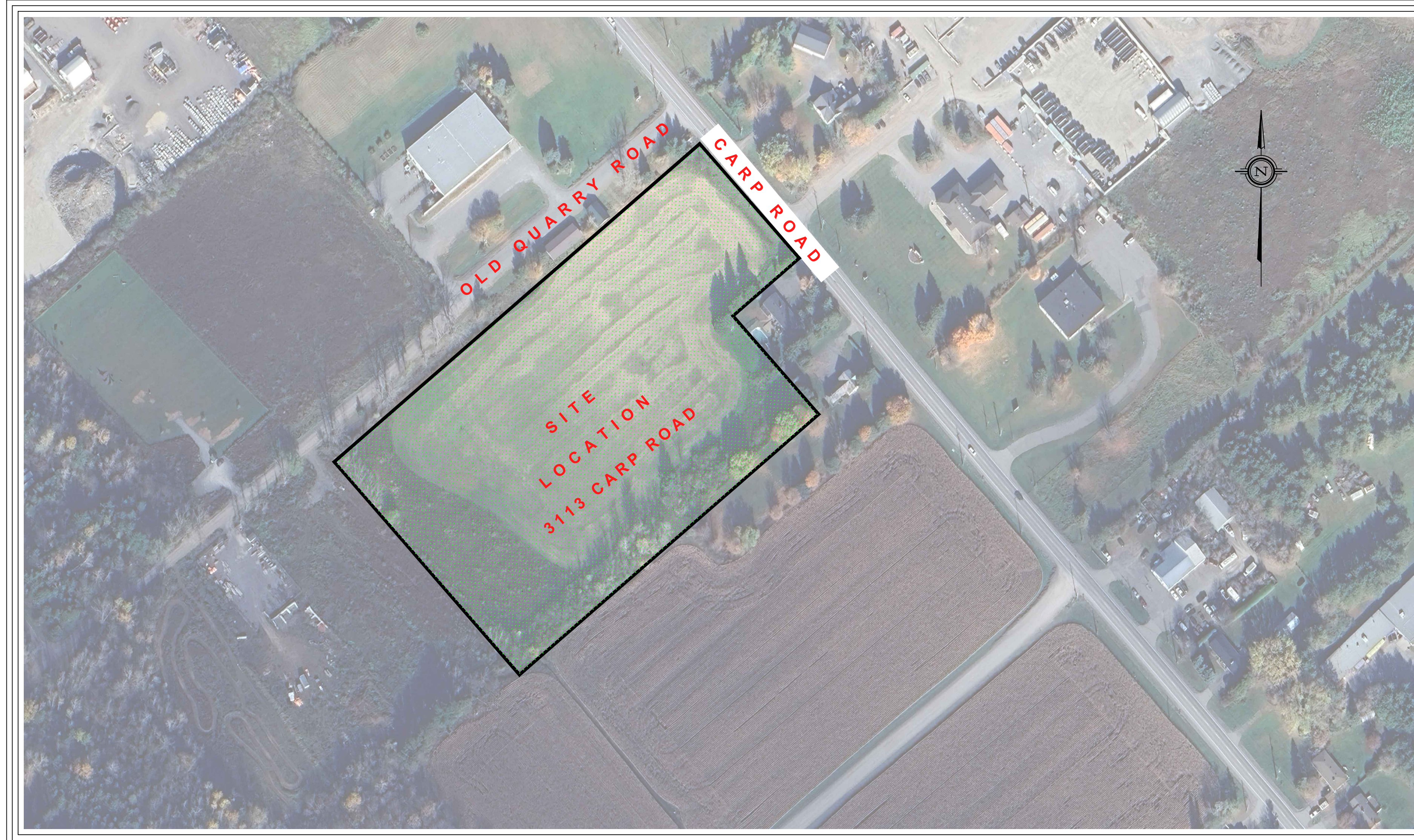




CIVIL DRAWINGS:

C-001	Site Servicing Plan
C-002	Site Grading, Erosion and Sediment control Plan
C-003	Typical Section and Details
C-004	Notes and Details
C-005	Construction Details Plan
C-006	Pre-Development Plan

PROPOSED 1-STOREY WAREHOUSE

3113 CARP ROAD

OTTAWA, ON

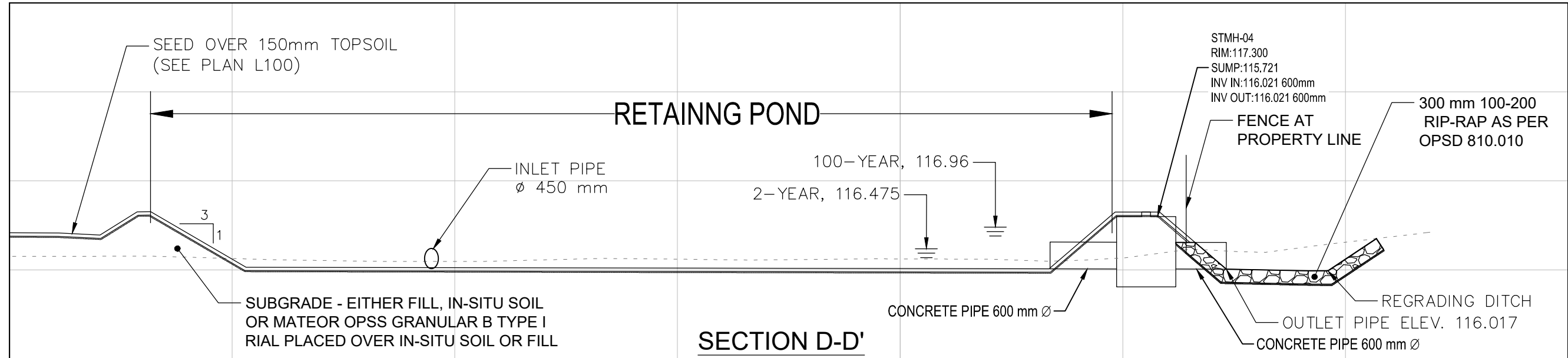
SITE SERVICING AND SITE GRADING, EROSION AND SEDIMENT CONTROL

MEGHA HOLDINGS Inc.

