

WATERMAIN

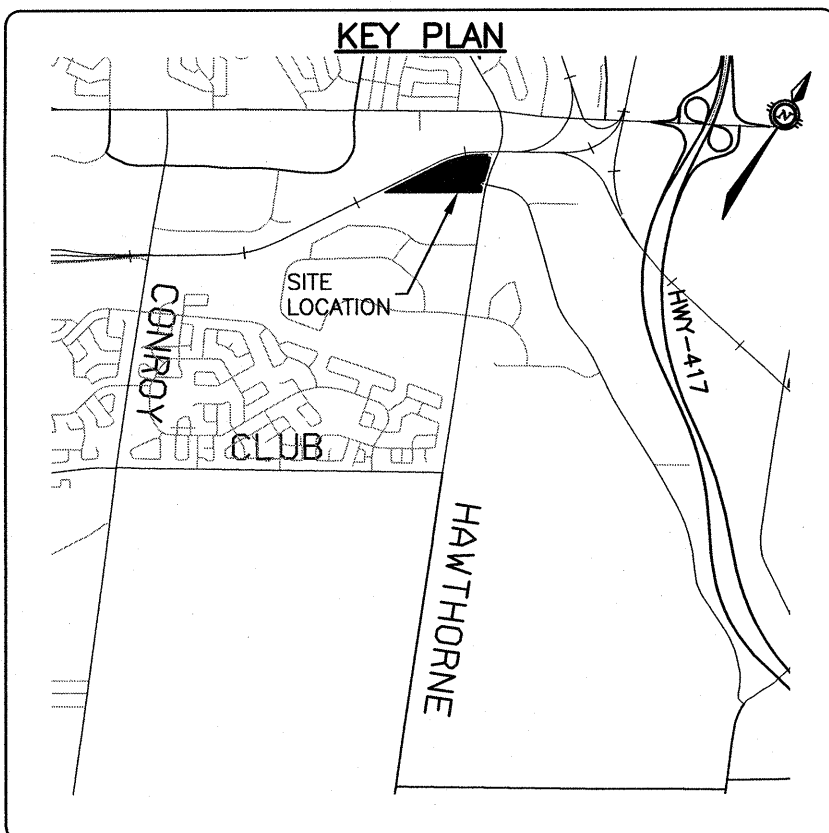
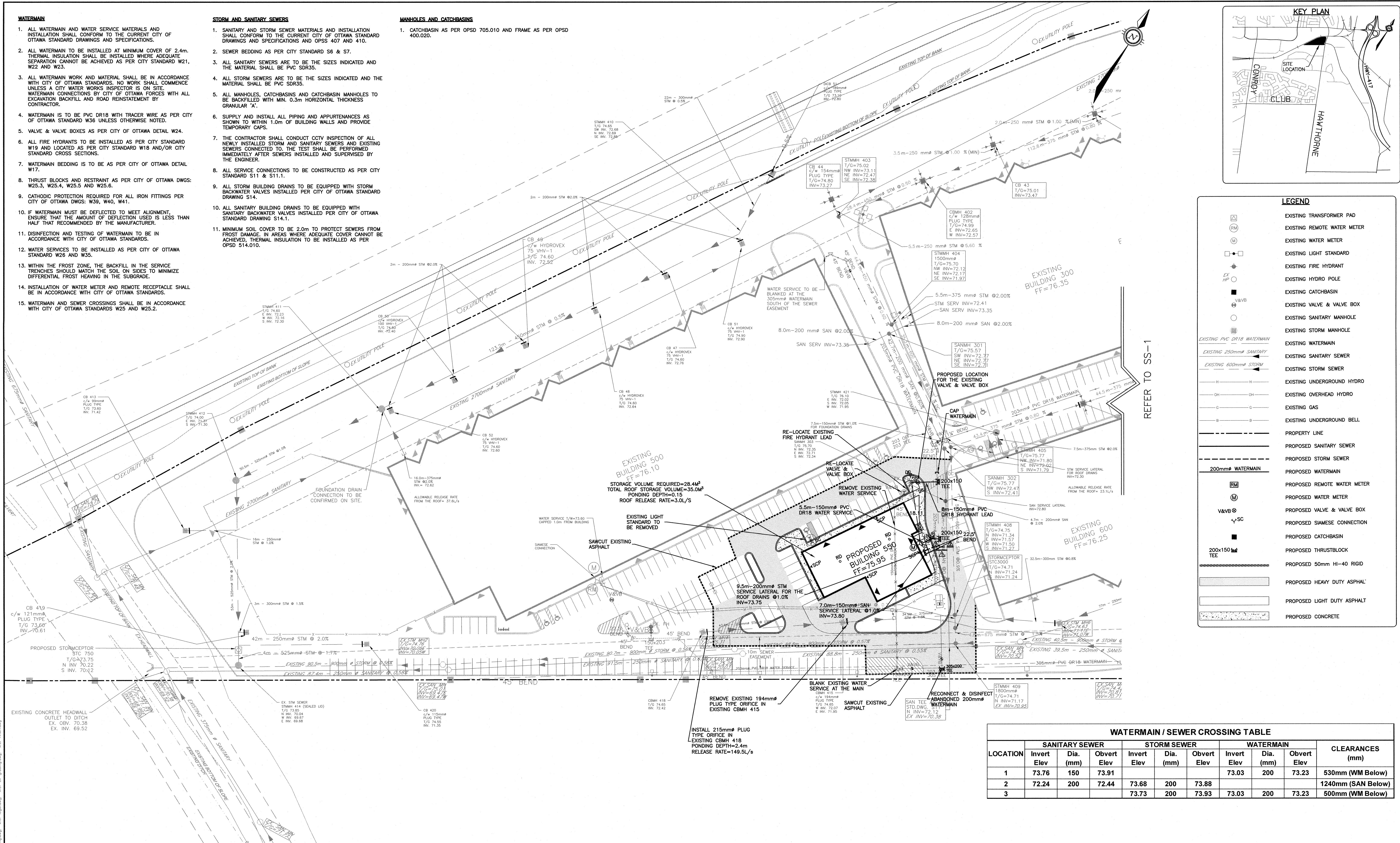
1. ALL WATERMAIN AND WATER SERVICE MATERIALS AND INSTALLATION SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS.
2. ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m. THERMAL INSULATION SHALL BE INSTALLED WHERE ADEQUATE SEPARATION CANNOT BE ACHIEVED AS PER CITY STANDARD W21, W22 AND W23.
3. ALL WATERMAIN WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS. NO WORK SHALL COMMENCE UNLESS A CITY WATERWORKS INSPECTOR IS ON SITE. WATERMAIN CONNECTIONS BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR.
4. WATERMAIN IS TO BE PVC DR18 WITH TRACER WIRE AS PER CITY OF OTTAWA STANDARD W36 UNLESS OTHERWISE NOTED.
5. VALVE & VALVE BOXES AS PER CITY OF OTTAWA DETAIL W24.
6. ALL FIRE HYDRANTS TO BE INSTALLED AS PER CITY STANDARD W19 AND LOCATED AS PER CITY STANDARD W18 AND/OR CITY STANDARD CROSS SECTIONS.
7. WATERMAIN BEDDING IS TO BE AS PER CITY OF OTTAWA DETAIL W17.
8. THRUST BLOCKS AND RESTRAINT AS PER CITY OF OTTAWA DWGS: W25.3, W25.4, W25.5 AND W25.6.
9. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS PER CITY OF OTTAWA DWGS: W39, W40, W41.
10. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
11. DISINFECTION AND TESTING OF WATERMAIN TO BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
12. WATER SERVICES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W26 AND W35.
13. WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
14. INSTALLATION OF WATER METER AND REMOTE RECEPTACLE SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
15. WATERMAIN AND SEWER CROSSINGS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS W25 AND W25.2.

