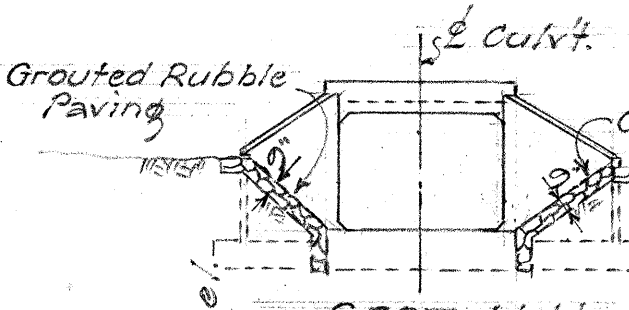


ESTIMATED QUANTITIES

Class A-1 Conc. 62.0 cu. y.
 Reinf. Steel 6,883.0 lbs.
 Struct. Exc. 37.0 cu. y.
 Dampproofing 120.0 sq. ft.
 Channel Exc. 257.0 cu. y.
 Grouted Rubble Paving 40 cu. y.

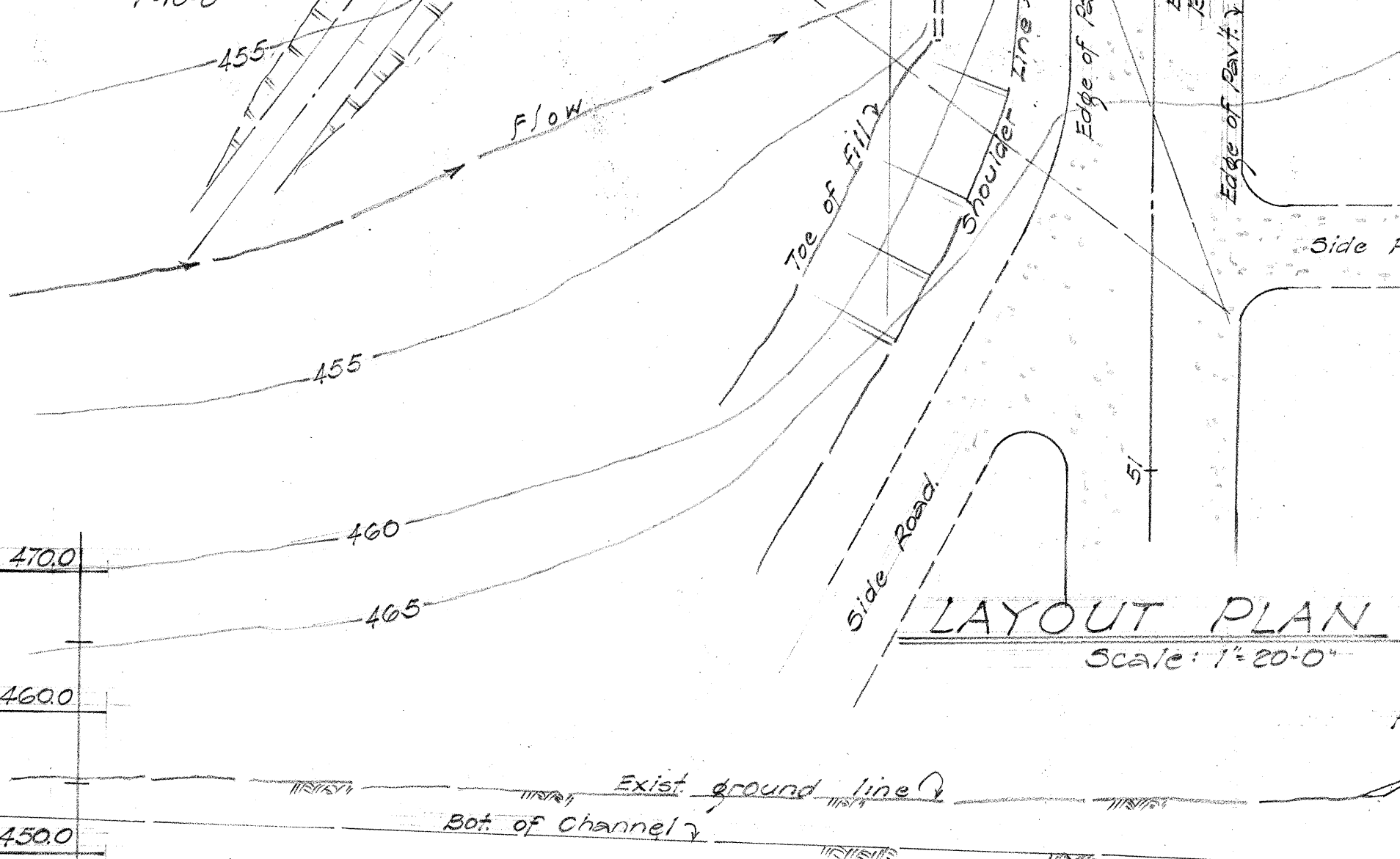
Class A-1 Conc. 2.5 cu. y.
 Class A-1 Conc. 2.5 cu. y.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	F 046(1)	1955	15	32

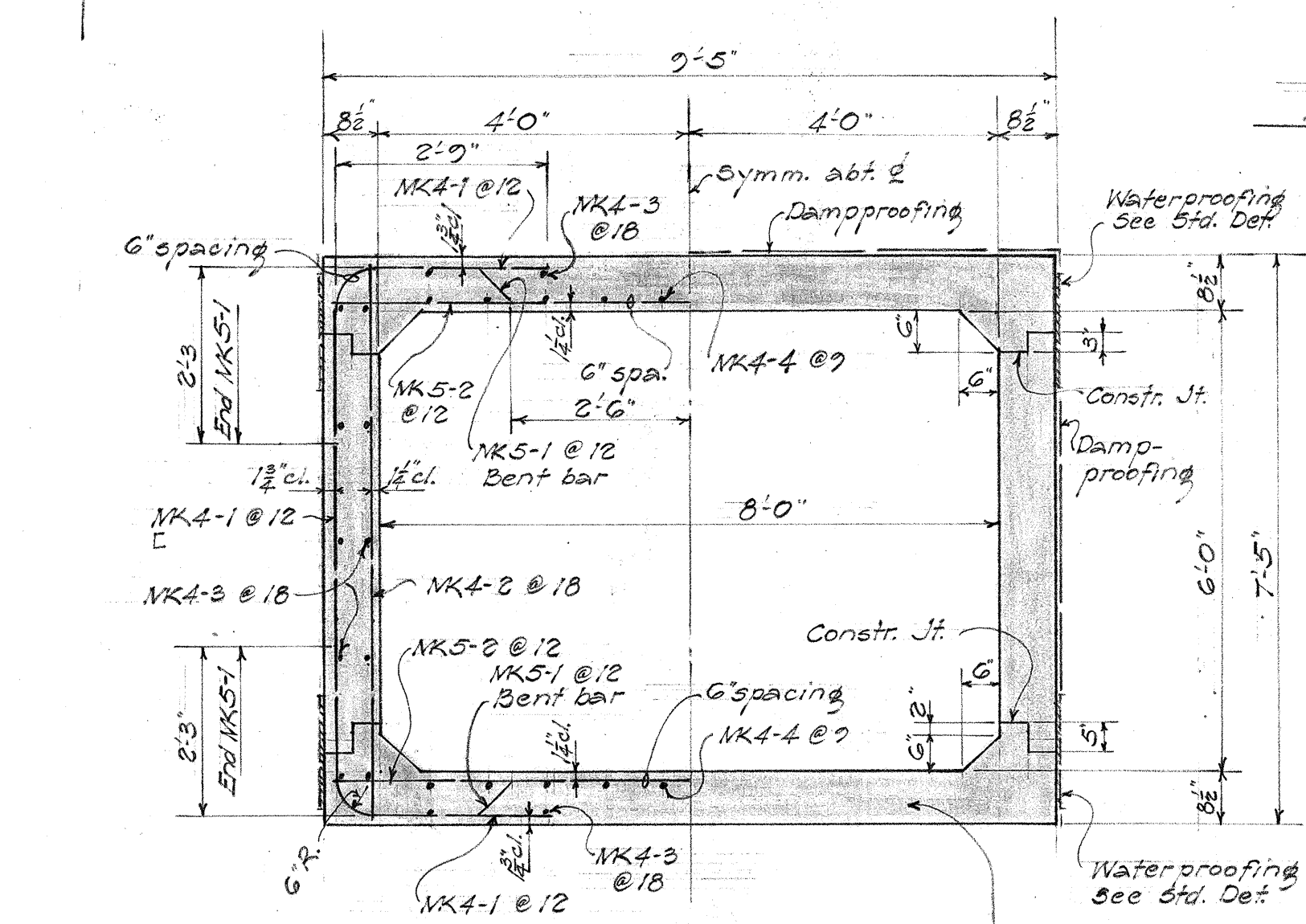


SECT. H-H
1'-10'-0"

SECT. G-G
1'-10'-0"

