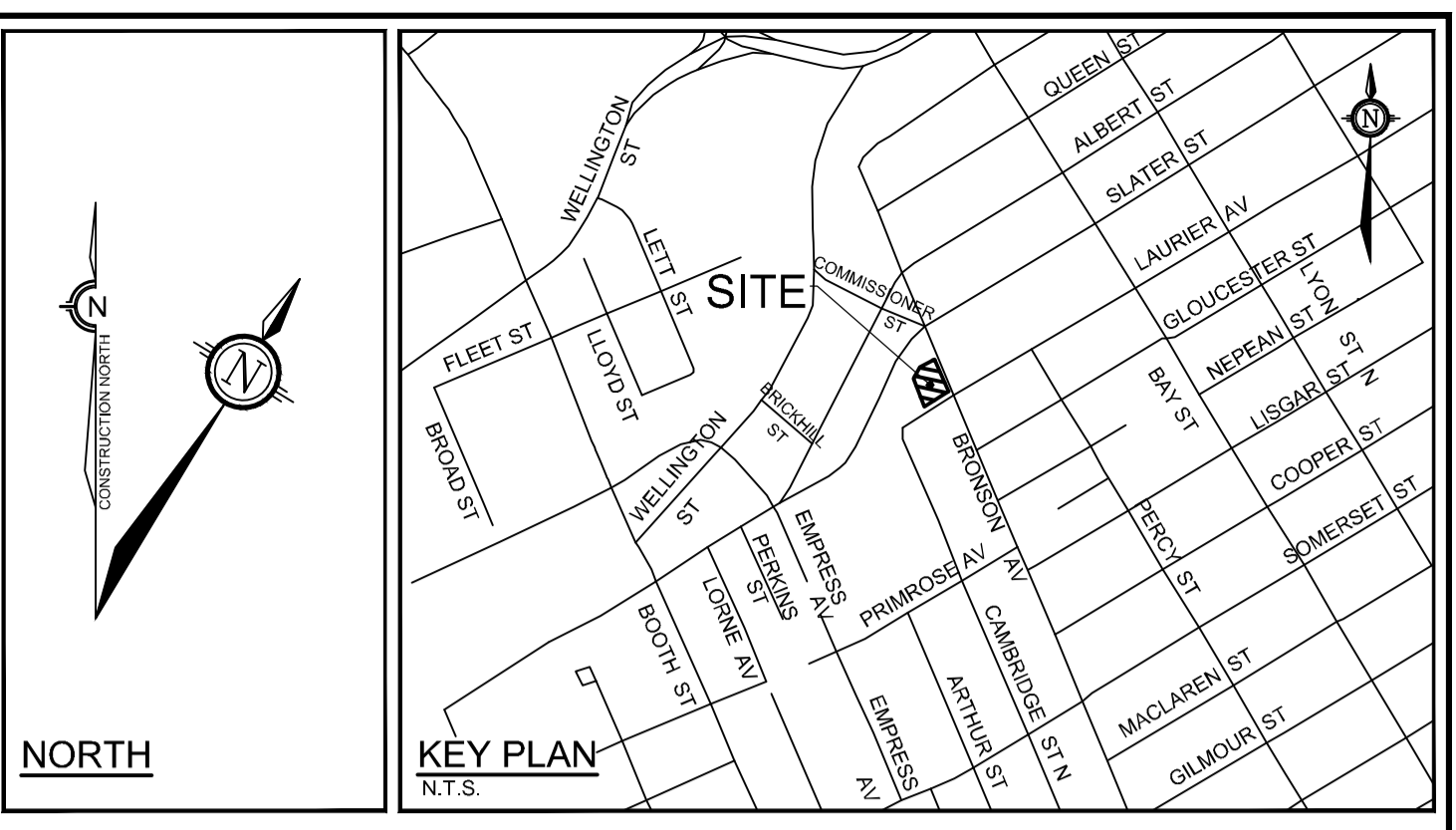


**LEGEND**

- DC: PROPOSED BARRIER CURB
- DC: PROPOSED DEPRESSED CURB
- : DRAINAGE AREA LIMITS
- 1.5 YR: APPROXIMATE PONDING LIMITS
- 1:100 YR: APPROXIMATE PONDING LIMITS
- A-3 (0.078, 0.57): POST-DEVELOPMENT AREA ID
- A-3 (0.062, 0.66): POST-DEVELOPMENT DRAINAGE AREA (ha)
- 0.34: 1.5 YEAR WEIGHTED RUNOFF COEFFICIENT
- FFE: FINISHED FLOOR ELEVATION
- T/FND: TOP OF FOUNDATION WALL ELEVATION
- USF: UNDERSIDE OF FOOTING ELEVATION
- RD: PROPOSED CONTROLLED FLOW ROOF DRAIN
- : PROPOSED STORM SEWER AND FLOW DIRECTION
- : EMERGENCY OVERLAND FLOW ROUTE
- : PROPOSED BUILDING ENTRANCE / EXIT
- STM MH: EXISTING STORM MH & SEWER
- CB: EXISTING CATCHBASIN C/W CATCHBASIN 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 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. 190227, DATED JUNE, 2019), PREPARED BY LRL ENGINEERING 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 AREAS AND DIMENSIONS.
  - REFER TO DEVELOPMENT SERVICING & STORMWATER MANAGEMENT REPORT (R-2019-193) 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).

