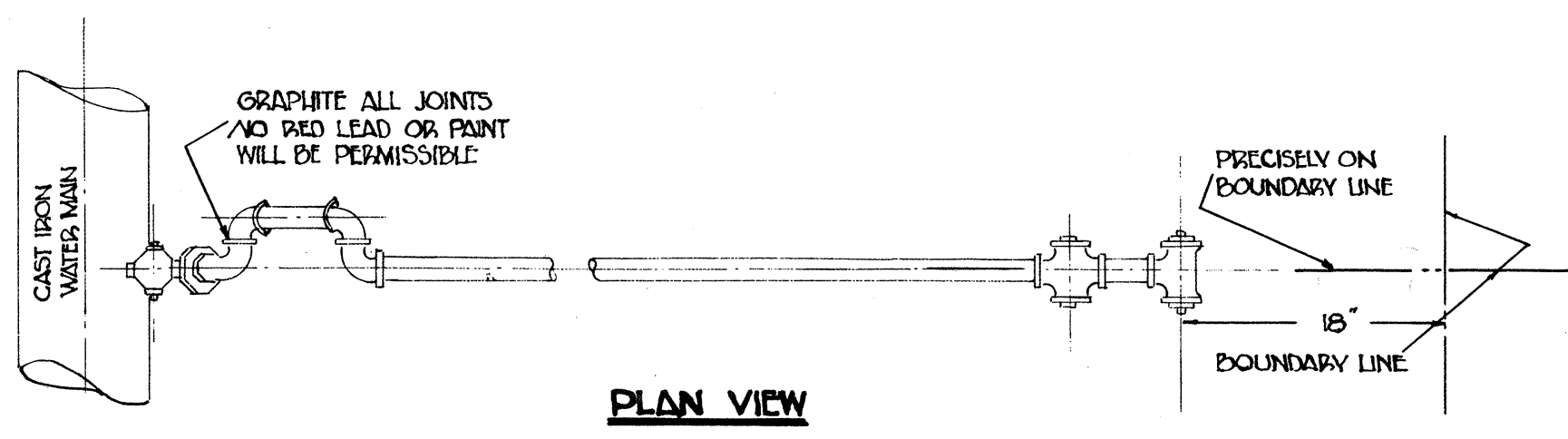
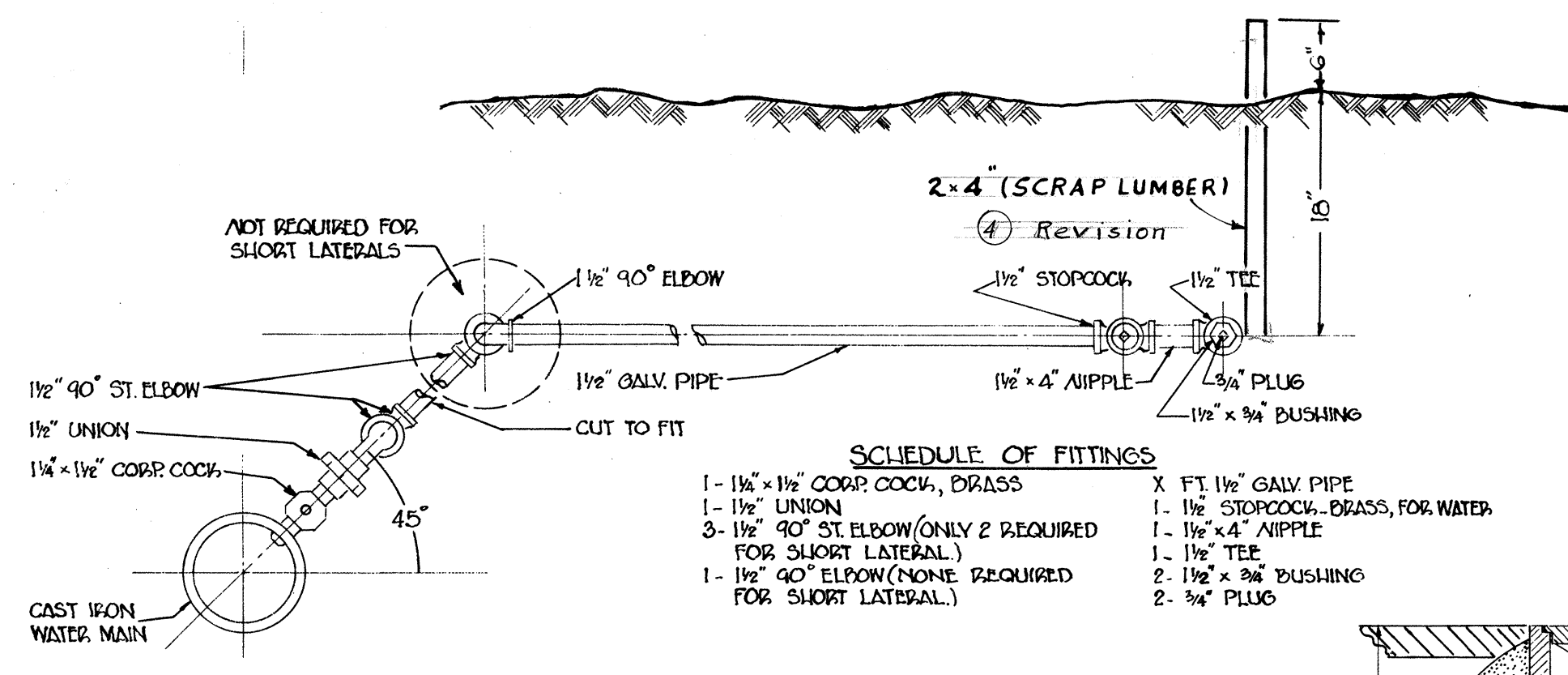


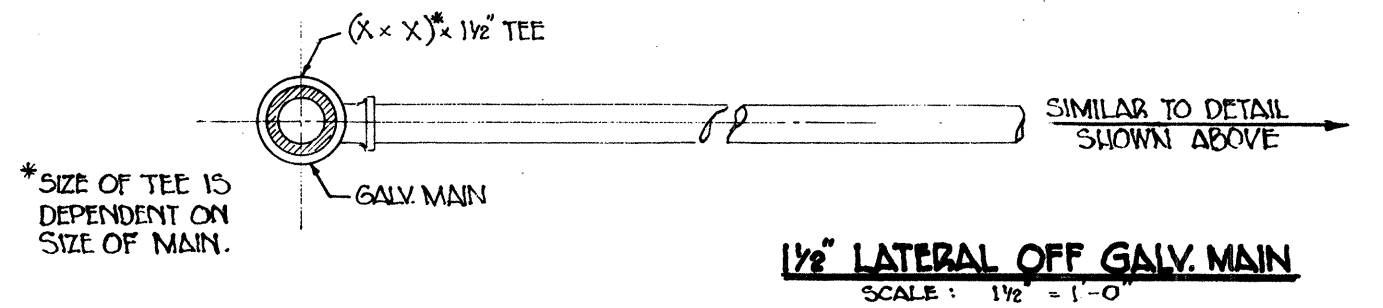
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	5-06304	1958	16	53



