

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F036-K11259	0	50	

GENERAL NOTES

MATERIALS
Concrete: All concrete Class A-1.
Admixture: Admixture of "Plastiment" or approved equal shall be added to concrete in accordance with manufacturer's recommendations.
Rock Embankment (Upper Layer): 20% to 30% of rock placed shall consist of pieces weighing not less than 100 lbs. each and the balance shall consist of pieces weighing between 1 and 50 lbs.
Face Rock (Lower Face): At least 50% of rock placed shall weigh 500 lbs. or more. All stones shall be angular with the greatest dimension not to exceed 3 times its least dimension.
CONSTRUCTION METHOD
Backfill Behind Abutments: All backfill behind abutment shall be complete in place before pouring concrete for the superstructure.
Rock Embankment: The slope of face rock shall be as indicated on the Plans.
The spaces between the larger stones shall be filled with spalls securely rammed into place.
Face Rock: See Sec. GG.3 of Standard Specs.
Sidewalk and Railing: Pour sidewalk and railing after the release of falsework.
Neat Line Excavation: Footings shall be excavated and poured to neat lines where shown.
In case of over excavation, space between footing and ground shall be filled with concrete at the contractor's expense. This fill concrete shall have a minimum quality of Class D-1.
Footing Seal: Any footing seal used to facilitate the pouring of footings to plans & specifications will be at contractor's expense. The seal & extra excavation will be incidental to struct. excavation & will not be paid for separately.

SECTION "G-G" Scale: 1/4" = 1'-0"

SECTION "F-F" Scale: 1/2" = 1'-0"

SECTION "I-I" Scale: 1/2" = 1'-0"

SECTION "H-H" Scale: 1/2" = 1'-0"

SECTION "B-B" Scale: 1/2" = 1'-0"

SECTION "E-E" (TYP.) No Scale

SECTION "A-A" Scale: 1/4" = 1'-0"

SECTION "D-D" No Scale

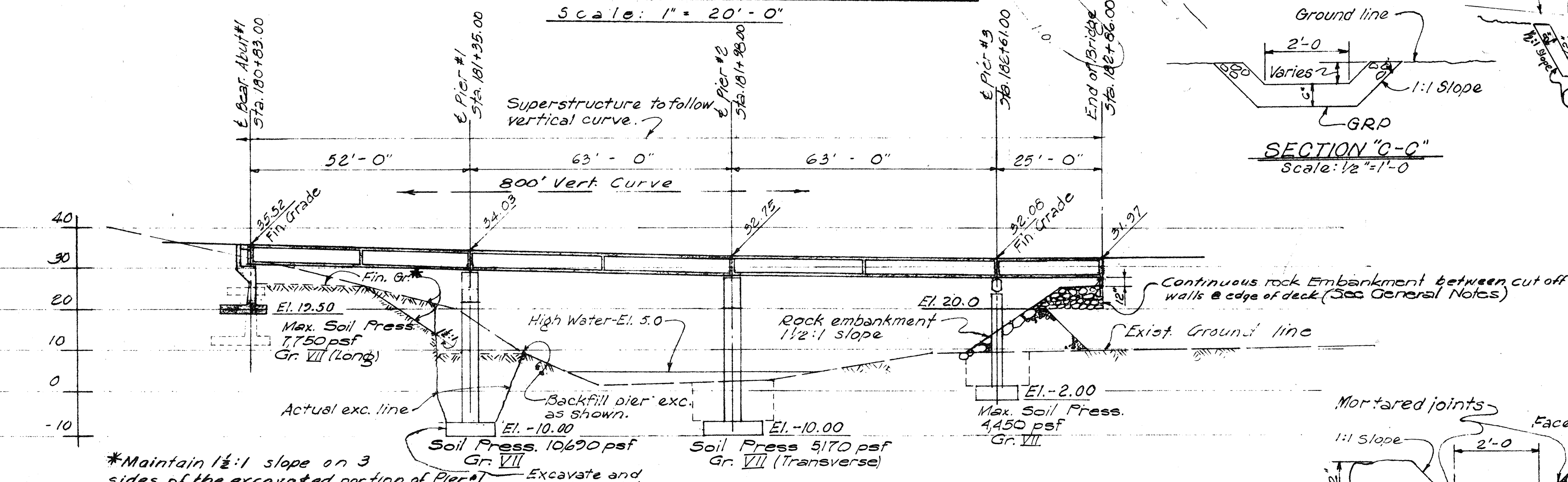
DETAIL "X" Scale: 1/2" = 1'-0"

TYP. BACKFILL DET. No Scale

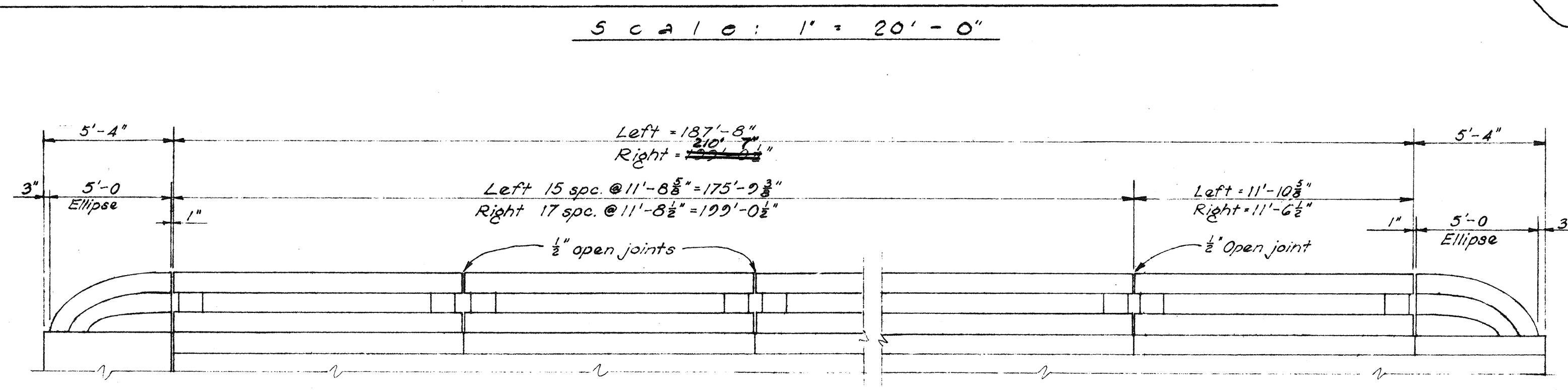
HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
MALIKO STREAM BRIDGE
Sta. 180+79.87 to Sta. 182+36.00
HANA BELT RD PROJ. F-036-1 (1)
February 1959

CURVE DATA See Rwy. Plan

LAYOUT PLAN Scale: 1" = 20'-0"



LONG SECTION ALONG ROADWAY Scale: 1" = 20'-0"

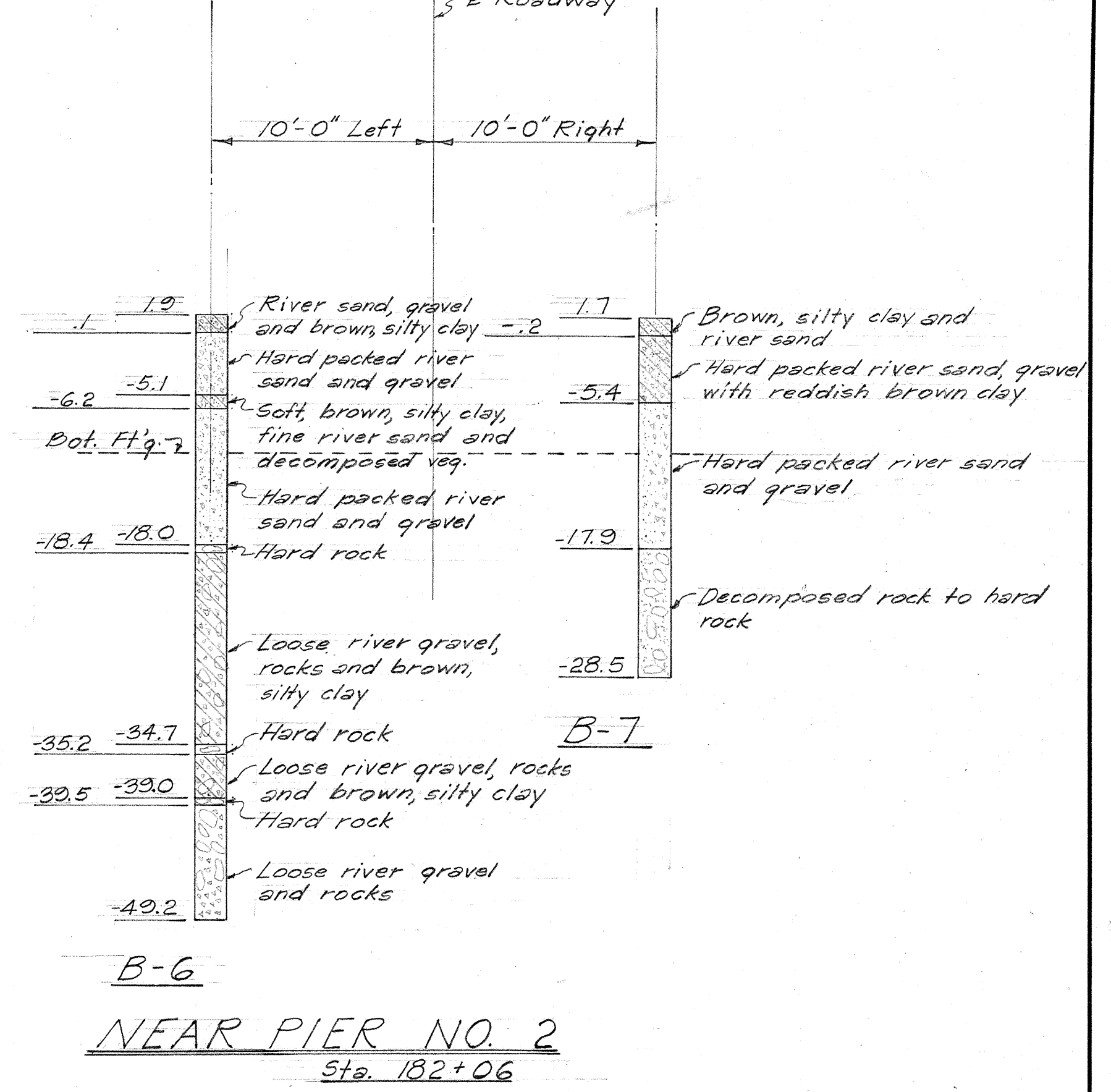
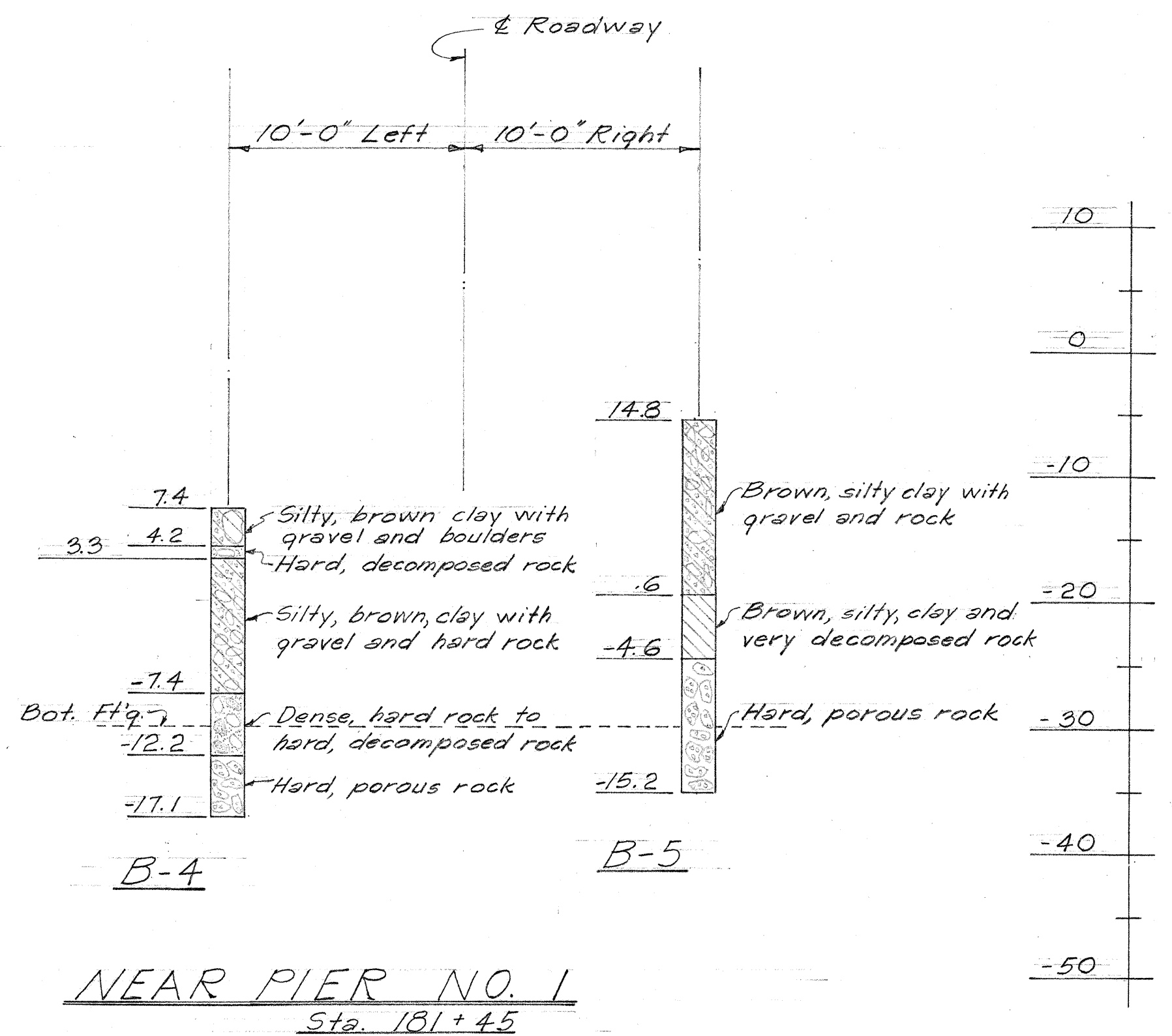
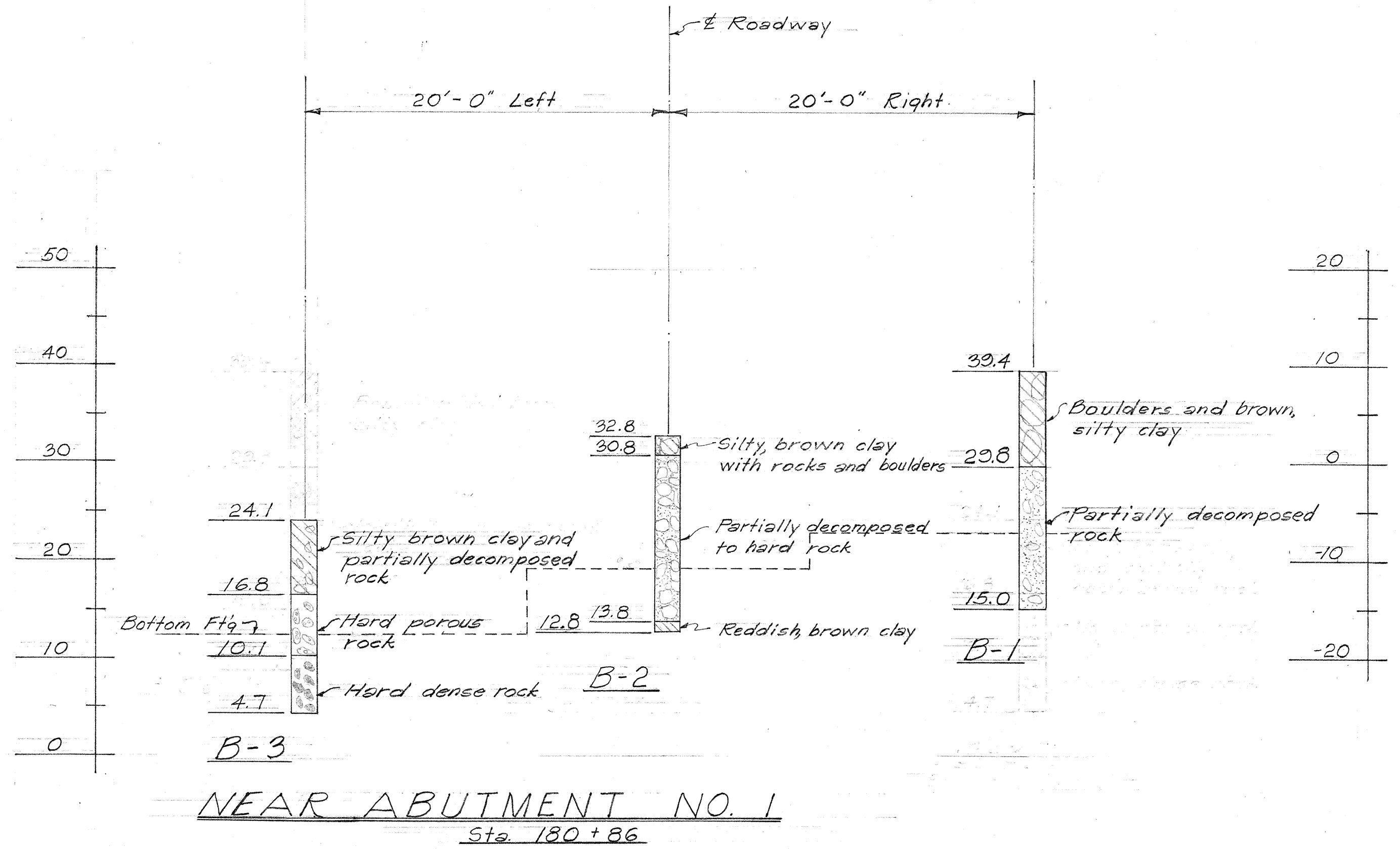


