Via email: bernam@ecolecatholique.ca

June 8th , 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 consultated and SWM quality and quantity requirements were discussed. The new parking lot and sidewalk construction corresponds to a new impervious surface of approximately 190m^2 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^2 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^2) 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.

LRL Associates Ltd.

Storm Watershed Summary

LRL file No: 180550
Project: Montfort School
Location: 350 Prom. Den Haag, Ottawa
Date: June 5, 2019
Designed: P. Paquette

Pre-Development Catchments

WATERSHED	C = 0.20	C = 0.90	Total Area (ha)	Combined C
TOTAL	1.2234	1.076	2.2996	0.528

Post-Development Catchments

WATERSHED	C = 0.20	C = 0.90	Total Area (ha)	Combined C
TOTAL	1.205	1.095	2.2996	0.533

Runoff Increase Calculations

A= from grass to asphalt (Ha.)	0.019
I= 1/5 year event, Tc=15 min. (mm/hr)	85.60
C=Pre-Dev.Runoff Coefficient	0.20
C=Post-Dev.Runoff Coefficient	0.90

Qpeak (pre-dev) = 2.78 CIA

Q peak Pre-Dev (L/s)	0.90

Qpeak (post-dev) = 2.78 CIA

Q Post Pre-Dev (L/s)	4.07
Total flow increasse (L/s)	**3.16**

Appendix B
RVCA email Correspondence.

Philippe Paquette

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 Phillipe,

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

Rideau Valley Conservation Authority
3889 Rideau Valley Drive
PO Box 599, Manotick ON K4M 1A5
T 613-692-3571 | 1-800-267-3504 F 613-692-0831 | www.rvca.ca

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 out letting to a watercourse. The site appears to be approximately 2 km from it's 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>
Sent: Thursday, May 30, 2019 2:56 PM
To: Eric Lalande <eric.lalande@rvca.ca>
Cc: Mélissa Bernard <bernam@ecolecatholique.ca>; Maxime Longtin <mlongtin@lrl.ca>
Subject: New parking lot addition- Ecole Monfort, De Haag Street Ottawa Ont.

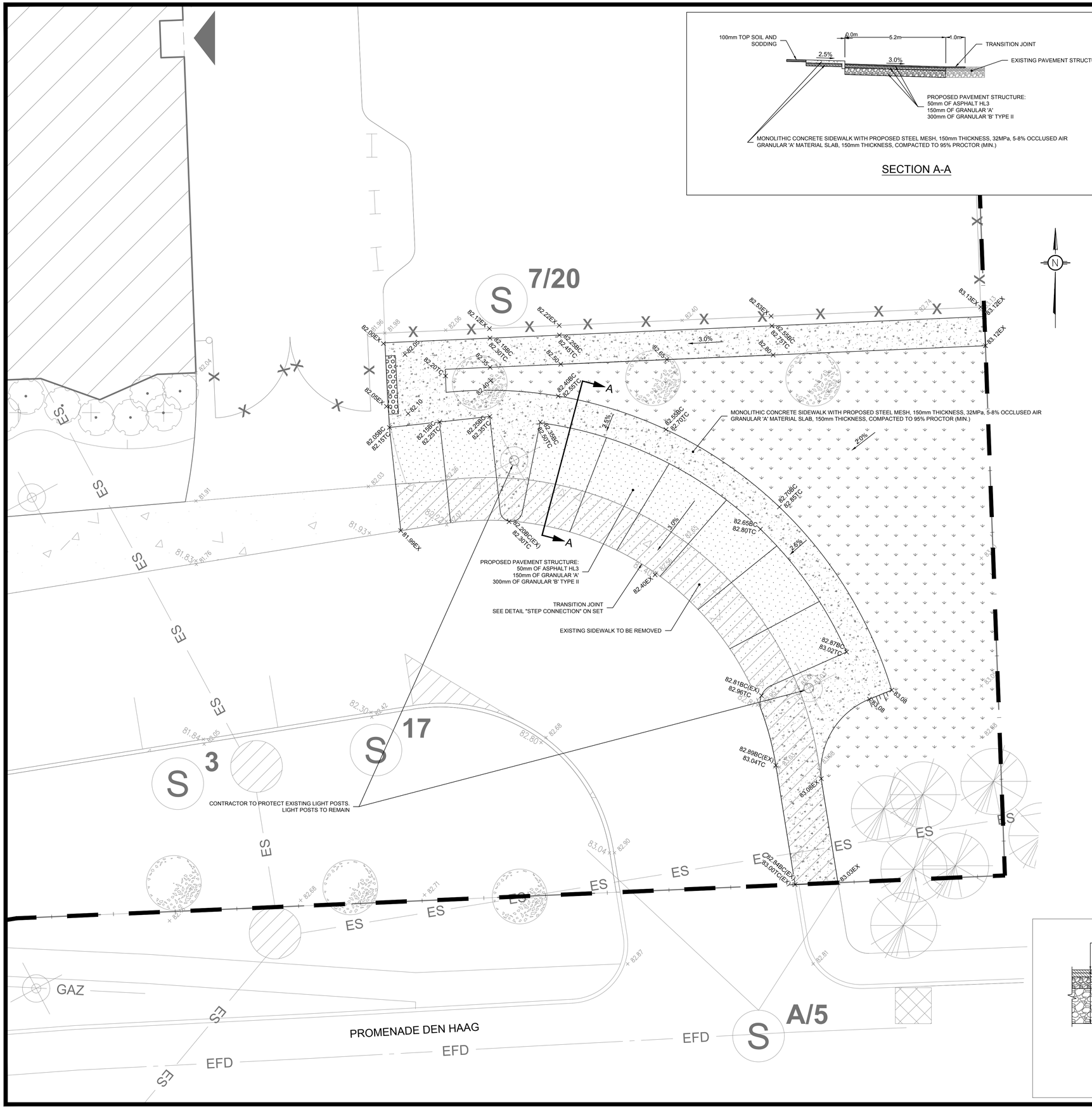
Hello Eric,
As mentioned in my voice mail I left you earlier, we are working on a new parking lot expansion (8 spots max) at the above mentioned school. The city of Ottawa is asking us to go Thru SPC and produce a SWM plan and brief. They advised me to contact you to get the RVCA quality control requirements 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 Associates Ltd.
5430 Canotek Road
Ottawa, Ontario K1J 9G2

