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MEMORANDUM

To: Township of South Orange Village
Planning Board Chairman & Members

From: Eric L. Keller, PE, PP, LEED AP
Planning Board Consulting Engineer

Re: Application No. 270
445 Scotland Road – Block 416, Lots 3, 4, 8 and 9
STEM Academy Orange School District
Technical Review #1
BCG Project # 080373-SO-008

Date: July 3, 2019

CC: Ojetti Davis, Planning Board Secretary
William Sullivan, Esq., Board Attorney
Philip Abramson, PP, Village Planner
Robert C. Shea, Esq., Applicant's Attorney

We have received the following documents for the purposes of conducting an engineering technical review:

1. Plan set entitled "Proposed Alterations to STEM Academy Orange School District, 445 Scotland Road, Block 416, Lots 3, 4, 8 and 9, South Orange, New Jersey" consisting of two (2) sheets prepared by Yezzi Associates dated April 18, 2019 and last revised (revision #3) 4/18/19;
2. Township of South Orange Village Planning Board and Zoning Board Application Form.

The application proposes to construct new walkway improvements and a new greenhouse on site with limited curb and sidewalk improvements within the public right of way.

While this review is for a capital improvement as outlined in the land use law, specifically 40:55D-31, we note that several technical items should be addressed as they affect the surrounding public.

Our technical review comments on the various submitted documents are as follows:

1. The plans do not reference any boundary information. The source of the property lines should be provided;

2. As the project fronts upon three (3) municipal roadways, the plans should provide the street names to orient both the Board and the public;
3. Setback dimensions provided for the greenhouse are listed as minimum. Testimony should be provided as to why these are shown as minimums and if any trees will be required to be removed as a result of the construction;
4. As the greenhouse will be 1,800 square feet in area in addition to other sidewalk improvements, testimony should be provided as to how any increases in stormwater runoff will be mitigated to prevent impacts to the surrounding public;
5. Testimony should be provided as to the proposed lighting within the greenhouse. Same should include hours of operation and if these lights will be provided for illumination only or for plant growth;
6. The greenhouse proposes a one and a half inch water service to be connected to the existing structure to the east. It is assumed that this service will be for irrigation purposes. Testimony should be provided as to where runoff from irrigation will be directed;
7. Testimony should be provided as to the need for a landing area at the entrance to the greenhouse. We note that the plans indicate that a ramp will be provided. Furthermore, the architect should indicate the ramp slope to verify if railings will be required;
8. Based upon aerial photography, it appears that the hatched walk along the northern corner of the existing structure is proposed. We note that this area slopes rapidly away from the structure. Testimony should be provided with regard to the sidewalk cross slope and the potential need for additional retaining walls in this area;
9. Improvements are proposed within the public right of way. Details for these improvements as well as proposed grades should be provided for review;
10. The width of the new curb cut on Vose Avenue should be provided;
11. Testimony should be provided with regard to the limits of soil disturbance. It appears same will be greater than 5,000 square feet thereby requiring certification from the Hudson-Essex-Passaic Soil Conservation District.

Any revised plans and other documents should be accompanied by a cover letter responding individually to each of the comments presented in this review letter.

The cover letter should also outline those changes to the plans that were required, as well as those not readily apparent.