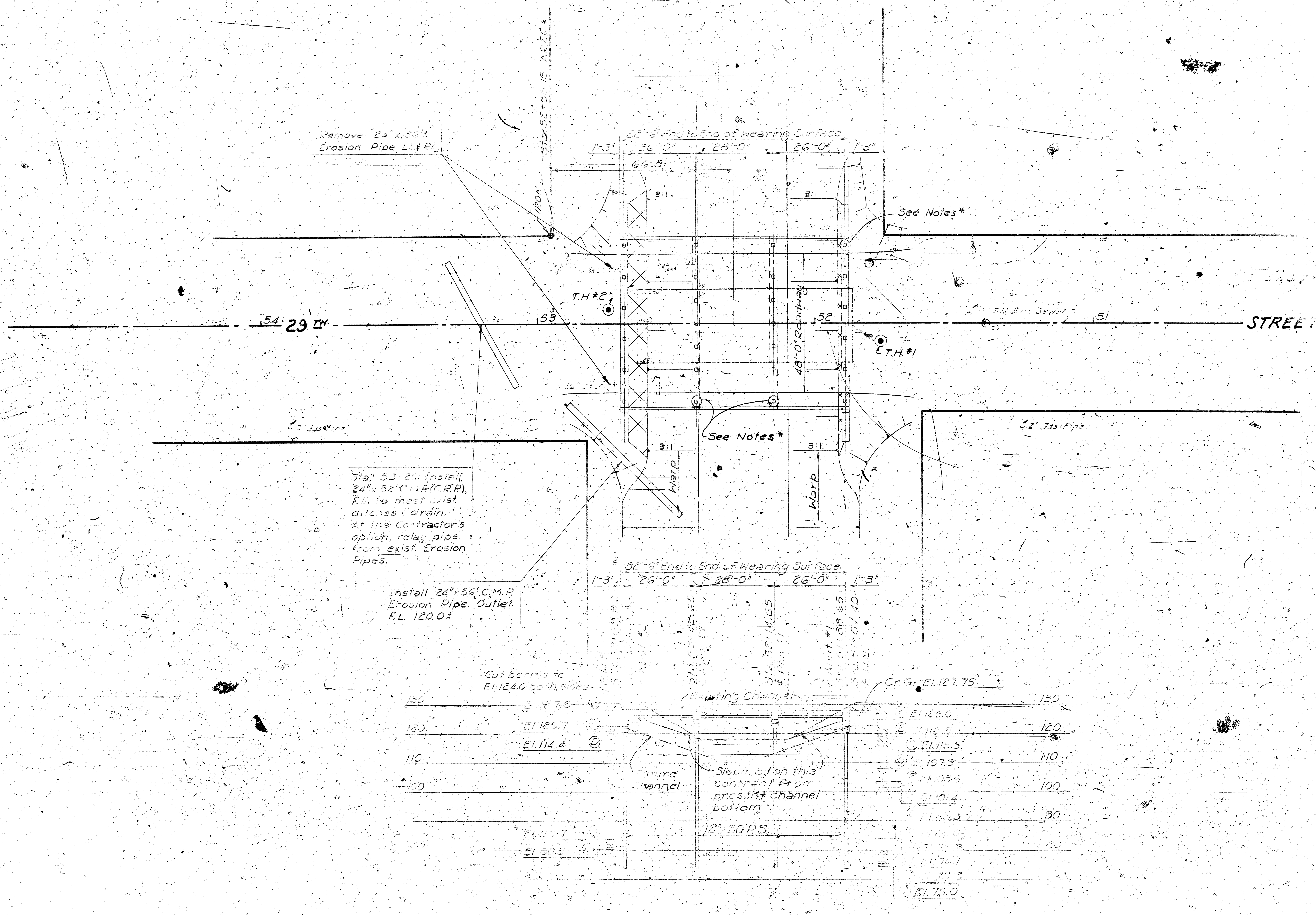
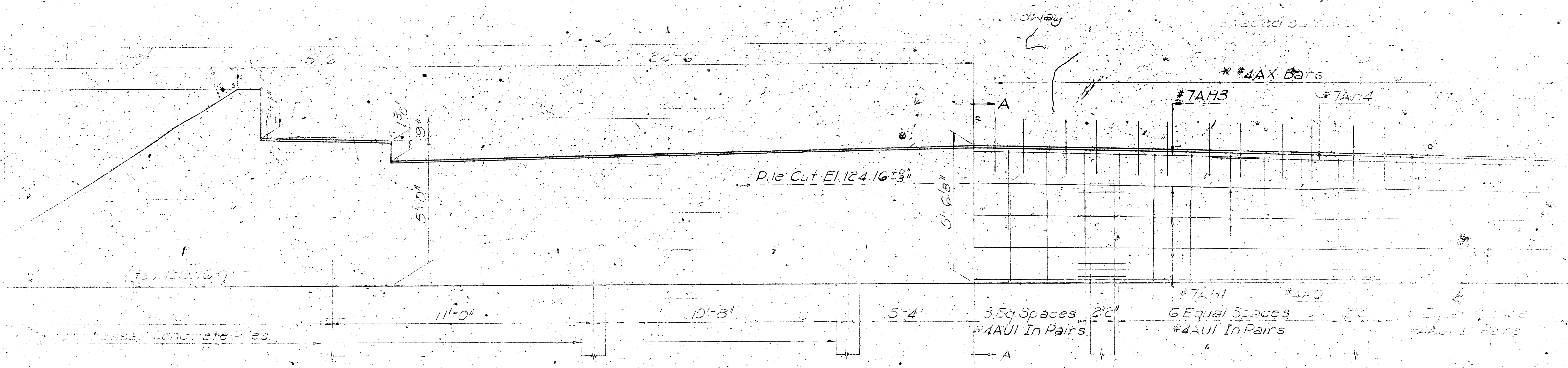
CITY OF WICHITA, KANSAS

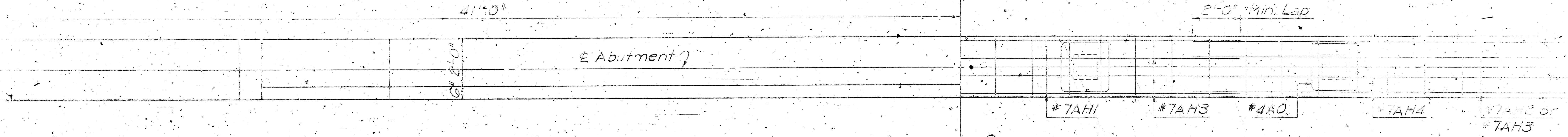
BRIDGE ON 29TH. ST. NORTH ACROSS CHISHOLM CREE

PROJECT NO. C16-12

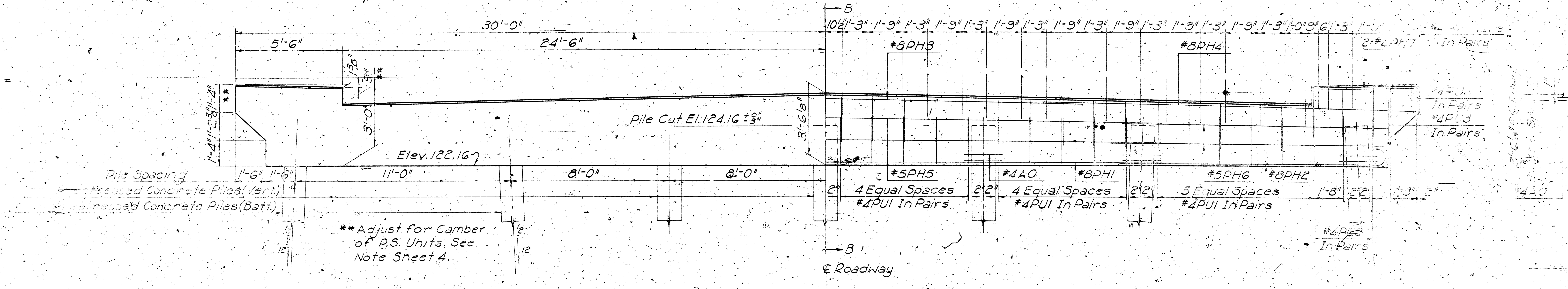

Sta. 52+95.15 AREC.
IRON
Remove 24"x36'± Erosion Pipe Lt. & Rt.
82'-6" End to End of Wearing Surface
1'-3"
26'-0"
28'-0"
26'-0"
1'-3"
66.5'
3:1
See Notes*
T.H.#2
T.H.#1
54
29TH
53
52
51
STREE
48'-0" Roadway
See Notes*
Warp
Sta. 53+20: Install 24"x52' C.M.P. (C.R.P.), F.L. to meet exist. ditches & drain. At the Contractor's option, relay pipe from exist. Erosion Pipes.
Install 24"x56' C.M.P. Erosion Pipe. Outlet F.L. 120.0±
Sta. 52+41.65
Abut. #1
Cut berms to El. 124.0 both sides
Existing Channel
Cr. Gr. El. 127.75
130
120
110
100
90
80
El. 126.7
El. 114.4
El. 125.0
El. 115.5
El. 107.9
El. 103.6
El. 101.4
El. 90.3
El. 75.0
Future Channel
Slope 3:1 on this contract from present channel bottom
12"x30' P.S.


