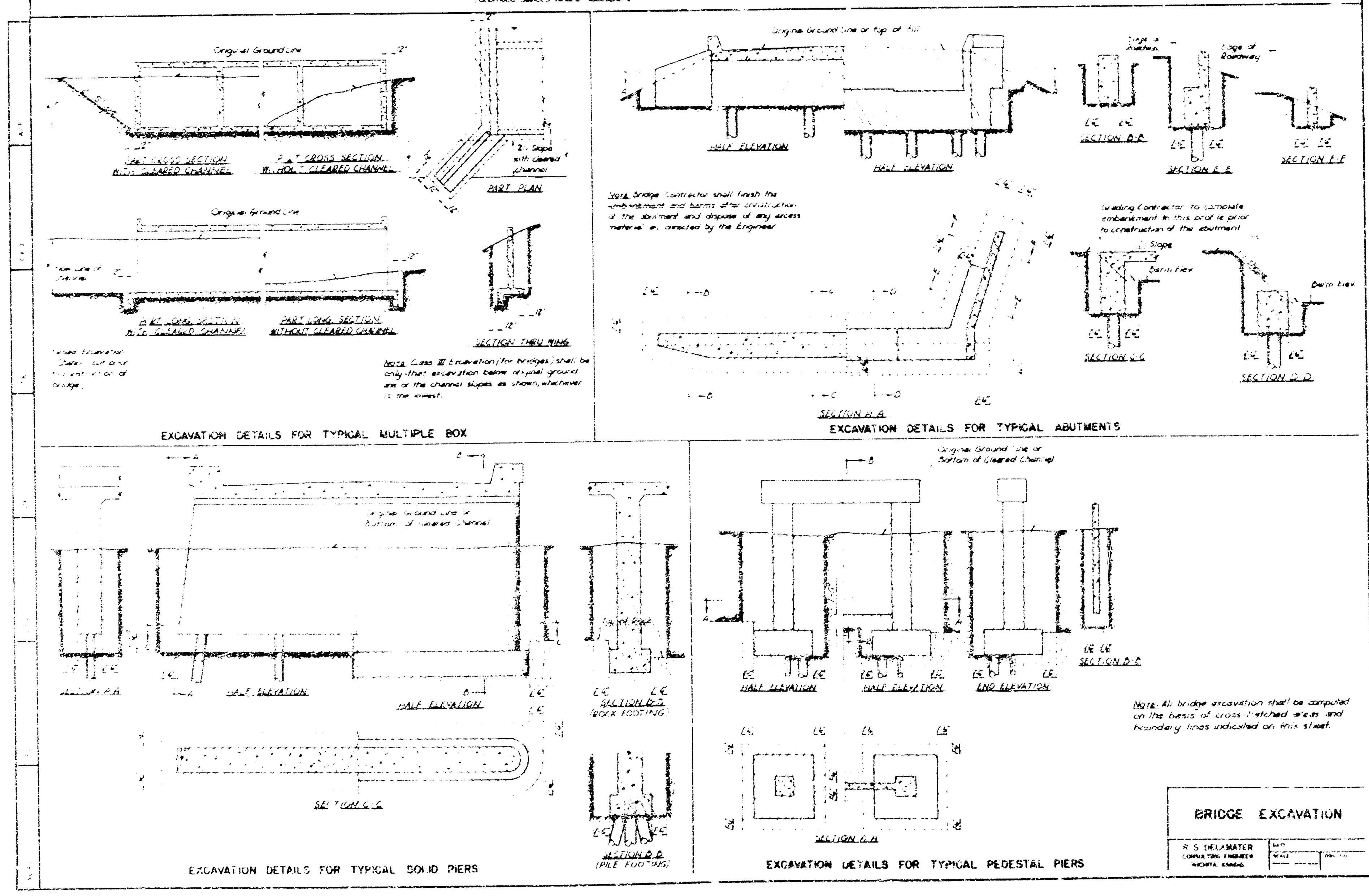
STANDARD PILE DETAILS

STD. NO. 102

SHEET NO. | SCALE | APP. | DESIGNED | DETAILED | QUANTITIES | TRACED | DESIGN CK. | DETAIL CK. | QUAN. CK. | TRACE CK.

