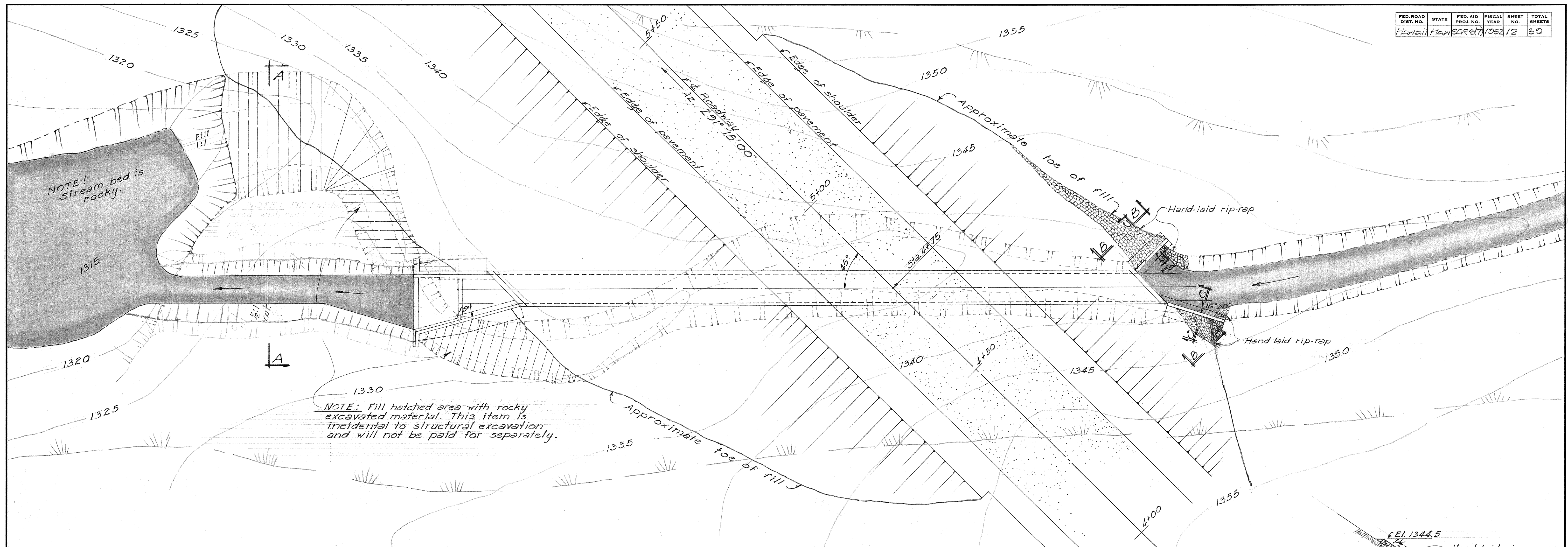




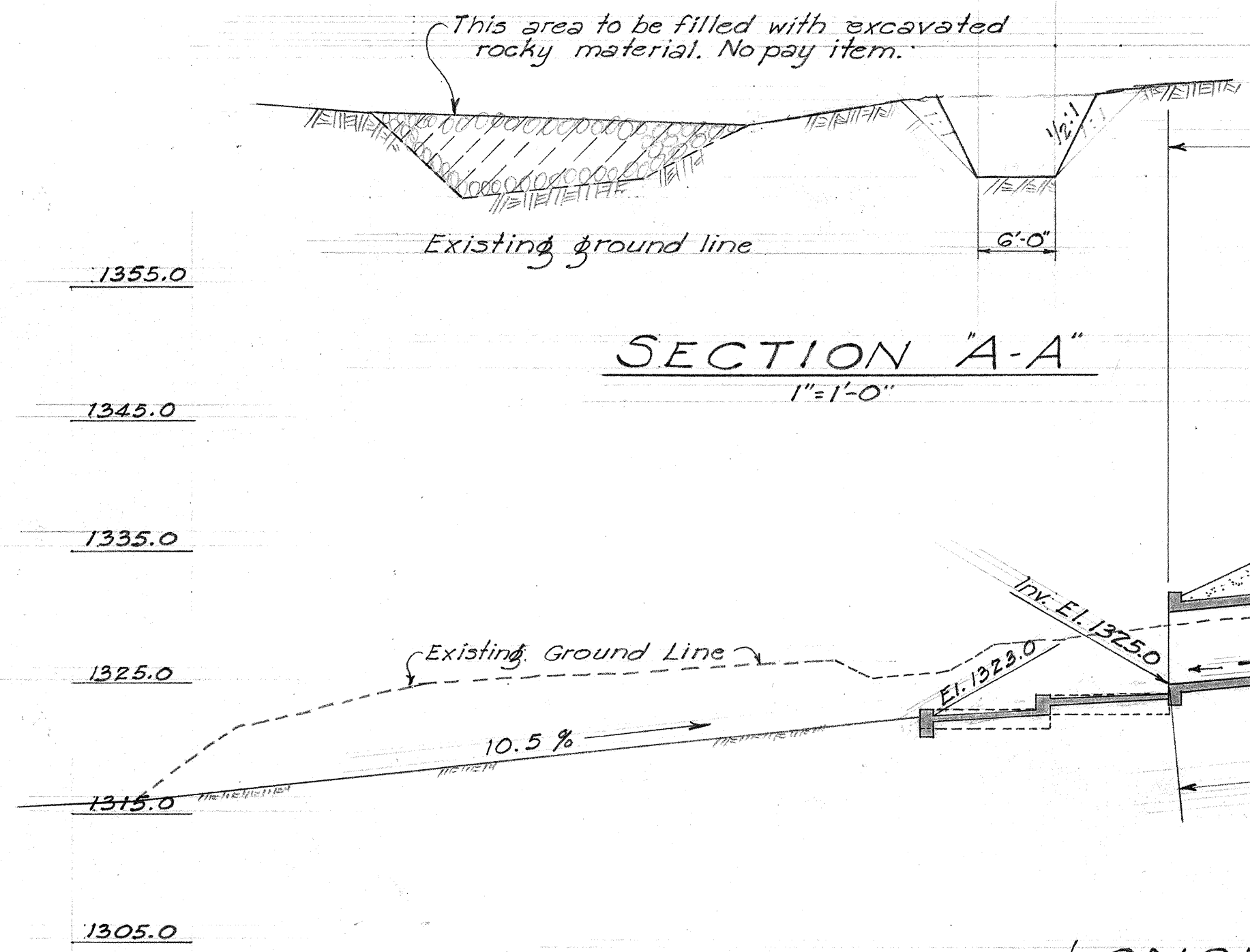
LAYOUT PLAN
1" = 10'-0"

TYPICAL SECTION "B-B"
1" = 10'-0"

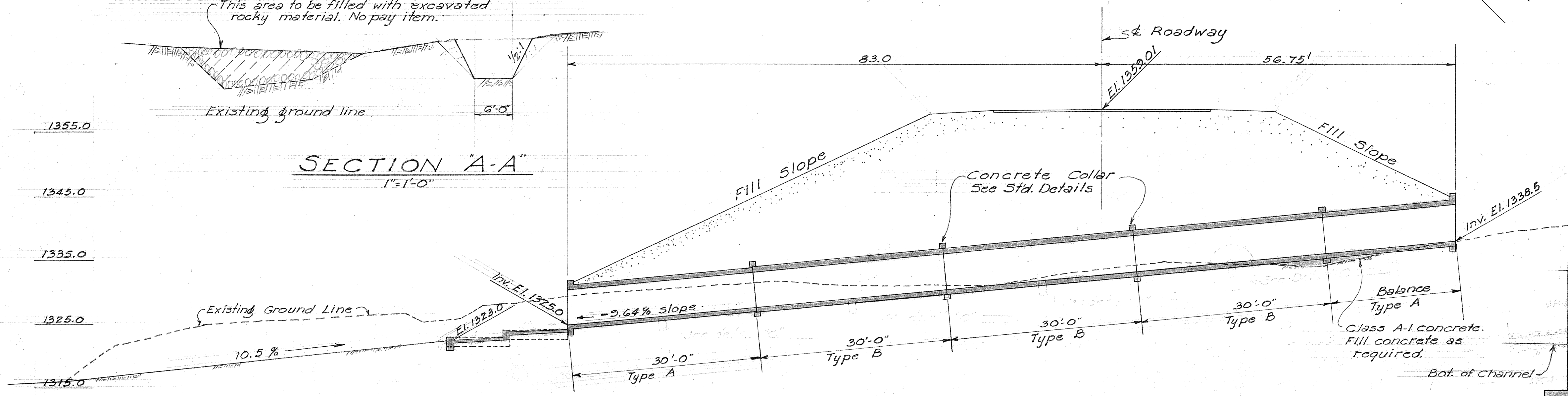
ESTIMATED QUANTITIES

Reinforcing Steel	14,412 lbs
Class A-1 Concrete	132 c.y.
Dampproofing	440 s.y.
Structural Excavation	275 c.y.
Channel Excavation	140 c.y.
Hand-Laid Rip-rap	20 c.y.

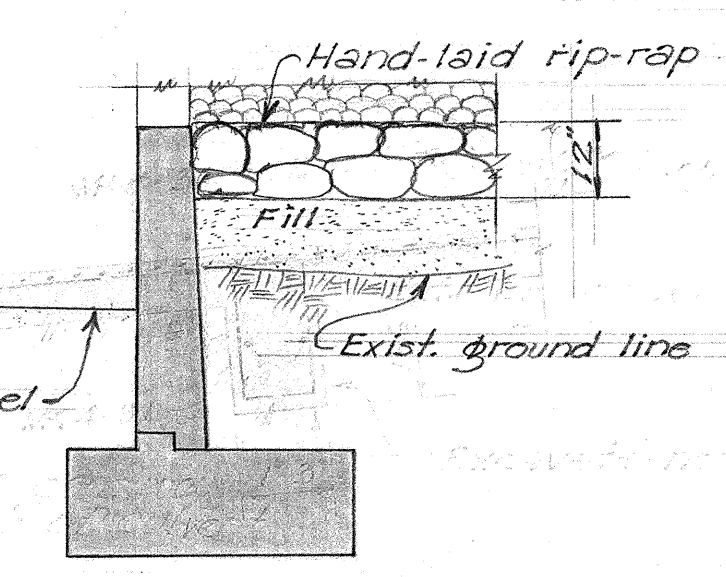
SECTION "A-A"
1" = 1'-0"



LONGITUDINAL SECTION ALONG & CULVERT
1" = 10'-0"



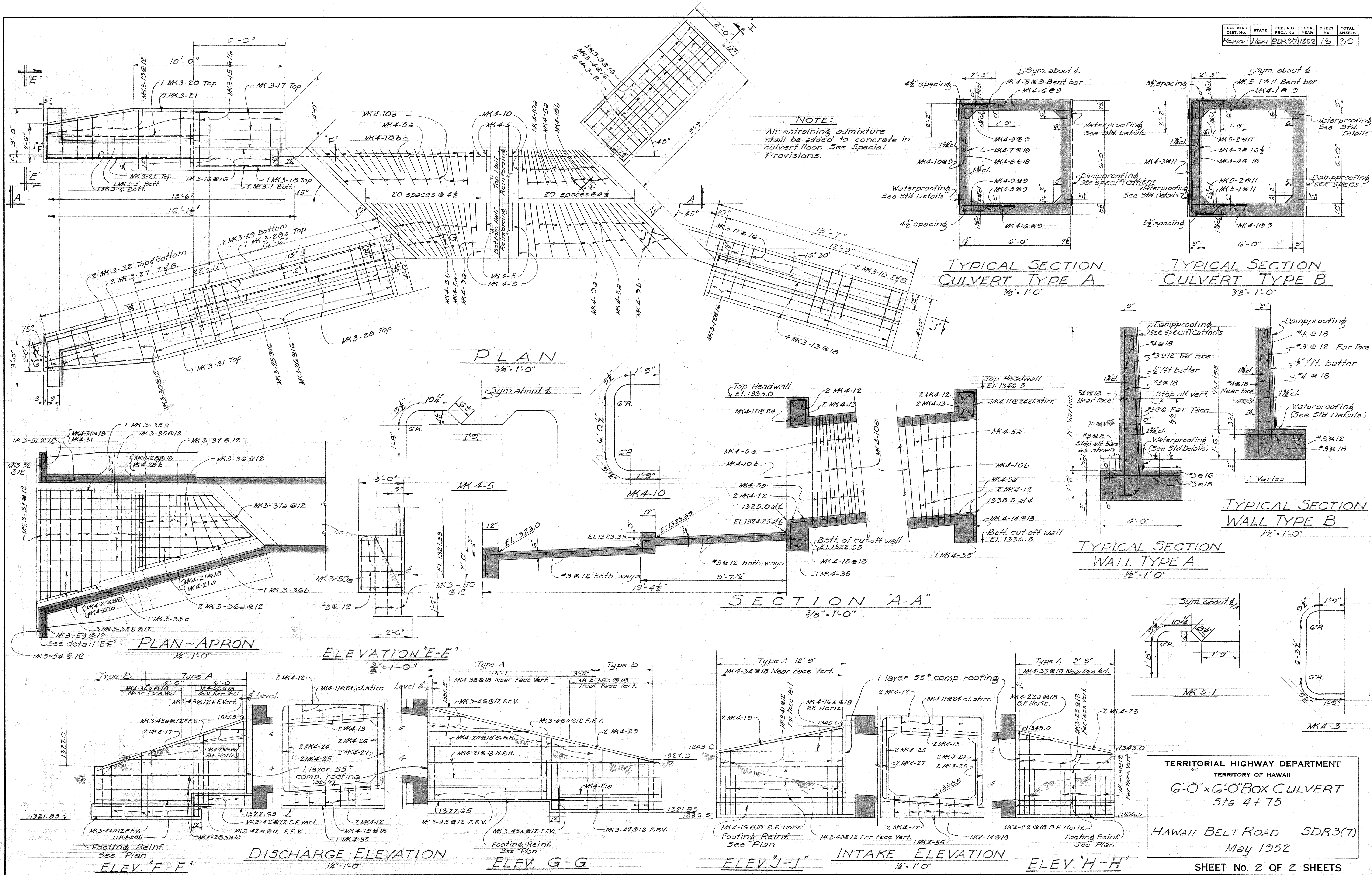
TYPICAL SECTION "C-C"
3/8" = 1'-0"



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
6'-0" X 6'-0" BOX CULVERT
Sta. 4+75
HAWAII BELT ROAD SDR3(7)
May 1952

SURVEY PLOTTED BY: DATE: DESIGNED BY: E. Miyata TRACED BY: E. Miyata QUANTITIES CHECKED BY: E. Miyata NOTE BOOK No. 12

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	SDR3(7)	1952	13	30

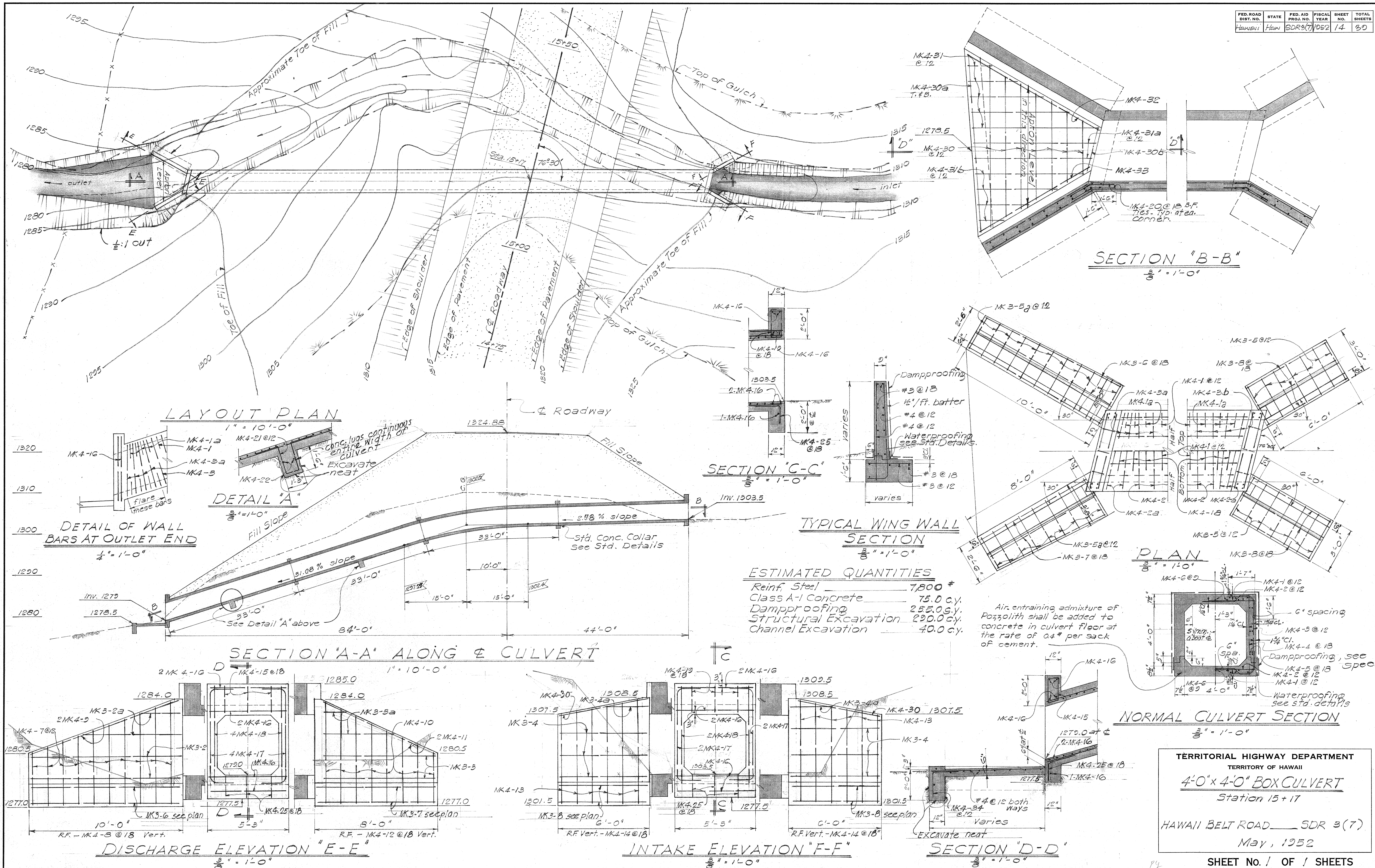


DESIGNED BY	DATE
TRACED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
6'-0" x 6'-0" BOX CULVERT
Sta 4+75

