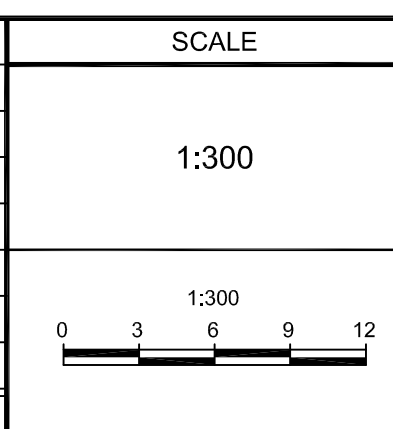


1.	ISSUED WITH SITE PLAN APPLICATION	MAR 9/18	JAG
No.	REVISION	DATE	BY



DESIGN	JAG
CHECKED	MSF
DRAWN	MTM
CHECKED	JAG
APPROVED	JGR

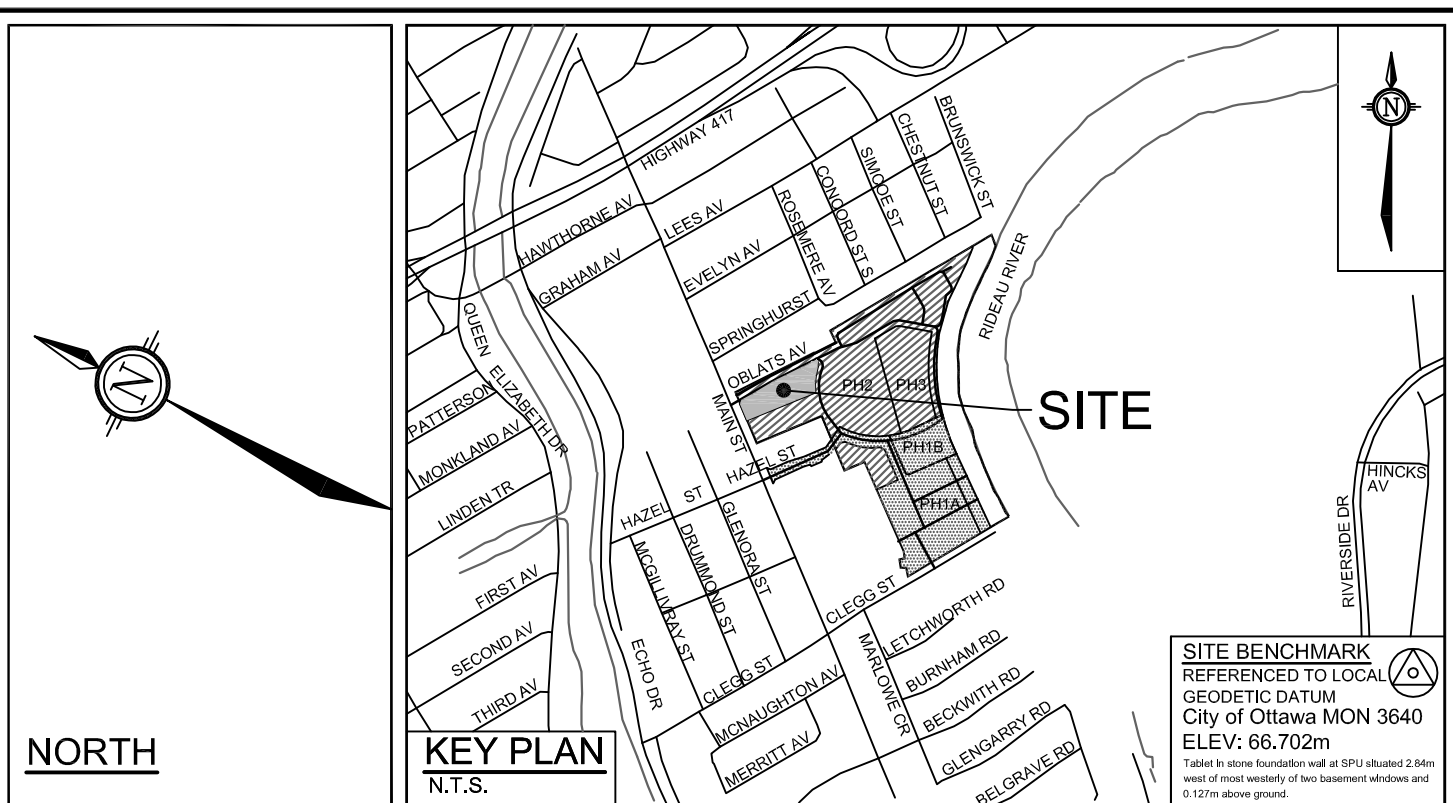
REGISTERED PROFESSIONAL ENGINEER  
J.G. RIDDELL  
PROVINCE OF ONTARIO






















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## GRADING, EROSION & SEDIMENT CONTROL PLAN

