



Via email: [bernam@ecolecatholique.ca](mailto:bernam@ecolecatholique.ca)

June 8<sup>th</sup>, 2019

Our File Ref.: 180550

Conseil des Écoles Catholiques du Centre-Est (C.E.C.C.E)  
4000, rue Labelle  
Ottawa Ontario  
K1J 1A1

Attention: Melissa Bernard, Project Agent.

Subject: **SWM Design Brief- New 8 Car Parking Lot Construction  
Monfort Elementary School, 350 De Haag Drive, Ottawa, Ontario**

Dear Ms. Bernard,

LRL associates Ltd. was retained by the Conseil des Écoles Catholiques du Centre-Est (C.E.C.C.E) to complete a Stormwater Management (SWM) design brief complete with other documents to fulfill the City of Ottawa Site Plan Control (SPC) requirements for the above-mentioned project. The proposed work in question involves the construction of a new eight (8) car parking lot and pedestrian sidewalk located at the S.E. corner of the existing school, adjacent to the existing school drop off loop.

**SWM Quantity and Quality Review and Requirements:**

During the design stage, the City of Ottawa and Rideau Valley Conservation Authority (RVCA) representatives were consulted and SWM quality and quantity requirements were discussed. The new parking lot and sidewalk construction corresponds to a new impervious surface of approximately 190m<sup>2</sup> where grass will be converted into asphalt/concrete surfaces. LRL, the City of Ottawa Representatives as well as the RVCA acknowledges that the increased runoff is negligible (C=0.528 in pre development conditions, and C=0.533 in post development conditions); therefore, eliminating the introduction of quantity control measures on site. Any surplus of stormwater runoff generated from the additional parking spaces will drain back into the paved bus loading area on site (as the grass did originally in pre development



conditions) and be collected via an existing catch basin (CB no.8) located at the west end of the drop off zone. Refer to Appendix E - Genivar Plan C.01, Site Servicing & Grading Plan for more details. When evaluating the post development to pre development runoff increase generated from these surfaces, the rational formula was used. Refer to the SWM calculations in Appendix A for more info.

Considering that half of the proposed 190m<sup>2</sup> of new impervious area will be comprised of concrete sidewalks, generating or conveying no surface pollutants or hydrocarbons, we assume that the new asphalt parking lot, (roughly 95m<sup>2</sup>) will have no, or very little, negative impact in relation to the quality of the runoff. Keeping in mind that the site outlet to major waterways is more than 2 km away, and any low impact development treatment options are not plausible within the area of construction nor favorable with the proposed design, the RVCA gave us their consent for the proposed parking lot addition without having to do any SWM quality treatment. Refer to RVCA correspondence in Appendix B for more details.

### **Sediment and Erosion Control Measures:**

Like any other development, either big or small, sediment and erosion control measures are mandatory and will be implemented before, during and after the construction of this project. For this project, a silt fence will be erected along the perimeter of the new parking lot and sidewalk area. Refer to the Erosion and Sediment Control Plan C101 in Appendix D for more details.

LRL believes that the above assessment and details outlines satisfies the City of Ottawa Stormwater Management brief requirements to obtain Site Plan Control. Please do not hesitate to contact the undersigned if you have any questions or comments.

Yours truly,  
LRL Associates Ltd.  
Prepared by



Philippe Paquette, C.E.T.

Approved by



Virginia Johnson, P. Eng.

- Encl. Appendix A -SWM calculations.  
Appendix B -RVCA email Correspondence.  
Appendix C -Site Grading and Drainage Plan C301.  
Appendix D -Erosion and Sediment Control Plan C101.  
Appendix E -Genivar Plan C.01, Site Servicing & Grading Plan.

**Appendix A**  
SWM calculations.





**Appendix B**  
RVCA email Correspondence.



## Philippe Paquette

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**From:** Jamie Batchelor <jamie.batchelor@rvca.ca>  
**Sent:** Tuesday, June 4, 2019 10:55 AM  
**To:** Eric Lalande; Philippe Paquette  
**Subject:** RE: New parking lot addition- Ecole Monfort, De Haag Street Ottawa Ont.

Good Morning Phillippe,

Based on the distance from the outlet and the small scope of the additional parking being provided, the constraints associated with the existing grades on site, the RVCA would accept the site serving as originally proposed.

