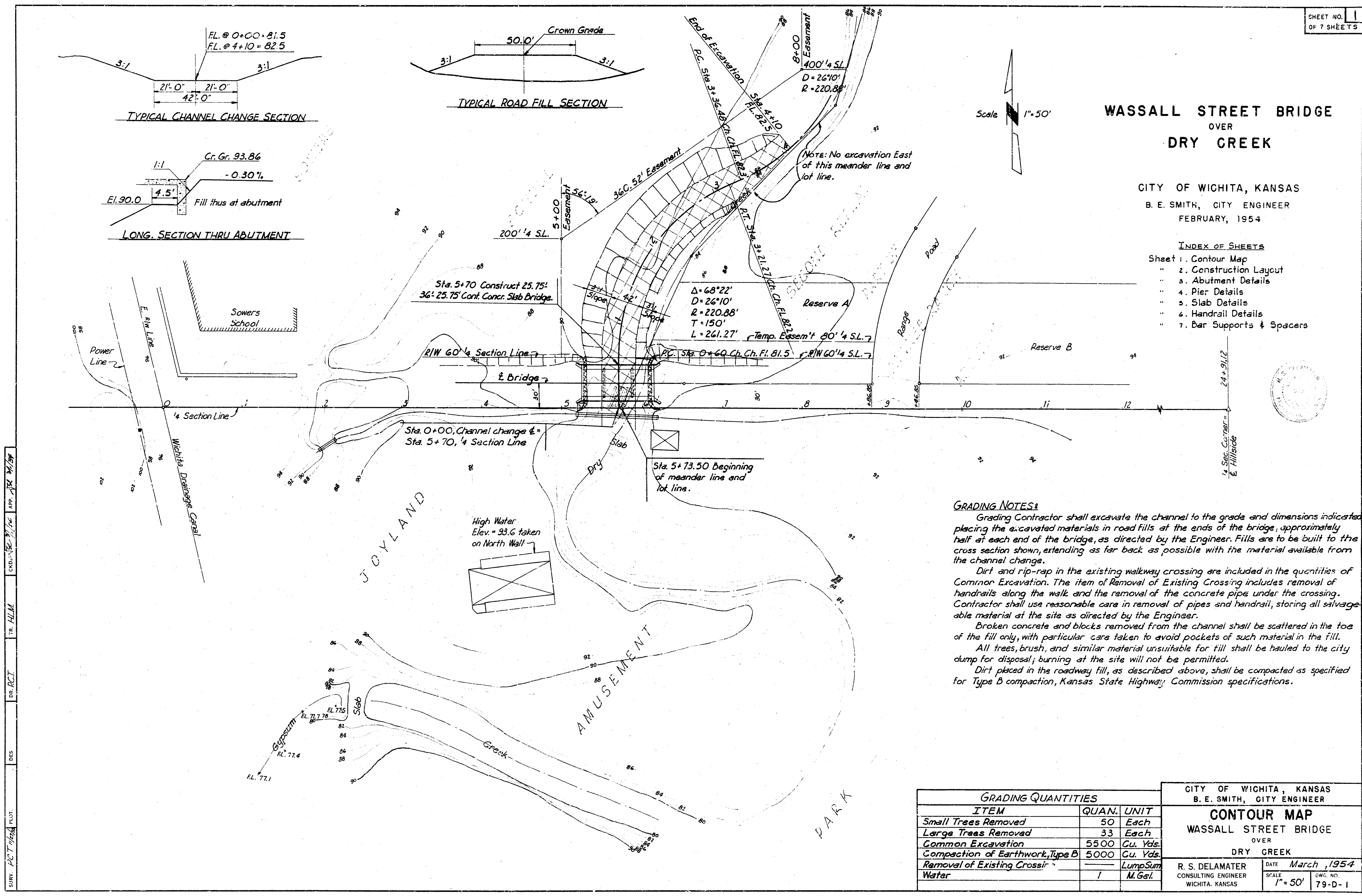




SHEET NO. 1
OF 7 SHEETS

WASSALL STREET BRIDGE
OVER
DRY CREEK

CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER
FEBRUARY, 1954

- INDEX OF SHEETS
- Sheet 1. Contour Map
 - " 2. Construction Layout
 - " 3. Abutment Details
 - " 4. Pier Details
 - " 5. Slab Details
 - " 6. Handrail Details
 - " 7. Bar Supports & Spacers

GRADING NOTES:

Grading Contractor shall excavate the channel to the grade and dimensions indicated placing the excavated materials in road fills at the ends of the bridge, approximately half at each end of the bridge, as directed by the Engineer. Fills are to be built to the cross section shown, extending as far back as possible with the material available from the channel change.

Dirt and rip-rap in the existing walkway crossing are included in the quantities of Common Excavation. The item of Removal of Existing Crossing includes removal of handrails along the walk and the removal of the concrete pipe under the crossing. Contractor shall use reasonable care in removal of pipes and handrail, storing all salvageable material at the site as directed by the Engineer.

Broken concrete and blocks removed from the channel shall be scattered in the toe of the fill only, with particular care taken to avoid pockets of such material in the fill.

All trees, brush, and similar material unsuitable for fill shall be hauled to the city dump for disposal; burning at the site will not be permitted.

Dirt placed in the roadway fill, as described above, shall be compacted as specified for Type B compaction, Kansas State Highway Commission specifications.