RAILING LAYOUT Scale: 1/4" = 1'-0"

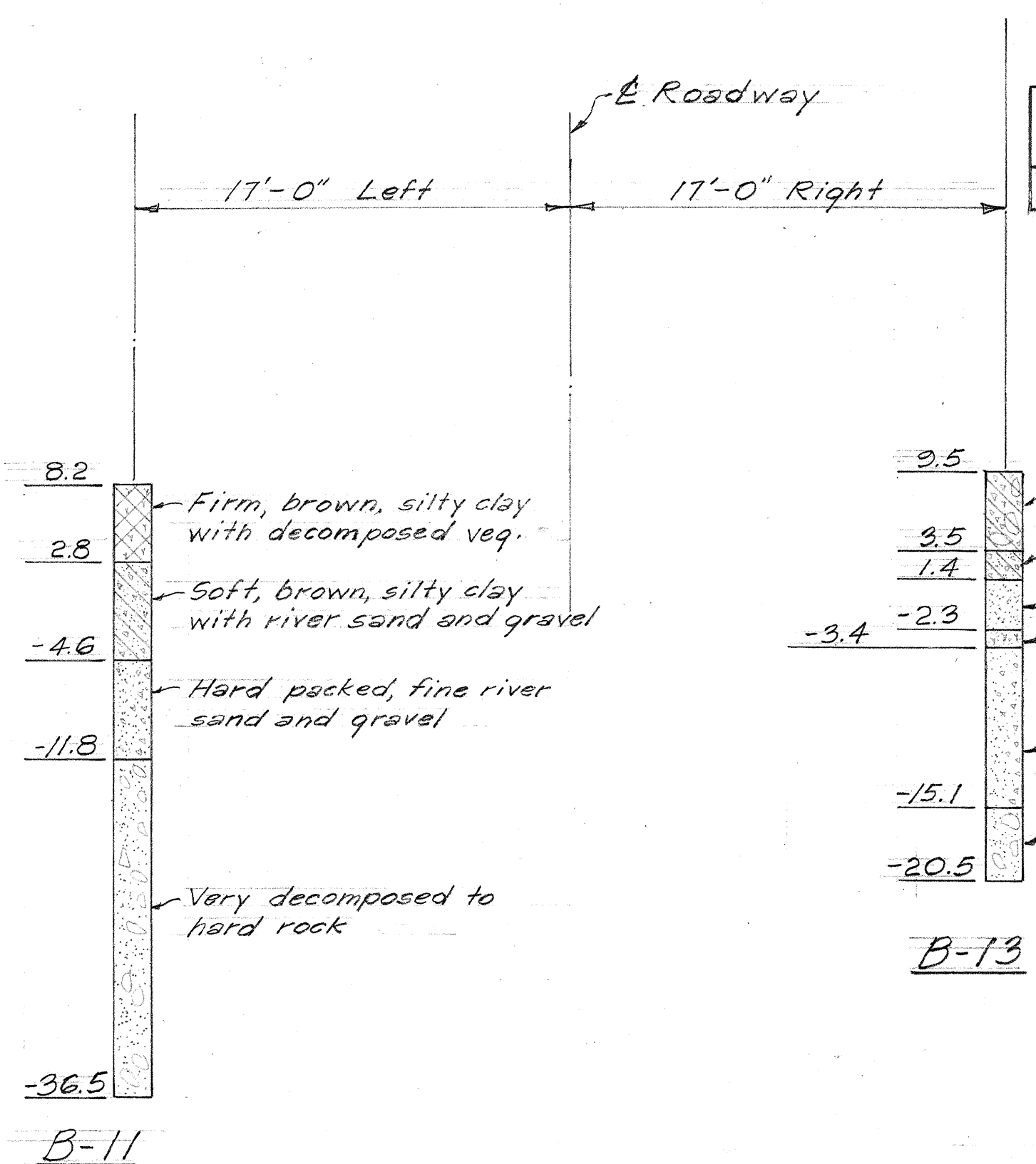
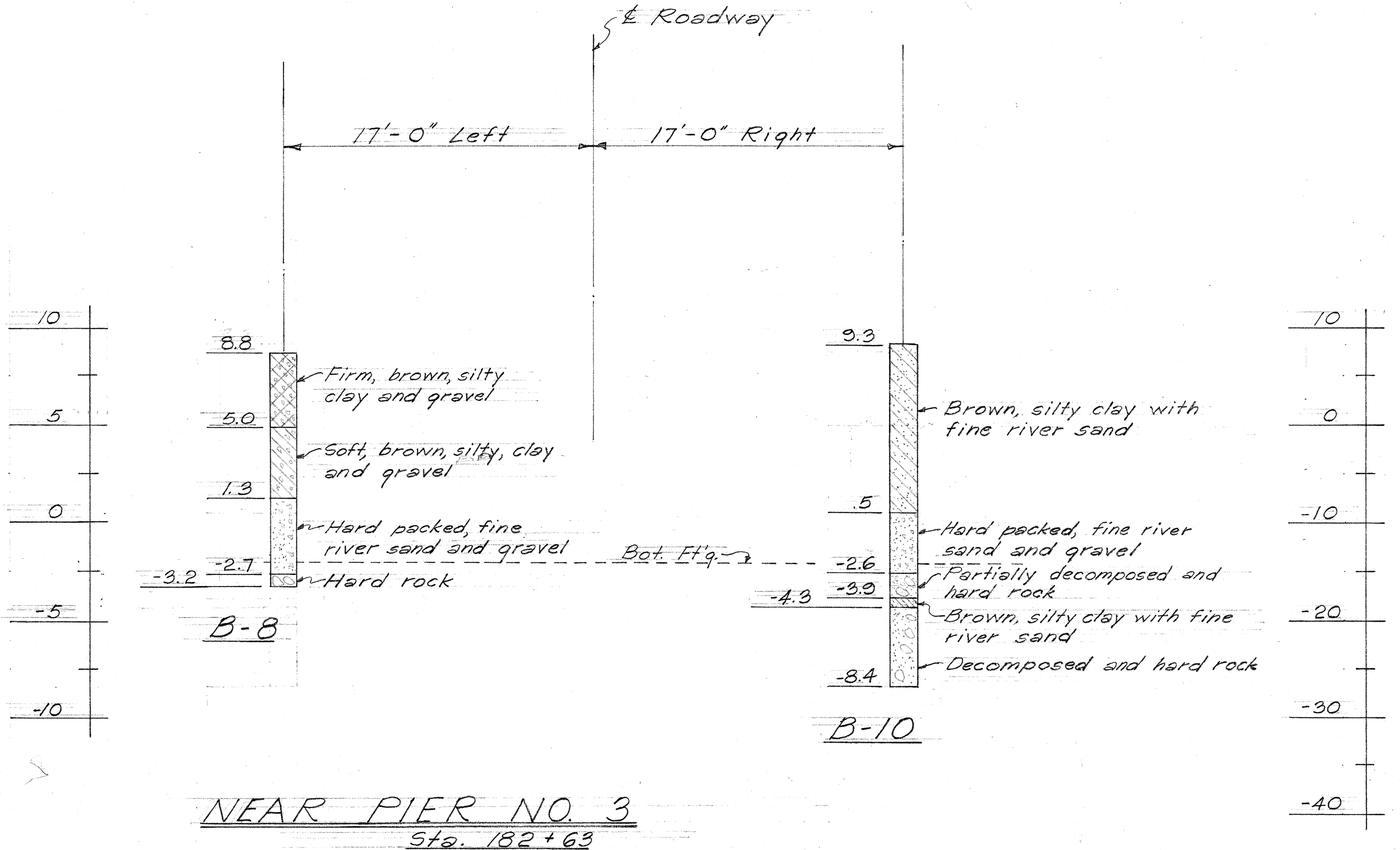
Note: For railing, railing post and rail details, see Std. Bridge Details.

(Dimensions @ inside face of railing)

DATE	DESIGNED BY	CHECKED BY
1959	G. J. J.	G. J. J.
DESIGNED BY	QUANTITIES BY	CHECKED BY
G. J. J.	G. J. J.	G. J. J.
NOTE BOOK		
No.		



BORING DATA
(SEE BRIDGE LAYOUT PLAN FOR LOCATION)
Scale: Vertical - 1" = 1'-0" Horizontal - 3/16" = 1'-0"



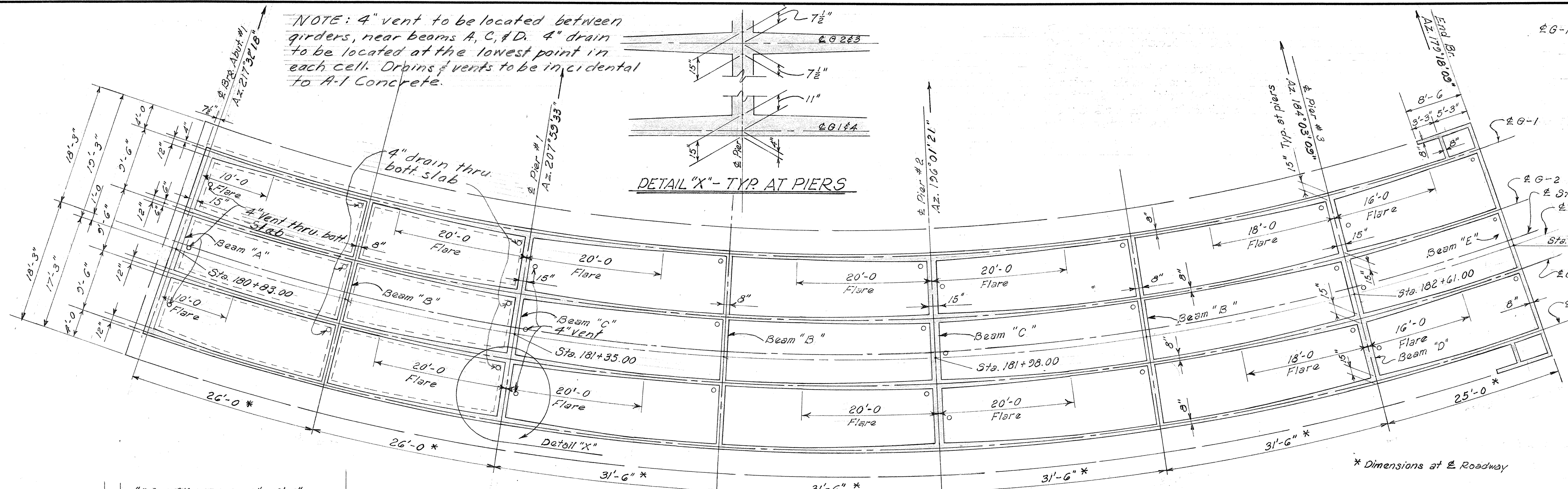
ESTIMATED QUANTITIES	
ITEM	QUANTITY
Contract Change Order No. 6 Increase	
Class A-1 Concrete	843.72 841 Cu. Yd.
Reinf. Steel	202, 150 #
Contract Change No. 1 Increase	
Struct. Exc.	936 686 Cu. Yd.
C.R.M.	46 45 Cu. Yd.
G.R.P.	13 15 Cu. Yd.
Filter Material	38 35 Cu. Yd.
A.C. Paving Mix V	52 48 Tons
Tack Coat	138 Gal.

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
MALIKO STREAM BRIDGE
Sta. 180+72.87 to Sta. 182+86.00
HANA BELT RD. F-036-1(1)
February 1952

SURVEY PLOTTED BY: _____
DATE: _____
DESIGNED BY: *M. Young*
DRAWN BY: _____
CHECKED BY: _____
NOTE BOOK NO. _____

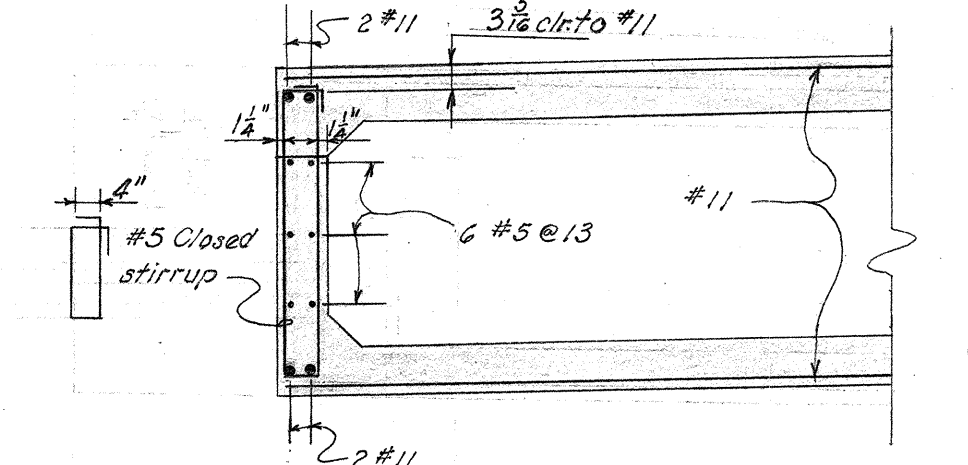
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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NOTE: 4" vent to be located between girders, near beams A, C, & D. 4" drain to be located at the lowest point in each cell. Drains & vents to be incidental to A-I Concrete.