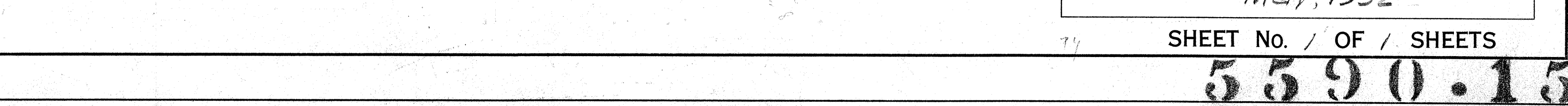
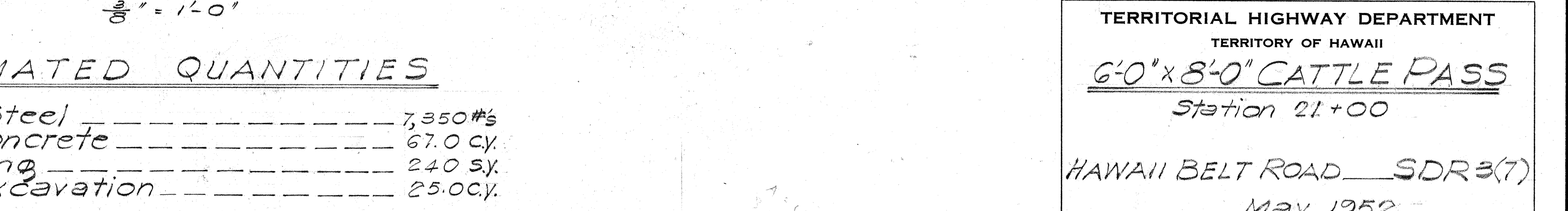
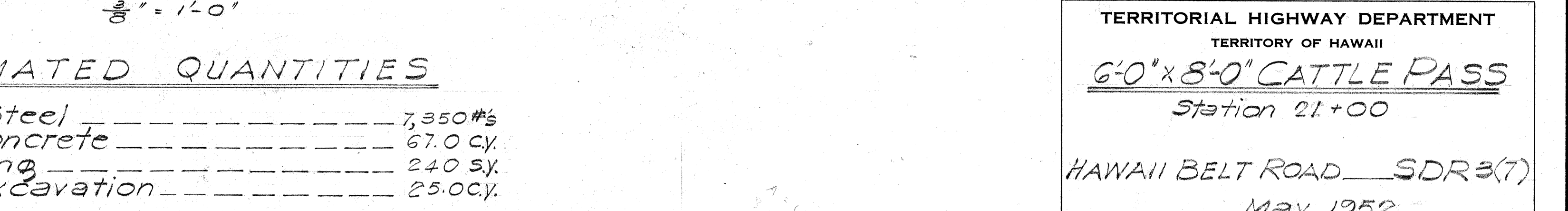
HAWAII BELT ROAD SDR3(7)
May 1952
SHEET No. 2 OF 2 SHEETS

5590.13



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
4'0" x 4'0" BOX CULVERT
Station 15+17
HAWAII BELT ROAD SDR 3(7)
May, 1952
SHEET NO. 1 OF 1 SHEETS

5590.14



Hand-drawn construction details for a concrete floor slab, likely for a culvert or tunnel. The main detail shows a rectangular slab with dimensions 8'-0" by 6'-0".

Reinforcement and Spacing:

- NK 4-1 @ 12" (Vertical bars on the left side)
- NK 4-2 @ 18" (Horizontal bars near the top)
- NK 4-3 @ 18" (Horizontal bars near the bottom)
- NK 5-1 @ 12" (Vertical bars near the right side)
- NK 5-2 @ 12" (Vertical bars near the bottom left corner)
- NK 4-4 (Top horizontal bar)
- NK 4-5 @ 6" (Bottom horizontal bars)

Dimensions and Notes:

- Overall dimensions: 8'-0" (width) by 6'-0" (depth).
- Top horizontal bar spacing: 2'-0".
- Right side vertical bar spacing: 6'-0".
- Bottom horizontal bar spacing: 6'-0".
- Left side vertical bar spacing: 2'-3".
- Corner detail (bottom left): 2'-0" by 2'-3" with reinforcement NK 4-1.
- Notes include: "Sym. about ϕ ", "6" spacing", "Waterproofing See Std. Detail.", "Dampproofing See specifications", and "Note: Air entraining admixture shall be added to concrete in culvert floor. See Special Provisions."

3'0" 3'0" 3'0" 3'0"

Top Headwall

NK4-21

NK4-23 @ 2'0"

NK4-22

EL. 1256.0 at 4' culvert

EL. 1254.5

12"

3'0"

3'0"

3'0"

3'0"

EL. 1255.2 at 2'

2'0"

12"

1#4

#4 @ 12" Both Ways

#4 @ 12"

3/8" x 1'0"

3/8" x 1'0"

#4 @ 18" F.F. Point

1/2" per ft. Batter

1 3/4" cl.

1 3/4" cl.

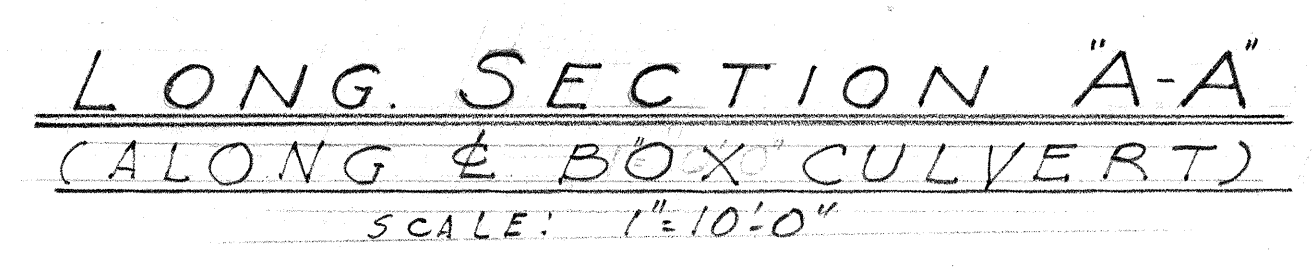
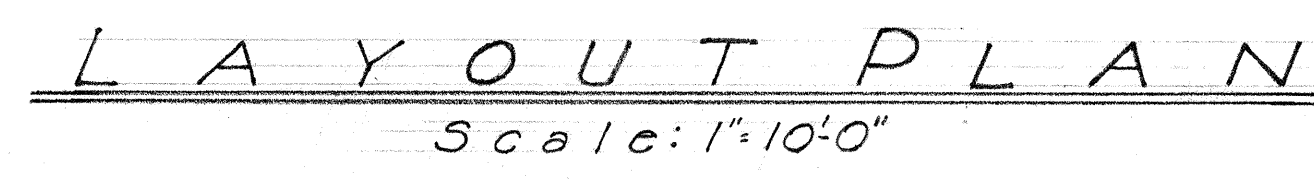
1 3/4" cl.

1 3/4" cl.

Hand-drawn architectural section of a dam headwall. The drawing shows a vertical wall on the left and a horizontal base. Reinforcement includes #4 bars at 12 inches on the wall and #4 bars at 2 feet on the base. A top headwall is labeled 'EI. 1272.0'. Waterproofing and dampproofing details are indicated with arrows and text. Dimensions include 12 inches for wall thickness, 2 feet for base width, and 16 inches for a vertical section on the right. Notes specify 'See Std. Detail' for waterproofing and 'See A/E specifications' for dampproofing.

[illegible]

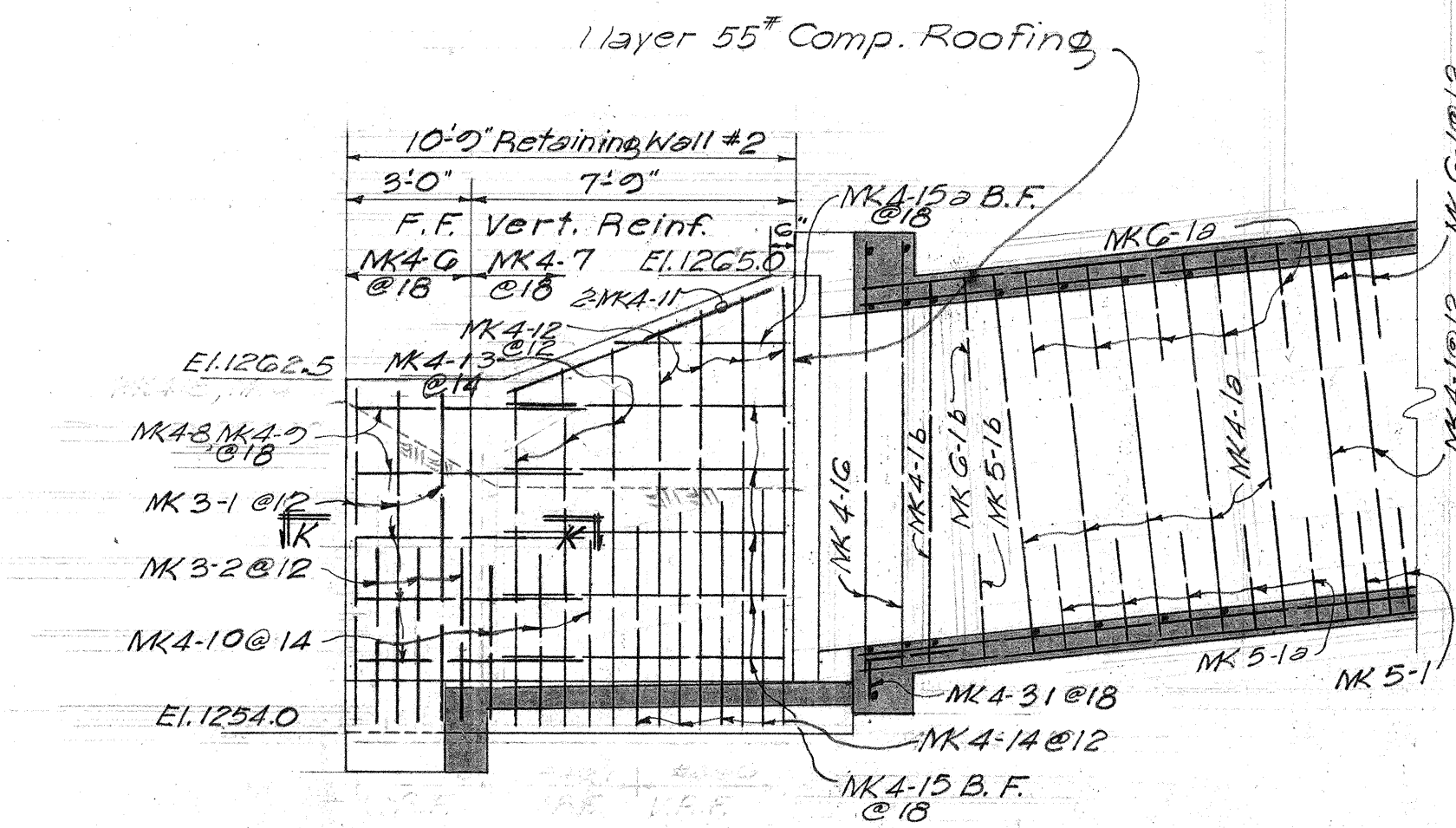
SECTION "C-C"
 $\frac{3}{8}'' = 1'0''$



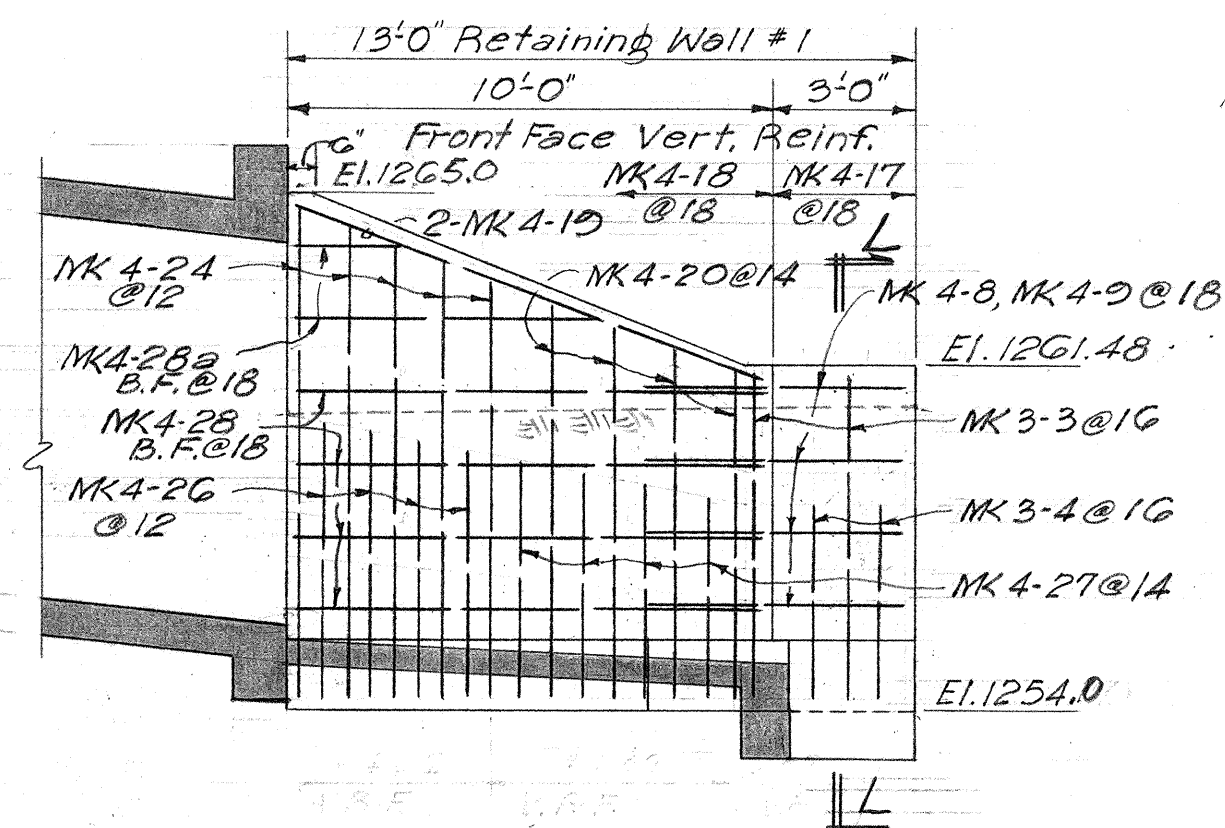
Reinf. Steel-----	8830 lb.
Class A-1 Concrete-----	25 c.y.
Dampproofing-----	200 s.y.
Structural Excavation----	140 c.y.
Channel Excavation----	130 c.y.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
8'-0" x 8'-0" BOX CULVERT
Station 25 + 48

