

**Kathleen M. Shanley**  
Manager – Transmission Siting  
Tel: (860) 728-4527

March 27, 2024

Melanie Bachman, Esq.  
Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

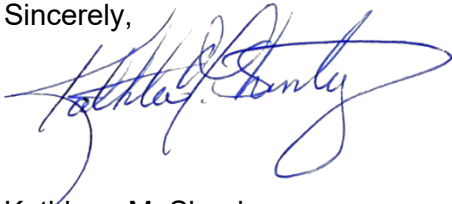
Re: Petition No. 1605 - Hartford Underground Cable Replacement Project

Dear Attorney Bachman,

This letter provides an original and 15 copies of the responses to the requests for information listed below:

Responses to CSC-001 Interrogatories, dated March 11, 2024  
CSC-001-1 through CSC-001-42.

Sincerely,



Kathleen M. Shanley  
Manager – Transmission Siting

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 1**

Referencing Petition pp. D-1 and D-2, were there any comments received from the City of Hartford (City) or abutting property owners since the filing of the Petition? If so, what were their concerns, and how were these concerns addressed?

**Response:**

Prior to filing the Petition, Company representatives held numerous discussions with City of Hartford on several aspects of the proposed Project including, but not limited to, temporary and permanent easement and workspace needs, a traffic management plan, permitting, temporary and permanent pavement restoration, safety, plans for communicating with abutting property owners, and preferred work hours. Since the Petition was filed, Eversource has not received any comments or concerns from the City of Hartford or abutting property owners. Discussions with these stakeholders continue and Eversource will address any concerns or comments that are raised going forward. Please refer to the response to Question CSC-001-2.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 2**

Have any abutting property owners requested further information? Were restoration measures described during public outreach?

**Response:**

Eversource has been communicating with affected property owners regarding the proposed project via mailings, door-to-door outreach, in-person meetings and community meetings. There are a few sizeable abutting property owners along the route, including Trinity College and Hartford Hospital, with whom the Company has been closely coordinating and communicating with regarding the plans for construction, preferred work hours, notification procedures, traffic management and other matters. For example, Hartford Hospital indicated it prefers night work hours to mitigate the impact on ambulatory and staff traffic coming in and out of the hospital buildings, and also to avoid the time of day when there are shift changes. Trinity College provided dates of school holiday recess, spring and summer breaks, and requested the Company attempt to schedule its work near the school around those times. Trinity College also provided dates for major events at the college such as move-in and move-out dates, graduation, and alumni weeks, and requested the Company avoid working during those timeframes.

In addition to these larger abutting property owners, a few business owners along the route also requested an update once the traffic management plans, work hours and schedule information is known. Eversource will continue to work with these abutters to address any concerns that may arise.

During outreach to affected abutters, restoration measures were described. Where private property impacts are anticipated, it was explained the Company will work with individual property owners on restoration of their property following completion of construction. It was also explained that restoration plans for City-owned roads will be developed in consultation with the City of Hartford.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 3**

Is the project, or any portion of the project, proposed to be undertaken by state departments, institutions or agencies, or to be funded in whole or in part by the state through any contract or grant?

**Response:**

No, no portion of the project is proposed to be undertaken by state departments, institutions or agencies, nor will it be funded in whole or in part by the state through a contract or grant.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 4**

Provide the approximate width (or range of widths) of the road ROW for the entire Project route.

**Response:**

The approximate widths of the road ROW for the entire route are provided below. The distances are rounded to the closest five foot increment but do not include locations where the route crosses large intersections.

**1722 Line – Northwest Hartford Substation to Southwest Hartford Substation**

Albany Avenue	-varies from 100 feet to 200 feet.
Scarborough Street	-100 feet, with two one-way lanes 40 feet in width and a 20-foot median.
Whitney Street	-50 feet.
South Whitney Street	-50 feet
Park Street	-70 feet.
Bulkely Avenue	-40 feet.
Kane Street	-60 feet.

**1704 Line – Southwest Hartford Substation to South Meadow Substation**

Kane Street	-60 feet.
New Park Avenue	-70 feet.
Hamilton Street	-50 feet from New Park Avenue to Pope Park Highway. -60 feet from Pope Park Highway to Zion Street.
Summit Street	-70 feet.
Vernon Street	-60 feet.
Retreat Avenue	-70 feet.
Wyllys Street	-70 feet.
Groton Street	-50 feet.
Stonington Street	-50 feet.
Hendricxsen Avenue	-60 feet.
Wawarme Avenue	-70 feet.
Reserve Road	-90 feet, generally; but varies from 75 feet to 100 feet.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 5**

How long is the 1722 Line Tap in linear miles?

