

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	A-56-01-65	1965	3	7

Sta. 121+66 Lt.

Const. Type "B" Catch Basin
ESTIMATED QUANTITIES

Struc. Exc. 15 40 C.Y.
Class A-1 conc. 36 35 C.Y.
Reinf. Steel 202 00 Lbs.
Type "B" Frame & Cover 1 Ea.

Sta. 125+72 Lt.

Const. Type "B" Catch Basin
ESTIMATED QUANTITIES

Struc. Exc. 18 20 C.Y.
Class A-1 conc. 60 C.Y.
Reinf. Steel 202 00 Lbs.
Type "B" Frame & Cover 1 Ea.

Sta. 129+25 Lt.

Const. Type "A" Catch Basin
ESTIMATED QUANTITIES

Struc. Exc. 37 40 C.Y.
Class A-1 conc. 110 40 C.Y.
Reinf. Steel 370 35 Lbs.
Type "B" Frame & Cover 1 Ea.

Sta. 129+75 Lt.

Const. Type "A" Catch Basin
ESTIMATED QUANTITIES

Struc. Exc. 41 C.Y.
Class A-1 conc. 111 40 C.Y.
Reinf. Steel 360 27 Lbs.
Type "B" Frame & Cover 1 Ea.

Sta. 132+25 Lt.

Const. Type "A" Catch Basin
ESTIMATED QUANTITIES

Struc. Exc. 30 42 C.Y.
Class A-1 conc. 112 40 C.Y.
Reinf. Steel 360 34 Lbs.
Type "B" Frame & Cover 1 Ea.

Sta. 121+60 to Sta. 125+60 Lt.

Install 30" RCCP, Class III or 30" CGMP, 12 Gage.

ESTIMATED QUANTITIES

Struc. Exc. 885 40 C.Y.
30" Culvert Pipe 400 L.F.

Sta. 125+75 to Sta. 129+22 Lt.

Install 30" RCCP, Class III or 30" CGMP, 12 Gage.

ESTIMATED QUANTITIES

Struc. Exc. 886 40 C.Y.
30" Culvert Pipe 340 L.F.

Sta. 129+25 to Sta. 129+72 Lt.

Install 42" RCCP, Class III or 42" CGMP, 12 Gage.

ESTIMATED QUANTITIES

Struc. Exc. 76 77 C.Y.
42" Culvert Pipe 50 44 L.F.

Sta. 129+75 to Sta. 132+22 Lt.

Install 42" RCCP, Class III or 42" CGMP, 12 Gage.

ESTIMATED QUANTITIES

Struc. Exc. 477 44 C.Y.
42" Culvert Pipe 248 44 L.F.

Sta. 132+25 to Sta. 133+40 Lt.

Relocate existing 2" water line 100 L.F.

(See General Note Nos. 4 and 5 on Sheet No. 2)

Sta. 133+54 Lt.

Demolish existing Conc. Drop Intake (Incidental to Roadway Exc.)

Const. Conc. Drop Intake (For details and Estimated Quantities see Sheet No. 4)

Sta. 132+25 to Sta. 133+40 Lt.

Install 42" RCCP, Class III or 42" CGMP, 12 Gage.

ESTIMATED QUANTITIES

Struc. Exc. 214 20 C.Y.
42" Culvert Pipe 106 54 L.F.

Sta. 133+43.50 to Sta. 133+62.50

Install 42" CGMP, 12 Gage.

ESTIMATED QUANTITIES

Struc. Exc. 36 C.Y.
42" Culvert Pipe 18 L.F.

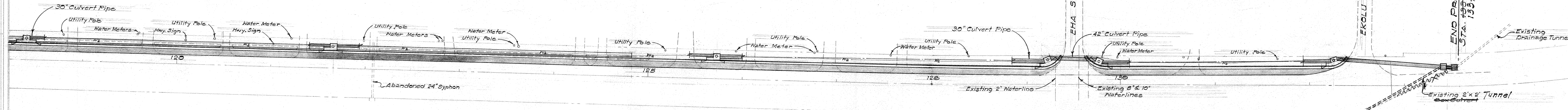
Sta. 117+75 to Sta. 132+45 Lt.

Construct 1457 L.F. of Type "DG" concrete curb and gutter.

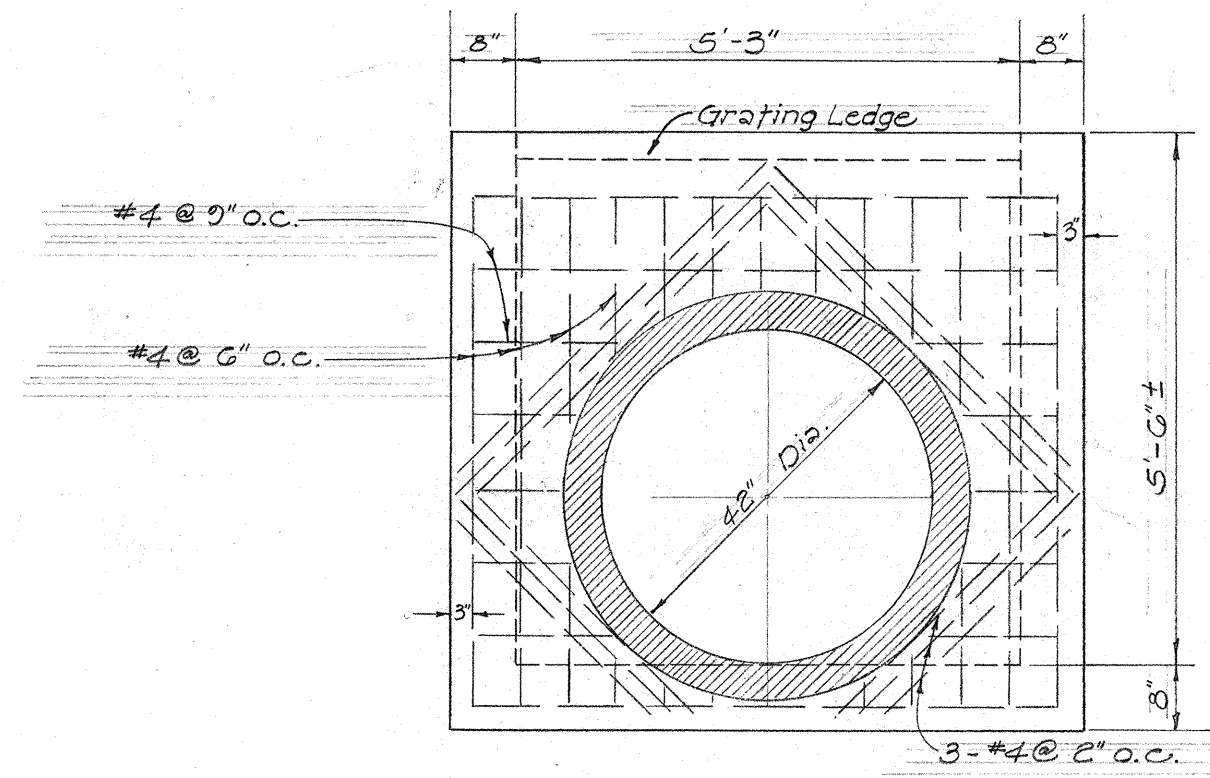
Sta. 117+75 to Sta. 132+45 Lt.

Construct 336" wide plain concrete sidewalk 2085 Sq. Ft. for Typical Section see Sheet No. 2

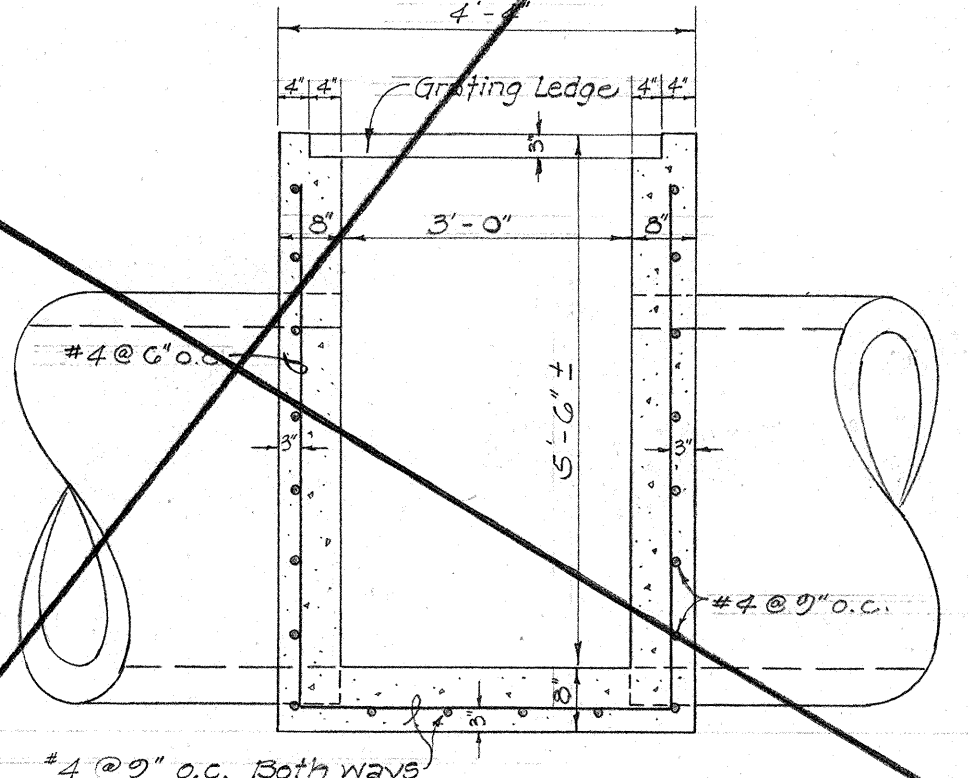
END PROJECT NO. A-56-01-65
Sta. 133+62.50 (FAP No. 12/18)
Sta. 133+62.50



PROJ. NO.	STATE	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
A-56-01-65	HAWAII	1965	4	7

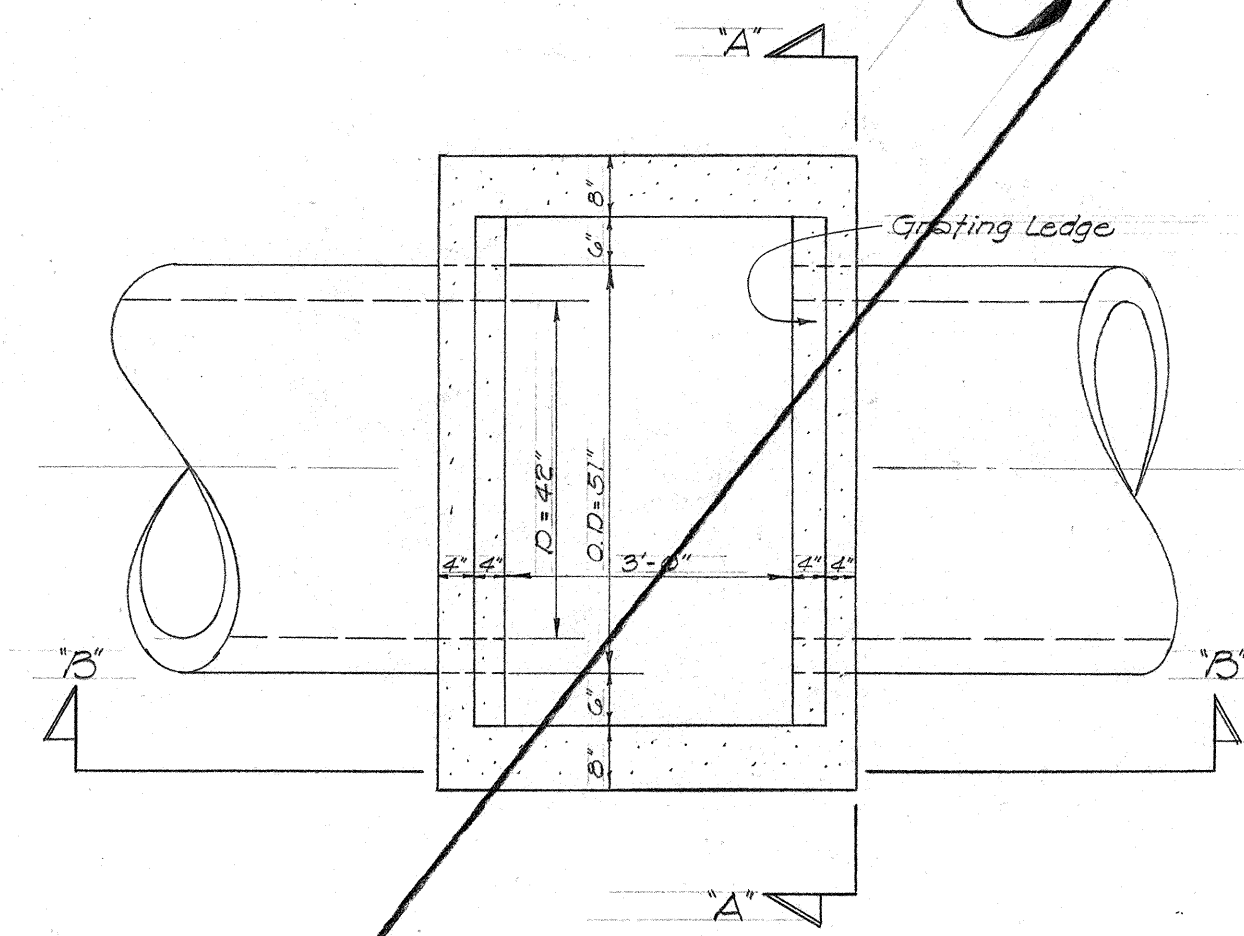


SECTION "A-A"
Scale: 1/2" = 1'-0"