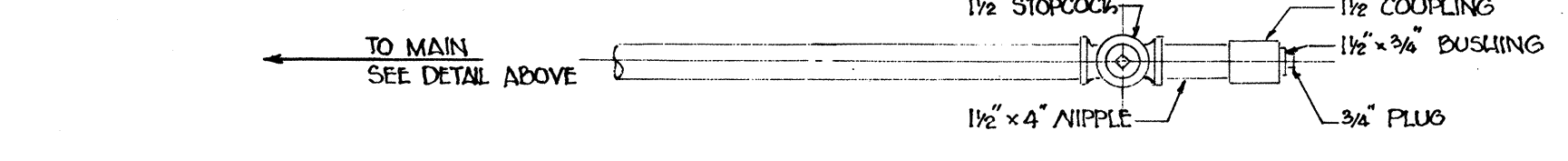
PLAN VIEW



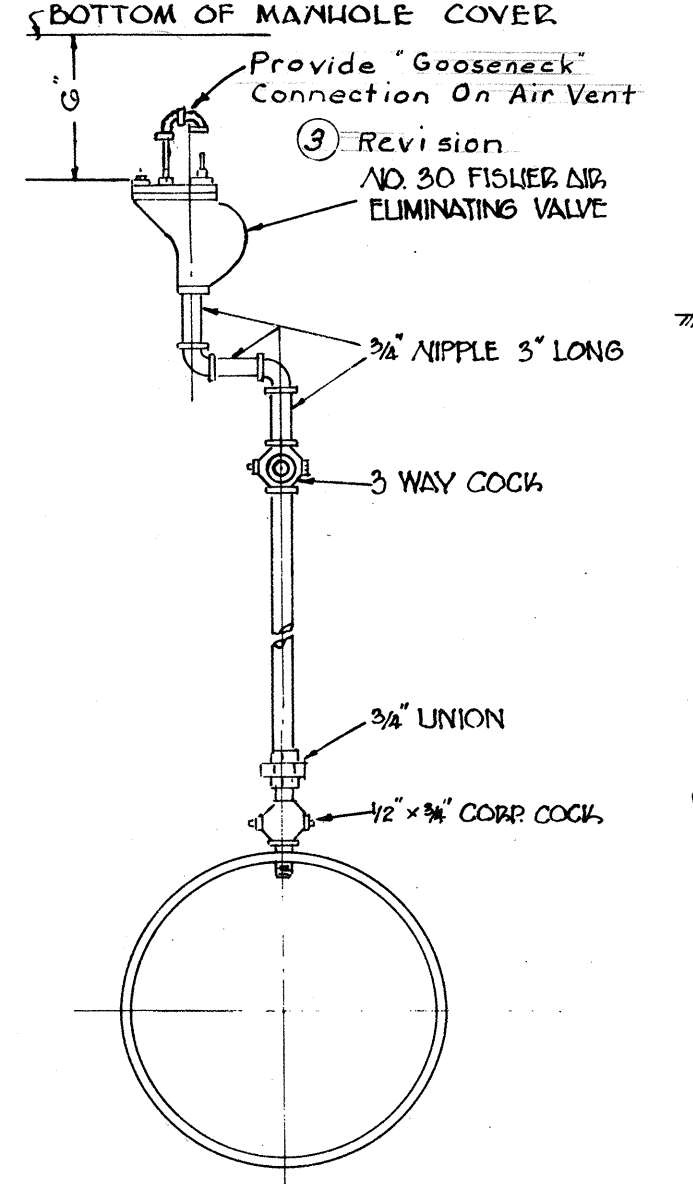
ELEVATION
1/2" SERVICE LATERAL OFF C.I. MAIN 6" AND LARGER
SCALE: 1" = 1'-0"



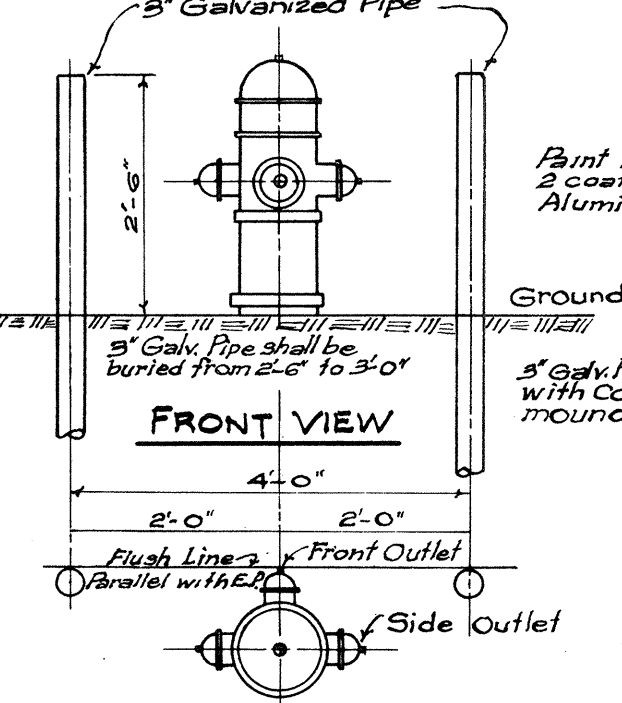
1/2" LATERAL OFF GALV. MAIN
SCALE: 1/2" = 1'-0"



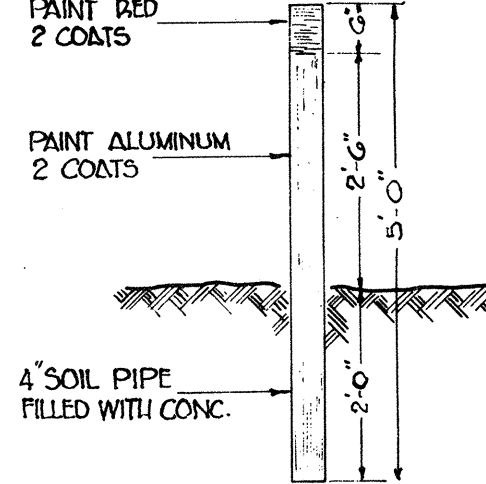
1/2" LATERAL FOR SINGLE SERVICE
SCALE: 1/2" = 1'-0"



