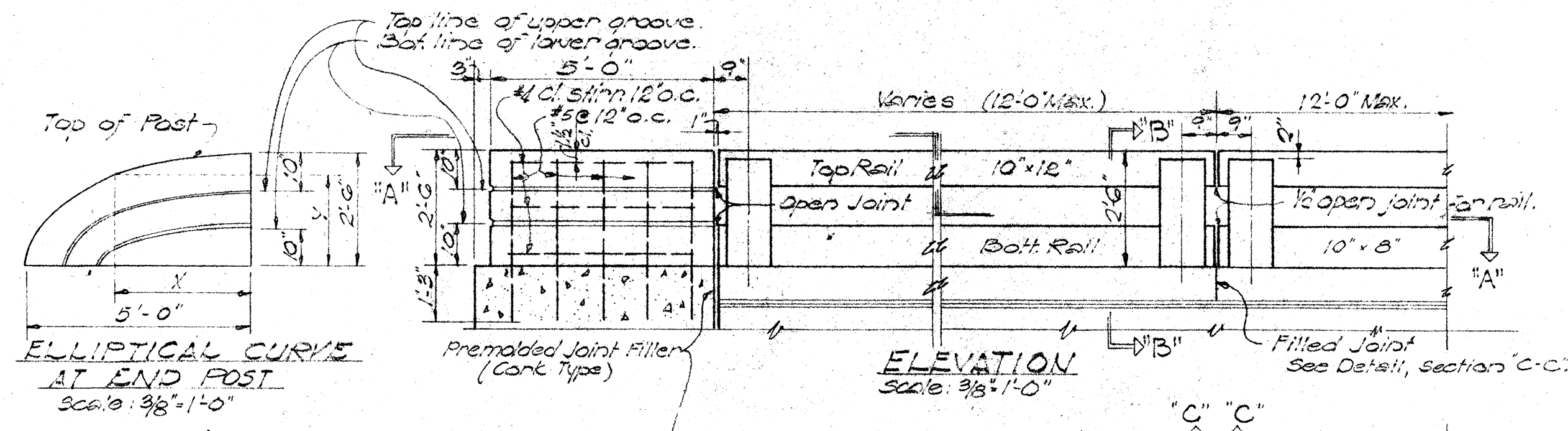




Top of Post

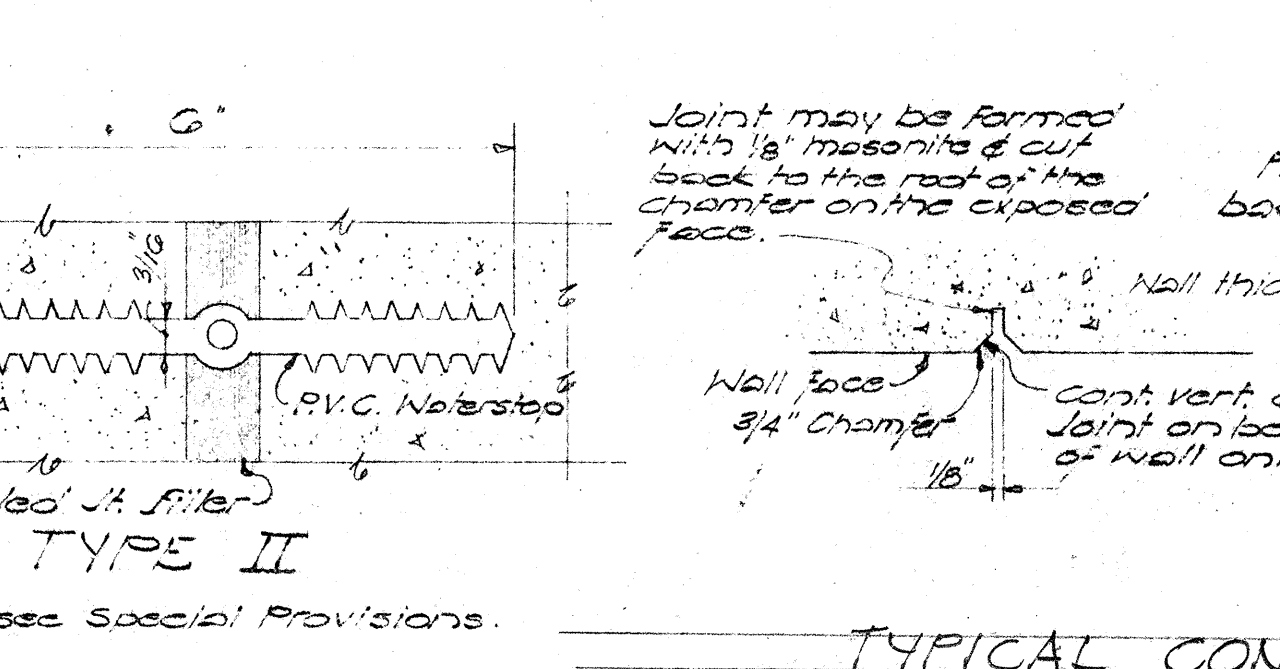
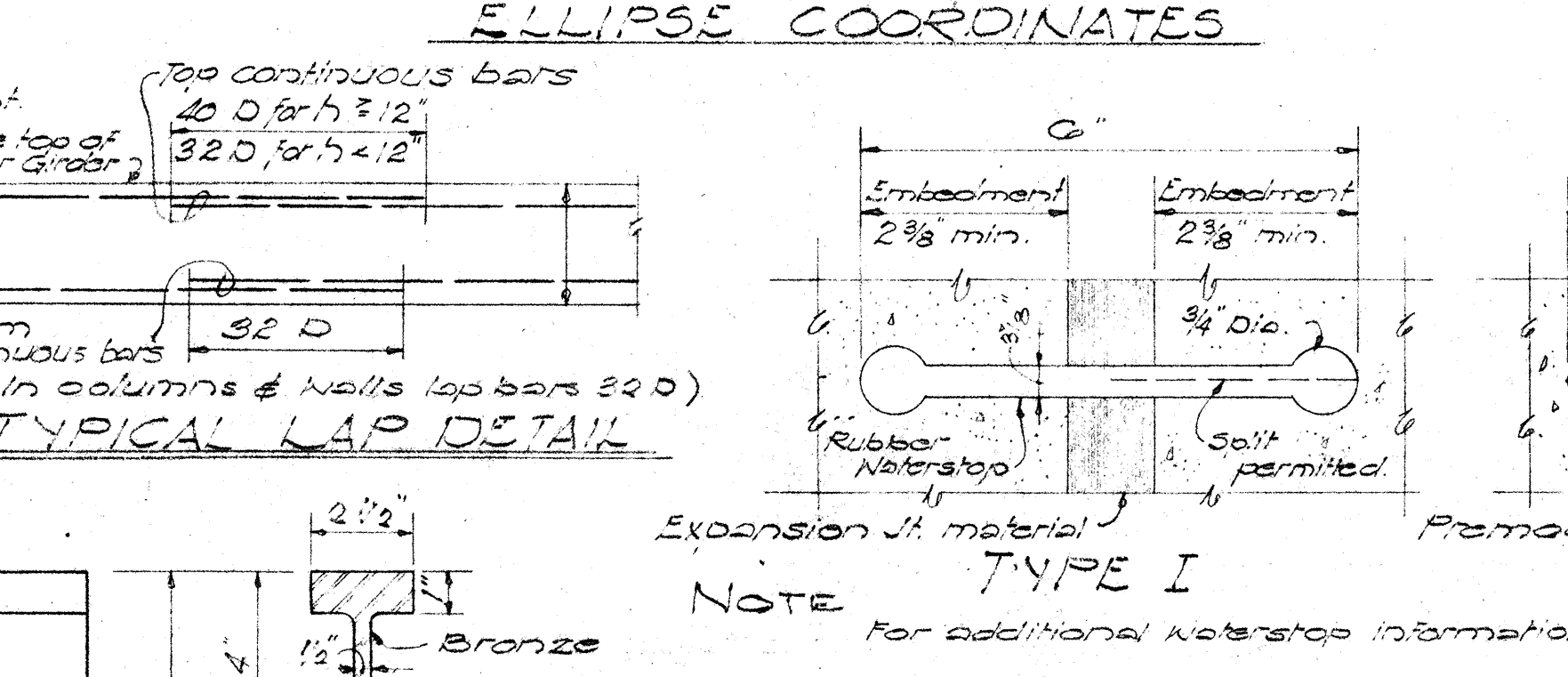
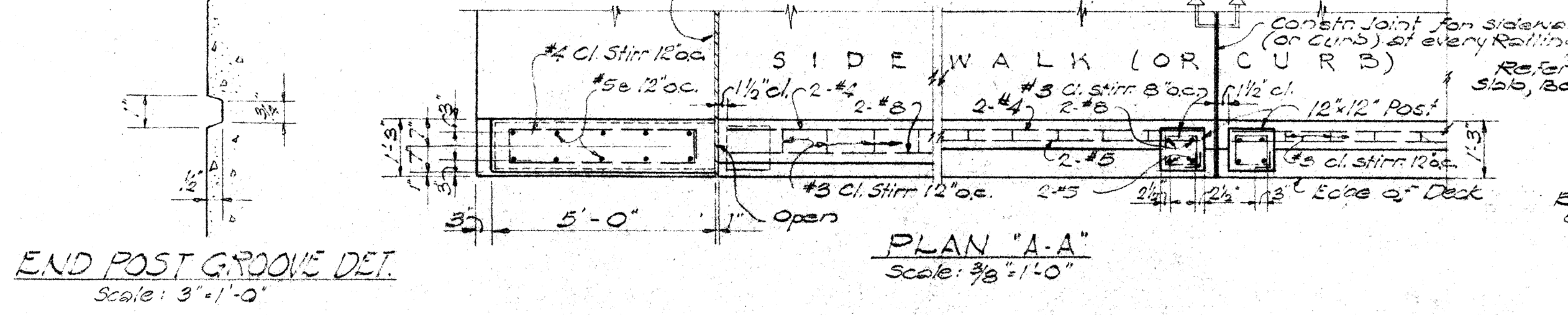
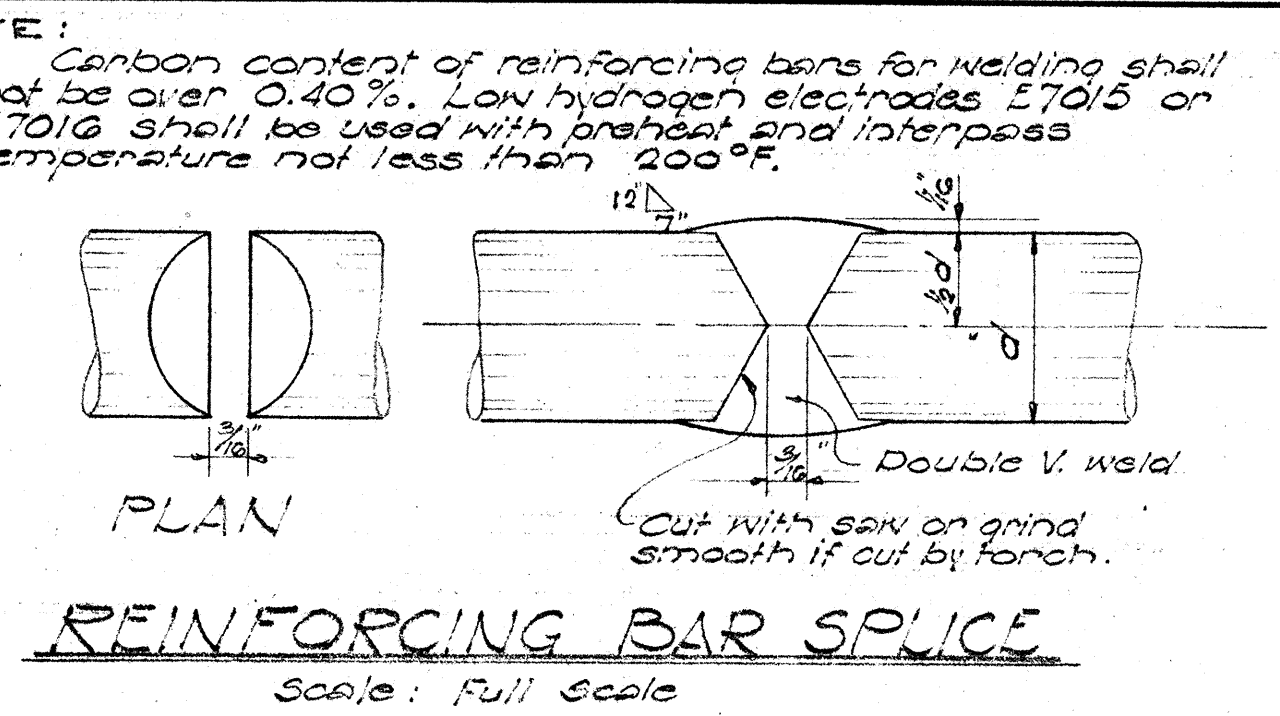
X	0	1'-0"	1'-0"	2'-0"	2'-0"	3'-0"	3'-0"	4'-0"	4'-0"	4'-0"	4'-0"	5'-0"
Y	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"

