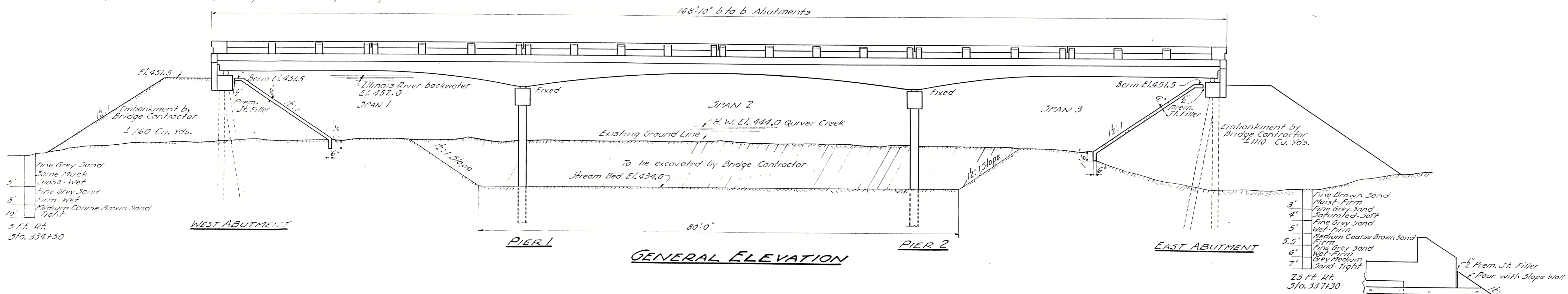


3. M. Top of steel cap on tube at S.W. corner of main span. El. 444.98  
 Existing Bridge: Two pony trusses of 40' spans and one thru truss of 80' span 16' Roadway. Masonry Abutments and steel tube piers to be removed by County after new bridge is completed.

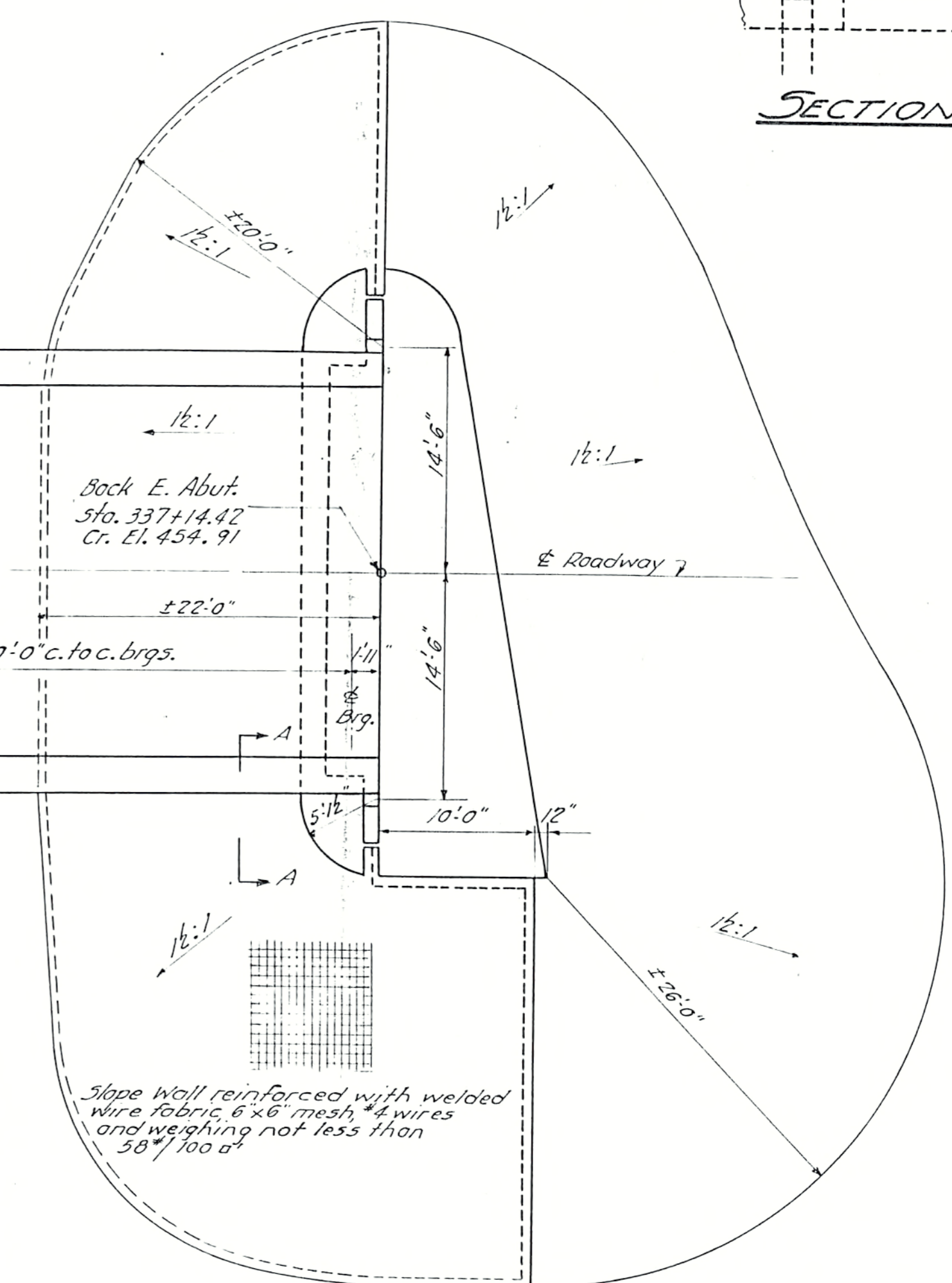
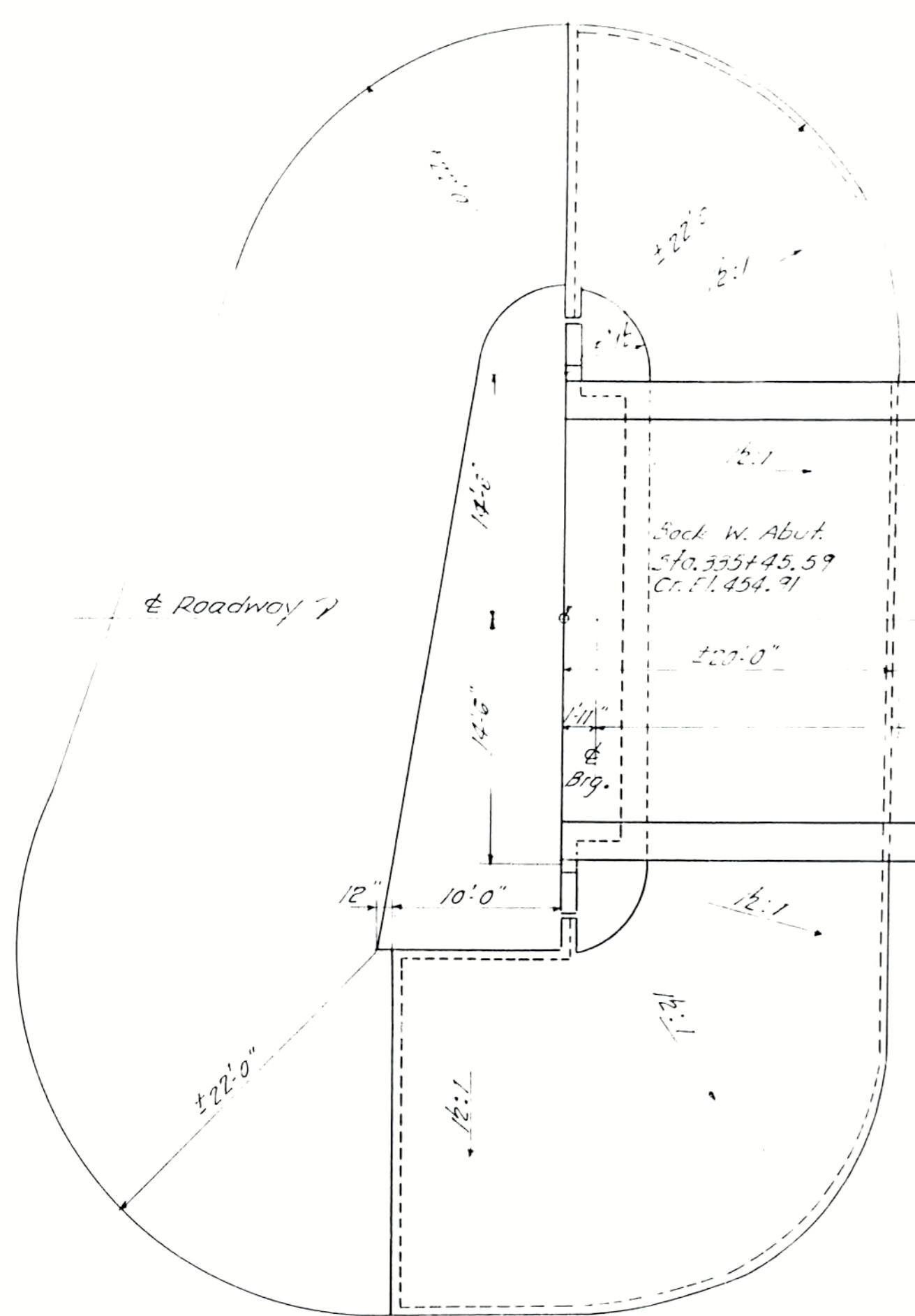
SHEET 1  
 4 SHEETS