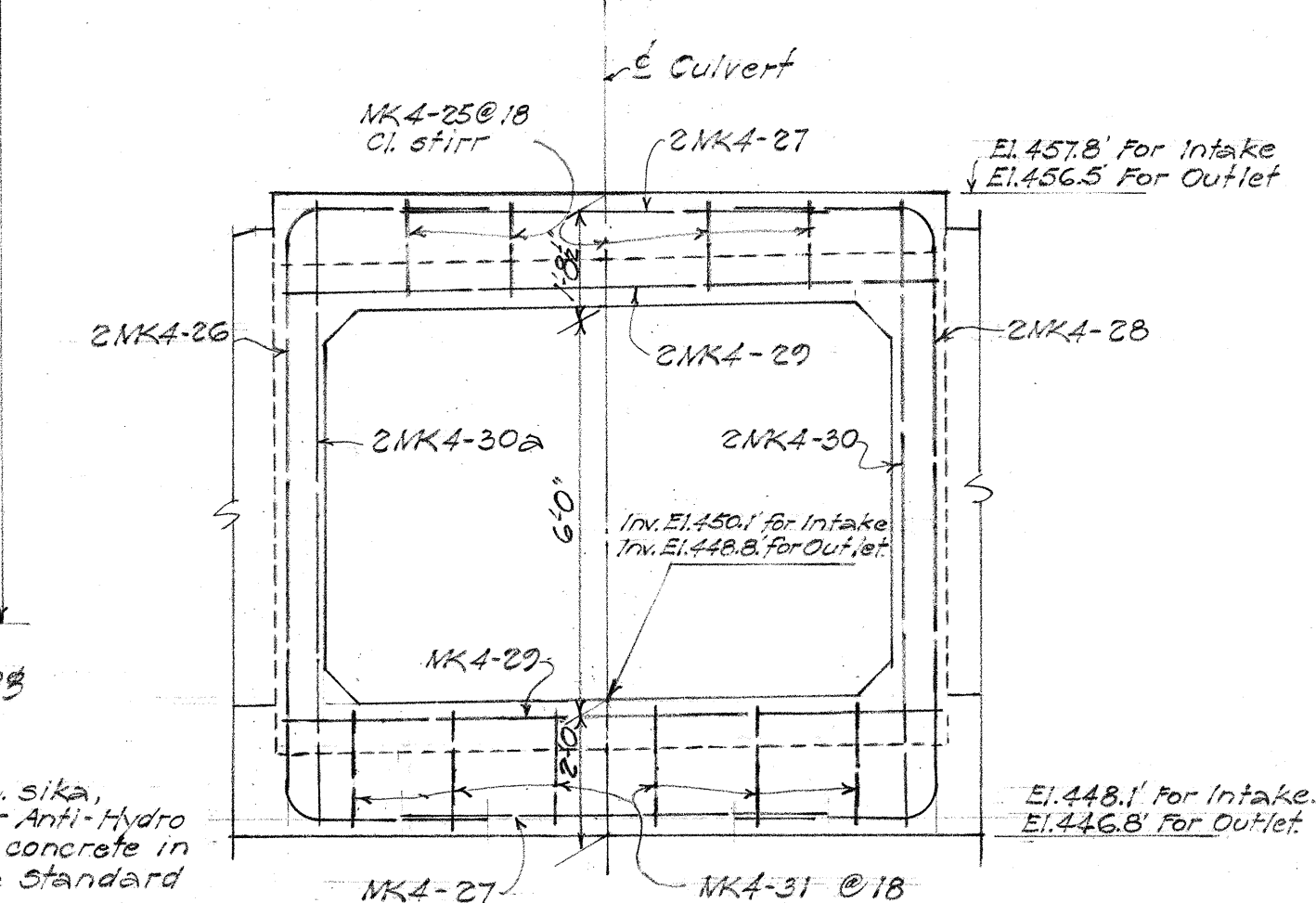


LAYOUT PLAN
Scale: 1"=20'-0"



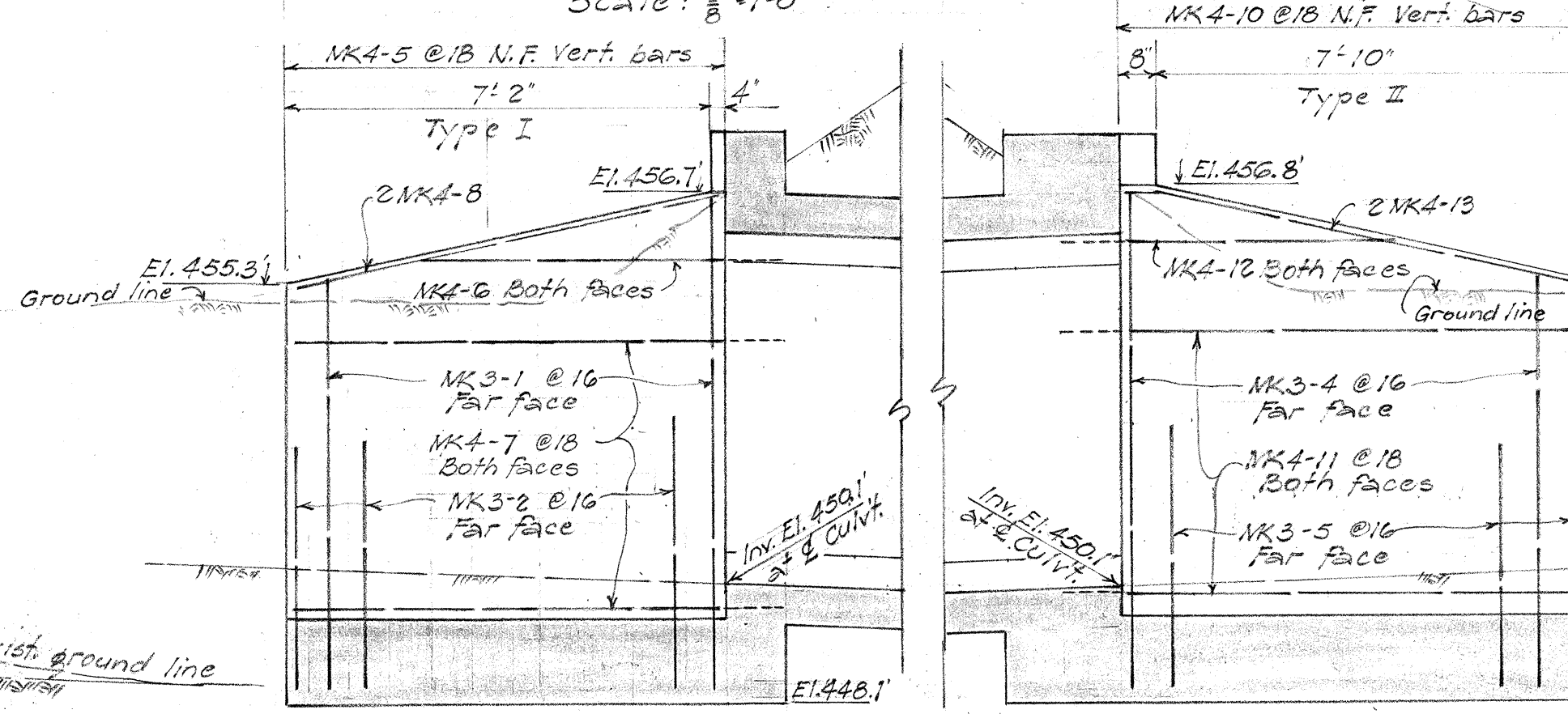
NORMAL SECTION
1'-10'-0"

Admixture of Conc. Silica, Tricosol Normal or Anti-Hydro shall be added to concrete in culvert floor. See Standard Specifications

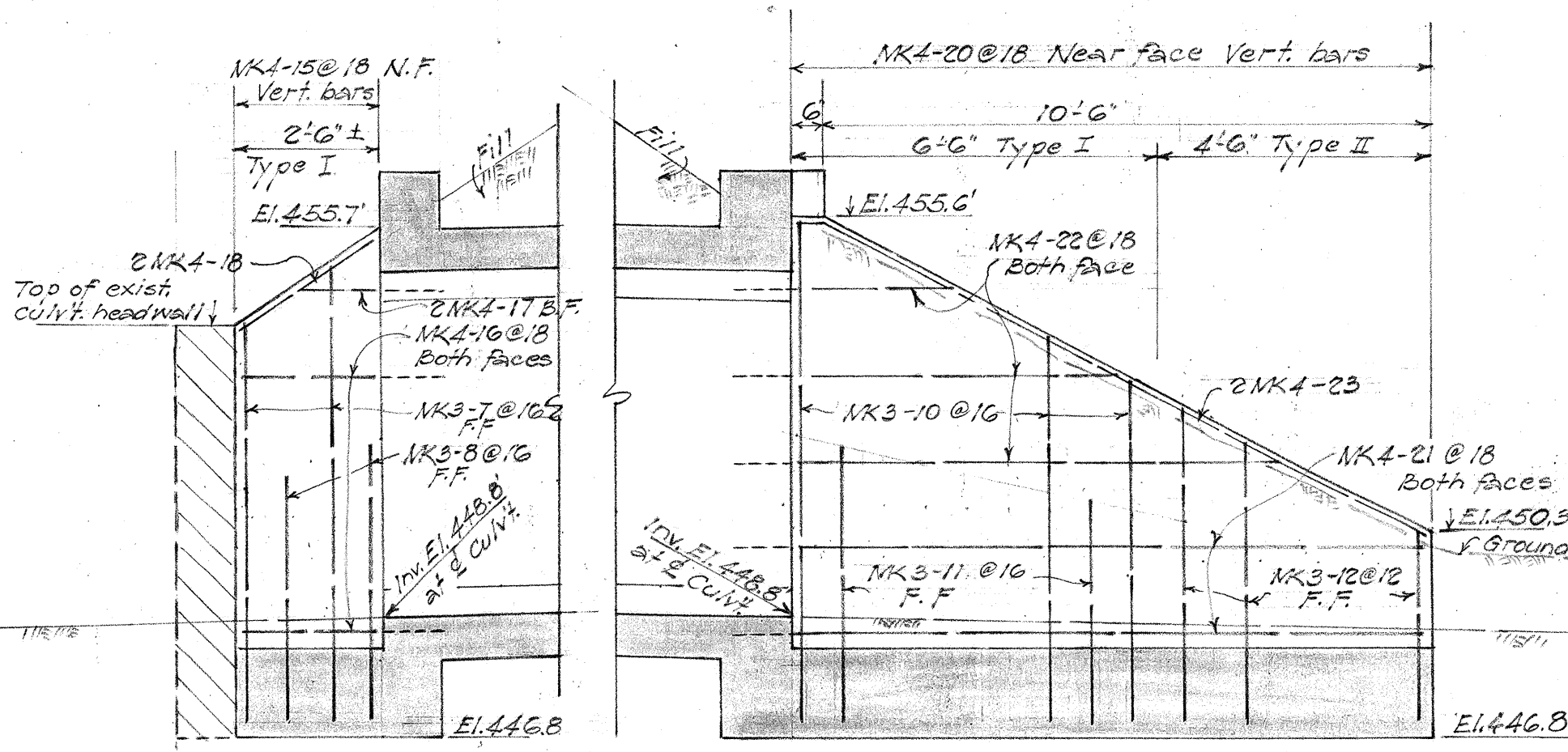


HEAD WALL REINF. ELEV.
Intake Head Wall reinf. as shown
Outlet Head Wall reinf. opposite hand
3/8"=1'-0"

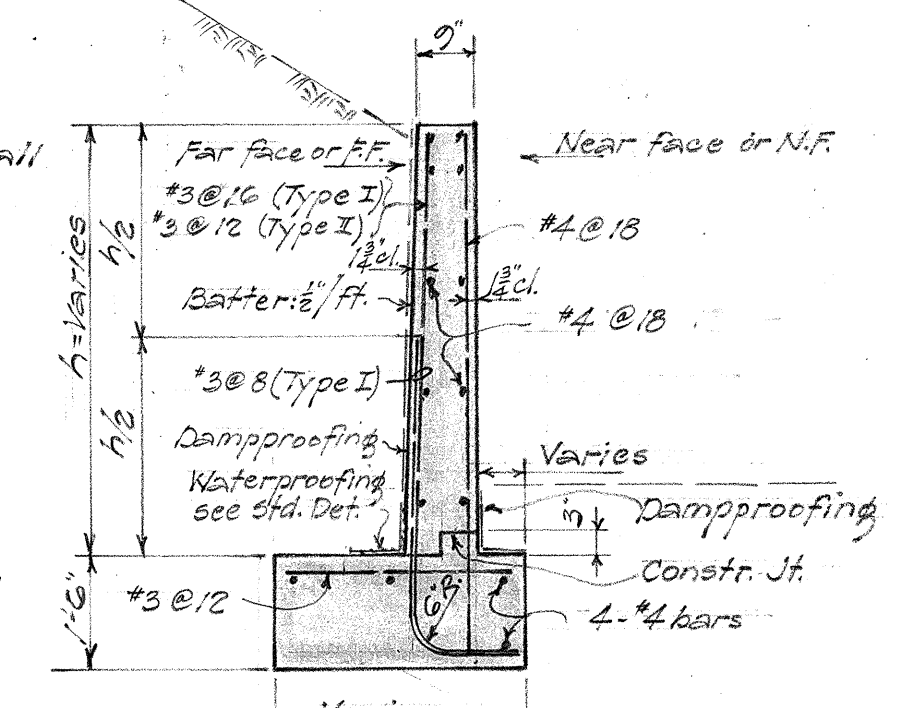
LONGITUDINAL SECTION ALONG & CULVERT
Scale: 1"=10'-0"



