













	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		
	PROPOSED SOLID HDPE SUBDRAIN		
	PROPOSED VALVE BOX		
	PROPOSED FIRE HYDRANT		
	PROPOSED SIAMESE CONNECTION		
	PROPOSED REMOTE WATER METER		
	PROPOSED WATER METER		

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.

TOPOGRAPHIC INFORMATION
TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
PROJ. NO. 17706-19
DATED APRIL 24, 2019

SITE PLAN PROVIDED BY MICROBIE ARCHITECTS + INTERIOR DESIGNERS
PROJ. NO.
DATED MAY 20, 2020

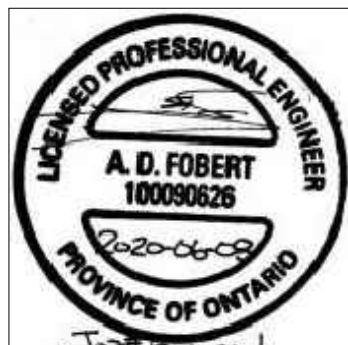
GEOTECHNICAL RECOMMENDATIONS PROVIDED BY PATERSON GROUP INC.
PROJ. NO. PG4863-1
DATED MAY 1, 2019

SERVICING AND STORMWATER MANAGEMENT RECOMMENDATIONS PROVIDED BY DSEL
 PROJ. NO. 18-1084
 DATED JUNE 2020

LOCATED TOP OF SPINDLE NW OF THE EXISTING MERIVALE ROAD SITE ENTRANCE
ELEV=92.38

[illegible]

1	C.M.K.	20.06.08	ISSUED FOR MUNICIPAL REVIEW
No.	BY	YY.MM.DD	DESCRIPTION

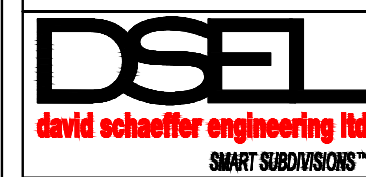


PROJECT No.19-1084

REVIEWED BY

FIRST CAPITAL ASSET MANAGEMENT

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DRAWN BY:	C.M.K.	CHECKED BY:	B.N.C.	DRAWING NO.	SHEET NO.
DESIGNED BY:	C.M.K.	CHECKED BY:	A.D.F.	SSP-1	3 of 4
SCALE:	1:250	DATE:	JUNE 2020		

1. ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISION OF THE STANDARDS AND SPECIFICATIONS FOR THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARDS (DRAFTS) (SPSD) AND SPECIFICATIONS (SPSS), WHERE APPLICABLE. LOCAL UTILITY STANDARDS AND SPECIFICATIONS SHALL BE USED WHERE APPLICABLE.
2. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DAMAGED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DAMAGED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES HAVING JURISDICTION.
3. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DAMAGED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES HAVING JURISDICTION.
4. ALL UTILITY LOCATIONS AND NOTIFY ENGINEER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
5. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE ENGINEER.
6. RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER AT THE EXPENSE OF THE DEVELOPER.
7. THE CONTRACTOR SHALL BE COMPLIANT 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.
8. THE CONTRACTOR SHALL BE COMPLIANT WITH THE MINISTRY OF TRANSPORTATION OF ONTARIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PER LATEST AMENDMENT.
9. THE CONTRACTOR IS ADVISED THAT WORK BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DAMAGED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES HAVING JURISDICTION.
10. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
11. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL IS RECEIVED FROM THE ENGINEER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAT THE COST OF THE SAME.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL BEDDING, OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH WAS SPECIFIED BY THE CONTRACTOR.
14. FOR DETAILS RELATING TO STORMWATER MANAGEMENT AND ROOF DRAINAGE REFER TO THE SITE SURVEYING AND STORMWATER MANAGEMENT PLAN.
15. ALL SEWERS CONSTRUCTED WITH GRADES LESS THAN 1.0% SHALL BE INSTALLED USING LASER ALIGNMENT AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
16. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAT THE COST OF THE SAME.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL BEDDING, OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH WAS SPECIFIED BY THE CONTRACTOR.
18. ALL PIPE / CULVERT SECTION SIZES REFER TO INSIDE DIMENSIONS.
19. SHOULD BURIED ARCHAEOLOGICAL REMAINS BE FOUND IN THE IMMEDIATE QUARTERLY CONSTRUCTION ACTIVITIES, THE HERITAGE OPERATIONS SHALL BE CONSULTED.
20. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DAMAGED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES HAVING JURISDICTION.
22. THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER ONE SET OF AS CONSTRUCTED SITE SERVICES AND GRADING DRAWINGS.
23. BENCHMARKS: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR MOVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DAMAGED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES HAVING JURISDICTION.

