

1. SOIL DESCRIPTION: VERY FINE SANDS, SANDY CLAYS, CLAYS. SOILS WITH TYPICAL BEARING STRENGTH OF 100 TO 199 KPa

PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	250	250	200	200
152	400	400	250	300
203	550	550	300	450
254	650	650	400	500
305	800	800	450	650
406	1050	1050	600	850

2. SOIL DESCRIPTION: SILTY SAND GRAVELS OR CLAYEY SAND GRAVEL MIXTURES, MODERATE AMOUNT OF FINES. SOILS WITH TYPICAL BEARING STRENGTH OF 200 TO 299 KPa

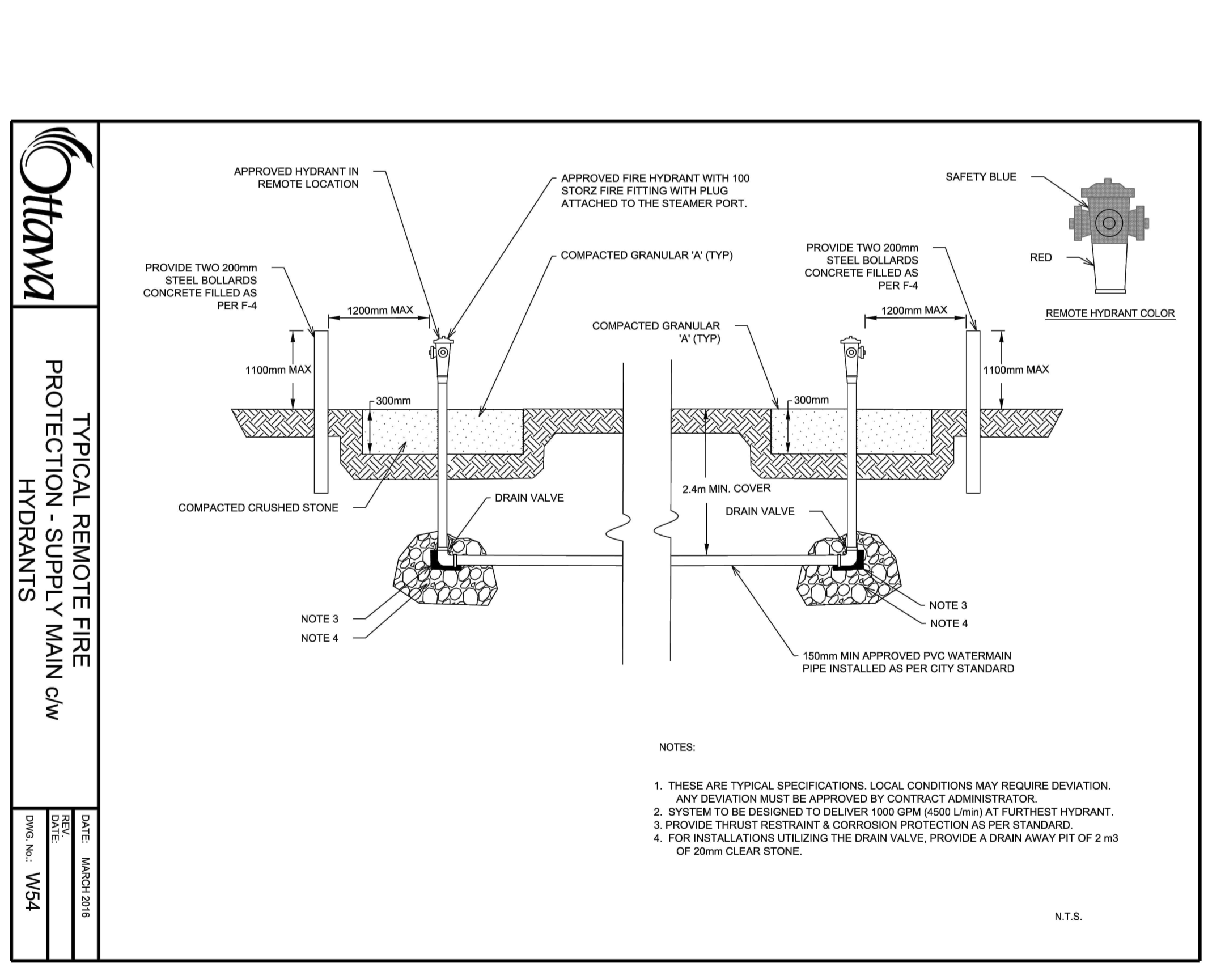
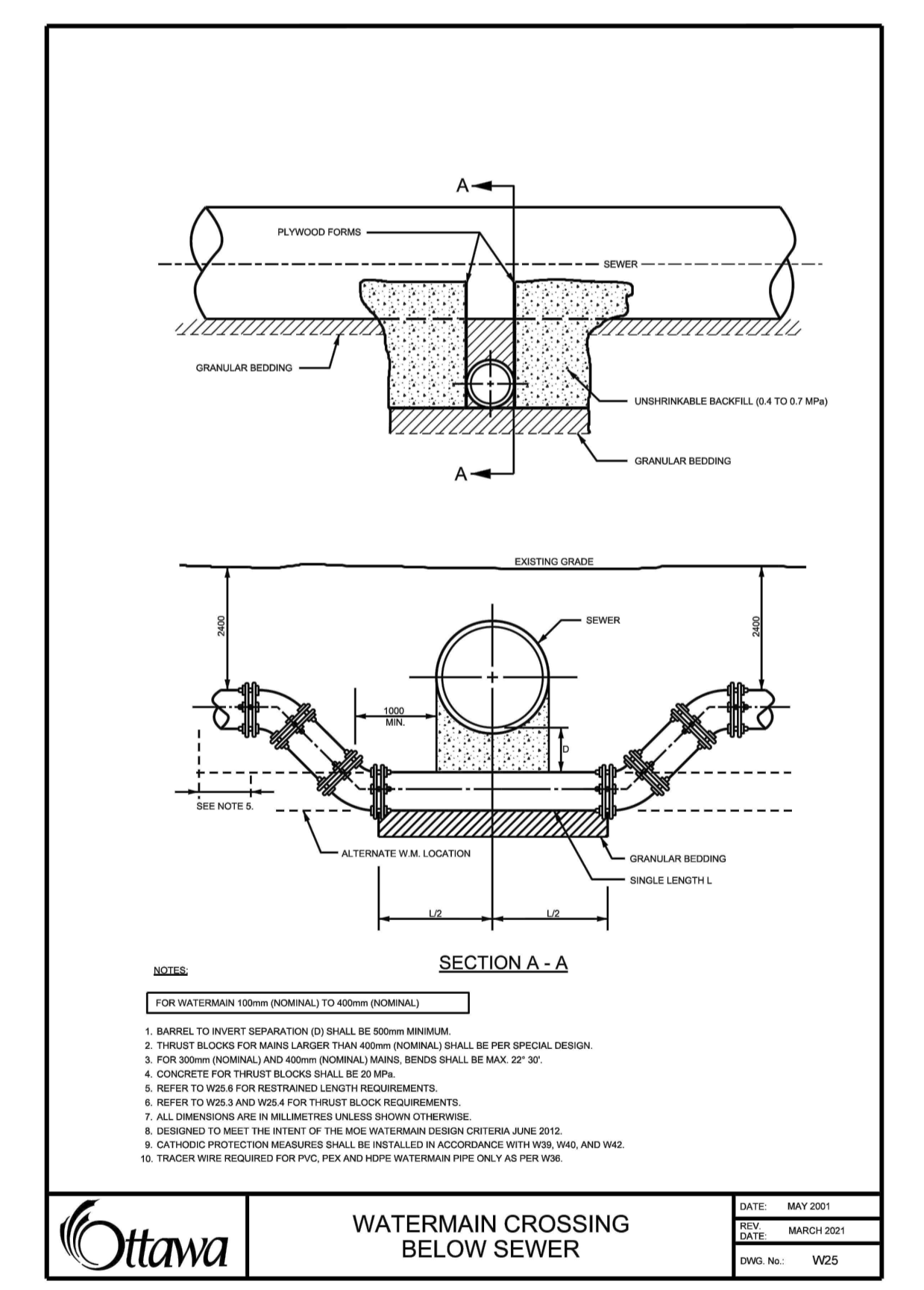
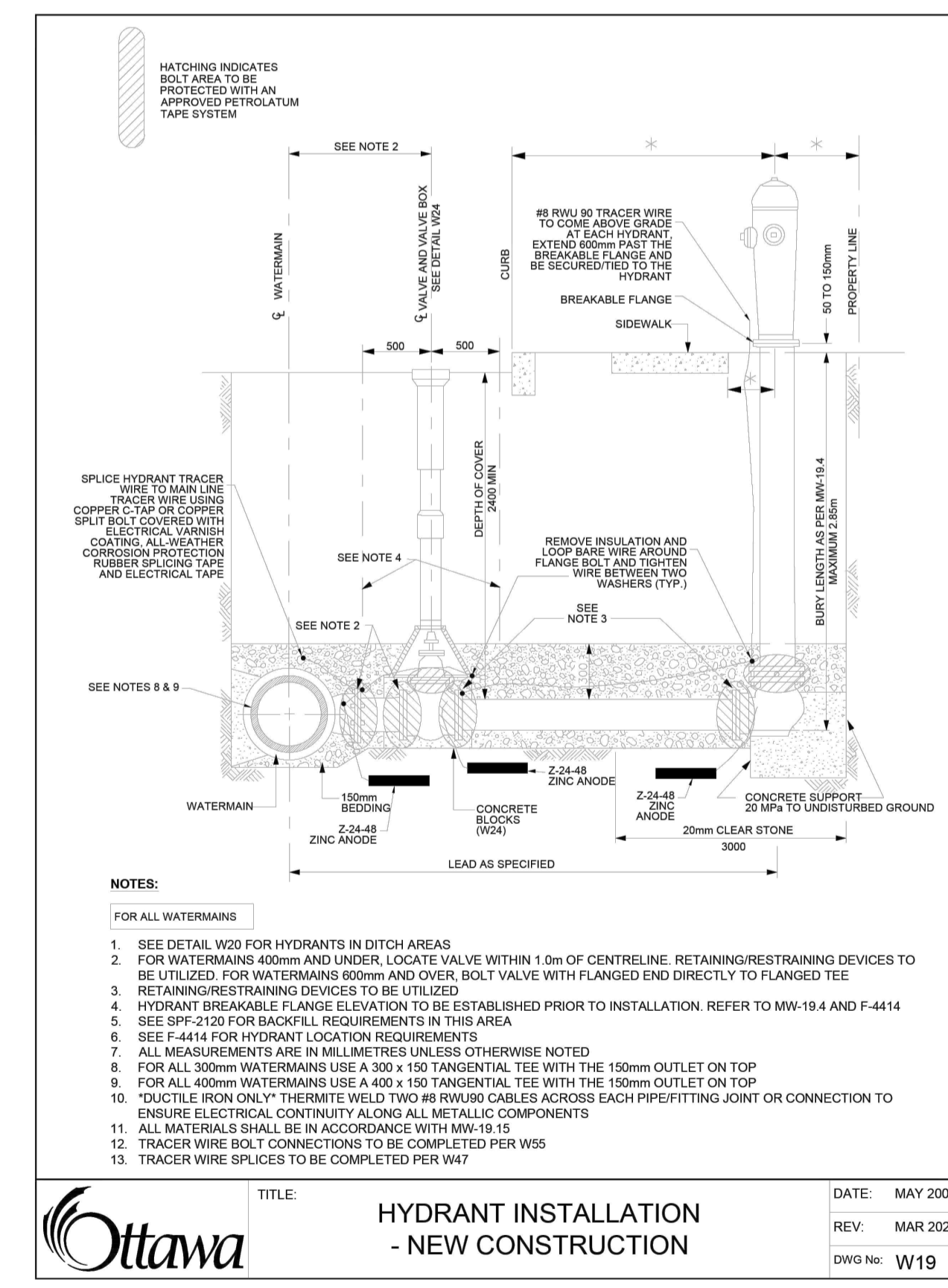
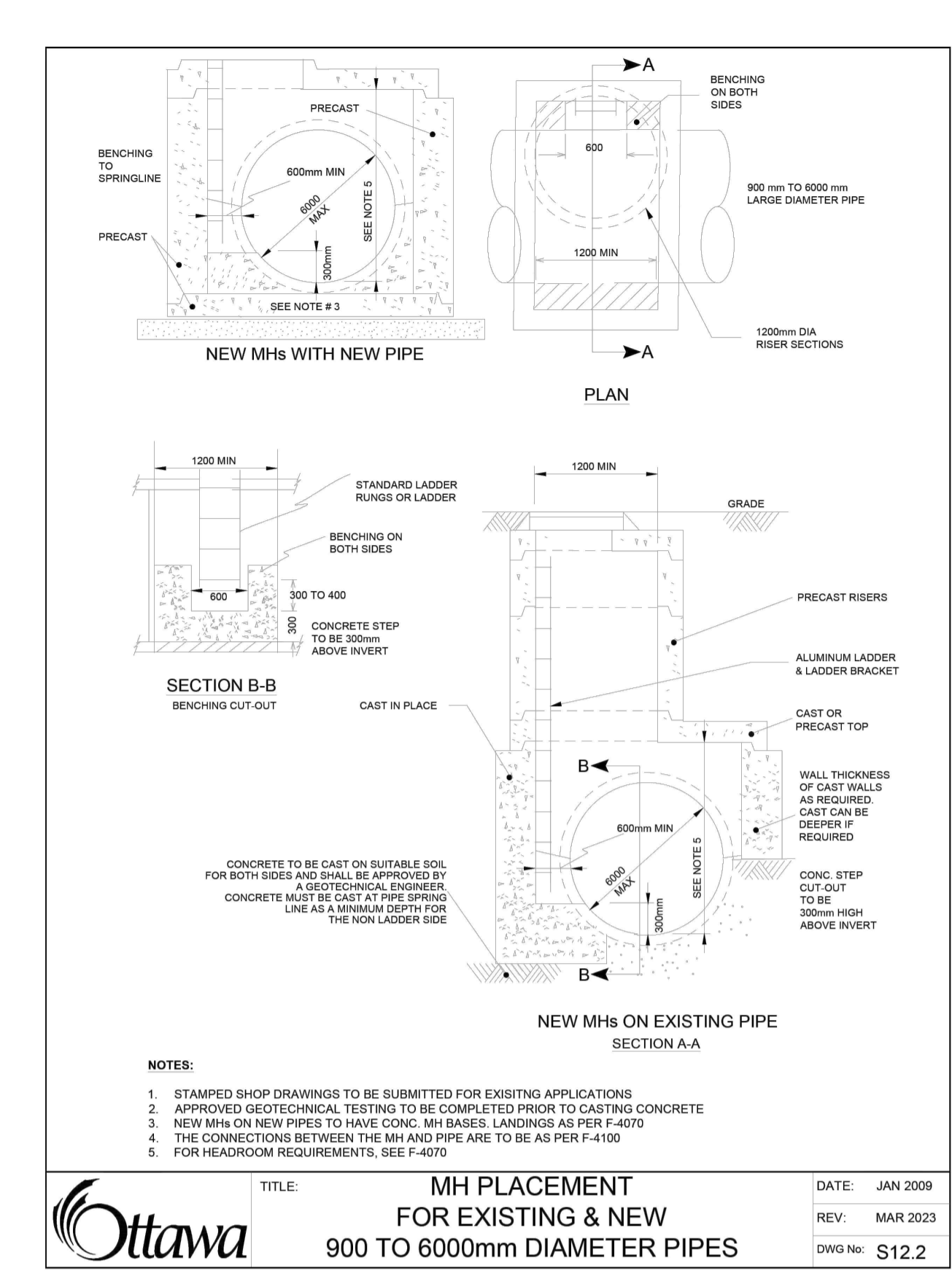
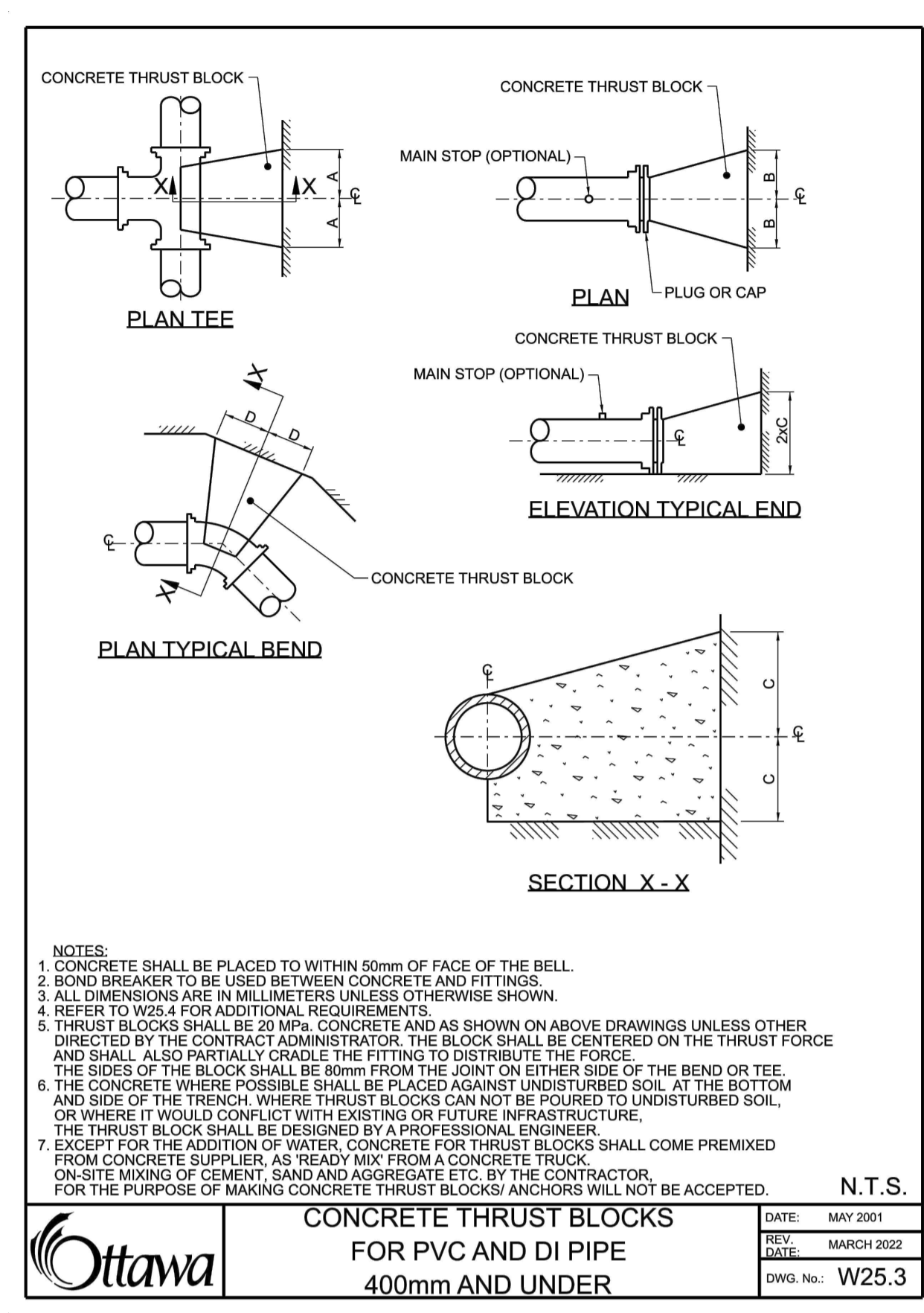
PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	200	200	150	150
152	250	250	200	200
203	350	350	250	270
254	450	450	300	350
305	500	500	350	400
406	750	750	400	600

