

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude and Importance of Project Impacts
and
Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

See Attached

Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: Type 1 Unlisted

Identify portions of EAF completed for this Project: Part 1 Part 2 Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information
See Attached list of Supporting Environmental Information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the
City of Ithaca Planning and Development Board _____ as lead agency that:

- A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.
- B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.d).

- C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action:

Name of Lead Agency:

Name of Responsible Officer in Lead Agency:

Title of Responsible Officer:

Signature of Responsible Officer in Lead Agency: _____ Date: _____

Signature of Preparer (if different from Responsible Officer) _____ Date: _____

For Further Information:

Contact Person:
Address:
Telephone Number:
E-mail:

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: <http://www.dec.ny.gov/enb/enb.html>

FULL ENVIRONMENTAL ASSESSMENT FORM - Part III
Project Name: North Campus Residential Expansion
Cornell University

PROJECT DESCRIPTION

The applicant, Cornell University through its agent Trowbridge Wolf Michaels (“Applicant”), proposes to construct two residential complexes (“Project”), one for Sophomores (“Sophomore Site”) and the other for Freshmen (“Freshman Site”) on a 26 acre area on Cornell University’s North Campus (“Project Site”). The Sophomore Site will consist of three residential buildings with 800 new beds and associated program space totaling 299,900 SF and a 1,200-seat, 59,700 SF dining facility. The Freshman Site will consist of three new residential buildings, each spanning the City of Ithaca (“City”) and the Town of Ithaca (“Town”) lines, with a total of 401,200 SF and 1,200 new beds and associated program space. The buildings will be between two and six stories using a modern aesthetic. The Project also includes reorganization of existing parking and vehicular access, new pedestrian paths, outdoor plazas, and other landscape amenities.

The Project Site is in three municipalities and three zoning districts. The Sophomore Site is mainly in the City’s U-1 zoning district with a small portion in the Village of Cayuga Heights’ (“Village”) Multiple Housing District. All buildings at the Sophomore Site are in the City where the proposed five stories and 55 feet are allowed. The Freshmen Site traverses the City and Town lines with 223,400 SF in the City’s U-1 Zoning district, and 177,800 in the Town’s Low Density Residential District (“LDR”). Buildings at the Freshman Site have been designed to comply with the allowed five stories and 55 feet in the City and the allowed two stories in the Town. The proposed use is allowed in the Town by special permit.

The Project has been determined to be a Type I Action under the City of Ithaca Environmental Quality Review Ordinance (“CEQRO”) §176-4 B.(1)(b), (h) 4, (i) and (n) and the State Environmental Quality Review Act (“SEQRA”) § 617.4 (b)(5)(iii) and a coordinated environmental impact review has been conducted with the City of Ithaca Development and Planning Board as lead agency (“Lead Agency”).

IMPACT ON LAND

Existing Conditions

The 26 acre Project Site is in a developed area of Cornell’s North Campus with roads, paths, buildings, programed greenspaces and recreation facilities. The Project Site contains approximately 10 acres of roads buildings and paved surfaces, including CC lot with 386 parking spaces, several other parking lots, 1.4 acres of artificial turf, and 15.5 acres of lawn and other landscaped areas. The Project Site has varied topography with 10% of the land having slopes of 15% or greater, and 4% of the land having slopes between 10 and 15%.

Proposed Conditions

The Project will alter 26 acres including the construction of six buildings, reorganization of existing parking and vehicular access, new pedestrian paths, outdoor plazas, retaining wall and other landscape amenities and result in a net increase of 6 acres of impervious surfaces. The Project also includes a construction field office to be located at the existing basketball and tennis courts north of the Sophomore Site. This area of Sophomore Site will be repaired/replaced in kind after construction is complete.

The Applicant has provided the following information regarding construction sequencing in application materials date July 12, 2018:

- *Sophomore Site – Construction from February 2019 to May 2021;*
- *Freshman Site – Construction from June of 2019 to May of 2022;*
- *Robert Purcell CC Parking – Construct and complete during the spring/summer of 2019;*

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- *Program House Drive & Connection to RPCC Loading – Construct and complete during the spring/summer of 2020; and*
- *Mary Donlon Hall Quad Area – Construct and complete during the spring/summer of 2021.*

Foundation Construction & Site Preparation

The Project involves the construction of six separate buildings between two and six stories, most having full basements, over a Project Site with varied topography and subsurface conditions. Construction will last approximately 37 months. Site preparation and excavation is expected to last approximately 18 months and will at times be concurrent on both the Freshman and Sophomore Sites.

The Applicant has submitted two *Geotechnical Engineering Evaluations for Foundation Design* prepared by John P Stopen Engineering LLP for Integrated Acquisition and Development – one for the Freshman Site dated February 8, 2017 and the other for the Sophomore Site dated February 7, 2018. The Freshman Site will involve 70,000 SF of building footprint for two to five story buildings, and 18,000 SF of footprint for the one story dining hall. The Sophomore Site involves 98,000 SF of footprint for buildings between two and five stories.

Foundation construction will require extensive cutting and filling and subsurface stabilization techniques depending on local conditions. Excavation is not expected to impact bedrock, therefore no blasting is anticipated. According to the reports, the Site's varying topography will require both localized raising of grades by up to 16 feet and lowering of grades by up to 7 feet for foundation preparation. There are three soil layers throughout the Project Site; old fill, silt and glacial till, of which only the latter is suitable for a foundation base without intervention. The Geotechnical report recommends the use of one of four stabilization techniques: Deep Dynamic Compaction ("DDC") which achieves compaction using a drop weight; aggregate piers to stabilize fine soils; grout columns; and removal and replacement. The Applicant has stated in the memo dated November 14, 2018 to Lisa Nicholas, that vibration monitoring equipment will be installed in buildings adjacent to DDC activity. To prevent damage to nearby buildings, vibration limits will be set based on building type, construction, age and conditions. In a memo dated November 14th from Kimberly Michaels, Principal Trowbridge Wolf Michaels LLP to Lisa Nicholas, Deputy Director of Planning, City of Ithaca, the Applicant explained that vibration monitoring as well as physical interventions to reduce vibrations will be employed as needed.

Foundation construction combined with Site preparation will involve the removal of approximately 55,000 CY of materials from the Site, including soils, pavements, plant materials and demolition debris. According to information provided by the Applicant in the Application Report, excavation will last approximately 18 months and generate 3,700 truck trips for hauling (assuming trucks with a 15 CY capacity).

The Project also includes installation of a construction field office off of Jessup Road that will be in operation for the duration of the Project.

Need information about hauling location

Impacts and Mitigations

The Project will permanently alter 26 acres including the construction of six buildings, reorganization of existing parking and vehicular access, new pedestrian paths, outdoor plazas, retaining wall and other landscape amenities and result in a net increase of 6 acres of impervious surface. The Project will also temporarily alter existing basketball and tennis courts north of the Sophomore Site for use as a construction field office. Construction is anticipated to last 37 months during which large areas of land will be in a disturbed state and 55,000 CY of materials will be removed from the Project Site. Foundation construction will not require blasting but may include deep dynamic compaction. However, construction of the Project will take approximately 37 months.

The following mitigations are proposed by Applicant to minimize potential impacts to land:

- A Stormwater Pollution Prevention Plan (“SWPPP”) will be required in compliance with NYS Department of Environmental Conservation’s (“DEC”) regulations for stormwater management. The SWPPP will require the installation of temporary practices to provide erosion and sediment controls during construction as well as permanent stormwater practices to treat and manage stormwater runoff following completion of the Project;
- The field office will be restored to its original condition at Project completion; and
- Monitoring of DDC as described the environmental information provided by the Applicant in the memo dated November 14, 2018 to Lisa Nicholas.
- Various construction related mitigations (detailed in other sections of this Part 3).

