

CURVE DATA

$\Delta = 25^\circ 24' 20''$
 $R = 1524.50'$
 $D = 3.75833$
 $T = 343.64$ 343.56
 $L = 475.98$
 $S.E. = 0.094$ 675.83

DESIGN DATA:

H 20-516-44 Loading
 $f_c = 20,000$ #
 $f_s = 1,000$ #
 $f_c = 1,200$ # (For negative moments
 $n = 10$ in girders)

MATERIALS:

All concrete except in piles, #5, W.W.
 Abut #2, Class A-1 Concrete in piles, Class E-1
 Conc. in Rt. W.W. Abut #2, Class C-1.

CONSTR. METHOD

Curb, sidewalk, railing, and railing posts shall be poured after release of falsework.

NOTE:

For Boring Data see Sheet # 3
 Boring Data for B-1 to B-6 inclusive will be furnished upon request.
 Note to Bureau of Public Roads:
 These borings are shown on Drawing 54074 of F-47(3).

Contractor's attention is called to the fact that reinforcing steel corrugations must be in accordance with the requirements of A.S.T.M. A305-49

Backfill:

Backfill behind abutment wall to be in place prior to superstructure pour

LAYOUT PLAN

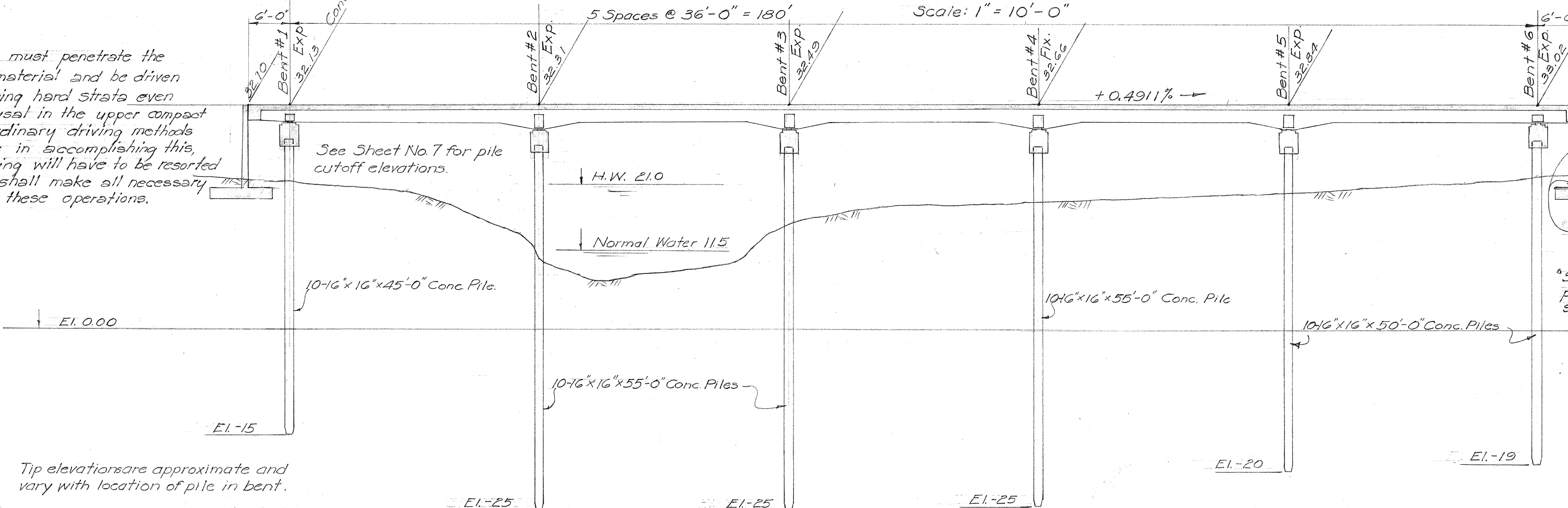
Scale: 1" = 10'-0"

Note: Structure to be constructed on curve.

ESTIMATED QUANTITIES

ITEM	SUPERSTRUCT	DECK	SIDEWALK	ABUT #1	ABUT #2	PIERS	TOTAL
Class 'A-1' Conc.	314.2	42.7	58.4	58.4	58.4	58.4	542.0 CY 344.2
Class 'C-1' Conc.	312.7	43.3	51.5	51.5	51.5	51.5	315.0 CY 43.0
Reinf. Steel	88,126	32	4,208	5,287	7,500	106,162	106,162 #
Struct. Exc.	88,115			23 CY	11 CY		100 CY 137
Precast Conc. Piles	50		103	78			3100 Lin. Ft.
A.C. Pavement	45 Tons						50 45 Tons
Dampproofing				151 sq. ft.	171 sq. ft.		322 sq. ft.
Type 'G' GI Frame							1
Tend. Grating							
Concrete Railing							404 Lin. Ft.
Bituminous Tack Coat							128 sq. ft.

Note: All piles must penetrate the layers of soft material and be driven into the underlying hard strata even in case of refusal in the upper compact material. If ordinary driving methods are not effective in accomplishing this, jetting or drilling will have to be resorted to. Contractor shall make all necessary preparation for these operations.



SECTION ALONG & RDWY.

1" = 10'-0"