GENERAL ELEVATION

SECTION A-A

**WATERWAY INFORMATION**  
 Drainage Area - 75000 Acres  
 Character - Level Bottomland  
 Opening Provided - 995' below Quiver Creek high water. Road grade was determined from high water of Illinois River backwater. Opening Reg'd. (15 Year Flood) 925'



GENERAL PLAN & LAYOUT OF SLOPE WALLS

**GENERAL NOTES**

Specifications of the Illinois Division of Highways adopted Jan. 2, 1952 shall govern.  
 Class-X Concrete shall be used throughout except in Handrails where Handrail Concrete shall be used.  
 Concrete girders and floor slab shall be poured in one continuous operation.  
 All rollers, bearing plates and anchor bolts shall be paid for as Struct. Steel.  
 Structural steel shall be inspected by the Illinois Division of Highways.  
 All structural steel shall receive one shop coat of red lead paint after inspection and two field coats of aluminum paint.  
 Layout of the slope walls may be altered in the field to fit existing ground conditions if so ordered by the Engineer.  
 Embankments shall be constructed by the Contractor before the superstructure is poured.  
 The Contractor shall drive one precast concrete pile in permanent pile location as directed by the Engineer before ordering or casting the remainder of the concrete piles.  
 The Contractor shall drive one timber test pile as directed by the Engineer before ordering the remainder of the timber piles.  
 The Contractor shall excavate the channel to the limits shown on the road plans. Surplus material shall be placed in the road embankment as directed by the Engineer.  
 \* All bars shall be round ASTM A305-49  
 The size number is the number of 8 inches in the nominal diameter.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER.	SUB.	TOTAL
Class-X Concrete	Cu. Yds.	215.0	37.3	252.3
Handrail Concrete	Cu. Yds.	8.0		8.0
Reinforcement Bars	Lbs.	57310	3030	60340
Structural steel	Lbs.	3470		3470
Precast Conc. Piles (45' lg)	Lin. Ft.		585	585
Creasoted Piles (35' lg)	Lin. Ft.		420	420
Test Pile (Conc.)	Each		1	1
Test Pile (Timber)	Each		1	1
Name Plates	Each	1		1
Slope Wall	Sq. Yds.		500	500
Channel Excavation	Cu. Yds.			

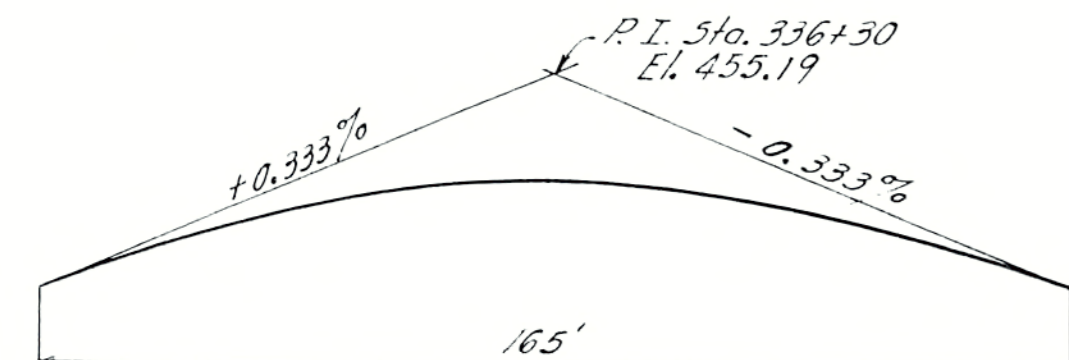
**DESIGN DATA**

S<sub>1</sub> - 20000 #/sq Reinf.  
 S<sub>2</sub> - 10000 #/sq Struct.  
 S<sub>3</sub> - 1400 #/sq Super.  
 S<sub>4</sub> - 800 #/sq Sub  
 n - 10

M<sup>c</sup>HARRY BRIDGE  
 STATION 336+30  
 BUILT 1952  
 F.A.S. RT. 567 SEC. 22B  
 FA PROJ. 5-650(1)  
 LOADING H-15

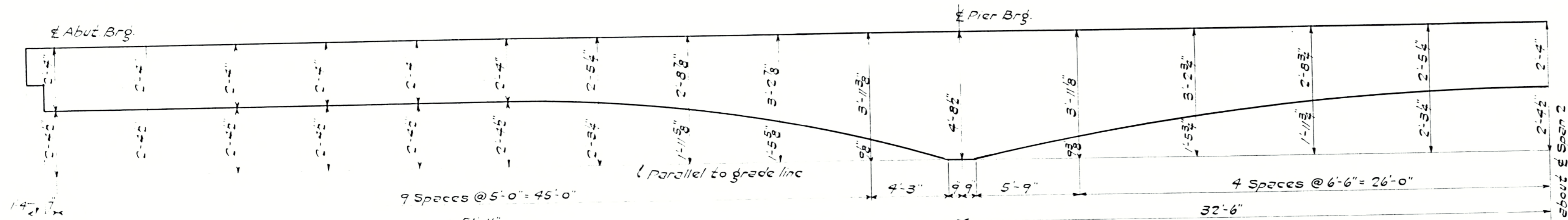
H200 Required at Fig. 25 Fig. 15  
 if needed please compute posting at 25 Fig.

M<sup>c</sup>HARRY BRIDGE  
 OVER QUIVER CREEK  
 F.A.S. RT. 567-SEC. 22B  
 PROJ. 5-650(1)  
 MASON COUNTY  
 STA. 336+30

