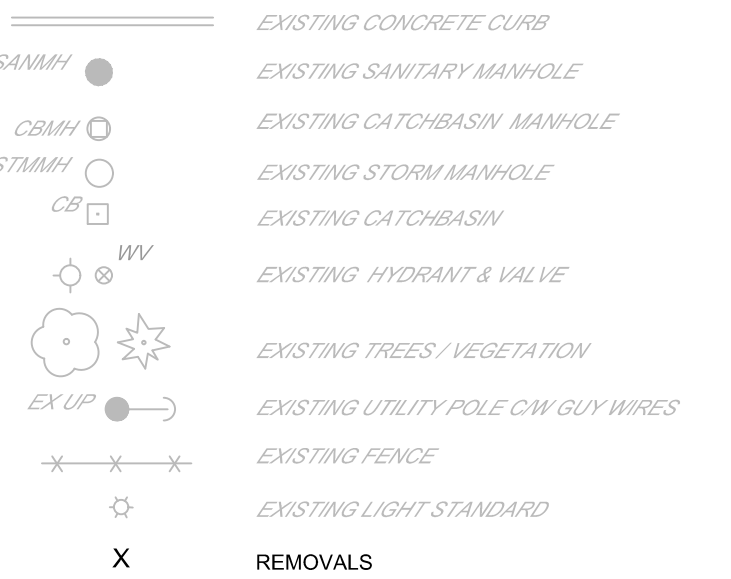
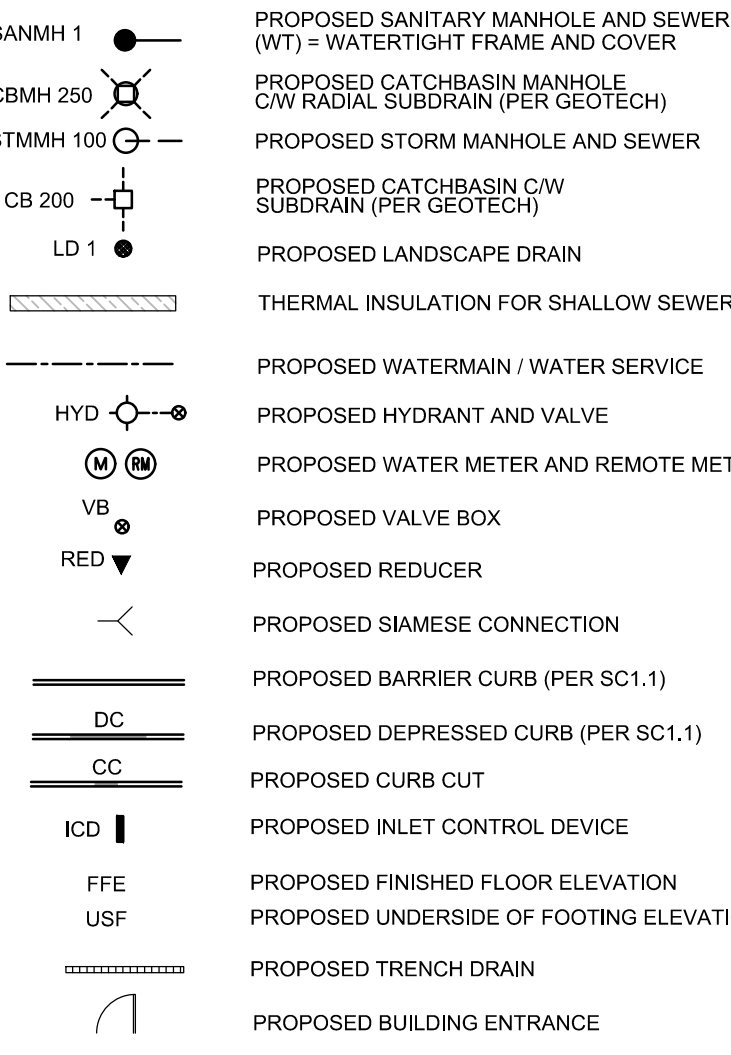


LEGEND



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 COINSURED.
- RESTORE 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. EXCAVATE 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 GEOTECHNICAL REPORT (No. 12667557-RPT-2, DATED OCTOBER 2, 2025), PREPARED BY GHD, 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 ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE DETAILS AND DIMENSIONS.
- REFER TO DEVELOPMENT SERVING STUDY AND STORMWATER MANAGEMENT REPORT (R-2023-082) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
- SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- PROVIDE UNPAVING PAINTING.

WATERMAIN NOTES:

- SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND AS AMENDED. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF THE CITY OF OTTAWA FORCES.
- SPECIFICATIONS:
 - ITEM: AUTOMATIC FLUSHING CHAMBER
 - ITEM: WATERMAIN FRESHING
 - ITEM: HYDRANT INSTALLATION
 - ITEM: THERMAL INSULATION IN SHALLOW TRENCHES
 - ITEM: INSULATION ADJACENT TO OPEN STRUCTURES
 - ITEM: VALVE BOX ASSEMBLY
 - ITEM: WATERMAIN CROSSING BELOW SEWER
 - ITEM: WATERMAIN CROSSING ABOVE SEWER
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE, UNLESS OTHERWISE INDICATED.
- PROVIDE MINIMUM 150mm CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, UNLESS OTHERWISE INDICATED.
- WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED.
- HYDRANTS SHALL BE ROTATED AT THE FLANGE TO FACE THE ROAD AND ALLOW FIRE SERVICES TO OPERATE THE NUTS.
- ALL DUCTILE IRON PIPES AND FITTINGS SHALL BE PROTECTED AGAINST POTENTIAL CORROSION PER GEOTECHNICAL RECOMMENDATIONS DUE TO THE CORROSIVE NATURE OF THE SUBGRADE AND GROUNDWATER.
- MODERATE SULPHATE RESISTANCE (MS) CEMENT SHALL BE USED FOR BELOW GRADE CONCRETE STRUCTURES PER GEOTECHNICAL RECOMMENDATION.

SEWER NOTES:

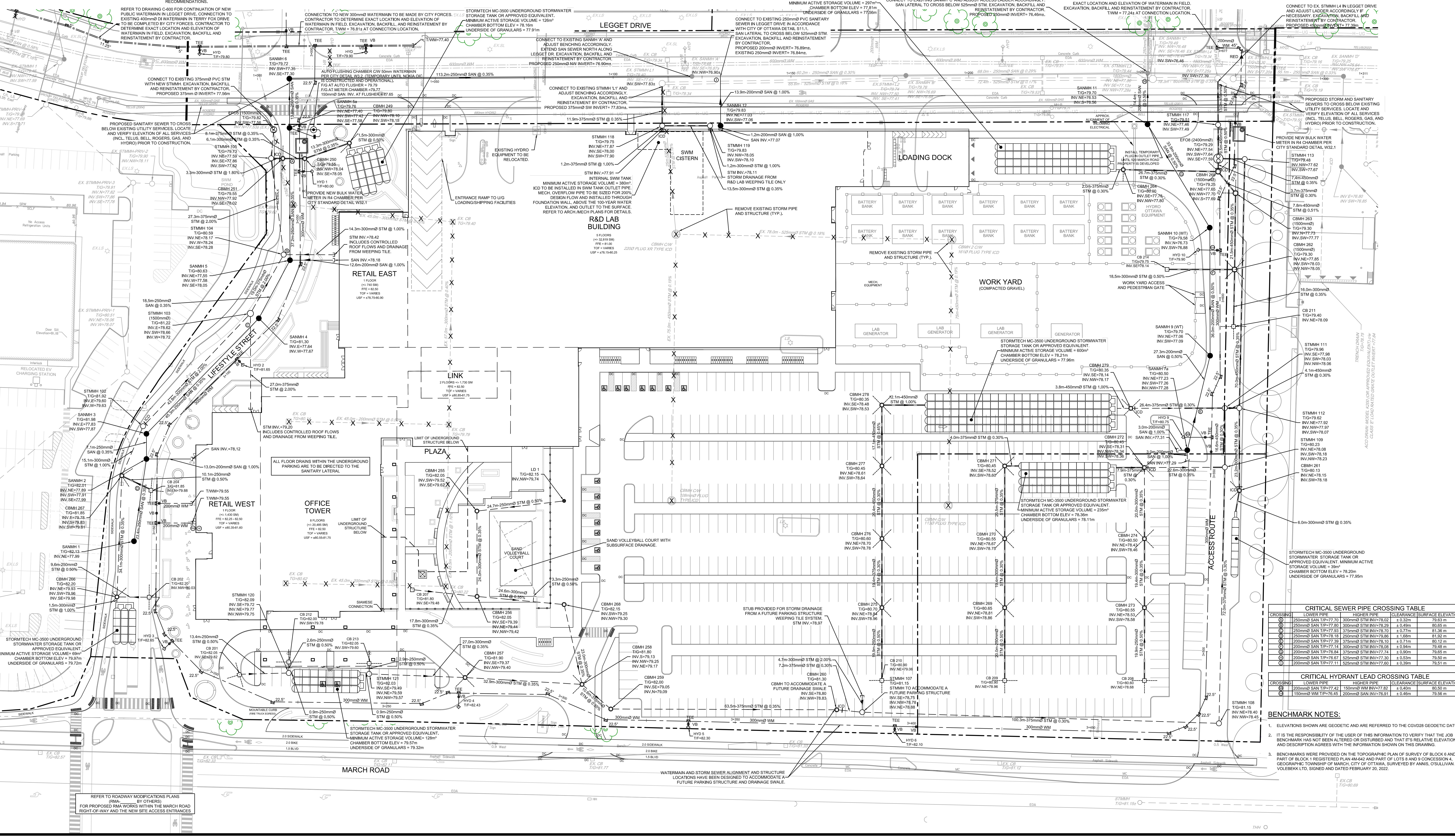
- SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND AS AMENDED.
- SPECIFICATIONS:
 - ITEM: CATCHBASIN (600mm/600mm)
 - ITEM: STORM / SANITARY MANHOLE (1200mm)
 - ITEM: STORM MANHOLE (1500mm)
 - ITEM: CB FRAME & COVER
 - ITEM: STORM / CBH MANHOLE FRAME AND COVER
 - ITEM: WATER TIGHT MAN FRAME AND COVER
 - ITEM: LANDSCAPE DRAIN (E.G. DRAIN COVER A PIPE)
 - ITEM: SEWER TRENCH
 - ITEM: INSULATION FOR SHALLOW SEWERS
 - ITEM: STORM SEWER
 - ITEM: SANITARY SEWER
 - ITEM: CATCHBASIN LEAD
- ALL STORM AND SANITARY SEWER LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
- INSULATE ALL PIPES (SANITARY) THAT HAVE LESS THAN 1.5m COVER WITH H-40 INSULATION PER CITY OF OTTAWA STANDARD DETAIL S35. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
- ALL SEWERS ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT MINIMUM SLOPE OF 1.0%.
- ALL MANHOLES AND CATCHBASIN MANHOLES SHALL BE 1200mm UNLESS OTHERWISE SPECIFIED.
- ALL SEWERS AND WATERMAINS LOCATED PARALLEL TO EACH OTHER ARE TO BE CONSTRUCTED IN SEPARATE TRENCHES MAINTAINING A CLEAR HORIZONTAL SEPARATION DISTANCE OF 2.5 METRES, AS PER MCP 1-6-1 STANDARDS.
- PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
- FLEXIBLE CONNECTIONS ARE TO CONNECTION PIPES TO MANHOLES (FOR EXAMPLE KORAN-SEAL, PSK, POSITIVE SEAL AND DUNBARAL). THE CONCRETE CHAMBER FOR THE PIPE CAN BE ELIMINATED.
- THE OWNER SHALL REQUIRE THAT THE SITE-SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.4 AND 407.07.4. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO DETERMINE 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 SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO HAVE 600mm SUMPS.
- ALL CATCHBASINS, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICDS INSTALLED WITH THEM ARE TO HAVE 600mm SUMPS.
- ALL WEeping TILE CONNECTIONS TO BE MADE TO THE PROPOSED STORM SEWER SYSTEM DOWNSTREAM OF ANY INLET CONTROL DEVICES.
- UNDERGROUND STORMWATER STORAGE TANKS TO BE DESIGNED BY SUPPLIER AND SHALL INCLUDE APPROPRIATE COUNTER BUOYANCY MEASURES WHERE APPLICABLE.
- ALL DUCTILE IRON PIPES AND FITTINGS SHALL BE PROTECTED AGAINST POTENTIAL CORROSION PER GEOTECHNICAL RECOMMENDATIONS DUE TO THE CORROSIVE NATURE OF THE SUBGRADE AND GROUNDWATER.
- MODERATE SULPHATE RESISTANCE (MS) CEMENT SHALL BE USED FOR BELOW GRADE CONCRETE STRUCTURES PER GEOTECHNICAL RECOMMENDATION.
- CONTRACTOR TO TELEVISION (CCTV) ALL PROPOSED SEWERS, 300mm OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZE, LENGTH, SLOPE, INVERT AND TIE ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TBM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

PROPOSED 300mmØ WATERMAIN TABLE - SITE LOOP			
Station	FIG. ELEVATION	TOP OF WATERMAIN	DESCRIPTION
3+000.00	79.57	79.60	300mmØ WATERMAIN TEE CONNECTION TO NEW 300mmØ WATERMAIN
3+003.45	79.62	79.60	22.5° VERTICAL BEND
3+004.90	79.65	79.62	22.5° VERTICAL BEND
3+006.10	79.66	79.62	CROSS UNDER EX. 600mmØ WATERMAIN, INV. = 79.62
3+007.10	79.68	79.62	22.5° VERTICAL BEND
3+008.90	79.73	79.75	22.5° VERTICAL BEND
3+009.10	79.73	79.75	CROSS UNDER NEW 250mmØ SANITARY SEWER, INV. = 77.29
3+010.30	79.72	79.77	22.5° HORIZONTAL BEND
3+012.80	79.60	79.65	CROSS UNDER EX. 100mmØ GAS LINE
3+016.90	79.67	79.68	CROSS UNDER EX. ROGERS LINE
3+020.20	79.74	79.60	CROSS UNDER EX. HYDRO LINE
3+021.80	79.77	79.62	22.5° HORIZONTAL BEND
3+023.30	79.76	79.64	VALVE AT PROPERTY LINE
3+024.40	79.74	79.65	50mm AUTO FLUSHING CHAMBER TEE
3+024.90	79.73	79.66	CROSS UNDER TOWNSHIP TRENCH WATERMAIN SEWER FROM AUTO FLUSHING CHAMBER, INV. = 77.61
3+026.80	79.68	79.60	BULK WATER METER IN RM CHAMBER
3+028.50	79.50	77.26	CROSS UNDER NEW 300mmØ STORM SEWER, INV. = 78.03
3+030.10	79.77	77.11	150mmØ HYDRANT 1 TEE
3+030.90	80.50	77.26	CROSS UNDER NEW 300mmØ STORM SERVICE LATERAL, INV. = 78.32
3+031.10	80.54	77.26	CROSS UNDER NEW 200mmØ SANITARY SERVICE LATERAL, INV. = 78.01
3+032.20	80.55	77.41	22.5° HORIZONTAL BEND
3+036.00	80.72	77.47	11.25° VERTICAL BEND
3+037.00	80.84	79.27	11.25° VERTICAL BEND
3+037.15	81.28	79.32	22.5° HORIZONTAL BEND
3+038.70	81.39	79.32	CROSS UNDER NEW 375mmØ STORM SERVICE LATERAL, INV. = 78.84
3+039.60	81.39	79.32	22.5° VERTICAL BEND
3+044.90	81.41	79.86	150mmØ HYDRANT 2 TEE
3+046.20	81.43	79.40	22.5° VERTICAL BEND
3+121.40	81.90	79.46	22.5° HORIZONTAL BEND
3+130.40	82.01	79.46	22.5° HORIZONTAL BEND
3+131.70	81.99	79.46	CROSS OVER NEW 200mmØ SANITARY SERVICE LATERAL, ØBV = 78.23

Station	FIG. ELEVATION	TOP OF WATERMAIN	DESCRIPTION
3+144.20	81.96	79.49	200mmØ WATER SERVICE TEE
3+146.40	81.97	79.49	VALVE & VALVE BOX
3+146.60	81.98	79.49	200mmØ WATER SERVICE TEE
3+174.50	82.31	79.84	22.5° HORIZONTAL BEND
3+181.40	82.47	79.84	22.5° HORIZONTAL BEND
3+184.20	82.45	79.84	150mmØ HYDRANT 3 TEE
3+196.10	82.33	79.84	22.5° HORIZONTAL BEND
3+217.90	82.31	79.84	22.5° HORIZONTAL BEND
3+250.00	82.28	79.81	22.5° HORIZONTAL BEND
3+256.70	82.27	79.87	22.5° HORIZONTAL BEND
3+267.80	82.17	79.57	22.5° HORIZONTAL BEND
3+268.00	82.03	79.55	150mmØ HYDRANT 4 TEE
3+276.80	81.95	79.51	22.5° HORIZONTAL BEND
3+313.60	82.12	79.51	22.5° HORIZONTAL BEND
3+325.00	82.08	79.50	-
3+336.80	82.00	79.45	150mmØ HYDRANT 5 TEE
3+350.00	82.10	79.42	-
3+375.00	81.80	79.38	-
3+384.00	81.90	79.33	150mmØ HYDRANT 6 TEE
3+400.90	81.78	79.32	VALVE AT PROPERTY LINE
3+425.00	82.05	79.28	-
3+450.00	81.95	79.23	-
3+454.90	81.60	79.21	11.25° VERTICAL BEND
3+457.50	81.50	78.69	11.25° VERTICAL BEND
3+472.00	81.30	78.69	22.5° HORIZONTAL BEND
3+477.00	81.31	77.96	22.5° HORIZONTAL BEND
3+478.60	82.30	77.96	CROSS UNDER NEW 375mmØ STORM SEWER, INV. = 78.48
3+482.00	81.30	77.85	22.5° HORIZONTAL BEND
3+487.00	81.07	77.86	22.5° HORIZONTAL BEND
3+500.00	80.98	78.30	-
3+525.00	80.65	78.20	-
3+551.80	80.28	77.86	CROSS UNDER NEW 300mmØ STORM SEWER, INV. = 78.24
3+566.20	80.29	77.85	VALVE & VALVE BOX AT PROPERTY LINE

Station	FIG. ELEVATION	TOP OF WATERMAIN	DESCRIPTION
3+560.30	80.24	77.85	150mmØ HYDRANT 9 TEE
3+568.50	80.03	77.82	CROSS UNDER NEW 450mmØ STORM SEWER, INV. = 78.01
3+572.40	79.86	77.50	22.5° HORIZONTAL BEND
3+577.80	79.85	77.35	22.5° HORIZONTAL BEND
3+600.00	79.55	77.10	-
3+607.80	79.42	77.08	CROSS UNDER NEW 300mmØ STORM SEWER, INV. = 78.01
3+613.20	79.47	76.90	150mmØ HYDRANT 10 TEE
3+617.80	79.48	76.90	22.5° HORIZONTAL BEND
3+632.90	79.27	76.95	CROSS UNDER NEW 450mmØ STORM SEWER, INV. = 77.11
3+637.90	79.40	76.90	22.5° HORIZONTAL BEND
3+638.90	79.29	76.95	CROSS UNDER NEW 450mmØ STORM SEWER, INV. = 77.11
3+644.00	79.34	76.85	BULK WATER METER IN RM CHAMBER
3+650.00	79.39	76.83	VALVE & VALVE BOX AT PROPERTY LINE
3+652.50	79.36	76.80	22.5° VERTICAL BEND
3+653.00	79.34	76.40	CROSS UNDER EX. BELL LINE
3+654.30	79.33	76.00	CROSS UNDER EX. ROGERS LINE
3+655.30	79.32	75.60	CROSS UNDER EX. TELUS LINE
3+656.30	79.31	75.20	CROSS UNDER EX. 100mmØ GAS LINE
3+657.20	79.28	74.82	22.5° VERTICAL BEND
3+657.70	79.28	74.82	22.5° HORIZONTAL BEND
3+659.00	79.28	74.82	CROSS UNDER EX. 600mmØ STORM SEWER, INV. = 77.28
3+661.00	79.30	74.82	22.5° HORIZONTAL BEND
3+662.70	79.30	74.82	CROSS UNDER EX. 750mmØ STORM SEWER, INV. = 77.19
3+663.90	79.32	74.82	CROSS UNDER EX. 250mmØ SANITARY SEWER, INV. = 76.54
3+666.90	79.26	74.82	CROSS UNDER EX. 600mmØ WATERMAIN, INV. = 75.42
3+668.40	79.32	74.82	REDUCER TO 200mmØ WATERMAIN
3+670.40	79.31	74.82	45° HORIZONTAL BEND
3+671.70	79.31	74.82	45° HORIZONTAL BEND
3+673.00	79.33	74.82	45° VERTICAL BEND
3+675.00	79.33	77.32	45° VERTICAL BEND
3+677.90	79.33	77.32	200mmØ WATERMAIN TEE CONNECTION TO EX. 200mmØ WATERMAIN

- CONNECTIONS TO NEW 300mmØ AND EXISTING 300mmØ WATERMAINS. EXACT ELEVATIONS TO BE FIELD DETERMINED.
- PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAIL S22 IN SHALLOW TRENCHES WHERE COVER IS LESS THAN 1.5m AND/OR W22 ADJACENT TO OPEN STRUCTURES.
- PIPE CROSSINGS WITH WATERMAINS ARE TO BE IN ACCORDANCE WITH CITY STANDARDS W25 AND W2.2 TO AVOID CONFLICTS, WHERE POSSIBLE.



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Smith + Anderson

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Security Consultant
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NOVATECH

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Civil and Planning Consultant
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CSW

CSW Landscape Architects Limited.

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Stantec

Stantec
Traffic Consultant
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Ottawa Ontario, K2C 3G5
Tel: 613.722.4420

Date	Description
SEP 12/24	ISSUED FOR SITE PLAN CONTROL APPROVAL
NOV 15/24	REVISED PER CITY COMMENTS
FEB 07/25	REVISED PER CITY COMMENTS
JUN 25/25	ISSUED FOR INFORMATION PM
AUG 06/25	REVISED PER CITY COMMENTS / SURFACE PARKING LOT ADDED
OCT 02/25	REVISED PER CITY COMMENTS

NOT FOR CONSTRUCTION

Seal / Signature



Project Name

Nokia Ottawa Campus

Project Number

027.7946.000

Description

GENERAL PLAN OF SERVICES

Scale

1 : 400

C100

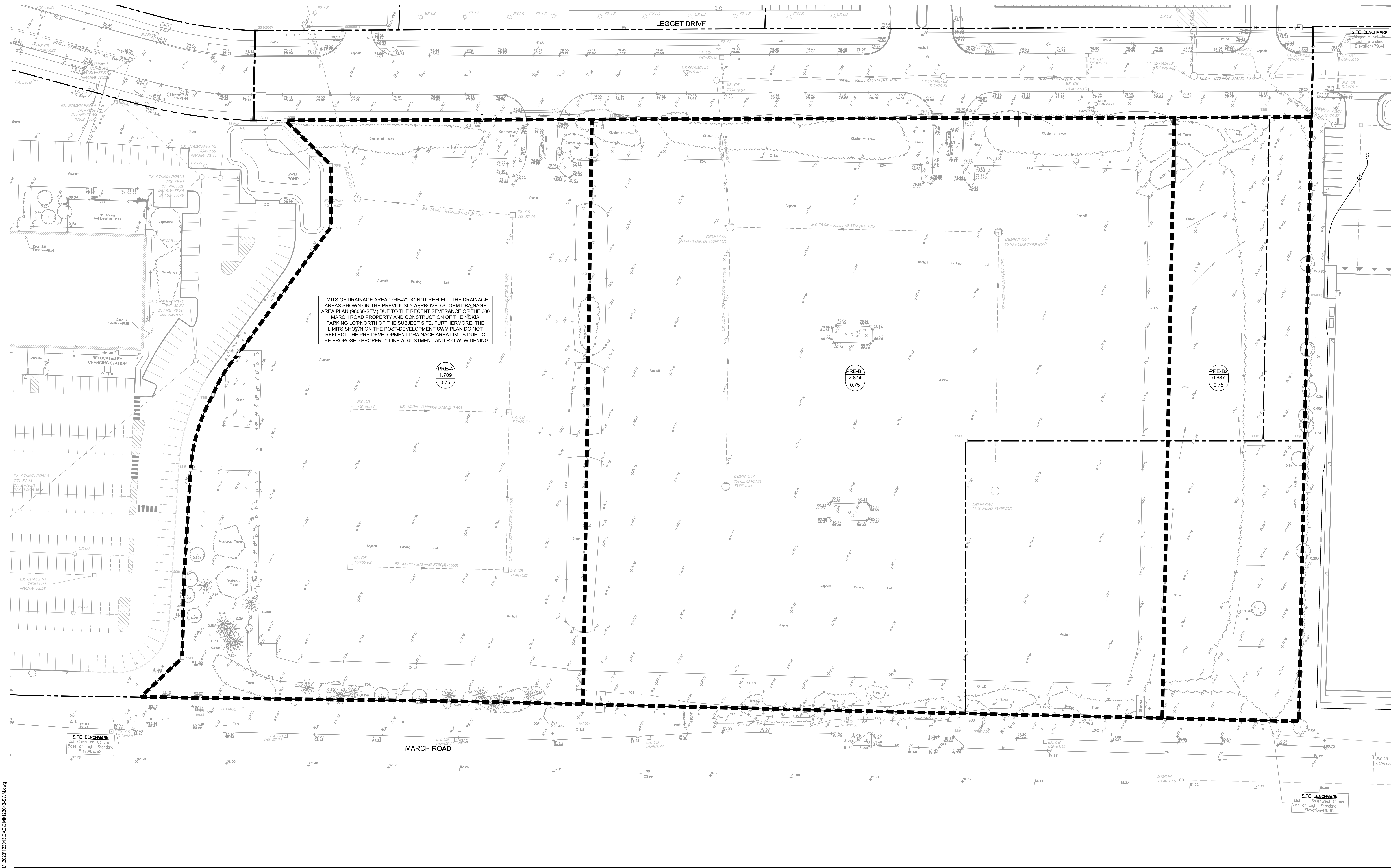
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Plan 119202

	DRAINAGE AREA LIMITS
	PRE-DEVELOPMENT AREA ID
	PRE-DEVELOPMENT DRAINAGE AREA (ha)
	1.5 YEAR WEIGHTED RUNOFF COEFFICIENT
	<i>EXISTING CONCRETE CURB</i>
	<i>EXISTING VALVE & VALVE BOX</i>
	<i>EXISTING SERVICE POST</i>
	<i>EXISTING HYDRANT</i>
	<i>EXISTING CATCHBASIN</i>
	<i>EXISTING CATCHBASIN/MAN</i>
	<i>EXISTING UTILITY POLE</i>
	<i>C/W GUY WIRES</i>
	<i>EXISTING DRAINAGE DIRECTION ARROWS</i>
	<i>EXISTING OVERLAND FLOW</i>

2. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
3. 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.
4. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
5. 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 COINSURED.
6. COMPLETE ALL WORKS IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS USING THE CURRENT GUIDELINES, BYLAWS AND STANDARDS INCLUDING MATERIALS OF CONSTRUCTION, DISINFECTION AND ALL REQUIREMENTS TO OPEN, OPEN A WALKWAY. ALL CURRENT VEHICLES AND AS PAVED.
7. RESTORE 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.
8. REMOVE FROM SITE ALL EXCESS AVAILABLE MATERIAL, ORGANIC MATERIAL, AND DESIRS UNLESS OTHERWISE INSTRUCTED BY CITY ENGINEER AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
9. ALL ELEVATIONS ARE GEODETIC.
10. REFER TO GEOTECHNICAL REPORT (No. 12675757-RPT-2, DATED OCTOBER 02, 2025) FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO BE RE-CONSULTED IMMEDIATELY AFTER CONSTRUCTION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
11. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HANDSURFACE AREAS AND DIMENSIONS.
12. REFER TO THE DEVELOPMENT SERVISING STUDY AND STORMWATER MANAGEMENT REPORT (R-2023-002) PREPARED BY NOVATECH.
13. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT IN THE POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
14. PROVIDE IN-PAVING PAINTING.

