RECEIVED

Civil Engineering



January 18, 2023

Franklin Zoning Board of Appeals Bruce Hunchard, Chair 355 East Central Street Franklin, MA 02038

RECEIVED TOWN OF FRANKLIN

Subject: 237 Pleasant Street – Comprehensive Permit

JAN 2 0 2023

Dear Mr. Chairman:

ZONING BOARD OF APPEALS

Hancock Associates has been retained by your Board to perform a civil engineering technical review of the 237 Pleasant Street Comprehensive Permit. Hancock Associates has reviewed the Comprehensive Permit submission and offer the following second peer review as further guidance to the Board.

New Documents Reviewed

- 1. Revised Site Plan prepared by Langan Engineering and Environmental Services, Inc. revised 1-11-23, containing 21 sheets, signed and stamped by Frank Homes PE
- 2. Cover letter from the Community Builders to the Franklin Zoning Board of Appeals dated 1-12-23.
- 3. Letter from Langan to the Community Builders dated 1-11-23 responding to prior
- 4. Deferred Parking Figure (for the church) prepared by Langan dated 1-11-23.
- 5. Traffic Impact Assessment prepared by Langan dated January 2023 stamped by John D. Plante, P.E.
- 6. Stormwater Management Report prepared by Langan dated 11-23-22.
- 7. Updated Project Narrative received 12-14-22.
- 8. Preliminary Geotechnical Report prepared by Langan dated 8-10-22.
- 9. Information regarding the load capacity for the proposed grass pavers Truegrid Fox Blocks.

Prior Documents Reviewed

- 1. Application dated 9-22-22 signed by Kathleen A. McAdams
- 2. Site Plan prepared by Langan Engineering and Environmental Services, Inc. dated 9-10-22, containing 20 sheets, signed and stamped by Frank Homes PE
- 3. Narrative Description prepared by Attorney Peter L. Freeman 10-4-22.
- 4. Survey Narrative prepared by Frank Homes, PE Langan dated 10-10-22.
- 5. Rendering of Proposed Project prepared for The Community Builders, undated.

DANVERS OFFICE 185 Centre Street Danvers, MA 01923 Phone: (978) 777-3050 Fax: (978) 774-7816

MARLBOROUGH OFFICE 315 Elm Street Marlborough, MA 01752 Phone: (508) 460-1111 Fax: (508) 460-1121

CHELMSFORD OFFICE 34 Chelmsford Street Chelmsford, MA 01824 Phone: (978) 244-0110 Fax: (978) 244-1133



- 6. Architectural Plans prepared by DBVW Architects, Inc. dated 9-9-22, containing 68 sheets.
- 7. Building Tabulation, undated.
- 8. Subdivision Plan prepared by Langan Engineering and Environmental Services, Inc. dated 10-3-22
- 9. Project Eligibility Letter from Massachusetts Department of Housing and Community Development dated 9-15-22.
- 10. Deed recorded 12-1-1964 at Norfolk Country Registry of Deeds Book 4216, Page 584 from William H. Golding to St. John's Episcopal Church of Franklin, describing a 15-acre parcel.
- 11. Requested Waiver List
- 12. Impact Statement
- 13. Traffic Assessment dated 7-29-22, prepared by Langan Engineering and Environmental Services, Inc.
- 14. Statement of Local Need
- 15. Certified Abutters List
- 16. Franklin Zoning By-Law Chapter 185
- 17. Franklin Housing Production Plan April 2022.
- 18. Franklin Zoning Board of Appeals Comprehensive Permit Rules March 31, 2005.
- 19. Franklin Subdivision Regulations Chapter 300
- 20. Franklin Public Way Access Permit Regulation Chapter 131
- 21. Franklin Stormwater Regulations Chapter 153
- 22. Franklin Sidewalk and Street Regulations Chapter 155
- 23. Franklin Water Regulations (Town Council) Chapter 179
- 24. Franklin Water Regulations (Board of Health) Chapter 263

Initial Review of Submission

760 CMR 56.05 contains the required elements of a submission of a Comprehensive Permit to the Zoning Board of Appeals. The following is a review of the submission with regard to our civil review of these requirements:

- Preliminary site development plans with the locations and outlines of proposed buildings; the proposed locations, general dimensions, and materials for streets, drives, parking areas, walks and other paved areas; and proposed landscaping improvements. Any project of five or more units must have a site plan stamped by a registered professional architect or engineer.
 - The applicant has satisfied this requirement. A Plan set has been submitted prepared by Langan dated 9-10-22 and revised 1-11-23.
- An existing condition report on the proposed site and the surrounding areas.

