



D&L Design Group

Civil Engineering & Land Surveying

115 Water Street • Milford, MA 01757
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February 20, 2024

Attention: Mr. William Andrews, Chair
UPTON ZONING BOARD OF APPEALS
One Main Street
P.O. Box 163
Upton, Massachusetts 01568

**Reference: Comprehensive Permit Application (40B)
Upton Apartments
47 Main Street (Route 140)**

Dear Mr. Andrews:

Our response to the Stantec peer review letter dated 2/16/24 are below.

SITE PLAN APPROVAL REGULATIONS

Stantec offers the following technical comments with respect to Section 308-8.

(11) Stantec (02/16/2024)

*We recommend size of existing water line be added to Sheet No. C-6.0 and response to the Fire Department Review/Comment Letter, dated January 19, 2024, be addressed by DLDG. **Response: Size of existing water main has been added to the plans and comments from Fire Chief on this matter have been addressed with the updated plan.***

(12) Stantec (02/16/2024)

*We recommend size of existing sewer line be added to Sheet No. C-6.0 and status of review by the Upton DPW be addressed by the applicant. The proposed sewer main profile is shown on Sheet No.C-12.1. We note the vertical separation between the existing water line and proposed sewer line within Main Street is less than 12-inches and recommend further review by DLDG. **Response: The size of the existing sewer line has been added to the plans. Note has been added to the plan to encase proposed sewer service in concrete where sewer line crosses the existing water line.***

(18) We recommend the applicant provide a profile of the proposed sewer system as shown on Sheet No. C-6.0

Stantec (02/16/2024)

*The proposed sewer main profile is shown on Sheet No.C-12.1. We note the vertical separation between the existing water line and proposed sewer line within Main Street is less than 12-inches and recommend further review by the DLDG. **Response: Note has been added to the plan to encase proposed sewer service in concrete where sewer line crosses the existing water line.***

(20) Stantec (02/16/2024)

*Proposed loading areas and fire lanes are identified on Sheet No. C-4.0. We recommend provisions for compact; visitor and electric vehicle (EV) parking spaces be discussed by the applicant with the Board. A total of 105 parking spaces including 8 accessible parking spaces or approximately 1.5 spaces per unit are identified on the Sheet No. C-4.0 **Response: The applicant has determined location for the EV spaces and have added it to the plan. Visitor parking will not be identified as parking will not be assigned.***



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STORMWATER MANAGEMENT SYSTEM

1. Stantec (02/16/2024):
DEP Standard #1

As noted by DLDG, rip-rap stone sizing calculations are included in the drainage report as part of this submission. We note that the rip-rap stone sizing calculations and the rip rap apron dimensions identified on the Sheet C-5.0 are not in agreement for Basin #1, Basin #2, and Basin #3. We recommend comment be addressed by DLDG. **Response: riprap aprons have been updated on the plan to match calculated sizes.**

2. Stantec (02/16/2024):
DEP Standard #2

Review of the peak flows as shown on the summary table and the HydroCAD peak flow analysis, peak flow for POI No. 1 is not in agreement for the Pre-Development 25-year storm event. We recommend comment be addressed by DLDG. **Response: Summary table has been updated.**

We recommend DLDG review the estimated rainfall intensity identified in the submitted pipe sizing calculations based on the time of concentration/design storm frequency. We recommend comment be addressed by DLDG. **Response: the estimated rainfall intensity has been updated.**

3. Stantec (02/16/2024):
DEP Standard #3

Cross sections of the proposed infiltration basin nos.1 and subsurface infiltration chamber system have been provided on Sheet C-11.0. We recommend cross section of infiltration basin no.2 be revised to include proposed subsurface infiltration chamber system. We recommend comment be addressed by DLDG. **Response: Additional cross section has been added to the plans for the subsurface portion of basin 2.**

Request the stage-storage worksheets be reviewed and label the (2) infiltration basins (nos.1&2), subsurface infiltration chamber system and volume provided for each stormwater control measure. We recommend comment be addressed by DLDG. **Response: Stage-storage worksheets have been added to the report.**

We note the resubmitted 72-hour drawdown calculations for the infiltration basins and subsurface infiltration system identified a K value are associated with a Hydrologic Soil Group (HSG) A and B which is not in agreement with the HSG C as identified in the HydroCAD analysis. We recommend comment be addressed by DLDG. **Response: drawdown calculations have been updated with a proper K value.**

4. Stantec (02/16/2024):
DEP Standard #4

TSS Removal worksheet for Basin #1 and Basin #2 are included as part of this submission. We recommend TSS Removal worksheet for Basin #3 and #4 be provided for review. We note review of the submitted water quality volume calculations, the paved area for P-3 and P-4 are not in agreement with the HydroCAD calculations provided. We recommend comments be addressed by DLDG. **Response: TSS work sheets have been added for Basin#3 & #4. Basin number three has a Stormceptor 900 as part of the chain with a paved drainage area of 4,200 s.f. and Basin 4 will only receive runoff from the roof and therefore there is no treatment needed.**



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If you have any questions on this project please contact me.

Respectfully,

Peter Lavoie
Project Engineer

CC: David Glenn, P.E.,
Vannary Tan