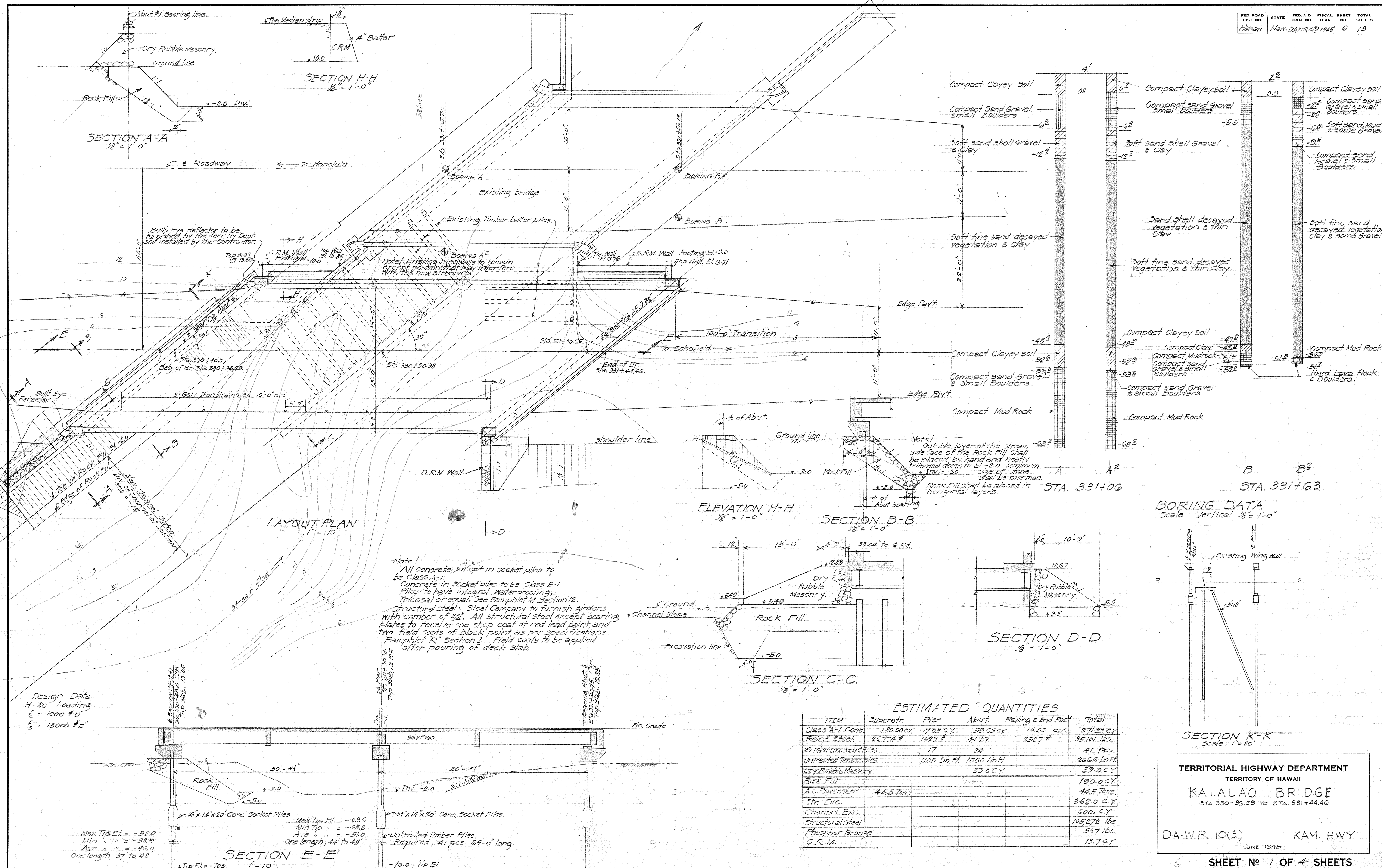
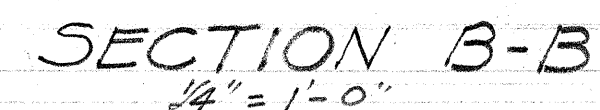
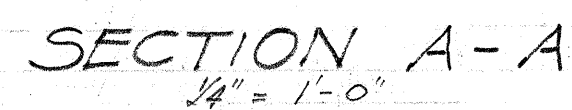
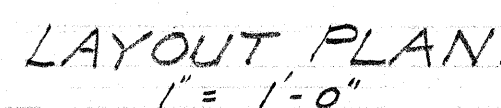




TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
KALAUAO BRIDGE
STA. 330+32.29 TO STA. 331+44.46
DA-WR 10(3) KAM. HWY
JUNE 1945

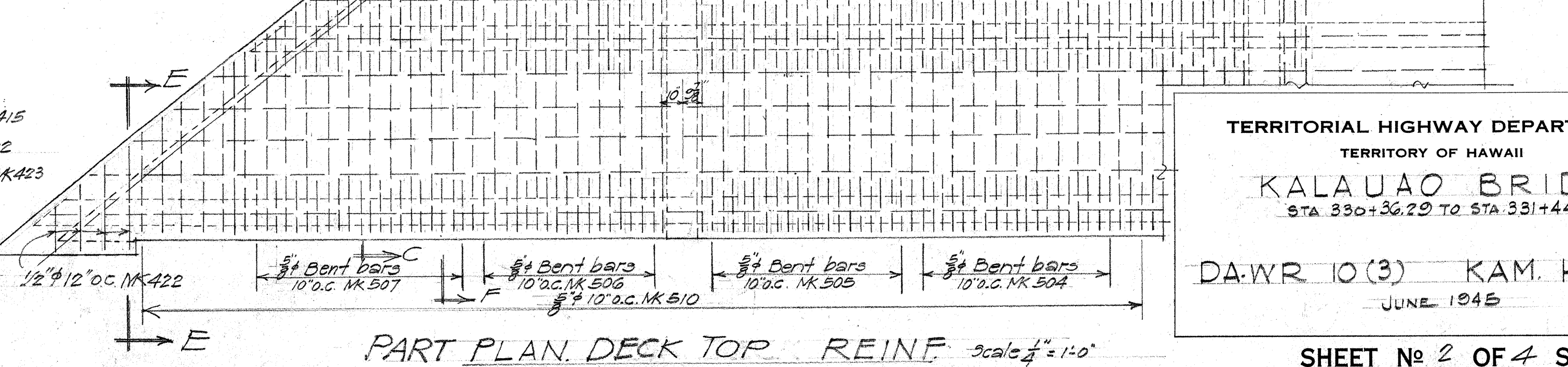
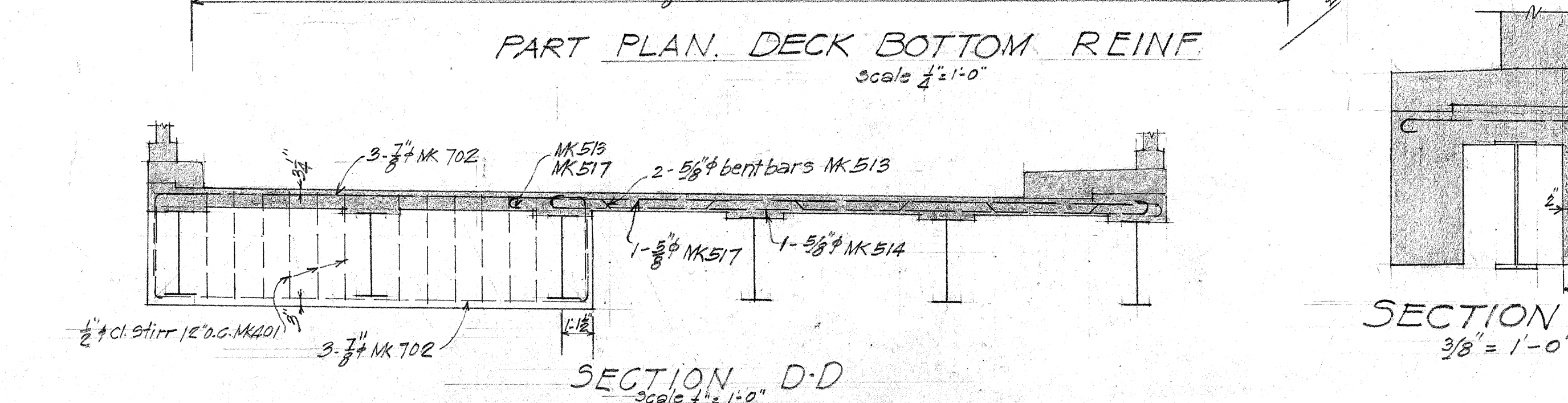
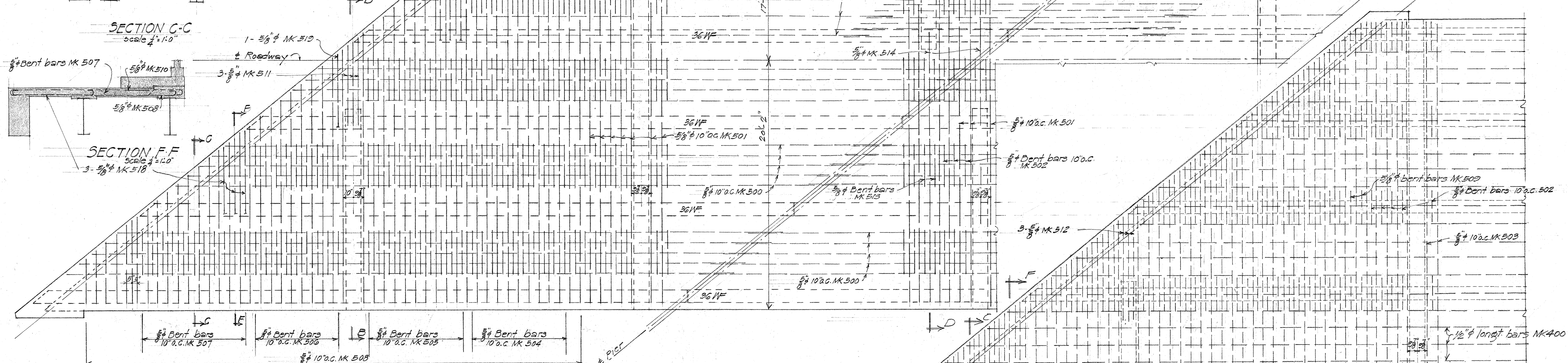
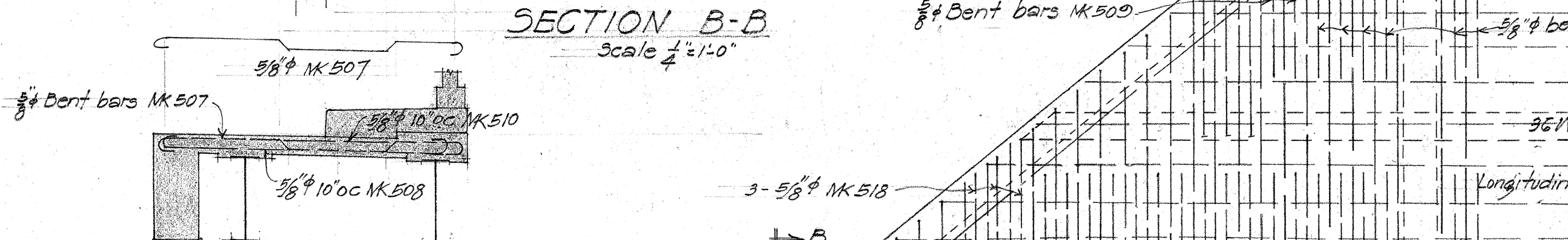
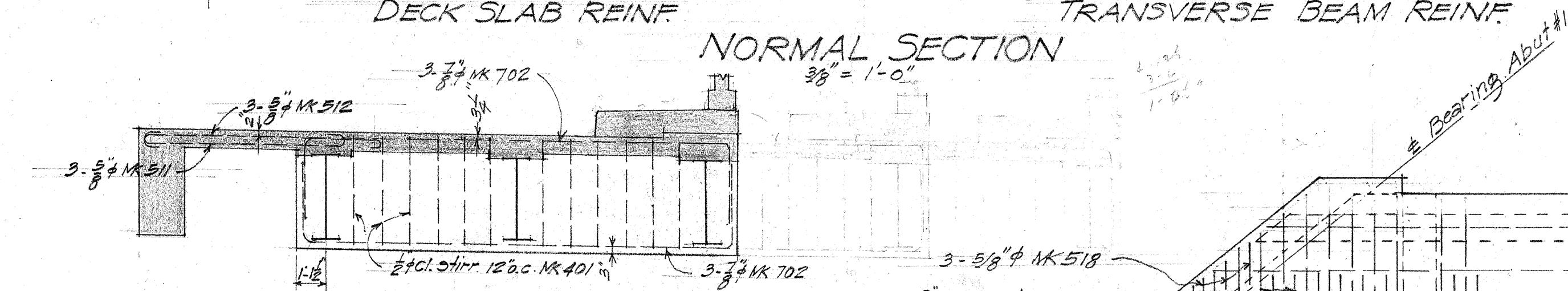
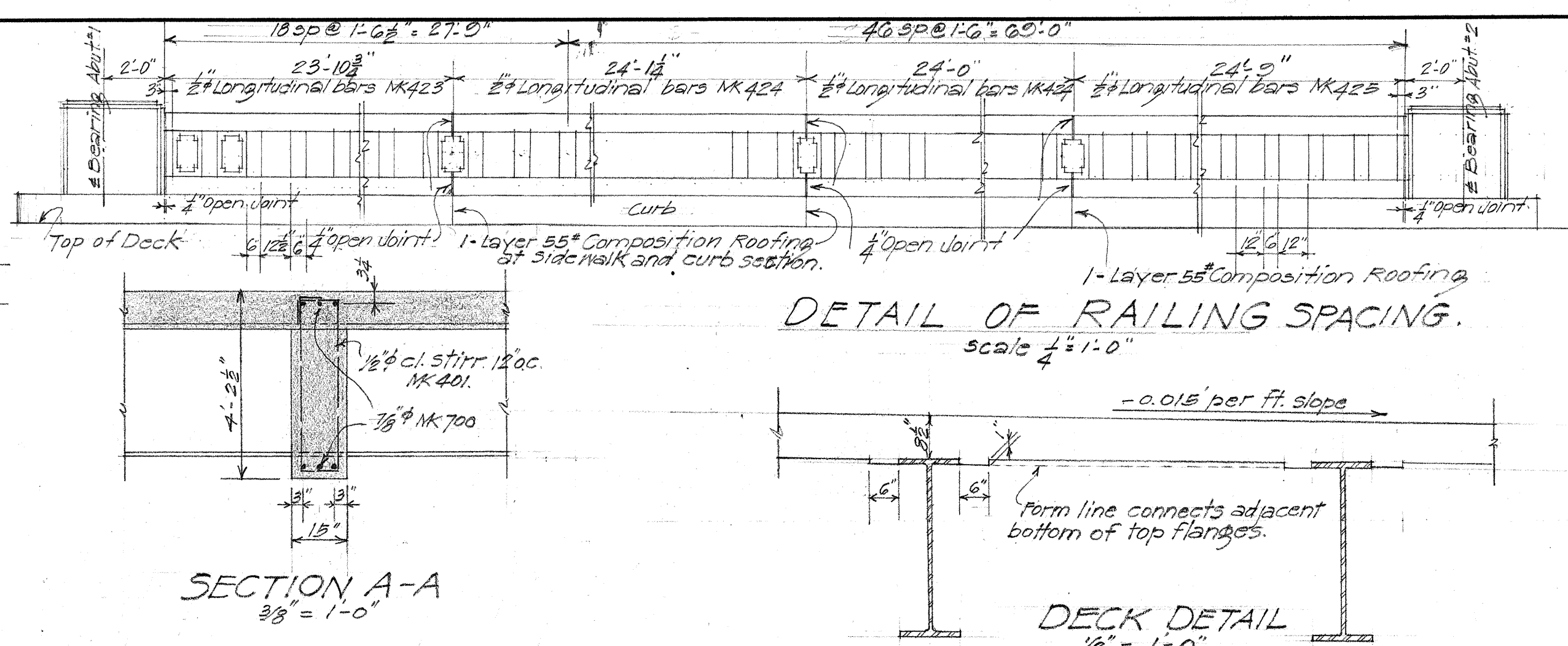
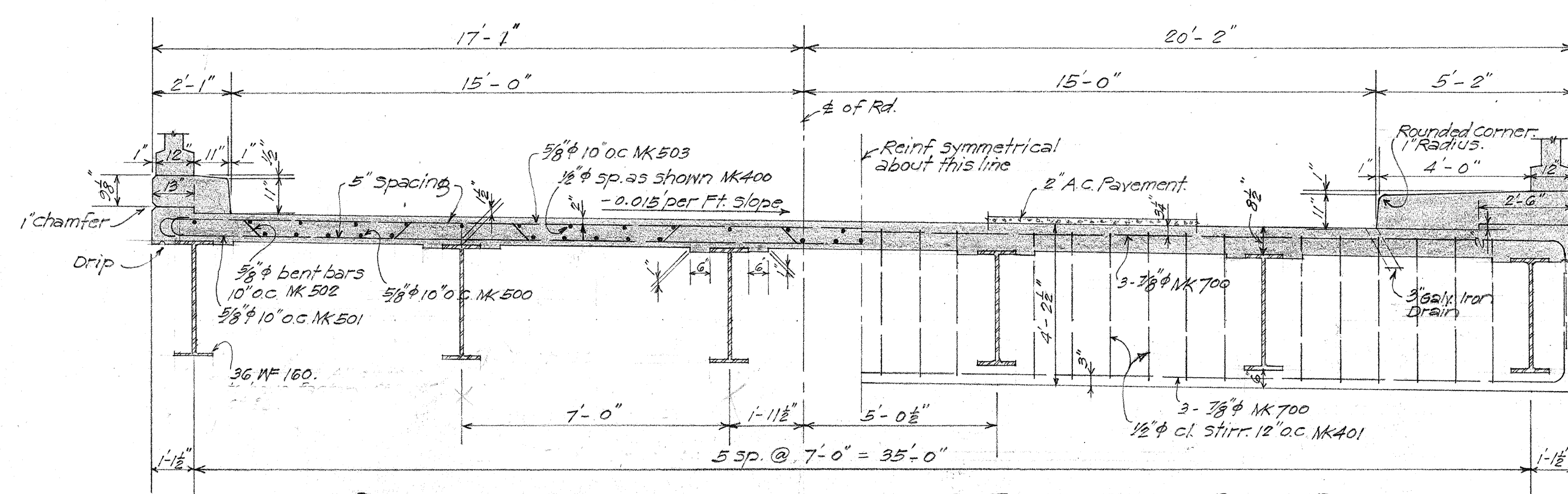


