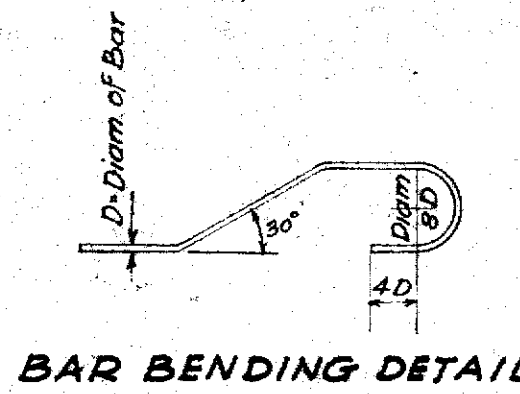
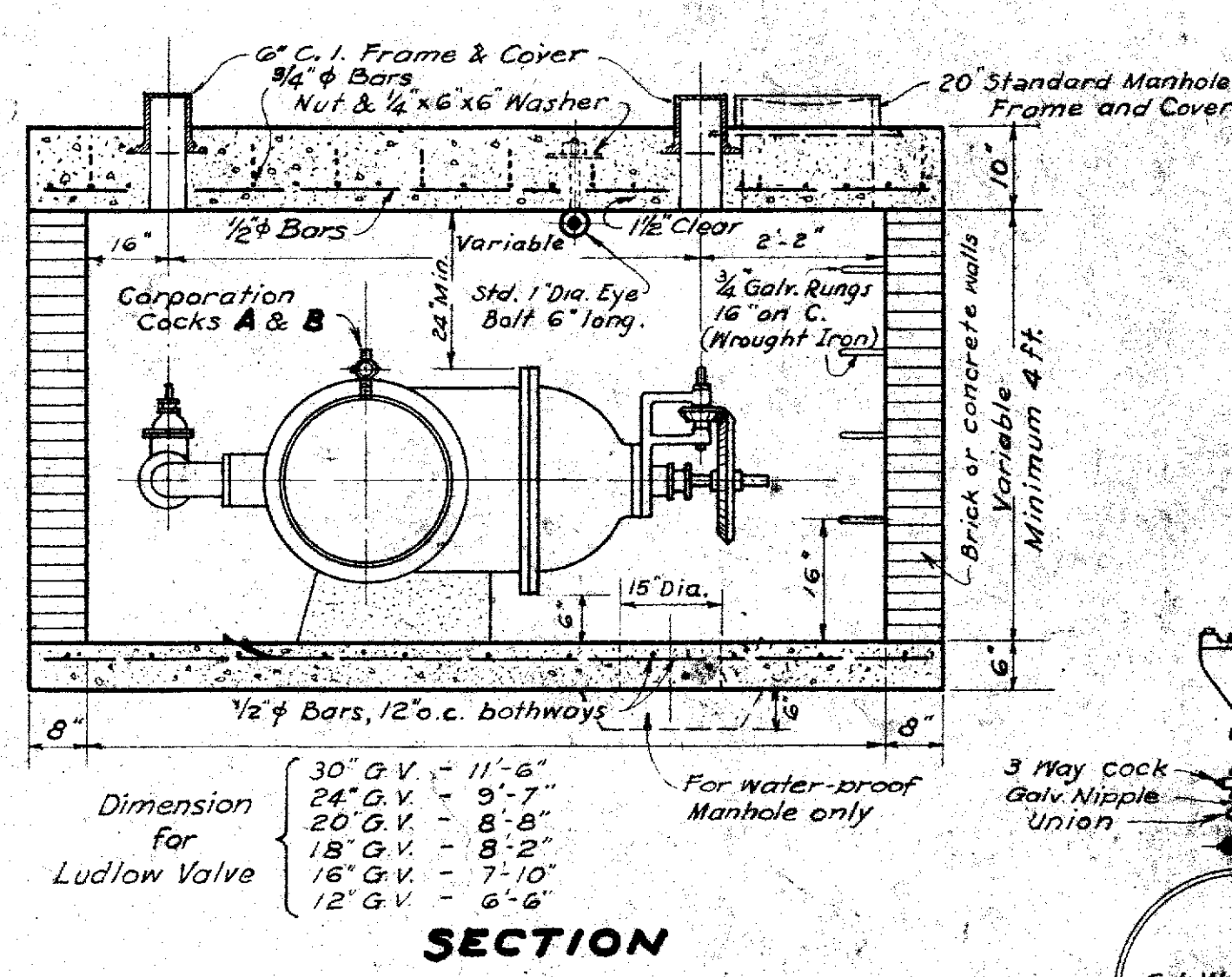
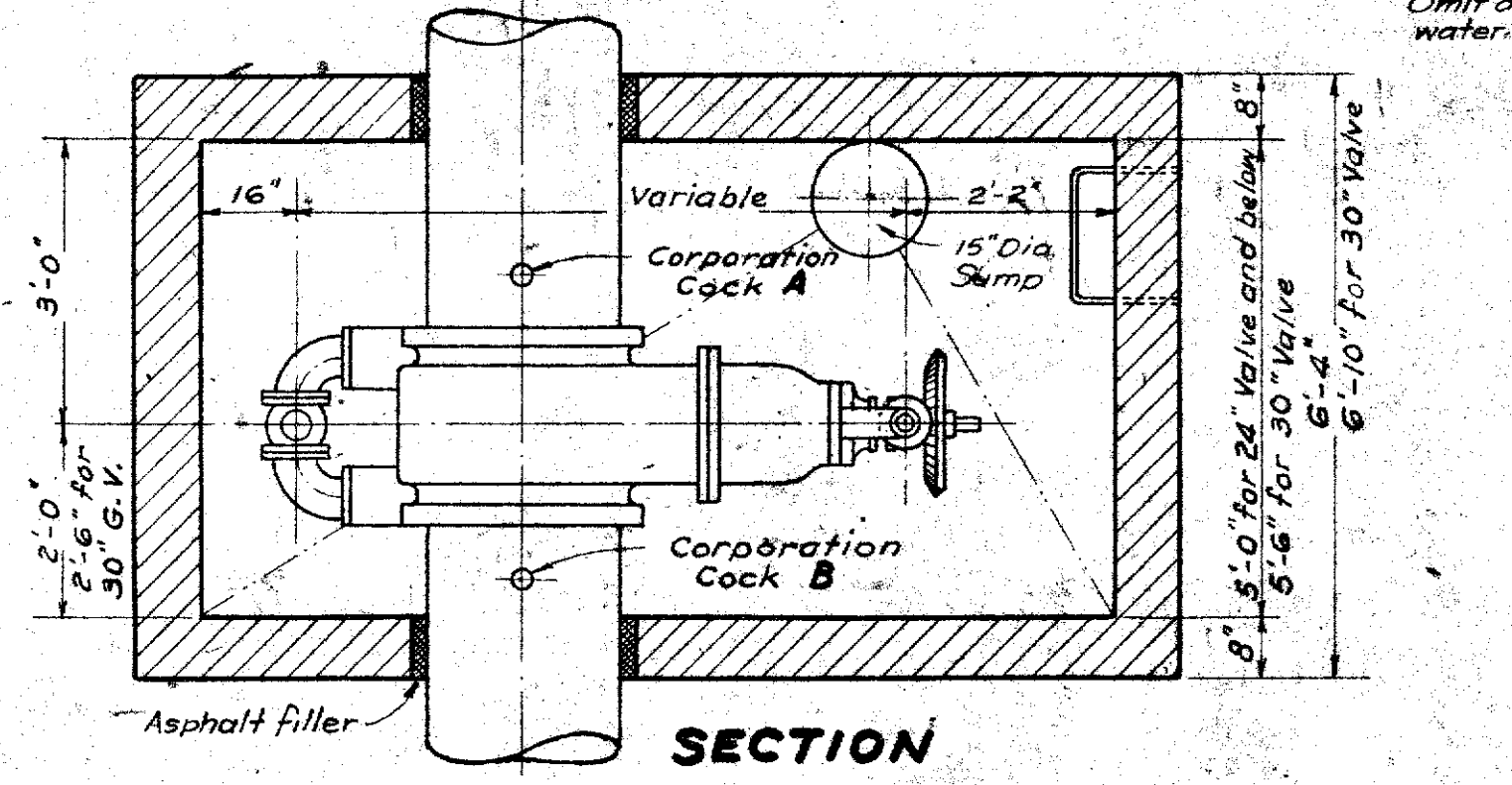
