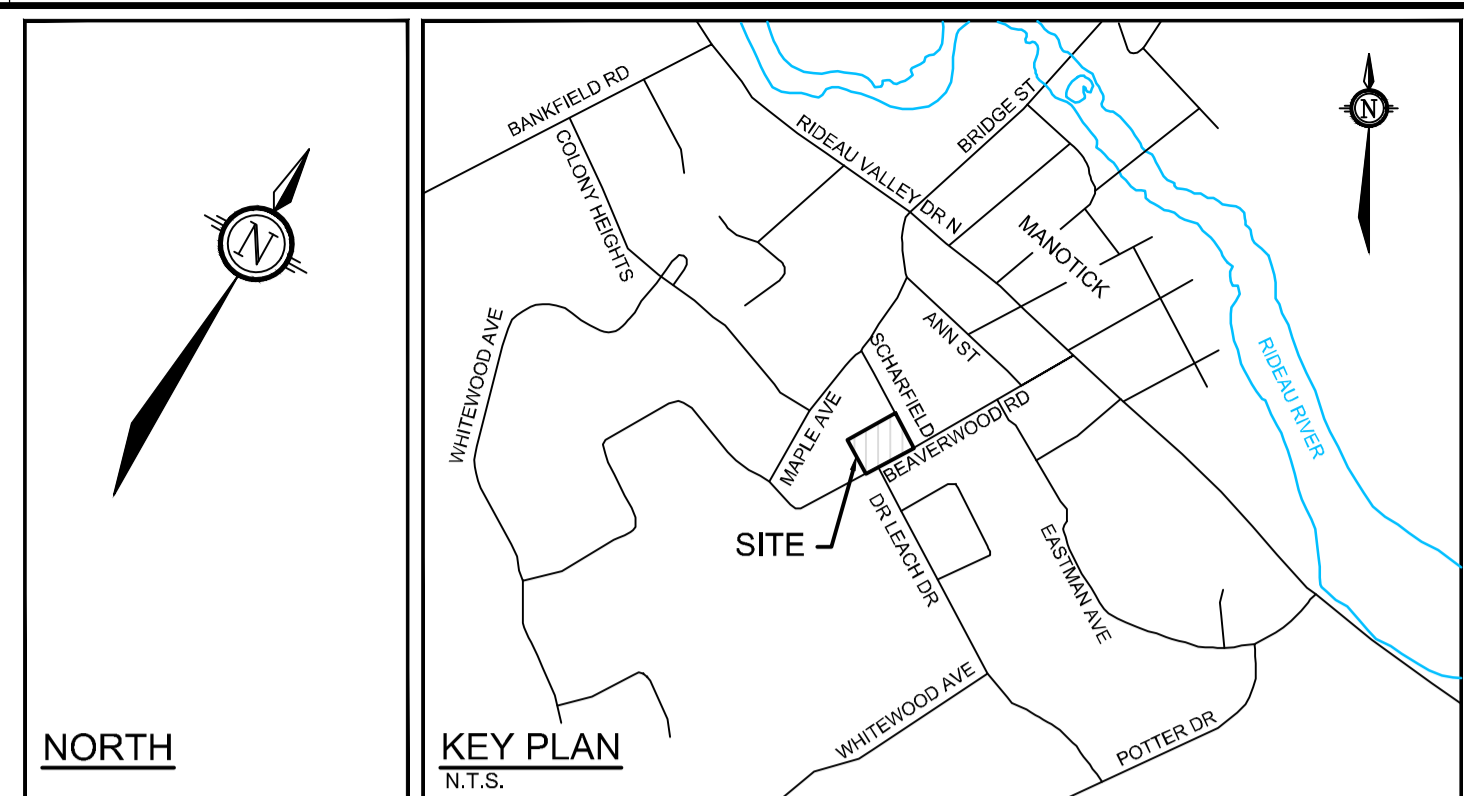


**BENCHMARK NOTES:**

- ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CANADIAN 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 TOPOGRAPHICAL PLAN OF SURVEY, PART OF BLOCK C, REGISTERED PLAN 771, CITY OF OTTAWA, PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
- TEMPORARY JOB BENCHMARK DESCRIPTION IS LOCATED ON MAIL IN EAST FACE OF UTILITY POLE, LOCATED APPROXIMATELY 24.7m WEST OF THE SOUTHWEST PROPERTY BOUNDARY ALONG BEAVERWOOD ROAD. SEE TOPOGRAPHICAL PLAN OF SURVEY MENTIONED ABOVE FOR DETAILS.