 The applicant has complied with this requirement. An existing condition plan is part of the site plan prepared by Langan, signed and sealed by Ian A.

 Wisuri, PLS, dated 5-26-21 was part of the site plan set.



- Tabulation of proposed buildings by type, size, and footprint, impervious coverage, and open space, including percentage of tract to be occupied by buildings, parking and paved vehicular areas.
 - The applicant has submitted tabulations for the buildings in separate documents from the architect and on the civil plans.
- A preliminary subdivision plan if the project involves a subdivision.

 A Subdivision Plan has been submitted prepared by Langan, dated 10-3-22.

 The plan should be revised noting Approval Under the Subdivision Control Law Not Required. Additionally, zoning information should be added to the plan indicating Lot 1 to be fully compliant with zoning and Lot 2 zoning waivers required.
- A preliminary utilities plan (water, wastewater, drainage, and storm water management facilities).
 - The applicant has satisfied this requirement within the Lagan plan set referenced above.

Technical Review

Hancock has reviewed the **revised** plans and supporting documentation for soundness of methodology and calculations and conformity to standard engineering practice. We have also reviewed conformity to or deviation from by-laws, regulations and bylaws as they apply to issues of on-site engineering including grading, stormwater management, sewage and site traffic circulation. Lastly, we looked at off-site impacts. The review is all done within the context of the regulation's call for only the submission of preliminary plans. Our goal is to give the Board comfort that ultimately the project can be built in a manner that will protect the general public and future residents and visitors to the site through review, requests for additional information and suggestion of certain conditions of approval that will aid in meeting that goal.

Zoning Compliance

The project is proposed on a proposed 15.13-acre lot subdivided from an overall 19.46-acre parcel owned by St. John's Episcopal Church of Franklin.

Comment Z1: The Project Narrative describes the project as being on the full 19.5-acre parcel. The Applicant should clarify that the project and the Comprehensive Permit is only being proposed on the proposed 15.13-acre Lot 2.

Response: The Applicant has stated the survey found more area within the property boundary than the deed reports. <u>Issue resolved</u>.

Comment Z2: The deed for the property describes a 15-acre parcel. The Applicant should clarify the discrepancy between the deed and subdivision plan.

Response: The Applicant has stated the survey found more area within the property boundary than the deed reports. <u>Issue resolved</u>.



Comment Z3: The existing parking for St. John's church appears to contain 53 spaces. The proposal reconfigures the parking lot to have 53 spaces. The Zoning Bylaw requires one space per 2.5 fixed seats. The Applicant should provide information regarding the seating capacity of the church as the subdivision impacts the availability of area for future parking for the church if needed.

Response: A parking figure has been submitted demonstrating compliant parking could be developed within the remaining land left to the church. <u>Issue resolved</u>.

Comment **Z4:** The Zoning Bylaw requires that entrance or exit center lines shall not fall within 50 feet of an intersection of street side lines. The Applicant should specify the offset distance between the proposed entrance and Padden Road.

Response: A dimension has been added to the plan to show the 68-foot distance between the centerline of the proposed main entrance of the development and the street sideline of Padden Road. See Drawing No. CS100. <u>Issue resolved</u>.

Comment Z5: The list of waivers appears to be a complete and thorough list of waivers from Zoning and applicable General Bylaws. The Applicant has included waivers from Franklin Subdivision Rules and Regulations. The project does not appear to propose a roadway and therefore requesting waivers from subdivision regulations seems unnecessary. Access to the project site is via a proposed driveway, not a roadway. The access driveway would not ever be considered for acceptance as a public way. The waivers include from the zoning requirement that parking areas for five or more cars shall not require backing onto a public way. This waiver is also not necessary.

Response: No further comment required.

Site Layout

The project proposes to reconfigure the church parking lot eliminating looped access to Pleasant Street from the church parking lot and providing a new access drive to the main development to the rear of the church on the new lot. Emergency access is proposed between the church lot and the new development parking lot.