Top Line of Upper Groove

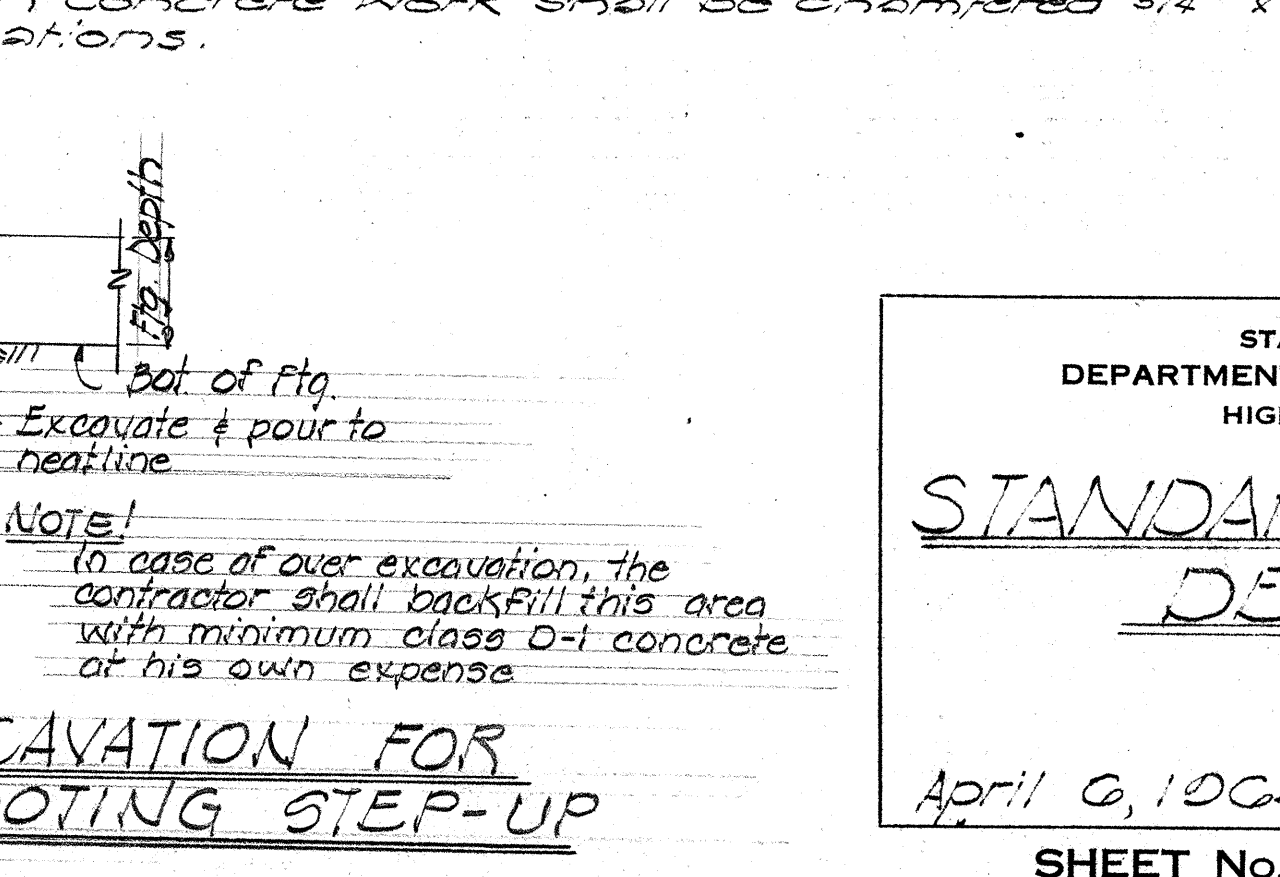
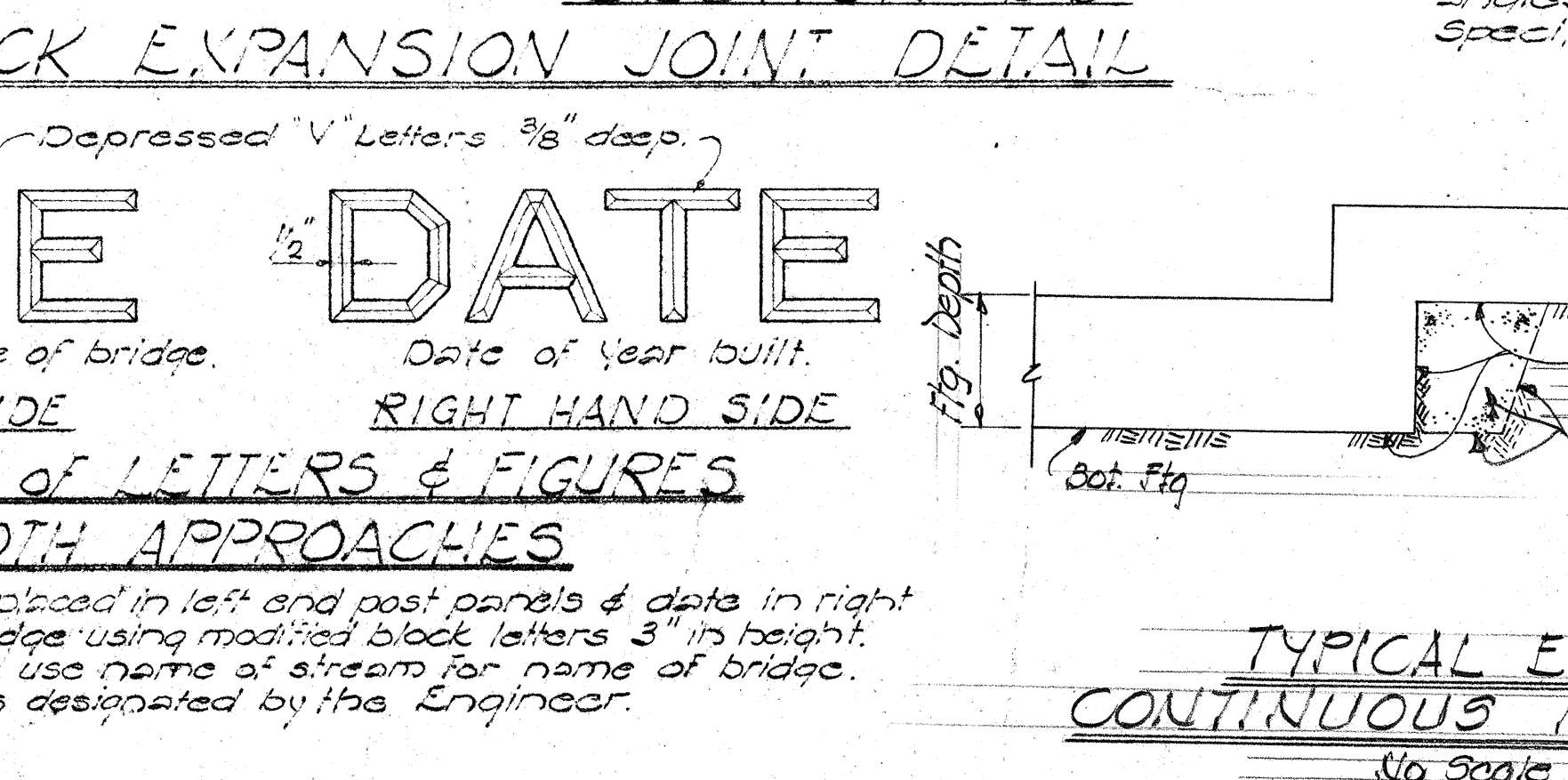
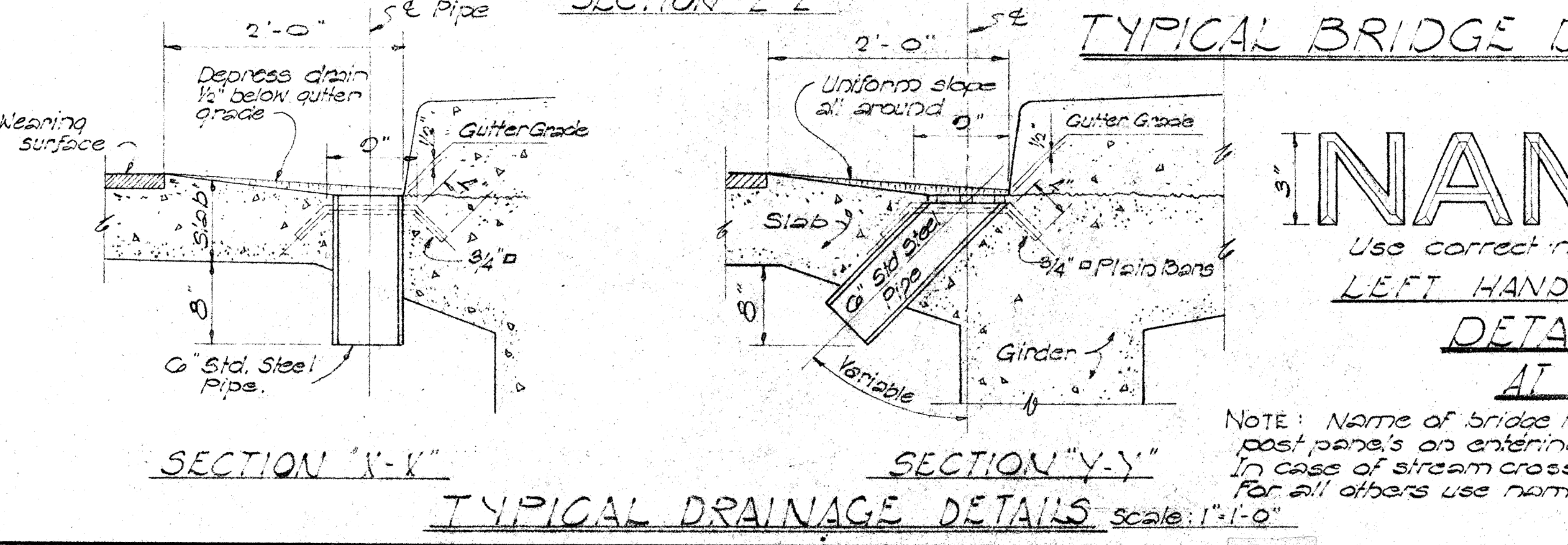
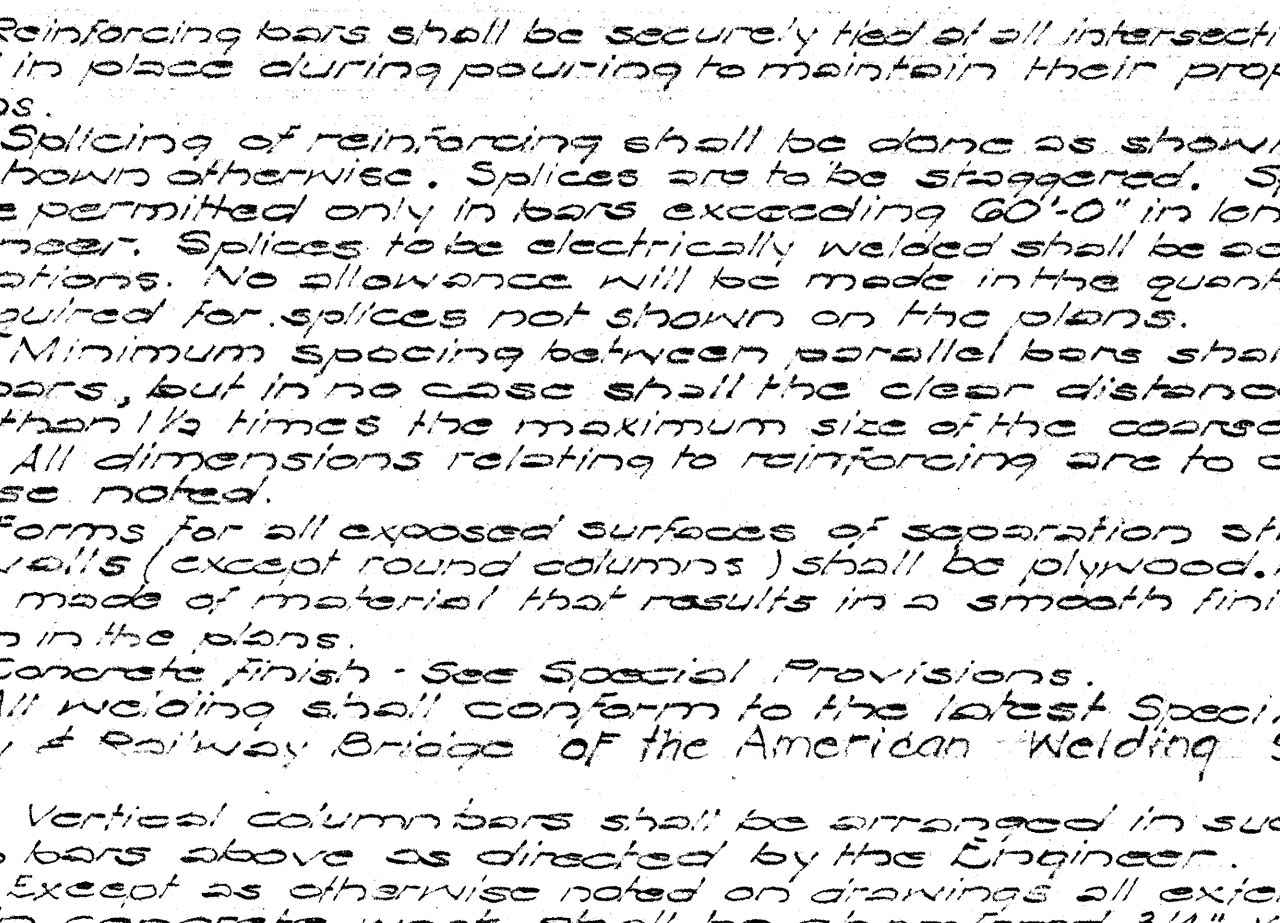
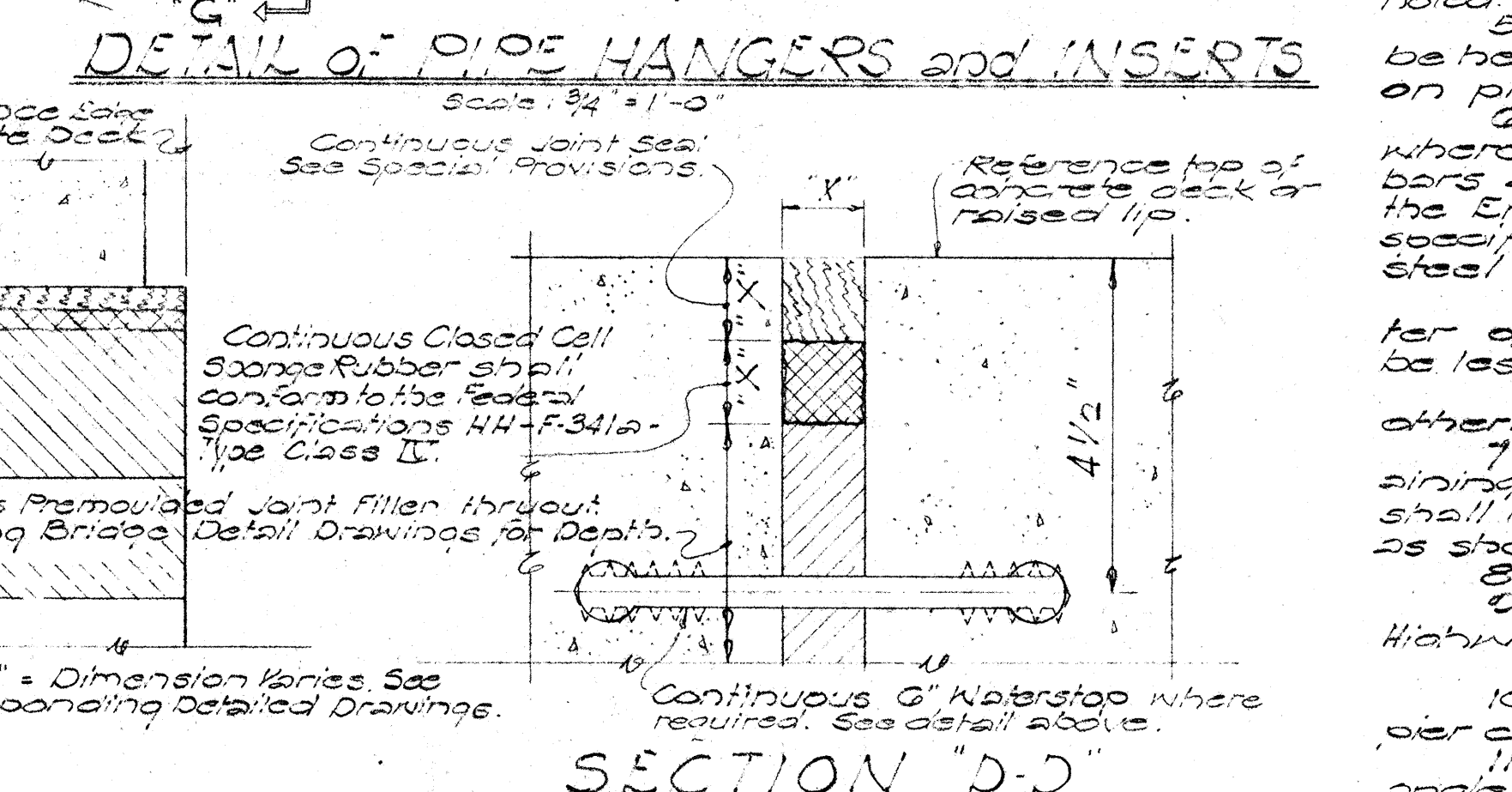
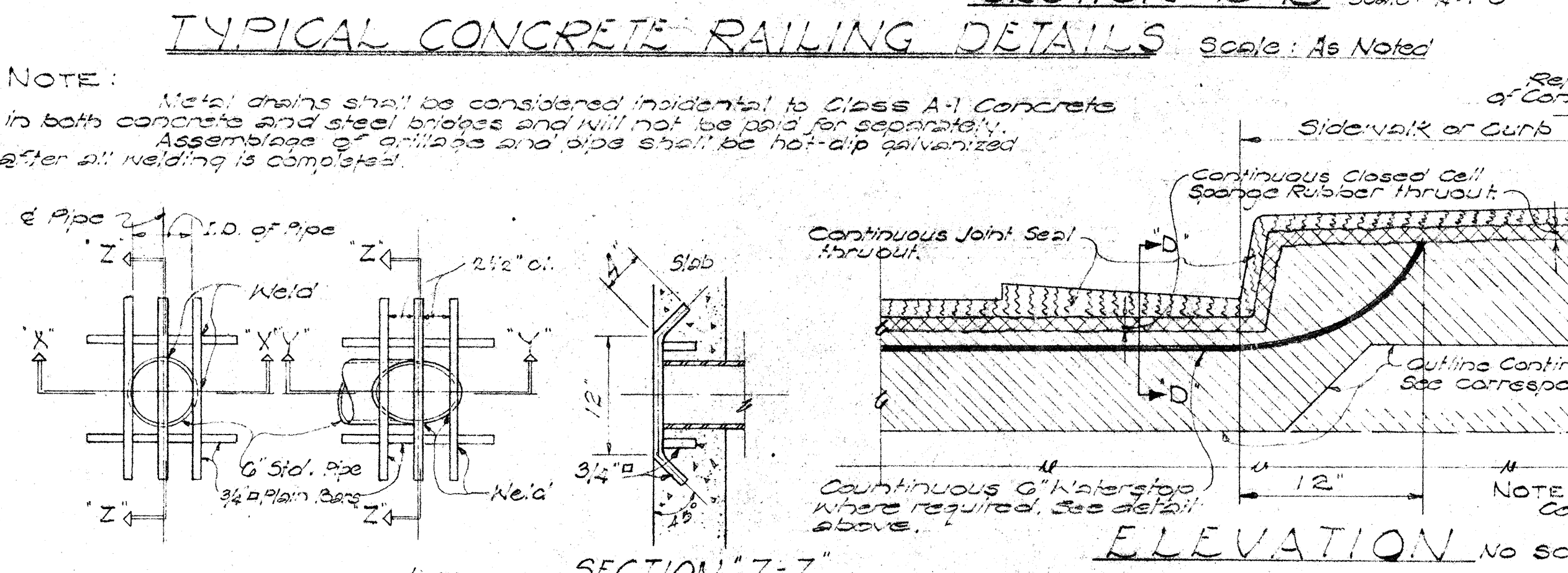
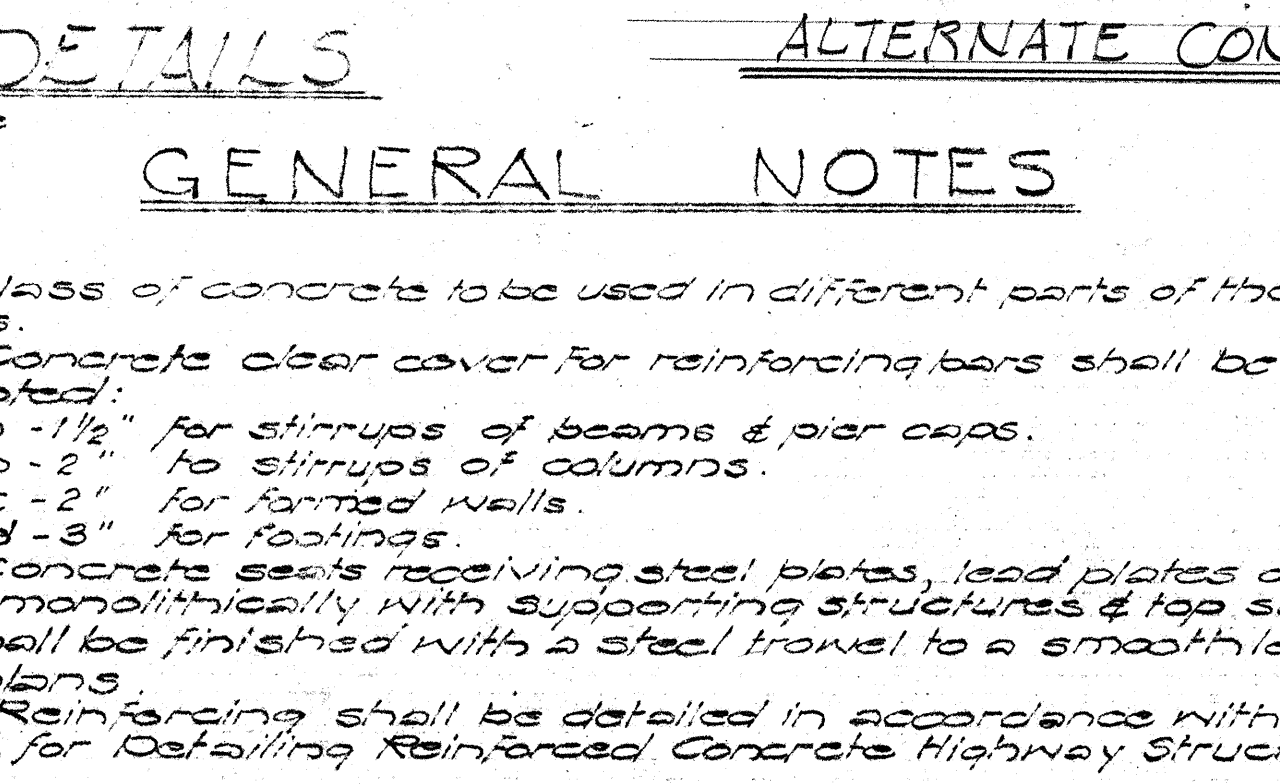
