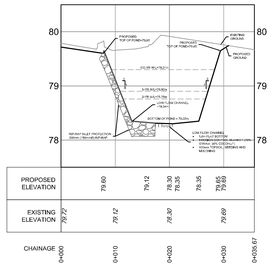
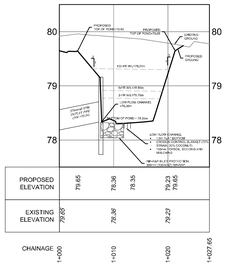


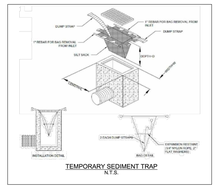

POND CROSS-SECTION A-A

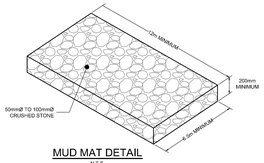
SCALE : 1:400 (H)
1:40 (V)




POND CROSS-SECTION B-B

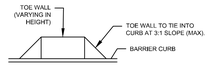
SCALE : 1:400 (H)
1:40 (V)



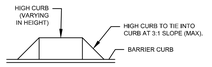

MUD MAT DETAIL

N.T.S.




TOE WALL/RETAINING WALL TIE-IN DETAIL

SCALE : N.T.S

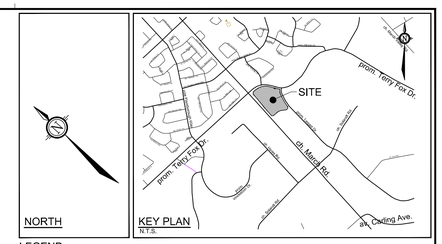



HIGH CURB TIE-IN DETAIL

SCALE : N.T.S

**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: Routine Responsibility | After Final Acceptance: Inspection/Maintenance Responsibility |
|---|---|---|---|---|---|---|---|---|---|
| Temporary Measures | Silt Fence | | OPSD 219.130 | Developer's Contractor | Developer's Contractor | Weekly (as a minimum) | Consultant | Developer's Contractor | N/A |
| | Filter Fabric | | Location as indicated in ESC note #3 | Developer's Contractor | Developer's Contractor | Weekly (as a minimum) | Consultant | Developer's Contractor | N/A |
| | Mud Mat | | 50mm Ø to 100mm Ø crushed stone | Developer's Contractor | Developer's Contractor | Weekly (as a minimum) | Developer's Contractor | Developer's Contractor | N/A |
| | Dust Control | | Location as Required. Assume Dust Control | Developer's Contractor | Developer's Contractor | Weekly (as a minimum) | Consultant | Developer's Contractor | N/A |
| | Stabilized Material Stockpiling | | Location as directed by Contractor | 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 directed by Contractor | Developer's Contractor | Developer's Contractor | After Every Rainstorm | Developer's Contractor | Developer's Contractor | N/A |




## LEGEND

- PROPOSED ELEVATION / EXISTING ELEVATION (79.60 / 79.65)
- GRADE AND DIRECTION (2.0%)
- TERRACING (MAXIMUM 3:1 SIDESLOPE)
- EMERGENCY OVERLAND FLOW ROUTE
- PROPOSED CATCHBASIN MANHOLE (CBMH 3)
- PROPOSED STORM MANHOLE (STMMH 1)
- PROPOSED STORM MANHOLE C/W WATERTIGHT LID (STMMH(WT) 1)
- PROPOSED CATCHBASIN (CB)
- PROPOSED BARRIER CURB (PER SC1.1)
- PROPOSED DEPRESSED CURB (PER SC1.1)
- REMOVALS
- EXISTING TREE TO REMAIN
- PROPOSED TOE WALL (PER OPSD 3120,100)
- PROPOSED RETAINING WALL
- PROPOSED BUILDING ENTRANCE
- PROPOSED SILT FENCING (OPSD 219.110)
- PROPOSED MUD MAT / CONSTRUCTION ENTRANCE (M M)
- APPROXIMATE PONDING LIMITS (2 YR / 1:5 YR / 1:100 YR)
- EXISTING CONCRETE CURB
- EXISTING SANITARY MANHOLE (SAMH)
- EXISTING CATCHBASIN MANHOLE (CBMH)
- EXISTING STORM MANHOLE (STMH)
- EXISTING CATCHBASIN (CB)
- EXISTING HYDRANT & VALVE (HYD / GV)
- EXISTING TREES / VEGETATION
- EXISTING UTILITY POLE C/W GUY WIRES (EP C/W)
- EXISTING FENCE
- EXISTING LIGHT STANDARD

## 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, ENGINEERS AND ARCHITECTS 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 THE CITY OF OTTAWA 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.
8. REFER TO THE GEOTECHNICAL INVESTIGATION AND HYDROGEOLOGICAL ASSESSMENT - 600 MARCH ROAD - (REPORT NO. 120068673-RPT-1), PREPARED BY GHD ON JUNE 16, 2023, 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 ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
10. REFER TO STORMWATER MANAGEMENT REPORT (R-2023-143) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
11. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
12. PROVIDE LINE/PARKING PAINTING.

