NOVATECH
Engineers, Planners & Landscape Architects

2727 CARP ROAD
ATCO SITE

SERVICING BRIEF – TEMPORARY BUILDING

July 22, 2019
Novatech Project No: 100149
Report Reference Number: R-2019-131

1.0 BACKGROUND

This Servicing Brief has been prepared in support of a Site Plan amendment application for the property located at 2727 Carp Road. The property is located on the west side of Carp Road, just north of Huntley Creek and directly opposite the existing Reis Business Park.

The purpose of the amendment is to allow the tenant to construct a 576m^2 (18.90m x 30.48m) temporary building in the northwest corner of their leased site. The proposed building consists of a pre-engineered steel-supported canvas-covered hoop structure that is set upon shipping containers serving as the side walls of the building. The temporary building has no plumbing fixtures and therefore no proposed services (well or septic system connections).

The balance of the site would remain as previously designed, primarily a gravel area to allow for the storage of ATCO trailers as a staging area between rental commitments. Refer to the Site Plan and Landscape Plan for the site layout (**100149-4-SP**).

The grading, drainage and stormwater management design for the site were completed as part of the original Site Plan application which was approved in February 2018. The engineering drawings have been updated to reflect the addition of the temporary building and are discussed below.

2.0 STORMWATER MANAGEMENT

The site was designed and constructed so that the runoff from the parking lot and the gravel storage area would be directed towards the west limit of the parcel. Drainage is captured in a 600mm diameter perforated storm sewer and swale system which has been sized to carry the 1:100 year runoff, uncontrolled. The flow is directed to a private stormwater facility (vegetated dry pond) to the south of the developed area.

The stormwater management strategy is as follows:

- The majority of storm events will infiltrate into the sandy soils.
- Stormwater quality control is provided by a treatment train consisting of infiltration, a vegetated filter strip, grassed swale and a dry pond, resulting in an ‘enhanced’ level of treatment corresponding to 80% TSS removal.
- The runoff from large storm events is stored in the stormwater facility and controlled to pre-development levels by means of an outlet structure, for the 5 year and 100 year rainfall events.

Suite 200, 240 Michael Cowpland Drive, Ottawa ON K2M 1P6 Tel: 613.254.9643 Fax: 613.254.5867 www.novatech-eng.com

The temporary building does not impact the storm drainage or stormwater management for the site and no changes are proposed to the constructed stormwater management system. The conclusions of the Stormwater Management Brief [Novatech, revised September 19, 2016] prepared for the original Site Plan application remain unchanged.

Revised grading details, adjusted to accommodate the temporary building, and the constructed stormwater works are provided on (Drawing **100149-4- GS**) and the Stormwater Management Plan (Drawing **100149-4-SWM**) included with this Brief.

Prepared by:

NOVATECH

Lisa Bowley, P. Eng.
Project Manager | Land Development Engineering

Attachments

- Site Plan and Landscape Plan: 100149-4-SP revision 7
- Grading, Servicing and Erosion & Sediment Control Plan: 100149-4-GS, revision 6
- Stormwater Management Plan: 100149-4-SWM, revision 5

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LEGEND:

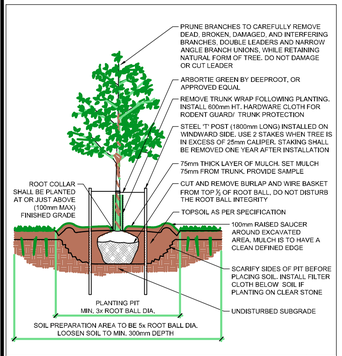
- LIMIT OF LANDS TO BE LEASED
- CHAIN LINK FENCE PER CITY OF OTTAWA STANDARD DETAIL F9
- 2 RAIL POST AND RAIL FENCE PER CITY OF OTTAWA STANDARD DETAIL F8
- GATE
- ASPHALT DRIVEWAY
- PROPOSED GRANULAR TRAILER STORAGE AREA
- STORAGE AREA
- PROPOSED SIGN
- EXISTING WELL
- PROPOSED TREES
- SEEDED AREA
- PROPOSED SWALE
- BOLLARD
- CULVERT
- PROPOSED RIP-RAP

ZONING PROVISIONS: RC9
City of Ottawa By-Law 2008-250

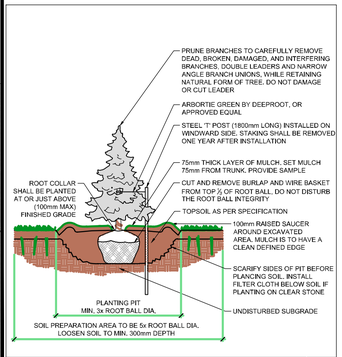
	Required	Provided
Minimum Lot Width (m)	30.0	184.7
Minimum Lot Area (ha)	0.4	1.97
Minimum Front Yard (m)	10.0	66.3
Minimum Rear Yard (m)	10.0	10.0
Minimum Interior Side Yard (m)	3.0	10.0
Maximum Height (m)	11.0	10.26
Maximum Lot Coverage (%)	25%	2.9%

NOTE:
THIS PLAN HAS BEEN COMPILED USING LEGAL INFORMATION OBTAINED FROM ANNIS, O'SULLIVAN, VOLLEBEKK LTD., ONTARIO LAND SURVEYORS; REGISTERED PLAN 4R-30271, DATED APRIL 26, 2017. JOB No. 14952-14

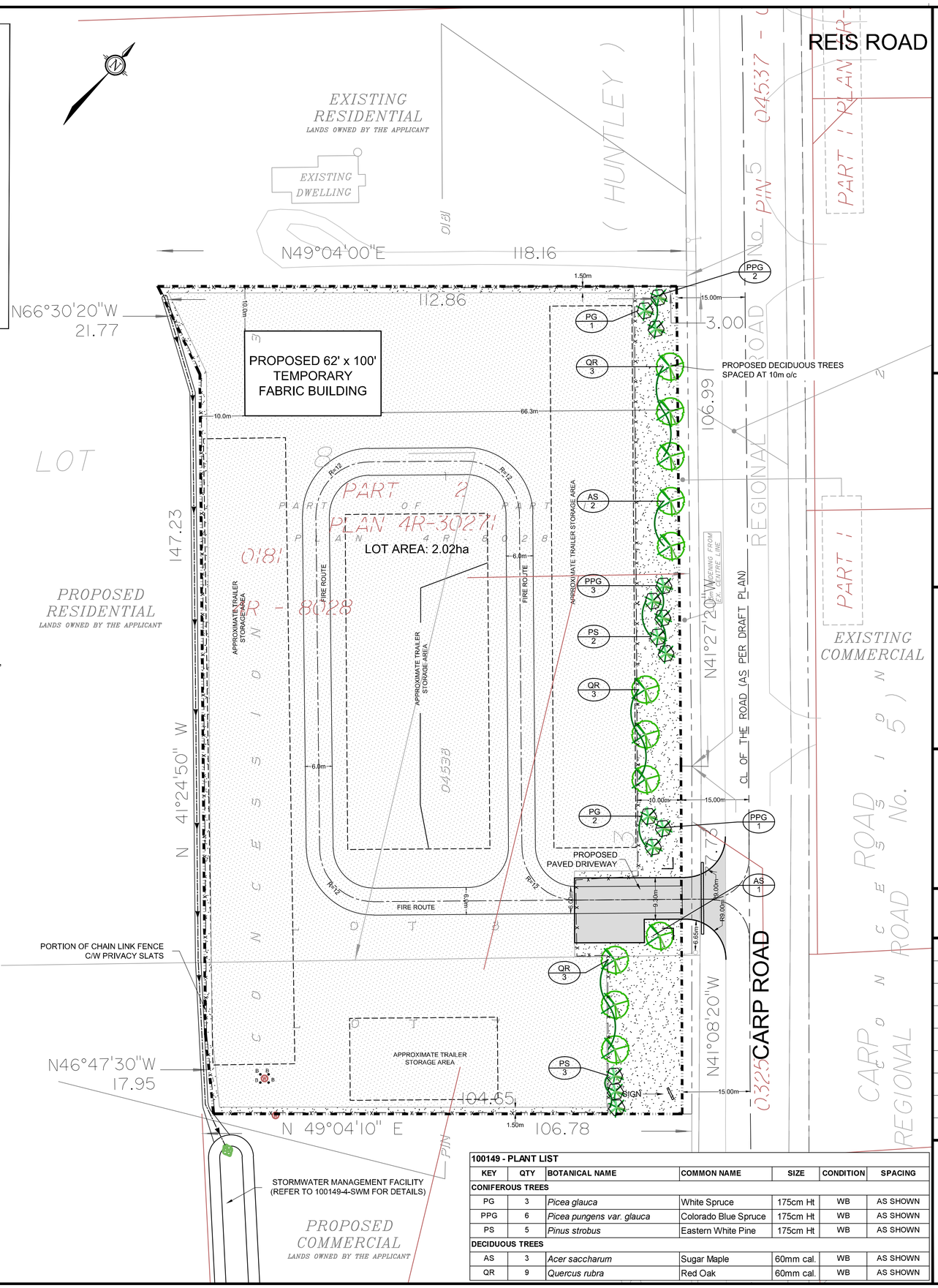
APPROXIMATE STORAGE AREAS PER "PROPOSED PLACEMENT PLAN"
Prepared by ATCO (Drawing: 916.040.R3, Rev#1, Dated October 7, 2016)

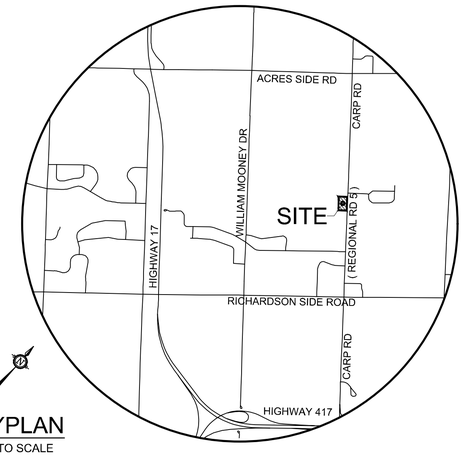


PROPOSED DECIDUOUS TREE PLANTING DETAIL | D2



PROPOSED CONIFEROUS TREE PLANTING DETAIL | D3





SITE PLAN
& LANDSCAPE PLAN
2727 CARP ROAD

PART OF LOTS 7 & 8
CONCESSION 3
TOWNSHIP OF HUNTLEY
Now CITY OF OTTAWA
PART OF PART 1, PLAN 4R-8028

1384341 ONTARIO LTD.
c/o Thomas Cavanagh Construction Limited

9094 Cavanagh Road, Ashton, ON
K0A 1B0
T. 613-257-2918

1:500
0 5 10 15 20

100149 - PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING
CONIFEROUS TREES						
PG	3	*Picea glauca*	White Spruce	175cm Ht	WB	AS SHOWN
PPG	6	*Picea pungens var. glauca*	Colorado Blue Spruce	175cm Ht	WB	AS SHOWN
PS	5	*Pinus strobus*	Eastern White Pine	175cm Ht	WB	AS SHOWN
DECIDUOUS TREES						
AS	3	*Acer saccharum*	Sugar Maple	60mm cal.	WB	AS SHOWN
QR	9	*Quercus rubra*	Red Oak	60mm cal.	WB	AS SHOWN

