

NEW HAVEN CITY PLAN COMMISSION SITE PLAN REVIEW

RE: 180, 256, AND 260 WHITNEY AVENUE, 223 PROSPECT STREET, AND 21 SACHEM STREET. Site Plan Review for demolition of existing buildings and construction of a 280,300 SF Yale Science Building in an RH-2 zone. (Owner/Applicant: John Bollier for Yale University; Agent: Kari Nordstorm for Yale University)

REPORT: 1522-01

ACTION: Approve with conditions

STANDARD CONDITIONS OF APPROVAL

1. Pursuant to State Statute, this site plan and soil erosion and sediment control plan approval is valid for a period of five (5) years following the date of decision, until September 21, 2021. Upon petition of the applicant, the Commission may, at its discretion, grant extensions totaling no more than an additional five (5) years to complete all work connected to the original approval.
2. The applicant shall record on the City land records an original copy of this Site Plan Review report (to be provided by the City Plan Department) and shall furnish written evidence to the City Plan Department that the document has been so recorded (showing volume and page number), prior to City Plan signoff on final plans.
3. Comments under **ADDITIONAL CONDITIONS OF APPROVAL** shall be reviewed with the City Plan Department and resolution reflected on final plans, prior to their circulation for signoff.
4. Signoff on final plans by the Greater New Haven Water Pollution Control Authority; Fire Marshal, City Engineer; Department of Transportation, Traffic, and Parking; and City Plan Department; and in that order shall be obtained prior to initiation of site work or issuance of building permit.
5. Construction Operations Plan/Site Logistics Plan, including any traffic lane/sidewalk closures, temporary walkways, detours, signage, haul routes to & from site, and construction worker parking plan shall be submitted to the Department of Transportation, Traffic and Parking for review and approval to prior to City Plan signoff on final plans for building permit.
6. Any proposed work within City right-of-way will require separate permits.
7. Any sidewalks or curbs on the perimeter of the project deemed to be in damaged condition shall be replaced or repaired in accord with City of New Haven standard details.
8. Final determination of traffic markings, V-loc locations, signs, and traffic controls on site and on the perimeter of the site will be subject to the approval of the Department of Transportation, Traffic, and Parking.
9. Filing (with City Plan) and implementation of a Storm Drainage Maintenance Plan and Inspection Schedule is required.
10. Following completion of construction, any City catch basins in the public right-of-way impacted by the project shall be cleaned, prior to issuance of Certificate of Occupancy.
11. As-built site plan shall be filed with City Plan Department, with a copy to the City Engineer, prior to issuance of Certificate of Occupancy. Site Plan shall be submitted in paper, mylar, and digital PDF on CD or flash drive.

ADDITIONAL CONDITIONS OF APPROVAL

12. Provide one complete, signed and sealed, bound and conformed set of drawings for City Plan records;
13. Applicant to provide City Plan with copy of CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction, if required;
14. The existing berm on the eastern edge of Lot 22 adjacent and parallel to Whitney Avenue must be reconstructed to elevation 47 feet and replanted and shown as such on the grading plans for the project.

Submission: SPR Application Packet including DATA, WORKSHEET, SITE, and SESC forms. NARRATIVE attached. Application fee: \$270. Received August 18, 2016.

