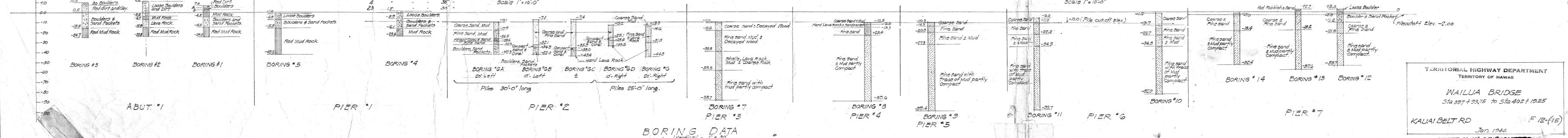
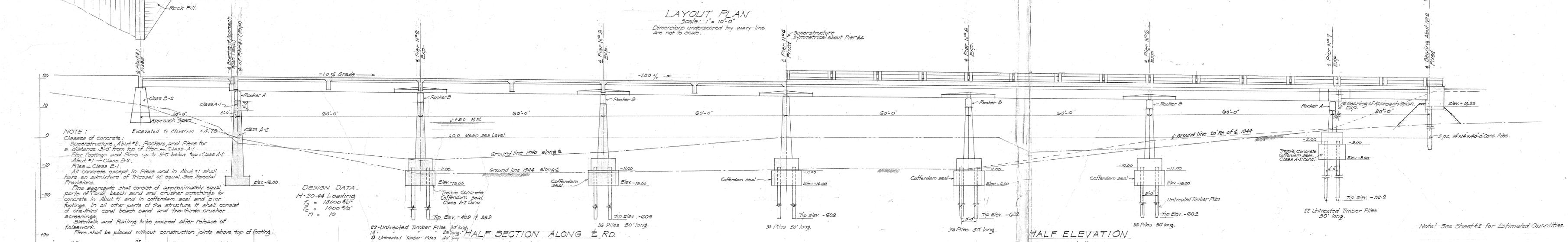
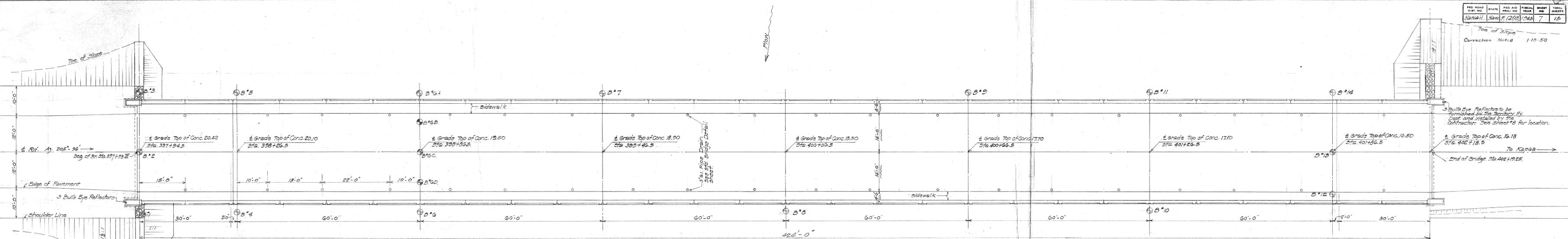


Correction Noted 1/15-50



NOTE:
Classes of concrete:
Superstructure, Abut. #2, Rockers, and Piers for a distance 3'-0" from top of Pier - Class A-1.
Pier Footings and Piers up to 3'-0" below top-Class A-2.
Abut. #1 - Class B-2.
Piers - Class E-1.
All concrete except in Piers and in Abut. #1 shall have an admixture of Triosol or equal. See Special Provisions.
Fine aggregate shall consist of approximately equal parts of coral beach sand and crusher screenings for concrete in Abut. #1 and in cofferdam seal and pier footings. In all other parts of the structure it shall consist of one-third coral beach sand and two-thirds crusher screenings.
Sidewalk and Railing to be poured after release of falsework.
Piers shall be placed without construction joints above top of footing.

DESIGN DATA
H-20-44 Loading
L_s = 18000 ft²
W_s = 1000 ft²
n = 10

Note: See Sheet #2 for Estimated Quantities.

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
WAILUA BRIDGE
 Sta 397+93.75 to Sta 402+19.25
 KAUAI BELT RD
 350, 1944
 SHEET No 7 OF 8 SHEETS
 F 12(15)

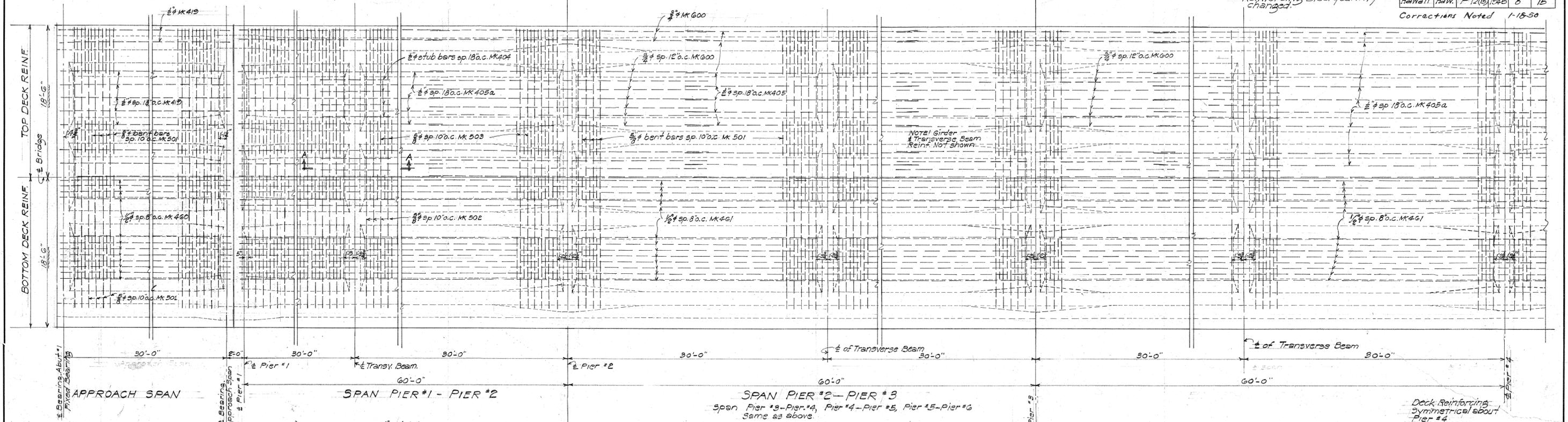
ORIGINAL SURVEY MAP BY W. R. G. 1935
 PLAN BY W. R. G. 1935
 SUPERVISION BY W. R. G.
 QUANTITIES BY W. R. G.
 CHECKED BY W. R. G.
 DATE: March, 1948

5178.7

Revised: 2-15-49
Reinforcing steel quantity changed.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F 12(15)	1948	8	15

Corrections Noted 1-15-50



PLAN OF DECK REINFORCING
scale 3/8" = 1'-0"
(Dimensions underscored by wavy line are not to scale)

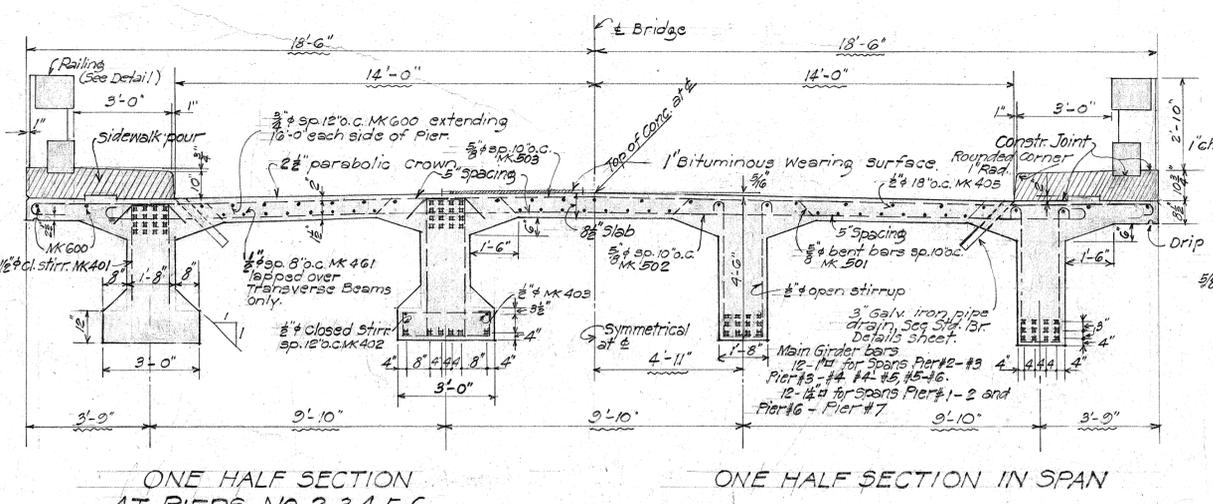
ESTIMATED QUANTITIES.

Item	Superstr.	Pier	Pier footing	Abut #1	Abut #2	Railing & End Post	Rocker	Total
Class A-1 Conc.	1040.90 CY	56.74 CY	365.68		15.56 CY	66.72 CY	13.60 CY	1,193.61 CY
Class A-2 Conc.		402.49 CY	366.09					768.58 CY
Class B-2 Conc.		17,833 #		103.81 CY				103.81 CY
Reinf. Steel	210,179 #	10,652 #		111.8 CY	1,543 #	10,469 #	4,792 #	255,468 #
Str. Exc.		4,250 CY			181 CY			4,431 CY
Rock Fill		1,432 CY		141.1 CY	358.6 CY	358.9 CY		899.6 CY
Dry Rubble Masonry					3.9 CY			3.9 CY
Untreated Timber Piles			2,410 L.F.					2,410 L.F.
14x14x46'6" Conc. Piles					5 PCS			5 PCS
Premie Conc. Class A-2		549.16 CY						549.16 CY
Keystone	49.1 CY	36 CY						85.1 CY
Chips	7.3 CY	10 CY						17.3 CY
Rock Sand	6.3 CY	6 CY						12.3 CY
Bit. Binder	7.9 Tons	5.62 Tons						13.52 Tons

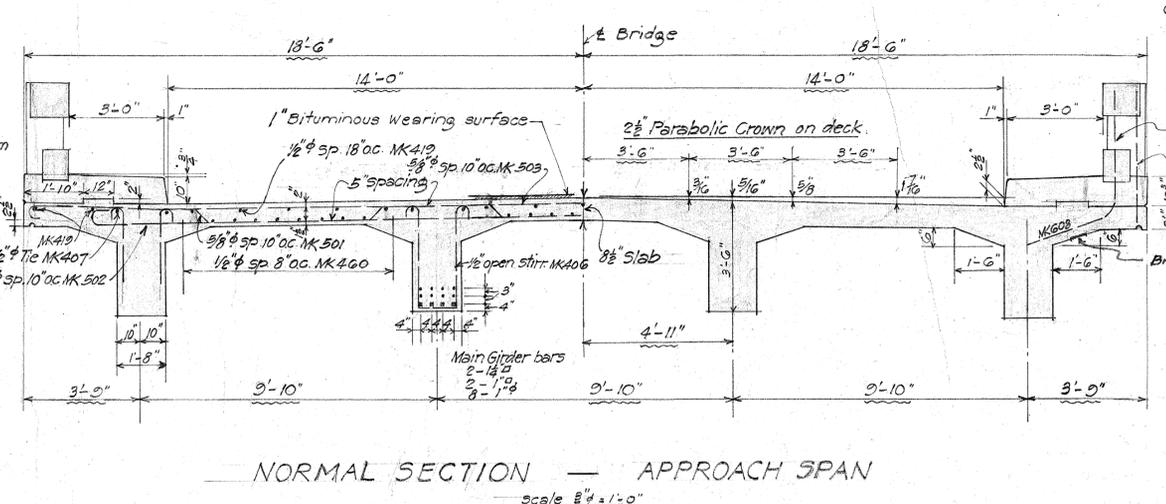
REV. 2-15-49

Note!
Sidewalk area shown crosshatched designates one layer of 25# Composition Roofing to be placed at railing joints. See Railing layout.

SECTION A-A
scale 3/4" = 1'-0"



ONE HALF SECTION AT PIERS NO. 2, 3, 4, 5, 6
NORMAL SECTION
scale 3/8" = 1'-0"



NORMAL SECTION - APPROACH SPAN
scale 3/8" = 1'-0"
(Dimensions underscored by wavy line are not to scale)

Class A-1 Concrete - Deck - 197.86 CY
(Superstructure) Sidewalk - 843.04
TOTAL - 1040.90 CY

* This quantity was left out in the original Table of Quantities.

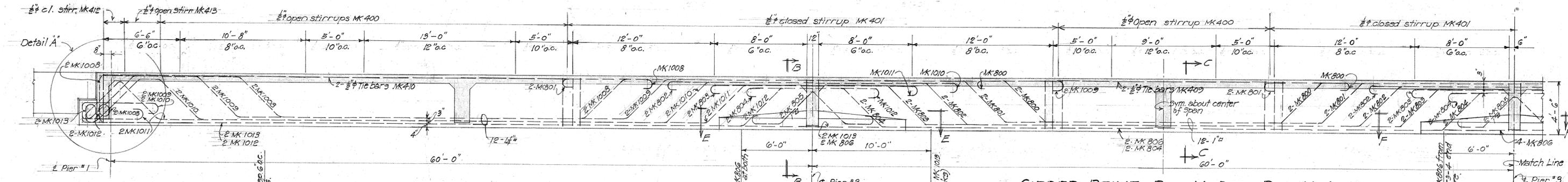
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAILUA BRIDGE
Sta. 397+23.25 to 5+402+19.25

KAUAI BELT RD. F 12 (15)

Jan. 1944

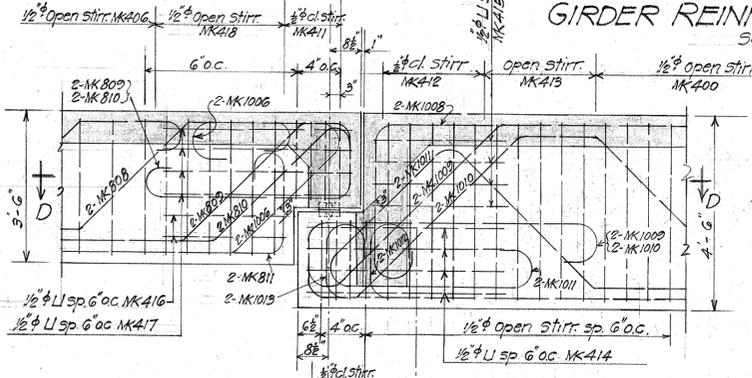
SURVEY OBTAINED BY DATE
 DESIGNED BY
 DRAWN BY
 QUANTITIES BY
 QUANTITIES CHECKED BY
 CHECKED BY
 ORIGINAL PLAN
 NOTE BOOK
 No.



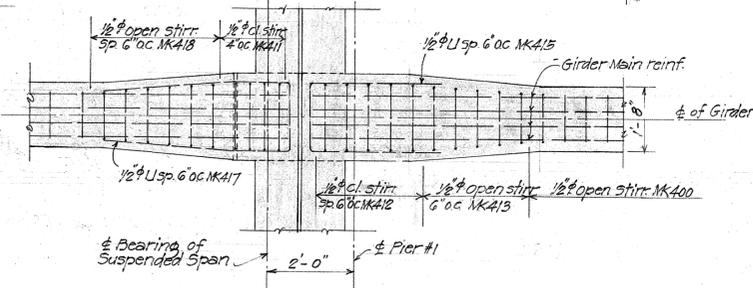
GIRDER REINF. PIER NO. 1 — PIER NO. 2
Scale $\frac{1}{4} = 1'-0"$ (Girder Reinf. Pier #6 - Pier #7 same.)

GIRDER REINF. PIER NO. 2 — PIER NO. 3
Scale $\frac{1}{4} = 1'-0"$

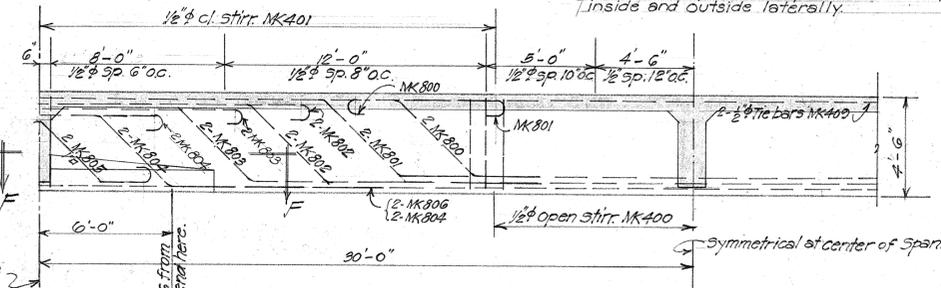
NOTE! Bars with identical MK numbers in interior spans to be placed alternately inside and outside laterally.



