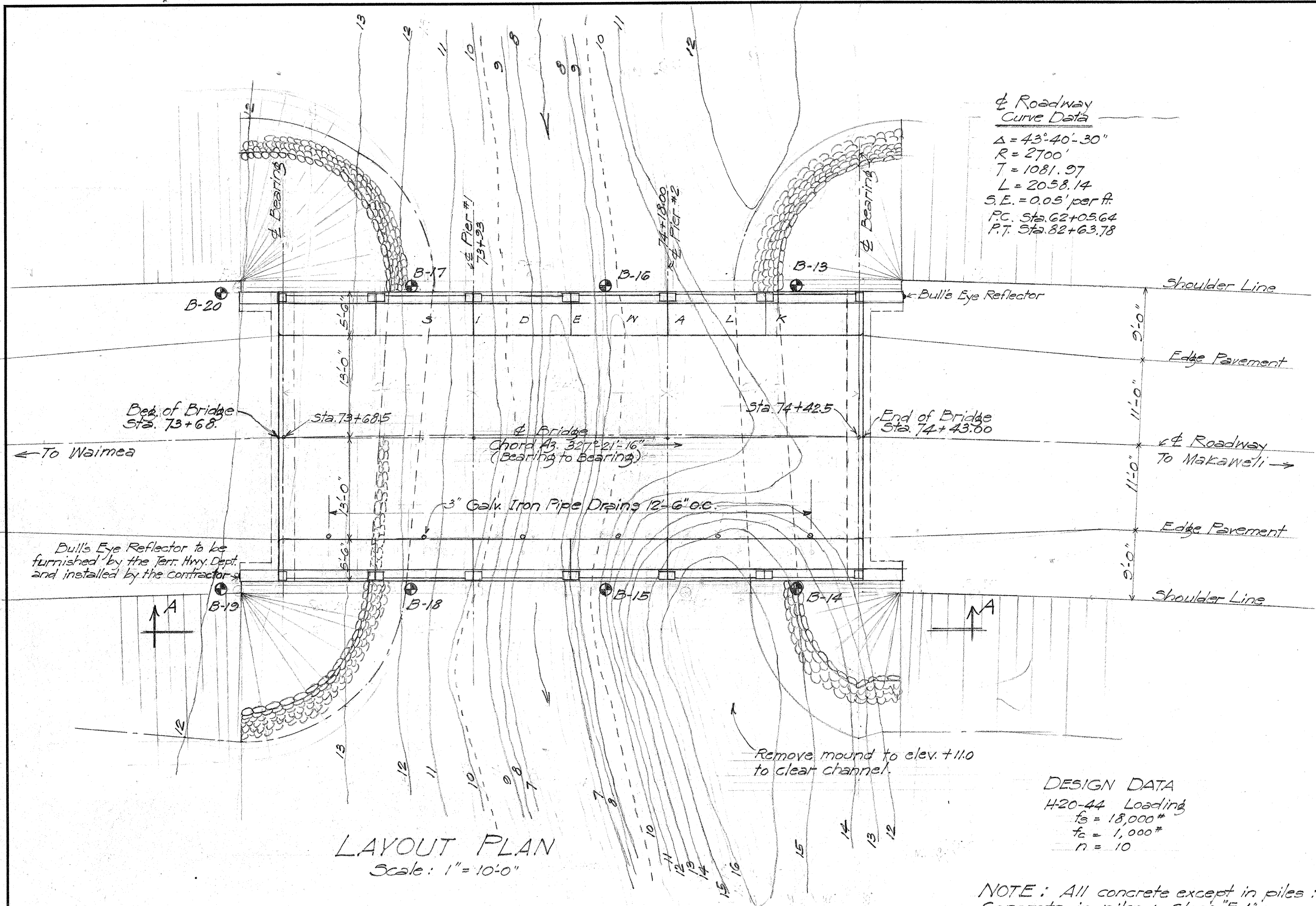


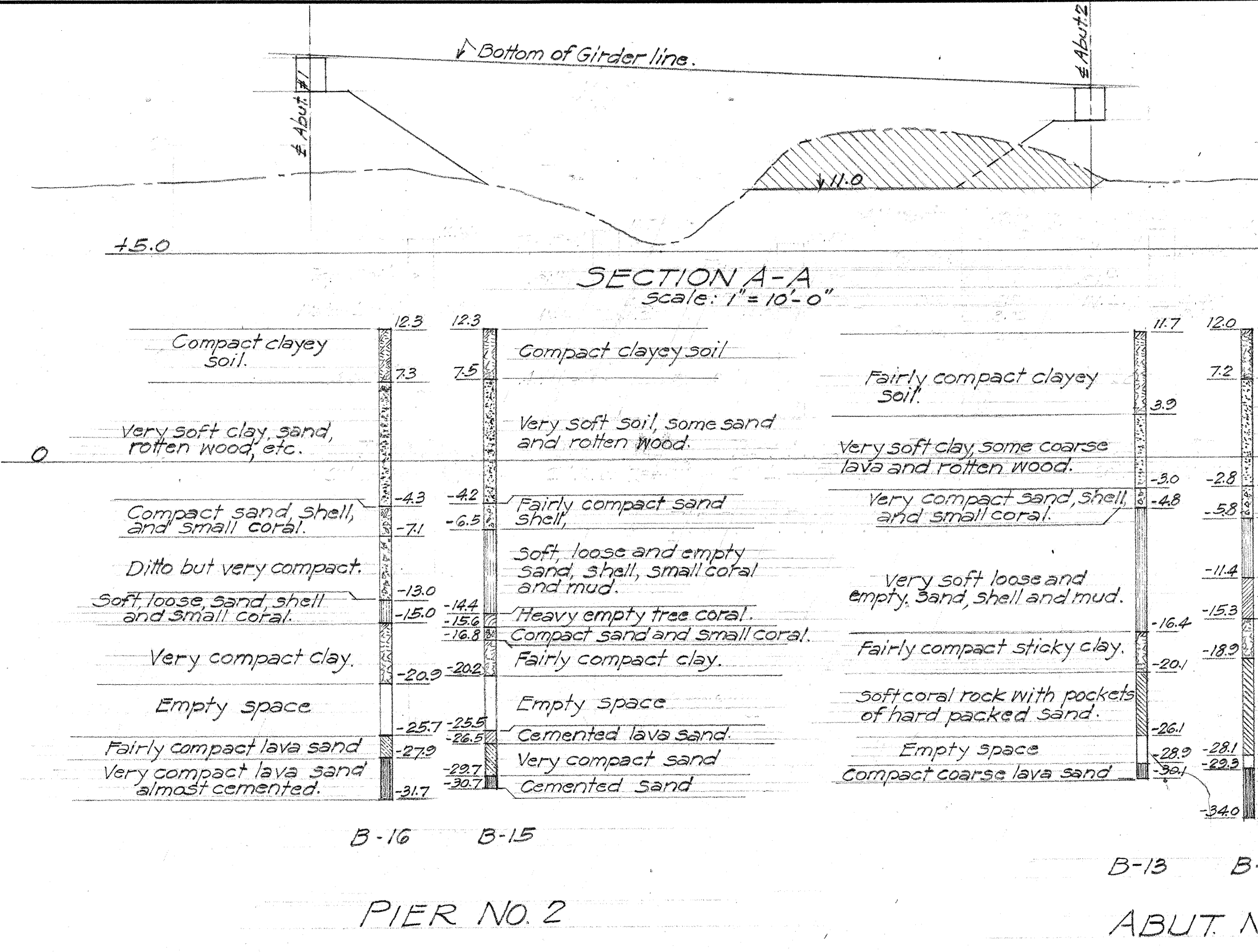
Revised: Mar. 1947
Revision: Bridge location changed. Retaining wall at Abut. #1 eliminated and replaced with Hand-Laid Riprap. Original test pit data eliminated and new wash boring data substituted. channel excavation added. Quantities changed.



Curve Data
 $\Delta = 43^\circ 40' 30''$
 $R = 2700'$
 $T = 1081.97$
 $L = 2058.14$
 $S.E. = 0.05' \text{ per ft.}$
 $P.C. \text{ Sta. } 62+05.64$
 $P.T. \text{ Sta. } 82+63.78$

DESIGN DATA
H20-44 Loading
 $f_c = 18,000^*$
 $f_s = 1,000^*$
 $n = 10$

NOTE: All concrete except in piles: Class "A-1". Concrete in piles: Class "E-1". Brush coat waterproofing required. See Pamphlet N. Section 34 of Specifications. Sidewalk, railing, and railing post to be poured after release of falsework.

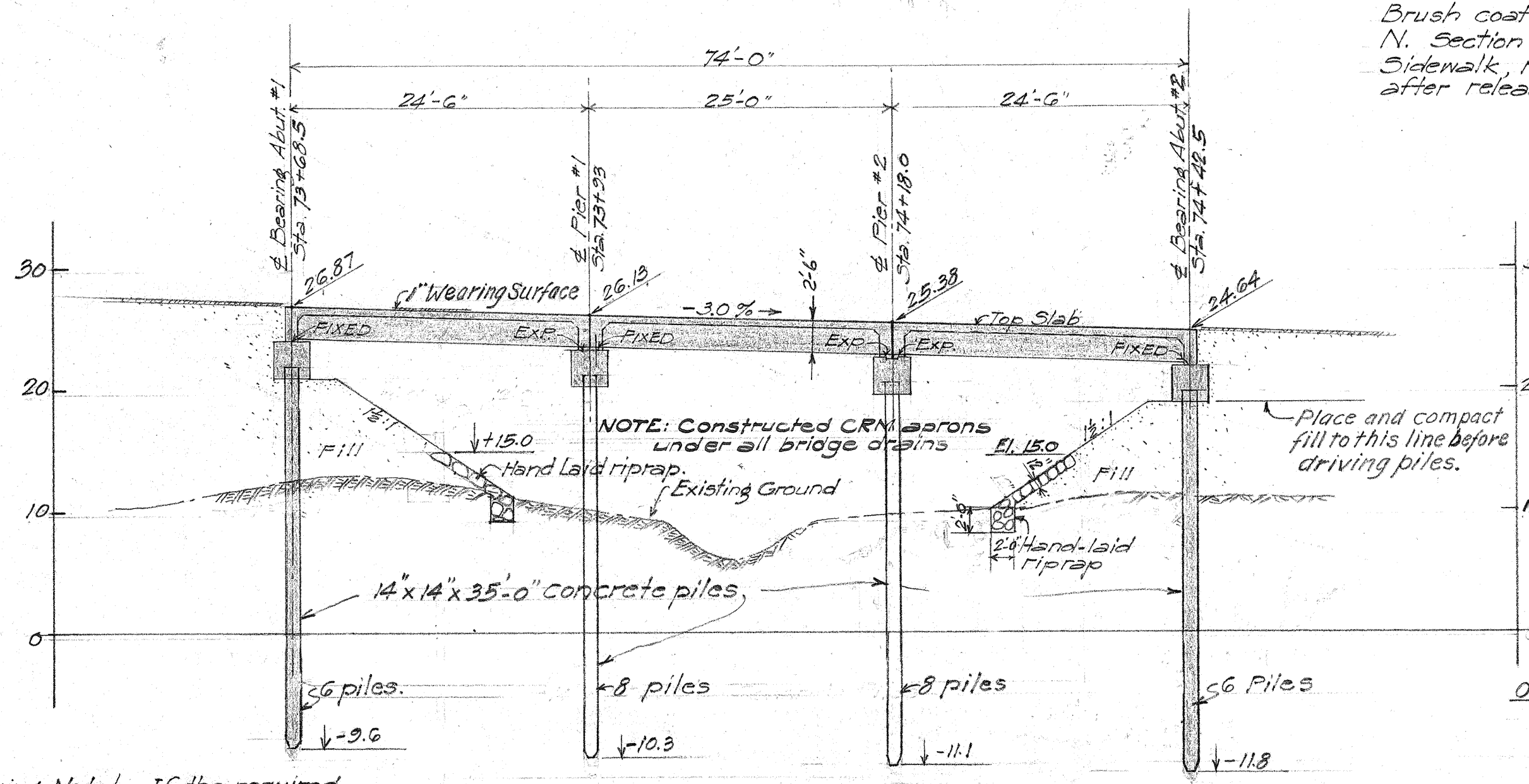


BORING DATA
Scale: 1" = 10'-0" (Vertical)

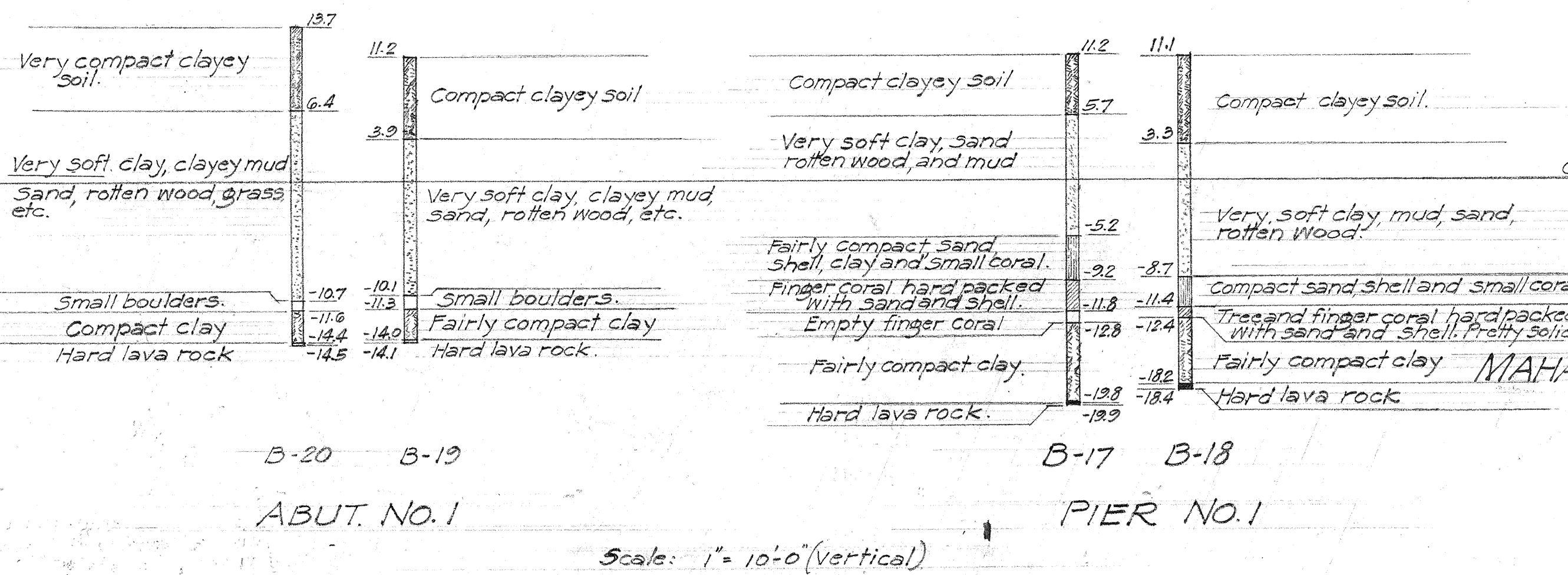
ESTIMATED QUANTITIES

LOCATION	Super-Structure	Railing & Rail Posts	Piers	Abutments, End Posts	Total
Concrete - Class A-1 (cu. yds.)	164.5	7.9	26.2	33.2	221.8 C.Y.
Reinforcing Steel (lbs.)	28,120	1669	2049	2965	34,803 lbs.
Channel Exc.					175 C.Y.
Hand-Laid Riprap (cu. yds.)				75.0 C.Y.	75.0 C.Y.
Conc. Piles - 14"x14"x35'-0" Long.			16	12	28 pcs

NOTE: Increase Class A-1 Concrete and Reinforcing Steel due to pile bulge as noted in Sheet No. 3.



LONGITUDINAL SECTION
1" = 10'-0"

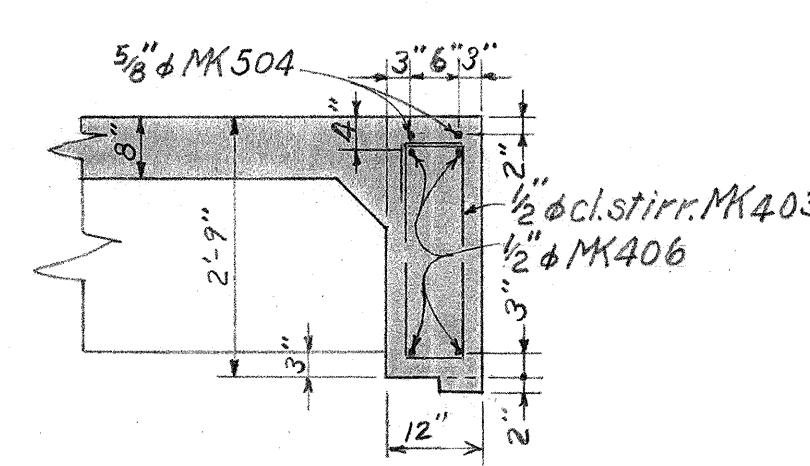
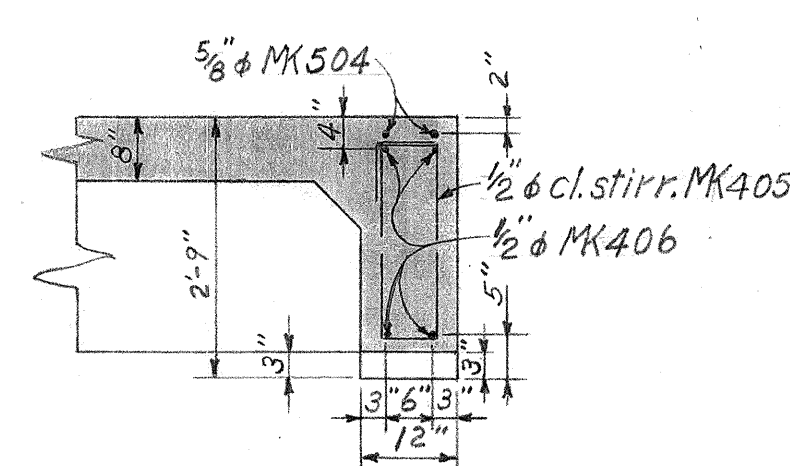
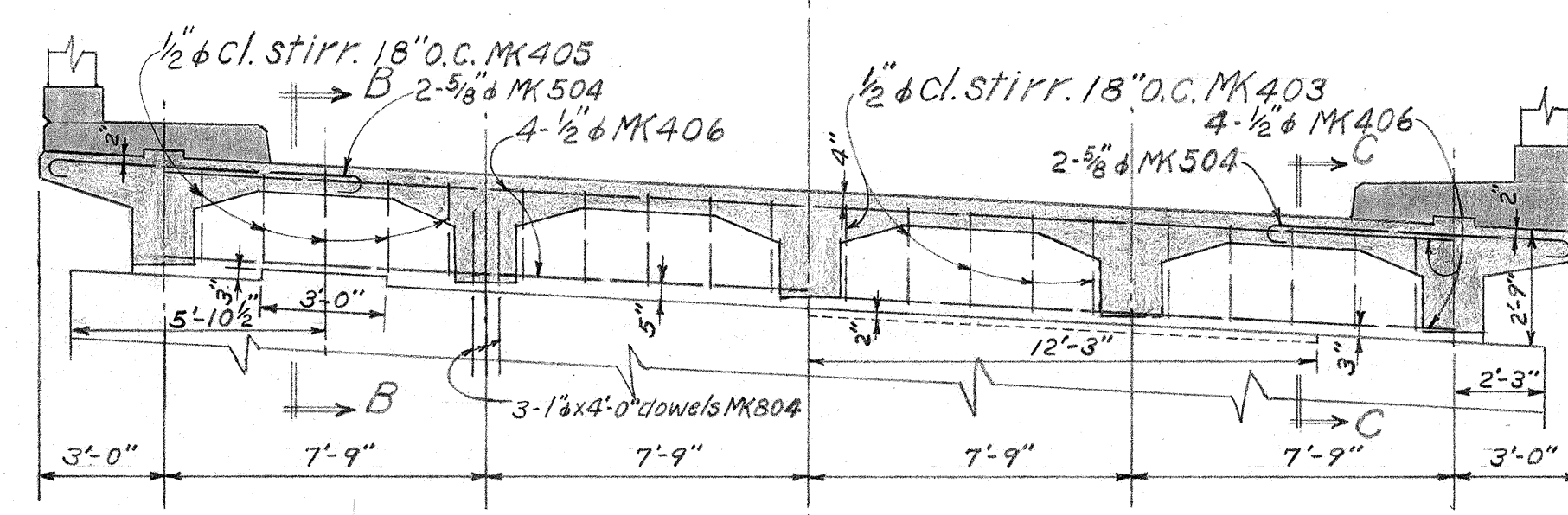
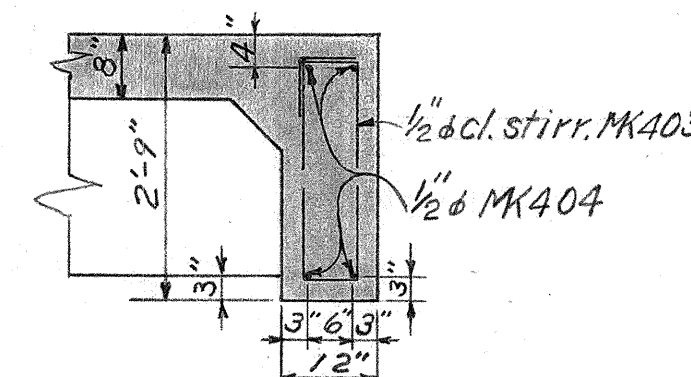
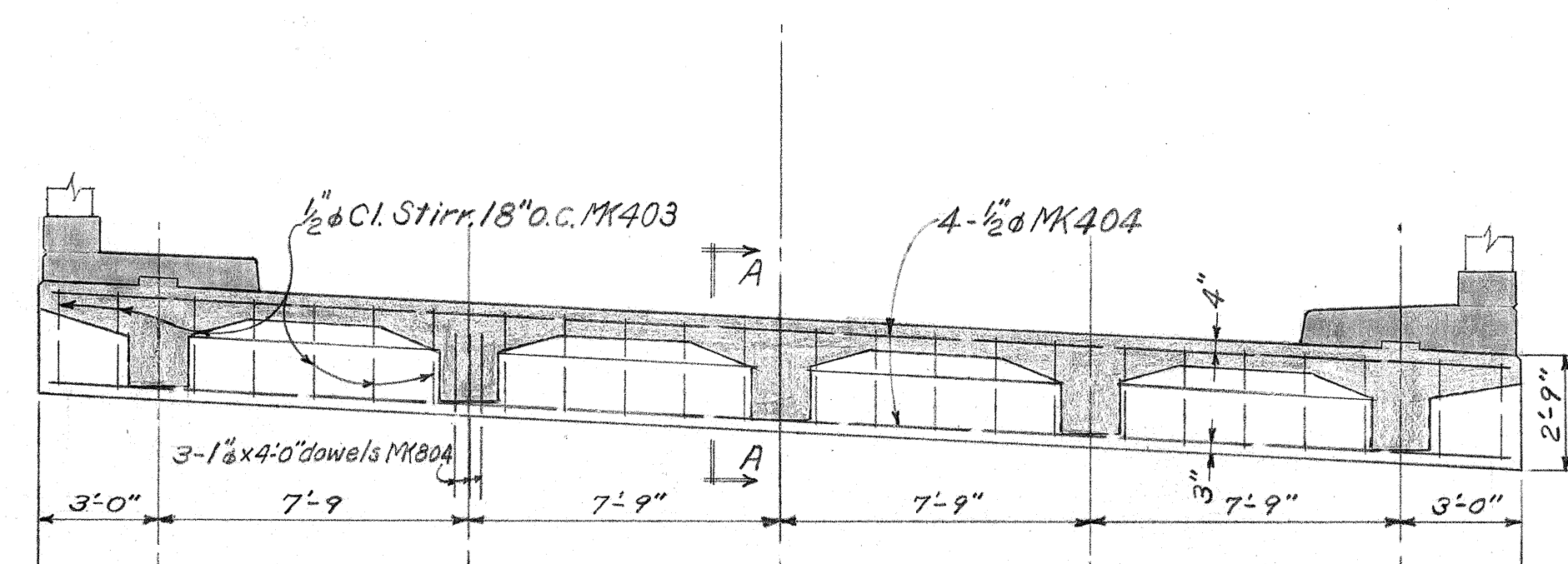
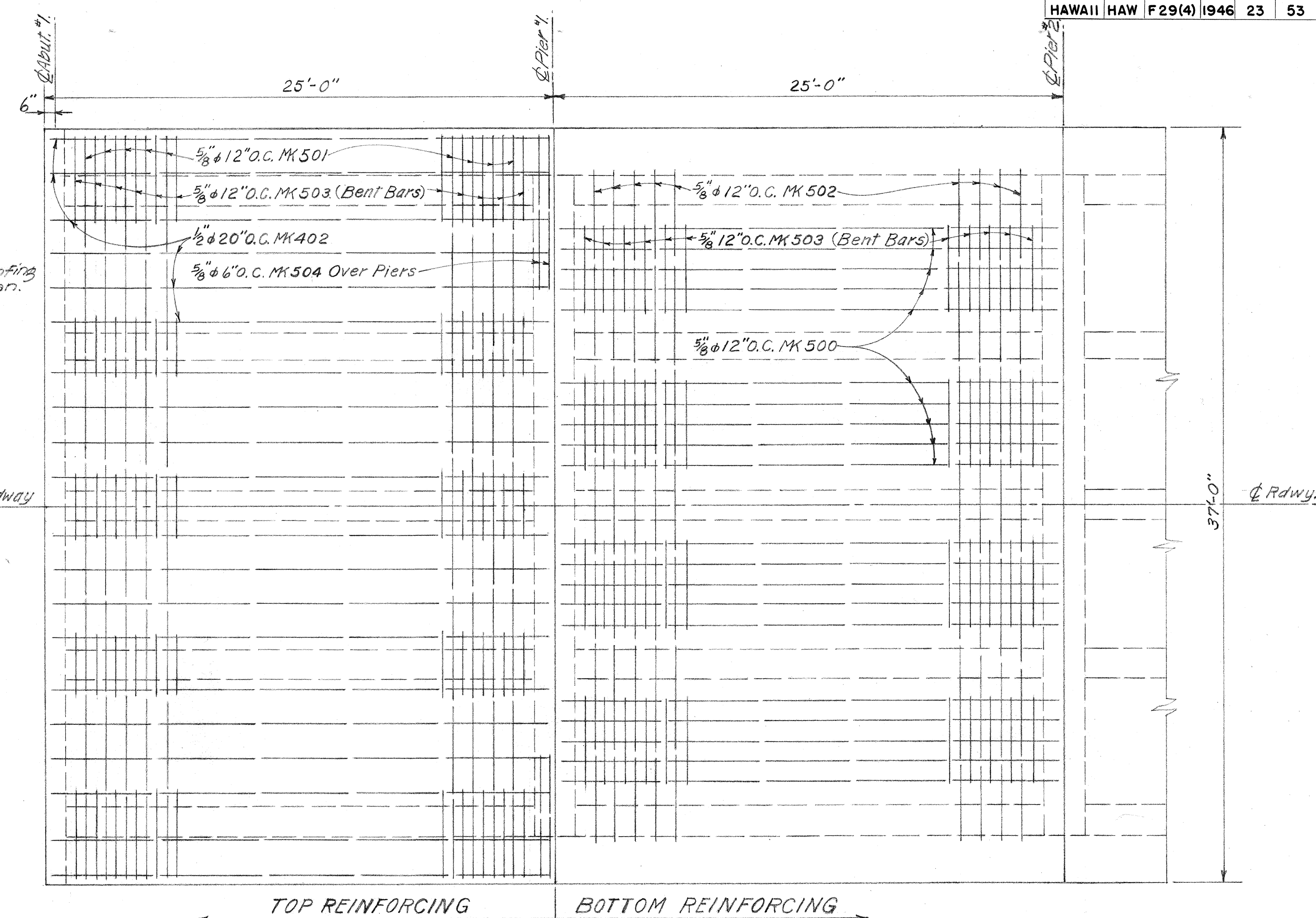
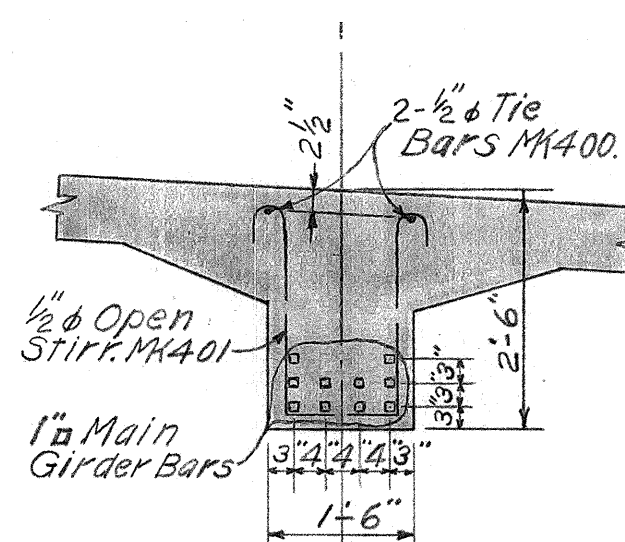
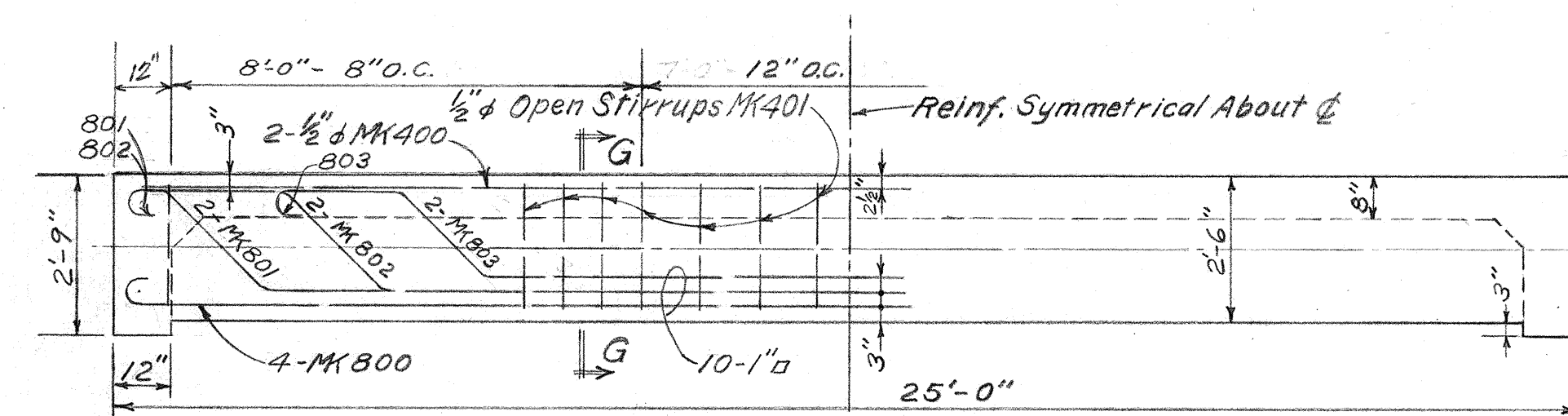
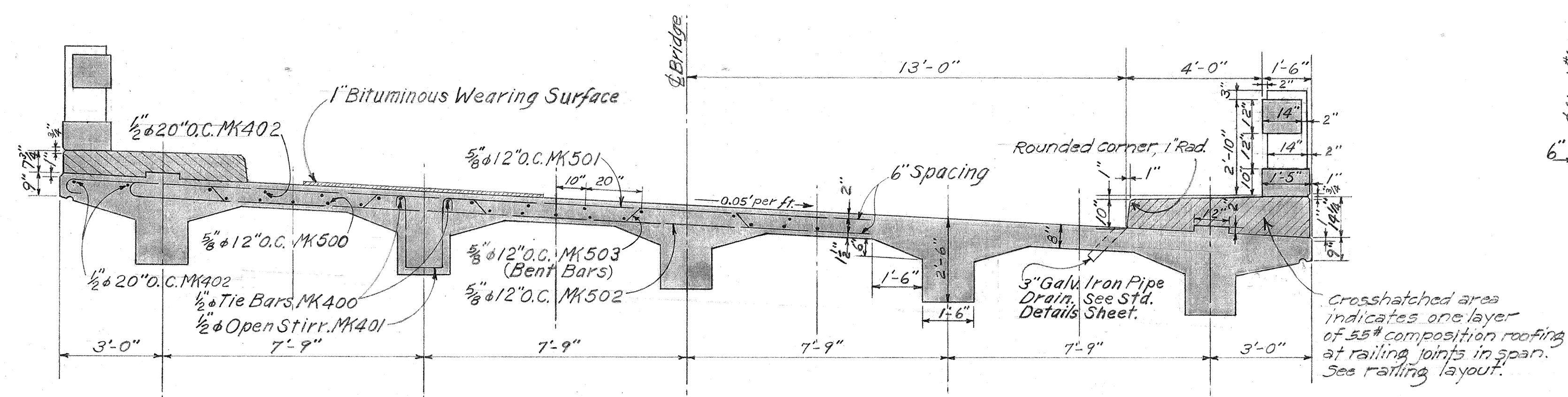


TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MAHAIKONA KEKAPUA BRIDGE
Sta. 73+68 - Sta. 74+43
KAUAI BELT RD. F.A.P. No. F-29(4)
July, 1946

SHEET No. 1 OF 4 SHEETS

5185.22

ORIGINAL PLAN
DATE
DRAWN BY
CHECKED BY
NOTE BOOK
No.



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

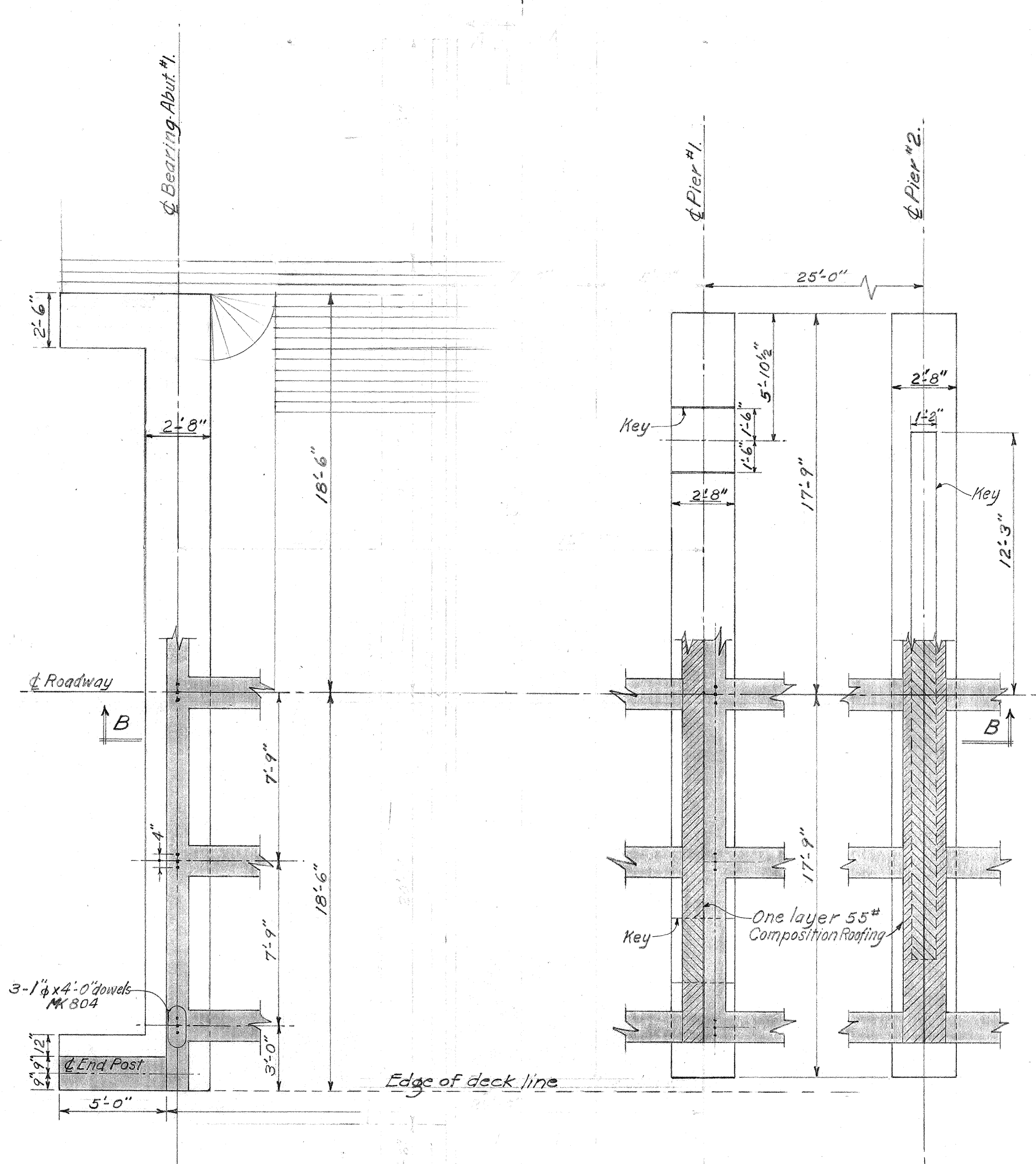
MAHAIKONA KEKAPUA BRIDGE
Sta. 73+68 - Sta. 74+43.
KAUAI BELT ROAD - F.A.P. N° F-29(4)
July, 1946.

SHEET № 2 OF 4 SHEETS

5185.23

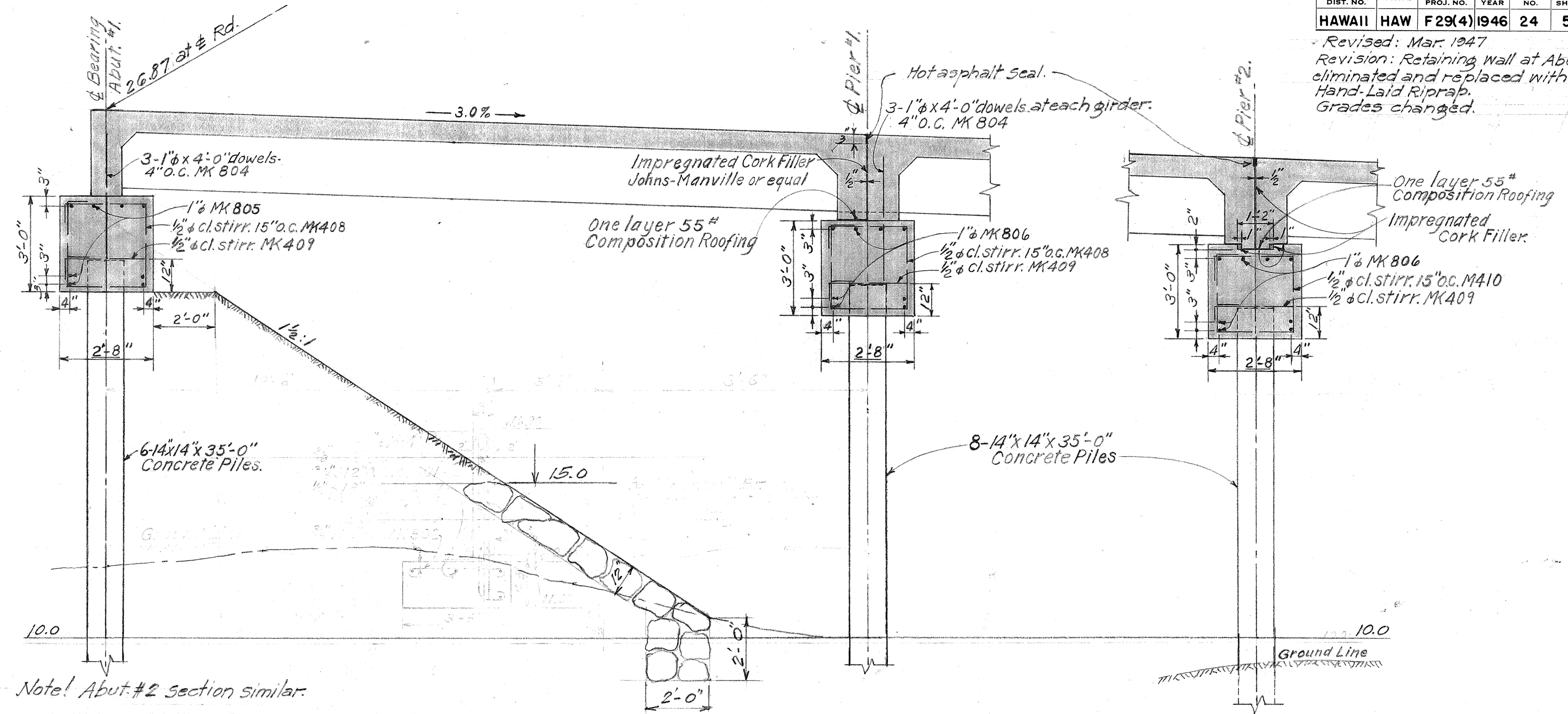
5185. 2

Revised: Mar. 1947
 Revision: Retaining Wall at Abut. #1 eliminated and replaced with Hand-Laid Riprap. Grades changed.



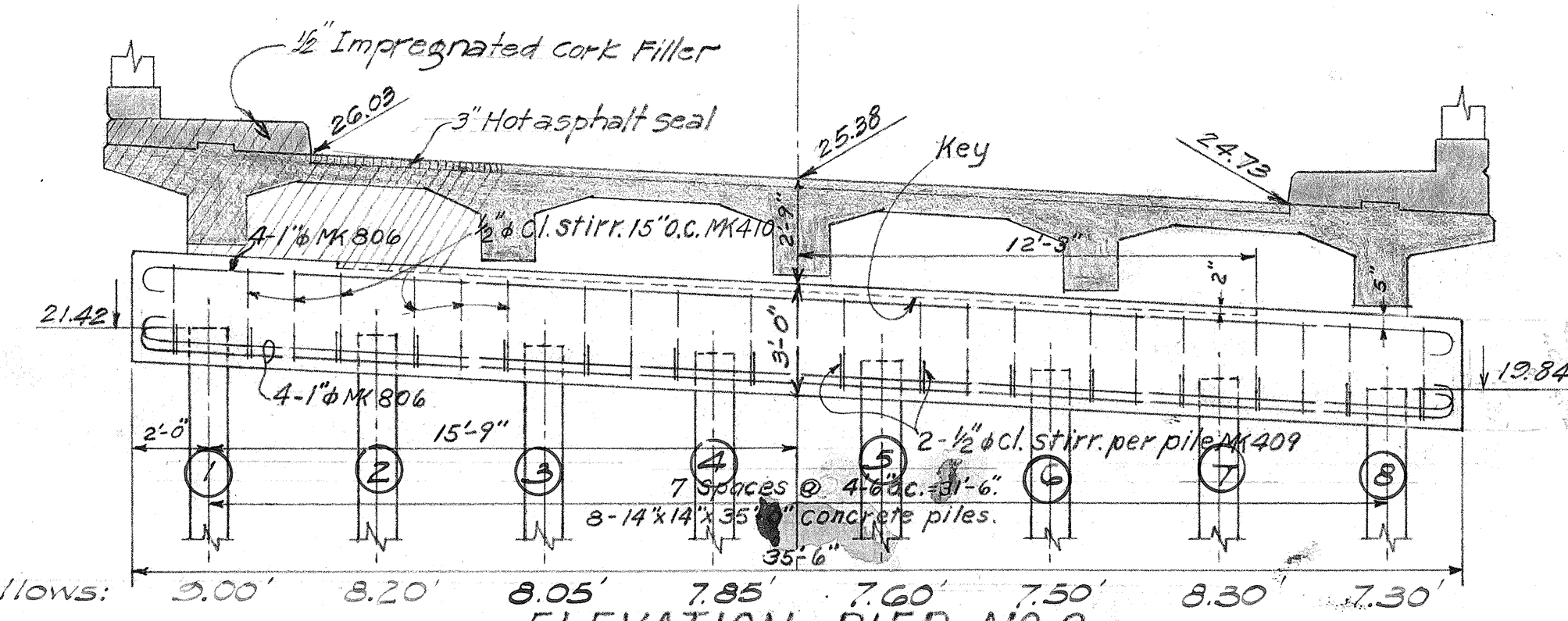
PLAN - ABUT. NO. 1
 1/4" = 1'-0"

PLAN - PIER
 1/4" = 1'-0"

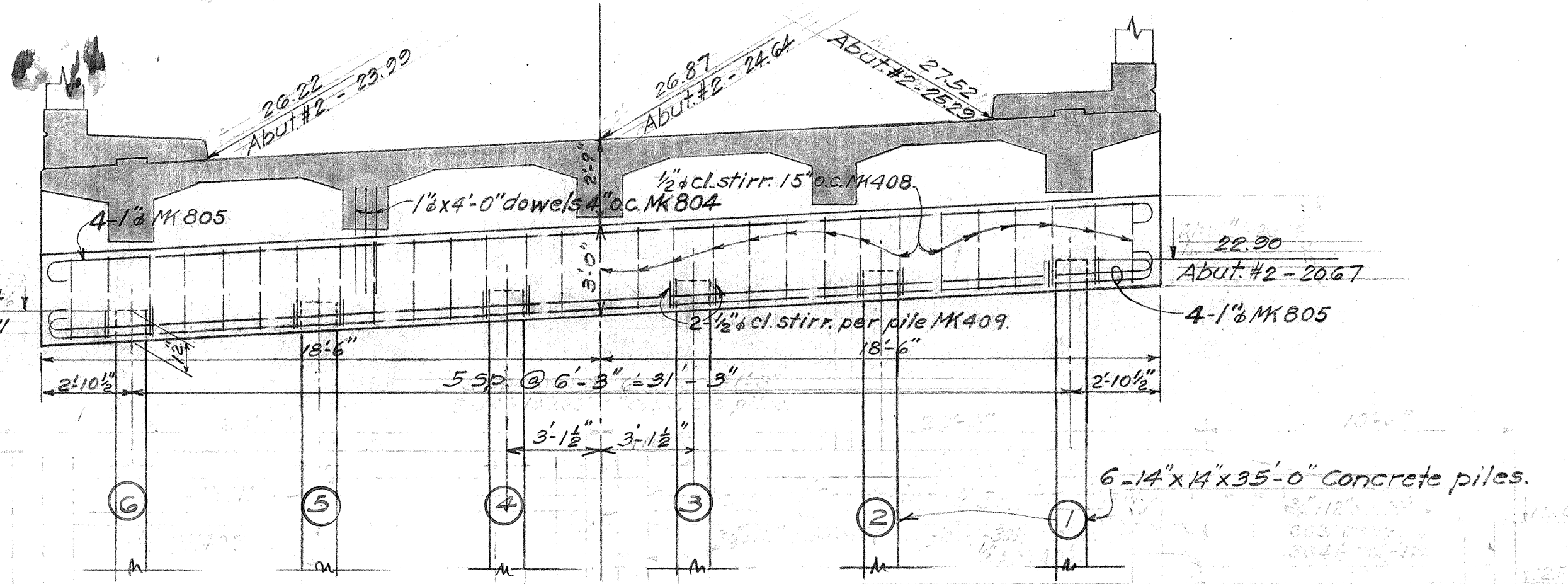


SECTION B-B
 Scale 3/8" = 1'-0"

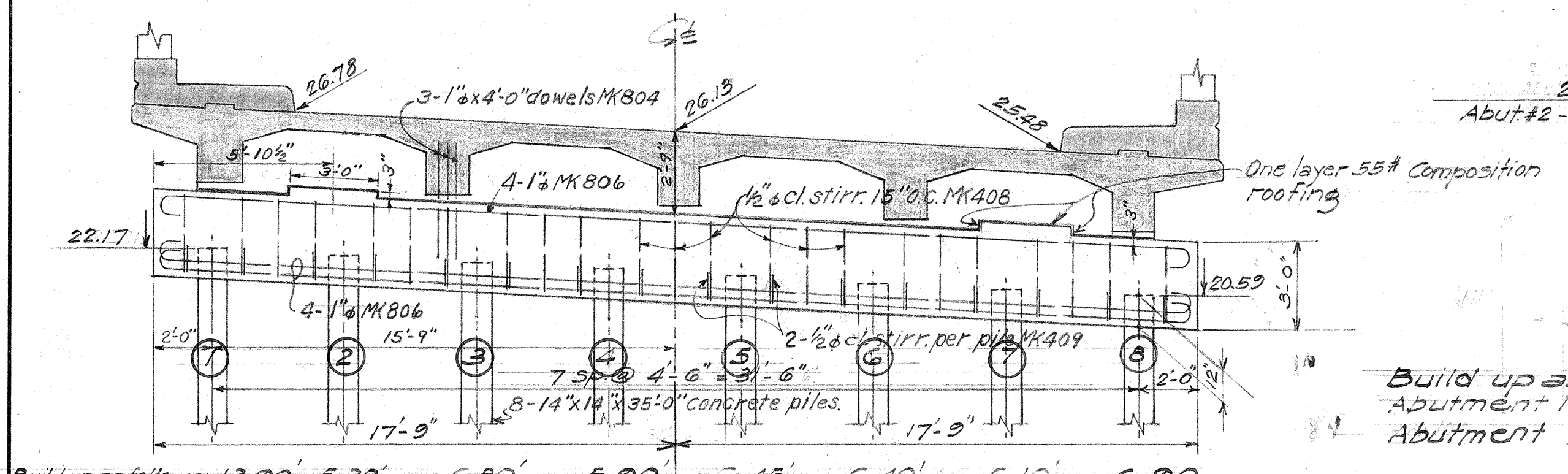
NOTE: SEE PILE DRIVING RECORD FOR FURTHER INFORMATION ON PILES.



