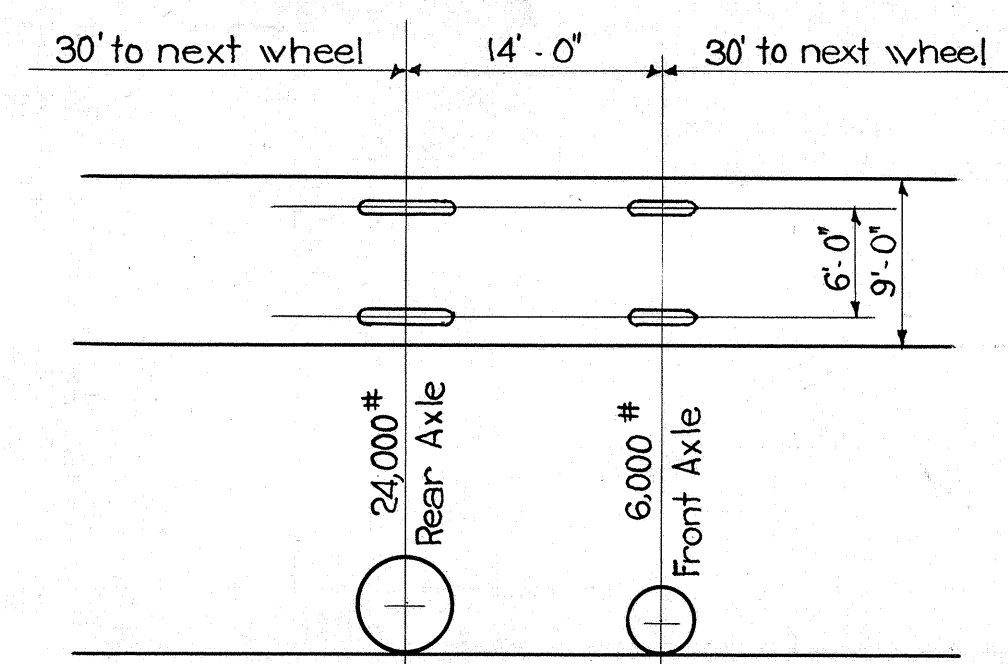
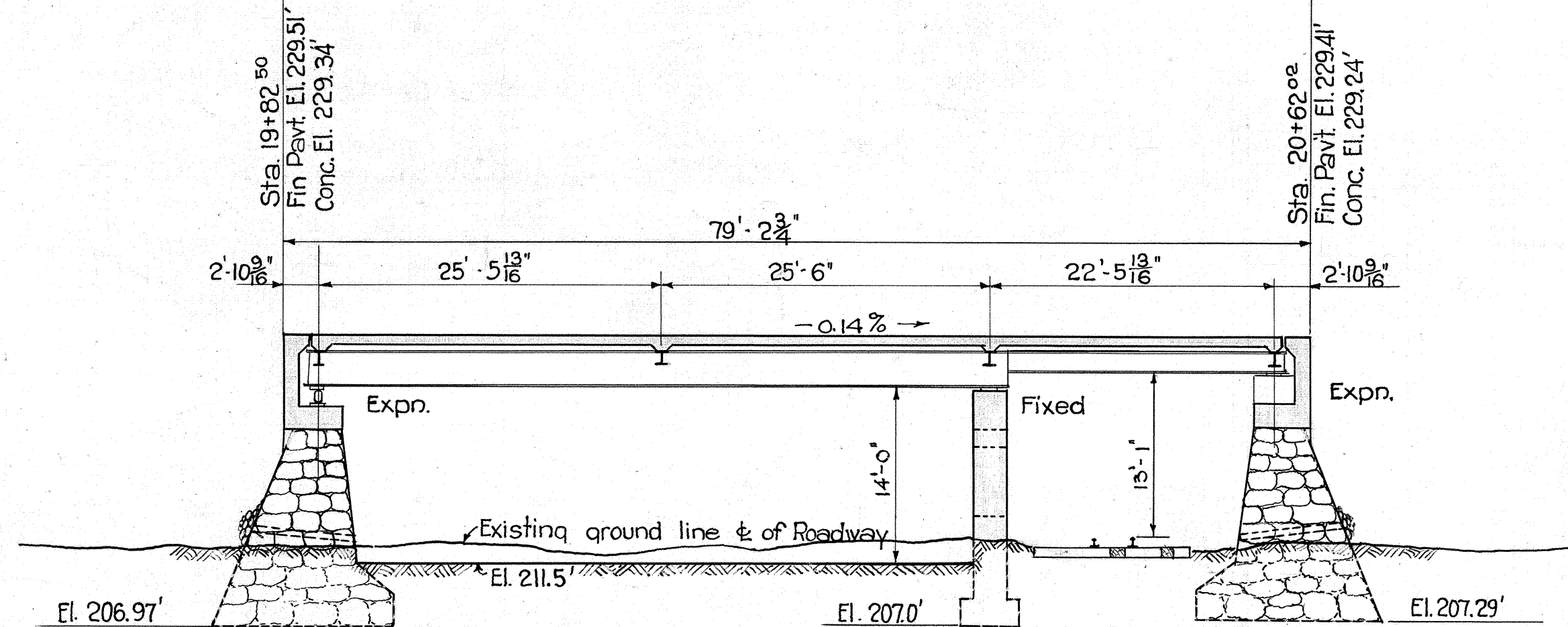
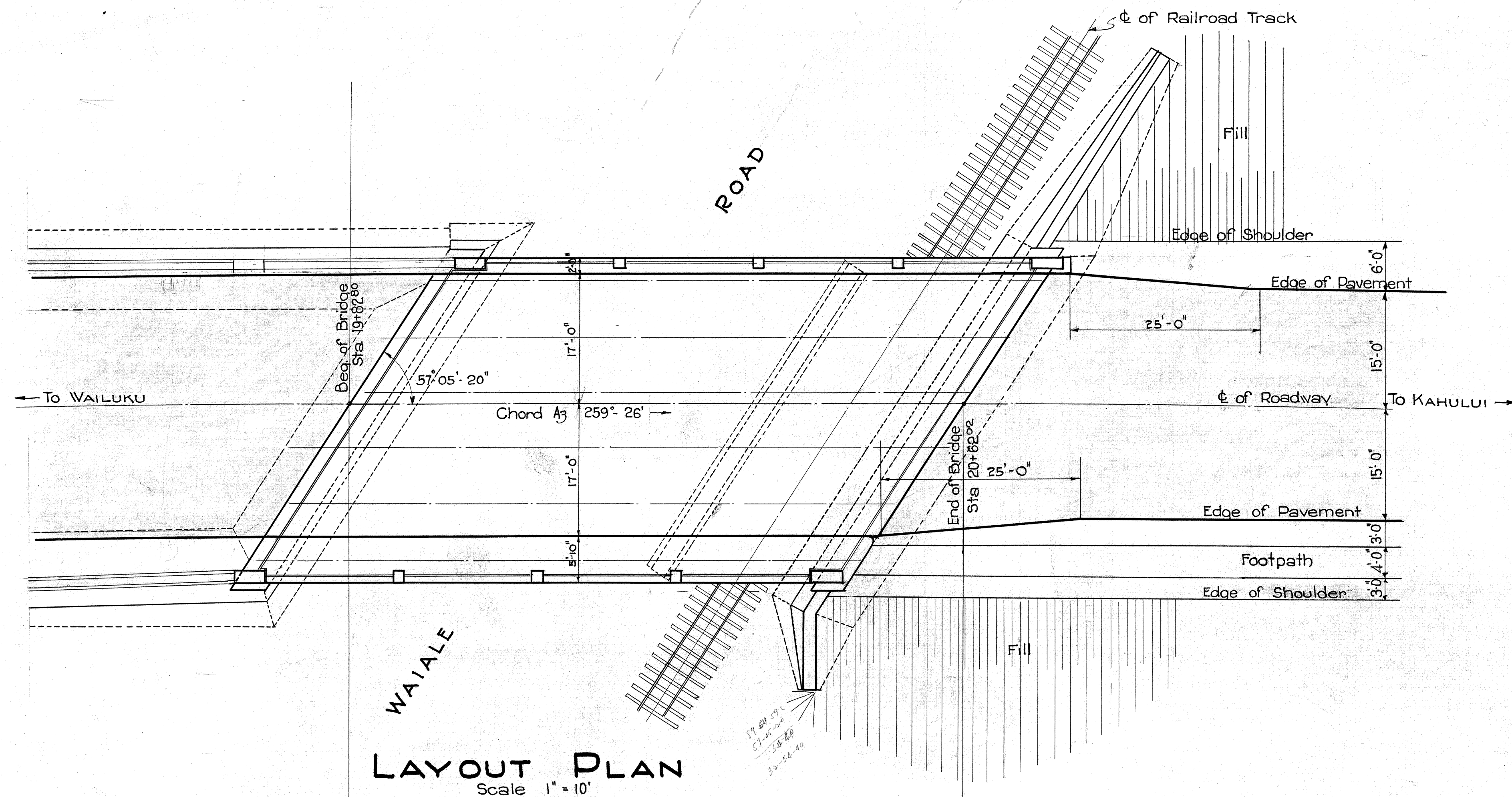


GENERAL NOTES

Dead Load: Concrete 150# per cubic foot.
Live Load: Train of 15 ton trucks in two traffic lanes. Impact allowance = $\frac{1}{4}$ of S.F.
Spacing of trucks as per diagram.
Concrete: Class "A" (1:2:4) with all exposed edges chamfered $\frac{3}{4}$ " unless otherwise noted. Allowable compression 750# per square inch.
Brush Coat Waterproofing: Remove all projections, cement film, dirt, etc. and apply waterproofing as specified. Waterproofing is incidental to the concrete used, and will not be paid for separately.
Construction Joints: All construction joints to have surface roughened and 1:2 cement grout applied immediately before second pour.
Reinforcing Steel: Intermediate grade; allowable tensile stress 18,000# per square inch. All steel to be round or square deformed bars of approved design. All dimension relating to reinforcement are to centers of bars unless otherwise noted. Where splicing of reinforcement is necessary bars are to be lapped 40 diameters and splices are to be staggered. No allowance will be made in the quantities for extra weight of steel required for splicing. Unless otherwise noted, the minimum covering measured from the surface of concrete to the face of any steel shall be not less than 2 1/2" in abutments and 1 1/2" in slab. Steel to be held rigidly and accurately in place before and during placing of concrete.
Structural Steel: All structural steel to be "medium grade" (A.S.T.M. A-734). Allowable fs = 18,000# per square inch. Bearing units to be cast steel. Steel castings shall conform to the requirements of the standard specification (serial designation A-27-24) of the A.S.T.M. or latest revision thereof.
Rivets sizes to be as indicated on plans. Rivet steel to be (A.S.T.M. A141-33). Shop assembly and reaming of girder splices required. Floor beam connections shall be drilled to an iron template.
All structural steel shall be given one shop coat of red lead paint. First and second field coat shall be aluminum paint. All shop plans must be approved by the Engineer before fabrication is started.
Backfill: Backfill of abutments to be completed before placing of superstructure.



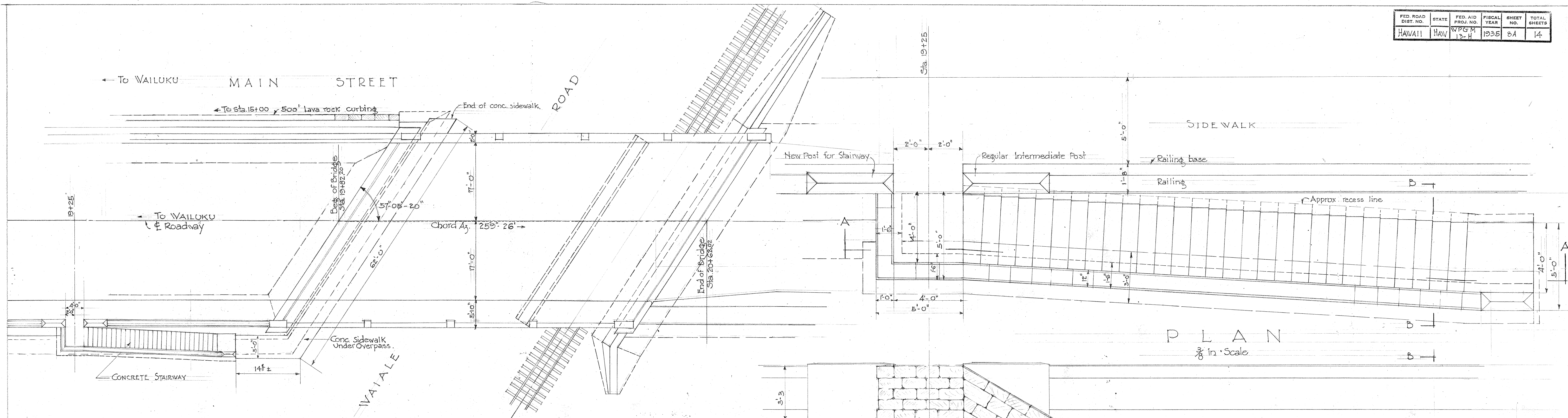
QUANTITIES							
Location	Unclass. Ex	Struct. Ex	C.R.M.	Class A Conc.	Reinf. Steel	Struct. Steel	Phosphor Bronze
Footings		422.0 CY		119 CY			
Abutments & Pier			579.2 CY	96.2	10,936 #		
Superstructure				93.9	16,160 #	83,600 #	313 #
Railing & Posts				46	821		
	444.0 CY				28,597 #		
Total	444.0 CY	422.0 CY	579.2 CY	206.6 CY	27,605 #	83,600 #	313 #