Roadway
spaced Bars
5'-6"
24'-6"
* #4AX Bars
#7AH3
#7AH4
A
1'-3"
9"
Pile Cut El. 124.16 ±0" -3"
5'-0"
5'-6 8"
Elev. 120.16
11'-0"
10'-8"
5'-4"
3 Eq. Spaces
2'-2"
#4AUI In Pairs
#7AH1
#4AO
6 Equal Spaces
#4AUI In Pairs
Prestressed Concrete Piles
A

ABUTMENT ELEVATION

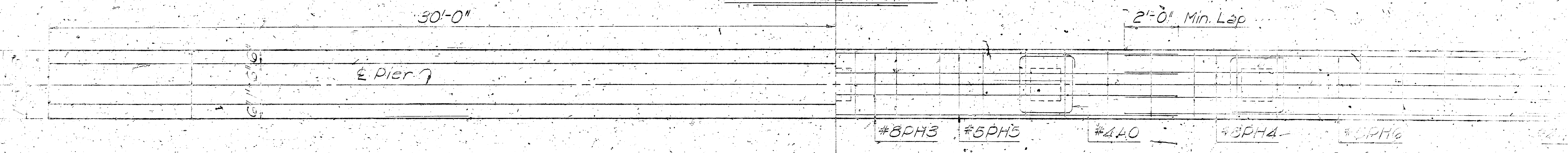

41'-0"
2'-0" Min. Lap
℄ Abutment
2'-0"
#7AH1
#7AH3
#4AO
#7AH4
#7AH2 or #7AH5

ABUTMENT PLAN

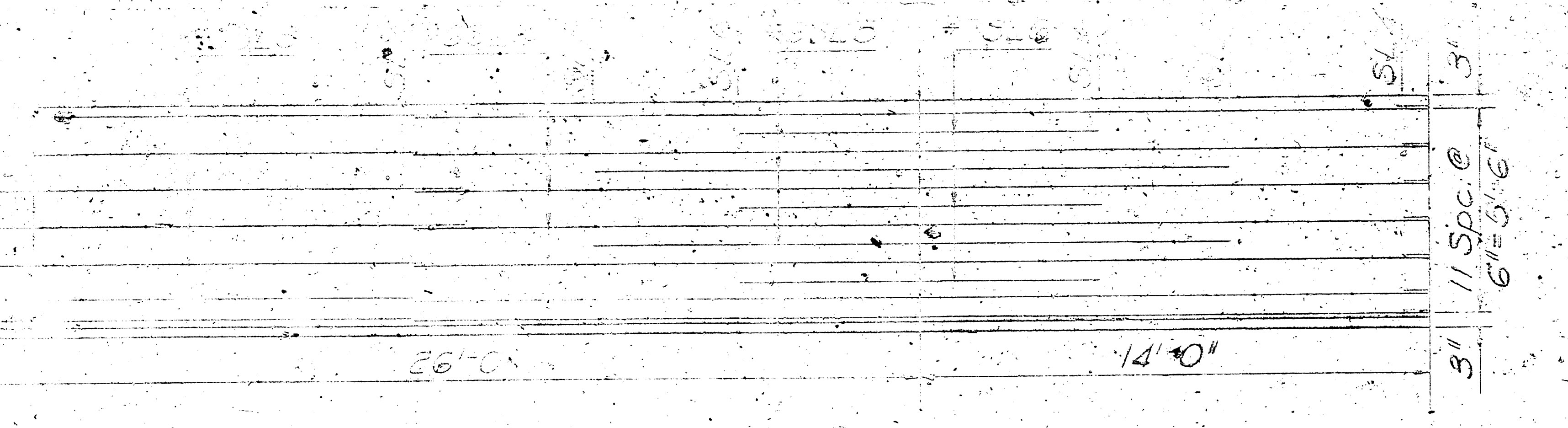

B
30'-0"
5'-6"
24'-6"
10½" 1'-3" 1'-9" 1'-3" 1'-9" 1'-3" 1'-9" 1'-3" 1'-9" 1'-3" 1'-9" 1'-3" 1'-9" 1'-3" 1'-9" 1'-3" 1'-0" 9" 6" 1'-3"
#8PH3
#8PH4
2-#4PH7
In Pairs
1'-3"
3"
**
1'-4" 1'-2⅜" 1'-2"
3'-0"
Pile Cut El. 124.16 ±0" -3"
3'-6 8"
Elev. 122.16
#4PU2 In Pairs
#4PU3 In Pairs
3'-6 8"
Pile Spacing
Prestressed Concrete Piles (Vert.)
Prestressed Concrete Piles (Batt.)
1'-6"
1'-6"
11'-0"
8'-0"
8'-0"
2"
#5PH5
#4AO
#8PH1
#5PH6
#8PH2
4 Equal Spaces
#4PUI In Pairs
2'-2"
4 Equal Spaces
#4PUI In Pairs
2'-2"
5 Equal Spaces
#4PUI In Pairs
1'-8"
2"
1'-3"
2"
#4AO
#4PU5
In Pairs
12
12
B
℄ Roadway