No.	REVISION	DATE	BY
7	ISSUED FOR SITE PLAN AMENDMENT	19/07/19	GLW
6	ISSUED FOR REVISED SITE PLAN APPROVAL	27/06/2018	GLW
5	OFFICE REMOVED	30/05/2018	GLW
4	REVISED AS PER CITY COMMENTS	19/01/2017	EB
3	REVISED FOR SITE PLAN APPROVAL	20/12/2016	EB
2	ISSUED FOR SITE PLAN APPLICATION	19/09/2016	EB
1	ISSUED FOR SITE PLAN APPLICATION	19/05/2016	EB

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Website www.novatech-eng.com

ISSUED
JULY, 2019

PROJECT No.
100149-4

DRAWING No.
100149-4-SP

D07-12-16-0077

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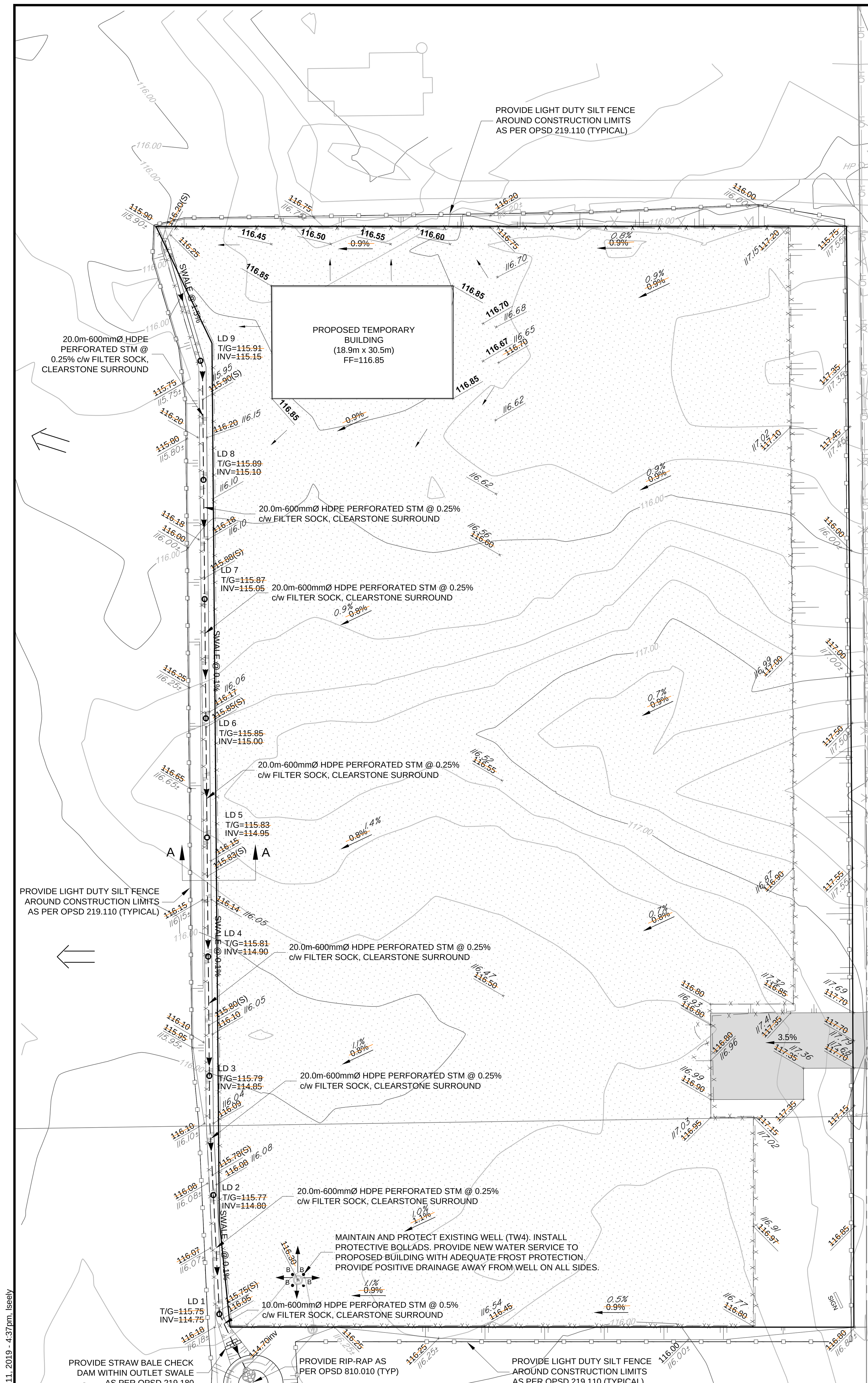
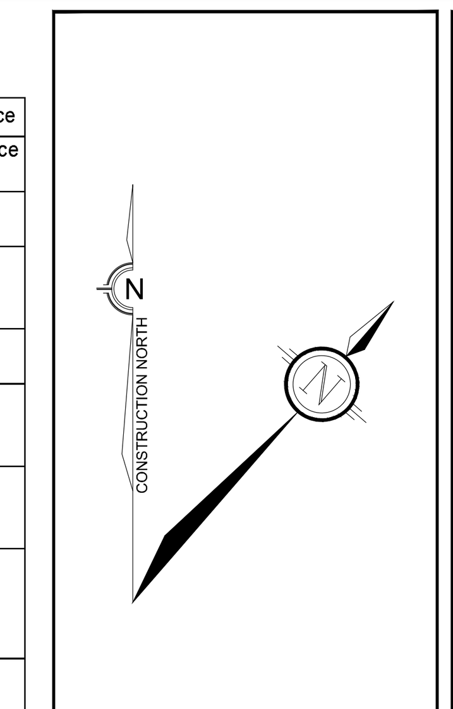


