

- GRADING**
- CONTACT CITY FOR ROUGH GRADING INSPECTION PRIOR TO PLACEMENT OF TOPSOIL OR TOPSOIL AND SOD.
 - THE OWNER SHALL CONTACT THE CITY ENGINEER FOR INSPECTION OF THE ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF AN ASPHALT OR TOPSOIL AND SOD.
 - FINISHED LOT GRADING SHALL NOT ADVERSELY AFFECT DRAINAGE PATTERNS OF ADJACENT LOTS.
 - ALL GRADES TO BE WITHIN 3% MAX. (3:1) SLOPE AT PROPERTY LINE AND WITHIN THE SITE.
 - MATCH EXISTING ELEVATIONS AT ALL PROPERTY LINES. ENSURE POSITIVE DRAINAGE WHETHER INDICATED OR NOT.
 - WHERE EXISTING GRADE IS FOUND TO BE MORE THAN 300mm BELOW THE PROPOSED GRADES INDICATED ON THIS GRADING PLAN, CONTACT ENGINEER IMMEDIATELY.
 - SWALES LESS THAN 15% SHALL HAVE A 250mm SUBDRAIN AS PER CITY OF OTTAWA STANDARD S29, S30 AND S31.
 - DEVELOPER TO ENSURE BLOCKS 34 & 38 ARE MAINTAINED FOR POSITIVE DRAINAGE AT OWNERS EXPENSE.

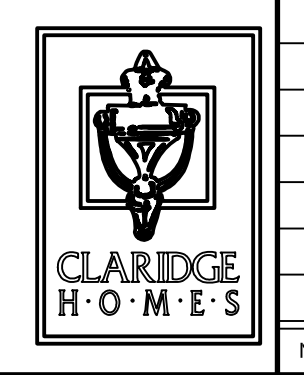
- EROSION AND SEDIMENT CONTROL:**
- THE CONTRACTOR ACKNOWLEDGES THAT SURFACE EROSION AND SEDIMENT RUNOFF RESULTING FROM HIS CONSTRUCTION OPERATIONS WILL HAVE A DETRIMENTAL IMPACT TO ANY DOWNSTREAM WATERCOURSE OR SEWER, AND THAT ALL CONSTRUCTION OPERATIONS THAT MAY IMPACT WATER QUALITY SHALL BE CARRIED OUT IN A MANNER THAT STRICTLY MEETS THE REQUIREMENTS OF ALL APPLICABLE LEGISLATION AND REGULATIONS.
 - AS SUCH THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT HIS OPERATIONS, AND SUPPLYING AND INSTALLING ANY APPROPRIATE CONTROL MEASURES, SO AS TO PREVENT SEDIMENT LAKEN RUNOFF FROM ENTERING ANY SEWER OR WATERCOURSE WITHIN DOWNSTREAM OF THE WORKING AREA.