** Adjust for Camber of P.S. Units. See Note Sheet 4.

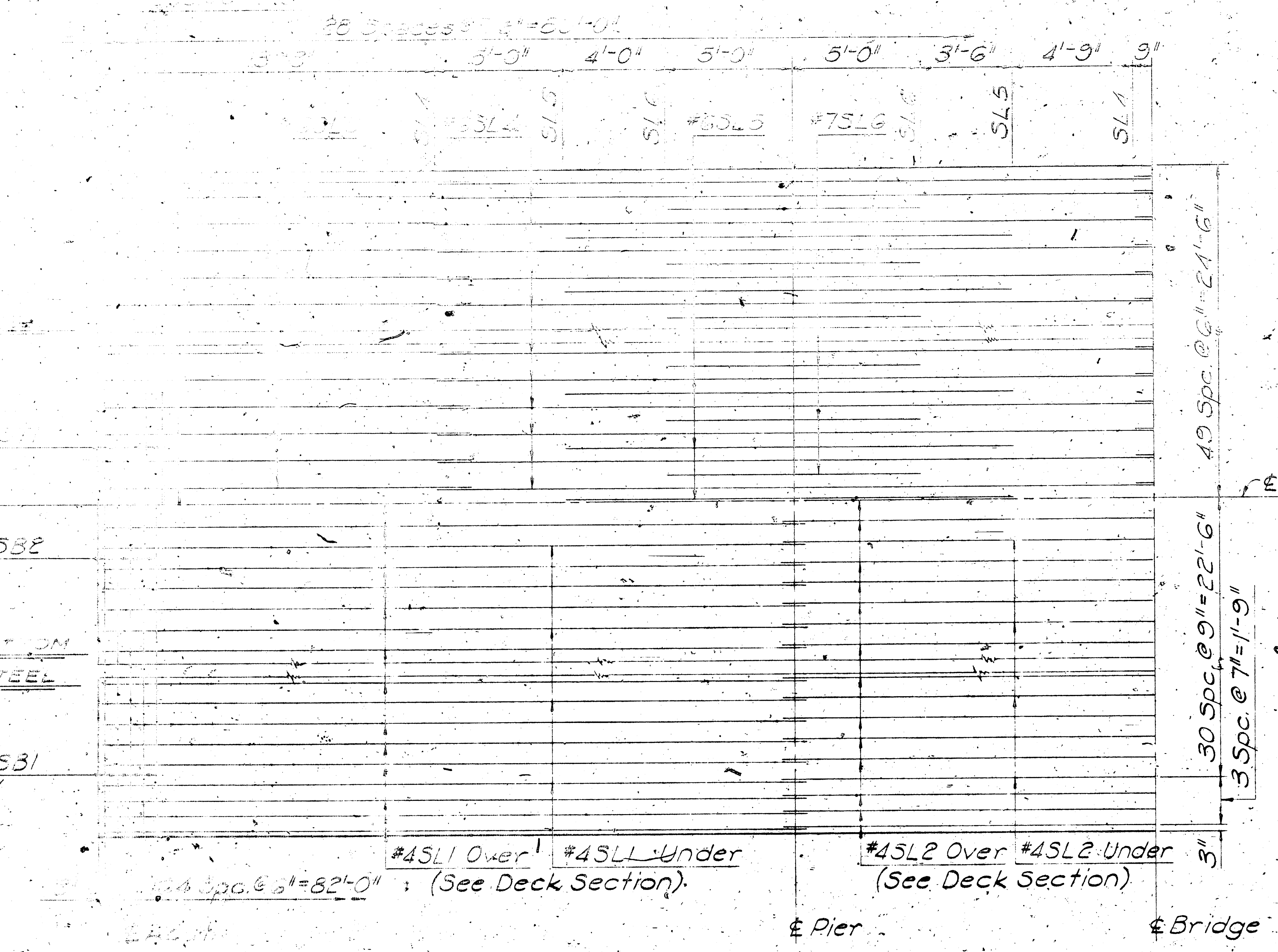
PIER ELEVATION


30'-0"
2'-0" Min. Lap
℄ Pier
#8PH3
#5PH5
#4AO
#8PH4
#5PH6

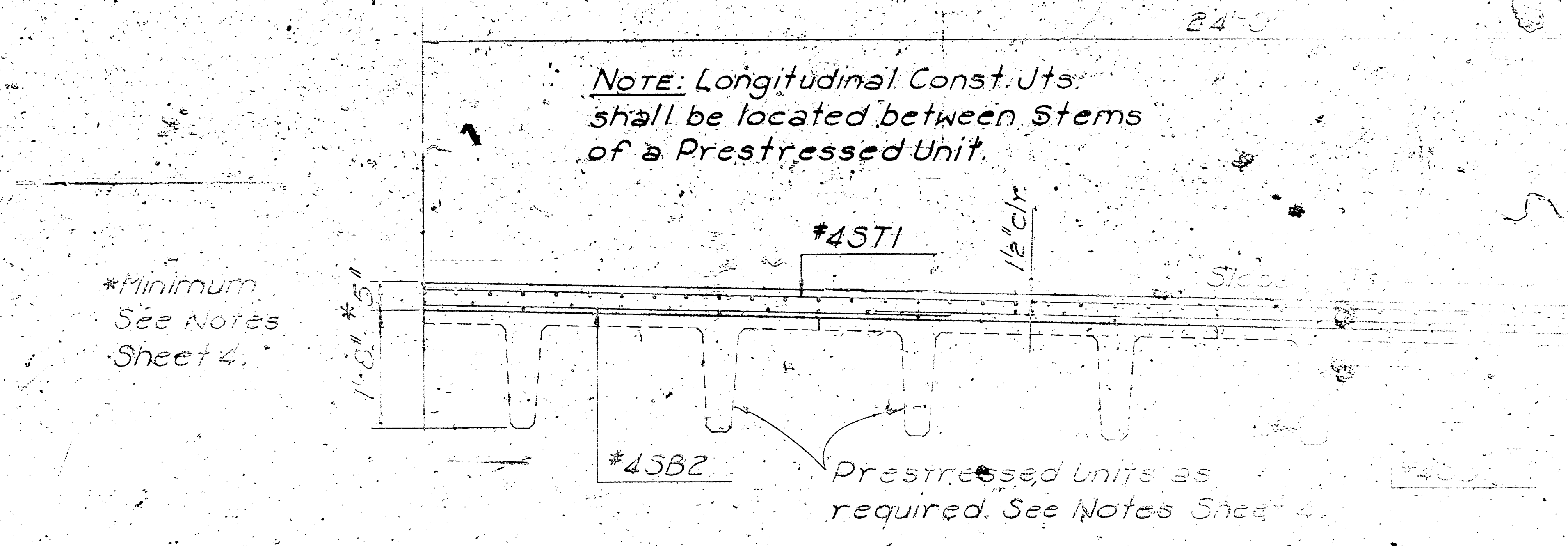
PIER PLAN


SL1
3"
11 Spc. @ 6"=5'-6"
26'-0"
14'-0"
3"

HALF SIDEWALK PLAN


28 Spaces @ 2'-6"=60'-0"
5'-0"
4'-0"
5'-0"
5'-0"
3'-6"
4'-9"
9"
#5SL4
SL5
SL6
#6SL5
#7SL6
SL6
SL5
SL1
49 Spc. @ 6"=24'-6"
℄ Roadway
30 Spc. @ 9"=22'-6"
3 Spc. @ 7"=1'-9"
5B2
5B1
#4SL1 Over
#4SL1 Under
(See Deck Section).
#4SL2 Over
#4SL2 Under
(See Deck Section)
3"
164 Spc. @ 6"=82'-0"
℄ Pier
℄ Bridge

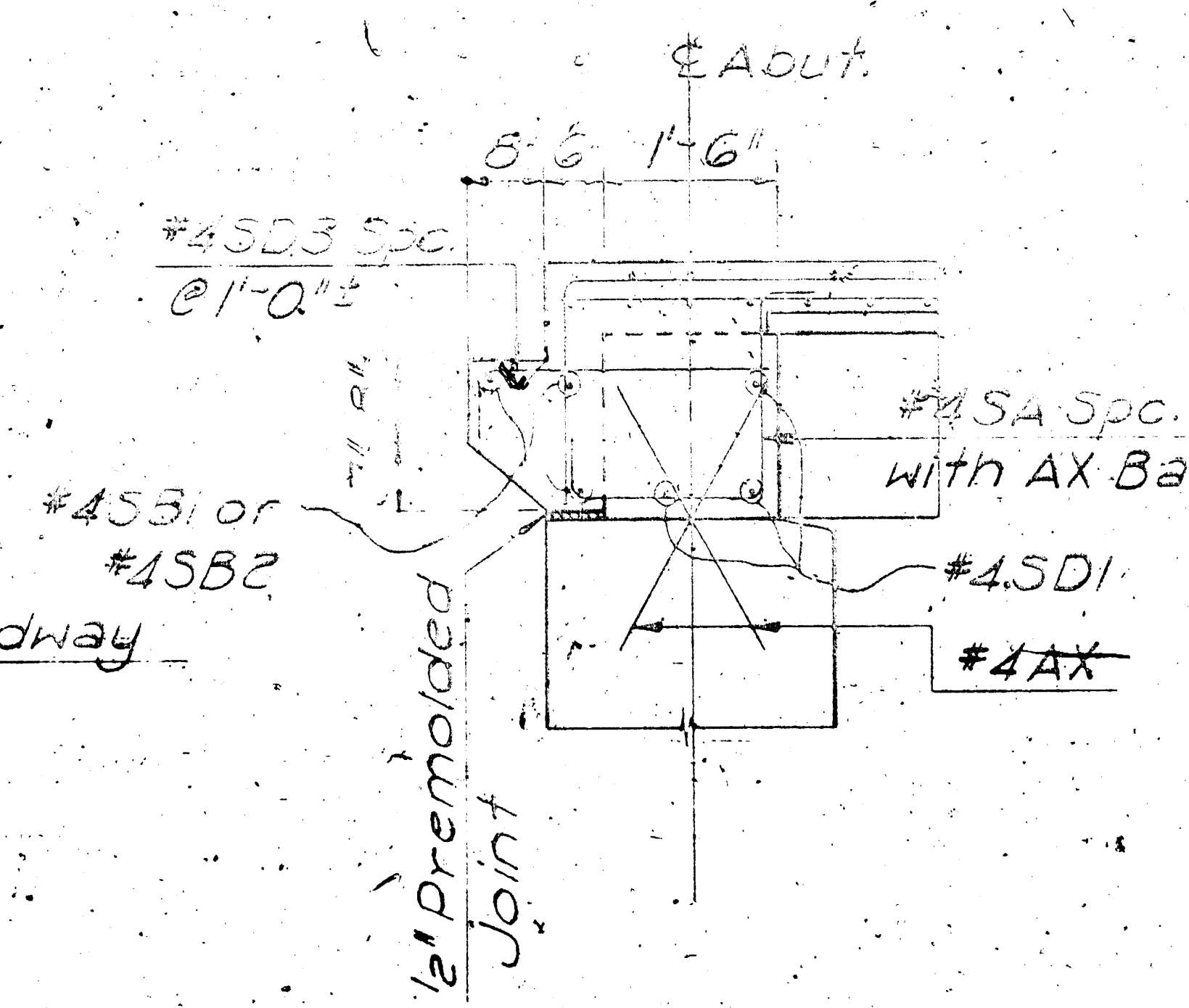
HALF SLAB PLAN


24'-0"
#4ST1
1½"Clr.
1'-8" *5"
#4SB2
*Minimum
See Notes
Sheet 4.

