Catherine Commons

Preliminary Site Plan Review
Application Report

Ithaca, NY
August 17, 2021
August 17th, 2021

JoAnn Cornish, Director of Planning and Development  
Department of Planning and Development  
City of Ithaca  
108 East Green Street  
Ithaca, NY 14850-5690  
Re: Catherine Commons Preliminary Site Plan Review Application

Dear JoAnn and members of the Planning Board:

Coll-Cath Associates, LLC and Cook Coll, LLC intend to redevelop multiple parcels on College Avenue, Catherine Street and Cook Street in the City of Ithaca. The project will move Collegetown toward the City’s vision for Collegetown as expressed in the City’s Comprehensive Plan and the 2009 Collegetown Urban Plan & Conceptual Design Guidelines.

Enclosed please find the project synopsis, supporting narrative, and SEQR forms. Site and architectural plans are provided as an attachment.

If you have any questions or require further information, please do not hesitate to call. We are looking forward to reviewing this project with the Board in the months to come.

Sincerely,

Kathryn Wolf  
Principal
Project Consultants

Novarr-Mackesey & Integrated Acquisition & Development
Developers

ikon.5 Architects
Architect

Trowbridge Wolf Michaels Landscape Architects, LLP
Landscape Architect

T.G. Miller, P.C., Engineers and Surveyors
Civil Engineer

Thornton Tomasetti
Structural Engineer

Beardsley Architects & Engineers (Light Gauge)
Light Gauge Framing Design

IPD Engineering
MEP Engineers

Taitem Engineering, PC
Energy Consulting

Stopen Engineering, LLP
Geotechnical Engineers
This page has been intentionally left blank.
## Table of Contents

Location & Zoning.................................................................................................................... 1
Project Proposal.......................................................................................................................... 5
   Existing Conditions............................................................................................................... 6
   Overall Project Description................................................................................................. 9
   Catherine North.................................................................................................................... 10
   Catherine South.................................................................................................................. 12
   Proposed Design Views........................................................................................................ 14
   Building Elevations............................................................................................................ 17
   Building Shadow Studies..................................................................................................... 24
   Long Environmental Assessment Form (FEAF) City of Ithaca................................................... 30
Addendum to FEAF..................................................................................................................... 44
   Impact on Land.................................................................................................................... 45
   Impact on Water................................................................................................................... 45
   Impact on Air....................................................................................................................... 50
   Impact on Plants, Animals & Agriculture............................................................................ 50
   Impact on Aesthetic Resources............................................................................................ 50
   Impact on Cultural Resources.............................................................................................. 74
   Impact on Critical Environmental Areas.............................................................................. 76
   Impact on Transportation..................................................................................................... 76
   Impact on Energy................................................................................................................ 79
   Impact from Sound, Odor & Light....................................................................................... 79
   Impact on Public Health...................................................................................................... 80
   Impact on Growth & Character of Community................................................................. 81
   Impact from Construction................................................................................................. 84
Appendices................................................................................................................................ 89
   Appendix A Building Permit & SPR Application Forms
   Appendix B Zoning Analysis
   Appendix C Traffic Report
   Appendix D Stormwater Report
   Appendix E Geotechnical Report (ELECTRONIC SUBMISSION ONLY)
   Appendix F Site & Architectural Drawings Package
This page has been intentionally left blank.
Location & Zoning
Project Location & Zoning

Catherine Commons is a proposed approximately 360-unit residential development located in the City of Ithaca in central Collegetown. Twelve parcels have been aggregated on the west side of College Avenue to form the 1.45 acre Catherine Commons project site. In addition to the residential use, the project also includes commercial space along College Avenue, a fitness center for the project at the corner of College Avenue and Cook Street, extensive streetscape improvements and public plaza space, and a small parking lot accessed off of Cook Street. The project is designed to be in substantial conformance with existing zoning, with some exceptions. The Catherine Commons project will significantly improve the quality of the urban fabric in Collegetown.

Figure 1: Location Map in Context with Collegetown
The properties are zoned Mixed Use (MU2 and MU1) and Collegetown Residential (CR4 and CR3). The requested variances pertain primarily to the College Avenue frontage in the MU2 and MU1 zones. The principal variances being sought are to allow an increase in the number of building floors and an increase in building height along College Avenue. The proposed buildings in the CR4 and CR3 zones are in conformance with the existing zoning and no height variances are being sought for the buildings in these zones. A variance is being sought to allow fewer than the required number of parking spaces in the CR3 zone. Minor rear yard setback variances are being sought in the CR-3 and CR-4 zones. A detailed description of the variances is included in Appendix B: Zoning Analysis.
Project Proposal
**Existing Conditions**

The 2009 Collegetown Urban Plan & Conceptual Design Guidelines identifies certain conditions in Collegetown as “characterized by poor urban design,...indifferent architecture and a very inconsistent mix of building heights” (see Part One, pg. 35). Nearly all of the existing buildings that are the focus of this proposal are older wood frame buildings that have been cut up into as many apartments as possible with the front porches of some enclosed to create more bedrooms and satisfy only the bare minimum of space requirements as dictated by the Building Code. Most of the buildings sideyards and rear yards have been turned into driveways and parking lots. All have major deferred maintenance items and are not in a condition where the developer is comfortable leasing the units. The existing structures are currently vacant and their prior use was predominantly student housing.

The Catherine North site is composed of three adjacent properties along the west side of College Avenue north of Catherine Street in zone MU2 and four adjacent properties along the north side of Catherine Street in zone CR4. The aggregated parcels for this site total approximately .81 acres. There are currently seven older and vacant wood frame homes on the site, which were previously rental properties.

The Catherine South site is composed of the four properties along the west side of College Avenue between Catherine Street and Cook Street in zone MU1 and one property along the north side of Cook Street in zone CR3. The aggregate parcels are approximately 0.64 acres. There are currently four older, vacant wood frame houses on the site, which were previously rental properties. Environmental abatement on these buildings is largely complete and the buildings will be removed as part of this project.

Figure 3: Existing Buildings to Be Removed
Abatement and Demolition of Existing Buildings

Abatement
There are currently 11 buildings which will need to be demolished in order to create the site for the Catherine Commons project. One building, 118 Cook Street, was demolished in November 2019 after a complete hazardous material survey was completed by Lakeland Environmental and all identified hazardous material removed.

The remaining 11 buildings were the subject of a hazardous material survey conducted by Lakeland Environmental in September-November 2019. This survey identified asbestos containing material (ACM) in all the buildings. Most of this material was found in old flooring, caulking in various locations, plaster on one wall in one building and in the roofing material in several buildings. In February 2020 the project sponsors hired the Sunstream Corporation to remove the identified ACMs from all the buildings. Sunstream received demolition permits for the abatement process in February 2020. The project sponsors also retained Atlantic Environmental to perform air monitoring testing during the course of the abatement work.

Of the 11 buildings for which Sunstream received a demolition permit, 5 have been completely abated and 6 have more abatement work that needs to be completed. The remaining abatement work is all exterior and largely confined to asbestos containing material on the roofs. The project sponsors opted to hold off on this work until they can apply for a demolition permit for the buildings which is expected to occur after the environmental review process for the Catherine Commons project has been completed. At that point, Sunstream will come back to remove the roof sections that have been identified as having asbestos containing material to minimize the time period between when the roofing material has been removed and demolition of the buildings can take place. Final air clearance reports have been submitted to the Building Department to close out the demolition permits for the 5 completed buildings. The demolition permits for the remaining 6 buildings will similarly be closed out once the roofs on these buildings have been abated.

Demolition
The City has determined that demolition permits for the existing 11 buildings on the site can only be applied for once the proposed Catherine Commons project has completed the environmental review process. During this interim period the project sponsors have been working with Ithaca ReUse to salvage all usable appliances, bookcases and miscellaneous other pieces of furniture. Currently, all buildings are completely empty. Ithaca ReUse will evaluate each building to determine what components - windows, doors, trim and other architectural pieces - of each building are worth salvaging. Ithaca ReUse will have an opportunity to remove these items before the buildings are demolished.

Utility services – gas, electric, water and sanitary sewer – have been completely terminated at each building. The first floor windows and doors have been boarded up with plywood per instructions from the Building Department. In order to facilitate NYSEG’s work undergrounding all the overhead electric power lines on College Avenue the project sponsors have agreed to let NYSEG’s contractor, Maxim, use the properties on College Avenue between Catherine and Cook Streets, including 118 Cook Street, as a staging area for all their materials and equipment. It is expected that NYSEG’s contractor will complete their work in late Fall, 2021 and the City is expected to complete their work in the fall of 2022.

An experienced, licensed and insured demolition contractor will perform demolition of the 11 remaining buildings. The demolition debris will be disposed of at a C&D landfill or recycling facilities licensed by NYSDEC per 6 NYCRR 360 Solid Waste Management facilities. It is expected that the demolition of these structures will generate approximately 1,480 tons of waste.

The demolition contractor will apply for Street Permits as needed and maintain a Vehicular and Pedestrian Traffic Control Plan. The project sponsor will retain a licensed monitoring firm to observe the demolition process and provide constant air monitoring services during the course of the demolition work. The demolition of all the buildings will take approximately 4 weeks to complete. Upon completion, the site will be turned over to the General Contractor for construction of the proposed project.
Figure 4: Illustrated Site Plan
Overall Project Description

**Site Design**

Streetscape improvements, open space and pedestrian amenities will be provided extensively throughout the project. Portions of the proposed buildings along College Avenue will step back as much as 41’ at the first and second floors to increase sidewalk widths and create more open space by utilizing private property. Several ADA compliant plaza spaces will be created as a result. A new bus stop will be located on College Avenue near Cook Street and a covered, protected plaza space will be incorporated into the architecture to function as a public bus stop.

**Catherine North Site**

The Catherine North site consists of three buildings. The use is proposed as residential with commercial space on the ground floor along College Avenue.

**Catherine South Site**

The Catherine South site consists of three residential buildings and includes a fitness center for the project. The Catherine South site will include townhouse units with individual entrances and front porches along College Avenue to create a more vibrant streetscape.

**Building Use & Square Footage Summary**

- Total number of units: 360 +/-
- Commercial GSF: 2,600 (includes possible use of Basement Space)
- Fitness GSF: 1,600
- Overall GSF: 265,000

Contextually, a first rate, high aspiring building will fit well in Collegetown. While Collegetown offers no consistent architectural language to suggest a specific architectural expression, a number of conditions adjacent to the project site at College Avenue and Catherine Street do offer clues that can inspire and influence design thinking. The most significant of these potential influences are the scale and masonry materiality, the residential massing and design features of the existing buildings in Collegetown.
Figure 5: Illustrated Site Plan - Catherine North Site
**Catherine North**

Three interconnected buildings are proposed for the Catherine North site. Building 1 (along College Avenue) is proposed at 8 stories/90 feet and will include first floor active use, including commercial space with multi-family residential use in the floors above. Buildings 2a and 2b on Catherine Street are proposed at four stories/44 feet 10" with multi-family residential use. All three buildings will be connected via open bridges. Three principal points of entry to the complex are proposed on College Avenue and four entrances are proposed on Catherine Street.

The first floor of building 1 along College Avenue is aligned with the adjacent building line established by the 312 College Avenue residential building and then is set back from the property line to provide additional circulation and socialization space at the street level. The first floor is a transparent glass wall and includes a lobby and concierge desk and commercial space.

The proposed building faces on College Avenue and Catherine Street will be clad with a combination of terra-cotta (clay tile) shingles, metal panels and insulated glazing. The College Avenue building faces will include insulated one and two-story window openings, and residential sized windows to activate the façade. The varied depth of the transparent openings, the variation in window size and placement, and the terra-cotta texture and color are intended to create a façade that is active, transparent, and minimize the scales of the buildings. Contextually, the materials and color provide connectivity to the College Avenue buildings of the 400 block.

Along College Avenue, the mass of Building 1 is broken down by introducing a continuous vertical glazed element that breaks the horizontal massing. The street level is activated by a glass enclosed commercial space within a loggia that promotes pedestrian activity and social interaction. The west elevations, which face the smaller scale multi-family buildings, will be clad in double height scaled metal panels evenly space to reduce scale and stacked windows to create repetition, symmetry, and order.

All three buildings will be connected via open metal pedestrian bridges along Catherine Street at the upper floors. The ground level will remain open, allowing both a physical and visual connection to the interior courtyard and creating residential scaled volumes along Catherine Street. The buildings on Catherine Street, similar to existing residences, are set back 10 feet from the property line to provide a landscaped front court that provides access to the main entrances. The building façades along Catherine Street will differ from College Avenue, respecting the transition to the neighborhood scale.

Please refer to the pages following, which include an illustrated site plan, first floor building plans, a streetscape rendering, and building elevations.
Catherine South

Plans for this site include three buildings that step down in height as grade falls along both College Avenue and Cook Street. Buildings 3a and 3b are proposed at 7 stories/78 feet with multi-family residential use and a Fitness center at the southern end of the site. Building 4 is proposed at 3 stories/34 feet 10" with a pitched roof and multi-family residential use.

The first two floors of Buildings 3a and 3b along College Avenue are proposed to step back from the property line at both the Catherine and Cook street intersections, increasing the available open space and providing additional circulation and amenity space at the street level. Two principal points of entry to the building are proposed on College Avenue. Additionally, the townhouse units along College Avenue include individual entries with front porches, creating a vibrant street dialogue with the urban residents.

The building façade for 3a along College Avenue is proposed as a terra-cotta (clay tile) shingle checkerboard. The patterning is intended to create an active solid/void pattern on the elevation, grounded by individual townhouse entry stoops at the street level along College Avenue. The windows will be arranged to create a visually active façade by staggering mullion spacing and metal panels.

At the southern end of the site, building 3b’s façade is proposed as a baked enamel aluminum clad grid frame infilled with windows and dark metal panels to promote a light transparent massing. The grid cladding will continue along Cook Street, and wrap the corner to the west. The western elevations of building 3a will be clad in the same manner.

Building 4, located on Cook Street, is a standalone three-story house that will provide a transition to the existing buildings. The façade will have a ground level porch, and be set back from the street to align with its neighbor to the west. This building will be more residential in form and scale and will include a pitched roof. The building will be clad in baked enamel aluminum panels with residential scaled windows and a combination of dormers and roof cutouts to be complimentary with the vernacular architecture.
Proposed Design Views

The design proposes that 1-2 stories at the ground floor are substantially pulled back from the City ROW at the Cook and Catherine Street corners to improve visibility and openness and to create plaza spaces that will allow for an active social street life that is the life-blood of a thriving neighborhood. This is the positive change to Collegetown that the City has stated is desirable in numerous planning studies. Due to minimal sidewalk widths within the public ROW, the only way to achieve these benefits is by eliminating SF on the first two floors. The creation of this high quality public space is made feasible by the modest increase in height being requested as a variance.

Figure 7: Proposed View: College Avenue looking north at Catherine Street. Ground floor building space reduced to allow creation of public plaza with sculptural bench
Proposed Design Views

Figure 8: College Avenue and Cook Street Proposed View
As previously stated, the principal variance request is for an increase in stories and height on College Avenue, near the center of Collegetown where density is the greatest. The proposed buildings on Catherine and Cook streets are consistent with existing zoning and no height variance is being sought for these buildings. They will provide a transition to the surrounding more residential scaled neighborhood.

Allowable height in the MU-2 zone is 80’. In addition, a 5’ parapet is allowed, resulting in a total maximum height of 85’. A 6’ height variance which includes a 5’ variance in building height and an additional 1’ parapet will result in a 91’ total apparent height.

Allowable height in the MU-1 zone is 70’. In addition, a 5’ parapet is allowed, resulting in a total height of 75’. A height variance which includes a 3’ variance in building height and an additional 1’ parapet will result in a 79’ total apparent height. The elevations below illustrate the relationship between the AOR and proposed roof and parapet heights.
This page has been intentionally left blank.
Building Elevations

Figure 13: Catherine South 3a - North Elevation - Materials

Figure 14: Catherine South - South Elevation - Cook Street - Materials
Building Elevations

Figure 15: Catherine South 3a - AOR Markers

Figure 16: Catherine South - South Elevation - Cook Street - AOR Markers
This page has been intentionally left blank.
Comparison of As-of-Right (AOR) & Proposed Extents of Streetscape Enhancements

Current sidewalk widths are inadequate for the density of the existing pedestrian population and this project will address this by substantially expanding the pedestrian zone at the street level. This will encourage a positive active street life which is beneficial to commercial activity and safety and promotes the neighborhood character envisioned by the City’s plans.
Building Shadow Studies

The yellow line represents the extent of shadow cast by an AQR building. The thickened yellow line represents additional shadow depth that would be created by the proposed buildings. The overall impact is nominal and consistent with other buildings along College Avenue.

Figure 19: Proposed Building Heights - Vernal Equinox, March 21
Building Shadow Studies

The yellow line represents the extent of shadow cast by an AOR building. The thickened yellow line represents additional shadow depth that would be created by the proposed buildings. The overall impact is nominal and consistent with other buildings along College Avenue.
Building Shadow Studies

The yellow line represents the extent of shadow cast by an AQR building. The thickened yellow line represents additional shadow depth that would be created by the proposed buildings. The overall impact is nominal and consistent with other buildings along College Avenue.
Building Shadow Studies

The yellow line represents the extent of shadow cast by an ADR building. The thickened yellow line represents additional shadow depth that would be created by the proposed buildings. The overall impact is nominal and consistent with other buildings along College Avenue.

Figure 22: Proposed Building Heights - Winter Solstice, December 21
This page has been intentionally left blank.
This page has been intentionally left blank.
Full Environmental Assessment Form (FEAF)
City of Ithaca

30
Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

<table>
<thead>
<tr>
<th>Name of Action or Project:</th>
<th>Telephone: 607-210-8357</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catherine Commons</td>
<td>E-Mail: <a href="mailto:kaw@twm.la">kaw@twm.la</a></td>
</tr>
<tr>
<td>Project Location (describe, and attach a general location map):</td>
<td></td>
</tr>
<tr>
<td>Intersection of Catherine Street, Cook Street, and College Avenue, Ithaca, NY.</td>
<td></td>
</tr>
<tr>
<td>Brief Description of Proposed Action (include purpose or need):</td>
<td></td>
</tr>
<tr>
<td>Catherine Commons is a proposed approximately 360-unit residential development located in Collegetown. In addition to the residential use, the project includes commercial space along College Avenue, a fitness center, a small parking lot for ADA and service vehicles, and extensive streetscape improvements and public plaza space on both the developer’s property as well as within the public ROW. The project is designed to be in conformance with the existing zoning with some exceptions. The properties are zoned Mixed Use (MU1 and MU2) and Collegetown Residential (CR3 and CR4). Variances are being requested and pertain primarily to the College Avenue frontage in the MU2 and MU1 zones. The variances along the College Avenue frontage include an increase in the number of building floors and building height. The proposed buildings in the CR4 and CR3 zones are in conformance with the existing zoning and no variances are being sought for the buildings in these zones. A variance is being sought to allow fewer than the required number of parking spaces in the CR3 zone - this is the only parcel within the project that has a parking requirement. Residents of Catherine Commons will be offered parking at the Collegetown Terrace property where excess parking capacity exists.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Applicant/Sponsor:</th>
<th>Telephone: 607-210-8357</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathryn Wolf, Sponsor</td>
<td>E-Mail: <a href="mailto:kaw@twm.la">kaw@twm.la</a></td>
</tr>
<tr>
<td>Address: 1001 West Seneca Street, Suite 201</td>
<td></td>
</tr>
<tr>
<td>City/PO: Ithaca</td>
<td>State: NY</td>
</tr>
<tr>
<td>Zip Code: 14850</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Contact (if not same as sponsor; give name and title/role):</th>
<th>Telephone:</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Mail:</td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>City/PO:</td>
<td>State:</td>
</tr>
<tr>
<td>Zip Code:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property Owner (if not same as sponsor):</th>
<th>Telephone: 607-257-5050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook-Coll, LLC and Coll-Cath Associates, LLC</td>
<td>E-Mail: <a href="mailto:kaw@twm.la">kaw@twm.la</a></td>
</tr>
<tr>
<td>Address: 15 Thornwood Drive</td>
<td></td>
</tr>
<tr>
<td>City/PO: Ithaca</td>
<td>State: NY</td>
</tr>
<tr>
<td>Zip Code: 14850</td>
<td></td>
</tr>
</tbody>
</table>
## B. Government Approvals

### B. Government Approvals, Funding, or Sponsorship.

(“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)

<table>
<thead>
<tr>
<th>Government Entity</th>
<th>If Yes: Identify Agency and Approval(s) Required</th>
<th>Application Date (Actual or projected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. City Counsel, Town Board, or Village Board of Trustees</td>
<td>☐ Yes ☑ No</td>
<td></td>
</tr>
<tr>
<td>b. City, Town or Village Planning Board or Commission</td>
<td>☑ Yes ☐ No</td>
<td>Site Plan Approval; SEQR Review 8/17/2021</td>
</tr>
<tr>
<td>c. City, Town or Village Zoning Board of Appeals</td>
<td>☑ Yes ☐ No</td>
<td>Height and Floor Variances and additional minor variances 1/21/2021</td>
</tr>
<tr>
<td>d. Other local agencies</td>
<td>☑ Yes ☐ No</td>
<td>Sewer and water hook-ups</td>
</tr>
<tr>
<td>e. County agencies</td>
<td>☐ Yes ☑ No</td>
<td></td>
</tr>
<tr>
<td>f. Regional agencies</td>
<td>☐ Yes ☑ No</td>
<td></td>
</tr>
<tr>
<td>g. State agencies</td>
<td>☑ Yes ☐ No</td>
<td>NYSDEC NOI TBD</td>
</tr>
<tr>
<td>h. Federal agencies</td>
<td>☐ Yes ☑ No</td>
<td></td>
</tr>
</tbody>
</table>

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☑ Yes ☐ No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑ Yes ☐ No

iii. Is the project site within a Coastal Erosion Hazard Area? ☑ Yes ☐ No

---

## C. Planning and Zoning

### C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☑ Yes ☐ No

- If Yes, complete sections C, F and G.
- If No, proceed to question C.2 and complete all remaining sections and questions in Part 1

### C.2. Adopted land use plans.

a. Do any municipally-adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑ Yes ☐ No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑ Yes ☐ No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑ Yes ☐ No

If Yes, identify the plan(s):

____________________________________________________
____________________________________________________
____________________________________________________


c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☑ Yes ☐ No

If Yes, identify the plan(s):

____________________________________________________
____________________________________________________
____________________________________________________

---

32
C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No

If Yes, what is the zoning classification(s) including any applicable overlay district?
MU-1, MU-2, CR-3, CR-4, Collegetown Area Form Districts

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☑ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No

If Yes,
i. What is the proposed new zoning for the site? __________________________________________________________

C.4. Existing community services.

a. In what school district is the project site located? City of Ithaca

b. What police or other public protection forces serve the project site? City of Ithaca Police

c. Which fire protection and emergency medical services serve the project site? City of Ithaca Fire Department

d. What parks serve the project site? Cascadilla Gorge and Trails is most significant open space serving the area

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Primarily residential; some commercial, fitness center

b. a. Total acreage of the site of the proposed action? 1.45 acres

b. Total acreage to be physically disturbed? 1.45 acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 1.45 acres

c. Is the proposed action an expansion of an existing project or use? ☑ Yes ☐ No

i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % ____________________ Units: ____________________

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No

If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? ☑ Yes ☐ No

iii. Number of lots proposed? ________

iv. Minimum and maximum proposed lot sizes? Minimum ________ Maximum ________

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No

i. If No, anticipated period of construction: ________ months

ii. If Yes:

- Total number of phases anticipated
- Anticipated commencement date of phase 1 (including demolition) ________ month ________ year
- Anticipated completion date of final phase ________ month ________ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: __________________________________________________________

33
D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? ☑ Yes ☐ No  
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)

If Yes:

i. What is the purpose of the excavation or dredging? foundations and utilities

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
   - Volume (specify tons or cubic yards): ~ 12K CU/YDS
   - Over what duration of time? 3-4 months

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

   Geotechnical report suggested 2-12’ of fill and medium density fill material will be hauled to legal dump site.

iv. Will there be on site dewatering or processing of excavated materials?  ☐ Yes ☑ No
   
   If yes, describe. Per geotechnical report it will not be needed except as required for rain events.

v. What is the total area to be dredged or excavated? 1.45 acres

vi. What is the maximum area to be worked at any one time? 1.45 acres

vii. What would be the maximum depth of excavation or dredging? ~ 26 feet

viii. Will the excavation require blasting? ☐ Yes ☑ No

ix. Summarize site reclamation goals and plan:  

   All disturbed areas will be seeded and include erosion control as appropriate.