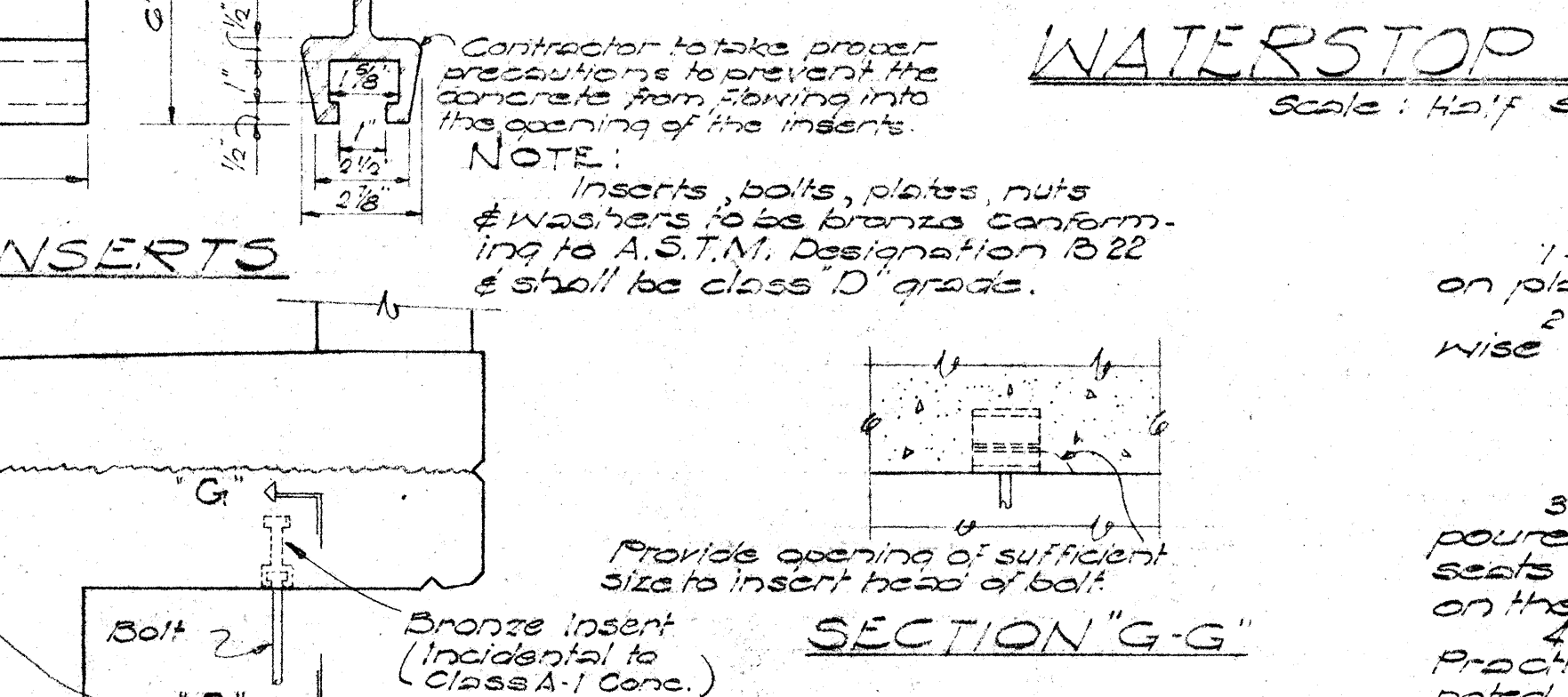
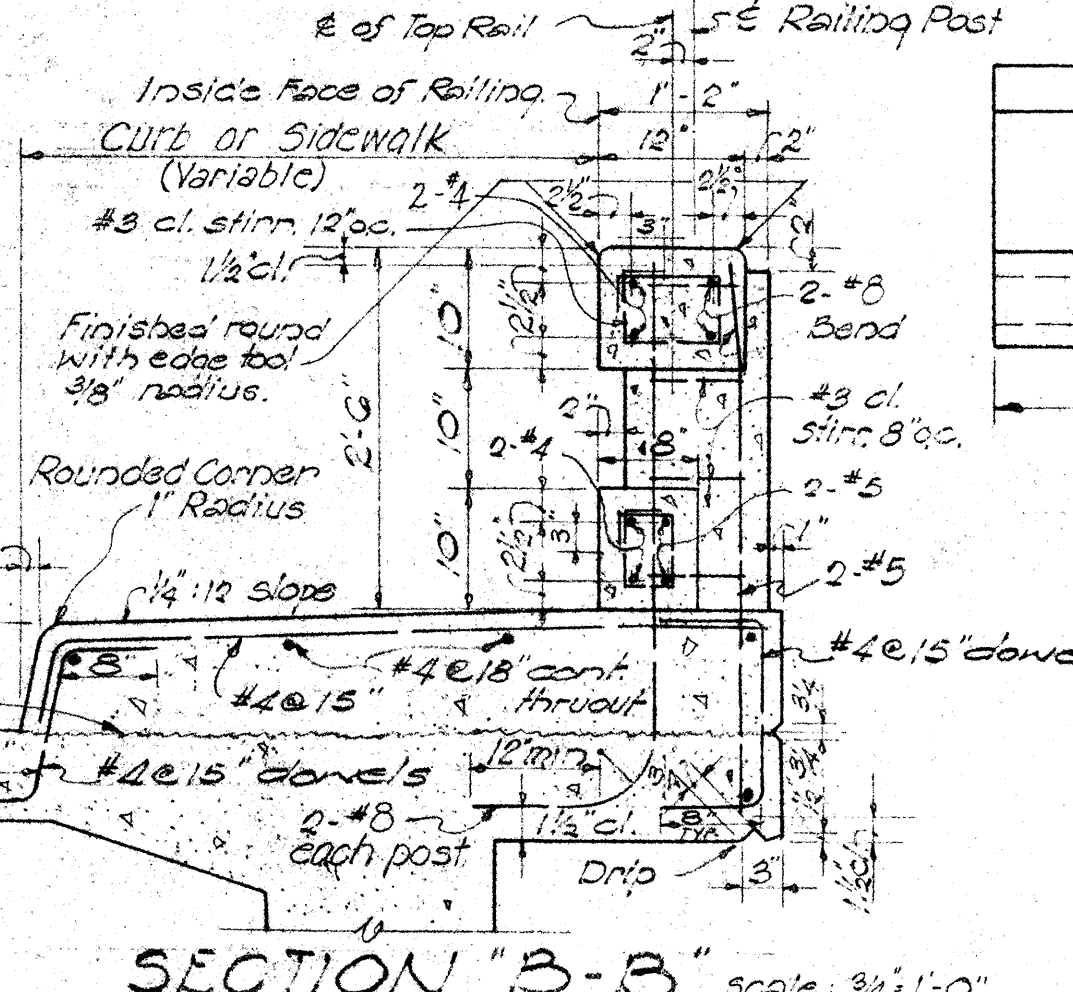
X	0	0"	1'-0"	1'-0"	2'-0"	2'-0"	3'-0"	3'-0"	3'-0"	3'-0"	4'-0"	4'-0"	4'-0"
Y	1'-8"	1'-7 1/2"	1'-7 1/2"	1'-6 1/2"	1'-5 1/2"	1'-4"	1'-3 1/2"	1'-3 1/2"	1'-3 1/2"	1'-3 1/2"	1'-2 1/2"	1'-2 1/2"	1'-2 1/2"