**Response:**

The 1722 Line tap is 0.96 miles long.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 6**

Referencing Petition p. A-8, the proposed cross linked polyethylene (XLPE) cables would be 5000-kcmil. What size are the existing high pressure fluid filled (HPFF) cables for the 1722 and 1704 Lines? Do the existing HPFF 1722 and 1704 Lines have one or two conductors per phase?

**Response:**

The existing cable size for 1722 HPFF line and 1704 HPFF line are each 3000 kcmil aluminum. Each line has one conductor per phase.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 7**

Is the proposed project identified in any ISO-New England, Inc. (ISO-NE) needs and solutions analyses? Is the proposed project on the ISO-NE Regional System Plan (RSP), Project List and/or Asset Condition List? If yes, identify.

**Response:**

The Hartford Underground Cable Replacement Project (the Project) was not identified by an ISO-New England Inc. needs and solution analysis. The Project is on the Asset Condition List (Project numbers 412 and 423).



**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 8**

Are any generation facilities listed on the ISO-NE interconnection queue associated with the proposed project? If so, please identify the generation facilities and queue position.

**Response:**

No, none of the generation facilities listed on the ISO-NE interconnection queue are associated with the proposed project.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 9**

Is Eversource required to seek any ISO-NE reviews and/or approvals for the replacement of the transmission facilities? Provide the status or copy of any such ISO-NE approvals if applicable.

**Response:**

Yes, Eversource is required to seek ISO-NE reviews and/or approvals for the replacement of the transmission facilities. Asset condition transmission projects are reviewed through a process that involves the ISO-NE and New England Power Pool ("NEPOOL") Reliability Committee ("RC") and the ISO-NE Planning Advisory Committee ("PAC"). While the specific process followed depends on the size and type of the proposed project, interested attendees are always provided opportunities to participate with questions, comments and concerns. For asset condition transmission projects located on regional Pool Transmission Facilities ("PTF") with an estimated cost of \$5 million or more, the sponsoring transmission owner makes at least one presentation to the PAC, followed by a Transmission Cost Allocation ("TCA") application (and associated Proposed Plan Application, if required) submission for review by the NEPOOL RC and ISO-NE. Following the review of the TCA application by the RC, ISO-NE will issue a formal TCA determination letter on the project regional cost allocation.

The project was presented to the ISO-NE PAC on June 15, 2023, as the "1704/1722 Underground Cable Rebuild Project," with materials posted here: [https://www.iso-ne.com/static-assets/documents/2023/06/a04\\_2023\\_06\\_15\\_1704\\_1722\\_underground\\_cable\\_rebuild\\_project.pdf](https://www.iso-ne.com/static-assets/documents/2023/06/a04_2023_06_15_1704_1722_underground_cable_rebuild_project.pdf). In response to stakeholder questions, the Company provided additional information in a memo: ([https://www.iso-ne.com/static-assets/documents/2023/08/a05\\_2023\\_08\\_16\\_pac\\_17041722\\_hpff\\_letter\\_to\\_nescoe.pdf](https://www.iso-ne.com/static-assets/documents/2023/08/a05_2023_08_16_pac_17041722_hpff_letter_to_nescoe.pdf)) and discussed the project at the August 16, 2023 PAC meeting. In October 2023, the project was added to the Asset Condition List for public disclosure tracking purposes as ACL 412 and ACL 423. The project TCA applications are pending and will be submitted to ISO-NE prior to the start of construction. Proposed Plan Applications are also required for the project and are pending at this time.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 10**

How does the Project relate to other proposed, planned or constructed Connecticut reliability and asset condition projects?

**Response:**

This Project is comparable to many other Eversource proposed, planned or constructed projects across Connecticut. The main purpose of these projects is first and foremost to improve transmission system reliability, which is achieved not only by expanding and upgrading existing infrastructure, but also by replacing aged and obsolete infrastructure, such as structures, conductors or shield wires.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 11**

Provide the cost estimates for both the 1722 Line and the 1704 Line replacements. Provide estimates broken down by components that Eversource believes are appropriate.

**Response:**

The total estimated cost of the project is \$315.8 million, this is divided into \$178M for the Line 1704 replacement and \$136.4M for Line 1722 replacement with an additional \$1.4M for the retirement of the 1722 tap.

Line 1704 estimate consists of \$162.5M for the underground line scope, \$7.4M for the Southwest Hartford Substation scope and \$8M for the South Meadow Substation scope.