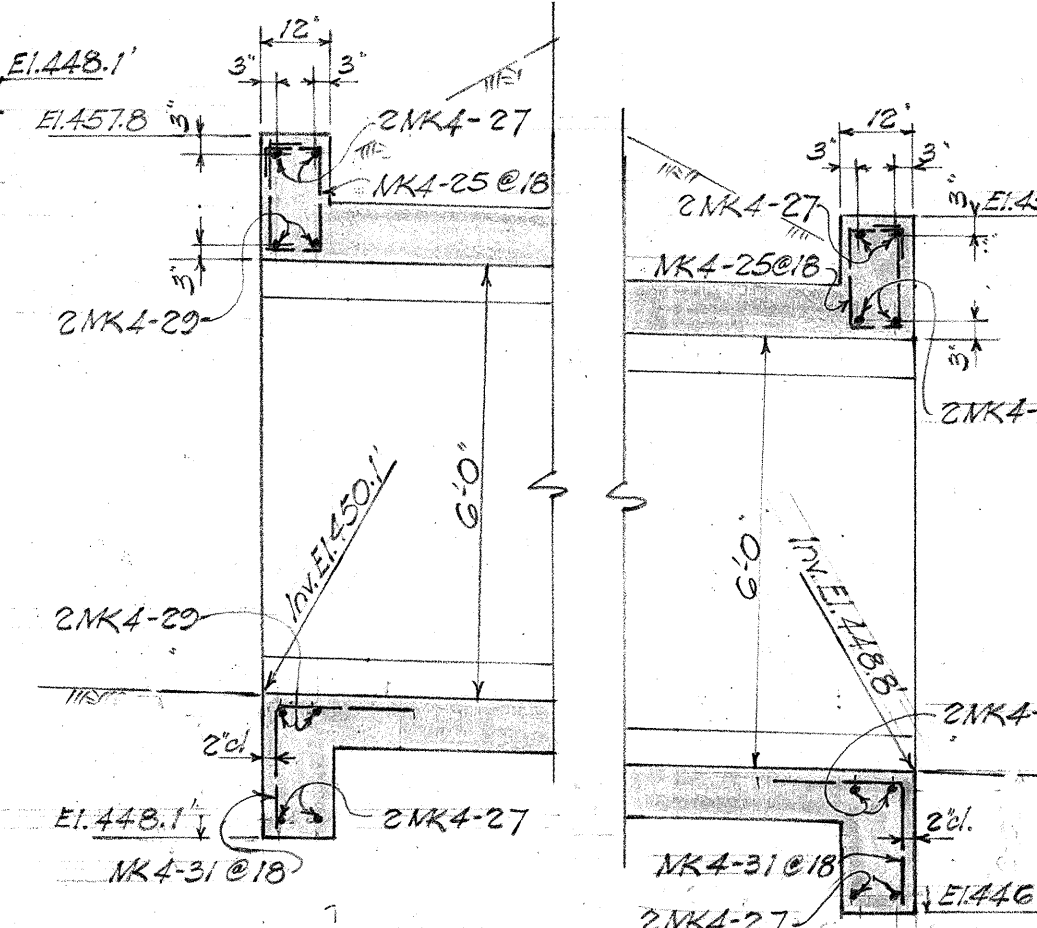
W.W. #1 ELEV. A-A
INTAKE WING WALLS ELEVATION
3/8"=7'-0"



W.W. #3 ELEV. C-C
OUTLET WING WALLS ELEVATION
3/8"=7'-0"



TYPICAL WING WALL SECT.
FOR TYPE I & II
3/8"=7'-0"



SECT. E-E
3/8"=7'-0"

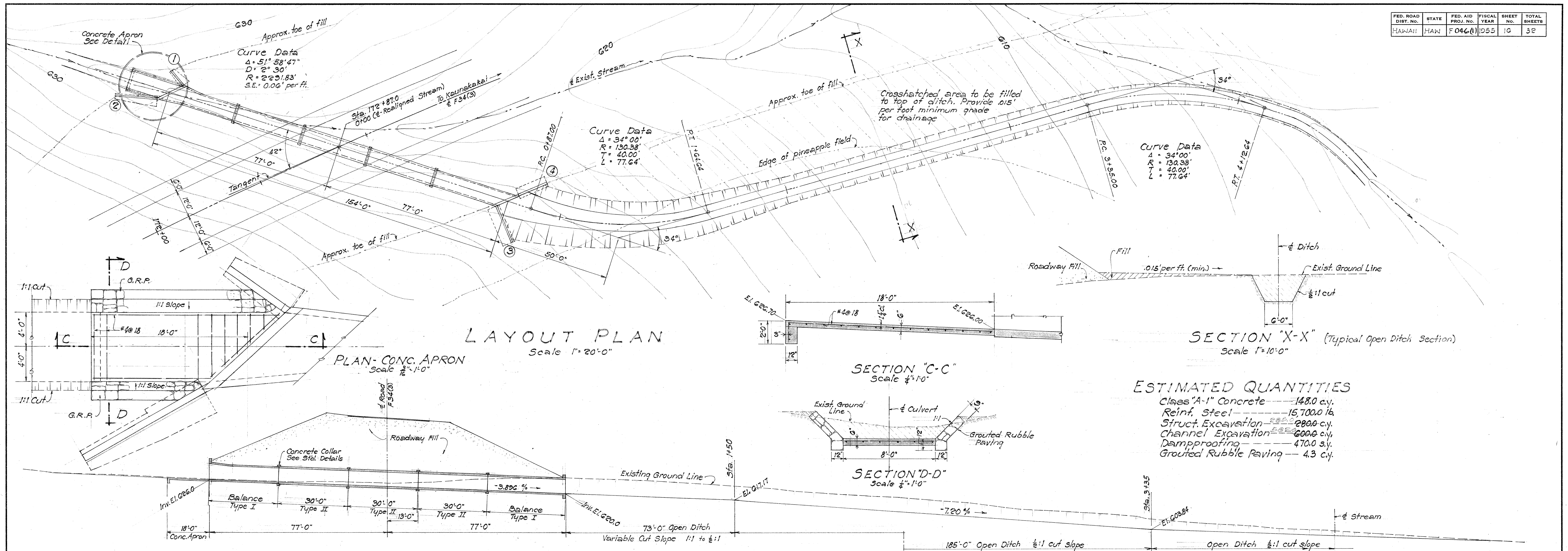
SECT. F-F
3/8"=7'-0"

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 8'-0"X6'-0" CONC. BOX CULV'T.
 Sta. 52+48.6
 Molokai Airport Rd. F 046(1)
 July 1954

