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MEMO TO: Township of Franklin
Zoning Board

FROM: Robert J. Russo, PE, PP, CME
Township Engineer

DATE: October 17, 2020

RE: **Stein Assisted Living, Inc./ DeMott Lane, Inc.
Preliminary & Final Site Plan
Report #1
Engineering
Block 386.07; Lots 54.01 & 54.06
360/370 DeMott Lane
Franklin, New Jersey
Our File: PFRZ0386.05/600.01
Application # ZBA-20-00015**

As per your request, this office has reviewed the following documents relative to the above referenced preliminary and final site plan application:

- Preliminary & Final Site Plan, as prepared by Menlo Engineering Associates, dated November 22, 2019, with no revisions;
- Boundary Survey and Topographic Survey, as prepared by Brunswick Surveying Incorporated, dated October 18, 2019, with no revisions;
- Stormwater Management Report, as prepared by Menlo Engineering Associates, dated November 22, 2019, with no revision;
- Application Forms.

The following comments are offered with regard to same:

A. PROJECT OVERVIEW

The site is located at 360 and 370 DeMott Lane with frontage along the southern side of DeMott Lane, approximately 172' west of the intersection of DeMott Lane and Levinson Boulevard. Access to the site will be from DeMott Lane. The applicant owns neighboring lot 54.06 and access is available from this property, as well. Lot 54.01 is approximately 3.04 acres; Lot 54.06 is approximately 9.98 acres. Both lots are located in the single family R-20 residential zone. Lot 54.01 currently contains an existing 1.5 story masonry garage that will remain, four (4) structures that will be removed, four (4) trailers that will be relocated off the property, as well as the removal of heavy vegetation and trees. The applicant is proposing 75,300 square feet of solar panels, and modifications to the existing detention basin on lot 54.06. The site improvements will include the removal of trees and grading within the solar field.

We defer the review of the zoning related issues to the Board Planner except where they may pertain to engineering issues.

B. GENERAL SITE IMPROVEMENTS

1. An Engineering Cost Estimate will be required once final plans are signed-off on by the Board. Upon approval, applicant shall provide appropriate bonds and Engineering inspection fees and attend a pre-construction meeting, prior to any site work.



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2. All fees shall be paid by the applicant at the time of adoption of a resolution of site plan approval for the cost of making upgrades and modifications to the geographic information system (GIS) (§112-329).
3. At the time the final plans are submitted for signature of the municipal officials, the applicant shall submit CAD-generated data files, prepared by a New Jersey licensed land surveyor, directly translatable into an identical image of the plan per the requirements of Ordinance §112-329.
4. Note: An As-Built Plan prepared by a licensed Land Surveyor is to be submitted to the Township prior to any Certificate of Occupancy inspection or the release of performance bonds. Same should be noted on the site plan.
5. Note: No soil can be imported to or removed from the site until a Soil Importation or Exportation Permit has been obtained from the Township as required by the Ordinance. Soil removal shall be in accordance with §206 of the Ordinance.
6. The applicant should clarify the use of the ½-story masonry garage on lot 54.03. Vehicular access is not provided to the garage.
7. The applicant should delineate the proposed utility lines/ equipment servicing the solar field. If the utility path crosses onto lot 54.06, a utility easement will be required.
8. The applicant should supply typical details for the construction of the solar fields such as mounting method, height, angle, conduit depths, above or below ground conduit installation details and grounding.
9. Solar fields are not a permitted use within the R-20 zone. A use variance is required for this project.
10. A variance is required for rear yard setback for the solar panels. A 25 ft. setback is required in the R-20 Zone; the applicant is proposing a 0.0 ft. setback. We recommend the applicant provide sufficient setbacks around the solar field so that vehicular access for maintenance is feasible.
11. A variance is required for side yard setback for the solar panels. A 15 ft. setback is required in the R-20 Zone; the applicant is proposing setbacks of 0.2 ft. and 3.3 ft., respectively.
12. There is insufficient setbacks along the property lines for future maintenance of the solar panels. The applicant should identify vehicular access points for the solar field for future maintenance and increase the setbacks, as required. The applicant should provide testimony to the Board regarding same.
13. Applicant provided a tree removal and replacement plan to satisfy the requirements of Ordinance §222-Trees. This office defers to the Township Planner as to the adequacy of the tree replacement plan, as well as the adequacy of the proposed landscaping and buffering to adjacent properties, respectively.