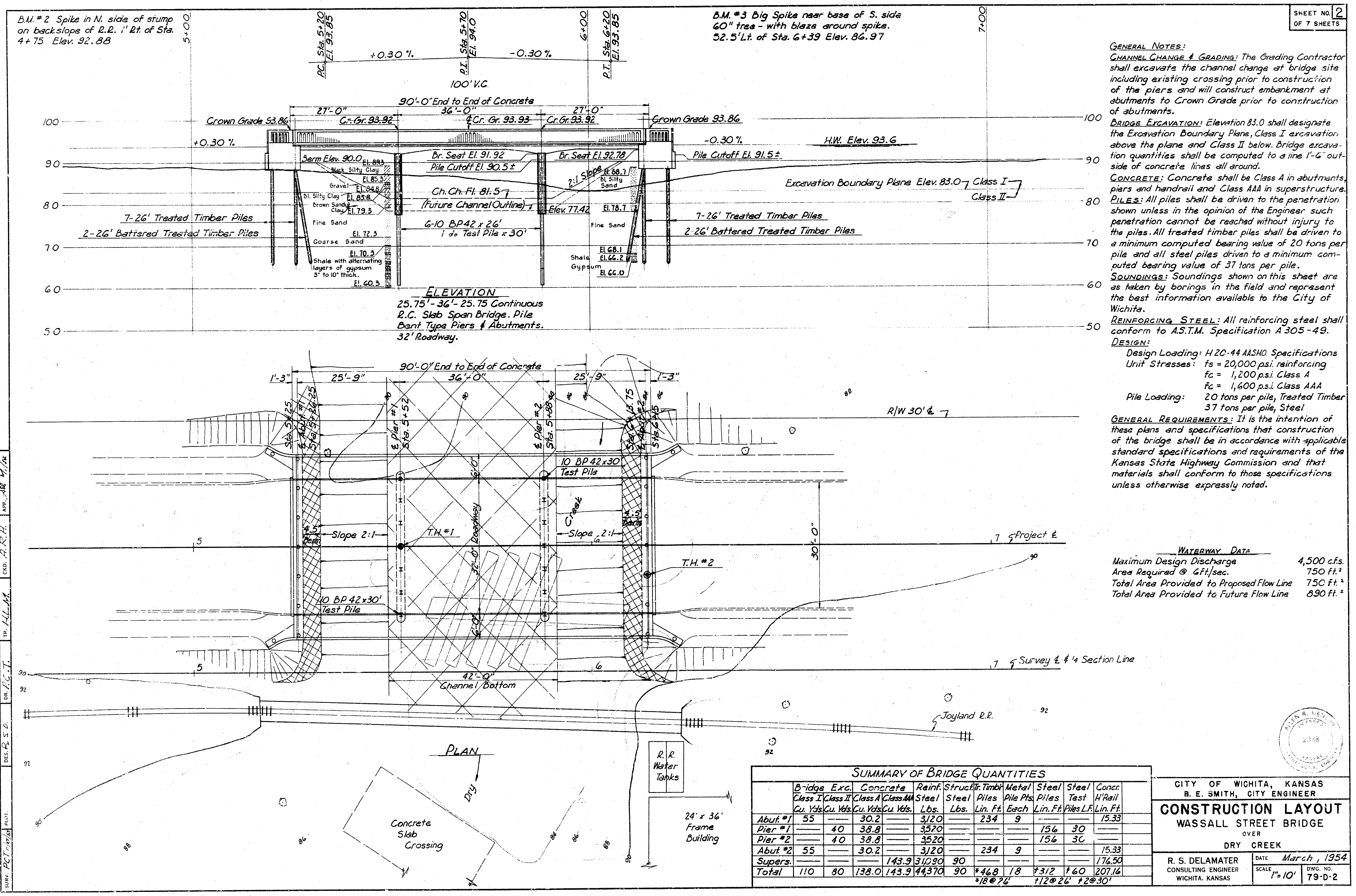
GRADING QUANTITIES		
ITEM	QUAN.	UNIT
Small Trees Removed	50	Each
Large Trees Removed	33	Each
Common Excavation	5500	Cu. Yds.
Compaction of Earthwork, Type B	5000	Cu. Yds.
Removal of Existing Crossing		Lump Sum
Water	1	M. Gal.

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

CONTOUR MAP
WASSALL STREET BRIDGE
OVER
DRY CREEK

R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

DATE March, 1954
SCALE 1"=50'
DWG. NO. 79-D-1



B.M. #2 Spike in N. side of stump on back slope of R.R. 1' E. of Sta. 4+75 Elev. 92.88

B.M. #3 Big Spike near base of S. side 60" tree - with blaze around spike. 52.5' Lt. of Sta. 6+39 Elev. 86.97

SHEET NO. 2
OF 7 SHEETS

GENERAL NOTES:
CHANNEL CHANGE & GRADING: The Grading Contractor shall excavate the channel change at bridge site including existing crossing prior to construction of the piers and will construct embankment at abutments to Crown Grade prior to construction of abutments.
BRIDGE ELEVATION: Elevation 83.0 shall designate the Excavation Boundary Plane, Class I excavation above the plane and Class II below. Bridge excavation quantities shall be computed to a line 1'-6" outside of concrete lines all around.
CONCRETE: Concrete shall be Class A in abutments, piers and handrail and Class AAA in superstructure.
PILES: All piles shall be driven to the penetration shown unless in the opinion of the Engineer such penetration cannot be reached without injury to the piles. All treated timber piles shall be driven to a minimum computed bearing value of 20 tons per pile and all steel piles driven to a minimum computed bearing value of 37 tons per pile.
SOUNDINGS: Soundings shown on this sheet are as taken by borings in the field and represent the best information available to the City of Wichita.
REINFORCING STEEL: All reinforcing steel shall conform to A.S.T.M. Specification A305-49.
DESIGN:
Design Loading: H20-44 AASHO Specifications
Unit Stresses: $f_s = 20,000$ psi. reinforcing
 $f_c = 1,200$ psi. Class A
 $f_c = 1,600$ psi. Class AAA
Pile Loading: 20 tons per pile, Treated Timber
37 tons per pile, Steel
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 those specifications unless otherwise expressly noted.

WATERWAY DATA
Maximum Design Discharge 4,500 cfs.
Area Required @ 6 ft/sec. 750 ft.²
Total Area Provided to Proposed Flow Line 750 ft.²
Total Area Provided to Future Flow Line 890 ft.²