PROJECT No.	114025-00
REV	REV # 1
DRAWING No.	114025-GR(2A/2B)



- # LEGEND
- |   |                                 |   |                                    |
|---|---------------------------------|---|------------------------------------|
|  | SITE BOUNDARY                   |  | EXISTING VALVE AND VALE BOX        |
|  | PROPOSED ELEVATION              |  | EXISTING FIRE HYDRANT              |
|  | EXISTING ELEVATION              |  | EXISTING CATCHBASIN                |
|  | PROPOSED TOP OF WALL ELEVATION  |  | EXISTING TOP OF GRATE              |
|  | EXISTING TOP OF CURB ELEVATION  |  | EXISTING UTILITY POLE CW GUY WIRES |
|  | EXISTING TOP OF GRATE ELEVATION |  | EXISTING LIGHT STANDARD            |
|  | PROPOSED GRADE AND DIRECTION    |   |                                    |
|  | PROPOSED TERRACING (MAX 3:1)    |   |                                    |
|  | PROPOSED SILT FENCE             |   |                                    |
|  | PROPOSED AREA DRAIN             |   |                                    |
|  | PROPOSED SHAMESE CONNECTION     |   |                                    |
|  | PROPOSED BUILDING ENTRANCE      |   |                                    |
|  | PROPOSED RETAINING WALL         |   |                                    |
|  | PROPOSED BARRIER CURB           |   |                                    |
|  | PROPOSED DEPRESSED CURB         |   |                                    |

### 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 \$5,000,000/30, 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 IN WRITTEN AGREEMENT. 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 ARCHITECTS AND LANDSCAPE ARCHITECTS'S DRAWINGS FOR BUILDING AND HARDSCAPE AREAS AND DIMENSIONS.
- 9) REFER TO SERVING DESIGN BRIEF PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
- 10) SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (RTD).
- 11) PROVIDE LINE/PARKING PAINTING.
- 12) CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GRADING PLAN INDICATING THE AS-BUILT ELEVATION OF EVERY DESIGN GRADE SHOWN ON THIS PLAN.
- 13) REFER TO GEOTECHNICAL REPORT (NO 1688819, JUNE 2017) PREPARED BY GOLDER ASSOCIATES 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.
- 14) ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
- 15) ALL PRIVATE APPROACHES MUST BE CONSTRUCTED AS PER CITY SPECIFICATION S.C13.

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 CONSULTANT.
- 3) ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUBEXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS.
- 4) THE GRANULAR BASE SHOULD BE COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USE BELOW THE PROPOSED PAVEMENT SHOULD BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
- 5) GRADE AND/OR FILL BEHIND PROPOSED CURB AND BETWEEN BUILDINGS AND CURBS, WHERE REQUIRED TO PROVIDE POSITIVE DRAINAGE.
- 6) MINIMUM OF 2% GRADE FOR ALL GRASS AREAS 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).
- 9) REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.

### PAVEMENT STRUCTURE DETAILS:

- 40mm Superpave 12.5mm PG 58-34
- 50mm Superpave 19.0mm PG 58-34
- 150mm GRANULAR 'A' BASE
- 375mm GRANULAR 'B' TYPE II SUBBASE
- OPSS SELECT SUBGRADE MATERIAL (SSM)

### PAVEMENT STRUCTURE (OVER UNDERGROUND PARKING

- 40mm Superpave 12.5mm PG58-34, TRAF. CAT.B
- 50mm Superpave 19mm PG58-34, TRAF. CAT.B
- 300mm GRANULAR 'A' BASE  
[INSULATION TO BE PER TRAF. LOAD (i.e. H160)]

## EROSION AND SEDIMENT CONTROL NOTES

- 1) 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. LIGNING OF CHANNELS, REMOVAL OF VEGETATION, OR ANY OTHER 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 LISTED ON THE ATTACHED SHEET.
- 2) TO PREVENT SURFACE EROSION FROM ENTERING THE DITCH OR STORM SYSTEM DURING CONSTRUCTION, FILTER CLOTH WILL BE PLACED UNDER GRATES OF CATCHBASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED ALONG THE PROPERTY LINES. THESE CONTROL MEASURES WILL REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED AND CONSTRUCTION IS COMPLETE.
- 3) 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.
- 4) THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO ANY DITCH OR STORM SEWER SYSTEM. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING OR NEW STRUCTURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
- 5) THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
- 6) ROADWAYS ARE TO BE SWEEP AS REQUIRED OR AS DIRECTED BY THE ENGINEER AND/OR MUNICIPALITY.
- 7) THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS.