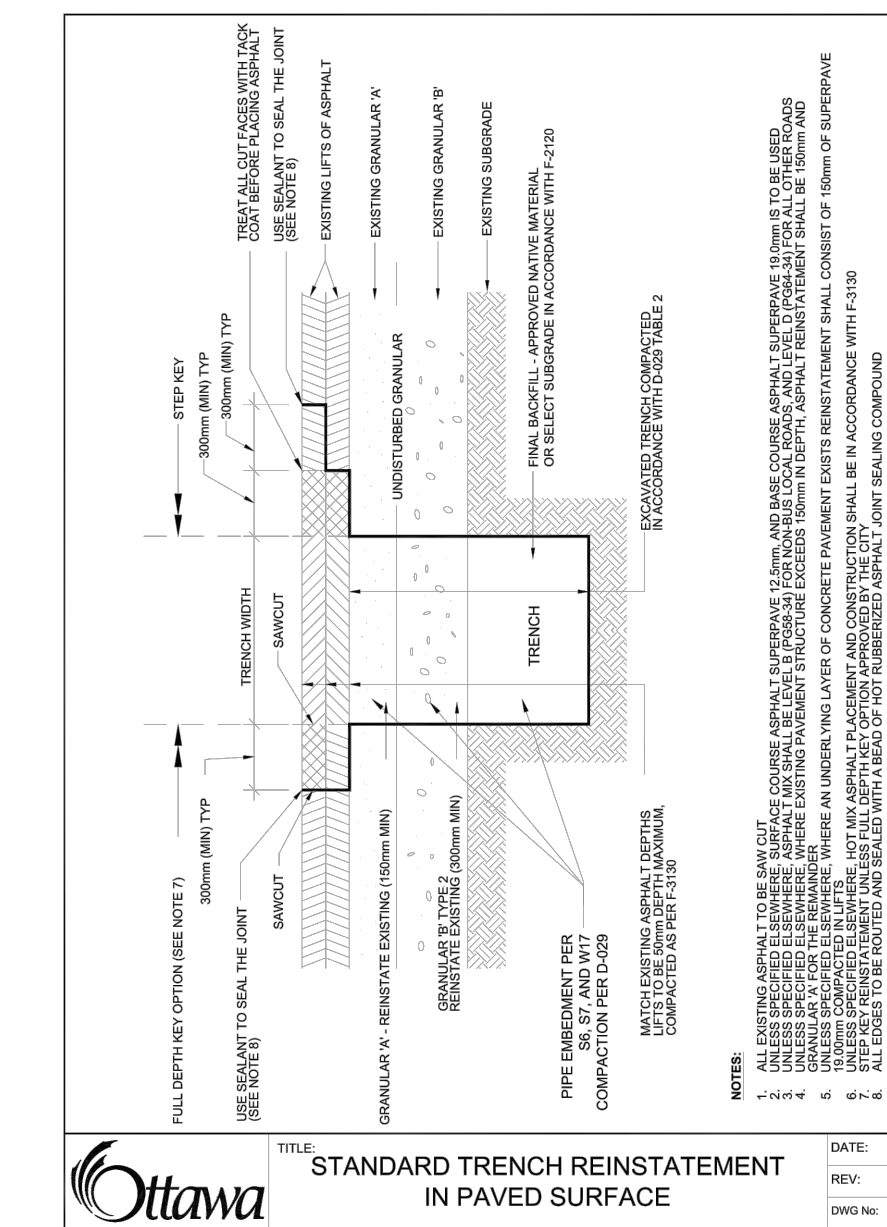
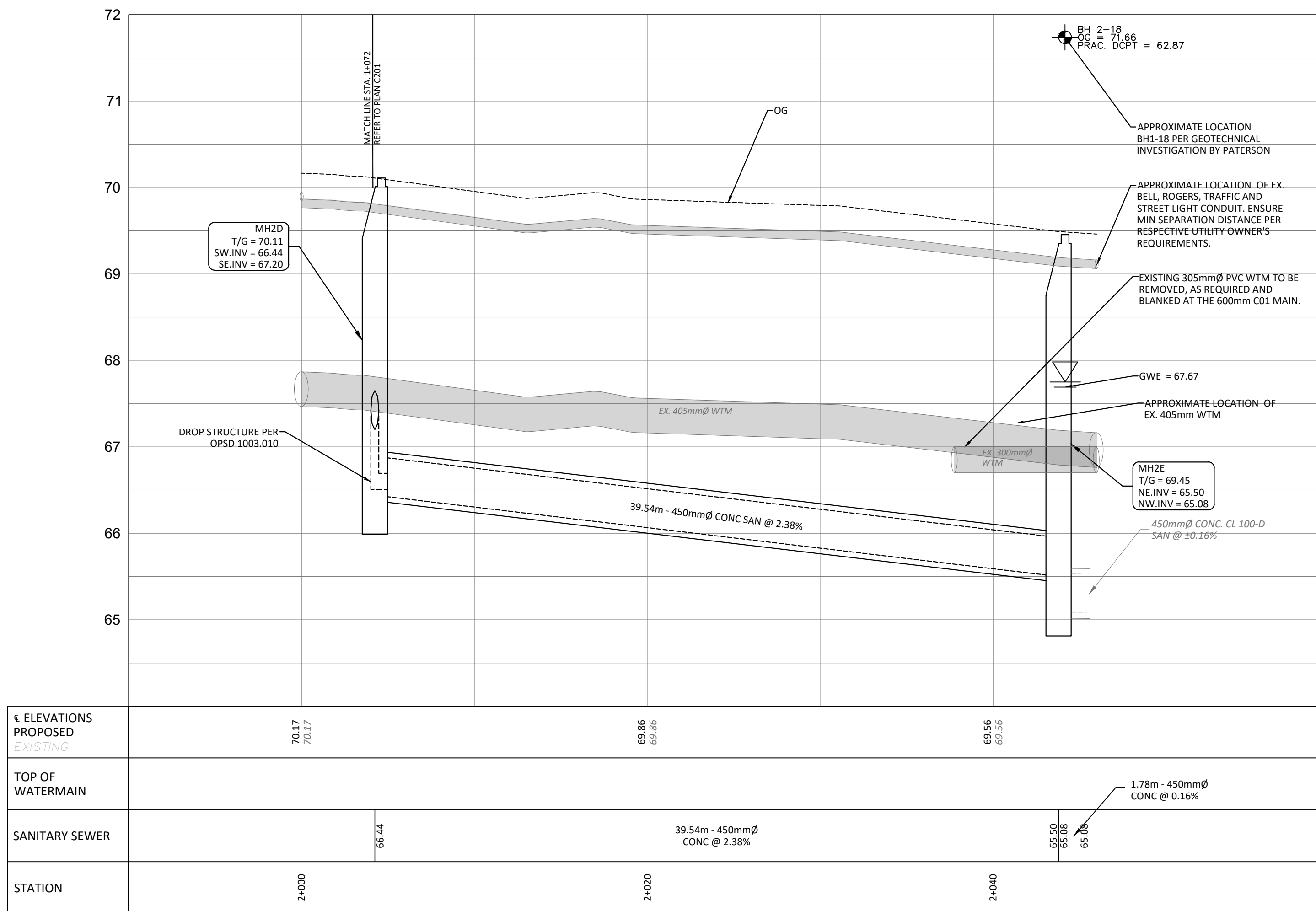