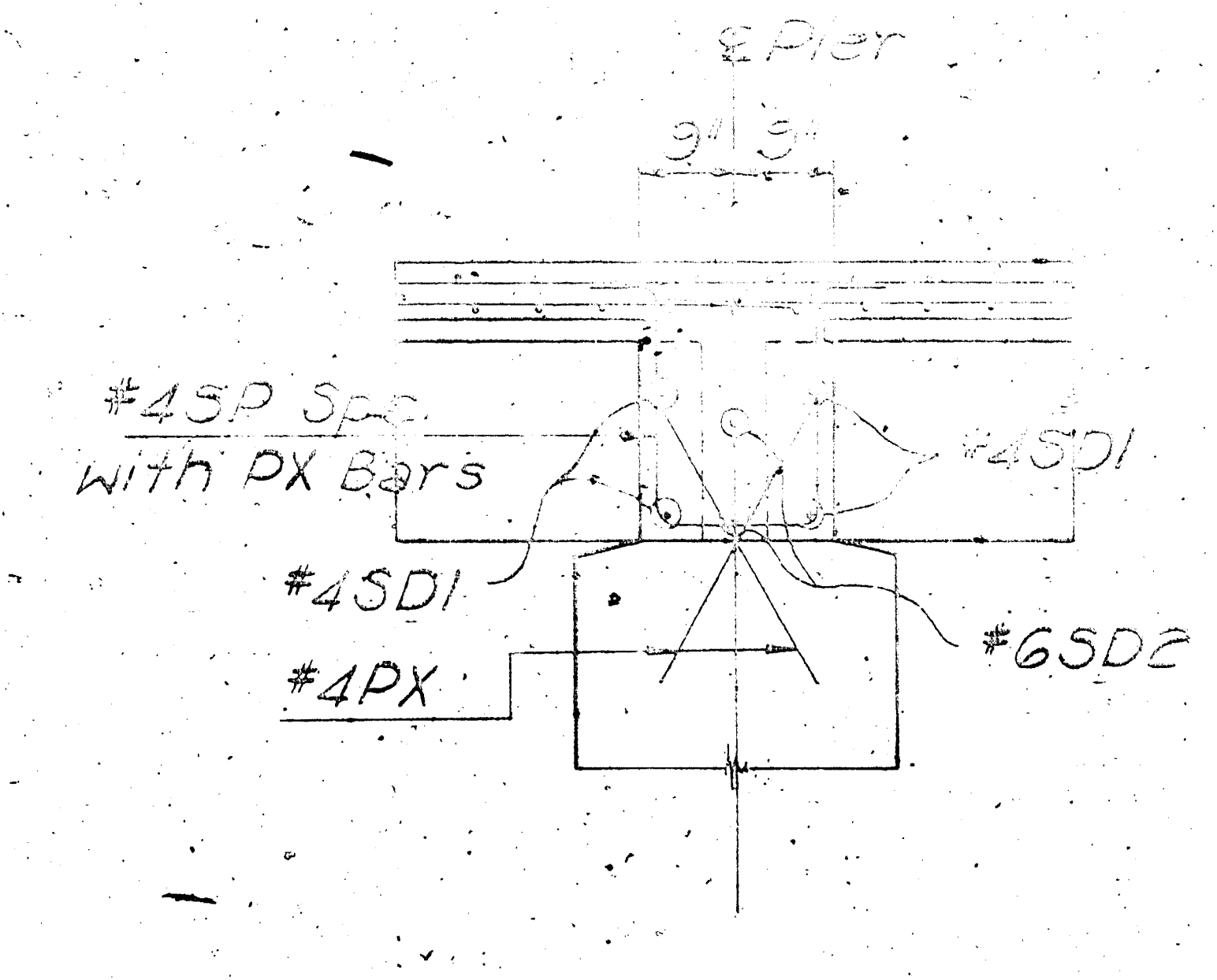
Note: Longitudinal Const. Jts. shall be located between Stems of a Prestressed Unit.

Prestressed Units as required. See Notes Sheet 4.

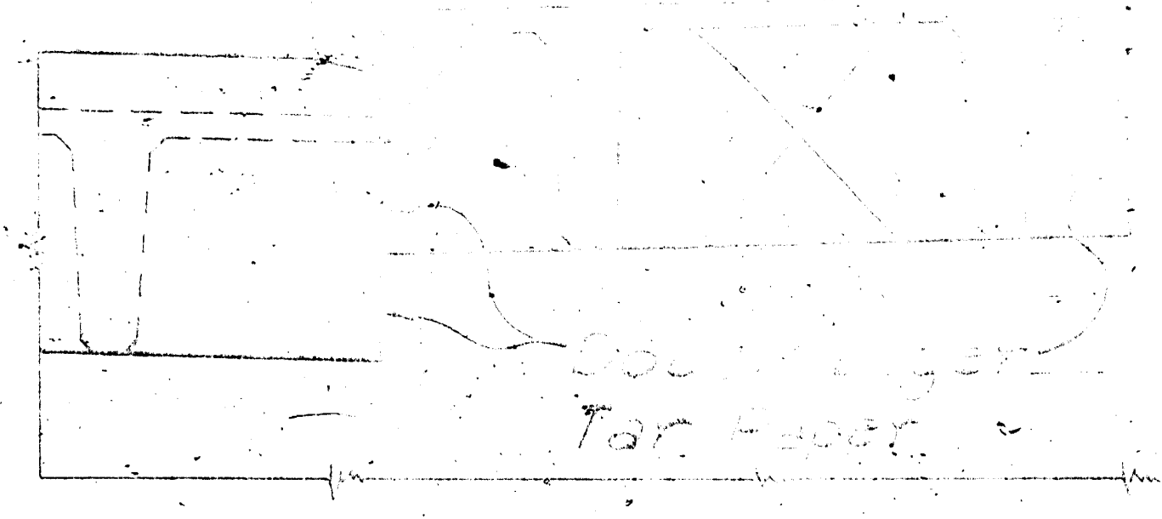
TYPICAL DECK SECTION


℄ Abut.
8" 6"
1'-6"
#4SD3 Spc. @ 1'-0"±
#4SA Spc. with AX Bars
#4SB1 or #4SB2
#4SD1
#4AX
½" Premolded Joint

