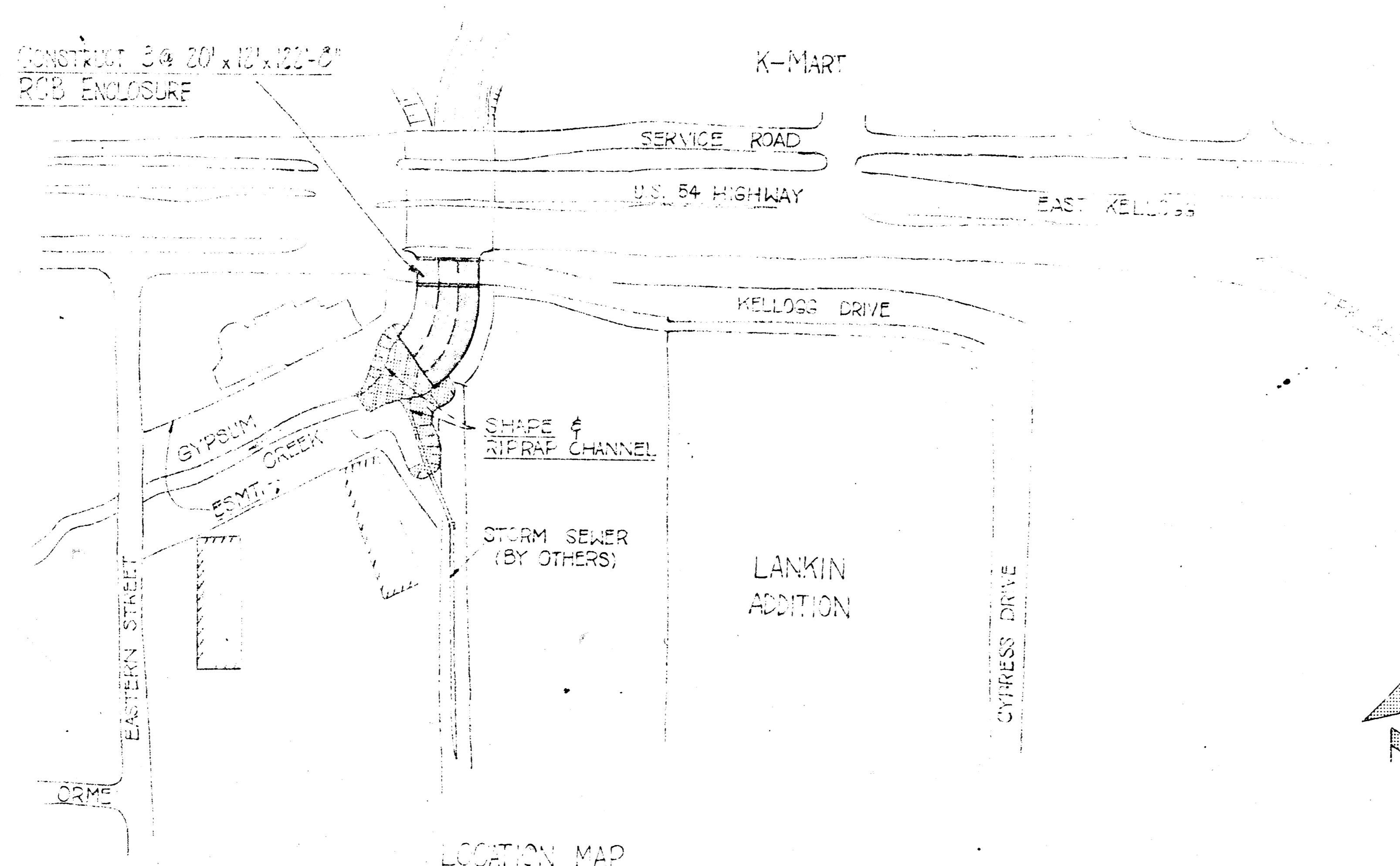


CONSTRUCT 3 @ 30" x 10" x 12'-0"  
RCS ENCLOSURE



LOCATION MAP

STORM WATER DRAIN - NO. 11  
C29-32

DESIGNED BY  
CHECKED BY  
DRAWN BY  
DATE  
PROJECT NO.