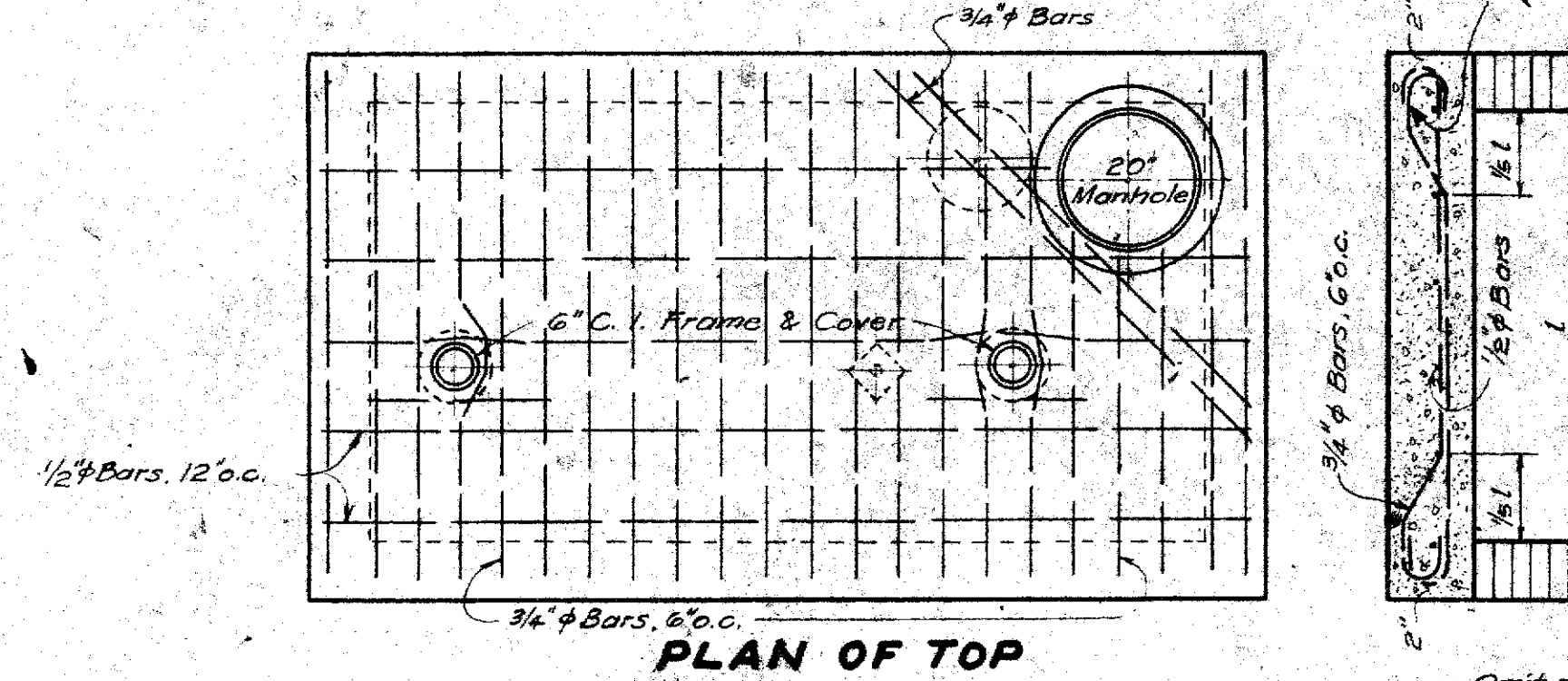
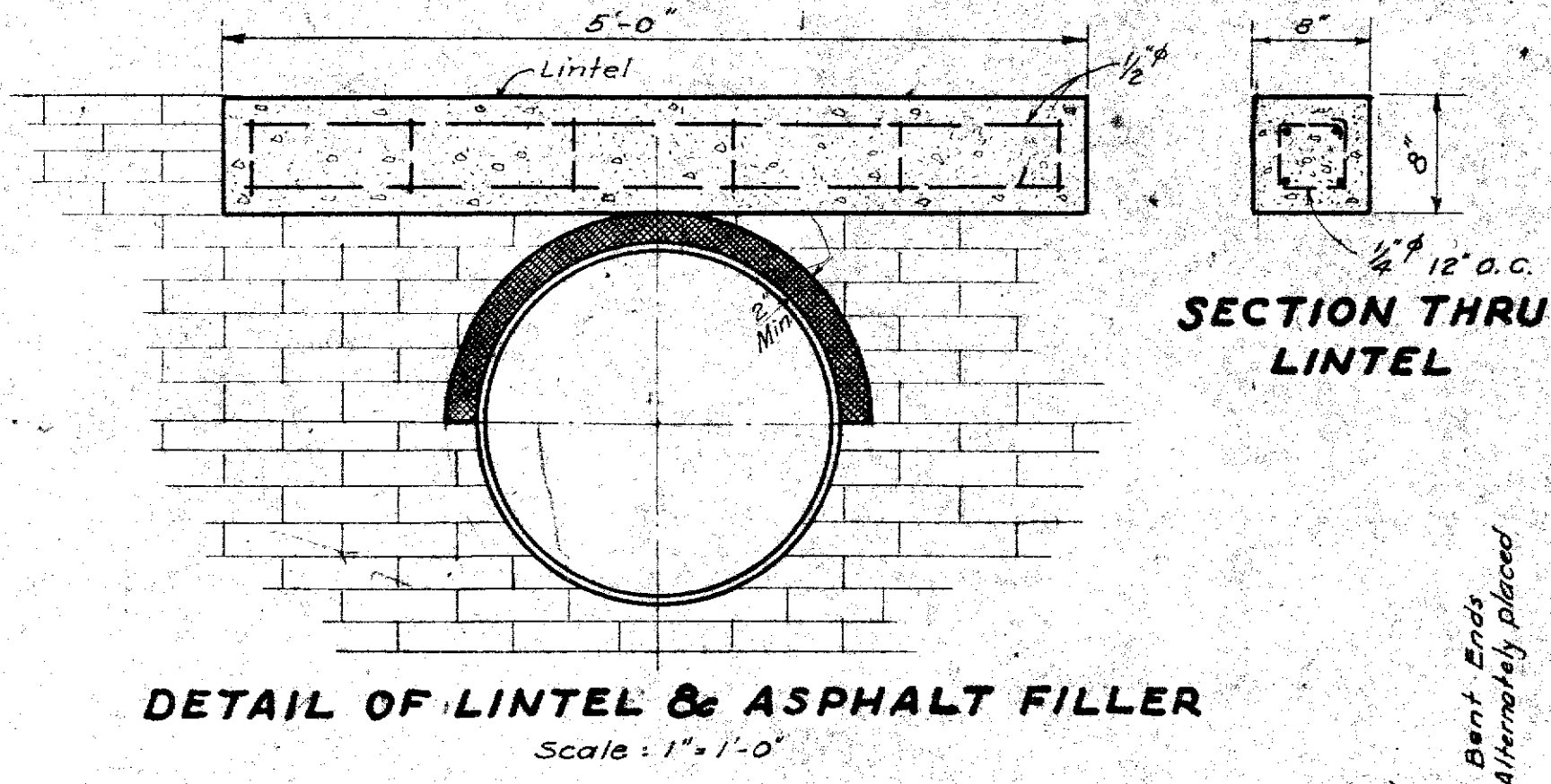