3. SOIL DESCRIPTION: SANDS, GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES. SOILS WITH TYPICAL BEARING STRENGTH OF 300 KPa AND OVER

PIPE DIAMETER	DIMENSION NOTED ON W25.3			
	A	B	C	D
102	150	150	150	150
152	200	200	200	200
203	300	300	200	230
254	400	400	250	270
305	450	450	300	300
406	650	650	350	450

NOTES:

- THE ABOVE THRUST BLOCK DIMENSIONS MEET OR EXCEED THE WATERMAIN DESIGN CRITERIA FOR FUTURE ALTERATIONS AUTHORIZED UNDER A DRINKING WATER WORKS PERMIT.
- THE ASSUMPTIONS MADE FOR THE ABOVE CALCULATIONS ARE AS FOLLOWS:
 - MAXIMUM OPERATING PRESSURE OF 100 psi
 - MAXIMUM SURGE PRESSURE WITH A FLOW VELOCITY CHANGE OF 0.8 m/s OF 115 psi (7.9 bar) FOR CLASS 52 DI AND FOR PVC MAX. SURGE IS 35 psi
- THE TABLES APPLY TO BOTH DUCTILE IRON AND PVC. WHERE ONE LENGTH EXCEEDED THE OTHER THE LONGER LENGTH WAS USED.
- DIMENSIONS MAY BE ADJUSTED 30 LMM AS THE BEARING SURFACE AREA OF THE THRUST BLOCK IS NOT REDUCED.
- TO BE USED IN CONJUNCTION WITH W25.3.



HYDRANT INSTALLATION - NEW CONSTRUCTION

DATE: MAY 2001
REV: MAR 2023
DWG No: W19

WATERMAIN CROSSING BELOW SEWER

DATE: MAY 2001
REV: MARCH 2021
DWG No: W25

TYPICAL REMOTE FIRE HYDRANT - SUPPLY MAIN c/w

DATE: MARCH 2018
REV: MARCH 2022
DWG No: W54

MH PLACEMENT FOR EXISTING & NEW 900 TO 6000mm DIAMETER PIPES

DATE: JAN 2009
REV: MAR 2023
DWG No: S12.2

DRAWING No.	DESCRIPTION	REV	DESCRIPTION	VERIFIED BY	APPROVED BY	DATE
AC	FOR PERMITTING			E. AMELI	M. SHAHRAKI	2025-06-19
AB	FOR COMMENTS			E. AMELI	M. SHAHRAKI	2025-06-06
AA	FOR COMMENTS			E. AMELI	M. SHAHRAKI	2025-03-03

PROJECT: SOUTH MARCH BESS 2556 MARCHURST ROAD, OTTAWA

TITLE: CIVIL STORMWATER AND WATER NETWORK DETAILS

CLIENT: Evolgen by Brookfield Renewable

DESIGNED BY: E. AMELI
VERIFIED BY: E. AMELI
SCALE: N/A
DRAWING No.: 7154023-100000-41-D50-0001

DRAFTED BY: S. PARK
APPROVED BY: M. SHAHRAKI P. ENG EGBC No. 45275
DATE: 2025-02-20

SHEET: 01
SIZE: A1
REV: AC

FOR PERMITTING