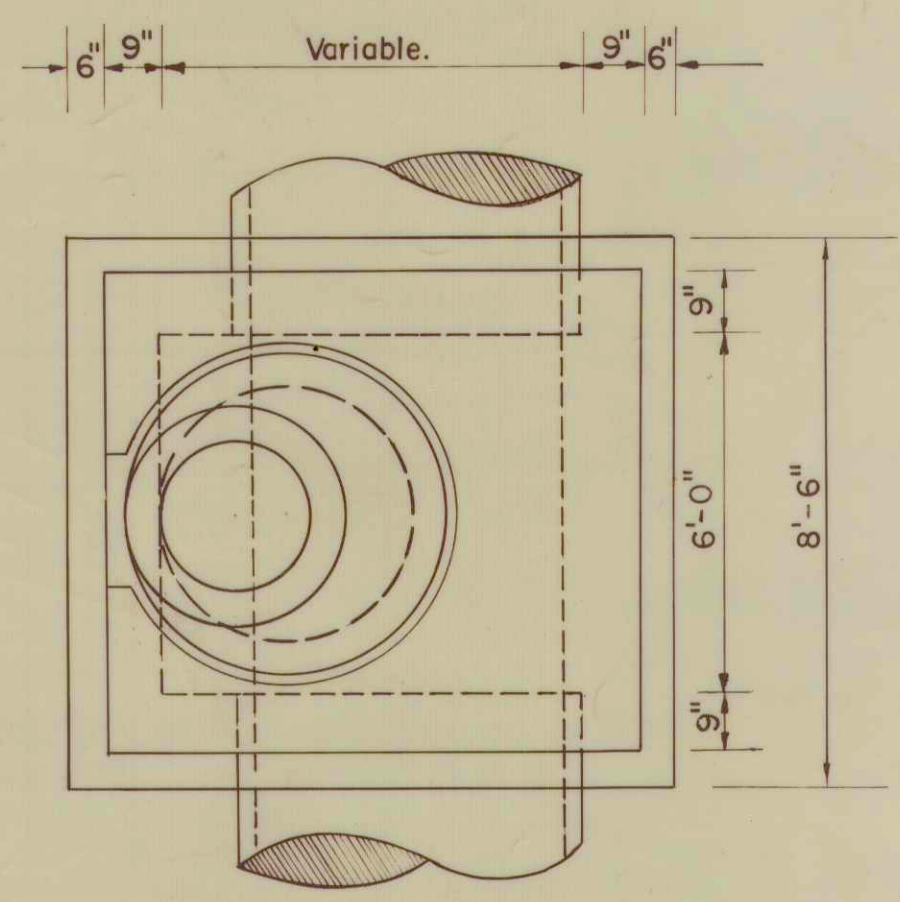
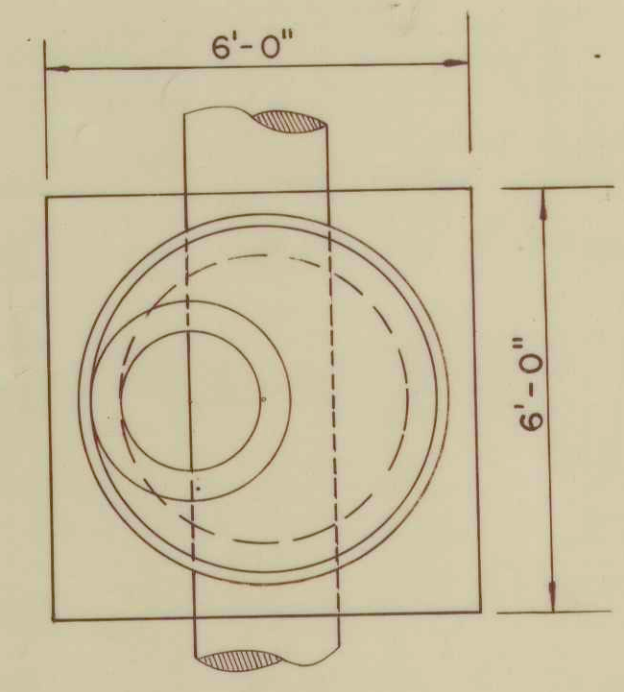




CONE HEIGHTS *			
ECCENTRIC		CONCENTRIC	
2'-6"		2'-6"	
3'-0"		3'-0"	
3'-2"		3'-2"	
3'-6"		4'-0"	