Line 1722 estimate consists of \$120.3M for the underground line scope, \$7.6M for the Southwest Hartford Substation scope and \$8.6M for the Northwest Hartford Substation scope.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 12**

Referencing Petition pp. A-9 and A-10, 1722 Line Bulkeley Avenue Deviation, what is the incremental cost for this approximately 800 foot deviation from the original route? Explain how the church and carwash impede the easements when the existing cable is located in the street.

**Response:**

Eversource's estimate of the incremental cost of this deviation is \$3.8 million.

The church and car wash impede the "easements"<sup>1</sup> where the existing line is located because both facilities were built directly over the existing cable. By way of background, the cable was installed within the public right-of-way of Madison Avenue in 1974. At that time, Madison Avenue extended from Park Avenue to Kane Street. By 1977, Madison had been truncated south of Kibbe Street and the carwash was constructed on Kane Street. The church was constructed between 1986 and 1988, between Kibbe Street and the carwash. Both structures were sited directly over the original location of Madison Avenue. As a result of the construction of these facilities and the "abandonment" of Madison Avenue, Eversource no longer has the franchise rights that would allow construction beneath these properties. Accordingly, Eversource would need to acquire property rights to allow construction. Eversource contacted the property owners regarding acquiring property rights; neither owner would grant such rights.

---

<sup>1</sup> Eversource did not obtain easements at the time of installation. The cable was installed in accordance with its "franchise rights" (under its company charter granted by special acts of the Connecticut legislature) allowing installation of the transmission line within the public street right-of-way.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 13**

Referencing Petition p. A-10, 1704 Line Hamilton Street Deviation, what is the incremental cost of this approximately 150 foot deviation from the original route (including the micro-tunneling)?

**Response:**

As described in the Petition, p. A-10, based on a review of several alternatives, the 1704 Line cannot be attached to the Hamilton Street Bridge for multiple reasons:

- the replacement cable cannot be attached to the south side of the bridge because the existing line is located there and the existing line must remain in place and energized until the replacement cable is energized;
- the replacement cable cannot be constructed on the north side of the bridge because a gas main is located there and cannot be relocated;
- the bridge is not constructed in a manner that would allow the replacement cable to be supported beneath the bridge because there are no longitudinal supports that provide bays in which the replacement cable could be attached (as does the CT DOT bridge on Albany Avenue) and it cannot be attached to the underside of the bridge due to its location within a flood zone.

In addition to the above, City of Hartford representatives informed Eversource that the bridge is significantly deteriorated and is due for replacement in the next 10 or 15 years, which would mean that the replacement cable would have to be removed from service and relocated long before its expected lifespan would expire.

Based on the foregoing, Eversource evaluated several options, including alternate routes to avoid Hamilton Street and the bridge crossing, the construction of a utility bridge, and subterranean options including jack and bore and micro-tunneling construction methods. The alternative routes analyzed to circumvent the crossing of the South Branch of the Park River were eliminated based on cost. Due to the estimated cost of replacement cable installation (approximately \$40 million per mile) and the long length of the alternate routes, this option was determined to be economically infeasible.

Eversource and City of Hartford representatives met to discuss the possibility of constructing a utility bridge to carry the replacement cables over the South Branch of the

Park River, near the existing bridge. The City representatives were opposed to the utility bridge solution based on safety and negative visual impact concerns. Other factors in the decision to eliminate this option from further consideration were trespassers on the bridge and associated security concerns, such as vandalism and sabotage due to the exposure that the replacement cables would have on a separate utility bridge. Finally, Eversource does not have the property rights to construct an overhead utility bridge. The land parcels adjacent to the bridge are separately owned by the City of Hartford and the State of Connecticut and Eversource would need to acquire these property rights.

Eversource consulted with a contractor specializing in jack and bore and micro-tunneling constructions methods. Based on the size and configuration of the construction site, Eversource determined that jack and bore was not a viable option and that micro-tunneling was a superior option. Eversource and the City of Hartford agreed that the micro-tunneling option was the preferred solution at this location.

Due to the above-described constraints, attaching the cables to the bridge was ruled out early in the planning process; therefore, Eversource did not develop a design or a cost estimate for attaching to the bridge. Accordingly, the incremental costs of the Hamilton Street Deviation also cannot be accurately estimated. Eversource did develop an estimate of the utility bridge prior to presenting the option to the City to determine if a utility bridge option was feasible. The conceptual estimate was approximately \$2 million, which is in line with the pedestrian/utility bridge that was constructed in Greenwich as part of the Greenwich Substation and Line Project that was approved in Docket No. 461A. By comparison, the cost of the micro-tunneling was estimated at a conceptual level at approximately \$2.3 million.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 14**

Referencing Petition p. A-10, what is the impact of an outage on the 1704 Line if it were attached to the Hamilton Street bridge? Could a portable generator be installed to maintain service while the installation onto the bridge occurs? Were there other alternatives explored? Explain.

