

ALLOWABLE CONDUIT SLOPE ENTERING AND EXITING THE MANHOLE SHALL BE A SPECIFIC MAXIMUM AND MINIMUM VALUE AS PER THE FOLLOWING TABLE:

PIPE SIZE	MIN. % SLOPE	MAX. % SLOPE
6"	2.00	2.2
8"	0.70	2.0
10"*	0.50	1.8
12"	0.40	1.6
15"	0.30	1.5
18"	0.24	1.4
21"	0.19	1.4

\*10" CONDUIT NOT APPROVED FOR NEW INSTALLATIONS.

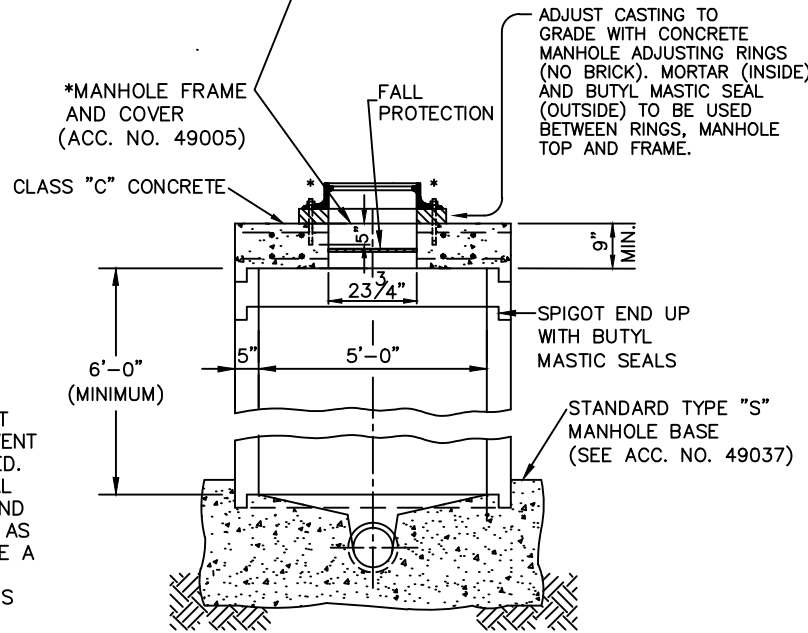
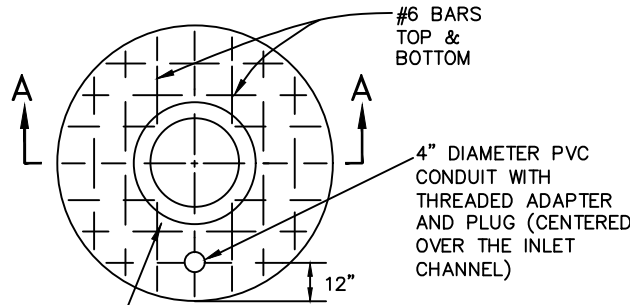
**NOTES:**

NO BENDS, DROP MANHOLES, FLOW JUNCTIONS, ETC., SHALL BE LOCATED WITHIN 25 PIPE DIAMETERS UPSTREAM OF THE CENTER OF THE MANHOLE.

DOWNSTREAM CONDUIT SLOPE SHALL BE GREATER THAN OR EQUAL TO THE UPSTREAM CONDUIT SLOPE WITH NO OBSTRUCTIONS LOCATED WITHIN TEN PIPE DIAMETERS DOWNSTREAM OF THE CENTER OF THE MANHOLE.

**FALL PROTECTION REQUIREMENT:**

A GRATED COVER CAPABLE OF SUPPORTING AT LEAST 1,600 POUNDS AND SECURED TO PREVENT ACCIDENTAL DISPLACEMENT SHALL BE PROVIDED. THE COVER SHALL BE OF A SLOTTED MATERIAL TO ALLOW VISUAL INSPECTION, VENTILATION, AND PASS THROUGH OF SAMPLE & BUBBLE LINES AS NEEDED. ADDITIONALLY, THE COVER MUST HAVE A HATCH OR FLOOR HOLE CENTRALLY LOCATED OVER THE PRIMARY MEASURING DEVICE THAT IS AT LEAST 8", BUT NOT MORE THAN 12"x12", THROUGH WHICH SAMPLES CAN BE TAKEN. THIS REQUIREMENT IS WAIVED FOR MANHOLES LESS THAN 4' IN DEPTH.



SECTION A-A

**NOTES:**

IN PROTECTED NON-TRAFFIC AREAS, THE STANDARD TYPE "C" SAMPLING AND GAUGING MANHOLE MAY BE USED WITH PRIOR APPROVAL.

ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2" BOTH FACES.

JOINTS ON MANHOLE SECTIONS SHALL BE MADE WITH A RUBBER GASKET MEETING THE REQUIREMENT OF ASTM C-443, EXCEPT THAT ONLY "O" RING AND PROFILE GASKETS ARE ACCEPTABLE.

LIFT HOLES IN MANHOLES TO BE SEALED WITH HYDRAULIC CEMENT

1' PRECAST MANHOLE SECTION TO BE SET WHEN MANHOLE TOP IS POURED.

ALL OTHER CHARACTERISTICS ARE SIMILAR TO STANDARD MANHOLES.

ALL CONCRETE SHALL BE CLASS "C".

PRECAST CONCRETE BARRELS SHALL BE IN ACCORDANCE WITH ITEM 706.13 OF THE SPECIFICATIONS.

\*MANHOLE FRAMES SHALL BE SECURELY FASTENED BY (4) 7/8" STAINLESS STEEL ANCHOR BOLTS. DOWEL HOLES SHALL BE IN ACCORDANCE WITH ITEM 510 OF THE SPECIFICATIONS.

THE  
METROPOLITAN SEWER DISTRICT  
OF  
GREATER CINCINNATI  
**STANDARD TYPE "B"  
SAMPLING & GAUGING  
MANHOLE**

NO SCALE DATE: JULY 2021  
APPROVED: *Nya Wall*  
SEWERS CHIEF ENGINEER