NOTE: All valves 16" and larger without Spur or Bevel Gears to be installed in Type "A" Manholes for Spur-Geared Gate Valves.

SECTION THRU LINTEL

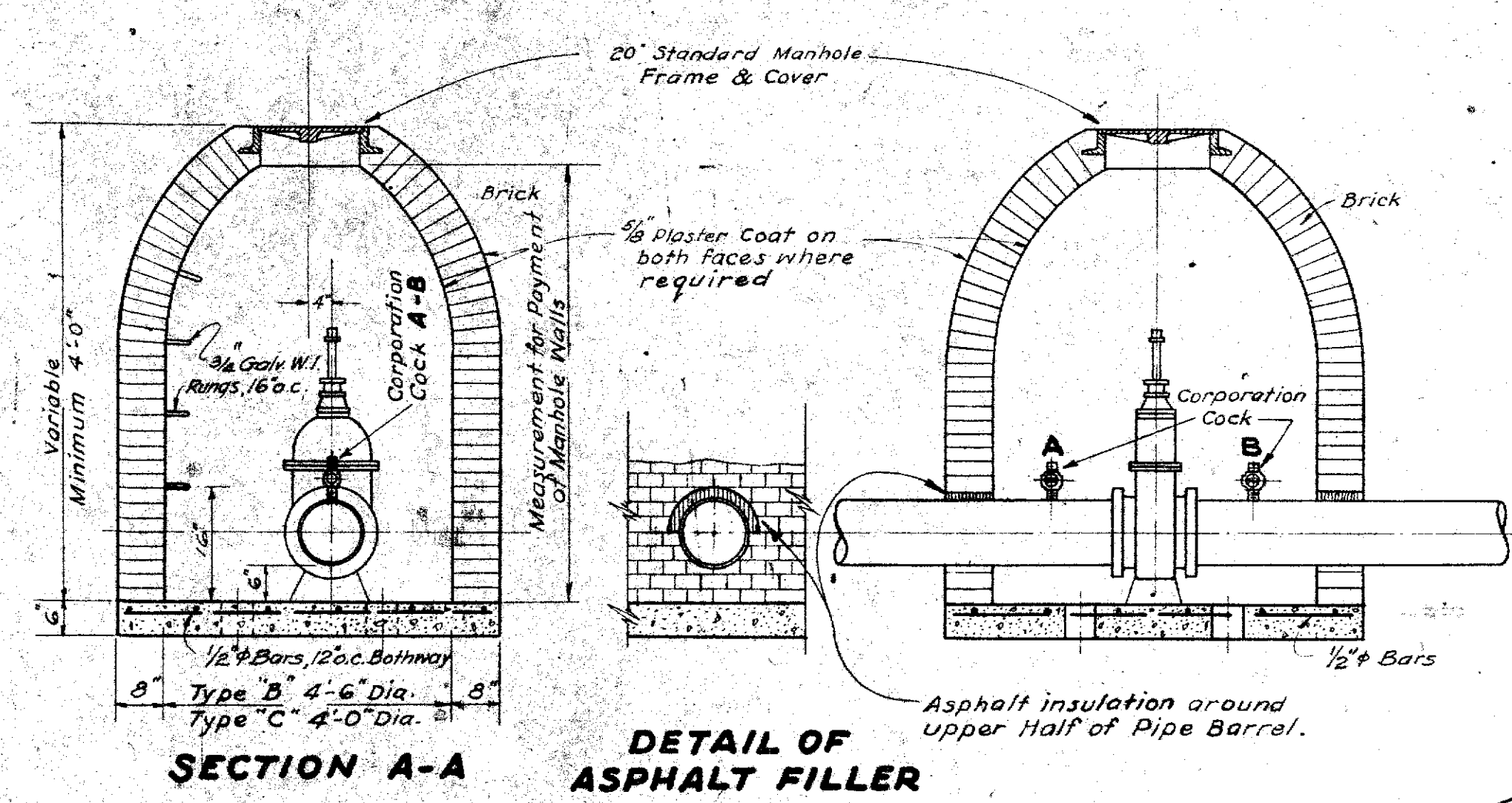
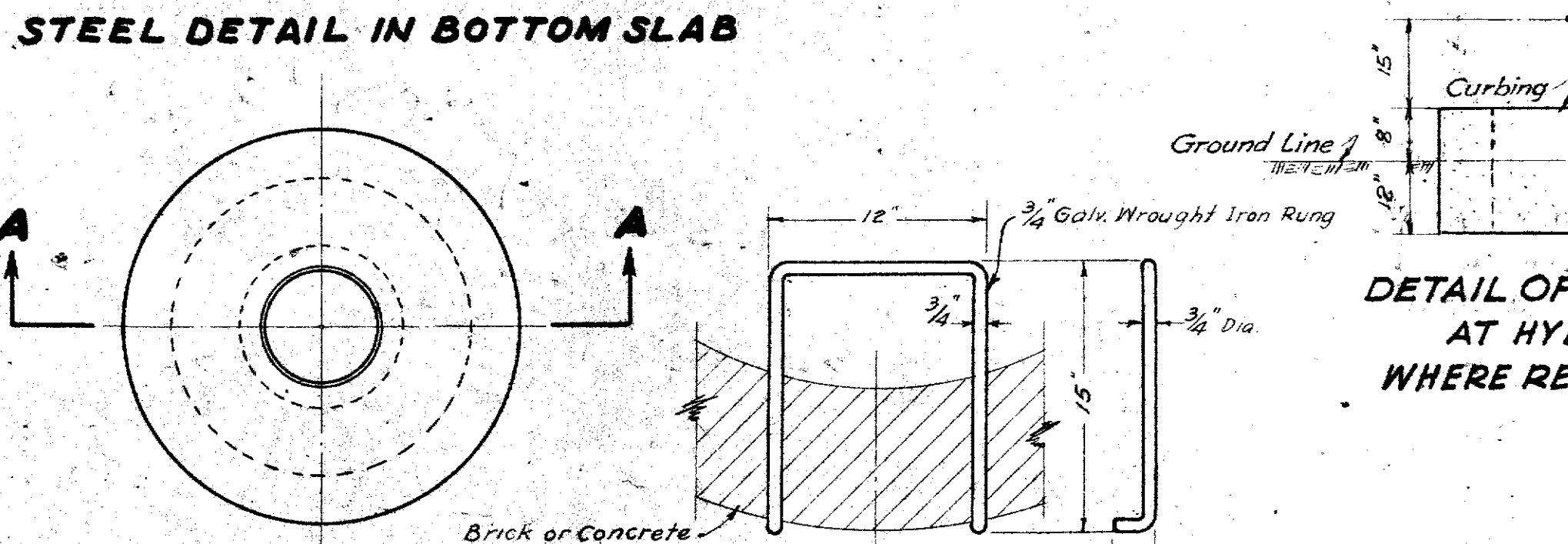


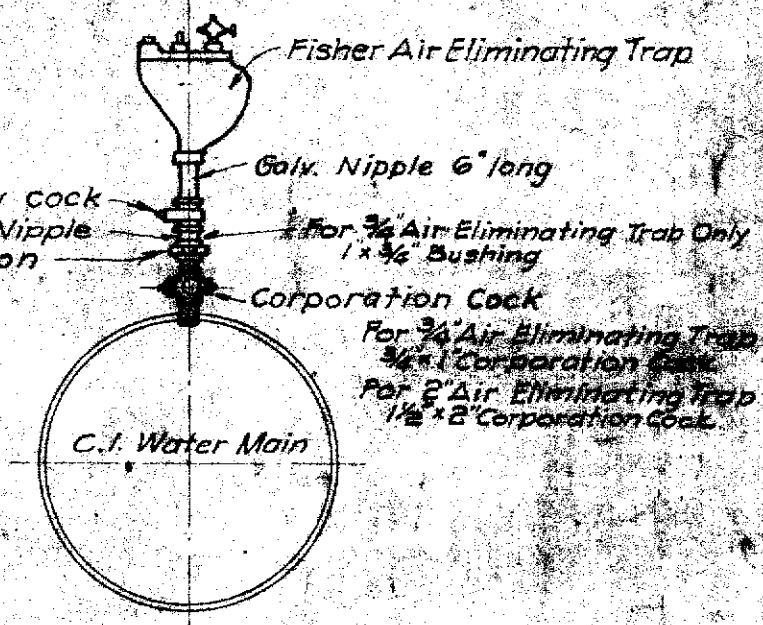
TABLE "A"
REQUIRED CORPORATION COCK SIZES

DIA. OF MAIN INCHES	INLET SIZE CORR COCK	
	A	B
6	1"	1"
8	1"	1"
12	1"	1"
16	1"	1"
20	1"	1"
24	1 1/2"	1"
36	1 1/2"	1"
42	1 1/2"	1"

