UCONN

PROCUREMENT SERVICES

CAPITAL PROJECTS AND
FACILITIES PROCUREMENT

PROJECT INFORMATION

Project Number: 300151

Project Name: Boiler Plant Equipment Replacement and Utility Tunnel Connection

Procurement Agent:
Cesar E Alonzo, PE
Senior Procurement Specialist
860-486-0012
cesar.alonzo@uconn.edu

Bids for this solicitation (event) can be submitted through the HuskyBuy Portal:
https://bids.sciquest.com/apps/Router/PublicEvent?CustomerOrg=UConnFullSuite

Critical Dates:

	Date	Time
Bid Due Date and Time	04/10/2019	2:00PM
Q&A (RFI) Due Date and Time	04/01/2019	2:00PM
Prebid/Walkthrough	N/A	N/A
Location for Prebid/Walkthrough	N/A	

DAS Classification:
Only Construction Managers prequalified by both the Department of Administrative Services (DAS) in the specified classification for this project **(CONSTRUCTION MANAGER AT RISK, GROUP C)** as of the due date of the Application, and the University, through this Prequalification Application, shall be permitted to bid on this project.

Project Description:
The Development of the Storrs Campus projected by the University Master Plan and Next Generation Connecticut Capital Plan adds significant utility loads to the campus.

The Owner intends to utilize a Construction Manager (CM) at Risk contract format with a Guaranteed Maximum Price, (GMP), with separately negotiated pre-construction services. The selection process will include, but not be limited to, a firm's proven performance to manage projects of similar scope, size and complexity and deliver it on time and within budget. Due to the nature of the proposed project, the Construction Manager's experience should include examples

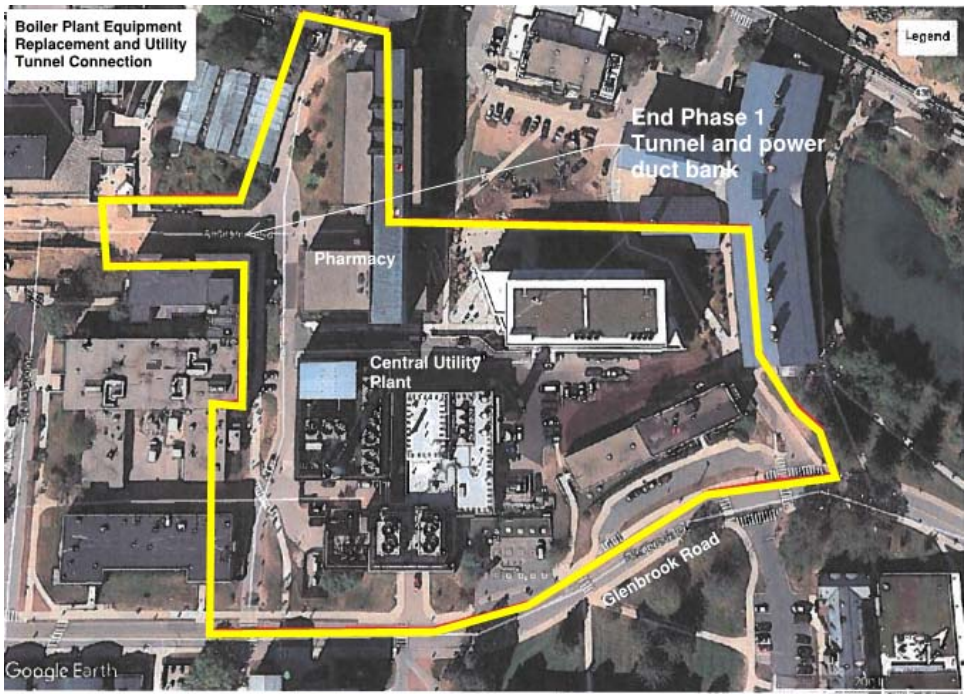
of successful projects which required similar types of construction as described below producing superior quality within time and pricing constraints.

After pre-qualification, each pre-qualified firm will be asked to respond to a Request for Proposal, (RFP), by providing information relative to such items as project staffing, schedule compliance, project controls, construction plan, fee for construction management services, general conditions costs and fee for pre-construction services, including producing estimates based on the proposed design. A combination of technical qualifications, fees and an interview process will be considered in the final selection process. The GMP will be established prior to the start of construction in accordance with State Statute and University Policies and Procedures.