Bottom Line of Lower Groove

X	0	0"	1'-0"	1'-0"	2'-0"	2'-0"	3'-0"	3'-0"	3'-0"	3'-0"	4'-0"	4'-0"	4'-0"
Y	10"	9 3/8"	9 1/8"	8 1/8"	8"	6 5/8"	5 5/8"	4 5/8"	3 5/8"	2 1/2"	0"	0"	0"



NOTE: Sidewalk, Curb and Railing to be poured after release of falsework. Forms for railing and endpost to be made of plywood. Bottom forms for top rails shall be kept in place a minimum of 14 days from date of pour.



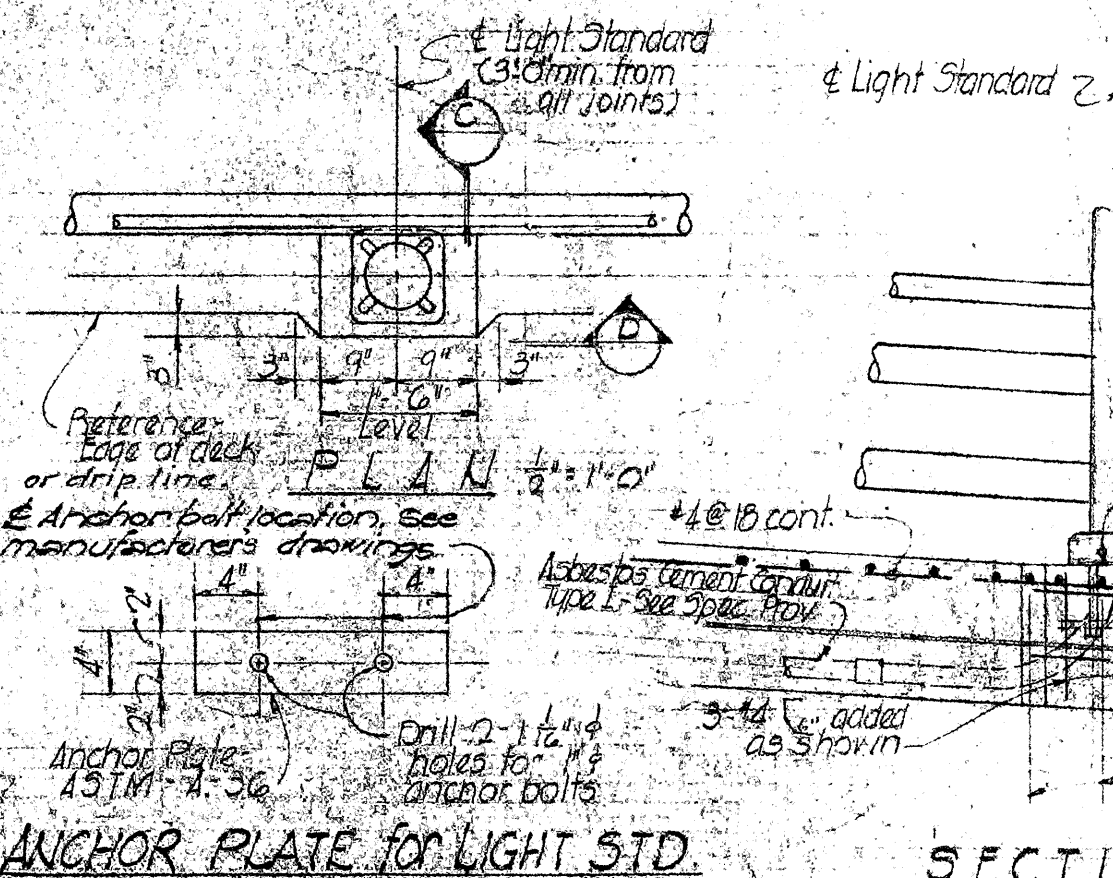
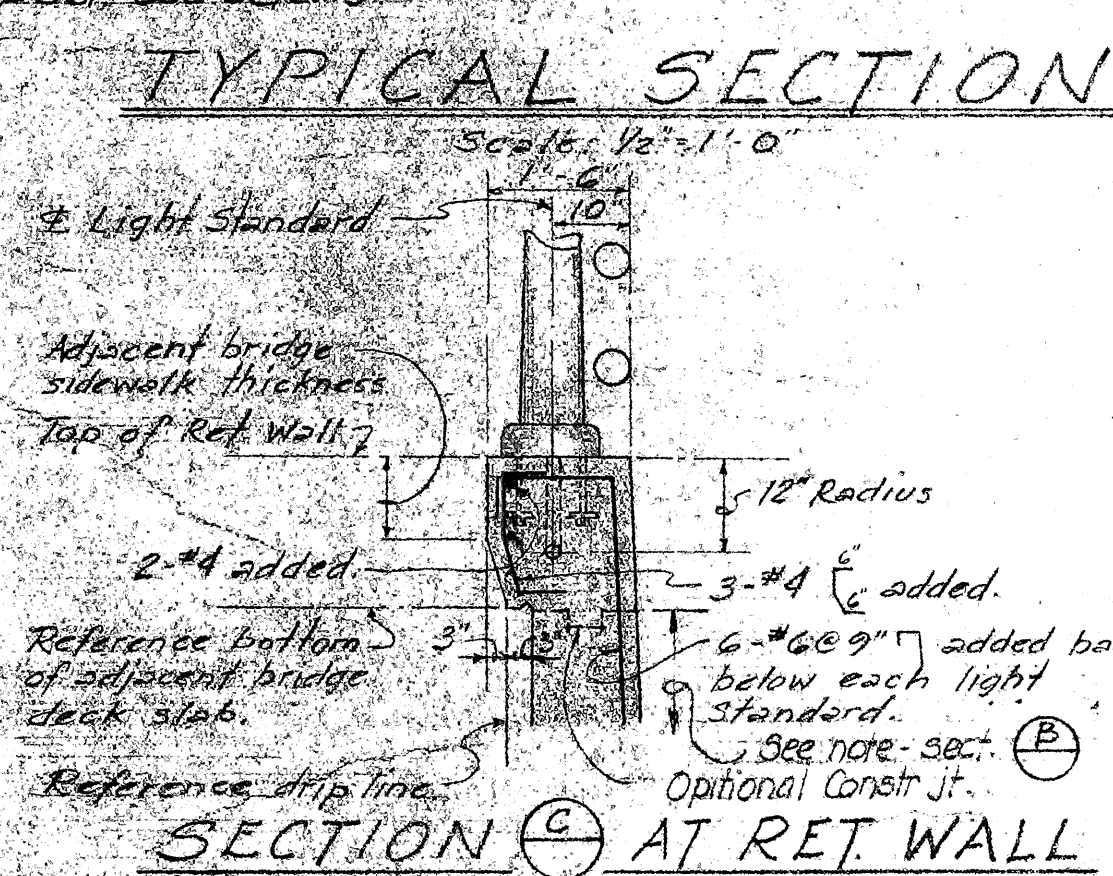
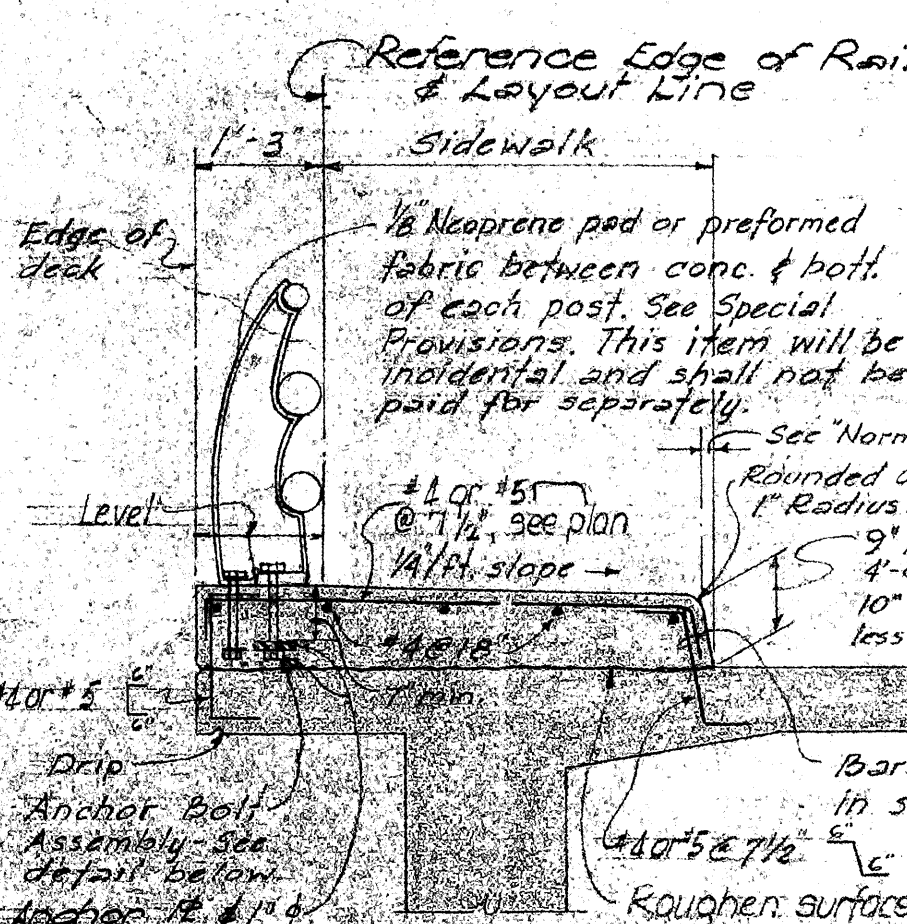
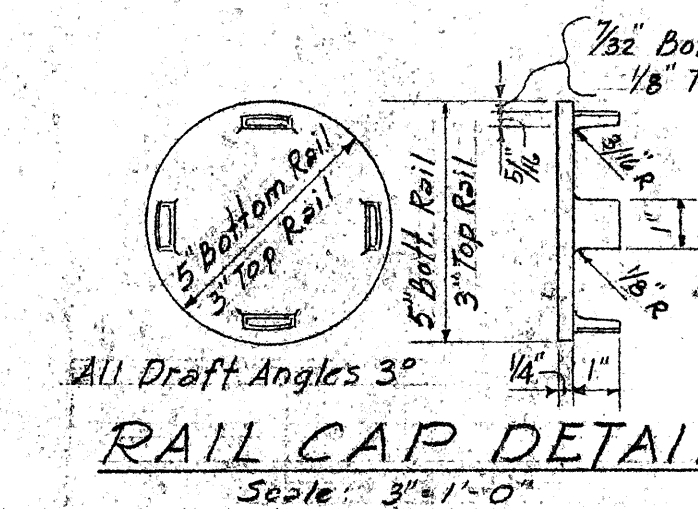
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**STANDARD BRIDGE
DETAILS**

