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July 27, 2022

Dudley Planning Board
Dudley Municipal Center
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Dudley, MA 01571

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**Subject: Nichols College – Center Road Townhomes
Major Site Plan Review**

Dear Planning Board Members:

We received the following documents in our office July 7, 2022:

- Plans entitled Nichols College, Townhomes, Center Road, Dudley, MA 01571 dated May 25, 2022 and revised June 30, 2022, prepared by Juster Pope Frazier, LLC and Clough Harbour Associate, LLP for Nichols College. (12 sheets)

We received the following documents in our office July 8, 2022:

- Correspondence from CHA to Dudley Town Planner dated June 30, 2022 RE: Nichols College – Center Road Townhomes, Major Site Plan Review, Response to Comments.
- Bound document entitled Drainage Report, Nichols College Townhouses, Center Road, Dudley, MA dated May 23, 2022 and revised June 30, 2022, prepared by CHA for Nichols College.

Graves Engineering, Inc. has been requested to review the plans and supporting materials for compliance with the Zoning Bylaws of the Town of Dudley, Massachusetts revised through October 19, 2020, MassDEP Stormwater Standards and Handbook, and generally accepted engineering practices.

This letter is a follow-up to our previous review letter dated June 21, 2022. For clarity, the comments from our previous letter are *italicized* and our comments to the applicant's responses are depicted in **bold**. Previous comment numbering has been maintained.

Our comments follow:

Zoning Bylaws

- Bicycle parking needs to be provided at a rate of 0.05 bicycle spaces per one vehicle space, with a minimum of one bicycle parking space. Considering the proposed use (educational campus), the design engineer may wish to consider more bicycle parking spaces than just one space. (§4.01.03)*
Acknowledged. Sheet C1.2 was revised to include eight bicycle parking spaces near the northern proposed building.
- The plans need to include the name, address, and telephone number of the owner and applicant. (§5.04.04.A.1)*

Acknowledged. The plans were revised to include the information of the owner and applicant in the title block.

3. *The plans need to include the site property address, Assessor Map-Block-Lot Number, names and street numbers of abutters, and names and street numbers of parcels along any ways. (§5.04.04.A.2)*

Acknowledged. Sheet C1.0 was revised to include the abutter's information.

4. *Sheet C2.1 needs to include proposed topographic elevation contours at the driveway intersection where the curb radius is being increased to widen the driveway. (§5.04.04.A.5)*

Acknowledged. Sheet C2.1 was revised to include the proposed topographic elevation contours at the driveway intersection.

5. *The site plans need to include the locations of handicap parking signs as well as any traffic signs (e.g., stop sign). (§5.04.04.A.18)*

Acknowledged. The plans were revised to include the locations of handicap parking and stop signs.

6. *GEI understands that the Chief of Police and Fire Chief will review the plan set separately. (§5.04.04.A.23)*

No further comment necessary.

Hydrology and MassDEP Stormwater Management

7. *GEI reviewed the hydrology computations and found them to be in order except as noted in the following comment.*

GEI reviewed the revised hydrology computations and found them to be in order.

8. *The hydrology calculations for Pond 50P need to be rechecked and revised as necessary relative to modeling the storage. GEI estimated areas of 2,800; 6,100 and 13,600 square feet for the 638; 640 and 644 elevations, respectively. The computations modeled 3,555; 6,861 and 14,157 square feet for the respective elevations.*

Acknowledged. The plans were revised to show the Water Quality Basin with grading that corresponds to the storage modeled in the hydrology calculations.

9. *Compliance with the MassDEP Stormwater Handbook and Standards is reasonable.*

No further comment necessary.

10. *The Drainage Report and the Stormwater Checklist need to be stamped and signed by a Massachusetts Professional Engineer.*

Acknowledged. The Drainage Report and Stormwater Checklist were stamped and signed.

General Engineering Comments

11. *The 15" diameter drainage pipe between the hydrodynamic separator and the water quality basin is proposed with a slope of 7.4%, which will result in excessive water velocity. The pipe slope needs to be revised to provide a water velocity no greater than 12 feet per second. A lesser velocity is preferable.*

Acknowledged. The drainage pipe was revised to have a slope of 5.0%.

12. *On Sheet C4.2, the Handicap Parking Sign construction detail includes a van parking sign. Sheet C1.2 needs to identify the van parking space.*

Acknowledged. Sheet C4.2 was revised to include a note stating that the two northern handicap parking spaces would be van parking spaces, and to refer to the Handicap Parking Layout Detail.

13. *The north arrow on Sheet C2.3 needs to be rotated approximately 90°.*

Acknowledged. Sheet C2.3 was revised to have the north arrow point in the correct direction.


General Comments

14. *GEI understands that the Dudley Water and Sewer Department will review the proposed water and sewer services.*

No further comment necessary.

We trust this letter addresses your review requirements. Feel free to contact this office if you have any questions or comments.

Very truly yours,
Graves Engineering, Inc.



Jeffrey M. Walsh, P.E.
Principal

cc: Kevin Chrobak, P.A.; Juster Pope Frazier Architects