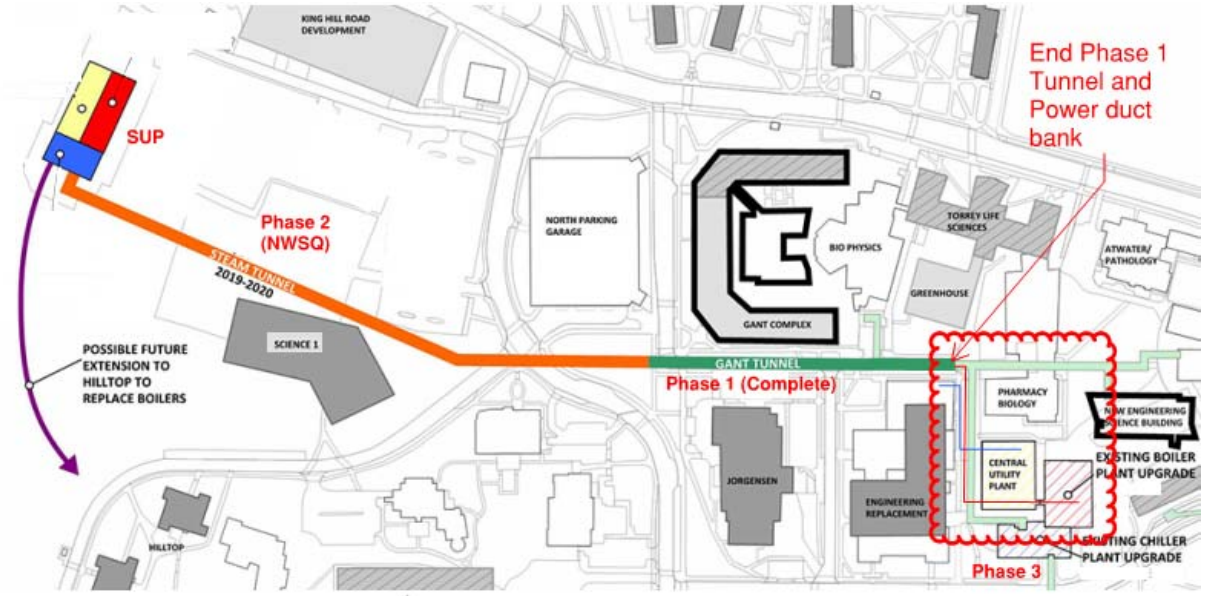
A project is currently in design which will construct a Supplemental Utility Plant (SUP) located on an existing parking lot to the north west of the project locus. The SUP will add additional electrical, steam, chilled water, emergency power capacities to the centrally distributed utilities produced by the University. The SUP will begin construction in January 2020 and be completed in October 2022. The SUP will be connected to the CUP primarily via a direct buried concrete tunnel. Phase I of the tunnel was completed in 2018. Phase II of the tunnel will be completed in September 2020. Phase III of the tunnel will be constructed under this project.

This project is an integral part of the utility production/distribution improvements and includes;

1. Extension of the existing steam piping and power duct banks from the utility tunnel terminus at the North East corner of United Engineering Technologies Building (UTEB) to and into the CUP
2. Replacement of 2 existing boilers in the Central Utility Plant and the installation of a third boiler at the Supplemental Utility Plant. The replacements of the boilers will be phased over a 3 year period



Project Locus (expanded to show building access paths that may be required)



Schematic showing tunnel phases and runs to CUP

Modelling of the centrally produced production and utility production and distribution capacities has determined that replacement boilers are needed to support this planned campus growth ahead of a 2023 lockout for emissions compliance. The replacement boilers will be interconnected from the existing Central Utility Plant (CUP) via a tunnel, the first phase of which is currently complete.

The University is developing a new infrastructure project to complete the interconnection from the proposed Supplemental Utility Plant to the existing Central Utility Plant. This project known as the "Northwest Science Quad Infrastructure Phase 3 Project" (a.k.a. "East Tunnel Project") will provide the remaining pieces of infrastructure to supply 125 psi steam and express condensate piping to and from the two utility plants. This project will also include the "Peer to Peer" electrical connection for the proposed NSS switch gear to the existing 14G switchgear in the CUP. This project will complete the easterly connection between the Central Utility Plant and the Supplemental Utility Plant.