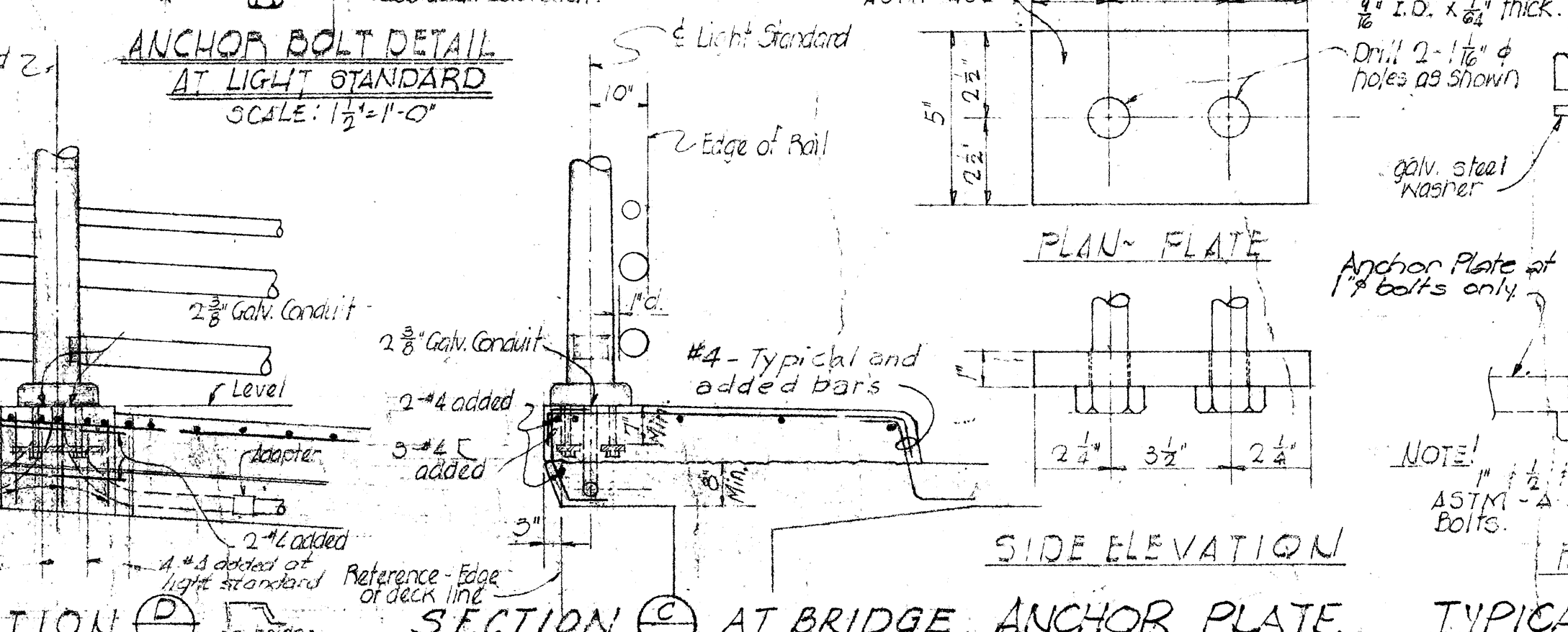
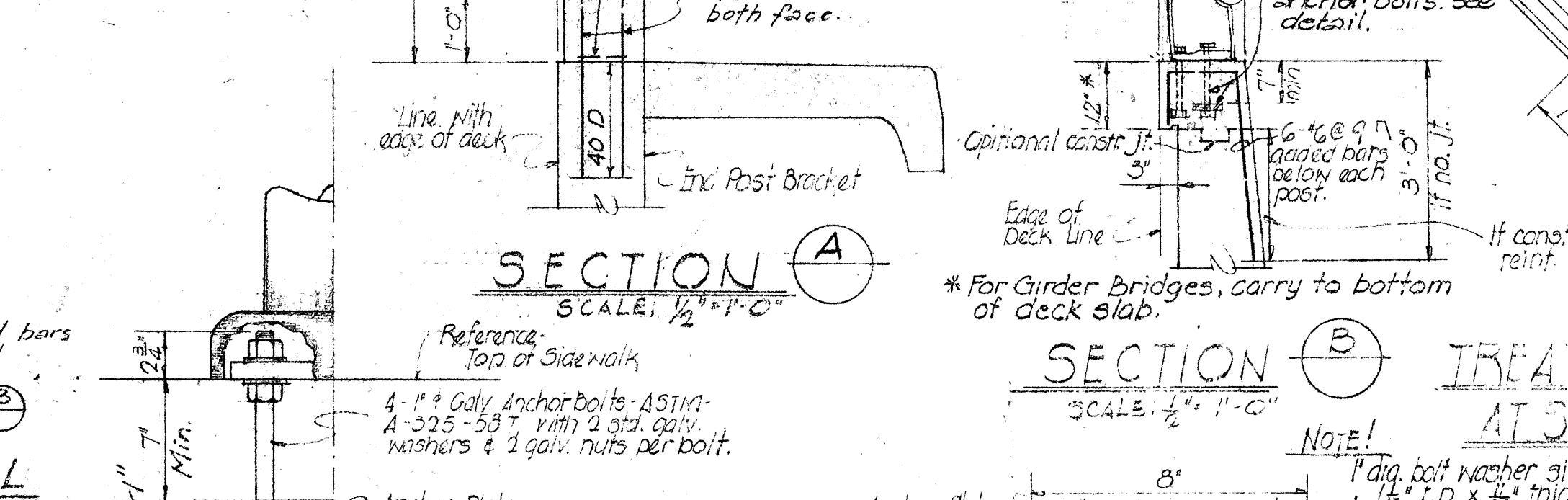
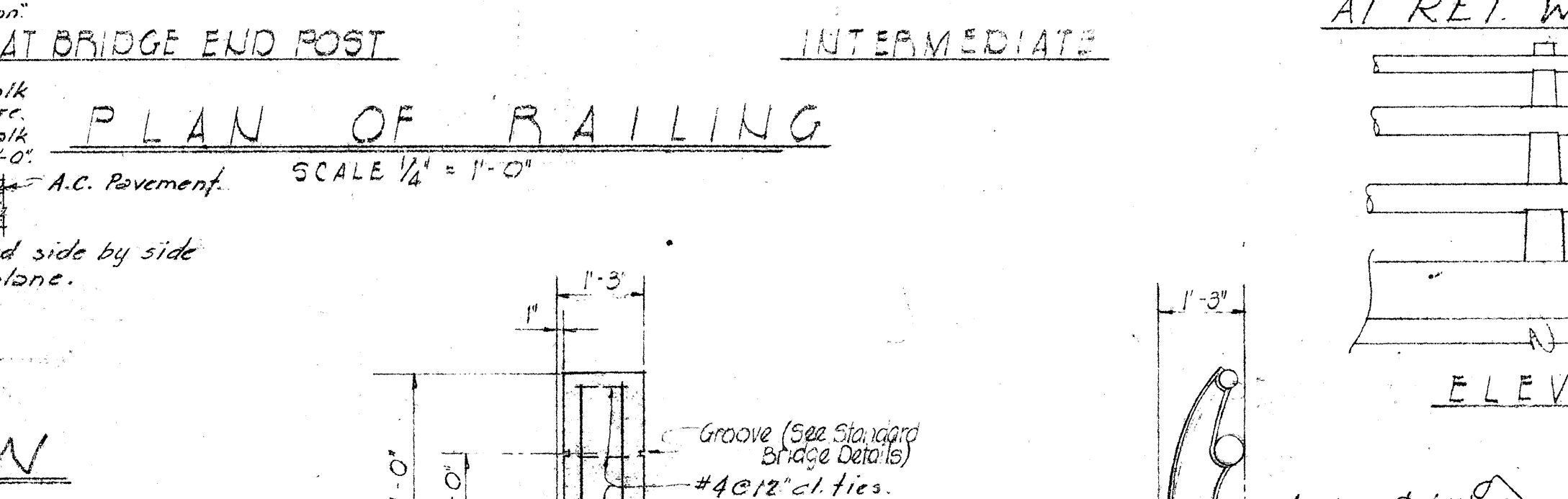
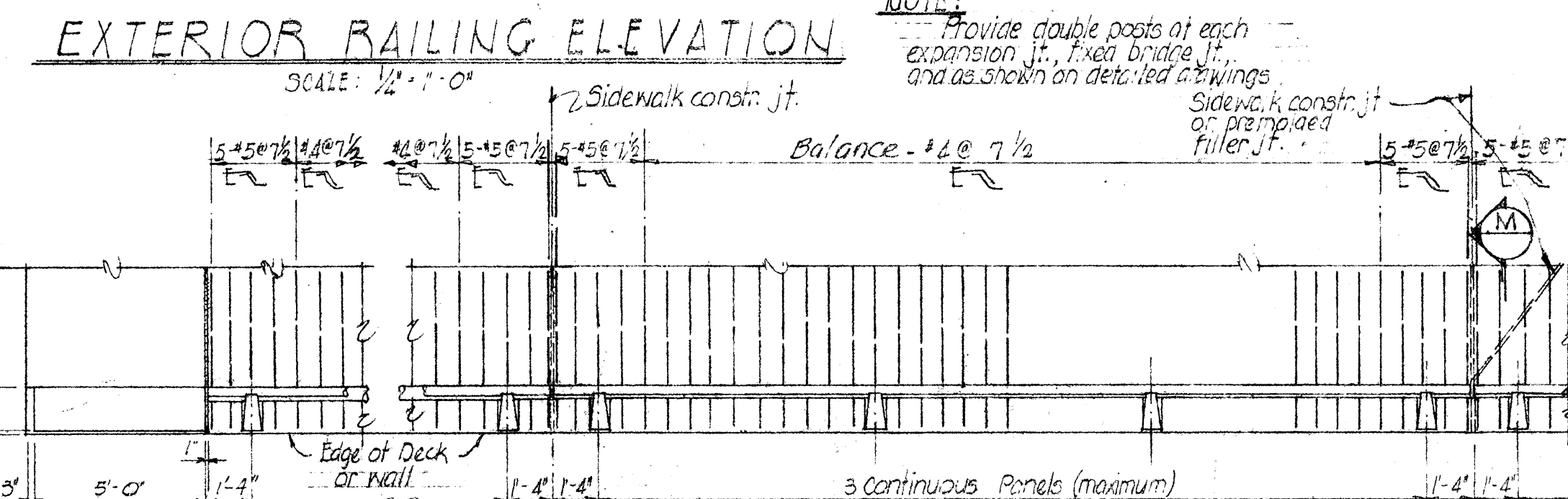
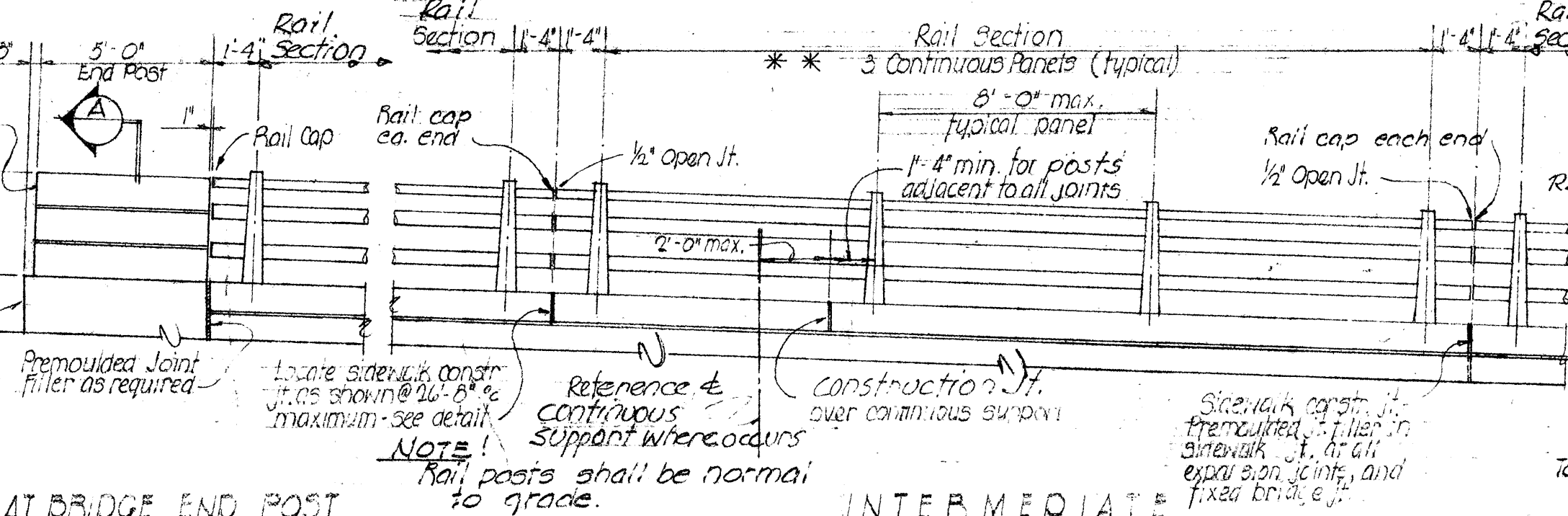
April 6, 1964

