



**BENCHMARK INFO:**

ALL ELEVATIONS ARE REFERRED TO THE CGVD28 GEODETIC DATUM. BEARINGS ARE ASTRONOMIC, DERIVED FROM THE SOUTHERLY LIMIT OF BYRON AVENUE SHOWN TO BE N66°01'30" ON REGISTERED PLAN 204 AS INDICATED ON THE TOPOGRAPHIC PLAN OF SURVEY BY ANNIS, O'SULLIVAN, VOLLEBECK DATED MARCH 29, 2021. THE EXISTING GRADES SHOWN ON THE PLANS ARE TAKEN DIRECTLY FROM THE TOPOGRAPHIC PLAN OF SURVEY NOTED ABOVE AND HAVING A SITE BENCHMARK ON THE TOP OF SPINDLE OF THE EXISTING MUNICIPAL FIRE HYDRANT IN FRONT OF 518 LOWER BYRON AVENUE. SURROUNDING BACKGROUND TOPO INFORMATION BEYOND THE LIMITS OF THE SITE SURVEY ARE FROM CITY OF OTTAWA MAPPING AND UCC PLANS SHOWING CONTEXT ONLY.



**LEGEND:**

- RD ○ PROPERTY LINE
- PROPOSED CONTROLLED FLOW ROOF DRAIN
- PROPOSED WATER METER AND REMOTE METER
- PROPOSED BARRIER CURB
- DC PROPOSED DEPRESSED CURB
- ▽ PROPOSED BUILDING ENTRANCE
- PROPOSED WATER SERVICE
- PROPOSED STORM SERVICE
- PROPOSED SANITARY SERVICE
- SP ○ PROPOSED STANDPOST ON WATER SERVICE
- FFE FINISHED FLOOR ELEVATION
- T/FND TOP OF FOUNDATION WALL ELEVATION
- USF UNDERSIDE OF FOOTING ELEVATION
- X REMOVAL AND/OR ABANDONMENT
- NEW SANITARY MAINTENANCE HOLE
- WATERMAIN CAP
- OHW PROPOSED OVERHEAD WIRES
- EXISTING CONCRETE CURB
- EXISTING SANITARY MANHOLE & SEWER
- EXISTING CATCHBASIN MANHOLE
- EXISTING STORM MANHOLE & SEWER
- EXISTING CATCHBASIN CW
- EXISTING CATCHBASIN LEAD
- EXISTING HYDRANT & VALVE
- EXISTING TREES / VEGETATION
- EXISTING UTILITY POLE
- EXISTING FENCE
- EXISTING WATERMAIN
- EXISTING HYDRANT CW VALVE & LEAD

**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.
- 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 MUNICIPAL AUTHORITIES.
- 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 (PATERSON REPORT NUMBER PG5981-1), DATED OCTOBER 1, 2021, PREPARED BY PATERSON GROUP, 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 MECHANICAL PLAN FOR ROOF DRAIN INFORMATION
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACED AREAS AND DIMENSIONS.
- REFER TO THE 'DEVELOPMENT SERVICING AND STORMWATER MANAGEMENT REPORT' (R-2022-089) PREPARED BY NOVATECH.
- SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE-IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

**SEWER NOTES:**

- SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES 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 RELEVANT REFERENCES TO OPS, OPSD & AWWA GUIDELINES - ALL CURRENT VERSIONS AND 'AS AMENDED'.
- SPECIFICATIONS:
 

ITEM	SPEC. No.	OPSD
SANITARY MANHOLE (1200mmØ)	701.010	
SANITARY MANHOLE FRAME AND COVER	401.010 - TYPE "A"	OPSD
STORM SERVICE	PVC DR 35	
SANITARY SERVICE	PVC DR 35	
SEWER TRENCH	BEDDING (GRANULAR 'A') COVER (GRANULAR 'A' OR GRANULAR 'B' TYPE I WITH MAXIMUM PARTICLE SIZE=25mm)	
- THE SANITARY SERVICE LATERAL SHALL BE EQUIPPED WITH BACKFLOW PREVENTERS WITHIN THE BUILDING FOOTPRINT AS PER CITY OF OTTAWA STANDARD DETAILS S14.1 OR S14.2. REFER TO MECHANICAL PLANS FOR DETAILS.
- THE STORM SERVICE LATERAL SHALL BE EQUIPPED WITH A BACKFLOW PREVENTER WITHIN THE BUILDING FOOTPRINT AS PER CITY OF OTTAWA STANDARD DETAILS S14. REFER TO MECHANICAL PLANS FOR DETAILS.
- 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.
- INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 1.8m COVER WITH UP TO 125mm THICK HI-40 RIGID INSULATION.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL APPLICABLE SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND TIG ELEVATIONS, STRUCTURE LOCATIONS AND ANY ALIGNMENT CHANGES, ETC.
- 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 OPS-410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES 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.