The project will be constructed in two phases. Phase I which will begin construction in 2020 and will include the utility tunnel connection, electrical connection and site improvements (from the current easterly Phase 1 termination as shown on the project locus). Phase II begin in late 2020 and will include the removal and replacement of existing boilers and necessary ancillary equipment.

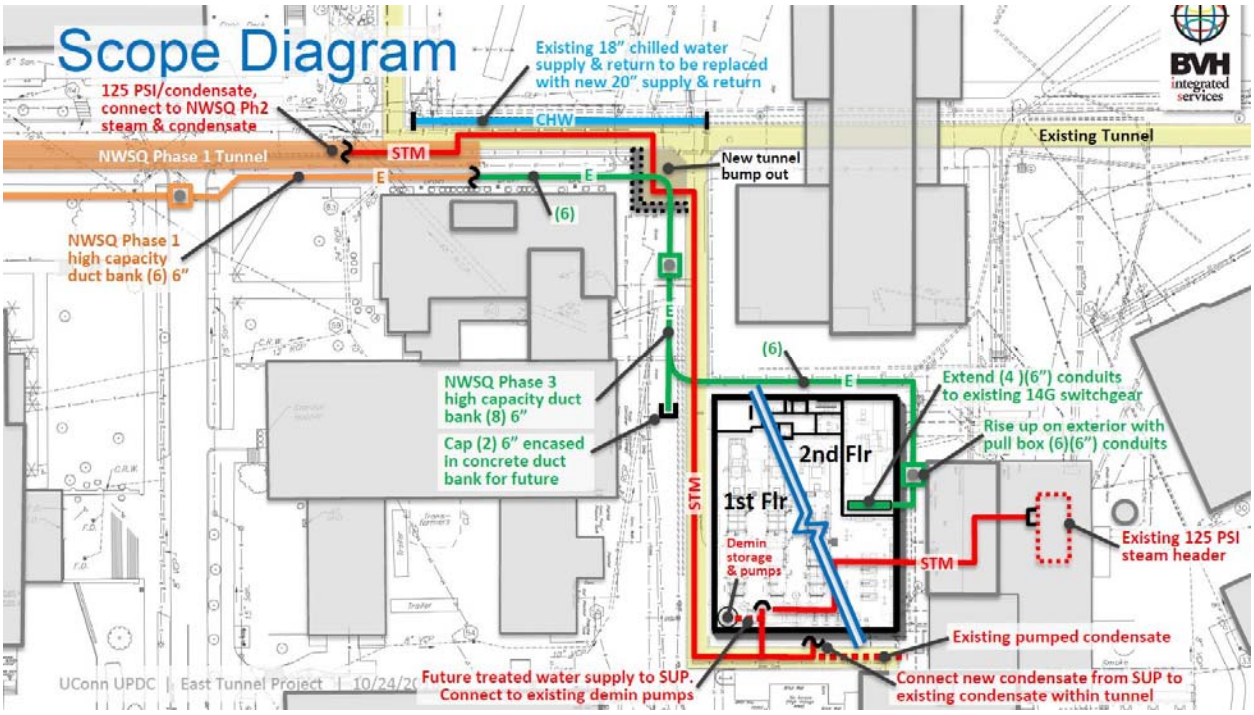
Current Project Status

Current Design Status: Both phases are currently at the Schematic Design level of documentation.

Scope of Work:

Phase I- Utility tunnel connection - Scope

- Northwest Science Quad Infrastructure Phase 3 (construction start anticipated May 2020)
- Installation of 125 psi steam and express condensate piping from the eastern end of the Phase 1 tunnel (connecting to piping installed with Science 1 & Northwest Science Quad Site Improvements and Tunnel Phase 2) to the existing Heating Plant. Portion of new piping to consist of direct buried "conduit piping" system(s).
- Construction of an "enlarged" section of existing tunnel to create pathway for proposed steam and condensate piping.
- The project will include modification of existing structural and architectural building systems to allow routing of piping and electrical conduits through the existing plant.
- Installation of direct buried primary electrical concrete duct bank from eastern edge of Phase 1 to the existing Central Utility Plant. (Conduits only, no cabling).
- Restoration of existing site work.
- See attached concept sketch.