1. ELEVATIONS SHOWN ARE GEODEIC AND ARE REFERRED TO THE CGVD28 GEODEIC DATUM.
2. 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.
3. BENCHMARKS WERE PROVIDED ON THE TOPOGRAPHIC PLAN OF SURVEY OF BLOCK 6 AND PART OF BLOCK 1 REGISTERED PLAN 4M-642 AND PART OF LOTS 8 AND 9 CONVESSION 4, GEOGRAPHIC TOWNSHIP OF MARCH, CITY OF OTTAWA, SURVEYED BY ANNIS, OSULLIVAN AND VOLEBEKK LTD, SIGNED AND DATED FEBRUARY 20, 2022.

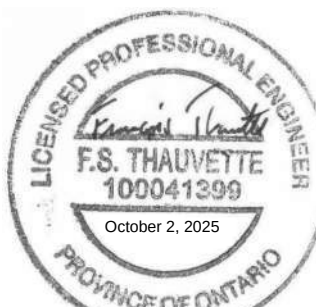


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**NOT FOR
CONSTRUCTION**

Seal / Signature



Project Name
Nokia Ottawa Campus

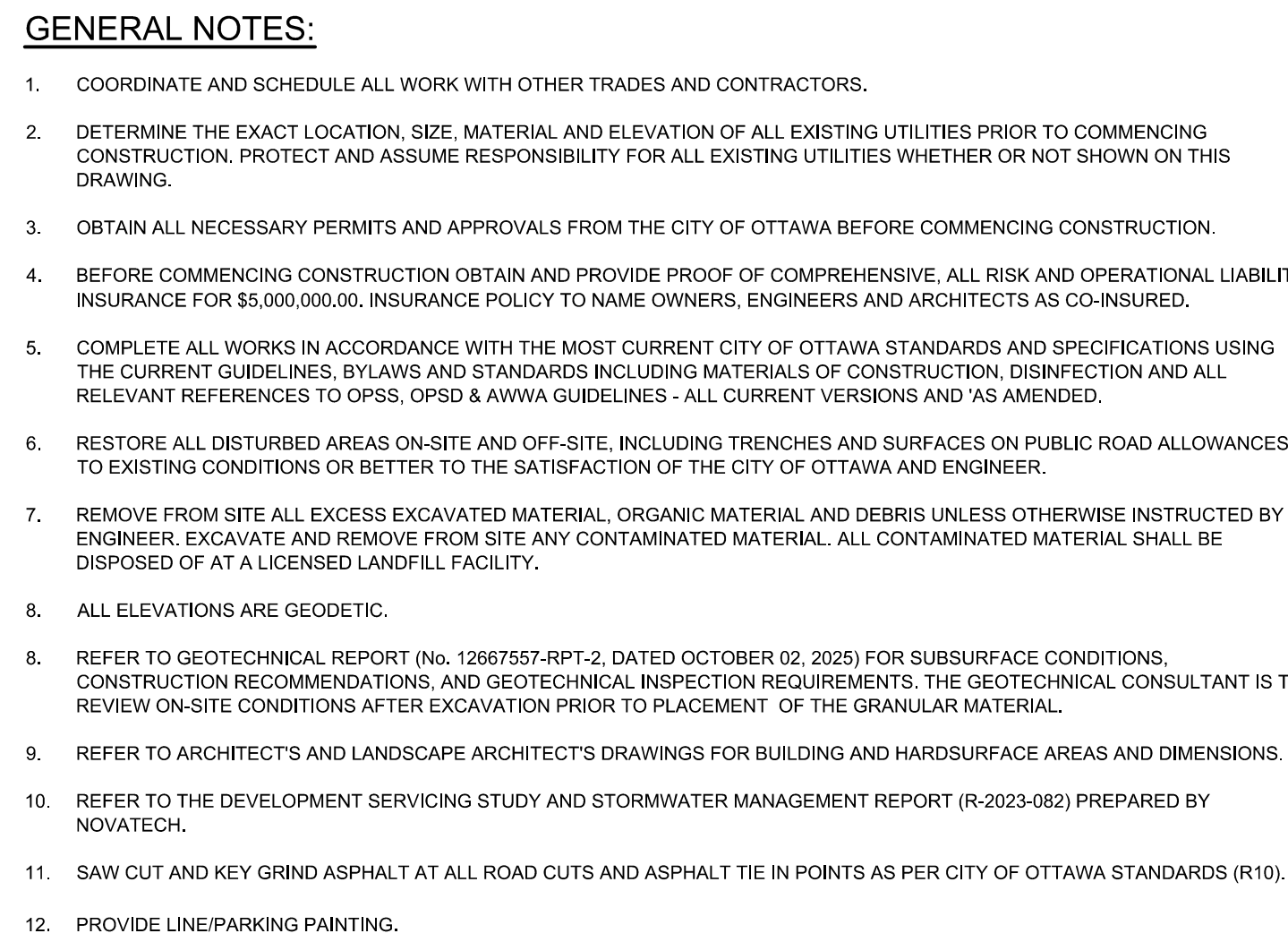
Project Number	027.7946.000
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Description
PRE-DEVELOPMENT STORM DRAINAGE PLAN

Scale

1 : 400

C300



INLET CONDUIT DATA TABLE : AREA A2:								
DESIGN EVENT	KC PIPE FLG TYPE	OUTLET STRUCTURE	DIMETERS OF INLET PIPE (mm)	PEAK FLOW (L/SEC)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m ³)	AVAILABLE STORAGE
12.5% PEX TAMPST	CRMB-250	370mm PVC	370	0.44	78.25	41.1		
15.5% PEX TAMPST	CRMB-250	370mm PVC	370	0.58	78.25	41.1		
100YR	CRMB-250	370mm PVC	370	1.18	78.25	41.1		156.3 m ³

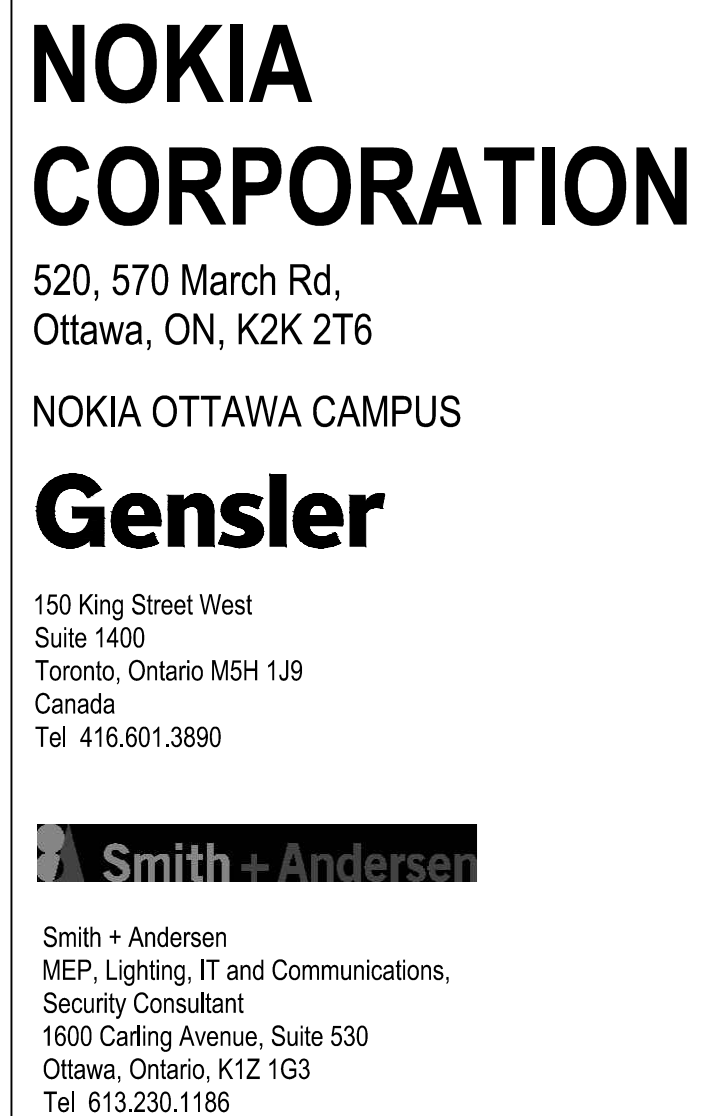
INLET CONDUIT DATA TABLE : AREA B2:								
DESIGN EVENT	KC PIPE FLG TYPE	OUTLET STRUCTURE	DIMETERS OF INLET PIPE (mm)	PEAK FLOW (L/SEC)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m ³)	AVAILABLE STORAGE
12.5% PEX TAMPST	CRMB-250	370mm PVC	370	0.27	1.03	80.02	79.3	
15.5% PEX TAMPST	CRMB-250	370mm PVC	370	0.35	2.14	80.02	79.3	
100YR	CRMB-250	370mm PVC	370	0.72	2.14	80.02	79.3	168.8 m ³