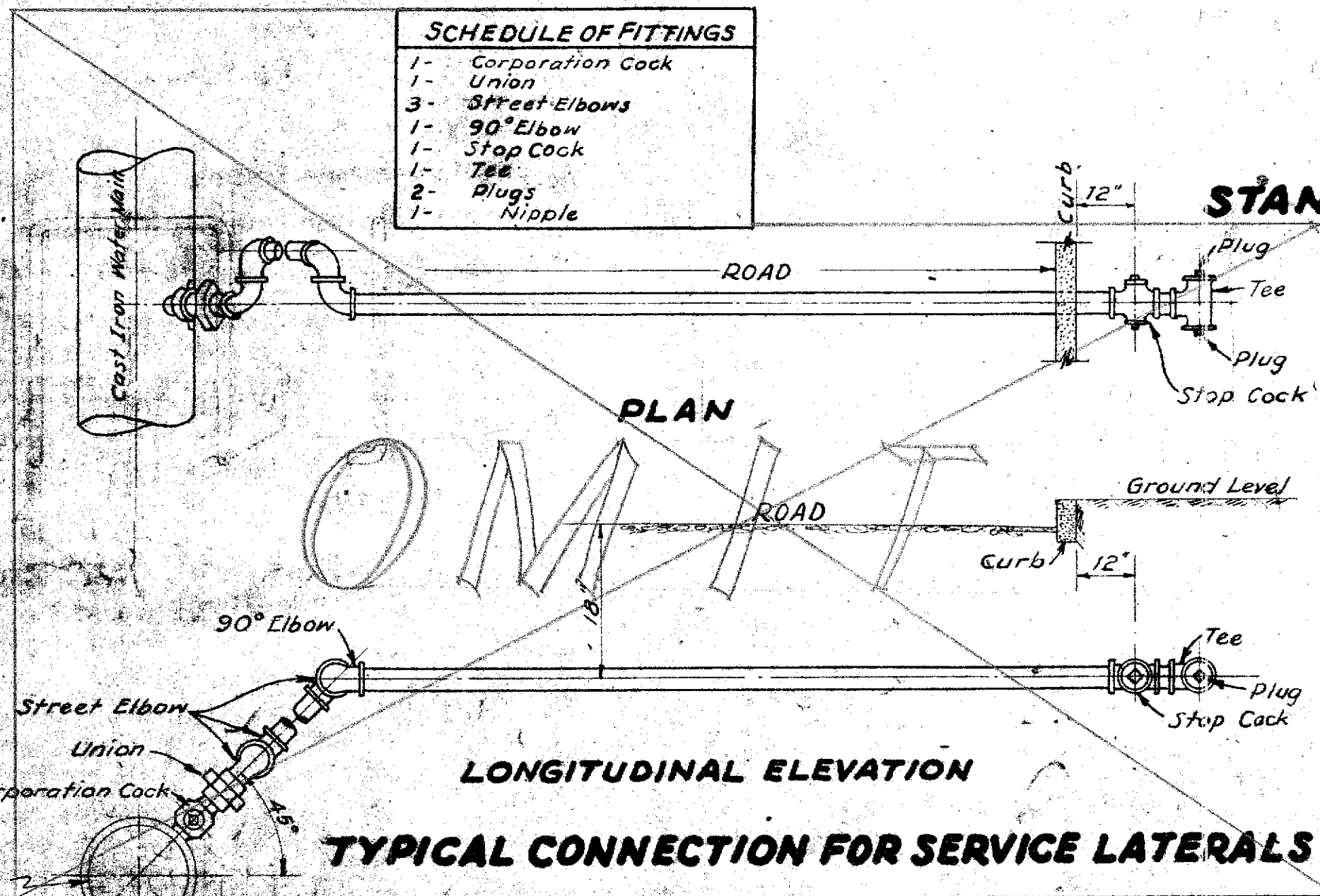


PLAN
TYPES "B" AND "C" MANHOLES
TYPE "B" 4'-6" DIA. (For 12" Valve)
TYPE "C" 4'-0" DIA. (For 6" & 8" Valves)
Scale: 1/2" = 1'-0"

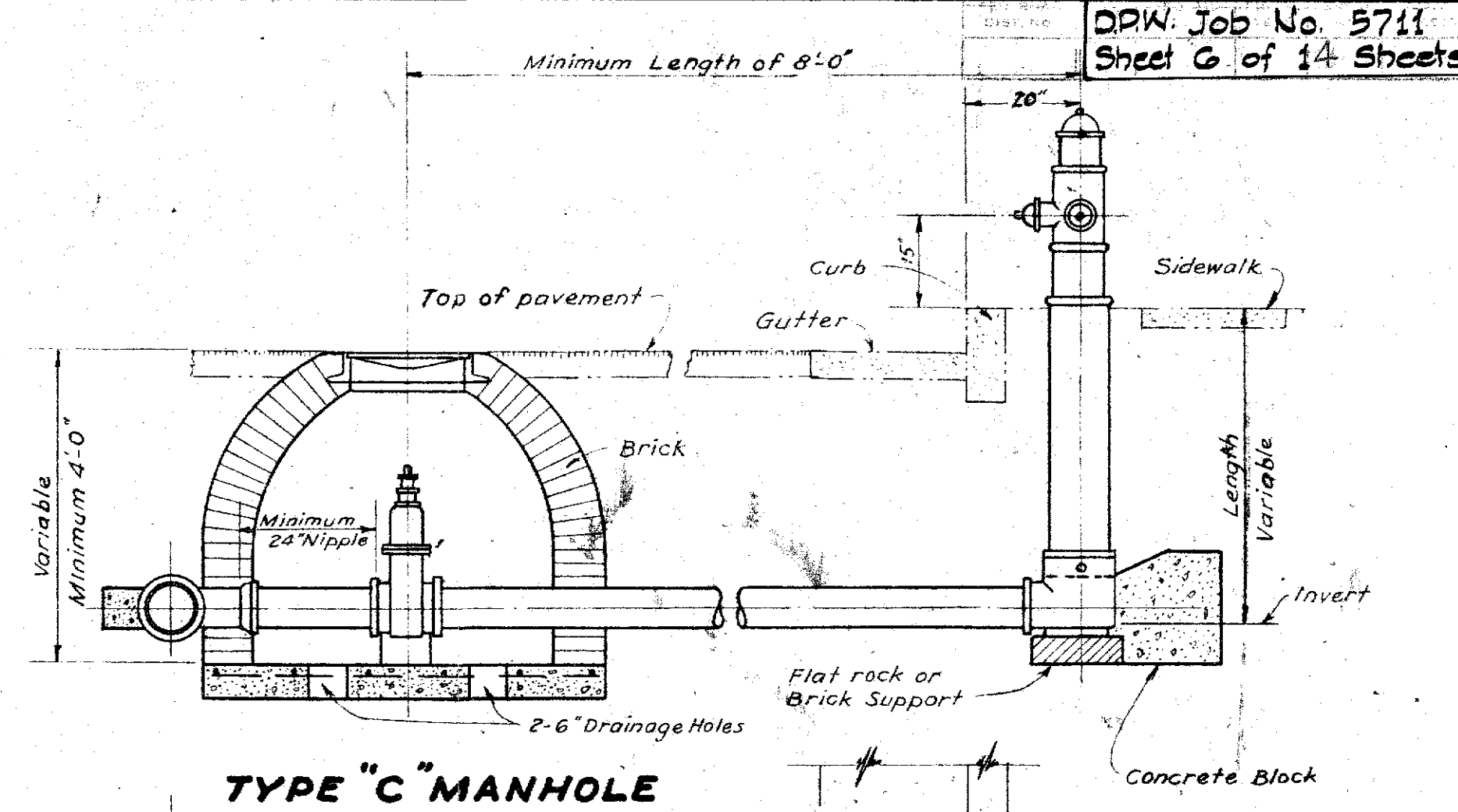
DETAIL OF RUNG
Scale: 1/2" = 1'-0"