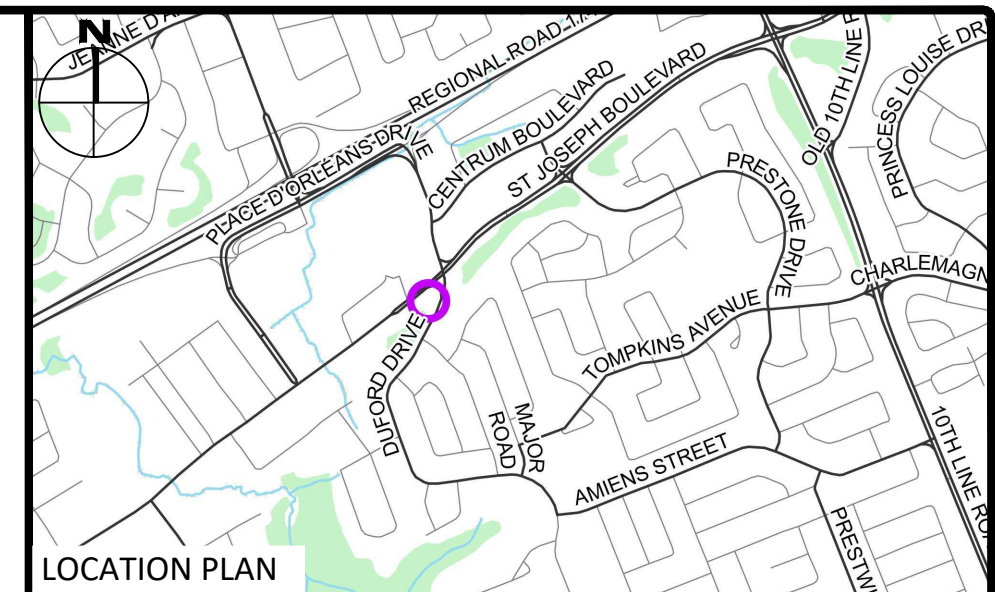


