

# **BERRY SURVEYING & ENGINEERING**

335 Second Crown Point Road Barrington, NH 03825 Phone: (603) 332-2863 Fax: (603) 335-4623 www.BerrySurveying.Com

Revised: October 12, 2021

Barrington Planning Board Attention: Marcia Gasses PO Box 660 333 Calef Highway Barrington, NH 03825

Re: Mixed Use Site Plan
Dove Development Group LLC
Tax Map 235, Lots 1-1 & 3
Waiver Requests

Ms. Gasses, Mr. Chairman, Members of the Barrington Planning Board,

In accordance with the Town of Barrington's Site Review Regulations and Subdivision Regulations, the applicant requests the following waivers:

- 1. Identification of Waiver Request: Section 12.7 Table #2, Intersection Design Standards, Overlook Drive (F/K/A High Point Drive) (Approved 9/7/21)
  - Allow for a greater than 2% road grade within 100' of an intersection.
  - Proposed grade is 2% for 40' (20+16-20+56), then transition to a 6% grade with a 40' vertical curve by station 20+96 (80' from E.O.P. station 20+16).

#### **Waiver Justification:**

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

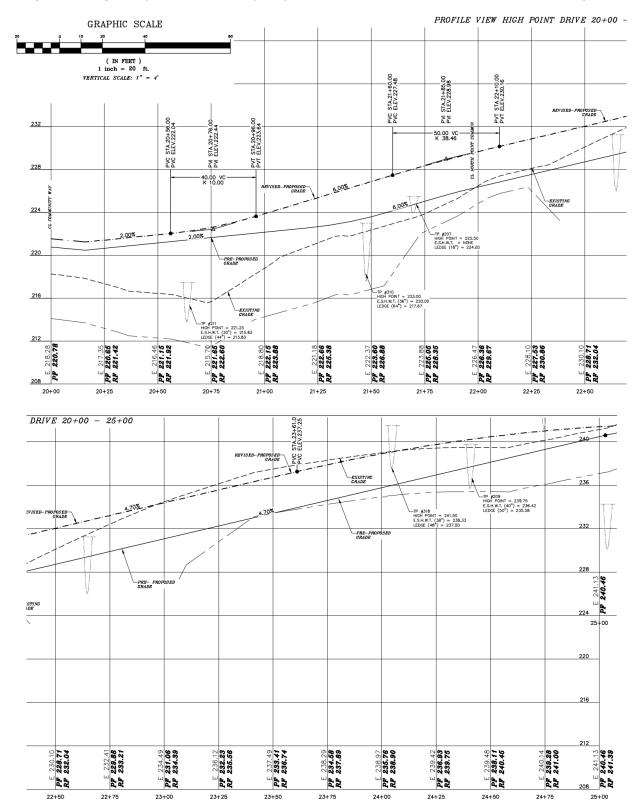
The intent of requiring a maximum road grade of 2% for 100′ from the intersection is to provide a safe approach for vehicles. The proposed design intersects the proposed Community Way with the required 25′ curb radii in a location near the crest of Community Way, creating a relatively level pad for vehicles turning onto Community Way. The proposed profile provides 40′ (a two passenger car queue) at 2%, allowing for safe vehicle approach to this intersection. In addition to the 40′ queue at 2%, a 40′ vertical curve provided allows for a gradual transition to 6% from the 2% grade so 6% is not experienced until 80′ away from the intersection.

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

The subject parcel presents in the location of proposed High Point Drive experiences substantial elevation change from west to east, with the existing topography ranging from 250 in the west to 215 in the east. The majority of test pits in the area of High Point Drive indicate ledge within 4-5' of the surface. This topographic change over the road profile can be seen in the attached profile. It can be seen from the original profile that a fill of 4-5' was proposed at the intersection of High Point Drive & Community Way and following the regulation of 2% max grade for 100' results in cuts of 7-8' along the centerline to the road selects, and greater cuts than 7-8' in the parking areas of units 5-18. With test pits indicating ledge at 4-5', this creates ledge cuts of 4-5' in certain areas of High Point Drive. It has been estimated that the original profile conforming to Barrington Subdivision Regulations creates approximately 4,350 CY of ledge removal necessary. Strict conformity to these regulations would impose unnecessary hardship by creating extraneous disturbance and ledge removal.

This revised profile would allow the profile of High Point Drive to be picked up by over three feet from station 21+50-24+20 and other reductions in cut along the profile. In the previous profile, from station 21+90-22+25 and 23+25-24+25, centerline road finished grade was nearly at ledge elevation. This revised profile allows for roadway selects, unit parking and pads, and utility trenches to require substantially reduced amount of ledge removal. It is estimated that the revised profile will required 1,000 CY of ledge remove, a difference of over 3,350 CY of ledge. See the revised profile attached. PF stands for pre-finished grade and RF stands for revised finished grade.