REFER TO PLAN 100149-4-SWM FOR DETAILS OF THE OFF-SITE THE STORMWATER MANAGEMENT FACILITY

Erosion and Sediment Control Responsibilities:

	ESC Measure	Symbol	Specification	During Construction: Installation Responsibility	During Construction: Inspection/Maintenance Responsibility	During Construction: Inspection Frequency	After Construction Prior to Final Acceptance: Approval to Remove	After Construction Prior to Final Acceptance: Removal Responsibility	After Final Acceptance: Inspection/Maintenance Responsibility
Temporary Measures	Silt Fence		OPSD 219.110	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Filter Fabric (under grates)	Location as Indicated On Plans	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Straw Bale Check Dam		OPSD 219.180	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Dust Control	Location as Required Around Site	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Consultant	Developer's Contractor	N/A
	Stabilized Material Stockpiling	Location as Required by Contractor	Erosion and Sediment Control Notes	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	Developer's Contractor	Developer's Contractor	N/A
	Sediment Basin (for flows being pumped out of excavations)	Location as Required by Contractor	- - -	Developer's Contractor	Developer's Contractor	After Every Rainstorm	Developer's Contractor	Developer's Contractor	N/A
Permanent Measures	Rip-Rap		OPSD 810.010	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	To Remain	N/A	Owner
	Hydraulic Seed & Mulch	Proposed Swales and Ditches	- - -	Developer's Contractor	Developer's Contractor	Weekly (as a minimum)	To Remain	N/A	Owner



NORTH

KEY PLAN
N.T.S.

AS-BUILT GRADING PROVIDED BY THOMAS CAVANAGH CONSTRUCTION SEPTEMBER, 2018

LEGEND

- 116.60 — DESIGN GRADE (2019)
- 115.81 / 116.60 — AS-BUILT ELEVATION (CAVANAGH 2018)
- 116.60 / 116.50 — PROPOSED ELEVATION / EXISTING ELEVATION
- 115.44 — EXISTING ELEVATION
- 114.00(D) — PROPOSED DITCH ELEVATION
- 115.90(S) — PROPOSED SWALE ELEVATION
- 2.0% — GRADE AND DIRECTION
- MAX 3:1 SIDESLOPES (UNLESS OTHERWISE NOTED)
- PROPOSED SILT FENCING (OPSD 219.110)
- DIRECTION OF MAJOR OVERLAND FLOW
- LD 3 — PROPOSED LANDSCAPE DRAIN (450mmØ)
- DICB 1 — PROPOSED DITCH INLET CATCHBASIN
- ICD — PROPOSED INLET CONTROL DEVICE
- PROPOSED STORM SEWER
- B — PROPOSED BOLLARD
- 1:5 YR / 1:100 YR — APPROXIMATE PONDING LIMITS
- PROPOSED 1.8m CHAINLINK FENCE
- EXISTING WELL
- EXISTING FENCE
- HP — EXISTING UTILITY POLE C/W GUY WIRES

PAVEMENT STRUCTURES:

GRAVEL AREA
150mm GRAN "A"
450mm GRAN "B" TYPE II

HEAVY DUTY ACCESS (NEW PAVEMENT)
45mm SUPERPAVE 12.5 (TRAFFIC LEVEL B)
45mm SUPERPAVE 12.5 (TRAFFIC LEVEL B)
150mm GRAN "A"
375mm GRAN "B" TYPE II
ASPHALT GRADE PG 58-34

SEWER NOTES:

1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
2. SPECIFICATIONS:

ITEM	SPEC. No.
DITCH INLET CATCHBASIN (600X1200)	OPSD 705.040
STORM SEWER	PVC DR 35
PERFORATED STORM (600mmØ PIPE)	HDPE SMOOTH-WALLED PIPE
LANDSCAPE DRAIN COVER (450mmØ)	HDPE SMOOTH-WALLED PIPE
LANDSCAPE DRAIN TEE (600x600x450 TEE)	HDPE SMOOTH-WALLED PIPE

3. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO CONCRETE STRUCTURES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.

EROSION AND SEDIMENT CONTROL NOTES :

THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.

1. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER AND THE MUNICIPAL AUTHORITIES. THEY ARE TO BE APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION. THESE PRACTICES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AND SHOULD INCLUDE AS A MINIMUM THOSE MEASURES INDICATED ON THE PLAN.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IMPLEMENTED DURING CONSTRUCTION IN ACCORDANCE WITH THE "GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES" (GOVERNMENT OF ONTARIO, MAY 1987). THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEETING ALL REGULATORY AGENCY REQUIREMENTS.
3. TO PREVENT SURFACE EROSION FROM ENTERING ANY STORM DRAINAGE SYSTEM DURING CONSTRUCTION, FILTER CLOTH WILL BE PLACED UNDER GRATES OF NEARBY LANDSCAPE DRAINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED AROUND THE CONSTRUCTION AREA (WHERE APPLICABLE). THESE CONTROL MEASURES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
4. TO LIMIT EROSION: MINIMIZE THE AMOUNT OF EXPOSED SOILS AT ANY GIVEN TIME, RE-VEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE AND PROTECT EXPOSED SLOPES WITH NATURAL OR SYNTHETIC MULCHES.
5. FOR MATERIAL STOCKPILING: MINIMIZE THE AMOUNT OF EXPOSED MATERIALS AT ANY GIVEN TIME; APPLY TEMPORARY SEEDING, TARPS, COMPACTION AND/OR SURFACE ROUGHENING AS REQUIRED TO STABILIZE STOCKPILED MATERIALS THAT WILL NOT BE USED WITHIN 14 DAYS.
6. THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER.
7. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO ANY STORM SEWER SYSTEM. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
8. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
9. ROADWAYS ARE TO BE SWEPT AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE REPRESENTATIVE OF THE MUNICIPALITY.
10. THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS. MONITOR DUST LEVELS DURING SITE PREPARATION/EXCAVATION, AND CONSTRUCTION ACTIVITIES, AND WHEN DUST LEVELS BECOME VISUALLY APPARENT SPRAY WATER TO MINIMIZE THE RELEASE OF DUST FROM GRAVEL, PAVED AREAS AND EXPOSED SOILS. USE CHEMICAL DUST SUPPRESSANTS ONLY WHERE NECESSARY ON PROBLEM AREAS.

INLET CONTROL DEVICE DATA - DICB 1

DESIGN EVENT	PLUG TYPE ICD (CIRCULAR ORIFICE SIZE)	DIAMETER OF OUTLET PIPE	DESIGN FLOW	DESIGN HEAD	WATER ELEVATION	PONDING DEPTH
1:5 YR	178mm Ø ORIFICE	300mm Ø	63.0 L/s	0.84 m	114.94 m	0.34 m
1:100 YR	178mm Ø ORIFICE	300mm Ø	71.0 L/s	1.07 m	115.17 m	0.57 m

GENERAL NOTES:

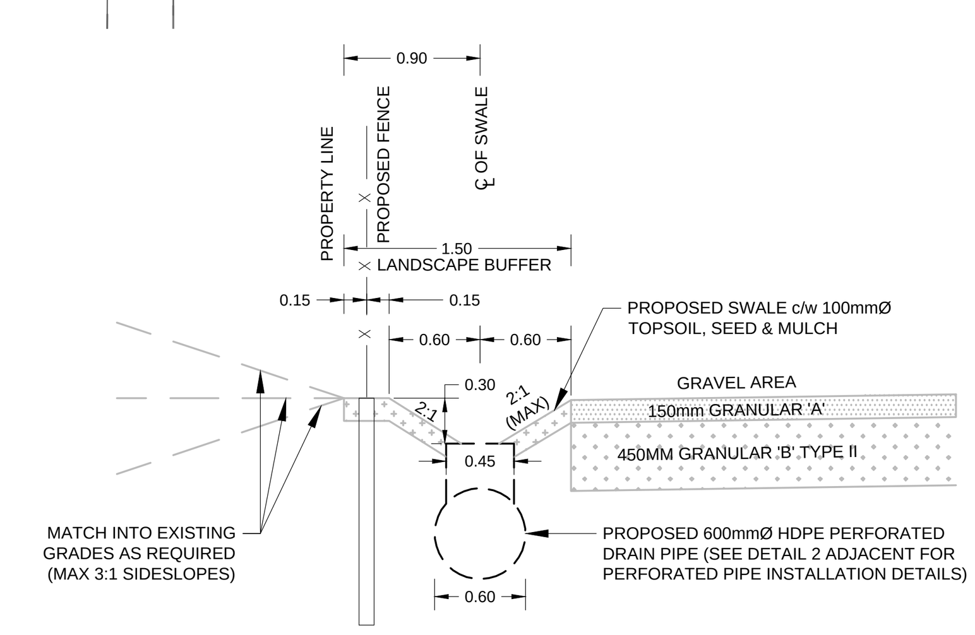
1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
3. OBTAIN 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 OPERATIONAL LIABILITY INSURANCE FOR $5,000,000.00. INSURANCE POLICY TO NAME OWNERS AND ENGINEERS 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 MUNICIPAL AUTHORITIES 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 ELEVATIONS ARE GEODETIC. THE EXISTING POINT ELEVATIONS, SITE CONTOURS AND SURVEY INFORMATION WAS PROVIDED BY THOMAS CAVANAGH CONSTRUCTION LIMITED (FILE NAME: 2727 Carp Rd Linework for Topo.dxf). THE SURROUNDING CONTOUR INFORMATION BEYOND THE SITE IS FROM CITY OF OTTAWA MAPPING.
8. REFER TO GEOTECHNICAL INVESTIGATION REPORT NO. 63978.96 (DATED APRIL 27, 2016) PREPARED BY HOULE CHEVRIER ENGINEERING 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.
9. REFER TO THE SITE PLAN AND LANDSCAPE PLAN FOR HARD SURFACE AREAS AND DIMENSIONS.
10. SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10 AND R25).