SHEET No. 1 OF 1 SHEETS

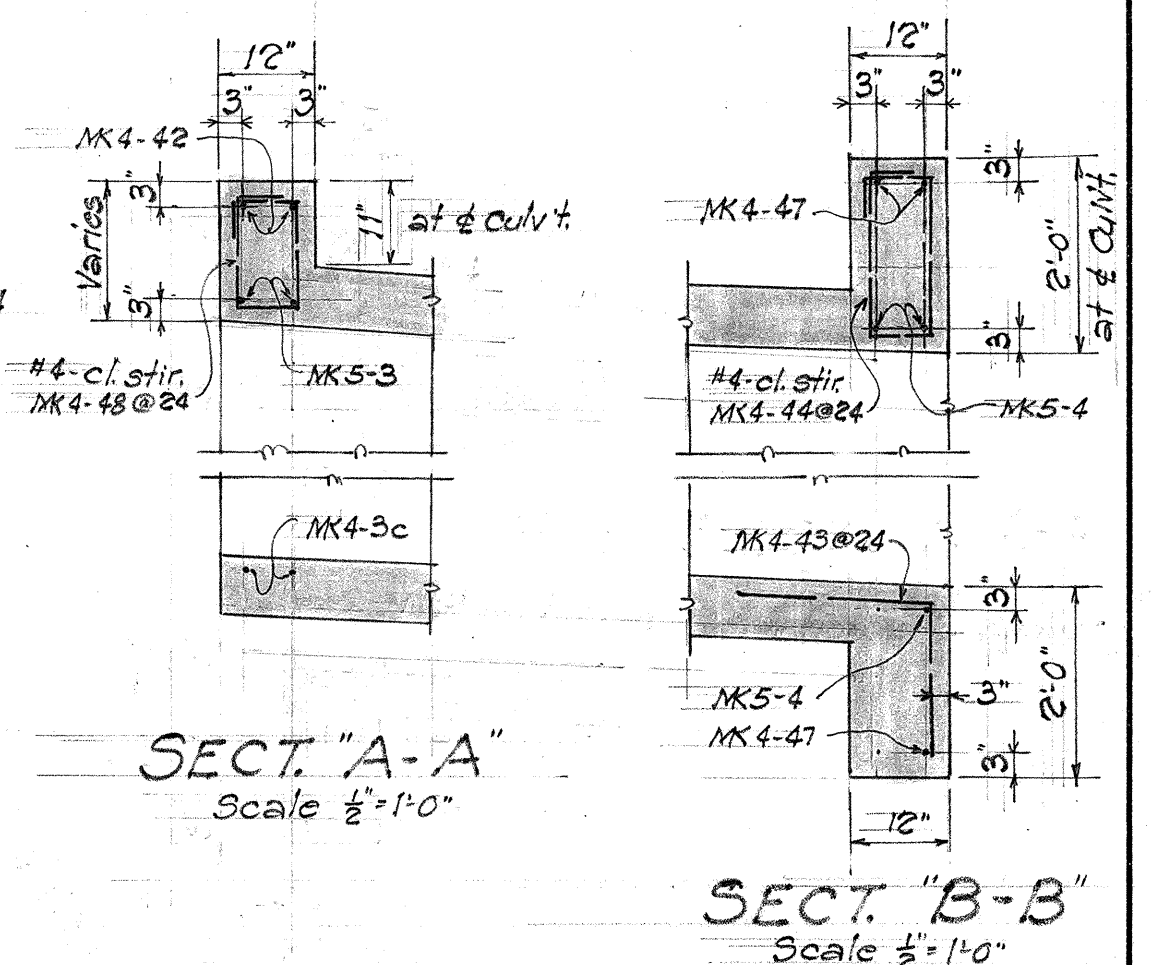
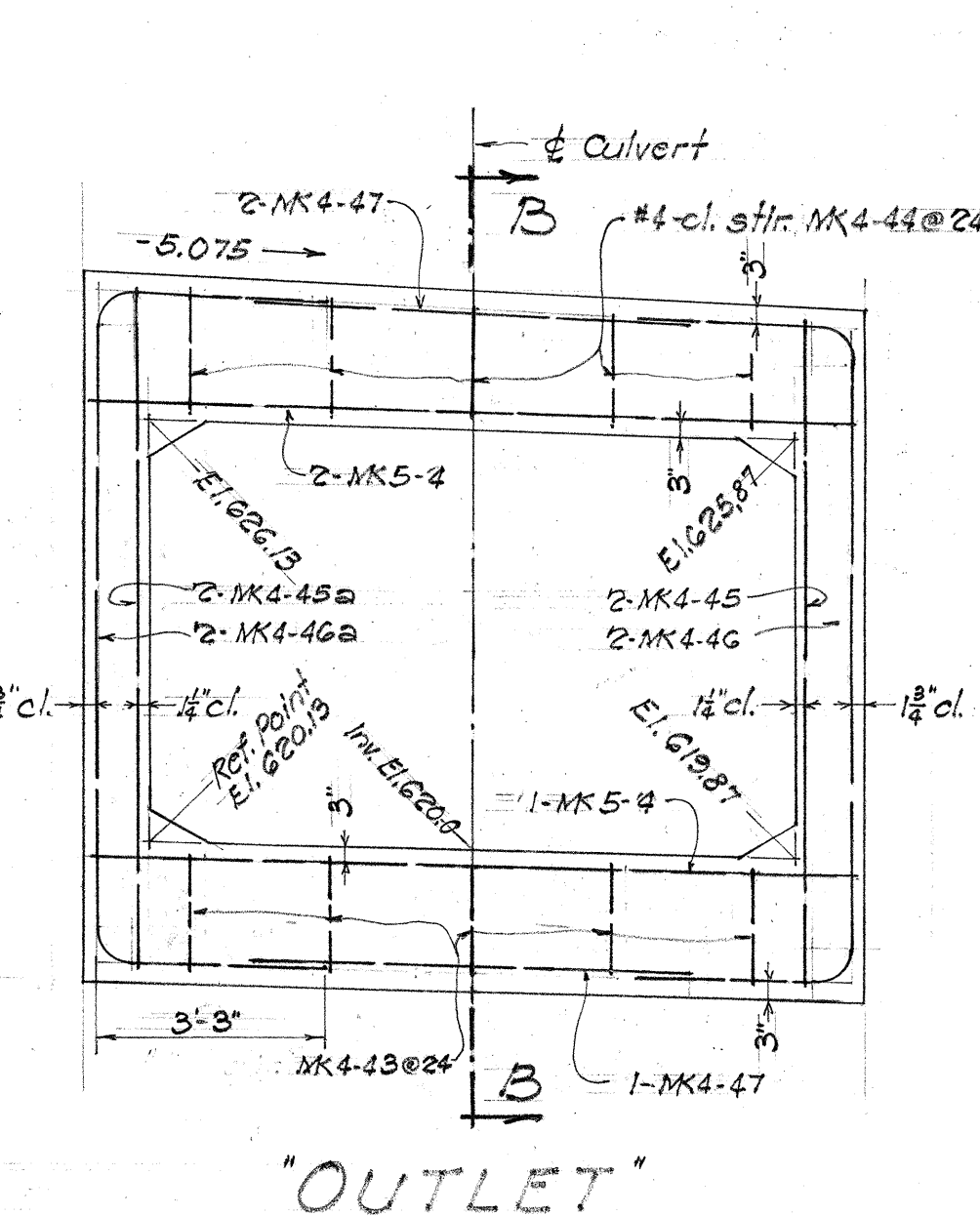
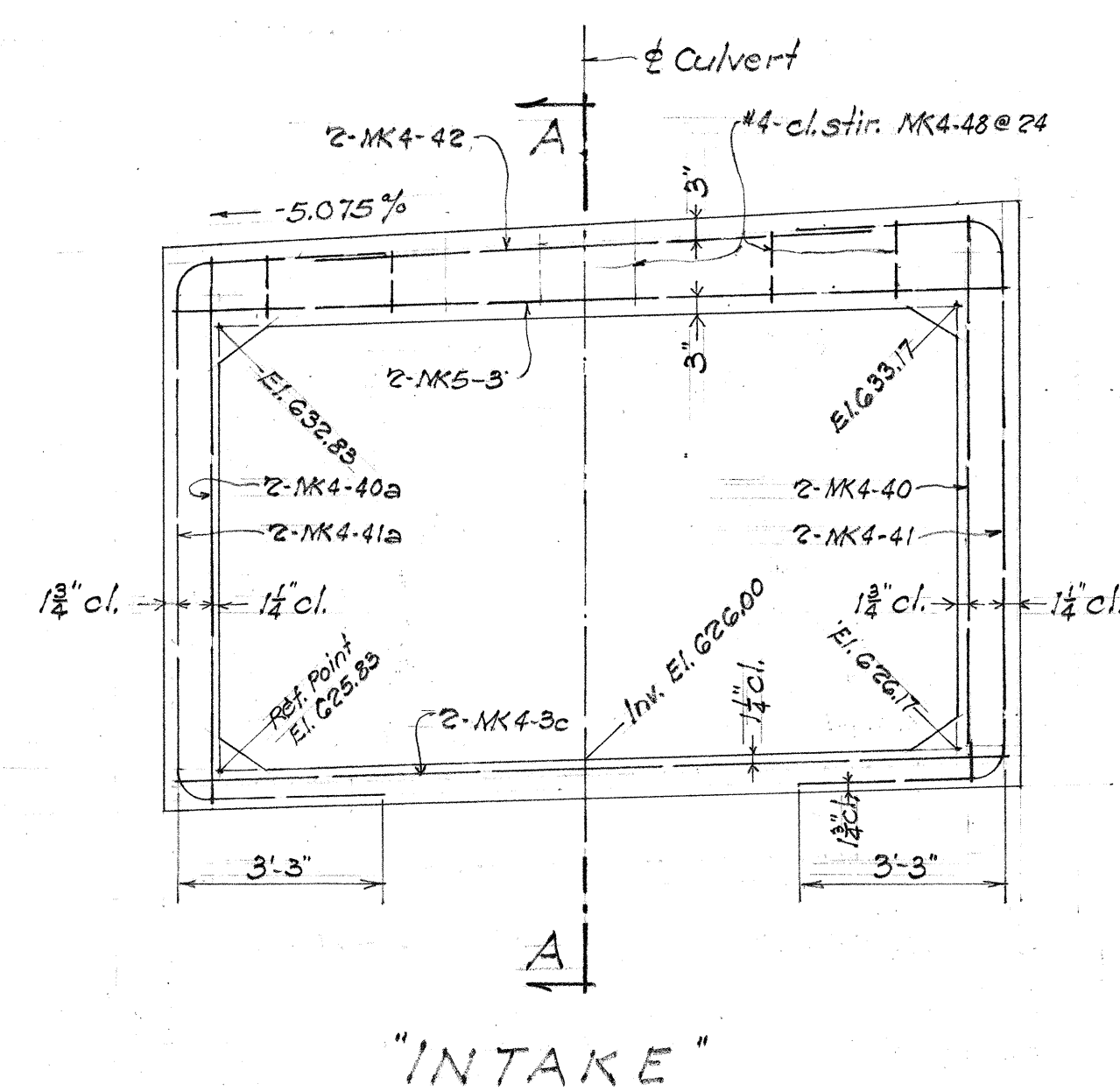
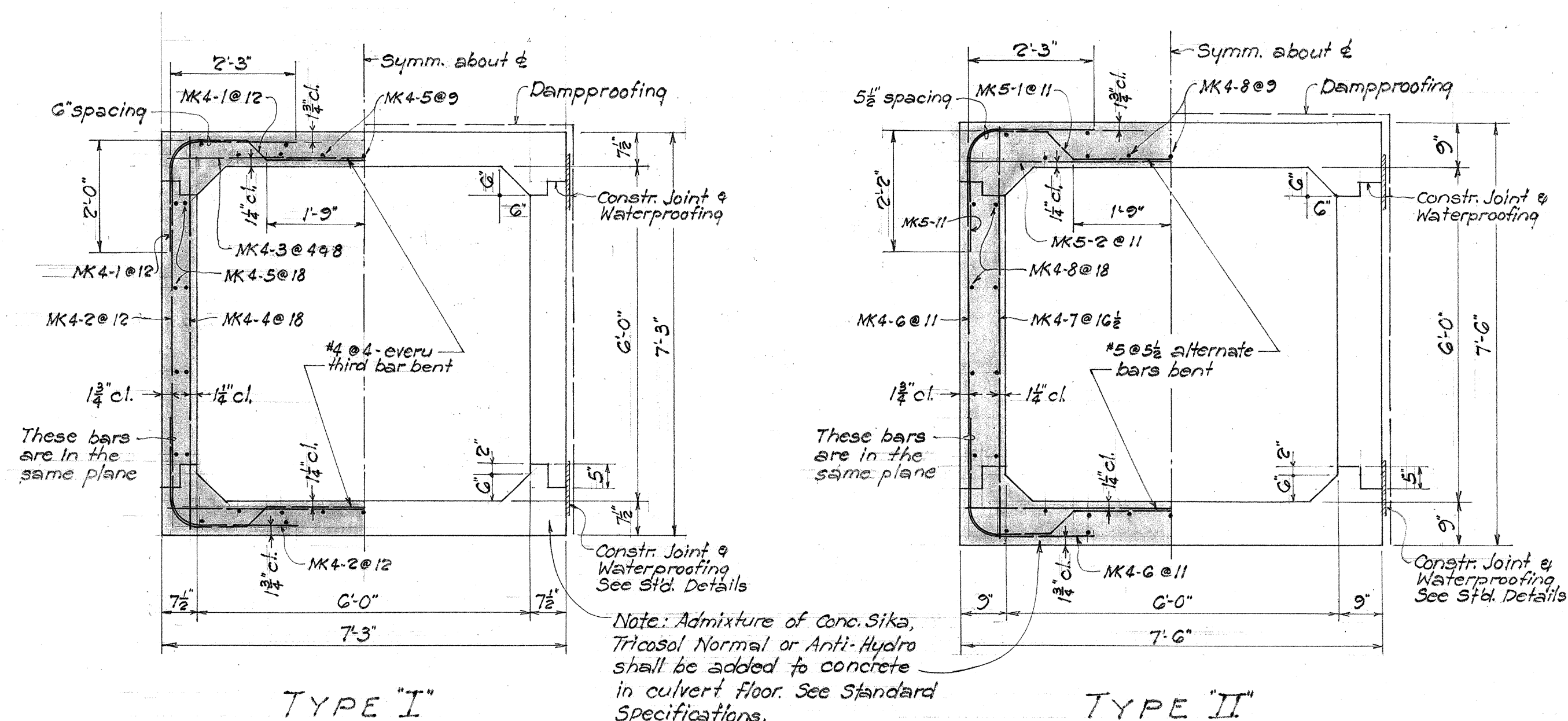
5712.15

