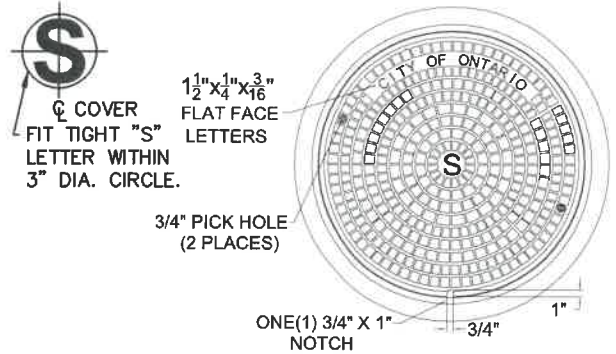


SECTION VIEW

*NON-REINFORCED MANHOLE



PLAN
TOP OF MANHOLE COVER
(TRAFFIC SIDE)

CONSTRUCTION NOTES:

- ① FRAME AND COVER: FOR 48 IN. I.D. MANHOLE, COVER SHALL BE 32 IN. FOR 60 IN. OR LARGER I.D. MANHOLE, COVER SHALL BE 38 IN.
- ② NON-REINFORCED PRE-CAST MANHOLE RINGS SHALL BE CLASS 560-C-3250 PER SECTION 201-1 OF THE SSPWC.
- ③ REINFORCED PRE-CAST MANHOLE RINGS SHALL BE PER ASTM C-478 SPECIFICATIONS.
- ④ THE DEPTH OF THE CHANNEL SHALL BE EQUAL TO THE FULL DIAMETER OF THE PIPE.
- ⑤ 48 IN. I.D. MANHOLE TO BE USED ON SEWERS WITH A DIAMETER OF 18 IN. OR LESS OR A DEPTH OF 12 FT. OR LESS UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
- ⑥ 60 IN. I.D. MANHOLE TO BE USED ON SEWERS WITH A DIAMETER OF 20 IN. OR GREATER OR WITH A DEPTH EXCEEDING 12 FT UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
- ⑦ 72 IN. I.D. MANHOLE TO BE USED ON SEWERS WITH A DIAMETER OF 30 IN. AND GREATER OR IF THE DEPTH IS 25 FT. OR GREATER. WHEN DEPTH IS 25 FT. OR GREATER, STAMPED STRUCTURAL CALCULATIONS REQUIRED FOR MANHOLE BASE AND PIPE BEDDING.
- ⑧ SAFETY LEDGES AT MIDWAY POINT ARE REQUIRED FOR MANHOLES 30 FT. OR GREATER TO INV.
- ⑨ A MIN. 0.2 FT. DROP BETWEEN ALL INLET(S) AND OUTLET(S) IS REQUIRED. IF PIPE SIZES VARY, THE SOFFIT ELEVATIONS OF ALL PIPES SHALL BE THE SAME AS THE SOFFIT ELEVATION OF THE LARGEST PIPE, PROVIDED THE 0.2 FT. MIN. DROP IS MAINTAINED.
- ⑩ FOR MANHOLES LOCATED IN SHOULDER AREAS, UNPAVED ROADS OR LANDSCAPED AREAS, THE FRAME AND COVER SHALL BE SET A MIN. OF 0.1 FT. ABOVE FINISHED GRADE. FOR MANHOLES LOCATED IN UNDEVELOPED AREAS THE FRAME AND COVER SHALL BE SET A MIN. OF 18 IN. ABOVE UNFINISHED GRADE.
- ⑪ **PLASTIC JOINTS** - PREFORMED COLD-APPLIED READY-TO-USE FLEXIBLE PLASTIC JOINT SEALING GASKET OR COMPOUND MUST BE USED WHEN GROUND WATER IS ENCOUNTERED.
MORTAR JOINTS - SUFFICIENT MORTAR SHALL BE APPLIED ACROSS ENTIRE FACE OF JOINT SO THAT WHEN PRECAST UNITS ARE PLACED ON TOP OF ONE ANOTHER, THE MORTAR WILL SQUEEZE OUT BOTH THE INSIDE AND OUTSIDE WALL FACES AROUND FULL CIRCUMFERENCE. JOINTS SHALL BE "POINTED UP" AFTER SETTING PRECAST UNITS EXCLUDING GRADE RINGS.
- ⑫ A 24" LONG PLAIN END STUB WITH SHIELDED TRANSITION COUPLING SHALL BE INSTALLED FROM THE MANHOLE INSIDE WALL AT ALL MANHOLE PENETRATIONS.

NOTES:

1. ALL MANHOLE COVER MARKINGS SHALL BE RAISED, FLAT FACE LETTERS MARKED BY MEANS OF CAST-IN MOLD LETTERING 1-1/2" X 1/4" X 3/16" (HEIGHT X LINE WIDTH X DEPTH).
2. MANHOLE COVER SHALL BE MANUFACTURED WITH THE LETTER "S" IN THE CENTER AND "CITY OF ONTARIO" ON THE COVERS FOR PUBLIC SEWERS ONLY. NO "CITY OF ONTARIO" INSCRIPTION ON PRIVATE SEWERS.
3. ANY INLET LOCATION MUST BE BETWEEN 90° AND 180° FROM THE OUTLET LOCATION.
4. MANHOLES ARE REQUIRED AT ALL JUNCTIONS OF 8 IN. PIPE OR GREATER; CHANGE IN HORIZONTAL DIRECTION; CHANGE IN SLOPE; CHANGE IN MATERIAL, AND MAIN STUBS GREATER THAN 2 FT.

5. MANHOLES SHALL BE SPACED AT A MAX. DISTANCE OF 350 FT. IF INVERT DEPTH IS 30 FT. OR GREATER. MANHOLES SHALL BE SPACED AT 300 FT MAX.
6. ALL FRAMES AND COVERS SHALL BE H-20 TRAFFIC RATED.



APPROVED BY: <i>[Signature]</i> 8-30-23 62809				
KHOI DO, CITY ENGINEER		RCE DATE		
RECOMMENDED: <i>[Signature]</i> 8/24/23 62268				
DENNIS MEJIA, UTILITIES ENG DIVISION MGR		RCE DATE		
REV	DESCRIPTION	BY	APP'D	DATE

CITY OF ONTARIO		STANDARD DRAWING NUMBER 2001
SEWER MANHOLE		