APPROVED BY  
DATE

SUMMARY OF QUANTITIES

DESCRIPTION	QUANTITY	UNITS
BANK GRADING & RIPRAP		
Bank Grading	415	Sq. Yds.
Dumped Riprap 12"	315	Sq. Yds.
Dumped Riprap 18"	114	Sq. Yds.
Sand/Gravel Bedding	250	Sq. Yds.
BOX CONSTRUCTION		
Bridge Excavation	1000	Cu. Yds.
Class A (AE) Concrete	834	Cu. Yds.
Reinforcing Steel	167,830	Lbs.
Steel Plate Girder Fences (each)	231.5	Lin. Ft.
Steel Sheet Piling	366	Sq. Ft.
Steel Shoring (Tee-nail)	1280	Sq. Ft.

INDEX OF SHEETS

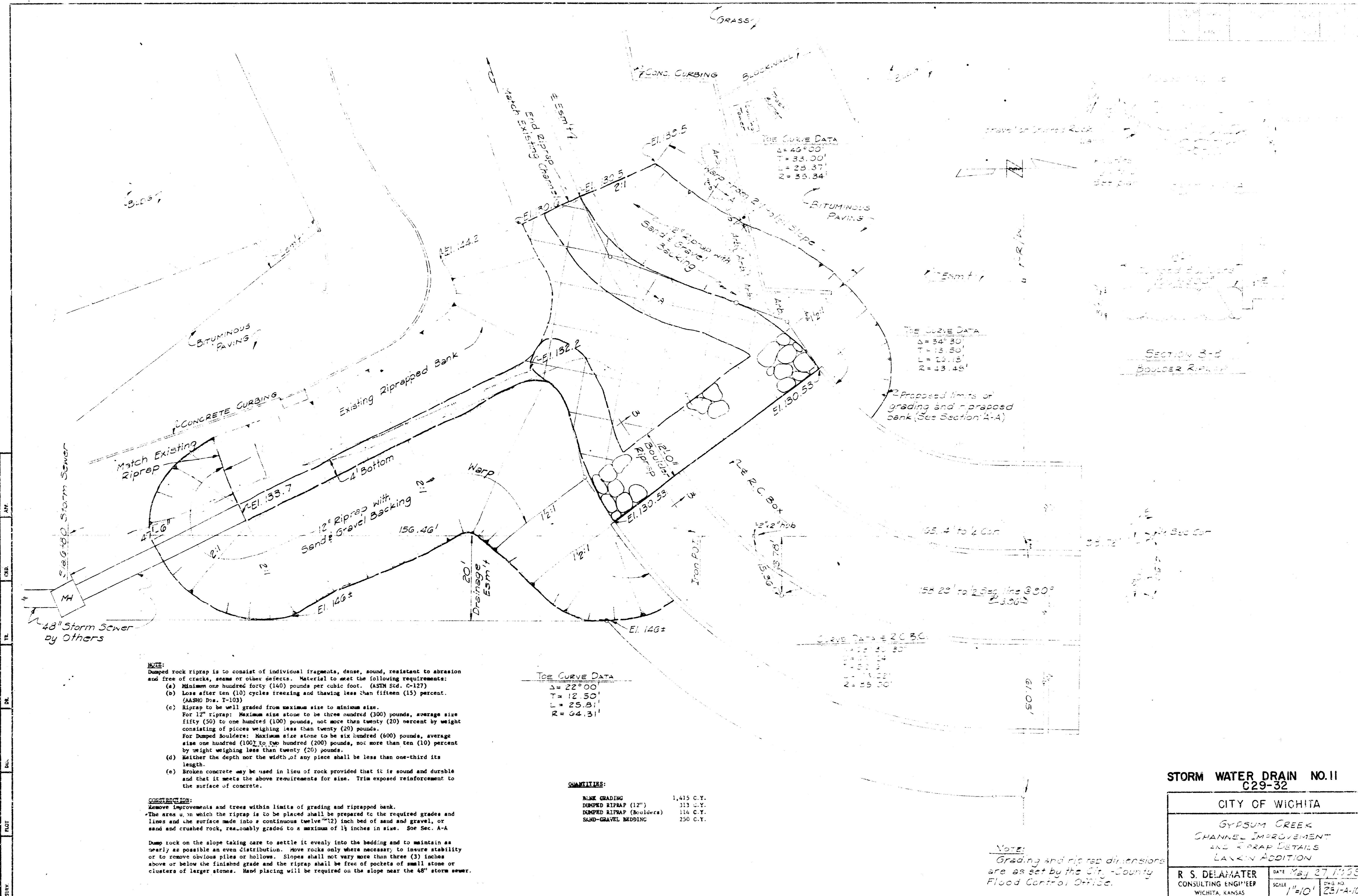
1. Location Map & Quantities
2. Channel Improvement & Riprap Details
3. Box Enclosure Details
4. Bridge Excavation, Box Supports, & Bar List

NOTE:

The quantities listed are for information only. The Contractor shall include all material and work necessary to complete the project, according to details and dimensions shown on the plans, in his lump sum bid.