PROJECT NO. PALA-001



DAURALD Consultant inc.
Civil engineering services
Telephone : 613 327 9862
admin@daurald.com

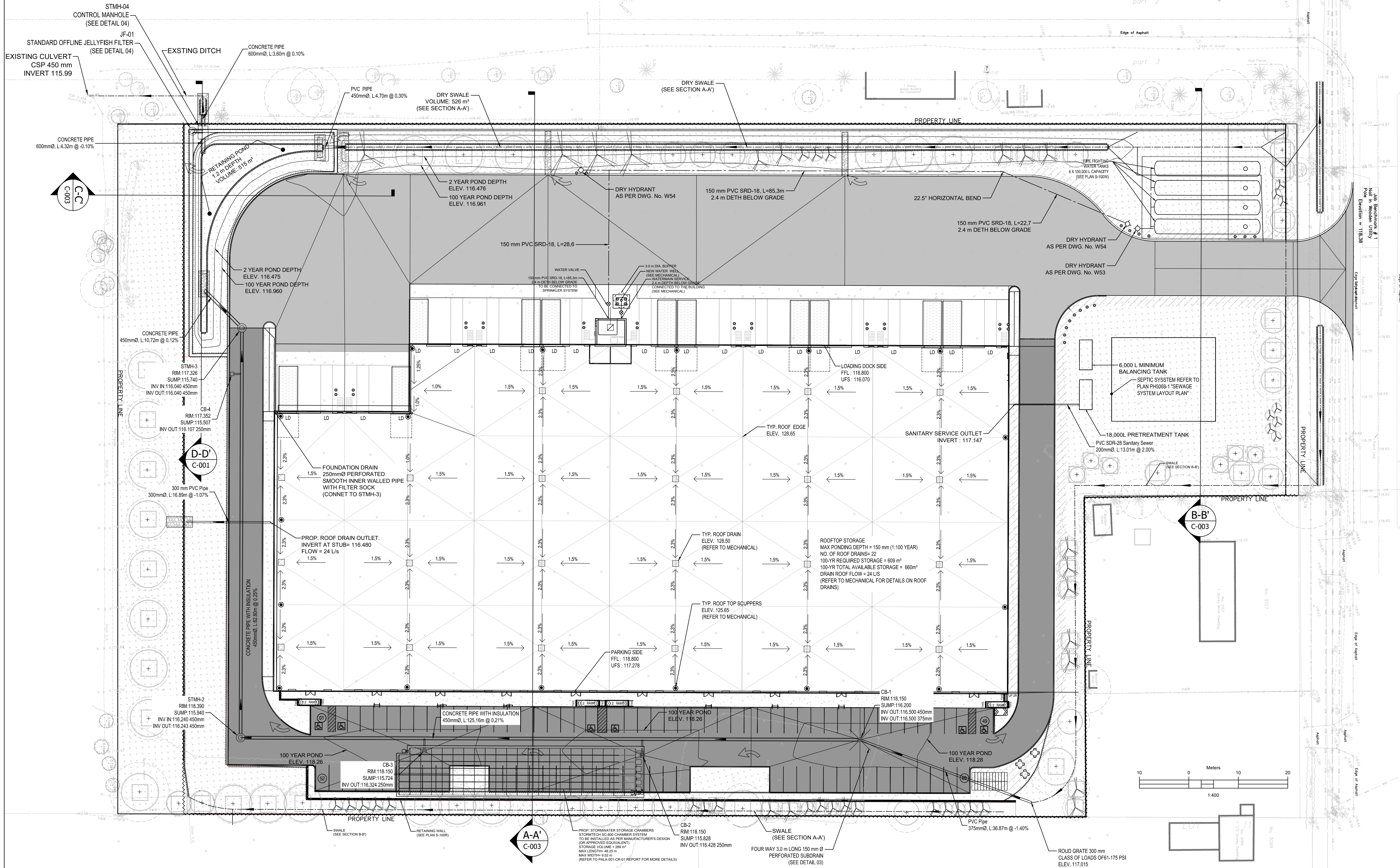


Post-development flows

Storm Event	pre-development flows (l/s)	Post-development flows to the outfall (l/s)	
		Retaining pond outfall	Roof Drain outfall
2 yr	64	26	24
5 yr	193	29	24
10 yr	316	32	24
50 yr	621	38	24
100 yr	748	40	24
			Total
			60
			63
			66
			62
			64

Post-development flows to watercourse

Storm Event	Uncontrolled flow (l/s)	Flow to the existing culvert (l/s)
2 yr	15	64
5 yr	44	97
10 yr	72	128
50 yr	142	203
100 yr	171	235



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DRAWING LEGEND

- PROPOSED FIRE HYDRANT
- PROPOSED STORM MANHOLE
- PROPOSED SANITARY MANHOLE
- PROPOSED CATCH BASIN
- MAJOR OVERLAND FLOW ROUTE
- SEWER FLOW DIRECTION
- SCOPPER (SEE MECHANICAL)
- ROOF DRAIN (SEE MECHANICAL)
- GRADING FILL
- GRADING CUT
- NEW HEAVY DUTY ASPHALT
- NEW LIGHT DUTY ASPHALT
- CONCRETE
- RIP-RAP (PER OPSD 810.010)
- PROPOSED BARRIER CURB (PER SC1.1)
- DEPRESSED CURB (PER SC1.4)
- PROPOSED BOLLARD (PER F5)
- SILT FENCE DURING CONSTRUCTION
- PROPOSED SLOPE
- PROPOSED ELEVATION

BEARINGS ARE GRID, DERIVED FROM CAN-NET 2016
REAL TIME NETWORK GPS OBSERVATIONS, MTM
ZONE 9 (78°30' WEST LONGITUDE) NAD-83
(ORIGINAL).