ELEVATION - PIER NO. 2
 Scale 1/4" = 1'-0"



ELEVATION A-A ABUT. NO. 1
 Scale 1/4" = 1'-0"



ELEVATION - PIER NO. 1
 Scale 1/4" = 1'-0"

Build up as follows:
 Abutment No. 1 5.10' 7.00' 8.40' 9.30' 6.70' 2.90'
 Abutment No. 2 6.90' 6.30' 5.50' 6.60' 6.20' 7.25'

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII

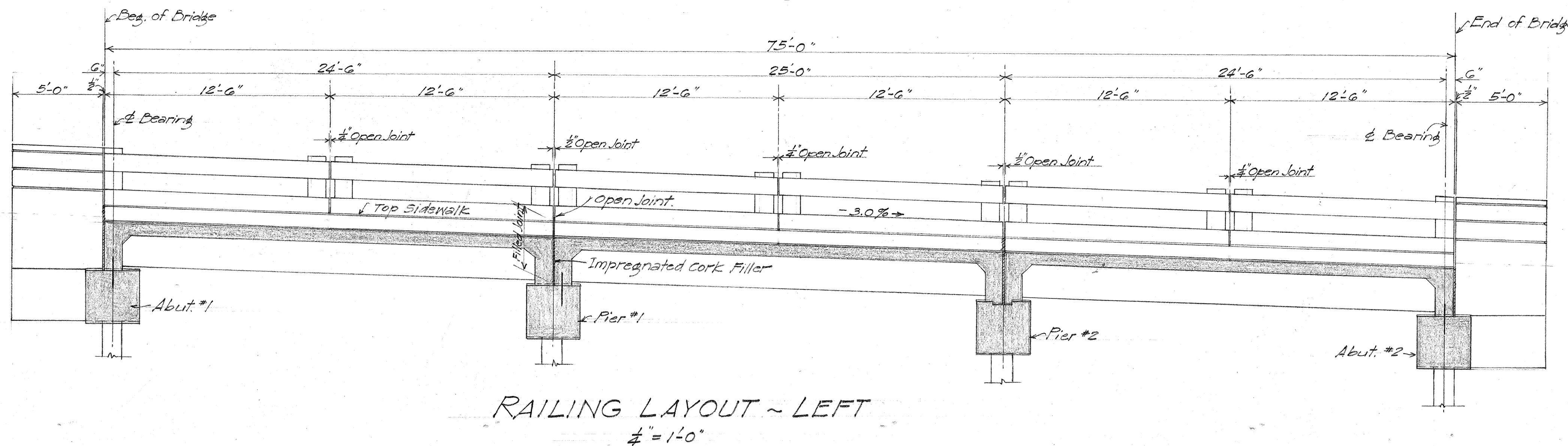
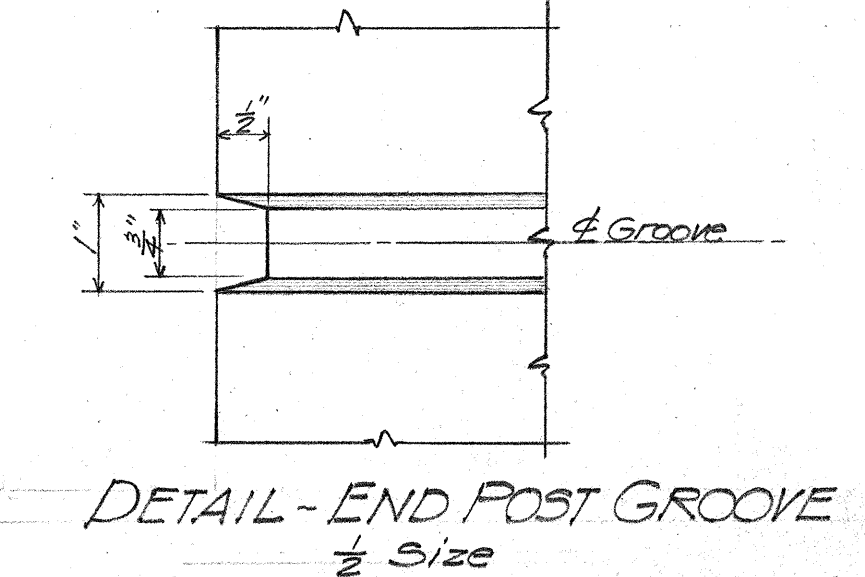
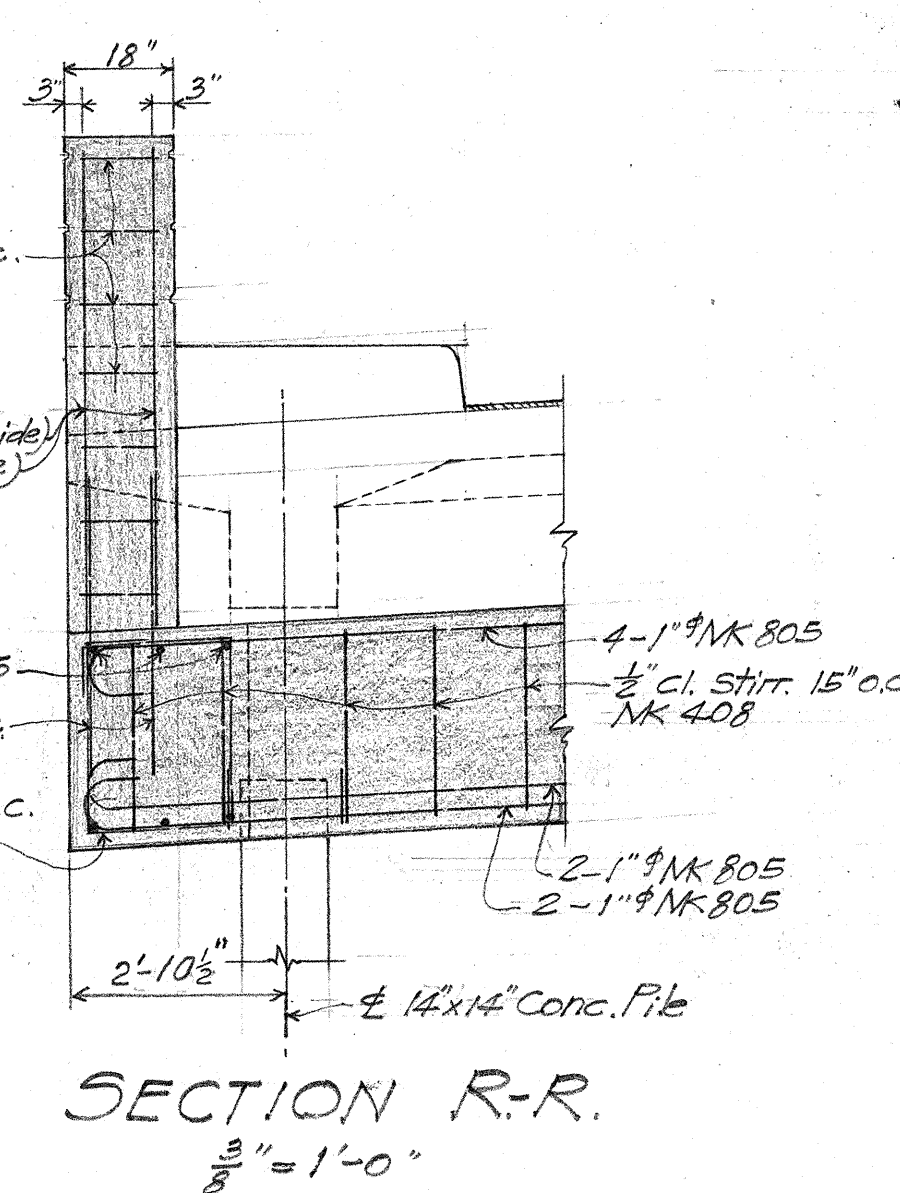
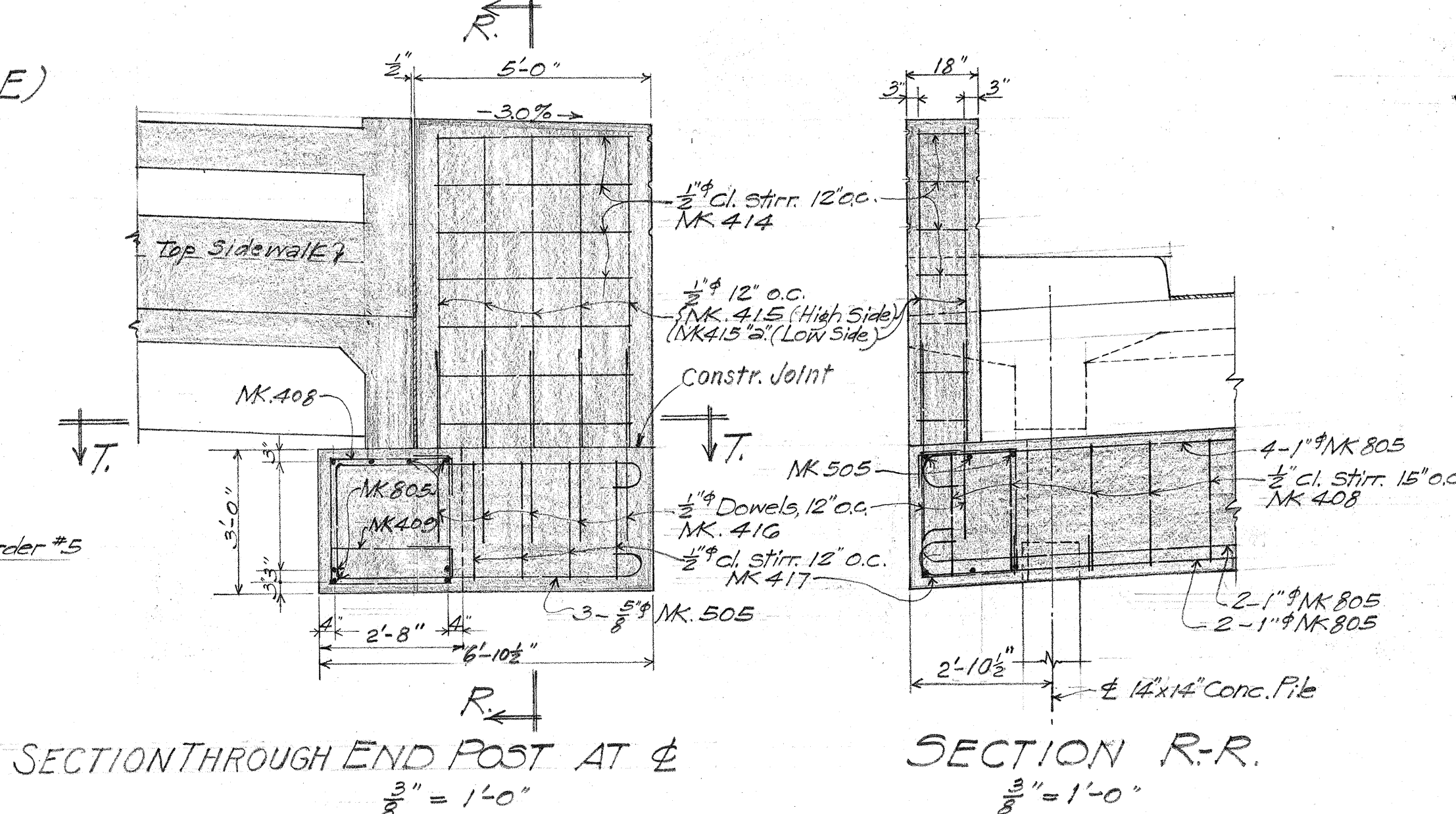
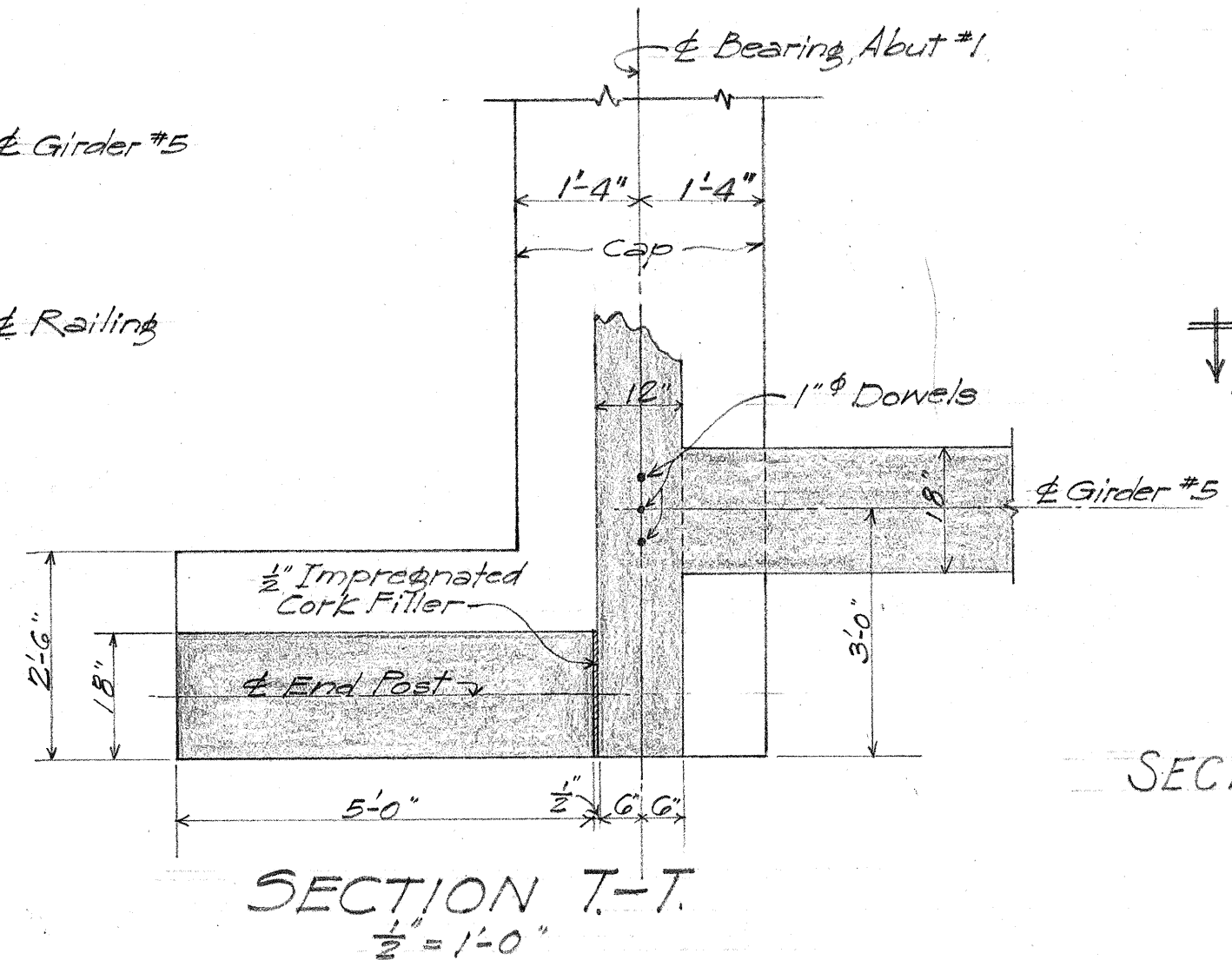
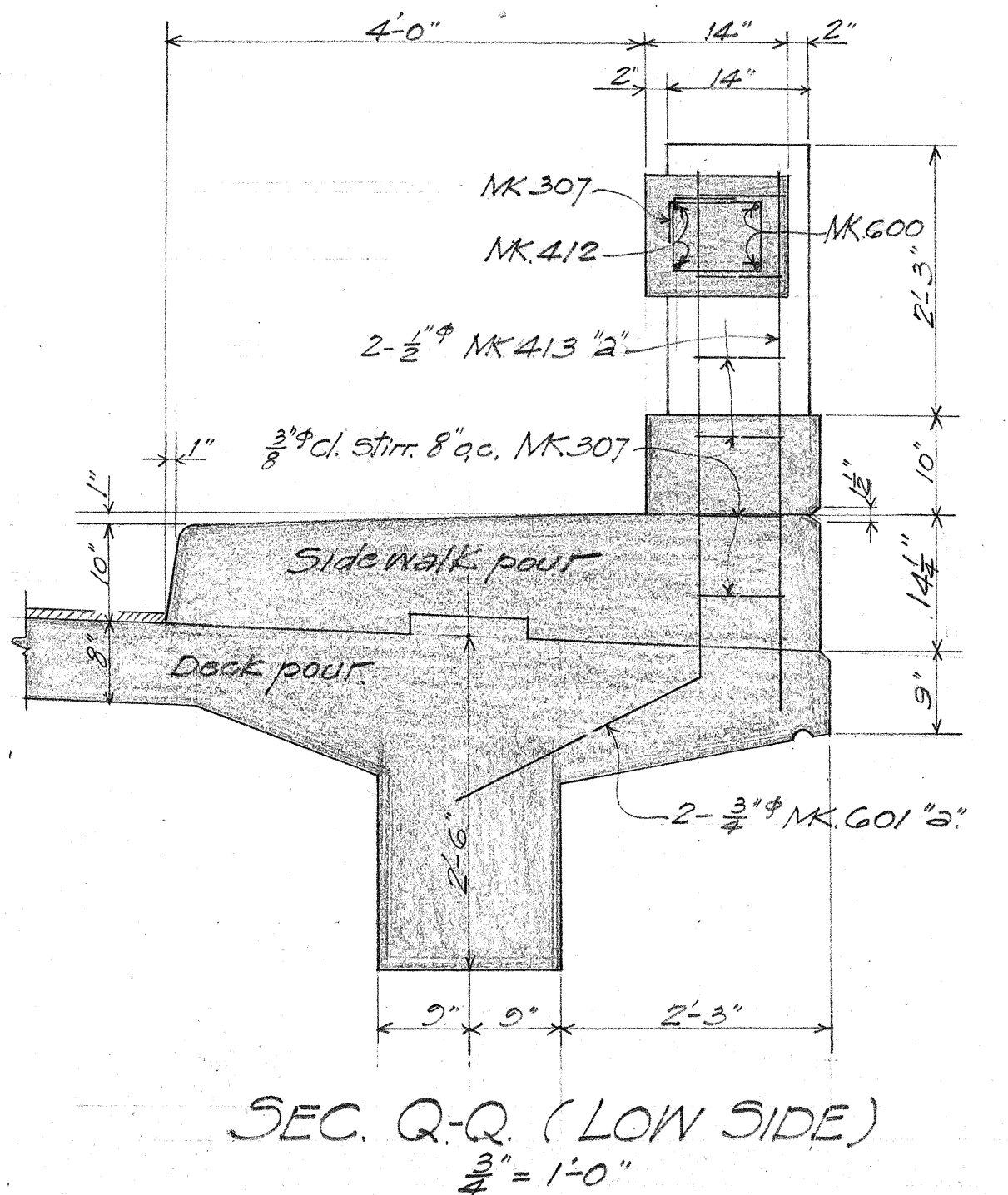
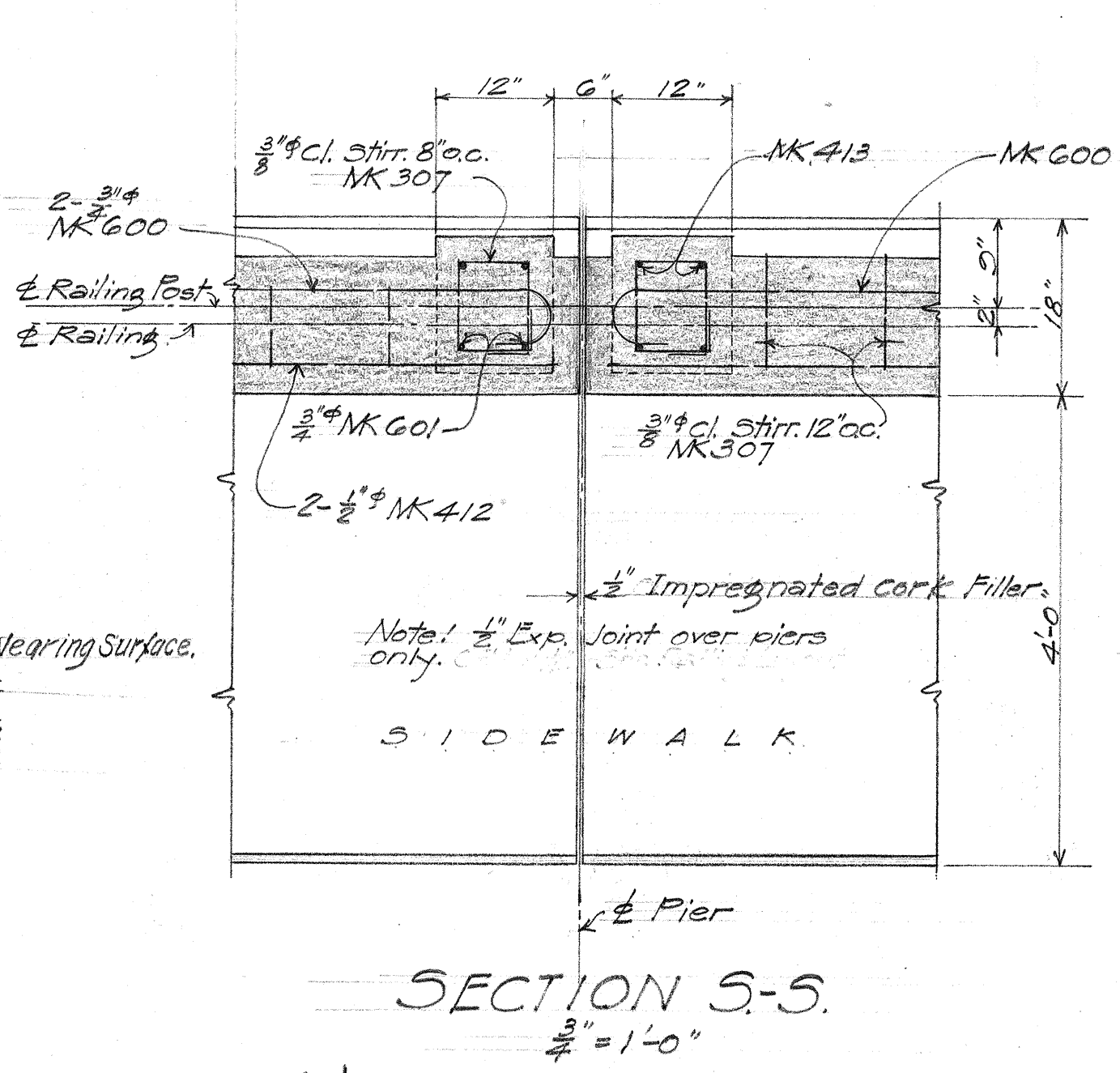
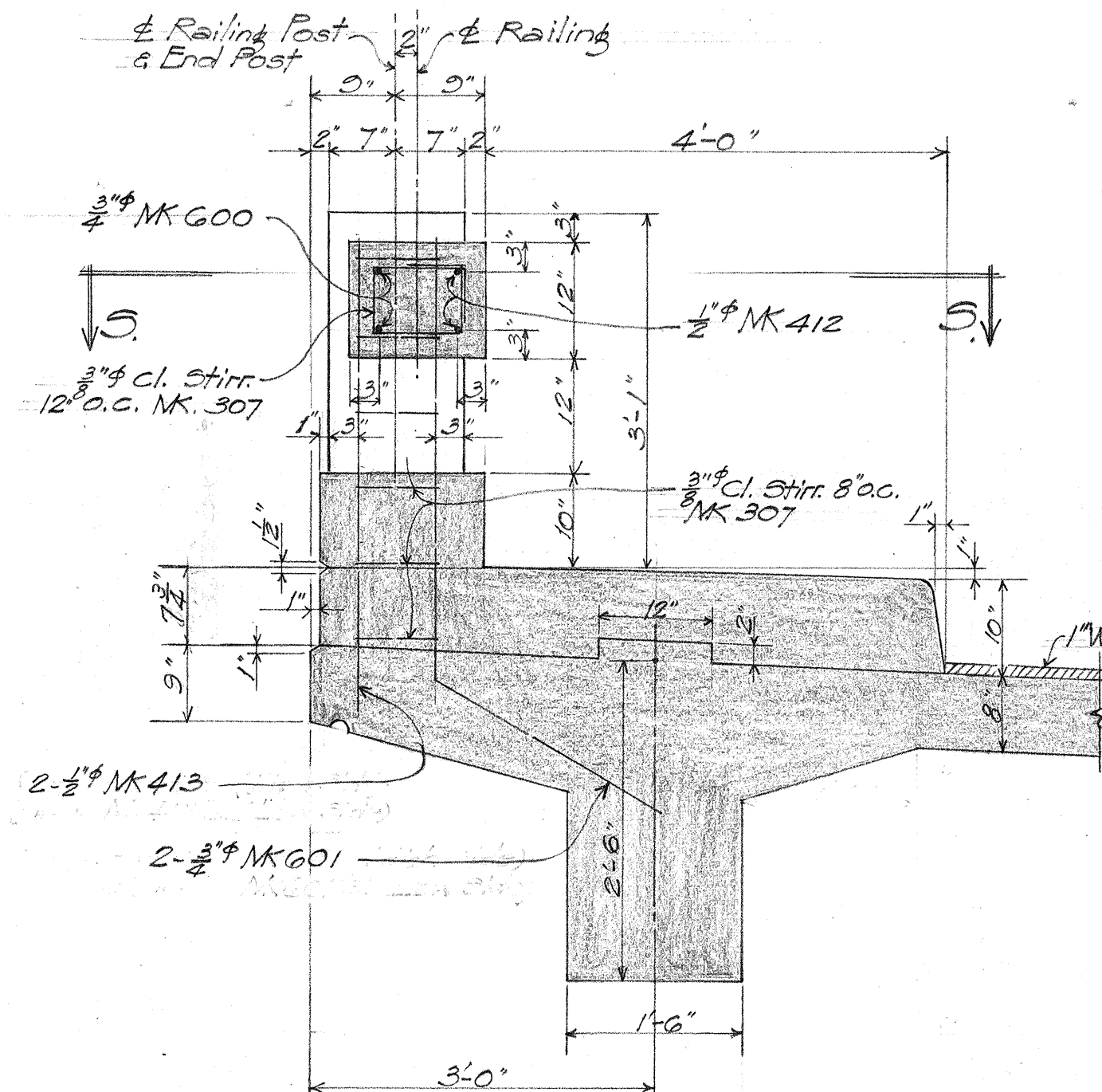
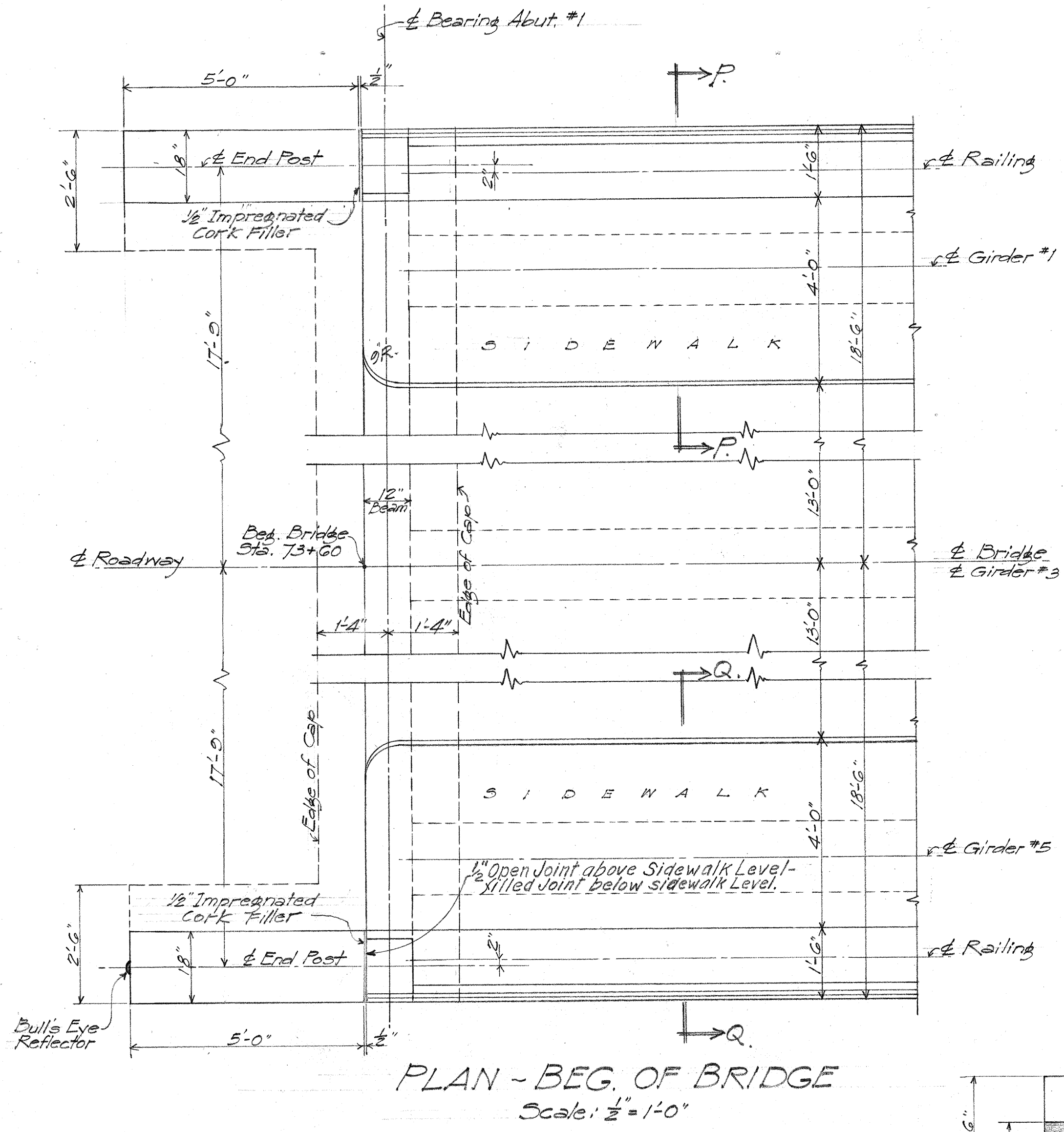
MAHAIKONA KEKAPUA BRIDGE
 Sta. 73+68 - Sta. 74+43
 KAUAI BELT ROAD - F.A.P. No. F-29(4)

July, 1946.