**Response:**

For the reasons stated in the Petition, page A-10, and as further explained in Eversource's response to CSC-001-13, it is not feasible to attach the replacement cable on the Hamilton Street Bridge. Therefore, Eversource has not evaluated the possible impacts to the transmission system or developed a solution to address an outage during construction of an attachment to the Hamilton Street Bridge.



**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 15**

Referencing Petition pp. A-10 and A-11, 1704 Line Colt Park Deviation, what is the incremental cost of this approximately 100 foot deviation from the original route?

**Response:**

Eversource's estimate of the incremental cost of the Colt Park Deviation is \$410,000.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 16**

What is the total estimated cost of the project? Of this total, what costs would be regionalized, and what costs would be localized? Estimate the percentages of the total cost that would be borne by Eversource ratepayers, Connecticut ratepayers, and the remainder of New England (excluding Connecticut) ratepayers, as applicable.

**Response:**

The total estimated cost of the project is approximately \$315.8 million. Of the total, \$1.4 million is associated with non-Pool Transmission Facilities (non-PTF). Eversource anticipates that the remaining costs will be regionalized pending the final determination of ISO-New England's Schedule 12 C review.

The Company anticipates the following overall allocations for the total cost:

- Customers of Eversource: 19.5%
- Other Connecticut customers: 6.0%
- Other New England customers: 74.5%

The estimated allocations are based on 2022 actual loads.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 17**

How would Eversource avoid and/or manage project cost overruns? Who would bear the burden of any cost overruns? Explain.

**Response:**

Eversource has several strategies to avoid or manage project cost overruns. For example, before the Detailed and Issue for Construction drawings are generated, a Quality Level A Survey would be completed to precisely identify any subsurface utility conflicts. Eversource would continue to evaluate and confirm cost assumptions and identify any risks in order to incorporate contingency funds into the estimate. Estimated costs for material and labor are based on most recent project costs, to avoid underestimating costs.

Further, the Project would be competitively bid to ensure the lowest priced competent contractor is selected. Once construction begins, robust project controls processes would be implemented, which would include contract management and strict oversight, as well as a rigorous justification process for any contractor change orders. Eversource project management also reviews expenditures against the project schedule on a monthly basis and evaluates the consistency with the Project budget and spend forecasting to ensure that key milestones are being reached as expected and that the work is progressing according to the Project schedule and without added cost of delay that could be avoided, mitigated or offset.

Cost overruns would become part of the total project cost, which would be allocated to ratepayers as described in the response to Interrogatory CSC-001-16.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 18**

Provide the ratings on the existing and the proposed cables.

**Response:**

The existing 1704 and 1722 cable ratings are identical and as follows:  
Normal: 245 MVA<sup>1</sup>, LTE: 277 MVA, STE: 409 MVA.

The proposed replacement 1704 cable ratings are as follows:  
Normal: 264 MVA, LTE: 432 MVA, STE: 1020 MVA.

The proposed replacement 1722 cable ratings are as follows:  
Normal: 307 MVA, LTE: 432 MVA, STE: 1018 MVA.

The LTE ratings are identical due to required design criteria established by Transmission System Planning during their analysis and load studies. The Normal and STE ratings have a difference due to thermal limitations from factors along the alignment such as depth of installation, adjacent heat sources from other underground facilities, and thermal resistivity of the soil surrounding the cables. These factors have an influence on the ratings of the cables which results in these dissimilarities.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 19**

Referencing Petition p. A-12, Eversource notes that, “Depending on subsurface conditions, the arrangement of the three power cable PVC conduits can be in a triangular arrangement of a standard duct bank, in a vertical arrangement for a narrow duct bank, or in a horizontal arrangement for a shallower duct bank.” These duct bank configurations are identified in Petition, Attachment 2, Typical Duct Bank Casing Cross-Sections. When would subsurface conditions be evaluated and the determinations on the duct bank configurations be made? If this has already been evaluated, which portions of the routes for each circuit would have which duct bank configurations?