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	F 046 (1)	1955	10	32



LONGITUDINAL SECTION ALONG & CULVERT

Scale 1" = 20'-0"



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

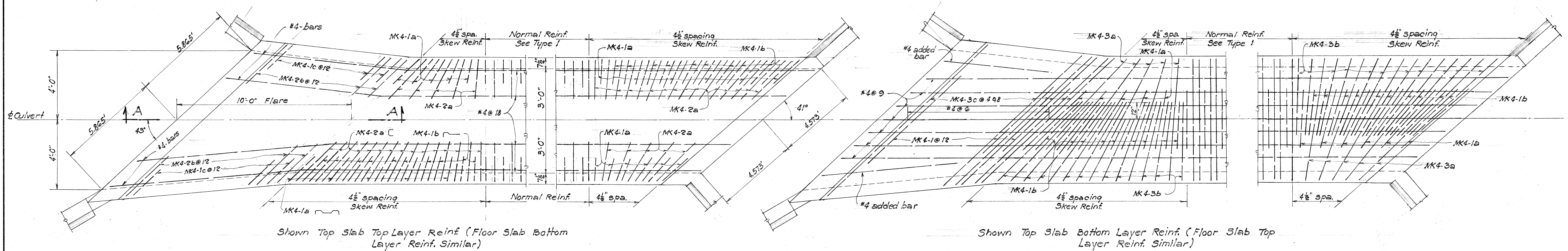
6' x 6' CONC. BOX CULVERT
Sta. 172+87

Molokai Airport Road July 1954 F.046 (1)

SHEET No. 1 OF 2 SHEETS

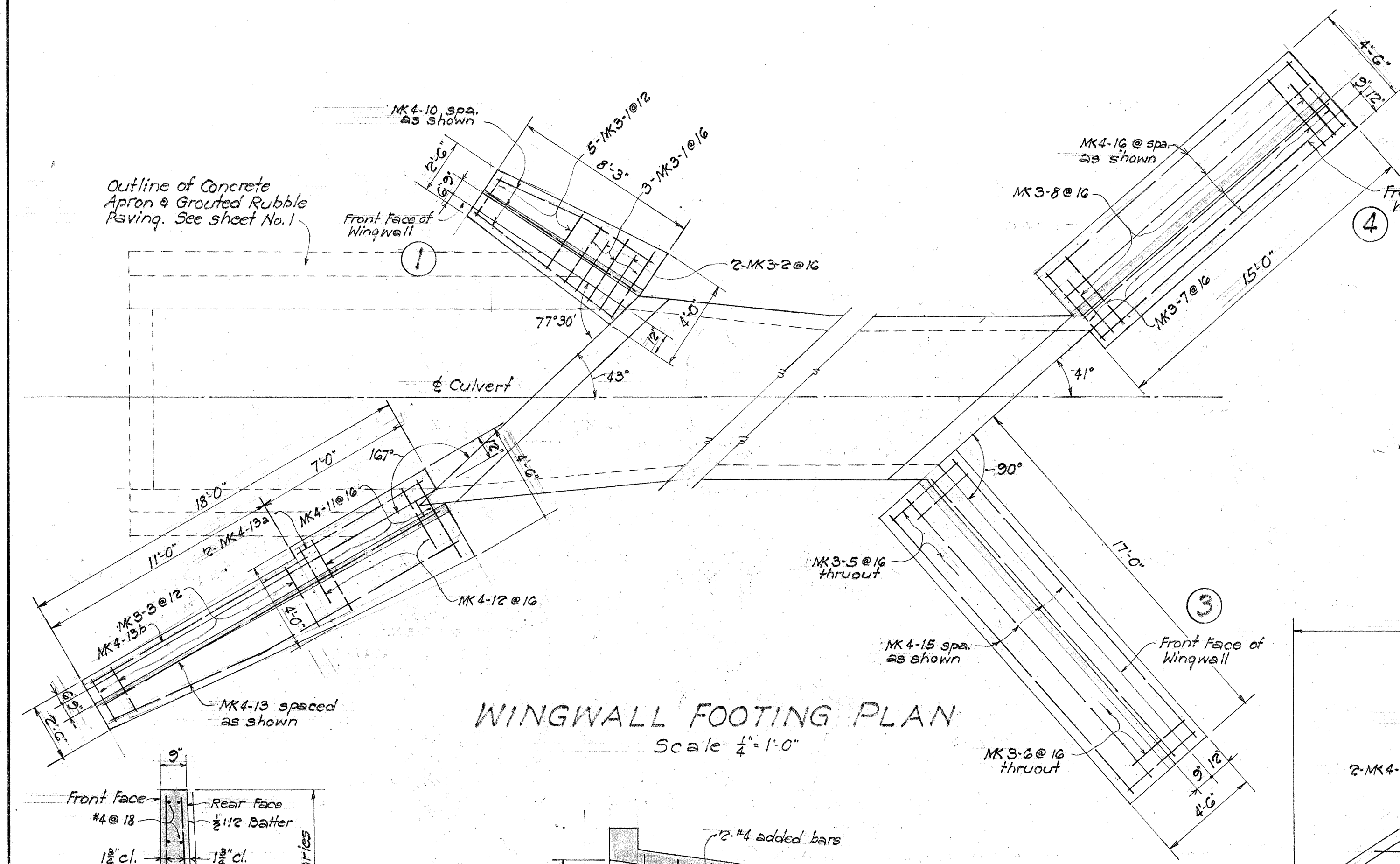
5712.16

SURVEY PLOTTED BY	DATE
DESIGNED BY	7/54
TRACED BY	
QUANTITIES BY	
CHECKED BY	
NO.	