The Lead Agency has determined that with the mitigations proposed by Applicant, no significant impacts to land are anticipated.

IMPACT ON GEOLOGIC FEATURES

There are no unique or unusual land forms on the Project Site that will be impacted as part of the Project. Accordingly, the Lead Agency has determined that no significant impact to geologic features is anticipated.

IMPACT ON SURFACE WATER

Existing Conditions

The Project Site is located to the north of Fall Creek and Beebe Lake and is approximately 150 feet above the elevation of Fall Creek (at the Thurston Avenue bridge) and 65 feet above Beebe Lake. The southern section of the contract limit line for the Freshman Site is closest to the Fall Creek Gorge, however, it is separated from lands immediately adjacent to the gorge by Cradit Farm Drive. A vegetative buffer exists along the walls and along the rim of the Fall Creek Gorge south of Cradit Farm Drive.

Cornell University maintains its own potable water system (Public Water Supply #NY5417686) that serves campus and portions of the surrounding community. Water to the system is drawn from Fall Creek and treated at the Cornell Water Filtration Plant on Caldwell Road. The system is also connected to, and uses some water from the Bolton Point water system that draws water from Cayuga Lake. The current Design Average Day Demand for water on North Campus is approximately 191,000 gallons per day (“gpd”) based on FY2017 meter readings. Although most water to North Campus is supplied from the Cornell Filtration Plant, meter readings taken at the Pleasant Grove PRV Station over the last 4.5 years indicate the Bolton Point system supplies on average approximately 3,840 gpd to the system. This amount represents approximately 2.0% of total consumption on North Campus.

Proposed Conditions

The Project includes the construction of six buildings, reorganization of existing parking and vehicular access, new pedestrian paths, outdoor plazas, retaining wall and other landscape amenities and results in a net increase of 6 acres of impervious surface. Construction is anticipated to last 37 months during which large areas of land will be in a disturbed state resulting in a potential for increased erosion.

The Project will increase the average day demand of water by approximately 104,000 gpd—calculated with a conservative design average day rate of 50 gpd per resident. This will increase the total Future Design Average Day Demand to 295,000 gpd, or 205 gpm.

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Impacts and Mitigations

The projected increase in demand is estimated to be 104,000 gallons per day, which equates to one sixth (1/6) of a cubic foot per second ("cfs"). During August, the lowest flow month, Fall Creek's average flow is at 35 cfs. Even during the drought of 2016 flows were 16-25 cfs. The Project's need of 0.167 cfs is therefore, not significant.

The capacity of Cornell's Water Filtration Plant is 3.6 MGD while the average daily demand on campus is currently 1.5 MGD. The Project will add 104,000 gpd, therefore the plant has adequate capacity to serve the Project.

The following mitigations are proposed by the Applicant to minimize potential impacts to water:

- The SWPPP will require the installation of temporary practices to provide erosion and sediment controls during construction as well as permanent stormwater practices to treat and manage stormwater runoff following completion of the Project.
- The Applicant is proposing low flow fixtures and other water conservation features to minimize water usage as described in application materials date July 12, 2018.

The Lead Agency has determined that with the mitigations proposed by Applicant, no significant impacts to surface water are anticipated.

IMPACT ON GROUNDWATER

Existing Conditions

The entire Project Site is approximately 26 acres of which 10.1 acres (39%) is impervious surface and 15.5 acres (61%) is grass, landscape and other pervious surfaces. The Project is located within a larger approximately 70-acre watershed which covers a large portion of North Campus, extending as far east as the Hasbrouck Apartment complex east of Pleasant Grove Road. Five separate subareas within the watershed and their associated outfalls have been identified.

Subareas one and two are generally located along the George Jessup Road corridor with their respective outfalls discharging toward the north and west. Significant portions of these subareas are within the Village of Cayuga Heights and City of Ithaca, with a relatively minor area to the east within the Town of Ithaca. Stormwater runoff from these subareas discharges to University storm sewers on the north side of Jessup Road before flowing generally within open channels and gorges through the Village and City, and ultimately discharging to Cayuga Lake to the west. The lands within these two subareas impacted by the Project are located generally along the north edge of the proposed Sophomore Site.

Stormwater runoff from subarea three is collected by University storm drainage systems before discharging to the City storm sewer collection system at the outfall on Triphammer Road. The runoff flows in the City system generally to the south and east before discharging to the Fall Creek Gorge below the Thurston Avenue Bridge. All the buildings and a majority of the Site improvements associated with the Sophomore Site are located within subarea three. Most, if not all, areas of the subarea are within the City of Ithaca.

Subareas four and five cover a large area of North Campus generally to the east. Project improvements associated with the Freshman Site are located within these subareas. The outfalls for these subareas are located to the south where stormwater runoff discharges to Beebe Lake on Fall Creek, which is classified by NYSDEC as a fifth order stream in this location. The vast majority of lands within subarea four are within the City of Ithaca. Subarea five straddles the City-Town corporation line with most lands, including the upper reaches, falling within the Town of Ithaca. The outfalls for both subarea four and five are located within the City. Prior to discharging to Beebe Lake,

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stormwater runoff from the subareas is treated by two existing hydrodynamic treatment facilities installed upstream of each outfall.

Proposed Conditions

The Project will result in minor changes in the boundaries between the three impacted subareas and small changes in the subarea boundaries with an approximate 1.9-acre increase in the size of subarea four and a commensurate reduction in subarea five. Overall, the rates and volumes of runoff from both subareas are expected to increase due to the increases in impervious surface.

Temporary erosion and sediment controls will be contained in the SWPPP with requirements for the practices to be employed and maintained during construction until all areas of the Project Site have been stabilized. The temporary practices will likely include silt fence, stabilized entrances, drainage inlet protection, erosion control blankets and sedimentation basins. Discharges from all excavation dewatering operations will be to geotextile filter sacks or other approved practices. All stormwater runoff from un-stabilized areas of the Project Site will be required to pass through control practices before discharge. The SWPPP will include sequencing requirement and regular inspections and reporting, in accordance with the State Pollution Discharge Elimination System ("SPDES") General Permit and MS4 regulations.

Permanent stormwater management will be contained in the SWPPP and will include Water Quality Volume treatment equivalent to 25% of the existing impervious soil cover plus 100% of any increase in impervious cover are required to be sized in accordance with criteria in the Design Manual related to Runoff Reduction Volume, Channel Protection Volume, Overbank Flood and Extreme Storm requirements. In addition, the Project will be required to employ four Better Site Design techniques. Description of specific stormwater management practices for each subarea and expected Better Site Design Techniques can be found in the application materials date July 12, 2018.

Impacts and Mitigations

The Project will permanently alter drainage patterns and increase volumes on the Project Site. Construction is anticipated to last 37 months during which large areas of land will be in a disturbed state resulting in a potential for increased erosion.

According to information provided by the Applicant, the Project will disturb approximately 0.03%, of the 128 acres Fall Creek watershed and create minor increases stormwater discharges to the stream. The Project is not expected to affect the quantity or timing of the volumes of run-off from this Project and will not damage downstream structures. The Project will also employ bioretention filter practices that will provide runoff volume reduction and water quality treatment

The Lead Agency has determined that with best practices and regulatory adherence for storm water retention and water quality in accordance with the approved SWPPP, no significant impacts to groundwater are anticipated.

IMPACT ON AIR

Existing Conditions

Cornell's North Campus area is primarily residential in nature and does not include facilities that affect air quality.

