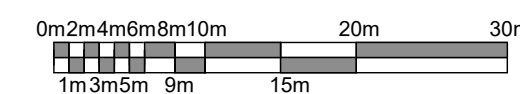
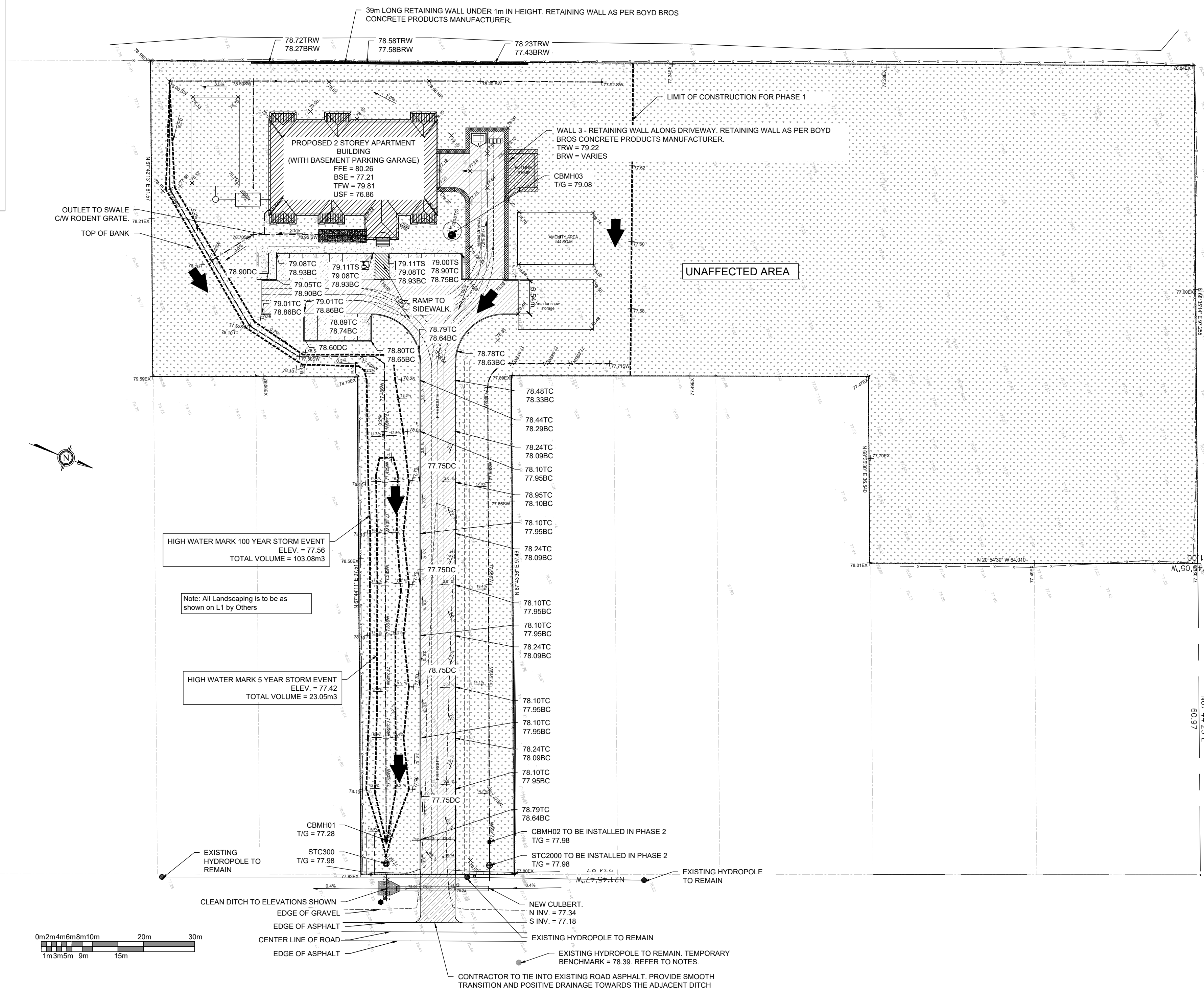