## GRADING NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED PAVED AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.
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.
3. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
4. THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 100% 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.
5. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
6. MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
7. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
8. ALL CURBS SHALL BE BARRIER CURB (150mm) UNLESS OTHERWISE NOTED AND CONSTRUCTED AS PER CITY OF OTTAWA STANDARDS (SC1.1). MOUNTABLE CURBS ARE TO BE PER CITY OF OTTAWA STANDARD (SC1.3).
9. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.
10. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING AS-BUILT ELEVATIONS OF ALL DESIGN GRADES SHOWN ON THIS PLAN.

## EROSION AND SEDIMENT CONTROL NOTES :

1. 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.
2. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA, 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.
3. EROSION AND SEDIMENT CONTROL MEASURES WILL 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.
4. TO PREVENT SURFACE EROSION FROM ENTERING ANY STORM SEWER SYSTEM DURING CONSTRUCTION, FILTER CLOTH WILL BE PLACED UNDER GRATES OF NEARBY CATCHBASINS 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
10. ROADWAYS ARE TO BE SWEPT AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR THE MUNICIPALITY.
11. 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.

## BENCHMARK NOTES:

1. ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM.
2. IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT IT'S RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
3. BENCHMARK WAS PROVIDED ON THE TOPOGRAPHIC PLAN OF SURVEY OF BLOCK 6 AND PART OF BLOCK 1 REGISTERED PLAN 4M-642 AND PART OF LOTS 8 AND 9 CONCESSION 4, GEOGRAPHIC TOWNSHIP OF MARCH. CITY OF OTTAWA, SURVEYED BY ANNIS, O'SULLIVAN AND VOLLEBEKK LTD.

## PAVEMENT STRUCTURES:

LIGHT DUTY (CAR PARKINGS PAVEMENT)
- 50mm HL3 or SUPERPAVE 12.5
- 150mm GRANULAR "A"
- 250mm GRANULAR "B" TYPE II

HEAVY DUTY (ACCESS ROADS)
- 40mm HL3 or SUPERPAVE 12.5
- 50mm HL3 oR SUPERPAVE 19.0
- 150mm GRANULAR "A"
- 500mm GRANULAR "B" TYPE II

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
NOKIA c/o COLLIERS
181 BAY STREET, SUITE 1400
TORONTO, ONTARIO, M5J 2V1

ERIK CUNNINGTON
PHONE: (416) 920-0155
EMAIL: erik.cunnington@colliers.com

SURVEYOR
ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 CONCOURSE GATE, SUITE 500
OTTAWA, ONTARIO, K2E 7S6
PHONE: (613) 727-0850

CIVIL ENGINEER/LANDSCAPE ARCHITECT
NOVATECH ENGINEERS, PLANNERS & LANDSCAPE ARCHITECTS
240 MICHAEL COWPLAND DRIVE, SUITE 200
OTTAWA, ONTARIO, K2M 1P6
PHONE: (613) 254-9643

| No. | REVISION | DATE | BY |
|---|---|---|---|
| 3. | REVISED AS PER CITY COMMENTS | FEB 14/24 | FST |
| 2. | ISSUED FOR SPC APPROVAL | NOV 7/23 | FST |
| 1. | PRELIMINARY PLANS ISSUED TO CITY | OCT 02/23 | FST |

SCALE: 1:400 (1:400 0 4 8 12 16)

DESIGN ZA | CHECKED FST | DRAWN ZA | CHECKED FST | APPROVED FST

**FOR REVIEW ONLY**

LICENSED PROFESSIONAL ENGINEER — Daniel Michaud — F.B. THAUVETTE — 100041599 — February 14, 2024 — PROVINCE OF ONTARIO

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
CITY OF OTTAWA
600 MARCH ROAD - NOKIA PARKING LOT EXPANSION

DRAWING NAME
GRADING PLAN AND EROSION & SEDIMENT CONTROL PLAN

PROJECT No. 121334
REV. REV # 3
DRAWING No. 121334-GR

D07-12-23-0138

PLAN #19073

M:\2023\121334\CAD\dwg\121334-GR.dwg, GR, Feb 14, 2024 - 4:05pm, cvoiron