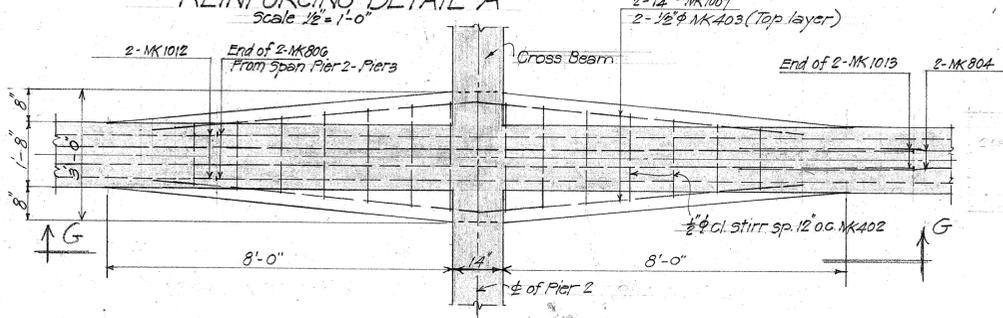
REINFORCING DETAIL A
Scale $\frac{1}{2} = 1'-0"$



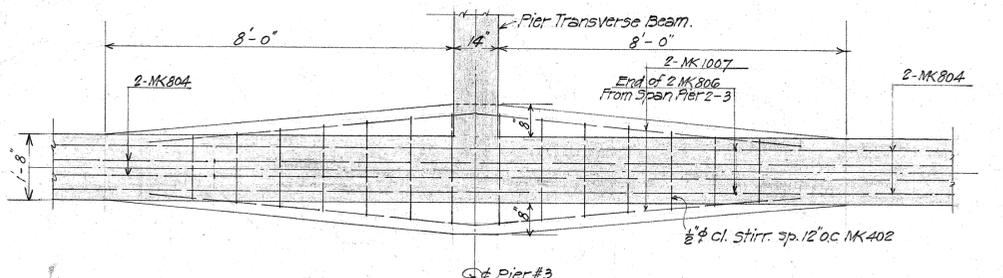
SECTION D-D
Scale $\frac{1}{2} = 1'-0"$



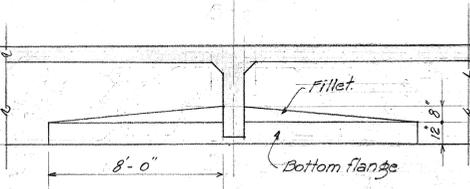
GIRDER REINF. PIER NO. 3 — PIER NO. 4
Scale $\frac{1}{4} = 1'-0"$
Note! Girder reinf. Pier #4 - Pier #5, Pier #5 - Pier #6 similar.



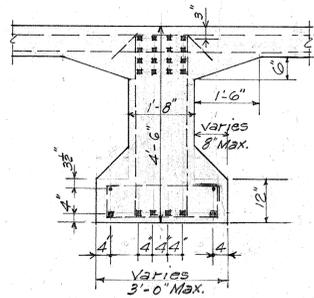
SECTION E-E SHOWING INTERIOR GIRDER BOTTOM LAYER REINF. OVER PIER 2
Scale $\frac{1}{2} = 1'-0"$ (Reinf. scheme for Exterior Girder same.)



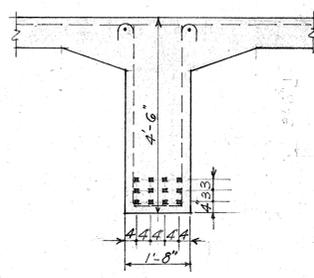
SECTION F-F SHOWING EXTERIOR GIRDER BOTTOM LAYER REINF. OVER PIER 3
Scale $\frac{1}{2} = 1'-0"$



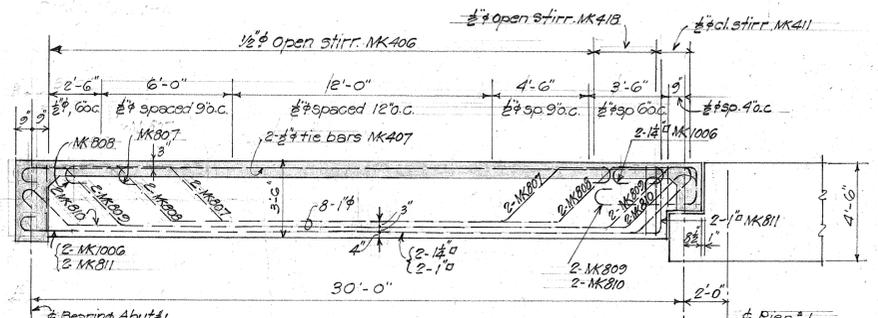
GIRDER ELEV. G-G
Scale $\frac{1}{2} = 1'-0"$



SECTION B-B
Scale $\frac{1}{2} = 1'-0"$



SECTION C-C
Scale $\frac{1}{2} = 1'-0"$



APPROACH SPAN GIRDER REINF.
Scale $\frac{1}{4} = 1'-0"$
Girder Reinf. for Approach Span, Pier #7 - Abut. #2 same.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAILUA BRIDGE
Sta 397+93.75 to Sta 402+19.25