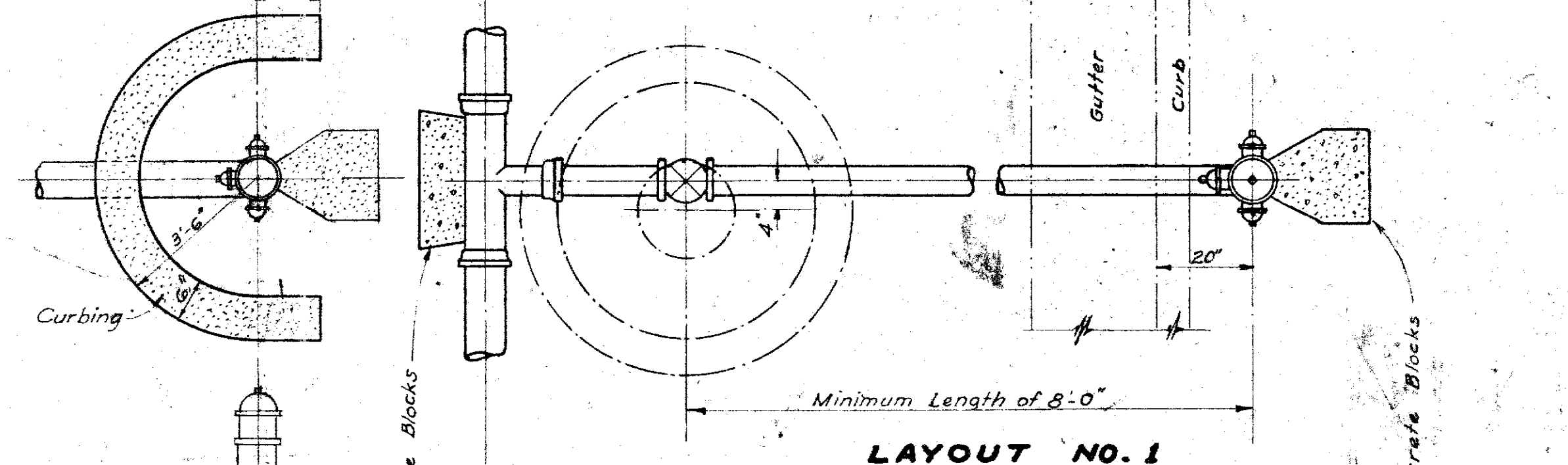
DETAIL OF CONNECTION FOR FISHER AIR ELIMINATING TRAP



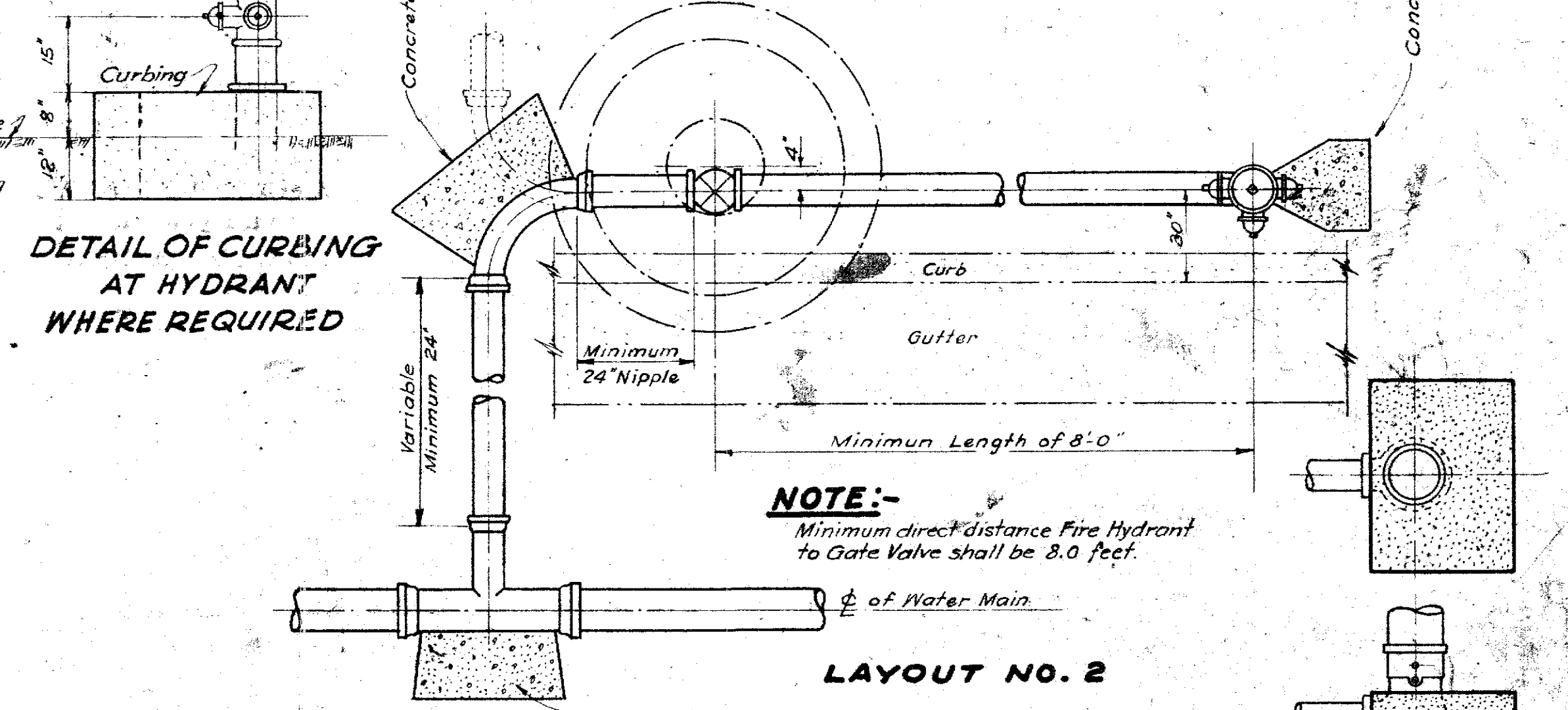
TYPICAL CONNECTION FOR SERVICE LATERALS



TYPE "C" MANHOLE



LAYOUT NO. 1



LAYOUT NO. 2

NOTE:- Minimum direct distance Fire Hydrant to Gate Valve shall be 8.0 feet.

DETAIL OF CURBING AT HYDRANT WHERE REQUIRED

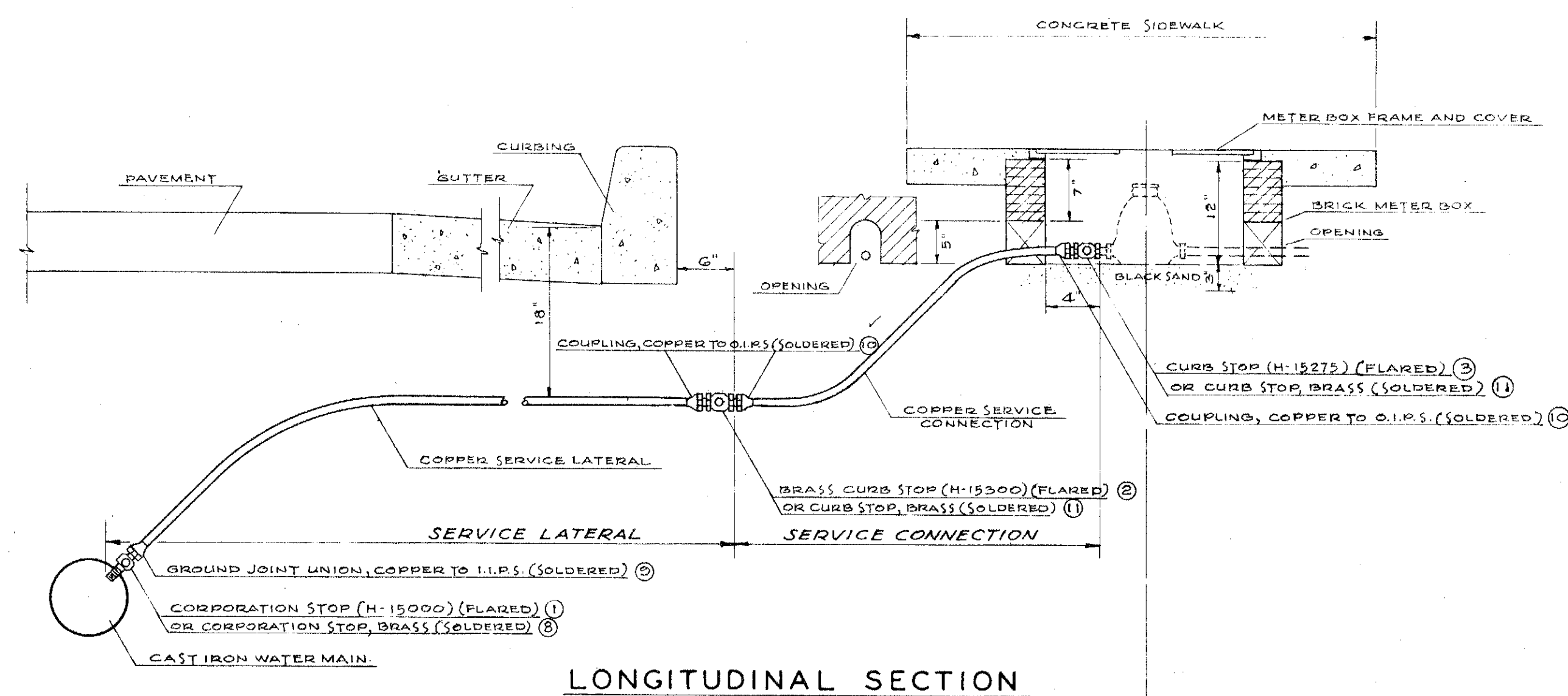
STANDARD FIRE HYDRANT LAYOUT

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

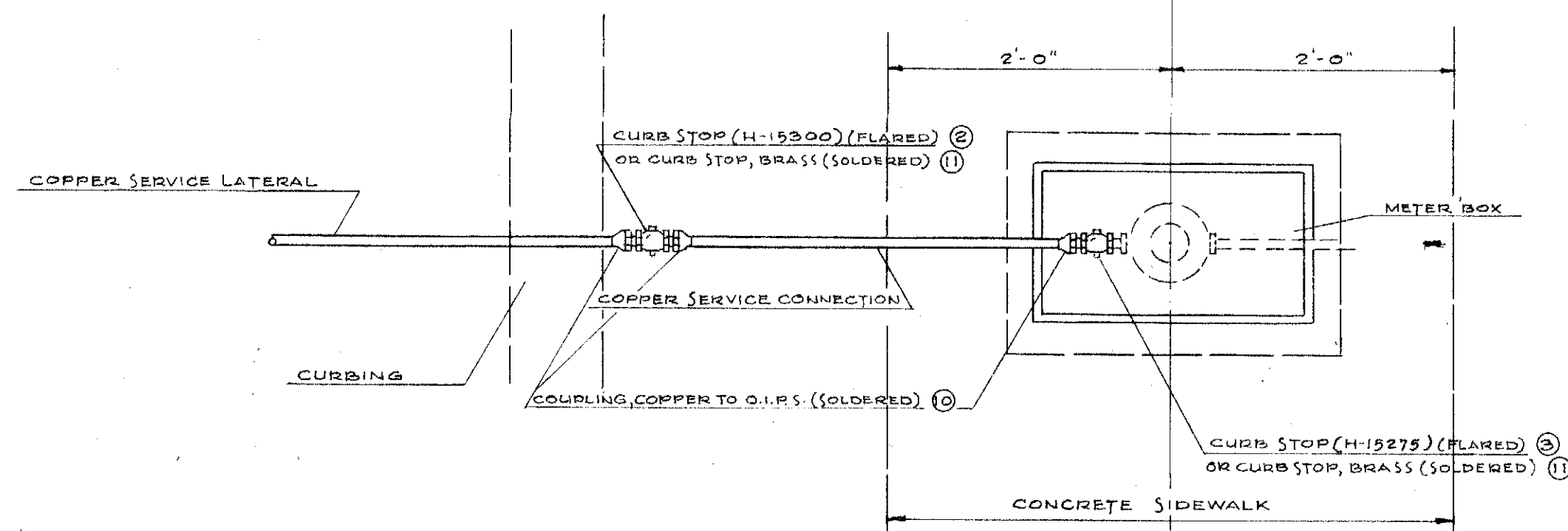
CONCRETE BLOCK FOR MATHEWS HYDRANT ONLY

NOTE: These details were prepared in the office of the Board of Water Supply, City & County of Honolulu.