SHEET No. 5-2 OF 3 SHEETS

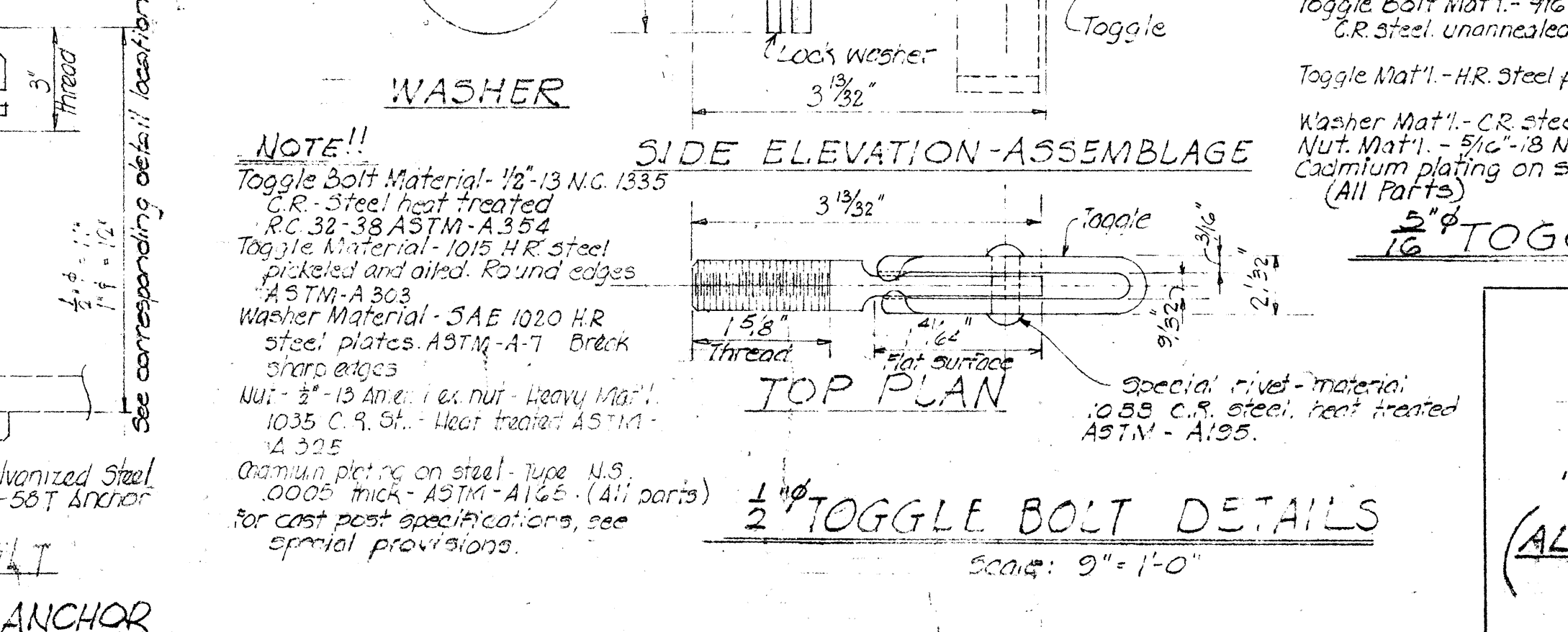
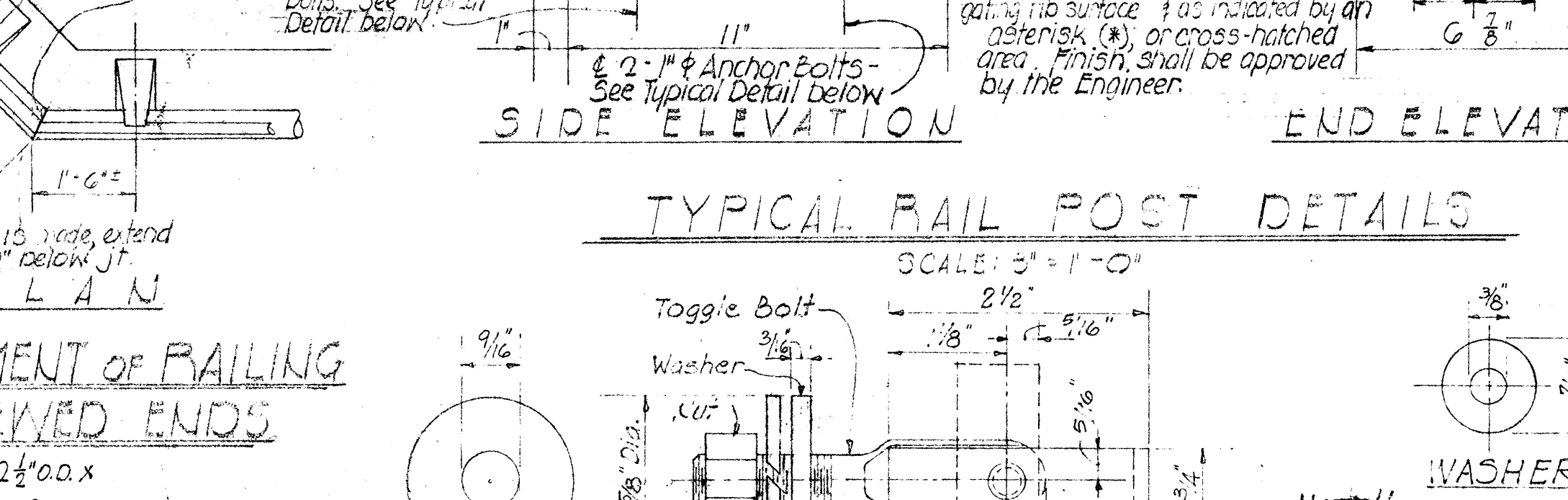
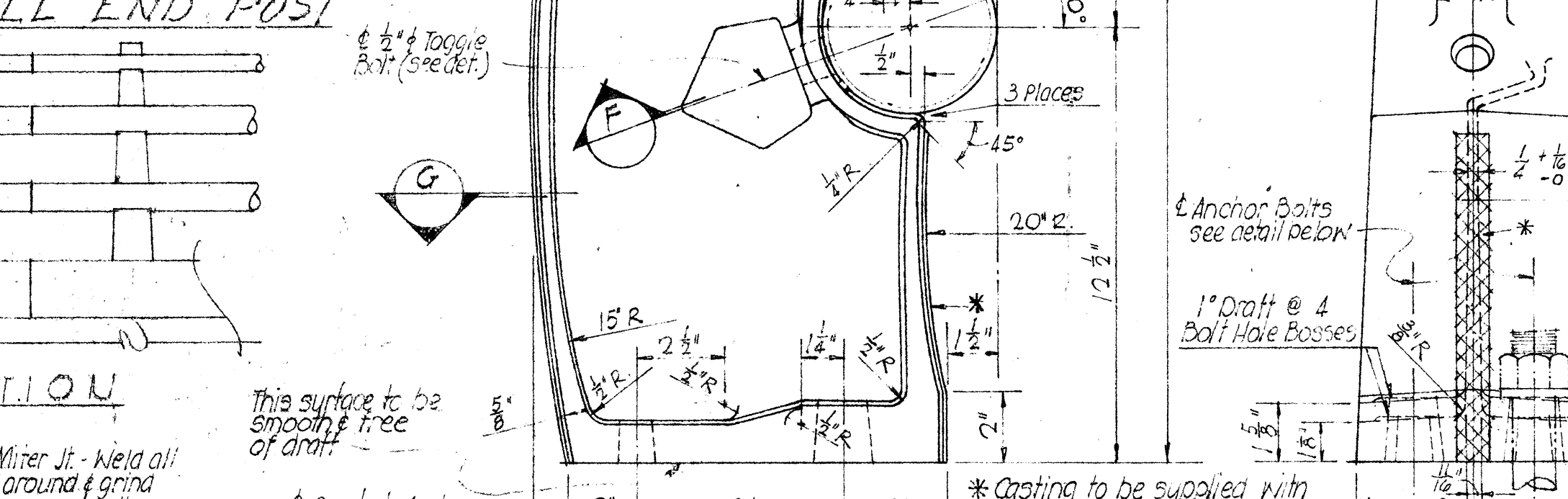
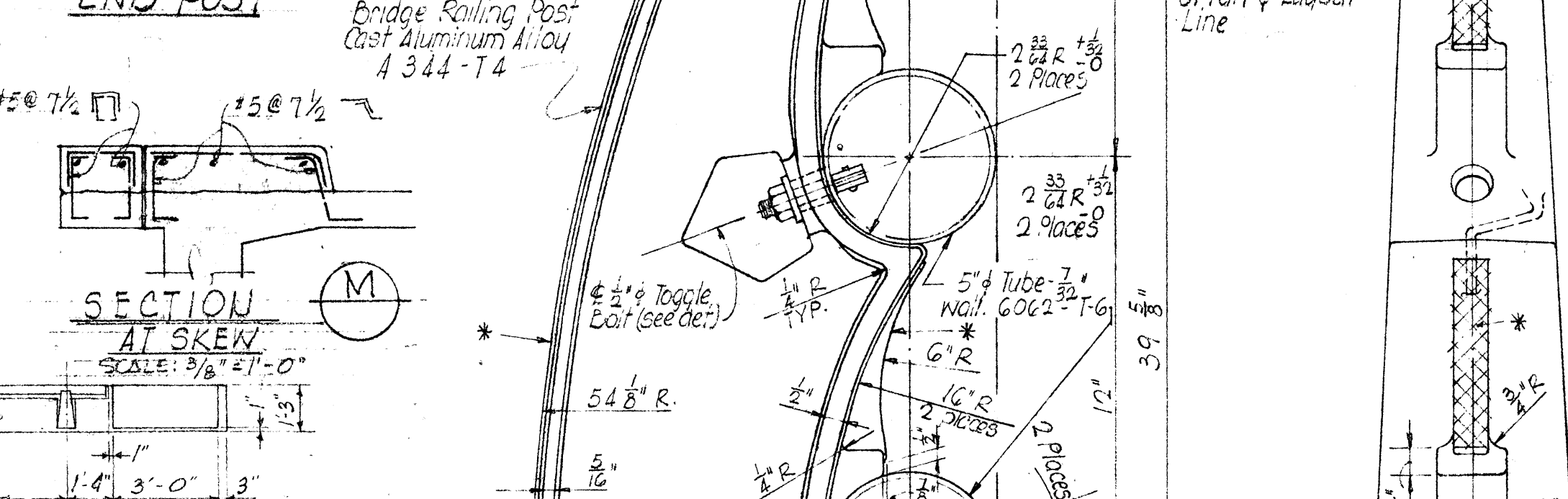
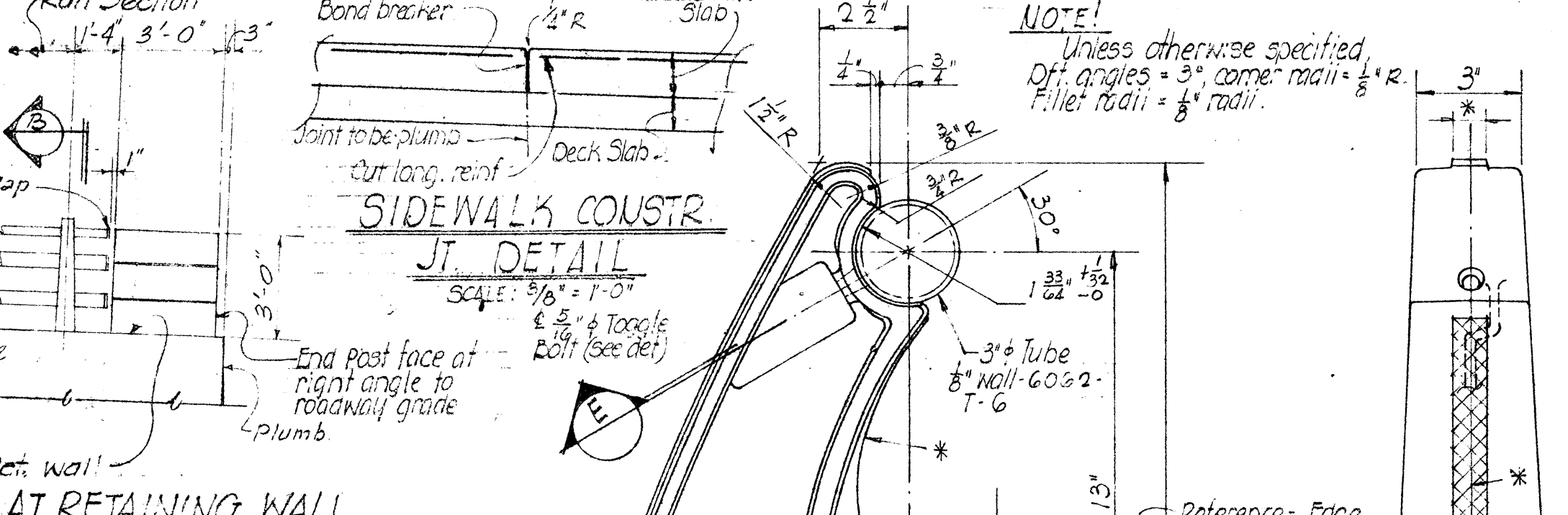
*** NOTE ***
The contractor shall layout the railing to provide 3 continuous panels, whenever possible. 2 or 4 continuous panels will be permitted to complete the layout. When 3 continuous panels cannot be made, single panels will not be permitted.