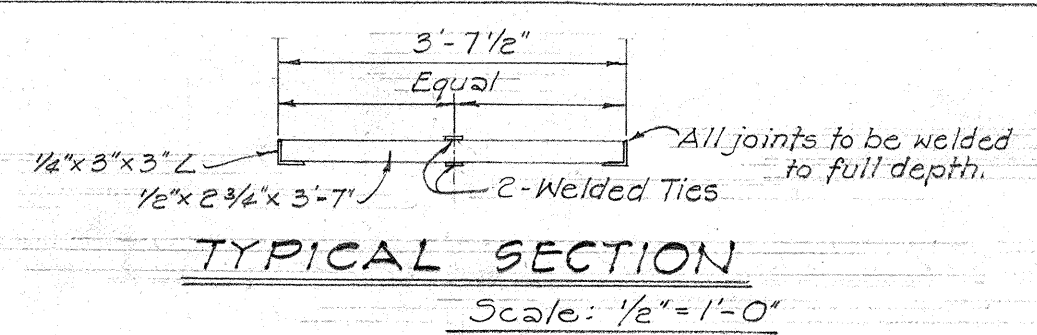
SECTION "B-B"
Scale: 1/2" = 1'-0"

ESTIMATED QUANTITIES	
Structure Excavation	124 c.y.
Class "A-1" Concrete	3.4 c.y.
Reinf. Steel	350 lbs.
Steel Grating	1 Ea.

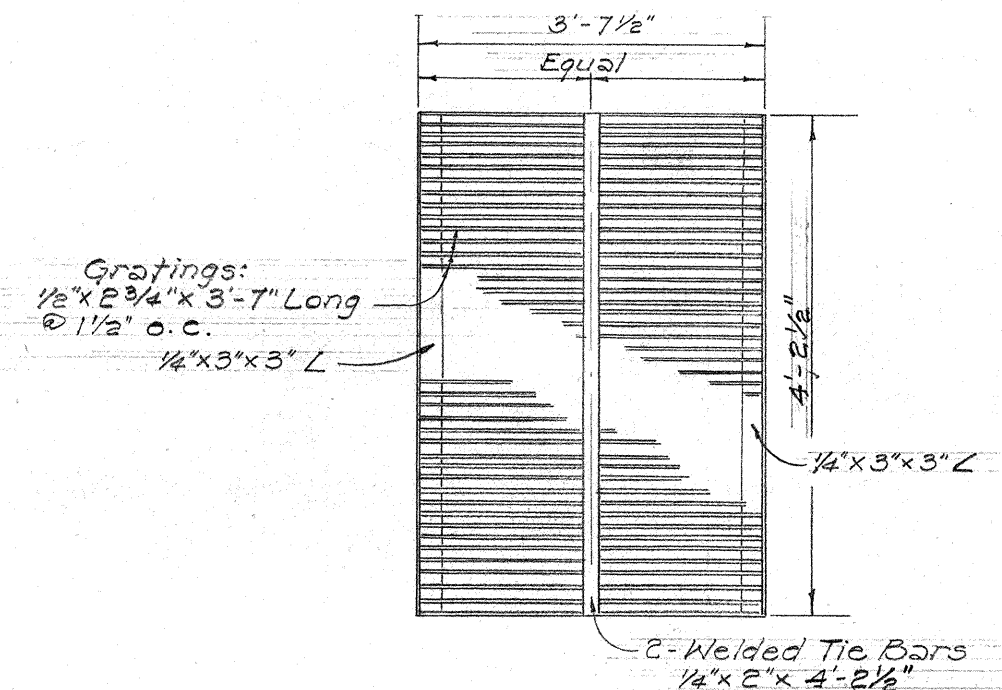


PLAN
Scale: 1/2" = 1'-0"

DETAILS FOR CONCRETE DROP INTAKE
AT STA. 132+18

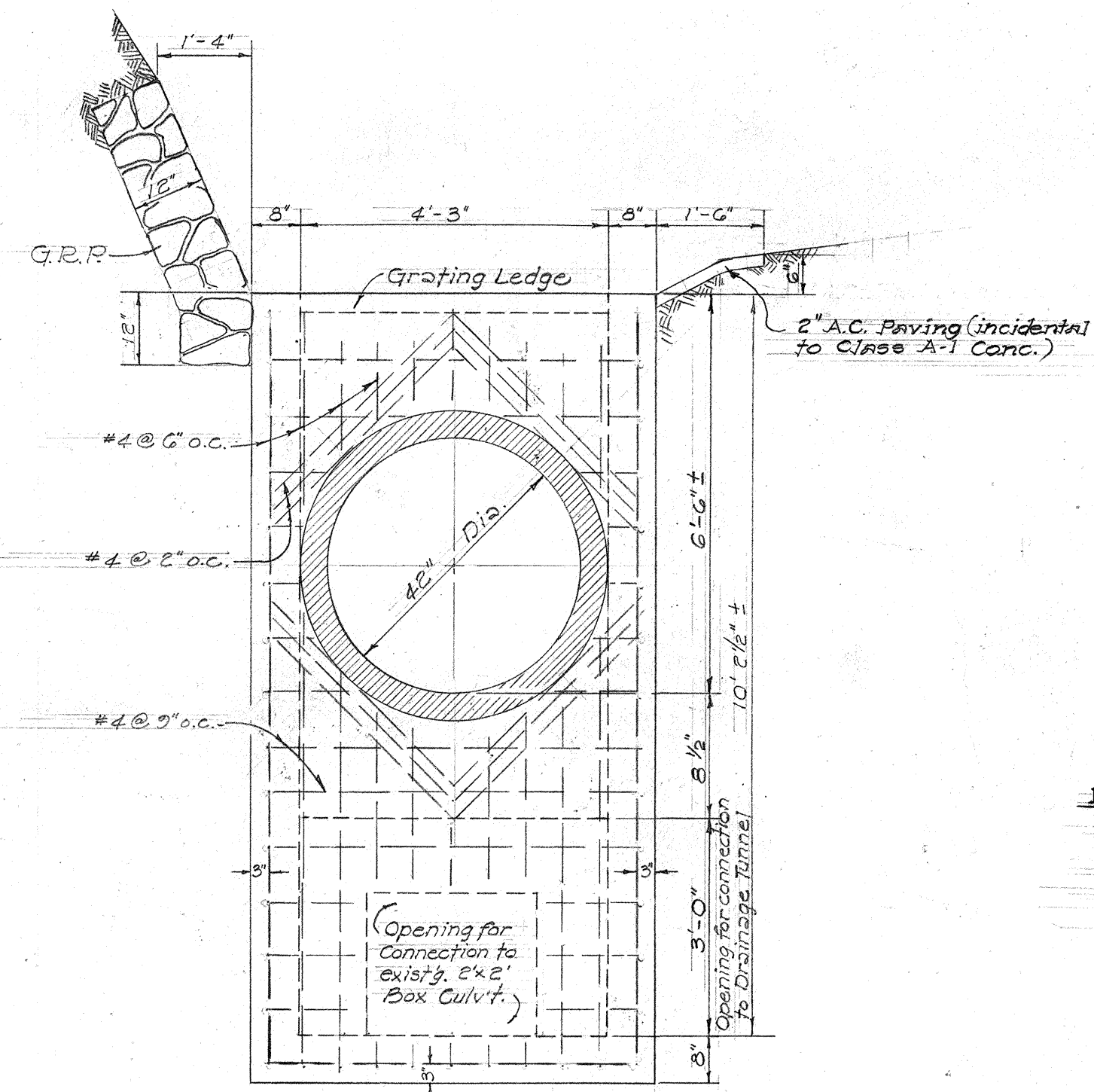


TYPICAL SECTION
Scale: 1/2" = 1'-0"

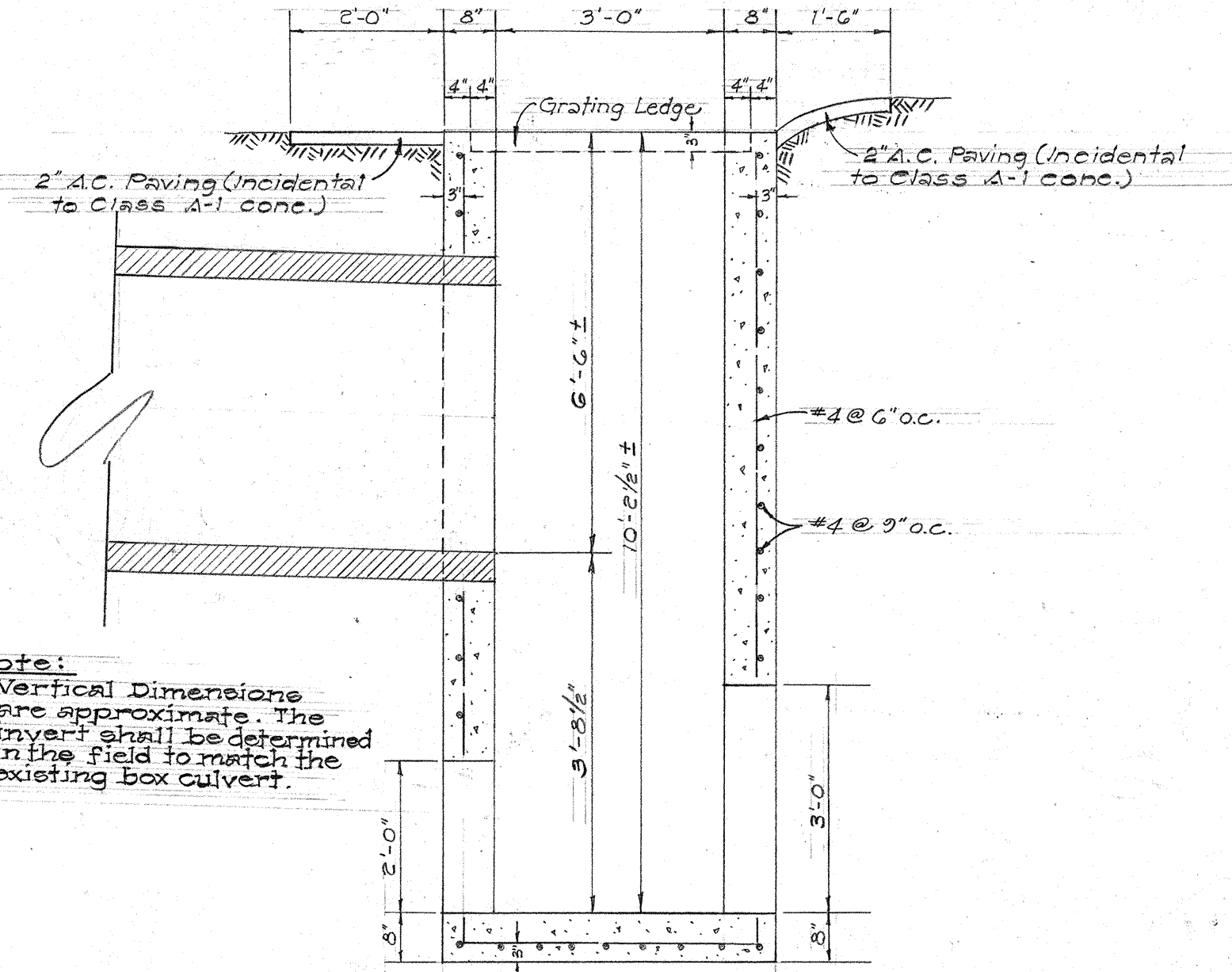


PLAN-GRATING DETAIL
Scale: 1/2" = 1'-0"

- NOTE:
- All steel shall be structural grade
 - Grates shall be hot dip galvanized after fabrication in accordance with Section 44 (H) of the Standard Specifications.

