

1. COORDINATE AND MATCH 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.
4. BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND ON-LOCATION LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
5. 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 THE CITY OF OTTAWA AND ENGINEER.
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 DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
8. ALL ELEVATIONS ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM. BASE MAPING IS REFERENCED TO THE MT JENAS 9-NAD83 (ORIGINAL DATUM). THE SITES BENCHMARKS ARE AT THE TOP OF THE SPINDLE FIRE HYDRANTS. SITE BENCHMARK #1 OUTSIDE THE SOUTHEAST (GEORGE STREET) CORNER OF THE SITE FIRE HYDRANT SPINDLE TO-GR2.03. SITE BENCHMARK #2 IS OUTSIDE OF THE NORTHEAST (YORK STREET) CORNER OF THE SITE FIRE HYDRANT SPINDLE TO-GR2.00.07.
9. REFER TO GEOLOGICAL REPORT (IN: PG2373.3) REV. 5, DATED OCTOBER 29, 2024, PREPARED BY PATERSON GROUP 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.
10. REFER TO ARCHITECTS AND LANDSCAPE ARCHITECTS' DRAWINGS FOR BUILDING AND HARDSCAPE AREAS AND DIMENSIONS.
11. REFER TO SERVING AND STORMWATER MANAGEMENT REPORT (R-2024-117) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD. DATED JUNE 23, 2023.
12. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
13. PROVIDE LINE/PAVING PAINTING.
14. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND TIG ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TOWN ELEVATIONS AND ANY ALLOCATION CHANGES, ETC.
15. ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. ONTARIO PROVINCIAL STANDARDS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
16. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.

NOTES:	SPEC NO.	REFERENCE
1. SEWER TRENCH SEWANTSEAL CATCH BASIN LEAD INSULATION FOR SHALLOW SEWERS	SPEC NO. 56 & 57 PVC DR 35 PVC DR 35 PVC DR 35 SIS	CITY OF OTTAWA
2. INSULATE ALL PIPES (SANITARY) THAT HAVE LESS THAN 2.0m COVER WITH 150mmx1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION. (REFER TO DETAILS).		
3. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0% (2.0% IS PREFERRED).		
4. SEWER SERVICE CONNECTIONS PER CITY OF OTTAWA DETAILS FOR S11 AND S11.1.		
5. A MINIMUM OF 150 mm PVC GRANULAR A SOFT BEDDING SHALL BE PROVIDED FOR SEWER OR WATER PIPES (WHEN A MINIMUM OF 150 mm SOFT BEDDING IS NOT SPECIFIED) TO THE SPRING LINE OF THE PIPE. COVER MATERIAL, FROM THE SPRING LINE TO 150 mm ABOVE THE COVER, SHALL CONSIST OF 100% GRANULAR A (CONCRETE OR PSM PIPE, OR SAND (CONCRETE PIPE)). THE BEDDING AND COVER MATERIALS SHOULD BE PLACED IN MAXIMUM 225 MM THICK LAYERS. ALL JOINTS SHALL BE PROTECTED BY A MINIMUM OF 150 mm GRANULAR A.		
6. WHERE HAD SURFACE AREAS ARE CONSIDERED ABOVE THE TRENCH BACKFILL, THE TRENCH BACKFILL MATERIAL WITHIN THE FROST FREE ZONE (ABOUT 1.8 M BELOW FINISHED GRADE) AND ABOVE THE COVER MATERIAL, SHOULD MATCH THE SOLTS EXPOSED. THE TRENCH WALLS TO MINIMIZE DIFFERENTIAL FROST HEAVING. THE TRENCH BACKFILL SHOULD BE PLACED IN MAXIMUM 225 MM THICK LAYERS. ALL JOINTS SHALL BE PROTECTED BY A MINIMUM OF 150 mm GRANULAR A. ALL COBBLES LARGER THAN 200 MM THEIR LONGEST DIRECTION SHOULD BE SEGREGATED FROM RE-USE AS TRENCH BACKFILL.		
7. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KORN-SEAL, PSM, POSTIVE SEAL AND DURASEAL). THE CONCRETE GRADE FOR THE PIPE CAN BE MINIMIZED.		
8. THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF THE SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH TESTS 410.17, 16, 410.17, 16.04 AND 407.01. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL SANITARY SEWERS TO CONFORM WITH CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A COMPLETED COPY OF THE TEST RESULTS.		
9. STORM MANHOLES AND CBMS ARE TO HAVE 300mm SPLASH UNLESS OTHERWISE INDICATED.		
10. BEFORE PROCEEDING SEWERS, 200mm OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.		

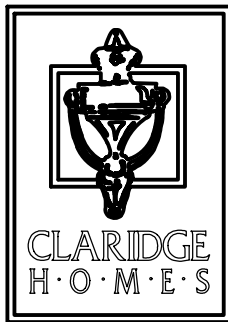
SPECIFICATIONS:		
ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER/ABOVE SEWER	W25 / W25.2	CITY OF OTTAWA
WATERMAIN	PVC DR 18	
VALVE AND VALVE BOX	W24	CITY OF OTTAWA
2. SUPPLY AND CONSTRUCT ALL WATERMAINS 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 24m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. ANY WATERMAIN WITH LESS THAN 2.4m COVER TO BE INSULATED PER THE SHOWN DETAIL.		
4. PROVIDE MINIMUM 0.25m ABOVE, 0.5m IF BELOW, CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS PER CITY OF OTTAWA STANDARDS W25/W25.2		
5. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.		
6. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS CITY OF OTTAWA STANDARD DETAILS W-39, 40, 41, 42, 43 AND 44.		
7. PROVIDE THERMAL INSULATION FOR WATERMAIN AT OPEN STRUCTURES PER CITY OF OTTAWA STANDARD DETAIL W-23.		
8. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.		

1. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 2.0m COVER AND ALL WATERMAIN WITH LESS THAN 2.4m OF COVER WITH EXPANDED POLYSTYRENE INSULATION AS PER OPSD 1109.030.
2. THE THICKNESS OF INSULATION SHALL BE THE EQUIVALENT OF 25mm FOR EVERY 300mm REDUCTION IN THE REQUIRED DEPTH OF COVER WITH 50mm MINIMUM (SEE TABLE)

T = THICKNESS OF INSULATION (mm)
W = WIDTH OF INSULATION (mm)
 $W = D + 300$ (1000 min.)
D = O.D OF PIPE (mm)

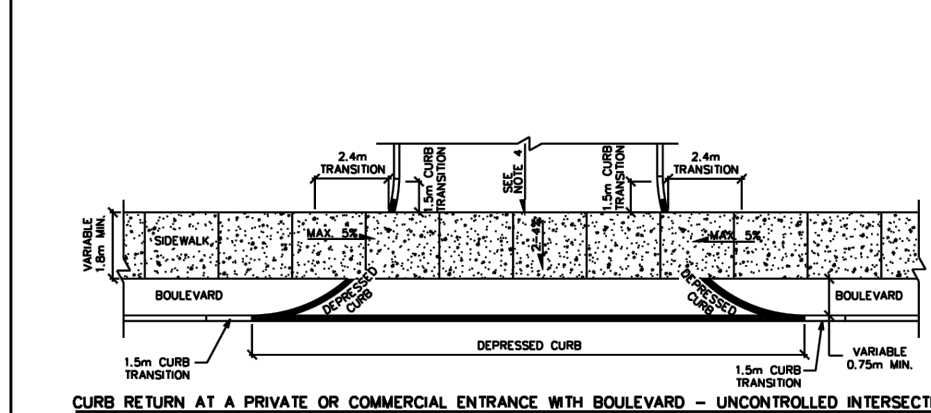
COVER SEWER / WATER (mm)	INSULATION THICKNESS (mm)
2000-1700 / 2400-2100	50
1700-1400 / 2100-1800	75
1400-1100 / 1800-1500	100

CLARIDGE HOMES
CLARIDGE HOMES
505 PRESTON STREET,
OTTAWA, ONTARIO
K1S 4N7.

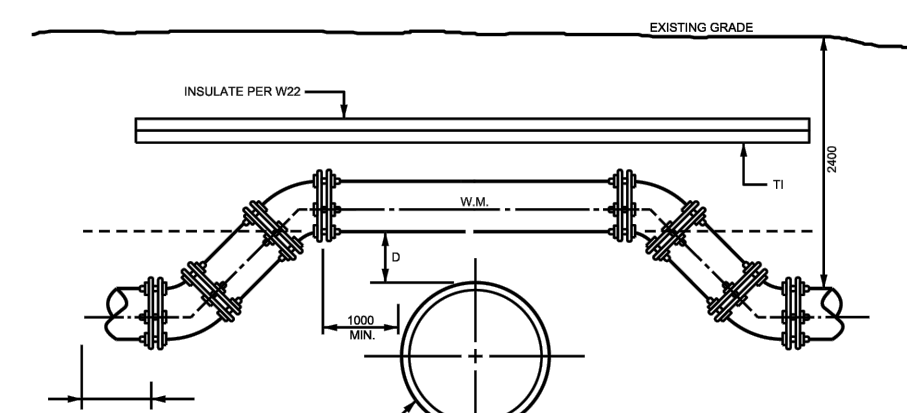
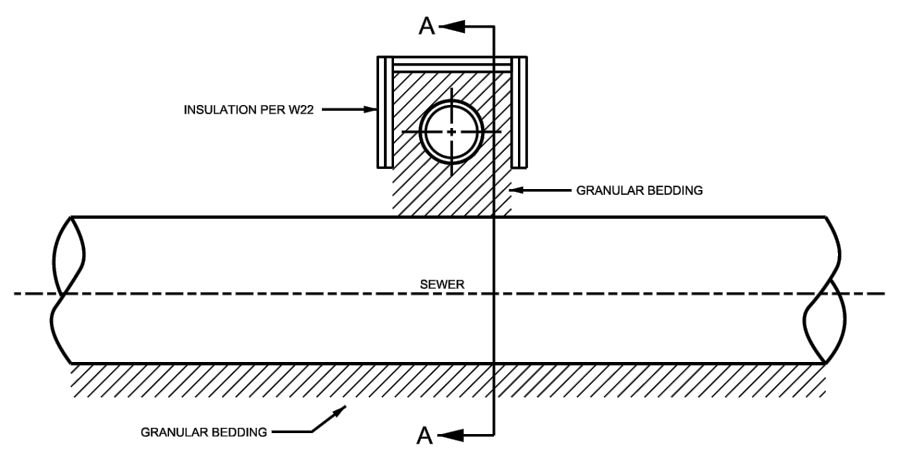


PROPOSED WATER SERVICE (4+000.0)			
STATION	SURFACE ELEVATION	T/M/ELEVATION	COMMENTS
4+000.0	60.90	58.50*	CONNECTION TO EXISTING 200mmØ SERVICE
4+004.8	60.65	58.77	CROSS ABOVE 1200mm S&N AS PER CITY OF OTTAWA DETAIL W25.2 (CLEARANCE =±0.30m)
4+007.8	60.70	59.21	CROSS ABOVE 875mm STM AS PER CITY OF OTTAWA DETAIL W25.2 (CLEARANCE =±0.30m)
4+023.0	60.15	57.75	V&VB
4+024.0	61.26	58.54	CAP SERVICE 1.0m FROM THE FOUNDATION WALL

Diagram illustrating a curb return at a private or commercial entrance with an uncontrolled intersection. The diagram shows a cross-section of the road with a 2.5m transition zone on both sides of a 2.5m wide curb. The curb is labeled "CURB RETURN AT A PRIVATE OR COMMERCIAL ENTRANCE - UNCONTROLLED INTERSECTION". The road surface is labeled "ROADWAY" and the curb is labeled "CURB". The diagram also shows a "SIDEWALK" and a "SIDEWALK" on the left side of the road. The curb is shown as a raised edge with a 2.5m transition zone on both sides. The road surface is shown as a textured area. The sidewalk is shown as a textured area on the left side of the road. The diagram is a cross-section view of the road and sidewalk.



