



Ref. No. D09109

September 21, 2011

Mr. G. Murphy  
Dexter Construction  
P.O. Box 48100  
927 Rocky Lake Drive  
Bedford, NS  
B4A 3Z2  
(Email: [gmurphy@dexter.ca](mailto:gmurphy@dexter.ca))

**Re: Geotechnical Inspection – Brunello Estates (Phase 1)  
Lot 45 - Maple Grove Avenue, Timberlea, NS**

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Dear Mr. Murphy:

As requested, GENIVAR has carried out geotechnical inspection services for the above-mentioned site. The purpose of the work was to monitor and evaluate construction methods during foundation subsoil preparation for building construction.

### **1.0 Project Background**

It is understood that Lot 45 will accommodate a wood-framed residential structure with slab-on-grade basement floor. The proposed structure will consist of conventional design and will measure 11.0 metres by 11.0 metres in maximum plan dimensions. The proposed basement floor elevation for Lot 45 is 103.88 metres, geodetic datum (ATS 77) and is shown on the enclosed Figure 1.0. Surveying during construction of the engineered pad was conducted by Dexter Construction. Ground elevations at the time of construction completion were surveyed by GENIVAR and are also shown on the enclosed Figure 1.0.

Existing grades at Lot 45 were generally above proposed design grades. To reach design grades, blasting of granite bedrock was required.

### **2.0 Inspection Summary**

Field inspection was generally carried out during the spring and summer of 2011. Construction of the engineered pad consisted of subexcavation of organic soils followed by blasting of granite bedrock to reach proposed design subgrade level(s). Leveling and removal of oversized materials was required on pad subgrade, followed by compaction with a large vibratory drum roller. The lot was excavated to an approximate elevation of 103.58 metres (300 mm below proposed finished floor elevation is typically industry standard). GENIVAR personnel were on-site periodically to monitor construction methods during excavation and re-compaction of the pad subgrade.

### 3.0 Summary

Based on our field inspections, we are of the opinion that generally good construction methods were practiced during subexcavation and foundation subsoil preparation for Lot 45 Maple Grove Avenue. In our opinion, the prepared structural fill will support the proposed residential structure with only tolerable settlements anticipated.

### 4.0 Recommendations

Additional fill placed at the site (i.e. wall backfill, underslab base course, interior fill, etc.) is to be prepared using similar methods for placement of engineered fill.

The engineered pad has been prepared for a structure measuring 11.0 metres x 11.0 metres in maximum plan dimensions, as indicated on the enclosed Figure 1. Any changes or relocation with the structure on the lot should be certified by a geotechnical engineer.

Any disturbance to the prepared lot as a result of freeze/thaw, vegetation growth, construction traffic, erosion, etc., would require that the lot be re-inspected by qualified geotechnical personnel prior to placement of concrete foundations.

This letter is based on our inspections conducted to date, at the completion of site grading work. If site conditions differ at time of building construction, we require immediate notification to permit reassessment of our recommendations.

If you have any questions regarding the enclosed information, please contact the undersigned at your convenience.

