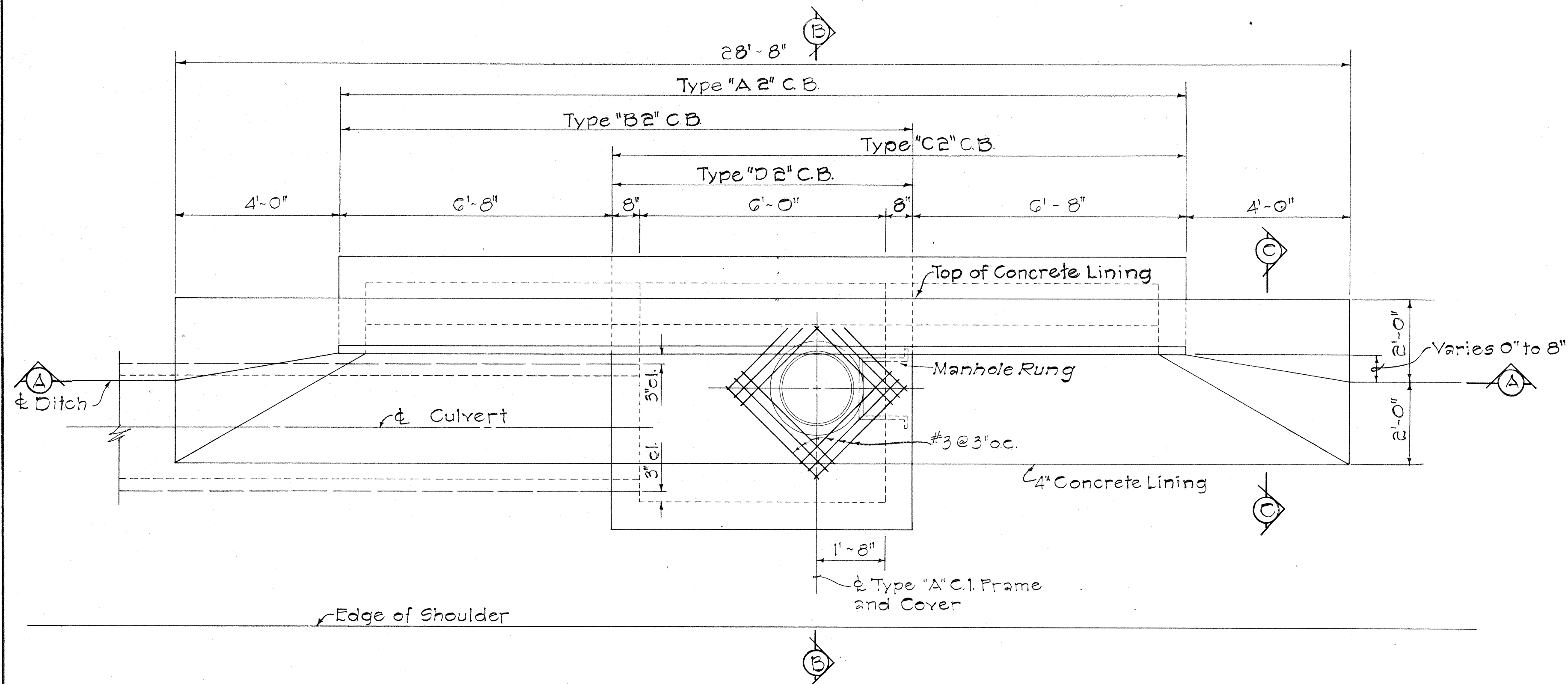
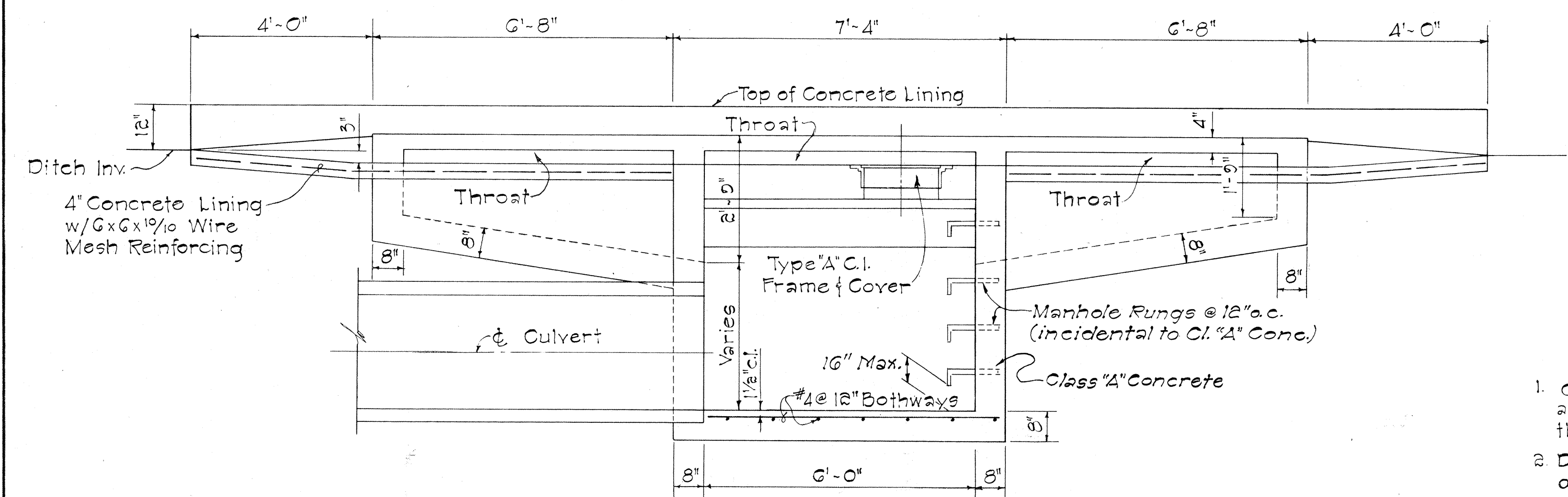