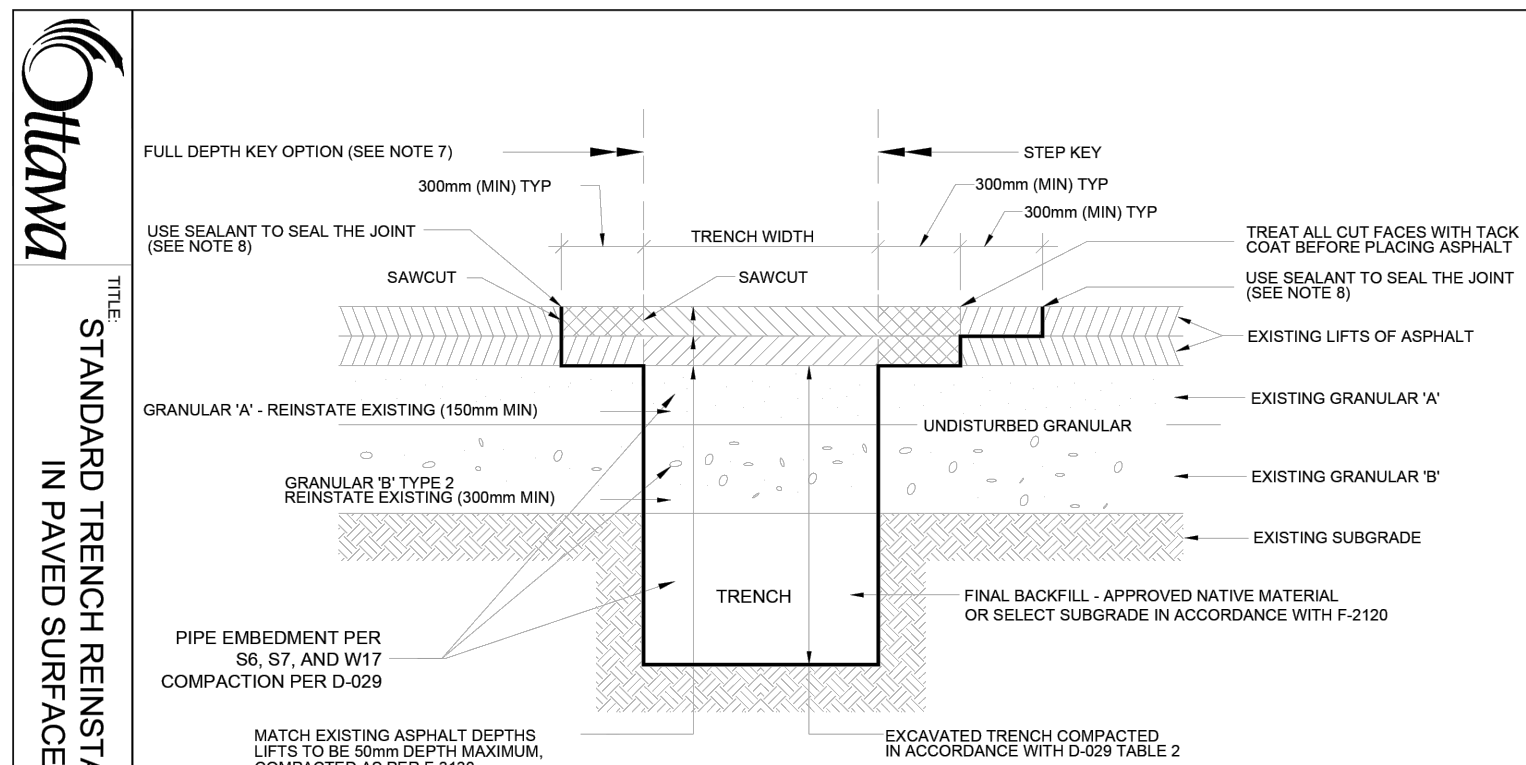
	CURB RETURN ENTRANCES -	DATE: M /
	UNCONTROLLED INTERSECTIONS	REV. DATE: M /
		DWG. No.:

✱ DENOTES OUTSIDE DIAMETER

NOTES:

FOR WATERMAIN 150mm (NOMINAL) TO 400mm (NOMINAL)