Proposed Conditions

Construction is expected to last 37 months, during which time Site preparation activities, including the removal of approximately 55,000 CY of materials for Site preparation, has the potential to create airborne dust. The Project includes a new 1,200 seat dining facility for which venting of air will be through the roof level.

Impacts and Mitigations

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. The Applicant will use dust-control measures, as needed, during construction as described in the application materials date July 12, 2018.

The Lead Agency has determined that the Project does not involve activities that require air quality control permits. With adherence to dust control measures during the construction period, the Lead Agency has determined that no significant impact to air is anticipated.

IMPACT ON PLANTS AND ANIMALS

Existing Conditions

The Project is in a developed area of the North Campus with roads, paths, buildings, programed greenspaces and recreation facilities. The Applicant has submitted an arborist report dated May 29, 2018 which provides an inventory and assessment of all trees on the Project Site. The report states that there are a total of 555 trees of all sizes within the Project Site of which 458 have a diameter at breast height (“DBH”) of less than 12” and 97 have a DBH of greater than 12”.

Proposed Conditions

Project Site preparation and construction will require the removal of 250 smaller trees and 41 mature trees as well as lawn areas and landscaped beds. 17 trees are slated for potential transplanting. Landscape plans have been submitted and the Applicant states that 320 new large canopy trees will be planted as well as other landscaping, including: low grasses and woody plants in bioretention areas, as well as ornamental grasses, shrubs, and smaller multi-stem trees throughout the Project Site.

Impacts and Mitigations

Project Site development will result in a net reduction of 6 acres of lawn and landscape/pervious surface and the removal of 291 trees. As a result, a moderate impact on plants is expected. However, the removal of trees will be mitigated by the installation of new landscaping that includes 17 trees to be potentially transplanted, and 320 new trees, and other plant materials. A more detailed Planting Plan will be developed during Site plan review and will include a full plant schedule and planting specifications.

The Lead Agency has determined that with the mitigations proposed by Applicant, no significant impacts to plants and animals are anticipated.

IMPACT ON AGRICULTURAL RESOURCES

The Project Site is located in an urbanized area, and there are no agricultural resources located in proximity to the Project Site. Accordingly, the Lead Agency has determined that no significant impact to agricultural resources is anticipated.

IMPACT ON AESTHETIC RESOURCES

Existing Conditions

The Project Site is located on the North Campus and is primarily residential, characterized by fairly intense development of dorms ranging from nine to three stories tall in differing architectural styles and sizes. The area also has student facilities, such as dining halls, peripheral athletic fields, integrated open spaces and several surface parking lots, including the 386 space CC lot directly off Jessup Road.

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The Project Site is close to residential neighborhoods east, west and north of campus. Forest Home to the east in the Town of Ithaca and Cornell Heights to the west in the City of Ithaca are both lower density residential neighborhoods and Historic Districts. The northern portion of the Site borders the Village of Cayuga Heights within the campus and has a mix of larger scale residential development across Jessup Road, smaller scale non-residential University buildings, and athletic fields.

The Tompkins County Scenic Resources Inventory identifies one Distinctive View and one Noteworthy View which are near the Project Site.

Proposed Conditions

The Applicant has submitted a visual analysis dated July 12, 2018 showing before and after visualization of the Project from 22 viewpoints. The viewpoints include six views within the Cornell Heights Historic District, four views within the Forest Home Historic District, and several views from vantage points identified in the Tompkins County Scenic Resources Inventory ("Inventory").

Views 6, 7 and 9 (two views each) are within the Cornell Heights Historic District. The visualizations demonstrate that Building 1 of the Sophomore Site will be highly visible from within the Historic district from vantage points in the vicinity of Triphammer Road and Sisson Place. The west and southwest facades of Building 1 will be visible behind Kappa Delta and Delta Gamma, replacing current views of Sigma Alpha Mu located at 10 Sisson Place which will be removed as a part of the Project, and parking.

Views within the Forest Home Historic District, including one 'Noteworthy View' (20) and two views along the Forest Home Drive Scenic Road (19 & 21) from the Inventory, demonstrate that the Project will not be visible from these vantage points.

Views 10, 11 and 12 demonstrate that the five-story building 2 of the Sophomore Site will be highly visible from vantage points on Jessup Road in the Village of Cayuga Heights but within campus. These views will be significantly altered from the existing view of CC lot and north campus building beyond.

Views 13, 14, 15, 16 & 17, two of which are identified in the Cornell Master Plan as important views, show buildings 1 & 3 of the Freshman Site from Jessup Road and Pleasant Grove Road within the campus. The buildings are highly visible from these points.

In addition to the visual analysis which provides only basic massing of the buildings, the Applicant has also provided several renderings of the proposed buildings that include more information about building design and materials.

Impacts and Mitigations

Views identified in the Inventory and Forest Home Historic District will not be affected by the Project.

Views within the Cornell Heights Historic District and along Jessup and Pleasant Grove Roads will be most altered. The Lead Agency finds much can be done to minimize any potential impact to views during Site Plan review through the selection of building materials and colors, and the development of a landscape plan that incorporates year-round screening in particularly sensitive areas.

The Lead Agency has determined that with further development of the building and landscape design, which is required in conjunction with Site plan review before the Lead Agency, no significant impacts to Aesthetic Resources are anticipated.

IMPACT ON HISTORIC AND ARCHAEOLOGICAL RESOURCES

The Planning Board has received a comment form the City Historic Preservation Planner stating:

The proposed project is located adjacent to the Cornell Heights Historic District, which was listed in the National Register of Historic Places and locally designated in 1989. This historic district is architecturally and historically significant as an exceptional intact example of a turn-of-the-century planned residential suburban development placed in an outstanding natural setting. The size and scale of the proposed buildings contrasts dramatically with the size and scale of the historic residences and their close proximity to the district boundary will make them highly visible from the historic environment. As the new buildings, particularly Building 1 and Building 2, have the potential to visually effect the historic quality the adjacent district, the Ithaca Landmarks Preservation Commission respectfully requests the opportunity to work with development team and the Planning and Development Board during the Site Plan Review process to minimize any negative impacts.

The Board will seek the advice of the Ithaca Landmarks Preservation Commission during Site Plan Review regarding minimizing visual impact to the Cornell Heights Historic District to the extent possible.

See also impact to Aesthetic Resources (previous section).

IMPACT ON OPEN SPACE & RECREATION

Existing Conditions

The Project Site does not contain public parks or public open spaces. However, the Project Site does contain recreation facilities that serve the Cornell community, including four tennis courts, three multipurpose fields and two basketball courts.

Proposed Conditions

The Project proposes to retain the four existing tennis courts and one basketball court and replace the three multipurpose fields with one artificial turf field. The Project's landscape design, which will be further developed during Site Plan review, includes plaza and landscape areas to provide green, interconnected spaces.

Impacts and Mitigations

The removal of the two multipurpose fields and one basketball court may impact University students but does not result in a major reduction of open space or recreation facilities to the broader community. The Applicant states in the application materials date July 12, 2018 that the three current fields are poorly drained and occasionally too wet for activities. The single new field will have artificial turf that allows quick drying and drainage from the surface, and therefore more potential recreational access. The Applicant also states, and the Lead Agency agrees, that the removal of the existing facilities is balanced by other campus recreational facilities such as outdoor basketball, tennis and volleyball courts, as well as a disc golf course and ready access to trails in natural areas. Outdoor recreation is complemented by fitness centers in Helen Newman Hall, and Appel Commons. The Project will also include a fitness center.

The Lead Agency has determined that there are no community wide adverse impacts to Open Space and Recreation as a result of this Project as the facilities are private. Furthermore, with the mitigations proposed by Applicant, there will be no adverse impacts to the affected students or to recreation.