SHEET No. 3 OF 4 SHEETS

5185.24

ORIGINAL PLAN
 NOTE BOOK
 QUANTITIES CHECKED BY S. A. C.
 DATE July 24, 1946
 DESIGNED BY S. A. C.
 DRAWN BY S. A. C.
 CHECKED BY S. A. C.



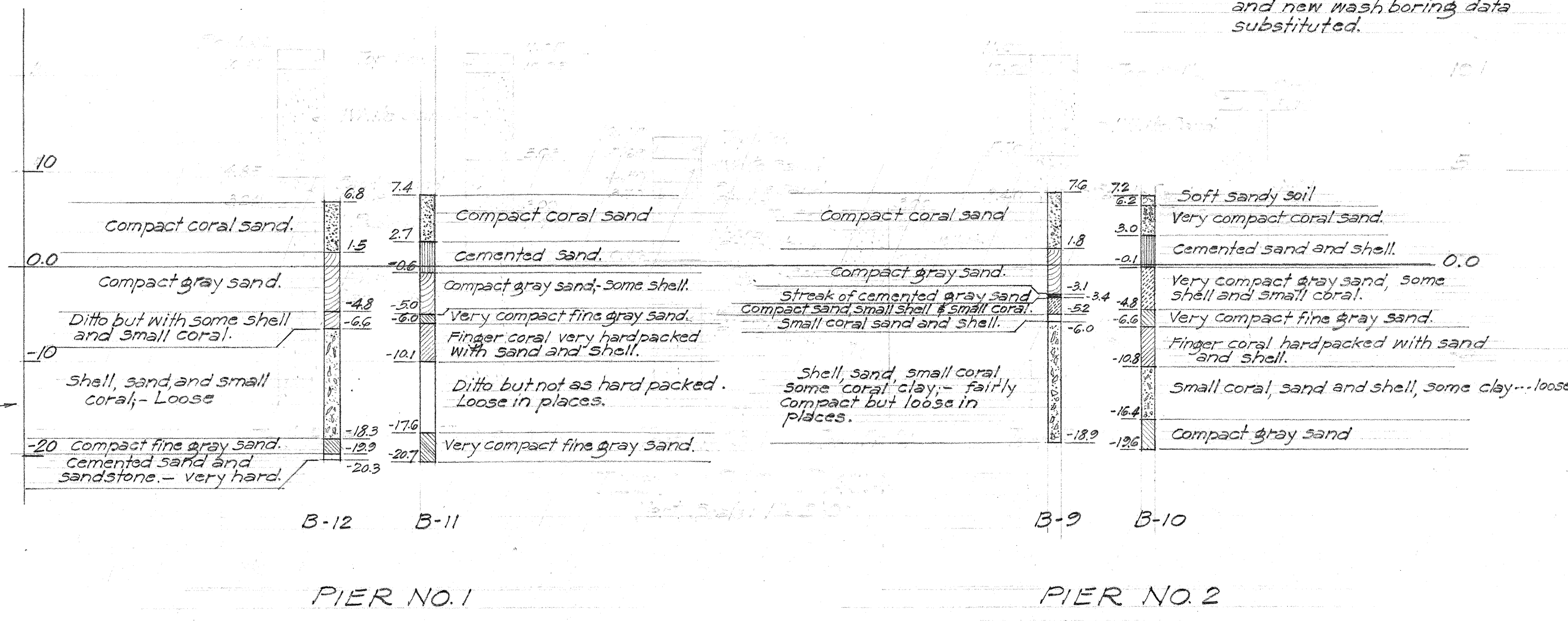
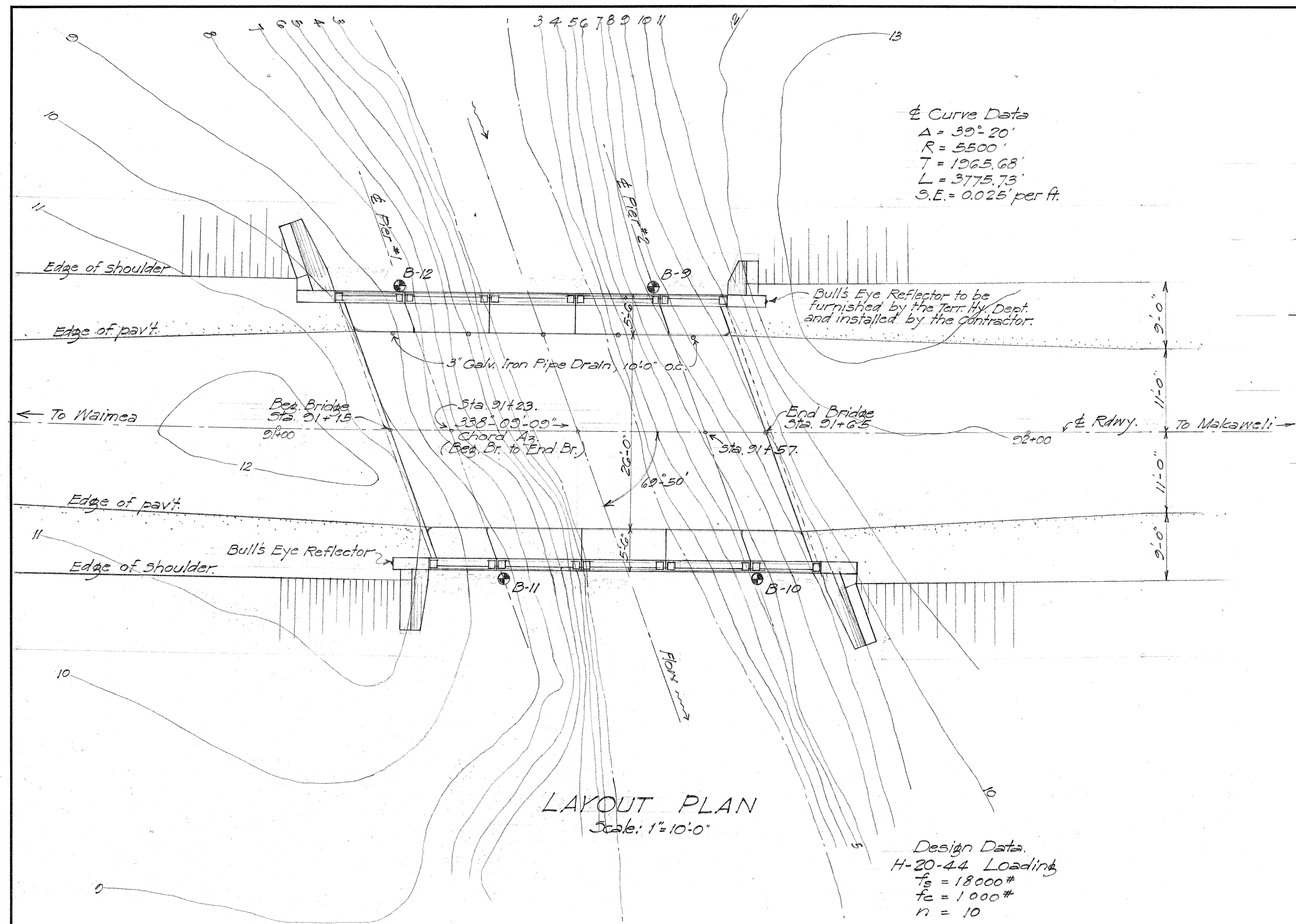
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MAHAIKONA KEKAPUA BRIDGE
Sta. 73+68 - Sta. 74+43
KAUAI BELT RD. F.A.P. No. F-29(4)
July, 1946

SHEET No. 4 OF 4 SHEETS

5185.25

ORIGINAL PLAN
DESIGNED BY
DRAWN BY
CHECKED BY
DATE
1946

Revised: Mar. 1947
Revision: Test pit data eliminated and new wash boring data substituted.

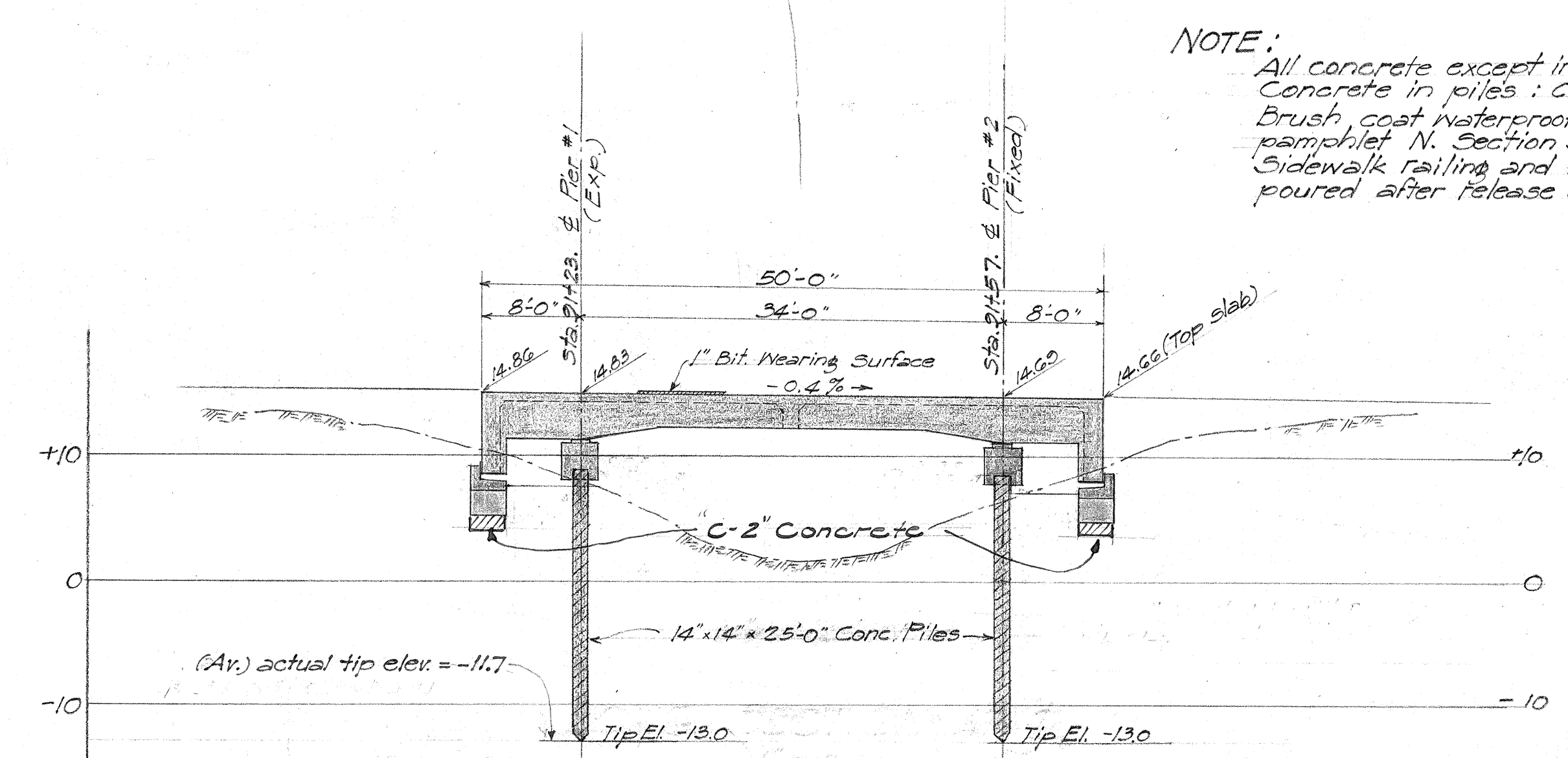


LAYOUT PLAN
Scale: 1"=10'-0"

Design Data
H-20-44 Loading
 $T_D = 18000\#$
 $T_L = 1000\#$
 $n = 10$

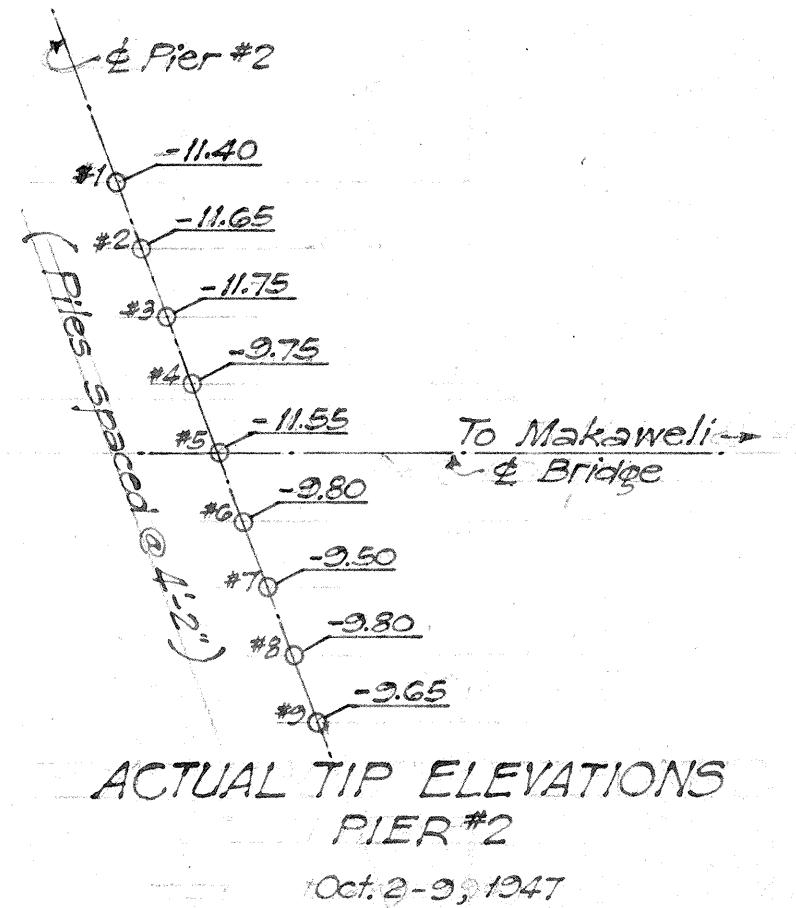
NOTE:
All concrete except in piles, end post base and wingwall: Class A-1.
Concrete in piles: Class E-1. Concrete in wingwall and end post base: Class C-2.
Brush coat waterproofing required: See pamphlet N. Section 34 of Specifications.
Sidewalk railing and railing post to be poured after release of falsework.

Item	Superstructure	Piers	Railing and Railing Post	Bag. of Bridge Sill/End Post, W.W.	End of Br. Sill/End Post, W.W.	Total
Class A-1 Conc.	133.4	24.0	5.7	7.6	7.6	178.3 c.y.
Class C-2 Conc.				25.5 16.5	25.9 16.7	51.4 c.y.
Reinf. Steel, lbs.	29,030	3496	1266	419	419	34,630 lbs.
14"x14"x25'-0" Conc. Piles		18 Piles				18 pcs.
Str. Exc.				51	44	25 c.y.



LONG. SECTION AT Δ
1"=10'-0"