Comment SL1:

The emergency access between the church and the new development parking lot is proposed as stabilized grass. No gate is proposed. It is important to note the Nation Fire Protection Association (NFPA) guidelines recommend secondary access to residential projects having 100 units or more. Similarly, a stabilized grassed drive provides emergency access to the rear of Buildings 6 and 7 and at the end of the parking between Buildings 3 and 5. The plans call for the use of the Truegrid Permeable Paving System for these areas. The Applicant should provide additional data for this product and its suitability to support emergency vehicle loading include the use of fire aerial ladder truck stabilizers. The Board should then seek input from the Fire Department as to the adequacy of these access areas.



Response: The Applicant has presented data demonstrating H-20 loading capacity of the reinforced turf system. The Board should seek review and input from the Franklin Fire Department. Issue open.

Comment SL2: The proposal calls for the elimination of the second access to the church parking lot and reconfiguration of the parking. The existing and proposed parking lots contain 53 spaces. The Applicant should comment on the number of spaces required based on the seating capacity of the church. Franklin Zoning requires 1 space per 2.5 fixed seats for places of assembly. The project eliminates possibility of significant parking expansion and should therefore be considered by the Board.

Response: A parking figure has been submitted demonstrating compliant parking could be developed within the remaining land left to the church. Issue resolved.

Comment SL3: The project proposes an accessible sidewalk from Pleasant Street to the clubhouse building (Building 1) with a series of ramps with handrails. The sidewalk system continues through the center of the site between Buildings 2, 3, 4 and 5 back to Buildings 6 and 7 utilizing stairs. An alternative accessible route is provided around Buildings 2 and 4 utilizing ramps with rails. The Applicant should verify compliance with accessibility regulations in not providing accessibility on the central pedestrian route.

Response: The Applicant believes the configuration complies with the applicable requirements for accessibility. The Board can defer this issue to the Building Inspector as a matter of state code compliance and beyond the prevue of the Comprehensive Permit.

Comment SL4: A 9' x 15' dumpster enclosure area is proposed at the far southwest corner of the project site adjacent to Building 6. The Applicant should clarify general approach to trash removal, if the area is adequately sized, will contain a compactor, include provisions for recycling and accommodate ADA accessibility.

Response: The grading around the four dumpster locations has been updated to accommodate ADA accessibility, with slopes no greater than 2% in ant direction. Additional pavement striping has been provided at locations where pedestrians must walk on the street. To access the eastern dumpster, the sidewalk has been extended and a crosswalk added. To access the dumpster to the south of Building 1, the sidewalk has been extended to allow access to the front of the dumpster enclosure. See Drawings Nos. CS100 and CG100. Issue resolved.

Comment SL5: The project proposes 1.5 parking spaces per unit. The project proposes seven three bedroom and thirty-seven (37) two-bedroom units of the sixty-four (64) total units proposed. Franklin Zoning Bylaw requires two spaces per dwelling unit. The Applicant should provide additional support for the reduced parking. The project's deeper affordability may justify the reduced parking. The Applicant should provide examples of existing projects with similar unit mix and affordability with similar parking ratios. Alternatively, the Applicant should propose a land banked area for parking that could be built in the event parking is found to be insufficient.



Response: The Applicant has presented a Parking Demand Analysis within the Traffic Impact Assessment reporting parking rates for the given use per the Institute for Transportation Engineers Parking Generation Manual 5th Edition. The demand reports 0.99 spaces per unit. Issue resolved.

Comment SL6: Given the steep grades adjacent to many of the driveways, the Applicant should consider adding guard rails and fencing to protect vehicle and pedestrians.

Response: A guardrail has been added to the driveway on the southwestern portion of the site. Issue resolved.

Site Grading

Comment G1: The access drive intersection of Pleasant Street does not provide a leveling area. As outlined in the requested waiver from subdivision regulations, on any street where the grade exceeds 6.0% on the approach to an intersection, a leveling area with a slope of not more than 3.0% shall be provided for a distance of not less than 100 feet, measured from the nearest exterior line of the intersecting street. As discussed above, the subdivision regulations are not applicable to the project but do provide guidance on how Franklin defines a safe intersection. The Applicant should comment on the safety of the proposed 8% access driveway intersecting Pleasant Street with no leveling area.