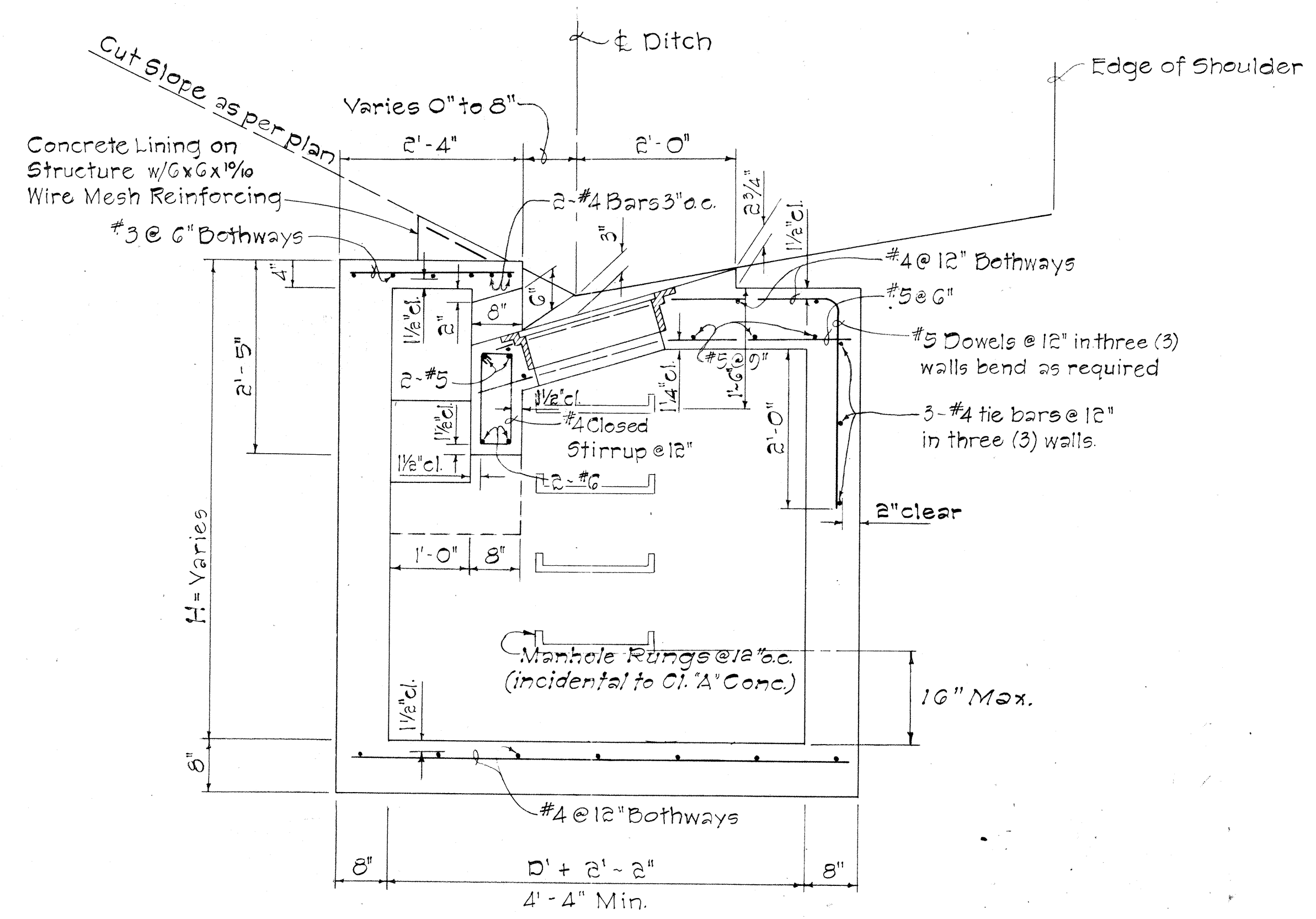
FED. ROAD DIST. NO.	STATE	FED. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	030B0-0175	1976	7	9



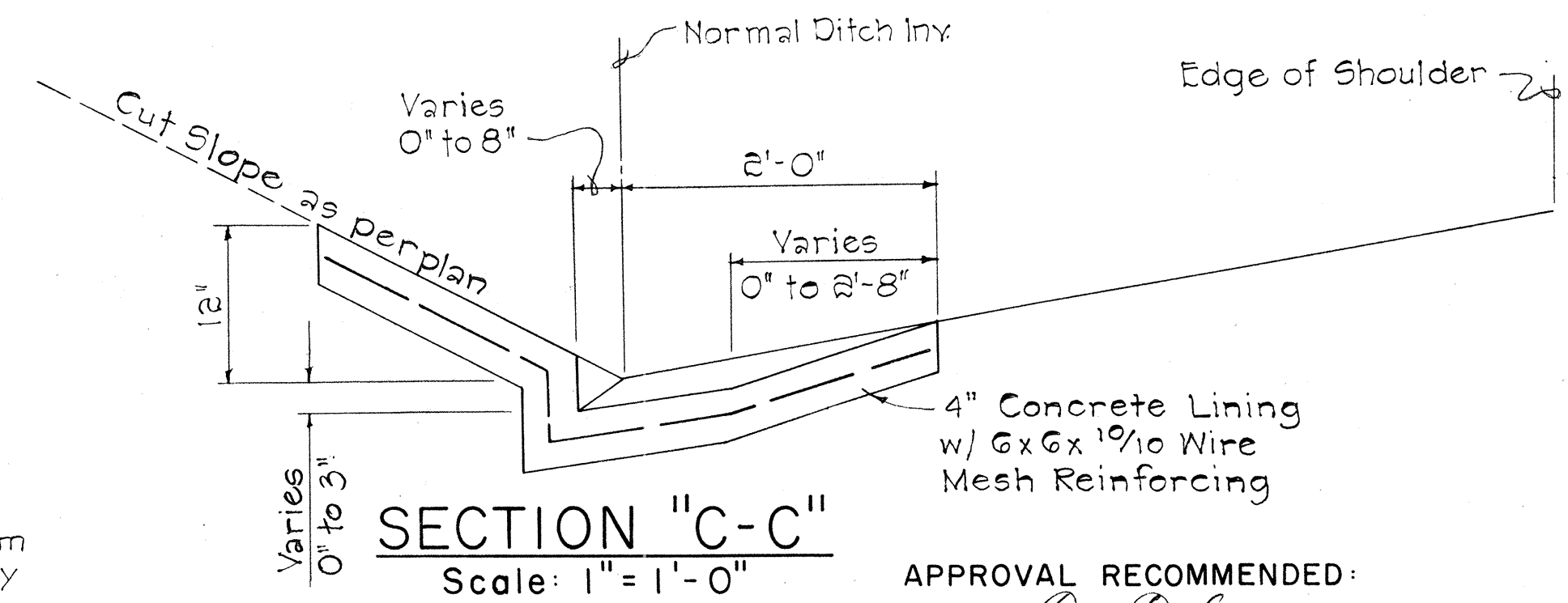
PLAN
Scale: 1/2" = 1' - 0"



