Environmental Services



Engineering Services

October 06, 2020

Mr. John Love Chairman – Zoning Board of Appeals Town of Holliston 703 Washington Street Holliston, MA 01746

# Re: Civil Engineering Peer Review #3 "Geoffrey Park" 40B Comprehensive Permit Project Indian Ridge Road South Holliston MA CMG ID 2020-131

Dear Mr. Love,

CMG is providing this letter report detailing our engineering peer review of the plans and stormwater report revisions to the proposed "Geoffrey Park" Site Development Plan of Land, a 40B Comprehensive Permit Project located at 0 Indian Ridge Road in Holliston, MA (the "Site"). The project is located on a 12.67 +/- Acre parcel within an "Agricultural Residence B" zoning district.

The Applicant proposes to construct a 24 Unit single family home residential development with 8 homes under MGL Chapter 40B for affordable housing. The proposed project driveway access requires crossing an existing intermittent stream and a portion of the project is within the 100-FT buffer zone of a bordering vegetated wetlands.

CMG is in receipt of the following documents as of Tuesday September 22, 2020:

- "Site Development Plan of Land A 40B Comprehensive Permit Project "Geoffrey Park" Holliston, Massachusetts" prepared by GLM Engineering Consultants, Inc., date 2/29/20, revise date 5/14/20, revise date September 16, 2020.
- "Stormwater Management Report Off Indian Ridge Road South Holliston MA" prepared by GLM Engineering Consultants, Inc., date 5/14/20, revise date September 16, 2020.
- GLM Engineering Consultants, Inc. Comment Response Letter, date September 16, 2020.

CMG is providing the following list of remaining comments and "conditions of approval" recommendations based on review of the above 9/16/20 plan revisions for consideration by the Holliston Zoning Board of Appeals (ZBA):

67 Hall Road Sturbridge, MA 01566 Phone (774) 241-0901 Fax (774) 241-0906

## **General Comments**

 List of Exceptions – in accordance with the Chapter 40B process, the Applicant is to submit a detailed list of exceptions to the regulations. The "Preliminary Request for Waivers" date March 11, 2020 only provides a summary of the overall local regulations and not specific waivers detailing specific Article & Section numbers. CMG recommends the Applicant provide a detailed list of waivers from local zoning and subdivision regulations. The list will provide CMG and the Board with an understanding to the degree of compliance planned for this project.

GLM Response: Waiver List to be provided to the Board.

## CMG Comment #3: Comment remains

2. Architectural Style - Two (2) examples of single family architectural building style and floor plans are provided. However, only one single story cape style Design 152596 appears to be shown on the plans. Design 152641 is not shown.

GLM Response: Architectural plans to be provided by the Applicant.

### CMG Comment #3: Comment remains

3. Two-family duplex homes are proposed on Lot 14 and 15. It is unclear if these homes will also have garages. CMG recommends architectural floor plans and elevations be provided for these units for review by the Board. Our experience is this information is necessary for the Board to judge the project.

GLM Response: Architectural plans to be provided by the Applicant.

### CMG Comment #3: Comment remains

4. Environmental Resource Area – The plans do not reference the date of the wetland flagging but only the company, Applied Ecological Sciences, which performed the delineation. In addition the project proposes an intermittent stream crossing at the entrance to the project.

Determination of the environmental resource areas and their site planning implications are regulated through the Conservation Commission through the Wetlands Protection Act, among other regulations, which is not exempted by the 40B process. Wetlands delineations are typically only valid for three years. Therefore, the Board should consider requesting additional information relating to the wetland flagging to insure the environmental resource areas are adequately defined.

*GLM Response: A Notice of Intent has been filed with the Holliston Conservation Commission for review of the wetland resource area impacts.* 

## CMG Comment #3: Recommended Condition of Approval

CMG recommends the Board consider requiring submittal of a valid "Order of Conditions" for the project prior to construction as a Condition of Approval.

5. Sanitary Disposal – The project proposes a shared septic system for the 24 unit housing project. All houses will have individual septic tanks piped to a common gravity sewer system. The gravity sewer system will drain to a 10,000 gallon holding tank with sewer pumping station located adjacent to Lot 2 on the lower portion of the Site. Sanitary sewage will be pumped via a subsurface force main to a shared soil absorption field located in the northwest corner of the Site.