- FOR THIS PROJECT THE SUGGESTED ON-SITE MEASURES SHALL INCLUDE BUT SHALL NOT BE LIMITED TO, THE FOLLOWING METHODS:
- CATCH BASIN FILTERS
 - SPECIFIC MEASURES SHALL BE INSTALLED AT THE SPECIFIED LOCATIONS AND IN ACCORDANCE WITH THE REQUIREMENTS OF OPSD S17 WHERE APPROPRIATE, OR IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- WHERE, IN THE OPINION OF THE CONTRACT ADMINISTRATOR OR ANY REGULATORY AGENCY, THE INSTALLED CONTROL MEASURES FAIL TO PERFORM ADEQUATELY, THE CONTRACTOR SHALL SUPPLY AND INSTALL ADDITIONAL OR ALTERNATIVE MEASURES AS DIRECTED BY THE CONTRACT ADMINISTRATOR OR THE REGULATORY AGENCY. AS SUCH, THE CONTRACTOR SHALL HAVE ADDITIONAL CONTROL MATERIALS ON SITE AT ALL TIMES WHICH ARE EASILY ACCESSIBLE AND MAY BE IMPLEMENTED BY HIM AT A MOMENT'S NOTICE.
 - THE CONTRACTOR SHALL ENSURE THAT ALL WORKERS, INCLUDING SUB-CONTRACTORS, IN THE WORKING AREA ARE AWARE OF THE IMPORTANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES AND INFORMED OF THE CONSEQUENCES OF THE FAILURE TO COMPLY WITH THE REQUIREMENTS OF ALL REGULATORY AGENCIES AND THE SPECIFICATIONS DETAILED HEREIN.
 - THE CONTRACTOR SHALL PERIODICALLY, OR WHEN REQUESTED BY THE CONTRACT ADMINISTRATOR, CLEAN OUT ACCUMULATED SEDIMENT DEPOSITS AS REQUIRED AT THE SEDIMENT CONTROL DEVICES, INCLUDING THOSE DEPOSITS THAT MAY ORIGINATE FROM OUTSIDE THE CONSTRUCTION AREA. ACCUMULATED SEDIMENT SHALL BE REMOVED IN SUCH A MANNER THAT PREVENTS THE DEPOSITION OF THIS MATERIAL INTO ANY SEWER OR WATERCOURSE AND AVOIDS DAMAGE TO THE CONTROL MEASURE. THE SEDIMENT SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S EXPENSE AND MANAGED IN COMPLIANCE WITH THE REQUIREMENTS FOR EXCESS EARTH MATERIAL, AS SPECIFIED ELSEWHERE IN THE CONTRACT.

- GEOTECHNICAL REPORT:**
- GEOTECHNICAL INVESTIGATION, PROPOSED RESIDENTIAL DEVELOPMENT, RUSSELL FINLAY LANDS, OTTAWA, ONTARIO BY GOLDER ASSOCIATES, SEPTEMBER 2004, REPORT NO. 04-1020-146.
 - GEOTECHNICAL INVESTIGATION, OTTAWA RIVER SUB-TRUNK SEWER, PHASE II, TRIM ROAD, OTTAWA, ONTARIO BY J.D. PATTERSON G8308-I-NOV. 2001.

REFER TO DRAWINGS GP1 FOR ADDITIONAL NOTES

NOTE: THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, 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.



No.	REVISION	DATE	BY	No.	REVISION	DATE	BY
12	REVISED AS PER CITY COMMENTS AND RE-ISSUED	JAN 14/11	GJM	7	REVISED AS PER CITY COMMENTS	NOV 19/09	GJM
11	REVISED GRADES AND NOISE BARRIER ADDED AND RE-ISSUED FOR CONSTRUCTION	JAN 07/11	GJM	6	ISSUED FOR UTILITY CIRCULATION	NOV 17/09	GJM
10	REVISED LOT NUMBER AND RE-ISSUED	AUG 31/10	GJM	5	ISSUED FOR TENDER	OCT 13/09	GJM
	FOR CONSTRUCTION			4	REVISED AND ISSUED FOR MOE APPROVAL	OCT 09/09	GJM
9	ISSUED FOR CONSTRUCTION	MAR 13/10	GJM	3	REVISED PER CITY COMMENTS	AUG 24/09	GJM
8	REVISED AND RE-ISSUED FOR MOE APPROVAL	DEC 17/09	GJM	2	ISSUED FOR CITY REVIEW	JUNE 11/09	GJM
				1	ISSUED WITH SWMR FOR CITY REVIEW	JUNE 08/09	GJM

NOVATECH ENGINEERING CONSULTANTS LTD.
 ENGINEERS & PLANNERS
 Suite 200, 240 Michael Cowpland Drive
 Ottawa, Ontario, Canada
 Telephone: (613) 254-9643
 Fax: (613) 254-5967
 Email: novinfo@novatech-eng.com

DESIGN	BHB/SS	SCALE	CITY OF OTTAWA
CHECKED	GJM	1:400	ROYAL RIDGE SUBDIVISION
DRAWN	BHB/SS		
CHECKED	GJM		
APPROVED	GJM		

PROJECT NO.	104094-G
DATE	DEC 2007
DRAWING NO.	104094-GR1
PROJECT NAME	ROYAL RIDGE SUBDIVISION
CLIENT	CITY OF OTTAWA
DESCRIPTION	GRADING PLAN