1. ALL WATERMAIN INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (SPSD) AND SPECIFICATIONS (SPSS).
2. ALL WATERMAIN SHALL BE AWMA C-900 CLASS 150 OR 18 IN APPROVED EQUIVALENT.
3. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W71. UNLESS SPECIFIED OTHERWISE, THE TRENCH SHALL BE 1.5 METERS DEEP.
4. ALL PVC WATERMANS SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWIN OR RTR WRAICER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W-36.
5. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS PER CITY OF OTTAWA STD. W40 AND W42.
6. VALVE BOXES SHALL BE INSTALLED PER CITY OF OTTAWA STD W24.
7. WATERMAIN IN FILL AREAS TO BE INSTALLED WITH RESTRAINED JOINTS PER CITY OF OTTAWA STD. W25.5 AND W25.7.
8. WHERE BURIED WATERMANS TO BE INSTALLED IN CITY OF OTTAWA STD. W25.3 AND W25.4.
9. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CABS, PLUGS, BLOW-OFFS, AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF WATERMANS.
10. WATERMAIN CROSSING OVER AND BELOW SLEWERS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25.2, RESPECTIVELY.
11. WATER SERVICES ARE TO BE INSULATED PER CITY STD. W23 WHERE SEPARATION BETWEEN SERVICES AND MAINTENANCE HOLES ARE LESS THAN 150MM.
12. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER / UTILITY IS 0.50m PER MORE GUIDELINES. FOR CROSSING UNDER THE EXISTING WATERMANS, THE MINIMUM VERTICAL CLEARANCE SHALL BE 0.75m PER MORE GUIDELINES. FOR CROSSING UNDER THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING TO ENSURE THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR FROM THE SLEWERS AS POSSIBLE.
13. ALL WATERMANS SHALL HAVE A MINIMUM COVER OR 2.4m, OTHERWISE THERMAL INSULATION IS REQUIRED AS PER STD DWG R20.
14. GENERAL WATER PLANT TO UTILITY CLEARANCE AS PER STD DWG R20.
15. FIRE PROTECTION SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W26. HYDRANT FLANGE ELEVATIONS TO BE INSTALLED 0.10m ABOVE PROPOSED FINISH GRADE AT HYDRANT. FIRE HYDRANT LOCATION AS PER STD DWG W26 UNLESS OTHERWISE NOTED.
16. BUILDING SERVICES TO BE CAPPED 1.0m OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED AND SHALL BE RESTRAINED A MINIMUM 12mm PLUGGED.
17. ALL WATERMANS SHALL BE BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO GUIDELINES UNLESS OTHERWISE NOTED.
18. ALL WATERMANS SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO GUIDELINES. ALL TESTS SHALL BE CONDUCTED TO PROVE THE INTEGRITY OF THE WATERMAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TESTING AND SHALL BE CONTROLLED AND TREATED SO AS NOT TO ADVERSELY EFFECT THE ENVIRONMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA.
19. ALL WATERMAIN STUDS SHALL BE TERMINATED WITH A PLUG AND 50mm Blow Off UNLESS OTHERWISE NOTED.