Response: The Applicant has provided a 40-foot leveling area. Seeing that the driveway is sloped away from the street, the Applicant argues the 40 feet provides sufficient area to not impair sight distance visibility and there is no concern with cars sliding into the street in icy conditions. Hancock accepts this argument. <u>Issue resolved</u>.

Comment G2: The project includes a great deal of earthwork. The Applicant should provide the Board with an estimated quantity of total earthwork as well as import and/or export anticipated and need for waivers from Franklin Earth Removal requirements (185-23).

Response: It the Applicant's intent to design the site to be balanced from an earthwork perspective. They estimate that there will be about 17,000 cubic yards of cut to fill for the project. As the project proceeds into construction documents, those volumes will be confirmed and if necessary approval required by Franklin's Earth Removal by-law will be obtained. Issue resolved.

Comment G3: No soil testing information was provided. The project impact on, and measures to deal with groundwater should be addressed.

Response: The Applicant has submitted a Preliminary Geotechnical Report. Hancock has reviewed the information and finds it acceptable. The test pits do not make any mention of redoximorphic features observed. One of the test pit photos shows water in the bottom of the pit, however none of the eight pits seem to have encountered water. Additional clarification is required.



Comment G3: The Wetland Buffer Zone should be added to the Grading and Drainage Plan. No waiver has been requested from the Franklin Wetlands Bylaw or Wetland Regulations. The 100-foot buffer zone has a presumption of significance and is considered a resource area under the bylaw. The Board must consider the provisions of the bylaw and regulations in considering issuance of the Comprehensive Permit. The Applicant should provide information regarding the quantity and proximity of buffer zone impact as defined in the regulations.

Response: The Wetland Buffer Zone is shown on the plans and has been revised to make it clearer. No work within the 100-foot buffer zone. <u>Issue resolved</u>.

Utilities

The project proposes connection to the municipal sewer and water systems in Pleasant Street. A small extension of the gravity sewer will be required for the connection of a proposed on site pump station and force main. A proposed water main is shown on the Utility Plan from Pleasant Street into the site along the access drive and between the buildings to the rear of the site. The water main dead ends between Buildings 6 and 7.

Comment U1: The Applicant should provide sewer design flow and water demand and comment on the capacities of the municipal systems to service the project included available information from flow tests performed proximate to the site.

Response: The Applicant estimates the total average demand to be approximately 6,325 gallons per day (50% of Title 5 estimated flow). The Applicant commits to continue to coordinate with town's Department of Public Works with respect to water demand and sewer flow and confirming capacity of the town's municipal systems. <u>Issue remains open.</u>

Comment U2: No municipal water main is shown in Pleasant Street. The Applicant should rectify this omission on the plans.

Response: Based on record information, there is a 10" municipal water main in Franklin Street. The plans have been revised. The Board should continue to seek input from the Franklin Water Department. <u>Issue remains open.</u>

Comment U3: The Board should seek input from the Franklin Fire Department with regard to the proposed locations of site fire hydrants.

Response: The Applicant has stated the Fire Department has reviewed and commented on fire hydrant locations. The Board should seek formal input from the Fire Department with regard to their review. <u>Issue remains open.</u>

Stormwater

The proposed stormwater system includes multiple proposed catch basins throughout the site to collect runoff and a pipe network connected to two detention/infiltration basins located to the rear of the site. In some respects, the design appears highly developed with elevation data provided for the piped system. No stormwater report was included in the submission. The site is within a Zone II Wellhead Protection Area related to public wells in Norfolk.



Comment S1: The Applicant should provide a preliminary stormwater report outlining how the project complies with MassDEP Stormwater requirements. Additionally, the Applicant has only requested a waiver from the provision of the Franklin Stormwater Regulations requiring DPW Director approval. A waiver from the performance standards has not been requested. The local standards required removal of 90% of the average annual load of total suspended solids (TSS) generated from the total post-construction impervious area on the site and 60% of the average annual load of total phosphorus (TP) generated from the total post-construction impervious surface area on the site. The Applicant should provide information as to how the project will meet these standards. Hancock will provide additional review and commentary once received.

Response: The Applicant has submitted a stormwater management report. Hancock has reviewed the report. Hancock finds the report generally in keeping with stand practices and MassDEP Stormwater Management Regulations.