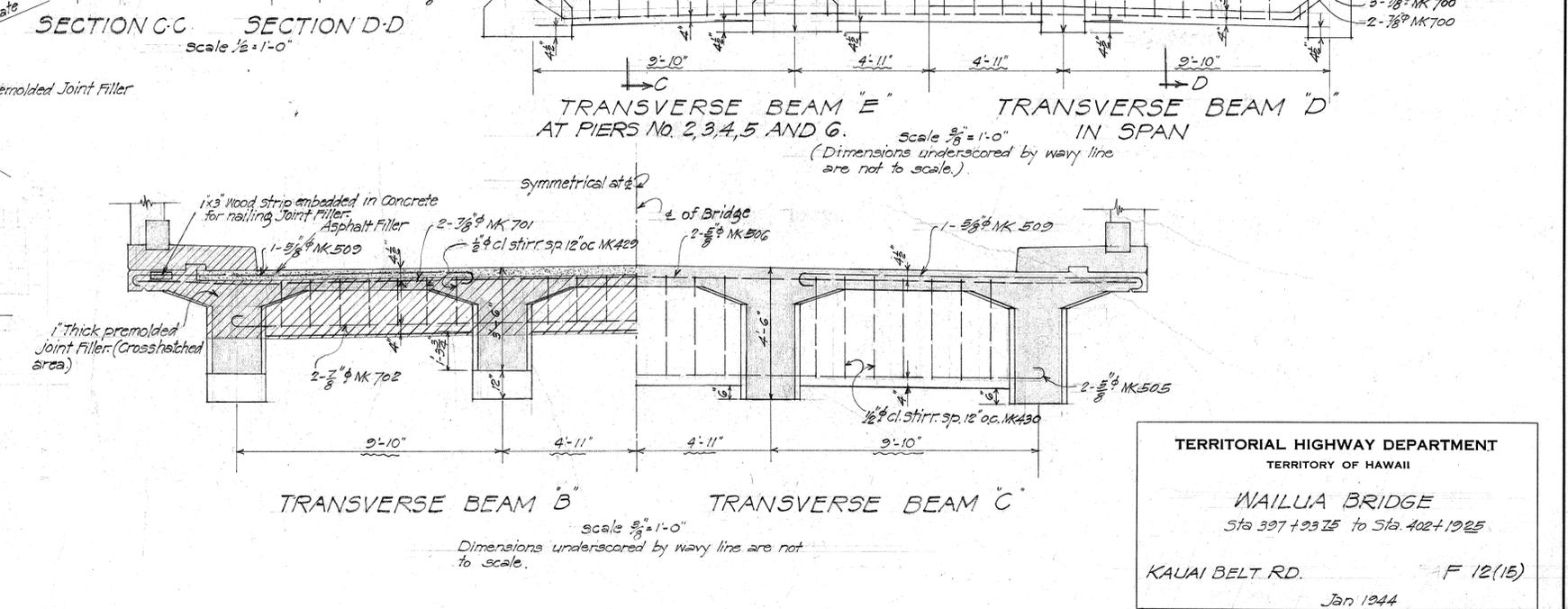
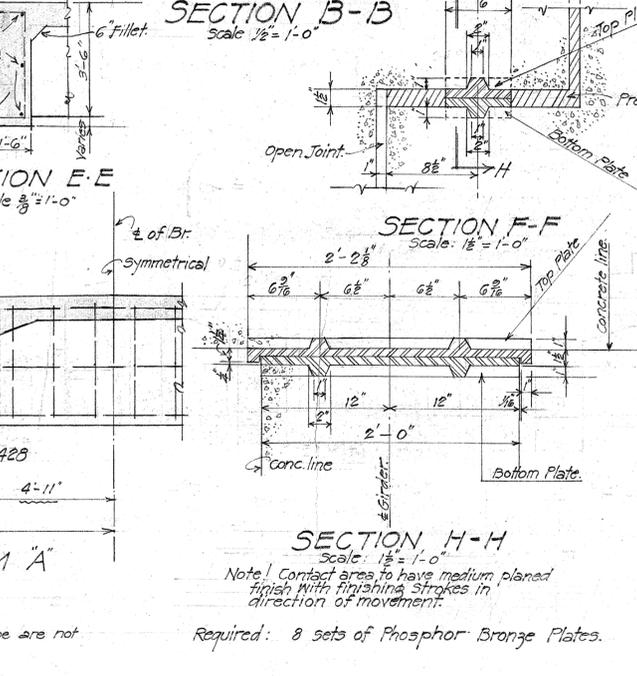
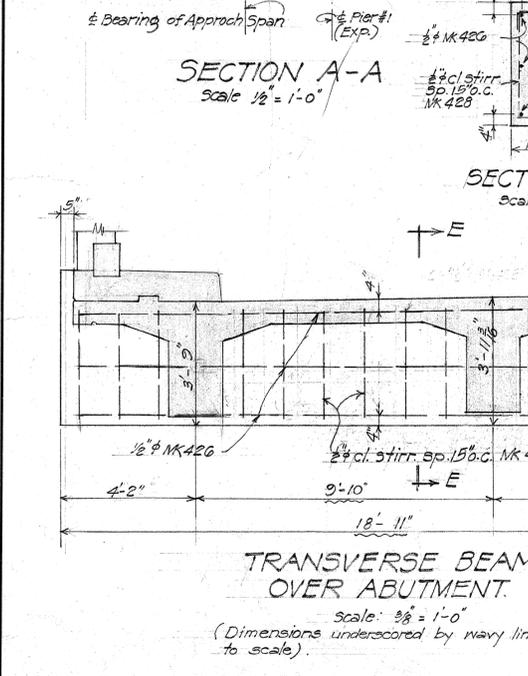
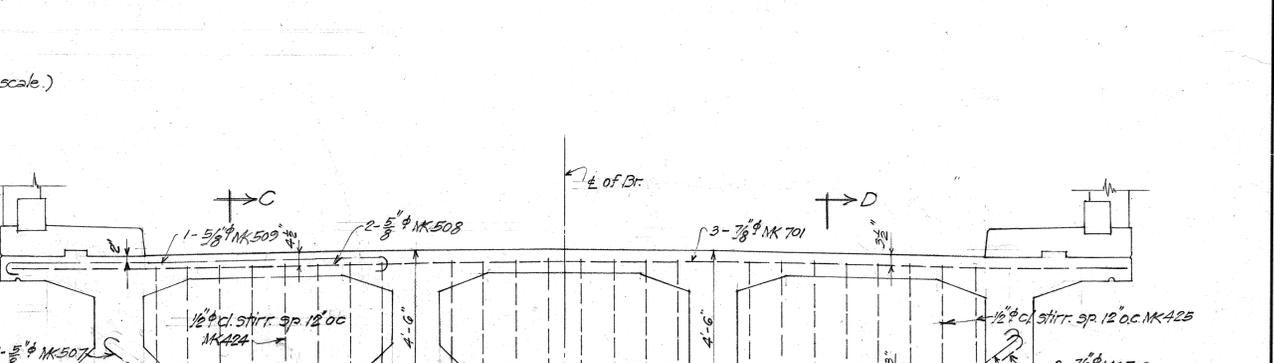
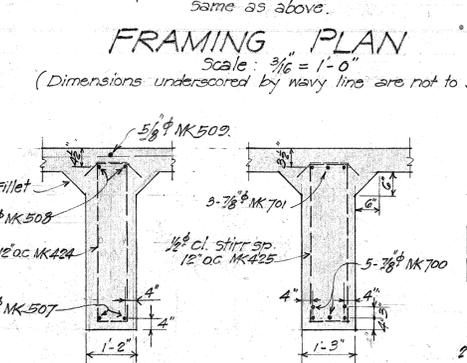
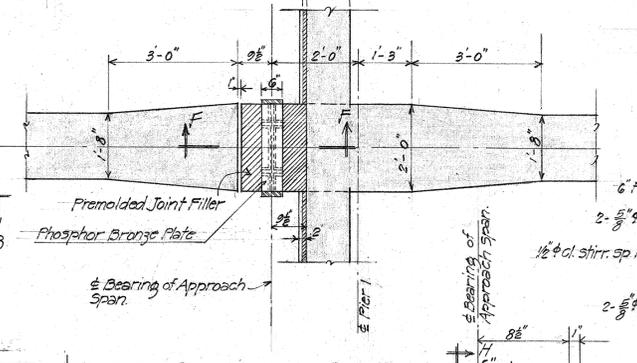
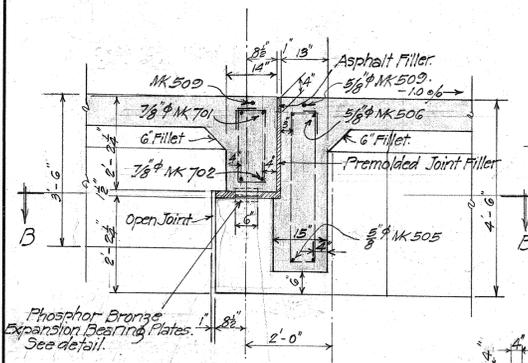
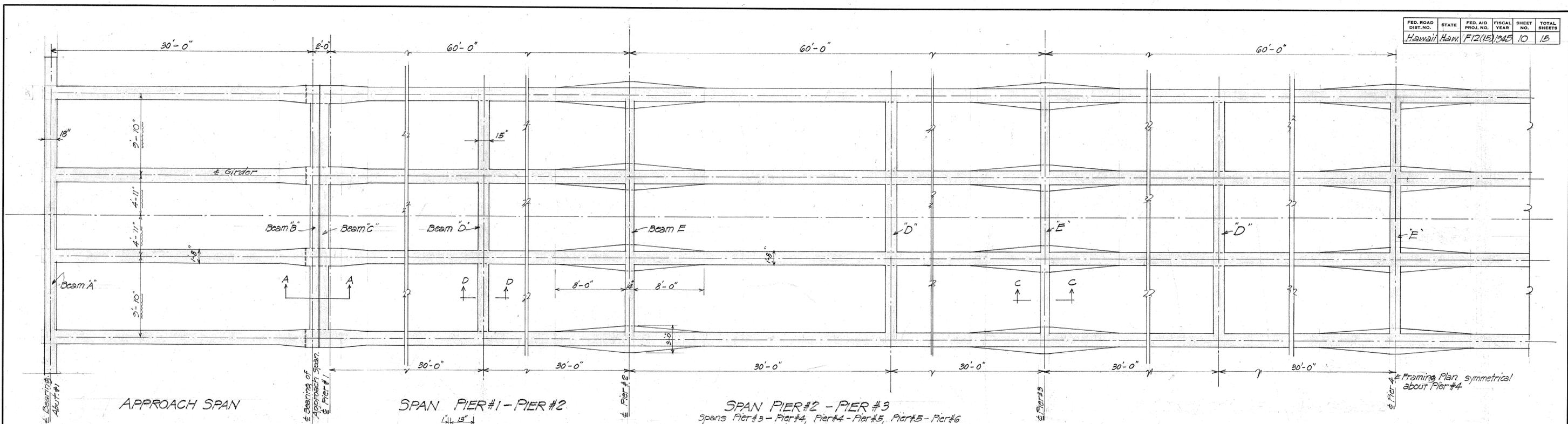
KAAUI BELT RD. F 12(15)

Jan. 1944

SHEET No 9 OF 8 SHEETS

DATE: Jan. 1944
DESIGNED BY: [Name]
CHECKED BY: [Name]
SURVEY PLOTTED BY: [Name]
ORIGINAL PLAN: [Name]
NOTE BOOK: [Name]
QUANTITIES CHECKED BY: [Name]
CHECKED BY: [Name]

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F12(15)	1945	10	15



ORIGINAL PLAN
DESIGNED BY
TRACED BY
QUANTITIES BY
CHECKED BY
DATE

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAILUA BRIDGE
Sta 397+93.25 to Sta. 402+19.25

KAUAI BELT RD. F 12(15)