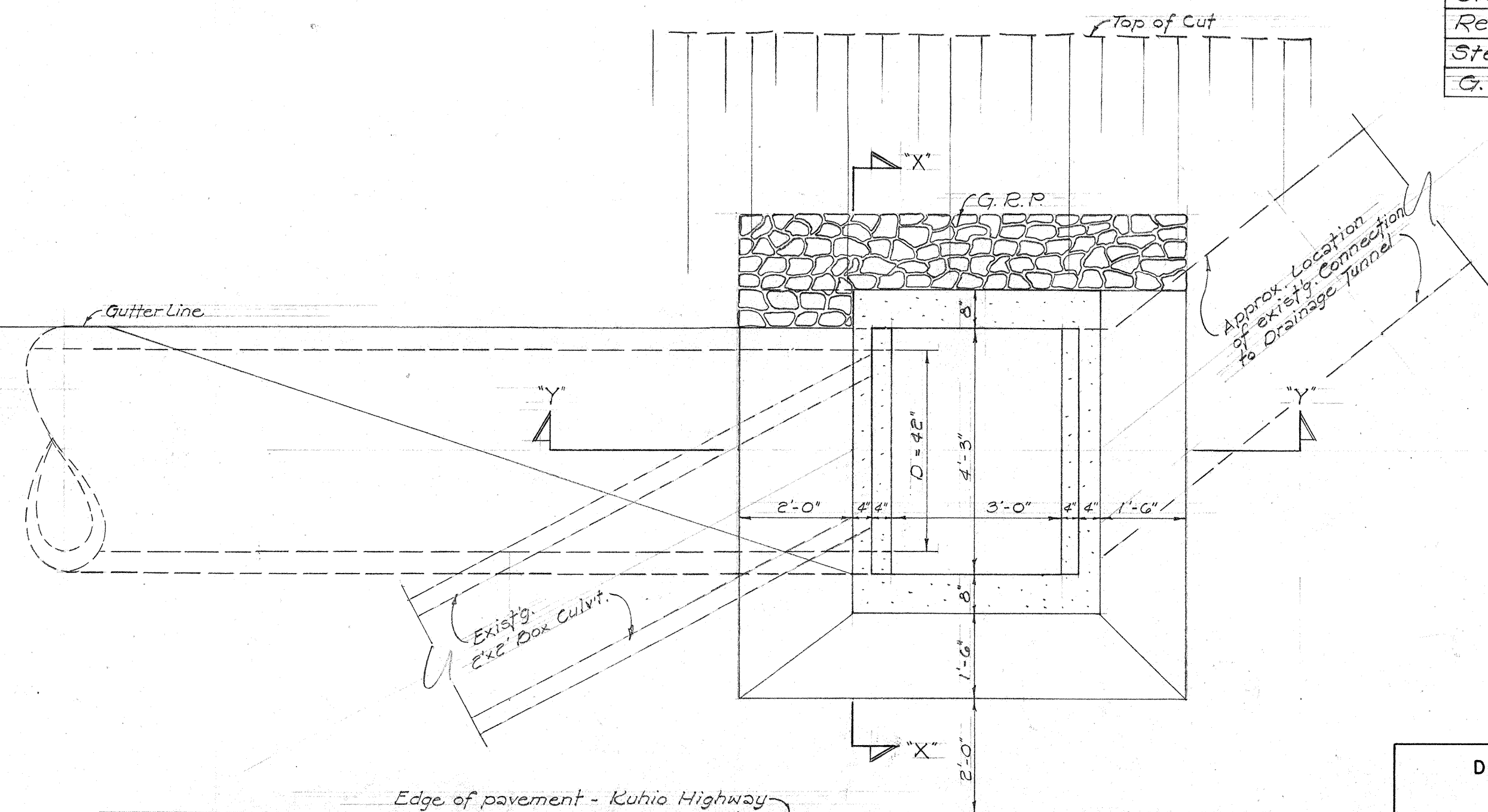


SECTION "X-X"
Not to Scale



SECTION "Y-Y"
Not to Scale

ESTIMATED QUANTITIES	
Structure Excavation	10 c.y.
Class "A-1" Concrete	4.6 c.y.
Reinf. Steel	375 lbs.
Steel Grating	1 Ea.
G.R.P.	2 c.y.



PLAN
Scale: 1/2" = 1'-0"

DETAILS FOR CONCRETE DROP INTAKE
AT STA. 133+54

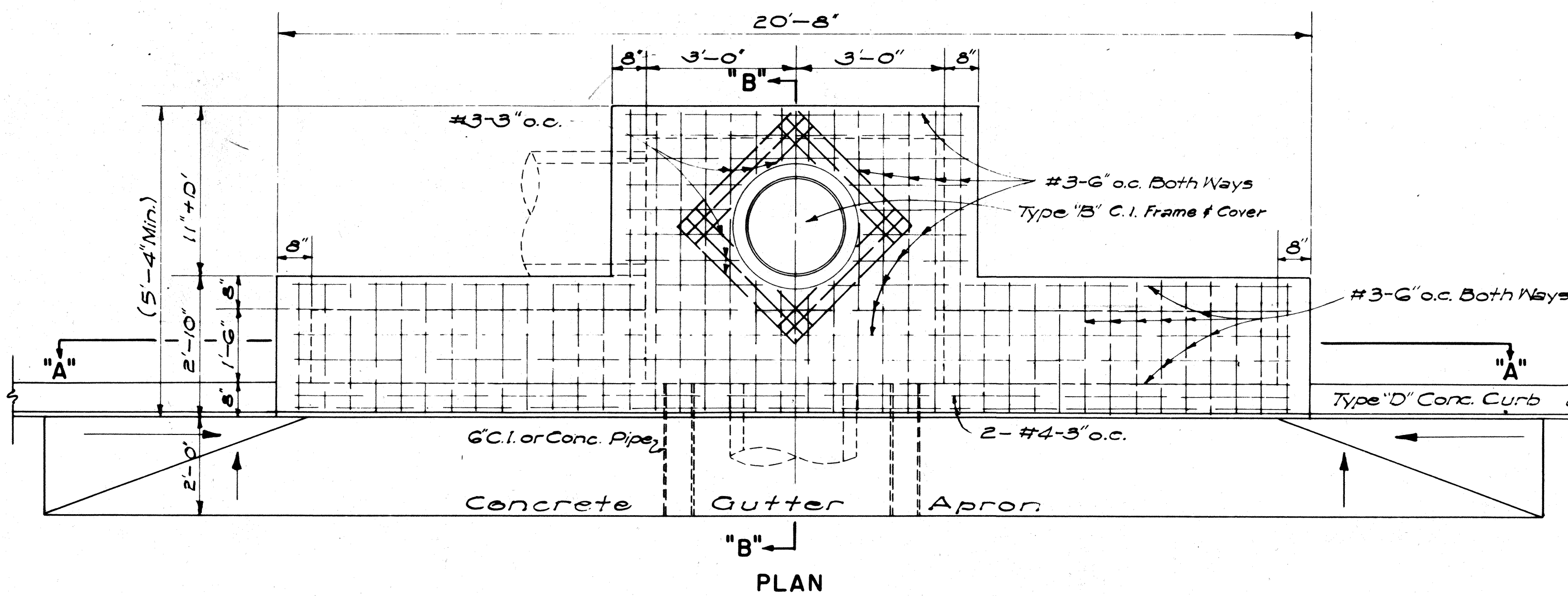
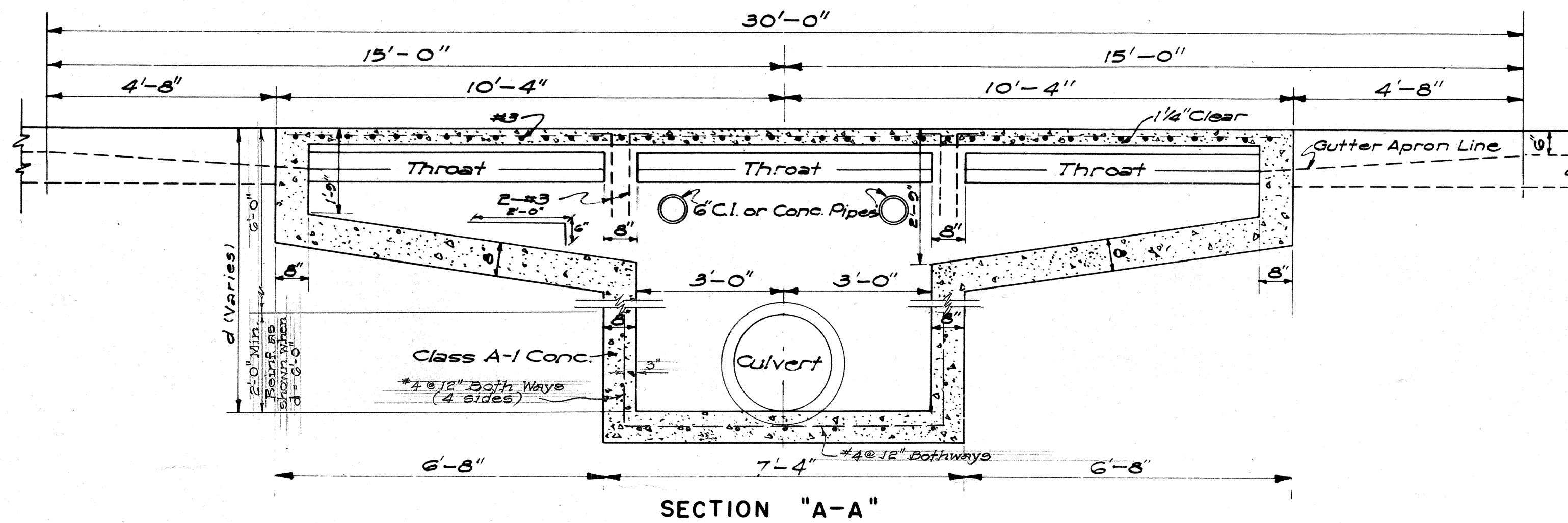
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

