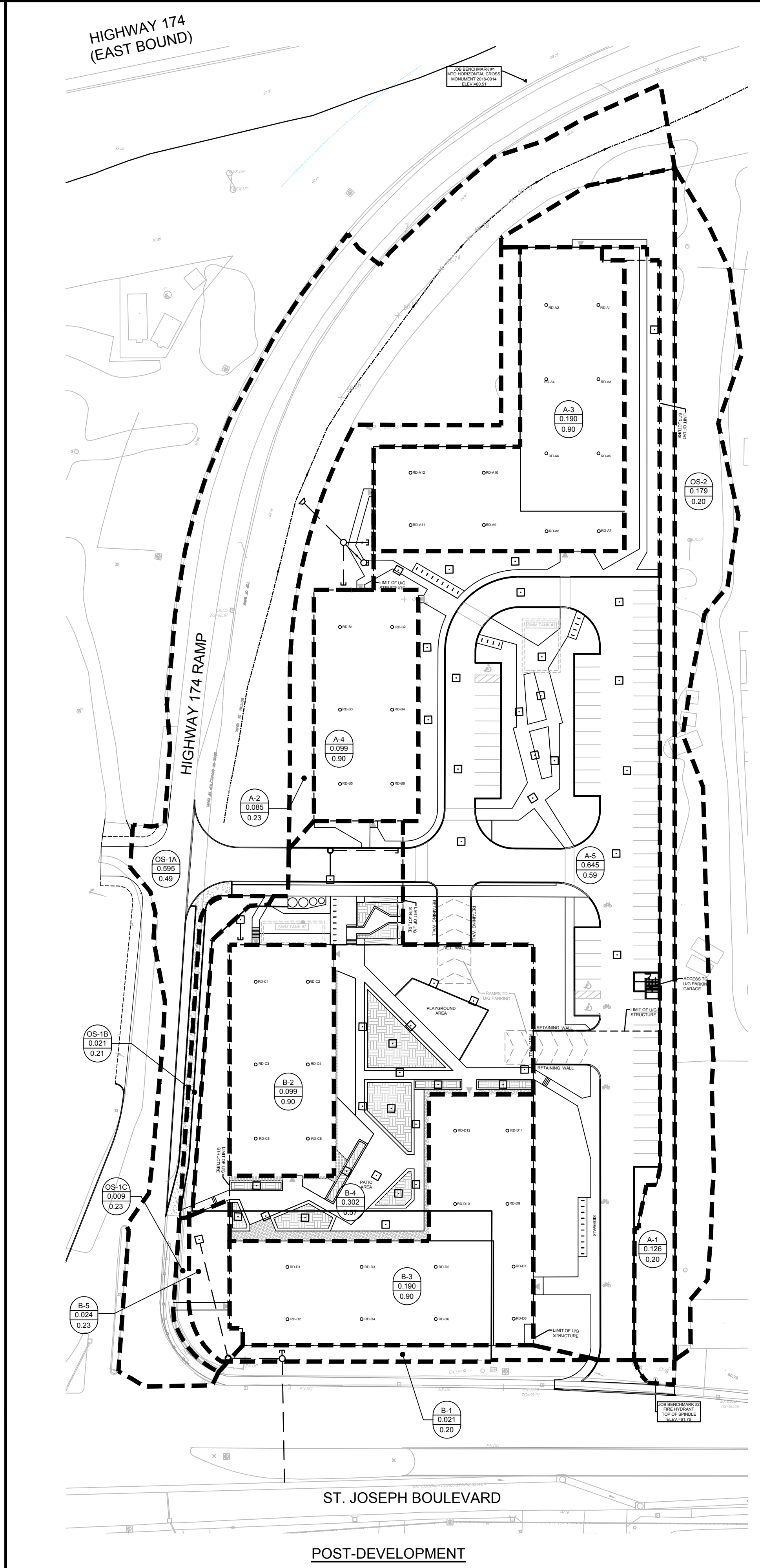


ST. JOSEPH BOULEVARD
PRE-DEVELOPMENT



ST. JOSEPH BOULEVARD
POST-DEVELOPMENT

LEGEND

- PROPOSED BARRIER CURB
- DC — PROPOSED DEPRESSED CURB
- - - DRAINAGE AREA LIMITS
- 1:5 YR. / 1:100 YR. APPROXIMATE PONDING LIMITS
- PRE 0.600 / 0.30 PRE-DEVELOPMENT AREA ID / PRE-DEVELOPMENT DRAINAGE AREA (ha)
- A-2 0.129 / 0.82 POST-DEVELOPMENT AREA ID / POST-DEVELOPMENT DRAINAGE AREA (ha)
- 1:5 YEAR WEIGHTED RUNOFF COEFFICIENT
- STM MH ○ PROPOSED STORM MANHOLE (WT=WATERTIGHT COVER)
- CBMH ○ PROPOSED CATCHBASIN MANHOLE
- CB □ PROPOSED CATCHBASIN
- RD ○ CONTROLLED FLOW ROOF DRAIN
- PROPOSED STORM SEWER AND FLOW DIRECTION
- ICD □ PROPOSED INLET CONTROL DEVICE
- ← EMERGENCY OVERLAND FLOW ROUTE
- PROPOSED LANDSCAPE WALL
- ▲ PROPOSED BUILDING ENTRANCE / EXIT
- FFE FINISHED FLOOR ELEVATION
- USF UNDERSIDE OF FOOTING ELEVATION
- STM MH ○ EXISTING STORM MH & SEWER
- CB □ EXISTING CATCHBASIN CW CATCHBASIN LEAD
- EXISTING CONCRETE CURB
- WV & V EXISTING VALVE & VALVE BOX
- SP ○ EXISTING SERVICE POST
- HYD ○ EXISTING HYDRANT
- CBMH ○ EXISTING CATCHBASIN
- CB □ EXISTING CATCHBASIN MH
- EX UP ○ EXISTING UTILITY POLE
- CH WY WIRES
- EXISTING DRAINAGE DIRECTION ARROWS
- EXISTING OVERLAND FLOW

- 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 INVESTIGATION REPORT (REF NO. PG5091-1, REVISION 1, DATED NOVEMBER 6, 2019, AND TREE PLANTING SETBACK RECOMMENDATIONS (REF NO. PG5801-MEMO-01), 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 ARCHITECTS AND LANDSCAPE ARCHITECTS DRAWINGS FOR BUILDING AND HARD SURFACED AREAS AND DIMENSIONS.
 - REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2023-086) PREPARED BY NOVATECH.
 - SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE-IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
 - 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, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, T/W ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.
 - PROVIDE LINE/PARKING PAINTING AS REQUIRED PER THE ARCHITECTURAL SITE PLAN.

- 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.
 - BENCHMARK WAS PROVIDED ON-PLAN OF SURVEY PART OF LOT 33, CONCESSION 1 (OLD SURVEY) GEOGRAPHIC TOWNSHIP OF CUMBERLAND, CITY OF OTTAWA, SURVEYED BY STANTEC GEOMATICS LTD.

INTERNAL SWM STORAGE TANK #1 SYSTEM

DESIGN EVENT	STORAGE SYSTEM CONTROLLED FLOW	STORAGE VOLUMES
		REQUIRED / PROVIDED
1:2 YR	39.5 m ³	>219 m ³
1:5 YR	64.7 m ³	
1:100 YR	170.2 m ³	
1:100+20%	218.4 m ³	

NOTES:

- ALL DRAINAGE FROM AREA A-5 TO BE DIRECTED TO THE INTERNAL STORMWATER STORAGE SYSTEM. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR DETAILS.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT SIZE AND DETAILS OF INTERNAL STORMWATER STORAGE SYSTEM.
- REFER TO MECHANICAL PLANS FOR PUMP INFORMATION AND DETAILS OF THE INTERNAL STORMWATER STORAGE SYSTEM.

