NEW HAVEN CITY PLAN COMMISSION SITE PLAN REVIEW

RE: CANAL STREET, LOCK STREET, MUNSON STREET, WINCHESTER AVENUE, 113 SACHEM STREET, 150 MUNSON STREET, 182 WINCHESTER AVENUE,

FARMINGTON CANAL GREENWAY, Site Plan Review for Installation of Chilled Water, Telecommunications and Electrical Ductbanks below Grade to connect proposed Chiller Plant with existing Distribution Loop and for Restoration of Farmington Canal Greenway (Owners: Yale University, Science Park Development Corp., City of New Haven;

Applicant: Yale University).

REPORT: 1433-04

ACTION: Approval with Conditions

CONDITIONS OF APPROVAL

- 1. Signoff on final plans by the City Engineer, Department of Transportation, Traffic and Parking and City Plan Department in that order shall be obtained prior to initiation of site work.
- 2. Any traffic lane/sidewalk closures, temporary walkways, detours, and related signage shall be subject to approval by the Department of Transportation, Traffic and Parking.
- 3. Any proposed work within City right-of-way will require separate permits.
- 4. Final determination of traffic markings, V-loc locations, signs and traffic controls will be subject to the approval of the Department of Transportation, Traffic and Parking.
- 5. Following completion of construction, any City catch basins in the public right-of-way impacted by the project shall be cleaned.
- 6. Following completion of construction, as-built site plan of utility installation shall be filed with City Plan Department, with a copy to the City Engineer. Site Plan shall be submitted in both mylar and digital format [.DWG file based on the State Plane Coordinates (NAD1983)]. Provide version of AutoCAD with submission.

Submission: Development Permit Application and Narrative 09/23/09, Application fee \$240, Plan Set by Charney Architects and RMF Engineering issued 09/17/09: Overall Existing Conditions and Layout Plan, Existing Conditions Plans, Overall Utility Site Plan, Utility Site Plans, Utility Stationing Plan, Utility Profiles, Trench Sections, Civil Details, Erosion and Sediment Control Plans & Details & Notes, Boring Logs, Blue Phone Power Schematic.

Landscape Plans by Towers Golde 9/17/09: Site Prep, Layout Plans, Layout and Grading Plans north of Munson, Grading Plans, Planting Plans, Planting Plan north of Munson, Sections and Profiles, Landscape Details for Paving, Planting, Signage, Masonry Piers, Fence, City Details. Reduced set of plans

Traffic Management Plans by Tighe & Bond 9/24/09: Materials Haul Route Plan, Traffic Management Plans for Phases I, II, & III, Intersection 1 Detail Phases A & B, Intersection 2 Phases A,B,& C, Details.

Reduced Plan Set at 8 ½ x 11; Digital version; Logistic Plan by Turner 9/22/09, Construction Worker Parking, SESC Plan, Storm Drainage and Drywell Calculations 09/17/09 by RMF Engineering inc. Executive Summary, Utility profiles, Drainage Area Map.

Previous Relevant Commission Actions: Amended and Restated Mutual License Agreement bet. City and Yale University for Chilled Water & Utility Lines (CPC 1432-08, 09/16/09); Detailed Plan Review for Science Park Garage and Chiller Plant (CPC 1416-06, 05/21/09), License Agreement (CPC 1420-08, 09/17/08).

PROJECT SUMMARY

Project: Chilled Water Distribution Loop betw. Chiller Plant @276 Winchester Av. and existing

campus wide distribution loop

Location: Munson St, Farmington Canal Greenway, Canal St., Lock St., Sachem St. Winchester

Av.

Funding: Private and City (per Amended and Restated License Agreement)

Owners: Yale University, Science Park Development Corp., City of New Haven

Applicant: David Spalding (Yale Facilities) **Phone:** 203-432-7576

Engineer: RMF Engineering, Baltimore, MD
Architect: Phone: 203-773-5057

Architect: Charney Architects Phone: 203-7/3-303/
Landscape Architect: Towers Golde Phone: 203-773-1153

City Lead: Engineering Department

City Project Manager: Larry Smith Phone: 203-946-8099

BACKGROUND

Yale University proposes to construct a new plant at 276 Winchester Avenue in Science Park which will provide chilled water to its main campus. In order to connect the new plant with the area where the chilled water will be provided, Yale proposes to install an underground distribution loop which will begin at the chiller plant, progress on Science Park property to Munson Street, across Munson Street to the Farmington Canal Greenway, run south down the Greenway to Sachem Street, turn east on Sachem Street to Mansfield Street where it will connect with existing facilities. It will also extend further south to connect with facilities at Canal and Lock Streets. Also included is the installation of new electrical and communication ductbanks needed to support the University's operations in Science Park, as well as security phone (blue phone) replacement from Sachem Street north to Division Street. An amended and restated License Agreement currently before the Board of Aldermen revises a previous Agreement which included a chiller loop route in the Canal Street right of way, a route which would have caused significant disruptions to the public and risk to existing utility lines, particularly a brick sewer line dating from 1873. The restated agreement details the new routing within the Greenway with an abbreviated time frame and agreements to restore the Greenway. (See CPC 1432-08 for other elements of the Agreement).