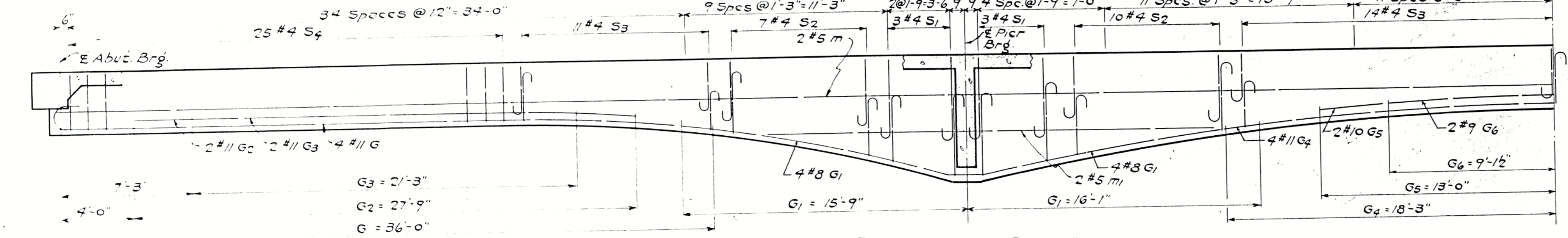


VERTICAL CURVE DATA

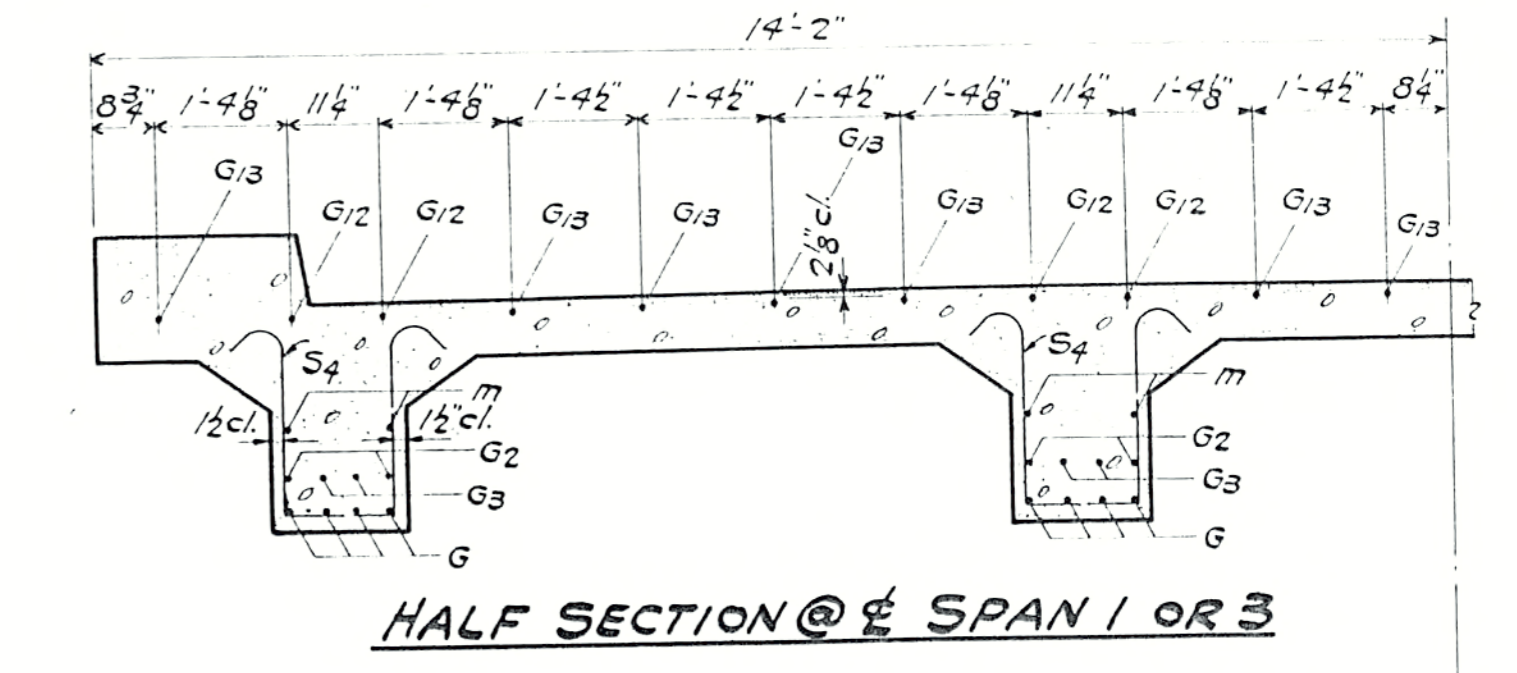




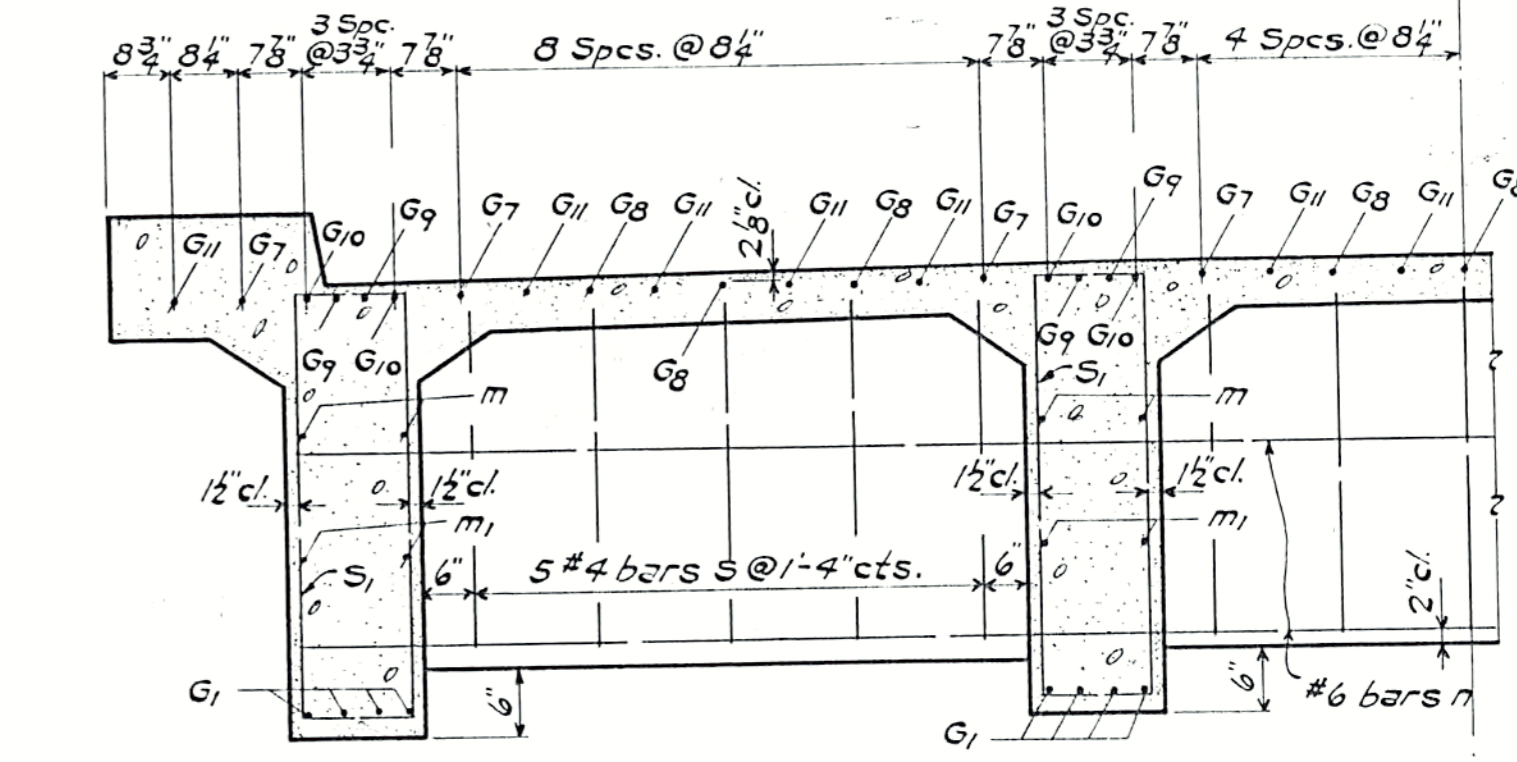
**GIRDER ORDINATES**  
Add an allowance to the ordinates shown above for dead load deflection and for shrinkage and settlement of forms. Dead load deflections shown below.