DRAINAGE DETAILS

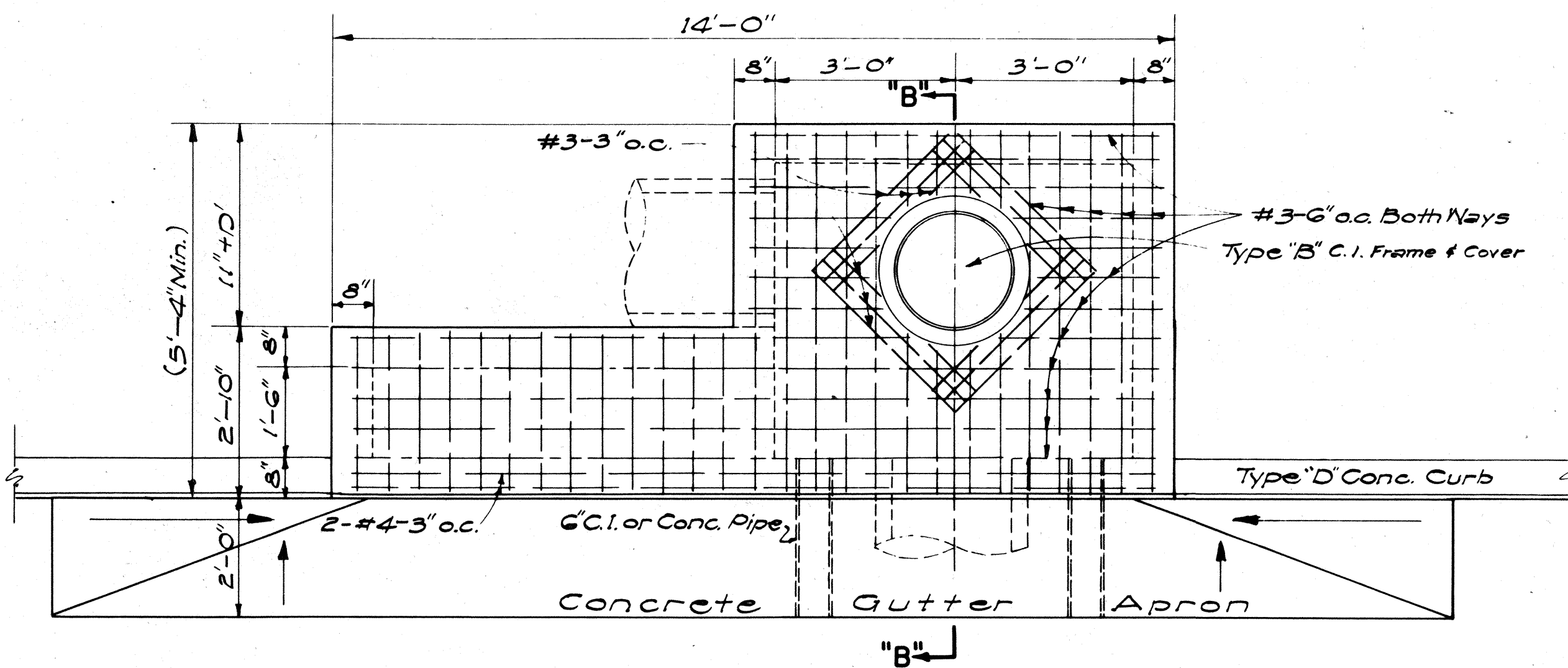
PROJ. NO. A-56-01-65
LIHUE, KAUAI, HAWAII
SCALE: AS SHOWN DATE: JUNE, 1965

2/17/59

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	A-56-01-65	1965	5	7

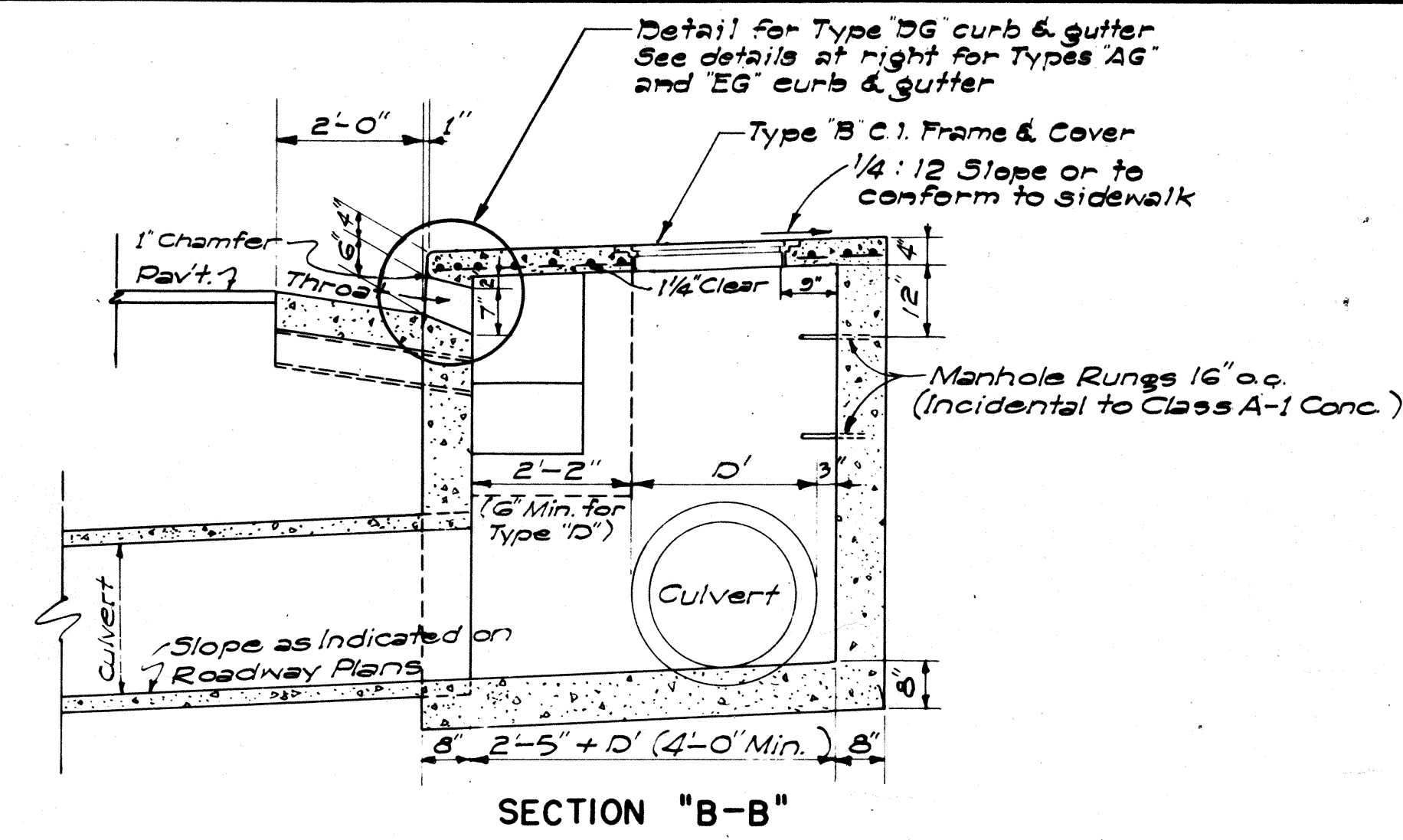


DETAIL OF TYPE "A" CATCH BASIN
SCALE: 1/2" = 1'-0"

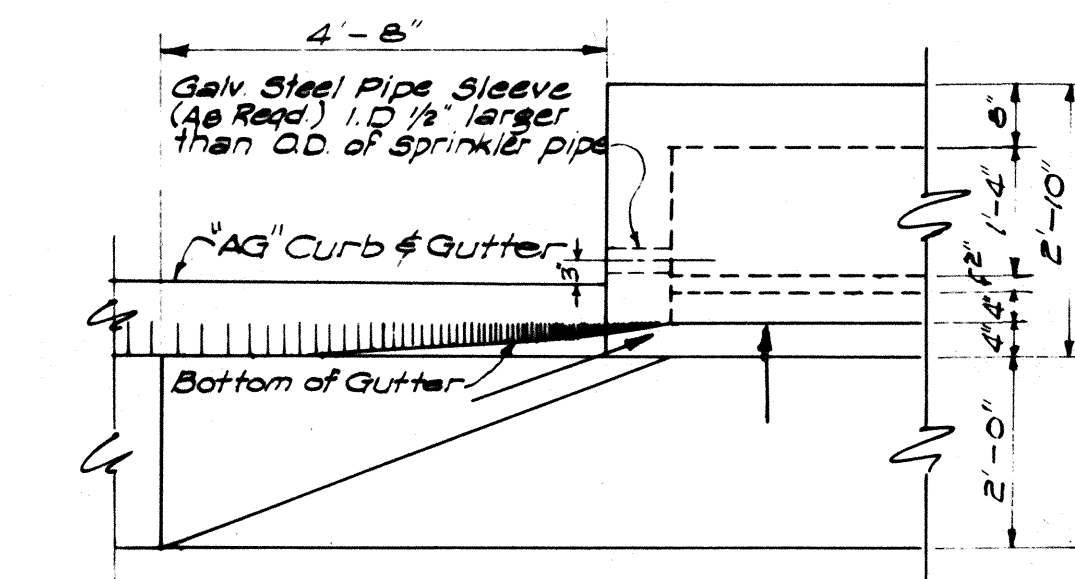


DETAIL OF TYPE "B" CATCH BASIN
SCALE: 1/2" = 1'-0"