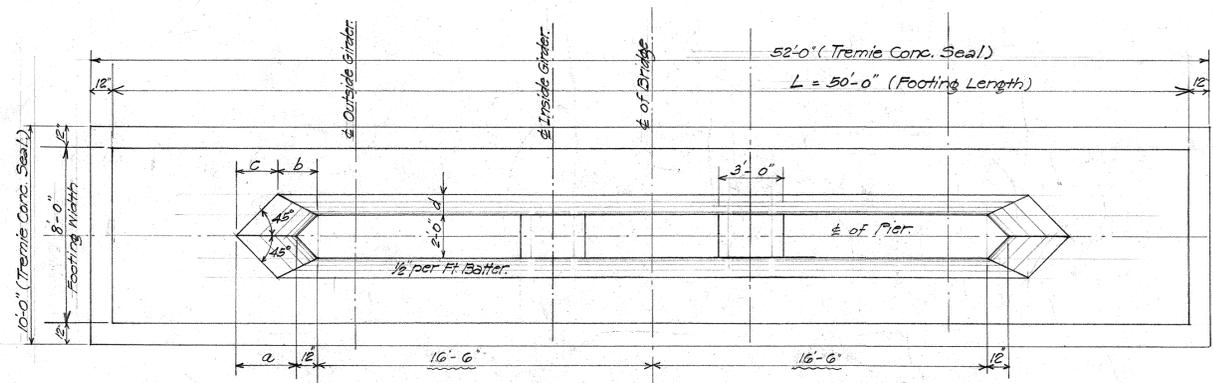
Jan 1944
SHEET No 4 OF 8 SHEETS

5178.10

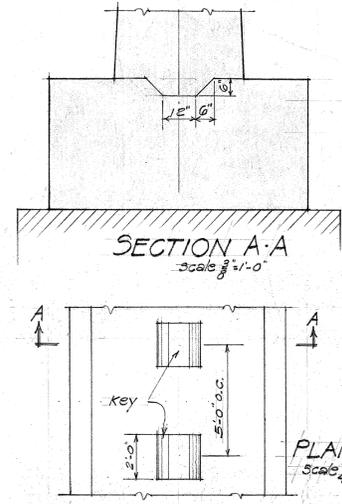
Revised: 2-15-40
 Reinforcing steel in Pier Shafts & Dowels in Pier Footings added.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F 12 (15)	1945	11	15

Corrections Noted 1-18-50

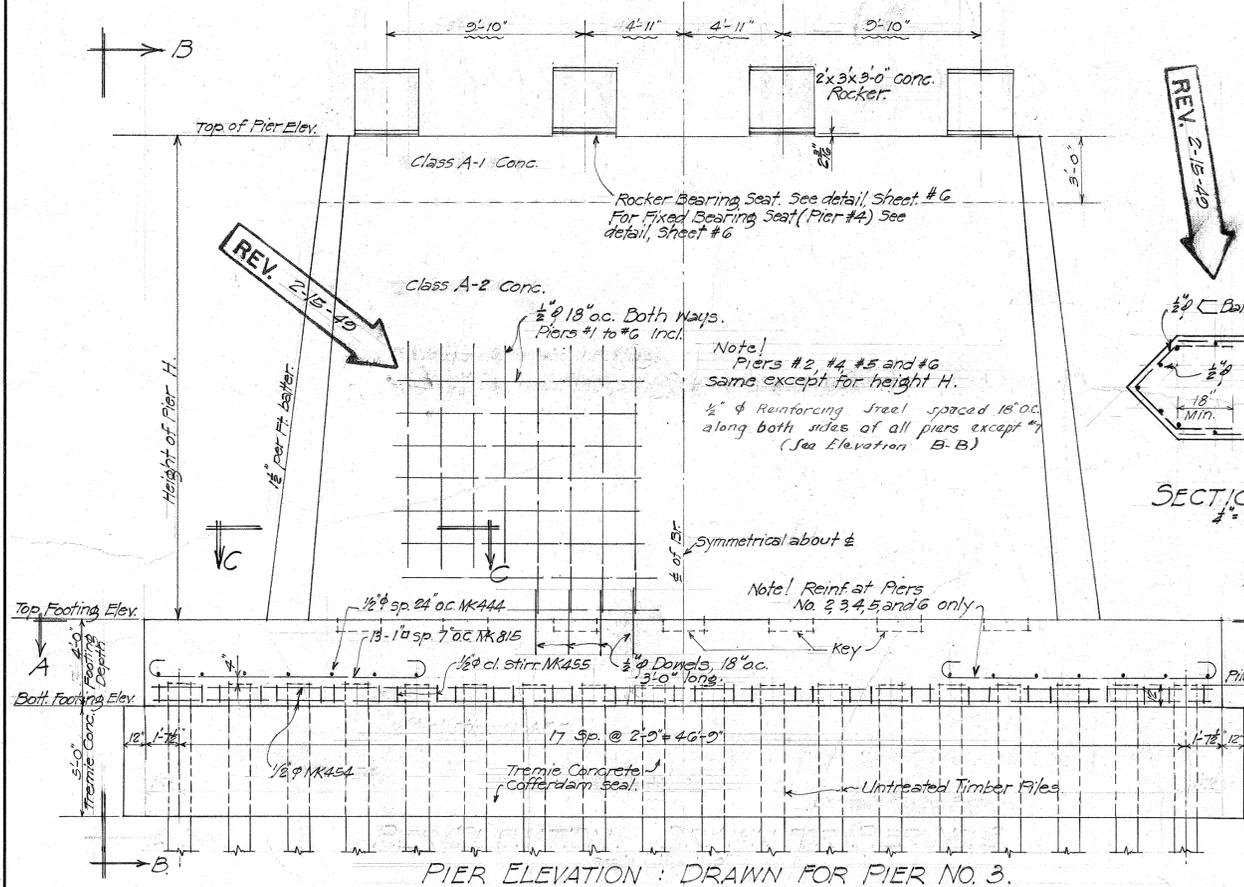


TYPICAL PIER PLAN, DRAWN FOR PIER NO. 3
 Scale: 1/4" = 1'-0"
 Dimensions underscored by navy line are not to scale.

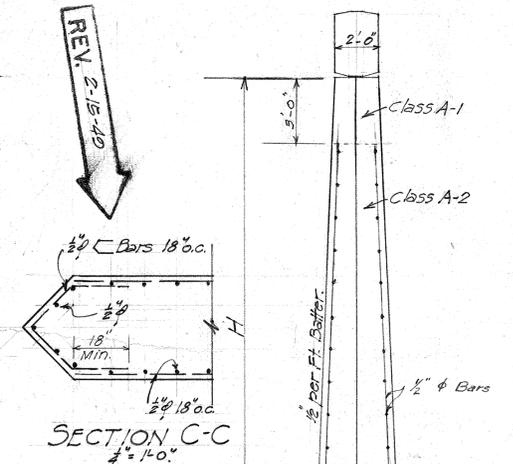


DETAIL OF KEY BETWEEN PIER & FOOTING
 Scale 1/4" = 1'-0"

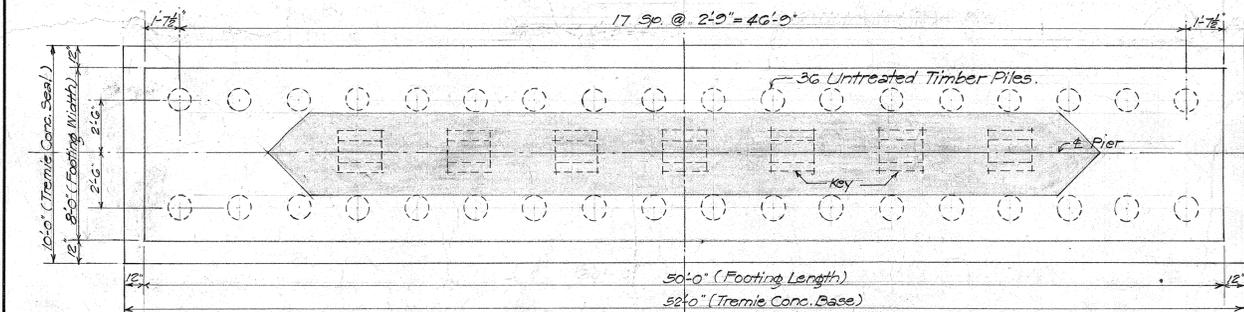
	Pier No. 1 Exp.	Pier No. 2 Exp.	Pier No. 3 Exp.	Pier No. 4 Fixed	Pier No. 5 Exp.	Pier No. 6 Exp.	Pier No. 7 Exp.
Top of Pier Elev.	12.26	11.66	11.06	13.11	9.86	9.26	8.66
Top of Footing Elev.	-13.0	-7.0	-7.0	-7.0	-7.0	-7.0	+1.0
H = Height of Pier.	25.26	18.66	18.06	20.11	16.86	16.26	7.66
d = 0.04666 H	1'-0 3/8"	0'-9 3/8"	0'-9"	0'-10"	0'-8 3/8"	0'-8 3/8"	0'-3 3/8"
a = 0.125 H	3'-1 3/8"	2'-4"	2'-3 3/8"	2'-6 3/8"	2'-12"	2'-0 3/8"	0'-11 3/8"
b = 0.08333 H	2'-1 3/8"	1'-6 3/8"	1'-6"	1'-8 3/8"	1'-4 3/8"	1'-4 3/8"	0'-7 3/8"
c = 0.04666 H + 1.0'	2'-0 3/8"	1'-9 3/8"	1'-9"	1'-10"	1'-3 3/8"	1'-8 3/8"	1'-3 3/8"
No. of Timber Piles.	None	36	36	36	36	36	22
Pile Cutoff Elevation	~	-10.0	-10.0	-10.0	-10.0	-10.0	-2.0
Bottom of Footing Elev.	-16.0	-11.0	-11.0	-11.0	-11.0	-11.0	-3.0



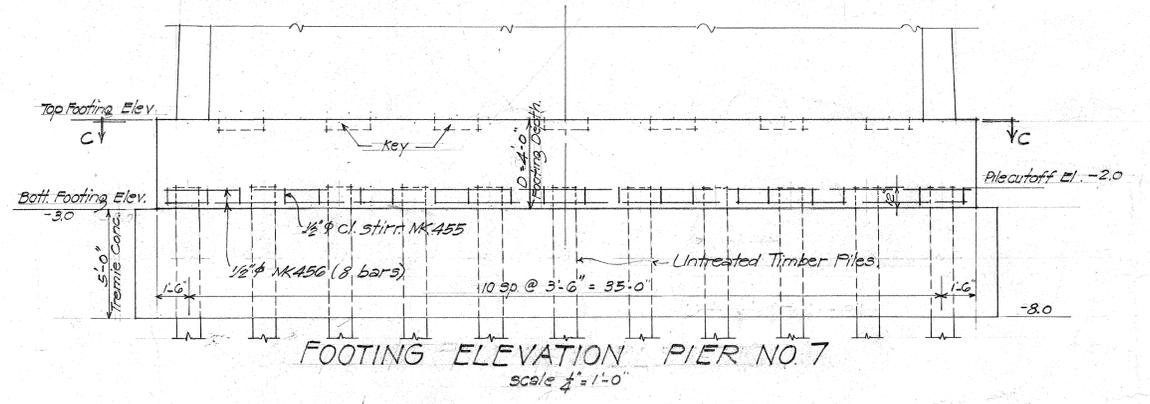
PIER ELEVATION: DRAWN FOR PIER NO. 3.



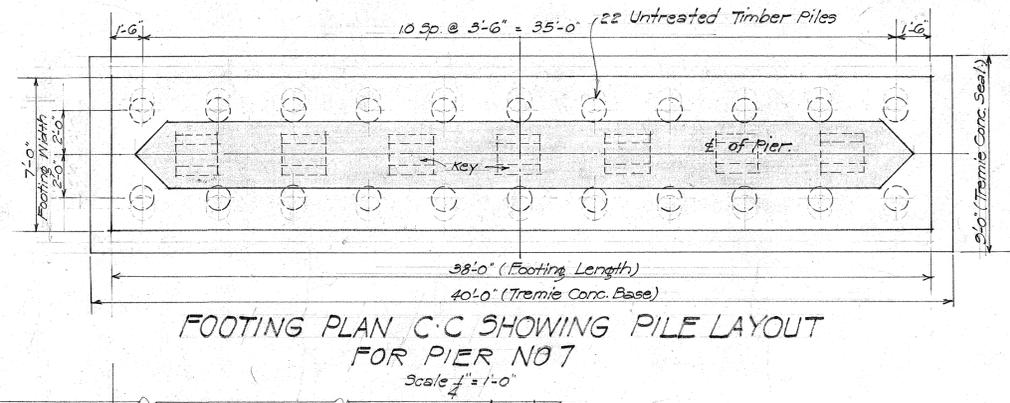
SECTION C-C
 Scale 1/4" = 1'-0"



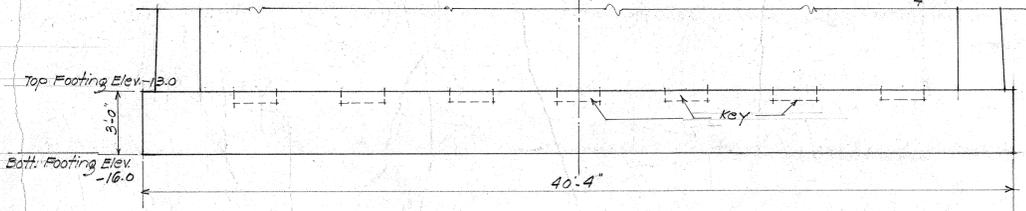
FOOTING PLAN A-A SHOWING PILE LAYOUT FOR PIERS NO. 2, 3, 4, 5 & 6.
 Scale: 1/4" = 1'-0"



FOOTING ELEVATION PIER NO. 7
 Scale 1/4" = 1'-0"



FOOTING PLAN C-C SHOWING PILE LAYOUT FOR PIER NO. 7
 Scale 1/4" = 1'-0"

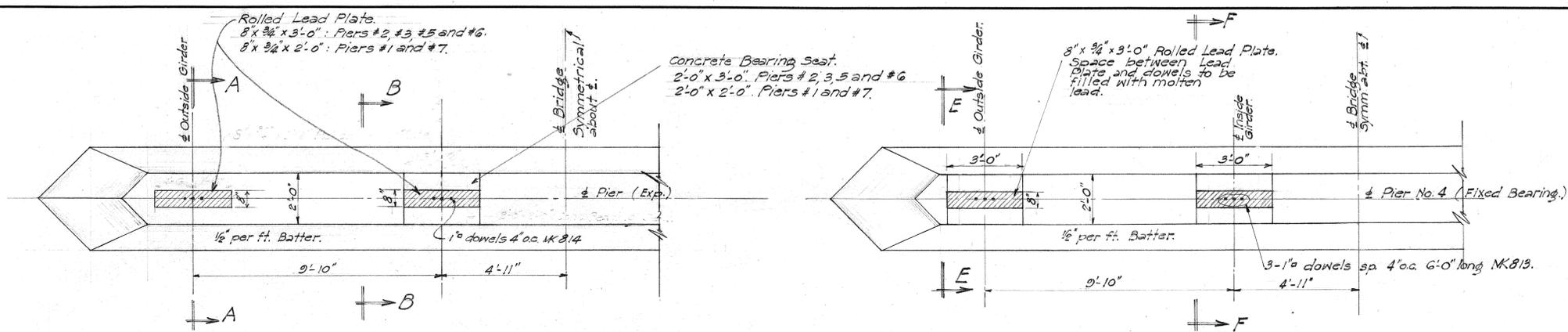


FOOTING ELEVATION PIER NO. 1
 Scale 1/4" = 1'-0"

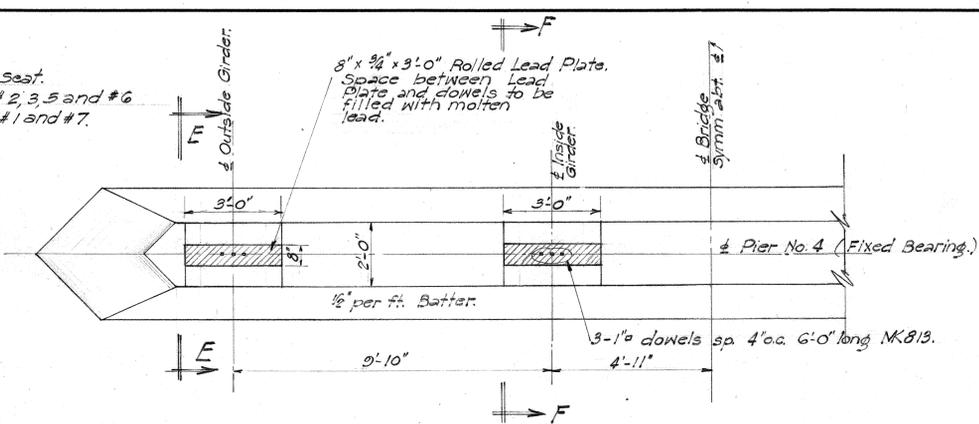
SURVEY PLOTTED BY: [Name]
 DESIGNED BY: [Name]
 CHECKED BY: [Name]
 ORIGINAL PLAN NO. [Number]
 NOTE BOOK NO. [Number]

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 WAILUA BRIDGE
 Sta 337+93.75 to Sta 402+19.25
 KAUAI BELT RD. F 12 (15)
 Jan 1944
 SHEET No 5 OF 8 SHEETS

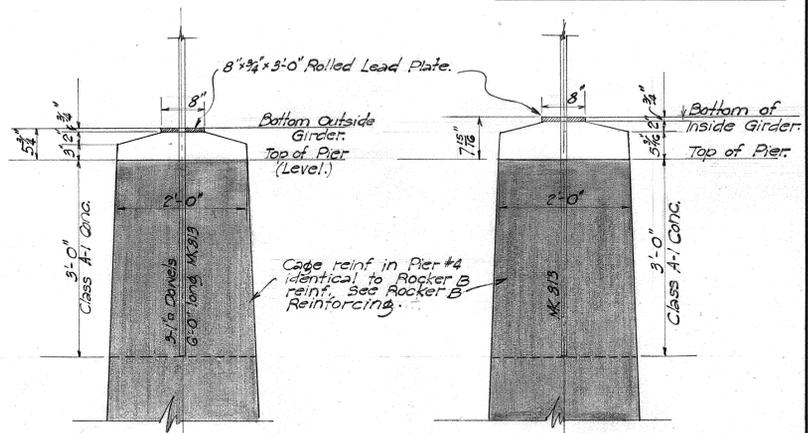
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F12 (15)	1948	12	15



PART PLAN PIER WALL SHOWING ROCKER BEARING SEATS. Scale 3/8"=1'-0"

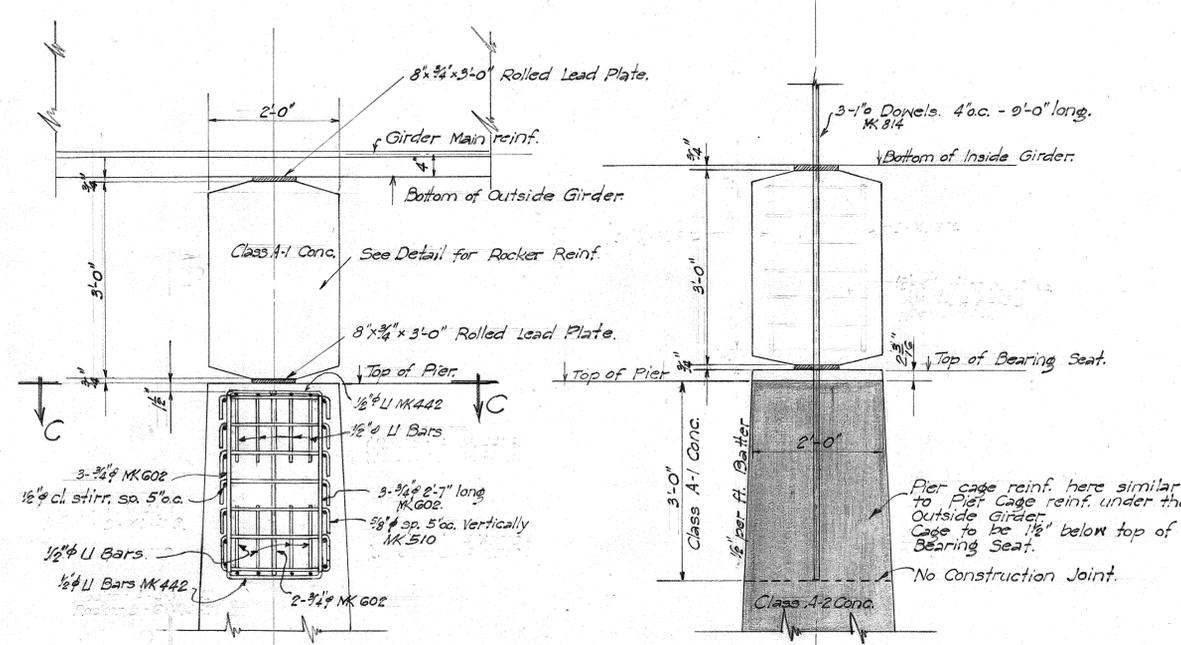


PART PLAN OF PIER NO. 4, SHOWING BEARING SEATS. Scale 3/8"=1'-0"



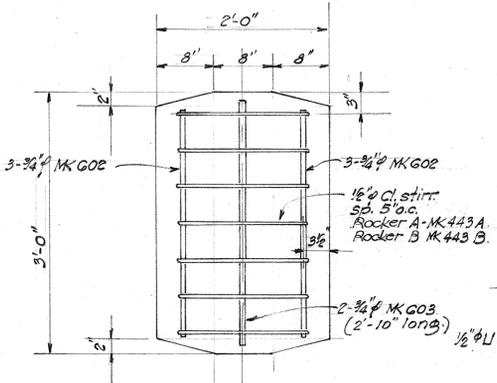
SECTION E-E 3/8"=1'-0"

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

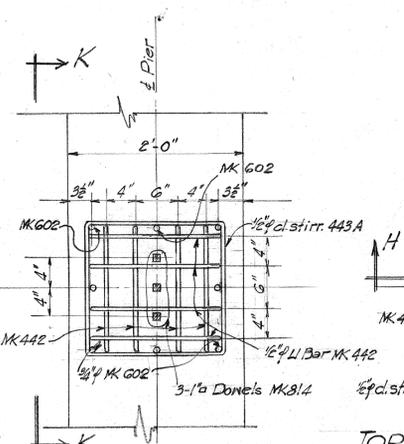


SECTION A-A SHOWING PIER CAGE REINF. 3/8"=1'-0"

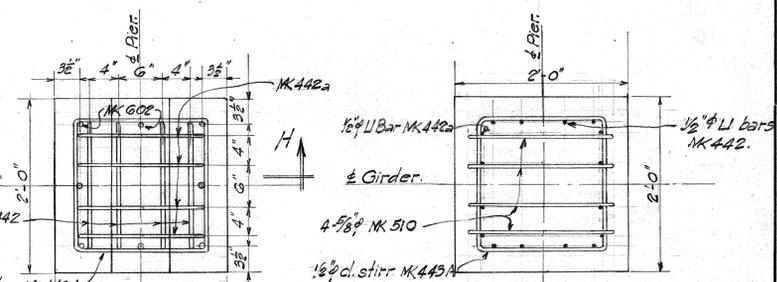
SECTION B-B 3/8"=1'-0"



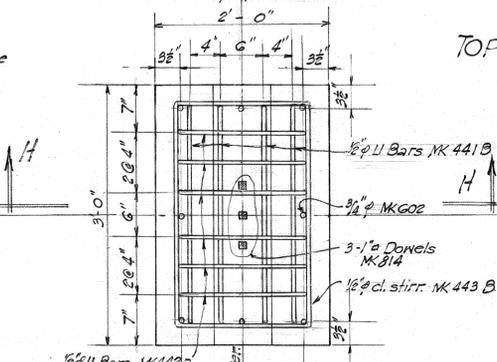
END ELEV. OF ROCKER 1"=1'-0"



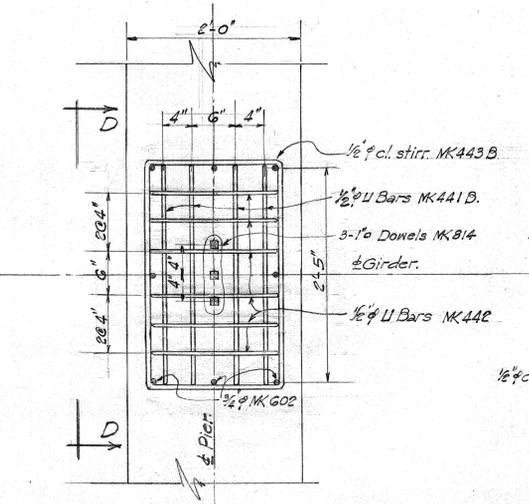
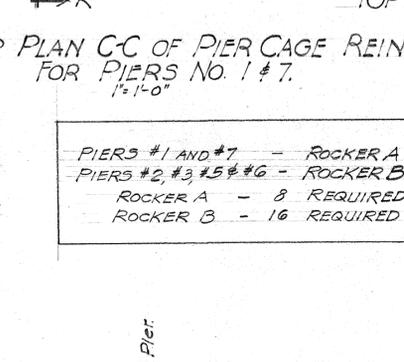
TOP PLAN - ROCKER A REINF. 1"=1'-0"



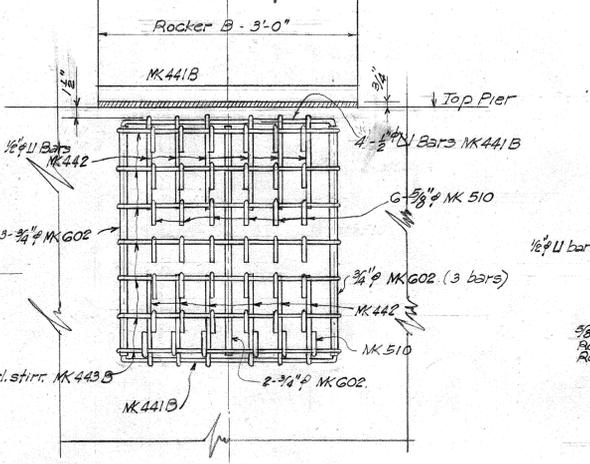
ROCKER A SECTION G-G 1"=1'-0"



