



George J. Saraceno, Senior Civil Engineer

TO: Michael Zehner, Planning Director

RE: **Project of Significant Impact PSI-14-01**
Pleasant Street Townhomes

DATE: October 29, 2014

The Department of Public Works (DPW) Engineering Division has received a set of plans with a revised date of September 26, 2014 from Engineering Design Consultants, Inc. (EDC) of Southborough, MA. The DPW has also received the Municipal Systems Impact Analysis for the project, submitted by EDC. The project involves razing the existing buildings and construction of 6 townhouses, on-site drainage, utility and landscaping work in a general residence district. The project is not within the Water Supply Protection District.

Listed below are the preliminary comments regarding the proposed project.

PSI REVIEW COMMENTS

GENERAL

- 1.) During the blasting or hammering effort to remove ledge on the property, the applicant shall comply with all applicable Building and Fire Department standards related to the removal of ledge.
- 2.) Our records indicate that the existing house is not connected to the Town's sanitary sewer system. As such, the applicant should locate the existing on-site cesspool or septic system and show the location on the Existing Conditions and Layout and Materials Plan, sheet 1. The existing on-lot cesspool or septic system shall be de-commissioned according to Title 5 regulations and the Town's Board of Health.

TRAFFIC & TRANSPORTATION

- 1.) The Engineering Corp (TEC) of Lawrence, MA performed a Traffic Impact Evaluation (TIE) for the proposed six (6) Townhome units. The analysis showed that the project will generate approximately 5 new vehicle trips during the weekday morning peak period and 6 during the evening peak period which will have a negligible impact to traffic operations on surrounding roadways according to TEC.
- 2.) The stopping sight distance (SSD) of 260 feet to the north and 130 feet to the south of the driveway is above the minimum requirements of the American Association of State Highway and Transportation Officials (AASHTO). The intersection sight distance (ISD) falls below the AASHTO standards but removing vegetation along the right-of-way will help improve site distance to the north.

- 3.) There is an existing 5' wide asphalt sidewalk on both sides of Pleasant Street that provides sidewalk connectivity from Westerly Street to Ivy Road. The existing sidewalks throughout the entire length of the Pleasant Street are in good condition. The sidewalk directly in front of the site should be maintained by the applicant during construction. It will be the responsibility of the applicant to make the necessary repairs to the sidewalk as a result of damage related to construction activity.

STORMWATER

- 1.) The drainage calculations show a reduction in peak flow and volume up to a 100-year storm event for the post development runoff scenario due to the installation of six (6) infiltration units. Test pits were submitted covering 5 of the proposed infiltration system locations. The analysis seems reasonable and is stamped that this analysis indicates that there is no detrimental effect to the Town's drain system from the proposal.
- 2.) The drainage system impact analysis should include information regarding the increase impervious area on-site, including a statement that the increased impervious area is mitigated by the proposed infiltration units.
- 3.) On the Details Plan, sheet 3, the information for mottling at TP#5 should be revised to reflect the depth of the test pit as the information was copied from TP#2.
- 4.) We recommend that the proposed infiltration chambers shall not be located within ten (10) feet from any foundation and ten (10) feet from the property line to minimize the potential for nuisance ponding issues.
- 5.) The drainage calculations should show invert elevations and peak flow elevations that match the grades provided on the Grading and Utility Plan, sheet 2.

WATER

- 1.) The plans should be revised to show a proposed 4" cement lined ductile iron pipe that will distribute water to the proposed 6 Townhome units. The Municipal Systems Impact Summary should be revised to show that the existing 6" water main on Pleasant Street has enough capacity to meet the flow demands from the proposed 6 Townhome units for the fire protection and domestic service. Additionally, the design engineer should provide results of the water system pressure and flow performed on Pleasant Street.
- 2.) We understand that the applicant will provide fire sprinklers in each unit and recommend that the units have 2" water service for fire protection with a 1" domestic line split outside the unit. The fire protection service line for each Townhouse shall not be metered.
- 3.) The applicant should provide the proposed sprinkler service demand for each Townhouse unit.

SEWER

- 4.) Based on calculations performed by EDC, the existing 8" sanitary sewer main on Pleasant Street has a capacity of 1.09 cfs or 490 gpm. The proposed 6 Townhome units with a factor of safety of 3.0 will yield a 5.50 gpm flow rate. There shall be sufficient sewer capacity within the existing 8" sanitary sewer pipe on Pleasant Street to meet the flow demands of the proposed 6 Townhome units without causing the sanitary sewer system to surcharge.

REFUSE DISPOSAL SYSTEM

- 1.) The refuse generated from the site will be removed by private haulers and will not impact the Town of Wellesley refuse disposal program. However, individual residents may apply for a permit and use the Town of Wellesley, Department of Public Works, Recycling and Disposal Facility.

If I may be of any further assistance in this matter, feel free to contact me.

Sincerely,



George J. Saraceno
Senior Civil Engineer

cc: Michael Pakstis
David Hickey
Douglas Stewart
William Shaughnessy
Joe Doherty
Ethan Parsons
Michael Grant
Meghan Jop