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAIALE R.R. OVERPASS

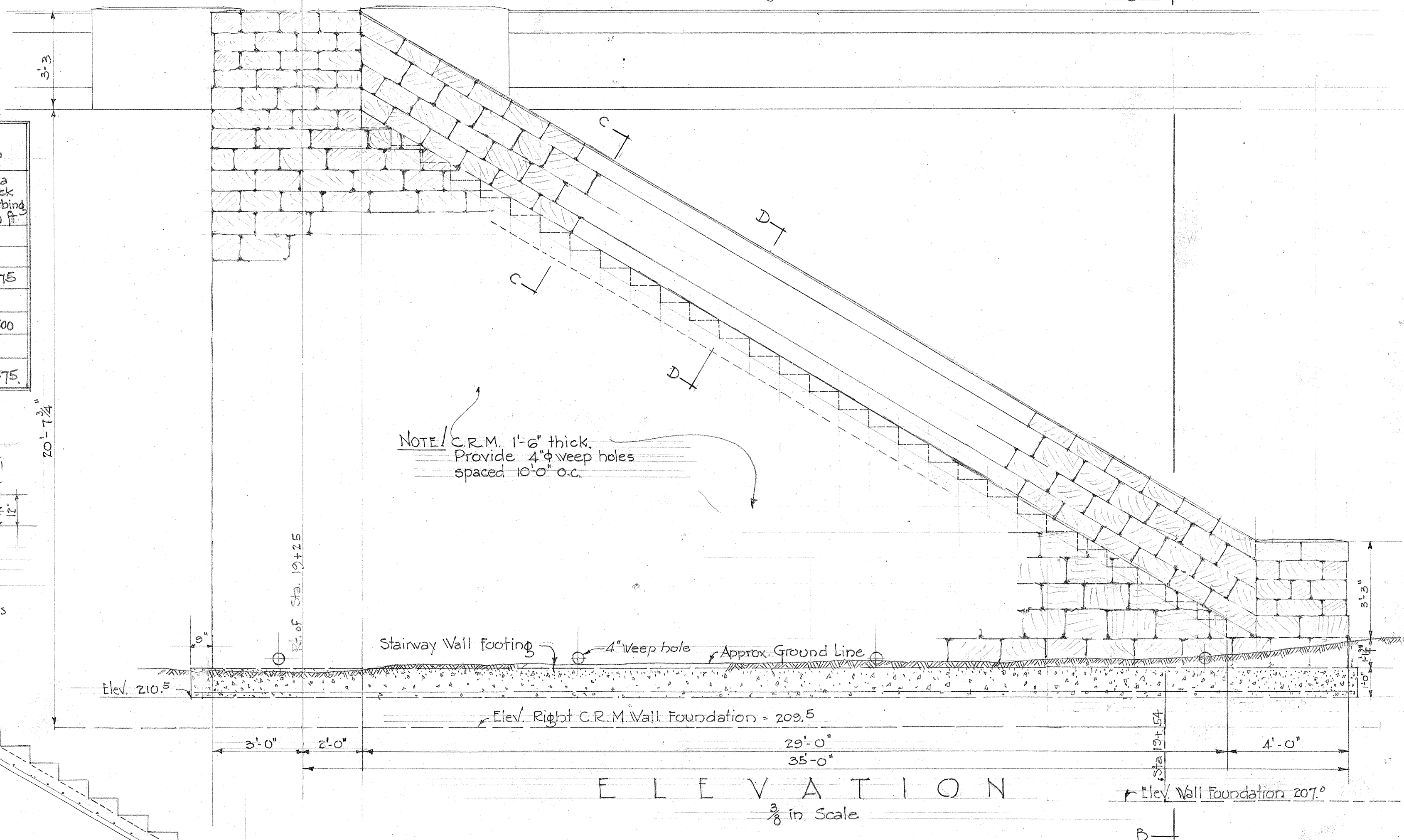
STA. 20

WAILUKU KAHULUI ROAD



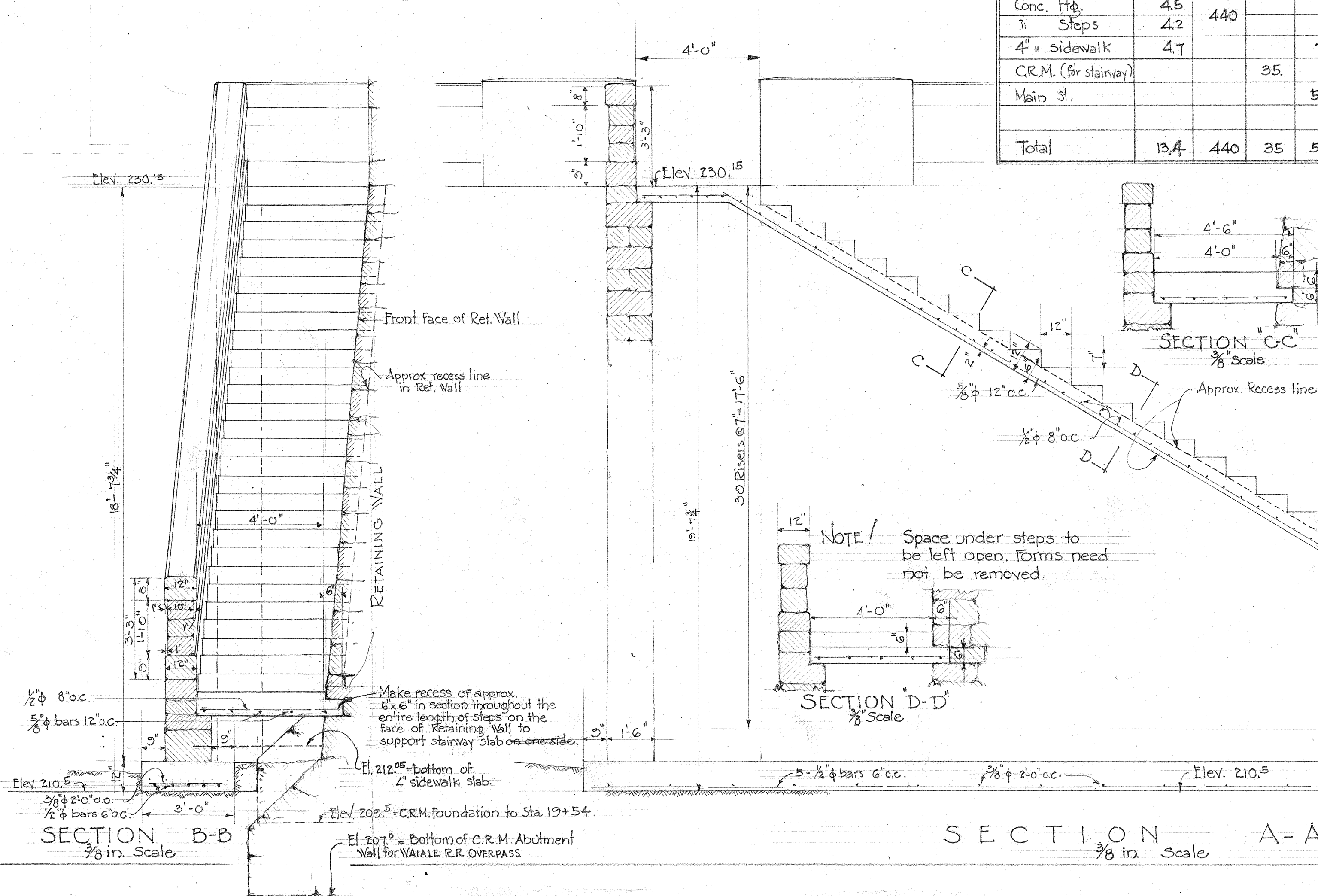
LAYOUT PLAN
Scale: 1"=10'

ESTIMATED QUANTITIES				
Items	Class "A" Conc. Cu. Yd.	Reinf. Steel Lbs.	C.R.M. Cu. Yd.	Lava Rock Curbing Lin. Ft.
Conc. Flg.	4.5	440		
11 Steps	4.2			
4" sidewalk	4.7			75
C.R.M. (for stairway)			35	
Main St.				500
Total	13.4	440	35	575



NOTE: C.R.M. 1'-6" thick. Provide 4" weep holes spaced 10'-0" o.c.

NOTE: Space under steps to be left open. Forms need not be removed.