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



SECTION "B-B"
Scale: 3/4" = 1' - 0"



SECTION "C-C"
Scale: 1" = 1' - 0"

- GENERAL NOTES**
- Culvert shall enter and leave C.B. from any position and in the direction indicated by the plans or ordered by the Engineer.
 - D shall be the maximum outside dimension of the culvert at the C.B. wall.
 - Manhole Rungs (12" o.c.) are required when "H" is greater than 4 feet 6 inches. Only one rung (16 inches from the bottom) is required if "H" is 4 feet 6 inches or less.
 - Type "A" C.I. Frame and Cover and Manhole Rungs may be placed at any location as ordered by the Engineer.

APPROVAL RECOMMENDED:
[Signature]
HYDRAULIC DESIGN ENGINEER 12-17-69
DATE

APPROVED:
[Signature]
ASSISTANT CHIEF, ENGINEERING 12-17-69
DATE

NO.	REVISION	APPROVED BY	DATE
1	Spacing on Manhole Rungs to conform to OSHA.	HT	1-21-75

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
TYPE "A2", "B2", "C2", AND "D2"
CATCH BASINS

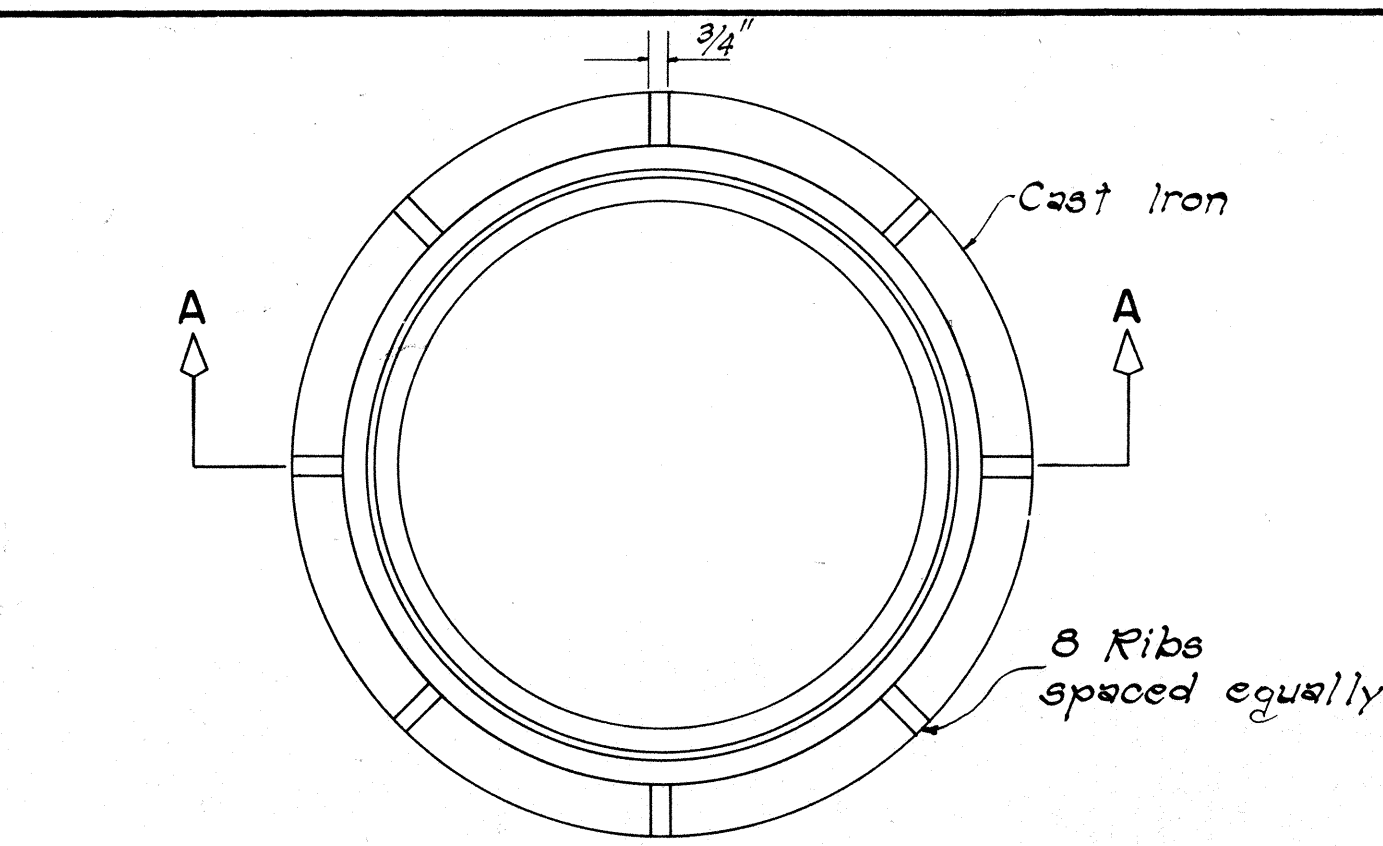
Scale: As Noted Date: July, 1969

SHEET No. 1 OF 2 SHEETS DH 4

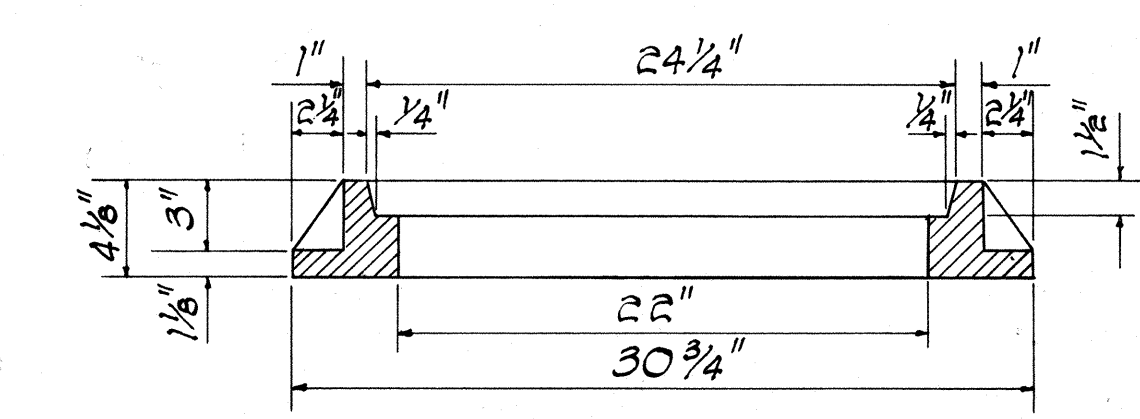
DETAILS OF TYPE "A2", "B2", "C2" AND "D2" CATCH BASIN