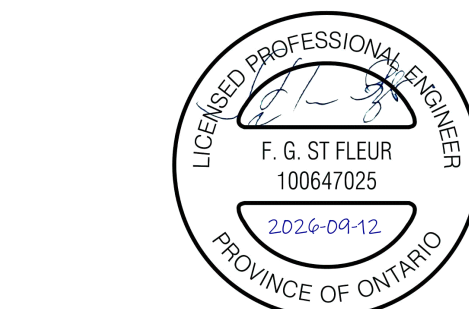
TOPOGRAPHIC INFORMATION:
Topographic information provided by Annis, O'Sullivan,
Vollebæk Ltd.
Job No. 22958-22 Pt L102 C3 HU T DI

BENCH MARK:
Job Benchmark # 1, Nail in Wooden Utility Pole
Elevation = 118.38

4	Issued for city permit	sep. 12 2026
3	Issued for city permit	Dec. 029 2025
2	Issued for coordination	Nov. 17 2025
1	Issued for coordination	Sept. 1st 2025
0	Issued for coordination	April 15 2025
revisions		date

project
Proposed 1-Storey Warehouse
3113 Carp Road
Ottawa, ON

drawing
Site Servicing Plan



designed
F.G. St Fleur, P.Eng., ing.
date
2025-12-07
drawn
F.G. St Fleur, P.Eng., ing.
date
2025-12-07

client
MEGHA HOLDINGS Inc.

Note
Do not scale. Refer any dimensional errors and/or possible trade interference/ conflict to the architects for clarification prior to commencement of the work.

project number
no. du projet

drawing no.
PALA-001

no. du dessin
C-001

NOTES:
ALL EXISTING TREES IDENTIFIED FOR RETENTION IN THE ENVIRONMENTAL IMPACT STATEMENT PREPARED BY GEMTEC (PROJECT NO. 104420.001) SHALL BE PRESERVED AND PROTECTED THROUGHOUT CONSTRUCTION AND THEREAFTER, IN ACCORDANCE WITH APPLICABLE MUNICIPAL BY-LAWS, THE URBAN TREE CONSERVATION BY-LAW, AND ALL SUBSEQUENT AMENDMENTS.



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DRAWING LEGEND

- PROPOSED FIRE HYDRANT
- PROPOSED STORM MANHOLE
- PROPOSED SANITARY MANHOLE
- PROPOSED CATCH BASIN
- MAJOR OVERLAND FLOW ROUTE
- SEWER FLOW DIRECTION
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- SILT FENCE DURING CONSTRUCTION
- PROPOSED SLOPE
- PROPOSED ELEVATION

BEARINGS ARE GRID, DERIVED FROM CAN-NET 2016 REAL TIME NETWORK GPS OBSERVATIONS, MTM ZONE 9 (76°30' WEST LONGITUDE) NAD-83 (ORIGINAL).

TOPOGRAPHIC INFORMATION:
Topographic information provided by Annis, O'Sullivan, Vollebakk Ltd.
Job No. 22958-22 Pl L102 C3 HU T DI

BENCHMARK:
Job Benchmark # 1, Nail in Wooden Utility Pole
Elevation = 118.38

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revisions		date

project

Proposed 1-Storey Warehouse
3113 Carp Road
Ottawa, ON

drawing
Site Grading, Erosion and
Sediment control Plan



designed F.G. St Fleur, P.Eng., ing. conçu
date 2025-12-07
drawn F.G. St Fleur, P.Eng., ing. dessiné
date 2025-12-07

client
MEGHA HOLDINGS Inc.

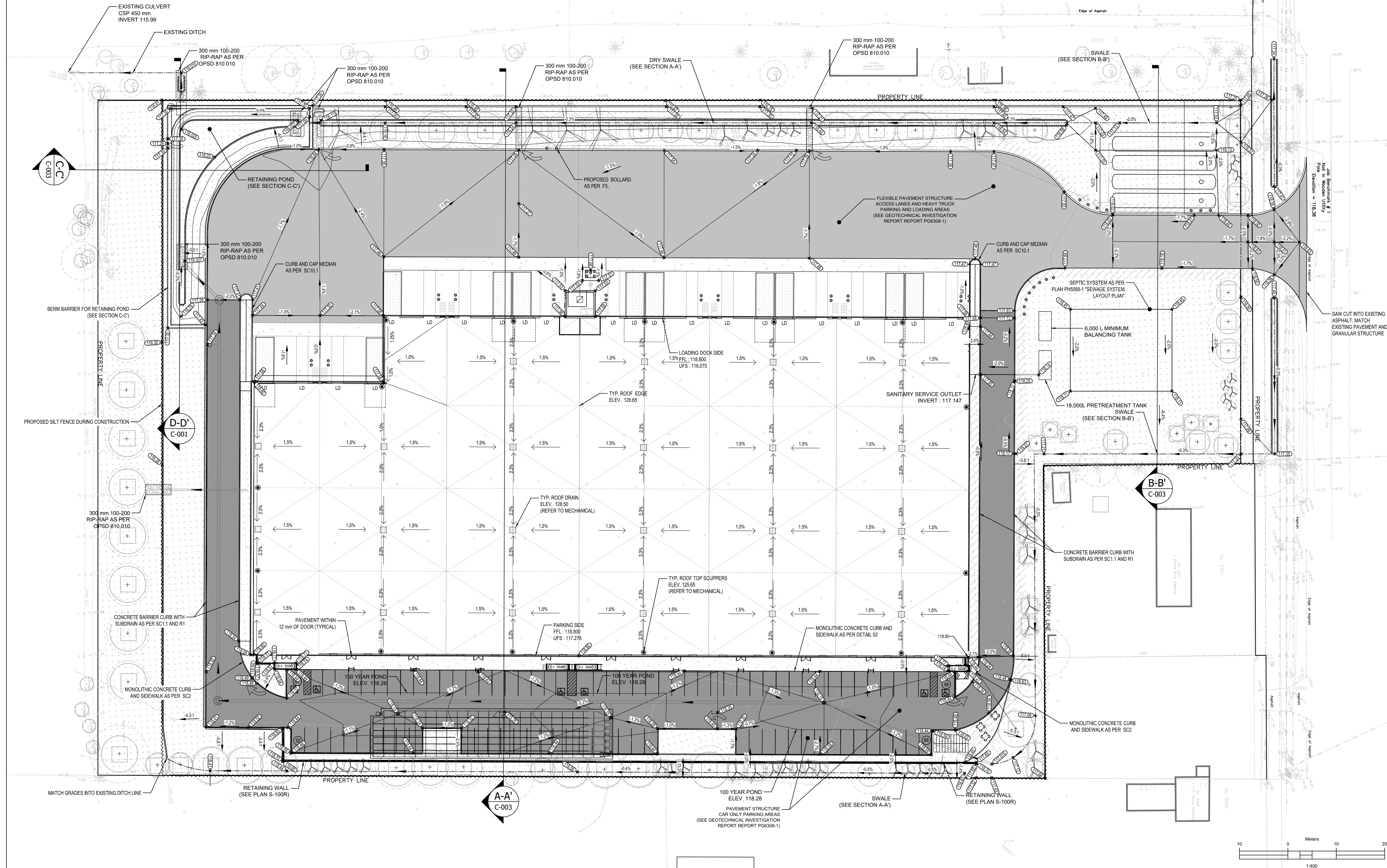
Note
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project number no. du projet