GENERAL

1. LASER ALIGNMENT CONTROL TO BE UTILIZED ON ALL SEWER INSTALLATIONS.
- a. CLAY SLABS TO BE INSTALLED PER CITY STANDARD DRAINING SLOPE. THE SEALS SHOULD BE AT LEAST 1.5m LONG (IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. THE SEALS SHOULD COME FROM THE FRONT LINE, AND FULLY COVER THE JOINTS OF THE EXISTING MAINS. THE JOINTS OF THE NEW MAINS SHALL BE MADE WITH A MINIMUM OF TWO LAYERS OF BROWN SILTY CLAY PLACED IN MAXIMUM 725mm LIFTS AND COMPACTED TO A MINIMUM OF 90% SPMD. THE CLAY SLABS SHOULD BE PLACED AT SITE BODIES AND 60cm INTO THE EXISTING SERVICE TRENCHES.
- b. SERVICES TO BE BURIED 1.5m FROM THE OUTSIDE SERVICE TRENCHES, UNLESS OTHERWISE NOTED.
- c. ALL MAINTENANCE STRUCTURE AND CATCH BASIN EXCAVATIONS TO BE BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 98%.
- d. "MODULOC" OR APPROVED PRE-CAST MAINTENANCE STRUCTURE AND CATCH BASIN ADJUSTERS TO BE USED IN LIEU OF BRICKING. PARGE ADJUSTING UNITS ON THE OUTSIDE ONLY.
- e. SAFETY PLATFORMS SHALL BE PER OPSD 404.02.
- f. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH OPSD 1003.01 AND 1003.02, IF APPLICABLE.
- g. THE CONTRACTOR IS TO PROVIDE CCTV CAMERA INSPECTIONS OF ALL SEWERS, INCLUDING PICTorial, PHOTO (1) CD COPY AND VIDEO RECORDING REQUIRED FOR ALL WORK. ALL DEFECTS ARE TO BE FLUSHED TO THE STREET AND NEARBY DRIVEWAYS ARE TO BE REPAIRED. ASPHALT WEAR COARSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS AND NECESSARY REPAIRS HAVE BEEN COMPLETED.
- h. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CANADIAN STANDARDS ASSOCIATION (CSA). THE RESULTS OF THE TESTING AND THE LOCATION OF ANY LEAKS SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF WEAR COARSE ASPHALT.
- i. THE CONTRACTOR SHALL REPORT ALL FINDINGS TO THE CONSULTANT. ALL SANITARY SEWERS LESS THAN 1.8m FROM GROUND SURFACE TO PIPE OVERTOP TO BE PROVIDED BY GEOTECHNICAL ENGINEER.

11. ALL SANITARY SEWER INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
12. ALL SANITARY GRAVITY SEWER SHALL BE PVC SDR 35, IPEX "RING-TITE" (OR APPROVED EQUIVALENT) PER CSA STANDARD B182.2 OR LATEST AMENDMENT, UNLESS SPECIFIED OTHERWISE.
13. EXISTING MAINTENANCE STRUCTURES TO BE RE-BENCHED WHERE A NEW CONNECTION IS MADE.
14. SANITARY GRAVITY SEWER TRENCH AND BEDDING SHALL BE PER CITY OF OTTAWA STD. 56 AND S7, CLASS "B" BEDDING, UNLESS SPECIFIED OTHERWISE.
15. SANITARY MAINTENANCE STRUCTURE FRAME AND COVERS SHALL BE PER CITY OF OTTAWA STD. S24 AND S25.
16. SANITARY MAINTENANCE STRUCTURES SHALL BE BENCHED PER OPSD 701.021.

17. 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 1500 MM DIA. UNLESS SPECIFIED OTHERWISE.
18. ALL STORM SEWER TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STD. S6 AND STD CLASS B* UNLESS OTHERWISE SPECIFIED. BEDDING SHALL BE 150 MM OF 1 1/2" GRADE SAND OR EQUIVALENT.
19. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED. CATCH BASINS SHALL BE IN ACCORDANCE WITH TOSQ 705.010.
20. CATCH BASIN LEADS SHALL BE 200MM DIA. AT 1% SLOPE (UN) UNLESS SPECIFIED OTHERWISE.
21. ALL CATCH BASINS SHALL HAVE 600MM SUMPS, UNLESS SPECIFIED OTHERWISE.
22. ALL CATCH BASIN LEAD INVERTS TO BE 1.5m BELOW FINISHED GRADE UNLESS SPECIFIED OTHERWISE.
23. THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED ABOVE, WHERE THE SPECIFIED TRENCH EXISTING CONDITIONS ARE NOT MET, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.
24. THE CONTRACTOR SHALL SUBMIT A DRAINAGE LOT CATCH BASIN SHALL BE INSTALLED PER CITY STD R1 AND GEOTECHNICAL RECOMMENDATIONS UNLESS OTHERWISE NOTED.
25. PERFORATED SUBDRAIN FOR REAR YARD AND LANDSCAPING APPLICATIONS SHALL BE INSTALLED PER CITY STD S29, S30, S31, AND S31A, MAINTENANCE STANDARD.
26. RIP-RAP TREATMENT FOR SEWER AND CULVERT OUTLETS PER CITY 810.010.
27. ALL STORM SEWERS / CULVERTS TO BE INSTALLED WITH FIRST TREATMENT PER CITY STD 803.031 WHERE APPLICABLE.
28. ALL STORM SEWER AND CULVERTS SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STD S28 AND S29.1 UNLESS OTHERWISE NOTED.
30. CATCH BASIN FRAME AND COVER SHALL BE PER CITY 400.002 AND CITY STD S19.1, UNLESS OTHERWISE NOTED.