

**LEGEND**

CBM 3	PROPOSED CATCHBASIN MANHOLE & SEWER	EXISTING SANITARY MANHOLE & SEWER
STM 102	PROPOSED STORM MANHOLE & SEWER (W/ WATERTIGHT COVER)	EXISTING STORM MANHOLE & SEWER
STM 120	PROPOSED STORM MANHOLE & SEWER (W/ WATERTIGHT COVER)	EXISTING STORM MANHOLE & SEWER
CB 100	PROPOSED CATCHBASIN AND LEAD WITH 100mm SUBRAIN (PER GEOTECH REPORT)	EXISTING CATCHBASIN AND LEAD
---	PROPOSED BARRIER CURB	EXISTING HYDRANT
---	PROPOSED DEPRESSION CURB	EXISTING CITY PAVEMENT
---	PROPOSED INLET CONTROL DEVICE	EXISTING HYDRANT
---	THERMAL INSULATION FOR SHALLOW SEWERS	EXISTING HYDRANT
X	REMOVALS	EXISTING LIGHT STANDARD
---	EXISTING TREE TO REMAIN	EXISTING FENCE
---		EXISTING OVERHEAD UTILITY LINES

- GENERAL NOTES:**
- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
  - DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
  - OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
  - BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
  - REMOVE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
  - REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EVACUATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
  - ALL ELEVATIONS ARE GEODETIC.
  - REFER TO THE GEOTECHNICAL INVESTIGATION AND HYDROLOGICAL ASSESSMENT - 600 MARCH ROAD - (REPORT NO. 1269873-RPT-1), PREPARED BY GHD ON JUNE 16, 2023, FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
  - REFER TO ARCHITECTS AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSCAPE AREAS AND DIMENSIONS.
  - REFER TO STORMWATER MANAGEMENT REPORT (2023-143) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
  - PROVIDE LINE-PARKING PAINTING.
  - REFER TO THE GEOTECHNICAL INVESTIGATION AND HYDROLOGICAL ASSESSMENT - 600 MARCH ROAD - (REPORT NO. 1269873-RPT-1), PREPARED BY GHD ON JUNE 16, 2023, FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
  - REFER TO ARCHITECTS AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSCAPE AREAS AND DIMENSIONS.
  - REFER TO STORMWATER MANAGEMENT REPORT (2023-143) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
  - REFER TO THE GEOTECHNICAL INVESTIGATION AND HYDROLOGICAL ASSESSMENT - 600 MARCH ROAD - (REPORT NO. 1269873-RPT-1), PREPARED BY GHD ON JUNE 16, 2023, FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
  - REFER TO ARCHITECTS AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSCAPE AREAS AND DIMENSIONS.
  - REFER TO STORMWATER MANAGEMENT REPORT (2023-143) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.