Proposed Activity: A temporary trail will be established to the west of the existing trail 7 feet wide. north of Webster to Munson and 10 feet wide south of Webster. Off site signs will be needed to warn of the Greenway detour. Some of the existing trees will be removed from the east side to make room for a laydown work area to be established on the east side of the existing trail. Two new 36" pipes will be installed in the licensed route with the electrical and communications ductbanks running parallel to and east of the large pipes. The new piping is approximately 3,600' in length with an additional 1,500' of electrical and data conduit running north from Munson to Division Street for power and communications to the emergency phones.

Work will include excavation and removal and disposal of any excess material off site, installation of specified bedding materials, laying and connecting of the pipes, construction of the new concrete ductbanks including security conduits, and backfilling and compaction of new materials to bring the excavation up to grade. Underground vaults and manholes will be installed at several points along the routing and at ductbank connection points. Following completion of the installation the Greenway will be restored to better than its former condition with new tree plantings, new paving and stone dust path and improved drainage. Signs, blue emergency lights, bollards and stone piers removed during excavation and burial of the private utility lines will be reinstalled or replaced. Upon new restoration new signs will be added at the pedestrian paths to warn cyclists of the approaching crossing.

Storm Drainage: Due to raising of the grade of the Greenway in the vicinity of Sachem Street, three new storm drain inlets (two just north of Sachem Street and one north of the Canal-Lock intersection) and a storm drain manhole will be installed to capture storm water runoff. The grade is being raised to eliminate stairs, and provide accessible paths across the greenway.

Soil Erosion and Sediment Control Review: An 8' construction fence will enclose the work area and silt fencing will be used where appropriate to keep silt from entering catch basins or running off the site. Existing inlets will be protected with filter fabric. The calculations provided with the application estimate that approximately 14,000 cubic yards of material will be moved, 9,000 cubic yards added and 14,000 cubic yards removed from the project site. The trench within the linear site will be open in segments of no longer than 200 feet. Work areas will be plated or filled in at night. John Williamson of RMF Engineering is named as the individual responsible for monitoring the site to assure there is no soil or runoff entering City catch basins or the storm sewer system and for assuring there is no dust gravitation off site by controlling dust generated by vehicles and equipment. Soil stockpiles if necessary shall be protected from dust gravitation and soil erosion. 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.

Robert Turner of Turner Construction Company is the on-site monitor responsible for monitoring activity on a day to day basis. Mr. Turner shall be responsible for determining the appropriate response, should unforeseen erosion or sedimentation problems arise and is fully responsible for insuring that SESC measures are properly installed, maintained and inspected according to the SESC Plan throughout the project.

Construction worker Parking Plan: Construction workers for this project will park in Lot A, a private lot owned by Science Park Development Corporation located on Winchester Avenue. Subcontractors will be reminded of the importance for using the lot, carpooling and use of public transportation during the project.

Restoration Plan: While numerous trees will be removed from the Greenway to prepare for a work area, some groves will remain and many more will be planted to replace some which are now considered invasive. The "treed" image of the Greenway will be maintained. Collapsible bollards at intersections will be replaced with a model used in later Greenway designs. Some chain link fencing will be replaced along the route with some reclaimed ornamental metal picket fencing.

Project Timetable: Start December, 2009; Finish August, 2010.

PLANNING CONSIDERATIONS

Of critical importance to this installation is coordination with other projects, particularly the GNHWPCA project at Canal and Lock, Prospect Street Bridge, and the Canal/Lock streetscape improvements.

As noted in the Commission's report on the restated agreement, the City Plan Department wishes to be notified if any historic features such as stone walls or any canal or railroad artifacts or equipment are uncovered or discovered during excavation of construction.

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 with the following comments:

• Trail shall be swept and plowed so that pedestrians and bikers have safe access at all times, including temporary trail detour.

ACTION

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

ADOPTED:

October 21 2009

Edward Mattison

Chair

Karyn M Gilvarg, AIA

Executive Director