INLET CONDUIT DATA TABLE : AREA B4:								
DESIGN EVENT	KC PIPE FLG TYPE	OUTLET STRUCTURE	DIMETERS OF INLET PIPE (mm)	PEAK FLOW (L/SEC)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m ³)	AVAILABLE STORAGE
12.5% PEX TAMPST	CRMB-250	370mm PVC	370	0.50	78.38	148.2		
15.5% PEX TAMPST	CRMB-250	370mm PVC	370	0.67	78.38	148.2		
100YR	CRMB-250	370mm PVC	370	1.34	78.38	148.2		314.4 m ³

ROOF DRAIN TABLE									
AREA ID	BUILDING	ROOF DRAIN NO. (W/ THIS MODEL)*	ROOF DRAIN PAVING SETTING	2-YEAR RELEASE RATE	APPROX. 2-YR PONDING DEPTH	5-YEAR RELEASE RATE	APPROX. 5-YEAR PONDING DEPTH	100-YEAR RELEASE RATE	APPROX. 100-YR PONDING DEPTH
A-3	RETAIL WEST	RD 1 (RD-100A-AAD)	FULLY EXPOSED	0.8% 1.5	8 cm	1.2% 1.5	10 cm	1.5% 1.8	15 cm
A-4	RETAIL EAST	RD 1 (RD-100A-AAD)	FULLY EXPOSED	0.9% 1.5	8 cm	1.2% 1.5	10 cm	1.6% 1.8	15 cm
		RD 2 (RD-100A-AAD)	FULLY EXPOSED	0.9% 1.5	8 cm	1.2% 1.5	10 cm	1.6% 1.8	15 cm
		RD 3 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 4 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 5 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 6 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 7 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 8 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 9 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 10 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
A-5	OFFICE TOWER	RD 11 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 12 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 13 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 14 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 15 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 16 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 17 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 18 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 19 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 20 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
A-6	LINK	RD 21 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 22 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 23 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 24 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 25 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 26 (RD-100A-AAD)	CLOSED	0.3% 1.2	8 cm	0.3% 1.2	10 cm	0.3% 1.2	15 cm
		RD 27 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 28 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 29 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm
		RD 30 (RD-100A-AAD)	1/4 OPEN	0.7% 1.5	8 cm	0.7% 1.5	10 cm	0.5% 1.5	15 cm

BENCHMARK NOTES:

1. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM.
2. 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.
3. BENCHMARKS WERE PROVIDED ON THE TOPOGRAPHIC PLAN OF SURVEY OF BLOCK 6 AND PART OF BLOCK 1 REGISTERED PLAN 484/42 AND PART OF LOTS 3 AND 9 CONVESSION 4, GEOGRAPHIC TOWNSHIP OF MARCH CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN AND VOLEBEK LTD.

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CONSTRUCTION

Seal / Signature

Project Name
Nokia Ottawa Campus

Project Number	027.7946.000
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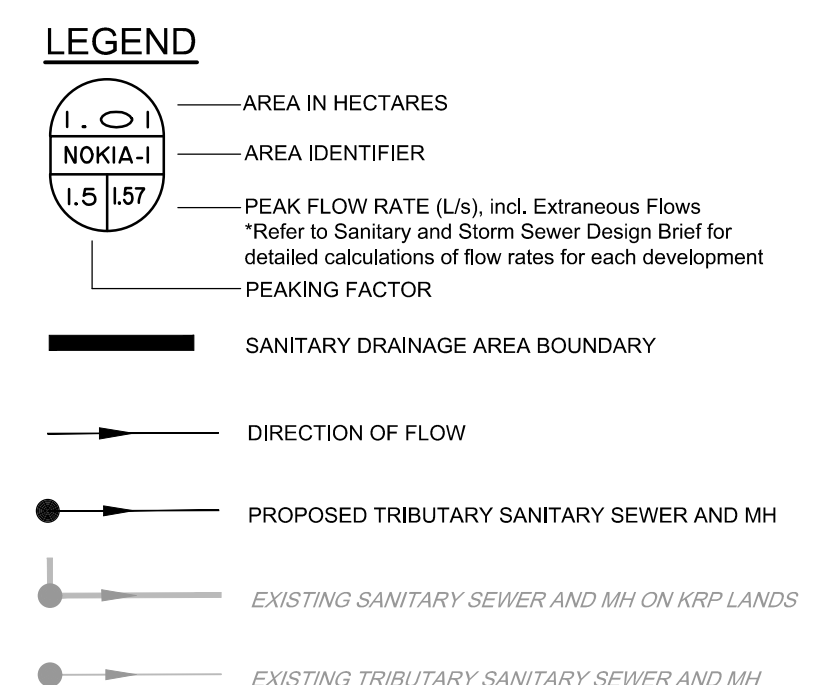
POST-DEVELOPMENT
STORMWATER MANAGEMENT PLAN

Scale
1 : 400

C301

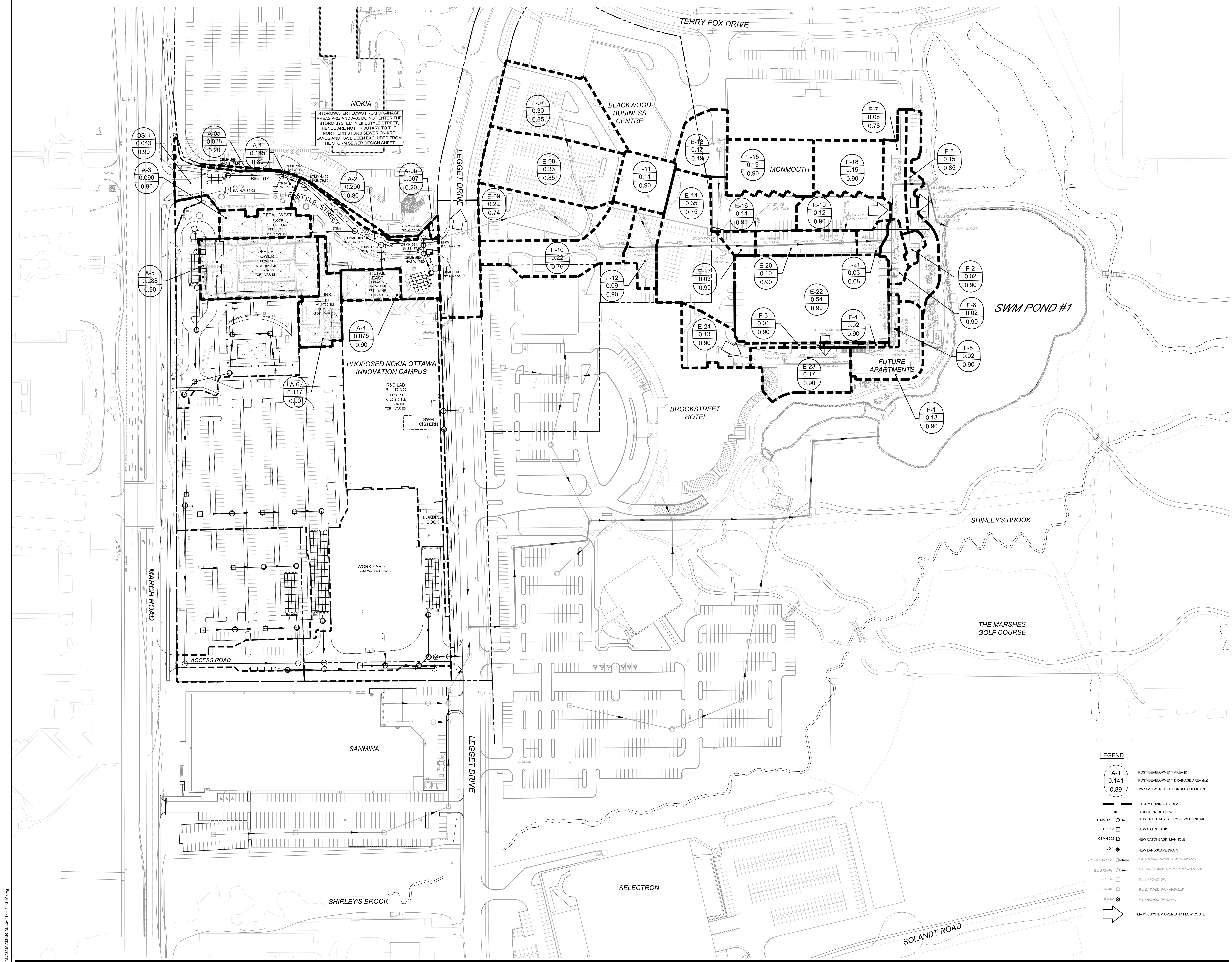
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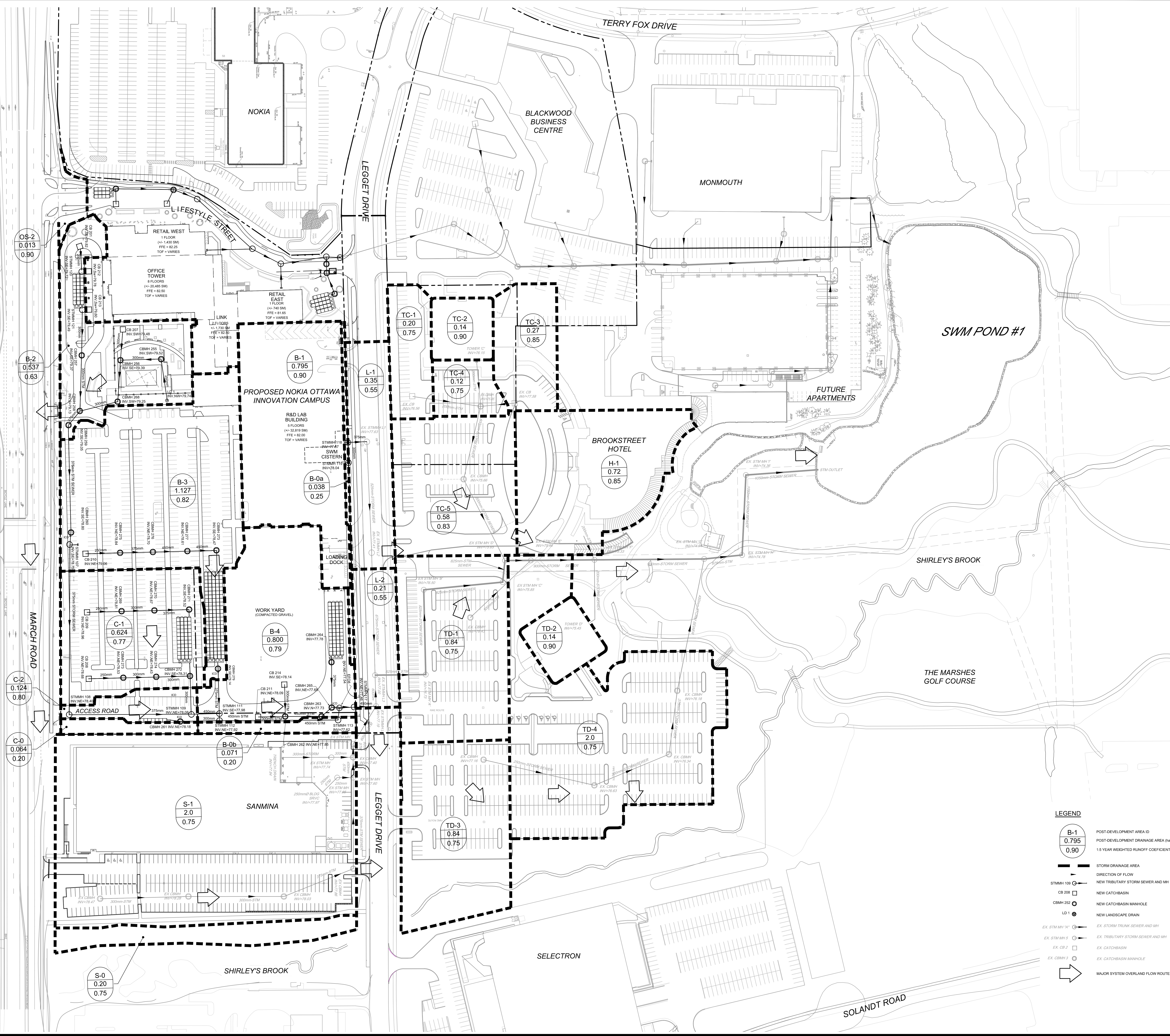
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City Project no: D07-12-24-0149



