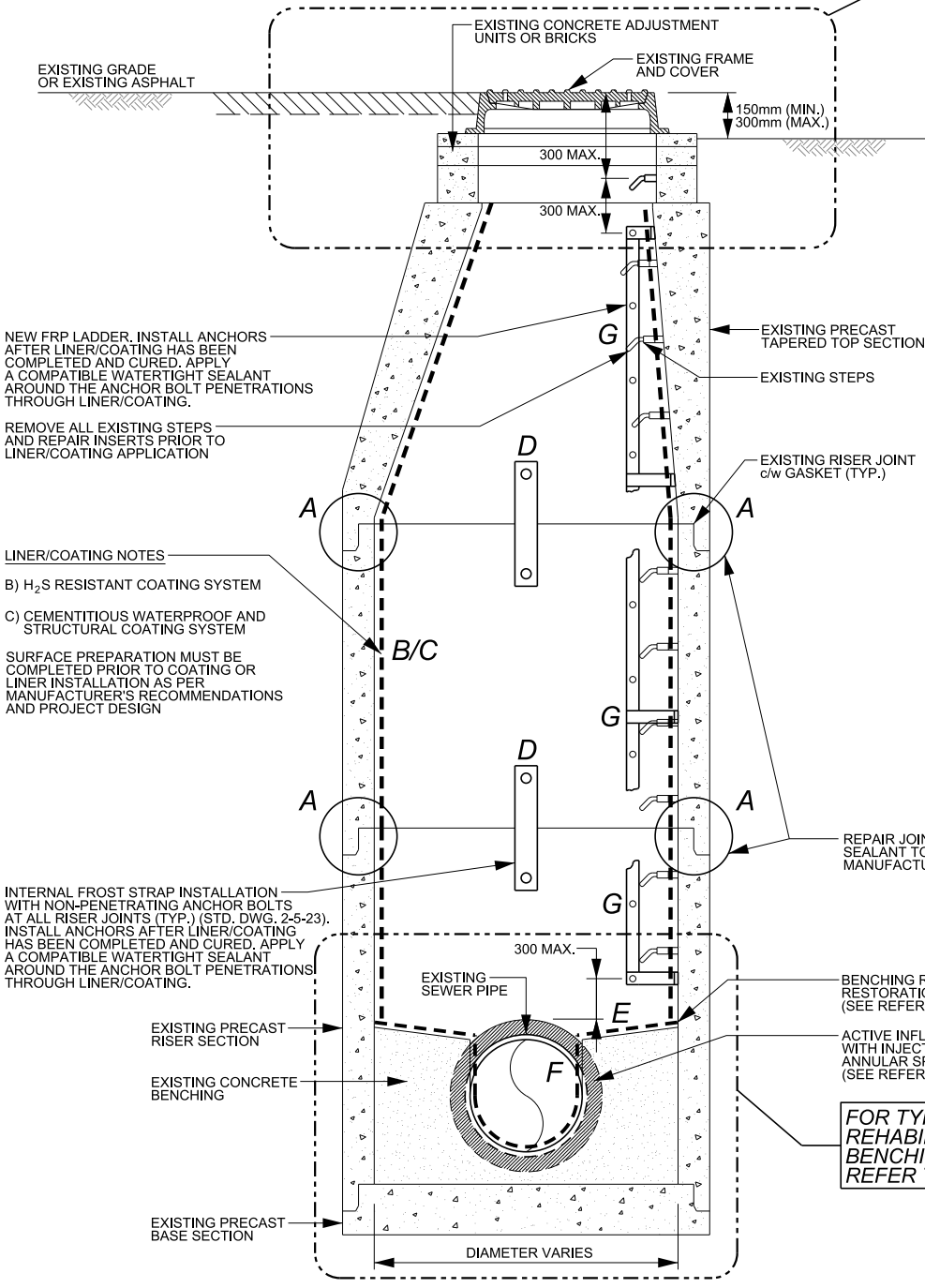


OPTIONS SHOWN ON THIS DRAWING ARE INTENDED FOR REHABILITATION OF INTERNAL COMPONENTS OF EXISTING MAINTENANCE HOLES WITHIN EITHER THE EXISTING R.O.W. OR WITHIN FLOOD PLAINS OR EASEMENTS. FOR DIFFERENT ALTERNATIVES TO THE TOP SECTION REHABILITATION WITHIN FLOOD PLAINS OR EASEMENTS REFER TO TYPICAL TOP SECTION AND FRAME AND COVER REHABILITATION OPTION DRAWINGS.