- Drainage Study, dated August 18, 2016. Received August 18, 2016.
- Construction staging plans. Received August 18, 2016.
- YSB occupancy comparison. Received August 18, 2016.
- Application drawings, 45 sheets received August 18, 2016.
 - CS-01: Cover sheet. Drawing date August 18, 2016.
 - Survey sheets 1 and 2. Revision date May 17, 2016.
 - C-001: Existing Conditions Plan. Drawing date August 18, 2016.
 - C-100: Overall Site Plan. Drawing date August 18, 2016.
 - C-101: Demolition and Sediment and Erosion Control Plan. Drawing date August 18, 2016.
 - C-102: Layout Plan. Drawing date August 18, 2016.
 - C-103: Materials and Planting Plan. Drawing date August 18, 2016.
 - C-104: Grading and Drainage Plan. Drawing date August 18, 2016.
 - C-105: Utilities Plan. Drawing date August 18, 2016.
 - C-106: Sediment and Erosion Control Notes and Details. Drawing date August 18, 2016.
 - C-107-109: Site Details. Drawing date August 18, 2016.
 - E010a: Electrical Site Lighting Plan. Drawing date August 18, 2016.
 - EP-100: Lighting Cutsheets. Drawing date August 18, 2016.
 - TTC-001: Haul Route Plan. Drawing date March 2, 2016.
 - SS-1-3: Solar Studies. Drawing date August 18, 2016.
 - L1.00-5.00: Landscaping Plans. Drawing date August 18, 2016.
 - L6.00-6.10: Landscaping Site Sections. Drawing date August 18, 2016.
 - L10.00: Paving Details. Drawing date August 18, 2016.
 - L10.10: Site Details. Drawing date August 18, 2016.
 - L10.20: Soil Details. Drawing date August 18, 2016.
 - L10.30: Planting Details. Drawing date August 18, 2016.
 - L10.40: Site Furnishing Details. Drawing date August 18, 2016.
 - L10.50: Site Drainage Details. Drawing date August 18, 2016.
 - L10.60: Wood Deck Details. Drawing date August 18, 2016.
 - I1.00-2.00: Irrigation System Layout and Details. Drawing date August 16, 2016.
 - A-201-208: Floor Plans, Ground Floor to Roof. Drawing date August 18, 2016.
 - A700-701. Building Elevations. Drawing date August 18, 2016.

PROJECT SUMMARY:

Project: Yale Science Building

Address: 180, 256, and 260 Whitney Avenue; 165 and 223 Prospect Street; and 21 Sachem Street

Site Size: 1,064,494 SF (24.44 acres)

Zone: RH-2 (Residential General High Density)

Financing: Private

Parking: 291 car spaces (including 8 HC and 2 HC van-accessible) and 96 bicycle parking spaces

Owner/Applicant: John Bollier, Associate VP for Facilities, Yale University **Phone:** 203-432-6764

Agent: Kari Nordstrom for Yale University **Phone:** 203-432-8405

Site Engineer: Philip Katz for Stantec **Phone:** 203-495-1645

City Lead: City Plan Department **Phone:** 203-946-6379

BACKGROUND

Previous CPC Actions:

CPC 1517-03: Site Plan Review for demolition of existing buildings and construction of a 280,300 SF Yale Science Building. Denied without prejudice on May 19, 2016.

260 Whitney Avenue

CPC 1335-15: Special Exception for PDU for new chemistry research building, April 5, 2003

CPC 1338-04: Detailed Plan Review for Pierson Sage Garage renovation, June 17, 2003

CPC 1417-06: Site Plan Review for new 180,000 SF Yale Biology Building and service node in RH-2 zone, June 18, 2008 (not built)

21 Sachem Street

CPC 1274-06: Site Plan Review for Phase I of Yale University Environmental Science Center, July 21, 1999

CPC 1278-04: Site Plan Review for Phase II of Environmental Science Center in RH-2 zone, September 22, 1999

CPC 1479A: Agreement for chilled water line improvements, May 28, 2013

Zoning:

The Site Plan as submitted meets the requirements of the New Haven Zoning Ordinance for the RH-2 zone. Parking is supplied in accordance with the Yale University Central/Science Hill Overall Parking Plan. There is no net increase or decrease in the number of spaces on site after construction. The Yale University Central/Science Hill campus Overall Parking Plan 2016 was approved by the Board of Alders on September 6, 2016 by Order file number LM-2016-2041.

Site Description/existing conditions:

The 24.4-acre subject parcel that encompasses the southern half of the city block currently houses numerous existing buildings, parking lots, and open space areas. Moving clockwise from the northern section of the site are Wright Lab, two large surface parking lots fronting Whitney Avenue, the Peabody Museum, a large grassy area fronting Sachem Street, Osborn Memorial Laboratories, Kroon Hall, Sage Hall, Sloane Physics Lab, Kline Biology Tower (KBT), Gibbs Laboratory, and Bass Center. The site is largely developed, although there are large swaths of grassy areas used for landscaping and passive recreation. The two parking lots on this site contain more than 400 parking spaces and are part of Yale's Overall Parking Plan. There is also a stop for the Yale University shuttle. Vehicle access to the site is provided via a driveway opposite Humphrey Street controlled by a traffic light that connects to two large lots, one to the north and one to the south. Additional vehicular access, for loading and emergency purposes, can be gained via a number of driveways off of Prospect Street and Sachem Street. The site is crisscrossed with many pedestrian pathways, as well as a bike route traversing the site from the driveway opposite Humphrey Street, across the parking lot, and through landscaped areas to Sachem Street. Some of the large red oak trees will be protected and retained.

