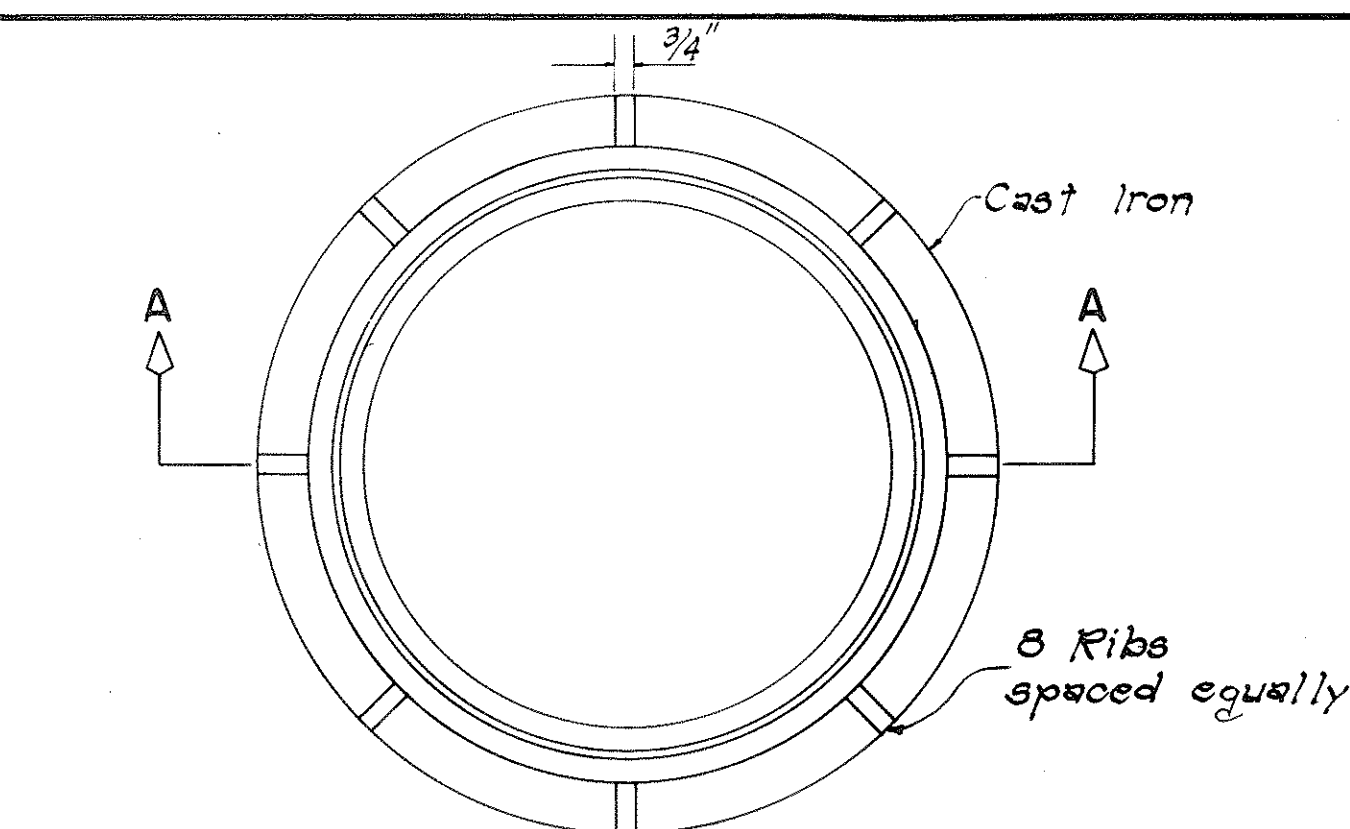
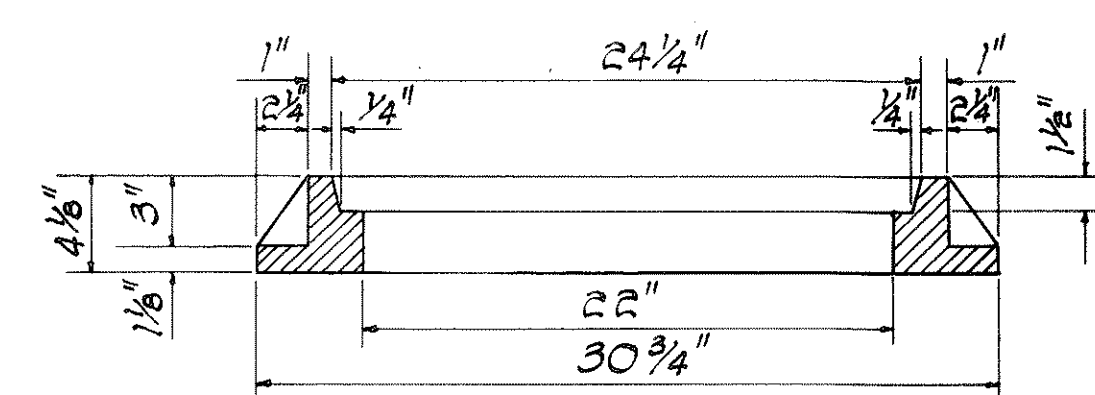


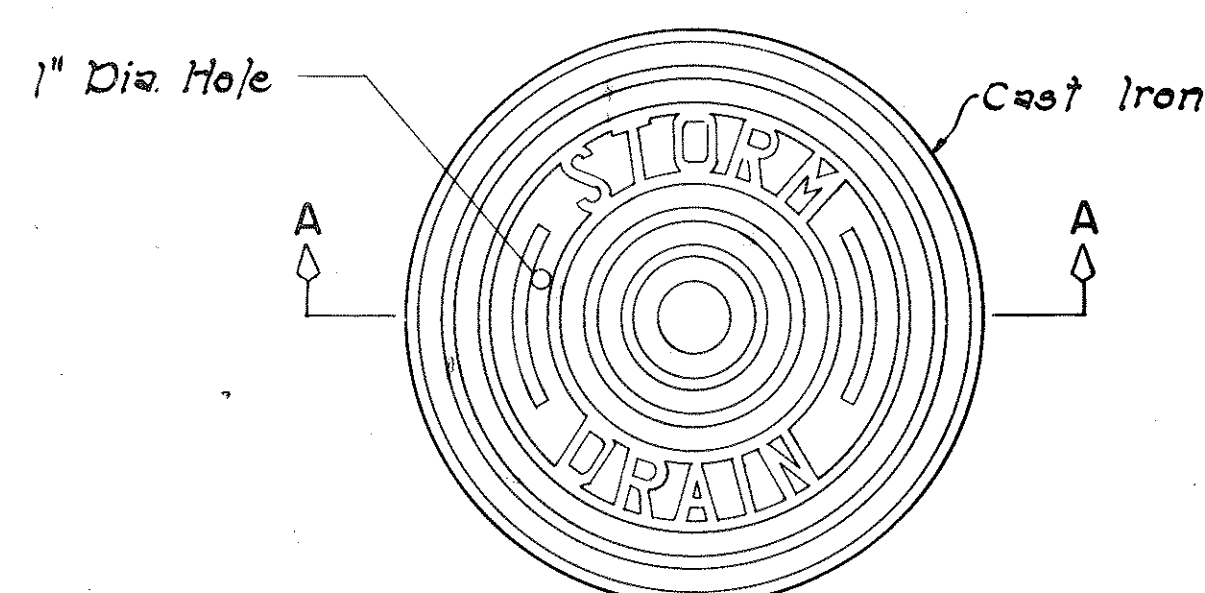
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-02-72	1973	4	5



