



LEGEND

свмн з О- —	PROPOSED CATCHBASIN MANHOLE c/w 3.0m SUBDRAINS PER GETOTECH & SEWER	n RADIAL			
^{a)} STM MH 1 O	PROPOSED STORM MANHOLE & SEWER		APPROXIMATE PONDING LIMITS		
т св 🗗 —	 PROPOSED CATCHBASIN c/w 3.0m RADIAL SUBDRAINS PER GETOTECH AND LEAD 	1:5 YR			
HYD -॑ ⊗ ^{VVB}	PROPOSED HYDRANT AND VALVE		EXISTING CONCRETE CURB		
	PROPOSED BARRIER CURB	SANMH	EXISTING SANITARY MANHOLE		
DC	PROPOSED DEPRESSED CURB	СВМН	EXISTING CATCHBASIN MANHOLE		
	PROPOSED INLET CONTROL DEVICE	STMMH O	EXISTING STORM MANHOLE		
e RD o	PROPOSED ROOF DRAIN	CB 🖸	EXISTING CATCHBASIN		
FFE=95.50	PROPOSED FINISHED FLOOR ELEVATION	HYD - C X	EXISTING HYDRANT & VALVE		
		· Z	EXISTING TREES / VEGETATION		
		EX UP	EXISTING UTILITY POLE C/W GUY WIRES		
		X`X	EXISTING FENCE		
OORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.					
	$\begin{array}{c} \text{a)} \text{STM MH 1} \bigcirc \\ \text{T} & \text{CB} \Box \\ \text{HYD} - \bigcirc \otimes & \text{VVB} \\ \hline \hline \Box C & \\ \text{ICD} & \\ \text{TE} & \text{RD} & \\ \text{FFE=95.50} \\ \hline \end{array}$	CBMH 3 O → SUBDRAINS PER GETOTECH & SEWER Ia) STM MH 1 O → PROPOSED STORM MANHOLE & SEWER IT CB O → PROPOSED CATCHBASIN c/w 3.0m RADIAL SUBDRAINS PER GETOTECH AND LEAD HYD Image: O PROPOSED CATCHBASIN c/w 3.0m RADIAL SUBDRAINS PER GETOTECH AND LEAD HYD Image: O PROPOSED CATCHBASIN c/w 3.0m RADIAL SUBDRAINS PER GETOTECH AND LEAD HYD Image: O PROPOSED HYDRANT AND VALVE Image: O PROPOSED BARRIER CURB ICD PROPOSED DEPRESSED CURB ICD PROPOSED INLET CONTROL DEVICE ICD PROPOSED ROOF DRAIN FFE=95.50 PROPOSED ROOF DRAIN FFE=95.50 PROPOSED FINISHED FLOOR ELEVATION AREA UNDER SITE PLAN DEVELOPMENT APPLICATION FOR THE SITE ACCESS ROAD	$\begin{array}{c} \text{SUBDRAINS PER GETOTECH & SEWER} \\ \text{SUBDRAINS PER GETOTECH & SEWER} \\ \text{T} & \text{CB} & \Box & - & - & \text{PROPOSED STORM MANHOLE & SEWER} \\ \text{T} & \text{CB} & \Box & - & - & \text{PROPOSED CATCHBASIN c/w 3.0m RADIAL} \\ \text{SUBDRAINS PER GETOTECH AND LEAD} & 1.5 YR \\ \text{SUBDRAINS PER GETOTECH AND LEAD} & 1.5 YR \\ \text{SUBDRAINS PER GETOTECH AND LEAD} & 1.100 YR \\ \text{HYD} & & & \text{VVB} & \text{PROPOSED HYDRANT AND VALVE} \\ \hline & & & \text{PROPOSED BARRIER CURB} & \text{SANMH} \\ \hline & & & & \text{DC} & & \text{PROPOSED DEPRESSED CURB} \\ \text{ICD} & & & \text{PROPOSED INLET CONTROL DEVICE} & \text{STMMH} \\ \hline & & & & \text{CBMH} & \bigcirc \\ \text{STMMH} & & & & \text{CBMH} & \bigcirc \\ \text{TE} & & \text{RD} & & & \text{PROPOSED ROOF DRAIN} & & & \text{CB} \\ \hline & & & & \text{FFE=95.50} & \text{PROPOSED FINISHED FLOOR ELEVATION} & & & \text{HYD} & & & & \text{VB} \\ \hline & & & & & \text{AREA UNDER SITE PLAN DEVELOPMENT} \\ & & & & \text{APPLICATION FOR THE SITE ACCESS ROAD} & & & & & & & & \\ \hline & & & & & & & & & &$		

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 \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.