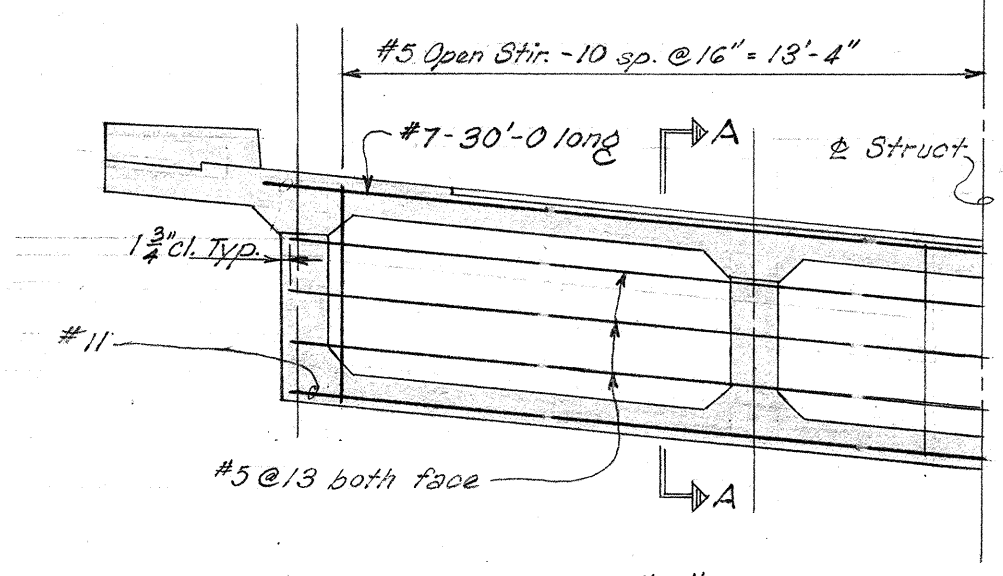


FRAMING PLAN
Scale: 1" = 10'-0"

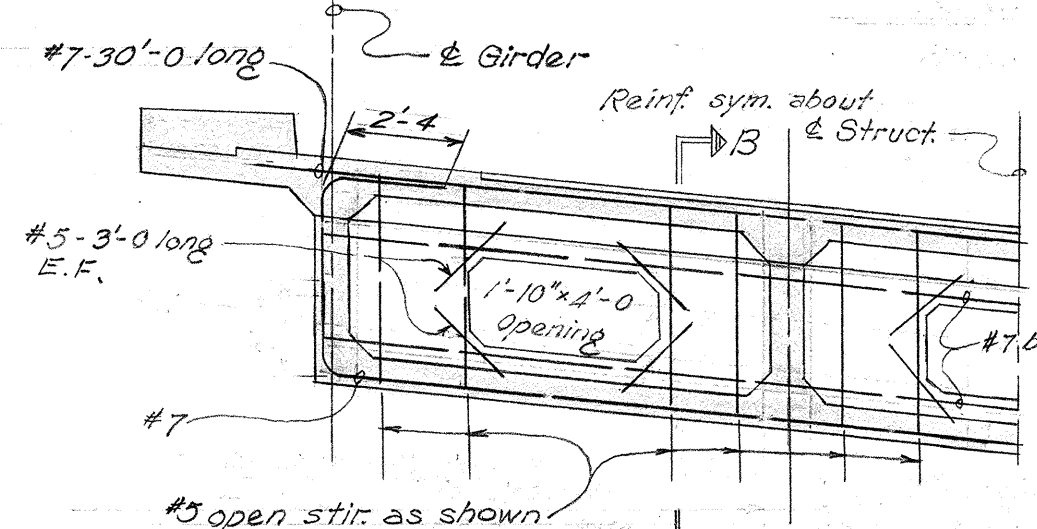
GIRDER STIRRUP DETAIL
No Scale



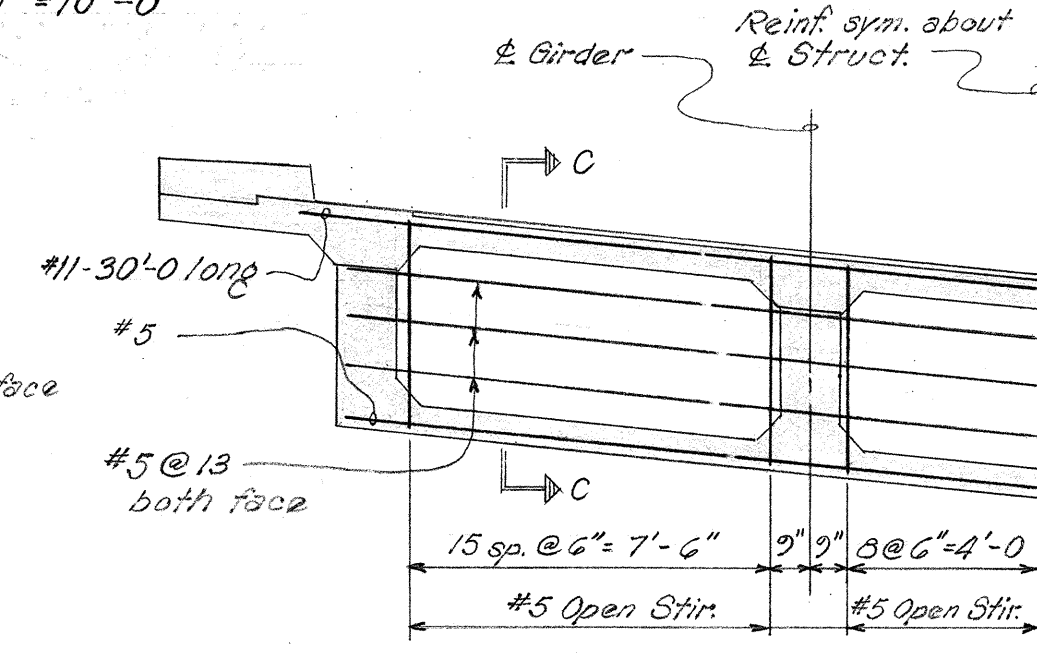
SECTION "E-E"
Scale: 1/8" = 1'-0"



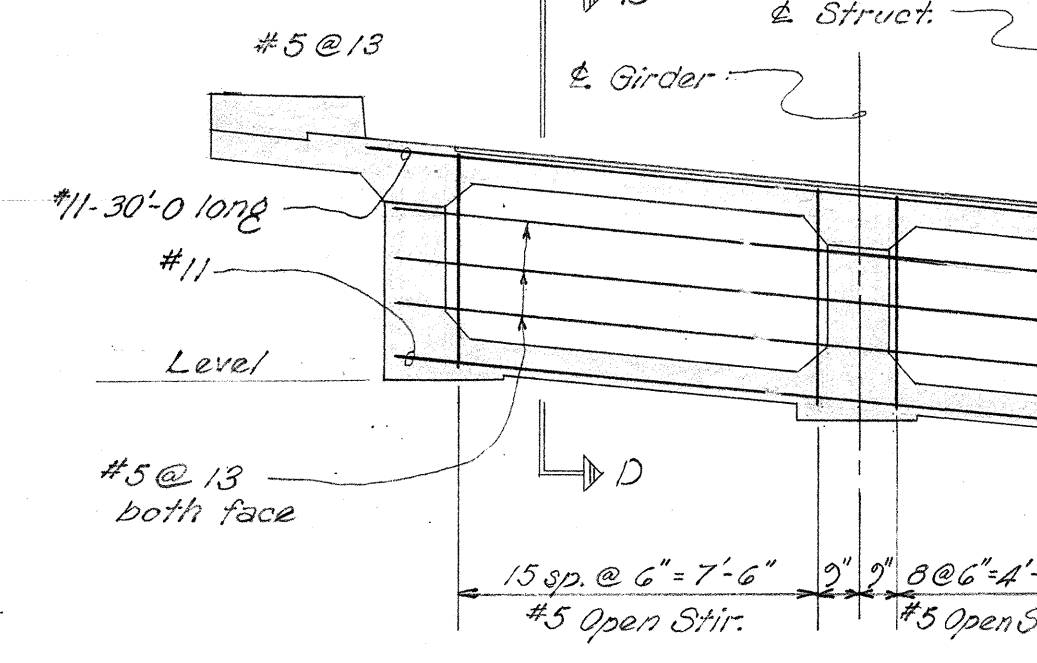
BEAM "A"
Scale: 1/4" = 1'-0"



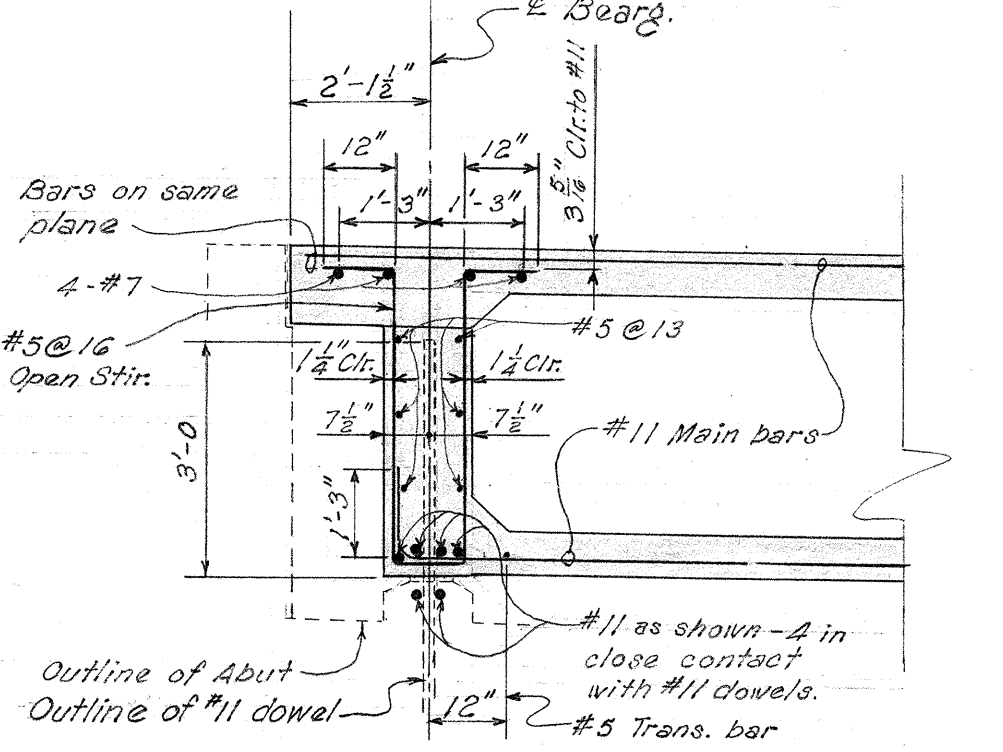
BEAM "B"
Scale: 1/4" = 1'-0"



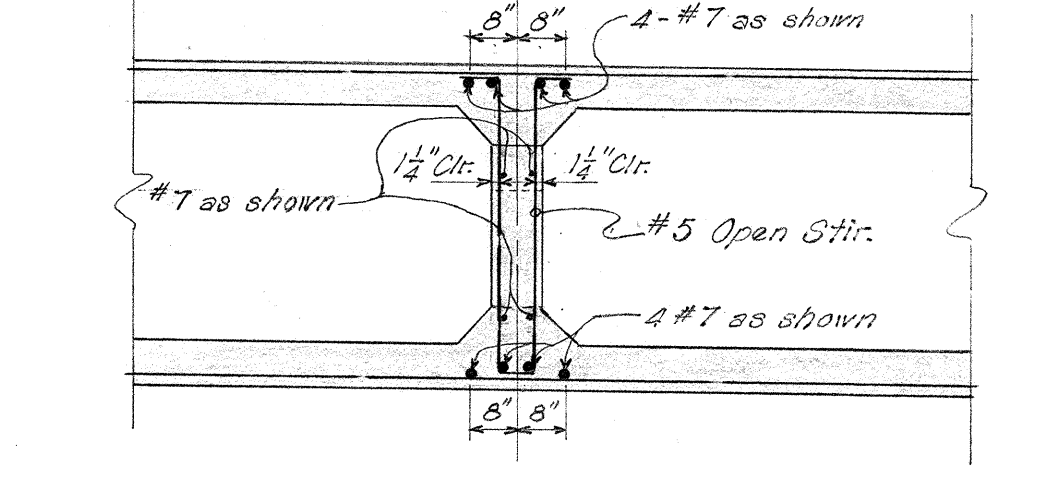
BEAM "C"
Scale: 1/4" = 1'-0"



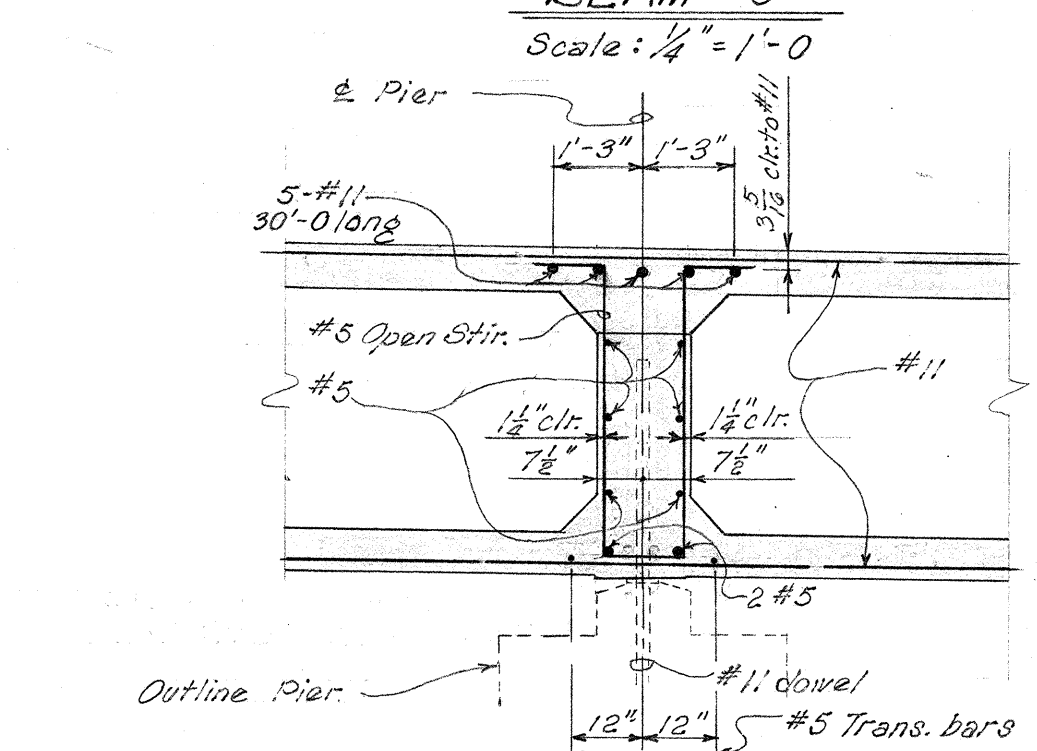
BEAM "D"
Scale: 1/4" = 1'-0"



