

March 28, 2024

Groton Planning Board  
c/o Mr. Takashi Tada  
Land Use Director/Town Planner  
Town of Groton  
173 Main Street  
Groton, MA 01450

RE: Nitsch Project #13346.28  
797 Boston Road  
Site Plan and Special  
Permit Review  
Groton, MA

Dear Planning Board Members:

Nitsch Engineering (Nitsch) has received and reviewed the following documents:

1. The Site Plan (the Plans) entitled "Site Plan for Proposed Age Restricted Housing Development, 797 Boston Road, Groton, MA" (18 sheets), dated February 16, 2024, and prepared by Howard Stein Hudson;
2. The Major Site Plan and Special Permits Applications, dated February 16, 2024, and prepared by Farrell & Robbins, P.C.;
3. The Architectural Plan Set, dated February 16, 2024, and prepared by The MZO GROUP;
4. The Architectural 3-D renderings, dated February 22, 2024, and prepared by The MZO GROUP; and
5. The Supplemental Data Report (Stormwater Report) for the Proposed Age Restrict Housing Development, 797 Boston Road, Groton, Massachusetts (52 sheets), dated February 16, 2024, and prepared by Howard Stein Hudson.

Nitsch has reviewed the Plans and supporting documents to determine conformance to the following:

1. "Zoning Bylaw", Chapter 218 from the Code of the Town of Groton, latest version; and
2. "Site Plan Review", Chapter 381, Part 5 from the Code of the Town of Groton, latest version.

Nitsch has also conducted a stormwater review of the project. Our comments on the stormwater design were provided under separate cover to the Earth Removal Stormwater Advisory Committee on March 18, 2024.

#### **WAIVERS REQUESTED BY THE APPLICANT**

The Applicant has not requested any waivers as part of their major site plan and special permits applications.

#### **ZONING BYLAW**

1. Section 218-6.2 states the maximum impervious coverage in the R-A district is 25%.

The Applicant should confirm the proposed impervious coverage of the property. Based on the information provided in the Stormwater Report, it appears the proposed impervious coverage exceeds the maximum allowed.

2. Section 218-9.3.B.(4)(b) states outdoor lighting fixtures shall be the cutoff type, mounted no higher than 15 feet, oriented and shielded to avoid glare on adjoining premises.

The Applicant should confirm all site lighting fixtures are cutoff type and the parking lot and driveway light pole heights are less than 15 feet.

3. Section 218-9.3.B.(4)(c) states to avoid traffic concern, any egress shall have at least 300 feet of visibility in each direction along state-numbered roads and at least 200 feet of visibility along other roads.

The Applicant should provide sight distances at driveways as required by this Section.

4. Section 218-9.3.B.(4)(f)[3] states the design of grading shall minimize the volume of earth cut and fill, in general with no cut or fill greater than five feet.

The Applicant should provide a cut and fill analysis to confirm the net amount of cut or fill proposed. The Plans appear to show no cuts or fills greater than five feet.

### **SITE PLAN REVIEW**

5. Section 381-39.B. states the site plan application shall contain an existing condition plan that indicates all existing site features, including property lines, easements, buildings, parking lots, utilities (above and below ground), conservancy (wetlands), and topography.

The Locus Map, Sheet C.3, includes some but not all this information. The Applicant should provide an existing condition plan meeting the requirements of this Section.

6. Section 381-39.E. states the site plan application shall contain zoning district boundary lines of the locus and all land within 200 feet of the parcel, including overlay districts.

The Applicant should update the Plans to show all zoning district boundary lines and overlay districts, including the Water Resources Protection District.

7. Section 381-39.M. states the site plan application shall contain information on the location, size, and type of loading, storage, and service areas.

The Applicant should provide information on how deliveries to the buildings will be made and where delivery and mail trucks will park.

8. Section 381-39.O. states the Planning Board may require an assessment of traffic impact and safety conditions performed by a professional traffic engineer. All plans shall indicate sight distances at proposed and existing driveway intersections within 200 feet of the site.

The Applicant provided trip generation calculations for the proposed development. Per the Institute of Transportation Engineers Trip Generation Manual, 11<sup>th</sup> Edition, Nitsch concurs with these calculations. Nitsch defers to the Planning Board if a traffic study is required. The Applicant should provide sight distances as required by this Section.

9. Section 381-40.B.(2) states access road/parking shall be 0.5 footcandle minimum (maintained) and 30.0 footcandles maximum.

The Plans indicate some sections of the driveways and parking lot have light levels less than the minimum allowed.

10. Section 381-40.B.(3) states walkway lighting shall be 1.0 footcandle minimum (maintained) and 30.0 footcandles maximum.  

The Plans indicate some sections of the walkways have light levels less than the minimum allowed.
11. Section 381-40.B.(4) states the plan shall indicate the light hours of operation, especially shut off times.  

The Plans should be updated to indicate site lighting hours of operation and shut off times.
12. Section 381-40.D.(5) states curbing shall be vertical granite at the access drive radii.  

The Plans should be updated to note vertical granite curb at the access drives and along public right-of-ways. The Plans currently call for sloped granite curb.
13. Section 381-40.D.(7) states curbing shall be placed at the edges of all surfaced areas and shall be vertical granite curb.  

The Plans should be updated to note vertical granite curb at the access drives and in the parking lot. The Plans currently call for sloped granite curb.
14. Section 381-40.D.(9)(b) states parking lot and access drive pavement shall consist of a 2-1/2 inch binder course and 1-1/2 inch top course.  

The Plans should be updated to note the required thickness for the parking lot and access drive asphalt binder course. The Plans currently call for 2 inches of asphalt binder course.
15. Section 381-40.D.(10) states all sidewalks shall be poured Portland cement concrete four inches in depth.  

The Plans should be updated to note concrete pavement for all sidewalk materials. The Plans currently call for asphalt pavement at sidewalks.
16. Section 381-40.E.(1) states service facilities such as dumpsters shall be screened around their perimeters.  

The Plans should be updated to include a detail for the dumpster pad and fence enclosure.

#### **GENERAL COMMENTS**

17. The Applicant may want to consider installing removable bollards at the ends of the porous pavement driveway, in addition to the already proposed signage, to prevent access to general vehicular traffic.
18. If sloped granite curb is used anywhere onsite, the detail should be updated to show finish grade at the top of the curb.

#### **RECOMMENDATIONS**

The Plans appear to conform to the Code, except as noted. The Applicant should revise and resubmit the applicable documents for review.

Groton Planning Board: Nitsch Project #13346.28  
March 28, 2024  
Page 4 of 4

If the Planning Board has any questions, please let us know.

Very truly yours,

**Nitsch Engineering, Inc.**



Rones Lubin  
Project Designer

RL/jeg

Approved by:



Jared E. Gentilucci, PE, CPESC, LEED AP BD+C  
Deputy Director of Civil Engineering