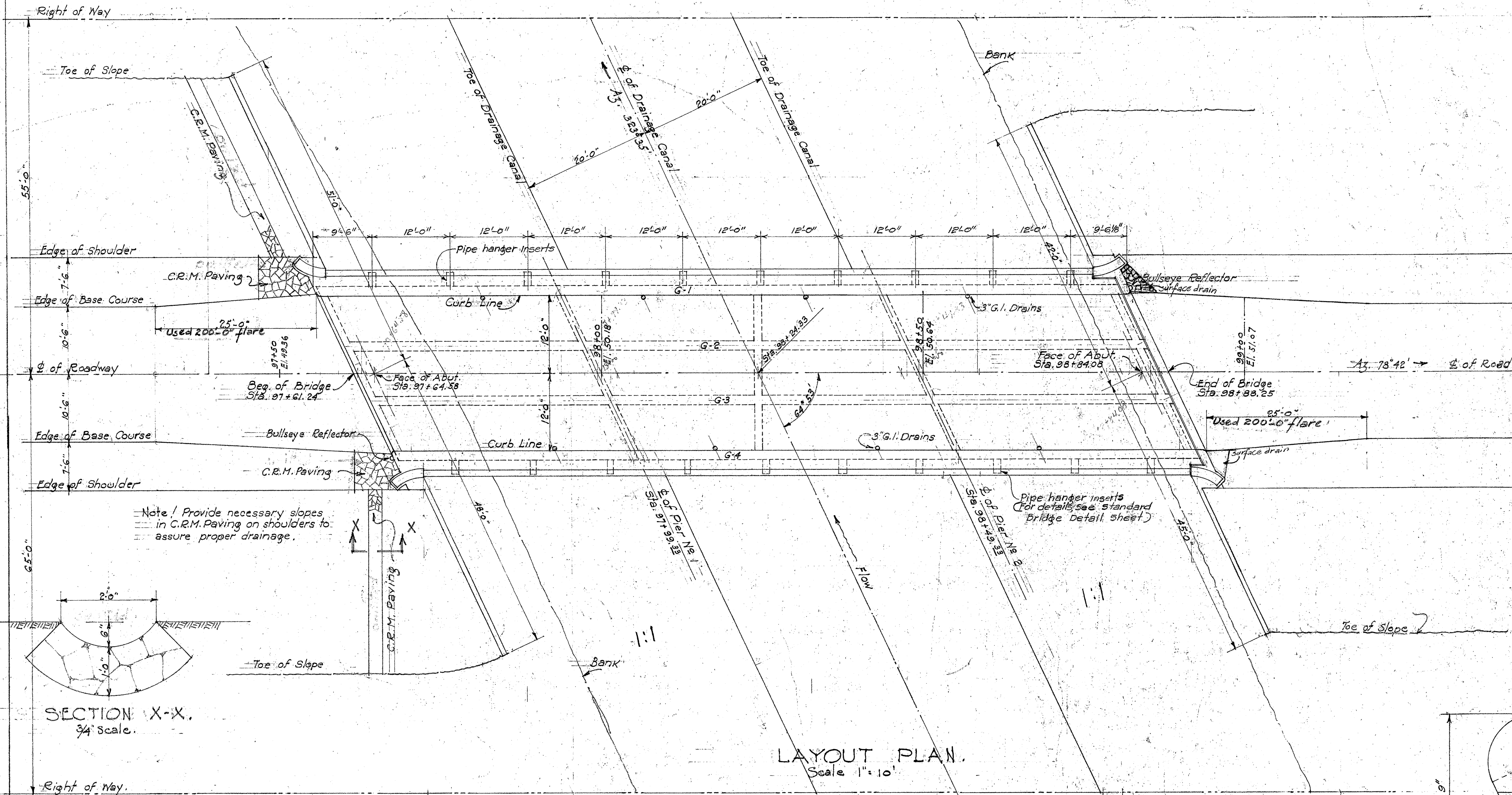
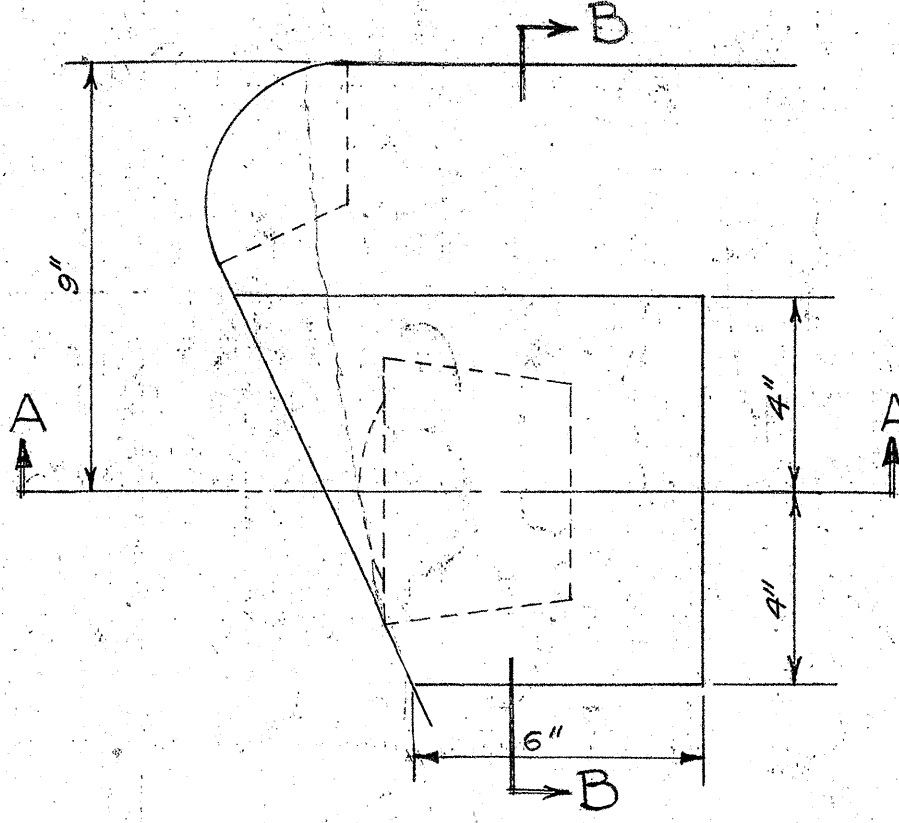


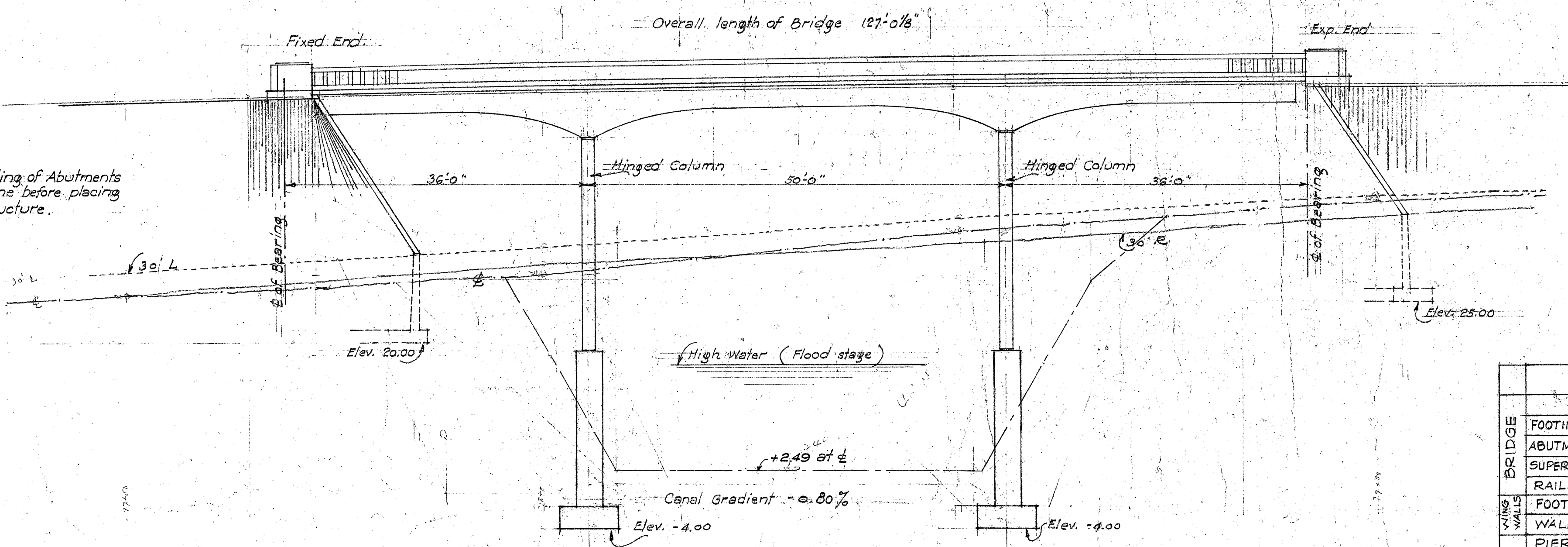
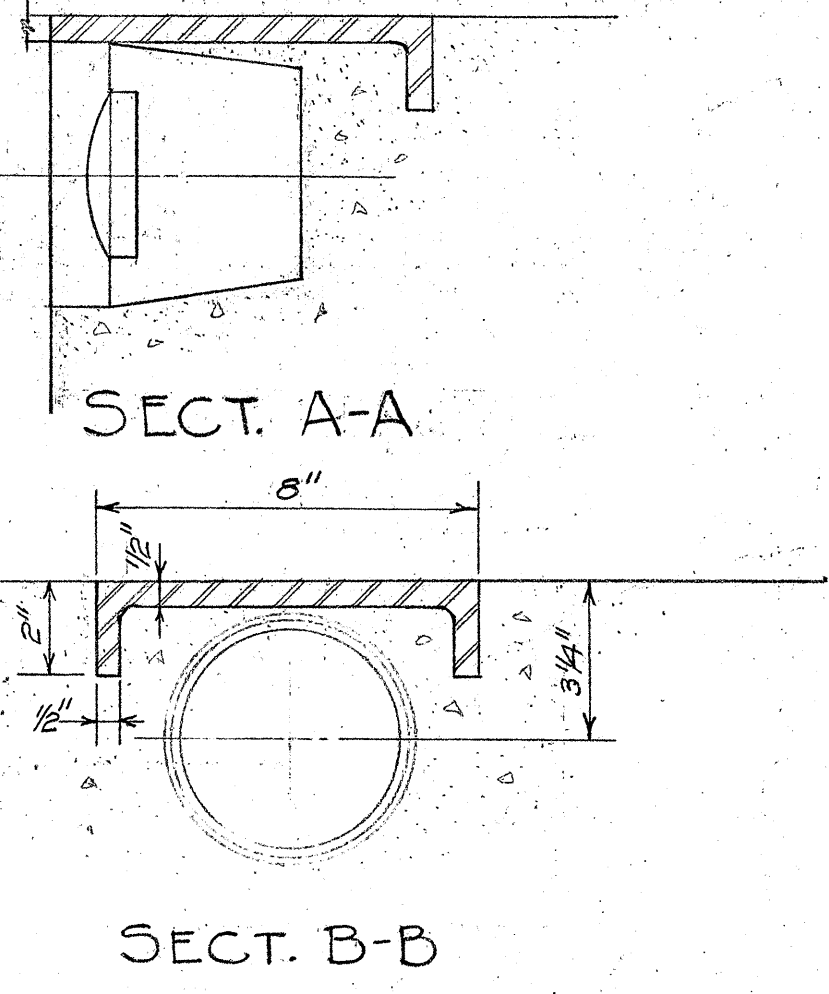


SPAN 1			SPAN 2		
FOR GIRDERS G1, G2, G3, G4			FOR GIRDERS G1, G2, G3, G4		
X	Y		X	Y	
0	0		0	0	
2'-3"	0'-11"	0'-11 1/16"	2'-3"	0'-11 1/16"	0'-11 1/16"
4'-3"	1'-7 1/16"	1'-8 1/16"	4'-3"	1'-7 1/16"	1'-8 1/16"
6'-3"	2'-1 7/8"	2'-3 1/16"	6'-3"	2'-1 7/8"	2'-3 1/16"
8'-3"	2'-6 3/4"	2'-9 3/8"	8'-3"	2'-6 3/4"	2'-9 3/8"
10'-3"	2'-10 3/8"	3'-1 1/8"	10'-3"	2'-10 3/8"	3'-1 1/8"
12'-3"	3'-0 1/8"	3'-4 1/8"	12'-3"	3'-0 1/8"	3'-4 1/8"
14'-3"	3'-4 3/8"	3'-5 3/8"	14'-3"	3'-4 3/8"	3'-5 3/8"

PARABOLIC ORDINATES



Note!
Bullseye reflector to be furnished by Terr. Hvy. Dept. and to be installed by the contractor.
Phosphor bronze plates to be furnished by the contractor, and to be same as bearing plate material.



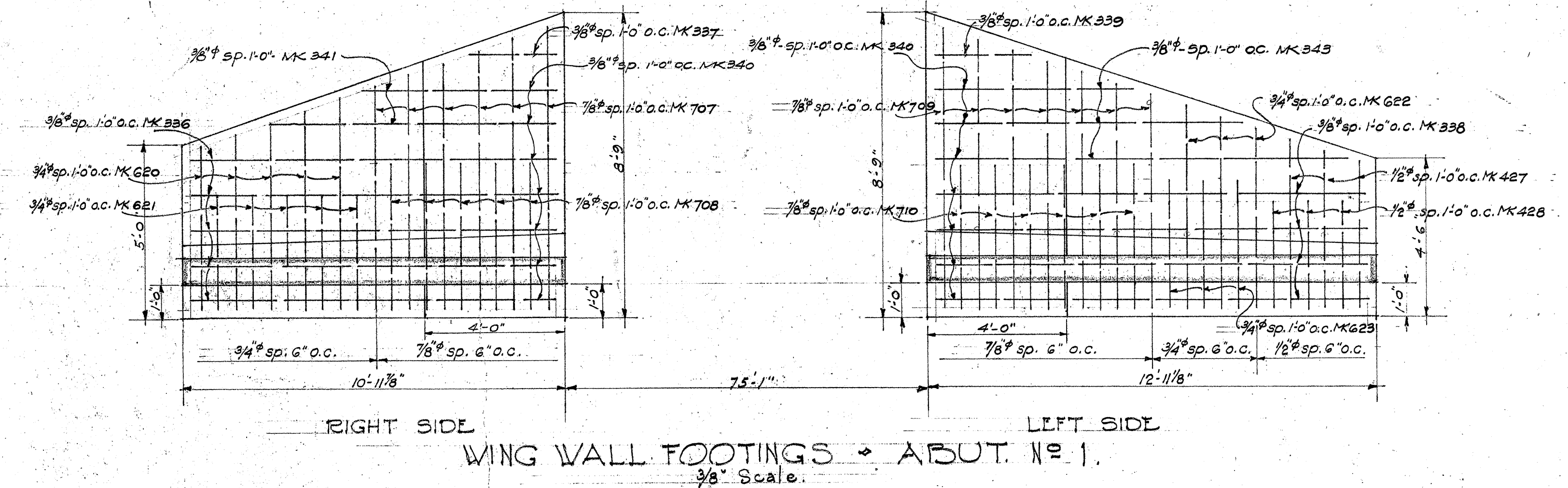
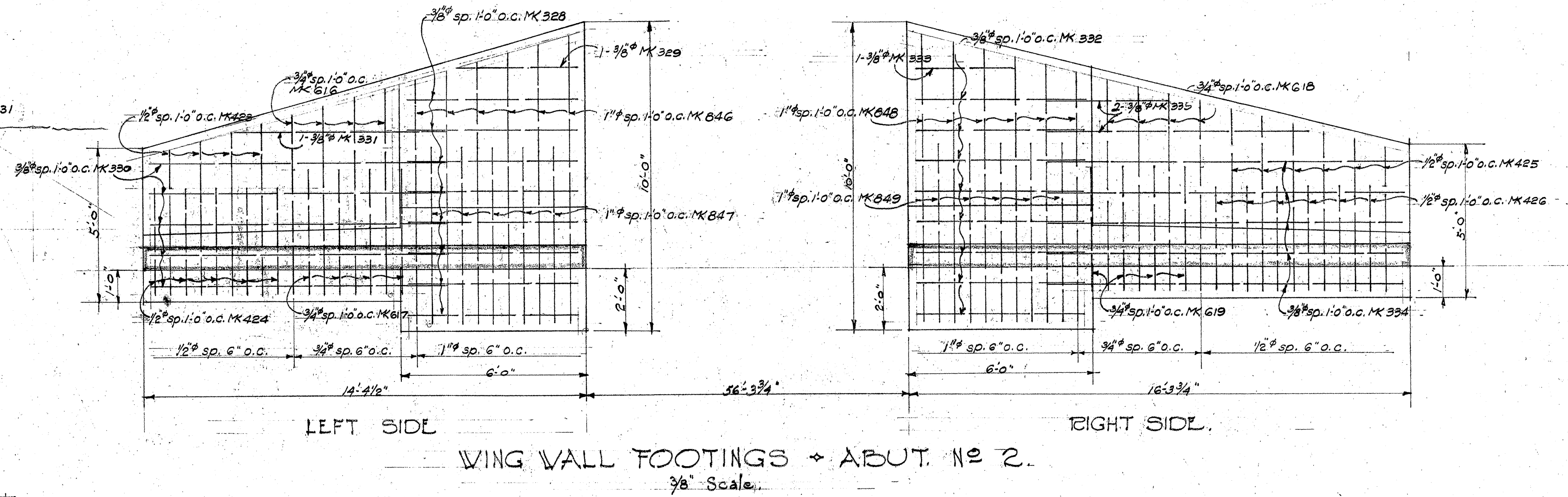
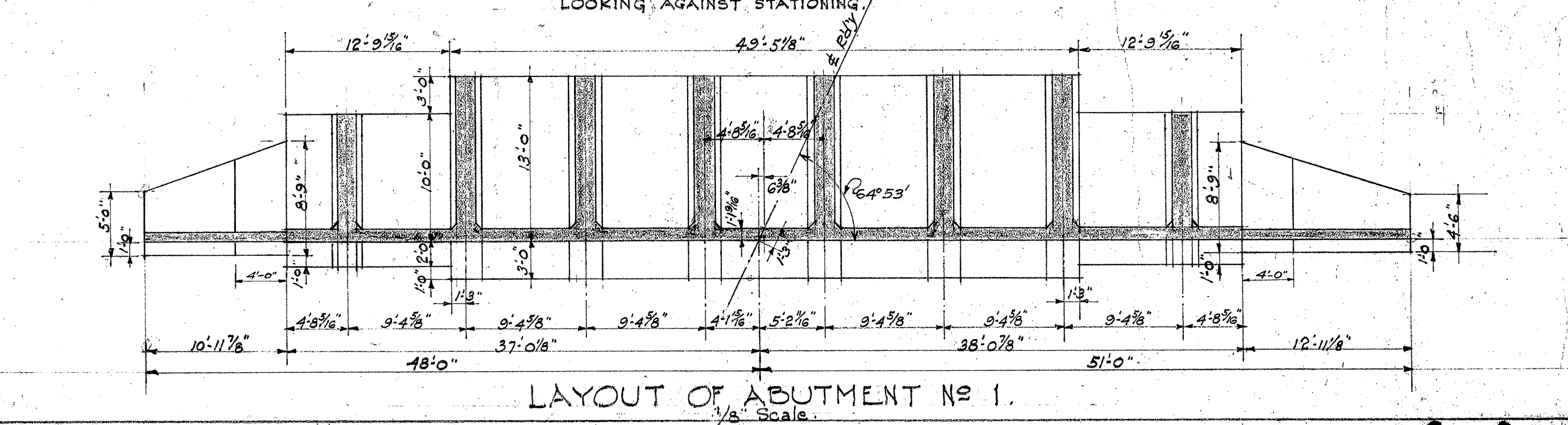
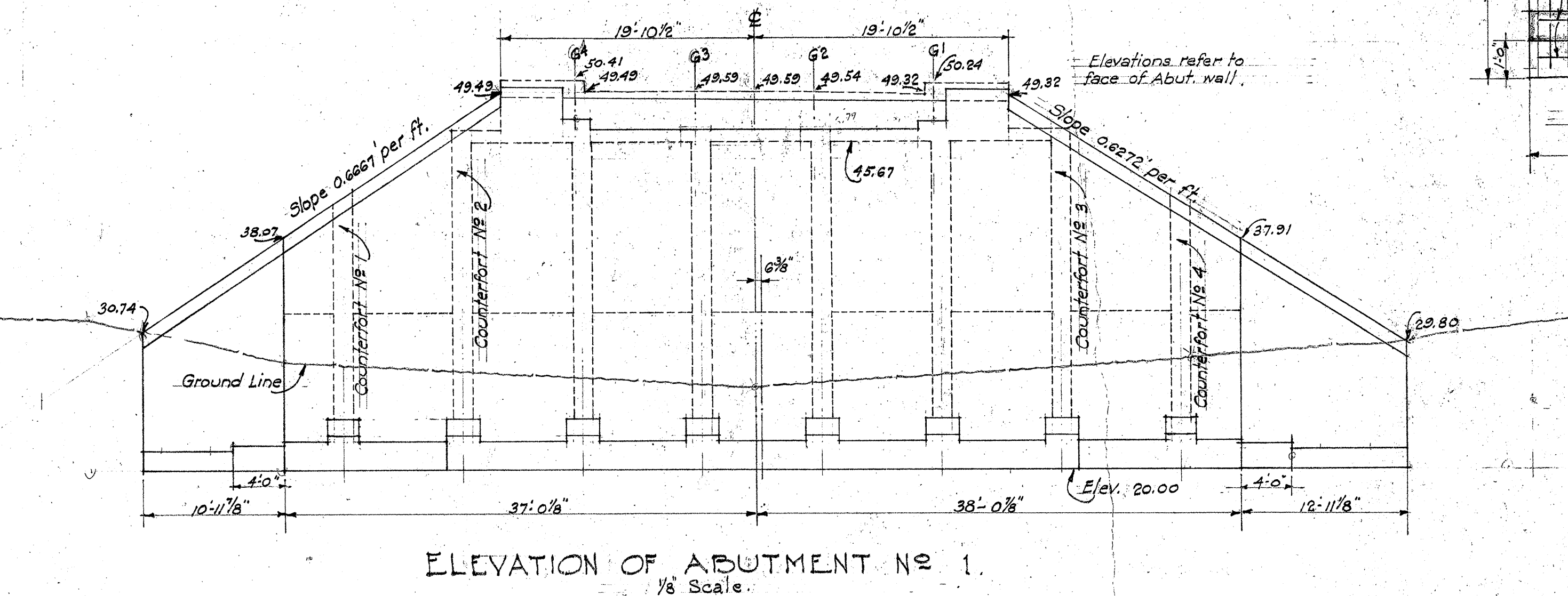
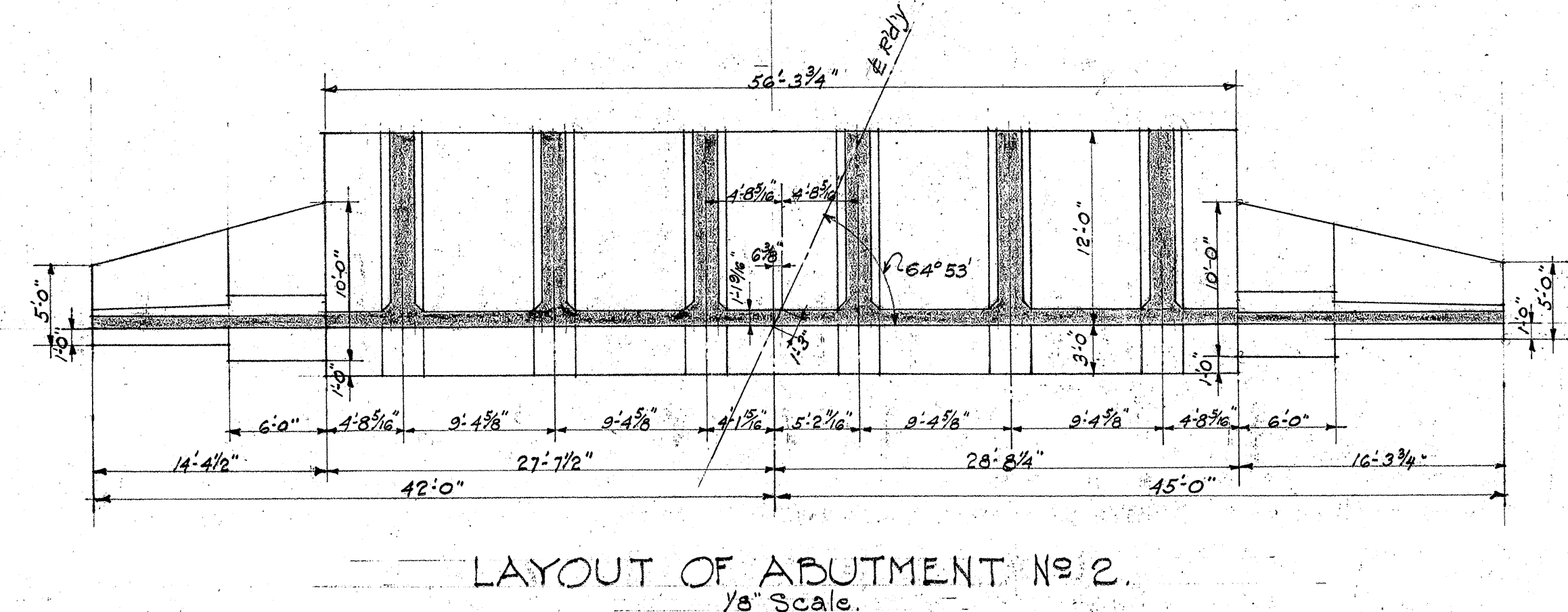
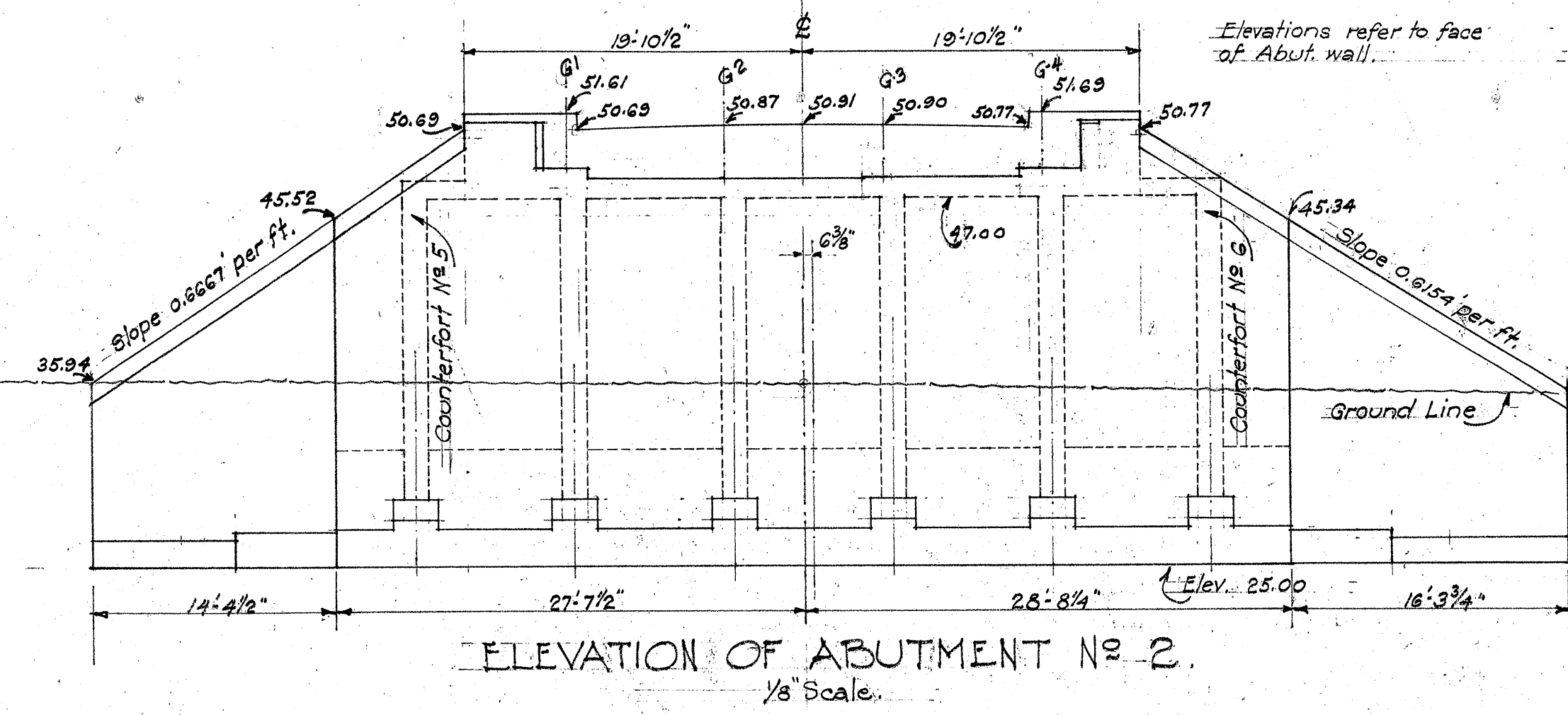
ITEMIZED QUANTITIES			
BRIDGE	CONCRETE	STR. EXC.	STEEL
FOOTING	155.7 C.Y.	782 C.Y.	12745 LBS.
ABUTMENT	249.6		38743
SUPERSTR.	187.0		46826
RAILING	17.7		1530
FOOTING	24.4	177	1513
WALLS	27.5		4142
PIER	135.7	305	12494
TOTALS	797.6 C.Y.	1264 C.Y.	117993 LBS.