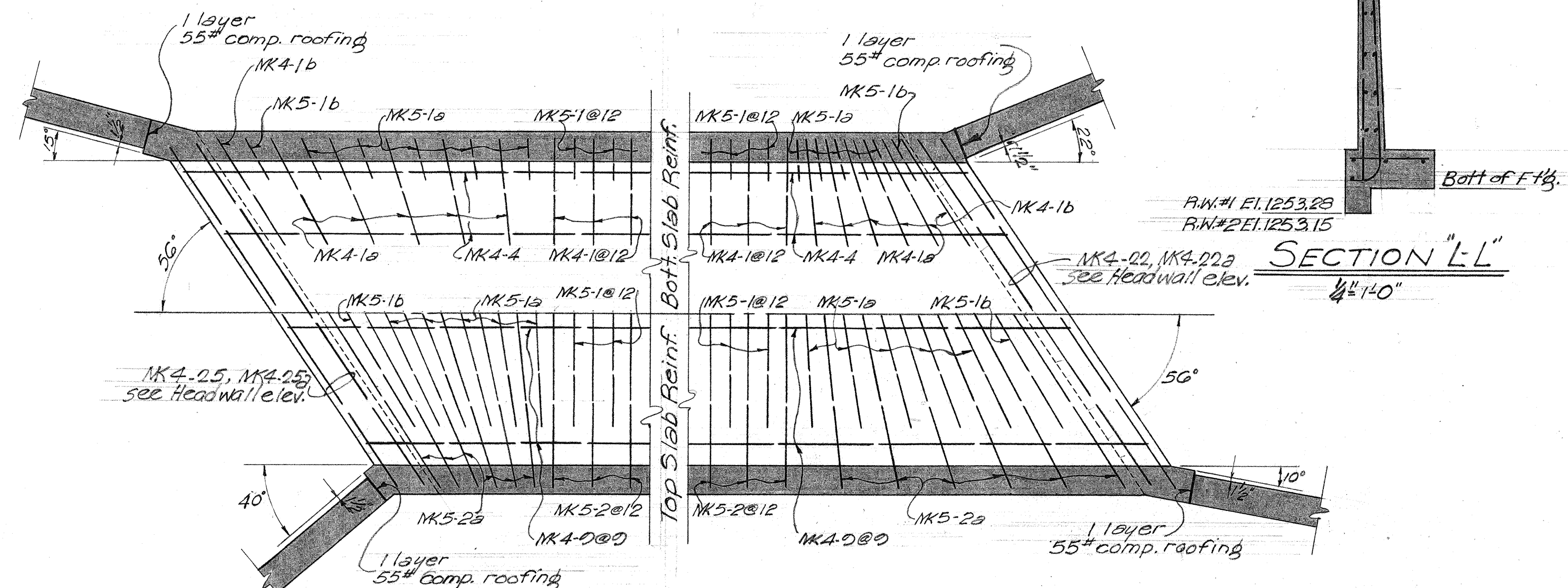
HAWAII BELT ROAD — SDR 3(7)
June, 1952



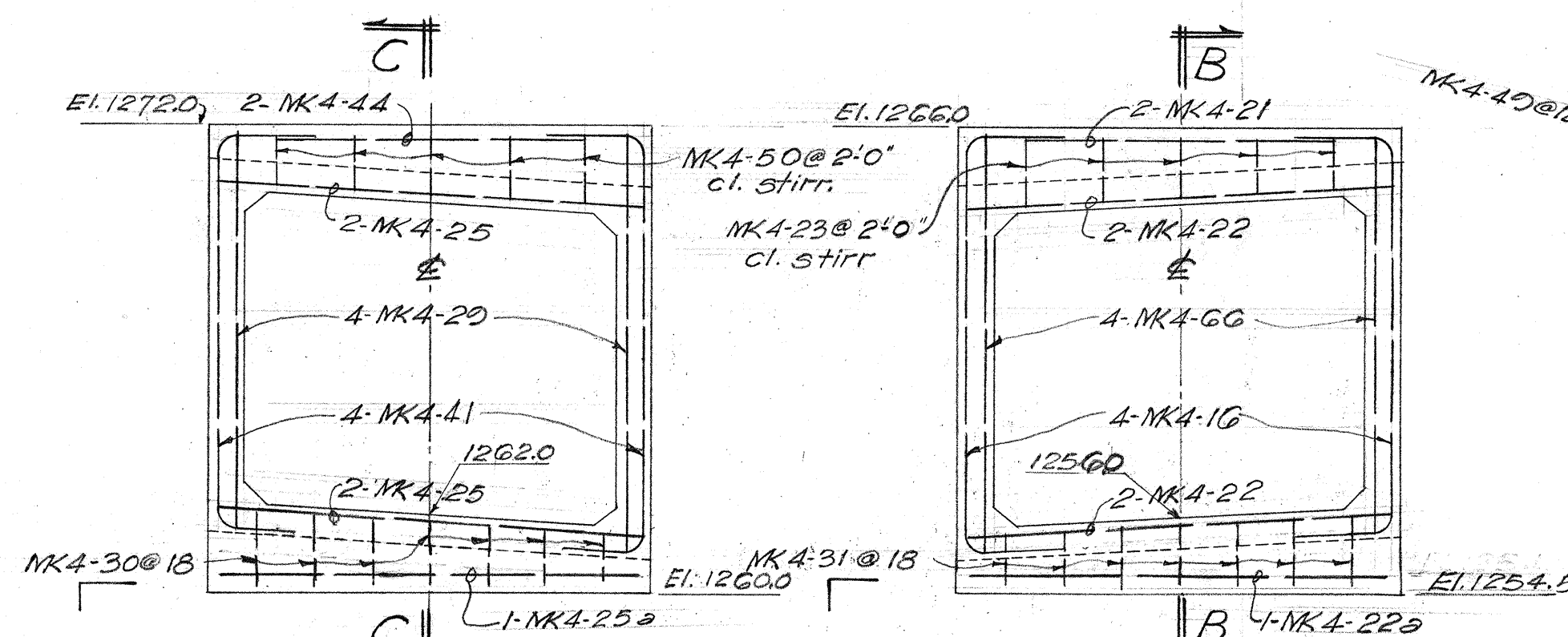
ELEVATION "E-E"
1/4"=1'-0"



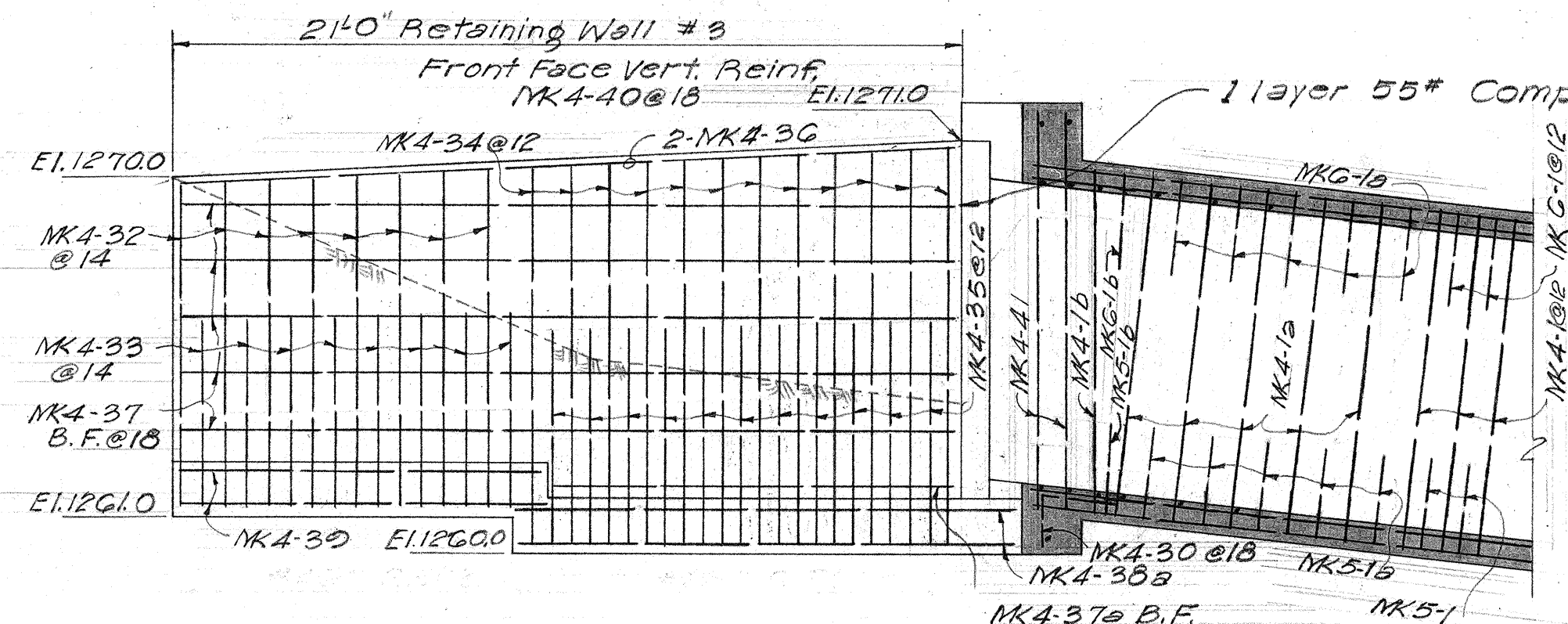
ELEVATION "D-D"
1/4"=1'-0"



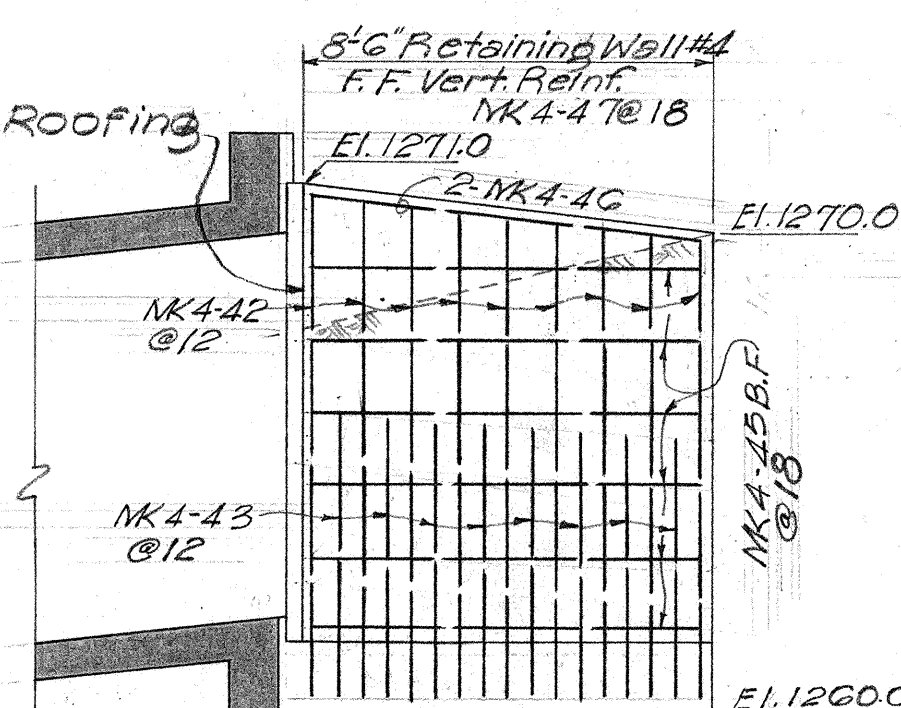
SECTION "L-L"
3/8"=1'-0"



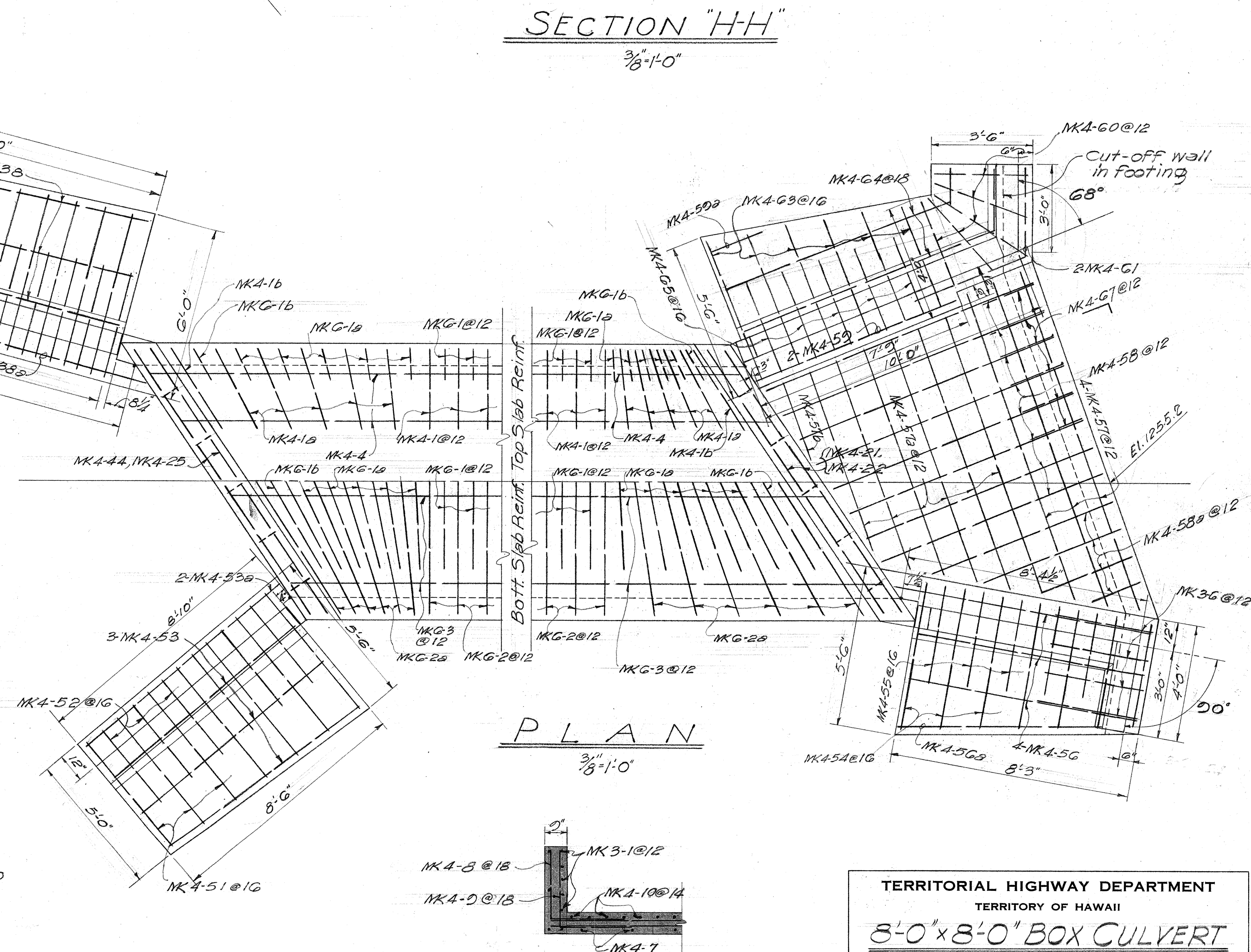
INTAKE
OUTLET
HEADWALL ELEV.
1/4"=1'-0"



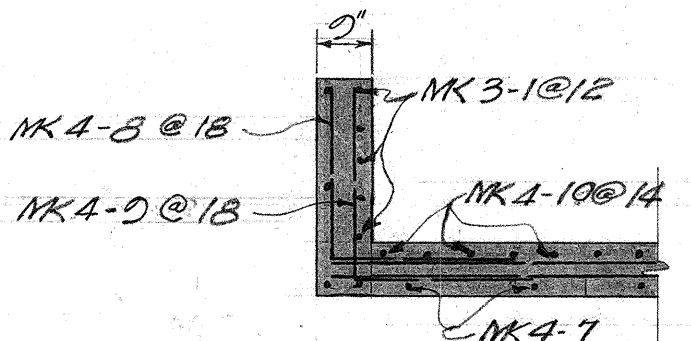
ELEVATION "F-F"
1/4"=1'-0"



ELEVATION "G-G"
1/4"=1'-0"

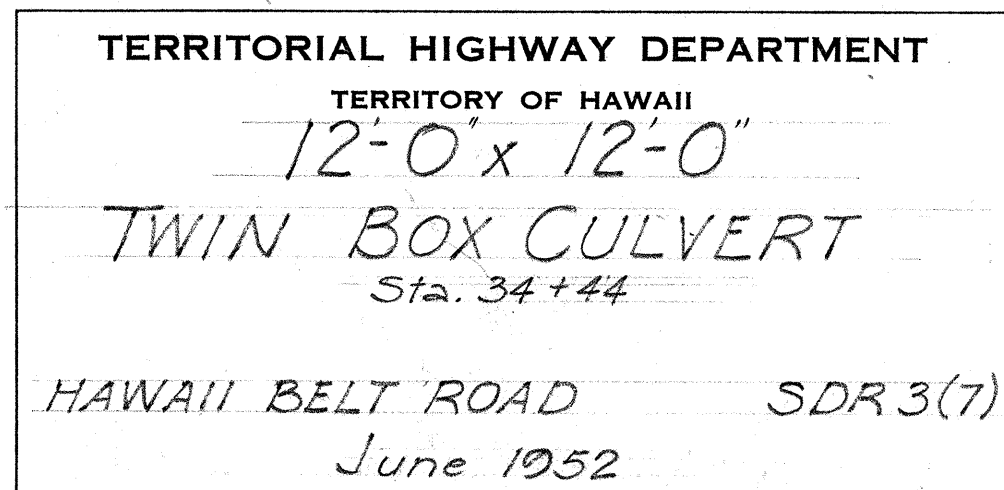


PLAN
3/8"=1'-0"

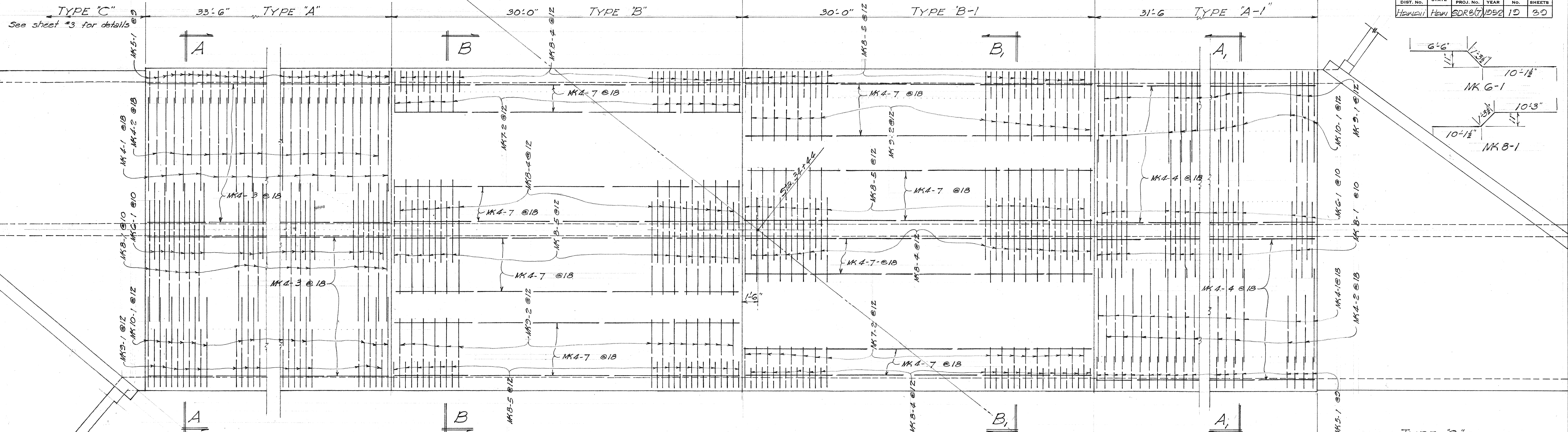


SECTION "K-K"
3/8"=1'-0"