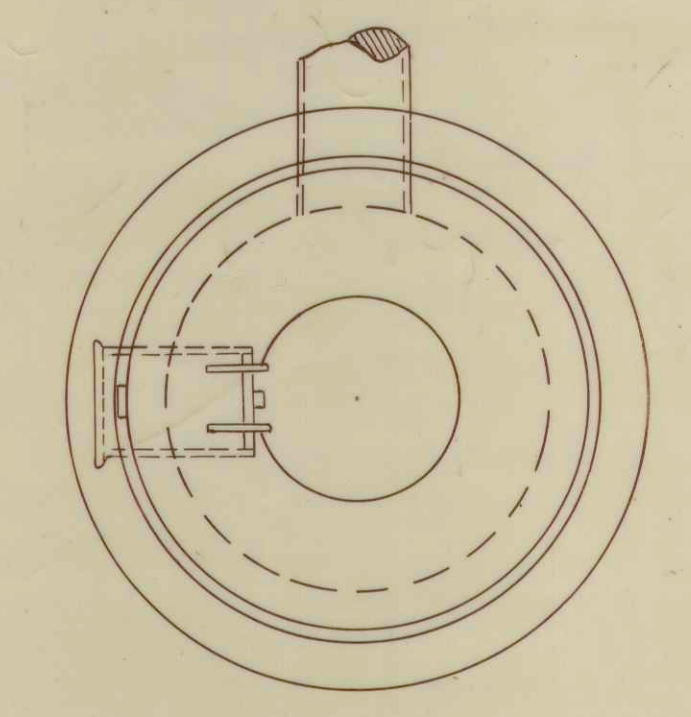
GENERAL NOTE
 BOTTOM SHALL BE CONSTRUCTED OF PRECAST BOTTOM SECTION OR CLASS "A" CONCRETE FORMED IN PLACE AND INCLUDED IN THE CONTRACT UNIT PRICE FOR MANHOLE OR CATCH BASIN AS THE CASE MAY BE.

ALL PRECAST MANHOLE AND CATCH BASIN MATERIAL SHALL CONFORM TO A.S.T.M. C-478 AND THE STANDARD SPECIFICATIONS (MIN. SQ. IN. OF REINFORCING STEEL PER LINEAL FOOT SHALL BE 0.12)

A 6" CUSHION OF B BORROW SHALL BE REQUIRED WHEN THE PRECAST BOTTOM SECTION IS USED AND SHALL BE PAID FOR IN THE CONTRACT UNIT PRICE FOR MANHOLE OR CATCH BASIN AS THE CASE MAY BE.

WATERPROOFING MATERIAL SHALL CONFORM TO AASHTO, M115 AND THE STANDARD SPECIFICATIONS.

BASIS OF PAYMENT FOR MANHOLES AND CATCH BASIN SHALL BE AS SET OUT IN THE STANDARD SPECIFICATIONS.