IMPACT ON CRITICAL ENVIRONMENTAL AREAS

There are no Critical Environmental Areas located within the City of Ithaca. Therefore there will be no impact to any Critical Environmental Areas. However, the Project Site is in proximity to two Unique Natural Areas

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(“UNA’s”). The Freshman and Sophomore residence halls are located between 825 and 75 feet north of the Beebe Lake Woods/Gorge Unique Natural Area (“UNA-132”). A second UNA (“UNA-104”), which includes Palmer Woods is the next closest to the Project, located 350 feet away to the north.

The proposed action is not expected to reduce the quantity or quality of the unique natural area, nor impact the function or enjoyment of the resource.

The Lead Agency has determined that no adverse impacts to the Beebe Lake Woods/Gorge UNA or Palmer Woods are anticipated.

IMPACT ON TRANSPORTATION

Existing Conditions

There are approximately 45 miles of roads within the Cornell Campus Master Plan Boundary. Of these roads, 17.5 miles are maintained by Cornell, 10 by the City of Ithaca, and 6.5 by the Town of Ithaca. The remaining roads are maintained by New York State, Tompkins County, or neighboring municipalities.

Existing Vehicular/ Transit / Bike and Pedestrian Capacity

The Applicant has submitted a “Transportation Impact Study for the proposed North Campus residential Expansion” dated June 2018 and prepared by SRF Associates (“TIS”). The study measures the existing and proposed capacity of 16 intersections. According to the analysis on pages 6-8 of the TIS, three intersections (#1: Thurston Avenue/University Avenue-Forest Home Road, #13/14: Trihammer Road/Hanshaw Road/East Upland and #15: Pleasant Grove Road/Hanshaw Road) contain some turning lanes that currently function at a Level of Service (“LOS”) of D, E or F during peak am and pm travel times.

The Applicant also submitted a *North Campus Residential Expansion Circulation Study* dated April 2018 and prepared by Kimley Horn of New York, PC. (“Circulation Study”), the purpose of which was to evaluate current and future transportation constraints in order to develop solutions for mobility challenges facing vehicular, pedestrian, bicycle, and Tompkins Consolidated Area Transit (“TCAT”) modes. The Circulation Study identified areas with missing sidewalks and below standard crossings, area where bike facilities need improvement and provided an inventory of TCAT service in and around North Campus. The Circulation Study identified five locations with conflict between pedestrian traffic and vehicular traffic, as well as conflict with bus traffic and bicycle traffic.

Campus Wide Parking

Application materials dated July 12, 2018 provide information on Cornell’s campus wide parking system. Parking at Cornell University is managed by the Transportation and Delivery Services Department. On an annual basis Cornell delivers a compliance report regarding parking to the City, reviewing it from a campus-wide perspective. This report provides annual parking updates based on the following calculations:

- 1 parking space per 7 full-time undergraduate students;
- 1 parking space per 2 full-time graduate and professional students;
- 3 spaces per 4 full-time employees; and
- 1 space per 25 people for total undergraduate students, graduate/professional students, employees.

Participants in a Transportation Demand Management (“TDM”) program are subtracted from the above calculations. As of fall 2017, Cornell had 11,364 parking spaces. Based on the metrics above, Cornell should be providing a minimum of 7,745 spaces.

Site Specific Parking

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The Project Site currently has 653 parking spaces spread over nine parking areas. The largest of these are the CC lot with 386 spaces and the Appel Commons Lot with 102 spaces.

Campus Wide TDM Program

In the application materials dated July 12, 2018, Cornell's two Transportation Demand Management ("TDM") programs are described. OmniRide and RideShare encourage walking, bicycling, transit use, and other alternatives to single-occupant vehicle commuting by all members of the campus community. Based on information provided by the Applicant, over 30% of faculty and staff commute by public transit or carpool. Over 50% of graduate students and 40% of undergraduate students have transit passes, while 15% of graduate and professional students and 5% of undergraduate students purchase parking permits. First year students receive free transit passes with unlimited access to TCAT buses anywhere in Tompkins County.

As of Fall 2017, the OmniRide program has approximately 5,700 undergraduate students, 4,600 graduate students, and 2,000 employees participating. The RideShare program has approximately 1,200 employee participants. A total of 13,500 people participate in the TDM program.

Proposed Conditions

Vehicular Capacity

The TIS identified four (4) locations that are projected to experience a decrease in LOS as a result of the traffic changes associated with the proposed development:

- Eastbound on University Avenue at Thurston Avenue: The delay increases 0.4 seconds per vehicle resulting in a change in level of service from "D" to "E" during the PM peak hour. This is a result of the background borderline condition as the threshold between LOS "D" and "E" is 55 seconds per vehicle. This change will be imperceptible to users of this intersection.
- Westbound on Hasbrouck Circle at Pleasant Grove Road: The delay is projected to increase 1.5 seconds resulting in a change from LOS "B" to "C" during the PM peak hour due to the borderline condition for this approach. The threshold between LOS "B" and "C" is 15 seconds per vehicle. Motorists will notice very little, if any, changes in operating conditions at this intersection as a result of the proposed housing development.
- Southbound left turn movement on Triphammer Road at Hanshaw Road: The delay is projected to increase 2.7 seconds resulting in a change from LOS "B" to "C" during the AM peak hour due to the borderline condition for this approach. The threshold between LOS "B" and "C" is 15 seconds per vehicle. Motorists will notice very little, if any, changes in operating conditions at this intersection as a result of the proposed housing development.
- Southbound left and through movements from the Express Mart driveway at Pleasant Grove and Hanshaw Roads: These movements are expected to operate at LOS "D" and "F" respectively with moderate to long delays (on the order of 27 to 50 seconds per vehicle) during the AM peak hour. It is noted that the volume of traffic executing these movements is extremely low (only 3 vph) and these operating conditions are reasonable for this driveway.

Site Parking

The Project will result in a net reduction in parking of 396 spaces from 653 to 257 spaces. Parking will be enhanced at the Robert Purcell Conference Center to accommodate visitors and conference attendees. At both the Freshman and Sophomore Sites parking facilities sufficient to service ADA requirements, residence hall live-in staff, and maintenance/delivery access will be provided. Accessible parking and service needs will be redistributed into small lots throughout North Campus with A Lot continuing to be the primary satellite parking for staff as well as faculty and visitors.

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Cornell University anticipates 823 new Sophomores and 1,256 new first year students will live on North Campus. Historical data indicates that approximately 4% of Freshman and 12% of Sophomores living on North Campus currently bring cars, resulting in 149 additional parked vehicles. New students living on North Campus are expected to park in the same four parking lots mentioned above.

Vehicular Traffic Generation

The TIS calculated that the North Campus Housing development is expected to generate approximately 7 entering/3 exiting vehicle trips during the weekday AM peak hour and 7 entering/33 exiting vehicle trips during the PM peak hour.

Pedestrian Circulation During Peak Vehicular Hours

Based on an analysis in the TIS, it is estimated that approximately 210 pedestrian trips will be added to the surrounding roadway network during the peak 15 minute time period during the A.M. commuter peak. New trips with origins on North Campus and destinations on central campus will create additional pedestrian and bicycle flow back and forth throughout the day. Flow to classes on central campus will coincide with the morning commuting peak. The pedestrian flow back to North Campus is more staggered throughout the day.

Proposed Service Trips

Five additional service vehicles per day (Cornell trades/maintenance/Grounds vehicles) are anticipated during normal operations. In addition, five delivery vehicles are expected to access the Site daily during normal operations (delivery to dining). It is unlikely that any of these vehicles would arrive or depart during the A.M. and P.M. peak traffic times.

