



## APPENDIX A

### **Lot Grading Plan Design, Procedure and Criteria**

#### **What is Lot Grading?**

Lot grading consists of sloping the land within a lot in order to direct the flow of surface water away from a building's foundation and towards a suitable outlet where water can be discharged safely without affecting abutting properties.

#### **Lot Grading Plan Design:**

One of the most contentious issues related to the development of land is improper drainage of surface water. Poor lot grading can result in inadequate surface drainage, ponding, flooding, basement dampness or settlement, insurance claims and conflict between owners of neighbouring properties.

With careful planning and the application of some basic principles, a good lot grading design can be achieved. Below are the key elements to a proper lot grading design.

- 1) The ground should be sloped to direct surface water away from the house foundation. Arrows should indicate the direction of all surface drainage. The design plan will allow the Town to review critical aspects of how you are planning to direct and drain surface water.
- 2) Proper lot grading should not block existing drainage patterns or direct additional drainage on to adjacent lands.
- 3) Swales should be constructed along the property lines with a minimum 2% grade.
- 4) All slopes, other than swales, shall be 2:1 (Horizontal to Vertical) or flatter.
- 5) Lot and house grade should be generally compatible with existing topography and surrounding development.
- 6) Provide as-built grades for any existing adjacent lands. Adequate grades to be provided to clearly show that drainage issues (either excessive run off or ponding) will not be caused by the new development to existing areas.

The result of a well planned and properly executed grading and surface drainage system is a lot free of ponding, with no adverse effects to adjacent properties.



## Lot Grading Plan Procedure:

All approved development applications will have the following conditions with respect to Lot Grading Plans:

1. After receipt of Service NL approval for the septic design which will indicate dwelling and septic system locations, a Lot Grading Plan shall be developed and submitted to the Town using the Town's Lot Grading Plan criteria (see lot Grading Plan Criteria below). The Lot Grading Plan shall be prepared by a certified Newfoundland Land Surveyor, a Professional Engineer (licensed to practice in NL), an Architect (licensed to practice in NL, or by an Engineering Technician/Technologist (AETTNL certified). For those lots located in approved subdivisions the individual lot grading plan shall be prepared based on and in keeping with the overall approved subdivision lot grading plan. **The lot grading plan must be received by the Town before any conditional permit to develop can be issued.**
2. Prior to any landscape sodding of the lot, a Lot Grading Plan Certificate of Completion must be submitted to the Town and stamped by a professional engineer, surveyor, architect or engineering technician as outlined above. The development security deposit and occupancy permit will not be released until the Certificate of Completion is received by the Town. Any permits issued for outbuilding, fence, patio, walkways, swimming pools etc. shall be constructed without disruption to the Lot Grading Plan so as to not adversely affect the drainage patterns within the lot or adjacent and/ or nearby properties.

## Lot Grading Plan Criteria:

1. A title block containing:
  - Civic address or lot number in a subdivision
  - Name of building permit owner
  - Name of firm and address of the professional preparing the plan -Scale -Date
2. Legend
3. North Arrow
4. Lot number
5. Dimensioned property limits and house location
6. House style
7. Finished floor elevation



8. Finished garage floor elevation
9. Top of foundation wall elevations (all locations)
10. Finished basement floor elevation
11. Proposed lot elevations for each lot corner, front and back of house, and 3m from the back of the house.
12. Driveway location, sight distances, width, and proposed grades
13. Driveway to be paved from the edge of the roadway to the property line when any part of the driveway grade is greater than 7%.
14. Arrows indicating the direction of all surface drainage
15. Location and elevation of swales
16. Location of garages, decks, porches, patios, etc.
17. Location of terraces and retaining walls
18. Location of well and septic system
19. Floor area
20. Building line setback
21. Side yard width
22. Rear yard depth
23. Lot frontage

**The appropriate tolerances are as follows:**

- 0 to 150mm below final grade before topsoil
- Within 150mm above or below final grade after topsoil

Elevations not within tolerance may be accepted at the discretion of council when the landscaping is graded to match existing conditions or infrastructure and positive drainage is maintained.