ORIGINAL PLAN	DATE
DRAWN BY	
TRACED BY	
CHECKED BY	
NOTED BY	
CHECKED BY	

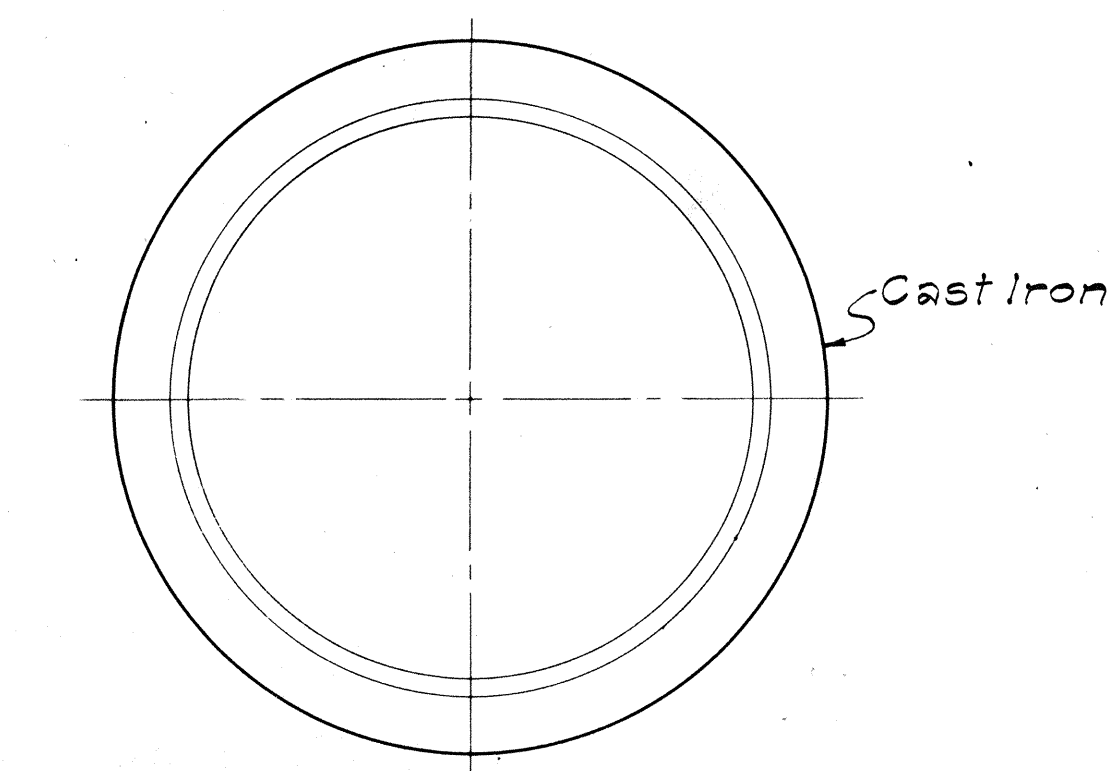
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	030BC-0175	1976	8	9