---

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description):  

---
ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

---

iii. Will the proposed action cause or result in disturbance to bottom sediments? □ Yes □ No
   If Yes, describe:

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? □ Yes □ No
   If Yes:
   - acres of aquatic vegetation proposed to be removed:
   - expected acreage of aquatic vegetation remaining after project completion:
   - purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):
   - proposed method of plant removal:
   - if chemical/herbicide treatment will be used, specify product(s):

v. Describe any proposed reclamation/mitigation following disturbance:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

---

c. Will the proposed action use, or create a new demand for water? □ Yes □ No
   If Yes:
   i. Total anticipated water usage/demand per day: 24,500 gallons/day □ Yes □ No
   ii. Will the proposed action obtain water from an existing public water supply? □ Yes □ No
      If Yes:
      - Name of district or service area: City of Ithaca Water, East Hill Pressure Grid, Maple Avenue Tank
      - Does the existing public water supply have capacity to serve the proposal? □ Yes □ No
      - Is the project site in the existing district? □ Yes □ No
      - Is expansion of the district needed? □ Yes □ No
      - Do existing lines serve the project site? □ Yes □ No
   iii. Will line extension within an existing district be necessary to supply the project? □ Yes □ No
      If Yes:
      - Describe extensions or capacity expansions proposed to serve this project:
        May need water main extension on Cook Street,
      - Source(s) of supply for the district: Six Mile Creek, City Filtration Plant
   iv. Is a new water supply district or service area proposed to be formed to serve the project site? □ Yes □ No
      If Yes:
      - Applicant/sponsor for new district:
      - Date application submitted or anticipated:
      - Proposed source(s) of supply for new district:
   v. If a public water supply will not be used, describe plans to provide water supply for the project:
   vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: __________ gallons/minute.

---

d. Will the proposed action generate liquid wastes? □ Yes □ No
   If Yes:
   i. Total anticipated liquid waste generation per day: 24,500 gallons/day
   ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
      Domestic residential sanitary wastewater
   iii. Will the proposed action use any existing public wastewater treatment facilities? □ Yes □ No
      If Yes:
      - Name of wastewater treatment plant to be used: Ithaca Area Wastewater Treatment Facility
      - Name of district: City of Ithaca
      - Does the existing wastewater treatment plant have capacity to serve the project? □ Yes □ No
      - Is the project site in the existing district? □ Yes □ No
      - Is expansion of the district needed?
iv. Will a new wastewater (sewage) treatment district be formed to serve the project site?  
   If Yes:
   - Applicant/sponsor for new district: 
   - Date application submitted or anticipated: 
   - What is the receiving water for the wastewater discharge?

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste:

---

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vi. Describe any plans or designs to capture, recycle or reuse liquid waste:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. How much impervious surface will the project create in relation to total size of project parcel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. Describe types of new point sources.</td>
<td>Roof leaders, downspouts, drainage inlets.</td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. How much impervious surface will the project create in relation to total size of project parcel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. Describe types of new point sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. In addition to emissions as calculated in the application, the project will generate:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. How much impervious surface will the project create in relation to total size of project parcel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. Describe types of new point sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. In addition to emissions as calculated in the application, the project will generate:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. Describe types of new point sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?</td>
<td>All stormwater runoff will be directed to City of Ithaca storm sewers with outfalls at Six Mile Creek. The project will not increase impervious soil cover on the site.</td>
<td></td>
</tr>
<tr>
<td>iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. In addition to emissions as calculated in the application, the project will generate:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)?
   - Yes □ No □

   i. Estimate methane generation in tons/year (metric):
   ________________________________

   ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring):
   ________________________________________________________________

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations?
   - Yes □ No □

   If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):
   ________________________________________________________________________________________

   ________________________________________________________________________________________

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services?
   - Yes □ No □

   i. When is the peak traffic expected (Check all that apply):
      □ Morning □ Evening □ Weekend
      □ Randomly between hours of _______ to ________.

   ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks):
      ________________________________

   ________________________________________________________________________________________

   ________________________________________________________________________________________

   iii. Parking spaces: Existing ________ Proposed ________ Net increase/decrease ________

   iv. Does the proposed action include any shared use parking?
   - Yes □ No □

   v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:
   ________________________________________________________________________________________

   ________________________________________________________________________________________

   vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site?
   - Yes □ No □

   vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles?
   - Yes □ No □

   viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes?
   - Yes □ No □

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?
   - Yes □ No □

   i. Estimate annual electricity demand during operation of the proposed action:
   1,590,000 kWh for North Bldg, 1,260,000 kWh for South Bldg

   ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):
   grid/local utility

   iii. Will the proposed action require a new, or an upgrade, to an existing substation?
   - Yes □ No □

l. Hours of operation. Answer all items which apply.
   i. During Construction:
      - Monday - Friday: 7:00 AM - 9 PM
      - Saturday: 7:00 AM - 9 PM
      - Sunday: 7:00 AM - 9 PM
      - Holidays: 7:00 AM - 9 PM

   ii. During Operations:
      - Monday - Friday: NA
      - Saturday: __________________________
      - Sunday: __________________________
      - Holidays: __________________________
m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? □ Yes □ No
    If yes:
    i. Provide details including sources, time of day and duration:
    Construction that produces noise exceeding existing levels will be restricted to 7:30 AM - 9 PM.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? □ Yes □ No
    Describe: ____________________________________________

n. Will the proposed action have outdoor lighting? □ Yes □ No
    If yes:
    i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:
    Lighting at building entrances and public plaza spaces will be provided as appropriate for safety but will be designed to be dark-sky and consistent with surrounding existing light levels.

ii. Will the proposed action remove existing natural barriers that could act as a light barrier or screen? □ Yes □ No
    Describe: ____________________________________________

o. Does the proposed action have the potential to produce odors for more than one hour per day? □ Yes □ No
    If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? □ Yes □ No
    If Yes:
    i. Product(s) to be stored
    ii. Volume(s) ___________ per unit time ___________ (e.g., month, year)
    iii. Generally, describe the proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? □ Yes □ No
    If Yes:
    i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? □ Yes □ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? □ Yes □ No
    If Yes:
    i. Describe any solid waste(s) to be generated during construction or operation of the facility:
        • Construction: ____________________ ~ 30 tons per ___________ month (unit of time)
        • Operation: ____________________ 60 tons per ___________ year (unit of time)
    ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
        • Construction: None on site
        • Operation:

iii. Proposed disposal methods/facilities for solid waste generated on-site:
    • Construction: Dumpster providers offer off-site sorting/recycling which typically diverts 70% of noted waste into recycling process.
    • Operation:
s. Does the proposed action include construction or modification of a solid waste management facility? 

Yes ☑ No ☐

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities):

ii. Anticipated rate of disposal/processing:
   - _______ Tons/month, if transfer or other non-combustion/thermal treatment, or
   - _______ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: ________________________________ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? 

Yes ☑ No ☐

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility:

ii. Generally describe processes or activities involving hazardous wastes or constituents:

iii. Specify amount to be handled or generated ______ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents:

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? 

Yes ☑ No ☐

If Yes: provide name and location of facility:

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☑ Urban ☐ Industrial ☑ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): parking

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

<table>
<thead>
<tr>
<th>Land use or Covertype</th>
<th>Current Acreage</th>
<th>Acreage After Project Completion</th>
<th>Change (Acres +/-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads, buildings, and other paved or impervious surfaces</td>
<td>1.13 acres</td>
<td>1.08 acres</td>
<td>(.05)</td>
</tr>
<tr>
<td>Forested</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural (includes active orchards, field, greenhouse etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface water features (lakes, ponds, streams, rivers, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wetlands (freshwater or tidal)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-vegetated (bare rock, earth or fill)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Describe: landscape areas</td>
<td>.32 acres</td>
<td>.37 acres</td>
<td>.05</td>
</tr>
</tbody>
</table>
c. Is the project site presently used by members of the community for public recreation?  
   i. If Yes: explain: 
   
   ☑ Yes ☐ No

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site?  
   If Yes, 
   i. Identify Facilities: 

   ☑ Yes ☐ No

e. Does the project site contain an existing dam?  
   i. Dimensions of the dam and impoundment: 
      • Dam height: ___________________________ feet 
      • Dam length: ___________________________ feet 
      • Surface area: ___________________________ acres 
      • Volume impounded: ___________________________ gallons OR acre-feet 
   ii. Dam's existing hazard classification: 
   iii. Provide date and summarize results of last inspection: 

   ☑ Yes ☐ No

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility?  
   If Yes: 
   i. Has the facility been formally closed?  
      • If yes, cite sources/documentation: 
   ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: 
   iii. Describe any development constraints due to the prior solid waste activities: 

   ☑ Yes ☐ No

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste?  
   If Yes: 
   i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: 

   ☑ Yes ☐ No

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site?  
   If Yes: 
   i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: 
      ☐ Yes – Spills Incidents database  ☐ Yes – Environmental Site Remediation database  ☐ Neither database  
      Provide DEC ID number(s): 
   ii. If site has been subject of RCRA corrective activities, describe control measures: 

   ☑ Yes ☐ No

   iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database?  
      If yes, provide DEC ID number(s): 
   iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): 

   ☑ Yes ☐ No
v. Is the project site subject to an institutional control limiting property uses?  □ Yes □ No
   - If yes, DEC site ID number: ____________________________
   - Describe the type of institutional control (e.g., deed restriction or easement): ____________________________________
   - Describe any use limitations: ____________________________
   - Describe any engineering controls: ______________________
   - Will the project affect the institutional or engineering controls in place?  □ Yes □ No
   - Explain: ____________________________________________________________________________________________
   ______________________________________________________________

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site?  2'-20' feet
b. Are there bedrock outcroppings on the project site?  □ Yes □ No
   If Yes, what proportion of the site is comprised of bedrock outcroppings? __________________%
c. Predominant soil type(s) present on project site:
   ____________________________  100 %
   ____________________________  ______%  ____________________________  ______%  ____________________________

   ____________________________  ______%  ____________________________  ______%  ____________________________

d. What is the average depth to the water table on the project site? Average: 20+ feet

   ____________________________  ____________________________  ____________________________  ____________________________  ____________________________

e. Drainage status of project site soils: □ Well Drained: 100 % of site
   □ Moderately Well Drained: ______% of site
   □ Poorly Drained ______% of site

   ____________________________  ____________________________  ____________________________  ____________________________

f. Approximate proportion of proposed action site with slopes:
   □ 0-10%: 45 % of site
   □ 10-15%: 20 % of site
   □ 15% or greater: 35 % of site

g. Are there any unique geologic features on the project site?  □ Yes □ No
   If Yes, describe: _______________________________________________________________________________________
   ______________________________________________________________

h. Surface water features.
   i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)?  □ Yes □ No
   ii. Do any wetlands or other waterbodies adjoin the project site?  □ Yes □ No
       If Yes to either i or ii, continue. If No, skip to E.2.i.
   iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency?  □ Yes □ No

   iv. For each identified regulated wetland and waterbody on the project site, provide the following information:
      - Streams: Name __________________ Classification __________________
      - Lakes or Ponds: Name __________________ Classification __________________
      - Wetlands: Name __________________ Approximate Size __________________
      - Wetland No. (if regulated by DEC) ____________________________

   v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies?  □ Yes □ No
      If yes, name of impaired water body/bodies and basis for listing as impaired: __________________

   i. Is the project site in a designated Floodway?  □ Yes □ No
   j. Is the project site in the 100-year Floodplain?  □ Yes □ No
   k. Is the project site in the 500-year Floodplain?  □ Yes □ No
   l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?  □ Yes □ No
      If Yes:
         i. Name of aquifer: ____________________________
m. Identify the predominant wildlife species that occupy or use the project site: ____________________________

n. Does the project site contain a designated significant natural community?  Yes ☐ No ☑
   If Yes:
   i. Describe the habitat/community (composition, function, and basis for designation):
      ____________________________
   ii. Source(s) of description or evaluation:
   iii. Extent of community/habitat:
      • Currently: ____________________________ acres
      • Following completion of project as proposed: ____________________________ acres
      • Gain or loss (indicate + or -): ____________________________ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species?  Yes ☐ No ☑
   If Yes:
   i. Species and listing (endangered or threatened):
      ____________________________

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern?  Yes ☐ No ☑
   If Yes:
   i. Species and listing:
      ____________________________

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing?  Yes ☐ No ☑
   If yes, give a brief description of how the proposed action may affect that use:
      ____________________________

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304?  Yes ☐ No ☑
   If Yes, provide county plus district name/number:
      ____________________________

b. Are agricultural lands consisting of highly productive soils present?  Yes ☐ No ☑
   i. If Yes: acreage(s) on project site: ____________________________
   ii. Source(s) of soil rating(s):
      ____________________________

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark?  Yes ☐ No ☑
   If Yes:
   i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature
   ii. Provide brief description of landmark, including values behind designation and approximate size/extent:
      ____________________________

   iii. Designating agency and date:
      ____________________________

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area?  Yes ☐ No ☑
   If Yes:
   i. CEA name:
      ____________________________
   ii. Basis for designation:
      ____________________________
   iii. Designating agency and date:
      ____________________________
e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?

If Yes:
   i. Nature of historic/archaeological resource:  [ ] Archaeological Site  [ ] Historic Building or District
   ii. Name: ________________________________________________________________
   iii. Brief description of attributes on which listing is based:

   Grandview House @ 209 College Ave and John Snaith House @ 140 College Ave are Local Landmarks are located across the street from the project.

   ✔ Grandview House @ 209 College Ave and John Snaith House @ 140 College Ave are Local Landmarks.

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?

   ✔ Yes  ✔ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site?

   If Yes:
   i. Describe possible resource(s): _______________________________________________________________________________________________
   ii. Basis for identification: ____________________________________________________________________________________________

   ✔ Yes  ✔ No

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?

   If Yes:
   i. Identify resource: Tompkins County Scenic Resources Inventory identifies several w/in 5 miles - but site is not visible from these
   ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): attractive local view
   iii. Distance between project and resource: _____________________ miles.

   ✔ Yes  ✔ No

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?

   If Yes:
   i. Identify the name of the river and its designation: ________________________________________________________________
   ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666?

   ✔ Yes  ✔ No

---

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name  Kathryn Wolf  Date  August 17, 2021

Signature  [Signature]  Title  Principal
Addendum to FEAF
Impacts

Impact on Land

The proposed site is an existing developed urban site with 80% impervious cover. The site consists of existing structure and parking lots which will all be demolished. Previous development included significant earthwork resulting in fill soils at the top of the soil profile.

The project will result in a net removal of approximately 12,000 cubic yards of asphalt and soil. Excavation and demolition shall be done in accordance with approved construction practices and according to the contract documents. Demolished materials, cleared vegetation, excess fill, and excess excavation material will be properly disposed of off site.

The project will employ a number of temporary measures to prevent the erosion of disturbed soils and prevent sediment from leaving the site during earthwork operations and until soils are stabilized. The erosion and sediment controls strategies and practices that will be used during construction are described in the Construction Impacts section.

Due to the amount of earth removal necessary for construction of the project, a moderate impact on the land is anticipated.

Impact on Water

Domestic Water

Water service to the project site and adjacent properties is provided by the City of Ithaca through their East Hill distribution system. The existing system in the street along the project frontage includes a 12-inch water main on College Avenue and 8-inch main on Catherine Street. Both mains were installed with ductile iron piping by the City in the very recent past to replace older piping that has been abandoned or removed. Additionally, the new main on Catherine Street has been looped by extending the new 8-inch main on Eddy Street between Catherine Street and East Buffalo Street. In conjunction with the main installation work, the mostly small diameter service pipes to the existing apartment buildings on the site have been disconnected, and removed or abandoned in place. The project improvements will include removal of any abandoned water piping and appurtenances within the site, and possibly within the street, as necessary to install the water and other site improvements.

Water system improvements will include new 6-inch services to both Buildings 1 and 3A connecting to the 12-inch main on College Avenue. Service to Building 3B will be provided through a sub-service from Building 3A. New 6-inch services to Buildings 2A and 2B with be provided from the main on Catherine Street. Given the lack of distribution mains on Cook Street, the improvements will include a new 8-inch branch main on the north side of the street connecting to the 12-inch main on College Avenue. The new main, to be considered an extension of the City owned system, will terminate with a new fire hydrant in front of Building 4 along with a new 6-inch service into the building. All water system improvements will be installed with ductile iron pipe, MJ fittings and AWWA gate valves. The services will be combined to supply both the domestic and fire suppression systems, and will enter the mechanical spaces in the buildings before splitting off to the respective systems. New hydrants may also be installed on College Avenue and Catherine Street if necessary to be within 100 feet of the fire department connections (FDC's) to the standpipe systems in the buildings. All connection to the existing system, including new hydrants and other improvements within the curb lines of the street will installed by the City DPW.

Pressures in the East Hill distribution system are maintained by the 0.615-million-gallon Maple Avenue Tank supplied through the system from pumps located at the City filtration plant on Water Street with supply from Six Mile Creek. The base and overflow elevations of the tank are 924' and 957.5', respectively. Normal static working pressures in the 12-inch main on College Avenue are estimated to vary from approximately 103 psi at the north edge of the site to approximately 110 psi at the Cook Street intersection. In the 8-inch main on Catherine Street, the pressures range up closer to 116 psi near the lower or west edge of the site. For the proposed 8-inch branch main on Cook Street, the maximum pressure at the down-hill end is estimated to be as high as 123 psi. The interior plumbing system for the buildings will be design accordingly and may require pressure reducing devices within the mechanical spaces before distribution to the plumbing fixtures.
Pre-development domestic water demands on the system are estimated to be approximately 5,500 gpm based on the metered water use data provided by the City DPW for 2017 through 2019. The demand is estimated using the maximum yearly recorded for each building for the 3 years of records. The 12 existing buildings on the site housed residential apartments with a total of 150 bedrooms indicating daily water demands in the past have averaged approximately 36 gpd/bedroom. For design purposes, and to assess project impacts, the design daily water use for the pre- and post-development water demands is 50 gpd/bedroom. This per bedroom demand is in line with similar housing in the Ithaca area. Specifically, the environmental assessment for the recent Cornell University residential project on North Campus utilized 50 gpd/bed as a design domestic demand.

The project will increase the number of bedrooms to approximately 489, which is estimated to result in an increase in the design daily water demand to approximately 24,500 gpd. The additional demands are not expected to have any measurable impact on the City water system except for slightly longer pump times and relatively minor increases in demands at the filtration plant. Given the system is sized for much larger fire flow demands, no significant impacts on the distribution grid are expected due to the increases in domestic demands.

**Fire Water**

Fire flow tests on the recently improved City water system in the vicinity of the site were performed by the Ithaca Fire Department (IFD) in July 2021. The tests were performed on Hydrant E-93 at the corner of College-Catherine intersection, Hydrant E-53 at the College-Dryden intersection and at Hydrant E-30 near the Catherine-Eddy intersection. The tests were performed with the pumps at the filtration plant off-line. In general, the tests indicate available fire flows from the distribution system at or near the site exceed 2,000 gpm at a minimum residual pressure of 20 psi. The flow capacities of the recently improved distribution system are expected to be sufficient for firefighting purposes for the completed project. With a normal pumping rate of approximately 700 gpm, the pumps at the filtration plant will likely push the available fire flows closer to 2,500 gpm.

With a normal low operating water level in the Maple Avenue tank at elevation 949’, reserve fire volume capacity in the 0.615-MG tank is estimated to be approximately 0.460 MG. The reserve volume equates to a flow duration of approximately 3.8 hours at a fire flow rate of 2,000 gpm, which is expected to be adequate for the completed project. The pumps at the filtration plant can add a volume of approximately 0.100 MG for a total reserve fire volume of over half a million gallons. Improvements will include fire department connects (FDC’s) to allow pressurizing of the building fire suppression system by the IFD. As indicated above, the FDC’s for the building standpipe fire systems will be located within 100 feet of an existing or new fire hydrant connected to the City distribution system. The locations of the FDC’s and fire hydrants will be determined in coordination with the IFD.

**Sanitary Sewer**

Sanitary sewer service to the project site and adjacent properties is provided by the City of Ithaca sewer collection system with sewer mains in the street on College Avenue, Catherine Street and Cook Street. The sewage is treated by the Ithaca Area Wastewater Treatment Plant (IAWWTP) on Third Street prior to discharge to Cayuga Lake. The plant has sufficient reserve capacity to accept the additional flows from the project.

The existing collection system includes a 12-inch PVC main on College Avenue, an 8-inch PVC main on Catherine Street and a 6-inch clay tile main on Cook Street. The mains on College Avenue and Catherine Street were recently removed and replaced with new sewer piping by the City and the size of the main on College Avenue was increased from 8-inch to 12-inch. In conjunction with the main replacement work, the existing sewer laterals to the properties within the project site have been disconnected, and removed or abandoned in place. The project improvements will include removal of any abandoned sewer piping and appurtenances within the site, and possibly within the street, as necessary to complete the project improvements.
Improvements to the sanitary system will include new PVC sewer laterals to the buildings from the existing mains in the street. Except possibly for certain lower building levels, Buildings 1, 3A and 3B will be sewered to the 12-inch main on College Avenue, Buildings 2A and 2B will be sewered to the main on Catherine Street and Building 4 to the main on Cook Street. The laterals will be equipped with sanitary traps with fresh air inlets on the site near the connections to the buildings. The connections to the mains and all other sanitary sewer improvements within the curb lines of the streets will be installed by the City of Ithaca.

Sewage loadings to the City mains are estimated based on an estimated per bedroom water use of 50 gpd per bedroom as indicated above in the section on Domestic Water. With an increase in the number of bedrooms on the site from approximately 150 to 489, the total daily design sewage loads from the property are estimated to increase from 7,500 gpd to 24,500 gpd. To assess the impacts on the existing sewer system, the peak hourly sewer loads from the site have been estimated by applying a peak factor of 4.3 to the daily design loads in accordance with Chapter 10 of the Recommended Standards for Wastewater Facilities (aka Ten State Standards). The peak hourly loads to the sanitary sewer mains from the site are estimated to increase from approximately 22 gpm to 73 gpm (51 gpm), with most of the increase (39 gpm) going to the recently up-sized main on College Avenue and smaller increases to the mains on Catherine Street (6 gpm) and Cook Street (6 gpm). The increases are relatively minor compared to the capacities of the mains which are estimated to be 4,600 gpm, 2,000 gpm and 700 gpm on College Avenue, Catherine Street and Cook Street, respectively. The mains on Catherine Street and Cook Street connect downstream to an 8-inch main on Eddy Street where the increase in load is estimated to be 12 gpm and where the main capacity is estimated to be approximately 1,200 gpm. Given the increases in peak hourly loads to the mains are estimated to be less than 1% of the main capacities in all cases, the project is not expected to have any measurable adverse impact on the existing sanitary sewer system.

**Stormwater Drainage**

The site slopes steeply generally from the northeast down towards the south and west with longitudinal grades along the streets approaching 7% on College Avenue, 15% on Catherine Street and 17.5% on Cook Street. There are few formal drainage or storm collection systems within the site except for gutters and downspouts, which discharge at grade adjacent to the existing buildings. Except for relatively minor areas of the site immediately adjacent to College Avenue, stormwater runoff from the vast majority of the site flows overland either directly or through adjacent properties to the north curb lines of Catherine Street and Cook Street.

Runoff from most areas of Catherine North and a smaller area at the northeast corner of Catherine South flows to existing gutters on Catherine Street where it is subsequently collected by drainage inlets at the intersection with Eddy Street. For most remaining areas of Catherine South, runoff from a portion of the site flows to a drainage inlet at the north curb line of the Cook street before continuing south in a 6-inch and 8-inch City storm sewer on the east of Blair Street. Runoff from the other areas of Catherine South flows overland through the neighboring properties to the lower section of Cook Street, where similar to Catherine Street, it is collected in inlets at the Eddy-Cook intersection. Runoff from the site collected by the inlets at the foot of Catherine Street and Cook Street is conveyed to the south in a 14-inch storm sewer on the west side of Eddy Street. Runoff from the smaller areas adjacent to College Avenue is collected by a 12-inch storm sewer on the west side of the street, which is expected to be replaced in conjunction with the current City street improvements project. Runoff collected by the College Avenue and Blair Street storm sewers discharges to Six Mile Creek upstream of the Columbia Street pedestrian bridge at an outfall near the site of the College Terrace project. The outfall associated with the Eddy Street storm sewer is also to Six Mile Creek immediately downstream of the pedestrian bridge.

Drainage improvements associated with the project will include roof drains and areaway drains with piping to convey runoff from the new buildings to the site drainage system. Improvements on the site will include new storm sewer piping, inlets and manholes as well as stormwater management practices to collect, treat and subsequently convey the runoff from the site storm system to the City storm sewers in the streets. Drainage for the below-grade levels of the new building will be provided by perforated piping at the outer perimeter of the foundations connecting by gravity to the site drainage system.
To allow below-grade piped connection from the site storm system on Catherine North, improvements will need to include an extension of the City storm sewer on Catherine Street from the Cook Street intersection to near the west edge of the project site. The storm sewer extension will also facilitate the reduction or elimination of overland flows from the site through the neighboring properties to the west.

**Stormwater Management**

The project will disturb approximately 1.45 acres of land on the site and will be required to prepare a Full Storm Water Pollution Prevention Plan (SWPPP) in compliance with the NYSDEC General Permit for Construction Activities (GP-0-20-001) and City of Ithaca stormwater regulations. The SWPPP will include requirements for temporary erosion and sediment control measures to be installed and maintained during construction, as well as requirements for the construction, operation and maintenance of permanent stormwater management practices (SMP’s) to remain after construction is complete. Obtaining permit coverage for stormwater discharges under the general permit will require submission to the NYSDEC of a Notice-of-Intent along with an MS4 SWPPP Acceptance Form approved by the City of Ithaca Stormwater Officer (SMO). There currently are no SMP’s on the existing site.

The temporary erosion and sediment controls to be installed and maintained during construction will be designed in accordance with the 2016 NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book). Specific practices will include silt fence, silt logs, inlet protection and stabilized vehicle entrances and haul roads. The proposed bioretention filter practices will be excavated and equipped to act as sediment traps until the other site improvements are completed. All discharges from dewatering activities will be directed to the silt traps, geotextile siltation bags or other temporary practice approved by the City. Dust control measures including mulch, establishment of vegetation and water sprinkling of temporary access pavements will also be performed per the Blue Book standards.

Pre-development soil cover on the site is estimated to be approximately 74% impervious. Once completed the project will reduce the area of pavement and roofs to approximately 72%. The installation of pervious pavements on the site will be considered to further reduce site imperviousness. Soils on the site are man-made and are considered to fall within Hydrologic Soils Group C (HSG-C) given they are most likely heavier silty loams but generally very well drained. The site is located above the 100-year flood level according to Federal Emergency Management Agency mapping and no wetlands are present on the site.

The project is considered ‘re-development’ and the SWPPP will comply with the standards in Chapter 9 of the NYSDEC Stormwater Management Design Manual. Under the standards, redevelopment activities, which do not change site hydrology or increase peak rates of runoff, are not required to provide water quantity controls. Therefore, given the project will reduce site imperviousness, SMP’s related to Channel Protection Volume (CpV), Overbank Floor peak discharge (Qp) or Extreme Flood peak discharge (Qf) associated with the 2-, 10- and 100-year return frequency storms, are not required. The project will however install SMP’s for water quality control which will tend to reduce the volumes and peak rates of runoff from the site. In addition to reducing runoff, the project will significantly reduce or eliminate runoff that currently leaves the site and flows overland onto the adjacent properties located below and to the west of the site.

In general, the project will maintain the current areas and the amounts of runoff draining to the respective City storm sewers on College Ave, Eddy Street and Blair Street. However, it will be possible to adjust the drainage areas and increase the amount of runoff draining to the College Avenue storm sewer with commensurate reductions in the amount of runoff directed to the sewers on Blair Street and Eddy Street if determined advantageous or preferable. This is possible given some portions or even all roof areas associated with Buildings 1, 3A and 3B can be sewered to the City storm sewer on College Avenue, which currently drains only minor areas of the site. Any changes in areas draining to the different storm sewers will be determined in coordination with the City of Ithaca Stormwater Officer (SMO) and the City DPW Streets and Facilities Division.
To provide the required water quality controls, the project will install post-construction SMP’s on the site in accordance with Chapter 9 of the NYSEDC design standard. In general, the project will reduce the amount of impervious soil cover and provide ‘standard’ and ‘alternative SMP’s to treat the equivalent of at least 25% of the water quality volume (WQv) associated with the site. The standard SMP’s on the site will provide a certain amount of runoff reduction volume (RRv) although not specifically required by the standards. Alternative practices as expected to include below-grade pre-manufactured hydrodynamic type treatment units which are effectively credited at treating 1/3 of the WQv of the associated catchment area. The WQv of the finished site will be computed in accordance with the NYSDEC standards using the 90-percentile storm event with a storm depth of $P = 1.0$ inches. The project is not expected to be subject to the NYSDEC Total Maximum Daily Load (TMDL) for Phosphorous in Cayuga Lake which is currently in draft form.

In general, the SMP’s will prioritize treatment of runoff from the higher-polluting paved areas of the site, although treatment of runoff from the roofs or the installation of green roofs will likely be necessary to comply with the design standards. Specifically, for Catherine North, a bioretention filters will be installed in the landscape north of Building 2A and a second one will be located at the far northwest corner of the site. The two SMP’s will treat runoff from the adjacent walkways, stairs and rear portion of the service drive east of Building 2B. Pervious pavements for the walkways behind Building 2A and adjacent to Building 2B will be considered to reduce site imperviousness. One or more alternative practices will be installed north of Catherine Street to treat runoff from the remaining portion of the service drives as well as the areaways and some portion of the roofs associated with Buildings 1, 2A and 2B prior to discharge to the City storm sewer. Alternative practices will also be considered to treat runoff from the roof of Building 1 and from the covered plaza areas adjacent to College Avenue.

For Catherine South, the SMP’s will include three separate bioretention filter practice. One filter practice will be installed west of Building 3A to treat runoff from service drive entering the site from north. The second such practice will be installed west of the proposed parking area to treat runoff from parking pavement as well as the dumpster pad and adjacent walks and stairways north of Building 3B, and the third, at the far southwest corner of the site, to treat runoff from service drive entering the site from Cook Street. Pervious pavement for the parking area will be considered to reduce imperviousness. Similar to Catherine North, alternative practices will be considered to treat roof runoff from the roofs of Buildings 3A, 3B, and 4 prior to discharge to the City storm sewer on Blair Street and/or College Avenue.

In summary, the project will employ strategies and provide temporary practices to control the erosion of soils on the site and prevent the discharge of sediment or dust from the site during construction. A reduction in site imperviousness will reduce the amounts and rates of discharge of stormwater runoff from the site thus reducing impacts to the City storm sewer collection system. Permanent SMP’s to be installed by the project will provide quality treatment of runoff and reduce the amount of pollutants leaving the site. The site grading and drainage improvements will significant reduce or eliminate runoff from the site that currently flows overland onto properties located west and down-grade of the project site. In short, the project will result in significant improvements for this area of the City related to stormwater runoff.
**Impact on Air**

Due to the expected operations (residential and commercial space), it is not anticipated that significant sources of air emissions will be generated. No regulated HVAC emission sources are planned. The proposed project will have no significant impact on air.

**Impact on Plants, Animals & Agriculture**

The project site has been previously disturbed and/or developed. No significant impacts to any plant or animal habitats or species are anticipated. The project is not in an area appropriate for agriculture and will not impact agriculture or agricultural land use.

Four trees in total are to be removed for this project: an 8” Norway Maple in poor condition, a 14” Norway Maple in fair condition, a 32” black locust in fair condition, and a 4” arborvitae in fair condition. Two of the four are invasive species. Other woody and herbaceous plants in the area of construction will be cleared. However, the removal of vegetation will be mitigated by the installation of new street trees and additional landscaping.

<table>
<thead>
<tr>
<th>DBH Class</th>
<th>Total Trees</th>
<th>Trees to Remain</th>
<th>Trees to be Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0&quot;-12&quot;</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13&quot;+&quot;</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Species:  
- 8” Norway maple  Poor
- 14” Norway maple  Fair
- 32” Black Locust  Fair
- 4” Arborvitae  Fair

**Impact on Aesthetic Resources**

This section contains images and descriptions of existing, as-of-right (AOR) and proposed views of the project. Please refer to Figure 23 for these viewpoint locations. Photographs of existing conditions were taken during the late winter and summer of 2021.

The components of the proposed project are similar to the current development patterns. The proposed buildings are adjacent to existing residential facilities in Collegetown and the City of Ithaca. Proposed building heights fit in with existing buildings in the Collegetown neighborhood.

The location and direction of each view included in the study are marked on the Figure 23 Viewpoint Diagram. Proposed views were simulated for this analysis by overlaying geolocated computer modeling of the proposed project on geolocated photography.
This page has been intentionally left blank.
Figure 23: Viewpoints Diagram
Viewpoint 01: Looking East on Seneca Street

Existing View

The view looking east along Seneca Street is taken at the intersection of Seneca and Cayuga streets. In the foreground is Seneca Street with adjacent parking on the north and south sides visible. In the mid ground, the Hilton and Tompkins Trust buildings are visible to the north and south, adjacent to Seneca Street. In the far background, at the top of the hill, the roof line for the 312 College Avenue building is visible.

Proposed View

The foreground and midground will remain unchanged. In the background the roof line for the 312 College Avenue building is visible, as well as the roofline of the proposed building.

AOR View

The red dashed line has been superimposed on the proposed view to illustrate the allowed parapet height AOR.
Figure 25: Proposed View

Figure 26: Proposed View with AOR Height Indicated
Viewpoint 02: Looking East from Intersection of Catherine and Eddy Streets

Existing View

The existing view looks east from the intersection of Catherine and Eddy streets. In the foreground, 211 Eddy Street is visible to the south and 102 Catherine Street to the north. In the background, Jason’s Grocery & Deli is visible.

Proposed View

The foreground and midground will remain unchanged. The proposed buildings will be visible in the background, as will Jason’s Grocery & Deli.

AOR View

The red dashed line has been superimposed on the proposed view to illustrate the allowed parapet height AOR.

Figure 27: Existing View
Viewpoint 03: Looking East from Intersection of Seneca and Eddy Streets

Existing View

The existing view looks east from the intersection of Seneca and Eddy streets. In the foreground 241 and 220 Eddy Street are visible.

Proposed View

The foreground and midground will remain unchanged. In the background, a small part of the proposed building is visible between 241 and 220 Eddy Street, but it is partially screened by the existing tree.

AOR View

Same as proposed view - the height of the building is not visible in the view.

Figure 30: Existing View
Figure 31: Proposed View

Figure 32: Proposed View - AOR View Same as Proposed
Viewpoint 04: Looking South from Intersection of College Avenue and Dryden Road

Existing View

The existing view looks south from the intersection of College Avenue and Dryden Road. In the foreground to the west is the vacant Collegetown Center building. In the midground 312 College Avenue is visible, and in the background the rolling hills and forested condition can be seen of South Hill.

Proposed View

The foreground and midground will remain largely unchanged, aside from increased plantings in the form of street trees in tree grates. In the background to the west, a portion of the proposed building will be visible. Views to the forested hills on South Hill will remain unchanged.

AOR View

The red dashed line has been superimposed on the proposed view to illustrate the allowed parapet height AOR.

Figure 33: Existing View
Figure 34: Proposed View

Figure 35: Proposed View with AOR Height Indicated
**Viewpoint 05: Looking West from Intersection of College Avenue and Catherine Street**

**Existing View**

The existing view looks west from the intersection of College Avenue and Catherine Street. In the foreground to the north 302 Catherine Street is visible, and in the foreground to the south 240 Catherine Street is visible. In the midground can be seen various other houses along Catherine Street as well as utility poles and overhead wires. Views of the forested hills of West Hill are visible in the distance.

**Proposed View**

In the foreground both proposed buildings will be visible to the north and south. The background will remain unchanged.

**AOR View**

Same as proposed view.
Figure 37: Proposed View

Figure 38: Proposed View - AOR View Same as Proposed
Viewpoint 06: Looking South from College Avenue

Existing View

The existing view looks south from College Avenue. Multi-family houses are visible in the foreground and midground to the west and the Grandview House, a local landmark, is visible to the east. Utility poles and overhead wires are visible along the east side of the street. The forested hills of South Hill are visible in the distance.

Proposed View

The City of Ithaca’s reconstruction of College Avenue will include the removal and burying of overhead wires and installation of street trees. These measures will improve views of the Grandview House. The foreground and midground of the eastern part of the street, and the background will remain unchanged. To the west, the new building will be visible, as well as new street trees and tree grates. Views to the forested hills of South Hill will remain.

AOR View

The red dashed line has been superimposed on the proposed view to illustrate the allowed parapet height AOR.
Figure 40: Proposed View

Figure 41: Proposed View with AOR Height Indicated
**Viewpoint 07: Looking West from Intersection of Cook Street and College Avenue**

**Existing View**

The existing view looks west at the intersection of Cook Street and College Avenue. In the foreground to the south is 140 College Avenue, the John Snaith House, a local landmark, and to the north is 202 College Avenue. In the midground 135 Cook Street is visible. In the background are the forested hills of West Hill.

**Proposed View**

The south side of the street will remain largely unchanged. To the north, the proposed building will be visible in the foreground and the midground. Views of the forested hills of West Hill will remain unchanged.

**AOR View**

Same as proposed view.

*Figure 42: Existing View*
Figure 43: Proposed View

Figure 44: Proposed View - AOR View Same as Proposed
**Viewpoint 08: Looking North from College Avenue**

**Existing View**

The existing view looks north on College Avenue. In the foreground to the east are The Lofts at 201 College Avenue and to the west, 136 College Avenue. Extensive overhead wires and utility poles are visible.

**Proposed View**

The most significant change in the foreground is the removal of the utility poles and placement of overhead wires underground. To the east, the midground and background remain the same aside from the addition of a few street trees and tree grates. The proposed building will be visible in the midground and background to the west.

**AOR View**

The red dashed line has been superimposed on the proposed view to illustrate the allowed parapet height AOR.

*Figure 45: Existing View*
Impacts

Figure 46: Proposed View

Figure 47: Proposed View with AOR Height Indicated
Viewpoint 09: Looking West from Intersection of Bryant, Harvard, & Delaware Streets

Existing View

The existing view looks west at the intersection of Bryant, Harvard & Delaware streets. In the foreground are 216 Delaware Avenue, 218 Delaware Avenue, and 302 Bryant Avenue. The forested hills of West Hill are visible in the background.

Proposed View

The foreground and midground remain the same. In the background, the roofline of the proposed building is visible, and the horizon line of West Hill is visible beyond.

AOR View

The red dashed line has been superimposed on the proposed view to illustrate the allowed parapet height AOR.

Figure 48: Existing View
Impacts

Figure 49: Proposed View

Figure 50: Proposed View with AOR Height Indicated
Viewpoint 10: Looking West from Delaware Avenue

Existing View

The existing view looks west from Delaware Avenue. In the foreground 210 and 212 Delaware Avenue are visible. The GrandView cupola is visible between the buildings. In the background, a portion of West Hill is visible.

Proposed View

The foreground and midground remain the same. In the background, the roofline of the proposed building is visible.

AOR View

The red dashed line has been superimposed on the proposed view to illustrate the allowed parapet height AOR.

Figure 51: Existing View
Impacts

Figure 52: Proposed View

Figure 53: Proposed View with AOR Height Indicated
Impact on Cultural Resources

The East Hill Historic District, which is locally and nationally designated, is located to the west. The proposed project properties are located outside of the historic district. Two properties in Collegetown are designated as Local Landmarks, the Grandview House at 209 College Avenue and the John Snaith House at 140 College Avenue. The Grandview house is located across the street on the east side of College Avenue, and the John Snaith House is across the street to the south (Cook Street) from the proposed project.

The Grandview House, with its period architecture, is an 1888, 5-story, wood-frame house. The building includes a contemporary addition on the back and is currently used as a rental property. (Source, Collegetown Historic Resources Worthy of Detailed Research, 2009, Mary Tomlan and John Schroeder).