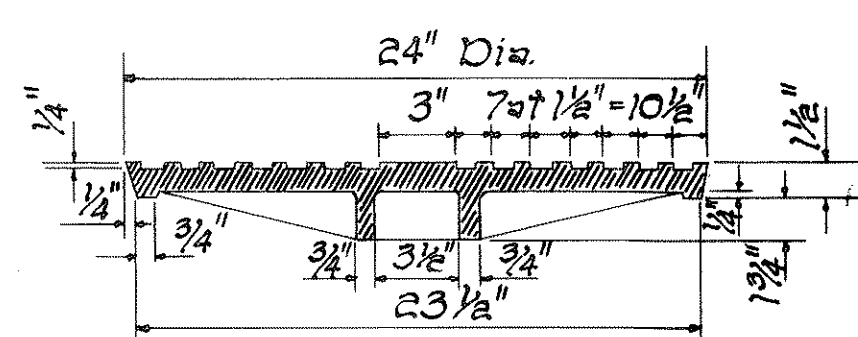
PLAN



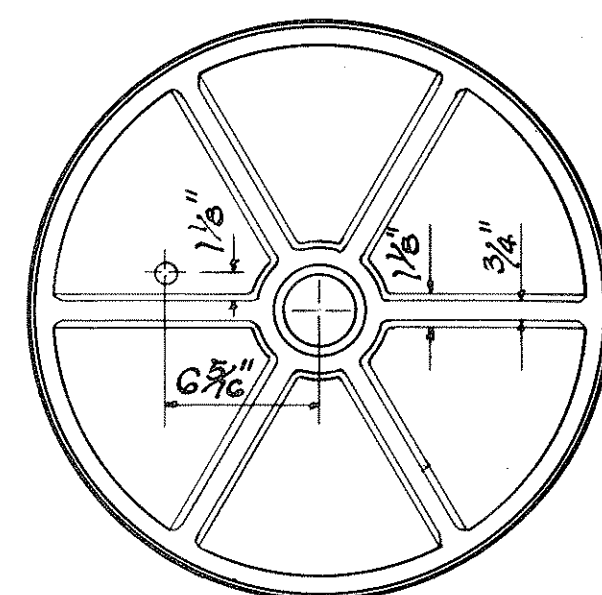
SECTION A-A



PLAN



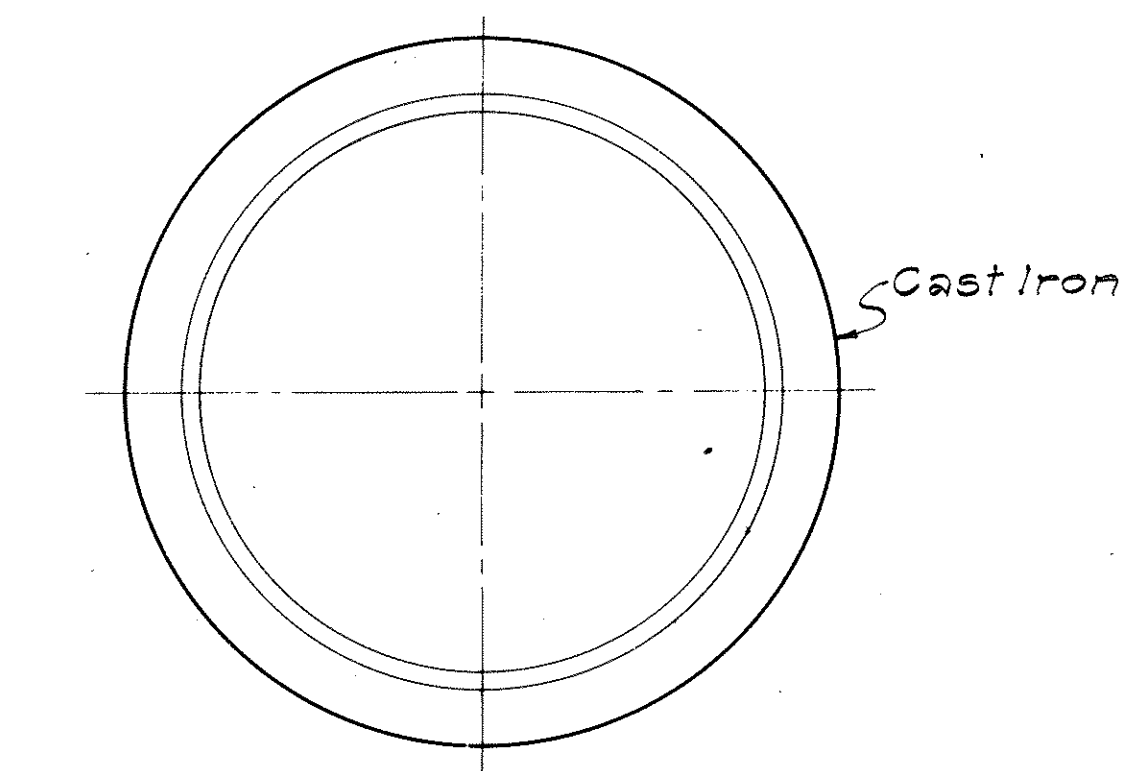
SECTION A-A



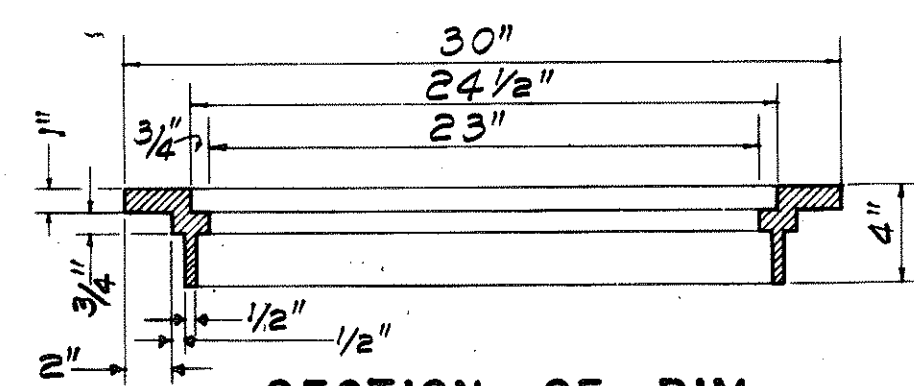
BOTTOM VIEW OF COVER

DETAILS OF TYPE "P"
CAST IRON FRAME AND COVER

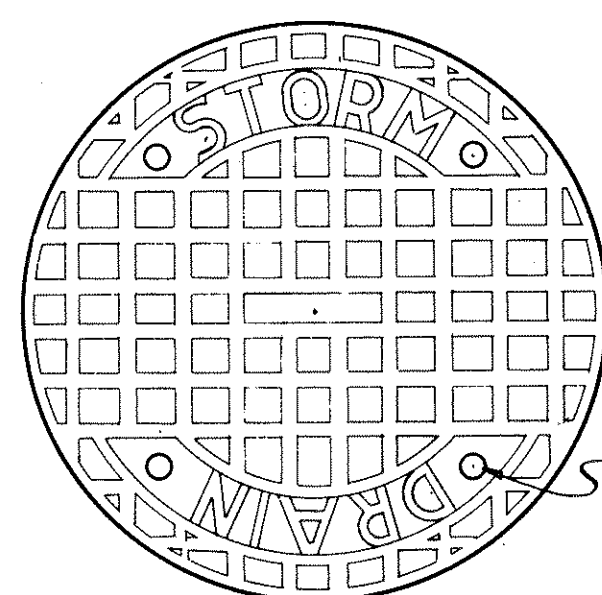
SCALE: 1-1/2" = 1'-0"



