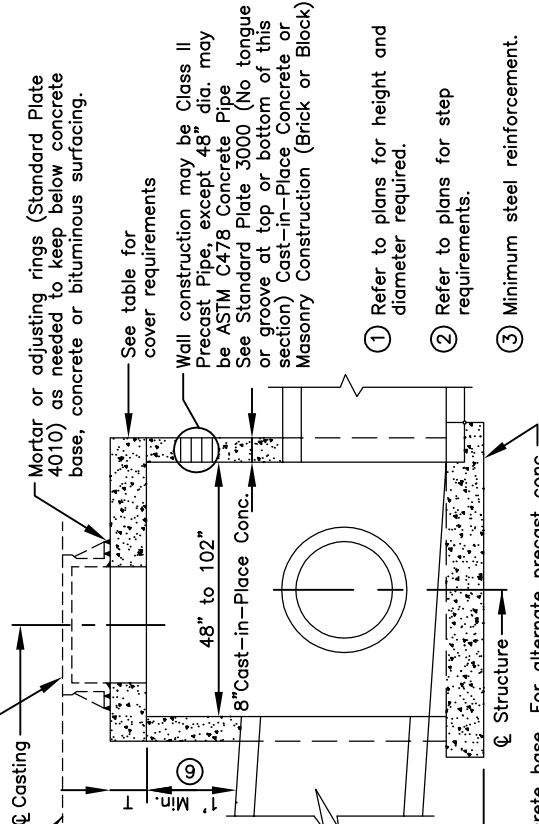
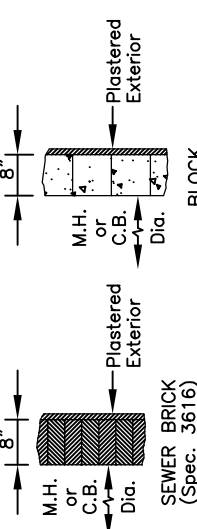


Refer to plans for castings required. Use precast conc. adjusting ring where necessary. See Standard Plate 4010. Casting and precast conc. adjusting rings (when used) shall be set on full mortar beds.



- ① Refer to plans for height and diameter required.
- ② Refer to plans for step requirements.
- ③ Minimum steel reinforcement.
- ④ Equivalent steel areas in wire mesh may be used.
- ⑤ General dimensions for concrete construction apply to brick and concrete masonry unit construction also, except as noted.
- ⑥ 1 ft. minimum for precast, 3 bricks or 1 block minimum for masonry construction.
- ⑦ Reinforcement as per Spec. 3301, Grade 60.

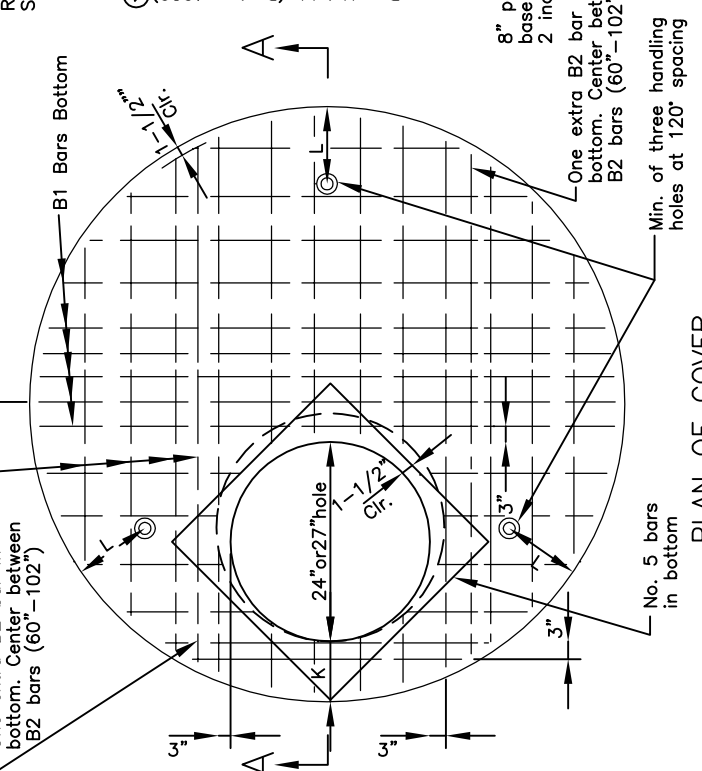
VIEW OF INSTALLATION



MASONRY CONSTRUCTION

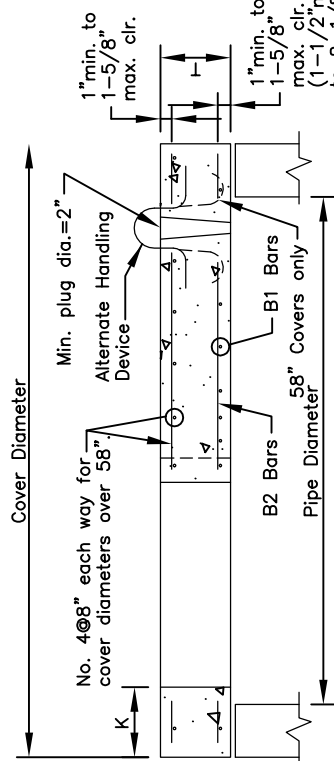
COVER REQUIREMENTS						
C.B. or M.H. DIAMETER	COVER DIAMETER	WEIGHT OF SECTION	T	K	L	B2 BARS
48"	58"	1140 lbs.	6"	6"	8"	No. 5 @ 6"
54"	65"	2000 lbs.	8"	6"	8"	No. 4 @ 6"
60"	72"	2525 lbs.	8"	7"	9"	No. 4 @ 5"
66"	79"	3105 lbs.	8"	7"	9"	No. 4 @ 8"
72"	86"	3740 lbs.	8"	8"	10"	No. 5 @ 7"
78"	93"	4403 lbs.	8"	8"	10"	No. 5 @ 7"
84"	100"	5710 lbs.	8"	9"	11"	No. 5 @ 6"
90"	106"	5840 lbs.	8"	9"	11"	No. 5 @ 6"
96"	113"	6680 lbs.	8"	9"	11"	No. 5 @ 8"
102"	119"	7450 lbs.	8"	9"	11"	No. 5 @ 5"

Two additional B bars center between bottom bars. If hole is located in center of cover space additional B bars shown, equally on either side of hole.



PLAN OF COVER

The No. 4020 shall be permanently marked on the cover



SECTION A-A

Design Note: When structure is used as a Catch Basin, give X-Y coordinates of both C for casting and Q for structure.

APPROVED Feb. 2, 1984
R.H. Sullivan
 Assistant Division Director
 Technical Services

STATE OF MINNESOTA
 DEPARTMENT OF TRANSPORTATION
MANHOLE OR CATCH BASIN
 FOR USE UNDER TRAFFIC LOADS

SPECIFICATION REFERENCE
 2506

STANDARD PLATE NO.
 4020E