TERRITORIAL HIGHWAY DEPARTMENT.
TERRITORY OF HAWAII.

CANAL BRIDGE.

WAIANAL ROAD F.A.P. 4-C.
DATE MAR. 1938 SCALES AS NOTED
SHEET NO. 1 OF 9 SHEETS.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4C	1938	28	75



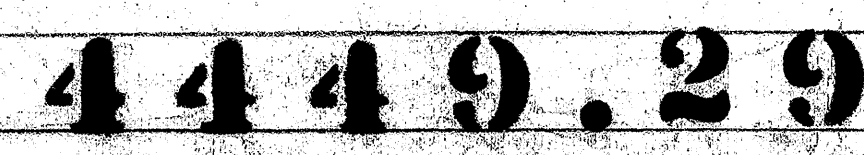
ORIGINAL PLAN
 DESIGNED BY
 DRAWN BY
 CHECKED BY
 QUANTITIES BY
 NOTEBOOK
 No.

TERRITORIAL HIGHWAY DEPARTMENT.
 TERRITORY OF HAWAII.
 CANAL BRIDGE.
 WAIANAE ROAD F.A.P. 4-C.
 DATE MAR. 1938 SCALES AS NOTED
 SHEET No. 2 OF 9 SHEETS.

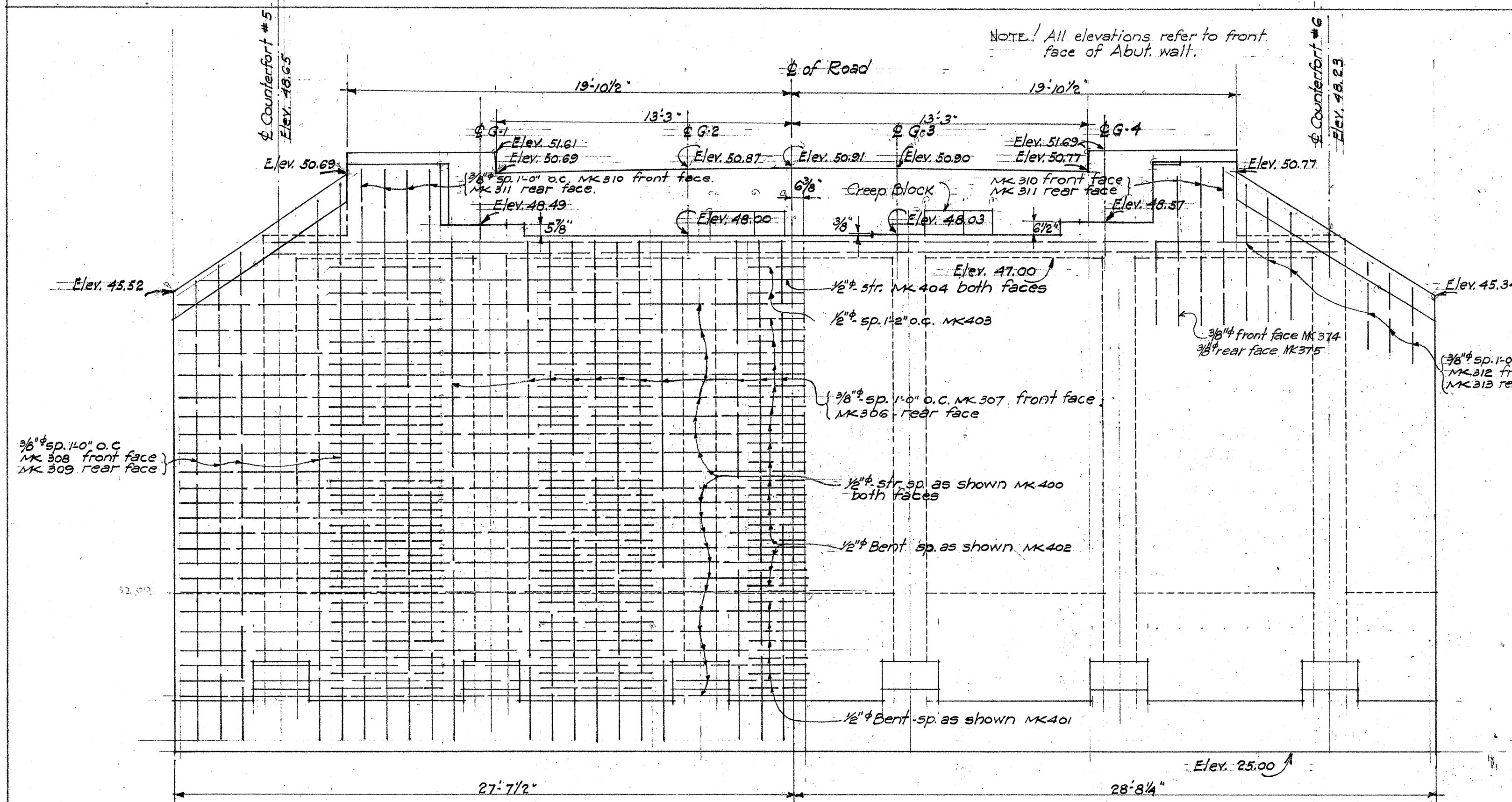
4449.28

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DESIGNED BY	"
	DRAWN BY	"
NOTEBOOK	TRACED BY	"
	QUANTITIES BY	"
No.	CHECKED BY	"

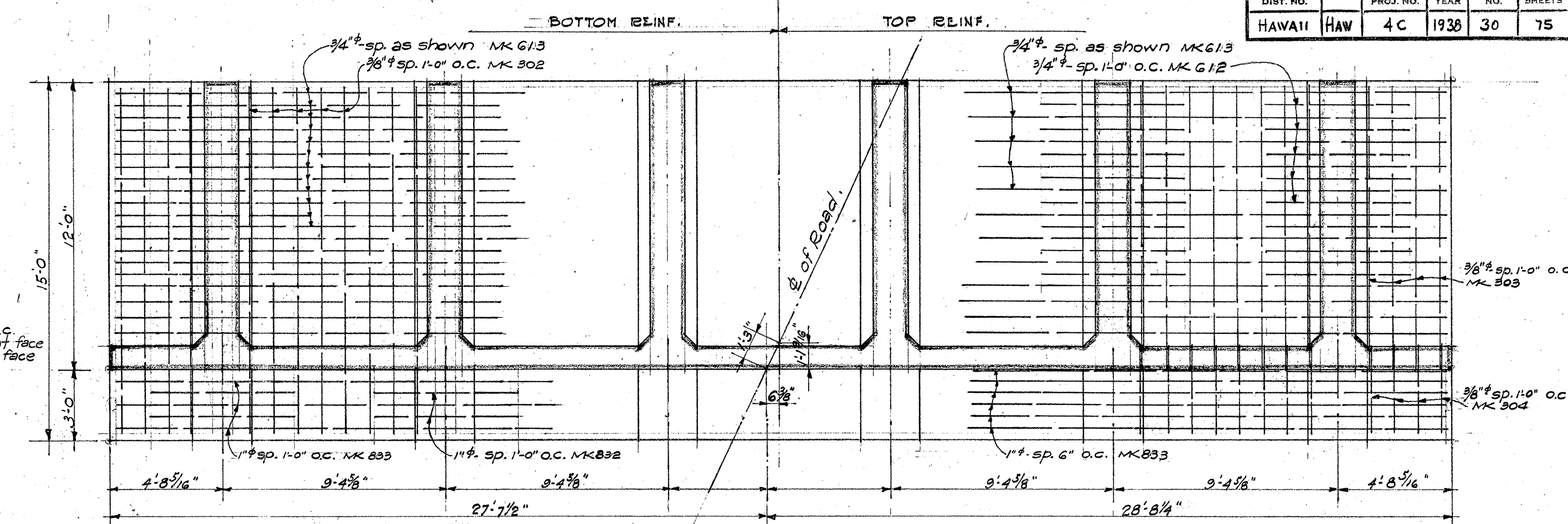
Feb 1938
M.B. Bartals
C.F. Wagner
T. Long
C.F.W.
Line & Ck by E. Hart
M.B. Bartals
M.B. Bartals



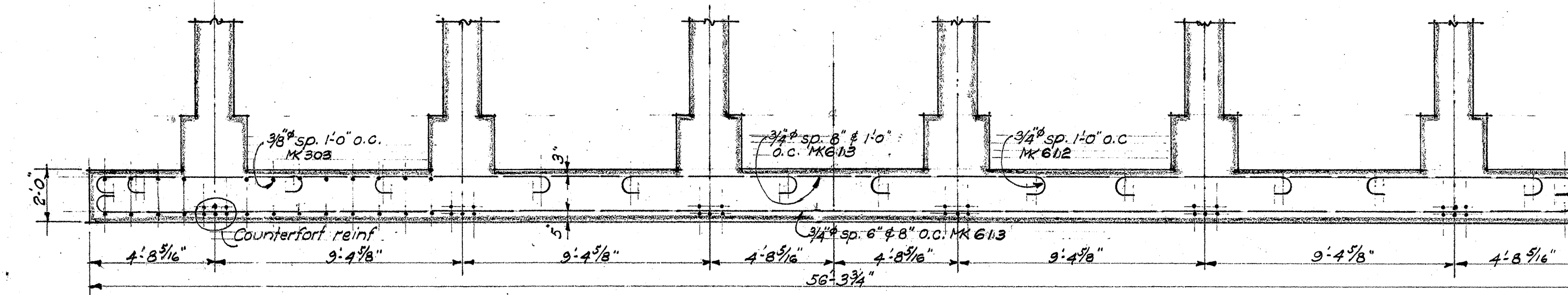
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4C	1938	30	75



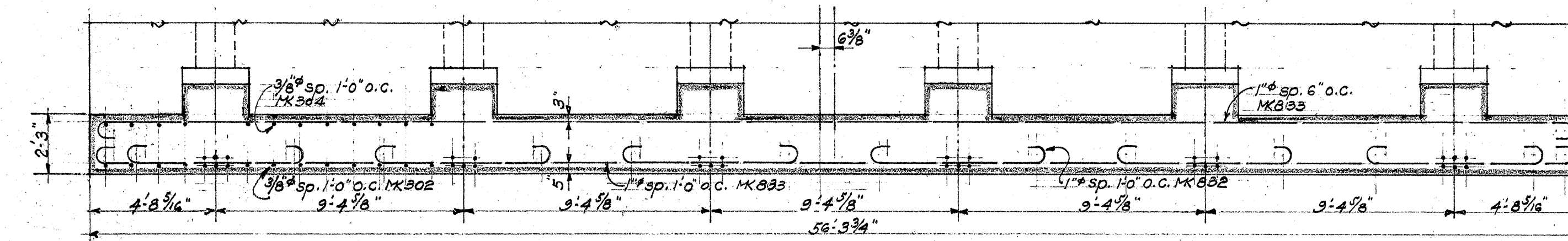
ELEVATION OF ABUT. NO. 2.
1/4" Scale.



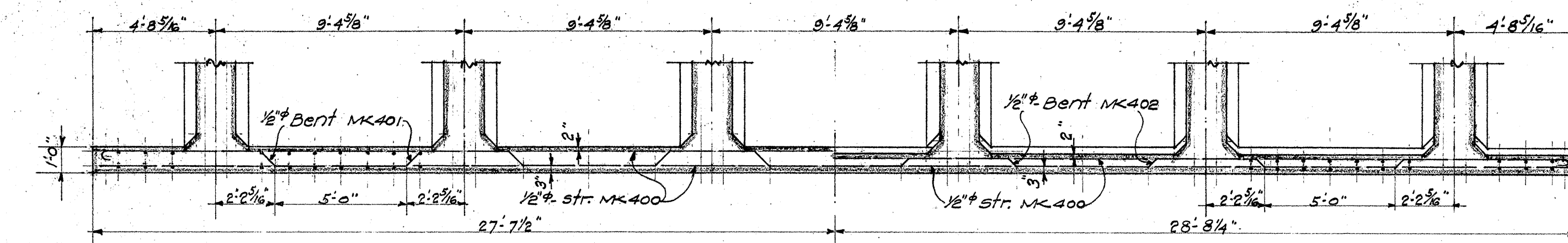
FOOTING REINF. - ABUT. NO. 2.
1/4" Scale.



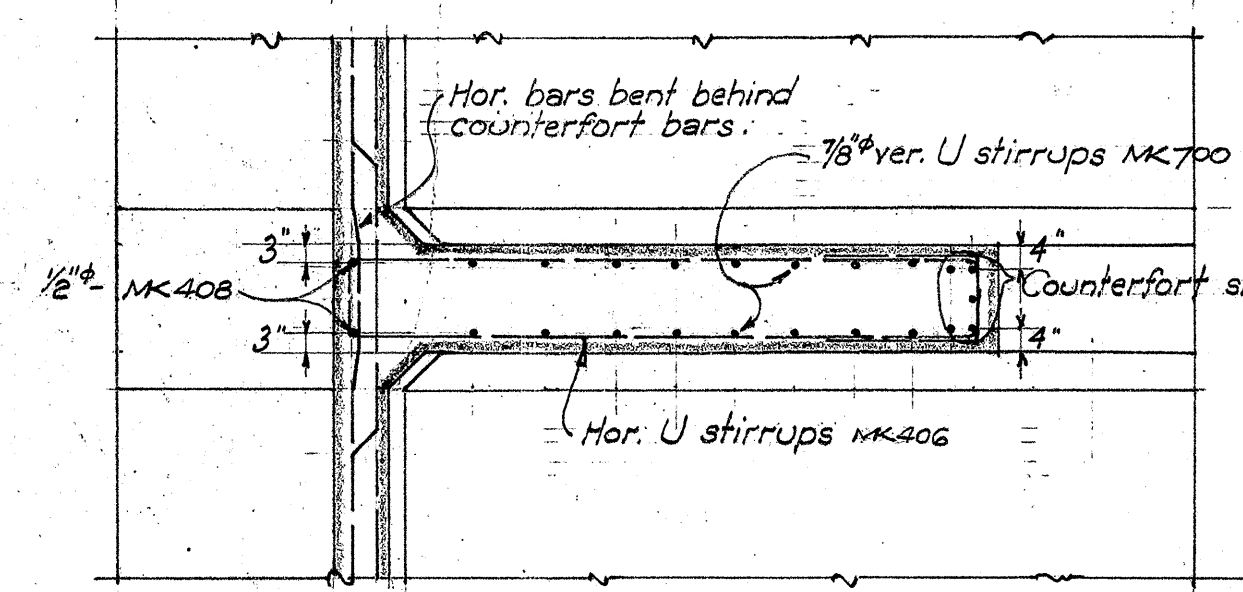
SEC. THRU HEEL OF ABUT. NO. 2.
1/4" Scale.



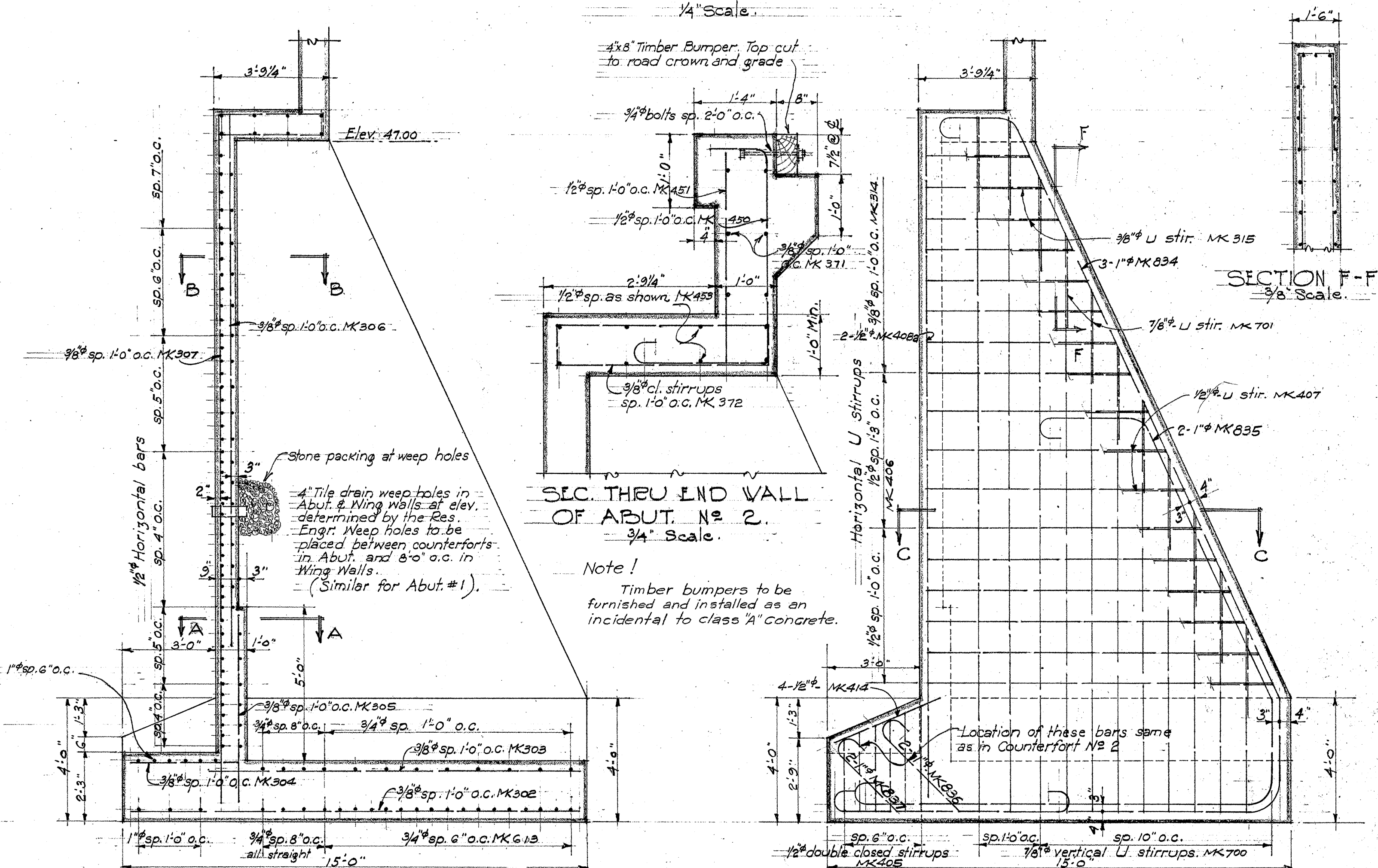
SEC. THRU TOE OF ABUT. NO. 2.
1/4" Scale.



HALF SECTION A-A. HALF SECTION B-B.
SECTION SHOWING ABUTMENT REINF.
1/4" Scale.



SECTION C-C.
3/8" Scale.



SECTION THRU ABUT. NO. 2.
3/8" Scale.

ABUT. NO. 2 COUNTERFORT.
3/8" Scale.

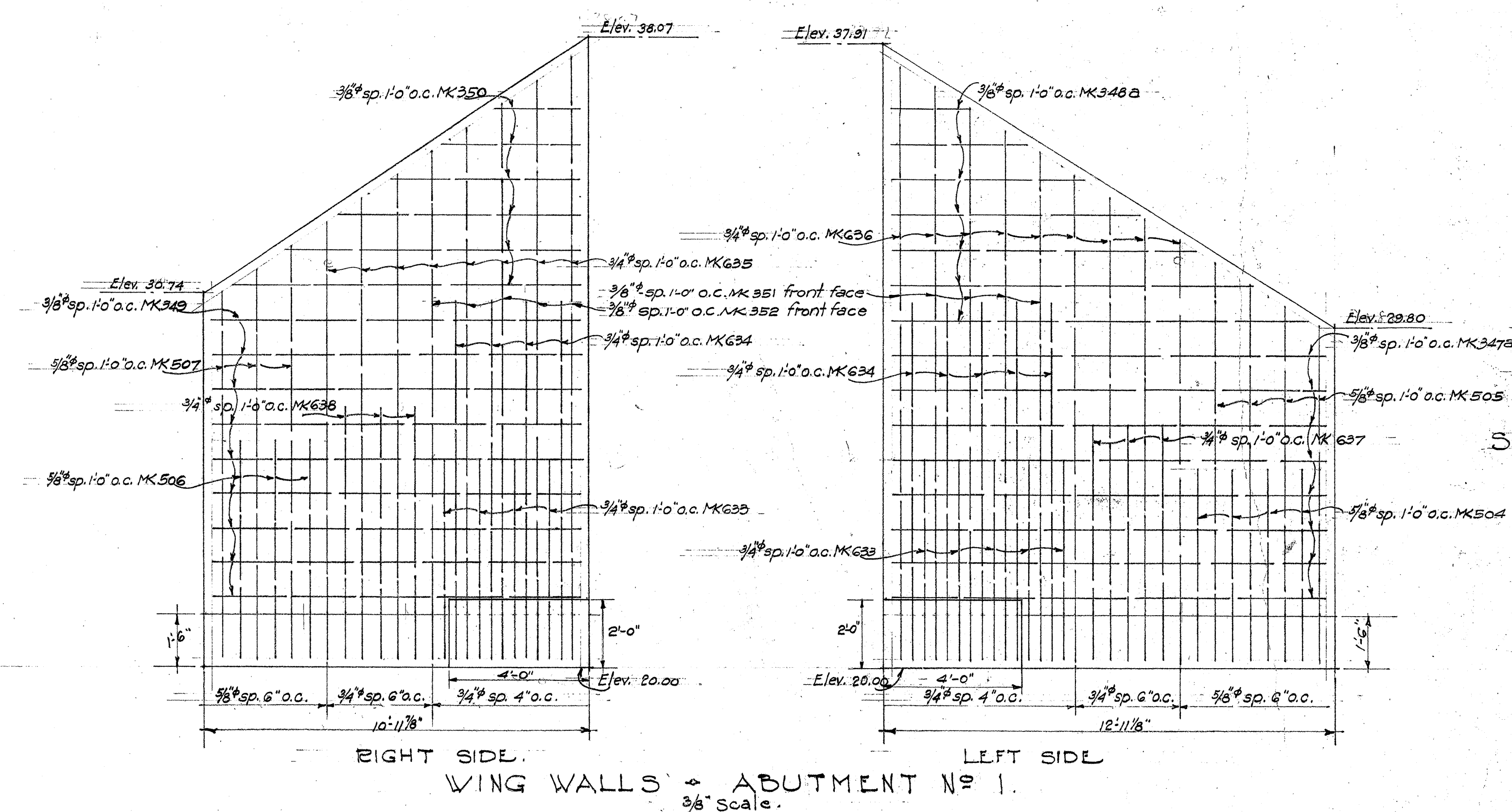
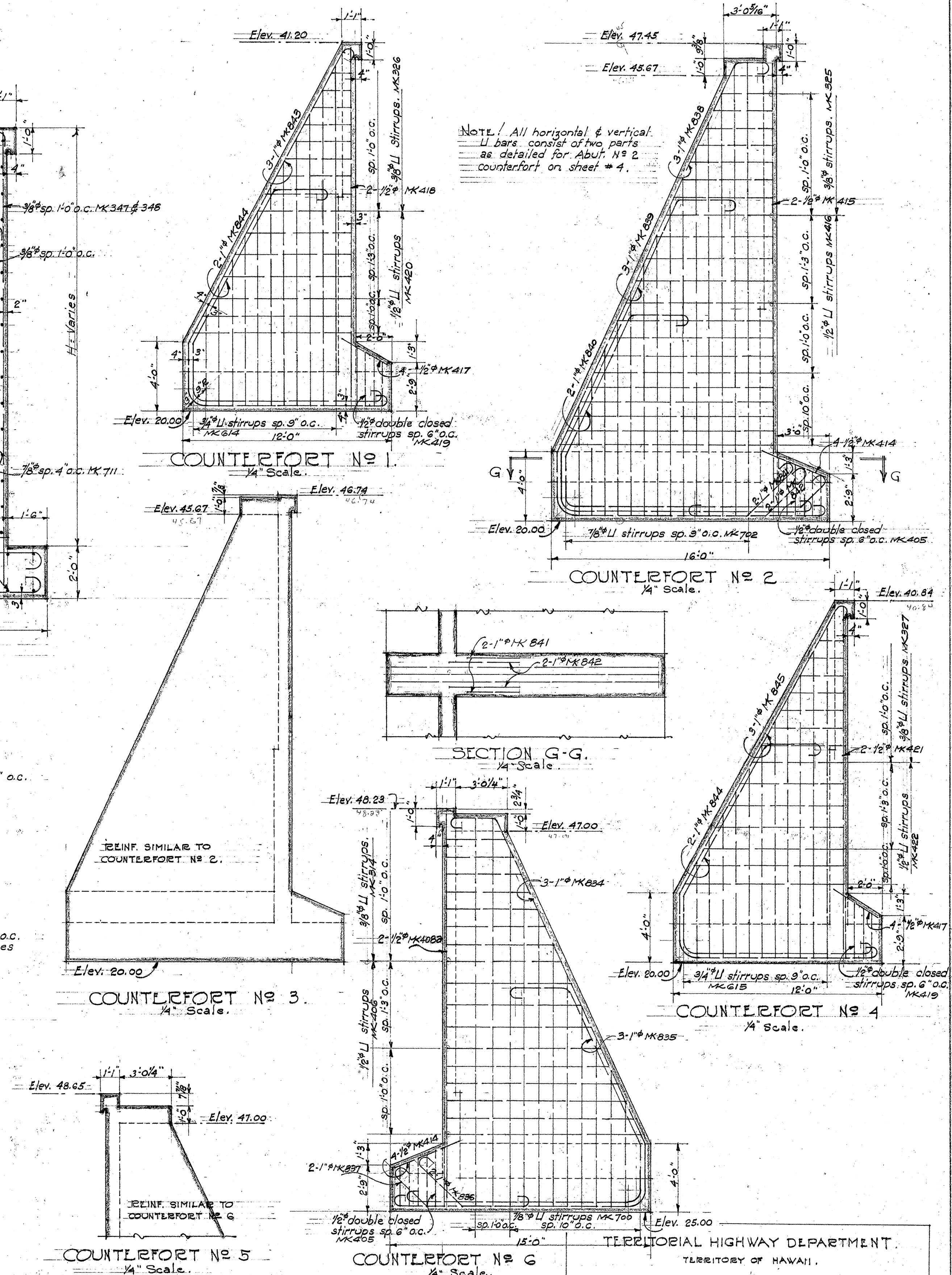
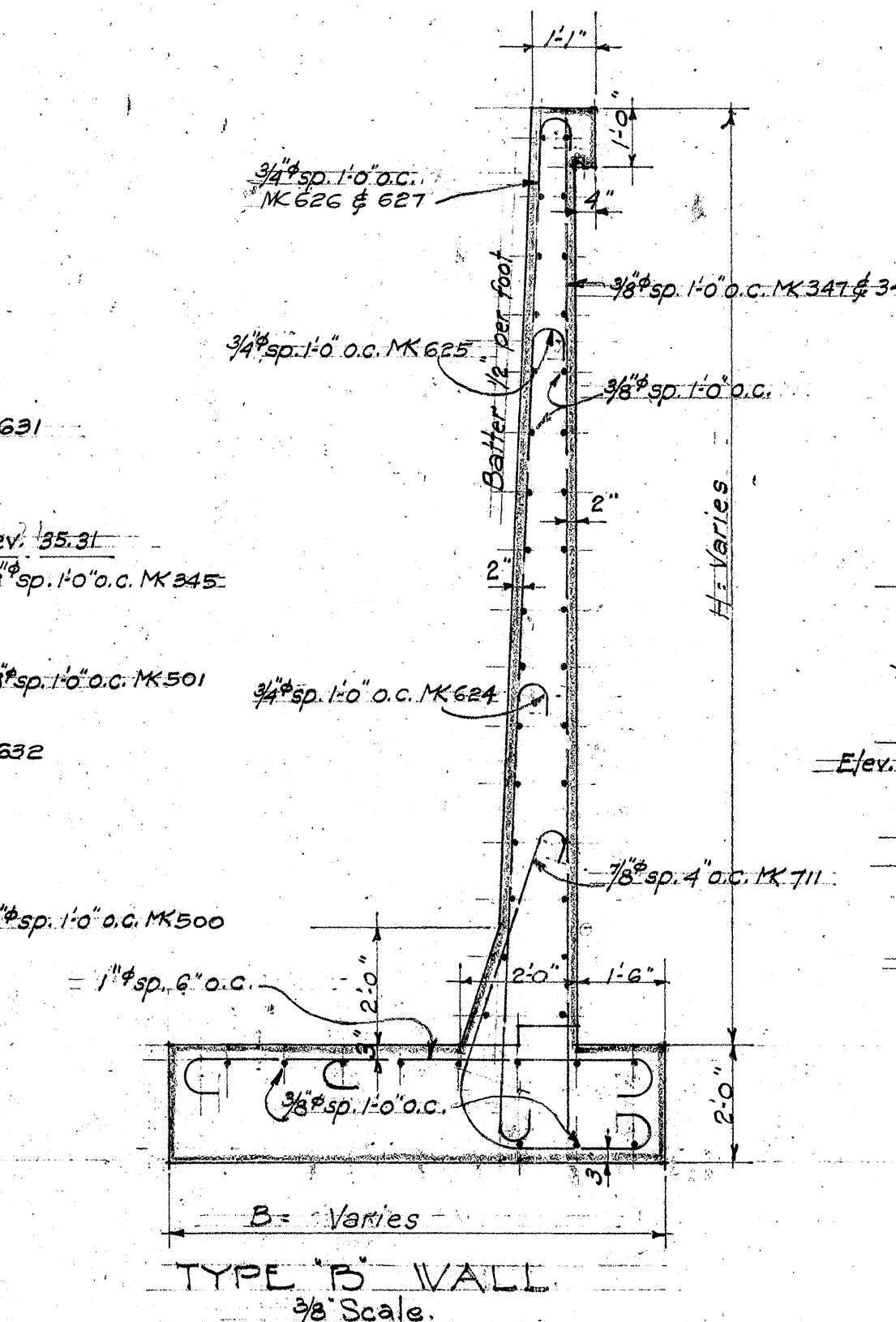
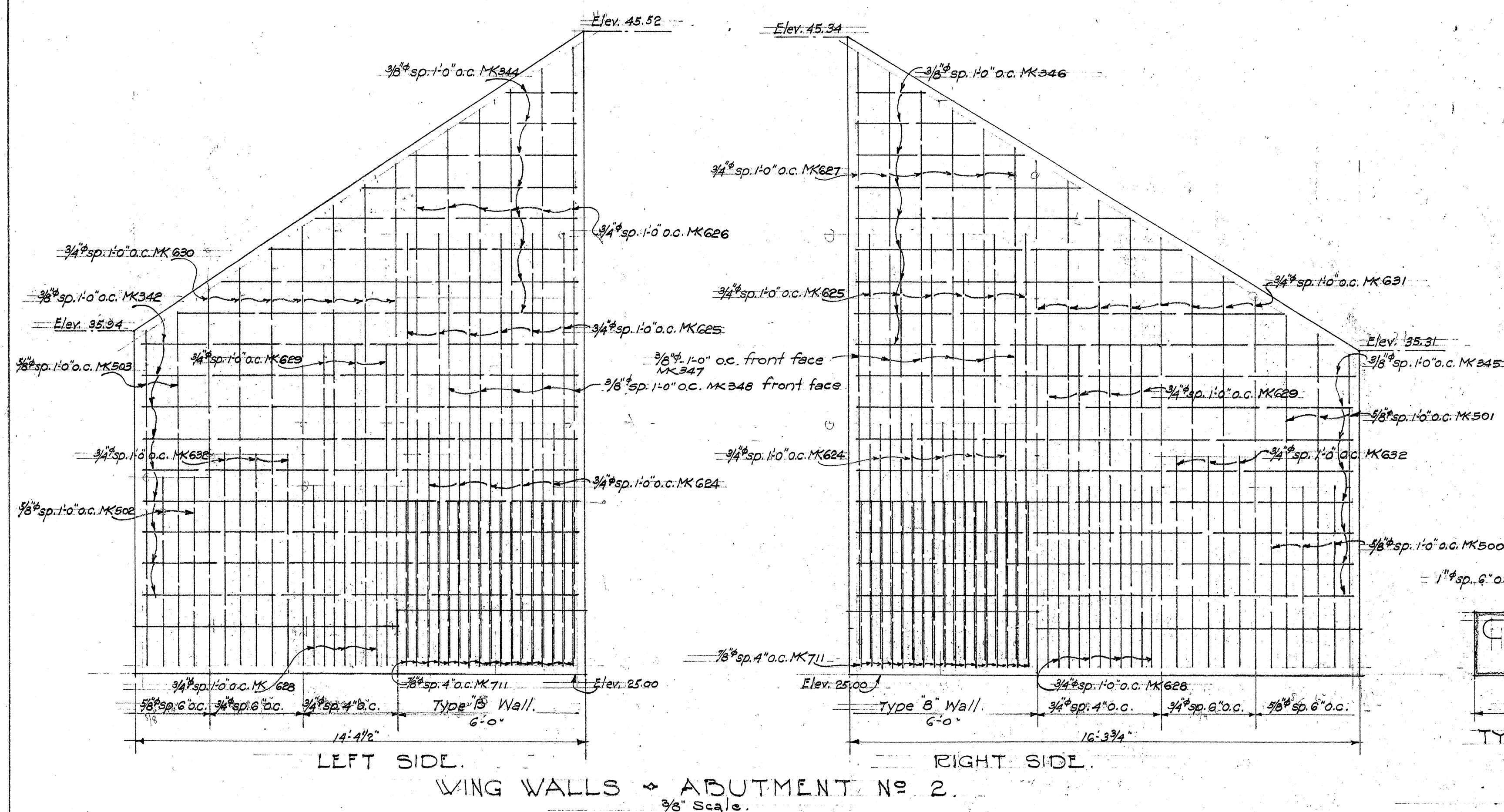
TERRITORIAL HIGHWAY DEPARTMENT.
TERRITORY OF HAWAII.