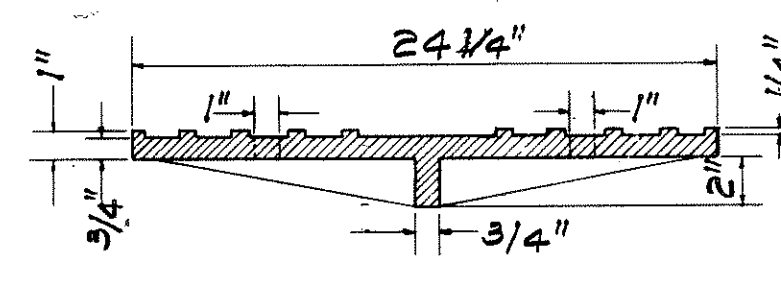
PLAN OF RIM



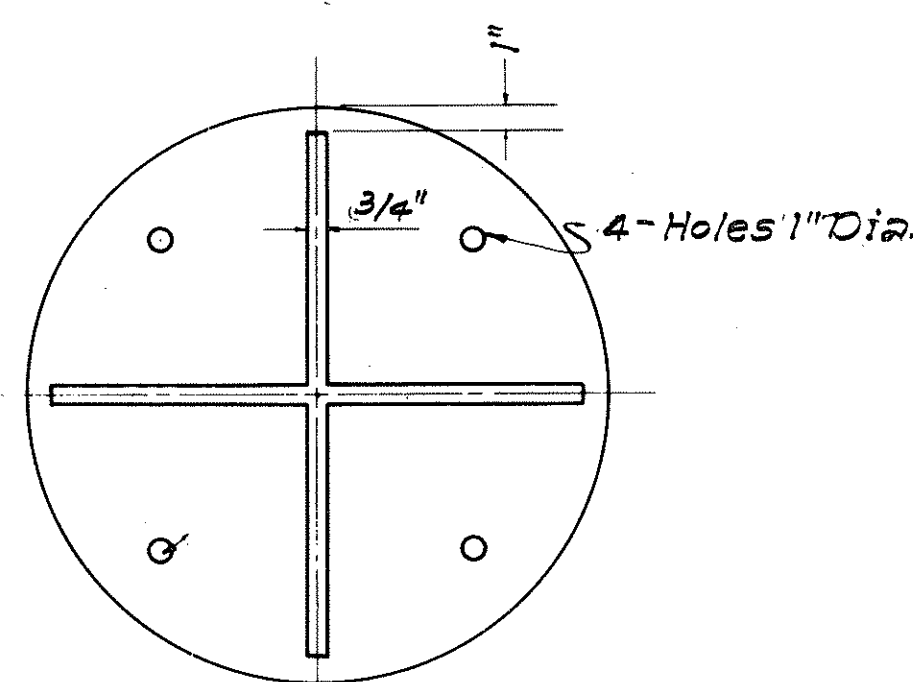
SECTION OF RIM



TOP VIEW OF COVER



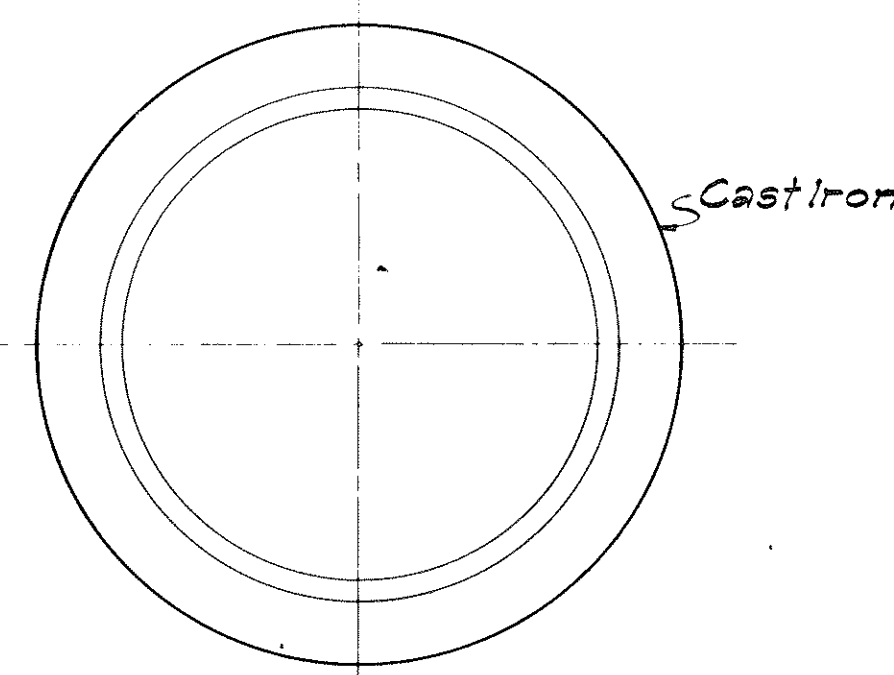
SECTION



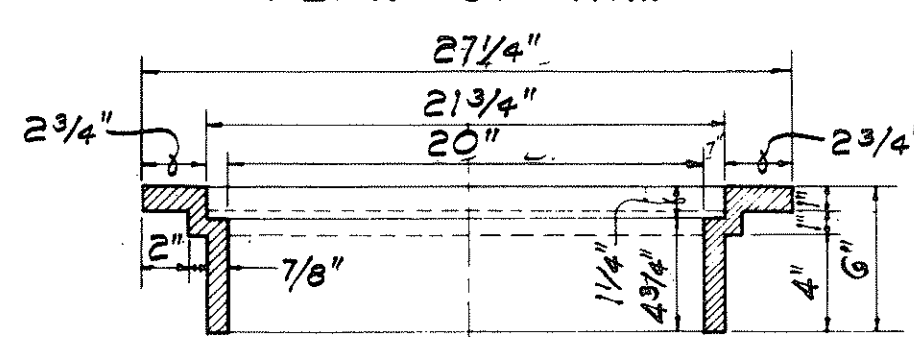
BOTTOM VIEW OF COVER

DETAILS OF TYPE "B"
CAST IRON FRAME AND COVER

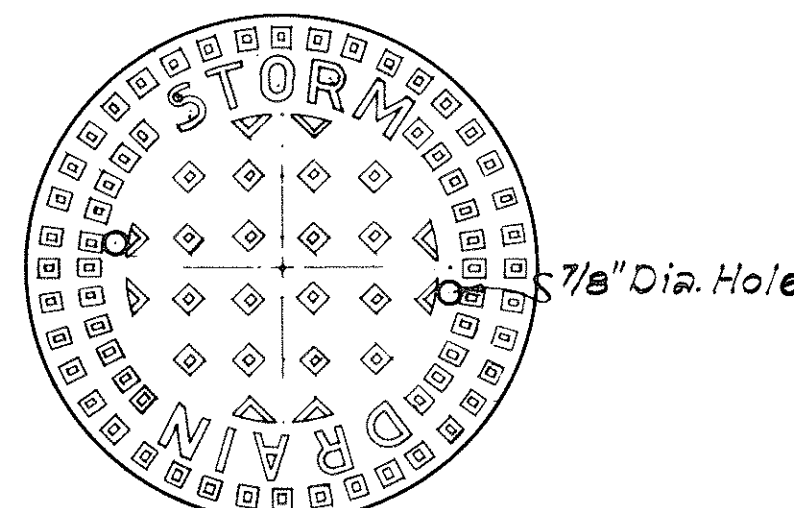
SCALE: 1-1/2" = 1'-0"