DETAILS OF RAILING AT LIGHT STANDARD



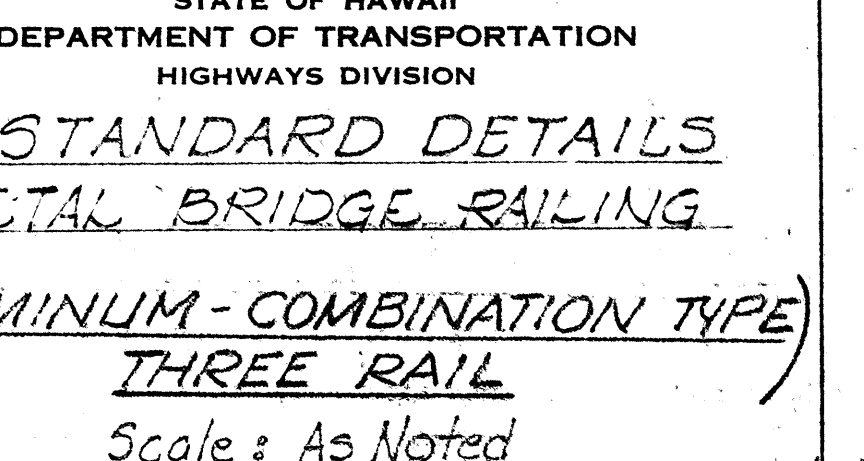
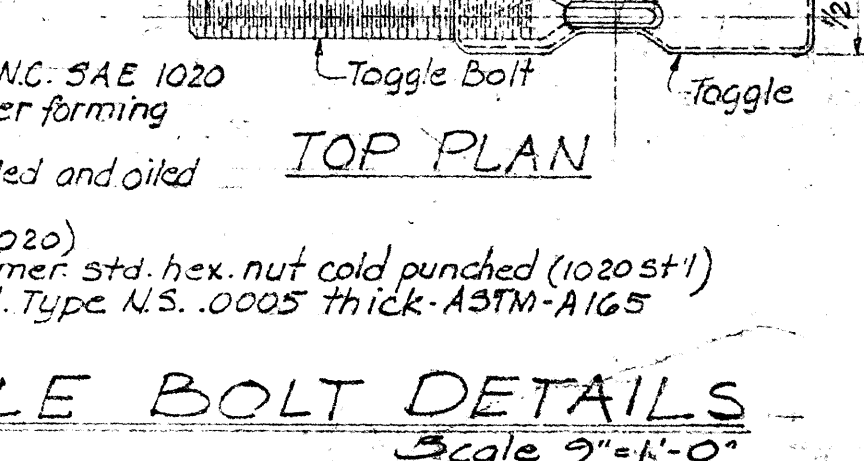
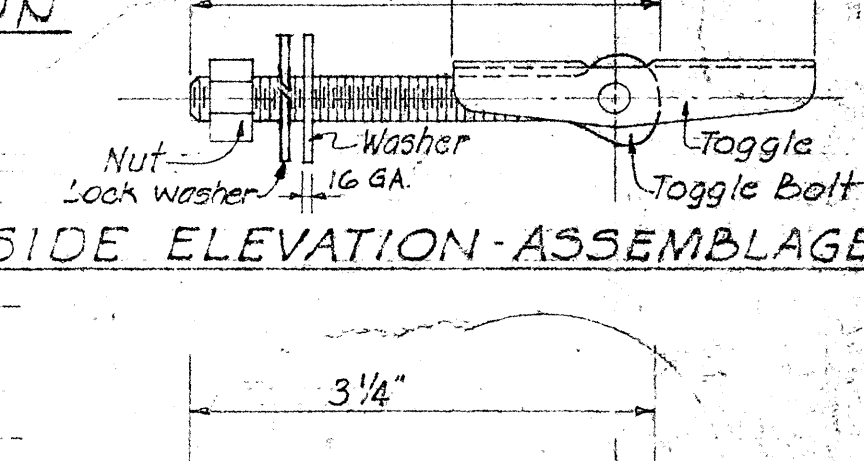
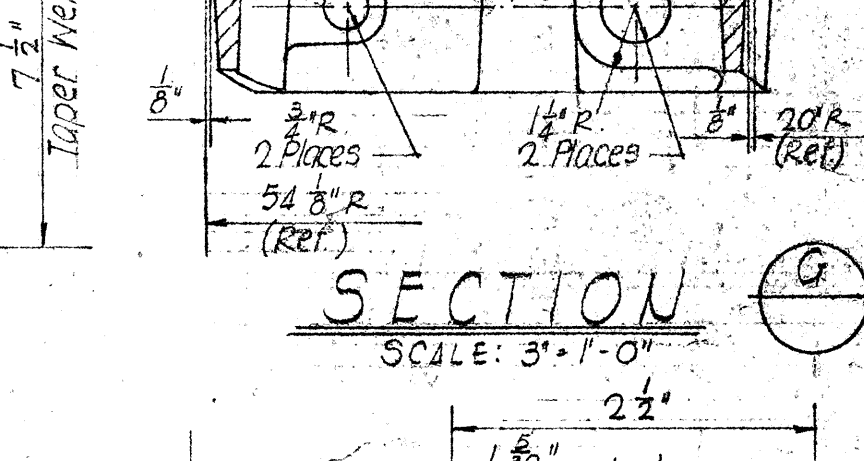
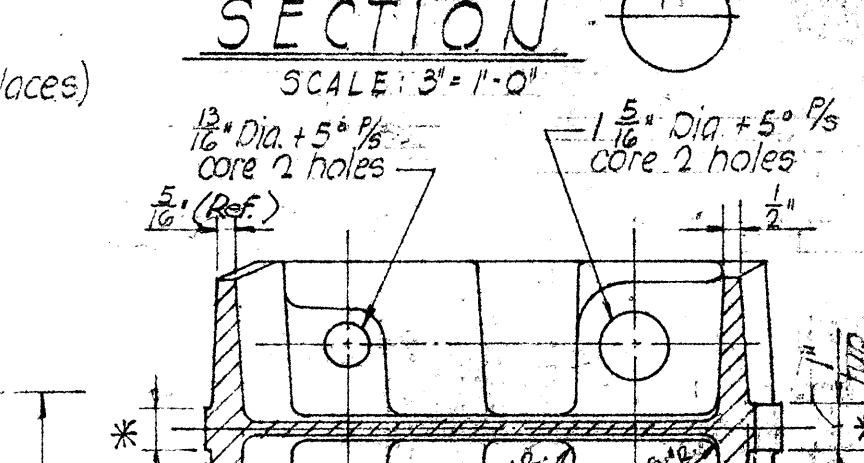
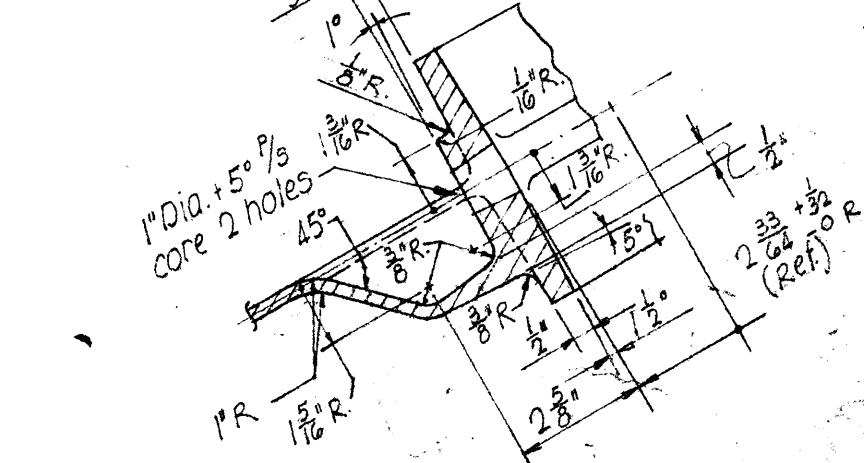
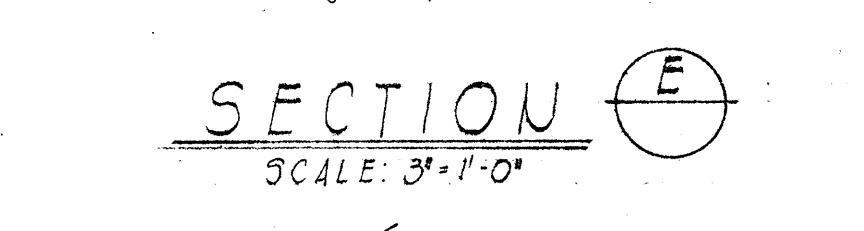
DETAILS OF RAILING AT BRIDGE



TYPICAL ANCHOR BOLT DETAIL

1-8-65
4-23-65
5-10-65

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	111-1(6)	1965	128	129

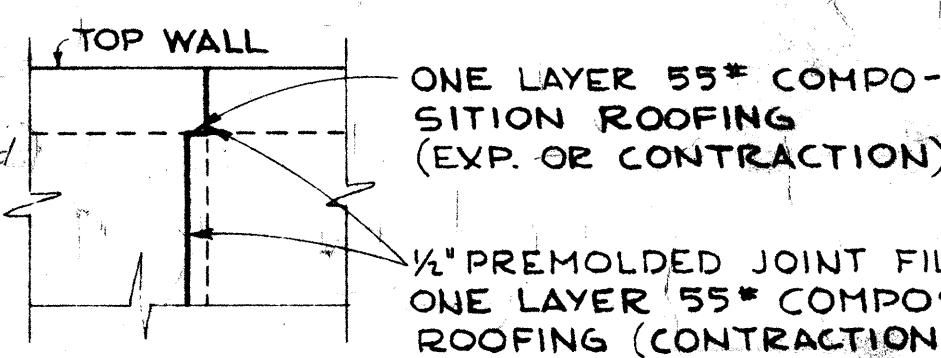


DETAILS OF RAILING AT BRIDGE

NOTE:
In lieu of the composition roofing for contraction joint, the surface may be cleaned smooth and coated with bond breaking material.

