

Paul W. Ferriero, PE, PP, CME, LEED AP, CFM Robert C. Brightly, PE, PP, CME

Mark S. Denisiuk, PE, CME, LEED AP Joseph S. Kosinski, PG, CFM, LEED AP C. Richard Quamme, PE, CME Jess H. Symonds, PE

February 17, 2021

Debra Coonce Planning & Zoning Coordinator Township of Long Hill 915 Valley Road Gillette, New Jersey 07933

Re: Elite Properties Preliminary and Final Major Site Plan Application Block 10801, Lot 3621 Valley Road Our Project No. 20LH201

Dear Ms. Coonce:

The above referenced application requests preliminary and final major site plan approval for the construction of 62 residential apartments, including 9 affordable apartments, on lot 3 in block 10801 along Valley Road. The following revised documents have been submitted in support of the application:

- 1. Cover letter, dated February 5, 2021, prepared by Derek W. Orth, Esq.
- 2. Boundary and Topographic Survey, dated April 6, 2020, prepared by James D. Sens, PLS.
- 3. Response letter, dated February 5, 2021, from John Saracco, Architect.
- 4. Architectural Plans, consisting of seven sheets revised February 5, 2021, prepared by John Saracco, RA.
- 5. Response letter, dated February 5, 2021, prepared by Joseph Jaworski, PE.
- 6. Site Plans, consisting of 21 sheets revised February 5, 2021, prepared by Joseph Jaworski, pF
- 7. Freshwater Wetlands Letter of Interpretation, dated May 4, 2017.
- 8. Environmental Impact Statement, revised February 2021, prepared by Joseph Jaworksi, PE.
- 9. Stormwater Basin Area Investigation Report, dated April 16, 2020, prepared by Peter H. Howell, PE.

A review of the above documents results in the following comments for Board's consideration.

I. Site Plans:

- A. Sheet 1 Cover Sheet
 - 1. Prior to the signing of plans for construction, the plans should be noted that they have been issued for construction.
- B. Sheet 2 Aerial Map No comments

■ 180 Main Street • P.O. Box 571 • Chester, NJ 07930 • 908-879-6209 • Fax: 908-879-6597

□ 17 Model Avenue • P.O. Box 577 • Hopewell, NJ 08525 • 609-466-0002 • Fax: 609-466-2008

mail@FerrieroEngineering.com

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C. Sheet 3 – General Notes

- 1. General Note 9 indicates 93 parking spaces are required per the ordinance and 105 spaces have been provided. RSIS standards require 122 parking spaces, using the parking requirement for garden apartments, which requires a de minimus exception from the RSIS for the amount of parking being proposed.
- 2. General Note 10C specifies the applicant is requesting a design waiver from Section LU-151.2.c for "Except in the case of single-family residences (including those with accessory apartments), no off-street parking or loading area shall be located in any front yard." Testimony in support of the waiver needs to be provided.
- 3. General Note 10G indicates that hairpin striping will be utilized for all parking stalls in accordance with ordinance requirements. The striping for the stalls on the ground floor of the building should be hairpin striping.
- 4. General Note 12 indicates walls within the front yard require a design waiver since the walls along the driveway exceed 4 feet in height.
- 5. Grading Note 9 indicates that a geotechnical consultant will be retained to inspect the infiltration/retention basin soils and permeability testing. Copies of all reports should be provided to the Township Engineer prior to any certificates of occupancy.
- 6. The detention basin maintenance notes and the underground detention basin maintenance notes need to refer to the fact that the maintenance is to be performed in accordance with the approved operations and maintenance manual for the stormwater system.

D. Sheet 4 – Existing Conditions & Demolition Plan

- 1. The plan does not indicate any disturbance within the wooded area along the sight triangle. The Engineer has indicated that adequate sight distance can be achieved through trimming of the trees. A field inspection should be required prior to the issuance of any certificates of occupancy.
- 2. The table indicates the total critical area as 140,565.39 square feet. A note indicates that the total does not count overlapping areas twice, however the sum of the steep slopes, flood hazard area and wetlands totals 98,960.21 square feet. Clarification is required.

E. Sheet 5 - Site Plan

- 1. Control and access to the parking under the building should be discussed by the applicant. There are no turn around areas and if a vehicle enters and the stalls are full, drivers will have to back out of the parking aisles and buildings.
- 2. Approval from the Morris County Planning Board is required.
- 3. Approval from NJDEP is required for the disturbance and compensation to the wetlands buffers.

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- 4. Approval from NJDEP is required for the proposed improvements within the flood hazard area.
- 5. As-Built Plans need to be provided for review and approval prior to a certificate of occupancy being issued. This should be a condition of any favorable resolution.