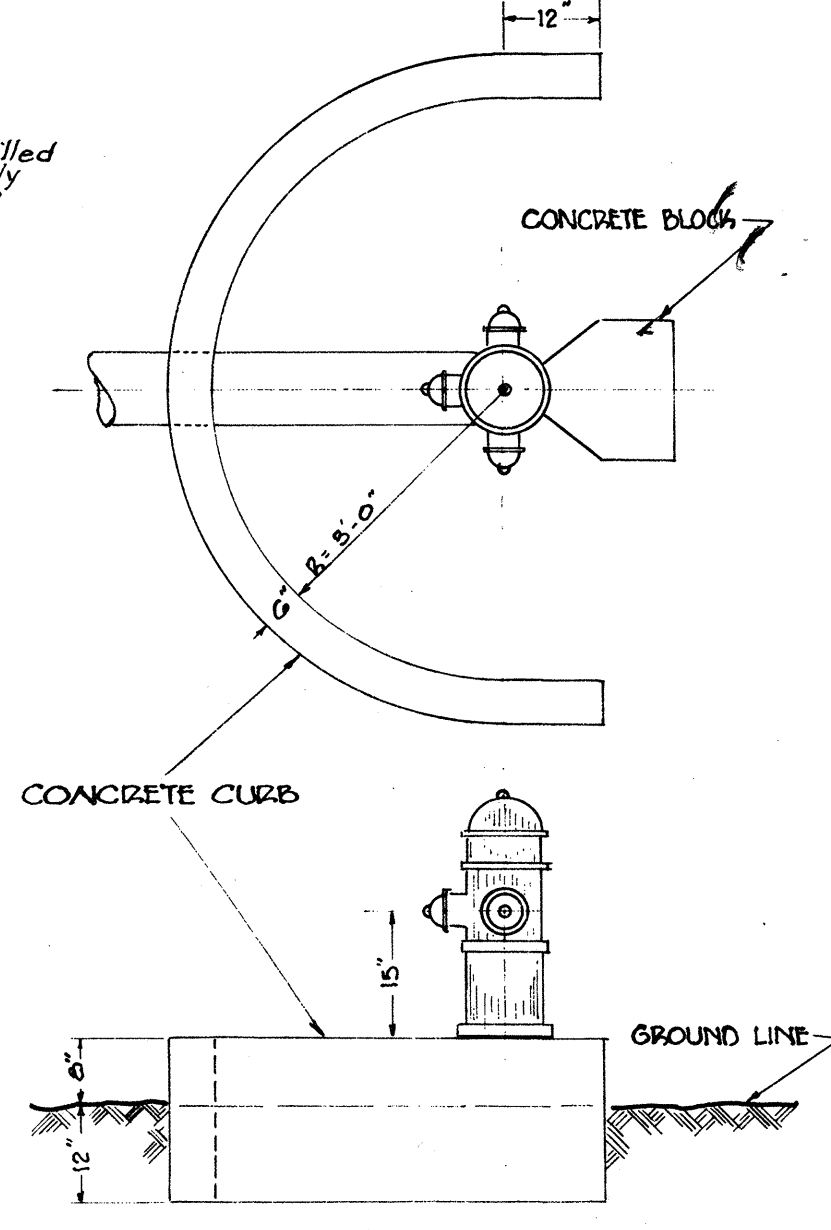
DETAIL OF CONNECTION FOR FIRE HYDRANT
SCALE: 1/2" = 1'-0"



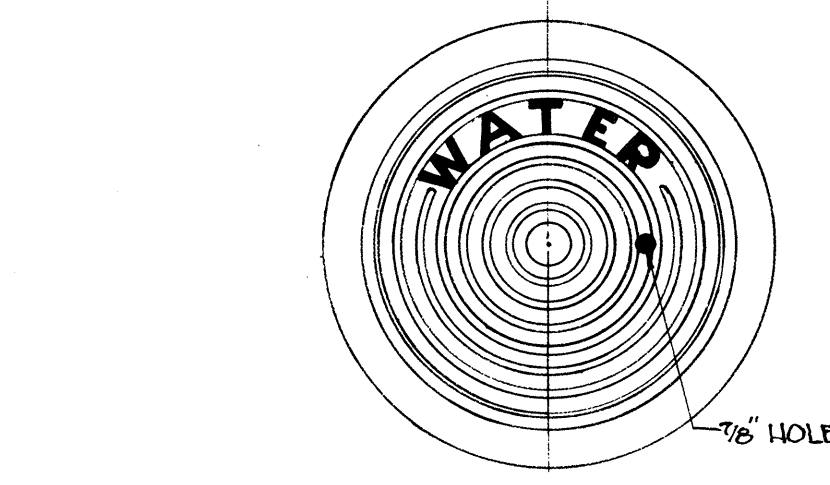
PLAN VIEW
GUARD FOR FIRE HYDRANT
IN 32-FT. ROADWAY
Scale 1/2" = 1'-0"



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



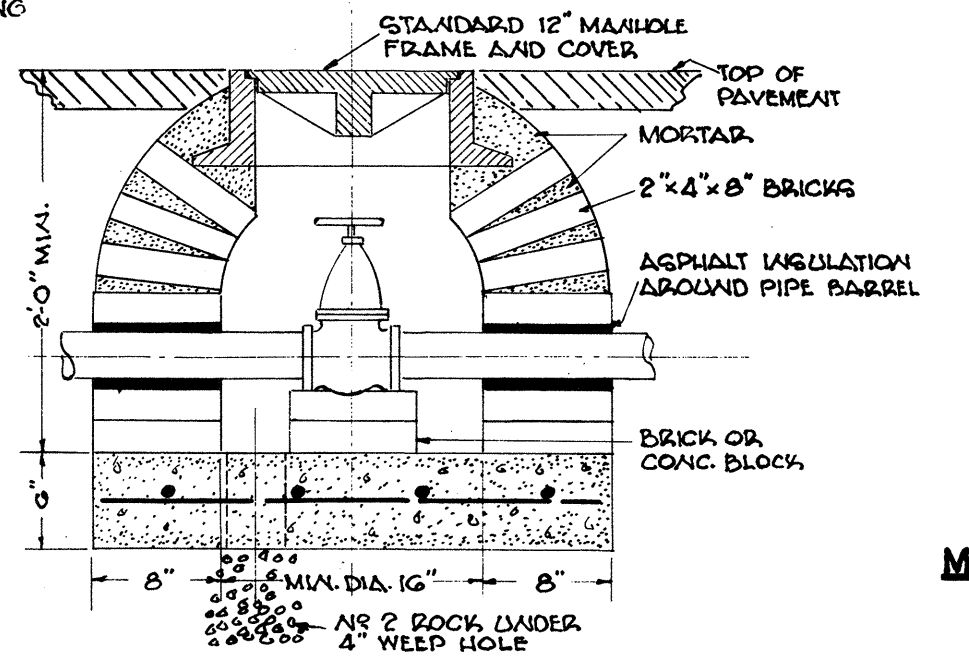
DETAIL OF CURBING AT HYDRANT WHERE REQUIRED
SCALE: 1/2" = 1'-0"



