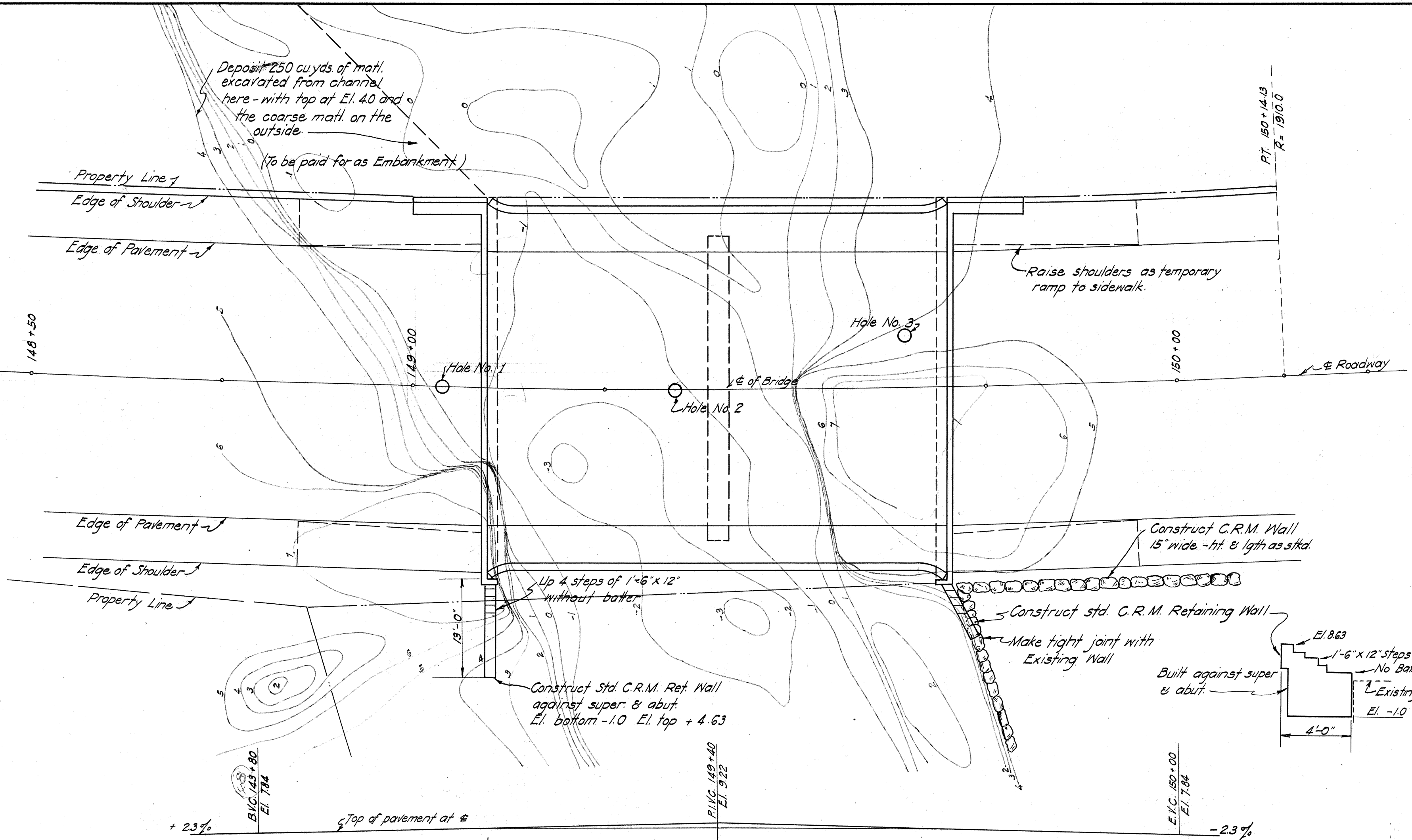


ESTIMATE OF QUANTITIES

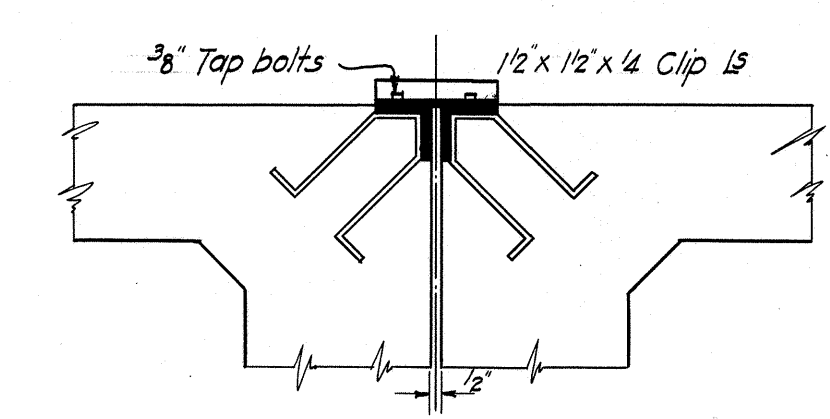
Concrete - 2 abuts.	=	34.1 cu yds
" - 1 pier	=	7.9 "
" - superstructure	=	157.7 "
Reinforcing - 2 abuts.	=	4639.0 lbs
" - 1 pier	=	2164.0 "
" - superstructure	=	2734.0 "
30 ft. Concrete Piles	=	29
Rock fill (150# stone)	=	32.0
Some miscellaneous fittings		