PALA-001

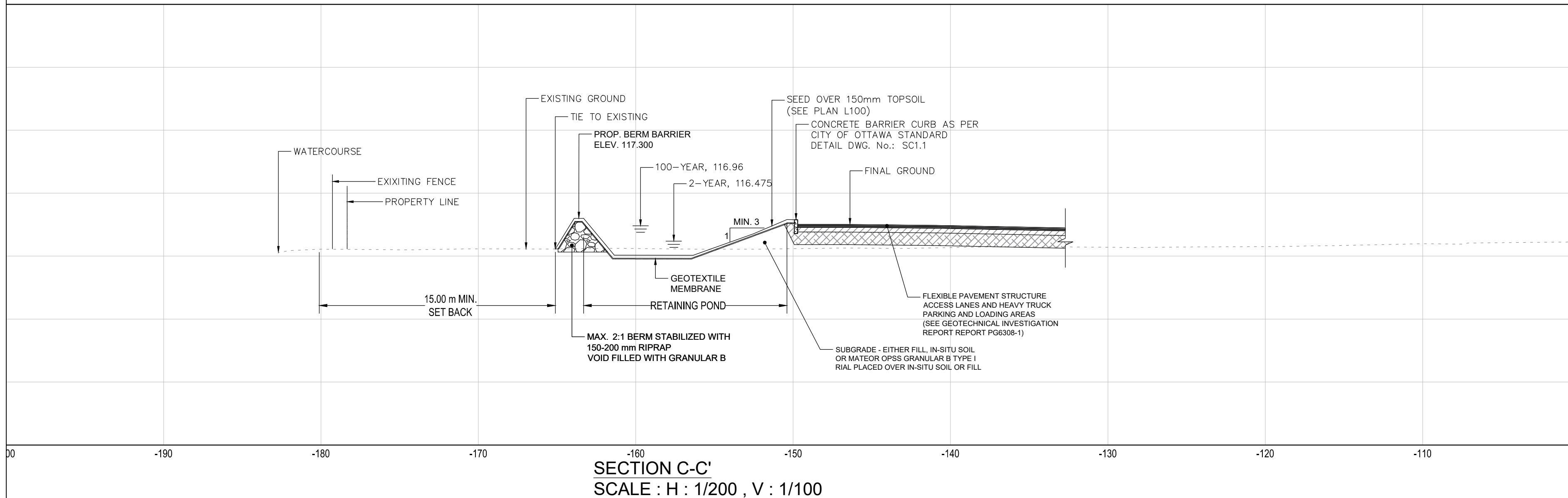
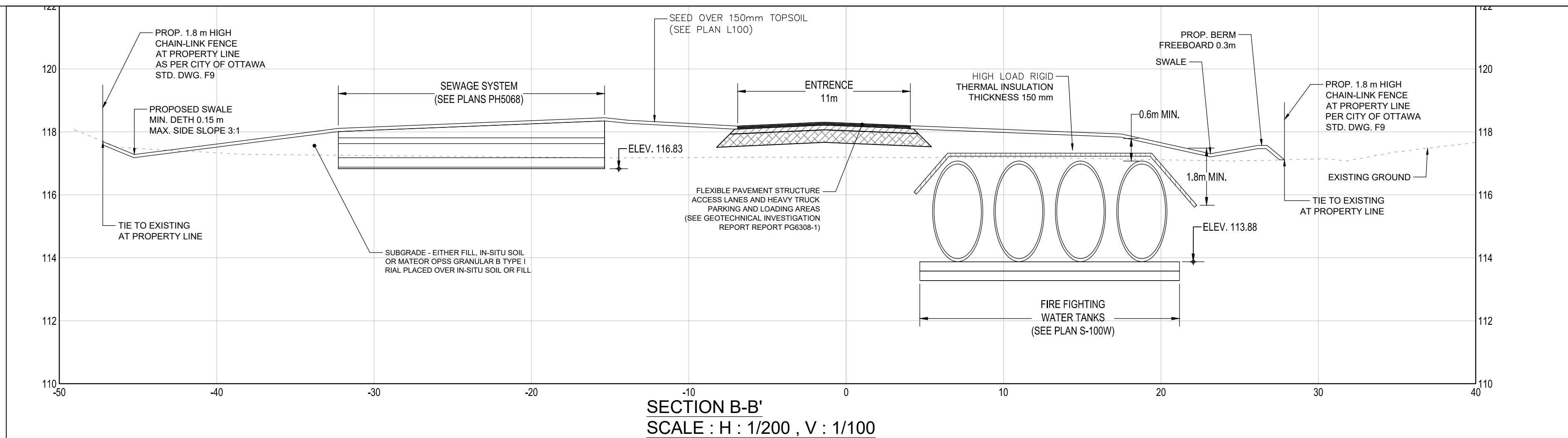
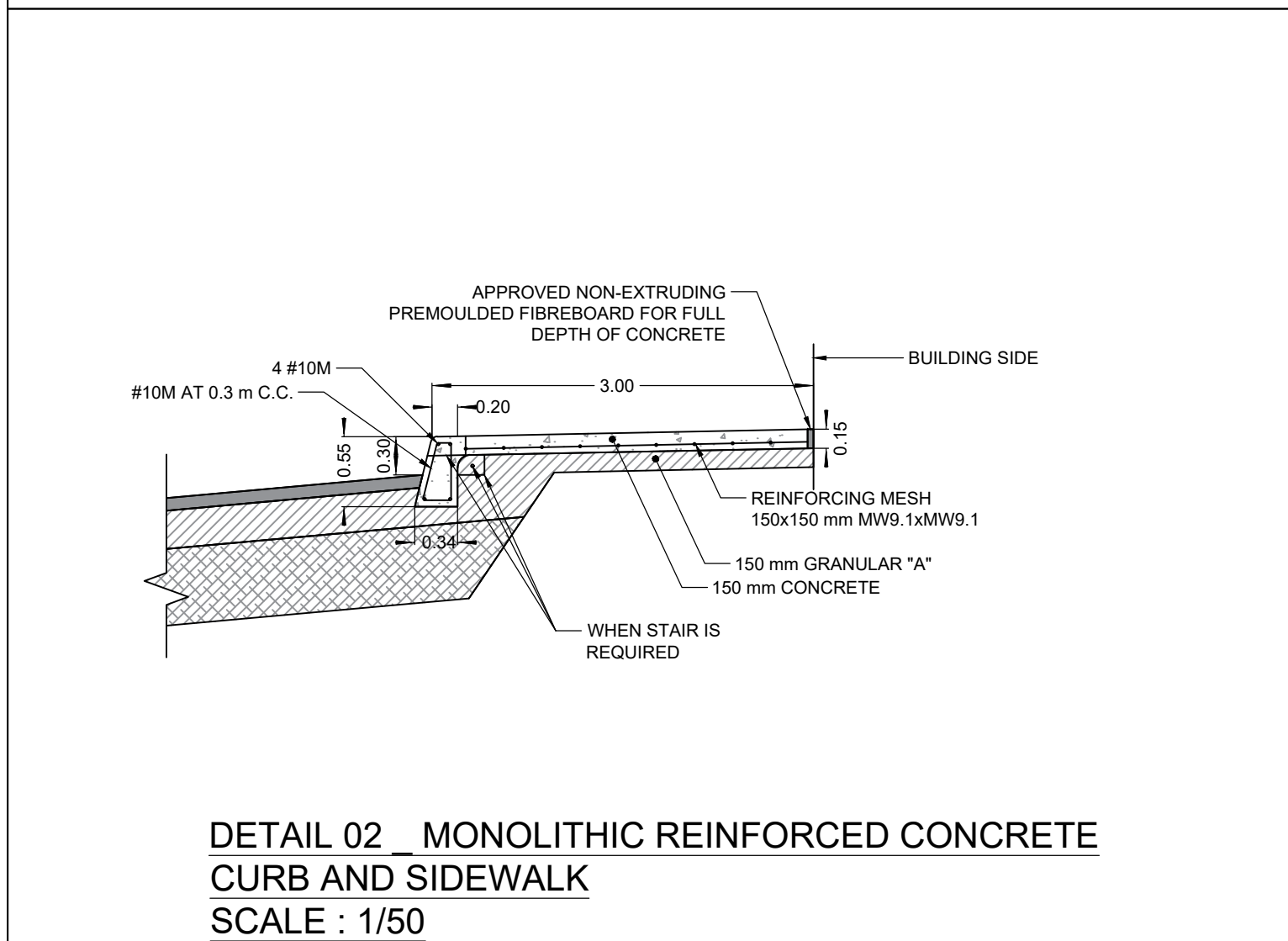
