



May 24, 2022

Barrington Planning Board
Attention: Vanessa Price
P.O. Box 660
333 Calef Highway
Barrington, NH 03825

**Re: Rock Iron Repair Major Site Plan Review
Calef Highway
Map 265, Lots 11 & 12
Owner: Jeffrey Sullivan
CMA # 1205 Task 15**

Dear Vanessa:

At the Town's request, and in accordance with Task Order 15 of our engineering services agreement, CMA Engineers reviewed materials supporting the development of a proposed building construction on Calef Highway.

Background

The proposed site plan was presented to the Barrington Planning Board by Jones & Beach Engineers, Inc., of Stratham, NH on behalf of Jeffrey Sullivan. The proposed building is accessed off Calef Highway across from Route 125 Fence. The proposed project includes construction of a 3,480 square foot building with a future proposed 3,000 square foot building. The development will be served by a private water supply well and an on-site septic system.

There are wetlands on site with proposed impacts to the wetland buffer. The proposed project includes a comprehensive stormwater management system. Components of the stormwater system include swales, closed drainage and overland flow, which directs all stormwater flow to a stormwater infiltration pond, with forebay, for treatment of all site generated stormwater runoff.

For this evaluation, we reviewed the following information that was provided to us:

- 1) Staff Report by the Town of Barrington Land Use Department from the April 5, 2022 Planning Board Meeting.
- 2) Plan set titled Commercial Site Plan "Rock Iron Repair", Tax Map 265 Lot 11 & 2, Calef Highway, Barrington NH. Prepared by Jones & Beach Engineers, Inc., Dated 3/15/22, and revised 5/2/22.
- 3) Drainage Analysis Erosion and Sediment Control Plan prepared by Jones and Beach Engineers, Inc. dated 3/9/22, and revised 5/2/22.
- 4) Response Letter - Staff Comments by Jones & Beach Engineers, Inc. dated May 6, 2022.

RECEIVED

24

4.9 Off-Street Parking and Loading Standards

- 4.9.7(1) Applicant should provide interior parking lot landscaping calculations to show conformance with the Ordinances.
- 4.9.7(5) Applicant should provide calculations to show that the perimeter shade trees requirement is met.
- 4.9.7(6) Applicant should provide calculations to show that screening standards are met.
- 4.9.11(1) Businesses that are used regularly at least five (5) days per week shall be graded and surfaced with asphalt, concrete, or other comparable surface; however, gravel surfaces are proposed. Has the applicant requested a waiver from this requirement? As noted in our Review of Drainage Analysis below, pavement area would significantly increase the Water Quality Volume (WQU) and associated size/volume of the proposed infiltration pond.
- 4.9.11(2) Applicant is proposing gravel parking and should describe how a reduction in dust and erosion will be achieved.
- 4.9.11(3) How will parking spaces on the gravel be demarcated?
- 4.9.11(4) The applicant should describe gravel surface maintenance.

4.10 Landscaping Design and Screening Standards

- 4.10 The proposed landscaping consists of 5 arborvitae between Calef Highway and the site. The applicant should describe how the proposed landscaping meets the intent of this section of the Ordinances. Additionally, see Section 4.9.7 comments above.

4.12 Outdoor Lighting Design Standards

- 4.12.2 The applicant should show conformance with the requirements of recommended site lighting levels. Also, both types of proposed light fixtures are available in a range of watts/lumens. What is being proposed?

4.14 Traffic Impact Analysis and Mitigation Standards

- 4.14 Applications creating 5,000 s.f. or more of non-residential floor space are required to provide a Short Traffic Impact Analysis. Please submit.

Review of Drainage Analysis

The proposed stormwater treatment system uses both closed and open flow to convey stormwater to an infiltration pond with sediment forebay. A slight increase in the 2-year post-development peak runoff rate is attributed to runoff downstream of the treatment devices. While all stormwater generated on the site is collected, only the currently proposed building and limited paved surface areas are being treated and included in the calculations for sizing the infiltration basin.

Additionally, the applicant is proposing extensive gravel surfaces for vehicular access, parking, and other purposes and is not including these gravel surfaces in the WQV calculations. Gravel surfaces have a CN of 96 and can reasonably be considered an impervious surface.

The sediment forebay sizing is based on the WQV of the building/paved surfaces, but it does not include the extensive gravel surfaces that flow to the sediment forebay. These gravel surfaces will send significant sediment to the stormwater treatment device and are not properly calculated in the WQV calculation to provide pre-treatment of the gravel surfaces. The sediment forebay sizing should be increased accordingly.

RECEIVED
24
LAND USE OFFICE