July 1969



**NOTE:**  
 Dumped rock riprap is to consist of individual fragments, dense, sound, resistant to abrasion and free of cracks, seams or other defects. Material to meet the following requirements:  
 (a) Minimum one hundred forty (140) pounds per cubic foot. (ASTM Std. C-127)  
 (b) Loss after ten (10) cycles freezing and thawing less than fifteen (15) percent. (ASBO Div. T-103)  
 (c) Riprap to be well graded from maximum size to minimum size.  
 For 12" riprap: Maximum size stone to be three hundred (300) pounds, average size fifty (50) to one hundred (100) pounds, not more than twenty (20) percent by weight consisting of pieces weighing less than twenty (20) pounds.  
 For Dumped Boulders: Maximum size stone to be six hundred (600) pounds, average size one hundred (100) to one hundred (200) pounds, not more than ten (10) percent by weight weighing less than twenty (20) pounds.  
 (d) Neither the depth nor the width of any piece shall be less than one-third its length.  
 (e) Broken concrete may be used in lieu of rock provided that it is sound and durable and that it meets the above requirements for size. Trim exposed reinforcement to the surface of concrete.

**CONSTRUCTION:**  
 Remove improvements and trees within limits of grading and riprapped bank.  
 The area within which the riprap is to be placed shall be prepared to the required grades and lines and the surface made into a continuous twelve (12) inch bed of sand and gravel, or sand and crushed rock, reasonably graded to a maximum of 1/4 inches in size. See Sec. A-A  
 Dump rock on the slope taking care to settle it evenly into the bedding and to maintain as nearly as possible an even distribution. Above rocks only where necessary to insure stability or to remove obvious piles or hollows. Slopes shall not vary more than three (3) inches above or below the finished grade and the riprap shall be free of pockets of small stones or clusters of larger stones. Hand placing will be required on the slope near the 48\"/>

**TOE CURVE DATA**  
 Δ = 22° 00'  
 T = 12.50'  
 L = 25.31'  
 R = 64.31'

**QUANTITIES:**  
 BANK GRADING 1,415 C.Y.  
 DUMPED RIPRAP (12") 213 C.Y.  
 DUMPED RIPRAP (Boulders) 114 C.Y.  
 SAND-GRAVEL BEDDING 250 C.Y.

