














- ## LEGEND
- | | | | |
|--|------------------------------|---|---------------------------|
|  | PROPERTY LINE |  | PROPOSED STORM MANHOLE |
|  | PROPOSED WATERMAIN |  | PROPOSED SANITARY MANHOLE |
|  | PROPOSED SANITARY SEWER |  | PROPOSED CATCH BASIN |
|  | PROPOSED STORM SEWER |  | PROPOSED CB 'T' |
|  | PROPOSED PERFORATED SUBDRAIN | | |
|  VB | PROPOSED VALVE BOX | | |
|  CS | PROPOSED CURB STOP | | |
|  | PROPOSED FIRE HYDRANT | | |
|  | PROPOSED SIAMESE CONNECTION | | |
|  (RM) | PROPOSED REMOTE WATER METER | | |
|  (M) | PROPOSED WATER METER | | |

EXISTING UNDERGROUND SERVICES AND UTILITY LOCATIONS DERIVED FROM THE BEST AVAILABLE DATA, AS-CONSTRUCTED DRAWINGS, UTILITY DRAWINGS AND INFRASTRUCTURE MAPPING PROVIDED BY THE CITY OF OTTAWA.

CONTRACTOR TO CONFIRM ELEVATIONS AND LOCATIONS OF EXISTING UNDERGROUND SERVICES AND UTILITIES WITHIN THE RIGHT OF WAY PRIOR TO INSTALLATION OF SITE SERVICING INFRASTRUCTURE.

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

NOT FOR CONSTRUCTION

TOPOGRAPHIC INFORMATION

TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD
PROJ. NO. 17722-19
DATED MAY 6, 2019

SITE PLAN INFORMATION

SITE PLAN PROVIDED BY HOBIN ARCHITECTURE
PROJ. NO. 1910
DATED JUNE 2019

GEOTECHNICAL STUDY

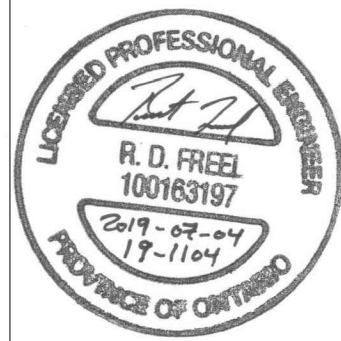

GEOTECHNICAL RECOMMENDATIONS PROVIDED BY PATERSON GROUP
 PROJ. NO. PG4875-1
 DATED MAY 27, 2019

SITE SERVICING AND STORMWATER MANAGEMENT STUDY

SERVICING AND STORMWATER MANAGEMENT RECOMMENDATIONS PROVIDED BY DSEL
 PROJ. NO. 19-1104
 DATED JULY 2019

BENCH MARK

TOP OF SPINDLE OF FIRE HYDRANT LOCATED
ELEV=73.86m

[illegible]

PROJECT No.19-1104

REVIEWED BY

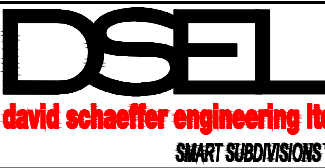
SITE SERVICING PLAN

1068-1090 CUMMINGS AVENUE

© DSEL

CUMMINGS CARON PROPERTY LTD

1306 Wellington Street West Suite 200
Ottawa, Ontario, K1Y 3B2
Tel. (613) 592-1818



DRAWN BY:	A.A.S.	CHECKED BY:	B.N.C.	DRAWING NO.	SHEET NO.
DESIGNED BY:	B.N.C.	CHECKED BY:	R.D.F.	SSP-1	3 of 4
SCALE:	1:300	DATE:	JULY 2019		