**Response:**

Most of the duct bank will be in the triangular arrangement. If adequate clearances from other utilities cannot be attained in this configuration during the installation, the contractor will “roll” to a vertical or horizontal configuration, shown as Section C and Section D in Attachment 2, Typical Duct Bank Casing Cross-Sections. Based on existing utility information, the duct bank for the 1704 line will be in a horizontal arrangement, shown as Section C, for approximately fifty feet on New Park Avenue.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 20**

Referencing Petition Attachment 2, Typical Duct Bank Casing Cross-Section, explain what Phase A, B, and C refer to?

**Response:**

Each phase corresponds to an individual phase of the 3-phase power system. The individual phases on Eversource's transmission system are referred to as A, B, and C. The phases are identified with this nomenclature to ensure correct positioning between terminations and splices during installation and verify such positioning during maintenance and repair.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 21**

Referencing Petition p. A-8, is the Capital District Energy Center Cogeneration Associates (CDECCA) line tap also HPFF? Page A-8 indicates the line would be retired in place, please provide retirement details

**Response:**

The CDECCA line tap is a HPFF line that would be retired in place in the same manner as the 1704 and 1722 Lines, as described in the Petition on page C-37.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 22**

1. Referencing Petition, pp. A-15 and A-16, provide the heights of the following:
  - a) Tallest existing structure at Northwest Hartford Substation;
  - b) Proposed termination structure for 1722 Line at Northwest Hartford Substation;
  - c) Tallest existing structure at Southwest Hartford Substation;
  - d) Proposed termination structure for 1722 Line at Southwest Hartford Substation; and
  - e) Tallest existing structure at South Meadow Substation.

**Response:**

Please see the response below:

**Northwest Hartford Substation**

- a) Tallest Existing Structure Height: 44 feet
- b) Proposed Termination Structure Height: 16 feet 6 inches

**Southwest Hartford Substation**

- c) Tallest Existing Structure Height: 65 feet
- d) Proposed Termination Structure Height: 27 feet 4 inches

**South Meadow Substation**

- e) Tallest Existing Structure Height: 68 feet



**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 23**

Referencing Petition, pp. A-15 and A-16, other than the proposed replacement cables and associated fiber optic lines entering the substations, would substation equipment modifications generally remain within the fenced substations?

**Response:**

Yes, all substation equipment modifications will be installed inside of the current substations' fenced areas.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 24**

Referencing Petition p. C-37, after removal of the HPFF, the pipes would be capped and pressurized with low pressure nitrogen. Explain why this would be performed on the decommissioned HPFF pipes.

**Response:**

After the HPFF conductors are removed and the fluid is extracted, the steel pipe would be pressurized with nitrogen to maintain a dry environment within the pipe, to reduce or eliminate ongoing corrosion, provided that the inside of the pipe is dry and there are no leaks present. Maintaining positive nitrogen pressure will identify future leaks that would serve as an early warning sign to prevent pipe collapse. The nitrogen pressure within the retired pipe would be monitored and an alarm would be triggered if the nitrogen pressure dropped below normal levels. If the low pressure alarm were activated, it would trigger an investigation followed by a pipe repair to avoid road damage and potential for road collapse claims from the City of Hartford.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 25**

Would the Project comply with the 2023 National Electrical Safety Code, effective February 1, 2023?

**Response:**

Yes, the Project would comply with the 2023 National Electrical Safety Code, effective February 1, 2023.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 26**

Referencing Petition p. A-15, would notice to the Federal Aviation Administration be required for the proposed substation termination structures? Would marking and/or lighting be required for such structures?

**Response:**

The Federal Aviation Administration (“FAA”) Notice Criteria Tool (“NCT”) was used to check the proposed substation termination structures. Per the NCT, the terminal structures at Northwest and Southwest Substations would not require notice to the FAA and therefore, no marking or lighting would be required. According to the NCT, the proposed terminal structure at South Meadow Substation exceeds the Notice Criteria and accordingly, a notice will be filed with the FAA to determine whether marking or lighting would be required. Eversource expects that because the proposed structure is not the tallest structure in the substation, marking or lighting will not be required.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 27**

Referencing Petition p. C-30, Table D-2, are the post-construction magnetic field calculations based on average annual load conditions?

**Response:**

The post-construction magnetic field calculations in Table D-2 of the Petition are based on peak forecasted steady state load conditions. Using peak forecasted load conditions is a more conservative approach than using average annual load conditions.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 28**

How would the proposed Project affect magnetic field levels at the property boundaries of the three substations? Explain.