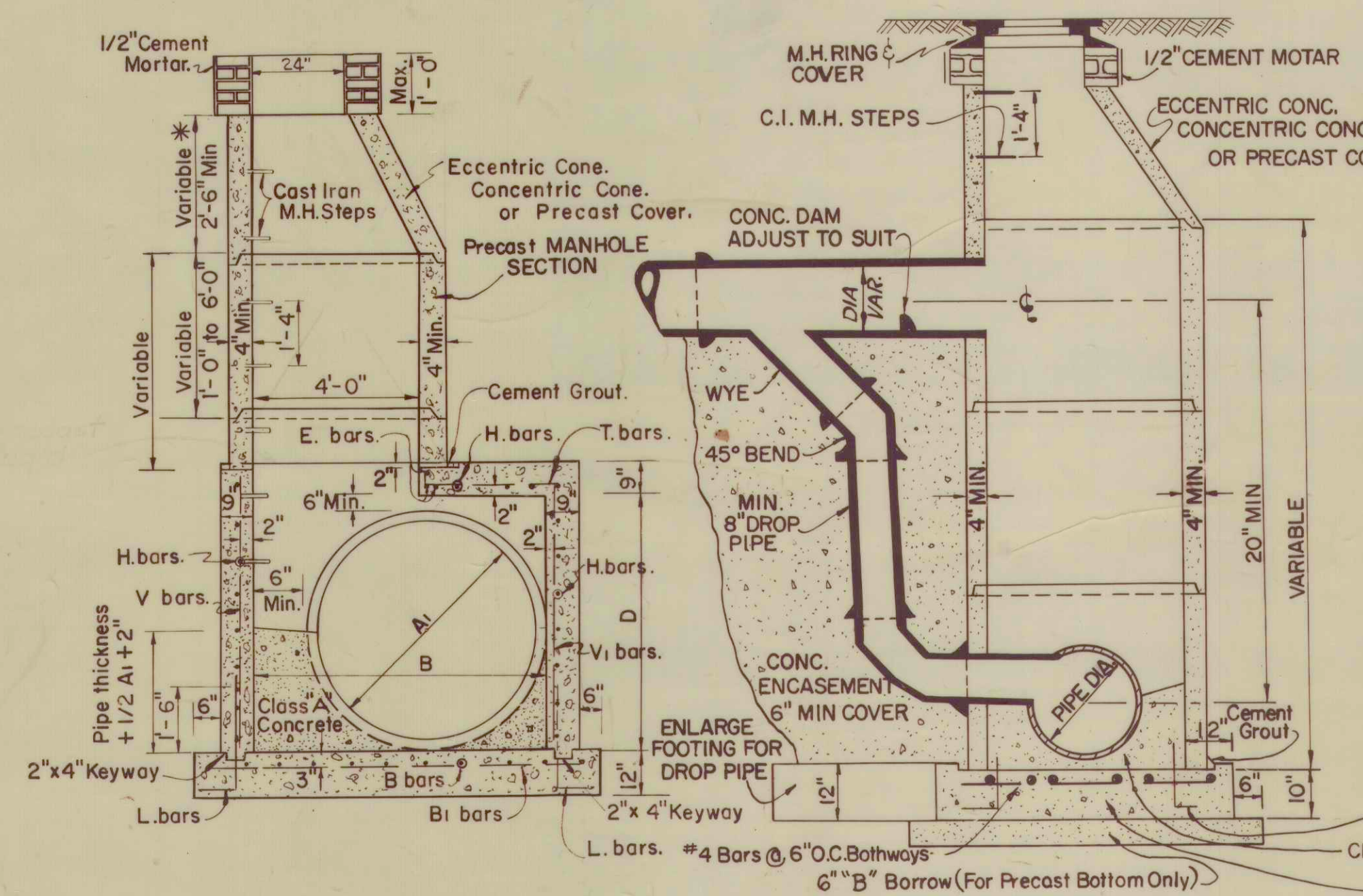
GENERAL NOTES

CONCENTRIC CONCRETE SECTION WILL NOT BE PERMITTED ON ANY MANHOLE THAT WILL BE UNDER THE JURISDICTION OF THE INDIANAPOLIS SANITARY DISTRICT.

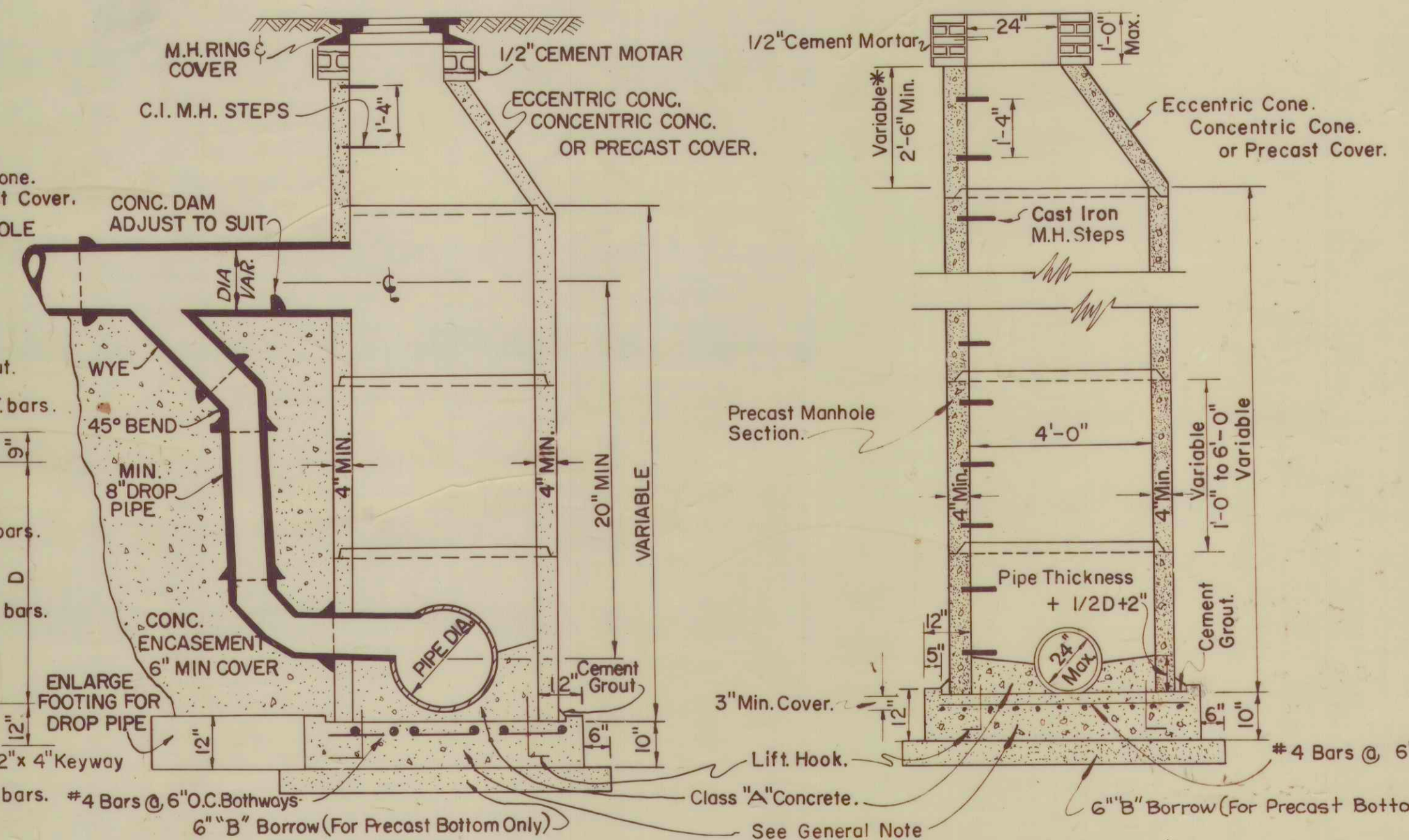
THE CONTRACTOR WILL BE PERMITTED TO SUBSTITUTE PRECAST MANHOLE TYPE "C" FOR MANHOLE TYPE "A" OR "B" AND PRECAST CATCH BASINS TYPE "W" FOR CATCH BASIN TYPE "A".