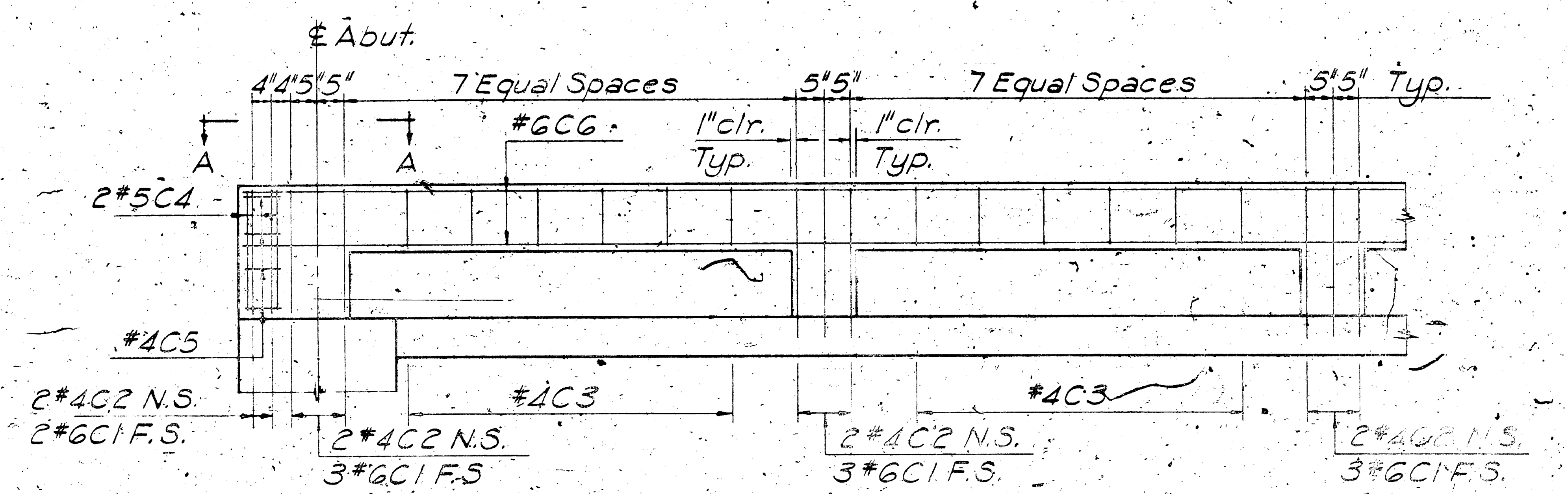
SECTION AT ABUTMENT


℄ Pier
9" 3"
#4SP Spc. with PX Bars
#4SD1
#4SD1
#4PX
#6SD2

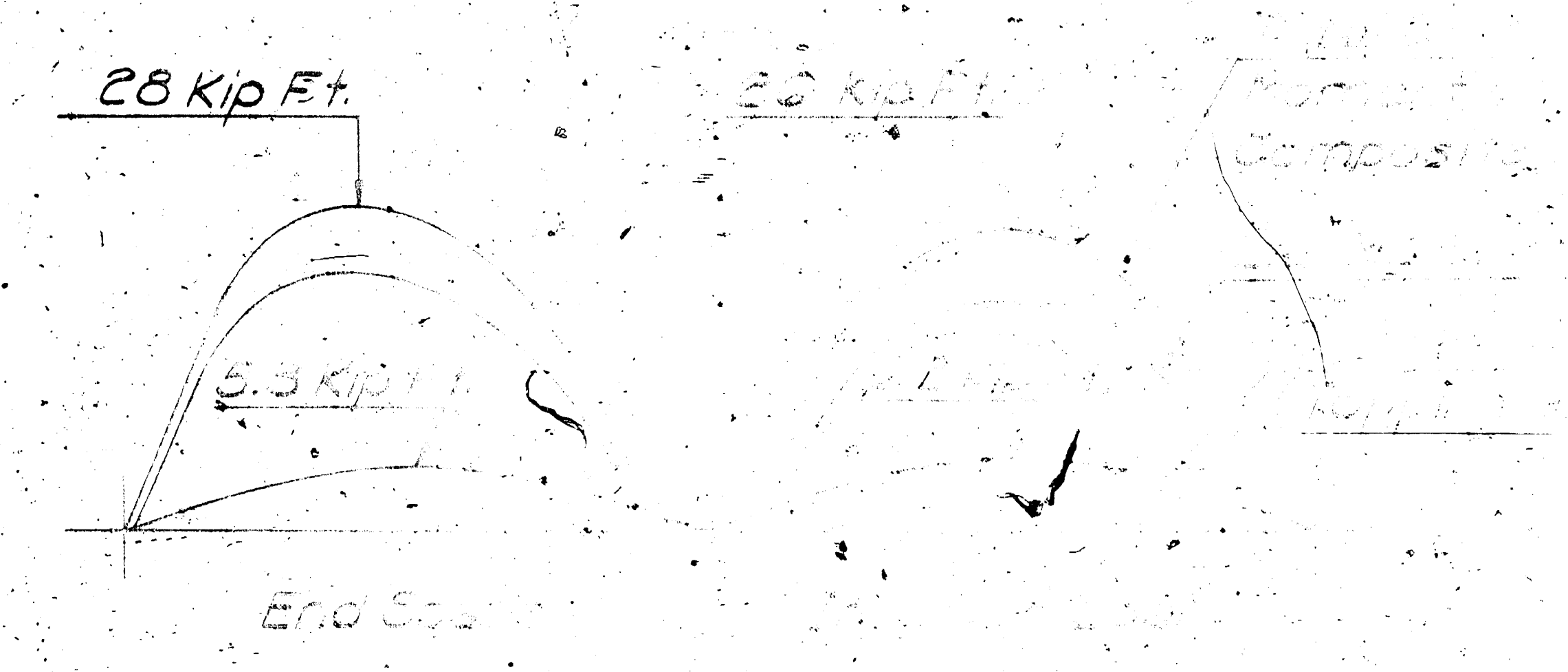
SECTION AT PIER

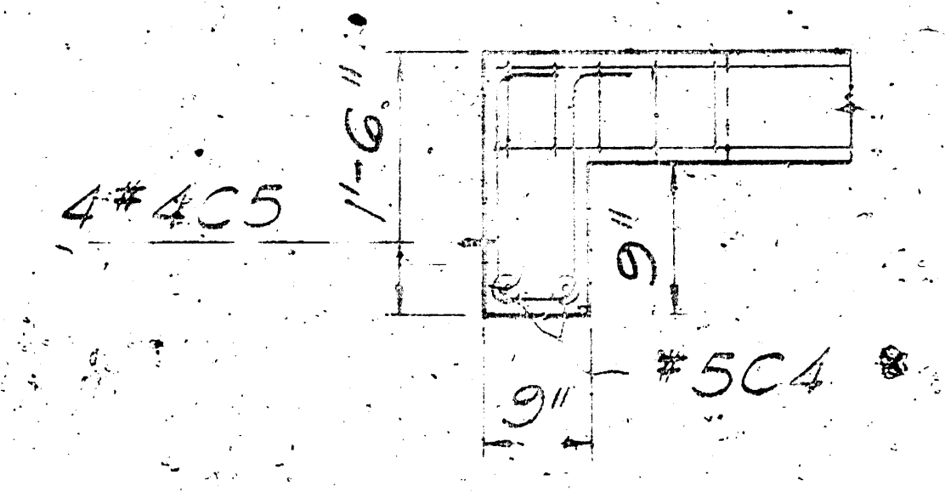


PART SECTION THRU SIDEWALK AT ABUTMENT

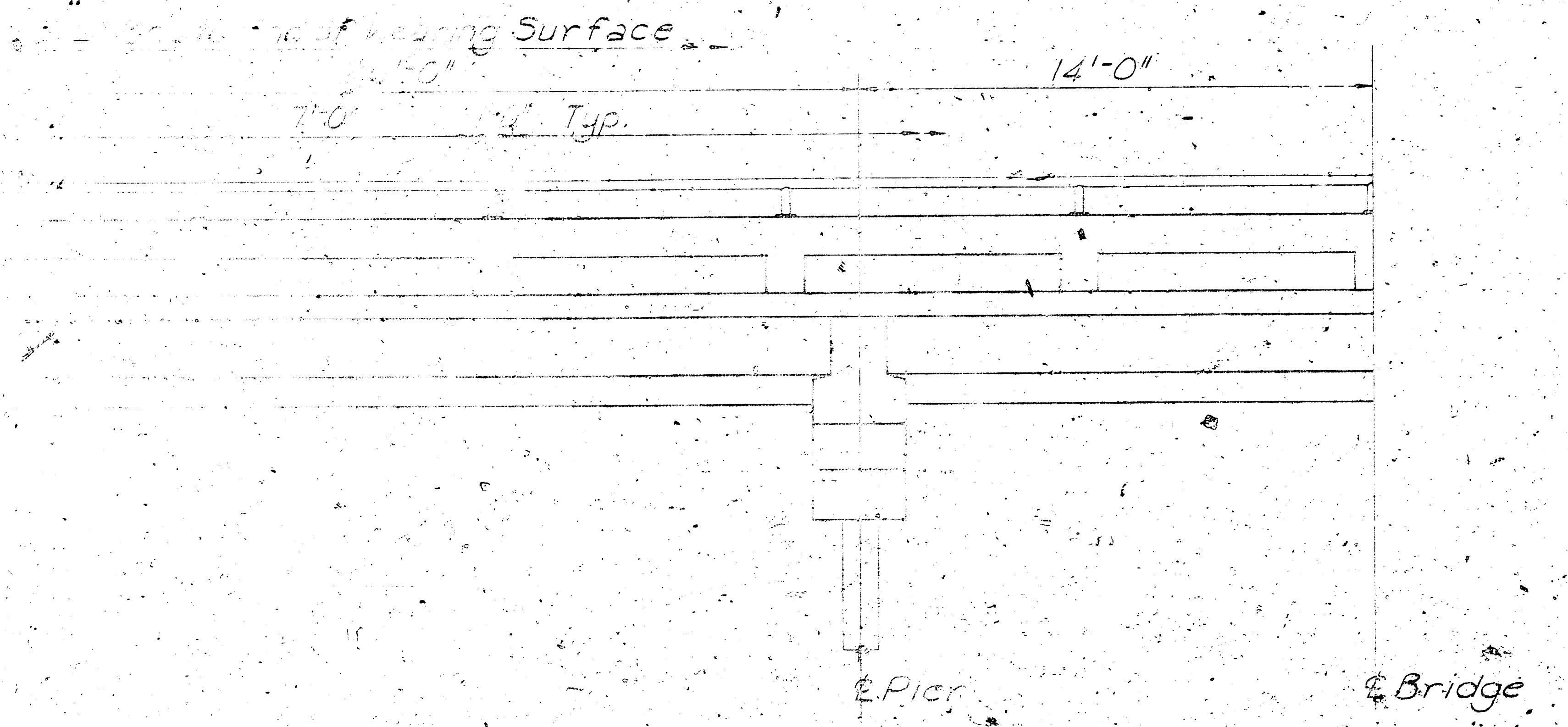

℄ Abut.
4" 4" 5" 5"
7 Equal Spaces
5" 5"
7 Equal Spaces
5" 5" Typ.
A
A
#6C6
1" clr. Typ.
1" clr. Typ.
2#5C4
#4C5
2#4C2 N.S.
2#6C1 F.S.
#4C3
#4C3
2#4C2 N.S.
3#6C1 F.S.
2#4C2 N.S.
3#6C1 F.S.
2#4C2 N.S.
3#6C1 F.S.