The John Snaith House is significant for its connection to the person who designed and lived in the home, John Snaith. A native of England, Snaith designed and erected this home himself. He developed and built several homes on East Hill, in Albany and to the south in Pennsylvania. After Snaith moved away, the home served as a boarding house and bed and breakfast. Today, the John Snaith House is used as a rental property. (Source, Collegetown Historic Resources Worthy of Detailed Research, 2009, Mary Tomlan and John Schroeder).

No changes to properties in the historic district or to the individually designated Grandview or John Snaith houses are proposed. The project will be visible from the historic resources. See discussion of visual impacts/impact on aesthetic resources.
Figure 54: Existing Cultural & Natural Resources Diagram

Historic Districts

Ithaca, NY

Figure 54: Existing Cultural & Natural Resources Diagram
**Impact on Open Space & Recreation**

Studies of Collegetown have repeatedly noted the insufficient widths of the sidewalks, the physical constraints present that inhibit streetscape amenities and the lack of publicly accessible open space. ‘Most sidewalks in the Collegetown core are far from adequate for existing pedestrian volumes, which are higher than motor vehicle volumes’ (2009 Collegetown Urban Plan, Part One, pg. 23). Only two open spaces occur in Collegetown, a seldom-used, small greenspace below the parking Garage on Dryden Road and an urban plaza in front of Cornell’s Schwartz Center for the Performing Arts and Sheldon Court to the south. The Student Agencies project, currently under construction, will add open space on the opposite side of the street from the existing Schwartz Center for the Performing Arts plaza. Access to the gorge is available at the north edge of Collegetown.

The project will result in expanded pedestrian zones and new plaza spaces that encourage socialization. These plaza spaces will be designed to be handicap accessible, creating outdoor recreation spaces that can be occupied by differently abled persons where no such space currently exists.

The project will result in an increase in open space and will have a positive impact by enhancing high quality public space.

**Impact on Critical Environmental Areas**

There are no Critical Environmental Areas within or near the site. There will be no impacts to Critical Environmental Areas.

**Impact on Transportation**

Parking on-site will actually be reduced from approximately 40 existing spaces to 5 proposed spaces. Proposed spaces will be designated accessible and for service vehicles/loading. Residents who desire to bring a vehicle will be offered parking at Collegetown Terrace.

Ample multimodal opportunities exist. Three TCAT bus stops are present in proximity to the proposed project. They are located at College Avenue and Oak Avenue in front of the Schwartz Center for the Performing Arts, mid-block on College Avenue in front of GreenStar and the proposed project, and at College Avenue & Mitchell Street. At least 10 routes serve these stops. There are bicycle racks throughout Collegetown, and TCAT has bicycle racks on their vehicles.

A campus shuttle privately operated by the project developer runs along College Avenue between the Collegetown Terrace Apartments and Cornell University. The shuttle services the Collegetown Terrace Apartments and 119-125 College Avenue. The shuttle operates two buses, or more if needed, five days per week; in the mornings from 7:30 to 11:30 am they run every 10 minutes, and in the afternoons, from 12:15 to 4:15 pm, they run every hour. On Sundays, the Collegetown Terrace shuttle runs service to Wegmans.

Car share is available in Collegetown, with four dedicated parking spaces (Sheldon Court, Dryden Road & Elmwood Avenue, College Avenue & Catherine Street, and Stewart Avenue & Buffalo Street). A Transportation Demand Assessment was prepared by SRF Traffic Engineers and is included in Appendix C. Conclusions and recommendations from that study are below.

1. The project site is located nearby available transportation services, such as TCAT and Ithaca Car Share, and will be serviced by an existing private shuttle.

2. Four TCAT routes service the area with headways varying from 10 to 30 minutes.

3. Given the similar characteristics between the proposed housing project and the existing Collegetown Terrace Apartments complex, actual parking rates were developed at the Collegetown Terrace Apartments complex for use to determine project-related parking demands.
4. Based upon the developed parking rates at Collegetown Terrace Apartments, there is a projected demand of 138 to 189 spaces.

5. When considering both student housing sites, there is sufficient capacity within the existing Collegetown Terrace Apartments complex to accommodate the projected parking demands created by the proposed Catherine Commons project.

6. It is expected that very few residents would choose to park on surrounding streets given the inconvenience of constantly moving vehicles or interacting with the parking pay station.

7. A public garage and on-street parking are available for patrons of the commercial uses. Catherine Commons residents are expected to patronize the uses; thus, can reduce the projected commercial parking demands. Additionally, considering the mode share statistics and Walk Score results, the area is characterized as a dense multi-use urban environment.

8. TDM strategies are planned to reduce parking demands, such as:
   a. Charging for off-site parking at Collegetown Terrace Apartments
   b. Shuttle service that will adjust its headways to meet resident demands
   c. Pedestrian and bicycle amenities (e.g., bike storage, increased sidewalk area, seating, etc.)
   d. New enhanced TCAT bus stop along the project’s frontage with comfort amenities
   e. Other streetscaping enhancements
   f. Additional strategies may be considered (if necessary)

9. The project developer will coordinate with TCAT on the new transit stop and any impacts to the existing service routes

10. Scheduled service deliveries will be encouraged to take place during off-peak times when commuting traffic is least disrupted.
Figure 55: Transportation Facilities
**Impact on Energy**

A full integrated building and landscape/site approach will maximize the ability to reduce energy consumption.

The project is investigating and reviewing a number of sustainable elements in order to drastically reduce the carbon footprint while reducing energy consumption. As part of the sustainable study is the development of the envelope system and in order to understand the efficiency of the system we will conduct an energy analysis, review the findings and adjust the envelope system accordingly to meet the Green Building Policy, the Ithaca Energy Code supplement and the New York State Energy Conservation Construction Code.

This integrated team approach would include:

- Reduce stormwater runoff
- Provide porous paving for water infiltration
- Exterior light fixtures on daylight sensors
- Enhance building envelope to reduce heat gain and loss; glazing with thermally broken windows and vestibules at major entry points
- Highly reflective roof to reduce heat gain and maximize sun reflectance
- Natural daylight to reduce energy consumption and enhance indoor quality
- Use of natural and recyclable materials
- Use of low flow water fixtures
- Use of Energy Star appliances to minimize energy consumption, including electric stoves and ventless heat pump clothes dryers
- All light fixtures used will be LED fixtures
- The proposed mechanical system is a VRF system that is an electric air-source heat pump packaged unit, similar to a PTAC. Each dwelling unit will have a dedicated HVAC system.

**Impact on Sound, Odor & Light**

**Sound**

Mechanical equipment serving the proposed buildings will include air-handling units, make-up air handling units, exhaust fans, VRF heat pump units (interior to the building and serving interior spaces) and emergency generators. The selection of this equipment is consistent not only with goals for energy efficiency and sustainability, but also with those for acoustical performance.
Mitigation Measures -
Best practice sound-control strategies are being incorporated into the project design as equipment selection and replacement decisions are made. These strategies include, but are not limited to, the following:

- Selection of packaged air-handling units; sound-producing fans are internal to these units and shielded from exterior sound receptors by insulated panels that both reduce heat loss/gain and provide sound attenuation
- Air-handling equipment with variable speed motors
- Sound-attenuating enclosure on emergency generator
- Locating rooftop equipment, louvered air intakes/discharges and emergency generator to maximize distance to residents
- Installation of in-line sound attenuators, acoustical louvers, and/or lined plenums where air discharge is located at the building face

Through the incorporation of the strategies listed above, sound created by the project will be compatible with an urban area. No permanent acoustical impacts are expected to result from the proposed project.

Odor
The project will not include animal or agricultural sources. No other odor sources are part of planned programs. There are no significant odor impacts expected to result from the project.

Light
Project lighting will include fixtures at building entrances, along walkways and at the small parking area. Pedestrian-scale fixtures will be incorporated into the project site design to enhance safety and define distinctive characteristics of building form and site amenities. Project site lighting will be dark sky compliant LED fixtures that include cutoffs to focus lighting in needed areas and minimize light spillover onto adjacent areas.

The lighting system will be designed to provide high-quality lighting that is glare-free, flexible and easily adjusted for user comfort and ease of use. No significant impacts from light are expected.

Impact on Public Health
The proposed actions will have no negative impacts on public health. The proposed actions will not create a risk of explosion, release hazardous substances, produce hazardous wastes or store quantities of natural gas or other flammable liquids. The actions do not include excavation within 2,000 feet of a disposal site.

As discussed in previous sections, the project will not have a significant negative impact on air quality, noise or circulation. The project will have a positive impact on the health and well-being of residents by providing housing that meets and exceeds existing fire and building codes.

The proposal replaces high density student housing currently located within older, converted wood-frame buildings with new, fully code-compliant buildings which will meet current ADA standards, provide state-of-the-art fire suppression, fire alarms and other safety features.
Impact on Growth & Character of Community

Consistency with Community Plans -

The redevelopment of Collegetown has been a long standing economic development goal of the City of Ithaca. In 2006 the City created the Collegetown Vision Task Force to evaluate the Collegetown environment and provide recommendations for new development, infrastructure needs, improving the pedestrian experience, vehicular access and parking. The Collegetown Vision Task Force completed its work in 2017. In the report to Common Council the Cask Force concluded that there is a unique opportunity to build on Collegetown’s proximity to Cornell University and create a “diverse, commercially viable, dense, mixed-use community characterized by notable urban design, high quality architecture, vibrant public spaces and pedestrian amenities.

A Collegetown Vision Implementation Committee was established, and together with consultant Goody Clancy, an urban design plan and design guidelines were put together for Collegetown. The final plan recommendations concentrated high density development on College Avenue with decreases in the intensity of development as one mores away from the core of Collegetown.

Current planning and policy efforts which are relevant to this project are the Collegetown Design Guidelines (March, 2017), PLAN ITHACA (City Comprehensive Plan, 2015) and the emerging Green Building Policy. Below is a description of how the proposal aligns with these initiatives.

PLAN ITHACA

Land Use -

In the land use section of PLAN ITHACA, goals set for Collegetown focus on encouraging increased development, providing mixed-use development as well as allowing a higher density of development, including providing more housing per acre. Two important reasons cited for promoting increased density is to lighten the tax burden and protect the surrounding neighborhoods from potential sprawl and the pressures of student housing. The proposed plans align with these goals.

The land use section also calls for an active streetscape and additional greenspace. The proposed plans provide for an activated, attractive public realm. Building frontages are stepped back from the property line, expanding the public realm, and creating additional green space and amenities on private property. Ground floor spaces are proposed as largely transparent with inside active spaces that will contribute to an energized streetscape.

Economic Vitality -

In the economic vitality section of PLAN ITHACA, development-related goals focus primarily on promoting economic growth through “expanding the tax base while offering more people the opportunity to live within the city. Additional compact, mixed-use development in appropriate areas will have the greatest impact. This type of development generates higher property tax revenues per acre...It allows residents to live near jobs, services, and transit while transforming underutilized areas into desirable urban neighborhoods...” while “preserving the character of our established residential neighborhoods” (pg. 58). The proposed project will provide an expanded tax base and attract more business to Collegetown.

Community Livability -

PLAN ITHACA identifies preservation of existing neighborhoods through relief of rent market pressure, as well as enhancing existing neighborhoods and their sense of place. The proposed project aligns with these goals through the densification of rental housing within the heart of Collegetown and by providing a high-quality, lively streetscape experience paired with outstanding architecture.
**Mobility & Transportation** -
PLAN ITHACA goals for mobility and transportation include providing adequate sidewalks in Collegetown, creating streets that are attractive public spaces, providing pedestrian lighting and supporting multimodal transportation. The location of the proposed project, walkable to services and Cornell, adjacent to bus service and in close proximity to Ithaca Car Share, supports these goals. Streetscape design provides wider sidewalks, urban plazas, lighting and an overall enhanced pedestrian experience. Residents of the project will also be allowed to utilize parking at Collegetown Terrace, as well as the Collegetown Terrace Shuttle.

A new TCAT bus stop will be developed on the west side of College Avenue, paired with the existing bus stop on the east side of the street. Covered seating for the bus stop will be integrated into the architecture.

**Natural & Cultural Resources** -
Goals include finding more greenspace, either public or private. Access to open space in Collegetown is limited. The proposed project will greatly increase the pedestrian urban open space and amenities. These pedestrian improvements are largely due to increasing ground floor setbacks on private property. In addition, despite its highly urban condition, extensive landscaping has been integrated into the proposed plazas to elevate the outdoor experience.

**Sustainability** -
PLAN ITHACA identifies promoting the use of renewable energy, and reducing water consumption in its sustainability goals. The proposed buildings will be high-performance, energy-efficient buildings. While future phases of design development will continue to refine sustainable options for the buildings, the following is a list of sustainable features that are being pursued for the buildings on the Catherine North and Catherine South sites:

- The proposed mechanical system is a VRF system that is an electric air-source heat pump packaged unit, similar to a PTAC. This system does not use natural gas.
- The buildings will have high-performance insulated glazing.
- The canopies and overhangs at the entrances will provide shading and limit solar gain.
- Lighting controls will reduce power consumption by turning off artificial lighting during the day.
- Interior shades will be provided to reduce solar gain and actual energy consumption
- The buildings will meet all ASHRAE 90.1 2013 requirements
- Low-flow plumbing fixtures will be installed to reduce water use
- Energy Star appliances for high efficiency and reduced power demand will be specified
- High-efficiency LED lighting will be used in the interior and exterior
- Smart elevator controls will be included to optimize elevator travel patterns based on actual usage, minimizing waste motion
- Site lighting light output will be reduced after hours, with motion sensors to automatically bring lighting up to full brightness only if required

**Collegetown Design Guidelines 2017**

**Site Design** -
The Collegetown Design Guidelines’ “Guiding Principles” call for a cohesive, livable place with an attractive pedestrian environment (pg. 23). In addition to achieving an improved pedestrian environment, the proposed project aligns with the following specific site design strategies as identified in the guidelines:

- Orienting the building to the street
- Connecting pedestrians to the building and the public realm
- Incorporating open space
- Use a coordinated landscape palette
Building Design -
The Collegetown Design guidelines for buildings focus on creating contextual spaces, reinforcing the notion that buildings should effectively relate to their immediate and greater overall context through use of scale, appropriateness, and compatibility. The project is aligned with the building design recommendations in the Collegetown Design guidelines.

The primary building materials selected for the project are included in the guidelines as preferred materials. These include: brick, natural stone, concrete, aluminum framed glazing openings, metal panels & metal trim. The windows and entries proposed for the project also align with the guidelines. These building elements are comprised of windows, storefront, curtain walls, doors, stoops, canopies, and building recesses, and are purposefully designed throughout with attention to scale, proportion, and rhythm. Street level interest is provided, through several of the methods described in the guidelines.

The buildings are designed to be compatible with the existing urban fabric through the use of the following façade articulation methods noted in the guidelines (Collegetown Design Guidelines, pg. 59-60):

- Accent lines
- Color changes
- Material changes
- Minor wall offsets
- Increased setbacks (lower floors)

Horizontal and vertical demarcations such as window and curtain wall Mullions, glass slots, and volumetric setbacks are used to establish floor lines, to establish vertical breaks in building length, and to create loggias and entry courts at the street level. Changes of materials, contrast of color, and shadow relief are used to further articulate the façade.

Character Areas -
The proposed project is located in all three of the character areas identified in the Design Guidelines.

In the Collegetown Core character area (zones MU2 and MU1), the guidelines require orienting buildings to the street and placing buildings as close to the property line as possible. The guidelines further note that additional setbacks can be appropriate to allow for greater sidewalk widths or plazas, which may require variances. The majority of the project is within this character area, and the proposed project aligns with these guidelines. Additionally, “specialized corner elements” (pg. 79) to accentuate key intersections are recommended. The project incorporates architecturally distinct treatments at the corners of College Avenue and Catherine Street and College Avenue and Cook Street.

Guidelines for the Residential Transition character area (Zone CR4) include setting back the building to be within the range of setbacks established within the block, providing landscaping in the front yard setbacks, minimizing paving in front yards and minimizing curb cuts for driveways (pg. 80-81). Providing porches, stoops or recessed entries is recommended and are ‘critically important in defining street character’ (pg. 81). Buildings 2a and 2b on Catherine Street at the Catherine North site is within this character area. The building is sited to respect the residential setbacks and to create alignment with its neighbors.

Guidelines for the Neighborhood Periphery character area (Zone CR3) include setting back the building to be within the range of setbacks established within the block, providing landscaping in the front yard setback, minimizing paving in front yards, minimizing curb cuts for driveways, and providing a front porch that is architecturally consistent with the primary structure and compatible to the context (pg. 82-83). Building 4 on Cook Street at the Catherine South site is within this character area. Building 4 is sited to be consistent with the neighboring setbacks, provides a transition in height between the buildings on College Avenue and the residential buildings on Cook Street, and includes a pitched roof, a landscaped front yard and a front porch.
**Green Building Policy/Ithaca Energy Code Supplement/Green New Deal** -
The proposed development will align with the Green Building Policy by meeting one of two compliance paths (Easy Path or Whole-Building Path) as well as the Water Efficiency requirements. The proposed development will align with the Ithaca Energy Code Supplement by meeting the New York State Energy Conservation Construction Code (NYSECCC) and one or the two compliance paths of the Green Building Policy.

The proposed development will meet the following goals in the Green New Deal:

- Produce 40% fewer greenhouse gas emissions than mandated by state code
- Incorporate energy efficient LED lighting
- Incorporate high-performance glazing
- Incorporate low-flow plumbing fixtures to reduce water use, thereby reducing sanitary output
- Incorporate Energy Star high efficiency appliances to reduce power demand

All of the previously mentioned redevelopment plans for Collegetown contain a section describing existing conditions or weaknesses. Collegetown generally, but more particularly the 300 block where most of this redevelopment proposal is focused, has been described as “characterized by poor urban design,...indifferent architecture and a very inconsistent mix of building heights”. Nearly all of the existing buildings that are the focus of the proposal are older wood frame buildings that have been cut up into as many apartments as possible and satisfy only the bare minimum of space requirements as dictated by the Building Code. All buildings have major deferred maintenance items and are not in a condition that the developer is comfortable leasing. The proposed buildings will be a marked improvement over existing conditions.

All of the proposed uses included in this redevelopment proposal are consistent with other uses in Collegetown currently and with what is allowed as of right under current zoning. The proposed new development will have a positive impact on adjoining properties and on the overall Collegetown neighborhoods. The design of the new proposed buildings will enhance the urban environment visually and physically by incorporating such items as improved site lighting, site landscaping, interior trash handling and pedestrian friendly street furniture. The scale of this development proposal, unlike previous proposals, will be both a visual and economic enhancement that will re-invigorate Collegetown.

The project, by densifying housing in the core of Collegetown, will relieve development pressure on single-family housing stock in the adjacent neighborhoods, while creating an ‘attractive and comfortable public realm around which redevelopment can occur’ (2009 Collegetown Urban Plan and Conceptual Design Guidelines, 6.13).

**Impact from Construction**
*Description of Construction Phasing/Staging and Construction Activities* -
Construction for the Projects is slated to begin in the spring of 2021, and be complete in the fall of 2023.

<table>
<thead>
<tr>
<th>SITE</th>
<th>DURATION</th>
<th>START</th>
<th>OCCUPANCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH SITE</td>
<td>16 MONTHS</td>
<td>MARCH 2021</td>
<td>FALL 2023</td>
</tr>
<tr>
<td>SOUTH SITE</td>
<td>16 MONTHS</td>
<td>MARCH 2021</td>
<td>FALL 2023</td>
</tr>
</tbody>
</table>

Construction activities on both sites are planned to commence at the same time and be managed as a singular project to ensure that both sites logistics are managed in an organized and efficient manner. Planning around material deliveries, construction traffic flows, and diverting/managing pedestrian and public vehicular traffic will be closely monitored and coordinated to ensure public safety. The project site(s) will be enclosed with construction fencing and secured during times when no construction activity is occurring.
**Impact from Construction, cont.**

A construction Traffic and Pedestrian Control Plan will be prepared as part of a Street Permit application to be submitted to the City Department of Public Works. This plan will detail pedestrian crossing points, signage approaching and around the project site to assist in managing vehicular and pedestrian traffic as well as flaggers when needed. Street closures when required will be coordinated with the City Fire Department and Department of Public Works. Construction activities will take place during the days and within the hours prescribed by the City Noise Ordinance.

**Utility Construction** -
Construction planning will minimize utility outages. Replacement systems will be installed prior to removal/decommissioning of existing systems where possible.

The proposed developments should result in no permanent negative impacts to these resources.

**Construction Impacts to Stormwater** -
Drainage from the sites ultimately reaches Six Mile Creek. Temporary controls will be maintained during construction to control the erosion of exposed soils and to minimize discharge of dewatering practices directly into storm sewer systems. The project will be required to comply with NYS DEC regulations by submitting a Storm Water Pollution Prevention Plan (SWPPP). This will include erosion and sediment control plans that will fully mitigate construction impacts from stormwater run-off.

It is expected that all phases of construction will employ the following temporary practices:

- Install silt fencing adjacent to the downhill edge of any site disturbance or material stockpile area, parallel with the site contours.
- Provide protection around drainage inlets to prevent siltation.
- Temporary seeding and mulching of disturbed areas or topsoil stockpiles.
- Install sediment traps prior to initiating significant earthwork and maintain throughout construction period.
- Direct all sediment-laden water from trench and pit excavations to a sediment basin or equivalent sedimentation system.
- Install crushed stone tracking pads at principal construction site access points.
- Construction documents for the project will include an erosion and sediment control plan prepared in accordance with New York State Guidelines for Urban Erosion & Sediment Control.