- The outfall structures for both infiltration basins should be detailed on Sheet CG502 to match the configurations from the model.
- The spillways should be adjusted on the plan to match the model.
- The crest of both basins should be more clearly shown as having a crest of 271.0 as both basins stage to 270.0 requiring a 271 crest to meet 1 foot of freeboard requirement.

Issue remains open

Comment S2: The project involves modification to the church parking lot including installation of a new drainage system. The new system for the church does not appear to have provisions for treatment, attenuation or recharge. As this would be considered redevelopment, the Applicant should comply with MassDEP redevelopment standards to the extent practicable.

Response: The plans have been revised to clearly show a proposed treatment device within the proposed church parking lot drainage system. <u>Issue resolved.</u>

Landscaping

The Applicant has included a detailed landscape plan.

Comment LS 1: The Applicant has not requested a waiver from Zoning Bylaw Section 185-21 C(5). The Landscape Plan should be revised verifying compliance with this section with regard to the number of trees proposed.

Response: The plans have been revised. Trees are provided to comply with the zoning Bylaw. <u>Issued resolved.</u>

Lighting

The Applicant has included a detailed lighting plan with details of the proposed light fixtures and anticipated light levels in the proposed parking lot.

Comment L1: No lighting is shown for the reconfigured church parking lot. The Applicant should address the proposal for lighting in this parking lot and to the degree possible adhere to lighting Franklin Zoning Bylaw Section 185-31.1C(4)(e)



Response: The plans have been revised to add lighting and configured in the church parking lot. Photometric values are shown on the Light Plan LL100 demonstrating no light trespass onto adject properties. <u>Issue resolved.</u>

Traffic Circulation and Fire Access

The Applicant has provided a Traffic Assessment. This is not a full standard Traffic Impact Assessment (TIA) in accordance with the Massachusetts Department of Transportation (MassDOT) Guidelines for traffic impact assessments and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports. The report presents information regarding anticipated trip generation, historic crash data and some evaluation of intersection safety with regard to safe sight distances. It could be argued that the trip generated by the project are low enough as to not warrant a full TIA by quantifying the impact the existing roadway and intersections on the area, however, no data is provided as to the existing daily and peak traffic in the area.

Comment T1: The assessment does not evaluate on site circulation, proximity of the proposed entrance to Padden Street and sufficiency of parking Response: The Applicant has provided a full Traffic Impact Assessment (TIA) in accordance with the Massachusetts Department of Transportation (MassDOT) guidelines. Parking and the intersection offset have been adequately addressed. Issue resolved.

Comment T2: The sight distance requirements are based on 5 miles per hour below the posted speed limit. Standard practice is to base the requirements on the 85th percentile speed based on a speed study performed.

Response: The Applicant has provided the necessary speed data and resulting required safe Stopping Distance (SSD) and recommended Intersection Sight Distance (ISD). The Applicant should clarify how the provided distances were measured as only ISDs are provided and right turn us reported as >385 ft (the required) and left turn is reported as exactly the required 445 ft. Distances should be measured in the field utilizing s applicable standards for distance from travelway and object and eye heights. Sight distance triangles should be added to the main plan set. Additional clarification is required.

Comment T3: The sight distances available are only reported as greater than the required. Actual sight distances should be provided and the criteria for those measurements. Sight distance triangles should be added to the plans to ensure signage and landscaping do not obscure available sight lines and the area within the triangles is either within the subject property, property controlled by the Applicant via easement or within the right of way of Pleasant Street.

Response: Sight distance triangles should be added to the main plan set.



Comment T4: A swept path analysis has been provided showing the movements of an emergency vehicle through the site. The Board should seek input from the Franklin Fire Department regarding this analysis.

Response: The Board should continue to seek formal review and response from the Franklin Fire Department. <u>Issue remains open.</u>

The Applicant has responded adequately to most of our comments. Hancock suggests the Applicant's team compile a follow-up point-by-point response letter to this report to assist the Board with their review.

We look forward to assisting the Board in this complex and dynamic process. Please do not hesitate to contact me should you have any questions or comments.

Sincerely,

Hancock Associates,

Joseph D. Peznola, PE

Director of Engineering

cc: Attorney Peter L. Freeman