Proposed Activity:

The application includes both the demolition of Gibbs Laboratory and construction of a new 280,300 SF, six-story science lab facility (Yale Science Building, or YSB) within and around its footprint. The building will primarily serve science graduate students, post-doctoral students, faculty, and staff will also contain a 500-seat lecture hall, underground core labs, a small greenhouse on the roof, and a shared commons area. The commons area will be located on Kline Biology Tower Plaza, between the southern ends of YSB and KBT. YSB will be connected to neighboring science facilities via existing and new underground hallways within the existing concourse level below KBT Plaza. Both the existing facilities and the proposed facilities are expected to house 550 occupants. The increased space the project provides is due to the addition of common space (such as the lecture hall and commons) as well as increased lab space required by more modern equipment.

The project will also include the renovation and re-landscaping of KBT Plaza with new trees, plantings, lawns, pedestrian pathways, and sitting areas. The eastern slope of the site facing the parking lot will be graded into a gentler slope as it meets the lot and will be landscaped with preserved and new plantings.

Circulation/Parking/Traffic:

All traffic, circulation, and parking will remain virtually unchanged upon completion of the project. The southern lot will be used for staging and material storage during the demolition and new construction phases. Although the southern parking lot will be reconstructed, the total number of parking spaces will remain at 291. The entrance to the site will remain traffic- and signal-controlled in its existing location opposite Humphrey Street. A number of new bicycle racks will be added throughout the site, and the bicycle path across the site from Whitney Avenue to Sachem Street will be better delineated with marked sharrows in both travel directions. Pedestrian access will still be possible from many different entry points, although some of the specific pathways through the site will be modified and upgraded.

Trash removal:

The existing loading dock on the north side of Bass is currently used for trash removal and recycling for both Bass and J.W. Gibbs, and will be continued to be used for trash removal and recycling for Bass and YSB after the project's completion.

Signage:

No new signage is proposed.

Sec. 58 Soil Erosion and Sedimentation Control:

- Class A (minimal impact)
- Class B (significant impact)
- Class C (significant public effect, hearing required)

Cubic Yards (cy) of soil to be moved, removed or added: 168,226

Start Date: September 2016

Completion Date: by October 2019

Responsible Party for Site Monitoring: Mike Camp

This individual is responsible for monitoring the site to assure there is no soil or runoff entering City catch basins or the storm sewer system. Other responsibilities include:

- monitoring soil erosion and sediment control measures on a daily basis;
- assuring there is no dust gravitation off site by controlling dust generated by vehicles and equipment and by soil stockpiles during both the demolition and construction phases;
- determining the appropriate response, should unforeseen erosion or sedimentation problems arise; and
- ensuring that SESC measures are properly installed, maintained and inspected according to the SESC Plan.

Should soil erosion problems develop (either by wind or water) following issuance of permits for site work, the named party is responsible for notifying the City Engineer within twenty-four hours of any such situation with a plan for immediate corrective action.

All SESC measures are required to be designed and constructed in accordance with the latest Standards and Specifications of the *Connecticut Guidelines for Soil Erosion and Sediment Control*.

Note: Because the project is larger than 5 acres, the applicant is required to obtain a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction from CT DEEP in addition to adhering to the erosion and sediment control regulations of the City of New Haven.