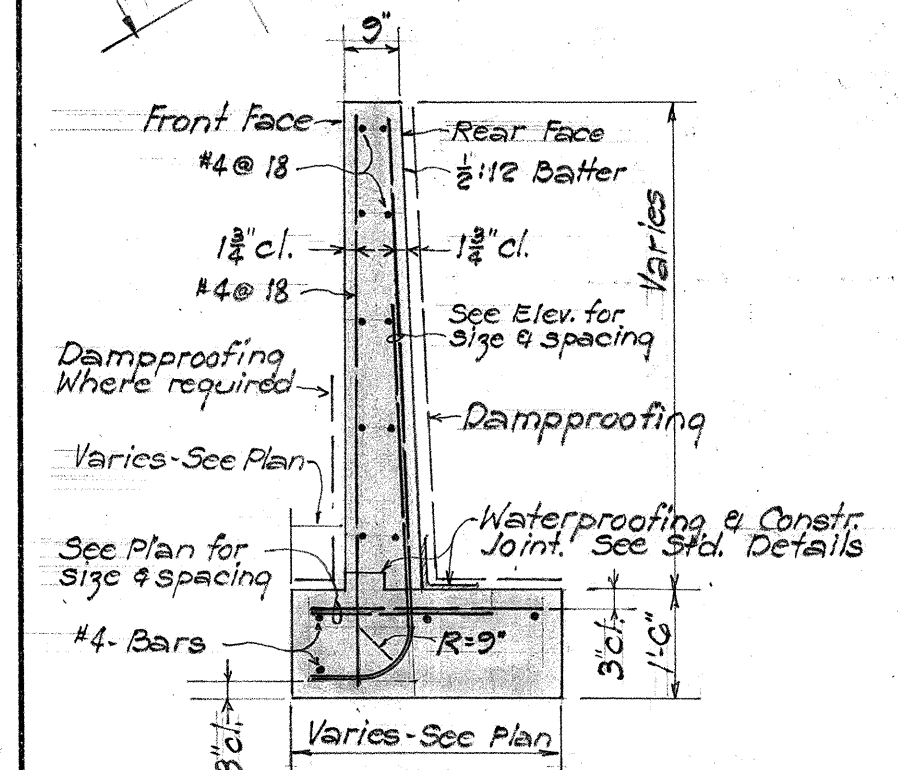
SLAB REINFORCEMENT PLAN

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



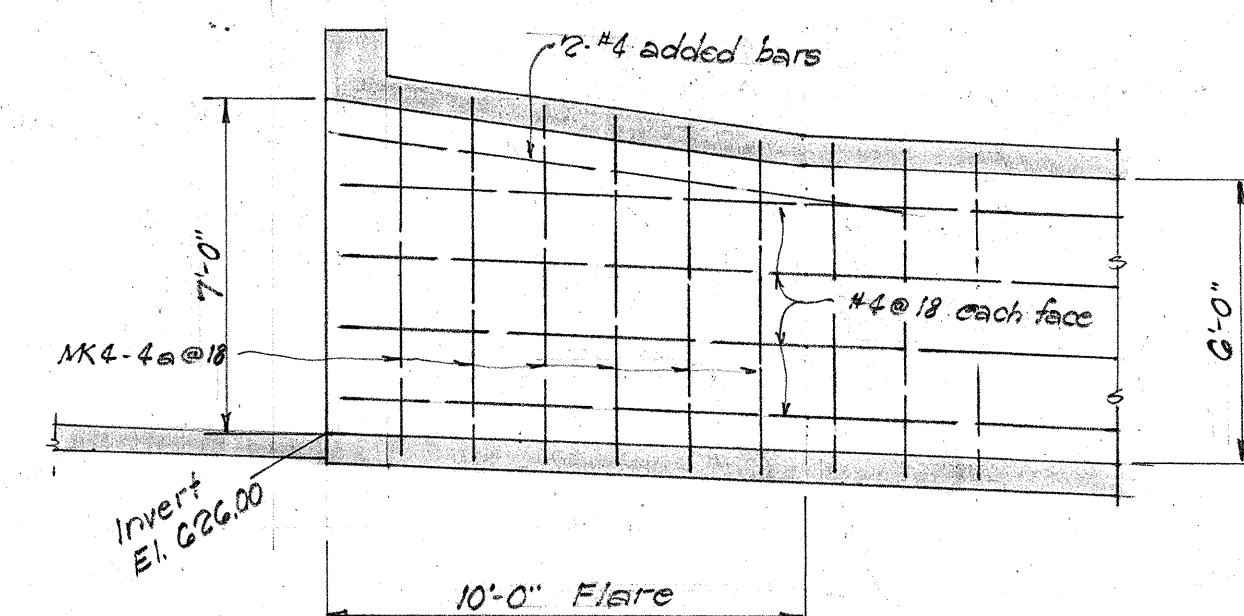
WINGWALL FOOTING PLAN

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



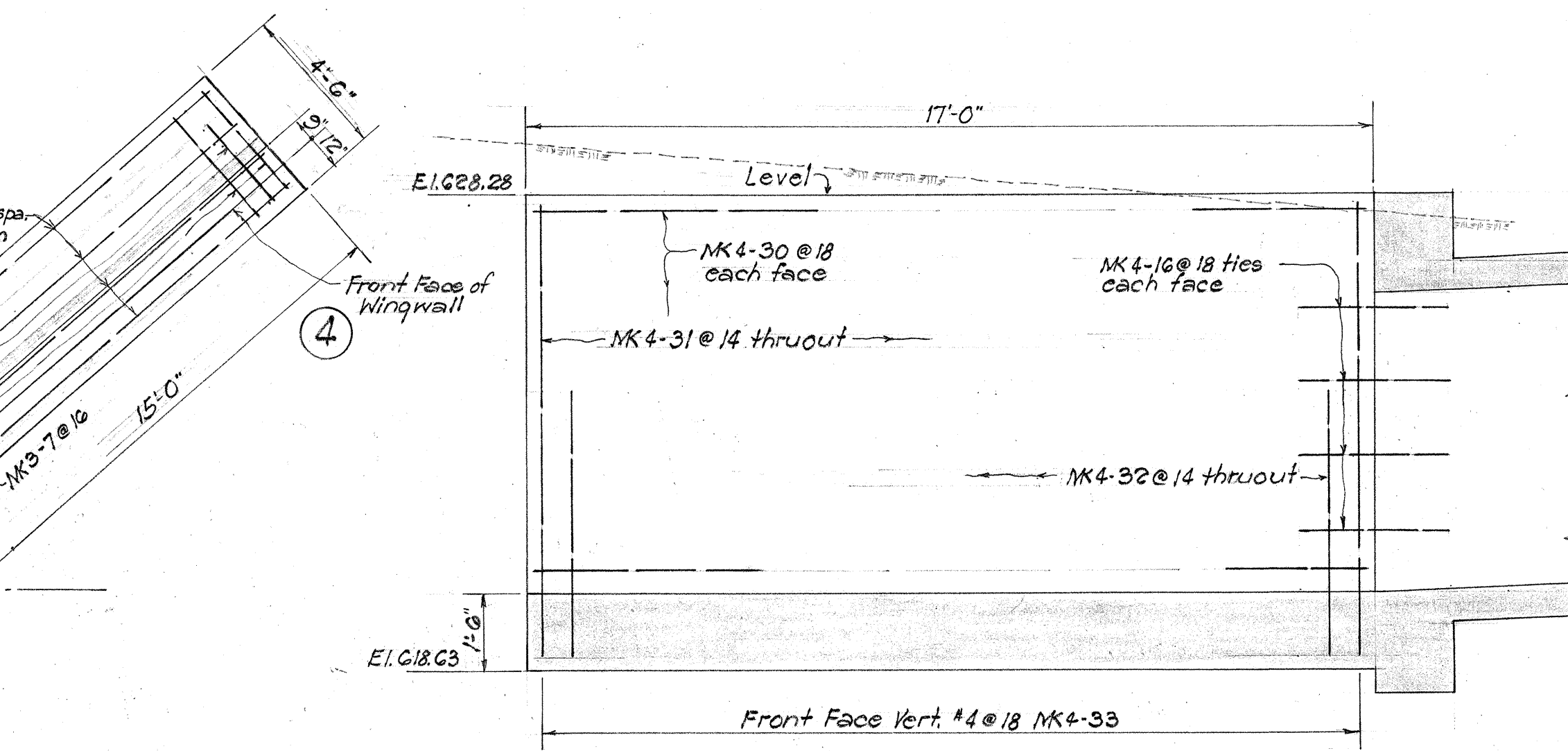
TYPICAL SECTION

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



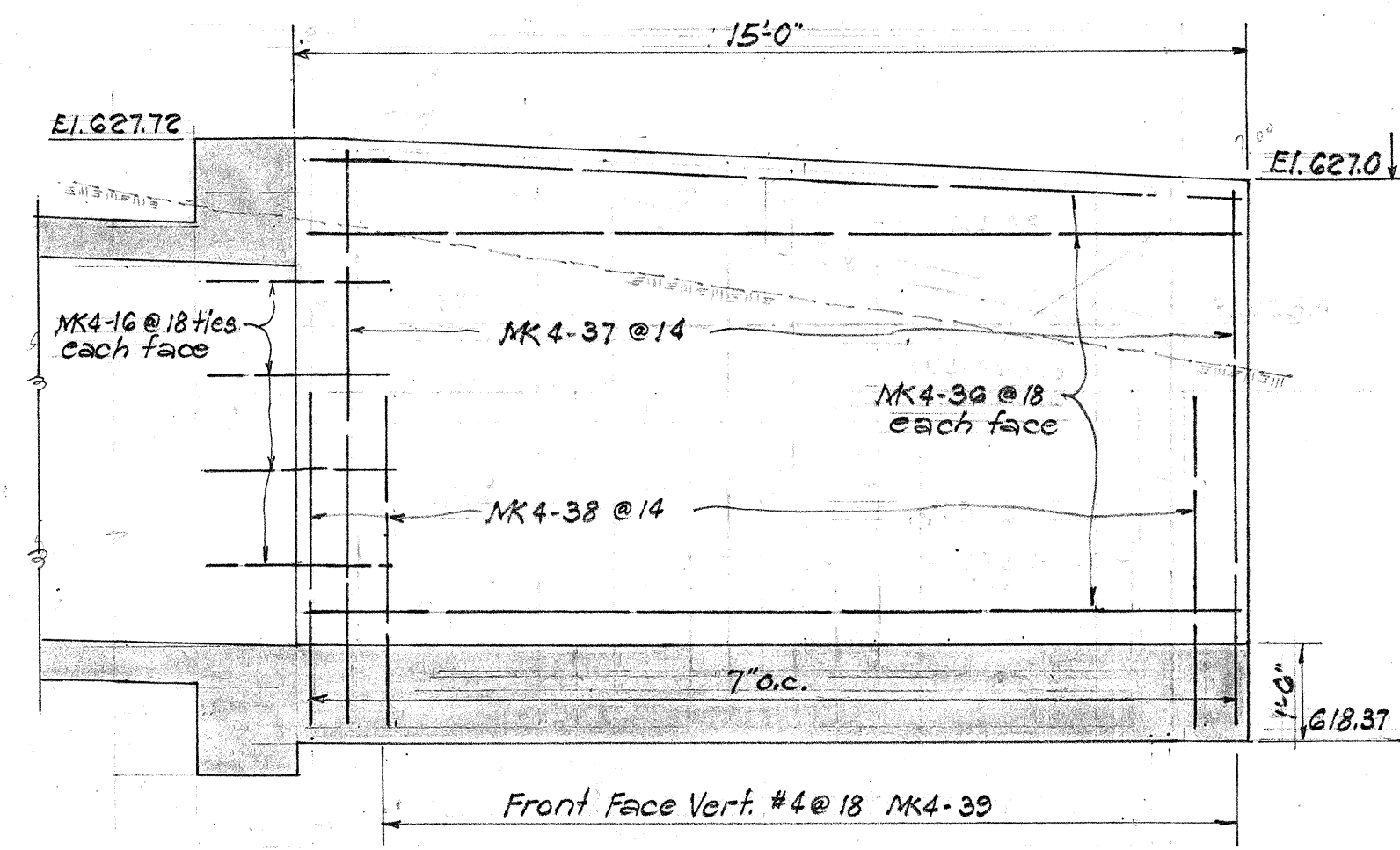
SECTION "A-A"

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



ELEV. WINGWALL NO. 3

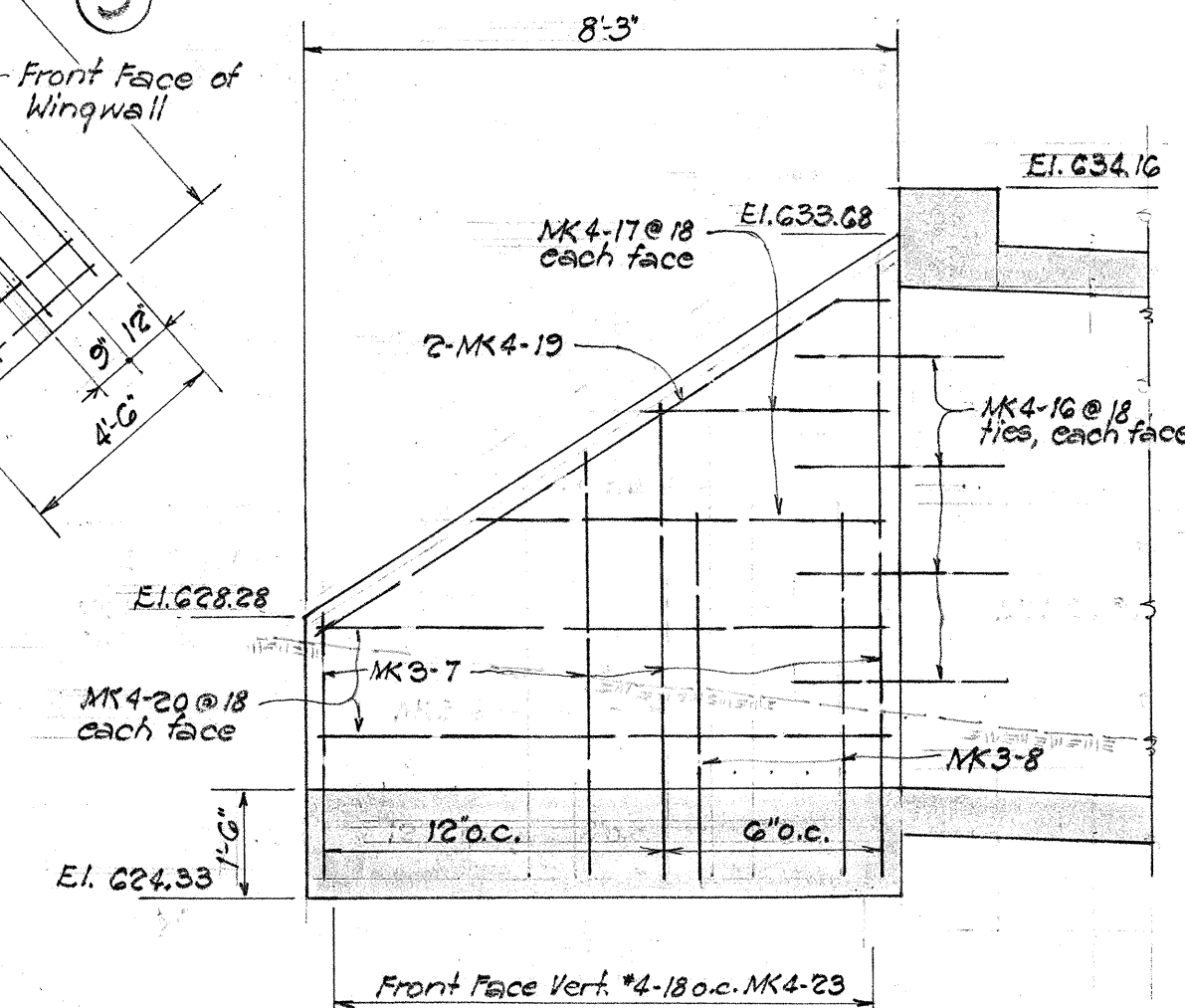
Scale $\frac{3}{8}$ " = 1'-0"