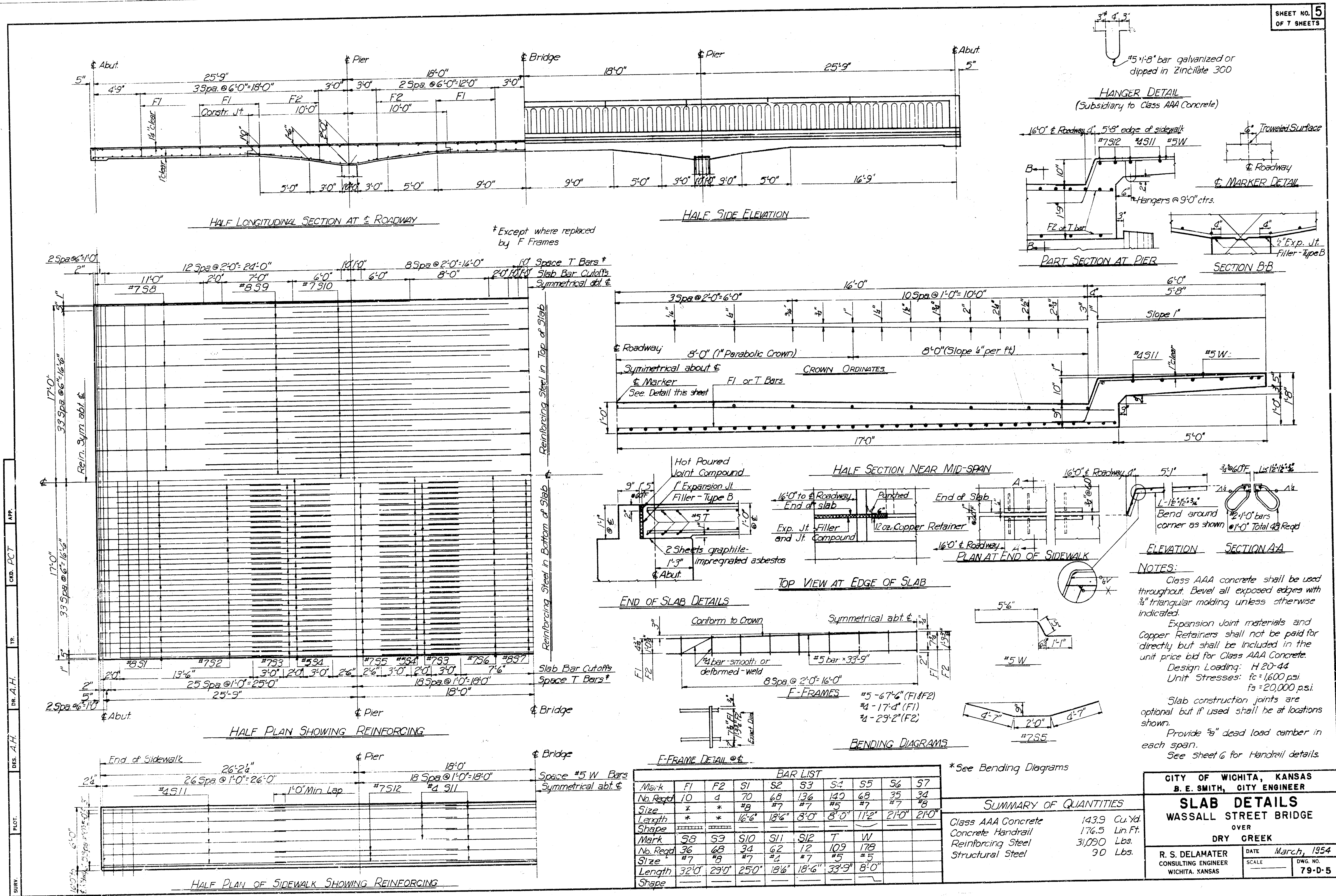
SUMMARY OF BRIDGE QUANTITIES											
	Bridge Ex.	Concrete	Reinf.	Struct.	Timber	Metal	Steel	Steel	Concr.	Steel	Concr.
	Class I	Class II	Class A	Class AAA	Steel	Steel	Piles	Pile Pts	Piles	Test	H/Rail
	Cu. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Lbs.	Lbs.	Lin. Ft.	Each	Lin. Ft.	Piles L.F.	Lin. Ft.
Abut. #1	55	30.2	3,120		234	9			15.33		
Pier #1	40	38.8	3,570				156	30			
Pier #2	40	38.8	3,570				156	30			
Abut. #2	55	30.2	3,120		234	9			15.33		
Supers.		143.9	3,109.0	90			176.50				
Total	110	80	138.0	143.9	44,370	90	*46.8	18	*312	*160	207.16
							*18@74'		*12@26'	*2@30'	

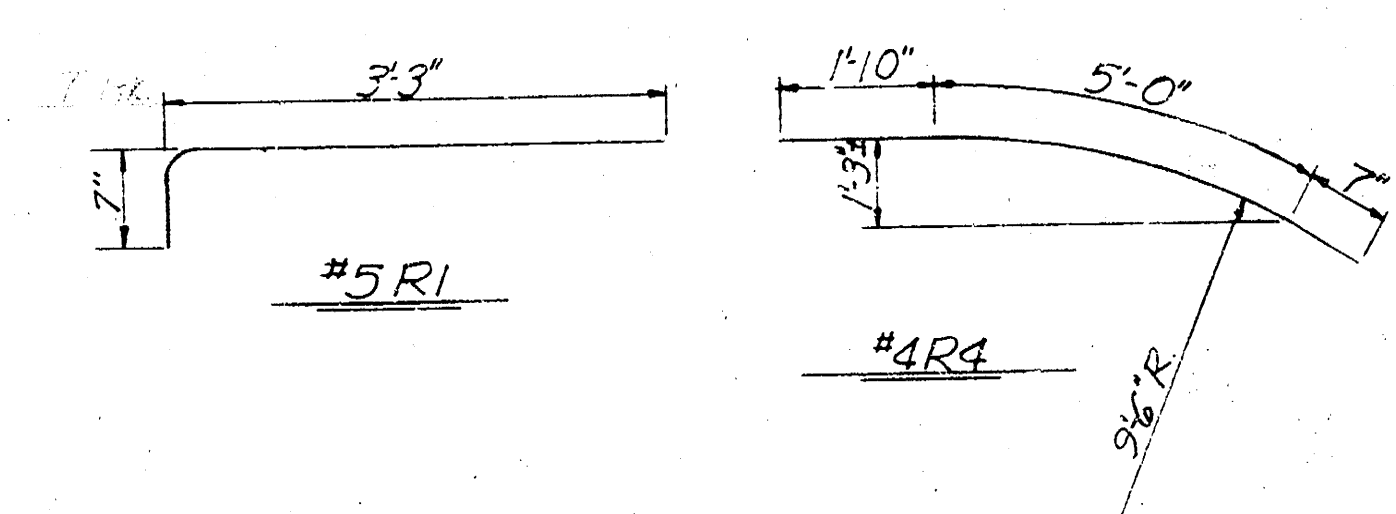
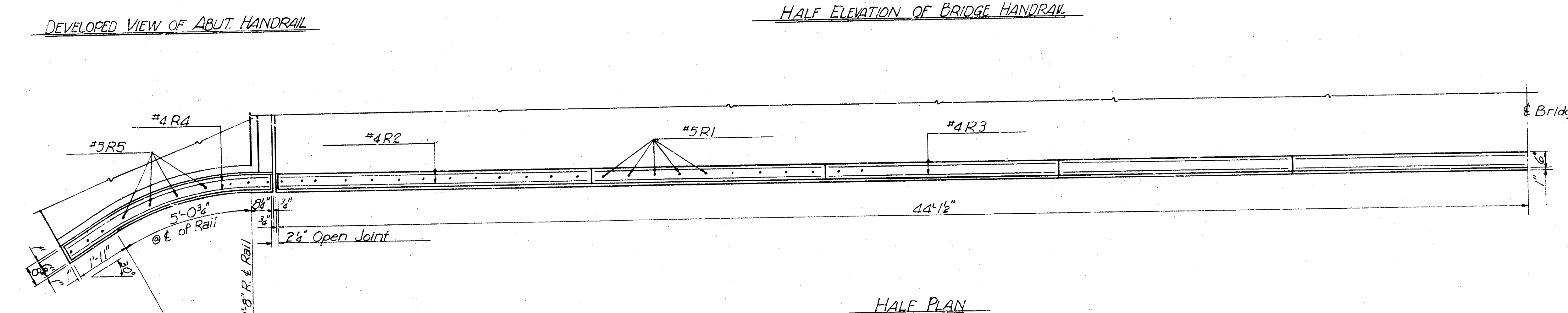
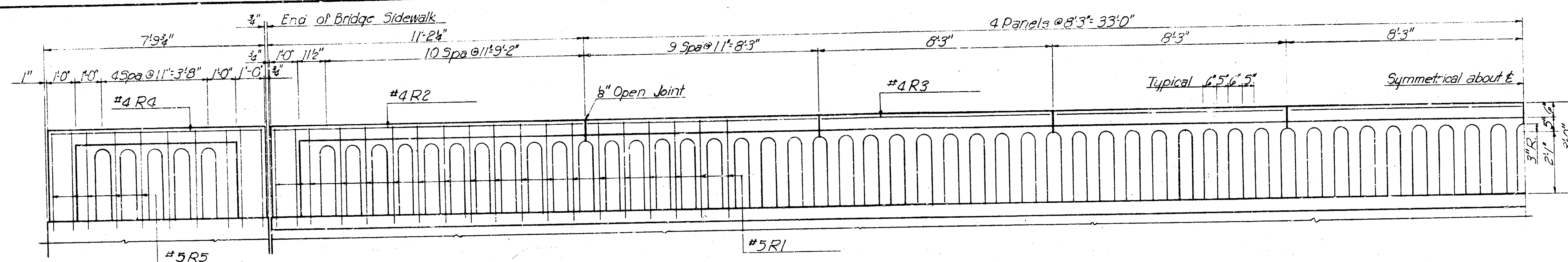
CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER
CONSTRUCTION LAYOUT
WASSALL STREET BRIDGE
OVER
DRY CREEK
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS
DATE March, 1954
SCALE 1"=10'
DWG. NO. 79-D-2



