



Engineering Division

TOWN OF ARLINGTON
Department of Public Works
51 Grove Street
Arlington, Massachusetts 02476
Telephone (781) 316-3320 Fax (781) 316-3281

1021 – 1025 Mass Ave. Review Comments

Date: May 18, 2022

To: Kelly Lynema; Planning & Community Development

From: Wayne Chouinard, Town Engineer

RE: Plan review for 1021-1025 Mass Ave. Comprehensive Permit

The Town of Arlington Engineering Division is in receipt of the Comprehensive Permit information provided by email on May 3, 2022. It should be noted that the submitted plans appear to be preliminary in nature and do not include suitable detail to fully and satisfactorily evaluate the submission. These comments will respond specifically to the content related to stormwater, site utilities and accessibility. It is expected that a final review will be required for final construction level documentation.

The comments provided are based on the documents provided by the Department of Planning and Community Development. Comments are as follows:

- **Stormwater:**

- It is noted that storm water control details are included on the Site Details Sheet. However, a comparison of pre and post development impervious areas should be provided along with a hydrological report detailing the stormwater runoff calculations in order to more accurately review the stormwater mitigation provided.
- All necessary calculations should be submitted in order to evaluate the hydrologic and stormwater runoff conditions for pre-development and post-development conditions.
- There is no information provided to review the stormwater collection system for runoff requirements from the building roof.
- No stormwater collection pipes or infrastructure – roof drain, leaders, pipes etc. are indicated.
- It is noted that there is an observation test hole indicated on the plan. Additional data should be provided indicating the subsurface conditions in the area proposed to be utilized for stormwater infiltration including soil horizons, soil type and classification and groundwater information.
- Calculations should be included detailing the effects of groundwater mounding in the vicinity of the proposed subsurface infiltration system.

- **Traffic:**

- Review and documentation of the Mass Ave. LOS ratings should be provided along with anticipated traffic generation and effects resulting from the proposed project.
- Due to proximity to the Mass Ave. and Brattle Street signalized intersection and the entrance to the Highland Fire Station, it is recommended that an analysis be provided indicating the anticipated impacts of increased traffic volume and use at these locations.

- **Lighting:**

- A photometric plan should be provided to evaluate site lighting and light spillage at property lines. Night sky reduction, light pollution, cut off fixtures and glare should be considered, carefully evaluated and documented with respect to impacts on abutting properties.



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- **Water :**

- The site plan does not indicate separate water connections for domestic and fire protection services. A suitable connection for both services should be sized and indicated.
- Calculations should be provided to ensure the distribution system for the area has capacity for increased demand for fire flow and domestic water supply without impacting the existing system or abutter's water volume and pressure.
- All connections to the Town water system require a triple gated connection to provide maximum shut-off and distribution control.
- Connections to the Town water main require a tee connection.

- **Sewer:**

- The proposed sewer connection indicates a tie-in along the existing sewer main. It is recommended that the connection be made directly to the existing and adjacent sewer manhole. All existing utilities are required to be cut and capped at the existing main connections.
- New sewer service lines from multi-family buildings should be a minimum of 8" diameter.
- Up-gradient sewer flow analysis, with peaking factor should be determined and provided to document suitable capacity for proposed additional flow. Evaluation should include the downstream sewer main to determine whether it will provide sufficient capacity for the intended increase in flow and address any added exfiltration potential.
- Floor drain and sewer connection details should be provided for all garage facilities serving more than five (5) vehicles including oil/gas separators. These should be designed and located properly within the parking structure or on-site.
- Hydraulic calculations should be provided for utilities to confirm suitable capacity. It is recommended that any upgrades or improvements necessary to maintain capacity with proposed additional flow should be included in this project.
- Details and offset dimensions are required to ensure proper spacing between water/sewer service connections.
- It is recommended during permitting and approval, to discuss whether an Inflow/Infiltration (I/I) mitigation fee be assessed to be used to reduce I/I of the Town sewer system in the amount equal to four(4) times the design flow of the project.

- **Utilities: Other**

- What are the off-site upgrade requirements necessary for the CATV requirements for proposed development? Will current utility pole and cable configurations accommodate the required cable electric and telephone wires without the need for additional utility poles or improvements outside of the project locus? Any installation of utility poles or underground conduit in the public right of way will require a Grant of Location from the Board of Selectmen. This information should be provided as part of the application process to evaluate the entirety of impacts and effects.

- **Pavement, parking and sidewalks:**

- Proposed pavement markings and signage should be indicated.
- Pavement markings and signage required for handicap spaces if required should be added, along with delineation of required ADA accessible routes to the structure.
- Information should be provided detailing the entrance/egress location and the impacts on pedestrian accessibility along the sidewalk located within the public right of way.



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- Properly designed fire lanes or access areas should be provided for access around the structure or a suitable alternative satisfactory to the Fire Department.
 - Turning radius should be included detailing required radii for all vehicles within the parking structure.
 - Suitable details should be provided indicating ADA accessibility requirements for sidewalks, ramps and any other pedestrian accommodations along the right of way.
 - Site plan should identify areas where delivery and other larger vehicles will frequent and address suitable turning radius requirements.
 - Time of use restrictions for deliveries, trash pickup etc. to reduce impacts on adjacent neighborhood.
- **Landscaping:**
 - Project should provide properly placed screening to minimize impacts on abutting properties.
 - If possible, street tree plantings should be provided along Mass Ave. to reduce heat island effects.