Jamie Batchelor, MCIP, RPP  
Planner, ext. 1191  
[Jamie.batchelor@rvca.ca](mailto:jamie.batchelor@rvca.ca)



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**From:** Eric Lalande <eric.lalande@rvca.ca>  
**Sent:** Friday, May 31, 2019 8:44 AM  
**To:** 'Philippe Paquette' <ppaquette@lrl.ca>  
**Cc:** Jamie Batchelor <jamie.batchelor@rvca.ca>  
**Subject:** RE: New parking lot addition- Ecole Monfort, De Haag Street Ottawa Ont.

Hi Philippe,

We would be happy to discuss the matter as needed. If you can provide us with a site plan ahead of meeting, as we can likely provide comments over email/phone too.

Typically, we look for 80% TSS removal, being provided on-site or through downstream SWM facilities prior to outletting to a watercourse. The site appears to be approximately 2 km from its outlet, whereby we may be able to recommend best management practices over our standard requirements.

I have added Jamie Batchelor to this email as he would be the primary contact for this area.

Merci,

**Eric Lalande, MCIP, RPP**  
Planner, Rideau Valley Conservation Authority  
613-692-3571 x1137

**From:** Philippe Paquette <[ppaquette@lrl.ca](mailto:ppaquette@lrl.ca)>  
**Sent:** Thursday, May 30, 2019 2:56 PM  
**To:** Eric Lalande <[eric.lalande@rvca.ca](mailto:eric.lalande@rvca.ca)>  
**Cc:** Mélissa Bernard <[bernarn@ecolecatholique.ca](mailto:bernarn@ecolecatholique.ca)>; Maxime Longtin <[mlongtin@lrl.ca](mailto:mlongtin@lrl.ca)>  
**Subject:** New parking lot addition- Ecole Monfort, De Haag Street Ottawa Ont.

Hello Eric,

As mentioned in my voice mail I left you earlier, we are working on a new parking lot expansion (8 spots max) at the above mentioned school. The city of Ottawa is asking us to go Thru SPC and produce a SWM plan and brief. They advised me to contact you to get the RVCA quality control requirements for this project. Would it be possible to meet you 30 min. max at your office to go over the project and explain to you our approach and options?

Please call me or email me back asap.

Many thanks

Bonne journée

**Philippe Paquette, CET.**

Certified Engineering Technologist



**LRL**  
ENGINEERING INGENIERIE

**LRL Associates Ltd.**

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**W** [www.lrl.ca](http://www.lrl.ca)

*We care deeply, so let us know how we did by completing our [Customer Satisfaction Survey](#).*



**Appendix C**  
Site Grading and Drainage Plan C301.







**Appendix D**  
Erosion and Sediment Control Plan C101.



**EROSION AND SEDIMENT CONTROL MEASURES:**

\*\* CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES \*\*

**1. PRIOR TO START OF CONSTRUCTION:**

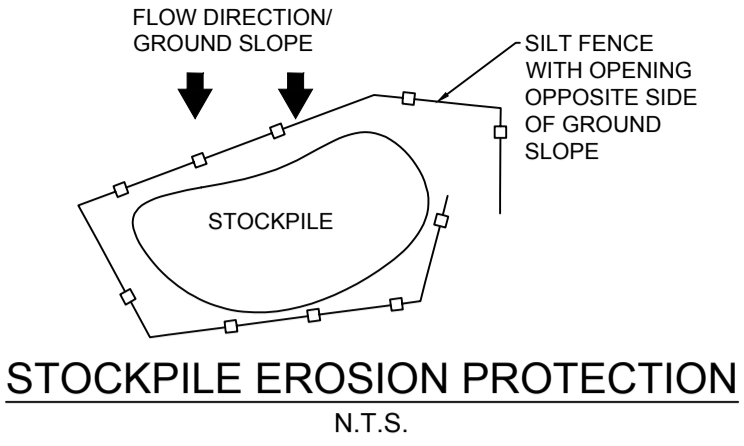
- PRIOR TO THE REMOVAL OF ANY VEGETATIVE COVER, MOVING OF SOIL AND CONSTRUCTION:
- INSTALL SILT FENCE IMMEDIATELY DOWNSTREAM FROM AREAS TO BE DISTURBED (SEE PLAN FOR LOCATION).
- INSTALL GEOSOCK INSERTS WITH AN OVERFLOW IN ALL THE DOWNSTREAM CATCHBASINS AND MANHOLES
- INSTALL SILTSACK FILTERS IN ALL CONCRETE CATCH BASINS STRUCTURES
- INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.