CANAL BRIDGE

WAIANAE ROAD F.A.P. 4-C
DATE MAR. 1938 SCALES AS NOTED
SHEET NO. 4 OF 9 SHEETS.

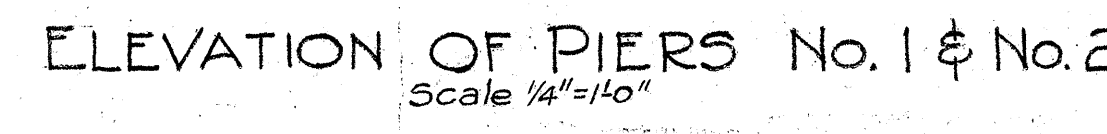
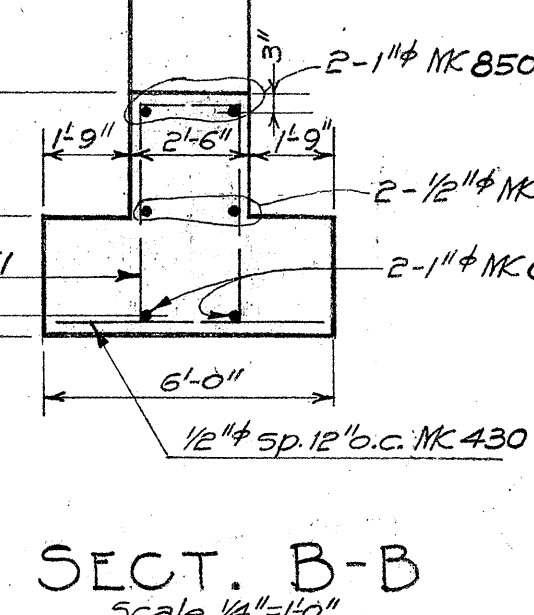
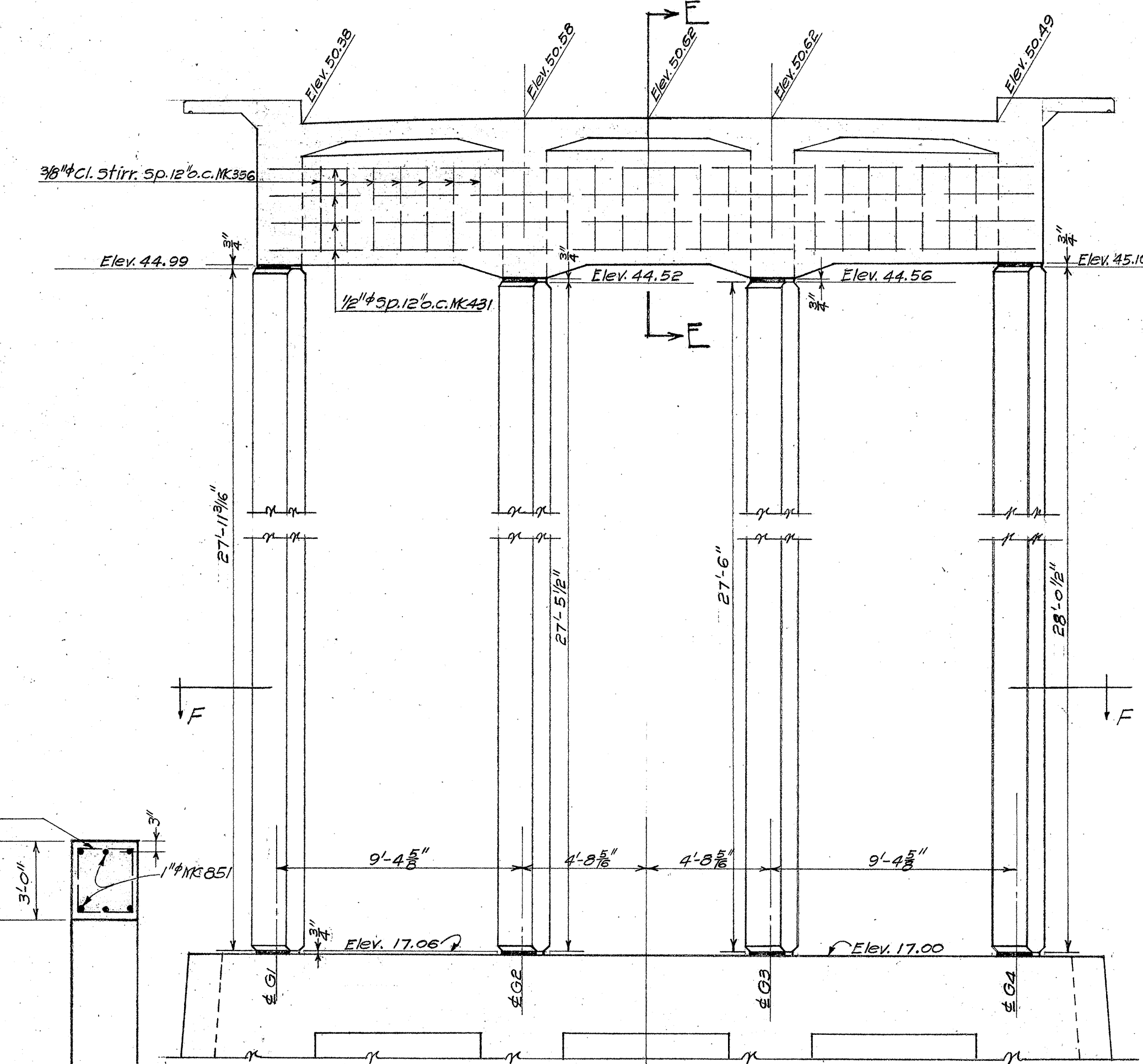
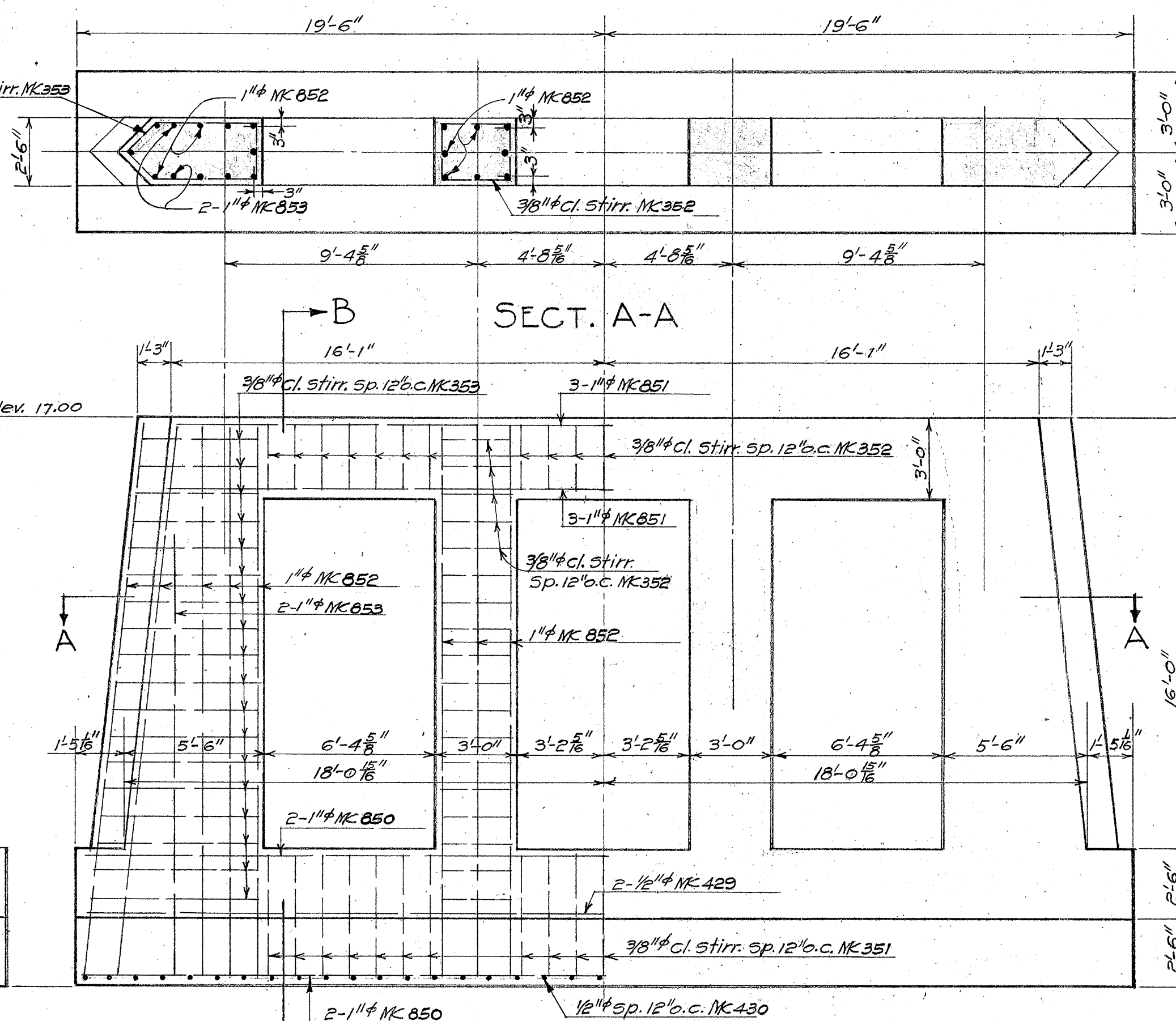
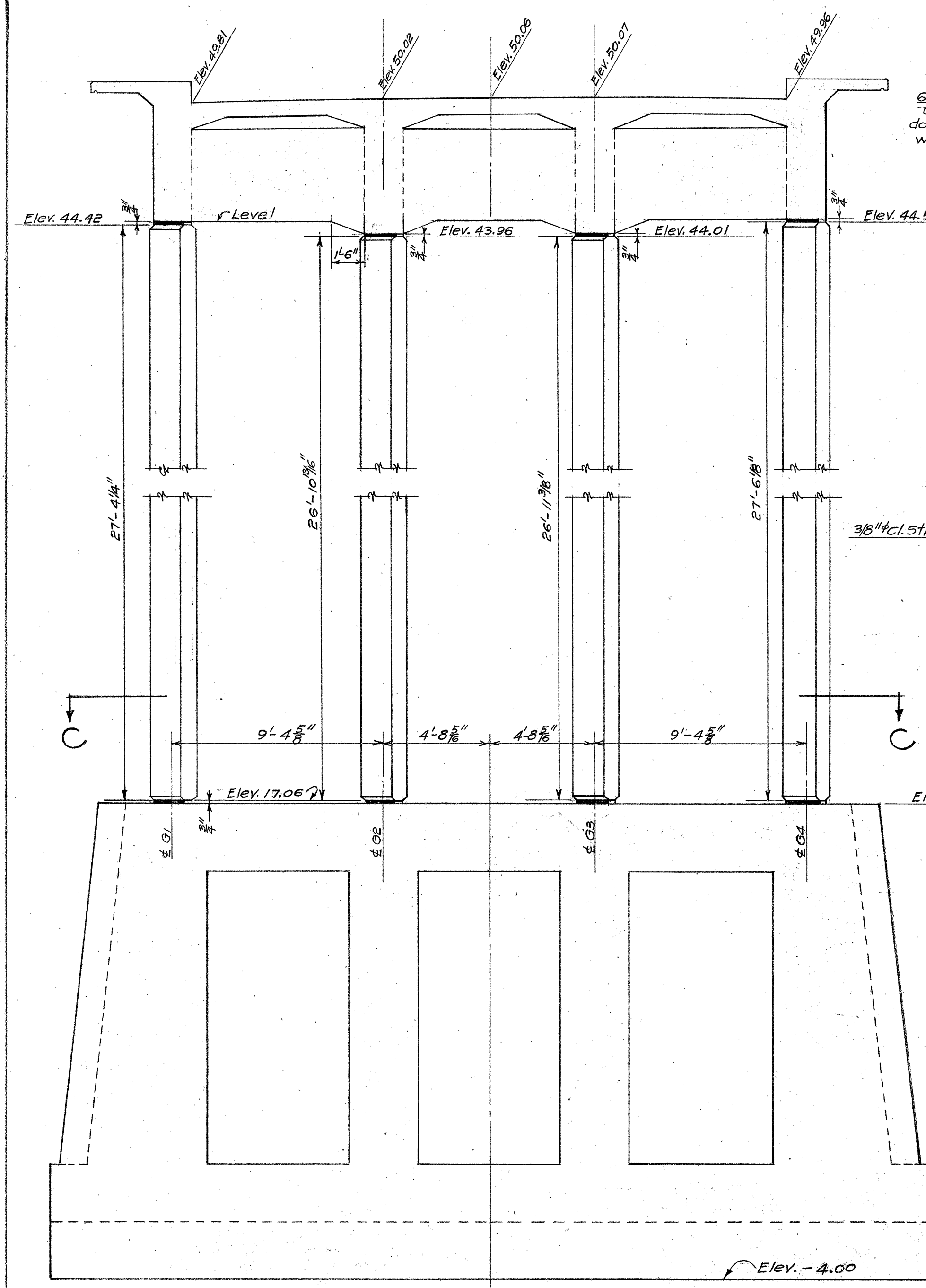
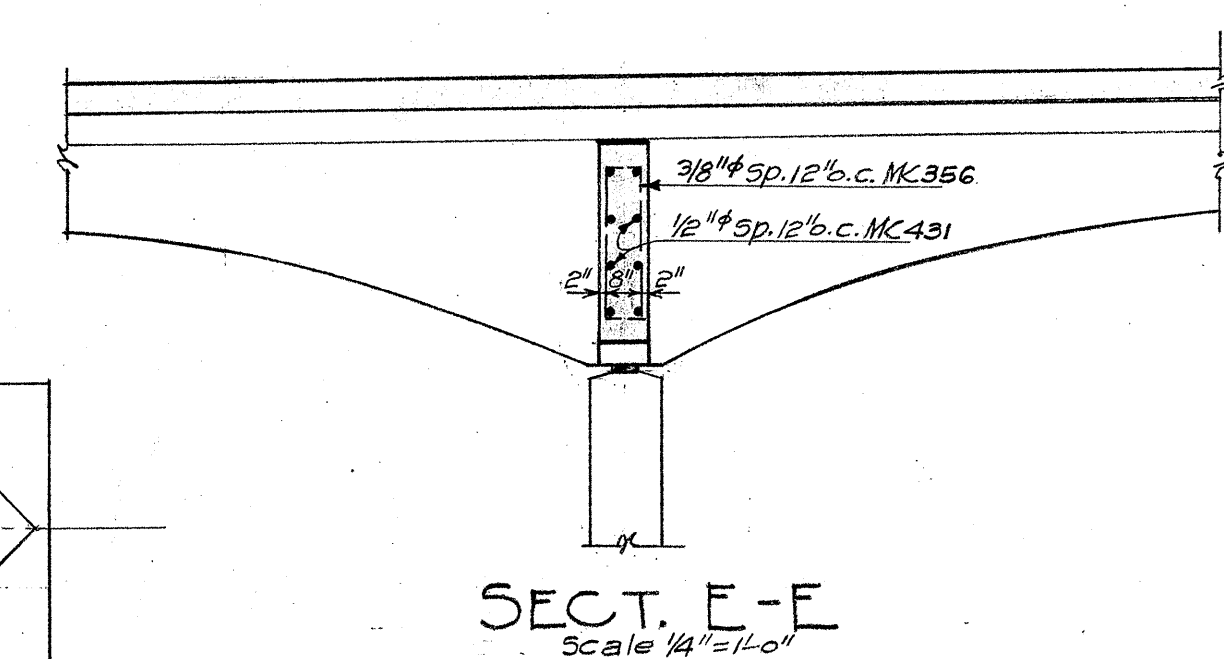
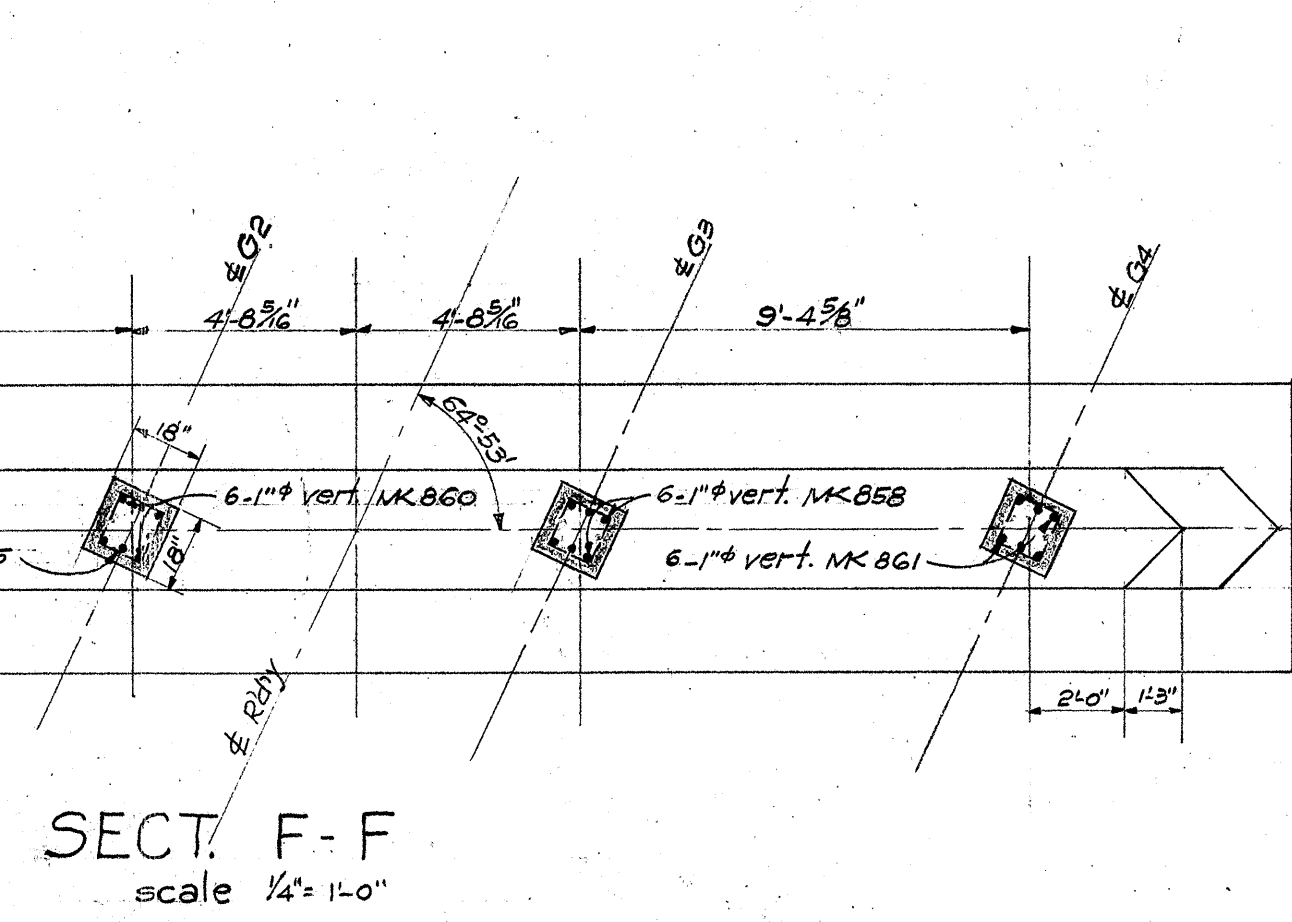
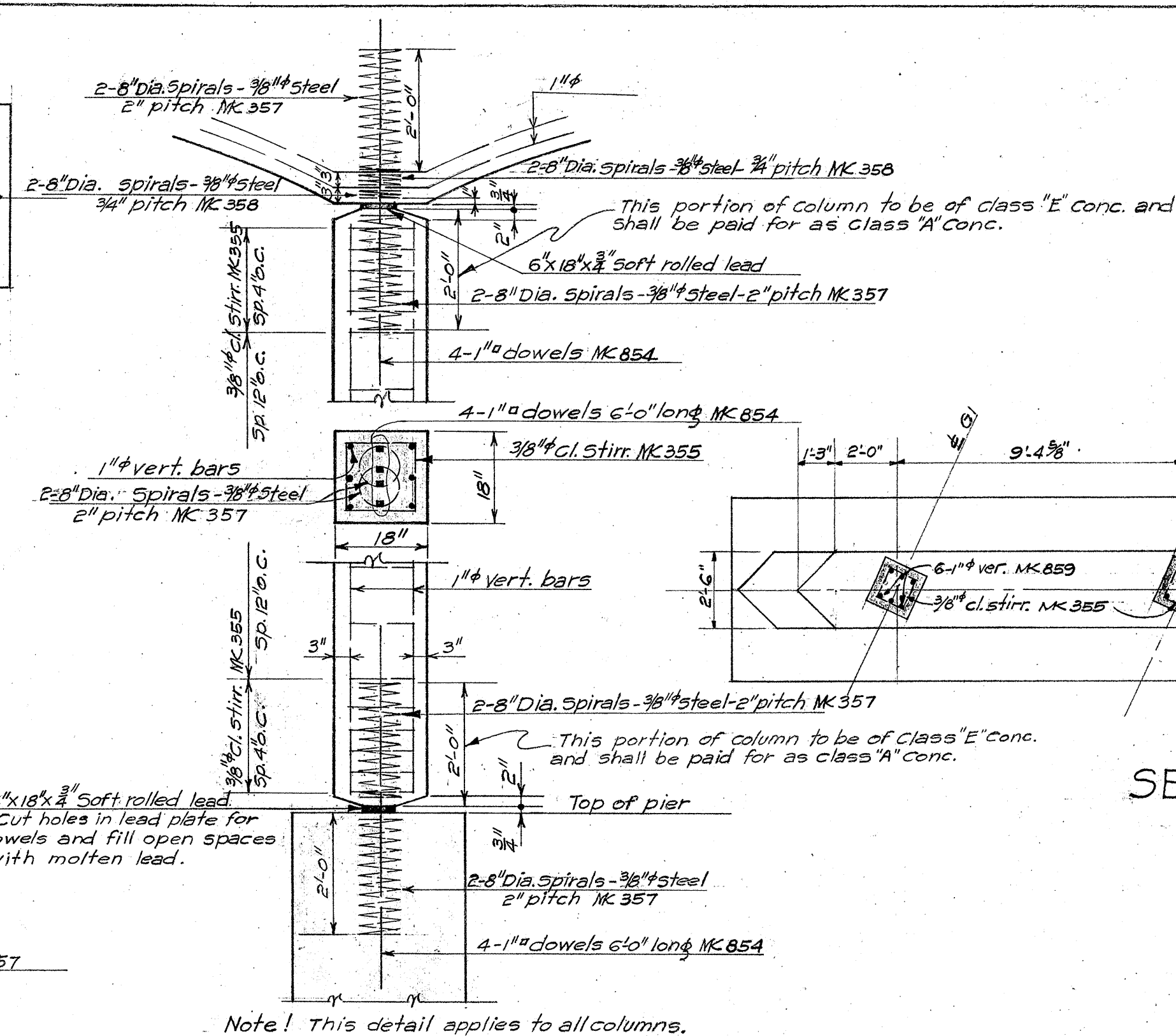
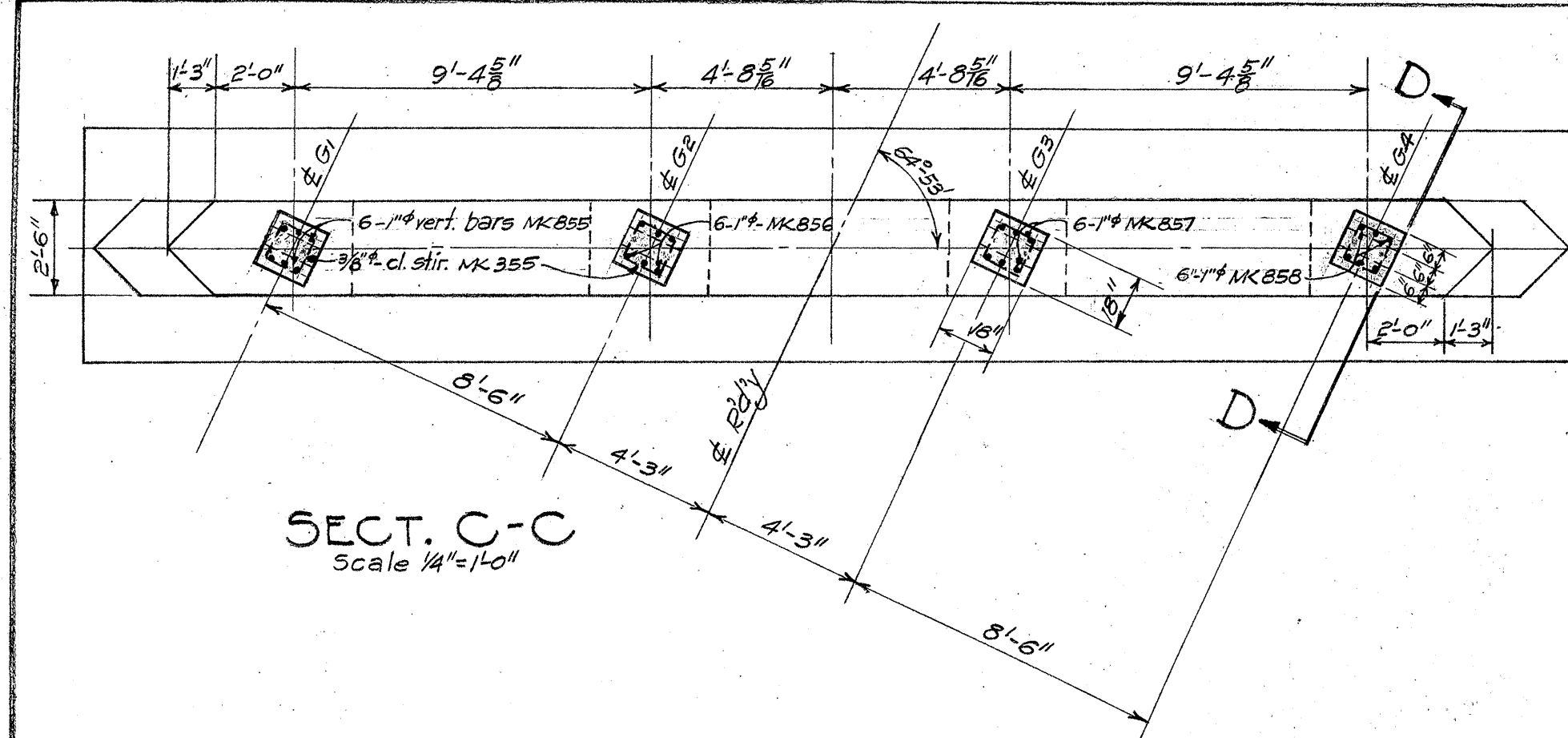
4449.30