**STORM WATER DRAIN NO. 11**  
**C29-32**

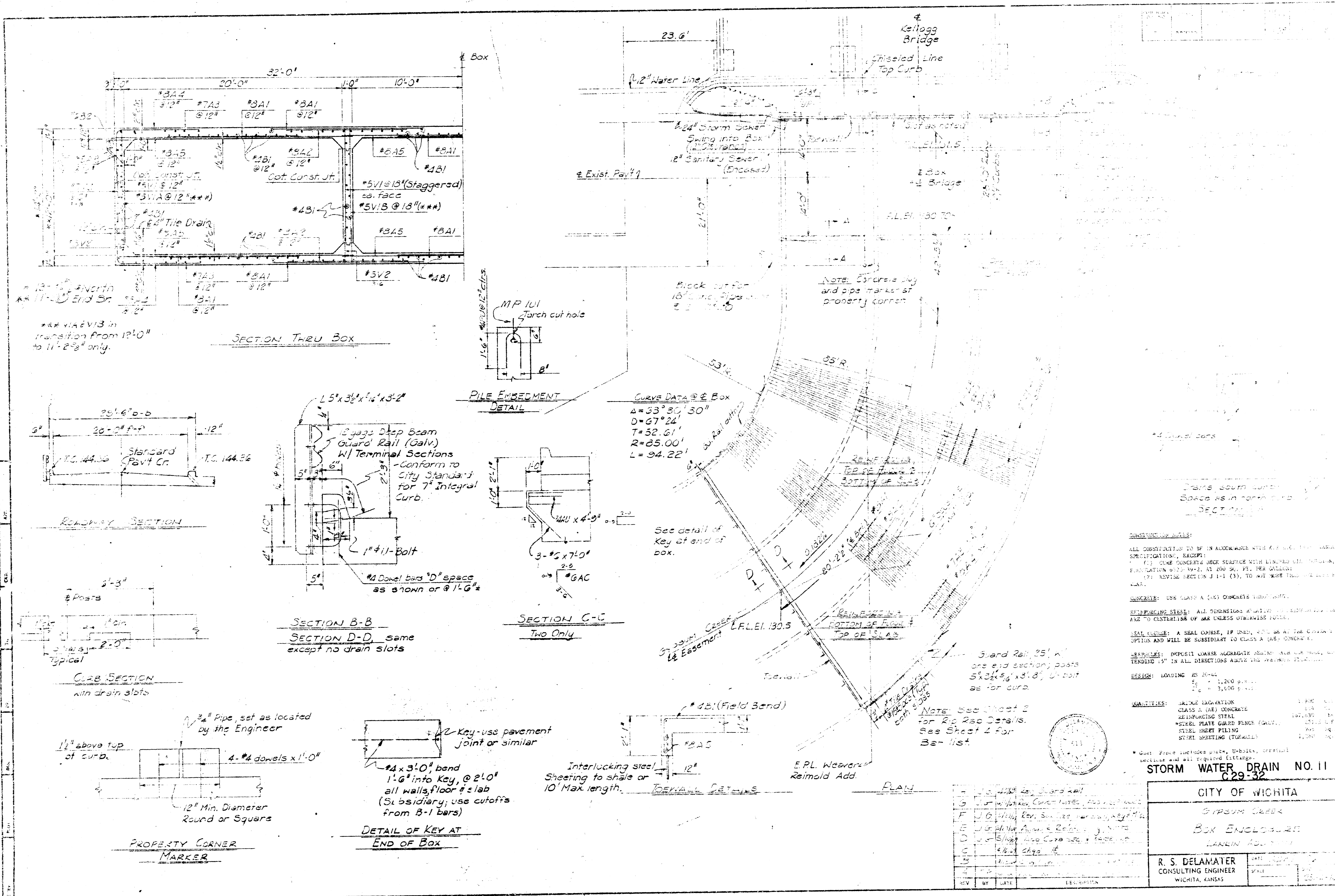
**CITY OF WICHITA**

**GYPSUM CREEK**  
**CHANNEL IMPROVEMENT**  
**AND RIPRAP DETAILS**  
**LAYOUT ADDITION**

**R. S. DELAMATER**  
 CONSULTING ENGINEER  
 WICHITA, KANSAS

DATE: **May 27 1959**  
 SCALE: **1"=10'**  
 SHEET NO: **231-A-105**

**NOTE:**  
 Grading and riprap dimensions are as set by the City of Wichita Flood Control Office.