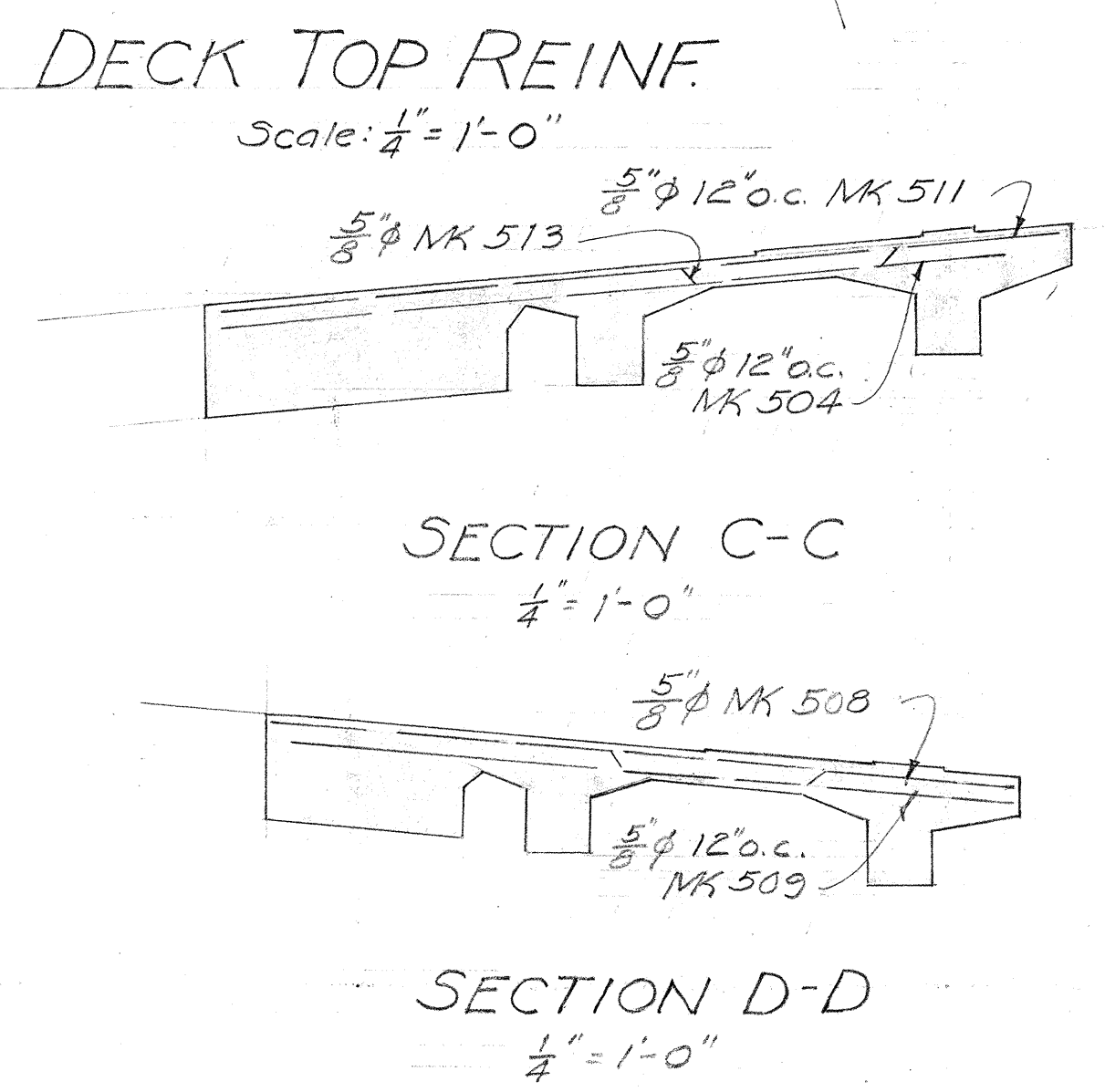
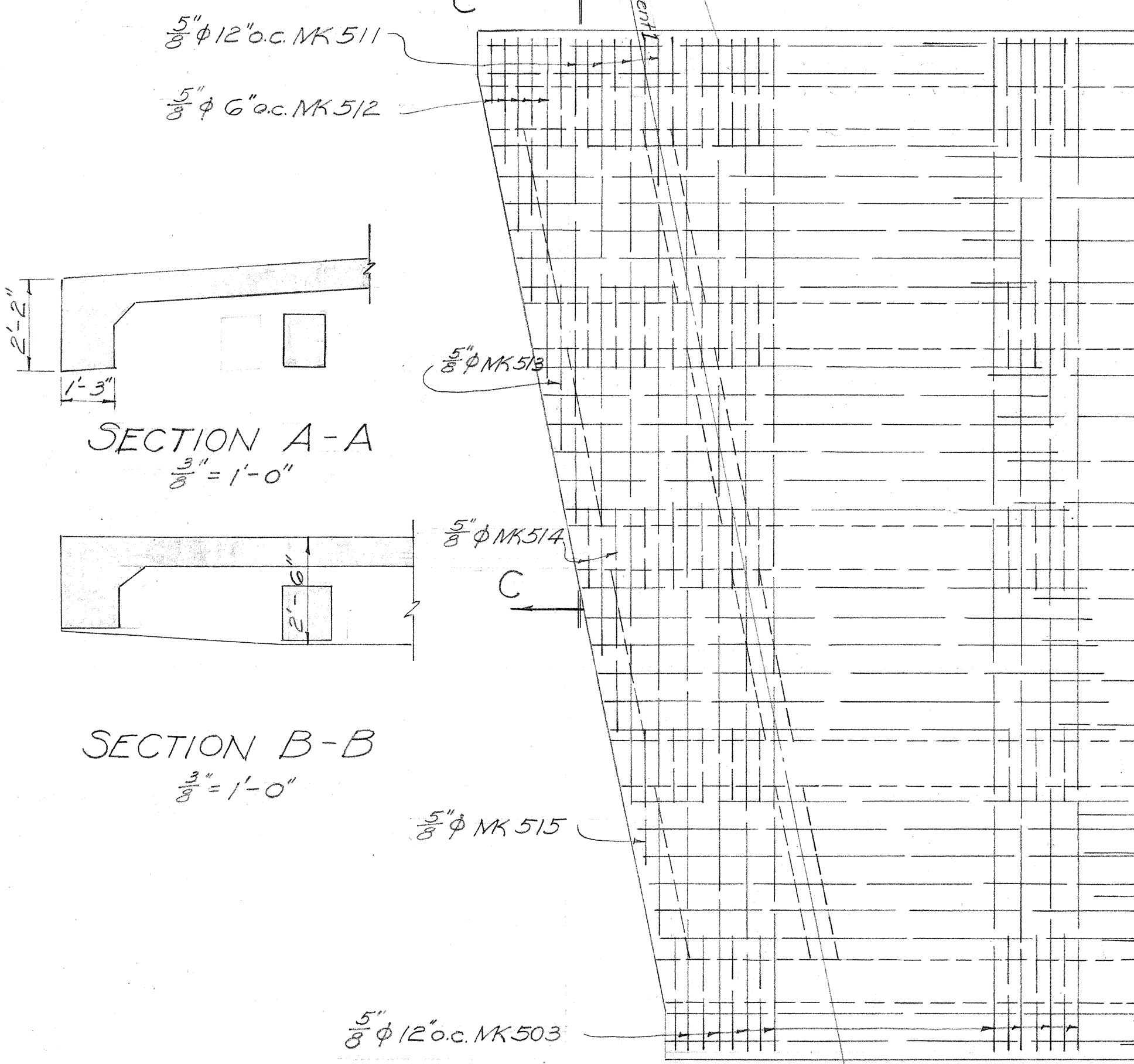
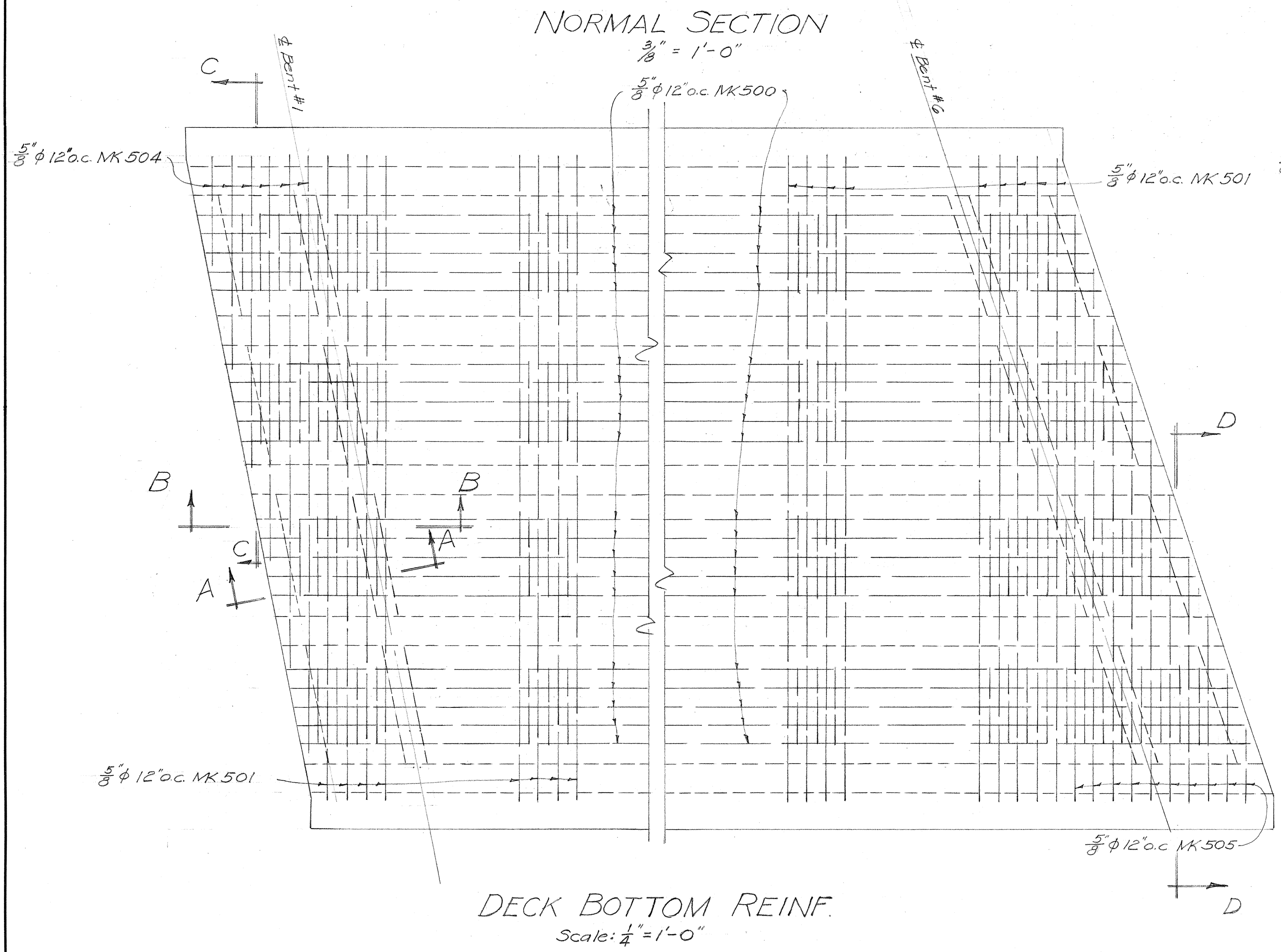
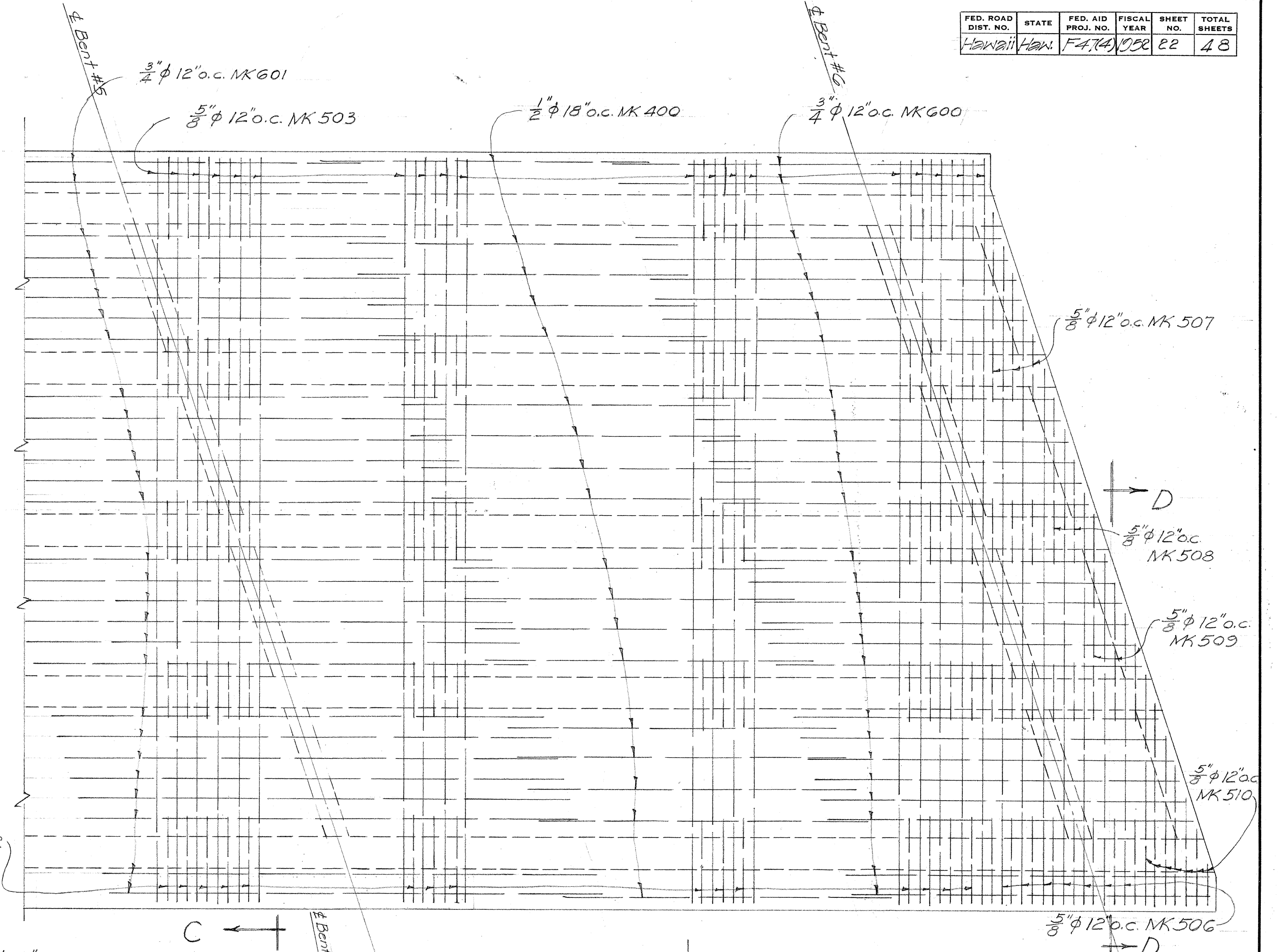
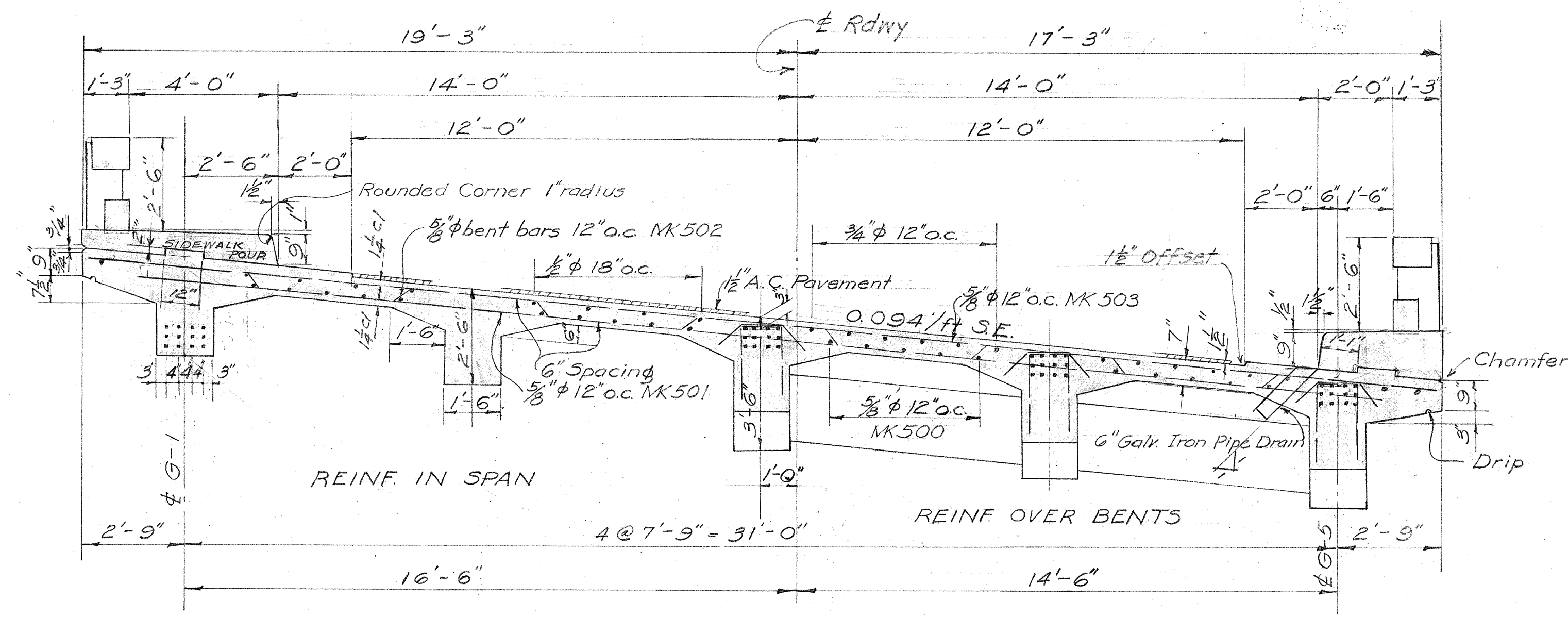
TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII

WAIKAWA CUTOFF BRIDGE
 Sta. 33+57.07 to Sta. 35+50.97

WAIKAWA CUTOFF F-47(4)
 August 1950

SHEET NO. 1 OF 7 SHEETS

5479.21

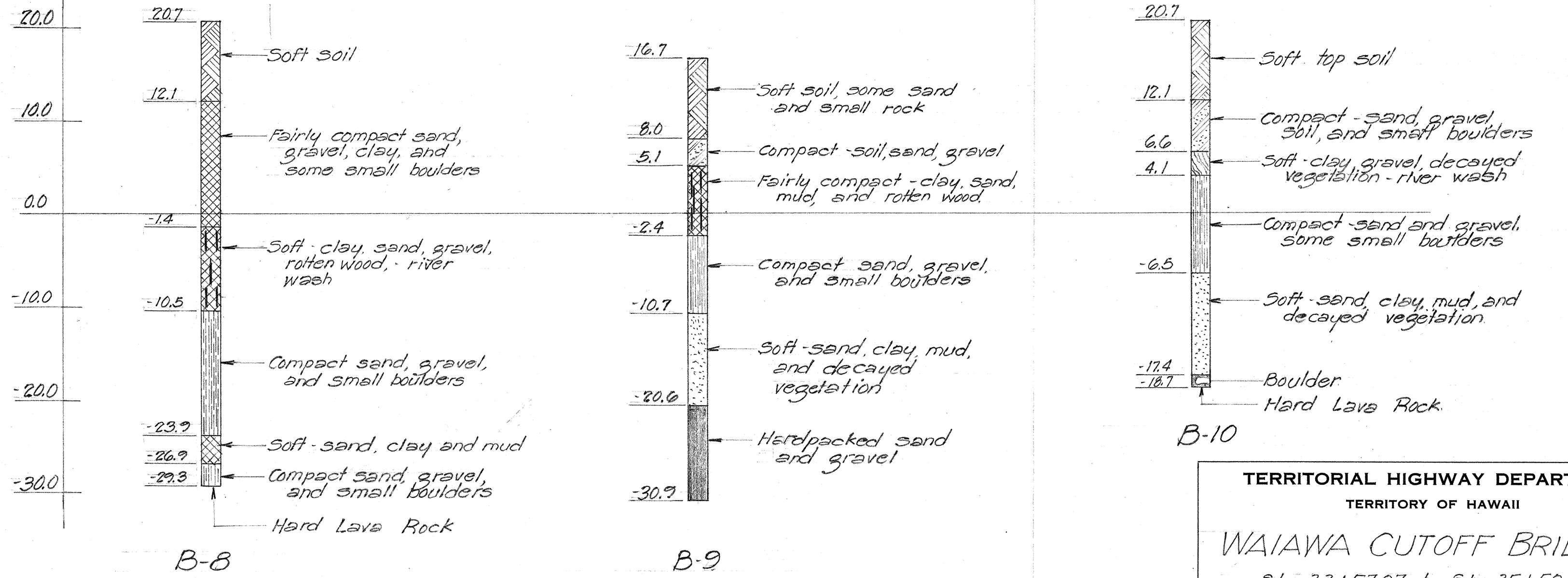
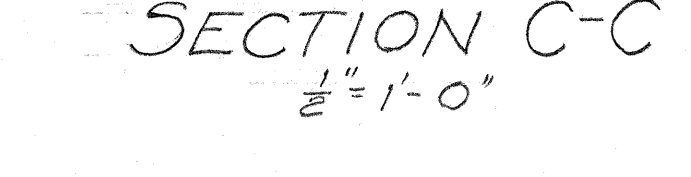
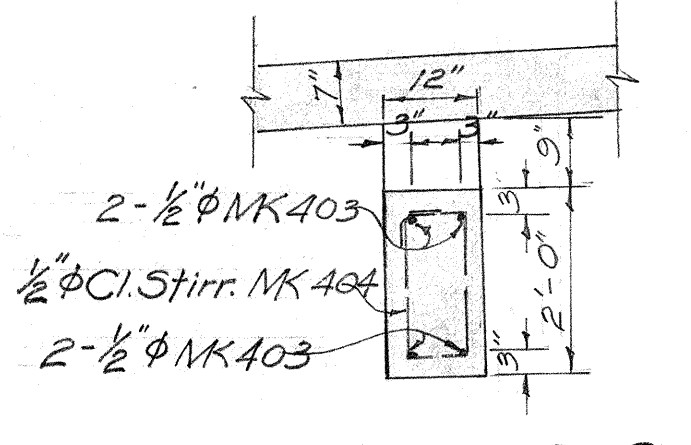
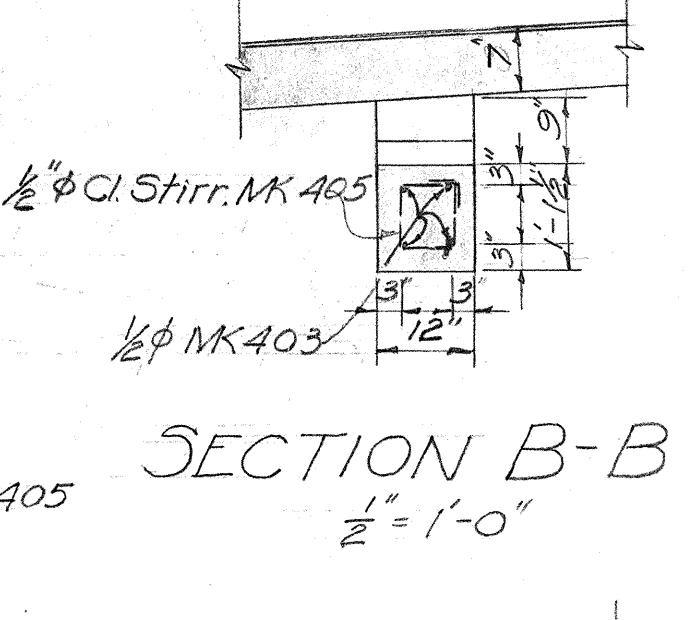