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	AC	1938	31	75



TERRITORIAL HIGHWAY DEPARTMENT.
 TERRITORY OF HAWAII.
 CANAL BRIDGE.
 WAIANAE ROAD F.A.R. 4-C.
 DATE MAR 1938 SCALES AS NOTED
 SHEET NO 5 OF 9 SHEETS.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4-C	1938	32	75



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

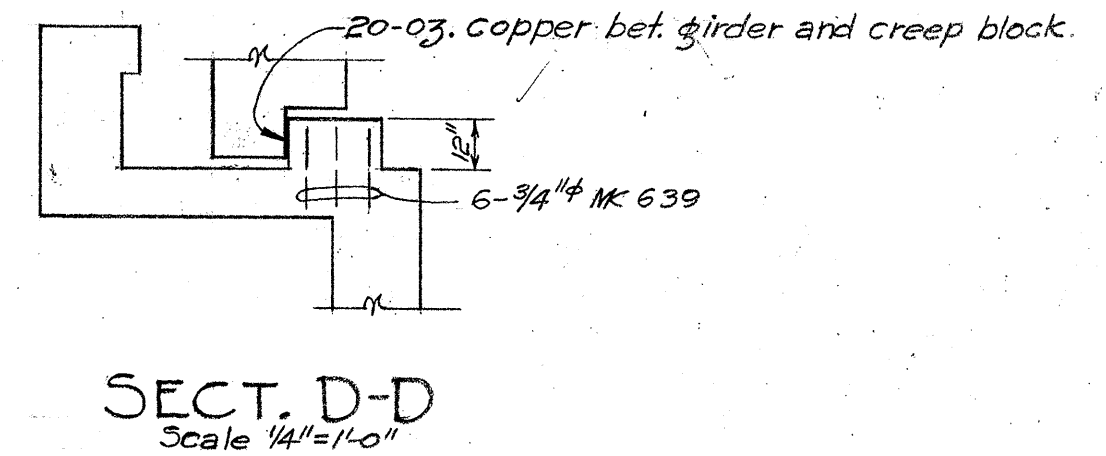
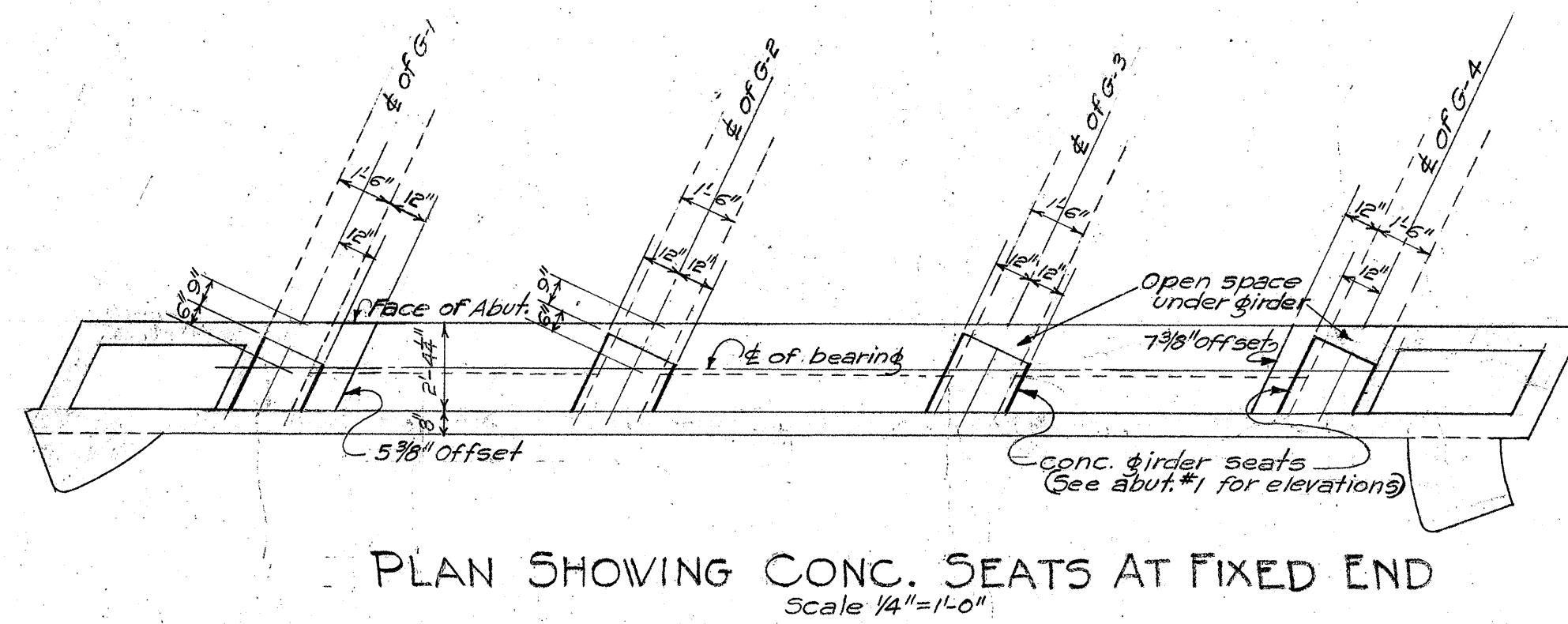
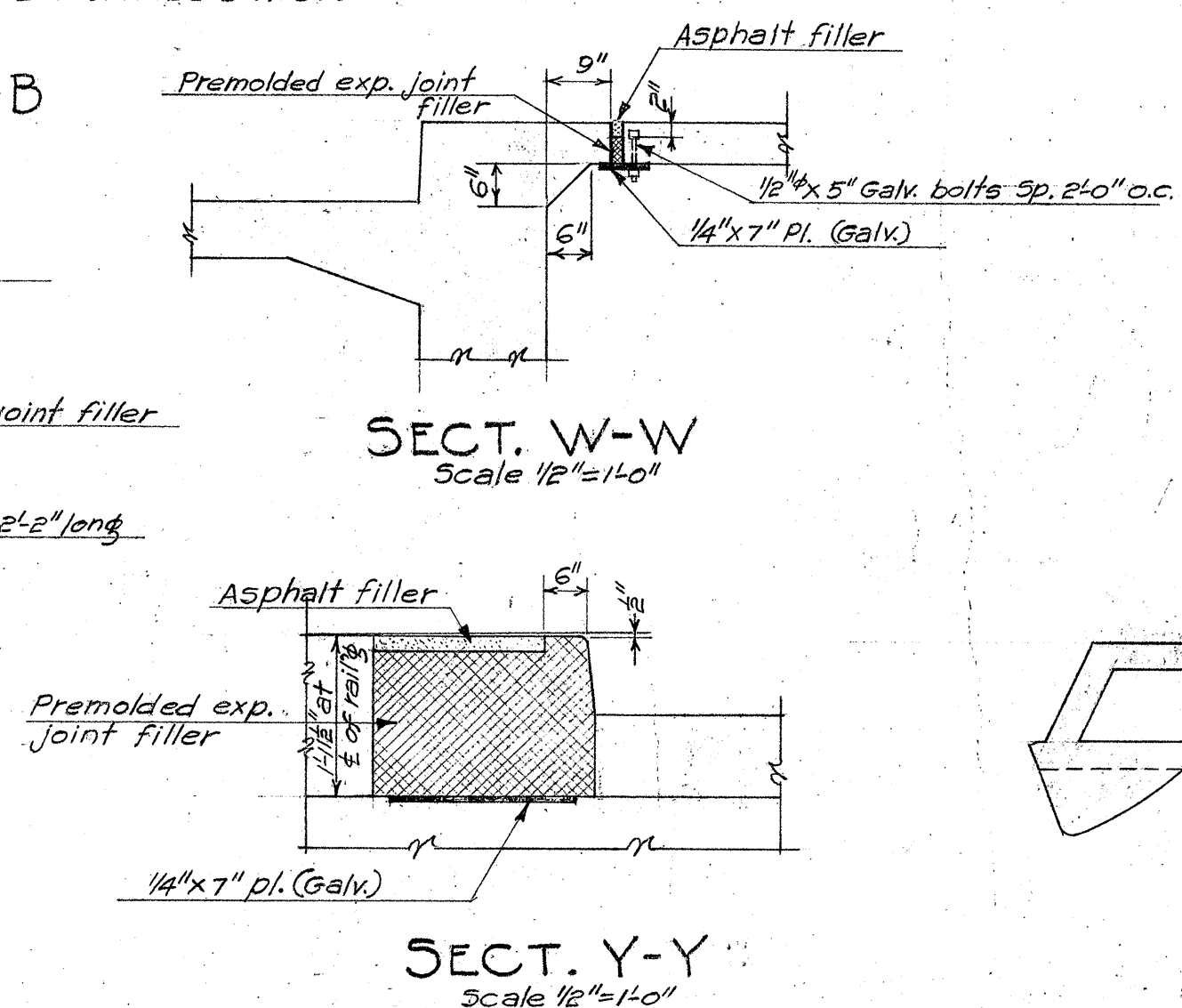
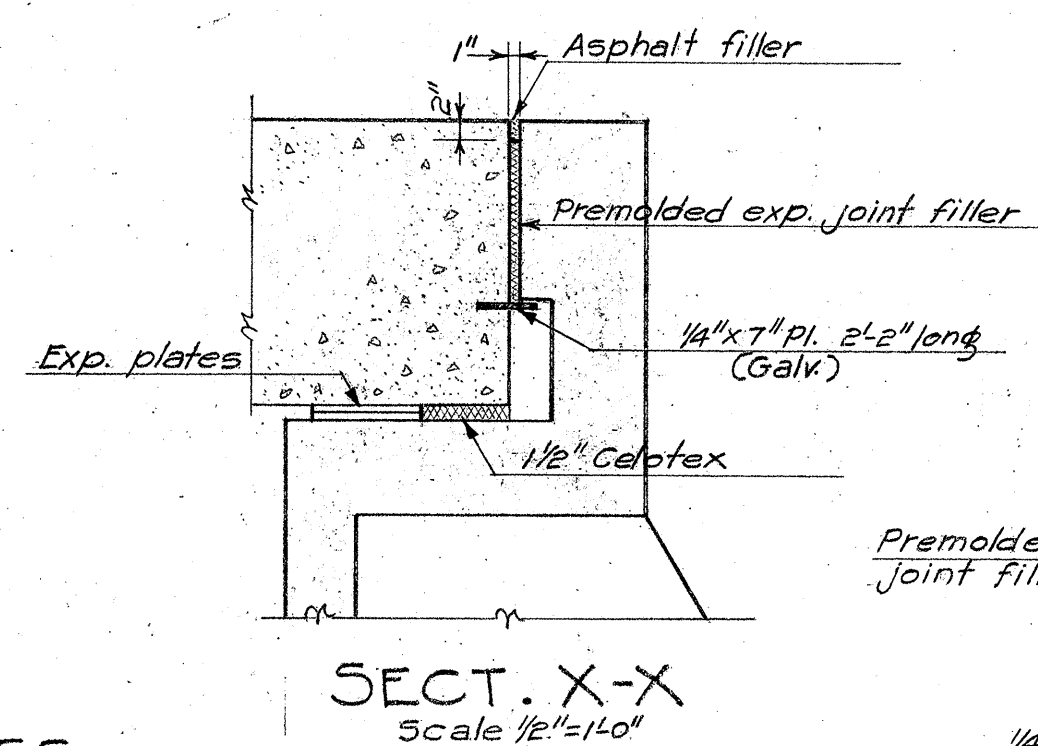
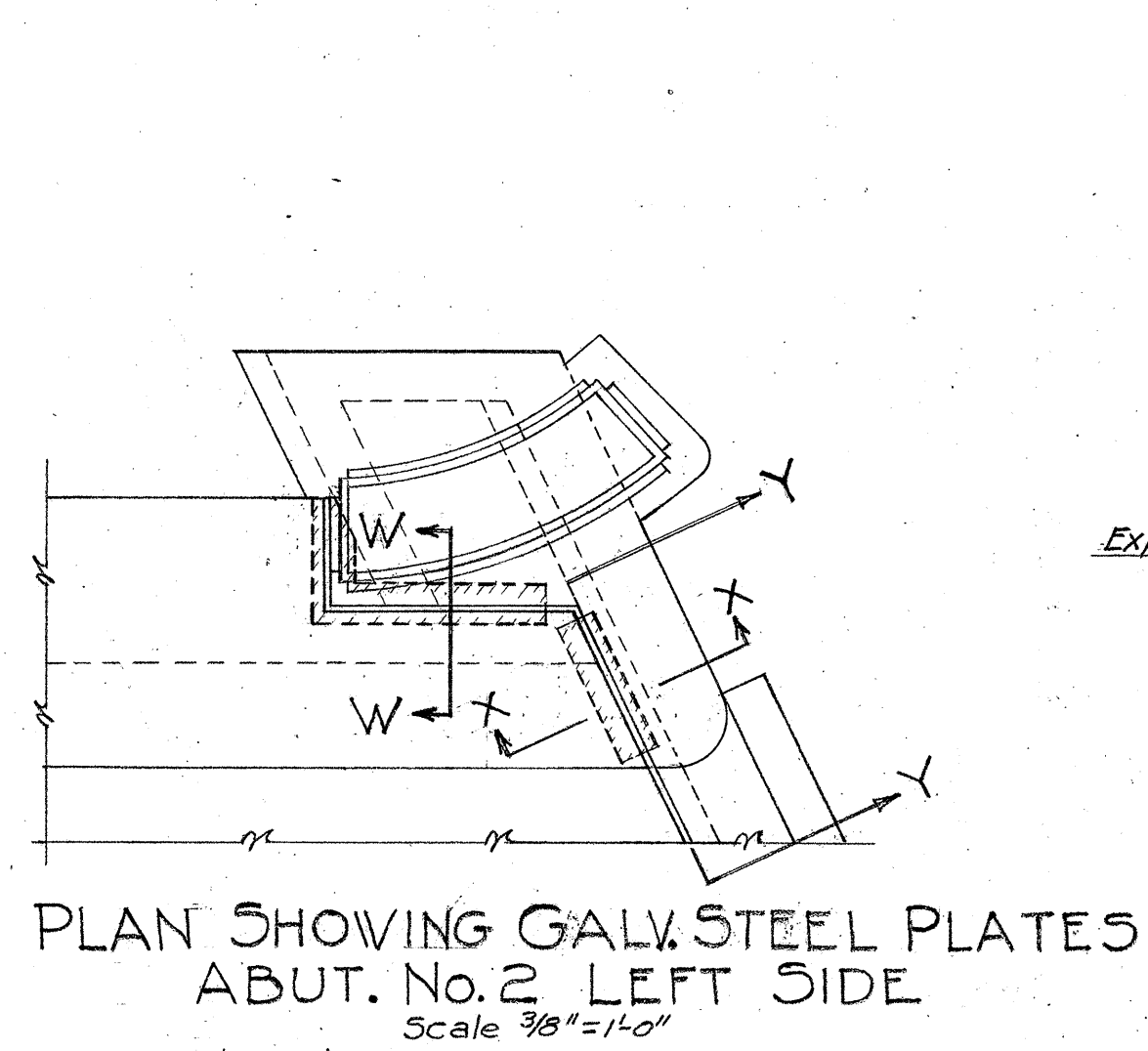
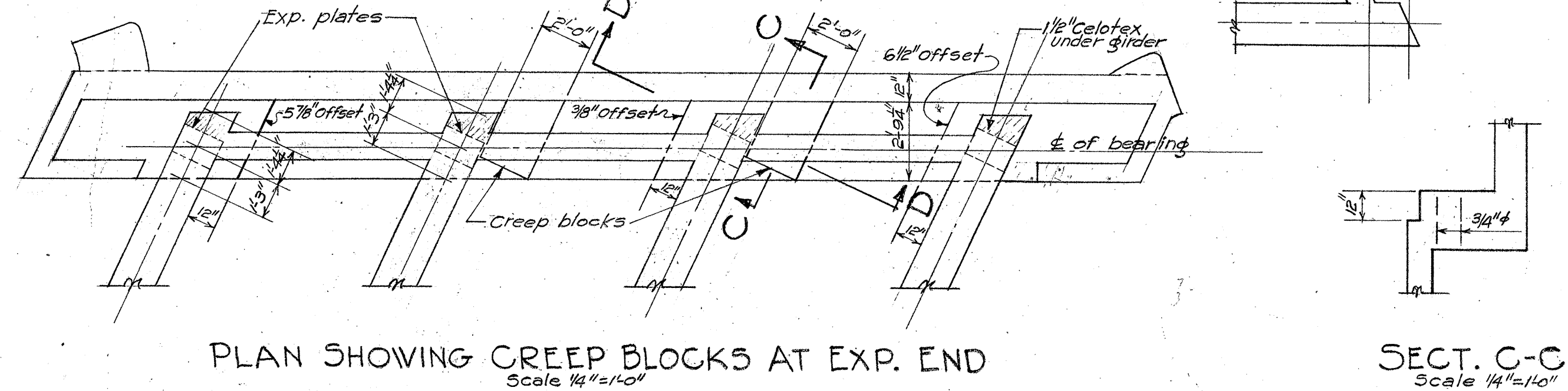
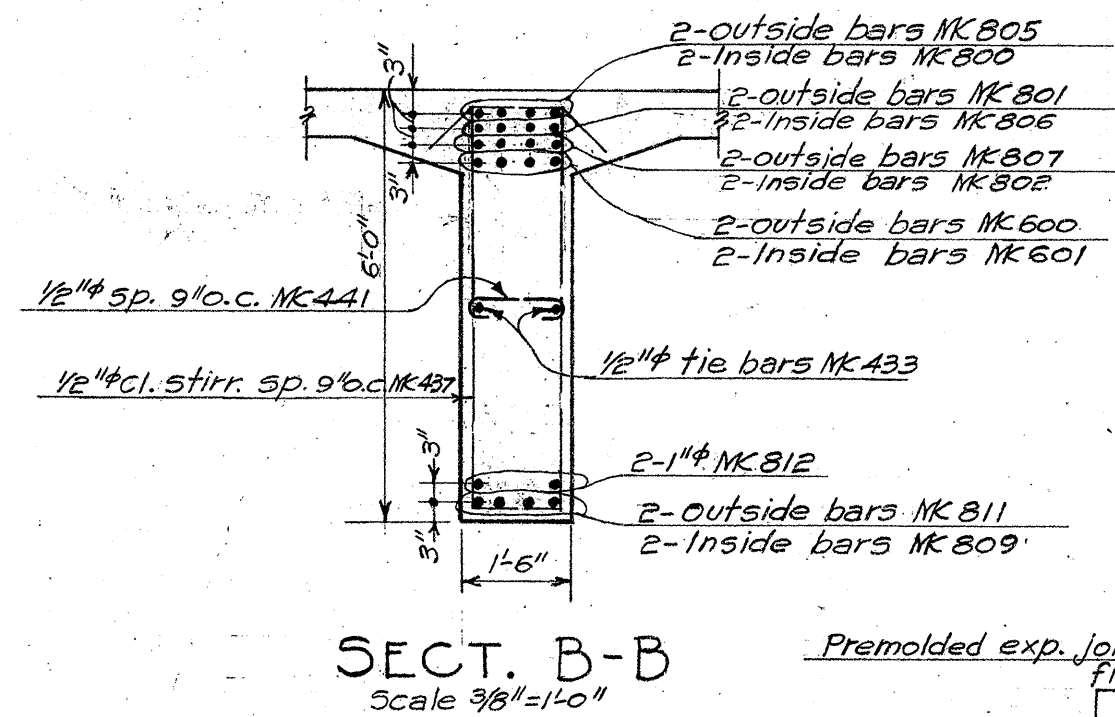
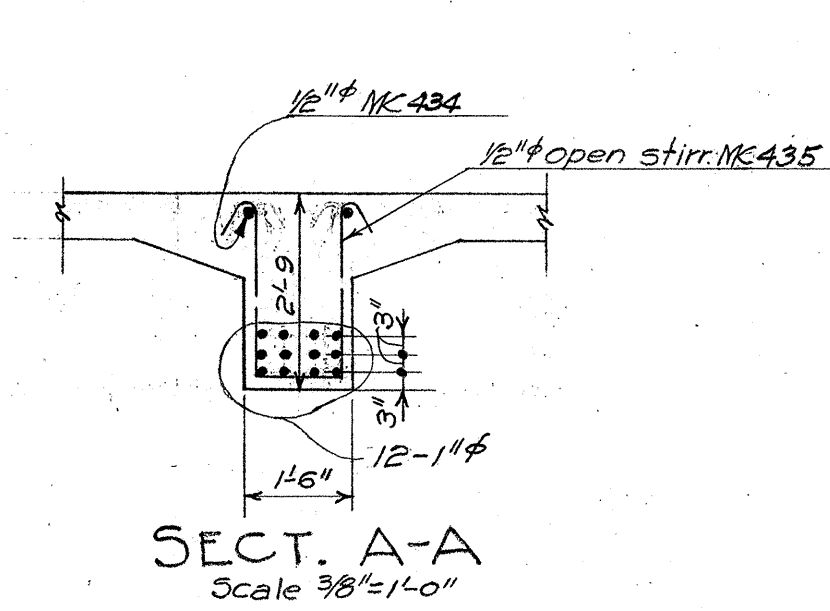
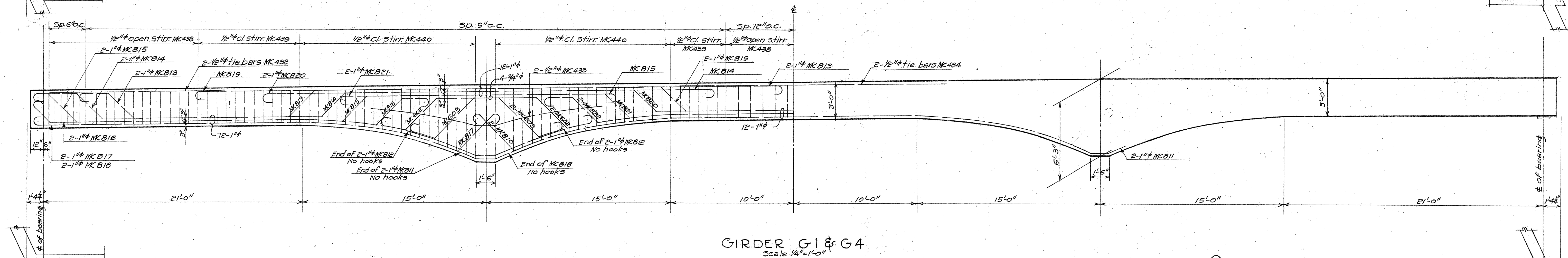
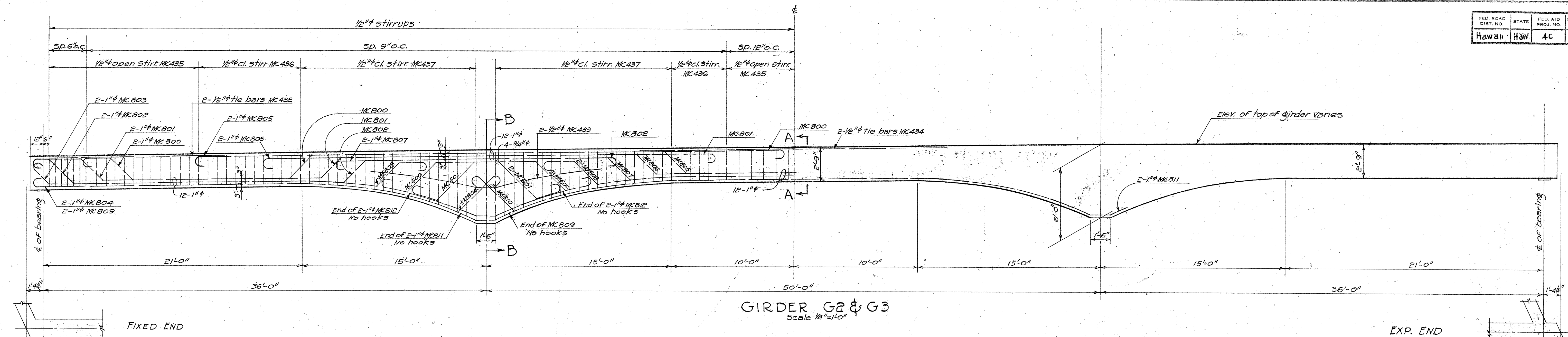
CANAL BRIDGE

VAIANAE ROAD F.A.P. 4-C

DATE: MARCH 1938 SCALES AS NOTED

SHEET NO. 6 OF 9 SHEETS.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	HAW	4C	1938	33	75



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

CANAL BRIDGE

VAIANAE ROAD F.A.P. 4-C

DATE: MARCH 1938 SCALES AS NOTED

SHEET NO. 7 OF 9 SHEETS.