Transit

Transit will continue to serve the perimeter roads, providing connections to Central Campus, perimeter parking, and regional destinations. The quantity, location and condition of existing bus stops have been evaluated by Kimley-Horn in coordination with TCAT. The Applicant is working with TCAT to add two new buses to North Campus routes in order to increase current capacity.

Construction Activities

Construction will result in approximately 55,000 cubic yards of materials being removed from the Site over an 18 month period. On average, each Site is expected to generate approximately 1,665 haul trips over a period of a year ($3,700 * 0.45$). This averages to approximately 6-7 trucks a day ($1,665/261$ working days in a year = 6.3) for each Site. When both Sites are actively excavating, an average of 12-14 haul trips per day is anticipated. The haul trips will be spread throughout the day, and peak hour additions to the traffic network, during the most active Site excavation, are likely to consist of 2 trucks.

Northcross Road, a campus-owned connection between A Lot and Jessup Road, is anticipated to be closed in order to be used for staging of deliveries and trucks during construction. The vehicular and bus loop through A lot (which has two exits on to Pleasant Grove Road) will remain open. Approximately one acre of open lawn area north of A-lot (currently a Frisbee golf course) is anticipated to be used for contractor parking.

The application materials dated July 12, 2018 state that construction deliveries are expected to fluctuate between 10 to 20 per day with a maximum of five arrivals and departures during the morning and afternoon peak times at the height of construction. The Applicant intends to schedule special deliveries (oversized loads and multiple truck loads) to be outside of peak travel times. All construction vehicles will be directed to use Route 13, via Triphammer Road to Hanshaw Road, and take Pleasant Grove to enter and exit the Project Site.

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The Applicant estimates the maximum workforce to be 280 on the Project Site at any one time, with 75-100 workers being the norm during the construction period. It is estimated that the maximum workforce size for the Balch Hall renovation will be 50 on the Project Site at any one time, with 20-30 workers being the norm during the construction period. The one-time maximum workforce sizes for the two Projects are not anticipated to coincide. The daily workforce will typically arrive prior to 8:00 a.m. and depart prior to 4:30 p.m.

Impacts and Mitigations

The Lead Agency has received many internal and involved agency comments regarding transportation. A list of comments and responses is found at the end of this document.

Construction

The Applicant intends to provide contractor parking on one acre of open lawn area north of A-lot (currently a Frisbee golf course). Contractors will be shuttled to the Site along a designated route through campus and will be prohibited from traveling through Forest Home.

University community members who use the CC parking lot south of Jessup Road, and other parking spaces disrupted by construction, will be re-directed to other parking areas on campus. A-lot permit holders will not be displaced as a result of construction activities. Cornell will manage all impacts from construction parking within its surplus of campus parking inventory.

Emergency

The Applicant is in active discussions with the Ithaca Fire Department regarding emergency access requirements on the Project Site. Access will be consistent with the road and path layout as shown in the drawing titled Illustrated Site Plan on page 25 of the Application Report dated July 12, 2018, however specific road widths and aerial access points will be finalized and approved by the Fire Department before final Site Plan Approval.

Special Events Move In/Out

The Applicant has submitted a letter dated 10-19-18 from Pat Wynn, Executive Director of Campus Life to Tom Parsons, City of Ithaca Fire Chief et.al. describing the University's plans to address issues with emergency access during move in/out days. As explained in the letter, the "University acknowledges these challenges and has formed a committee consisting of knowledgeable and competent staff from across the campus to revise Cornell's move-in processes beginning with fall 2019." The revised processes include improved scheduling, staffing and communications and will be formalized before Site Plan approval.

Vehicular, Pedestrian, Transit and Bike

First, the Lead Agency acknowledges that the Project sponsor's existing management of parking, and transportation through its TDM programs currently functions to mitigate potential impacts as the increases in students and staff will result in more participation in these programs. Furthermore, the Lead Agency finds that while providing additional beds on campus does increase the number of staff potentially commuting to campus, it necessarily decreases the number of students potentially commuting to campus by car or bus by approximately 2,079.

The Applicant proposes the following improvements, all of which will be formalized before final Site Plan approval, to mitigate traffic impacts associated with the increase in student and staff population:

1. Vehicular Improvements: Together with the Town and Tompkins County, explore the possibility of Cornell realigning the intersection of Cradit Farm Drive and Pleasant Grove Road (County owned) to direct traffic more

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readily to the Cornell Campus. Cornell would fund and manage the Project once approved by Cornell, the Town of Ithaca, and the County.

2. Transit Improvements: Provide a larger bus pull-off on Jessup Road (Cornell owned) in front of RPCC. The bus pull-off as currently shown accommodates only one bus at a time. The Applicant will work with TCAT to add two buses to the North Campus routes to accommodate the increase in student population.
3. Pedestrian & Bike Improvements:
 - Provide improved crosswalks along Jessup Road between the Project Site and the Townhouses to the north.
 - Together with the City of Ithaca, work to develop and approve a reasonable pedestrian improvement plan for the intersections of Thurston Avenue (City owned) and Credit Farm Drive and Thurston Avenue and Wait Avenue (City owned). Cornell would fund and manage the Project once approved by Cornell and the City.
 - Widen Credit Farm Drive (a Cornell-owned road) in front of Appel Commons and Helen Newman Hall to provide bicycle lanes, bus pull-offs on both sides and improve pedestrian crossings. This section of Credit Farm Drive is the only section without bicycle lanes. Credit Farm Drive is along major bus routes and has heavy pedestrian traffic.

The Lead Agency has determined that with the above mitigations proposed by the Applicant as well as those already in place, no significant impact to transportation is anticipated as a result of this Project.

IMPACT ON ENERGY

Existing Conditions

Cornell has an integrated energy production, monitoring and conservation program that includes district energy distribution, Lake Source Cooling, campus-wide energy use monitoring, a user based program to encourage conservation, and implementation of a Climate Action Plan (“CAP”) formalized in 2009.

Cornell’s district energy system is powered by its Combined Heat and Power Plant (“CHPP”) which uses gas to generate electricity and heat to meet a large share of the energy needs on the Ithaca Campus. The CHPP utilizes “waste heat” from the initial generation of electricity for additional electricity production and heat for the campus. According to information submitted in the materials dated July 12, 2018 this dual use is an extremely effective use of energy; up to 80% of the source energy can be converted to some useful form (by contrast, standard power plants release generated heat, and a standard gas turbine-generator converts only about 33% of the source energy to some useful form).

Cornell’s Lake Source Cooling (“LSC”) utilizes the University’s chilled water loop to cool campus buildings. LSC uses Cayuga Lake’s deep water passing through a heat exchanger to cool the campus’ chilled water loop. The same water (typically raised in temperature from 39°F to 45-55°F) is then returned directly to the lake, without addition of any chemicals or other additives. According to information in the application materials dated July 12, 2018 , LSC’s efficiency significantly reduces peak electric use because a minimal increase in energy is needed to increase pump speed and ramp up production.

Cornell’s CAP demands the Ithaca Campus reach Carbon Neutrality by 2035. Infrastructure that supports this goal includes Cornell’s District Energy System: Lake Source Cooling, solar farms, hydroelectric plant, and Central Energy Plant that utilizes Combined Heat and Power. Cornell’s CAP also includes a goal to match all of the Ithaca campus net annual electricity needs with power from new wind, water, and solar photovoltaic generation facilities. The power from Projects located off campus will feed into the state electricity grid, offsetting electricity used on campus. The CAP also includes the potential future integration of the Earth Source Heat (“ESH”) initiative, an

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area being actively researched for bringing geothermal heat for direct campus heating. Similar to Lake Source Cooling, ESH researchers are exploring the potential for using water circulated through hot rocks accessed through deep wells to transfer heat directly to a campus heating loop, eliminating the need for fossil fuels for heating.