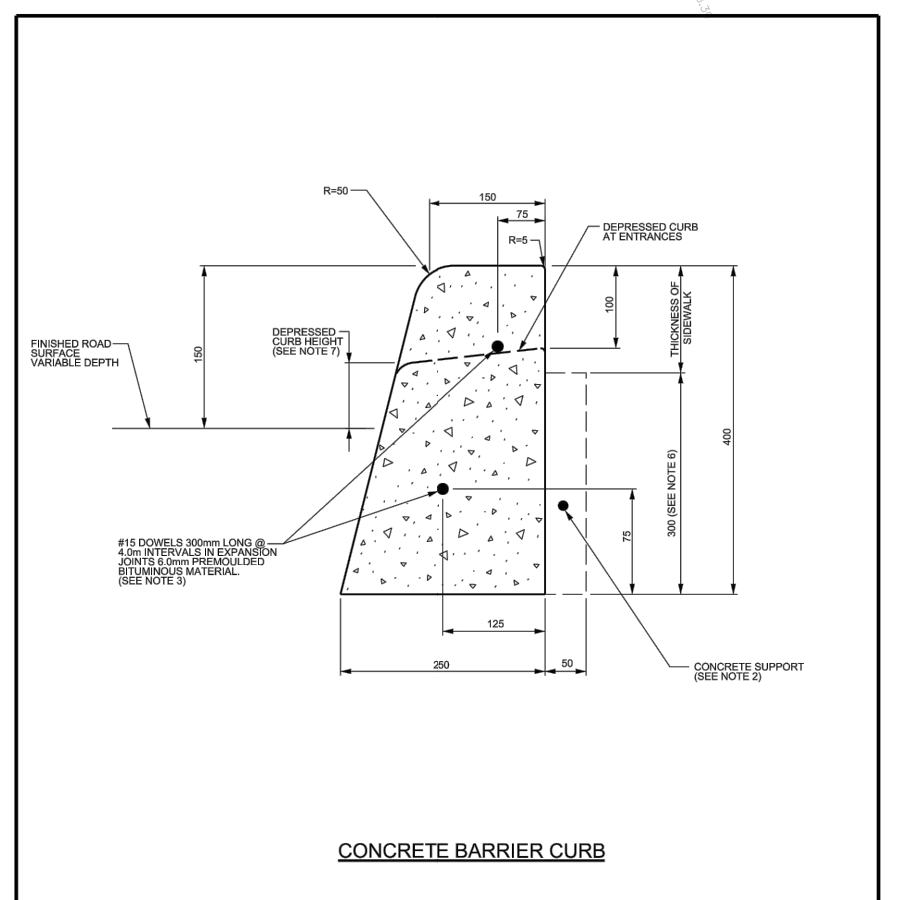
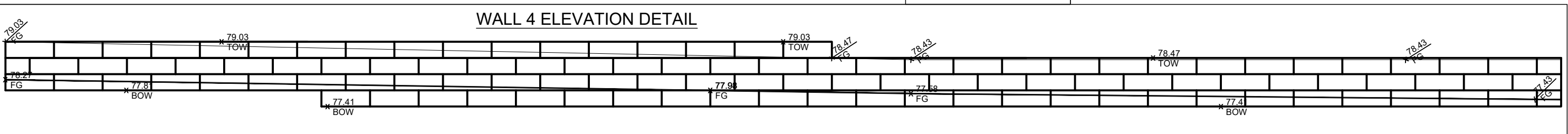
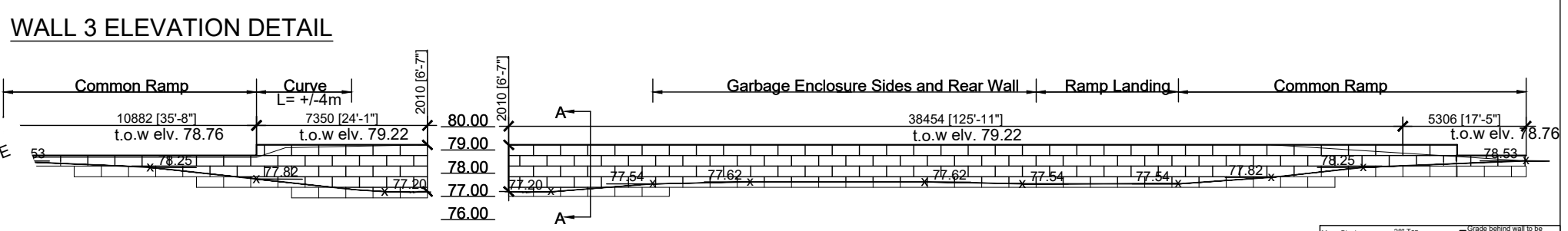
SWALE & SUBDRAIN - TYPICAL SECTION (N.T.S.)