1. SAREP TO BARRIS SEPARATION (C) SHALL BE 250mm MINIMUM.
2. THRUST BLOCS FOR MAINS LARGER THAN 400mm (NOMINAL) SHALL BE PER SPECIAL DESIGN.
3. FOR 300mm (NOMINAL) AND 400mm (NOMINAL) MAINS, BENDS SHALL BE MAX 22°/30°.
4. CONCRETE FOR THRUST BLOCS SHALL BE 20 MPa.
5. REFER TO W25.6 FOR RESTRAINED LENGTH REQUIREMENTS.
6. REFER TO W25.3 AND W25.4 FOR THRUST-LOC REQUIREMENTS.
7. ALL OVERTENSIONS ARE IN HELLIMETERS UNLESS OTHERWISE SPECIFIED.
8. ORDERED TO MEET THE INTENT OF THE WORK WATERMAIN DESIGN CRITERIA JUNE 2013.
9. CATHODIC PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH WWS, W40, AT.
10. TRACER WIRE REQUIRED FOR PVC, PEH AND HDPE WATERMAIN PIPE ONLY AS PER WWS.



NOTES:

1. ALL EXISTING ASPHALT TO BE SAW CUT
2. UNLESS SPECIFIED ELSEWHERE, SURFACE COURSE ASPHALT SUPERPAVE 1.25mm AND BASE COURSE ASPHALT SUPERPAVE 19.0mm IS TO BE USED
3. UNLESS SPECIFIED ELSEWHERE, ASPHALT MIX SHALL BE TYPE 1 (PG68-30) FOR NON-BUILD LOCAL ROADS, AND LEVEL D (PG68-34) FOR ALL OTHER THROTTLED AREAS. WHERE EXISTING PAVEMENT STRUCTURE EXCEEDS 150mm IN DEPTH, ASPHALT REINSTATEMENT SHALL BE 150mm GRANULAR A FOR THE REMAINDER
4. UNLESS SPECIFIED ELSEWHERE, WHERE AN UNDERLYING LAYER OF CONCRETE PAVEMENT EXISTS REINSTATEMENT SHALL CONSIST OF 150mm OF SUPERPAVE 1.25mm AND 150mm OF GRANULAR A
5. UNLESS SPECIFIED ELSEWHERE, HOT MIX ASPHALT PLACEMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH F-3130
6. JOINT KEY REINSTATEMENT SHALL BE THE DEPTH KEY OPTION APPROVED BY THE CITY
7. ALL EDGES TO BE ROUTED AND SEALED WITH A BEAD OF HOT RUBBERIZED ASPHALT JOINT SEALING COMPOUND

MAY 2001
MAR 2023
R10

				SCALE		DESIGN				LOCATION CITY OF OTTAWA 137, 141 GEORGE ST, 110, 116 YORK ST, AND 321, 325 DALHOUSIE ST	
				AS SHOWN		ARM/C/JF		 		NOVATECH Engineers, Planners & Landscape Architects Suite 200, 240 Michael Cowpland Drive Ottawa, Ontario, Canada K2M 1P5 Telephone (613) 254-9643 Facsimile (613) 254-5867 Website www.novatech-eng.com	
						CHECKED					
8. REVISED PER CITY COMMENTS JUL 29/25 GJM				AS SHOWN		DRAWN		 		PROJECT No. 112142 REV 112142-ND-Y	
3. REVISED DRAINAGE CATCHMENTS JUL 23/25 GJM						ARM/C/JF					
4. REVISED PER CITY COMMENTS JUNE 12/25 GJM				AS SHOWN		CHECKED		 		DRAWING NAME NOTES AND DETAILS (YORK)	
2. SUPPORT SPC SUBMISSION MAR 07/25 GJM						ARM/C/JF					
2. MUNICIPAL CONSENT APPLICATION MAY 06/24 GJM				AS SHOWN		CHECKED		 		PROJECT No. 112142 REV 112142-ND-Y	
1. PART LOT CONTROL APPLICATION FEB 01/24 GJM						ARM/C/JF					
No. REVISION DATE BY						APPROVED					