



November 3, 2016

JoAnn Cornish, Director of Planning & Development and
Members of the Planning Board
City of Ithaca
108 E. Green St.
Ithaca, New York 14850

Re: Supplement to the Preliminary SPR Submission for College Townhouses

Dear JoAnn and Members of the Board:

Attached please find a supplement to the Preliminary SPR application package for the College Townhouse project originally submitted on October 14, 2016. This submission includes the civil engineering, including site utilities and storm water design for the project prepared by T.G. Miller Engineers. Frank Santelli, Principal of T.G. Miller Engineers, met with Scott Gipson, Erik Whitney, Matt Sledjeski, and Marc Albanese at the City DPW Water and Sewer Department to review the project and the plans. The written narrative and plans reflect their input.

We look forward to reviewing this project with you at the November 22, 2016 Planning Board Meeting.

Sincerely,

A handwritten signature in black ink that reads "Kathryn Wolf". The signature is written in a cursive, flowing style.

Kathryn Wolf, RLA
Principal

Trowbridge Wolf Michaels Landscape Architects LLP

1001 West Seneca Street, Suite 101 Ithaca, New York 14850 ph. 607.277.1400

www.twm.la

College Townhouse

SPR Civil Narrative – Prepared by T.G. Miller Engineers

November 2, 2016

Water –

Water service to the new building will be supplied by the City of Ithaca distribution system from their East Hill (Maple Avenue Tank) pressure grid. Normal static water pressure in the street is estimated to be approximately 116 psi. The average daily water demand for the proposed buildings is estimated to be approximately 3,100 gpd based on 87 residents and water use of 35 gallons per day per resident. The existing distribution system is more than adequate to supply the estimated domestic water demands. The available fire flows and residual pressures supplied by the City system will need to be determined but are expected to be adequate to serve the building.

Improvements will include a new service connection to the existing 8-inch City main in the street on College Avenue. The new service will be 6-inch ductile iron splitting into a 6-inch fire service and 4-inch domestic service before entering Building 2. Domestic and fire services to Buildings 1 and 3 will be supplied by sub-services from Building 2.

Sanitary Sewer –

Sanitary sewer service to the site is currently provided by the City of Ithaca collection system with service laterals connected to an 8-inch sewer main in the street on College Avenue. Treatment of all sewage is provided by the Ithaca Area Wastewater Treatment Facility (IAWWTF) on Third Street. The capacity of the collection system and treatment plant to accept any increases in sewage flows from the property is believed adequate based on initial conversations with DPW staff. The new services will be equipped with sanitary traps outside each of the 3 buildings. The improvements will connect to the existing City system at one location with a new manhole on the main in the street. All three buildings will be sewered by gravity.

Stormwater Drainage -

The site and surrounding lands slope generally from northeast to southwest. Runoff from the adjoining lots above the site to the north and east drains overland onto the site with no formal drainage system. Runoff from the neighboring properties combines with runoff from the site and continues overland to the street at College Avenue where it is collected by the City of Ithaca storm sewer system. The existing onsite drainage facilities include primarily house gutters and downspouts that discharge at the surface. The two existing drainage inlets behind House #119 and trench drain at the driveway have long been inoperable due to clogging with sediment and debris. The lack of existing onsite drainage facilities has resulted in significant flows over the existing gravel driveways with significant erosion, and sediment leaving the site.

The existing City storm sewer system includes inlets and 15-inch storm sewer piping located along the west curb line of College Avenue. The sewer system flows toward the south, and then west along Mitchell Street, before ultimately discharging to Six Mile Creek southwest of the Collegetown Terrace site.

Improvements will include numerous onsite drainage inlets, site area drains, trench drains, foundation drains and associated storm sewer piping to collect runoff entering the site from the north and east, and runoff from the proposed buildings and improved site. Since the lower levels of Buildings 1 and 2 are lower than the City storm sewer system, the areaways of these two buildings, along with their

foundation drains, will be connected to sumps below their respective lower level floor slabs and pumped up to the building storm services exiting the buildings higher up. All other areas of the site including the building roofs will be sewered by gravity. The drainage system for the Building 3 foundation drains and adjacent site areas at the lower building level will be equipped with a backwater valve where it connects to the onsite storm system to prevent flooding of the interior building space. The onsite storm sewer system will connect to the existing City storm sewer across the street at the west curb line of College Avenue where a new drainage inlet will be provided at the point of connection.

Stormwater Management -

The total area of soil disturbance on the site will be less than one acre and the project will not be required to complete a 'Full' Stormwater Pollution Prevention Plan (SWPPP) or submit a Notice of Intent to obtain permit coverage from the NYSDEC for stormwater discharges. The project will exceed certain thresholds in the City of Ithaca stormwater regulations that will require a 'Basic' SWPPP. The Basic SWPPP will include an erosion and sediment control plan with temporary practices to be installed and maintained during construction. The temporary practices will be designed in accordance with the current NYSDEC standards. Based on the current site plan the amount of impervious area on the site will be slightly reduced. Post-construction stormwater management practices are not required.

Electric and Telecommunications -

Electric and telecommunication services to the existing houses on the site are all believed to be overhead from utility poles located adjacent to the east curb line of College Avenue. The services have been disconnected and removed in advance of the recent demolition of the existing houses. Service to the site for both electric and telecommunications is expected to be below ground in conduit to Building 1 from the utility pole near the southeast corner of the #125 house lot. Sub-services to the other 2 buildings will be in conduit from Building 1. The electric transformers for the project are expected to be mounted on the existing pole. The improvement will need to be confirmed by the utility companies providing services. Provisions will need to be made to accommodate any potential future relocation of the existing aerial facilities to below ground along the College Avenue corridor.

Natural Gas -

Service to the new building will be needed to supply gas-fired equipment for heat, hot water and possibly backup power generation. The existing gas distribution system includes an existing low pressure main below the sidewalk on the east side of the street. We understand the utility company, NYSEG, has plans to extend their medium pressure system along this section of College Avenue. Gas service is expected to be provided to Building 2 with sub-services to the other 2 buildings. All gas improvements will need to be confirmed by NYSEG in coordination with the project.