GENERAL NOTES

- ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISION OF THE STANDARDS AND SPECIFICATIONS FOR THE CITY OF OTTAWA AND THE APPLICABLE CANADIAN STANDARDS. THE CITY OF OTTAWA'S MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY WHERE REQUIRED.
- THE CONTRACTOR SHALL PROTECT THE LOCATION AND ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE PROTECTING FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED BY THE WORK.
- ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE AUTHORITY HAVING JURISDICTION IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATIONS AND NOTIFY EVERYONE OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES TO REMAIN TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTORS EXPENSE.
- RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER AT THE CONTRACTORS EXPENSE.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE "CONTRACTOR" AS DEFINED IN THE ACT.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CANADIAN STANDARDS FOR THE INSTALLATION OF UNDERGROUND TRAFFIC DEVICES PER LATEST AMENDMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WORKS DURING THE PERIOD OF WORKING OF THE CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES TO PREVENT CONFLICTS.
- ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING ALL NECESSARY PERMITS UNLESS PRIOR WRITTEN APPROVAL IS RECEIVED FROM THE ENGINEER.
- ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT. FOR DETAILS RELATING TO STORMWATER MANAGEMENT AND ROOF DRAINAGE REFER TO THE SITE SERVING AND STORMWATER MANAGEMENT DRAWINGS.
- ALL SEWERS CONNECTED WITH GRADES LESS THAN 1.0% SHALL BE INSTALLED USING LASER ALIGNMENT AND CHECKED WITH LEVEL.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAR THE COST OF THE SAME.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING, OR ADDITIONAL STRENGTH OF THE MAXIMUM TRENCH WIDTH AS SPECIFIED BY THE ENGINEER.
- SHALL BE / CURB/ SIDEWALK SIZES REFER TO INSIDE DIMENSIONS.
- APPROPRIATE ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPOSED CONSTRUCTION ACTIVITIES, THE HERITAGE OPERATIONS OF THE MAJOR MUSEUM SHALL BE CONSIDERED.

18. ALL NECESSARY CLEARING AND GRUBBING TO BE COMPLETED BY THE CITY OF OTTAWA PRIOR TO ANY TRIMMING.

10. DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL SITE PLAN.
11. THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER ONE SET OF AS CONSTRUCTED SITE SERVING AND GRADING DRAWINGS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL NOT BE ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION PROVIDED ON THIS PLAN.
- ## WATERMAIN NOTES
1. ALL WATERMAIN INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (SPD) (SPECIFICATIONS) (STRESS).
 2. ALL PVC WATERMAINS SHALL BE ANWMA C-900 CLASS 150, DR 18 OR APPROVED EQUIVALENT.
 3. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS SPECIFIED OTHERWISE.
 4. WATERMAINS IN FULL SERVICE SHALL BE INSTALLED WITH A 10 GAUGE STRAINED COPPER TWO OR RW1 TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.6.
 5. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS PER CITY OF OTTAWA STD. W40 AND W24.
 6. VALVE BOXES SHALL BE INSTALLED PER CITY OF OTTAWA STD. W24.
 7. WATERMAINS IN FULL SERVICE SHALL NOT BE INSTALLED WITH RESTRAINTS PER CITY OF OTTAWA STD. W25.5 AND W25.6.
 8. THRUST BLOCKING OF WATERMAINS TO BE INSTALLED PER CITY OF OTTAWA STD. W25.3 AND W25.4.
 9. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS, BLOW-OFFS, AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF WATERMAINS.
 10. WATERMAIN CROSSING OVER AND BELOW SEWERS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25, RESPECTIVELY.
 11. WATER SERVICES ARE TO BE INSULATED PER CITY STD. W23 WHERE SEPARATION BETWEEN SERVICES AND MAINTENANCE HOLES ARE LESS THAN 100 MM.
 12. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER / UTILITY IS 0.50M PER MOE GUIDELINES. FOR CROSSING UNDER WATERMAINS, THE MINIMUM VERTICAL CLEARANCE SHALL BE 0.75M. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND OVERHEAD POWER LINES SHALL BE 1.50M. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING TO ENSURE THAT THE JOINTS WILL BE EQUIVALENT AND THE JOINTS SHALL BE PROTECTED BY AN APPROVED METHOD.
 13. ALL WATERMAINS SHALL HAVE A MINIMUM COVER OF 2.4m, OTHERWISE THERMAL INSULATION IS REQUIRED AS PER STD W20 W22.
 14. GENERAL WATER PLANT TO UTILITY CLEARANCE AS PER STD W20 DR20
 15. ALL 12" DRAINAGE PIPES SHALL BE INSTALLED WITH A MINIMUM 0.3% SLOPE TO THE BOTTOM OF THE FIRST MANHOLE FLANGE ELEVATIONS TO BE INSTALLED 0.10M ABOVE PROPOSED FINISHED GRADE AT HYDRAINT; FIRE HYDRANT LOCATION AS PER STD W18 UNLESS OTHERWISE NOTED.
 16. BUILDING SERVICE TO BE CAPPED 1.0M OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED AND MUST BE RESTRAINED A MINIMUM OF 120 CM.