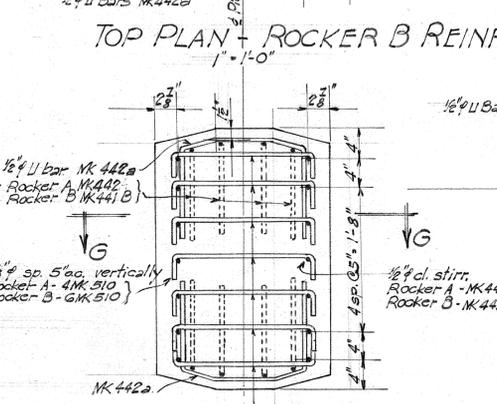
TOP PLAN - ROCKER B REINF. 1"=1'-0"



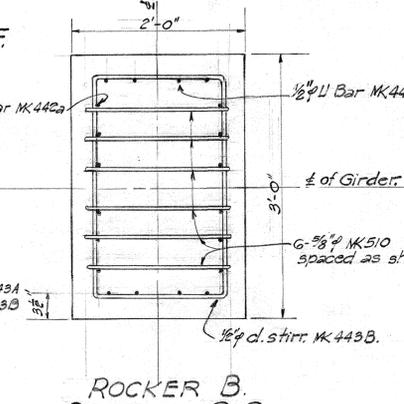
TOP PLAN C-C OF PIER CAGE REINF FOR PIERS NO. 2, 3, 4, 5 & 6. 1"=1'-0"



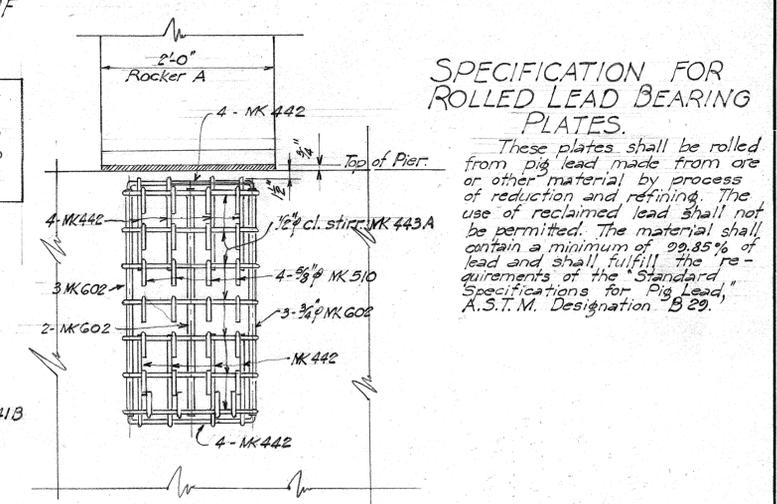
ELEV. D-D OF PIER CAGE REINF. 1"=1'-0"



SECTION H-H 1"=1'-0"



ROCKER B SECTION G-G 1"=1'-0"



ELEV. K-K OF PIER CAGE REINF. 1"=1'-0"

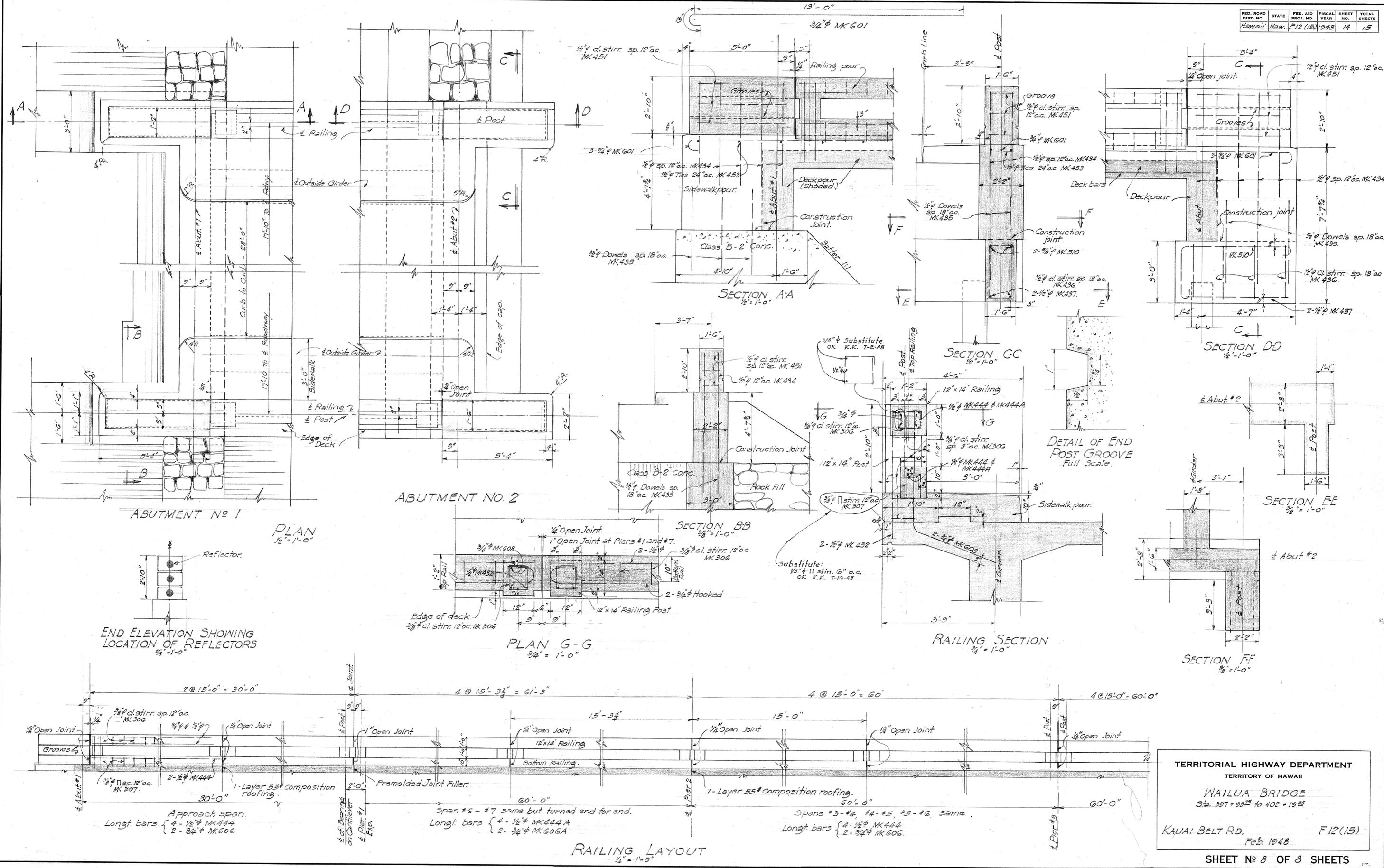
PIERS #1 AND #7 - ROCKER A
PIERS #2, #3, #5 & #6 - ROCKER B
ROCKER A - 8 REQUIRED
ROCKER B - 16 REQUIRED

SPECIFICATION FOR ROLLED LEAD BEARING PLATES.
These plates shall be rolled from pig lead made from ore or other material by process of reduction and refining. The use of reclaimed lead shall not be permitted. The material shall contain a minimum of 99.85% of lead and shall fulfill the requirements of the "Standard Specifications for Pig Lead," A.S.T.M. Designation "B 20."

DATE: 1/22/48
SURVEY PLOTTED BY: [Name]
DRAWN BY: [Name]
CHECKED BY: [Name]
NOTE BOOK NO. [Number]

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
WAILUA BRIDGE
Sta. 397+93.25 to 402+19.25
KAUAI BELT RD. F12(15)
March, 1948

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F12 (15)	1948	14	15



DATE: 10/15/47
 SURVEY PLOTTED BY: [Name]
 DESIGNED BY: [Name]
 CHECKED BY: [Name]
 QUANTITIES BY: [Name]
 NOTE BOOK NO. [Number]
 QUANTITIES CHECKED BY: [Name]
 CHECKED BY: [Name]

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 WAILUA BRIDGE
 Sta. 397+25 to 402+10
 KAUAI BELT RD. Feb 1948 F12(15)

SHEET No 8 OF 8 SHEETS

5178.14