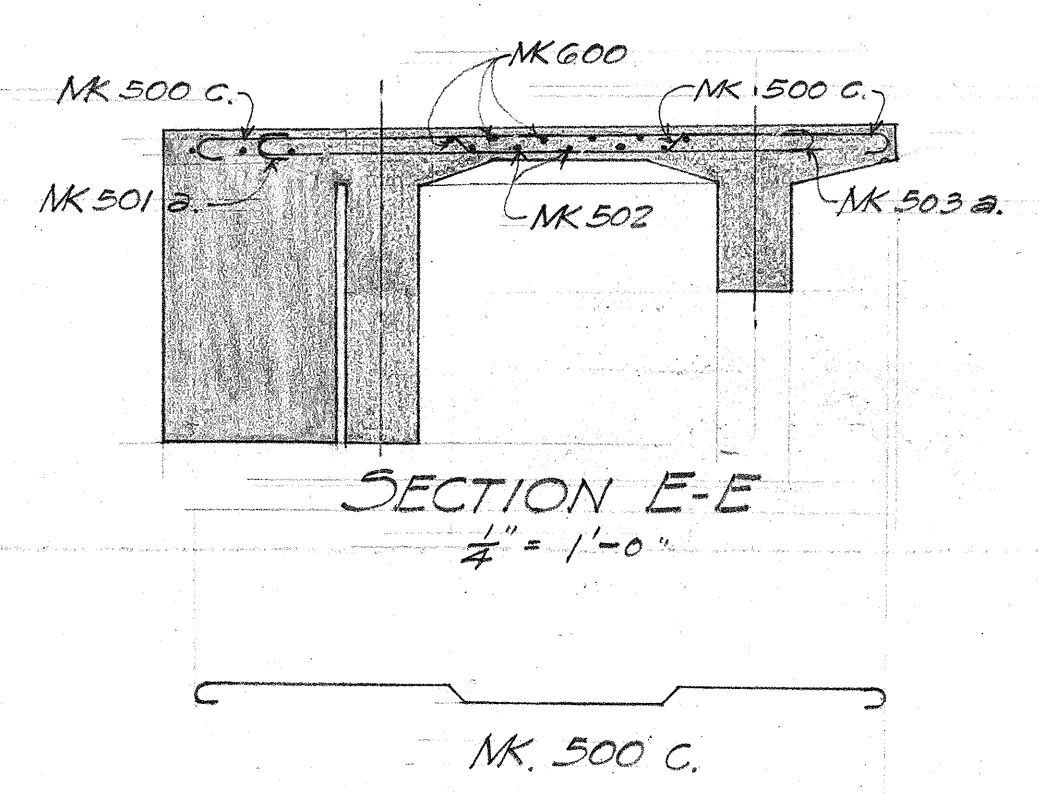
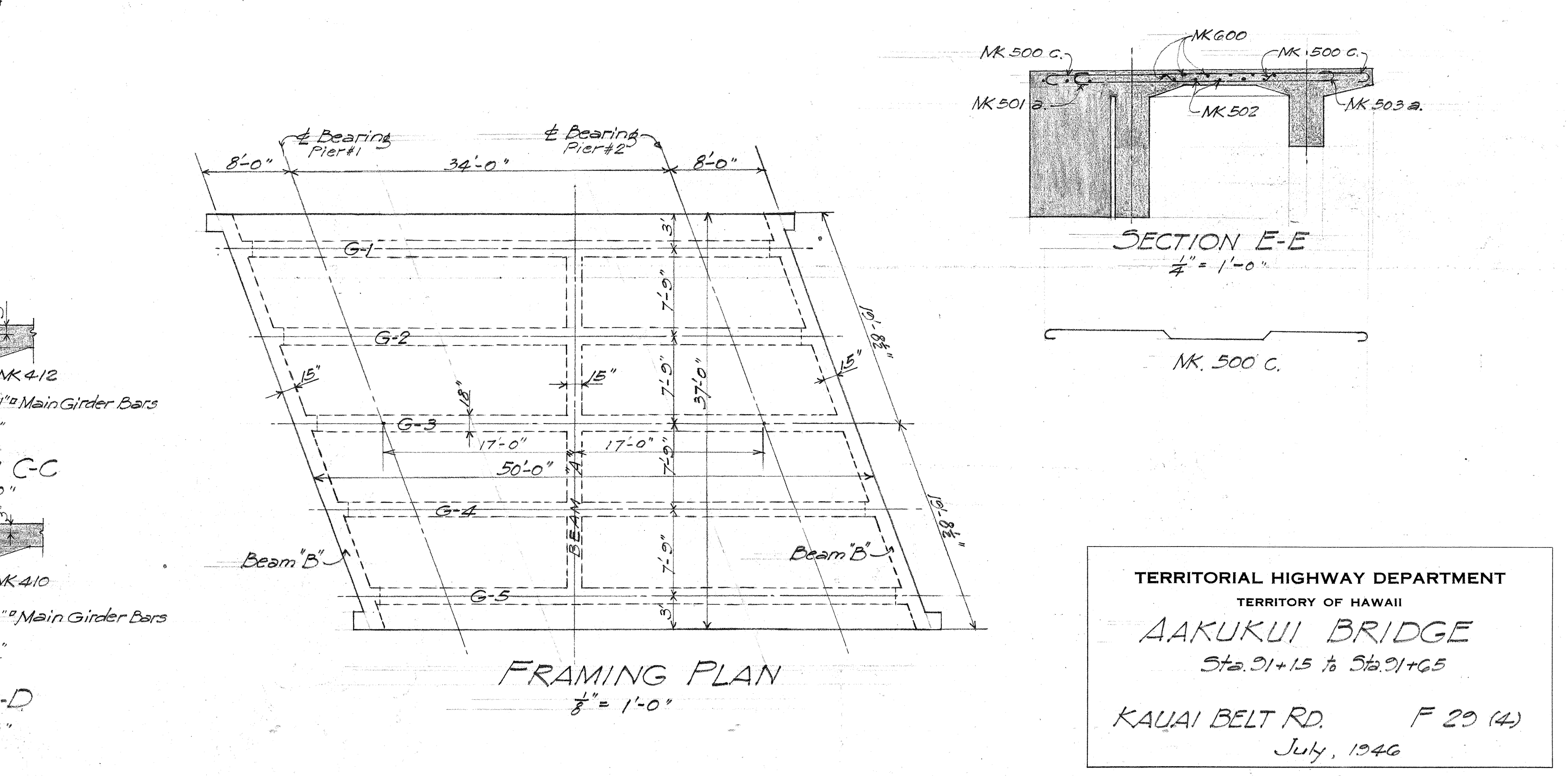
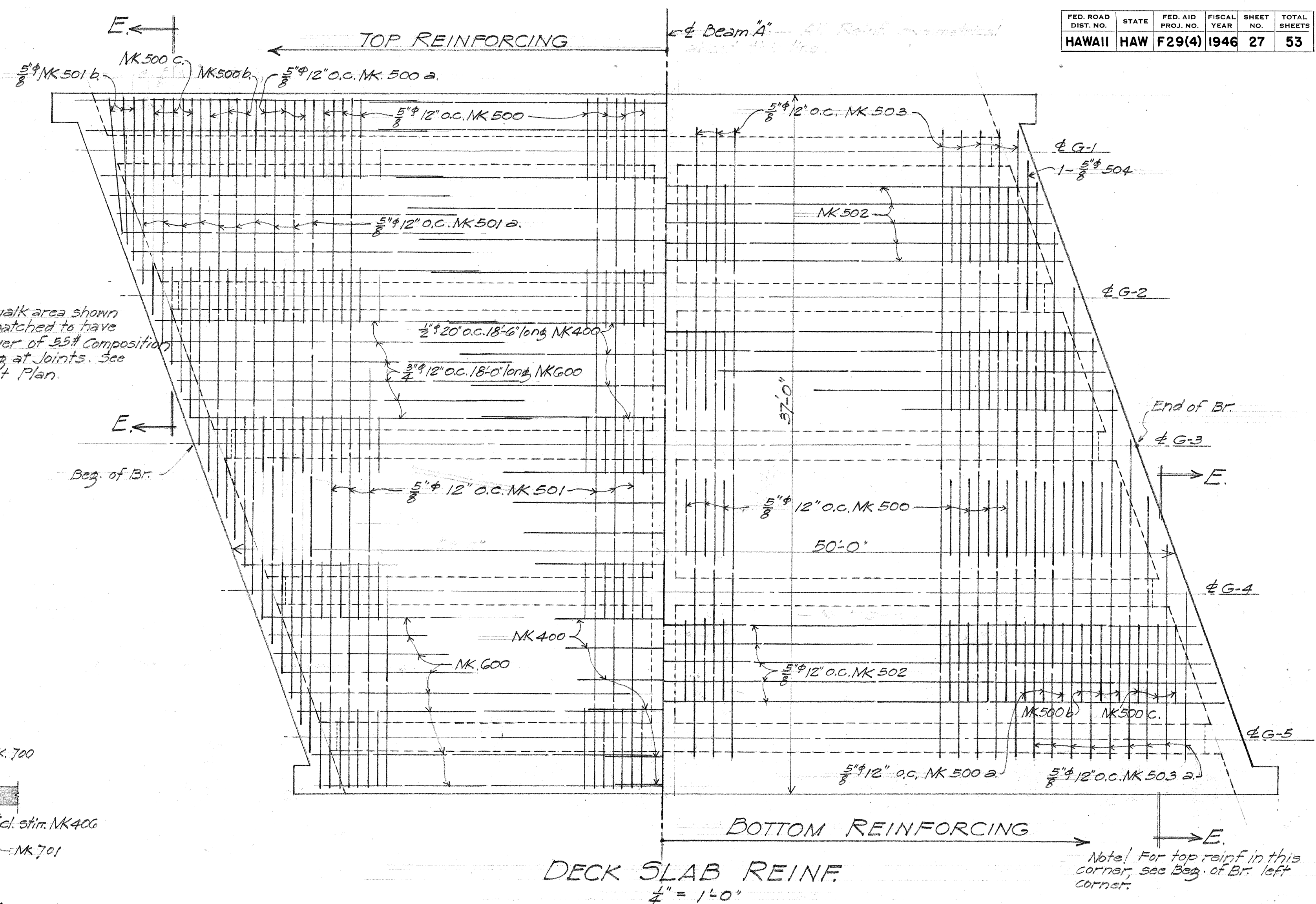
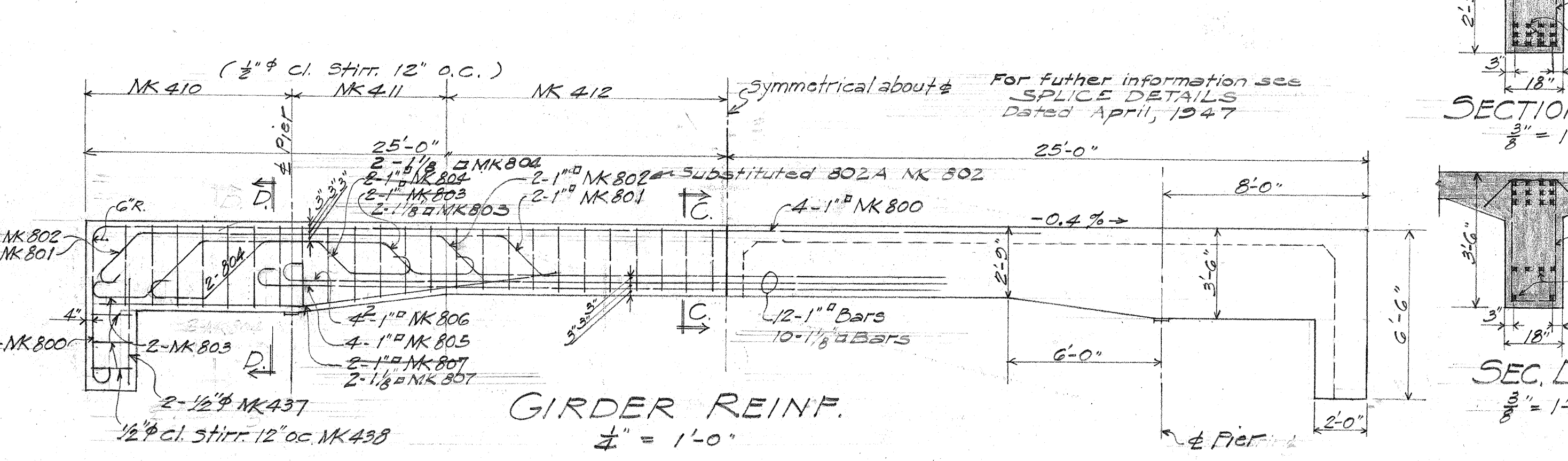
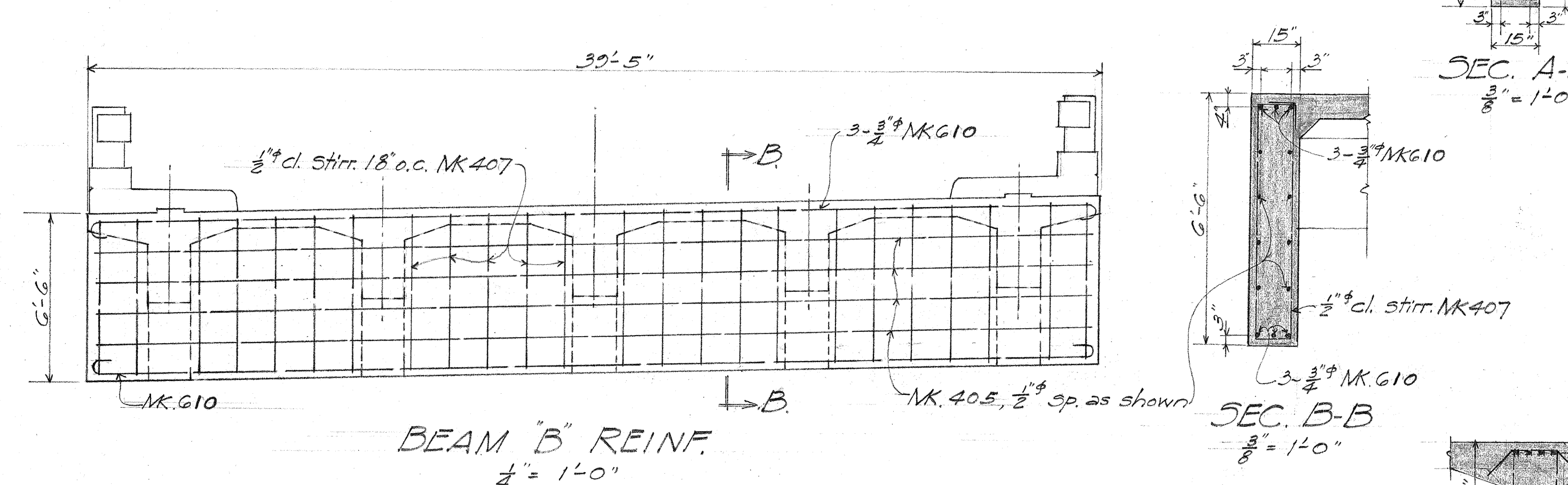
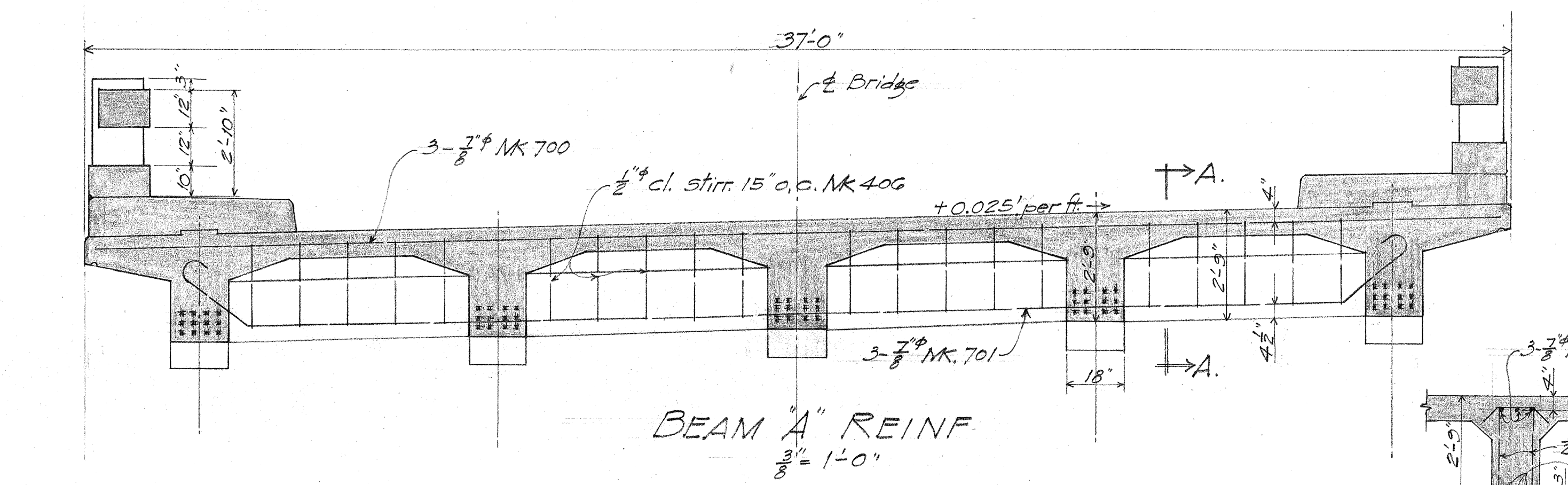
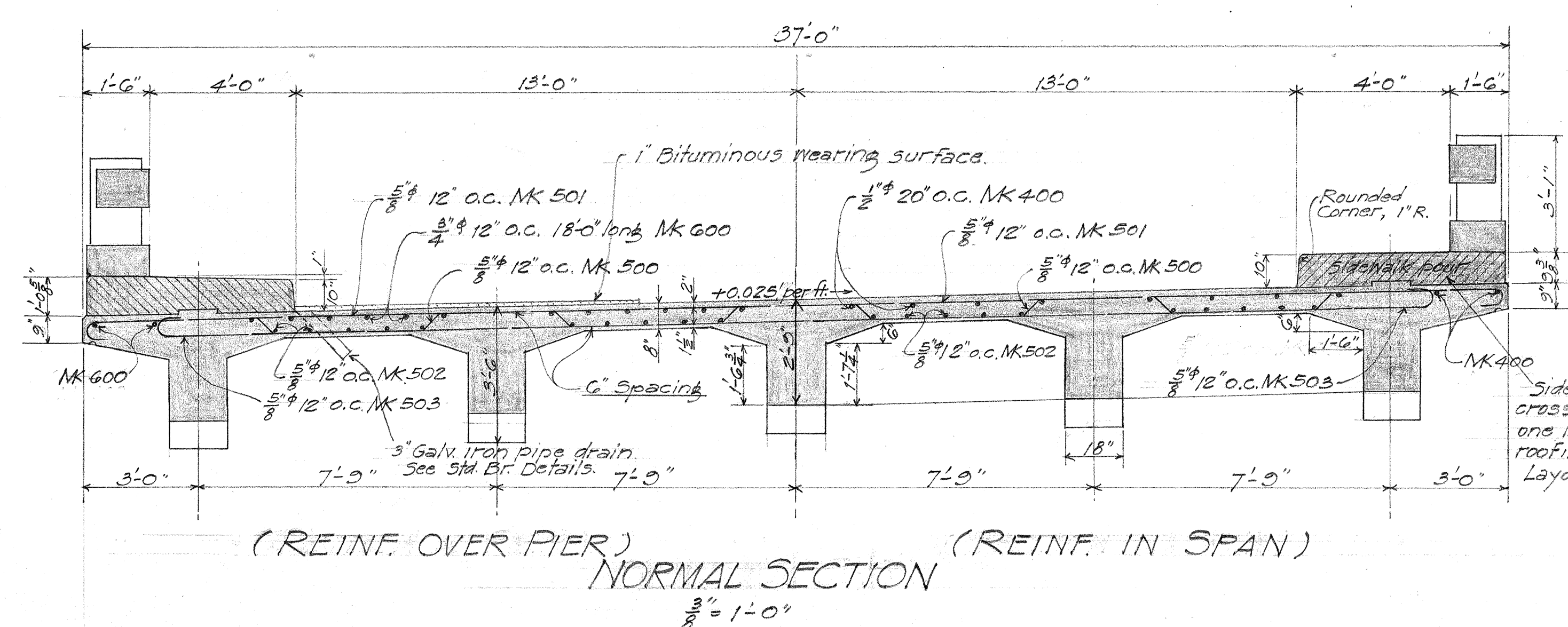
NOTE:
Tip elevation indicated must be reached in all cases. Resort to jacking or drilling.



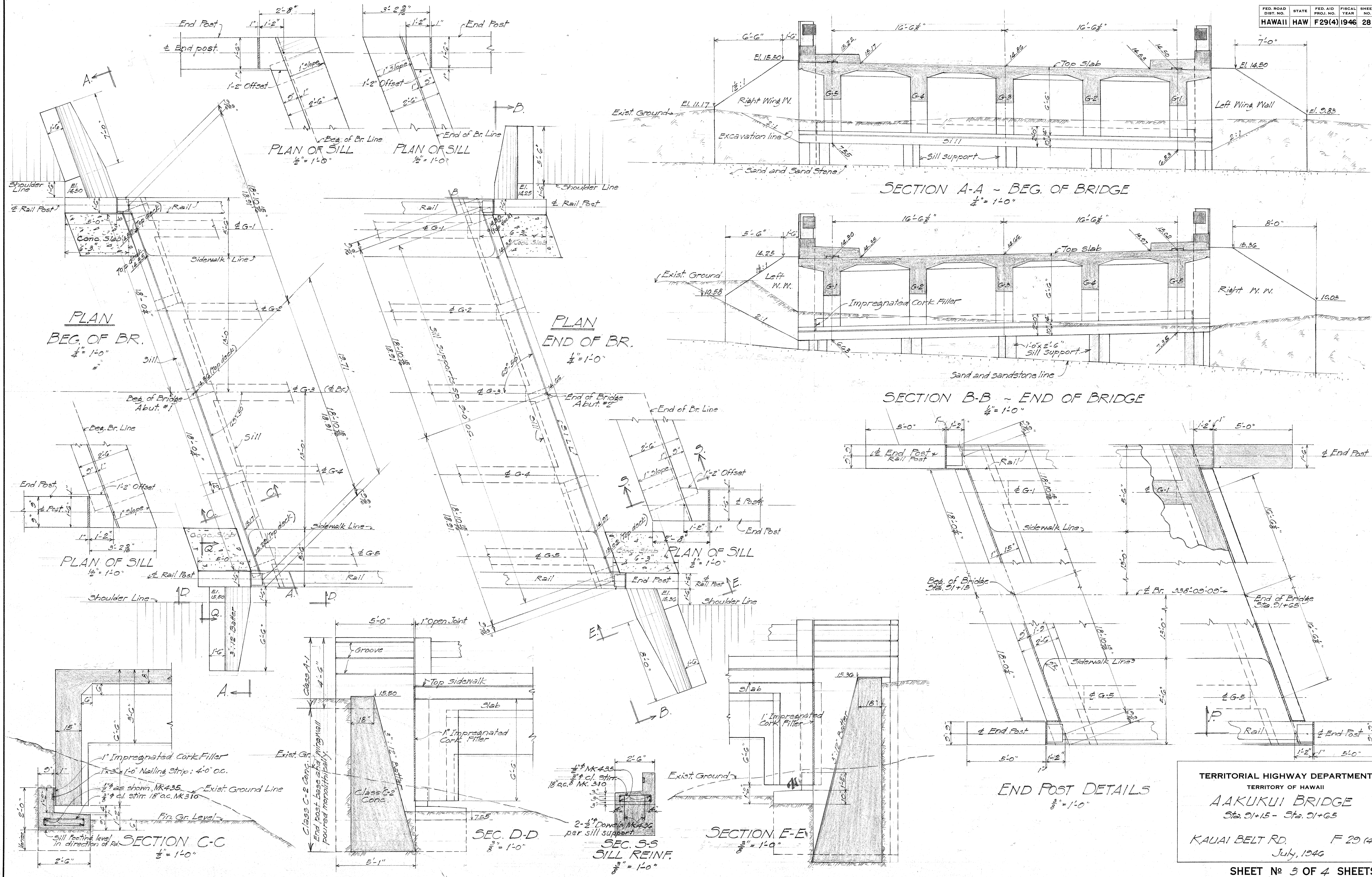
ACTUAL TIP ELEVATIONS
PIER #2
Oct. 2-9, 1947

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
AAKUKUI BRIDGE
Sta. 91+15 to Sta. 91+65
KAUAI BELT RD. F 29 (4)
July, 1946

