

May 23 2022

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

Re: Preliminary Subdivision Plan  
1355 Main Street

To the Board:

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

- Plans entitled “Preliminary Subdivision Plan in Leicester, Massachusetts”, sheets 1 and 2, dated Apr 14, 2022 without revision date, by Hannigan Engineering , Inc.
- Letter addressed to Alaa M. Abusalah, Town Planner, dated April 29, 2022, providing a project narrative.
- Form B, Preliminary Subdivision Plan Application, dated April 26, 2022, completed.

We have performed a review of the submitted plans for conformance with the Leicester Subdivision Rules and Regulations, and appropriate sections of the current Town of Leicester Zoning By-Laws. As is customary, we have not reviewed for completeness.

The Engineer has requested waivers of the following subdivision requirements. Our comments follow, *in italics*:

1. §V.A.3.a. Waiver requested to permit 6% road slope within turnaround, to minimize grading requirements.

*§V.A.3.a limits road slopes to 4% in cul-de-sac turnarounds. 6% road slope could be inconvenient for vehicles using the turnaround, and presents minimal safety hazard. It is recommended that input from Leicester Police and Fire Department chiefs be requested.*

2. §V.A.4.b. Waiver requested to permit a T-style turnaround, instead of a cul-de-sac.

*A T- style turnaround can accommodate vehicle turning maneuvers, however, the engineer should document that the dimensions of the turnaround will accommodate Leicester Fire Department apparatus. It is recommended that input from Leicester Police and Fire Department chiefs be requested.*

3. §VI.B.1. Waiver requested to permit HDPE drainage lines in lieu of reinforced concrete pipe.

*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 designed and installed. We do not object to this requested waiver.*

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

4. §VI.G Waiver requested from requirement for sidewalks.

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

5. §VI.J. Waiver requested from requirement for granite gutter inlets.

*The Board may wish to seek input from Leicester Highway Department on this requested waiver; in the past LHD has requested that granite gutter inlets not be installed, due to problems with snow plowing operations.*

6. §VI.R.3. Waiver requested to permit reduction of pavement width to 20 feet.

7. §VI.R.4. Waiver requested to permit reduction of curb radii to 20 feet.

*§VI.R.3 and §VI.R.4 pertain to road geometry required to accommodate large vehicles, typical of an industrial subdivision. The Engineer should provide more detailed information to the Board as to the types of vehicles which will use this road, and the frequency with which large tractor-trailers will be entering and departing the site.*

*The Engineer should also submit information documenting turning movements of the anticipated vehicles on the roadway as proposed. The required turning movements will be directly affected by both the width of the roadway, and the curb radii.*

*If the proposed roadway will be subject to frequent tractor-trailer traffic, reductions in road width and curb radii may contribute to vehicle conflicts.*

8. §VI.R.7. Waiver requested of requirements for pavement markings.


*We do not object to waiving pavement markings on this short section of roadway.*

Our comments follow:

1. The embankment fill from the roadway slopes at 1:1, an exceptionally steep fill slope, over a height of approximately 40 vertical feet. The stability of the fill slope must be assessed by a geotechnical engineer.
2. The definitive subdivision plan must include use of guardrail where appropriate.
3. No Open Space is identified on plan. The Planning Board may require Open Space in accordance with § IV, E.

Please feel free to call, should members have questions.

Sincerely,  
QUINN ENGINEERING, INC.

A handwritten signature in dark ink, appearing to read "Kevin J. Quinn". The signature is fluid and cursive, with the first name "Kevin" and last name "Quinn" clearly legible.

Kevin J. Quinn, P.E.  
President