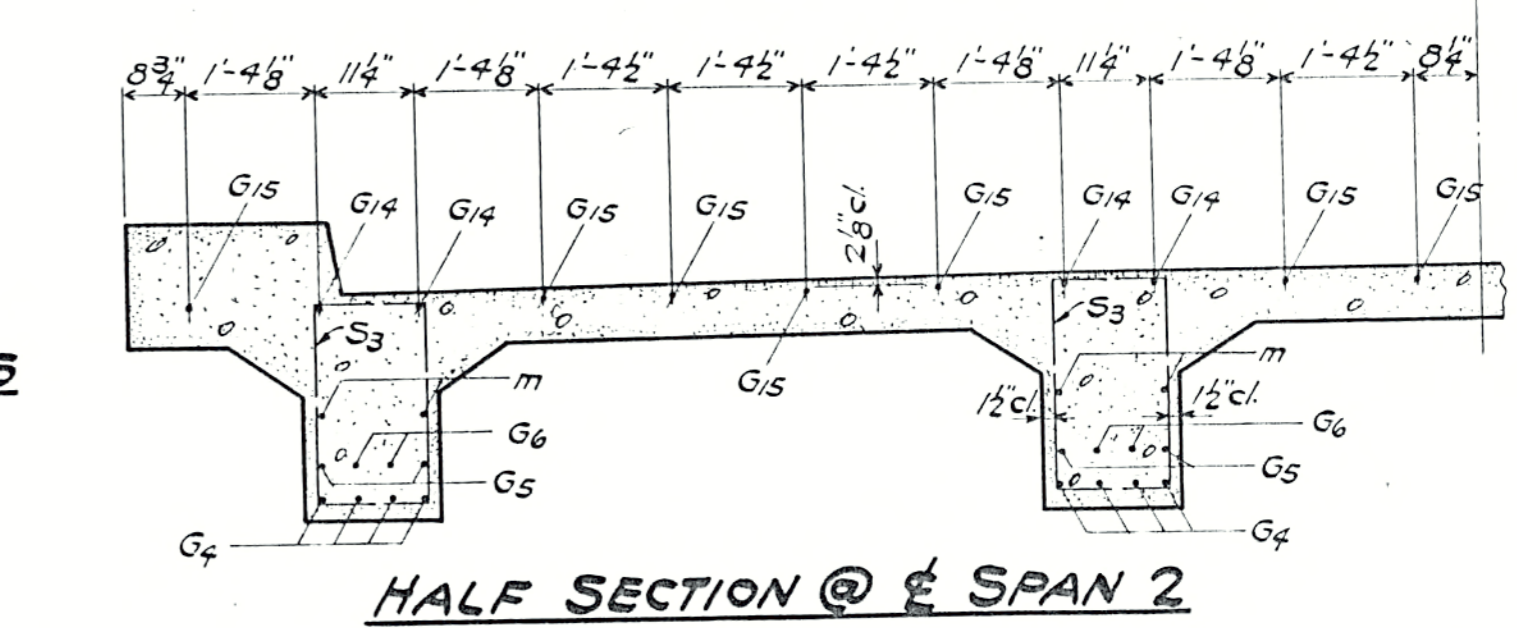
**HALF ELEVATION OF GIRDER**  
Showing stirrups & bottom girder bars



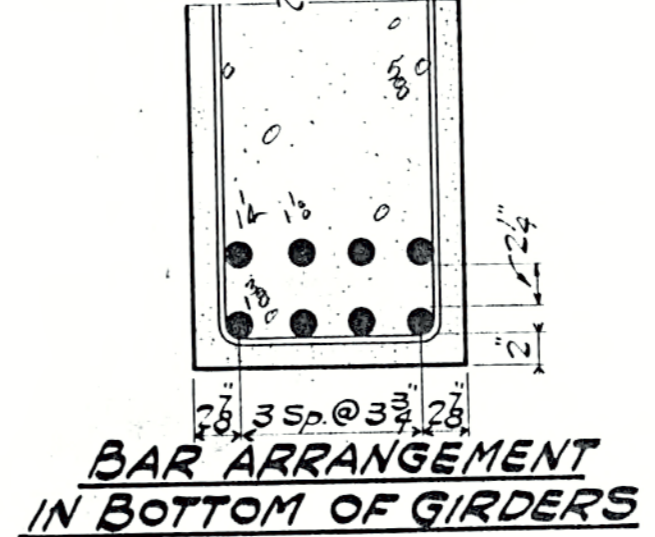
**HALF SECTION @ SPAN 1 OR 3**



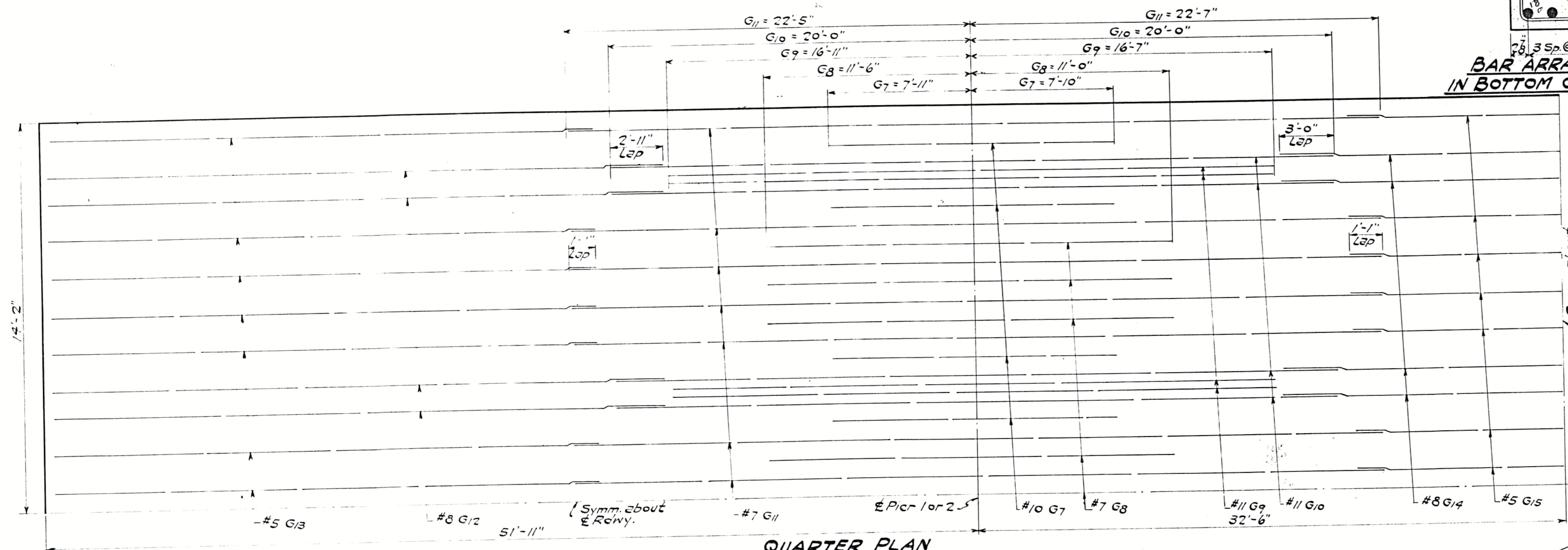
**HALF SECTION @ PIERS**



**HALF SECTION @ SPAN 2**



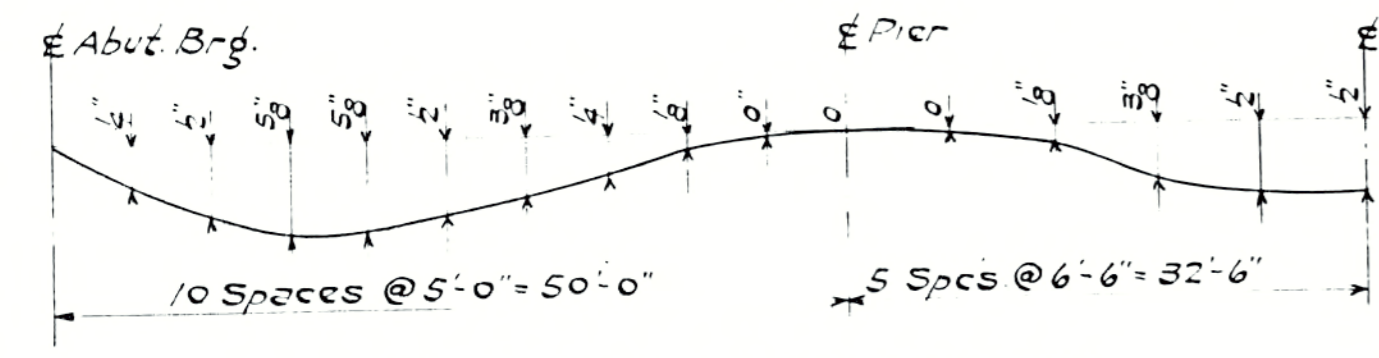
**BAR ARRANGEMENT IN BOTTOM OF GIRDERS**