ORIGINAL PLAN
DATE: 7/2/46
DRAWN BY: [Signature]
CHECKED BY: [Signature]
NO. 1



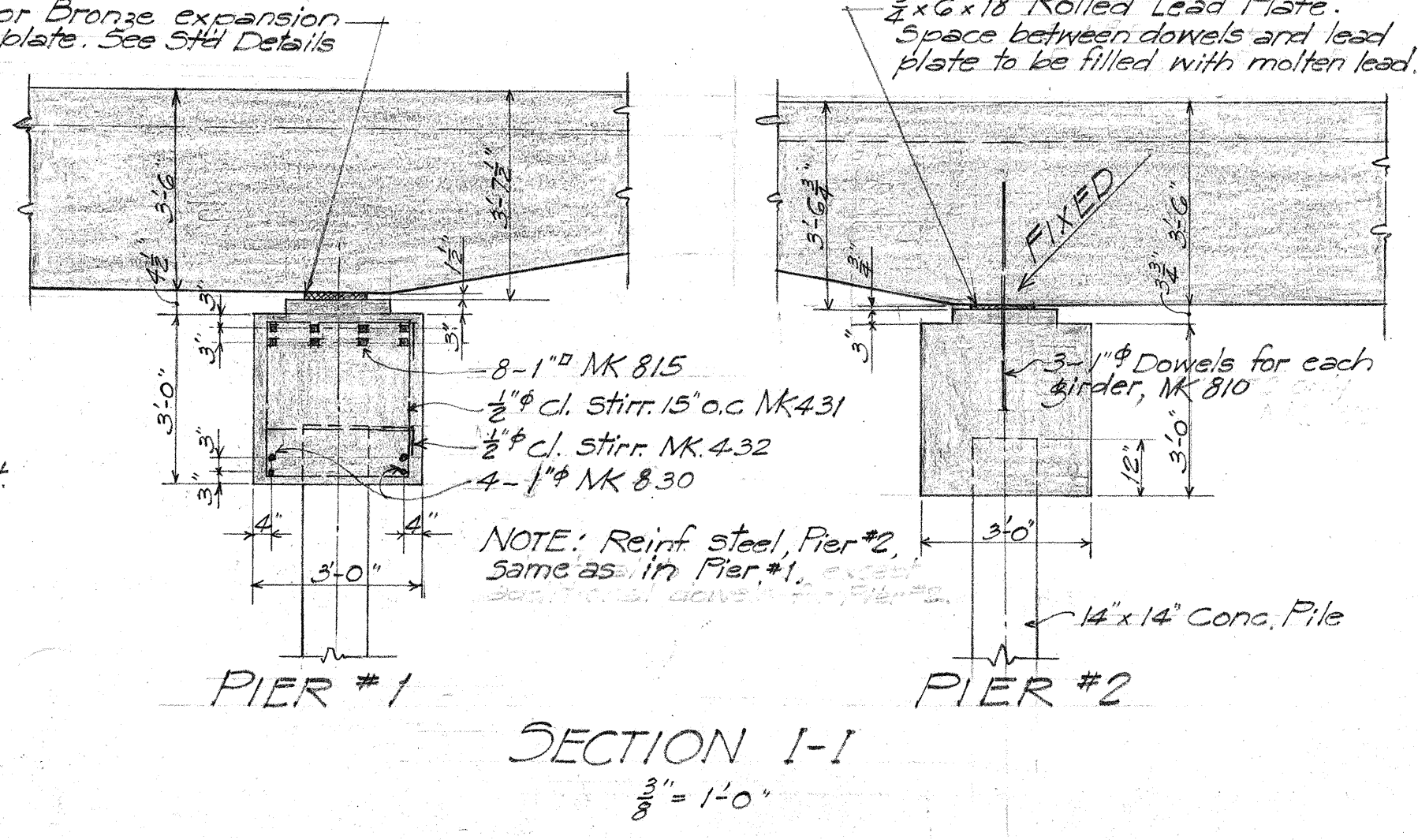
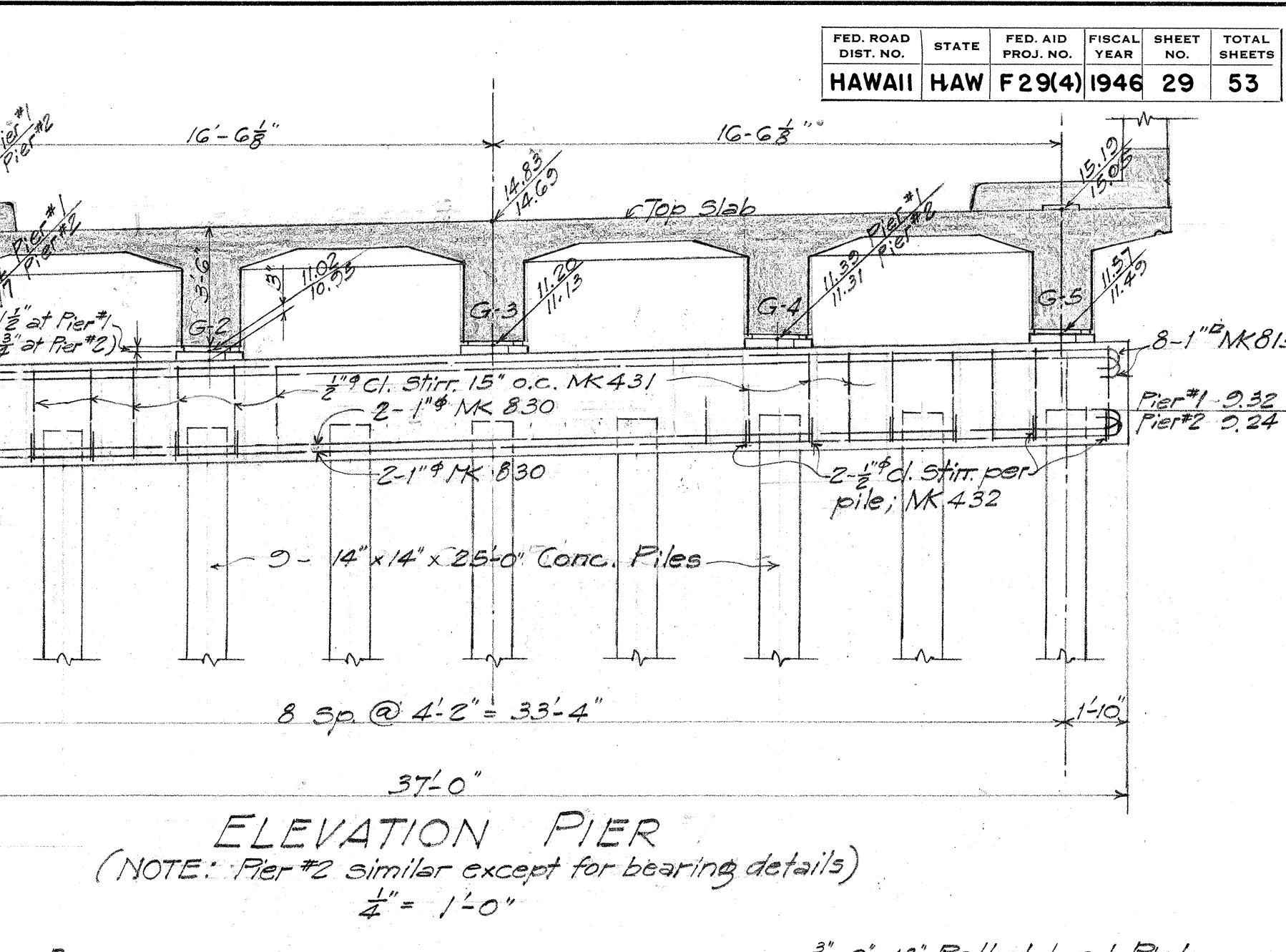
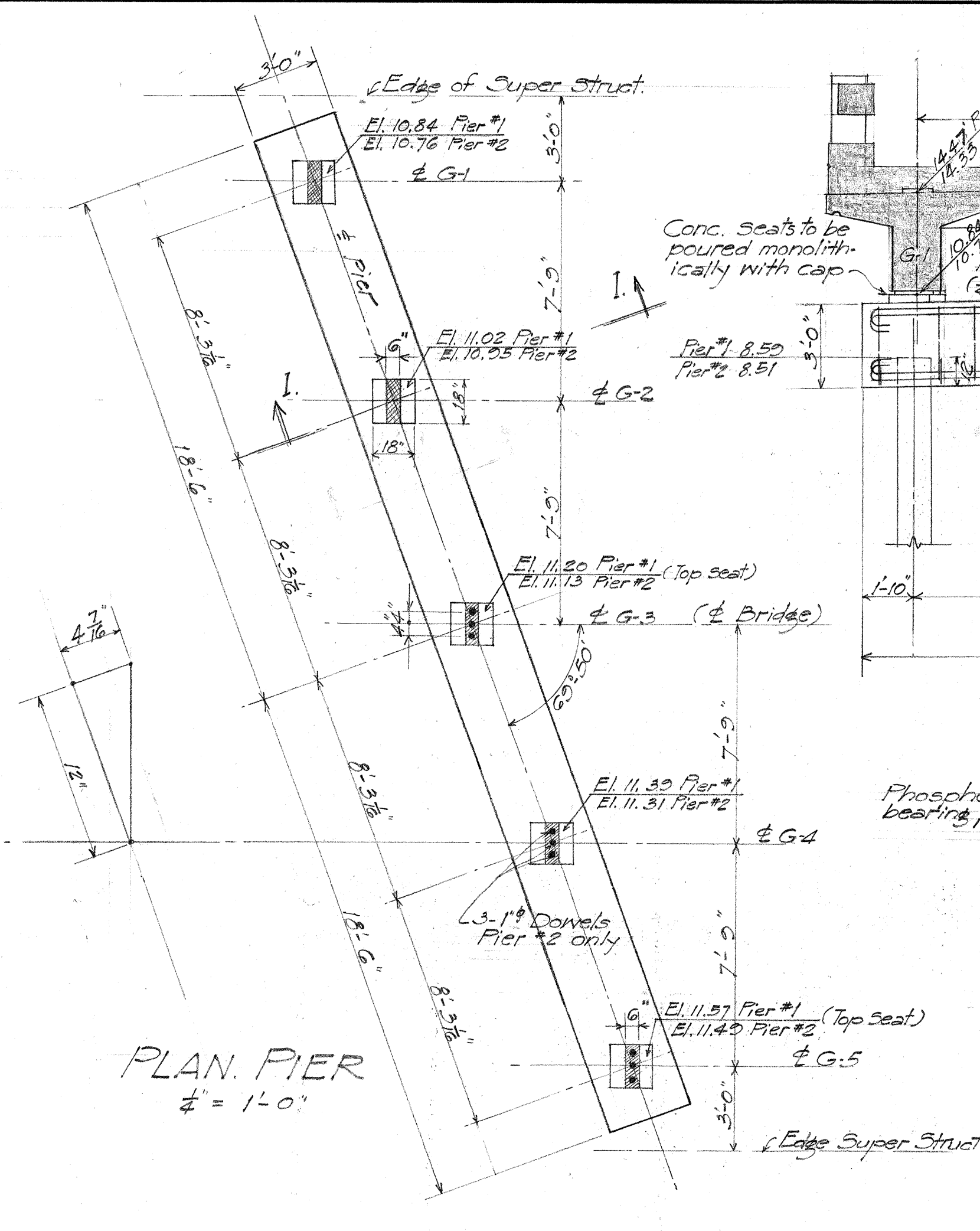
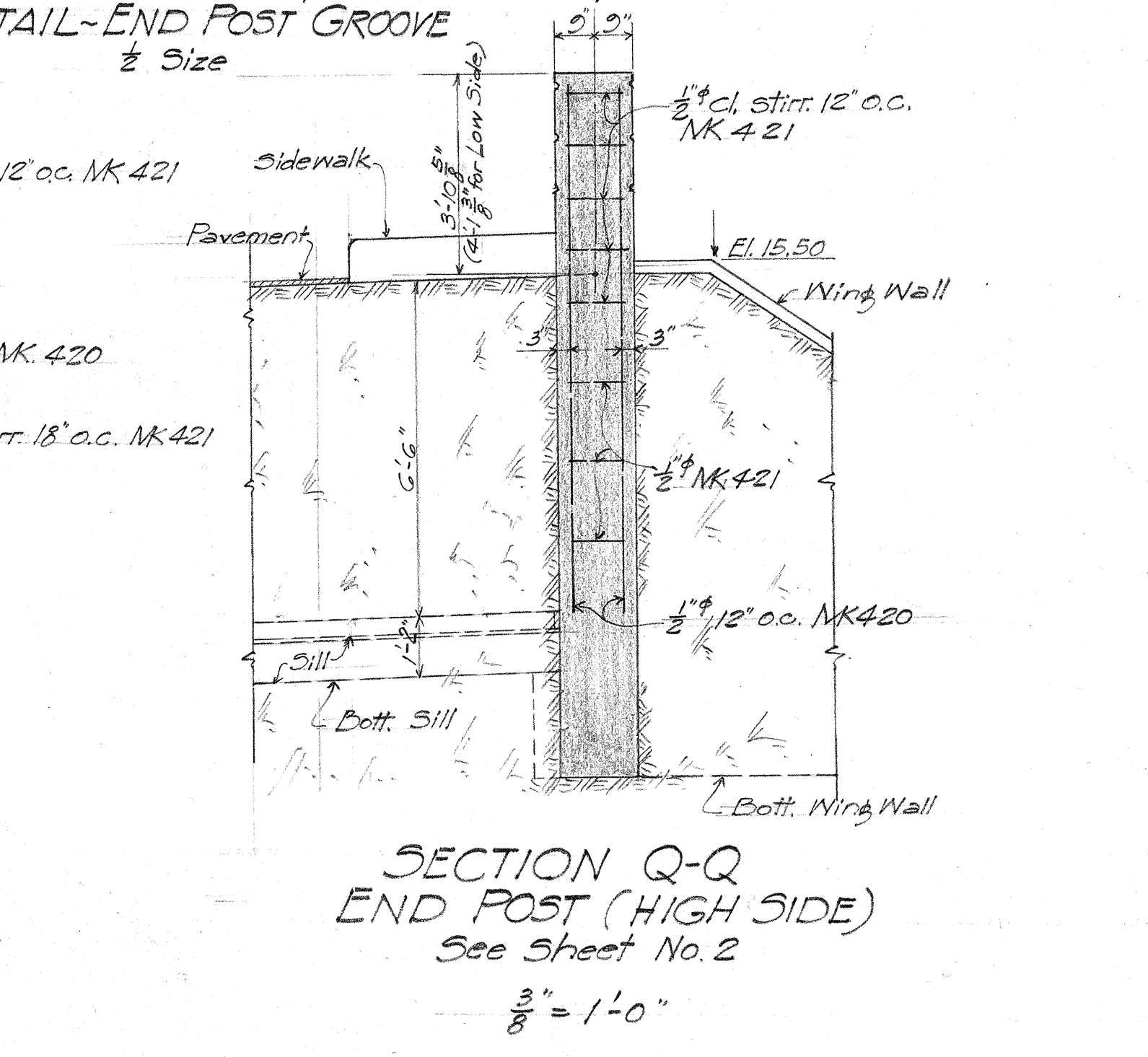
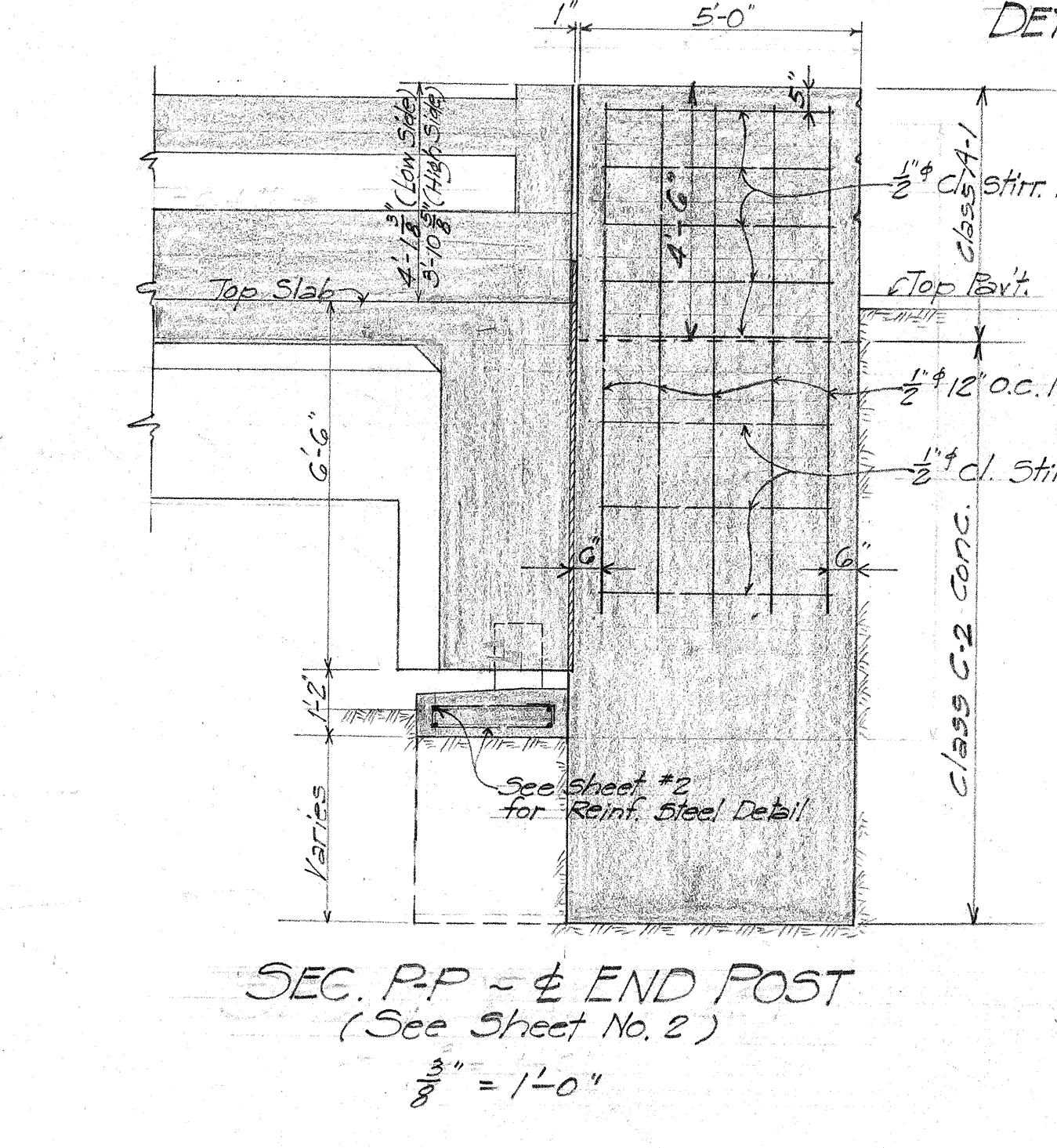
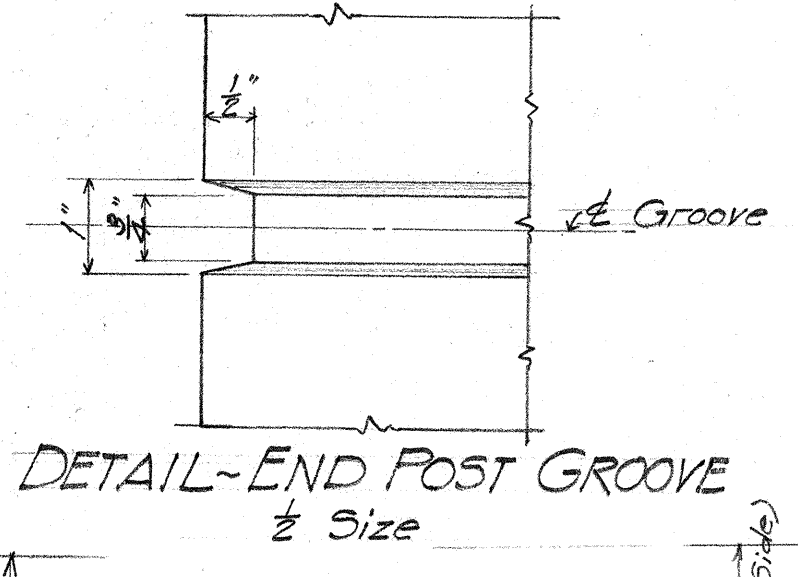
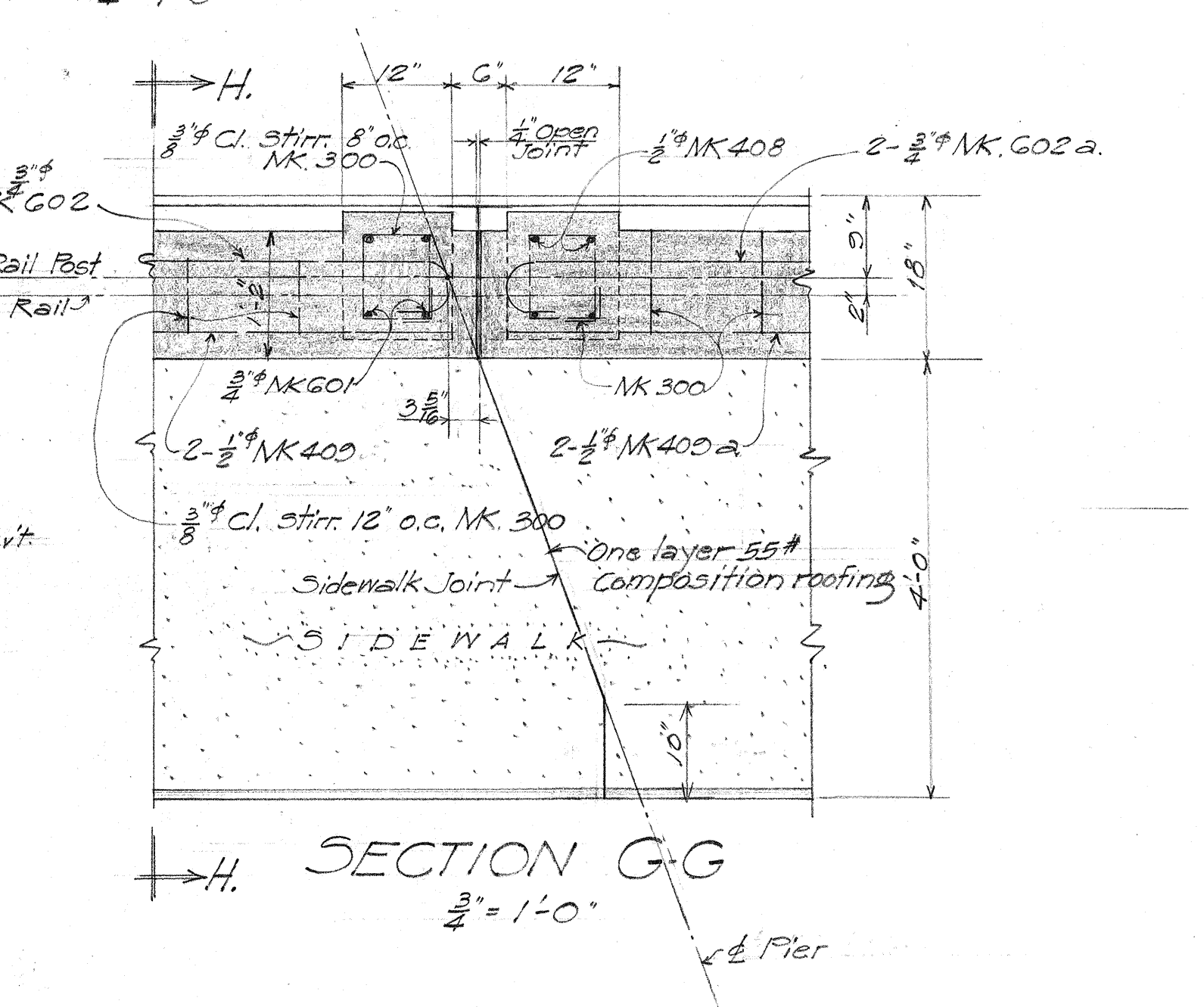
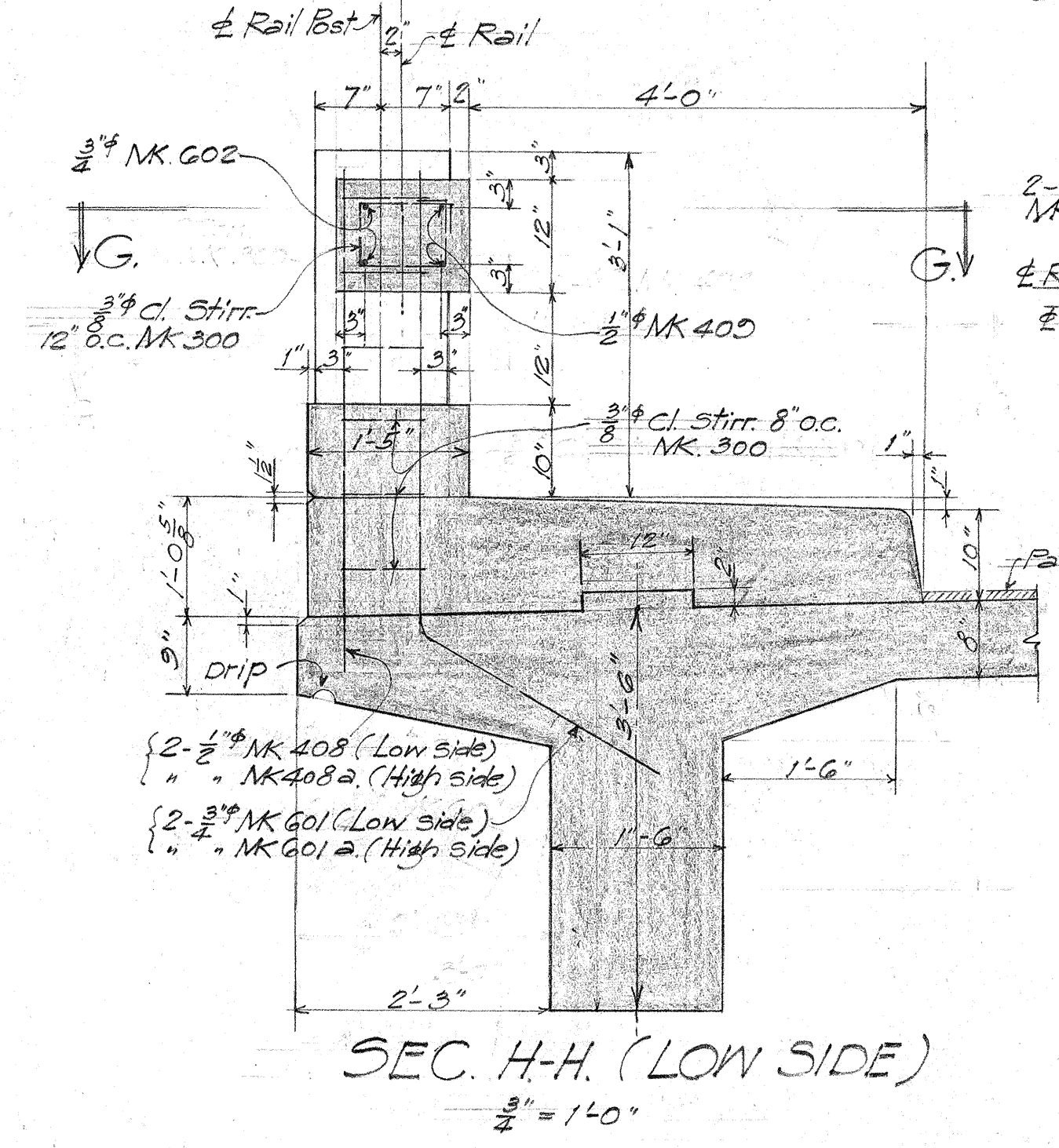
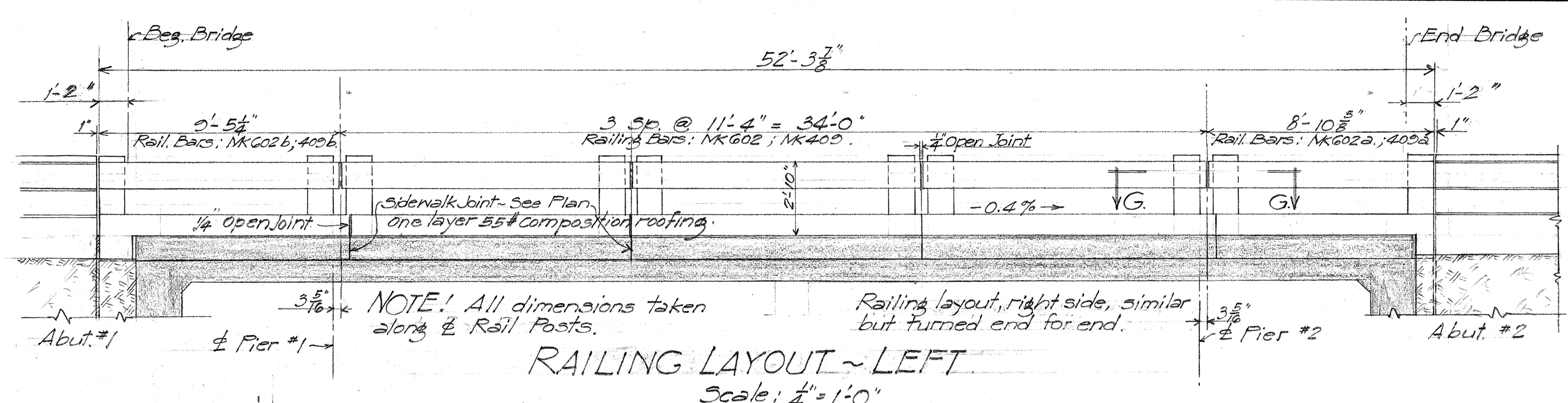
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
AAKUKUI BRIDGE
Sta. 21+15 to Sta. 21+65
KAUAI BELT RD. F 29 (4)
July, 1946
SHEET No 2 OF 4 SHEETS



DATE: 7/1/46
 DESIGNED BY: J. H. HARRIS
 DRAWN BY: J. H. HARRIS
 CHECKED BY: J. H. HARRIS
 QUANTITIES CHECKED BY: J. H. HARRIS
 NOTE BOOK
 No.

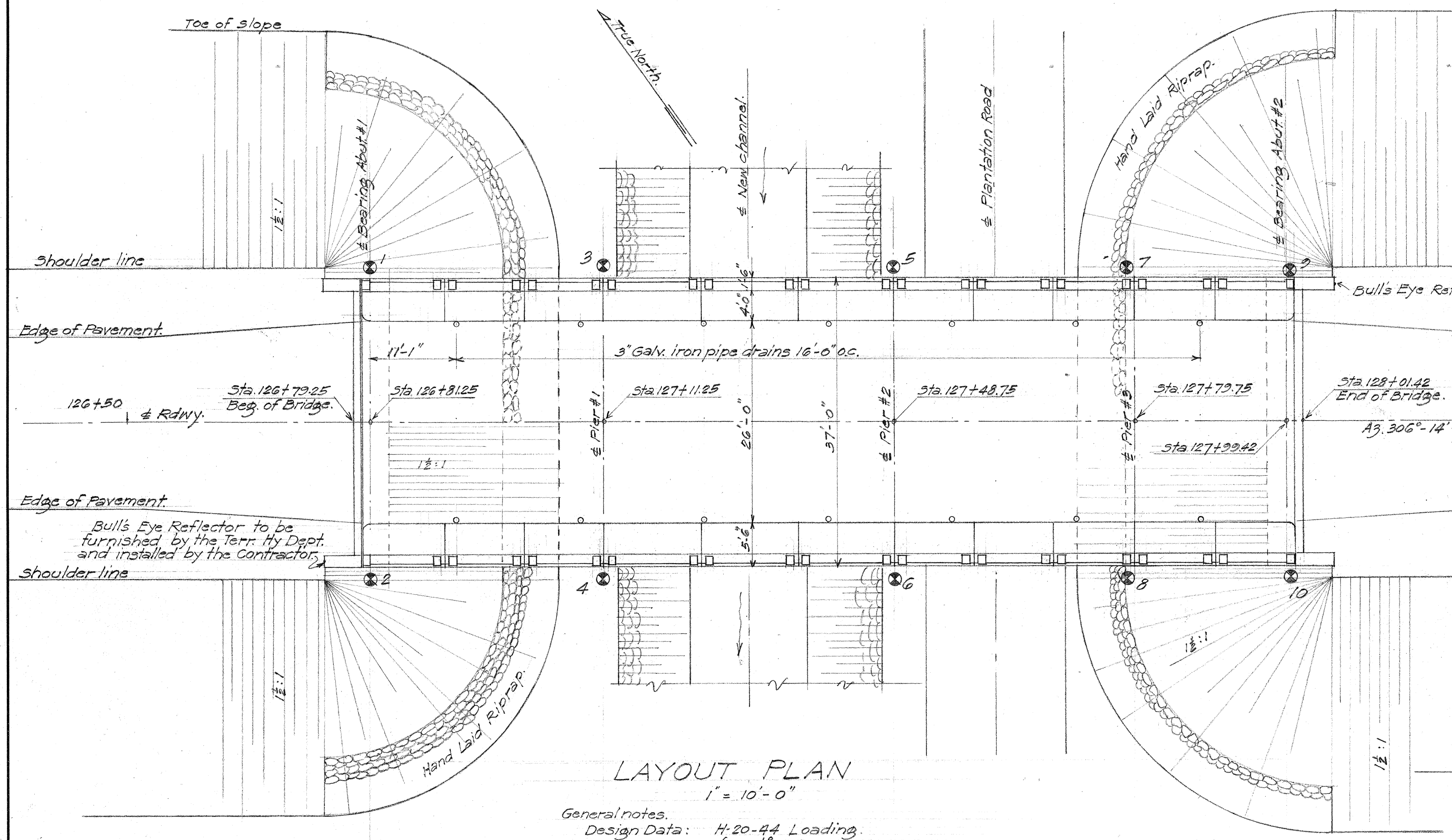
TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
AAKUKUI BRIDGE
 Sta. 21+15 - Sta. 21+65
 KAUAI BELT RD. F 29 (4)
 July, 1946

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F29(4)	1946	29	53

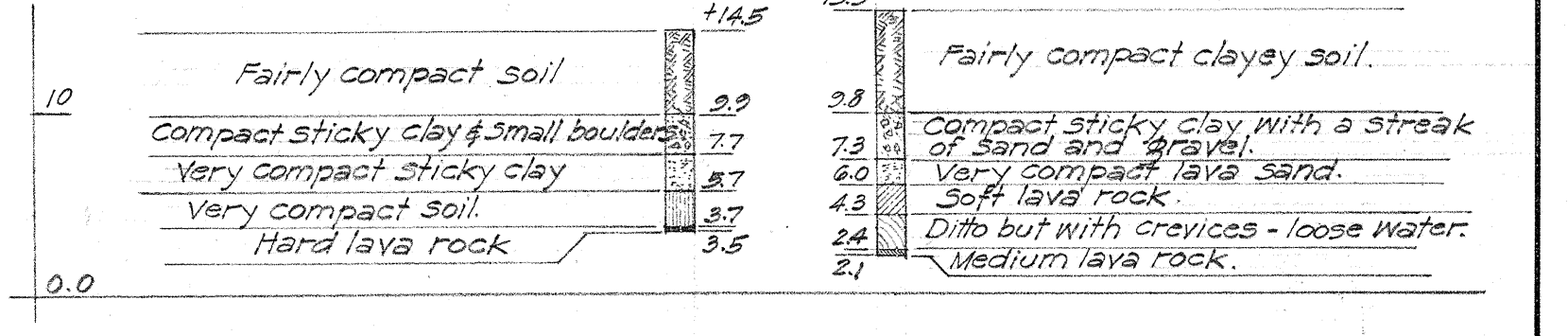
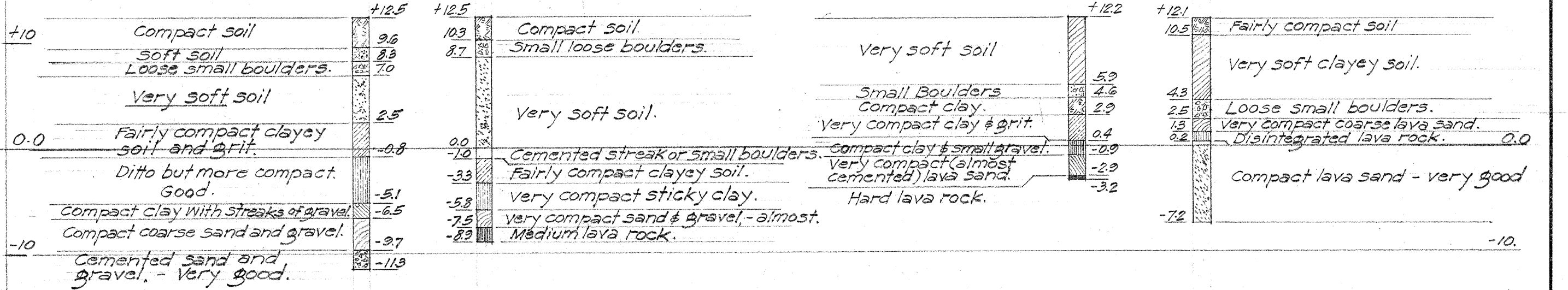
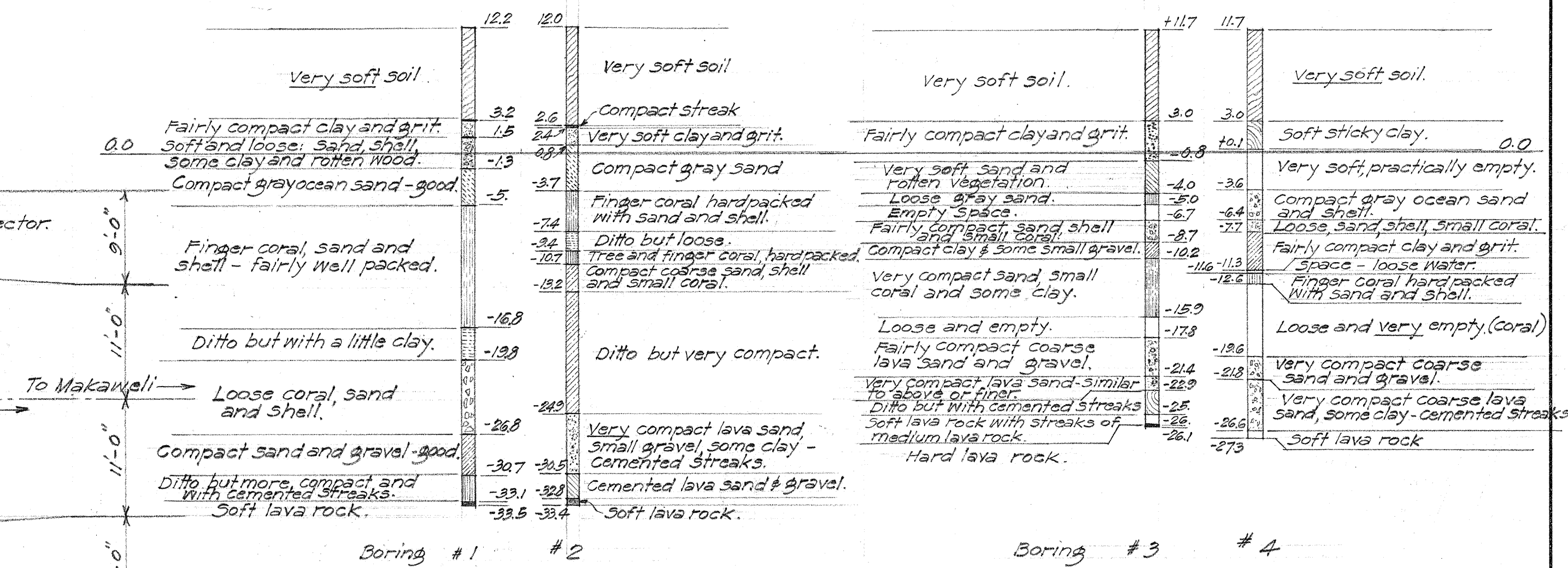


TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
AAKUKUI BRIDGE
Sta. 21+15 - Sta. 21+65
KAUAI BELT RD. F. 29 (4)
July, 1946

Revised: Mar. 14, 1947
Revision: Pile length for Abutment #1 changed.