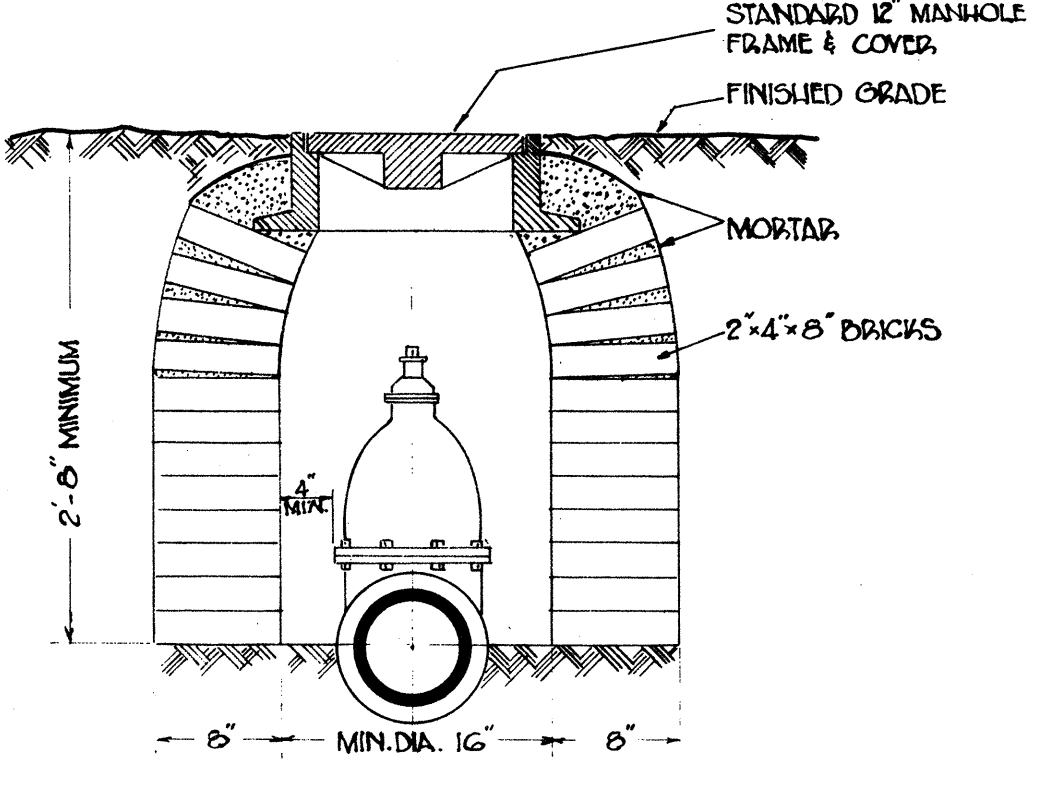
DETAIL OF MANHOLE FRAME AND COVER
CITY AND COUNTY STANDARD
SCALE: 1" = 1'-0"

MANHOLE FRAME & COVER DIMENSIONS

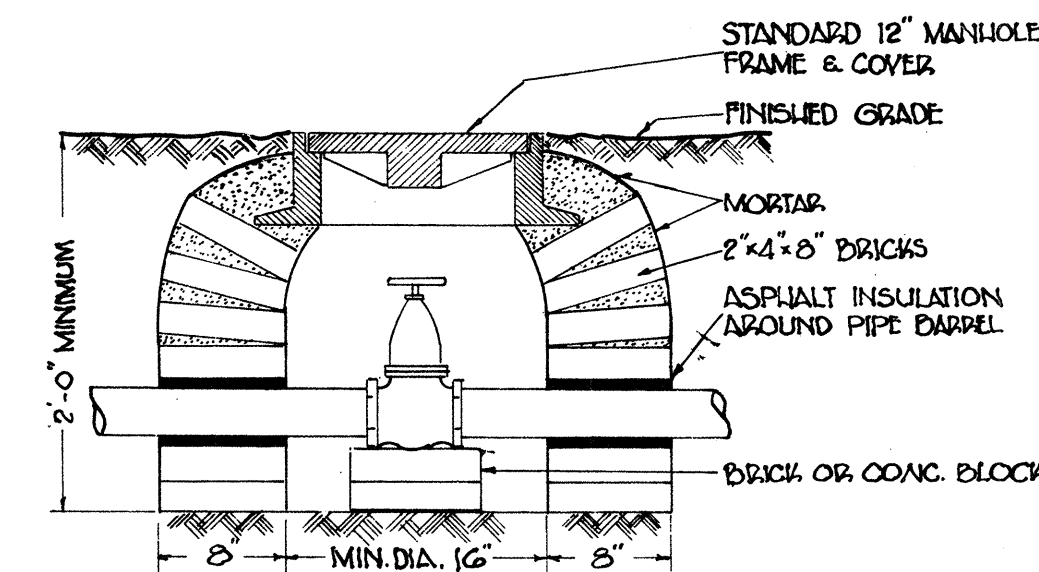
SIZE OF MANHOLE	INSIDE DIAMETER	DIAMETER OF COVER	DIAMETER OF FRAME	DIAMETER OF DRAIN HOLE
12"	12"	18 1/4"	20"	6"
18"	18"	24 1/4"	26"	8"
24"	24"	30 1/4"	32"	10"



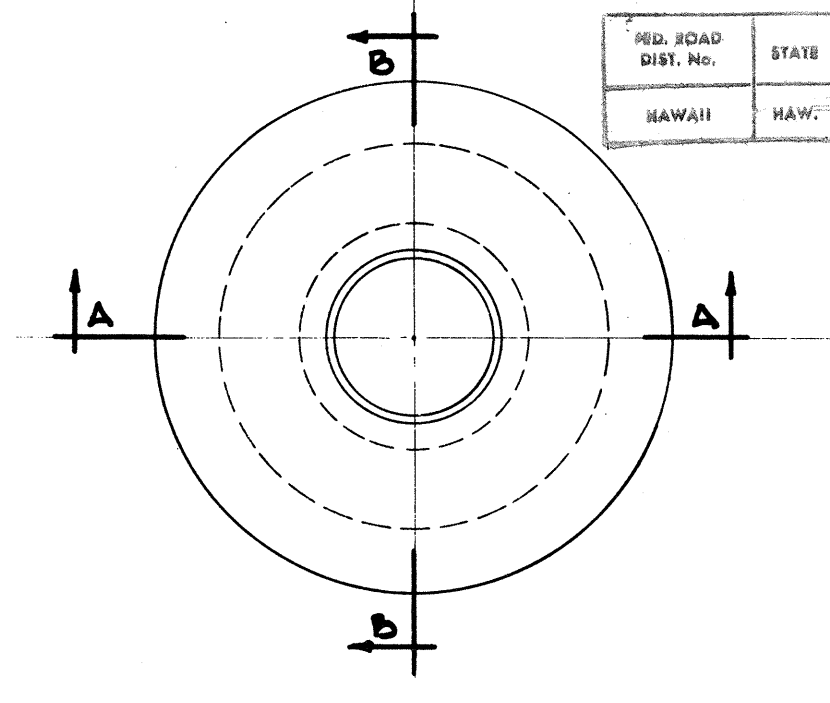
TYPE "E" MANHOLE
(TO BE USED WHENEVER SUBJECT TO TRAFFIC IN PLACE OF TYPES "A" OR "D" MANHOLES)
SCALE: 1" = 1'-0"