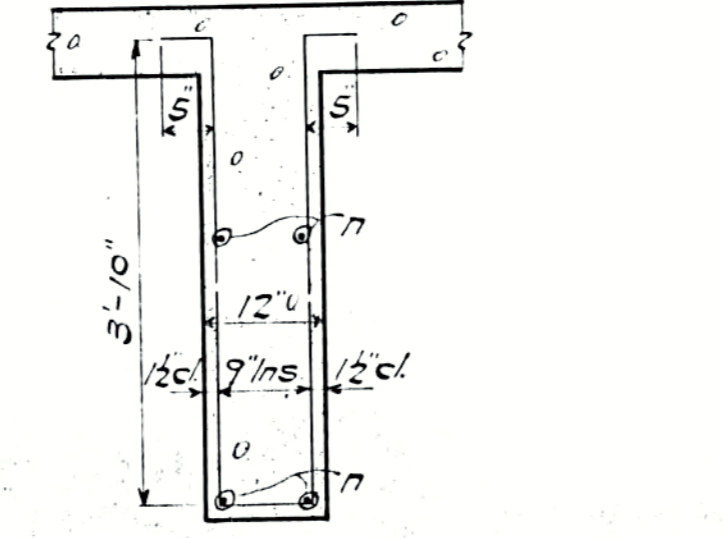
**QUARTER PLAN**  
Longitudinal reinforcement in top of slab

**REINFORCEMENT BARS GIRDERS & DIAPHRAGMS**

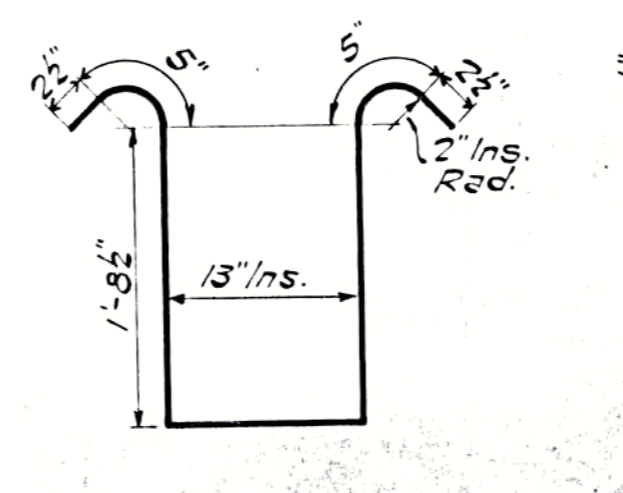
BAR	No	SIZE	LENGTH	SHAPE	BAR	No	SIZE	LENGTH	SHAPE
G	32	#11	38'-0"	—	G14	8	#8	31'-0"	—
G1	32	#8	32'-0"	—	G15	14	#5	22'-0"	—
G2	16	#11	27'-9"	—					
G3	16	#11	21'-3"	—					
G4	16	#11	36'-6"	—	m	48	#5	28'-6"	—
G5	8	#10	26'-0"	—	m1	16	#5	25'-0"	—
G6	8	#9	18'-3"	—	n	8	#6	24'-3"	—
G7	16	#10	15'-9"	—					
G8	18	#7	22'-6"	—	S	30	#4	9'-3"	U
G9	16	#11	33'-6"	—	S1	96	#4	7'-6"	U
G10	16	#11	40'-0"	—	S2	272	#4	6'-9"	U
G11	28	#7	45'-0"	—	S3	392	#4	5'-9"	U
G12	16	#8	34'-3"	—	S4	200	#4	5'-9"	U
G13	28	#5	30'-0"	—					