Section	Ponding Elevation (m)	Swale Elevation (m)	Average Area (sq m)	Length (m)	Volume (cu m)	Capacity (cu m)
1	77.56	77.28	0.311	10,000	3.110	3.110
2	77.56	77.30	1.061	10,000	10.605	13.915
3	77.56	77.32	1.593	10,000	15.928	29.843
4	77.56	77.34	1.384	10,000	13.843	43.685
5	77.56	77.36	1.237	10,000	12.365	56.050
6	77.56	77.38	1.057	10,000	10.565	66.615
7	77.56	77.40	0.925	10,000	9.245	75.360
8	77.56	77.42	0.847	10,000	8.470	84.430
9	77.56	77.44	0.847	10,000	8.470	92.900
10	77.56	77.46	0.847	10,000	8.470	97.168
11	77.56	77.48	0.847	10,000	8.470	100.234
12	77.56	77.50	0.847	10,000	8.470	101.583
13	77.56	77.52	0.847	10,000	8.470	102.909
14	77.56	77.54	0.847	10,000	8.470	103.980
Target Storage						88.82



LEGEND:

- EXISTING PROPERTY LINE TO REMAIN
- PROPOSED EASEMENT
- PROPOSED TERRACING (3:1 MIN.)
- PROPOSED DOOR ENTRANCE/EXIT
- PROPOSED ELEVATION
- PROPOSED HIGH POINT ELEVATION
- PROPOSED SWALE ELEVATION
- MATCH INTO EXISTING ELEVATION
- EXISTING ELEVATION
- PROPOSED OVERLAND MAJOR FLOW ROUTE
- PROPOSED SILT FENCE AS PER OPSD 219.1.10
- PROPOSED 100mm PERFORATED SUBDRAIN
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- PROPOSED CATCH BASIN/MANHOLE/CATCH BASIN
- PROPOSED CURB STOP
- PROPOSED PIPE INSULATION
- PROPOSED 100 YEAR HIGH WATER LEVEL
- STORM WATERSHED EXTENT
- WATERSHED NAME
- RUNOFF COEFFICIENT
- AREA IN HECTARES
- PROPOSED GRASS AREA
- PROPOSED CONCRETE FEATURES/SLAB
- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED LIGHT DUTY ASPHALT
- PROPOSED GRAVEL AREA
- PROPOSED RIP RAP AS PER OPSD 810.010
- PROPOSED WATER METER
- PROPOSED ACCESS GATE
- PROPOSED GROWING FIELD