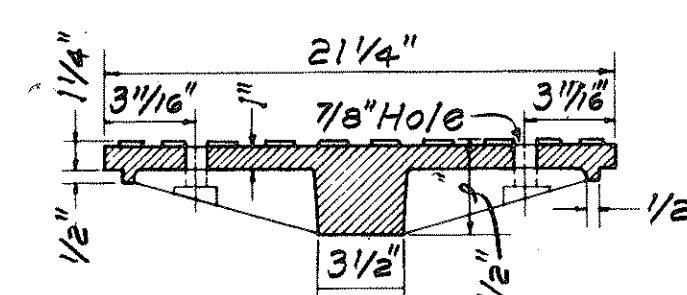
PLAN OF RIM



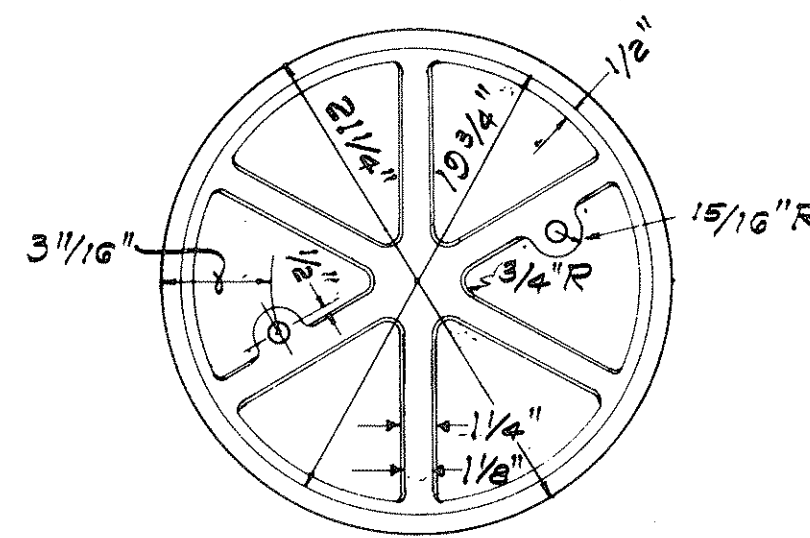
SECTION OF RIM



TOP VIEW OF COVER



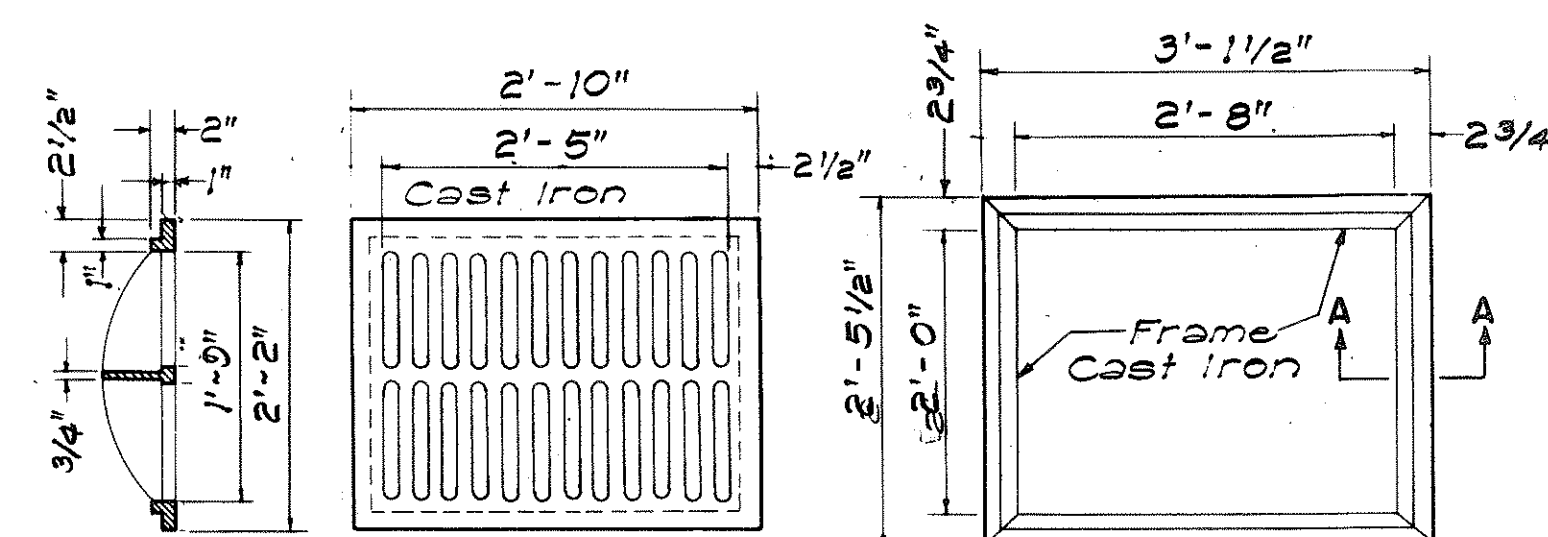
SECTION



BOTTOM VIEW OF COVER

DETAILS OF TYPE "A"
CAST IRON FRAME AND COVER

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



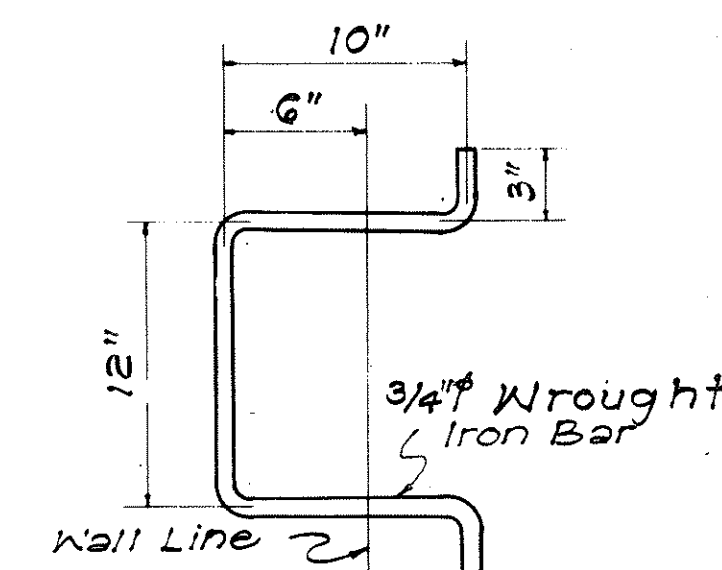
SECTION

TOP VIEW

TOP VIEW

TYPE C C.I. FRAME AND GRATE

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



MANHOLE RUNG

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

APPROVAL RECOMMENDED:

R. Takano
HYDRAULIC DESIGN ENGINEER

12-17-69
DATE

APPROVED:

W. J. J. J.
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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
CATCH BASIN AND
MANHOLE CASTINGS