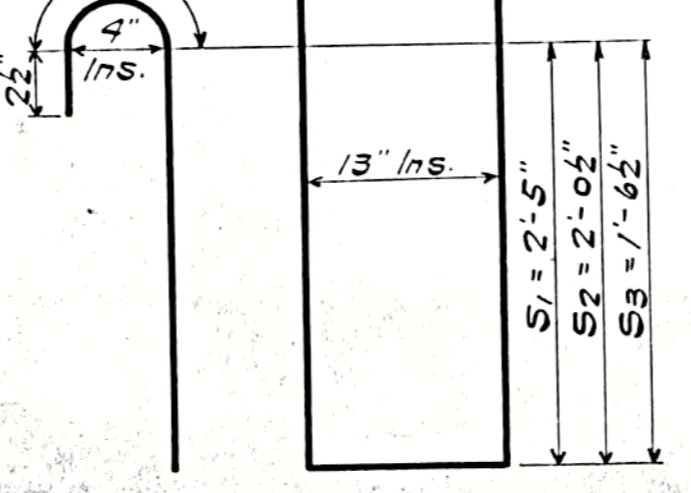
**DEAD LOAD DEFLECTIONS**



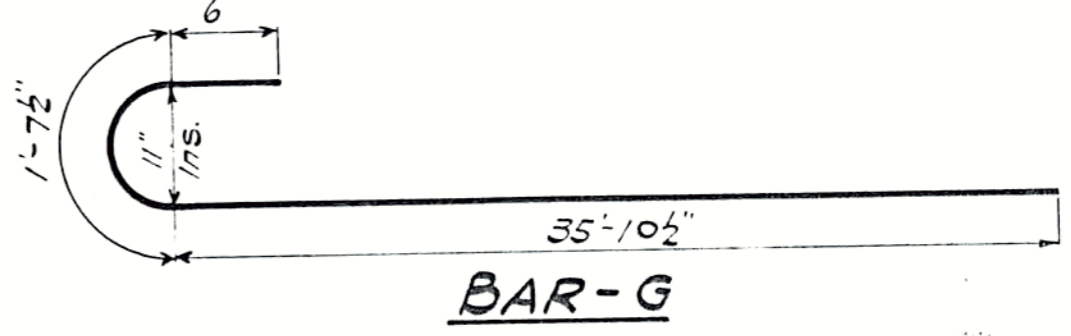
**SECTION THRU DIAPHRAGM  
DETAIL OF BAR S**



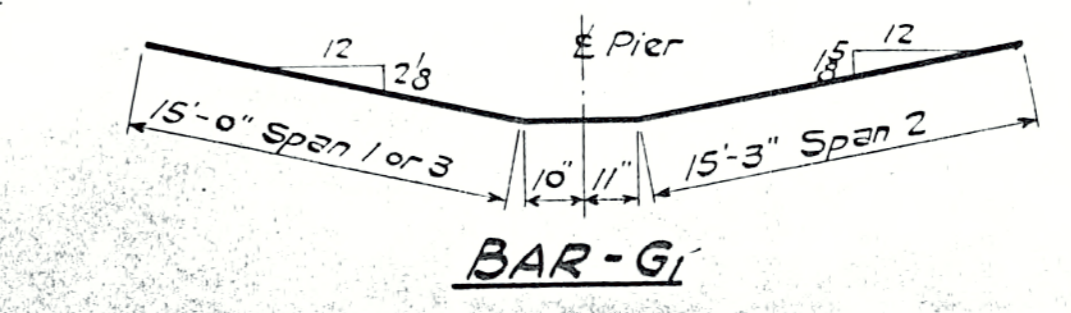
**BAR-S4**



**BARS-S1-S2 & S3**

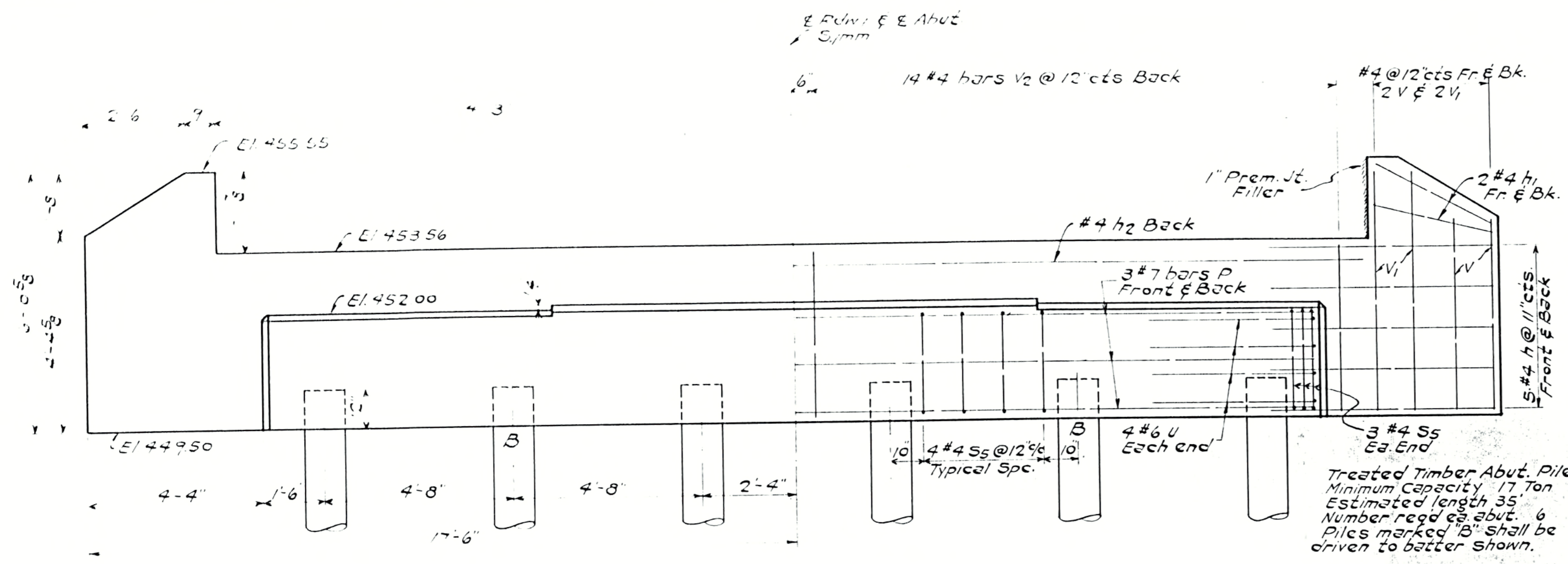


**BAR-G**

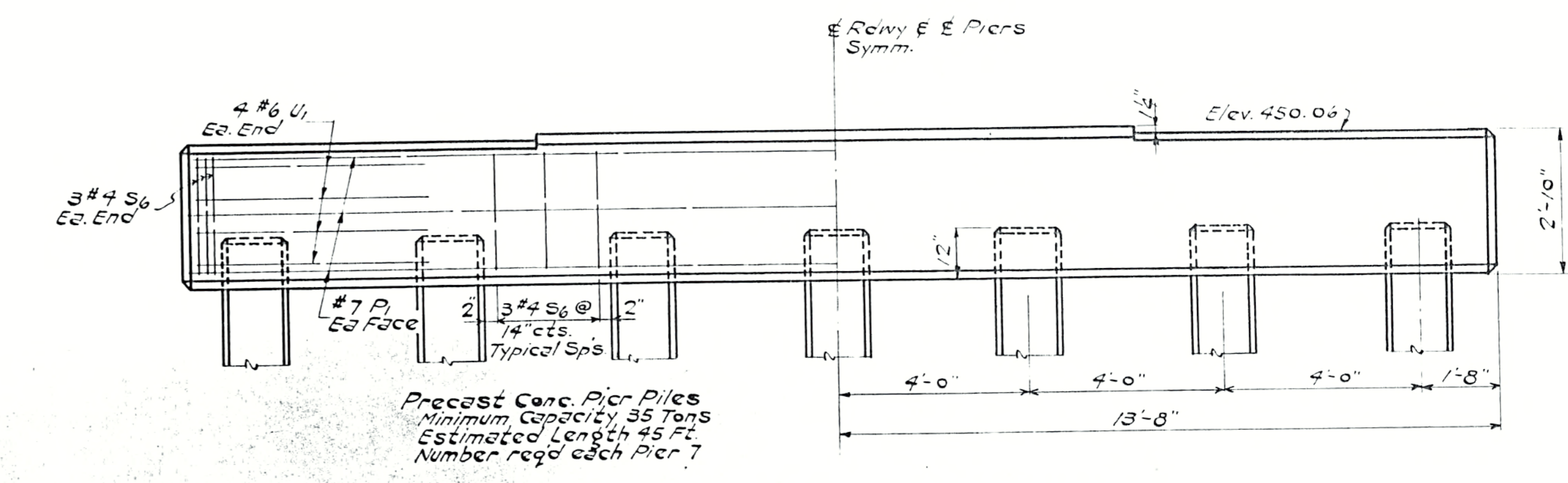


**BAR-G1**

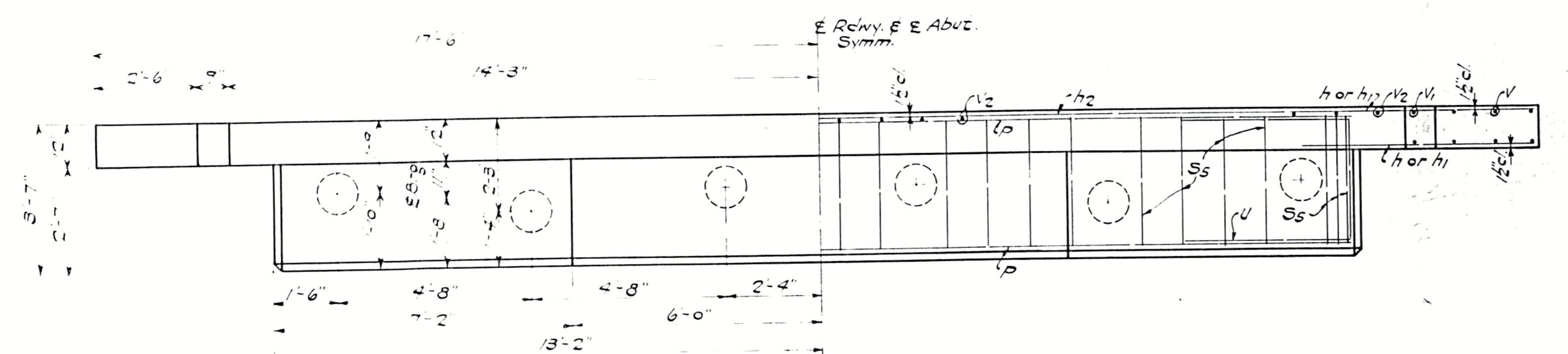
**MCHARRY BRIDGE  
OVER QUIVER CREEK  
F.A.S.R.T. 567 SEC 22-B  
PROJ. S 650 (1)  
MASON COUNTY  
STA. 336+30**



