

George J. Saraceno, Senior Civil Engineer

TO: Meghan Jop, Planning Director

RE: **Project of Significant Impact PSI-013-01**
Babson College – First Year Residence Hall

DATE: April 19, 2013

The Project of Significant Impact submission by Sasaki Associates, Inc. for the Babson College First Year Residence Hall project, which will be located behind the dwelling at 225 Forest Street, has been received and reviewed by the Department of Public Works (DPW). The project involves construction of a 78,000 s.f. residence hall, extensive utility relocation work, new landscaping elements and accessible walkways and new connection points to the residence hall. The project site work includes regrading, onsite stormwater drainage system, utilities, landscaping and paving. The project is located in an Educational A Zone and Water Supply Protection District.

Listed below are the preliminary comments regarding the proposed project. Additional comments from the Town Engineer and the Water and Sewer Division will be provided upon completion of their review.

PSI REVIEW COMMENTS

GENERAL

- 1.) Please revise plan C2-1, Layout and Material Plan, to be legible by removing unnecessary background information. All the plans should be revised to remove unnecessary background information.
- 2.) Identify on the plans what benchmark was used and show on the plans.
- 3.) The plans should include building elevations and include proper building height.
- 4.) Sewer flows will exceed 15,000 gpd and therefore require a MassDEP sewer connection permit.
- 5.) What inflow and infiltration reduction improvements will be recommended for this project?
- 6.) The planting plan, C5-1 should include a proposed planting schedule, including tree sizes and species with botanical names showing the number of trees that will be installed. The planting plan should be stamped by a Landscape Architect registered in the Commonwealth of Massachusetts.
- 7.) For the note regarding deed distances on plan C1-1, Sediment Control and Demo Plan, please

provide more information on which deed distances don't match.

- 8.) The plans provided are missing several key elements such as utility profiles, pipe data and construction details. This information should be provided at a minimum for PSI review.
- 9.) Provide a locus map, 1"=500' on the cover sheet of the plan set.
- 10.) The applicant has appropriately addressed the work being performed in the Water Supply Protection District, Section XIVE of the Zoning Bylaws.
- 11.) On the Sediment Control and Demolition Plan, C1-1, show a construction fence around the entire site.
- 12.) Add a note to the plan set that any debris from the construction site on Forest Street or Wellesley Avenue will be cleaned with a street sweeper.

TRAFFIC

- 1.) The Applicant should provide an analysis of pedestrian and bike safety on Wellesley Avenue and Forest Street, including improvements to the roadway and sidewalk within 600 feet of the project.
- 2.) The driveway entrance to Park Manor Central from the rear will be closed. Does this present a problem for students or commercial vehicle deliveries, etc? What is the contingency plan?
- 3.) Babson College has agreed to clear lower branches east of the Babson Main Gate driveway to improvement site distance by 500 feet.
- 4.) There have been no reported accidents from 2008 to 2010 at the Babson College Main Gate and West Gate driveways. The Wellesley Country Club will be installing "all-way" plaques to the existing stop signs at the intersection of Forest Street and Wellesley Avenue to help reduce accidents.
- 5.) Transportation Engineering, Planning and Policy (TEPP LLC), the traffic engineer for the project has reported in the traffic analysis that the proposed project may result in a reduction in student traffic because of the additional on-campus housing for students. According to TEPP LLC, the additional on-campus housing will not result in increased student enrollment as the project is addressing a bed shortage on-campus.
- 6.) According the Traffic Impact and Access Study submitted by TEPP LLC, the project does not negatively impact existing traffic conditions on Wellesley Avenue or Forest Street. Also, the project does not negatively impact the entrances to Babson College at the Main Gate and West Gate driveways.

STORMWATER

- 1.) The condition of the existing drainage system that will be directly impacted by this project at Babson College and including the drainage system and culvert on Forest Street is not know and should be investigated with the aid of a closed circuit television camera (CCTV).
- 2.) For the Sediment Control and Demolition Plan, C1-1, provide a wash pad for construction vehicles entering and leaving the site. Add a detail for the wash pad on a separate detail sheet.
- 3.) Show haybales and silt fence or erosion control sock on the Sediment Control and Demolition Plan, C1-1.
- 4.) Revise Study Point #4 (POA#4) to state that POA#4 discharges to ECB-395, which connects to the existing 15" drain pipe on Forest street.
- 5.) The proposed site improvements will increase the impervious area by 0.50 acres, most of which is the roof for the proposed First Year Residence Hall.
- 6.) On plan C3-1 or on a separate details plan, please show a cross sectional area with appropriate elevations, including pipe inverts, groundwater table, stone depth, etc. for the proposed subsurface infiltration chambers. Show the number of infiltration chambers, cleanouts or access points to the infiltration system.
- 7.) Provide an operation and maintenance plan for the proposed drainage structures. The operation and maintenance plan logs should be sent to the Town of Wellesley Town Engineering Division on an annual basis.
- 8.) Provide a description of each Stormwater Management Standards per MassDEP in the Storm Drainage Impact Analysis.
- 9.) The peak runoff rates for the proposed site improvements will decrease, therefore reducing stormwater water runoff overflow from the 500 Stormtech MC-3500 chambers to the existing 8" storm drain pipe prior to entering the 20" culvert on Forest Street. Provide the pipe capacity of the existing 8" storm drain. Add a separate column that shows the peak volume of runoff for each storm event.
- 10.) On the Grading and Drainage Plan, C3-1, properly label the proposed drainage structures with rim and invert elevations and show roof connection to area drain system.
- 11.) Darken the proposed contours on the Grading and Drainage Plan, C3-1.
- 12.) The stormwater runoff model shows a reduction in the rate of runoff for the proposed development for the 2, 10, 25 and 100-year storm event. However, a complete description of the drainage system and infiltration chambers should be provided for the DPW to complete the review of the stormwater runoff model.

WATER

- 1.) Label all water pipe sizes on the plans.
- 2.) Water demand for the proposed residence hall facility is projected to be 17,653 gallons per day or 10% greater than the expected sanitary sewer flow rates for water consumption in the residence hall building.
- 3.) Please provide a 4" water gate to the proposed water service connection to the residence hall building.
- 4.) The water systems analysis shows that the existing 12" water main on Babson College Drive has enough capacity to meet the additional flow from the proposed residence hall building.

SEWER

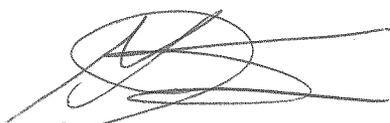
- 1.) Please label the proposed sewer manholes, including proposed rim and invert elevations.
- 2.) Please label the pipe size, material type and flow arrows for the proposed sanitary sewer pipe.

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.
- 2.) A recycling program will be provided for the proposed project.

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
William Shaughnessy
David Hickey
Douglas Stewart
Michael Grant
Zachary Chrisco, Sasaki Associates