

BERRY SURVEYING & ENGINEERING

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June 3, 2019

Town of Nottingham
Planning Office
Attn: JoAnna Arendarczyk, Planning Secretary
139 Stage Road
P.O. Box 114
Nottingham, NH 03820

RE: Domus Developers Inc.
Residential Site Review
Old Turnpike Road
Nottingham, NH
Tax Map 6, Lot 22

Mr. Chairman and Members of the Nottingham Planning Board

In accordance with the Town of Nottingham's Subdivision Regulations, the applicant requests the following waivers:

1. Identification of Waiver Request: Road and Driveway Design and Construction Standards Table 1, minimum of 100' between reverse curves.

- Proposed roadway with one tangent between reverse curves that is less than 100' feet. The proposal allows for 51.86' and has a very short deflection angle.

The applicant is proposing to construct a privately owned road to 12 single family attached townhouse condominium units known as Ada Drive. The Road and Driveway Design and Construction Standards were consulted, using the Minor Local Street column.

2. Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The purpose and intent of the minimum of 100' between reverse curves is to ensure safe vehicular traffic. The proposed road design will not inhibit vehicular traffic in anyway. The road was designed so that it would conform to the existing topography as much as possible at the top of the development zone. Given the low deflection angle the minimum tangent length makes for a better design allowing the road to carry up the existing topographic sag.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity to the regulations will pose an unnecessary hardship on the applicant whereby requiring the applicant to maintain the 100' between reverse curves will cause the road to be elongated and push the curve further uphill creating a larger cut slope.

2. Identification of Waiver Request: Road and Driveway Design and Construction Standards Table 1, Max. Grade of 2% within 50' of an intersection.

- Proposed roadway proposes 4% within 50' of the intersections where 2% max. is required.

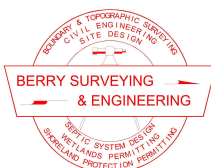
2. Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The 4% proposed is required by NHDOT. The regulation is intended to allow for a safe platform at the roadway entrance. This is an NHDOT controlled roadway and therefore their rules and national standards apply.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity to the regulations will pose an unnecessary hardship on the applicant where requiring non-conformance with the NHDOT requirements.



3. Identification of Waiver Request: Road and Driveway Design and Construction Standards Table 1, Max. 3:1 side slopes as does site plan review section 14.7.4

- The proposed Roadway proposes 2:1 side slopes in certain areas where 3:1 are required by the regulations.

2. Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The purpose and intent of the minimum of regulation is to provide safe stable slopes on the entire project site. In this case the slopes that are greater than 3:1 are proposed to be 2:1 and are lined with either matting or rip-rap for permanent stabilization. No roadway fill slopes warrant protective barrier with most of the 2:1 slopes being located in a cut situation.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity to the regulations will pose an unnecessary hardship on the applicant whereby requiring larger cuts and fills in areas that would not otherwise require them thus increasing environmental impact.



4. Identification of Waiver Request: 14.7.7 Roadside Drainage #4

- Ditches: Ditches shall not be permitted at grades above eight percent, which requiring curbing, culverts and basins or at grades above six percent within the developed length exceeds 250 feet.

2. Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

Ada Drive proposes swale slopes that match 9.75% on both the left and right. The road is super elevated to the left directing the storm flow to the left swale. A swale stability analysis was conducted and it was determined that rip-rap lining was required for stabilization. The swale proposed on the right side of Ada Drive is simply a cut off swale to keep flow off the new road, and does not take on additional impervious flow. During most rain events this sub catchment area doesn't produce any runoff. Additionally, there is a basin proposed mid-way down the slope directing flow to a culvert pipe to the proposed Rain Garden #101. This further reduces flow in the swale.


Sera Drive proposes a swale line that is over six percent for just over 250 linear feet. A swale stability analysis was conducted and given the low flow directed to it, it does not need any additional reinforcement.

The engineered solutions carry out the purposes and intent of the regulation allowing the swales to work properly and not cause erosion.

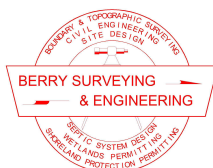
b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity to the regulations will pose an unnecessary hardship on the applicant whereby requiring curbing and basins for such a small section of road, that employs other practices that are easier to maintain, and is a better fit to the Town of Nottingham.

Respectfully submitted,
BERRY SURVEYING & ENGINEERING



Christopher R. Berry
Principal, President



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