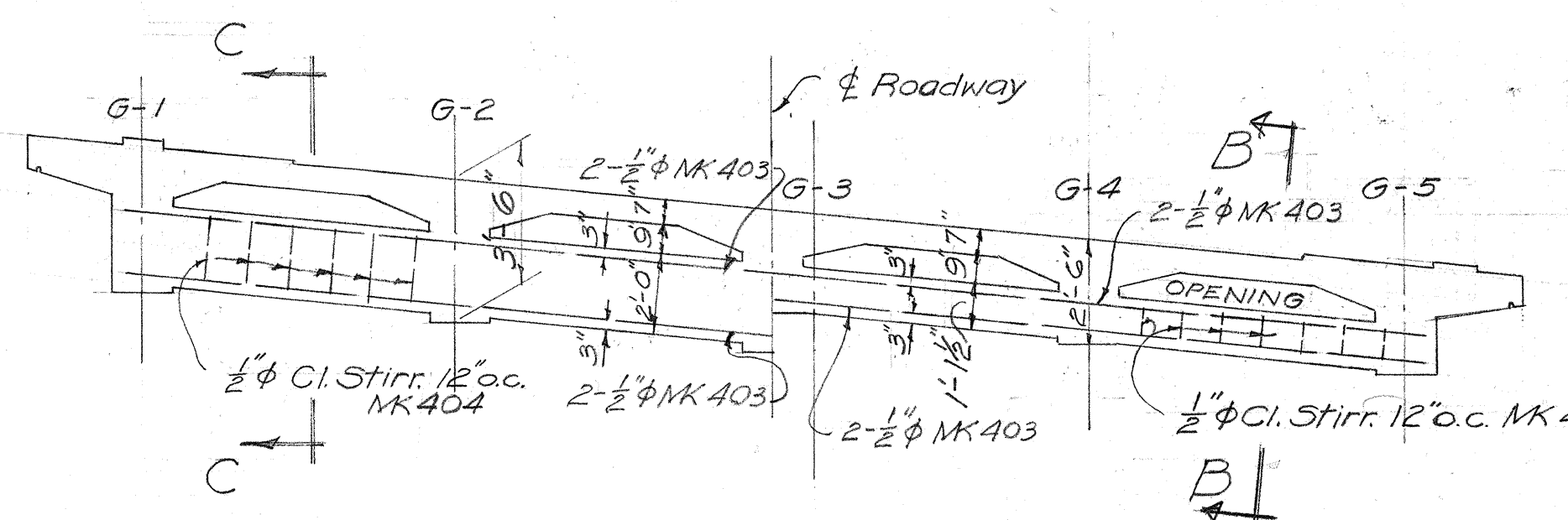
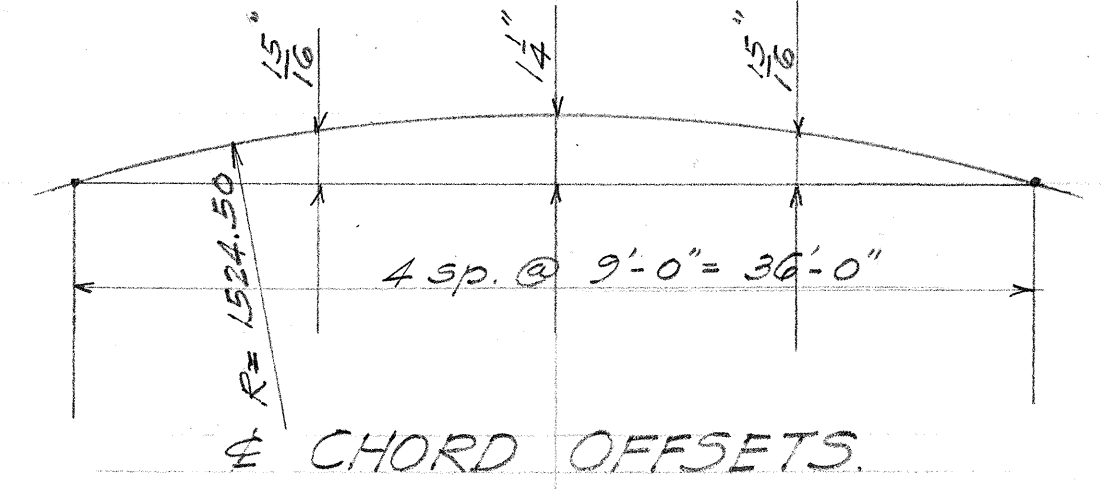
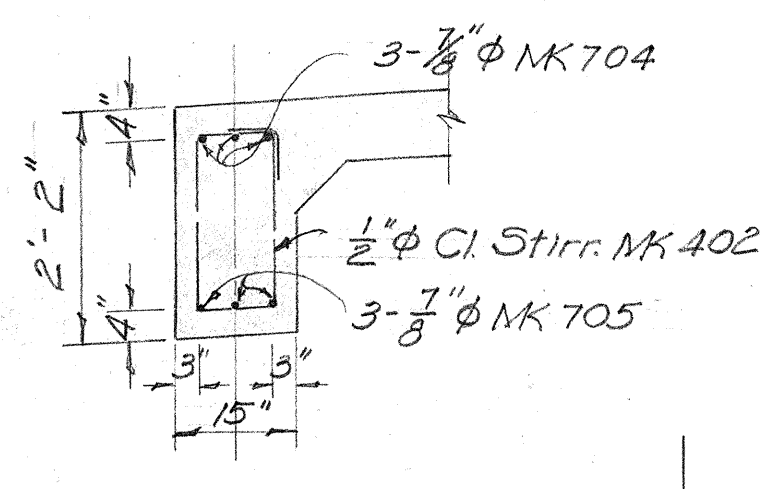
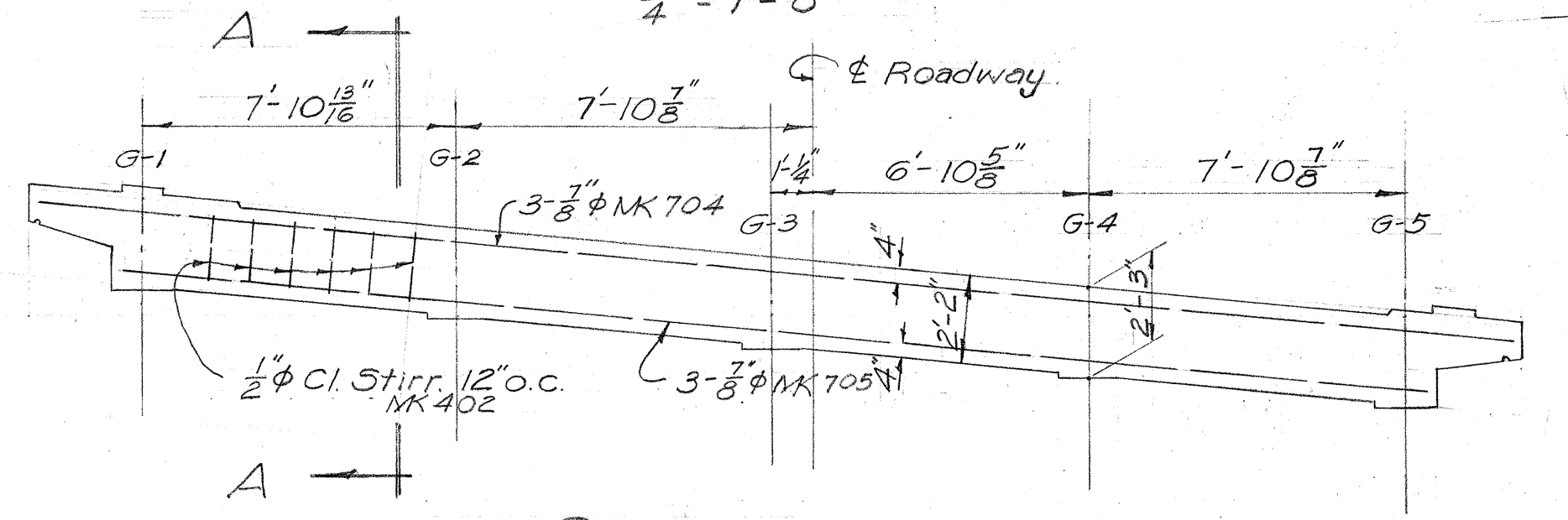
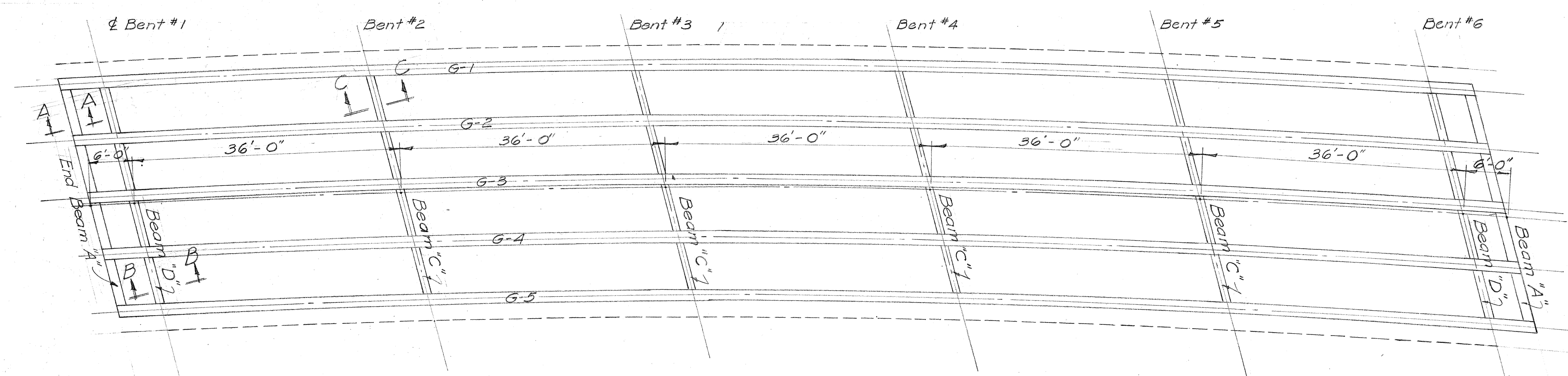
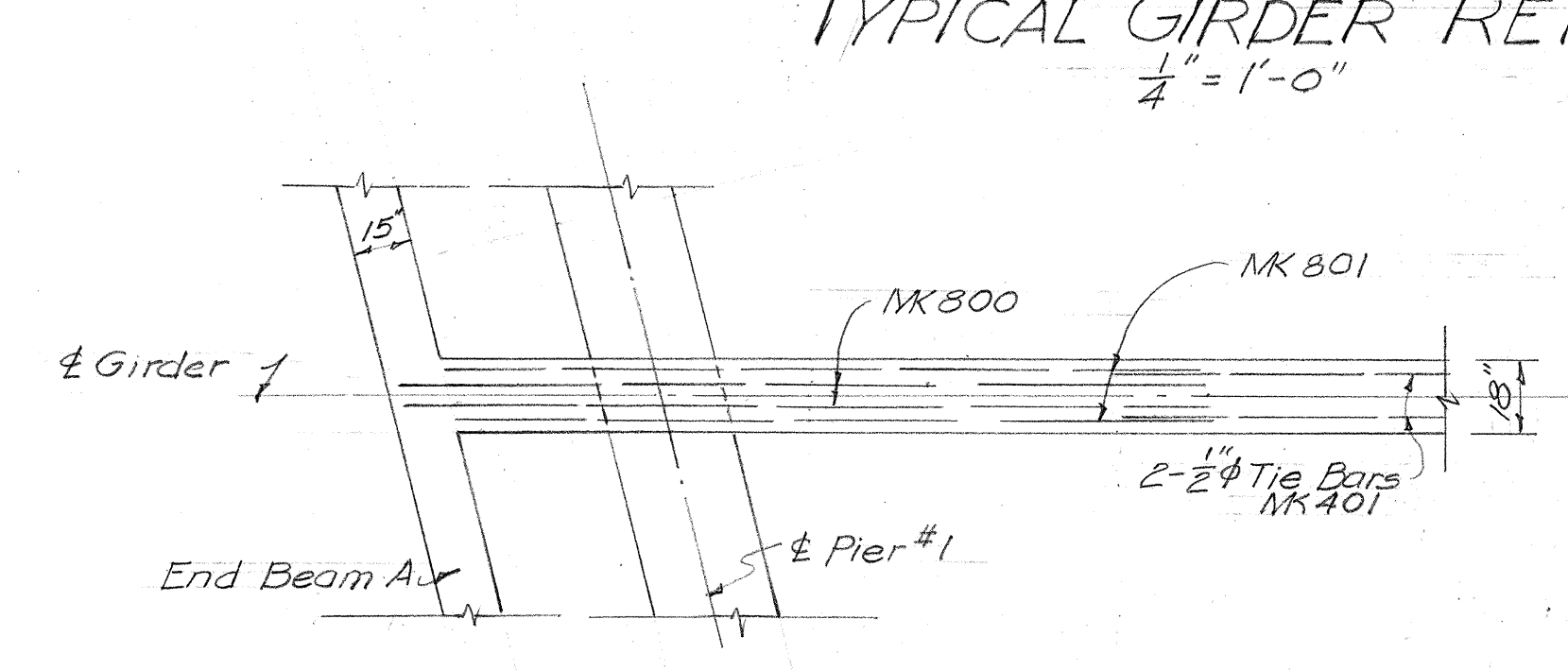
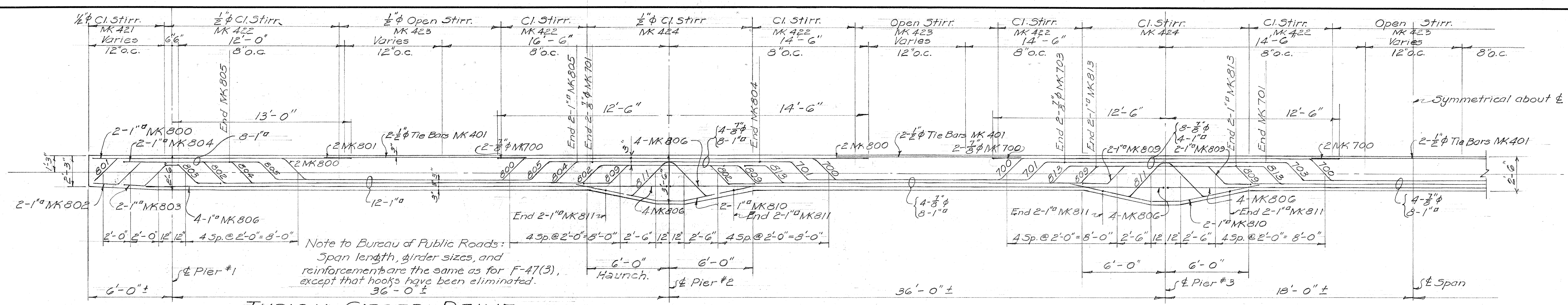


TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAIAWA CUTOFF BRIDGE
Sta. 33+57.07 to Sta. 35+50.97

WAIAWA CUTOFF F-47(4)
August 1950

SURVEY PLOTTED BY: BARTHEL'S
DATE: 4/24/50
ORIGINAL PLAN
NOTE BOOK
NO.

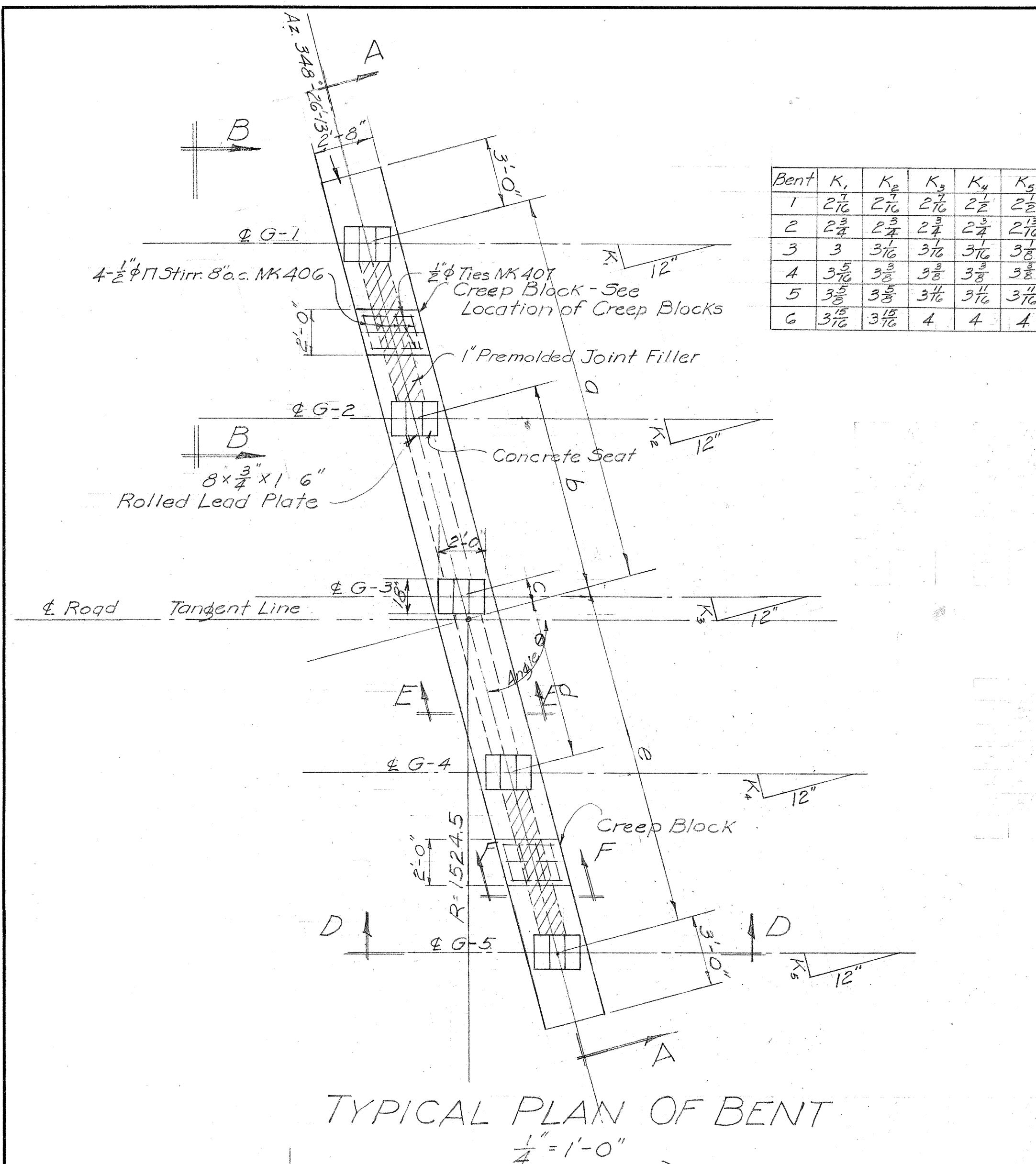


NOTE: Creep Block Key not shown. See Sheet 4

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII

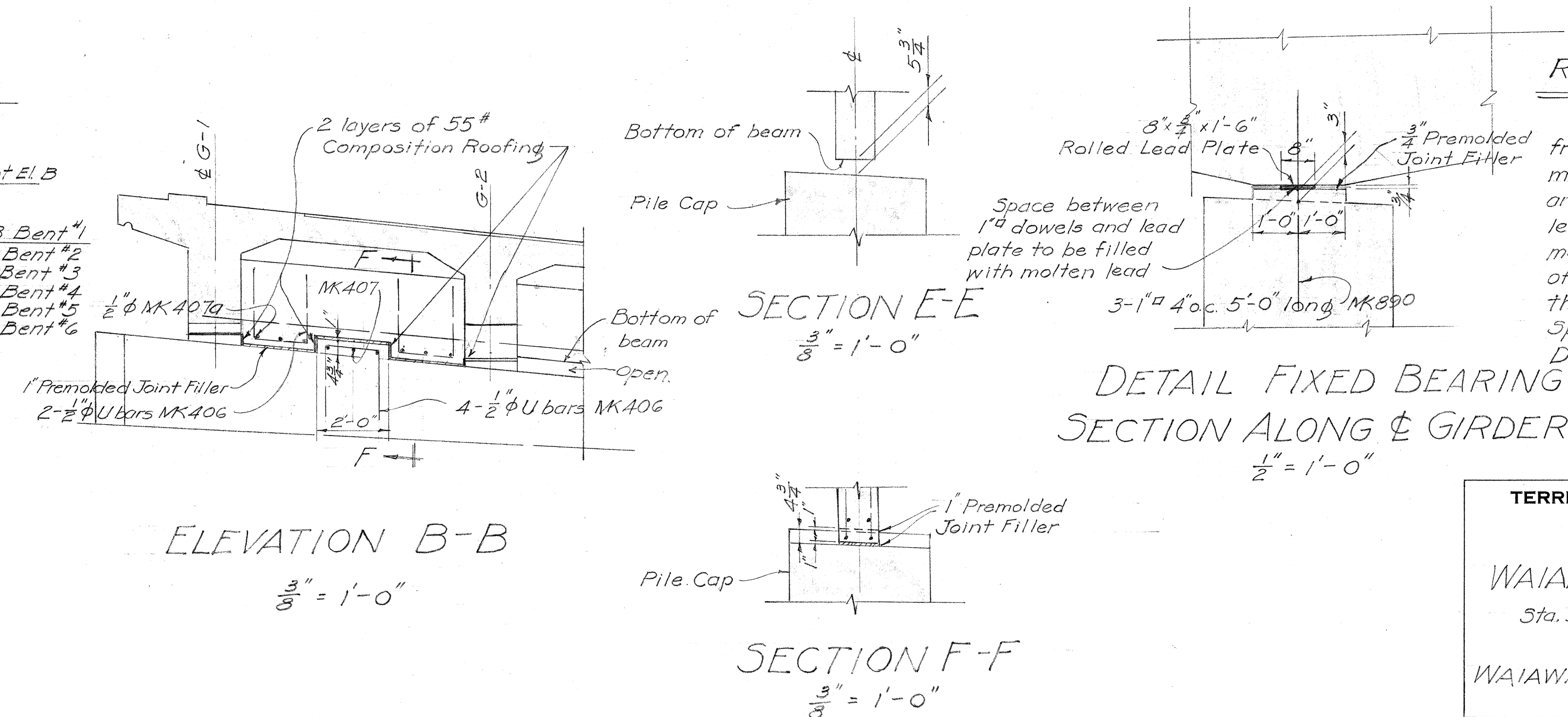
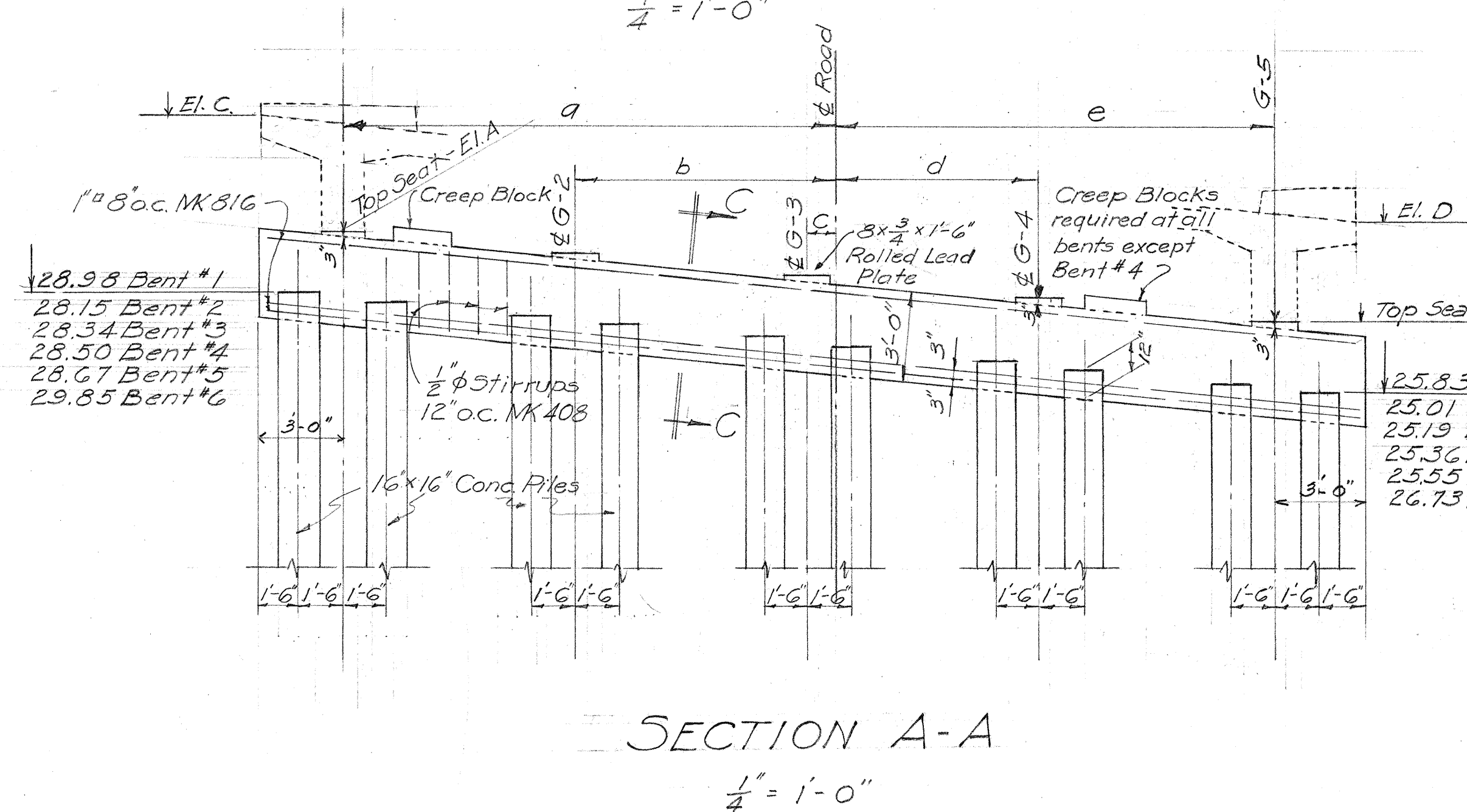
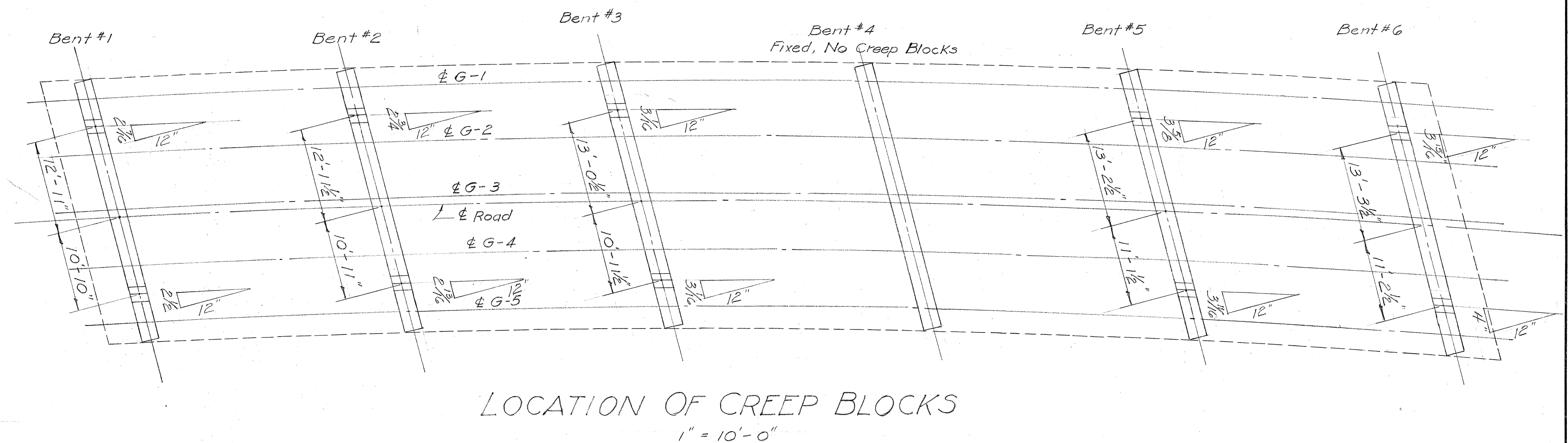
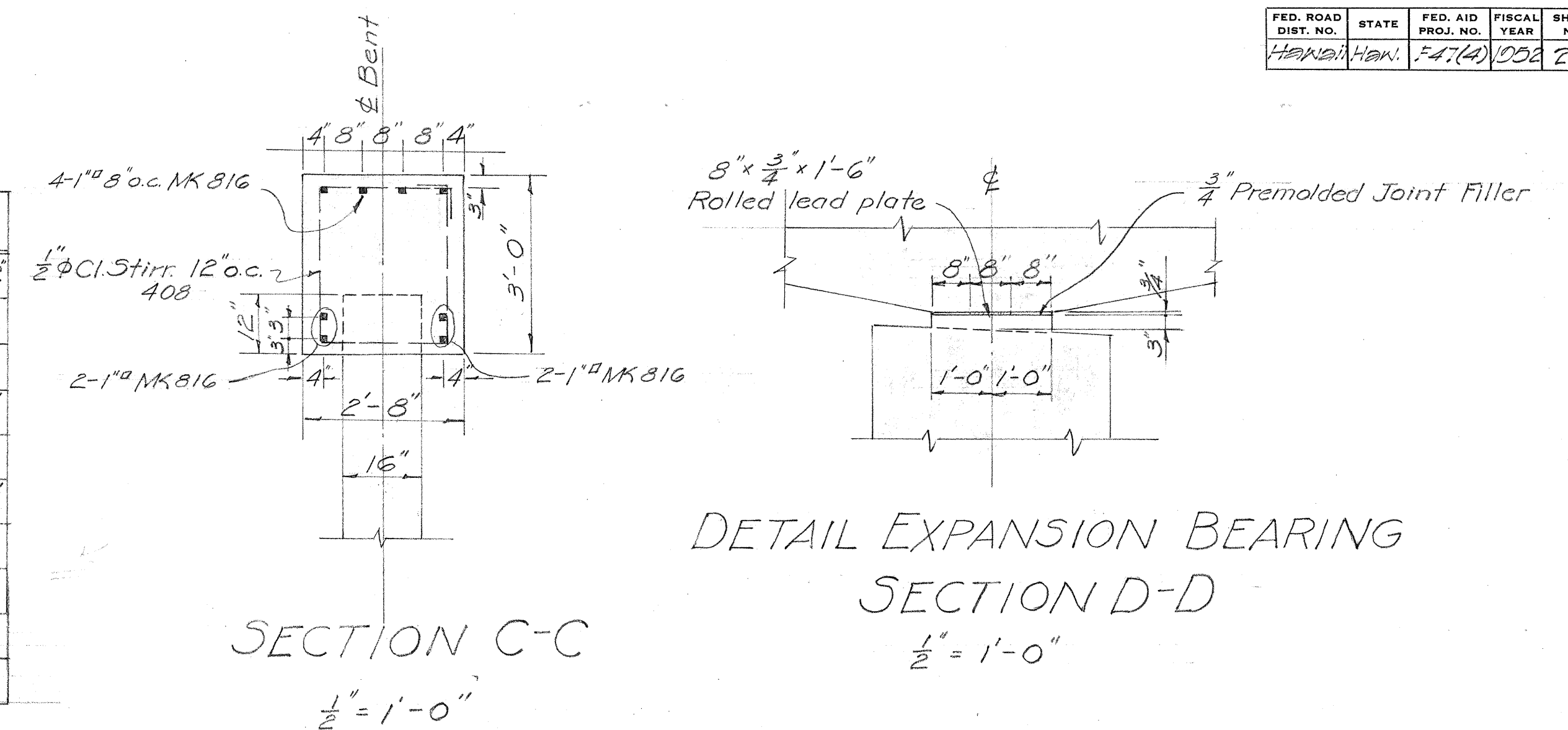
WAIAWA CUTOFF BRIDGE
 Sta. 33+57.07 to Sta. 35+50.97