**CONCRETE:** USE CLASS A (60) CONCRETE UNLESS NOTED OTHERWISE.

**STEEL:** ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE TO CENTERLINE OF MEMBER UNLESS OTHERWISE NOTED.

**REINFORCING STEEL:** ALL DIMENSIONS UNLESS OTHERWISE NOTED SHALL BE TO CENTERLINE OF MEMBER UNLESS OTHERWISE NOTED.

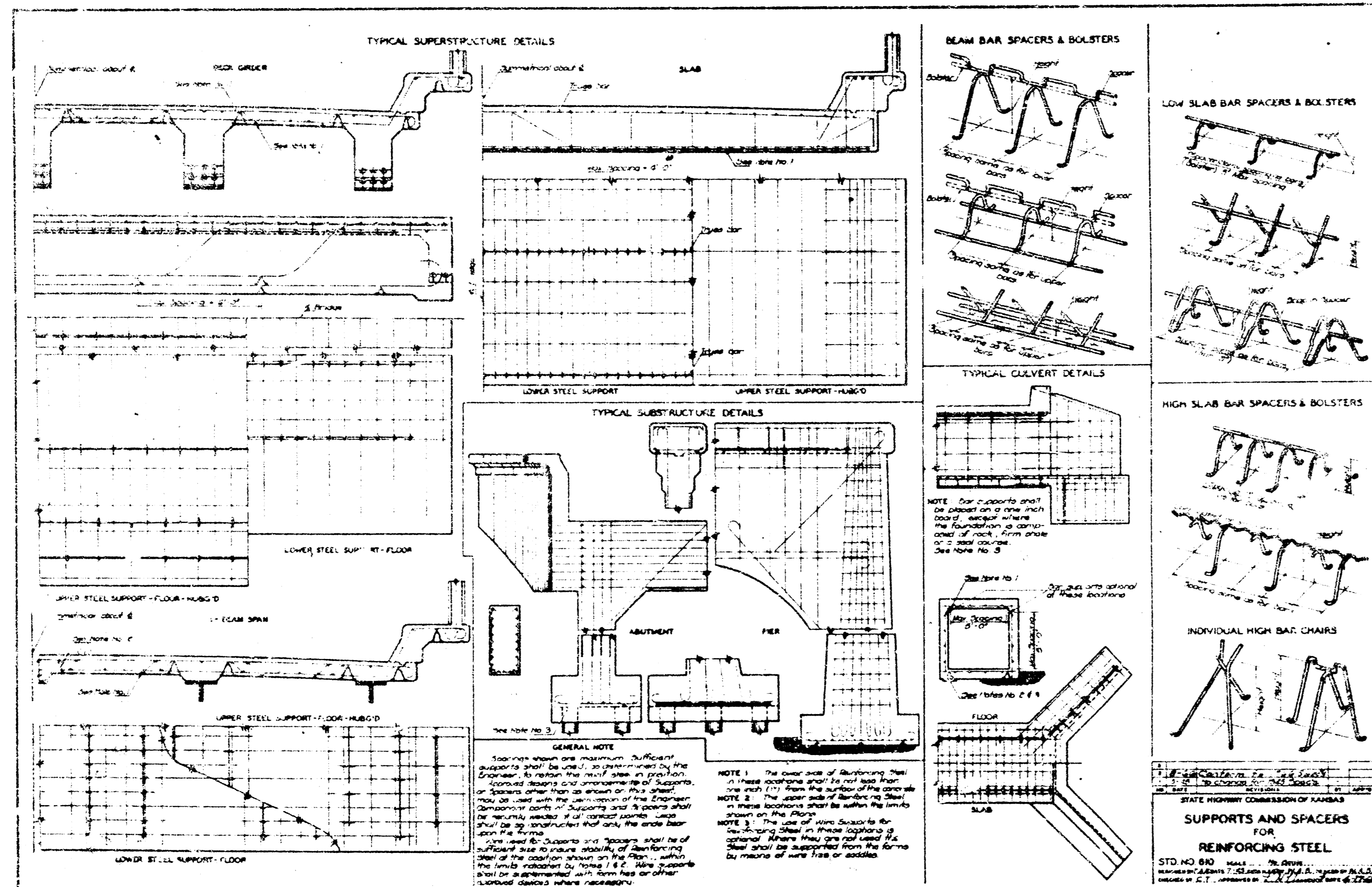
**PAVEMENT:** A SEAL COURSE, IF USED, SHALL BE AS AT THE OPTION OF THE CONTRACTOR AND SHALL BE SUBSTANTIAL TO CLASS A (60) CONCRETE.