17. ALL WATERMANS SHALL BE INSTANTANEOUSLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND OTTAWA GUIDELINES UNLESS OTHERWISE SPECIFIED. PROVISIONS FOR FLUSHING WATER PRIOR TO TESTING, ETC. MUST BE PROVIDED.
 18. ALL WATERMANS SHALL BE INSTALLED IN ACCORDANCE WITH ALL CITY AND OTTAWA GUIDELINES. ALL DISCHARGED WATER BEING DISCHARGED TO THE STREET SHALL BE DISCHARGED TO ACCEPTABLE LEVELS PRIOR TO DISCHARGE. ALL DISCHARGED WATER BEING DISCHARGED TO THE STREET SHALL BE DISCHARGED TO ACCEPTABLE LEVELS PRIOR TO DISCHARGE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MUNICIPAL AND/OR PROVINCIAL REQUIREMENTS ARE FOLLOWED.
 19. ALL WATERMAN STUBS SHALL BE TERMINATED WITH A PLUG AND 50mm Blow OFF UNLESS OTHERWISE NOTED.
- ## SANITARY AND STORM SEWER NOTES
1. LASER ALIGNMENT CONTROL TO BE UTILIZED ON ALL SEWER INSTALLATIONS.
 2. CLAY SEALS TO BE INSTALLED AS PER CITY STANDARD DRAWING SR. THE SEALS SHOULD BE AT LEAST 1.5m LONG (IN THE TRENCH) AND 150mm WIDE. THE SEALS SHOULD EXTEND FROM THE PROST LINE AND PENETRATE THE BEDDING, SUB-BEDDING, AND COVER MATERIAL. THE BARRIERS SHOULD BE COMPOSED OF RELATIVELY DRY AND COMPACTED GRANULAR MATERIAL. THE SEALS SHOULD BE PLACED AT 15m INTERVALS AND 90% SPMD. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT 60m INTERVALS IN THE SERVICE TRENCHES.
 3. SERVICES TO BUILDINGS TO BE TERMINATED 1.0m FROM THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
 4. ALL MAINTENANCE STUBS SHALL BE INSTALLED IN ACCORDANCE WITH GRANULAR MATERIAL, COMPACTED TO 98% STANDARD PROCTOR DENSITY, A MINIMUM OF 300mm AROUND STRUCTURES.
 5. "MODULOC" OR APPROVED PERI-CAST MAINTENANCE STRUCTURE AND CATCH BASIN INCLUDING TO BE USED IN LIEU OF BRICKING. P.A.
 6. SAFETY PLATFORMS SHALL BE PER OPSD 404.02.
 7. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH OPSD 1003.01 AND 1003.02, IF APPLICABLE.
 8. THE CONTRACTOR SHALL COMPLY WITH ALL CITY AND OTTAWA GUIDELINES. ALL SEWERS, INCLUDING PICTORIAL REPORT, ONE (1) CD COPY AND (2) VIDEO RECORDINGS IN A FORMAT ACCEPTABLE TO THE ENGINEER. ALL SEWERS ARE TO BE FLUSHED PRIOR TO CAMERA INSPECTION. ALL SEWERS SHALL BE FLUSHED PRIOR TO TESTING. THE VIDEO INSPECTION OF SEWERS AND NECESSARY REPAIRS HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER.
 9. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH THE CITY OF OTTAWA GUIDELINES. ALL SANITARY SEWERS SHALL BE TESTED IN ACCORDANCE WITH THE VIDEO INSPECTION AND TESTING REPORT. THE CONTRACTOR SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF WEAR COURSE ASPHALT.
 10. ALL SANITARY SEWERS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF OTTAWA GUIDELINES. ALL SANITARY SEWERS WITH LESS THAN 1.0m GROUND SURFACE TO PIPE OVERTOP TO BE PROVIDED BY GEOTECHNICAL ENGINEER.