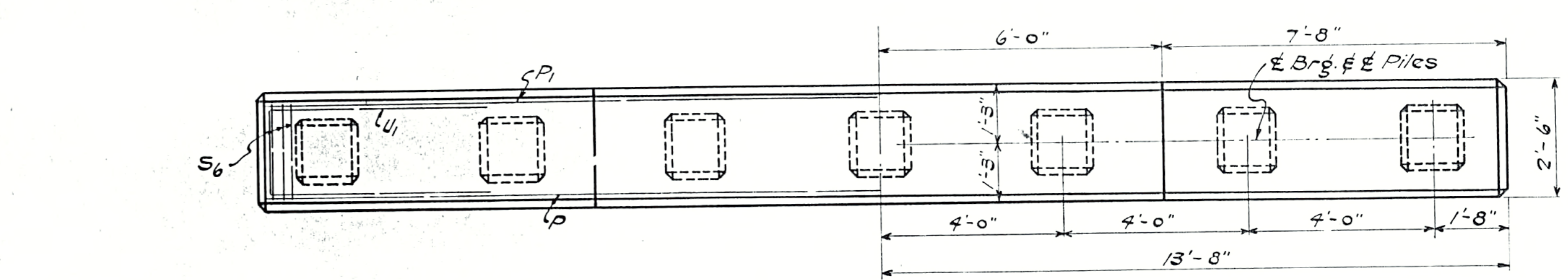
**ABUTMENT ELEVATION**



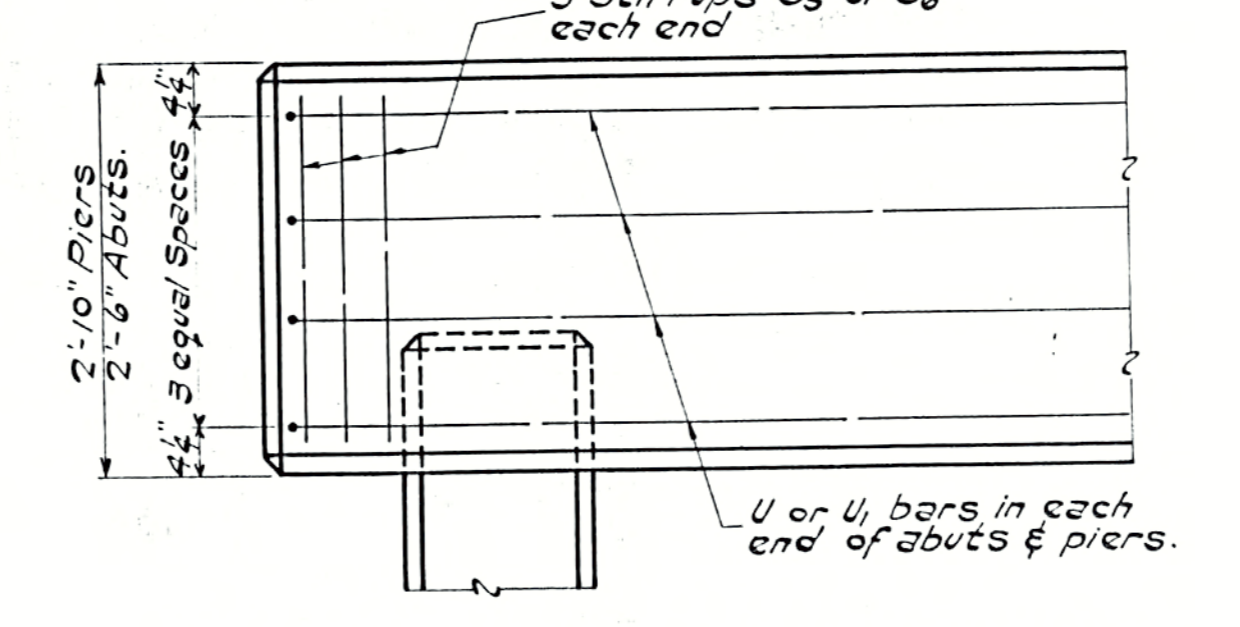
**ELEVATION PIER 1 OR 2**



**ABUTMENT PLAN**



**PLAN PIER 1 OR 2**

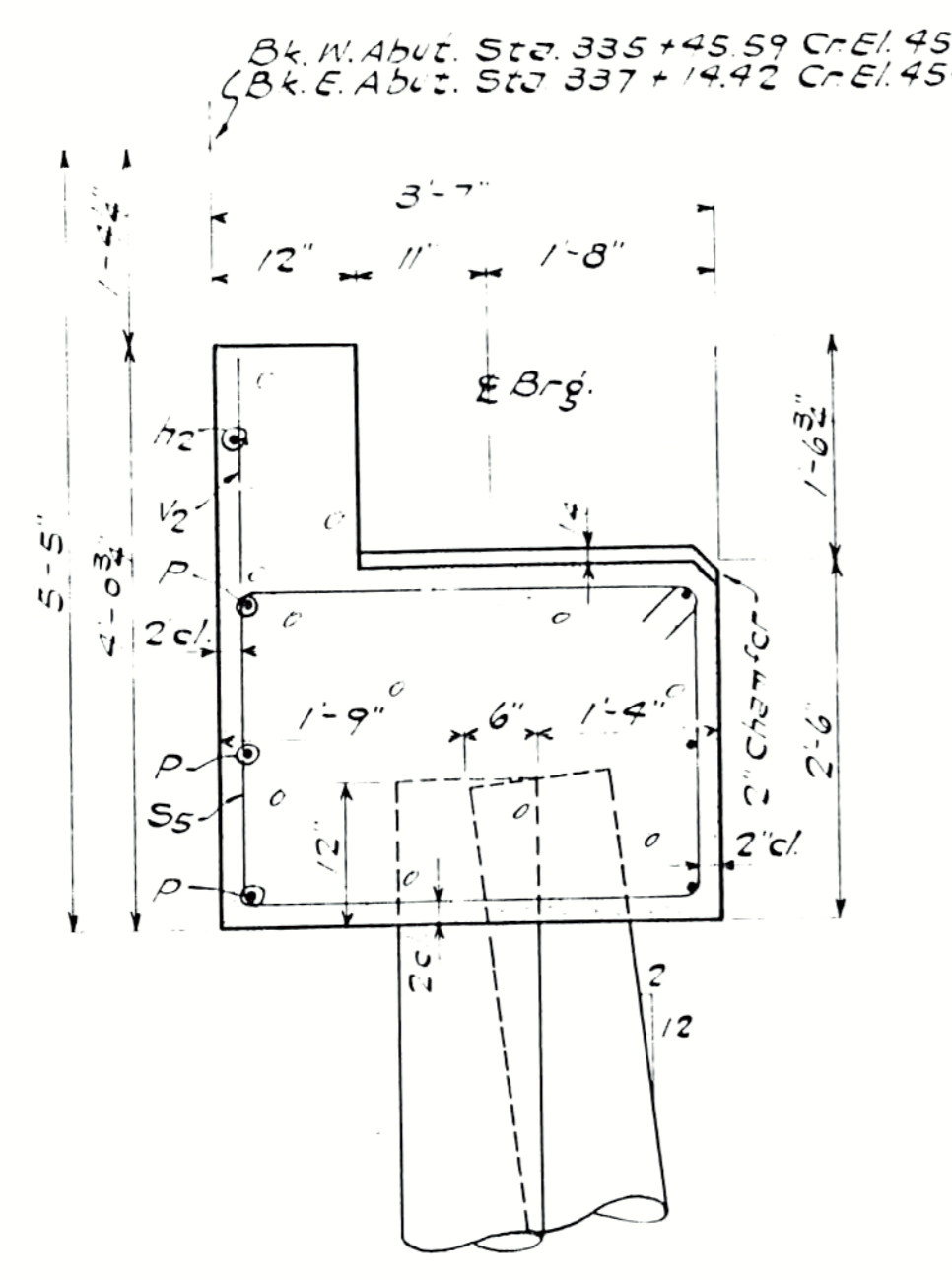


**PART ELEVATION OF ABUT. OR PIER SHOWING U OR U1 BARS**

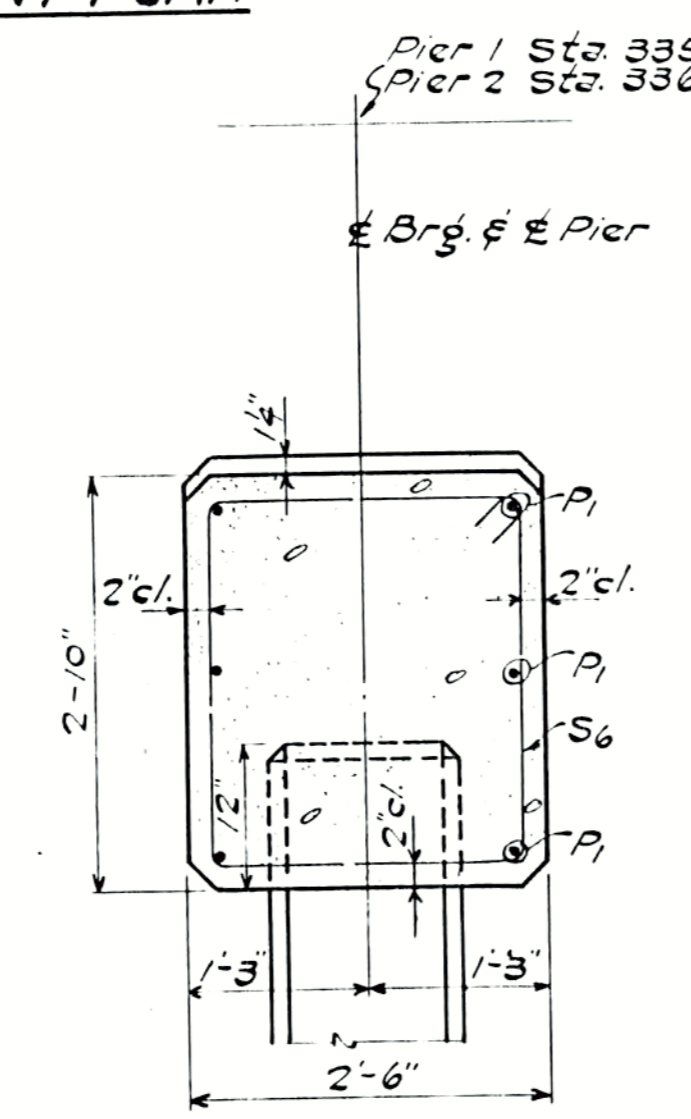
**BILL OF MATERIAL  
TWO ABUTS & TWO PIERS**

BAR	No	SIZE	LENGTH	SHAPE
h	40	#4	5'-6"	—
h1	16	#4	3'-0"	—
h2	2	#4	28'-6"	—
P	12	#7	26'-0"	—
P1	12	#7	27'-0"	—
S5	52	#4	11'-6"	□
S6	48	#4	10'-3"	□
U	16	#6	11'-6"	□
U1	16	#6	10'-6"	□
V	16	#4	4'-6"	—
V1	16	#4	5'-9"	—