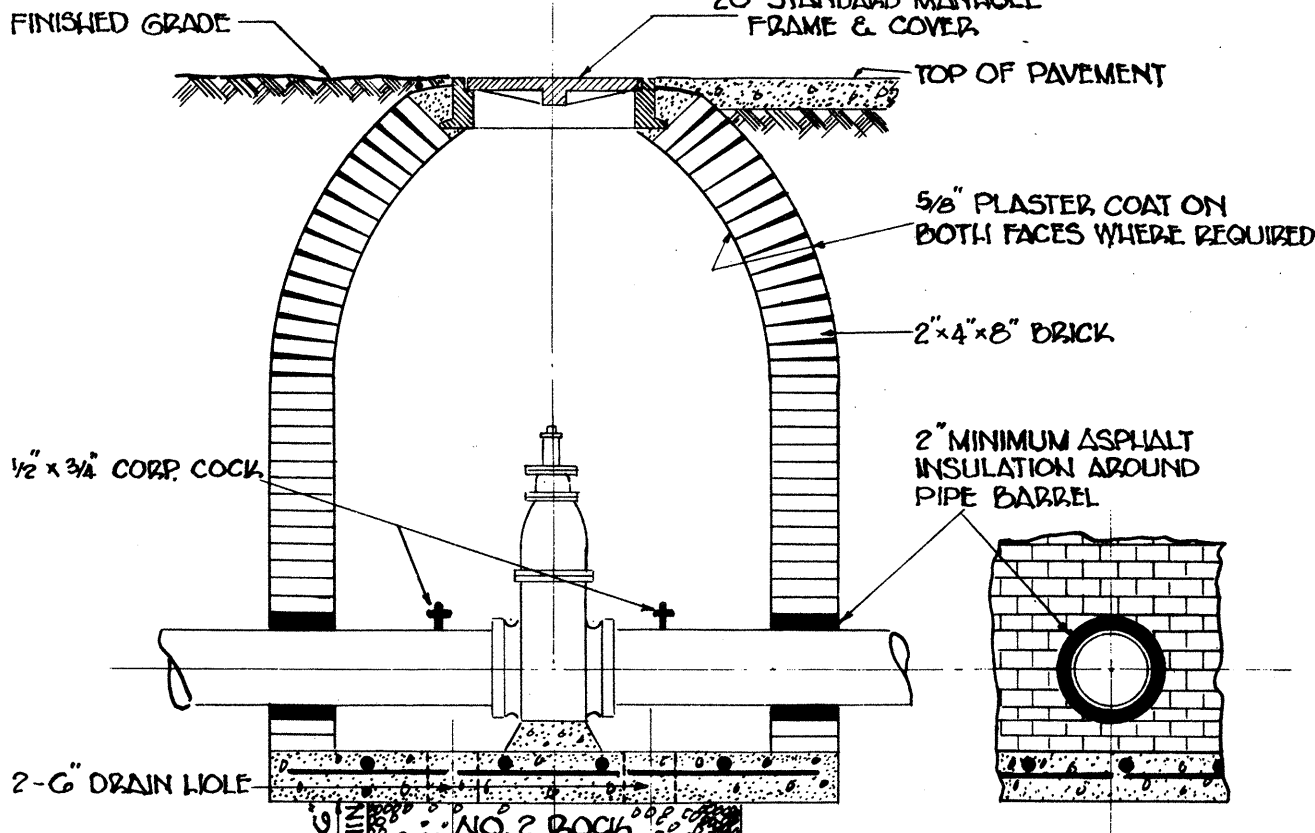
TYPE "A" MANHOLE
SCALE: 1" = 1'-0"



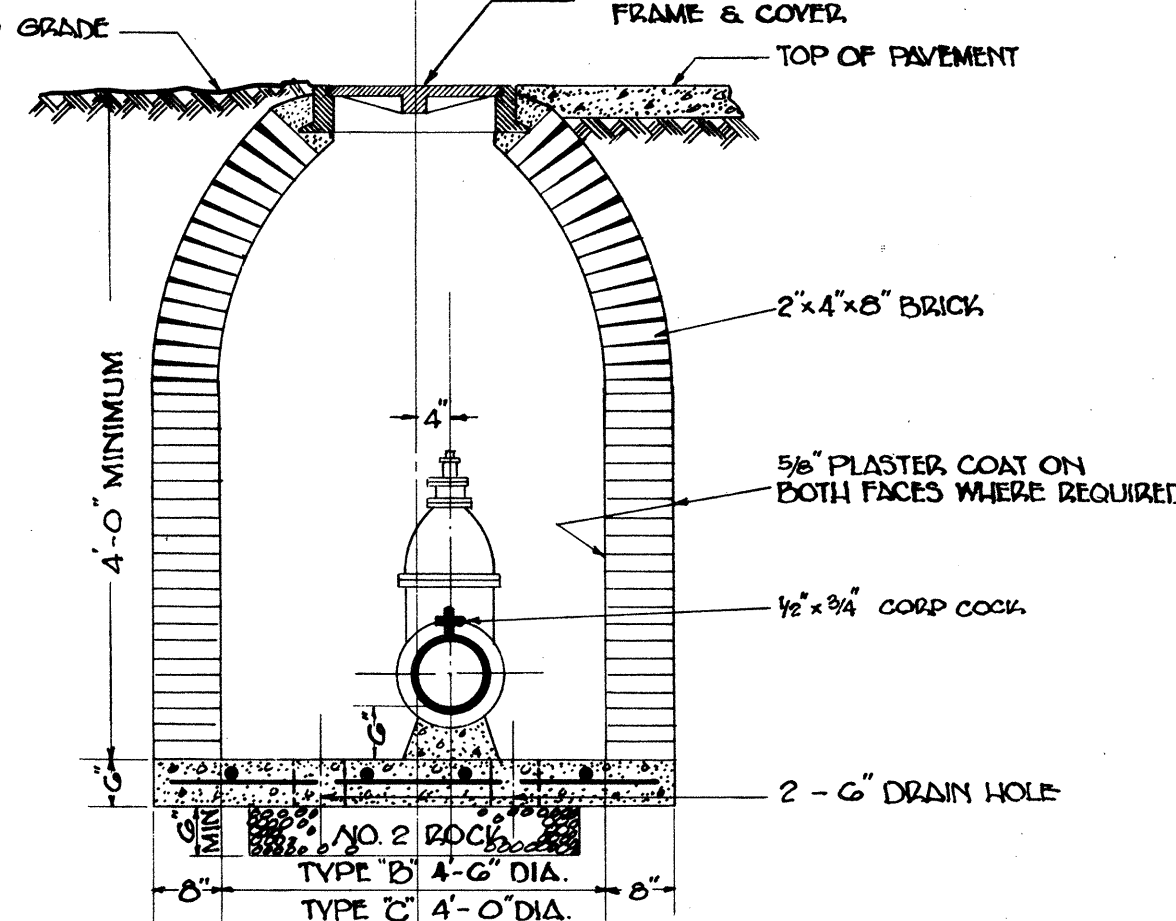
TYPE "D" MANHOLE
SCALE: 1" = 1'-0"