WAIAWA CUTOFF F-47(4)
 August 1950



Bent	K_1	K_2	K_3	K_4	K_5
1	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$
2	$2\frac{3}{4}$	$2\frac{3}{4}$	$2\frac{3}{4}$	$2\frac{3}{4}$	$2\frac{13}{16}$
3	3	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{3}{4}$
4	$3\frac{5}{8}$	$3\frac{5}{8}$	$3\frac{5}{8}$	$3\frac{5}{8}$	$3\frac{3}{2}$
5	$3\frac{5}{8}$	$3\frac{5}{8}$	$3\frac{11}{8}$	$3\frac{11}{8}$	$3\frac{11}{4}$
6	$3\frac{15}{8}$	$3\frac{15}{8}$	4	4	4

	Bent #1	#2	#3	#4	#5	#6
Angle θ	78°-22'-57"	77°-01'-46"	75°-40'-35"	74°-19'-24"	72°-58'-13"	71°-37'-01"
a	16'-10 $\frac{1}{8}$ "	16'-11 $\frac{1}{8}$ "	17'-0 $\frac{1}{4}$ "	17'-1 $\frac{1}{16}$ "	17'-3"	17'-4 $\frac{1}{2}$ "
b	8'-11 $\frac{3}{16}$ "	8'-11 $\frac{3}{16}$ "	9'-0 $\frac{5}{16}$ "	9'-1"	9'-1 $\frac{1}{16}$ "	9'-2 $\frac{1}{8}$ "
c	1'-0 $\frac{1}{4}$ "	1'-0 $\frac{5}{16}$ "	1'-0 $\frac{3}{8}$ "	1'-0 $\frac{1}{16}$ "	1'-0 $\frac{1}{16}$ "	1'-0 $\frac{5}{8}$ "
d	6'-10 $\frac{1}{16}$ "	6'-11 $\frac{1}{8}$ "	6'-11 $\frac{5}{8}$ "	7'-0 $\frac{1}{8}$ "	7'-0 $\frac{3}{4}$ "	7'-1 $\frac{1}{8}$ "
e	14'-9 $\frac{1}{16}$ "	14'-10 $\frac{5}{8}$ "	14'-11 $\frac{5}{8}$ "	15'-0 $\frac{3}{4}$ "	15'-2 $\frac{1}{16}$ "	15'-3 $\frac{1}{8}$ "
Elev. A Top Seat/GG1	31.11	30.28	30.46	30.63	30.80	31.98
Elev. B Top Seat/GG5	28.23	27.41	27.58	27.76	27.94	29.12
Elev. C	34.05	34.23	34.40	34.58	34.75	34.93
Elev. D	30.66	30.84	31.02	31.20	31.37	31.55



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 B29.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