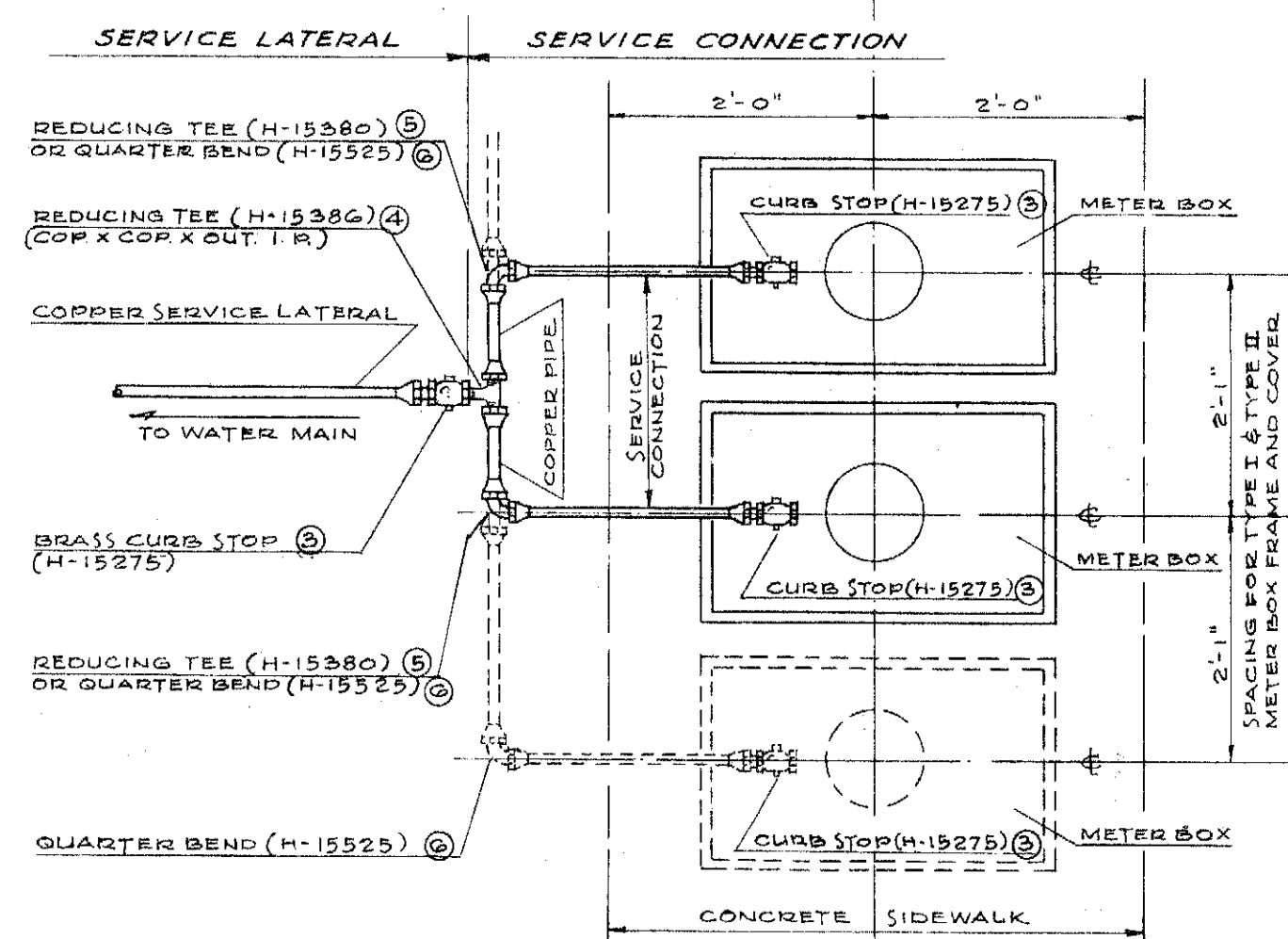
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
BOARD OF WATER SUPPLY
STANDARD DETAILS