ORIGINAL PLAN	SURVEY PLOTTED BY		DATE
	FORWARDED BY	W. R. Barfels	Feb. 17/28
	BY	P. Kang	" Mar "
NOTE BOOK	PLANNED BY		" " "
	QUANTITIES BY T. J. P. Eck by F. Hart		" " "
No. _____	CHECKED BY		" " "
	W. R. Barfels		" " "

RAILING LAYOUT

Scale 1/4" = 1'-0"

Note! All elevations are given along $\pm$ of bearing.

TRANSVERSE BEAM AT EXP. END
Scale $\frac{3}{8}'' = 1'-0''$

SECT. A-A
Scale $\frac{3}{8}'' = 1'-0''$

SECT. B-B
Scale 3/8" = 1'-0"

SECT. D-D
Scale 3/8"=1'-0"

SECTION E-E
Scale $\frac{3}{8}'' = 1'-0''$

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

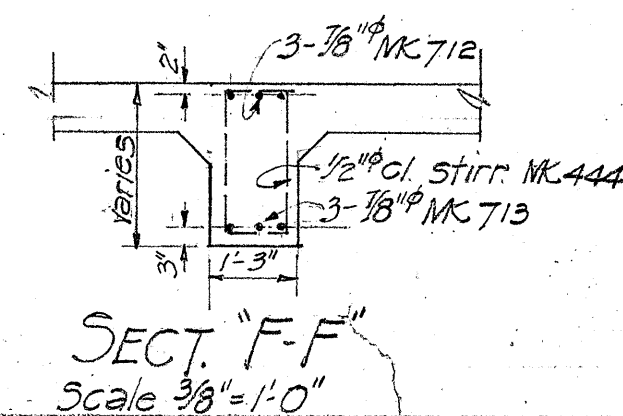
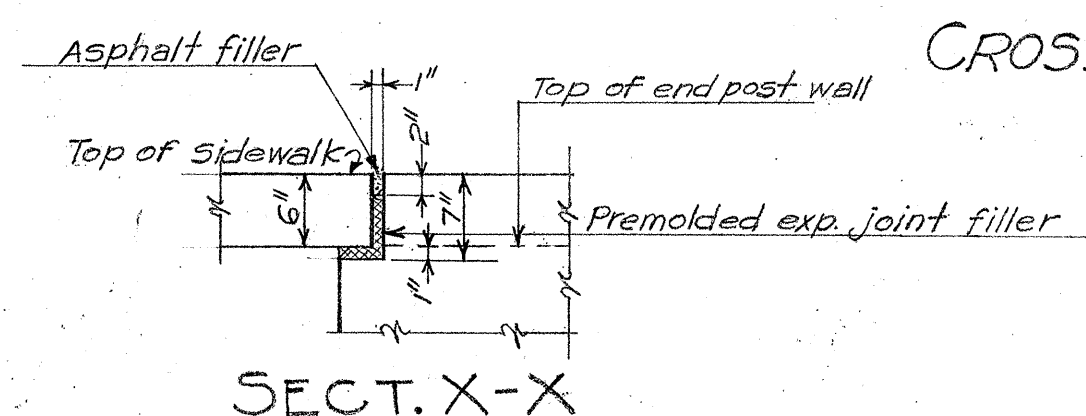
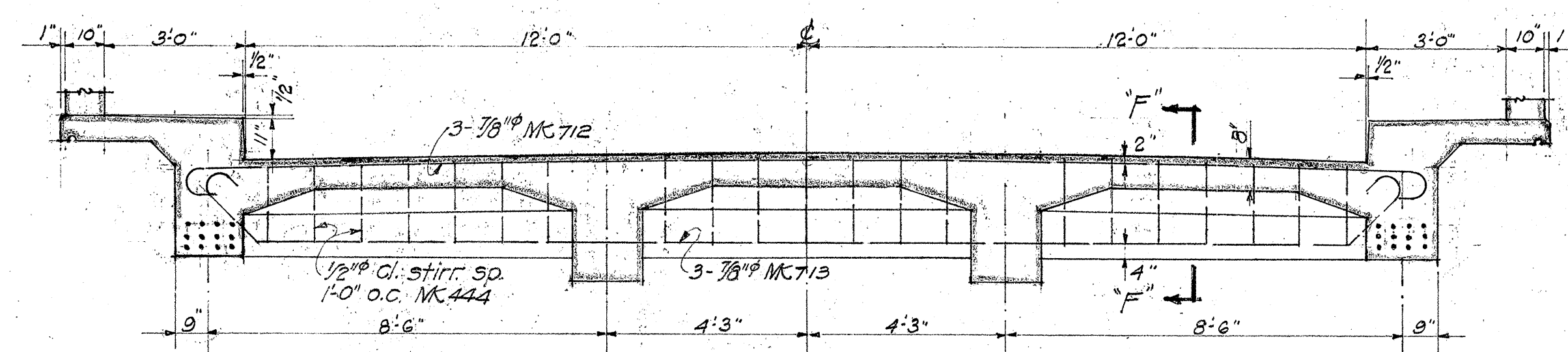
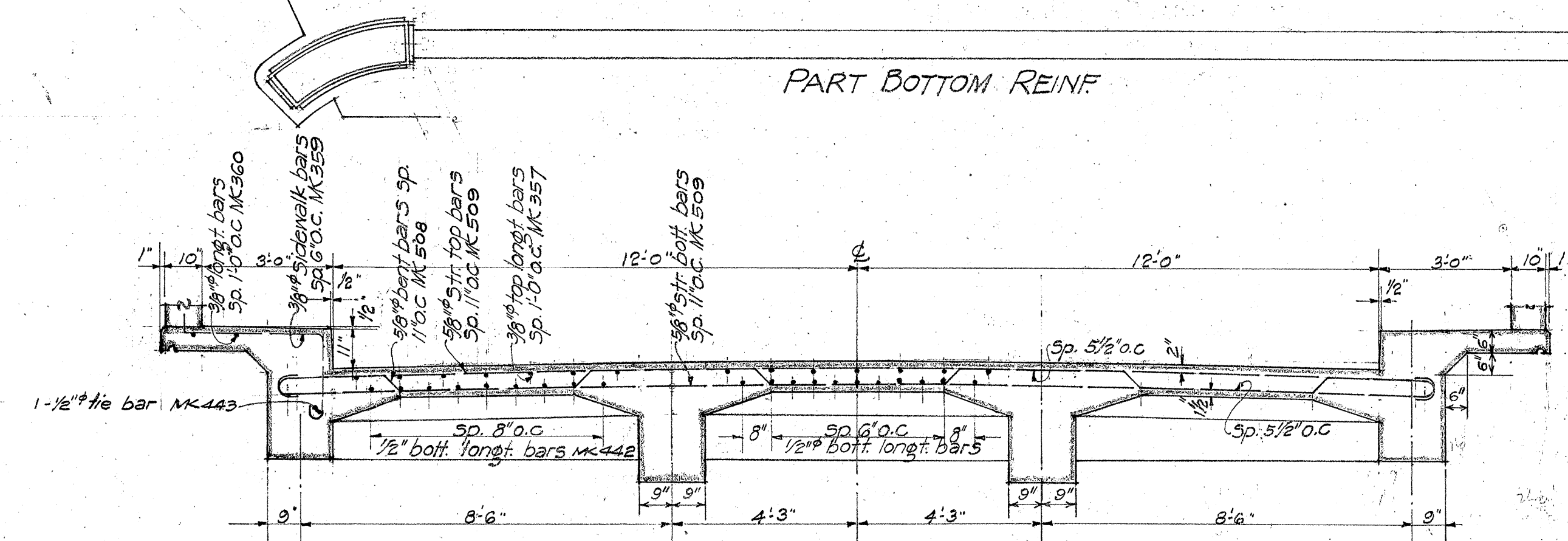
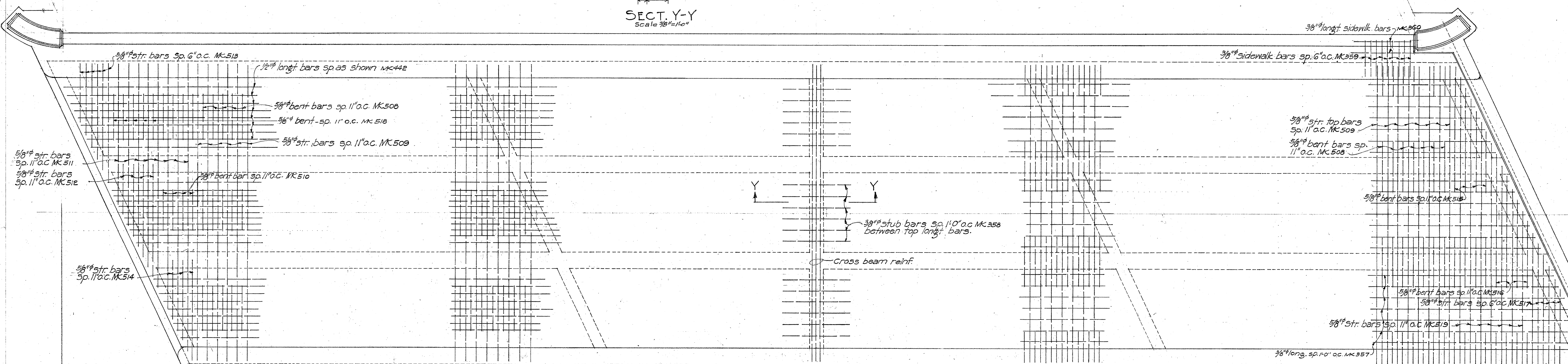
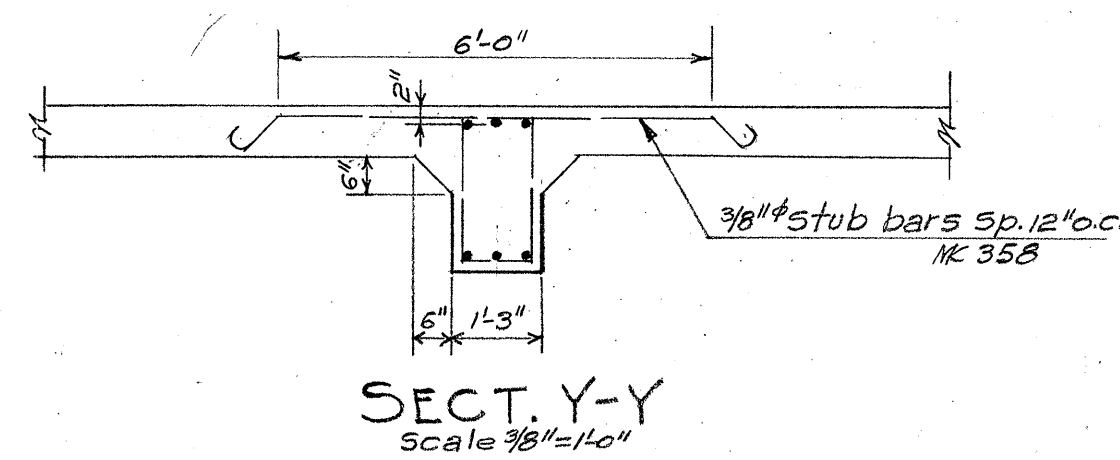
CANAL BRIDGE

WAIANAE ROAD F.A.P. 4-C
DATE: MARCH 1938 SCALES AS NOTED

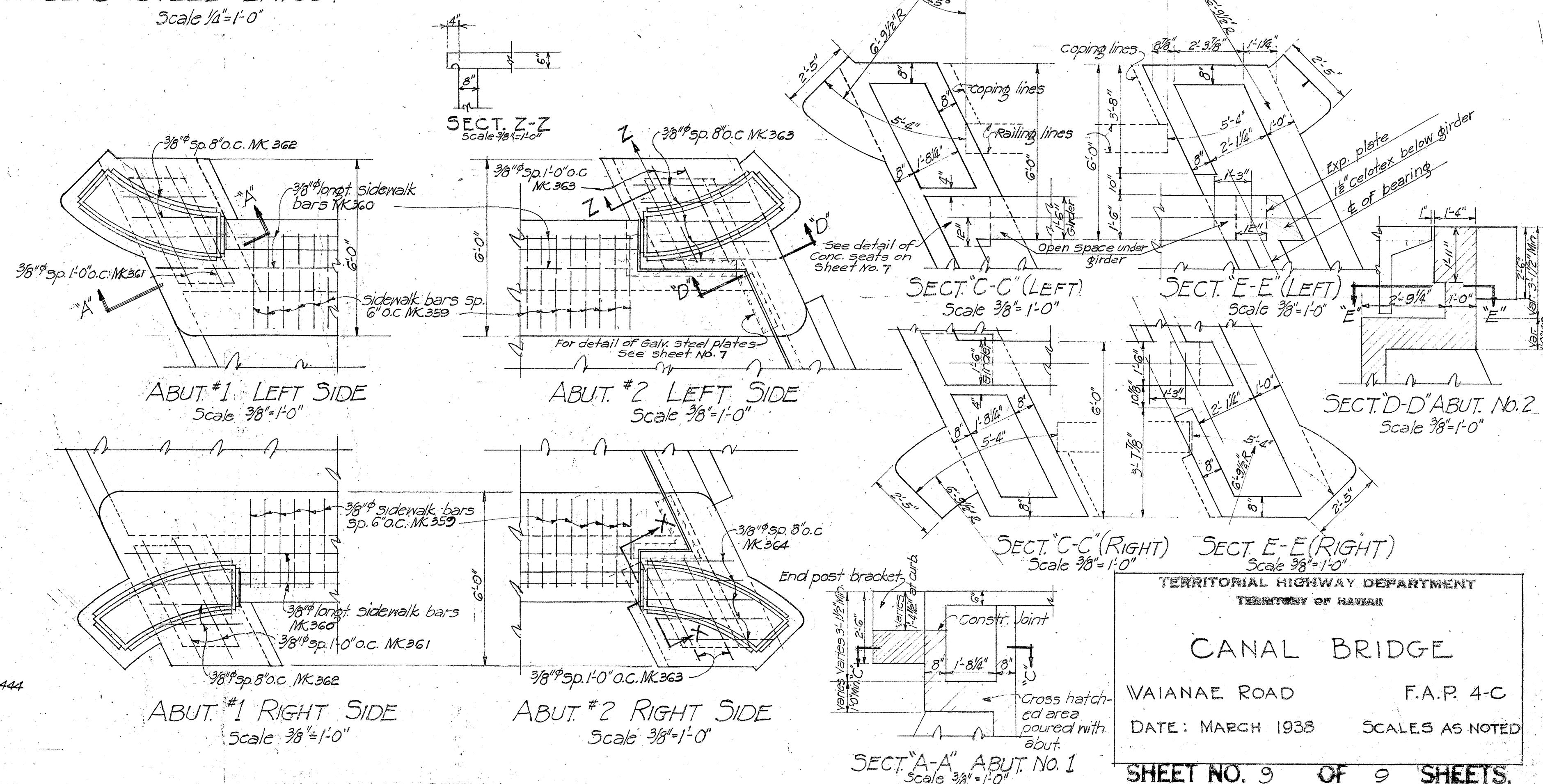
SHEET NO. 8 OF 9 SHEETS.

4449.34

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
HAWAII	HAW	4C	1938	35	75

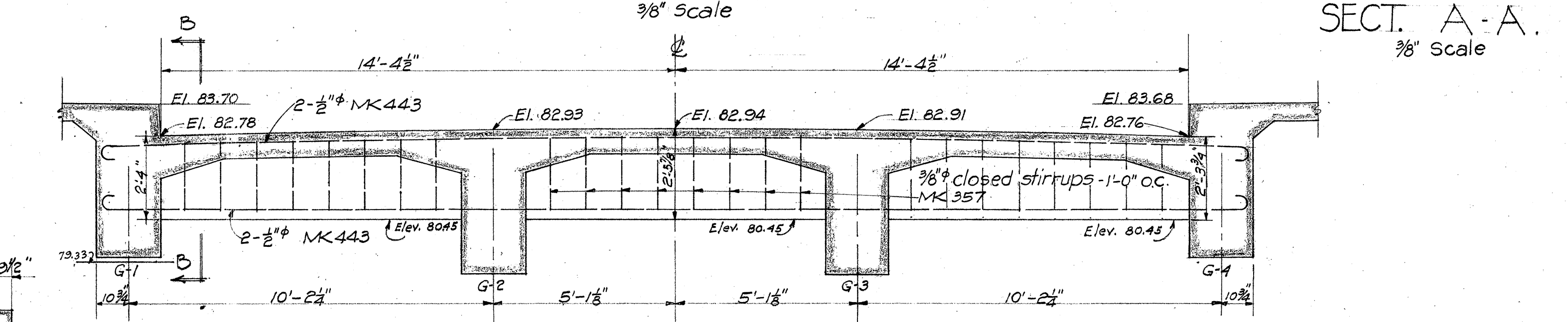
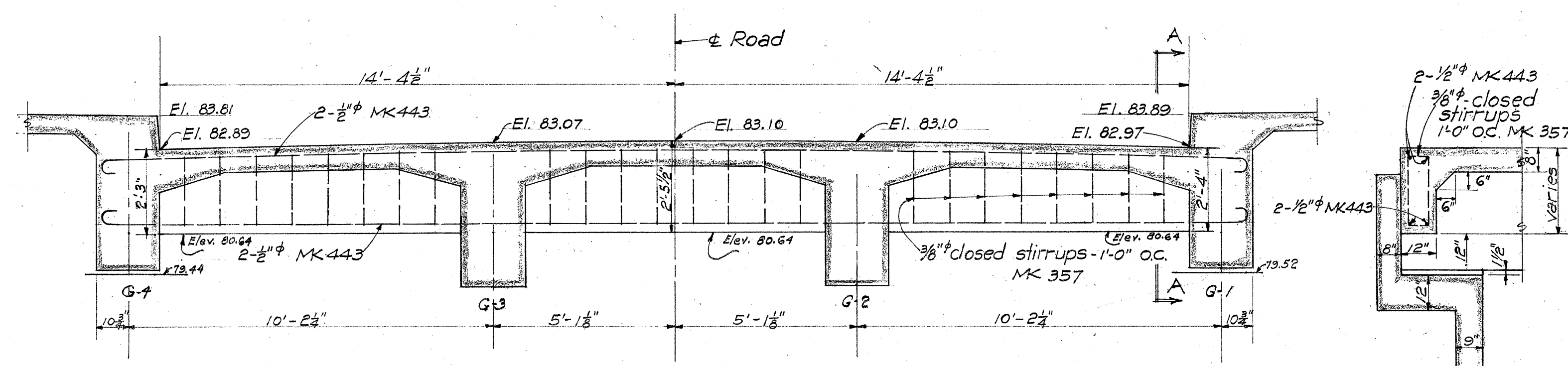
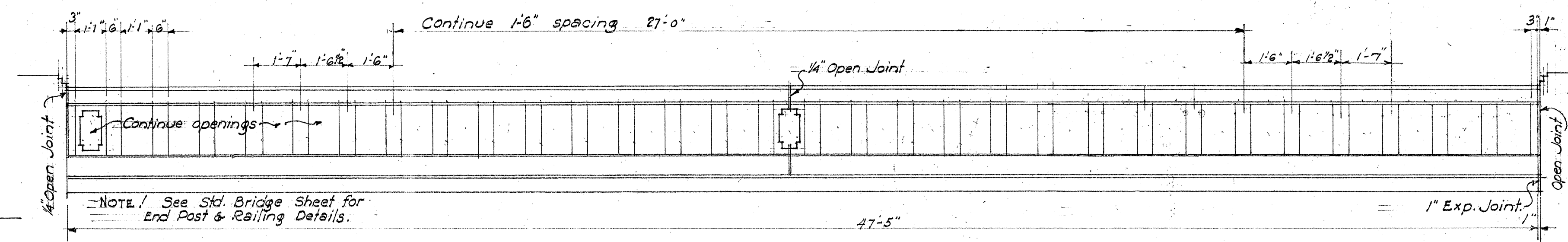
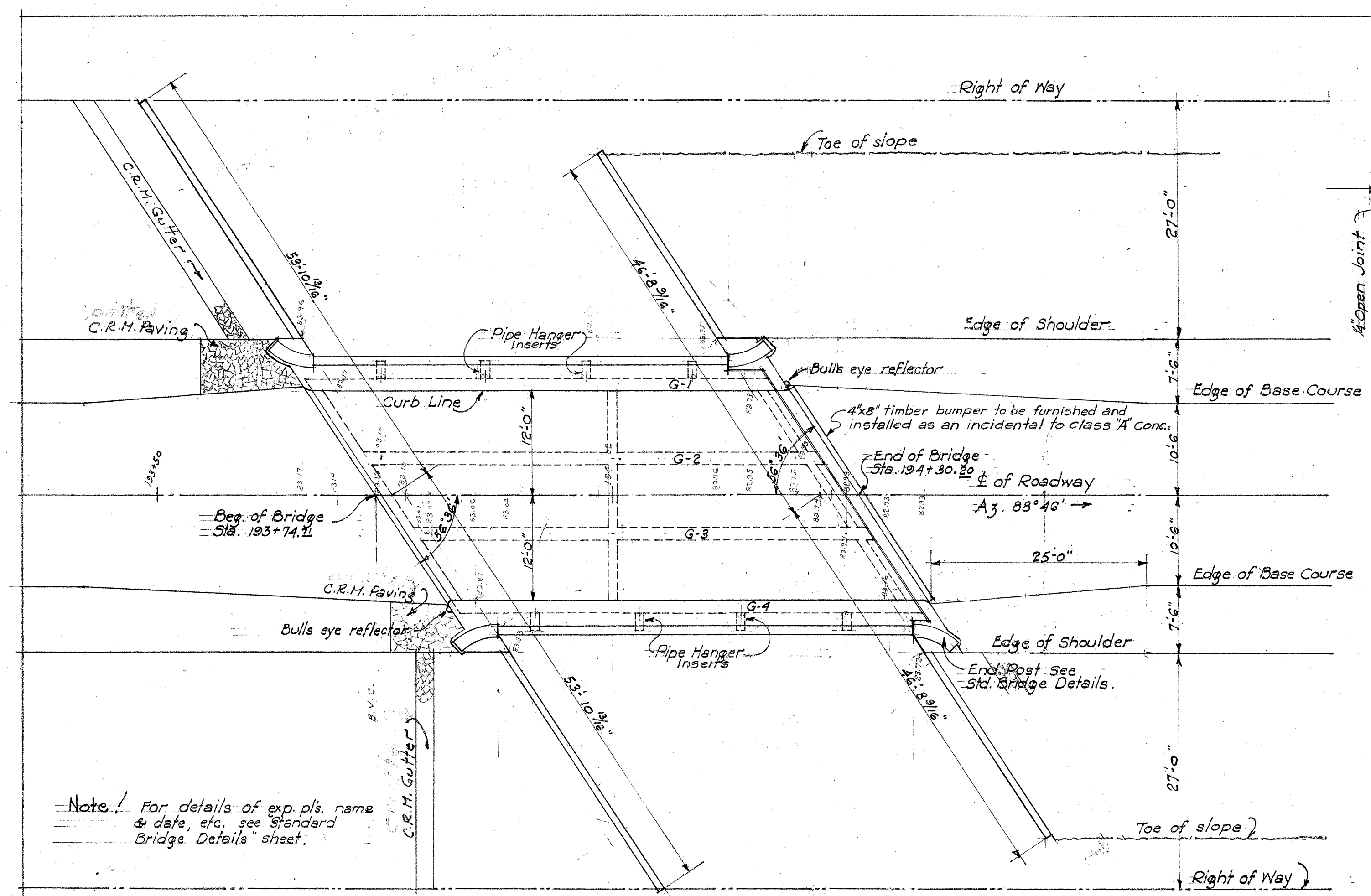


SLAB STEEL LAYOUT
Scale $\frac{1}{4}'' = 1'-0''$



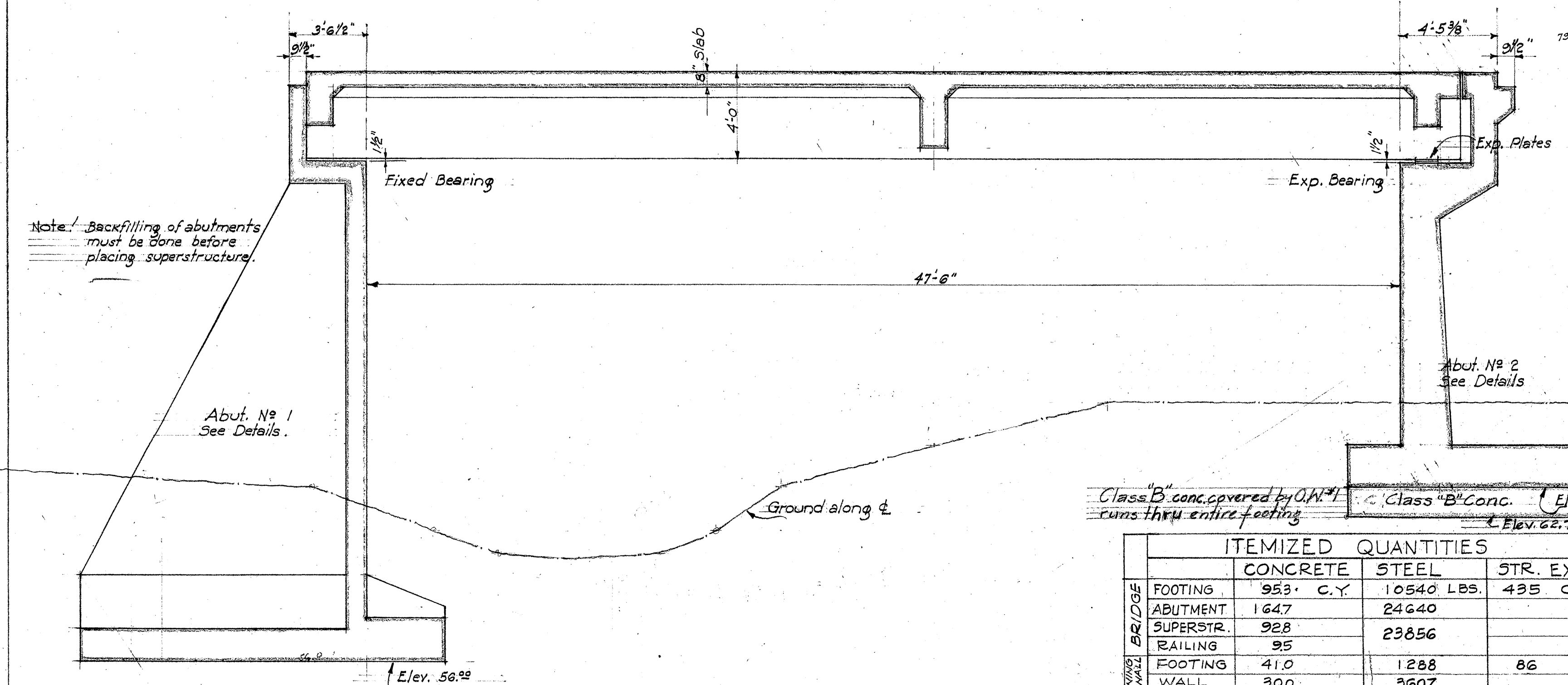
TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 CANAL BRIDGE
 WAIANAE ROAD F.A.P. 4-C
 DATE: MARCH 1938 SCALES AS NOTED
 SHEET NO. 9 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4C	1938	36	75