Sec. 60 Stormwater Management Plan:

- Direct channeling of untreated surface water runoff into adjacent ground and surface waters shall be prohibited;
- No net increase in the peak rate or total volume of stormwater runoff from the site, to the maximum extent possible, shall result from the proposed activity;
- Design and planning for the site development shall provide for minimal disturbance of pre-development natural hydrologic conditions, and shall reproduce such conditions after completion of the proposed activity, to the maximum extent feasible;

- Pollutants shall be controlled at their source to the maximum extent feasible in order to contain and minimize contamination;
- Stormwater management systems shall be designed and maintained to manage site runoff in order to reduce surface and groundwater pollution, prevent flooding, and control peak discharges and provide pollution treatment;
- Stormwater management systems shall be designed to collect, retain, and treat the first inch of rain on-site, so as to trap floating material, oil and litter;
- On-site infiltration and on-site storage of stormwater shall be employed to the maximum extent feasible;
- Post-development runoff rates and volumes shall not exceed pre-development rates and volumes for various storm events. Stormwater runoff rates and volumes shall be controlled by infiltration and on-site detention systems designed by a professional engineer licensed in the state of Connecticut except where detaining such flow will affect upstream flow rates under various storm conditions;
- Stormwater treatment systems shall be employed where necessary to ensure that the average annual loadings of total suspended solids (TSS) following the completion of the proposed activity at the site are no greater than such loadings prior to the proposed activity. Alternately, stormwater treatment systems shall remove 80 percent TSS from the site on an average annual basis; and
- Use of available BMPs to minimize or mitigate the volume, rate, and impact of stormwater to ground or surface waters.

In addition, the existing berm on the eastern edge of Lot 22 adjacent and parallel to Whitney Avenue must be reconstructed to an elevation of approximately 47 feet and replanted and shown as such on the grading plans for the project.

Sec. 60.1 Exterior Lighting: SUBMISSION MEETS REQUIREMENTS

REQUIRED SUBMISSION

- Lighting Plan with location of all fixtures, type of fixture and elevation of lights;
- Manufacturer specifications or cut-sheet for each fixture;
- Photometrics.

STANDARDS

- Prevent or minimize direct glare and light trespass;
- All parking area lighting shall be full cut-off type fixtures and shall not exceed twenty (20) feet in height from the ground to the highest point of the fixture;
- Up lighting and high pressure sodium light sources are prohibited. Externally lit signs, display building, and aesthetic lighting must be lit from the top and shine downward and not sideward or upward. The lighting must be shielded to prevent direct glare and/or light trespass. The lighting must also be, as much as physically possible, contained within the target area;
- All building lighting for security or aesthetics shall be full cut-off or shielded type, not allowing any upward distribution of light. Floodlighting is discouraged, and if used, must be shielded to prevent: (a) disability glare for drivers or pedestrians, (b) light trespass beyond the property line, and (c) light above the horizontal plane;
- Where non-residential development is adjacent to residential property, no direct light source shall be visible at the property line at ground level or above; and
- High pressure sodium and flickering or flashing lights are prohibited.

Sec. 60.2 Reflective Heat Impact: SUBMISSION MEETS REQUIREMENTS

STANDARDS

- 50% of all on-site non-roof hardscape or paved areas will be either:
 - shaded AND/OR
 - constructed of a material with a solar reflectance index of at least 29.

TOTAL SF of non-roof hardscape:	375,248 SF
50% of non-roof hardscape:	187,624 SF
Shaded (based on average values per code):	40,465 SF
Areas with SRI > or = 29	147,835 SF
TOTAL PROPOSED SHADED/HIGH SRI AREA	188,300 SF
% SHADE/HIGH SRI PROPOSED	50.2%

Project Timetable: Preparation work is scheduled to begin in June 2016, with demolition beginning in fall 2016 and excavation lasting from December 2016 to January 2017. Construction is expected to begin in February 2017 and be completed by the beginning of the academic year beginning in the fall of 2019.

SITE PLAN REVIEW

Plans have been reviewed by the Site Plan Review team with representatives from the Departments of City Plan; City Engineer; Building; Disabilities Services; and Transportation, Traffic, and Parking and have been found to meet the requirements of City ordinances, regulations, and standard details.

ACTION

The City Plan Commission approves the submitted Site Plans subject to the conditions on Page 1.

ADOPTED: September 21, 2016
Edward Mattison
Chair

ATTEST:

Karyn M. Gilvarg, AIA
Executive Director