JOINTS BETWEEN SECTIONS OF PRECAST MANHOLES AND PRECAST CATCH BASINS SHALL BE IN ACCORDANCE WITH ASTM C-443.

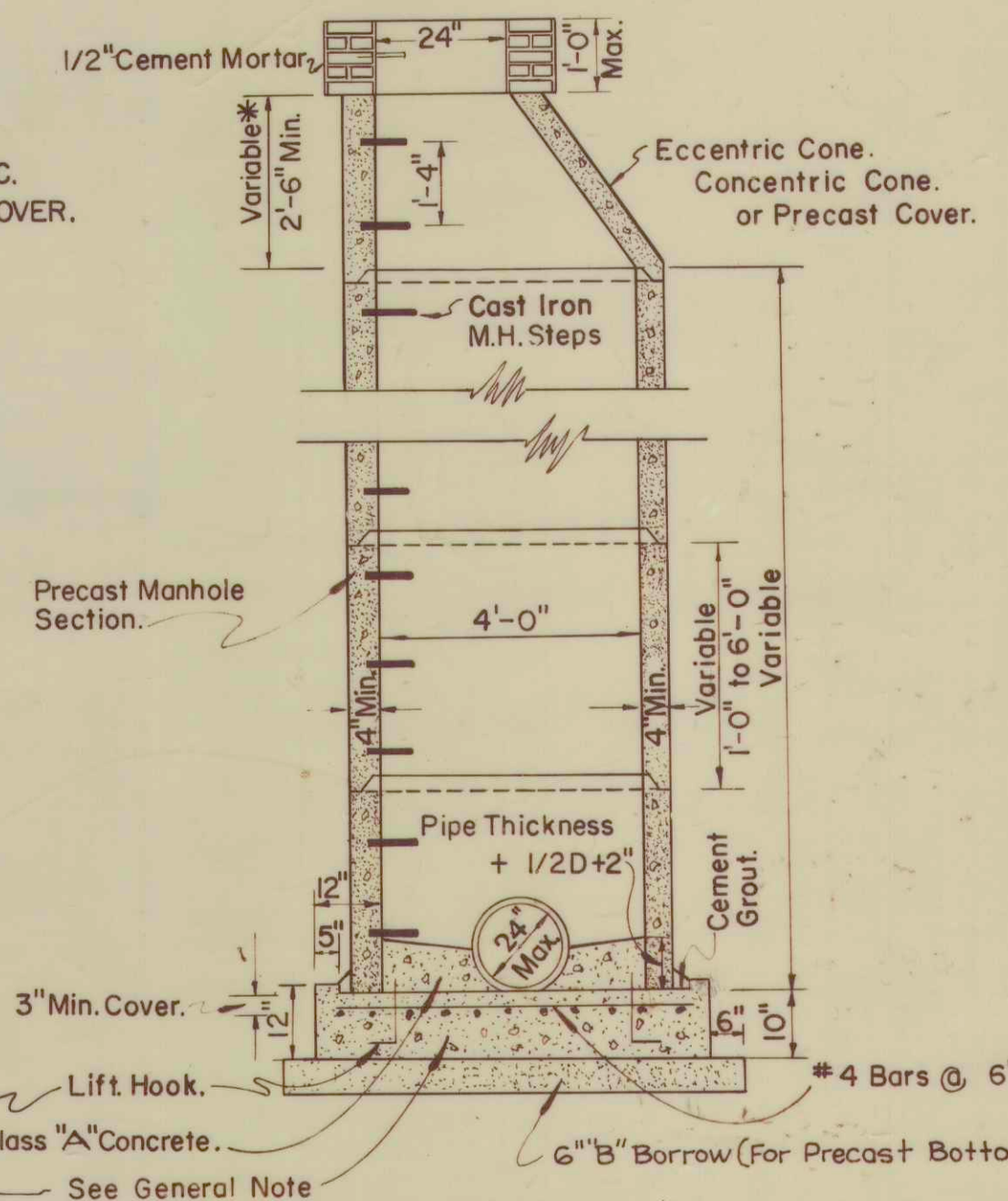
AIR-ENTRAINED CONCRETE WILL NOT BE REQUIRED IN THE PRECAST PORTION OF THE CONCRETE MANHOLE AND CATCH BASIN.