**Response:**

Because the Project proposes to replace conductors rather than add new lines at the substations, the spacing of the phases will remain approximately the same; consequently, only a negligible change to the magnetic field levels at the property boundaries will result.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 29**

Referencing Petition p. A-14, identify the drilling fluid to be used for micro-tunneling, if applicable. How is the fluid contained during use?

**Response:**

A clay based fluid (bentonite) is typically used during micro-tunneling; however, the final fluid type will be determined by the contractor. This fluid is typically collected in a fractionating tank and processed off-site at an appropriate facility.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 30**

Referencing Petition Attachment 4, Flood Contingency Plan, bullet point 11 notes “Protect HDD drill shafts and entry/exist pits from flooding...” Would this apply to the proposed micro-tunneling noted on page A-14 of the Petition? What time of year is the micro-tunneling expected to take place?

**Response:**

Yes, this language would apply to the proposed micro-tunnelling. The reference to HDD was an error.

The schedule for the micro-tunneling work has not yet been established; it will be developed after a contractor is selected for this work.



**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 31**

Is there a possibility that night-time work hours would be required during construction? If yes, what type of construction activities would occur at night, and what is the noise-generating propensity of these activities?

**Response:**

Yes, there would be night work along the route to avoid impacting areas of high traffic congestion during the day and also with certain project activities, such as splicing, that may require work around the clock. For excavation and duct bank installation in areas with high traffic congestion, noise would be primarily generated from saw cutting the street, excavating the subsurface and restoration (plating or paving) using typical construction vehicles. Once trenchless construction begins, activity would occur around the clock. Noise sources would be primarily from a generator and tunneling equipment.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 32**

In addition to Eversource's Best Management Practices, what other specific environmental mitigation measures and/or monitoring would be conducted for construction within environmentally sensitive areas?

**Response:**

In addition to Eversource's Best Management Practices ("BMPs"), Eversource would comply with any permit conditions specified in any approvals from the U.S. Army Corps of Engineers, the Greater Hartford Flood Commission, and the Connecticut Department of Energy and Environmental Protection's General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities requirements.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 33**

Has Eversource developed a Protection Plan for wetlands and watercourses, including applicable pre-construction environmental resource field delineations and environmental inspections and duties, in its construction plan for the Project? If yes, submit the plan. If no, when would such a plan be developed?

**Response:**

Eversource has not developed a stand-alone Protection Plan for wetlands and watercourses. However, permit plans showing protection measures of wetlands and watercourses are being developed and will be part of the permit applications to the U.S. Army of Corps of Engineers and the Greater Hartford Flood Commission.

In addition, the Project Stormwater Pollution Control Plan (“SWPCP”) that will be submitted per the CT DEEP General Permit for the Discharge of *Stormwater* and Dewatering Wastewaters from *Construction* Activities will cover all work areas. It will provide erosion and sedimentation control measures to be implemented throughout the project duration to protect wetlands and watercourses within the Project area.

Eversource believes that the protection measures defined in the SWPCP, permit authorizations, and our 2022 Construction and Maintenance Environmental Requirements Best Management Practices manual (BMP manual) are comprehensive and meet the spirit and intent of a single wetlands and watercourses Protection Plan.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 34**

Referencing Petition p. B-26, have the Phase 1A and/or Pedestrian Survey results been submitted to the State Historic Preservation Office (SHPO)? If yes, provide any comments received from SHPO?

**Response:**

The State Historic Preservation Office submitted comments for both lines on February 1, 2024.<sup>2</sup> Please see the attached letters.

---

<sup>2</sup> Although the letters are dated February 1, 2023, that is a typographical error and the letters should have been dated, February 1, 2024.

February 1, 2023

Mr. David George  
Heritage Consultants LLC  
830 Berlin Turnpike  
Berlin, CT 06057  
(sent only via email to [dgeorge@heritage-consultants.com](mailto:dgeorge@heritage-consultants.com))

Subject: Archaeological Assessment Survey  
Proposed Line 1722 UCMP Rebuild Project  
Hartford, Connecticut

Dear Mr. George:

The State Historic Preservation Office (SHPO) has reviewed the following technical reports prepared by Heritage Consultants, LLC (Heritage):

*Phase IA Cultural Resources Literature Review and Archaeological Assessment Survey of the Line 1722 XLPE Rebuild Project in Hartford, Connecticut (dated September 2023)*

*Results of Pedestrian Survey of the Proposed 1722 UCMP Rebuild Project in Hartford, Connecticut (dated October 25, 2023)*

The reports submitted for review meet the standards set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*. SHPO understands that the proposed project consists of the replacement/rerouting of the buried Line 1722 transmission cable running between the Southwest Hartford 47N Substation and the Northwest 2N Substation. The project will require a permit from the United States Army Corps of Engineers. As a result, it is subject to review by this office pursuant to Section 106 of the National Historic Preservation Act.