- Elevations shown on plans are geodetic in meters and taken from topographical survey drawing by Arpenage Dufresne Surveying Inc. July 2013.
- Project T.B.M. (Temporary Benchmark), Nail in Utility Pole on East side of Rockdale Road Elev. = 78.39.
- All water works to respect requirements of the City of Ottawa and to conform to the latest revision of Standard Tendering Documents as prepared by city.
- All catch basin manholes and sewers work to be constructed as per the requirements of the City of Ottawa.
- Pipes sizes shall be as shown on drawing.
- Pipes material to be as follows:
- storm sewer - PVC SDR28
- watermain - PVC DR18
- sanitary sewer - SDR 35
- sub-drain - flexible perforated heavy duty polyethylene pipe c/w polyester sock filter by BIG'O or equivalent.
- All water services shall have 2.4 m frost cover minimum.
- Existing services and utilities shown on this drawing are taken from best available records but are not complete. Contractor is required to check in field for location and all elevation of pipes and check with utility companies before digging or ordering any material. Advise engineer of any discrepancies for recommendations and directions, prior to ordering any materials or starting any work.
- Geotechnical Report, perform by Morey Associates Ltd. (report# 013300, written September 2013), forms part of our specifications and requirements. Contractor must be fully cognizant of its content and respect its recommendations.
- Stormwater Management Report by Blanchard Letendre Engineering Ltd., forms part of our specifications and requirements. The contractor must be fully cognizant of its content and respect its recommendations.
- All plumbing and electrical work to be coordinated with civil engineering.
- Notify engineer for inspection prior to backfilling or covering any pipes or appurtenances.
- Contractor to respect grading around building to be 0.15m minimum below top of foundation or any siding or finish wall material.
- All works for private approach including any temporary construction access to the site lane shall be constructed in accordance with requirements of the City of Ottawa standards.
- Contractor to prevent erosion and sedimentation damages by installing geosocks under cover of existing down stream catch basins and also take necessary measures to prevent erosion and sediment deposit on adjacent property. Provide also straw wall with pickets & geotextile at perimeter of property.
- All pipe bedding to be as per the City of Ottawa requirements and as specified in geotechnical report.
- Contractor to obtain clearance certificate from all agencies, authorities and utility company prior to making any excavation. Provide copy of clearance certificate to engineer prior to start of construction.
- MH#1 & MH#2 are to be as per OPSD 705.010. MH#3 is to be as per OPSD 701.015 complete with transition slab, 1200mm diameter riser and 1200mm diameter precast flat cap.
- All catch basin manholes shall be cleaned and empty annually for the purpose of capturing sediment.
- Refer to site plan by Blanchard Letendre Engineering Ltd. for details of curb radius, dimensions of lanes, parking stalls, set back requirements and site data.
- Location of street water is approximate and contractor to verify the exact distance and elevation.
- Contractor to perform all testing verification, cleaning and preparation as per the requirements of the City of Ottawa before final approval.
- Major overland flow is @ an elevation of 77.65 m.
- Proposed grade elevations to match existing elevations at property line or as per plan.
- All proposed grades greater than 7% are proposed average grades. Contractor to use construct slope using terracing.
- Floor drains are to be drained into an oil grit interceptor prior to discharged a septic system.

ENGINEERING STAMP

LICENSED PROFESSIONAL ENGINEER
G. L. BRUNET
100191036
24/08/2020
PROVINCE OF ONTARIO

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BLANCHARD LETENDRE ENGINEERING
767, Notre Dame, Local 42, Embrun, Ontario,
(613) 693-0700 K0A 1R1 blengr.com

CLIENT:
BERGERON CONSTRUCTION
172 ST. THOMAS ROAD
VARS, ON, K0A 3H0

PROJECT:
12 UNIT APARTMENT BUILDING
6574 ROCKDALE ROAD
VARS, ON

DRAWING:
SITE GRADING PLAN

PAPER FORMAT: 24x36
DRAWN BY: BF + GB
CHECKED BY: GB
DATE: 03-2020
SCALE: 1:500
PROJECT NUMBER: 19-276

PAGE:
C200