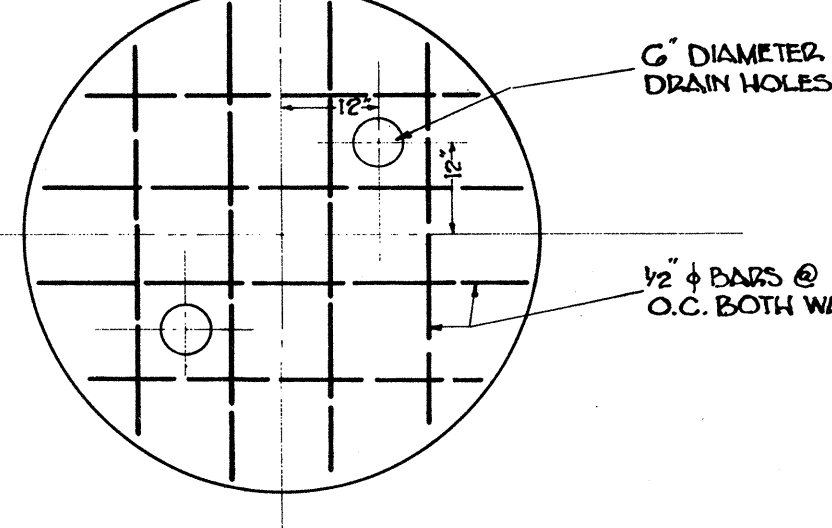
PLAN
TYPES "B" & "C" MANHOLES



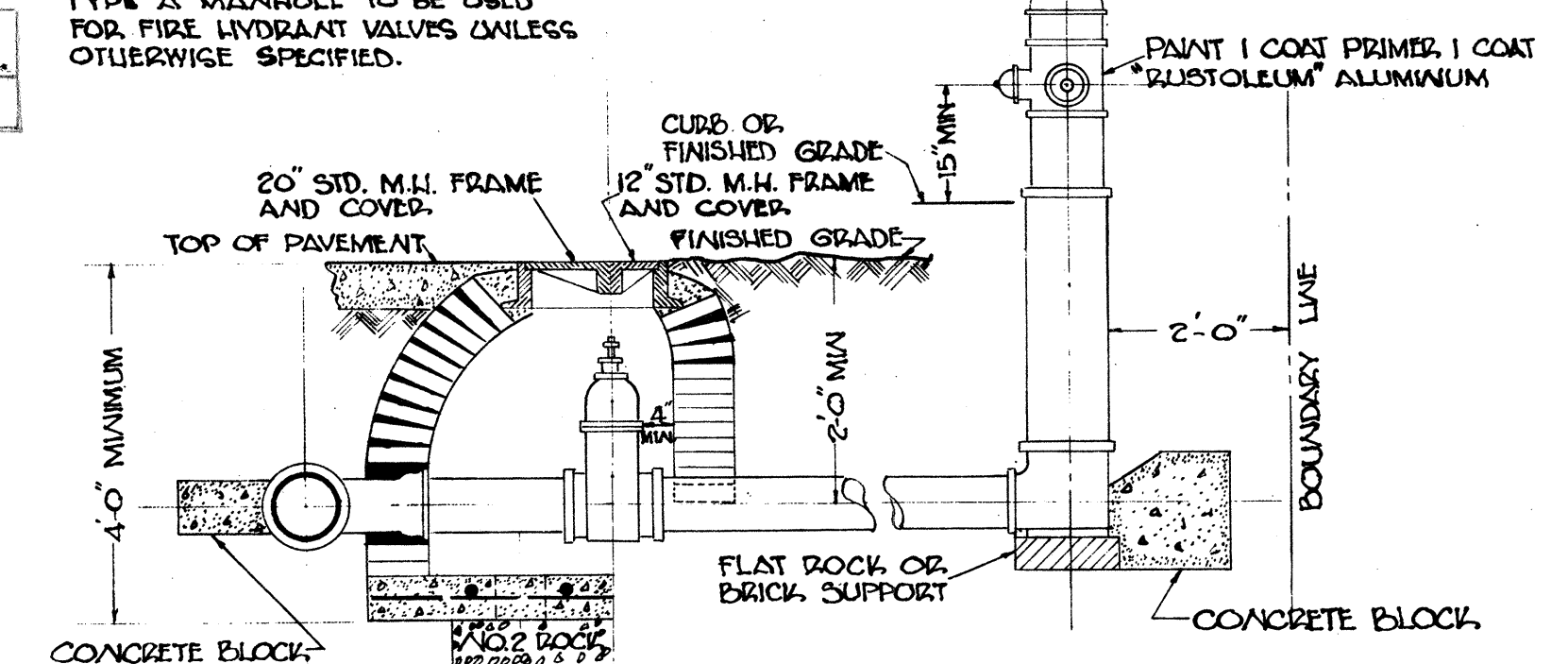
SECTION "B-B"