Based on information provided by the Applicant, Cornell's North Campus has grown 20% in square footage between 2000 and 2018. Despite this growth, the energy usage of Cornell's North Campus has remained relatively constant since 2000.

In addition, Cornell runs a Residential Sustainability Engagement Program for on-campus housing to encourage lower energy consumption by building occupants. This program is described in a memo dated 9/2/18 from Kimberly Michaels, Principal Trowbridge Wolf Michaels LLP to Lisa Nicholas, Deputy Director of Planning, City of Ithaca.

Proposed Conditions

Energy Use for Building Operations:

The Project will have total square footage of approximately 761,000 SF, representing a 4% overall increase in campus building square footage. According to information submitted in the application materials dated July 12, 2018 the Project will increase overall energy usage on campus by 1.4%. The CHPP and LSC have the capacity to serve the Project and will not require the extension of distribution lines to the Project Site.

The Applicant has submitted a report titled *Energy and Emissions Impact Assessment of the North Campus Residential Expansion at Cornell University* prepared by Taitem Engineering and dated July 6, 2018 ("Taitem Report") that calculates and analyzes energy use and impacts of the Project. The report states that the CHPP will supply 95% of the electricity used by the proposed buildings. The regional power grid will supply 5% of the electricity used in the proposed buildings, as well as 100% of the electricity needed to drive LSC.

The Project is the first Cornell construction required to install a new low-temperature heat distribution system for the future integration of renewable energy sources. Currently, heat is distributed as steam, through radiators and heating coils that operate at 180° or higher. Cornell is now requiring projects like the current Project to design building heat transfer equipment for lower temperatures (130° F max).

Energy Conservation/Reduction Measures

Based on information provided by the Applicant, the Project is expected to use about 30% less energy than the current New York State Energy Code permits and is targeted to achieve LEED Gold certification (with 20 credits in the energy category). Building design approaches to achieve these goals focus on specifications for mechanical, electrical and plumbing equipment, building envelope design, and interventions to control internal loads. A full description of these approaches is found on in the application materials.

Building Energy Monitoring

The buildings within the Project will be designed to be highly efficient and this efficiency will be confirmed through LEED commissioning. In addition, Cornell provides constant energy monitoring and internal maintenance once the buildings come online as described above.

Energy Conservation due to renovations of adjacent buildings

The Project will result the creation of "surge space" so that nearby facilities (for example, Balch Hall) can be renovated to be more energy-efficient. Currently, the lack of available space has prevented substantial residential

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energy conservation efforts (i.e., buildings that require significant reconstruction, which is incompatible with continuous habitation).

Energy Use/Emissions During Construction:

Building construction will produce a one-time release of greenhouse gas emissions. The Taitem Report estimates 8,768 MT CO₂ Project related emissions during construction.

Thresholds Exceeded

The Lead Agency acknowledges that the proposed Project exceeds two specific thresholds and one 'other' threshold identified in the NYSDEC's Full Environmental Assessment Form ("FEAF") Part 2 under # 14 Impact on Energy:

- c. The proposed action may utilize more than 2,500 MW hrs per year of electricity,
 - d. The proposed action may involve the heating and/or cooling of more than 100,000 square feet of building area when completed
- Other: CO₂ emissions, production/ use of non-renewable energy sources, lack of consistency with Cornell net-zero goals

The Lead Agency has received several public comments stating that the proposed Project exceeds one additional threshold under # 14 Impact on Energy: "the proposed action will require the creation or extension of energy transmission or supply system to serve more than 50 single or two family residences or to serve a commercial or industrial use". The Lead agency has determined that the Project does not exceed this threshold. According to information provided by the Applicant, the CHPP and LSC have the capacity to serve the Project. The Project only requires installation of distribution lines within the Cornell North Campus to connect to the existing system.

Impacts and Mitigations

The Project is large and will increase energy use. Based on information provided by the application materials dated July 12, 2018, the Project will account for approximately 1.4% of energy loads on campus. Natural gas will be used to generate the majority of power for the Project as Cornell's CHPP, which will provide 95% of the power for this Project, currently uses natural gas as its source energy. Increase of energy use has indirect impacts, including consumption of non-renewable resources and upstream CO₂ emissions associated with the extraction of natural gas by hydraulic fracturing and its transport by pipeline.

After careful evaluation, the Lead Agency has determined that the Applicant is minimizing the use of energy, including non-renewable resources (specifically natural gas), and any potential impacts from its use, in the following ways:

- The Project will connect to Cornell's CHPP and LSC, both highly efficient systems
- The Project will be 30% more energy efficient than is required by building code
- The Project will attain LEED Gold status, with many points under the category of Energy and Atmosphere
- Project energy use will be monitored and adjusted through the required LEED commissioning as well as the campus-wide monitoring system.
- The Project incorporates a low temperature distribution system for future conversion to renewable energy
- Occupants of the Project will participate in the Residential Sustainability Program Engagement

The Lead agency also finds that the Project does not conflict with Cornell's CAP net zero goals. Based on information provided in the application materials dated July 12, 2018, although the Project will equal about 4% of campus building footprint, it will only utilize about 1.4% of current campus electric, heat, and cooling loads

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because of its energy efficient design features. After Project completion Cornell's energy Projections, based on planned energy conservation Projects over the next several years, forecast reduced energy demands for campus (about 2% below current needs), offsetting the additional energy needs of this Project. Cornell projects that natural gas use at the CHPP will be lower when the new Project facilities open than they are today.

The Lead Agency has received many comments from the public and information from the Applicant regarding the usage of the CHPP to provide energy for the Project and the resulting use of natural gas including upstream CO2 emissions associated with the extraction of natural gas by hydraulic fracturing and transport by pipeline. The DEC, in analyzing energy impacts in an environmental impact statement, guides its Staff to include a qualitative discussion of upstream GHG emissions when a project proponent has demonstrated that the project as designed has minimized emissions to the maximum extent practicable. Although this guidance is not applicable to the Project, it does serve good guidance for taking a hard look at the issue. Accordingly, the Lead Agency asked the Applicant to quantify upstream emission as a result of the Project. Based on information provided by the Applicant in the memo dated October 12, 2018 from Kimberly Michaels, Principal Trowbridge Wolf Michaels LLP to Lisa Nicholas, Deputy Director of Planning, City of Ithaca, upstream GHG emissions for the Project as proposed is estimated at 3,857 metric tons of CO2 per year. Given the total amount of annual CO2 emissions in the United States, the upstream CO2 emissions from the Project are acknowledged but are not considered significant.

Conformance with Local Energy Plans

The Lead Agency has received numerous comments arguing that the Project does not conform to a number of local plans and initiatives including the City's Green Building Policy adopted in 2017, the County's Energy Road Map of 2016 and Cornell's 2009 CAP.

2009 CAP

The Applicant has provided the information about the Project's relationship to the CAP and has concluded that the Project specifically incorporates or enables actions of the plan in the areas of green building, alternative transportation and fuel mix and renewables. The Applicant states that *"As documented in the original FEAR materials, this high level of performance is consistent with Cornell policy and in line with community and state low energy standards and goals."*

City Green Building Policy

The City Green Building Policy has not yet been adopted as law. Moreover, the implementation of the policy may exclude certain institutional buildings. The Applicant is proposing LEED Gold buildings that use 30% less energy than current building code. Therefore, the Lead Agency does not see a conflict between this Project and the Green Building Policy.

Energy Road Map

The Lead Agency finds that the Project is in conformance with the Road Map for the reasons stated in this section.