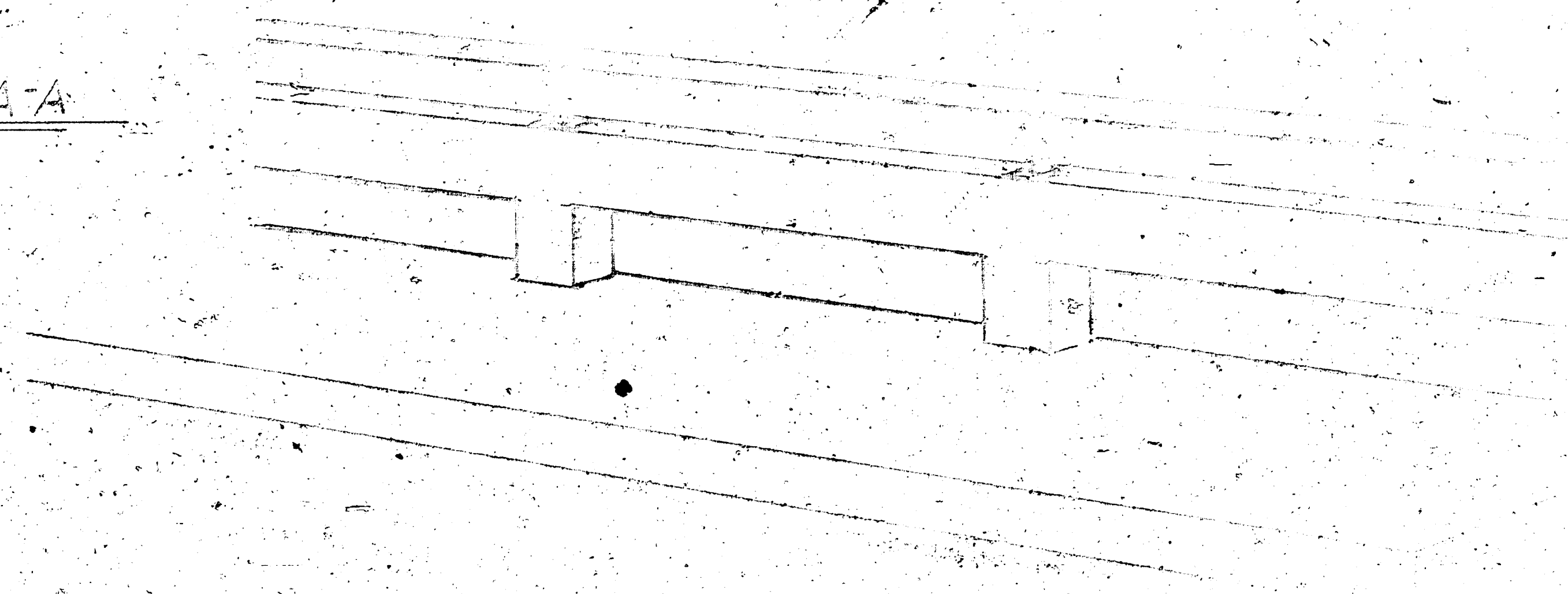
CURB REINFORCING.