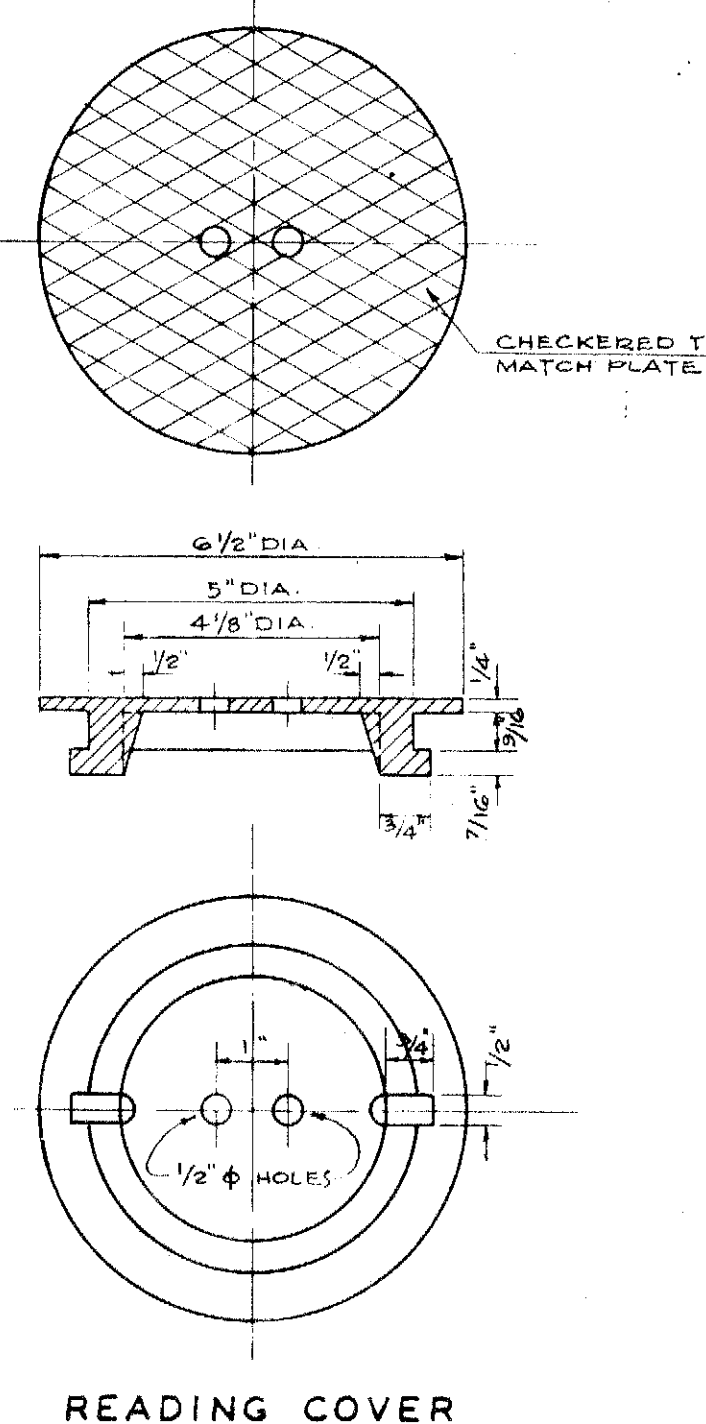
LONGITUDINAL SECTION



SINGLE SERVICE CONNECTION



MULTIPLE SERVICE CONNECTION
FLARED JOINTS

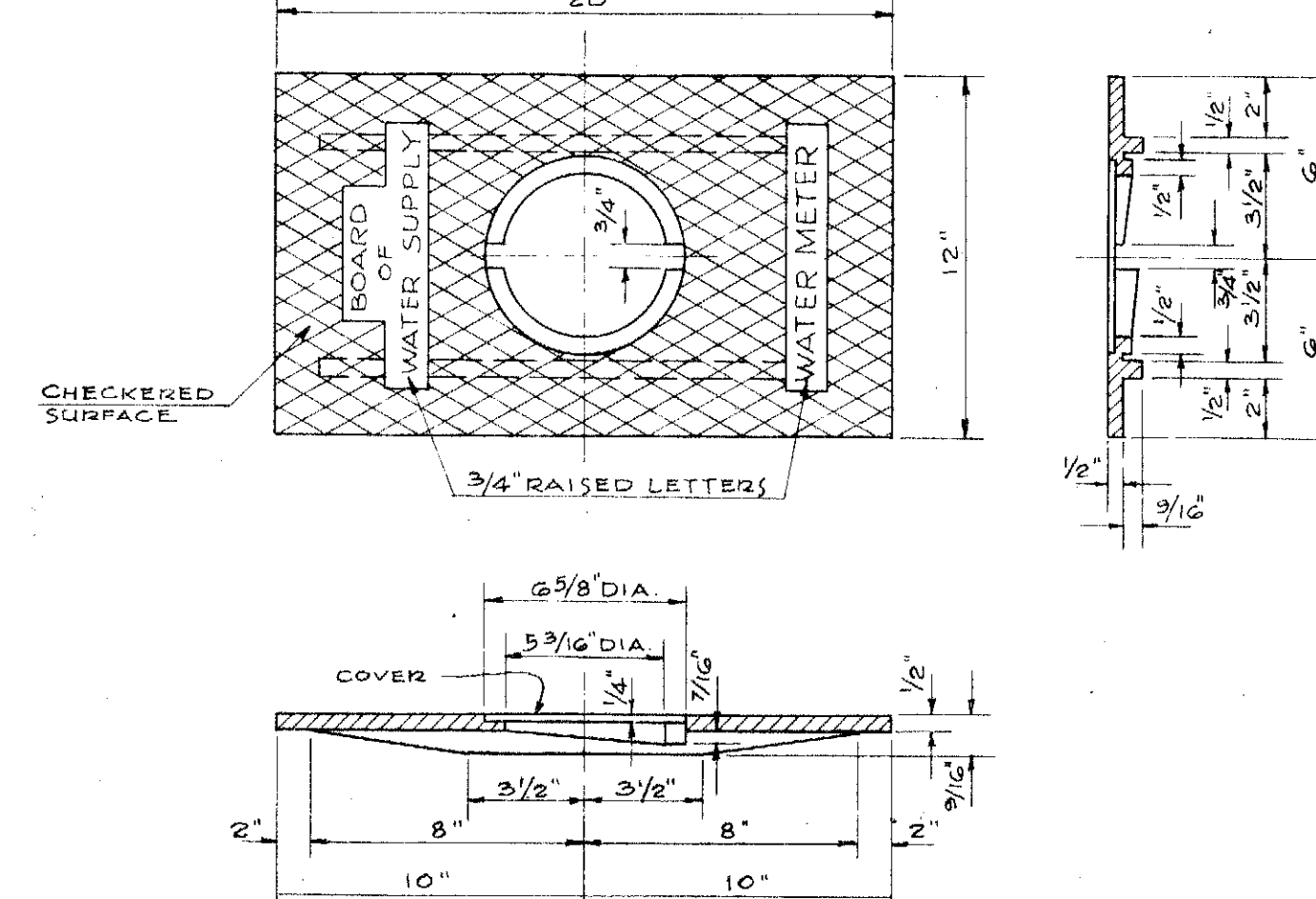


CAST IRON COVER FOR
TYPE I & TYPE II FRAMES

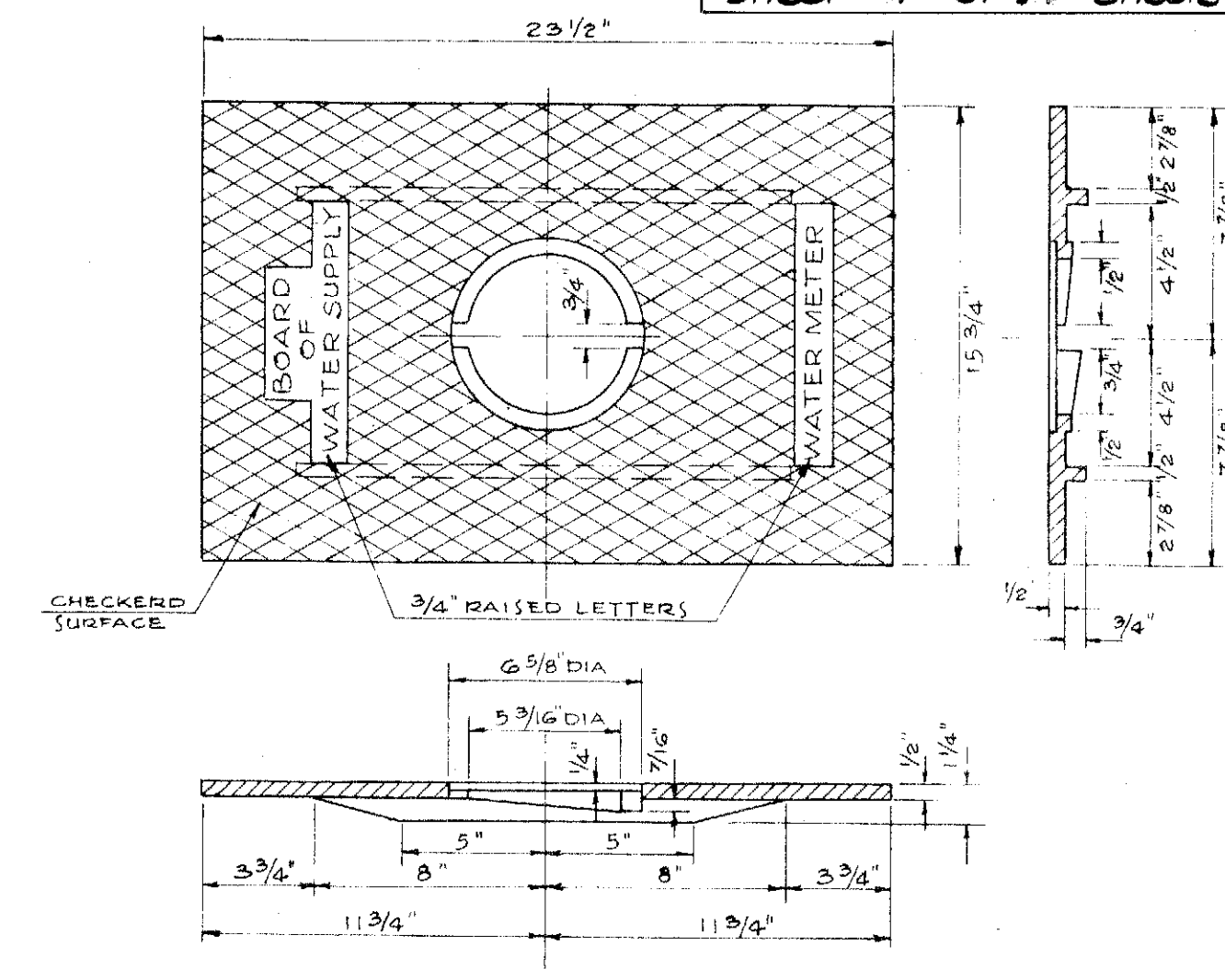
SCHEDULE OF COPPER FITTINGS
(SOLDERED JOINT)

ITEM NO.	DESCRIPTION	SINGLE SERVICE CONN.	MULTIPLE SERV. CONN. TWO SERVICES	MULTIPLE SERV. CONN. THREE SERVICES
8	CORPORATION STOP, BRASS (H-10003)	1	1	1
9	GROUND JOINT UNION (A-1424) COPPER TO I.P.S. (A-1427)	1	1	1
10	COUPLING, COPPER TO O.I.P.S. (A-1553 TO A-1672)	2	1	1
11	CURB STOP, BRASS (B.W.S. STANDARD)	1	1	1
12	FITTING ADAPTER (A-1555 TO FITTING TO O.I.P.S. (A-1674)	1	1	1
13	TEE, COPPER TO COPPER TO COPPER (A-1566 TO A-2710)	1	1	1
14	BUSHINGS, FITTING TO COPPER (W-1343 TO W-1362)	1	2	2
15	90° ELBOW, COPPER TO COPPER (A-1557 TO A-2724)	1	2	2
16	COUPLING, COPPER TO O.I.P.S. (A-1555 TO A-1672)	1	2	3
17	CURB STOP, BRASS (B.W.S. STANDARD)	1	2	3
18	REDUCING TEE, COPPER TO COPPER TO COPPER (SUBSTITUTE FOR ITEMS NUMBER 13 & 14). (A-1566 TO A-2710)	1	1	1
19	TEE, COPPER TO COPPER TO COPPER (A-1566 TO A-2710)	1	1	1
20	BUSHING, FITTING TO COPPER (W-1343 TO W-1362)	1	1	1
21	REDUCING TEE, COPPER TO COPPER TO COPPER (SUBSTITUTE FOR ITEMS NUMBER 13 & 14). (A-1566 TO A-2710)	1	1	1