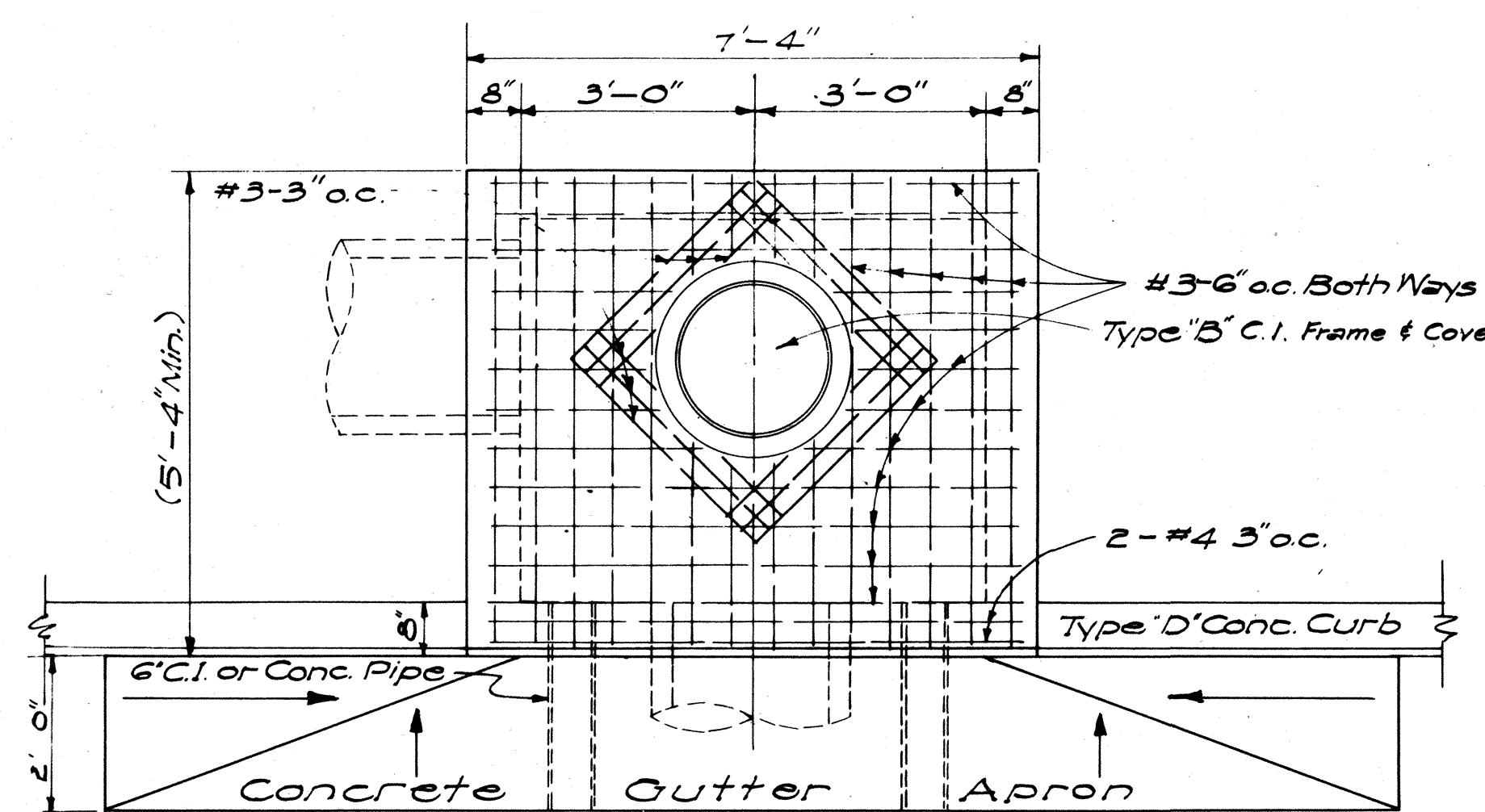
NOTE: TYPE "C" C.B. SIMILAR BUT OPPOSITE HAND



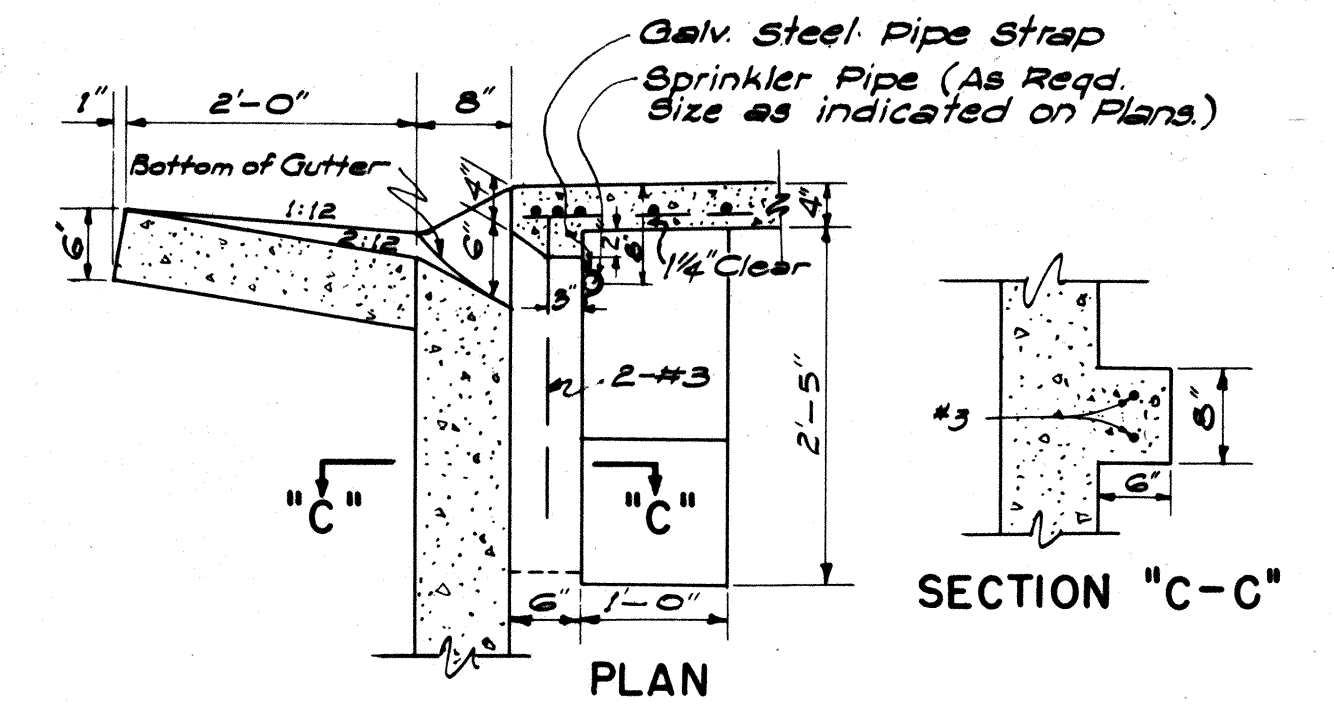
DETAIL OF CATCH BASIN WITH TYPE "EG" CURB & GUTTER



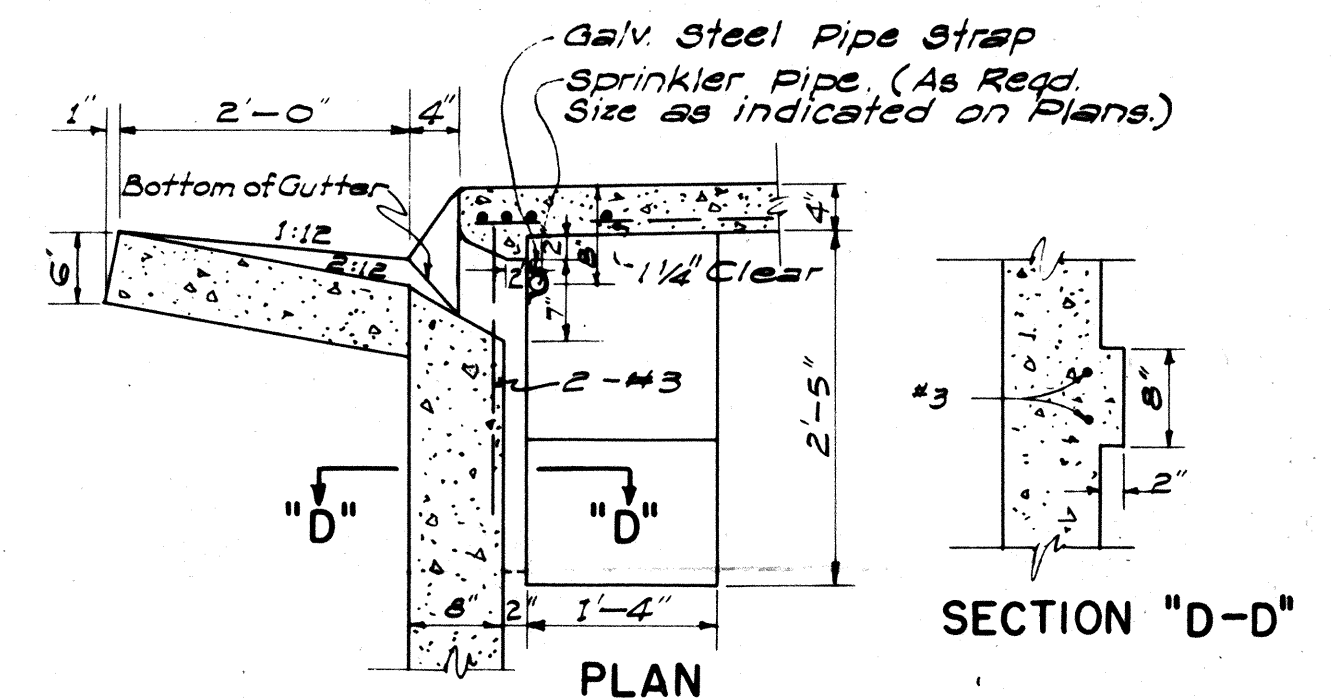
DETAIL OF CATCH BASIN WITH TYPE "AG" CURB & GUTTER
SCALE: 1/2" = 1'-0"



DETAIL OF TYPE "D" CATCH BASIN
SCALE: 1/2" = 1'-0"



THROAT DETAIL FOR TYPE "EG" CURB & GUTTER
SCALE: 3/4" = 1'-0"



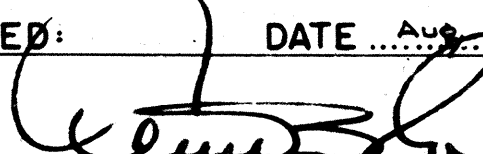
THROAT DETAIL FOR TYPE "AG" CURB & GUTTER
SCALE: 3/4" = 1'-0"

ESTIMATED QUANTITIES

Type	Class A-1 Conc.	Struct. Exc.	Reinf. Steel	Gutter Length
"A"	7.5 c.y.	24.7 c.y.	145 lb.	30'-0"
"B"	6.0 c.y.	21.5 c.y.	108 lb.	23'-4"
"C"	6.0 c.y.	21.5 c.y.	108 lb.	23'-4"
"D"	4.9 c.y.	16.5 c.y.	77 lb.	16'-8"

NOTES:

- Quantities based on $d = 5.75'$ and $D = 30'$
- Quantities do not include concrete for Gutter Apron.
- The Contractor shall install two 6" Cast Iron or Concrete Pipes as incidental to Class A-1 Concrete for Construction Drainage.
- Culvert shall leave C.B. from any position and any direction indicated by plans or ordered by the Engineer. Culvert may both enter and leave C.B. so that C.B. will also act as Manhole.
- The Contractor shall install Galvanized Steel Pipe Sleeves and Straps as incidental to Sprinkler System.

APPROVED:  DATE: AUG 25, 1959
STATE HIGHWAY ENGINEER

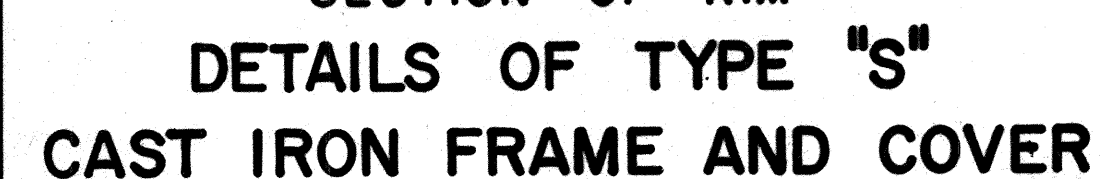
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
CATCH BASINS

SCALES AS NOTED
SHEET NO 2 OF 4 SHEETS

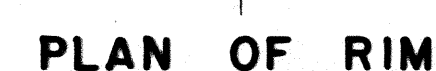
DATE: 2/17/59
DESIGNED BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]
ORIGINAL PLAN: [Signature]
NOTE BOOK: [Signature]
QUANTITIES BY: [Signature]
CATCHED BY: [Signature]

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
HAWAII	HAW.	A-56-01-65	1965	6	7

August 1957



SCALE: 1-1/2" = 1'-0"



DETAILS OF TYPE "B"
CAST IRON FRAME AND COVER

SCALE: 1-1/2" = 1'-0"



DETAILS OF TYPE "A" CAST IRON FRAME AND COVER

SCALE: 1-1/2" = 1'-0"

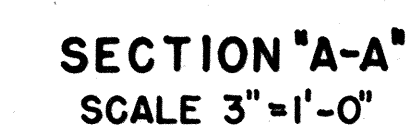
SECTION

TOP VIEW

TOP VIEW

TYPE C C.I. FRAME AND GRATING

SCALE: 3/4" = 1' - 0"



DETAILS OF TYPE "W" CAST IRON FRAME AND COVER

SCALE: 1-1/2" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS CATCH BASIN AND MANHOLE CASTINGS