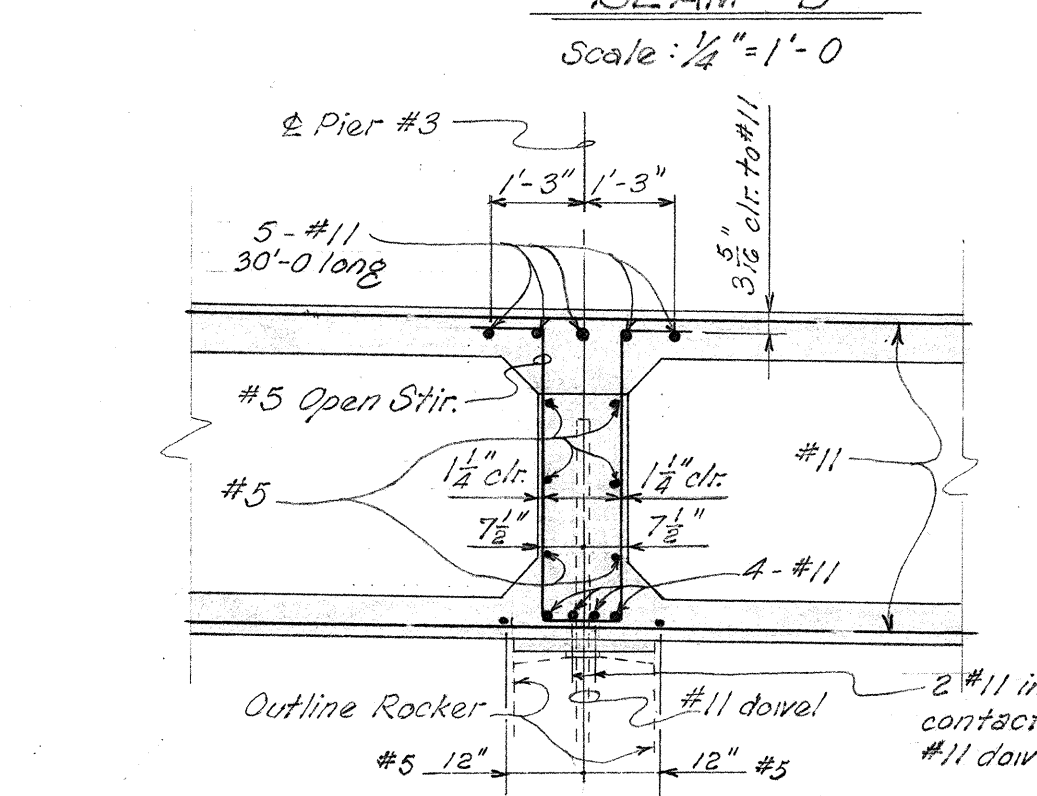
SECTION "A-A"
Scale: 3/8" = 1'-0"



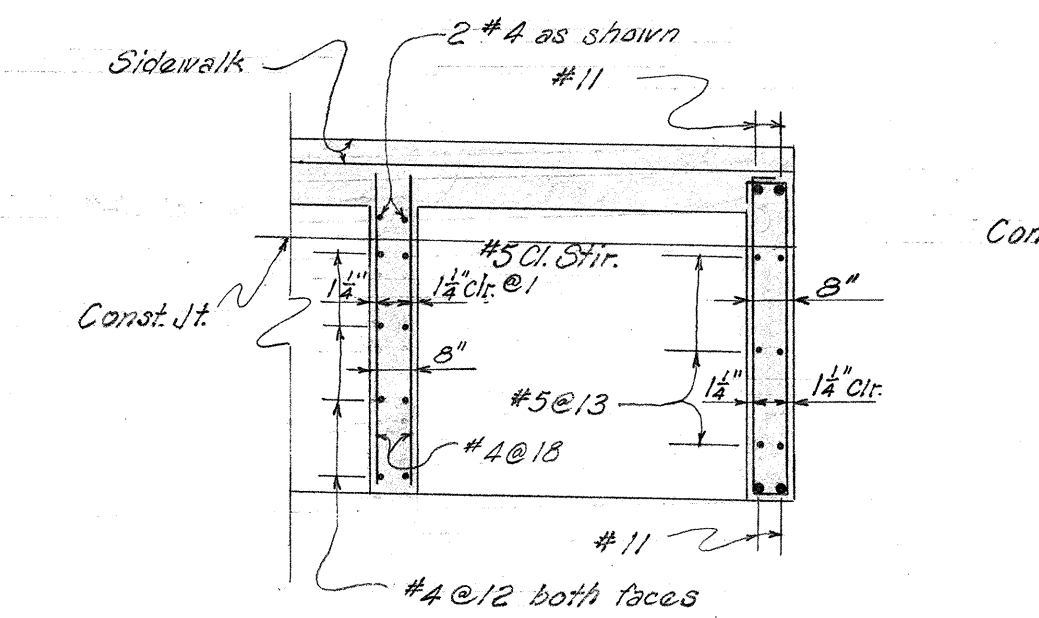
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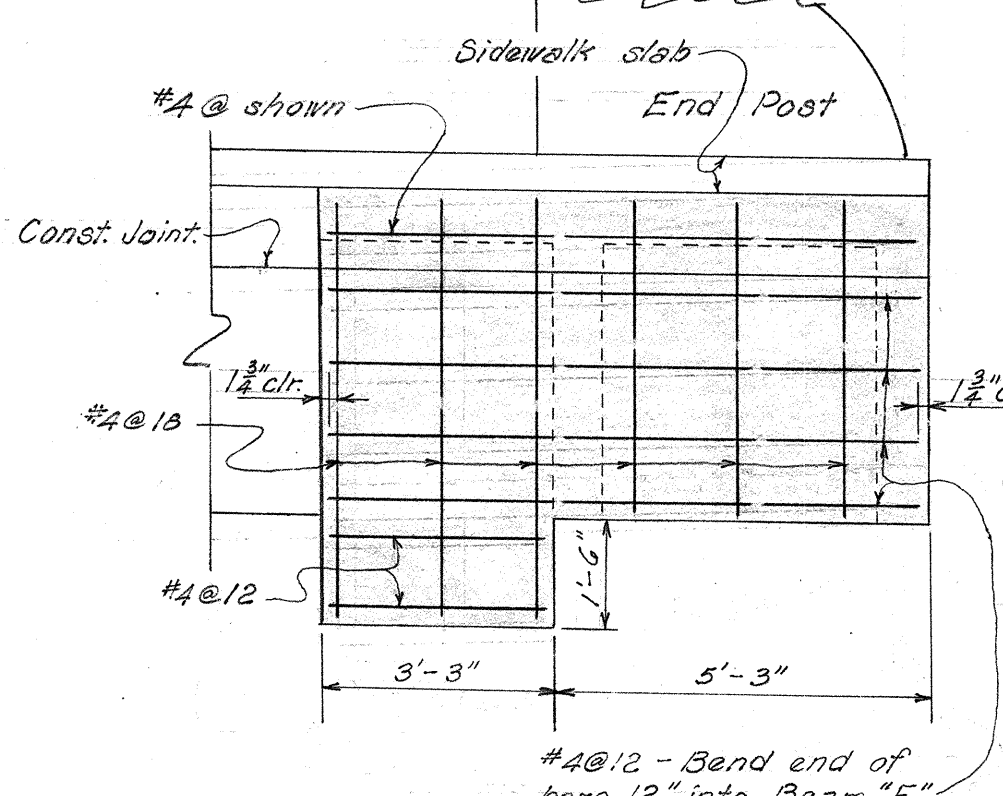
SECTION "C-C"
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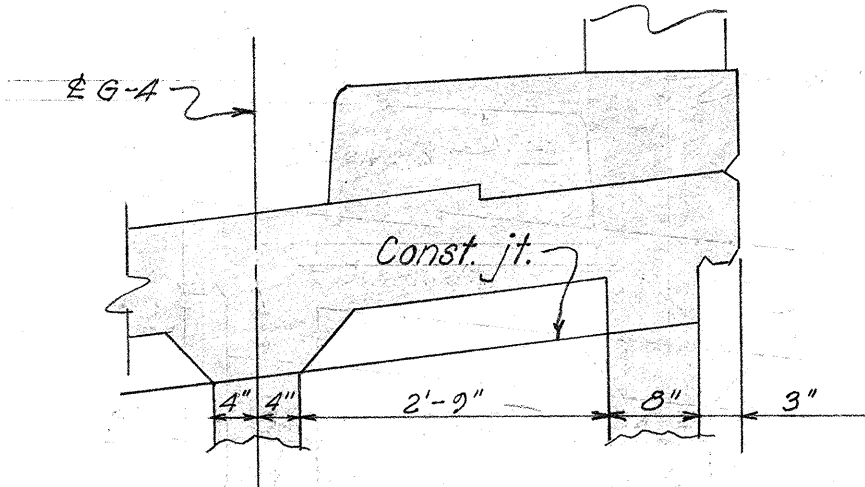
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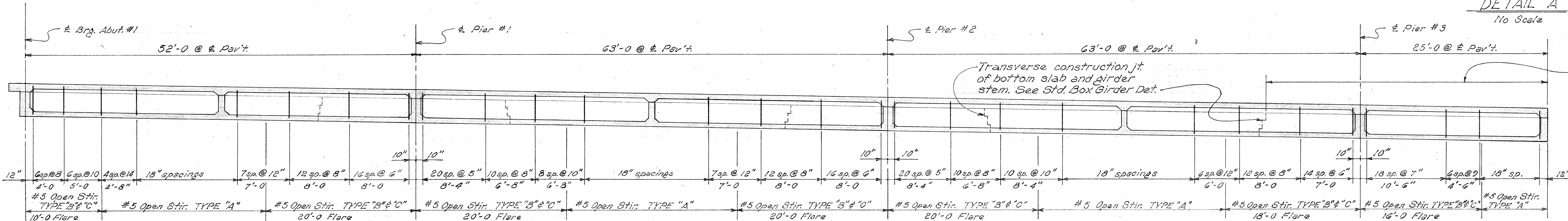
SECTION "F-F"
Scale: 3/8" = 1'-0"



SECTION "G-G"
Scale: 3/8" = 1'-0"



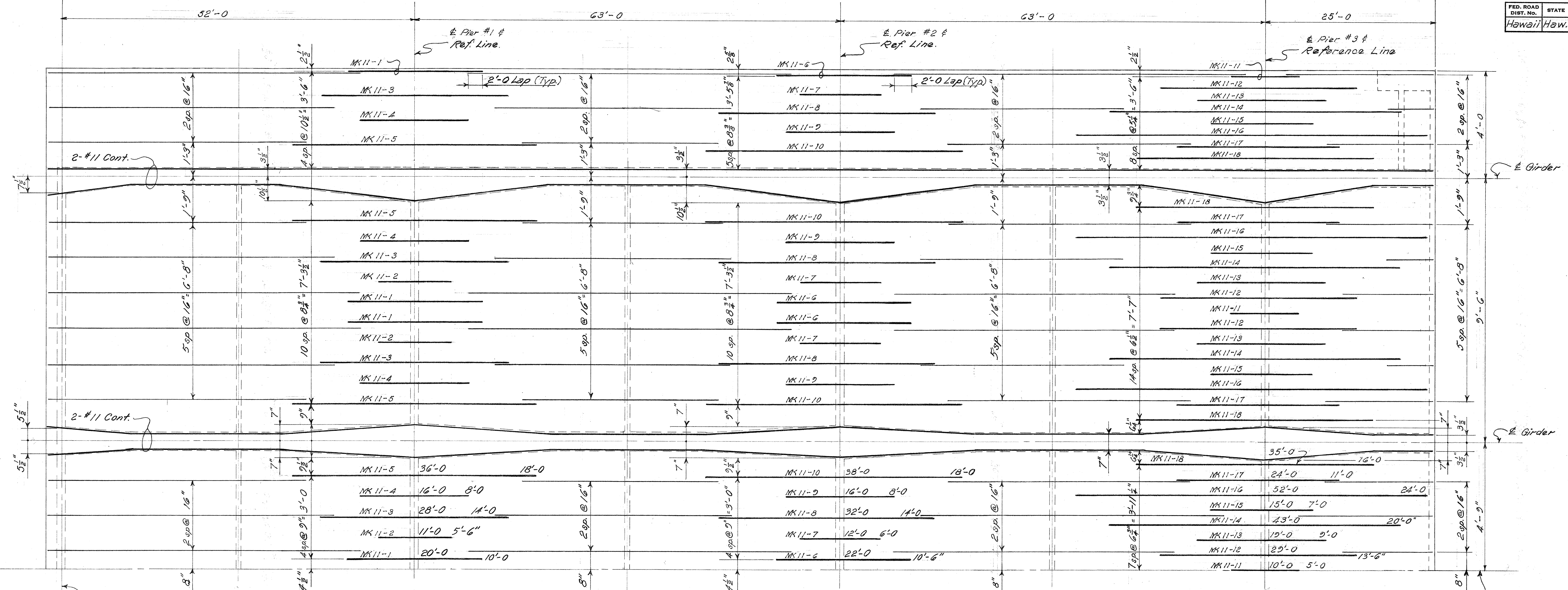
DETAIL "A"
No Scale



GIRDER STIRRUP SPACING
Scale: 1/8" = 1'-0"

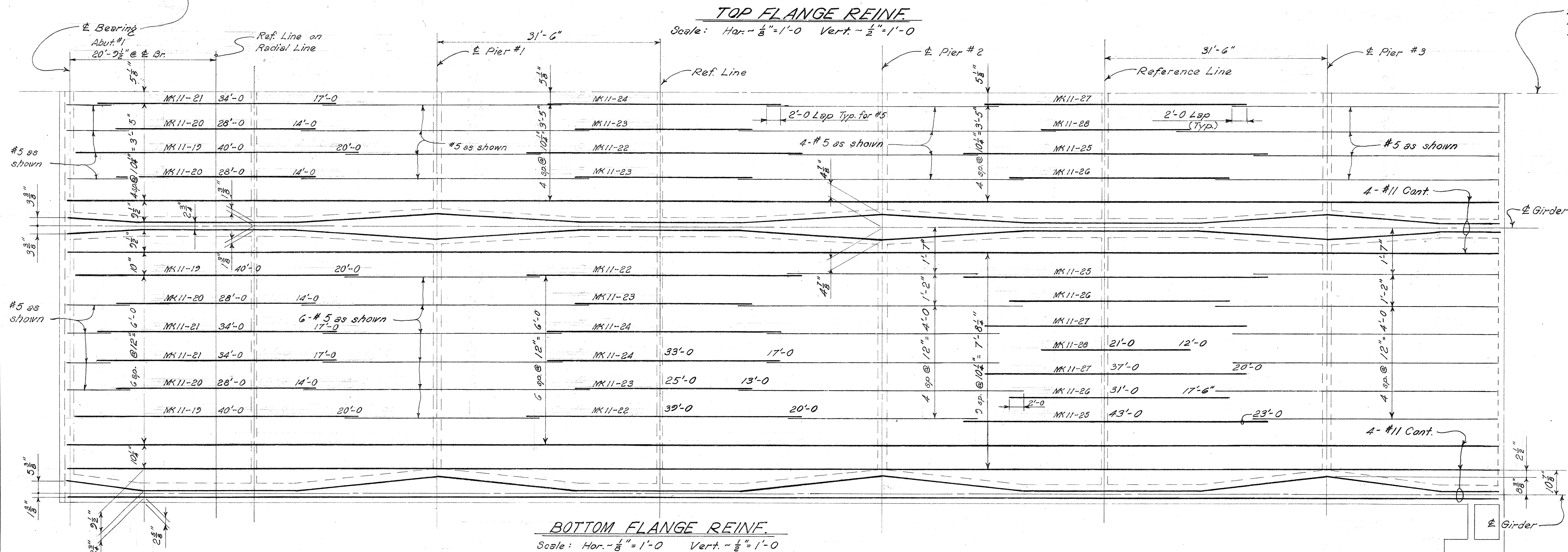
HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
MALIKO STREAM BRIDGE
Sta. 180+72.87 to Sta. 182+86.00
HANA BELT RD. Proj. No. F-036-1(1)
February 1959

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F-036-1(1)	1959	11	50



TOP FLANGE REINF.