The archaeological assessment survey consisted of comprehensive background research that examined historic maps and aerial imagery as well as previously identified cultural resources within 500 feet of the proposed project corridor. The review identified eight National Register of Historic Places (NRHP) listed districts (Parkville, West End South, West End North, Prospect Avenue, Elizabeth Park West Boulevard, Oxford-Whitney Streets, and the Sisson-South Whitney Historic Districts), two individually listed NRHP properties (A. Everett Austin Jr. House and Saint Paul's Methodist Church), and two State Register of Historic Places listed properties (the Rusden-Lake House and 1870 Park Street) within 500 feet of project components. No previously recorded archaeological sites or cemeteries were recorded in proximity to the project corridor. A subsequent pedestrian survey of the proposed cable route determined that there will be no direct or indirect impacts to previously identified cultural resources by the undertaking. The survey also determined that the project corridor will be located within areas of significant prior disturbance or saturated wetland soils. Therefore, Heritage recommended no further archaeological investigation prior to construction. Finally, the report recommended the implementation of an Unanticipated Discoveries Plan (UDP) prior to construction in the event that unexpected archaeological deposits are encountered during the course of construction. SHPO concurs with the results of the Heritage investigation and is of the opinion that there will be no adverse effect to historic properties, conditional upon the implementation of the recommended UDP.

This office appreciates the opportunity to review and comment upon this project. For additional information, please contact Cory Atkinson, Staff Archaeologist and Environmental Reviewer, at (860) 500-2458 or [cory.atkinson@ct.gov](mailto:cory.atkinson@ct.gov).

Sincerely,



Jonathan Kinney  
State Historic Preservation Officer



February 1, 2023

Mr. David George  
Heritage Consultants LLC  
830 Berlin Turnpike  
Berlin, CT 06057  
(sent only via email to [dgeorge@heritage-consultants.com](mailto:dgeorge@heritage-consultants.com))

Subject: Archaeological Assessment Survey  
Proposed Line 1704 XLPE Rebuild Project  
Hartford, Connecticut

Dear Mr. George:

The State Historic Preservation Office (SHPO) has reviewed the following technical reports prepared by Heritage Consultants, LLC (Heritage):

*Phase IA Cultural Resources Literature Review and Archaeological Assessment Survey of the Line 1704 XLPE Rebuild Project in Hartford, Connecticut* (dated September 2023)

*Results of Pedestrian Survey of the Proposed 1704 XLPE Rebuild Project in Hartford, Connecticut* (dated October 25, 2023)

The completed investigations meet the standards set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*. SHPO understands that the proposed project consists of the replacement/rerouting of the buried Line 1704 transmission cable running between the Southwest Hartford 47N Substation and the South Meadows Substation. The project will require a permit from the United States Army Corps of Engineers. As a result, it is subject to review by this office pursuant to Section 106 of the National Historic Preservation Act.

The archaeological assessment survey consisted of comprehensive background research that examined historic maps and aerial imagery as well as previously identified cultural resources within 500 feet of the proposed project corridor. The review identified a National Historic Park (Coltsville), seven National Register of Historic Places (NRHP) listed districts (Parkville, South Green, Frog Hollow, Congress Street, Charter Oak Place, Allen Place-Lincoln Street, and Capewell Horse Nail Company Historic Districts), six individually listed NRHP properties (Samuel Colt House, 140 Retreat Avenue, 144 Retreat Avenue, Henry Barnard House, Royal Typewriter Company Building, Saint Anthony Hall), six State Register of Historic Places listed properties (Institute of Living, Motto Building, Potsdam Village, Mary Borden Munsill Mansion, Flat Iron Building, and The Church Home), and three historic cemeteries (Mount Pleasant, Congregation Beth Israel, and the Old South Cemeteries) within 500 feet of project components. A subsequent pedestrian survey of the Area of Potential Effect (APE) determined that there will be no direct or indirect impacts to previously identified cultural resources by the proposed project. The survey also determined that the APE is characterized by areas of significant prior disturbance. Therefore, Heritage recommended no further archaeological investigation prior to construction. Finally, Heritage recommended the implementation of an Unanticipated Discoveries Plan (UDP) prior to construction in the event that unexpected archaeological deposits are encountered during construction. SHPO concurs

with the results of the Heritage investigation and is of the opinion that there will be no adverse effect to historic properties, conditional upon the implementation of the recommended UDP.

