

January 22, 2024

Ms. Karen Sherman, Town Planner
Town of Holliston
703 Washington Street
Holliston, MA 01746

Re: Open Space Residential Development peer review response letter

Creative Land & Water Engineering, LLC (CLAWE) has received and reviewed the Engineering Peer Review Letter from CMG (the "Reviewer") dated November 28, 2023. This letter provides our responses. To facilitate the review, we will quote the Reviewer's comments first in *italics* and follow-up with our response in **red**.

CMG provides the following comments for Planning Board consideration:

Holliston Zoning By-Law (Section V-H Open Space Residential Development):

- 1. Section V-H 4.A (Minimum Requirements: Density) Applicant is proposing to modify the existing "Jasper Hill Road" right of way as a 30' wide Access, Egress, Utility and Drainage Easement. Additional supporting legal documentation should be provided to support the use of an easement versus creating a modified right of way to provide access to an OSRD development. Minimum right of way width for a Rural Residential Lane is 40 FT while the Applicant is proposing a 30 FT wide access "easement" across the Town of Holliston's municipal parking lot.*
Response: See Attorney's response to this by Fletcher Tilton PC.
- 2. Section V-H 4.A – The total number of lots for building purposes within the tract shown on the plan shall not be more than allowed by conventional zoning. It is not clear the proposed Four (4) Lot Conventional Subdivision Plan provided as Sheet 5 of 12 is compliant with Town of Holliston Planning Board Rules and Regulations.*
Response: See Attorney's response to this by Fletcher Tilton PC.
- 3. Section V-H 6.A 1) - Applicant did not provide a traffic study or evaluation of the existing versus proposed municipal parking lot capacity to determine if unreasonable traffic congestion or unsafe conditions may result from the development.*
Response: See Attorney's response to this by Fletcher Tilton PC.
- 4. Section V-H 6.A 2) - Applicant should verify with the Fire Department what size vehicle will need to access the cul-de-sac and provide a truck turning diagram to verify there is adequate pavement width for the required design vehicle. The proposed cul-de-sac turnaround proposes a large island in the middle with retaining walls and is not dimensioned and the type of pavement edging / curbing is not identified on the plan.*
Response: See Attorney's response to this by Fletcher Tilton PC.

The Fire Department has not provided us the exact model of the fire apparatus that will be used to access to the site. Per the Fire Department Website, the largest fire truck that the Holliston Fire Department uses is a 2011 Pierce Mid-Mount Ladder. Through online research, we were able to verify that similar models to this specific truck are approximately 44-ft long.

The proposed cul-de-sac road will be 20-ft wide and will have a 64-ft diameter circular island in the middle where stormwater basin D2 will be located. The cul-de-sac inside turning radius is 32 ft and outside turning radius is 52, which will satisfy the truck turning 27 ft and 47 turning need for inside and outside radia, respectively. See Engineering response for details.

5. *Section V-H 6.A 2) - Slope transition from cul-de-sac to common driveway doesn't look feasible for emergency vehicle access as it goes from 1.83% to 12 %. Additionally, common driveway grades are fairly steep and range from 12% - 15% slope.*

Response: The NFPA (National Fire Protection Association) recommends that the angle of approach and departure should not exceed 8° or 14%. Per our research, similar models of the fire truck as the one used in the Town of Holliston also require that the angle of approach and departure should not exceed 8° or 14%. Our current design approach and departure angle is at 4.8° or 8.4% (12%-3.6%) and meets the minimum requirements per NFPA and for other similar fire trucks.

6. *Section V-H 7.B – Open space only provides a 10 FT buffer strip along the southern property boundary where no less than 15 FT is required.*

Response: See Attorney's response to this by Fletcher Tilton PC.

7. *Section V-H 8.B (Common Open Space Ownership and Management) Application should address how the open space shall be available for use by the general public. No public parking is shown.*

Response: See Attorney's response to this by Fletcher Tilton PC.

Holliston Planning Board Subdivision Rules and Regulations (Article IV Section 4.3):

8. *Section 4.3.1 d & e – Existing Conditions plan is not provided at a suitable scale (1"=40'), is combined with a Watershed Plan, and does not provide all of the information required (i.e. lot size, property line bearing and distances, existing limits of Jasper Hill Road right of way, easements etc.).*

Response: See Attorney's response to this by Fletcher Tilton PC.

9. *Section 4.3.1 k – Locations of all existing trees within all proposed right of ways that area at least fourteen inches (14") in diameter at breast height are not provided.*

Response: Trees of 14" or larger are added to the proposed tree plan in the right of way area.

10. *Section 4.3.1 m – Building set back lines for all lots are not provided.*

Response: The Zoning building setbacks for AR-B Open Space subdivision is provided on Sheets 2 and 4. The house locations meet all the requirements. For a better and convenience of reference, sheet 8 is updated to have the building envelope and setback lines for each lot. A summary zoning compliance table is added to Sheets 1 and 8.