Scale: Hor. - $\frac{1}{8}'' = 1'-0''$ Vert. - $\frac{1}{2}'' = 1'-0''$



BOTTOM FLANGE REINF.

Scale: Hor. - $\frac{1}{8}'' = 1'-0''$ Vert. - $\frac{1}{2}'' = 1'-0''$

REINF. NOTE

All laps are made by placing bars side by side except at girders where bars are lapped one on top of the other. When no splices are shown for bars longer than 60 feet, Contractor may use one splice per 60 feet at an arbitrary location away from Reference Line. These splices shall not be bunched together but shall be staggered. Contractor shall furnish a splice layout plan to the Engineer for approval. Dimensions at end of bars indicate distance from Reference Line. Dimensions at reference line indicate total length of bar. Lap of 4'-0" is required when splicing two #11 bars. Lettered bars are #11. All other bars are #5 unless noted otherwise. Bars are laid on curve lines with spacing measured on radial. Edge of deck, railing, curb and joint along center line structure are on curve.

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII

MALIKO STREAM BRIDGE

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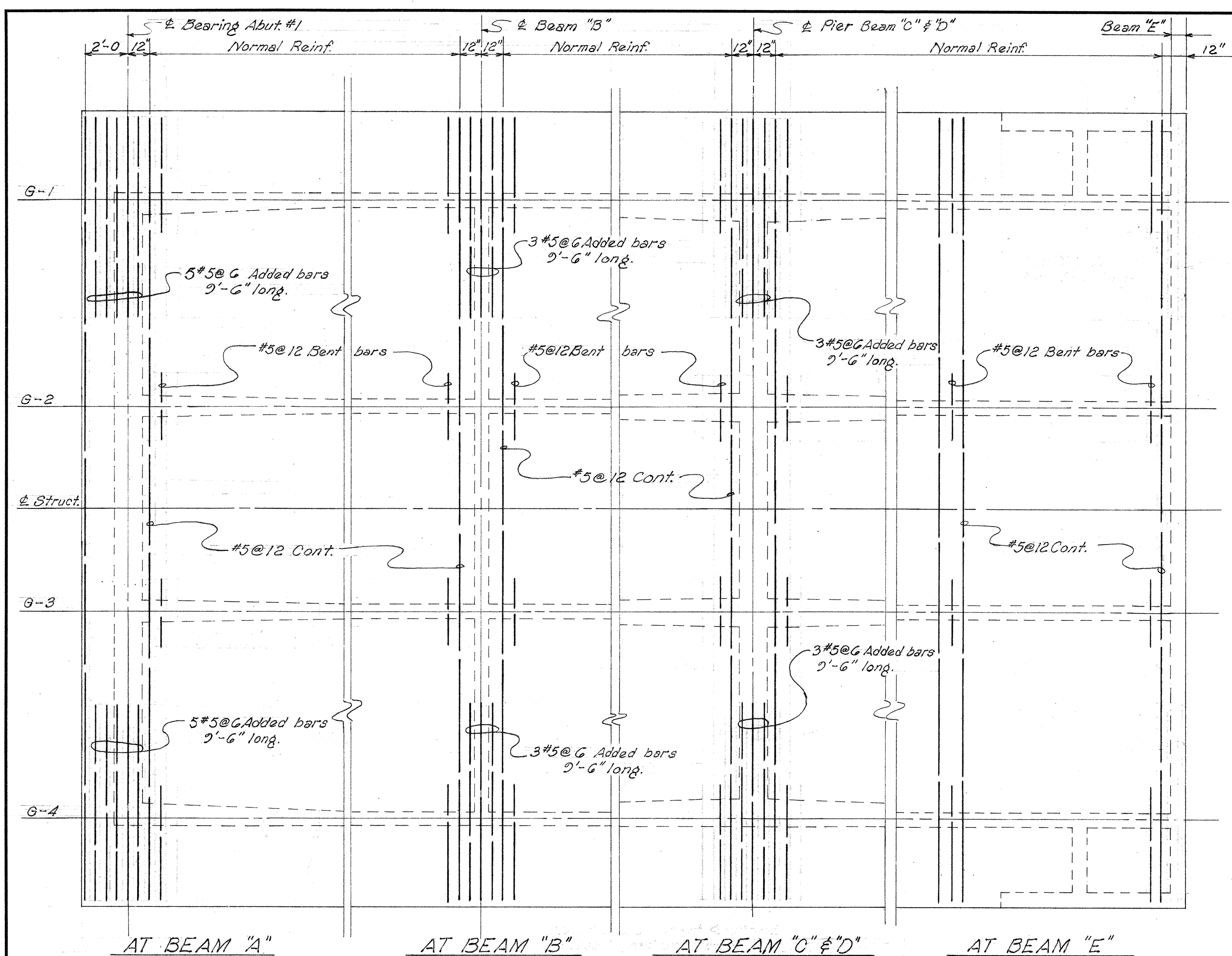
HANA BELT RD. Proj. No. F-036-1(1)

February 1959

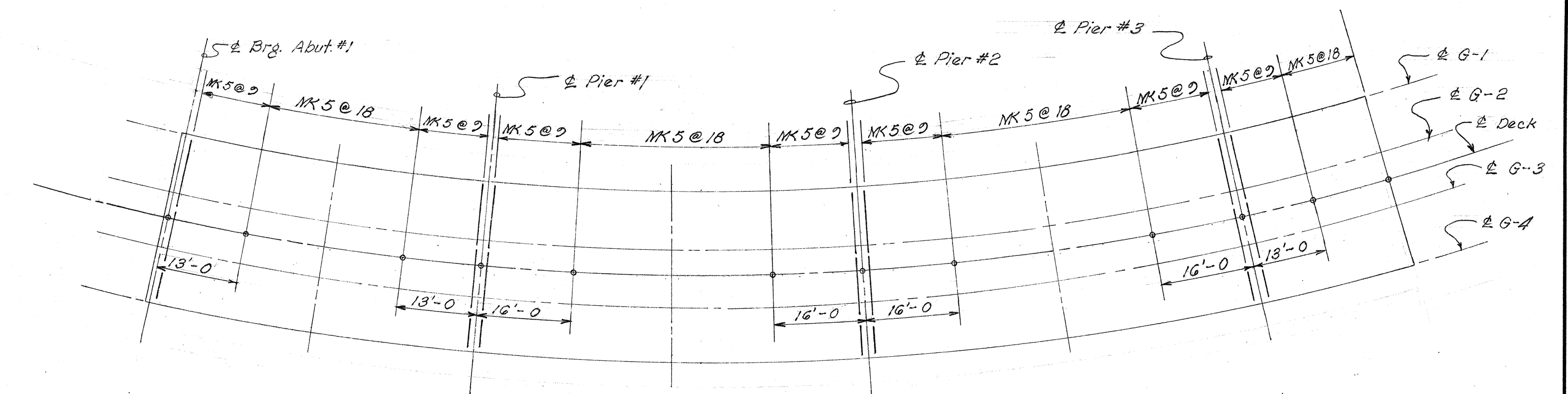
SHEET NO. 4 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F-036-1(1)	1953	12	50

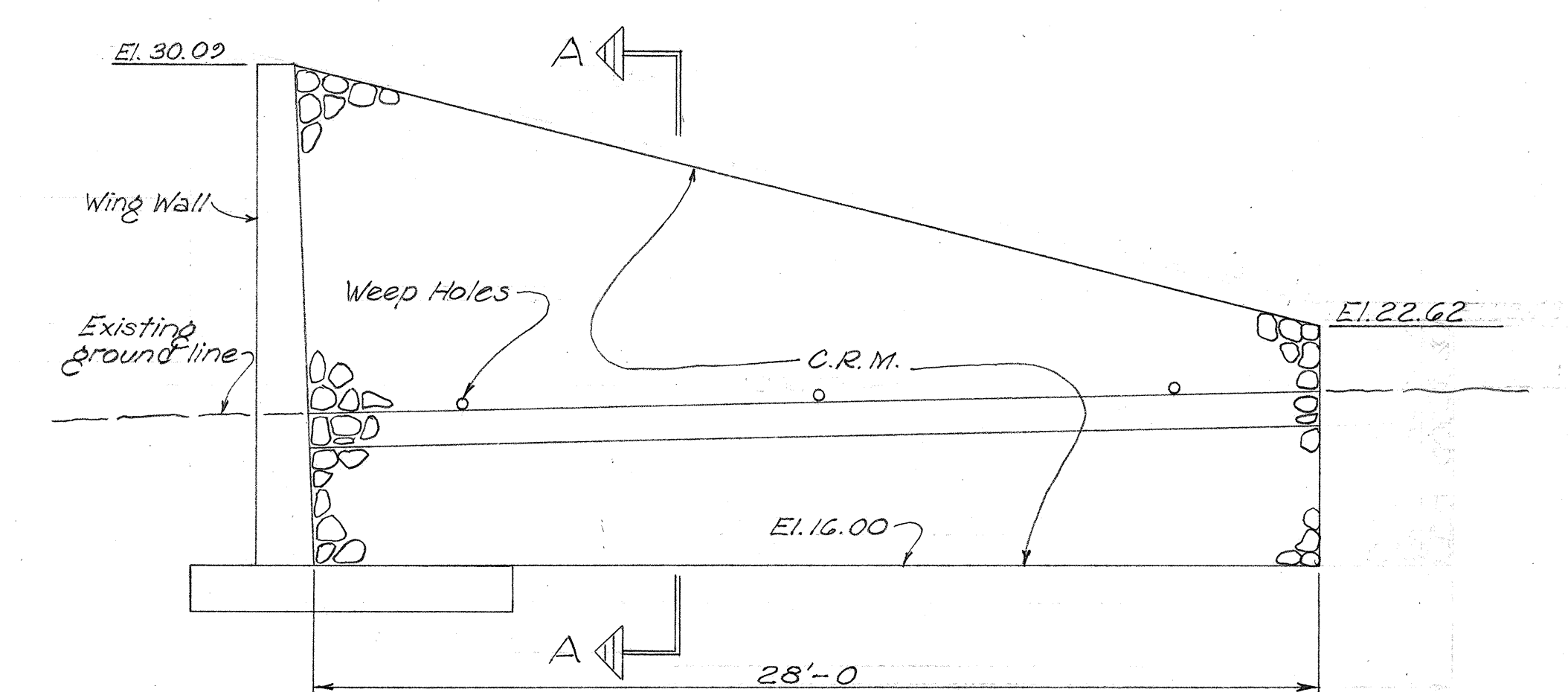
NOTE: Space transverse reinf. as shown (2 in. op. or 18 in. o.c.) at $\pm$ of deck. Place on radial lines.



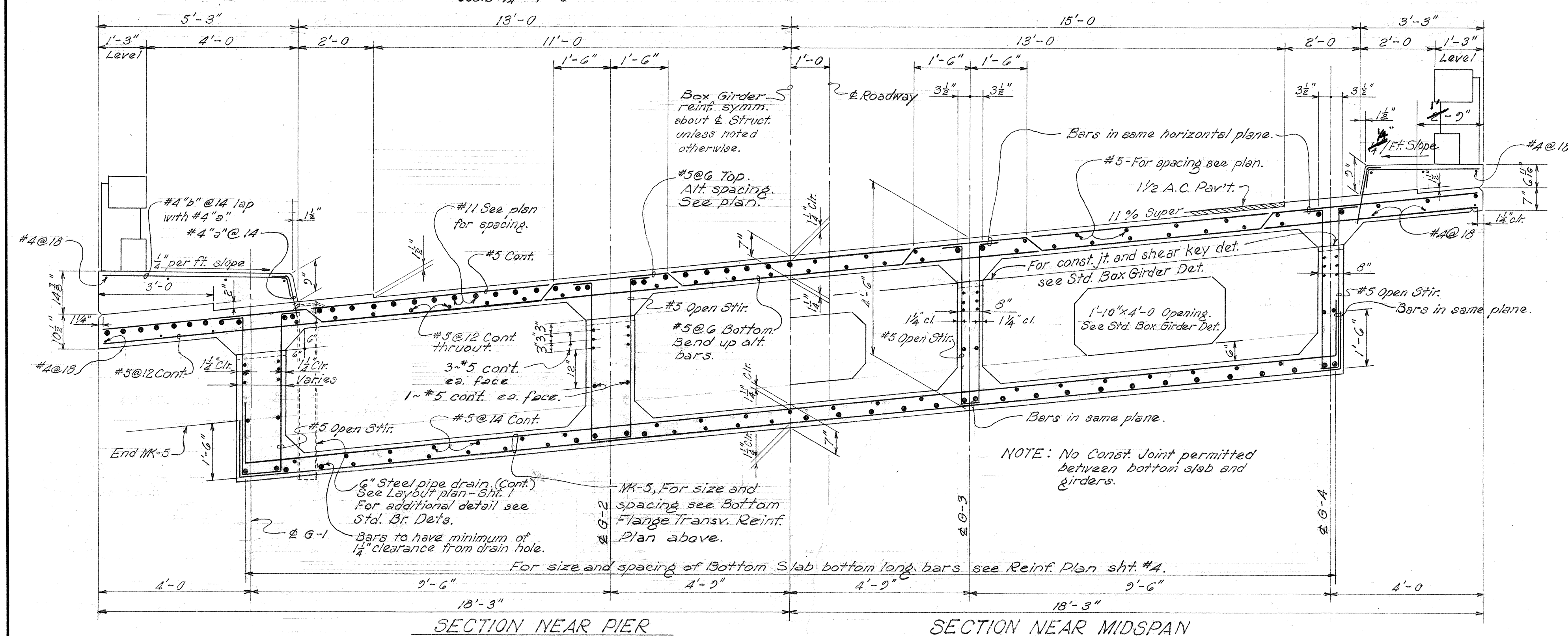
TOP FLANGE TRANSVERSE REINF. PLAN
Scale: 1/4"=1'-0"