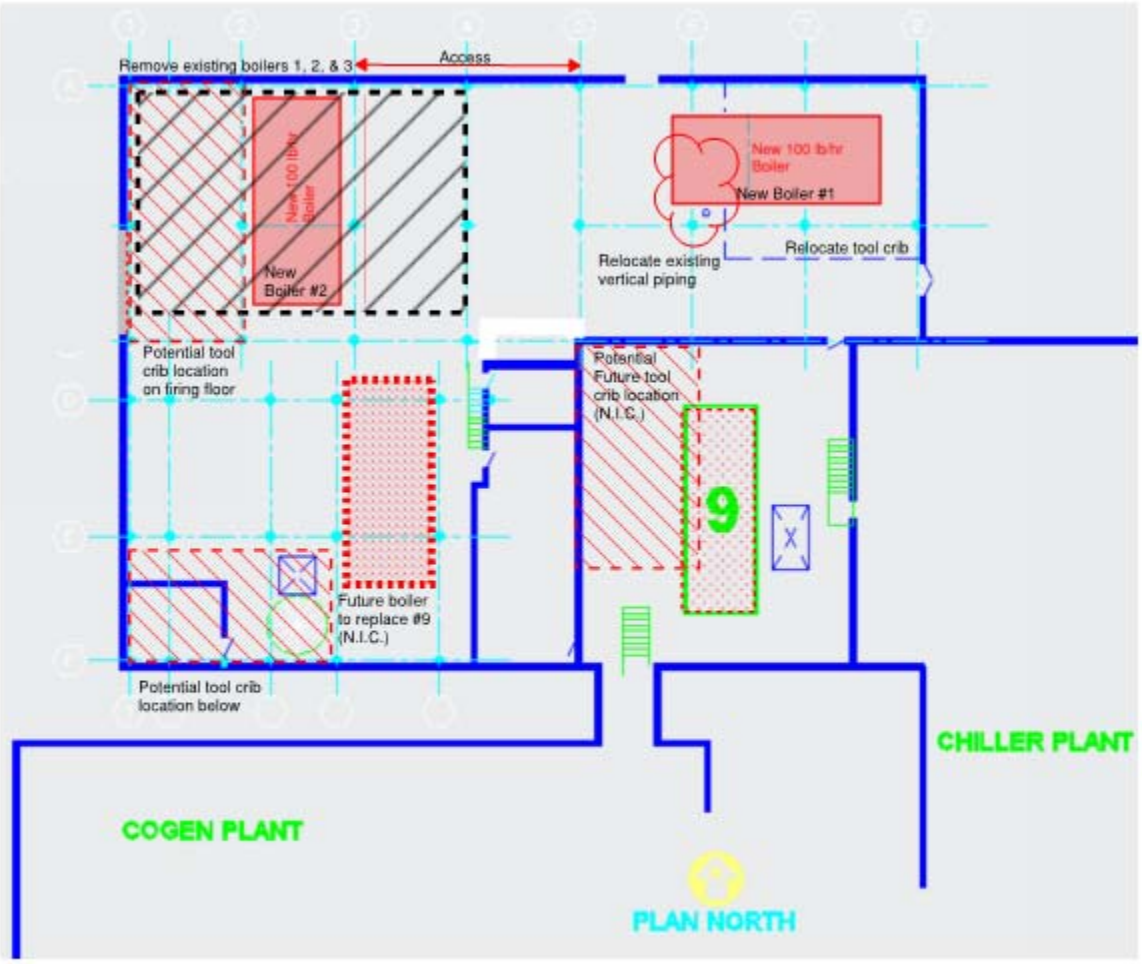


Phase II- Boiler replacement

Due to regulatory emissions caps, existing boilers located in the Central Utility Plant are required to be phased out of service in 2023. The boiler replacement is intended to be as follows.

- Existing CUP Boilers B-1, B-2, B-3, and B-7 will be removed and replaced with two (2) new 100,000 lb./hr., 125psi steam boilers. Boiler 9 will remain in service.
- One (1) new 100,000 lb./hr., 125psi steam boiler to be installed in the new Supplemental Utility Plant (SUP) building which is presently being designed and constructed as a separate project to accommodate this boiler as a future phase. Current plans are that this new boiler would follow the boilers in the CUP.