ELEV. WINGWALL NO. 4

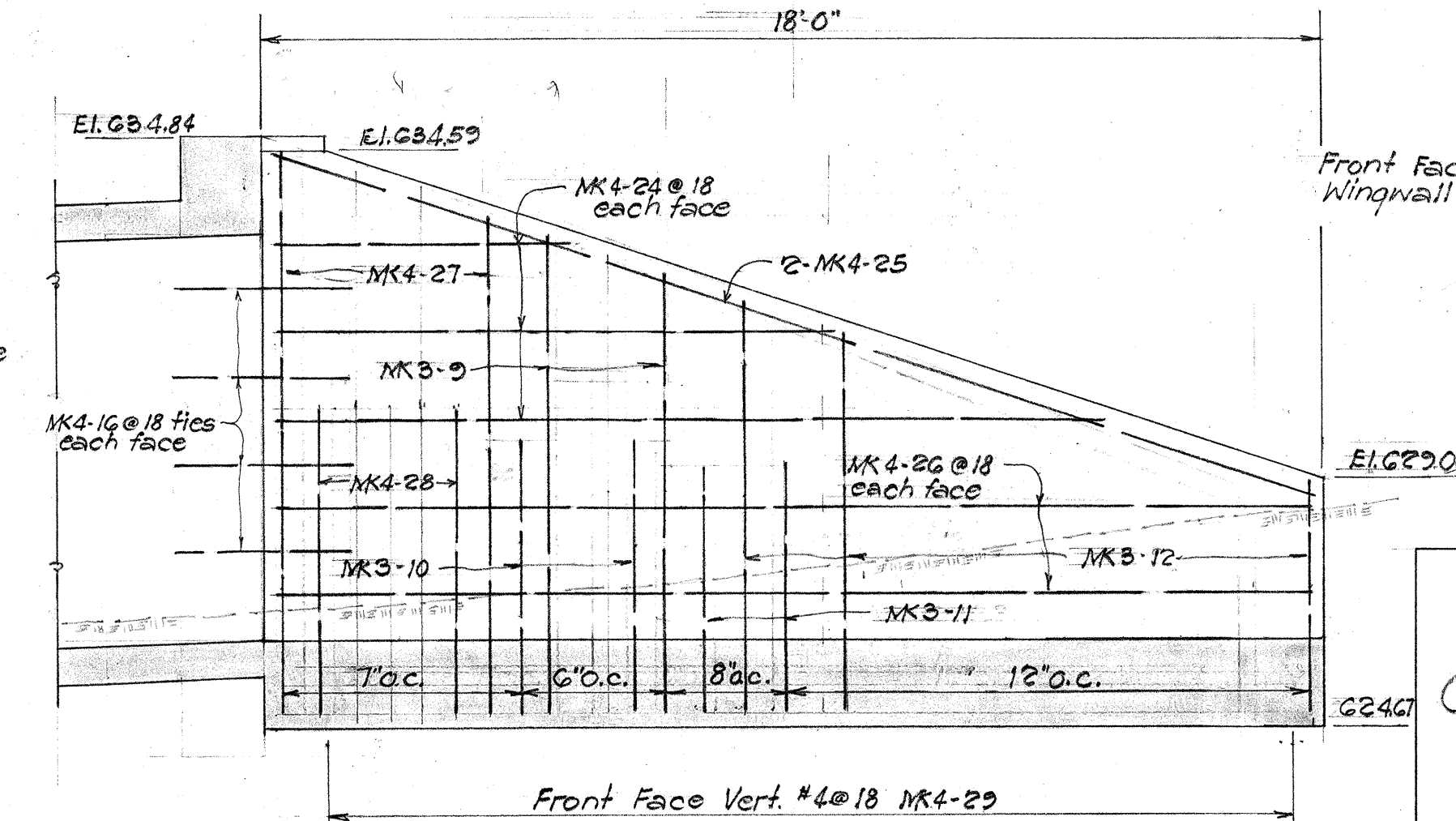
Scale $\frac{3}{8}$ " = 1'-0"

Note: Shown - Rear face reinf. only except as noted otherwise.



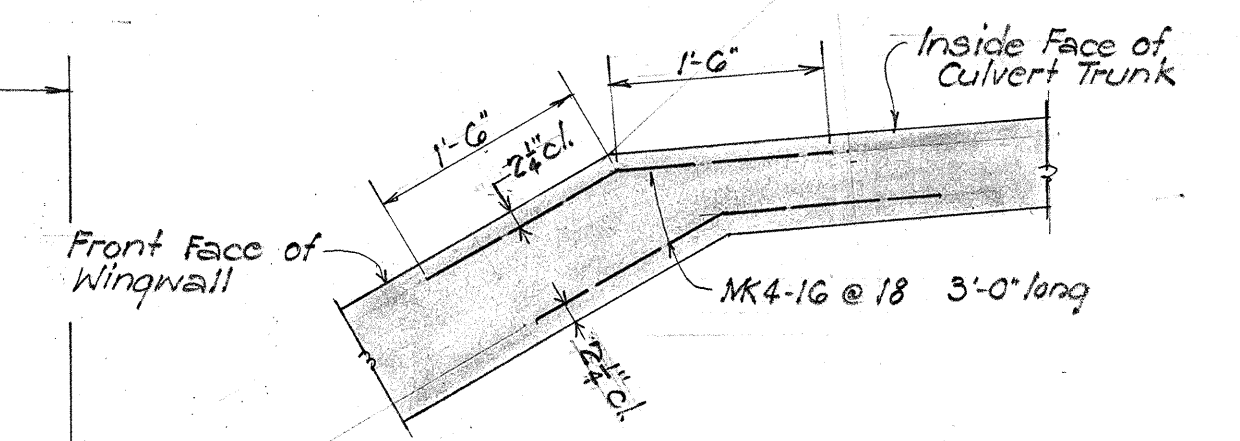
ELEV. WINGWALL NO. 1

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



ELEV. WINGWALL NO. 2

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



TYPICAL CONNECTION

Wingwall to Culvert

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

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

6'x6' CONC. BOX CULVERT

Sta. 172+87

Molokai Airport Road

July 1954

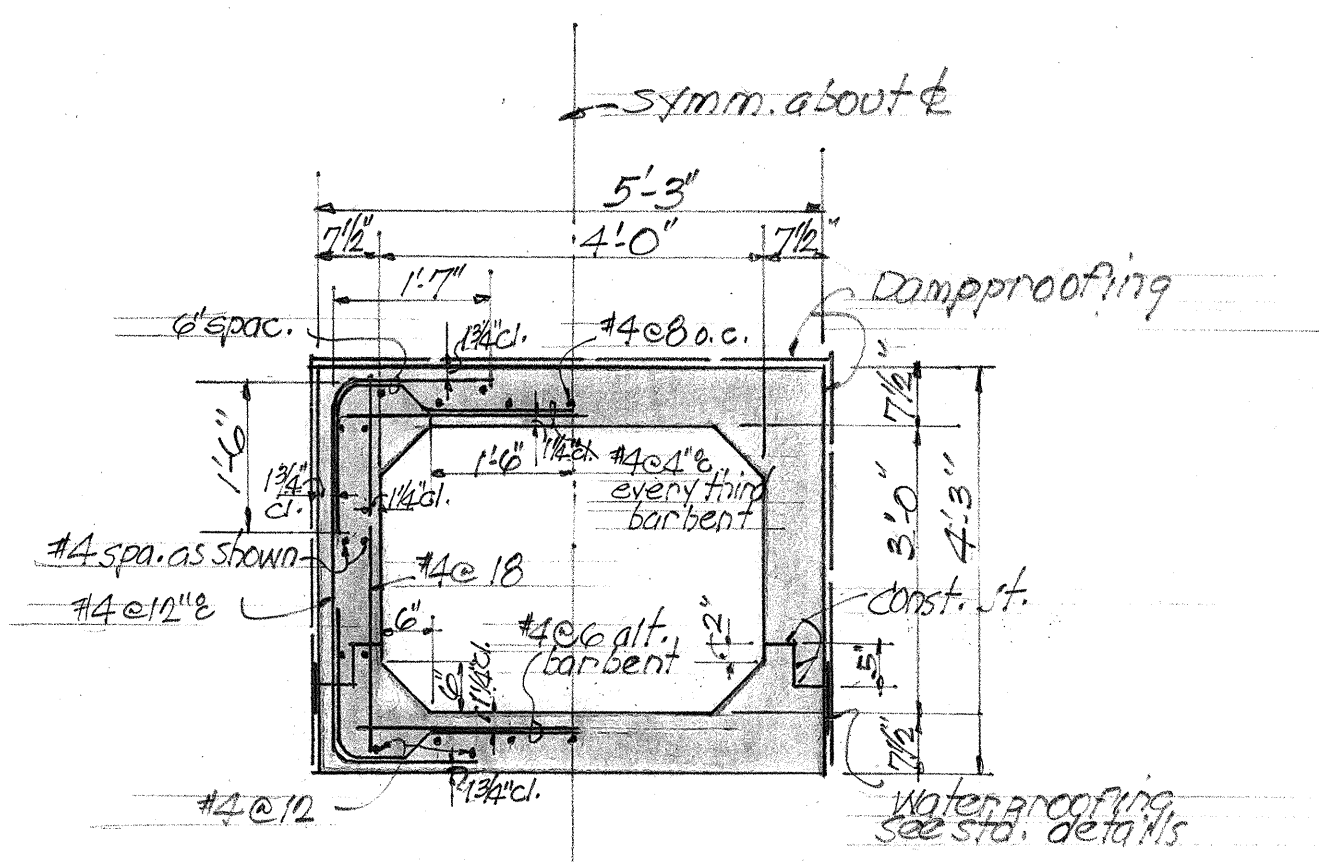
F046(1)

SHEET NO. 2 OF 2 SHEETS

5712.17

Molokai F34(3)