BOTTOM FLANGE-TRANSVERSE REINF. PLAN
TOP & BOTTOM OF SLAB
Scale: 1/16"=1'-0"



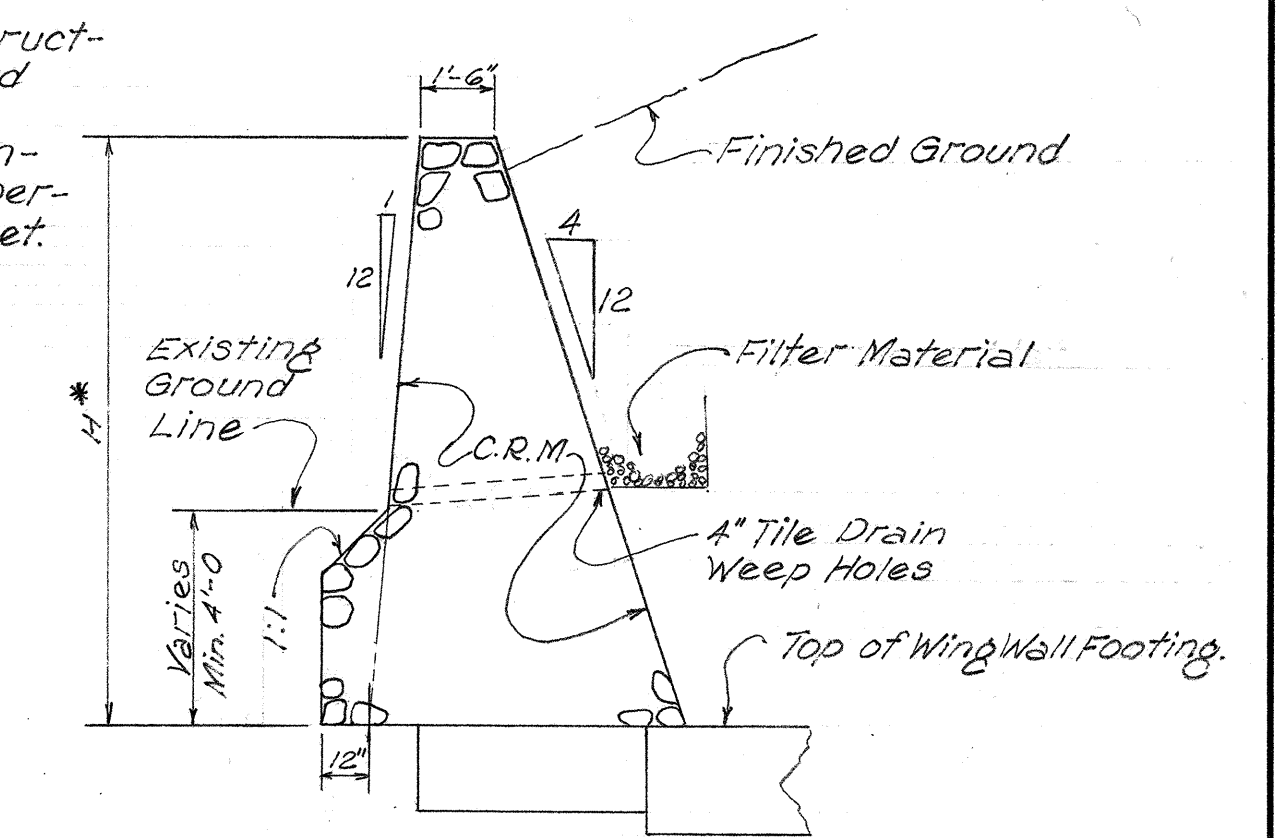
DETAIL "Z" - ELEVATION (SEE SH. 6)
Scale: 1/4"=1'-0"



SECTION NEAR PIER
SECTION NEAR MIDSPAN
NORMAL SECTION
Scale: 1/2"=1'-0"

NOTE: C.R.M. Wall to be constructed as shown in Standard Details "High Cement Rubble Masonry Retaining Wall" except as otherwise shown on this sheet.

* H varies from 14.09' to 6.62'.



SECTION "A-A"
Scale: 1/4"=1'-0"

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STATE OF HAWAII

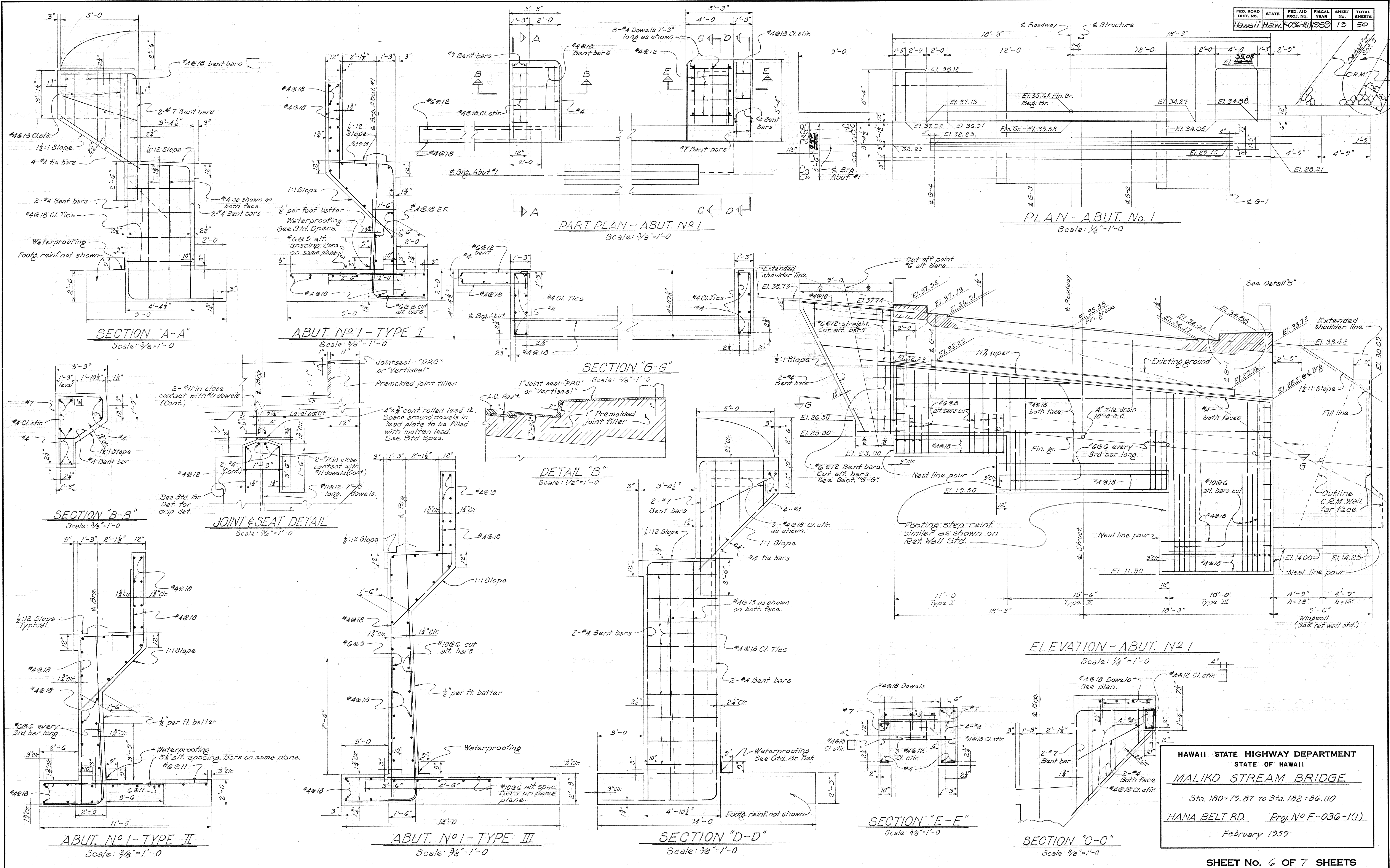
MALIKO STREAM BRIDGE

Sta. 180+79.37 to Sta. 182+86.00

HANA BELT RD. Proj. No. F-036-1(1)