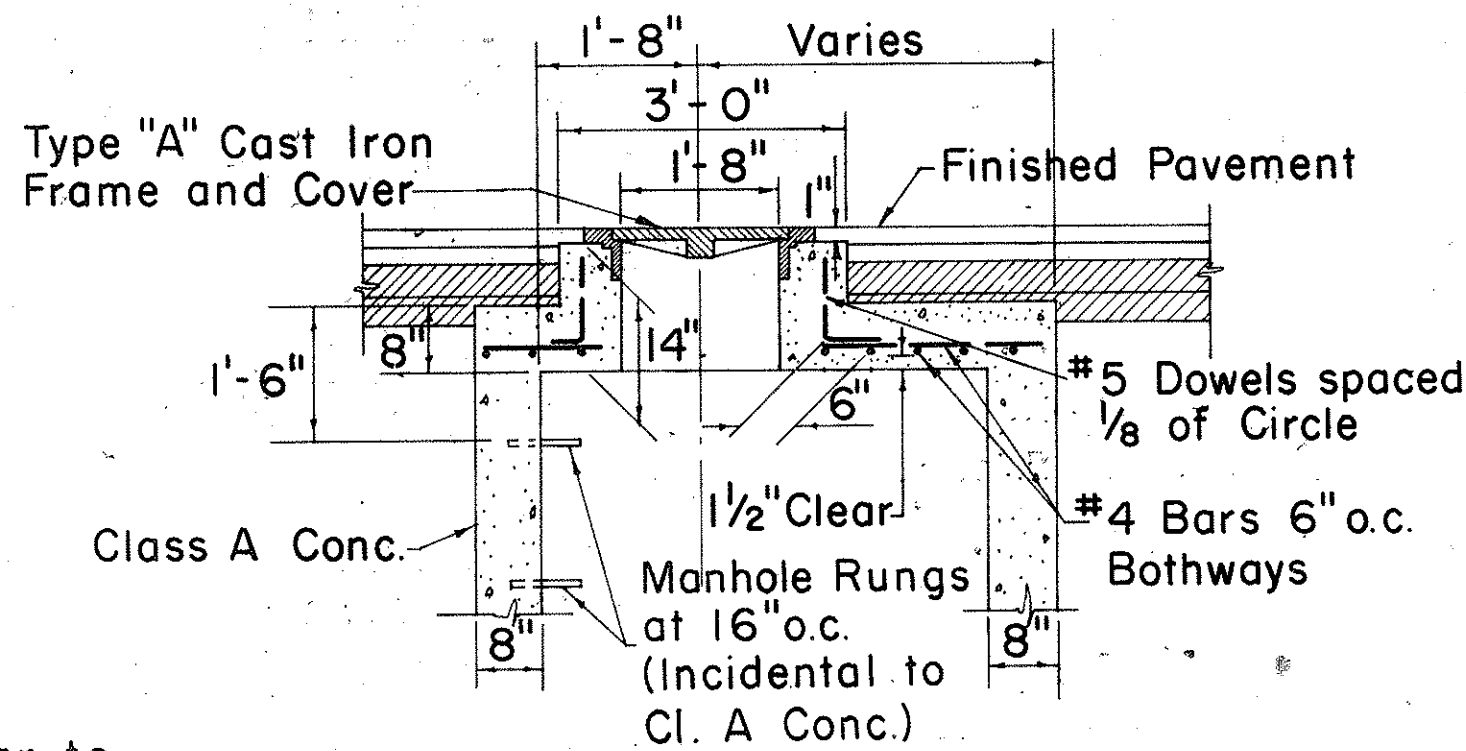
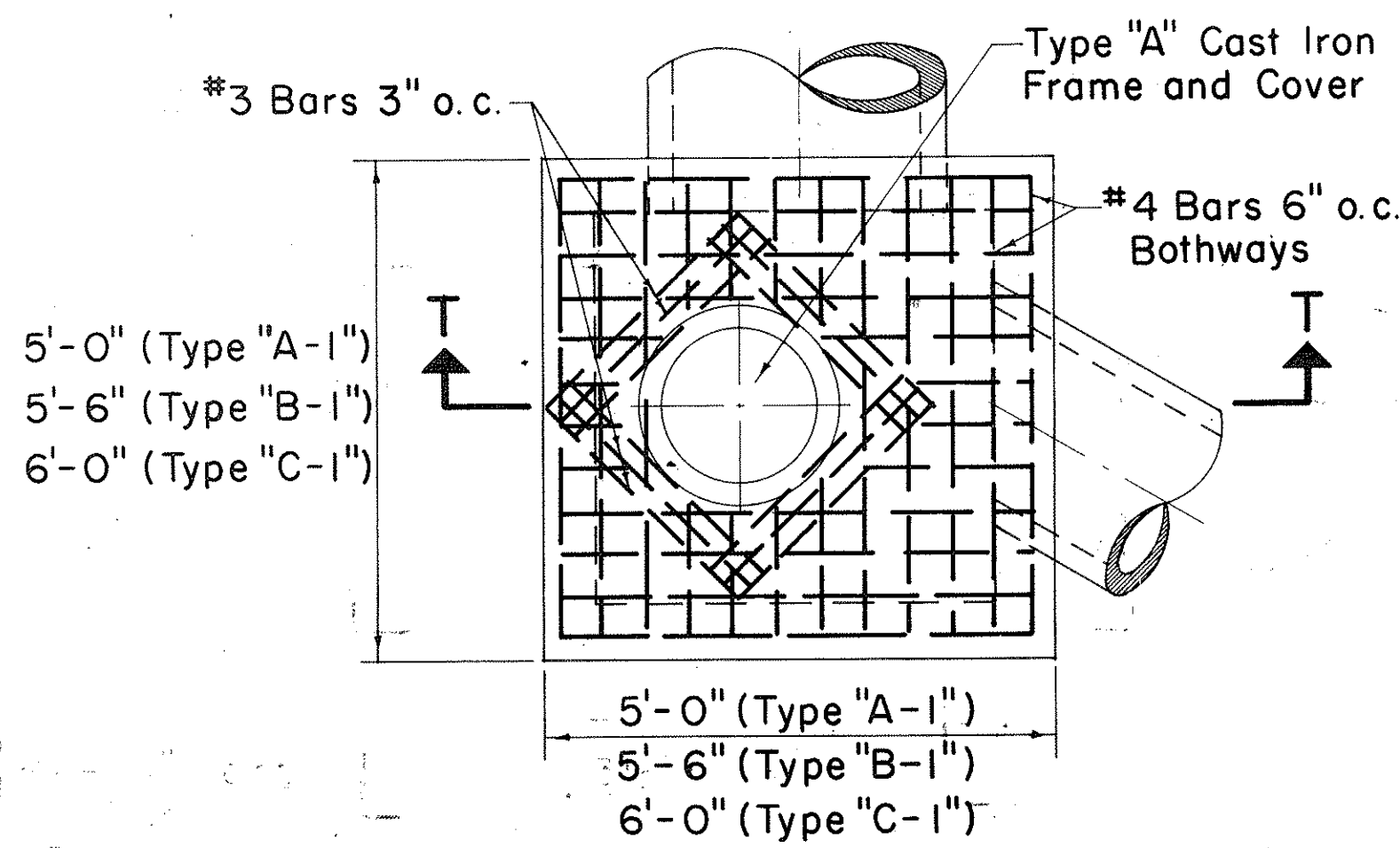
Scale: As Noted

Date: July, 1969

SHEET NO. 1 OF 2 SHEETS DH 6

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
REVISIONS	

FED. ROAD DIST. NO.	STATE	PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	02A-02-72	1973	5	5