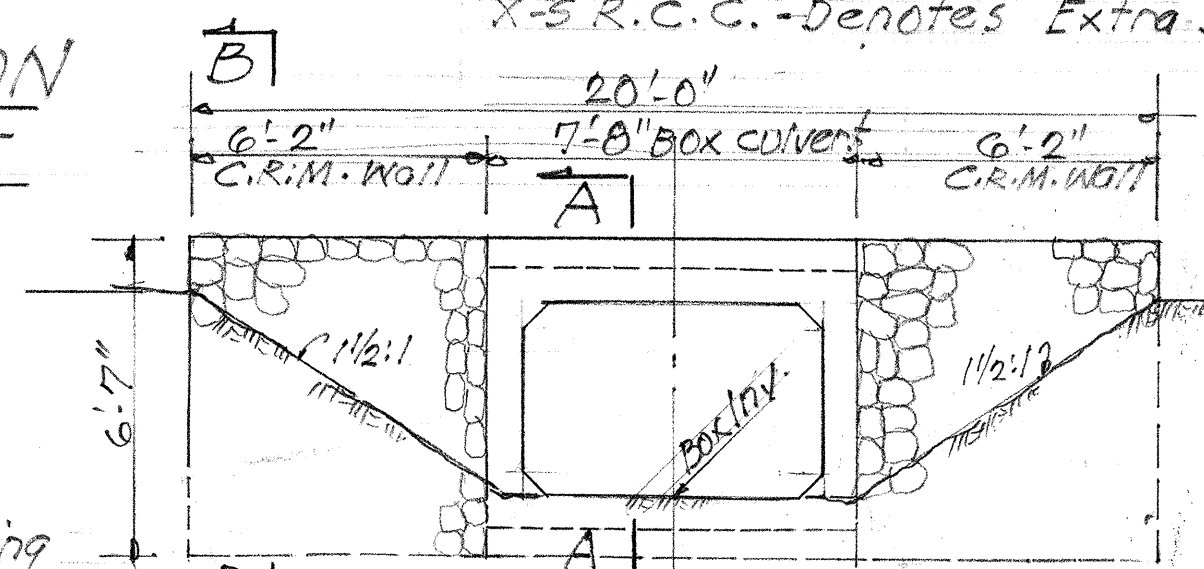
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	F046(1)	1955	17A	32



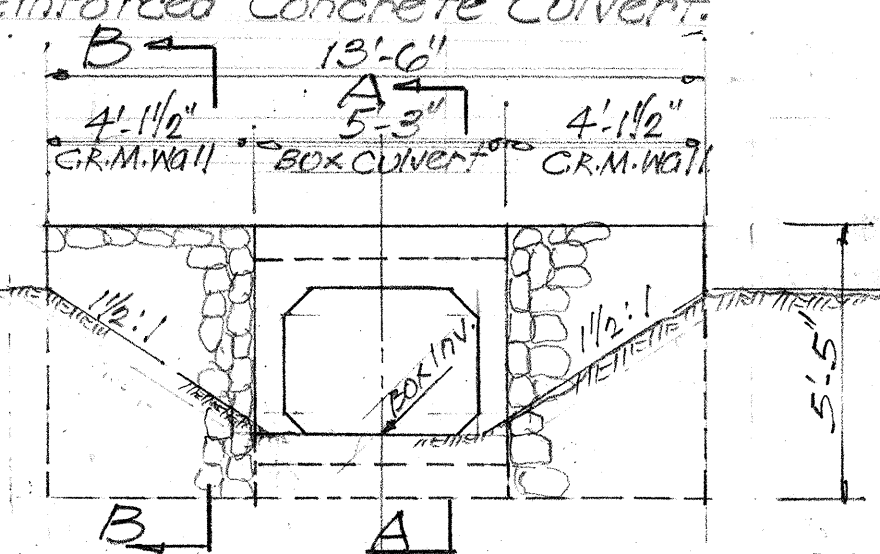
TYPICAL NORMAL SECTION
4'0" x 3'0" BOX CULVERT
 SCALE: 1/2" = 1'-0"

LOCATION	CONTRACT DESIGN		ALTERNATE DESIGN
	X-5 R.C.C. PIPE CULVERT	CULVERT LENGTH	
STA. 15+60	2-48" dia.	52'	6'-3" x 4'-0" conc. Box culvert
" 138+91	2-48" dia.	44'	ditto
" 144+66	2-48" dia.	64'	ditto
" 196+50	1-48" dia.	44'	4'-0" x 3'-0" conc. Box culvert
" 5+75	1-48" dia.	48'	ditto

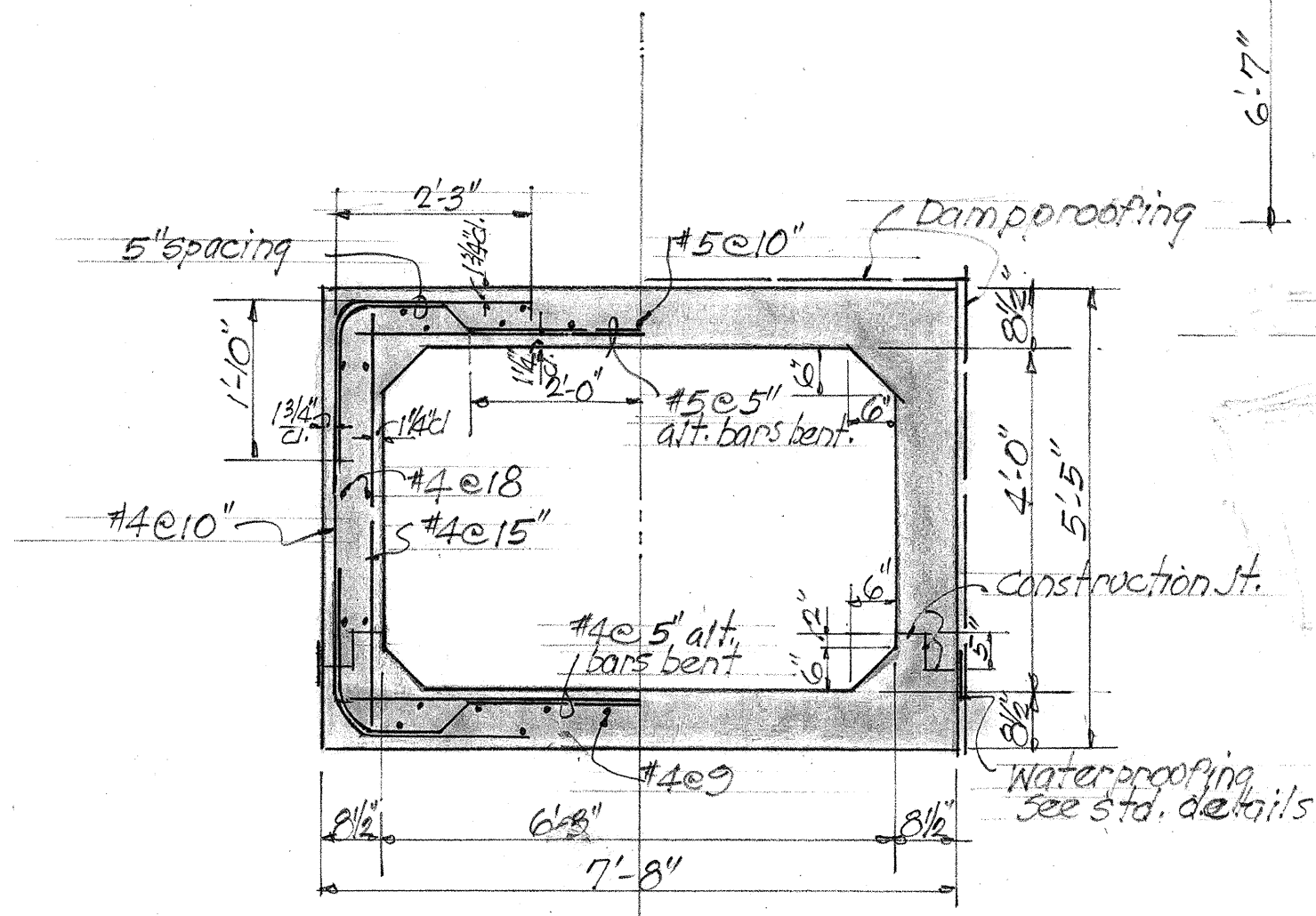
X-5 R.C.C. - Denotes Extra Strength Reinforced Concrete Culvert.



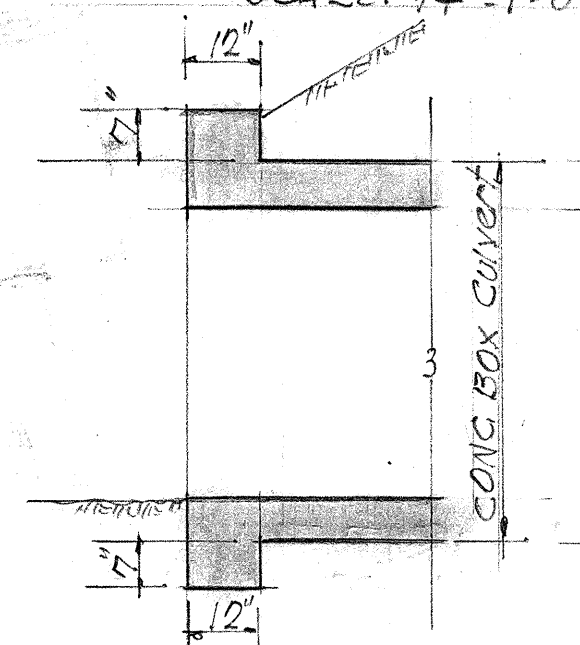
HEADWALL ELEVATION
6'-3" x 4'-0" BOX CULVERT
 SCALE: 1/4" = 1'-0"



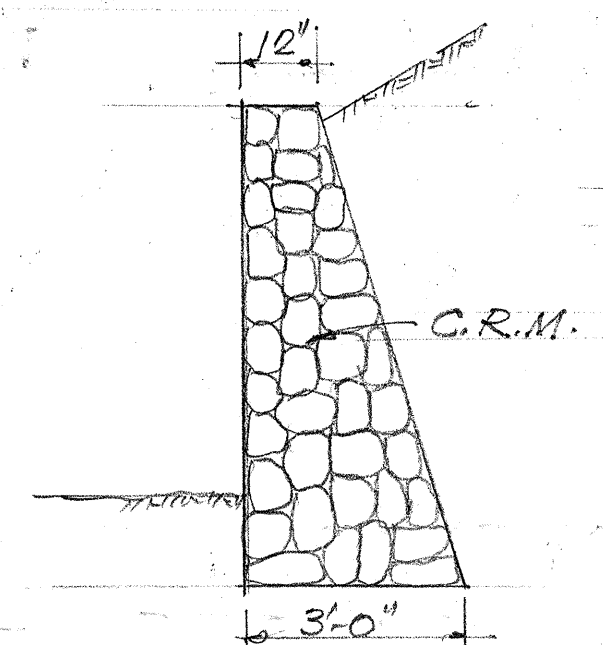
HEADWALL ELEVATION
4'-0" x 3'-0" BOX CULVERT
 SCALE: 1/4" = 1'-0"



TYPICAL NORMAL SECTION
6'-3" x 4'-0" BOX CULVERT



TYP. SECTION "A-A"
 SCALE: 3/8" = 1'-0"



TYP. SECTION "B-B"
 SCALE: 3/8" = 1'-0"

NOTES: - NO collars required for Box Culverts.
 Admixture of conc. silica, Tricodal Normal or Anti-Hydro shall be added to concrete in all culvert floors - see standard specifications.

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 ALTERNATE CONCRETE BOX CULVERT DESIGN TO REPLACE 48" PIPE CULVERTS
 MOLOKAI AIRPORT ROAD F.O46(1)
 OCTOBER, 27, 1954
 TO ACCOMPANY WORK ORDER No. 1

5712.17A