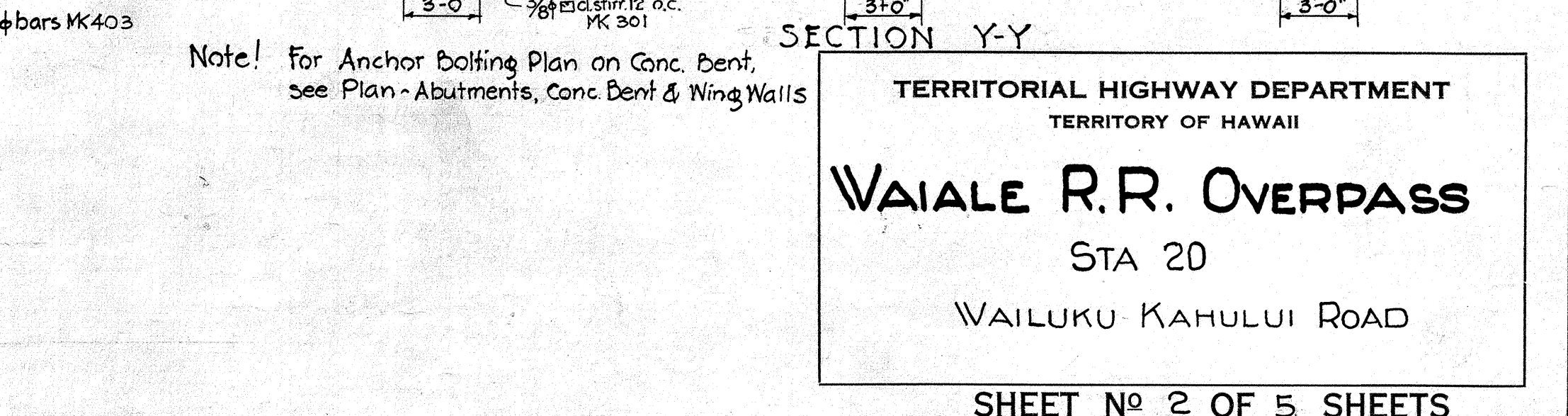
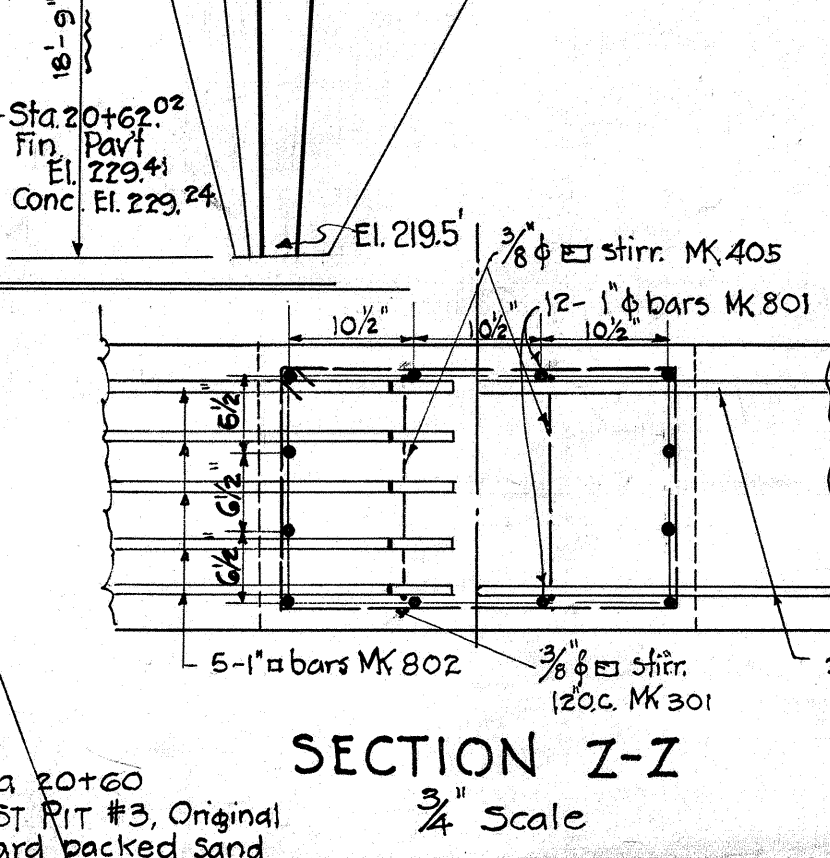
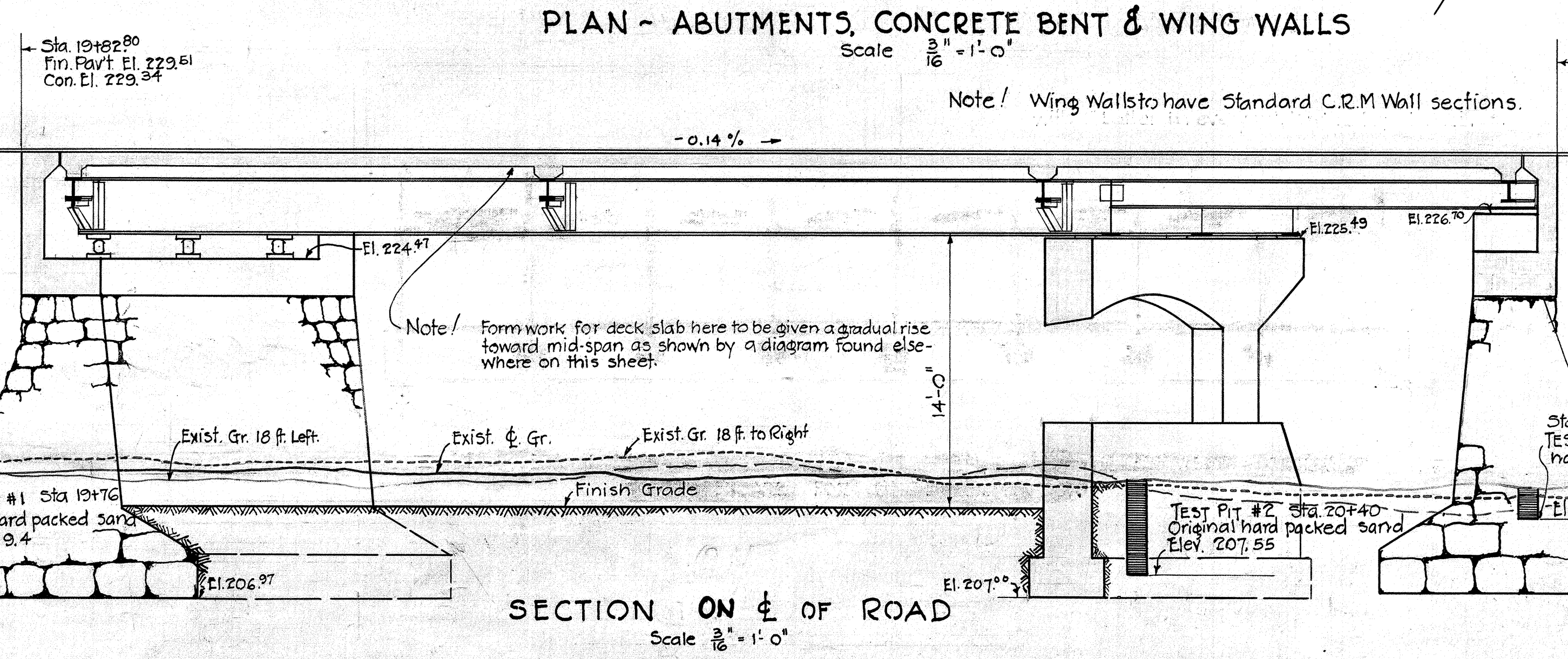
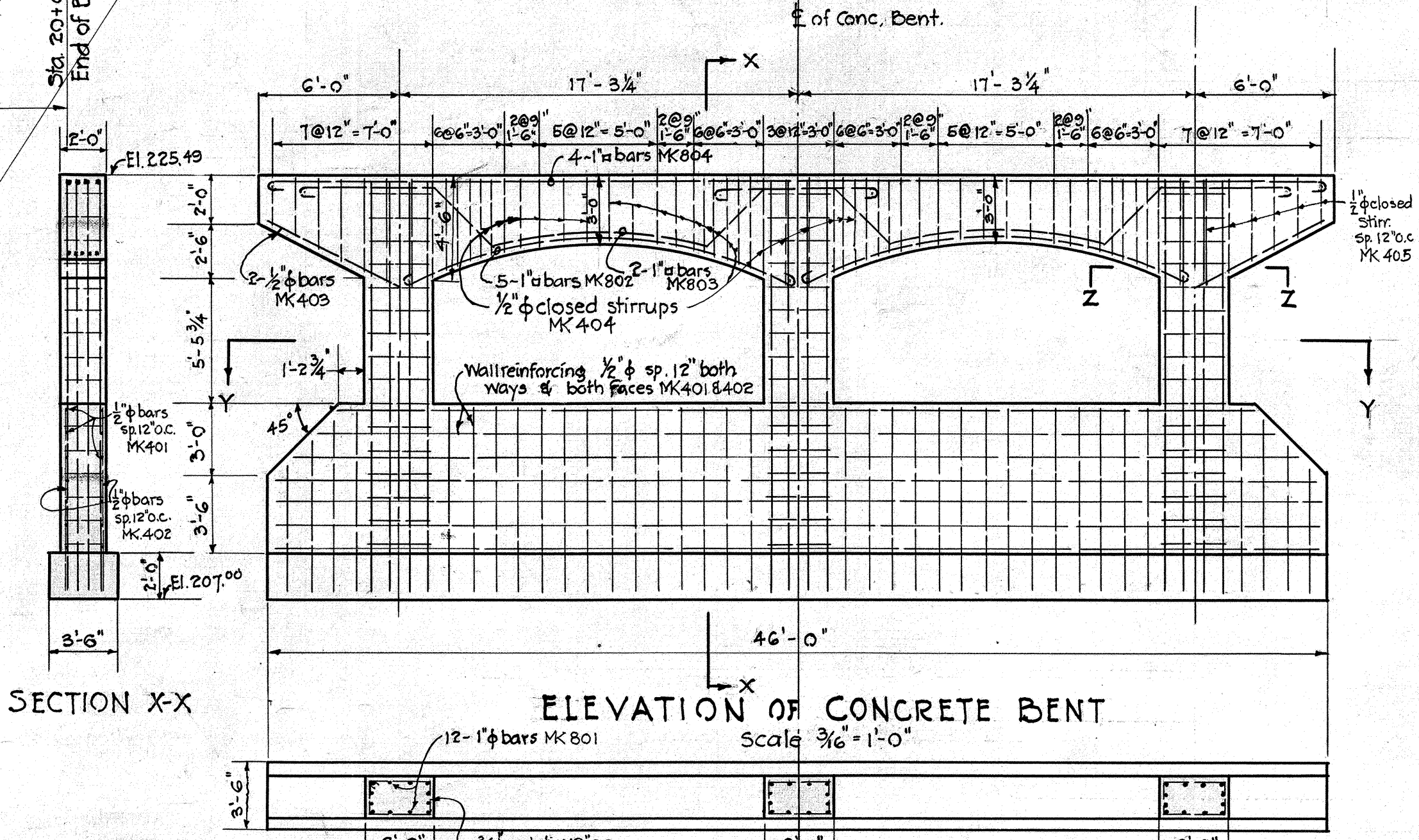
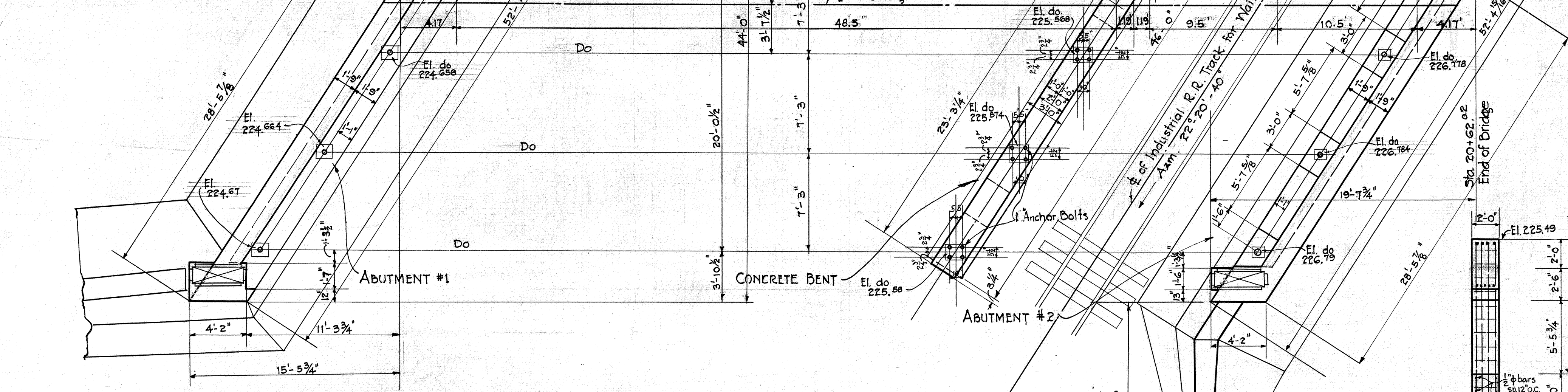