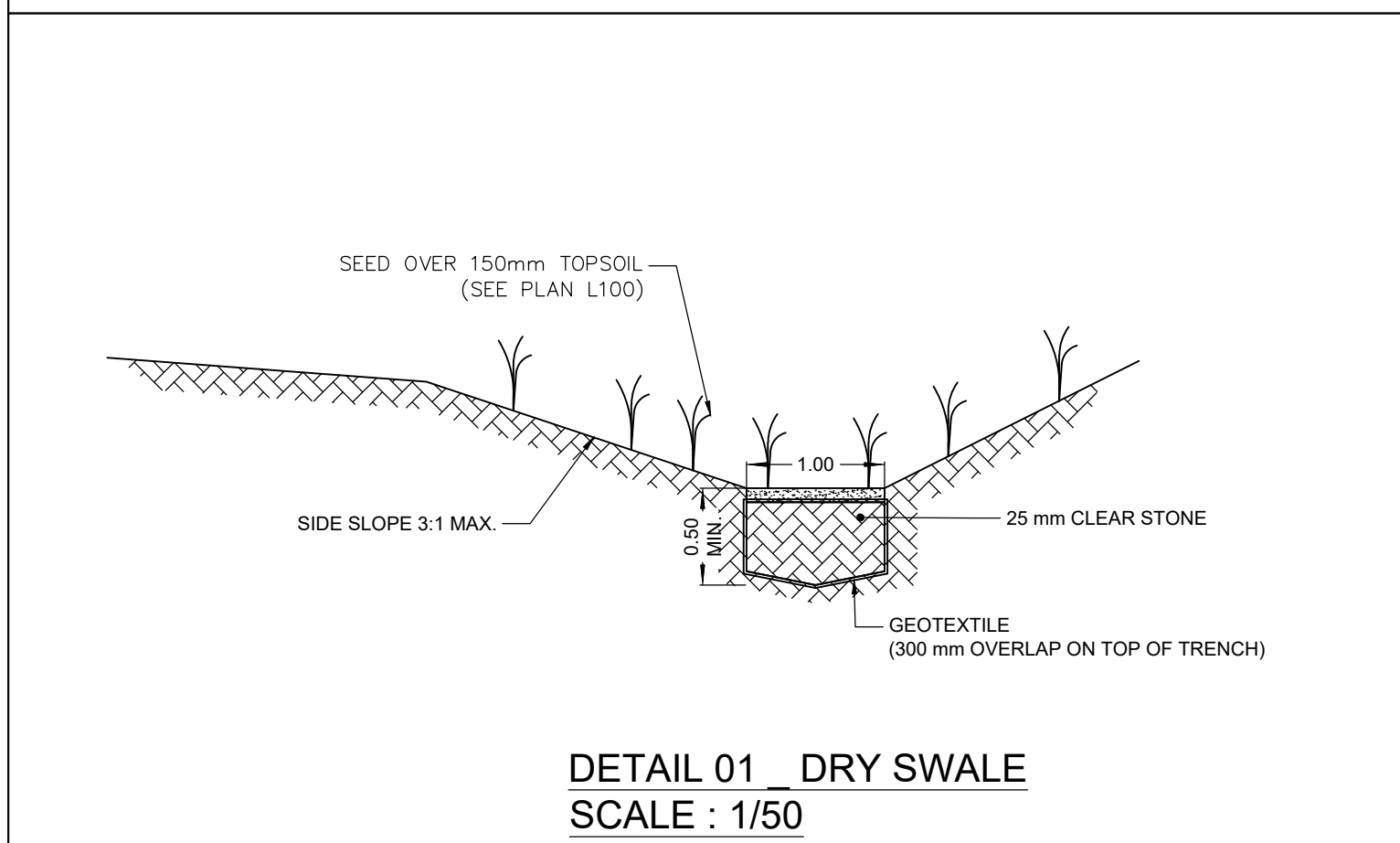
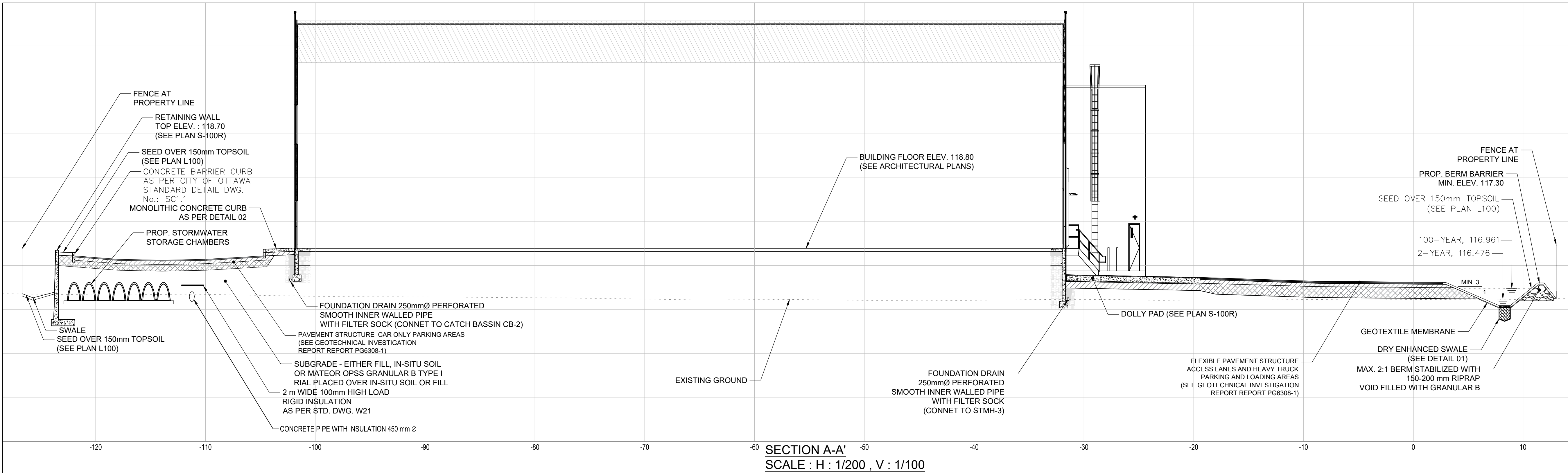
drawing no. no. du dessin

