

BEDDING DETAILS ARE INTENDED FOR GENERAL INFORMATION. REFER TO CONTRACT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR PROJECT SPECIFIC REQUIREMENTS.

ROCK/SHALE

1. MATERIAL TO BE PLACED IN TRENCH IN 150mm LAYERS AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD)

2. IN CASE OF OVER-EXCAVATION TRENCH TO BE FILLED TO BOTTOM OF PIPE WITH APPROVED MATERIALS IN 150mm LAYERS AND COMPACTED TO 100% STANDARD PROCTOR DENSITY.

9. IN ROCK EXCAVATION, A MINIMUM OF 150mm GRANULAR MATERIAL BEDDING IS REQUIRED UNDERNEATH THE PIPE (FOR PVC), AND UP TO SPRING LINE FOR CONCRETE PIPE.

PUBLIC WORKS

STANDARD DRAWING

4. BACKFILL ABOVE BEDDING AS REQUIRED PER DESIGN. NATIVE BACKFILL NOT PERMITTED UNDER PAVED PORTIONS.

POOR SOIL CONDITIONS

CONCRETE ENCASEMENT

REV. DATE: MARCH 2017

DRAWN BY

APPROVED BY

2-3-1

STD. DWG. NUMBER

ROCK/SHALE

ROCK/SHALE

GRANULAR BEDDING

CONCRETE CRADLE

5. COVER MATERIAL, NO STONES GREATER THAN 25mm WILL BE PERMITTED.

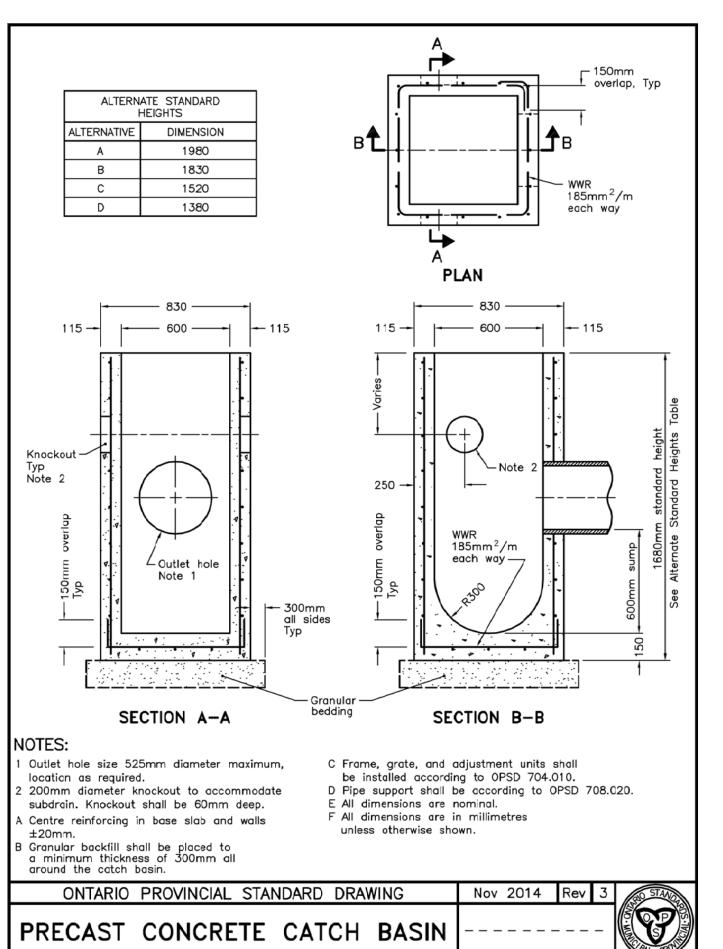
APPROVED SOIL AS PER GEOTECHNICAL REPORT RECOMMENDATIONS

Region of Peel

Working for you

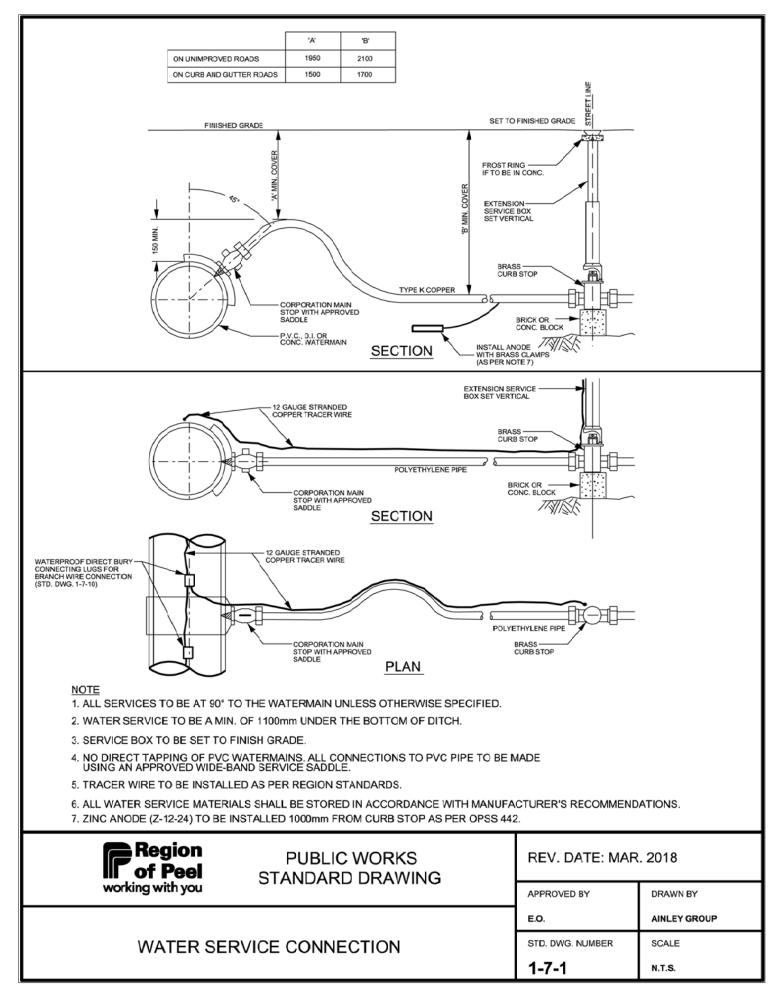
6. MIN. TRENCH WIDTH TO BE O.D. PLUS 450mm, MAX. TRENCH WIDTH TO BE O.D. PLUS 750m