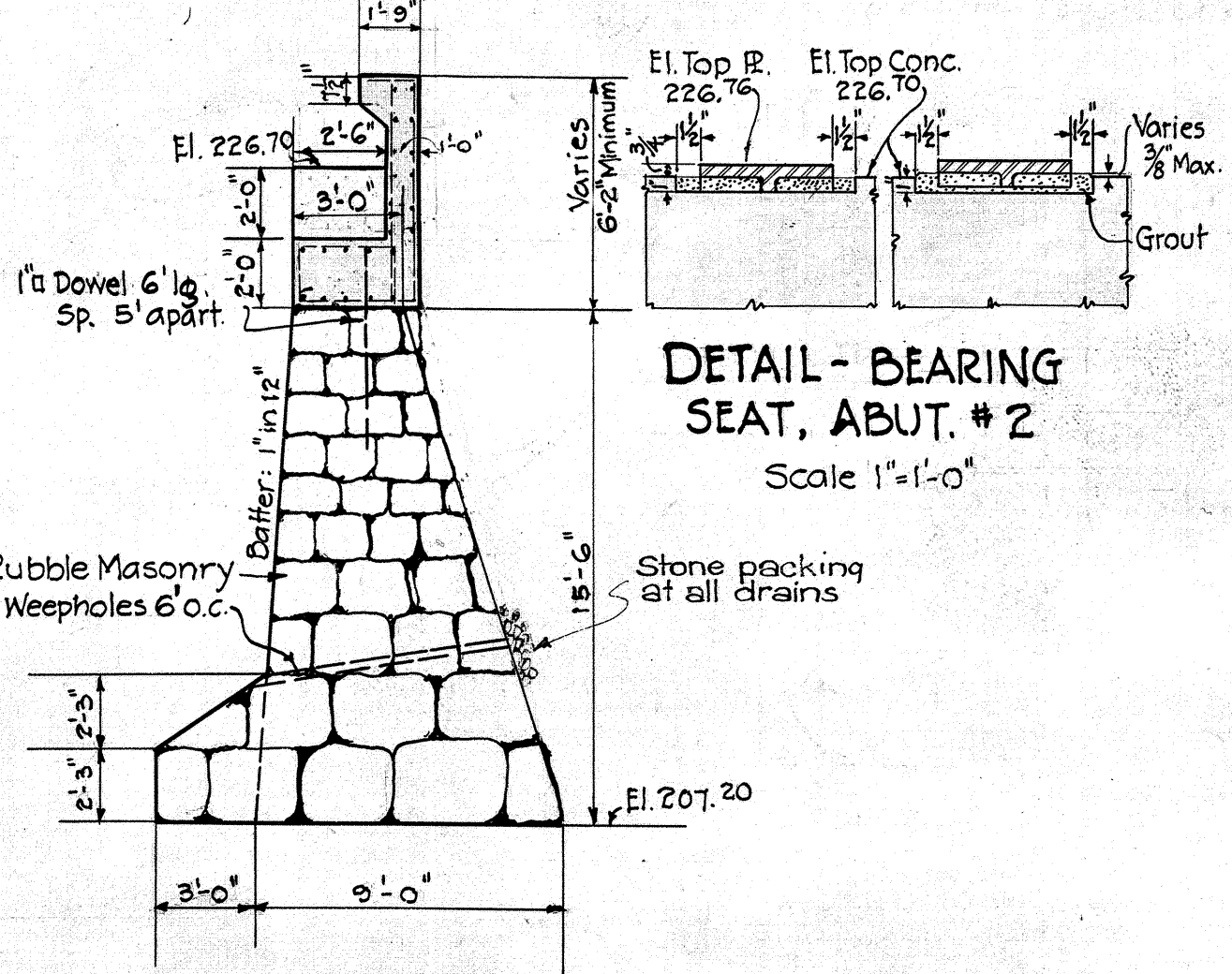
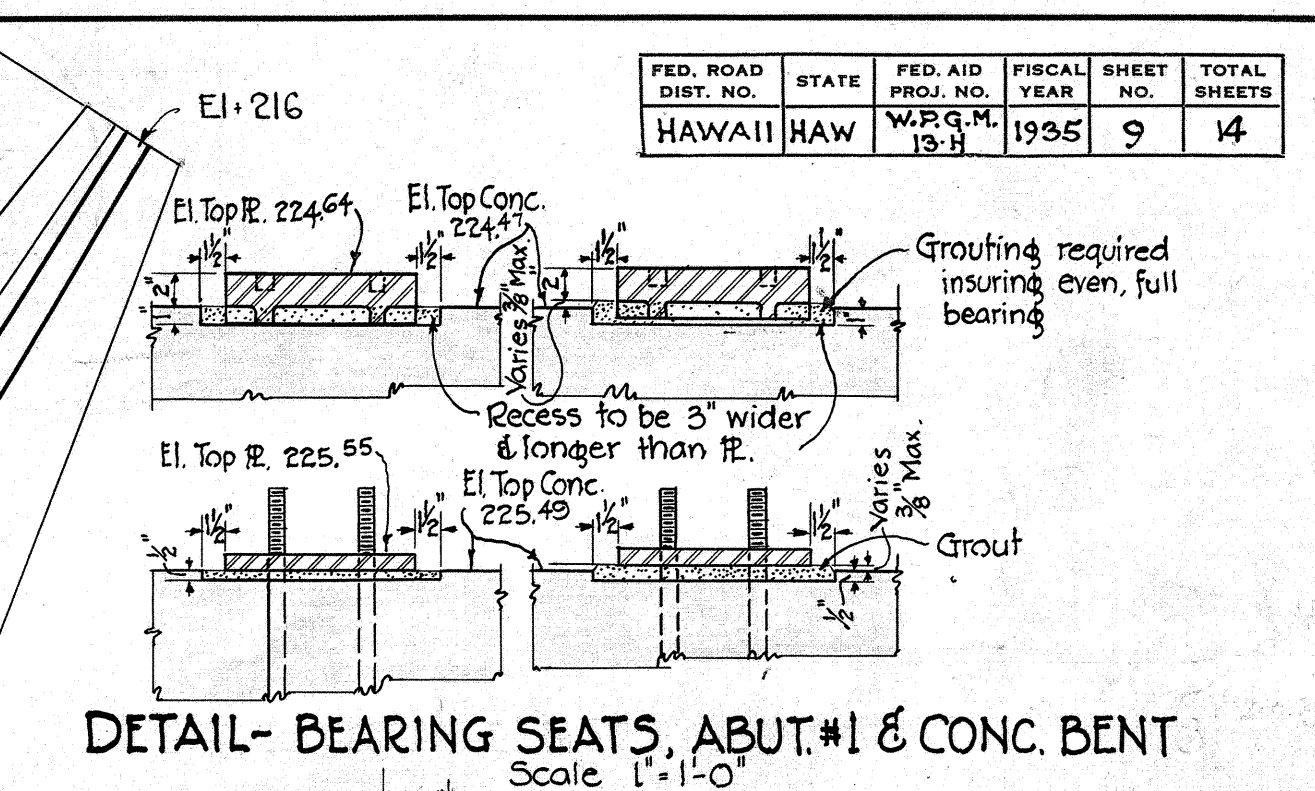
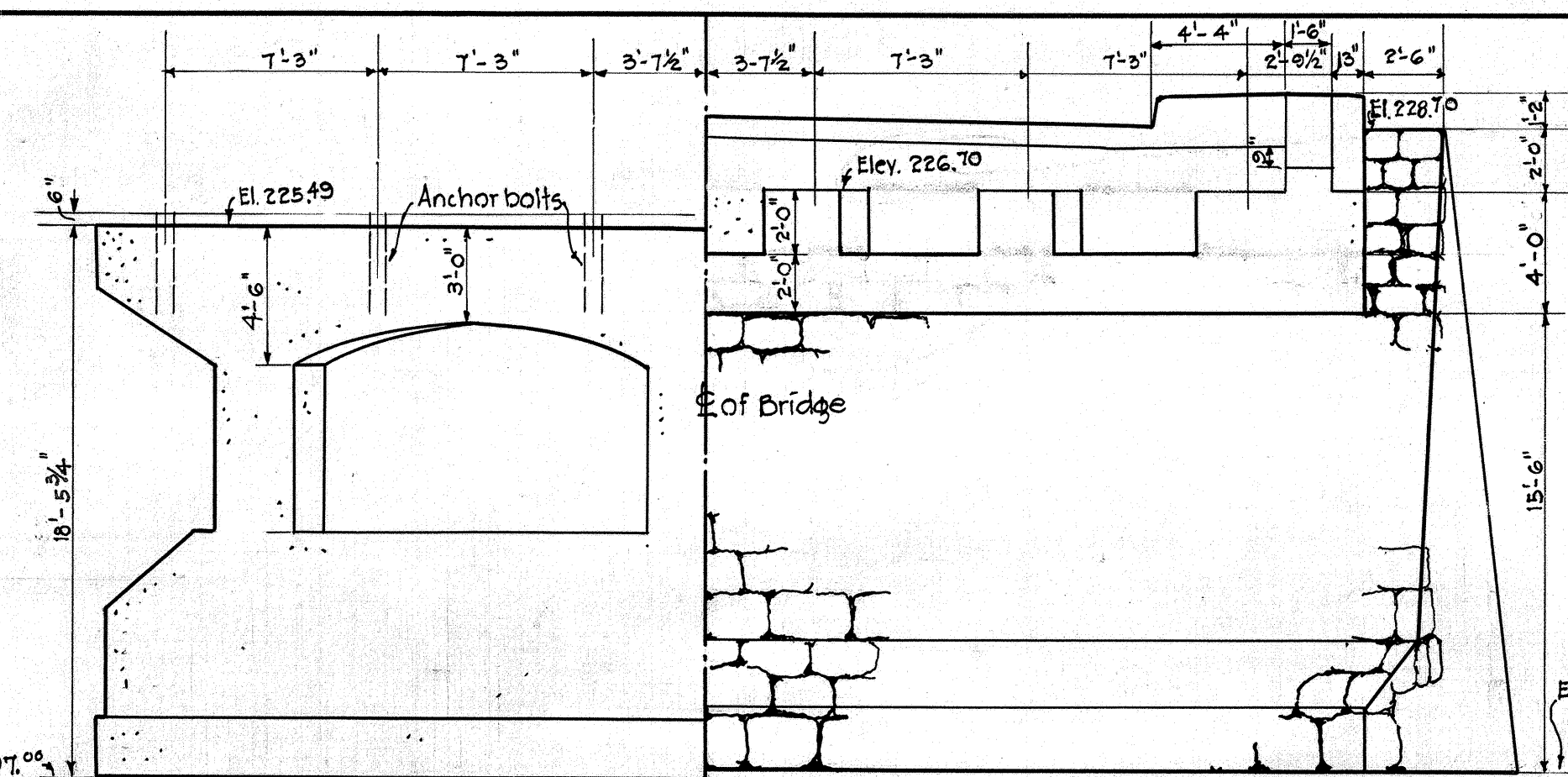
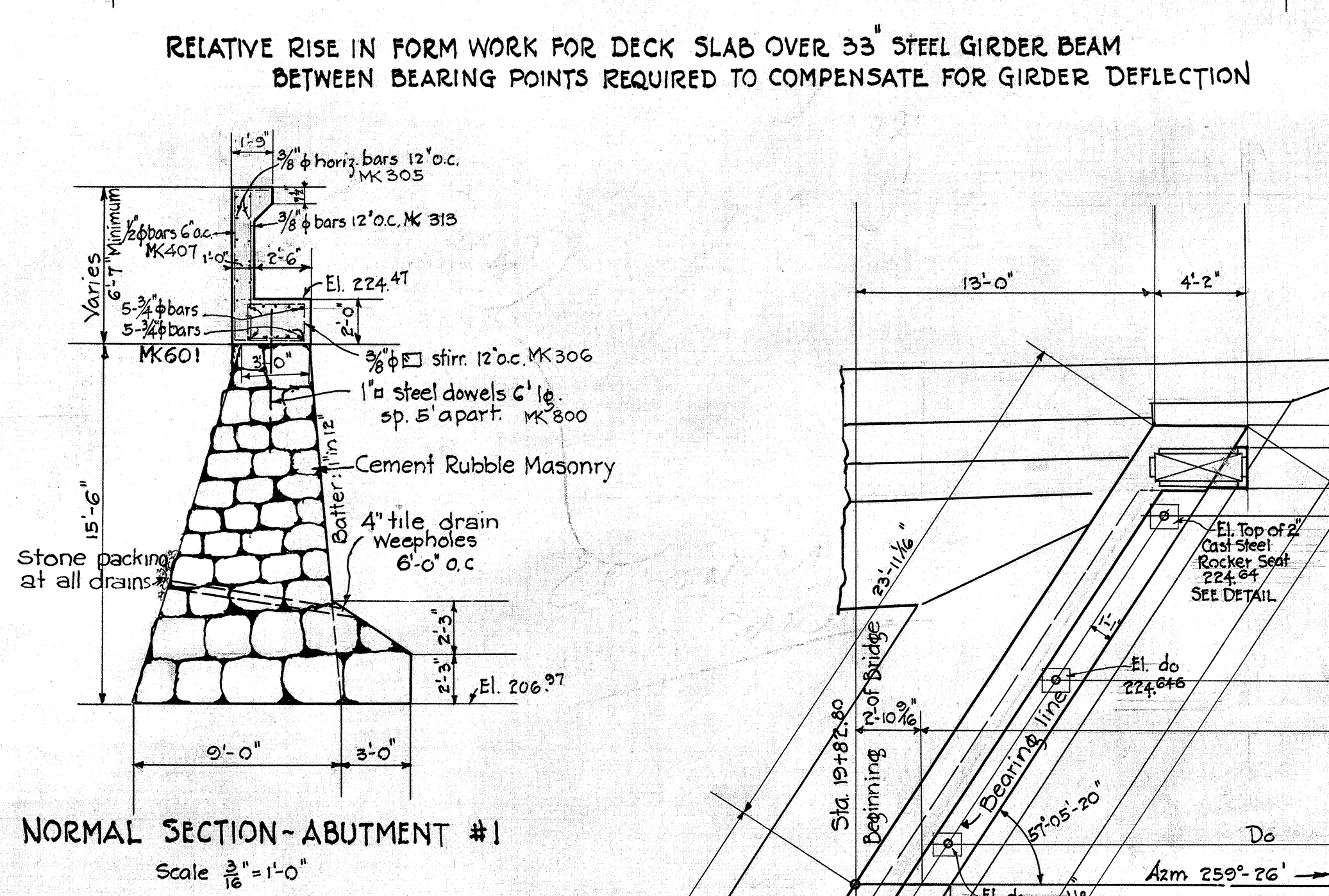
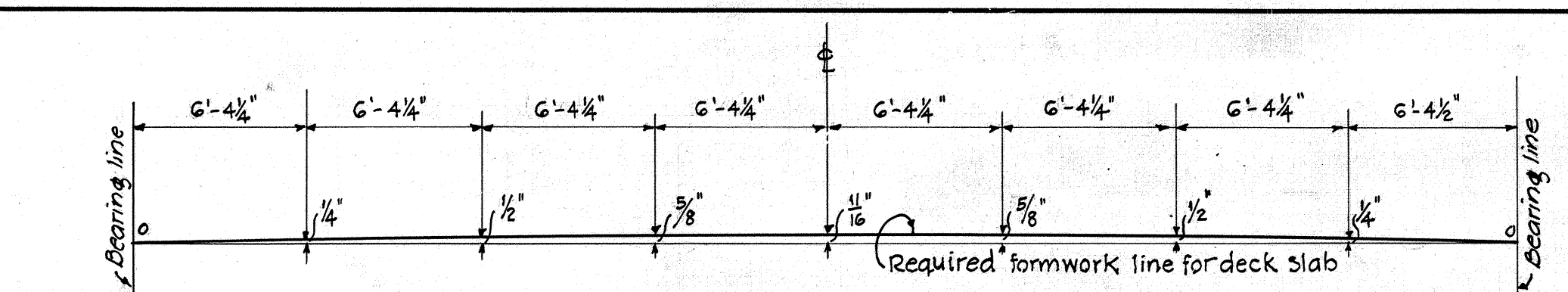