**WATERMAIN NOTES:**

- SUPPLY AND CONSTRUCT ALL WATERMAIN AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'.
- SPECIFICATIONS:
 

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
THERMAL INSULATION BY OPEN STRUCTURES	W23	CITY OF OTTAWA
WATERMAIN CROSSING ABOVE SEWERS	W25	CITY OF OTTAWA
WATERMAIN MATERIAL	TYPE 'K' SOFT COPPER (50mm SERVICE)	
- EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS. EXCAVATION, INSTALLATION OF SERVICE, BACKFILL AND RESTORATION BY THE CONTRACTOR.
- 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.
- WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

**PROPOSED 100mmØ WATER SERVICE TABLE**

STATION	SURFACE ELEVATION	T/W/M ELEVATION	COMMENTS
0+00	69.70±	67.62±	100mmØ ROLLED CONNECTION TO EX. 150mmØ WM
0+00.9	69.70	68.05	22.5" VERTICAL BEND
0+01.2	69.70	68.05	CROSS ABOVE 225mmØ SAN (0.5m CLEARANCE)
0+02.3	69.70	68.05	22.5" VERTICAL BEND
0+04.1	69.70	67.30	22.5" VERTICAL BEND
0+05.4	69.71	67.30	CROSS BELOW 38mmØ GAS (~1.3m CLEARANCE)
0+06.1	69.71	67.30	100mmØ VALVE & VALVE BOX
0+06.3	69.72	67.30	PROPERTY LINE
0+10	70.29	67.25	---
0+11.3	70.30	67.23	CAP 1.0m FROM FOUNDATION WALL

\* CONNECTION TO EXISTING 150mmØ UCI WATERMAIN. EXACT ELEVATIONS TO BE FIELD DETERMINED.  
 \*\* PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAIL W22 IN SHALLOW TRENCHES AND/OR CITY OF OTTAWA DETAIL W23 ADJACENT TO OPEN STRUCTURES.

**ROOF DRAIN TABLE: AREA A-1 (ROOF DRAINS 1- 4)**

AREA ID (RD)	ROOF DRAIN No. (WATTS MODEL)	WEIR SETTING	1.5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1-100 YEAR RELEASE RATE	APPROX. 100 YR PONDING DEPTH
A-1 (R-1)	RD 1 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	15 cm
A-1 (R-1)	RD 2 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	14 cm
A-1 (R-1)	RD 3 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	15 cm
A-1 (R-1)	RD 4 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	14 cm
TOTAL			1.28 L/s		1.28 L/s	

\* REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2022-089) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.  
 \*\* ALL CONTROLLED FLOW ROOF DRAINS FOR THE PROPOSED BUILDING TO BE WATTS ACCUTROL ADJUSTABLE ROOF DRAINS.

**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**  
 SERCO REALTY GROUP  
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 EMAIL: l.porcari@sercorealty.com

No.	REVISION	DATE	BY
1	ISSUED FOR SITE PLAN APPROVAL	JUL 7/22	MS

**SCALE**  
 1:100

**DESIGN**  
 SM  
 CHECKED MS  
 DRAWN SM / DM  
 CHECKED SM  
 APPROVED MS

**FOR REVIEW ONLY**

1:100  
 0 1 2 3 4



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**LOCATION**  
 CITY OF OTTAWA  
 522 LOWER BYRON AVENUE

**DRAWING NAME**  
 GENERAL PLAN OF SERVICES

**PROJECT No.** 121097  
**REV** REV #1  
**DRAWING No.** 121097-GP

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