**INTERNAL SWM STORAGE SYSTEM**

DESIGN EVENT	STORAGE SYSTEM CONTROLLED FLOW	STORAGE VOLUMES	
		REQUIRED	PROVIDED
1:2 YR	1.26 L/s	0.7 m³	> 5.0 m³
1:5 YR	1.26 L/s	1.3 m³	
1:100 YR	1.26 L/s	3.7 m³	
1:100+20%	1.26 L/s	4.9 m³	

**NOTES:**

- ALL DRAINAGE FROM AREA B-1 (ALL PROPOSED EXTERIOR MECHANICAL DRAINS + WEEPING TILE DRAINAGE SYSTEM) TO BE DIRECTED TO THE INTERNAL STORMWATER STORAGE SYSTEM. REFER TO THE ARCHITECTURAL AND MECHANICAL PLANS FOR DETAILS.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT SIZE AND DETAILS OF INTERNAL STORMWATER STORAGE SYSTEM.
- REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATION AND CONNECTIONS AND DETAILS OF THE INTERNAL STORMWATER STORAGE SYSTEM.

**SITE FLOWS & STORMWATER MANAGEMENT TABLE**

DESIGN EVENT	PRE-DEVELOPMENT CONDITIONS		POST-DEVELOPMENT CONDITIONS							
	UNCONTROLLED FLOW (L/s)	ALLOWABLE RELEASE RATE (L/s)	SAN FLOWS (L/s)	R-1 FLOW (L/s)	B-1 FLOW (L/s)	A-1 FLOW (L/s)	A-2 FLOW (L/s)	A-3 FLOW (L/s)	TOTAL FLOW (L/s)	REDUCTION IN FLOW (L/s OR %)*
1:5 YR	17.7	10.5	1.2	3.2	1.3	0.1	0.1	2.5	8.5	9.2 or 52%
1:100 YR	34.6	10.5		4.0	1.3	0.2	0.2	3.5	10.5	24.1 or 70%

\* REDUCED FLOW COMPARED TO PRE-DEVELOPMENT UNCONTROLLED CONDITIONS

**INLET CONTROL DEVICE DATA TABLE - CBM 01**

DESIGN EVENT	ICD TYPE (VORTEX MODEL)	DIAMETER OF OUTLET PIPE (mm)	DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m³)	AVAILABLE STORAGE
1:2 YR	HYDROVEX (MODEL 75 VHV-1)	250mmØ PVC	2.1	0.34	79.49	6.0	19.1 m³
1:5 YR			2.5	0.46	79.61	9.9	
1:100 YR			3.5	0.89	80.04	19.1	

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

AREA ID	ROOF DRAIN No. (WATTS MODEL)	ROOF DRAIN OPENING SETTING	1:5 YEAR RELEASE RATE (L/s)	APPROX. 5-YR PONDING DEPTH (cm)	1:100 YEAR RELEASE RATE (L/s)	APPROX. 100-YR PONDING DEPTH (cm)
R-1	RD 1 (RD-100-A-ADJ)	3/4 EXPOSED	0.95 L/s	11 cm	1.58 L/s	15 cm
R-1	RD 2 (RD-100-A-ADJ)	CLOSED	0.32 L/s	7 cm	0.32 L/s	12 cm
R-1	RD 3 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 4 (RD-100-A-ADJ)	CLOSED	0.32 L/s	11 cm	0.32 L/s	15 cm
R-1	RD 5 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.87 L/s	14 cm

\* REFER TO THE 'DEVELOPMENT SERVICING AND STORMWATER MANAGEMENT REPORT' (R-2019-193) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.  
\*\* ALL CONTROLLED FLOW ROOF DRAINS FOR THE PROPOSED BUILDING TO BE WATTS 'ADJUSTABLE ACCUTROL' ROOF DRAINS.

*Douglas James*

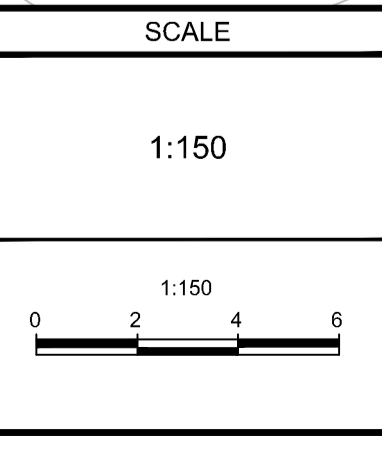
**DOUGLAS JAMES, MCIP, RPP**  
 MANAGER, DEVELOPMENT REVIEW - CENTRAL  
 PLANNING, INFRASTRUCTURE & ECONOMIC  
 DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

**APPROVED**  
 By Douglas James at 2:38 pm, Aug 12, 2021

**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**  
 ALEXANDER FLECK HOUSE INC.  
 250 STE ANNE AVENUE,  
 OTTAWA, ONTARIO, K1L 7C4  
 DENIS MICHAUD  
 PHONE: (613) 402-2855  
 denis@henryinvestments.ca

No.	REVISION	DATE	BY
2	REVISED SITE PLAN / ISSUED FOR SITE PLAN APPROVAL	JUL 31/20	MS
1	ISSUED FOR SITE PLAN APPROVAL	DEC 9/19	MS



DESIGN	SM / MS
CHECKED	MS
DRAWN	BF / SM
CHECKED	JLS
APPROVED	MS

**FOR REVIEW ONLY**

**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 593 LAURIER AVENUE	PROJECT No. 119019
DRAWING NAME STORMWATER MANAGEMENT PLAN	REV # 2
DRAWING No. 119019-SWM	

D07-12-19-0207