**2. DURING CONSTRUCTION:**

- WORK TO BE DONE IN THE VICINITY OF MAJOR WATERWAYS TO BE CARRIED OUT FROM JULY TO SEPTEMBER ONLY.
- MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE.
- PROTECT DISTURBED AREAS FROM RUNOFF.
- PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA WILL NOT BE REHABILITATED WITHIN 30 DAYS.
- INSPECT SILT FENCES, FILTER CLOTHS AND CATCH BASIN SUMPS WEEKLY AND AFTER EVERY MAJOR STORM EVENT. CLEAN AND REPAIR WHEN NECESSARY.
- CONSTRUCT SWALES AS PER DETAIL.
- PLAN TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION
- EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL STOCKPILES.
- DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS).
- CONTROL WIND-BLOWN DUST OFF SITE TO ACCEPTABLE LEVELS BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED).
- ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
- NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY THIS CONSULTING ENGINEER AND THE CITY DEPARTMENT OF PUBLIC WORKS.
- CONTRACTOR RESPONSIBLE FOR CITY ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING ETC. AT THE END OF EACH WORK DAY.
- PROVIDE GRAVEL ENTRANCE WHEREVER EQUIPMENT LEAVES THE SITE TO PREVENT MUD TRACKING ONTO PAVED SURFACES. GRAVEL BED SHALL BE A MINIMUM OF 15m LONG, 4M WIDE AND 0.2m DEEP AND SHALL CONSIST OF COARSE (50mm CRUSHER-RUN LIMESTONE) MATERIAL. MAINTAIN GRAVEL ENTRANCE IN CLEAN CONDITION.
- DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPPED.
- ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.
- TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ADJACENT PROPERTIES OR PUBLIC STREETS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED.