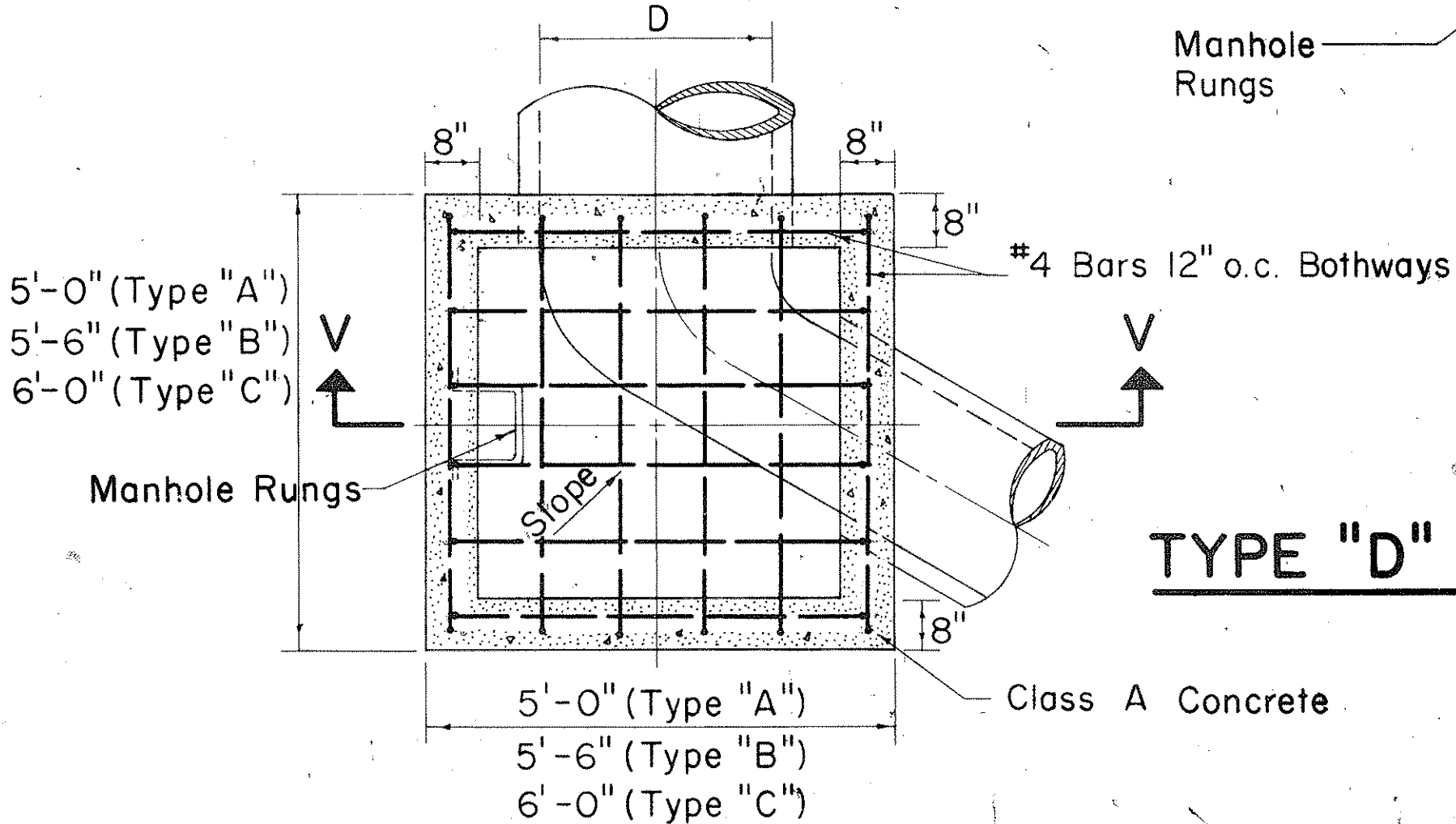
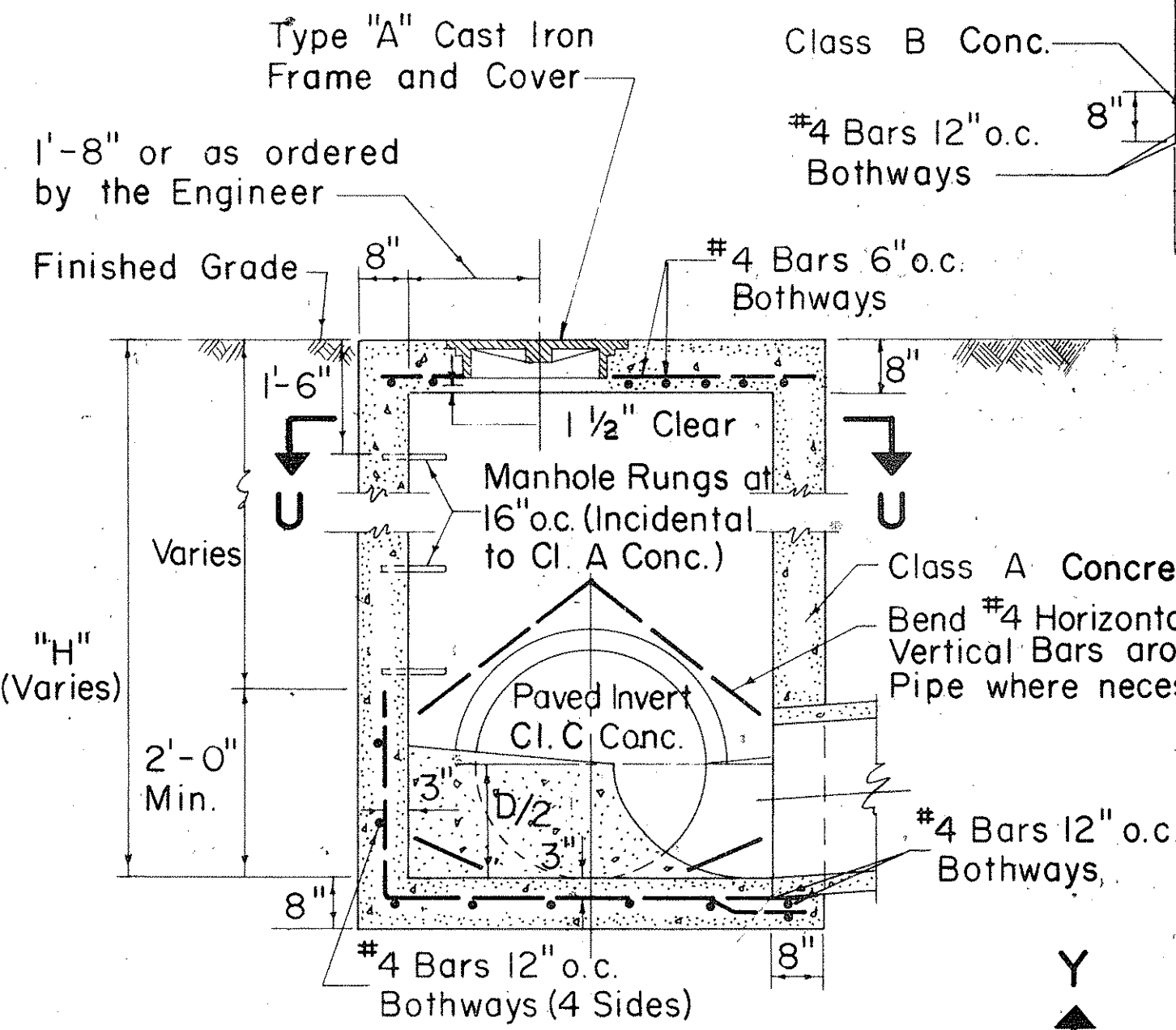


Note:
Bottom detail similar to Type "A", "B", & "C".

