

	EX. SANMH T/G=70.30			
$\bigcirc$	INV. W=68.83m			
	INV. E=68.68m	ATION		
	(NOT ACTUAL LOC	A HON)		
FX .	STMMH			
T/G=	=70.36			
INV.	W=68.21m			
INV.	E=67.70m			
(NO	T ACTUAL LOCATIC	DN)		



ELEVATION=70.80

## GENERAL NOTES:

- 1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- 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.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$2,000,000.00. 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.
- 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.
- REFER TO GEOTECHNICAL INVESTIGATION PG4975-1, DATED JULY 04, 2019, 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 SURFACED AREAS AND DIMENSIONS. 10. REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2019-155) PREPARED BY NOVATECH.
- 11. SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE-IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- 12. PRIOR TO COMMENCEMENT OF ANY WORKS, CONTRACTOR TO OBTAIN SERVICE LOCATES BY CALLING ONTARIO ONE CALL AT 1-800-400-2255

#### **SEWER NOTES:**

SEWER TRENCH

- 1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. 2. SPECIFICATIONS:
  - TIEM STORM SERVICE SANITARY SERVICE
- SPEC. No. PVC DR 3 PVC DR 35 CITY OF OTTAWA - S6 & S7
- 3. ALL STORM AND SANITARY SERVICE LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTERS WITHIN THE BUILDING FOOTPRINT AS PER CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2. REFER TO MECHANICAL PLANS FOR DETAILS.
- 4. 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.
- 5. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 1.5m COVER WITH 125mm THICK HI-40 RIGID INSULATION.
- 6. TYPICAL STORM MANHOLES AND CATCHBASIN MANHOLES ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO HAVE 600mm SUMPS UNLESS OTHERWISE INDICATED. 7. ALL CATCHBASINS, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICD'S INSTALLED WITHIN THEM ARE TO
- HAVE 600mm SUMPS. 8. 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 T/G ELEVATIONS, STRUCTURE LOCATIONS AND ANY ALIGNMENT CHANGES, ETC 9. 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 OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYF 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
- 10. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS, GREATER THAN 200mmØ PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

#### WATERMAIN NOTES:

WATERMAIN MATERIAL

- 1. SUPPLY AND CONSTRUCT ALL WATERMAIN AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- 2. SPECIFICATIONS:
  - WATERMAIN TRENCHING THERMAL INSULATION IN SHALLOW TRENCHES THERMAL INSULATION BY OPEN STRUCTURES WATERMAIN CROSSING BELOW SEWERS

SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.

- REFERENCE CITY OF OTTAWA CITY OF OTTAWA W22 W23 CITY OF OTTAWA W25 CITY OF OTTAWA PVC DR 18 (100mm AND LARGER)
- 3. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS 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.
- 4. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED
- 5. PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, UNLESS OTHERWISE INDICATED. 6. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.



# LEGEND

RD o
DC

<u>150m</u>	<u>m</u>
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0	-
	1
M	R

FFE TF BFE USF

AREA II
R-1
R-2
R-3
R-4
* REFEF NOVA
** ^ 1 0

DESIGI EVENT
1:5 YR
1:100 Y

F.S. THAUVETTE

100041399

Nov. 18,2012

				SCALE 1:250	
			SCALE	DESIGN	FOR REVIEW ONLY
			1:125	CHECKED FST DRAWN	S ES THAL
ISSUED FOR SITE PLAN APPLICATION	NOV 18/19	FST	- 1:125 0 2.5 5		- 10004 Nov. 13
ISSUED FOR COORDINATION	OCT 17/19	FST		APPROVED	THO INCE OF
REVISION	DATE	BY		FST	



### PROPOSED FINISHED FLOOR ELEVATION PROPOSED TOP OF FOUNDATION ELEVATION PROPOSED BASEMENT FLOOR ELEVATION

PROPOSED UNDERSIDE OF FOOTING ELEVATION

APPROXIMATE LIMIT OF 40mm

FULL ROADWAY WIDTH ASPHALT

OVERLAY PER CITY STANDARDS

2	COOF DRAIN TABLE: AREA R-1 TO R-4 (ROOF DRAINS 1, 2, 3 & 4)								
r	ROOF DRAIN No. (WATTS MODEL)**	ROOF DRAIN OPENING SETTING	1:5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1:100 YEAR RELEASE RATE	APPROX. 100 YR PONDING DEPTH			
	RD 1 (RD-100-A-ADJ)	1/4 EXPOSED	0.63 L/s	5 cm	0.75 L/s	9 cm			
	RD 2 (RD-100-A-ADJ)	1/4 EXPOSED	0.74 L/s	9 cm	0.84 L/s	12 cm			
	RD 3 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.91 L/s	14 cm			
	RD 4 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.87 L/s	13 cm			

R TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2019-155) PREPARED BY TECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS. \*\*ALL CONTROLLED FLOW ROOF DRAINS FOR THE PROPOSED BUILDING TO BE WATTS ADJUSTABLE ACCUTROL ROOF DRAINS.

	SITE FLOWS & STORMWATER MANAGEMENT TABLE									
	PRE-DEVE CONDI	LOPMENT TIONS		POST-DEVELOPMENT CONDITIONS						
	UNCONTROLLED FLOW (L/s)	ALLOWABLE RELEASE RATE (L/s)	A-1 FLOW (L/s)	A-2 FLOW (L/s)	A-3 FLOW (L/s)	R 1-4 FLOW (L/s)	TOTAL FLOW (L/s)	REDUCTION IN FLOW (L/s OR %)*		
	3.5	10.0	0.30	0.63	0.19	2.96	4.06	N/A		
2	7.1	10.0	0.61	1.19	0.40	3.40	5.57	1.53 OR 22%		

\* REDUCED FLOW COMPARED TO PRE-DEVELOPMENT UNCONTROLLED CONDITIONS