In summary, the Lead Agency acknowledges the significant public concern that has been raised regarding the use of natural gas associated with the Project. Many commenters have urged the Lead Agency to take a leadership role to address nonrenewable energy consumption and GHG emissions and that the Lead Agency should force the Applicant to do more to combat climate change. A careful review of the record shows that the Applicant has provided a tremendous amount of documentation relative to the Project's potential impacts to energy and that the Project has been designed to minimize energy impacts and is consistent with the Applicant's CAP and local

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sustainable energy plans. Thus, the Lead Agency has determined that based on the mitigations proposed by the Applicant and described above, there will be no significant impacts to Energy as a result of this Project.

IMPACT ON NOISE, ODOR & LIGHT

Existing Conditions

North Campus is a student residential area with dorms, recreation facilities, dining and other related services.

Proposed Conditions

Construction is expected to last approximately three years. During this time noise producing construction activities will be present from both building construction and the extensive Site work proposed for the Project Site.

Mechanical equipment serving the proposed buildings at the Sophomore and Freshman Sites will include energy recovery units, air-handling units, make-up air handling units, exhaust fans, fan-coil units (interior to the buildings and serving interior spaces) and emergency generators.

Air from the dining hall will be exhausted at the roof level and will include scrubbers on the grease exhaust to minimize any potential odors.

Lighting for the Project is in design and will be further developed and approved during Site Plan approval. Exterior lighting will include fixtures at parking lots and building entrances as well as Pedestrian-scale fixtures including light standards and bollards. 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. The lighting system will be designed to meet requirements listed in Cornell University Design and Construction Standards and to meet best practices, including a color temperature of 3500K.

Impacts and Mitigations

Noise

The Applicant is proposing the following noise-control strategies be incorporated into the Project design as equipment selection and placement decisions are made:

- 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;
- Occupancy-based setback strategies;
- Sound-attenuating enclosures on all emergency generators;
- Scheduling emergency generator testing between 7:30 AM and 9:00 PM;
- Locating rooftop equipment away from the roof edge. Doing so maximizes the shielding of residents from rooftop generated sound;
- Locating rooftop equipment, louvered air intakes/discharges and emergency generators 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; and
- A No Idling policy for all delivery trucks serving the Sophomore and Freshman buildings.

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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 7:30 AM to 9:00 PM. In addition, the University 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 the Project. Construction noise is an unavoidable but a temporary negative impact as a result of the Project.

Odors

The Project includes a new 1,200 seat dining facility. In a letter dated September 5, 2018 from Kimberly Michaels, Principal Trowbridge Wolf Michaels LLP to Lisa Nicholas, Deputy Director of Planning, City of Ithaca, it is stated that air vents will include sound attenuation on the discharge air and return air connections of the air-handling unit serving the dining hall to mitigate noise.

Light

The Applicant has proposed an approach to lighting design, as described above, which is mindful of potential impacts. Lighting design will be refined and reviewed by the City and Town Planning Boards during Site Plan review to confirm that all lighting is dark sky compliant, no spillage occurs onto adjacent properties, and that nighttime lighting of buildings does not impact adjacent city neighborhoods.

The Lead Agency has determined that with the mitigations proposed by the Applicant as well as further refinement of lighting design during Site Plan review, no significant impacts to noise, odors or light are anticipated as a result of this Project.

IMPACT ON HUMAN HEALTH

The Project Site has no known history of potential contamination, nor is it within 2,000 feet of any Site in the New York State Environmental Site Remediation Database. Therefore, construction activities are not anticipated to involve the handling or transport of any hazardous materials. If there are asbestos containing materials involved with the demolition of Sigma Alpha Mu or the renovation of Balch Hall, the removal and disposal of such materials will be done by a NYS licensed professional.

Project operations will not involve the generation, storage, handling or disposal of hazardous materials and will not store quantities of natural gas or other flammable liquids.

The Lead Agency has determined that based on the information above, no significant impacts to human health are anticipated as a result of this Project.

CONSISTENCY WITH COMMUNITY PLANS

Existing Conditions

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The Project Site is in Cornell's North Campus area and is primarily residential, characterized by fairly intense development of dorms ranging from nine to three stories tall in differing architectural styles and sizes. The area also has student facilities, such as dining halls, peripheral athletic fields, integrated open spaces and several surface parking lots, including the 386 space CC lot directly off of Jessup Road.

The Project Site is close to residential neighborhoods east, west and north of campus. Forest Home to the east in the Town of Ithaca and Cornell Heights to the west in the City of Ithaca are both lower density residential neighborhoods and Historic Districts. The northern portion of the Site borders the Village of Cayuga Heights within the campus and has a mix of larger scale residential development across Jessup Road, smaller scale non-residential University buildings, and athletic fields.

This area of campus is served by:

- The University's utility system, including CHPP, LSC, water treatment plant (see Impacts to Energy and Water);
- Bolton Point Water treatment Plan (see Impacts to Water);
- Cornell Public Safety , police and fire;
- City of Ithaca Police and Fire; and
- City of Ithaca wastewater treatment plant.

Proposed Conditions

The Project will add a total of 400,000 SF of building over the Freshman and Sophomore Sites, 2,079 new student beds, approximately 75 new residential employees, approximately XXXX new non-residential support staff. The primary goal of the Project is to provide all Freshman and Sophomore students with on campus housing while accommodating planned enrollment growth of 900 students (at a rate of 225 per year starting in the year 2021).

The Project will require the extension of service lines to provide heat, power, water and sewer service to the buildings. Additional demand for services includes the following:

- Additional 104,000 GPD wastewater;
- Additional 104,000 GPD additional water demand (see Impacts to Water);
- Emergency Services; and
- Additional energy (see Impacts to Energy).

Impact to Utilities

Discussion of additional water, heating and cooling are described in Impacts to Surface Water and Impacts to Energy.

The City of Ithaca Waste Water Treatment Plant ("IWWTP") has the capacity to serve the additional demand, however the City Water and Sewer Division has identified segments to the sewer system that will require upgrades to accommodate projected flows. In a memo (attached in the appendix) dated 10/12/18 from Erik Whitney, PE, Asst. Superintendent of Public Works, Water and Sewer Division to Kim Michaels, RLA of Trowbridge Wolf Michaels, Whitney states that "The City and Town of Ithaca share the costs of maintenance and replacement for this interceptor and will need to explore and discuss how to facilitate and fund a Project to replace and upgrade this sanitary sewer." The Board will require a written commitment as a condition of Site Plan Approval, and a Certificate of Occupancy will not be issued until the upgrade is complete.

Impact to Local Housing Market

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The University enrolls approximately of 23,006 students of which 14,315 are undergraduates. The majority of students - 54% of undergraduates and 94% of graduates currently live off campus. Based on Cornell's 2016 Housing Master Plan, the University offers approximately 7,100 beds for its 14,315 undergraduates including dorms, co-op housing program housing and Greek affiliated housing.

At Project completion Cornell will increase the amount of undergraduate beds by 2,079 from 7,100 to 9,179. Factoring in a planned enrollment increase of 900 students, it is anticipated that at Project completion and full enrollment, about 1,200 less undergraduate students will live in neighboring communities off campus than under current conditions.

The Project, combined with a rise in both purpose-built student housing in Collegetown as well as apartment development in other areas of the City, may have an impact of the local housing market. As housing supply increases there may be several outcomes that have a long-term benefit to the community, including lower pricing and more opportunities for work force housing near employment.