MANHOLE TYPE D, E, F, or G
 (See Table)
 SCALE: 3/8" = 1'-0"

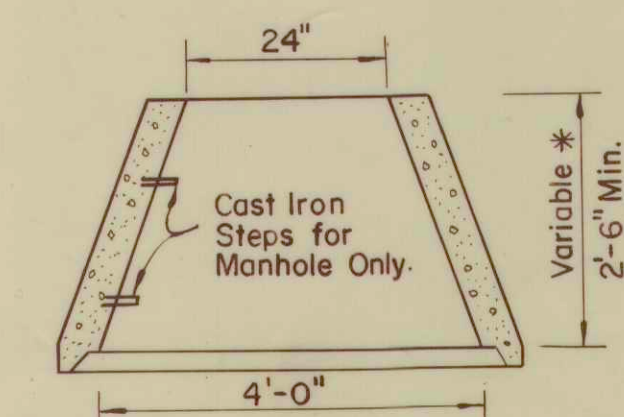


MANHOLE TYPE "C"
 SCALE: 3/8" = 1'-0"

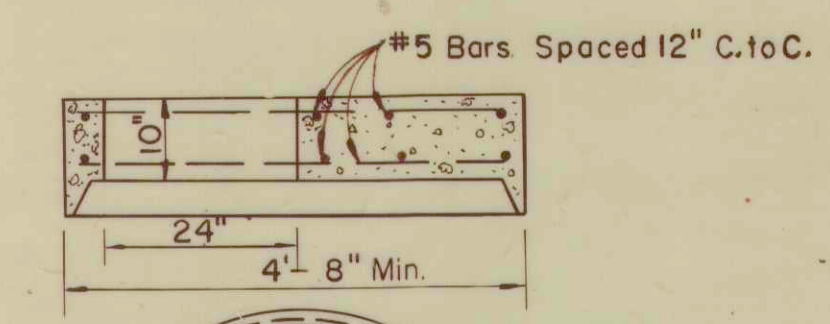


MANHOLE TYPE -"C"
 SCALE: 3/8" = 1'-0"

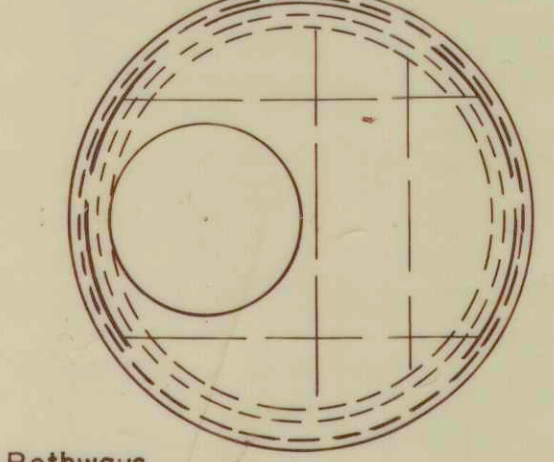
‡ Drop pipe may be used with Manhole Type D, E, F or G. and referred to as Drop Manhole Type D, E, F or G.