SUMMARY OF PIER QUANTITIES							
Mark	PV1	PV2	PV3	PV1	PV2	PT	
No. Reg'd	30	30	12	70	20	2	
Size	#5	#5	#5	#6	#5	#4	
Length	34'-6"	47'-7"	18'-8"	14'-8"	42'-0"	6'-8"	36'-2"
Shape	□		~		□		
Class A Concrete				38.8 Cu. Yds.			
Reinforcing Steel				3520 Lbs.			
Steel Piles (10BP42)				156 Lin. Ft.			
Steel Test Pile				30 Lin. Ft.			

CITY OF WICHITA, KANSAS	
B. E. SMITH, CITY ENGINEER	
PIER DETAILS	
WASSALL STREET BRIDGE	
OVER	
DRY CREEK	
R. S. DELAMATER CONSULTING ENGINEER WICHITA, KANSAS	Date: <i>March, 1954</i> DWG. NO. 79-D-4





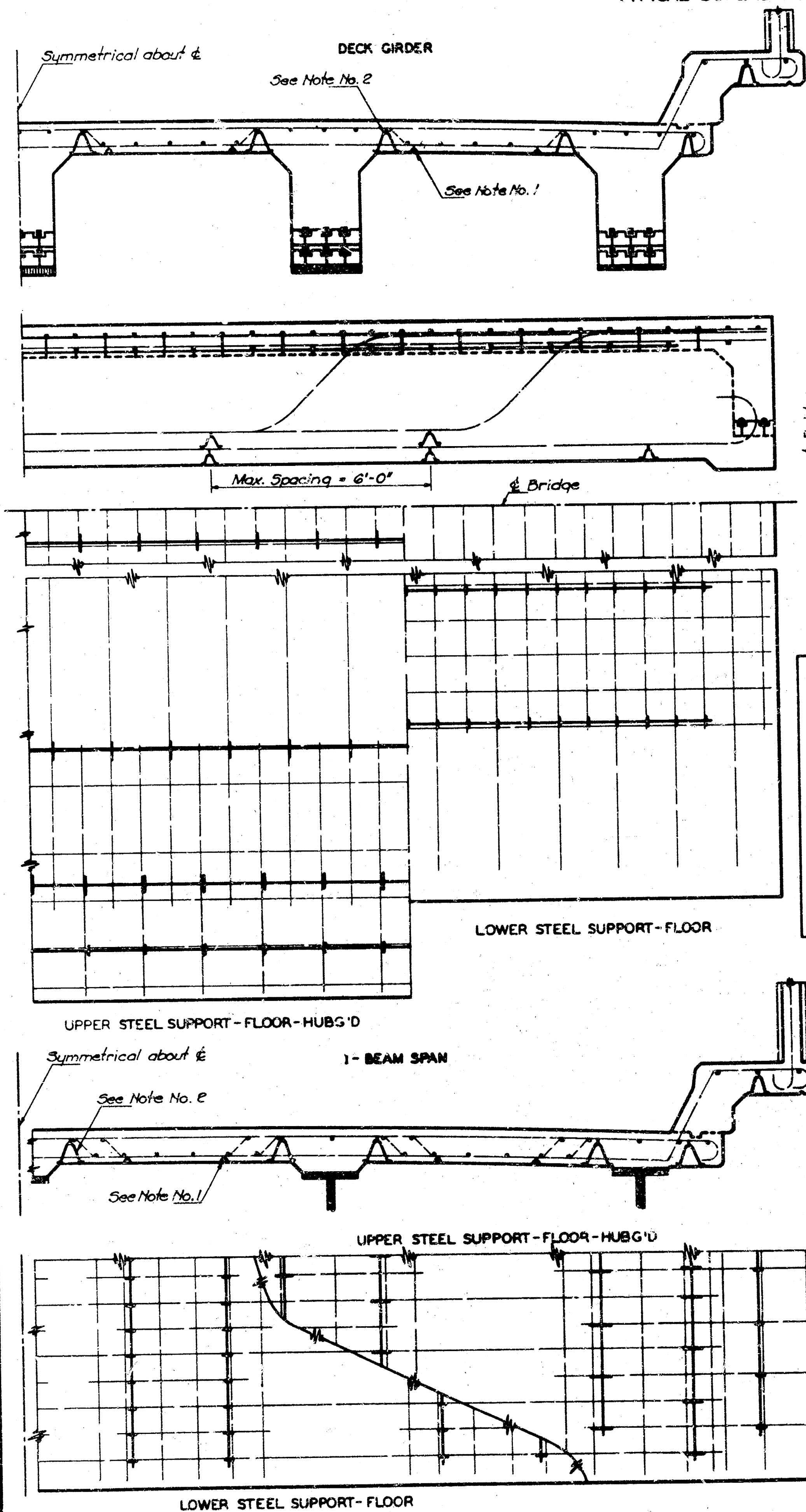
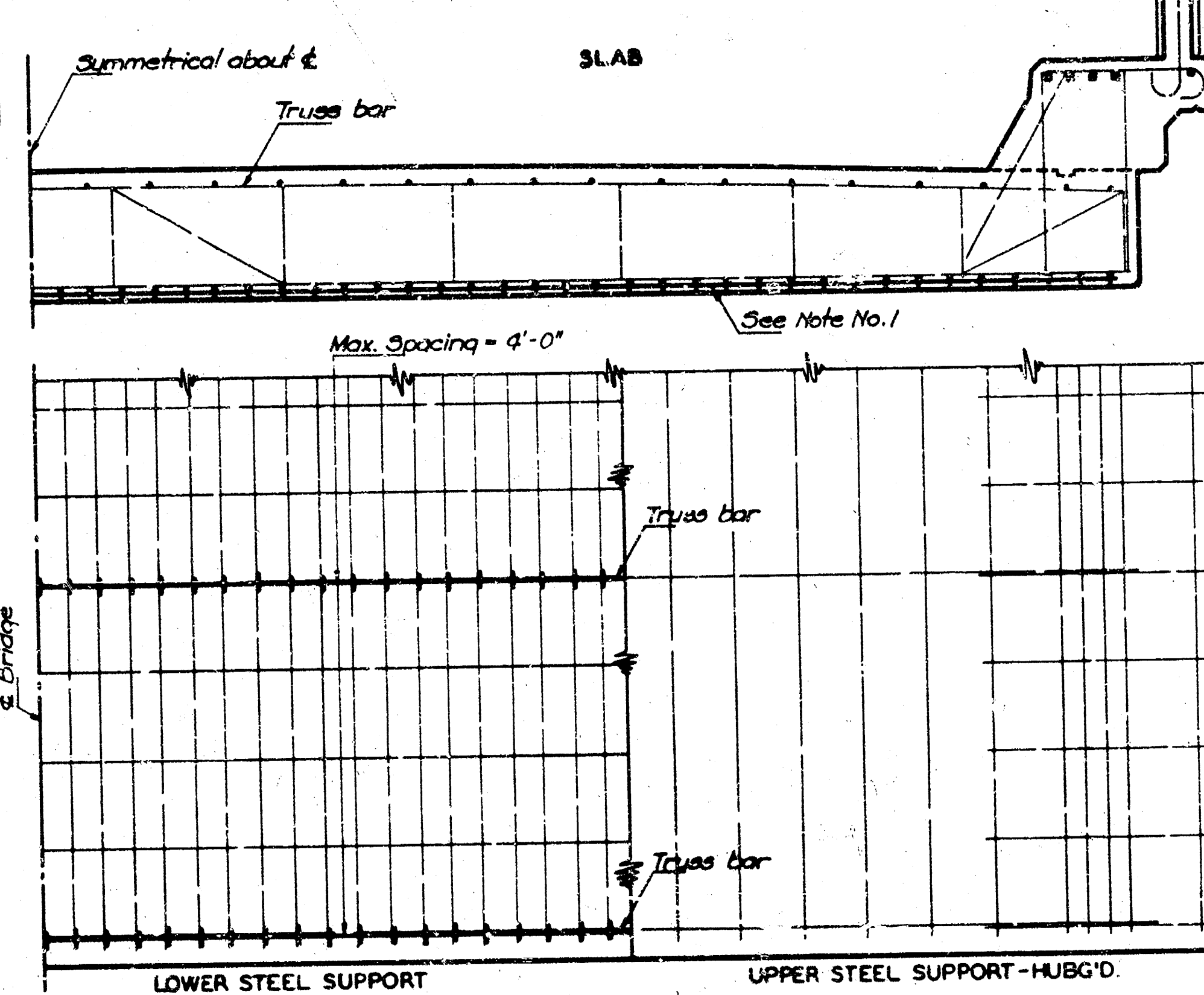
BAR LIST					
Mark	R1	R2	R3	R4	R5
No. Reqd	196	8	32	8	40
Size	#5	#4	#4	#4	#5
Length	3'-10"	1'-10"	8'-0"	7'-5"	3'-10"
Shape					
SUMMARY OF QUANTITIES					
Class A Concrete	5.6 Cu Yd.				
Reinforcing Steel	1210 Lbs.				