**Construction Impacts to Air Quality** -
The proposed actions do not include construction practices that will significantly impact air quality. Some increase of suspended dust particles is unavoidable during aspects of construction. The amount of construction-generated dust depends on several factors including soil conditions, moisture content, amount of time soils are exposed to the wind and sun, weather-related factors and construction practices.
**Impact from Construction, cont.**

*Construction Impacts to Air Quality, cont.* -
The demolition, excavation, and preparation of foundations will create the potential for increased dust and dirt particles in the air. Dust control measures during construction may include the following:

- Misting or fog spraying site to minimize dust.
- Maintaining crushed stone tracking pads at all entrances to the construction site.
- Reseeding disturbed areas to minimize bare exposed soils.
- Keeping the roads clear of dust and debris.
- Requiring trucks to be covered.
- Prohibiting the burning of debris on site.

No significant construction impacts to air quality are expected as a result of these actions.

*Construction Impacts of Noise* -
Noise resulting from normal construction practices is inevitable and will impact the surrounding area. There is currently no plan for blasting operations during construction. Construction noise will be muffled to the extent practical and will not exceed levels allowed by law.

In accordance with local noise ordinances, construction activities that result in exterior noise will be limited to 7:30AM to 9:00PM. In addition, the developer will work closely with the contractor to implement Best Management Practices (BMP) for noise reduction to the extent possible. BMP mitigation measures listed by New York State Department of Environmental Conservation include:

- Source reduction by using mufflers, dampers and electric motors instead of air compressors.
- Duration and impact reduction by limiting times worked.
- Use of equipment inside the building to reduce noise.

Small to moderate impacts from construction noise are expected as a result of these projects. Construction noise is an unavoidable but temporary negative result of the project.

*Construction Impacts to Traffic* -
Construction activities will be supported by daily deliveries of materials, supplies and miscellaneous services. It is anticipated that this traffic will fluctuate between 10 to 20 construction deliveries per day, dependent on phase and times of the year. The related trips, most of which are trucks, arrive and depart the site throughout the day. A maximum of approximately five arrivals and departures during the morning and afternoon commuter peaks is expected at the height of construction activity. This level of increase is minimal when considering the magnitude of existing traffic volumes on the network. However, it is recognized that truck traffic typically requires more time and space for maneuvering and minor increases in delay can be expected. Large deliveries (oversized loads or multiple truck loads) will be scheduled for special delivery times so as not to coincide with periods of peak activity on the delivery routes.

Construction vehicles will be directed to use Route 13 (a designated truck route), exit on Rte. 366 and take Mitchell Street and College Avenue to access the project site. The developer will work with contractors to coordinate these routes in order to minimize construction traffic impacts. It is expected that material staging will occur on-site.
Construction Impacts to Parking -
Construction workforce parking will be provided and designated in a specific location to avoid having the workforce park at other locations within the City of Ithaca. Contractor parking will be provided at a designated contractor parking location. The daily workforce will typically arrive prior to 8:00AM and depart prior to 4:30PM. These times are outside the morning and afternoon peak commuter times on adjacent public and private roads. Since traffic is less during these off peak times the actual effect of the work force added to traffic is minimized. Small to moderate construction impacts to traffic are expected as a result of these actions.

Construction Impacts to Pedestrians and Cyclists -
Pedestrians and cyclists within the Collegetown area will be impacted by the construction process. Impacted pedestrian routes will include sidewalks along College Avenue, Catherine Street, and Cook Street. Proposed mitigation measures to address anticipated impacts will include:

- Provide safe detours around active construction areas and mark these clearly.
- Utilize personnel with flags to assist with the safe arrival and departure of construction delivery vehicles as appropriate.
- Construct adequate fencing, walls or other barriers to prevent pedestrians or bicyclists from entering active construction areas.
- Locate construction staging areas to minimize conflicts between major pedestrian and bicycle routes to and from active construction areas.
- Minimize dust and water run-off along or over pedestrian routes and bicycle lanes.

Due to the disruption of normal routes around the sites caused by construction, the proposed actions will impact pedestrian and bicycle circulation in a small to moderate way. These impacts are not expected to extend beyond completion of the project, but will be mitigated by the measures stated above.

Communication During Construction -
The developer will create a communication plan to respond to community inquiries during construction. Inquiries will be sent to a single point of contact for coordination and response.
This page has been intentionally left blank.
Appendices
This page has been intentionally left blank.
Appendix A

Building Permit & SPR Application Forms
IMPORTANT: Application for informational purposes only. Applicants are asked to enter information on Building Division’s Building Permit application console (address & times listed below). Thank you.

CITY OF ITHACA - BUILDING PERMIT APPLICATION

108 East Green Street, Ithaca, New York 14850
Telephone: 607-274-6598 Fax: 607-274-6521
Building Permit Application must be submitted Mon.-Fri. 8AM-10AM or by appointment. This side to be completed by applicant.

PROJECT INFORMATION

Project Street Address: SEE ATTACHED
Tax Parcel Number (e.g. 55.-5.-5): SEE ATTACHED
Building/Room:

Project Type: New Building ☐ Demolition/Removal ☐ Relocation ☐ Site Work ☐ Fill/Stock Piling ☐
Repair ☐ Alteration-1 ☐ Alteration-2 ☐ Alteration-3 ☐ Change of Occupancy ☐ Addition ☐

Estimated Cost: $1,109,000 Permit Fee: $7,700.00 Receipt #

General Contractor: TBD
Contractor:
Licensed Electrical Contr.
Licensed Plumbing Contr.
City Registered Heating Contr.

Existing Use: VACANT RESIDENTIAL BUILDING Proposed Use: MULTI-FAMILY RESIDENTIAL

Project Location: WEST SIDE OF COLLEGE AVE. ON 300/300 BLOCK

Project Description:
PRELIMINARY SITE WORK FOR MULTI-STORY RESIDENTIAL BUILDINGS.

Energy Code Compliance: Prescriptive ☐ REScheck/COMcheck ☐ Trade-off ☐ Worksheets ☐ Analysis ☐
Attached: Plans ☐ Specifications ☐ Other documentation ☐

PROPERTY INFORMATION

Zone ______ Historic/Landmark Dist/Site ☐ Flood Zone: 100yr ☐ 500yr ☐

OWNER/APPLICANT INFORMATION (Please Type or Print Legibly)

Owner: COOK-CATH ASSOCIATES, LLC Address: 15THORNLWOOD DR Tel 257-5050
Applicant: HERMAN SIEGELING Address: 15THORNLWOOD DR Tel 257-5050

Required liability, disability, Workers’ Compensation insurance carried by Owner ☐ Contractors ☐ will be in force at all times throughout operations.
Insurance on file or provided ☐ Liability ☐ Workers Comp. ☐ Disability ☐ State Waiver attached for WC/DIS.

I am the owner or agent of the owner of the premises in the City of Ithaca, New York described in this application. I hereby apply for a permit to perform the work described in this application and on attached plans, specifications and other documents. I will comply with all provisions of applicable ordinances, codes and regulations in the performance of this work whether specified herein or not. Any amendment to this application, plans, specifications or other documents upon which this permit was issued will be filed with the Ithaca Building Department for approval before such changes are made in the actual work. I hereby request that all work be inspected and approved by the appropriate inspectors. I certify that every person performing work on the permitted project will comply with all applicable codes, ordinances and regulations.

By my signature I certify I have read and understand the above paragraph.

Applicant Signature: [Signature] Date: 4/25/13
Typed or Legibly Printed Name: HERMAN SIEGELING Email: herman.siegel@gmail.com

Revised 4/26/2013
APPLICATION TO NOTIFY OF PLANNED DEVELOPMENT

APPLICANT:  Kathryn Wolf, Trowbridge Wolf Michaels Landscape Arch.  
Title/Role:  Agent for Owner/Project Sponsor

Address 1: 1001 West Seneca Street, Suite 201

Address 2:  
City, State, & Zip Code:  Ithaca, NY  14850

Telephone: 607-210-8357  Cell Phone:  
E-Mail: kaw@twm.la

CONSULTANT:  Arvind Tikku, ikon 5 Architects  
Title/Role:  Project Architect

Address 1: 864 Mapleton Road, Suite 100

Address 2:  
City, State, & Zip Code:  Princeton, NJ 08540

Telephone: 609.919.0099  Cell Phone:  
E-Mail: atikku@ikon5architects.com

PROJECT SPONSOR:  Same as applicant

Title/Role:  Owner

Address 1:  

Address 2:  
City, State, & Zip Code:  Ithaca, NY  14850

Telephone: 607-257-5050  Cell Phone:  
E-Mail:  

— PROJECT DESCRIPTION —

Project Title:  Catherine Commons

Address:  See Attachment

Project Type (check one):  
Residential  Commercial  Industrial  Institutional  Mixed-Use

Scope of Work (check all that apply & indicate approximate operation/construction cost):

Vegetation Removal $ 75,000  Façade Change $ 600,000  Demolition $ 1,100,000

New Paving $ 75,000  Earthwork $ 600,000  New Structure $ 37,281,000

New Structure Expansion $ 20,000  New Parking $  

Addition to Building/Structure $  

Total Construction Cost:  $ 39,136,000  

Anticipated Construction Period:  March 2022 to August, 2023

— OWNER INFORMATION —

1. If the development site is leased property, list the property owner’s name and address below:

Name:  
Address:  
City, State, & Zip Code:  
Telephone:  
Cell Phone:  
E-Mail:  

Length of Lease:

Note:  If property is not owned by Project Sponsor, OWNER’S AUTHORIZATION FORM required.
2. Please record the application date and approval status of any required federal, state, and/or local permits or approvals for this project:

<table>
<thead>
<tr>
<th>Type</th>
<th>Approval Agency</th>
<th>Application Date</th>
<th>Approval Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolition</td>
<td>Building Division</td>
<td>Feb. 2022</td>
<td>NA</td>
</tr>
<tr>
<td>Building</td>
<td>Building Division</td>
<td>8/13/2021</td>
<td>NA</td>
</tr>
<tr>
<td>Variance</td>
<td>Ithaca Landmarks Preservation Commission (ILPC)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Board of Zoning Appeals (BZA)</td>
<td>1/21/2022</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Board of Public Works (BPW)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Identify any existing restriction(s) relevant to development of this property:

- Deed Restriction(s)
- Lien(s)
- Easement(s)
- License Agreement(s)
- Other: ____________________________

**APPLICATION FEE**

Application fee is based on total construction, site work, and landscaping costs, charged in accordance with the following schedule. The fee is payable by check to the “City of Ithaca,” upon submission of this application.

<table>
<thead>
<tr>
<th>Type of Approval</th>
<th>Project Cost</th>
<th>Application Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Plan Review</td>
<td>less than $10,000</td>
<td>$75</td>
</tr>
<tr>
<td></td>
<td>$10,000 to $49,999</td>
<td>$150</td>
</tr>
<tr>
<td></td>
<td>$50,000 to $100,000</td>
<td>$300</td>
</tr>
<tr>
<td></td>
<td>over $100,000</td>
<td>$1.50 per $1,000</td>
</tr>
<tr>
<td>* Modified Site Plan</td>
<td>less than $50,000</td>
<td>$150</td>
</tr>
<tr>
<td>Review</td>
<td>$50,000 or more</td>
<td>$250</td>
</tr>
</tbody>
</table>

* Modified Site Plan Review fee only applies to modifications to approved site plans that do not trigger reconsideration of Determination of Environmental Significance. Modifications that require additional environmental review should follow fee schedule for full Site Plan Review. This determination will be made at time of application.

**QUICK APPLICATION CHECKLIST**

<table>
<thead>
<tr>
<th>Item</th>
<th>No. of Copies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Form (completely filled out and signed)</td>
<td>14</td>
</tr>
<tr>
<td>Short Environmental Assessment Form (SEAF) (completely filled out and signed)</td>
<td>14</td>
</tr>
<tr>
<td>Full Environmental Assessment Form (FEAF) — Part 1 [if required] (completely filled out and signed)</td>
<td>14</td>
</tr>
<tr>
<td>Full-Size Drawings: (1) scalable site survey with building footprint(s); and (2) height elevations</td>
<td>2</td>
</tr>
<tr>
<td>Reduced Drawings (11”x17”) [see “Site Plan Review Application Checklist”]</td>
<td>14</td>
</tr>
<tr>
<td>Site Plan Review Application Fee</td>
<td>14</td>
</tr>
</tbody>
</table>

**ELECTRONIC SUBMISSIONS:** You must provide electronic versions of all submitted documents.

**LARGE FILES:** Incoming e-mails to the City must be under 10 MB in size (incl. message envelope), so please either provide a flash/thumb drive, or use a free file-sharing web site, like: www.highway.com, www.dropbox.com, www.google.com/drive, etc. You can also split documents into smaller parts and send multiple e-mails/files to: nicholas@cityofithaca.org or aharris@cityofithaca.org.

**Applicant’s Signature:** ____________________________  **Date:** 8/17/2021

*By signing this application form, the applicant acknowledges City staff may visit the site in order to fully understand the proposed development.*
<table>
<thead>
<tr>
<th>PROJECT SITE</th>
<th>ADDRESS</th>
<th>TAX MAP - PARCEL NO.</th>
<th>OWNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catherine North</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>306 College Avenue</td>
<td>68.-4-6</td>
<td>Coll-Cath Associates, LLC</td>
</tr>
<tr>
<td></td>
<td>304 College Avenue</td>
<td>68.-4-7</td>
<td>Coll-Cath Associates, LLC</td>
</tr>
<tr>
<td></td>
<td>302 College Avenue</td>
<td>68.-4-8</td>
<td>Coll-Cath Associates, LLC</td>
</tr>
<tr>
<td></td>
<td>128 Catherine Street</td>
<td>68.-4-9</td>
<td>Coll-Cath Associates, LLC</td>
</tr>
<tr>
<td></td>
<td>124 Catherine Street</td>
<td>68.-4-10</td>
<td>Coll-Cath Associates, LLC</td>
</tr>
<tr>
<td></td>
<td>122 Catherine Street</td>
<td>68.-4-3</td>
<td>Coll-Cath Associates, LLC</td>
</tr>
<tr>
<td></td>
<td>120 Catherine Street</td>
<td>68.-4-11</td>
<td>Coll-Cath Associates, LLC</td>
</tr>
<tr>
<td>Catherine South</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>210 College Avenue</td>
<td>68.-5-10</td>
<td>Cook Coll, LLC</td>
</tr>
<tr>
<td></td>
<td>206 College Avenue</td>
<td>68.-5-11</td>
<td>Cook Coll, LLC</td>
</tr>
<tr>
<td></td>
<td>204 College Avenue</td>
<td>68.-5-12</td>
<td>Cook Coll, LLC</td>
</tr>
<tr>
<td></td>
<td>202 College Avenue</td>
<td>68.-5-13</td>
<td>Cook Coll, LLC</td>
</tr>
<tr>
<td></td>
<td>118 Cook Street</td>
<td>68.-5-14</td>
<td>Cook Coll, LLC</td>
</tr>
</tbody>
</table>
Appendix B

Zoning Analysis
Catherine Commons

Zoning Analysis
**CR-3 - Use - Multiple Dwelling (Building 4)**

**Lot Criteria** - Figure 1A

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Allowed</th>
<th>Actual</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lot Size</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum area, Multiple dwelling</td>
<td>3,500 SF</td>
<td>8,007 SF</td>
<td>YES</td>
</tr>
<tr>
<td>width at street line, Multiple dwelling</td>
<td>40’</td>
<td>60’-2”</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Lot Coverage</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum, by building</td>
<td>40%</td>
<td>(3,179 SF) 39.7%</td>
<td>YES</td>
</tr>
<tr>
<td>Minimum green Space</td>
<td>30%</td>
<td>(2,816) 35.1%</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Minimum off-street parking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 space per unit</td>
<td>13</td>
<td>5</td>
<td>NO</td>
</tr>
</tbody>
</table>

**Siting** - Figure 1B

<table>
<thead>
<tr>
<th>Siting</th>
<th>Allowed</th>
<th>Actual</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principal building</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front setback</td>
<td>10’</td>
<td>10’</td>
<td>YES</td>
</tr>
<tr>
<td>Side setback</td>
<td>5’</td>
<td>47’-6”</td>
<td>YES</td>
</tr>
<tr>
<td>Rear setback</td>
<td>20’</td>
<td>5’</td>
<td>NO</td>
</tr>
</tbody>
</table>

**Height** - Figure 2

<table>
<thead>
<tr>
<th>Height</th>
<th>Allowed</th>
<th>Actual</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principal building</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum height (stories/feet)</td>
<td>3/35’</td>
<td>3/34’-10”</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Floor Height Principal Building</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum floor height</td>
<td>9’</td>
<td>9’</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Roof</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pitched roof required</td>
<td>Pitched</td>
<td>Pitched</td>
<td>YES</td>
</tr>
<tr>
<td>Roof Pitch min/max</td>
<td>6:12/12:12</td>
<td>12:12</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Activation** - Figure 2

<table>
<thead>
<tr>
<th>Activation</th>
<th>Allowed</th>
<th>Actual</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Street Facade</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum façade length</td>
<td>45’</td>
<td>45’</td>
<td>YES</td>
</tr>
<tr>
<td>Maximum length of blank wall</td>
<td>8’</td>
<td>&lt;8’</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Doors and Entries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functioning entry on street facing façade</td>
<td>Required</td>
<td>Provided</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Porch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front porch</td>
<td>Required</td>
<td>Provided</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Variances Required:**
- Minimum Off-Street Parking
- Rear setback
### CR-4 - Use - Multiple Dwelling (Buildings 2a and 2b)

#### Lot Criteria - Figure 3

<table>
<thead>
<tr>
<th><strong>Lot Size</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum area, Multiple dwelling</td>
<td>3,500 SF</td>
<td>19,698 SF</td>
<td>YES</td>
</tr>
<tr>
<td>width at street line, Multiple dwelling</td>
<td>40'</td>
<td>147'-8&quot;</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lot Coverage</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum, by building</td>
<td>50%</td>
<td>(9,836 SF)</td>
<td>49.9%</td>
</tr>
<tr>
<td>Minimum green space</td>
<td>25%</td>
<td>(7,220)</td>
<td>36.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Min off-street parking</strong></th>
<th>required</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand management plan required</td>
<td>0</td>
<td>0</td>
<td>YES</td>
</tr>
</tbody>
</table>

#### Siting - Figure 3

<table>
<thead>
<tr>
<th><strong>Principal building</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front setback</td>
<td>10'</td>
<td>10'-6 ½&quot;</td>
<td>YES</td>
</tr>
<tr>
<td>Side setback, rowhouse</td>
<td>0'</td>
<td>NA</td>
<td>YES</td>
</tr>
<tr>
<td>Side setback, all other</td>
<td>5'</td>
<td>32'-2&quot;</td>
<td>YES</td>
</tr>
<tr>
<td>Rear setback</td>
<td>20'</td>
<td>5'</td>
<td>NO</td>
</tr>
<tr>
<td>Minimum spacing between primary structures</td>
<td>5'</td>
<td>13'-0&quot;</td>
<td>YES</td>
</tr>
</tbody>
</table>

#### Height - Figure 4

<table>
<thead>
<tr>
<th><strong>Principal building</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum height (stories/feet)</td>
<td>4/45'</td>
<td>4/44'-8&quot;</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Floor Height Principal Building</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum floor height</td>
<td>9'</td>
<td>9'-4&quot;</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Roof</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitched or flat roof allowed</td>
<td>Pitched or flat</td>
<td>Flat</td>
<td>YES</td>
</tr>
</tbody>
</table>

#### Activation - Figure 4

<table>
<thead>
<tr>
<th><strong>Street Facade</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum façade length, rowhouse</td>
<td>100'</td>
<td>73'-8&quot;</td>
<td>YES</td>
</tr>
<tr>
<td>Maximum façade length, all other</td>
<td>45'</td>
<td>42'-7&quot;</td>
<td>YES</td>
</tr>
<tr>
<td>Maximum length of blank wall</td>
<td>8'</td>
<td>&lt;8'</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Doors and Entries</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functioning entry on street facing façade</td>
<td>Required</td>
<td>Provided</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Porch</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front porch, stoop or recess @ each entry</td>
<td>Required</td>
<td>Provided</td>
<td>YES</td>
</tr>
</tbody>
</table>

#### Variances Required:
- Rear setback
**Lot Criteria** – Figure 5

<table>
<thead>
<tr>
<th><strong>Lot Size</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum area, Multiple dwelling</td>
<td>3,500 SF</td>
<td>19,945 SF</td>
<td>YES</td>
</tr>
<tr>
<td>Width at street line, Multiple dwelling</td>
<td>40’</td>
<td>221’-1”/100’</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Lot Coverage</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum, by building</td>
<td>70%</td>
<td>(13,648) 68.4%</td>
<td>YES</td>
</tr>
<tr>
<td>Minimum green Space</td>
<td>10%</td>
<td>(2,569) 12.9%</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Siting** – Figure 5

<table>
<thead>
<tr>
<th><strong>Principal building</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front setback</td>
<td>5’</td>
<td>5’</td>
<td>YES</td>
</tr>
<tr>
<td>Side setback, rowhouse</td>
<td>0’</td>
<td>3’-0”</td>
<td>YES</td>
</tr>
<tr>
<td>Side setback, all other</td>
<td>5’</td>
<td>5’</td>
<td>YES</td>
</tr>
<tr>
<td>Rear setback</td>
<td>10’</td>
<td>10’</td>
<td>YES</td>
</tr>
<tr>
<td>Minimum spacing between primary structures</td>
<td>5’</td>
<td>6’</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Height** – Figure 6

<table>
<thead>
<tr>
<th><strong>Principal building</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum height (stories/feet)</td>
<td>5/70’</td>
<td>7/78’</td>
<td>NO</td>
</tr>
</tbody>
</table>

**Accessory structure not applicable**

<table>
<thead>
<tr>
<th><strong>Floor Height Principal Building</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum floor height, residential</td>
<td>10’</td>
<td>10’</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Roof</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitched or flat roof allowed</td>
<td>Pitched or flat</td>
<td>Flat</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Activation** – Figure 6

<table>
<thead>
<tr>
<th><strong>Street Facade</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum façade length, rowhouse</td>
<td>150’</td>
<td>150’-0”</td>
<td>YES</td>
</tr>
<tr>
<td>Maximum façade length, all other</td>
<td>75’</td>
<td>89’-10”/56’-7”</td>
<td>NO</td>
</tr>
<tr>
<td>Maximum length of blank wall</td>
<td>12’</td>
<td>&lt;12’</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Doors and Entries</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum distance bet. Street facing entries</td>
<td>35’</td>
<td>35’</td>
<td>No Entry on Cook NO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Recessed Entry</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required for each functional entry</td>
<td>Required</td>
<td>Provided</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Rowhouse Definition</strong></th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional entry required</td>
<td>Each rowhouse module None at northernmost</td>
<td>None</td>
<td>NO</td>
</tr>
</tbody>
</table>

**Variances Required:**
- Building Height - Stories
- Building Height - Feet
- Maximum Façade Length - Cook Street
- Distance Between Entries - no entry on Cook
- Recessed Entry at northernmost rowhouse
### MU-2 - Use - Multiple Dwelling / Retail Store or Service Commercial Facility (Building 1)

#### Lot Criteria – Figure 7

<table>
<thead>
<tr>
<th>Lot Size</th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum area, Multiple dwelling</td>
<td>2,500 SF</td>
<td>13,334 SF</td>
<td>YES</td>
</tr>
<tr>
<td>Width at street line, Multiple dwelling</td>
<td>25’</td>
<td>152'-10/61'-6”</td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lot Coverage</th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum, by building</td>
<td>100%</td>
<td>(11,484) 86%</td>
<td>YES</td>
</tr>
<tr>
<td>Minimum green Space</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Siting

<table>
<thead>
<tr>
<th>Principal building</th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front setback, min/max</td>
<td>0’/2’</td>
<td>0’</td>
<td>YES</td>
</tr>
<tr>
<td>Side setback</td>
<td>0’</td>
<td>0’</td>
<td>YES</td>
</tr>
<tr>
<td>Rear setback</td>
<td>10’</td>
<td>10’-2 ½”</td>
<td>YES</td>
</tr>
</tbody>
</table>

#### Height

<table>
<thead>
<tr>
<th>Principal building</th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum height (stories/feet)</td>
<td>6/80’</td>
<td>8/90’</td>
<td>NO</td>
</tr>
</tbody>
</table>

#### Accessory structure not applicable

#### Floor Height Principal Building

| Minimum floor height, street level | 12’ | 12’ | YES |
| Minimum floor height, upper story | 10’ | 10’ | YES |

| Roof | allowed | actual | complies |
| Flat roof required | Flat | Flat | YES |

#### Activation – Figure 8

| Street Facade | allowed | actual | complies |
| Minimum glazing at street level | 65% | 90% | YES |
| Maximum length of blank wall | 12’ | <12’ | YES |

<table>
<thead>
<tr>
<th>Doors and Entries</th>
<th>allowed</th>
<th>actual</th>
<th>complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum distance bet. Street facing entries</td>
<td>60’</td>
<td>58’</td>
<td>NO</td>
</tr>
</tbody>
</table>

| Required for each functional entry | allowed | actual | complies |
| Required | Provided | | YES |

#### Chamfered Corner

Required at corners in MU2 district | NO |

### Variances Required:
- Building Height - Stories
- Building Height - Feet
- Distance Between Entries - no entry on Catherine
- Chamfer at corner in MU-2 District
ZONE - CR-3
USE - MULTIPLE DWELLING

Lot Criteria

<table>
<thead>
<tr>
<th>Lot Size</th>
<th>8,007 SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building</td>
<td>3,179 SF</td>
</tr>
<tr>
<td>Green Space</td>
<td>2,816 SF</td>
</tr>
</tbody>
</table>

Siting

See figure below for setbacks

FIGURE 1A

FIGURE 1B

47'6" (SIDE YARD)

5'0" (REAR YARD)

10'0" (FRONT YARD)
<table>
<thead>
<tr>
<th>Height</th>
<th>Activation</th>
<th>ZONE - CR-3 USE - MULTIPLE DWELLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (Stories/Feet)</td>
<td>3/34'-10&quot;</td>
<td>Blank Wall</td>
</tr>
<tr>
<td>Minimum Floor Height</td>
<td>9'-0&quot;</td>
<td>Functioning Entry</td>
</tr>
<tr>
<td>Roof Shape</td>
<td>Pitched 12:12</td>
<td>Porch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

**BUILDING 4**

**BUILDING HEIGHT** 34'-10"

**GRADE PLANE** 670'-11"

**FUNCTIONAL ENTRY /PORCH**

FIGURE 2
ZONE - CR-4
USE - MULTIPLE DWELLING

Lot Criteria

<table>
<thead>
<tr>
<th>Lot Size</th>
<th>19,698 SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building</td>
<td>9,836 SF</td>
</tr>
<tr>
<td>Green Space</td>
<td>7,220 SF</td>
</tr>
</tbody>
</table>

Siting

See figure below for setbacks

FIGURE 3
ZONE - CR-4
USE - MULTIPLE DWELLING

<table>
<thead>
<tr>
<th>Height</th>
<th>Activation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (Stories/Feet)</td>
<td>4/44'-10&quot;</td>
<td>Blank Wall</td>
</tr>
<tr>
<td>Minimum Floor Height</td>
<td>9'-4&quot;</td>
<td>73'-6 1/2&quot;</td>
</tr>
<tr>
<td>Roof Shape</td>
<td>Flat</td>
<td>42'-7&quot;</td>
</tr>
<tr>
<td></td>
<td>Recessed Entries</td>
<td>Yes</td>
</tr>
</tbody>
</table>

FIGURE 4
ZONE - MU-1
USE - MULTIPLE DWELLING

Lot Criteria

- Lot Size: 19,945 SF
- Building: 13,648 SF
- Green Space: 2,569 SF

Siting

See figure for setbacks
<table>
<thead>
<tr>
<th>Height</th>
<th>Activation</th>
<th>Activation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (Stories/Feet)</td>
<td>7/78'-0&quot;</td>
<td>Blank Wall</td>
</tr>
<tr>
<td>Minimum Floor Height</td>
<td>10'-0&quot;</td>
<td>Facade Length, Rowhouse 150'-0&quot;</td>
</tr>
<tr>
<td>Roof Shape</td>
<td>Flat</td>
<td>All Other 56'-7&quot;/89'-10&quot;</td>
</tr>
</tbody>
</table>

FIGURE 6
ZONE - MU-2
USE - MULTIPLE DWELLING /
RETAIL STORE OR SERVICE COMMERCIAL FACILITY

Lot Criteria

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot Size</td>
<td>13,334 SF</td>
</tr>
<tr>
<td>Building</td>
<td>11,484 SF</td>
</tr>
</tbody>
</table>

Siting

See figures below for setbacks

---

GROUND FLOOR

FIGURE 7A

FLOORS 2-8

FIGURE 7B
**ZONE - MU-2**
**USE - MULTIPLE DWELLING / RETAIL STORE OR SERVICE COMMERCIAL FACILITY**

<table>
<thead>
<tr>
<th>Height</th>
<th>Activation</th>
<th>Activation Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (Stories/Feet)</td>
<td>8/90'-0&quot;</td>
<td>Blank Wall</td>
</tr>
<tr>
<td>Minimum Floor Height, Ground</td>
<td>12'-0&quot;</td>
<td>Ground Level Glazing</td>
</tr>
<tr>
<td>All Other</td>
<td>10'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>Roof Shape</td>
<td>Flat</td>
<td>Recessed Entries</td>
</tr>
</tbody>
</table>

**BUILDING 1**

**GRAGE PLANE**

**BUILDING HEIGHT**

90'-0"

**RECESSED ENTRY**

**FIGURE 8**
Appendix C

Traffic Report
Ms. Kathryn Wolf, RLA
Principal
Trowbridge Wolf Michaels
Landscape Architects LLP
1001 West Seneca Street Suite 201
Ithaca, New York 14850

RE: Proposed Catherine Commons Project, Collegetown, City of Ithaca, NY
Transportation Demand Assessment

Dear Ms. Wolf:

The purpose of this technical letter is to provide a Transportation Demand Assessment related to the proposed Catherine Commons project located in Collegetown along the west side of College Avenue amongst an aggregation of 12 parcels in the City of Ithaca, NY. The proposed project plans to develop a mix of 360 residential units with limited ground floor commercial space and intends to utilize the existing parking supply at the Collegetown Terrace Apartments complex located just over 1/4-mile from the project site. It is noted that the developer for the proposed Catherine Commons project is the owner of the Collegetown Terrace Apartments complex. Streetscaping enhancements are planned, including a new enhanced TCAT bus stop, landscaping, and outdoor seating to elevate the form and function of the pedestrian realm.

This assessment documents the existing parking capacity and demands at the Collegetown Terrace Apartments, examines the projected parking demands associated with the proposed project, assesses the multi-modal environment adjacent to the project site, and describes the potential parking impacts resulting from the proposed project.

PROJECT DESCRIPTION

As shown on the attached concept site plan, the proposed project consists of redeveloping the existing parcels into the following:

- 360 apartment units with approximately 510 beds.
- ±2,600 square feet (SF) of commercial space.
- ±1,600 SF of fitness space for resident use.

A tenant mix is not yet determined for the commercial space. Based upon the proposed occupant loads for each commercial space, a total of 45 occupants are allowed. Likely suitors may be a coffee/donut shop or quick service eatery.

Five on-site parking spaces are provided off Cook Street. No other on-site parking is provided. Instead, off-street parking is provided at the Collegetown Terrace Apartments complex located just over 1/4-mile to the south from the project site.
LOCAL TRANSPORTATION ACCOMMODATIONS

The proposed project will be served by the following transportation options within 1,320 feet (0.25 miles) of the project site. A diagram of the existing transportation system nearby the project site is included in the attachments.

1. Transit Facilities
   According to the Tompkins Consolidated Area Transit (TCAT), the project site is nearby existing bus routes and stops. Existing stops are located across the street at the Collegetown Crossing and at the intersection of College Avenue/Mitchell Street. Headways vary during the peak morning and evening commute times, but generally range from 10-30 minutes. The routes that serve College Avenue are:
   - Route 10 – normally operates at 10 to 20-minute intervals
   - Route 30 – normally operates at 15-minute intervals
   - Route 51 – normally operates at 1-hour intervals
   - Route 90 – normally operates at 40-minute intervals

   Based upon a conversation with TCAT personnel, TCAT desires paired bus stops along the College Avenue corridor to maximize capacity and operations of the routes. The project proposes a new southbound bus stop in front of the site which will be paired with the existing northbound Collegetown Crossing stop. The project developer will coordinate with TCAT on the new transit stop and any impacts to the existing service routes.

2. Collegetown Terrace Shuttle Bus (Privately Operated)
   The Collegetown Terrace Apartments complex operates a shuttle on weekdays and Sundays. On weekdays, two buses (or more, if needed) operate from 7:30-11:30 AM. Buses pick up at Collegetown Terrace Apartments every 10 minutes and travel along College Avenue with a stop at 119-125 College Avenue. The route continues to Anabel Taylor Hall on Cornell Campus and then returns to Collegetown Terrace Apartments. On Sundays, the bus makes stops at Wegmans and the Asian Food Market. The number of trips fluctuate based on demand.

   It is expected that the proposed Catherine Commons tenants will utilize the existing stop at 119-125 College Avenue.

3. Bicycle Facilities
   There are no dedicated facilities along College Avenue. There are bike lanes along a portion of Mitchell Street, as well as State Street. Bicycle parking facilities are located throughout Collegetown, as illustrated on the previously noted transportation diagram. Cyclists are permitted to share the road with motorists on all roadways within the general study area.

4. Pedestrian Facilities
   There are sidewalks along all roadways within the general study area. Pedestrian countdown signals are present at the signalized intersection of College Avenue/Dryden Road.

5. Car Share Facilities
   Ithaca Car Share has two locations in the project vicinity: one is at the intersection of College Avenue/Catherine Street across the street from the proposed project, and one is at College Avenue at Sheldon Court.
6. **Walk Score Assessment**

Walk Score, along with Transit Score and Bike Score, are online analytical tools using patented methodology to measure the walkability, transit access, and bikeability of an address. Places are assigned a score from 0 to 100, with 100 representing the highest rated location for each category. The following image illustrates the results of this assessment. A description of the methodology and scoring system is included in the attachments. Based upon these results, the project site is located within a highly walkable area with complementary services close-by.

![Walk Score Results at 302 College Avenue](image)

**Figure 1: Walk Score Results at 302 College Avenue**

**COLLEGETOWN COMMUTING CHARACTERISTICS**

Because the proposed project has a residential component, commuting characteristics from the U.S. Census and American Community Survey (ACS) was consulted. Mode shares are representative of Census Tract 2; the tract in which the project site is located. **Table 1** depicts the means of transportation to work. It is noted that there may be variability given the demographic of residents surveyed (workers versus college students). However, an overwhelming majority of residents choose to walk or use means other than a personal vehicle.

<table>
<thead>
<tr>
<th>MODE OF TRANSPORTATION</th>
<th>ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drove Alone</td>
<td>5.8%</td>
</tr>
<tr>
<td>Carpoled</td>
<td>3.3%</td>
</tr>
<tr>
<td>Public Transportation (excluding taxicab)</td>
<td>7.3%</td>
</tr>
<tr>
<td>Walked</td>
<td>65.6%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>2.7%</td>
</tr>
<tr>
<td>Taxicab, motorcycle, or other means</td>
<td>2.8%</td>
</tr>
<tr>
<td>Worked from home</td>
<td>12.4%</td>
</tr>
</tbody>
</table>
PARKING DEMAND ANALYSIS

Given that the proposed residential portion of the project is likely to be predominately students, the parking generation rates were based on the existing demand at the Collegetown Terrace Apartments complex. Yearly information was provided by the developer and is shown in the following table. It is noted that the existing complex has a parking supply of 649 spaces and consists of 1,245 beds.

<table>
<thead>
<tr>
<th>ACADEMIC YEAR</th>
<th>SPACES RENTED</th>
<th>AVAILABLE SPACES</th>
<th>OCCUPANCY</th>
<th>NUMBER OF OCCUPIED BEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 – 2019</td>
<td>391</td>
<td>258</td>
<td>60%</td>
<td>1,076</td>
</tr>
<tr>
<td>2019 – 2020</td>
<td>353</td>
<td>296</td>
<td>54%</td>
<td>1,232</td>
</tr>
<tr>
<td>2021 – 2022</td>
<td>325 (projection)</td>
<td>324</td>
<td>50%</td>
<td>1,240</td>
</tr>
</tbody>
</table>

Note:
1. COVID-19 was considered not representative of typical conditions.
2. For the 2021-2022 academic year, the projected number of parking spaces to be rented is 325. During the month of July 2021, there were 143 spaces rented and spaces will be rented up until the time of student arrival.

The developer noted that the number of parking spaces rented has consistently decreased each year. At no point in the site’s history have all spaces been rented. The results in Table 2 show that the average occupancy during the latest representative academic years of 2018-2019 and 2019-2020 is 57%.

The parking generation rates of the existing Collegetown Terrace Apartments complex are shown in Table 3.

<table>
<thead>
<tr>
<th>ACADEMIC YEAR</th>
<th>RENTED/ OCCUPIED SPACES</th>
<th>NUMBER OF BEDS</th>
<th>PARKING RATE (SPACES/BED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 – 2019</td>
<td>391</td>
<td>1,076</td>
<td>0.37 spaces/bed</td>
</tr>
<tr>
<td>2019 – 2020</td>
<td>353</td>
<td>1,232</td>
<td>0.29 spaces/bed</td>
</tr>
<tr>
<td>2021 – 2022 Projection</td>
<td>325</td>
<td>1,240</td>
<td>0.27 spaces/bed</td>
</tr>
</tbody>
</table>

Table 4 depicts the projected parking demand using each of the rates developed from the Collegetown Terrace Apartments. The developer projects, based upon experience with the Collegetown Terrace Apartments complex, that approximately 25% of the Catherine Commons residents will bring a vehicle. This ownership rate is consistent with the calculated parking rate, notably for the academic year of 2019-2020. As mentioned, Collegetown Terrace Apartments is serviced by TCAT and a private shuttle, in addition to being within 0.5 miles of The Commons and Collegetown and within 0.75 miles of Cornell University.
TABLE 4: CATHERINE COMMONS PROJECTED RESIDENTIAL PARKING GENERATION

<table>
<thead>
<tr>
<th>ACADEMIC YEAR</th>
<th>PARKING RATE (SPACES/BED)</th>
<th>NUMBER OF BEDS</th>
<th>PARKING DEMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 – 2019</td>
<td>0.37 spaces/bed</td>
<td>510</td>
<td>189</td>
</tr>
<tr>
<td>2019 – 2020</td>
<td>0.29 spaces/bed</td>
<td>510</td>
<td>148</td>
</tr>
<tr>
<td>2021 – 2022 Projection</td>
<td>0.27 spaces/bed</td>
<td>510</td>
<td>138</td>
</tr>
</tbody>
</table>

Based upon the developed rates, there is a projected demand of 138 to 189 spaces. Table 5 depicts the projected parking demand impacts at the Collegetown Terrace Apartments complex.

TABLE 5: VEHICLE PARKING ACCOMMODATIONS

<table>
<thead>
<tr>
<th>ACADEMIC YEAR</th>
<th>CATHERINE COMMONS PARKING DEMAND</th>
<th>COLLEGETOWN TERRACE APARTMENTS PARKING DEMAND</th>
<th>TOTAL DEMAND</th>
<th>PROJECTED UTILIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 – 2019</td>
<td>189</td>
<td>391</td>
<td>580</td>
<td>90%</td>
</tr>
<tr>
<td>2019 – 2020</td>
<td>148</td>
<td>353</td>
<td>501</td>
<td>78%</td>
</tr>
<tr>
<td>2021 – 2022 Projection</td>
<td>138</td>
<td>325</td>
<td>463</td>
<td>72%</td>
</tr>
</tbody>
</table>

When considering both residential sites, there is sufficient capacity within the Collegetown Terrace Apartments complex to accommodate the projected parking demands created by the proposed Catherine Commons project.

It is noted that a portion of future residents may utilize available on-street parking spaces to accommodate their demands in lieu of parking at the Collegetown Terrace Apartments complex. This is influenced by several factors, such as pricing of parking permits at the Collegetown Terrace Apartments complex, time of day, weather, duration of parking session, and/or when local schools and colleges are in session. The surrounding streets, aside from Delaware Avenue, do not require residential parking permits and operate on a first-come/first-serve basis. On time restricted streets, parking is enforced from 9:00 AM to 6:00 PM. The hourly rate is $1.50 for a two-hour limit and can be initiated at pay station machines. Between 6:00 PM and 9:00 AM, parking is free. It is expected that very few residents would choose to park on surrounding streets given the inconvenience of constantly moving vehicles or interacting with the parking pay station. The project developer will strongly encourage its residents to utilize the existing facility at the Collegetown Terrace Apartments complex to reduce potential impacts to neighborhood streets.
Table 6 depicts the projected peak parking demands resulting from the proposed commercial uses based upon a General Urban/Suburban setting.

### TABLE 6: CATHERINE COMMONS PROJECTED COMMERCIAL PARKING GENERATION

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PARKING RATE</th>
<th>SIZE</th>
<th>PARKING DEMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee/Donut Shop w/out Drive-thru Window (ITE LUC 936)²</td>
<td>17.20/1,000 SF</td>
<td>±1,040 SF</td>
<td>18</td>
</tr>
<tr>
<td>Fast Casual Restaurant (ITE LUC 930)²</td>
<td>11.03/1,000 SF</td>
<td>±1,560 SF</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total Parking Demand³</strong></td>
<td></td>
<td></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

Notes:
1. Peak parking demand for Coffee/Donut Shop occurs from 7:00-8:00 AM.
2. Peak parking demand for Fast Casual Restaurant occurs from 12:00-1:00 PM.
3. The peak parking demands do not overlap; therefore, the total commercial parking generation will be fewer than 36 parking spaces.

Public on-street parking throughout the neighborhood and off-street municipal parking at the Dryden Road Garage is available for patrons of the commercial uses. Catherine Commons residents are expected to patronize the uses; thus, can reduce the projected commercial parking demands. Additionally, considering the mode share statistics and Walk Score results, the area is characterized as a dense multi-use urban environment. This setting is defined as “a fully developed area, with diverse and interacting complementary land uses, good pedestrian connectivity, and convenient and frequent transit.” Although the ITE does not have data for a Dense Multi-Use Urban environment for the commercial land uses, a reduction in the projected parking demand is expected.

### TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

The proposed project is expected to be predominately occupied by students attending Cornell University. The site is located within walking distance to services and the campus. The proposed project is committed to utilizing transportation demand management strategies to reduce future parking demands. The following strategies will be implemented:

- Charging for off-site parking (e.g., unbundled parking) at Collegetown Terrace Apartments.
- Shuttle service with recommended service levels to appropriately meet the demands of residents to and from the campus as well as other destinations.
- Pedestrian and Bicycle amenities.
- TCAT bus stop along project’s frontage with comfort amenities.
- Streetscape enhancements.