F. Sheet 6 – Grading Plan

1. Final construction details will need to be prepared for all retaining wall prior to construction.

G. Sheet 7 – ADA Grading & Access Drive Section

- 1. The Board should evaluate whether or not sidewalk should be provided along the full lot frontage. This would impact the grading of any ramps and the placement of a cross walk.
- 2. The cross walk/curb ramps at the beginning of the driveway within Passaic Valley Road is subject to review and approval from Morris County. It is noted the cross slope of the sidewalk, and the curb ramp exceed maximum slopes as required under PROWAG.

H. Sheet 8 – Drainage & Utility Plan

- 1. The locations of the hydrants should be approved by the Fire Official. The water meter vault and any building connections should also be reviewed and approved.
- 2. The "hot box" required by NJAW is shown to be 7'x12'x6.5' high. This is a large structure along the street and any possible screening should be provided.
- 3. The projected increase in sewer flow pursuant to NJAC 7:14A-23.3 is 13,425 gallons per day (gpd); (14 one bedroom units at 150 gpd; 41 two bedroom apartments at 225 gpd; 7 three bedroom units at 300 gpd). Since the project increase the projected sewer flow by more than 8,000 gpd, an NJDEP Treatment Works approval is required (7:14A-22.3(a)2.).
- 4. NJAC 7:14A-23.6 Sanitary sewer design specifies "The minimum diameter of sewer extensions shall be eight inches, however, consideration will be given to the use of smaller diameter sewers for lateral connections." It is noted that 6" diameter sanitary SDR35 sewer at 0.3% slope is proposed for the sanitary sewer line and the plans indicate the existing sewer main located in the street is also 6" diameter. The size of the existing main in the street should be confirmed.
- 5. The underground detention basin outfall is within the flood hazard area of the Passaic River. A Tideflex backflow prevention valve is proposed on the outlet pipe. Approval from NJDEP for the discharge within the flood hazard area will be required.
- I. Sheet 9 Landscape Plan No comments
- J. Sheets 10 Lighting Plan No comments

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- K. Sheets 11 Lighting & Landscape Notes & Details
 - 1. Section LU-153.2.g stipulates "All lighting plans shall be subject to a post-development lighting inspection by the Township Planner and/or Engineer." This should be a condition of any favorable resolution.
- L. Sheet 12 Soil Erosion & Sediment Control Plan
 - 1. This plan will need to be certified by the Morris County Soil Conservation District.
- M. Sheet 13 Soil Erosion & Sediment Control Notes & Details
 - 1. This plan will need to be certified by the Morris County Soil Conservation District.
- N. Sheets 14 thru 19 Construction Details
 - 1. The depth of runoff generated by the maximum design storm must be marked on all inspection ports and these levels included in the design report and maintenance plan.
 - 2. The fire hydrant detail should be approved by the Fire Official.
 - 3. Final retaining wall details will be required before construction.
- O. Sheet 20 Morris County Construction Details
 - 1. These details will need to be approved by Morris County
- P. Sheet 21 Vehicle Circulation Plan (Fire Truck) No comments
- II. Architectural Plans:
 - A. The floor plans depict trash rooms on each floor of the building. The timing, frequency and location of where trash pickup will occur should be provided. If pickup will be via a garbage truck in the circular driveway, then some of the parking spaces, access may be temporarily blocked while trash collection is performed.
- III. Environmental Impact Statement No comments
- IV. Stormwater Management Report: These comments are being repeated from the prior report and will be reviewed with a new drainage report when that is submitted by the engineer.
 - A. DA-3 identified in the report is included within DA-4B on the proposed drainage area map. The report and drainage area map should be consistent.
 - B. The water quantity description on Page 6 references three points of analysis while the calculations utilize two points of analysis. Clarification is required.
 - C. At scale drainage area maps need to be provided in order to confirm drainage areas. The soil boundaries should be depicted on the drainage area maps.