Note! Wingwall detail shown on this sheet supersedes detail on sheet 51.57.6

WINGWALL DETAIL

KALAUAO BRIDGE DA WR 10(3)

AUG. 1946

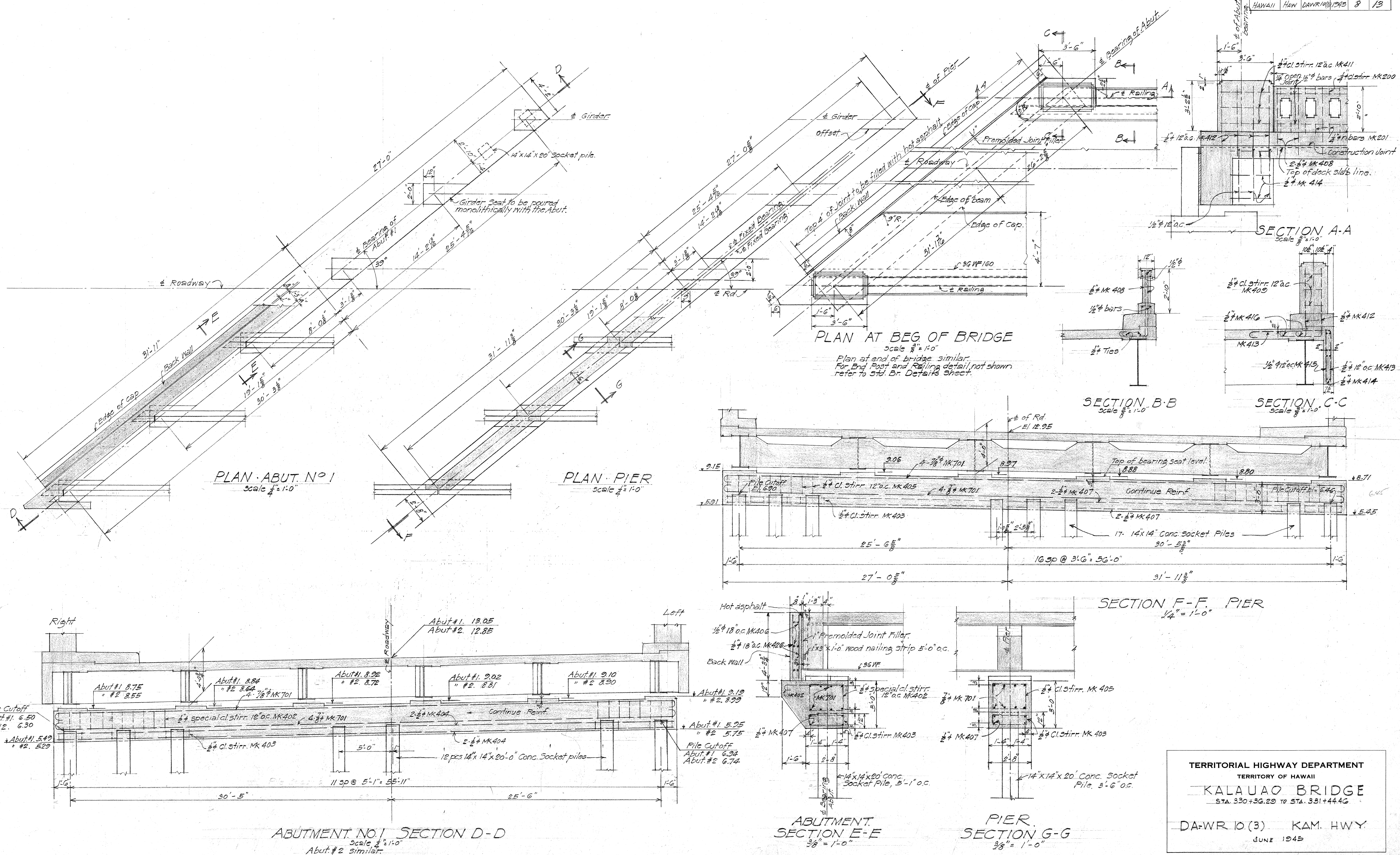


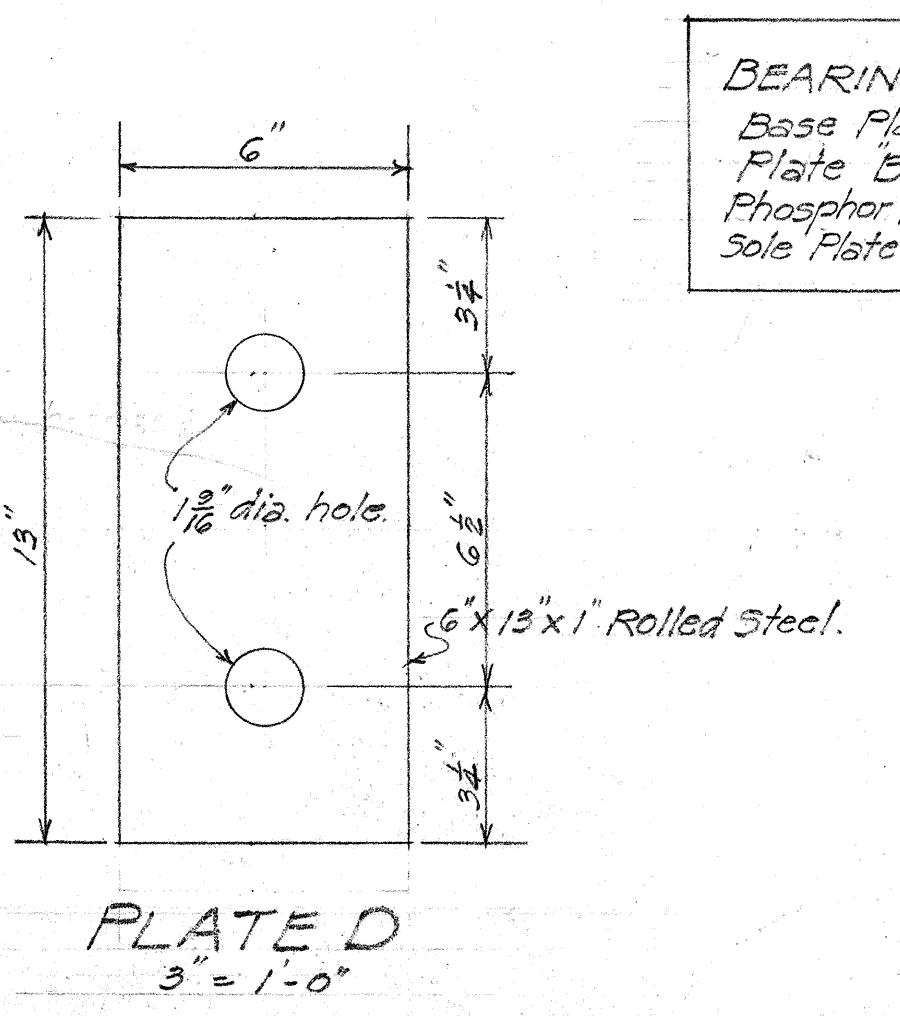
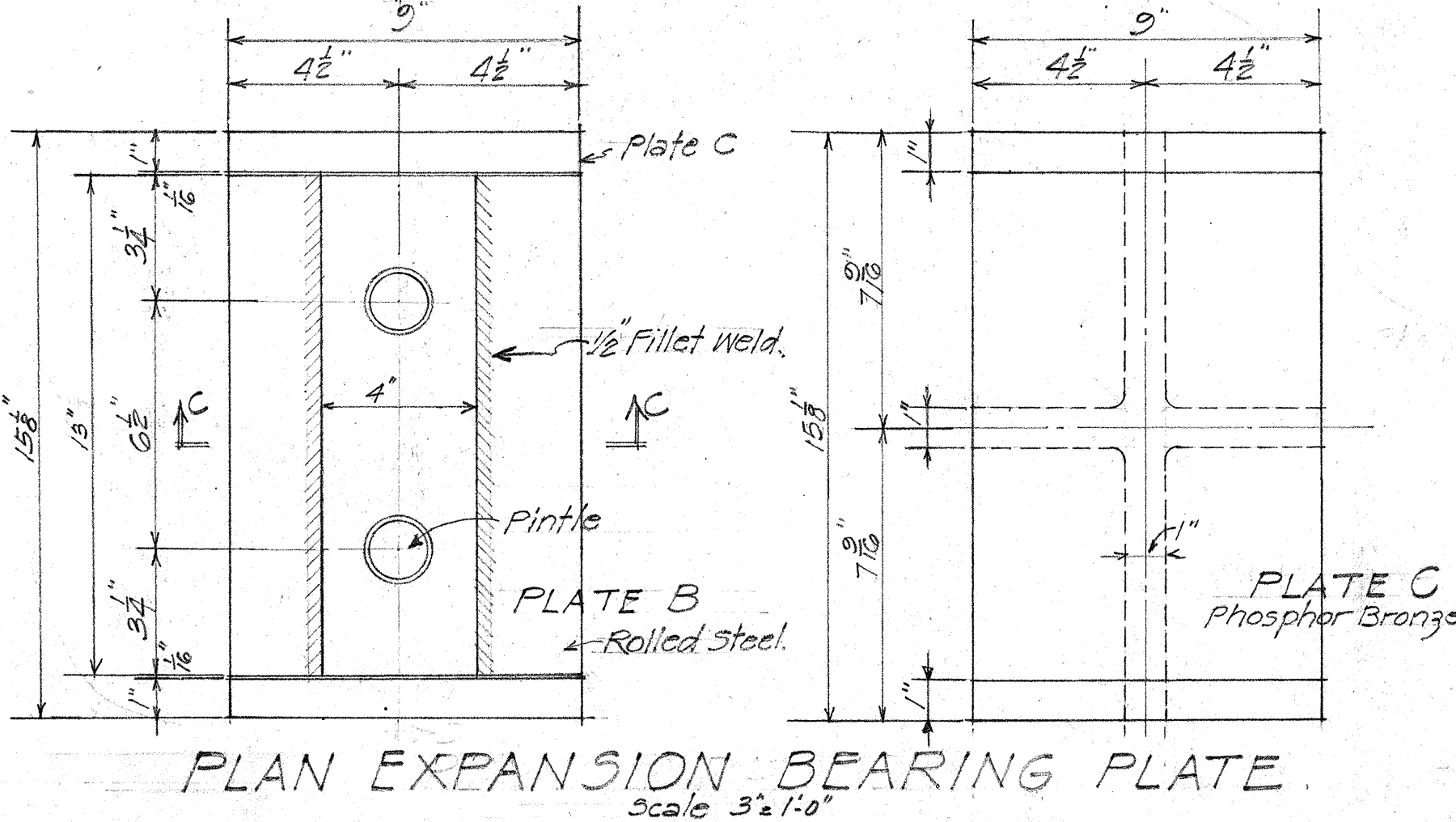
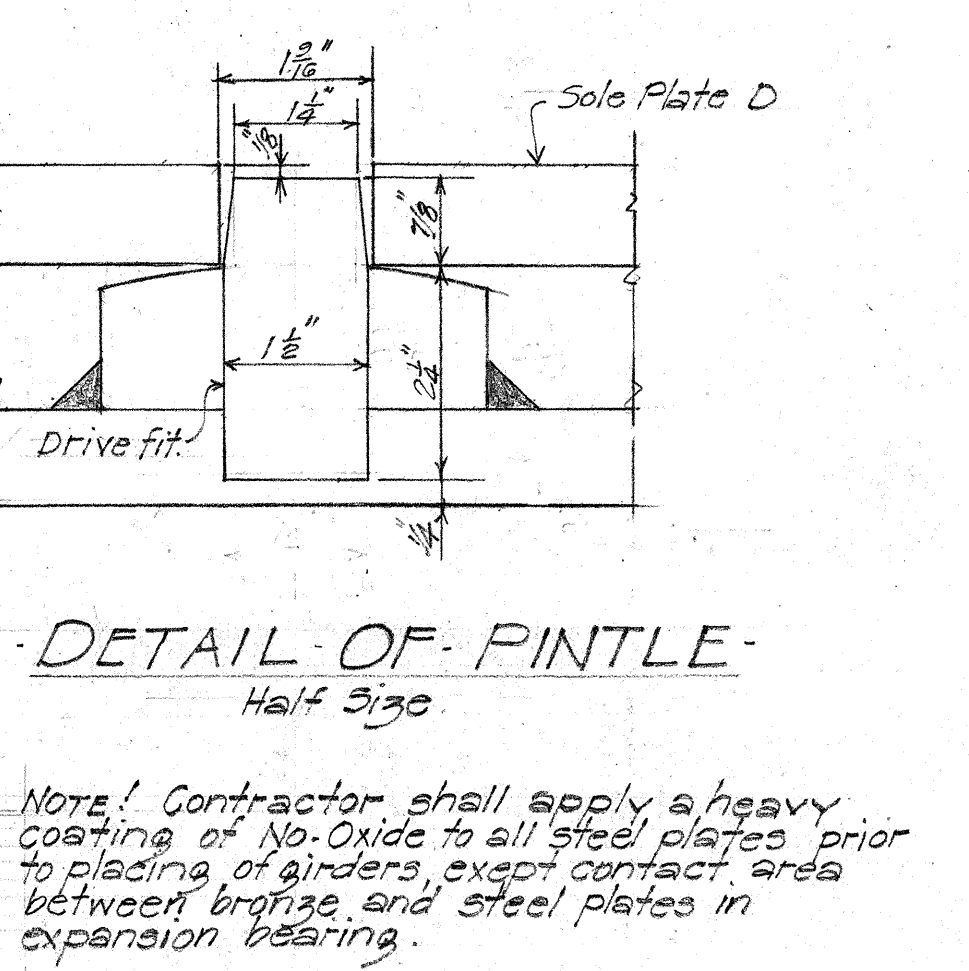
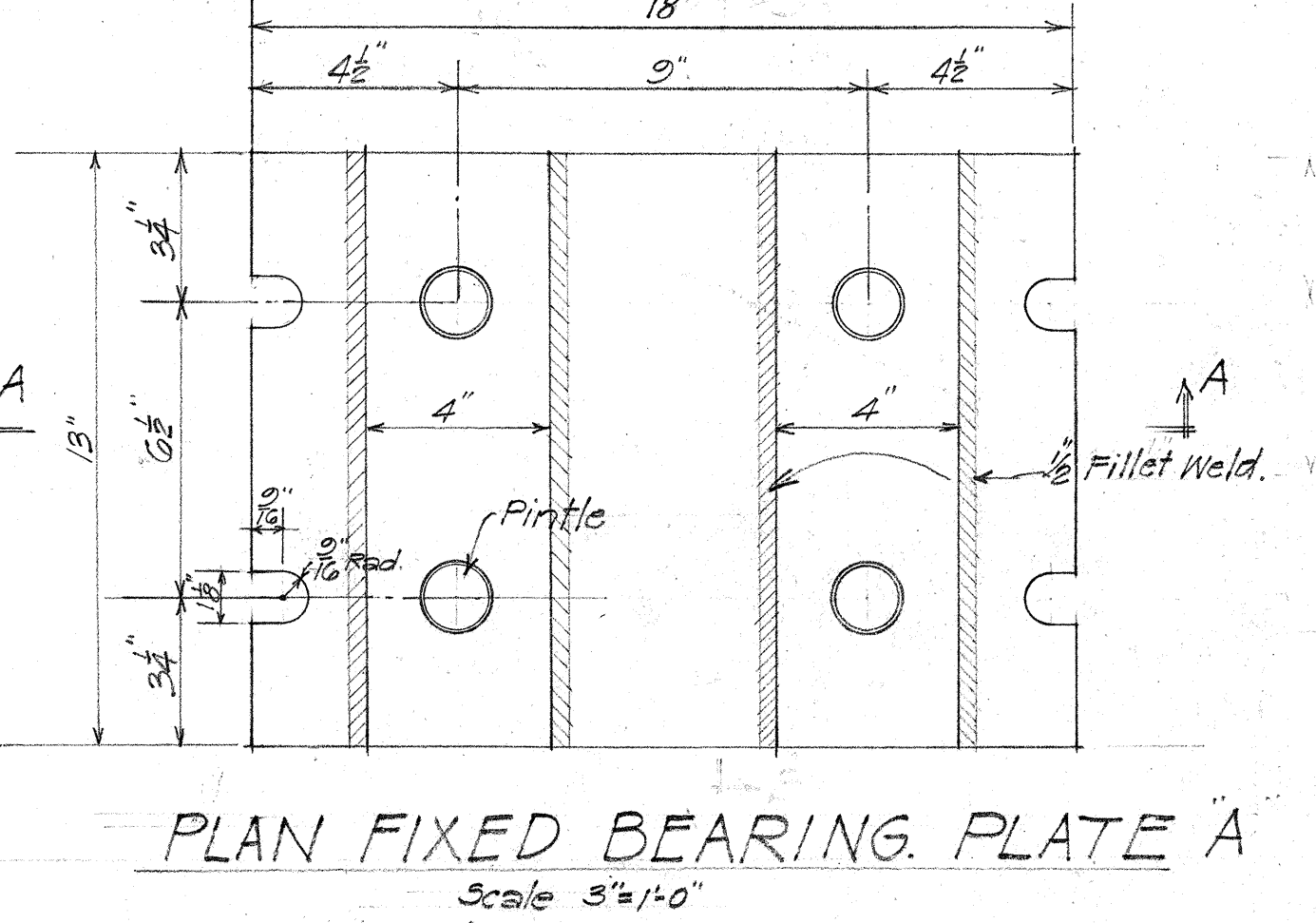
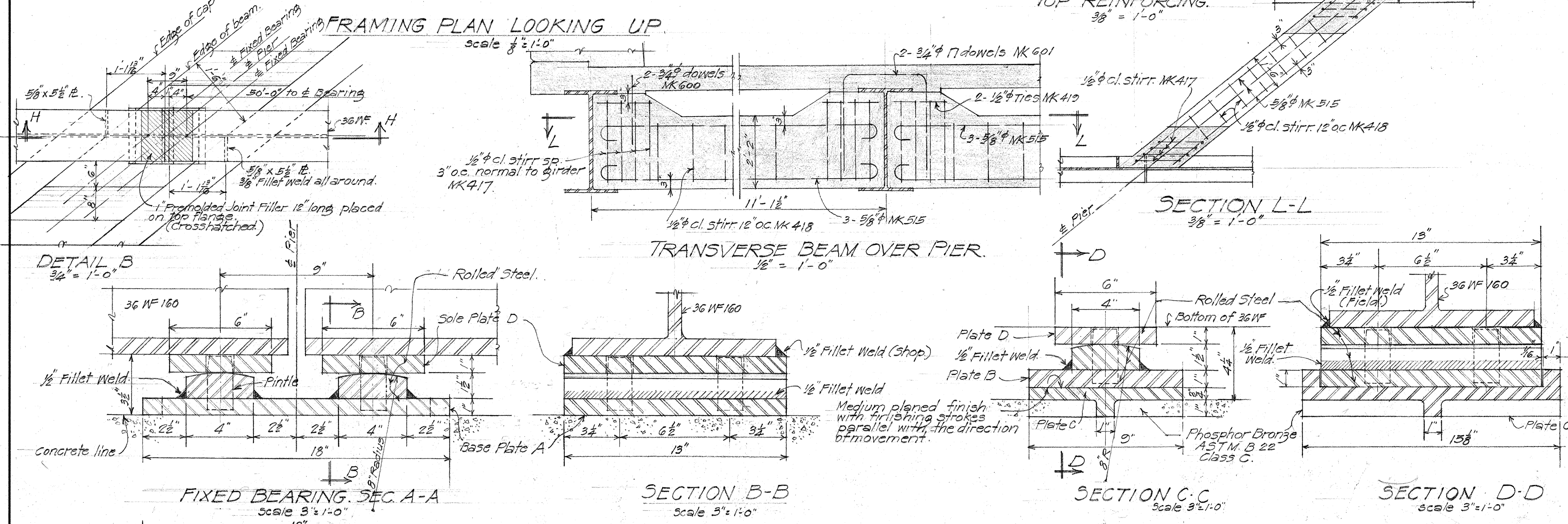
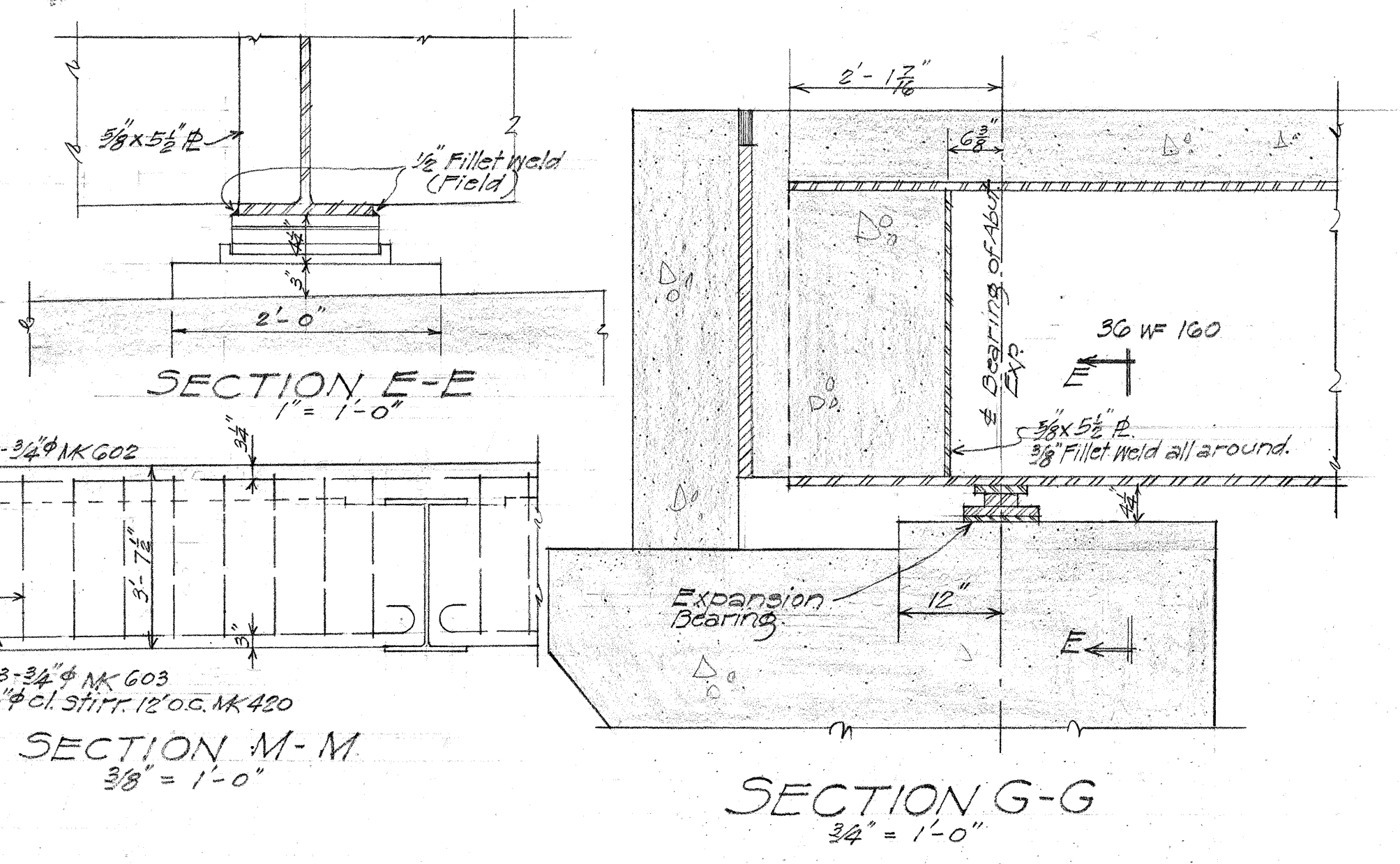
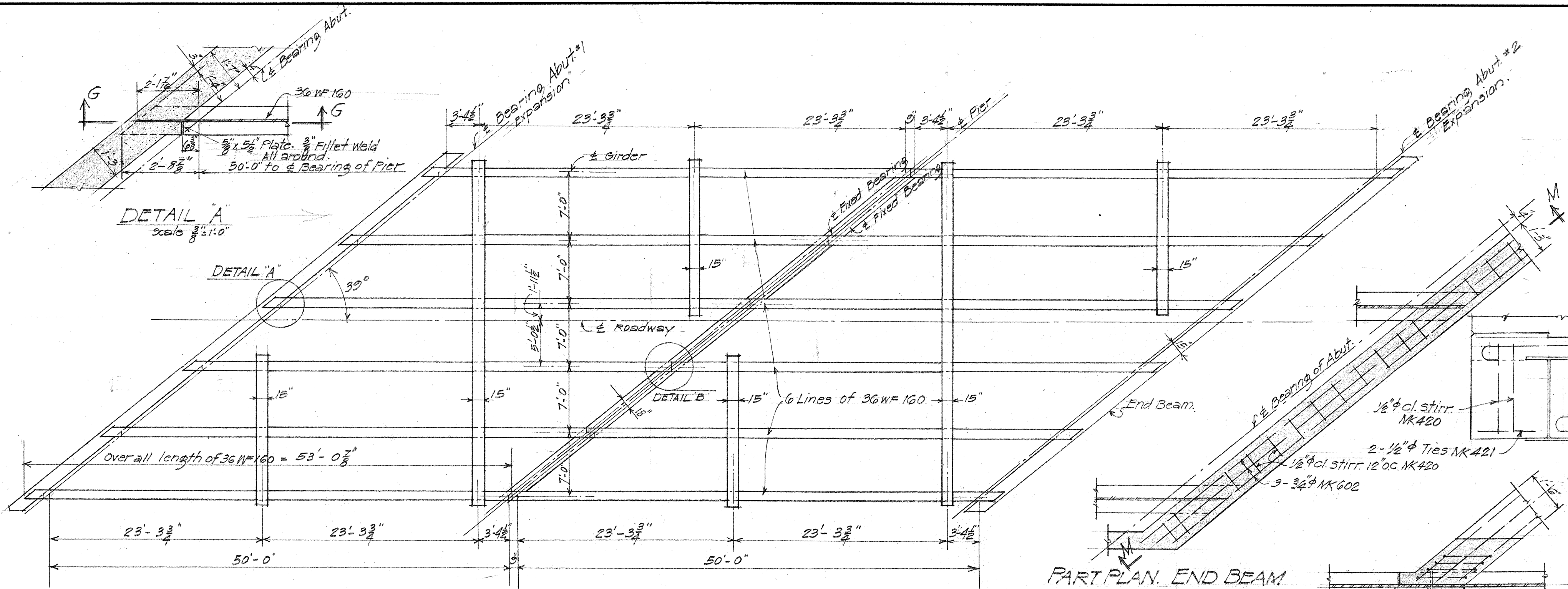
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
KALAUAO BRIDGE
STA 330+36.29 TO STA 331+44.46
DAWR 10(3) KAM. HWY
JUNE 1945
SHEET No 2 OF 4 SHEETS

DATE: 6/1/45
DRAWN BY: J. H. B. / J. H. B.
CHECKED BY: J. H. B. / J. H. B.
ORIGINAL PLAN: 10/1/45
NOTE BOOK: 10/1/45

5157.8

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DESIGNED BY <i>M.R. Bannister</i>	<i>5/12/52</i>
	DRAWN BY <i>P. Varnham</i>	<i>6/19/52</i>
	TRACED BY	"
	QUANTITIES BY <i>P.Y.</i>	"
	QUANTITIES CHECKED BY <i>P. Varnham</i>	"
	CHECKED BY <i>M.R.B.</i>	"





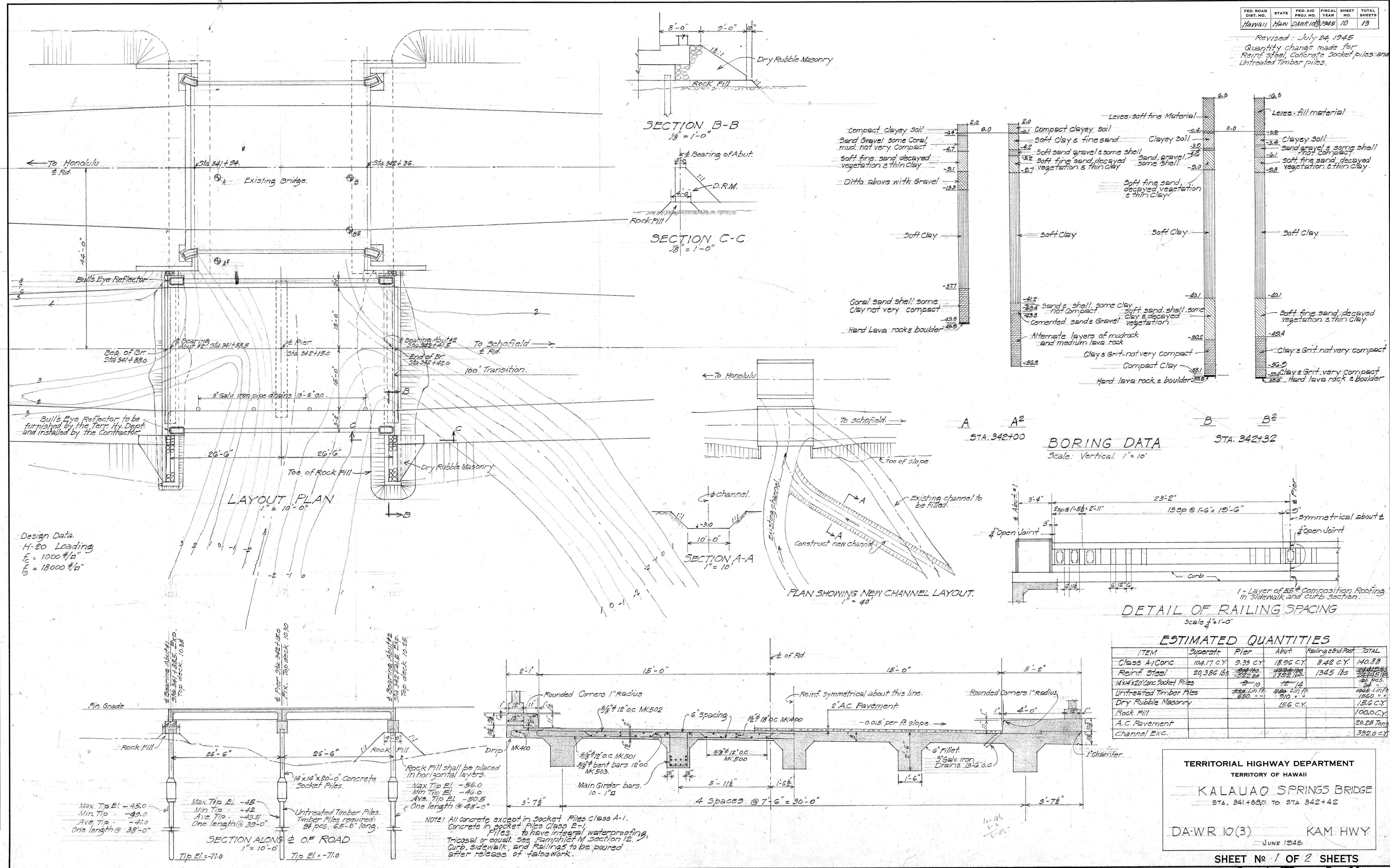
BEARING PLATES REQUIRED
 Base Plate A — 6 pcs.
 Plate B — 12
 Phosphor Bronze Plate C — 12
 Sole Plate D — 24

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
KALAUAAO BRIDGE
 STA. 330+30.20 TO STA. 331+44.46
 DAWR 10(3) K.A.M. HWY
 JUNE 1945
SHEET No 4 OF 4 SHEETS

SURVEY PLOTTED BY DATE
 DRAWN BY
 CHECKED BY
 NOTE BOOK
 No.

NOTE: Contractor shall apply a heavy coating of No. 10 oxide to all steel plates prior to placing of girders, except contact area between bridge and steel plates in expansion bearing.

Revised: July 24, 1945
Quantity change made for Reinf. steel, concrete socket piles and untreated timber piles.



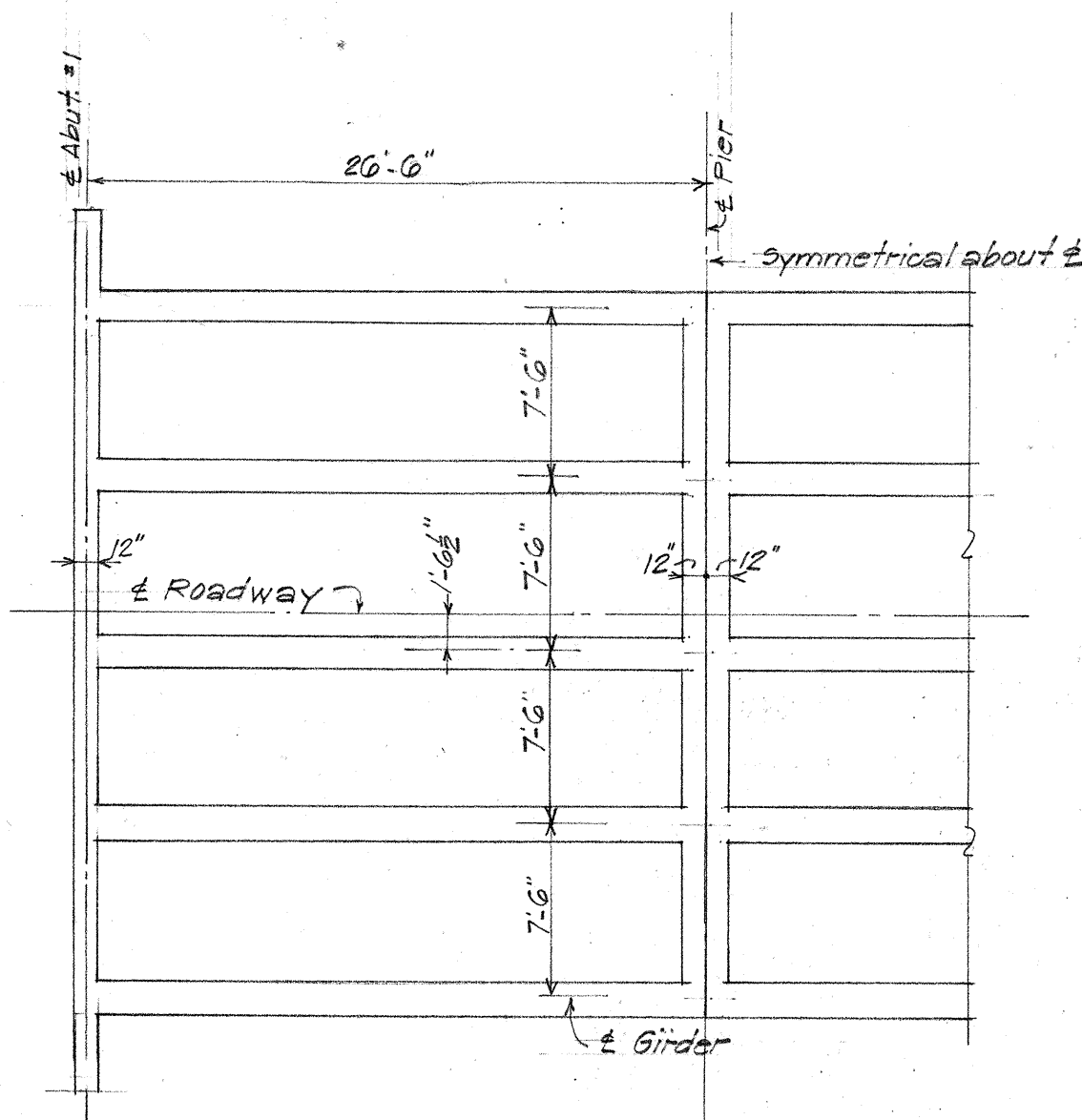
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
KALAUO SPRINGS BRIDGE
STA. 341+83.0 TO STA. 342+42
DA-WR 10(3) KAM. HWY.
JUNE 1945