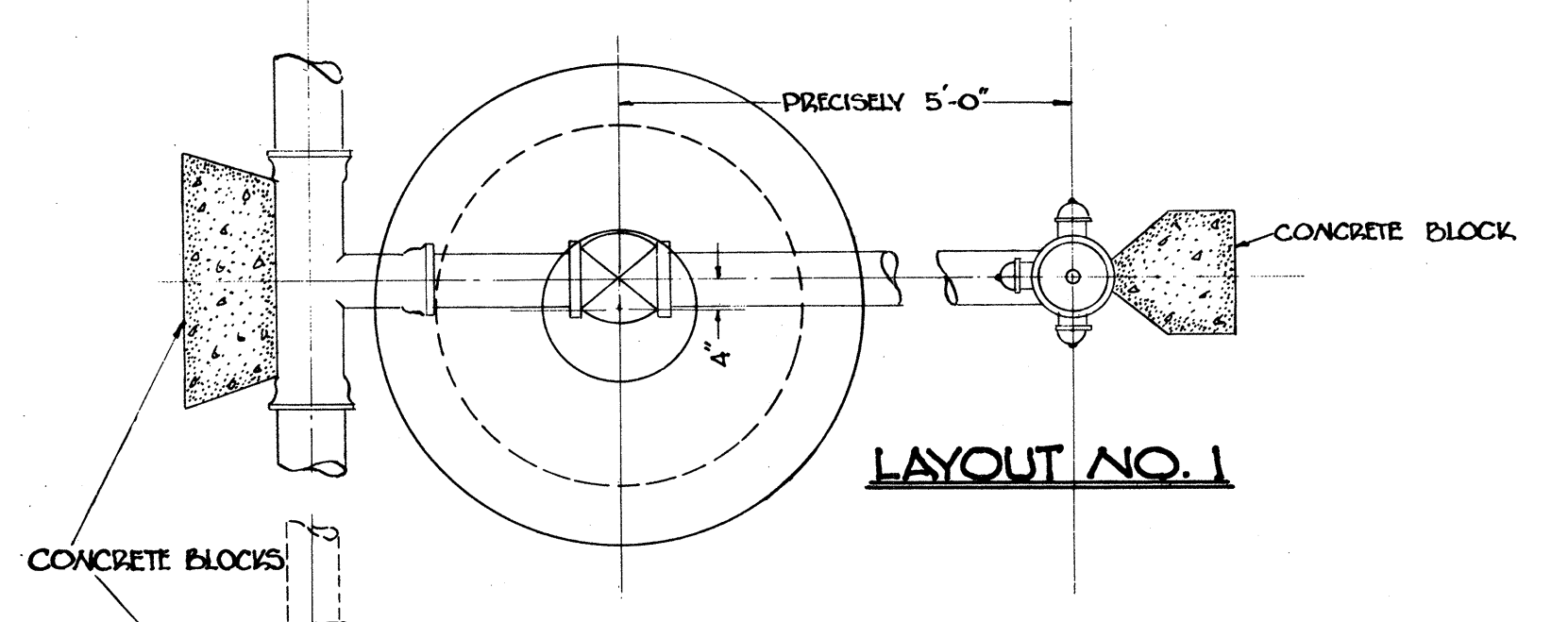
SECTION "A-A"



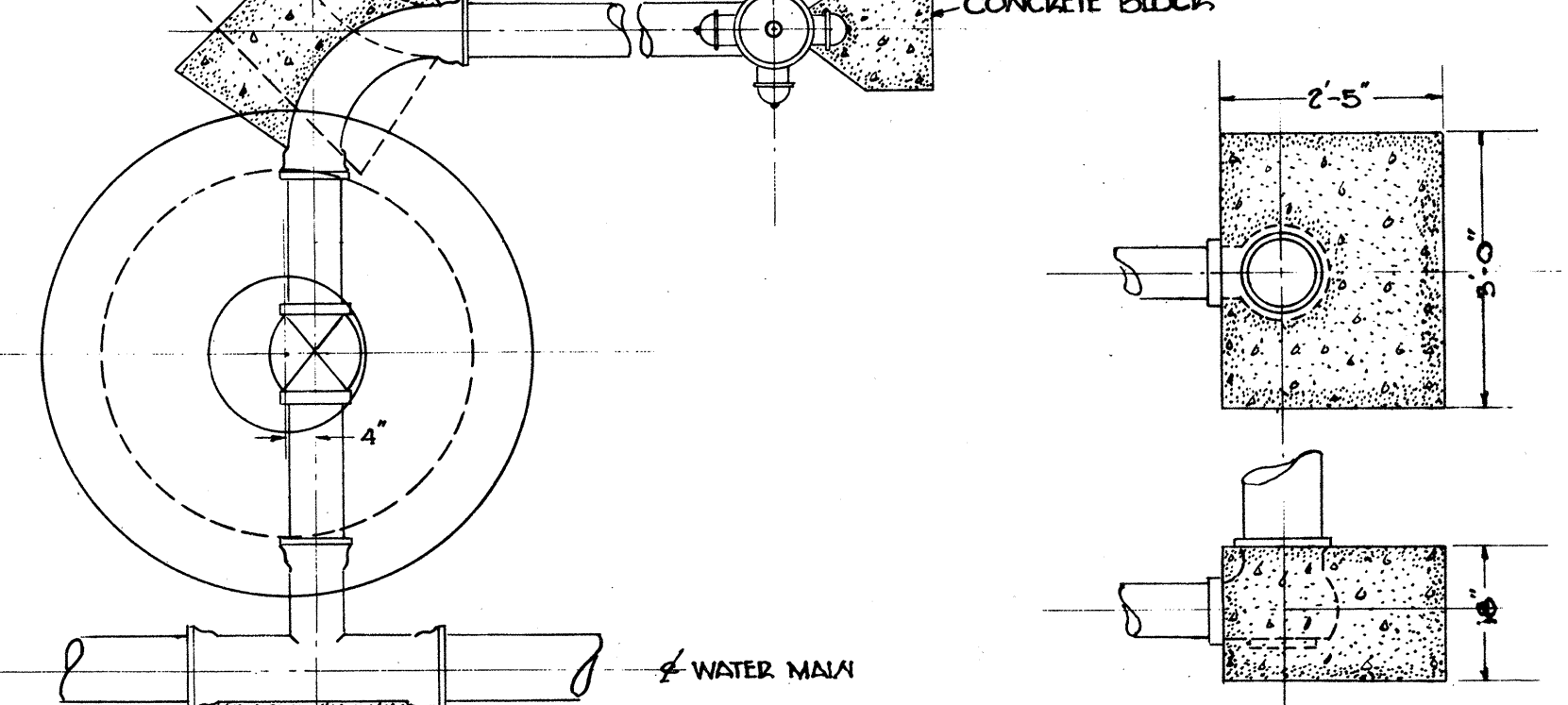
STEEL DETAIL IN BOTTOM SLAB
TYPES "B" & "C" MANHOLES
SCALE: 1/2" = 1'-0"