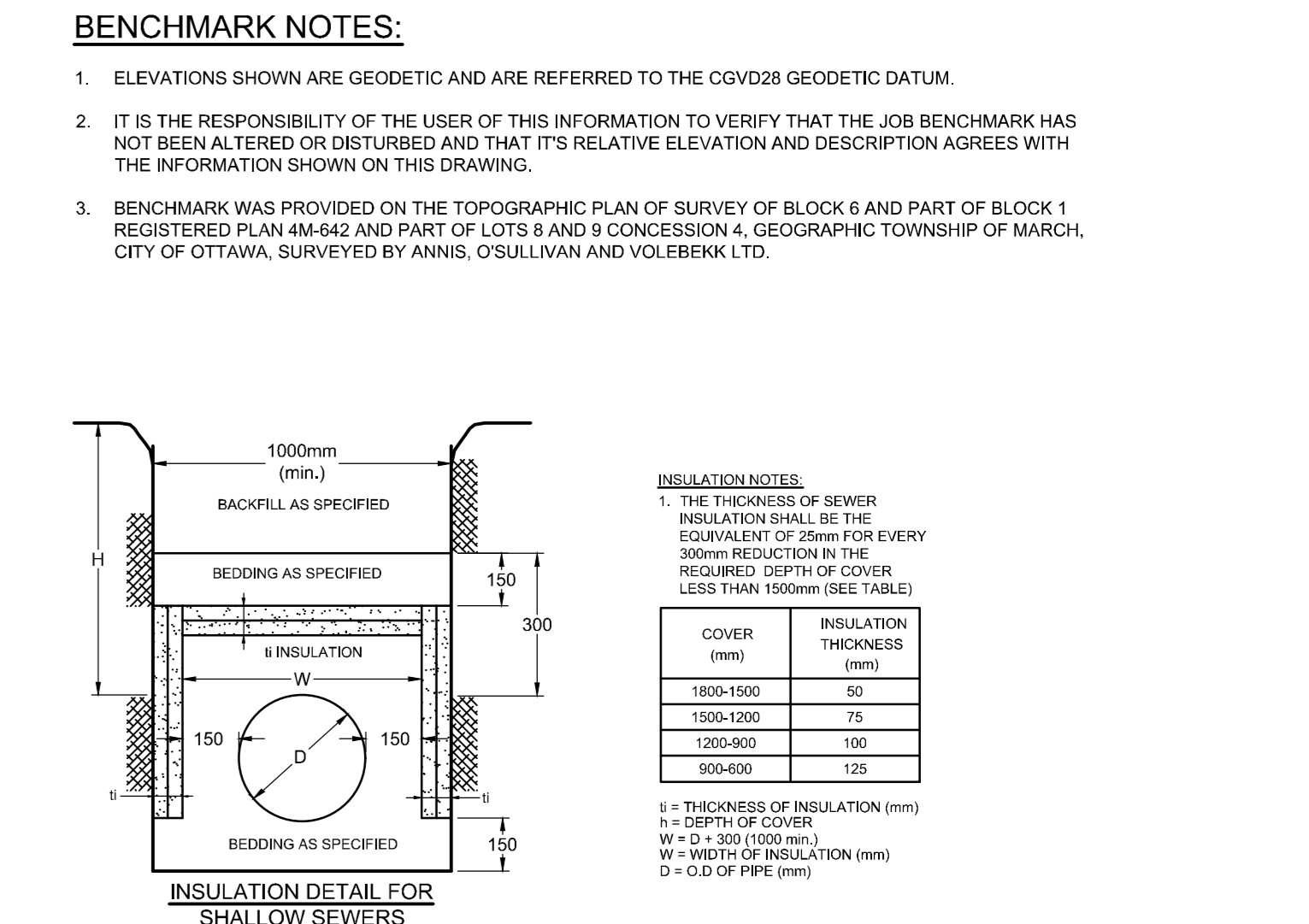
**SEWER NOTES:**

- SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- SPECIFICATIONS:
 

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
STORM SANITARY MANHOLE (1200mm)	705.010	OPSD
CE, FRAME & COVER	S19	CITY OF OTTAWA
STORM SANITARY MH FRAME & COVER	401.010 - TYPE "A"	CITY OF OTTAWA
WATERTIGHT MH FRAME AND COVER	401.000	CITY OF OTTAWA
SEWER TRENCH	SS	CITY OF OTTAWA
STORM SEWER	CONC 50.0	
CATCHBASIN LEAD	PVC DR 35	
- ALL STORM AND SANITARY SERVICE LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARDS DETAILS S14 AND S14.1 OR S14.2.
- INSULATE ALL PIPES (SANITARY) THAT HAVE LESS THAN 1.8m COVER WITH H-40 INSULATION PER INSULATION DETAIL FOR SHALLOW SEWERS. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
- SEWERS ARE TO BE CONSTRUCTED TO 1.5m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
- PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
- FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KORN-INS, SEAL, POSITIVE SEAL AND DURASAL). THE CONCRETE CHAMBER FOR THE PIPE CAN BE ELIMINATED.
- THE OWNER SHALL REQUIRE THAT THE SITE SERVICES CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSD 410.17.2, 410.17.3, 410.17.4 AND 410.17.5. THE TESTING IS TO BE COMPLETED ON ALL SANITARY SEWERS TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- ALL STORM MANHOLES AND CATCHBASIN MANHOLES ARE TO HAVE 300mm SLUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO BE 600mm SLUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS TO HAVE 3.0m OF FILTER-COARSE LOG WRAPPED 100mm P/C PERFORATED SUBRAIN IN AN UPGRADIENT DIRECTION AND ALL ALONG THE PERIMETER OF THE CATCHBASIN LOT. PER GEOTECHNICAL RECOMMENDATIONS.
- ALL CATCHBASIN, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICD'S INSTALLED WITHIN THEM ARE TO HAVE 600mm SLUMPS.
- ALL KEEPING TILE CONNECTIONS TO BE MADE TO THE PROPOSED STORM SEWER SYSTEM DOWNSTREAM OF ANY INLET CONTROL DEVICES.
- CONTRACTOR TO TELEVISION (CCTV) ALL PROPOSED SEWERS, 200mm OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