C-002





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2	Issued for city permit	sep. 12 2026
1	Issued for city permit	Dec. 29 2025
0	Issued for coordination	Nov. 17 2025
revisions		date

project
Proposed 1-Storey Warehouse
3113 Carp Road
Ottawa, ON

drawing
Typical Section and Details



designed
F.G. St Fleur, P.Eng., ing.
date
2025-12-07
drawn
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date
2025-12-07

client
MEGHA HOLDINGS Inc.

Note
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project number
PALA-001
drawing no.
C-003

A - GENERAL

- UNLESS OTHERWISE STATED "ENGINEER" REFERS TO FRITZ GERALD ST FLEUR.
- USE BAR SCALE TO CONFIRM ACTUAL PLOT SCALE. EXISTING AND NEW ELEVATIONS AND INVERTS SHOWN ARE GEODETIC AND ARE IN METERS. ALL PIPE DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- EXISTING ELEVATIONS AND LOCATIONS, INVERTS AND SIZES OF EXISTING SERVICES AND UTILITIES ARE NOT NECESSARILY SHOWN ON PLAN AND THOSE SHOWN ARE DERIVED FROM AVAILABLE PROPOSED CIVIL 3D MODEL AND SURVEY AND MUST BE CONFIRMED ON SITE BEFORE COMMENCING CONSTRUCTION.
- REPORT ANY DIFFERENCES TO ENGINEER.
- UNDERGROUND LOCATES (INCLUDING ONTARIO ONE CALL : 1 800 400 2255) SHALL BE CONDUCTED PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION.
- SITE BOUNDARIES AND EXISTING GRADES AND OTHER FEATURES DERIVED FROM TOPOGRAPHIC SURVEY PREPARED BY ANNIS. O'SULLIVAN, VOLLEBEKK LTD. JOB No. 22958-22. IT IS THE RESPONSIBILITY OF THE USER USER OF THE SURVEY PLAN AND THESE DRAWINGS TO VERIFY THAT THE JOB BENCH MARK HAS NOT BEEN ALTERED OR DISTURB AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREE WITH THE INFORMATION SHOWN ON SURVEY PLAN AND THESE DRAWINGS.
- REFERENCE THE LATEST REVISION AND ALL ADDENDUMS OF THE "GEOTECHNICAL INVESTIGATION, REPORT PG6308-1 REVISION2 " BY PATERSON GROUP. SITE PREPARATION INCLUDING BUILDING, SUB-GRADE PREPARATION AND PAVEMENT SUB-GRADE PREPARATION AND CONSTRUCTION OF THE PAVEMENT STRUCTURE AND EXCAVATION AND BACKFILLING, INCLUDING COMPACTION OF MATERIALS, SHALL CONFORM TO THE GEOLOGICAL INVESTIGATION TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
- DRAWINGS ARE TO BE READ READ IN CONJUNCTION WITH SERVICING BRIEF & STORM WATER MANAGEMENT REPORT No. PALA-001-CR-01 PREPARED BY FRITZ GERALD ST FLEUR P. ENG.
- REINSTATE ADJACENT PROPERTIES TO PRE-CONSTRUCTION CONDITIONS.
- ALL RELEVANT WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT CITY STANDARDS AND SPECIFICATIONS.
- ONTARIO PROVINCIAL STANDARDS & SPECIFICATIONS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
- ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH THE CONTRACT DOCUMENTS.
- CONTRACTOR MUST COMPLY WITH LOCAL BY-LAWS, ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT AND ALL REGULATIONS SET BY AUTHORITIES HAVING JURISDICTION. IN CASE OF CONFLICT OR DISCREPANCY, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
- CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED UTILITY LOCATES, DAYLIGHTING, INSPECTIONS, PERMITS, AND APPROVALS, INCLUDING ALL ASSOCIATED COSTS. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND BASED ON BEST AVAILABLE INFORMATION.