11. *Section 4.3.1 p – A combined Plan & Profile of the proposed street is not provided.*

Response: We have provided a combined Plan and Profile of Jasper Hill Rd and one of the common driveway on Sheets 11 and 12, respectively.

12. *Section 4.3.1 q – Existing centerline profile and stationing of Jasper Hill Road for 100 ft. in each direction from where it intersects Washington Street is not provided.*

Response: See Attorney's response to this by Fletcher Tilton PC.

13. *Section 4.3.1 s – Site's location with a "Groundwater Protection District Zone III" should be noted on the plan set.*

Response: The entire project site is located in Zone III to Town's water supply wells. A note is added to the existing condition plan as: The project site is located in a Zone III to the Town of Holliston's water supply wells according to the plan entitled "Zone II and Zone III Delineation" dated March 1996." This does not change any design features of the project.

14. *Section 4.3.1 t – Proposed water supply system layout and details are not provided*

Response: The subdivision will be serviced by public water, onsite septic system, electric heat pump heating. In addition to the drainage plan, a separate utility plan is added to include water system layout, electricity line, conceptual septic locations. Details are updated in the detail sheet for water supply. The septic system final design and approval will be dealt with Holliston Board of Health. Soil evaluation for each lot has been done and witnessed by the BOH.

15. *Section 4.3.1 u – Locus map scale is not provided consistent with this section.*

Response: A scale is added to the Locus plan.

16. *Section 4.3.1 v – Detail drawings of proposed construction features including roadway cross sections, utility and drainage details, etc. are not provided.*
Response: Drainage details are shown in the plan sheet 14. The sheet is updated to include water supply system details of typical structures and a roadway cross section.
17. *Section 4.3.1. w – Location of proposed landscaping along with planting details is not provided.*
Response: See Attorney's response to this by Fletcher Tilton PC.
18. *Sections 4.3.2 – Subsurface soil data for road construction across the Town of Holliston municipal parking lot is not provided as specified.*
Response: See Attorney's response to this by Fletcher Tilton PC.
19. *4.3.3.1 – CMG recommends the Planning Board consider this project provides "good cause" for requiring a Traffic Impact Assessment given the proposed right-of-way access through the existing municipal parking lot area.*
Response: See Attorney's response to this by Fletcher Tilton PC.
20. *Section 4.3.4.1 – Typical Street cross-section is not provided.*
Response: The typical street cross section is added to the detail sheet 14.
21. *Section 4.3.4.3 – List of waivers from strict compliance with the Rules and Regulations is not provided.*
Response: See Attorney's response to this by Fletcher Tilton PC.

General Engineering Completeness & Technical Adequacy

22. *Engineering design plans are at a 1" = 50' scale and the text size provided does not allow for details to be shown clearly and adequately. CMG recommends the engineering plans be provided at a 1" = 40' scale and use a minimum standard text size of 0.10 in.*
Response: Request for waiver on this for better view of the overall site condition.
23. *Applicant is proposing to tie both the proposed OSRD development and Jasper Hill Road drainage system into the existing 12" PVC drain pipe located adjacent to the Town Hall. However, no evaluation of the Town's existing drainage system to accommodate the additional runoff is provided.*
Response: The runoff under the existing condition is going to Washington Street through the catch basin in Jasper hill. The project design will reduce the runoff. Therefore, it will have no negative impact on the existing drainage system.
24. *Application does not include soil testing for the stormwater basins proposed on Town property.*
Response: See response to Item 18.
25. *Application does not provide a Rational Method pipe size and capacity analysis for the existing and proposed drainage piping for the 25-year storm events.*
Response: The Rational method calculation sheet is provided. The road drainage system will handle more than 25-yr storm flow. The proposed condition will have less discharge to the existing manhole than the existing condition.
26. *CMG recommends evaluation of the existing and proposed municipal parking layout to determine if the proposed improvements are adequate to address the needs of the Town Hall staff and visitors in addition to ADA and AAB handicap accessibility requirements.*
Response: See Attorney's response to this by Fletcher Tilton PC.

Sincerely,
Creative Land & Water Engineering, LLC and Applewood Survey Co., LLC

By



Desheng Wang, Ph.D., P.E.
Civil/Environmental Engineer
Certified Wetland Scientist
Certified Soil Evaluator

A blue ink signature that appears to read "Francis Alves".

Francis Alves, E.I.T.
Civil/Environmental Engineer

A blue ink signature that appears to read "Terry Ryan".

Terry Ryan, PLS
Applewood Survey Co., LLC

CC: Jasper Hill Realty Trust LLC, 340 Winter Street, Framingham, MA 01702
Peter Barbieri