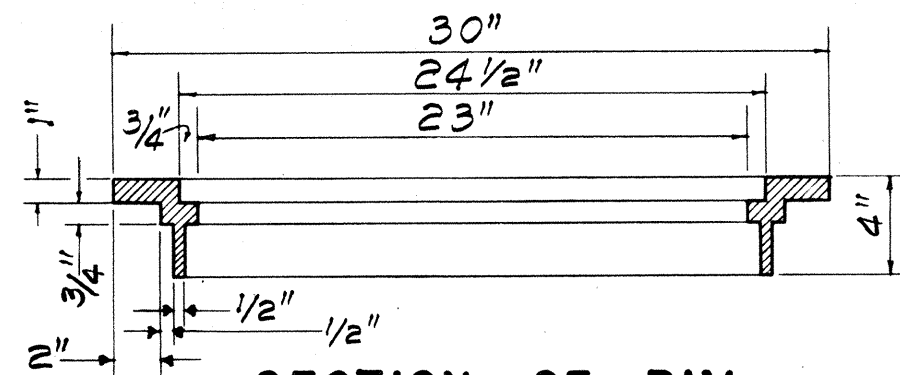
PLAN



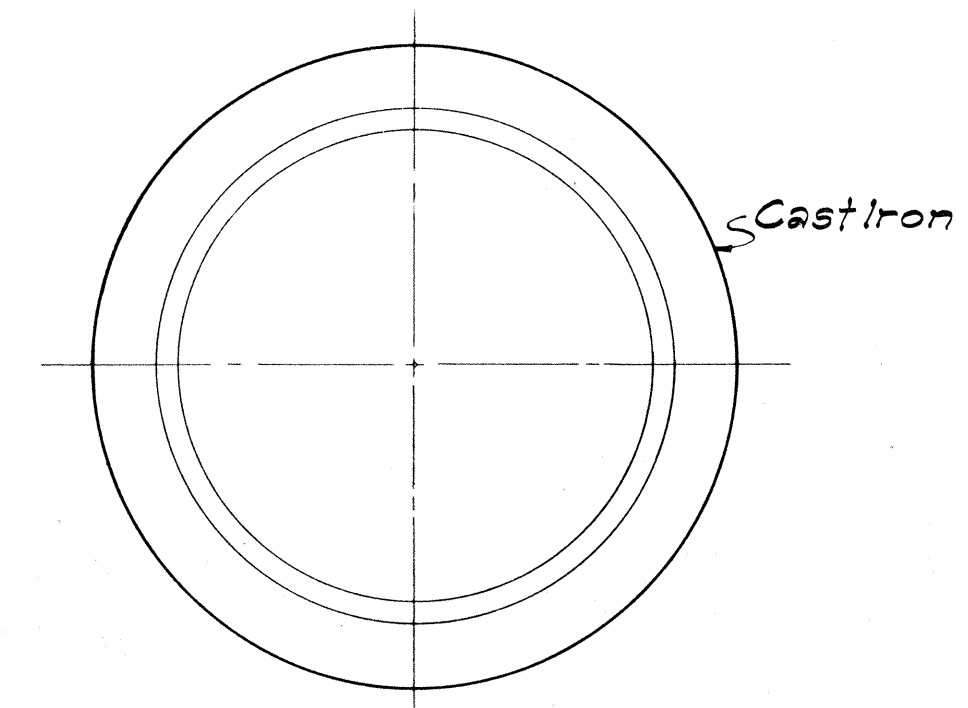
SECTION A-A



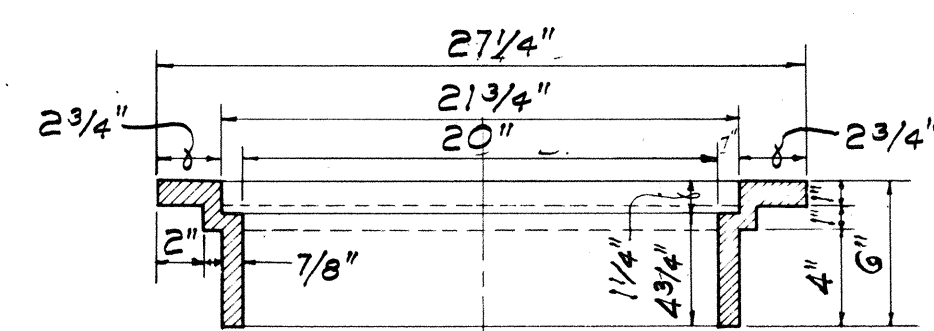
PLAN OF RIM



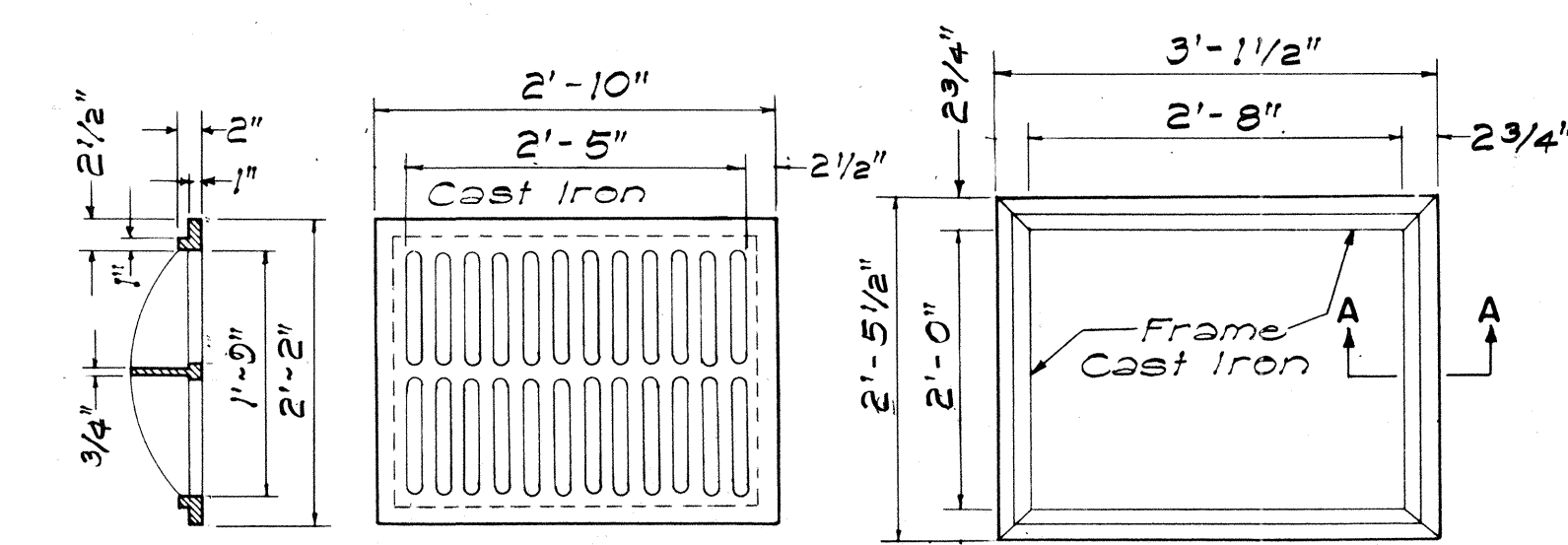
SECTION OF RIM



PLAN OF RIM



SECTION OF RIM