WASH BORING DATA

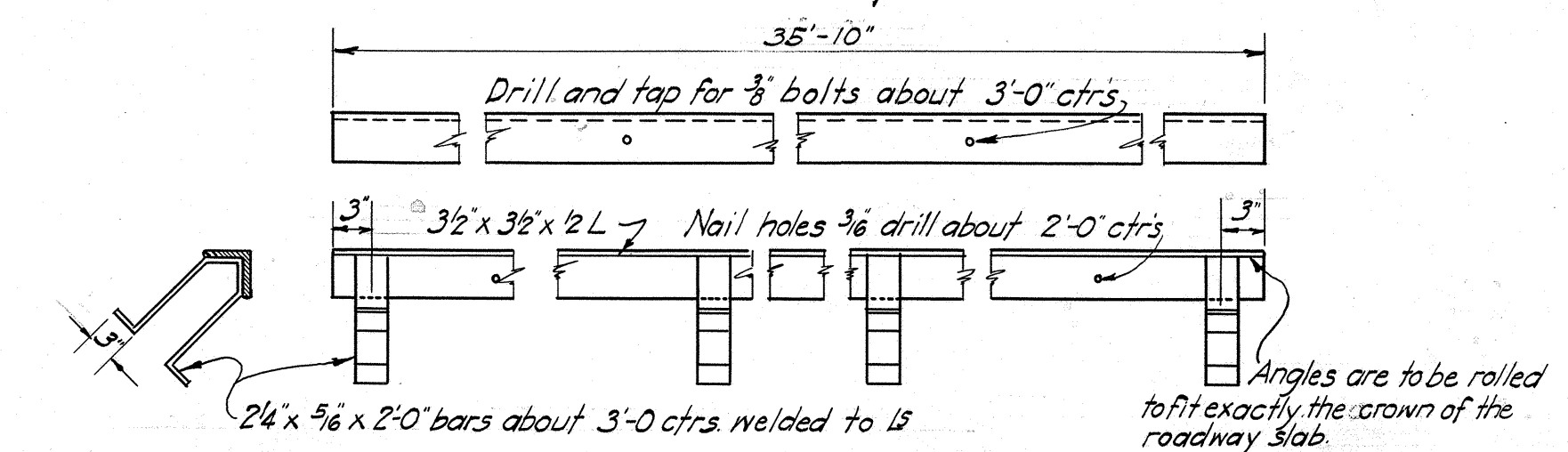
Hole No. 1	Hole No. 2	Hole No. 3
El. 0.0 Soft sand & shell, small coral & mud. El. -10.0 Soft sand & shell, small coral & mud. El. -20.0 Soft disintegrated lava. Tree coral, sand & shell. Heavy tree coral. El. -30.0 Medium coral rock with streaks of hard & soft coral rock.	Soft sand & gravel & mud. Soft sand & shell, small coral and mud. Soft disintegrated lava. Tree coral almost rotten. Heavy tree coral. Soft coral rock almost decomposed. Medium coral rock with streaks of hard & soft coral rock.	Soft soil. Tree coral. Tree coral hard packed sand & shell. Soft mud rock. Hard packed black sand. Compact mud rock. Medium coral rock with streaks of hard & soft coral rock. Tree coral almost rotten. Med. Coral Rock. Cemented sand like medium coral rock. Hard coral rock.



PLAN AND PROFILE OF BRIDGE AT CENTER LINE
Scale 1"=10'



Guard Ls to be set as follows:- First L to be nailed to form of slab first poured, second L then to be attached to first by means of clip L and top bolts until second slab is poured.



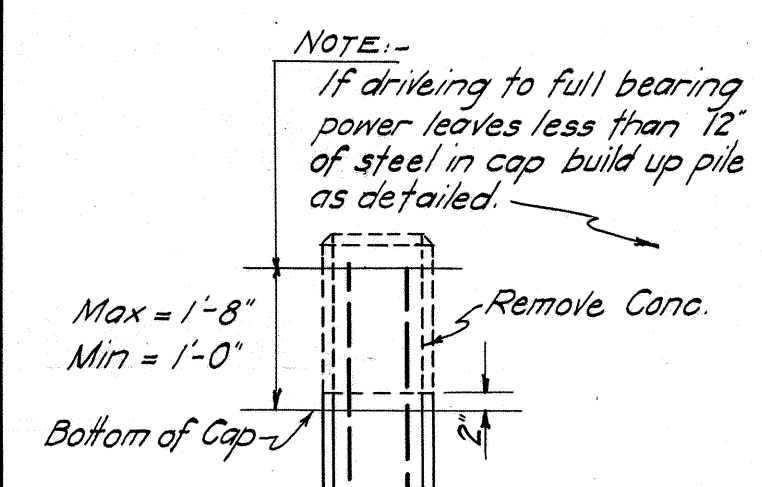
STEEL GUARD ANGLES
Scale 1"=1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
WAILUPE BRIDGE
No. 6 STATION 149+40
KALANIANA'OLE HIGHWAY - F.A.P. No. 6 B.