T (613) 842-3434 or (877) 632-5664 ext 209
C (613) 880-9793
F (613) 842-4338
E ppaquette@lrl.ca
W www.lrl.ca
We care deeply, so let us know how we did by completing our Customer Satisfaction Survey.

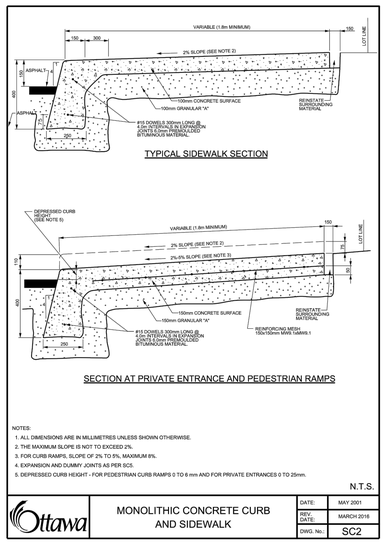
Appendix C
Site Grading and Drainage Plan C301.



SECTION A-A

LEGEND:

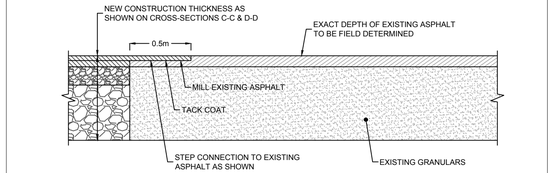
- EXISTING PROPERTY LINE TO REMAIN
- PROPOSED CURB
- PROPOSED TERRACING (3:1 MIN.)
- PROPOSED SILT FENCE AS PER OPSD 219.110
- PROPOSED GRASS AREA (100mm TOP SOIL & SOD)
- PROPOSED CONCRETE FEATURES/SLAB
- PROPOSED LIGHT DUTY ASPHALT
- ×50.00 PROPOSED ELEVATION
- ×50.00S PROPOSED SWALE ELEVATION
- ×50.00BC PROPOSED BOTTOM OF CURB ELEVATION
- ×50.00TC PROPOSED TOP OF CURB ELEVATION
- ×50.00EX MATCH INTO EXISTING ELEVATION
- ×70.19 EXISTING ELEVATION



NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE.
2. THE MAXIMUM SLOPE IS NOT TO EXCEED 2%.
3. FOR CURB RAMPS, SLOPE OF 2% TO 5%, MAXIMUM 8%.
4. EXPANSION AND DUMMY JOINTS AS PER SC5.
5. DEPRESSED CURB HEIGHT - FOR PEDESTRIAN CURB RAMPS 0 TO 6 mm AND FOR PRIVATE ENTRANCES 0 TO 25mm.