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 GEOTECHNICAL REPORT (NO. PG4409-1, DATED FEBRUARY 9, 2018), 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.

9. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.

10. REFER TO DSS & SWM REPORT (R-2018-011) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.

11. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

12. PROVIDE LINE/PARKING PAINTING

EROSION AND SEDIMENT CONTROL NOTES

THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES. TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE. DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO

1. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA. THEY ARE TO BE APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION. THESE PRACTICES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AND SHOULD INCLUDE AS A MINIMUM THOSE MEASURES INDICATED ON THE PLAN.

2. EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED DURING CONSTRUCTION IN ACCORDANCE WITH THE "GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES" (GOVERNMENT OF ONTARIO, MAY 1987). THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEETING ALL REGULATORY AGENCY REQUIREMENTS.

3. TO PREVENT SURFACE EROSION FROM ENTERING ANY STORM SEWER SYSTEM DURING CONSTRUCTION, FILTER CLOTH WILL BE PLACED UNDER GRATES OF NEARBY CATCHBASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE CONSTRUCTION AREA (WHERE APPLICABLE). THESE CONTROL MEASURES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.

4. TO LIMIT EROSION: MINIMIZE THE AMOUNT OF EXPOSED SOILS AT ANY GIVEN TIME, RE-VEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE AND PROTECT EXPOSED SLOPES WITH NATURAL OR SYNTHETIC MULCHES.

5. FOR MATERIAL STOCKPILING: MINIMIZE THE AMOUNT OF EXPOSED MATERIALS AT ANY GIVEN TIME; APPLY TEMPORARY SEEDING, TARPS, COMPACTION AND/OR SURFACE ROUGHENING AS REQUIRED TO STABILIZE STOCKPILED MATERIALS THAT WILL NOT BE USED WITHIN 14 DAYS.

6. THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER.

7. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO ANY STORM SEWER SYSTEM. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.

8. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

9. ROADWAYS ARE TO BE SWEPT AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE MUNICIPALITY.

10. THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS. MONITOR DUST LEVELS DURING SITE PREPARATION/EXCAVATION, AND CONSTRUCTION ACTIVITIES, AND WHEN DUST LEVELS BECOME VISUALLY APPARENT SPRAY WATER TO MINIMIZE THE RELEASE OF DUST FROM GRAVEL, PAVED AREAS AND EXPOSED SOILS. USE CHEMICAL DUST SUPPRESSANTS ONLY WHERE NECESSARY ON PROBLEM AREAS.

	CAMP MA	ART SITE FLO	OWS & ST	rormwa ⁻	TER MAN	AGEMEN ⁻	T TABLE	
GN NT	PRE-DEVELOPMENT CONDITIONS		POST-DEVELOPMENT CONDITIONS					
	UNCONTROLLED FLOW (L/s)	ALLOWABLE RELEASE RATE (L/s)	A-0 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 %)**
ΥR	115.3	99.5	6.7	43.4	9.0	28.0	87.1	28.2 OR 25%
	247.0	00 F	10.7	44.6	44.4	20.4	00 5	149 5 00 600/

 247.0
 99.5
 13.7
 44.6
 11.1
 29.1
 98.5
 148.5 OR 60%
 * REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2018-011) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.

**REDUCED FLOW COMPARED TO PRE-DEVELOPMENT UNCONTROLLED CONDITIONS.

REVIEW ONLY		LOCATION		C
	ΝΟΛΤΞϹΗ	CITY OF OTTAWA 20 FRANK NIGHBOR PLACE - CAMP MART	T SITE	7
	Engineers, Planners & Landscape Architects	DRAWING NAME	PROJECT No.	C
	Suite 200, 240 Michael Cowpland Drive Ottawa, Ontario, Canada K2M 1P6		117193 REV	
	Telephone(613) 254-9643Facsimile(613) 254-5867Websitewww.novatech-eng.com	STORMWATER MANAGEMENT PLAN	REV # 1 DRAWING №.	

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