ASBUILTS:

1. THE CONTRACTOR IS TO PROVIDE THE CONSULTANT WITH A PLAN INDICATING ALL OF THE APPLICABLE GRADING AND SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS AND ANY ALIGNMENT CHANGES AS WELL AS THE ASBUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.

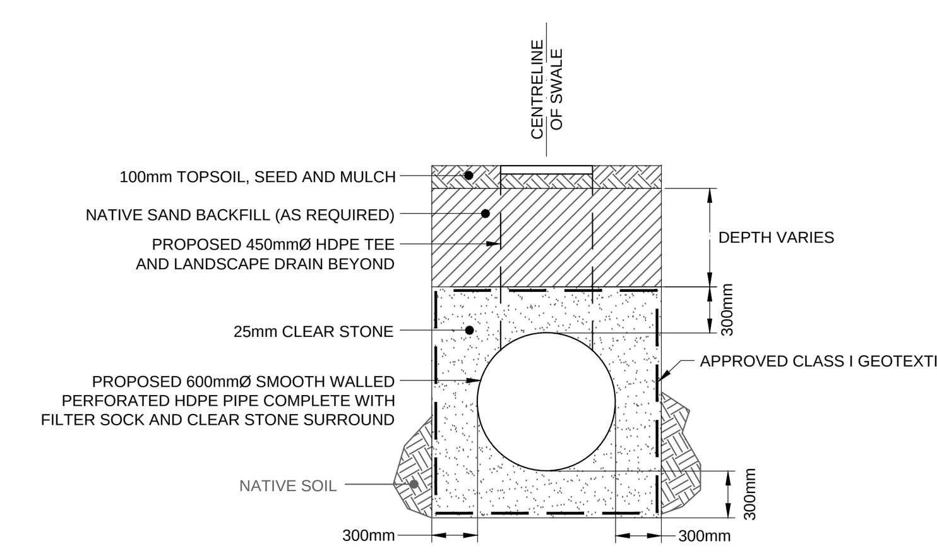
GRADING NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS.
2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUBEXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS.
3. THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
4. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
5. REFER TO THE SITE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.



SECTION A-A (TYPICAL): REAR SWALE & DRAIN PIPE

SCALE 1:50



DETAIL 2: PERFORATED DRAIN PIPE INSTALLATION

N.T.S.

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

OWNER INFORMATION
1384341 ONTARIO LTD.
c/o THOMAS CAVANAGH CONSTRUCTION LIMITED
9094 CAVANAGH ROAD
ASHTON, ONTARIO, K0A 1B0

CONTACT: MATT NESRALLAH
PHONE: (613) 257-2918
E-MAIL: mnesrallah@thomascavanagh.ca

No.	REVISION	DATE	BY
6.	ISSUED FOR SITE PLAN AMENDMENT APPLICATION	JUL 19/19	SMG
5.	INTERIM AS-BUILT (GRADES PROVIDED BY CAVANAGH CONSTRUCTION)	NOV 9/18	LAB
4.	ISSUED FOR REVISED SITE PLAN APPROVAL	JUN 27/18	SM
3.	REVISED PER CITY COMMENTS	SEPT 19/16	SM
2.	ISSUED FOR CLIENT REVIEW	MAY 27/16	SM
1.	ISSUED FOR SITE PLAN APPLICATION	MAY 20/16	SM