SHEET No. 1 OF 2 SHEETS

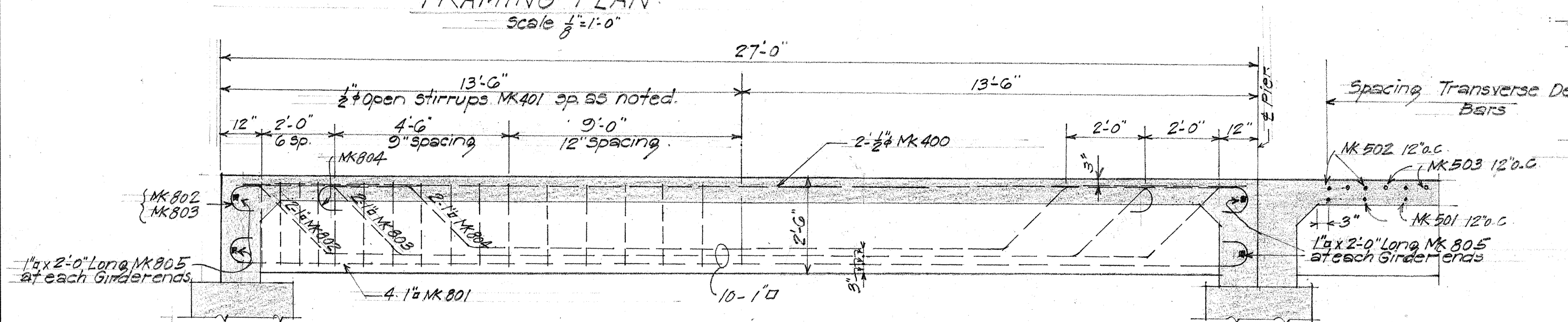
5157.10

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	DAWR 103	1945	11	13

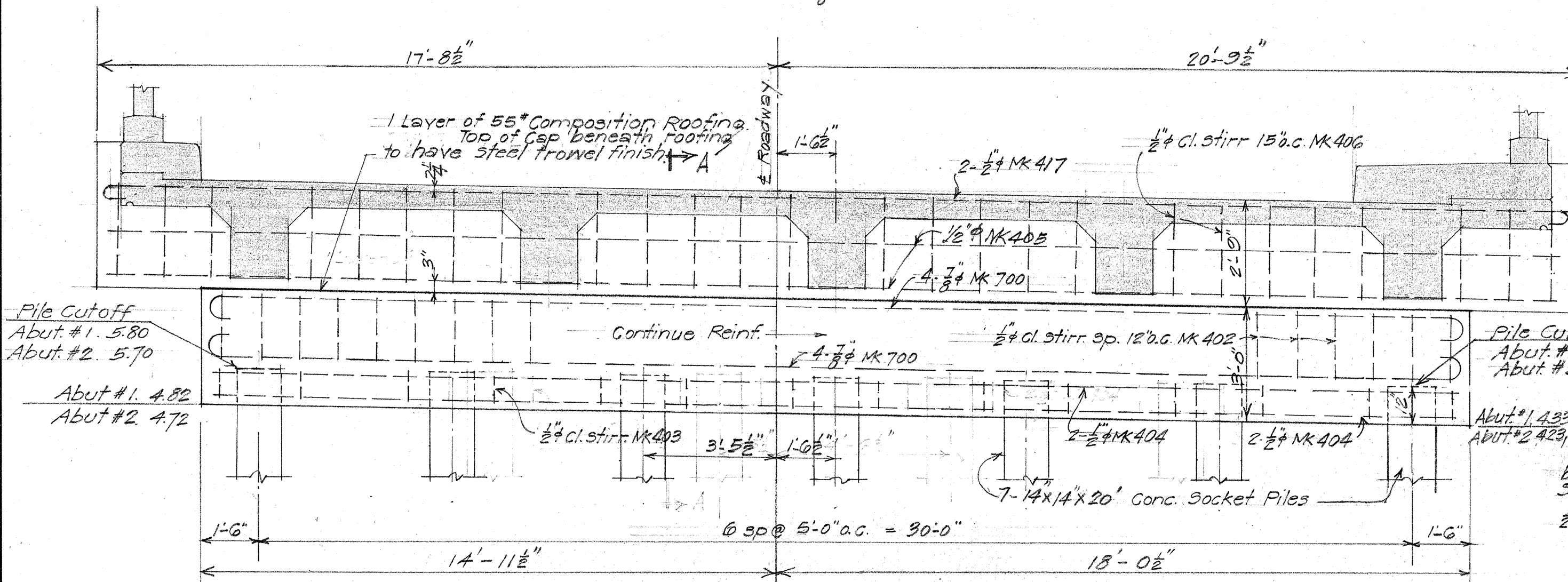
Revised: July 24, 1945
Number of piles at Pier and Abutments increased.



FRAMING PLAN
Scale $\frac{1}{8}$ " = 1'-0"

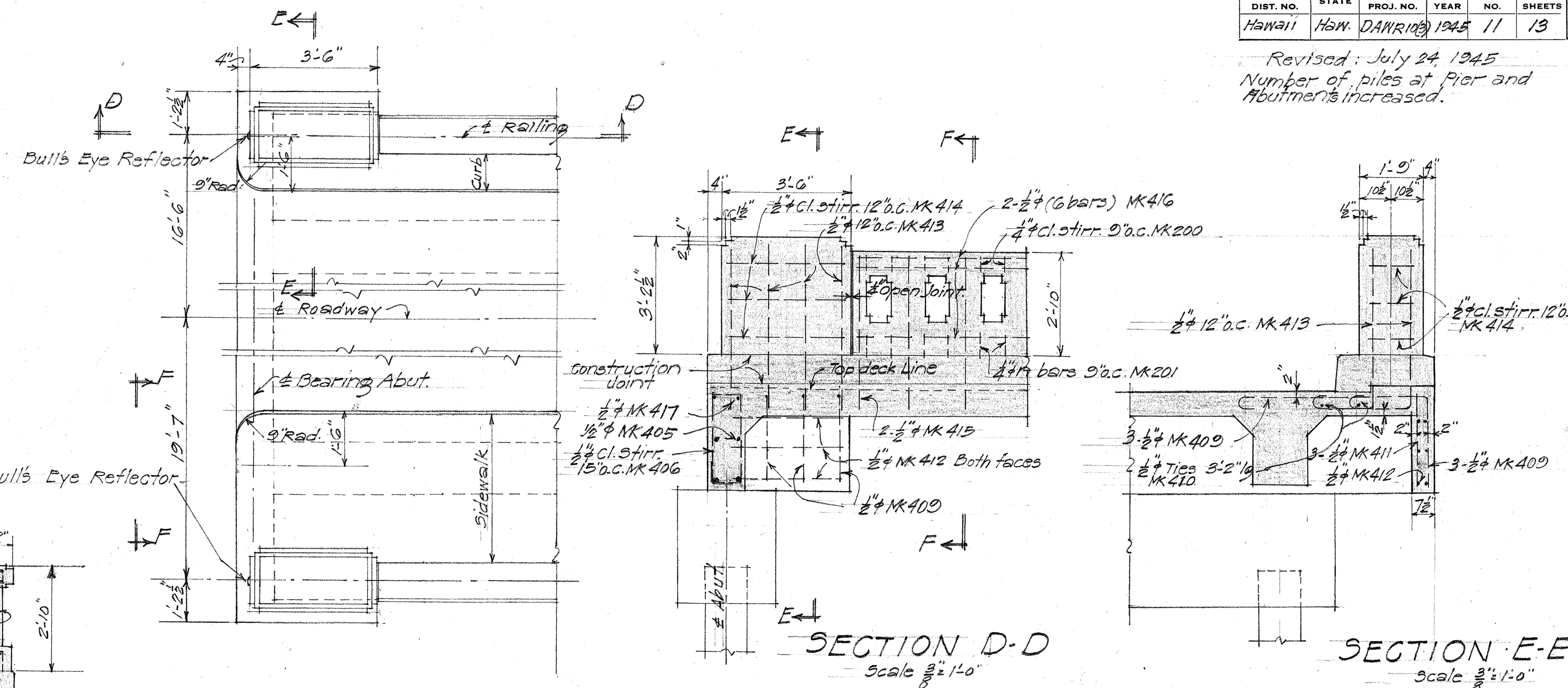


GIRDER REINF.
Scale $\frac{1}{8}$ " = 1'-0"



ABUTMENT NO 2 REINF.
Scale $\frac{1}{8}$ " = 1'-0"

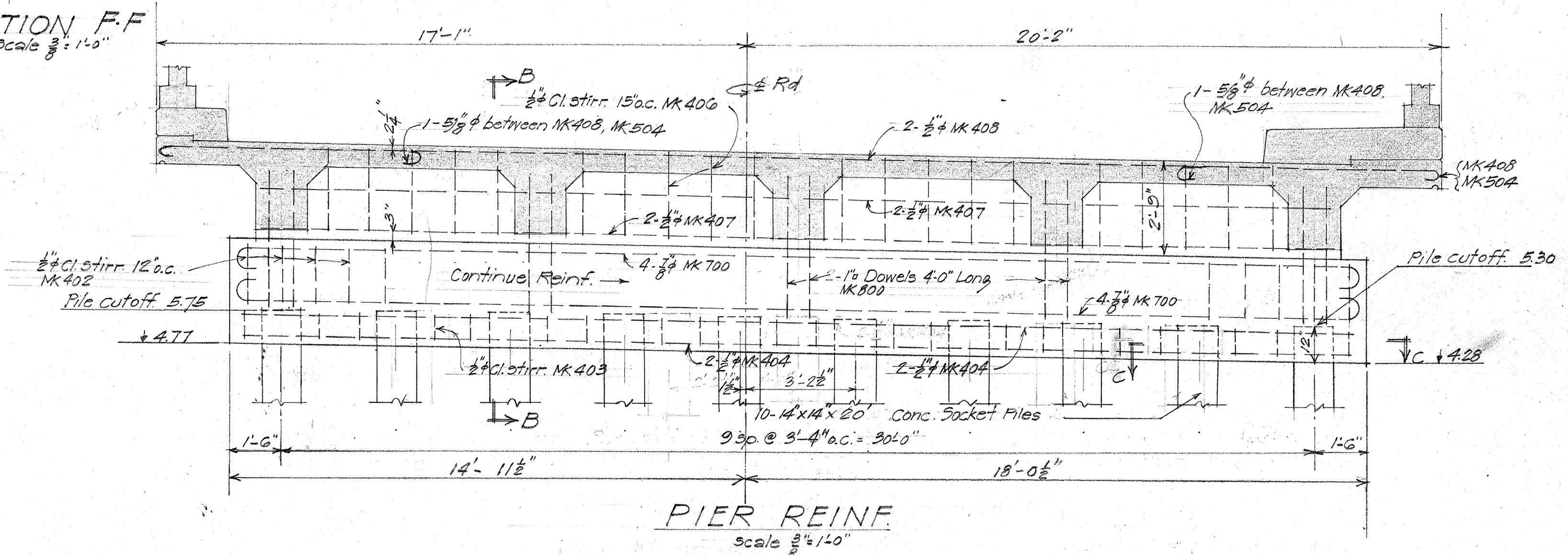
NOTE! Abut. No. 1 Similar.



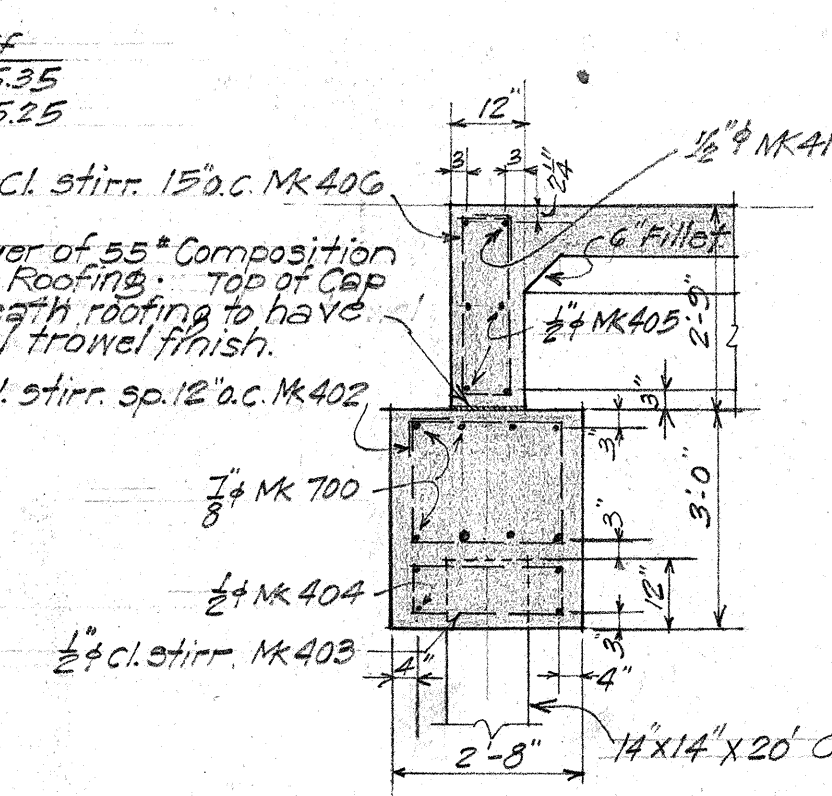
PLAN AT BEG. OF BRIDGE
Scale $\frac{1}{8}$ " = 1'-0"

NOTE! Plan at end of bridge similar. For end post and railing detail, not shown, refer to Std. Br. Detail sheet.