N.T.S.

Ottawa	MONOLITHIC CONCRETE CURB AND SIDEWALK	DATE: MAY 2001
		REV. DATE: MARCH 2016
		DWG. No.: SC2



TYPICAL KEY CONNECTION TO EXISTING ASPHALT
(N.T.S.)

USE AND INTERPRETATION OF DRAWINGS

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

2m 0.5 0 2 4m

SCALE: 1:100

No.	REVISIONS	BY	DATE
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

LICENSED PROFESSIONAL ENGINEER
V. JOHNSON
100510576
July 23, 2019
PROVINCE OF ONTARIO

NOT AUTHENTIC UNLESS SIGNED AND DATED

LRL
ENGINEERING | INGÉNIERIE
5430 Canotek Road I Ottawa, ON, K1J 9G2
www.lrl.ca I (613) 842-3434

CLIENT
CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST (CECCE)

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

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

DRAWING TITLE
GRADING AND DRAINAGE PLAN

PROJECT NO.
170373

DATE
SEPTEMBER 2018

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.

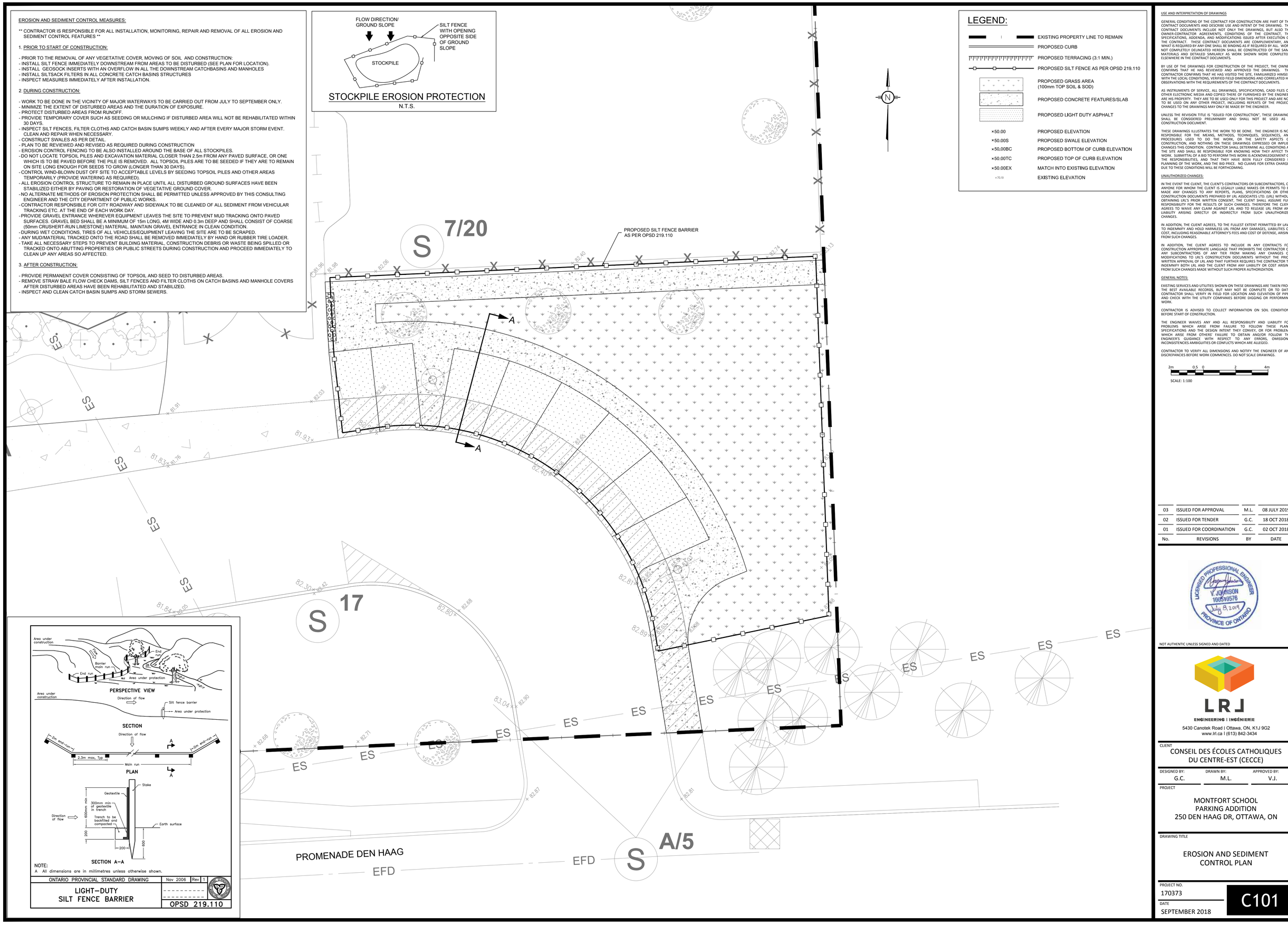
2. DURING CONSTRUCTION:

- 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 0.3m DEEP AND SHALL CONSIST OF COARSE (50mm CRUSHERT-RUN LIMESTONE) MATERIAL. MAINTAIN GRAVEL ENTRANCE IN CLEAN CONDITION.
- DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPED.
- 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 ABUTTING 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.

STOCKPILE EROSION PROTECTION
N.T.S.



NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2006	Rev 1
LIGHT–DUTY SILT FENCE BARRIER		OPSD 219.110

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LICENSED PROFESSIONAL ENGINEER
V. JOHNSON
100510576
July 8, 2019
PROVINCE OF ONTARIO

NOT AUTHENTIC UNLESS SIGNED AND DATED

LRL
ENGINEERING | INGÉNIERIE
5430 Canotek Road | Ottawa, ON, K1J 9G2
www.lrl.ca | (613) 842-3434

CLIENT
CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST (CECCE)

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

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

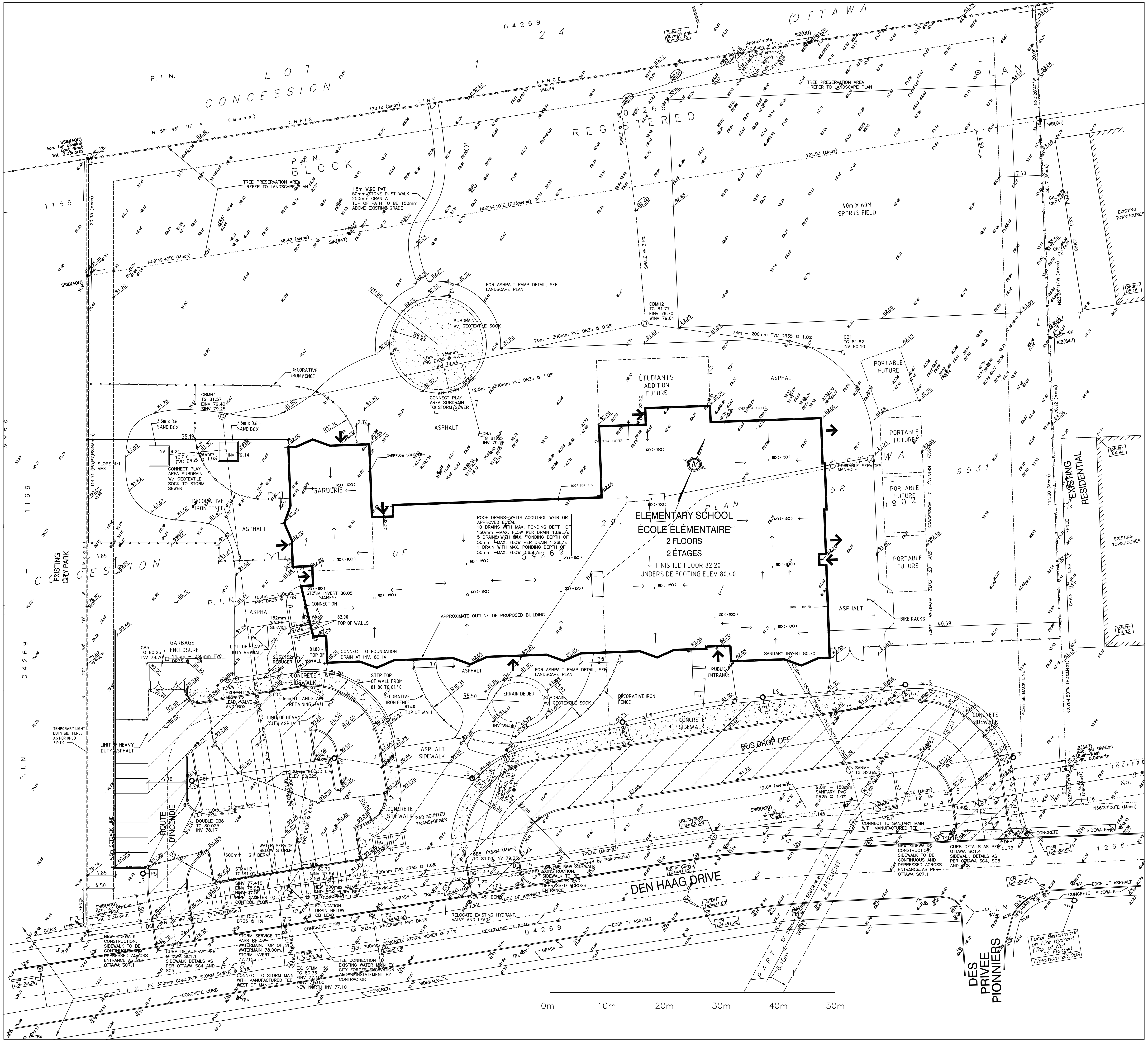
DRAWING TITLE
EROSION AND SEDIMENT CONTROL PLAN

PROJECT NO. 170373
DATE SEPTEMBER 2018

C101

Appendix E

Genivar plan C.01, Site Servicing & Grading Plan.



WATER SERVICE PROFILE TABLE STATION (m)	TG ELEV	TOP WM ELEV	NOTE
0.0	80.30	78.10	WATERMAIN
7.4	80.58	78.10	VALVE BOX
8.6	80.55	78.10	CROSS BELOW SANITARY
10.0	80.50	78.10	CLAY SEAL IN TRENCH
19.4	80.21	77.81	CROSS BELOW STORM
30.0	80.52	78.12	CLAY SEAL IN TRENCH
46.3	80.98	78.04	HYDRANT TEE
49.3	81.25	78.85	45° BEND
54.5	81.44	79.04	45° BEND
59.8	81.80	79.40	SERVICE TO SCHOOL

GENERAL NOTES

1. ALL WORK TO BE COORDINATED WITH OTHER PLANS FOR THIS SITE. RETAIN SUBCONTRACTORS AS NECESSARY FOR REQUIRED ROAD AND SERVICE WORK. REFER TO M AND E DRAWINGS FOR GAS, ELECTRICAL, PLUMBING AND COMMUNICATION SERVICES.
2. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO MINIMIZE EROSION AND SEDIMENT RELEASE DURING CONSTRUCTION. DOUBLE WRAP (TOP AND BOTTOM) CATCH BASIN GRATES WITH GEOTEXTILE. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY. LIGHT DUTY SILT FENCE REQUIRED ALONG WEST PROPERTY BOUNDARY AS SHOWN ON PLAN.
3. VERIFY THAT JOB BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED AND THAT THEIR RELATIVE ELEVATION AND DESCRIPTION AGREE WITH INFORMATION SHOWN ON THIS DRAWING.
4. LOCATION OF SERVICES, CHAMBERS, UTILITIES AND ALL UNDERGROUND WORKS ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL SERVICES, UTILITIES AND UNDERGROUND STRUCTURES PRIOR TO ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REINSTATEMENT.
5. THE CONTRACTOR IS RESPONSIBLE FOR ALL REMOVALS NECESSARY TO SATISFY ENGINEERING WORKS.
6. PROVIDE 3H:1V TERRACED SLOPES AS NECESSARY TO OBTAIN MAXIMUM GRADES OF 7% IN LANDSCAPED AREAS.
7. ALL GRANULAR BASE AND SUB-BASE MATERIALS TO BE COMPACTED TO 100% SPMDD IN MAXIMUM 300mm LIFTS.
8. OBTAIN AND PAY FOR ROAD CUT PERMIT AND ALL OTHER PERMITS AND APPROVALS REQUIRED FOR CONSTRUCTION
9. PIPE BEDDING (MIN 150mm) AND COVER TO 300mm OVER OBVERT SHALL BE OPSS GRANULAR A PLACED IN MAXIMUM 225mm LIFTS AND COMPACTED TO 95% SPMDD. TRENCH BACKFILL TO MATCH EXISTING.
10. SITE CONC. BARRIER CURB AND SIDEWALK AS PER OTTAWA SC1.4
11. FOR SERVICING DETAILS, REFER TO SERVICING REPORT–ECOLE MONTFORT REV 2, 2008–04–17 BY GENIVAR
12. FOR GEOTECHNICAL DETAILS, REFER TO GEOTECHNICAL INVESTIGATION PROPOSED MONTFORT ELEMENTARY SCHOOL, REPORT Pg1576–1, 2007–12–21 BY GOLDER ASSOCIATES.