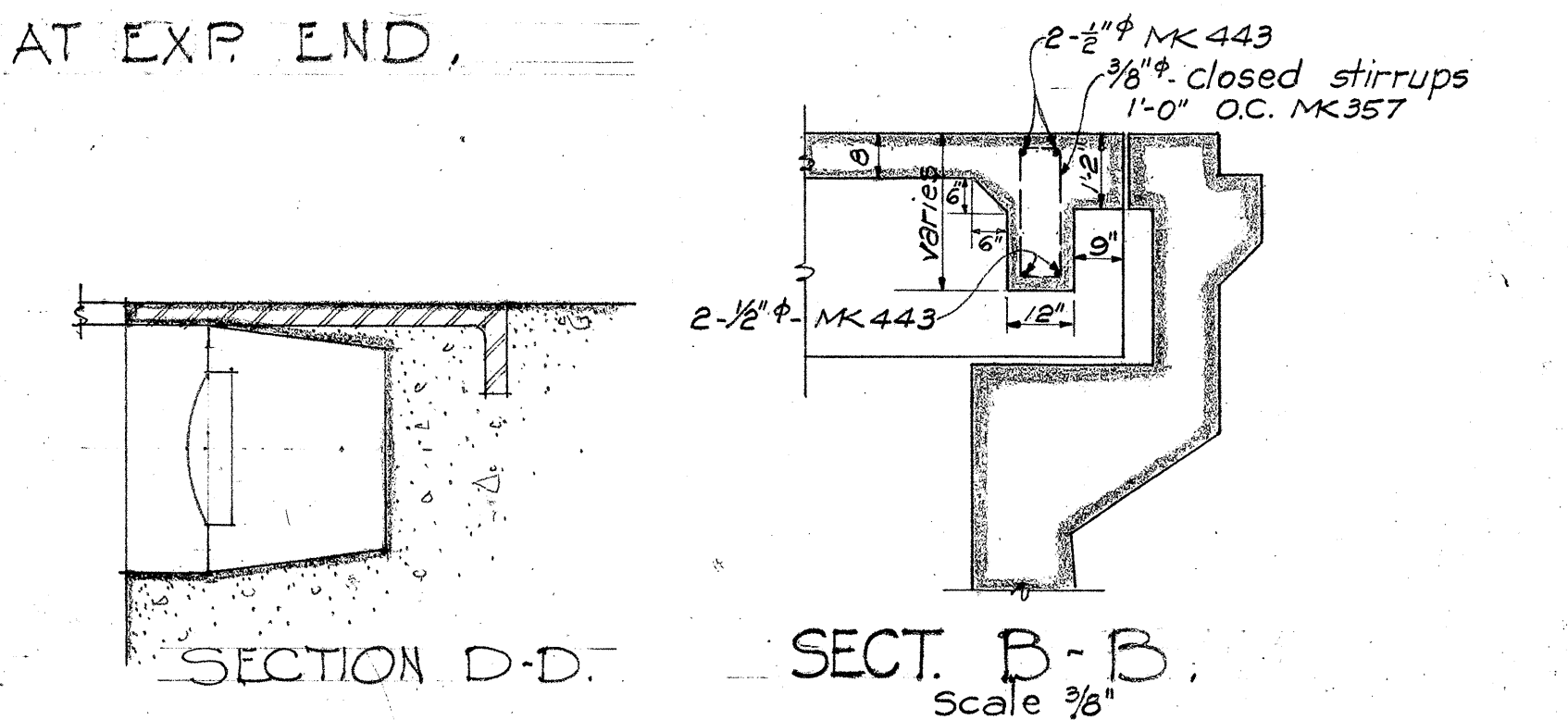
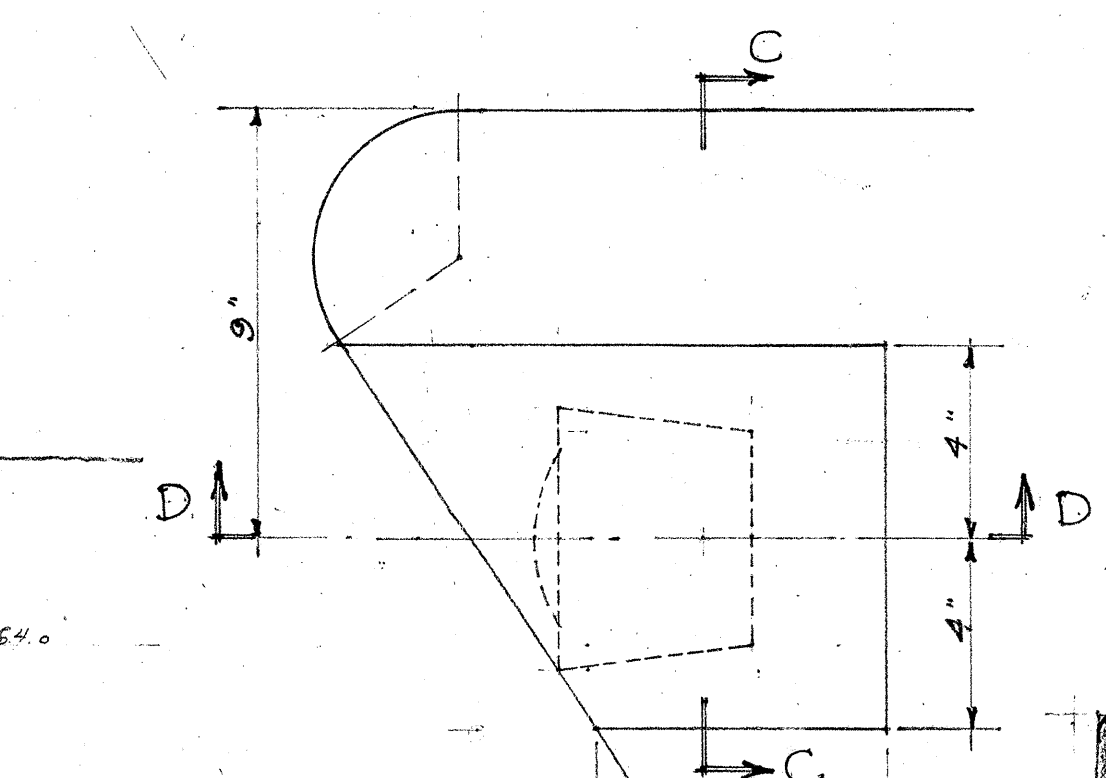


- SPECIFICATIONS FOR ASPHALT FILLER
- Melting Point 190-200 (A.S.T.M. D36-26)
- Penetration 30-40 (A.S.T.M. D5-25)
- Flash Point min. 400 (A.S.T.M. D93-22)

LAYOUT PLAN.
Scale 1"=10'



Note: Backfilling of abutments must be done before placing superstructure.



ITEMIZED QUANTITIES

	CONCRETE	STEEL	STR. EXC.
FOOTING	953 C.Y.	10540 LBS.	435 C.Y.
ABUTMENT	1647	24640	
SUPERSTR.	928	23856	
RAILING	95		
FOOTING	410	1288	86
WALL	300	3607	
TOTALS	4333 C.Y.	63931 LBS.	521 C.Y.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII.

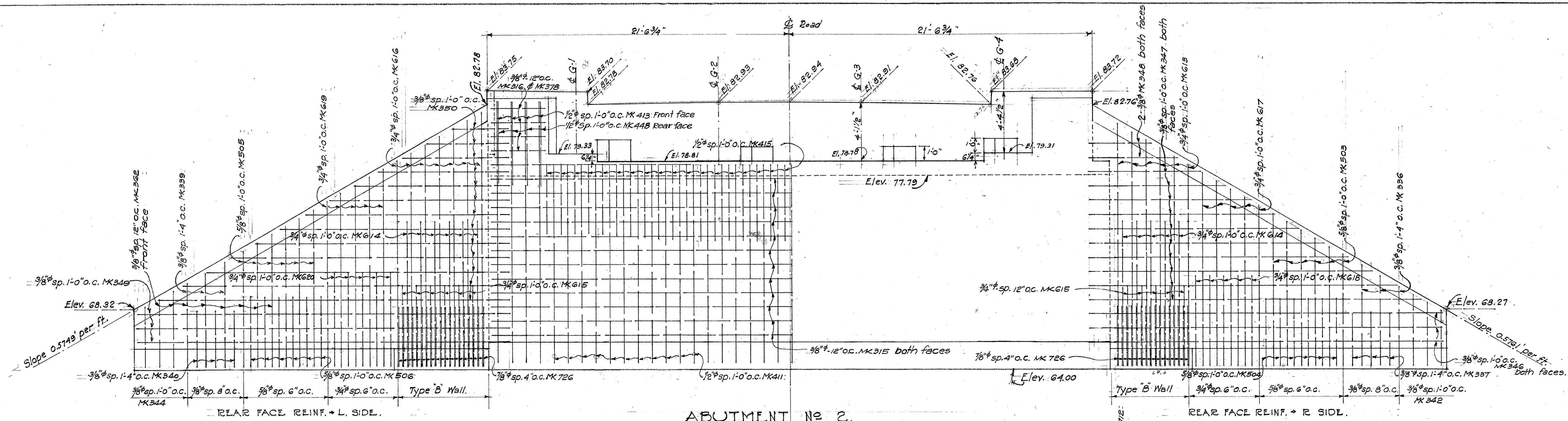
HONOULIULI BRIDGE.

WAIANAE ROAD F.A.P. 4-C.
DATE FEB. 1938 SCALES AS NOTED

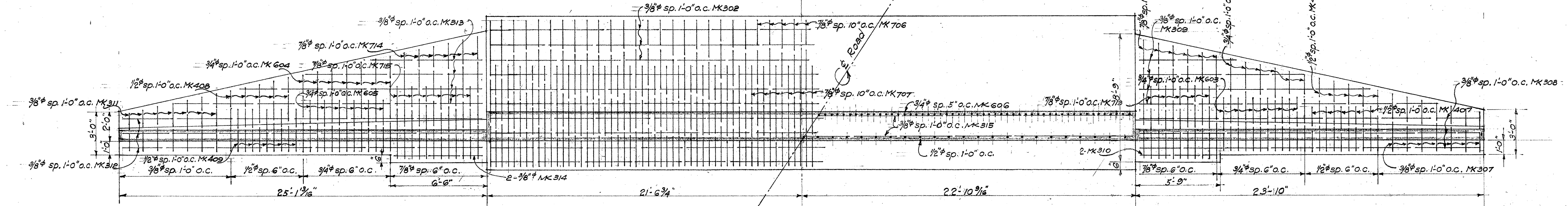
SHEET NO 1 OF 6 SHEETS.

4449.36

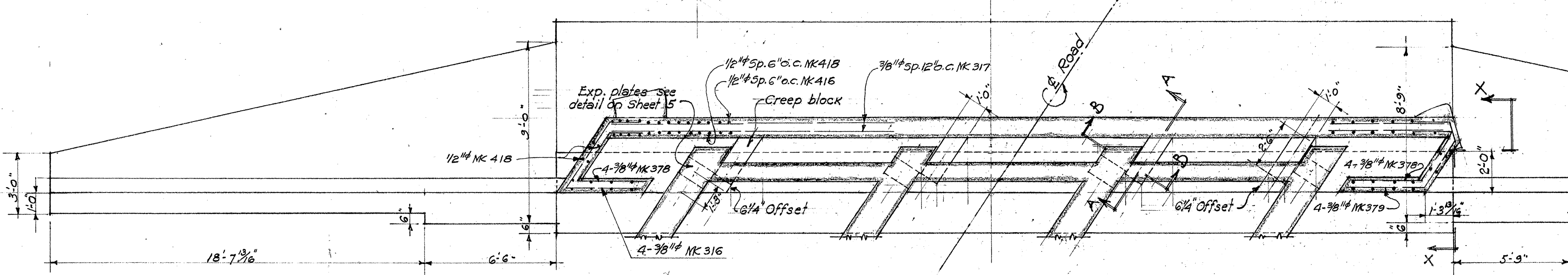
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4C	1938	38	75



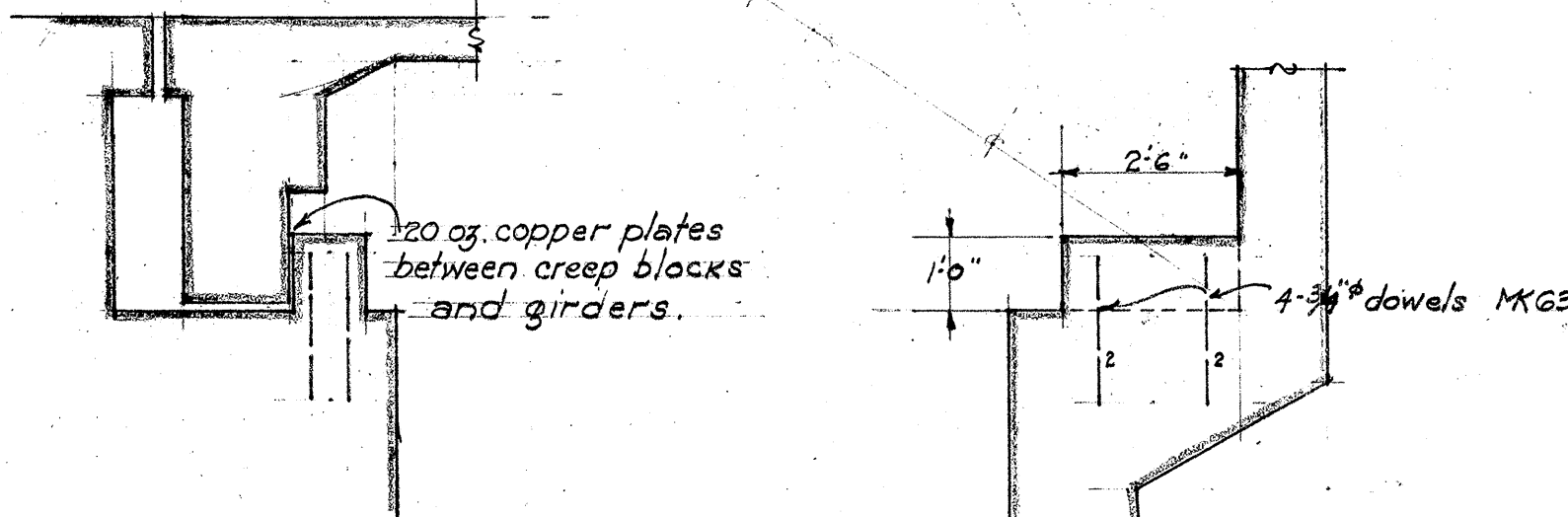
ABUTMENT NO. 2.
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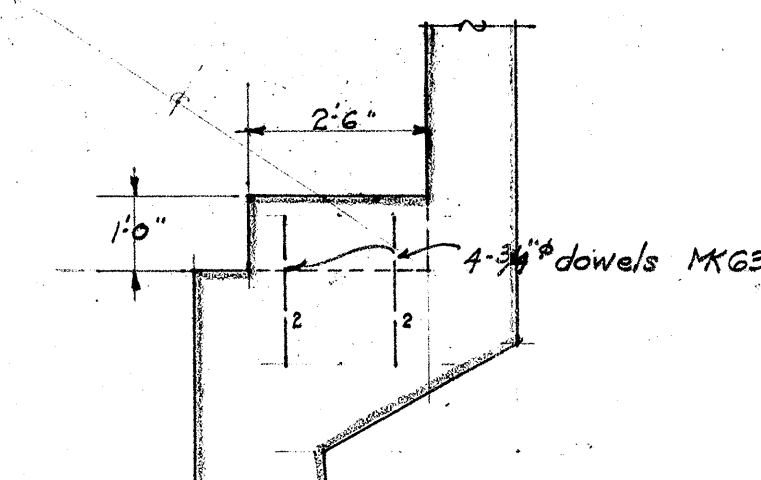
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1/4\" Scale.



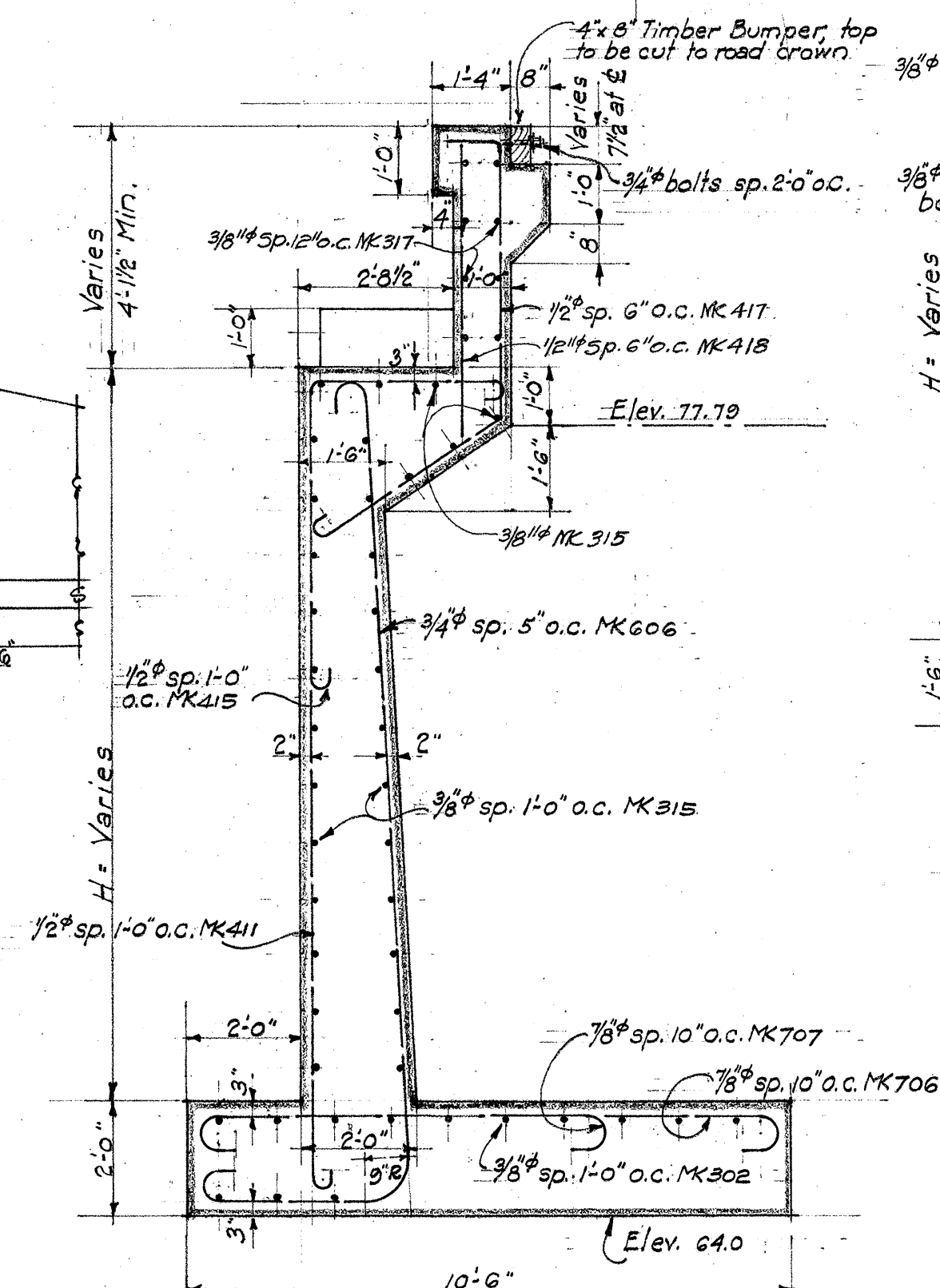
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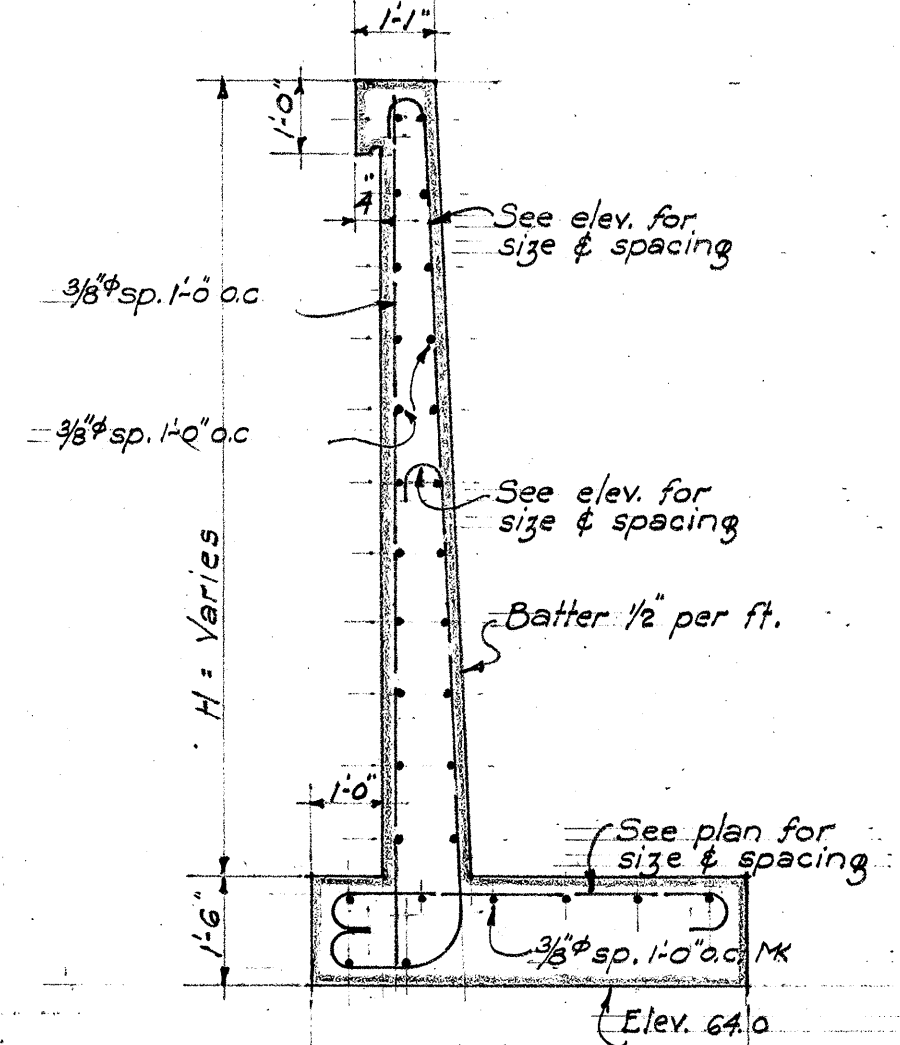
SECTION B-B.
3/8\" Scale.



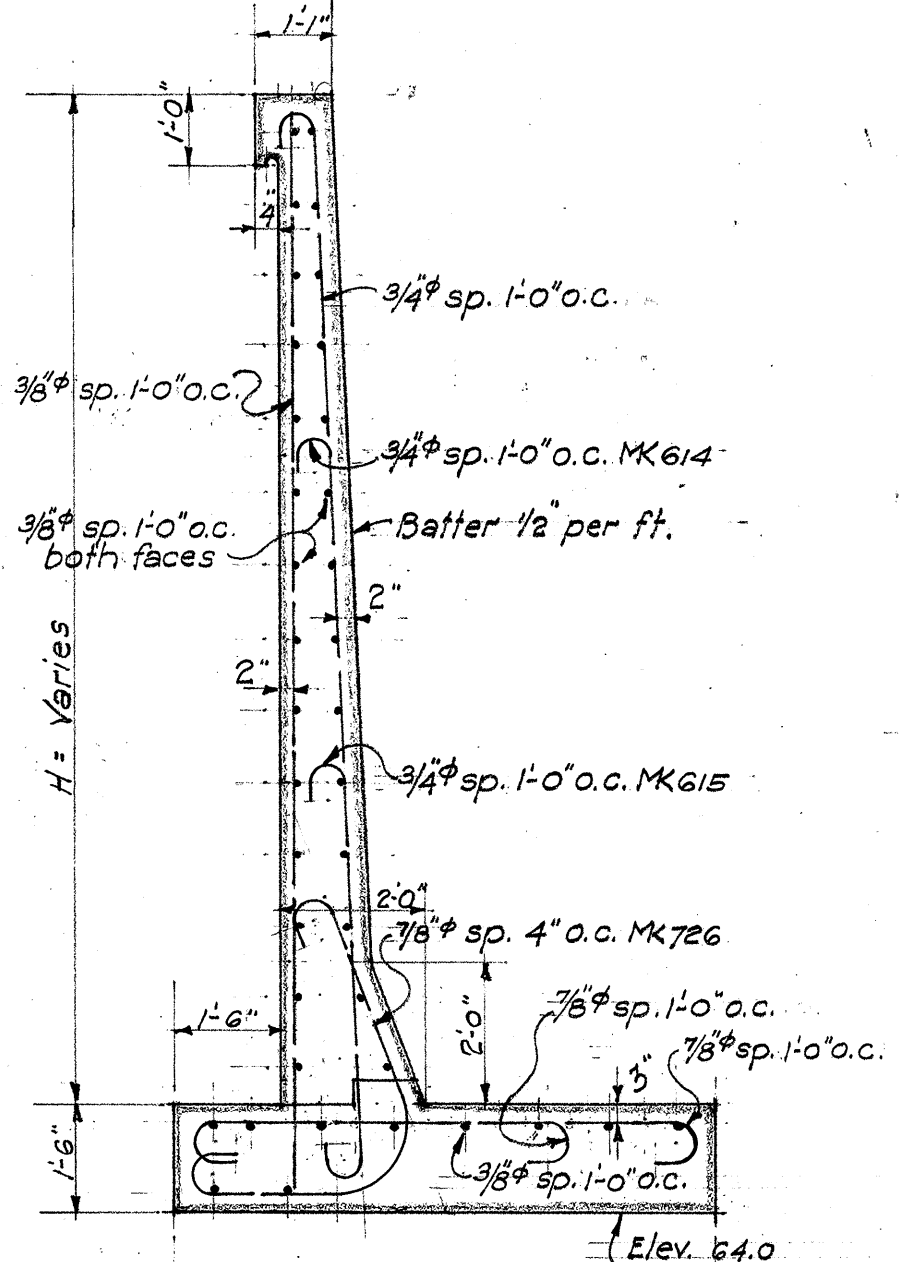
SECTION A-A.
3/8\" Scale.



SEC. THRU ABUT. NO. 2.
3/8\" Scale.



SEC. THRU WING WALLS.
3/8\" Scale.



TYPE 'B' WALL.
3/8\" Scale.

TERRITORIAL HIGHWAY DEPARTMENT.
TERRITORY OF HAWAII.