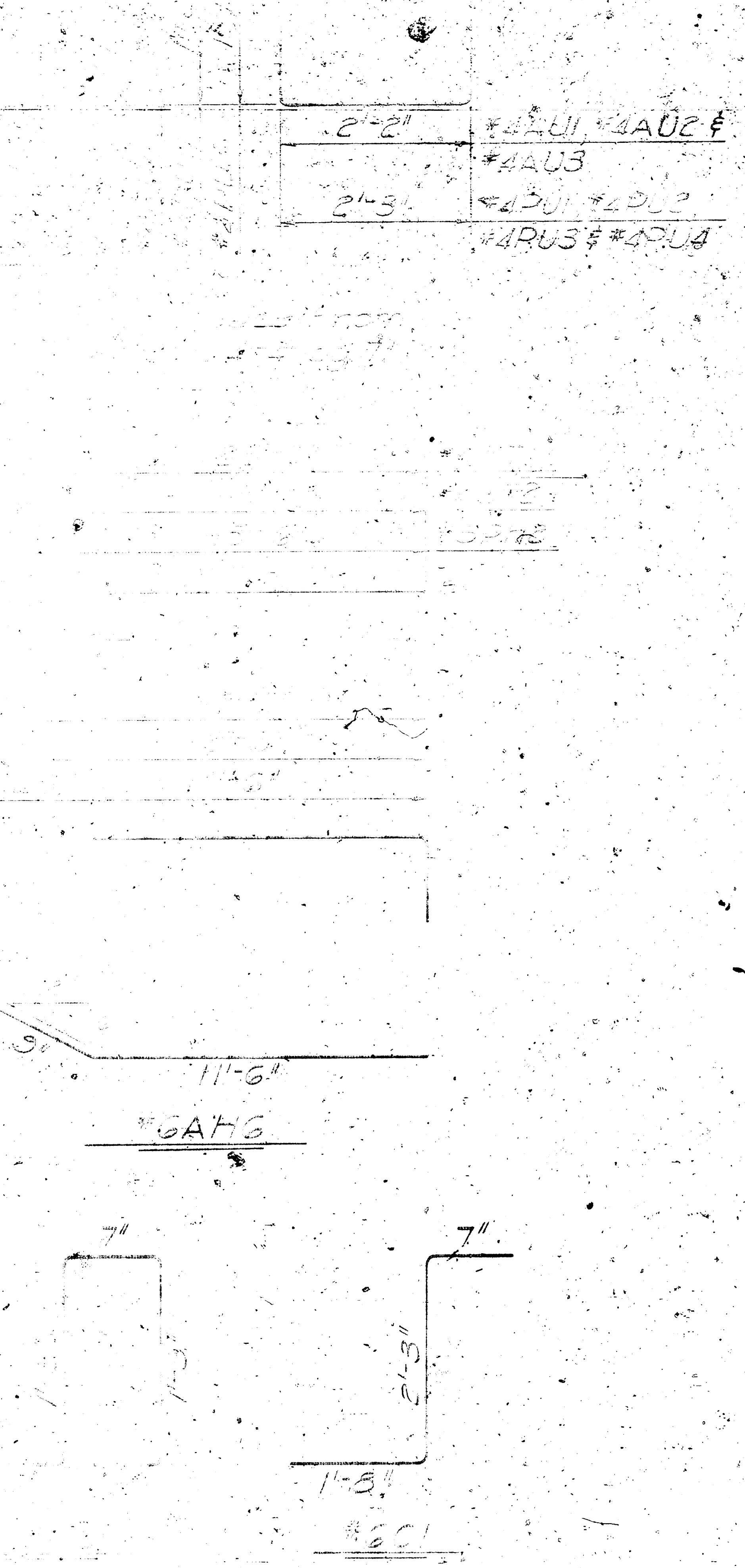



4#4C5
1'-6"
9"
9"
#5C4

SECTION A-A


Riding Surface
14'-0"
7'-0"
Typ.
℄ Pier
℄ Bridge

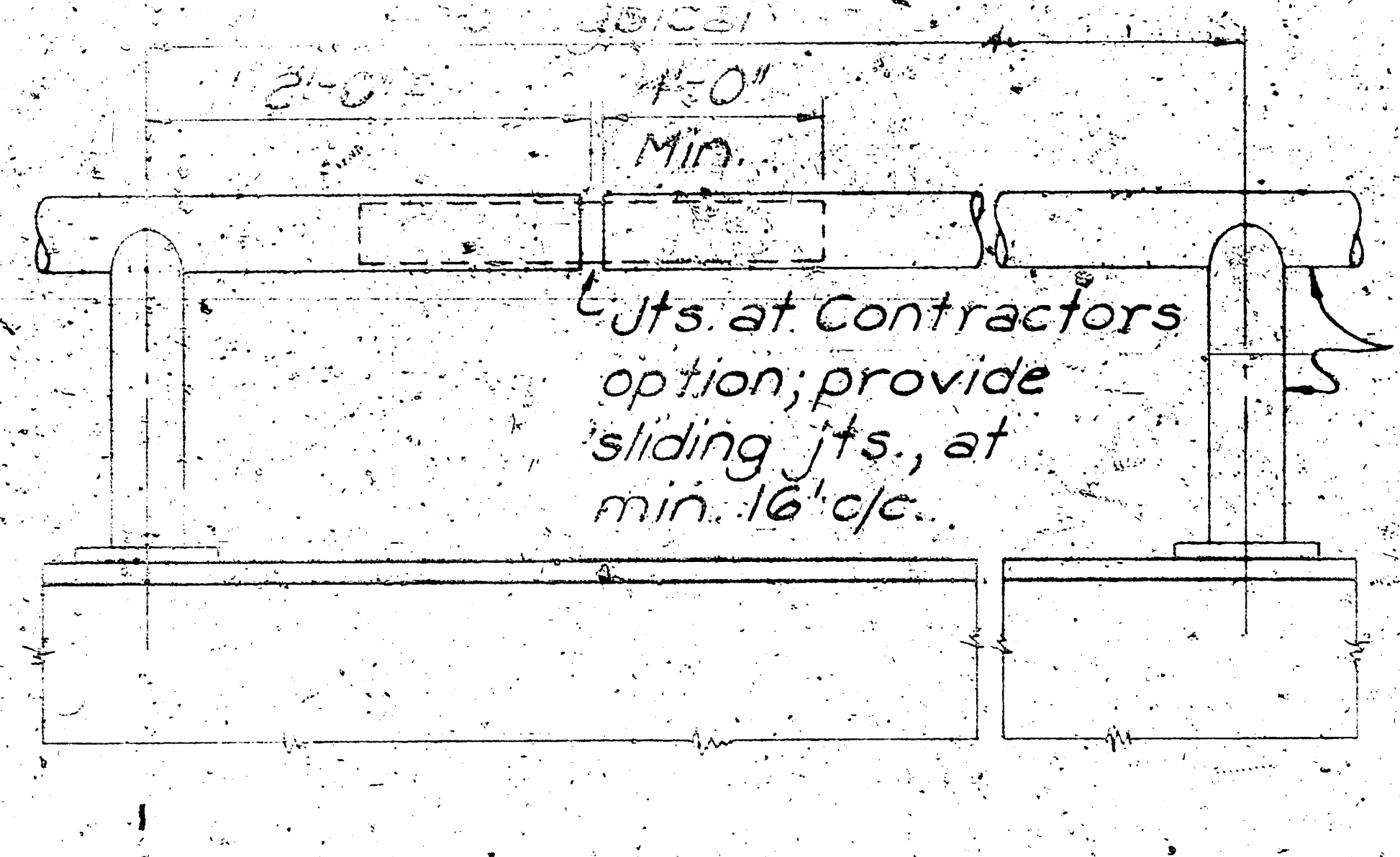


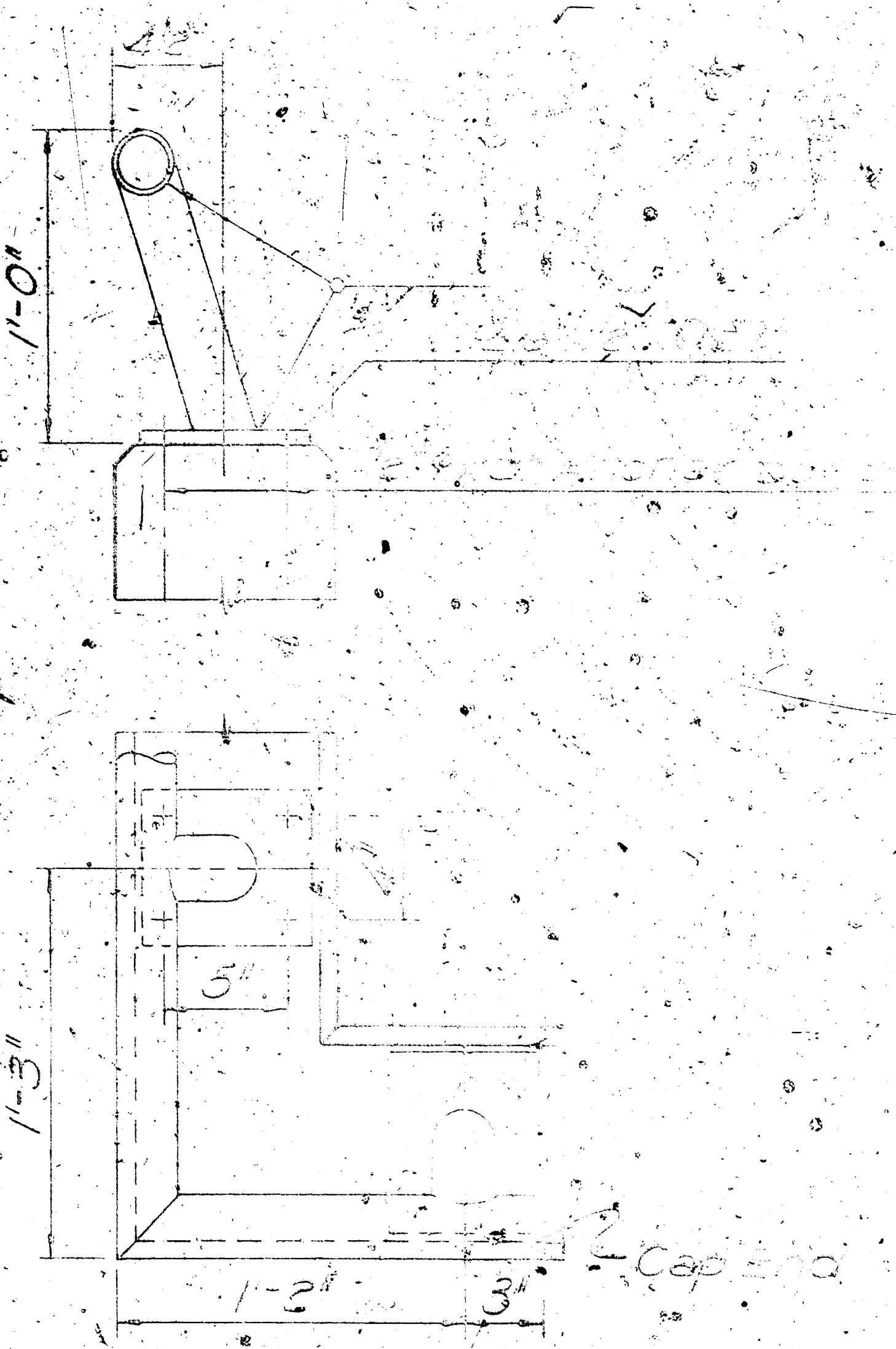

2'-2"
#4AU1, #4AU2 &
#4AU3
2'-3"
#4PU1, #4PU2
#4PU3 & #4PU4
11'-6"
#6AH6
7"
7"
2'-3"
1'-8"
#6C1

[illegible]							
STRAIGHT BARS				BENT BARS			
Mark.	No.Req.	Size	Length	Mark	No.Req.	Size	Length
[illegible]	10	7	34'-0"	AO	30	4	9'-0"
[illegible]	15	7	[illegible]				
[illegible]	8	[illegible]	24'-0"	[illegible]	62	[illegible]	8'-0"
[illegible]	8	[illegible]	[illegible]	[illegible]	16	[illegible]	9'-0"
[illegible]	[illegible]	5	9'-3"	[illegible]	24	4	[illegible]
[illegible]	[illegible]	4	[illegible]	AH6	4	6	12'-3"
				* See Bending Diagram			
[illegible] Excavation						92	Cu. Yds.
[illegible] Concrete						40.3	Cu. Yds.
[illegible] Steel						3430	Lbs.
[illegible] Prestressed Concrete Piles						300	Lin. Ft.

[illegible]							
[illegible]	4	8	34'-0"	PH2	8	8	14'-7"
PH3	4	8	26'-0"				
PH4	8	8	19'-0"	PU1	60	4	6'-7"
PH5	4	5	34'-0"	PU2	12	4	6'-11"
PH6	8	5	14'-0"	PU3	4	4	5'-7"
PH7	4	4	5'-3"	PU4	4	4	4'-5"
PX	88	4	3'-0"	AO	14	4	[illegible]
Class A Concrete						18.1	Cu. Yds.
Reinforcing Steel						2240	Lbs.
12" Prestressed Concrete Piles						350	Lin. Ft.