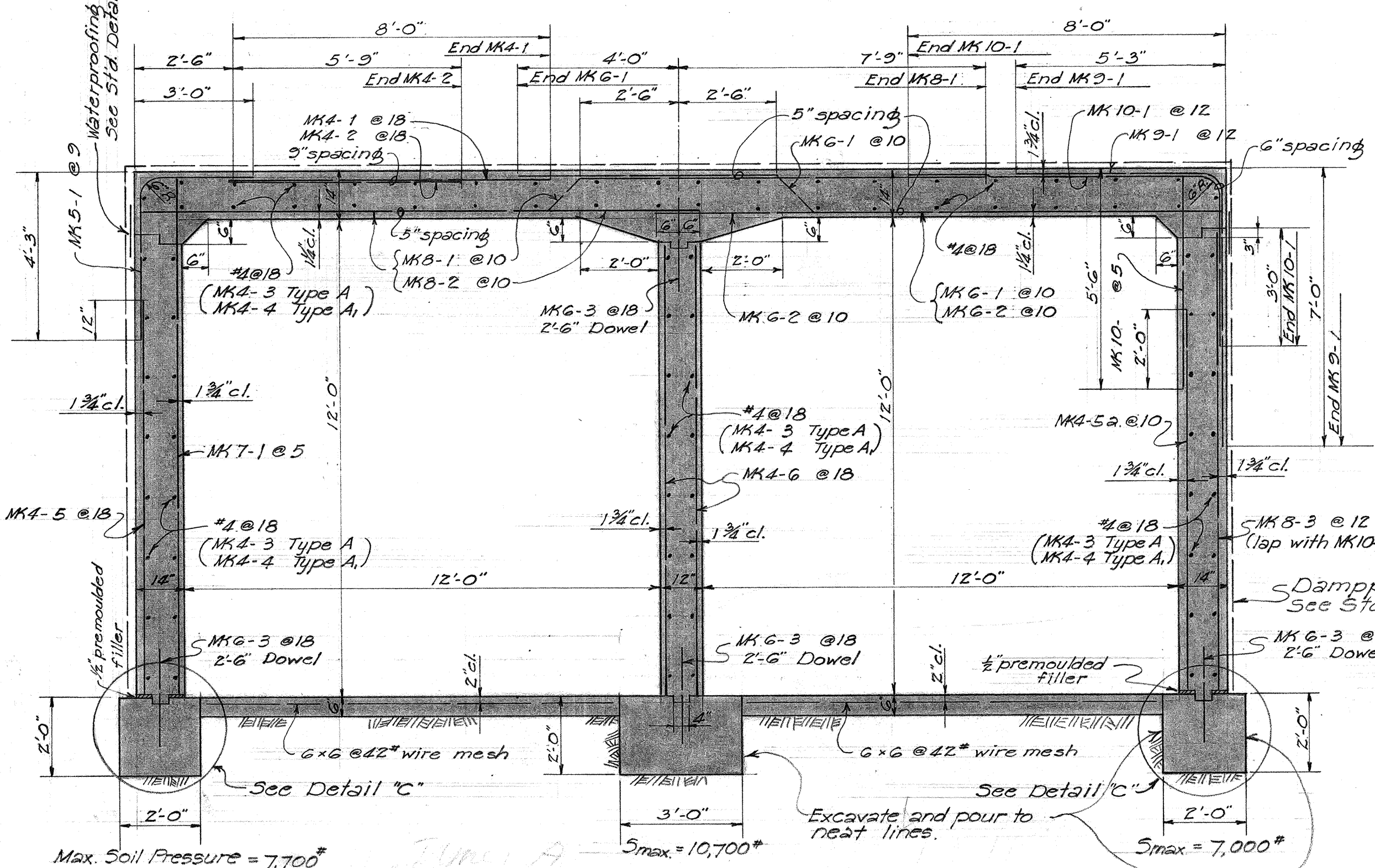
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
8'-0"x8'-0" BOX CULVERT
Station 25+48
HAWAII BELT ROAD SDR 3(7)
June, 1952
SHEET No. 2 OF 2 SHEETS



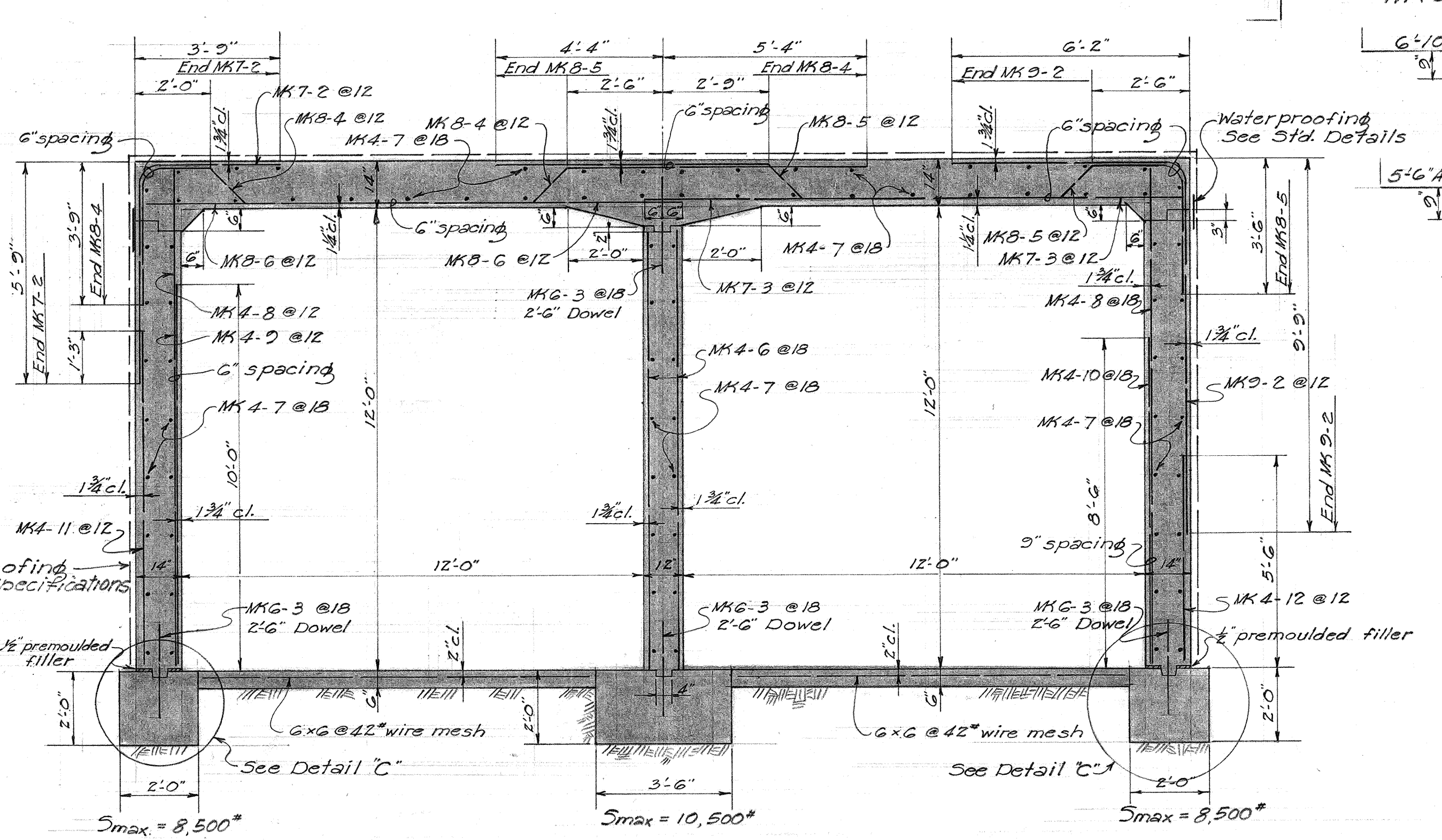
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	SDR3(7)	1952	19	30



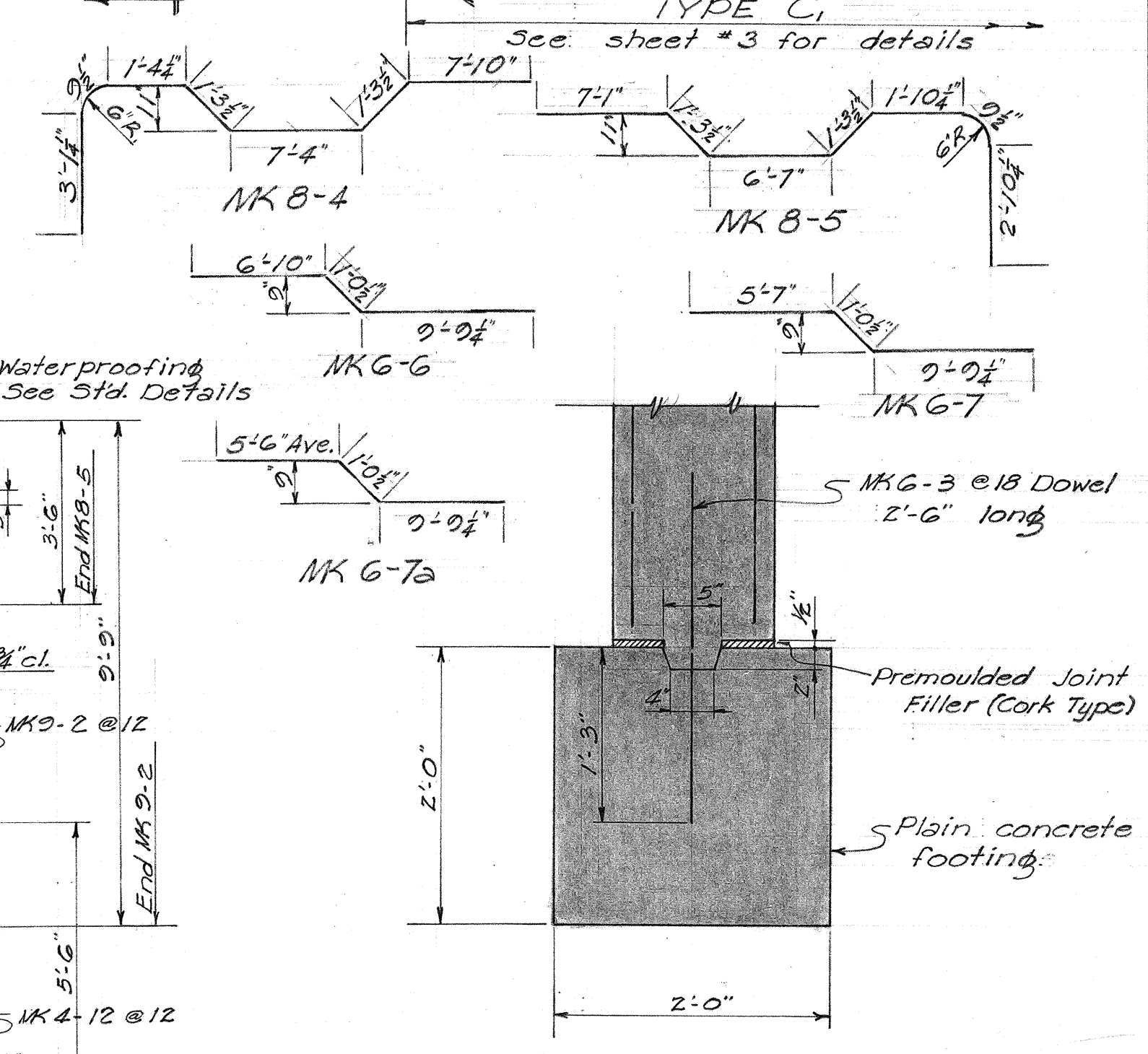
PLAN ~ SHOWING TOP SLAB REINFORCEMENT
(BOX CULVERT TYPES A, A-1, B & B-1 ONLY)
 1/4" = 1'-0"



TYPE A TRUNK SECTION "A-A"
TYPE A-1 TRUNK SECTION "A1-A1"
 3/8" = 1'-0"



TYPE B TRUNK SECTION "B-B"
TYPE B-1 TRUNK SECTION "B1-B1"
 3/8" = 1'-0"



HINGE DETAIL "C"
 1" = 1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
12'-0" X 12'-0"
TWIN BOX CULVERT
 Sta. 34+44
 HAWAII BELT ROAD SDR3(7)
 June 1952

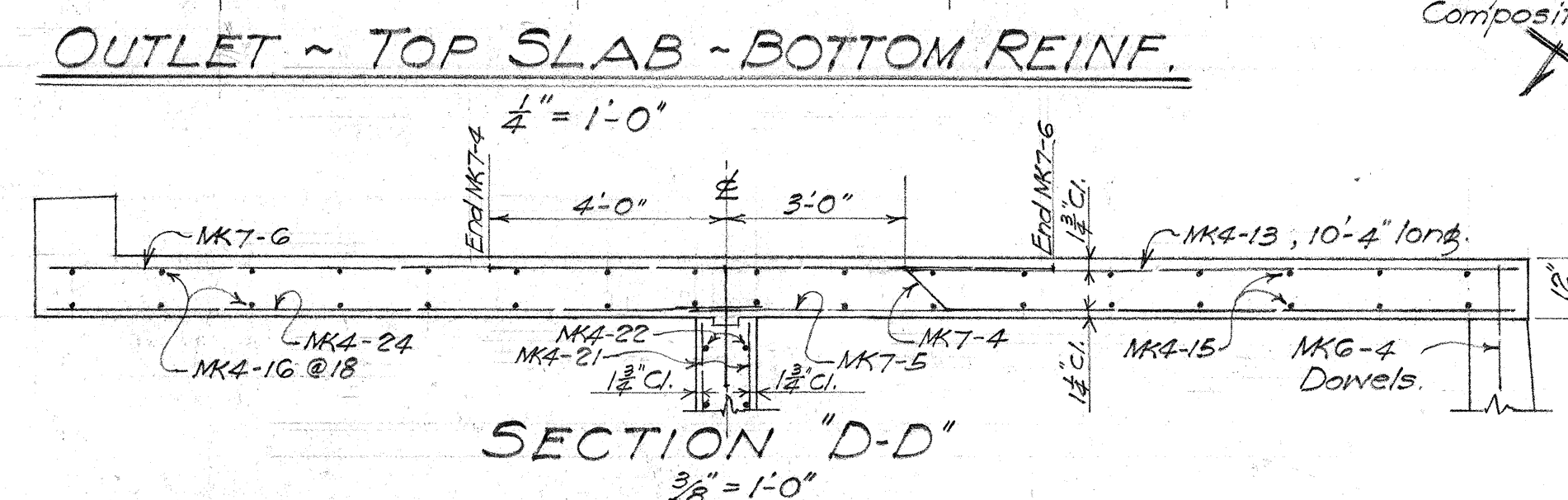
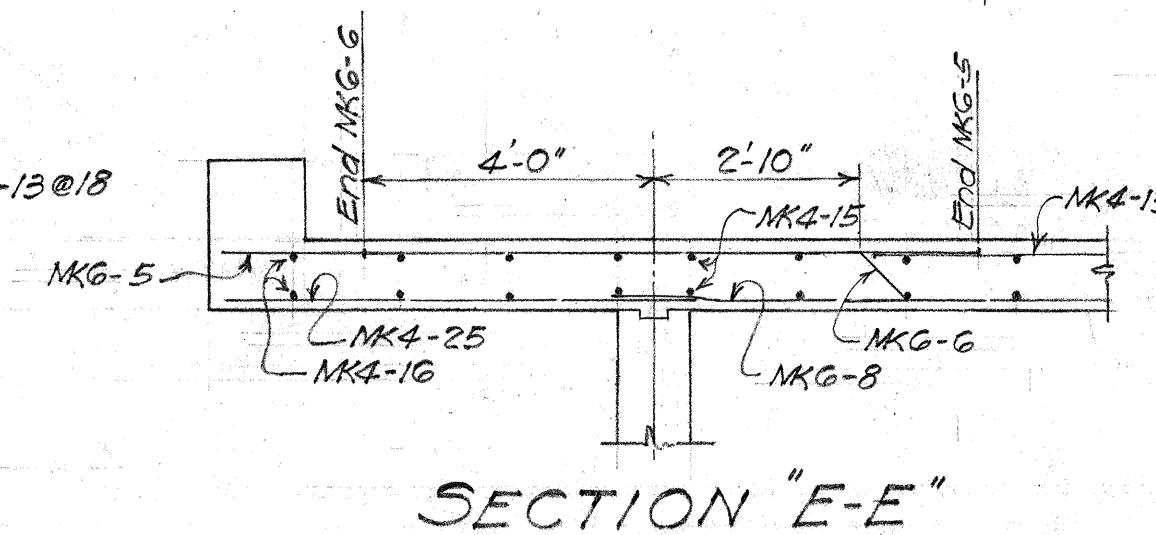
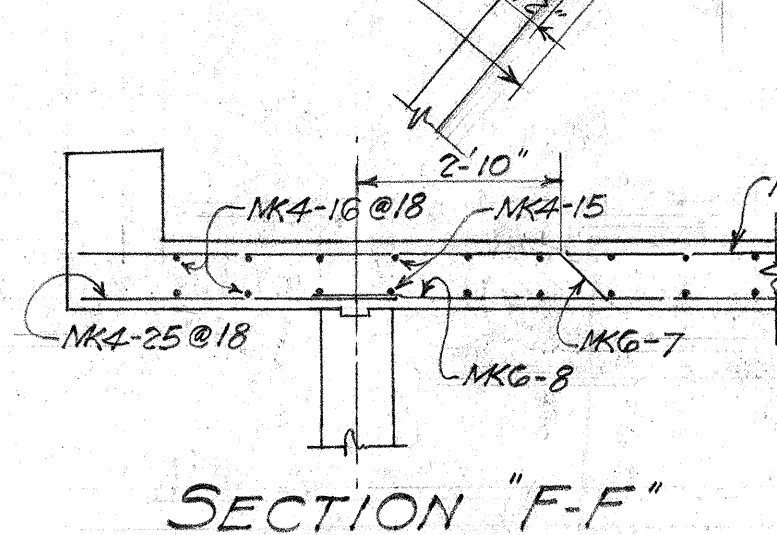
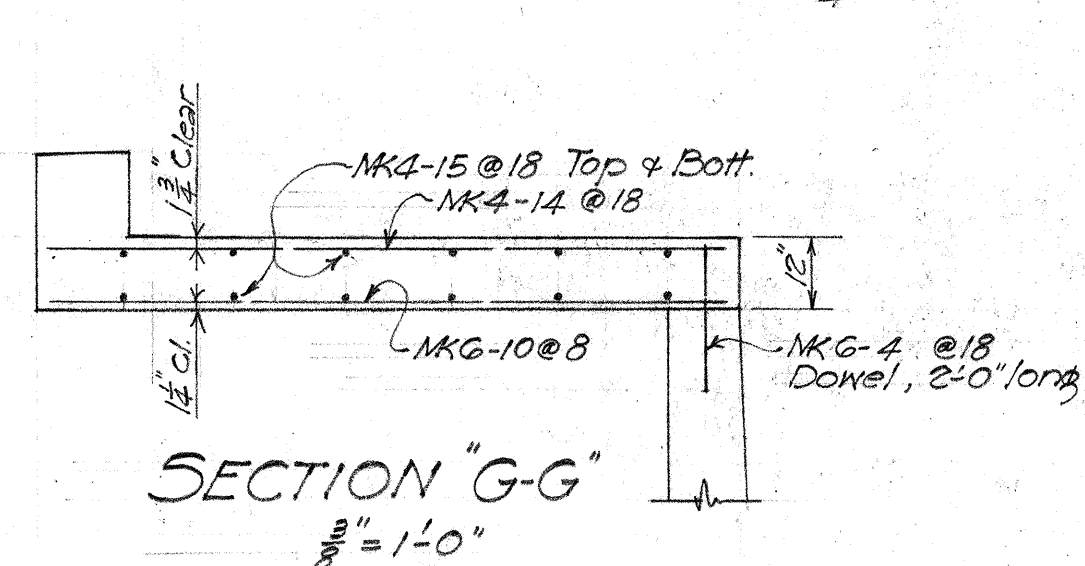
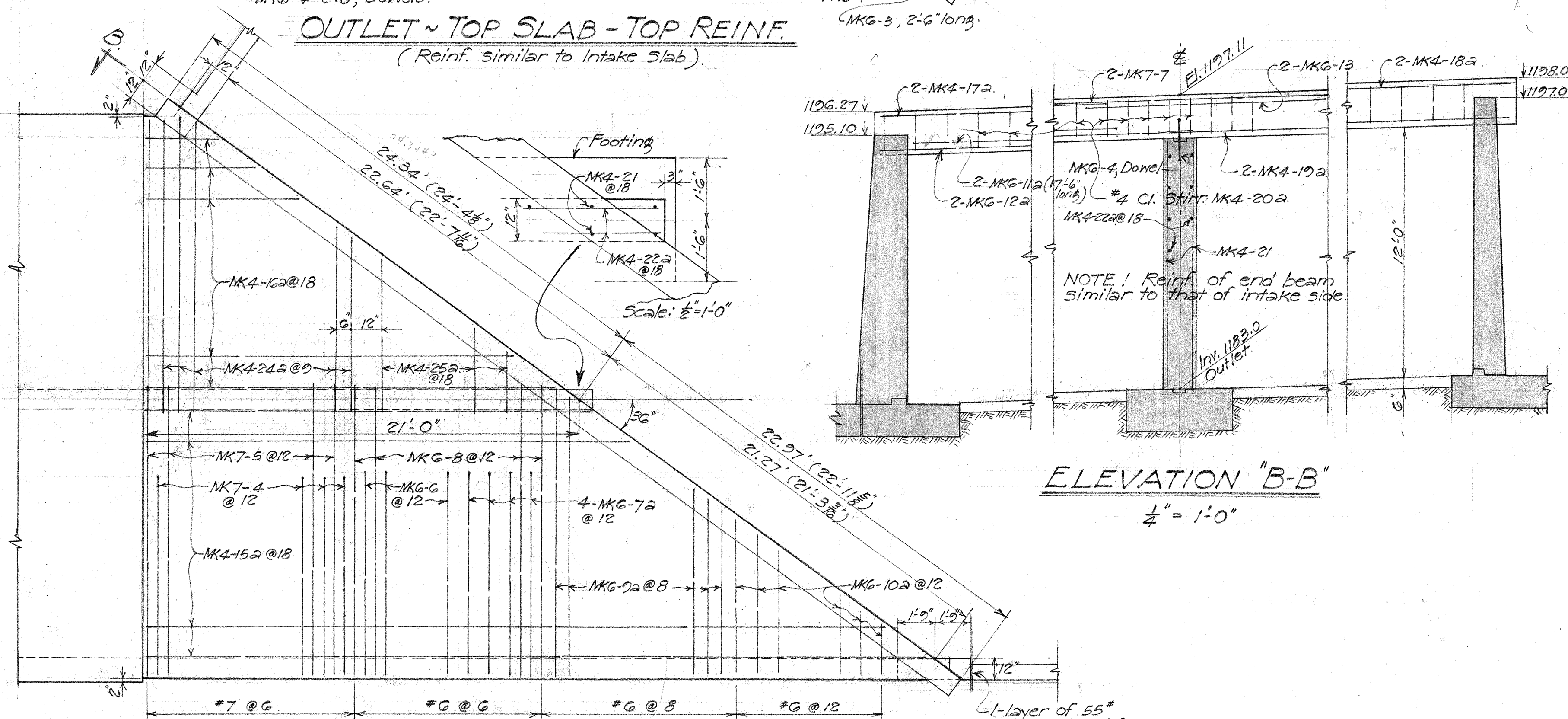
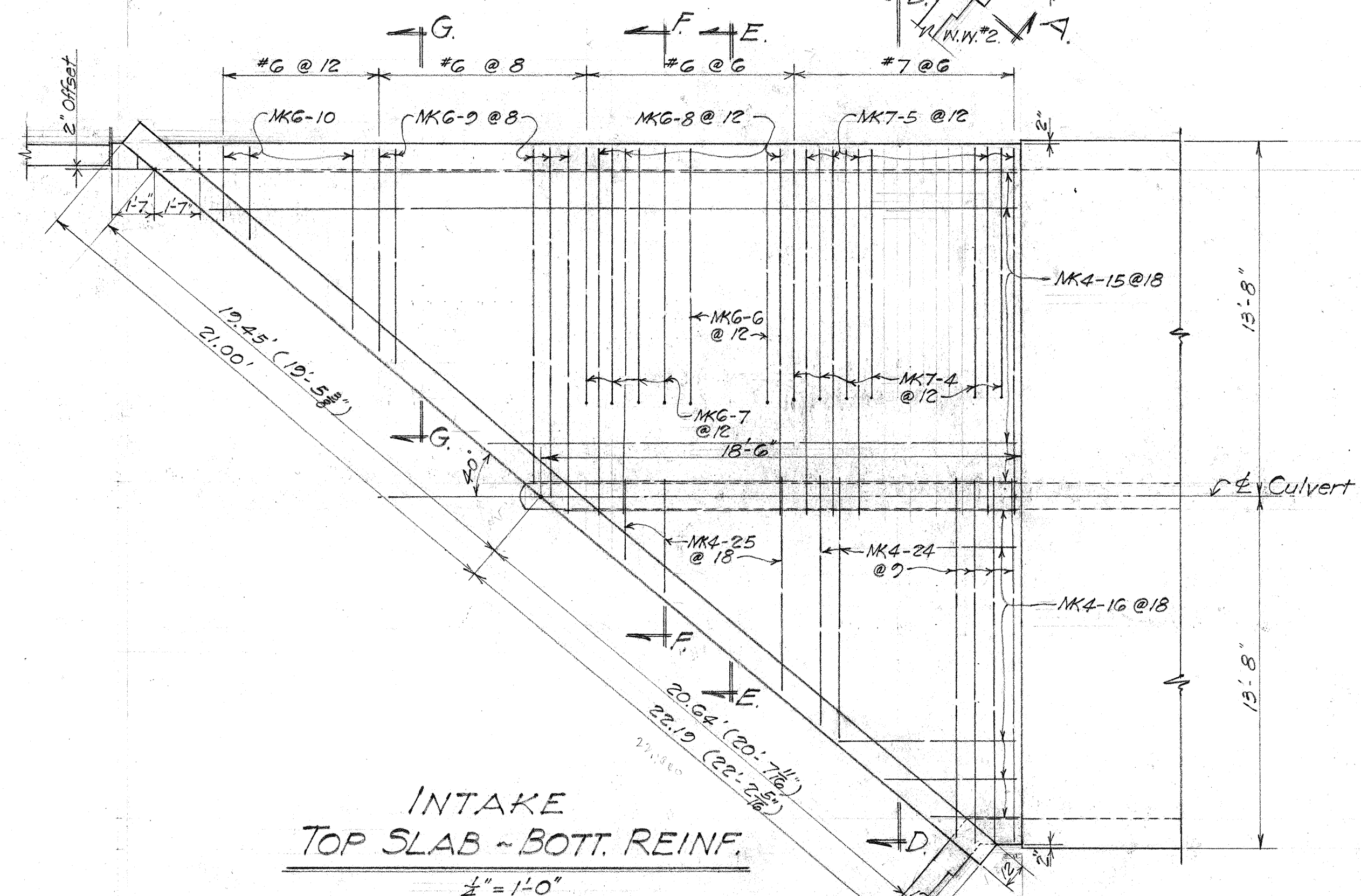
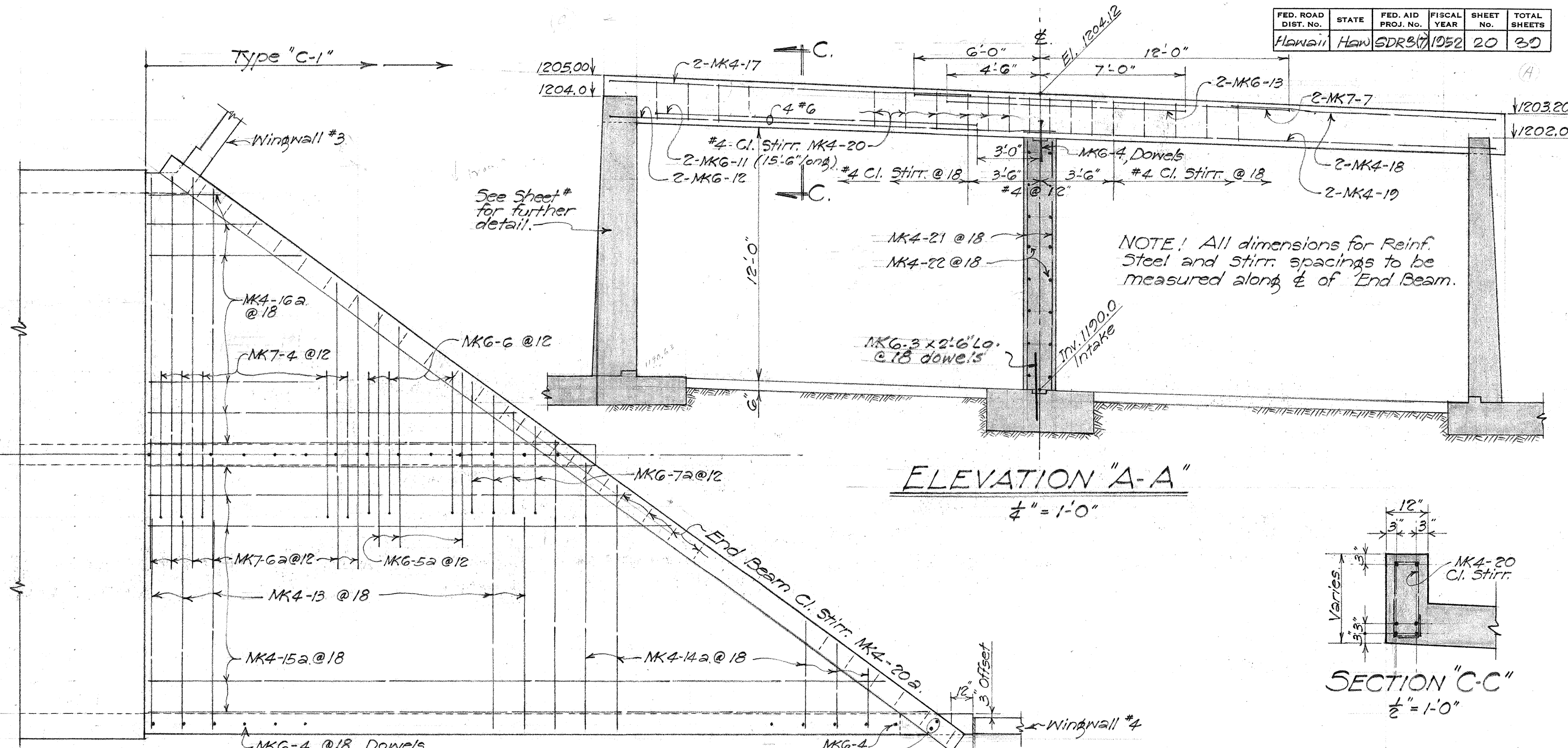
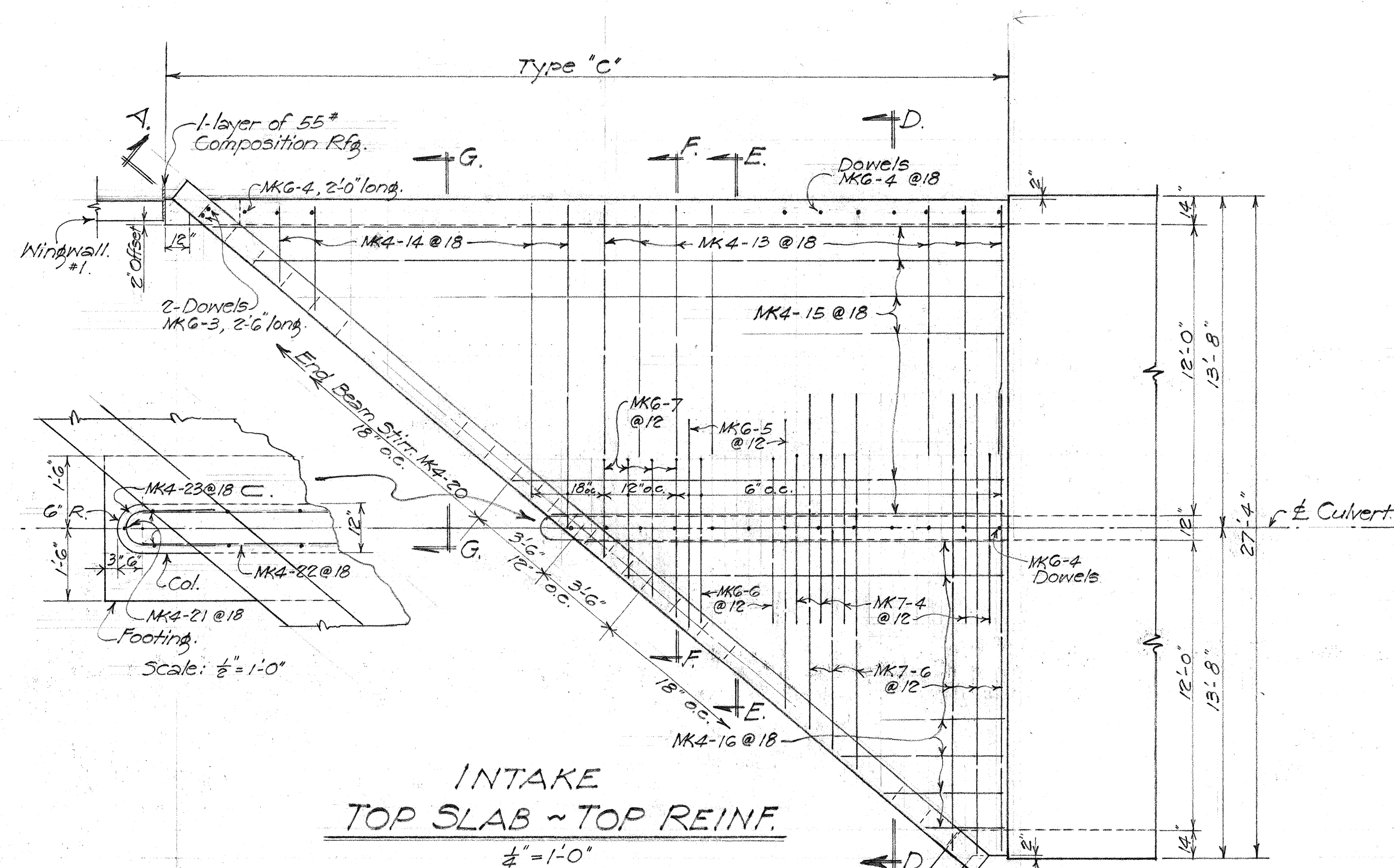
SHEET No. 2 OF 5 SHEETS

5590.19

ORIGINAL
 PLAN
 NOTE BOOK
 NO.