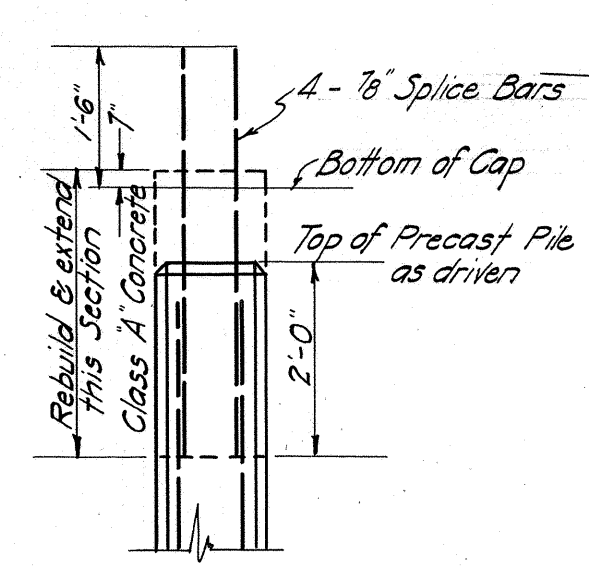
SHEET 1 OF 2 SHEETS

Plan File No.	Pocket No.	Folder No.	Plan No.
2	9	4	

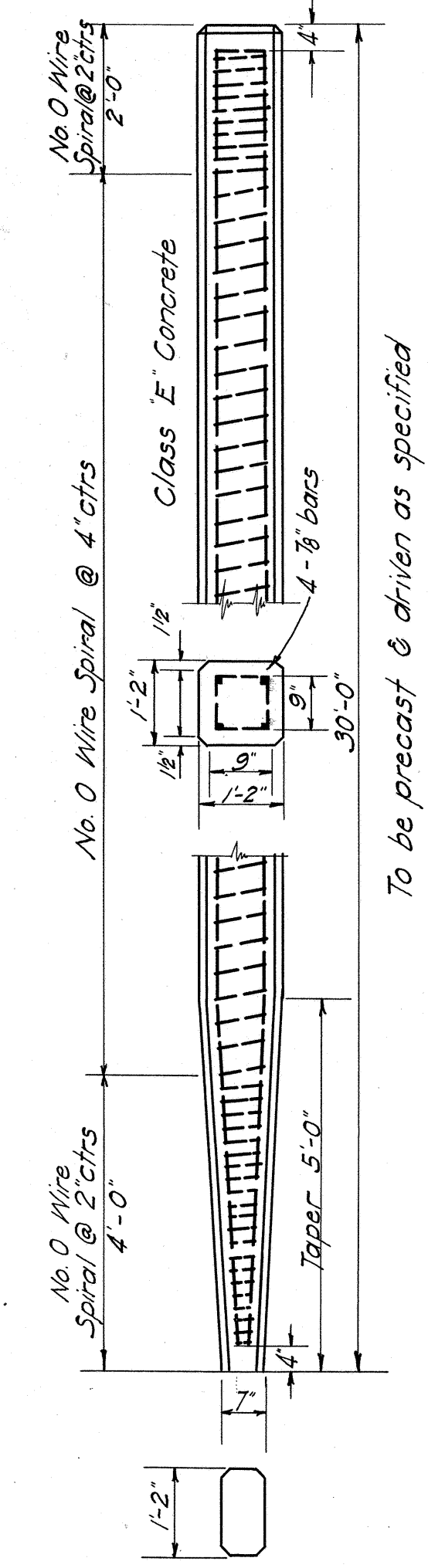
4141.4



DETAIL OF CUT-OFF

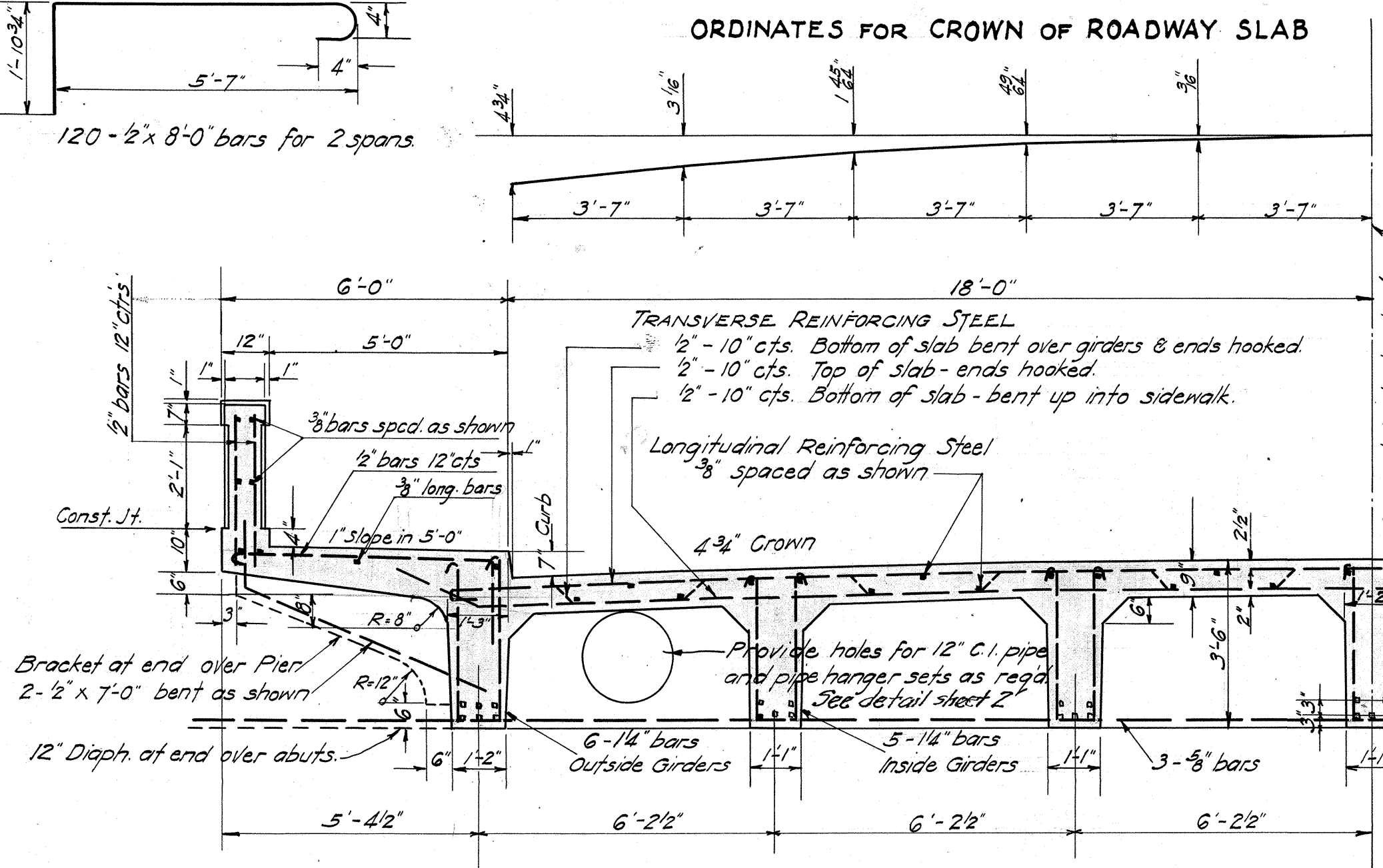


DETAIL OF BUILT-UP PILE

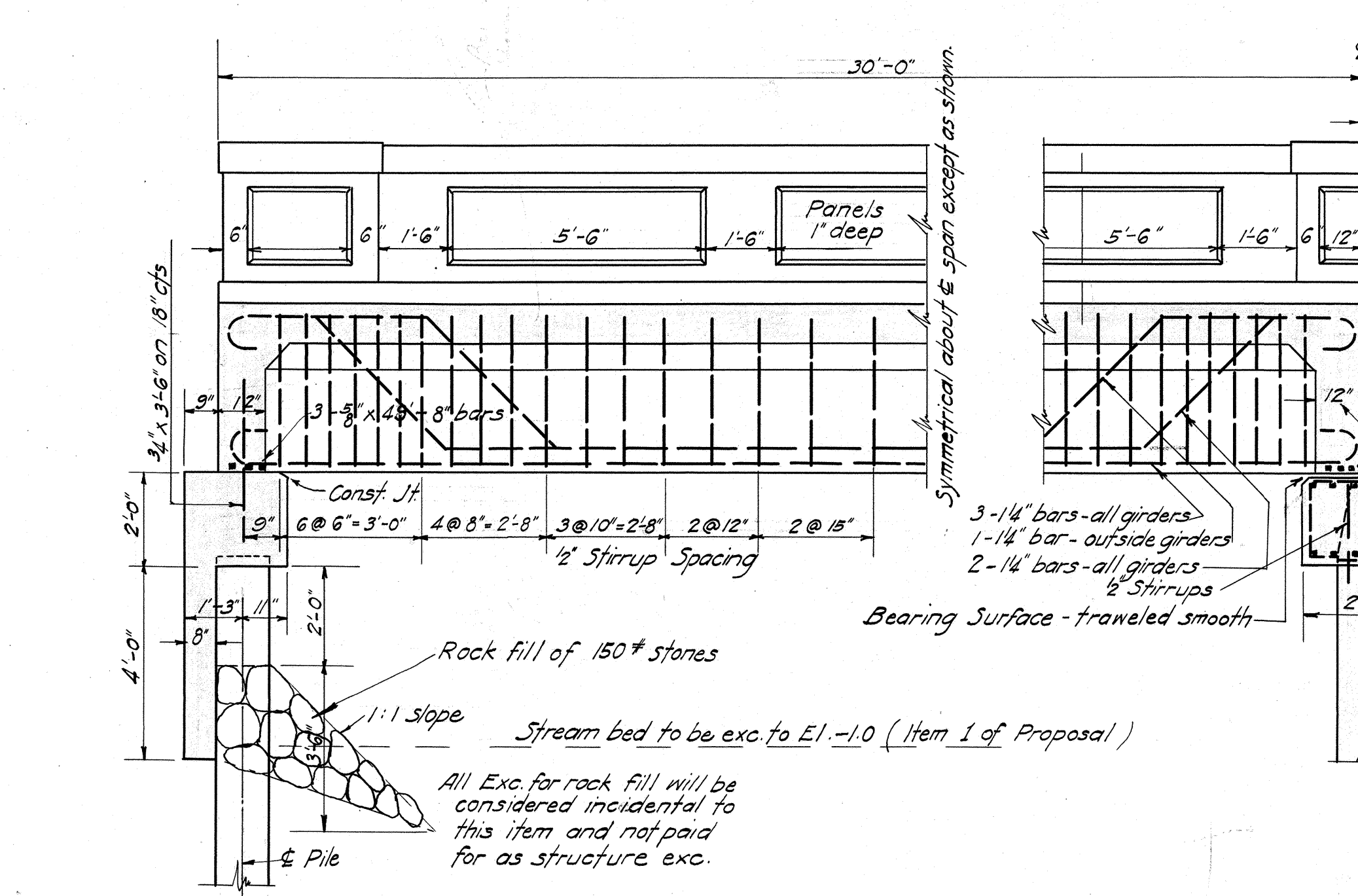


DETAIL OF CONCRETE PILES

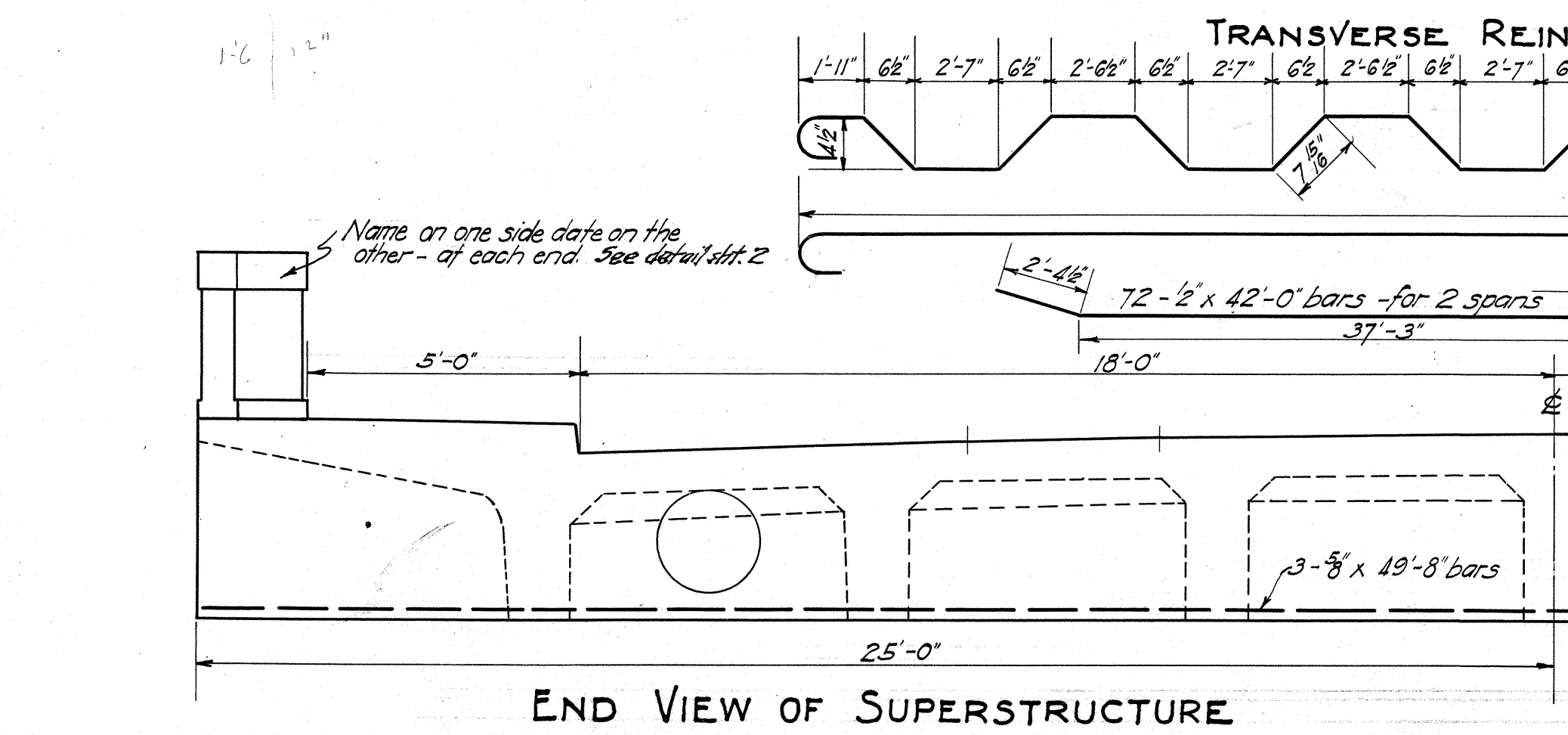
TRANSV. REINF. SIDEWALK



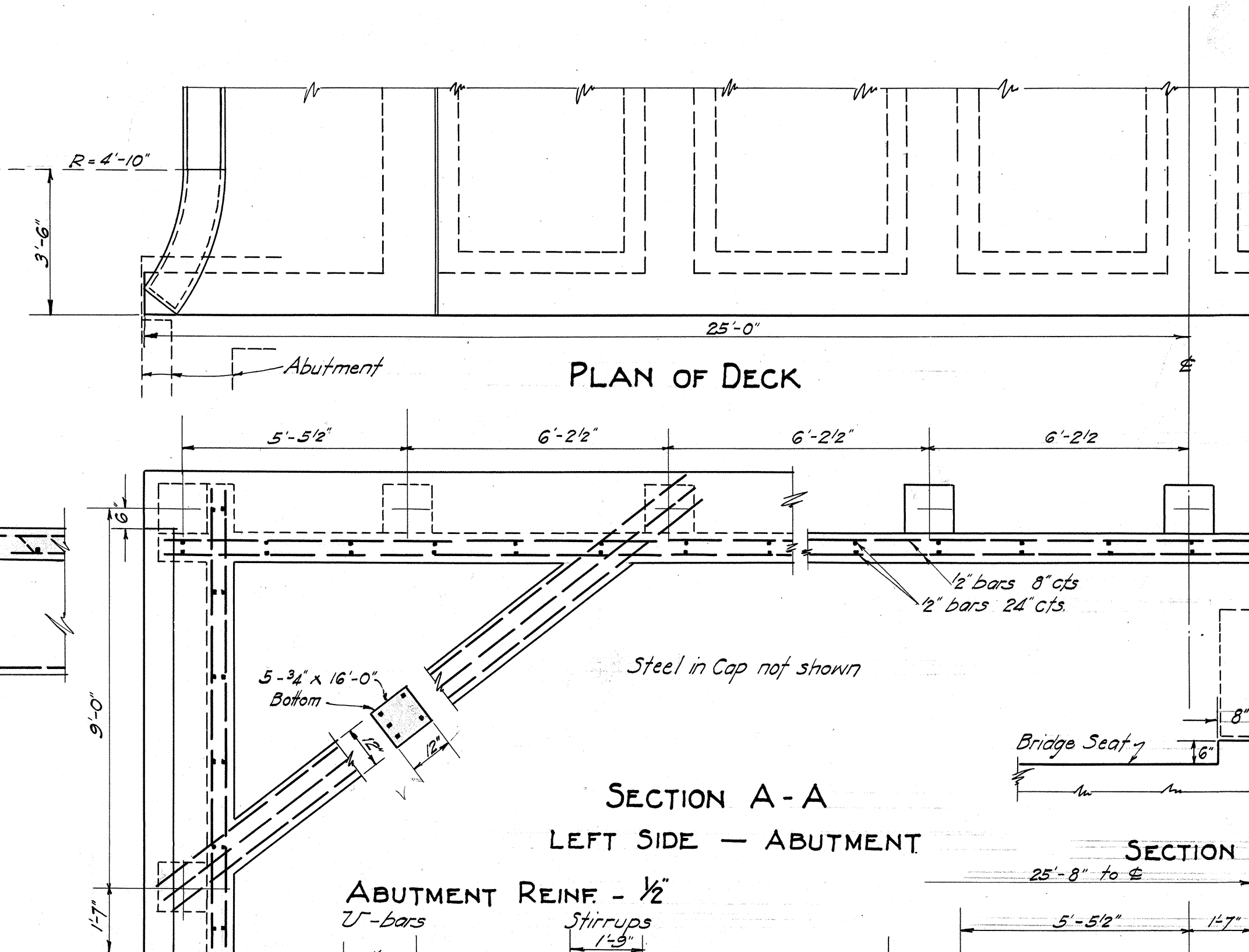
TYPICAL TRANSVERSE SECTION



TYPICAL LONGITUDINAL SECTION