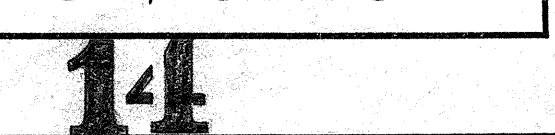
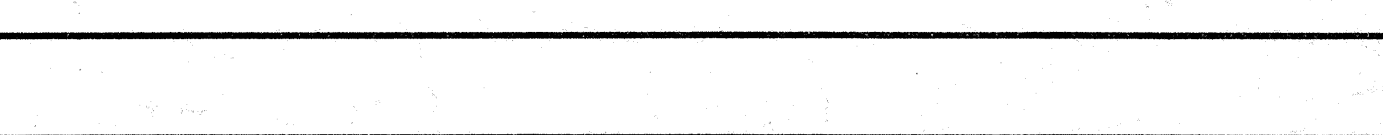
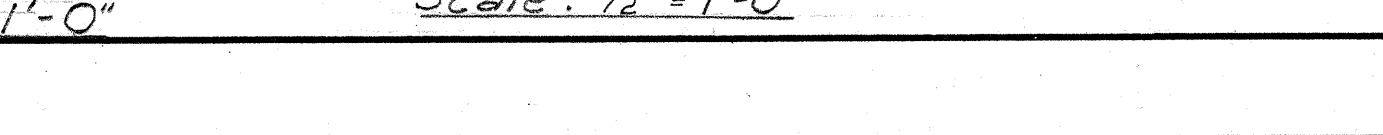
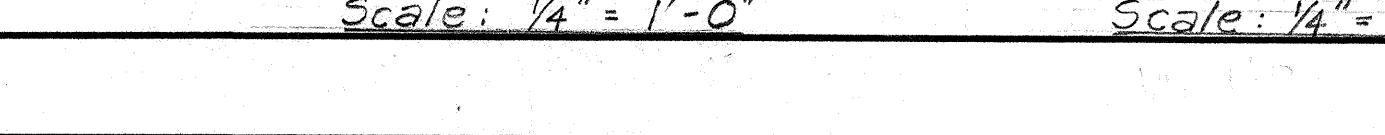
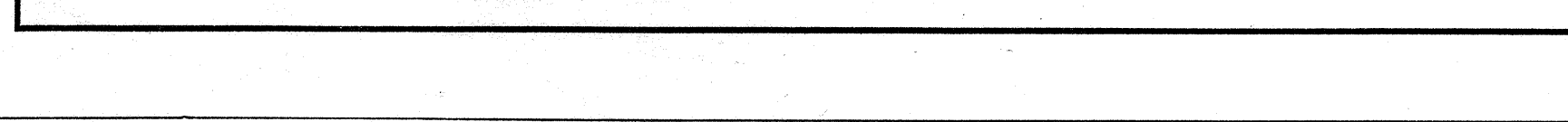
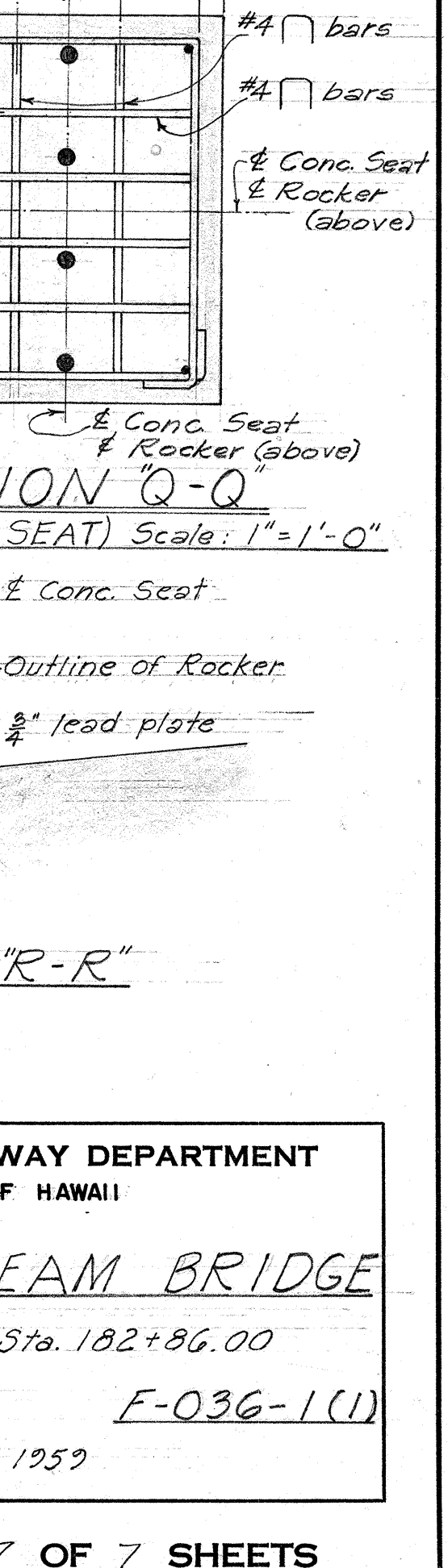
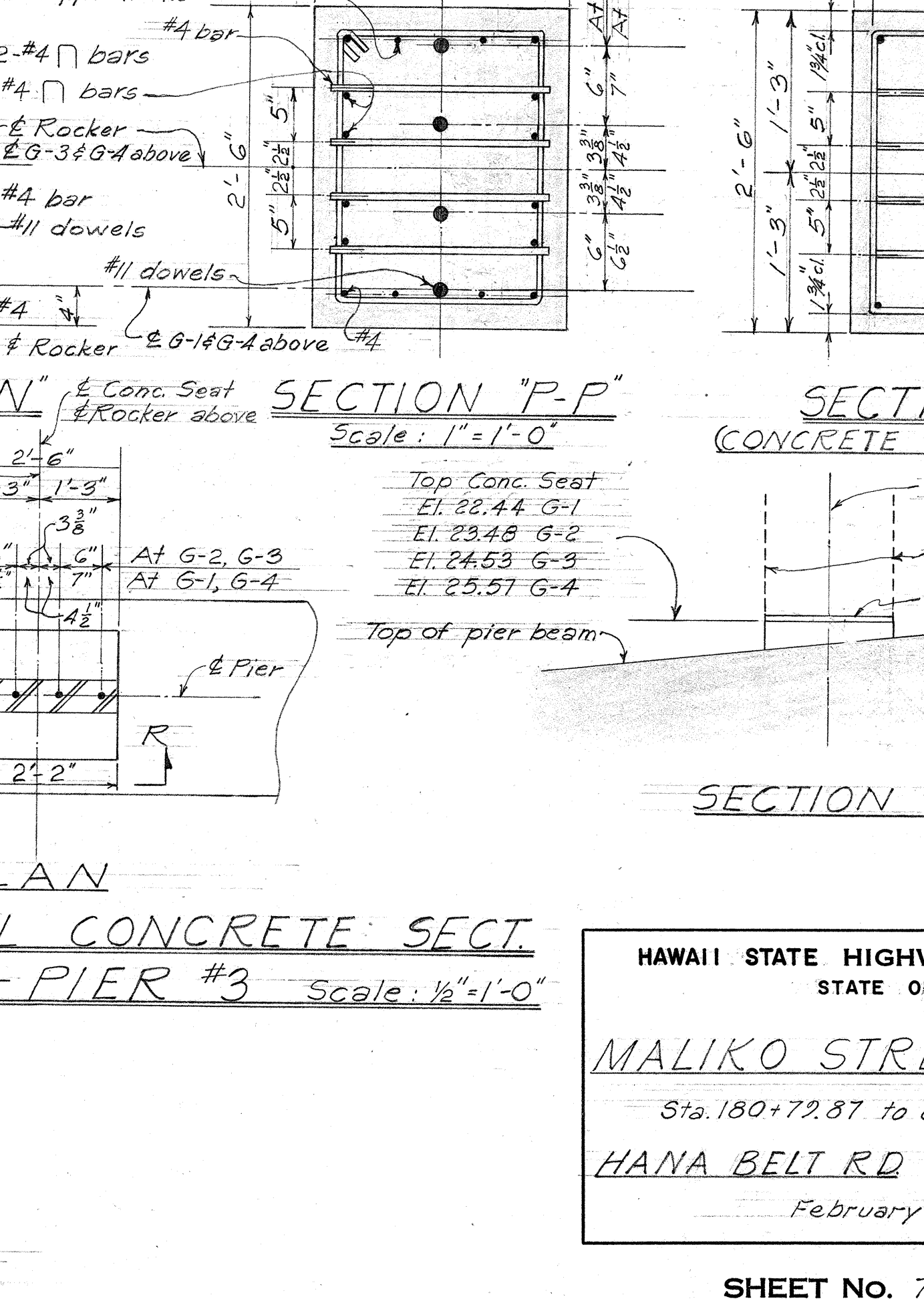
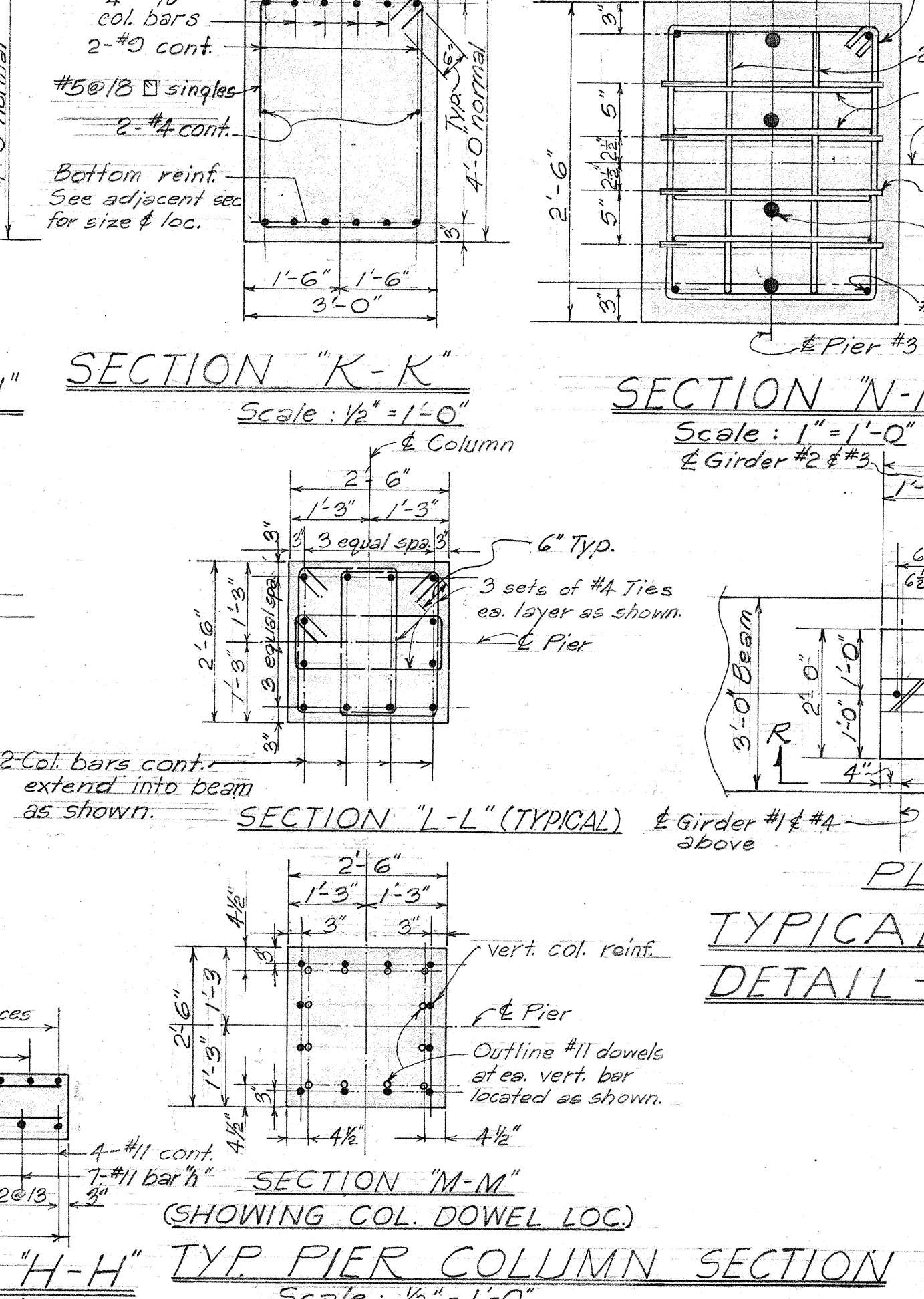
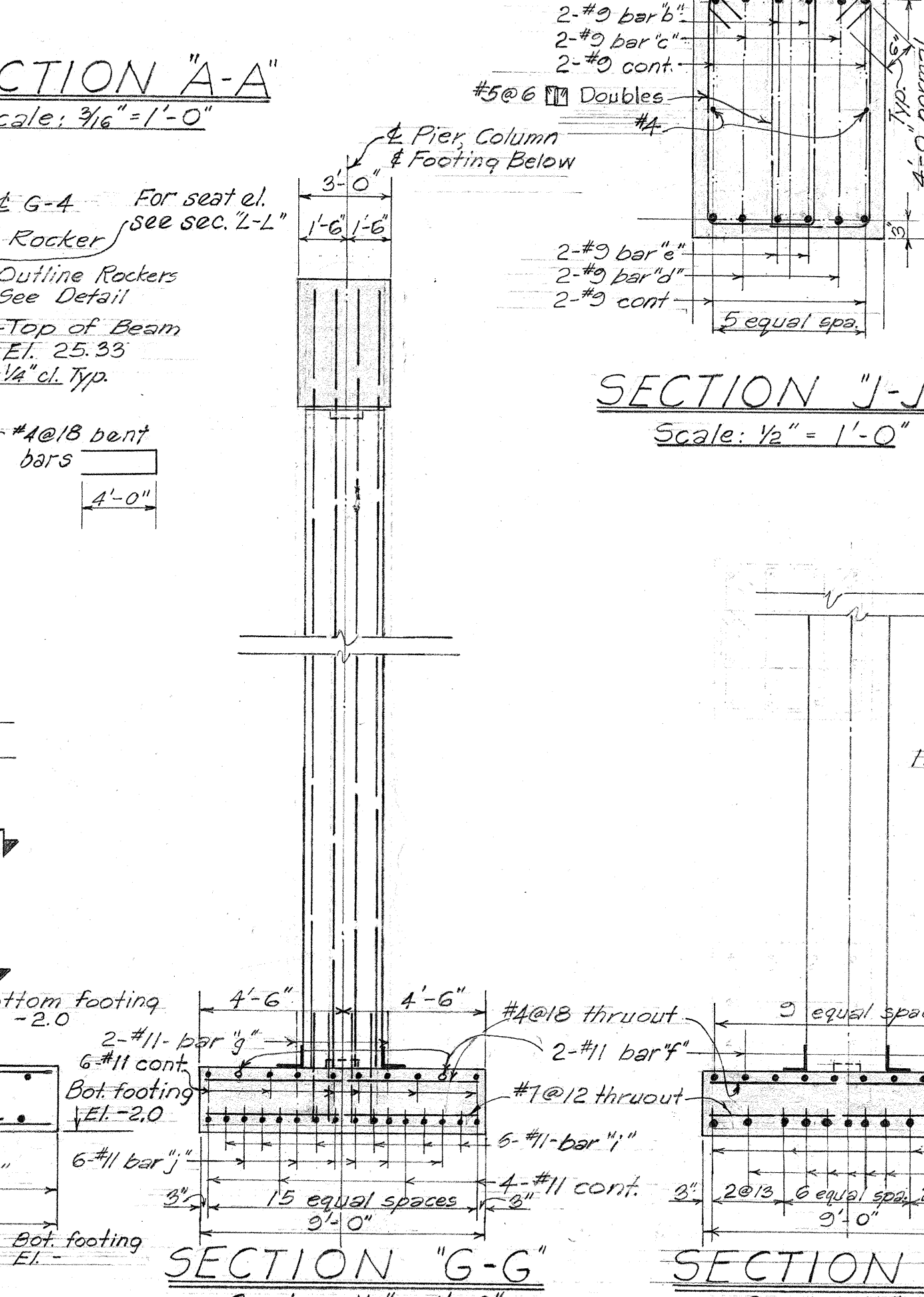
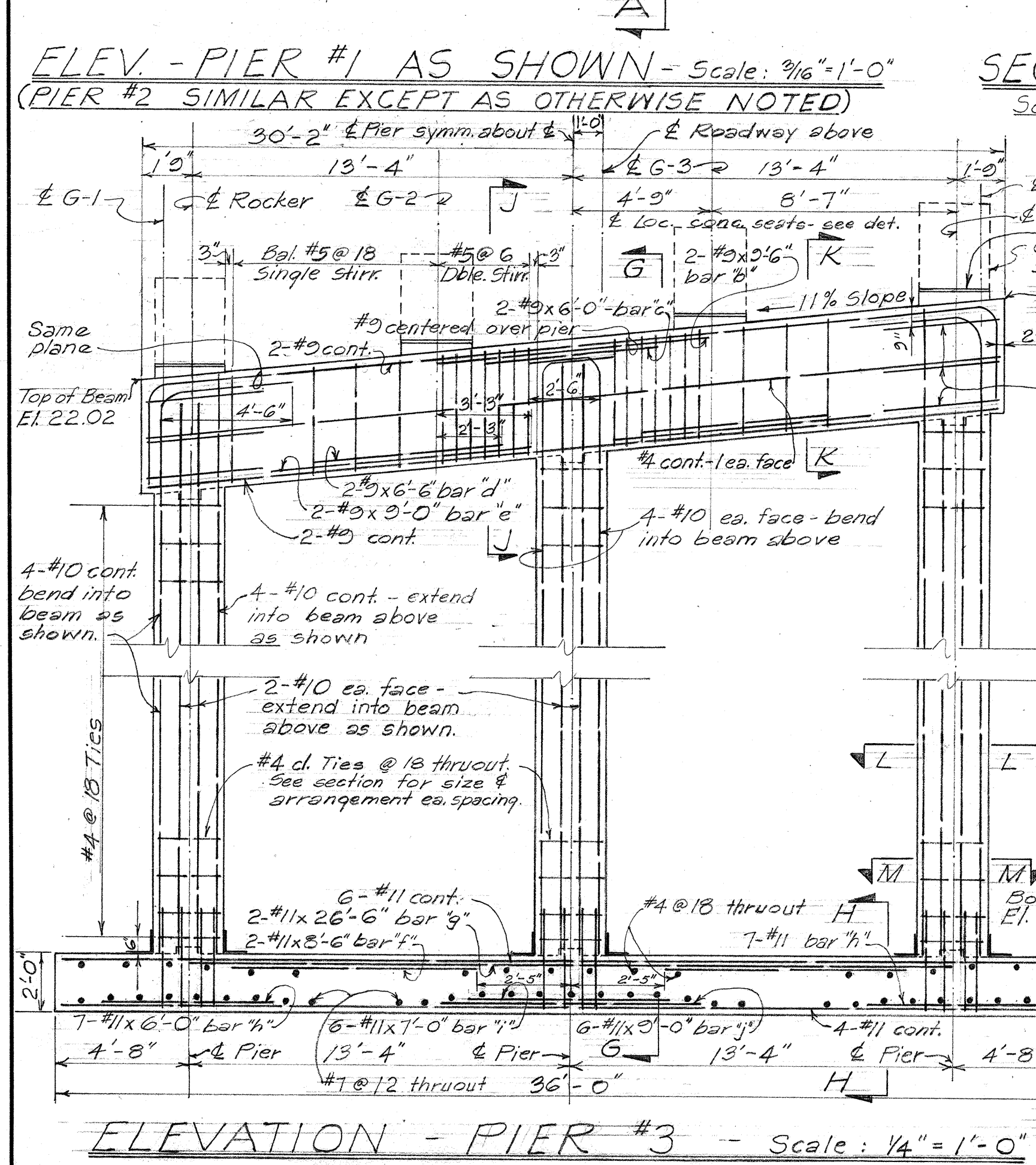
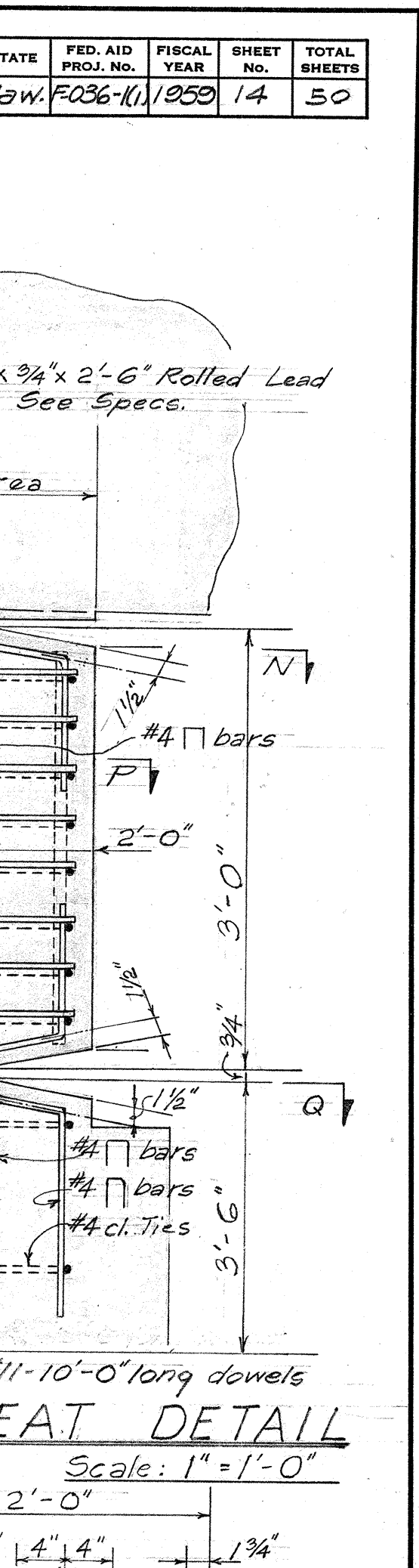
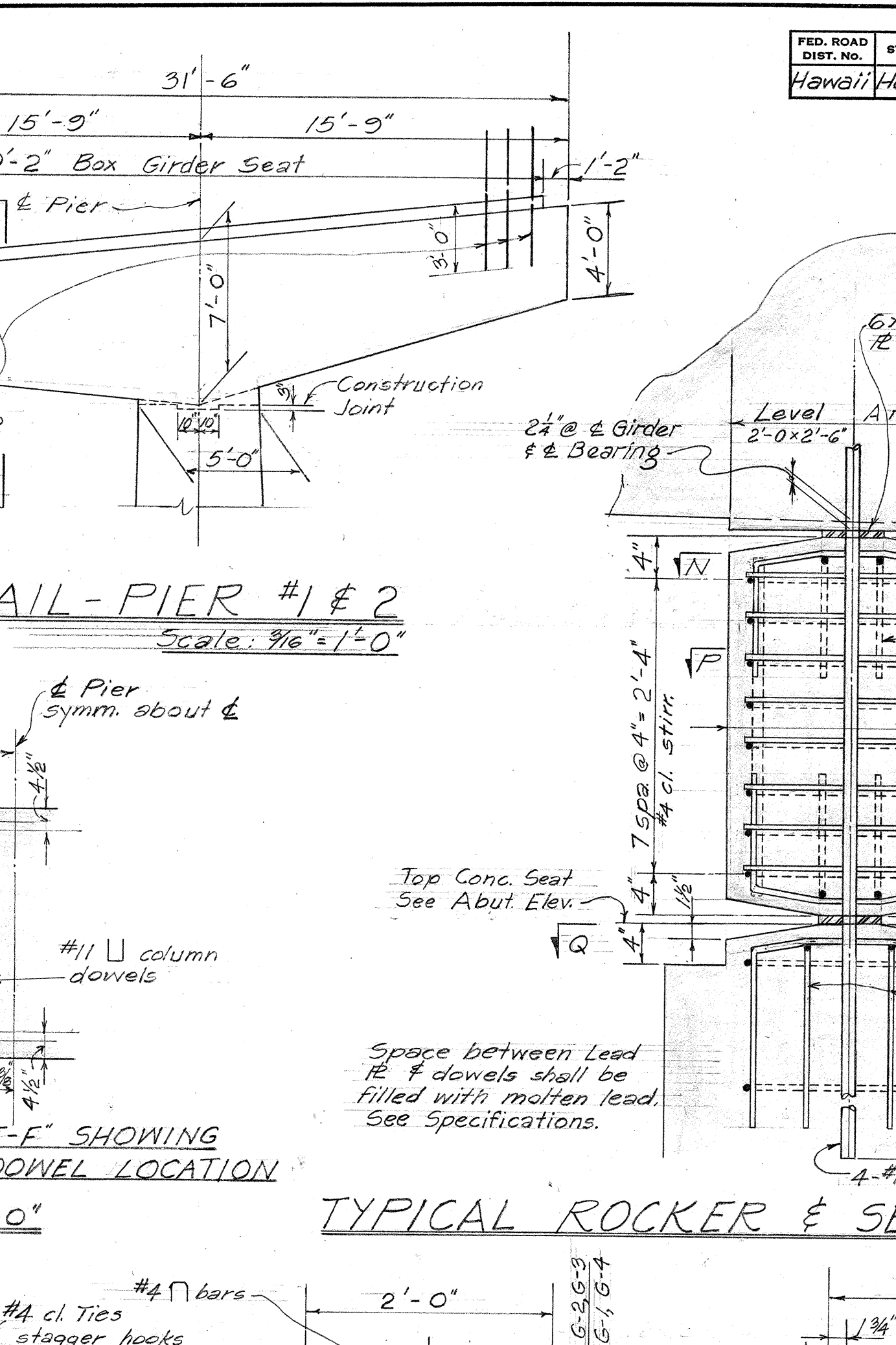
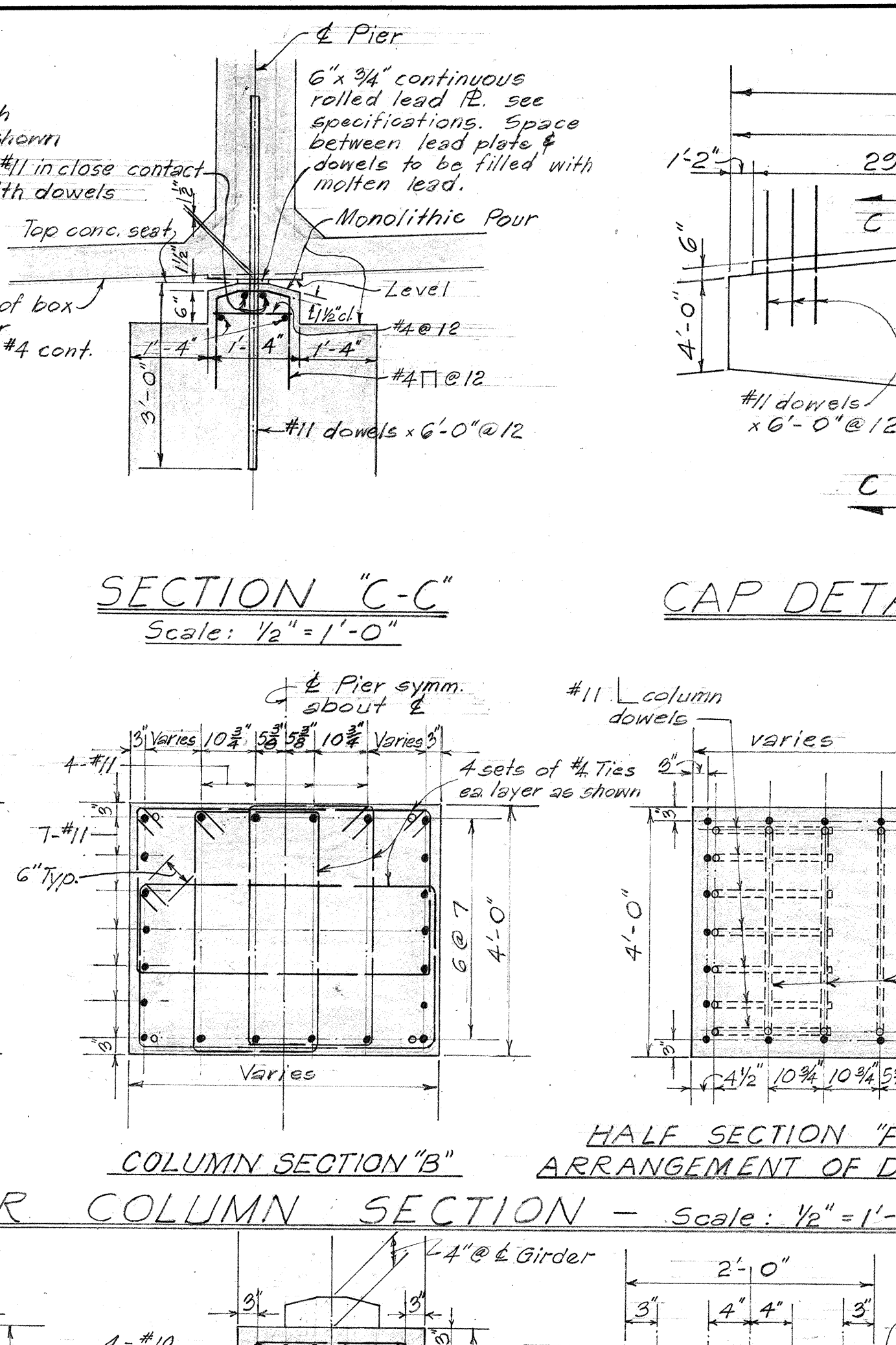
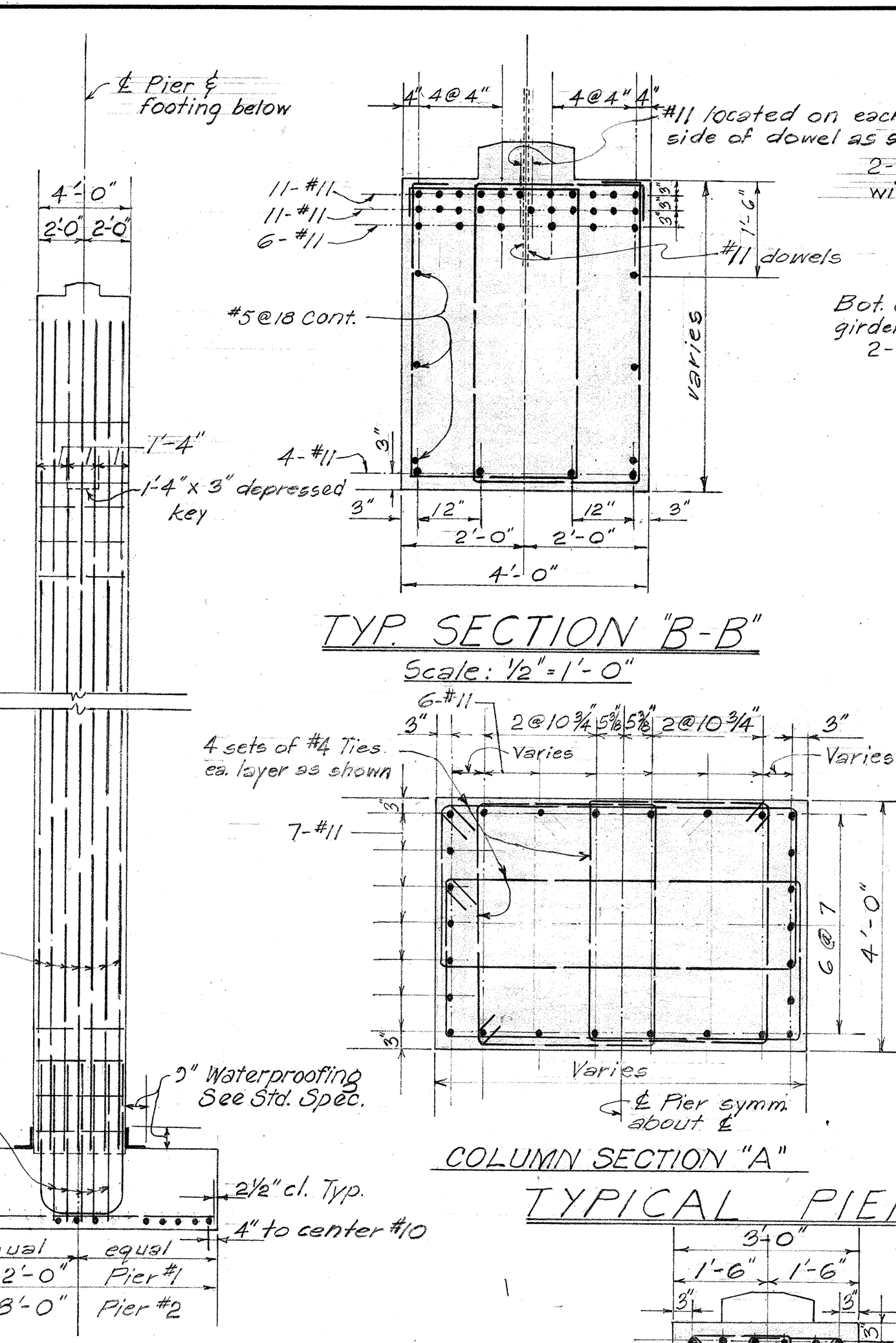