NOTES:
 All concrete used in the handrail shall be Class A.
 Bevel all exposed edges with a 1/2" triangular molding unless otherwise indicated.
 Bid item "Concrete Handrail" shall include all Class A Concrete and reinforcing steel in handrail complete in place, as shown on this sheet.
 Concrete Handrail shall be bid on basis of linear feet in place. The Class A Concrete and Reinforcing Steel quantities shown on this sheet are for Contractors information only.

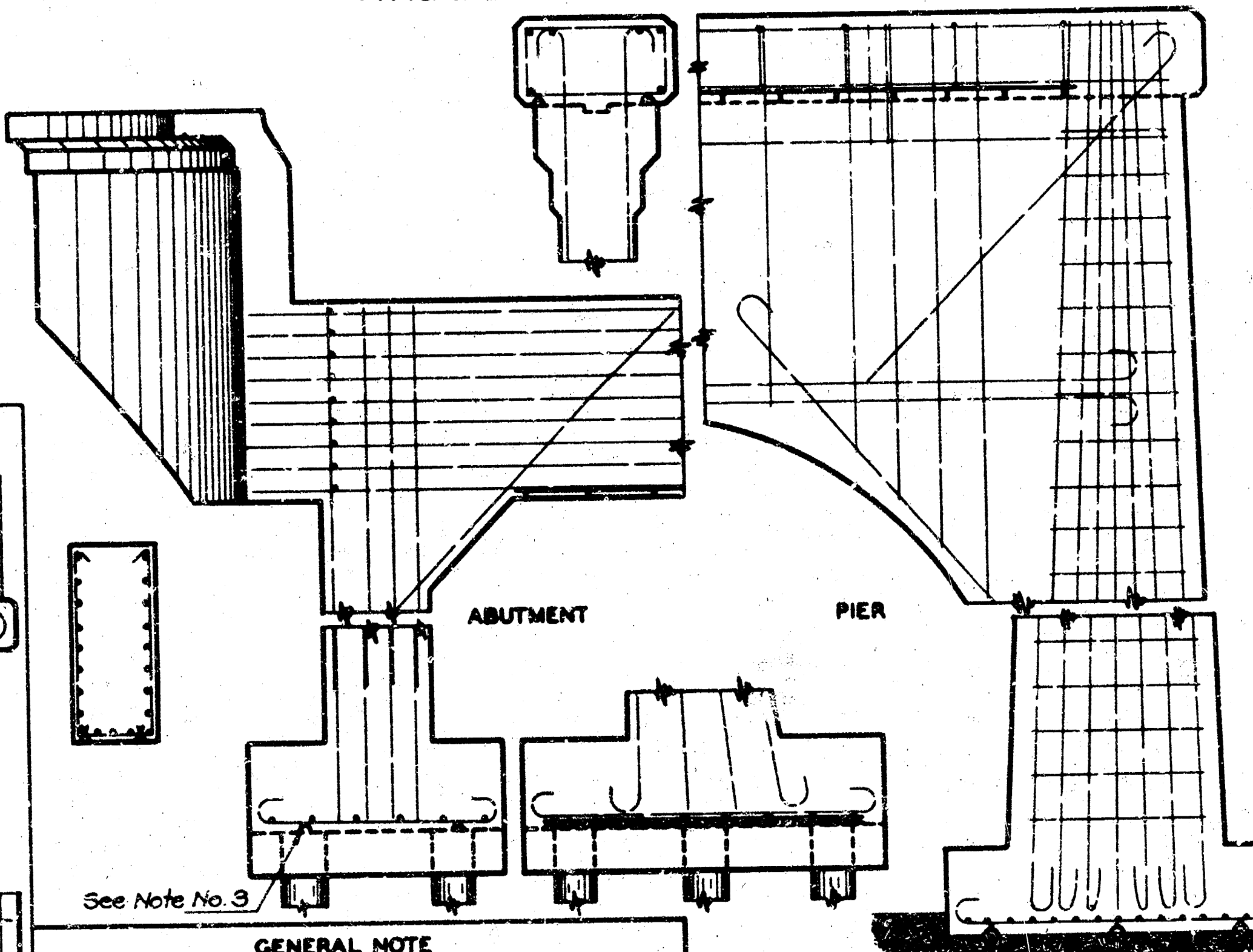
CITY OF WICHITA, KANSAS B. E. SMITH, CITY ENGINEER	
HANDRAIL DETAILS WASSALL STREET BRIDGE OVER DRY CREEK	
R. S. DELAMATER CONSULTING ENGINEER WICHITA, KANSAS	DATE March 1954 SCALE 1/2"=1'-0" DWG. NO. 79-D-6