B - EROSION AND SEDIMENT CONTROL PLAN

- THE EROSION AND SEDIMENT CONTROL PLAN IS A "LIVING DOCUMENT" AND SHALL BE UPDATED AS REQUIRED. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION OF THE DRAINAGE SYSTEM AND THE RECEIVING WATER COURSE DURING CONSTRUCTION ACTIVITIES.
- INSTALL A SILT FENCE BARRIER AROUND STOCKPILED SEDIMENT OR SOIL. PRIOR TO COMMENCEMENT OF CONSTRUCTION, INSTALL A SILT FENCE BARRIER AS SHOWN ON PLANS. REMOVE DEPOSITS WHEN THE LEVEL REACHES ONE-THIRD THE HEIGHT OF THE FENCE. IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED SECTIONS OF FENCE. DO NOT REMOVE UNTIL CONSTRUCTION IS COMPLETE.
- CONSTRUCTION IS CONSIDERED COMPLETE WHEN:
 - ALL STRUCTURES HAVE BEEN BUILT
 - EXPOSED SOIL HAS BEEN STABILIZED OR HAS FULL COVERAGE OF WELL-ESTABLISHED TURF AND HAS HAD A MINIMUM OF ONE FULL GROWING SEASON (MAY 15TH TO SEPTEMBER 15TH)
 - THERE ARE NO AREAS OF EXPOSED EARTH
- THE CONSTRUCTION CONTRACTOR MUST REMOVE EROSION AND SEDIMENT CONTROL MEASURES WHEN CONSTRUCTION IS COMPLETE.
- STOCKPILED SOIL SHALL BE LOCATED A MINIMUM OF 15 m FROM THE HEADWATER DRAINAGE FEATURE, DITCHES, STORM INLETS, SEPTIC BED AREA, AND PROPERTY LINES. STOCKPILES SHALL BE SURROUNDED BY SILT FENCE AND STABILIZED IF LEFT IN PLACE FOR MORE THAN 30 DAYS.
- ALL STORM MANHOLES AND CATCHBASIN MANHOLES TO HAVE 300mm SUMPS; ALL CATCHBASINS TO HAVE 600mm SUMPS.
- INSTALL FILTER BAG INSERT IN ALL STORM MANHOLES AND CATCH BASINS IMPACTED DURING CONSTRUCTION.
- NO SILT, SEDIMENT, TURBID WATER, CONSTRUCTION DEBRIS, OR OTHER DELETERIOUS MATERIAL SHALL BE PERMITTED TO ENTER THE EXISTING DITCHES, HEADWATER DRAINAGE FEATURE, STORMWATER MANAGEMENT FACILITIES, OR DOWNSTREAM WATERCOURSES.
- DEWATERING WATER FROM TRENCHES, EXCAVATIONS, OR FOUNDATION WORK SHALL BE FILTERED THROUGH A SEDIMENT BAG OR APPROVED SETTLING DEVICE PRIOR TO DISCHARGE. DIRECT DISCHARGE OF SEDIMENT-LADEN WATER TO THE DITCH OR WATERCOURSE IS PROHIBITED.
- PROVIDE MINIMUM 300 mm THICK RIP-RAP PROTECTION USING STONES WITH A MINIMUM D50 OF 150 mm NOMINAL DIAMETER, IN ACCORDANCE WITH OPSD 810.010, TYPE R-25. INSTALL NON-WOVEN GEOTEXTILE FILTER FABRIC IN ACCORDANCE WITH OPSS 511 BENEATH THE RIP-RAP. EXTEND RIP-RAP PROTECTION A MINIMUM OF 1.0 m BEYOND THE OUTLET.
- THE CONTRACTOR SHALL INSPECT ALL ESC MEASURES DAILY DURING ACTIVE CONSTRUCTION, WEEKLY THEREAFTER, AND FOLLOWING SIGNIFICANT RAINFALL, OR OTHER EVENTS THAT MAY AFFECT THEIR PERFORMANCE. IDENTIFIED DEFICIENCIES SHALL BE REPAIRED IMMEDIATELY AND NO LATER THAN 24 HOURS FOLLOWING IDENTIFICATION. DEFICIENCIES THAT COULD RESULT IN SEDIMENT LEAVING THE SITE SHALL BE CORRECTED IMMEDIATELY. ADEQUATE SPARE ESC MATERIALS SHALL BE MAINTAINED ON-SITE AT ALL TIMES FOR PROMPT REPAIR OR REPLACEMENT.
- CONSTRUCT BERM USING 150-200 MM RIPRAP UNDERLAIN BY GEOTEXTILE. VOIDS BETWEEN RIPRAP SHALL BE FILLED WITH GRANULAR B OR 19 MM CLEAR STONE TO PROVIDE INTERLOCK AND IMPROVE STABILITY. BERM GEOMETRY SHALL BE AS SHOWN ON THE DRAWINGS, WITH A MAXIMUM SIDE SLOPE OF 2H:1V. FINAL BERM DESIGN AND SLOPE STABILITY SHALL BE CONFIRMED BY THE GEOTECHNICAL ENGINEER.

C - GRADING AND DRAINAGE

- NEW GRADES TO MATCH EXISTING AT PROPERTY LINE. NO ALTERATION TO EXISTING GRADE AND DRAINAGE PATTERNS ON PROPERTY LINE.
- ALL AREAS SHALL BE GRADED TO ENSURE ADEQUATE DRAINAGE AWAY FROM BUILDINGS TO AVOID PONDING.
- PROMPTLY MAKE GOOD OTHER CONTRACTOR'S WORK DAMAGED BY SUCH CORRECTIONS.
- GEOTEXTILE FABRIC: TO OPSS 1860. WOVEN SYNTHETIC FIBER FABRIC SHALL BE USED IN MATERIAL BY UNROLLING ONTO GRADED SURFACE. SMOOTH AND FREE OF TENSION STRESS.
- EXCAVATE USING A HYDRO-VAC TRUCK TO MINIMIZE ROOT DAMAGE WHERE ANY EXCAVATION IS WITHIN THE CRITICAL ROOT ZONE (10x TRUNK DIAMETER) OF ANY TREE TO REMAIN.