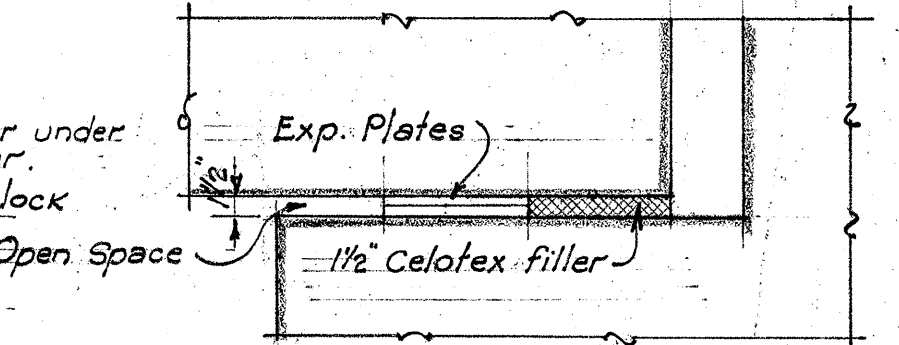
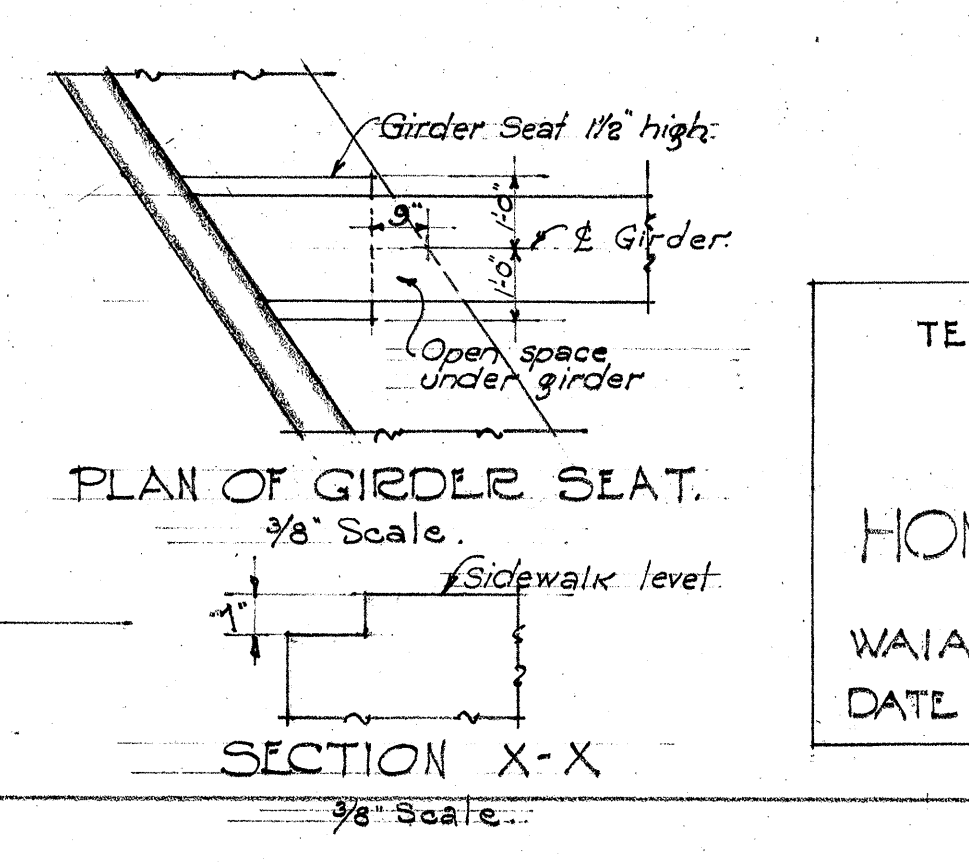
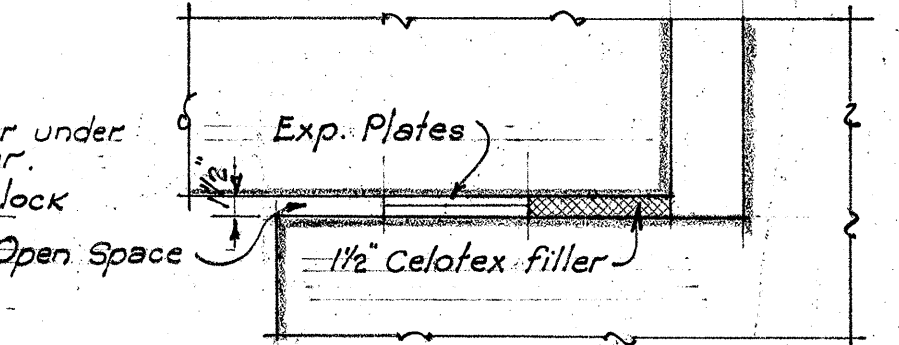
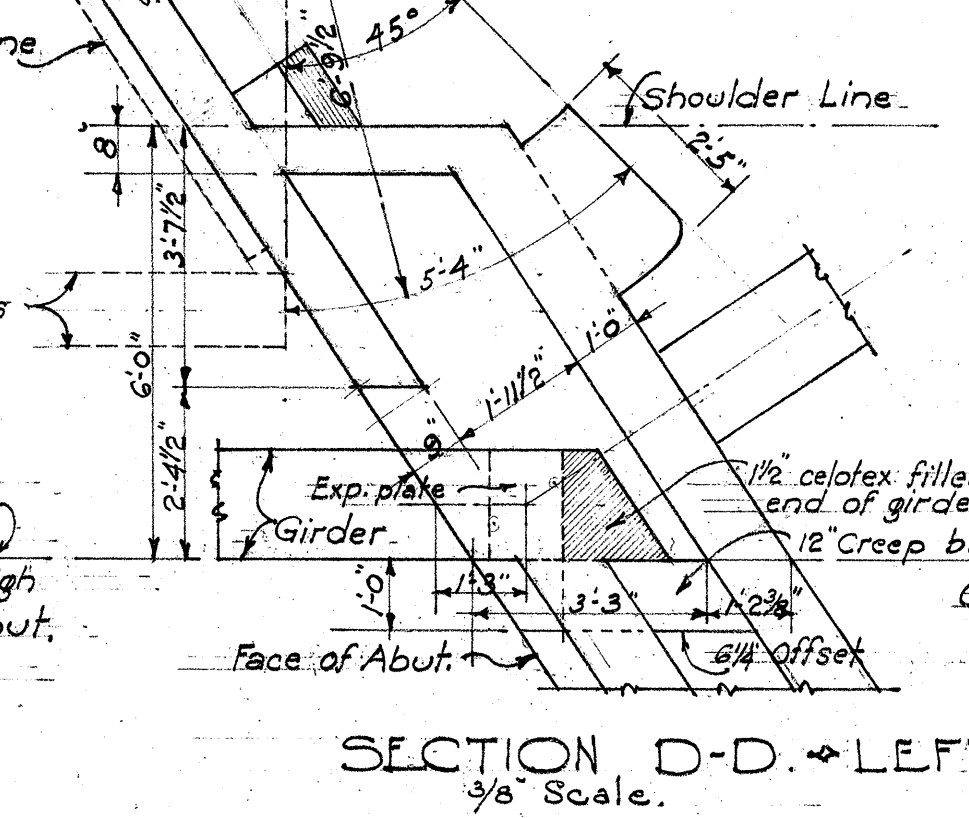
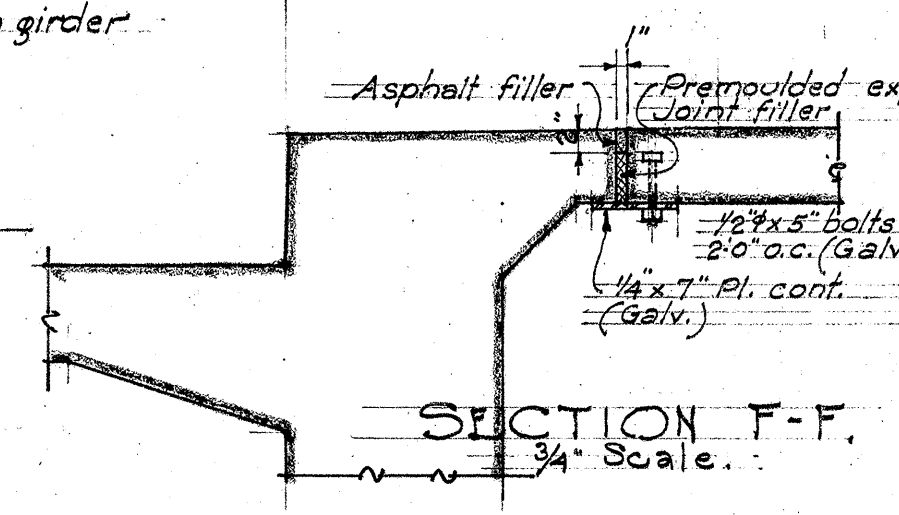
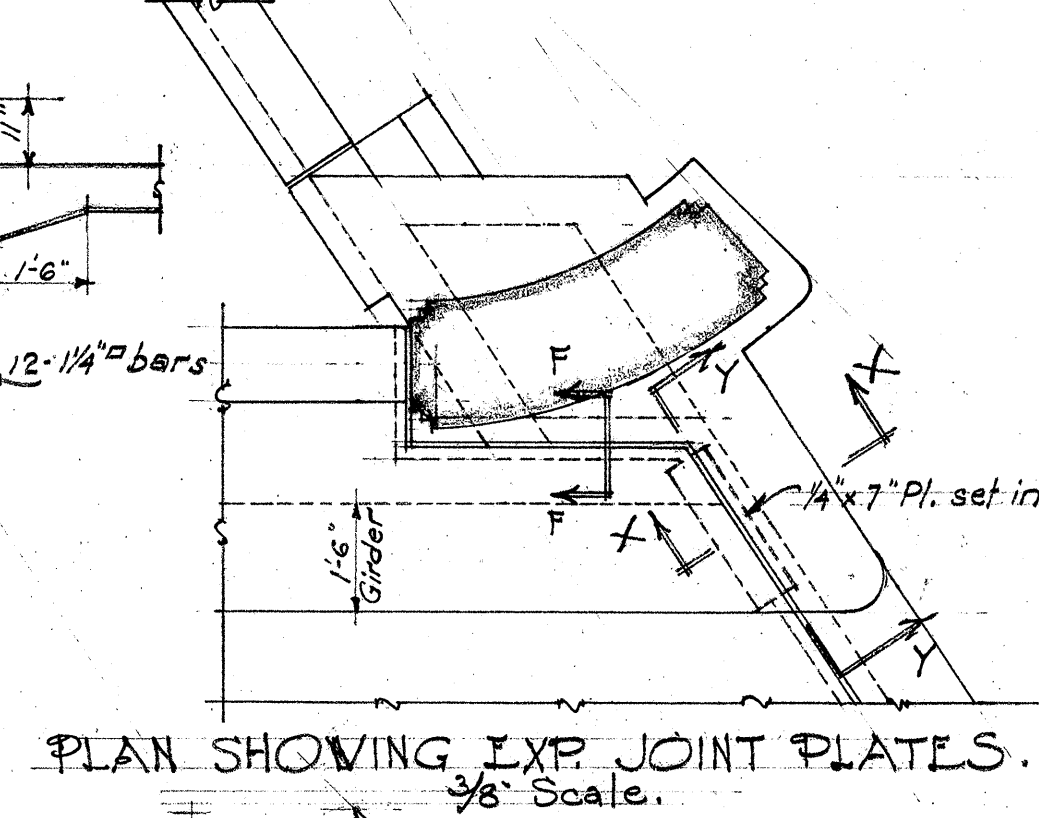
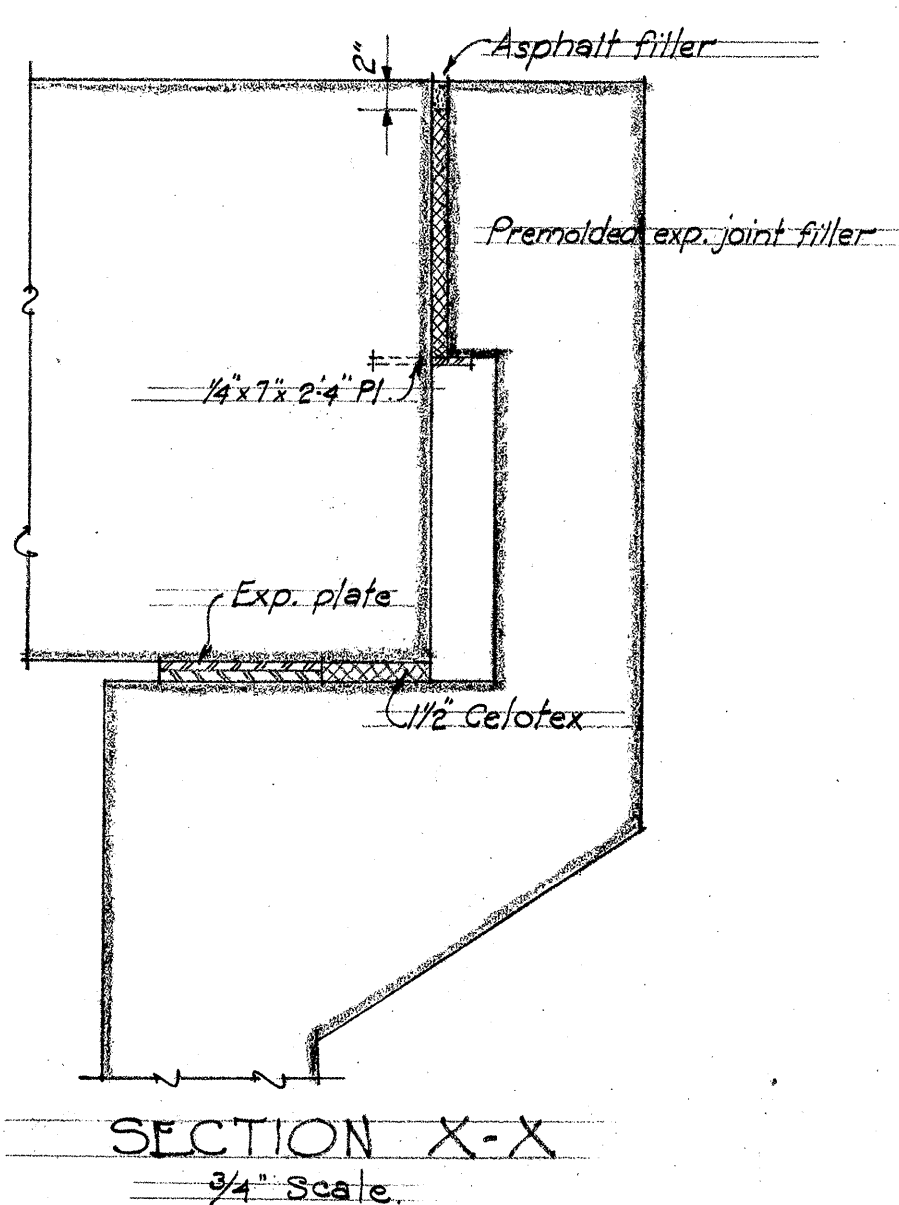
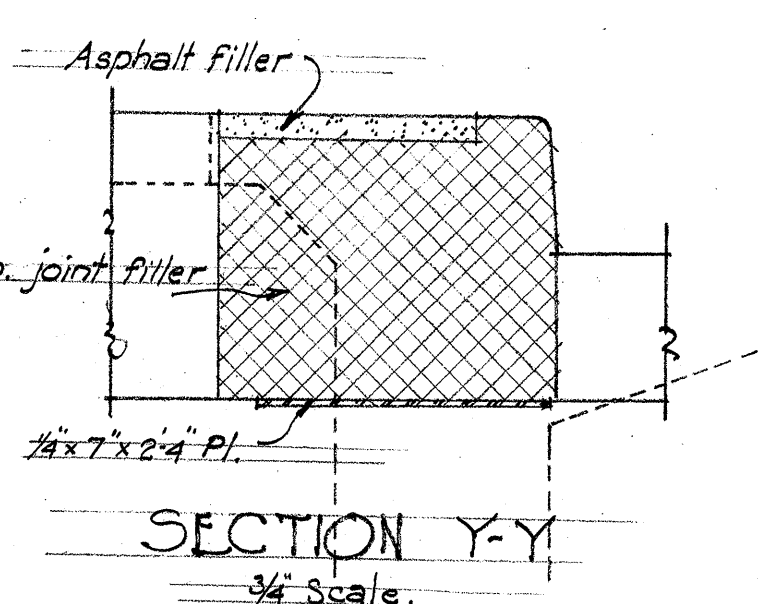
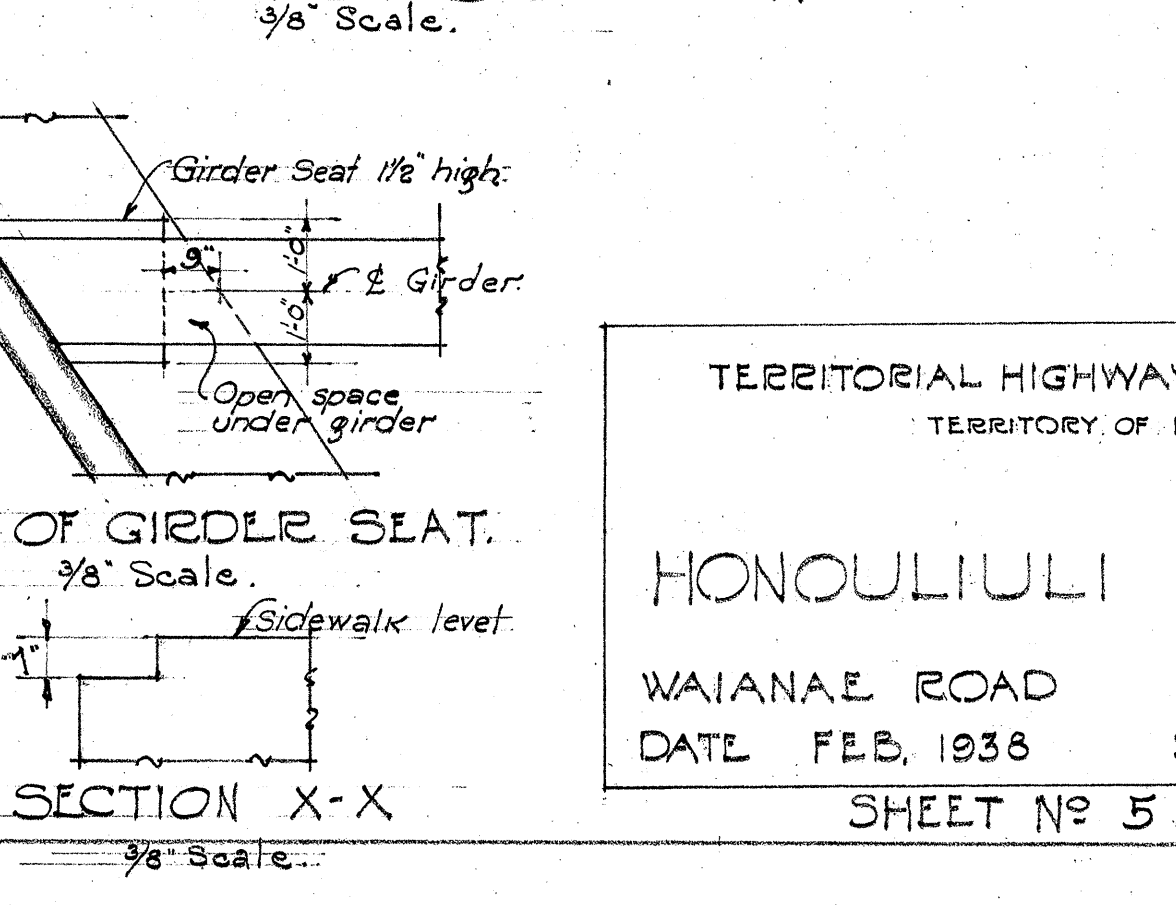
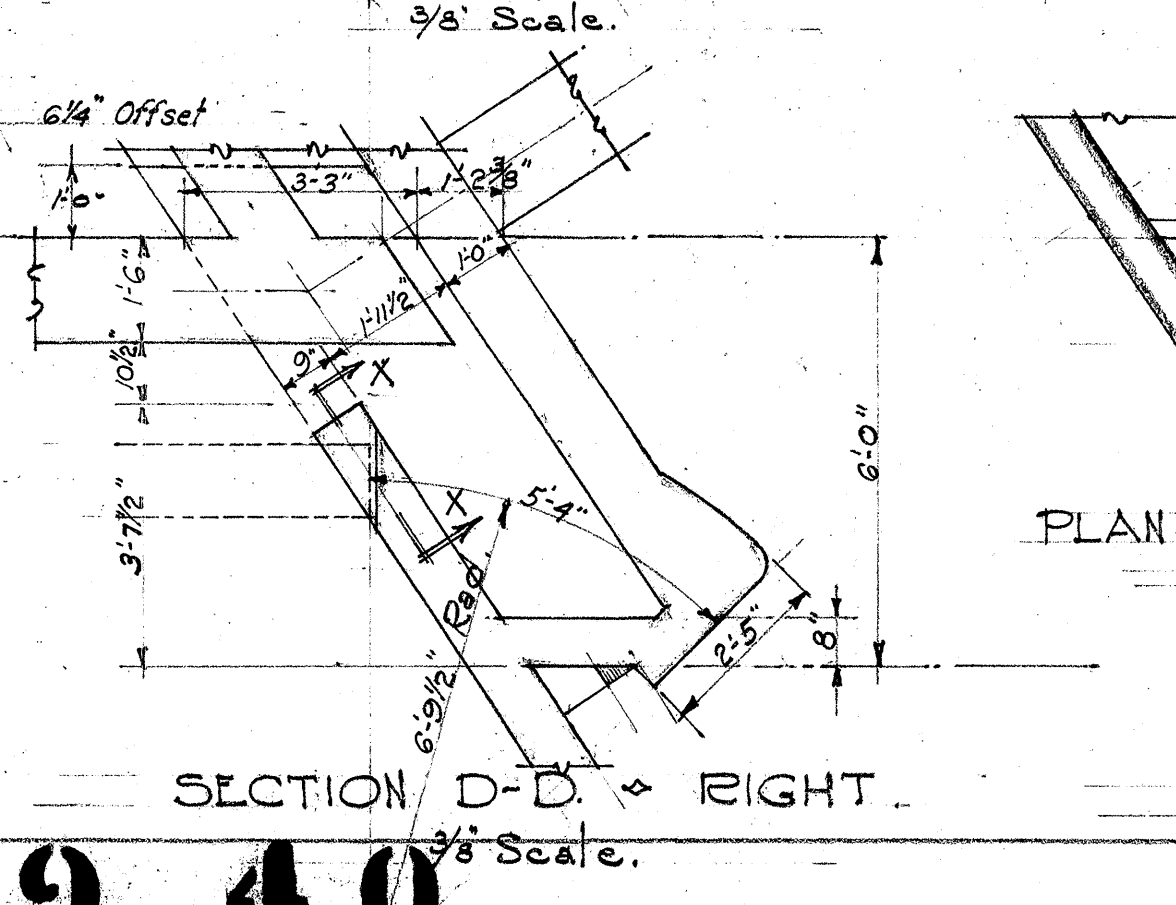
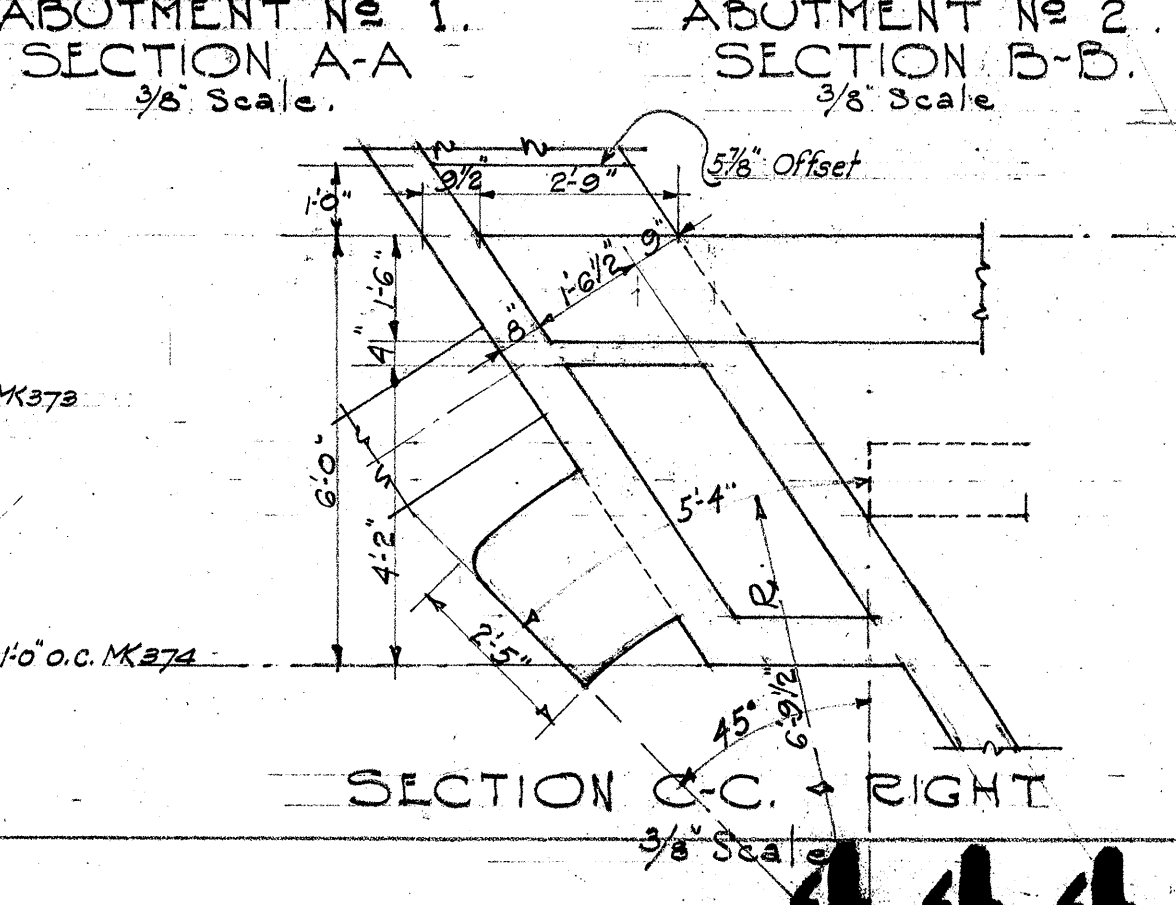
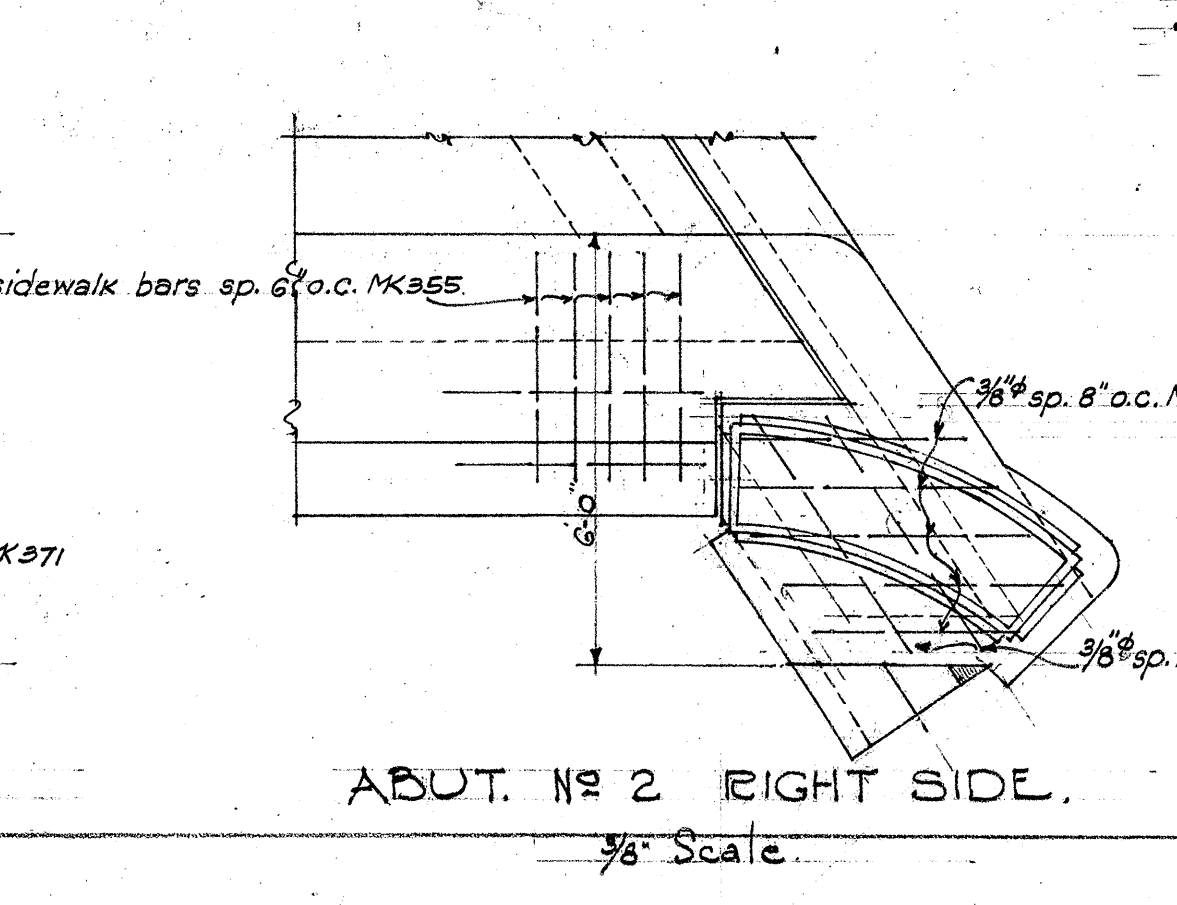
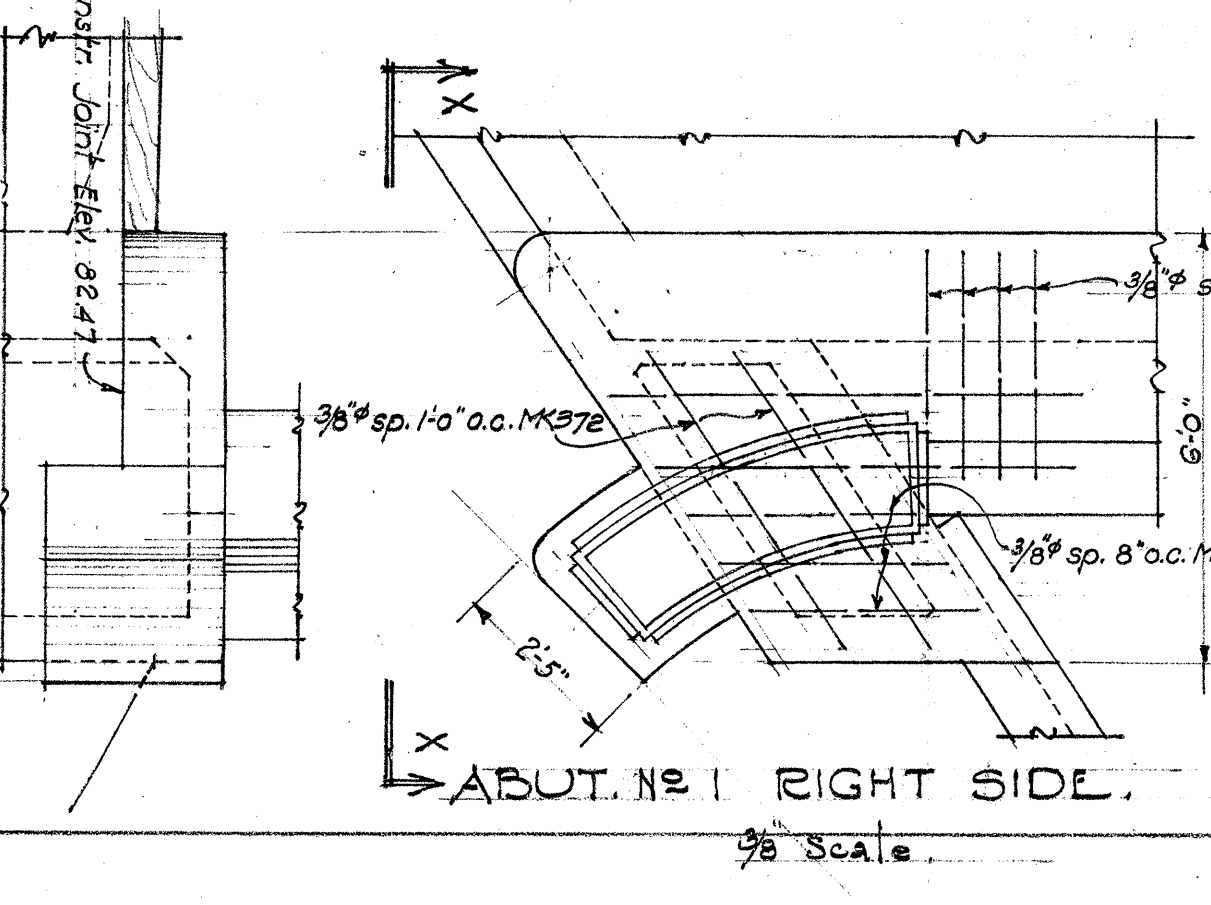
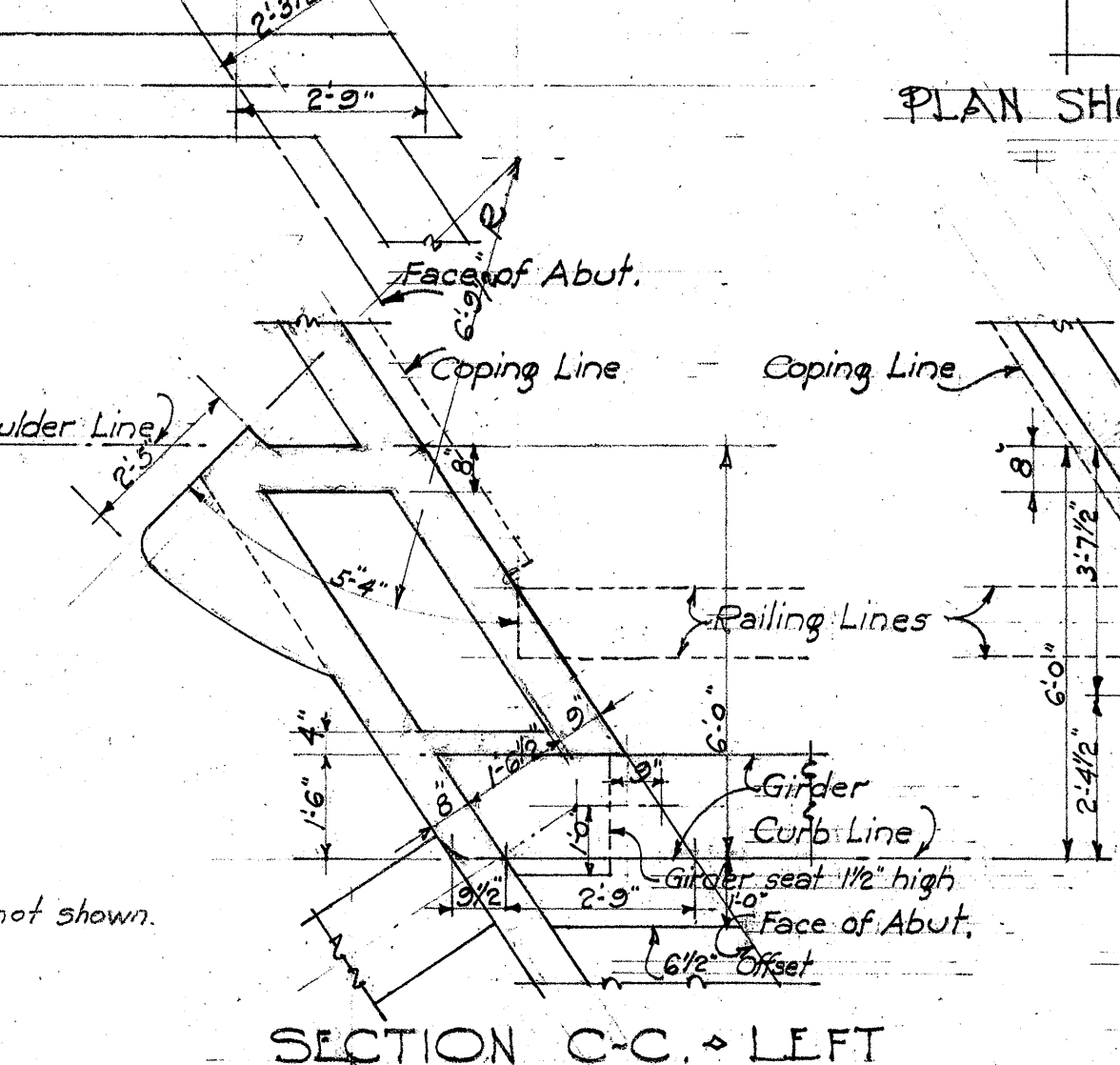
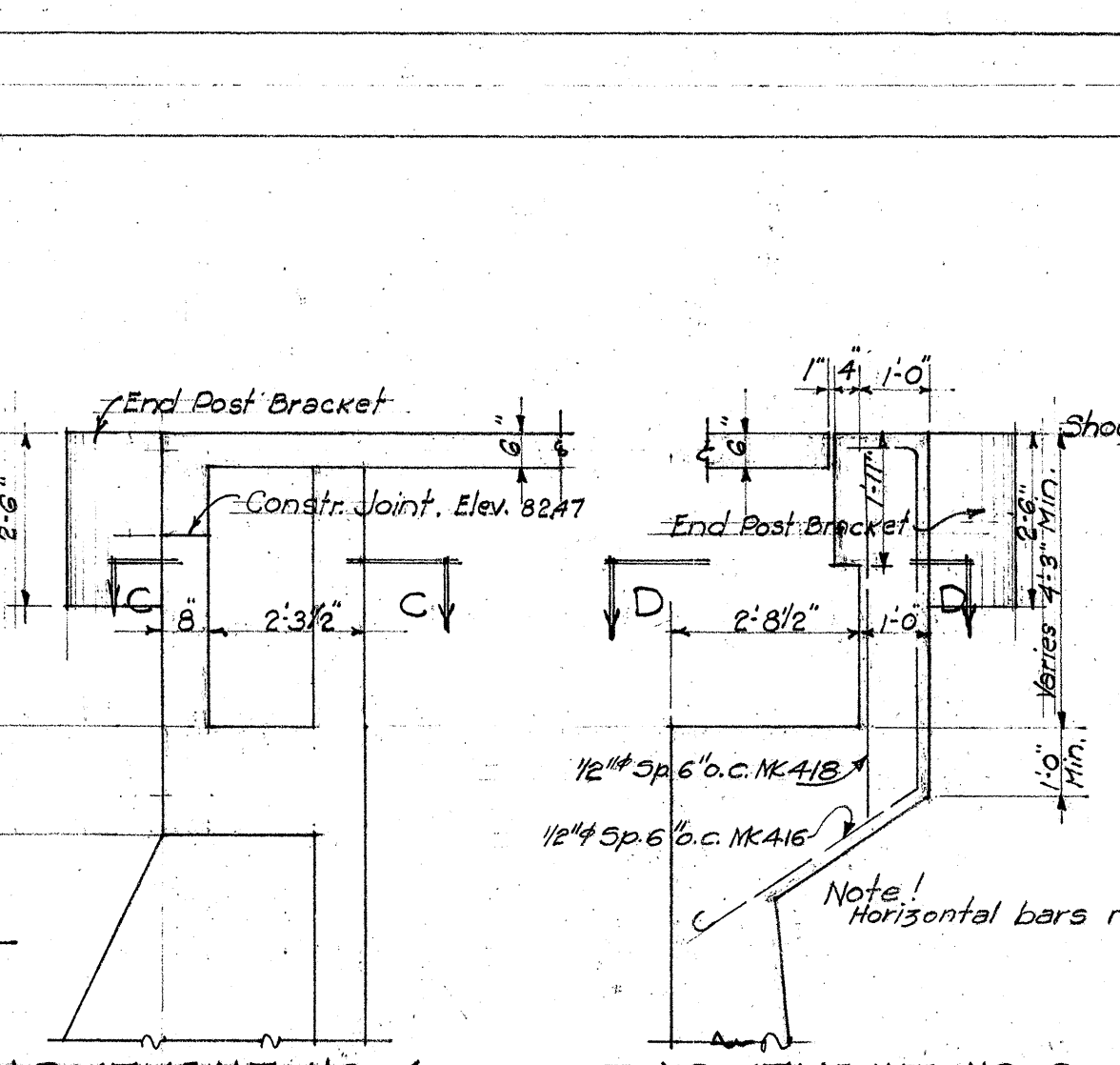
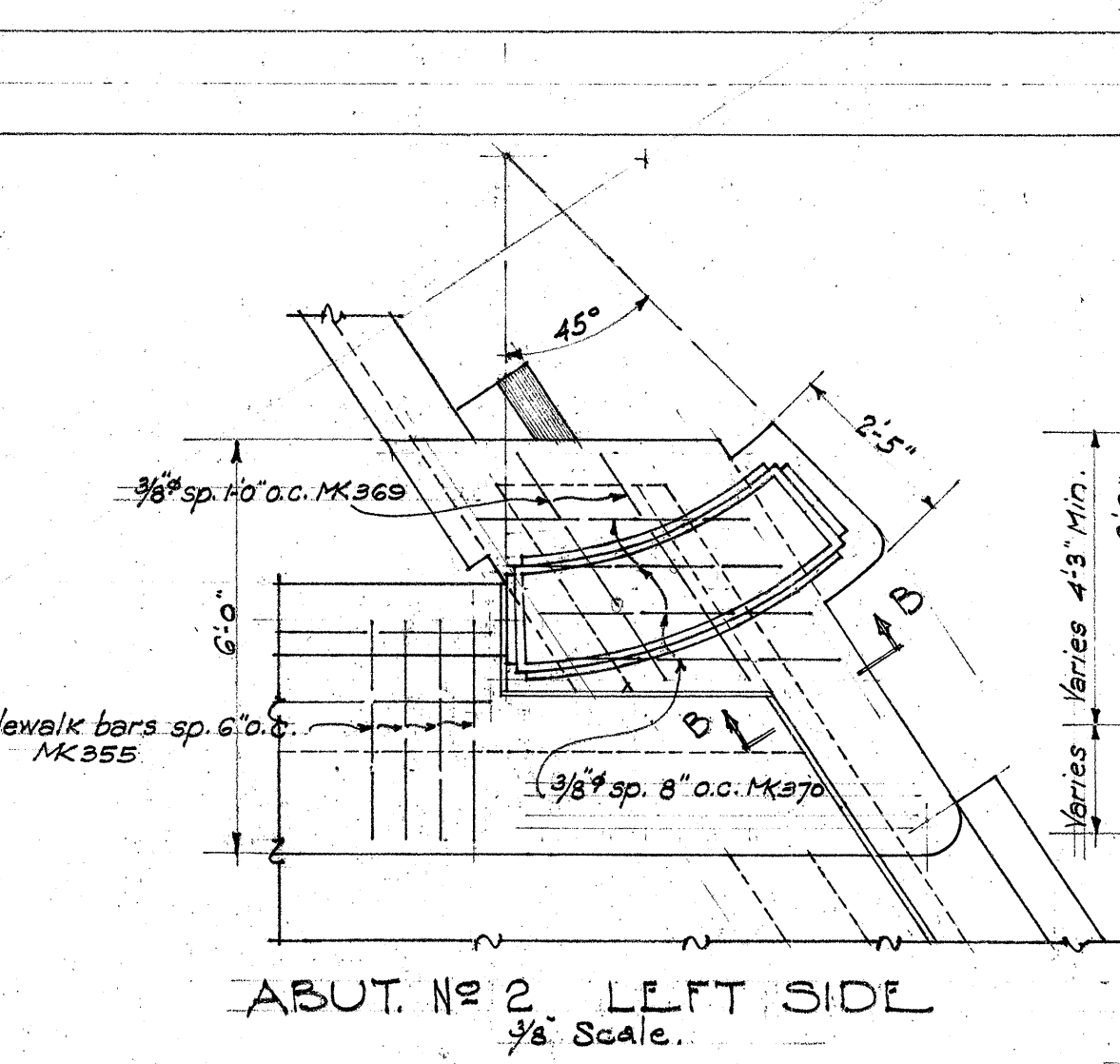
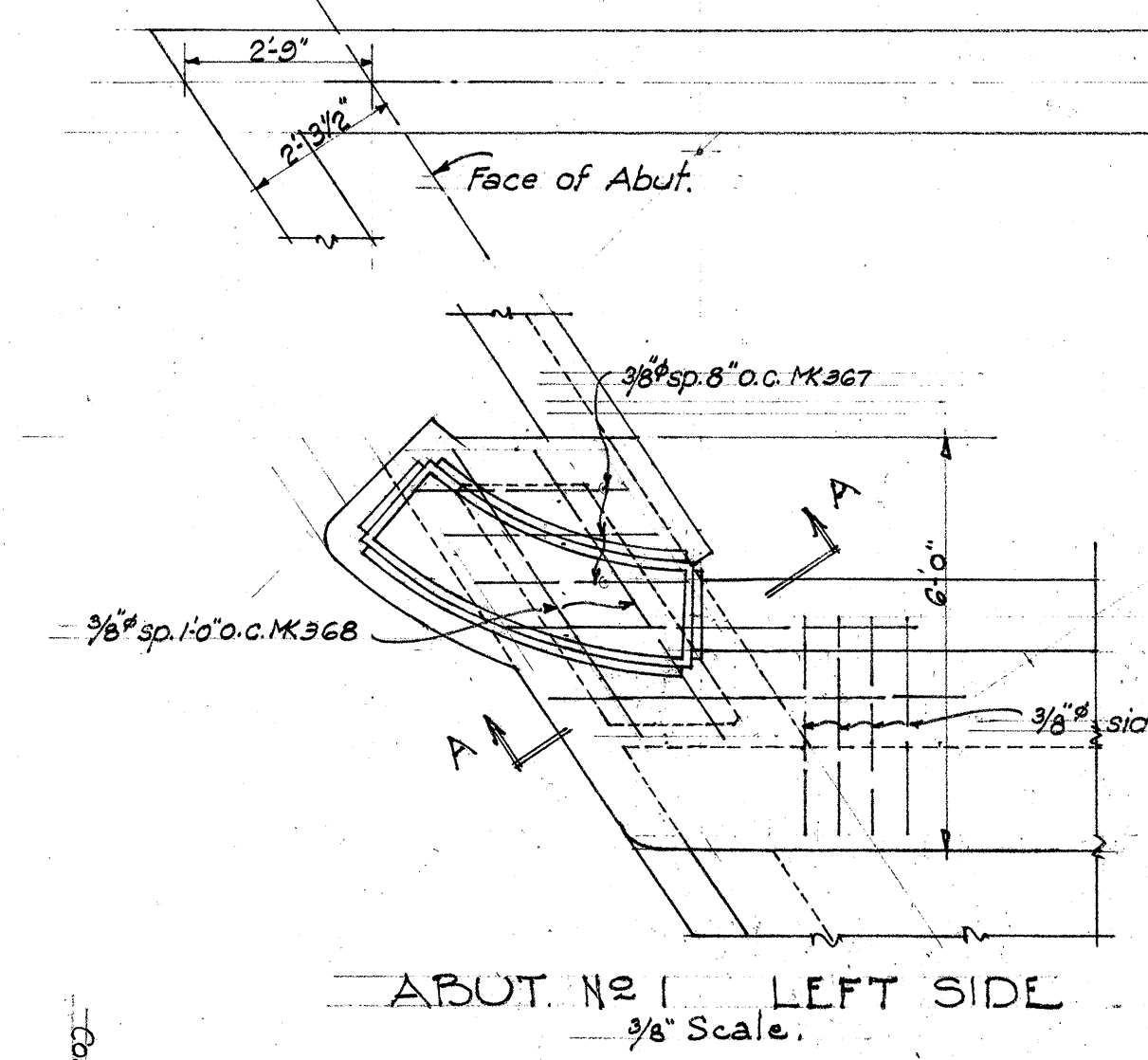
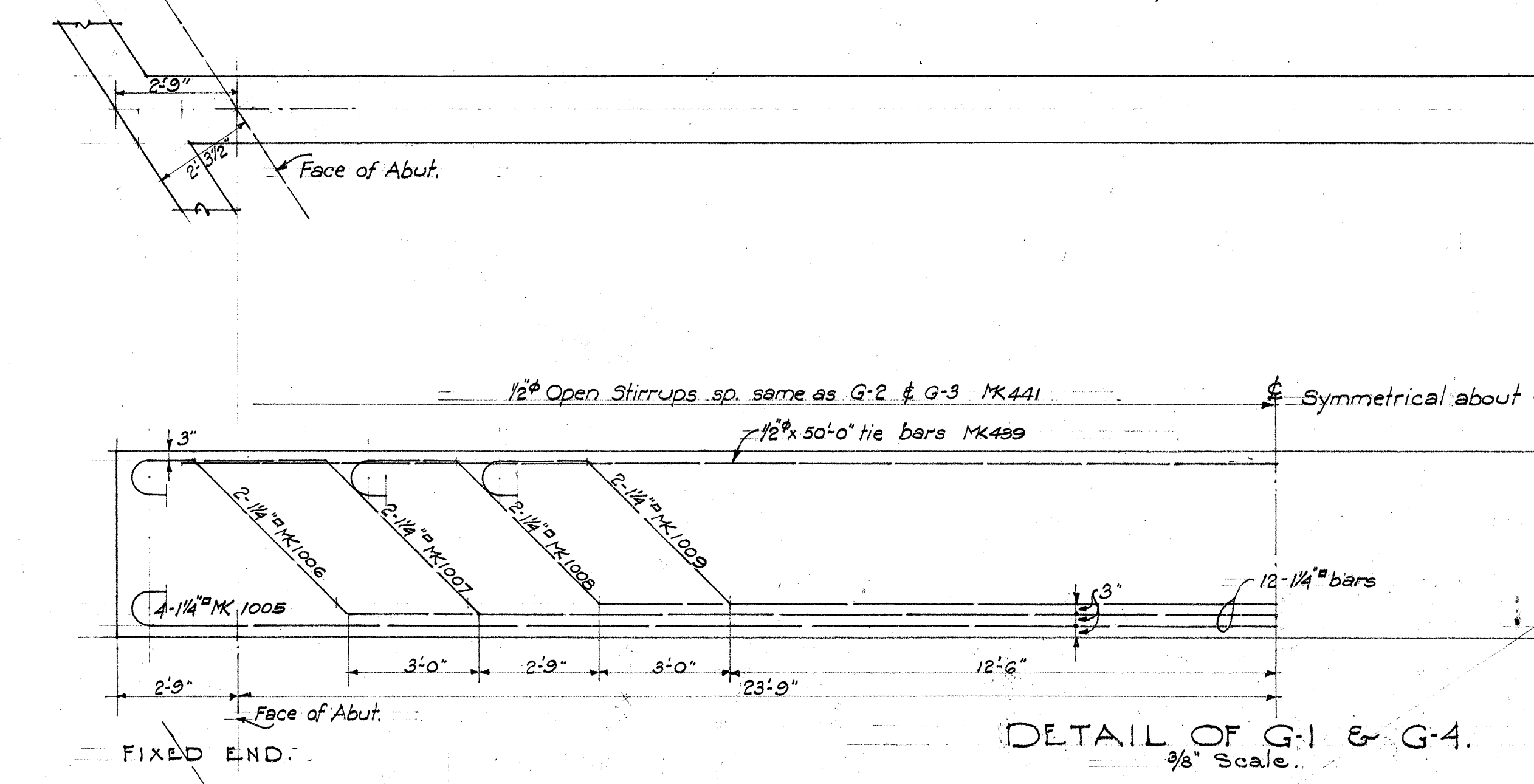
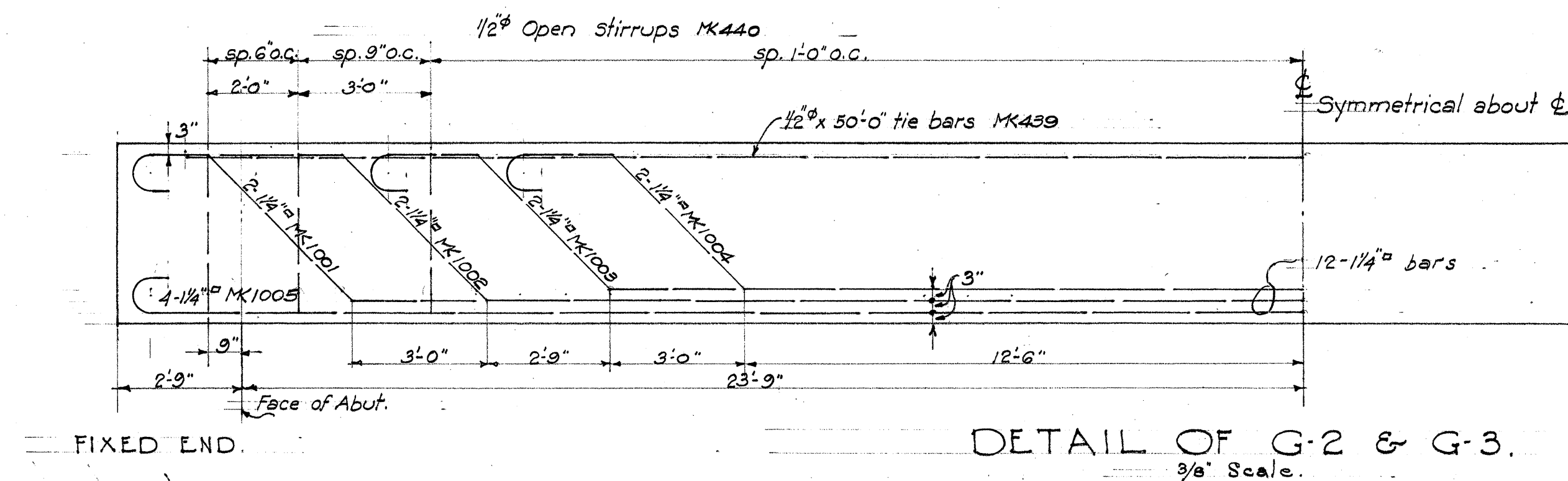
HONOLULU BRIDGE.