Fed. Road Div. No.	State	Project No.	Fiscal Year	
5	Kansas	C16-37	1967	





Summary of Bridge Quantities

Item	Abut.#1	Pier #1	Pier #2	Pier #3	Pier #4	Abut.#2	Superst.	Total	Unit
Excavation Class I	60	2	—	—	2	60	—	124	Cu. Yds.
Excavation Class II	—	61	61	61	61	—	—	244	Cu. Yds
Class AAA(AE) Conc.	53.6	—	—	—	—	53.6	812.0	931.2	Cu. Yds.
Class A(AE) Conc.	—	84.5	84.5	84.5	84.5	—	—	338.0	Cu. Yds
Reinforcing Steel *	6,330	12,030	12,030	12,030	12,030	6,330	215,770	276,550	Lbs.
Aluminum Handrail	—	—	—	—	—	—	401.33	401.33	Lin. Ft.
Steel Piles 10" ‡	490	—	—	—	—	490	—	980	Lin. Ft.
Steel Piles 12" ‡	—	640	640	640	640	—	—	2,560	Lin. Ft.
Electrical Installation	—	—	—	—	—	—	L.S.	Lump Sum	L.S.

Const. Note:
‡ See pile logs for lengths in place and cut off.
* Paid plan quantity for superstructure steel.

Summary of Grading Quantities

Item	Quan.	Unit
Stm. Swr. Relocation (N.B.)	L.S.	L.S.
Hawl. Reconst. (E.B.)	L.S.	L.S.
Compacted Emb.	[illegible]	Cu. Yds.
Riprap	2,305	Sq. Yds
Chain Link Fence	L.S.	L.S.

GENERAL NOTES

COMMON EXCAVATION: There will be no direct payment for Common Excavation, or borrow, as such. Payment will be for material in place, as Compacted Embankment.

EMBANKMENTS: The Contractor shall construct the embankments and grade the berms at the abutments as shown on Construction Layout and Contour Map prior to construction of the bridge.

EXCAVATION: Elevation 110.60 constitutes the Excavation Boundary Plane for estimating quantities for Class I and Class II Bridge Excavation; Class I above and Class II below; see diagrams this sheet for limits of pay excavation.

SOUNDINGS: Sounding information shown on Sheet 3 is as obtained from borings made in the field and represents the best information available to the City of Wichita.

PILES: All 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 43 tons per pile in piers, 36 tons per pile in abutments.

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.

FALSEWORK AND FORMING: Falsework under superstructure, including each sidewalk slab, shall be left in place in any span until the concrete in that span and the adjacent span constructed latest shall have attained its design strength; but in no case shall the falsework be removed before 14 days after placing concrete. Parapet walls under handrails shall preferably, but not necessarily, be placed after falsework supporting the walk has been removed. Camber shall be provided in the amounts shown on the Dead-Load Camber Diagram.

CONCRETE: Class AAA(AE) Concrete shall be used in abutments and superstructure, including walks; Class A(AE) in Piers. Bevel all exposed edges with a 3/4" triangular molding and fillet all corners 3/4" unless otherwise noted.

REINFORCING STEEL: All dimensions shown 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.

DECK TREATMENT: Bridge deck shall be cured with Linseed Oil emulsion, in accordance with the Specifications.

DESIGN:

Design Loading: H20-S16-44 A.A.S.H.O. Specifications ([illegible] Ed.)

Unit Stresses:
- fc = 1,[illegible] p.s.i. Class AAA
- fc = 1,[illegible] p.s.i. Class A
- fs = 20,[illegible] p.s.i. (Reinf)
- f'c = 4,[illegible] p.s.i. Class AAA
- f'c = 3,000 p.s.i. Class A

Pile Loading: 43 tons per pile in piers; 36 tons per pile in abutments

	KJU	1968	As Built

CITY OF WICHITA, KANSAS
R. E. SMITH, CITY ENGINEER

25th. STREET BRIDGE OVER LITTLE ARKANSAS RIVER

B.S., B.E., NOTES & QUANTITIES
NORTH WICHITA THRUWAY

R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

DATE: April 1967
SCALE: —
DWG. NO. 89-D-11