SURV. PLOT DES. DR. ALH. IN. CUB. PCY. APP. RE. 7/1/54

TYPICAL SUPERSTRUCTURE DETAILS

**SLAB**

TYPICAL SUBSTRUCTURE DETAILS

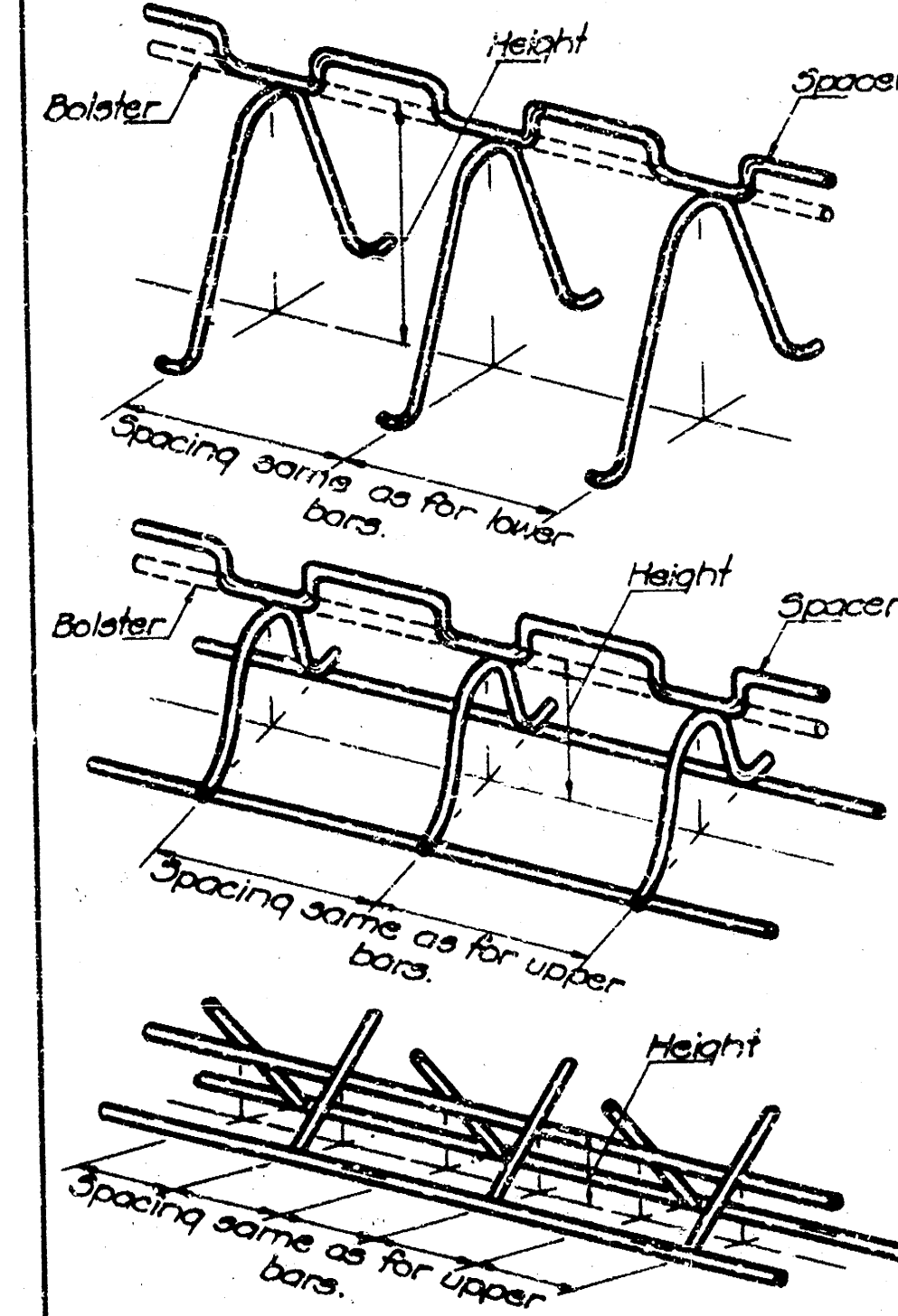


GENERAL NOTE

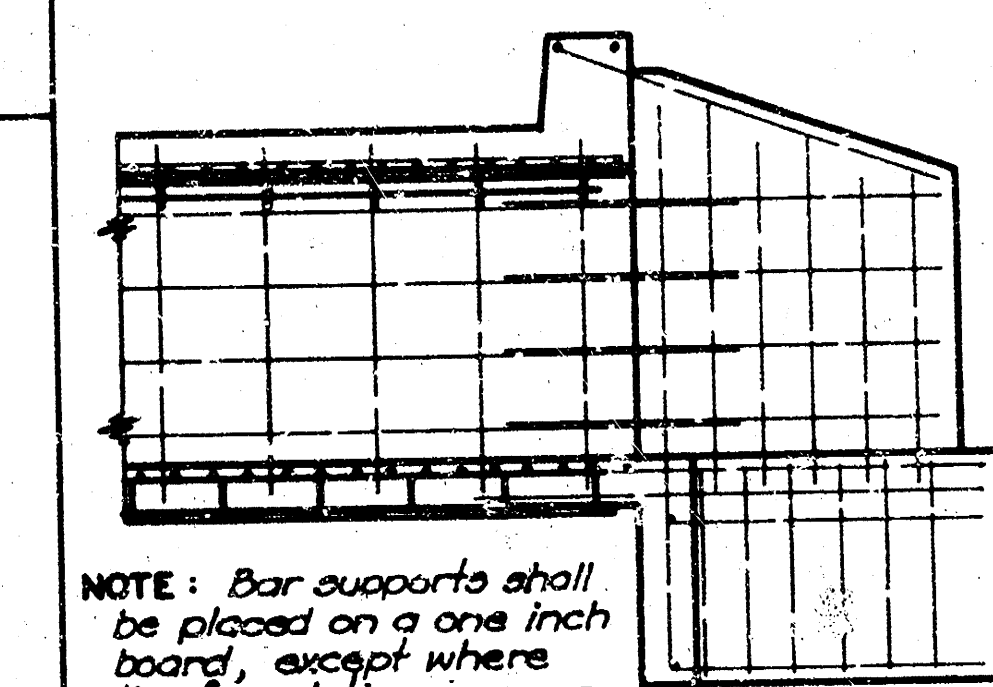
Spacings shown are maximum. Sufficient supports shall be used, as determined by the Engineer, to retain the reinf. steel in position. Approved designs and arrangements of Supports or Spacers other than as shown on this sheet, may be used with the permission of the Engineer. Component parts of the supports or spacers shall be welded at all contact points. Legs shall be so constructed that only the ends bear upon the forms.

Wire used for Supports and Spacers shall be of sufficient size to insure stability of reinforcing steel at the position shown. Plans within the limits indicated in Note 1 § E. Wire supports shall be supplemented with ties or other approved devices where necessary.

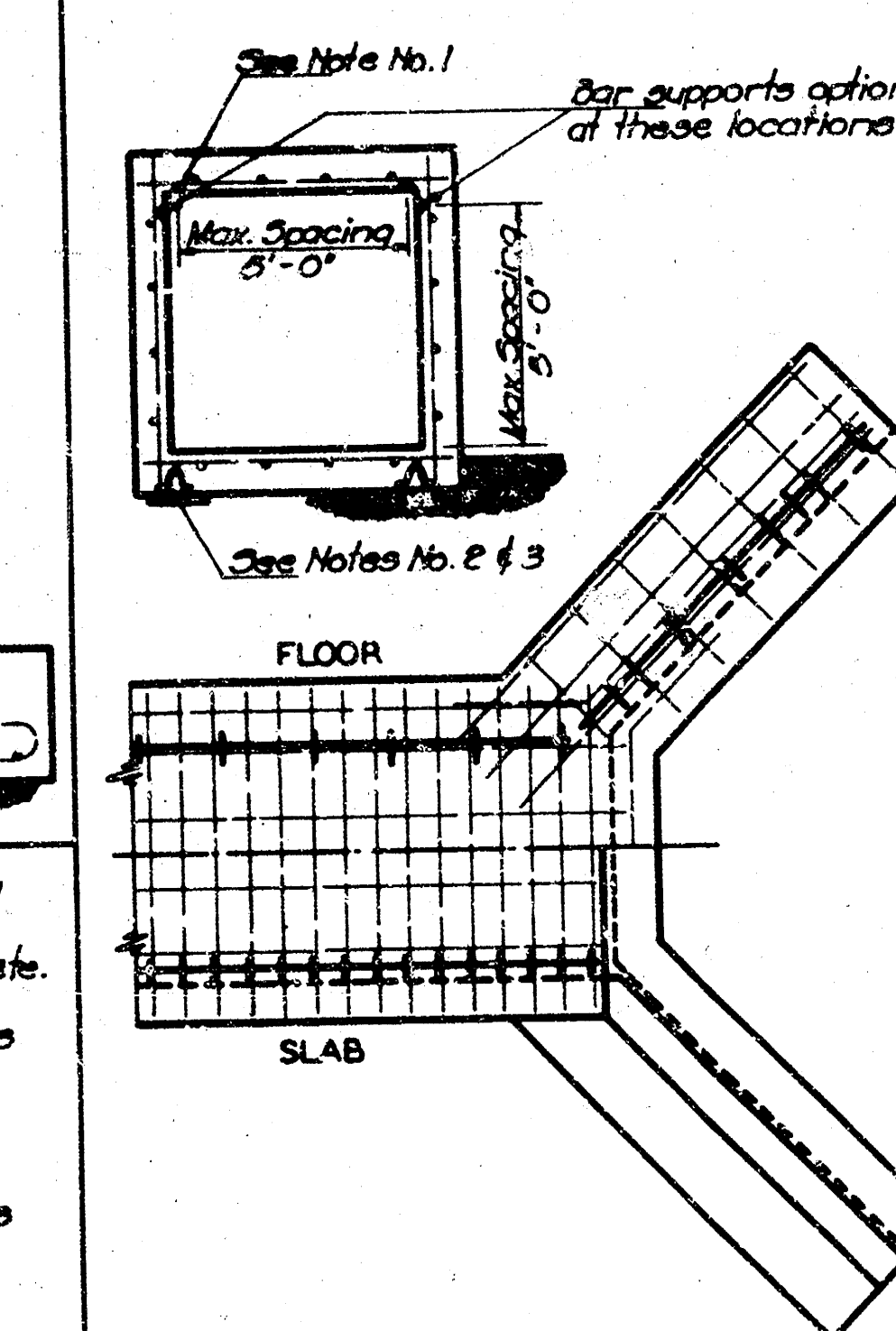
BEAM BAR SPACERS & BOLSTERS



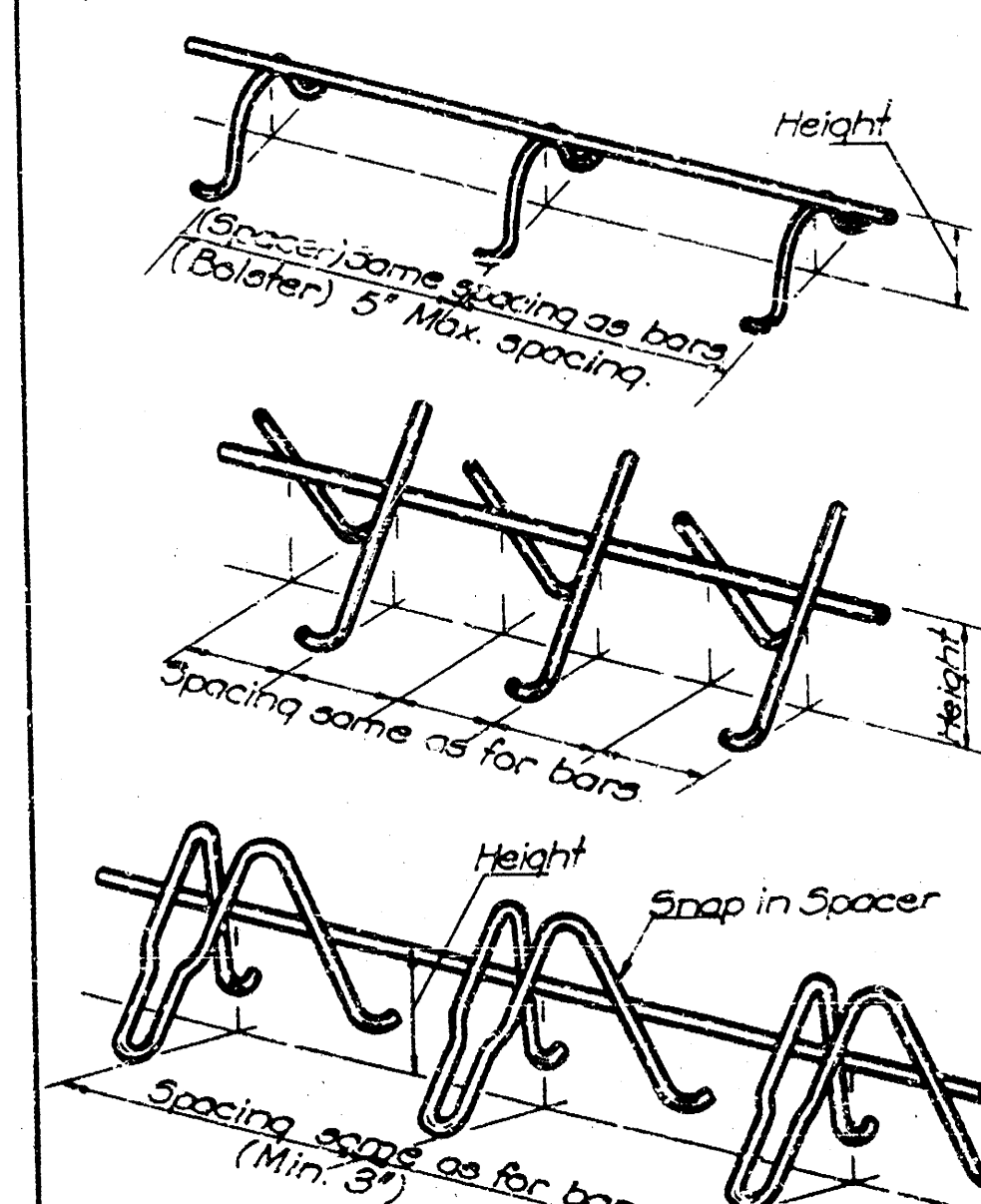
TYPICAL CULVERT DETAILS



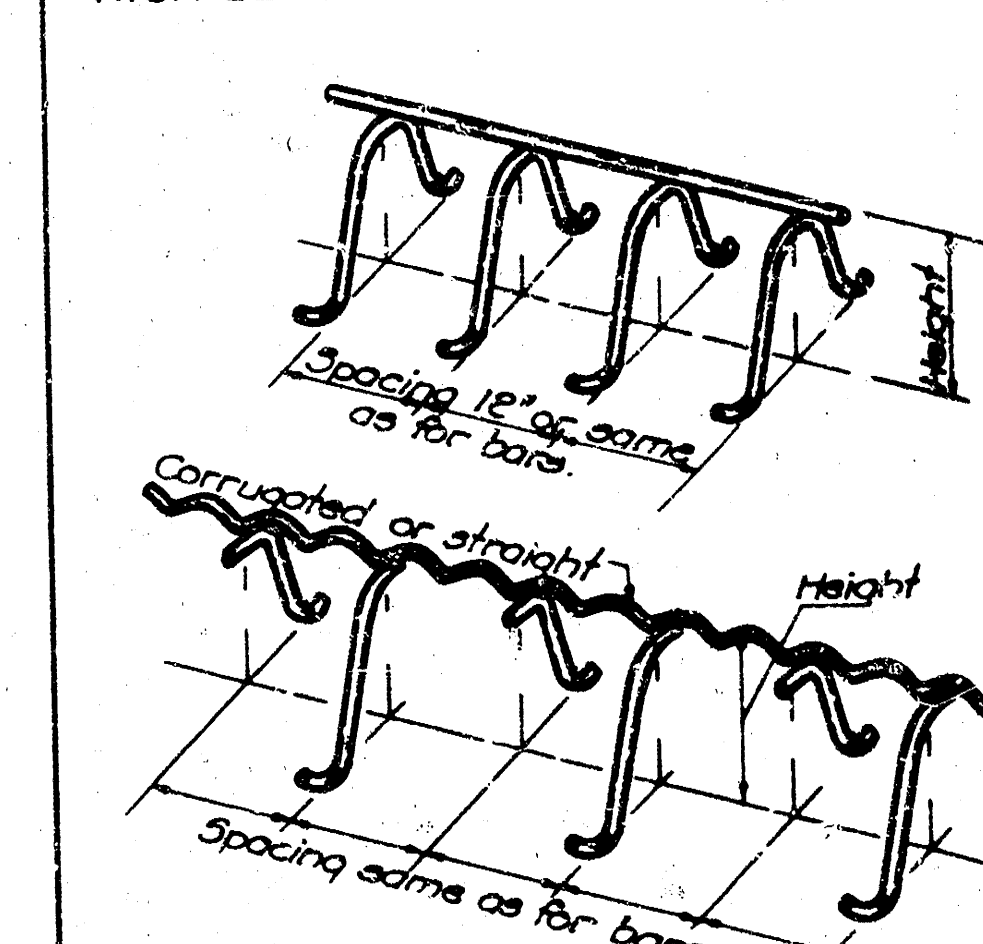
NOTE: Bar supports shall be placed on a one inch board, except where the foundation is composed of rock, firm sand or a seal course.
See Note No. 3.



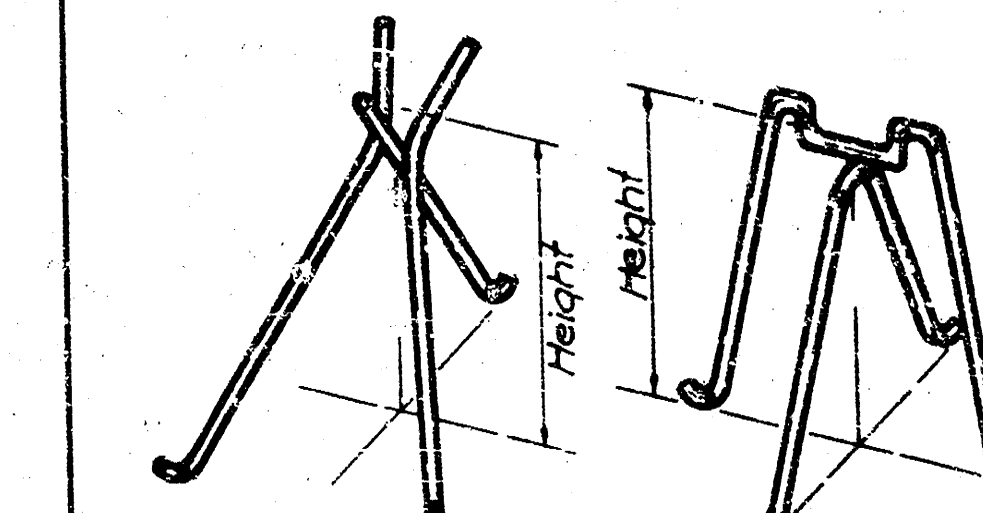
LOW SLAB BAR SPACERS & BOLSTERS



HIGH SLAB BAR SPACERS & BOLSTERS



INDIVIDUAL HIGH BAR CHAIRS



3					
2					
1	3-26	No change for 1945 Spec's			
NO DATE		REVISION		BY	APP'D

STATE HIGHWAY CO. MISSION OF KANSAS

SUPPORTS AND SPACERS

FOR

REINFORCING STEEL

STD. NO. 610 SCALE No Scale

DESIGNED BY S. B. Z. 7-25 DETAILING BY N. A. S. TRACED BY N. A. S.

CHECKED BY G. C. APPROVED BY L. A. Howard DATE 4-17-46