SEWER NOTES

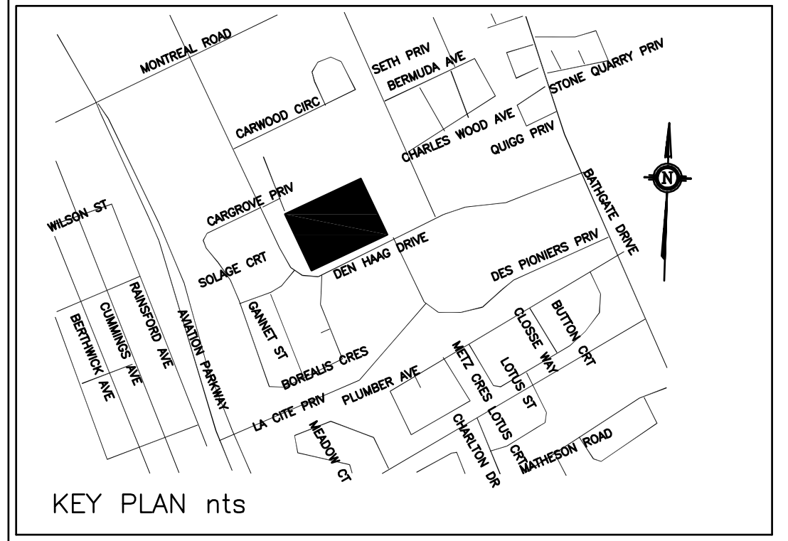
1. CONSTRUCT SEWERS AND APPURTENANCES AS PER OTTAWA AND MINISTRY OF THE ENVIRONMENT STANDARDS. CONFIRM EXISTING TIE IN ELEVATIONS PRIOR TO CONSTRUCTION. SEWER TRENCH SHALL INCLUDE CLASS 'B' BEDDING AS PER OTTAWA S6 AND S7. COMPACTION TO BE A MINIMUM OF 98% SPMDD FOR PIPE AND DRAINAGE STRUCTURE BEDDING AND BACKFILL.
2. SEWERS AND CATCH BASIN LEADS TO BE PVC DR 35 CERTIFIED TO CAN/CSA–B182.2 FOR DIAMETERS SHOWN OF LESS THAN 375mm.
3. STORM CATCHBASINS (CB)TO BE AS PER OPSD 705.010 AND 705.020 WITH FRAMES AND GRATE AS PER OPSD 400.020.
4. STORM SERVICE SHALL BE CONSTRUCTED WITH A MINIMUM CLEARANCE OF 2.0m FROM TREES.
5. 1200mm MANHOLES AS PER OPSD 701.010. STORM MANHOLES TO HAVE 300mm SUMP BELOW LOW INVERT. SANITARY MANHOLES TO BE BENCHED AS PER OPSD 701.021. CONFIRM INVERTS PRIOR TO ORDERING.
6. CBMH FRAMES AND GRATES AS PER OPSD 400.070. SANITARY MANHOLES TO HAVE FRAME AND COVER AS PER TYPE A, OPSD 401.010. STORM MANHOLES (MH) TO HAVE TYPE B COVERS AND FRAMES AS PER OPSD 401.010.
7. PROVIDE 150mm DIA. SUBDRAIN AS PER OTTAWA L9 BELOW SWALES UPSTREAM OF CATCHBASINS IN LANDSCAPED AREAS FOR A LENGTH OF 10m. FOR CATCHBASINS IN LANDSCAPED AREAS WHERE SWALES ARE NOT SHOWN, PROVIDE SUBDRAIN EXTENDING OUT 5m FROM CB ON ALL FOUR SIDES.
8. FOR CATCHBASINS AND CATCHBASIN MANHOLES IN PAVED AREAS, PROVIDE 150mm DIAMETER SUBDRAIN AS PER OTTAWA R1, EXTENDING A MINIMUM OF 3m IN FOUR ORTHOGANAL DIRECTIONS OR ALONG CURB. SLOPE SUBGRADE TOWARD SUBDRAIN.
9. PROVIDE CAMERA INSPECTION OF ALL SEWERS FOLLOWING COMPLETION OF CONSTRUCTION AND PROVIDE TO ENGINEER. MAINTAIN SEWERS IN CLEAN CONDITION UNTIL OWNER ACCEPTANCE.
10. PROVIDE 2m WIDE CLAY SEALS IN TRENCHES AT INTERVALS NOT EXCEEDING 40m ALONG TRENCHES AS PER OTTAWA S8.