FOR TYPICAL TOP SECTION AND FRAME AND COVER REHABILITATION OPTIONS REFER TO STD. DWGS. 2-8-4 TO 2-8-9



### OPTIONAL REHABILITATION METHODS

- A. INJECTION OF HYDROPHOBIC GROUT AT RISER JOINTS:**
  - HYPERFLEX OR SEALGUARD II BY S1E (OR APPROVED EQUAL)
- B. H<sub>2</sub>S RESISTANT COATING SYSTEM:**
  - CEM-KOTE FLEX CR (OR APPROVED EQUAL)
- C. CEMENTITIOUS WATERPROOF AND STRUCTURAL COATING SYSTEM:**
  - PERMACAST MS-10000 (OR APPROVED EQUAL)
- D. INTERNAL FROST STRAPS:**
  - STD. DWG. 2-5-23
- E. BENCHING REPAIR AND/OR REPLACEMENT:**
  - STD. DWG. 2-8-10
- F. PIPE CONNECTION GROUTING REPAIR AND SEALING:**
  - CN2000 (OR APPROVED EQUAL)
- G. STEP REMOVAL AND REPLACEMENT WITH FRP ACCESS LADDER:**
  - ACCESS INDUSTRIAL OF MISSISSAUGA (OR APPROVED EQUAL)

REFER TO PROJECT SPECIFIC REQUIREMENTS FOR SELECTION OF ALL APPLICABLE METHODS

REPAIR JOINT OR CRACKS WITH INJECTED HYDROPHOBIC GROUT SEALANT TO ELIMINATE ACTIVE INFLOW AND INFILTRATION AS PER MANUFACTURER'S RECOMMENDATIONS.

BENCHING REPAIR AND SURFACE RESTORATION AS DETAILED (SEE REFERENCE NOTE BELOW)

ACTIVE INFLOW AND INFILTRATION ELIMINATED WITH INJECTED HYDROPHOBIC GROUT SEALANT. ANNULAR SPACES TO BE BACK GROUTED. (SEE REFERENCE NOTE BELOW)

FOR TYPICAL MAINTENANCE HOLE REHABILITATION OPTIONS FOR BENCHING AND PIPE CONNECTION DETAILS REFER TO STD. DWG. 2-8-10

NEW FRP LADDER, INSTALL ANCHORS AFTER LINER/COATING HAS BEEN COMPLETED AND CURED. APPLY A COMPATIBLE WATERTIGHT SEALANT AROUND THE ANCHOR BOLT PENETRATIONS THROUGH LINER/COATING.

REMOVE ALL EXISTING STEPS AND REPAIR INSERTS PRIOR TO LINER/COATING APPLICATION

**LINER/COATING NOTES**

B) H<sub>2</sub>S RESISTANT COATING SYSTEM

C) CEMENTITIOUS WATERPROOF AND STRUCTURAL COATING SYSTEM

SURFACE PREPARATION MUST BE COMPLETED PRIOR TO COATING OR LINER INSTALLATION AS PER MANUFACTURER'S RECOMMENDATIONS AND PROJECT DESIGN

INTERNAL FROST STRAP INSTALLATION WITH NON-PENETRATING ANCHOR BOLTS AT ALL RISER JOINTS (TYP.) (STD. DWG. 2-5-23). INSTALL ANCHORS AFTER LINER/COATING HAS BEEN COMPLETED AND CURED. APPLY A COMPATIBLE WATERTIGHT SEALANT AROUND THE ANCHOR BOLT PENETRATIONS THROUGH LINER/COATING.

**NOTE**

1. REFER TO STANDARD DRAWING 2-8-1 FOR GENERAL NOTES PERTAINING TO REHABILITATION OF MAINTENANCE HOLES.

NEW CONSTRUCTION		REHABILITATION	
FULL EXCAVATION	PARTIAL EXCAVATION	NO EXCAVATION	
INTERNAL		EXTERNAL	
ROW	FLOOD PLAIN	EASEMENT	
VI	H2S	SECURITY	

REV. DATE: NOVEMBER 2019

REVISION NUMBER: 1 FOR REVISION TRACKING REFER TO STD. DWG. 2-0-2

APPROVED BY DRAWN BY

A.P. AINLEY GROUP

STD. DWG. NUMBER SCALE

**2-8-3** N.T.S.



## PUBLIC WORKS STANDARD DRAWING

# REHABILITATION TYPICAL EXISTING PRECAST MAINTENANCE HOLE LINER OR COATING REPAIR OPTION - NO EXCAVATION