This office appreciates the opportunity to review and comment upon this project. For additional information, please contact Cory Atkinson, Staff Archaeologist and Environmental Reviewer, at (860) 500-2458 or [cory.atkinson@ct.gov](mailto:cory.atkinson@ct.gov).

Sincerely,



Jonathan Kinney  
State Historic Preservation Officer





**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 35**

Referencing Petition pp. B-24 to B-26, how would Eversource protect the historic resources within 500 feet of the existing and proposed route during construction (i.e. vibrations generated by excavation equipment)?

**Response:**

Eversource does not anticipate any impacts to historic resources from the Project construction work. Nevertheless, in response to this concern, Eversource would develop a vibration monitoring plan and vibration threshold limits in conjunction with its cultural resources consultant, the Project team and the construction contractors for work activity occurring within 500 feet of historic structures.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 36**

Referencing Petition p. B-18 and Map Sheet 5A of 10, the unnamed watercourse would be diverted via temporary coffer dams and a flexible flume pipe. For approximately how long would this watercourse be diverted?

**Response:**

The estimated duration of the diversion is anticipated to be two to three weeks. The conduits for each line will be installed at the same time, which will limit the amount of time the unnamed water course will be diverted.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 37**

Referencing Petition p. B-22, Eversource notes that for northern long-eared bat (NLEB), “[T]ree clearing would not occur during the NLEB inactive season.” Explain how this would or would not impact the NLEB?

**Response:**

Tree clearing during the NLEB inactive season (winter months), when NLEB could possibly be roosting in trees, has the potential to disrupt the overwintering bats. While some bats may roost in trees during the inactive season, most NLEB prefer to overwinter in caves or mines. As stated in the Petition, p. B-22, the Hartford urban setting does not provide suitable habitat for roosting NLEB, nor are there any known maternity nesting trees for NLEB in Connecticut. The closest known hibernaculum is greater than five miles distant from the Project area.

Eversource consulted with the U.S. Fish and Wild Service (“USFWS”) using its Information for Planning and Consultation system for the northern long-eared bat (“NLEB”). The USFWS response letter states, “[the] project has reached the determination of “No Effect” on the northern long-eared bat.” Based on this response, Eversource anticipates there would be no impacts to NLEB.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 38**

Referencing Petition p. A-13, how long would the jack-and-bore portion of the Project take to complete?

**Response:**

There are three jack and bore locations along the route. Eversource commissioned a contractor specializing in trenchless techniques to complete a feasibility study and report for all three locations. Estimates for completion are based on conceptual design and does not include confirmation of geotechnical data. Based on this initial estimate, the first jack and bore on Hamilton Street between Francis Avenue and Bartholomew Avenue is estimated to take 43 days to complete. The second jack and bore on Wawarme Avenue and Reserve Road is estimated to take 42 days to complete. The third jack and bore on Reserve Road is estimated to take 42 days to complete.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 39**

Referencing Petition p. A-14, how long would the micro-tunneling portion of the Project take to complete?

**Response:**

Eversource commissioned a contractor specializing in trenchless installations to complete a feasibility study and report for the micro-tunneling work. Based on the conceptual design, micro-tunneling is estimated to take 72 days to complete, although this estimate could change upon receipt and review of geotechnical data.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 40**

Refencing Petition p. A-14, would the micro-tunneling require a pilot hole prior to the 4-foot diameter drilling process? If yes, approximately what would the pilot hole diameter be?

**Response:**

No. During the micro-tunneling process a laser-guided cutting head is launched at the entrance pit and subsequently advanced by jacking. Sections of pipe are lowered into the entrance pit and jacked in sequence behind the cutting head until the product pipe reaches the exit pit.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 41**

Describe site construction monitoring and inspections that are required for this project under the DEEP General Permit.

**Response:**

In accordance with the General Permit, a qualified inspector (as defined by CT DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities) will inspect the site weekly and within 24 hours of the end of a storm that generates a discharge that equals or exceeds 0.5 inch. For storms of less than 0.5 inch, an inspection shall occur immediately upon the start of the subsequent normal working hours.

**Date Filed:** March 27, 2024

**Request from:** Connecticut Siting Council

**Question: 42**

Referencing Petition p. C-35, a Traffic Plan Management (TPM) would be developed in coordination with the City. Is the TPM complete? If yes, please provide a copy.

**Response:**

The Traffic Management Plan is currently being developed. Meetings have been held with the City of Hartford on the conceptual level plan and positive feedback has been received thus far.