

December 30, 2022

Leicester Planning Board
Town of Leicester
3 Washburn Square
Leicester, Massachusetts 01524

Re: Skyview Estates
Major Site Plan Review & Special Permit

To the Board:

We are in receipt of the following in association with the above referenced project:

- Plans entitled “SITE PLANS FOR SKYVIEW ESTATES, MAIN STREET, LEICESTER, MA 01611”, 31 sheets, dated 09-01-2022 with revision date of 12-05-2022, by Allen & Major Associates, Inc. of Woburn, Massachusetts.
- Bound document entitled “Drainage Report, Skyview Estates, Leicester, MA” dated 09-01-2022, with revision date of 12-02-2022 prepared by Allen & Major Associates, Inc. of Woburn MA.
- Application for Site Plan Review & Special Permit, dated Dec 15, 2022.
- Letter addressed to Alaa M. Abusalah, dated December 2, 2022, providing a project narrative.

Plans identify the following waiver requests, from Leicester Subdivision Regulations. Our comments on requested waivers follow:

1. Waive §V, A, 1, f to permit roadway centerline radius of curvature of 135 feet and 120 feet. Minimum radius of curvature is 200 feet.

On a local development road, curve radii of 120 feet and 135 feet can be negotiated by vehicles, and will not impede public safety vehicles, but may be perceived as inconvenient for some drivers. We do not object to the requested waivers. See note below.

The radius of curvature of Skyview Drive from STA 11+29.41 to STA 11+50.18 is 120 feet. There is room to accommodate an expansion of the radius of curvature in this area. Leicester Planning Board may wish to require the Engineer make reasonable efforts to minimize the relief requested, before considering a waiver.

2. Waive §V, A, 3, a, to permit a road slope of 12%. Maximum permitted road slope is 10%.

Skyview Drive has a maximum road slope of 11.65%, and the Emergency Access Road has a slope of 12.00%. It is the opinion of this office that this road slope is within the limits of safe roadway design. If Leicester Planning Board grants this waiver, it is recommended that the waiver specify the proposed road slopes and locations.

3. Waive §VI, B, 1, a, to permit HDPE drain pipe. Reinforced concrete pipe (RCP) drains are required.

The use of HDPE pipe as drainage culvert has been permitted and even requested by Leicester Highway Department in the past. This product is long-lived and performs well, if correctly installed. We do not object to this requested waiver.

A waiver should specify double wall HDPE pipe, with smooth interior.

4. Waive §VI, C, 4 to permit flow velocities in drains of 11.92 and 14.0 feet per second. Required storm flow velocity is between 2 and 10 feet per second.

The primary concern with high-velocity flow is long-term erosive damage to drainage structures, however, on these plans the likelihood of damage to infrastructure is low. We do not object to this requested waiver.

5. Waive §VI, E, 3, to permit coachlamps at the end of each driveway in lieu of streetlights. §VI, E, 3 specifies streetlights at specific locations.

The proposed coachlamps will provide a light post at the end of each driveway, and a separate streetlight at the intersection of Main Street and Skyview Drive. We defer to Leicester Planning Board on this request.

6. Waive §VI, L to permit street trees on one side of the roadway. Street trees are required on both sides of the road.

We defer to Leicester Planning Board on this non-engineering related request. See Comment 13 below.

7. Waive §VI, G, 1 to permit sidewalks on one side of the roadway.
Sidewalks are required on both sides of the roadway.

We defer to Leicester Planning Board on this non-engineering related request.

Pertaining to the submitted plan package, Michael Malynowski, Senior Project Manager for Allen & Major Associates, Inc indicates that the drainage system design has not been revised over development plans most recently submitted, however, with the reduction of the number of dwelling units onsite, impervious areas in the current plan will be slightly less than previously assessed. On that basis, the anticipated rates of stormwater runoff will be reduced by some degree. Based on Mr Malynoski's assertion, we have not re-reviewed the hydrology analysis.

Our comments on the current plan follow:

1. The detail for the Emergency Access Cross-Section (Detail 1, Sheet C-202) calls for a 5" crown, however, the plan shows the Emergency Access Road cross-pitched. The plan and detail should be coordinated to correspond.
2. On the Emergency Access Road, drainage swales extending from STA 5+00 terminate at approximately STA 4+ 50. It may be expected that the discharge from the swales will pass overland toward private properties. The swales should be continued to connect to swales at STA 3+50, to ensure the continuity of the drainage in the area.
3. Plans call for underdrains to run to "daylight". It is recommended that underdrains discharge into the proposed system of drains.
4. On Skyview Drive STA 22+50 +/-, the termination of Skyview Drive appears to be intended to accommodate a future roadway extension. Any

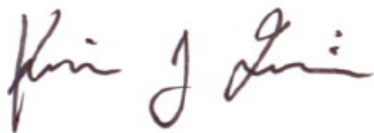
intention to expand the roadway in the future for any reason should be articulated to Leicester Planning Board.

5. The cover sheet for the plans states “Issued for Site Plan Approval September 1, 2022”, however, the current version of the site development plan has a revision date of September 2, 2002 and was filed on December 15, 2022. To avoid confusion, the note should either have the correct date, or be deleted altogether.
6. Portions of the development are located within Water Resources Protection Overlay District (WRPOD). The Engineer is requested to document the percentage of area of impervious surfaces within the WRPOD and the need for a Special Permit.

We remain at the service of Leicester Planning Board on this project, and would be pleased to comment on any changes to the plans which are subsequently made.

Please contact this office should you have questions.

Sincerely,
QUINN ENGINEERING, INC.

A handwritten signature in black ink, appearing to read "Kevin J. Quinn". The signature is written in a cursive, flowing style.

Kevin J. Quinn, P.E.
President