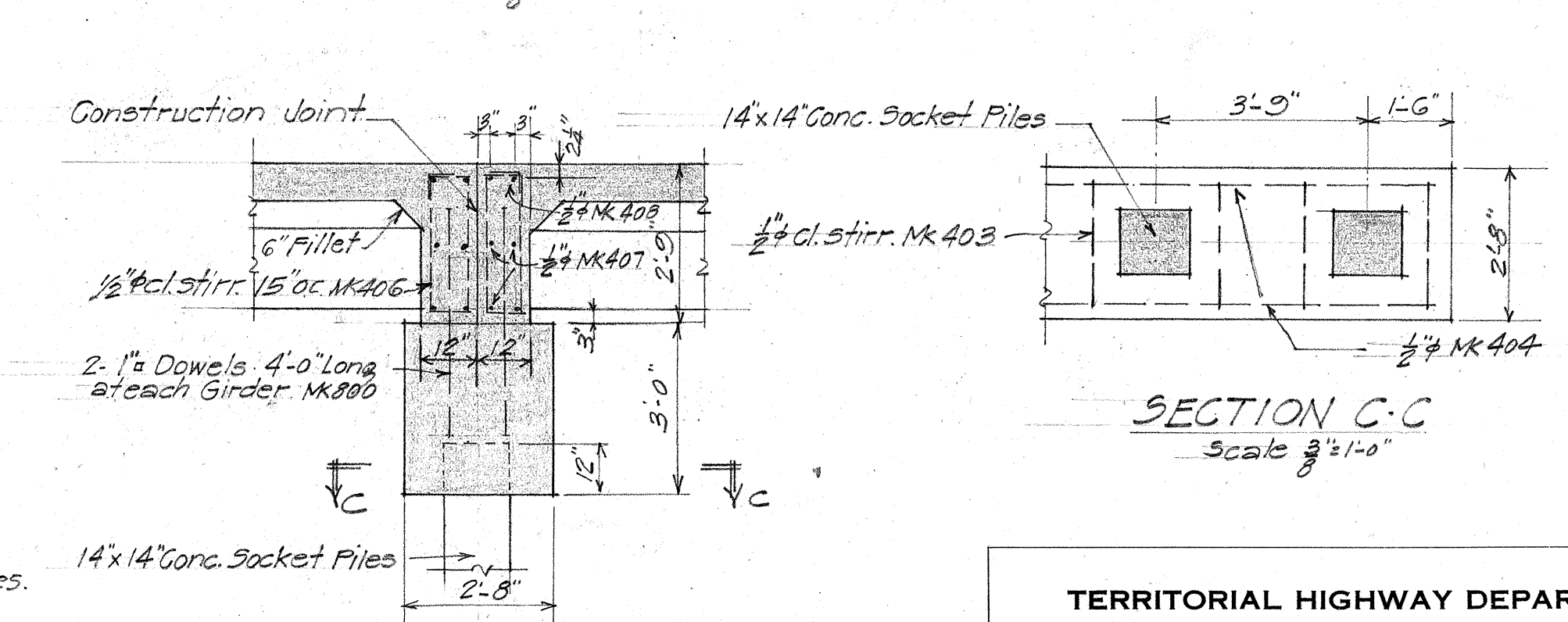
SECTION F-F
Scale $\frac{1}{8}$ " = 1'-0"



PIER REINF.
Scale $\frac{1}{8}$ " = 1'-0"



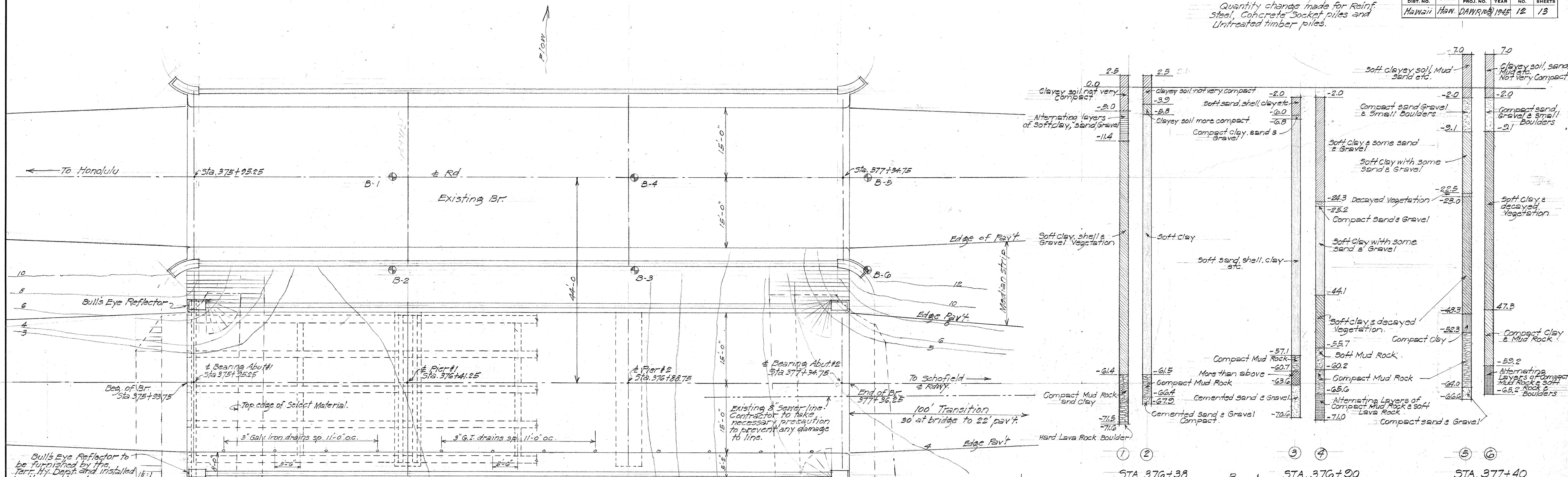
SECTION A-A
Scale $\frac{1}{8}$ " = 1'-0"



SECTION B-B
Scale $\frac{1}{8}$ " = 1'-0"

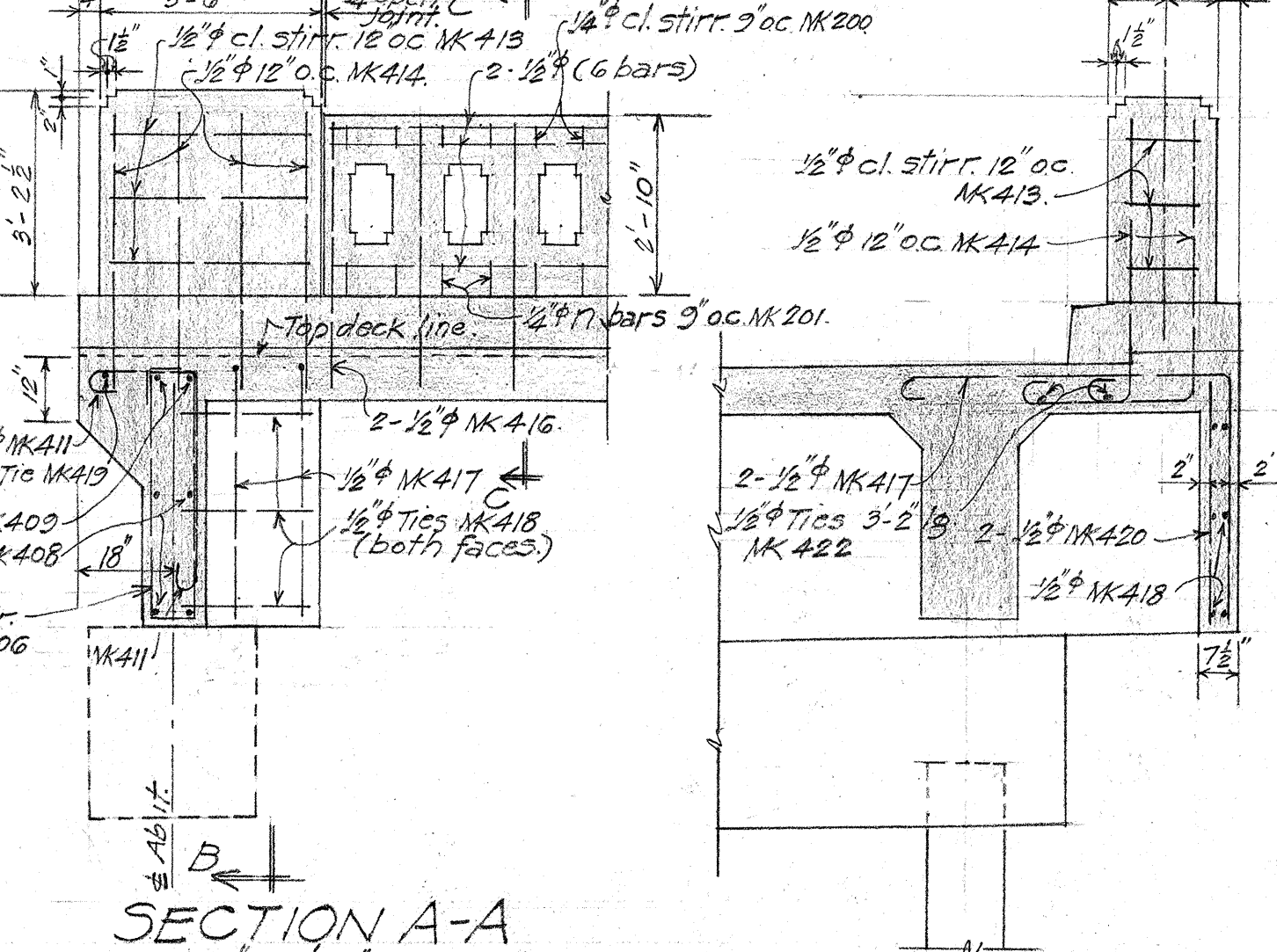
Revised: July 24, 1945
Quantity change made for Reinf. Steel, Concrete Socket piles and Untreated timber piles.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	DAWR 10(3)	1945	12	13



LAYOUT PLAN
1" = 10'

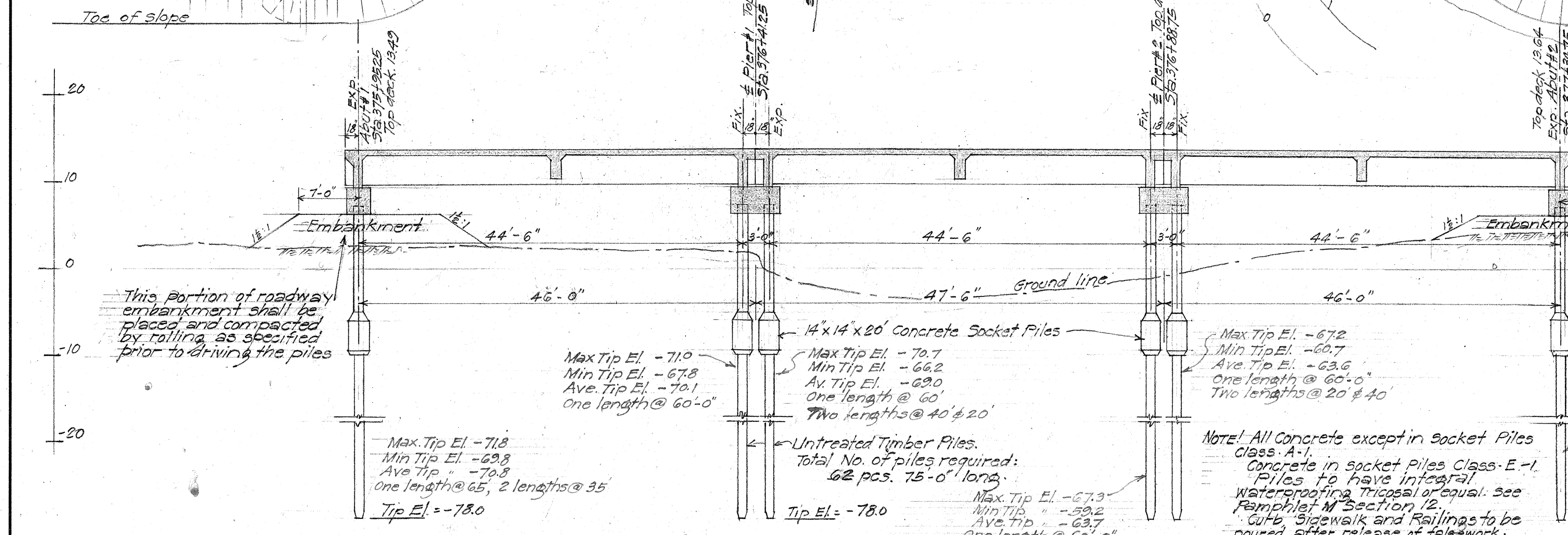
BORING DATA
Vertical scale: 1" = 10'



PLAN AT BEG OF BRIDGE
3/8" = 1'-0"

Plan at end of bridge similar.
For End Post and Railing detail not shown, refer to Sta. Br. Details sheet.

LONGITUDINAL SECTION ALONG & ROAD
1" = 10'



ESTIMATED QUANTITIES

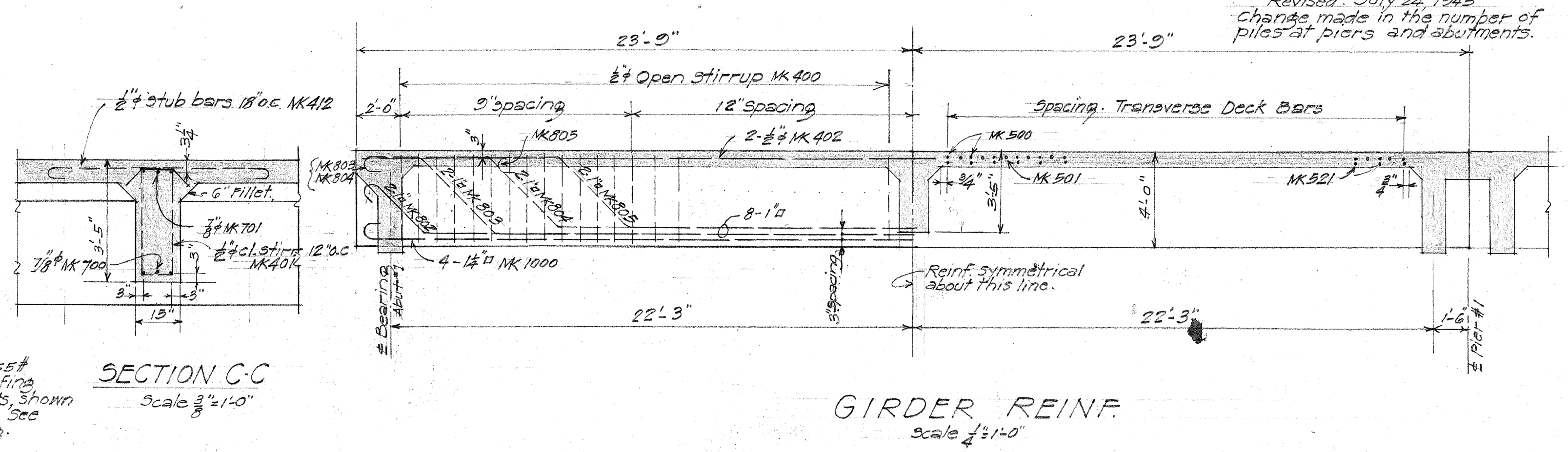
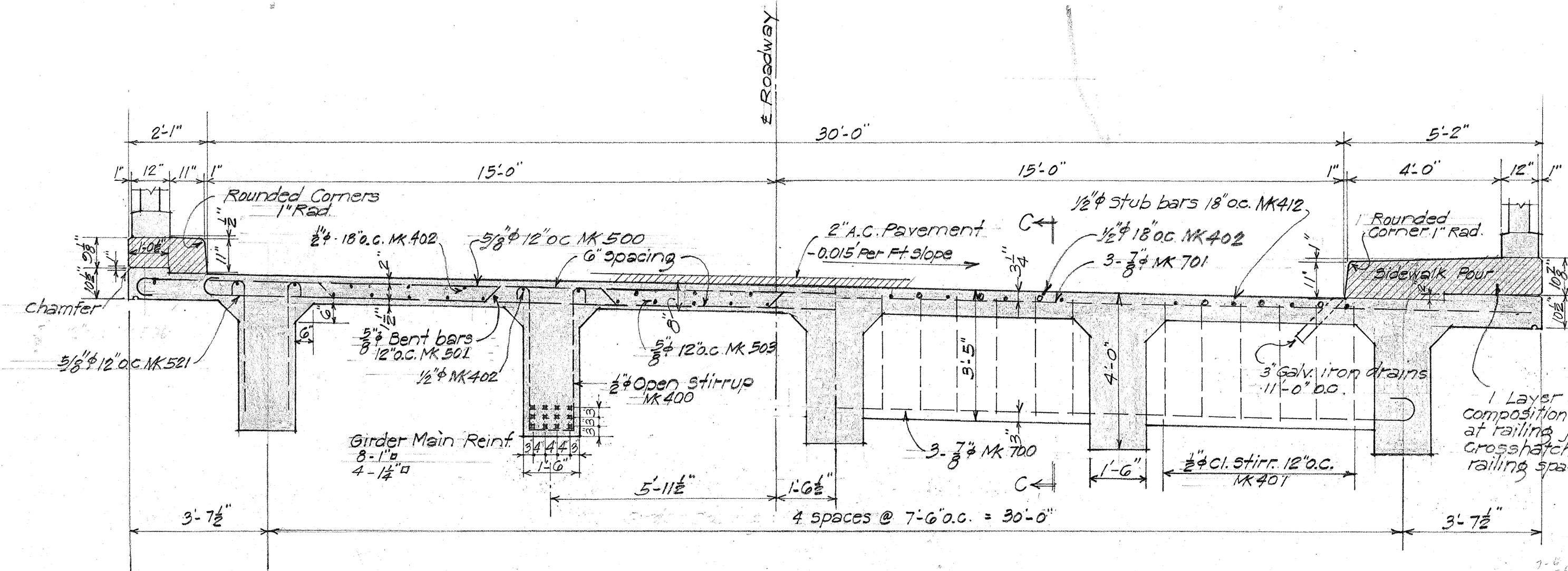
ITEM	Superstr.	Piers	Abut.	Railings & End Post	Total
Class A-1 Conc.	343.12 cy	32.75 cy	18.67 cy	19.15 cy	420.69 cy
Reinf. Steel	65.082 #	38.74 #	18.63 #	34.45 #	156.90 #
14" x 14" Conc. socket		36.40	18.22		54.62 pcs.
Untreated Timber Piles		2700 lin. ft.	1350 lin. ft.		4050 lin. ft.
A.C. Pavement	52.9				52.9 tons

NOTE: The Reinf. Steel quantity does not include steel in conc. socket piles.
Reinf. in conc. socket piles = 25,110 lbs.
28,830 "

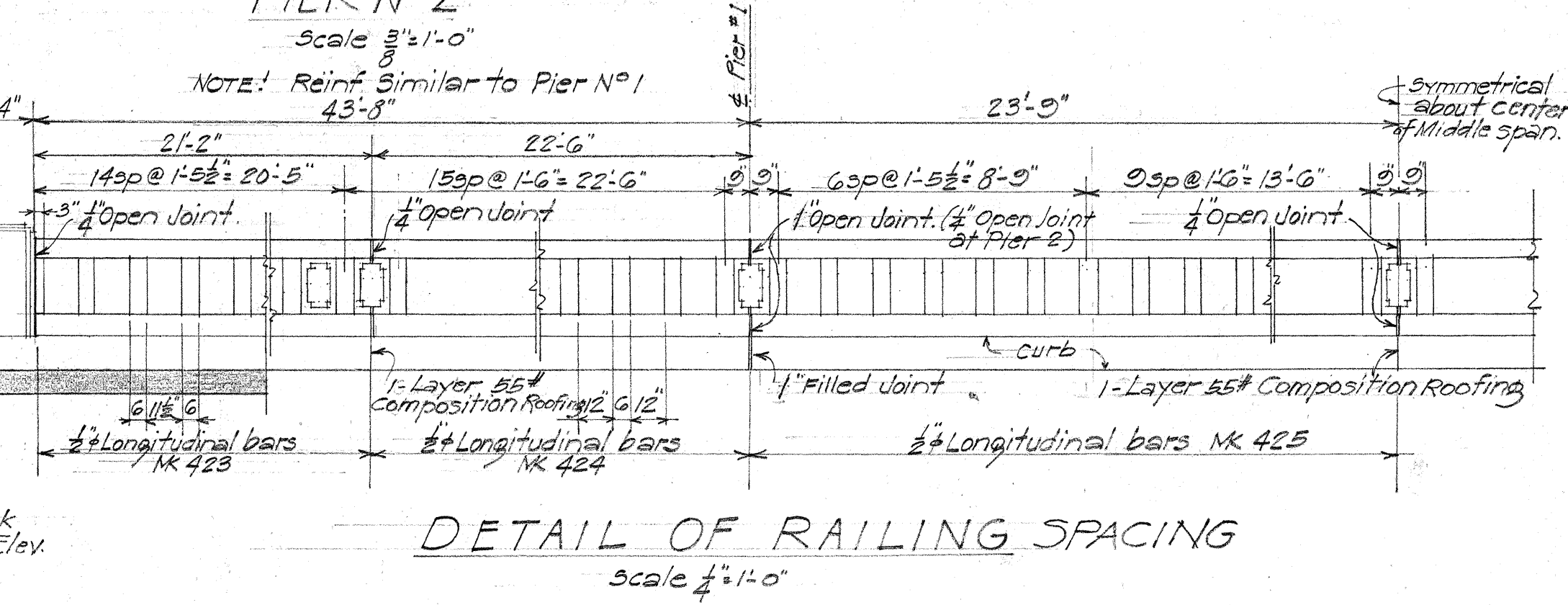
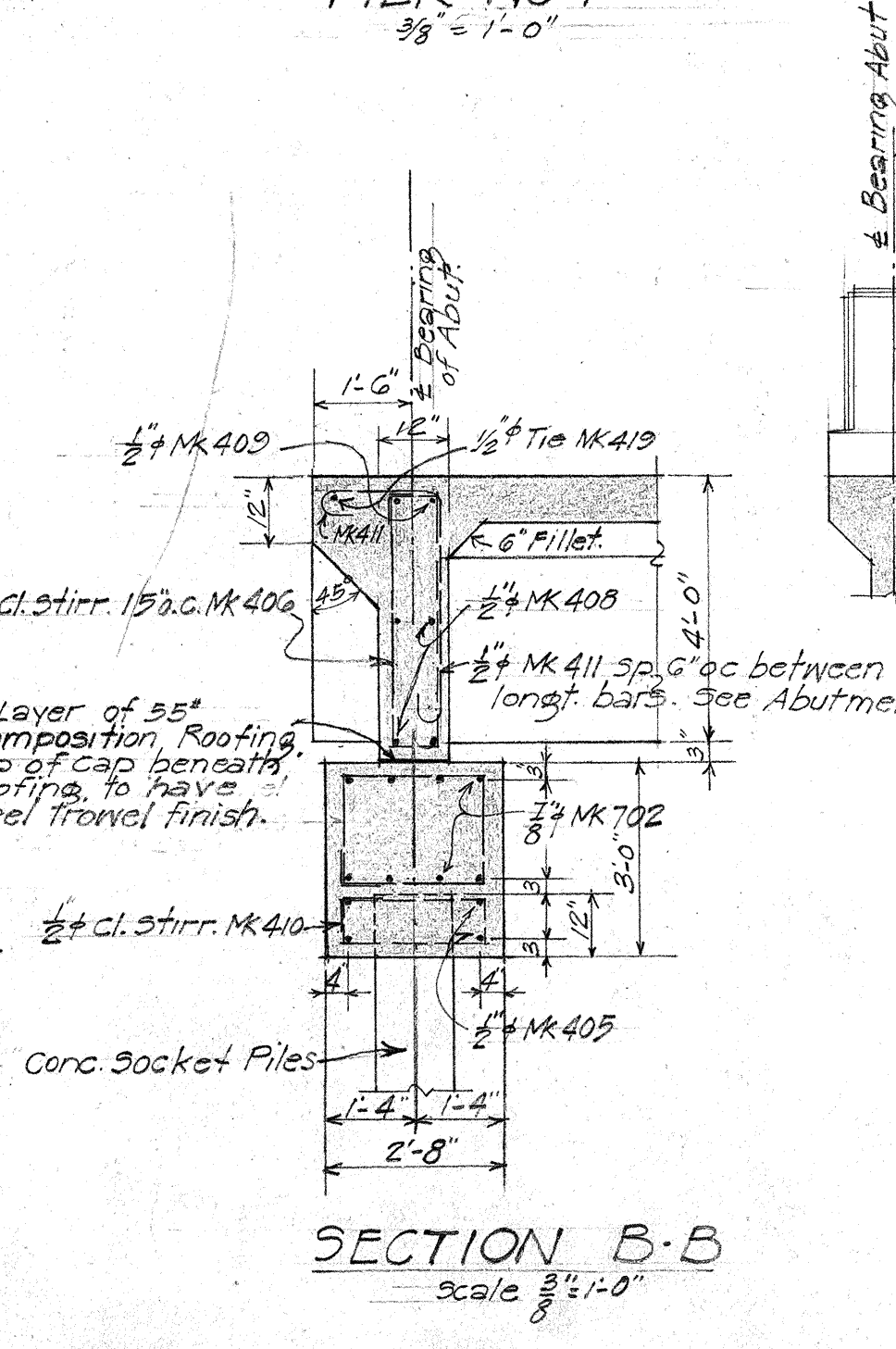
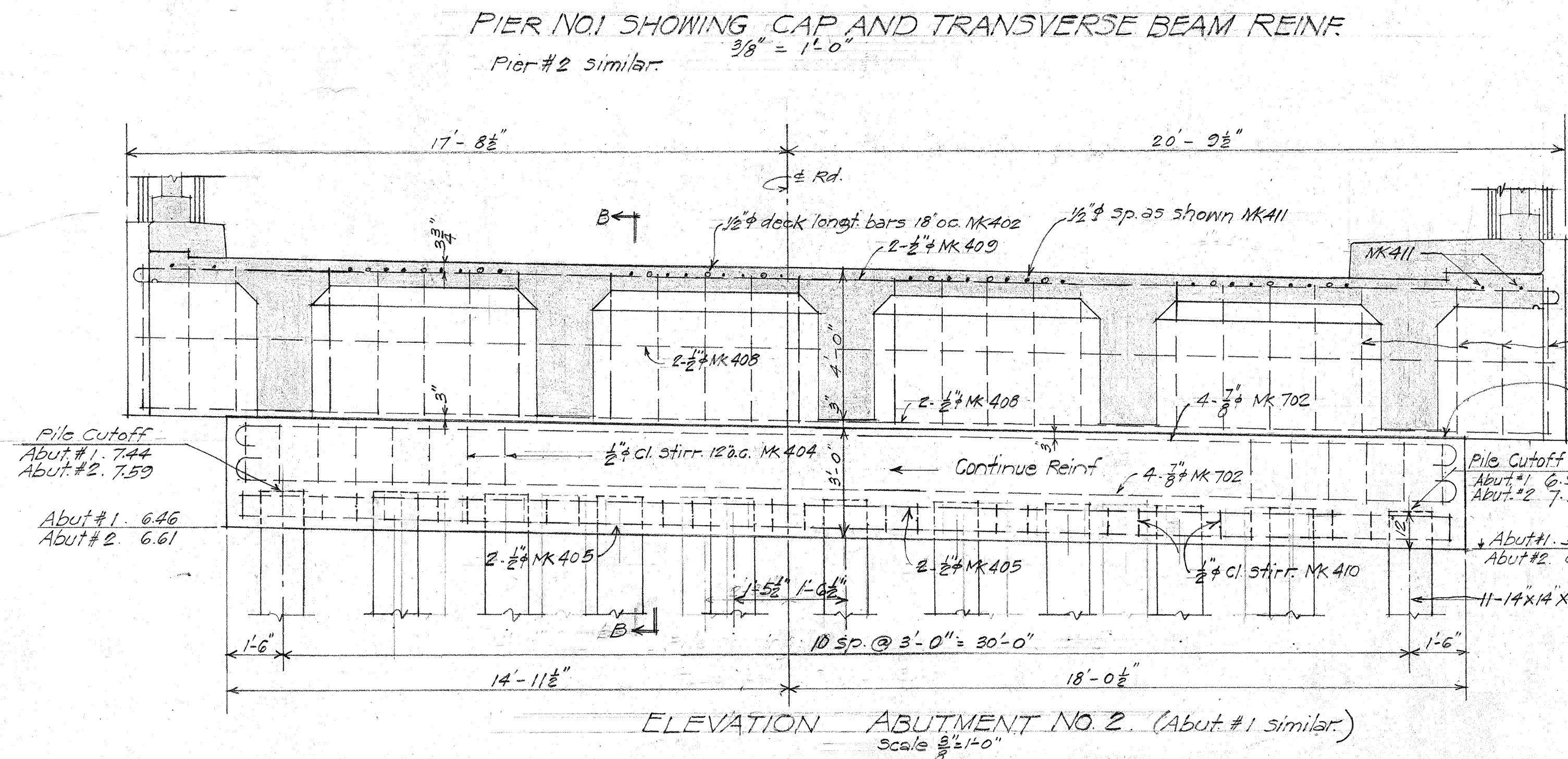
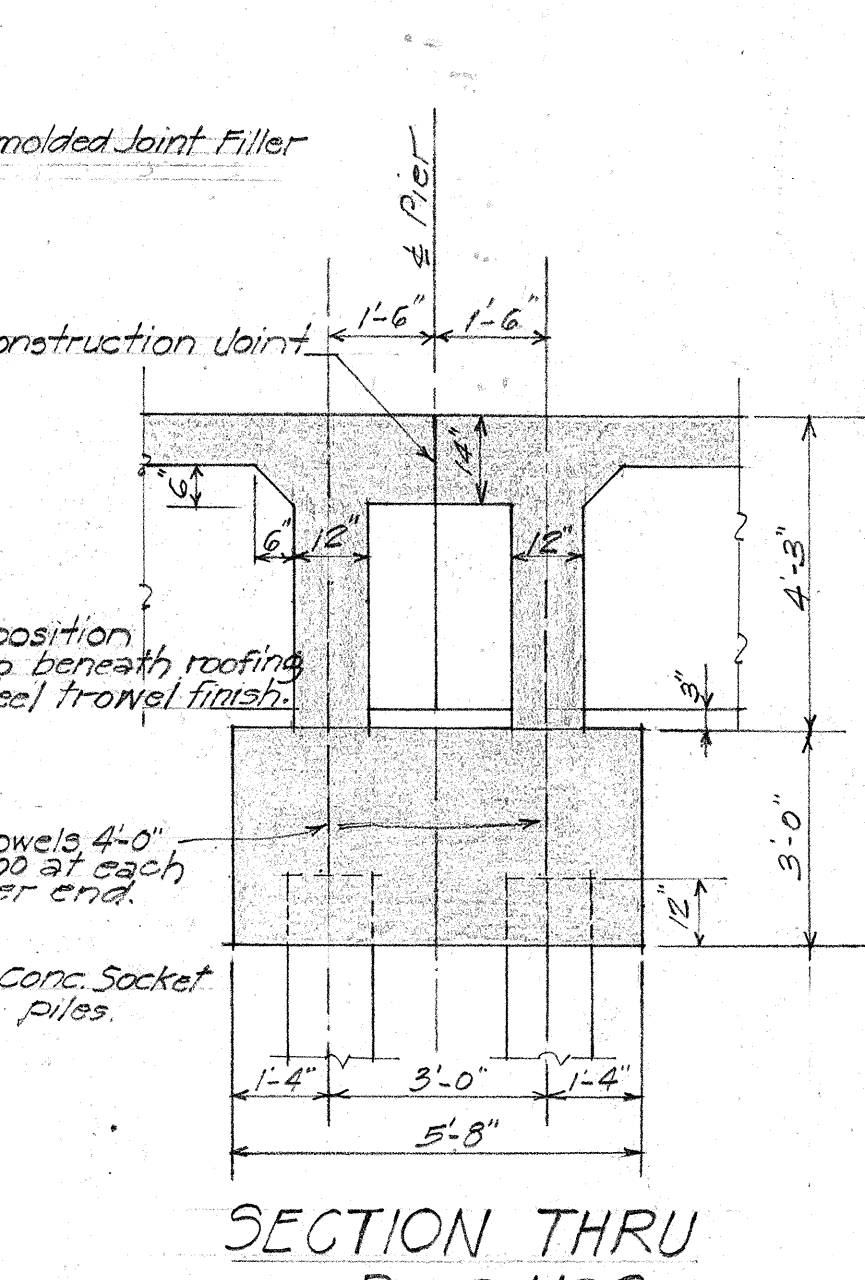
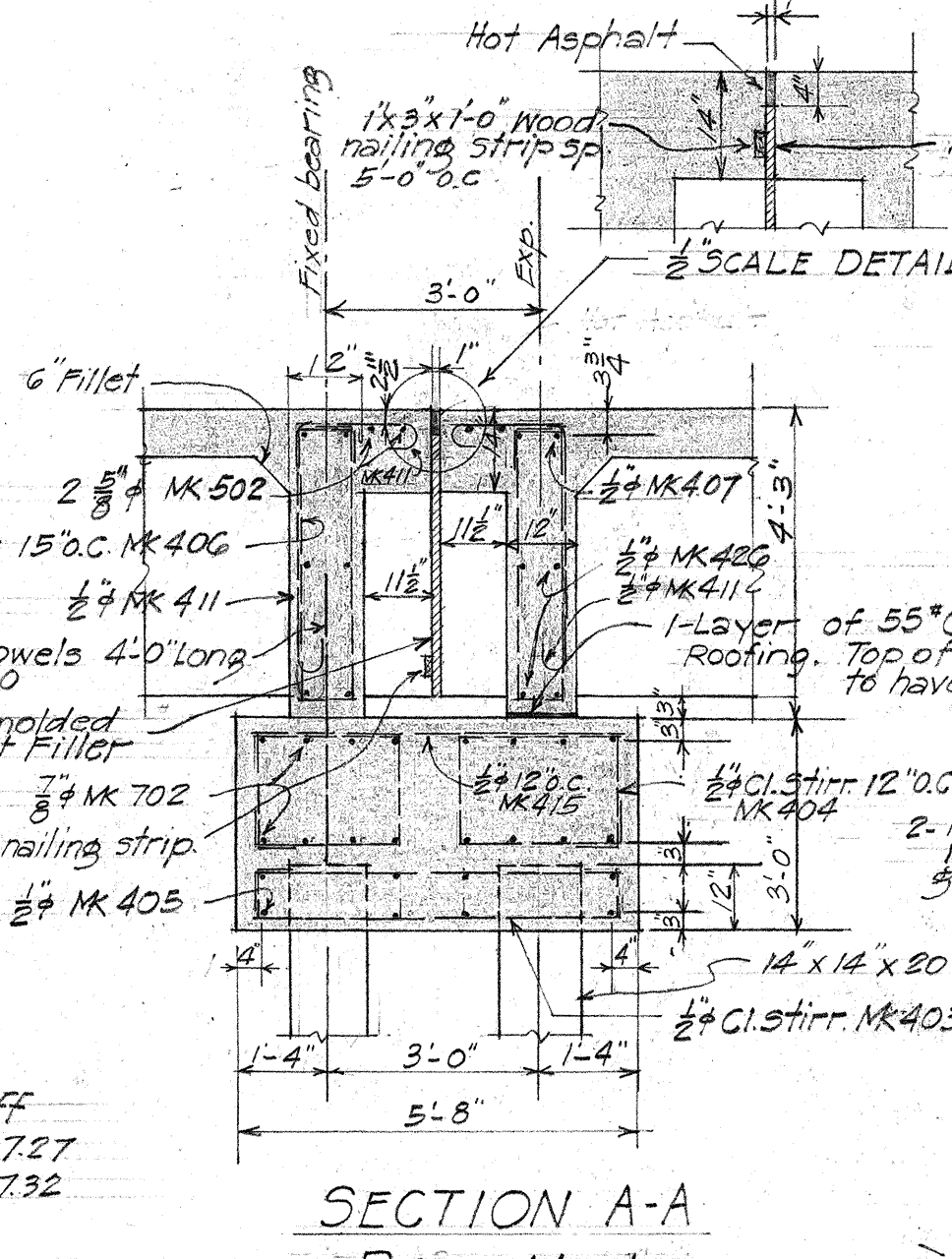
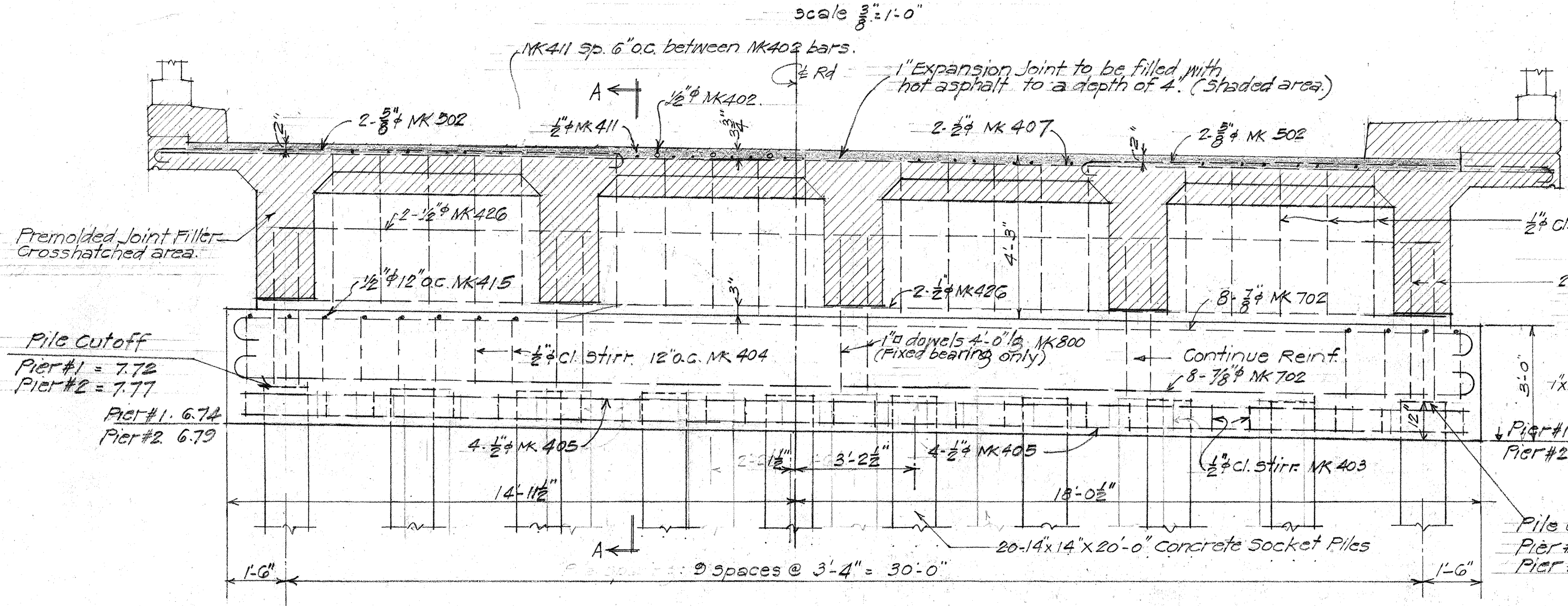
SURVEY PLOTTED BY: [Signature]
DATE: 6/1/45
DRAWN BY: [Signature]
CHECKED BY: [Signature]
QUANTITIES CHECKED BY: [Signature]
NOTE BOOK: [Signature]

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
WAIMALU BRIDGE
STA. 375+23.25 TO STA. 377+36.25
DA-WR 10(3)
JUNE 1945
KAM HWY

Revised: July 24, 1945
 Change made in the number of piles at piers and abutments.



TRANSVERSE BEAM REINF. AT CENTER OF SPAN.
 Scale 3/8" = 1'-0"



TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
WAIMALU BRIDGE
 STA. 875+98.75 TO 877+36.25
 DA-WR 10 (3) KAM. HWY.
 JUNE 1945
SHEET No 2 OF 2 SHEETS

DATE: 6/24/45
 DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 ORIGINAL PLAN BOOK NO. 1007 KECOD, N.Y.