D - WATER

- ALL PVC WATERMANS SHALL CONFORM TO AWWA C900, PRESSURE CLASS 150, SDR 18, OR AN APPROVED EQUIVALENT.
- PROVIDE A MINIMUM 2.4 m COVER OVER WATER SERVICE CONNECTION. WHERE THE MINIMUM COVER IS NOT POSSIBLE, INSULATE AS PER CITY OF OTTAWA STANDARDS.
- ALL WATERMAIN TRENCHING, BEDDING, AND BACKFILL SHALL CONFORM TO CITY OF OTTAWA STANDARD DRAWING W17, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIALS SHALL BE PROVIDED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER.
- VALVE BOXES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING W24.
- FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWINGS W53 AND W54.

E - STORM SEWER

- PROVIDE A MINIMUM 2.0 m COVER OVER SEWERS. WHERE THE MINIMUM COVER IS NOT POSSIBLE, PROVIDE 100mm HIGH LOAD RIGID INSULATION PLACED WITHIN SUBGRADE. INSULATION SHALL BE 2.0m WIDE ABOVE PIPE WHERE INDICATED (WITH TYPICAL).
- ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL CONFORM TO CSA A257.2 (LATEST EDITION). ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL CONFORM TO CSA A257.1 (LATEST EDITION). ALL PIPE JOINTS SHALL BE PROVIDED WITH RUBBER GASKETS IN ACCORDANCE WITH CSA A257.3 (LATEST EDITION).
- PVC STORM SEWERS SHALL CONFORM TO CSA B182.2 (LATEST EDITION) AND SHALL BE SDR 35, UNLESS OTHERWISE SPECIFIED.
- PERFORATED 250 MM SUB-DRAINS SHALL BE HDPE, INTERIOR SMOOTH-WALLED WITH FILTER SOCK.
- MANHOLES AND CATCH BASINS TO OPSS 1351 AND OPSD 701.01D.
- PROVIDE MINIMUM 3 m LONG, 150 MM DIAMETER PERFORATED SUBDRAINS WITH FILTER FABRIC WRAP AND END PLUG AT ALL CATCH BASINS AND CATCH BASIN MANHOLES.
- ROOF DRAINS SHALL BE FLOW CONTROL TYPE WITH A CONTROL WEIR MINIMUM 50 mm IN DIAMETER.
- SUBDRAINS SHOULD BE INSTALLED ON ALL CURBS IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DRAWING R1.
- FLOW CONTROL DEVICE LOCATED IN THE OUTLET PIPE OF CATCH BASIN MANHOLE COMPARTMENT SHALL BE PLUG STYLE WITH A ROUND ORIFICE (WITH THE ORIFICE LOCATED AT THE BOTTOM). DEVICE SHALL BE MANUFACTURED FOR A DISCHARGE RATE AS INDICATED ON PLAN. PRIOR TO INSTALLATION, SUBMIT SHOP DRAWING TO ENGINEER FOR APPROVAL.

F - CONSTRUCTION REQUIREMENTS

- PRIOR TO COMMENCING WORK:
 - OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS
 - CONFIRM EXISTING GRADE ELEVATIONS
 - COORDINATE AND SCHEDULE WORK WITH AUTHORITIES AND OTHER TRADES
- SCHEDULE WORK TO MINIMIZE DISRUPTION
- MAINTAIN AND PROTECT FROM DAMAGE ALL SERVICES, UTILITIES, AND STRUCTURES ENCOUNTERED.
- PROTECT EXISTING BUILDINGS, TREES, PLANTS, LAWNS, FENCING, SERVICE POLES.
- PROVIDE TRAFFIC CONTROL AND SAFETY MEASURES AS REQUIRED.
- REMOVE OBSTRUCTIONS, ICE, AND SNOW FROM SURFACES TO BE EXCAVATED.
- COORDINATE AND PAY FOR GEOTECHNICAL INSPECTIONS AND COMPACTION TESTS.
- DISPOSE OF SURPLUS AND UNSUITABLE EXCAVATED MATERIAL OFF-SITE.
- PLACE AND COMPACT FILL MATERIAL PER GEOTECHNICAL REPORT.
- PREVENT SEGREGATION AND CONTAMINATION OF MATERIALS.
- THE CONSTRUCTION CONTRACTOR SHALL IMPLEMENT AND COMPLY WITH ALL RECOMMENDED MITIGATION MEASURES IDENTIFIED IN THE *TREE CONSERVATION REPORT* (PROJECT NO. 104420.001) PREPARED BY GEMTEC.
- VEGETATION REMOVAL SHOULD OCCUR OUTSIDE OF THE COMBINED WILDLIFE ACTIVE SEASON, OF MARCH 15 - NOVEMBER 30, OF ANY GIVEN YEAR.
- NEW GRADES SHALL MATCH EXISTING GRADES AT ALL PROPERTY LINES. NO ADDITIONAL STORMWATER RUNOFF SHALL BE DIRECTED ONTO ADJACENT PROPERTIES DURING OR AFTER CONSTRUCTION. EXISTING GRADES AND DRAINAGE PATTERNS ALONG PROPERTY LINES SHALL BE MAINTAINED, AND NO ALTERATIONS SHALL BE MADE WITHOUT PRIOR APPROVAL.
- TOPSOIL SHOULD BE STRIPPED FROM UNDER ANY BUILDINGS, PAVED AREAS, PIPE BEDDING, AND OTHER SETTLEMENT SENSITIVE STRUCTURES. PRECAUTIONS SHOULD BE TAKEN TO ENSURE THAT ALL BEARING SURFACES AND SUBGRADE SOILS REMAIN UNDISTURBED DURING SITE PREPARATION ACTIVITIES. UNDER PAVED AREAS, EXISTING CONSTRUCTION REMNANTS, SUCH AS FOUNDATION WALLS, PIPE DUCTS, ETC., SHOULD BE EXCAVATED TO A MINIMUM DEPTH OF 1 M BELOW FINAL GRADE.