SCALES AS NOTED

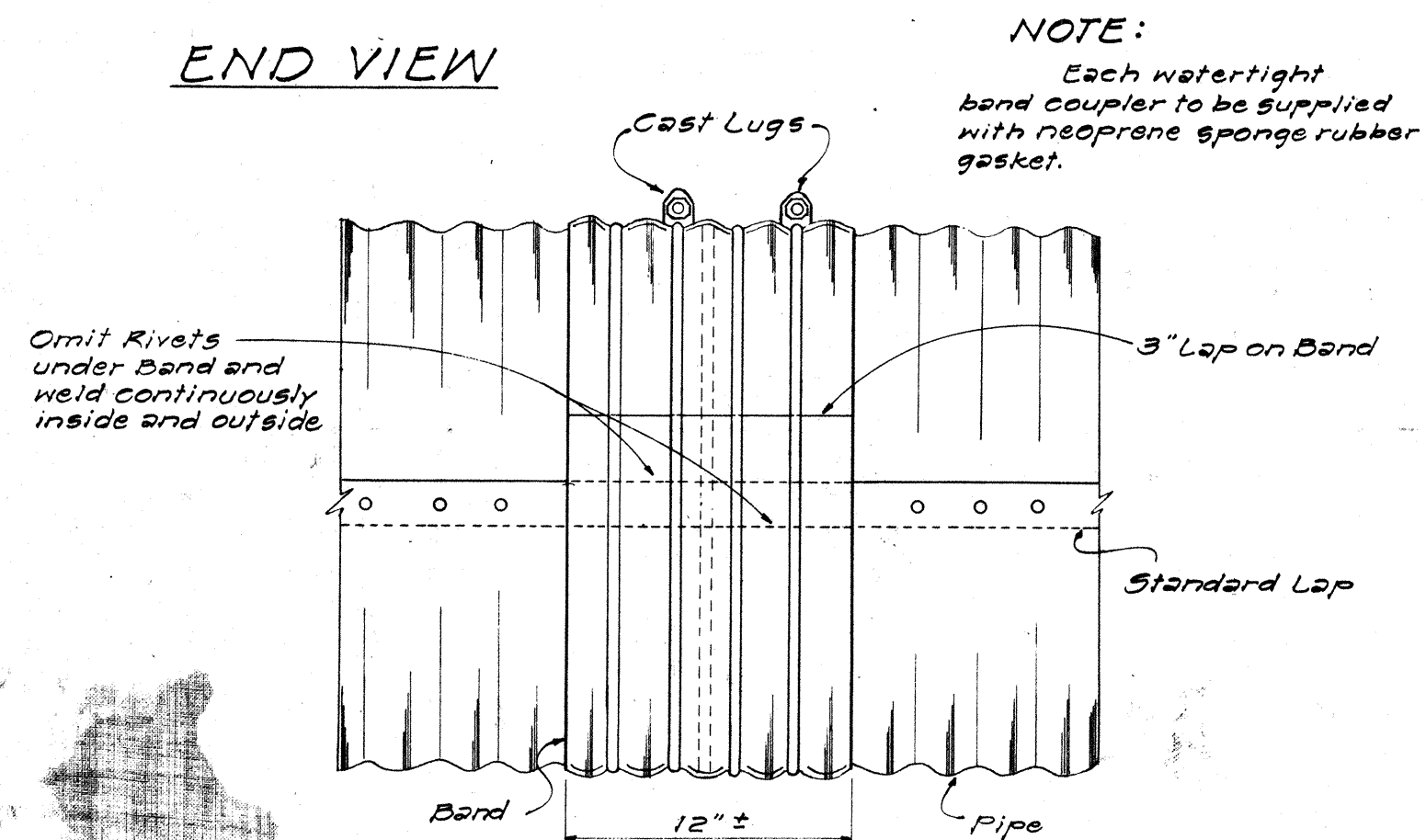
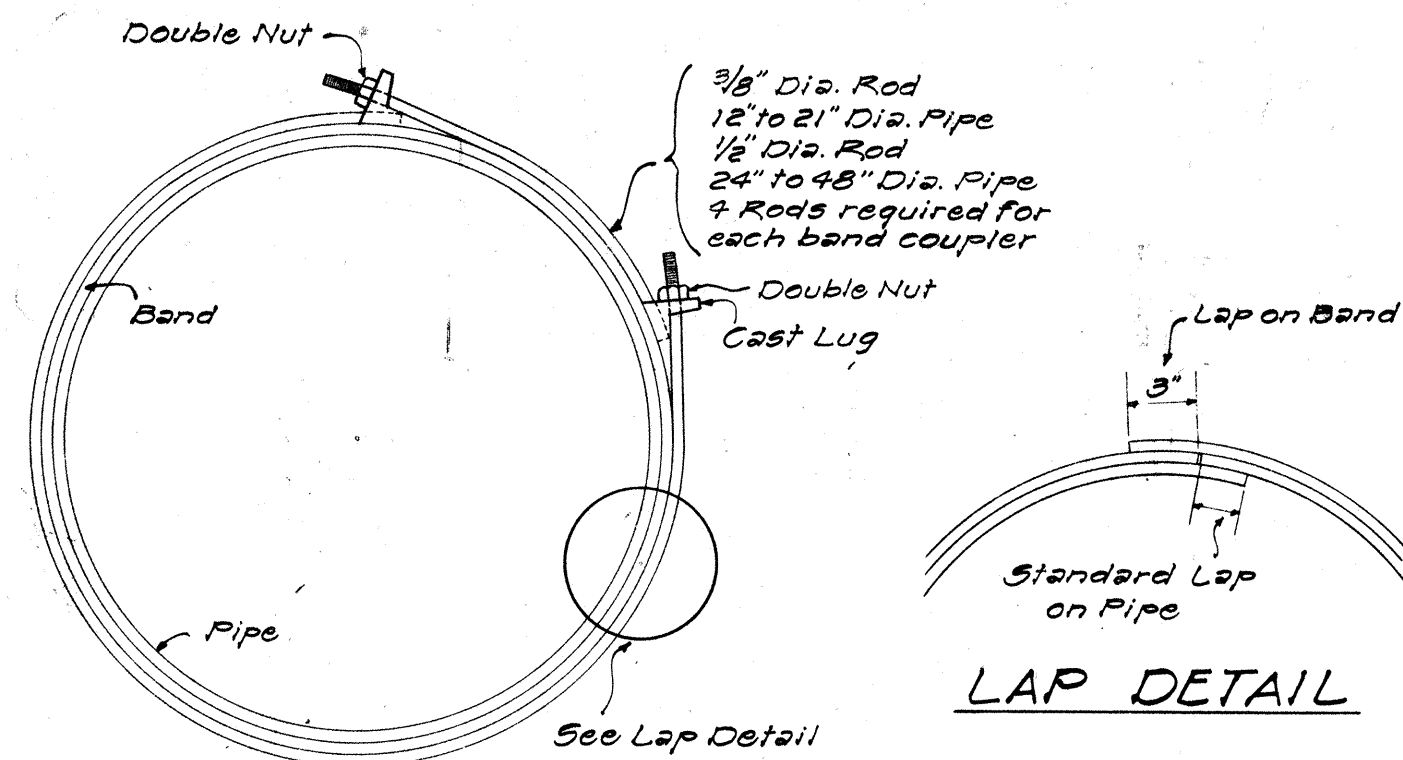
SHEET No 3 OF 4 SHEETS

NOTE:

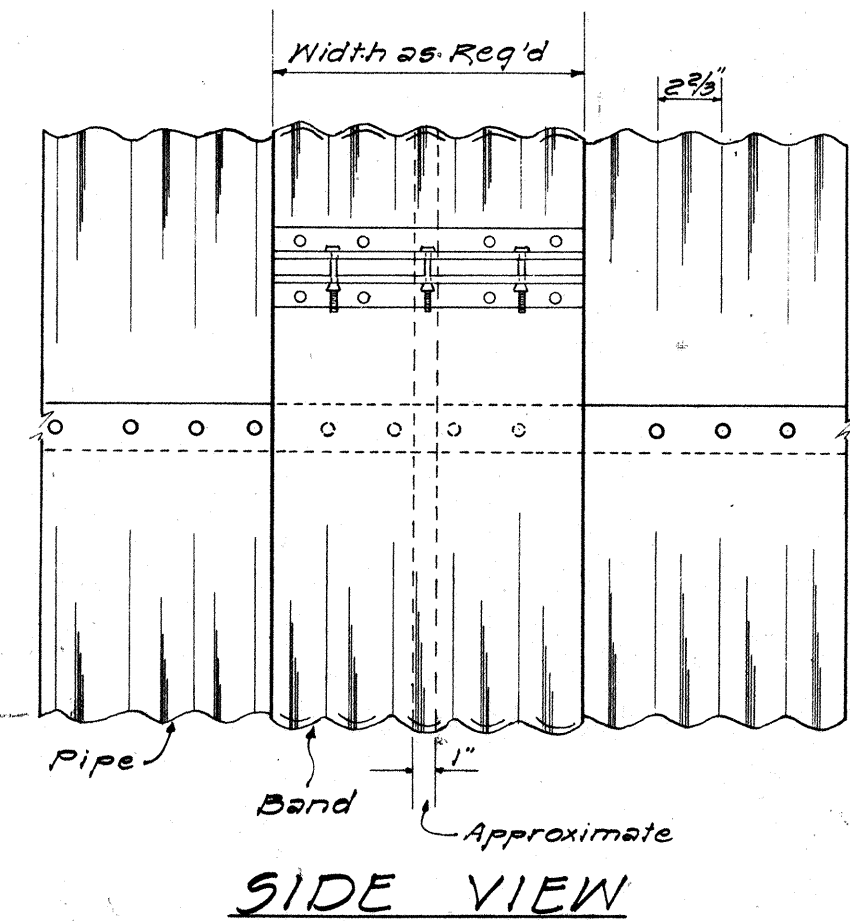
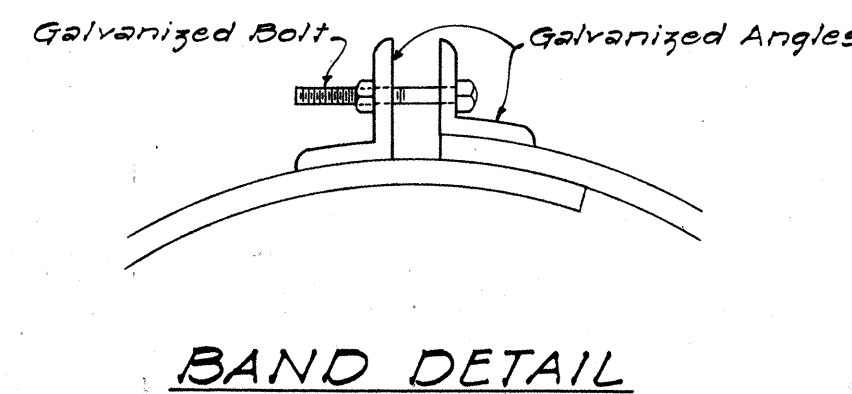
THE TYPE "S" CAST IRON FRAME AND COVER SHOWN
ON THIS SHEET IS EQUIVALENT TO THE CITY AND
COUNTY OF HONOLULU, DIVISION OF SEWERS' TYPE
"A" CAST IRON MANHOLE FRAME AND COVER.

THE TYPE "W" CAST IRON FRAME AND COVER
SHOWN ON THIS SHEET IS EQUIVALENT TO THE
CITY AND COUNTY OF HONOLULU, BOARD OF
WATER SUPPLY'S CAST IRON MANHOLE FRAME
AND COVER, 20" SIZE.

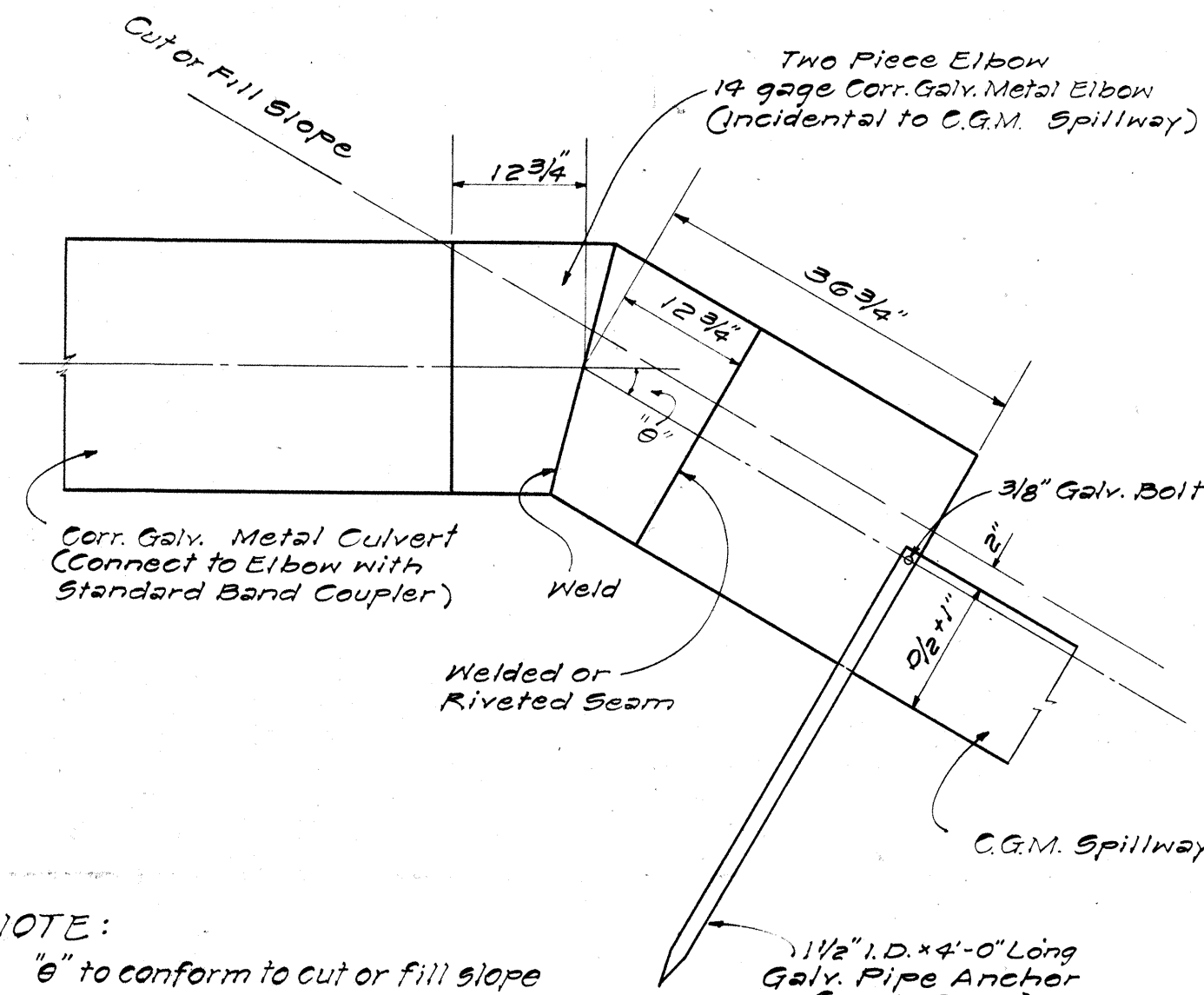
ORIGINAL PLAN	SURVEY PLOTTED BY.....	DATE.....
	DESIGNED BY.....	"
	DRAWN BY.....	"
	TRACED BY <i>A. Calisto</i>	"
	QUANTITIES BY.....	"
	CHECKED BY.....	"