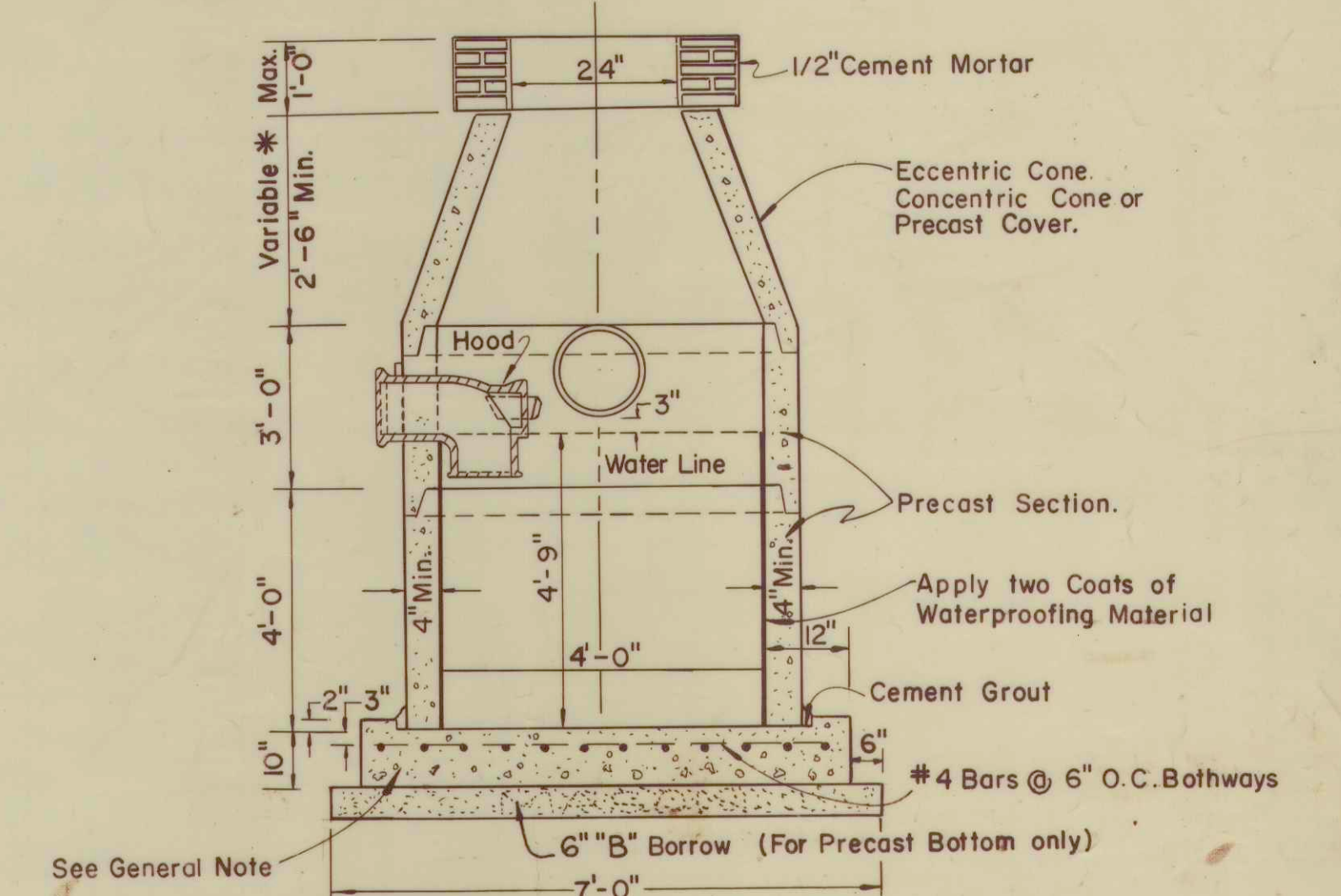
CONCENTRIC CONE.
 SCALE: 1/2" = 1'-0"



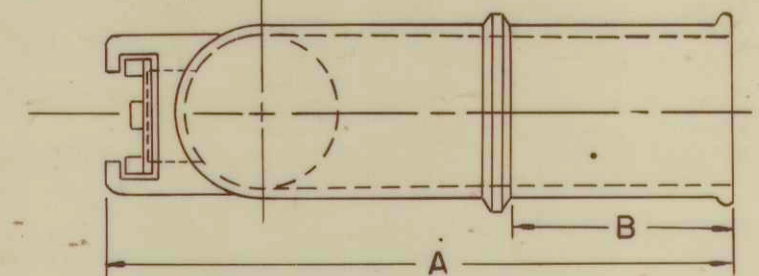
PRECAST COVER
 SCALE: 1/2" = 1'-0"



NOTE: PRECAST COVER SHALL BE USED WHERE HEADROOM IS LIMITED.