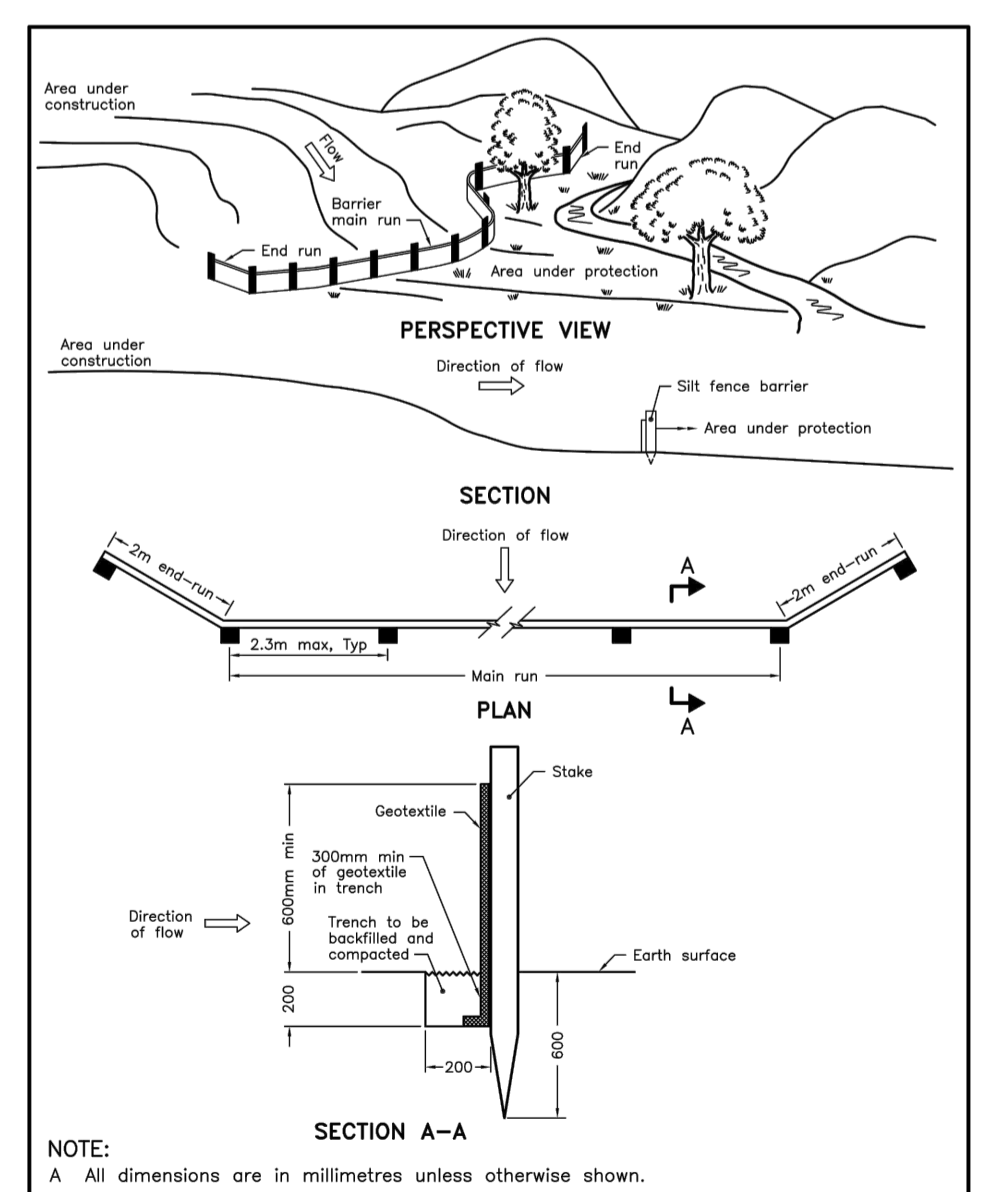
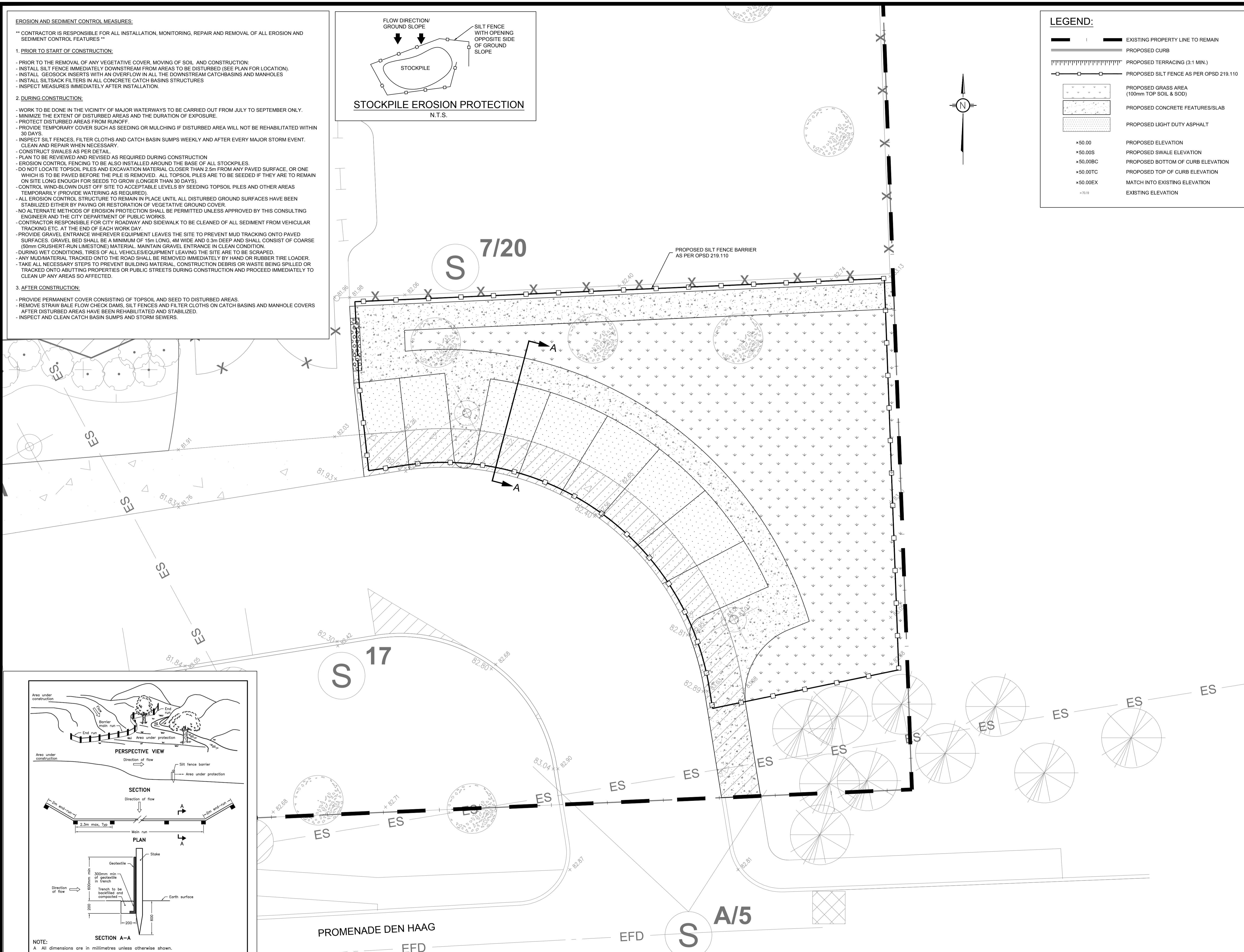
**3. AFTER CONSTRUCTION:**

- PROVIDE PERMANENT COVER CONSISTING OF TOPSOIL AND SEED TO DISTURBED AREAS.
- REMOVE STRAW BALE FLOW CHECK DAMS, SILT FENCES AND FILTER CLOTHS ON CATCH BASINS AND MANHOLE COVERS AFTER DISTURBED AREAS HAVE BEEN REHABILITATED AND STABILIZED.
- INSPECT AND CLEAN CATCH BASIN SUMPS AND STORM SEWERS.



**LEGEND:**

- EXISTING PROPERTY LINE TO REMAIN
- PROPOSED CURB
- PROPOSED TERRACING (3:1 MIN.)
- PROPOSED SILT FENCE AS PER OPSD 219.110
- PROPOSED GRASS AREA (100mm TOP SOIL & SOD)
- PROPOSED CONCRETE FEATURES/SLAB
- PROPOSED LIGHT DUTY ASPHALT
- PROPOSED ELEVATION
- PROPOSED SWALE ELEVATION
- PROPOSED BOTTOM OF CURB ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- MATCH INTO EXISTING ELEVATION
- EXISTING ELEVATION



**USE AND INTERPRETATION OF DRAWINGS**

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ARE PART OF THE CONTRACT DOCUMENTS AND DESCRIBE THE USE AND INTENT OF THE DRAWING. THE CONTRACT DOCUMENTS INCLUDE NOT ONLY THE DRAWINGS, BUT ALSO THE OWNER-CONTRACTOR AGREEMENTS, CONDITIONS OF THE CONTRACT, THE SPECIFICATIONS, ADDENDA, AND MODIFICATIONS ISSUED AFTER EXECUTION OF THE CONTRACT. THESE CONTRACT DOCUMENTS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ANY ONE SHALL BE BINDING AS IF REQUIRED BY ALL. WORK NOT COMPLETELY DELINEATED HEREON SHALL BE CONSTRUCTED OF THE SAME MATERIALS AND DETAILED SIMILARLY AS WORK SHOWN MORE COMPLETELY ELSEWHERE IN THE CONTRACT DOCUMENTS.

BY USE OF THE DRAWINGS FOR CONSTRUCTION OF THE PROJECT, THE OWNER CONFIRMS THAT HE HAS REVIEWED AND APPROVED THE DRAWINGS. THE CONTRACTOR CONFIRMS THAT HE HAS VISITED THE SITE, FAMILIARIZED HIMSELF WITH THE LOCAL CONDITIONS, VERIFIED FIELD DIMENSIONS AND CORRELATED HIS OBSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

AS INSTRUMENTS OF SERVICE, ALL DRAWINGS, SPECIFICATIONS, CAD FILES OR OTHER ELECTRONIC MEDIA AND COPIES THERE OF FURNISHED BY THE ENGINEER ARE HIS PROPERTY. THEY ARE TO BE USED ONLY FOR THIS PROJECT AND ARE NOT TO BE USED ON ANY OTHER PROJECT, INCLUDING REPEATS OF THE PROJECT. CHANGES TO THE DRAWINGS MAY ONLY BE MADE BY THE ENGINEER.

UNLESS THE REVISION TITLE IS "ISSUED FOR CONSTRUCTION", THESE DRAWINGS SHALL BE CONSIDERED PRELIMINARY AND SHALL NOT BE USED AS A CONSTRUCTION DOCUMENT.

THESE DRAWINGS ILLUSTRATE THE WORK TO BE DONE. THE ENGINEER IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK, OR THE SAFETY ASPECTS OF CONSTRUCTION, AND NOTHING ON THESE DRAWINGS EXPRESSED OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL DETERMINE ALL CONDITIONS AT THE SITE AND SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTALS OF A BID TO PERFORM THIS WORK IS A KNOWLEDGE/ACKNOWLEDGEMENT OF THE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK, AND THE BID PRICE. NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.

UNAUTHORIZED CHANGES:

IN THE EVENT THE CLIENT, THE CLIENT'S CONTRACTORS OR SUBCONTRACTORS, OR ANYONE FOR WHOM THE CLIENT IS LEGALLY LIABLE MAKES OR PERMITS TO BE MADE ANY CHANGES TO ANY REPORTS, PLANS, SPECIFICATIONS OR OTHER CONSTRUCTION DOCUMENTS PREPARED BY LRL ASSOCIATES LTD. (LRL) WITHOUT OBTAINING LRL'S PRIOR WRITTEN CONSENT, THE CLIENT SHALL ASSUME FULL RESPONSIBILITY FOR THE RESULTS OF SUCH CHANGES. THEREFORE THE CLIENT AGREES TO WAIVE ANY CLAIM AGAINST LRL AND TO RELEASE LRL FROM ANY LIABILITY ARISING DIRECTLY OR INDIRECTLY FROM SUCH UNAUTHORIZED CHANGES.

IN ADDITION, THE CLIENT AGREES TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS LRL FROM ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEY'S FEES AND COST OF DEFENSE, ARISING FROM SUCH CHANGES.

IN ADDITION, THE CLIENT AGREES TO INCLUDE IN ANY CONTRACTS FOR CONSTRUCTION APPROPRIATE LANGUAGE THAT PROHIBITS THE CONTRACTOR OR ANY SUBCONTRACTORS OF ANY TIER FROM MAKING ANY CHANGES OR MODIFICATIONS TO LRL'S CONSTRUCTION DOCUMENTS WITHOUT THE PRIOR WRITTEN APPROVAL OF LRL AND THAT FURTHER REQUIRES THE CONTRACTOR TO INDEMNIFY BOTH LRL AND THE CLIENT FROM ANY LIABILITY OR COST ARISING FROM SUCH CHANGES MADE WITHOUT SUCH PROPER AUTHORIZATION.

GENERAL NOTES:

EXISTING SERVICES AND UTILITIES SHOWN ON THESE DRAWINGS ARE TAKEN FROM THE BEST AVAILABLE RECORDS, BUT MAY NOT BE COMPLETE OR TO DATE. CONTRACTOR SHALL VERIFY IN FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH THE UTILITY COMPANIES BEFORE DIGGING OR PERFORMING WORK.

CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS BEFORE START OF CONSTRUCTION.

THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE INSTRUMENTS THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WRITTEN CONSENT, THE CLIENT SHALL ASSUME FULL RESPONSIBILITY FOR ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.

2m 0 0.5 1 2 4m  
SCALE: 1:100

03	ISSUED FOR APPROVAL	M.L.	08 JULY 2019
02	ISSUED FOR TENDER	G.C.	18 OCT 2018
01	ISSUED FOR COORDINATION	G.C.	02 OCT 2018

No.	REVISIONS	BY	DATE

NOT AUTHENTIC UNLESS SIGNED AND DATED

**LRJ**  
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CLIENT  
**CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST (CECE)**

DESIGNED BY: G.C.    DRAWN BY: M.L.    APPROVED BY: V.J.

PROJECT  
**MONTFORT SCHOOL PARKING ADDITION**  
250 DEN HAAG DR, OTTAWA, ON

DRAWING TITLE  
**EROSION AND SEDIMENT CONTROL PLAN**

PROJECT NO.  
170373

DATE  
SEPTEMBER 2018

**C101**

**Appendix E**  
Genivar plan C.01, Site Servicing & Grading Plan.