STORM AND SANITARY SEWERS

1. SANITARY AND STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS AND OPSS 407 AND 410.
2. SEWER BEDDING AS PER CITY STANDARD S6 & S7.
3. ALL SANITARY SEWERS ARE TO BE THE SIZES INDICATED AND THE MATERIAL SHALL BE PVC SDR35.
4. ALL STORM SEWERS ARE TO BE THE SIZES INDICATED AND THE MATERIAL SHALL BE PVC SDR35.
5. ALL MANHOLES, CATCHBASINS AND CATCHBASIN MANHOLES TO BE BACKFILLED WITH MIN. 0.3m HORIZONTAL THICKNESS GRANULAR 'A'.
6. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN TO WITHIN 1.0m OF BUILDING WALLS AND PROVIDE TEMPORARY CAPS.
7. THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED STORM AND SANITARY SEWERS AND EXISTING SEWERS CONNECTED TO THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED AND SUPERVISED BY THE ENGINEER.
8. ALL SERVICE CONNECTIONS TO BE CONSTRUCTED AS PER CITY STANDARD S11 & S11.1.
9. ALL STORM BUILDING DRAINS TO BE EQUIPPED WITH STORM BACKWATER VALVES INSTALLED PER CITY OF OTTAWA STANDARD DRAWING S14.
10. ALL SANITARY BUILDING DRAINS TO BE EQUIPPED WITH SANITARY BACKWATER VALVES INSTALLED PER CITY OF OTTAWA STANDARD DRAWING S14.1.
11. MINIMUM SOIL COVER TO BE 2.0m TO PROTECT SEWERS FROM FROST DAMAGE. IN AREAS WHERE ADEQUATE COVER CANNOT BE ACHIEVED, THERMAL INSULATION TO BE INSTALLED AS PER OPSS 514.010.

MANHOLES AND CATCHBASINS

1. CATCHBASIN AS PER OPSS 705.010 AND FRAME AS PER OPSS 400.020.



LEGEND	
	EXISTING TRANSFORMER PAD
	EXISTING REMOTE WATER METER
	EXISTING WATER METER
	EXISTING LIGHT STANDARD
	EXISTING FIRE HYDRANT
	EXISTING HYDRO POLE
	EXISTING CATCHBASIN
	EXISTING VALVE & VALVE BOX
	EXISTING SANITARY MANHOLE
	EXISTING STORM MANHOLE
	EXISTING WATERMAIN
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING UNDERGROUND HYDRO
	EXISTING OVERHEAD HYDRO
	EXISTING GAS
	EXISTING UNDERGROUND BELL
	PROPERTY LINE
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED WATERMAIN
	PROPOSED REMOTE WATER METER
	PROPOSED WATER METER
	PROPOSED VALVE & VALVE BOX
	PROPOSED SIAMESE CONNECTION
	PROPOSED CATCHBASIN
	PROPOSED THRUSTBLOCK
	PROPOSED 50mm HI-40 RIGID
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED LIGHT DUTY ASPHALT
	PROPOSED CONCRETE

WATERMAIN / SEWER CROSSING TABLE									
LOCATION	SANITARY SEWER			STORM SEWER			WATERMAIN		
	Invert Elev	Dia. (mm)	Obvert Elev	Invert Elev	Dia. (mm)	Obvert Elev	Invert Elev	Dia. (mm)	Obvert Elev
1	73.76	150	73.91	73.68	200	73.88	73.03	200	73.23
2	72.24	200	72.44	73.73	200	73.93	73.03	200	73.23
3									

CAUTION 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.		ARCHITECT DAVID S. McROBIE ARCHITECTS INC. 66 QUEEN STREET OTTAWA, ON. K1P 5C6 613.238.2072		LANDSCAPE ARCHITECT JAMES B. LENNOX & ASSOCIATES INC. 3332 CARLING AVE OTTAWA, ON. K2H 5A8 613.722.5168		SURVEYOR ANNIS O'SULLIVAN VOLLEBEKK LTD. 14 CONCORSE GATE, SUITE 500 NEPEAN, ON. K2E 7S6 613.727.0850		CLIENT CONTROLEX CORPORATION 100-223 COLONNADE ROAD SOUTH OTTAWA, ON. K2E 7K3 613.723.7490		PROJECT 3020 HAWTHORNE ROAD BUILDING 100 AND 550 OTTAWA, ONTARIO.		PROJECT NO. OTT-250557-A0	
GEOTECHNICAL ENGINEERS PATERSON GROUP 154 COLONNADE ROAD NEPEAN, ON. K2E 7J5 613.226.7381		DESIGNED BY M.A. ANSARI 29/1/2019		REVIEWED BY M.A. ANSARI 29/1/2019		DATE DECEMBER 2018		DRAWING NO. SS-2		PLAN # 13714		PROJECT NO. OTT-250557-A0	