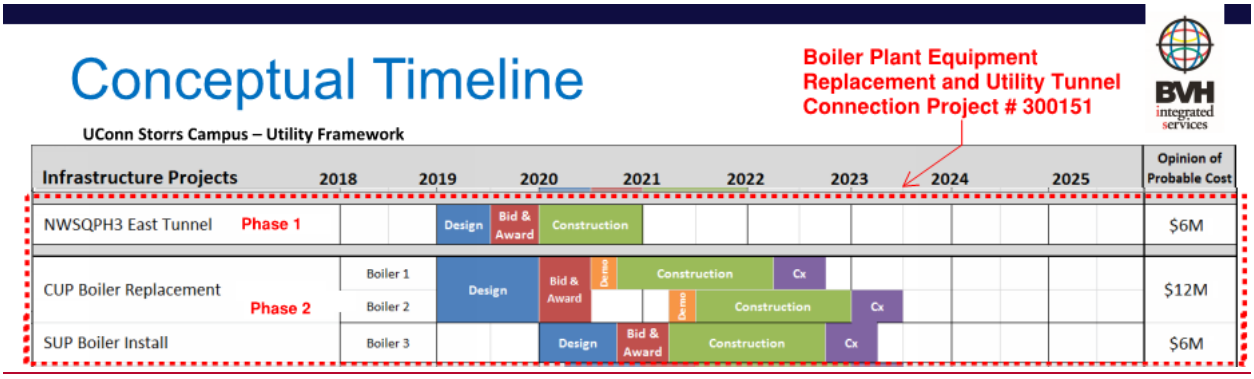
- The project will include modification of existing structural and architectural building systems as well as modification/replacement of ancillary mechanical and electrical systems required to replace boilers while maintaining service to the campus. Temporary construction or thermal generation systems may be required to be designed and installed by the construction manager or their subcontractors.
- The estimated construction budget is a total of $18,000,000 for all three (3) boilers.
- The three boilers will be procured as a single project with the understanding the construction activities will be phased over multiple "non-heating seasons".



BOILER REPLACEMENT AT EXISTING CUP
N.T.S.

Project Schedule/Duration:

- **Tunnel extension/electrical connection**
  - The construction is planned to start: Summer of 2020.
  - Construction duration: 12 months (Work outside the CUP is to be completed over the summer of 2020).
- **Boiler replacement**
  - The construction is planned to start: Fall of 2020.
  - Construction duration: 27 months (Over three non-heating seasons, while campus minimum steam production is maintained).



Financial Ability:

The Construction Manager must demonstrate the financial ability and bonding capacity to complete a construction project with a minimum value of at least **$25,000,000**.

Project Staffing:

The Construction Manager must demonstrate the ability to staff the project with high quality, experienced personnel. The Construction Manager must demonstrate adequate levels of staffing to oversee the project through completion. The firm must demonstrate the individual staff members' experience on past relevant projects performing work of a similar scope and nature to this project and in a comparable position as assigned on this project.

Project Relevant Experience:

A minimum of **three (3) examples** must be submitted that are in progress (at least 75% complete) or completed within the past **ten (10) years.** For a project to be considered, the value of that project must have a minimum value of **$18,750,000.** A detailed description of the work performed and how it relates to the scope of work outlined in the Prequalification Application shall be included.

Threshold Building Project:

This project **is not** a "Threshold Building" project.

All Construction Managers and major subcontractors must possess, at the time the Application is submitted, a valid license, registration or certification issued by the Department of Consumer Protection in accordance with Connecticut General Statutes Sec. 20-341gg if a project(s) is for a "Threshold Building" as defined in Connecticut General Statutes Sec. 29-276b. (Pursuant to C.G.S. §29-276b, the term "threshold limit" shall apply to any structure or addition thereto (1) having four stories, (2) sixty feet in height, (3) with a clear span of one hundred fifty feet in width, (4) containing one hundred fifty thousand square feet of total gross floor area, or (5) with an occupancy of one thousand persons. If a joint venture, all joint venture partners shall be licensed, registered or certified).

*Note: If project **is not** a "Threshold Building", Question 11.1.6 under Tab 11 Licenses and Misc. Documents, is not applicable.*

Supplier Diversity Requirements:

If prequalified, as is the case with most deferred maintenance, major renovation, and new construction projects, the awarded Construction Manager is advised that they must award **thirty percent (30%)** or more of the value of the Construction Manager's contract to certified SBE's and, of that amount, **one-third (10% of the total award)** or more must be awarded to SBE's who are also MBE's. The Construction Manager is responsible for ensuring that the SBE's/MBE's they have elected are eligible contractors, and that they meet state requirements. In support of the 30/10 goal, it is suggested that a thoughtful approach be considered in package size, value, and design to encourage SBE/MBE opportunities.