SECTION A-A
Scale: 3/8 in. Scale

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
STAIRWAY DETAILS
STA. 19+25
WAILUKU KAHULUI HIGHWAY
PROJ. No. W.P.G.M. 13-H
MAR. 1936

4347.SA

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	W.P.R.M. 19-1	1935	9	14

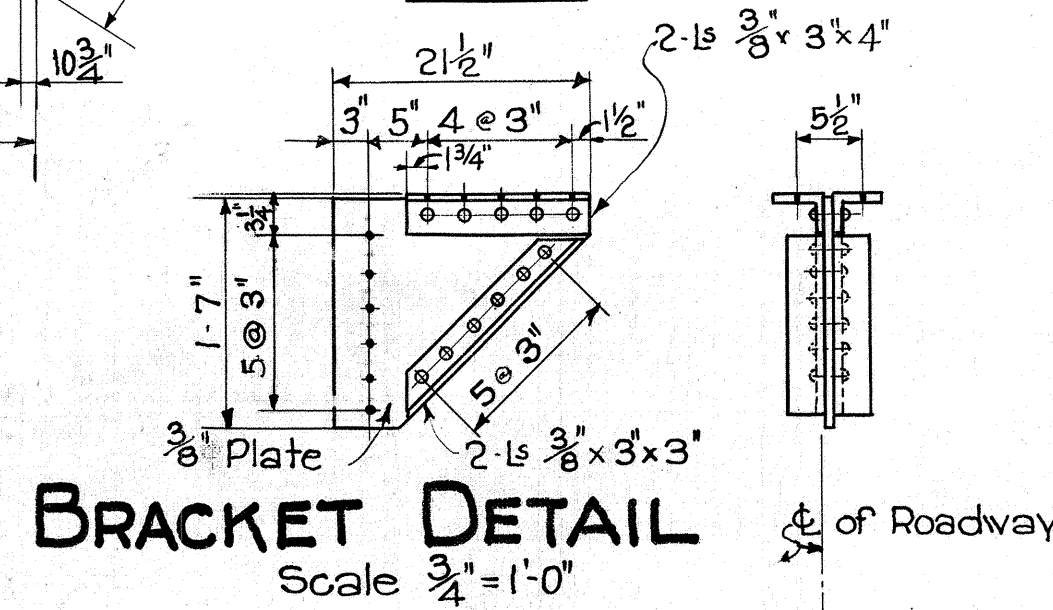
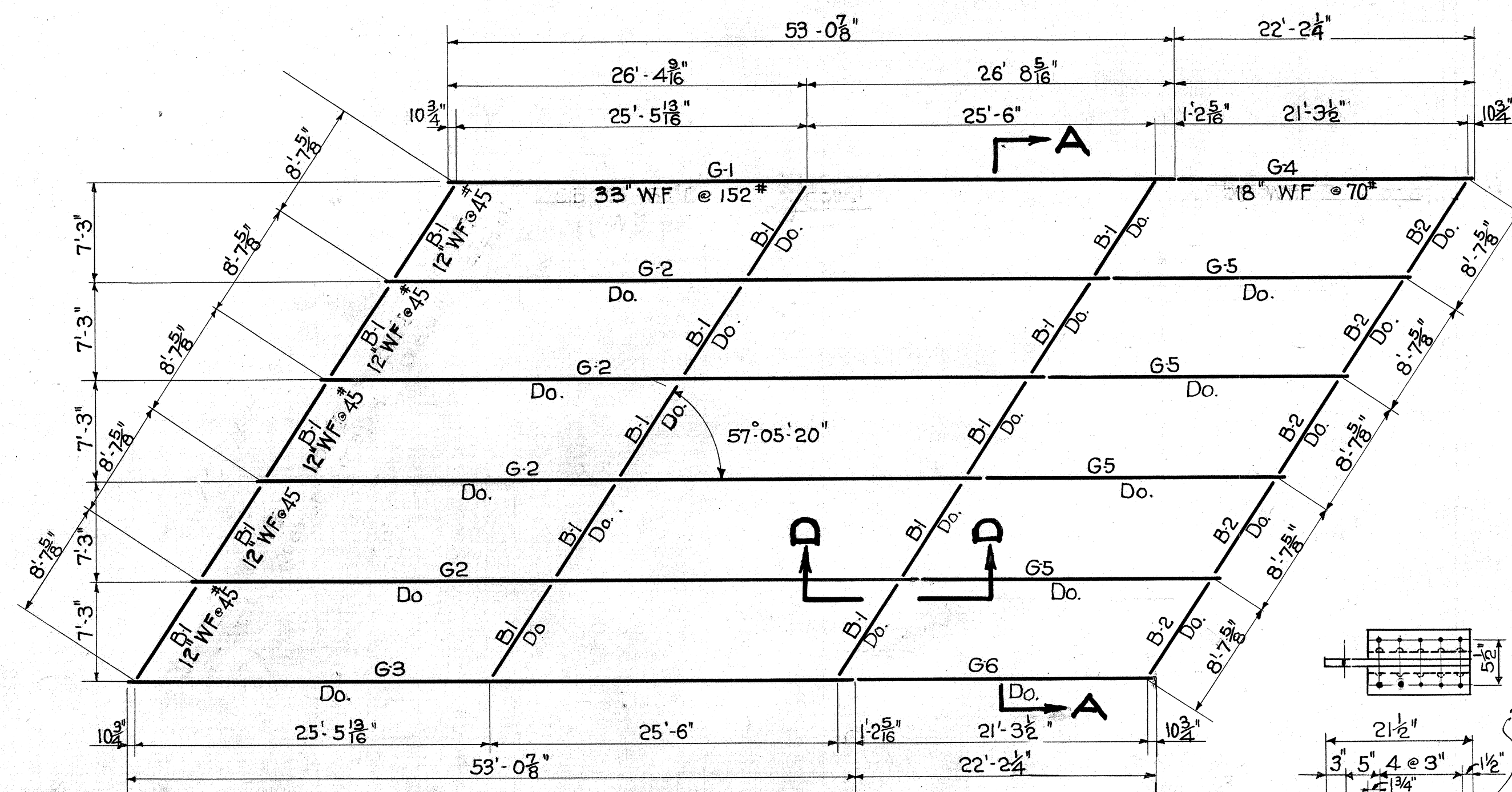


DATE	DESIGNED BY	DRAWN BY	CHECKED BY
10-2-35	W.S.B.	H.C.R.	H.C.R.
10-2-35	W.S.B.	H.C.R.	H.C.R.
10-2-35	W.S.B.	H.C.R.	H.C.R.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
WAIKALE R.R. OVERPASS
STA 20
WAILUKU-KAHULUI ROAD

SHEET No 2 OF 5 SHEETS

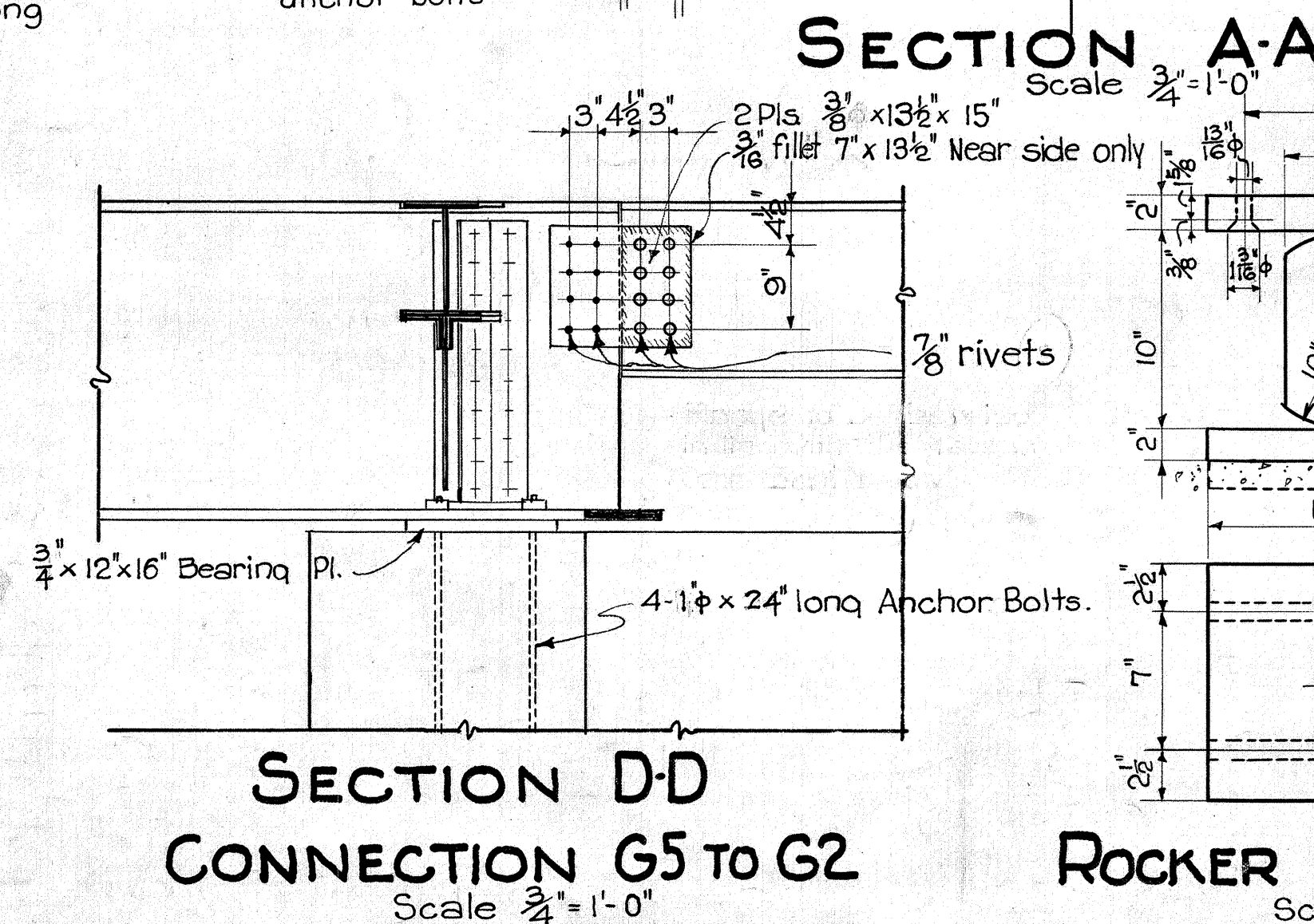
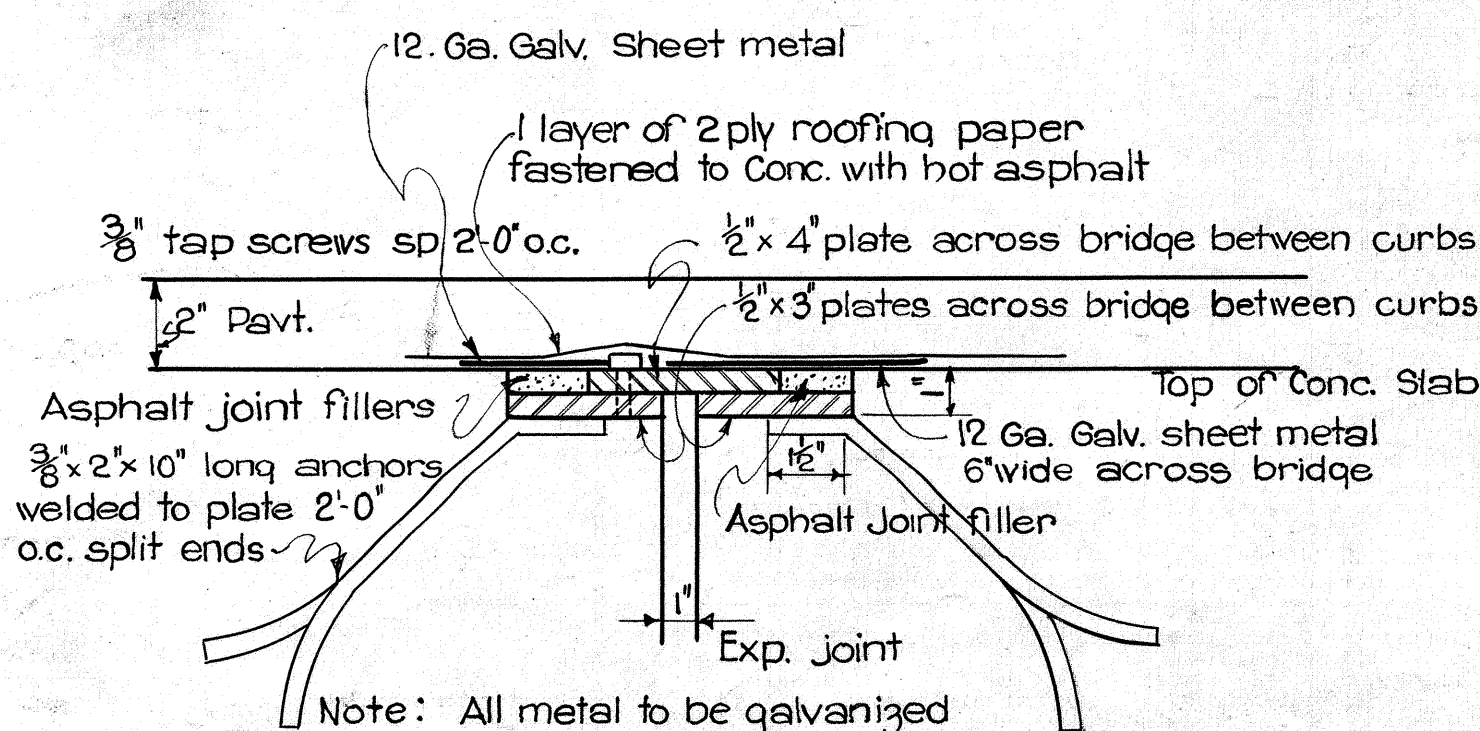
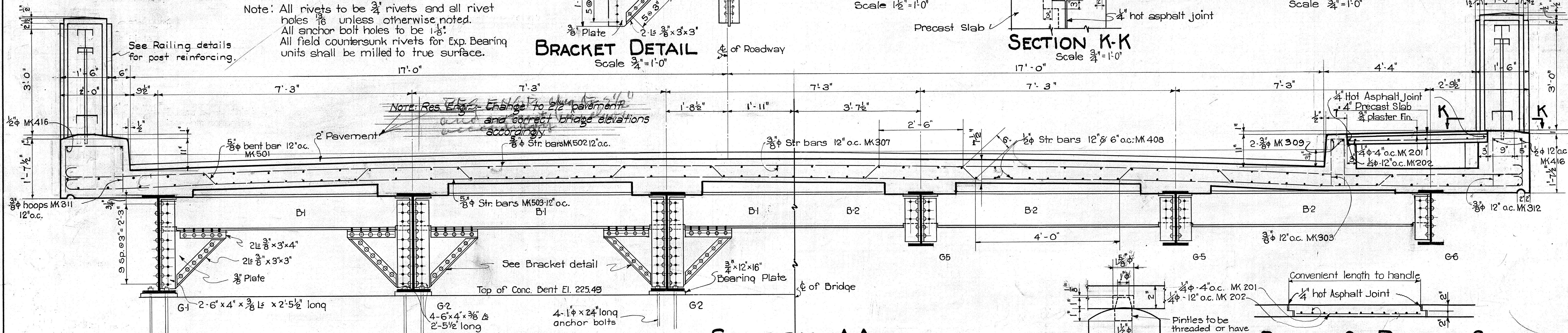
4347.9