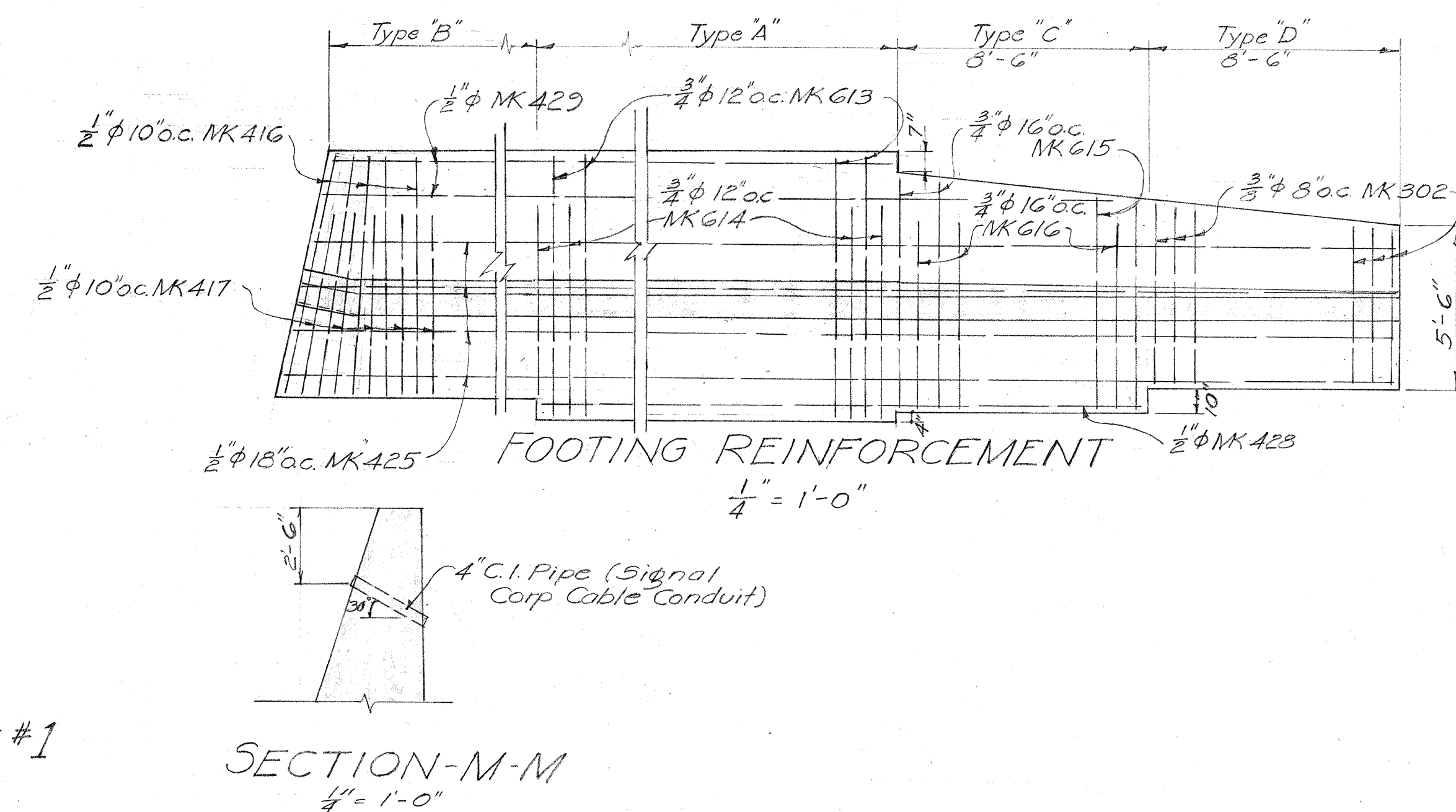
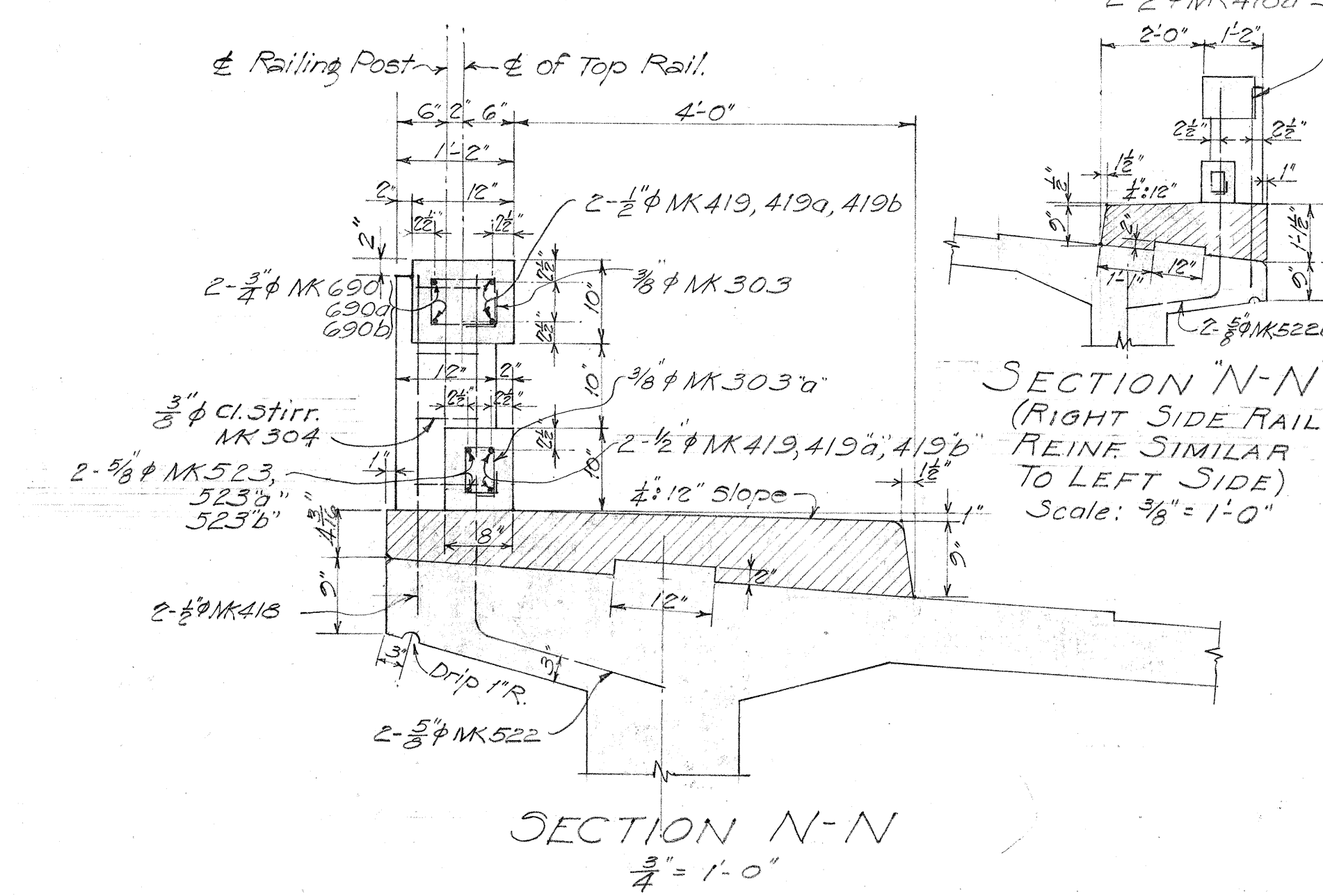
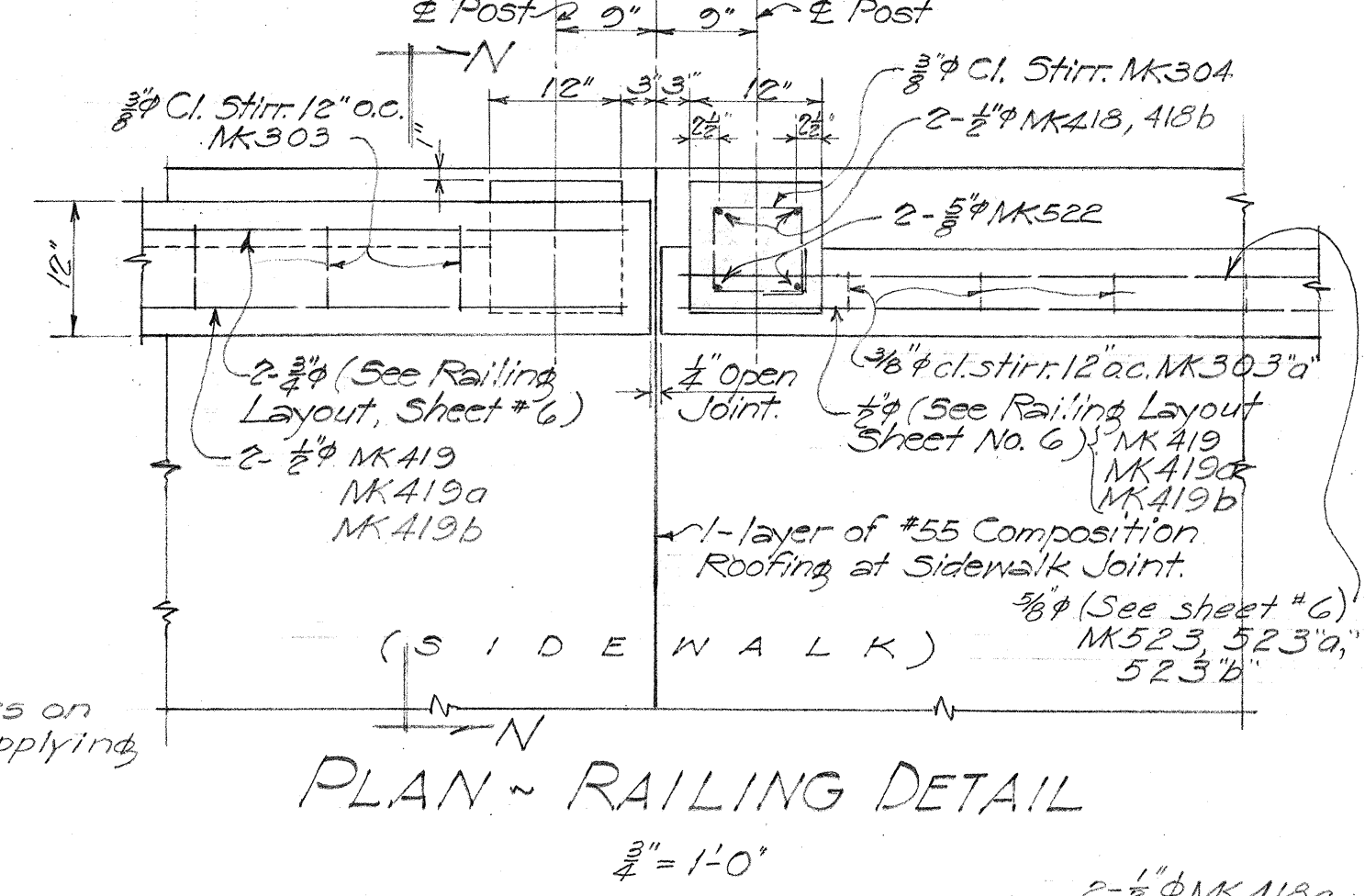
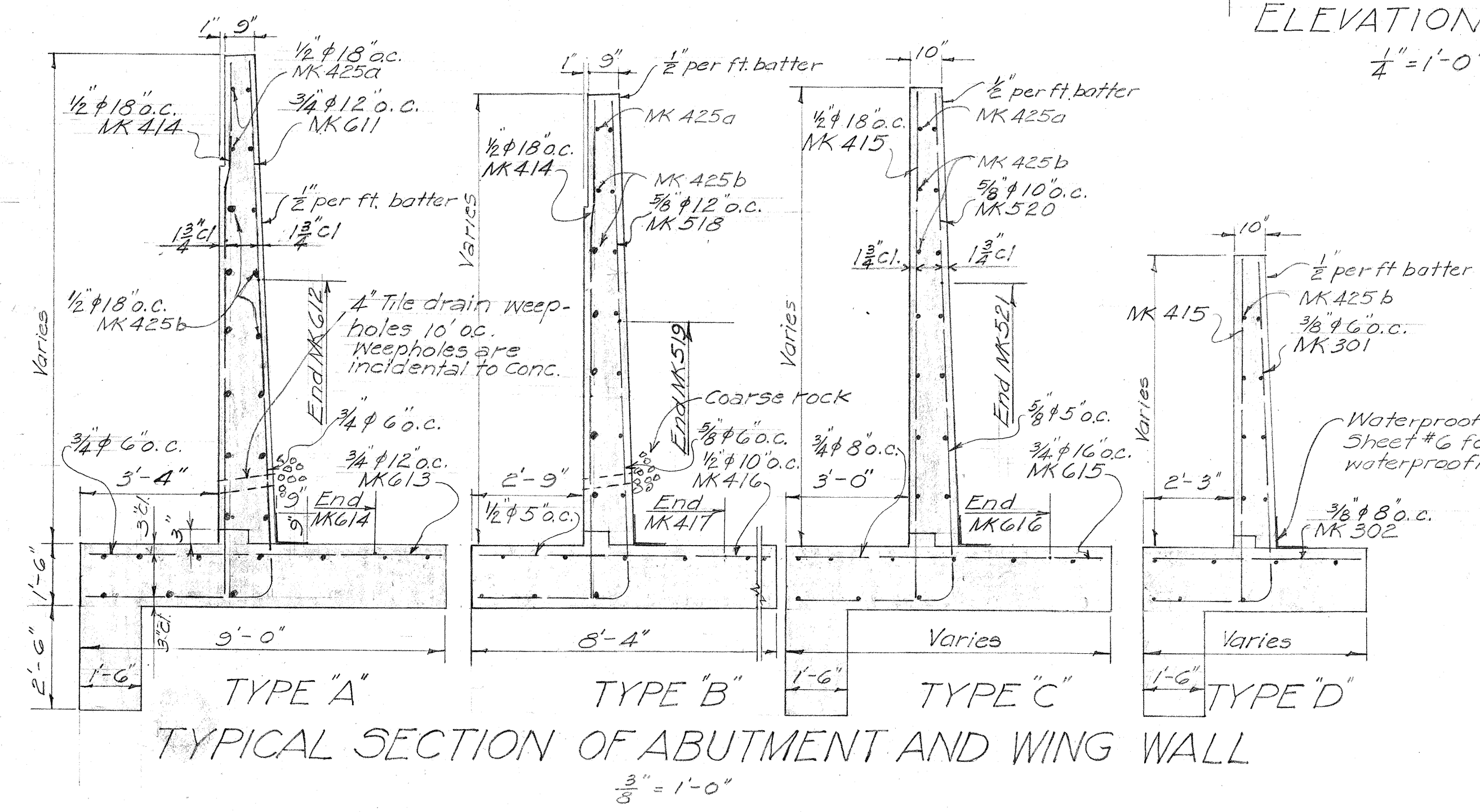
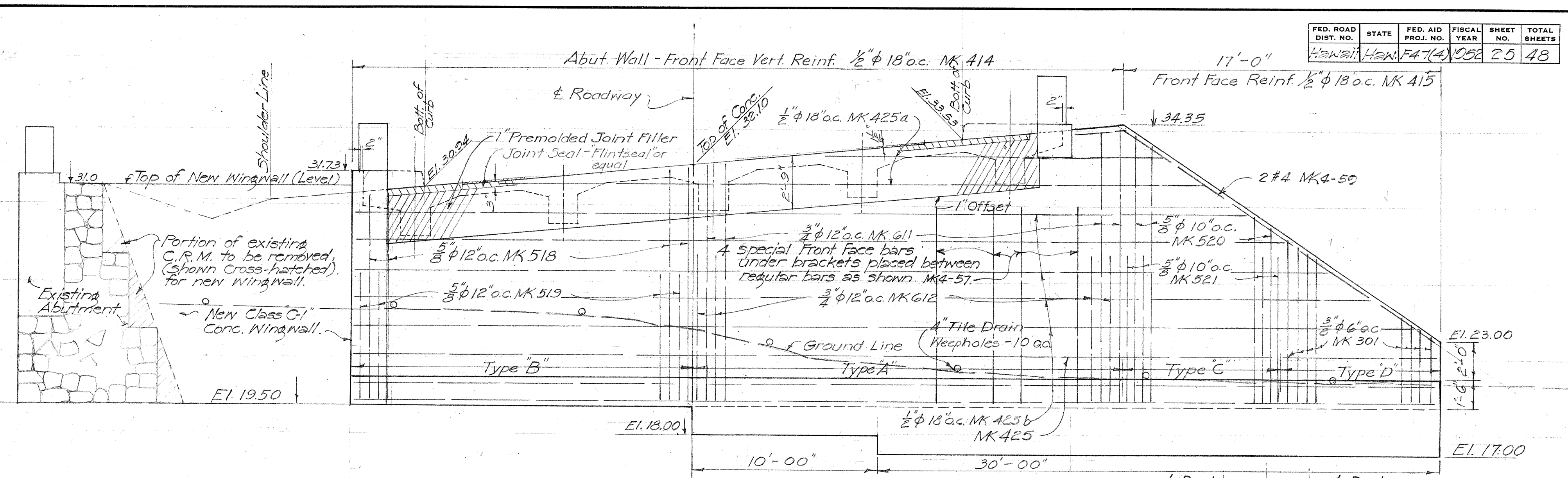
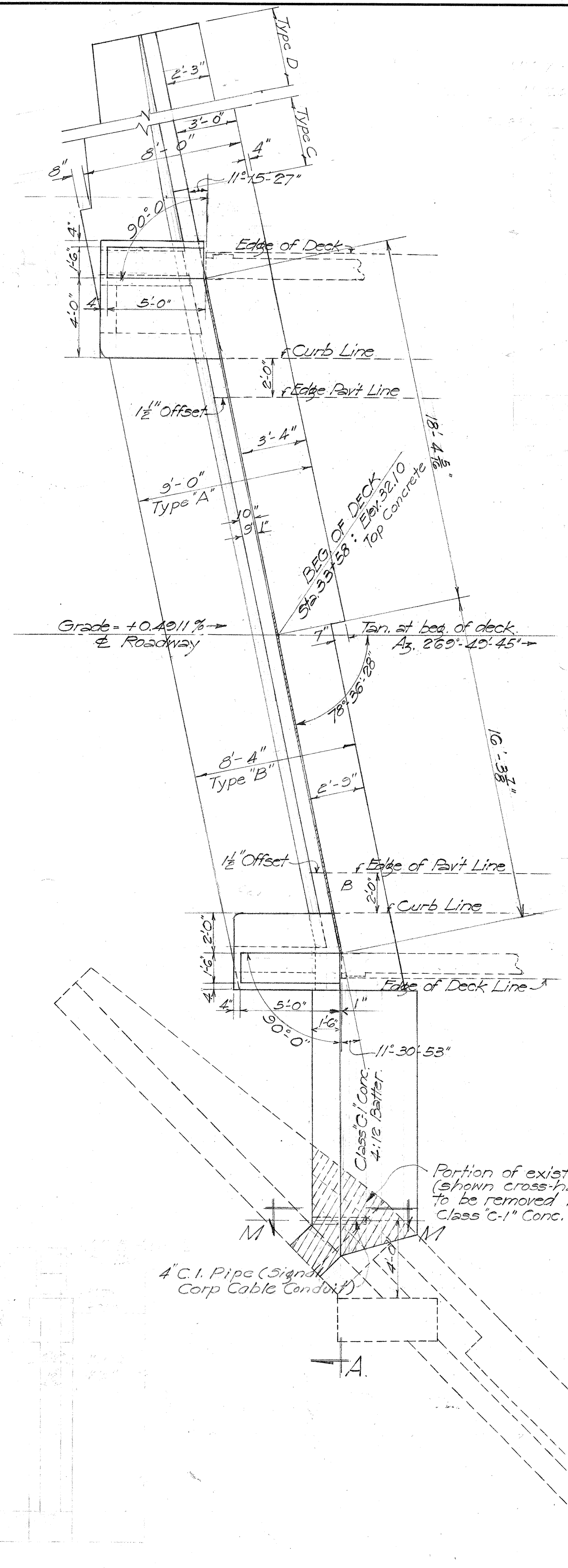
WAIAWA CUTOFF BRIDGE
Sta. 33+57.07 to Sta. 35+50.97

WAIAWA CUTOFF F-47(4)
August 1950

SHEET No. 4 OF 7 SHEETS

NOTE:
Concrete bearing seats and creep blocks must be poured monolithically with the cap.