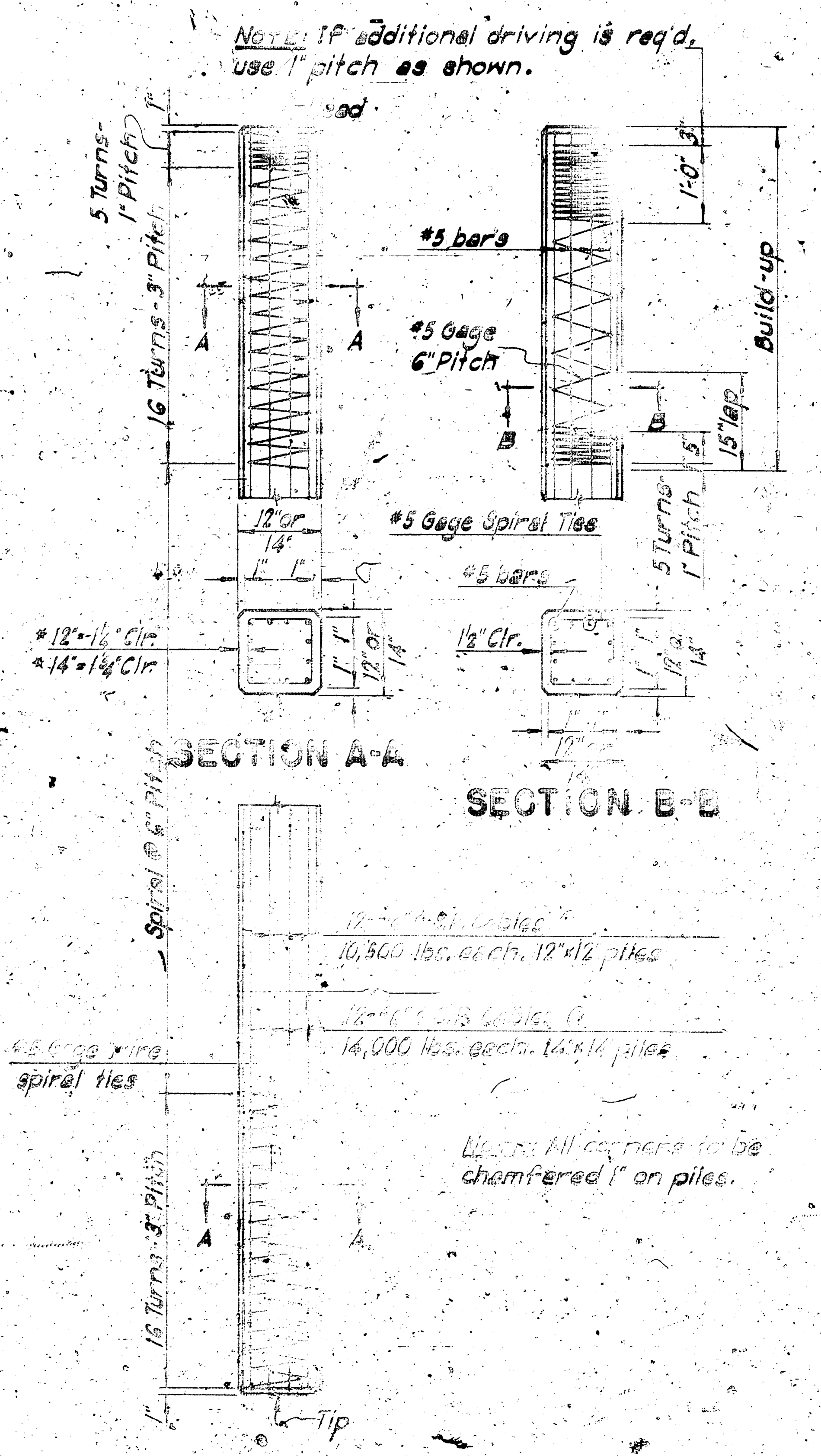
SUPERSTRUCTURE							
SB1	342	4	17'-6"	C1	74	6	4'-6"
SB2	171	4	16'-0"	C2	52	4	3'-0"
				C3	120	4	3'-6"
C4	8	5	1'-9"	C5	16	4	4'-1"
C6	32	6	21'-9"				
				SA	44	4	5'-0"
SD1	210	4	2'-4"	SP	44	4	6'-9"
SD2	12	6	17'-3"	SD3	98	4	3'-0"
				ST1	266	4	25'-6"
[illegible]	134	4	27'-9"	ST2	330	4	6'-3"
[illegible]	67	4	23'-0"				
[illegible]	128	6	[illegible]	SL3	128	6	16'-3"
[illegible]	54	6	17'-6"				
[illegible]	[illegible]	7	10'-0"				
Class AA (AE) Concrete						114.8	Cu. Yds.
Reinforcing Steel						29,980	Lbs.


Typical
2'-0"
4'-0"
Min.
℄ Jts. at Contractors option; provide sliding jts., at min. 16' c/c.
2" Std. Pipe

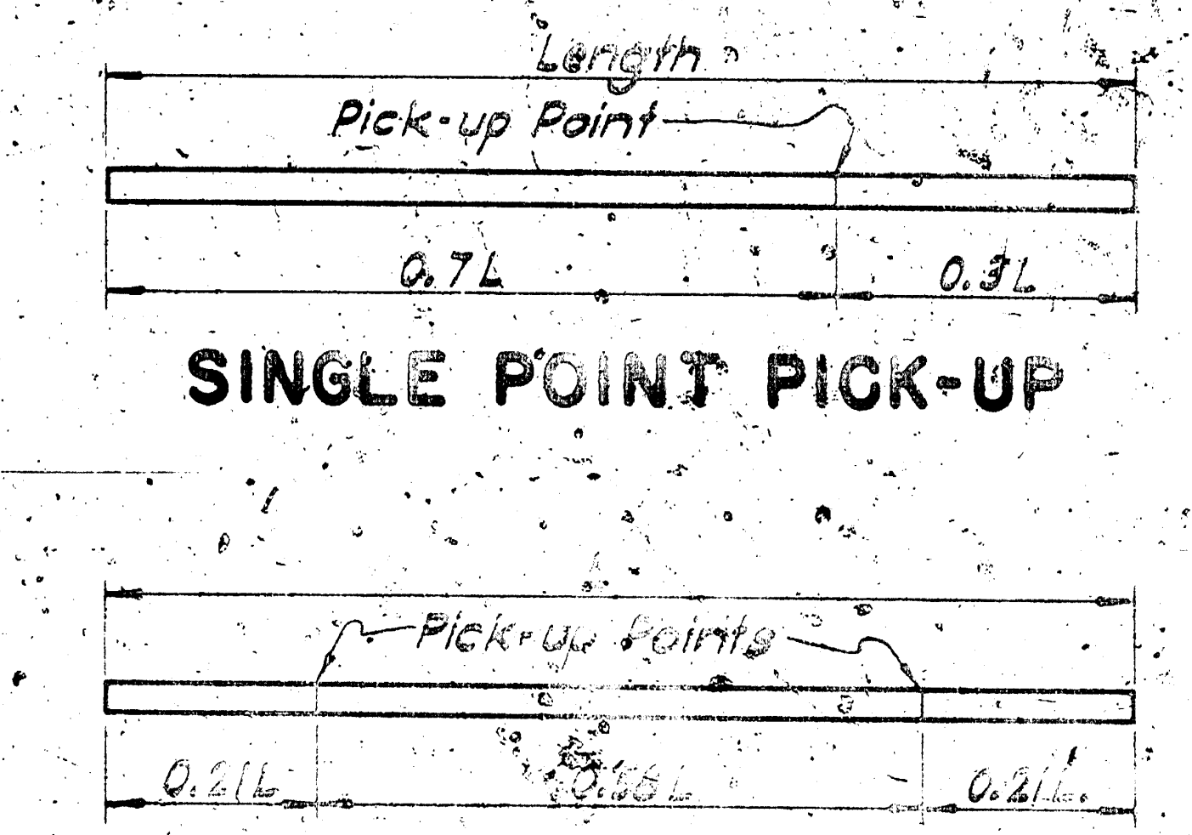

4½"
1'-0"
5"
1'-3"
1'-2"
3"
℄ Cap

PIPE HANDRAIL DETAILS

Sections to be galvanized after fabrication.


Note: If additional driving is req'd, use 1" pitch as shown.
Head
5 Turns-1" Pitch
16 Turns-3" Pitch
A
A
#5 bars
#5 Gage 6" Pitch
B
B
1'-0"
3"
Build-up
15" lap
5"
5 Turns-1" Pitch
12" or 14"
1"
1"
#5 Gage Spiral Ties
#5 bars
* 12" = 1½" Clr.
* 14" = 1¾" Clr.
1½" Clr.
12" or 14"
SECTION A-A
SECTION B-B
Spiral @ 6" Pitch
10,500 lbs. each, 12"x12" piles
14,000 lbs. each, 14"x14" piles
#5 Gage wire spiral ties
Note: All corners to be chamfered 1" on piles.
16 Turns-3" Pitch
A
A
1"
Tip

PRESTRESSED CONCRETE PILE[illegible]


Length
Pick-up Point
0.7L
0.3L
Pick-up Points
0.21L
0.58L
0.21L

SINGLE POINT PICK-UP

DOUBLE POINT PICK-UP

Note: Piles shall be marked at Pick-up Points to indicate proper points for attaching handling lines.

12"x12" Piles:
Max. Length - 50' Single Point Pick-up
- 75' Double

14"x14" Piles:
Max. Length - 60' Single Point Pick-up
- 85' Double

Notes:
All concrete in Prestressed Piles shall be Class [illegible]. Spiral details for Prestressed Piles shall [illegible] with manufacturer's [illegible] subject to approval [illegible].
Price bid per foot [illegible] shall [illegible] total cost per foot of pile in place, including driving, concrete and reinforcing steel.

[illegible] material [illegible] ahead of topping [illegible] the surface [illegible]

Place top [illegible] nearly [illegible] as possible, [illegible] vibrate thoroughly into the diaphragms and particularly between the ends of prestressed units.

Finish sidewalk and deck surfaces with a broom finish.

In lieu of other curing [illegible] surfaces of roadways and [illegible] surfaces of [illegible] conforming to USDA, Oilseed Crop Laboratory Formulation [illegible] as available from Spur-Tex Products, of Wichita, Kansas.

SUMMARY OF PRO[illegible]	
ITEM	QUANTITY
REMOVAL OF [illegible] BRIDGE [illegible]	[illegible]
CHANNEL EXCAVATION	[illegible]
[illegible]	[illegible]