It is noted in the 2009 Collegetown Urban Plan and Conceptual Design Guidelines that flexibility be allowed to property owners when meeting parking requirements. Several goals were defined related to transportation issues in Collegetown, such as:

- Increase support for car-free living in Collegetown.
- Improve pedestrian and bicycle facilities in Collegetown.
- Ensure that transportation goals/actions support other goals/actions in the Collegetown plan (transportation and land-use coordination).
To achieve these goals, the plan identified measures that should be considered. A copy of these measures from the plan is shown below. The proposed project seeks to implement several of these measures, notably pricing of private parking separately from rents, provide remote parking for long-term vehicle storage, improve streetscape, and improve transit stops.

These parking management strategies are classified as Transportation Demand Management (TDM) actions which seek to better manage travel demands through incentives, programs, and infrastructure which encourage a shift from personal vehicle travel to other modes (e.g., walking, bicycling, transit/shuttle).

The City of Buffalo is a good example of a municipal TDM program. The City of Buffalo’s TDM Policy Guide offers a menu of actions that can be implemented and associated credits that can be applied to baseline parking demands. For instance, unbundled parking can achieve up to a 10% reduction in parking demands. In this case and when taken together, charging residents for on-site parking at a remote site while providing convenient shuttle service will enhance the effectiveness of each strategy; thus, reducing the projected parking demands. These effects can be greater in student housing projects, as indicated by the parking demand rates per bed at the existing Collegetown Terrace Apartments.

It is noted that contextual differences exist between the City of Buffalo and the City of Ithaca and can influence the percentage of credit for each strategy. However, some similarities include bus service, car sharing, walking and bicycling facilities, densely populated neighborhoods with a mix of complementary uses, and available ride hailing services (e.g., Uber, Lyft). Table 7 depicts strategies that the project developer will implement and the associated credit per the City of Buffalo’s TDM Policy Guide. A full menu of the City of Buffalo’s strategies is included in the attachments.
Re: Proposed Catherine Commons Project
Transportation Demand Assessment

August 12, 2021
City of Ithaca, NY

**TABLE 7: PROPOSED TDM/PARKING MANAGEMENT STRATEGIES**

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>DESCRIPTION</th>
<th>CREDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carshare</strong></td>
<td>Carsharing can be used to substitute private car ownership and has a greater impact when associated with residential projects. Future residents will have access to a vehicle currently offered by Ithaca Car Share adjacent to the project site.</td>
<td>2 trips per 1 carshare space 1 trip per carshare membership</td>
</tr>
<tr>
<td><strong>Promotion &amp; Education</strong></td>
<td>Information highlighting non-SOV opportunities (transit, carshare, carpool, etc.) should be tailored to the project site and materials be made available online and in-person for new residents, employees, or tenants in highly visible areas of the development.</td>
<td>Up to 2%</td>
</tr>
<tr>
<td><strong>Roadway Improvements</strong></td>
<td>Any improvements adjacent to the site encouraging the use of transportation alternatives by way of streetscape elements or infrastructure improvements. The developer will be installing streetscaping enhancements (e.g., greenery, seating, expanded sidewalk area, etc.) elevating the aesthetic and functional value of the pedestrian realm along the site’s frontages.</td>
<td>Up to 4%</td>
</tr>
<tr>
<td><strong>Bicycle Facilities and Service</strong></td>
<td>Providing bicycle facilities can increase the attractiveness of bicycling by the project’s residents. Such enhancements are secured parking. The project applicant will be constructing bike parking spaces including interior bike storage. Parking: 1 vehicle space per 5 additional bike spaces above requirement</td>
<td></td>
</tr>
<tr>
<td><strong>Transit Facility</strong></td>
<td>An enhanced transit facility (e.g., shelter, seating, lighting, etc.) can increase the comfort, accessibility, and safety for riders. The developer will be constructing a TCAT bus stop with amenities to encourage transit use at the intersection of College Avenue/Cook Street.</td>
<td>Up to 4%</td>
</tr>
<tr>
<td><strong>Shuttles</strong></td>
<td>Shuttles can offer origin-to-destination opportunities for site users and operate at 10-minute headways during peak hours. The developer currently operates a private shuttle and will continue to do so servicing the proposed project. The shuttle will be traveling to Cornell and other destinations.</td>
<td>Up to 10%</td>
</tr>
<tr>
<td><strong>Unbundled Parking (Parking Permit Fees)</strong></td>
<td>Parking spaces sold separately from unit leasing costs can reduce parking demands as residents may choose to use other modes of transportation or available ride hailing services. Residents will be offered remote parking at the Collegetown Terrace Apartments complex and be required to purchase a parking permit.</td>
<td>Up to 10%</td>
</tr>
</tbody>
</table>

It is noted that Cornell University provides free transit passes to all new students. All other students received discounted transit passes.

It is likely that the parking rates developed for the Collegetown Terrace Apartments complex are influenced by some factors described in Table 7, such as transit facilities and unbundled parking. Therefore, adjustments to the calculated rates to account for these strategies, for example, are inappropriate. However, when taken together and considering the proximity of the proposed Catherine Commons project to Cornell University, it is likely that there will be some variability of parking.
reductions. **Table 8** depicts the parking demand after implementation of the proposed parking management strategies at varying credit thresholds. The parking rates for the 2019-2020 academic year were used as the basis for this assessment.

**TABLE 8: PARKING DEMAND ADJUSTMENTS**

<table>
<thead>
<tr>
<th>TOTAL PERCENT OF APPLIED CREDITS</th>
<th>TOTAL PERCENT OF APPLIED CREDITS AND ADJUSTED PARKING DEMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>3%</td>
<td>$148 \times 3% = \textbf{144 spaces}$</td>
</tr>
<tr>
<td>5%</td>
<td>$148 \times 5% = \textbf{141 spaces}$</td>
</tr>
<tr>
<td>10%</td>
<td>$148 \times 10% = \textbf{134 spaces}$</td>
</tr>
<tr>
<td>15%</td>
<td>$148 \times 15% = \textbf{126 spaces}$</td>
</tr>
</tbody>
</table>

With the implementation of the proposed strategies, a reduction in projected parking demands is anticipated.

**SITE DELIVERIES**

It is expected that scheduled deliveries of goods will take place related to the residential units and commercial uses. The National Cooperative Highway Research Program Synthesis 298: Truck Trip Generation Data was consulted to project the number of daily truck traffic. On average, the prepared foods land use exhibits approximately 3.9 daily truck trips per 1,000 GSF with a low of 0.7 and a high of 61.4. Given the types of tenants the site is expecting, approximately two to 10 daily truck trips can be expected. The developer will work with the tenants so that scheduled deliveries occur at a time when neighborhood traffic is at a minimum and commuting traffic is least disrupted.

**CONCLUSIONS AND RECOMMENDATIONS**

This detailed analysis assessed the projected parking impacts associated with the proposed project within the surrounding neighborhood. The following sets forth the conclusions and recommendations:

1. The project site is located nearby available transportation services, such as TCAT, Ithaca Car Share, and will be serviced by an existing private shuttle.

2. Four TCAT routes service the area with headways varying from 10 to 30 minutes.

3. Given the similar characteristics between the proposed housing project and the existing Collegetown Terrace Apartments complex, actual parking rates were developed at the Collegetown Terrace Apartments complex for use to determine project-related parking demands.

4. Based upon the developed parking rates at Collegetown Terrace Apartments, there is a projected demand of 138 to 189 spaces.

5. When considering both student housing sites, there is sufficient capacity within the existing Collegetown Terrace Apartments complex to accommodate the projected parking demands created by the proposed Catherine Commons project.
6. It is expected that very few residents would choose to park on surrounding streets given the inconvenience of constantly moving vehicles or interacting with the parking pay station.

7. A public garage and on-street parking are available for patrons of the commercial uses. Catherine Commons residents are expected to patronize the uses; thus, can reduce the projected commercial parking demands. Additionally, considering the mode share statistics and Walk Score results, the area is characterized as a dense multi-use urban environment.

8. TDM strategies are planned to reduce parking demands, such as:
   a. Charging for off-site parking at Collegetown Terrace Apartments
   b. Shuttle service that will adjust its headways to meet resident demands
   c. Pedestrian and bicycle amenities (e.g., bike storage, increased sidewalk area, seating, etc.)
   d. New enhanced TCAT bus stop along the project’s frontage with comfort amenities
   e. Other streetscaping enhancements
   f. Additional strategies may be considered (if necessary)

9. The project developer will coordinate with TCAT on the new transit stop and any impacts to the existing service routes.

10. Scheduled service deliveries will be encouraged to take place during off-peak times when commuting traffic is least disrupted.

If you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,
SRF Associates, D.P.C.

David Kruse, AICP, PTP
Transportation Planner

Attachments
ATTACHMENT

August 12, 2021

Letter to
Ms. Kathryn Wolf, RLA
Trowbridge Wolf Michaels Landscape Architects, LLC

Proposed Catherine Commons Project
Collegetown

Transportation Demand Assessment

City of Ithaca
Tompkins County, New York
## COMMUTING CHARACTERISTICS
2019: 5-Year Estimates

Census Tract 2, Tompkins County, New York

### MEANS OF TRANSPORTATION TO WORK

<table>
<thead>
<tr>
<th>Mode of Transportation</th>
<th>Estimate (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car, truck, or van</td>
<td>9.1</td>
</tr>
<tr>
<td>Drove alone</td>
<td>5.8</td>
</tr>
<tr>
<td>Carpooled</td>
<td>3.3</td>
</tr>
<tr>
<td>In 2-person carpool</td>
<td>3.3</td>
</tr>
<tr>
<td>In 3-person carpool</td>
<td>0</td>
</tr>
<tr>
<td>In 4-or-more person carpool</td>
<td>0</td>
</tr>
<tr>
<td>Workers per car, truck, or van</td>
<td>1.2</td>
</tr>
<tr>
<td>Public transportation (excluding taxicab)</td>
<td>7.3</td>
</tr>
<tr>
<td>Walked</td>
<td>65.6</td>
</tr>
<tr>
<td>Bicycle</td>
<td>2.7</td>
</tr>
<tr>
<td>Taxicab, motorcycle, or other means</td>
<td>2.8</td>
</tr>
<tr>
<td>Worked from home</td>
<td>12.4</td>
</tr>
</tbody>
</table>

### VEHICLES AVAILABLE

<table>
<thead>
<tr>
<th>Number of Vehicles</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>No vehicle available</td>
<td>35</td>
</tr>
<tr>
<td>1 vehicle available</td>
<td>41.7</td>
</tr>
<tr>
<td>2 vehicles available</td>
<td>13.1</td>
</tr>
<tr>
<td>3 or more vehicles available</td>
<td>10.3</td>
</tr>
<tr>
<td>Workers 16 years and over in households</td>
<td>1967</td>
</tr>
</tbody>
</table>
Fast Casual Restaurant
(930)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Peak Period of Parking Demand: 12:00 - 1:00 p.m.
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 3.0

Peak Period Parking Demand per 1000 Sq. Ft. GFA

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>33rd / 85th Percentile</th>
<th>95% Confidence Interval</th>
<th>Standard Deviation (Coeff. of Variation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.93</td>
<td>8.57 - 11.03</td>
<td>8.86 / 11.03</td>
<td>***</td>
<td>1.23 (12%)</td>
</tr>
</tbody>
</table>

Caution – Small Sample Size

Data Plot and Equation

Fitted Curve Equation: P = 8.92(X) + 3.08

R² = 0.93
Coffee/Donut Shop without Drive-Through Window (936)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Peak Period of Parking Demand: 7:00 - 8:00 a.m.
Number of Studies: 11
Avg. 1000 Sq. Ft. GFA: 1.8

Peak Period Parking Demand per 1000 Sq. Ft. GFA

<table>
<thead>
<tr>
<th>Average Rate</th>
<th>Range of Rates</th>
<th>33rd / 85th Percentile</th>
<th>95% Confidence Interval</th>
<th>Standard Deviation (Coeff. of Variation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.49</td>
<td>3.49 - 19.31</td>
<td>8.44 / 17.20</td>
<td>***</td>
<td>4.96 (47%)</td>
</tr>
</tbody>
</table>

Data Plot and Equation

---

Fitted Curve Equation: ***

P = Parked Vehicles

X = 1000 Sq. Ft. GFA

Study Site

Average Rate

R² = ***

Parking Generation Manual, 5th Edition • Institute of Transportation Engineers
Walk Score Methodology

Walk Score measures the walkability of any address, Transit Score measures access to public transit, and Bike Score measures whether a location is good for biking.

The Walk Score methodology was developed with the Walk Score advisory board and has been validated by leading academic researchers.

Planners and Analysts: Learn about using Walk Score data in your research.

Walk Score

Walk Score measures the walkability of any address using a patented system. For each address, Walk Score analyzes hundreds of walking routes to nearby amenities. Points are awarded based on the distance to amenities in each category. Amenities within a 5 minute walk (.25 miles) are given maximum points. A decay function is used to give points to more distant amenities, with no points given after a 30 minute walk.

Walk Score also measures pedestrian friendliness by analyzing population density and road metrics such as block length and intersection density. Data sources include Google, Education.com, Open Street Map, the U.S. Census, Localsearch, and places added by the Walk Score user community.

Transit Score

Transit Score is a patented measure of how well a location is served by public transit. Transit Score is based on data released in a standard format by public transit agencies.

To calculate a Transit Score, we assign a "usefulness" value to nearby transit routes based on the frequency, type of route (rail, bus, etc.), and distance to the nearest stop on the route. The "usefulness" of all nearby routes is summed and normalized to a score between 0 - 100.

Bike Score

Bike Score measures whether an area is good for biking. For a given location, a Bike Score is calculated by measuring bike infrastructure (lanes, trails, etc.), hills, destinations and road connectivity, and the number of bike commuters.

These component scores are based on data from city governments, the USGS, OpenStreetMap, and the U.S. Census.
### Table 1: TDM Strategy Options

<table>
<thead>
<tr>
<th>Category</th>
<th>Strategy</th>
<th>Requirements</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share Programs</strong></td>
<td>1. Car-share</td>
<td><strong>Stations.</strong> Car-share stations must be located on the same zone lot of the proposed project site. Consider partnering with existing car-share service providers in Buffalo.</td>
<td>2 trips for each</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Membership.</strong> Employee, tenant, or resident memberships to existing car-share service providers located within ¼ mile (1,320 feet).</td>
<td>1 car-share space</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Bike-share</td>
<td><strong>Stations.</strong> Bike-share stations must be located in the same building, on the same proposed project site, or in the public right-of-way abutting the site. Consider partnering with existing bike-share service providers in Buffalo.</td>
<td>1 trip for each</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Membership.</strong> Employee, tenant, or resident memberships to existing bike-share service providers located within ¼ mile (1,320 feet).</td>
<td>5 bike-share spaces</td>
</tr>
<tr>
<td><strong>Promotion and Outreach</strong></td>
<td>3. Promotion and Education</td>
<td>Promotion and education material must be tailored to the TDM opportunities and incentives available at the project site and include all available information associated with those opportunities and incentives. This information must be kept up-to-date, be made available in a highly visible location, and be provided directly to any new employee, resident, or tenant.</td>
<td>Up to 2%</td>
</tr>
<tr>
<td><strong>Employee Incentives and Programs</strong></td>
<td>4. Alternative/flexible work schedules</td>
<td>Information regarding the availability of these options must be made available in a highly visible location and provided directly to any new employee.</td>
<td>Up to 2%</td>
</tr>
</tbody>
</table>

**Notes:**
- TDM stands for Traffic Demand Management.
- The table outlines various strategies aimed at reducing traffic demand by promoting car-sharing, bike-sharing, and alternative work schedules.
- Requirements and credits vary depending on the specific strategy and its implementation details.
<table>
<thead>
<tr>
<th>Category</th>
<th>Strategy</th>
<th>Requirements</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employee Incentives and Programs (continued)</strong></td>
<td>5. Transit Pass</td>
<td>A transit pass subsidy can be for a 7-day pass, 30-day pass, monthly pass, or Paratransit Access Line (PAL) pass. Passes must be renewed monthly. Use of the pass is at the discretion of the employee.</td>
<td>Number of trips = number of passes multiplied by % of subsidy (Example: 5 passes @ 20% subsidy = 1 trip)</td>
</tr>
<tr>
<td></td>
<td>6. “Live near your work” programs</td>
<td>Incentives and benefits offered to employees must consist of financial assistance for closing costs, moving expenses, or an adjustment in base compensation. Any home or rental unit within 1 mile of the employee’s place of work qualifies for a “live near your work” program.</td>
<td>1 trip for each employee that utilizes program</td>
</tr>
<tr>
<td></td>
<td>7. Guaranteed ride home (GRH)</td>
<td>The guaranteed ride home program can be implemented through car-share membership, taxi service, or on-demand ride-share. The program is intended to be used by employees that already use an alternative mode but need a guarantee for a ride home. The program must be free-of-charge to any employee, but can be capped per employee at 5 times/uses per year.</td>
<td>Up to 2%</td>
</tr>
<tr>
<td><strong>Enhanced Design Amenities</strong></td>
<td>8. Roadway Improvements</td>
<td>Roadway improvements must comply with UDO Article 10, Transportation Network, and any other applicable standards in the UDO and other local, state, and federal regulations. These improvements must be for encouraging transportation alternatives for transit riders, pedestrians, and bicyclists.</td>
<td>Up to 4%</td>
</tr>
<tr>
<td>Category</td>
<td>Strategy</td>
<td>Requirements</td>
<td>Credit</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>--------------</td>
<td>--------</td>
</tr>
<tr>
<td>Enhanced Design Amenities (continued)</td>
<td>9. Bicycle Facilities and Services</td>
<td><strong>Parking.</strong> Only bicycle parking spaces in excess of the minimum required Section 8.2 of the UDO qualify for the TDM Credit. <strong>1 trip</strong> for each <strong>5 bike spaces</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Shower facilities and lockers.</strong> Shower facilities and lockers must be conveniently located to bicycle parking facilities. <strong>Up to 4%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Repair station.</strong> A bicycle repair station must be located in a designated and secure location with bicycle maintenance tools and supplies that could be used for emergency repair or maintenance. These tools and supplies include a bicycle tire pump, wrenches, chain tool, lubricants, hex keys, Allen wrenches, torx keys, screwdrivers, spoke wrenches, etc. <strong>1%</strong></td>
<td></td>
</tr>
<tr>
<td>10. Transit Facilities</td>
<td>Enhanced transit facilities can increase the comfort, convenience, accessibility, or safety of transit riders. These improvements increase the appeal of using transit and should be considered in conjunction with bicycle parking strategies.</td>
<td><strong>Enhanced transit facilities can consist of bus shelters, seating, lighting, or other improvements. Transit facility improvements must be coordinated with the NFTA and may require appropriate right-of-way approvals found in Section 11.4 of the UDO. Up to 4%</strong></td>
<td></td>
</tr>
<tr>
<td>High Occupancy</td>
<td>11. Shuttles (Buspool)</td>
<td><strong>Shuttles must be provided free-of-charge, not replicate any NFTA transit route, operate during peak travel times from 7AM-9AM and 4PM-6PM with a 15-minute headways, and during off-peak times until at least 8PM with a 30-minute headways. Shuttle routes, stop locations, and schedules must be posted in highly visible locations. A shuttle program would require a designated TDM Coordinator. The amount of credit to be applied to the site’s estimated travel demand is based on the frequency and quality of service provided. Up to 10%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transit-to-work shuttles provide the project site’s residents, tenants, and/or employees transit service to local residential areas, commercial centers, or transit hubs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Vanpool</td>
<td><strong>Vanpool service may not replicate any NFTA transit route and requires a designated TDM Coordinator (specified below). Up to 5%</strong></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Strategy</td>
<td>Requirements</td>
<td>Credit</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>High Occupancy (continued)</strong></td>
<td>13. Carpool</td>
<td>Carpool programs generally operate using employees own cars to pick up fellow employees while traveling to work. These programs offer ease of implementation but can incur direct costs to employees. Employee vehicles associated with a carpool program should be given preferred parking located close to the main entrance of the principal building and/or be offered parking discounts if the site has unbundled parking. Information regarding the availability of carpool must be made available in a highly visible location and provided directly to any new employee. The financial cost of the carpool is the responsibility of the employees in the carpool. A carpool program would require a designated TDM Coordinator (specified below).</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Parking Management</strong></td>
<td>14. Shared-Parking</td>
<td>Shared parking facilities are used by multiple users, destinations, and/or land uses.</td>
<td>Up to 10%</td>
</tr>
<tr>
<td></td>
<td>15. Parking Cash-out</td>
<td>Parking cash-out programs offer cash alternatives to subsidized parking for employees.</td>
<td>Up to 10%</td>
</tr>
<tr>
<td></td>
<td>16. Unbundled Parking</td>
<td>Parking sold or rented separately from building space for the life of the property.</td>
<td>Up to 10%</td>
</tr>
<tr>
<td>Category</td>
<td>Strategy</td>
<td>Requirements</td>
<td>Credit</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>TDM Management</td>
<td><strong>17. TDM Coordinator</strong>&lt;br&gt;The TDM Coordinator has the responsibility of coordinating and implementing the strategies within the TDM plan.</td>
<td>The coordinator may be an employee or a contracted third-party (transportation brokerage service).</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td><strong>18. Membership in a Transportation Management Association (TMA)</strong>&lt;br&gt;Transportation Management Associations (TMAs) are non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district, mall, medical center or industrial park. They are often public-private partnerships and generally consist of area businesses, organizations, and government agencies.</td>
<td>Requirements of the TMA would be determined by the public-private partnership and should include the institutional structure to implement various TDM strategies. To receive credits, active participation in the TMA and coordination with TMA partners in pursuing TDM strategies for the area and the project site, is required.</td>
<td>2%</td>
</tr>
</tbody>
</table>
This page has been intentionally left blank.
This page has been intentionally left blank.
Appendix D