Yours truly,

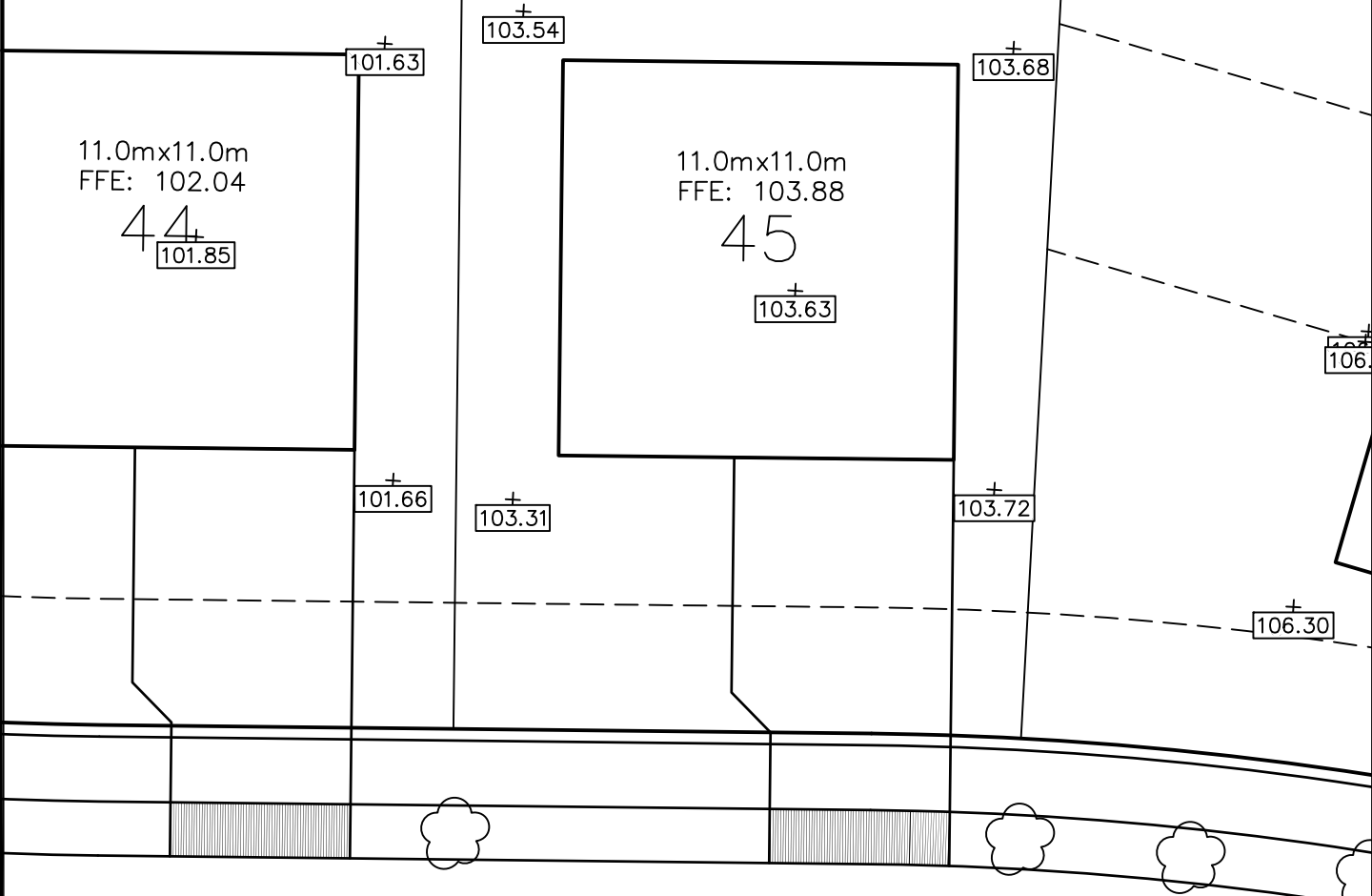
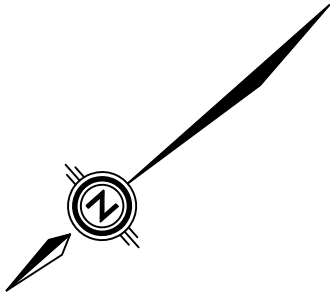
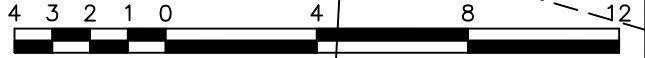
GENIVAR Inc



Clayton J. Rogers, P. Eng.  
Project Geotechnical Engineer



SCALE: 1:200 METRIC



MAPLE GROVE AVENUE

93.00 → AS-BUILT GRADE



1 SPECTACLE LAKE DRIVE  
DARTMOUTH, NOVA SCOTIA  
CANADA, B3B 1X7  
PHONE: 902 835-9955 - FAX: 902 835-1645  
WWW.GENIVAR.COM

TITLE:

BRUNELLO ESTATES  
MAPLE GROVE AVENUE  
LOT 45

A SENSE OF PLACE



SCALE:

1:200

DATE: (YYYY/MM/DD)

15-SEP-2011

FIGURE 1.0

K:\DARTMOUTH\2009\009109\DWG\ENG\DA09109-ASBUILT-ENGPADS.DWG LOT 44 PRINTED: 1:32 PM 2011/09/15 BY: KYLE.BLADES GENIVAR REF. NO.: DA09109