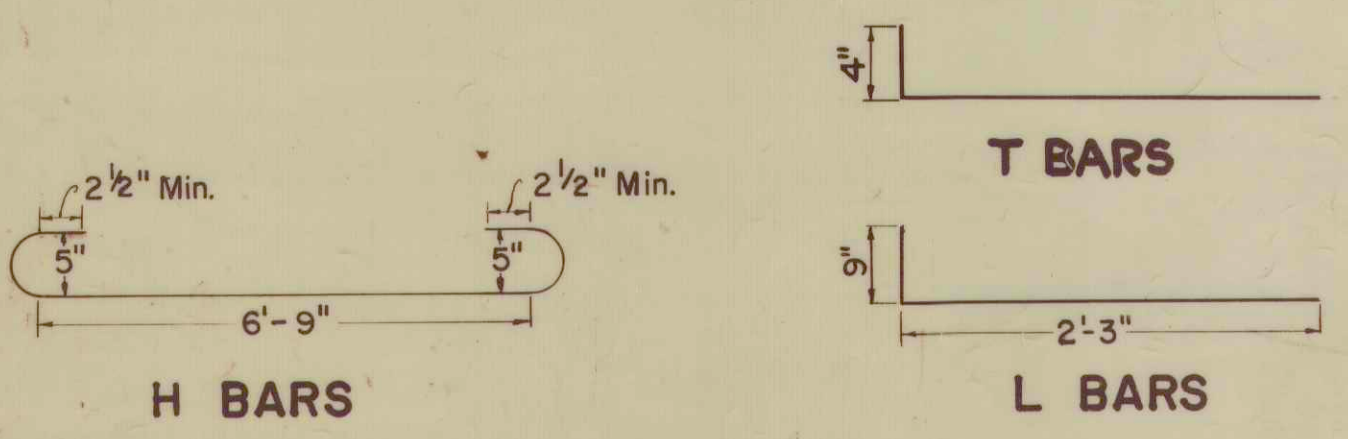


CATCH BASIN TYPE -"W"
 SCALE: 1/2" = 1'-0"

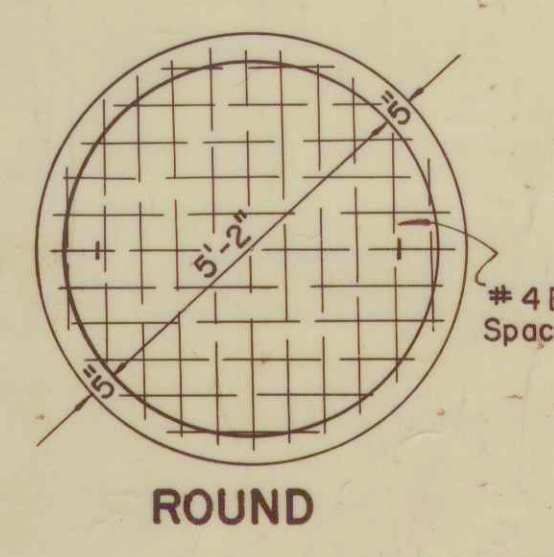
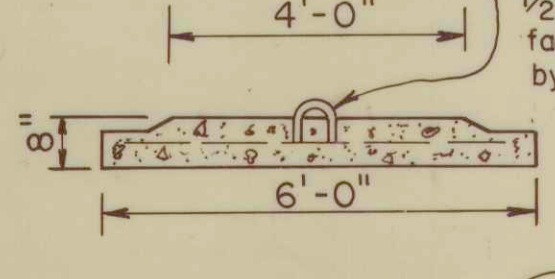
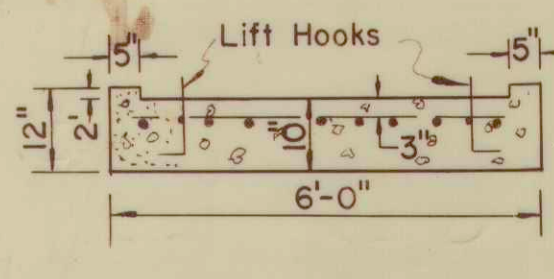
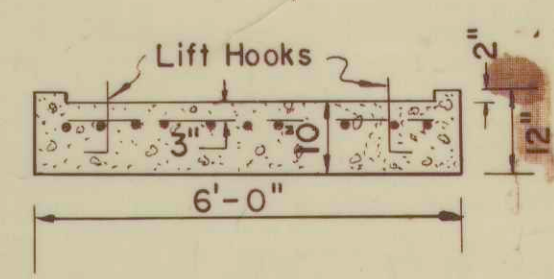


CATCH BASIN HOOD SHALL BE MADE FROM GRAY CAST IRON AND CONFORM TO AASHTO, M105 AND THE STANDARD SPECIFICATIONS.

