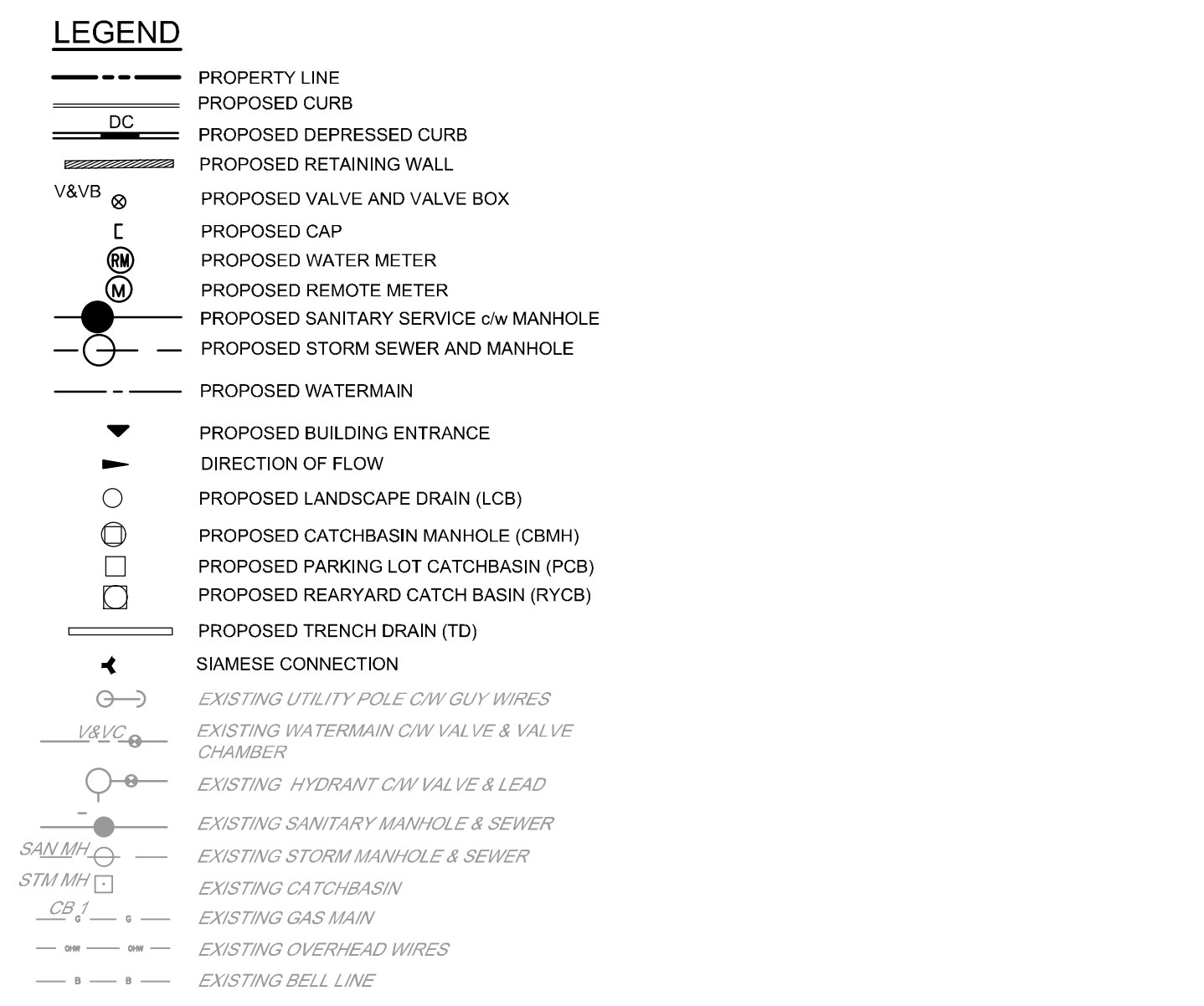


NOTE: THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.



- ## SEWER NOTES:
- SPECIFICATIONS:**

<u>ITEM</u>	<u>SPEC. NO.</u>	<u>REFERENCE</u>
CATCHBASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (12000)	701.010	OPSD
STORM / SANITARY MANHOLE (15000)	701.010	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME	325	CITY OF OTTAWA
SANITARY COVER	324	CITY OF OTTAWA
STORM COVER (CLOSED)	324.1	CITY OF OTTAWA
STORM COVER (OPEN)	328.1	CITY OF OTTAWA
SEWER TRENCH	56 & S7	CITY OF OTTAWA
STORM COVER	PVC DR 35	CITY OF OTTAWA
SANITARY SEWER	PVC DR 35	CITY OF OTTAWA
ELBOW CB	S31	CITY OF OTTAWA
TEE CB	S30	CITY OF OTTAWA
THERMAL INSULATION	1109.030	OPSD
PARKING LOT CATCH BASIN (PCB)		REFER TO MECHANICAL
PARKING LOT TRENCH DRAIN (TD)		REFER TO MECHANICAL
 - SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
 - 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.
 - FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
 - DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN.
 - STORM MANHOLES AND CBMHs ARE TO HAVE 300mm SLUMPS UNLESS OTHERWISE INDICATED.
 - CONTRACTOR TO TELEVIEW (CCTV) ALL PROPOSED SEWERS, 200mm OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
 - INSULATE ALL STORM AND SANITARY SERVICES THAT HAVE LESS THAN 2.0m OF COVER.
 - BACK FILL VALVES FOR STORM SERVICE CONNECTIONS ARE REQUIRED. REFER TO MECHANICAL DRAWINGS.

WATERMAIN NOTES:

1. SPECIFICATIONS:





<u>ITEM</u>	<u>SPEC. NO.</u>	<u>REFERENCE</u>
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
PERMANENT INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN	PVC DR 18	CITY OF OTTAWA
HYDRANT	WSD-19	CITY OF OTTAWA
WATERMAIN VALVE & VALVE BOX	WSD-19	CITY OF OTTAWA

2. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. 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.

3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.

4. PROVIDE MINIMUM 0.30m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.

6. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED UNLESS OTHERWISE INDICATED.

				SCALE		DESIGN		FOR REVIEW ONLY				LOCATION 1705 CARLING AVE, CITY OF OTTAWA PROPOSED HIGH-RISE RESIDENTIAL AND CARE FACILITY			
				1:300		AAR						 Engineers, Planners & Landscape Architects Suite 200, 240 Michael Cowpland Drive Ottawa, Ontario, Canada K2M 1P6 Telephone (613) 254-9643 Facsimile (613) 254-5867 Website www.novatech-eng.com			
						CHECKED									
3. REVISED PER CITY COMMENTS				NOV 4/20		AAR						120010-G		DRAWING NAME	
2. ISSUED FOR REVIEW				APR 19/20		AAR								GENERAL PLAN OF SERVICES	
1. ISSUED FOR COORDINATION				MAR 27/20		AAR								REV	
														REV	
No. REVISION				DATE		BY		APPROVED		Telephone (613) 254-9643 Facsimile (613) 254-5867 Website www.novatech-eng.com		DRAWING No.		120010-G	
						GMAC									