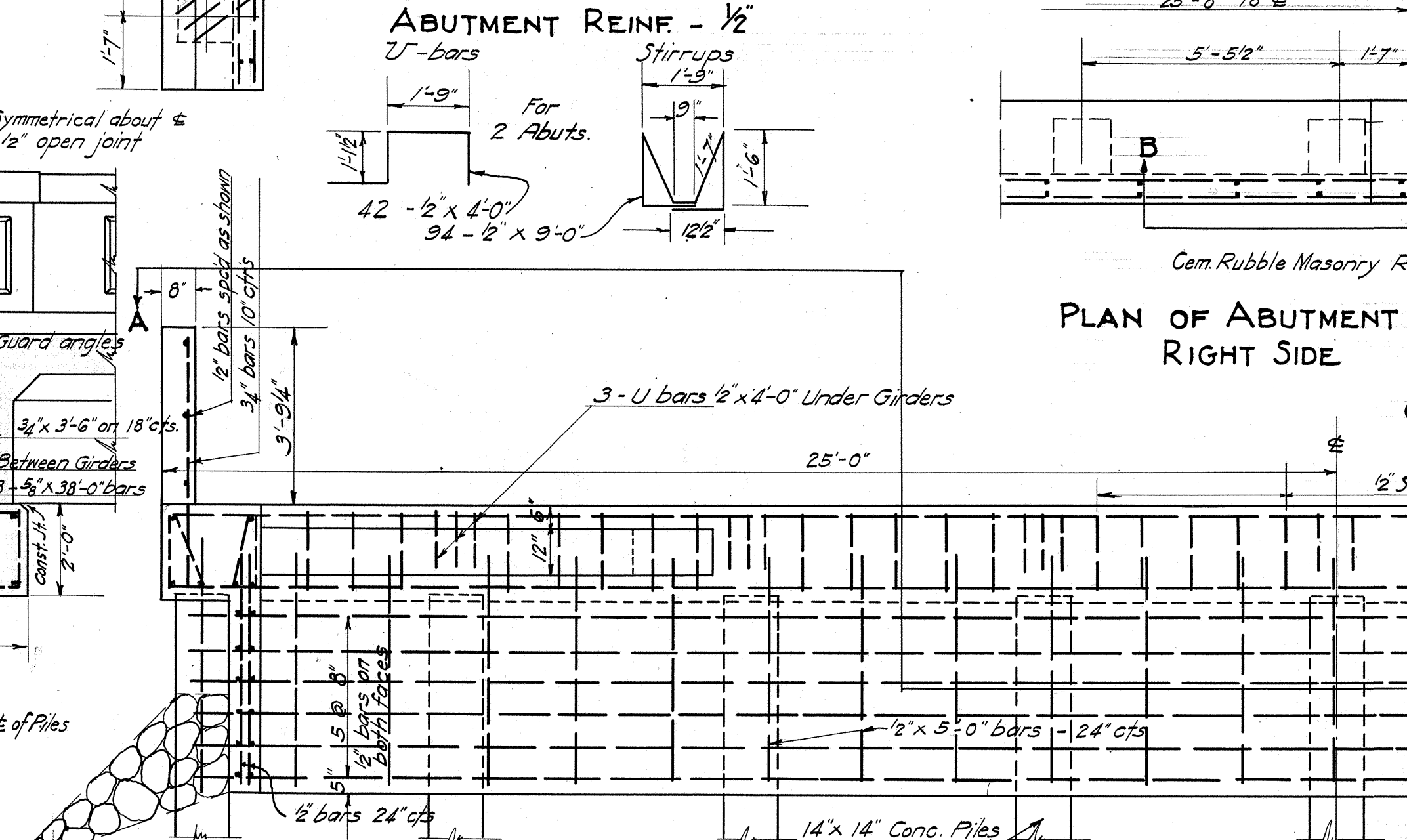
END VIEW OF SUPERSTRUCTURE



PLAN OF DECK

SECTION A-A

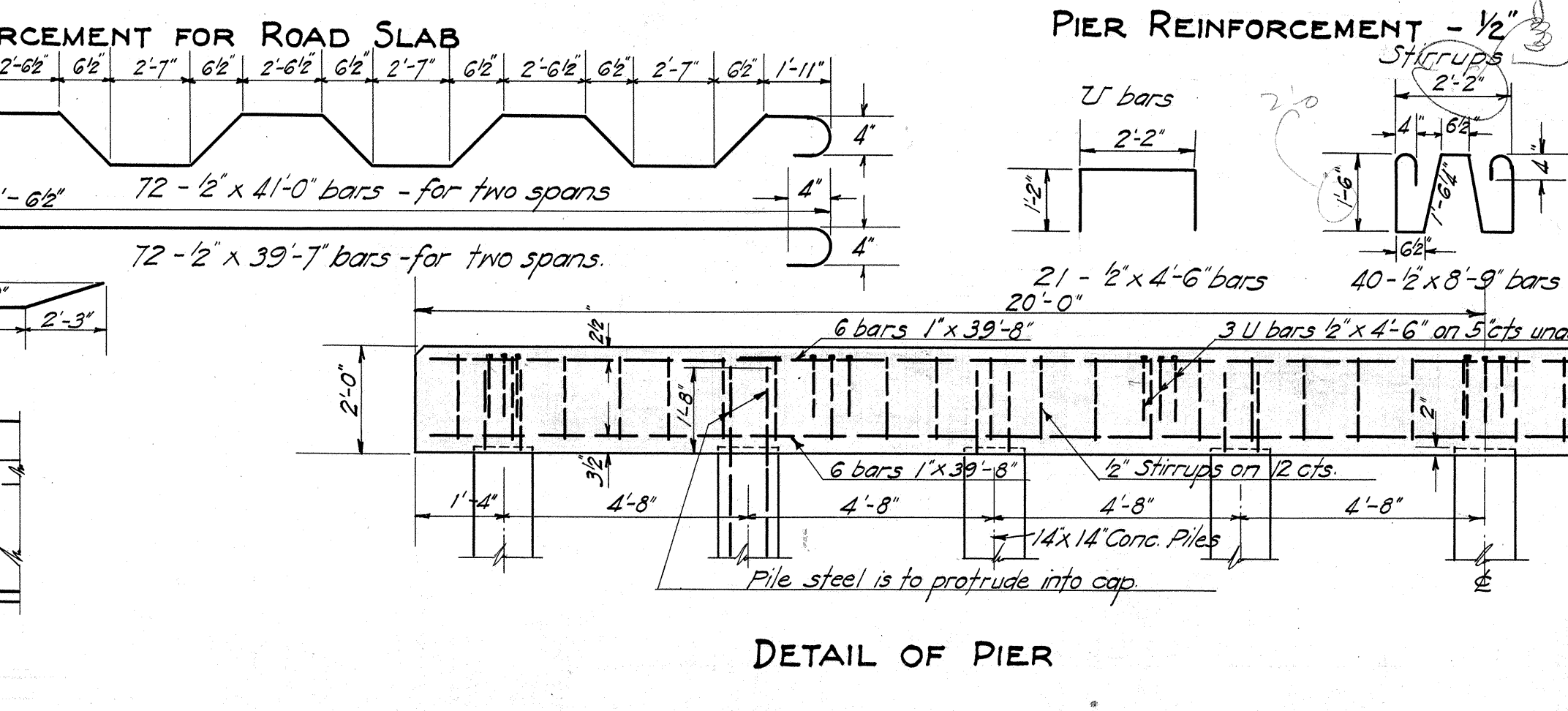
LEFT SIDE - ABUTMENT



PLAN OF ABUTMENT
RIGHT SIDE

Left Side Only - See plan of Right Side

ELEVATION BACK OF ABUTMENT



DETAIL OF PIER

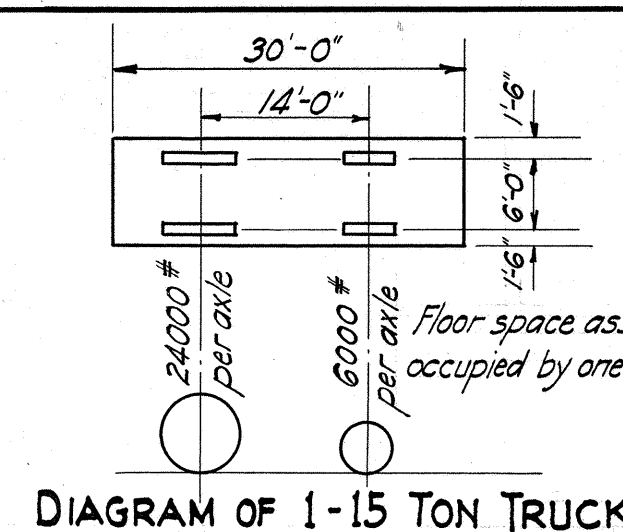
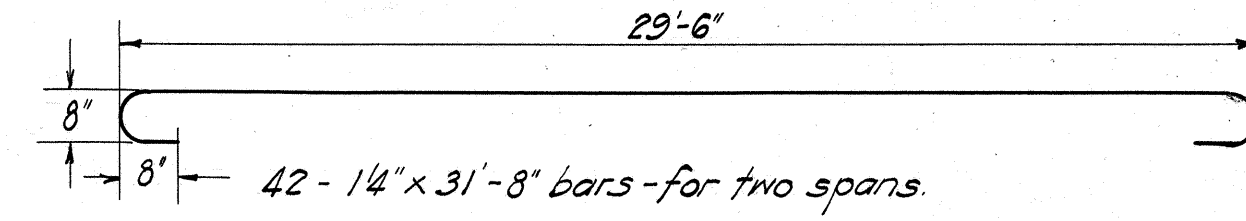


DIAGRAM OF 1-15 TON TRUCK

TABLE FOR ENTIRE BRIDGE - 2 SPANS

No.	Size	Length	a	b	c	d	e	Location
12	1 1/4"	34'-0"	1'-10"	2'-8"	20'-6"	3'-9 1/2"	1'-1 1/4"	3 Center Girders
8	"	34'-0"	1'-10"	2'-11"	20'-0"	4'-1 1/8"	12 1/2"	2 Outside "
8	"	33'-9"	1'-10"	2'-6 1/2"	20'-9"	3'-7"	1'-1"	2 Other "
4	"	34'-0"	4'-10"	2'-11"	14'-0"	4'-1 1/2"	12 1/2"	2 Outside "



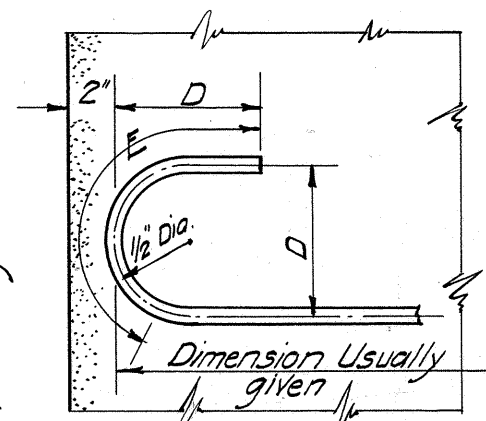
GIRDER STIRRUPS

FOR TWO SPANS

Girders	No.	Length
3 in Center	216	8'-0"
2 on Outside	144	8'-5"
2 Others	144	7'-8"

All inside Girders
Outside Girders

E = excess length
of bar reqd for one hook



HOOK DETAIL

Size	D	E
3"	3"	4 1/2"
1/2"	4"	6 1/4"
3/8"	5"	7 1/8"
3/4"	6"	9 1/2"
