

Town of Simsbury

933 HOPMEADOW STREET ~ SIMSBURY, CONNECTICUT 06070

Engineering Department

MEMORANDUM

To: Michael Glidden, Director of Planning and Community Development

From: Jerome F. Shea, P.E., Town Engineer

Cc: Daniel Gannon, Project Engineer

Subject: Engineering Comments – Barber Cove Development

32-36 Iron Horse Boulevard

Date: July 19, 2021

I have completed a review of the Site Plan Application for development of 32-36 Iron Horse Boulevard received by our department on May 28, 2021:

- 1. Civil Plan Set titled "Barber Cove" prepared by SLR Consulting, dated May 28, 2021
- 2. Drainage Report prepared by SLR Consulting, dated May 28, 2021
- 3. Traffic Impact Study, prepared by SLR Consulting, dated June 22, 2021
- 4. Architecture Plan Set titled "Barber Cove" prepared by Allies Architecture, Inc., dated May 21, 2021
- 5. Site Lighting Photometric Calculation prepared by Apex Lighting Solutions, dated June 16, 2021

The applicant has submitted plans for a redevelopment of a 13.6 acre site which proposes a residential development with five multi-family apartment buildings, outdoor parking areas, three garage buildings, a clubhouse, a pool area, paved sidewalks, and a walking trail around the perimeter of the development.

The following comments are based on a review the submitted materials:

- 1. The applicant has completed a study of the potential traffic impacts from the development. The study area included the key intersections serving Iron Horse Boulevard and select intersections on Hopmeadow Street. The traffic expected from the development should not have a significant impact on the level of service at these key intersections based on the analysis provided.
- 2. The consultant recommends as part of the development that additional stop signs be placed in on Iron Horse Boulevard at the main entrance to the development. Locating these additional

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- stop signs in the median may not be possible in considering the location of the existing stop signs on the side of the roadway.
- 3. Show the existing crosswalk across Iron Horse Blvd in relation to the main access driveway on the plan set.
- 4. In anticipation of additional pedestrian crossings expected on Iron Horse Boulevard at the main entrance to the development, suitable sidewalk ramps and areas of refuge should be provided at the existing crosswalk.
- 5. A "One-Way" sign should be placed in the median of Iron Horse Boulevard at the north access driveway to direct exiting traffic to the right on Iron Horse Boulevard.
- 6. Stopping sight distance (SSD) is a concern for through travel on the Farmington Canal Heritage Trail. Indicate on the plans the required stopping sight distance (SSD) and the proposed SSD to confirm the minimum SSD has been met.
- 7. Stop signs and stop bars should be provided where the proposed multi-use trails intersect the Farmington River Heritage Trail. Also, consider adding an advance "Stop Ahead" warning signs at both trail egresses to warn bicyclists exiting the development.
- 8. The plans indicate that the proposed driveway is to be level with the existing multi-use trail. The grading plan is not consistent with this intent when comparing existing and proposed grades indicated on the plans. Please provide additional detail for this intersection indicating trail areas requiring reconstruction with the intent to match existing elevation of the multi-use trail. Also, the proposed catch basins at primary entrance driveway should be located further from the existing trail for more favorable transitions from catch basins to existing multi-use trail.
- 9. Timber post and rail exists across the proposed northern driveway. Show post and rail requiring removal and new post locations at this driveway.
- 10. Test Pits were dug and recorded on March 31, 2021. Spring 2021 has been relatively dry in Simsbury, with some towns classified as "abnormally dry" by the State of Connecticut. The observed groundwater in the test pits may not accurately represent the Seasonal High Groundwater (SHGW) at this location. Please confirm whether or not mottling was noted in the test pits during observation of these test pits.
- 11. Provide a pond report as part of the Drainage Report for the Hydraflow Hydrologic Analysis for the water quality swale.
- 12. Calculations for an adjusted CN-Value for rooftops due to the storage from infiltration galleries have been provided. Clarify whether infiltration in these galleries is accounted for in the modeling. If not, accounting for infiltration may significantly reduce the amount of runoff and associated pipe size associated with these drainage areas.
- 13. The plans include the construction of a gazebo in the floodplain zone. The engineer shall provide details and certify that the structure is sufficiently anchored to prevent flotation,

- collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- 14. All electrical, heating, ventilation, plumbing, air conditioning equipment, HVAC ductwork, and other service facilities, or any machinery or utility equipment or connections servicing a structure shall be elevated at or above two (2) feet above the base flood elevation (BFE) to prevent water from entering or accumulating within the components during conditions of flooding. This includes, but is not limited to generators, furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation ductwork, washer and dryer hook-ups, electrical junction boxes, and circuit breaker boxes.
- 15. The plan indicated grading will occur within the floodplain zone. The engineer shall confirm that the water holding capacity of the floodplain shall not be reduced. Any reduction caused by filling, new construction or substantial improvements involving an increase in footprint to the structure, shall be compensated for by deepening and/or widening of the floodplain. Such compensatory volume, if required, shall have an unrestricted hydraulic connection to the same waterway or water body.
- 16. The Water Pollution Control Authority should be consulted in regards to sufficiency of sanitary sewers and pump station requirements. A minimum separating distance to other proposed utilities may apply if sewers as proposed are to be accepted by the WPCA.
- 17. The detail for the "Typical Foot Bridge Sample" did not appear on the plan set. Please submit a detail on the foot bridge with appropriate dimensions.
- 18. There is minimal lighting proposed along sidewalks and building entrances in the photometric plan provided. Confirm that sufficient entrance lighting will be provided per the zoning regulations. Photometric plan does not indicate sufficient entrance lighting at the buildings.
- 19. Confirm that the turning radii provide in the roadway areas can accommodate turning movements for expected fire apparatus.
- 20. In discussing the project with Fire District representatives, they indicated a desire to widen the proposed stone dust trail to 8 feet to accommodate small emergency response vehicles at the eastern boundary of the property. Please confirm this requirement with Fire District representatives.
- 21. Please provide evidence of registration of the DEEP stormwater management plan for project file when available.

The favorable recommendation is subject to resolution of these outstanding comments to the satisfaction of the Engineering Department prior to final sign-off of the project. I would be available to meet and discuss these comments if required.