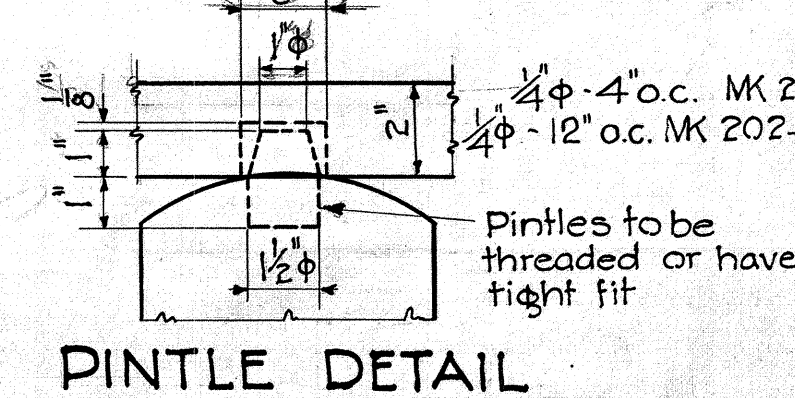
SECTION C-C
Scale $1\frac{1}{2}" = 1'-0"$

SECTION B-B
Scale $\frac{3}{4}" = 1'-0"$

SECTION K-K
Scale $\frac{3}{4}" = 1'-0"$



ROCKER EXP BEARING
Scale $1\frac{1}{2}" = 1'-0"$

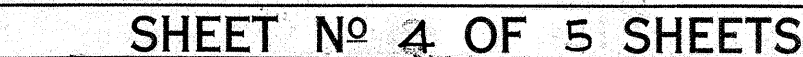


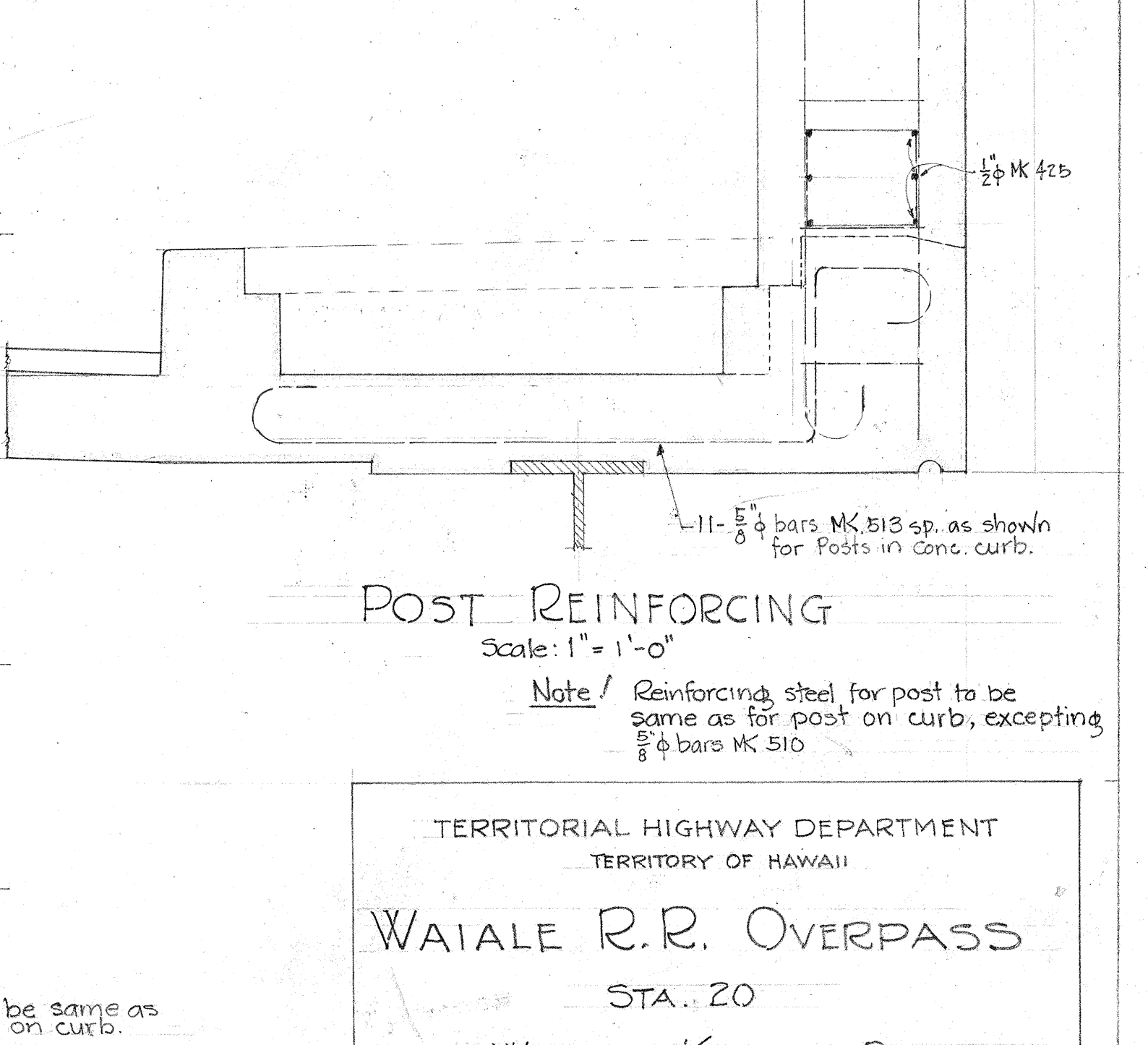
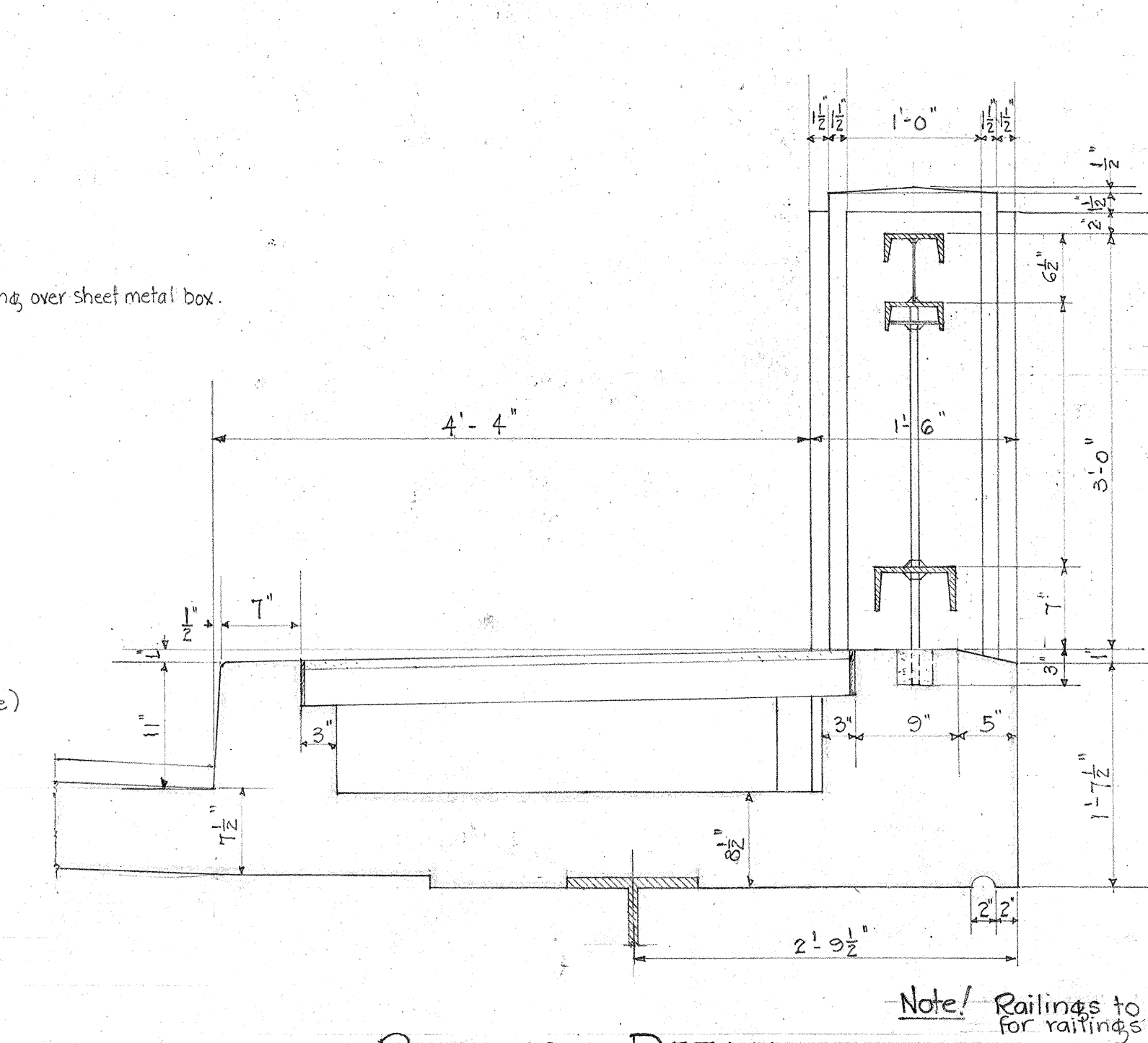
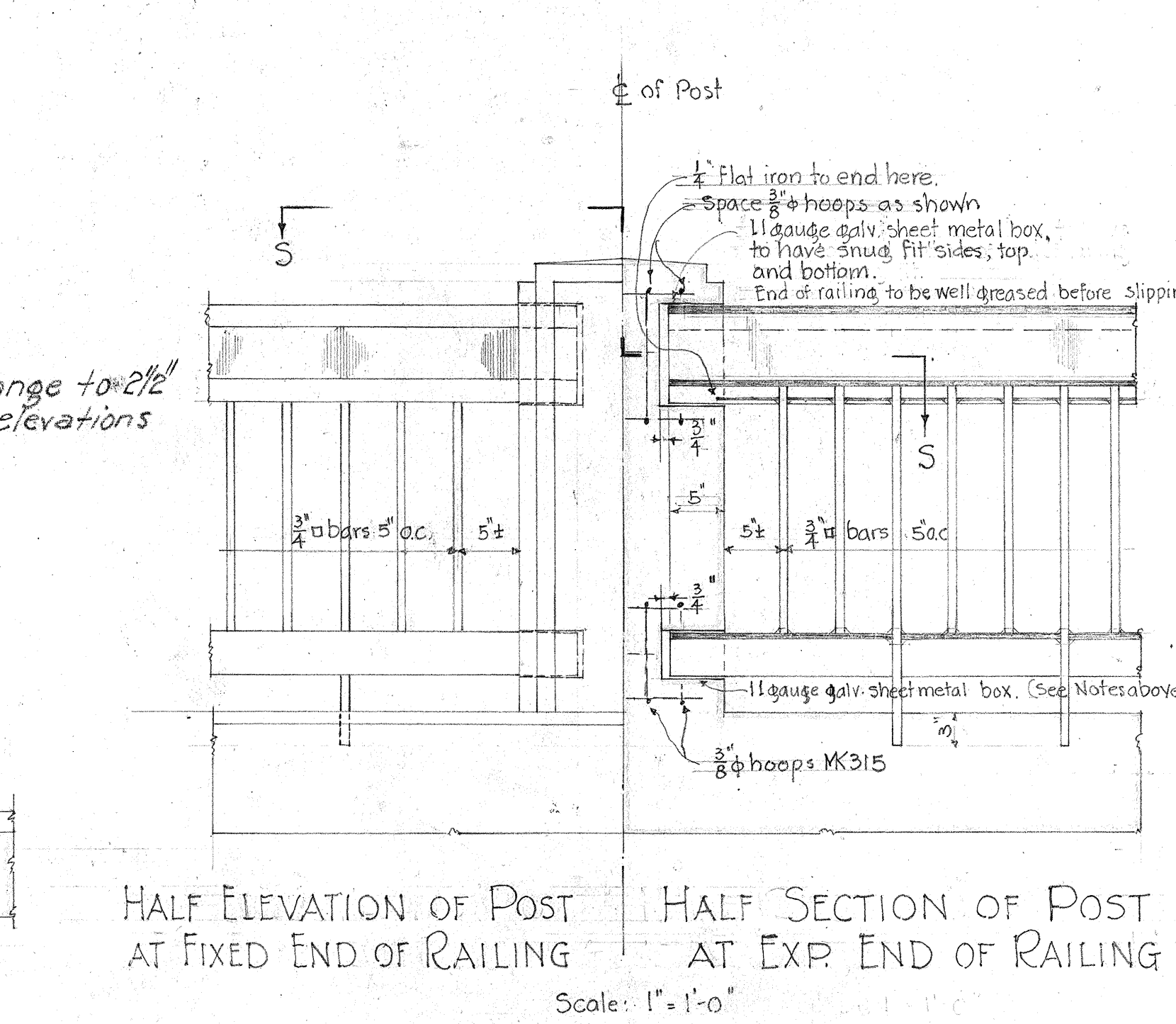
