



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

May 29, 2024

File No. 2022-11019

Andrew J. Nowick, Mayor
City of Lambertville
18 York Street
Lambertville, NJ 08530-2093

Reference: Lambertville High School (a.k.a. Academy Hill) Redevelopment Proposal 5
Block 1073, Lots 1, 3, 5-11, 33, & 33.01
Block 1090, Lots 4 & 5; Block 1091, Lots 1 & 1.01
City of Lambertville, Hunterdon County, New Jersey

Dear Mayor:

Pursuant to your request, Gilmore & Associates, Inc. (G&A) has conducted a cursory review of the information listed below with regards to the proposal by K Hovnanian Homes LLC for the Lambertville High School Redevelopment site (a.k.a. Academy Hill) and offers the following comments related to engineering for consideration by the City of Lambertville.

I. Submission

- A. Existing Steep Slopes Exhibit, prepared by Dynamic Engineering, one (1) sheet, dated March 22, 2022 and last revised October 17, 2023.
- B. Retaining Wall Cross-Section Exhibit, prepared by Dynamic Engineering, five (5) sheets, dated December 7, 2023.
- C. Conceptual Site Plan A8, prepared by Dynamic Engineering, one (1) sheet, dated 2024.
- D. Proposed Slope Disturbance Exhibit A8, prepared by Dynamic Engineering, one (1) sheet, dated December 15, 2023.
- E. Academy Hill: Elevation Presentation, prepared by K.Hovnanian Companies, twelve (12) sheets, dated October 17, 2023.
- F. 2024 Amended Redevelopment Plan prepared by Clarke Caton Hintz.

II. Review Comments

A. Zoning Ordinance

We offer the following comments in regard to the requirements and provisions of the current City of Lambertville Zoning Ordinance:

- 1. A mandatory component of the 2024 Amended Redevelopment Plan is that all development shall be served by public water and public sanitary sewer. We note that public sewer appears to be located within the vicinity of the subject property and is available according to the Applicant. However, according to the Applicant, public water is available but is located on the west side of State Route 179. The Applicant has contacted Veolia to begin discussing the best route for crossing S.R.0179 in order to connect to their existing water system. We note that since City Council has stated that they do not want the water tank on SR0179 to run 24 hours a day seven days a week due to the proposed connection, it may be necessary to locate public water infrastructure within the site, which shall be in the location identified on the Conceptual Site Plan with access from Coryell Road.

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2. §Z-510.4.B. – In the landscape design of sites, areas shall be designated for retaining existing trees and the replacement of trees cleared from the site. We note that trees and/or woodlands will be cleared as part of this development. The Applicant shall designate areas within the development for the replacement of trees cleared from the site.
3. §Z-519.5. – Steep Slope Limits. Disturbance on areas of steep slopes shall be limited according to the following schedule: 0%-<15% (No limit), 15%-<20% (35%-40% disturbance), 20%-<30% (max 25% disturbance), and +30% (max 15% disturbance). Once a final concept plan is approved, a final analysis shall be provided demonstrating that all steep slope disturbances are within the tolerances noted above in order to protect the health, safety and welfare of people and property within the City of Lambertville.
4. §Z-1500 – Stormwater Management. The City is currently in the process of preparing Ordinance No. 06-2024, which is an Ordinance to Amend the Zoning Ordinance, Article XV, Stormwater Management, specific to the provisions for stormwater control of the City of Lambertville. The City is working to adopt the Ordinance in time for use by the design engineer when designing the stormwater management measures for the development. The following stormwater management comments pertain to the sections of the Ordinance amendment.
5. §Z-1500.1.A.a. – Stormwater Management. As noted in this section of the Ordinance, green infrastructure best management practices (GI BMPs) and low-impact development (LID) “should be utilized to meet the goal of maintaining natural hydrology to reduce stormwater runoff volume, reduce erosion, encourage infiltration and groundwater recharge, and reduce pollution.” The design engineer is encouraged to utilize these best management practices during the design of the stormwater management measures.
6. §Z-1500.1.B. – Stormwater Management. The requirements of the amended Stormwater Management Ordinance are intended not only to meet but also exceed the design and performance standards found in the New Jersey Department of Environmental Protection (NJDEP) Post-Construction Stormwater Management rules (N.J.A.C. 7:8). We note that the subject site is also located within the Delaware and Raritan Canal Commission (DRCC) Review Zone B, which has its own stormwater requirements. Therefore, if the requirements of the DRCC differ from the City requirements, then the design engineer shall follow the most stringent requirements. Also, the development shall be designed in accordance with the *NJ Stormwater Best Management Practices Manual* utilizing the latest NOAA rainfall amounts, even if not currently adopted by the state.
7. §Z-1500.4.I. – Whenever the stormwater management design includes one or more BMPs that will infiltrate stormwater into subsoil, the design engineer shall assess and certify the hydraulic impact on the groundwater table and design the site, so as to avoid adverse hydraulic impacts. Potential adverse hydraulic impacts include, but are not limited to, exacerbating a naturally or seasonally high-water table, so as to cause surficial ponding, flooding of basements, or interference with the proper operation of subsurface sewage disposal systems or other subsurface structures within the zone of influence of the groundwater mound, or interference with the proper functioning of the stormwater management measure itself. We note that the current Concept Site Plan illustrates the location of six (6) water quality basins and one (1) stormwater management basin throughout the site. While the facilities are spread out throughout the site, the design engineer shall still assess their total hydraulic impact on the groundwater table. Also, we note that the Applicant previously indicated that no basements are planned for the townhomes.
8. §Z-1500.4.J.1. – Stormwater management measures shall be designed to take into account the existing site conditions, including, but not limited to, environmentally critical areas; wetlands; flood-prone areas; slopes; depth to seasonal high-water table; soil type, permeability and texture; drainage area and drainage patterns; and the presence of solution-prone carbonate rocks (limestone). We note that a large stormwater management basin is proposed in the location of an existing structure surrounded by steep slopes. The basin shall be designed to factor into the design the steep slopes on the downslope side of the basin. If the berm is not constructed in strict accordance with state and local requirements, then the berm could potentially give out and cause adverse harm to downslope properties.
9. §Z-1500.4.Q.4.a. – Stormwater runoff shall not be recharged from areas where recharge would be inconsistent with a Department-approved remedial action work plan approved pursuant to the Administrative Requirements for the Remediation of Contaminated Sites rules, N.J.A.C. 7:26C, or Department landfill closure plan and areas. We note that the Concept Site Plan indicates that a former municipal landfill area is located within the subject property. We also note that water quality basin 1 is