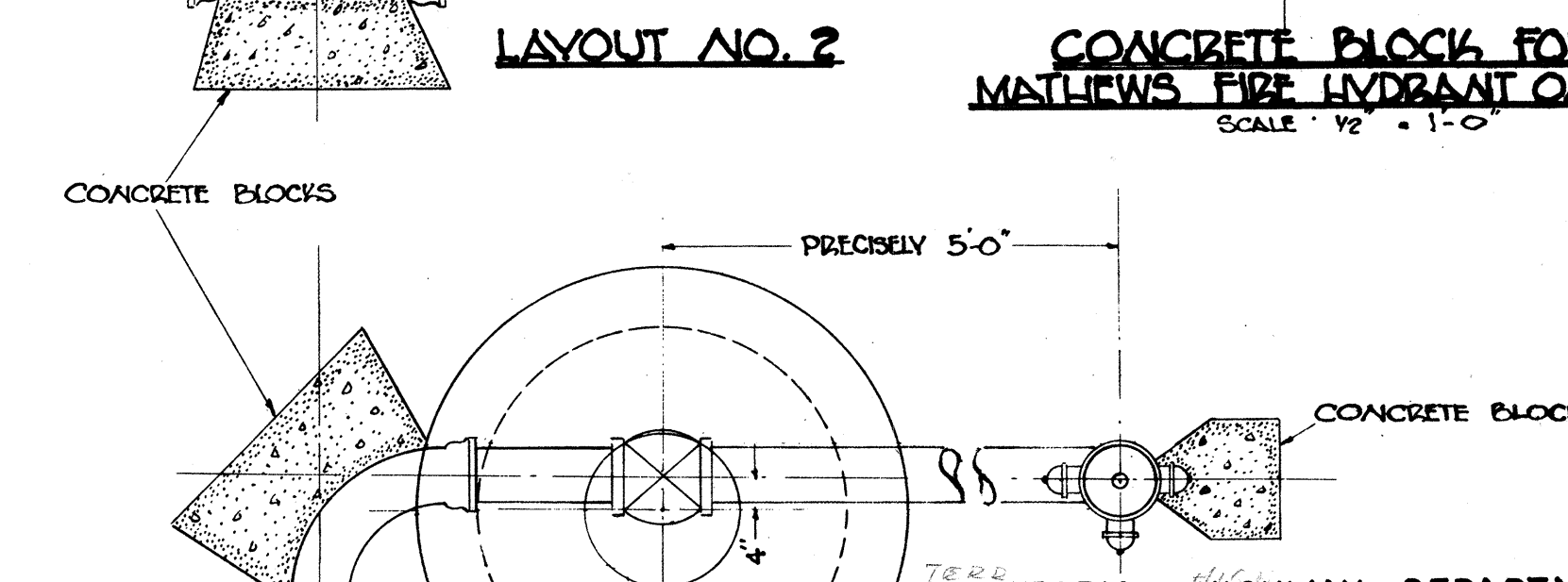
TYPE "A" MANHOLES



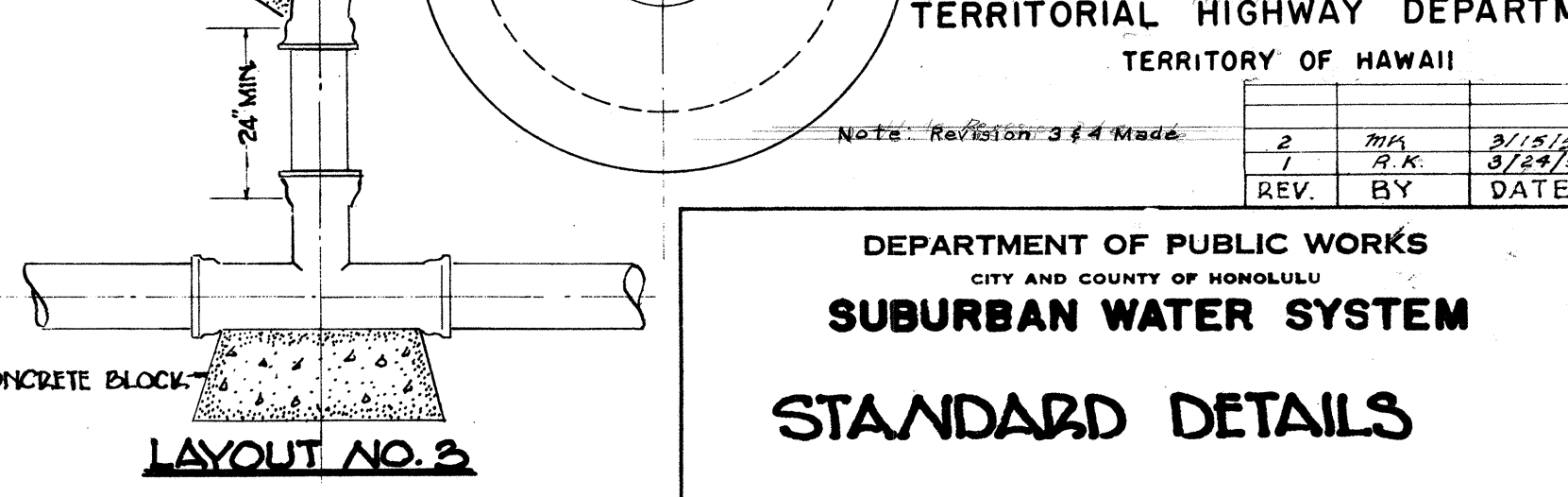
TYPE "C" MANHOLES



LAYOUT NO. 1



LAYOUT NO. 2



LAYOUT NO. 3

STANDARD FIRE HYDRANT LAYOUTS
SCALE: 1/2" = 1'-0"

CONCRETE BLOCK FOR MATTHEWS FIRE HYDRANT ONLY
SCALE: 1/2" = 1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

Note: Revision 3 & 4 Made

REV.	BY	DATE
1	M.P.	3/15/58
2	B.K.	3/24/59

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
SUBURBAN WATER SYSTEM
STANDARD DETAILS

ENGINEER: D. WHANG
DRAFTSMAN: D. WHANG
SCALE: AS SHOWN
APPROVED: [Signature]
CHIEF ENGINEER

DATE: SEPTEMBER 26, 1958
CHECKED BY: D.Y. GUON
TRACER: [Signature]
APPROVED: [Signature]
SUPV. & ENGINEER: SUD. WTR. SYS.

W. B. [Signature] F. B. [Signature] C. B. [Signature]
C. B. [Signature] F. B. [Signature] S. B. [Signature]
W. M. BY: [Signature] F. W. BY: [Signature] S. W. BY: [Signature]

APPROVED: [Signature]
DIRECTOR, BUREAU OF SANITATION