ROOF DRAIN TABLE

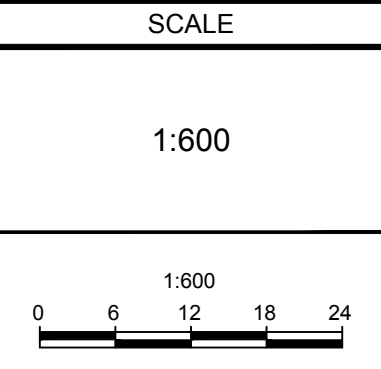
AREA ID	BUILDING	ROOF DRAIN No. (WATTS MODEL)**	ROOF DRAIN OPENING SETTING	2 YEAR RELEASE RATE	APPROX. 2-YR PONDING DEPTH	5-YEAR RELEASE RATE	APPROX. 5-YEAR PONDING DEPTH	100-YEAR RELEASE RATE	APPROX. 100-YR PONDING DEPTH
A-3	A	RD 1 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	12 cm	0.32 L/s	16 cm
		RD 2 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	12 cm	0.32 L/s	16 cm
		RD 3 (RD-100-A-ADJ)	CLOSED	0.32 L/s	10 cm	0.32 L/s	11 cm	0.32 L/s	15 cm
		RD 4 (RD-100-A-ADJ)	CLOSED	0.32 L/s	10 cm	0.32 L/s	11 cm	0.32 L/s	15 cm
		RD 5 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	12 cm	0.32 L/s	15 cm
		RD 6 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	12 cm	0.32 L/s	15 cm
		RD 7 (RD-100-A-ADJ)	CLOSED	0.32 L/s	8 cm	0.32 L/s	10 cm	0.32 L/s	16 cm
		RD 8 (RD-100-A-ADJ)	CLOSED	0.32 L/s	8 cm	0.32 L/s	10 cm	0.32 L/s	16 cm
		RD 9 (RD-100-A-ADJ)	CLOSED	0.32 L/s	8 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 10 (RD-100-A-ADJ)	CLOSED	0.32 L/s	8 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 11 (RD-100-A-ADJ)	CLOSED	0.32 L/s	10 cm	0.32 L/s	11 cm	0.32 L/s	13 cm
		RD 12 (RD-100-A-ADJ)	CLOSED	0.32 L/s	10 cm	0.32 L/s	11 cm	0.32 L/s	13 cm
A-4	B	RD 1 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 2 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 3 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 4 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
B-2	C	RD 5 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 6 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 1 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 2 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 3 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 4 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 5 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
		RD 6 (RD-100-A-ADJ)	CLOSED	0.32 L/s	9 cm	0.32 L/s	10 cm	0.32 L/s	12 cm
B-3	D	RD 7 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	12 cm	0.32 L/s	14 cm
		RD 2 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	12 cm	0.32 L/s	14 cm
		RD 3 (RD-100-A-ADJ)	CLOSED	0.32 L/s	10 cm	0.32 L/s	11 cm	0.32 L/s	13 cm
		RD 4 (RD-100-A-ADJ)	CLOSED	0.32 L/s	10 cm	0.32 L/s	11 cm	0.32 L/s	13 cm
		RD 5 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	12 cm	0.32 L/s	15 cm
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		RD 12 (RD-100-A-ADJ)	CLOSED	0.32 L/s	10 cm	0.32 L/s	11 cm	0.32 L/s	13 cm

**REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2023-086) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.
**ALL CONTROLLED FLOW ROOF DRAINS FOR THE PROPOSED BUILDING TO BE WATTS 'ADJUSTABLE CONTROL' 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
8417709 CANADA INC.
430 boulevard de l'hôpital, Suite 310
Gatineau, QC J8V 1T7
NAME: PAUL-ANDRÉ CHARBONNEAU
PHONE: (819) 955-8032
EMAIL: paul-andre@chartro.ca

No.	REVISION	DATE	BY
1.	ISSUED FOR SPC APPLICATION	JUL 19/24	FST



FOR REVIEW ONLY

DESIGN	CV
CHECKED	FST
DRAWN	CV
CHECKED	FST
APPROVED	FST



NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone: (613) 254-9643
Facsimile: (613) 254-5867
Website: www.novatech-eng.com

LOCATION
CITY OF OTTAWA
3459 & 3479 ST. JOSEPH BOULEVARD

DRAWING NAME
PRE-DEVELOPMENT STORM DRAINAGE & POST-DEVELOPMENT STORMWATER MANAGEMENT PLAN

PROJECT No. 113020-00
REV #1
DRAWING No. 113020-SWM