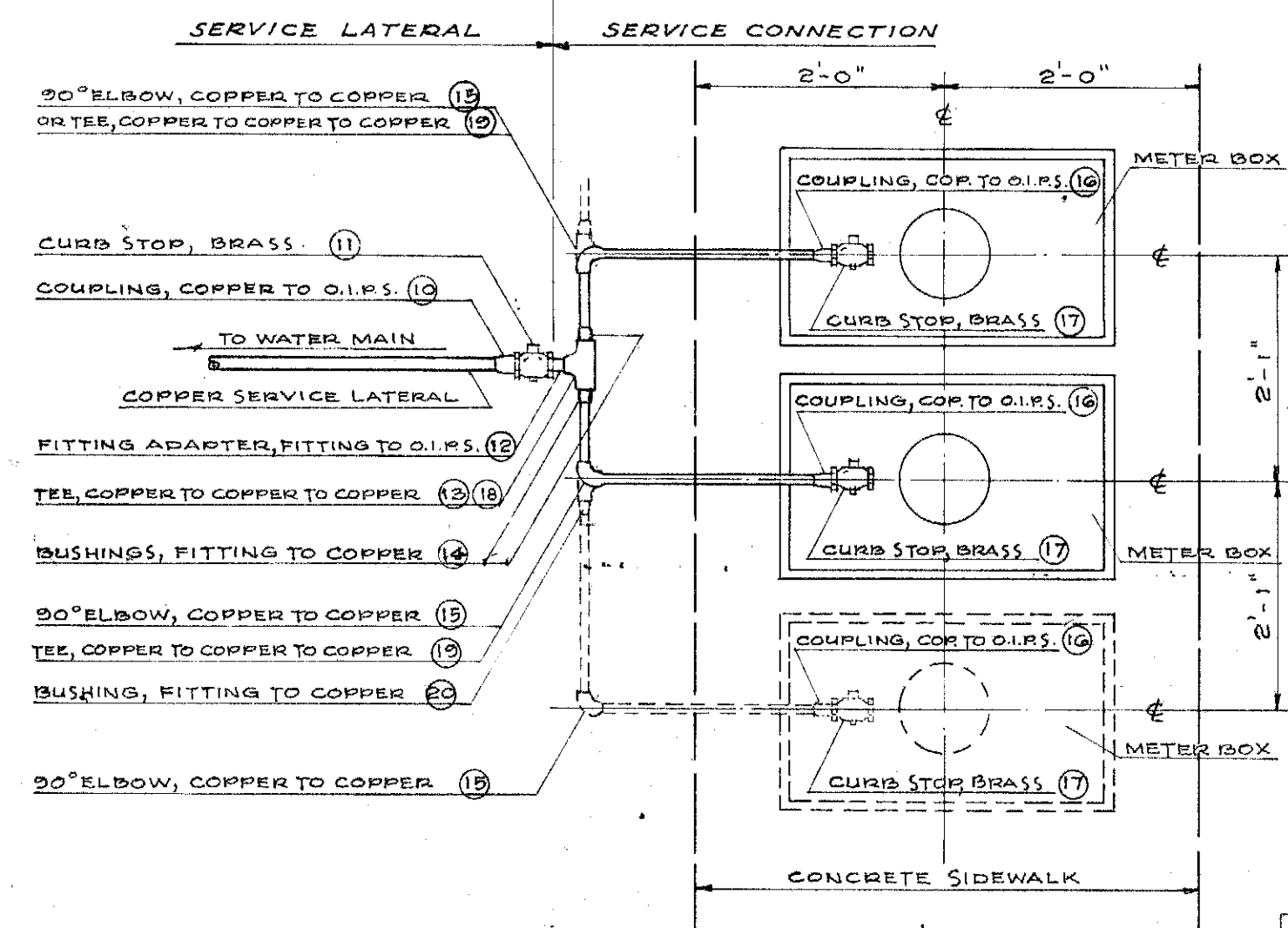
NOTE:
REFERENCE NUMBERS SHOWN ARE FROM MUELLER CATALOG "H" FOR PURPOSES OF IDENTIFYING FITTINGS. APPROVED EQUAL MAY BE USED.



COVER PLATE
FRAME
CAST IRON FRAME AND PLATE
TYPE I

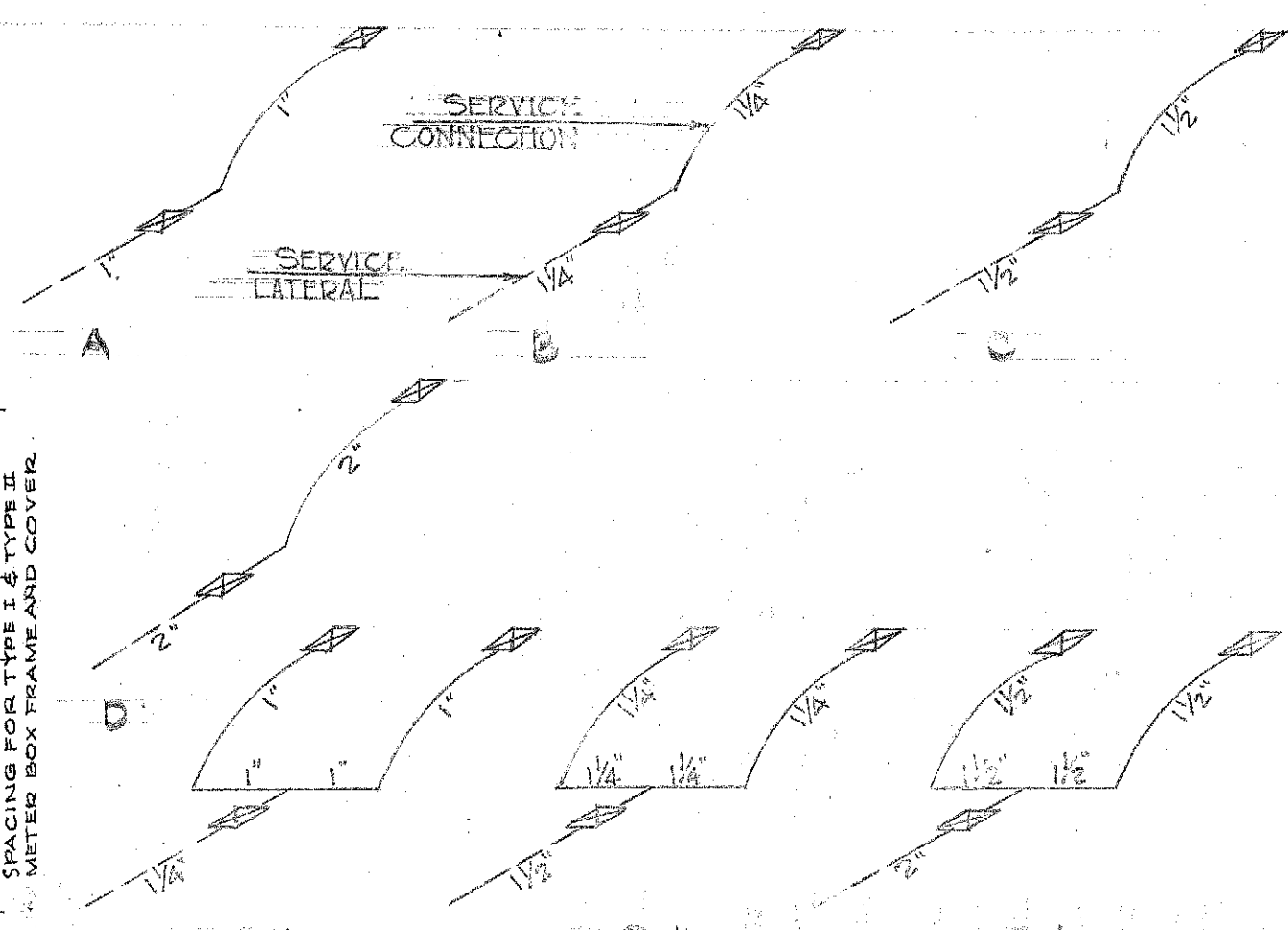


COVER PLATE
FRAME
CAST IRON FRAME AND PLATE
TYPE II



MULTIPLE SERVICE CONNECTION
SOLDERED JOINTS

NOTE:
USE OF COPPER PIPE AND FITTINGS WITH "SOLDERED" JOINTS OPTIONAL UNTIL FURTHER NOTICE.



TYPICAL LAYOUT OF
SERVICE LATERALS AND CONNECTIONS

SCHEDULE OF COPPER FITTINGS
(FLARED JOINT)

ITEM NO.	DESCRIPTION	SINGLE SERVICE CONN.	MULTIPLE SERV. CONN. TWO SERVICES	MULTIPLE SERV. CONN. THREE SERVICES
1	CORPORATION STOP WITH STRAIGHT COUPLING NUT (H-15000)	1	1	1
2	BRASS CURB STOP (H-15300)	1	1	1
3	CURB STOP WITH TUBE NUT COPPER TO INSIDE I.P. (H-15275)	1	2	4
4	REDUCING TEE WITH TUBE NUTS - COPPER TO COPPER TO OUTSIDE I.P. (H-15386)	1	1	1
5	REDUCING TEES WITH TUBE NUTS - COPPER TO COPPER TO COPPER (H-15360)	1	1	1
6	1/4 BEND UNION COUPLING WITH TUBE NUTS - COPPER TO COPPER (H-15525)	1	1	1
7	THREE PART UNION COUPLING (H-15400) OR SOLDER COUPLING	1	1	1

NOTE:
REFERENCE NUMBERS SHOWN ARE FROM MUELLER CATALOG "H" FOR PURPOSES OF IDENTIFYING FITTINGS. APPROVED EQUAL MAY BE USED.

STANDARD DETAILS
COPPER SERVICE LATERALS
AND CONNECTIONS
C.I. METER BOX FRAME AND COVER

APPROVED: _____
MANAGER AND CHIEF ENGINEER
DATE: Jan. 27, 1953
SCALE: _____
BOARD OF WATER SUPPLY
HONOLULU, TH.