BEDDING DETAILS FOR SEWERS



OPSD 705.010

600x600mm



GENERAL NOTES FOR PRECAST CIRCULAR OR RECTANGULAR MAINTENANCE HOLES: I. PRECAST MAINTENANCE HOLES TO BE SUPPLIED BY A MANUFACTURER CERTIFIED UNDER THE OCPA PLANT PREQUALIFICATION PROGRAM (STD. DWG. 2-0-1) PROVIDE MONOLITHIC BASE SECTIONS FOR ALL MAINTANANCE HOLES UNLESS ALTERNATE APPROVED AND SPECIFIED ON PROJECT SPECIFIC REQUIREMENTS. 3. USE ALTERNATIVE BASE, TOP, PIPE SUPPORT OR CONNECTOR, STEPS, FRAME AND COVER AND/OR BENCHING ONLY WHERE APPROVED AND SPECIFIED ON PROJECT SPECIFIC REQUIREMENTS. 4. PROVIDE BASE EXTENSIONS FOR UPLIFT PREVENTION ON PRECAST MAINTENANCE HOLES 1200mm DIAMETER OR GREATER WHERE REQUIRED. REFER TO CONTRACT DRAWINGS AND SPECIFICATIONS AND GEOTECHNICAL REPORT FOR PROJECT SPECIFIC REQUIREMENTS. 5. SPECIAL BASE DESIGN REQUIRED FOR DEPTHS GREATER THAN 9.0 m. 6. FOR 1500mm DIAMETER AND LARGER SEWERS, PRECAST MAINTENANCE HOLE TEES ARE ACCEPTABLE 7. APPROVED ADJUSTMENT UNITS AND APPROVED FRAME AND COVER SYSTEMS TO BE INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS (STD. DWGS. SECTION 2-6). 8. FILL LIFTING HOLES WITH 1:3 NON SHRINK MORTAR MIX. 9. FROST STRAPS SHALL BE INSTALLED AT ALL RISER, TOP AND BASE SECTION JOINTS ON ALL PRECAST MAINTENANCE HOLES TO A MAXIMUM DEPTH OF 3.0m FROM FINISHED GRADE. INTERNAL FROST STRAP TO BE TYPICAL (STD. DWG. 2-5-23). EXTERNAL FROST STRAPS PERMITTED WITH APPROVAL FROM PROJECT ENGINEER. ADDITIONAL CORROSION PROTECTION REQUIRED AS PER MANUFACTURER'S RECOMMENDATIONS. 10. VENT PIPES SHALL BE REQUIRED AT EVERY THIRD MAINTENANCE HOLE ON SECTIONS OF SANITARY SEWERS WITH WATERTIGHT COVERS IN EASEMENTS, INSTALLATIONS WITHIN FLOOD PLAINS OR AREAS WITH HIGH LEVELS OF HYDROGEN SULFIDE. REFER TO PROJECT SPECIFIC REQUIREMENTS (STD. DWG. 2-5-22). 1. WATERPROOF MEMBRANE SHALL BE APPLIED EXTERNALLY AROUND ALL RISER, GRADE ADJUSTMENT UNITS, TOP AND BASE SECTION JOINTS ON ALL MAINTENANCE HOLES. WATERPROOF MEMBRANE TO BE "MEL-ROL" BY W.R. MEADOWS OF MILTON ONTARIO OR APPROVED EQUAL. EXTEND COMPLETELY AROUND ALL RISER SECTION JOINTS WITH A MINIMUM 300mm WIDE STRIP. WATERPROOF ABOVE GRADE SURFACES WITH "CEM-KOTE FLEX ST" BY W.R. MEADOWS OF MILTON ONTARIO OR APPROVED EQUAL (STD. DWG. 2-5-2, 2-5-25). APPLY DETAIL STRIP ON ALL INSIDE OR OUTSIDE CORNER JOINTS BENEATH WATERPROOF MEMBRANE, C/W PRIMER AND SURFACE PREPARATION AS PER MANUFACTURER'S SPECIFICATIONS. DETAIL STRIP TO BE "MEL-ROL DETAIL STRIP" BY W.R. MEADOWS OF MILTON ONTARIO OR APPROVED EQUAL (STD. DWG. 2-5-25). 12. FRP SAFETY PLATFORMS BY ACCESS INDUSTRIAL OF MISSISSAUGA ONTARIO, OR ALUMINUM SAFETY PLATFORMS, WHERE REQUIRED, TO BE INSTALLED IN MAINTENANCE HOLES 1200mm DIAMETER OR GREATER (STD DWGS. SECTION 2-6). PLATFORMS TO BE ANCHORED USING 316 SS HILTI KWIK BOLTS OR ENGINEER APPROVED EQUAL. 13. FRP LADDERS BY ACCESS INDUSTRIAL OF MISSISSAUGA ONTARIO, OR ALUMINUM LADDERS, TO BE INSTALLED IN ALL MAINTENANCE HOLES 1200mm DIAMETER OR GREATER (STD DWGS. SECTION 2-6). LADDERS TO BE ANCHORED USING 316 SS HILTI KWIK BOLTS OR ENGINEER APPROVED EQUAL.

14. BENCHING TO BE CONSTRUCTED TO THE OBVERT OF THE PIPE IN ALL CASES. 15MPa CONCRETE UNLESS OTHERWISE INDICATED (STD DWG. 2-5-20). BENCHING AS PER OPSS PROV 1350, MATERIAL SPECIFICATION FOR CONCRETE MATERIALS AND PRODUCTION.

15. FOR PVC PIPE (SEE NOTE 19), USE A FLEXIBLE WATERTIGHT CONNECTOR WITH GRANULAR BEDDING (STD. DWG. 2-5-15). 16. FOR RIGID PIPE (SEE NOTE 19), SUPPORT FROM MAINTENANCE HOLE TO FIRST JOINT WITH MIN. 20 MPa. CONCRETE CRADLE (STD. DWG 2-5-16).