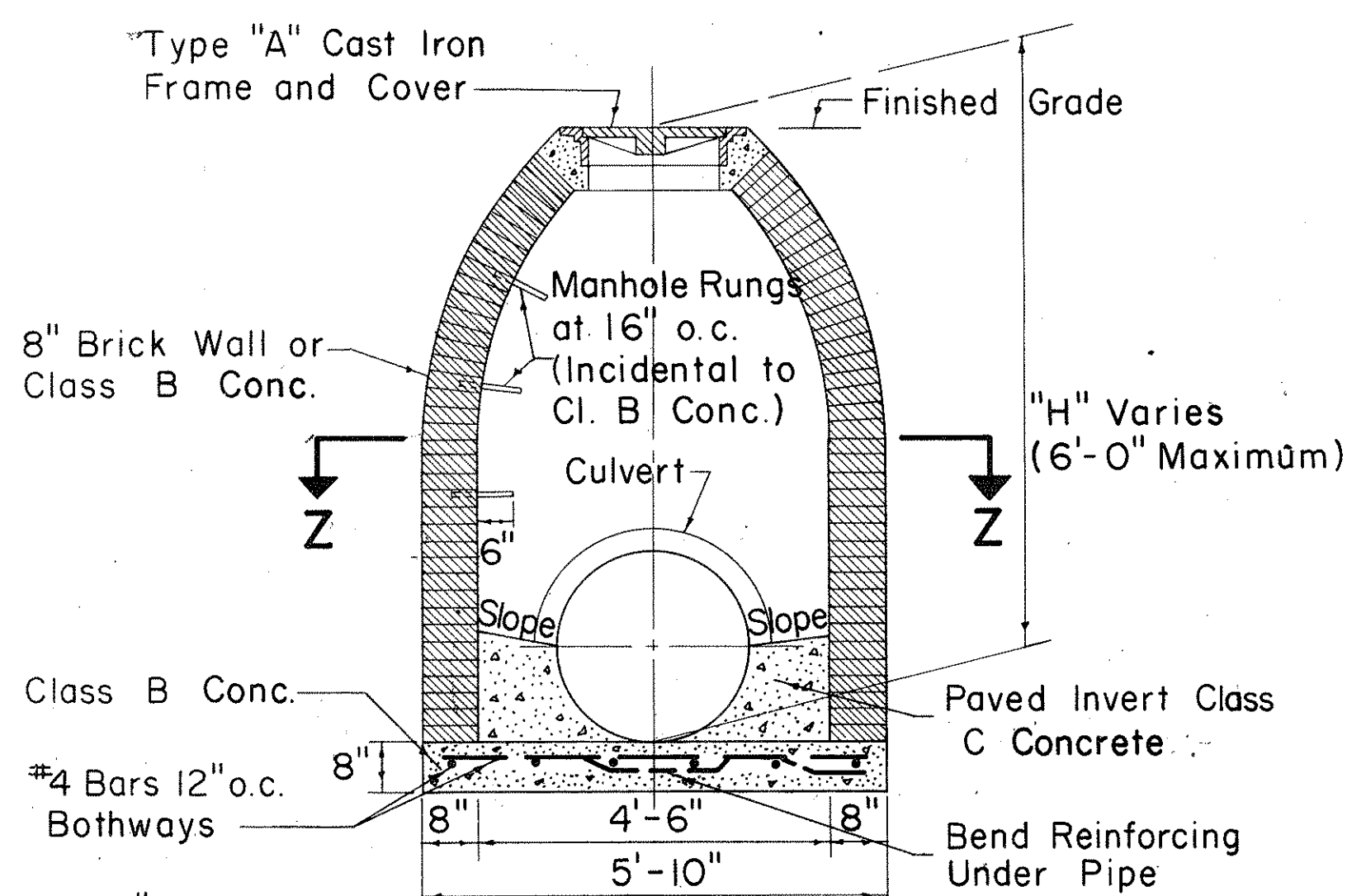
TYPE "A-1", "B-1", & "C-1"
STORM DRAIN MANHOLE
TOP DETAIL UNDER PAVEMENT
Scale: 1/2" = 1'-0"

GENERAL NOTES

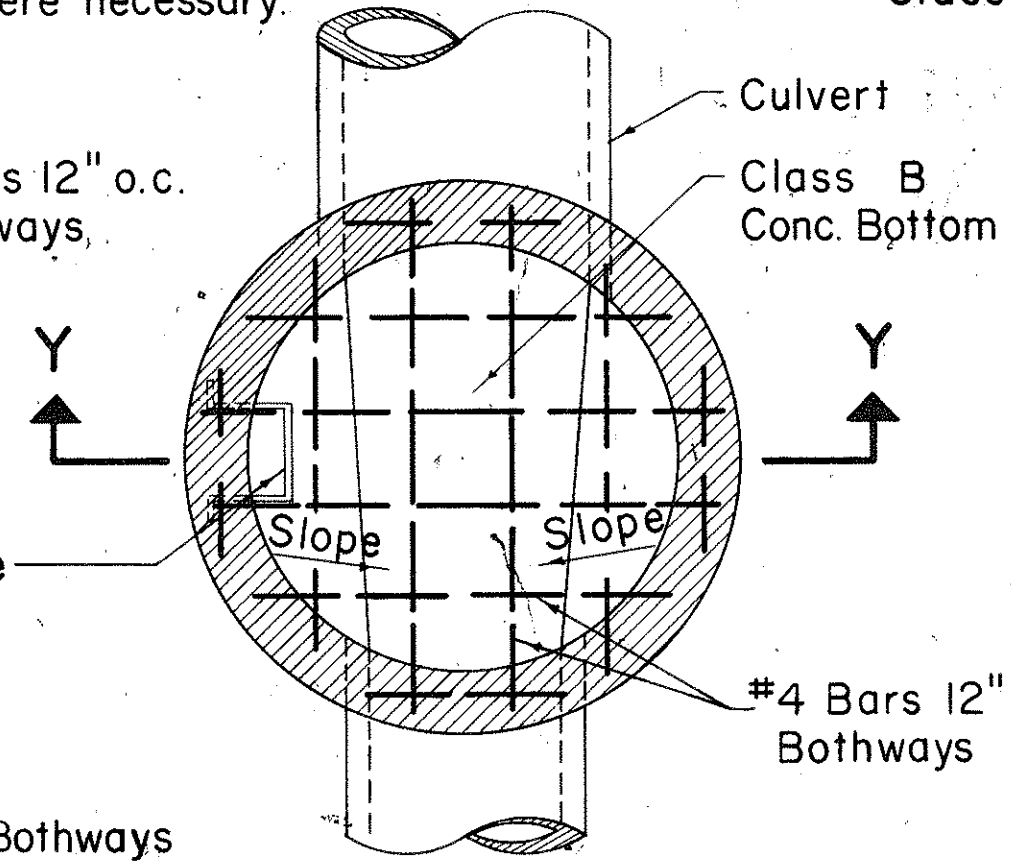
- Culvert shall enter and leave S.D.M.H. from any position and in the direction indicated by the plans or ordered by the Engineer.
- Manhole Rungs (16" o.c.) are required when "H" is greater than 4'-6". Only one rung (12" from the bottom) is required if "H" is 4'-6" or less. Type "A" C.I. Frame and Cover and Manhole Rungs may be placed at any location as ordered by the Engineer.