**BENCHMARK NOTES:**

- ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CVD23 GEODETIC DATUM.
- IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
- BENCHMARK WAS PROVIDED ON THE TOPOGRAPHIC PLAN OF SURVEY OF BLOCK 6 AND PART OF BLOCK 1 REGISTERED PLAN 4M-642 AND PART OF LOTS 2 AND 3 CONVEYANCE 4, GEODETIC TOWNSHIP OF MARCH, CITY OF OTTAWA, SURVEYED BY ANNIS, OSULLIVAN AND VOLEBEK LTD.



**INLET CONTROL DEVICE DATA TABLE: AREA A-1 (INCL. AREAS OS-1 & OS-2)**

DESIGN EVENT	ICD TYPE (STRUCTURE)	OUTLET DIAMETER (mm)	DIAMETER OF OUTLET PIPE (mm)	PEAK FLOW (L/S)	DESIGN HEAD (m)	WATER STORAGE (L)	VOLUME STORAGE (L)	AVAILABLE STORAGE (L)
T2.5R	110mm DIA. CHISEL FLUID TYPE ICD	110	110	8.2	2.5	81.7	152.4	1008.0
L2.5R	110mm DIA. CHISEL FLUID TYPE ICD	110	110	8.2	2.5	81.7	152.4	1008.0

**INLET CONTROL DEVICE DATA TABLE: AREA A-2 (POND)**

DESIGN EVENT	ICD TYPE (STRUCTURE)	OUTLET DIAMETER (mm)	DIAMETER OF OUTLET PIPE (mm)	PEAK FLOW (L/S)	DESIGN HEAD (m)	WATER STORAGE (L)	VOLUME STORAGE (L)	AVAILABLE STORAGE (L)
T2.5R	110mm DIA. CHISEL FLUID TYPE ICD	110	110	8.2	2.5	81.7	152.4	1008.0
L2.5R	110mm DIA. CHISEL FLUID TYPE ICD	110	110	8.2	2.5	81.7	152.4	1008.0

**NOTE:**  
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

**OWNER INFORMATION**  
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**CIVIL ENGINEER/LANDSCAPE ARCHITECT**  
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PHONE: (613) 254-9643

No.	REVISION	DATE	BY
3.	REVISED AS PER CITY COMMENTS	FEB 14/24	FST
2.	ISSUED FOR SPC APPROVAL	NOV 7/23	FST
1.	PRELIMINARY PLANS ISSUED TO CITY	OCT 29/23	FST

SCALE	DATE	DESIGNER	CHECKED	APPROVED
1:400		ZA	FST	
		ZA	FST	
		FST	FST	

**FOR REVIEW ONLY**

Professional Engineer  
F.S. TRAUWETTE  
10034/1299  
February 14, 2024

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LOCATION  
CITY OF OTTAWA  
600 MARCH ROAD - NOKIA PARKING LOT EXPANSION

DRAWING NAME  
GENERAL PLAN OF SERVICES

PROJECT NO.  
121334

REV.  
REV #3

DRAWING NO.  
121334-GP

PLAN #1907

007-12-23-0108