C. STORM WATER MANAGEMENT:

1. The property in question, Block 386.07 Lots 54.01 & 54.06, consists of approximately 13.02 acres. The proposed solar field and basin modifications will disturb approximately 3.466 acres of land and will decrease the existing impervious surface by 0.09 acres. The project exceeds the threshold of 1 acre of disturbance; therefore, it is classified as a major development for stormwater management purposes. In accordance with the Township Ordinance, major projects must comply with water quantity control, water quality and groundwater recharge standards.



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2. The project site is located within the review zone of the Delaware and Raritan Canal Commission and the Applicant should obtain approval from the Commission. A copy of the permit should be provided to this office.
3. The Applicant must obtain a NJDEP Freshwater Wetlands Letter of Interpretation (presence/absence) to determine the existence or absence of wetlands within the limit of disturbance. A copy of the LOI must be provided to this office.
4. The Applicant must obtain a Soil Erosion and Sediment Control Plan Certification from the Somerset-Union Soil Conservation District. A copy of the certification must be provided to this office.
5. The proposed development proposes more than 1 acre of land disturbance and must obtain a General Permit for Construction Activities from the NJDEP. A copy of the permit must be provided to this office.
6. The Applicant's engineer should provide certification that all existing catch basins in the property comply with NJDEP Municipal Stormwater Management – Phase II. All catch basins that are not Phase II compliant should be identified on the Grading and Utility Plan and noted as to be retrofitted with type N castings. A construction detail of the new casting should be included in the plans.
7. The site plan should be revised to provide a drainage and detention basin easement around the existing/proposed detention basin.
8. The drainage report should be revised to provide calculations to determine the storm duration used in generating the inflow hydrograph in the routing calculations through the existing detention basin for pre-development and post-development conditions.
9. The drainage report should be revised to include a capacity analysis of the existing 24"x36" pipe from the existing outlet structure to the existing headwall at the existing point of discharge to verify adequate capacity for the proposed 100-yr outflow.
10. Spot elevations should be provided along the perimeter and center of the bottom of the regraded detention basin to verify minimum 1% slope toward the outlet structure. Revise the site plan accordingly.
11. The existing conditions plan should be revised to indicate the length, diameter, slope and material of all stormwater pipes. Revise pipe calculations using the appropriate Manning coefficient for the pipe material.
12. The site plan should be revised to show the location of the 60-ft long emergency spillway. Provide invert elevation of the emergency spillway, top of berm elevation, maximum water surface elevation and freeboard. A minimum freeboard of 1 foot should be provided.
13. The site plan should be revised to indicate the existing outlet structure is to be modified. Provide information of the existing and proposed outflow devices (type, size and invert). In addition, label the maximum water surface elevation in the basin for the 2-yr, 10-yr and 100-yr storm event.
14. The site plan should be revised to provide spot elevations every 50 ft. around the detention basin to ensure the top of berm is 1 ft. above the maximum water elevation in the emergency spillway.
15. In accordance with BMP Manual requirements, no standing water may remain in the storage bed 72 hours after a rain event. The drainage report should be revised to document compliance with this requirement.
16. The site plan should be revised to include details of the existing or proposed overflow grate to verify compliance with stormwater management regulations N.J.A.C. 7:8-5.7 and 7:8-6.2.



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17. Pipe sizing calculations for the existing outlet structure to the existing outfall should be provided to demonstrate adequate capacity to convey the 100-yr storm event by gravity.
18. An executed Major Development Stormwater Summary (Attachment D of the Tier A MS4 NJPDES Permit) shall be submitted to this office for review and approval.
19. In accordance with N.J.A.C. 7:8-5.8 the design engineer shall prepare a maintenance plan for the stormwater management measures incorporated into the design of a major development. A copy of the maintenance plan should be provided to this office for review and approval.
20. Provide a Stormwater Maintenance Agreement for the stormwater system to insure future maintenance. A sample agreement is available from the Engineering Department.

The Applicant is required to obtain either approvals or letter of no interest from the following agencies:

Outside Agencies:

- Delaware Raritan Canal Commission
- Somerset County Planning Board
- Somerset-Union Soil Conservation District
- New Jersey Department of Environmental Protection

Township Departments:

- Franklin Township Fire Department
- Franklin Township Police Department
- Franklin Township Water Department
- Somerset County Health Department
- Franklin Township Sewerage Authority

The Engineering Department reserves the right to make additional comments based upon the submission of revised plans or testimony presented to the Board.

Should you have any questions regarding this matter, please do not hesitate to contact this office.

RJR/DM

cc: Zoning Board Secretary