SAN STRUCTURE TABLE			
NAME	RIM ELEV.	INVERT IN	INVERT OUT
MH2A	75.79	5873.520	N72.940
MH2B	75.25	572.777	N69.578
MH2C	71.16	568.620	NW67.788
MH2D	70.11	562.200	SW66.440
MH2E	69.45	N65.500	NW65.080

**MUNICIPAL SEWER/WATERMAIN RELOCATION NOTES:**

- CONSTRUCT ALL SEWERS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.
- SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
  - BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 98% STANDARD PROCTOR DRY DENSITY (SPMDD). CLEAR STONE BEDDING SHALL NOT BE PERMITTED. BEDDING THICKNESS TO BE INCREASED TO 300mm IF PLACED ON BEDROCK.
  - SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 40mm OF COMPACTED GRANULAR "B" TYPE 1, BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE 1.
  - TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 1.8 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS. THE TRENCH BACKFILL SHOULD BE PLACED IN MAXIMUM 225mm THICK LOOSE LIFTS AND COMPACTED TO 98% OF THE MATERIAL'S SPMDD.
- THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION PHASING AND LAYOUT. A PHASING PLAN SHALL BE ESTABLISHED FOR THE REALIGNMENT OF THE PROPOSED WATER AND SANITARY SERVICES TO ENSURE CONTINUAL SERVICE FOR THE OFF-SITE FLOWS.
- SEWERS AND CONNECTIONS 200mm-375mm Ø TO BE PVC SDR-35. SEWER CONNECTIONS 450mm Ø AND LARGER TO BE CONCRETE. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE. CONCRETE SEWER CLASS IN ACCORDANCE WITH OPSD 807.010 & 807.030, AS APPLICABLE.
- CONTRACTOR TO CCTV SANITARY SEWER UPSTREAM AND DOWNSTREAM OF PROPOSED TIE IN LOCATIONS PRIOR TO AND AFTER PROPOSED WORKS.
- PROPOSED SANITARY MAINTENANCE STRUCTURES TO BE BENCHED PER OPSD 701.021.
- SEWERS AND WATERMANS LOCATED PARALLEL TO EACH OTHER SHOULD BE CONSTRUCTED IN SEPARATE TRENCHES. WHEN IT IS IMPOSSIBLE OR NOT PRACTICAL TO MAINTAIN VERTICAL AND/OR HORIZONTAL SEPARATION PER MEC STANDARDS, ALL SEWERS SHOULD BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, PRESSURE TESTED IN PLACE AT A PRESSURE OF 350 kPa (50 psi) WITHOUT LEAKAGE USING THE TESTING METHODOLOGY IN ONTARIO PROVINCIAL STANDARD SPECIFICATION 701 (OPS 701) OF THE OPS.
- WHERE SANITARY SEWERS ARE 0.6M BELOW GROUNDWATER TABLE, SANITARY MAINTENANCE HOLES SHALL BE EXTERNALLY WRAPPED WITH WATERPROOF MEMBRANE PLACED EXTERNALLY AROUND ALL PRECAST JOINTS, INCLUDING JOINTS BELOW THE MAINTENANCE HOLE FRAME AND COVER, WITH A MINIMUM 300MM WIDE STRIP.
- THE LOCATION OF EXISTING UTILITIES ARE TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO ONE, BELL, ROGERS AND THE CITY.
- CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS.
- WATERMANS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMANS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER CITY DETAIL W22.
- IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
- THERMAL INSULATION OF WATERMANS AT OPEN STRUCTURES AS PER CITY DETAIL W23.
- VALVES TO BE OPERATED BY CITY STAFF ONLY.
- NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CITY TO BE PRESENT FOR WATERMAIN CONNECTION, CONNECTION, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY CONTRACTOR.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S) REQUIRED. THIS SHALL BE COMPLETED IN THE PRESENCE OF A DESIGNATED MUNICIPAL WATER OPERATOR AND THE SELECTED CONTRACTOR SHALL PROVE TO THE SATISFACTION OF THE CITY THAT THEY ARE COMPETENT TO PERFORM THE WORKS PRIOR TO INITIATING CONSTRUCTION.
- CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
- ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT.
- ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.
- AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W23-2 FOR CROSSING UNDER SEWER. THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.



Revisions	Date	
4	ISSUED FOR SPC & MUNICIPAL CONSENT	SEPT 05, 2024
3	ISSUED FOR FOUNDATION PERMIT	AUG 09, 2024
2	ISSUED FOR REVIEW	JUL 31, 2024
1	ISSUED FOR SITE PLAN CONTROL	MAR 07, 2024

Check and verify all dimensions before proceeding with the work. Do not scale drawings.

SCALE 1 : 200  
0 10 20 Metres

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SEPT 05/2024  
PROVINCE OF ONTARIO

Client: **THEBERGE DEVELOPMENTS LTD**  
1600 LAPERRIERE AVE  
OTTAWA, ON K1Z 8P5

Project: **3030 ST. JOSEPH BOULEVARD**

OTTAWA ON

Drawing Title: **PLAN & PROFILE STA. 2+000 TO 2+040**

Scale: 1:200 Project Number: CCO-24-0142

Drawn By: RRR

Checked By: AM

Designed By: RRR

Drawing Number: C202