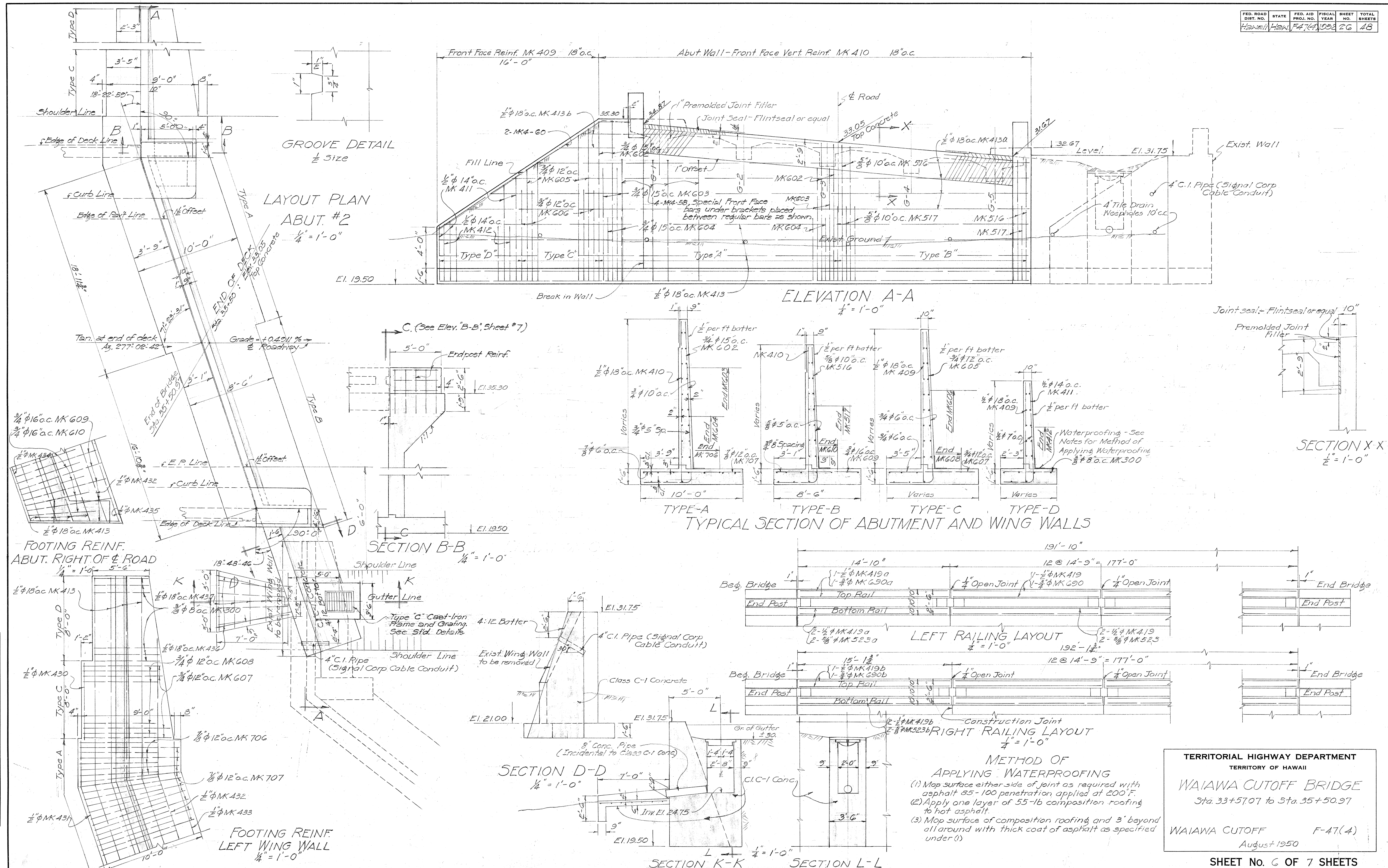
ORIGINAL PLAN	SURVEY PLOTTED BY DESIGNED BY <u>M.R. BARTELS</u> DRAWN BY <u>S. YOUNG</u> TRACED BY <u>S. YOUNG</u> QUANTITIES CHECKED BY <u>S. YOUNG</u> QUANTITIES CHECKED BY <u>K. KAWAMURA</u> CHECKED BY <u>M.R. BARTELS</u>	DATE " " " " " " " " " " " "	2/2/50
NOTE BOOK No.			



LAYOUT PLAN - ABUT. #1
Scale: 1/4" = 1'-0"

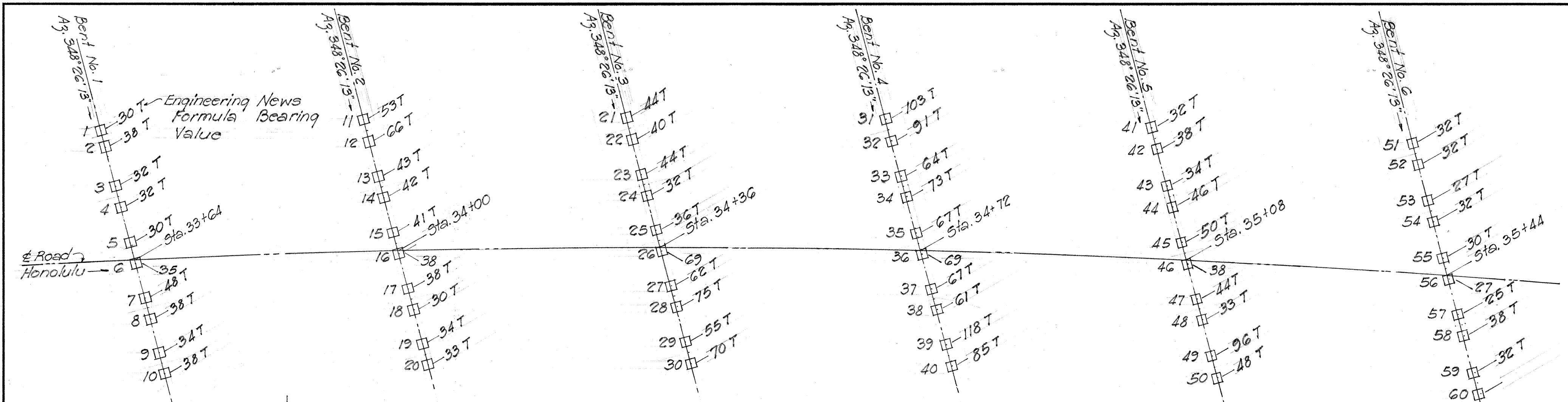
SECTION-M-M
1/4" = 1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
WAIAWA CUTOFF BRIDGE
Sta. 33+57.07 to Sta. 35+50.97
WAIAWA CUTOFF F-47(4)
August 1950
SHEET No. 5 OF 7 SHEETS

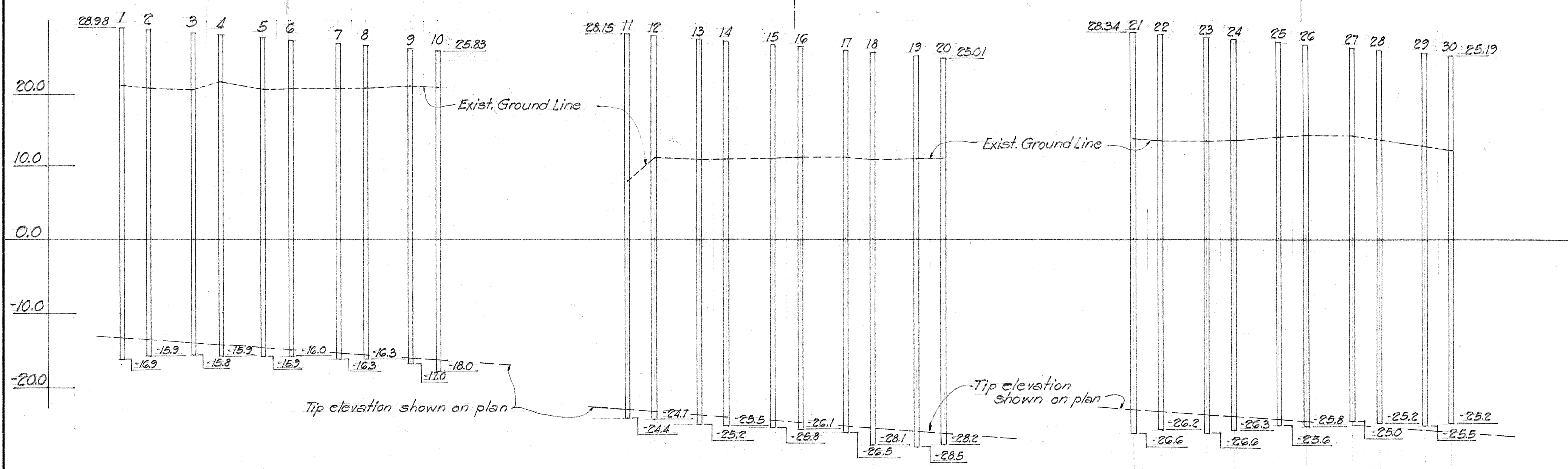


TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
WAIAWA CUTOFF BRIDGE
Sta. 33+57.07 to Sta. 35+50.97
WAIAWA CUTOFF F-47(4)
August 1950

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F47(4)	1953	27A	48



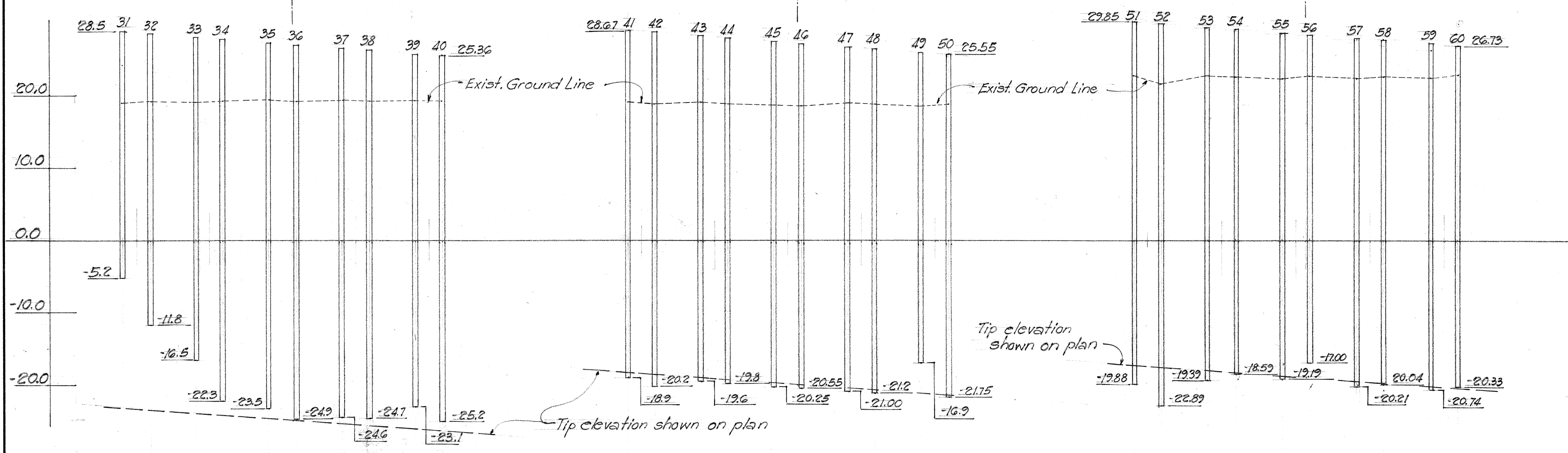
16x16 CONC. PILE LAYOUT
Scale 1"=10'-0"



BENT No. 1

BENT No. 2

BENT No. 3



BENT No. 4

BENT No. 5

BENT No. 6

Pile Tip Elevation As Driven
Scale Hor. 1"=10'-0"
Vert. 1"=10'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

WAIAWA CUTOFF BRIDGE
Sta. 33+57.07 to Sta. 35+50.97

WAIAWA CUTOFF F47(4)
February 1953

SHEET No. 7A OF 7 SHEETS

5479.27A

SURVEY PLOTTED BY	DATE
PLAN	
TRACED BY	
QUANTITIES CHECKED BY	
NOTE BOOK	
No.	