SANITARY

12. ALL SANITARY SEWER INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS FOR SANITARY SEWER.
13. ALL SANITARY GRAVITY SEWER SHALL BE PVC SD 36, 15" PEX "RING-ITE" (OR APPROVED EQUIVALENT) PER CSA STANDARD B182.2 OR LATEST AMENDMENT, UNLESS SPECIFIED OTHERWISE.
14. EXISTING MAINTENANCE STRUCTURES TO BE RE-BENCHED WHERE A NEW CONNECTION IS MADE.
15. SANITARY GRAVITY SEWER TRENCH AND BEDDING SHALL BE PER CITY OF OTTAWA STD. 56 AND 57, CLASS "B" BEDDING, UNLESS SPECIFIED OTHERWISE.
16. SANITARY MAINTENANCE STRUCTURE FRAME AND COVERS SHALL BE PER CITY OF OTTAWA STD. 524 AND 524-1, UNLESS SPECIFIED OTHERWISE.
17. SANITARY MAINTENANCE STRUCTURES SHALL BE BENCHED PER CITY STD 700.701.21.
18. STORM
19. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.2, OR LATEST AMENDMENT. ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.1, OR LATEST AMENDMENT. PIPE SHALL BE STANDARD 36" RIBBED CAST IRON PIPE PER CSA A257.1, UNLESS SPECIFIED OTHERWISE.
20. ALL STORM SEWER TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. 56 AND 57 CLASS "B" UNLESS OTHERWISE SPECIFIED.
21. ALL PVC STORM SEWERS ARE TO BE SD 36 APPROVED PER CSA B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
22. CATCH BASINS SHALL BE IN ACCORDANCE WITH STANDARD 705.010.
23. CATCH BASIN SHALL BE 200MM DIA. AT 1% SLOPE (MIN) UNLESS SPECIFIED OTHERWISE.
24. ALL CATCH BASINS SHALL HAVE 6000MM SUMPS, UNLESS SPECIFIED OTHERWISE.
25. ALL CATCH BASIN LAID INVERTS TO BE 1.5m BELOW FINISHED GRADE UNLESS SPECIFIED OTHERWISE.
26. ALL STORM SEWER TRENCHES SHALL BE BENCH TO THE FINISHED GRADE UNLESS OTHERWISE SPECIFIED. WHERE THE SPECIFIED TRENCH DEPTH IS EXCEEDED, THE CONTRACTOR IS REQUIRED TO PROVIDE AND SHALL BE RESPONSIBLE FOR EXTRA TRENCHING AND/OR PERMANENT BENCHING TO THE FINISHED TRENCH DEPTH.
27. PERFORATED SUBMERGIBLE FOR ROAD AND HIGHWAY. THE CATCH BASIN SHALL BE INSTALLED PER CITY STD R1 AND GEOTECHNICAL RECOMMENDATIONS UNLESS OTHERWISE SPECIFIED.
28. PERFORATED SUBMERGIBLE FOR ROAD AND HIGHWAY. LANDSCAPING APPLICATIONS SHALL BE INSTALLED PER CITY STD 529, 530, AND 531, WHERE APPLICABLE.
29. RIP-RAV TRENCHING FOR SEWER AND CULVERT OUTLETS PER OSPD 80.010.
30. ALL STORM SEWER / CULVERTS TO BE INSTALLED WITH FROST TREATMENT PER OSPD 803.031 WHERE APPLICABLE.
31. STORM MAINTENANCE STRUCTURE FRAME AND COVERS SHALL BE PER CITY OF OTTAWA STD 525 AND 524-1, UNLESS OTHERWISE NOTED.
32. CATCH BASIN FRAME AND COVER SHALL BE PER OSPD 400.02 AND CITY STD 519.1, UNLESS SPECIFIED, UNLESS OTHERWISE NOTED.