The current plan set does not provide estimated sewage flow rates or preliminary design data. CMG believes the proposed septic system design will be regulated under State Title V regulations by MassDEP due to the size of the development. CMG recommends the Applicant provide additional information relative to the on-site feasibility of the area proposed for the shared soil absorption system and proposed sewer pump station.

*GLM Response: The sewage disposal system will be completed and submitted to the Board of Health for review and approval. .* 

*GLM Response #2 (9/16/20): Board of Health approval will be obtained prior to construction.* 

# CMG Comment #3: Recommended Condition of Approval.

CMG recommends the ZBA consider requiring submittal of an approved "Subsurface Sewage Disposal Plan" and Board of Health Approval for the project prior to construction as a Condition of Approval.

6. Additional topographic information is needed on the adjacent property at 10 Indian Ridge Road to determine if there are potential issues relating to the proposed soil absorption system grading and required breakout distances.

*GLM Response: The sewage disposal system design will address all grading related to the leaching field.* 

*GLM Respone #2 (9/16/20): Board of Health approval will be obtained prior to construction.* 

# CMG Comment #3: Recommended Condition of Approval (See Comment 5.)

7. Roadway Geometry – The roadway is proposed as a 20-foot pavement width within a 50 ft right of way. The proposed roadway cross section is consistent with the Town of Holliston's design standards for a "local residential" roadway. The proposed project will further extend the length of the existing Indian Ridge Road South dead-end. Recommend the Applicant include this in the request for waivers.

GLM Response: Waiver requested for length of cul-de-sac.

GLM Response #2 (9/16/20): Waiver requested for length of the cul-de-sac.

CMG Comment #3: Comment remains. A comprehensive project waiver list should be submitted for review and approval by the ZBA (See Comment 1.)

9. Applicant's engineer should review road, sidewalk, crosswalk, and proposed handicap ramp layout and grading for conformance with ADA / AAB regulations. Handicap ramp details are not provided and additional detail should be provided regarding the crosswalk between ramps at approximate STA. 6+50.

GLM Response: Revised See Sheet 7 & 16. HC Ramp with crosswalk shown.

GLM Response #2 (9/16/20): HC Details will be provided on final construction plans

# CMG Comment #3: Recommended Condition of Approval

Applicants Engineer will need to provide detailed grading and handicap ramp and crosswalk details as part of the final construction plans to verify full compliance with applicable ADA / AAB regulations.

11. There is no roadway lighting proposed for the project. CMG recommends the Applicant's Engineer consider some level of lighting, especially on the sidewalk side of the road for pedestrian safety.

GLM Response: Street lights may be provided, the location shall be discussed with the ZBA.

GLM Response #2 (9/16/20): Street lights may be provided, the location shall be discussed with the ZBA

CMG Comment #3: Recommended Condition of Approval.

CMG recommends the ZBA consider requiring submittal of a lighting plan and photometrics as part of the final construction plans based on discussions with the Applicant.

12. There is no Landscaping Plan or Details provided. CMG recommends the Applicant's Engineer provide some form of landscape design plan showing street tree locations and typical residential unit planting schematic.

GLM Response: Revised Street trees shown, See Sheet 7 & 16.

GLM Response #2 (9/16/20): Generally landscape plans for individual lots are not provided for a subdivision.

CMG Comment #3: Recommended Condition of Approval.

CMG defers to the ZBA for further discussion of whether to require a landscape planting plan and details as part of the final construction plans specifying the types of trees and typical residential unit planting schematic as this project is a planned 40B development project and not a definitive subdivision project.

13. A "dog park" and "passive recreation amenities" are mentioned in the Comprehensive Permit Application materials, however, it doesn't appear these areas are shown on the current plan.

GLM Response: This shall be clarified by the Applicant.

GLM Response #2 (9/16/20): Comment Remains.

CMG Comment #3: Comment remains.

### **Engineering Technical Review Comments**

14. CMG recommends a summary table be provided on the Title Sheet tabulating building, parking, walks, roadway, total wetlands, wetland disturbance, wetland replication, remaining open space areas. The table should also include a summary of the 40B housing unit breakdown (25% affordable, and at least 5% fully accessible in accordance with ADA).

GLM Response: Provide project summary See Sheet 1.

*GLM Response #2 (9/16/20): Location of affordable units is not provide at this time in the process. The affordable units are distributed throughout the Site.* 

CMG Comment #3: Comment partially addressed. CMG notes the percentage and number of affordable units should be shown on the Project Summary on Sheet 1.