SCALE 1:500
1:500
0 5 10 15 20

DESIGN BH / SM
CHECKED BH
DRAWN MWC
CHECKED BH
APPROVED SG

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
2727 CARP ROAD (ATCO TRAILER SITE LEASE AREA ONLY)
OTTAWA, ONTARIO

DRAWING NAME
GRADING, SERVICING & EROSION AND SEDIMENT CONTROL PLAN

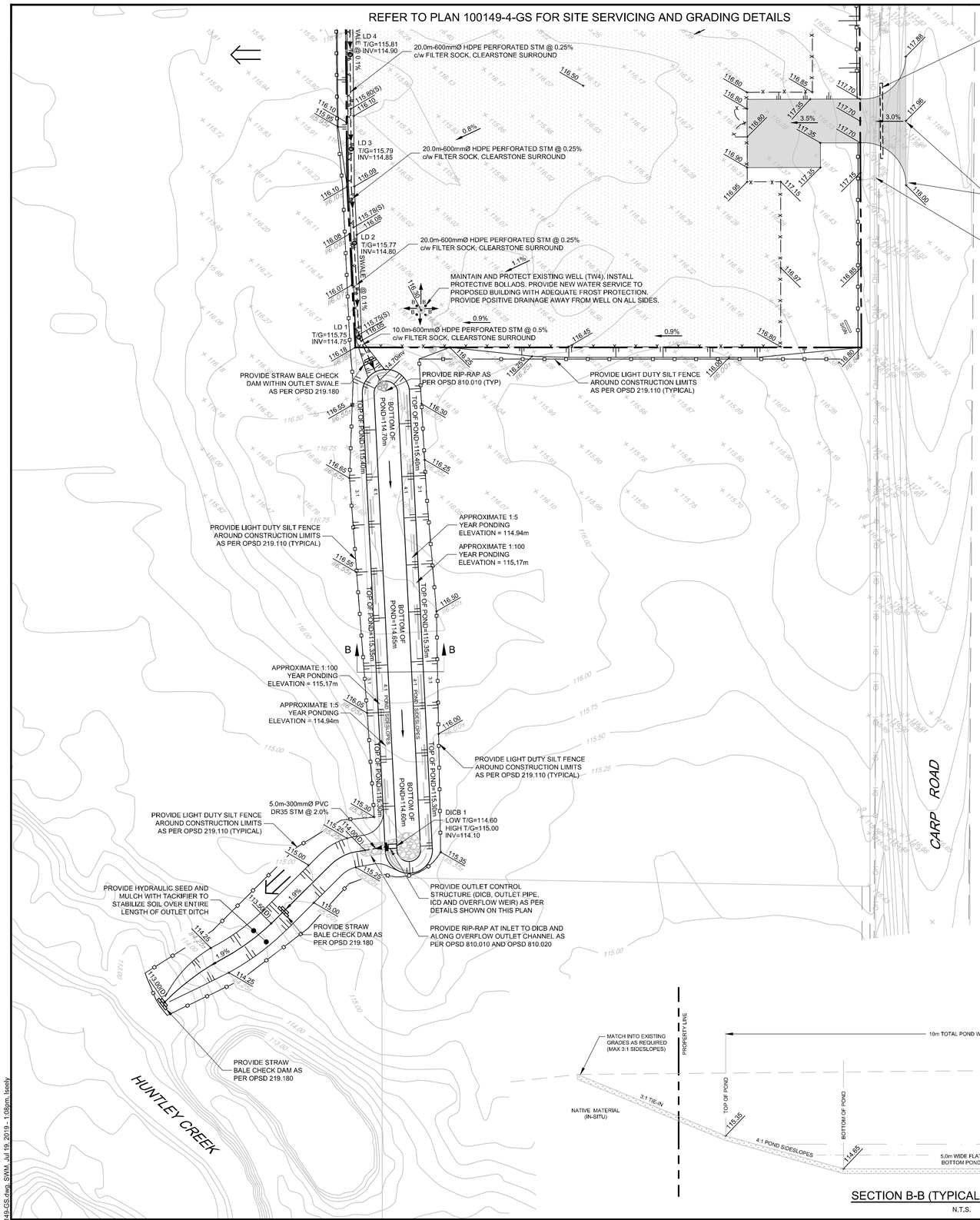
PROJECT No. 100149-4
REV: REV # 6
DRAWING No. 100149-4-GS

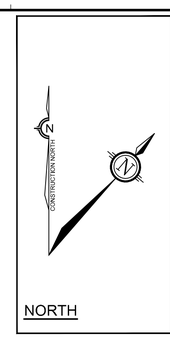
D07-12-16-0077

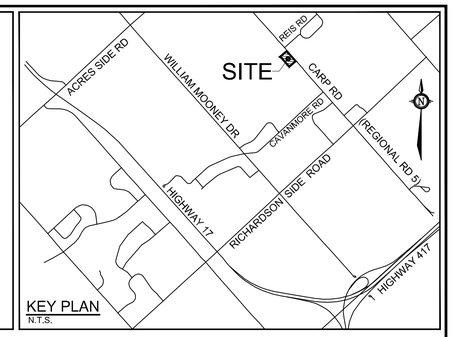
PLAN # 17341

PLANA1.DWG - 841mmx594mm

REFER TO PLAN 100149-4-GS FOR SITE SERVICING AND GRADING DETAILS

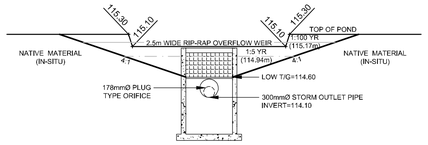






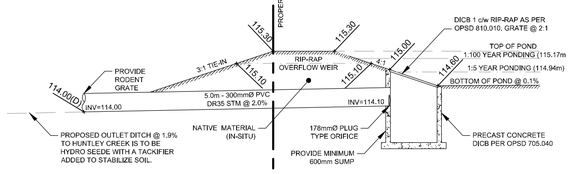
LEGEND

- PROPOSED ELEVATION / *EXISTING ELEVATION*
- EXISTING ELEVATION
- PROPOSED DITCH ELEVATION
- PROPOSED SWALE ELEVATION
- GRADE AND DIRECTION
- MAXIMUM 3:1 SIDESLOPE
- PROPOSED SILT FENCING (OPSD 219.110)
- DIRECTION OF MAJOR OVERLAND FLOW
- LD 3 — PROPOSED LANDSCAPE DRAIN (450mmØ)
- DICB 1 — PROPOSED DITCH INLET CATCHBASIN
- ICD — PROPOSED INLET CONTROL DEVICE
- PROPOSED STORM SEWER
- PROPOSED BOLLARD
- APPROXIMATE PONDING LIMITS (1:5 YR / 1:100 YR)
- PROPOSED 1.8m CHAINLINK FENCE
- *EXISTING WELL*
- *EXISTING FENCE*
- *EXISTING UTILITY POLE C/W GUY WIRES*