Stormwater Report
### Soil Cover Area Calculations

<table>
<thead>
<tr>
<th>Soil Cover</th>
<th>Existing</th>
<th>Redevelop</th>
<th>Delta</th>
<th>Existing</th>
<th>Redevelop</th>
<th>Delta</th>
<th>Existing</th>
<th>Redevelop</th>
<th>Delta</th>
<th>Existing</th>
<th>Redevelop</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pervious</td>
<td>10,782 S.F.</td>
<td>11,444 S.F.</td>
<td>662 S.F.</td>
<td>3,291 S.F.</td>
<td>4,817 S.F.</td>
<td>1,526 S.F.</td>
<td>14,073 S.F.</td>
<td>16,261 S.F.</td>
<td>2,188 S.F.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35,227 S.F.</td>
<td>35,227 S.F.</td>
<td>0 S.F.</td>
<td>27,953 S.F.</td>
<td>27,953 S.F.</td>
<td>0 S.F.</td>
<td>63,180 S.F.</td>
<td>63,180 S.F.</td>
<td>0 S.F.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Soil Cover</th>
<th>Existing</th>
<th>Redevelop</th>
<th>Delta</th>
<th>Existing</th>
<th>Redevelop</th>
<th>Delta</th>
<th>Existing</th>
<th>Redevelop</th>
<th>Delta</th>
<th>Existing</th>
<th>Redevelop</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pervious</td>
<td>0.25 acres</td>
<td>0.26 acres</td>
<td>0.02 acres</td>
<td>0.08 acres</td>
<td>0.11 acres</td>
<td>0.04 acres</td>
<td>0.32 acres</td>
<td>0.37 acres</td>
<td>0.05 acres</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impervious</td>
<td>0.56 acres</td>
<td>0.55 acres</td>
<td>-0.02 acres</td>
<td>0.57 acres</td>
<td>0.53 acres</td>
<td>-0.04 acres</td>
<td>1.13 acres</td>
<td>1.08 acres</td>
<td>-0.05 acres</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.81 acres</td>
<td>0.81 acres</td>
<td>0.00 acres</td>
<td>0.64 acres</td>
<td>0.64 acres</td>
<td>0.00 acres</td>
<td>1.45 acres</td>
<td>1.45 acres</td>
<td>0.00 acres</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Soil Cover</th>
<th>North</th>
<th>South</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperviousness</td>
<td>69.4%</td>
<td>67.5%</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Imperviousness Reduction</td>
<td>3.5%</td>
<td>IMPERVIOUSNESS REDUCTION= -4.5%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment (Equiv. Imperv. Area)</th>
<th>North</th>
<th>South</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Treatment</td>
<td>6,111 S.F.</td>
<td>6,166 S.F.</td>
<td>12,277 S.F.</td>
</tr>
<tr>
<td>Imperv Reduction</td>
<td>-662 S.F.</td>
<td>-1,526 S.F.</td>
<td>-2,188 S.F.</td>
</tr>
<tr>
<td>Pervious Pavement</td>
<td>0 S.F.</td>
<td>-3,000 S.F.</td>
<td>-3,000 S.F.</td>
</tr>
<tr>
<td>Remaining to Treat</td>
<td>5,449 S.F.</td>
<td>1,640 S.F.</td>
<td>7,089 S.F.</td>
</tr>
<tr>
<td>Approx. Alternative</td>
<td>16,348 S.F.</td>
<td>4,919 S.F.</td>
<td>21,266 S.F.</td>
</tr>
<tr>
<td>Approx. Biofilter Area</td>
<td>545 S.F.</td>
<td>164 S.F.</td>
<td>709 S.F.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment (Equiv. Imperv. Area)</th>
<th>North</th>
<th>South</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Treatment</td>
<td>0.14 acres</td>
<td>0.14 acres</td>
<td>0.28 acres</td>
</tr>
<tr>
<td>Imperv Reduction</td>
<td>-0.02 acres</td>
<td>-0.04 acres</td>
<td>-0.05 acres</td>
</tr>
<tr>
<td>Pervious Pavement</td>
<td>0.00 acres</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remaining to Treat</td>
<td>0.13 acres</td>
<td>0.10 acres</td>
<td>0.23 acres</td>
</tr>
<tr>
<td>Approx. Alternative</td>
<td>0.38 acres</td>
<td>0.30 acres</td>
<td>0.69 acres</td>
</tr>
<tr>
<td>Approx. Biofilter Area</td>
<td>0.01 acres</td>
<td>0.01 acres</td>
<td>0.02 acres</td>
</tr>
</tbody>
</table>
### Pre-Development Water Demands and Sewage Loadings

#### Metered Water Use

<table>
<thead>
<tr>
<th>STREET ADDRESS</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>MAX YEAR</th>
<th>MAX YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>304 COLLEGE AVENUE</td>
<td>95 MCF</td>
<td>150 MCF</td>
<td>223 MCF</td>
<td>223 MCF</td>
<td>167,250 gals</td>
</tr>
<tr>
<td>306 COLLEGE AVENUE</td>
<td>203 MCF</td>
<td>387 MCF</td>
<td>300 MCF</td>
<td>387 MCF</td>
<td>290,250 gals</td>
</tr>
</tbody>
</table>

**TOTAL TO COLLEGE AVENUE SEWER SYSTEM=** 1,253 gpd

<table>
<thead>
<tr>
<th>STREET ADDRESS</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>MAX YEAR</th>
<th>MAX YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>210 COLLEGE AVENUE</td>
<td>180 MCF</td>
<td>209 MCF</td>
<td>222 MCF</td>
<td>222 MCF</td>
<td>166,500 gals</td>
</tr>
<tr>
<td>302 COLLEGE AVENUE</td>
<td>115 MCF</td>
<td>146 MCF</td>
<td>138 MCF</td>
<td>146 MCF</td>
<td>109,500 gals</td>
</tr>
<tr>
<td>120 CATHERINE STREET</td>
<td>82 MCF</td>
<td>93 MCF</td>
<td>165 MCF</td>
<td>165 MCF</td>
<td>123,750 gals</td>
</tr>
<tr>
<td>122 CATHERINE STREET</td>
<td>56 MCF</td>
<td>64 MCF</td>
<td>79 MCF</td>
<td>79 MCF</td>
<td>59,250 gals</td>
</tr>
<tr>
<td>124 CATHERINE STREET</td>
<td>66 MCF</td>
<td>103 MCF</td>
<td>212 MCF</td>
<td>212 MCF</td>
<td>159,000 gals</td>
</tr>
<tr>
<td>128 CATHERINE STREET</td>
<td>132 MCF</td>
<td>102 MCF</td>
<td>111 MCF</td>
<td>132 MCF</td>
<td>99,000 gals</td>
</tr>
</tbody>
</table>

**TOTAL TO CATHERINE STREET SEWER SYSTEM=** 1,964 gpd

<table>
<thead>
<tr>
<th>STREET ADDRESS</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
<th>MAX YEAR</th>
<th>MAX YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>202 COLLEGE AVENUE</td>
<td>139 MCF</td>
<td>154 MCF</td>
<td>191 MCF</td>
<td>191 MCF</td>
<td>143,250 gals</td>
</tr>
<tr>
<td>204 COLLEGE AVENUE</td>
<td>199 MCF</td>
<td>135 MCF</td>
<td>154 MCF</td>
<td>199 MCF</td>
<td>149,250 gals</td>
</tr>
<tr>
<td>206 COLLEGE AVENUE</td>
<td>189 MCF</td>
<td>246 MCF</td>
<td>241 MCF</td>
<td>246 MCF</td>
<td>184,500 gals</td>
</tr>
<tr>
<td>118 COOK STREET</td>
<td>94 MCF</td>
<td>255 MCF</td>
<td>110 MCF</td>
<td>459 MCF</td>
<td>344,250 gals</td>
</tr>
</tbody>
</table>

**TOTAL TO COOK STREET SEWER SYSTEM=** 2,250 gpd

**TOTAL WATER USE FROM EXISTING BUILDINGS=** 5,468 gpd

**TOTAL BEDROOMS=** 150 beds

**AVE DAILY WATER USE PER BEDROOM=** 36 gpd

### Pre-Development Residential Bedroom Counts

<table>
<thead>
<tr>
<th>No.</th>
<th>STREET ADDRESS</th>
<th>SEWER SYSTEM</th>
<th>BEDROOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>304</td>
<td>COLLEGE AVENUE</td>
<td>COLLEGE AVE SEWER</td>
<td>16 beds</td>
</tr>
<tr>
<td>306</td>
<td>COLLEGE AVENUE</td>
<td>COLLEGE AVE SEWER</td>
<td>18 beds</td>
</tr>
</tbody>
</table>

**TOTAL TO COLLEGE AVENUE SEWER=** 34 beds

<table>
<thead>
<tr>
<th>No.</th>
<th>STREET ADDRESS</th>
<th>SEWER SYSTEM</th>
<th>BEDROOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>COLLEGE AVENUE</td>
<td>CATHERINE STREET SEWER</td>
<td>15 beds</td>
</tr>
<tr>
<td>302</td>
<td>COLLEGE AVENUE</td>
<td>CATHERINE STREET SEWER</td>
<td>14 beds</td>
</tr>
<tr>
<td>120</td>
<td>CATHERINE STREET</td>
<td>CATHERINE STREET SEWER</td>
<td>10 beds</td>
</tr>
<tr>
<td>122</td>
<td>CATHERINE STREET</td>
<td>CATHERINE STREET SEWER</td>
<td>5 beds</td>
</tr>
<tr>
<td>124</td>
<td>CATHERINE STREET</td>
<td>CATHERINE STREET SEWER</td>
<td>10 beds</td>
</tr>
<tr>
<td>128</td>
<td>CATHERINE STREET</td>
<td>CATHERINE STREET SEWER</td>
<td>8 beds</td>
</tr>
</tbody>
</table>

**TOTAL TO CATHERINE STREET SEWER=** 62 beds

<table>
<thead>
<tr>
<th>No.</th>
<th>STREET ADDRESS</th>
<th>SEWER SYSTEM</th>
<th>BEDROOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>COLLEGE AVENUE</td>
<td>COOK STREET SEWER</td>
<td>18 beds</td>
</tr>
<tr>
<td>204</td>
<td>COLLEGE AVENUE</td>
<td>COOK STREET SEWER</td>
<td>11 beds</td>
</tr>
<tr>
<td>206</td>
<td>COLLEGE AVENUE</td>
<td>COOK STREET SEWER</td>
<td>13 beds</td>
</tr>
<tr>
<td>118</td>
<td>COOK STREET</td>
<td>COOK STREET SEWER</td>
<td>12 beds</td>
</tr>
</tbody>
</table>

**TOTAL TO COOK STREET SEWER=** 54 beds

**TOTAL APARTMENT BEDROOMS=** 150 beds
<table>
<thead>
<tr>
<th></th>
<th>STUDIO</th>
<th>1-BED</th>
<th>2-BED</th>
<th>3-BED</th>
<th>4-BED</th>
<th>TOTAL UNITS</th>
<th>TOTAL BEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUILDING 1 (TO COLLEGE AVE SEWER)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LL</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>8 beds</td>
</tr>
<tr>
<td>LEVEL 1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>10 beds</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>23 beds</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>23 beds</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>23 beds</td>
</tr>
<tr>
<td>LEVEL 5</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>23 beds</td>
</tr>
<tr>
<td>LEVEL 6</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>23 beds</td>
</tr>
<tr>
<td>ADD2</td>
<td>16</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>32</td>
<td>46 beds</td>
</tr>
<tr>
<td>TOTAL</td>
<td>125</td>
<td>125</td>
<td>90</td>
<td>30</td>
<td>20</td>
<td>125</td>
<td>172 beds</td>
</tr>
<tr>
<td>BUILDING 2A (TO CATHERINE STREET SEWER)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>7 beds</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>9 beds</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>9 beds</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>9 beds</td>
</tr>
<tr>
<td>LEVEL 5</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>9 beds</td>
</tr>
<tr>
<td>TOTAL</td>
<td>34</td>
<td>34</td>
<td>24</td>
<td>12</td>
<td>6</td>
<td>34</td>
<td>43 beds</td>
</tr>
<tr>
<td>BUILDING 2B (TO CATHERINE STREET SEWER)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LL</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>8 beds</td>
</tr>
<tr>
<td>LEVEL 1</td>
<td>7</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>11 beds</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>13 beds</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>13 beds</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>13 beds</td>
</tr>
<tr>
<td>TOTAL</td>
<td>48</td>
<td>48</td>
<td>32</td>
<td>16</td>
<td>8</td>
<td>48</td>
<td>58 beds</td>
</tr>
<tr>
<td>BUILDING 3A (TO COLLEGE AVE SEWER)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5 beds</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>14 beds</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>15 beds</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>15</td>
<td>18 beds</td>
</tr>
<tr>
<td>LEVEL 5</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>15</td>
<td>18 beds</td>
</tr>
<tr>
<td>LEVEL 6</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>15</td>
<td>18 beds</td>
</tr>
<tr>
<td>ADD2</td>
<td>22</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>22</td>
<td>36 beds</td>
</tr>
<tr>
<td>TOTAL</td>
<td>77</td>
<td>77</td>
<td>50</td>
<td>20</td>
<td>14</td>
<td>77</td>
<td>124 beds</td>
</tr>
<tr>
<td>BUILDING 3B (TO COOK STREET SEWER)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LL</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3 beds</td>
</tr>
<tr>
<td>LEVEL 1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4 beds</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>8 beds</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>7</td>
<td>11 beds</td>
</tr>
<tr>
<td>LEVEL 4</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>7</td>
<td>11 beds</td>
</tr>
<tr>
<td>LEVEL 5</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>7</td>
<td>11 beds</td>
</tr>
<tr>
<td>ADD2</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>14</td>
<td>22 beds</td>
</tr>
<tr>
<td>TOTAL</td>
<td>42</td>
<td>42</td>
<td>28</td>
<td>12</td>
<td>14</td>
<td>42</td>
<td>70 beds</td>
</tr>
<tr>
<td>BUILDING 4 (TO COOK STREET SEWER)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LL</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>6 beds</td>
</tr>
<tr>
<td>LEVEL 1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>7 beds</td>
</tr>
<tr>
<td>LEVEL 2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>7 beds</td>
</tr>
<tr>
<td>LEVEL 3</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2 beds</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td>13</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>13</td>
<td>22 beds</td>
</tr>
</tbody>
</table>
Catherine Commons
Estimated Sanitary Sewage Loads and Capacities

Design Sewage Load Per Bedroom = 50 gpd/bed
Peak Factor - Peak Hourly to Design Daily = 4.3

<table>
<thead>
<tr>
<th>Sanitary Sewer</th>
<th>Bedroom Counts</th>
<th>Design Daily Loads</th>
<th>Peak Hourly Design Load</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Dev</td>
<td>Post Dev</td>
<td>Pre-Dev</td>
</tr>
<tr>
<td>College Avenue</td>
<td>34 beds</td>
<td>296 beds</td>
<td>1,700 gpd</td>
</tr>
<tr>
<td>Catherine Street</td>
<td>62 beds</td>
<td>101 beds</td>
<td>3,100 gpd</td>
</tr>
<tr>
<td>Cook Street</td>
<td>54 beds</td>
<td>92 beds</td>
<td>2,700 gpd</td>
</tr>
<tr>
<td>Total</td>
<td>150 beds</td>
<td>489 beds</td>
<td>7,500 gpd</td>
</tr>
<tr>
<td>Combined to Eddy Street</td>
<td>116 beds</td>
<td>193 beds</td>
<td>5,800 gpd</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sanitary Sewer</th>
<th>Diameter (Inch)</th>
<th>Manning n-Value</th>
<th>Limiting Slope</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Avenue</td>
<td>12</td>
<td>0.011</td>
<td>6.0%</td>
<td>4,637 gpm</td>
</tr>
<tr>
<td>Catherine Street</td>
<td>8</td>
<td>0.011</td>
<td>10.0%</td>
<td>2,030 gpm</td>
</tr>
<tr>
<td>Cook Street</td>
<td>6</td>
<td>0.013</td>
<td>8.0%</td>
<td>713 gpm</td>
</tr>
<tr>
<td>Eddy Street</td>
<td>8</td>
<td>0.013</td>
<td>5.5%</td>
<td>1,274 gpm</td>
</tr>
</tbody>
</table>
This page has been intentionally left blank.
Appendix E

Geotechnical Report
Submitted Electronically Only
This page has been intentionally left blank.
Appendix F

Site & Architectural Drawing Package (under separate cover)
SITE DEMOLITION AND REMOVALS PLAN - CATHERINE NORTH

- REMOVE STAIRS
- REMOVE TREE, TYP.
- REMOVE (3) TREES
- REMOVE (2) TREES
- REMOVE FULL EXTENT OF WALL
- MATCHLINE TO L1.03
- COORDINATE WITH NEIGHBORING PROPERTY OWNER
- REMOVE EXTENT OF WALL WITHIN REDEVELOPMENT PARCEL
- COORDINATE PARTIAL DEMOLITION WITH NEIGHBORING PROPERTY OWNER

- ALL EXISTING STRUCTURES, PAVEMENTS, FOUNDATIONS, AND VEGETATION TO BE REMOVED FOR REDEVELOPMENT
- ANY DEMOLITION WITHIN THE R.O.W. TO BE COORDINATED WITH THE CITY OF ITHACA

DRAWING NO.:  
DRAWN BY:  
DATE:  
SHEET TITLE:  
PROJECT TITLE:  
VERSIONS
No.  
Date  
Description

PROFESSIONAL LICENSE NUMBER:

ARCHITECT:

FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL ENGINEER:

CIVIL ENGINEER:

STRUCTURAL ENGINEER:

CFMF ENGINEER:

LANDSCAPE ARCHITECT:

ikon.5 architects
147 W 25th Street, 11th Fl
New York, NY 10001
212.956.2530
464 Mapleton Rd, Suite 100
Princeton, NJ 08540
609.919.0099
www.ikon5architects.com
REMOVE FULL EXTENT OF WALLS AND STAIRS
ALL EXISTING STRUCTURES, PAVEMENTS, FOUNDATIONS, AND VEGETATION TO BE REMOVED FOR REDEVELOPMENT
ANY DEMOLITION WITHIN THE R.O.W. TO BE COORDINATED WITH THE CITY OF ITHACA

MATCHLINE TO L1.02

P110.00

LANDSCAPE ARCHITECT:

FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL ENGINEER:

CIVIL ENGINEER:

STRUCTURAL ENGINEER:

CFMF ENGINEER:

ARCHITECT:

PROFESSIONAL LICENSE NUMBER:
1. See specifications for planting soil mix requirements.
2. See specifications for seed type and seeding rate.
3. Contractor to provide imported planting soil mixes, per specifications.
4. All planting beds to be prepared as specified: shrub beds to be prepared in their entirety to 24" depth with specified soils. Tree pits to be dug to minimum depth equal to the rootball by 3x the diameter.
5. Lawn areas to be prepared with 8" of topsoil per specifications.
6. After beds are prepared, the landscape contractor is to locate trees, shrubs, and perennials as shown on plans. Tree, shrub, and perennial locations are to be approved by landscape architect before they are planted.
7. All disturbed areas that are not shown as paved or planted bed are to be restored to lawn, unless otherwise indicated.
8. Apply erosion control blanket to all slopes 3:1 or greater - refer to specifications.
9. Trees are to receive 3' dia. mulch rings, unless otherwise indicated in drawings.

PROPOSED BUILDING 2B

PROPOSED BUILDING 1

PROPOSED BUILDING 2A

312 COLLEGE AVENUE

Catherine Commons

Site Planting Plan - Catherine North
STREET TREE PIT WITH DUCTILE IRON TREE GRATE - SECTION

C L TREE PRIMARY LEADER

2' DEEP CU-STRUCTURAL SOIL - REFER TO LAYOUT PLAN FOR EXTENT, TYPICAL

MULCH AREA BELOW TREE GRATE AND WITHIN TREE GUARD OPENING

FRAME ANCHOR IN CONCRETE PAVEMENT PER MANUFACTURER, TYP. 2'-0" - 4'-0"

SET TREE PLUMB

MEDIUM DUTY CONCRETE PAVEMENT. HAUNCH Pavement AT TREE GRATE INTERFACE, TYP. GRANITE CURB

FINISH GRADE - ROADWAY

DUCTILE IRON TREE GRATE - 'JAMISON' BY URBAN ACCESSORIES. INSTALL WITH ELONGATED OPENING PERPENDICULAR TO STREET CURB, TYP.

3" THK. x4'x4' (NOMINAL) PANEL HEAVY DUTY DUCTILE IRON TREE GRATE - REFER TO SPECIFICATIONS, TYP.

FRAME ANCHOR IN CONCRETE PAVEMENT PER MANUFACTURER, TYP. 2'-0" - 4'-0"

3'-0" TYP.

CONCRETE PAVEMENT INTERFACE WITH STREET TREE GRATE FRAME, TYP.

PLANTING SOIL MIX

EQUAL 4'-0"

EQUAL 1'-0" - 2'

MEDIUM DUTY CONCRETE PAVEMENT

CONCRETE PAVEMENT JOINT, TYP. 1'-6" MAX.

MULCH AREA BELOW TREE GRATE AND WITHIN OPENING

DUCTILE IRON TREE GRATE FRAME, TYP.

1'-6" MAX. - 3" THK.