**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.
- 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 RELEVANT REFERENCES TO OFSS, OFSD & AWWA GUIDELINES - ALL CURRENT VERSIONS AND AS AMENDED.
- 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 INVESTIGATION REPORT (PG6160-1, REVISION 2, DATED DECEMBER 16, 2022), PREPARED BY PATERSON GROUP INC. 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 HARDSURFACE AREAS AND DIMENSIONS.
- REFER TO THE DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT (R-2022-013) PREPARED BY NOVATECH.
- SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

**INLET CONTROL DEVICE DATA TABLE: AREA A-2**

DESIGN EVENT	ICD TYPE (PLUG TYPE)	OUTLET STRUCTURE	DIAMETER OF OUTLET PIPE (mm)	PEAK FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m³)	AVAILABLE STORAGE
1:2 YR	IPEX TEMPEST	1800mm Ø CBMH 101	200mm Ø PVC	1.2	0.42	89.50	14.4	38.7 m³
1:5 YR	VORTEX LMF 75			1.4	0.60	89.88	20.0	
1:100 YR				2.5	1.81	90.89	38.6	

**PROPOSED ROOF DRAIN TABLE: AREA R-1 (RD 1 to RD 5)**

AREA ID	ROOF DRAIN No. (WATTS MODEL)	ROOF DRAIN OPENING SETTING	1.5 YEAR RELEASE RATE	APPROX. 5-YR PONDING DEPTH	1:100 YEAR PONDING DEPTH	APPROX. 100-YR PONDING DEPTH
R-1	RD 1 (RD-100-A-ADJ)	CLOSED	0.32 L/s	8 cm	0.32 L/s	12 cm
R-1	RD 2 (RD-100-A-ADJ)	CLOSED	0.32 L/s	8 cm	0.32 L/s	12 cm
R-1	RD 3 (RD-100-A-ADJ)	CLOSED	0.32 L/s	7 cm	0.32 L/s	10 cm
R-1	RD 4 (RD-100-A-ADJ)	FULLY EXPOSED	1.28 L/s	10 cm	1.73 L/s	14 cm
R-1	RD 5 (RD-100-A-ADJ)	CLOSED	0.32 L/s	8 cm	0.32 L/s	12 cm

\* REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2022-013) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.

**LEGEND**

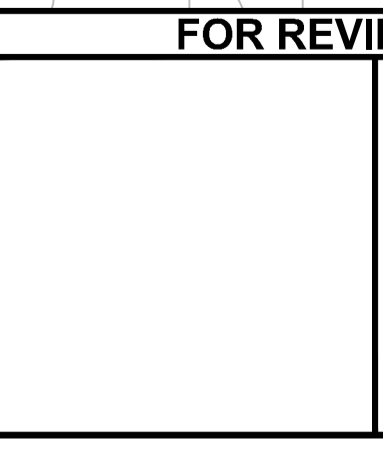
- PROPOSED BARRIER CURB
- DC PROPOSED DEPRESSED CURB
- DRAINAGE AREA LIMITS
- POST-DEVELOPMENT AREA ID
- POST-DEVELOPMENT DRAINAGE AREA (ha)
- 1.5 YEAR WEIGHTED RUNOFF COEFFICIENT
- MAXIMUM 3:1 SIDESLOPE
- PROPOSED TERRACE ELEVATION
- SAN MH 201 PROPOSED SANITARY MANHOLE
- STM MH 101 PROPOSED STORM MANHOLE
- HYD V&V PROPOSED HYDRANT AND VALVE
- CBMH 01 PROPOSED CATCHBASIN MANHOLE
- CB 02 PROPOSED CATCHBASIN
- EMERGENCY OVERLAND FLOW ROUTE
- PROPOSED HYDRO TRANSFORMER
- FFE FINISHED FLOOR ELEVATION
- ▲ BUILDING ENTRANCE / EXIT
- EXISTING CONCRETE CURB
- EXISTING VALVE & VALVE BOX
- EXISTING SERVICE POST
- EXISTING HYDRANT
- EXISTING CATCHBASIN
- EXISTING CATCHBASIN MH
- EXISTING UTILITY POLE
- EXISTING GUY WIRES
- APPROXIMATE PONDING LIMITS

**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**  
NIVO DEVELOPMENTS INC.  
255 MICHAEL COWPLAND DRIVE,  
OTTAWA, ONTARIO, K2M 0M5  
CONTACT: ANTHONY NICOLINI  
PHONE: (613) 880-2274  
EMAIL: anthony@arkconstruction.ca

No.	REVISION	DATE	BY
2	REVISED PER CITY COMMENTS	DEC 22/22	FST
1	ISSUED FOR SITE PLAN APPROVAL	JUL 15/22	FST

DESIGN	SM
CHECKED	FST
DRAWN	SM
CHECKED	FST
APPROVED	FST



**FOR REVIEW ONLY**



**NOVATECH**  
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Telephone: (613) 254-9643  
Facsimile: (613) 254-5867  
Website: www.novatech-eng.com

**LOCATION**  
CITY OF OTTAWA  
1185 BEAVERWOOD ROAD

**DRAWING NAME**  
POST-DEVELOPMENT  
STORMWATER  
MANAGEMENT PLAN

PROJECT No. 121184  
REV # 2  
DRAWING No. 121184-SWM2

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