proposed along the former landfill area. The Applicant shall determine if a landfill closure plan was prepared for the former landfill area, and if so, the proposed water quality basin shall not provide for infiltration if the recharge would be inconsistent with the landfill closure plan.

10. §Z-1500.5.B. – Field testing is required to derive values for permeability (hydraulic conductivity). The location of the stormwater management features shall be determined based on the results of the required field testing. The field testing shall take place throughout the site and the locations with the greatest permeability values shall be the locations for the stormwater management features. Also, the testing shall indicate the depth to the restrictive feature (i.e. bedrock or groundwater table) to ensure that the stormwater management feature maintains the required separation distance.

B. General Comments

1. Based on the heights and locations of the proposed retaining walls throughout the development, adequate fall protection shall be required in all locations meeting the state and federal minimum height requirements for fall protection.
2. Whenever possible, the discharge pipes for the proposed stormwater management features shall be connected to public storm sewer and not have concentrated discharge down a steep slope in order to prevent future erosion and stormwater runoff issues. The Applicant previously noted that “to the extent feasible and acceptable to the DRCC, the project will be designed to connect to existing storm drainage pipes.” However, if a public storm sewer system does not exist within close proximity of the site, then at a minimum a level spreader shall be added below all discharge points in order to convert concentrated flow back to diffuse flow.
3. As stated previously, the current Concept Plan illustrates six (6) water quality basins and one (1) stormwater management basin throughout the site. The Department of Environmental Protection recommends a minimum separation distance of ten (10) feet between the facilities and any structures. The proposed facilities shall be designed to meet this separation.
4. The Applicant appears to be proposing on-street perpendicular parking along every proposed roadway. Since the development is a private development with limited access, perpendicular parking can be utilized. However, several of the roads are long enough that unsafe speeds can be achieved by vehicles on these roads which could cause a safety issue with vehicles backing out into these roads, especially in the location of the proposed curves in the roads which could be blind curves. Therefore, speed humps may be warranted in this development to slow vehicles.
5. The City shall determine if they want cul-de-sacs at the end of any of the proposed dead-end roads to provide a safe turnaround area for vehicles. We note that RSIS §5:21-4. states that a cul-de-sac bulb is optional so long as the length of the cul-de-sac road is not greater than 300 feet.
6. Based on the potential volume of average daily traffic (ADT) to be produced by the proposed development and the residential street types that the occupants will utilize leaving the subject site, we recommend that a Traffic Impact Assessment be performed for the site and the results provided to the City for review in order to determine the impact of the additional traffic on the existing intersections to be utilized by the development.
7. We note that City Council at their closed session held on June 22, 2023 stated their desire to request that the Developer be responsible for stabilization of the right-of-way of Washington Street.

If you have any questions regarding the above, please contact this office.

Sincerely,



Douglas C. Rossino, P.E.
Gilmore & Associates, Inc.
City Engineer

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