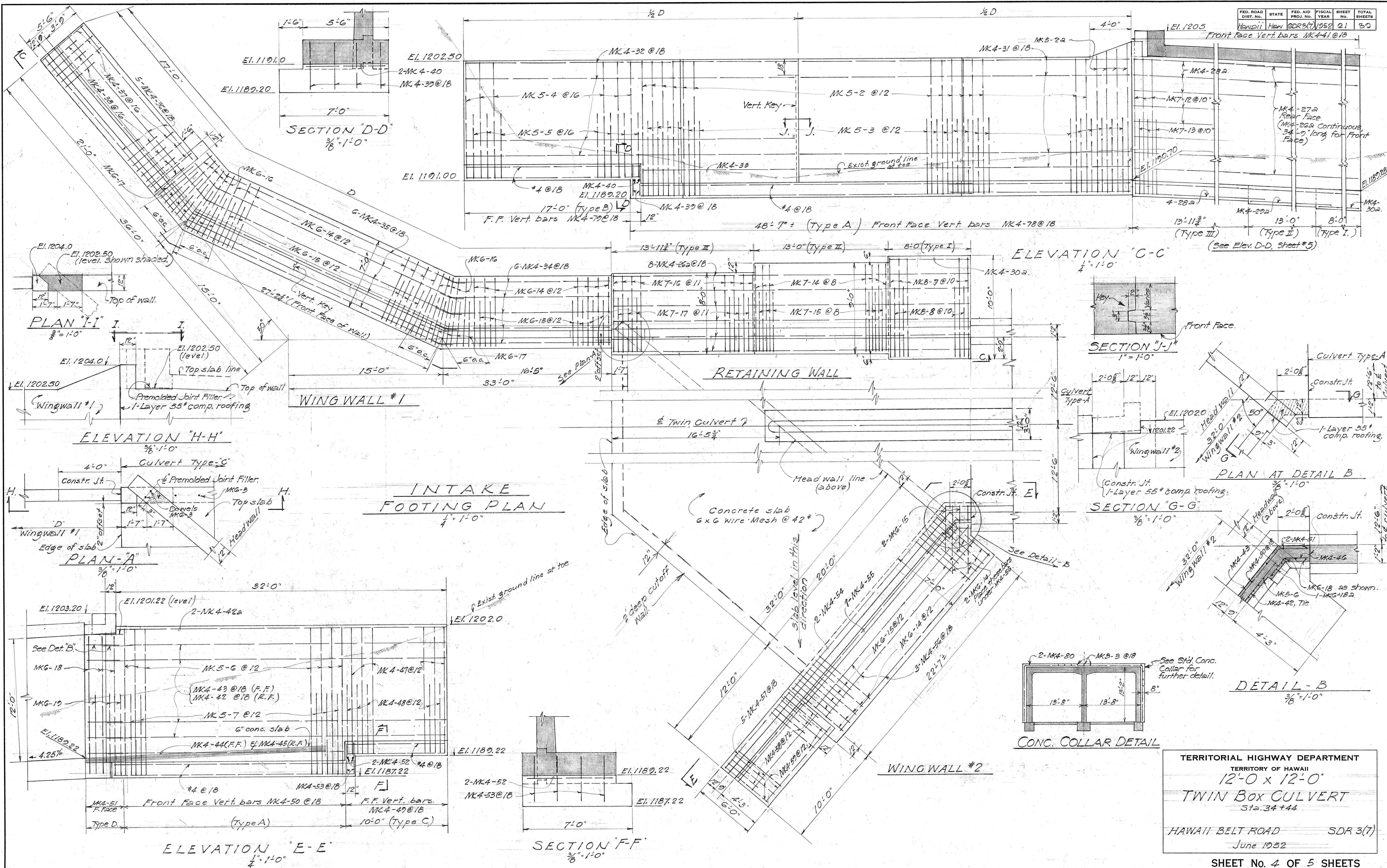
NOTE! All details for Type A-1 same as for Type A except reinforcing turned 180° about vertical axis at $\frac{1}{2}$.

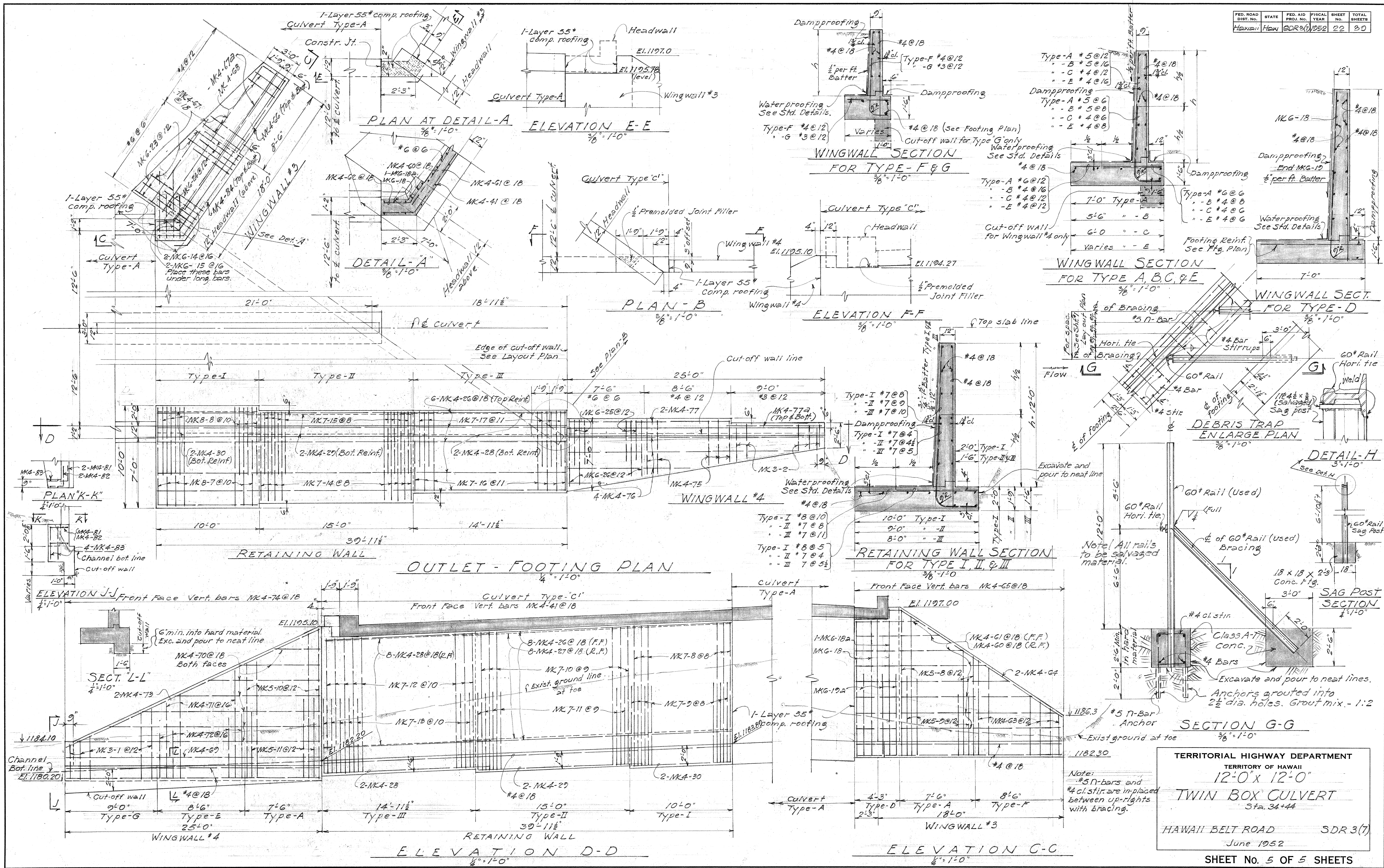
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
Hawaii	Haw	SDR3(7)	1952	20	30



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
12'-0" X 12'-0"
TWIN BOX CULVERT
Sta. 34 + 44
HAWAII BELT ROAD SDR3(7)
June 1952

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
Hawaii	HAW	SDR3(7)	1952	21	30

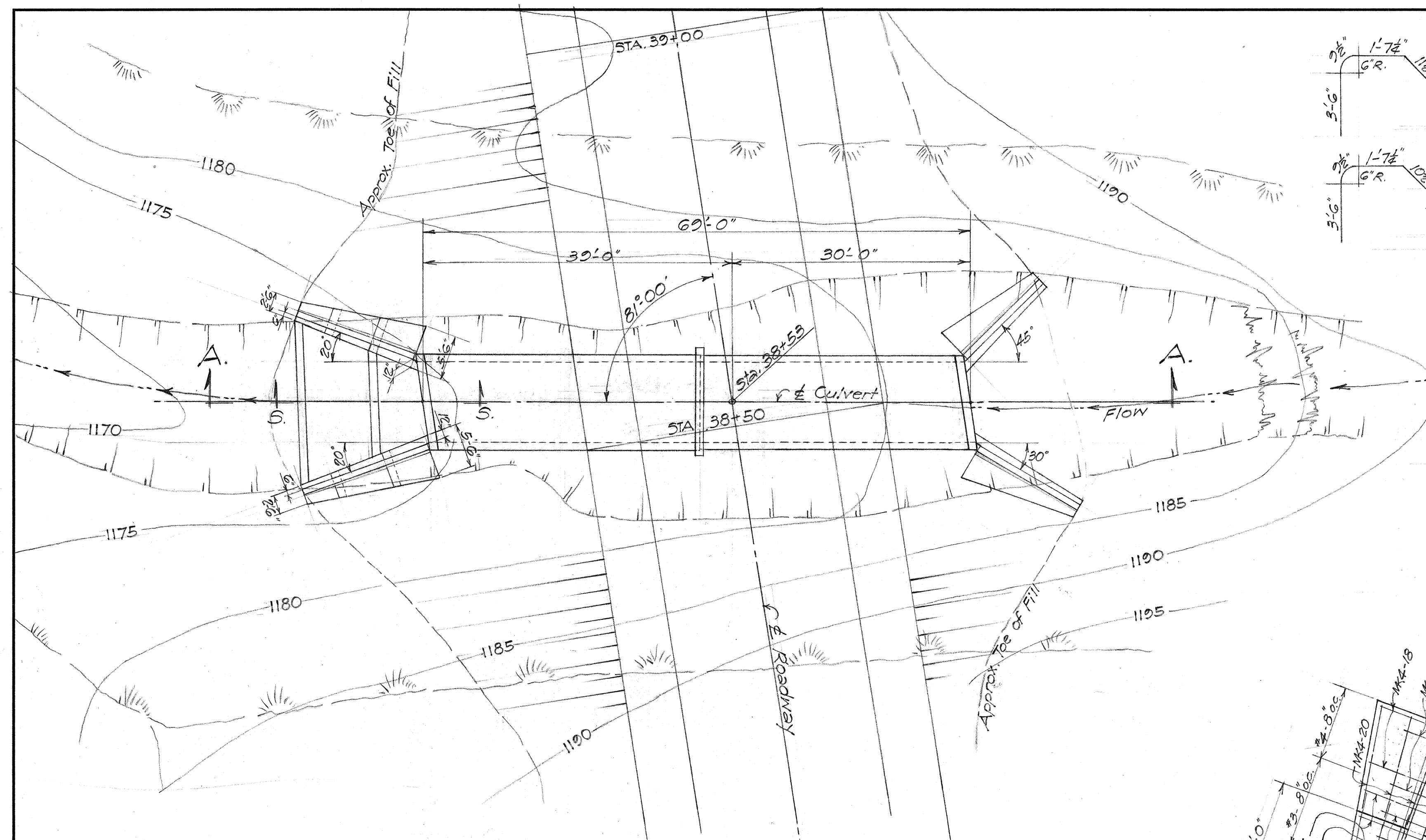




DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 6-52
 ORIGINAL PLAN
 NOTE BOOK
 NO.

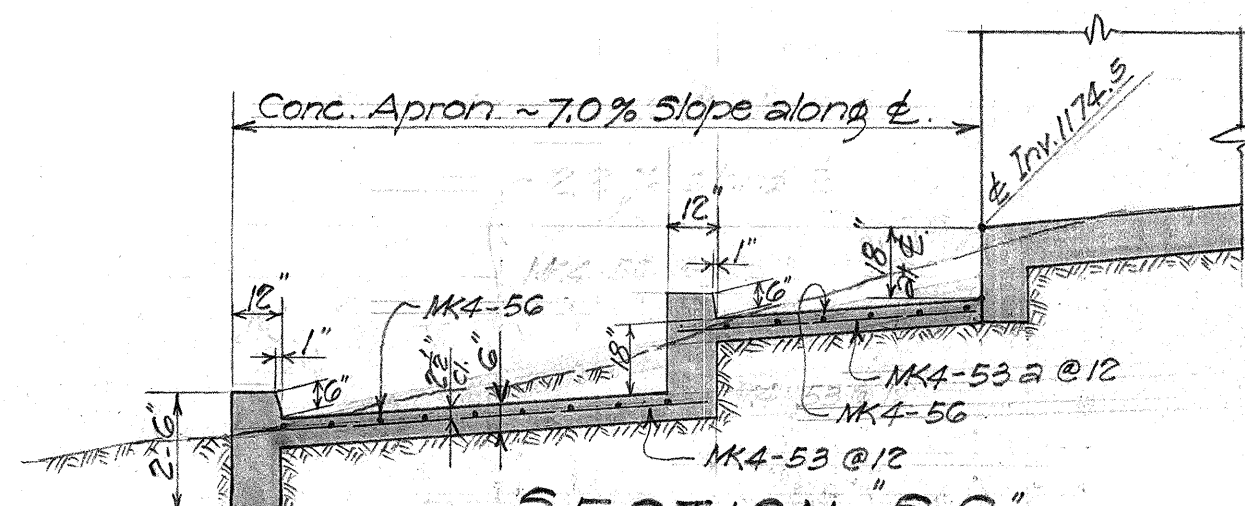
TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 12'-0" x 12'-0"
TWIN BOX CULVERT
 Sta. 34+44
 HAWAII BELT ROAD SDR 3(7)
 June 1952
 SHEET No. 5 OF 5 SHEETS

5590.22



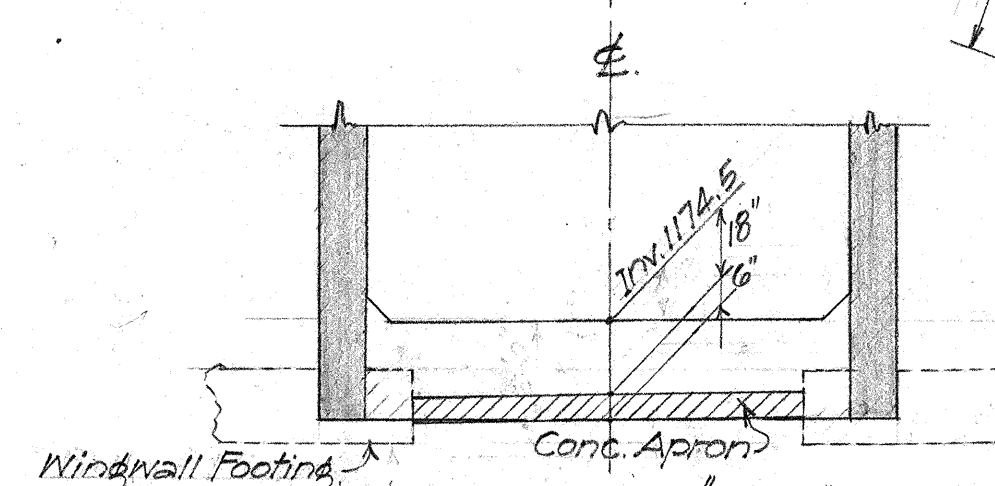
LAYOUT PLAN

Scale: 1" = 10'-0"



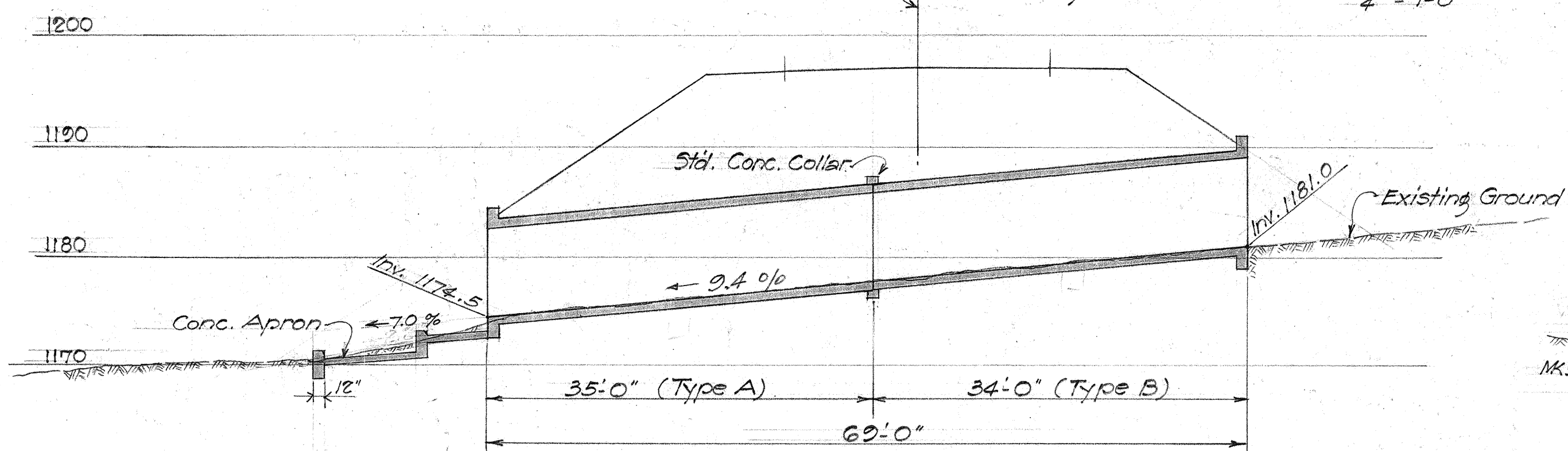
SECTION 'S-S'

1/4" = 1'-0"