17. IF MONOLITHIC RISER OR PRECAST RISER SECTIONS ARE USED, THEN THE LADDER (OR FIRST STEP) CAN BE ANCHORED INTO THE SECTION TO MEET THE MAX. 300mm DISTANCE FROM SURFACE. IF COMPOSITE SECTIONS ARE USED, THEN FRP LADDER MUST ANCHOR INTO TOP OF CONE OR TOP OF BARREL SECTION AND EXTEND TO WITHIN 300mm OF SURFACE.

18. ALL CHAMBERS LOCATED OUTSIDE OF R.O.W. OR WITHIN PARK SETTINGS MUST HAVE A 1500mm HIGH SANITARY CHAMBER MARKING POST (GREEN IN COLOUR), WITHIN 600mm OF CHAMBER COVER (STD. DWG. 2-5-24). MARKERS SHALL NOT BE INSTALLED IF ERECTION RESULTS IN AN IMPEDIMENT TO PEDESTRIAN OR VEHICULAR TRAFFIC, NOT INCLUSIVE OF MAINTENANCE EQUIPMENT.

19. FOR CONNECTION OF FLEXIBLE OR RIGID PIPE TO SANITARY CHAMBERS, A FLEXIBLE WATERIGHT RUBBER CONNECTOR SHALL BE USED. THE CONNECTOR DESIGN TO MATCH SPECIFIC PIPE MATERIAL AND DIAMETER. CONNECTOR SHALL BE FACTORY CAST WHERE POSSIBLE. CONNECTOR MAY BE INSTALLED IN A FACTORY PRODUCED OPENING THAT MEETS CONNECTOR MANUFACTURER'S SPECIFICATIONS. PVC CONNECTION ADAPTERS WITH SANDED ENDS WILL BE USED IN CONJUNCTION WITH FLEXIBLE RUBBER BOOT TO FACILITATE GROUTING OF ANNULAR SPACE INSIDE OF CHAMBER (STD. DWG. 2-5-15, 2-5-16, 2-5-17) 20. ALL INTERNAL HORIZONTAL SURFACES ON UNDERSIDE OF PRECAST FLAT CAPS OR TRANSITION SECTIONS TO BE PROVIDED WITH MIC PROTECTION (CEM-KOTE FLEX CR OR APPROVED EQUAL).

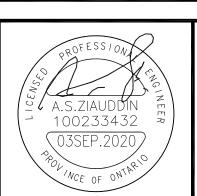
21. ALL CHAMBERS LOCATED OUTSIDE OF R.O.W. OR WITHIN PARK SETTINGS SHALL BE CONSTRUCTED SO THAT COVER SURFACE IS 150mm (MIN.) ABOVE FINISHED GRADE UNLESS OTHERWISE APPROVED BY PROJECT ENGINEER, OR IF THIS CREATES AN IMPEDIMENT TO PEDESTRIAN OR VEHICULAR TRAFFIC, NOT INCLUSIVE OF MAINTENANCE EQUIPMENT.

GENERAL NOTES TO BE READ IN CONJUNCTION WITH ALL STANDARD DRAWINGS PERTAINING TO PRECAST CIRCULAR MAINTENANCE HOLES.

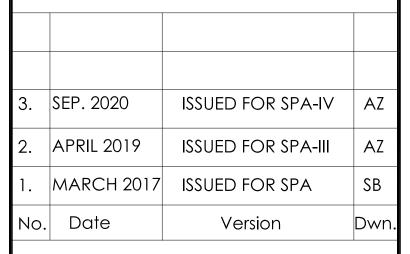
PUBLIC WORKS REV. DATE: MARCH 2017 Region of Peel STANDARD DRAWING Working for you APPROVED BY DRAWN BY NEW SANITARY SEWER CONSTRUCTION AINLEY GROUP **GENERAL NOTES FOR PRECAST** STD. DWG. NUMBER SCALE MAINTENANCE HOLES 2-5-1



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PROJECT:

GAS STATION AT 12544 HIGHWAY 50 BOLTON, ON.

DRAWING TITLE:

SPA 2015-006 R2 15-08

STANDARD DETAILS

SITE PLAN FILE NUMBER: SC 2003 - 0035 DRAWN BY: AZ DATE: 01 FEB. 2019

CHECKED BY: AZ PROJECT NO.:

SCALE: N.T.S DRAWING NO .:

13-40