1"	8"	12 3/8"
1 1/4"	8"	12 3/4"

GENERAL NOTES:-

- DEAD LOAD - Concrete at 150 # per cu ft
- LIVE LOAD - Three 15 ton trucks with 30% impact and 100 # per sq ft on sidewalk.
- CONCRETE - All Class 'A' (1:2:4 mix) with all exposed corners chamfered 3/4". Allowable compression 650 #/sq in.
- REINFORCING STEEL - Allowable tensile stress 16000 #/sq in. All steel to be square deformed bars - square twisted bars not to be considered deformed. All dimensions relating to reinforcement are to centers of bars. Where location of bars is not given they are to be placed 2 inches from the adjacent concrete surface. Length of all bars unless given, are to be such as to reach a point 2 inches from the concrete face at their ends. Splices must be approved by the Engineer and shall have a lap of 40 diameters with splices staggered. The main longitudinal bars in girders cannot be spliced. Extra weight of steel required for splices will not be included in quantities for payment.
- FOUNDATIONS - All elevations shown may be changed upon order of the Engineer. Piles used are of precast concrete. Piles may be changed in number & location upon order of the Engineer. Additional concrete & steel to accommodate piles not driven to exact location shall be provided as required by the Engineer at the Contractor's expense.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAILUPE BRIDGE

No. 6 STATION 149+40

KALANIANA'OLE HIGHWAY - F.A.P. No. 6 B

APRIL, 1930

SHEET 2 OF 2 SHEETS.

Plan	Profile	Foundation	Detail
2	4	4	4

4141.5