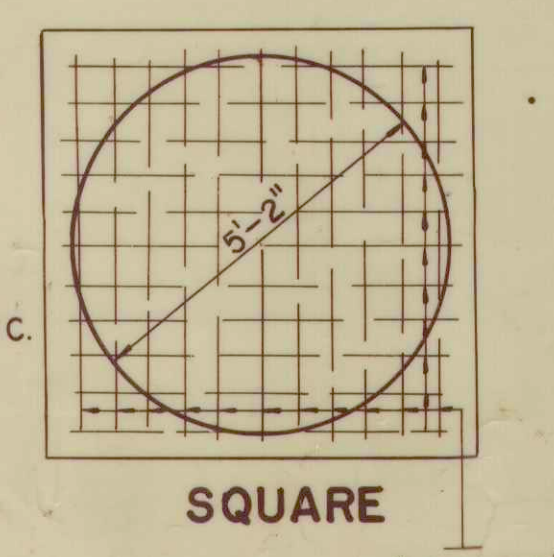
REINFORCING STEEL FOR MANHOLES																
	Manhole Type "D"				Manhole Type "E"				Manhole Type "F"				Manhole Type "G"			
Bars	Length	No.	Spa.	Size	Length	No.	Spa.	Size	Length	No.	Spa.	Size	Length	No.	Spa.	Size
B	8'-0"	10	9"	#5	8'-0"	12	9"	#5	8'-0"	16	9"	#5	8'-0"	19	9"	#5
Bi	6'-9"	12	9"	#5	8'-6"	12	9"	#5	11'-0"	12	9"	#5	13'-3"	12	9"	#5
E	7'-3"	3	2"	#5	7'-3"	3	7"	#5	7'-3"	3	2"	#5	7'-3"	3	2"	#5
H	8'-6"	22	6"	#5	8'-6"	33	6"	#5	8'-6"	41	6"	#5	8'-6"	58	6"	#5
L	3'-0"	16	12"	#5	3'-0"	16	12"	#5	3'-0"	16	12"	#5	3'-0"	16	12"	#5
T	1'-3"	16	6"	#5	3'-0"	16	6"	#5	5'-3"	16	6"	#5	7'-6"	16	6"	#5
V	5'-0"	16	6"	#5	6'-9"	16	6"	#5	9'-0"	16	6"	#5	11'-6"	16	6"	#5
Vi	4'-9"	16	6"	#5	6'-6"	16	6"	#5	8'-9"	16	6"	#5	11'-3"	16	6"	#5



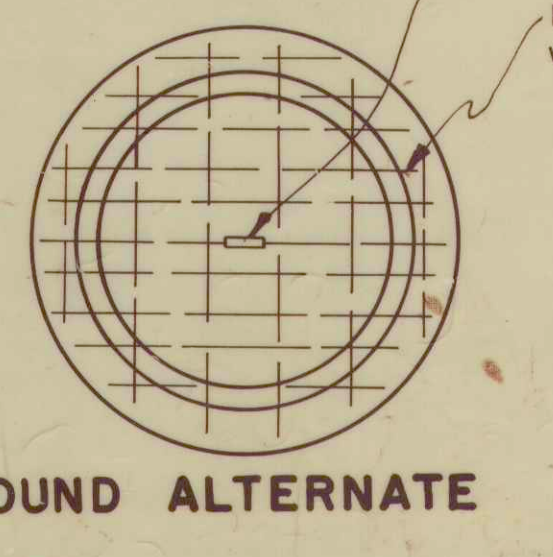
MANHOLE DIMENSIONS		
TYPE	A-I PIPE SIZE DIA (INCH)	B-E D
D	27" to 42"	4'-9"
E	48" to 60"	6'-6"
F	66" to 84"	8'-10"
G	90" to 108"	11'-2"



ROUND

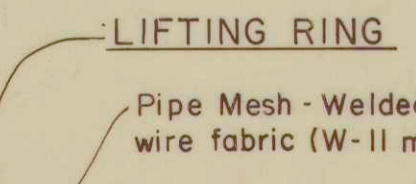
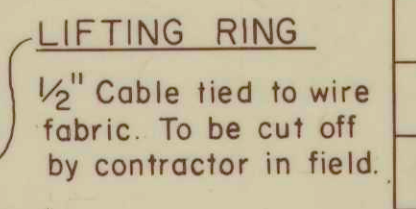


SQUARE



ROUND ALTERNATE

PRECAST BOTTOM SECTION
 SCALE: 3/8" = 1'-0"



SIZE	A	B	C	D	E	F	G	H	J	K
12"	31 1/4"	6"	28 5/8"	12"	13 5/8"	8"	17"	4"	-	-
15"	34"	6"	31 1/2"	15"	16 5/8"	8"	21 1/4"	4"	16"	2"
18"	36 5/8"	6 1/2"	34"	18"	19 5/8"	8"	24 1/2"	4"	20"	2"

DETAIL OF PRECAST CATCHBASIN HOODS
 NOT TO SCALE

MISCELLANEOUS STANDARDS

RECORD DRAWING

REVISIONS	
4-4-66	General Notes
1-1-66	Drop Manhole
6-26-68	Gen. Notes
7-26-68	Gen. Notes
4-1-69	1969 Spec.
1-4-71	1971 Spec.
3-1-71	Precast Bottom
1-2-74	1974 Spec.

SHEET MD3