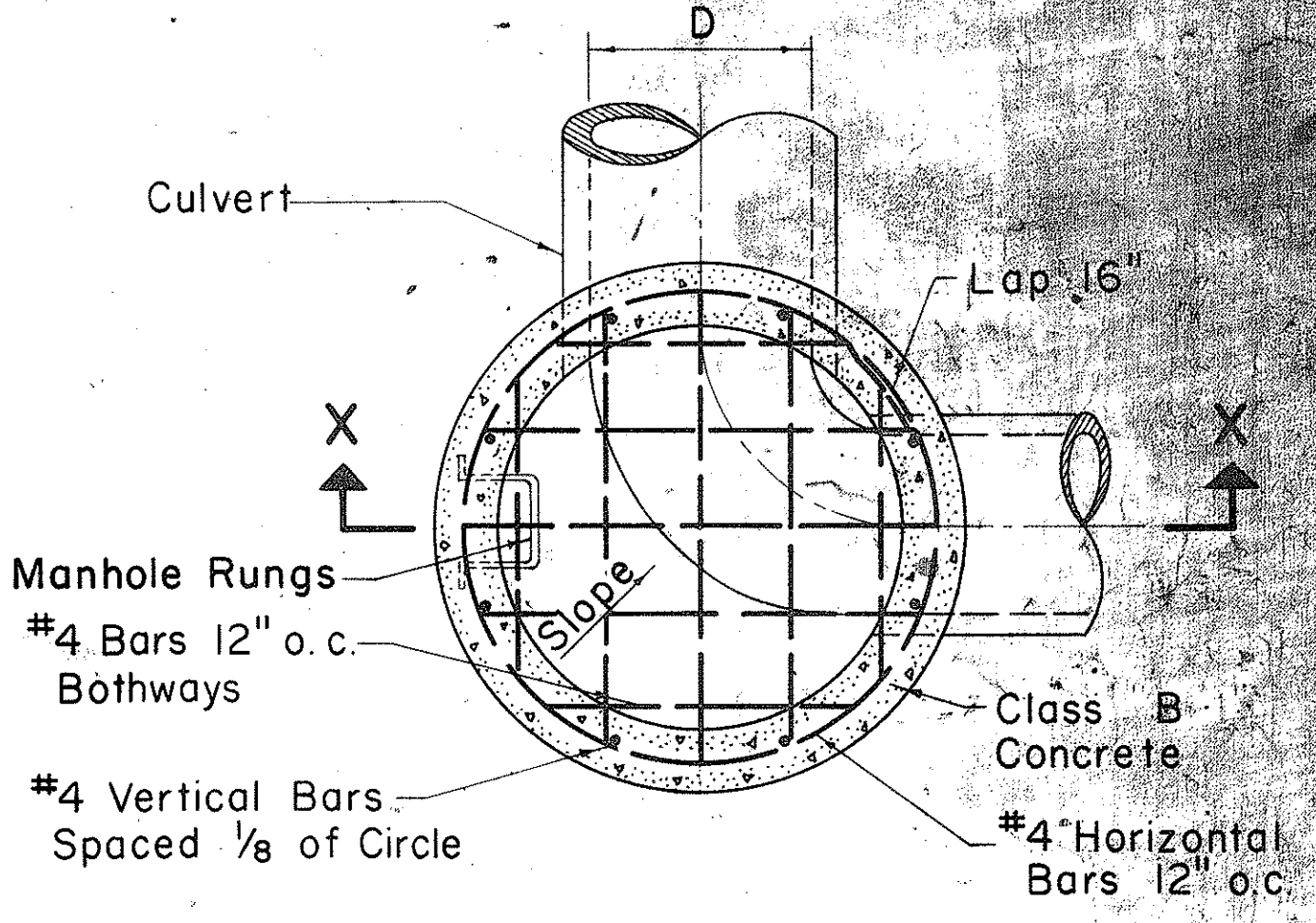
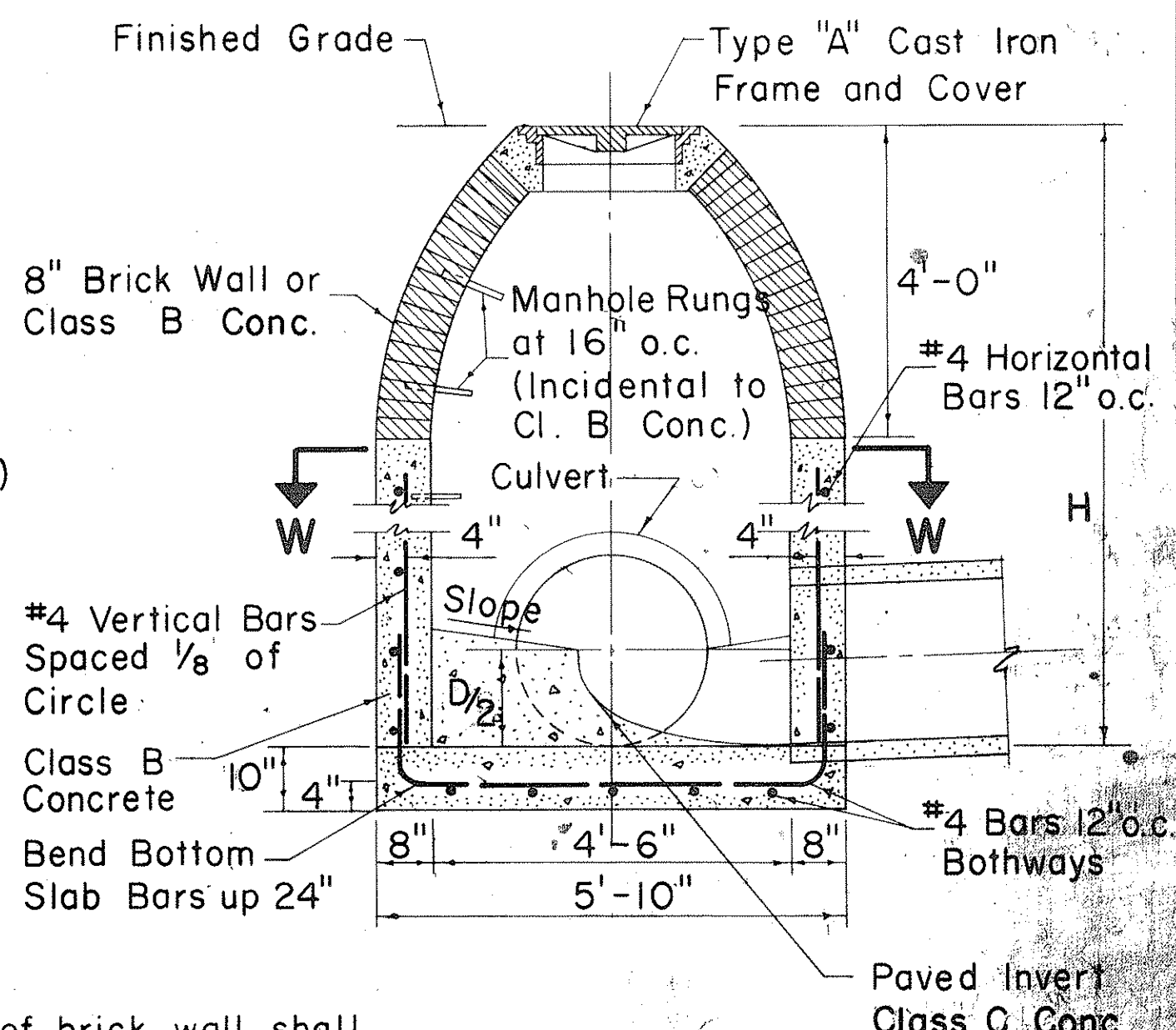
TYPE "A", "B", & "C"
S.D.M.H.
Scale: 1/2" = 1'-0"



- NOTE:
- Exterior surface of brick wall shall be plastered with 1" thickness of 1:2 Cement Mortar.
 - Number, size and direction of culvert at manhole to be as shown on plans.
 - Paved invert not required at drop manholes.
 - All Class C Concrete to be incidental to Class B Concrete.



TYPE "D" STORM DRAIN MANHOLE
Scale: 1/2" = 1'-0"



TYPE "E" STORM DRAIN MANHOLE
Scale: 1/2" = 1'-0"

APPROVAL RECOMMENDED:
P. Palano
HYDRAULIC DESIGN ENGINEER
DATE: 12-17-69

APPROVED:
John J. Del...
ASST. CHIEF, ENGINEERING
DATE: 12-17-69

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
STORM DRAIN MANHOLES

Scales: As Noted Date: July, 1969

SHEET NO. OF SHEETS DH 5