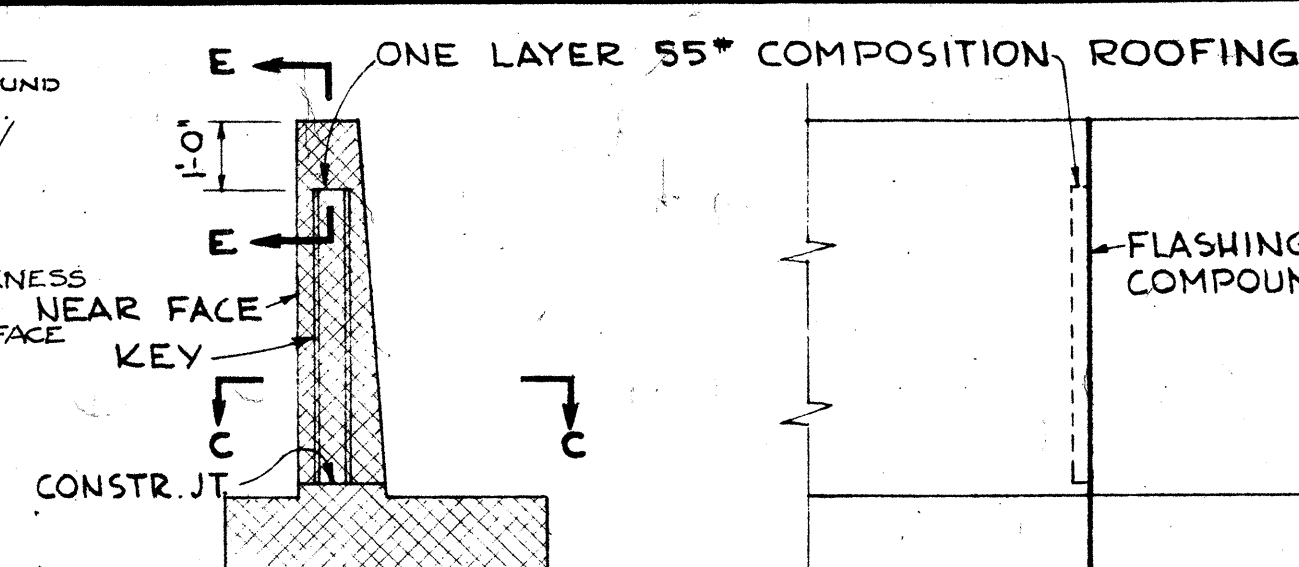
NOTE:
CONTRACTION JOINT IS SIMILAR TO EXPANSION JOINT EXCEPT THAT ONE LAYER OF 55* COMPOSITION ROOFING SHALL BE USED IN PLACE OF PREMOLDED JOINT FILLER AND THE JOINT SHALL EXTEND THROUGH THE STEM ONLY.

NOTE:
For ret. walls with bridge railing, spacing for contr. joint and exp. joint shall be determined so that the joints in the wall will coincide with the joints in railing.

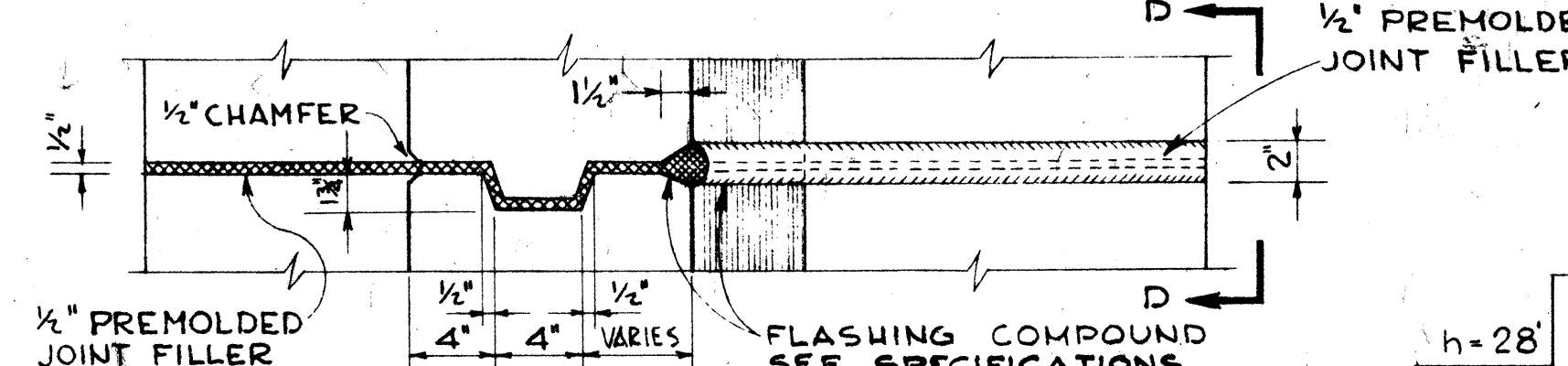


SECT. E-E

(SPACING OF JOINTS)
CONTRACTION JOINT - 30'-0" MAX.
EXPANSION JOINT - 90'-0" MAX.

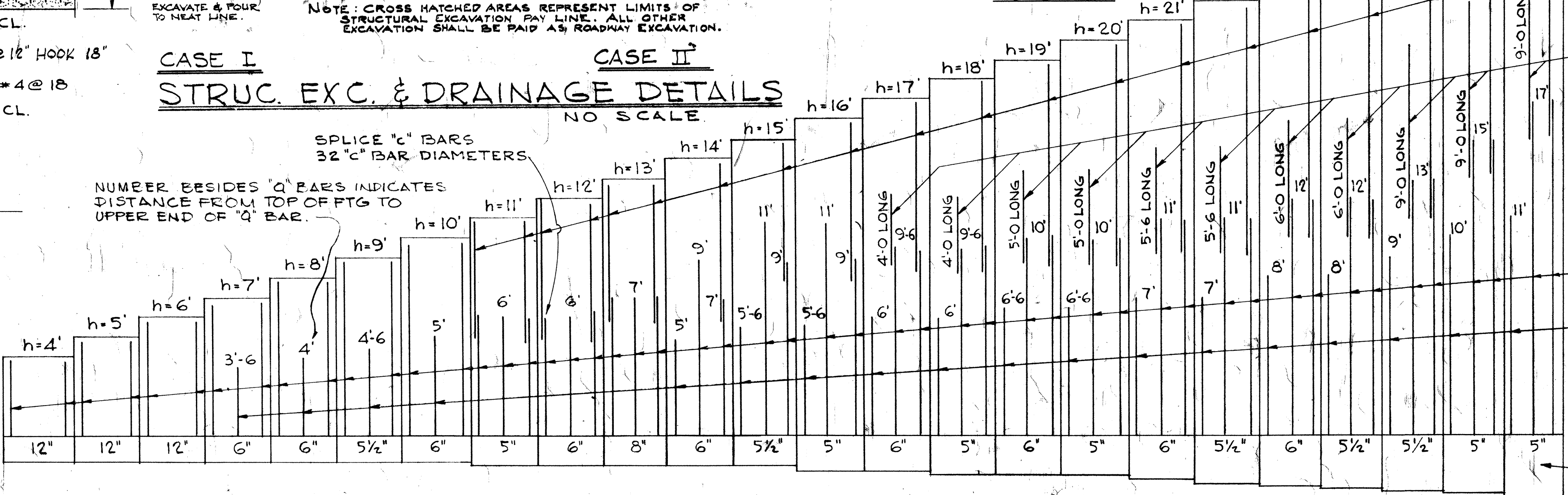


JOINT ELEVATION VIEW D-D



SECTION C-C
TYPICAL EXPANSION JOINT DETAIL

NO SCALE



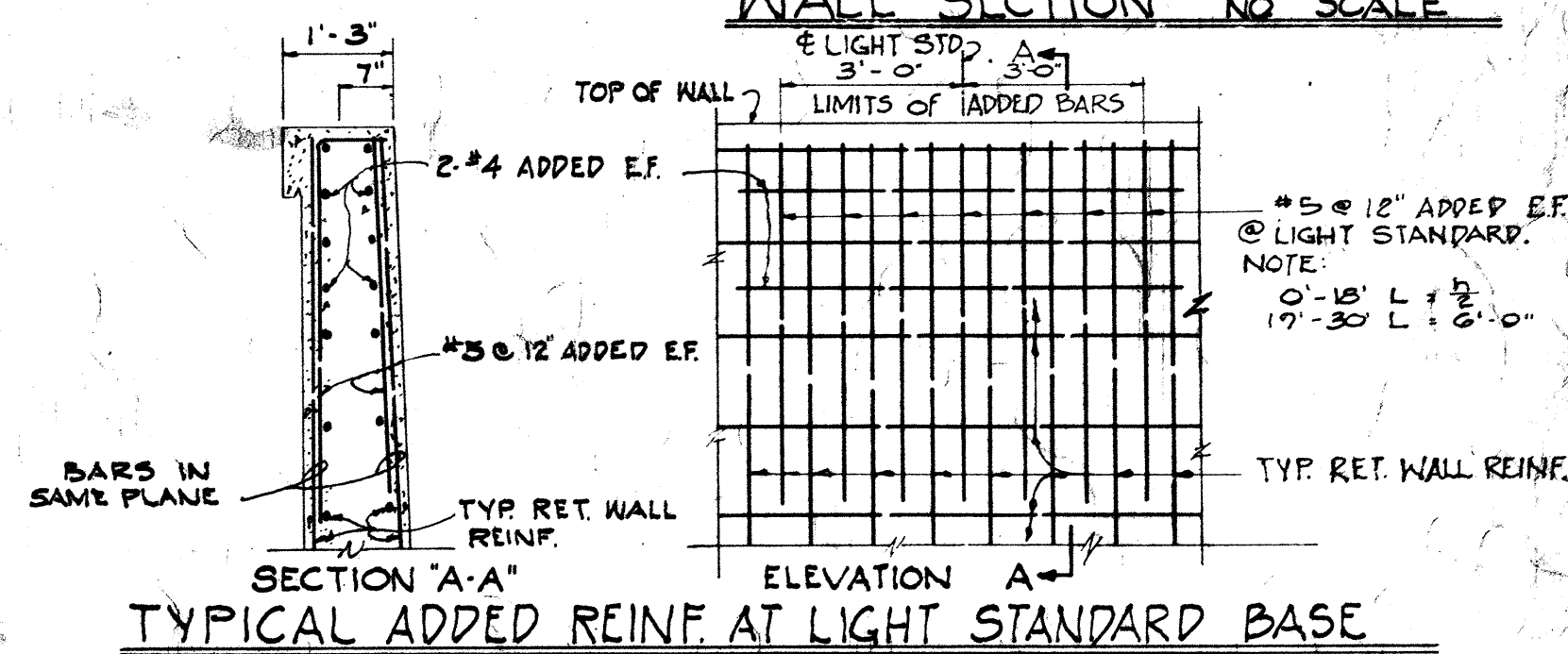
VERTICAL REINFORCING STEEL ARRANGEMENT NO SCALE

TABLE OF DIMENSIONS AND REINFORCING STEEL

MAXIMUM h	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'	23'	24'	26'	28'	30'
"a" BARS	*3@12	*3@12	*4@12	*3@6	*4@6	*4@5 1/2	*5@6	*5@5	*6@6	*6@8	*6@6	*6@5 1/2	*6@5	*7@6	*7@5	*8@6	*8@5	*9@6	*9@5 1/2	*10@6	*10@5 1/2	*10@5 1/2	*10@5	*11@5
"c" BARS	-	-	-	-	-	-	-	*4	*4	*4	*4	*4	*4	*4	*4	*5	*5	*6	*6	*7	*7	*7	*7	*7
TYPE (FTG. ON EARTH)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
a	6"	6"	6"	12"	12"	12"	12"	12"	12"	12"	15"	18"	21"	24"	24"	24"	27"	30"	33"	36"	39"	54"	60"	72"
L	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'	6.0'	6.5'	7.0'	7.75'	8.25'	9.0'	9.75'	10.5'	11.5'	12.5'	13.5'	14.5'	15.25'	16.0'	18.0'	20.0'	21.0'
t	14"	14"	14"	14"	14"	14"	14"	18"	18"	18"	18"	18"	21"	21"	24"	24"	27"	30"	31"	33"	36"	39"	42"	42"
"b" BARS	*3@12	*3@12	*3@12	*3@12	*3@12	*4@11	*5@9	*5@10	*5@6	*6@8	*6@6	*6@5 1/2	*6@5	*7@6	*7@5	*9@6	*9@5	*10@6	*10@5 1/2	*11@6	*11@5 1/2	*11@5 1/2	*11@5	*11@5

TYPE (FTG. ON ROCK)	A	B	C	D	E	F	G	H	I	J-R	K-R	L-R	M-R	N-R	O-R	P-R	Q-R	R-R	S-R	T-R	U-R	V-R	W-R	X-R
a	6"	6"	6"	12"	12"	12"	12"	12"	12"	12"	15"	18"	21"	21"	21"	21"	24"	27"	30"	33"	36"	42"	48"	54"
L	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'	6.0'	6.5'	6.75'	7.25'	7.75'	8.50'	9.25'	10.00'	10.50'	11.00'	11.50'	12.00'	12.50'	13.00'	14.00'	15.00'	16.00'
t	14"	14"	14"	14"	14"	14"	14"	18"	18"	18"	18"	18"	18"	21"	21"	21"	21"	21"	24"	24"	24"	27"	30"	36"
"b" BARS	*3@12	*3@12	*3@12	*3@12	*3@12	*4@11	*5@9	*5@10	*5@6	*6@8	*6@6	*6@5 1/2	*6@5	*7@6	*7@5	*9@6	*9@5	*10@6	*10@5 1/2	*11@6	*11@5 1/2	*11@5 1/2	*11@5	*11@5

GENERAL NOTE:
FENCE POST INSERT DETAIL TO BE SAME AS SHOWN ON "L" TYPE WALL DETAILS. EXCEPT WHERE DETAILED OTHERWISE IN THE PLANS ALL DETAIL ON THIS SHEET GOVERN.



SECTION A-A
TYPICAL ADDED REIN AT LIGHT STANDARD BASE

STANDARD RETAINING WALL DETAIL TYPE "T-1"

SHEET NO. 54 OF 3 SHEETS