WAIANAE ROAD F.A.P. 4-C.
DATE FEB. 1938 SCALES AS NOTED

SHEET NO. 3 OF 6 SHEETS.

4449.38

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4C	1938	40	75



TERRITORIAL HIGHWAY DEPARTMENT.
TERRITORY OF HAWAII.

HONOLULU BRIDGE.

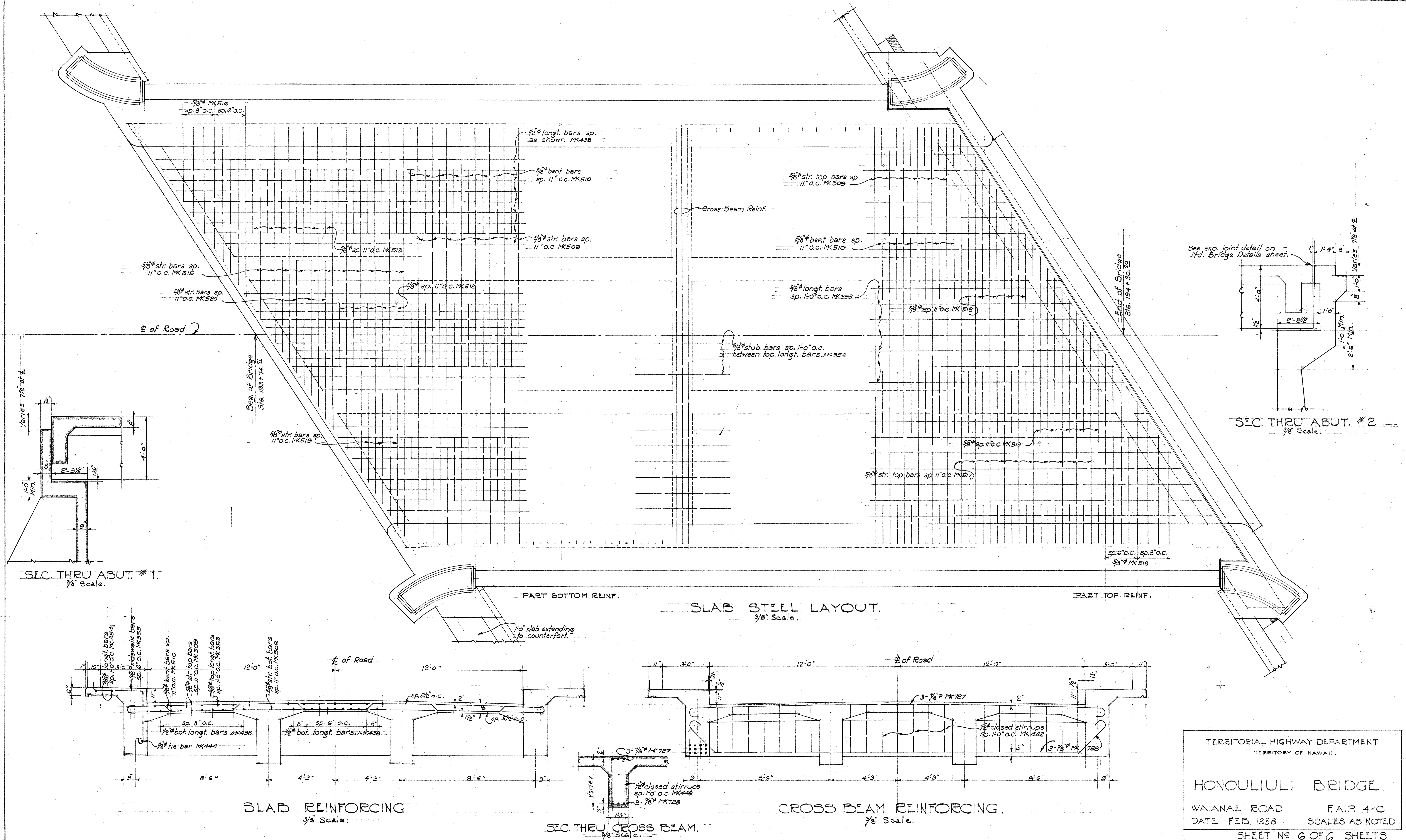
WAIANAE ROAD F.A.P. 4-C.
DATE FEB. 1938 SCALES AS NOTED.

SHEET NO. 5 OF 6 SHEETS.

DESIGNED BY
DRAWN BY
CHECKED BY
DATE

4449.40

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4C	1938	41	75



4449.41