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- 2. Identification of Waiver Request: Section 12.2.1 Figure 4A, Road Design Standards Preferred Cul-de-Sac design: High Point Drive Cul-de-sac
  - Allow for a cul-de-sac with a 35' CL Radius (23' inner pavement radius, 47' outer pavement radius) when a 62' CL Radius (50' inner pavement radius, 74' outer pavement radius) is preferred. (Approved 9/7/21)

## **Waiver Justification:**

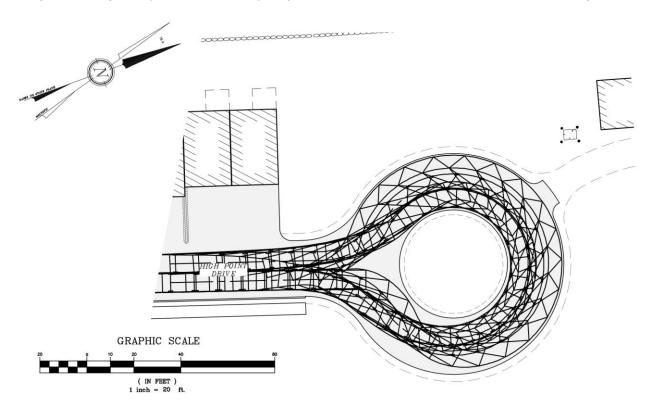
a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The intent of requiring pavement radius of this size is to allow for safe turning movement for fire trucks and other vehicles around the cul-de-sac. As shown in the provided fire truck turning template, a fire truck is still able to maneuver around a cul-de-sac of this size safely.

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

The current proposed location of the High Point Drive cul-de-sac experiences 21' of elevation change (250-229) from the top of the cut slope in the west and to the toe of the fill slope in the east. High Point Drive is proposed to be a private roadway, and is essentially a very long private driveway. The current proposed cul-de-sac is 94' wide at the widest from edge of pavement to edge of pavement. If strict conformity to the preferred cul-de-sac pavement radii would create a cul-de-sac 148' wide at the widest pavement width. This would create unnecessary hardship by creating additional construction over an area that experiences greater than 20' of topographic change when the current proposed cul-de-sac can safely allow a fire truck to pass.





FIRE TRUCK TURNING HIGH POINT DRIVE CUL-DE-SAC

- 3. Identification of Waiver Request: Section 12.2.1 Figure 4C, Road Design Standards Boulevard Collector Roadway: Community Way Cross Section
  - Allow for a cross section of 8' center median 12' travel lanes, 2' grass strip, and 5' sidewalk on the right side, when a boulevard collector requires 10' median lane, 12' travel lane, 3' strip, 3'6" clear edge, 10' planter, then 5' walk (left and right). (Approved 9/7/21)

### **Waiver Justification:**

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

The intent of requiring this roadway cross section is to allow for safe vehicle and pedestrian access to the proposed site. A cross section with an 8' median without clear edge and pavement strip will still allow safe access to the site for vehicles and pedestrians, as a sidewalk is still provided on the right side of the roadway. Planters are shown to provide enhanced landscaping which is provided along the front of north point commons, adjacent to Community Way.



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

The subject parcel experiences substantial topographic change (30') from the rear of North Point Commons to the toe of the fill slope along Community Way (243-213'). Strict conformity of this cross section would pose unnecessary hardship on the applicant as this type of cross section is unrealistic in an application with this amount of topographic change. The proposed 8' median is the same width median that is provided at the entrance to Community Way. The cross section from Figure 4C would not fit in the entrance to the project (STA 5+60-6+50) due to limited available width and topographic challenges. Requiring this section would also adversely have a negative environmental impact, creating larger ledge cuts for North Point Commons (Sta 7+50-9+75) as the building and associated parking pad would need to move further into the slope . A 16' grass/planting area is provided in front of North Point Commons provided the ability for enhanced landscaping. Turn templates show that a fire truck is able to traverse the roadway safely.

- 4. Identification of Waiver Request: Section 12.3.2(5) Curbing, Driveway Design: North Point Commons Entrance
  - Allow for two curb radii to be 10' when 25' is required. (Approved 9/7/21)

### **Waiver Justification:**

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

The intent of requiring this curb radii is to allow for safe entrance and turning movements of passenger and emergency vehicles. As shown in fire truck turning templates, appropriate and safe movements are still able to be made by emergency vehicles.

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

The two entrances to North Point Common from Community Way require 10' curb radii on the inside corners due to the placement of North Point Commons and parking. Strict conformity to the regulations would have an adverse environmental impact by requiring a substantial increased volume of ledge cut. North point Commons and associated infrastructure would need to be moved back 15' into the slope to be able to provide 25' curb radii. Pavement at the



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entrances has been widened to be more accommodating to drivers making these turning movements.

- 5. Identification of Waiver Request: Section 3.2.7 Legend on each sheet of plans
  - Per planning board discussion, allow a legend at the beginning of each plan section as opposed to each sheet. (Requested October 2021)

## **Waiver Justification:**

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

The intent of requiring legends on each plan sheet is to provide clarity and information about plan view items. By providing a section legend at the beginning of the Grading & Drainage Plans, Erosion & Sediment Control Plans, Utility Plans, the reviewer/contractor is able to see plan specific legends without having to flip to the beginning of the plan set.

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

Many sheets do not have room for a legend on the plans due to the space taken up by profiles or other required design information. Based upon previous conversation had with the Planning Board, this compromise was found acceptable.

Please let us know if you have further questions.

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Christopher R. Berry – Project Manager

Principal, President