**LOADING:** AS SHOWN ON DRAWING.

**FINISHES:** UNLESS OTHERWISE NOTED, ALL FINISHES SHALL BE AS SHOWN ON DRAWING.

**NOTES:** SEE SHEET 2 FOR R.P. 250 DETAILS. SEE SHEET 4 FOR B-115.

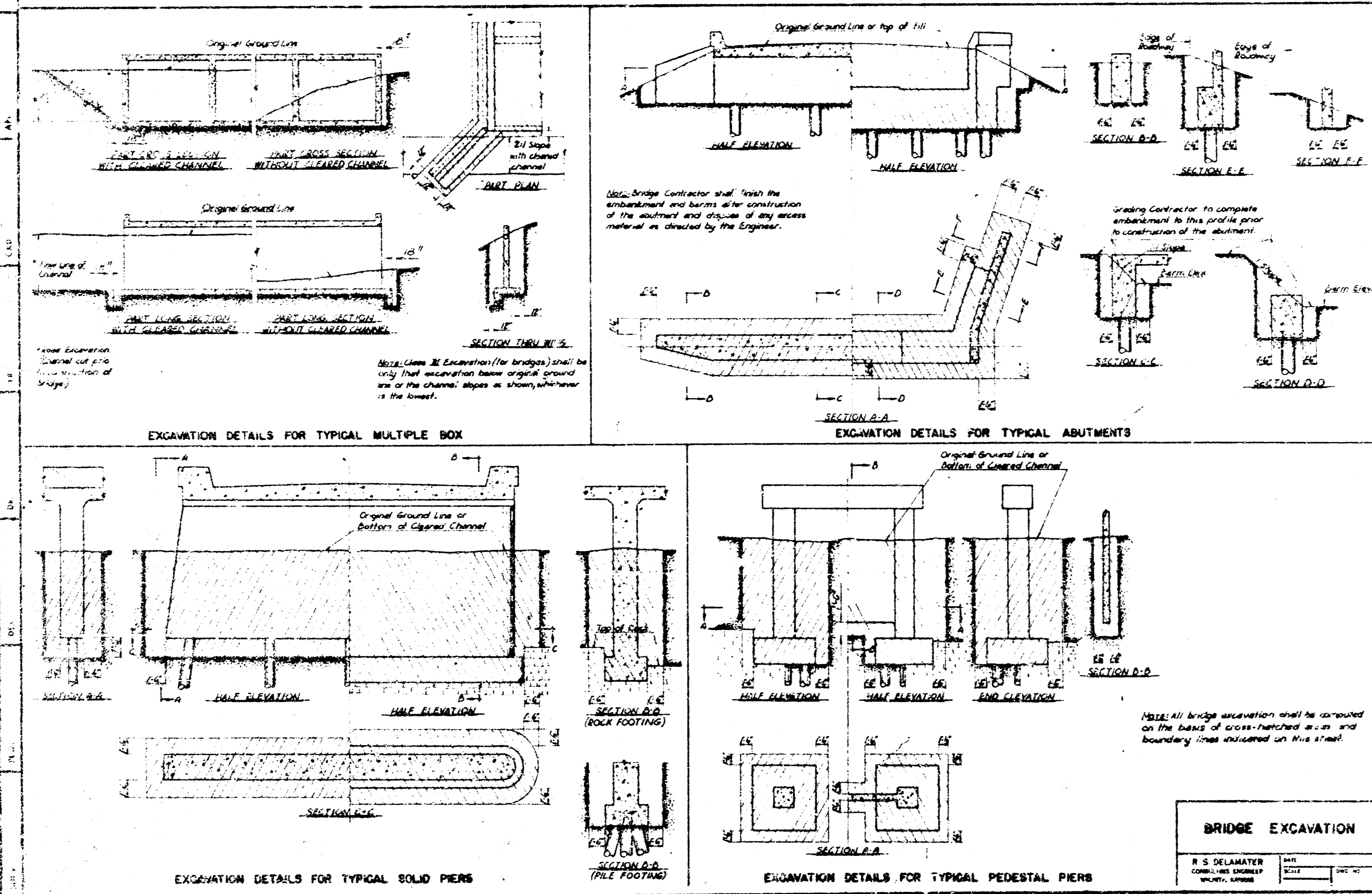
NO.	REVISION	DATE	DESCRIPTION
1	AS SHOWN		
2	ADD		
3	ADD		
4	ADD		
5	ADD		
6	ADD		
7	ADD		
8	ADD		
9	ADD		
10	ADD		



**BAR LIST**

MARK	NO. REB.	SIZE	LENGTH	SHAPE
A 1	1,274	8	12' 0"	
A 2	482	8	12' 0"	
A 3	636	7	13' 6"	
A 4	482	8	11' 6"	
A 5	284	3	22' 0"	
AP	22	5	31' 6"	
AC	1	3	71' 0"	
AD	4	4	81' 0"	
B 1	4	4	29,000' (Total)	
B 2	4	5	29' 3"	
C	9	5	22' 0"	
D	155	4	11' 4"	
ED	20	4	31' 0"	
V 1	410	5	11' 10"	
V 2	530	5	3' 6"	
V 3	494	7	6' 9"	
V 1A	40	5	*	
V 1B	34	5	**	

- # Stock Lengths
- \* V 1A Increase by increments of 3/8" from 11' 0" to 11' 11 1/2"
- \*\* V 1B Increase by increments of 3" from 11' 0" to 11' 10"



STORM WATER DRAIN NO. 11  
C 29-32

CITY OF WICHITA  
**BAR SUPPORTS**  
**BRIDGE EXCAVATION**  
**BAR LIST**

R. S. DELAMATER  
CONSULTING ENGINEER  
WICHITA, KANSAS

DATE: 1937  
SCALE: 1/4" = 1'-0"