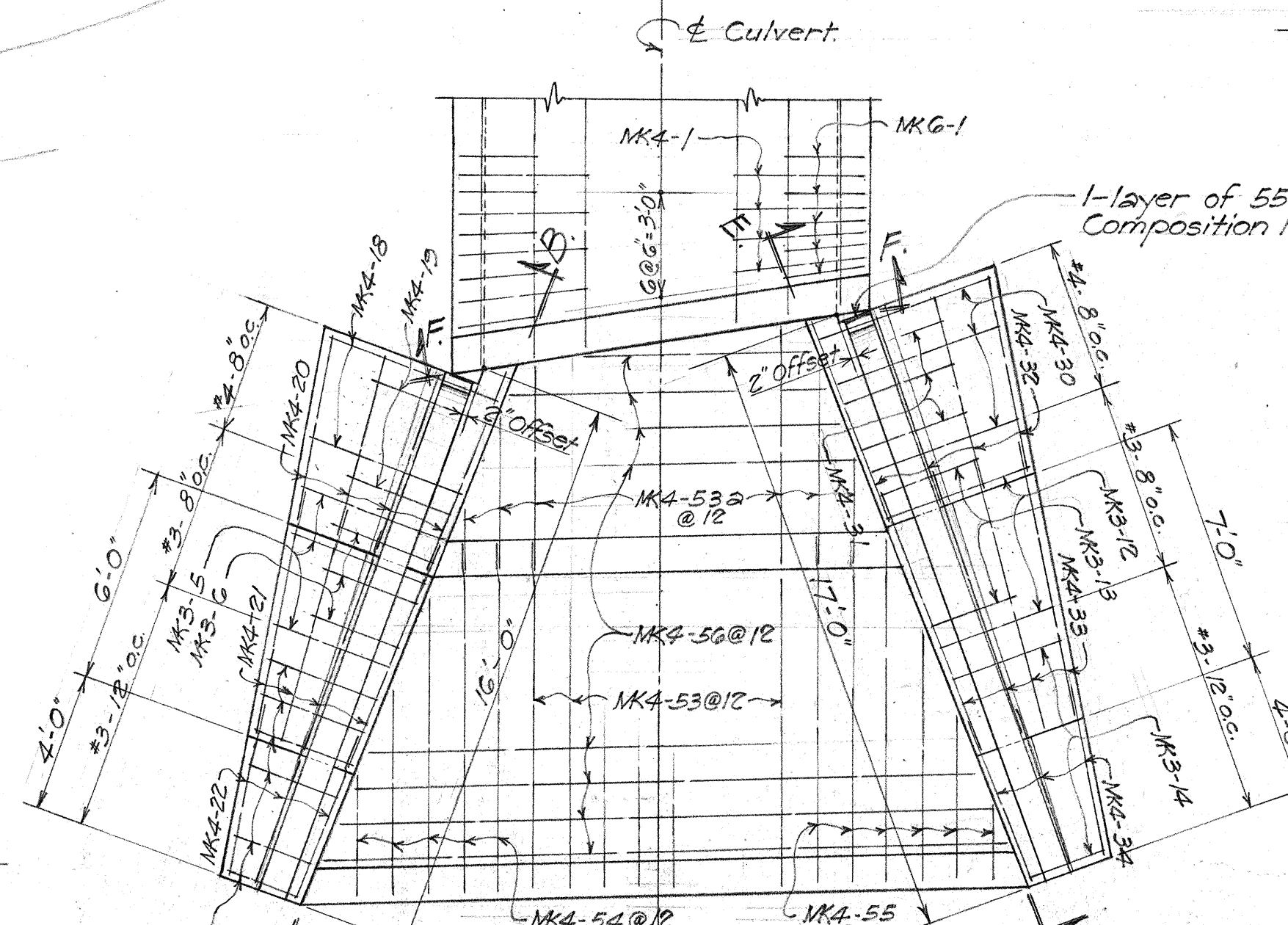
SECTION 'F-F'

1/4" = 1'-0"



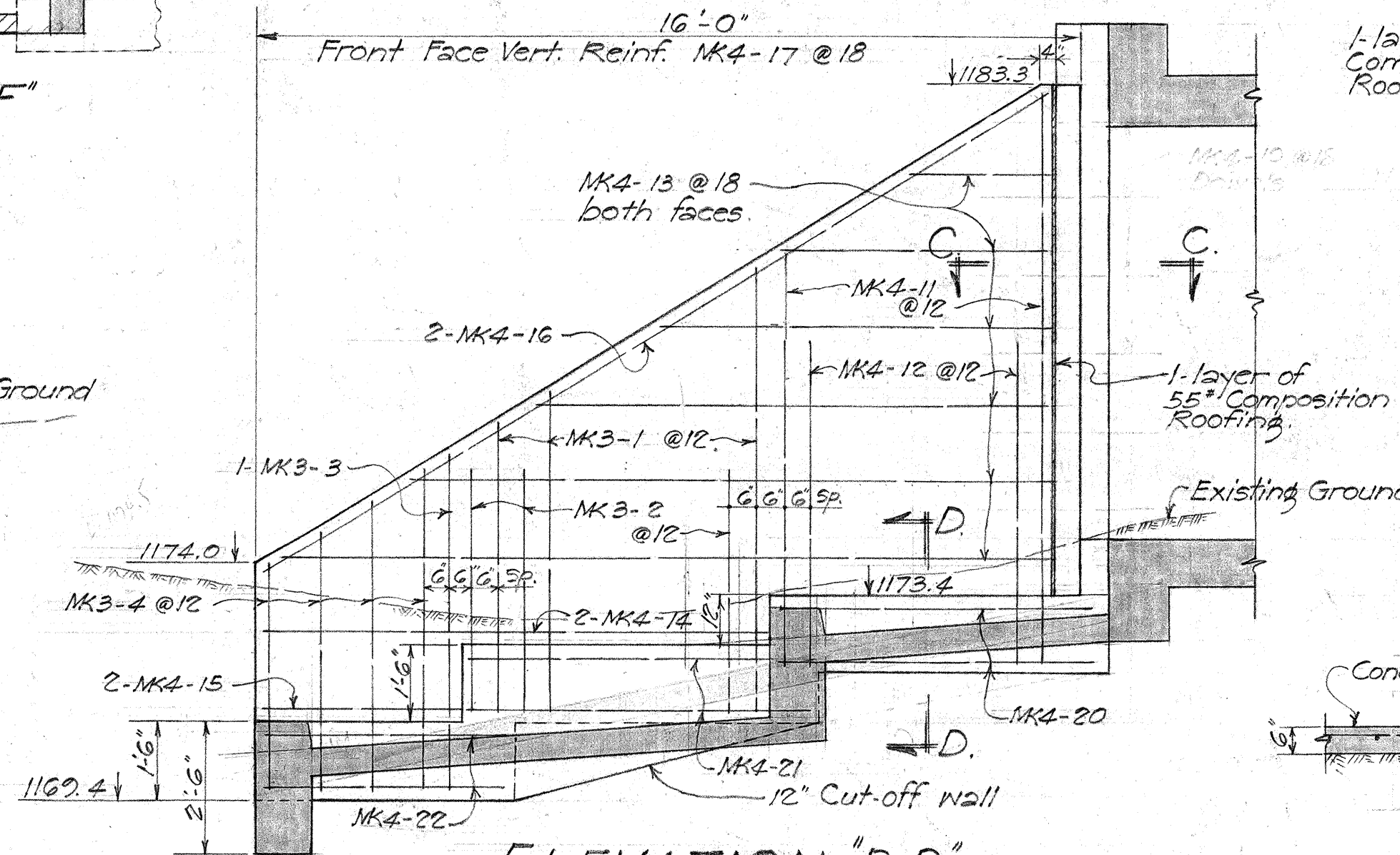
LONG. SECTION 'A-A'

1" = 10'-0"



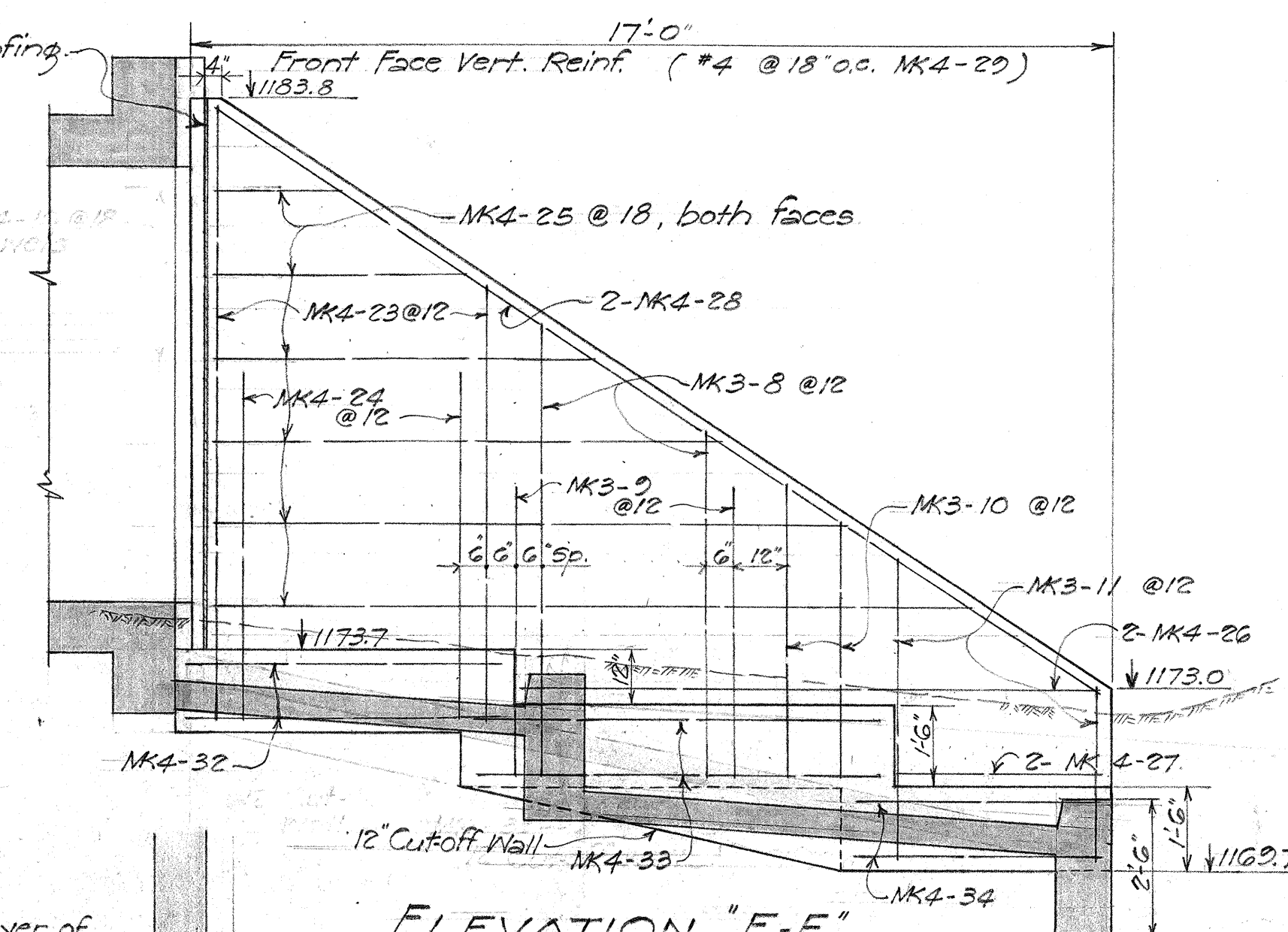
PLAN - OUTLET

1/4" = 1'-0"



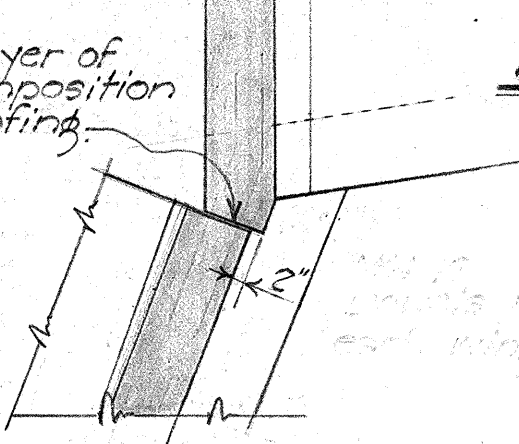
ELEVATION 'B-B'

3/8" = 1'-0"



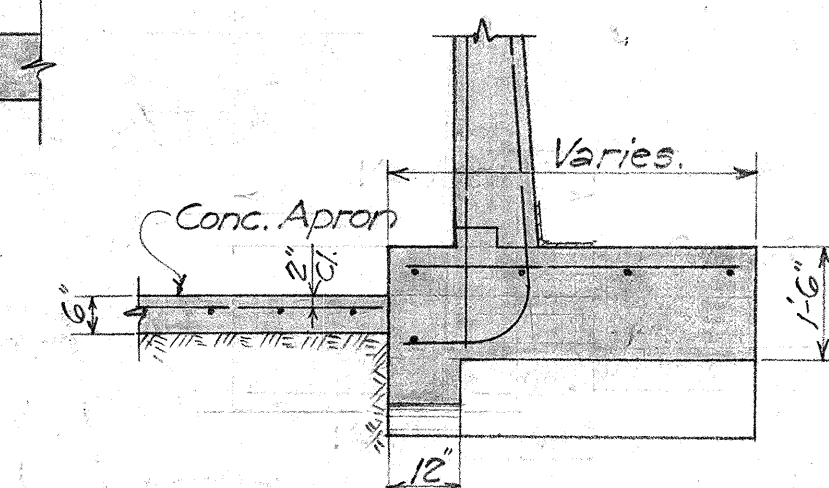
ELEVATION 'E-E'

3/8" = 1'-0"



SECTION 'C-C'

3/8" = 1'-0"



SECTION 'D-D'

3/8" = 1'-0"

ESTIMATED QUANTITIES

Class A-1 Conc.	131.2 C.Y.
Reinf. Steel	13,500 Lbs.
Damp Proofing	315.0 S.Y.
Structural Exc.	71 C.Y.