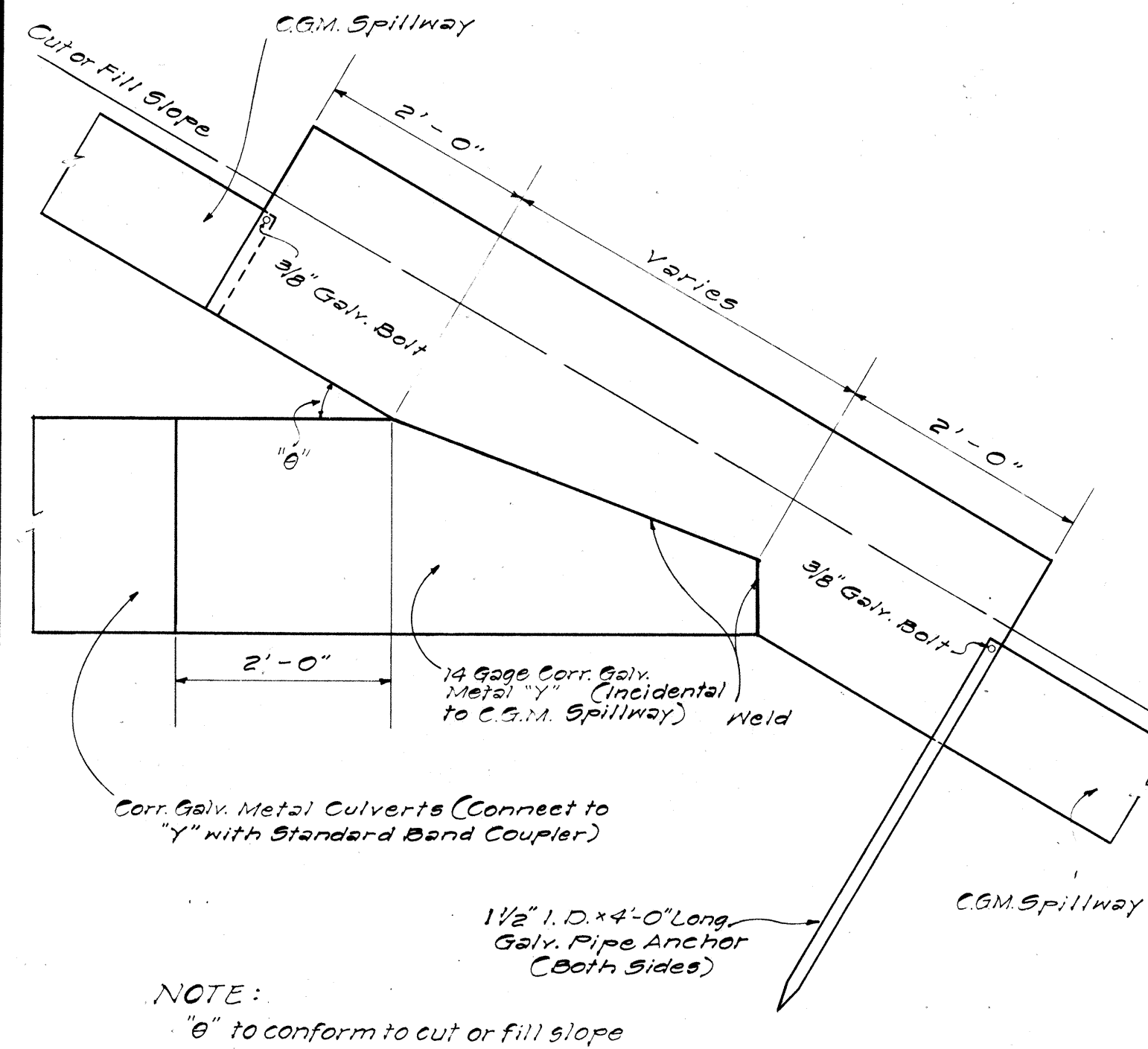
DETAIL OF WATERTIGHT BAND COUPLER
NOT TO SCALE



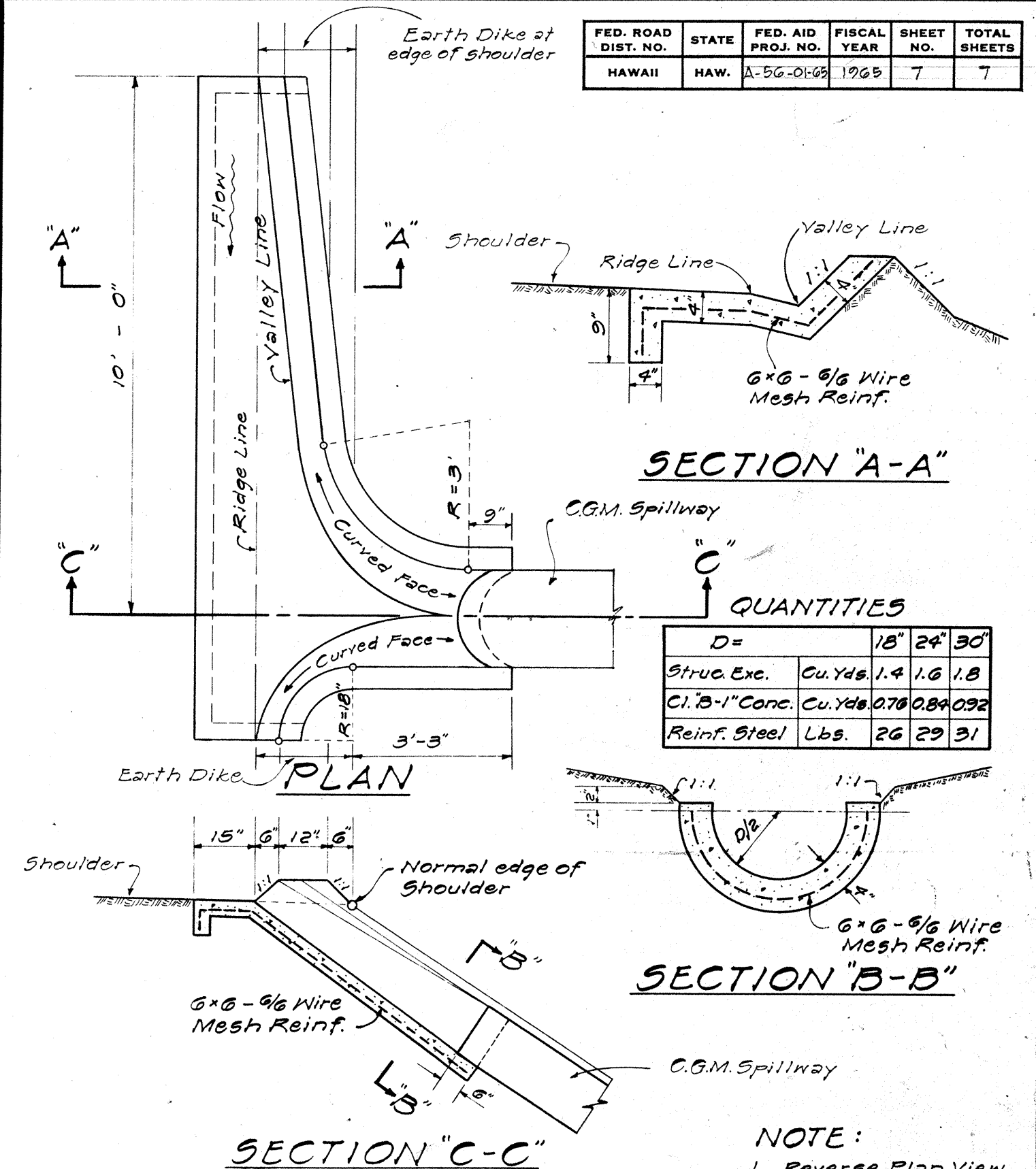
DETAIL OF STANDARD BAND COUPLER
NOT TO SCALE



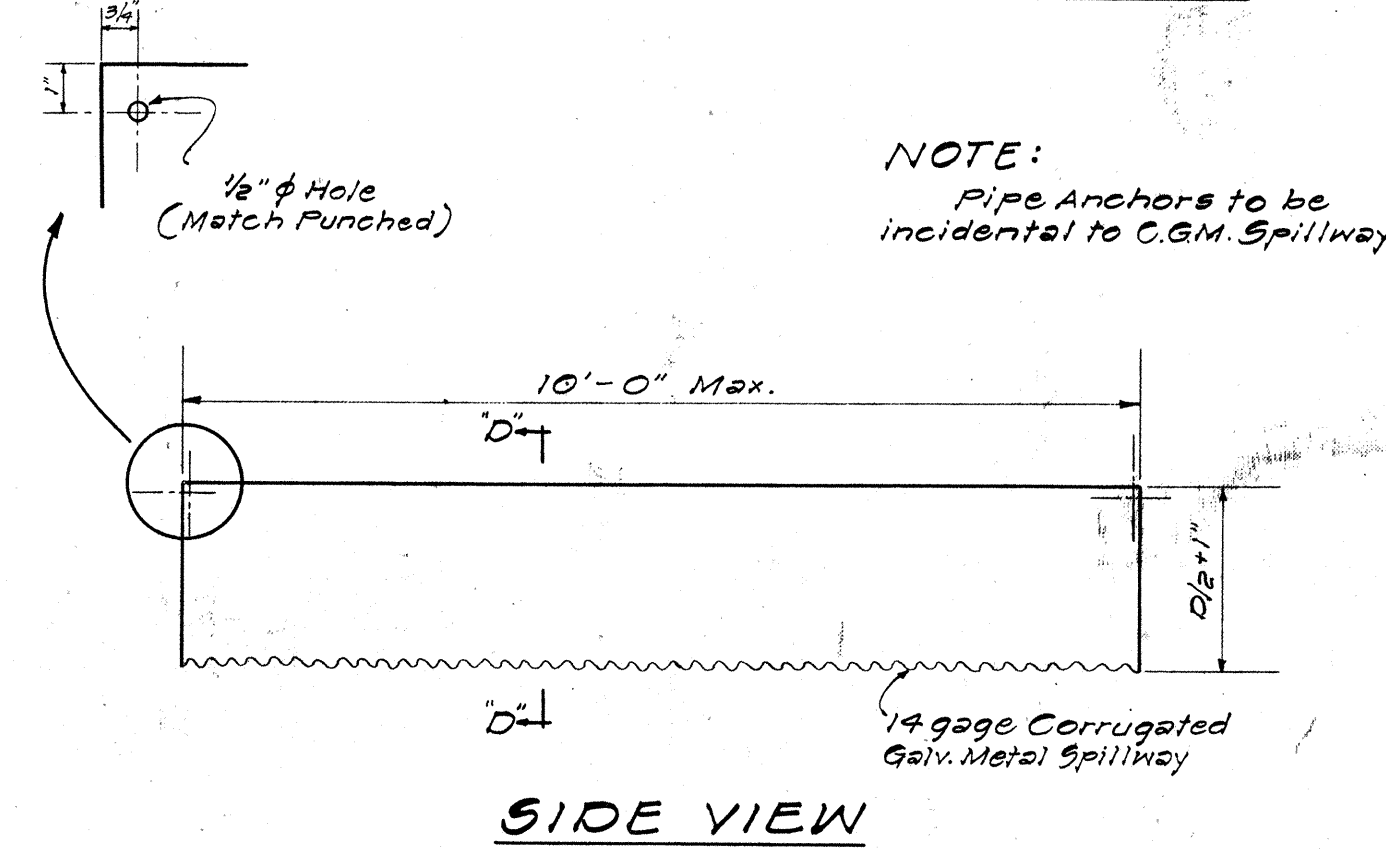
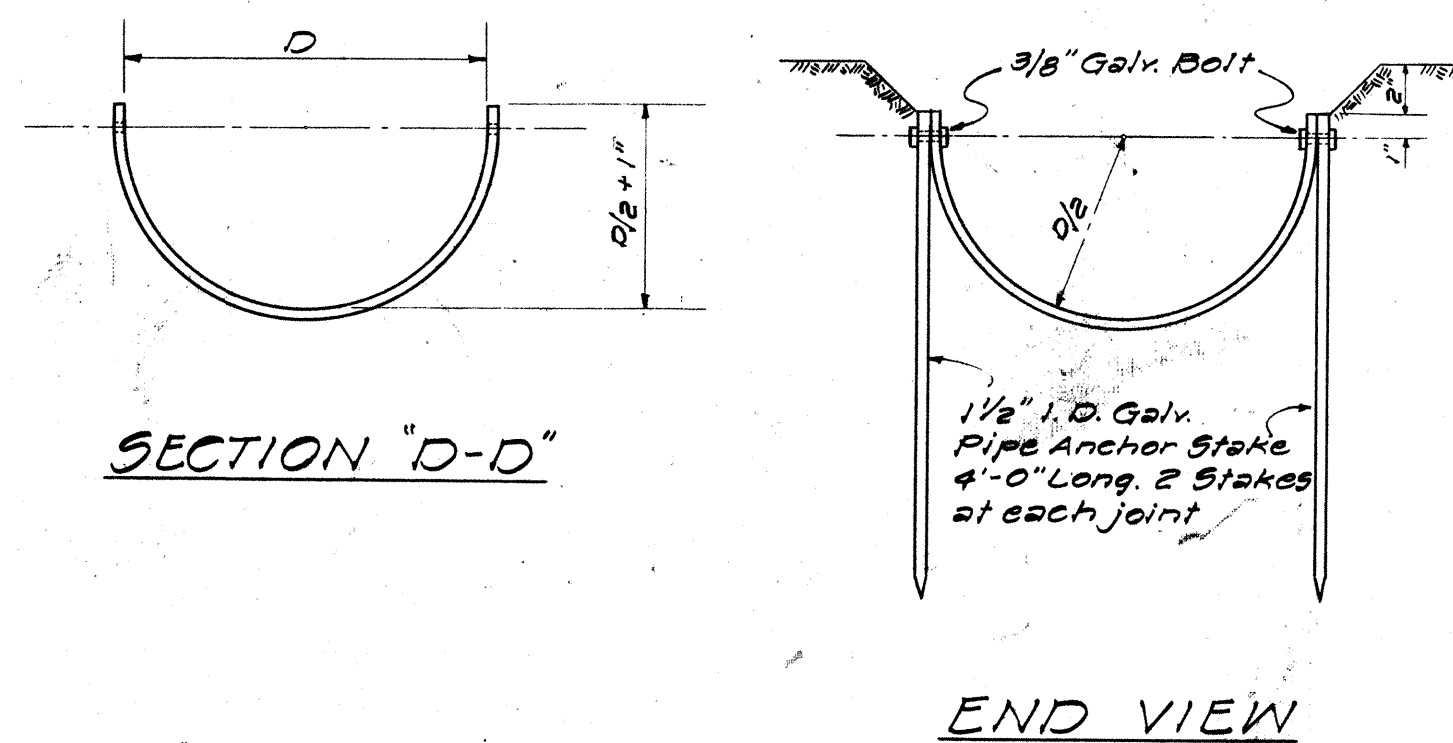
DETAIL OF CULVERT TO SPILLWAY CONNECTION
NOT TO SCALE



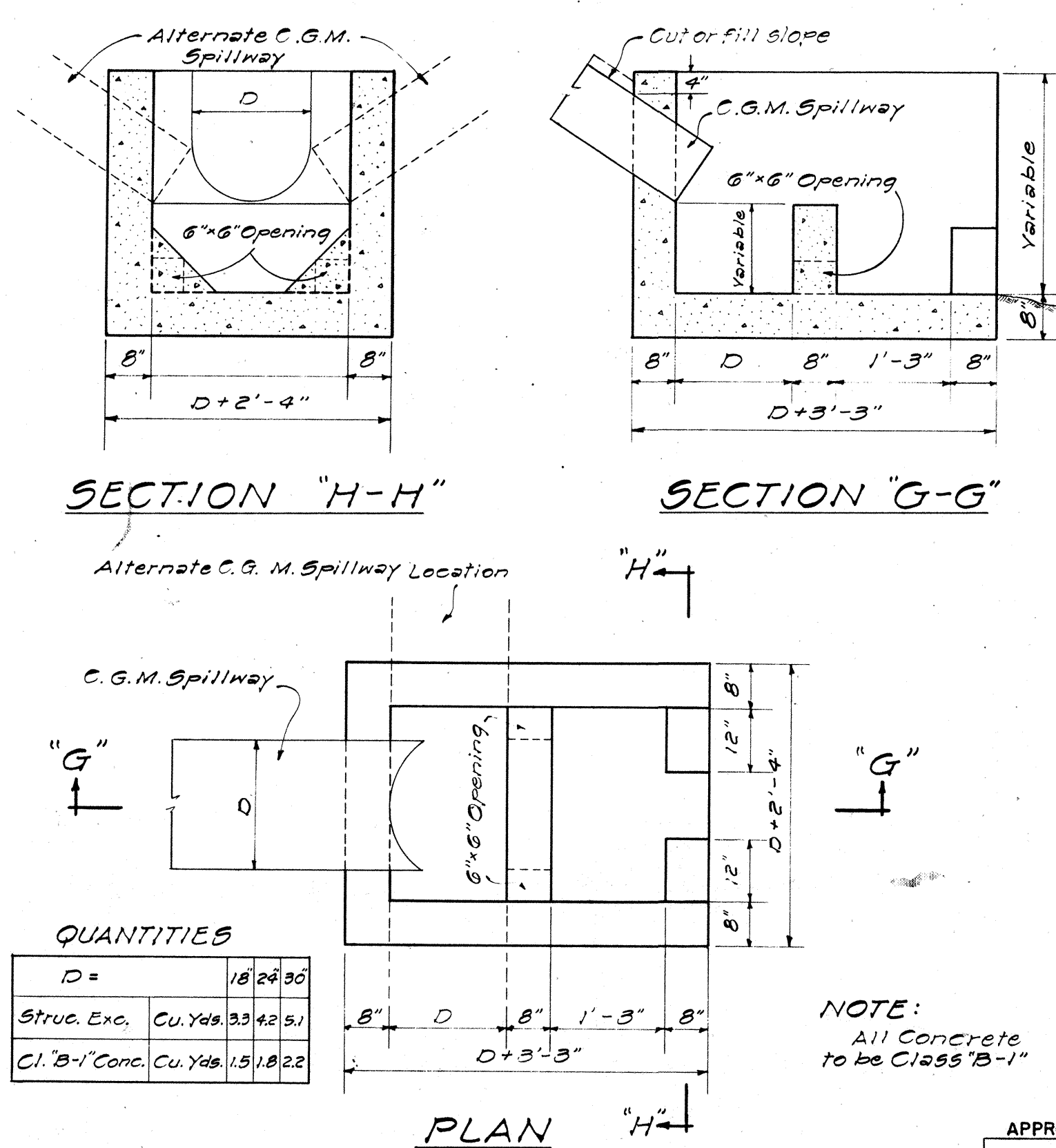
DETAIL OF CULVERT TO SPILLWAY "Y" CONNECTION
NOT TO SCALE