20. Applicant should provide the Board with confirmation from the Town of Holliston Water Department that there will be adequate pressure and volume for the proposed project.

GLM Response: The applicant is working with the DPW.

GLM Response#2 (9/16/20): The applicant is working with the DPW.

CMG Comment #3: CMG recommends correspondence be provided from the Holliston DPW to the ZBA relating to the water service status for the project.

25. Plan should quantify proposed number of individual residential unit parking and guest parking areas. It is unclear if two-family units will have garages.

GLM Response: All units will have garages. Each home can accommodate a minimum of 4 vehicles.

*GLM Response #2: Generally a parking table is not provided for a subdivision. Each dwelling can accommodate a minimum of 4 vehicles.* 

CMG Comment #3: Recommended Condition of Approval.

CMG recommends a note be provided on the plan set noting each lot will provide a minimum parking for 4 vehicles per lot as this is a 40B Development.

34. The proposed roadway intersection STA 5+00 / STA 16+47 slope exceeds 2% for greater than 150 ft. in all directions. Applicant's Engineer should explore alternatives to the 4 % plus slopes shown or provide supporting information the proposed intersection grades will provide safe stopping and sight distances within the development.

GLM Response: Waiver requested. Traffic consultant may provide additional information.

GLM Response #2 (9/16/20): See Traffic Engineer Response

# CMG Comment #2: Comment Remains. See Vanasse & Associates, Inc. 9/29/20 Traffic Engineering Peer Review Letter.

35. Roadway profile exceeds 8% grade between STA 13+0 & 15+00. Applicant's engineer should evaluate whether this can be adjusted to provide a less steep approach to the intersection.

GLM Response: Waiver requested. Traffic consultant may provide additional information.

GLM Response #2 (9/16/20): See Traffic Engineer Response

CMG Comment #2: Comment Remains. See Vanasse & Associates, Inc. 9/29/20 Traffic Engineering Peer Review Letter.

41. Wetland crossing cross section and retaining wall details are not provided.

GLM Response: Revised See Sheet 16.

CMG Comment #2: CMG recommends a steel guard rail and fencing be provided along the top of the retaining wall for the entire length of the retaining wall and for side slopes greater than 3:1.

GLM Response #2 (9/16/20: Revised see Sheet 7 of 17.

CMG Comment #3: Cross Section Details sheet 13 & 17 should also show steel guard rail meeting AASHTO safety standards and minimum 4 ft. height fencing along top of retaining wall.

42. CMG believes MassDEP will require the proposed intermittent stream crossing meet the State of Massachusetts Stream Crossing Standards based on our recent experience with similar projects. This will most likely require a three sided culvert design instead of the 18" culvert shown. Applicant's Engineer should explore this option and revise the plans accordingly.

*GLM Response: A Notice of Intent has been filed with the conservation commission for review and approval.* 

*GLM Response #2 (9/16/20): A Notice of Intent has been filed with the conservation commission for review and approval.* 

CMG Comment #3: Recommended Condition of Approval

CMG recommends the ZBA consider requiring submittal of a valid "Order of Conditions" for the project prior to construction as a Condition of Approval.

#### **Stormwater Management Design Comments**

71. The Site is > 1 Acre therefore an NPDES SWPPP is required to be submitted prior to construction. CMG recommends the Zoning Board of Appeals make this a condition of approval.

GLM Response: Agreeable to condition of approval.

## CMG Comment #3: Recommended Condition of Approval

CMG recommends the ZBA consider requiring the submittal of NPDES CGP E-NOI Registration verification and NPDES - Stormwater Pollution Prevention Plan (SWPPP) prior to construction.

81. An Illicit Discharge Statement is provided, however, not signed by the property owner. CMG recommends the ZBA require a signed copy be provided as a condition of approval.

CMG Comment #2: Recommended Condition of Approval

CMG recommends the ZBA consider requiring the submittal of a signed Illicit Discharge Compliance Statement along with the Final Long Term Stormwater System Operation and Maintenance Plan prior to construction.

Please contact me if you have any questions or need additional information at (508) 864-6802.

Sincerely, CMG Environmental, Inc.

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David T. Faist, PE Principal Engineer – Engineering Services

cc. Karen Sherman, Holliston Town Planner