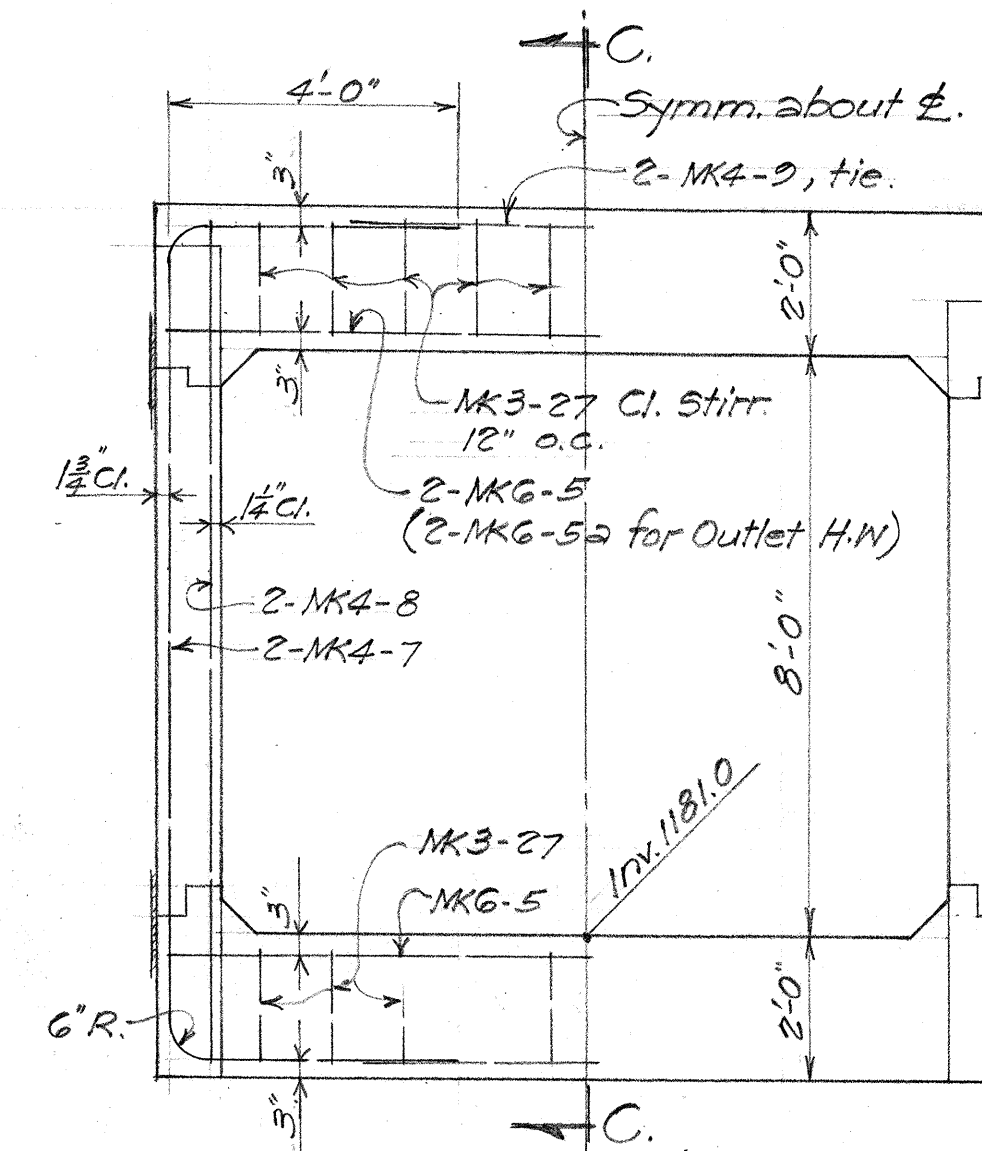
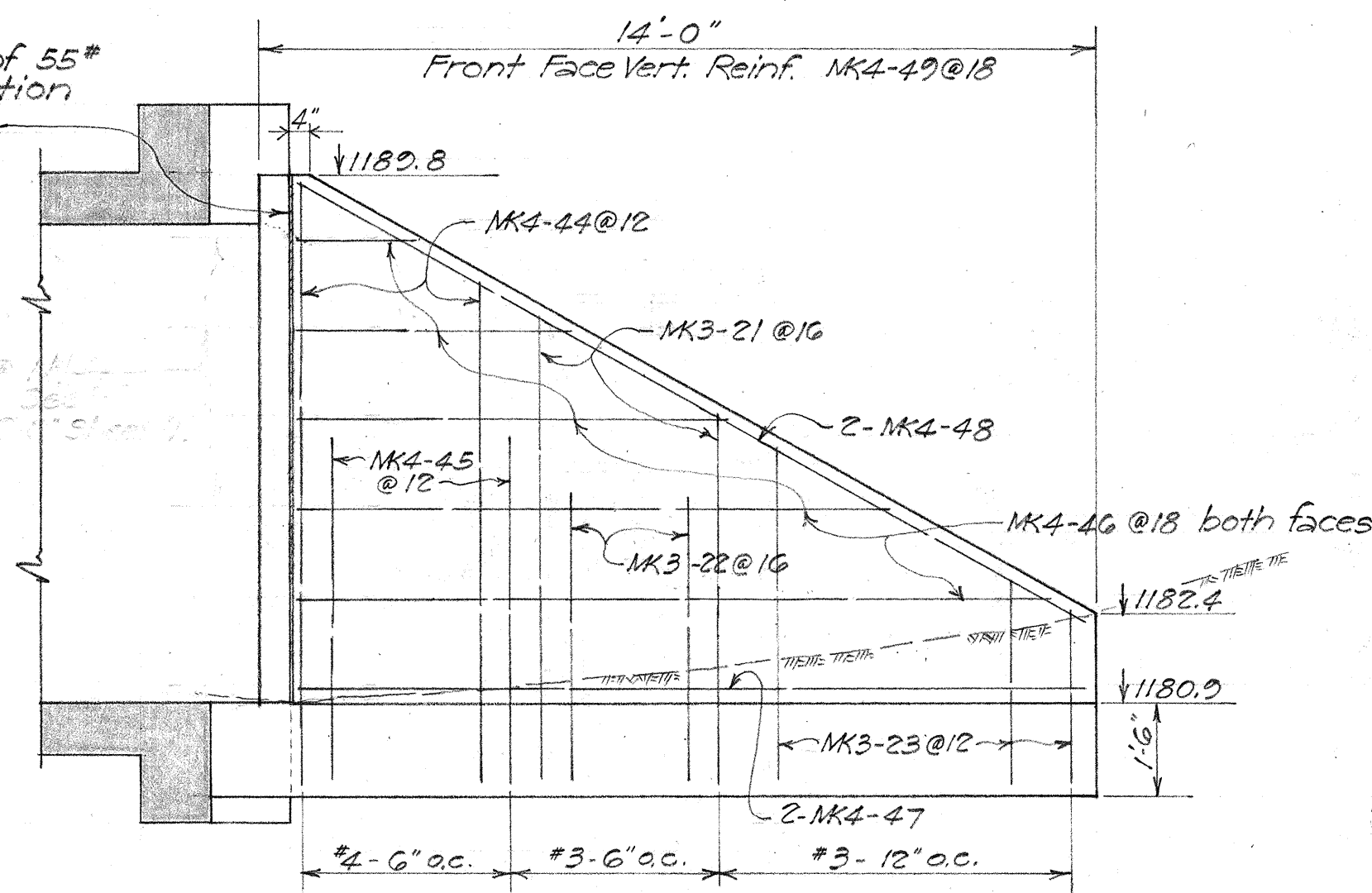
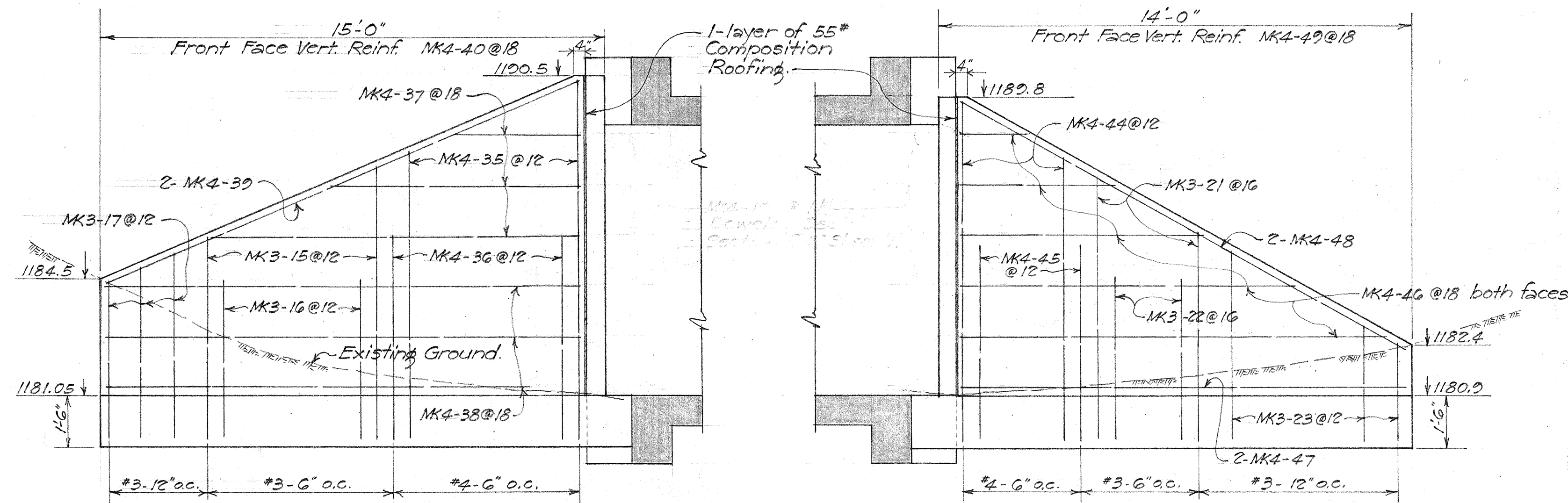
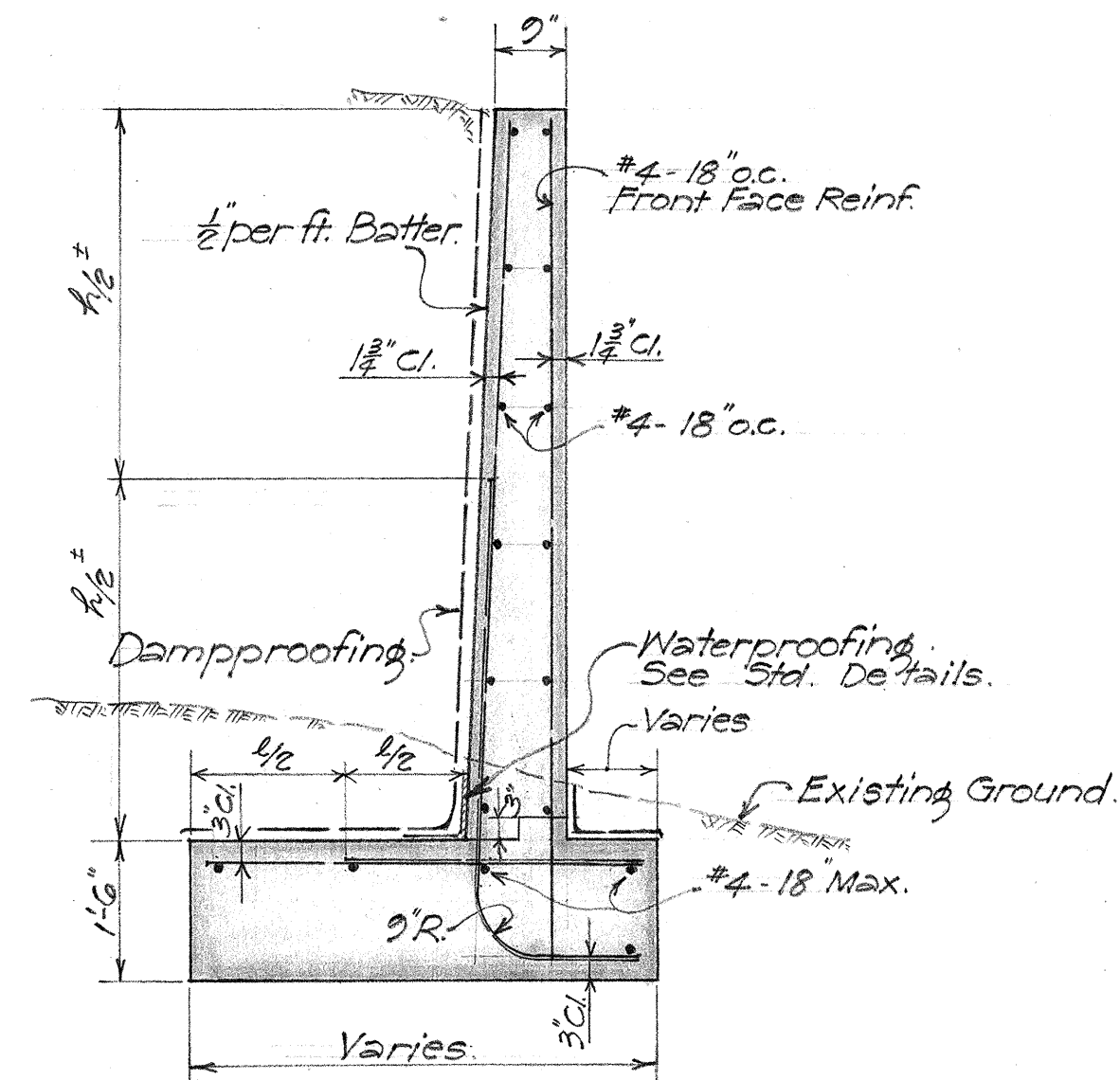
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
10'x8' BOX CULVERT
5/2.38+53
HAWAII BELT RD. SDR 3(7)
May, 1952

SHEET NO. 1 OF 2 SHEETS

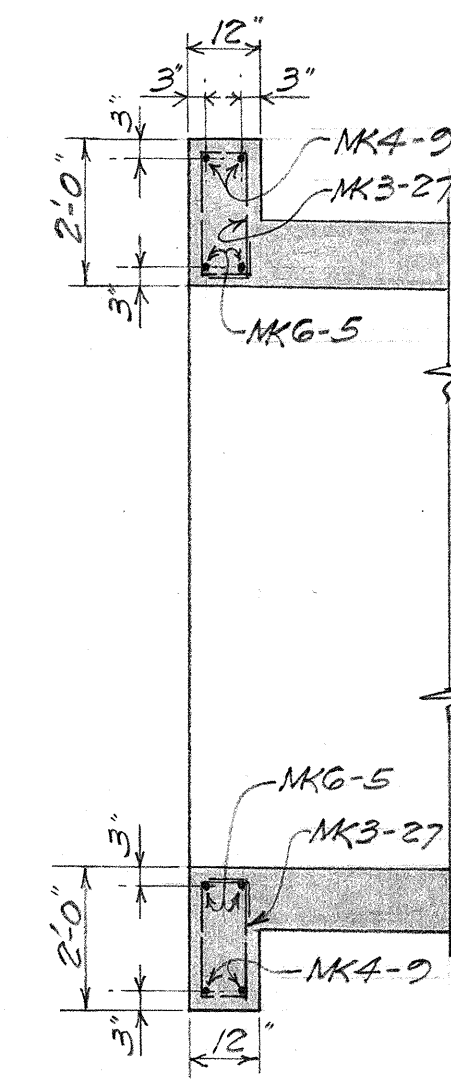
5590.23

PLAN ~ INTAKE

Scale: 1" = 1'-0"



NOTE: Reinf. for Outlet Headwall similar.



ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
	DESIGNED BY _____	" _____
	DRAWN BY <i>R.K.</i>	" <i>May 50</i>
	TRACED BY _____	" _____
	QUANTITIES BY <i>R.K. & R.N.</i>	" _____
	QUANTITIES CHECKED BY _____	" _____
NOTE BOOK No. _____	CHECKED BY _____	" _____

TERRITORIAL HIGHWAY DEPARTMENT

TERRITORY OF HAWAII

10'x8' BOX CULVERT

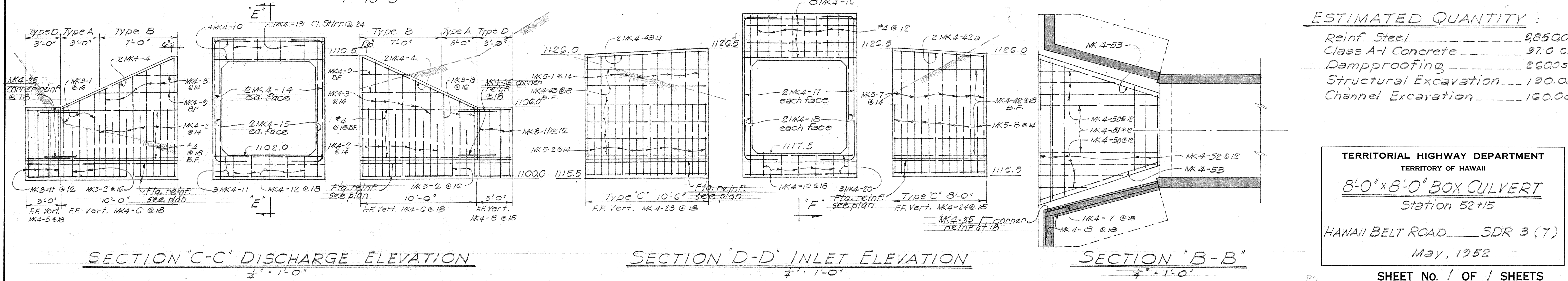
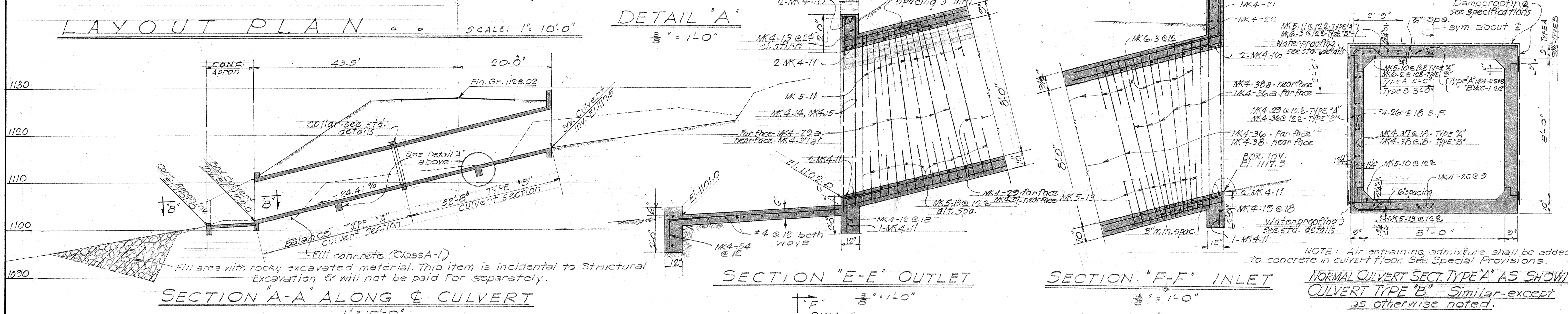
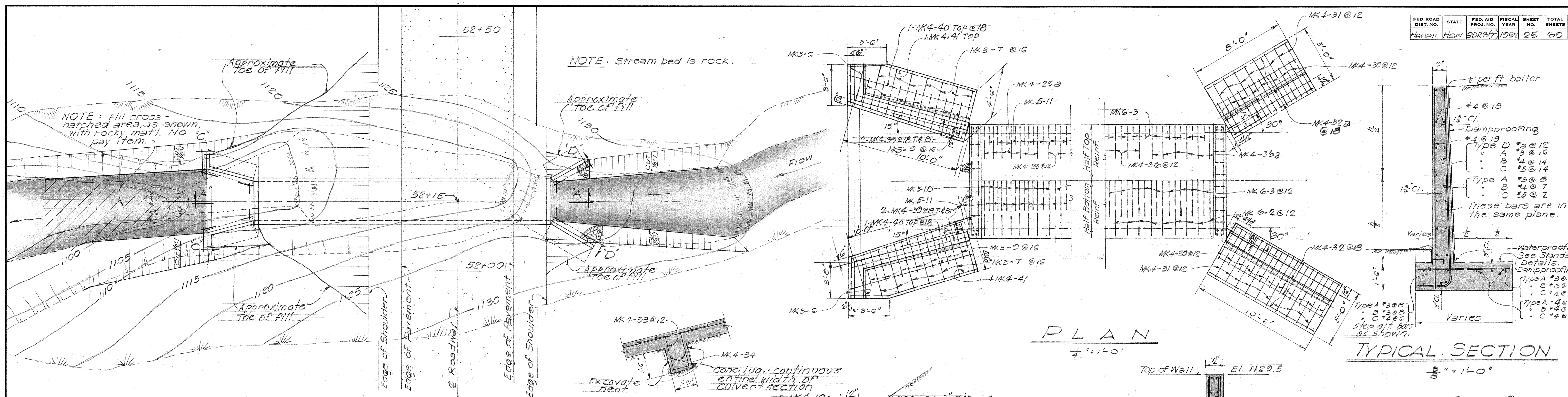
Sta. 38 + 53

HAWAII BELT RD. SDR 3(7)

May, 1952

SHEET No. 2 OF 2 SHEETS

5590.24



ESTIMATED QUANTITY:

Reinf. Steel	985.00
Class A-1 Concrete	97.0 c.y.
Dampproofing	2600 sq. yd.
Structural Excavation	190.00 c.y.
Channel Excavation	160.00 c.y.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

8'-0" x 8'-0" BOX CULVERT
Station 52+15

HAWAII BELT ROAD SDR 3 (7)

May, 1952

SHEET No. 1 OF 1 SHEETS

SURVEY PLOTTED BY: [Name]
DESIGNED BY: [Name]
CHECKED BY: [Name]
NOTE BOOK No. [Number]