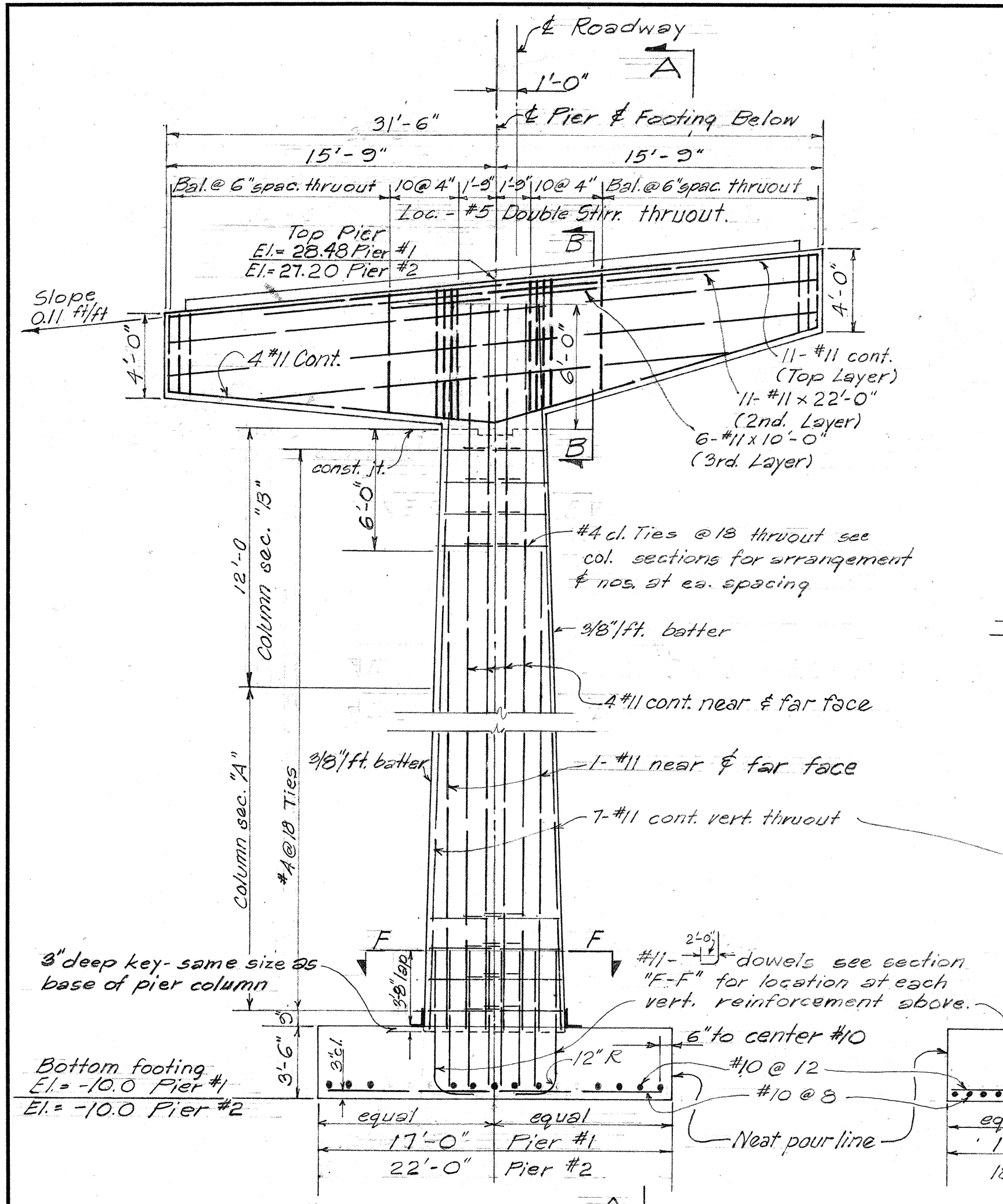
February 1953

SURVEY PLOTTED BY	DATE
DESIGNED BY	
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES CHECKED BY	
NO.	



HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
MALIKO STREAM BRIDGE
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F036-1(1)	1959	14	50



DATE	DESIGNED BY	CHECKED BY
1959	W. Young	W. Young
PLAN	QUANTITIES BY	NOTES BY
NO.		

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII

MALIKO STREAM BRIDGE

Sta. 180+72.87 to Sta. 182+86.00

HANA BELT RD F-036-1(1)

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