General notes:
Design Data: H-20-44 Loading.
L₁₀ = 18,000
n = 10
Materials: All concrete except in piles: Class A-1.
Concrete in piles: Class E-1.
Construction Methods: Sidewalk, railing and railing post to be poured after release of falsework.
Brush coat waterproofing required. See Pamphlet N Section 34 of Specification.



BORING DATA
1" = 10' (Vertical)

Item.	Superstr.	Railing Post & Rail Curb.	Piers	Abut and End Post.	Total
Class A-1 Conc.	255.13 C.Y.	23.53 C.Y.	37.85 C.Y.	50.22 C.Y.	366.73 C.Y.
Reinforcing Steel	53,766 lbs.	2,745 lbs.	4,976 lbs.	1,038 lbs.	62,525 lbs.
Str. Exc.				79.0 C.Y.	79.0 C.Y.
Hand-Laid Riprap				113.0 C.Y.	113.0 C.Y.
14"x14"x30' Conc. Piles				5 pcs.	5 pcs.
14"x14"x35' Conc. Piles			8 pcs.		8 pcs.
14"x14"x40' Conc. Piles			9 pcs.		9 pcs.
14"x14"x50' Conc. Piles			9 pcs.	5 pcs.	14 pcs.

Pile Driving Note! If the required minimum penetration of 100 feet in hard material cannot be obtained by ordinary methods, resort to jacking or drilling.

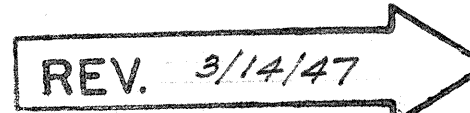
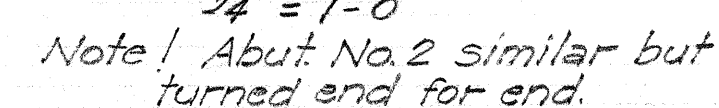
This sheet supersedes Sheet No. 5185.30

NOTE: Increase Class A-1 Concrete and Reinforcing Steel due to Pile Build-Ups as noted in Sheet No. 5185.3

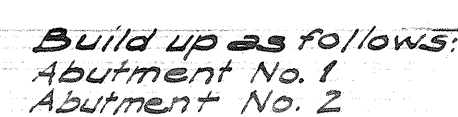
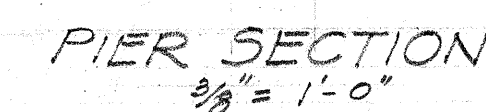
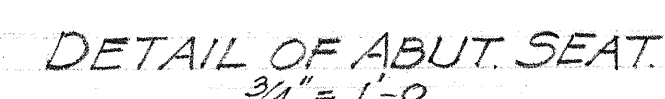
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MAHINAULI BRIDGE
Sta. 126+79.25 - Sta. 128+01.42
KAUAI BELT RD F 29 (4)
Feb. 1947

DATE: 2/27/47
SURVEY PLOTTED BY: J. H. HARRIS
DRAWN BY: J. H. HARRIS
CHECKED BY: J. H. HARRIS
ORIGINAL PLAN
NOTE BOOK
No.

REV. MAR. 14, 1947



SECTION A-A
3/8" = 1'-0"



ABUTMENT ELEVATION
1/4" = 1'-0"

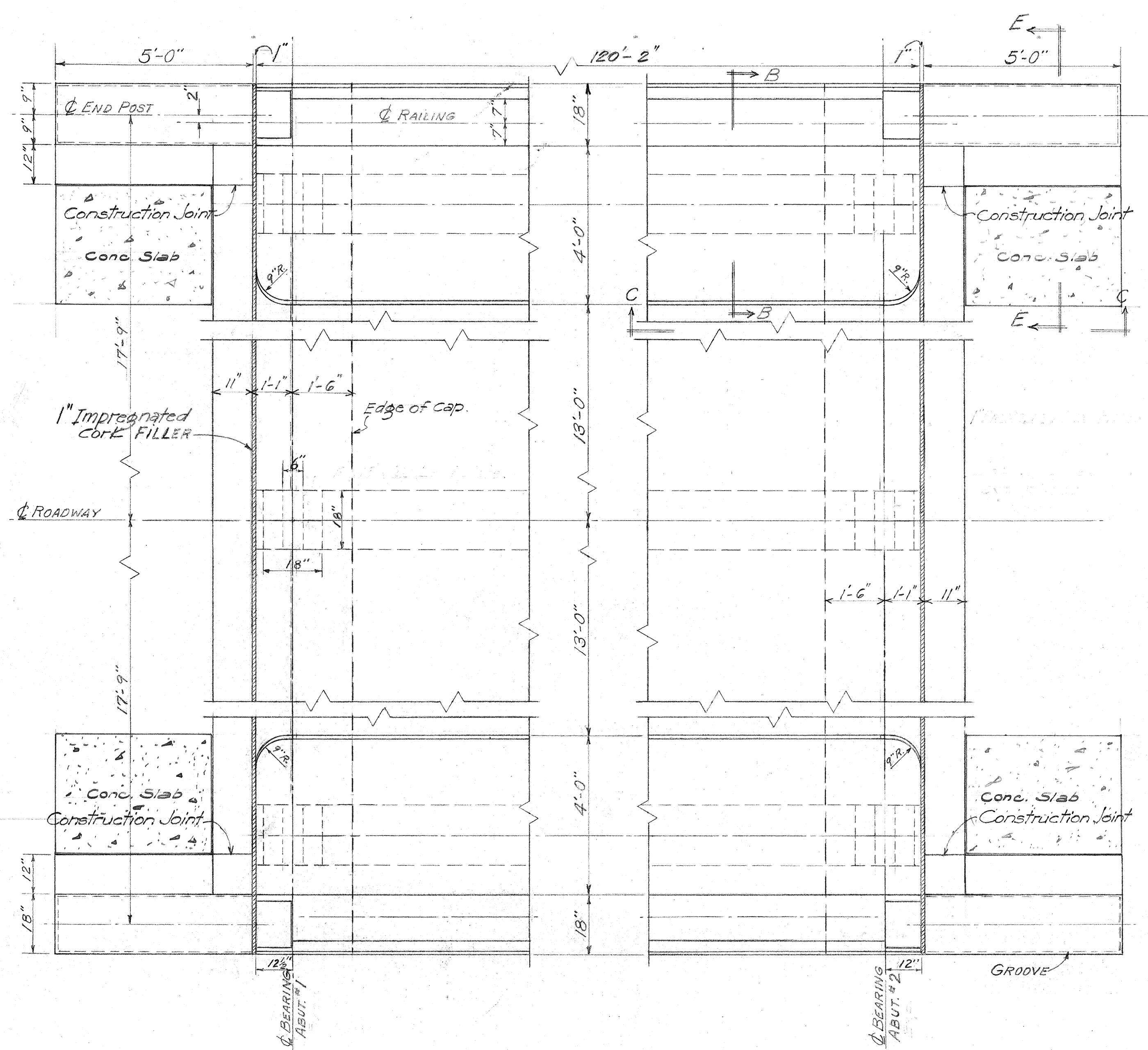


ELEVATION. PIER #3
1/4" = 1'-0"

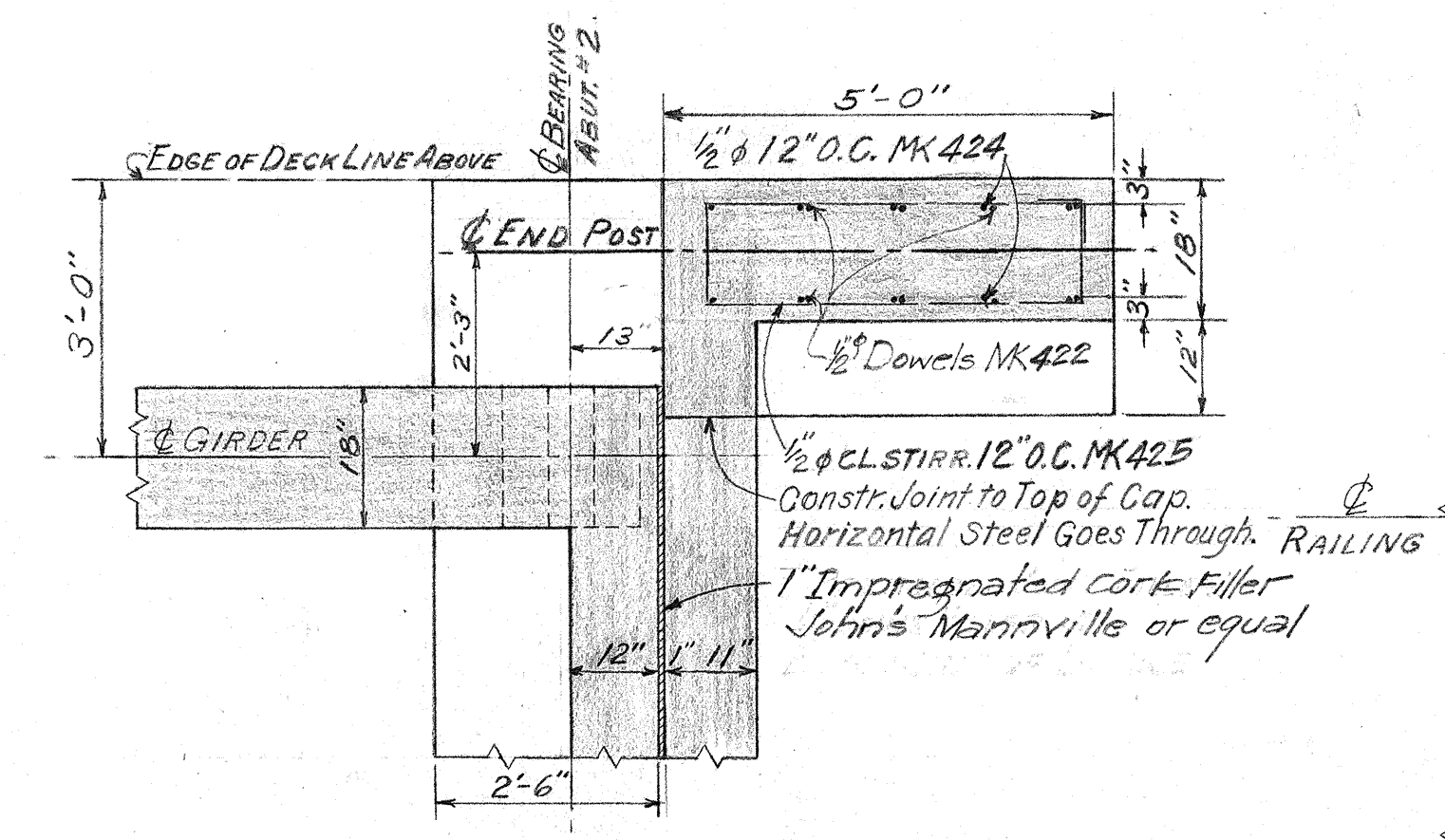
SHEET No 3 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F 29(4)	1946	33	53

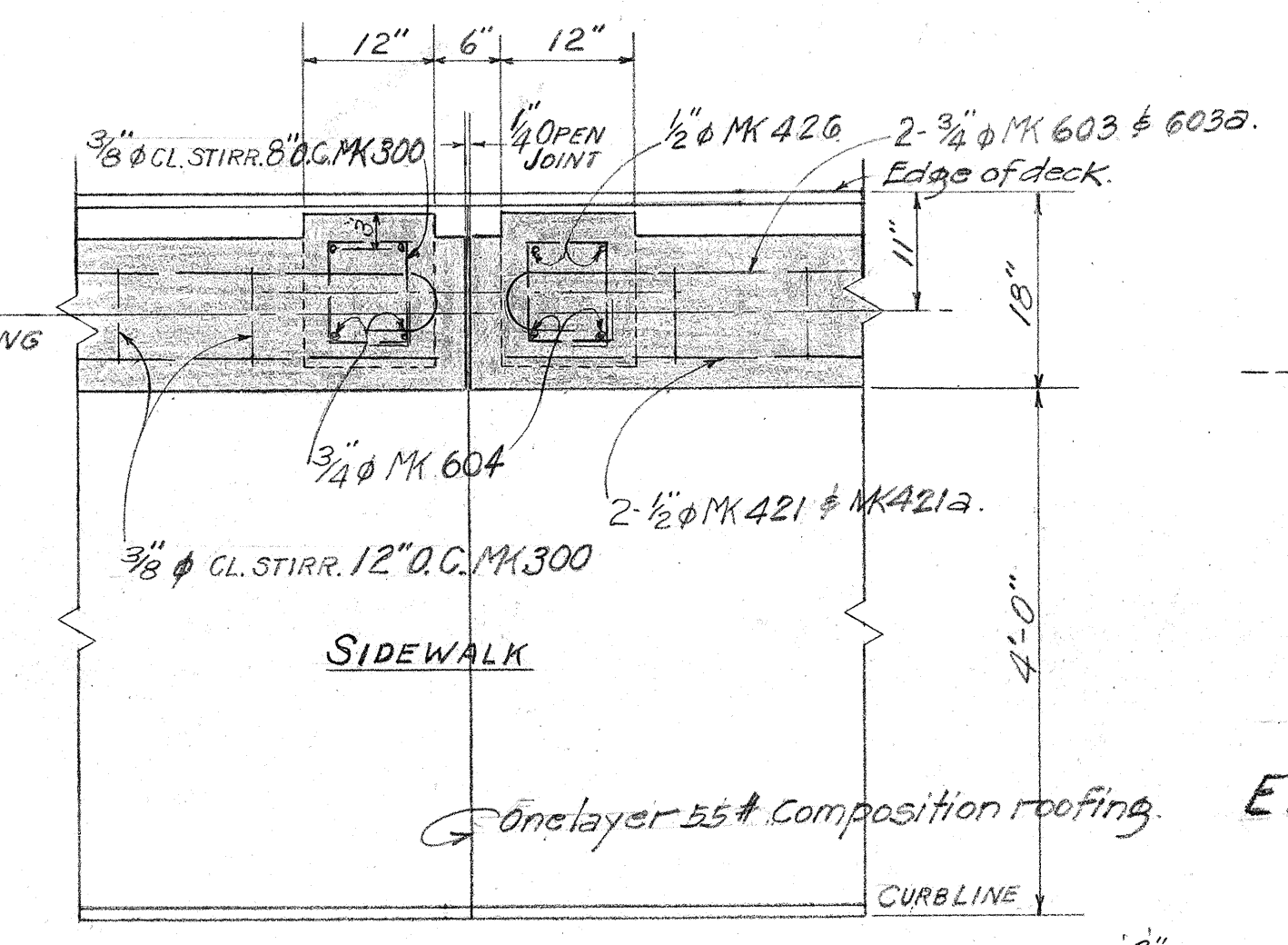
Revised: Feb. 1947
Revision: Bridge location changed. Number of spans increased.



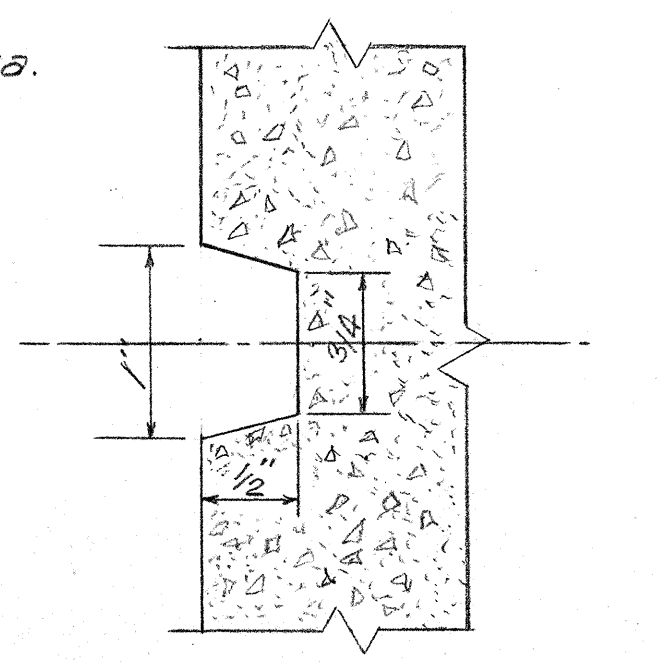
PLAN AT BEG. AND END OF BRIDGE
SCALE 1/2" = 1'-0"



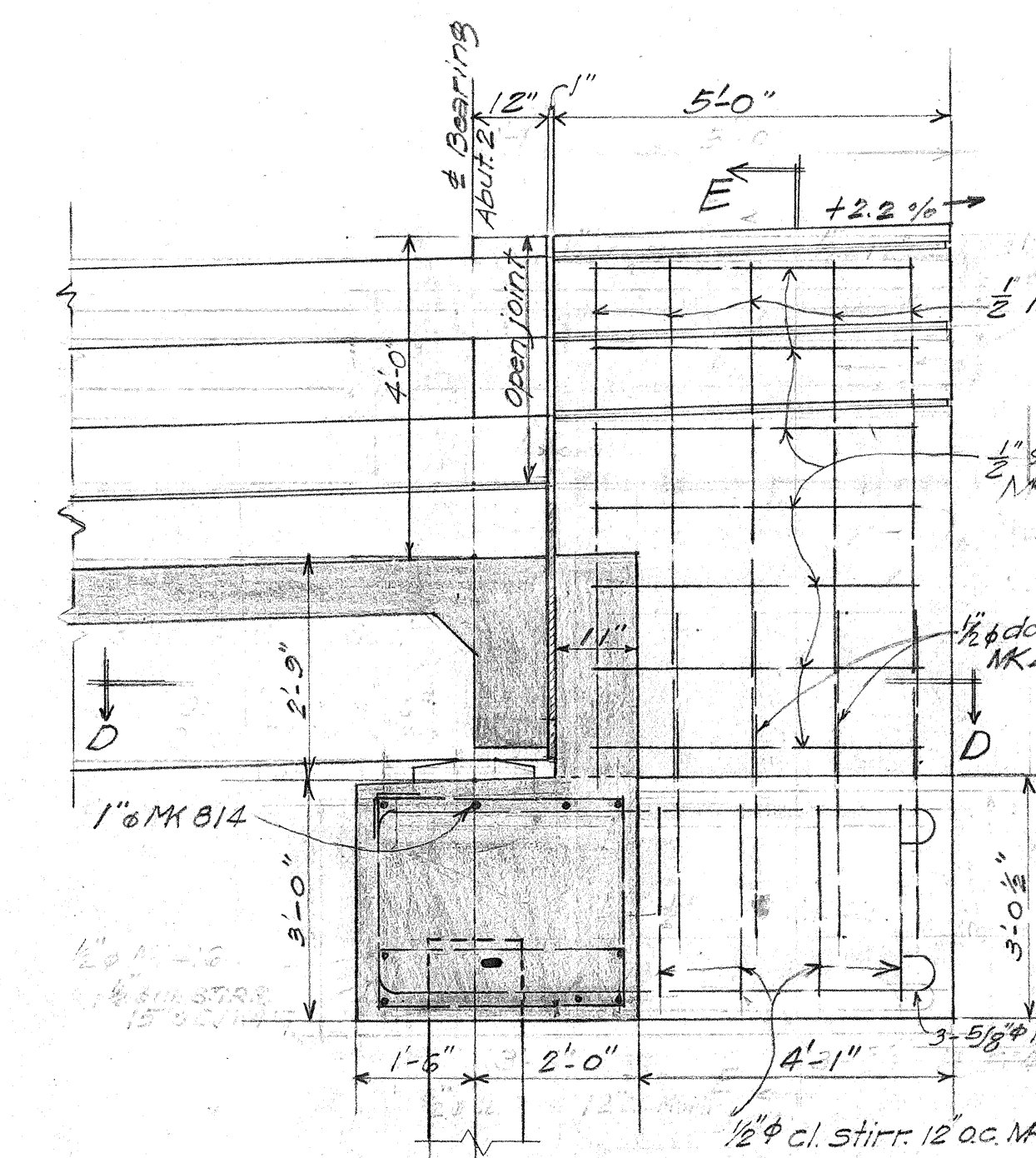
SECTION D-D
SCALE 1/2" = 1'-0"



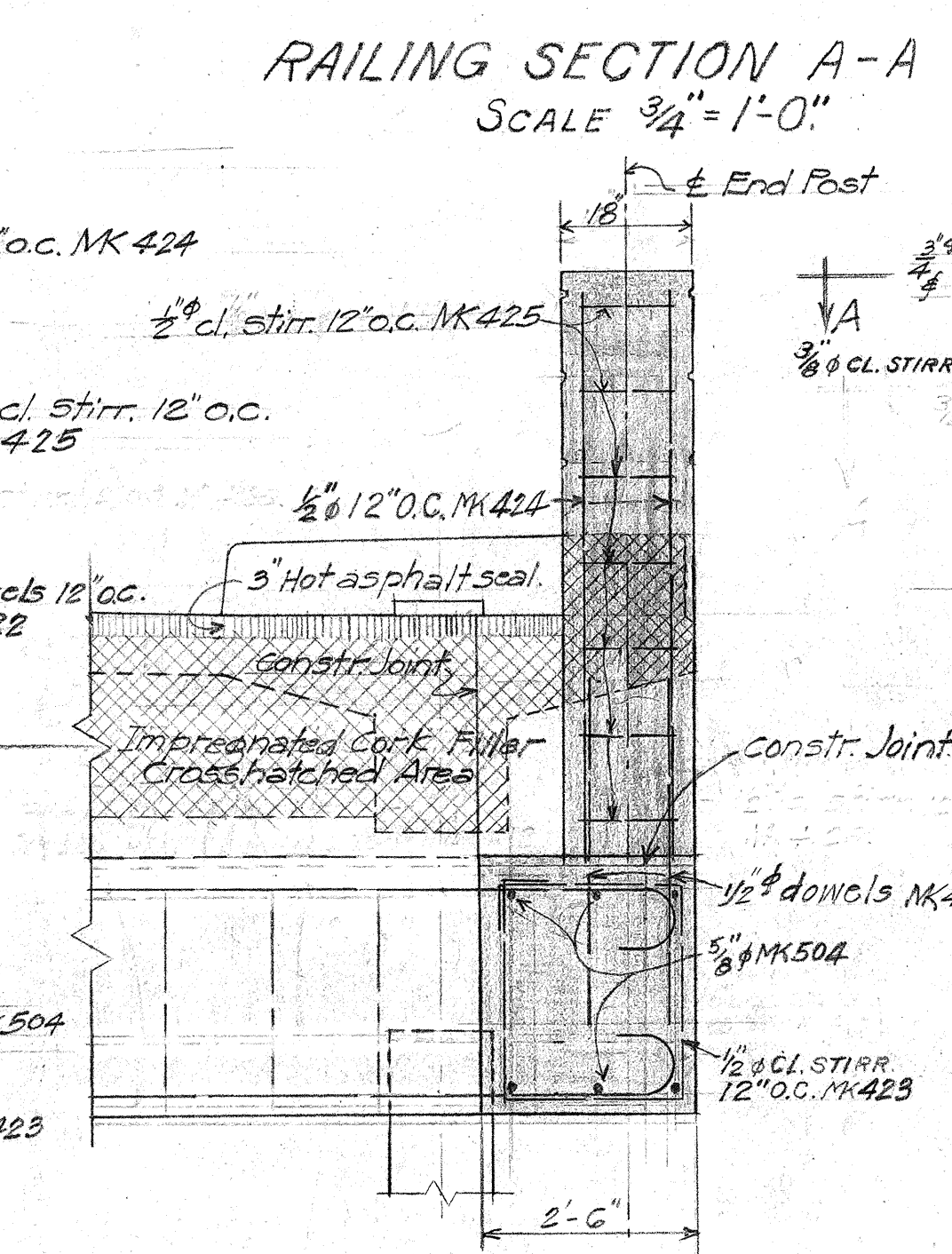
RAILING SECTION A-A
SCALE 3/4" = 1'-0"