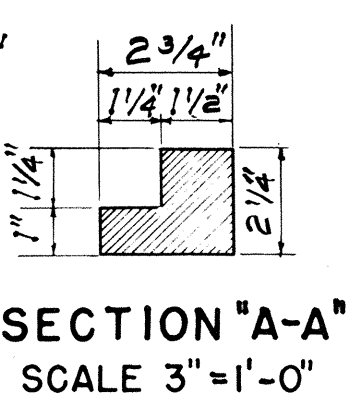
SECTION

TOP VIEW

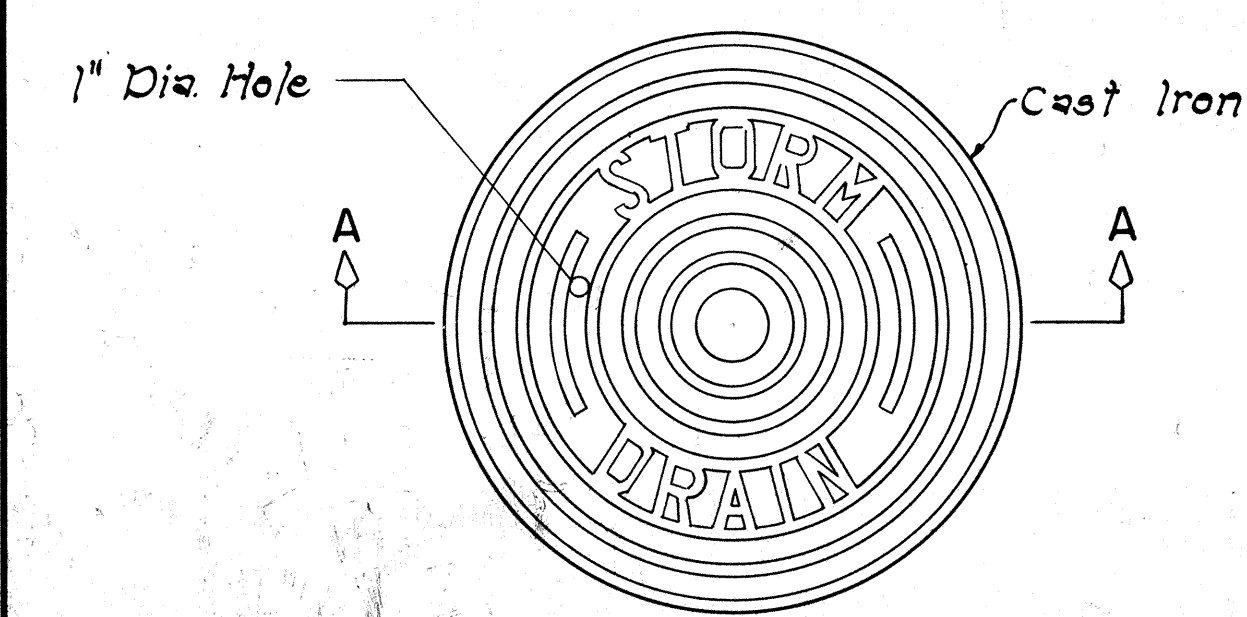
TOP VIEW

TYPE C C.I. FRAME AND GRATE

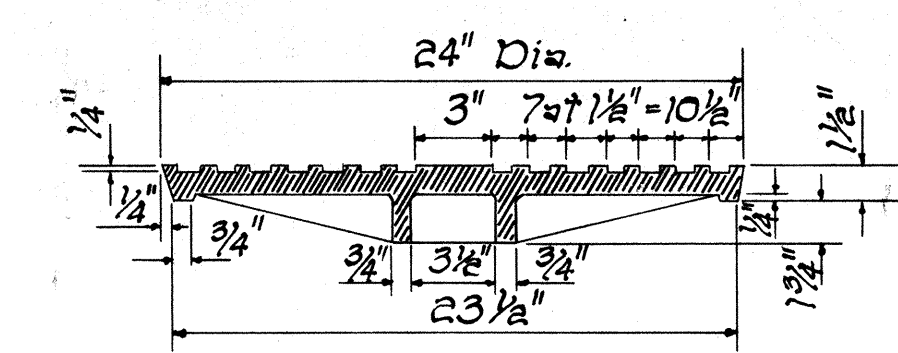
SCALE: 3/4" = 1'-0"



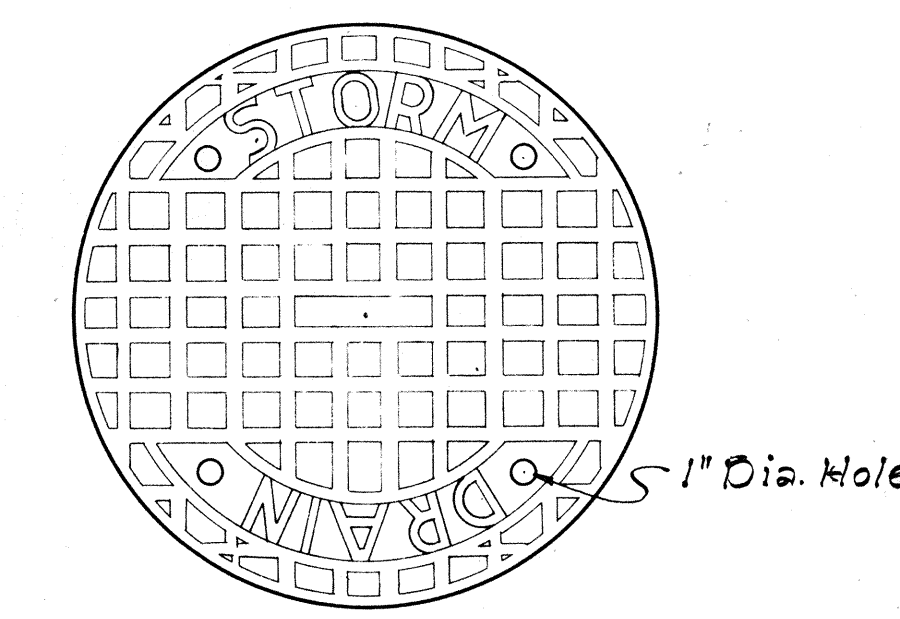
SECTION "A-A"
SCALE 3"=1'-0"



