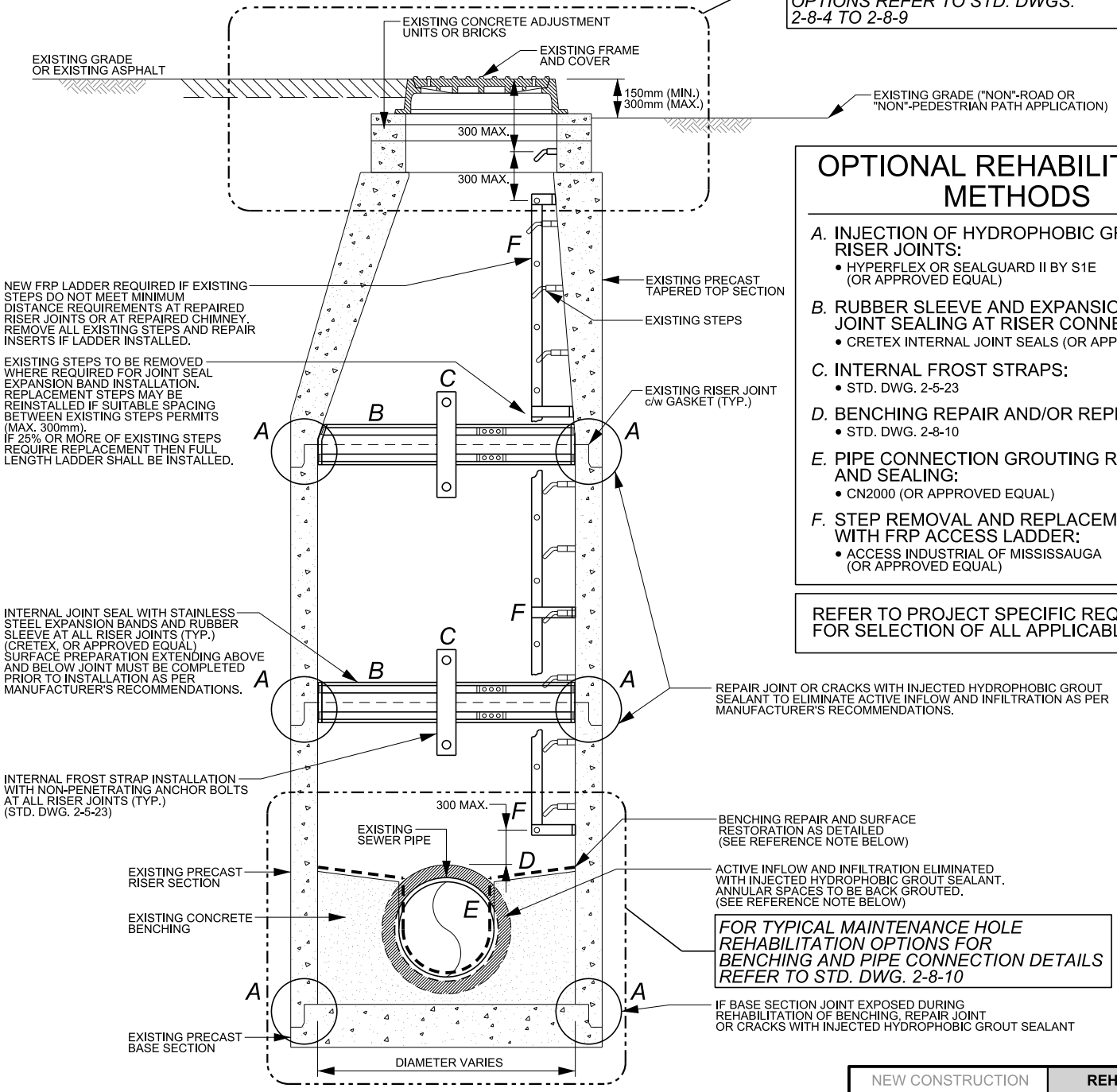


OPTIONS SHOWN ON THIS DRAWING ARE INTENDED FOR REHABILITATION OF INTERNAL COMPONENTS OF EXISTING MAINTENANCE HOLES WITHIN EITHER THE EXISTING R.O.W. OR WITHIN FLOOD PLAINS OR EASEMENTS. FOR DIFFERENT ALTERNATIVES TO THE TOP SECTION REHABILITATION WITHIN FLOOD PLAINS OR EASEMENTS REFER TO TYPICAL TOP 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. RUBBER SLEEVE AND EXPANSION BAND JOINT SEALING AT RISER CONNECTIONS:**
 - CRETEX INTERNAL JOINT SEALS (OR APPROVED EQUAL)
- C. INTERNAL FROST STRAPS:**
 - STD. DWG. 2-5-23
- D. BENCHING REPAIR AND/OR REPLACEMENT:**
 - STD. DWG. 2-8-10
- E. PIPE CONNECTION GROUTING REPAIR AND SEALING:**
 - CN2000 (OR APPROVED EQUAL)
- F. 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

NEW FRP LADDER REQUIRED IF EXISTING STEPS DO NOT MEET MINIMUM DISTANCE REQUIREMENTS AT REPAIRED RISER JOINTS OR AT REPAIRED CHIMNEY. REMOVE ALL EXISTING STEPS AND REPAIR INSERTS IF LADDER INSTALLED.

EXISTING STEPS TO BE REMOVED WHERE REQUIRED FOR JOINT SEAL EXPANSION BAND INSTALLATION. REPLACEMENT STEPS MAY BE REINSTALLED IF SUITABLE SPACING BETWEEN EXISTING STEPS PERMITS (MAX. 300mm). IF 25% OR MORE OF EXISTING STEPS REQUIRE REPLACEMENT THEN FULL LENGTH LADDER SHALL BE INSTALLED.

INTERNAL JOINT SEAL WITH STAINLESS STEEL EXPANSION BANDS AND RUBBER SLEEVE AT ALL RISER JOINTS (TYP.) (CRETEX, OR APPROVED EQUAL) SURFACE PREPARATION EXTENDING ABOVE AND BELOW JOINT MUST BE COMPLETED PRIOR TO INSTALLATION AS PER MANUFACTURER'S RECOMMENDATIONS.

INTERNAL FROST STRAP INSTALLATION WITH NON-PENETRATING ANCHOR BOLTS AT ALL RISER JOINTS (TYP.) (STD. DWG. 2-5-23)

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

IF BASE SECTION JOINT EXPOSED DURING REHABILITATION OF BENCHING, REPAIR JOINT OR CRACKS WITH INJECTED HYDROPHOBIC GROUT SEALANT

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	
II	H2S	SECURITY	



PUBLIC WORKS STANDARD DRAWING

REHABILITATION TYPICAL EXISTING PRECAST MAINTENANCE HOLE JOINT REPAIR OPTION - NO EXCAVATION

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

2-8-2 N.T.S.