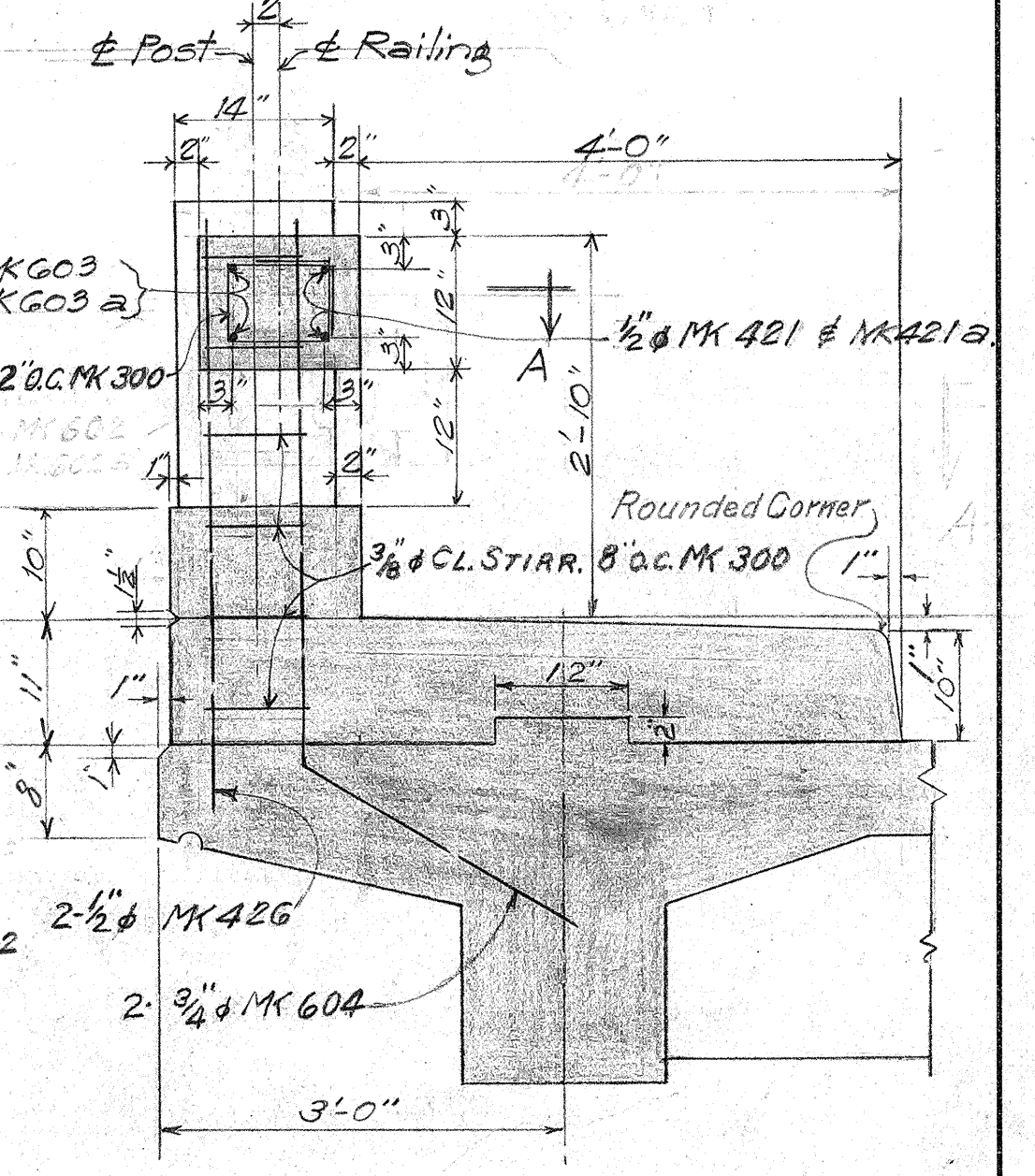
DETAIL OF END POST GROOVE
FULL SCALE



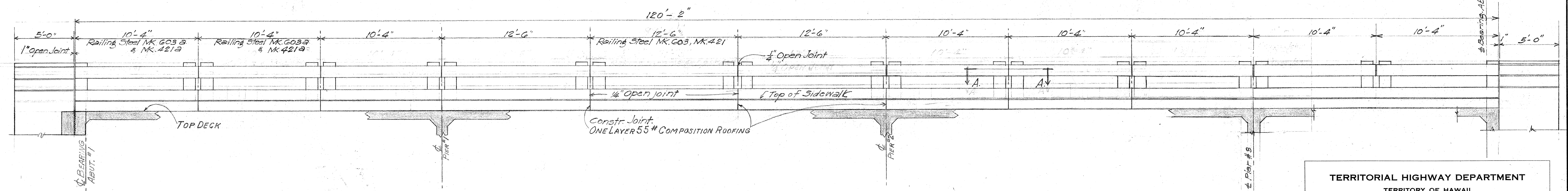
SECTION C-C
SCALE 1/2" = 1'-0"



SECTION E-E
SCALE 1/2" = 1'-0"



SECTION B-B
SCALE 3/4" = 1'-0"



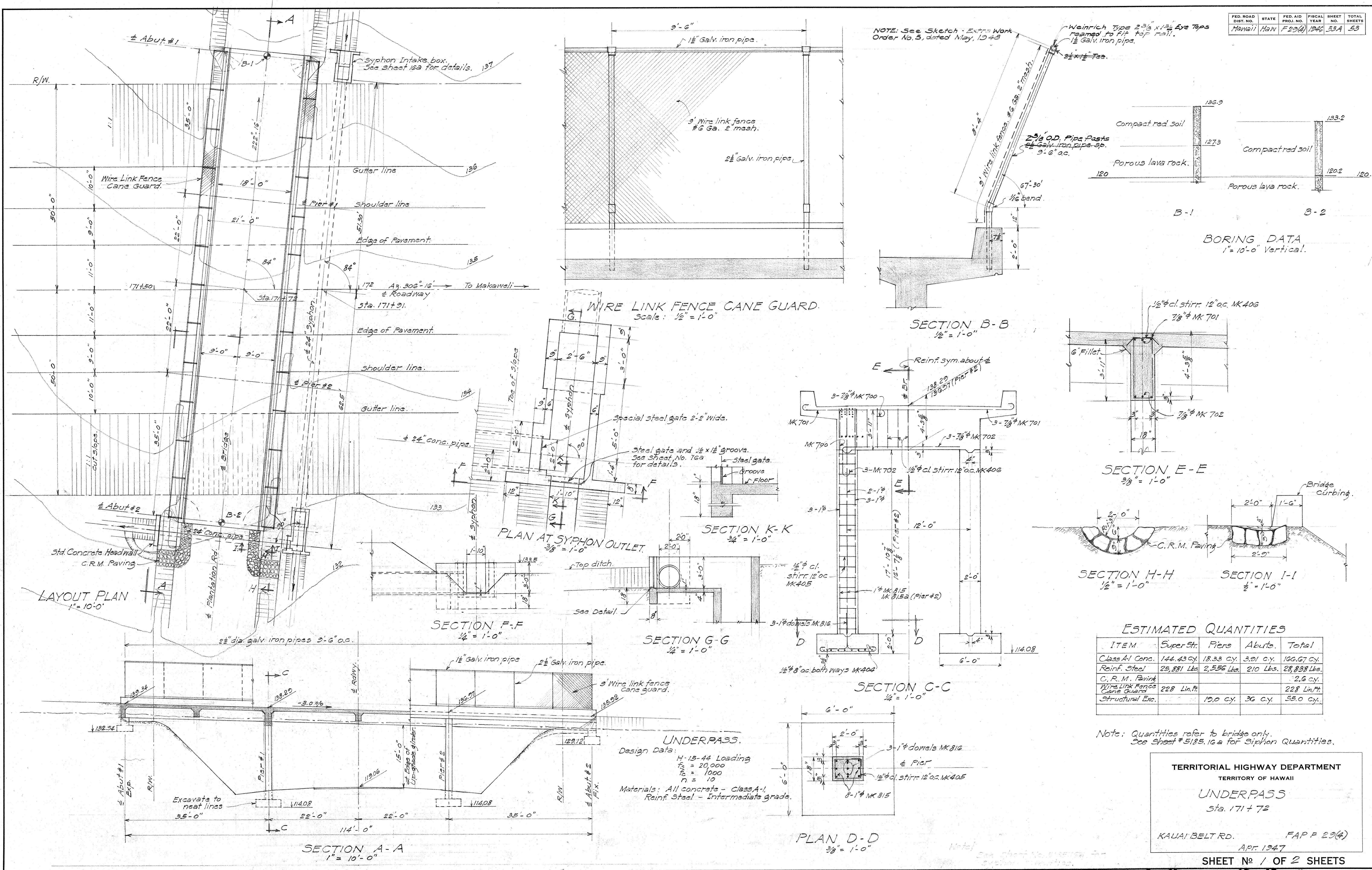
RAILING LAYOUT
SCALE 1/4" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
QUANTITIES CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

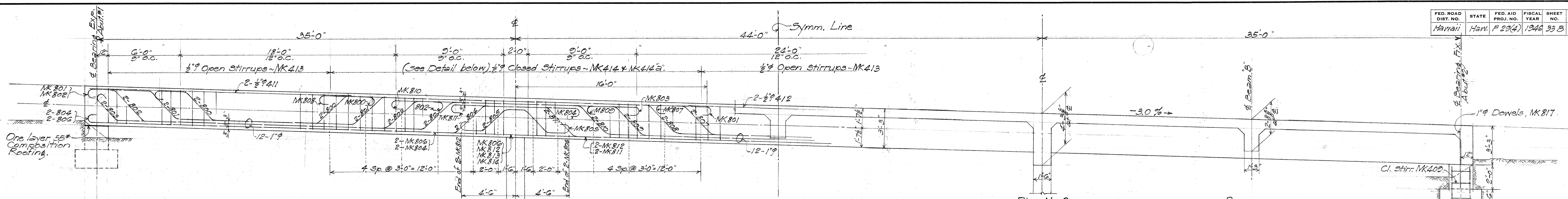
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MAHINAULI BRIDGE
Sta. 126+79.25 - Sta. 128+01.42
KAUAI BELT RD. F 29(4)
May 1946

SHEET No 4 OF 4 SHEETS

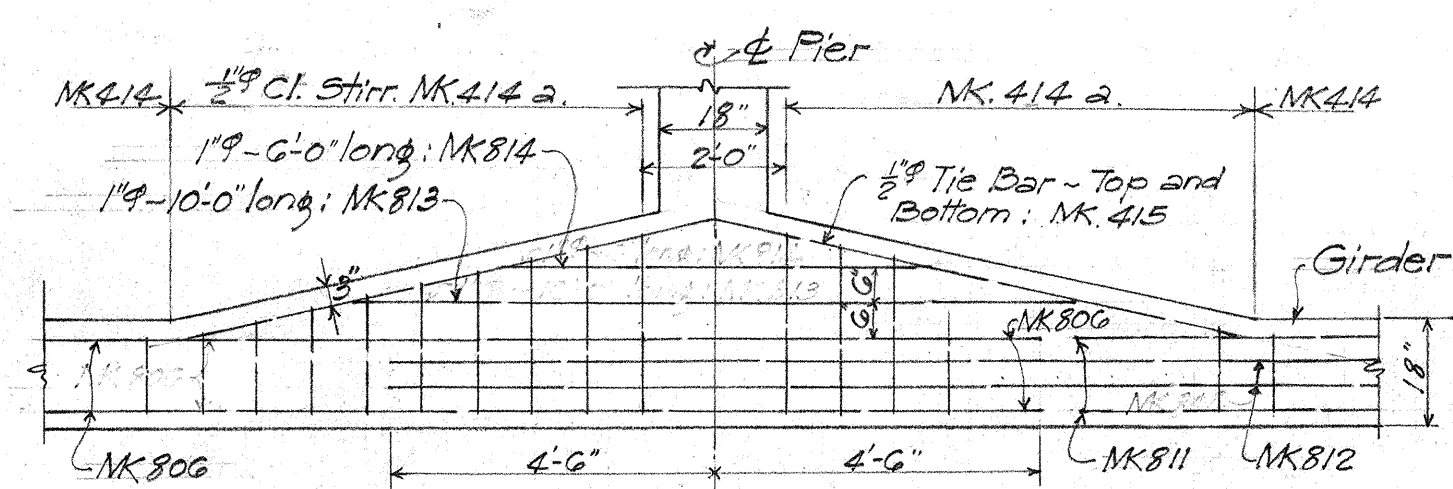
5185.33



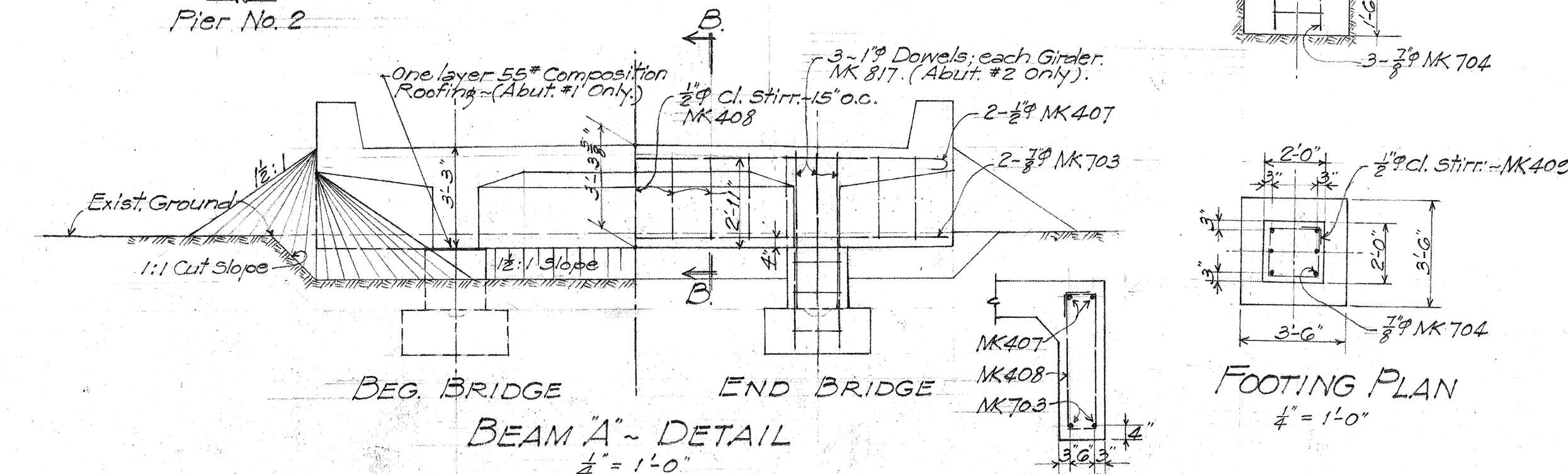
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-29(4)	1946	33 B	53



GIRDER REINFORCING
Scale: 1/4" = 1'-0"



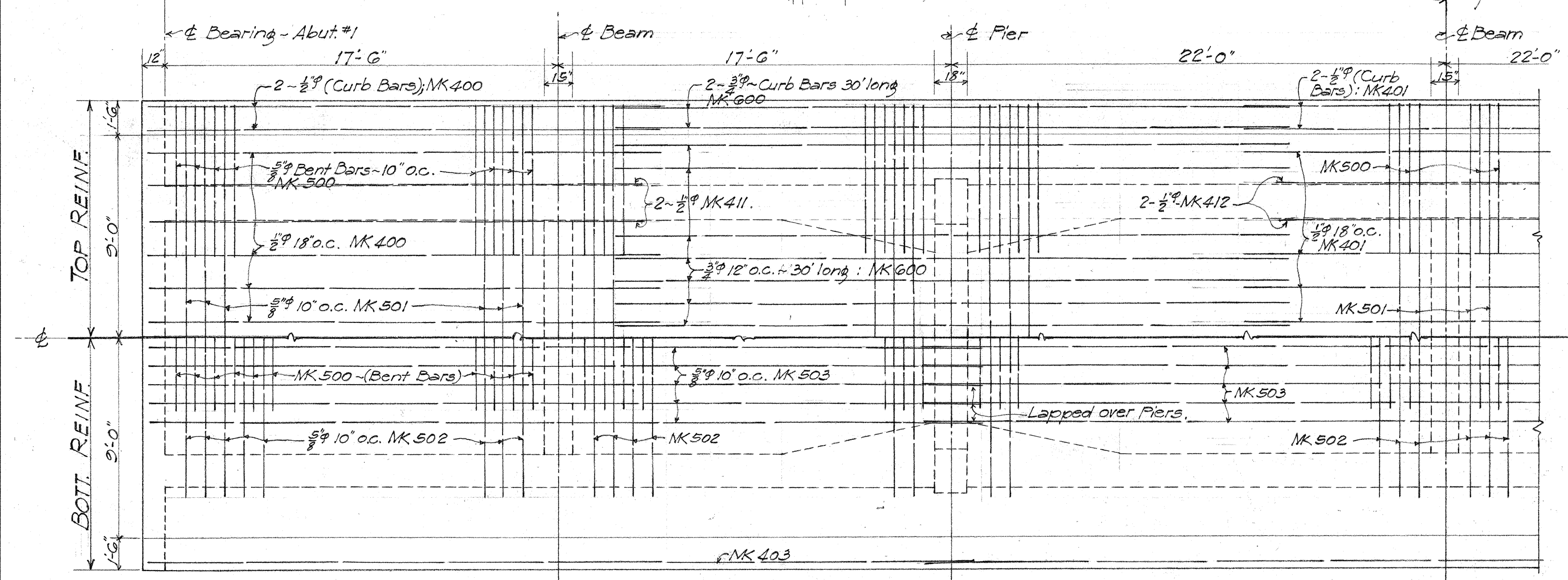
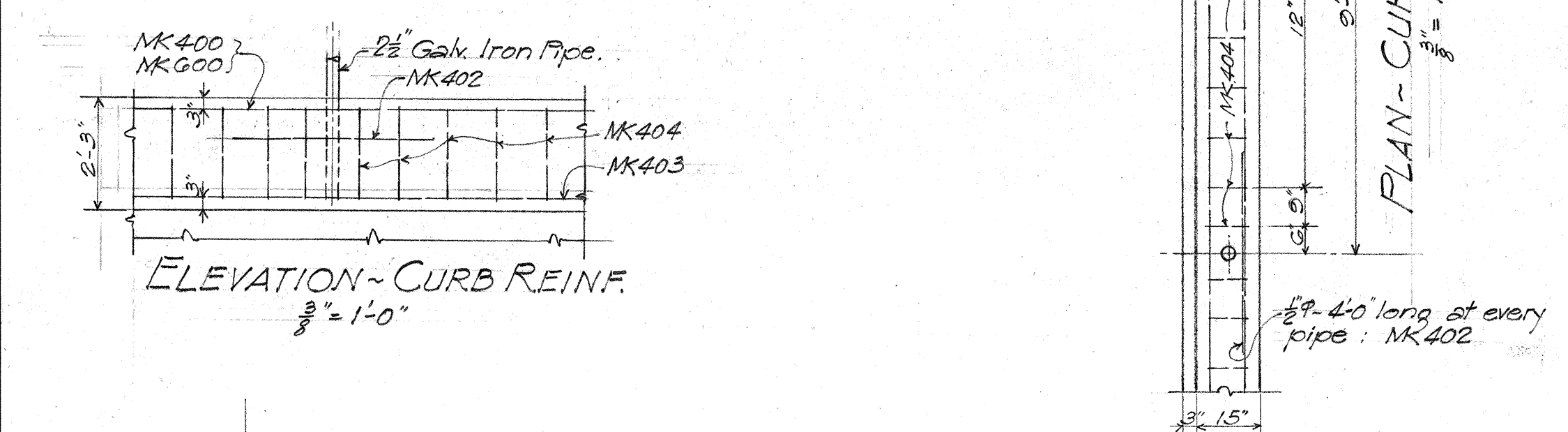
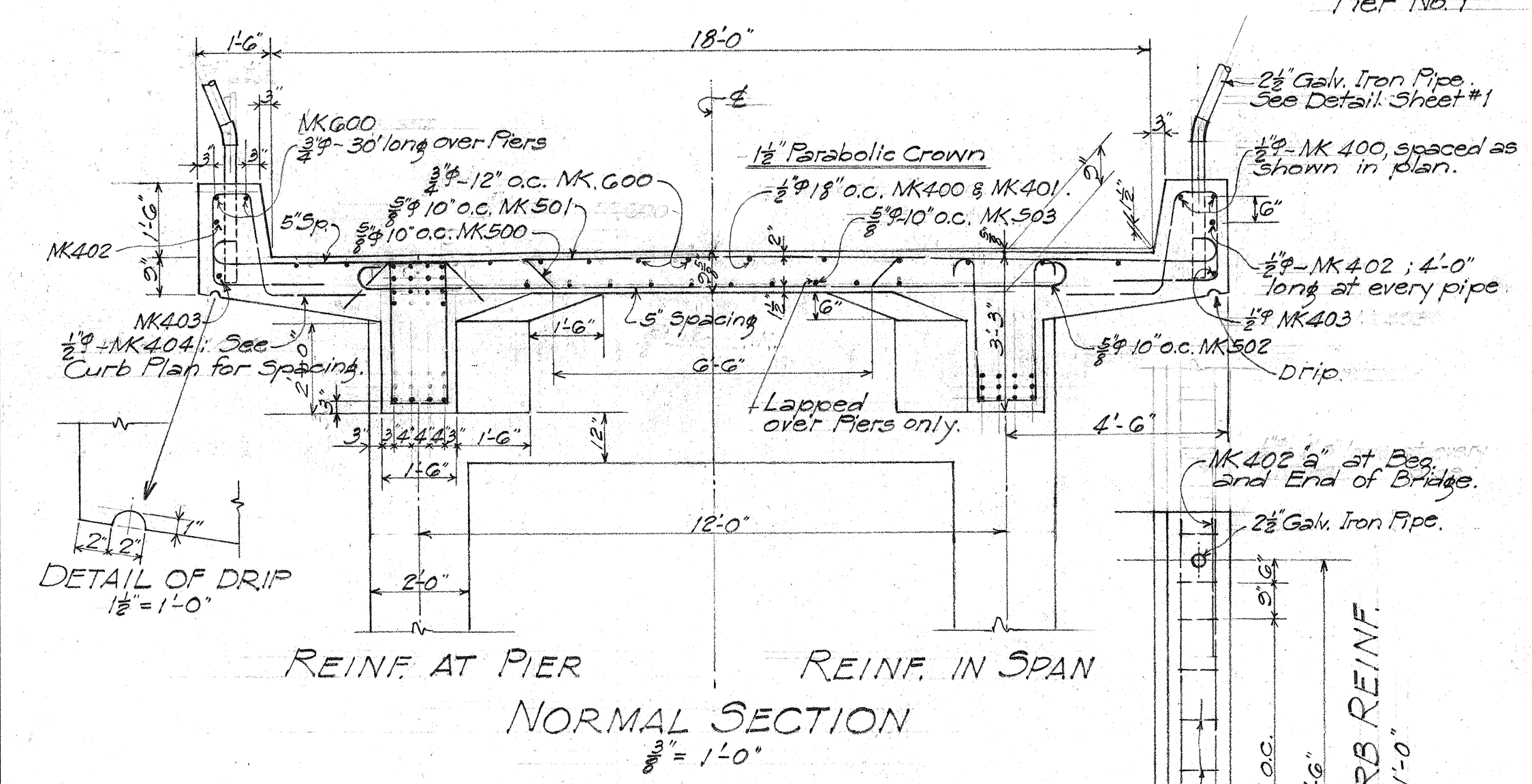
GIRDER BOTTOM LAYER REINF.
1/8" = 1'-0"



BEAM A - DETAIL
1/4" = 1'-0"

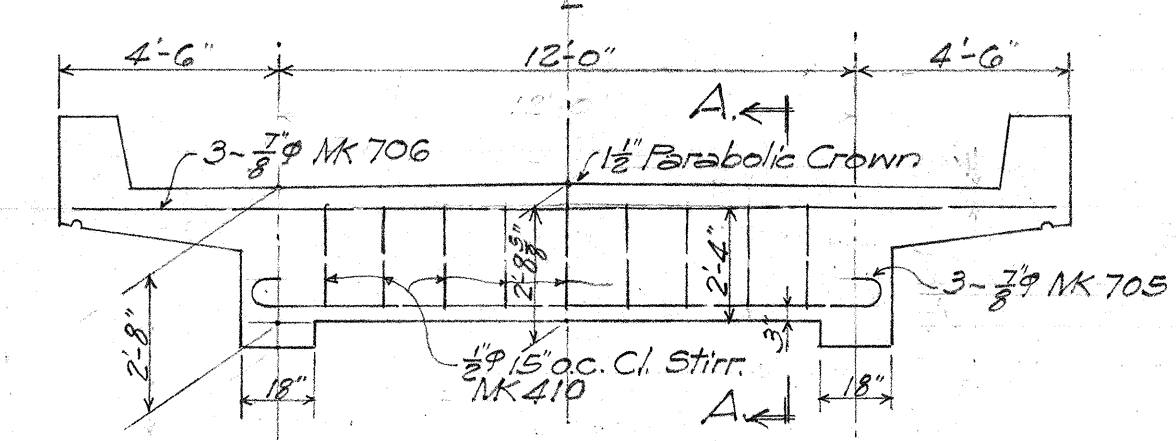
FOOTING PLAN
1/4" = 1'-0"

SECTION B-B
1/8" = 1'-0"



DECK SLAB REINF.
1/4" = 1'-0"

FRAMING PLAN
1/4" = 1'-0"



BEAM B REINF.
1/4" = 1'-0"

SECTION A-A
1/8" = 1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
UNDERPASS
Sta. 171+72
KAUAI BELT RD. F.A.P. F-29(4)
Apr. 1947
SHEET No 2 OF 2 SHEETS

5185.33B

DESIGNED BY	DATE
TRACED BY	
QUANTITIES BY	
CHECKED BY	
CHECKED BY	