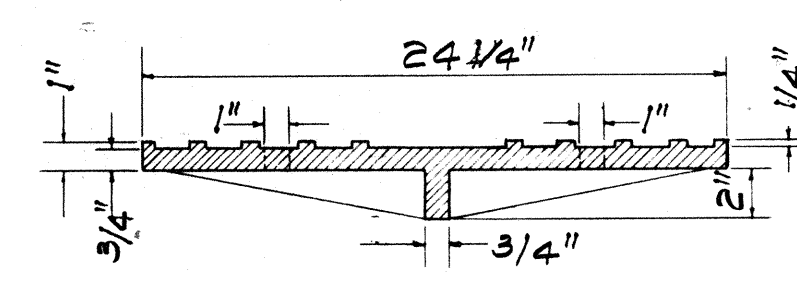
PLAN



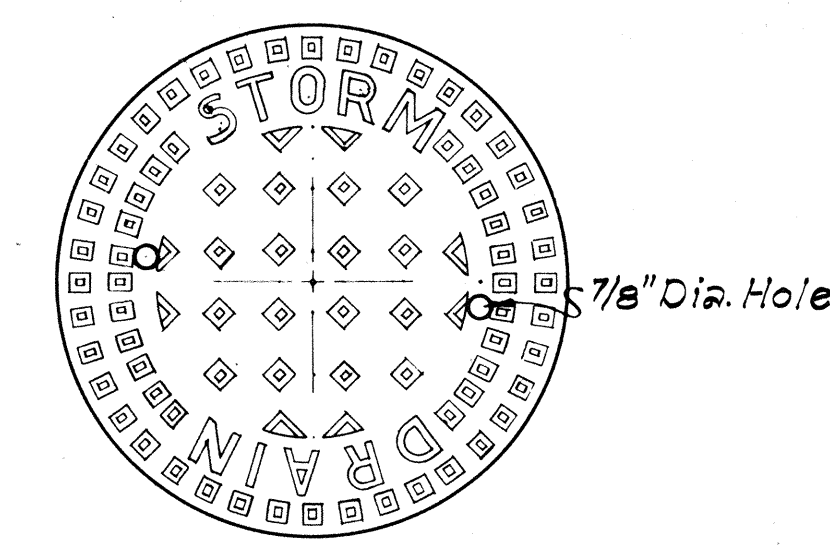
SECTION A-A



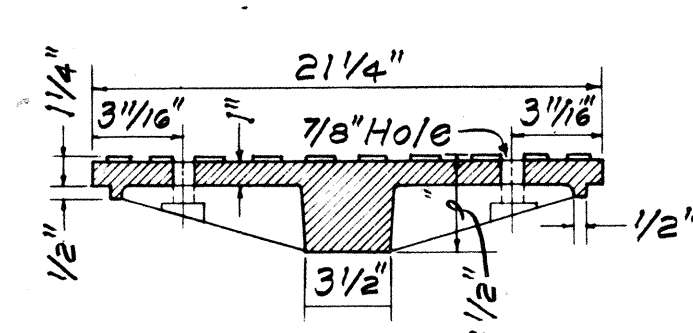
TOP VIEW OF COVER



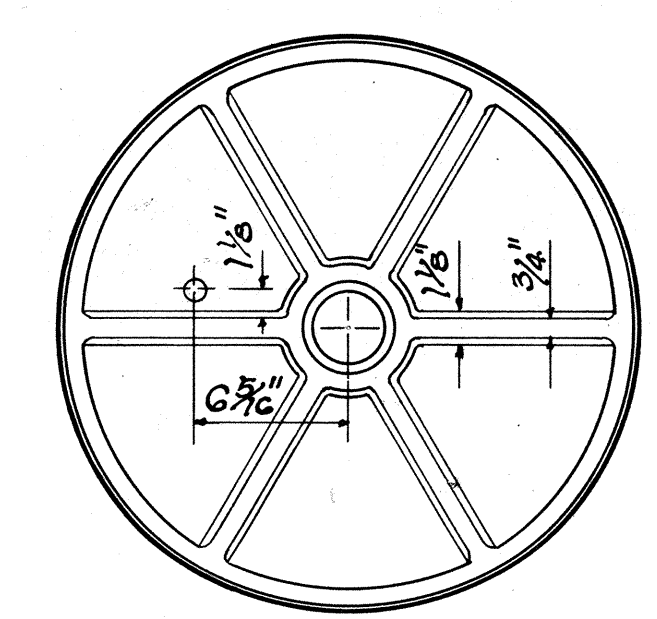
SECTION



TOP VIEW OF COVER



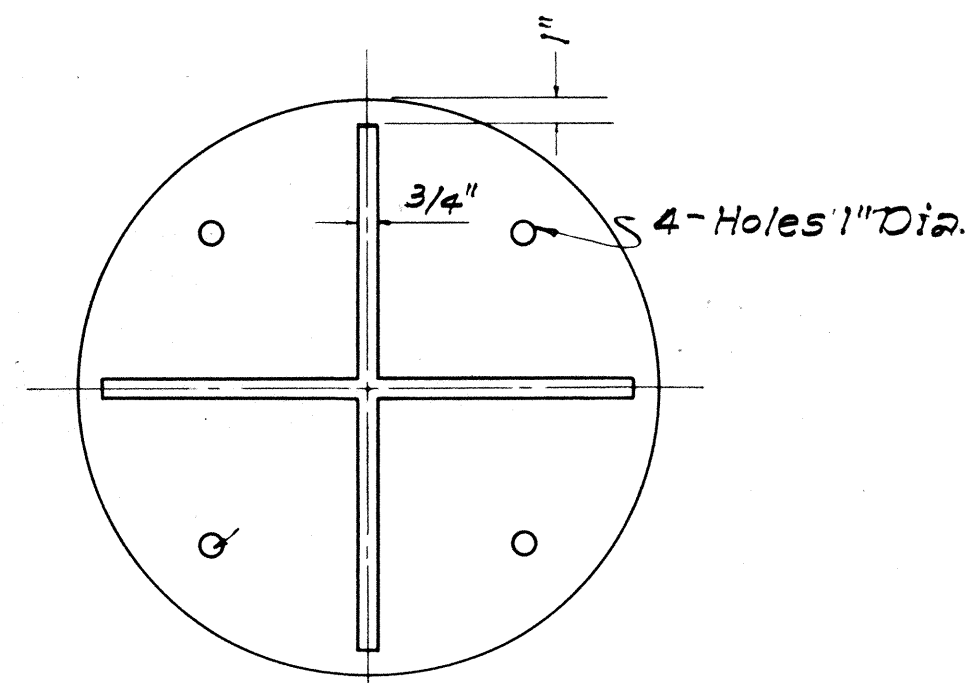
SECTION



BOTTOM VIEW OF COVER

DETAILS OF TYPE "P"
CAST IRON FRAME AND COVER

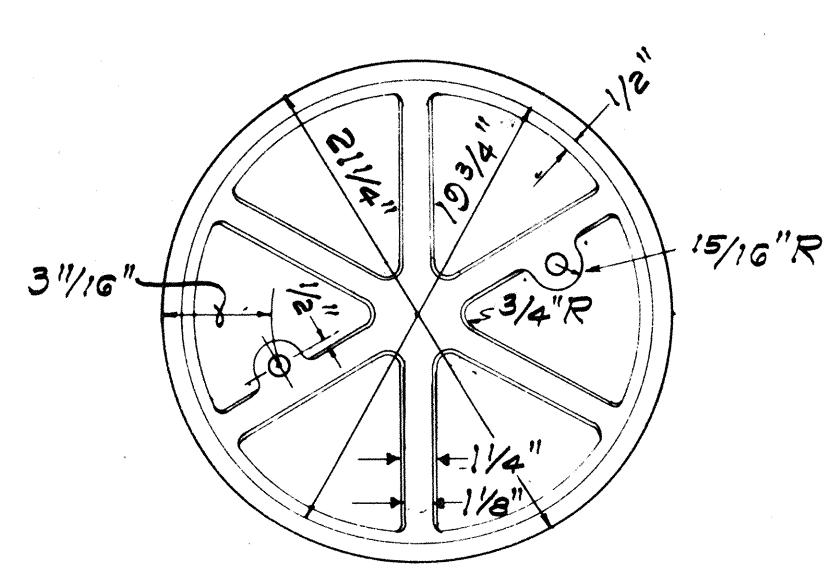
SCALE: 1-1/2" = 1'-0"