WATER NOTES

1. ALL WATER SERVICE, VALVE AND HYDRANT MATERIALS TO CONFORM WITH CITY OF OTTAWA STANDARDS.
2. OBTAIN AND PAY FOR WATER PERMIT FROM CITY OF OTTAWA AND ALL RELATED COSTS OF CONNECTION, INSPECTION AND DISINFECTION BY CITY PERSONNEL. HYDROSTATIC AND BACTERIOLOGICAL TESTING REQUIRED AS PER OTTAWA STANDARDS. ALL EXCAVATION, BACKFILL AND REINSTATEMENT BY CONTRACTOR.
3. COMPLY WITH THE FOLLOWING OTTAWA STANDARD DRAWINGS:
   - W17 STANDARD TRENCH DETAIL
   - W19 HYDRANT INSTALLATION
   - W22 THERMAL INSULATION IN SHALLOW TRENCHES
   - W23 THERMAL INSULATION OF WATERMAINS
   - W24 VALVE BOX ASSEMBLY
   - W25–2 WATERMAIN CROSSING OVER SEWER
   - W25–3 CONCRETE THRUST BLOCKS
   - W25–4 THRUST BLOCK DIMENSION TABLES
   - W25–5 RESTRAINING AND RETAINING RINGS
   - W25–6 TABLES OF RESTRAINED LENGTHS
   - W25 WATERMAIN CROSSING BELOW SEWER
   - W32 TYPICAL WATER METER INSTALLATION
   - W40 CATHODE PROTECTION
   - W42 TYPICAL ANODE PROTECTION
4. PROVIDE MINIMUM 2.4m COVER OR EQUIVALENT INSULATION IF PERMITTED BY CITY INSPECTOR WHEN MINIMUM DEPTH CANNOT BE ACHIEVED.
5. COORDINATE SUPPLY AND INSTALLATION OF METER AND REMOTE WITH MECHANICAL CONTRACTOR.
6. PROVIDE 2m WIDE CLAY SEALS IN SERVICE TRENCH AT INTERVALS NOT EXCEEDING 30m AS PER OTTAWA S8.

PAVEMENT STRUCTURE LIGHT DUTY (PARKING AREAS) THICKNESS(mm)	MATERIAL DESCRIPTION
50 150 300	WEAR COURSE–HL3 OR SUPERPAVE 12.5 BASE–OPSS GRANULAR A CRUSHED STONE SUBBASE–OPSS GRANULAR B TYPE II SUBGRADE–EITHER FILL, IN–SITU SOIL OR OPSS GRANULAR B TYPE I OR II MATERIAL PLACED OVER IN–SITU SOIL OR FILL.
PAVEMENT STRUCTURE HEAVY DUTY ▨ THICKNESS(mm)	MATERIAL DESCRIPTION
40 50 150 300	WEAR COURSE–HL3 OR SUPERPAVE 12.5 BINDER COURSE–HL8 OR SUPERPAVE 19.0 BASE–OPSS GRANULAR A CRUSHED STONE SUBBASE–OPSS GRANULAR B TYPE II SUBGRADE–EITHER FILL, IN–SITU SOIL OR OPSS GRANULAR B TYPE I OR II MATERIAL PLACED OVER IN–SITU SOIL OR FILL.
PAVEMENT STRUCTURE ASPHALT APRON AND PLAY AREA THICKNESS(mm)	MATERIAL DESCRIPTION
50 150 200	WEAR COURSE–HL3 OR SUPERPAVE 12.5 BASE–OPSS GRANULAR A CRUSHED STONE SUBBASE–OPSS GRANULAR B TYPE II SUBGRADE–EITHER FILL, IN–SITU SOIL OR OPSS GRANULAR B TYPE I OR II MATERIAL PLACED OVER IN–SITU SOIL OR FILL.

CONSEIL DES ÉCOLES CATHOLIQUES DE LANGUE FRANÇAISE DU CENTRE-EST



KEY PLAN nts

GENERAL NOTES:

1. SEE SITE SERVICES, ELECTRICAL & MECHANICAL DRAWINGS FOR UNDERGROUND UTILITIES LINES AND FOR NEW GRADING. EXCAVATE BACKFILL & PROVIDE CONCRETE TO REQUIREMENTS OF MECHANICAL, ELECTRICAL & SITE SERVICES DRAWINGS AND SPECIFICATIONS AND TO REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
2. PROVIDE 0.5M RADIUS FOR CONCRETE CURBS UNLESS OTHERWISE NOTED
3. PERFORM LANDSCAPE & SITE WORKS INCLUDING SIDEWALKS WITHIN THE ROAD ALLOWANCE AS INDICATED

LEGEND

88.63	PROPOSED ELEVATION
88.63	PROPOSED SWALE ELEVATION
TG89.24	TOP OF GRATE ELEVATION
+ 89.24	EXISTING ELEVATION
MH ◎	STORM MANHOLE
LCB ○	LANDSCAPE CATCH BASIN
CB □ CB MH	CATCH BASIN/MANHOLE
EP	INDICATES EDGE PAVEMENT
═	INDICATES CONC. CURBS
DC	INDICATES DEPRESSED CURB
—··—··—	PROPERTY LINE
▽ ▼	SERVICE ENTRANCE ENTRY/EXIT
-------------	GROUND SWALE
LS ⑫	NEW LIGHT STANDARD
HYD	NEW FIRE HYDRANT
EX FH	FIRE HYDRANT
EX LS	EXISTING LIGHT STANDARD
⊕	PROPOSED WATER VALVE AND BOX
⇨	OVERLAND FLOW DIRECTION
100 YR	100 YEAR PONDING LIMIT
— — — —	WATERMAIN
—— – ——	STORM SEWER
—— – – ——	SANITARY SEWER
– – – – – –	POWER/COMMUNICATION LINES
—·—·—	FIRE ROUTE
Ⓜ	WATER METER
Ⓡ	WATER REMOTE
Ⓖ	GAS METER

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NO.	ISSUE & REVISIONS	DATE
6	REVISED PARKING	22–JULY–2008
5	REVISED PARKING	11–JULY–2008
4	ADDENDUM 1	08–MAY–2008
3	CITY COMMENTS	01–MAY–2008
2	ISSUED FOR TENDER	21–APR–2008
1	ISSUED FOR BUILDING PERMIT	31–MARCH–2008
0	SITE PLAN APPLICATION	01–FEB–2008

SEAL

J. C. JOHNSTON

Not for construction unless SEALED and SIGNED.

PROJECT NORTH

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PROJECT

ÉCOLE ÉLÉMENTAIRE MONTFORT
CONSEIL DES ECOLES CATHOLIQUES DE LANGUE FRANCAIS DU CENTRE-EST
PH: 613-744-2555
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DRAWING

SITE SERVICING AND GRADING PLAN

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

PROJECT NO. N6304
SCALE - 1:300
DRAWN - C.J.
CHECKED - J.J
PLOT DATE - 19-Nov-2007
DRAWING NO. C.01
REVISION NO. 1