The Lead Agency has determined that based on the information above, and with the mitigations proposed by Applicant for emergency access and sewer upgrades, no significant impacts to Community Character are anticipated as a result of this Project

Prepared by: Lisa Nicholas, AICP, 108 E Green St, City of Ithaca, NY 14850 607-274-6557 (contact for more information)

Supporting Environmental Information

Report of Geotechnical Engineering Evaluations for Foundation Design for Site #1- CC Lot Proposed North Campus Housing, Ithaca, New York, February 8, 2018, John P. Stopen Engineering LLP

Report of Geotechnical Engineering Evaluations for Foundation Design for Site 2- Appel Fields Proposed North Campus Housing, Ithaca, New York, February 7, 2018, John P. Stopen Engineering LLP

Public Archeology Facility Report, Phase 1 Cultural Resource Survey, Cornell University North Campus Project, City and Town of Ithaca, Tompkins County New York, MCDs 10940, 10906, Andrea Zlotucha Kozub, Binghamton University, State University of New York, April 11, 2018

Traffic Impact Study for the Proposed North Campus Residential Expansion, City of Ithaca, Town of Ithaca, Village of Cayuga Heights, Tompkins County New York, June 2108, SRF Associates, Rochester NY

North Campus Residential Expansion, Circulation Study, April 2018, Kimley Horn of New York P.C.

Energy and Emission Impact Assessment of the North Campus Residential Expansion at Cornell University, 7/6/18 Taitem Engineering, PC, Ithaca, New York.

North Campus Residential Expansion, Review Application Report, Cornell University, Ithaca, NY July 12, 2018.

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Memo dated September 17, 2018, from Kimberly Michaels, Principal Trowbridge Wolf Michaels LLP to Brent Cross, Village of Cayuga Heights.

Memos dated October 12, 2018 and September 17, 2018, from Kimberly Michaels, Principal Trowbridge Wolf Michaels LLP to Chris Balestra, Planner, Town of Ithaca.

Memos dated November 14, 2018, October 12, 2018 and September 5, 2018, from Kimberly Michaels, Principal Trowbridge Wolf Michaels LLP to Lisa Nicholas, Deputy Director of Planning, City of Ithaca.

Responses to Internal and Involved Agency Comments:

The Lead Agency notes that it has received many internal and involved agency comments regarding transportation issues below:

1. Both the City transportation Engineer and the Village of Cayuga Height Board expressed concerns that parking utilization rates at AA and CC lots were underestimated based on informal Site visits.

The Lead Agency understands that neither informal Site visit found the lots near capacity. Therefore they currently have surplus space - even if utilization rates are increased. Furthermore, the Applicant has demonstrated a campus-wide parking surplus of over a 7,000 spaces.

2. Concern that a combination of factors related to the Project will shift parking demand from Cornell Campus into nearby neighborhoods in the City and Cayuga Heights.

The Lead Agency recognizes that although students and staff cannot be prohibited from parking on public streets in adjacent neighborhoods, the Project sponsor has comprehensive campus-wide TDM programs to incentivize travel by transit and discourage commuting by single occupancy vehicles. The Project is providing numerous pedestrian and bike improvements and reassigning parking to other lots, and has demonstrated a parking surplus on campus.

3. Should consider implementing a high-frequency transit service within the campus as described in Cornell's 2008 Master Plan for the Ithaca Campus to encourage parking at the periphery of the Core Campus.

The Lead Agency understands that the Project sponsor is working with TCAT to add two new buses to the North campus loop and is making improvements to transit stops.

4. Concerns that pedestrian counts are inaccurate and should be redone.

The Lead Agency recognizes that the Project sponsor is already proposing pedestrian improvements in the area of most conflict. If additional counts are needed, they should be done to inform the design phase of the improvements but are not needed at this time.

5. Requests for pedestrian improvement outside the Project boundary on Wait Ave and the intersection of Jessup and Triphammer.

These intersections are no doubt in need of improvements, however they are on the periphery of the Project Site and are unlikely to see increased pedestrian traffic as a result of the Project. The Lead agency encourages Cornell to make these improvements in the future. The Lead Agency sees that the Applicant is proposing significant improvements in the areas of highest pedestrian traffic.

6. Documentation that the Project sponsor is in contact with TCAT and Rideshare for the proposed improvements.

Lead Agency response: The Lead Agency understands that as a major funder of TCAT and a member of its Board, the Project sponsor will be in a position to work with TCAT to achieve the proposed improvements.

7. Concern that service vehicle trips have been undercounted

The Lead Agency understands that these trips are accounted in the background traffic growth in the TIS and are not likely to occur at peak travel times.

8. Concern about Site distances for proposed new driveway

A Site distance analysis will be done during design of the driveway and will be reviewed and approved by engineering staff as part of the street permitting process.

9. The Village of Cayuga Heights Board disagrees that there will not be a significant impact to Village intersections. Many intersections in Community Corners already have a failing LOS and the Project will produce more traffic through these intersections. Although the amount of traffic (less than 100 additional peak hour vehicular trips) may not be considered 'substantial' according to TIS methods, the increase will likely exacerbate existing delay times - even if it does not produce worse LOS grades. Therefore, although the Project did not create failing LOS grades for Village intersections, the Project will worsen these conditions even if the degree to which they will worsen can be debated.

The Lead Agency acknowledges the concerns of the Village. However, it finds that the combination of already poor conditions with the small increase of traffic going through the intersections does not warrant requiring additional mitigations from the Applicant beyond their existing efforts to reduce trips by single occupancy vehicle.

10. The Village Board has requested the following mitigations to address traffic impacts in the Village: Establishment of a park-and-ride lot in a North Triphammer Road mall to "catch" commuters before they drive through the Village and TCAT to add express bus routes for the Park & Ride.

The Lead Agency feels that this option functionally exists as there is a bus router that goes from the mall to campus.

11. Create a new road link from Warren Road to Pleasant Grove Road, north of the Robert Trent Jones Golf Course, to reduce Cornell-related traffic on Hanshaw Road and ease congestion at

the Hanshaw and Pleasant Grove Road intersections as well as to divert Cornell-bound traffic heading south on Warren to Pleasant Grove.

The Lead agency does not find this option to be feasible or practicable as there does not appear to be a possible road alignment for this scenario because the golf course extends up to Hanshaw Road.

12. Potential mitigation during construction could include restricting construction truck traffic during peak AM and PM traffic hours and requiring off-Site contractor parking on Palm Road near Route 366 (with a shuttle) rather than on the Frisbee golf course near A lot adjacent to Pleasant Grove Road.

The Lead Agency finds that parking closer to the Project Site will alleviate any potential traffic problems related to contractor parking.

13. In a letter dated October 18, 2018 to the City Planning Board from the Town Planning Board, an involved Agency in this action, the Town Board stated their support for the following mitigations proposed by the Applicant:

- To work with TCAT to provide two additional buses to the existing Cornell North Campus routes to accommodate the increase in student population in that area.
- To upgrade the existing bicycle and pedestrian networks on and around Cornell's North Campus including improved crosswalks, new sidewalks and pedestrian crossings, new bicycle lanes, and the implementation of a pedestrian improvement plan covering a variety of intersections within the Project (based on a circulation study prepared by the Applicant's consultant).
- To realign of the intersection of Pleasant Grove Road and Credit Farm Drive as it will alleviate the current and future cut-through traffic that moves through the Forest Home neighborhood.

14. The Town Board states that these mitigation measures will be further discussed, possibly modified, and likely included in any eventual approval that might be granted by the appropriate municipal boards. We expect that the Town of Ithaca Planning Board, in its Site Plan review process, would condition any approvals upon the implementation of these proposed mitigation measures. To that end, the Board does not consider the transportation impacts related to the Project as having the potential for significant adverse environmental impacts.

The Lead Agency acknowledges and appreciates these comments and has carefully considered these comments in its evaluation of the Project's potential adverse environmental impacts.