BOTTOM VIEW OF COVER

DETAILS OF TYPE "B"
CAST IRON FRAME AND COVER

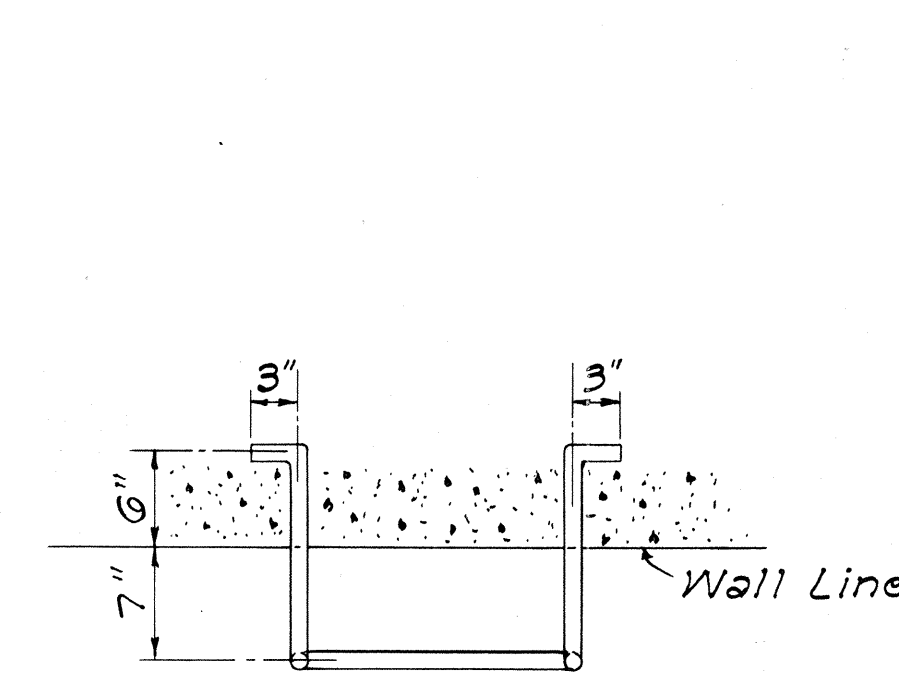
SCALE: 1-1/2" = 1'-0"



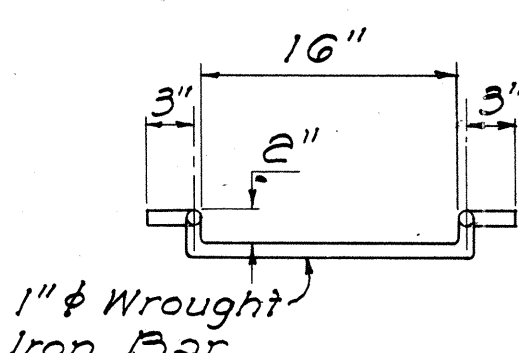
BOTTOM VIEW OF COVER

DETAILS OF TYPE "A"
CAST IRON FRAME AND COVER

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



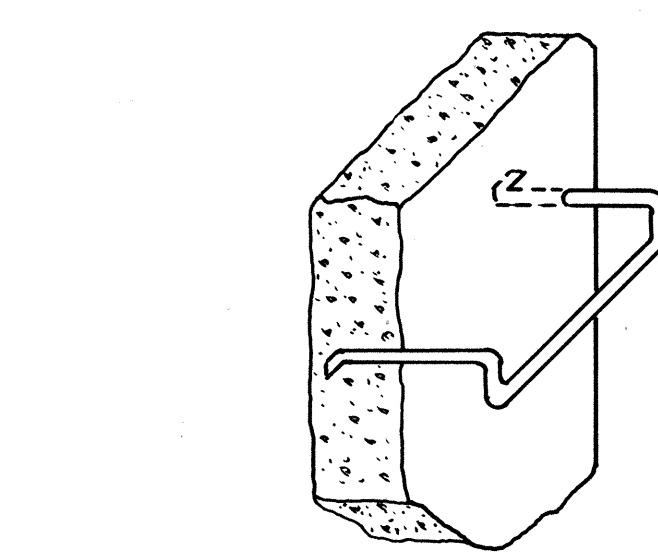
P L A N



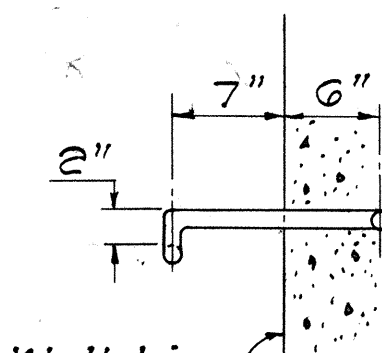
FRONT VIEW

DETAILS OF MANHOLE RUNG

SCALE: 1" = 1'-0"



PICTORIAL VIEW
NOT TO SCALE



SIDE VIEW

APPROVAL RECOMMENDED:

HYDRAULIC DESIGN ENGINEER

12-17-69
DATE

APPROVED:

ASSISTANT CHIEF, ENGINEERING

12-17-69
DATE

NO.	REVISION	APPROVED BY	DATE
1.	Detail of Type "P" Cast Iron Frame and Cover	H.T.	1-6-71
2.	Details of Manhole Rungs to conform to OSHA.	H.T.	1-21-75

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
STANDARD DETAILS CATCH BASIN AND MANHOLE CASTINGS
Scale: As Noted Date: July, 1969

SHEET No 2 OF 2 SHEETS DH 6

DATE: _____
SURVEY PLOTTED BY: _____
DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
ORIGINAL PLAN: _____
NOTE BOOK: _____
No. _____