SWMF OUTLET STRUCTURE (DICB 1) SECTION

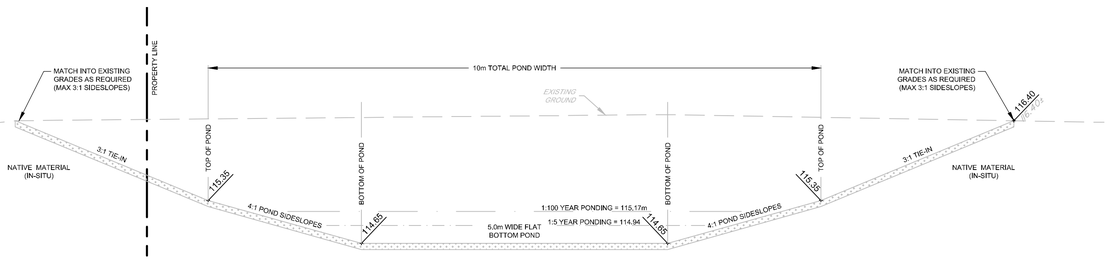
N.T.S.



SWMF OUTLET STRUCTURE (DICB 1) PROFILE

N.T.S.

INLET CONTROL DEVICE DATA - DICB 1						
DESIGN EVENT	PLUG TYPE ICD (CIRCULAR ORIFICE SIZE)	DIAMETER OF OUTLET PIPE	DESIGN FLOW	DESIGN HEAD	WATER ELEVATION	PONDING DEPTH
1:5 YR	178mm Ø ORIFICE	300mm Ø	63.0 L/s	0.84 m	114.94 m	0.34 m
1:100 YR	178mm Ø ORIFICE	300mm Ø	71.0 L/s	1.07 m	115.17 m	0.57 m



SECTION B-B (TYPICAL): SWM FACILITY

N.T.S.

GENERAL NOTES:

1. COORDINATE AND SCHEDULE 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 OPERATIONAL LIABILITY INSURANCE FOR $5,000,000.00. INSURANCE POLICY TO NAME OWNERS AND ENGINEERS 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 MUNICIPAL AUTHORITIES 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 ELEVATIONS ARE GEODETIC. THE EXISTING POINT ELEVATIONS, SITE CONTOURS AND SURVEY INFORMATION WAS PROVIDED BY THOMAS CAVANAGH CONSTRUCTION LIMITED (FILE NAME: 2727 Carp Rd Linework for Topo.dxf). THE SURROUNDING CONTOUR INFORMATION BEYOND THE SITE IS FROM CITY OF OTTAWA MAPPING.
8. REFER TO GEOTECHNICAL INVESTIGATION REPORT NO. 63978.96 (DATED APRIL 27, 2016) PREPARED BY HOULE CHEVRIER ENGINEERING 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.
9. REFER TO THE SITE PLAN FOR HARD SURFACE AREAS AND DIMENSIONS.
10. SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10 AND R25).

SEWER NOTES:

1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
2. SPECIFICATIONS:

ITEM	SPEC. No.
DITCH INLET CATCHBASIN (600X1200)	OPSD 705.040
STORM SEWER	PVC DR 35
PERFORATED STORM (600mmØ PIPE)	HDPE SMOOTH-WALLED PIPE
LANDSCAPE DRAIN COVER (450mmØ)	HDPE SMOOTH-WALLED PIPE
LANDSCAPE DRAIN TEE (600x600x450 TEE)	HDPE SMOOTH-WALLED PIPE

3. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO CONCRETE STRUCTURES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.

ASBUILTS:

1. THE CONTRACTOR IS TO PROVIDE THE CONSULTANT WITH A PLAN INDICATING ALL OF THE APPLICABLE GRADING AND SERVICING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS AND ANY ALIGNMENT CHANGES AS WELL AS THE ASBUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.

GRADING NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS.
2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUBEXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS.
3. THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
4. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
5. REFER TO THE SITE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

OWNER INFORMATION
1384341 ONTARIO LTD.
c/o THOMAS CAVANAGH CONSTRUCTION LIMITED
9094 CAVANAGH ROAD
ASHTON, ONTARIO, K0A 1B0

CONTACT: MATT NESRALLAH
PHONE: (613) 257-2918
E-MAIL: mnesrallah@thomascavanagh.ca

No.	REVISION	DATE	BY
5.	ISSUED FOR SITE PLAN AMENDMENT APPLICATION (NO CHANGES)	JUL 19/19	SMG
4.	ISSUED FOR REVISED SITE PLAN APPROVAL	JUN 27/18	SM
3.	REVISED PER CITY COMMENTS	SEPT 19/16	SM
2.	ISSUED FOR CLIENT REVIEW	MAY 27/16	SM
1.	ISSUED FOR SITE PLAN APPLICATION	MAY 20/16	SM

SCALE: 1:500 (1:500, 0 5 10 15 20)

DESIGN: CS / SM
CHECKED: BH
DRAWN: SM
CHECKED: CS
APPROVED: SG

FOR REVIEW ONLY

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Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
2727 CARP ROAD (ATCO TRAILER SITE LEASE AREA ONLY)
OTTAWA, ONTARIO

DRAWING NAME
STORMWATER MANAGEMENT PLAN

PROJECT No. 100149-4
REV # 5
DRAWING No. 100149-4-SWM

D07-12-16-0077

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