V2	56	#4	3'-9"	—

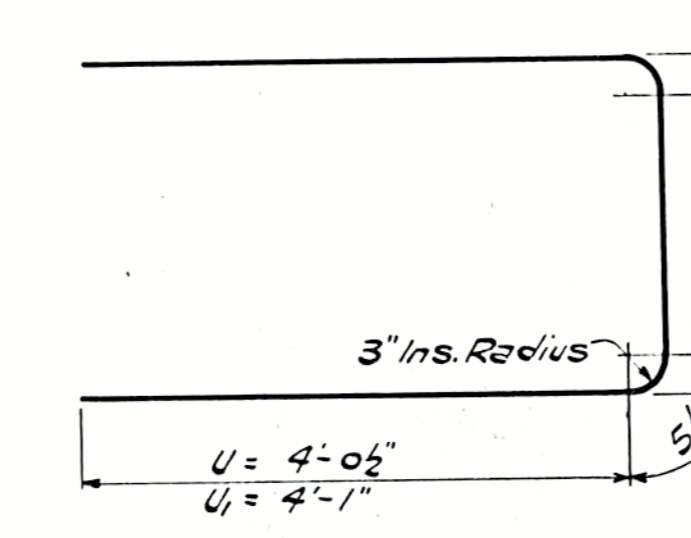
Class X Concrete	Cu.Yds.	37.3
Reinforcement Bars	Lbs.	3030
Precast Conc. Piles (45' lgh)	Lin.Ft.	585
Crossed Piles (35' lgh)	Lin.Ft.	420
Test Piles (Precast Conc)	Each	1
Test Piles (Timber)	Each	1



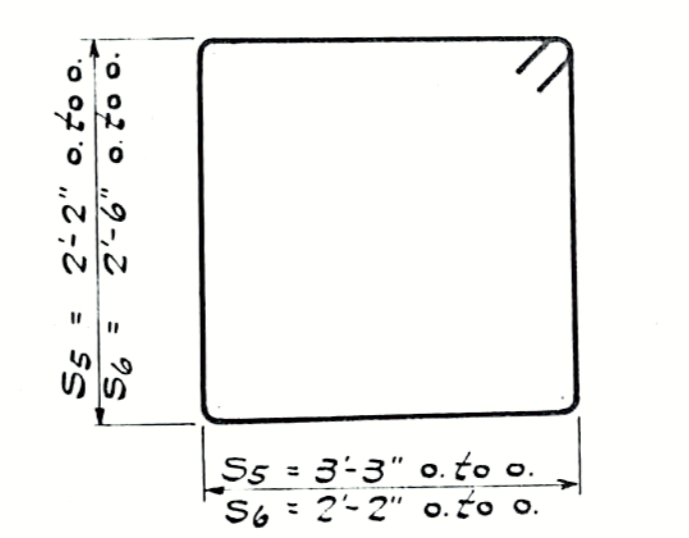
**SECTION THRU ABUTMENT**



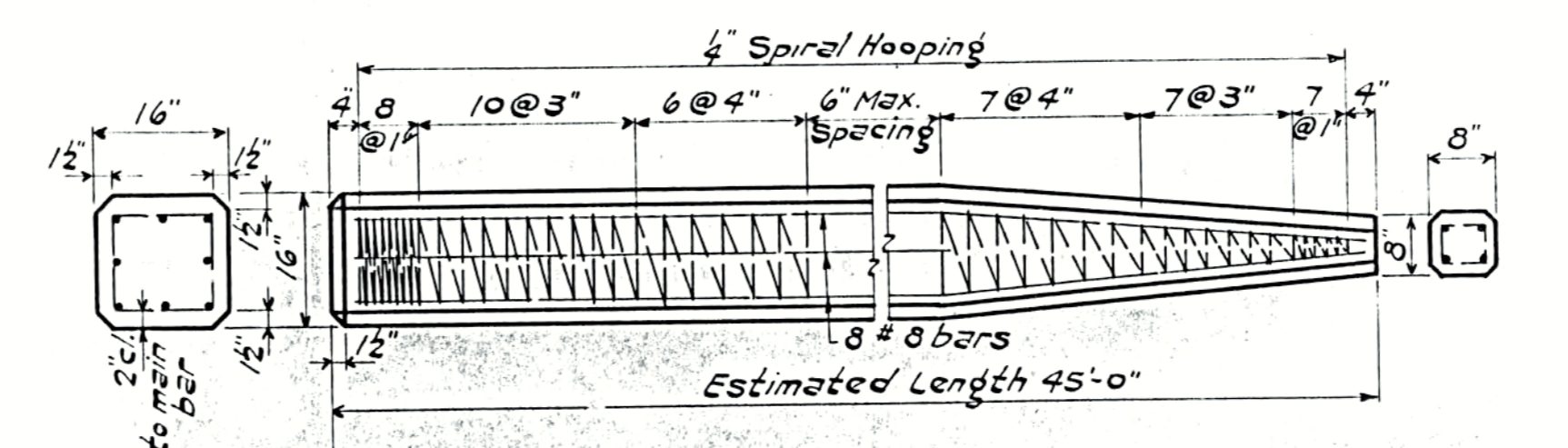
**SECTION THRU PIERS**



**BARS U & U1**



**BARS S5 & S6**



**DETAIL OF PRECAST CONCRETE PILES**

**Mc HARRY BRIDGE  
OVER QUIVER CREEK  
F.A.S. RT. 567 SEC. 22B  
PROJ. 5650(1)  
MASON COUNTY  
STA 336+30**