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- D. To flow paths need to be provided for each drainage area on scaled drainage area maps in order to confirm time of concentration calculations.
- E. Tc calculations should be provided for EX-DA-1A (EX-DA1-UNDIST).
- F. The Tc for PDA-1 is longer than the TC for EDA-1, which does not seem reasonable, since a portion of the wooded sheet flow in existing conditions is being replaced by a graded slope.
- G. A minimum Tc of 6 minutes needs to be used for NRCS methodology. Any Tc longer than 6 minutes need to be supported with calculations.
- H. PDA-3 includes area that will bypass basin B. A portion of the area along the top of the basin walls, and a portion of the front entrance that bypasses inlet #212 should be treated as bypass areas.
- I. The CN calculations indicate PDA-4 includes 1.74 acres of area while the routings include 1.45 acres. It appears the portion of the drainage area that is open space was not included in the routing. Clarification is required.
- J. The analysis needs to analyze the existing wetland/low area located in the northeasterly corner of the property. It appears this area would act as a detention area. Additional spot grades should be provided within the bottom of the depression (bounded by 214 contour) and along the adjacent offsite driveway to better define the area. Any offsite areas that are tributary to the low area should be accounted for in the analysis.
- K. The inlet drainage area map should include the drainage area, average coefficient, and Tc information with it. It appears subarea area 212 was identified as 211 in the routing analysis (hydrograph No. 35). Clarification is required.
- L. The inlet analysis is based on a 25 year storm event. A 100 year storm event should be analyzed to ensure runoff will reach the detention basins without bypassing the basins. The rain garden should also be checked to confirm runoff will be contained within the garden without overflowing onto the driveway.
- M. Sizing calculations for the proposed roof conveyance system needs to be provided in the report. The conveyance analysis should confirm the system has capacity for the 100 year storm event to ensure runoff will reach underground basin A without overtopping and bypassing the basin.
- N. The water quality section of the report needs to include the full routing analysis for both basins (Basin A and B), the Contech stormfilter water quality unit, and the rain garden.
- O. Sizing calculations for the Contech stormfilter water quality unit need to be provided in the report. The routing analysis indicates the storm filter will be inundated from the 2 year storm event routing within Basin A. The Engineer shall confirm whether the stormfilter can be surcharged.
- P. It appears Basin B will act as an under drained sand filter and therefore needs to meet the requirements for Sand Filters within Chapter 9.9 of the NJDEP BMP. Additional information and detailing need to be provided to demonstrate compliance with the BMP Manual.

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- Q. A larger scale detail for Basin B should be provided, and the contour areas used in the basin volume calculations confirmed (scaling indicated approximately 20% less contour area than was depicted in the stage storage table).
- R. Drain time calculations need to be provided for all the basins. The calculations should include the underdrains to confirm they will drain the basins within 72 hours.
- S. Manufacturer information on the sizing of the Cupolex drainage system (Basin A) should be provided in the report. The routing used 760 lf of 5' diameter storage volume. The basin section details depict shorter rectangular openings. The clear width and height of the openings should be labeled on the details.
- T. The outlet pipes for each of the detention basins have been analyzed assuming free flow conditions. Inlet/outlet control analysis needs to be provided for each pipe to ensure there is no impact on the functionality of the outlet structure.
- U. The elevation of Basin A (and the outlet pipe) is below the elevation of the flood hazard area. The engineer is proposing a Tideflex Checkmate valve on the outlet pipe. Approval from NJDEP for the proposed basin and outlet pipe below the flood hazard elevation should be a condition of any favorable resolution.
- V. Water quality treatment is not being provided for the portion of the proposed driveway that bypasses basin B (approximately 1300 square feet). Water quality treatment for other portions of the site should compensate for this untreated area so the project meets 80% TSS treatment.
- W. Information relative to the depth of groundwater/bedrock should be provided for the underground detention basin and surface to confirm minimum separation in accordance with the NJDEP BMP Manual is being provided.
- X. A low impact development checklist needs to be provided in the report.
- Y. The groundwater recharge narrative indicates meeting groundwater recharge is not feasible due to the presence of rock throughout the site that presents unsuitable conditions for groundwater recharge. The narrative further states that a waiver on the developed site is warranted and justified. The field testing that this is based upon needs to be provided. The Engineer shall confirm whether the testing is in conformance with Chapter 12 of the NJDEP BMP Manual. Project redesign to incorporate dispersed runoff instead of a structure for recharge may be necessary to ensure compliance with the rules in this area. Mitigation for not providing groundwater recharge may also be required.
- Z. Soil testing confirming the depth to bedrock and the seasonal high groundwater table needs to be provided. Minimum separation distances as specified within the NJDEP BMP Manual from the lowest elevation of the proposed stormwater management basins needs to be demonstrated.
- AA. Attachment D Major Development Stormwater Summary of the Tier A Municipal Stormwater General Permit needs to be completed by the Applicant.
- BB. An Operations and Maintenance Manual needs to be provided. It is recommended that the Manual be submitted once the stormwater management system had been approved. The

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Manual will need to be recorded with the property deed as a condition of any favorable resolution.

- V. Stormwater Basin Area Investigation Report
 - A. Page 4 of the report indicates that there are conditions that needed additional investigation. These include testing to determine whether or not the shallow mottling that was encountered was the result of a perched water table and basin flooding testing to determine the permeability of the underlying rock. These results should be submitted in conjunction with the revised stormwater management report.

I trust the above comments are useful to the Board in its consideration of the application.

Very truly yours,

Paul W. Ferriero, PE, CME

Township Engineer

cc: Board Members Jolanta Maziarz, Esq. Elizabeth Leheny, PP/AICP Derek W. Orth, Esq.

Joseph Jaworski, PE