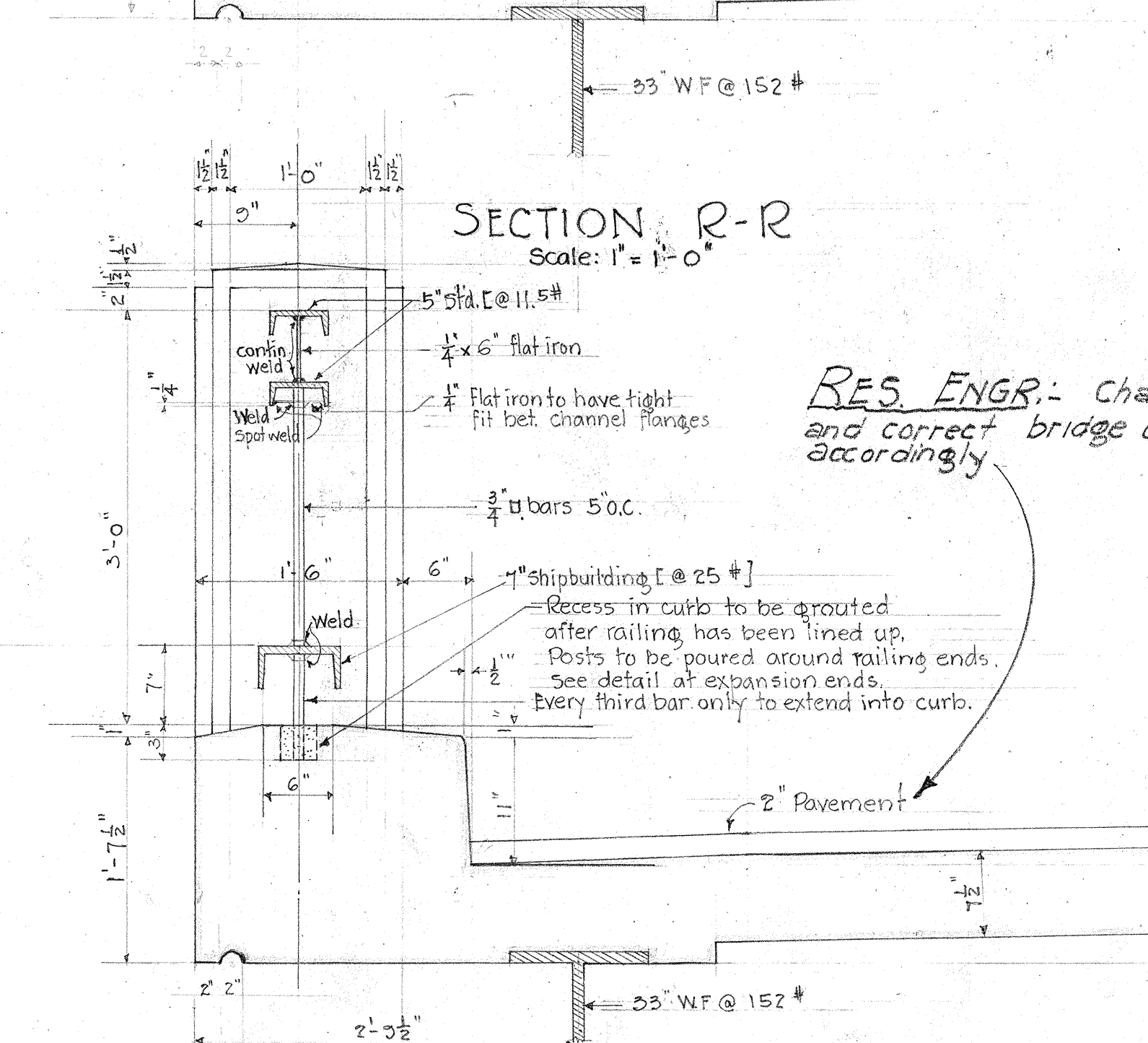
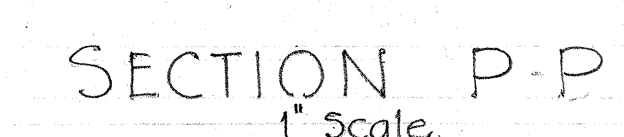
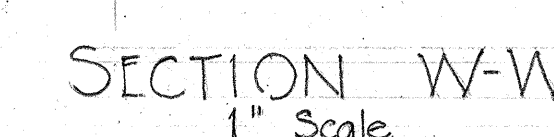
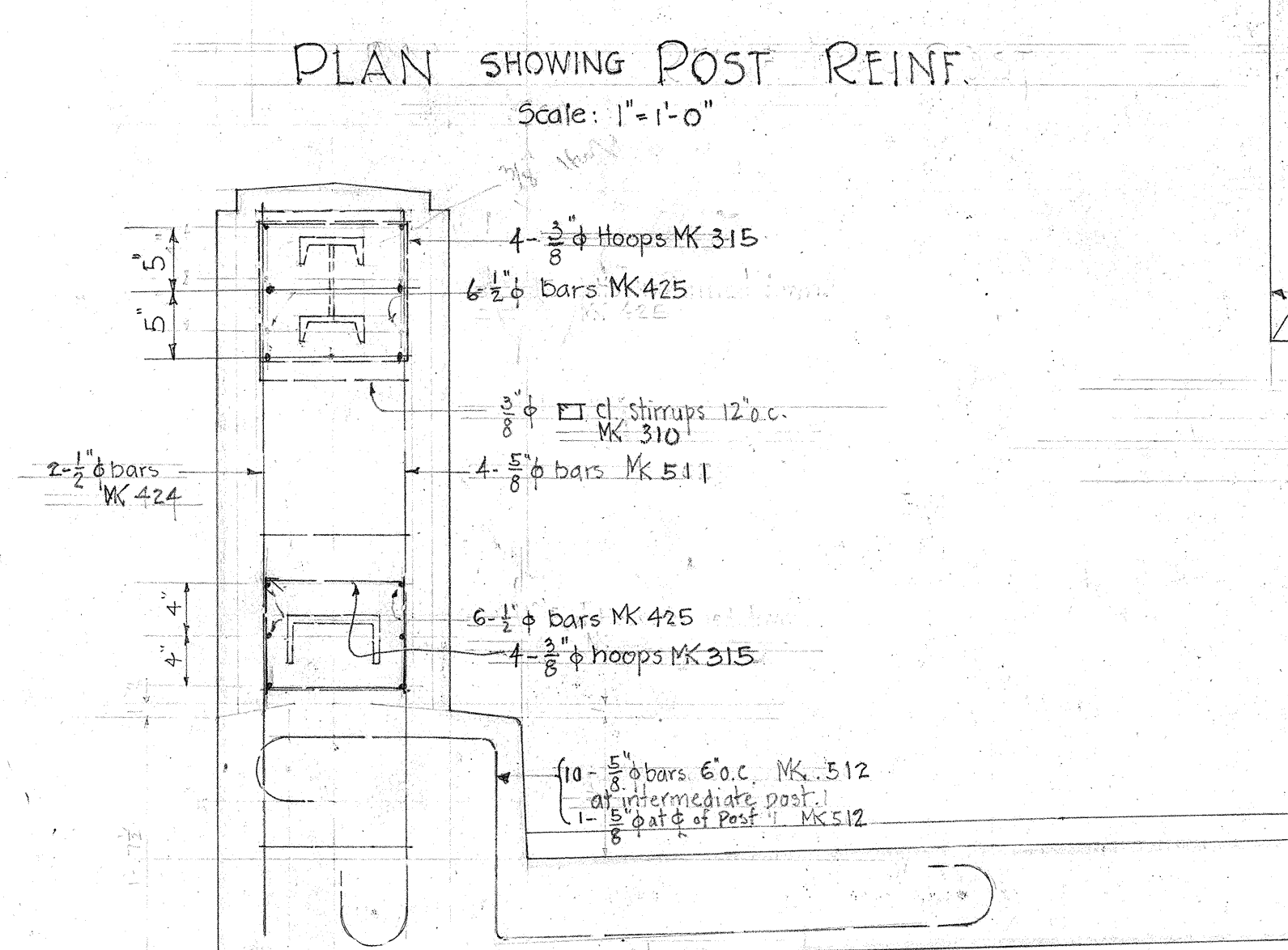
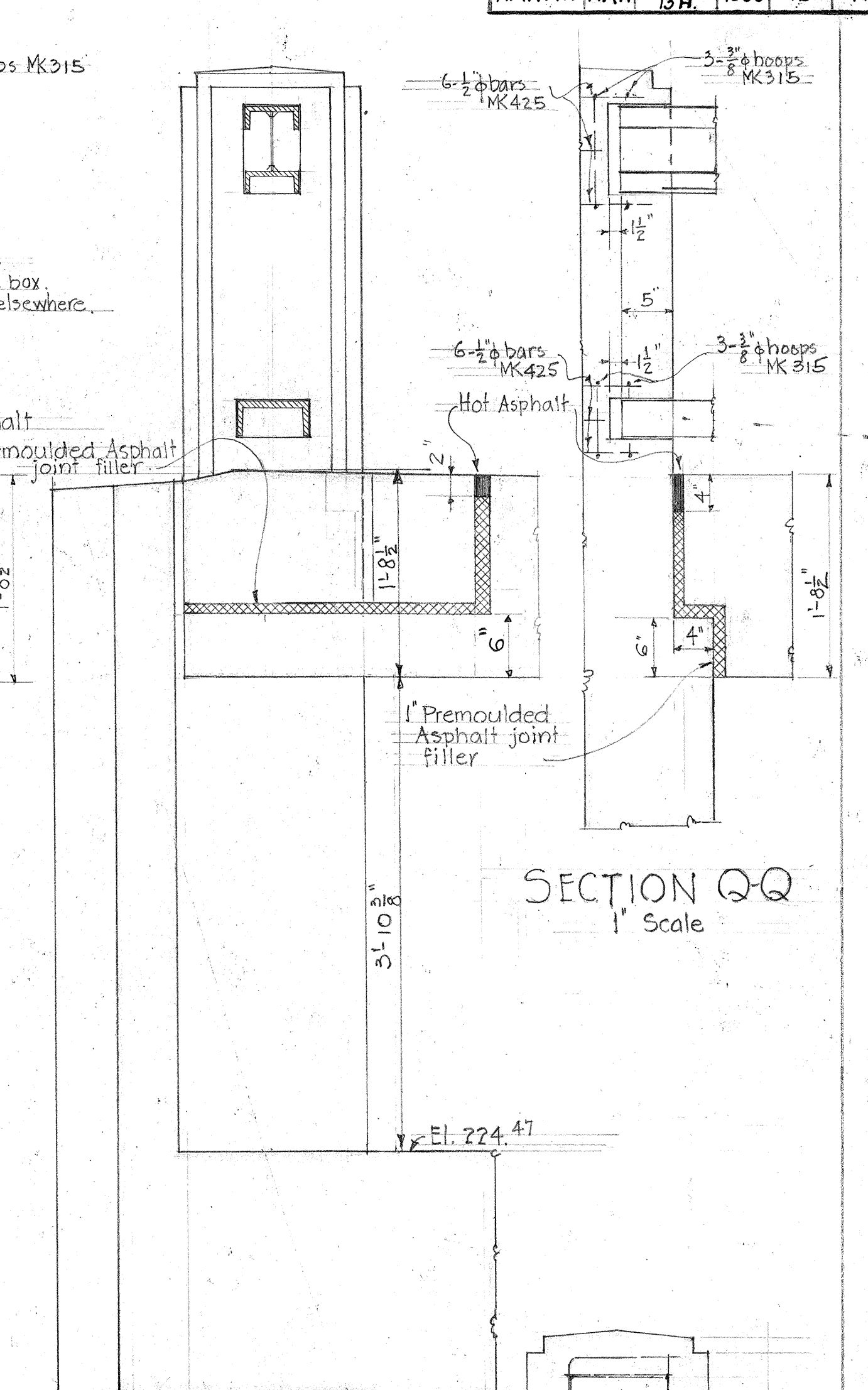
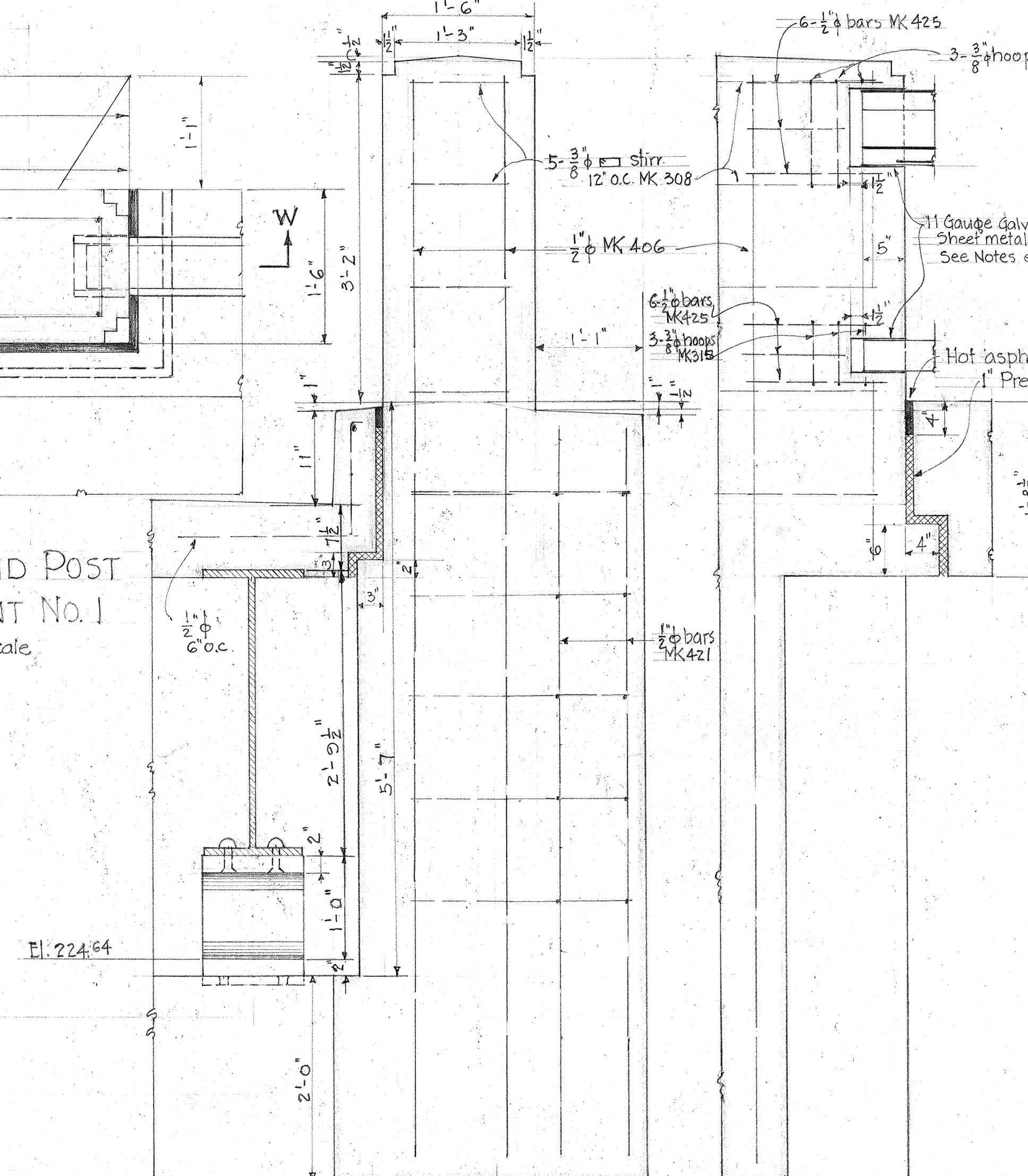
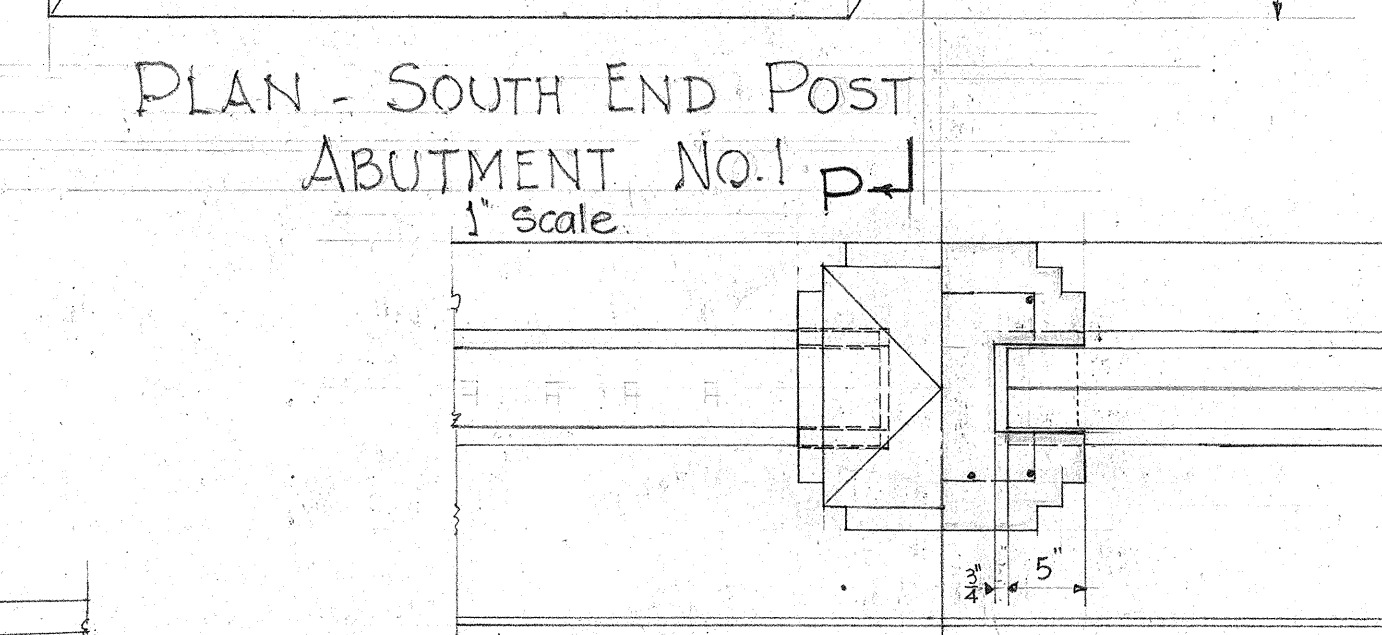
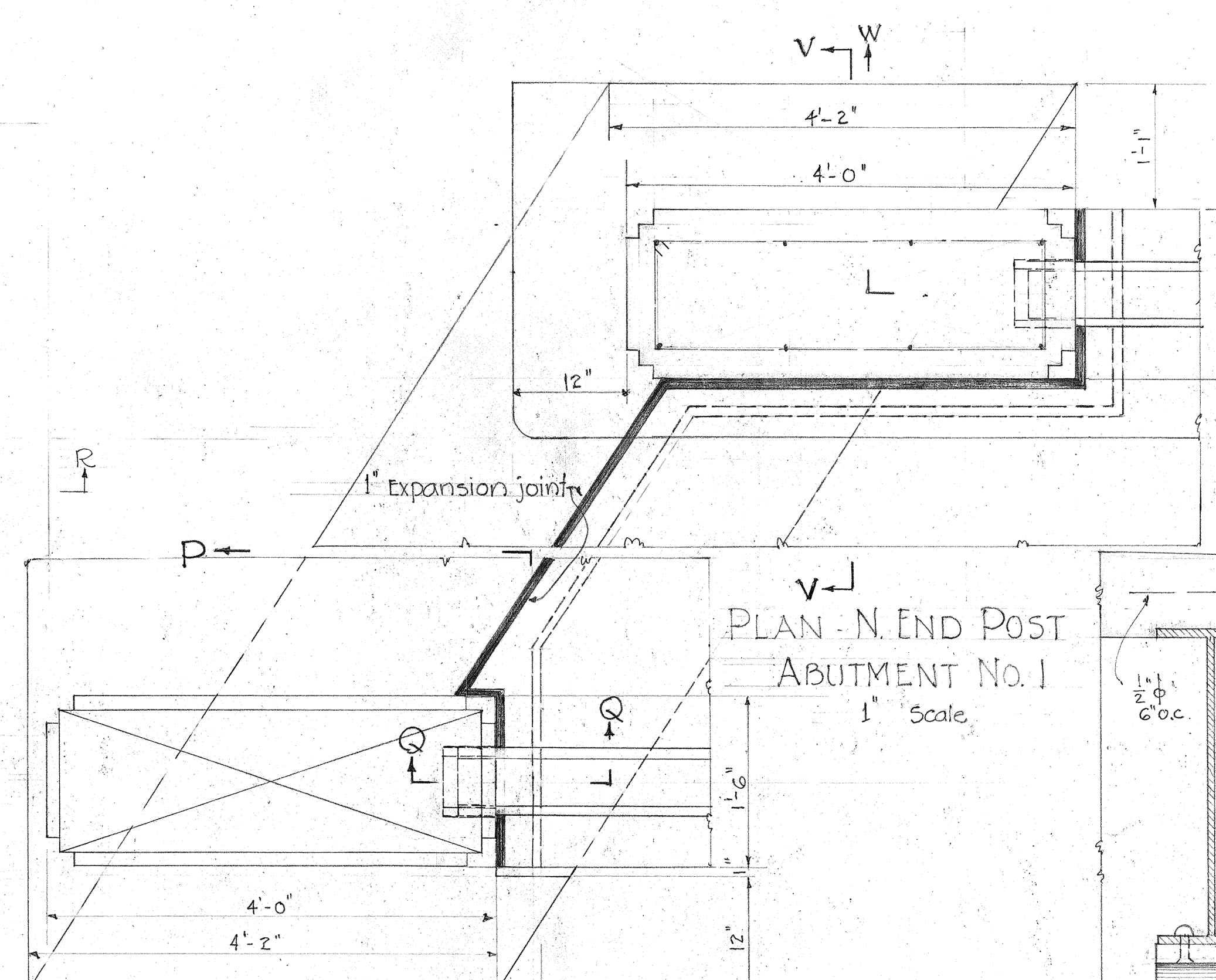
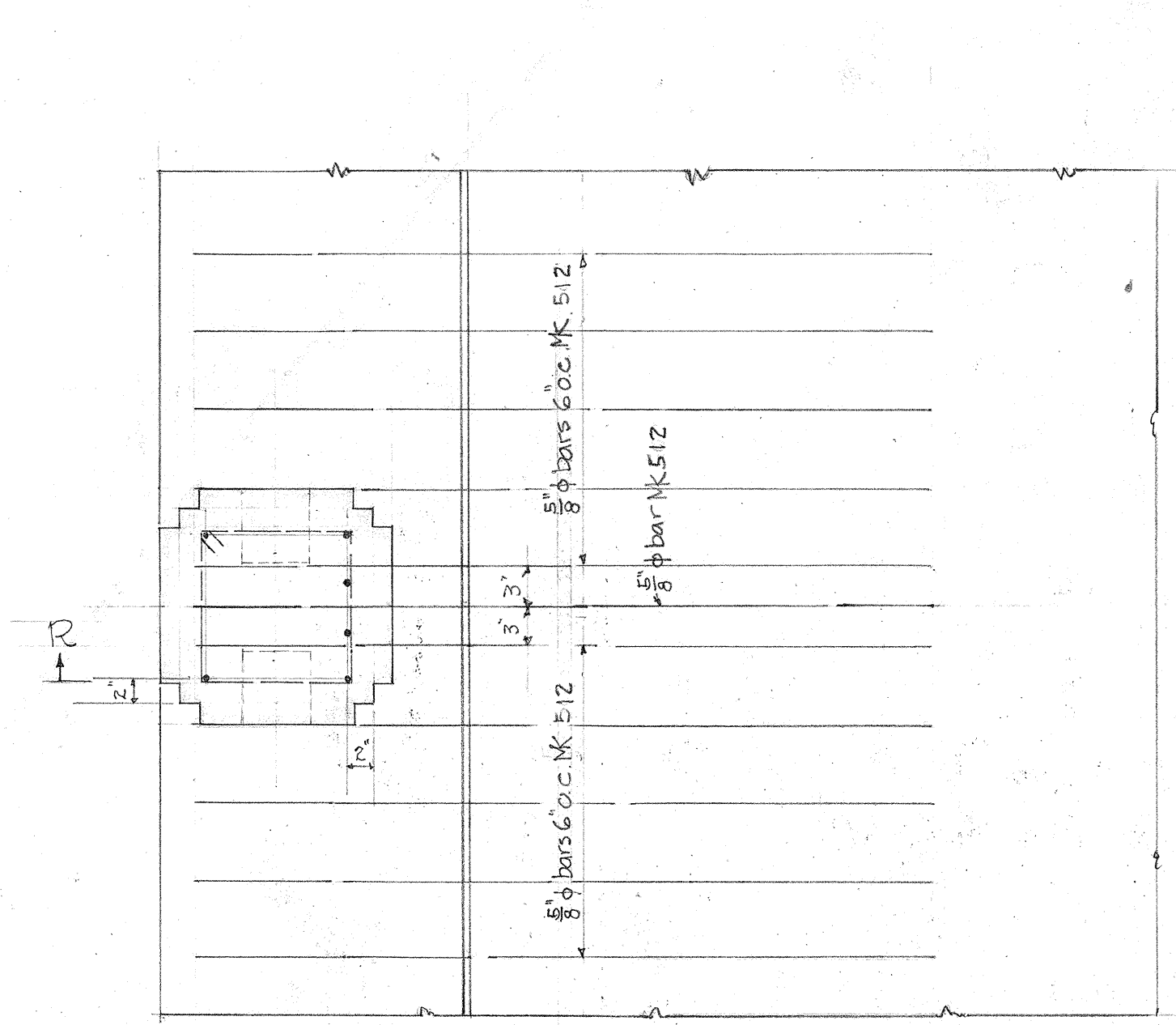
DETAIL OF PRECAST SLAB