LEGEND

SAN MH 1	PROPOSED SANITARY MANHOLE AND SEWER	PROPOSED BUILDING ENTRANCE
CBMH 250	PROPOSED CATCH-BASIN MANHOLE	EXISTING CONCRETE CURB
STMMH 100	PROPOSED STORM MANHOLE AND SEWER	EXISTING SANITARY MANHOLE
CB 200	PROPOSED CATCH-BASIN	EXISTING CATCH-BASIN MANHOLE
LD 1	PROPOSED LANDSCAPE DRAIN	EXISTING STORM MANHOLE
	PROPOSED LANDSCAPE DRAIN	EXISTING CATCH-BASIN
	THERMAL INSULATION	EXISTING HYDRANT & VALVE
	PROPOSED WATERMAIN / WATER SERVICE	EXISTING TREES / VEGETATION
HYD	PROPOSED HYDRANT AND VALVE	EXISTING UTILITY POLE ON GUY WIRES
VAVB	PROPOSED VALVE BOX	EXISTING FENCE
RED	PROPOSED REDUCER	EXISTING LIGHT STANDARD
	PROPOSED BARRIER CURB (PER SCT.1)	REMOVALS
DC	PROPOSED DEPRESSED CURB (PER SCT.1)	
CC	PROPOSED CURB CUT	
ICD	PROPOSED INLET CONTROL DEVICE	ASPHALT OVERLAY PER CITY STANDARD R10
		BOREHOLE LOCATION (REFER TO GEOTECH REPORTS PROJECT: 10394.007 REV.1 DATED SEPTEMBER 26, 2025, PREPARED BY GEMTEC, FOR DETAILS)

BENCHMARK NOTES:

- ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 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.
- BENCHMARKS WERE PROVIDED ON THE TOPOGRAPHIC PLAN OF SURVEY OF BLOCK 6 AND PART OF BLOCK 1 (REGISTERED PLAN M4042 AND PART OF LOTS 3 AND 9 CONCRETE) A GEOGRAPHIC TOWNSHIP OF MARCH, CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN AND VOLEBERK LTD. SIGNED AND DATED FEBRUARY 20, 2022.

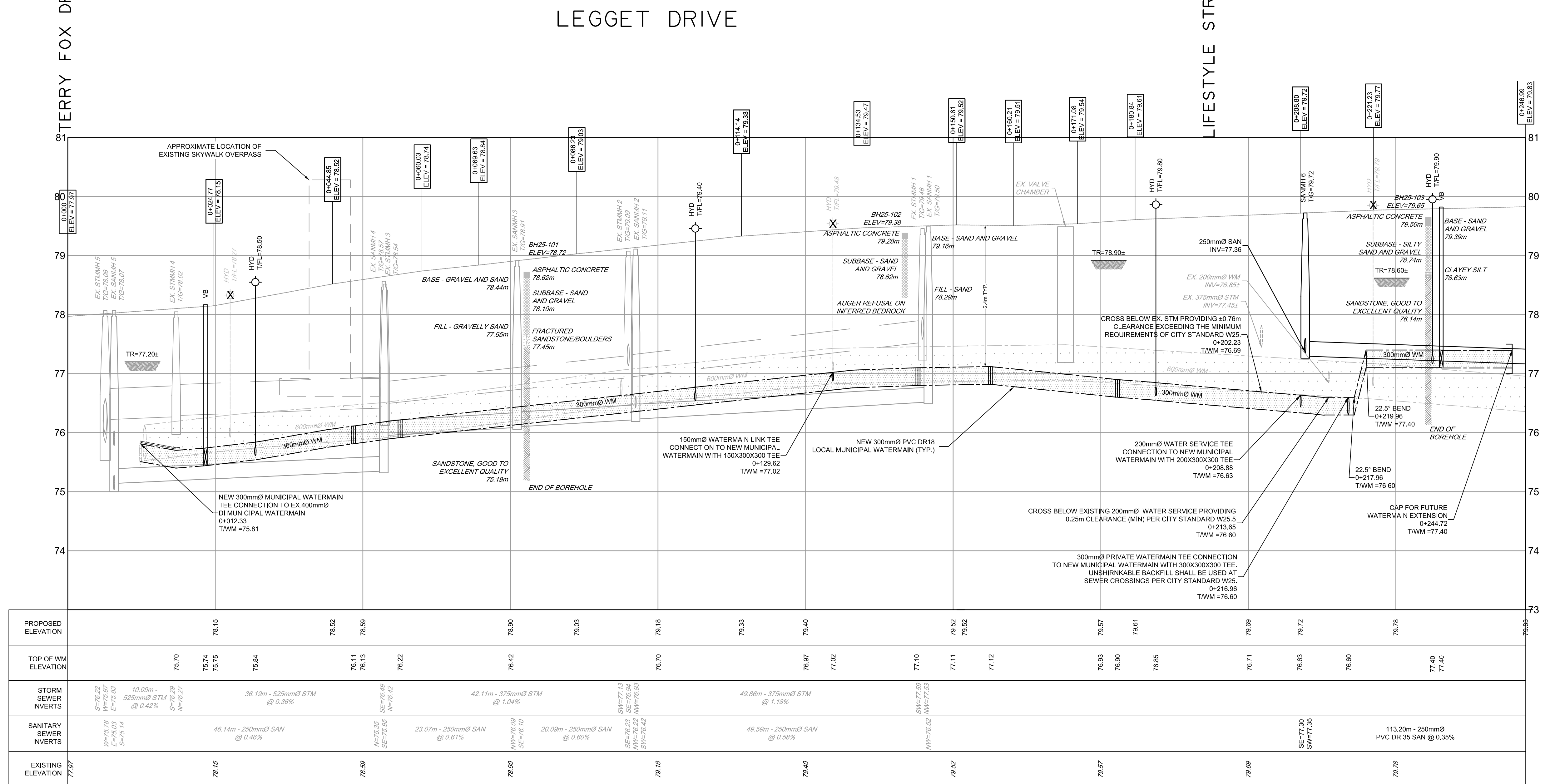
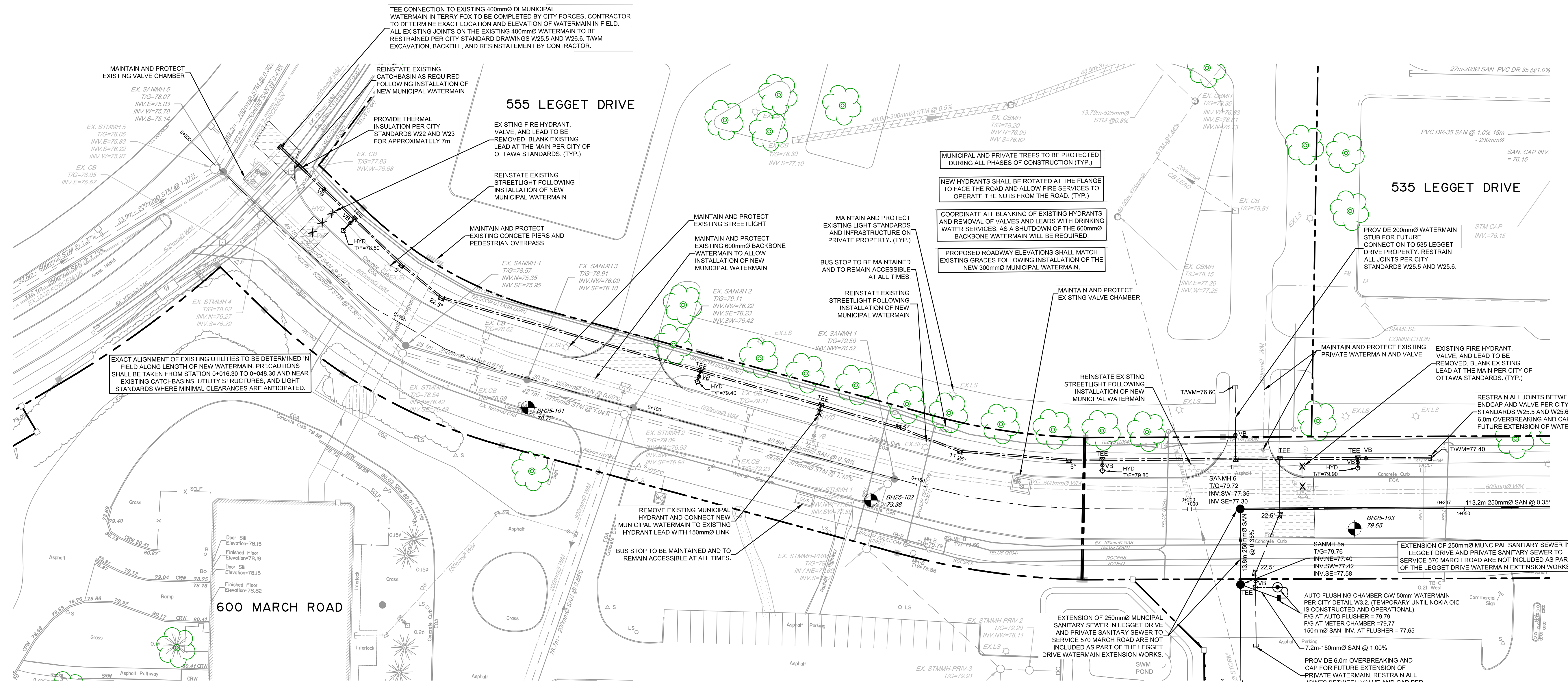
GENERAL NOTES:

- 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 AND ENGINEERS AS CO-INSURED.
- RESTORE 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. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DEPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO THE GEOTECHNICAL REPORT, SOIL QUALITY REPORT, AND SUBSURFACE INVESTIGATION REPORT (PROJECT: 10394.007 REV.1 DATED SEPTEMBER 26, 2025), PREPARED BY GEMTEC, FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, EXCESS SOIL MANAGEMENT, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- SAV CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- PROVIDE LINE PAINTING.

WATERMAIN NOTES:

- SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND AS AMENDED; EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF CITY OF OTTAWA FORCES. COORDINATE ALL BLANKING OF EXISTING HYDRANTS AND REMOVAL OF VALVES AND LEADS WITH DRINKING WATER SERVICES, AS A SHUTDOWN OF THE BACKBONE WATERMAIN WILL BE REQUIRED.
- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
AUTOMATIC FLUSHING CHAMBER	W03.2	CITY OF OTTAWA
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
HYDRANT INSTALLATION	W19	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
INSULATION ADJACENT TO OPEN STRUCTURES	W23	CITY OF OTTAWA
VALVE BOX ASSEMBLY	W24	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	PVC DR 18	CITY OF OTTAWA
WATERMAIN CROSSING ABOVE SEWER	W05.2	CITY OF OTTAWA
RESTRAINING AND RETAINING RINGS	W05.5	CITY OF OTTAWA
TABLES OF RESTRAINED LENGTHS	W05.6	CITY OF OTTAWA
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE, UNLESS OTHERWISE INDICATED.
- PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, UNLESS OTHERWISE INDICATED.
- HYDRANTS SHALL BE ROTATED AT THE FLANGE TO FACE THE ROAD AND ALLOW FIRE SERVICES TO OPERATE THE NUTS.
- ALL DUCTILE IRON PIPES AND FITTINGS SHALL BE PROTECTED AGAINST POTENTIAL CORROSION PER GEOTECHNICAL RECOMMENDATIONS DUE TO THE CORROSIVE NATURE OF THE SUBGRADE AND GROUNDWATER.
- MODERATE SULPHATE RESISTANCE (MS) CEMENT SHALL BE USED FOR BELOW GRADE CONCRETE STRUCTURES PER GEOTECHNICAL RECOMMENDATIONS.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A PLAN AND PROFILE DRAWING INDICATING ALL SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN, AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.



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Stantec

Stantec
Traffic Consultant
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Ottawa Ontario, K2C 3G5
Tel 613.722.4420

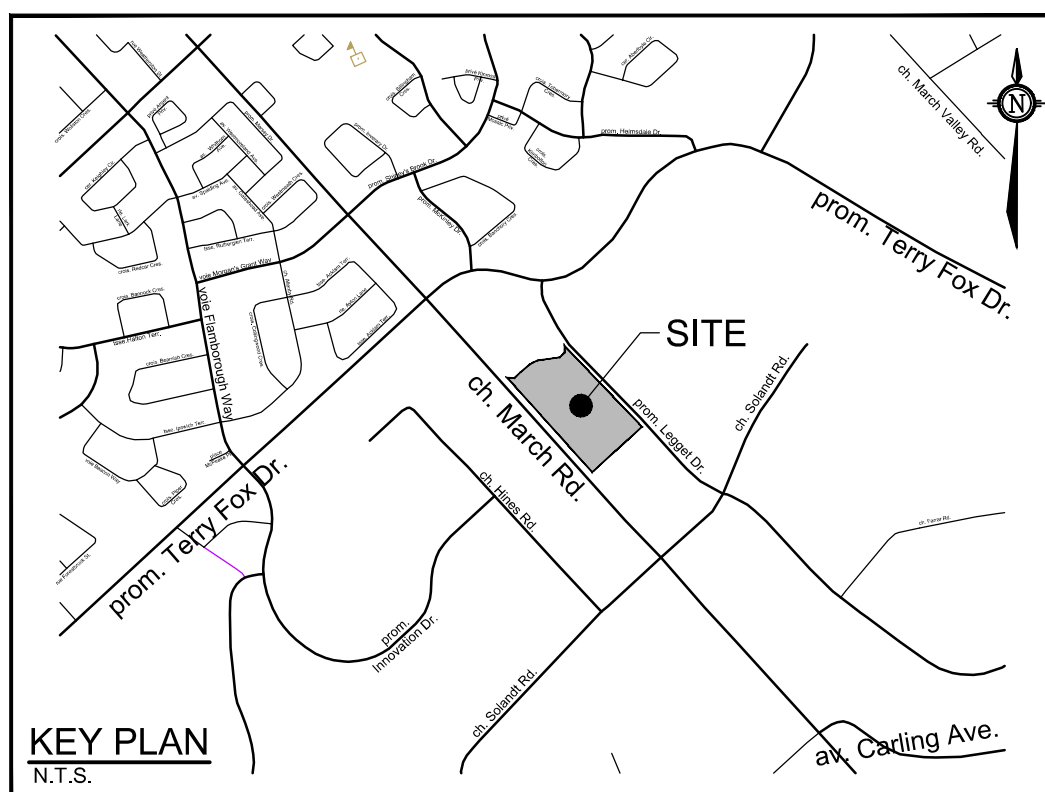
Date	Description
JAN 24/25	PRELIMINARY WATERMAIN DESIGN ISSUED WITH CLASS C COST ESTIMATE
FEB 12/25	PRELIMINARY WATERMAIN DESIGN ISSUED WITH REVISED CLASS C COST ESTIMATE
MAY 28/25	REVISED WATERMAIN DESIGN ISSUED WITH REVISED CLASS C COST ESTIMATE
AUG 06/25	REVISED PER CITY COMMENTS / SURFACE PARKING LOT AD

 SAN MH	PROPOSED SANITARY MANHOLE AND SEWER
 CBN 250	PROPOSED SANITARIAN MANHOLE
 STMMH 100	PROPOSED STORM MANHOLE AND SEWER
 CB 200	PROPOSED STORM MANHOLE
 LD 1	PROPOSED LANDSCAPE DRAIN
	THERMAL INSULATION FOR SHALLOW SEWER
	PROPOSED WATERMAIN / WATER SERVICE
 HYD	PROPOSED HYDRANT AND VALVE
 VABX	PROPOSED VALVE BOX
 VC	PROPOSED VALVE CHAMBER
 RED	PROPOSED REDUCER
	PROPOSED BARRIER CURB (PER S.C. 1)
	PROPOSED DEPRESSED CURB (PER S.C. 1)
	PROPOSED CURB CUT
	PROPOSED INLET CONTROL DEVICE

1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. 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.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR THE PROJECT, INCLUDING INSURANCE TO NAME OWNERS AND ENGINEER.
5. RESTORE 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.
6. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
7. ALL ELEVATIONS ARE GEODETIC.
8. REFER TO THE SOIL QUALITY REPORT AND GEOTECHNICAL REPORT PROJECT#: 10340.090 REV.1, DATED SEPTEMBER 26, 2020, PREPARED BY GEMTEC, INC. FOR GEOTECHNICAL CONSTRUCTION RECOMMENDATIONS. EXCESS SOIL MANAGEMENT AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER CONSTRUCTION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
9. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
10. PROVIDE LINE AND POINTING.

SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS, AND ALL CURRENT VENTURES AND AS AMENDED:			
2. SPECIFICATIONS:			
ITEM	SPEC. No.	REFERENCE	
SANITARY MANHOLE (1200mm) R	S24	CITY OF OTTAWA	
SANITARY MH FRAME & COVER	S24	CITY OF OTTAWA	
REGULATION FOR SHALLOW SEWERS	SPS	CITY OF OTTAWA	
SANITARY SEWER	PCV 20	CITY OF OTTAWA	
3. INSULATE ALL NEW PIPES THAT HAVE LESS THAN 1 INCH COVER WITH H=40 INSULATION PER STANDARD DATA 335. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.			
4. ALL MANHOLES SHALL BE 1200mm UNLESS OTHERWISE SPECIFIED.			
5. ALL SEWERS AND WATERMAIN LOCATED PARALLEL TO EACH OTHER ARE TO BE CONSTRUCTED IN SEPARATE TRENCHES MAINTAINING A CLEAR HORIZONTAL SEPARATION DISTANCE OF 2 METRES, AS PER MOPC 6-1 STANDARDS.			
6. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE BACKFILL SHALL BE A REGION 3A OR 3B MATERIAL, UNLESS OTHERWISE SPECIFIED.			
7. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KORN-SALE, PSL POSTHOLE SALE AND DURA-SALE). THE CONCRETE GRADE FOR THE PIPE CAN BE ELIMINATED.			
8. ALL SEWERS SHALL BE CONSTRUCTED TO MEET THE FOLLOWING MINIMUM COVER/DEPTH FIELD TESTS FOR QUALITY CONTROL: (1) ALL SANITARY SEWERS: LEAKAGE TESTS SHALL BE COMPLETED IN ACCORDANCE WITH OPSHS 4007-16.0, 4007-16.1, 4007-16.2 AND 4007-24.1. DYE TESTING IS TO BE COMPLETED BY THE SERVICE TO VERIFY THE SEWER CONNECTION TO THE MAIN SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A QUALIFIED PROFESSIONAL ENGINEER WHO SHALL CERTIFY A CERTIFIED COPY OF THE TEST RESULTS.			
9. ALL DUCTILE IRON PIPES AND FITTINGS SHALL BE PROTECTED AGAINST POTENTIAL CORROSION PER GEOTECHNICAL RECOMMENDATIONS DUE TO THE CORROSIVE NATURE OF THE SUBGRADE AND GROUNDWATER.			
10. MODERATE SULPHATE RESISTANCE (MS) CEMENT SHALL BE USED FOR BELOW GRADE CONCRETE STRUCTURES PER GEOTECHNICAL RECOMMENDATIONS.			
11. CONTRACTOR TO TELETYPE (CTV) ALL PROPOSED SEWERS, 200mm OR GREATER RADIUS TO BASE COURSE ASPHALT, UPON COMPLETION OF THE CONSTRUCTION RESPONSIBLE TO THE CITY OF OTTAWA FOR CLEARANCE AND RECORDING.			
12. CONTRACTOR TO PROVIDE THE CONSULTANT WITH AN AS-BUILT PLAN AND PROFILE DRAWING INDICATING ALL SERVING AS-BUILT INFORMATION SHOWN ON THIS PLAN, AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERTS AND TO ELEVATIONS.			

1. ELEVATIONS SHOW HERE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM.
2. 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.
3. BENCHMARKS WERE PROVIDED ON THE TOPOGRAPHIC PLAN OF SURVEY OF BLOCK 6 AND PART OF BLOCK 1, REGISTRATION DISTRICT OF LAMBTON, TOWNSHIP OF LAMBTON, LAMBTON COUNTY, ONTARIO, CANADA, GEODETIC SURVEY OF MARCH CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN AND VOLEBEK LTD, SIGNED AND DATED FEBRUARY 20, 2022.



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CSV

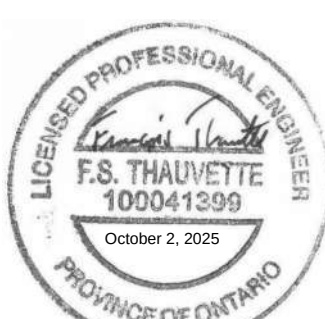
CSW Landscape Architects Limited,
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Traffic Consultant
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Tel 613.722.4420

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CONSTRUCTION

Seal / Signature



Project Name
Nokia Ottawa Campus

Project Number	027.7946.000
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Description
PLAN AND PROFILE - LEGGET DRIVE STATION 1+000 TO 1+310

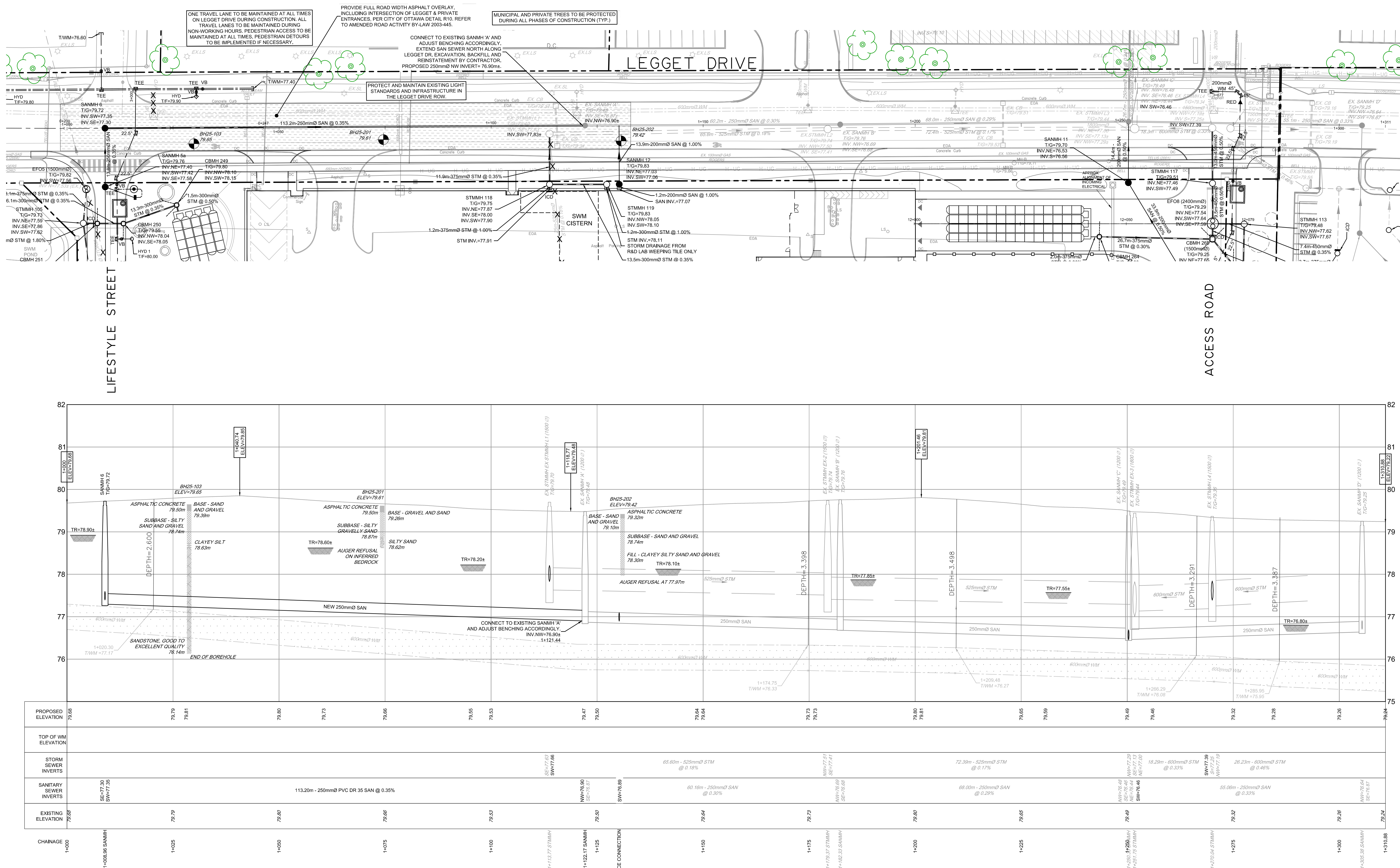
Scale

HORIZONTAL
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VERTICAL
1 : 40

C601

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REFER TO DRAWING C-100 FOR ADDITIONAL NOTES