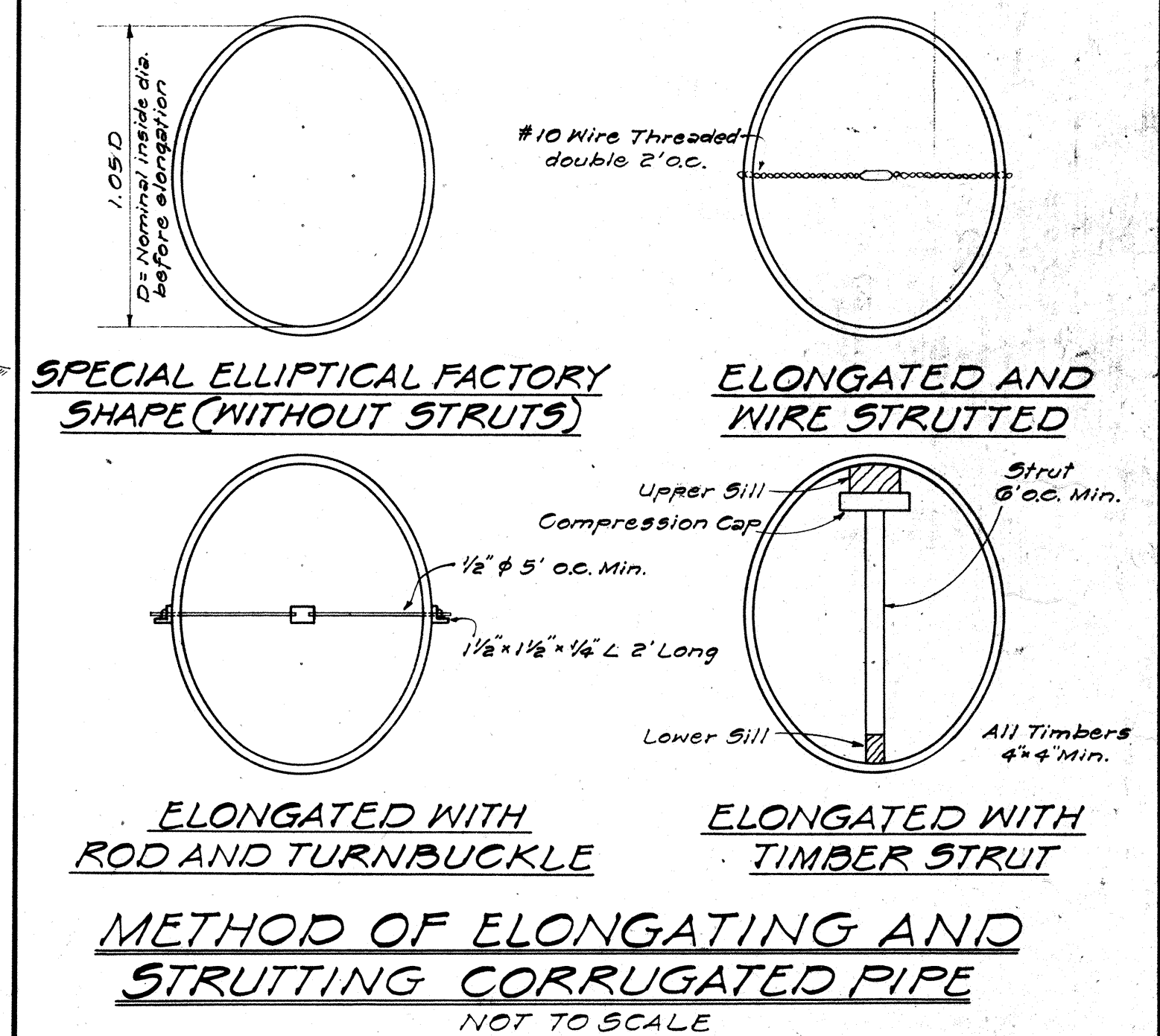
DETAIL OF SPILLWAY INLET
NOT TO SCALE



C. G. M. SPILLWAY
NOT TO SCALE



DETAILS OF CONC. DROP BOX AT OUTLET OF C. G. M. SPILLWAY
NOT TO SCALE



DETAILS OF CORRUGATED GALVANIZED METAL CULVERTS, SPILLWAYS, AND SPECIAL DETAILS
SCALES AS NOTED
SHEET NO. OF SHEETS

SURVEY PLOTTED BY: DATE: 5-24-61
DRAWN BY: R. Y.
DESIGNED BY: O. M.
NOTE BOOK
QUANTITIES BY: 5-24-61
CHECKED BY:
No.