6 PAIRS REQUIRED
PHOSPHOR BRONZE
EXPANSION PLATES
Scale $1\frac{1}{2}" = 1'-0"$

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
WAIKALE R.R. OVERPASS
STA 20
WAILUKU KAHULUI ROAD
SHEET No 3 OF 5 SHEETS

4347.10





RES. ENGR: Change to 2 1/2" and correct bridge elevations accordingly

NOTE! All railing ends to be provided with sheet metal box as shown.

NOTE! Railings to be same as for railings on curb.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAIALE R.R. OVERPASS

STA. 20

WAILUKU KAHULUI ROAD

SHEET No 5 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	WPGM 13H	1935	12A	21

❖ CONTRACTORS NOTE ❖

This steel schedule is subordinate to details shown on plans. In case of discrepancy between steel list and detail drawings, the latter shall govern.

The territorial highway Dept. does not assume responsibility for any errors that occur in the steel schedule. Contractor shall check steel schedule before placing order.

All stirrup dimensions are to inside of stirrups: all other dimensions are figured on ϕ of bar.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAIALE R.R. OVERPASS

STA. 20

WAILUKU KAHULUI ROAD

SHEET N^o 5A OF 5 SHEETS

4347.12A

ORIGINAL	SURVEY PLOTTED BY	DATE
PLAN	DESIGNED BY	"
	DRAWN BY	" Jan. 1936
	TRACED BY	"
	QUANTITIES BY	" Nov. 1935
	CHECKED BY	"
NOTE BOOK		
No.		